TESTING
NVLAP LAB CODE 600118-0

SAR TEST REPORT

No. I22Z61676-SEM01

For

TCL Communication Ltd.

GSM/UMTS/LTE Mobile phone

Model name: T430W

With

Hardware Version: 03

Software Version: UGS4

FCC ID: 2ACCJH167

Issued Date: 2022-9-30

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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REPORT HISTORY

Report Number	Revision	Issue Date	Description
I22Z61676-SEM01	Rev.0	2022-9-30	Initial creation of test report

TABLE OF CONTENT

1 Test Laboratory

1.1 Testing Location

Company Name:	CTTL
Address:	No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191

1.2 Testing Environment

Temperature:	18°C~25°C,
Relative humidity:	30%~ 70%
Ground system resistance:	< 0.5 Ω
Ambient noise & Reflection:	< 0.012 W/kg

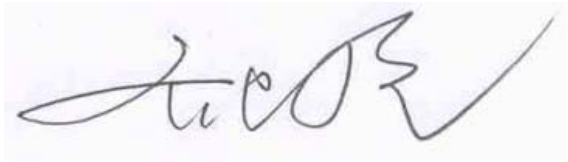
1.3 Project Data

Project Leader:	Qi Dianyuan
Test Engineer:	Lin Xiaojun
Testing Start Date:	September 5, 2022
Testing End Date:	September 18, 2022

1.4 Signature

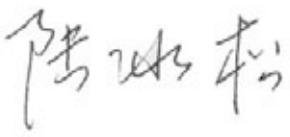
Lin Xiaojun

(Prepared this test report)



Qi Dianyuan

(Reviewed this test report)



Lu Bingsong

Deputy Director of the laboratory

(Approved this test report)

2 Statement of Compliance

The maximum results of SAR found during testing for TCL Communication Ltd. GSM/UMTS/LTE Mobile phone T430W is as follows:

Table 2.1: Highest Reported SAR -Standalone(1g)

Mode		Highest Reported SAR (1g)		
		1g SAR Head	1g SAR Body-worn 15mm	1g SAR Hotspot 10mm
GSM	GSM 850	0.47	0.71[1]	0.71
	PCS 1900	0.22	0.35	0.60
WCDMA	UMTS FDD 2	0.45	0.61	0.70
	UMTS FDD 4	0.25	0.46	0.66
	UMTS FDD 5	0.48	0.50[1]	0.50
LTE	LTE Band 2	/	/	/
	LTE Band 4	/	/	/
	LTE Band 5	/	/	/
	LTE Band 12	0.79	0.60[1]	0.60
	LTE Band 25	0.61	0.46	0.76
	LTE Band 26	0.71	0.33[1]	0.33
	LTE Band 41	0.23	0.29	0.53
	LTE Band 41 HPUE	0.30	0.38	0.71
	LTE Band 66	0.41	0.42	0.85
	LTE Band 71	0.57	0.31[1]	0.31
WLAN 2.4 GHz		1.38	0.44[1]	0.44
WLAN 5 GHz		0.85	0.96[1]	0.96

Note1: SAR result at 10mm is used for conservative evaluation.

Note2: The device have similar frequency in some LTE bands ： LTEB2/25, LTEB4/66 ,LTEB5/26 since the supported frequency spans for the smaller LTE bands are completely cover by the larger LTE bands and the channel bandwidth and other operating parameters for the smaller band be fully supported by the larger band, therefore, only larger LTE bands were required to be tested for SAR.

The SAR values found for the Mobile Phone are below the maximum recommended levels of 1.6 W/kg as averaged over any 1g tissue according to the ANSI C95.1-1992.

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and which provides a minimum separation distance of 10 mm for hotspot and 15mm for body worn between this device and the body of the user. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output.

The measurement together with the test system set-up is described in annex C. A detailed description of the equipment under test can be found in chapter 4 of this test report. The

highest reported SAR value is obtained at the case of **(Table 2.1),** and the values are**:1.38 W/kg(1g).**

Table 2.2: The sum of SAR values for Main antenna + WiFi-2.4G

	Position	Main antenna	WiFi-2.4G	Sum
Highest SAR value for Head	Right head, Touch (LTE Band 12)	0.79	0.47	**1.26**
Highest SAR value for Body	Rear10mm (LTE Band 66)	0.75	0.17	**0.92**

Table 2.3: The sum of SAR values for Main antenna + WiFi-5G

	Position	Main antenna	WiFi-5G	Sum
Highest SAR value for Head	Right head, Touch (LTE Band 12)	0.79	0.45	**1.24**
Highest SAR value for Body	Rear10mm (LTE Band 66)	0.75	0.62	**1.37**

Table 2.4: The sum of SAR values for Main antenna + BT

	Position	Main antenna	BT	Sum
Highest SAR value for Head	Right head, Touch (LTE Band 12)	0.79	＜0.01	**0.79**
Highest SAR value for Body	Rear10mm (LTE Band 66)	0.75	＜0.01	**0.75**

Table 2.5: The sum of SAR values for Main antenna + WiFi-5G+ BT

	Position	Main antenna	WiFi-5G	BT	Sum
Highest SAR value for Head	Right head, Touch (LTE Band 12)	0.79	0.45	＜0.01	**1.24**
Highest SAR value for Body	Rear10mm (LTE Band 66)	0.75	0.62	＜0.01	**1.37**

According to the above tables, The sum of reported SAR values is<1.6W/kg. So the simultaneous transmission SAR with volume scans is not required.

According to the above tables, the highest sum of reported SAR values is **1.37W/kg (1g)**.The detail for simultaneous transmission consideration is described in chapter 14.

3 Client Information

3.1 Applicant Information

Company Name:	TCL Communication Ltd.
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3.2 Manufacturer Information

Company Name:	TCL Communication Ltd.
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Telephone:	+86 755 3661 1621
Fax:	+86 755 3661 2000-81722

4 Equipment Under Test (EUT) and Ancillary Equipment (AE)

4.1 About EUT

Description:	GSM/UMTS/LTE Mobile phone
Model name:	T430W
Operating mode(s):	GSM850/900/1800/1900,WCDMA850/900/1700,BT,Wi-Fi2.4G& 5GHz, 4G-FDD LTE Band 2/4/5/12/25/26/66/71/28/66, 4G-TDD LTE:B41(PC2/PC3)
Tested Tx Frequency:	824 – 849 MHz (GSM 850)
	1850 – 1910 MHz (GSM 1900)
	824–849 MHz (WCDMA 850 Band V)
	1710 – 1755 MHz (WCDMA 1700 Band IV)
	1850–1910 MHz (WCDMA1900 Band II)
	699.7 – 711 MHz(LTE Band 12)
	1850.7–1905 MHz(LTE Band 25)
	814.7 – 841.5 MHz(LTE Band 26)
	2498.5 –2680 MHz (LTE Band 41)
	1710.7 – 1770MHz(LTE Band66)
	665.5 – 688MHz(LTE Band71)
	2402 – 2480 MHz (Bluetooth)
	2412 – 2462 MHz (Wi-Fi 2.4G)
	5.15 – 5.35 GHz 5.47 – 5.850 GHz(Wi-Fi 5G)
GPRS/EGPRS Multislot Class:	12
GPRS capability Class:	B
Antenna type:	Integrated antenna
Hotspot mode:	Support
Note： WLAN transmit with WWAN/BT simultaneously, WLAN will invoke reduced power level	

4.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW	SW Version
EUT1	016298000001067	03	UGS4
EUT2	016298000001091	03	UGS4
EUT3	016298000001554	03	UGS4
EUT4	016298000001539	03	UGS4
EUT5	016298000001505	03	UGS4

*EUT ID: is used to identify the test sample in the lab internally.

Note: It is performed to test SAR with the EUT3~5 and conducted power with the EUT1~2.

4.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	TLi028C7	/	VEKEN
AE2	Battery	TLi028C1	/	BYD

*AE ID: is used to identify the test sample in the lab internally.

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

ANSI C95.1–1992:IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

5.2 Applicable Measurement Standards

IEEE 1528–2013: Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

KDB447498 D01: General RF Exposure Guidance v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

KDB648474 D04 Handset SAR v01r03: SAR Evaluation Considerations for Wireless Handsets.

KDB941225 D01 SAR test for 3G devices v03r01: SAR Measurement Procedures for 3G Devices

KDB941225 D05 SAR for LTE Devices v02r05: SAR Evaluation Considerations for LTE Devices

KDB941225 D06 Hotspot Mode SAR v02r01: SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities

KDB248227 D01 802.11 Wi-Fi SAR v02r02: SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

KDB865664 D01SAR measurement 100 MHz to 6 GHz v01r04: SAR Measurement Requirements for 100 MHz to 6 GHz.

KDB865664 D02RF Exposure Reporting v01r02: RF Exposure Compliance Reporting and Documentation Considerations

6 Specific Absorption Rate (SAR)

6.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ) . The equation description is as below:

$$SAR = \frac{d}{dt}\left(\frac{dW}{dm}\right) = \frac{d}{dt}\left(\frac{dW}{\rho dv}\right)$$

SAR is expressed in units of Watts per kilogram (W/kg)
SAR measurement can be either related to the temperature elevation in tissue by

$$SAR = c\left(\frac{\delta T}{\delta t}\right)$$

Where: C is the specific head capacity, δT is the temperature rise and δt is the exposure duration, or related to the electrical field in the tissue by

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

Where: σ is the conductivity of the tissue, ρ is the mass density of tissue and E is the RMS electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

7 Tissue Simulating Liquids

The temperature of the tissue-equivalent medium used during measurement must also be within 18 °C to 25 °C and within ± 2 °C of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3 – 4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.

The dielectric constant (εr) and conductivity (σ) of typical tissue-equivalent media recipes are expected to be within ± 5% of the required target values; but for SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEEE Std 1528-2013, to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, the tolerance for εr and σ may be relaxed to ± 10%. This is limited to frequencies ≤ 3 GHz.

7.1 Targets for tissue simulating liquid

Table 7.1: Targets for tissue simulating liquid

Frequency(MHz)	Liquid Type	Conductivity(σ)	±10% Range	Permittivity(ε)	± 10% Range
750	Head	0.89	0.80～0.98	41.94	37.75～46.13
835	Head	0.90	0.81～0.99	41.5	37.35～45.65
1750	Head	1.37	1.26～1.54	40.08	36～44
1900	Head	1.40	1.26～1.54	40.0	36～44
2450	Head	1.80	1.62～1.98	39.2	35.28～43.12
2600	Head	1.96	1.76～2.16	39.01	35.11～42.91
Frequency(MHz)	Liquid Type	Conductivity(σ)	±5% Range	Permittivity(ε)	± 5% Range
5250	Head	4.71	4.47～4.95	35.93	34.13～37.73
5600	Head	5.07	4.82～5.32	35.53	33.8～37.3
5750	Head	5.22	4.96～5.48	35.36	33.59～37.13

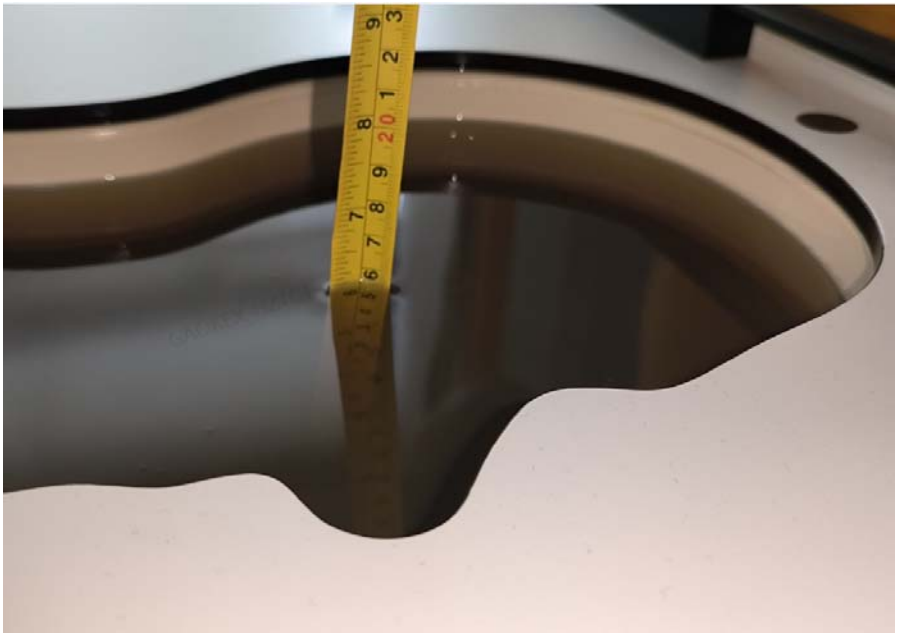
7.2 Dielectric Performance

Table 7.2: Dielectric Performance of Tissue Simulating Liquid

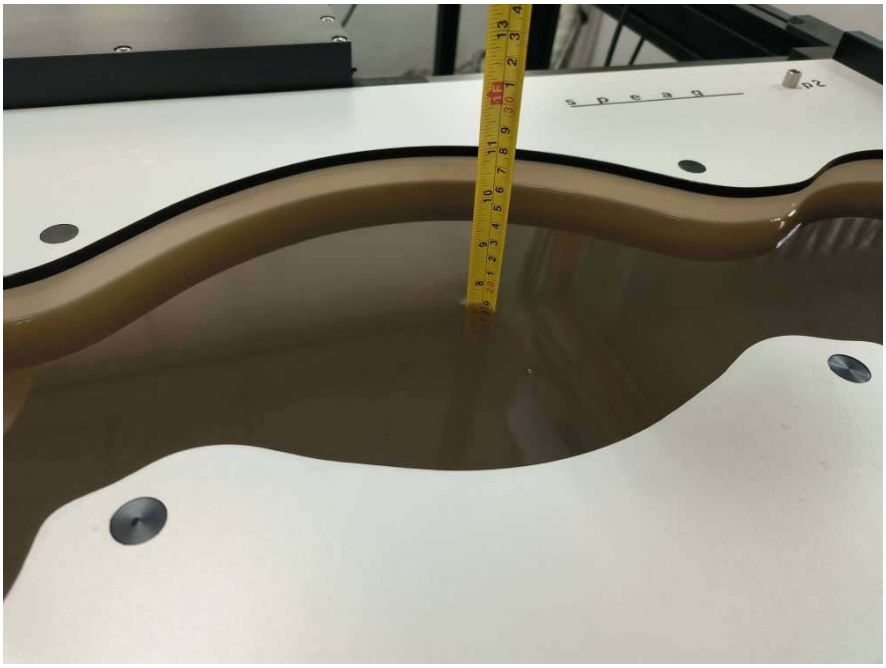
Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ε	Drift (%)	Conductivity σ (S/m)	Drift (%)
2022/9/8	Head	750MHz	43.10	2.77%	0.918	3.15%
2022/9/9	Head	835MHz	42.69	2.87%	0.932	3.56%
2022/9/10	Head	1750MHz	40.79	1.77%	1.367	-0.22%
2022/9/11	Head	1900MHz	40.81	2.03%	1.458	4.14%
2022/9/12	Head	2450MHz	40.20	2.55%	1.824	1.33%

2022/9/13	Head	2450MHz	40.10	2.30%	1.812	0.67%
2022/9/14	Head	2600MHz	38.74	-0.69%	1.938	-1.12%
2022/9/15	Head	2600MHz	39.82	2.08%	1.932	-1.43%
2022/9/16	Head	5250MHz	35.36	-1.59%	4.558	-3.23%
2022/9/17	Head	5600MHz	34.68	-2.39%	4.865	-4.04%
2022/9/18	Head	5750MHz	34.21	-3.25%	5.012	-3.98%

Note: The liquid temperature is 22.0℃



Picture 7-1 Liquid depth in the Head Phantom

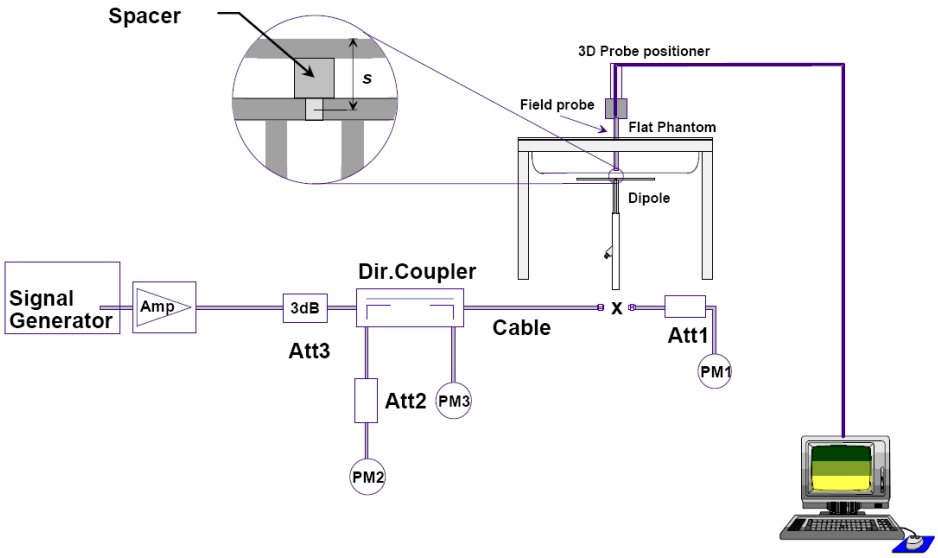


Picture 7-2 Liquid depth in the Flat Phantom

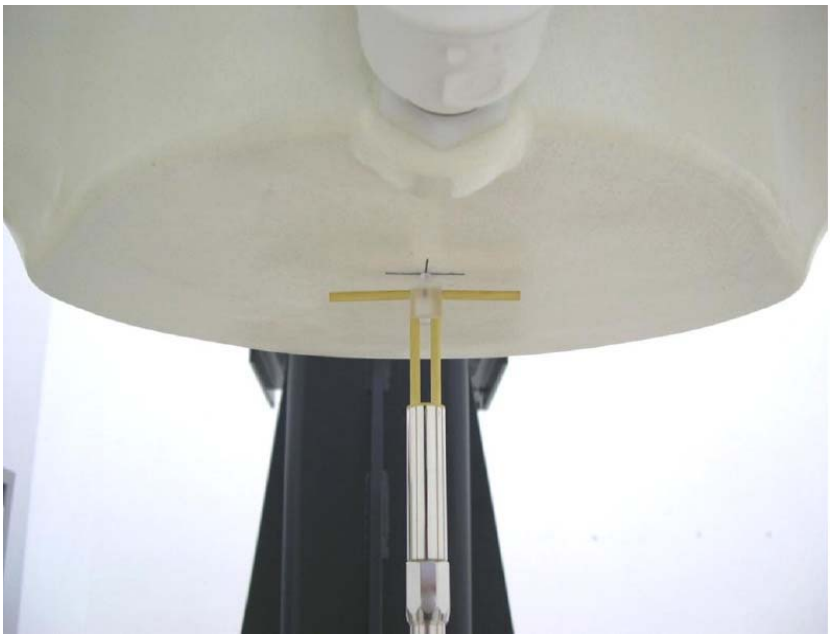
8 System verification

8.1 System Setup

In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



Picture 8.1 System Setup for System Evaluation



Picture 8.2 Photo of Dipole Setup

8.2 System Verification

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device.

Table 8.1: System Verification of Head

Measurement Date	Frequency	Target value (W/kg)		Measured value (W/kg)		Deviation	
(yyyy-mm-dd)		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2022-9-8	750MHz	5.64	8.63	5.76	8.48	2.13%	-1.74%
2022-9-9	835MHz	6.34	9.73	6.28	9.48	-0.95%	-2.57%
2022-9-10	1750MHz	19.3	36.8	19.1	36.2	-0.93%	-1.52%
2022-9-11	1900MHz	20.7	39.7	20.5	39.6	-1.06%	-0.15%
2022-9-12	2450MHz	24.9	52.7	24.9	52.8	-0.08%	0.19%
2022-9-13	2450MHz	24.9	52.7	24.3	52.4	-2.33%	-0.57%
2022-9-14	2600MHz	25.2	55.8	25.6	57.6	1.43%	3.23%
2022-9-15	2600MHz	25.2	55.8	25.4	57.2	0.79%	2.51%
2022-9-16	5250MHz	22.3	78.1	22.6	79.0	1.35%	1.15%
2022-9-17	5600MHz	23.7	83.2	22.9	80.1	-3.38%	-3.73%
2022-9-18	5750MHz	22.8	80.4	22.1	78.0	-3.07%	-2.99%

9 General Measurement Procedure

9.1 *Power Reference Measurement*

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

9.2 *Area Scan*

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB0 is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.
Area scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

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

9.3 *Zoom Scan*

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

Zoom Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

9.4 *Power drift measurement*

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as 9.1.

10 Measurement Procedure for different technologies

10.1 GSM/GPRS Measurement Procedures for SAR

GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, 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, SAR measurement is not required for the secondary mode.

10.2 WCDMA Measurement Procedures for SAR

The following procedures are applicable to WCDMA handsets operating under 3GPP Release99, Release 5 and Release 6. The default test configuration is to measure SAR with an established radio link between the DUT and a communication test set using a 12.2kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations (DPCCH & $DPDCH_n$), HSDPA and HSPA (HSUPA/HSDPA) modes according to output power, exposure conditions and device operating capabilities. Both uplink and downlink should be configured with the same RMC or AMR, when required. SAR for Release 5 HSDPA and Release 6 HSPA are measured using the applicable FRC (fixed reference channel) and E-DCH reference channel configurations. Maximum output power is verified according to applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. When Maximum Power Reduction (MPR) is not implemented according to Cubic Metric (CM) requirements for Release 6 HSPA, the following procedures do not apply.

For Release 5 HSDPA Data Devices:

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs}	CM/dB
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/25	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

For Release 6 HSPA Data Devices

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{hs}	β_{ac}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM (dB)	MPR (dB)	AG Index	E-TFCI
1	11/15	15/15	64	11/15	22/15	209/225	1039/225	4	1	1.5	1.5	20	75
2	6/15	15/15	64	6/15	12/15	12/15	12/15	4	1	1.5	1.5	12	67

3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	1.5	1.5	15	92
4	2/15	15/15	64	2/15	4/15	4/15	56/75	4	1	1.5	1.5	17	71
5	15/15	15/15	64	15/15	24/15	30/15	134/15	4	1	1.5	1.5	21	81

Rel.7 Release 7 HSPA+ Data Devices

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	$\beta_{ed}1$: 30/15 $\beta_{ed}2$: 30/15	$\beta_{ed}3$: 24/15 $\beta_{ed}4$: 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c.
Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
Note 3: DPDCH is not configured, therefore the β_c is set to 1 and β_d = 0 by default.
Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

Rel.8 DC-HSDPA (Cat 24)

SAR test exclusion for Rel.8 DC-HSDPA must satisfy the SAR test exclusion requirements of Rel.5 HSDPA. SAR test exclusion for DC-HSDPA devices is determined by power measurements according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to qualify for SAR test exclusion.

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table. Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

10.3 LTE Measurement Procedures for SAR

SAR tests for LTE are performed with a base station simulator, Rohde & Rchwarz CMW500 or . Anritsu MT8821C Closed loop power control was used so the UE transmits with maximum output power during SAR testing.

It is performed for conducted power and SAR based on the KDB941225 D05.

SAR is evaluated separately according to the following procedures for the different test positions in each exposure condition – head, body, body-worn accessories and other use conditions. The procedures in the following subsections are applied separately to test each LTE frequency band.

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 among 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.

TDD test:

TDD testing is performed using guidance from FCC KDB 941225 D05 v02r05 and the SAR test guidance provided in April 2013 TCB works hop notes. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05 v02r05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.

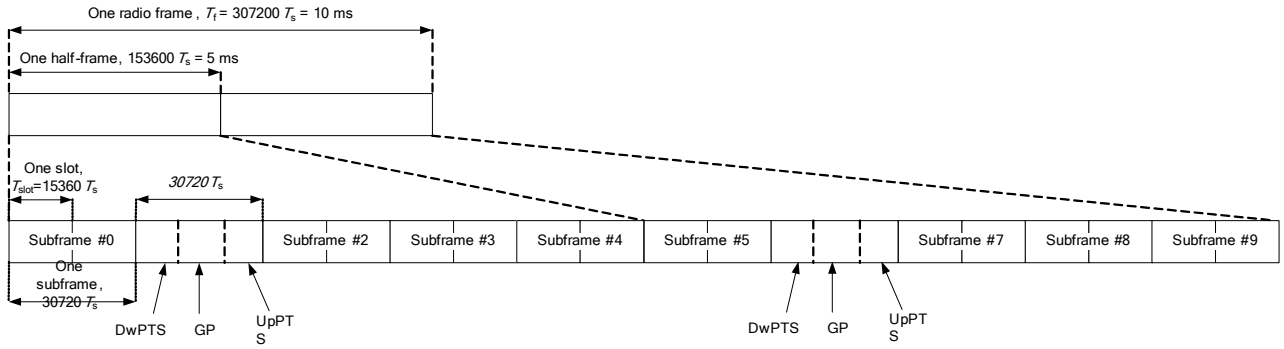


Figure 10.2: Frame structure type 2 (for 5 ms switch-point periodicity)

Table 10.1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

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

Table 10.2: Uplink-downlink configurations

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

Duty factor is calculated by:

Duty factor = uplink frame*6+UpPTS*2/one frame length

= (30720.T_s * 6+5120. T_s*2)/307200.T_s

= 0.633

According to the KDB 447498 D01, SAR should be evaluated at more than 3 frequencies for devices supporting transmit bands wider than 100MHz. Oct.2014 FCC-TCB conference notes (Dec. 2014 rev.) specifies the 5 test channels to use for 3GPP band 38/41 SAR evaluation.

10.4 Bluetooth & Wi-Fi Measurement Procedures for SAR

Normal network operating configurations are not suitable for measuring the SAR of 802.11 transmitters in general. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure that the results are consistent and reliable.

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in a test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

11 Conducted Output Power

This device has several different power modes for head, body-worn, hotspot SAR compliance; power selection is determined by the device's positioning and usage scenarios. The details of test scenarios categorization in the table below

Antenna	Head receiver on	Body worn receiver off	Hotspot
Main antenna	Power Level A1	Power Level B1	Power Level C1

11.1 GSM Measurement result

During the process of testing, the EUT was controlled via Anritsu Digital Radio Communication tester (MT8820C&MT8821C) to ensure the maximum power transmission and proper modulation. This result contains conducted output power for the EUT. In all cases, the measured peak output power should be greater and within 5% than EMI measurement.

Table 11.1-1: The conducted power measurement results-GSM850 PowerLevelA1/B1/C1

GSM 850 Speech(GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.39	32.33	32.20	33.30	/	/	/	/
GSM 850 GPRS(GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.22	32.19	32.13	33.30	-9.03	23.19	23.16	23.10
2 Txslots	28.96	28.89	28.83	30.50	-6.02	22.94	22.87	22.81
3 Txslots	28.03	27.98	27.91	28.50	-4.26	23.77	23.72	23.65
4 Txslots	**26.97**	**26.93**	**26.81**	**27.50**	**-3.01**	**23.96**	**23.92**	**23.80**
GSM 850 EGPRS(GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.25	32.24	32.15	33.30	-9.03	23.22	23.21	23.12
2 Txslots	28.98	28.95	28.86	30.50	-6.02	22.96	22.93	22.84
3 Txslots	28.05	28.03	27.94	28.50	-4.26	23.79	23.77	23.68
4 Txslots	**27.01**	**26.97**	**26.84**	**27.50**	**-3.01**	**24.00**	**23.96**	**23.83**
GSM 850 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	26.14	25.81	25.80	26.50	-9.03	17.11	16.78	16.77
2 Txslots	24.05	23.72	23.70	25.50	-6.02	18.03	17.70	17.68
3 Txslots	22.99	22.52	22.52	24.50	-4.26	18.73	18.26	18.26
4 Txslots	21.32	21.00	21.01	23.00	-3.01	18.31	17.99	18.00

NOTES:

1) Division Factors

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

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

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

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

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

According to the conducted power as above, the body measurements are performed with 4Txslots for GSM850 .

Table 11.1-2: The conducted power measurement results-GSM1900 Power Level A1

GSM 1900 Speech(GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.11	29.24	29.44	30.30	/	/	/	/
GSM 1900 GPRS(GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.48	29.58	29.71	30.30	-9.03	20.45	20.55	20.68
2 Txslots	28.38	28.94	29.03	29.50	-6.02	22.36	22.92	23.01
3 Txslots	**27.25**	**27.33**	**27.38**	**28.00**	**-4.26**	**22.99**	**23.07**	**23.12**
4 Txslots	25.80	25.84	25.93	26.50	-3.01	22.79	22.83	22.92
GSM 1900 EGPRS(GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.4	29.62	29.74	30.30	-9.03	20.37	20.59	20.71
2 Txslots	28.78	28.95	29.07	29.50	-6.02	22.76	22.93	23.05
3 Txslots	**27.21**	**27.34**	**27.41**	**28.00**	**-4.26**	**22.95**	**23.08**	**23.15**
4 Txslots	25.79	25.86	25.95	26.50	-3.01	22.78	22.85	22.94
GSM 1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.78	25.68	25.93	26.50	-9.03	16.75	16.65	16.90
2 Txslots	24.42	24.35	24.53	25.00	-6.02	18.40	18.33	18.51
3 Txslots	23.27	23.06	23.36	24.00	-4.26	19.01	18.80	19.10
4 Txslots	21.78	21.55	21.85	23.00	-3.01	18.77	18.54	18.84

NOTES:

1) Division Factors

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

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

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

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

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

According to the conducted power as above, the body measurements are performed with 3Txslots for GSM1900.

Table 11.1-3: The conducted power measurement results-GSM1900 Power Level B1

GSM 1900 Speech(GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	27.65	27.79	27.91	28.30	/	/	/	/
GSM 1900 GPRS(GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	27.62	27.73	27.87	28.30	-9.03	18.59	18.70	18.84
2 Txslots	25.71	25.77	25.90	26.50	-6.02	19.69	19.75	19.88
3 Txslots	**23.96**	**24.02**	**24.12**	**24.50**	**-4.26**	**19.70**	**19.76**	**19.89**
4 Txslots	22.60	22.68	22.78	23.00	-3.01	19.59	19.67	19.77
GSM 1900 EGPRS(GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	27.6	27.75	27.85	28.30	-9.03	18.57	18.72	18.82
2 Txslots	25.68	25.80	25.88	26.50	-6.02	19.66	19.78	19.86
3 Txslots	**23.94**	**24.05**	**24.13**	**24.50**	**-4.26**	**19.68**	**19.79**	**19.87**
4 Txslots	22.59	22.68	22.76	23.00	-3.01	19.58	19.67	19.75
GSM 1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	23.07	23.01	23.27	23.50	-9.03	14.04	13.98	14.24
2 Txslots	21.16	20.96	21.31	21.50	-6.02	15.14	14.94	15.29
3 Txslots	19.45	19.28	19.54	20.00	-4.26	15.19	15.02	15.28
4 Txslots	18.17	17.95	18.19	18.50	-3.01	15.16	14.94	15.18

NOTES:

1) Division Factors

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

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

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

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

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

According to the conducted power as above, the body measurements are performed with 3Txslots for GSM1900.

Table 11.1-4: The conducted power measurement results-GSM1900 Power Level C1

GSM 1900 Speech(GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	26.67	26.78	26.91	27.30	/	/	/	/

GSM 1900 GPRS(GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	26.65	26.76	26.86	27.30	-9.03	17.62	17.73	17.83
2 Txslots	24.67	24.75	24.84	25.50	-6.02	18.65	18.73	18.82
3 Txslots	**22.93**	**23.03**	**23.10**	**23.50**	**-4.26**	**18.67**	**18.77**	**18.84**
4 Txslots	21.67	21.77	21.84	22.00	-3.01	18.66	18.76	18.83
GSM 1900 EGPRS(GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	26.64	26.75	26.90	27.30	-9.03	17.61	17.72	17.87
2 Txslots	24.66	24.73	24.88	25.50	-6.02	18.64	18.71	18.86
3 Txslots	**22.93**	**23.01**	**23.14**	**23.50**	**-4.26**	**18.67**	**18.75**	**18.88**
4 Txslots	21.69	21.75	21.88	22.00	-3.01	18.68	18.74	18.87
GSM 1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	22.23	22.18	22.38	22.50	-9.03	13.20	13.15	13.35
2 Txslots	20.19	20.15	20.30	20.50	-6.02	14.17	14.13	14.28
3 Txslots	18.43	18.30	18.51	19.00	-4.26	14.17	14.04	14.25
4 Txslots	17.14	17.08	17.29	17.50	-3.01	14.13	14.07	14.28

NOTES:

1) Division Factors

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

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

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

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

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

According to the conducted power as above, the body measurements are performed with 3Txslots for GSM1900.

11.2 WCDMA Measurement result

Table 11.2-1: The conducted Power-WCDMA B2 Power Level A1

Item	band	FDDII result			
	ARFCN	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)	Tune up
WCDMA	\	24.26	24.33	24.18	24.50
HSDPA	1	23.34	23.34	23.21	24.00
	2	23.25	23.24	23.17	24.00
	3	22.74	22.72	22.66	23.50
	4	22.71	22.69	22.62	23.50
HSUPA	1	21.38	21.41	21.27	22.50
	2	21.33	21.34	21.25	21.50
	3	22.31	22.34	22.20	23.00

	4	20.86	20.89	20.78	21.50
	5	22.11	22.23	22.19	23.50
HSPA+		23.10	23.01	22.98	23.50

Table 11.2-2: The conducted Power-WCDMA B2 Power Level B1

Item	band	FDDII result			
	ARFCN	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)	Tune up
WCDMA	\	21.36	21.34	21.20	21.50
HSDPA	1	21.42	21.45	21.24	21.50
	2	21.31	21.32	21.20	21.50
	3	20.80	20.78	20.72	21.00
	4	20.78	20.73	20.70	21.00
HSUPA	1	19.93	19.40	19.18	20.50
	2	19.37	19.32	19.18	20.50
	3	20.42	20.36	20.17	21.00
	4	18.94	18.88	18.71	19.50
	5	20.23	20.27	20.15	21.00
HSPA+		20.12	19.98	19.81	20.50

Table 11.2-3: The conducted Power-WCDMA B2 Power Level C1

Item	band	FDDII result			
	ARFCN	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)	Tune up
WCDMA	\	20.20	20.25	20.16	21.00
HSDPA	1	20.31	20.36	20.23	21.00
	2	20.16	20.20	20.17	20.50
	3	19.64	19.72	19.68	20.00
	4	19.63	19.69	19.65	20.00
HSUPA	1	18.81	18.31	18.18	19.50
	2	18.26	18.29	18.17	19.50
	3	19.27	19.31	19.17	20.00
	4	17.83	17.84	17.70	18.50
	5	19.10	19.21	19.15	20.00
HSPA+		19.08	19.15	18.97	19.50

Table 11.2-4: The conducted Power-WCDMA B4 Power Level A1

Item	band	FDDIV result			
	ARFCN	1513 (1752.6MHz)	1412(1732.4MHz)	1312 (1712.4MHz)	Tune up
WCDMA	\	24.10	24.11	24.15	24.50
HSDPA	1	23.10	23.12	23.09	24.00

	2	23.01	23.04	23.05	24.00
	3	22.47	22.56	22.56	23.00
	4	22.49	22.53	22.53	23.00
HSUPA	**1**	21.65	21.65	21.65	22.00
	2	21.12	21.14	21.11	21.50
	3	22.16	22.14	22.13	22.50
	4	20.63	20.62	20.64	21.50
	5	22.02	22.05	22.08	23.00
HSPA+		23.08	22.99	23.10	23.50

Table 11.2-5: The conducted Power-WCDMA B4 Power Level B1

Item	**band**	**FDDIV result**			
	ARFCN	**1513 (1752.6MHz)**	**1412(1732.4MHz)**	**1312 (1712.4MHz)**	**Tune up**
WCDMA	\	21.00	21.14	21.28	21.50
HSDPA	**1**	21.05	21.17	21.24	21.50
	2	21.06	21.07	21.17	21.50
	3	20.58	20.58	20.73	21.00
	4	20.54	20.56	20.67	21.00
HSUPA	**1**	19.05	19.12	19.21	20.00
	2	19.04	19.12	19.20	20.00
	3	20.00	20.09	20.19	20.50
	4	18.52	18.61	18.72	19.50
	5	19.93	20.03	20.13	21.00
HSPA+		19.75	19.98	20.10	20.50

Table 11.2-6: The conducted Power-WCDMA B4 Power Level C1

Item	**band**	**FDDIV result**			
	ARFCN	**1513 (1752.6MHz)**	**1412(1732.4MHz)**	**1312 (1712.4MHz)**	**Tune up**
WCDMA	\	20.08	20.06	20.12	20.50
HSDPA	**1**	20.12	20.13	20.14	20.50
	2	20.10	20.07	20.07	20.50
	3	19.59	19.57	19.58	20.00
	4	19.58	19.52	19.57	20.00
HSUPA	**1**	18.11	18.07	18.10	19.00
	2	18.09	18.06	18.09	19.00
	3	19.12	19.11	19.10	19.50
	4	17.60	17.63	17.60	18.50
	5	19.01	19.05	19.05	20.00

HSPA+		18.95	19.00	19.10	19.50

Table 11.2-7: The conducted Power-WCDMA B5 Power Level A1

Item	band	FDDⅤ result			
	ARFCN	4233/(846.6MHz)	4183(836.6MHz)	4132 (826.4MHz)	Tune up
WCDMA	\	21.85	21.84	21.89	22.50
HSDPA	**1**	21.88	21.86	21.90	22.50
	2	21.85	21.79	21.88	22.50
	3	21.31	21.31	21.36	21.50
	4	21.33	21.28	21.36	21.50
HSUPA	**1**	20.31	19.80	19.81	21.00
	2	19.78	19.75	19.82	20.50
	3	20.80	20.75	20.83	21.50
	4	19.33	19.32	19.33	20.50
	5	20.68	20.69	20.73	21.50
HSPA+		20.68	20.72	20.80	21.50

Table 11.2-8: The conducted Power-WCDMA B5 Power Level B1/C1

Item	band	FDDⅤ result			
	ARFCN	4233/(846.6MHz)	4183(836.6MHz)	4132 (826.4MHz)	Tune up
WCDMA	\	23.77	23.75	23.81	24.50
HSDPA	**1**	22.78	22.77	22.81	23.50
	2	22.74	22.74	22.75	23.50
	3	22.28	22.29	22.35	23.00
	4	22.29	22.29	22.31	23.00
HSUPA	**1**	21.26	20.76	20.77	21.50
	2	20.73	20.71	20.79	21.50
	3	21.76	21.74	21.76	22.50
	4	20.25	20.24	20.30	21.00
	5	21.66	21.67	21.69	22.00
HSPA+		22.65	22.67	22.78	23.50

11.3 LTE Measurement result

The maximum output power(Tune-up Limit)

Band	Tune up		
	Power Level A1	Power Level B1	Power Level C1
LTE Band 25	25	22	21
LTE Band 66	25	22	21
LTE Band 26	23	25	25
LTE Band 12	23	25	25

LTE Band 41(PC3)	24	20	19
LTE Band 41(PC2)	26.5	23	22
LTE Band 71	23	24.5	24.5

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification. UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Maximum Power Reduction (MPR) for LTE-Normal Power

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	3

Maximum Power Reduction (MPR) for LTE -Low power

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	0
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	0
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	0

LTE B12 Power Level A1

Band 12-Power level A1					
Bandwidth (MHz)	RB allocation	Frequency	Actual output power (dBm)		
	RB offset	(MHz)	QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3 (5173)	21.93	22.06	22.09
		707.5 (5095)	22.12	22.30	22.27
		699.7 (5017)	22.08	22.21	22.19
	1RB-Middle (3)	715.3 (5173)	22.10	22.20	22.19
		707.5 (5095)	22.22	22.41	22.43
		699.7 (5017)	22.24	22.40	22.35
	1RB-Low (0)	715.3 (5173)	21.98	22.14	22.15
		707.5 (5095)	22.10	22.24	22.28
		699.7 (5017)	22.06	22.25	22.23
	3RB-High (3)	715.3 (5173)	22.06	22.05	22.00
		707.5 (5095)	22.21	22.24	22.19
		699.7 (5017)	22.21	22.13	22.12
	3RB-Middle (1)	715.3 (5173)	22.10	22.10	22.01
		707.5 (5095)	22.26	22.30	22.24
		699.7 (5017)	22.24	22.25	22.16
	3RB-Low (0)	715.3 (5173)	22.05	22.09	22.01
		707.5 (5095)	22.21	22.26	22.18
		699.7 (5017)	22.18	22.16	22.13
	6RB (0)	715.3 (5173)	22.04	22.02	21.01
		707.5 (5095)	22.22	22.22	21.17
		699.7 (5017)	22.19	22.20	21.13
3MHz	1RB-High (14)	714.5 (5165)	21.97	22.24	22.13
		707.5 (5095)	22.12	22.37	22.30
		700.5 (5025)	22.09	22.36	22.24
	1RB-Middle (7)	714.5 (5165)	22.18	22.43	22.33
		707.5 (5095)	22.25	22.50	22.46
		700.5 (5025)	22.25	22.39	22.36
	1RB-Low (0)	714.5 (5165)	22.08	22.31	22.20
		707.5 (5095)	22.18	22.41	22.31
		700.5 (5025)	22.08	22.37	22.25
	8RB-High (7)	714.5 (5165)	21.98	22.02	20.94
		707.5 (5095)	22.16	22.15	21.08
		700.5 (5025)	22.08	22.12	21.07
	8RB-Middle (4)	714.5 (5165)	22.08	22.09	20.98
		707.5 (5095)	22.19	22.19	21.13
		700.5 (5025)	22.13	22.18	21.09

	8RB-Low (0)	714.5 (5165)	22.04	22.07	21.00
		707.5 (5095)	22.17	22.17	21.09
		700.5 (5025)	22.10	22.13	21.04
	15RB (0)	714.5 (5165)	22.03	22.01	20.96
		707.5 (5095)	22.14	22.13	21.10
		700.5 (5025)	22.12	22.06	21.03
5MHz	1RB-High (24)	713.5 (5155)	21.90	22.18	22.03
		707.5 (5095)	22.07	22.32	22.22
		701.5 (5035)	22.04	22.31	22.18
	1RB-Middle (12)	713.5 (5155)	22.20	22.50	22.30
		707.5 (5095)	22.32	22.62	22.50
		701.5 (5035)	22.24	22.64	22.41
	1RB-Low (0)	713.5 (5155)	22.01	22.33	22.14
		707.5 (5095)	22.04	22.31	22.17
		701.5 (5035)	22.04	22.27	22.14
	12RB-High (13)	713.5 (5155)	22.01	22.06	20.96
		707.5 (5095)	22.19	22.21	21.13
		701.5 (5035)	22.09	22.13	21.00
	12RB-Middle (6)	713.5 (5155)	22.09	22.13	21.03
		707.5 (5095)	22.23	22.21	21.16
		701.5 (5035)	22.17	22.16	21.13
	12RB-Low (0)	713.5 (5155)	22.10	22.10	21.03
		707.5 (5095)	22.20	22.20	21.18
		701.5 (5035)	22.10	22.12	21.03
	25RB (0)	713.5 (5155)	22.05	22.04	20.99
		707.5 (5095)	22.18	22.18	21.14
		701.5 (5035)	22.10	22.08	21.06
10MHz	1RB-High (49)	711 (5130)	21.93	22.10	22.09
		707.5 (5095)	22.08	22.24	22.24
		704 (5060)	22.09	22.25	22.23
	1RB-Middle (24)	711 (5130)	22.20	22.38	22.37
		707.5 (5095)	22.24	22.40	22.39
		704 (5060)	22.22	22.41	22.35
	1RB-Low (0)	711 (5130)	22.11	22.30	22.25
		707.5 (5095)	22.11	22.22	22.21
		704 (5060)	22.04	22.22	22.22
	25RB-High (25)	711 (5130)	22.08	22.11	21.02
		707.5 (5095)	22.24	22.23	21.18
		704 (5060)	22.19	22.15	21.14
	25RB-Middle (12)	711 (5130)	22.15	22.16	21.12
		707.5 (5095)	22.22	22.22	21.16
		704 (5060)	22.15	22.16	21.14

	25RB-Low (0)	711 (5130)	22.23	22.21	21.15
		707.5 (5095)	22.18	22.20	21.18
		704 (5060)	22.18	22.14	21.12
	50RB (0)	711 (5130)	22.15	22.14	21.09
		707.5 (5095)	22.23	22.23	21.17
		704 (5060)	22.21	22.18	21.15

LTE B12 Power Level B1/C1

Band 12-Power level B1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	715.3 (5173)	23.92	23.02	22.15
		707.5 (5095)	24.06	23.23	22.38
		699.7 (5017)	24.01	23.16	22.31
	1RB-Middle (3)	715.3 (5173)	24.02	23.19	22.36
		707.5 (5095)	24.19	23.31	22.51
		699.7 (5017)	24.19	23.24	22.44
	1RB-Low (0)	715.3 (5173)	23.93	23.11	22.23
		707.5 (5095)	24.08	23.23	22.39
		699.7 (5017)	24.05	23.16	22.33
	3RB-High (3)	715.3 (5173)	24.02	22.97	22.07
		707.5 (5095)	24.20	23.18	22.26
		699.7 (5017)	24.16	23.13	22.23
	3RB-Middle (1)	715.3 (5173)	24.08	23.07	22.13
		707.5 (5095)	24.24	23.20	22.29
		699.7 (5017)	24.17	23.16	22.29
	3RB-Low (0)	715.3 (5173)	24.03	22.99	22.09
		707.5 (5095)	24.18	23.22	22.27
		699.7 (5017)	24.13	23.13	22.17
	6RB (0)	715.3 (5173)	23.03	22.11	21.11
		707.5 (5095)	23.21	22.25	21.28
		699.7 (5017)	23.14	22.20	21.25
3MHz	1RB-High (14)	714.5 (5165)	23.92	23.16	22.21
		707.5 (5095)	24.10	23.33	22.39
		700.5 (5025)	24.06	23.29	22.33
	1RB-Middle (7)	714.5 (5165)	24.15	23.19	22.37
		707.5 (5095)	24.25	23.47	22.52
		700.5 (5025)	24.19	23.48	22.46
	1RB-Low (0)	714.5 (5165)	24.02	23.14	22.30
		707.5 (5095)	24.14	23.25	22.39

		700.5 (5025)	24.03	23.28	22.32
	8RB-High (7)	714.5 (5165)	22.94	22.04	21.05
		707.5 (5095)	23.14	22.19	21.18
		700.5 (5025)	23.07	22.12	21.15
	8RB-Middle (4)	714.5 (5165)	23.03	22.05	21.10
		707.5 (5095)	23.16	22.24	21.22
		700.5 (5025)	23.10	22.17	21.16
	8RB-Low (0)	714.5 (5165)	22.99	22.09	21.05
		707.5 (5095)	23.12	22.23	21.20
		700.5 (5025)	23.08	22.14	21.13
	15RB (0)	714.5 (5165)	22.98	22.02	21.08
		707.5 (5095)	23.11	22.13	21.20
		700.5 (5025)	23.06	22.09	21.12
5MHz	1RB-High (24)	713.5 (5155)	23.81	23.04	22.04
		707.5 (5095)	24.00	23.26	22.28
		701.5 (5035)	23.99	23.23	22.26
	1RB-Middle (12)	713.5 (5155)	24.18	23.40	22.46
		707.5 (5095)	24.30	23.60	22.53
		701.5 (5035)	24.21	23.44	22.56
	1RB-Low (0)	713.5 (5155)	23.96	23.20	22.25
		707.5 (5095)	24.00	23.24	22.29
		701.5 (5035)	23.95	23.21	22.23
	12RB-High (13)	713.5 (5155)	22.97	22.07	21.04
		707.5 (5095)	23.17	22.25	21.25
		701.5 (5035)	23.07	22.13	21.16
	12RB-Middle (6)	713.5 (5155)	23.05	22.12	21.16
		707.5 (5095)	23.18	22.25	21.28
		701.5 (5035)	23.12	22.20	21.21
	12RB-Low (0)	713.5 (5155)	23.07	22.12	21.14
		707.5 (5095)	23.16	22.23	21.22
		701.5 (5035)	23.05	22.11	21.14
	25RB (0)	713.5 (5155)	23.00	22.05	21.09
		707.5 (5095)	23.14	22.17	21.21
		701.5 (5035)	23.06	22.10	21.15
10MHz	1RB-High (49)	711 (5130)	23.88	23.04	22.18
		707.5 (5095)	24.03	23.17	22.32
		704 (5060)	24.09	23.20	22.34
	1RB-Middle (24)	711 (5130)	24.19	23.29	22.42
		707.5 (5095)	24.22	23.34	22.48
		704 (5060)	24.19	23.33	22.42
	1RB-Low (0)	711 (5130)	24.06	23.21	22.38
		707.5 (5095)	24.05	23.22	22.36

		704 (5060)	24.01	23.12	22.29
	25RB-High (25)	711 (5130)	23.04	22.10	21.11
		707.5 (5095)	23.22	22.25	21.28
		704 (5060)	23.14	22.23	21.25
	25RB-Middle (12)	711 (5130)	23.15	22.20	21.20
		707.5 (5095)	23.20	22.24	21.28
		704 (5060)	23.15	22.18	21.23
	25RB-Low (0)	711 (5130)	23.18	22.21	21.24
		707.5 (5095)	23.16	22.22	21.25
		704 (5060)	23.16	22.17	21.21
	50RB (0)	711 (5130)	23.13	22.15	21.20
		707.5 (5095)	23.21	22.22	21.27
		704 (5060)	23.17	22.19	21.24

TE B25 Power Level A1

Band 25-Power level A1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	23.62	22.72	21.80
		1882.5 (26365)	23.69	22.91	21.91
		1850.7 (26047)	23.64	22.87	21.87
	1RB-Middle (3)	1914.3 (26683)	23.76	22.85	21.97
		1882.5 (26365)	23.84	23.01	22.04
		1850.7 (26047)	23.77	23.01	22.04
	1RB-Low (0)	1914.3 (26683)	23.65	22.82	21.89
		1882.5 (26365)	23.71	22.88	21.95
		1850.7 (26047)	23.66	22.91	21.94
	3RB-High (3)	1914.3 (26683)	23.73	22.73	21.76
		1882.5 (26365)	23.79	22.85	21.84
		1850.7 (26047)	23.75	22.80	21.77
	3RB-Middle (1)	1914.3 (26683)	23.83	22.76	21.80
		1882.5 (26365)	23.87	22.93	21.85
		1850.7 (26047)	23.84	22.89	21.88
	3RB-Low (0)	1914.3 (26683)	23.76	22.74	21.78
		1882.5 (26365)	23.81	22.83	21.83
		1850.7 (26047)	23.77	22.84	21.87
	6RB (0)	1914.3 (26683)	22.77	21.79	20.77
		1882.5 (26365)	22.84	21.83	20.87
		1850.7 (26047)	22.75	21.80	20.79
3MHz	1RB-High (14)	1913.5 (26675)	23.68	22.89	21.90
		1882.5 (26365)	23.78	23.05	21.99

		1851.5 (26055)	23.76	23.01	21.96
	1RB-Middle (7)	1913.5 (26675)	23.83	23.07	22.11
		1882.5 (26365)	23.96	23.21	22.22
		1851.5 (26055)	23.97	23.08	22.14
	1RB-Low (0)	1913.5 (26675)	23.76	23.02	22.03
		1882.5 (26365)	23.76	23.04	22.02
		1851.5 (26055)	23.79	23.02	22.04
	8RB-High (7)	1913.5 (26675)	22.73	21.76	20.76
		1882.5 (26365)	22.82	21.86	20.79
		1851.5 (26055)	22.79	21.81	20.79
	8RB-Middle (4)	1913.5 (26675)	22.81	21.82	20.81
		1882.5 (26365)	22.87	21.86	20.85
		1851.5 (26055)	22.83	21.85	20.85
	8RB-Low (0)	1913.5 (26675)	22.80	21.84	20.79
		1882.5 (26365)	22.81	21.87	20.82
		1851.5 (26055)	22.81	21.81	20.78
	15RB (0)	1913.5 (26675)	22.80	21.77	20.78
		1882.5 (26365)	22.81	21.75	20.82
		1851.5 (26055)	22.81	21.76	20.79
5MHz	1RB-High (24)	1912.5 (26665)	23.60	22.89	21.82
		1882.5 (26365)	23.69	22.97	21.87
		1852.5 (26065)	23.60	22.94	21.84
	1RB-Middle (12)	1912.5 (26665)	23.90	23.23	22.14
		1882.5 (26365)	24.05	23.35	22.20
		1852.5 (26065)	23.91	23.24	22.20
	1RB-Low (0)	1912.5 (26665)	23.69	22.90	21.92
		1882.5 (26365)	23.67	22.96	21.91
		1852.5 (26065)	23.68	22.96	21.90
	12RB-High (13)	1912.5 (26665)	22.74	21.75	20.78
		1882.5 (26365)	22.80	21.81	20.83
		1852.5 (26065)	22.77	21.80	20.77
	12RB-Middle (6)	1912.5 (26665)	22.86	21.91	20.89
		1882.5 (26365)	22.86	21.89	20.88
		1852.5 (26065)	22.82	21.86	20.82
	12RB-Low (0)	1912.5 (26665)	22.82	21.85	20.82
		1882.5 (26365)	22.83	21.86	20.86
		1852.5 (26065)	22.78	21.76	20.76
	25RB (0)	1912.5 (26665)	22.80	21.80	20.82
		1882.5 (26365)	22.83	21.83	20.83
		1852.5 (26065)	22.79	21.79	20.79
10MHz	1RB-High (49)	1910 (26640)	23.71	22.82	21.90
		1882.5 (26365)	23.77	22.91	22.00

