FCC SAR TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.

FOR

Mobile Phone

ISSUED TO
Realme Chongqing Mobile Telecommunications Corp., Ltd.

No.2 Building, No.24 Nichang Boulevard, Huixing Block, Yubei District, Chongqing.

Tested by: Zong Liyao
Date Jan. 22, 2020

Approved by: Liao Jianming
(Technical Director)
Date Jan. 22, 2020

Report No.:	BL-SZ19C0704-701
EUT Name:	Mobile Phone
Model Name:	RMX2040
Brand Name:	realme
FCC ID:	2AUYFRMX2040
Test Standard:	FCC 47 CFR Part 2.1093
	ANSI C95.1: 1999, IEEE 1528: 2013
Maximum SAR:	Head (1 g): 1.105 W/kg
	Body-worn (1 g): 0.351 W/kg
	Hotspot (1 g): 0.700 W/kg
Test Conclusion:	Pass
Test Date:	Dec. 27, 2019 ~ Jan. 19, 2020
Date of Issue:	Jan. 22, 2020

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Revision History

Version	Issue Date	Revisions Content
Rev. 01	Jan. 22, 2020	Initial Issue

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1 GENERAL INFORMATION

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100
Fax Number	+86 755 6182 4271

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196. The laboratory is a testing organization accredited by American Association for Laboratory Accreditation (A2LA) according to ISO/IEC 17025.The accreditation certificate is 4344.01. The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Test Environment Condition

Ambient Temperature	20℃ to 23℃
Ambient Relative Humidity	37% to 48%
Ambient Pressure	100 KPa to 102 KPa

1.4 Announce

(1) The test report reference to the report template version v2.2.

(2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.

(3) The test report is invalid if there is any evidence and/or falsification.

(4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.

(5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.

(6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.2 Building, No.24 Nichang Boulevard, Huixing Block, Yubei District, Chongqing.

2.2 Manufacturer Information

Manufacturer	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.2 Building, No.24 Nichang Boulevard, Huixing Block, Yubei District, Chongqing.

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	RMX2040
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	11
Software Version	Color OS 7.0
Dimensions (Approx.)	75.4 x 164.4 x 9.0 mm
Weight (Approx.)	195g±5g(with battery)

2.5 Ancillary Equipment

Ancillary Equipment 1	Li-Polymer Battery	
	Brand Name	realme
	Model No.	BLP771
	Serial No.	N/A
	Capacitance	Rated: 4880mAh/18.889Wh Typical: 5000mAh/19.35Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	Huizhou Desay Battery Co., LTD

2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/900/1800/1900 MHz 3G Network WCDMA/HSDPA/HSUPA/HSPA+ Band 1/2/4/5/8 4G Network LTE FDD Band 1/2/3/4/5/7/8/20/28 LTE TDD Band 38/40/41 Bluetooth 5.0 (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) GPS, GLONASS, BDS, FM, NFC
Note : The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g /n(HT20)	2400 ~ 2483.5 MHz	
	Bluetooth	2400 ~ 2483.5 MHz	
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	Not Support		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		
EUT Stage	Portable Device		
Product	Type		
	☒ Production unit	☐ Identical prototype	

Note:

1. This device supports both LTE Band 38 and Band 41. Since the supported frequency span for LTE Band 38 falls completely within the supports frequency span for LTE Band 41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE Band 41.
2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering

applications.

3. This device has two WWAN transmit antennas. WWAN down antenna is located at the bottom edge of the device, and WWAN up antenna is located at the top edge of the device. Up and Down antenna support the same WWAN frequency bands, and they can't transmit simultaneously.

2.7 Power Reduction Description

This mobile phone device supports the receiver detection mechanism. This device uses the receiver to indicate whether the user is making a call in head or body or hand.

When there is a voice call (including VOIP) and the audio is actively routed through the earpiece receiver, which indicating the head exposure condition it will trigger the head exposure reduced the power.

When there is a voice call (including VOIP), and the audio is actively routed through the headset or speaker, which indicating the body or extremity exposure conditions and will trigger the body or extremity exposure reduced the power.

When this device used data mode only, and the receiver will not work too, the reduced the power are same as body or extremity exposure.

For WWAN Up Antenna (4 sets of power reduction levels)

Head, Body and Product Specific exposure condition conduction different reduction category, the detail as below:

a) Head exposure conditions(2 sets of power reduction levels):

Reduced power level 1-PCS1900; WCDMA Band 2/4; LTE Band2/4/5/7/38/41(WWAN Use Only)

When the device is transmitting at the WWAN Up Antenna, power reduction will be enabled for those bands.

Reduced power level 2 -PCS1900; WCDMA Band 2/4; LTE Band2/4/5/7/38/41(WWAN+WLAN2.4G)

When the device WLAN 2.4GHz is transmitting simultaneously with the WWAN Up Antenna, power reduction will be enabled for those bands.

Power reduced level 2 is same as level 1.

b) Body（Body-worn and Hotspot）and Product Specific exposure conditions:

Once the device is transmitting at the WWAN Up Antenna, the receiver to indicate user in body or hand. Power reduction will be enabled for those bands.

Reduced power level 3-PCS1900; WCDMA Band 2/4; LTE Band2/4/5/7/38/41(WWAN Use Only)

When the device is transmitting at the WWAN Up Antenna, power reduction will be enabled for those bands.

Reduced power level 4 -PCS1900; WCDMA Band 2/4; LTE Band2/4/5/7/38/41(WWAN+WLAN2.4G)

When the device WLAN 2.4GHz is transmitting simultaneously with the WWAN Up Antenna, power reduction will be enabled for those bands.

Power reduced level 4 is same as level 3.

For WWAN Down Antenna (2 sets of power reduction levels)

a) Body（Body-worn and Hotspot）and Product Specific exposure conditions:

Once the device is transmitting at the WWAN Down Antenna, the receiver to indicate user in body or hand. Power reduction will be enabled for those bands.

Reduced power level 5-GSM850; PCS1900; WCDMA Band 2/4; LTE Band2/4/7/38/41(WWAN Use Only)

When the device is transmitting at the WWAN Down Antenna, power reduction will be enabled for those bands.

Reduced power level 6 -GSM850; PCS1900; WCDMA Band 2/4; LTE Band2/4/7/38/41(WWAN+WLAN2.4G)

When the device WLAN 2.4GHz is transmitting simultaneously with the WWAN Down Antenna, power reduction will be enabled for those bands.

Power reduced level 6 is same as level 5.

For WLAN Antenna (3 sets of power reduction levels)

Head exposure conditions(2 sets of power reduction levels):

Reduced power level 1-WLAN2.4G (WLAN Use Only)

When the device is transmitting at the WLAN Antenna, power reduction will be enabled for those bands.

Reduced power level 2-WLAN2.4G (WLAN +WWAN)

When the device WLAN Antenna is transmitting simultaneously with the WWAN Antenna, power reduction will be enabled for those bands.

Body exposure conditions(1 sets of power reduction levels):

Reduced power level 3-WLAN2.4G (WLAN +WWAN)

When the device WLAN Antenna is transmitting simultaneously with the WWAN Antenna, power reduction will be enabled for those bands.

Power reduced level 3 is same as level 2.

Note： When the device transmitting at the WLAN only at body or limbs exposure conditions this product not support power reduction function.

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	ANSI/IEEE Std. C95.1-1999	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D01 v06	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	FCC KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	FCC KDB 941225 D06 v02r01	SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
8	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
10	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
11	KDB 248227 D01 v02r02	SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters

3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user.

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

Body Position	SAR Value (W/Kg)	
	General Population/ Uncontrolled Exposure	Occupational/ ControlledExposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

General Population/Uncontrolled Exposure: Locations where there is the exposure of individuals who have no knowledge or control of their exposure. General population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Occupational/Controlled Exposure: Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

3.3 Test Result Summary

3.3.1 Highest Head and Body SAR (1 g Value)

Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
	Head	Body		Head	Body-worn	Hotspot
		Body-worn (15mm)	Hotspot (10mm)			
GSM 850	0.594	0.170	0.208	1.105	0.351	0.700
GSM 1900	1.053	0.301	0.532			
WCDMA Band 2	0.594	0.146	0.391			
WCDMA Band 4	0.448	0.120	0.378			
WCDMA Band 5	0.555	0.264	0.285			
LTE Band 2	0.628	0.115	0.402			
LTE Band 4	0.612	0.198	0.478			
LTE Band 5	0.157	0.280	0.318			
LTE Band 7	0.771	**0.351**	**0.700**			
LTE Band 41	0.456	0.189	0.350			
2.4G WLAN	**1.105**	0.289	0.689			
Bluetooth	0.319	0.057	0.125			
Limit (W/kg)	1.60					
Verdict	Pass					
Note: This device supports both LTE Band 38 and Band 41. Since the supported frequency span for LTE Band 38 falls completely within the supports frequency span for LTE Band 41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE Band 41.						

3.3.2 Highest Product Specific SAR (10 g Value)

Band	Maximum Scaled SAR (W/kg)	Maximum Report SAR (W/kg)
	Specific (0mm)	Specific (0mm)
WCDMA Band 2	**1.321**	1.321
WCDMA Band 4	0.852	
LTE Band 2	1.162	
LTE Band 4	1.157	
LTE Band 7	1.092	
Limit (W/kg)	4.0	
Verdict	Pass	

3.3.3 Highest Simultaneous SAR

Position	Simultaneous Configuration	Simultaneous SAR (W/kg)	Limit (W/kg)	Verdict
Head (1g)	GSM + 2.4G WLAN	1.487	1.6	Pass
Body-worn (1g)	LTE + 2.4G WLAN	0.432	1.6	Pass
Hotspot Mode (1g)	LTE + 2.4G WLAN	1.100	1.6	Pass

3.4 Test Uncertainty

According to KDB 865664 D01, When the highest measured 1 g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis is not required in SAR reports submitted for equipment approval.