		1855 (26090)	23.72	22.85	22.00
	1RB-Middle (24)	1910 (26640)	23.85	23.03	22.13
		1882.5 (26365)	23.83	23.04	22.14
		1855 (26090)	23.75	22.97	22.06
	1RB-Low (0)	1910 (26640)	23.83	22.92	22.04
		1882.5 (26365)	23.81	22.96	22.02
		1855 (26090)	23.79	22.95	22.00
	25RB-High (25)	1910 (26640)	22.87	21.85	20.86
		1882.5 (26365)	22.83	21.84	20.86
		1855 (26090)	22.79	21.79	20.82
	25RB-Middle (12)	1910 (26640)	22.93	21.91	20.93
		1882.5 (26365)	22.86	21.85	20.86
		1855 (26090)	22.78	21.77	20.79
	25RB-Low (0)	1910 (26640)	23.02	22.03	21.03
		1882.5 (26365)	22.90	21.91	20.92
		1855 (26090)	22.78	21.78	20.79
	50RB (0)	1910 (26640)	22.99	21.95	20.99
		1882.5 (26365)	22.90	21.87	20.91
		1855 (26090)	22.80	21.76	20.81
15MHz	1RB-High (74)	1907.5 (26615)	23.65	22.92	21.89
		1882.5 (26365)	23.76	23.00	22.00
		1857.5 (26115)	23.74	22.99	21.96
	1RB-Middle (37)	1907.5 (26615)	24.00	23.18	22.20
		1882.5 (26365)	23.84	23.15	22.21
		1857.5 (26115)	23.90	23.08	22.16
	1RB-Low (0)	1907.5 (26615)	23.83	23.10	22.09
		1882.5 (26365)	23.72	22.98	21.95
		1857.5 (26115)	23.72	22.99	21.97
	36RB-High (38)	1907.5 (26615)	22.86	21.81	20.83
		1882.5 (26365)	22.86	21.81	20.85
		1857.5 (26115)	22.83	21.78	20.82
	36RB-Middle (19)	1907.5 (26615)	22.94	21.89	20.94
		1882.5 (26365)	22.88	21.81	20.83
		1857.5 (26115)	22.78	21.76	20.78
	36RB-Low (0)	1907.5 (26615)	23.08	22.03	21.04
		1882.5 (26365)	22.88	21.85	20.90
		1857.5 (26115)	22.80	21.74	20.76
	75RB (0)	1907.5 (26615)	22.97	21.96	20.97
		1882.5 (26365)	22.88	21.87	20.86
		1857.5 (26115)	22.81	21.77	20.79
20MHz	1RB-High (99)	1905 (26590)	23.61	22.85	21.92
		1882.5 (26365)	23.73	23.06	21.96

		1860 (26140)	23.68	22.95	21.93
	1RB-Middle (50)	1905 (26590)	23.90	23.20	22.19
		1882.5 (26365)	23.87	23.17	22.09
		1860 (26140)	23.87	23.07	22.11
	1RB-Low (0)	1905 (26590)	23.77	23.09	22.04
		1882.5 (26365)	23.65	22.92	21.89
		1860 (26140)	23.71	23.02	21.90
	50RB-High (50)	1905 (26590)	22.79	21.77	20.80
		1882.5 (26365)	22.82	21.81	20.85
		1860 (26140)	22.85	21.83	20.86
	50RB-Middle (25)	1905 (26590)	22.97	21.96	20.99
		1882.5 (26365)	22.88	21.87	20.89
		1860 (26140)	22.83	21.82	20.84
	50RB-Low (0)	1905 (26590)	23.05	22.05	21.05
		1882.5 (26365)	22.95	21.90	20.95
		1860 (26140)	22.75	21.71	20.72
	100RB (0)	1905 (26590)	22.89	21.91	20.92
		1882.5 (26365)	22.86	21.86	20.88
		1860 (26140)	22.79	21.77	20.81

LTE B25 Power Level B1

Band 25-Power level B1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm) QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	20.57	20.77	20.77
		1882.5 (26365)	20.61	20.85	20.88
		1850.7 (26047)	20.57	20.78	20.83
	1RB-Middle (3)	1914.3 (26683)	20.69	20.90	20.92
		1882.5 (26365)	20.75	20.94	21.02
		1850.7 (26047)	20.75	20.98	20.95
	1RB-Low (0)	1914.3 (26683)	20.56	20.81	20.78
		1882.5 (26365)	20.63	20.87	20.89
		1850.7 (26047)	20.61	20.77	20.91
	3RB-High (3)	1914.3 (26683)	20.66	20.71	20.73
		1882.5 (26365)	20.73	20.78	20.79
		1850.7 (26047)	20.70	20.81	20.73
	3RB-Middle (1)	1914.3 (26683)	20.73	20.79	20.77
		1882.5 (26365)	20.78	20.84	20.81
		1850.7 (26047)	20.75	20.90	20.83
	3RB-Low (0)	1914.3 (26683)	20.69	20.74	20.74
		1882.5 (26365)	20.73	20.75	20.77

		1850.7 (26047)	20.71	20.85	20.78
	6RB (0)	1914.3 (26683)	20.72	20.74	20.76
		1882.5 (26365)	20.71	20.77	20.79
		1850.7 (26047)	20.69	20.77	20.77
3MHz	1RB-High (14)	1913.5 (26675)	20.62	20.99	20.88
		1882.5 (26365)	20.70	21.00	20.90
		1851.5 (26055)	20.67	21.02	20.93
	1RB-Middle (7)	1913.5 (26675)	20.90	21.01	21.05
		1882.5 (26365)	20.86	21.18	21.15
		1851.5 (26055)	20.89	21.13	21.17
	1RB-Low (0)	1913.5 (26675)	20.70	21.01	20.90
		1882.5 (26365)	20.71	20.92	20.92
		1851.5 (26055)	20.69	21.08	20.96
	8RB-High (7)	1913.5 (26675)	20.69	20.73	20.67
		1882.5 (26365)	20.71	20.78	20.74
		1851.5 (26055)	20.73	20.80	20.74
	8RB-Middle (4)	1913.5 (26675)	20.74	20.78	20.70
		1882.5 (26365)	20.77	20.79	20.79
		1851.5 (26055)	20.77	20.83	20.77
	8RB-Low (0)	1913.5 (26675)	20.70	20.79	20.71
		1882.5 (26365)	20.73	20.78	20.75
		1851.5 (26055)	20.71	20.79	20.73
	15RB (0)	1913.5 (26675)	20.71	20.69	20.70
		1882.5 (26365)	20.72	20.71	20.75
		1851.5 (26055)	20.71	20.72	20.79
5MHz	1RB-High (24)	1912.5 (26665)	20.50	20.85	20.72
		1882.5 (26365)	20.59	20.92	20.81
		1852.5 (26065)	20.53	20.79	20.78
	1RB-Middle (12)	1912.5 (26665)	20.92	21.31	21.14
		1882.5 (26365)	20.89	21.21	21.12
		1852.5 (26065)	20.82	21.26	21.11
	1RB-Low (0)	1912.5 (26665)	20.59	20.89	20.84
		1882.5 (26365)	20.60	20.90	20.85
		1852.5 (26065)	20.61	21.00	20.84
	12RB-High (13)	1912.5 (26665)	20.66	20.72	20.71
		1882.5 (26365)	20.70	20.74	20.73
		1852.5 (26065)	20.71	20.75	20.72
	12RB-Middle (6)	1912.5 (26665)	20.78	20.82	20.79
		1882.5 (26365)	20.78	20.84	20.82
		1852.5 (26065)	20.71	20.75	20.74
	12RB-Low (0)	1912.5 (26665)	20.74	20.76	20.76
		1882.5 (26365)	20.76	20.81	20.79

		1852.5 (26065)	20.70	20.72	20.68
	25RB (0)	1912.5 (26665)	20.72	20.73	20.73
		1882.5 (26365)	20.75	20.74	20.74
		1852.5 (26065)	20.71	20.73	20.72
10MHz	1RB-High (49)	1910 (26640)	20.62	20.74	20.86
		1882.5 (26365)	20.69	20.88	20.91
		1855 (26090)	20.64	20.77	20.89
	1RB-Middle (24)	1910 (26640)	20.78	21.00	21.03
		1882.5 (26365)	20.76	21.00	21.05
		1855 (26090)	20.76	20.93	21.01
	1RB-Low (0)	1910 (26640)	20.77	20.95	21.00
		1882.5 (26365)	20.71	20.88	20.93
		1855 (26090)	20.72	20.91	20.95
	25RB-High (25)	1910 (26640)	20.77	20.77	20.77
		1882.5 (26365)	20.75	20.77	20.75
		1855 (26090)	20.71	20.74	20.74
	25RB-Middle (12)	1910 (26640)	20.82	20.84	20.82
		1882.5 (26365)	20.76	20.77	20.79
		1855 (26090)	20.68	20.71	20.71
	25RB-Low (0)	1910 (26640)	20.96	20.97	20.96
		1882.5 (26365)	20.82	20.84	20.84
		1855 (26090)	20.72	20.73	20.72
	50RB (0)	1910 (26640)	20.92	20.89	20.92
		1882.5 (26365)	20.80	20.80	20.82
		1855 (26090)	20.69	20.71	20.73
15MHz	1RB-High (74)	1907.5 (26615)	20.62	20.94	20.84
		1882.5 (26365)	20.68	20.98	20.89
		1857.5 (26115)	20.65	21.00	20.84
	1RB-Middle (37)	1907.5 (26615)	20.87	21.26	21.16
		1882.5 (26365)	20.81	21.16	21.09
		1857.5 (26115)	20.79	21.08	21.03
	1RB-Low (0)	1907.5 (26615)	20.80	21.02	21.00
		1882.5 (26365)	20.62	20.95	20.88
		1857.5 (26115)	20.65	20.97	20.94
	36RB-High (38)	1907.5 (26615)	20.79	20.77	20.74
		1882.5 (26365)	20.77	20.74	20.73
		1857.5 (26115)	20.73	20.72	20.72
	36RB-Middle (19)	1907.5 (26615)	20.84	20.83	20.84
		1882.5 (26365)	20.78	20.77	20.74
		1857.5 (26115)	20.71	20.69	20.68
	36RB-Low (0)	1907.5 (26615)	20.99	20.97	20.95
		1882.5 (26365)	20.79	20.77	20.80

		1857.5 (26115)	20.72	20.70	20.71
	75RB (0)	1907.5 (26615)	20.87	20.88	20.88
		1882.5 (26365)	20.78	20.79	20.76
		1857.5 (26115)	20.71	20.71	20.73
20MHz	1RB-High (99)	1905 (26590)	20.57	20.95	20.78
		1882.5 (26365)	20.64	21.02	20.90
		1860 (26140)	20.60	20.93	20.84
	1RB-Middle (50)	1905 (26590)	20.86	21.25	21.08
		1882.5 (26365)	20.77	21.13	21.07
		1860 (26140)	20.81	21.17	21.02
	1RB-Low (0)	1905 (26590)	20.73	21.09	20.94
		1882.5 (26365)	20.57	20.86	20.80
		1860 (26140)	20.62	21.00	20.83
	50RB-High (50)	1905 (26590)	20.69	20.67	20.68
		1882.5 (26365)	20.73	20.73	20.78
		1860 (26140)	20.75	20.75	20.79
	50RB-Middle (25)	1905 (26590)	20.91	20.90	20.91
		1882.5 (26365)	20.78	20.78	20.81
		1860 (26140)	20.75	20.75	20.79
	50RB-Low (0)	1905 (26590)	20.95	20.93	20.94
		1882.5 (26365)	20.84	20.83	20.87
		1860 (26140)	20.68	20.68	20.68
	100RB (0)	1905 (26590)	20.79	20.81	20.80
		1882.5 (26365)	20.76	20.80	20.78
		1860 (26140)	20.71	20.71	20.72

LTE B25 Power Level C1

Band 25-Power level C1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1914.3 (26683)	19.73	19.91	19.93
		1882.5 (26365)	19.69	19.91	19.94
		1850.7 (26047)	19.70	19.93	20.01
	1RB-Middle (3)	1914.3 (26683)	19.88	20.08	20.07
		1882.5 (26365)	19.83	19.95	20.12
		1850.7 (26047)	19.80	20.06	20.11
	1RB-Low (0)	1914.3 (26683)	19.73	19.95	20.00
		1882.5 (26365)	19.68	19.89	19.99
		1850.7 (26047)	19.73	19.93	20.02
	3RB-High (3)	1914.3 (26683)	19.82	19.86	19.85
		1882.5 (26365)	19.78	19.87	19.84

		1850.7 (26047)	19.83	19.91	19.89
	3RB-Middle (1)	1914.3 (26683)	19.89	19.91	19.91
		1882.5 (26365)	19.83	19.88	19.88
		1850.7 (26047)	19.88	19.95	19.95
	3RB-Low (0)	1914.3 (26683)	19.84	19.86	19.83
		1882.5 (26365)	19.78	19.82	19.81
		1850.7 (26047)	19.81	19.89	19.86
	6RB (0)	1914.3 (26683)	19.83	19.84	19.89
		1882.5 (26365)	19.77	19.78	19.86
		1850.7 (26047)	19.80	19.89	19.92
3MHz	1RB-High (14)	1913.5 (26675)	19.82	20.00	20.06
		1882.5 (26365)	19.80	20.14	20.11
		1851.5 (26055)	19.81	20.07	20.10
	1RB-Middle (7)	1913.5 (26675)	19.99	20.13	20.20
		1882.5 (26365)	19.90	20.25	20.22
		1851.5 (26055)	20.04	20.21	20.29
	1RB-Low (0)	1913.5 (26675)	19.80	20.09	20.05
		1882.5 (26365)	19.79	20.06	20.02
		1851.5 (26055)	19.83	20.04	20.11
	8RB-High (7)	1913.5 (26675)	19.84	19.86	19.88
		1882.5 (26365)	19.82	19.88	19.85
		1851.5 (26055)	19.86	19.90	19.90
	8RB-Middle (4)	1913.5 (26675)	19.88	19.93	19.89
		1882.5 (26365)	19.83	19.91	19.86
		1851.5 (26055)	19.90	19.96	19.93
	8RB-Low (0)	1913.5 (26675)	19.86	19.92	19.90
		1882.5 (26365)	19.79	19.90	19.83
		1851.5 (26055)	19.87	19.91	19.89
	15RB (0)	1913.5 (26675)	19.84	19.83	19.90
		1882.5 (26365)	19.80	19.80	19.88
		1851.5 (26055)	19.83	19.85	19.88
5MHz	1RB-High (24)	1912.5 (26665)	19.72	20.07	19.94
		1882.5 (26365)	19.70	20.04	19.96
		1852.5 (26065)	19.73	20.09	20.01
	1RB-Middle (12)	1912.5 (26665)	19.98	20.29	20.24
		1882.5 (26365)	19.92	20.24	20.17
		1852.5 (26065)	19.97	20.39	20.17
	1RB-Low (0)	1912.5 (26665)	19.72	20.13	20.01
		1882.5 (26365)	19.68	20.08	19.97
		1852.5 (26065)	19.75	20.09	20.01
	12RB-High (13)	1912.5 (26665)	19.83	19.86	19.84
		1882.5 (26365)	19.80	19.88	19.85

		1852.5 (26065)	19.88	19.93	19.92
	12RB-Middle (6)	1912.5 (26665)	19.90	19.96	19.96
		1882.5 (26365)	19.85	19.92	19.90
		1852.5 (26065)	19.93	19.94	19.96
	12RB-Low (0)	1912.5 (26665)	19.89	19.91	19.89
		1882.5 (26365)	19.82	19.88	19.87
		1852.5 (26065)	19.82	19.84	19.87
	25RB (0)	1912.5 (26665)	19.89	19.91	19.91
		1882.5 (26365)	19.83	19.85	19.89
		1852.5 (26065)	19.85	19.88	19.91
10MHz	1RB-High (49)	1910 (26640)	19.81	20.00	20.05
		1882.5 (26365)	19.81	20.05	20.08
		1855 (26090)	19.74	19.92	20.04
	1RB-Middle (24)	1910 (26640)	19.96	20.21	20.19
		1882.5 (26365)	19.88	20.15	20.19
		1855 (26090)	19.92	20.11	20.21
	1RB-Low (0)	1910 (26640)	19.78	20.02	20.04
		1882.5 (26365)	19.80	19.96	20.06
		1855 (26090)	19.78	19.96	20.07
	25RB-High (25)	1910 (26640)	19.89	19.92	19.92
		1882.5 (26365)	19.80	19.88	19.89
		1855 (26090)	19.81	19.87	19.90
	25RB-Middle (12)	1910 (26640)	19.93	19.97	19.95
		1882.5 (26365)	19.86	19.88	19.93
		1855 (26090)	19.83	19.88	19.93
	25RB-Low (0)	1910 (26640)	20.05	20.09	20.07
		1882.5 (26365)	19.91	19.92	19.95
		1855 (26090)	19.80	19.84	19.88
	50RB (0)	1910 (26640)	20.01	20.00	20.04
		1882.5 (26365)	19.91	19.91	19.96
		1855 (26090)	19.82	19.82	19.90
15MHz	1RB-High (74)	1907.5 (26615)	19.78	20.09	20.01
		1882.5 (26365)	19.76	19.98	19.99
		1857.5 (26115)	19.75	20.04	19.99
	1RB-Middle (37)	1907.5 (26615)	20.00	20.24	20.19
		1882.5 (26365)	19.97	20.24	20.21
		1857.5 (26115)	19.97	20.32	20.20
	1RB-Low (0)	1907.5 (26615)	19.80	20.11	20.04
		1882.5 (26365)	19.76	20.05	19.96
		1857.5 (26115)	19.78	20.06	20.01
	36RB-High (38)	1907.5 (26615)	19.87	19.85	19.86
		1882.5 (26365)	19.85	19.88	19.86

		1857.5 (26115)	19.85	19.81	19.86
	36RB-Middle (19)	1907.5 (26615)	19.90	19.90	19.91
		1882.5 (26365)	19.90	19.92	19.92
		1857.5 (26115)	19.87	19.85	19.90
	36RB-Low (0)	1907.5 (26615)	19.95	19.94	19.95
		1882.5 (26365)	19.90	19.86	19.90
		1857.5 (26115)	19.88	19.85	19.88
	75RB (0)	1907.5 (26615)	19.92	19.92	19.94
		1882.5 (26365)	19.89	19.88	19.91
		1857.5 (26115)	19.82	19.83	19.86
20MHz	1RB-High (99)	1905 (26590)	19.73	20.06	19.94
		1882.5 (26365)	19.70	20.04	19.91
		1860 (26140)	19.67	20.04	19.94
	1RB-Middle (50)	1905 (26590)	19.95	20.26	20.14
		1882.5 (26365)	19.89	20.18	20.15
		1860 (26140)	19.92	20.21	20.15
	1RB-Low (0)	1905 (26590)	19.75	20.14	20.00
		1882.5 (26365)	19.63	20.05	19.91
		1860 (26140)	19.73	20.06	19.96
	50RB-High (50)	1905 (26590)	19.68	19.68	19.67
		1882.5 (26365)	19.79	19.81	19.83
		1860 (26140)	19.83	19.88	19.88
	50RB-Middle (25)	1905 (26590)	19.92	19.92	19.95
		1882.5 (26365)	19.88	19.93	19.94
		1860 (26140)	19.89	19.88	19.90
	50RB-Low (0)	1905 (26590)	19.94	19.94	19.98
		1882.5 (26365)	19.91	19.92	19.94
		1860 (26140)	19.81	19.81	19.85
	100RB (0)	1905 (26590)	19.83	19.84	19.84
		1882.5 (26365)	19.85	19.91	19.90
		1860 (26140)	19.82	19.83	19.83

LTE B26 Power Level A1

Band 26-Power level A1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (27033)	22.02	22.17	22.16
		831.5 (26865)	22.10	22.24	22.23
		814.7 (26697)	21.93	22.10	22.05
	1RB-Middle (3)	848.3 (27033)	22.10	22.29	22.28
		831.5 (26865)	22.20	22.38	22.36

		814.7 (26697)	22.02	22.19	22.18
	1RB-Low (0)	848.3 (27033)	22.01	22.17	22.14
		831.5 (26865)	22.09	22.18	22.22
		814.7 (26697)	21.91	22.03	22.02
	3RB-High (3)	848.3 (27033)	22.09	22.14	22.06
		831.5 (26865)	22.18	22.23	22.11
		814.7 (26697)	22.04	22.03	21.92
	3RB-Middle (1)	848.3 (27033)	22.15	22.16	22.09
		831.5 (26865)	22.21	22.23	22.11
		814.7 (26697)	22.05	22.11	21.96
	3RB-Low (0)	848.3 (27033)	22.10	22.10	22.00
		831.5 (26865)	22.17	22.19	22.07
		814.7 (26697)	22.02	22.02	21.91
	6RB (0)	848.3 (27033)	22.12	22.10	21.10
		831.5 (26865)	22.18	22.15	21.19
		814.7 (26697)	21.99	22.02	20.99
3MHz	1RB-High (14)	847.5 (27025)	22.10	22.31	22.21
		831.5 (26865)	22.16	22.47	22.28
		815.5 (26705)	22.03	22.30	22.13
	1RB-Middle (7)	847.5 (27025)	22.26	22.35	22.36
		831.5 (26865)	22.34	22.61	22.51
		815.5 (26705)	22.17	22.33	22.24
	1RB-Low (0)	847.5 (27025)	22.08	22.29	22.18
		831.5 (26865)	22.14	22.41	22.23
		815.5 (26705)	21.98	22.27	22.14
	8RB-High (7)	847.5 (27025)	22.09	22.12	21.09
		831.5 (26865)	22.22	22.26	21.15
		815.5 (26705)	22.03	22.06	21.00
	8RB-Middle (4)	847.5 (27025)	22.15	22.19	21.11
		831.5 (26865)	22.24	22.24	21.20
		815.5 (26705)	22.06	22.08	21.01
	8RB-Low (0)	847.5 (27025)	22.15	22.17	21.10
		831.5 (26865)	22.19	22.23	21.14
		815.5 (26705)	21.98	22.00	20.95
	15RB (0)	847.5 (27025)	22.14	22.08	21.13
		831.5 (26865)	22.20	22.17	21.17
		815.5 (26705)	22.01	22.00	21.00
5MHz	1RB-High (24)	846.5 (27015)	21.97	22.26	22.05
		831.5 (26865)	22.06	22.38	22.18
		816.5 (26715)	21.92	22.31	22.09
	1RB-Middle (12)	846.5 (27015)	22.25	22.59	22.35
		831.5 (26865)	22.32	22.51	22.42

		816.5 (26715)	22.08	22.49	22.29
	1RB-Low (0)	846.5 (27015)	21.95	22.20	22.06
		831.5 (26865)	22.01	22.28	22.13
		816.5 (26715)	21.89	22.21	22.03
	12RB-High (13)	846.5 (27015)	22.08	22.11	21.07
		831.5 (26865)	22.19	22.26	21.19
		816.5 (26715)	22.07	22.10	21.04
	12RB-Middle (6)	846.5 (27015)	22.18	22.20	21.15
		831.5 (26865)	22.24	22.26	21.20
		816.5 (26715)	22.08	22.13	21.06
	12RB-Low (0)	846.5 (27015)	22.14	22.16	21.11
		831.5 (26865)	22.18	22.19	21.11
		816.5 (26715)	21.99	22.02	20.94
	25RB (0)	846.5 (27015)	22.13	22.12	21.11
		831.5 (26865)	22.16	22.19	21.13
		816.5 (26715)	22.06	22.04	21.01
10MHz	1RB-High (49)	844 (26990)	22.07	22.19	22.16
		831.5 (26865)	22.12	22.31	22.25
		820 (26750)	21.91	22.07	22.02
	1RB-Middle (24)	844 (26990)	22.17	22.26	22.20
		831.5 (26865)	22.27	22.41	22.36
		820 (26750)	22.11	22.31	22.22
	1RB-Low (0)	844 (26990)	22.05	22.21	22.16
		831.5 (26865)	21.94	22.12	22.05
		820 (26750)	21.98	22.09	22.09
	25RB-High (25)	844 (26990)	22.06	22.06	21.02
		831.5 (26865)	22.20	22.24	21.18
		820 (26750)	22.03	22.03	21.01
	25RB-Middle (12)	844 (26990)	22.11	22.10	21.06
		831.5 (26865)	22.19	22.21	21.16
		820 (26750)	22.04	22.05	21.01
	25RB-Low (0)	844 (26990)	22.14	22.13	21.11
		831.5 (26865)	22.12	22.12	21.08
		820 (26750)	22.00	22.00	20.98
	50RB (0)	844 (26990)	22.10	22.10	21.07
		831.5 (26865)	22.17	22.18	21.15
		820 (26750)	22.02	22.01	20.98
15MHz	1RB-High (74)	841.5 (26965)	21.99	22.27	22.11
		831.5 (26865)	21.99	22.28	22.12
		822.5 (26775)	21.90	22.11	22.02
	1RB-Middle (37)	841.5 (26965)	22.24	22.46	22.22
		831.5 (26865)	22.32	22.57	22.42

		822.5 (26775)	22.13	22.44	22.28
	1RB-Low (0)	841.5 (26965)	22.07	22.24	22.20
		831.5 (26865)	21.88	22.15	22.02
		822.5 (26775)	21.91	22.21	22.04
	36RB-High (38)	841.5 (26965)	22.02	22.01	20.98
		831.5 (26865)	22.16	22.13	21.11
		822.5 (26775)	21.97	21.91	20.92
	36RB-Middle (19)	841.5 (26965)	22.11	22.08	21.05
		831.5 (26865)	22.21	22.19	21.12
		822.5 (26775)	22.07	22.02	20.99
	36RB-Low (0)	841.5 (26965)	22.12	22.09	21.08
		831.5 (26865)	22.04	22.03	21.00
		822.5 (26775)	22.02	22.00	20.95
	75RB (0)	841.5 (26965)	22.06	22.04	21.03
		831.5 (26865)	22.09	22.10	21.05
		822.5 (26775)	21.98	21.97	20.95

LTE B26 Power Level B1/C1

Band 26-Power level B1/C1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	848.3 (27033)	23.97	23.09	22.15
		831.5 (26865)	24.08	23.25	22.26
		814.7 (26697)	23.90	23.02	22.08
	1RB-Middle (3)	848.3 (27033)	24.11	23.22	22.28
		831.5 (26865)	24.20	23.34	22.37
		814.7 (26697)	24.03	23.15	22.24
	1RB-Low (0)	848.3 (27033)	24.00	23.12	22.17
		831.5 (26865)	24.07	23.26	22.29
		814.7 (26697)	23.89	23.07	22.10
	3RB-High (3)	848.3 (27033)	24.11	23.10	22.03
		831.5 (26865)	24.19	23.19	22.17
		814.7 (26697)	24.01	23.01	22.02
	3RB-Middle (1)	848.3 (27033)	24.19	23.16	22.12
		831.5 (26865)	24.23	23.22	22.22
		814.7 (26697)	24.05	23.02	21.98
	3RB-Low (0)	848.3 (27033)	24.14	23.14	22.08
		831.5 (26865)	24.18	23.18	22.17
		814.7 (26697)	23.99	23.00	21.98
	6RB (0)	848.3 (27033)	23.13	22.13	21.17

		831.5 (26865)	23.18	22.16	21.22
		814.7 (26697)	22.98	22.04	21.03
3MHz	1RB-High (14)	847.5 (27025)	24.09	23.19	22.27
		831.5 (26865)	24.16	23.44	22.36
		815.5 (26705)	24.02	23.27	22.23
	1RB-Middle (7)	847.5 (27025)	24.25	23.50	22.42
		831.5 (26865)	24.35	23.56	22.53
		815.5 (26705)	24.16	23.33	22.35
	1RB-Low (0)	847.5 (27025)	24.09	23.34	22.24
		831.5 (26865)	24.15	23.36	22.28
		815.5 (26705)	24.00	23.23	22.16
	8RB-High (7)	847.5 (27025)	23.13	22.14	21.13
		831.5 (26865)	23.23	22.26	21.23
		815.5 (26705)	23.03	22.04	21.07
	8RB-Middle (4)	847.5 (27025)	23.21	22.19	21.17
		831.5 (26865)	23.24	22.30	21.26
		815.5 (26705)	23.07	22.09	21.11
	8RB-Low (0)	847.5 (27025)	23.18	22.18	21.20
		831.5 (26865)	23.19	22.24	21.28
		815.5 (26705)	23.01	22.05	21.03
	15RB (0)	847.5 (27025)	23.16	22.11	21.16
		831.5 (26865)	23.23	22.18	21.25
		815.5 (26705)	23.05	22.00	21.08
5MHz	1RB-High (24)	846.5 (27015)	23.99	23.19	22.12
		831.5 (26865)	24.08	23.36	22.23
		816.5 (26715)	23.96	23.24	22.08
	1RB-Middle (12)	846.5 (27015)	24.21	23.54	22.41
		831.5 (26865)	24.34	23.70	22.51
		816.5 (26715)	24.21	23.37	22.34
	1RB-Low (0)	846.5 (27015)	23.95	23.16	22.10
		831.5 (26865)	24.04	23.34	22.18
		816.5 (26715)	23.88	23.18	22.08
	12RB-High (13)	846.5 (27015)	23.13	22.14	21.12
		831.5 (26865)	23.24	22.28	21.22
		816.5 (26715)	23.10	22.14	21.09
	12RB-Middle (6)	846.5 (27015)	23.19	22.25	21.19
		831.5 (26865)	23.26	22.27	21.25
		816.5 (26715)	23.14	22.14	21.13
	12RB-Low (0)	846.5 (27015)	23.19	22.19	21.16
		831.5 (26865)	23.17	22.21	21.17
		816.5 (26715)	23.02	22.05	21.03
	25RB (0)	846.5 (27015)	23.16	22.15	21.17

		831.5 (26865)	23.20	22.21	21.22
		816.5 (26715)	23.10	22.08	21.09
10MHz	1RB-High (49)	844 (26990)	24.09	23.13	22.25
		831.5 (26865)	24.15	23.28	22.33
		820 (26750)	23.98	23.12	22.16
	1RB-Middle (24)	844 (26990)	24.12	23.27	22.30
		831.5 (26865)	24.28	23.44	22.44
		820 (26750)	24.11	23.30	22.27
	1RB-Low (0)	844 (26990)	24.06	23.19	22.24
		831.5 (26865)	23.97	23.14	22.15
		820 (26750)	24.02	23.10	22.15
	25RB-High (25)	844 (26990)	23.11	22.07	21.10
		831.5 (26865)	23.24	22.25	21.25
		820 (26750)	23.08	22.09	21.09
	25RB-Middle (12)	844 (26990)	23.15	22.12	21.14
		831.5 (26865)	23.25	22.26	21.23
		820 (26750)	23.09	22.09	21.08
	25RB-Low (0)	844 (26990)	23.21	22.19	21.18
		831.5 (26865)	23.14	22.16	21.16
		820 (26750)	23.04	22.03	21.07
	50RB (0)	844 (26990)	23.16	22.13	21.15
		831.5 (26865)	23.23	22.18	21.21
		820 (26750)	23.06	22.04	21.10
15MHz	1RB-High (74)	841.5 (26965)	24.02	23.24	22.18
		831.5 (26865)	24.01	23.25	22.19
		822.5 (26775)	23.93	23.18	22.11
	1RB-Middle (37)	841.5 (26965)	24.26	23.34	22.38
		831.5 (26865)	24.35	23.55	22.53
		822.5 (26775)	24.20	23.34	22.34
	1RB-Low (0)	841.5 (26965)	24.08	23.35	22.25
		831.5 (26865)	23.91	23.14	22.08
		822.5 (26775)	23.95	23.19	22.13
	36RB-High (38)	841.5 (26965)	23.09	22.03	21.04
		831.5 (26865)	23.22	22.19	21.18
		822.5 (26775)	23.01	21.97	20.97
	36RB-Middle (19)	841.5 (26965)	23.14	22.11	21.11
		831.5 (26865)	23.24	22.20	21.20
		822.5 (26775)	23.11	22.08	21.08
	36RB-Low (0)	841.5 (26965)	23.16	22.12	21.16
		831.5 (26865)	23.11	22.05	21.08
		822.5 (26775)	23.07	22.03	21.03
	75RB (0)	841.5 (26965)	23.11	22.07	21.11

		831.5 (26865)	23.17	22.12	21.12
		822.5 (26775)	23.05	22.02	21.02

LTE B41 (PC3) Power Level A1

Band 41(PC3) - Power level A1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	22.86	22.25	21.24
		2640.3(41093)	22.88	22.19	21.20
		2593 (40620)	22.77	22.08	21.08
		2545.8(40148)	22.65	21.96	20.97
		2498.5 (39675)	22.73	22.04	21.04
	1RB-Middle (12)	2687.5 (41565)	22.98	22.25	21.33
		2640.3(41093)	23.03	22.34	21.32
		2593 (40620)	22.92	22.22	21.17
		2545.8(40148)	22.78	22.08	21.03
		2498.5 (39675)	22.84	22.14	21.13
	1RB-Low (0)	2687.5 (41565)	22.83	22.20	21.23
		2640.3(41093)	23.05	22.33	21.28
		2593 (40620)	22.79	22.11	21.14
		2545.8(40148)	22.62	21.94	20.95
		2498.5 (39675)	22.72	22.02	21.04
	12RB-High (13)	2687.5 (41565)	22.11	21.08	20.13
		2640.3(41093)	22.14	21.10	20.15
		2593 (40620)	22.00	20.96	19.98
		2545.8(40148)	21.83	20.81	19.80
		2498.5 (39675)	21.94	20.88	19.90
	12RB-Middle (6)	2687.5 (41565)	22.16	21.15	20.19
		2640.3(41093)	22.19	21.15	20.19
		2593 (40620)	22.06	21.00	20.04
		2545.8(40148)	21.88	20.85	19.84
		2498.5 (39675)	21.98	20.91	19.94
	12RB-Low (0)	2687.5 (41565)	22.10	21.09	20.11
		2640.3(41093)	22.19	21.13	20.14
		2593 (40620)	22.02	21.00	20.00
		2545.8(40148)	21.84	20.76	19.81
		2498.5 (39675)	21.90	20.87	19.88
	25RB (0)	2687.5 (41565)	22.15	21.22	20.23
		2640.3(41093)	22.14	21.23	20.24
		2593 (40620)	22.00	21.06	20.09
		2545.8(40148)	21.83	20.94	19.91

		2498.5 (39675)	21.93	20.99	20.00
10MHz	1RB-High (49)	2685 (41540)	22.99	22.22	21.35
		2639(41080)	22.93	22.15	21.25
		2593 (40620)	22.83	22.04	21.16
		2547(40160)	22.74	21.95	21.08
		2501 (39700)	22.79	22.00	21.09
	1RB-Middle (24)	2685 (41540)	23.08	22.29	21.35
		2639(41080)	23.08	22.25	21.45
		2593 (40620)	22.98	22.16	21.27
		2547(40160)	22.83	22.02	21.13
		2501 (39700)	22.92	22.11	21.21
	1RB-Low (0)	2685 (41540)	22.96	22.17	21.31
		2639(41080)	23.23	22.47	21.43
		2593 (40620)	22.93	22.12	21.24
		2547(40160)	22.67	21.95	21.02
		2501 (39700)	22.82	22.02	21.12
	25RB-High (25)	2685 (41540)	22.27	21.20	20.28
		2639(41080)	22.22	21.20	20.28
		2593 (40620)	22.06	21.03	20.07
		2547(40160)	21.91	20.89	19.96
		2501 (39700)	22.01	20.96	20.04
	25RB-Middle (12)	2685 (41540)	22.20	21.19	20.26
		2639(41080)	22.26	21.24	20.32
		2593 (40620)	22.08	21.03	20.14
		2547(40160)	21.93	20.91	19.96
		2501 (39700)	21.97	20.96	20.03
	25RB-Low (0)	2685 (41540)	22.21	21.16	20.31
		2639(41080)	22.28	21.26	20.34
		2593 (40620)	22.12	21.09	20.19
		2547(40160)	21.93	20.91	20.02
		2501 (39700)	21.98	20.97	20.03
	50RB (0)	2685 (41540)	22.21	21.20	20.25
		2639(41080)	22.25	21.25	20.27
		2593 (40620)	22.08	21.10	20.10
		2547(40160)	21.93	20.90	19.95
		2501 (39700)	21.98	20.96	20.00
15MHz	1RB-High (74)	2682.5 (41515)	23.01	22.30	21.24
		2637.8(41068)	22.96	22.24	21.18
		2593 (40620)	22.86	22.15	21.07
		2548.3(40173)	22.85	22.10	21.03
		2503.5 (39725)	22.86	22.13	21.05
	1RB-Middle	2682.5 (41515)	23.04	22.32	21.33

	(37)	2637.8(41068)	23.22	22.49	21.36
		2593 (40620)	22.99	22.26	21.26
		2548.3(40173)	22.94	22.11	21.09
		2503.5 (39725)	22.98	22.25	21.21
	1RB-Low (0)	2682.5 (41515)	22.95	22.25	21.18
		2637.8(41068)	23.25	22.46	21.36
		2593 (40620)	22.97	22.27	21.17
		2548.3(40173)	22.73	22.17	20.96
		2503.5 (39725)	22.88	22.16	21.07
	36RB-High (38)	2682.5 (41515)	22.13	21.13	20.12
		2637.8(41068)	22.18	21.18	20.15
		2593 (40620)	22.01	21.03	19.98
		2548.3(40173)	21.93	20.94	19.91
		2503.5 (39725)	21.96	20.96	19.94
	36RB-Middle (19)	2682.5 (41515)	22.16	21.17	20.15
		2637.8(41068)	22.24	21.25	20.23
		2593 (40620)	22.05	21.08	20.05
		2548.3(40173)	21.90	20.89	19.88
		2503.5 (39725)	22.00	20.99	19.97
	36RB-Low (0)	2682.5 (41515)	22.13	21.13	20.13
		2637.8(41068)	22.27	21.29	20.26
		2593 (40620)	22.07	21.10	20.07
		2548.3(40173)	21.89	20.90	19.88
		2503.5 (39725)	21.94	20.96	19.93
	75RB (0)	2682.5 (41515)	22.14	21.17	20.17
		2637.8(41068)	22.20	21.22	20.24
		2593 (40620)	22.04	21.07	20.06
		2548.3(40173)	21.93	20.96	19.94
		2503.5 (39725)	21.95	20.99	19.98
20MHz	1RB-High (99)	2680 (41490)	22.83	22.15	21.15
		2636.5(41055)	22.80	22.11	21.12
		2593 (40620)	22.69	22.00	20.99
		2549.5(40185)	22.66	21.97	20.94
		2506 (39750)	22.64	21.95	20.95
	1RB-Middle (50)	2680 (41490)	22.99	22.27	21.27
		2636.5(41055)	23.18	22.50	21.42
		2593 (40620)	22.91	22.25	21.30
		2549.5(40185)	22.87	22.16	21.17
		2506 (39750)	22.92	22.23	21.23
	1RB-Low (0)	2680 (41490)	22.77	22.10	21.17
		2636.5(41055)	23.02	22.33	21.39
		2593 (40620)	22.88	22.23	21.17

		2549.5(40185)	22.58	21.90	20.93
		2506 (39750)	22.79	22.06	21.04
	50RB-High (50)	2680 (41490)	22.07	21.09	20.08
		2636.5(41055)	22.15	21.19	20.19
		2593 (40620)	21.98	21.00	19.97
		2549.5(40185)	21.89	20.91	19.89
		2506 (39750)	21.93	20.96	19.95
	50RB-Middle (25)	2680 (41490)	22.12	21.13	20.13
		2636.5(41055)	22.24	21.29	20.27
		2593 (40620)	22.05	21.08	20.07
		2549.5(40185)	21.93	20.96	19.95
		2506 (39750)	22.00	21.02	20.00
	50RB-Low (0)	2680 (41490)	22.08	21.11	20.09
		2636.5(41055)	22.24	21.26	20.27
		2593 (40620)	22.12	21.15	20.11
		2549.5(40185)	21.90	20.95	19.91
		2506 (39750)	21.92	20.97	19.95
	100RB (0)	2680 (41490)	22.08	21.13	20.07
		2636.5(41055)	22.20	21.25	20.20
		2593 (40620)	22.07	21.11	20.04
		2549.5(40185)	21.89	20.92	19.87
		2506 (39750)	21.95	20.99	19.95

LTE B41 (PC3) Power Level B1

Band 41(PC3) - Power level B1					
Bandwidth (MHz)	RB allocation / RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	18.95	19.25	19.22
		2640.3(41093)	18.89	19.17	19.15
		2593 (40620)	18.77	19.07	19.03
		2545.8(40148)	18.59	18.89	18.86
		2498.5 (39675)	18.72	19.03	18.99
	1RB-Middle (12)	2687.5 (41565)	19.05	19.35	19.33
		2640.3(41093)	19.05	19.36	19.33
		2593 (40620)	18.87	19.16	19.15
		2545.8(40148)	18.71	19.01	18.97
		2498.5 (39675)	18.81	19.12	19.09
	1RB-Low (0)	2687.5 (41565)	18.92	19.25	19.22
		2640.3(41093)	18.93	19.26	19.25
		2593 (40620)	18.79	19.09	19.09

		2545.8(40148)	18.56	18.86	18.84
		2498.5 (39675)	18.69	19.00	19.01
	12RB-High (13)	2687.5 (41565)	19.13	19.08	19.11
		2640.3(41093)	19.08	19.05	19.06
		2593 (40620)	18.93	18.87	18.93
		2545.8(40148)	18.73	18.66	18.69
		2498.5 (39675)	18.86	18.80	18.83
	12RB-Middle (6)	2687.5 (41565)	19.17	19.15	19.17
		2640.3(41093)	19.15	19.11	19.12
		2593 (40620)	19.00	18.94	18.98
		2545.8(40148)	18.76	18.71	18.74
		2498.5 (39675)	18.92	18.86	18.90
	12RB-Low (0)	2687.5 (41565)	19.12	19.06	19.10
		2640.3(41093)	19.12	19.06	19.10
		2593 (40620)	18.95	18.91	18.96
		2545.8(40148)	18.73	18.66	18.70
		2498.5 (39675)	18.87	18.82	18.84
	25RB (0)	2687.5 (41565)	19.14	19.22	19.20
		2640.3(41093)	19.10	19.17	19.16
		2593 (40620)	18.94	19.01	18.98
		2545.8(40148)	18.75	18.81	18.77
		2498.5 (39675)	18.87	18.91	18.93
10MHz	1RB-High (49)	2685 (41540)	19.04	19.21	19.33
		2639(41080)	18.95	19.09	19.23
		2593 (40620)	18.81	18.99	19.10
		2547(40160)	18.70	18.87	18.98
		2501 (39700)	18.75	18.90	19.03
	1RB-Middle (24)	2685 (41540)	19.11	19.28	19.38
		2639(41080)	19.12	19.27	19.40
		2593 (40620)	18.96	19.11	19.23
		2547(40160)	18.77	18.90	19.04
		2501 (39700)	18.89	19.04	19.19
	1RB-Low (0)	2685 (41540)	18.98	19.17	19.28
		2639(41080)	19.10	19.25	19.38
		2593 (40620)	18.90	19.07	19.17
		2547(40160)	18.63	18.79	18.92
		2501 (39700)	18.78	18.95	19.08
	25RB-High (25)	2685 (41540)	19.20	19.17	19.25
		2639(41080)	19.16	19.13	19.21
		2593 (40620)	19.00	18.96	19.05
		2547(40160)	18.80	18.78	18.86
		2501 (39700)	18.93	18.89	18.99

	25RB-Middle (12)	2685 (41540)	19.16	19.14	19.24
		2639(41080)	19.20	19.17	19.25
		2593 (40620)	19.01	18.97	19.07
		2547(40160)	18.82	18.78	18.86
		2501 (39700)	18.91	18.88	18.97
	25RB-Low (0)	2685 (41540)	19.19	19.15	19.25
		2639(41080)	19.23	19.20	19.30
		2593 (40620)	19.03	19.04	19.11
		2547(40160)	18.82	18.77	18.87
		2501 (39700)	18.92	18.89	19.00
	50RB (0)	2685 (41540)	19.16	19.16	19.20
		2639(41080)	19.18	19.16	19.19
		2593 (40620)	19.03	19.01	19.06
		2547(40160)	18.80	18.80	18.83
		2501 (39700)	18.90	18.89	18.94
15MHz	1RB-High (74)	2682.5 (41515)	19.05	19.30	19.22
		2637.8(41068)	18.97	19.23	19.15
		2593 (40620)	18.85	19.12	19.02
		2548.3(40173)	18.74	19.03	18.94
		2503.5 (39725)	18.80	19.06	18.98
	1RB-Middle (37)	2682.5 (41515)	19.13	19.39	19.28
		2637.8(41068)	19.20	19.47	19.39
		2593 (40620)	19.00	19.28	19.17
		2548.3(40173)	18.87	19.14	19.04
		2503.5 (39725)	18.96	19.22	19.12
	1RB-Low (0)	2682.5 (41515)	18.98	19.23	19.14
		2637.8(41068)	19.12	19.41	19.33
		2593 (40620)	18.94	19.20	19.13
		2548.3(40173)	18.69	18.95	18.84
		2503.5 (39725)	18.85	19.11	19.03
	36RB-High (38)	2682.5 (41515)	19.09	19.07	19.08
		2637.8(41068)	19.09	19.10	19.09
		2593 (40620)	18.92	18.93	18.94
		2548.3(40173)	18.80	18.80	18.79
		2503.5 (39725)	18.85	18.85	18.85
	36RB-Middle (19)	2682.5 (41515)	19.11	19.10	19.10
		2637.8(41068)	19.16	19.16	19.16
		2593 (40620)	18.97	18.98	18.98
		2548.3(40173)	18.76	18.79	18.76
		2503.5 (39725)	18.90	18.90	18.90
	36RB-Low (0)	2682.5 (41515)	19.06	19.07	19.08
		2637.8(41068)	19.19	19.20	19.19

		2593 (40620)	18.98	19.00	18.99
		2548.3(40173)	18.75	18.78	18.76
		2503.5 (39725)	18.87	18.86	18.87
	75RB (0)	2682.5 (41515)	19.09	19.13	19.11
		2637.8(41068)	19.12	19.15	19.17
		2593 (40620)	18.94	18.98	19.00
		2548.3(40173)	18.78	18.81	18.81
		2503.5 (39725)	18.87	18.88	18.90
20MHz	1RB-High (99)	2680 (41490)	18.84	19.14	19.12
		2636.5(41055)	18.78	19.08	19.06
		2593 (40620)	18.64	18.94	18.93
		2549.5(40185)	18.57	18.87	18.86
		2506 (39750)	18.55	18.85	18.87
	1RB-Middle (50)	2680 (41490)	19.03	19.34	19.31
		2636.5(41055)	19.15	19.47	19.46
		2593 (40620)	18.89	19.22	19.21
		2549.5(40185)	18.76	19.09	19.05
		2506 (39750)	18.88	19.18	19.16
	1RB-Low (0)	2680 (41490)	18.76	19.06	19.06
		2636.5(41055)	18.97	19.30	19.29
		2593 (40620)	18.81	19.12	19.11
		2549.5(40185)	18.47	18.80	18.76
		2506 (39750)	18.69	19.01	18.99
	50RB-High (50)	2680 (41490)	19.01	19.05	19.06
		2636.5(41055)	19.06	19.10	19.10
		2593 (40620)	18.88	18.93	18.93
		2549.5(40185)	18.77	18.78	18.79
		2506 (39750)	18.81	18.85	18.84
	50RB-Middle (25)	2680 (41490)	19.05	19.08	19.10
		2636.5(41055)	19.17	19.21	19.24
		2593 (40620)	18.96	19.01	19.01
		2549.5(40185)	18.79	18.84	18.84
		2506 (39750)	18.89	18.92	18.92
	50RB-Low (0)	2680 (41490)	19.01	19.05	19.06
		2636.5(41055)	19.16	19.20	19.21
		2593 (40620)	19.01	19.05	19.05
		2549.5(40185)	18.77	18.79	18.79
		2506 (39750)	18.84	18.87	18.86
	100RB (0)	2680 (41490)	19.01	19.07	19.03
		2636.5(41055)	19.11	19.17	19.14
		2593 (40620)	18.95	19.00	18.98
		2549.5(40185)	18.73	18.81	18.77

		2506 (39750)	18.83	18.88	18.87

LTE B41(PC3) Power level C1

Band 41(PC3) - Power level C1					
Bandwidth (MHz)	RB allocation	Frequency	Actual output power (dBm)		
	RB offset	(MHz)	QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	18.22	18.54	18.51
		2640.3(41093)	18.01	18.34	18.34
		2593 (40620)	17.85	18.14	18.19
		2545.8(40148)	17.56	17.85	17.89
		2498.5 (39675)	17.76	18.08	18.09
	1RB-Middle (12)	2687.5 (41565)	18.27	18.62	18.61
		2640.3(41093)	18.11	18.44	18.48
		2593 (40620)	17.98	18.32	18.31
		2545.8(40148)	17.66	17.98	17.95
		2498.5 (39675)	17.91	18.22	18.22
	1RB-Low (0)	2687.5 (41565)	18.14	18.48	18.46
		2640.3(41093)	18.05	18.39	18.39
		2593 (40620)	17.86	18.21	18.23
		2545.8(40148)	17.53	17.88	17.90
		2498.5 (39675)	17.78	18.12	18.14
	12RB-High (13)	2687.5 (41565)	18.38	18.34	18.37
		2640.3(41093)	18.19	18.17	18.20
		2593 (40620)	18.00	17.98	18.03
		2545.8(40148)	17.70	17.64	17.71
		2498.5 (39675)	17.94	17.90	17.94
	12RB-Middle (6)	2687.5 (41565)	18.43	18.39	18.41
		2640.3(41093)	18.27	18.25	18.29
		2593 (40620)	18.10	18.07	18.12
		2545.8(40148)	17.75	17.73	17.74
		2498.5 (39675)	18.00	17.96	18.03
	12RB-Low (0)	2687.5 (41565)	18.38	18.32	18.35
		2640.3(41093)	18.22	18.18	18.21
		2593 (40620)	18.04	18.03	18.06
		2545.8(40148)	17.74	17.69	17.76
		2498.5 (39675)	17.94	17.91	17.99
	25RB (0)	2687.5 (41565)	18.38	18.43	18.46
		2640.3(41093)	18.24	18.29	18.31
		2593 (40620)	18.04	18.09	18.15
		2545.8(40148)	17.72	17.78	17.81
		2498.5 (39675)	17.96	18.03	18.05

10MHz	1RB-High (49)	2685 (41540)	18.27	18.47	18.59
		2639(41080)	18.07	18.23	18.42
		2593 (40620)	17.92	18.08	18.27
		2547(40160)	17.68	17.84	17.98
		2501 (39700)	17.80	17.96	18.14
	1RB-Middle (24)	2685 (41540)	18.36	18.53	18.67
		2639(41080)	18.26	18.42	18.59
		2593 (40620)	18.09	18.26	18.42
		2547(40160)	17.80	17.95	18.14
		2501 (39700)	17.98	18.13	18.30
	1RB-Low (0)	2685 (41540)	18.20	18.37	18.52
		2639(41080)	18.19	18.35	18.54
		2593 (40620)	18.00	18.16	18.33
		2547(40160)	17.64	17.79	17.98
		2501 (39700)	17.88	18.03	18.21
	25RB-High (25)	2685 (41540)	18.41	18.40	18.48
		2639(41080)	18.25	18.24	18.40
		2593 (40620)	18.09	18.09	18.19
		2547(40160)	17.79	17.79	17.92
		2501 (39700)	17.99	17.98	18.09
	25RB-Middle (12)	2685 (41540)	18.40	18.38	18.49
		2639(41080)	18.28	18.29	18.39
		2593 (40620)	18.13	18.10	18.23
		2547(40160)	17.78	17.78	17.90
		2501 (39700)	17.99	17.97	18.08
	25RB-Low (0)	2685 (41540)	18.40	18.40	18.52
		2639(41080)	18.34	18.32	18.45
		2593 (40620)	18.11	18.12	18.23
		2547(40160)	17.82	17.82	17.94
		2501 (39700)	18.02	17.99	18.13
	50RB (0)	2685 (41540)	18.40	18.41	18.48
		2639(41080)	18.29	18.28	18.36
		2593 (40620)	18.10	18.12	18.18
		2547(40160)	17.79	17.79	17.87
		2501 (39700)	17.98	18.00	18.05
15MHz	1RB-High (74)	2682.5 (41515)	18.29	18.57	18.51
		2637.8(41068)	18.10	18.40	18.31
		2593 (40620)	17.96	18.25	18.17
		2548.3(40173)	17.72	18.00	17.92
		2503.5 (39725)	17.86	18.13	18.05
	1RB-Middle (37)	2682.5 (41515)	18.30	18.56	18.49
		2637.8(41068)	18.26	18.57	18.48

		2593 (40620)	18.14	18.42	18.36
		2548.3(40173)	17.84	18.13	18.03
		2503.5 (39725)	18.02	18.31	18.21
	1RB-Low (0)	2682.5 (41515)	18.14	18.48	18.38
		2637.8(41068)	18.24	18.54	18.47
		2593 (40620)	18.05	18.34	18.26
		2548.3(40173)	17.73	17.99	17.92
		2503.5 (39725)	17.96	18.25	18.16
	36RB-High (38)	2682.5 (41515)	18.29	18.33	18.33
		2637.8(41068)	18.18	18.21	18.21
		2593 (40620)	18.04	18.06	18.06
		2548.3(40173)	17.80	17.82	17.81
		2503.5 (39725)	17.93	17.94	17.93
	36RB-Middle (19)	2682.5 (41515)	18.25	18.30	18.28
		2637.8(41068)	18.24	18.26	18.26
		2593 (40620)	18.10	18.11	18.11
		2548.3(40173)	17.79	17.82	17.80
		2503.5 (39725)	17.97	17.98	17.95
	36RB-Low (0)	2682.5 (41515)	18.24	18.28	18.25
		2637.8(41068)	18.28	18.30	18.30
		2593 (40620)	18.09	18.12	18.11
		2548.3(40173)	17.80	17.82	17.80
		2503.5 (39725)	17.98	18.00	17.99
	75RB (0)	2682.5 (41515)	18.28	18.35	18.34
		2637.8(41068)	18.22	18.29	18.30
		2593 (40620)	18.07	18.12	18.13
		2548.3(40173)	17.78	17.82	17.83
		2503.5 (39725)	17.95	17.99	17.98
20MHz	1RB-High (99)	2680 (41490)	18.11	18.45	18.42
		2636.5(41055)	17.96	18.26	18.25
		2593 (40620)	17.75	18.11	18.05
		2549.5(40185)	17.56	17.90	17.89
		2506 (39750)	17.62	17.94	17.91
	1RB-Middle (50)	2680 (41490)	18.20	18.49	18.51
		2636.5(41055)	18.21	18.54	18.57
		2593 (40620)	18.07	18.41	18.37
		2549.5(40185)	17.76	18.09	18.07
		2506 (39750)	17.93	18.27	18.23
	1RB-Low (0)	2680 (41490)	17.93	18.29	18.24
		2636.5(41055)	18.07	18.38	18.37
		2593 (40620)	17.86	18.23	18.21
		2549.5(40185)	17.56	17.89	17.85

		2506 (39750)	17.83	18.14	18.12
	50RB-High (50)	2680 (41490)	18.21	18.28	18.28
		2636.5(41055)	18.16	18.22	18.23
		2593 (40620)	17.96	18.03	18.02
		2549.5(40185)	17.74	17.80	17.79
		2506 (39750)	17.85	17.90	17.86
	50RB-Middle (25)	2680 (41490)	18.25	18.31	18.31
		2636.5(41055)	18.26	18.31	18.31
		2593 (40620)	18.07	18.12	18.13
		2549.5(40185)	17.78	17.82	17.82
		2506 (39750)	17.96	17.99	17.98
	50RB-Low (0)	2680 (41490)	18.19	18.24	18.24
		2636.5(41055)	18.25	18.33	18.32
		2593 (40620)	18.05	18.12	18.09
		2549.5(40185)	17.80	17.85	17.83
		2506 (39750)	17.97	18.00	18.00
	100RB (0)	2680 (41490)	18.21	18.28	18.24
		2636.5(41055)	18.21	18.30	18.25
		2593 (40620)	17.99	18.06	18.03
		2549.5(40185)	17.76	17.83	17.77
		2506 (39750)	17.92	17.96	17.91

LTE B41(PC2) Power level A1

Band 41 (PC2)-Power level A1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	25.82	25.03	24.12
		2640.3(41093)	25.81	25.04	24.06
		2593 (40620)	25.79	25.02	24.01
		2545.8(40148)	25.71	24.94	23.82
		2498.5 (39675)	25.81	25.02	23.94
	1RB-Middle (12)	2687.5 (41565)	26.01	25.17	24.25
		2640.3(41093)	26.05	25.23	24.26
		2593 (40620)	25.98	25.18	24.15
		2545.8(40148)	25.86	25.08	23.95
		2498.5 (39675)	25.97	25.15	23.98
	1RB-Low (0)	2687.5 (41565)	25.82	25.04	24.13
		2640.3(41093)	25.90	25.12	24.17
		2593 (40620)	25.82	25.07	24.05
		2545.8(40148)	25.68	24.91	23.80
		2498.5 (39675)	25.80	25.01	23.94

	12RB-High (13)	2687.5 (41565)	25.15	24.04	23.17
		2640.3(41093)	25.18	24.06	23.10
		2593 (40620)	25.08	23.97	22.99
		2545.8(40148)	24.95	23.82	22.78
		2498.5 (39675)	25.04	23.92	22.86
	12RB-Middle (6)	2687.5 (41565)	25.23	24.10	23.26
		2640.3(41093)	25.25	24.11	23.19
		2593 (40620)	25.17	24.04	23.06
		2545.8(40148)	24.99	23.86	22.83
		2498.5 (39675)	25.09	23.98	22.89
	12RB-Low (0)	2687.5 (41565)	25.15	24.04	23.15
		2640.3(41093)	25.21	24.09	23.19
		2593 (40620)	25.13	24.00	23.04
		2545.8(40148)	24.97	23.82	22.76
		2498.5 (39675)	25.06	23.94	22.90
	25RB (0)	2687.5 (41565)	25.12	24.16	23.26
		2640.3(41093)	25.14	24.17	23.24
		2593 (40620)	25.07	24.09	23.10
		2545.8(40148)	24.93	23.94	22.87
		2498.5 (39675)	25.01	23.98	22.96
10MHz	1RB-High (49)	2685 (41540)	25.99	25.14	24.18
		2639(41080)	25.83	25.08	24.12
		2593 (40620)	25.81	25.02	24.07
		2547(40160)	25.79	24.99	23.94
		2501 (39700)	25.84	25.04	24.04
	1RB-Middle (24)	2685 (41540)	26.07	25.21	24.26
		2639(41080)	26.03	25.23	24.29
		2593 (40620)	25.95	25.15	24.20
		2547(40160)	25.85	25.05	23.98
		2501 (39700)	25.94	25.13	24.12
	1RB-Low (0)	2685 (41540)	25.96	25.10	24.17
		2639(41080)	26.02	25.21	24.29
		2593 (40620)	25.91	25.10	24.15
		2547(40160)	25.73	24.95	23.88
		2501 (39700)	25.85	25.05	24.04
	25RB-High (25)	2685 (41540)	25.21	24.13	23.30
		2639(41080)	25.22	24.16	23.29
		2593 (40620)	25.09	24.04	23.14
		2547(40160)	25.00	23.94	22.95
		2501 (39700)	25.09	24.00	23.08
	25RB-Middle (12)	2685 (41540)	25.18	24.11	23.26
		2639(41080)	25.26	24.19	23.34

		2593 (40620)	25.14	24.07	23.16
		2547(40160)	25.00	23.94	22.97
		2501 (39700)	25.17	23.98	23.08
	25RB-Low (0)	2685 (41540)	25.19	24.14	23.28
		2639(41080)	25.29	24.22	23.38
		2593 (40620)	25.18	24.11	23.19
		2547(40160)	25.02	23.94	22.94
		2501 (39700)	25.07	23.97	23.04
	50RB (0)	2685 (41540)	25.26	24.19	23.06
		2639(41080)	25.29	24.23	23.31
		2593 (40620)	25.20	24.13	23.16
		2547(40160)	25.05	23.99	22.94
		2501 (39700)	25.12	24.05	23.04
15MHz	1RB-High (74)	2682.5 (41515)	25.93	25.08	24.14
		2637.8(41068)	25.87	25.10	24.12
		2593 (40620)	25.82	25.05	24.03
		2548.3(40173)	25.81	25.06	23.90
		2503.5 (39725)	25.87	25.12	24.04
	1RB-Middle (37)	2682.5 (41515)	26.07	25.22	24.26
		2637.8(41068)	26.18	25.32	24.35
		2593 (40620)	26.13	25.26	24.20
		2548.3(40173)	25.97	25.19	24.07
		2503.5 (39725)	26.01	25.25	24.07
	1RB-Low (0)	2682.5 (41515)	25.86	25.10	24.09
		2637.8(41068)	26.06	25.28	24.31
		2593 (40620)	26.03	25.20	24.10
		2548.3(40173)	25.76	25.02	23.85
		2503.5 (39725)	25.87	25.11	23.98
	36RB-High (38)	2682.5 (41515)	25.17	24.09	23.21
		2637.8(41068)	25.20	24.15	23.23
		2593 (40620)	25.08	24.05	23.04
		2548.3(40173)	25.04	23.99	22.92
		2503.5 (39725)	25.07	24.03	22.96
	36RB-Middle (19)	2682.5 (41515)	25.20	24.13	23.28
		2637.8(41068)	25.28	24.23	23.30
		2593 (40620)	25.14	24.10	23.10
		2548.3(40173)	25.01	23.96	22.96
		2503.5 (39725)	25.10	24.04	23.01
	36RB-Low (0)	2682.5 (41515)	25.16	24.11	23.26
		2637.8(41068)	25.30	24.26	23.32
		2593 (40620)	25.17	24.13	23.16
		2548.3(40173)	25.01	23.96	22.95

		2503.5 (39725)	25.07	24.01	23.01
	75RB (0)	2682.5 (41515)	25.18	24.15	23.22
		2637.8(41068)	25.23	24.19	23.34
		2593 (40620)	25.12	24.09	23.08
		2548.3(40173)	25.03	23.99	22.99
		2503.5 (39725)	25.08	24.04	23.08
20MHz	1RB-High (99)	2680 (41490)	25.72	24.96	24.06
		2636.5(41055)	25.73	25.00	24.00
		2593 (40620)	25.64	24.91	23.95
		2549.5(40185)	25.66	24.89	23.85
		2506 (39750)	25.68	24.90	23.86
	1RB-Middle (50)	2680 (41490)	25.94	25.16	24.27
		2636.5(41055)	26.10	25.32	24.35
		2593 (40620)	25.96	25.18	24.22
		2549.5(40185)	25.87	25.12	24.03
		2506 (39750)	25.96	25.20	24.10
	1RB-Low (0)	2680 (41490)	25.70	24.98	24.01
		2636.5(41055)	25.91	25.19	24.23
		2593 (40620)	25.82	25.11	24.11
		2549.5(40185)	25.61	24.84	23.76
		2506 (39750)	25.76	25.01	23.95
	50RB-High (50)	2680 (41490)	25.14	24.10	23.21
		2636.5(41055)	25.23	24.16	23.23
		2593 (40620)	25.06	24.01	23.10
		2549.5(40185)	24.98	23.93	22.93
		2506 (39750)	25.05	24.02	23.00
	50RB-Middle (25)	2680 (41490)	25.17	24.12	23.22
		2636.5(41055)	25.30	24.28	23.35
		2593 (40620)	25.16	24.11	23.14
		2549.5(40185)	24.99	23.98	22.95
		2506 (39750)	25.09	24.07	23.04
	50RB-Low (0)	2680 (41490)	25.16	24.11	23.20
		2636.5(41055)	25.33	24.28	23.34
		2593 (40620)	25.22	24.17	23.21
		2549.5(40185)	24.98	23.95	22.94
		2506 (39750)	25.05	24.02	22.99
	100RB (0)	2680 (41490)	25.20	24.15	23.17
		2636.5(41055)	25.30	24.31	23.31
		2593 (40620)	25.20	24.11	23.17
		2549.5(40185)	24.99	23.99	22.93
		2506 (39750)	25.10	24.07	23.02

LTE B41(PC2) Power level B1

Band 41 (PC2)-Power level B1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm) QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	21.95	22.22	22.24
		2640.3(41093)	21.92	22.21	22.16
		2593 (40620)	21.82	22.10	22.02
		2545.8(40148)	21.65	21.92	21.89
		2498.5 (39675)	21.78	22.05	22.01
	1RB-Middle (12)	2687.5 (41565)	22.02	22.31	22.31
		2640.3(41093)	22.08	22.31	22.25
		2593 (40620)	21.94	22.18	22.17
		2545.8(40148)	21.74	21.95	21.97
		2498.5 (39675)	21.85	22.11	22.08
	1RB-Low (0)	2687.5 (41565)	21.98	22.32	22.24
		2640.3(41093)	21.99	22.28	22.26
		2593 (40620)	21.83	22.15	22.07
		2545.8(40148)	21.60	21.92	21.95
		2498.5 (39675)	21.76	22.05	21.99
	12RB-High (13)	2687.5 (41565)	22.18	22.13	22.19
		2640.3(41093)	22.14	22.09	22.15
		2593 (40620)	22.00	21.96	21.96
		2545.8(40148)	21.79	21.74	21.76
		2498.5 (39675)	21.92	21.86	21.87
	12RB-Middle (6)	2687.5 (41565)	22.23	22.19	22.23
		2640.3(41093)	22.22	22.10	22.12
		2593 (40620)	22.08	22.01	22.03
		2545.8(40148)	21.83	21.77	21.80
		2498.5 (39675)	21.98	21.94	21.93
	12RB-Low (0)	2687.5 (41565)	22.20	22.12	22.18
		2640.3(41093)	22.17	22.14	22.13
		2593 (40620)	22.03	21.98	21.98
		2545.8(40148)	21.80	21.74	21.75
		2498.5 (39675)	21.95	21.90	21.88
	25RB (0)	2687.5 (41565)	22.30	22.25	22.26
		2640.3(41093)	22.16	22.23	22.22
		2593 (40620)	22.02	22.08	22.07
		2545.8(40148)	21.80	21.88	21.86
		2498.5 (39675)	21.94	21.98	21.97
10MHz	1RB-High (49)	2685 (41540)	22.10	22.28	22.30

		2639(41080)	21.98	22.24	22.22
		2593 (40620)	21.91	22.08	22.10
		2547(40160)	21.75	21.89	21.98
		2501 (39700)	21.78	21.99	22.04
	1RB-Middle (24)	2685 (41540)	22.14	22.26	22.37
		2639(41080)	22.15	22.34	22.32
		2593 (40620)	22.00	22.13	22.25
		2547(40160)	21.79	21.92	22.03
		2501 (39700)	21.91	22.08	22.17
	1RB-Low (0)	2685 (41540)	22.01	22.21	22.27
		2639(41080)	22.15	22.35	22.42
		2593 (40620)	22.02	22.15	22.14
		2547(40160)	21.71	21.84	21.97
		2501 (39700)	21.82	22.02	22.04
	25RB-High (25)	2685 (41540)	22.27	22.25	22.29
		2639(41080)	22.23	22.21	22.23
		2593 (40620)	22.08	22.01	22.07
		2547(40160)	21.91	21.81	21.91
		2501 (39700)	21.97	21.95	22.00
	25RB-Middle (12)	2685 (41540)	22.24	22.21	22.27
		2639(41080)	22.29	22.25	22.28
		2593 (40620)	22.10	22.07	22.03
		2547(40160)	21.80	21.84	21.90
		2501 (39700)	21.97	21.93	21.99
	25RB-Low (0)	2685 (41540)	22.26	22.21	22.28
		2639(41080)	22.31	22.29	22.33
		2593 (40620)	22.14	22.04	22.12
		2547(40160)	21.82	21.84	21.87
		2501 (39700)	21.98	21.95	21.99
	50RB (0)	2685 (41540)	22.28	22.26	22.29
		2639(41080)	22.26	22.27	22.24
		2593 (40620)	22.11	22.11	22.07
		2547(40160)	21.82	21.85	21.86
		2501 (39700)	21.94	21.95	21.98
15MHz	1RB-High (74)	2682.5 (41515)	22.12	22.27	22.20
		2637.8(41068)	22.02	22.22	22.13
		2593 (40620)	21.98	22.15	21.98
		2548.3(40173)	21.78	22.04	21.80
		2503.5 (39725)	21.83	22.02	21.97
	1RB-Middle (37)	2682.5 (41515)	22.16	22.39	22.22
		2637.8(41068)	22.19	22.41	22.37
		2593 (40620)	22.04	22.33	22.14

		2548.3(40173)	21.91	22.11	21.96
		2503.5 (39725)	22.01	22.20	22.12
	1RB-Low (0)	2682.5 (41515)	22.12	22.25	22.14
		2637.8(41068)	22.17	22.42	22.31
		2593 (40620)	22.10	22.23	22.16
		2548.3(40173)	21.74	21.95	21.85
		2503.5 (39725)	21.92	22.12	22.01
	36RB-High (38)	2682.5 (41515)	22.17	22.16	22.13
		2637.8(41068)	22.16	22.16	22.13
		2593 (40620)	22.01	22.02	21.95
		2548.3(40173)	21.87	21.86	21.82
		2503.5 (39725)	21.91	21.92	21.88
	36RB-Middle (19)	2682.5 (41515)	22.17	22.19	22.15
		2637.8(41068)	22.23	22.26	22.22
		2593 (40620)	22.06	22.06	21.99
		2548.3(40173)	21.86	21.86	21.83
		2503.5 (39725)	21.95	21.97	21.96
	36RB-Low (0)	2682.5 (41515)	22.15	22.15	22.11
		2637.8(41068)	22.27	22.26	22.22
		2593 (40620)	22.08	22.09	22.01
		2548.3(40173)	21.84	21.83	21.87
		2503.5 (39725)	21.94	21.93	21.98
	75RB (0)	2682.5 (41515)	22.17	22.20	22.15
		2637.8(41068)	22.20	22.22	22.20
		2593 (40620)	22.03	22.05	22.03
		2548.3(40173)	21.89	21.88	21.86
		2503.5 (39725)	21.92	21.96	21.95
20MHz	1RB-High (99)	2680 (41490)	21.93	22.15	22.13
		2636.5(41055)	21.84	22.11	22.05
		2593 (40620)	21.70	22.00	21.91
		2549.5(40185)	21.63	21.90	21.85
		2506 (39750)	21.59	21.89	21.93
	1RB-Middle (50)	2680 (41490)	22.06	22.33	22.31
		2636.5(41055)	22.20	22.42	22.43
		2593 (40620)	22.00	22.26	22.22
		2549.5(40185)	21.83	22.08	22.05
		2506 (39750)	21.92	22.19	22.16
	1RB-Low (0)	2680 (41490)	21.81	22.09	22.08
		2636.5(41055)	22.04	22.34	22.27
		2593 (40620)	21.89	22.13	22.09
		2549.5(40185)	21.53	21.83	21.79
		2506 (39750)	21.74	22.00	21.98

	50RB-High (50)	2680 (41490)	22.08	22.13	22.05
		2636.5(41055)	22.14	22.16	22.15
		2593 (40620)	21.94	21.98	21.95
		2549.5(40185)	21.84	21.86	21.81
		2506 (39750)	21.87	21.91	21.89
	50RB-Middle (25)	2680 (41490)	22.13	22.15	22.03
		2636.5(41055)	22.24	22.28	22.26
		2593 (40620)	22.03	22.08	22.04
		2549.5(40185)	21.87	21.90	21.86
		2506 (39750)	21.94	21.98	21.96
	50RB-Low (0)	2680 (41490)	22.07	22.13	22.08
		2636.5(41055)	22.23	22.27	22.24
		2593 (40620)	22.10	22.14	22.09
		2549.5(40185)	21.83	21.86	21.82
		2506 (39750)	21.91	21.93	21.92
	100RB (0)	2680 (41490)	22.09	22.14	22.07
		2636.5(41055)	22.18	22.25	22.17
		2593 (40620)	22.04	22.11	22.01
		2549.5(40185)	21.81	21.88	21.78
		2506 (39750)	21.90	21.96	21.91

LTE B41(PC2) Power level C1

Band 41 (PC2)-Power level C1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	2687.5 (41565)	21.20	21.51	21.70
		2640.3(41093)	21.09	21.35	21.45
		2593 (40620)	20.85	21.22	21.38
		2545.8(40148)	20.60	20.91	21.06
		2498.5 (39675)	20.82	21.14	21.28
	1RB-Middle (12)	2687.5 (41565)	21.21	21.56	21.68
		2640.3(41093)	21.14	21.48	21.60
		2593 (40620)	21.03	21.27	21.43
		2545.8(40148)	20.70	21.02	21.18
		2498.5 (39675)	20.92	21.24	21.40
	1RB-Low (0)	2687.5 (41565)	21.11	21.46	21.59
		2640.3(41093)	21.07	21.40	21.52
		2593 (40620)	20.91	21.26	21.40
		2545.8(40148)	20.60	20.92	21.09
		2498.5 (39675)	20.83	21.17	21.32

	12RB-High (13)	2687.5 (41565)	21.43	21.42	21.52
		2640.3(41093)	21.25	21.23	21.36
		2593 (40620)	21.08	21.01	21.32
		2545.8(40148)	20.75	20.74	20.92
		2498.5 (39675)	21.04	21.00	21.14
	12RB-Middle (6)	2687.5 (41565)	21.37	21.41	21.57
		2640.3(41093)	21.30	21.30	21.42
		2593 (40620)	21.17	21.15	21.39
		2545.8(40148)	20.86	20.81	21.00
		2498.5 (39675)	21.08	20.98	21.23
	12RB-Low (0)	2687.5 (41565)	21.40	21.38	21.58
		2640.3(41093)	21.30	21.25	21.38
		2593 (40620)	21.10	21.19	21.28
		2545.8(40148)	20.83	20.77	20.96
		2498.5 (39675)	21.04	21.00	21.16
	25RB (0)	2687.5 (41565)	21.39	21.48	21.61
		2640.3(41093)	21.24	21.36	21.46
		2593 (40620)	21.12	21.20	21.41
		2545.8(40148)	20.79	20.88	21.03
		2498.5 (39675)	21.09	21.10	21.23
10MHz	1RB-High (49)	2685 (41540)	21.27	21.47	21.66
		2639(41080)	21.09	21.30	21.48
		2593 (40620)	20.96	21.18	21.50
		2547(40160)	20.73	20.89	21.15
		2501 (39700)	20.85	21.03	21.30
	1RB-Middle (24)	2685 (41540)	21.36	21.54	21.73
		2639(41080)	21.29	21.49	21.67
		2593 (40620)	21.13	21.22	21.50
		2547(40160)	20.86	21.01	21.28
		2501 (39700)	21.04	21.21	21.45
	1RB-Low (0)	2685 (41540)	21.22	21.44	21.63
		2639(41080)	21.22	21.41	21.67
		2593 (40620)	21.04	21.17	21.54
		2547(40160)	20.68	20.87	21.01
		2501 (39700)	20.93	21.17	21.42
	25RB-High (25)	2685 (41540)	21.46	21.47	21.58
		2639(41080)	21.33	21.33	21.45
		2593 (40620)	21.17	21.20	21.37
		2547(40160)	20.88	20.83	21.08
		2501 (39700)	21.10	21.07	21.27
	25RB-Middle (12)	2685 (41540)	21.44	21.48	21.56
		2639(41080)	21.39	21.37	21.48

		2593 (40620)	21.20	21.12	21.36
		2547(40160)	20.87	20.88	21.07
		2501 (39700)	21.11	21.08	21.25
	25RB-Low (0)	2685 (41540)	21.47	21.45	21.56
		2639(41080)	21.38	21.42	21.50
		2593 (40620)	21.21	21.23	21.40
		2547(40160)	20.92	20.90	21.10
		2501 (39700)	21.12	21.09	21.30
	50RB (0)	2685 (41540)	21.46	21.48	21.55
		2639(41080)	21.36	21.37	21.43
		2593 (40620)	21.16	21.19	21.35
		2547(40160)	20.87	20.87	21.01
		2501 (39700)	21.09	21.10	21.22
15MHz	1RB-High (74)	2682.5 (41515)	21.30	21.56	21.60
		2637.8(41068)	21.14	21.40	21.36
		2593 (40620)	21.00	21.28	21.40
		2548.3(40173)	20.74	21.03	21.05
		2503.5 (39725)	20.88	21.15	21.19
	1RB-Middle (37)	2682.5 (41515)	21.34	21.61	21.59
		2637.8(41068)	21.34	21.58	21.40
		2593 (40620)	21.11	21.45	21.49
		2548.3(40173)	20.89	21.09	21.11
		2503.5 (39725)	21.04	21.32	21.33
	1RB-Low (0)	2682.5 (41515)	21.18	21.45	21.44
		2637.8(41068)	21.27	21.51	21.50
		2593 (40620)	21.09	21.38	21.40
		2548.3(40173)	20.75	21.04	21.08
		2503.5 (39725)	20.98	21.27	21.31
	36RB-High (38)	2682.5 (41515)	21.36	21.39	21.42
		2637.8(41068)	21.25	21.27	21.25
		2593 (40620)	21.09	21.14	21.20
		2548.3(40173)	20.85	20.89	20.98
		2503.5 (39725)	21.00	21.02	21.06
	36RB-Middle (19)	2682.5 (41515)	21.33	21.38	21.36
		2637.8(41068)	21.28	21.35	21.32
		2593 (40620)	21.12	21.16	21.25
		2548.3(40173)	20.86	20.87	20.95
		2503.5 (39725)	21.02	21.05	21.11
	36RB-Low (0)	2682.5 (41515)	21.29	21.34	21.32
		2637.8(41068)	21.33	21.36	21.32
		2593 (40620)	21.15	21.19	21.24
		2548.3(40173)	20.84	20.89	20.92

		2503.5 (39725)	21.04	21.08	21.13
	75RB (0)	2682.5 (41515)	21.34	21.38	21.43
		2637.8(41068)	21.28	21.34	21.37
		2593 (40620)	21.11	21.17	21.28
		2548.3(40173)	20.85	20.89	20.95
		2503.5 (39725)	21.00	21.05	21.14
20MHz	1RB-High (99)	2680 (41490)	21.14	21.42	21.46
		2636.5(41055)	20.95	21.32	21.28
		2593 (40620)	20.77	21.08	21.20
		2549.5(40185)	20.61	20.92	21.01
		2506 (39750)	20.64	20.95	21.05
	1RB-Middle (50)	2680 (41490)	21.20	21.46	21.46
		2636.5(41055)	21.25	21.58	21.57
		2593 (40620)	21.03	21.40	21.33
		2549.5(40185)	20.78	21.02	21.09
		2506 (39750)	20.95	21.26	21.37
	1RB-Low (0)	2680 (41490)	21.00	21.29	21.33
		2636.5(41055)	21.07	21.41	21.43
		2593 (40620)	20.89	21.22	21.31
		2549.5(40185)	20.59	20.89	21.01
		2506 (39750)	20.84	21.16	21.21
	50RB-High (50)	2680 (41490)	21.25	21.30	21.34
		2636.5(41055)	21.20	21.28	21.26
		2593 (40620)	21.01	21.07	21.18
		2549.5(40185)	20.79	20.82	20.92
		2506 (39750)	20.91	20.94	21.04
	50RB-Middle (25)	2680 (41490)	21.29	21.35	21.37
		2636.5(41055)	21.32	21.36	21.35
		2593 (40620)	21.10	21.19	21.28
		2549.5(40185)	20.81	20.88	20.95
		2506 (39750)	20.99	21.05	21.12
	50RB-Low (0)	2680 (41490)	21.23	21.29	21.41
		2636.5(41055)	21.30	21.37	21.35
		2593 (40620)	21.08	21.14	21.25
		2549.5(40185)	20.83	20.88	20.96
		2506 (39750)	21.02	21.05	21.13
	100RB (0)	2680 (41490)	21.26	21.34	21.31
		2636.5(41055)	21.28	21.36	21.30
		2593 (40620)	21.04	21.11	21.18
		2549.5(40185)	20.81	20.88	20.95
		2506 (39750)	20.98	21.06	21.08

LTE B66 Power Level A1

Band 66-Power level A1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	24.16	23.28	22.29
		1745 (132322)	24.25	23.35	22.40
		1710.7 (131979)	24.14	23.28	20.35
	1RB-Middle (3)	1779.3 (132665)	24.26	23.40	22.41
		1745 (132322)	24.35	23.41	22.47
		1710.7 (131979)	24.25	23.28	22.42
	1RB-Low (0)	1779.3 (132665)	24.15	23.28	22.35
		1745 (132322)	24.24	23.37	22.41
		1710.7 (131979)	24.14	23.26	22.32
	3RB-High (3)	1779.3 (132665)	24.25	23.21	22.24
		1745 (132322)	24.35	23.32	22.32
		1710.7 (131979)	24.25	23.26	22.21
	3RB-Middle (1)	1779.3 (132665)	24.30	23.30	22.27
		1745 (132322)	24.43	23.36	22.35
		1710.7 (131979)	24.30	23.27	22.20
	3RB-Low (0)	1779.3 (132665)	24.29	23.24	22.24
		1745 (132322)	24.35	23.25	22.30
		1710.7 (131979)	24.26	23.22	22.17
	6RB (0)	1779.3 (132665)	23.28	22.25	21.26
		1745 (132322)	23.38	22.35	21.34
		1710.7 (131979)	23.28	22.24	21.29
3MHz	1RB-High (14)	1778.5 (132657)	24.26	23.41	22.48
		1745 (132322)	24.35	23.55	22.50
		1711.5 (131987)	24.26	23.45	22.41
	1RB-Middle (7)	1778.5 (132657)	24.36	23.60	22.64
		1745 (132322)	24.53	23.67	22.69
		1711.5 (131987)	24.41	23.50	22.53
	1RB-Low (0)	1778.5 (132657)	24.25	23.34	22.42
		1745 (132322)	24.36	23.51	22.48
		1711.5 (131987)	24.30	23.42	22.40
	8RB-High (7)	1778.5 (132657)	23.30	22.30	21.21
		1745 (132322)	23.38	22.38	21.33
		1711.5 (131987)	23.30	22.29	21.24
	8RB-Middle (4)	1778.5 (132657)	23.34	22.36	21.28
		1745 (132322)	23.43	22.44	21.35
		1711.5 (131987)	23.34	22.35	21.28

	8RB-Low (0)	1778.5 (132657)	23.32	22.34	21.23
		1745 (132322)	23.42	22.40	21.33
		1711.5 (131987)	23.32	22.30	21.25
	15RB (0)	1778.5 (132657)	23.30	22.26	21.27
		1745 (132322)	23.41	22.34	21.34
		1711.5 (131987)	23.32	22.23	21.25
5MHz	1RB-High (24)	1777.5 (132647)	24.17	23.40	22.33
		1745 (132322)	24.27	23.51	22.42
		1712.5 (131997)	24.14	23.35	22.33
	1RB-Middle (12)	1777.5 (132647)	24.36	23.63	22.57
		1745 (132322)	24.48	23.72	22.71
		1712.5 (131997)	24.45	23.57	22.64
	1RB-Low (0)	1777.5 (132647)	24.19	23.40	22.32
		1745 (132322)	24.26	23.47	22.40
		1712.5 (131997)	24.17	23.36	22.32
	12RB-High (13)	1777.5 (132647)	23.29	22.28	21.23
		1745 (132322)	23.40	22.39	21.33
		1712.5 (131997)	23.33	22.31	21.25
	12RB-Middle (6)	1777.5 (132647)	23.36	22.37	21.30
		1745 (132322)	23.47	22.45	21.39
		1712.5 (131997)	23.34	22.32	21.27
	12RB-Low (0)	1777.5 (132647)	23.30	22.31	21.25
		1745 (132322)	23.39	22.36	21.35
		1712.5 (131997)	23.28	22.30	21.21
	25RB (0)	1777.5 (132647)	23.33	22.28	21.27
		1745 (132322)	23.40	22.37	21.37
		1712.5 (131997)	23.31	22.29	21.25
10MHz	1RB-High (49)	1775 (132622)	24.26	23.38	22.44
		1745 (132322)	24.35	23.47	22.50
		1715 (132022)	24.30	23.35	22.44
	1RB-Middle (24)	1775 (132622)	24.39	23.54	22.56
		1745 (132322)	24.46	23.58	22.61
		1715 (132022)	24.37	23.47	22.57
	1RB-Low (0)	1775 (132622)	24.31	23.39	22.46
		1745 (132322)	24.34	23.44	22.49
		1715 (132022)	24.25	23.35	22.43
	25RB-High (25)	1775 (132622)	23.40	22.35	21.34
		1745 (132322)	23.52	22.46	21.43
		1715 (132022)	23.42	22.37	21.36
	25RB-Middle (12)	1775 (132622)	23.38	22.37	21.32
		1745 (132322)	23.50	22.47	21.43
		1715 (132022)	23.38	22.36	21.32

	25RB-Low (0)	1775 (132622)	23.42	22.39	21.35
		1745 (132322)	23.48	22.44	21.40
		1715 (132022)	23.34	22.31	21.28
	50RB (0)	1775 (132622)	23.44	22.38	21.39
		1745 (132322)	23.53	22.45	21.45
		1715 (132022)	23.43	22.37	21.36
15MHz	1RB-High (74)	1772.5 (132597)	24.26	23.47	22.45
		1745 (132322)	24.32	23.49	22.51
		1717.5 (132047)	24.30	23.40	22.45
	1RB-Middle (37)	1772.5 (132597)	24.41	23.60	22.66
		1745 (132322)	24.56	23.63	22.67
		1717.5 (132047)	24.44	23.45	22.53
	1RB-Low (0)	1772.5 (132597)	24.28	23.46	22.44
		1745 (132322)	24.32	23.47	22.46
		1717.5 (132047)	24.19	23.43	22.37
	36RB-High (38)	1772.5 (132597)	23.40	22.37	21.30
		1745 (132322)	23.52	22.43	21.43
		1717.5 (132047)	23.45	22.38	21.38
	36RB-Middle (19)	1772.5 (132597)	23.42	22.35	21.35
		1745 (132322)	23.52	22.45	21.42
		1717.5 (132047)	23.39	22.33	21.31
	36RB-Low (0)	1772.5 (132597)	23.42	22.36	21.35
		1745 (132322)	23.50	22.40	21.41
		1717.5 (132047)	23.36	22.28	21.25
	75RB (0)	1772.5 (132597)	23.44	22.37	21.36
		1745 (132322)	23.50	22.44	21.42
		1717.5 (132047)	23.39	22.33	21.31
20MHz	1RB-High (99)	1770 (132572)	24.21	23.41	22.38
		1745 (132322)	24.20	23.45	22.40
		1720 (132072)	24.28	23.52	22.43
	1RB-Middle (50)	1770 (132572)	24.39	23.60	22.57
		1745 (132322)	24.47	23.69	22.61
		1720 (132072)	24.36	23.60	22.52
	1RB-Low (0)	1770 (132572)	24.19	23.36	22.37
		1745 (132322)	24.22	23.41	22.40
		1720 (132072)	24.13	23.34	22.26
	50RB-High (50)	1770 (132572)	23.40	22.37	21.33
		1745 (132322)	23.52	22.46	21.45
		1720 (132072)	23.49	22.40	21.42
	50RB-Middle (25)	1770 (132572)	23.47	22.42	21.39
		1745 (132322)	23.54	22.47	21.47
		1720 (132072)	23.40	22.35	21.31

	50RB-Low (0)	1770 (132572)	23.45	22.36	21.38
		1745 (132322)	23.49	22.42	21.41
		1720 (132072)	23.33	22.26	21.25
	100RB (0)	1770 (132572)	23.41	22.38	21.36
		1745 (132322)	23.45	22.45	21.43
		1720 (132072)	23.35	22.32	21.32

LTE B66 Power Level B1

Band 66-Power level B1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	21.12	21.31	21.28
		1745 (132322)	21.20	21.35	21.34
		1710.7 (131979)	21.06	21.26	21.22
	1RB-Middle (3)	1779.3 (132665)	21.24	21.40	21.36
		1745 (132322)	21.33	21.43	21.48
		1710.7 (131979)	21.18	21.39	21.33
	1RB-Low (0)	1779.3 (132665)	21.10	21.31	21.26
		1745 (132322)	21.19	21.37	21.36
		1710.7 (131979)	21.06	21.32	21.24
	3RB-High (3)	1779.3 (132665)	21.25	21.23	21.14
		1745 (132322)	21.32	21.30	21.31
		1710.7 (131979)	21.20	21.25	21.12
	3RB-Middle (1)	1779.3 (132665)	21.25	21.29	21.20
		1745 (132322)	21.36	21.34	21.27
		1710.7 (131979)	21.21	21.28	21.18
	3RB-Low (0)	1779.3 (132665)	21.19	21.21	21.15
		1745 (132322)	21.29	21.32	21.22
		1710.7 (131979)	21.17	21.17	21.09
	6RB (0)	1779.3 (132665)	21.21	21.19	21.17
		1745 (132322)	21.31	21.29	21.25
		1710.7 (131979)	21.14	21.20	21.14
3MHz	1RB-High (14)	1778.5 (132657)	21.18	21.50	21.33
		1745 (132322)	21.28	21.59	21.43
		1711.5 (131987)	21.22	21.36	21.34
	1RB-Middle (7)	1778.5 (132657)	21.36	21.57	21.55
		1745 (132322)	21.52	21.62	21.62
		1711.5 (131987)	21.35	21.53	21.50
	1RB-Low (0)	1778.5 (132657)	21.18	21.48	21.33
		1745 (132322)	21.30	21.56	21.43
		1711.5 (131987)	21.19	21.43	21.34

	8RB-High (7)	1778.5 (132657)	21.22	21.25	21.15
		1745 (132322)	21.31	21.34	21.26
		1711.5 (131987)	21.17	21.22	21.12
	8RB-Middle (4)	1778.5 (132657)	21.27	21.29	21.18
		1745 (132322)	21.35	21.39	21.30
		1711.5 (131987)	21.25	21.29	21.17
	8RB-Low (0)	1778.5 (132657)	21.20	21.26	21.14
		1745 (132322)	21.31	21.34	21.23
		1711.5 (131987)	21.20	21.28	21.15
	15RB (0)	1778.5 (132657)	21.22	21.20	21.17
		1745 (132322)	21.32	21.31	21.25
		1711.5 (131987)	21.18	21.17	21.13
5MHz	1RB-High (24)	1777.5 (132647)	21.12	21.45	21.27
		1745 (132322)	21.17	21.50	21.32
		1712.5 (131997)	21.06	21.41	21.22
	1RB-Middle (12)	1777.5 (132647)	21.40	21.66	21.53
		1745 (132322)	21.37	21.67	21.64
		1712.5 (131997)	21.39	21.61	21.52
	1RB-Low (0)	1777.5 (132647)	21.14	21.42	21.30
		1745 (132322)	21.20	21.50	21.34
		1712.5 (131997)	21.08	21.45	21.24
	12RB-High (13)	1777.5 (132647)	21.22	21.27	21.15
		1745 (132322)	21.32	21.36	21.23
		1712.5 (131997)	21.20	21.23	21.16
	12RB-Middle (6)	1777.5 (132647)	21.28	21.29	21.20
		1745 (132322)	21.37	21.38	21.28
		1712.5 (131997)	21.23	21.28	21.19
	12RB-Low (0)	1777.5 (132647)	21.23	21.23	21.16
		1745 (132322)	21.32	21.32	21.23
		1712.5 (131997)	21.16	21.17	21.13
	25RB (0)	1777.5 (132647)	21.21	21.26	21.17
		1745 (132322)	21.33	21.32	21.25
		1712.5 (131997)	21.21	21.20	21.15
10MHz	1RB-High (49)	1775 (132622)	21.20	21.42	21.38
		1745 (132322)	21.29	21.51	21.42
		1715 (132022)	21.18	21.27	21.33
	1RB-Middle (24)	1775 (132622)	21.33	21.54	21.44
		1745 (132322)	21.42	21.64	21.55
		1715 (132022)	21.31	21.49	21.47
	1RB-Low (0)	1775 (132622)	21.26	21.44	21.36
		1745 (132322)	21.27	21.48	21.37
		1715 (132022)	21.15	21.32	21.32

	25RB-High (25)	1775 (132622)	21.30	21.29	21.25
		1745 (132322)	21.42	21.38	21.33
		1715 (132022)	21.28	21.28	21.24
	25RB-Middle (12)	1775 (132622)	21.30	21.30	21.25
		1745 (132322)	21.41	21.40	21.34
		1715 (132022)	21.25	21.25	21.20
	25RB-Low (0)	1775 (132622)	21.35	21.32	21.28
		1745 (132322)	21.41	21.37	21.32
		1715 (132022)	21.23	21.22	21.15
	50RB (0)	1775 (132622)	21.33	21.33	21.27
		1745 (132322)	21.43	21.41	21.34
		1715 (132022)	21.27	21.26	21.23
15MHz	1RB-High (74)	1772.5 (132597)	21.22	21.48	21.34
		1745 (132322)	21.28	21.50	21.40
		1717.5 (132047)	21.21	21.34	21.40
	1RB-Middle (37)	1772.5 (132597)	21.39	21.65	21.55
		1745 (132322)	21.50	21.77	21.66
		1717.5 (132047)	21.35	21.61	21.54
	1RB-Low (0)	1772.5 (132597)	21.21	21.41	21.36
		1745 (132322)	21.25	21.55	21.39
		1717.5 (132047)	21.13	21.45	21.30
	36RB-High (38)	1772.5 (132597)	21.35	21.28	21.24
		1745 (132322)	21.42	21.40	21.32
		1717.5 (132047)	21.32	21.30	21.26
	36RB-Middle (19)	1772.5 (132597)	21.33	21.30	21.22
		1745 (132322)	21.42	21.41	21.31
		1717.5 (132047)	21.26	21.24	21.19
	36RB-Low (0)	1772.5 (132597)	21.35	21.30	21.27
		1745 (132322)	21.39	21.36	21.28
		1717.5 (132047)	21.24	21.19	21.15
	75RB (0)	1772.5 (132597)	21.35	21.35	21.27
		1745 (132322)	21.41	21.40	21.34
		1717.5 (132047)	21.27	21.25	21.21
20MHz	1RB-High (99)	1770 (132572)	21.13	21.47	21.29
		1745 (132322)	21.15	21.49	21.35
		1720 (132072)	21.20	21.50	21.37
	1RB-Middle (50)	1770 (132572)	21.38	21.57	21.55
		1745 (132322)	21.45	21.74	21.52
		1720 (132072)	21.31	21.63	21.43
	1RB-Low (0)	1770 (132572)	21.11	21.46	21.31
		1745 (132322)	21.15	21.42	21.29
		1720 (132072)	21.05	21.39	21.20

	50RB-High (50)	1770 (132572)	21.31	21.28	21.23
		1745 (132322)	21.42	21.40	21.34
		1720 (132072)	21.37	21.35	21.33
	50RB-Middle (25)	1770 (132572)	21.36	21.33	21.31
		1745 (132322)	21.44	21.42	21.37
		1720 (132072)	21.27	21.27	21.22
	50RB-Low (0)	1770 (132572)	21.35	21.30	21.27
		1745 (132322)	21.39	21.36	21.31
		1720 (132072)	21.19	21.17	21.12
	100RB (0)	1770 (132572)	21.30	21.29	21.26
		1745 (132322)	21.36	21.36	21.31
		1720 (132072)	21.26	21.27	21.22

LTE B66 Power Level C1

Band 66-Power level C1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1RB-High (5)	1779.3 (132665)	20.11	20.31	20.25
		1745 (132322)	20.17	20.36	20.36
		1710.7 (131979)	20.05	20.23	20.25
	1RB-Middle (3)	1779.3 (132665)	20.21	20.39	20.41
		1745 (132322)	20.32	20.51	20.51
		1710.7 (131979)	20.24	20.39	20.32
	1RB-Low (0)	1779.3 (132665)	20.10	20.30	20.30
		1745 (132322)	20.16	20.36	20.39
		1710.7 (131979)	20.05	20.24	20.27
	3RB-High (3)	1779.3 (132665)	20.21	20.24	20.20
		1745 (132322)	20.27	20.31	20.25
		1710.7 (131979)	20.17	20.20	20.12
	3RB-Middle (1)	1779.3 (132665)	20.22	20.30	20.21
		1745 (132322)	20.34	20.38	20.33
		1710.7 (131979)	20.20	20.26	20.18
	3RB-Low (0)	1779.3 (132665)	20.20	20.17	20.17
		1745 (132322)	20.27	20.29	20.27
		1710.7 (131979)	20.18	20.21	20.13
	6RB (0)	1779.3 (132665)	20.17	20.18	20.20
		1745 (132322)	20.25	20.32	20.22
		1710.7 (131979)	20.17	20.19	20.18
3MHz	1RB-High (14)	1778.5 (132657)	20.15	20.47	20.32
		1745 (132322)	20.24	20.51	20.39
		1711.5 (131987)	20.15	20.50	20.35

	1RB-Middle (7)	1778.5 (132657)	20.34	20.62	20.50
		1745 (132322)	20.40	20.60	20.53
		1711.5 (131987)	20.31	20.51	20.43
	1RB-Low (0)	1778.5 (132657)	20.12	20.33	20.24
		1745 (132322)	20.23	20.52	20.39
		1711.5 (131987)	20.13	20.38	20.30
	8RB-High (7)	1778.5 (132657)	20.17	20.20	20.11
		1745 (132322)	20.24	20.29	20.19
		1711.5 (131987)	20.16	20.21	20.08
	8RB-Middle (4)	1778.5 (132657)	20.18	20.25	20.14
		1745 (132322)	20.29	20.32	20.23
		1711.5 (131987)	20.19	20.23	20.11
	8RB-Low (0)	1778.5 (132657)	20.17	20.24	20.12
		1745 (132322)	20.26	20.27	20.20
		1711.5 (131987)	20.14	20.16	20.10
	15RB (0)	1778.5 (132657)	20.16	20.15	20.13
		1745 (132322)	20.26	20.23	20.22
		1711.5 (131987)	20.16	20.12	20.09
5MHz	1RB-High (24)	1777.5 (132647)	20.11	20.42	20.21
		1745 (132322)	20.19	20.46	20.28
		1712.5 (131997)	20.08	20.37	20.23
	1RB-Middle (12)	1777.5 (132647)	20.35	20.59	20.42
		1745 (132322)	20.41	20.61	20.58
		1712.5 (131997)	20.37	20.63	20.47
	1RB-Low (0)	1777.5 (132647)	20.09	20.43	20.23
		1745 (132322)	20.16	20.45	20.30
		1712.5 (131997)	20.02	20.42	20.20
	12RB-High (13)	1777.5 (132647)	20.20	20.23	20.11
		1745 (132322)	20.29	20.31	20.20
		1712.5 (131997)	20.24	20.27	20.12
	12RB-Middle (6)	1777.5 (132647)	20.25	20.27	20.17
		1745 (132322)	20.34	20.40	20.24
		1712.5 (131997)	20.21	20.28	20.14
	12RB-Low (0)	1777.5 (132647)	20.18	20.21	20.09
		1745 (132322)	20.28	20.30	20.20
		1712.5 (131997)	20.14	20.16	20.05
	25RB (0)	1777.5 (132647)	20.21	20.21	20.11
		1745 (132322)	20.31	20.30	20.20
		1712.5 (131997)	20.17	20.20	20.09
10MHz	1RB-High (49)	1775 (132622)	20.09	20.21	20.31
		1745 (132322)	20.19	20.36	20.40
		1715 (132022)	20.10	20.28	20.36

	1RB-Middle (24)	1775 (132622)	20.21	20.42	20.42
		1745 (132322)	20.31	20.45	20.49
		1715 (132022)	20.16	20.40	20.42
	1RB-Low (0)	1775 (132622)	20.14	20.32	20.34
		1745 (132322)	20.16	20.31	20.34
		1715 (132022)	20.00	20.24	20.27
	25RB-High (25)	1775 (132622)	20.12	20.15	20.12
		1745 (132322)	20.26	20.27	20.25
		1715 (132022)	20.17	20.18	20.20
	25RB-Middle (12)	1775 (132622)	20.18	20.18	20.18
		1745 (132322)	20.27	20.26	20.27
		1715 (132022)	20.14	20.19	20.16
	25RB-Low (0)	1775 (132622)	20.19	20.19	20.16
		1745 (132322)	20.20	20.19	20.20
		1715 (132022)	20.07	20.10	20.10
	50RB (0)	1775 (132622)	20.16	20.15	20.18
		1745 (132322)	20.23	20.22	20.24
		1715 (132022)	20.15	20.16	20.19
15MHz	1RB-High (74)	1772.5 (132597)	20.06	20.41	20.28
		1745 (132322)	20.17	20.41	20.37
		1717.5 (132047)	20.12	20.39	20.35
	1RB-Middle (37)	1772.5 (132597)	20.30	20.48	20.56
		1745 (132322)	20.41	20.58	20.57
		1717.5 (132047)	20.28	20.44	20.51
	1RB-Low (0)	1772.5 (132597)	20.10	20.40	20.28
		1745 (132322)	20.10	20.39	20.30
		1717.5 (132047)	20.01	20.26	20.21
	36RB-High (38)	1772.5 (132597)	20.18	20.15	20.13
		1745 (132322)	20.31	20.27	20.27
		1717.5 (132047)	20.25	20.18	20.20
	36RB-Middle (19)	1772.5 (132597)	20.21	20.15	20.13
		1745 (132322)	20.27	20.24	20.23
		1717.5 (132047)	20.21	20.18	20.19
	36RB-Low (0)	1772.5 (132597)	20.21	20.20	20.18
		1745 (132322)	20.26	20.17	20.18
		1717.5 (132047)	20.12	20.09	20.10
	75RB (0)	1772.5 (132597)	20.18	20.17	20.18
		1745 (132322)	20.25	20.23	20.22
		1717.5 (132047)	20.18	20.16	20.18
20MHz	1RB-High (99)	1770 (132572)	20.05	20.35	20.26
		1745 (132322)	20.04	20.43	20.30
		1720 (132072)	20.11	20.34	20.29

	1RB-Middle (50)	1770 (132572)	20.26	20.55	20.42
		1745 (132322)	20.33	20.59	20.53
		1720 (132072)	20.27	20.54	20.46
	1RB-Low (0)	1770 (132572)	20.01	20.30	20.23
		1745 (132322)	20.03	20.30	20.23
		1720 (132072)	19.93	20.27	20.17
	50RB-High (50)	1770 (132572)	20.13	20.17	20.16
		1745 (132322)	20.24	20.23	20.25
		1720 (132072)	20.24	20.22	20.24
	50RB-Middle (25)	1770 (132572)	20.21	20.20	20.18
		1745 (132322)	20.26	20.26	20.26
		1720 (132072)	20.18	20.16	20.19
	50RB-Low (0)	1770 (132572)	20.20	20.19	20.21
		1745 (132322)	20.21	20.21	20.19
		1720 (132072)	20.10	20.07	20.10
	100RB (0)	1770 (132572)	20.15	20.17	20.14
		1745 (132322)	20.20	20.19	20.21
		1720 (132072)	20.12	20.15	20.14

LTE B71 Power Level A1

Band 71-Power level A1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm) QPSK	16QAM	64QAM
5MHz	1RB-High (24)	695.5 (133447)	21.99	22.37	22.10
		680.5 (133297)	21.88	22.21	21.95
		665.5 (133147)	21.77	22.06	21.88
	1RB-Middle (12)	695.5 (133447)	22.26	22.48	22.33
		680.5 (133297)	22.13	22.39	22.20
		665.5 (133147)	22.10	22.42	22.21
	1RB-Low (0)	695.5 (133447)	22.01	22.23	22.07
		680.5 (133297)	21.76	22.05	21.85
		665.5 (133147)	21.85	22.10	21.95
	12RB-High (13)	695.5 (133447)	22.07	22.09	20.94
		680.5 (133297)	21.97	21.99	20.86
		665.5 (133147)	21.97	21.99	20.86
	12RB-Middle (6)	695.5 (133447)	22.18	22.18	21.03
		680.5 (133297)	21.99	22.04	20.89
		665.5 (133147)	22.02	22.03	20.90
	12RB-Low (0)	695.5 (133447)	22.13	22.14	21.01
		680.5 (133297)	21.88	21.91	20.79
		665.5 (133147)	21.89	21.91	20.75

	25RB (0)	695.5 (133447)	22.11	22.12	21.00
		680.5 (133297)	21.94	21.95	20.84
		665.5 (133147)	21.92	21.91	20.79
10MHz	1RB-High (49)	693 (132422)	22.07	22.22	22.17
		680.5 (133297)	21.91	22.08	22.01
		668 (133172)	21.78	21.90	21.92
	1RB-Middle (24)	693 (132422)	22.20	22.29	22.25
		680.5 (133297)	22.05	22.13	22.16
		668 (133172)	21.96	22.14	22.05
	1RB-Low (0)	693 (132422)	22.03	22.21	22.11
		680.5 (133297)	21.84	22.01	21.91
		668 (133172)	21.94	21.99	22.02
	25RB-High (25)	693 (132422)	22.04	22.07	20.97
		680.5 (133297)	22.04	22.04	20.93
		668 (133172)	21.97	21.91	20.81
	25RB-Middle (12)	693 (132422)	22.14	22.12	21.04
		680.5 (133297)	21.95	21.98	20.84
		668 (133172)	21.96	21.94	20.81
	25RB-Low (0)	693 (132422)	22.15	22.14	21.05
		680.5 (133297)	21.95	21.92	20.84
		668 (133172)	21.89	21.86	20.75
	50RB (0)	693 (132422)	22.09	22.10	21.02
		680.5 (133297)	22.03	21.96	20.90
		668 (133172)	21.90	21.87	20.78
15MHz	1RB-High (74)	690.5 (133397)	22.05	22.27	22.17
		680.5 (133297)	21.97	22.11	22.09
		670.5 (133197)	21.77	21.98	21.91
	1RB-Middle (37)	690.5 (133397)	22.19	22.40	22.35
		680.5 (133297)	22.11	22.30	22.26
		670.5 (133197)	22.03	22.28	22.13
	1RB-Low (0)	690.5 (133397)	21.92	22.24	22.04
		680.5 (133297)	21.81	22.03	21.88
		670.5 (133197)	21.92	22.19	22.06
	36RB-High (38)	690.5 (133397)	22.13	22.10	21.01
		680.5 (133297)	22.02	22.02	20.93
		670.5 (133197)	21.92	21.88	20.79
	36RB-Middle (19)	690.5 (133397)	22.14	22.12	21.00
		680.5 (133297)	22.00	22.00	20.87
		670.5 (133197)	21.93	21.90	20.83
	36RB-Low (0)	690.5 (133397)	22.04	22.00	20.93
		680.5 (133297)	21.88	21.87	20.78
		670.5 (133197)	21.92	21.86	19.77

	75RB (0)	690.5 (133397)	22.09	22.05	20.96
		680.5 (133297)	21.98	21.97	20.87
		670.5 (133197)	21.92	21.92	20.81
20MHz	1RB-High (99)	688 (133372)	21.95	22.27	22.06
		683 (133322)	21.92	22.19	22.03
		673 (133222)	21.79	22.14	21.92
	1RB-Middle (50)	688 (133372)	22.14	22.37	22.28
		683 (133322)	22.10	22.39	22.21
		673 (133222)	21.94	22.22	21.97
	1RB-Low (0)	688 (133372)	21.76	22.04	21.83
		683 (133322)	21.74	22.10	21.81
		673 (133222)	21.86	22.12	21.94
	50RB-High (50)	688 (133372)	22.05	22.05	20.97
		683 (133322)	22.12	22.09	21.02
		673 (133222)	21.96	21.94	20.87
	50RB-Middle (25)	688 (133372)	22.08	22.07	20.99
		683 (133322)	22.03	22.04	20.92
		673 (133222)	21.88	21.87	20.79
	50RB-Low (0)	688 (133372)	22.03	22.01	20.94
		683 (133322)	21.90	21.87	20.78
		673 (133222)	21.83	21.79	20.74
	100RB (0)	688 (133372)	22.02	22.03	0.00
		683 (133322)	22.00	21.97	20.88
		673 (133222)	21.88	21.88	20.80

LTE B71 Power Level B1/C1

Band 71-Power level B1/C1					
Bandwidth (MHz)	RB allocation RB offset	Frequency (MHz)	Actual output power (dBm)		
			QPSK	16QAM	64QAM
5MHz	1RB-High (24)	695.5 (133447)	23.92	23.22	22.18
		680.5 (133297)	23.76	23.03	22.07
		665.5 (133147)	23.66	22.92	21.95
	1RB-Middle (12)	695.5 (133447)	24.10	23.24	22.44
		680.5 (133297)	23.95	23.31	22.25
		665.5 (133147)	24.03	23.29	22.27
	1RB-Low (0)	695.5 (133447)	23.88	23.06	22.18
		680.5 (133297)	23.65	22.96	21.99
		665.5 (133147)	23.79	23.05	22.05
	12RB-High (13)	695.5 (133447)	23.00	22.05	21.05
		680.5 (133297)	22.96	21.94	20.97
		665.5 (133147)	22.95	21.91	20.92

	12RB-Middle (6)	695.5 (133447)	23.06	22.13	21.13
		680.5 (133297)	22.97	21.98	20.99
		665.5 (133147)	22.98	21.98	21.01
	12RB-Low (0)	695.5 (133447)	23.04	22.08	21.10
		680.5 (133297)	22.84	21.87	20.88
		665.5 (133147)	22.83	21.85	20.86
	25RB (0)	695.5 (133447)	23.04	22.07	21.10
		680.5 (133297)	22.92	21.91	20.92
		665.5 (133147)	22.90	21.88	20.92
10MHz	1RB-High (49)	693 (132422)	23.97	23.07	22.29
		680.5 (133297)	23.82	23.01	22.14
		668 (133172)	23.68	22.90	22.00
	1RB-Middle (24)	693 (132422)	24.04	23.14	22.32
		680.5 (133297)	23.93	23.15	22.24
		668 (133172)	23.90	23.07	22.16
	1RB-Low (0)	693 (132422)	23.92	23.08	22.22
		680.5 (133297)	23.73	22.97	22.06
		668 (133172)	23.87	22.93	22.12
	25RB-High (25)	693 (132422)	22.98	22.00	21.05
		680.5 (133297)	23.00	21.99	21.02
		668 (133172)	22.93	21.88	20.90
	25RB-Middle (12)	693 (132422)	23.06	22.11	21.14
		680.5 (133297)	22.96	21.91	20.96
		668 (133172)	22.92	21.89	20.92
	25RB-Low (0)	693 (132422)	23.08	22.09	21.13
		680.5 (133297)	22.91	21.88	20.90
		668 (133172)	22.85	21.85	20.85
	50RB (0)	693 (132422)	23.07	22.05	21.11
		680.5 (133297)	22.97	21.93	20.97
		668 (133172)	22.89	21.83	20.90
15MHz	1RB-High (74)	690.5 (133397)	23.94	23.15	22.24
		680.5 (133297)	23.84	23.11	22.13
		670.5 (133197)	23.70	23.01	21.96
	1RB-Middle (37)	690.5 (133397)	24.13	23.30	22.45
		680.5 (133297)	24.04	23.15	22.30
		670.5 (133197)	23.92	23.23	22.28
	1RB-Low (0)	690.5 (133397)	23.83	23.08	22.13
		680.5 (133297)	23.69	23.03	21.99
		670.5 (133197)	23.83	23.04	22.13
	36RB-High (38)	690.5 (133397)	23.07	22.04	21.07
		680.5 (133297)	22.98	22.00	21.02
		670.5 (133197)	22.89	21.84	20.89

	36RB-Middle (19)	690.5 (133397)	23.07	22.06	21.08
		680.5 (133297)	23.01	21.95	20.97
		670.5 (133197)	22.89	21.87	20.89
	36RB-Low (0)	690.5 (133397)	22.96	21.98	21.00
		680.5 (133297)	22.88	21.85	20.85
		670.5 (133197)	22.87	21.82	20.87
	75RB (0)	690.5 (133397)	23.00	22.06	21.07
		680.5 (133297)	22.95	21.93	20.95
		670.5 (133197)	22.89	21.85	20.90
20MHz	1RB-High (99)	688 (133372)	23.88	23.08	22.15
		683 (133322)	23.84	23.06	22.10
		673 (133222)	23.73	23.06	22.01
	1RB-Middle (50)	688 (133372)	24.06	23.22	22.28
		683 (133322)	23.96	23.20	22.26
		673 (133222)	23.78	23.12	22.13
	1RB-Low (0)	688 (133372)	23.68	22.97	21.97
		683 (133322)	23.63	23.02	21.93
		673 (133222)	23.76	22.96	22.05
	50RB-High (50)	688 (133372)	23.01	22.04	21.05
		683 (133322)	23.05	22.07	21.10
		673 (133222)	22.94	21.93	20.95
	50RB-Middle (25)	688 (133372)	23.02	22.04	21.09
		683 (133322)	23.04	21.99	20.99
		673 (133222)	22.89	21.84	20.88
	50RB-Low (0)	688 (133372)	22.95	22.00	21.03
		683 (133322)	22.90	21.85	20.86
		673 (133222)	22.81	21.75	20.82
	100RB (0)	688 (133372)	22.94	21.98	21.01
		683 (133322)	22.97	21.96	20.97
		673 (133222)	22.88	21.86	20.89

11.4 Wi-Fi and BT Measurement result

When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, n, ac then ax) is selected. Therefore the SAR measurements performed for the 802.11n/ac modes, as the lowest order modulation, cover 802.11ax modes.