The maximum 1 g SAR for the EUT in this report is 1.105 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.
The maximum 10 g SAR for the EUT in this report is 1.321 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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.

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:

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

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

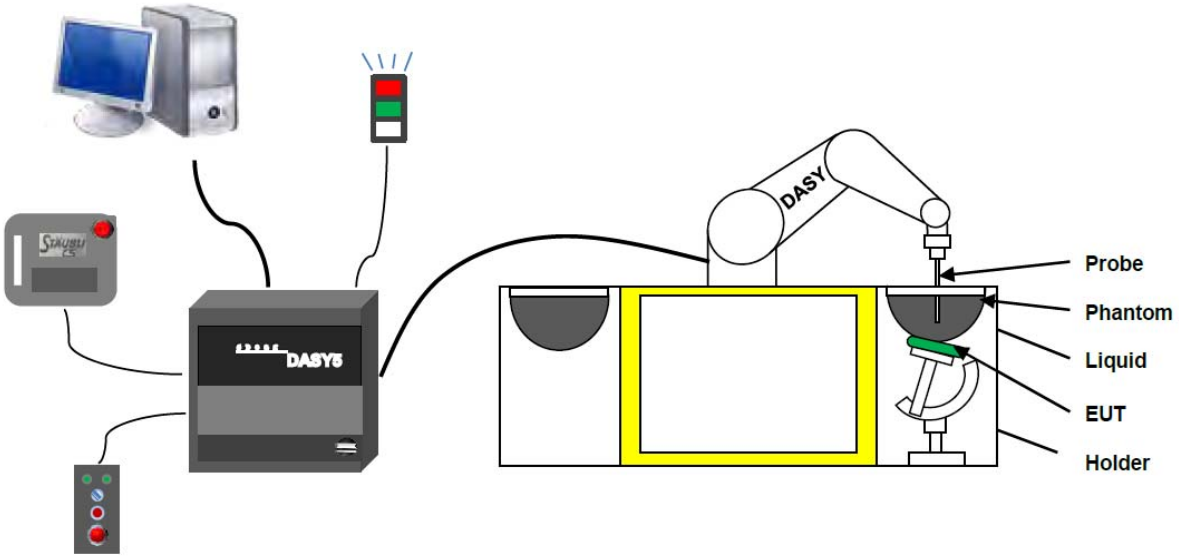
$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}\mathbf{E}^2}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue,

ρ is the mass density of the tissue and E is the RMS electrical field strength.

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

The Dasy SAR system uses the high precision robots. Symmetrical design with triangular core Built-in optical fiber for surface detection system For the 6-axis controller system, Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents). The robot series have many features that are important for our application:

- High precision
  (repeatability ±0.02 mm)
- High reliability
  (industrial design)
- Low maintenance costs
  (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements
  (brush less synchron motors; no stepper motors)
- Low ELF interference
  (motor control _elds shielded via the closed metallic construction shields)

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4-SN:7510 with following specifications is used.

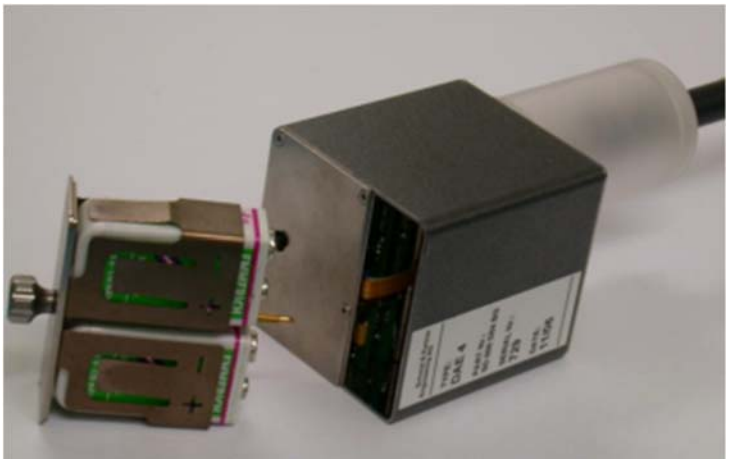
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection systemBuilt-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 µW/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)

E-Field Probe Calibration Process

Probe calibration is realized, in compliance with CENELEC EN 62209-1/-2 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 62209-1/2 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

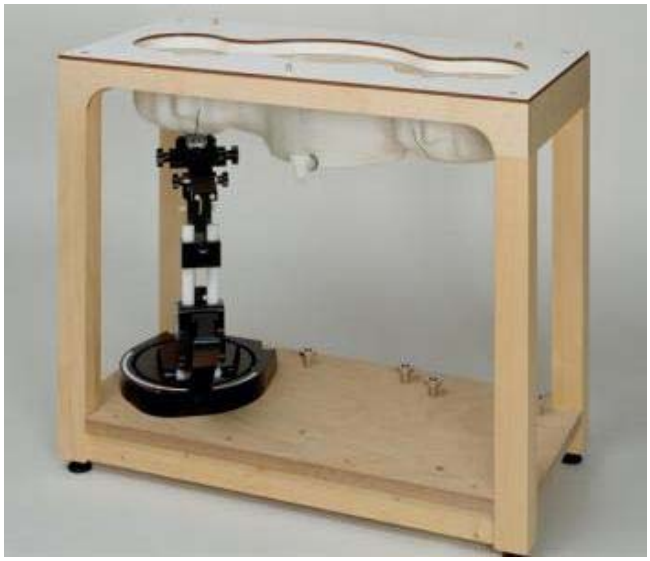
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.



- Input Impedance: 200MOhm
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

4.2.5 Phantoms

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.



- Left hand
- Right hand
- Flat phantom

Photo of Phantom SN1857

Photo of Phantom SN1859

Serial Number	Material	Length	Height
SN 1857 SAM1	Vinylester, glass fiber reinforced	1000	500
SN 1859 SAM2	Vinylester, glass fiber reinforced	1000	500

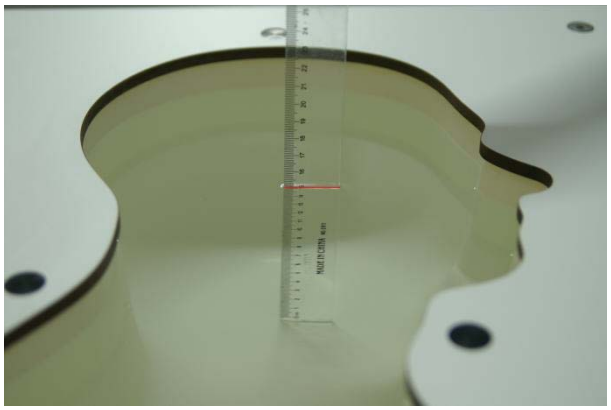
4.2.6 Device Holder

The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA"s only. If necessary an additional support of polystyrene material is used. Larger DUT"s (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.

The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1°.

4.2.7 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.

Head Liquid Depth	Body Liquid Depth
	

The following table gives the recipes for tissue simulating liquid and the theoretical Conductivity/Permittivity.

Head (Reference IEEE1528)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ε
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0.1	0	44.9	1.80	39.2
2600	54.9	0	0	0.1	0	45.0	1.96	39.0
Frequency (MHz)	Water (%)	Hexyl Carbitol (%)			Triton X-100 (%)		Conductivity σ (S/m)	Permittivity ε
5200	62.52	17.24			17.24		4.66	36.0
5800	62.52	17.24			17.24		5.27	35.3
Body (From instrument manufacturer)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ε
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0.1	0	31.3	1.95	52.7
2600	68.2	0	0	0.1	0	31.7	2.16	52.5
Frequency(MHz)	Water	DGBE (%)			Salt (%)		Conductivity σ (S/m)	Permittivity ε
5200	78.60	21.40			/		5.54	47.86
5800	78.50	21.40			0.1		6.0	48.20

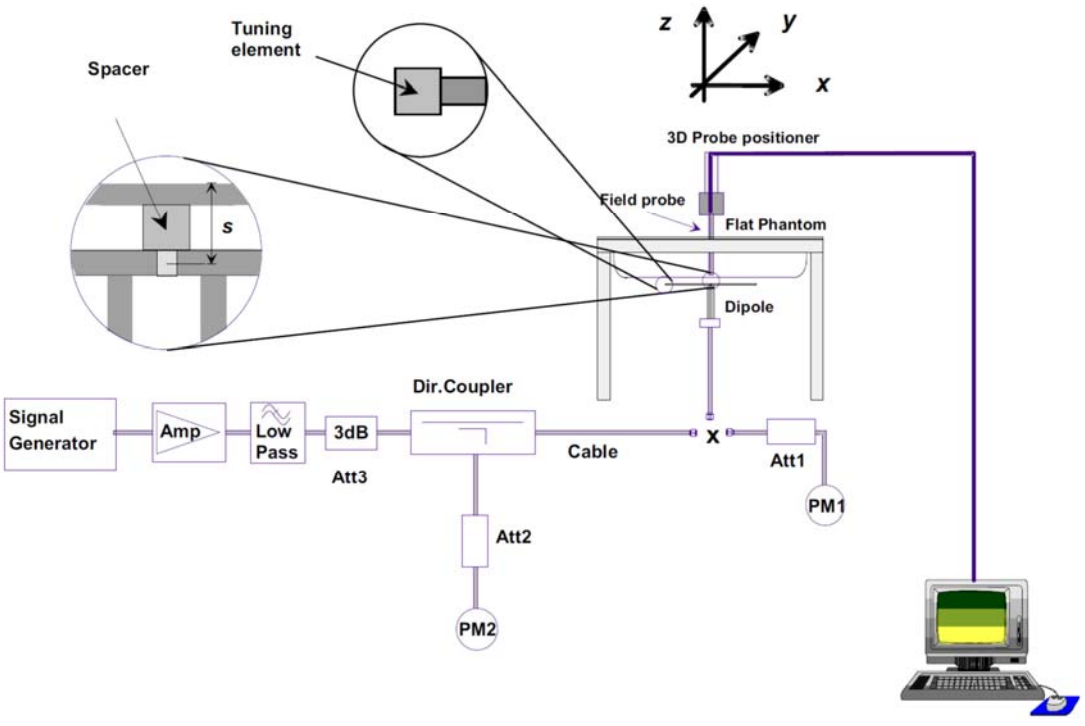
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source.This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

5.2 System Check Setup

In the simplified setup for system evaluation, the EUT 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:



6 TEST POSITION CONFIGURATIONS

According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

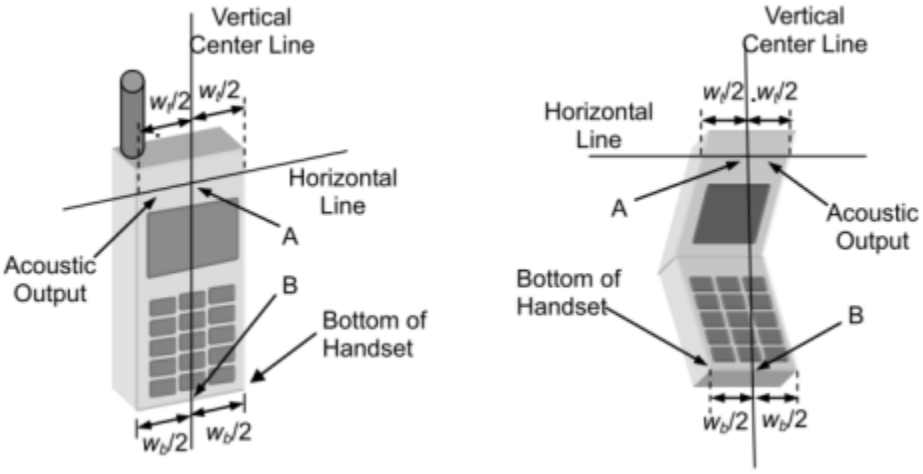
Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

6.1.1 Two Imaginary Lines on the Handset

(a) The vertical center line passes through two points on the front side of the handset - the midpoint of the width w t of the handset at the level of the acoustic output, and the midpoint of the width w b of the bottom of the handset.

(b) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.

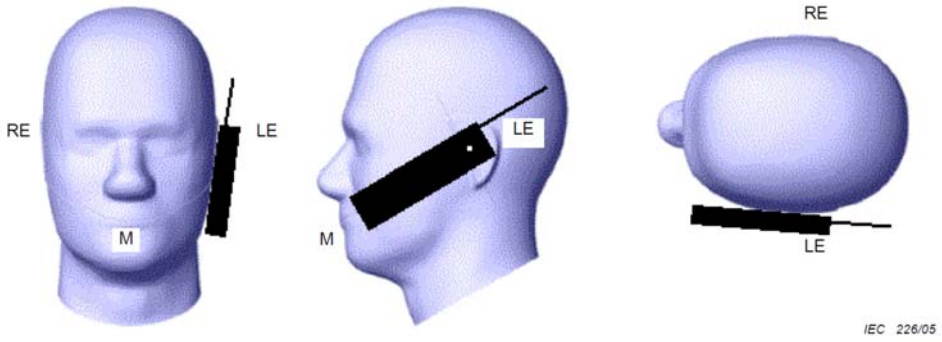
(c) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



6.1.2 Cheek Position

(a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.

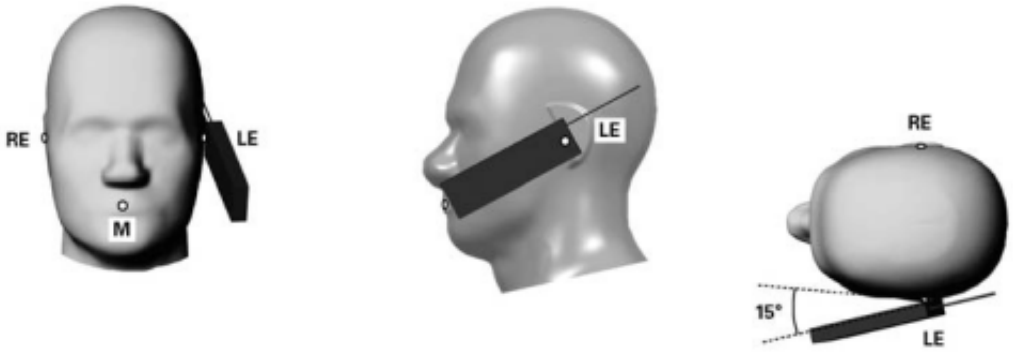
(b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.



6.1.3 Tilted Position

(a) To position the device in the “cheek” position described above.

(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

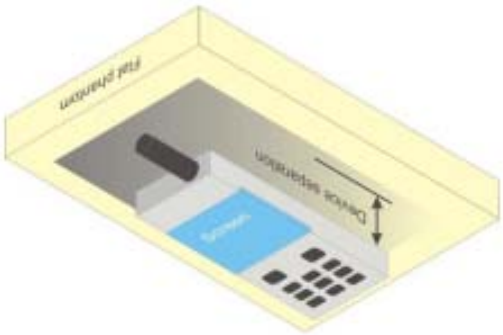


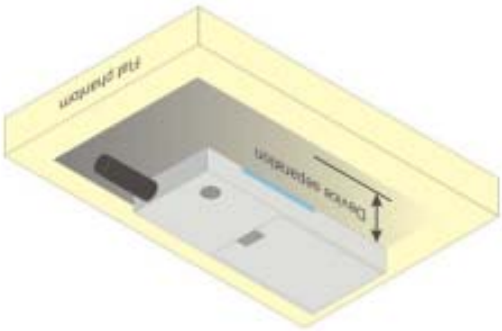
6.2 Body-worn Position Conditions

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB 447498 are used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode. When the reported SAR for a body-worn accessory.

Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.

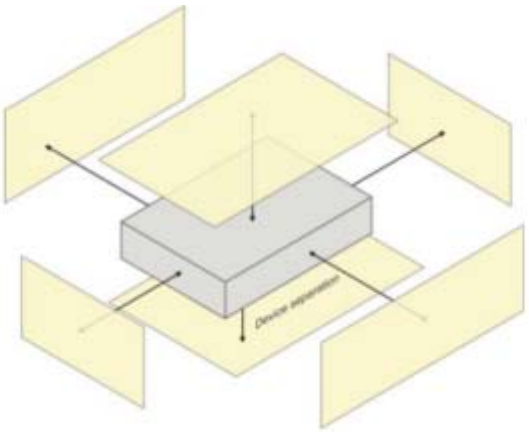
Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required. A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets is used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer, according to the requirements of Supplement C 01-01. Devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, will be tested using a conservative minimum test separation distance <= 5 mm to support compliance.





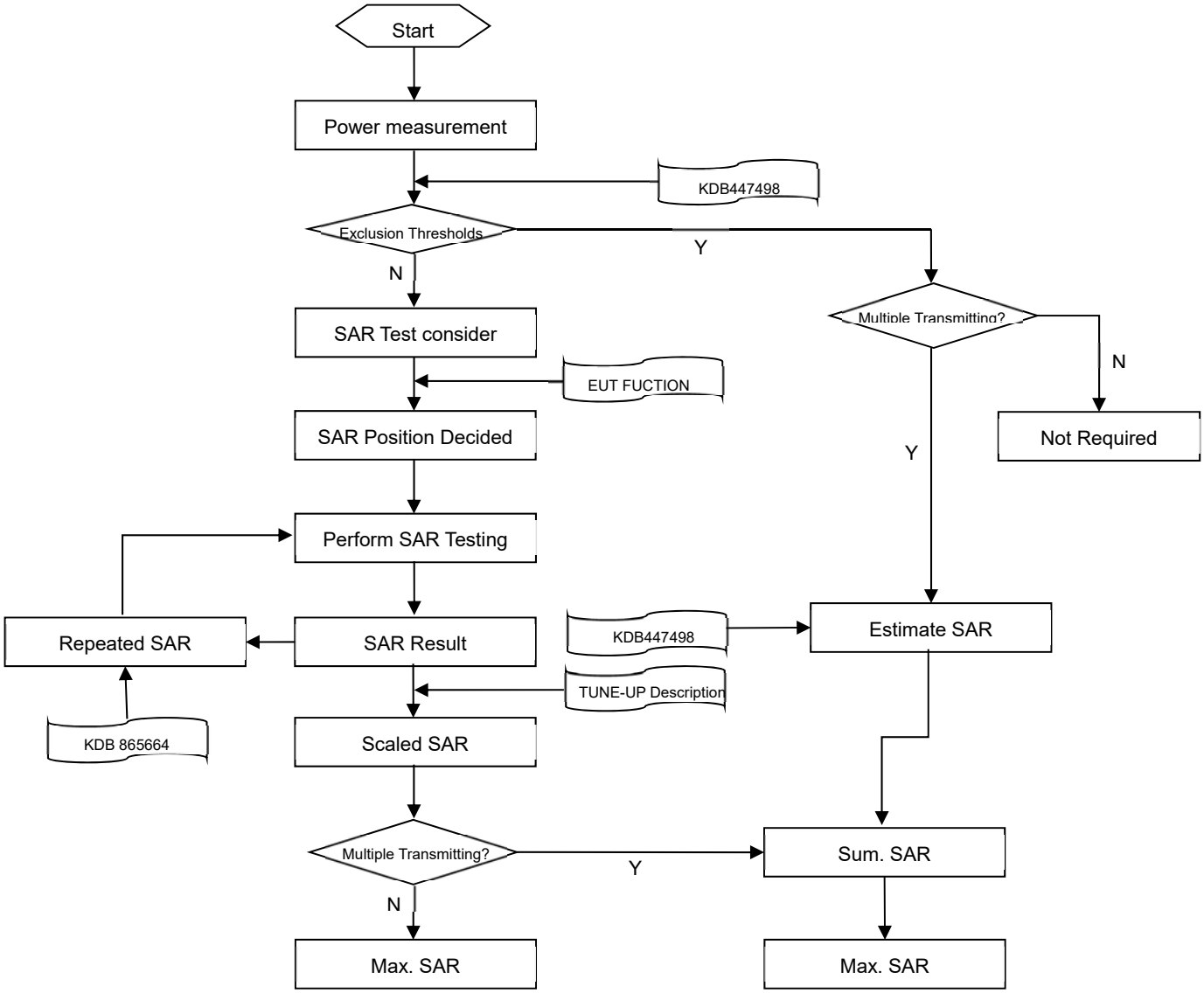
6.3 Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).