When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.

According to KDB 248227 D01, simultaneous SAR provisions in KDB 447498 D01 apply to determine

simultaneous transmission SAR test exclusion for Wi-Fi MIMO. If the sum of 1-g single transmission chain SAR measurements is<1.6W/kg and/or the MIMO output power is equal or less than a single chain, then no additional SAR measurements for simultaneously at the specified maximum output power of MIMO operation. When antennas are spatially separated to the extent that SAR distributions do not overlap and can be treated independently, SAR compliance for simultaneous transmission is determined separately for each individual antenna.

The average conducted power for Wi-Fi 2.4G is as following:

Head and Body worn– Transmit alone

802.11b(dBm)	
Channel\data rate	1Mbps
11(2462MHz)	19.03
6(2437MHz)	19.29
1(2412MHz)	19.08
Tune-up	20.00
802.11g(dBm)	
Channel\data rate	6Mbps
11(2462MHz)	18.35
6(2437MHz)	18.56
1(2412MHz)	18.33
Tune-up	19.00
802.11n(dBm)-20MHz	
Channel\data rate	MCS0
11(2462MHz)	18.83
6(2437MHz)	18.7
1(2412MHz)	18.2
Tune-up	19.00
802.11n(dBm)-40MHz	
Channel\data rate	MCS0
9(2452MHz)	18.38
6(2437MHz)	18.54
3(2422MHz)	18.67
Tune-up	19.00

Head and Body worn – Transmit with WWAN

802.11b(dBm)	
Channel\data rate	1Mbps
11(2462MHz)	13.83
6(2437MHz)	14.32
1(2412MHz)	13.95
Tune-up	15.00
802.11g(dBm)	
Channel\data rate	6Mbps
11(2462MHz)	13.22
6(2437MHz)	13.62
1(2412MHz)	13.05
Tune-up	14.00
802.11n(dBm)-20MHz	
Channel\data rate	MCS0
11(2462MHz)	13.87
6(2437MHz)	13.93
1(2412MHz)	13.3
Tune-up	14.00
802.11n(dBm)-40MHz	
Channel\data rate	MCS0
9(2452MHz)	13.95
6(2437MHz)	13.82
3(2422MHz)	13.76
Tune-up	14.00

The average conducted power for Wi-Fi 5G is as following:

Head and Body worn– Transmit alone

802.11a(dBm)	
Channel\data rate	6Mbps
36(5180 MHz)	17.18
40(5200 MHz)	17.25
44(5220 MHz)	17.74
48(5240 MHz)	17.11
52(5260 MHz)	17.28
56(5280 MHz)	17.47
60(5300 MHz)	17.66
64(5320 MHz)	17.78
100(5500 MHz)	18.00
104(5520 MHz)	18.16
108(5540 MHz)	18.33
112(5560 MHz)	18.42
116(5580 MHz)	18.41
120(5600 MHz)	18.54
124(5620 MHz)	18.62
128(5640 MHz)	18.27
132(5660 MHz)	18.35
136(5680 MHz)	17.67
140(5700 MHz)	17.88
144(5720 MHz)	17.93
149(5745 MHz)	17.58
153(5765 MHz)	17.64
157(5785 MHz)	17.65
161(5805 MHz)	17.66
165(5825 MHz)	18.27
Tune-up	18.80

Head and Body worn – Transmit with WWAN

802.11a(dBm)	
Channel\data rate	6Mbps
36(5180 MHz)	14.59
40(5200 MHz)	14.58
44(5220 MHz)	14.65
48(5240 MHz)	14.55
52(5260 MHz)	14.36
56(5280 MHz)	14.37
60(5300 MHz)	14.45
64(5320 MHz)	14.68
100(5500 MHz)	15.25
104(5520 MHz)	15.55
108(5540 MHz)	15.70
112(5560 MHz)	15.73
116(5580 MHz)	15.75
120(5600 MHz)	15.58
124(5620 MHz)	15.67
128(5640 MHz)	15.39
132(5660 MHz)	14.67
136(5680 MHz)	14.85
140(5700 MHz)	15.15
144(5720 MHz)	15.19
149(5745 MHz)	14.57
153(5765 MHz)	14.63
157(5785 MHz)	14.65
161(5805 MHz)	15.08
165(5825 MHz)	15.65
Tune-up	16.30

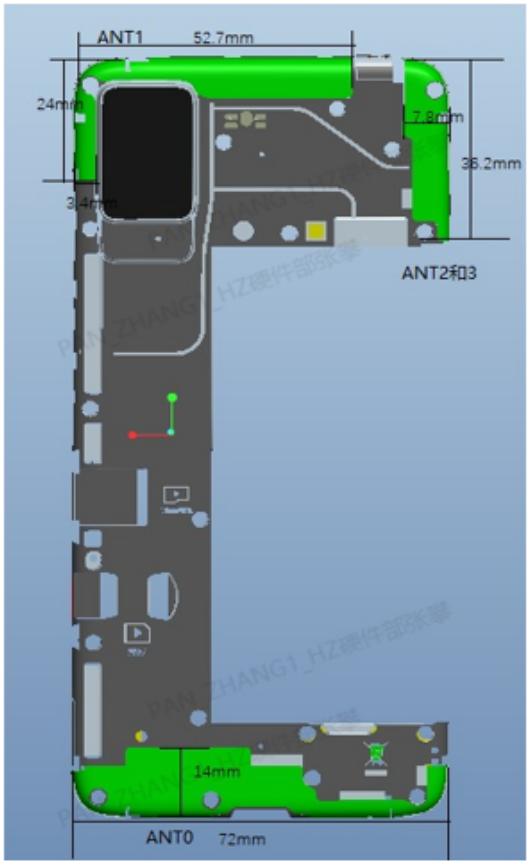
The average conducted power for BT is as following:

BR/EDR									
	GFSK			**EDR2M-4_DQPSK**			**EDR3M-8DPSK**		
	Ch0	**Ch 39**	**Ch 78**	**Ch 0**	**Ch 39**	**Ch 78**	**Ch 0**	**Ch 39**	**Ch 78**
Maximum Transmit Power(<20dBm)	6.98	8.07	7.54	6.28	7.13	6.64	6.26	7.13	6.64
Tune up	**7.50**	**8.50**	**8.00**	**6.50**	**7.50**	**7.00**	**6.50**	**7.50**	**7.00**

12 Antenna Location

12.1 Transmit Antenna Separation Distances

ANT1
GSM850 PRX
W5/B5/B12/B26/B71 TX/PRX
B41 DRX



ANT2
GPS/2.4GWIFI/5GWIFI/BT

ANT3
PCS1900/W2/W4/B2/B4/B25/B66 DRX

ANT0
GSM850 TX/DRX
GSM850 TX/ GSM900/DCS1800/PCS1900/W2/W4/B2/B4/B25/B41/B66 TX/PRX
W5/B5/B12/B26/B71 DRX

12.2 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR v01, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

SAR measurement positions						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
ANT0	Yes	Yes	Yes	Yes	No	Yes
ANT1	Yes	Yes	Yes	Yes	Yes	No
ANT2	Yes	Yes	Yes	No	Yes	No

13 SAR Test Result

Note:

KDB 447498 D01 General RF Exposure Guidance:

For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor

For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

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

≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz

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

KDB 648474 D04 Handset SAR:

With headset attached, when the reported SAR for 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.

KDB 941225 D01 SAR test for 3G devices:

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.

KDB 941225 D05 SAR for LTE Devices:

SAR test reduction is applied using the following criteria:

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among 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 for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.

Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low,Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg.

Testing for 16-QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.

Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is <1.45 W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.

For LTE bands that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing; therefore, the requirement for H, M and L channels may not fully apply.

KDB 248227 D01 SAR meas for 802.11:

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.

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.

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.

When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.

When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

Duty Cycle

Mode	Duty Cycle
Speech for GSM	1:8.3
GPRS&EGPRS 1 Slot	1:8.3
GPRS&EGPRS 2 Slot	1:4
GPRS&EGPRS 3 Slot	1:2.67
GPRS&EGPRS 4 Slot	1:2
WCDMA&LTE FDD	1:1
LTE TDD	1:1.58 or 1:2.37

13.1 SAR results for Cellular

B1：The battery of TLi028C7 by VEKEN

B2：The battery of TLi028C1 by BYD

Table 13.1-1: SAR Values (GSM 850 MHz Band - Head)

Ambient Temperature: 22.9 ℃					Liquid Temperature: 22.5℃						
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
128	824.2	Left	Touch	/	32.39	33.30	0.148	**0.18**	0.213	**0.26**	-0.05
190	836.6	Left	Touch	/	32.33	33.30	0.239	**0.30**	0.346	**0.43**	-0.20
251	848.8	Left	Touch	Fig.1	32.20	33.30	0.280	**0.36**	0.361	**0.47**	0.15
190	836.6	Left	Tilt	/	32.33	33.30	0.115	**0.14**	0.164	**0.21**	-0.03
190	836.6	Right	Touch	/	32.33	33.30	0.207	**0.26**	0.297	**0.37**	0.12
190	836.6	Right	Tilt	/	32.33	33.30	0.101	**0.13**	0.144	**0.18**	0.11
251	848.8	Left	Touch	B2	32.20	33.30	0.241	**0.31**	0.351	**0.45**	-0.04

Table 13.1-2: SAR Values (GSM 850 MHz Band - Body)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃					
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
190	836.6	GPRS(4)	Front	/	26.93	27.50	0.253	**0.29**	0.323	**0.37**	0.00
128	824.2	GPRS(4)	Rear	/	26.81	27.50	0.261	**0.31**	0.377	**0.44**	0.01
190	836.6	GPRS(4)	Rear	/	26.93	27.50	0.380	**0.43**	0.539	**0.61**	-0.18
251	848.8	GPRS(4)	Rear	Fig.2	26.97	27.50	0.465	**0.53**	0.630	**0.71**	-0.04
190	836.6	GPRS(4)	Left	/	26.93	27.50	0.266	**0.30**	0.394	**0.45**	-0.03
190	836.6	GPRS(4)	Right	/	26.93	27.50	0.203	**0.23**	0.299	**0.34**	-0.04
190	836.6	GPRS(4)	Bottom	/	26.93	27.50	0.034	**0.04**	0.056	**0.06**	0.10
190	836.6	EGPRS(4)	Rear	/	26.97	27.50	0.256	**0.29**	0.370	**0.42**	-0.05
251	848.8	GPRS(4)	Rear	B2	26.97	27.50	0.434	**0.49**	0.613	**0.69**	0.01

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 13.1-3: SAR Values (GSM 1900 MHz Band - Head)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃					
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max .tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
661	1880	Left	Touch	/	29.24	30.30	0.073	**0.09**	0.124	**0.16**	0.19
661	1880	Left	Tilt	/	29.24	30.30	0.043	**0.05**	0.073	**0.09**	-0.11

512	1850.2	Right	Touch	/	29.44	30.30	0.082	**0.10**	0.131	**0.16**	-0.09
661	1880	Right	Touch	/	29.24	30.30	0.090	**0.11**	0.145	**0.19**	0.15
810	1909.8	Right	Touch	Fig.3	29.11	30.30	0.107	**0.14**	0.167	**0.22**	-0.03
661	1880	Right	Tilt	/	29.24	30.30	0.060	**0.08**	0.103	**0.13**	0.12
810	1909.8	Right	Touch	B2	29.11	30.30	0.079	**0.10**	0.127	**0.17**	-0.02

Table 13.1-4: SAR Values (GSM 1900 MHz Band - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max.tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
661	1880	GPRS(3)	Front	/	23.03	23.50	0.130	**0.14**	0.222	**0.25**	0.06
661	1880	GPRS(3)	Rear	/	23.03	23.50	0.160	**0.18**	0.313	**0.35**	0.15
661	1880	GPRS(3)	Left	/	23.03	23.50	0.037	**0.04**	0.066	**0.07**	-0.03
661	1880	GPRS(3)	Right	/	23.03	23.50	0.097	**0.11**	0.164	**0.18**	0.07
512	1850.2	GPRS(3)	Bottom	Fig.4	23.10	23.50	0.280	**0.31**	0.547	**0.60**	-0.11
661	1880	GPRS(3)	Bottom	/	23.03	23.50	0.225	**0.25**	0.436	**0.49**	-0.20
810	1909.8	GPRS(3)	Bottom	/	22.93	23.50	0.219	**0.25**	0.428	**0.49**	-0.03
661	1880	EGPRS(3)	Bottom	/	23.01	23.50	0.261	**0.29**	0.489	**0.55**	-0.02
512	1850.2	GPRS(3)	Bottom	B2	23.10	23.50	0.280	**0.31**	0.545	**0.60**	-0.20

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 13.1-5: SAR Values (GSM 1900 MHz Band - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max.tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
661	1880	GPRS(3)	Front	/	24.02	24.50	0.151	**0.17**	0.254	**0.28**	0.13
512	1880	GPRS(3)	Rear	Fig.5	24.15	24.50	0.176	**0.19**	0.323	**0.35**	0.08
661	1880	GPRS(3)	Rear	/	24.02	24.50	0.171	**0.19**	0.284	**0.32**	0.16
810	1880	GPRS(3)	Rear	/	23.96	24.50	0.160	**0.18**	0.271	**0.31**	0.00
661	1880	EGPRS(3)	Rear	/	24.05	24.50	0.107	**0.12**	0.192	**0.21**	0.06

Note: The distance between the EUT and the phantom bottom is 15mm

Table 13.1-6: SAR Values (WCDMA 1900 MHz Band - Head)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max.tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
9400	1880	Left	Touch	/	24.33	24.50	0.205	**0.21**	0.352	**0.37**	0.20
9400	1880	Left	Tilt	/	24.33	24.50	0.106	**0.11**	0.178	**0.19**	-0.07
9262	1852.4	Right	Touch	/	24.18	24.50	0.202	**0.22**	0.329	**0.35**	0.02
9400	1880	Right	Touch	/	24.33	24.50	0.224	**0.23**	0.358	**0.37**	0.14

9538	1907.6	Right	Touch	Fig.6	24.26	24.50	0.278	**0.29**	0.428	**0.45**	-0.08
9400	1880	Right	Tilt	/	24.33	24.50	0.152	**0.16**	0.259	**0.27**	0.19
9400	1880	Right	Touch	B2	24.33	24.50	0.208	**0.22**	0.337	**0.36**	0.17

Table 13.1-7: SAR Values (WCDMA 1900 MHz Band - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃										
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
9400	1880	Front	/	20.25	21.00	0.251	**0.30**	0.427	**0.51**	0.05
9400	1880	Rear	/	20.25	21.00	0.212	**0.25**	0.373	**0.44**	-0.11
9400	1880	Left	/	20.25	21.00	0.052	**0.06**	0.090	**0.11**	-0.15
9400	1880	Right	/	20.25	21.00	0.186	**0.22**	0.329	**0.39**	-0.01
9262	1852.4	Bottom	/	20.16	21.00	0.306	**0.37**	0.580	**0.70**	0.03
9400	1880	Bottom	Fig.7	20.25	21.00	0.311	**0.30**	0.588	**0.70**	-0.08
9538	1907.6	Bottom	/	20.20	21.00	0.270	**0.32**	0.501	**0.60**	0.01
9400	1880	Bottom	B2	20.16	21.00	0.284	**0.30**	0.541	**0.66**	-0.08

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 13.1-8: SAR Values (WCDMA 1900 MHz Band - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃										
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
9400	1880	Front	/	21.34	22.00	0.263	**0.31**	0.433	**0.50**	0.01
9400	1880	Rear	Fig.8	21.34	22.00	0.304	**0.35**	0.526	**0.61**	-0.01
9538	1907.6	Rear	/	21.36	22.00	0.144	**0.17**	0.247	**0.29**	0.19
9262	1852.4	Rear	/	21.20	22.00	0.145	**0.17**	0.256	**0.31**	0.11

Note: The distance between the EUT and the phantom bottom is 15mm

Table 13.1-9: SAR Values (WCDMA 1700 MHz Band – Head)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max.tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
1312	1712.4	Left	Touch	/	24.15	24.50	0.117	**0.13**	0.196	**0.21**	-0.10
1412	1732.4	Left	Touch	/	24.11	24.50	0.101	**0.11**	0.173	**0.19**	-0.17
1513	1752.6	Left	Touch	Fig.9	24.10	24.50	0.146	**0.16**	0.229	**0.25**	0.15
1412	1732.4	Left	Tilt	/	24.11	24.50	0.056	**0.06**	0.091	**0.10**	0.14
1412	1732.4	Right	Touch	/	24.11	24.50	0.095	**0.10**	0.156	**0.17**	0.09
1412	1732.4	Right	Tilt	/	24.11	24.50	0.074	**0.08**	0.121	**0.13**	-0.19
1412	1732.4	Left	Touch	B2	24.11	24.50	0.114	**0.12**	0.192	**0.21**	-0.16

Table 13.1-10: SAR Values (WCDMA 1700 MHz Band - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃										
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
1412	1732.4	Front	/	20.06	20.50	0.175	**0.19**	0.293	**0.32**	0.01
1412	1732.4	Rear	/	20.06	20.50	0.211	**0.23**	0.372	**0.41**	-0.03
1412	1732.4	Left	/	20.06	20.50	0.039	**0.04**	0.065	**0.07**	-0.05
1412	1732.4	Right	/	20.06	20.50	0.058	**0.06**	0.099	**0.11**	0.13
1312	1712.4	Bottom	/	20.12	20.50	0.254	**0.28**	0.487	**0.53**	0.04
1412	1732.4	Bottom	Fig.10	20.06	20.50	0.317	**0.35**	0.593	**0.66**	-0.20
1513	1752.6	Bottom	/	20.08	20.50	0.263	**0.29**	0.499	**0.55**	0.00
1412	1732.4	Bottom	B2	20.06	20.50	0.301	**0.33**	0.572	**0.63**	0.04

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 13.1-11: SAR Values (WCDMA 1700 MHz Band - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃										
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
1412	1732.4	Front	/	21.14	21.50	0.174	**0.19**	0.288	**0.31**	-0.02
1412	1732.4	Rear	Fig.11	21.14	21.50	0.241	**0.26**	0.427	**0.46**	0.00
1513	1752.6	Rear	/	21.00	21.50	0.189	**0.21**	0.330	**0.37**	0.09
1312	1712.4	Rear	/	21.28	21.50	0.178	**0.19**	0.319	**0.34**	0.16

Note: The distance between the EUT and the phantom bottom is 15mm

Table 13.1-12: SAR Values (WCDMA 850 MHz Band - Head)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
4183	836.6	Left	Touch	/	21.84	22.50	0.200	**0.23**	0.312	**0.36**	0.02
4183	836.6	Left	Tilt	/	21.84	22.50	0.174	**0.20**	0.282	**0.33**	0.09
4132	826.4	Right	Touch	/	21.89	22.50	0.205	**0.32**	0.309	**0.36**	0.05
4183	836.6	Right	Touch	Fig.12	21.84	22.50	0.254	**0.30**	0.415	**0.48**	0.02
4233	846.6	Right	Touch	/	21.85	22.50	0.219	**0.25**	0.350	**0.41**	0.03
4183	836.6	Right	Tilt	/	21.84	22.50	0.156	**0.18**	0.242	**0.28**	-0.19
4183	836.6	Right	Touch	B2	21.84	22.50	0.205	**0.24**	0.307	**0.36**	0.20

Table 13.1-13: SAR Values (WCDMA 850 MHz Band - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃										
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz									
4183	836.6	Front	/	23.75	24.50	0.116	**0.14**	0.179	**0.21**	0.05
4132	826.4	Rear	/	23.81	24.50	0.154	**0.18**	0.233	**0.27**	-0.01
4183	836.6	Rear	Fig.13	23.75	24.50	0.238	**0.28**	0.423	**0.50**	-0.16
4233	846.6	Rear	/	23.77	24.50	0.114	**0.13**	0.173	**0.20**	-0.01
4183	836.6	Left	/	23.75	24.50	0.058	**0.07**	0.085	**0.10**	0.16
4183	836.6	Right	/	23.75	24.50	0.102	**0.12**	0.151	**0.18**	0.02
4183	836.6	Top	/	23.75	24.50	0.089	**0.11**	0.160	**0.19**	0.01
4183	836.6	Rear	B2	23.75	24.50	0.162	**0.19**	0.260	**0.31**	-0.01

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 13.1-14: SAR Values (LTE Band12 - Head)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃												
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
23095	707.5	1RB-Middle	Left	Touch	/	22.24	23.00	0.460	**0.55**	0.657	**0.78**	0.00
23095	707.5	1RB-Middle	Left	Tilt	/	22.24	23.00	0.230	**0.27**	0.354	**0.42**	0.01
23095	707.5	1RB-Middle	Right	Touch	Fig.14	22.24	23.00	0.418	**0.50**	0.661	**0.79**	0.06
23095	707.5	1RB-Middle	Right	Tilt	/	22.24	23.00	0.196	**0.23**	0.296	**0.35**	-0.01
23095	707.5	25RB-High	Left	Touch	/	22.24	23.00	0.360	**0.43**	0.515	**0.61**	0.02
23095	707.5	25RB-High	Left	Tilt	/	22.24	23.00	0.225	**0.27**	0.347	**0.41**	0.04
23095	707.5	25RB-High	Right	Touch	/	22.24	23.00	0.373	**0.44**	0.556	**0.66**	0.00
23095	707.5	25RB-High	Right	Tilt	/	22.24	23.00	0.191	**0.23**	0.288	**0.34**	0.10
23095	707.5	1RB-Middle	Right	Touch	B2	22.24	23.00	0.325	**0.39**	0.495	**0.59**	0.00

Note1: The LTE mode is QPSK_10MHz

Table 13.1-15: SAR Values (LTE Band12 – Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃												
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
Ch.	MHz											
23095	707.5	1RB-Middle	Front	/	24.22	25.00	0.248	**0.30**	0.347	**0.42**	-0.02	
23095	707.5	1RB-Middle	Rear	Fig.15	24.22	25.00	0.385	**0.46**	0.499	**0.60**	0.02	
23095	707.5	1RB-Middle	Left	/	24.22	25.00	0.195	**0.23**	0.283	**0.34**	0.00	

23095	707.5	1RB-Middle	Right	/	24.22	25.00	0.296	**0.35**	0.429	**0.51**	0.00
23095	707.5	1RB-Middle	Top	/	24.22	25.00	0.069	**0.08**	0.115	**0.14**	0.10
23095	707.5	25RB-High	Front	/	23.22	24.00	0.209	**0.25**	0.293	**0.35**	0.06
23095	707.5	25RB-High	Rear	/	23.22	24.00	0.278	**0.33**	0.392	**0.47**	0.00
23095	707.5	25RB-High	Left	/	23.22	24.00	0.160	**0.19**	0.231	**0.28**	-0.02
23095	707.5	25RB-High	Right	/	23.22	24.00	0.251	**0.30**	0.364	**0.44**	0.00
23095	707.5	25RB-High	Top	/	23.22	24.00	0.071	**0.09**	0.119	**0.14**	0.11
23095	707.5	1RB-Middle	Rear	B2	24.22	25.00	0.207	**0.25**	0.312	**0.37**	-0.04

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_10MHz

Table 13.1-16: SAR Values (LTE Band25 - Head)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
26590	1905	1RB-	Left	Touch	/	23.90	25.00	0.167	**0.22**	0.288	**0.37**	0.19
26590	1905	1RB-	Left	Tilt	/	23.90	25.00	0.086	**0.11**	0.154	**0.20**	0.06
26590	1905	1RB-	Right	Touch	Fig.16	23.90	25.00	0.303	**0.39**	0.477	**0.61**	-0.02
26590	1905	1RB-	Right	Tilt	/	23.90	25.00	0.160	**0.21**	0.274	**0.35**	0.05
26590	1905	50RB-Low	Left	Touch	/	23.05	24.00	0.165	**0.21**	0.279	**0.35**	-0.19
26590	1905	50RB-Low	Left	Tilt	/	23.05	24.00	0.087	**0.11**	0.145	**0.18**	-0.09
26590	1905	50RB-Low	Right	Touch	/	23.05	24.00	0.197	**0.20**	0.339	**0.32**	0.11
26590	1905	50RB-Low	Right	Tilt	/	23.05	24.00	0.142	**0.18**	0.247	**0.31**	0.09
26590	1905	1RB-	Right	Touch	B2	23.90	25.00	0.275	**0.35**	0.446	**0.57**	0.16

Note1: The LTE mode is QPSK_20MHz

Table 13.1-17: SAR Values (LTE Band25 - Body)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
26590	1905	1RB-	Front	/	19.95	21.00	0.315	**0.40**	0.549	**0.70**	0.13
26590	1905	1RB-	Rear	/	19.95	21.00	0.233	**0.30**	0.421	**0.54**	-0.17
26590	1905	1RB-	Left	/	19.95	21.00	0.074	**0.09**	0.132	**0.17**	0.01
26590	1905	1RB-	Right	/	19.95	21.00	0.165	**0.21**	0.299	**0.38**	0.18
26590	1905	1RB-	Bottom	/	19.95	21.00	0.289	**0.37**	0.572	**0.73**	0.12
26590	1905	50RB-Low	Front	/	19.94	21.00	0.324	**0.41**	0.565	**0.72**	-0.02
26590	1905	50RB-Low	Rear	/	19.94	21.00	0.249	**0.32**	0.447	**0.57**	-0.01

26590	1905	50RB-Low	Left	/	19.94	21.00	0.049	**0.06**	0.090	**0.11**	-0.05
26590	1905	50RB-Low	Right	/	19.94	21.00	0.188	**0.24**	0.324	**0.41**	0.02
26590	1905	50RB-Low	Bottom	Fig.17	19.94	21.00	0.314	**0.40**	0.598	**0.76**	0.08
26590	1905	50RB-Low	Bottom	B2	19.94	21.00	0.279	**0.36**	0.525	**0.67**	0.02

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_20MHz

Table 13.1-18: SAR Values (LTE Band25 - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃											
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
26590	1905	1RB-	Front	/	20.86	22.00	0.136	**0.18**	0.228	**0.30**	0.05
26590	1905	1RB-	Rear	Fig.18	20.86	22.00	0.194	**0.25**	0.351	**0.46**	0.17
26590	1905	50RB-Low	Front	/	20.95	22.00	0.136	**0.17**	0.227	**0.29**	0.02
26590	1905	50RB-Low	Rear	/	20.95	22.00	0.145	**0.18**	0.255	**0.32**	0.07

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK_20MHz

Table 13.1-19: SAR Values (LTE Band26 - Head)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃												
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
26865	831.5	1RB-Middle	Left	Touch	/	22.32	23.00	0.400	**0.47**	0.601	**0.70**	-0.02
26865	831.5	1RB-Middle	Left	Tilt	/	22.32	23.00	0.295	**0.35**	0.473	**0.55**	0.05
26865	831.5	1RB-Middle	Right	Touch	Fig.19	22.32	23.00	0.382	**0.45**	0.611	**0.71**	-0.01
26865	831.5	1RB-Middle	Right	Tilt	/	22.32	23.00	0.213	**0.25**	0.328	**0.38**	0.06
26865	831.5	36RB-Middle	Left	Touch	/	22.21	23.00	0.314	**0.38**	0.480	**0.58**	0.02
26865	831.5	36RB-Middle	Left	Tilt	/	22.21	23.00	0.229	**0.27**	0.364	**0.44**	-0.01
26865	831.5	36RB-Middle	Right	Touch	/	22.21	23.00	0.351	**0.42**	0.529	**0.63**	0.02
26865	831.5	36RB-Middle	Right	Tilt	/	22.21	23.00	0.206	**0.25**	0.319	**0.38**	0.02
26865	831.5	1RB-Middle	Right	Touch	B2	22.32	23.00	0.261	**0.31**	0.392	**0.46**	0.02

Note1: The LTE mode is QPSK_15MHz

Table 13.1-20: SAR Values (LTE Band26 - Body)

Ambient Temperature: 22.9 ℃					Liquid Temperature: 22.5℃						
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
26865	831.5	1RB-Middle	Front	/	24.35	25.00	0.105	**0.12**	0.157	**0.18**	0.03
26865	831.5	1RB-Middle	Rear	Fig.20	24.35	25.00	0.166	**0.19**	0.288	**0.33**	0.01
26865	831.5	1RB-Middle	Left	/	24.35	25.00	0.047	**0.05**	0.069	**0.08**	0.00
26865	831.5	1RB-Middle	Right	/	24.35	25.00	0.092	**0.11**	0.135	**0.16**	0.04
26865	831.5	1RB-Middle	Top	/	24.35	25.00	0.090	**0.10**	0.150	**0.17**	0.01
26865	831.5	36RB-	Front	/	23.24	24.00	0.102	**0.12**	0.152	**0.18**	0.08
26865	831.5	36RB-	Rear	/	23.24	24.00	0.155	**0.18**	0.240	**0.29**	0.06
26865	831.5	36RB-	Left	/	23.24	24.00	0.046	**0.05**	0.068	**0.08**	0.12
26865	831.5	36RB-	Right	/	23.24	24.00	0.090	**0.11**	0.132	**0.16**	0.06
26865	831.5	36RB-	Top	/	23.24	24.00	0.088	**0.10**	0.145	**0.17**	0.00
26865	831.5	1RB-Middle	Rear	B2	24.35	25.00	0.159	**0.18**	0.255	**0.30**	0.08

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_15MHz

Table 13.1-21: SAR Values (LTE Band41 (PC3)- Head)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
41055	2636.5	1RB-Middle	Left	Touch	/	23.18	24.00	0.063	**0.08**	0.134	**0.16**	-0.11
41055	2636.5	1RB-Middle	Left	Tilt	/	23.18	24.00	0.083	**0.10**	0.175	**0.21**	0.12
41055	2636.5	1RB-Middle	Right	Touch	Fig.21	23.18	24.00	0.109	**0.13**	0.188	**0.23**	-0.09
41055	2636.5	1RB-Middle	Right	Tilt	/	23.18	24.00	0.024	**0.03**	0.065	**0.08**	0.15
41055	2636.5	50RB-Middle	Left	Touch	/	22.24	23.00	0.049	**0.06**	0.104	**0.12**	-0.15
41055	2636.5	50RB-Middle	Left	Tilt	/	22.24	23.00	0.044	**0.05**	0.093	**0.11**	0.19
41055	2636.5	50RB-Middle	Right	Touch	/	22.24	23.00	0.081	**0.10**	0.157	**0.19**	0.06
41055	2636.5	50RB-Middle	Right	Tilt	/	22.24	23.00	0.017	**0.02**	0.037	**0.04**	-0.10

41055	2636.5	50RB-Low	Left	Touch	/	22.24	23.00	0.042	**0.05**	0.083	**0.10**	0.19
41055	2636.5	50RB-Low	Left	Tilt	/	22.24	23.00	0.042	**0.05**	0.090	**0.11**	-0.02
41055	2636.5	50RB-Low	Right	Touch	/	22.24	23.00	0.060	**0.07**	0.129	**0.15**	0.08
41055	2636.5	50RB-Low	Right	Tilt	/	22.24	23.00	0.027	**0.03**	0.058	**0.07**	0.18
41055	2636.5	1RB-Middle	Right	Touch	B2	23.18	24.00	0.077	**0.09**	0.150	**0.18**	-0.16

Note1: The LTE mode is QPSK_20MHz

Table 13.1-22: SAR Values (LTE Band41 (PC3)- Body)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃				
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
41055	2636.5	1RB-Middle	Front	/	18.21	19.00	0.056	**0.07**	0.105	**0.13**	-0.10
41055	2636.5	1RB-Middle	Rear	Fig.22	18.21	19.00	0.193	**0.23**	0.443	**0.53**	0.04
41055	2636.5	1RB-Middle	Left	/	18.21	19.00	0.025	**0.03**	0.047	**0.06**	-0.09
41055	2636.5	1RB-Middle	Right	/	18.21	19.00	0.029	**0.03**	0.058	**0.07**	0.20
41055	2636.5	1RB-Middle	Bottom	/	18.21	19.00	0.122	**0.15**	0.273	**0.33**	-0.09
41055	2636.5	50RB-Middle	Front	/	18.26	19.00	0.112	**0.13**	0.205	**0.24**	0.02
41055	2636.5	50RB-Middle	Rear	/	18.26	19.00	0.181	**0.21**	0.408	**0.48**	0.11
41055	2636.5	50RB-Middle	Left	/	18.26	19.00	0.040	**0.05**	0.070	**0.08**	0.13
41055	2636.5	50RB-Middle	Right	/	18.26	19.00	0.029	**0.03**	0.057	**0.07**	-0.04
41055	2636.5	50RB-Middle	Bottom	/	18.26	19.00	0.117	**0.14**	0.262	**0.31**	0.09
41055	2636.5	1RB-Middle	Rear	B2	18.21	19.00	0.140	**0.17**	0.303	**0.36**	0.03

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_20MHz

Table 13.1-23: SAR Values (LTE Band41 (PC3)- Body)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃				
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
41055	2636.5	1RB-	Front	/	19.15	20.00	0.097	**0.12**	0.185	**0.22**	-0.14
41055	2636.5	1RB-	Rear	Fig.23	19.15	20.00	0.114	**0.14**	0.239	**0.29**	0.01
41055	2636.5	50RB-	Front	/	19.17	20.00	0.092	**0.11**	0.168	**0.20**	0.07
41055	2636.5	50RB-	Rear	/	19.17	20.00	0.106	**0.13**	0.219	**0.27**	-0.06

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK_20MHz

Table 13.1-24: SAR Values (LTE Band41(PC2) - Head)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃												
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
41055	2636.5	1RB-	Left	Touch	/	26.10	26.50	0.101	**0.11**	0.204	**0.22**	-0.13
41055	2636.5	1RB-	Left	Tilt	/	26.10	26.50	0.083	**0.09**	0.175	**0.19**	0.12
41055	2636.5	1RB-	Right	Touch	Fig.24	26.10	26.50	0.156	**0.17**	0.272	**0.30**	0.10
41055	2636.5	1RB-	Right	Tilt	/	26.10	26.50	0.021	**0.02**	0.044	**0.05**	0.11
41055	2636.5	50RB-Low	Left	Touch	/	25.33	25.50	0.066	**0.07**	0.140	**0.15**	-0.08
41055	2636.5	50RB-Low	Left	Tilt	/	25.33	25.50	0.059	**0.06**	0.127	**0.13**	-0.12
41055	2636.5	50RB-Low	Right	Touch	/	25.33	25.50	0.087	**0.09**	0.171	**0.18**	-0.01
41055	2636.5	50RB-Low	Right	Tilt	/	25.33	25.50	0.021	**0.02**	0.044	**0.05**	0.05
41055	2636.5	1RB-	Right	Touch	B2	26.10	26.50	0.107	**0.12**	0.207	**0.23**	0.11

Note1: The LTE mode is QPSK_20MHz

Table 13.1-25: SAR Values (LTE Band41(PC2) - Body)

Ambient Temperature: 22.9 ℃ Liquid Temperature: 22.5℃											
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
41055	2636.5	1RB-Middle	Front	/	21.25	22.00	0.117	**0.14**	0.228	**0.27**	-0.01
41055	2636.5	1RB-Middle	Rear	Fig.25	21.25	22.00	0.262	**0.46**	0.599	**0.71**	-0.03
41055	2636.5	1RB-Middle	Left	/	21.25	22.00	0.024	**0.03**	0.042	**0.05**	-0.14
41055	2636.5	1RB-Middle	Right	/	21.25	22.00	0.032	**0.04**	0.057	**0.07**	-0.14
41055	2636.5	1RB-Middle	Bottom	/	21.25	22.00	0.189	**0.22**	0.419	**0.50**	0.17
41055	2636.5	50RB-Middle	Front	/	21.32	22.00	0.115	**0.13**	0.223	**0.26**	0.05
41055	2636.5	50RB-Middle	Rear	/	21.32	22.00	0.243	**0.28**	0.561	**0.66**	-0.12
41055	2636.5	50RB-Middle	Left	/	21.32	22.00	0.047	**0.06**	0.083	**0.10**	0.07
41055	2636.5	50RB-Middle	Right	/	21.32	22.00	0.032	**0.04**	0.057	**0.07**	0.13
41055	2636.5	50RB-Middle	Bottom	/	21.32	22.00	0.207	**0.24**	0.438	**0.51**	0.02
41055	2636.5	1RB-Middle	Rear	B2	21.25	22.00	0.258	**0.31**	0.576	**0.68**	-0.01

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_20MHz

Table 13.1-26: SAR Values (LTE Band41(PC2) - Body)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
41055	2636.5	1RB-Middle	Front	/	22.20	23.00	0.052	**0.06**	0.095	**0.11**	-0.14
41055	2636.5	1RB-Middle	Rear	/	22.20	23.00	0.144	**0.17**	0.290	**0.35**	-0.04
41055	2636.5	50RB-	Front	/	22.24	23.00	0.052	**0.06**	0.096	**0.11**	-0.01
41055	2636.5	50RB-	Rear	Fig.26	22.24	23.00	0.152	**0.18**	0.318	**0.38**	0.04

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK_20MHz

Table 13.1-27: SAR Values (LTE Band66 - Head)

Ambient Temperature: 22.9 ℃							Liquid Temperature: 22.5℃					
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
132322	1745	1RB-	Left	Touch	Fig.27	24.47	25.00	0.234	**0.26**	0.367	**0.41**	0.13
132322	1745	1RB-	Left	Tilt	/	24.47	25.00	0.069	**0.08**	0.114	**0.13**	-0.18
132322	1745	1RB-	Right	Touch	/	24.47	25.00	0.092	**0.10**	0.149	**0.17**	-0.11
132322	1745	1RB-	Right	Tilt	/	24.47	25.00	0.075	**0.09**	0.124	**0.14**	0.13
132322	1745	50RB-	Left	Touch	/	23.54	24.00	0.131	**0.15**	0.222	**0.25**	-0.15
132322	1745	50RB-	Left	Tilt	/	23.54	24.00	0.070	**0.08**	0.117	**0.13**	0.10
132322	1745	50RB-	Right	Touch	/	23.54	24.00	0.090	**0.10**	0.144	**0.16**	-0.20
132322	1745	50RB-	Right	Tilt	/	23.54	24.00	0.076	**0.08**	0.126	**0.14**	-0.05
132322	1745	1RB-	Left	Touch	B2	24.47	25.00	0.102	**0.12**	0.168	**0.19**	0.06

Note1: The LTE mode is QPSK_20MHz

Table 13.1-28: SAR Values (LTE Band66 - Body)

Ambient Temperature: 22.9 ℃							Liquid Temperature: 22.5℃				
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
132322	1745	1RB-Middle	Front	/	20.33	21.00	0.163	**0.19**	0.277	**0.32**	0.01
132322	1745	1RB-Middle	Rear	/	20.33	21.00	0.292	**0.34**	0.520	**0.61**	0.11
132322	1745	1RB-Middle	Left	/	20.33	21.00	0.058	**0.07**	0.098	**0.11**	0.06

132322	1745	1RB-Middle	Right	/	20.33	21.00	0.056	**0.07**	0.094	**0.11**	-0.13
132072	1720	1RB-Middle	Bottom	/	20.27	21.00	0.331	**0.39**	0.633	**0.75**	-0.08
132322	1745	1RB-Middle	Bottom	Fig.28	20.33	21.00	0.388	**0.45**	0.727	**0.85**	-0.18
132572	1770	1RB-Middle	Bottom	/	20.26	21.00	0.347	**0.40**	0.660	**0.78**	-0.06
132322	1745	50RB-Middle	Front	/	20.26	21.00	0.221	**0.26**	0.37	**0.44**	-0.01
132322	1745	50RB-Middle	Rear	/	20.26	21.00	0.317	**0.38**	0.632	**0.75**	-0.20
132322	1745	50RB-Middle	Left	/	20.26	21.00	0.039	**0.05**	0.066	**0.08**	-0.05
132322	1745	50RB-Middle	Right	/	20.26	21.00	0.044	**0.05**	0.076	**0.09**	-0.04
132322	1745	50RB-Middle	Bottom	/	20.26	21.00	0.243	**0.29**	0.561	**0.67**	0.17
132322	1745	50RB-Middle	Bottom	B2	20.26	21.00	0.320	**0.38**	0.627	**0.74**	0.02
132322	1745	100RB	Bottom	/	20.20	21.00	0.292	**0.35**	0.589	**0.71**	0.01

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_20MHz

Table 13.1-29: SAR Values (LTE Band66 - Body)

Ambient Temperature: 22.9 ℃					Liquid Temperature: 22.5℃						
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
132322	1745	1RB-Middle	Front	/	21.45	22.00	0.114	**0.13**	0.170	**0.19**	0.10
132322	1745	1RB-Middle	Rear	Fig.29	21.45	22.00	0.216	**0.25**	0.371	**0.42**	0.01
132322	1745	50RB-Middle	Front	/	21.44	22.00	0.101	**0.11**	0.166	**0.19**	0.12
132322	1745	50RB-Middle	Rear	/	21.44	22.00	0.178	**0.20**	0.311	**0.35**	0.12

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK_20MHz

Table 13.1-30: SAR Values (LTE Band71 - Head)

Ambient Temperature: 22.9 ℃						Liquid Temperature: 22.5℃						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
133372	688	1RB-Middle	Left	Touch	/	22.14	23.00	0.230	**0.28**	0.331	**0.40**	0.03
133372	688	1RB-Middle	Left	Tilt	/	22.14	23.00	0.178	**0.22**	0.274	**0.33**	0.00
133372	688	1RB-Middle	Right	Touch	/	22.14	23.00	0.209	**0.29**	0.342	**0.42**	0.13

133372	688	1RB-Middle	Right	Tilt	/	22.14	23.00	0.218	**0.27**	0.335	**0.41**	-0.01
133322	683	50RB-Middle	Left	Touch	/	22.12	23.00	0.219	**0.27**	0.315	**0.39**	0.01
133322	683	50RB-Middle	Left	Tilt	/	22.12	23.00	0.228	**0.28**	0.349	**0.43**	0.01
133322	683	50RB-Middle	Right	Touch	Fig.30	22.12	23.00	0.284	**0.35**	0.464	**0.57**	-0.05
133322	683	50RB-Middle	Right	Tilt	/	22.12	23.00	0.217	**0.27**	0.388	**0.48**	0.11
133322	683	50RB-Middle	Right	Touch	B2	22.12	23.00	0.233	**0.29**	0.343	**0.42**	0.01

Note1: The LTE mode is QPSK_20MHz

Table 13.1-31: SAR Values (LTE Band71 - Body)

Ambient Temperature: 22.9 ℃					Liquid Temperature: 22.5℃						
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
133372	688	1RB-Middle	Front	/	24.06	24.50	0.129	**0.14**	0.181	**0.20**	0.05
133372	688	1RB-Middle	Rear	/	24.06	24.50	0.188	**0.21**	0.264	**0.29**	0.00
133372	688	1RB-Middle	Left	/	24.06	24.50	0.118	**0.13**	0.173	**0.19**	0.01
133372	688	1RB-Middle	Right	/	24.06	24.50	0.166	**0.18**	0.242	**0.27**	-0.03
133322	683	50RB-Middle	Front	/	23.05	23.50	0.129	**0.14**	0.184	**0.20**	0.02
133322	683	50RB-Middle	Rear	Fig.31	23.05	23.50	0.158	**0.18**	0.282	**0.31**	-0.01
133322	683	50RB-Middle	Left	/	23.05	23.50	0.106	**0.12**	0.162	**0.18**	-0.07
133322	683	50RB-Middle	Right	/	23.05	23.50	0.184	**0.20**	0.270	**0.30**	-0.01
133322	683	50RB-Middle	Rear	B2	23.05	23.50	0.155	**0.17**	0.280	**0.31**	-0.01

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_20MHz

13.2 SAR results for WLAN

The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures.

When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.

SAR Test reduction was applied from KDB 248227 guidance, when the same maximum power is specified for

multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

WLAN Evaluation for 2.4G

According to the KDB248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

Head Evaluation

Table 13.2-1: SAR Values (WLAN - Head)– 802.11b (Fast SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃											
Frequency		Side	Test Position	Note	Conducted Power (dBm)	Max. tune up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
Ch.	MHz										
6	2437	Left	Touch	Note1	19.29	20.00	0.232	**0.27**	0.436	**0.51**	-0.07
6	2437	Left	Tilt	Note1	19.29	20.00	0.228	**0.27**	0.456	**0.54**	-0.10
6	2437	Right	Touch	Note1	19.29	20.00	0.558	**0.66**	1.160	**1.37**	-0.08
6	2437	Right	Tilt	Note1	19.29	20.00	0.419	**0.49**	0.891	**1.05**	-0.05
6	2437	Left	Touch	Note2	14.32	15.00	0.061	**0.07**	0.116	**0.14**	0.01
6	2437	Left	Tilt	Note2	14.32	15.00	0.061	**0.07**	0.124	**0.15**	-0.13
6	2437	Right	Touch	Note2	14.32	15.00	0.188	**0.22**	0.404	**0.47**	-0.18
6	2437	Right	Tilt	Note2	14.32	15.00	0.115	**0.13**	0.239	**0.28**	0.03
6	2437	Right	Touch	Note1\B2	19.29	20.00	0.483	**0.57**	1.010	**1.19**	-0.05
6	2437	Right	Touch	Note2\B2	14.32	15.00	0.180	**0.21**	0.376	**0.44**	0.10

Note1: The results are for Wifi antenna transmit standalone

Note2: The results are for Wifi antenna transmit with WWAN

As shown above table, the initial test position for head is “Right Cheek”. So the head SAR of WLAN is presented as below:

Table 13.2-2: SAR Values (WLAN - Head)– 802.11b (Full SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
Ch.	MHz										
6	2437	Right	Touch	Note1/ Fig.32	19.29	20.00	0.555	**0.65**	1.170	**1.38**	-0.08
1	2412	Right	Touch	Note1	19.08	20.00	0.374	**0.46**	0.781	**0.97**	-0.11
6	2437	Right	Tilt	Note1	19.29	20.00	0.438	**0.52**	0.908	**1.07**	-0.03
1	2412	Right	Tilt	Note1	19.08	20.00	0.302	**0.37**	0.626	**0.77**	-0.18

6	2437	Left	Tilt	Note1	19.29	20.00	0.201	**0.24**	0.388	**0.46**	-0.07
6	2437	Right	Touch	Note2/ Fig.33	14.32	15.00	0.191	**0.22**	0.405	**0.47**	-0.18

Note1: The results are for Wifi antenna transmit standalone

Note2: The results are for Wifi antenna transmit with WWAN

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is **≤** 0.8 W/kg.

Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is **≤** 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

Table 13.2-3: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	**MHz**						
6	2437	Right	Touch	100%	100%	**1.38**	**1.38**

The highest reported SAR in 802.11 b mode is 1.38 W/kg and the specified maximum output power for 802.11 g mode and n mode are 19dBm,the adjusted SAR is 1.09 W/kg. The adjusted SAR is ≤ 1.2 W/kg; therefore,SAR is not required for OFDM.