7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Boththe probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

<table>
<tr><th colspan="3"></th><th>≤3GHz</th><th>>3GHz</th></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5±1 mm</td><td>½·δ·ln(2)±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30°±1°</td><td>20°±1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx Area , Δy Area</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3–4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom</td><td>≤ 2 GHz: ≤ 8 mm
2 –3 GHz: ≤ 5 mm*</td><td>3–4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="6">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2" rowspan="3">uniform grid: Δz Zoom (n)</td><td rowspan="3">≤ 5 mm</td><td>3–4 GHz: ≤ 4 mm</td></tr>
<tr><td>4–5 GHz: ≤ 3 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="3">graded grid</td><td rowspan="2">Δz Zoom (1): between 1st two points closest to phantom surface</td><td rowspan="2">≤ 4 mm</td><td>3–4 GHz: ≤ 3 mm</td></tr>
<tr><td>4–5 GHz: ≤ 2.5 mm</td></tr>
<tr><td>Δz Zoom (n>1): between subsequent points</td><td>5–6 GHz: ≤ 2 mm</td><td>≤ 1.5·Δz Zoom (n-1)</td></tr>
<tr><td rowspan="3">Minimum zoom scan volume</td><td colspan="2" rowspan="3">x, y, z</td><td rowspan="3">≥30 mm</td><td>3–4 GHz: ≥ 28 mm</td></tr>
<tr><td>4–5 GHz: ≥ 25 mm</td></tr>
<tr><td>5–6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note:
1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * 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 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

7.3 Measurement Procedure

The following steps are used for each test position

a. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface

b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.

c. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.

d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 *32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.

When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

8 CONDUCTED RF OUPUT POWER

8.1 GSM

GSM 850								
GSM850 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power (dBm)			Tune-up Limit (dBm)
Channel	128	190	251		128	190	251	
GSM (GMSK, 1-Slot)	31.97	32.11	32.16	33.50	22.78	22.92	22.97	24.31
GPRS (GMSK, 1-Slot)	32.03	32.15	32.17	33.50	22.84	22.96	22.98	24.31
GPRS (GMSK, 2-Slots)	30.45	30.56	30.63	31.50	24.32	24.43	**24.50**	25.37
GPRS (GMSK, 3-Slots)	28.43	28.50	28.61	29.50	24.01	24.08	24.19	25.08
GPRS (GMSK, 4-Slots)	27.48	27.57	27.64	28.50	24.30	24.39	24.46	25.32
EGPRS (8PSK, 1-Slot)	28.84	29.03	28.91	29.50	19.65	19.84	19.72	20.31
EGPRS (8PSK, 2-Slots)	27.71	27.88	27.89	28.50	21.58	21.75	21.76	22.37
EGPRS (8PSK, 3-Slots)	25.67	25.61	25.75	26.50	21.25	21.19	21.33	22.08
EGPRS (8PSK, 4-Slots)	24.51	24.53	24.58	25.50	21.33	21.35	21.40	22.32

GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power(dBm)			Tune-up Limit (dBm)
Channel	512	661	810		512	661	810	
GSM (GMSK, 1-Slot)	29.41	29.27	29.23	30.50	20.22	20.08	20.04	21.31
GPRS (GMSK, 1-Slot)	29.41	29.26	29.22	30.50	20.22	20.07	20.03	21.31
GPRS (GMSK, 2-Slots)	27.15	26.98	27.02	28.00	21.02	20.85	20.89	21.87
GPRS (GMSK, 3-Slots)	25.83	25.67	25.71	27.00	21.41	21.25	21.29	22.58
GPRS (GMSK, 4-Slots)	24.87	24.69	24.74	26.00	**21.69**	21.51	21.56	22.82
EGPRS (8PSK, 1-Slot)	28.27	27.76	27.73	29.00	19.08	18.57	18.54	19.81
EGPRS (8PSK, 2-Slots)	26.84	26.72	26.37	28.00	20.71	20.59	20.24	21.87
EGPRS (8PSK, 3-Slots)	24.62	24.42	24.34	26.00	20.20	20.00	19.92	21.58
EGPRS (8PSK, 4-Slots)	23.62	23.32	23.26	25.00	20.44	20.14	20.08	21.82

Note [1]: SAR testing was performed on the maximum frame-averaged power mode.

Note [2]: The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:

Frame-averaged power = Burst averaged power (1 Tx Slot) – 9.19 dB

Frame-averaged power = Burst averaged power (2 Tx Slots) – 6.13 dB

Frame-averaged power = Burst averaged power (3 Tx Slots) - 4.42dB

Frame-averaged power = Burst averaged power (4 Tx Slots) – 3.18 dB

8.2 WCDMA

WCDMA	Band 2				Band 4			
Channel	9262	9400	9538	Tune-up Limit (dBm)	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	**22.97**	22.87	22.93	24.00	22.56	**22.65**	22.50	24.00
HSDPA Subtest-1	21.97	21.94	21.97	23.00	21.57	21.69	21.49	23.00
HSDPA Subtest-2	21.92	21.87	21.90	23.00	21.53	21.62	21.44	23.00
HSDPA Subtest-3	21.43	21.19	21.43	22.50	21.07	21.18	21.02	22.50
HSDPA Subtest-4	21.38	21.41	21.43	22.50	21.09	21.15	20.99	22.50
HSUPA Subtest-1	19.96	19.91	19.93	21.00	19.56	19.68	19.49	21.00
HSUPA Subtest-2	19.95	19.90	19.90	21.00	19.56	19.17	19.51	21.00
HSUPA Subtest-3	20.94	20.90	20.92	22.00	20.57	20.70	20.54	22.00
HSUPA Subtest-4	19.46	19.42	19.43	20.50	19.09	19.19	18.99	20.50
HSUPA Subtest-5	20.93	20.85	20.89	22.00	20.57	20.66	20.48	22.00
WCDMA	Band 5				-			
Channel	4132	4182	4233	Tune-up Limit (dBm)	-	-	-	-
RMC 12.2Kbps	**23.00**	22.94	22.98	24.00	-	-	-	-
HSDPA Subtest-1	22.03	21.97	21.99	23.00	-	-	-	-
HSDPA Subtest-2	21.97	21.93	21.94	23.00	-	-	-	-
HSDPA Subtest-3	21.49	21.45	21.44	22.50	-	-	-	-
HSDPA Subtest-4	21.45	21.43	21.43	22.50	-	-	-	-
HSUPA Subtest-1	21.04	20.98	21.01	22.00	-	-	-	-
HSUPA Subtest-2	21.07	20.99	21.02	22.00	-	-	-	-
HSUPA Subtest-3	22.02	21.96	21.99	23.00	-	-	-	-
HSUPA Subtest-4	20.54	20.51	20.53	21.50	-	-	-	-
HSUPA Subtest-5	21.99	21.93	21.95	23.00	-	-	-	-

8.3 LTE

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	22.48	22.47	22.30	24.00	22.01	21.92	21.81	23.00
	1 (RB_Pos:50)	22.78	**22.87**	22.71	24.00	22.43	22.22	22.18	23.00
	1 (RB_Pos:99)	22.41	22.36	22.40	24.00	21.98	21.80	21.73	23.00
	50 (RB_Pos:0)	21.77	21.77	21.76	23.00	20.81	20.78	20.80	22.00
	50 (RB_Pos:25)	21.80	21.71	21.75	23.00	20.84	20.76	20.77	22.00
	50 (RB_Pos:50)	21.72	21.63	21.55	23.00	20.79	20.67	20.61	22.00
	100 (RB_Pos:0)	21.73	21.65	21.63	23.00	20.81	20.70	20.76	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18675	18900	19125		18675	18900	19125	
15 MHz	1 (RB_Pos:0)	22.65	22.59	22.48	24.00	21.59	21.98	21.97	23.00
	1 (RB_Pos:38)	22.70	22.69	22.65	24.00	21.72	22.07	22.01	23.00
	1 (RB_Pos:74)	22.57	22.50	22.62	24.00	21.59	21.87	21.85	23.00
	36 (RB_Pos:0)	21.80	21.79	21.69	23.00	20.79	20.78	20.68	22.00
	36 (RB_Pos:20)	21.82	21.74	21.68	23.00	20.78	20.79	20.68	22.00
	36 (RB_Pos:39)	21.75	21.68	21.67	23.00	20.71	20.70	20.66	22.00
	75 (RB_Pos:0)	21.81	21.76	21.77	23.00	20.82	20.72	20.75	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	22.71	22.69	22.60	24.00	21.66	22.06	21.67	23.00
	1 (RB_Pos:25)	22.89	22.91	22.88	24.00	21.84	22.16	21.77	23.00
	1 (RB_Pos:49)	22.67	22.60	22.82	24.00	21.67	21.95	21.62	23.00
	25 (RB_Pos:0)	21.82	21.78	21.75	23.00	20.85	20.83	20.92	22.00
	25 (RB_Pos:12)	21.81	21.71	21.69	23.00	20.85	20.80	20.87	22.00
	25 (RB_Pos:25)	21.82	21.67	21.62	23.00	20.88	20.72	20.80	22.00
	50 (RB_Pos:0)	21.85	21.75	21.76	23.00	20.82	20.76	20.89	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	22.64	22.62	22.54	24.00	21.84	22.10	21.62	23.00
	1 (RB_Pos:13)	22.76	22.72	22.74	24.00	21.91	22.23	21.76	23.00
	1 (RB_Pos:24)	22.63	22.58	22.64	24.00	21.84	22.03	21.67	23.00
	12 (RB_Pos:0)	21.74	21.67	21.68	23.00	20.79	20.84	20.79	22.00
	12 (RB_Pos:6)	21.79	21.73	21.75	23.00	20.88	20.89	20.81	22.00
	12 (RB_Pos:13)	21.69	21.63	21.65	23.00	20.83	20.78	20.70	22.00

	25 (RB_Pos:0)	21.73	21.65	21.66	23.00	20.77	20.76	20.68	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	22.73	22.69	22.77	24.00	21.65	22.04	21.65	23.00
	1 (RB_Pos:8)	22.69	22.71	22.81	24.00	21.64	22.01	21.62	23.00
	1 (RB_Pos:14)	22.70	22.69	22.81	24.00	21.65	22.01	21.63	23.00
	8 (RB_Pos:0)	21.74	21.69	21.72	23.00	20.84	20.78	20.73	22.00
	8 (RB_Pos:3)	21.77	21.74	21.75	23.00	20.88	20.85	20.79	22.00
	8 (RB_Pos:7)	21.70	21.69	21.68	23.00	20.82	20.74	20.73	22.00
	15 (RB_Pos:0)	21.73	21.71	21.71	23.00	20.76	20.72	20.66	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18607	18900	19193		18607	18900	19193	
1.4 MHz	1 (RB_Pos:0)	22.70	22.67	22.81	24.00	21.82	22.02	21.66	23.00
	1 (RB_Pos:3)	22.81	22.86	23.00	24.00	21.91	22.19	21.79	23.00
	1 (RB_Pos:5)	22.65	22.67	22.82	24.00	21.83	22.02	21.67	23.00
	3 (RB_Pos:0)	22.86	22.78	22.87	24.00	21.83	21.97	21.94	23.00
	3 (RB_Pos:1)	22.83	22.84	22.90	24.00	21.85	21.98	22.00	23.00
	3 (RB_Pos:3)	22.85	22.79	22.86	24.00	21.82	21.97	21.97	23.00
	6 (RB_Pos:0)	21.74	21.75	21.77	23.00	20.93	20.68	20.91	22.00

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	22.01	22.17	22.15	24.00	21.49	21.59	21.59	23.00
	1 (RB_Pos:50)	22.44	**22.60**	22.47	24.00	21.93	22.02	21.87	23.00
	1 (RB_Pos:99)	21.98	22.08	21.85	24.00	21.51	21.54	21.30	23.00
	50 (RB_Pos:0)	21.27	21.46	21.45	23.00	20.37	20.46	20.44	22.00
	50 (RB_Pos:25)	21.36	21.45	21.38	23.00	20.42	20.48	20.37	22.00
	50 (RB_Pos:50)	21.31	21.37	21.23	23.00	20.35	20.42	20.23	22.00
	100 (RB_Pos:0)	21.30	21.44	21.35	23.00	20.33	20.45	20.40	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20025	20175	20325		20025	20175	20325	
15 MHz	1 (RB_Pos:0)	22.14	22.36	22.30	24.00	21.08	21.69	21.75	23.00
	1 (RB_Pos:38)	22.29	22.42	22.28	24.00	21.28	21.78	21.70	23.00
	1 (RB_Pos:74)	22.12	22.22	22.06	24.00	21.08	21.61	21.44	23.00
	36 (RB_Pos:0)	21.35	21.49	21.41	23.00	20.30	20.52	20.36	22.00

	36 (RB_Pos:20)	21.36	21.46	21.36	23.00	20.35	20.51	20.31	22.00
	36 (RB_Pos:39)	21.36	21.45	21.26	23.00	20.37	20.46	20.20	22.00
	75 (RB_Pos:0)	21.35	21.45	21.35	23.00	20.33	20.46	20.33	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20000	20175	20350		20000	20175	20350	
10 MHz	1 (RB_Pos:0)	22.22	22.39	22.28	24.00	21.17	21.75	21.34	23.00
	1 (RB_Pos:25)	22.44	22.59	22.42	24.00	21.37	21.93	21.40	23.00
	1 (RB_Pos:49)	22.26	22.37	22.16	24.00	21.20	21.72	21.13	23.00
	25 (RB_Pos:0)	21.32	21.46	21.31	23.00	20.38	20.55	20.47	22.00
	25 (RB_Pos:12)	21.37	21.42	21.28	23.00	20.41	20.54	20.39	22.00
	25 (RB_Pos:25)	21.37	21.41	21.23	23.00	20.39	20.51	20.32	22.00
	50 (RB_Pos:0)	21.35	21.46	21.32	23.00	20.37	20.51	20.37	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	22.14	22.31	22.17	24.00	21.34	21.79	21.27	23.00
	1 (RB_Pos:13)	22.28	22.39	22.27	24.00	21.44	21.87	21.37	23.00
	1 (RB_Pos:24)	22.17	22.29	22.10	24.00	21.38	21.74	21.20	23.00
	12 (RB_Pos:0)	21.23	21.34	21.22	23.00	20.33	20.55	20.29	22.00
	12 (RB_Pos:6)	21.27	21.46	21.30	23.00	20.38	20.56	20.31	22.00
	12 (RB_Pos:13)	21.28	21.35	21.22	23.00	20.32	20.50	20.27	22.00
	25 (RB_Pos:0)	21.26	21.37	21.24	23.00	20.31	20.44	20.23	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19965	20175	20385		19965	20175	20385	
3.0 MHz	1 (RB_Pos:0)	22.23	22.39	22.24	24.00	21.16	21.76	21.26	23.00
	1 (RB_Pos:8)	22.23	22.40	22.21	24.00	21.16	21.76	21.26	23.00
	1 (RB_Pos:14)	22.22	22.35	22.22	24.00	21.15	21.76	21.19	23.00
	8 (RB_Pos:0)	21.25	21.36	21.21	23.00	20.38	20.49	20.28	22.00
	8 (RB_Pos:3)	21.30	21.39	21.26	23.00	20.42	20.52	20.29	22.00
	8 (RB_Pos:7)	21.25	21.35	21.19	23.00	20.35	20.45	20.26	22.00
	15 (RB_Pos:0)	21.22	21.37	21.23	23.00	20.29	20.43	20.21	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19957	20175	20393		19957	20175	20393	
1.4 MHz	1 (RB_Pos:0)	22.23	22.38	22.20	24.00	21.33	21.75	21.24	23.00
	1 (RB_Pos:3)	22.38	22.57	22.44	24.00	21.45	21.92	21.40	23.00
	1 (RB_Pos:5)	22.22	22.37	22.27	24.00	21.34	21.73	21.22	23.00
	3 (RB_Pos:0)	22.31	22.47	22.34	24.00	21.35	21.66	21.47	23.00
	3 (RB_Pos:1)	22.34	22.47	22.40	24.00	21.39	21.65	21.49	23.00

	3 (RB_Pos:3)	22.29	22.45	22.38	24.00	21.34	21.63	21.47	23.00
	6 (RB_Pos:0)	21.28	21.43	21.28	23.00	20.43	20.34	20.45	22.00

FDD LTE Band 5									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20450	20525	20600		20450	20525	20600	
10 MHz	1 (RB_Pos:0)	22.50	22.49	22.54	24.00	21.56	21.95	21.66	23.00
	1 (RB_Pos:25)	22.64	22.70	**22.71**	24.00	21.72	22.21	21.86	23.00
	1 (RB_Pos:49)	22.51	22.55	22.55	24.00	21.57	22.01	21.68	23.00
	25 (RB_Pos:0)	21.58	21.64	21.70	23.00	20.62	20.68	20.83	22.00
	25 (RB_Pos:12)	21.62	21.63	21.65	23.00	20.64	20.69	20.78	22.00
	25 (RB_Pos:25)	21.62	21.67	21.59	23.00	20.70	20.72	20.74	22.00
	50 (RB_Pos:0)	21.59	21.65	21.70	23.00	20.60	20.72	20.73	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20425	20525	20625		20425	20525	20625	
5MHz	1 (RB_Pos:0)	22.49	22.50	22.48	24.00	21.78	22.08	21.75	23.00
	1 (RB_Pos:13)	22.64	22.64	22.60	24.00	21.82	22.18	21.75	23.00
	1 (RB_Pos:24)	22.50	22.51	22.43	24.00	21.77	22.03	21.70	23.00
	12 (RB_Pos:0)	21.54	21.59	21.61	23.00	20.60	20.69	20.67	22.00
	12 (RB_Pos:6)	21.63	21.65	21.65	23.00	20.69	20.81	20.74	22.00
	12 (RB_Pos:13)	21.55	21.60	21.61	23.00	20.62	20.77	20.68	22.00
	25 (RB_Pos:0)	21.59	21.64	21.61	23.00	20.58	20.69	20.59	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
3.0 MHz	1 (RB_Pos:0)	22.58	22.60	22.61	24.00	21.67	22.05	21.73	23.00
	1 (RB_Pos:8)	22.48	22.57	22.51	24.00	21.57	22.09	21.70	23.00
	1 (RB_Pos:14)	22.49	22.56	22.54	24.00	21.55	22.02	21.66	23.00
	8 (RB_Pos:0)	21.58	21.57	21.55	23.00	20.69	20.71	20.67	22.00
	8 (RB_Pos:3)	21.59	21.61	21.64	23.00	20.73	20.75	20.75	22.00
	8 (RB_Pos:7)	21.54	21.56	21.55	23.00	20.66	20.71	20.65	22.00
	15 (RB_Pos:0)	21.57	21.59	21.64	23.00	20.63	20.65	20.63	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4MHz	1 (RB_Pos:0)	22.56	22.54	22.45	24.00	21.72	21.96	21.62	23.00
	1 (RB_Pos:3)	22.65	22.68	22.63	24.00	21.84	22.14	21.78	23.00
	1 (RB_Pos:5)	22.49	22.49	22.45	24.00	21.68	21.96	21.63	23.00