Table 13.2-4: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)

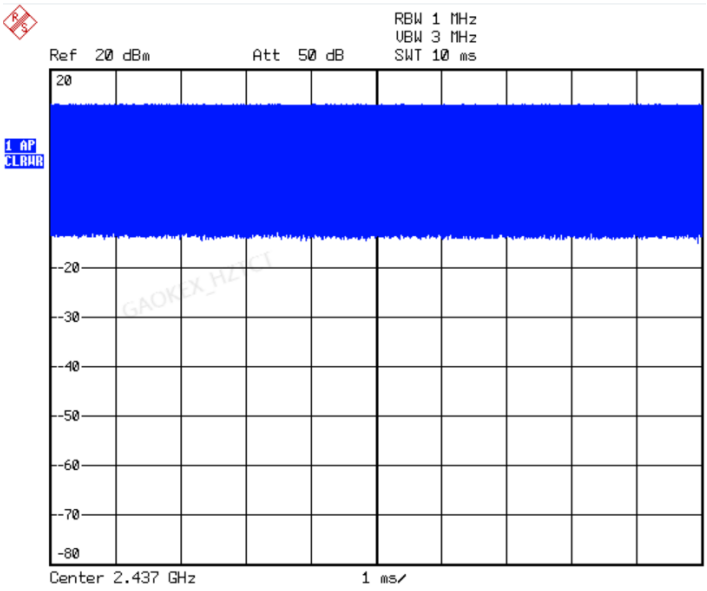
Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	**MHz**						
6	2437	Right	Touch	100%	100%	**0.47**	**0.47**

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.

Duty factor plot

CH6



Body Evaluation

Table 13.2-5: SAR Values (WLAN - Body)– 802.11b (Fast SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃										
Frequency		**Test Position**	**Figure No./ Note**	**Conducted Power (dBm)**	**Max. tune up Power (dBm)**	**Measured SAR(10g) (W/kg)**	**Reported SAR(10g)(W/kg)**	**Measured SAR(1g) (W/kg)**	**Reported SAR(1g)(W/kg)**	**Power Drift (dB)**
Ch.	MHz									
6	2437	Front	Note1	19.29	20.00	0.098	**0.12**	0.183	**0.22**	-0.08
6	2437	Rear	Note1	19.29	20.00	0.164	**0.19**	0.355	**0.42**	-0.07
6	2437	Left	Note1	19.29	20.00	0.152	**0.18**	0.320	**0.38**	0.02
6	2437	Top	Note1	19.29	20.00	0.070	**0.08**	0.132	**0.16**	0.02
6	2437	Front	Note2	14.32	15.00	0.033	**0.04**	0.061	**0.07**	-0.01
6	2437	Rear	Note2	14.32	15.00	0.062	**0.07**	0.135	**0.16**	-0.12
6	2437	Left	Note2	14.32	15.00	0.056	**0.07**	0.119	**0.14**	-0.13
6	2437	Top	Note2	14.32	15.00	0.024	**0.03**	0.046	**0.05**	0.01
6	2437	Rear	Note1\B2	19.29	20.00	0.147	**0.17**	0.313	**0.37**	0.03
6	2437	Rear	Note2\B2	14.32	15.00	0.058	**0.07**	0.12	**0.14**	0.01

Note1: The results are for Wifi antenna transmit standalone
Note2: The results are for Wifi antenna transmit with WWAN
Note3: the distance between the EUT and the phantom bottom is 10mm

As shown above table, the initial test position for body is “Rear”. So the body SAR of WLAN is presented as below:

Table 13.2-6: SAR Values (WLAN - Body)– 802.11b (Full SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
Ch.	MHz									
6	2437	Rear	Note1/ Fig.34	19.29	20	0.173	**0.20**	0.374	**0.44**	-0.07
6	2437	Rear	Note2/ Fig.35	14.32	15	0.066	**0.08**	0.144	**0.17**	-0.12

Note1: The results are for Wifi antenna transmit standalone

Note2: The results are for Wifi antenna transmit with WWAN

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is ≤0.8 W/kg.

Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

Table 13.2-7: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
6	2437	Rear	100%	100%	**0.44**	**0.44**

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.

Table 13.2-8: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)

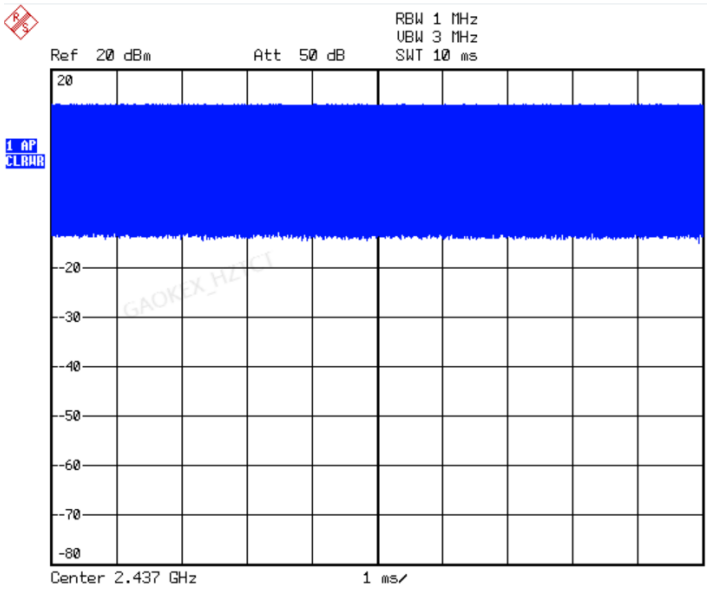
Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
6	2437	Rear	100%	100%	**0.17**	**0.17**

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.

Duty factor plot

CH6



WLAN Evaluation for 5G

Table 13.2-9: OFDM mode specified maximum output power of WLAN antenna

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	X		X	X	X	X	X	
U-NII-2A	X		X	X	X	X	X	
U-NII-2C	X		X	X	X	X	X	
U-NII-3	X		X	X	X	X	X	
§ 15.247 (5.8 GHz)								
X: maximum(conducted) output power(mW), including tolerance, specified for production units								

Table 13.2-10: Maximum output power specified of WLAN antenna – Head and Body worn– Transmit alone

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	76		63	50	50	40	32	
U-NII-2A	76		63	50	50	40	32	
U-NII-2C	76		63	50	50	40	32	
U-NII-3	76		63	50	50	40	32	

§ 15.247 (5.8 GHz)								
● The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes. ● The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included								

Table 13.2-11: Maximum output power specified of WLAN antenna –Head and Body worn – Transmit with WWAN

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	43		32	25	25	20	16	
U-NII-2A	43		32	25	25	20	16	
U-NII-2C	43		32	25	25	20	16	
U-NII-3	43		32	25	25	20	16	
§ 15.247 (5.8 GHz)								
● The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes. ● The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.								

Table 13.2-12: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations – Head and Body worn– Transmit alone

802.11 Mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 **52/53/59/51**	36/40/44/48 Lower power	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
U-NII-2A	52/56/60/64 **53/56/58/60**	52/56/60/64 Lower power	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power

U-NII-2C	100/104/108/112 116/120/124/128/ 132/136/140/144 **63/65/68/70/69/71/ 73/67/68/58/61/62**	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	102/110/118 / 126/134/142 Lower power	100/104/108/112 116/120/124/128 / 132/136/140/144 Lower power	102/110/118 / 126/134/142 Lower power	106/122/ 138 Lower power
U-NII-3	149/153/157/161/ 165 **57/58/58/58/67**	149/153/157/161/ 165 Lower power	151/159 Lower power	149/153/157/161 /165 Lower power	151/159 Lower power	155 Lower power

● The bold numbers is the maximum output measured power (mW).
● Channels with measured maximum power within 0.25dB are considered to have the same measured output.Channels selected for initial test configuration are highlighted in yellow

Table 13.2-13: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations– Head and Body worn– Transmit with WWAN

802.11 Mode	**a**	**n**		**ac**		
BW(MHz)	**20**	**20**	**40**	**20**	**40**	**80**
U-NII-1	36/40/44/48 **28/28/29/28**	36/40/44/48 Lower power	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
U-NII-2A	52/56/60/64 **27/27/28/29**	52/56/60/64 Lower power	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power
U-NII-2C	100/104/108/112 116/120/124/128/ 132/136/140/144 **33/36/37/37/38/36/ 37/35/29/31/33/33**	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	102/110/118/ 126/134/142 Lower power	100/104/108/112 116/120/124/128/ 132/136/140/144 Lower power	102/110/118/ 126/134/142 Lower power	106/122/ 138 Lower power

U-NII-3	149/153/157/161/165 **29/29/29/32/37**	149/153/157/161/165 Lower power	151/159 Lower power	149/153/157/161/165 Lower power	151/159 Lower power	155 Lower power

- The **bold numbers** is the maximum output measured power (mW).
- Channels with measured maximum power within 0.25dB are considered to have the same measured output.Channels selected for initial test configuration are highlighted in yellow

Table 13.2-14: Reported SAR of initial test configuration for Head transmit alone

802.11 mode	**a**	**n**		**ac**		
BW(MHz)	**20**	**20**	**40**	**20**	**40**	**80**
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64	52/56/60/64	54/62	52/56/60/64	54/62	58
U-NII-2C	100/104/108/112/116/120/124/128/132/136/140/144	100/104/108/112/116/120/124/128/132/136/140/144	102/110/118/126/134/142	100/104/108/112/116/120/124/128/132/136/140/144	102/110/118/126/134/142	106/122/138
U-NII-3	149/153/157/161/165 **0.85**	149/153/157/161/165	151/159	149/153/157 /165/161	151/159	155
Highest measured output power channel tested initially are in yellow highlight.						

Table 13.2-15: Reported SAR of initial test configuration for Body worn transmit alone

802.11 mode	**a**	**n**		**ac**		
BW(MHz)	**20**	**20**	**40**	**20**	**40**	**80**
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64	52/56/60/64	54/62	52/56/60/64	54/62	58

U-NII-2C	100/104/108/112/116/120/124/128/132/136/140/144	100/104/108/112/116/120/124/128/132/136/140/144	102/110/118/126/134/142	100/104/108/112/116/120/124/128/132/136/140/144	102/110/118/126/134/142	106/122/138
U-NII-3	149/153/157/161/165 **0.96**	149/153/157/161/165	151/159	149/153/157 /165/161	151/159	155
Highest measured output power channel tested initially are in yellow highlight.						

Table 13.2-16: Reported SAR of initial test configuration for Head transmit with WWAN

802.11 mode	**a**	**n**		**ac**		
BW(MHz)	**20**	**20**	**40**	**20**	**40**	**80**
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64	52/56/60/64	54/62	52/56/60/64	54/62	58
U-NII-2C	100/104/108/112/116/120/124/128/132/136/140/144	100/104/108/112/116/120/124/128/132/136/140/144	102/110/118/126/134/142	100/104/108/112/116/120/124/128/132/136/140/144	102/110/118/126/134/142	106/122/138
U-NII-3	149/153/157/161/165 **0.45**	149/153/157/161/165	151/159	149/153/157 /165/161	151/159	155
Highest measured output power channel tested initially are in yellow highlight.						

Table 13.2-17: Reported SAR of initial test configuration for Body transmit with WWAN

802.11 mode	**a**	**n**		**ac**		
BW(MHz)	**20**	**20**	**40**	**20**	**40**	**80**
U-NII-1	36/40/44/48	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64 **0.62**	52/56/60/64	54/62	52/56/60/64	54/62	58

U-NII-2C	100/104/108/112/116/120/124/128/132/136/140/144	100/104/108/112/116/120/124/128/132/136/140/144	102/110/118/126/134/142	100/104/108/112/116/120/124/128/132/136/140/144	102/110/118/126/134/142	106/122/138
U-NII-3	149/153/157/161/165	149/153/157/161/165	151/159	149/153/157 /165/161	151/159	155
Highest measured output power channel tested initially are in yellow highlight.						

Table 13.2-18: SAR Values (WLAN 5G - Head)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
Ch.	MHz										
64	5320	Left	Touch	Note1	17.78	18.80	0.036	**0.05**	0.114	**0.14**	0.01
64	5320	Left	Tilt	Note1	17.78	18.80	0.038	**0.05**	0.109	**0.14**	0.01
64	5320	Right	Touch	Note1	17.78	18.80	0.141	**0.18**	0.395	**0.50**	-0.04
64	5320	Right	Tilt	Note1	17.78	18.80	0.089	**0.11**	0.252	**0.32**	0.16
124	5620	Left	Touch	Note1	18.62	18.80	0.043	**0.05**	0.137	**0.14**	-0.14
124	5620	Left	Tilt	Note1	18.62	18.80	0.041	**0.04**	0.125	**0.13**	-0.04
124	5620	Right	Touch	Note1	18.62	18.80	0.172	**0.18**	0.492	**0.51**	0.02
124	5620	Right	Tilt	Note1	18.62	18.80	0.105	**0.11**	0.327	**0.34**	-0.11
165	5825	Left	Touch	Note1	18.27	18.80	0.133	**0.15**	0.372	**0.42**	-0.07
165	5825	Left	Tilt	Note1	18.27	18.80	0.108	**0.12**	0.290	**0.33**	0.06
165	5825	Right	Touch	Note1/Fig.36	18.27	18.80	0.220	**0.25**	0.752	**0.85**	-0.19
161	5805	Right	Touch	Note1	17.66	18.80	0.133	**0.17**	0.451	**0.59**	-0.14
165	5825	Right	Tilt	Note1	18.27	18.80	0.211	**0.24**	0.672	**0.76**	-0.10
165	5825	Right	Touch	Note1 \B2	18.27	18.80	0.236	**0.27**	0.735	**0.83**	0.20
64	5320	Left	Touch	Note2	14.68	16.30	0.015	**0.02**	0.048	**0.07**	-0.12
64	5320	Left	Tilt	Note2	14.68	16.30	0.009	**0.01**	0.027	**0.04**	0.18
64	5320	Right	Touch	Note2	14.68	16.30	0.069	**0.10**	0.218	**0.32**	0.17
64	5320	Right	Tilt	Note2	14.68	16.30	0.042	**0.06**	0.130	**0.19**	-0.12
116	5580	Left	Touch	Note2	15.75	16.30	0.016	**0.02**	0.055	**0.06**	-0.12
116	5580	Left	Tilt	Note2	15.75	16.30	0.018	**0.02**	0.055	**0.06**	-0.04
116	5580	Right	Touch	Note2	15.75	16.30	0.087	**0.10**	0.269	**0.31**	-0.06
116	5580	Right	Tilt	Note2	15.75	16.30	0.056	**0.06**	0.192	**0.22**	0.20
165	5825	Left	Touch	Note2	15.65	16.30	0.038	**0.04**	0.118	**0.14**	-0.19
165	5825	Left	Tilt	Note2	15.65	16.30	0.028	**0.03**	0.099	**0.11**	0.14

165	5825	Right	Touch	Note2/ Fig.37	15.65	16.30	0.112	**0.13**	0.386	**0.45**	0.06
165	5825	Right	Tilt	Note2	15.65	16.30	0.083	**0.10**	0.302	**0.35**	-0.19
165	5825	Right	Touch	Note2 \B2	15.65	16.30	0.110	**0.13**	0.339	**0.39**	0.06

Note1: The results are for Wifi antenna transmit standalone

Note2: The results are for Wifi antenna transmit with WWAN

Table 13.2-19: SAR Values (WLAN 5G – Body worn)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Power Drift (dB)
Ch.	MHz									
64	5320	Front	Note1	17.78	18.80	0.048	**0.06**	0.128	**0.16**	0.07
64	5320	Rear	Note1	17.78	18.80	0.251	**0.32**	0.698	**0.88**	-0.10
60	5300	Rear	Note1	17.66	18.80	0.940	**1.22**	0.529	**0.69**	-0.20
64	5320	Left	Note1	17.78	18.80	0.175	**0.22**	0.496	**0.63**	-0.15
64	5320	Top	Note1	17.78	18.80	0.050	**0.06**	0.124	**0.16**	-0.07
124	5620	Front	Note1	18.62	18.80	0.063	**0.07**	0.164	**0.17**	-0.13
124	5620	Rear	Note1	18.62	18.80	0.274	**0.29**	0.795	**0.83**	0.00
120	5600	Rear	Note1	18.54	18.80	0.206	**0.22**	0.589	**0.63**	0.15
124	5620	Left	Note1	18.62	18.80	0.154	**0.16**	0.478	**0.50**	-0.17
124	5620	Top	Note1	18.62	18.80	0.086	**0.09**	0.223	**0.23**	0.05
165	5825	Front	Note1	18.27	18.80	0.073	**0.08**	0.208	**0.23**	-0.20
165	5825	Rear	Note1/ Fig.38	18.27	18.80	0.291	**0.33**	0.853	**0.96**	-0.20
161	5805	Rear	Note1	17.66	18.80	0.221	**0.29**	0.665	**0.86**	0.05
165	5825	Left	Note1	18.27	18.80	0.280	**0.32**	0.730	**0.82**	-0.19
161	5805	Left	Note1	17.66	18.80	0.113	**0.15**	0.373	**0.48**	0.07
165	5825	Top	Note1	18.27	18.80	0.115	**0.13**	0.290	**0.33**	-0.12
64	5320	Front	Note2	14.68	16.30	0.022	**0.03**	0.062	**0.09**	0.16
64	5320	Rear	Note2/ Fig.39	14.68	16.30	0.147	**0.21**	0.425	**0.62**	0.00
64	5320	Left	Note2	14.68	16.30	0.090	**0.13**	0.267	**0.39**	0.07
64	5320	Top	Note2	14.68	16.30	0.029	**0.04**	0.070	**0.10**	0.04
116	5580	Front	Note2	15.75	16.30	0.021	**0.02**	0.055	**0.06**	-0.05
116	5580	Rear	Note2	15.75	16.30	0.140	**0.16**	0.412	**0.47**	0.08
116	5580	Left	Note2	15.75	16.30	0.064	**0.07**	0.203	**0.23**	-0.08
116	5580	Top	Note2	15.75	16.30	0.044	**0.05**	0.113	**0.13**	0.07
165	5825	Front	Note2	15.65	16.30	0.033	**0.04**	0.096	**0.11**	0.16
165	5825	Rear	Note2	15.65	16.30	0.153	**0.18**	0.446	**0.52**	0.01

165	5825	Left	Note2	15.65	16.30	0.098	**0.11**	0.337	**0.39**	0.12
165	5825	Top	Note2	15.65	16.30	0.058	**0.07**	0.147	**0.17**	-0.16
165	5825	Rear	Note1 \B2	18.27	18.80	0.270	**0.31**	0.789	**0.89**	0.10
64	5320	Rear	Note2 \B2	15.65	16.30	0.140	**0.16**	0.378	**0.44**	-0.06

Note1: The results are for Wifi antenna transmit standalone
Note2: The results are for Wifi antenna transmit with WWAN
Note3: the distance between the EUT and the phantom bottom is 10mm

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

Table 13.2-20: SAR Values (WLAN 5G- Head) –(Scaled Reported SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz						
165	5825	Right	Touch	100%	100%	**0.85**	**0.85**

Table 13.2-21: SAR Values (WLAN 5G- Head) –(Scaled Reported SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz						
165	5825	Right	Touch	100%	100%	**0.45**	**0.45**

Table 13.2-22: SAR Values (WLAN 5G- Body) – (Scaled Reported SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
165	5825	Rear	100%	100%	**0.96**	**0.96**

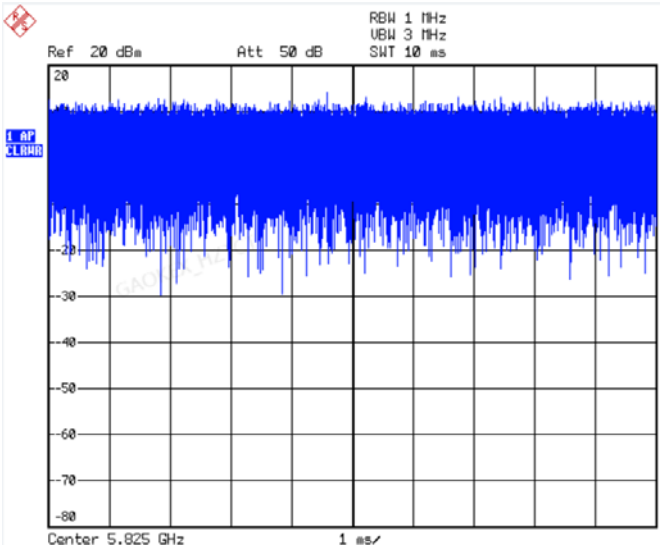
Table 13.2-23: SAR Values (WLAN 5G- Body) –(Scaled Reported SAR)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
Ch.	MHz					
64	5320	Rear	100%	100%	**0.62**	**0.62**

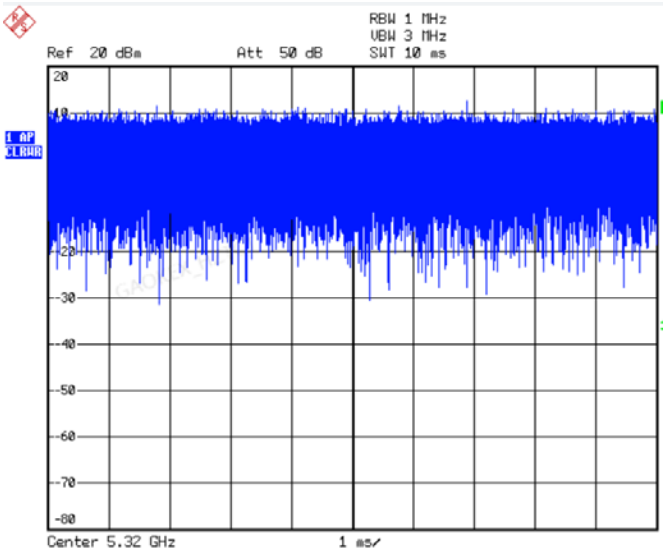
Duty factor plot

CH165



Duty factor plot

CH64



13.3 SAR results for BT

Table 13.3-1: SAR Values (BT - Head)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃											
Frequency		Side	Test Position	Note	Conducted Power (dBm)	Max. tune up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
39	2441	Left	Cheek	Note1	8.07	8.50	<0.01	/	<0.01	/	<0.01
39	2441	Left	Tilt	Note1	8.07	8.50	<0.01	/	<0.01	/	<0.01
39	2441	Right	Cheek	Note1	8.07	8.50	<0.01	/	<0.01	/	<0.01
39	2441	Right	Tilt	Note1	8.07	8.50	<0.01	/	<0.01	/	<0.01

Table 13.3-2: SAR Values (BT – Body worn)

Ambient Temperature: 22.9℃ Liquid Temperature: 22.5℃										
Frequency		Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Power Drift (dB)
Ch.	MHz									
39	2441	Front	Note1	8.07	8.50	<0.01	/	<0.01	/	<0.01
39	2441	Rear	Note1	8.07	8.50	<0.01	/	<0.01	/	<0.01
39	2441	Left	Note1	8.07	8.50	<0.01	/	<0.01	/	<0.01
39	2441	Top	Note1	8.07	8.50	<0.01	/	<0.01	/	<0.01

Note: The distance between the EUT and the phantom bottom is 10mm.

14 Evaluation of Simultaneous

14.1 Introduction

The following procedures adopted from “FCC SAR Considerations for Cell Phones with Multiple Transmitters” are applicable to handsets with built-in unlicensed transmitters such as WLAN and Bluetooth devices which may simultaneously transmit with the licensed transmitter. KDB 447498 D01 provides two procedures for determining simultaneous transmission SAR test exclusion: Sum of SAR and SAR to Peak Location Ratio (SPLSR)

14.1.1 Sum of SAR

To qualify for simultaneous transmission SAR test exclusion based upon Sum of SAR the sum of the reported standalone SARs for all simultaneously transmitting antennas shall be below the applicable standalone SAR limit. If the sum of the SARs is above the applicable limit then simultaneous transmission SAR test exclusion may still apply if the requirements of the SAR to Peak Location Ratio (SPLSR) evaluation are met.

14.1.2 SAR to Peak Location Ratio (SPLSR)

KDB 447498 D01 General RF Exposure Guidance explains how to calculate the SAR to Peak Location Ratio (SPLSR) between pairs of simultaneously transmitting antennas:

$SPLSR = (SAR1 + SAR2)^{1.5} / Ri$

Where:

SAR1 is the highest reported or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition.

SAR2 is the highest reported or estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first .

Ri is the separation distance between the pair of simultaneous transmitting antennas. When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of

$[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$

In order for a pair of simultaneous transmitting antennas with the sum of 1-g SAR > 1.6 W/kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$(SAR1 + SAR2)^{1.5} / Ri \leqslant 0.04$

When an individual antenna transmits at on two bands simultaneously, the sum of the highest reported SAR for the frequency bands should be used to determine SAR1 or SAR2. When SPLSR is necessary, the smallest distance between the peak SAR locations for the antenna pair with respect to the peaks from each antenna should be used.

14.2 Simultaneous Transmission Capabilities

The simultaneous transmission possibilities for this device are listed as below:

Capable Transmit Configurations	Head	Body	Product Specific 10-g (0mm)
Cellular + BT	Yes	Yes	Yes
Cellular + Wi-Fi 2.4G	Yes	Yes	Yes
Cellular + Wi-Fi 5G	Yes	Yes	Yes
Cellular + Wi-Fi 5G+ BT	Yes	Yes	Yes

Note:

1. Wi-Fi 2.4G&Bluetooth cannot transmit simultaneously.
2. Wi-Fi 5G&Bluetooth can transmit simultaneously.
3. WWAN cannot transmit simultaneously.
4. The reported SAR summation is calculated based on the same configuration and test position.
5. For the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR, we determined the SAR of this edges were less than 0.01. For the convenience of simultaneous transmission calculation, all SAR values less than 0.01 are uniformly written as 0.00

14.3 SAR Simultaneous Transmission Analysis

Table 14.3-1: The sum of SAR values for Main antenna + WiFi-2.4G

	Position	Main antenna	WiFi-2.4G	Sum
Highest SAR value for Head	Right head, Touch (LTE Band 12)	0.79	0.47	**1.26**
Highest SAR value for Body	Rear10mm (LTE Band 66)	0.75	0.17	**0.92**

Table 14.3-2: The sum of SAR values for Main antenna + WiFi-5G

	Position	Main antenna	WiFi-5G	Sum
Highest SAR value for Head	Right head, Touch (LTE Band 12)	0.79	0.45	**1.24**
Highest SAR value for Body	Rear10mm (LTE Band 66)	0.75	0.62	**1.37**

Table 14.3-3: The sum of SAR values for Main antenna + BT

	Position	Main antenna	BT	Sum
Highest SAR value for Head	Right head, Touch (LTE Band 12)	0.79	＜0.01	**0.79**
Highest SAR value for Body	Rear10mm (LTE Band 66)	0.75	＜0.01	**0.75**

Table 14.3-4: The sum of SAR values for Main antenna + WiFi-5G+ BT

	Position	Main antenna	WiFi-5G	BT	Sum
Highest SAR value for Head	Right head, Touch (LTE Band 12)	0.79	0.45	＜0.01	**1.24**
Highest SAR value for Body	Rear10mm (LTE Band 66)	0.75	0.62	＜0.01	**1.37**

14.4 Conclusion

According to the above tables, he highest simultaneous transmission reported SAR values is **1.37W/kg (1g).** The sum of reported SAR values is<1.6W/kg. So the simultaneous transmission SAR with volume scans is not required.

15 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps2) through 4) do not apply.

2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.

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

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

Band	Frequency		Mode	Side	Test Position	Distance	Hightest Measured SAR(W/kg)	First Repeated SAR(W/kg)	The Ratio	Second Repeated SAR(W/kg)
	Ch.	MHz								
WiFi-2.4G	6	2437	802.11b	Right	Touch	0mm	1.170	1.121	1.04	/
WiFi-2.4G	6	2437	802.11b	Right	Tilt	0mm	0.908	0.881	1.03	/
WiFi-5G	165	5825	802.11a	/	Rear	10mm	0.853	0.814	1.05	/

16 Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be ≤ 30%, for a confidence interval of k = 2. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

Therefore, the measurement uncertainty is not required.

17 MAIN TEST INSTRUMENTS

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46418996	May 11, 2022	One year
02	Power sensor	NRP110T	101139	January 13, 2022	One year
03	Power sensor	NRP110T	101159	January 13, 2022	One year
04	Signal Generator	E4438C	MY49071430	January 13, 2022	One year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	155735	November 3, 2021	One year
07	BTS	MT8821C	6262314712	July 15, 2022	One year
08	E-field Probe	SPEAG EX3DV4	7609	March 24,2022	One year
09	DAE	SPEAG DAE4	1250	August 3, 2022	One year
10	Dipole Validation Kit	SPEAG D750V3	1017	July 20,,2022	One year
11	Dipole Validation Kit	SPEAG D835V2	4d069	July 20,,2022	One year
12	Dipole Validation Kit	SPEAG D1750V2	1003	July 18,,2022	One year
13	Dipole Validation Kit	SPEAG D1900V2	5d101	July 26,2022	One year
14	Dipole Validation Kit	SPEAG D2450V2	853	July 20,2022	One year
15	Dipole Validation Kit	SPEAG D2600V2	1012	July 20,2022	One year
16	Dipole Validation Kit	SPEAG D5GHzV2	1060	July 5,2022	One year

END OF REPORT BODY

Appendixes

Refer to separated files for the following appendixes

ANNEX A Graph Results

GSM850_CH251 Left Touch
Date: 2022/9/9
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 848.8 MHz; σ = 0.944 mho/m; ε_r = 42.61; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: GSM850 (824-849MHz); Frequency: 848.8 MHz;
Duty Cycle: 1:8.3
Probe: EX3DV4 - SN7609; ConvF(10.53, 10.53, 10.53) @ 848.8 MHz;

Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.374 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.684 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.441 W/kg
SAR(1 g) = 0.361 W/kg; SAR(10 g) = 0.280 W/kg
Maximum value of SAR (measured) = 0.374 W/kg

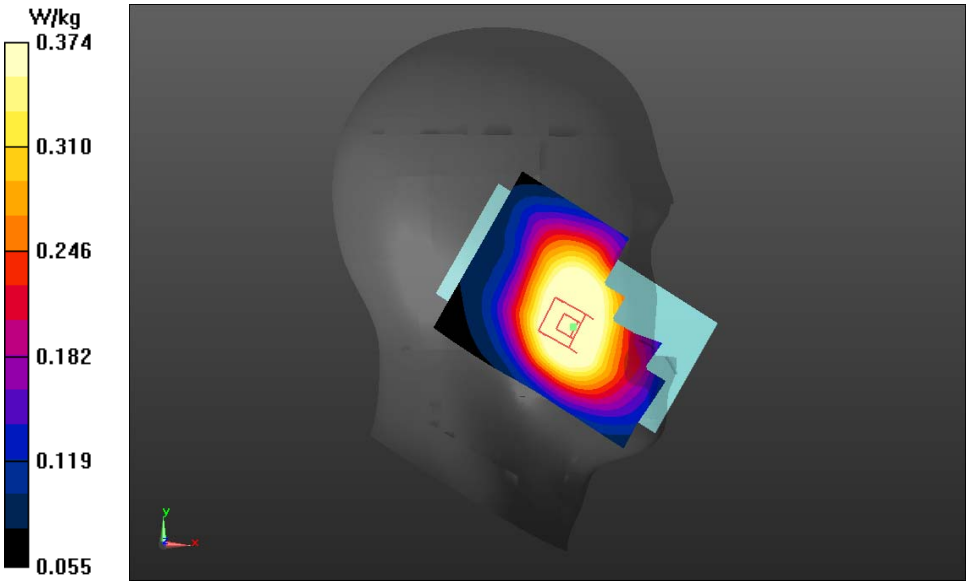


Fig A.1

GSM850_CH251 Rear 4TX 10mm
Date: 2022/9/9
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 848.8 MHz; σ = 0.944 mho/m; ε_r = 42.61; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: GSM850 (824-849MHz); Frequency: 848.8 MHz;
Duty Cycle: 1:2
Probe: EX3DV4 - SN7609; ConvF(10.53, 10.53, 10.53) @ 848.8 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.713 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.49 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.848 W/kg
SAR(1 g) = 0.630 W/kg; SAR(10 g) = 0.465 W/kg
Maximum value of SAR (measured) = 0.693 W/kg

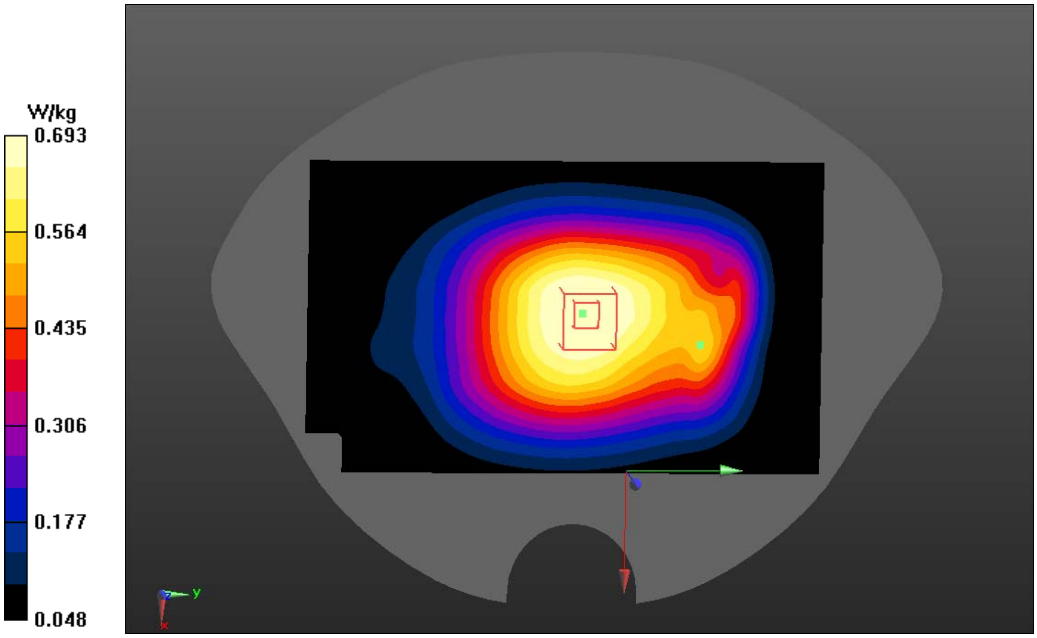


Fig A.2

GSM1900_CH810 Right Touch
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1909.8 MHz; σ = 1.468 mho/m; ε_r = 40.76; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: PCS1900(1850-1910MHz); Frequency: 1909.8 MHz;
Duty Cycle: 1:8.3
Probe: EX3DV4 - SN7609; ConvF(8.62, 8.62, 8.62) @ 1909.8 MHz;

Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.220 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.847 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.252 W/kg
SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.107 W/kg
Maximum value of SAR (measured) = 0.181 W/kg

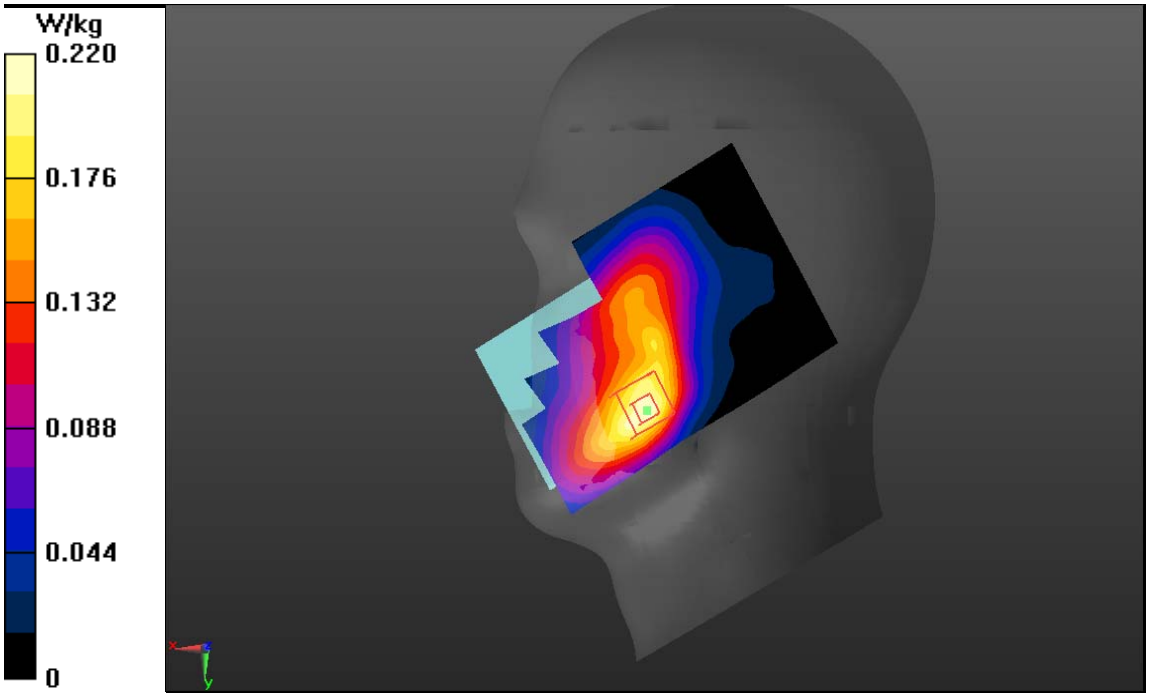


Fig A.3

GSM1900_CH512 Bottom 3TX 10mm
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1850.2 MHz; σ = 1.398 mho/m; ε_r = 41.09; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: PCS1900(1850-1910MHz); Frequency: 1850.2 MHz;
Duty Cycle: 1: 2.67
Probe: EX3DV4 - SN7609; ConvF(8.62, 8.62, 8.62) @ 1850.2 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.820 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.17 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.988 W/kg
SAR(1 g) = 0.547 W/kg; SAR(10 g) = 0.280 W/kg
Maximum value of SAR (measured) = 0.621 W/kg

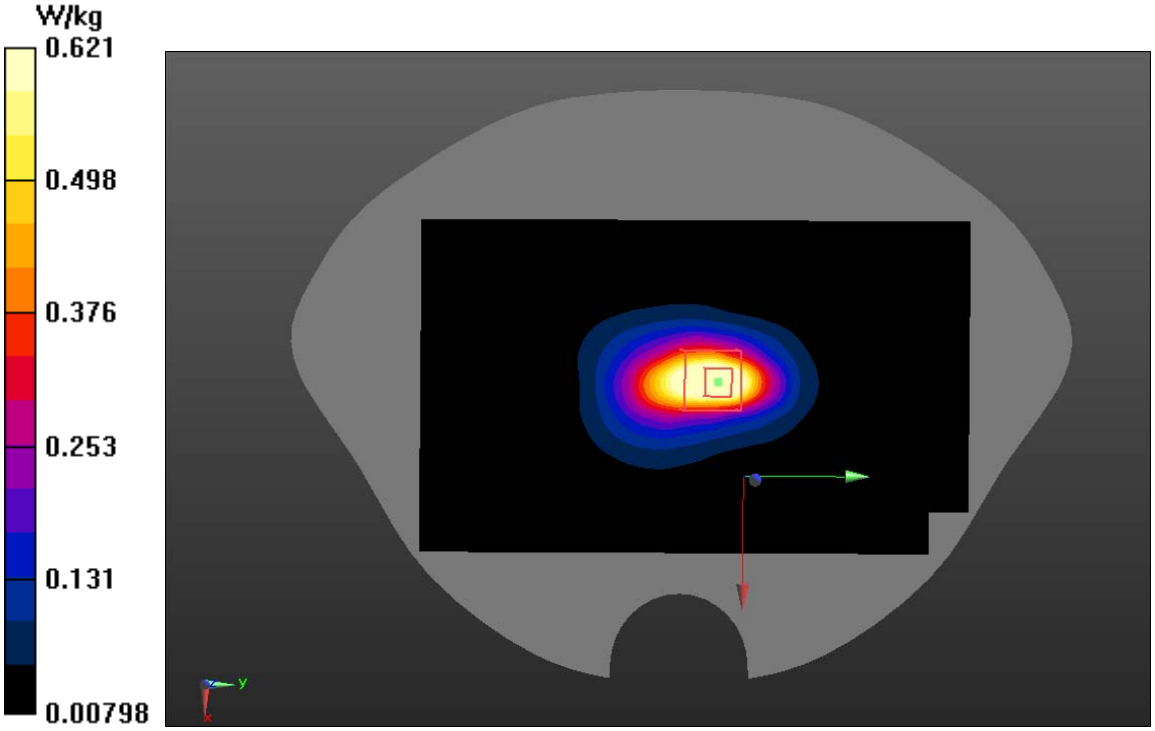


Fig A.4

GSM1900_ CH512 Rear 3TX 15mm
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1850.2 MHz; σ = 1.398 mho/m; ε_r = 41.09; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: PCS1900(1850-1910MHz); Frequency: 1850.2 MHz;
Duty Cycle: 1: 2.67
Probe: EX3DV4 - SN7609; ConvF(8.62, 8.62, 8.62) @ 1850.2 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.354 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.514 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.548 W/kg
SAR(1 g) = 0.323 W/kg; SAR(10 g) = 0.176 W/kg
Maximum value of SAR (measured) = 0.356 W/kg

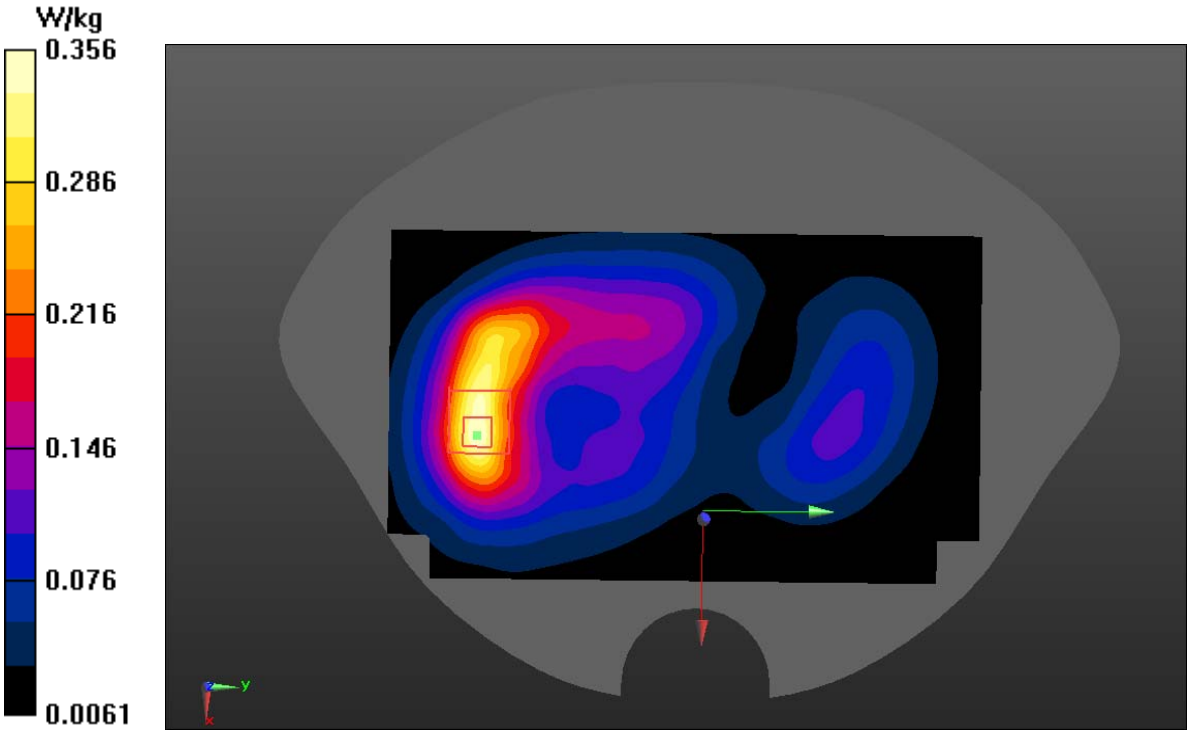


Fig A.5

WCDMA Band 2_CH9538 Right Touch
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1907.6 MHz; σ = 1.470 mho/m; ε r = 40.74; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC,Liquid Temperature: 22.5 ºC
Communication System Band: WCDMA Band 2; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(8.62, 8.62, 8.62) @ 1907.6 MHz;

Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.578 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.804 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.654 W/kg
SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.278 W/kg
Maximum value of SAR (measured) = 0.462 W/kg

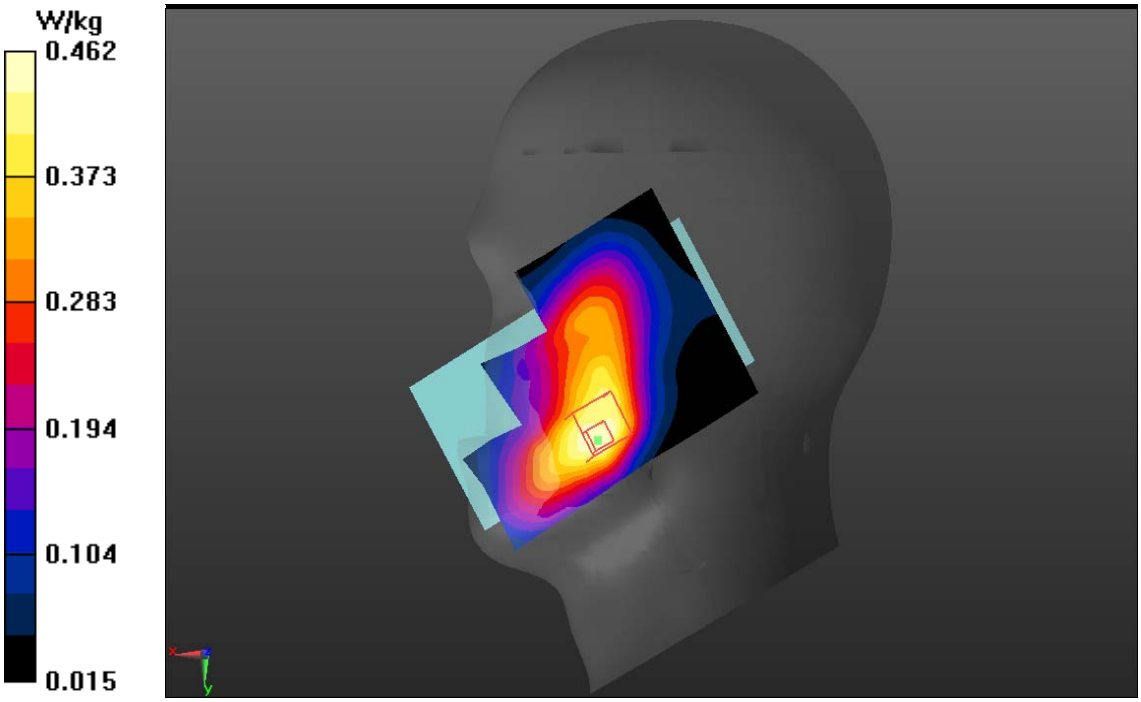


Fig A.6

WCDMA Band 2_CH9400 Bottom 10mm
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1880 MHz; σ = 1.410 mho/m; ε_r =40.50; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: WCDMA Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(8.62, 8.62, 8.62) @ 1880 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.898 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.22 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.588 W/kg; SAR(10 g) = 0.311 W/kg
Maximum value of SAR (measured) = 0.631 W/kg

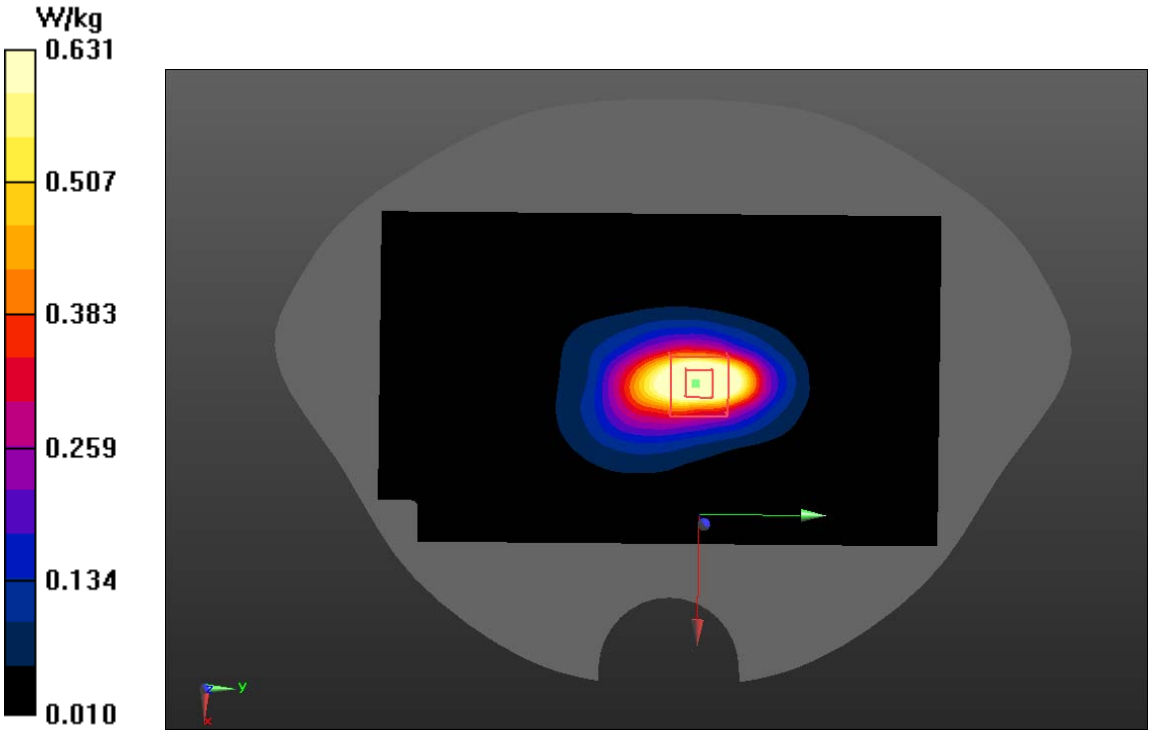


Fig A.7

WCDMA Band 2_CH9400 rear 15mm
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1880 MHz; σ = 1.410 mho/m; ε_r =40.50; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: WCDMA Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(8.62, 8.62, 8.62) @ 1880 MHz;

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.558 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.01 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.526 W/kg; SAR(10 g) = 0.304 W/kg
Maximum value of SAR (measured) = 0.732 W/kg

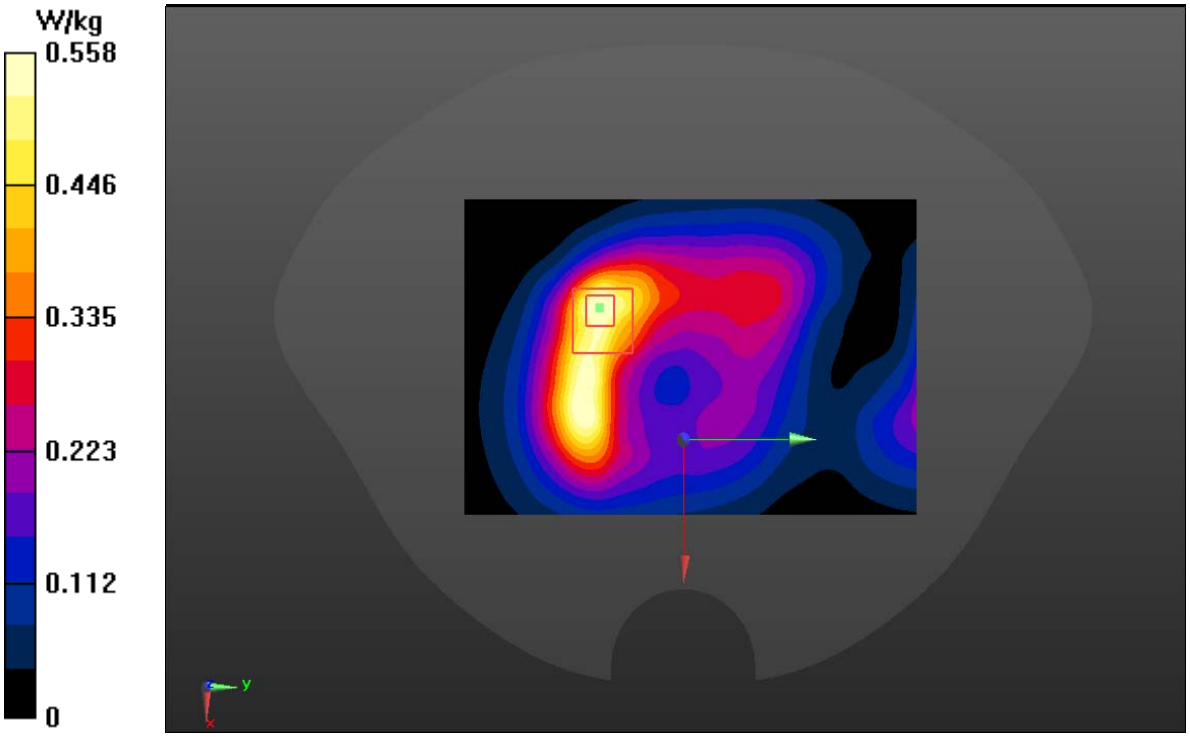


Fig A.8

WCDMA Band 4_CH1513 Left Touch
Date: 2022/9/10
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1752.6 MHz; σ = 1.376 mho/m; ε r = 40.75; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC,Liquid Temperature: 22.5 ºC
Communication System Band: WCDMA Band 4(1712.2MHz-1752.8MHz); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(8.85, 8.85, 8.85) @ 1752.6 MHz;

Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.315 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.455 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.329 W/kg
SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.146 W/kg
Maximum value of SAR (measured) = 0.243 W/kg