	3 (RB_Pos:0)	22.63	22.64	22.66	24.00	21.71	21.87	21.77	23.00
	3 (RB_Pos:1)	22.61	22.66	22.66	24.00	21.67	21.86	21.94	23.00
	3 (RB_Pos:3)	22.57	22.64	22.68	24.00	21.62	21.90	21.84	23.00
	6 (RB_Pos:0)	21.56	21.56	21.58	23.00	20.72	20.46	20.78	22.00

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	22.63	22.55	22.66	24.00	22.08	21.92	22.02	23.00
	1 (RB_Pos:50)	22.96	22.94	**23.02**	24.00	22.42	22.23	22.37	23.00
	1 (RB_Pos:99)	22.52	22.37	22.63	24.00	22.00	21.74	22.01	23.00
	50 (RB_Pos:0)	21.71	21.74	21.80	23.00	20.75	20.76	20.83	22.00
	50 (RB_Pos:25)	21.83	21.68	21.90	23.00	20.88	20.72	20.90	22.00
	50 (RB_Pos:50)	21.81	21.58	21.80	23.00	20.88	20.61	20.83	22.00
	100 (RB_Pos:0)	21.79	21.69	21.82	23.00	20.85	20.71	20.89	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	22.76	22.68	22.80	24.00	21.70	21.98	22.17	23.00
	1 (RB_Pos:38)	22.79	22.66	22.85	24.00	21.76	21.92	22.24	23.00
	1 (RB_Pos:74)	22.67	22.44	22.72	24.00	21.60	21.78	22.06	23.00
	36 (RB_Pos:0)	21.85	21.84	21.84	23.00	20.83	20.78	20.83	22.00
	36 (RB_Pos:20)	21.89	21.75	21.87	23.00	20.86	20.78	20.84	22.00
	36 (RB_Pos:39)	21.89	21.66	21.81	23.00	20.90	20.68	20.81	22.00
	75 (RB_Pos:0)	21.83	21.72	21.86	23.00	20.86	20.71	20.86	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	22.81	22.71	22.81	24.00	21.77	21.99	21.76	23.00
	1 (RB_Pos:25)	22.93	22.84	22.96	24.00	21.86	22.08	21.93	23.00
	1 (RB_Pos:49)	22.74	22.55	22.80	24.00	21.72	21.87	21.76	23.00
	25 (RB_Pos:0)	21.83	21.75	21.82	23.00	20.90	20.72	20.91	22.00
	25 (RB_Pos:12)	21.83	21.66	21.84	23.00	20.92	20.71	20.91	22.00
	25 (RB_Pos:25)	21.89	21.63	21.78	23.00	20.98	20.67	20.89	22.00
	50 (RB_Pos:0)	21.87	21.69	21.79	23.00	20.88	20.70	20.80	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	22.72	22.62	22.70	24.00	21.89	22.01	21.78	23.00

	1 (RB_Pos:13)	22.89	22.72	22.85	24.00	22.02	22.14	21.96	23.00
	1 (RB_Pos:24)	22.73	22.59	22.69	24.00	21.90	21.94	21.78	23.00
	12 (RB_Pos:0)	21.82	21.65	21.78	23.00	20.88	20.77	20.81	22.00
	12 (RB_Pos:6)	21.89	21.69	21.84	23.00	20.99	20.82	20.91	22.00
	12 (RB_Pos:13)	21.80	21.60	21.74	23.00	20.93	20.74	20.83	22.00
	25 (RB_Pos:0)	21.81	21.61	21.77	23.00	20.89	20.69	20.75	22.00

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37850	38000	38150		37850	38000	38150	
20MHz	1 (RB_Pos:0)	22.71	22.72	22.81	24.00	21.99	21.89	22.03	23.00
	1 (RB_Pos:50)	23.18	23.18	**23.33**	24.00	22.39	22.34	22.63	23.00
	1 (RB_Pos:99)	22.58	22.62	22.79	24.00	21.79	21.87	22.09	23.00
	50 (RB_Pos:0)	21.96	21.99	21.96	23.00	21.01	21.04	21.04	22.00
	50 (RB_Pos:25)	21.90	21.94	21.99	23.00	20.95	21.05	21.07	22.00
	50 (RB_Pos:50)	21.75	21.85	21.95	23.00	20.78	20.97	21.01	22.00
	100 (RB_Pos:0)	21.85	21.94	21.97	23.00	20.90	21.02	21.00	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15MHz	1 (RB_Pos:0)	22.85	22.92	22.96	24.00	22.12	22.26	22.19	23.00
	1 (RB_Pos:38)	22.95	23.00	23.08	24.00	22.15	22.38	22.35	23.00
	1 (RB_Pos:74)	22.73	22.85	22.89	24.00	21.95	22.28	22.17	23.00
	36 (RB_Pos:0)	22.04	22.05	22.07	23.00	21.05	21.03	21.05	22.00
	36 (RB_Pos:20)	21.98	22.00	22.04	23.00	20.98	21.01	21.08	22.00
	36 (RB_Pos:39)	21.92	22.00	22.00	23.00	20.92	20.94	21.05	22.00
	75 (RB_Pos:0)	21.97	22.01	22.05	23.00	20.98	21.05	21.07	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	22.95	22.98	23.08	24.00	22.23	22.31	22.37	23.00
	1 (RB_Pos:25)	23.26	23.26	23.34	24.00	22.46	22.60	22.68	23.00
	1 (RB_Pos:49)	22.86	22.96	23.01	24.00	22.10	22.34	22.36	23.00
	25 (RB_Pos:0)	22.01	22.03	22.04	23.00	21.07	21.07	21.10	22.00
	25 (RB_Pos:12)	21.96	22.00	22.04	23.00	21.04	21.04	21.11	22.00
	25 (RB_Pos:25)	21.92	21.95	22.04	23.00	20.96	21.02	21.11	22.00
	50 (RB_Pos:0)	21.96	21.99	22.04	23.00	21.03	21.04	21.11	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit	16QAM			Tune up limit
	Channel	37775	38000	38225		37775	38000	38225	

					(dBm)				(dBm)
5MHz	1 (RB_Pos:0)	22.89	22.91	23.01	24.00	22.10	22.14	22.36	23.00
	1 (RB_Pos:13)	23.00	23.03	23.14	24.00	22.24	22.27	22.49	23.00
	1 (RB_Pos:24)	22.88	22.89	22.99	24.00	22.05	22.14	22.32	23.00
	12 (RB_Pos:0)	21.93	21.97	22.02	23.00	21.04	20.99	21.14	22.00
	12 (RB_Pos:6)	22.00	22.02	22.05	23.00	21.08	21.03	21.18	22.00
	12 (RB_Pos:13)	21.93	21.94	22.03	23.00	21.02	20.95	21.14	22.00
	25 (RB_Pos:0)	21.95	21.93	22.02	23.00	21.00	21.04	21.08	22.00

TDD LTE Band 41											
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40140	40473	40807	41140		40140	40473	40807	41140	
20MHz	1 (RB_Pos:0)	22.69	22.63	22.56	22.96	24.00	21.98	21.83	21.78	22.24	23.00
	1 (RB_Pos:50)	23.13	23.16	23.04	**23.42**	24.00	22.45	22.41	22.39	22.68	23.00
	1 (RB_Pos:99)	22.55	22.61	22.58	22.88	24.00	21.89	21.97	21.93	22.14	23.00
	50 (RB_Pos:0)	21.84	21.98	21.86	22.06	23.00	20.86	21.08	20.97	21.14	22.00
	50 (RB_Pos:25)	21.88	22.02	21.98	22.02	23.00	20.94	21.14	21.08	21.11	22.00
	50 (RB_Pos:50)	21.89	21.95	21.95	21.89	23.00	20.95	21.09	20.98	20.95	22.00
	100 (RB_Pos:0)	21.87	21.98	21.90	21.95	23.00	20.94	21.08	20.99	20.99	22.00
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40115	40465	40815	41165		40115	40465	40815	41165	
15MHz	1 (RB_Pos:0)	22.82	22.85	22.83	23.07	24.00	22.06	22.27	22.16	22.27	23.00
	1 (RB_Pos:38)	22.87	22.97	22.90	23.13	24.00	22.14	22.44	22.36	22.32	23.00
	1 (RB_Pos:74)	22.69	22.84	22.80	22.94	24.00	21.96	22.38	22.25	22.17	23.00
	36 (RB_Pos:0)	21.85	21.99	21.84	22.12	23.00	20.87	21.02	20.93	21.10	22.00
	36 (RB_Pos:20)	21.89	21.96	21.90	22.07	23.00	20.91	21.01	20.97	21.08	22.00
	36 (RB_Pos:39)	21.83	21.92	21.85	22.00	23.00	20.83	20.99	20.96	20.99	22.00
	75 (RB_Pos:0)	21.85	21.98	21.83	22.05	23.00	20.90	21.05	20.94	21.05	22.00
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40090	40457	40823	41190		40090	40457	40823	41190	
10MHz	1 (RB_Pos:0)	22.85	22.96	22.92	23.09	24.00	22.09	22.38	22.33	22.36	23.00
	1 (RB_Pos:25)	23.10	23.24	23.15	23.36	24.00	22.36	22.71	22.71	22.62	23.00
	1 (RB_Pos:49)	22.76	22.95	22.93	23.04	24.00	22.05	22.45	22.35	22.31	23.00
	25 (RB_Pos:0)	21.84	22.03	21.95	22.08	23.00	20.90	21.12	21.05	21.10	22.00
	25 (RB_Pos:12)	21.84	22.06	22.01	22.00	23.00	20.93	21.13	21.13	21.03	22.00
	25 (RB_Pos:25)	21.87	22.02	21.91	21.96	23.00	20.93	21.14	21.13	20.99	22.00
	50 (RB_Pos:0)	21.87	22.04	22.04	21.99	23.00	20.95	21.18	21.16	21.06	22.00
Bandwidth	RB Set	Power (dBm)									

(MHz)		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40065	40448	40832	41215		40065	40448	40832	41215	
5MHz	1 (RB_Pos:0)	22.79	22.83	22.71	22.97	24.00	21.98	22.13	22.02	22.23	23.00
	1 (RB_Pos:13)	22.91	22.98	22.91	23.12	24.00	22.12	22.29	22.19	22.37	23.00
	1 (RB_Pos:24)	22.74	22.82	22.69	22.95	24.00	21.91	22.16	22.02	22.24	23.00
	12 (RB_Pos:0)	21.82	21.93	21.84	22.01	23.00	20.89	21.01	20.94	21.05	22.00
	12 (RB_Pos:6)	21.90	22.01	21.93	22.03	23.00	20.97	21.09	20.94	21.12	22.00
	12 (RB_Pos:13)	21.84	21.92	21.79	21.98	23.00	20.89	21.05	21.00	21.05	22.00
	25 (RB_Pos:0)	21.82	21.98	21.88	21.97	23.00	20.88	21.12	21.10	20.98	22.00

8.4 WIFI

8.4.1 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	17.98	20.00	No
		6	2437	18.04	20.00	No
		11	2462	**18.09**	20.00	Yes
	802.11g	1	2412	15.28	17.00	No
		6	2437	16.86	18.50	No
		11	2462	14.75	16.50	No
	802.11n(HT20)	1	2412	14.08	16.00	No
		6	2437	16.78	18.50	No
		11	2462	14.06	16.00	No

8.5 Bluetooth

Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	**10.04**	9.63	9.97	9.48	8.95	9.57
Tune-Up Limit (dBm)	12.00			10.00		
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Average Power (dBm)	9.50	8.96	9.56	/	/	/
Tune-Up Limit (dBm)	10.00			/		
Mode	BLE (1Mbps)			BLE (2Mbps)		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
Average Power (dBm)	-3.06	-3.43	-3.72	-3.79	-3.43	-3.61
Tune-Up Limit (dBm)	-3.00			-3.00		

8.6 Power Reduction List

8.6.1 Power Reduced Level 5&6 of GSM 850

GSM 850								
GSM850 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power (dBm)			Tune-up Limit (dBm)
Channel	128	190	251		128	190	251	
GSM (GMSK, 1-Slot)	30.88	31.02	31.07	32.50	21.69	21.83	21.88	23.31
GPRS (GMSK, 1-Slot)	30.87	30.96	31.10	32.50	21.68	21.77	21.91	23.31
GPRS (GMSK, 2-Slots)	29.32	29.38	29.52	30.50	23.19	23.25	**23.39**	24.37
GPRS (GMSK, 3-Slots)	27.36	27.46	27.54	28.50	22.94	23.04	23.12	24.08
GPRS (GMSK, 4-Slots)	26.44	26.56	26.56	27.50	23.26	23.38	23.38	24.32
EGPRS (8PSK, 1-Slot)	27.80	27.88	27.73	28.50	18.61	18.69	18.54	19.31
EGPRS (8PSK, 2-Slots)	26.59	26.78	26.73	27.50	20.46	20.65	20.60	21.37
EGPRS (8PSK, 3-Slots)	24.66	24.59	24.70	25.50	20.24	20.17	20.28	21.08
EGPRS (8PSK, 4-Slots)	23.45	23.38	23.44	24.50	20.27	20.20	20.26	21.32

8.6.2 Power Reduced Level 1&2&3&4&5&6 of GSM 1900

GSM 1900								
GSM1900 Band	Burst Average Power(dBm)			Tune-up Limit (dBm)	Frame-Averaged power(dBm)			Tune-up Limit (dBm)
Channel	512	661	810		512	661	810	
GSM (GMSK, 1-Slot)	26.28	26.21	26.08	27.50	17.09	17.02	16.89	18.31
GPRS (GMSK, 1-Slot)	26.27	26.20	26.05	27.50	17.08	17.01	16.86	18.31
GPRS (GMSK, 2-Slots)	23.25	23.18	23.04	24.50	17.12	17.05	16.91	18.37
GPRS (GMSK, 3-Slots)	21.45	21.41	21.27	22.50	17.03	16.99	16.85	18.08
GPRS (GMSK, 4-Slots)	20.39	20.35	20.20	22.00	**17.21**	17.17	17.02	18.82
EGPRS (8PSK, 1-Slot)	25.80	24.33	24.16	26.00	16.61	15.14	14.97	16.81
EGPRS (8PSK, 2-Slots)	23.14	23.32	23.11	24.00	17.01	17.19	16.98	17.87
EGPRS (8PSK, 3-Slots)	21.44	21.32	21.55	22.00	17.02	16.90	17.13	17.58
EGPRS (8PSK, 4-Slots)	20.06	20.21	20.22	21.00	16.88	17.03	17.04	17.82

8.6.3 Power Reduced Level 1&2 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	**16.03**	15.92	15.85	16.50
HSDPA Subtest-1	15.43	15.44	15.27	16.00
HSDPA Subtest-2	15.31	15.23	15.20	16.00
HSDPA Subtest-3	14.88	14.96	14.86	15.50
HSDPA Subtest-4	14.83	14.72	14.97	15.50
HSUPA Subtest-1	13.33	13.19	13.22	13.50
HSUPA Subtest-2	13.51	13.38	13.50	13.50
HSUPA Subtest-3	14.45	14.50	14.63	14.00
HSUPA Subtest-4	13.03	12.94	13.12	13.00
HSUPA Subtest-5	14.35	14.32	14.25	14.00

8.6.4 Power Reduced Level 3&4 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	**17.44**	17.34	17.33	18.00
HSDPA Subtest-1	16.77	17.09	17.10	17.50
HSDPA Subtest-2	16.95	16.92	16.65	17.50
HSDPA Subtest-3	16.28	16.42	16.32	17.00
HSDPA Subtest-4	16.43	16.17	16.39	17.00
HSUPA Subtest-1	14.78	14.86	14.90	15.00
HSUPA Subtest-2	15.15	14.89	14.87	15.00
HSUPA Subtest-3	15.97	16.02	15.76	15.50
HSUPA Subtest-4	14.58	14.65	14.53	14.50
HSUPA Subtest-5	15.66	15.85	15.95	15.50

8.6.5 Power Reduced Level 5&6 of WCDMA Band 2

WCDMA	Band 2			
Channel	9262	9400	9538	Tune-up Limit (dBm)
RMC 12.2Kbps	**18.51**	18.41	18.34	19.00
HSDPA Subtest-1	17.78	17.85	18.03	18.50
HSDPA Subtest-2	17.97	17.77	17.69	18.50
HSDPA Subtest-3	17.35	17.36	17.37	18.00
HSDPA Subtest-4	17.17	17.32	17.15	18.00
HSUPA Subtest-1	15.65	15.87	15.86	16.00
HSUPA Subtest-2	15.86	15.90	15.87	16.00
HSUPA Subtest-3	16.86	17.12	17.00	16.50
HSUPA Subtest-4	15.57	15.54	15.61	15.50
HSUPA Subtest-5	16.66	16.77	16.99	16.50

8.6.6 Power Reduced Level 1&2 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	16.49	**16.50**	16.46	17.50
HSDPA Subtest-1	16.00	15.87	16.14	17.00
HSDPA Subtest-2	15.90	15.86	15.87	17.00
HSDPA Subtest-3	15.49	15.47	15.46	16.50
HSDPA Subtest-4	15.46	15.36	15.66	16.50
HSUPA Subtest-1	14.41	14.48	14.21	14.50
HSUPA Subtest-2	14.38	14.46	14.23	14.50
HSUPA Subtest-3	15.47	15.52	15.65	15.00
HSUPA Subtest-4	14.06	14.24	13.88	14.00
HSUPA Subtest-5	15.46	15.34	15.43	15.00

8.6.7 Power Reduced Level 3&4 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	16.94	**16.99**	16.92	18.00
HSDPA Subtest-1	16.50	16.61	16.45	17.50
HSDPA Subtest-2	16.29	16.36	16.52	17.50
HSDPA Subtest-3	16.11	16.04	15.91	17.00
HSDPA Subtest-4	16.06	15.77	15.94	17.00
HSUPA Subtest-1	15.02	14.88	14.77	15.00
HSUPA Subtest-2	14.90	14.72	14.71	15.00
HSUPA Subtest-3	16.10	15.89	16.07	15.50
HSUPA Subtest-4	14.64	14.43	14.64	14.50
HSUPA Subtest-5	15.85	15.76	15.77	15.50

8.6.8 Power Reduced Level 5&6 of WCDMA Band 4

WCDMA	Band 4			
Channel	1312	1412	1513	Tune-up Limit (dBm)
RMC 12.2Kbps	17.90	**17.95**	17.92	19.00
HSDPA Subtest-1	17.38	17.41	17.46	18.50
HSDPA Subtest-2	17.48	17.56	17.35	18.50
HSDPA Subtest-3	16.97	16.80	17.12	18.00
HSDPA Subtest-4	16.92	16.92	16.96	18.00
HSUPA Subtest-1	16.05	15.86	15.91	16.00
HSUPA Subtest-2	15.94	15.98	16.02	16.00
HSUPA Subtest-3	17.07	16.87	17.08	16.50
HSUPA Subtest-4	15.53	15.50	15.39	15.50
HSUPA Subtest-5	16.97	16.92	17.14	16.50