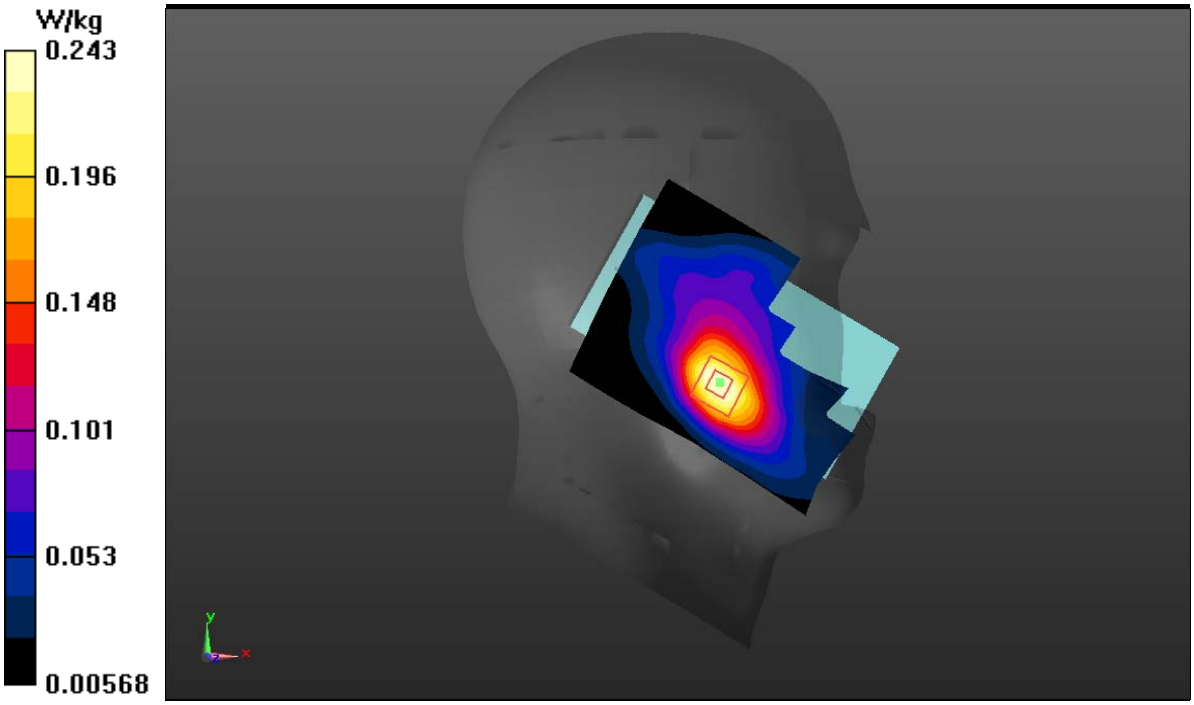


Fig A.9

WCDMA Band 4_1412 Bottom 10mm
Date: 2022/9/10
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.323 mho/m; ε_r = 41.24; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: WCDMA Band 4(1712.2MHz-1752.8MHz); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(8.85, 8.85, 8.85) @ 1732.4 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.888 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.90 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 0.991 W/kg
SAR(1 g) = 0.593 W/kg; SAR(10 g) = 0.317 W/kg
Maximum value of SAR (measured) = 0.623 W/kg

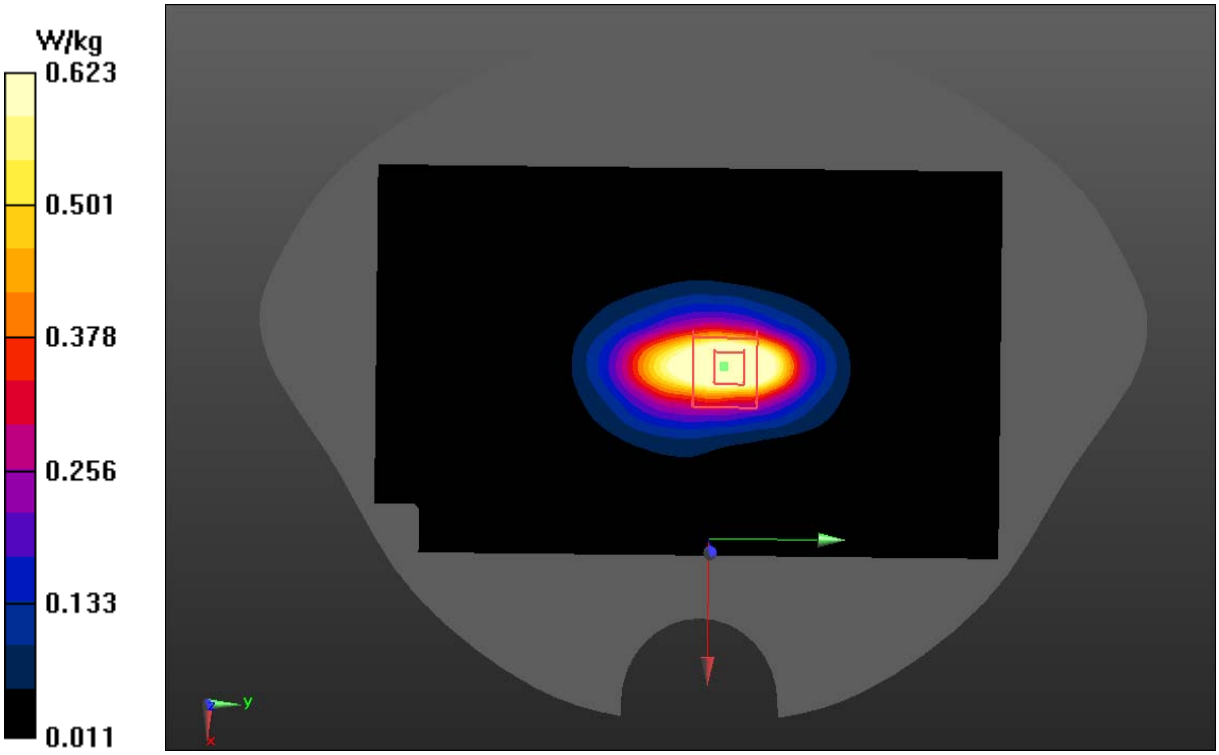


Fig A.10

WCDMA Band 4_CH1412 Rear 15mm
Date: 2022/9/10
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.323 mho/m; ε r = 41.24; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: WCDMA Band 4(1712.2MHz-1752.8MHz); Frequency: 1732.4 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(8.85, 8.85, 8.85) @ 1732.4 MHz;

Area Scan (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.547 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.21 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.826 W/kg
SAR(1 g) = 0.427 W/kg; SAR(10 g) = 0.241 W/kg
Maximum value of SAR (measured) = 0.602 W/kg

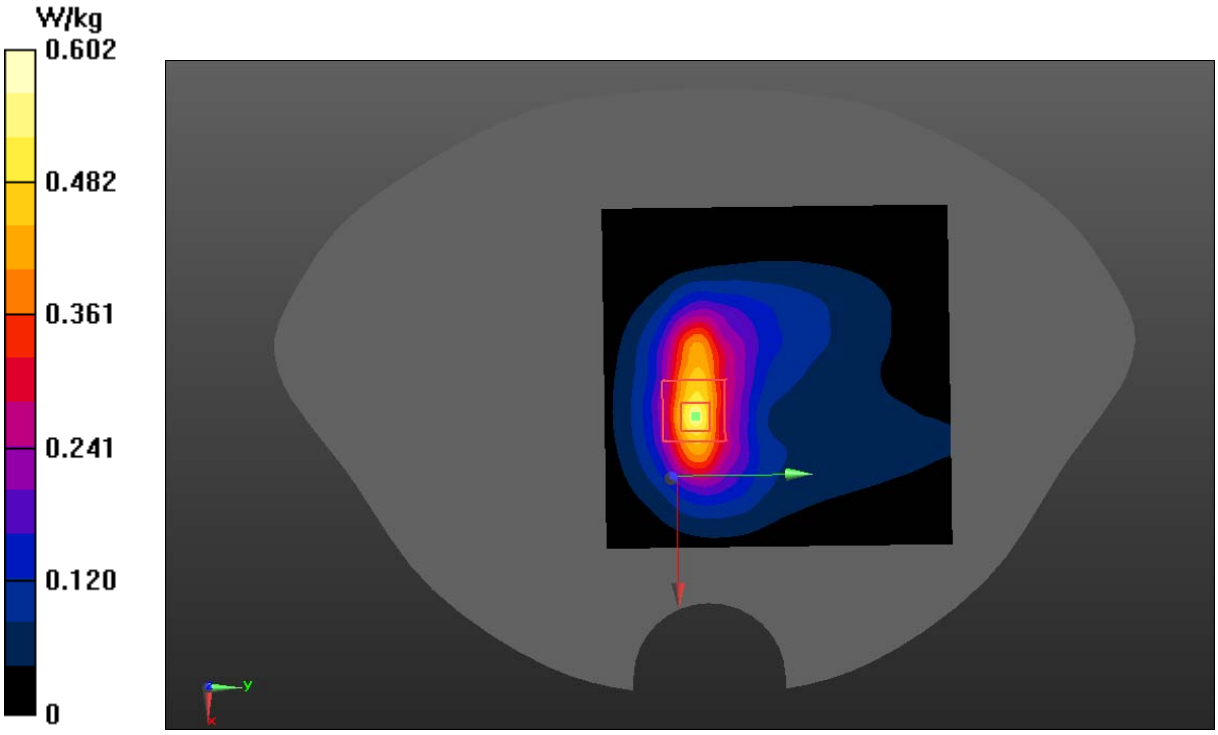


Fig A.11

WCDMA Band 5_CH4183 Right Touch
Date: 2022/9/9
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 836.6 MHz; σ = 0.940 mho/m; ε_r = 42.65; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC,Liquid Temperature: 22.5 ºC
Communication System Band: WCDMA Band 5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(10.53, 10.53, 10.53) @ 836.6 MHz;

Area Scan (81x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.426 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.87 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.669 W/kg
SAR(1 g) = 0.415 W/kg; SAR(10 g) = 0.254 W/kg
Maximum value of SAR (measured) = 0.447 W/kg

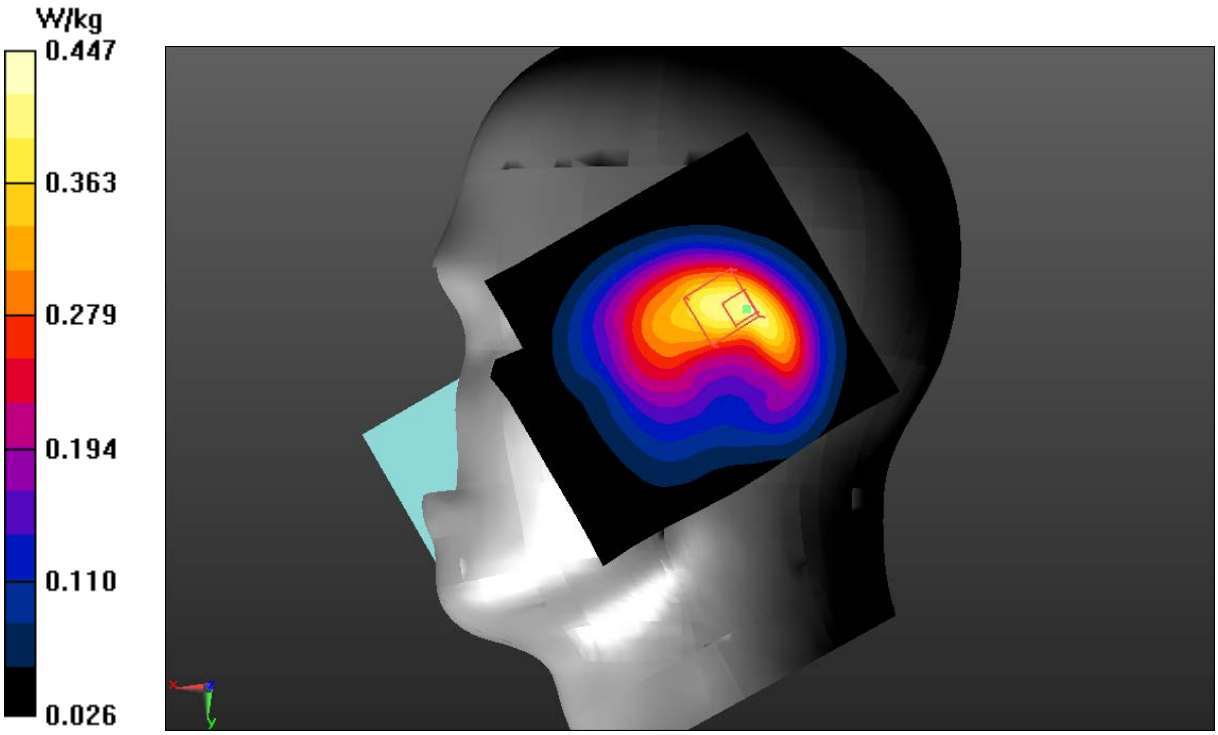


Fig A.12

WCDMA Band 5_CH4183 Rear 10mm
Date: 2022/9/9
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 836.6 MHz; σ = 0.940 mho/m; ε r = 42.65; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: WCDMA Band 5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(10.53, 10.53, 10.53) @ 836.6 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.343 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.04 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.743 W/kg
SAR(1 g) = 0.423 W/kg; SAR(10 g) = 0.248 W/kg
Maximum value of SAR (measured) = 0.459 W/kg

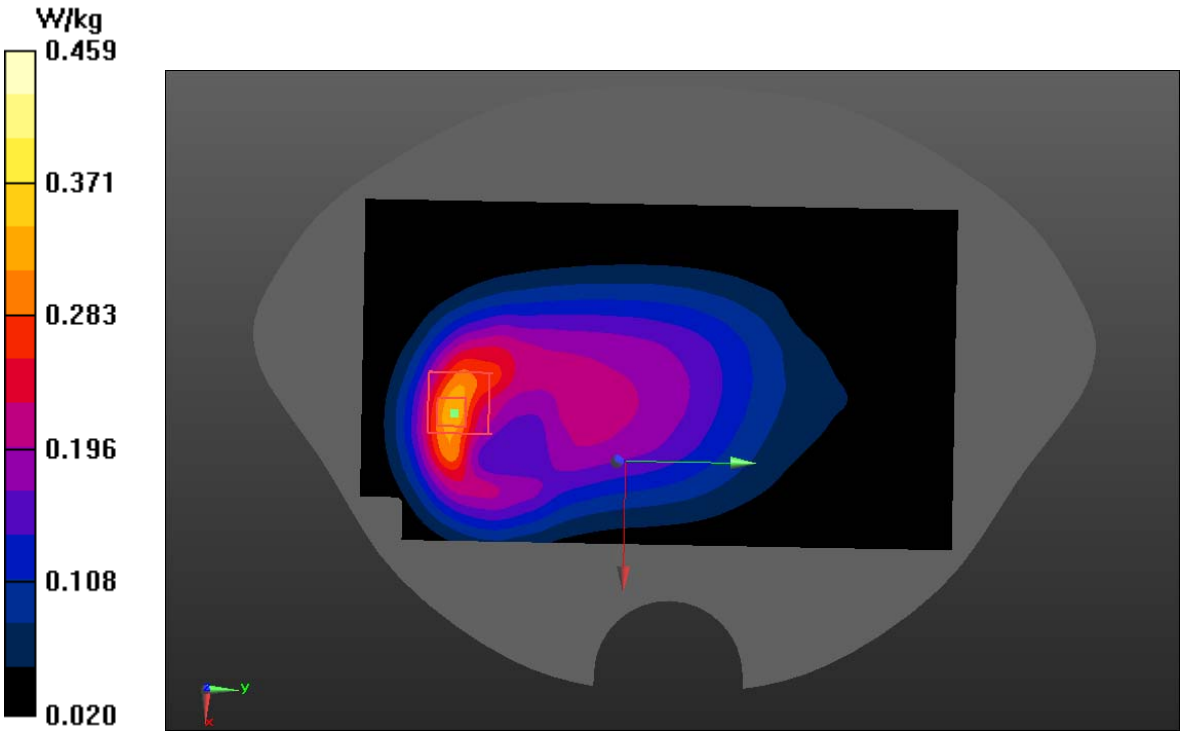


Fig A.13

LTE B12_CH 23095 1RB- Middle Right Touch
Date: 2022/9/8
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 707.5 MHz; σ = 0.892 mho/m; ε_r = 43.50; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: LTE Band 12 10M; Frequency: 707.5 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(10.87, 10.87, 10.87) @ 707.5 MHz;

Area Scan (81x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.688 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.48 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.21 W/kg
SAR(1 g) = 0.661 W/kg; SAR(10 g) = 0.418 W/kg
Maximum value of SAR (measured) = 0.925 W/kg

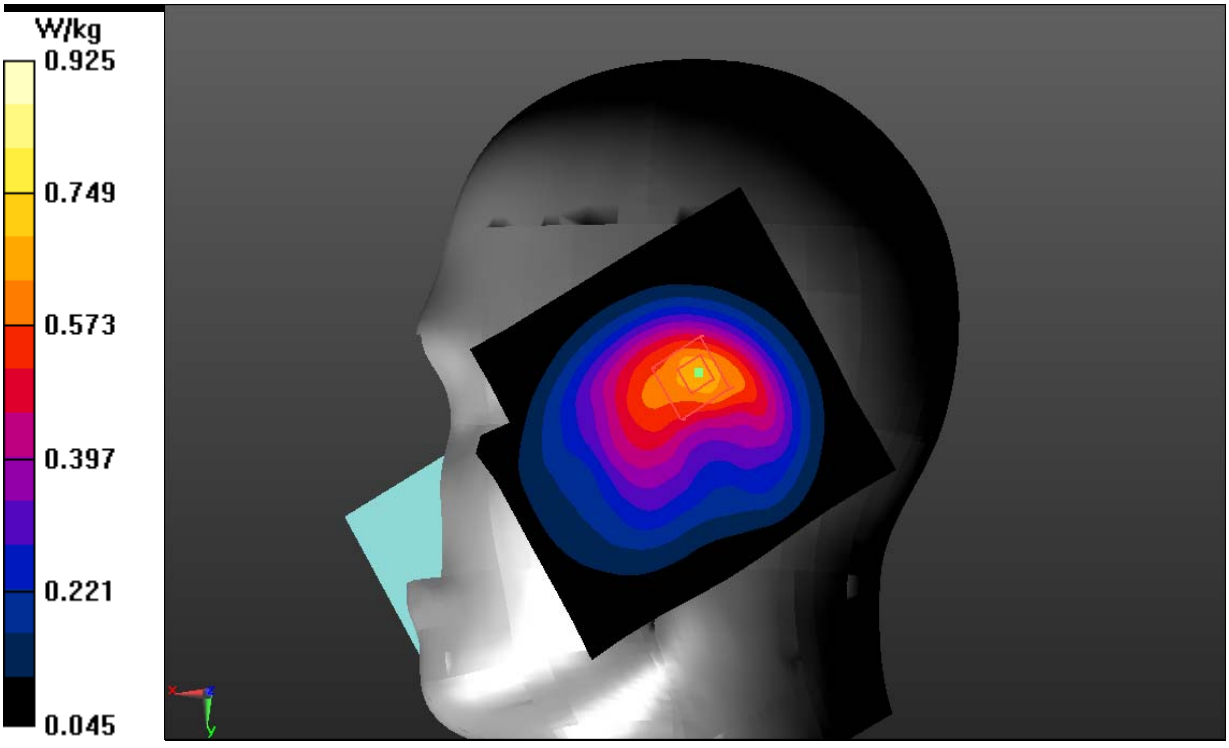


Fig A.14

LTE Band 12_CH23095 1RB-Middle Rear 10mm
Date: 2022/9/8
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 707.5 MHz; σ = 0.892 mho/m; ε r = 43.50; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: LTE Band 12 10M; Frequency: 707.5 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(10.87, 10.87, 10.87) @ 707.5 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.490 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.68 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.595 W/kg
SAR(1 g) = 0.499 W/kg; SAR(10 g) = 0.385 W/kg
Maximum value of SAR (measured) = 0.508 W/kg

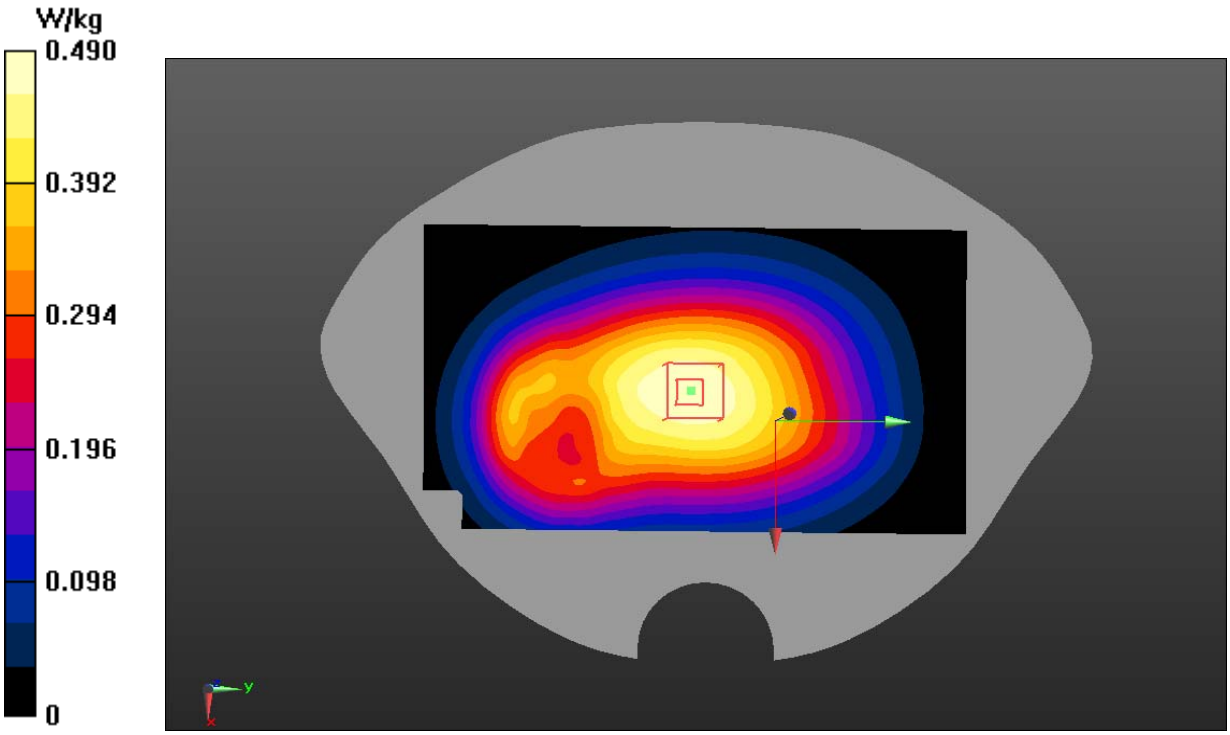


Fig A.15

LTE B25_CH26590 1RB- Middle Right Touch
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1905 MHz; σ = 1.432 mho/m; ε r = 40.72; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: Band 25, E-UTRA/FDD (1850.0 - 1915.0 MHz); Frequency: 1905 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(8.62, 8.62, 8.62) @ 1905 MHz;

Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.418 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.645 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.757 W/kg
SAR(1 g) = 0.477 W/kg; SAR(10 g) = 0.303 W/kg
Maximum value of SAR (measured) = 0.642 W/kg

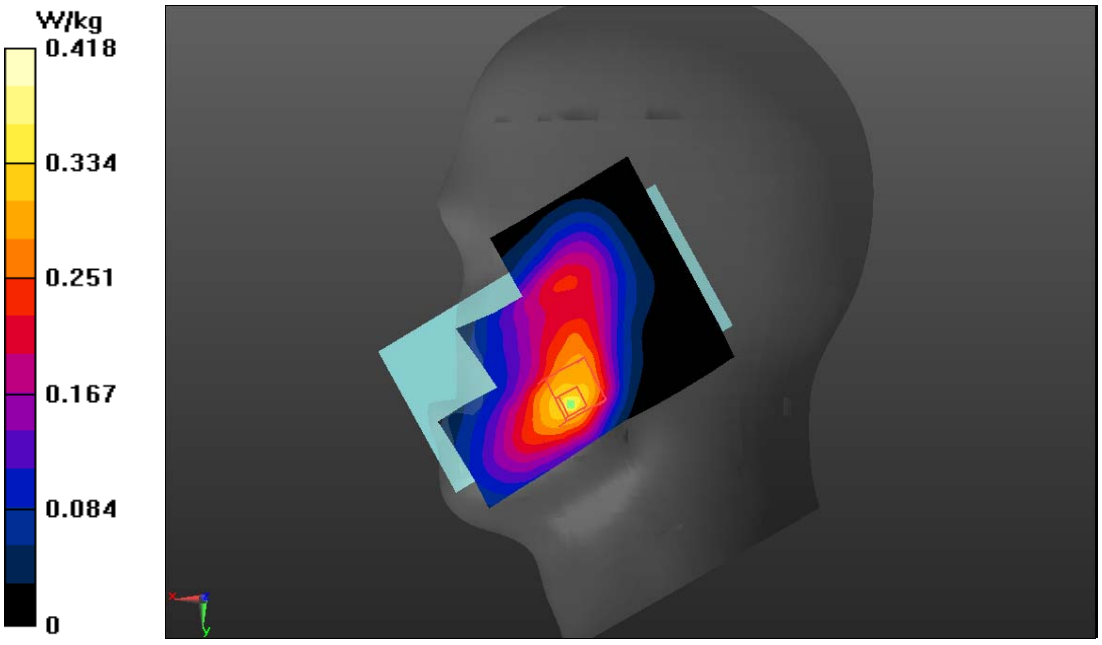


Fig A.16

LTE Band 25_CH26590 50RB-Low Bottom 10mm
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1905 MHz; σ = 1.432 mho/m; ε r = 40.72; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: Band 25, E-UTRA/FDD (1850.0 - 1915.0 MHz); Frequency: 1905 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(8.62, 8.62, 8.62) @ 1905 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.910 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.66 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.598 W/kg; SAR(10 g) = 0.314 W/kg
Maximum value of SAR (measured) = 0.677 W/kg

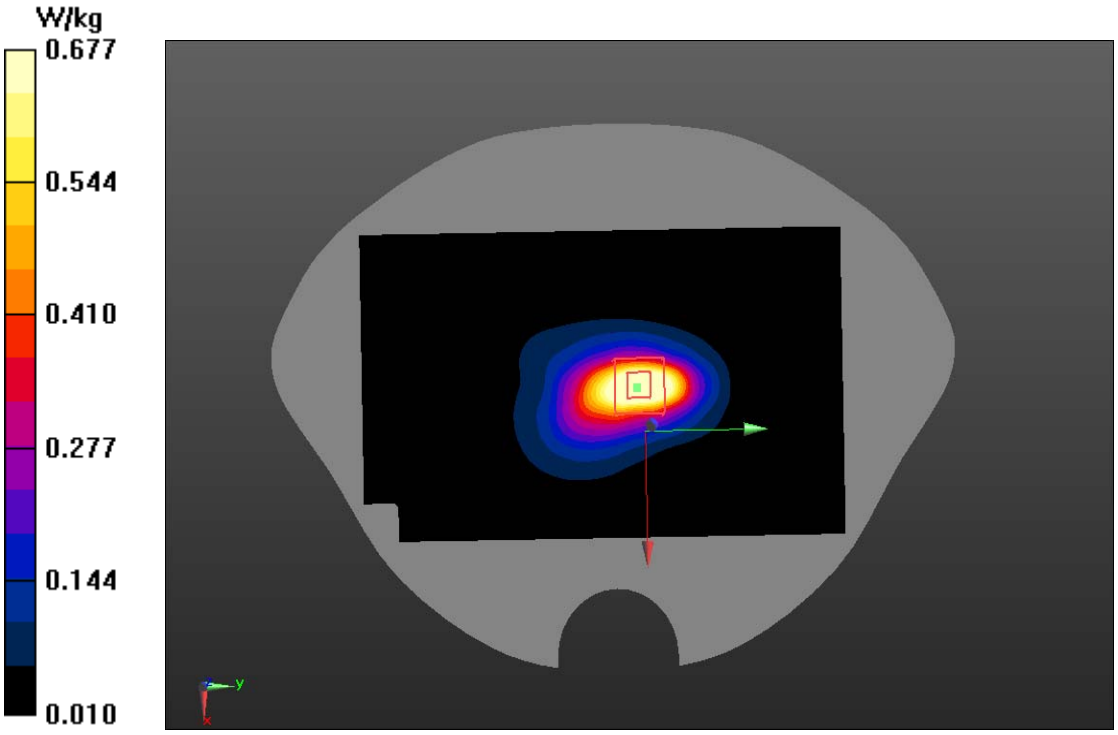


Fig A.17

LTE Band 25 _CH26590 1RB-Middle Rear 15mm
Date: 2022/9/11
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1905 MHz; σ = 1.432 mho/m; εr = 40.72; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: Generic LTE Frequency: 1905 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(8.62, 8.62, 8.62)

Area Scan (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.374 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.698 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.6870
SAR(1 g) = 0.351 mW/g; SAR(10 g) = 0.194 mW/g
Maximum value of SAR (measured) = 0.552 mW/g

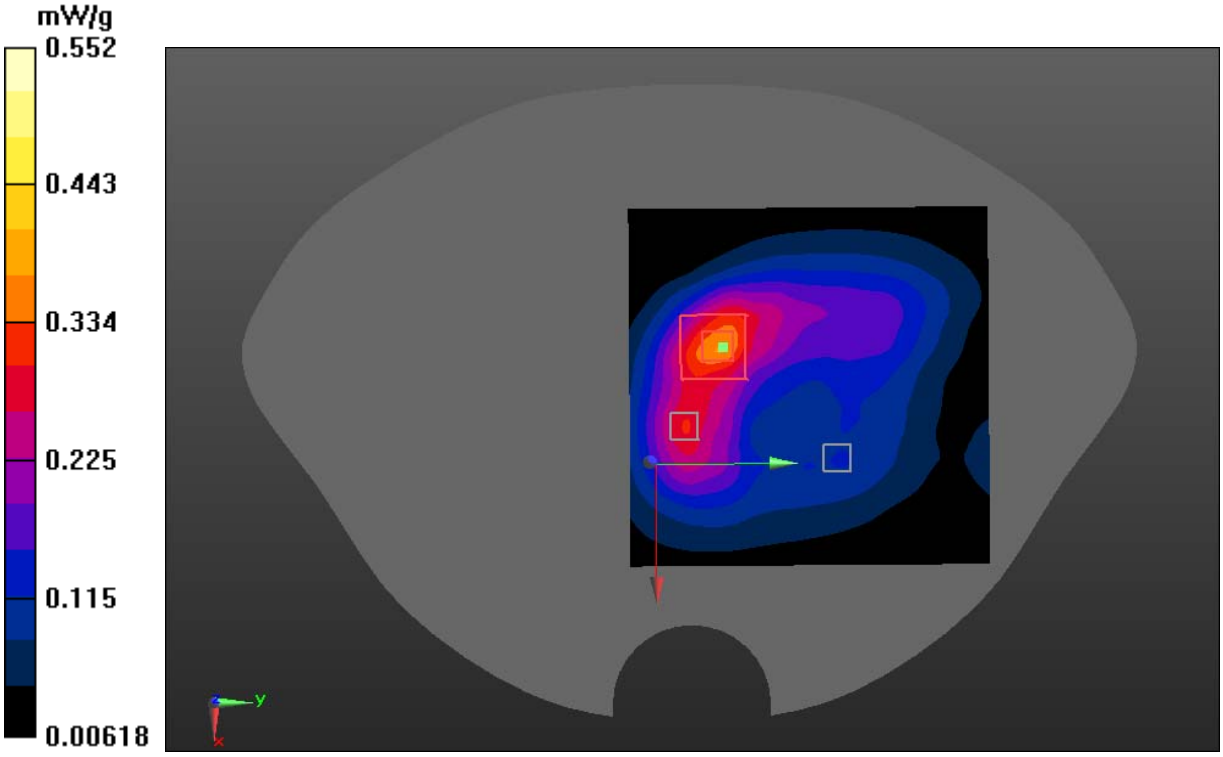


Fig A.18

LTE B26_CH26865 1RB- Middle Right Touch
Date: 2022/9/8
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 718 MHz; σ = 0.919 mho/m; ε r = 43.16; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: Band 26; Frequency: 718 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(10.87, 10.87, 10.87) @ 718 MHz;

Area Scan (81x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.646 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.98 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.945 W/kg
SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.382 W/kg
Maximum value of SAR (measured) = 0.651 W/kg

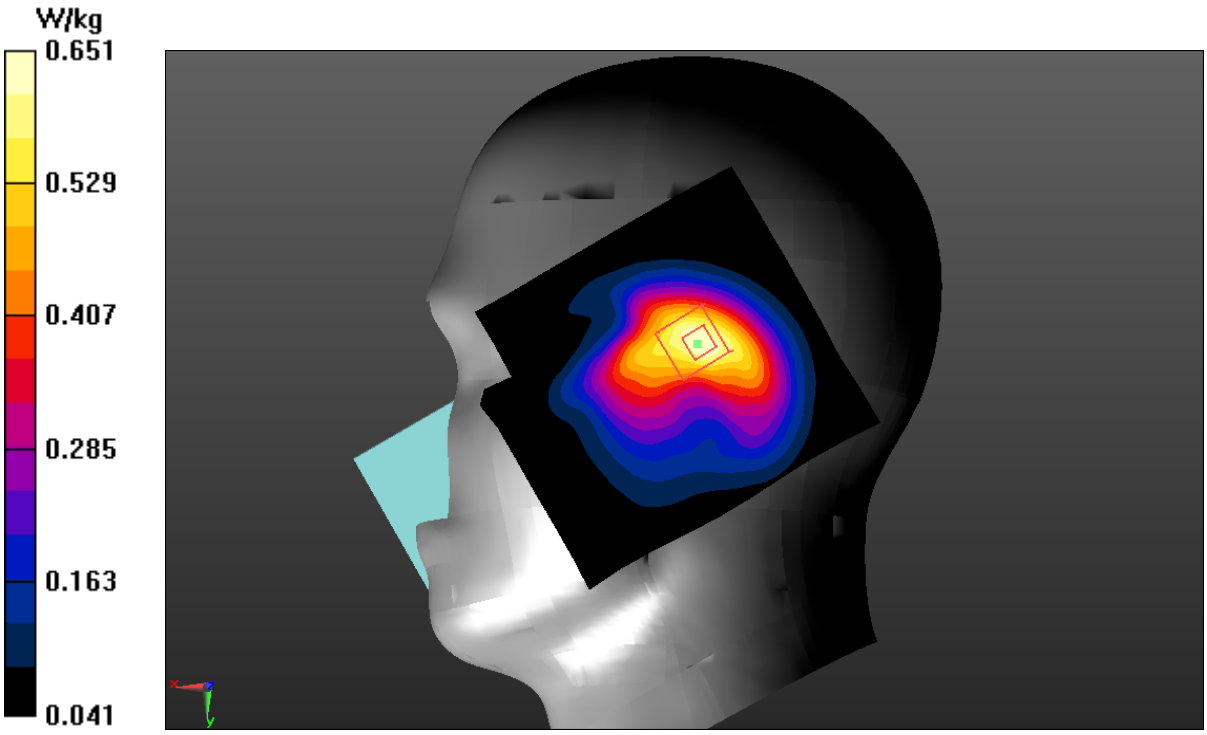


Fig A.19

LTE Band 26_CH26865 1RB-Middle Rear 10mm
Date: 2022/9/9
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 831.5 MHz; σ = 0.935 mho/m; ε r = 42.69; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: Mid; Frequency: 831.5 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(10.53, 10.53, 10.53) @ 831.5 MHz;

Area Scan (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.270 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.38 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.517 W/kg
SAR(1 g) = 0.288 W/kg; SAR(10 g) = 0.166 W/kg
Maximum value of SAR (measured) = 0.316 W/kg

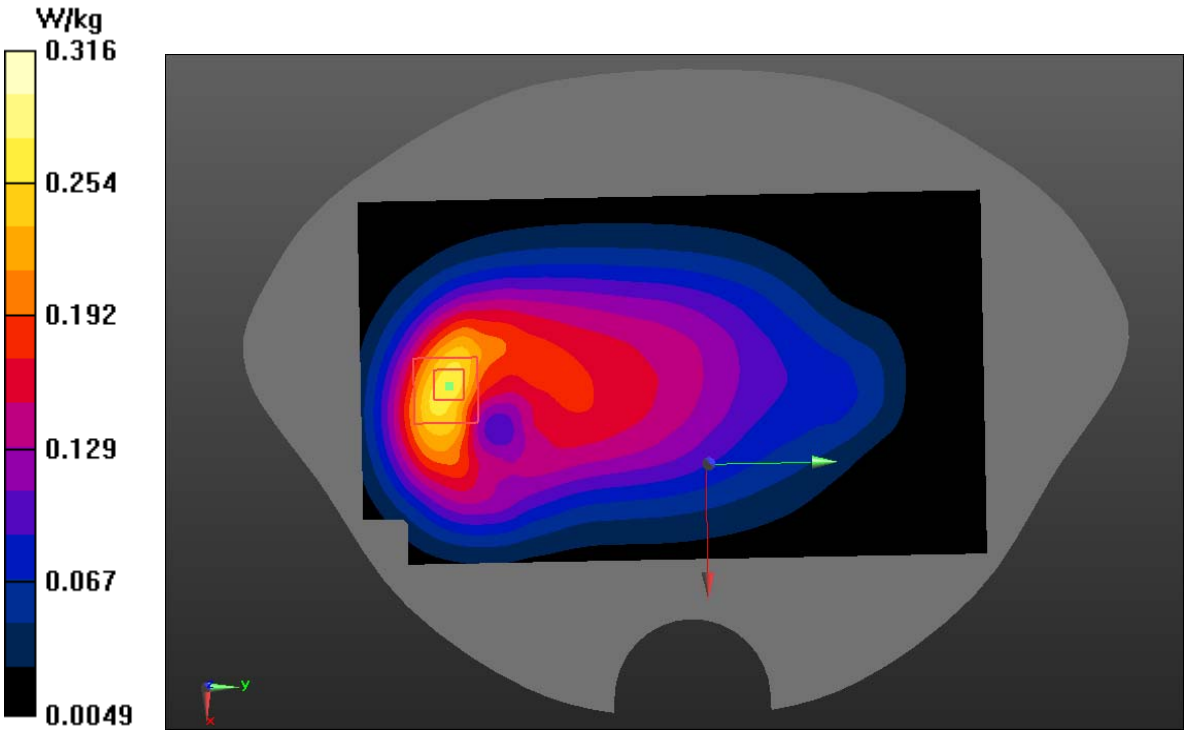


Fig A.20

LTE B41_CH41055 1RB- Middle Right Touch
Date: 2022/9/12
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2636.5 MHz; σ = 1.958 mho/m; ε r = 38.65; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: TDD band 41; Frequency: 2636.5 MHz;Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7609; ConvF(7.77, 7.77, 7.77) @ 2636.5 MHz;

Area Scan (91x141x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.216 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.644 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.307 W/kg
SAR(1 g) = 0.188 W/kg; SAR(10 g) = 0.109 W/kg
Maximum value of SAR (measured) = 0.200 W/kg

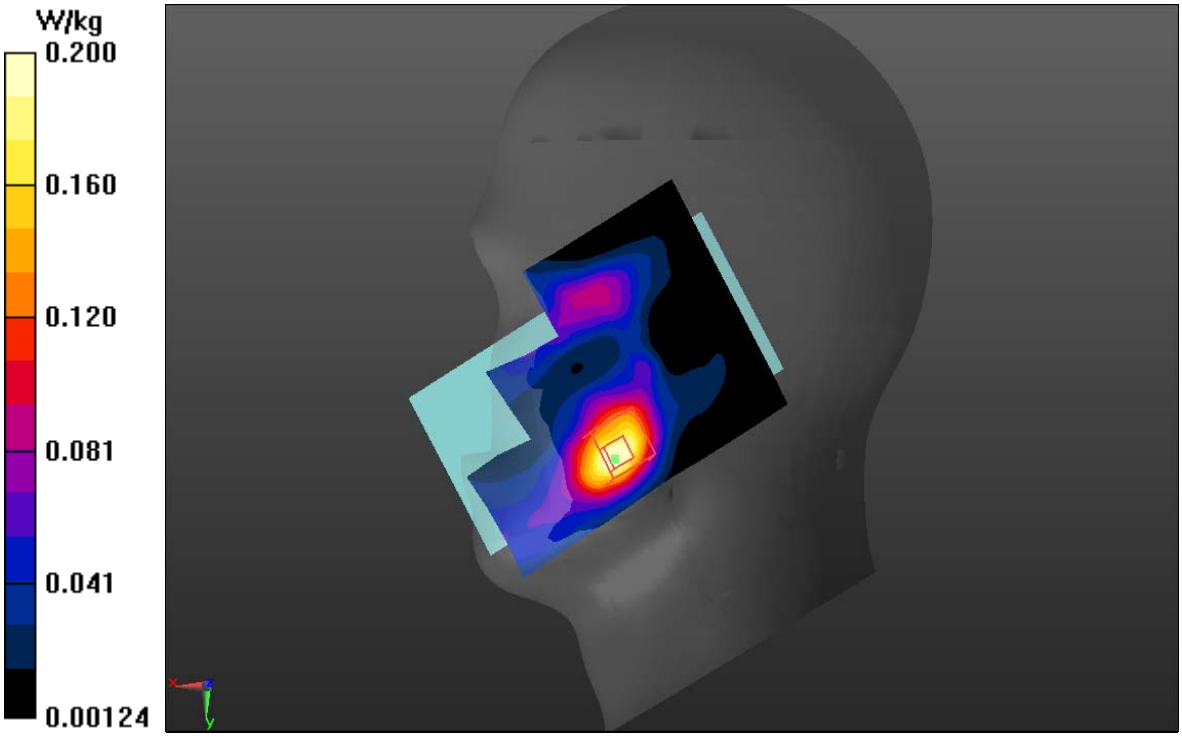


Fig A.21

LTE Band 41_CH41055 1RB-Middle Rear 10mm
Date: 2022/9/12
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2636.5 MHz; σ = 1.958 mho/m; ε_r = 38.65; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2636.5 MHz;Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7609; ConvF(7.77, 7.77, 7.77) @ 2636.5 MHz;

Area Scan (121x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.711 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.58 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.924 W/kg
SAR(1 g) = 0.443 W/kg; SAR(10 g) = 0.193 W/kg
Maximum value of SAR (measured) = 0.510 W/kg

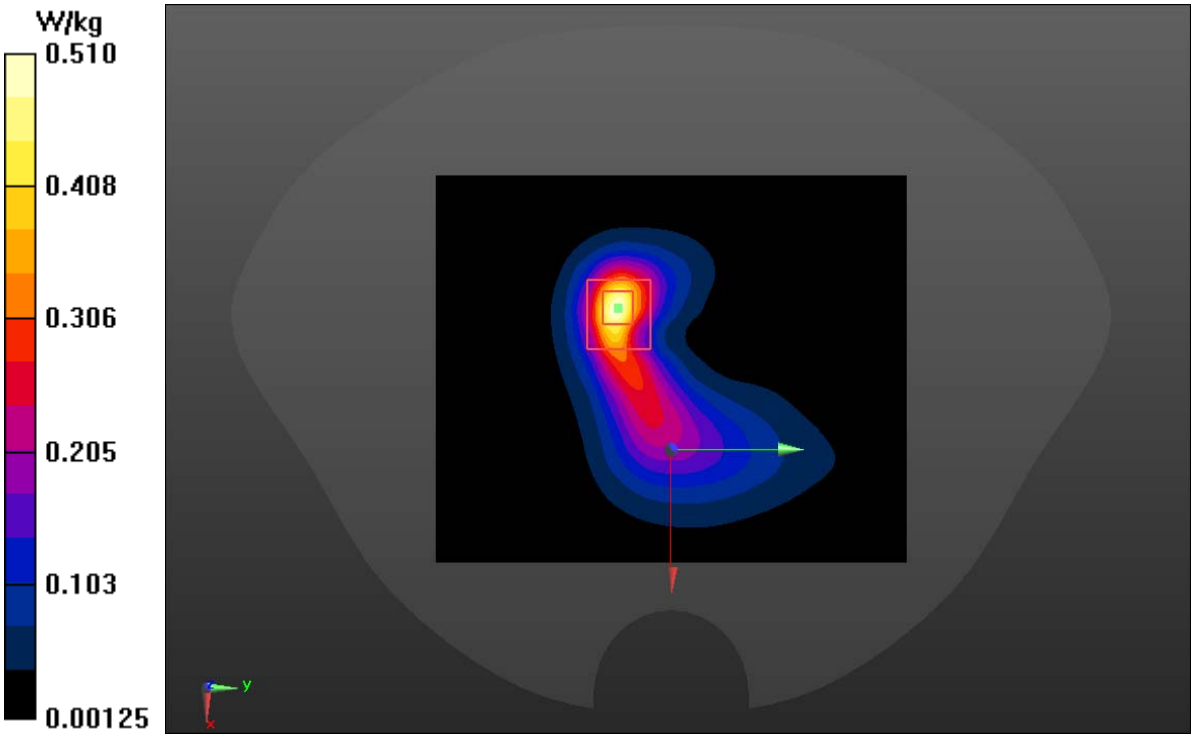


Fig A.22

LTE Band 41 _CH41055 1RB-Middle Rear 15mm
Date: 2022/9/13
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2636.5 MHz; σ = 1.958 mho/m; ε r = 38.65; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: LTE B41 PC3 (0) Frequency: 2636.5 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7609 ConvF(7.77, 7.77, 7.77)

Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.400 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.893 V/m; Power Drift = 0.0083 dB
Peak SAR (extrapolated) = 0.4670
SAR(1 g) = 0.239 mW/g; SAR(10 g) = 0.114 mW/g
Maximum value of SAR (measured) = 0.261 mW/g

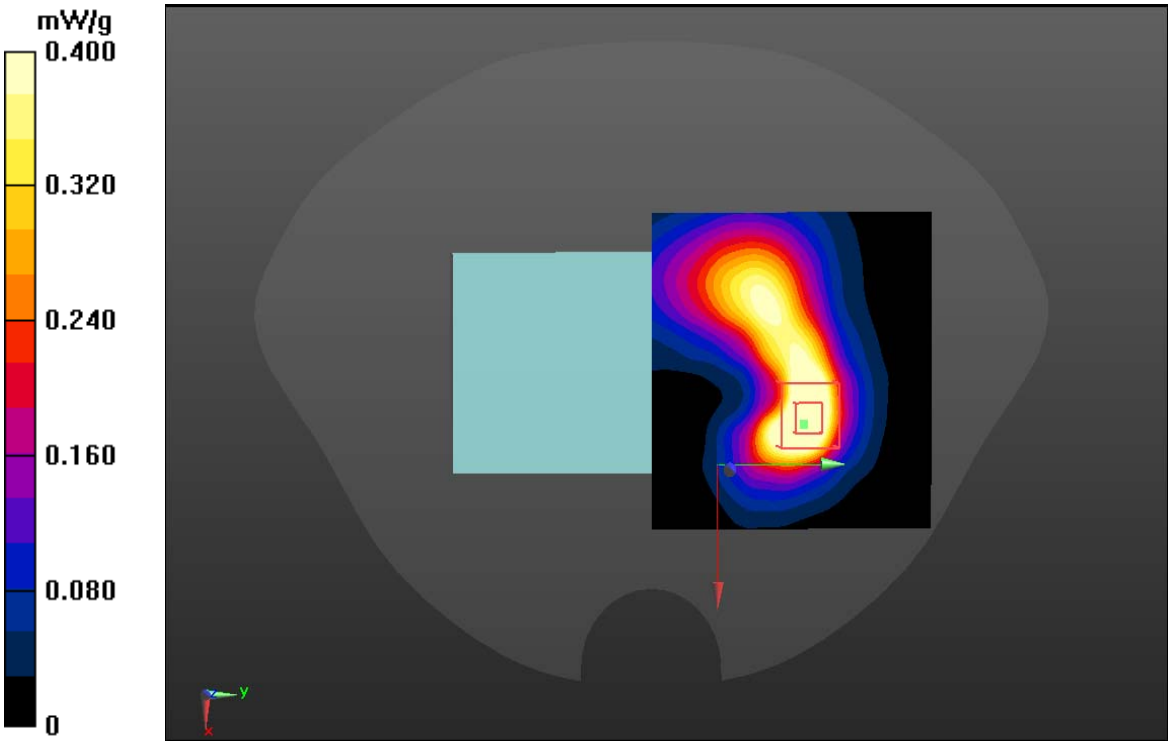


Fig A.23

LTE B41 PC2_CH41055 1RB- Middle Right Touch
Date: 2022/9/14
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2636.5 MHz; σ = 1.958 mho/m; ε r = 38.65; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: LTE TDD Frequency: 2636.5 MHz Duty Cycle: 1:2.37
Probe: EX3DV4 - SN7609 ConvF(7.77, 7.77, 7.77)

Area Scan (91x141x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.261 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.981 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.4390
SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.156 mW/g
Maximum value of SAR (measured) = 0.291 mW/g

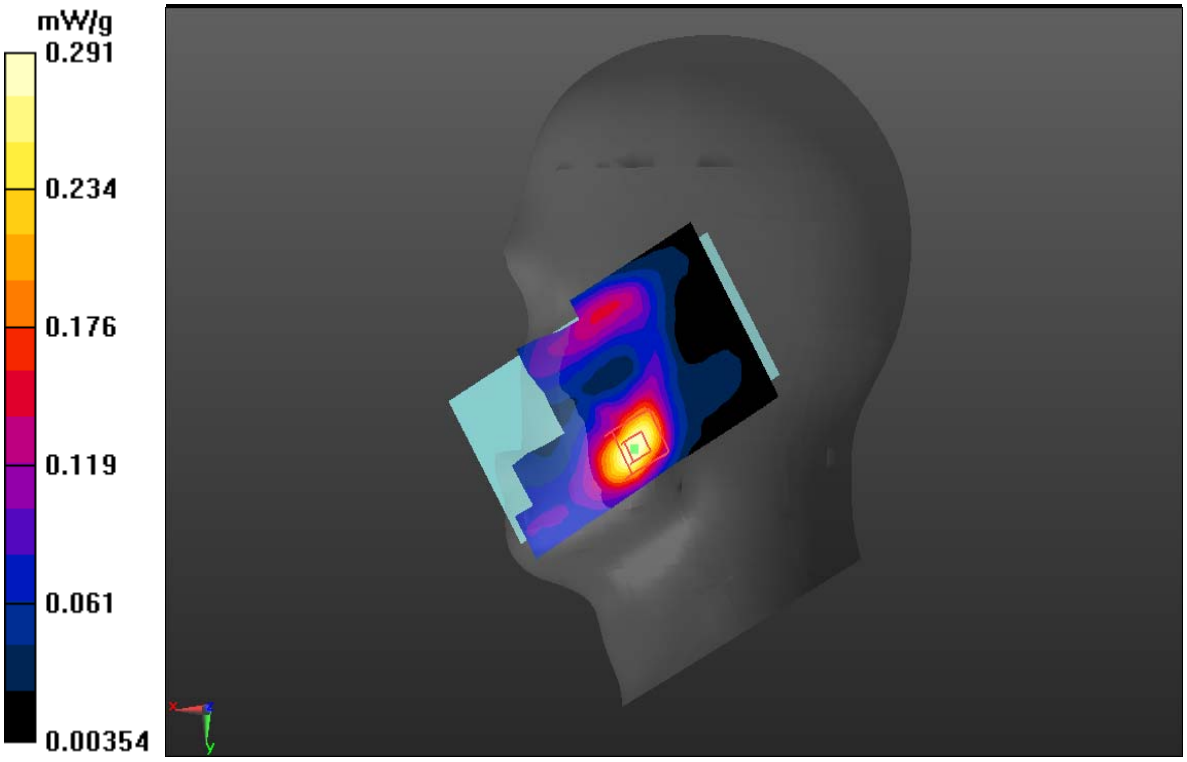


Fig A.24

LTE Band 41 PC2_CH41055 1RB-Middle Rear 10mm
Date: 2022/9/14
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2636.5 MHz; σ = 1.958 mho/m; ε_r = 38.65; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2636.5 MHz;Duty Cycle: 1:2.37
Probe: EX3DV4 - SN7609; ConvF(7.77, 7.77, 7.77) @ 2636.5 MHz;

Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.10 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.19 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.262 W/kg
Maximum value of SAR (measured) = 0.677 W/kg

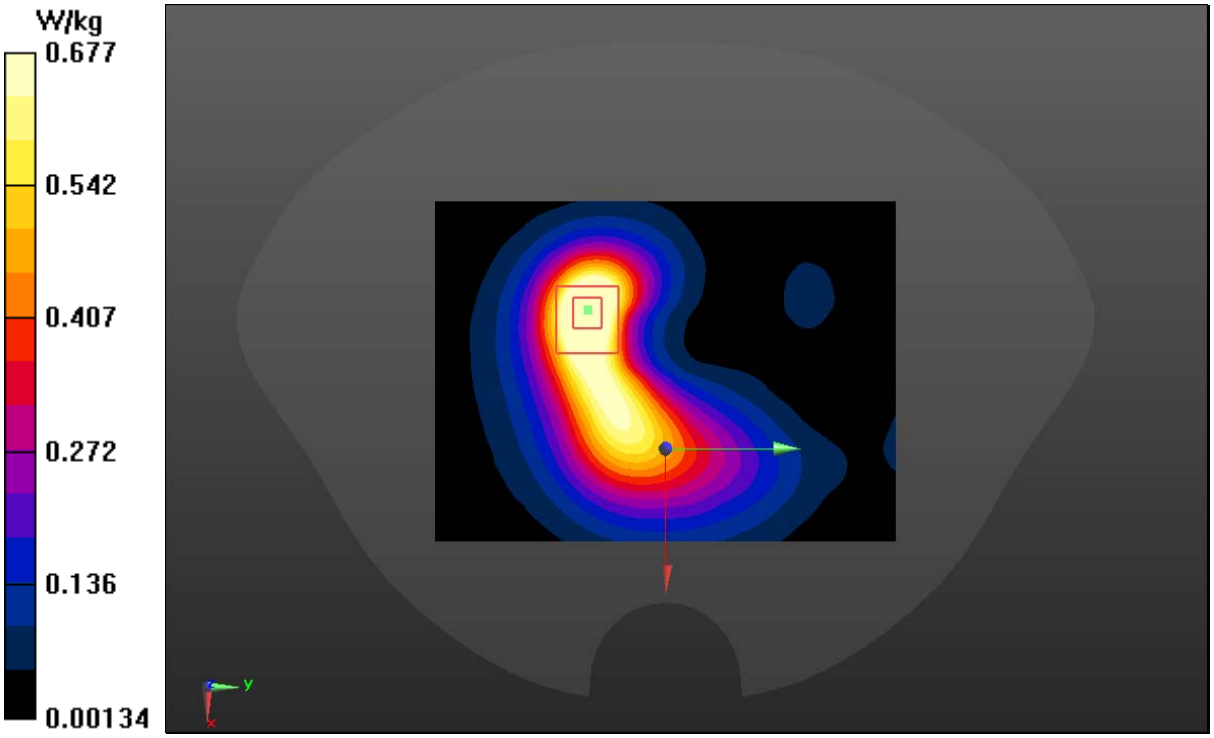


Fig A.25

LTE Band 41 PC2_CH41055 50RB-Middle Rear 15mm
Date: 2022/9/14
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2636.5 MHz; σ = 1.958 mho/m; ε_r = 38.65; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: LTE B41 HPUE (0) Frequency: 2636.5 MHz Duty Cycle: 1:2.37
Probe: EX3DV4 - SN7609 ConvF(7.77, 7.77, 7.77)

Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.489 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.703 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.6110
SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.152 mW/g
Maximum value of SAR (measured) = 0.497 mW/g

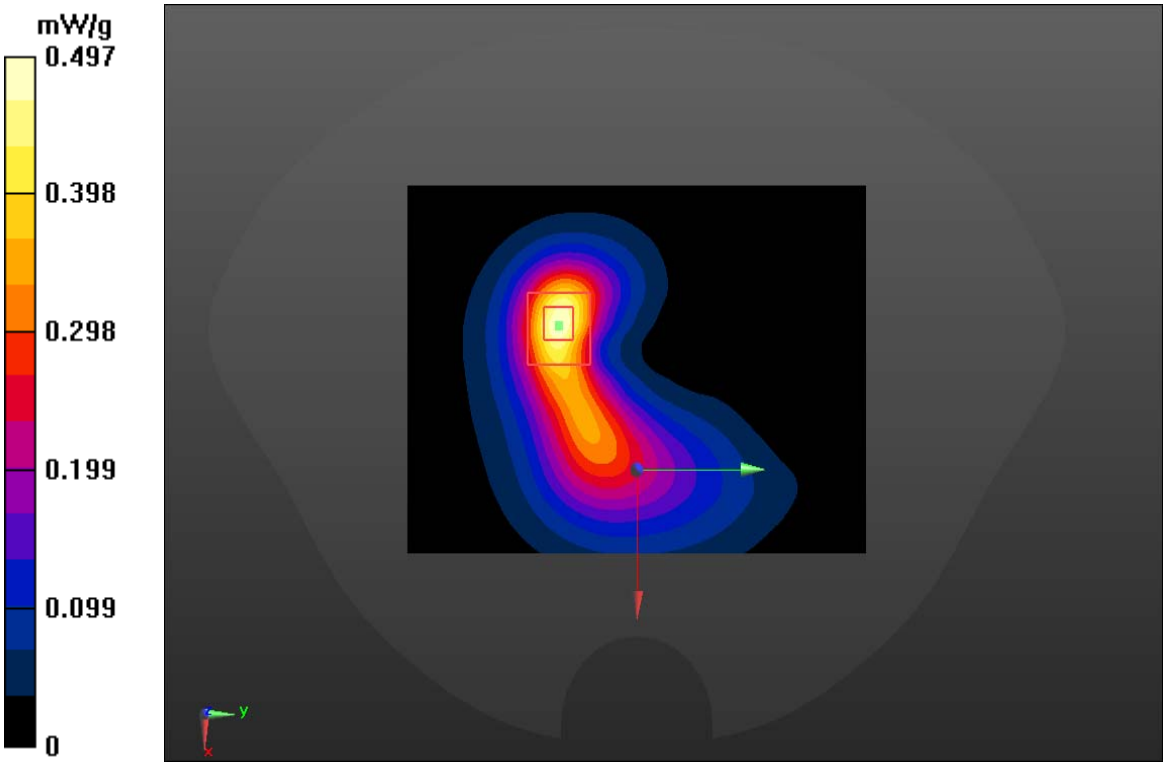


Fig A.26

LTE B66_CH132322 1RB- Middle Left Touch
Date: 2022/9/10
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1745 MHz; σ = 1.343 mho/m; εr = 41.19; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: LTE FDD Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(8.85, 8.85, 8.85)

Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.286 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.250 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.5240
SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.234 mW/g
Maximum value of SAR (measured) = 0.389 mW/g

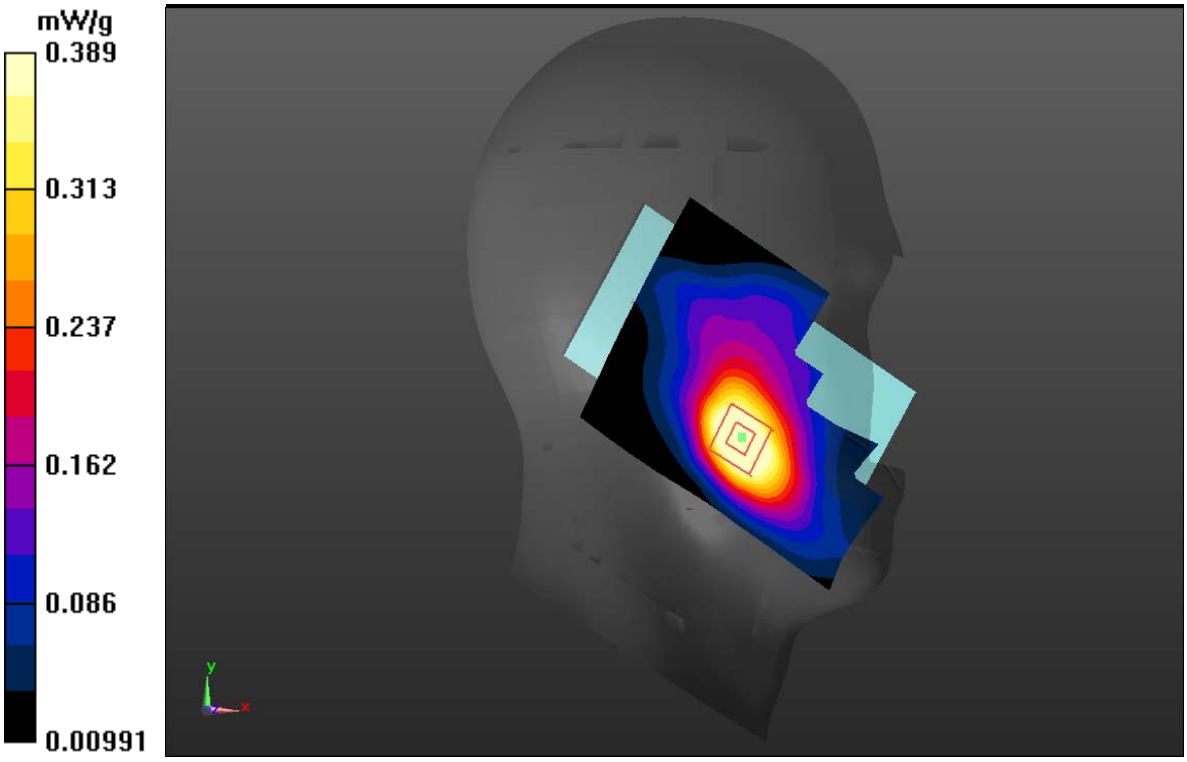


Fig A.27

LTE Band 66_CH132322 1RB-Middle Bottom 10mm
Date: 2022/9/10
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1745 MHz; σ = 1.343 mho/m; εr = 41.19; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: B66 (0) Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(8.85, 8.85, 8.85)

Area Scan (81x141x1): Measurement grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.008 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.018 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 1.2270
SAR(1 g) = 0.727 mW/g; SAR(10 g) = 0.388 mW/g
Maximum value of SAR (measured) = 0.799 mW/g

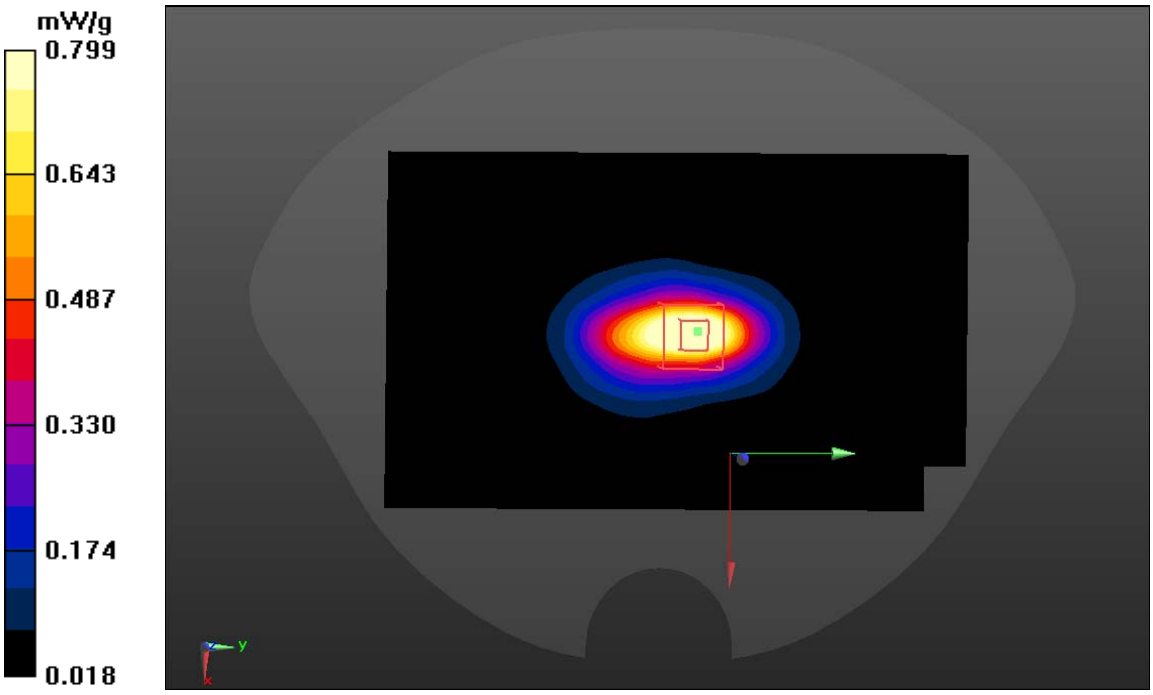


Fig A.28

LTE Band 66_CH132322 1RB-Middle Rear 15mm
Date: 2022/9/10
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 1745 MHz; σ = 1.343 mho/m; εr = 41.19; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: LTE FDD Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(8.85, 8.85, 8.85)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.512 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.692 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.6030
SAR(1 g) = 0.371 mW/g; SAR(10 g) = 0.216 mW/g
Maximum value of SAR (measured) = 0.503 mW/g

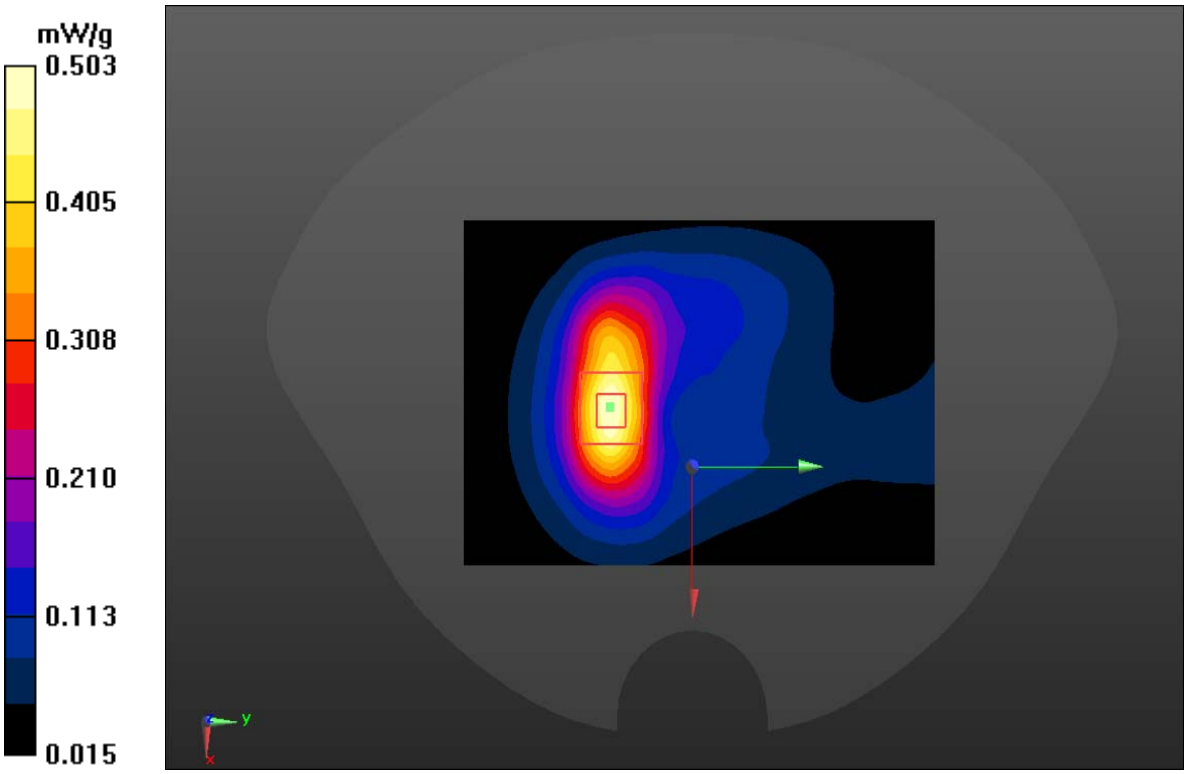


Fig A.29

LTE B71_CH133322 50RB0 Right Touch
Date: 2022/9/8
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 683 MHz; σ = 0.886 mho/m; ε r = 43.7; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: Band 71; Frequency: 683 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(10.87, 10.87, 10.87) @ 683 MHz;

Area Scan (111x101x1): Measurement grid: dx=1.500mm, dy=1.500mm
Maximum value of SAR (measured) = 0.416 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.70 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.871 W/kg
SAR(1 g) = 0.464 W/kg; SAR(10 g) = 0.284 W/kg
Maximum value of SAR (measured) = 0.672 W/kg

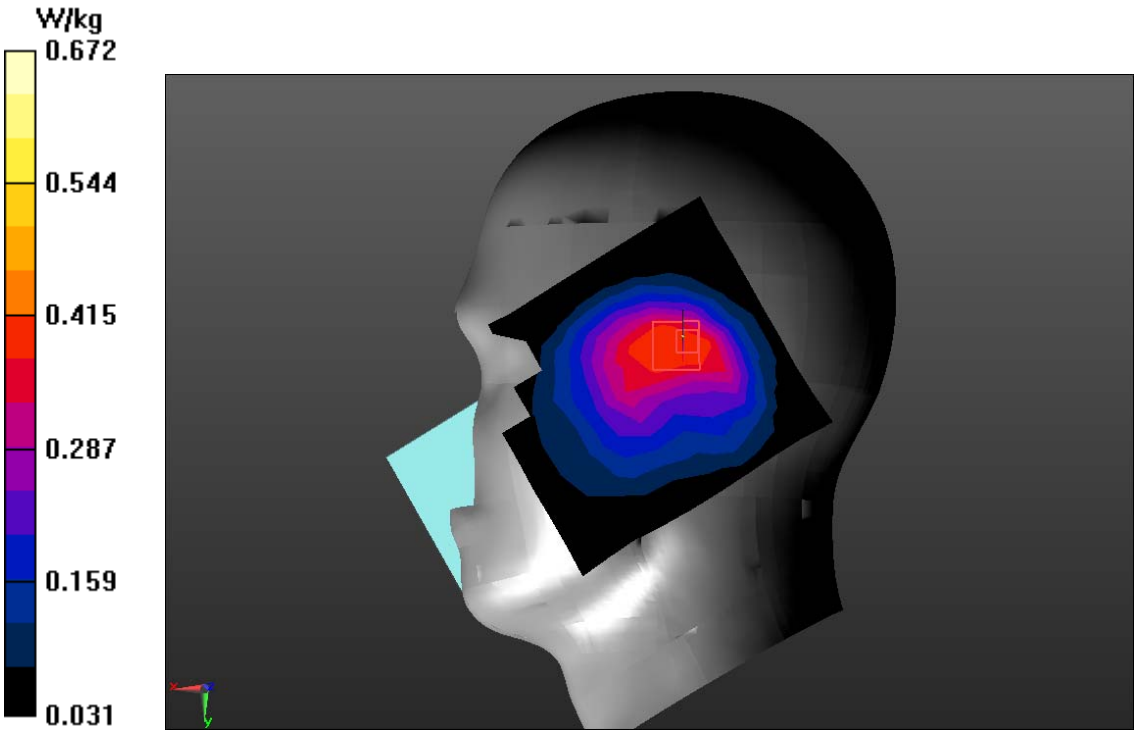


Fig A.30

LTE Band 71_CH132322 50RB-Middle Rear 10mm
Date: 2022/9/8
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 683 MHz; σ = 0.886 mho/m; εr = 43.7; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: Generic LTE (0) Frequency: 683 MHz Duty Cycle: 1:2.37
Probe: EX3DV4 - SN7609 ConvF(10.87, 10.87, 10.87)

Area Scan (81x141x1): Measurement grid: dx=1.500mm, dy=1.500mm
Maximum value of SAR (interpolated) = 0.362 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.345 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.5100
SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.158 mW/g
Maximum value of SAR (measured) = 0.300 mW/g

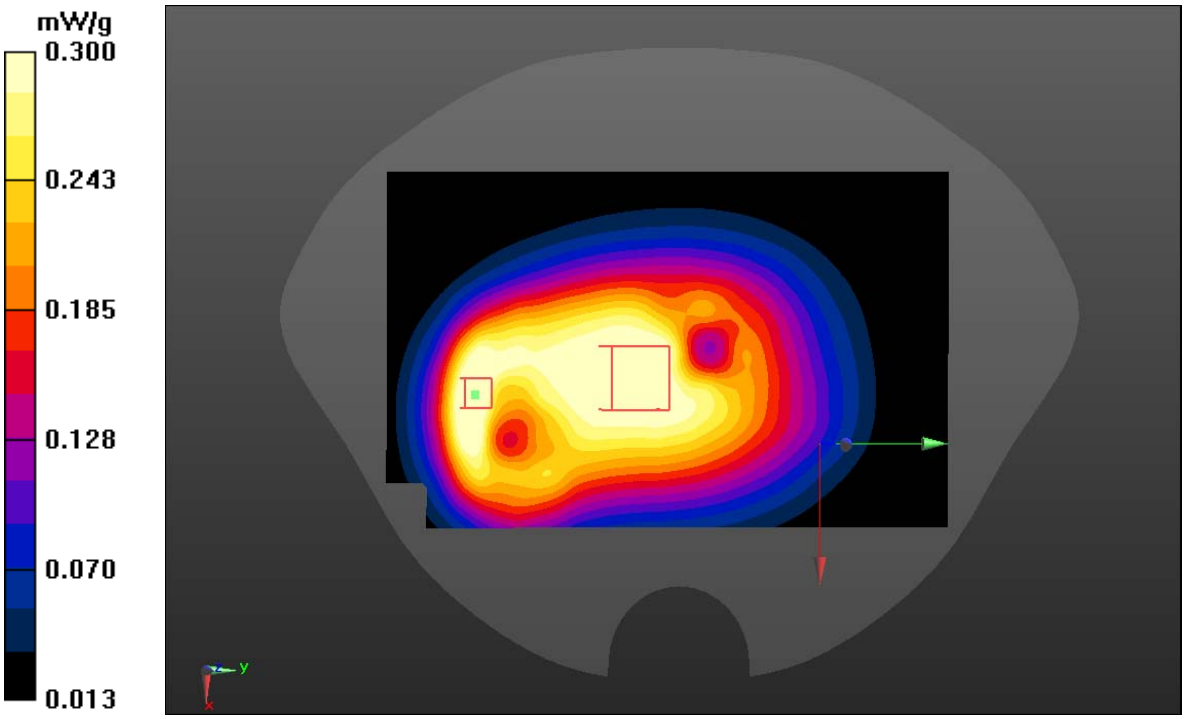


Fig A.31

WLAN2450_CH6 Right Touch
Date: 2022/9/12
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2437 MHz; σ = 1.799 mho/m; εr = 40.36; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: WIFI 2.4G (0) Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(8.02, 8.02, 8.02)

Area Scan (111x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.883 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.817 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 2.3800
SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.555 mW/g
Maximum value of SAR (measured) = 1.938 mW/g

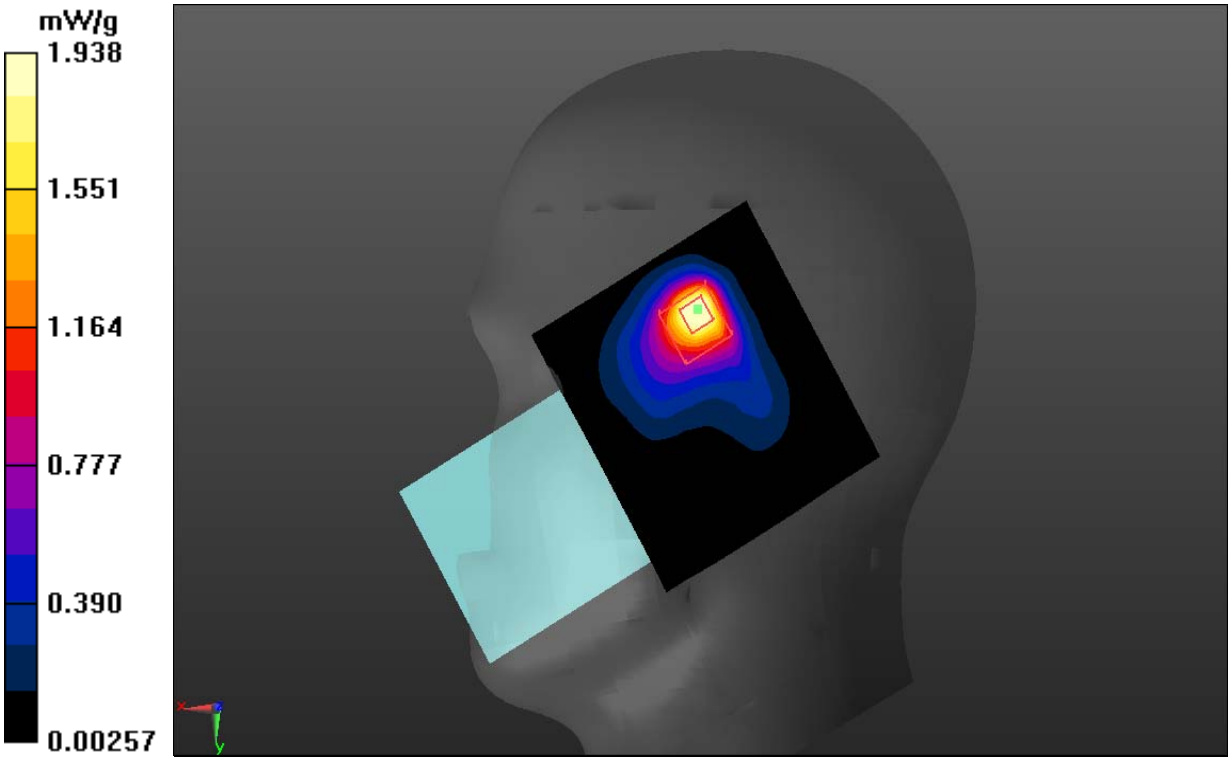


Fig A.32

WLAN2450_CH6 Rear 10mm
Date: 2022/9/12
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2437 MHz; σ = 1.799 mho/m; εr = 40.36; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: WIFI 2.4G (0) Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(8.02, 8.02, 8.02)

Area Scan (131x111x1): Measurement grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.577 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.155 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.7530
SAR(1 g) = 0.374 mW/g; SAR(10 g) = 0.173 mW/g
Maximum value of SAR (measured) = 0.603 mW/g

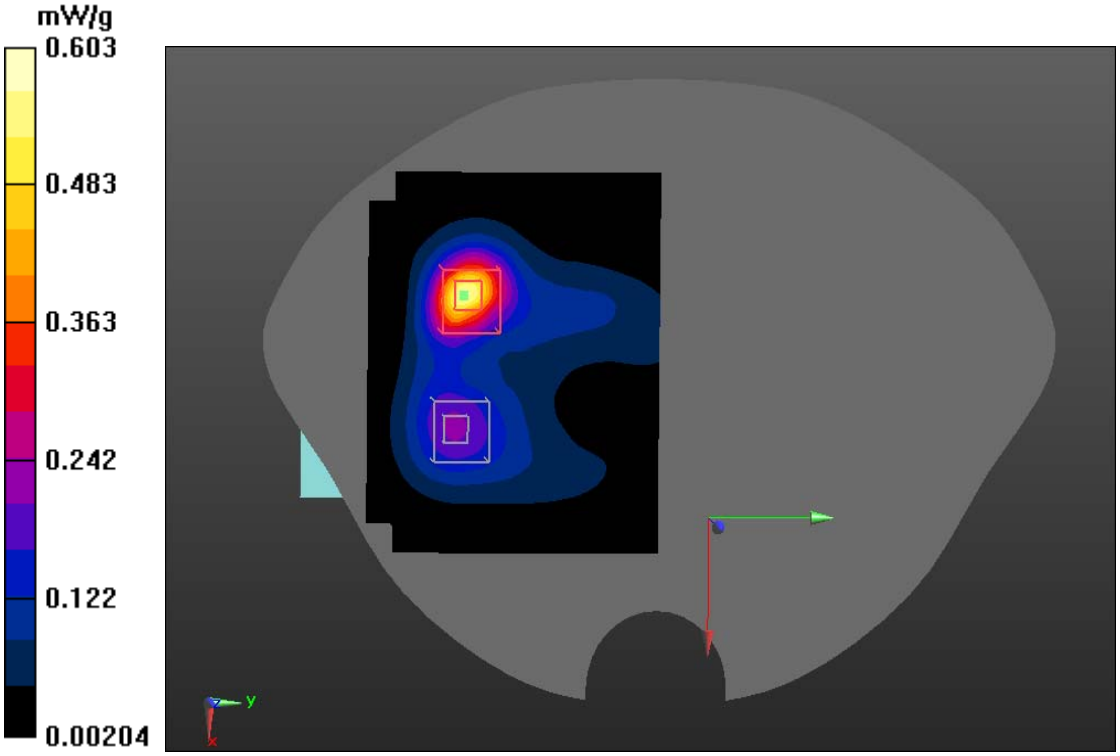


Fig A.33

WLAN2450_CH6 Right Touch
Date: 2022/9/13
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2437 MHz; σ = 1.799 mho/m; εr = 40.36; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: WIFI 2.4G (0) Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(8.02, 8.02, 8.02)

Area Scan (101x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.682 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.342 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.8250
SAR(1 g) = 0.405 mW/g; SAR(10 g) = 0.191 mW/g
Maximum value of SAR (measured) = 0.670 mW/g

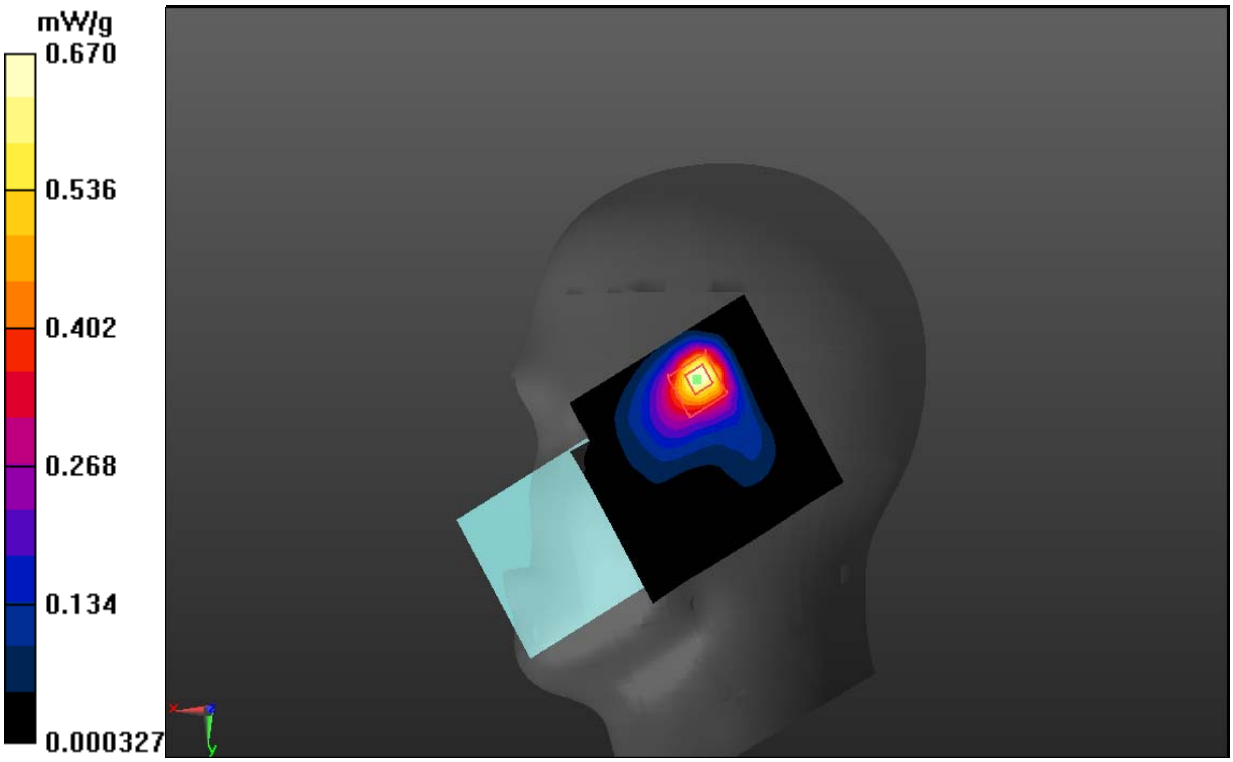


Fig A.34

WLAN2450_CH6 Rear 10mm
Date: 2022/9/13
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 2437 MHz; σ = 1.799 mho/m; εr = 40.36; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: WIFI 2.4G (0) Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(8.02, 8.02, 8.02)

Area Scan (131x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.577 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.155 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.7530
SAR(1 g) = 0.374 mW/g; SAR(10 g) = 0.173 mW/g
Maximum value of SAR (measured) = 0.603 mW/g

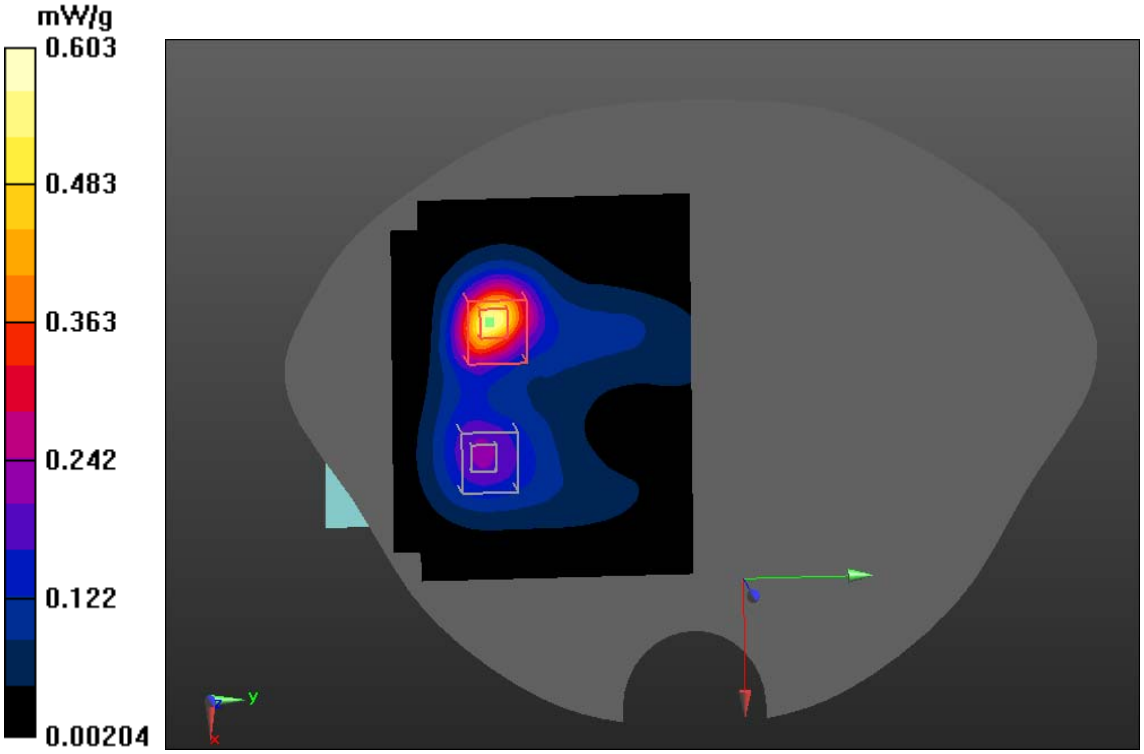


Fig A.35

UNII-3_CH165 Right Touch
Date: 2022/9/18
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 5825 MHz; σ = 5.06 mho/m; ε_r = 34.13; ρ = 1000 kg/m^3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System Band: WIFI 5G; Frequency: 5825 MHz;Duty Cycle: 1:1
Probe: EX3DV4 - SN7609; ConvF(5.1, 5.1, 5.1) @ 5825 MHz;

Area Scan (10x10x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (measured) = 1.83 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 20.00 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 3.42 W/kg
SAR(1 g) = 0.752 W/kg; SAR(10 g) = 0.220 W/kg
Maximum value of SAR (measured) = 1.91 W/kg

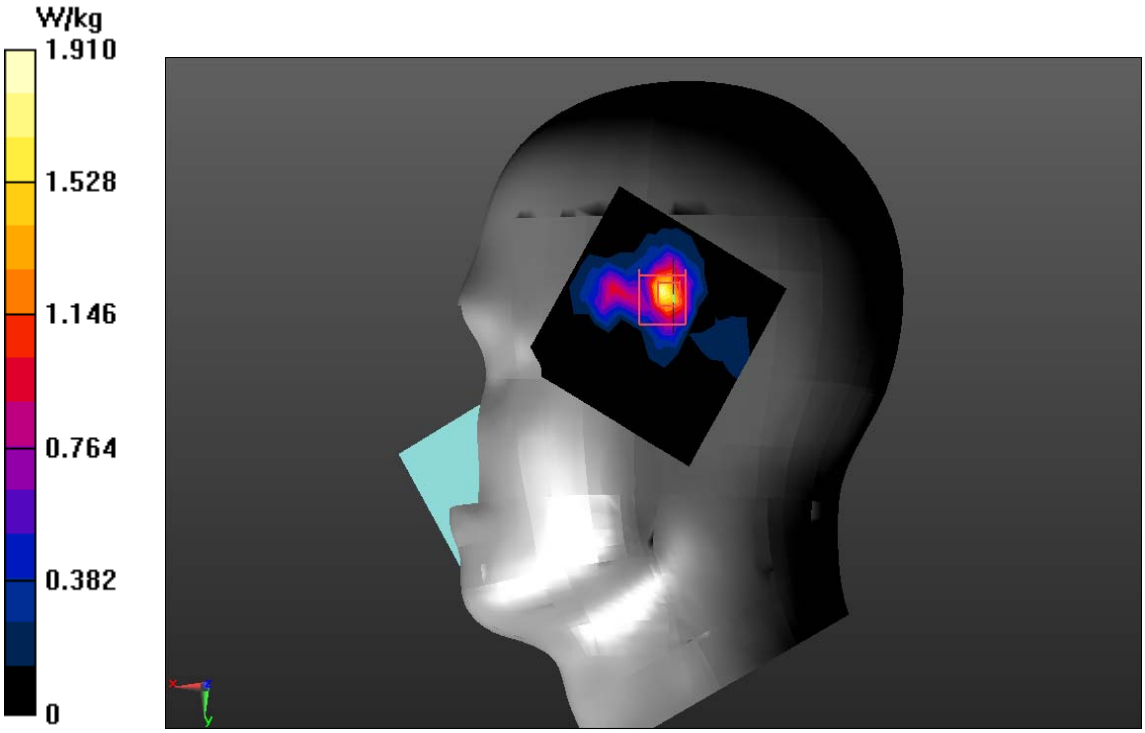


Fig A.36

UNII-3_CH165 Rear 10mm
Date: 2022/9/18
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 5825 MHz; σ = 5.06 mho/m; εr = 34.13; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: WIFI 5G (0) Frequency: 5825 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(5.1, 5.1, 5.1)

Area Scan (101x141x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (measured) = 1.954 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.230 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 3.2510
SAR(1 g) = 0.853 mW/g; SAR(10 g) = 0.291 mW/g
Maximum value of SAR (measured) = 2.055 mW/g

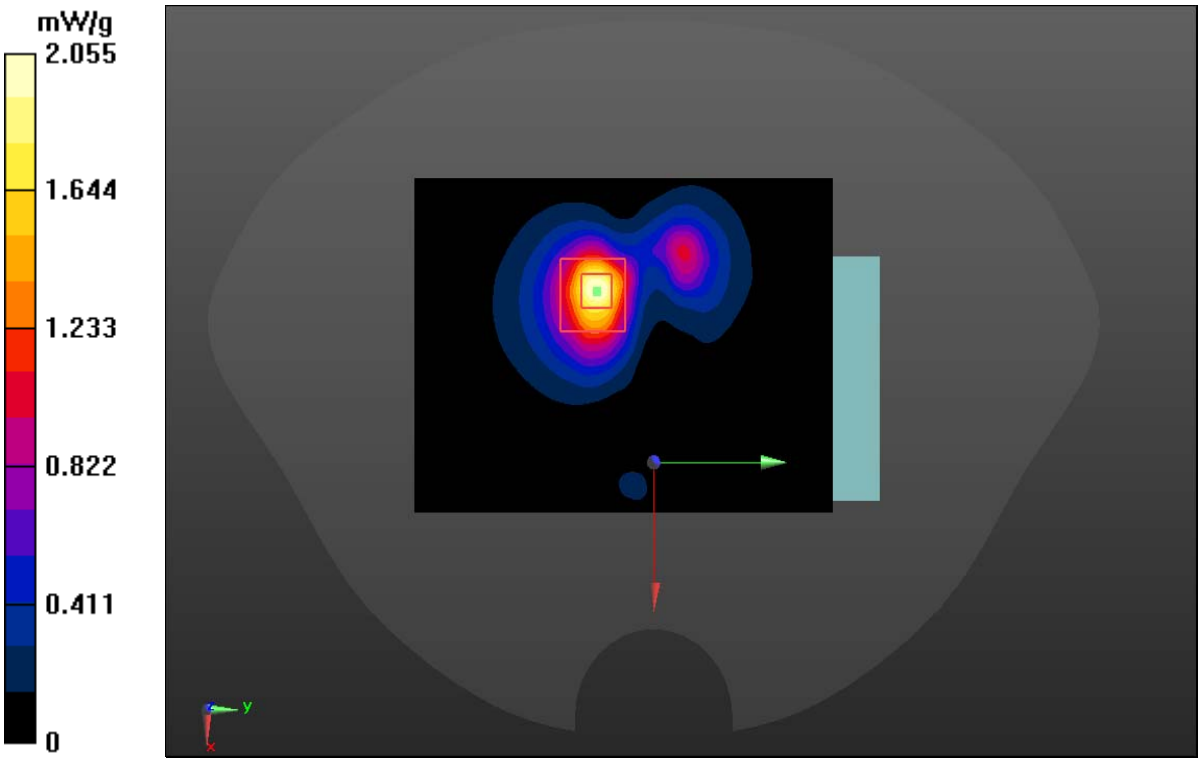


Fig A.37

UNII-3_CH165 Right Touch
Date: 2022/9/18
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 5825 MHz; σ = 5.06 mho/m; εr = 34.13; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: WIFI 5G (0) Frequency: 5825 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(5.1, 5.1, 5.1)

Area Scan (10x10x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (measured) = 1.023 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.102 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.7000
SAR(1 g) = 0.386 mW/g; SAR(10 g) = 0.112 mW/g
Maximum value of SAR (measured) = 1.002 mW/g

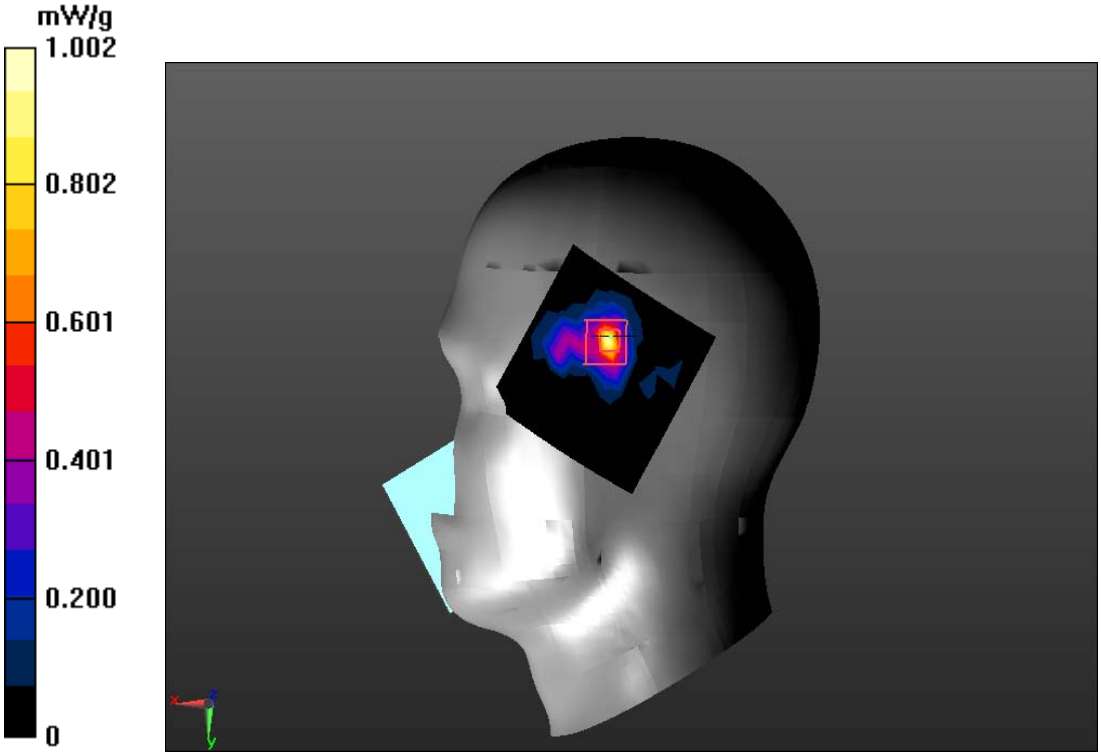


Fig A.38

UNII-2_CH64 Rear 10mm
Date: 2022/9/16
Electronics: DAE4 Sn1250;
Medium: HBBL-600-10000
Medium parameters used (interpolated):
f = 5320 MHz; σ = 4.507 mho/m; εr = 35.18; ρ = 1000 kg/m³
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: WIFI 5G (0) Frequency: 5320 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7609 ConvF(5.5, 5.5, 5.5)

Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (measured) = 0.823 mW/g

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0 dB
Peak SAR (extrapolated) = 1.4320
SAR(1 g) = 0.425 mW/g; SAR(10 g) = 0.147 mW/g
Maximum value of SAR (measured) = 0.946 mW/g

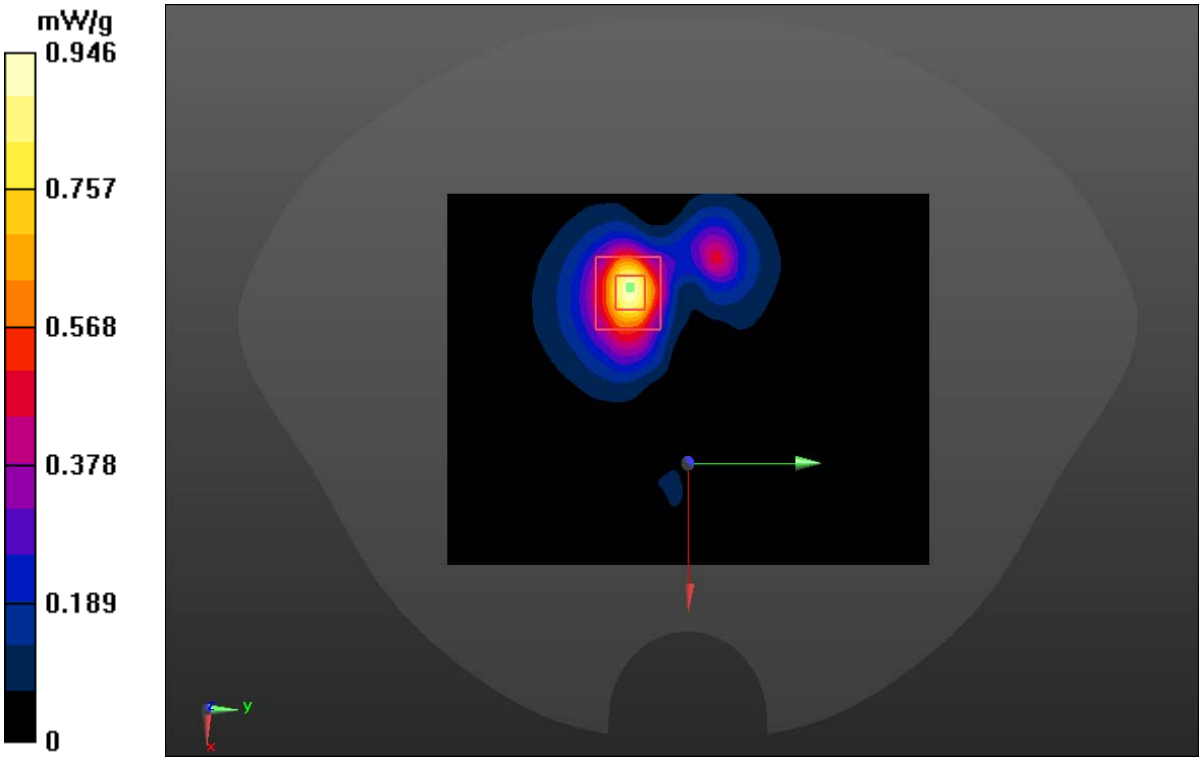
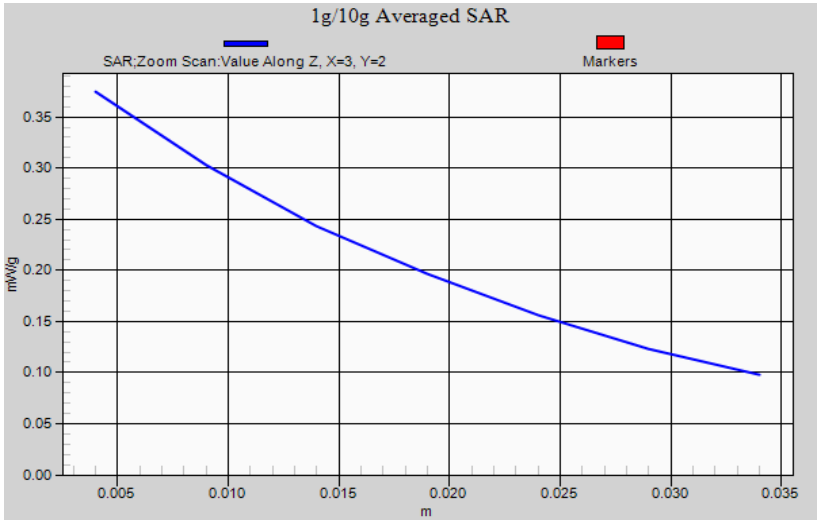
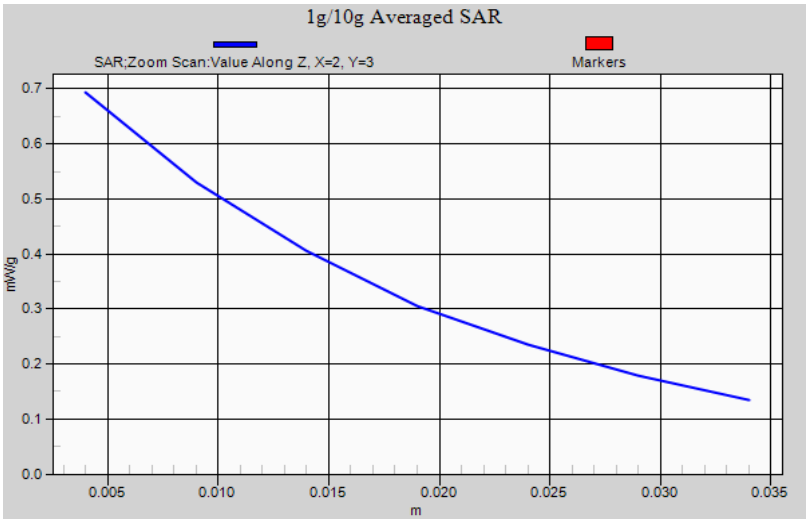


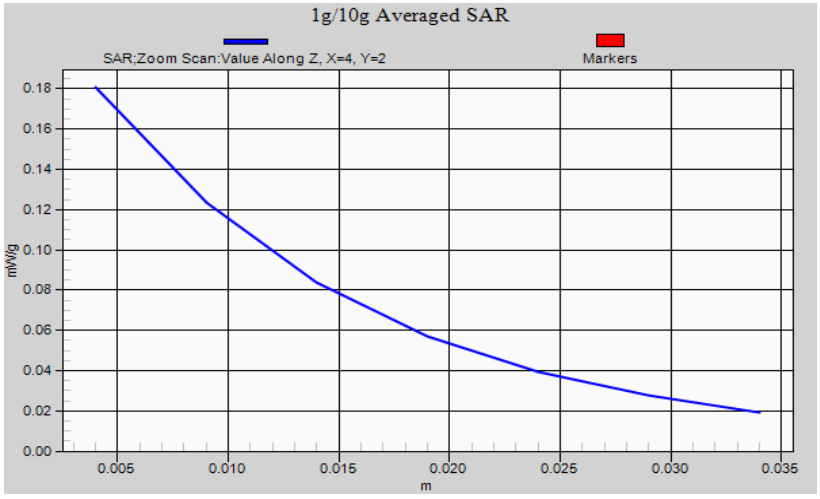
Fig A.39



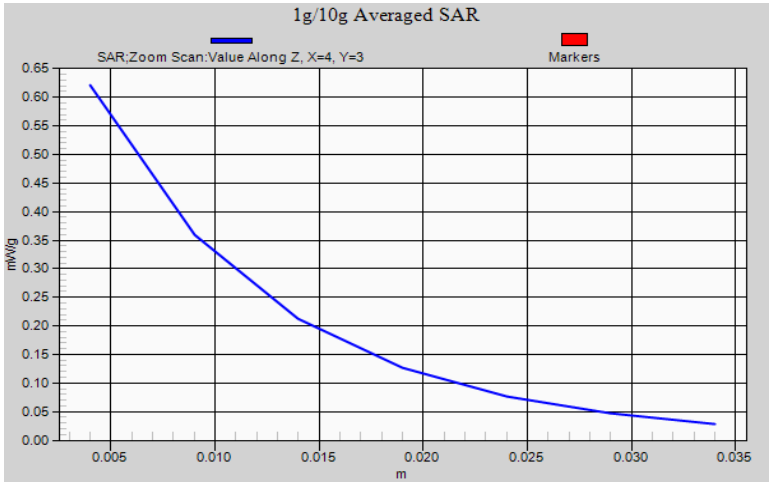
Z-Scan at power reference point-head (850 MHz)



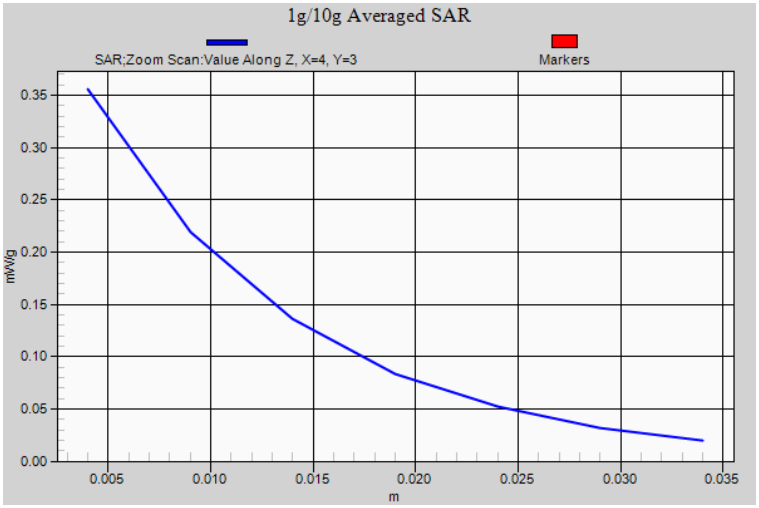
Z-Scan at power reference point-body (850 MHz)



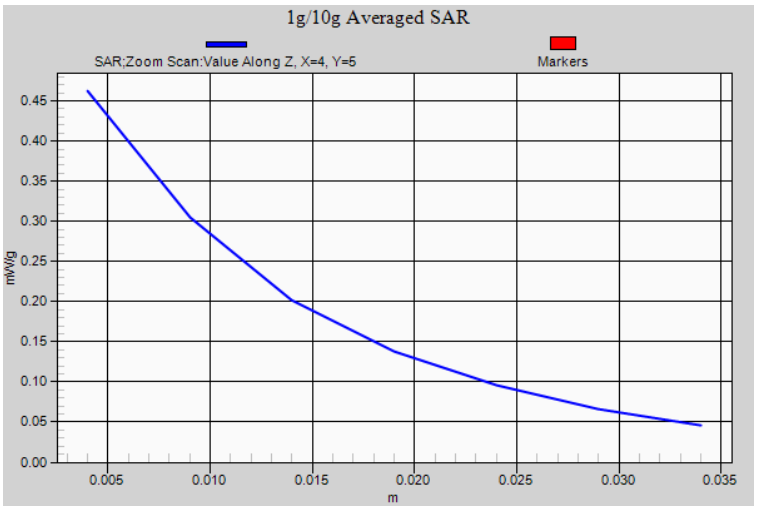
Z-Scan at power reference point-head (1900 MHz)



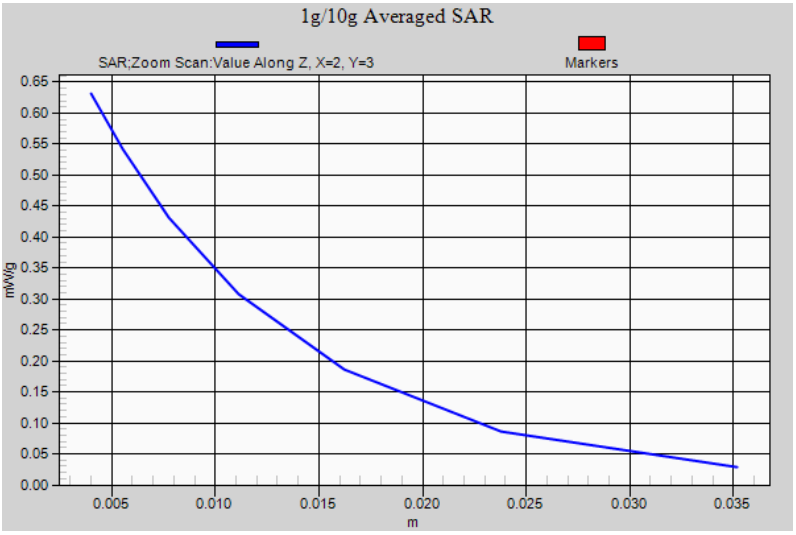
Z-Scan at power reference point-body(1900 MHz)



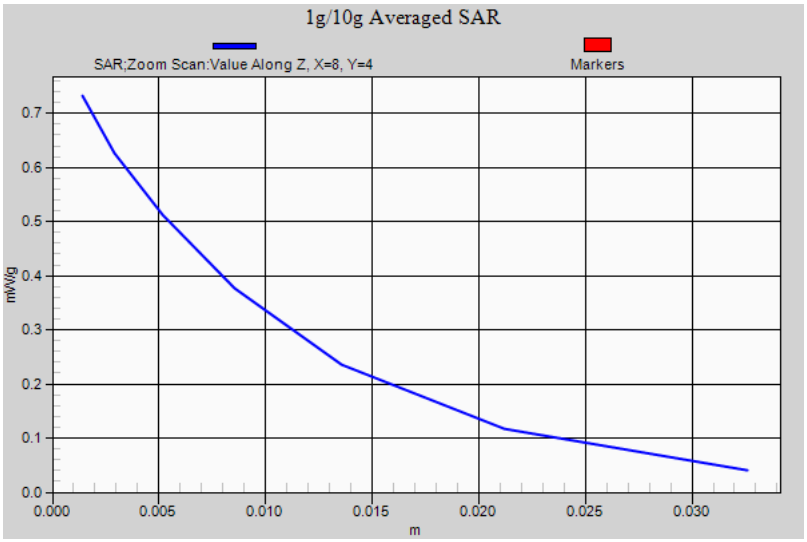
Z-Scan at power reference point-body(1900 MHz)



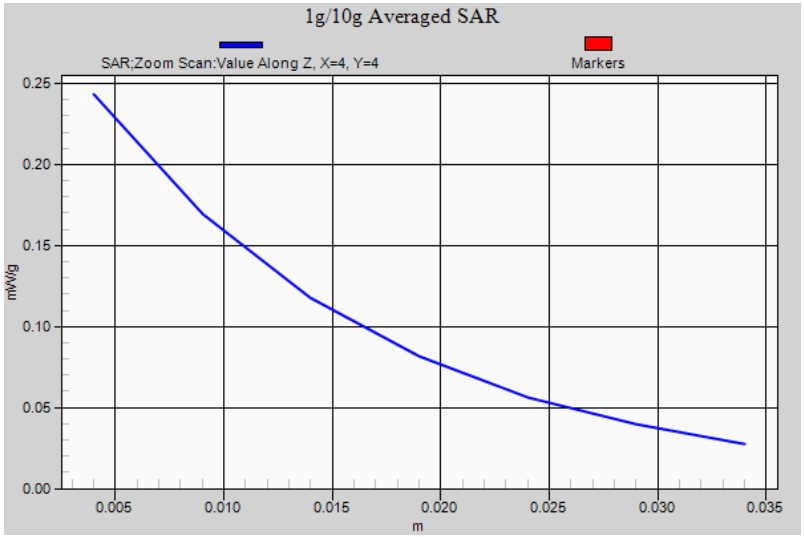
Z-Scan at power reference point-head (WCDMA1900)



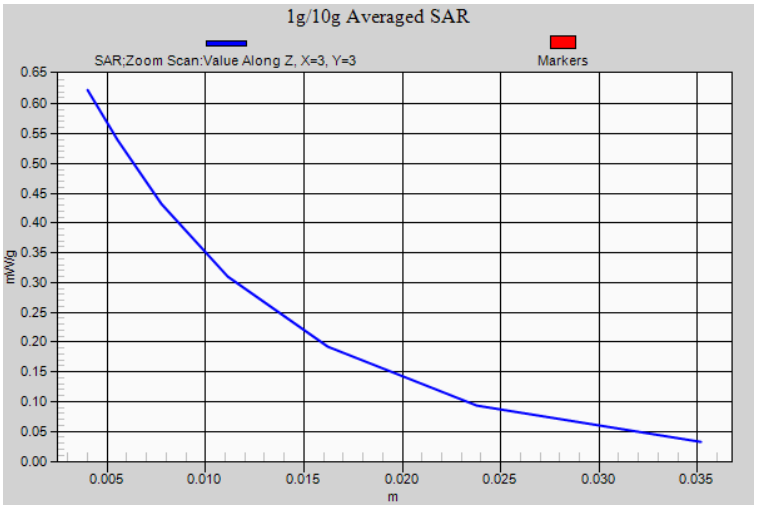
Z-Scan at power reference point -body (WCDMA1900)



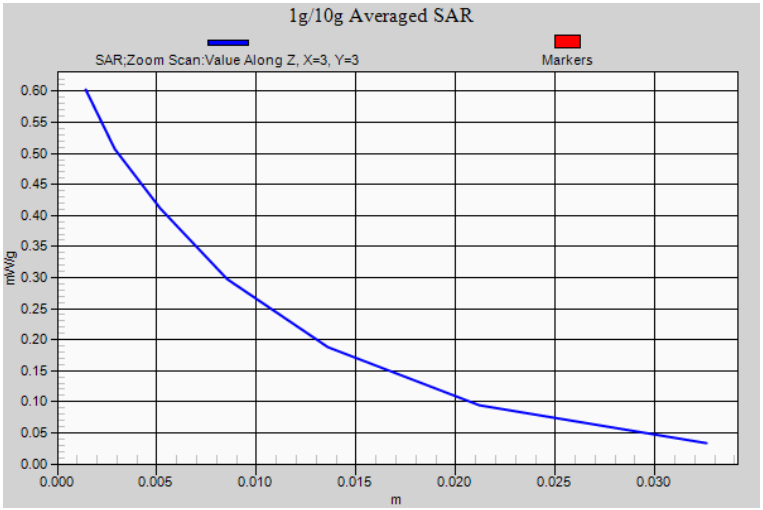
Z-Scan at power reference point -body (WCDMA1900)



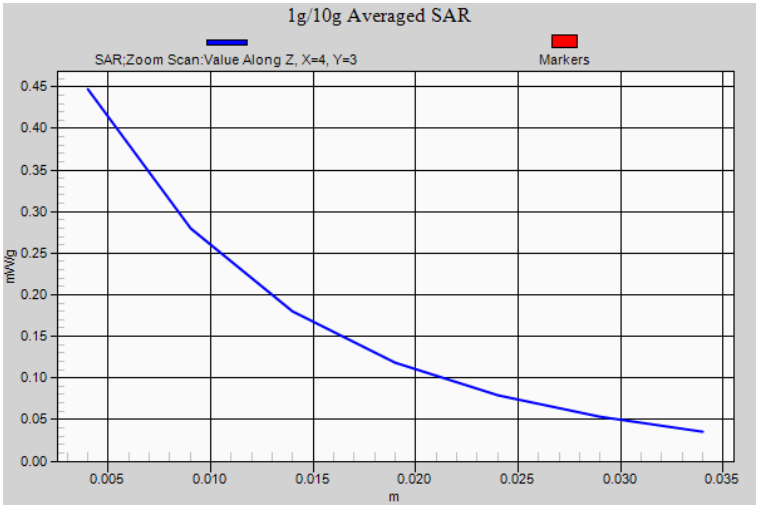
Z-Scan at power reference point -head (WCDMA1700)



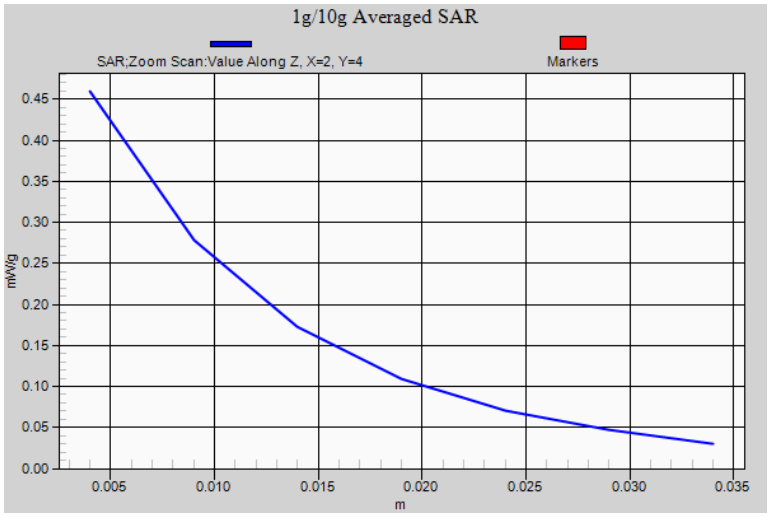
Z-Scan at power reference point-body (WCDMA1700)



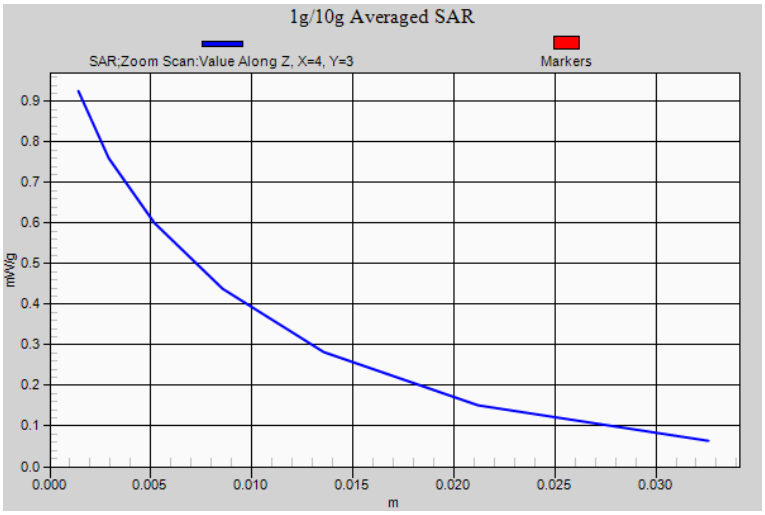
Z-Scan at power reference point -body (WCDMA1700)



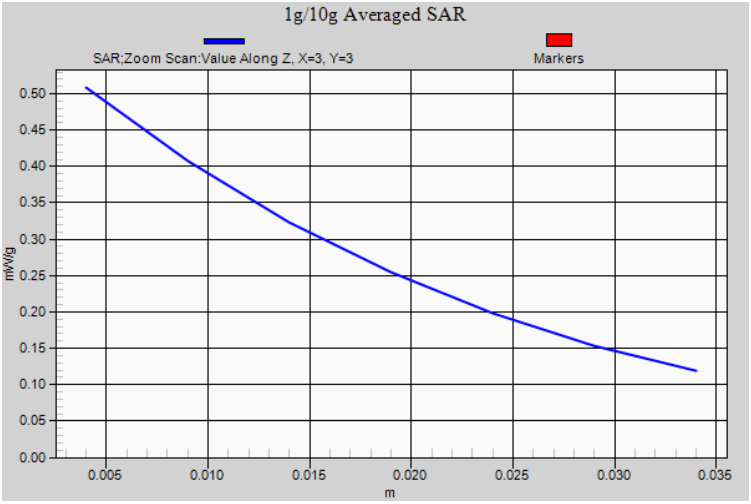
Z-Scan at power reference point -head (WCDMA850)



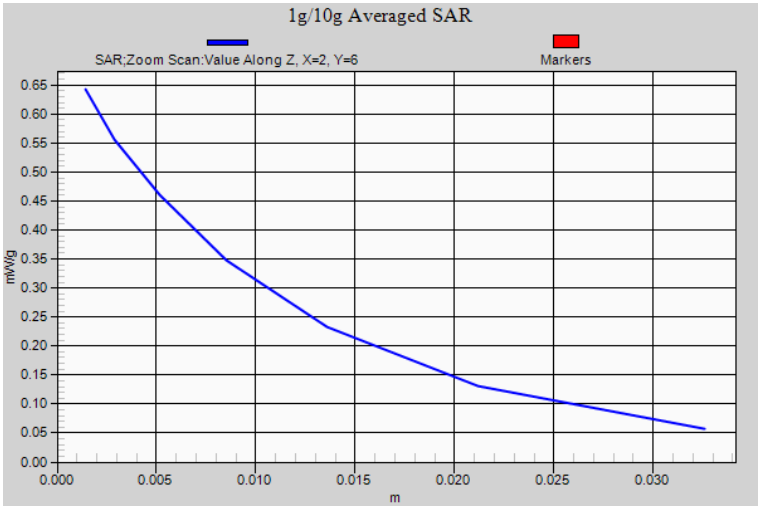
Z-Scan at power reference point-body (WCDMA850)



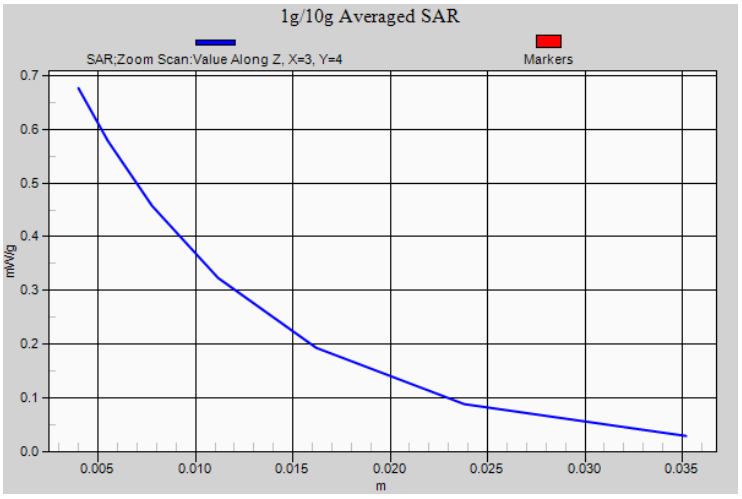
Z-Scan at power reference point-head (LTEB12)



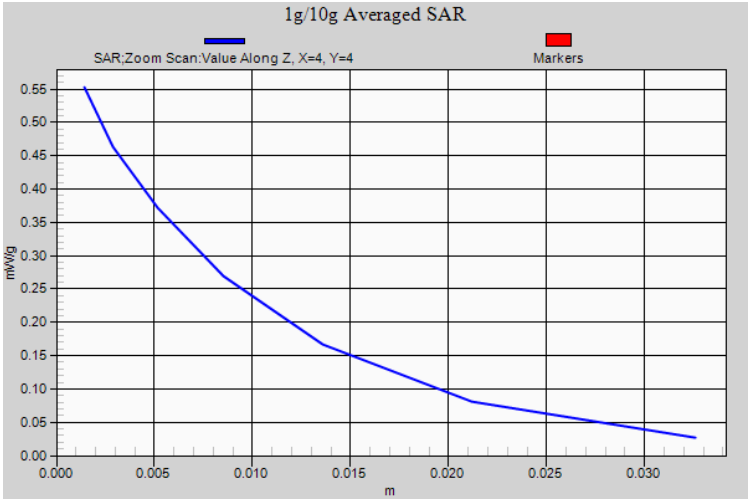
Z-Scan at power reference point-body (LTEB12)



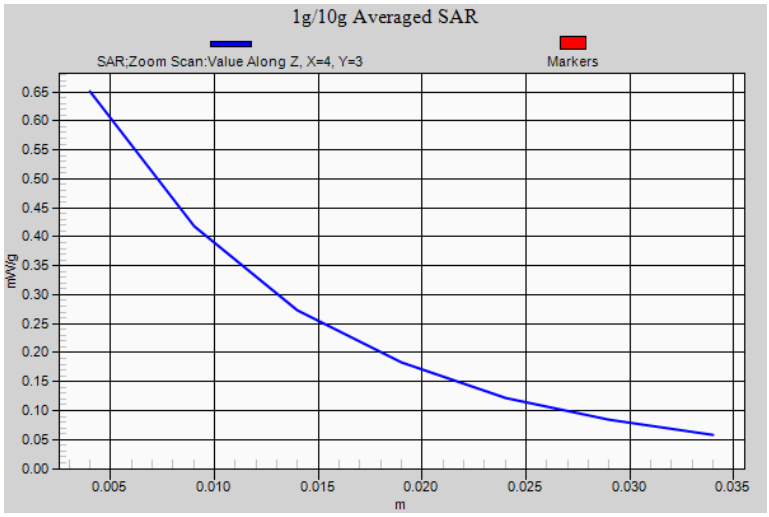
Z-Scan at power reference point-head (LTEB25)



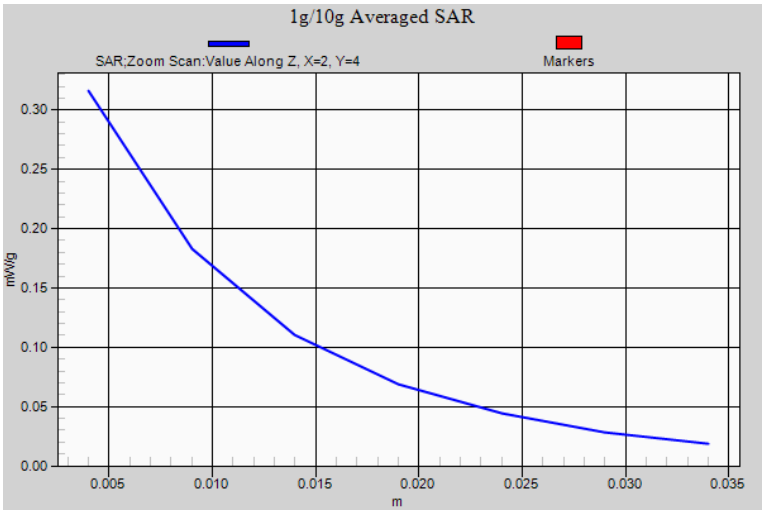
Z-Scan at power reference point-body (LTEB25)



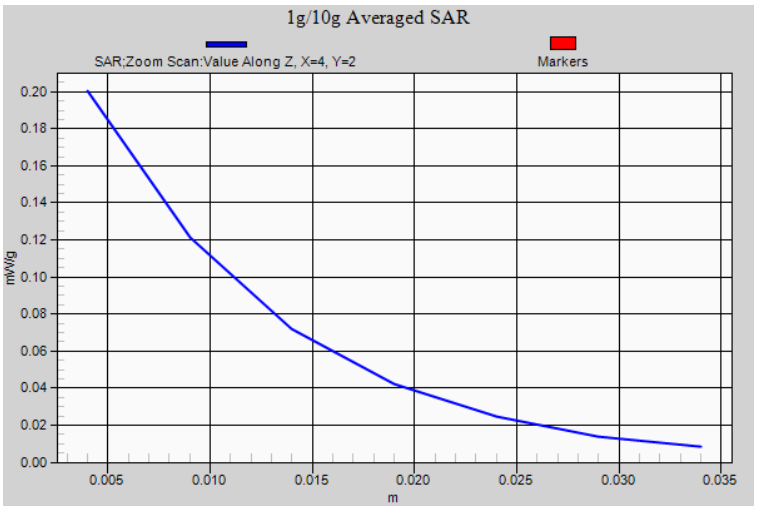
Z-Scan at power reference point-body (LTEB25)



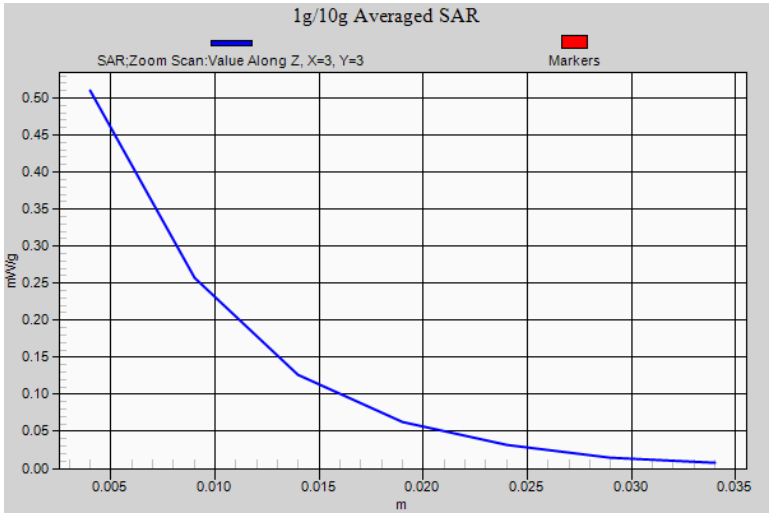
Z-Scan at power reference point -head (LTEB26)



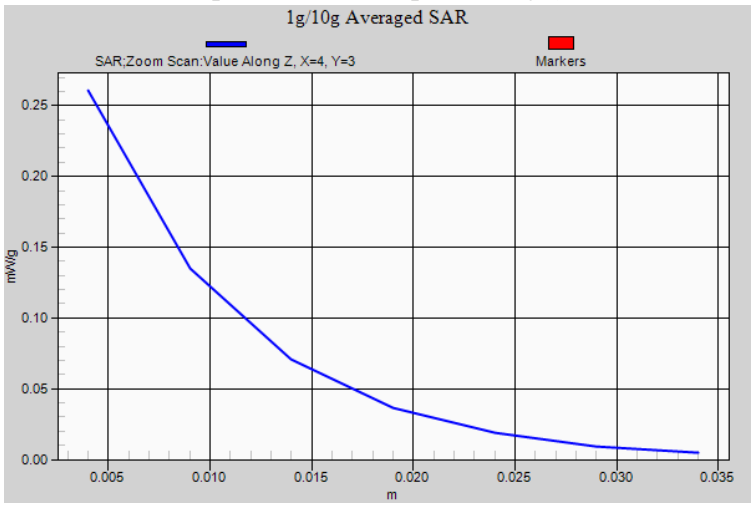
Z-Scan at power reference point -body (LTEB26)



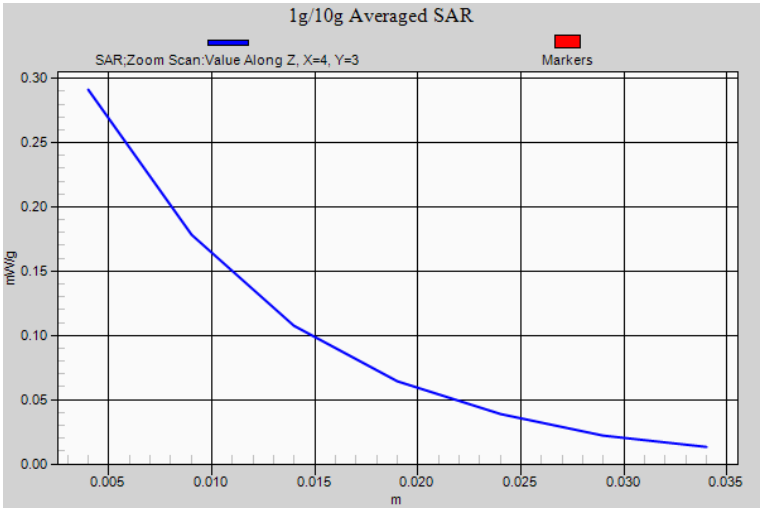
Z-Scan at power reference point -head (LTEB41)



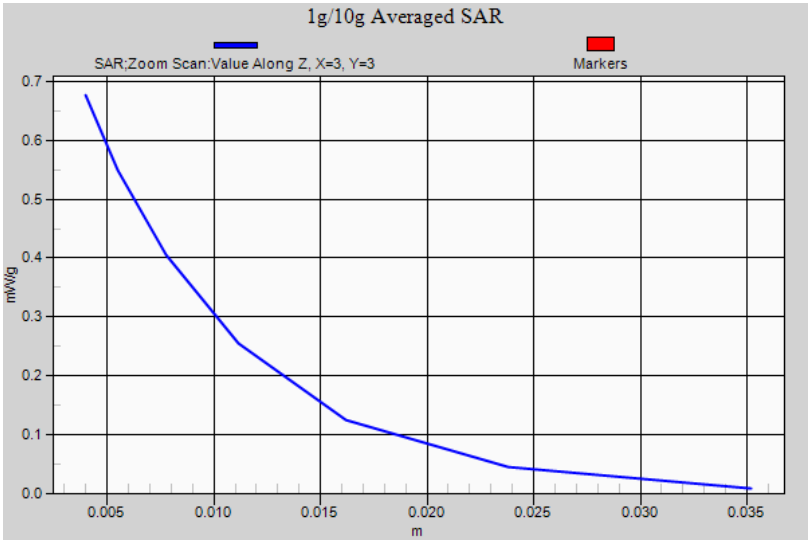
Z-Scan at power reference point-body (LTEB41)



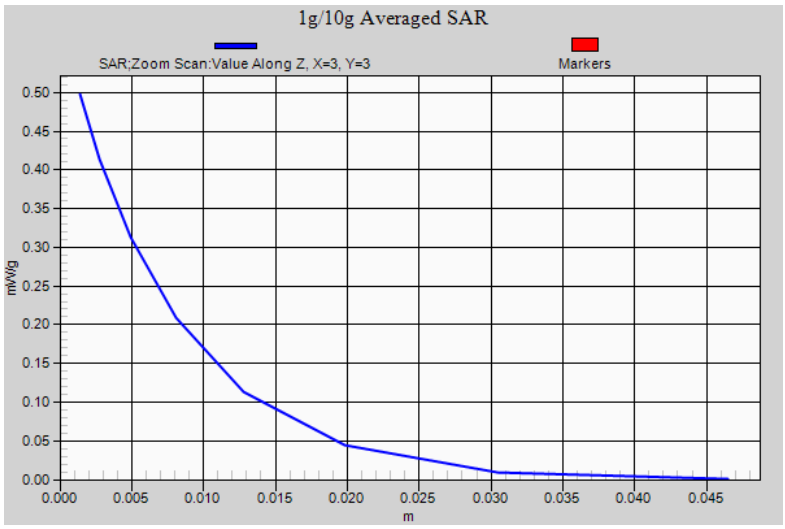
Z-Scan at power reference point -body (LTEB41)



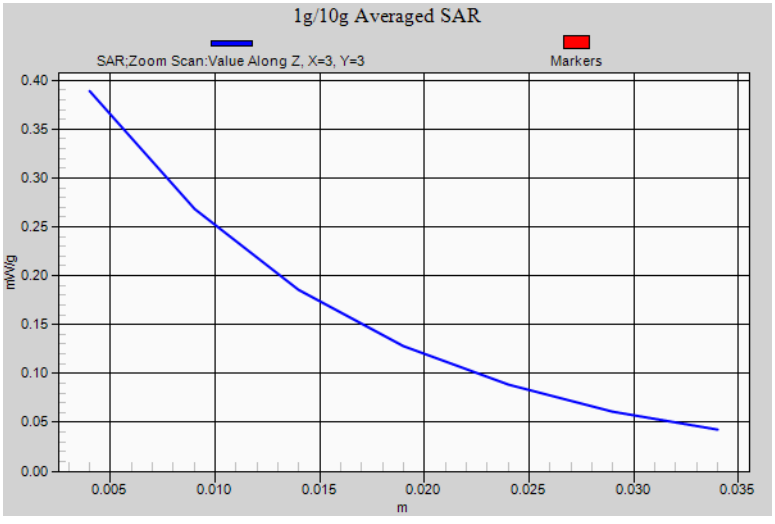
Z-Scan at power reference point-head (LTEB41 PC2)



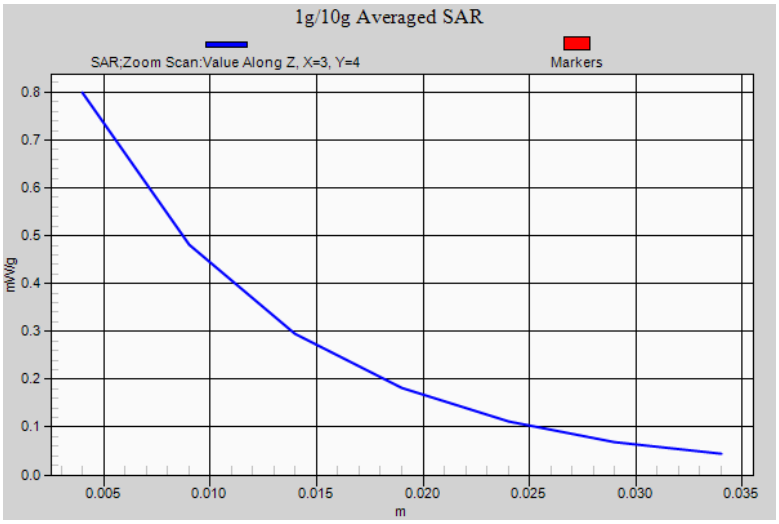
Z-Scan at power reference point -body (LTEB41 PC2)



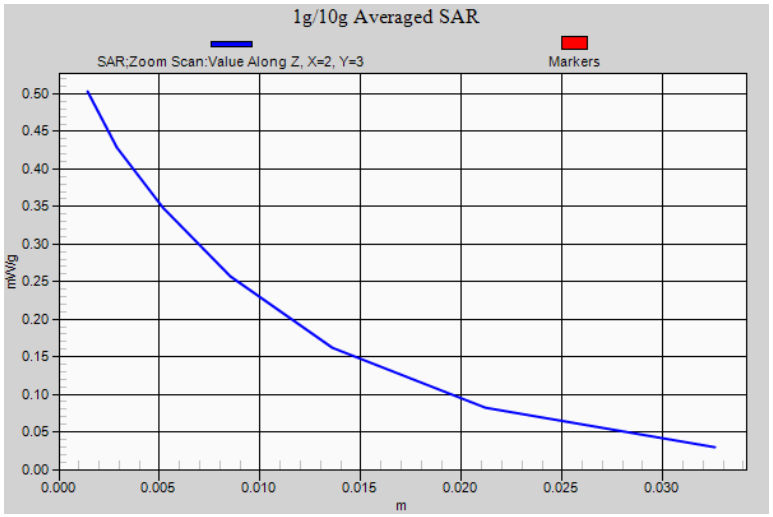
Z-Scan at power reference point-body (LTEB41 PC2)



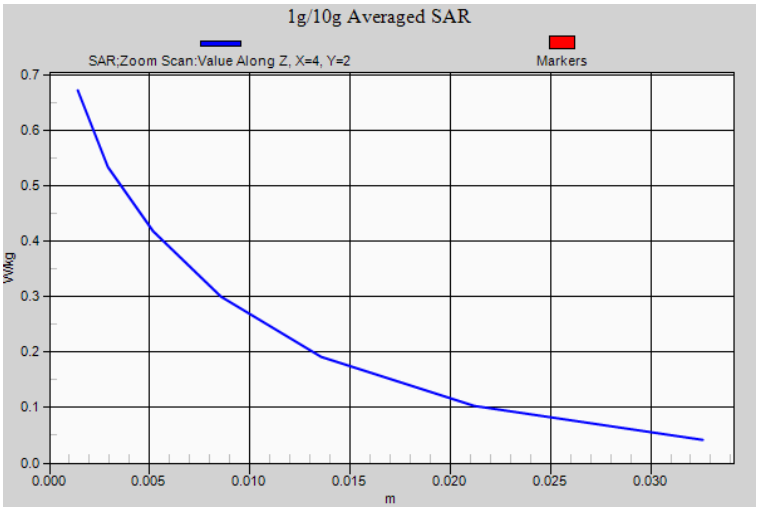
Z-Scan at power reference point-head (LTEB66)



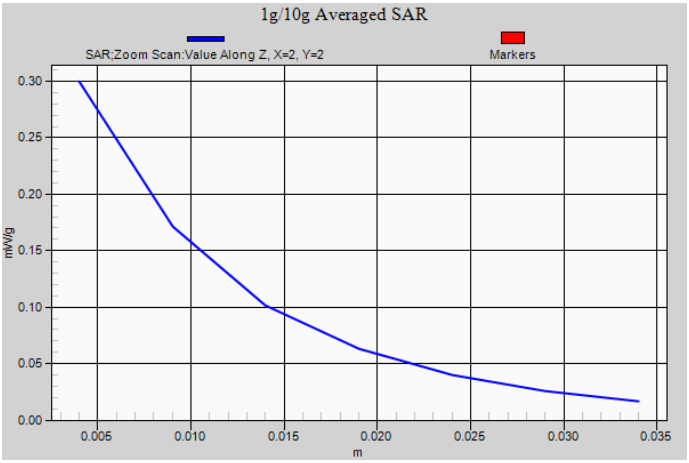
Z-Scan at power reference point-body (LTEB66)



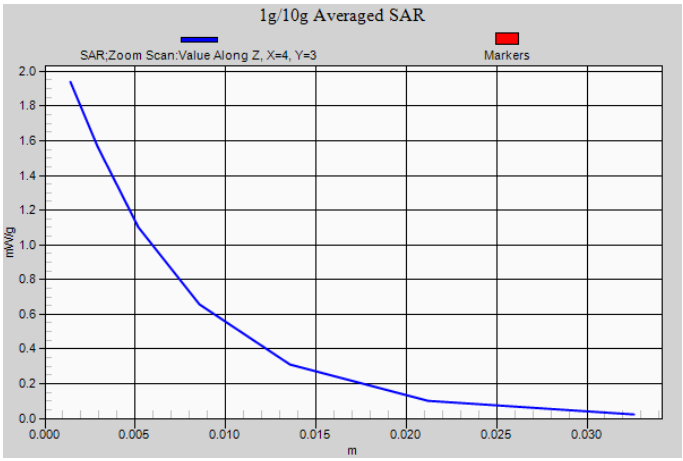
Z-Scan at power reference point-body (LTEB66)



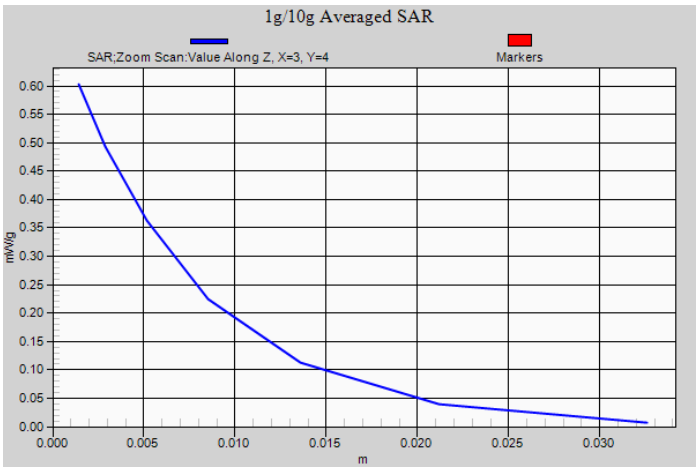
Z-Scan at power reference point -head (LTEB71)



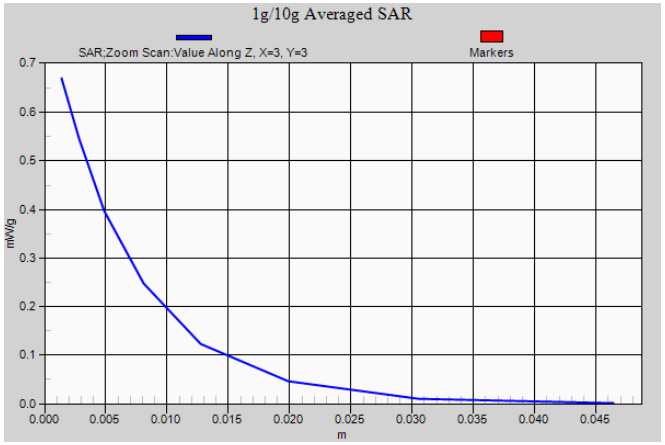
Z-Scan at power reference point-body (LTEB71)



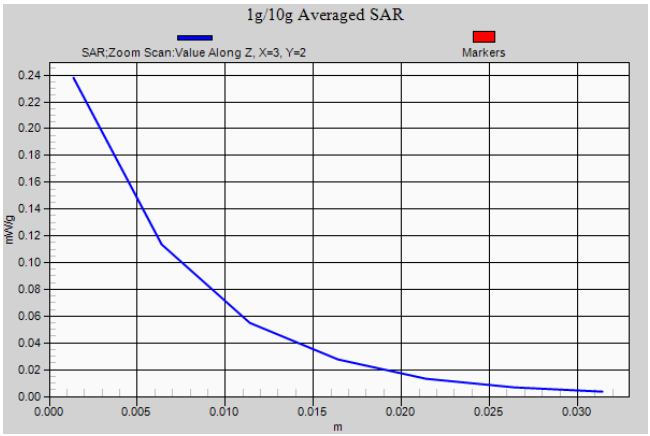
Z-Scan at power reference point -head (WIFI2.4G)



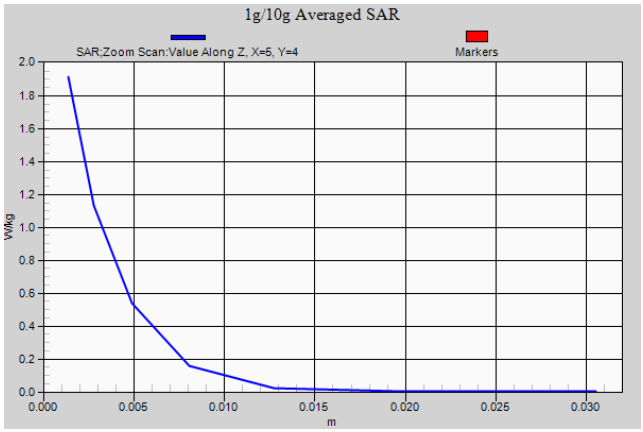
Z-Scan at power reference point -body (WIFI2.4G)



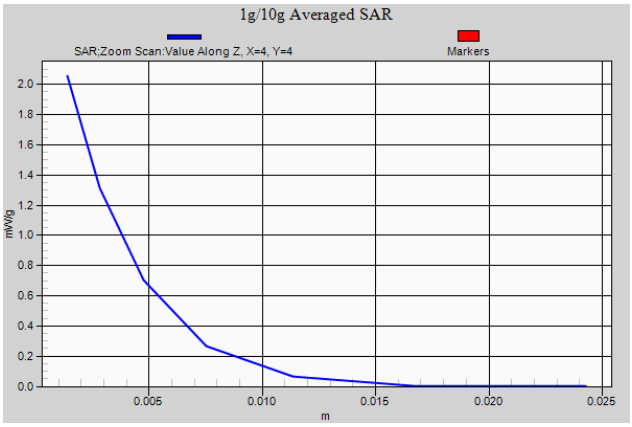
Z-Scan at power reference point -head (WIFI2.4G)



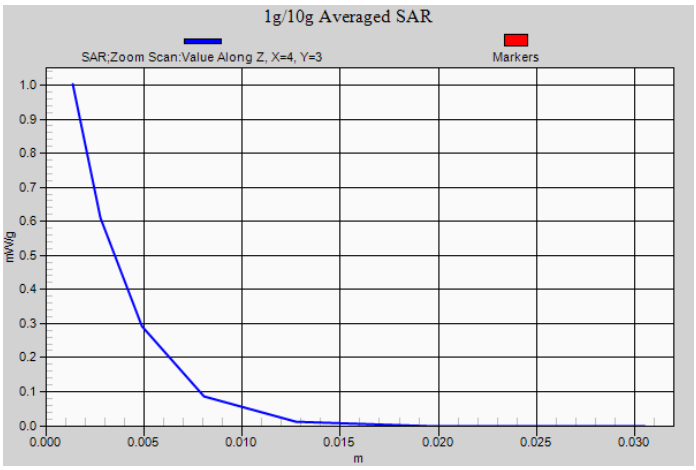
Z-Scan at power reference point-body (WIFI2.4G)



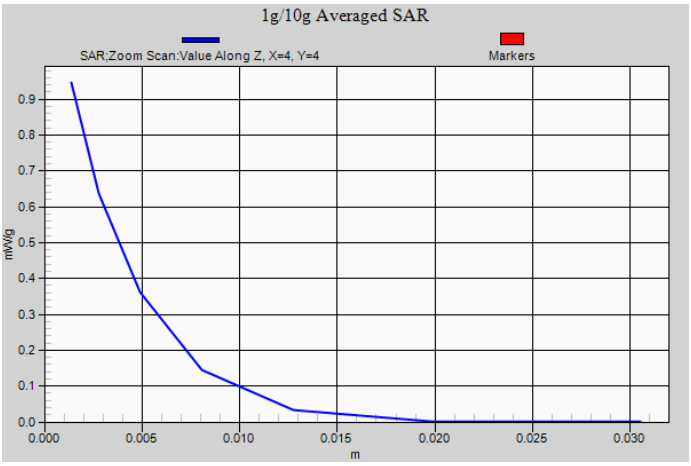
Z-Scan at power reference point-head (WIFI5G)



Z-Scan at power reference point -body (WIFI5G)



Z-Scan at power reference point-head (WIFI5G)



Z-Scan at power reference point -body (WIFI5G)

ANNEX B System Verification Results

750MHz

Date: 9/8/2022

Electronics: DAE4 Sn1250

Medium: HBBL-600-10000

Medium parameters used: f = 750MHz; σ= 0.918 mho/m; εr = 43.1; ρ = 1000 kg/m3

Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC

Communication System: CW Frequency: 750MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7609 ConvF(10.87,10.87,10.87)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value =53.73 V/m; Power Drift = 0.01

Fast SAR: SAR(1 g) = 2.1 W/kg; SAR(10 g) = 1.42 W/kg

Maximum value of SAR (interpolated) = 2.69 W/kg

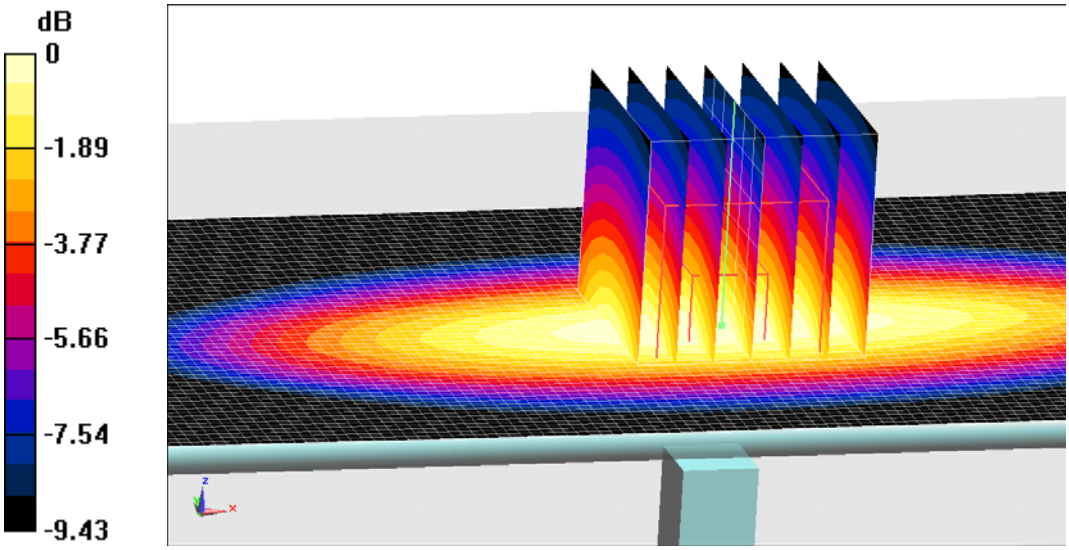
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =53.73 V/m; Power Drift = 0.01

Peak SAR (extrapolated) = 3.04 W/kg

SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.44 W/kg

Maximum value of SAR (measured) = 2.74 W/kg



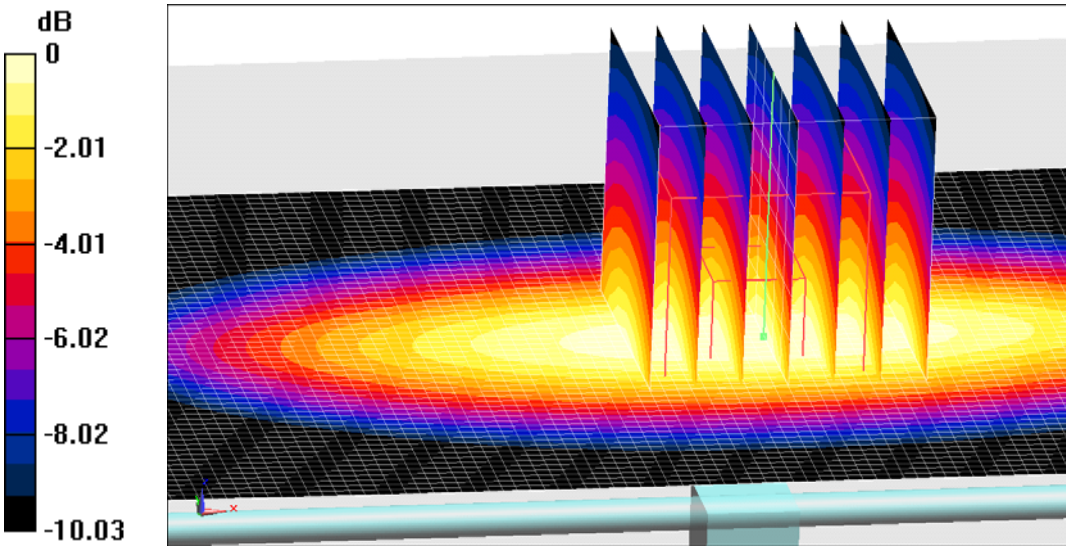
0 dB = 2.74 W/kg = 4.38 dB W/kg

Fig.B.1 validation 750MHz 250mW

835MHz
Date: 9/9/2022
Electronics: DAE4 Sn1250
Medium: HBBL-600-10000
Medium parameters used: f = 835MHz; σ = 0.932 mho/m; εr = 42.69; ρ = 1000 kg/m3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: CW Frequency: 835MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7609 ConvF(10.53, 10.53, 10.53)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value =57.63 V/m; Power Drift = -0.02 dB
Fast SAR: SAR(1 g) = 2.34 W/kg; SAR(10 g) = 1.54 W/kg
Maximum value of SAR (interpolated) = 3.09 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =57.63 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.53 W/kg
SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.57 W/kg
Maximum value of SAR (measured) = 3.13 W/kg



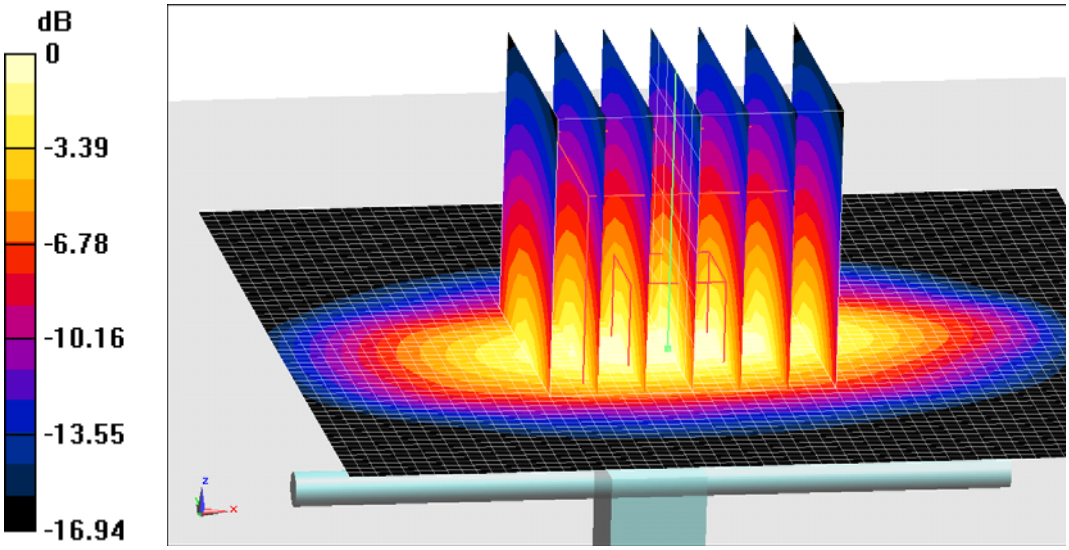
0 dB = 3.13 W/kg = 4.96 dB W/kg

Fig.B.2 validation 835MHz 250mW

1750MHz
Date: 9/10/2022
Electronics: DAE4 Sn1250
Medium: HBBL-600-10000
Medium parameters used: f = 1750MHz; σ = 1.367 mho/m; εr = 40.79; ρ = 1000 kg/m3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: CW Frequency: 1750MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7609 ConvF(8.85, 8.85, 8.85)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value =90.69 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 9.24 W/kg; SAR(10 g) = 5.11 W/kg
Maximum value of SAR (interpolated) = 14.3 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =90.69 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 17.0 W/kg
SAR(1 g) = 9.06 W/kg; SAR(10 g) = 4.97 W/kg
Maximum value of SAR (measured) = 14.1 W/kg



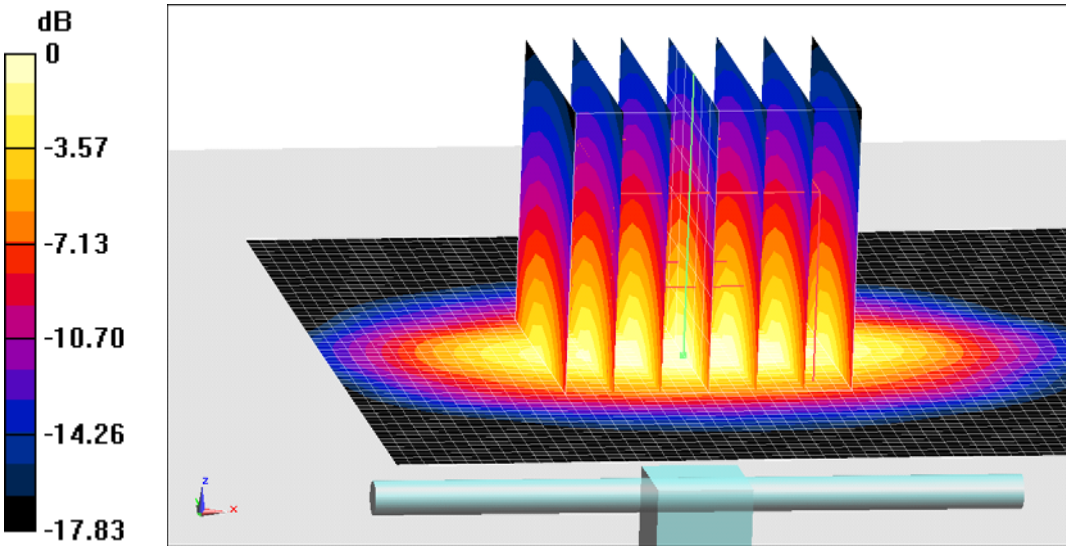
0 dB = 14.1 W/kg = 11.49 dB W/kg

Fig.B.3 validation 1750MHz 250mW

1900MHz
Date: 9/11/2022
Electronics: DAE4 Sn1250
Medium: HBBL-600-10000
Medium parameters used: f = 1900MHz; σ= 1.458 mho/m; εr = 40.81; ρ = 1000 kg/m3
Ambient Temperature :22.9 ºC ,Liquid Temperature: 22.5 ºC
Communication System: CW Frequency: 1900MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7609 ConvF(8.62, 8.62, 8.62)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value =97.51 V/m; Power Drift = 0.08 dB
Fast SAR: SAR(1 g) = 9.75 W/kg; SAR(10 g) = 4.98 W/kg
Maximum value of SAR (interpolated) = 15.4 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =97.51 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 18.9 W/kg
SAR(1 g) = 9.91 W/kg; SAR(10 g) = 5.12 W/kg
Maximum value of SAR (measured) = 15.6 W/kg



0 dB = 15.6 W/kg = 11.93 dB W/kg

Fig.B.4 validation 1900MHz 250mW