8.6.9 Power Reduced Level 1&2 of LTE Band 2

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	15.50	15.58	15.61	16.50	15.98	16.05	16.03	16.50
	1 (RB_Pos:50)	15.90	**15.99**	15.93	16.50	16.38	16.46	16.38	16.50
	1 (RB_Pos:99)	15.46	15.57	15.54	16.50	15.95	16.04	15.99	16.50
	50 (RB_Pos:0)	15.70	15.81	15.85	16.50	15.80	15.85	15.91	16.50
	50 (RB_Pos:25)	15.66	15.78	15.81	16.50	15.74	15.85	15.86	16.50
	50 (RB_Pos:50)	15.64	15.75	15.60	16.50	15.72	15.83	15.70	16.50
	100 (RB_Pos:0)	15.69	15.78	15.75	16.50	15.77	15.82	15.86	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18675	18900	19125		18675	18900	19125	
15 MHz	1 (RB_Pos:0)	15.63	15.71	15.79	16.50	15.57	16.10	16.27	16.50
	1 (RB_Pos:38)	15.69	15.84	15.84	16.50	15.67	16.20	16.30	16.50
	1 (RB_Pos:74)	15.55	15.69	15.77	16.50	15.52	16.03	16.14	16.50
	36 (RB_Pos:0)	15.84	15.93	16.00	16.50	15.75	15.84	15.90	16.50
	36 (RB_Pos:20)	15.81	15.92	15.93	16.50	15.72	15.85	15.84	16.50
	36 (RB_Pos:39)	15.74	15.86	15.88	16.50	15.68	15.86	15.76	16.50
	75 (RB_Pos:0)	15.78	15.91	15.93	16.50	15.71	15.82	15.84	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	15.69	15.78	15.82	16.50	15.66	16.14	15.87	16.50
	1 (RB_Pos:25)	15.85	15.93	16.00	16.50	15.81	16.27	16.03	16.50
	1 (RB_Pos:49)	15.62	15.78	15.87	16.50	15.60	16.11	15.81	16.50
	25 (RB_Pos:0)	15.72	15.79	15.87	16.50	15.75	15.89	16.03	16.50
	25 (RB_Pos:12)	15.67	15.79	15.81	16.50	15.75	15.85	15.95	16.50
	25 (RB_Pos:25)	15.71	15.78	15.70	16.50	15.76	15.83	15.89	16.50
	50 (RB_Pos:0)	15.68	15.75	15.77	16.50	15.75	15.83	15.89	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	15.59	15.69	15.76	16.50	15.77	16.15	15.87	16.50
	1 (RB_Pos:13)	15.67	15.78	15.86	16.50	15.87	16.25	15.99	16.50
	1 (RB_Pos:24)	15.58	15.70	15.77	16.50	15.78	16.16	15.88	16.50
	12 (RB_Pos:0)	15.65	15.71	15.80	16.50	15.70	15.88	15.87	16.50
	12 (RB_Pos:6)	15.66	15.74	15.80	16.50	15.75	15.92	15.89	16.50
	12 (RB_Pos:13)	15.60	15.67	15.74	16.50	15.69	15.86	15.81	16.50

	25 (RB_Pos:0)	15.59	15.68	15.68	16.50	15.67	15.79	15.73	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	15.69	15.78	15.85	16.50	15.64	16.14	15.86	16.50
	1 (RB_Pos:8)	15.66	15.76	15.89	16.50	15.59	16.17	15.87	16.50
	1 (RB_Pos:14)	15.64	15.77	15.87	16.50	15.58	16.16	15.82	16.50
	8 (RB_Pos:0)	15.67	15.78	15.79	16.50	15.75	15.84	15.83	16.50
	8 (RB_Pos:3)	15.70	15.82	15.87	16.50	15.79	15.88	15.87	16.50
	8 (RB_Pos:7)	15.64	15.78	15.82	16.50	15.75	15.81	15.83	16.50
	15 (RB_Pos:0)	15.61	15.69	15.74	16.50	15.67	15.77	15.75	16.50
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18607	18900	19193		18607	18900	19193	
1.4 MHz	1 (RB_Pos:0)	15.60	15.70	15.82	16.50	15.68	16.09	15.80	16.50
	1 (RB_Pos:3)	15.75	15.87	15.97	16.50	15.90	16.32	15.97	16.50
	1 (RB_Pos:5)	15.57	15.72	15.81	16.50	15.75	16.07	15.80	16.50
	3 (RB_Pos:0)	15.59	15.71	15.79	16.50	15.70	15.91	15.92	16.50
	3 (RB_Pos:1)	15.71	15.77	15.81	16.50	15.68	15.96	16.00	16.50
	3 (RB_Pos:3)	15.55	15.72	15.77	16.50	15.69	15.93	16.02	16.50
	6 (RB_Pos:0)	15.69	15.83	15.92	16.50	15.76	15.68	15.95	16.50

8.6.10 Power Reduced Level 3&4 of LTE Band 2

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	16.93	17.07	17.09	18.00	17.40	17.46	17.43	18.00
	1 (RB_Pos:50)	17.35	**17.40**	17.38	18.00	17.84	17.86	17.85	18.00
	1 (RB_Pos:99)	16.88	16.92	17.00	18.00	17.35	17.40	17.41	18.00
	50 (RB_Pos:0)	17.16	17.24	17.29	18.00	17.19	17.34	17.34	18.00
	50 (RB_Pos:25)	17.07	17.17	17.23	18.00	17.12	17.31	17.32	18.00
	50 (RB_Pos:50)	17.05	17.12	17.01	18.00	17.11	17.31	17.18	18.00
	100 (RB_Pos:0)	17.08	17.27	17.21	18.00	17.20	17.22	17.32	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18675	18900	19125		18675	18900	19125	
15 MHz	1 (RB_Pos:0)	17.06	17.20	17.15	18.00	16.92	17.53	17.61	18.00
	1 (RB_Pos:38)	17.19	17.26	17.28	18.00	17.04	17.67	17.74	18.00
	1 (RB_Pos:74)	16.99	17.06	17.16	18.00	16.98	17.41	17.62	18.00

	36 (RB_Pos:0)	17.33	17.41	17.45	18.00	17.21	17.26	17.26	18.00
	36 (RB_Pos:20)	17.30	17.38	17.41	18.00	17.17	17.28	17.26	18.00
	36 (RB_Pos:39)	17.16	17.31	17.27	18.00	17.04	17.32	17.25	18.00
	75 (RB_Pos:0)	17.16	17.33	17.41	18.00	17.07	17.26	17.32	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	17.17	17.21	17.26	18.00	17.08	17.53	17.30	18.00
	1 (RB_Pos:25)	17.24	17.35	17.41	18.00	17.22	17.70	17.52	18.00
	1 (RB_Pos:49)	17.09	17.14	17.32	18.00	16.97	17.49	17.20	18.00
	25 (RB_Pos:0)	17.20	17.24	17.28	18.00	17.18	17.37	17.45	18.00
	25 (RB_Pos:12)	17.09	17.23	17.17	18.00	17.11	17.26	17.37	18.00
	25 (RB_Pos:25)	17.20	17.21	17.09	18.00	17.25	17.25	17.38	18.00
	50 (RB_Pos:0)	17.05	17.18	17.19	18.00	17.20	17.30	17.29	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	17.01	17.10	17.23	18.00	17.19	17.58	17.34	18.00
	1 (RB_Pos:13)	17.10	17.17	17.21	18.00	17.22	17.66	17.42	18.00
	1 (RB_Pos:24)	16.95	17.17	17.23	18.00	17.15	17.56	17.37	18.00
	12 (RB_Pos:0)	17.06	17.21	17.27	18.00	17.07	17.35	17.25	18.00
	12 (RB_Pos:6)	17.02	17.10	17.24	18.00	17.21	17.36	17.26	18.00
	12 (RB_Pos:13)	16.98	17.17	17.23	18.00	17.05	17.29	17.27	18.00
	25 (RB_Pos:0)	17.02	17.03	17.06	18.00	17.12	17.27	17.14	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	17.18	17.16	17.34	18.00	17.06	17.61	17.29	18.00
	1 (RB_Pos:8)	17.04	17.17	17.32	18.00	16.96	17.57	17.23	18.00
	1 (RB_Pos:14)	17.12	17.16	17.23	18.00	17.04	17.55	17.24	18.00
	8 (RB_Pos:0)	17.12	17.23	17.18	18.00	17.15	17.31	17.26	18.00
	8 (RB_Pos:3)	17.11	17.22	17.36	18.00	17.20	17.30	17.36	18.00
	8 (RB_Pos:7)	17.11	17.16	17.19	18.00	17.15	17.31	17.32	18.00
	15 (RB_Pos:0)	17.00	17.06	17.11	18.00	17.06	17.25	17.10	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18607	18900	19193		18607	18900	19193	
1.4 MHz	1 (RB_Pos:0)	16.95	17.18	17.17	18.00	17.15	17.50	17.25	18.00
	1 (RB_Pos:3)	17.19	17.22	17.40	18.00	17.28	17.68	17.44	18.00
	1 (RB_Pos:5)	16.97	17.14	17.20	18.00	17.14	17.44	17.20	18.00
	3 (RB_Pos:0)	16.96	17.10	17.28	18.00	17.09	17.34	17.31	18.00

	3 (RB_Pos:1)	17.07	17.12	17.19	18.00	17.10	17.36	17.42	18.00
	3 (RB_Pos:3)	17.01	17.20	17.23	18.00	17.08	17.39	17.50	18.00
	6 (RB_Pos:0)	17.04	17.30	17.39	18.00	17.13	17.04	17.37	18.00

8.6.11 Power Reduced Level 5&6 of LTE Band 2

FDD LTE Band 2									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18700	18900	19100		18700	18900	19100	
20 MHz	1 (RB_Pos:0)	17.93	18.01	18.02	19.00	18.40	18.45	18.48	19.00
	1 (RB_Pos:50)	18.31	**18.39**	18.29	19.00	18.78	18.87	18.74	19.00
	1 (RB_Pos:99)	17.86	18.00	17.91	19.00	18.34	18.48	18.34	19.00
	50 (RB_Pos:0)	18.18	18.28	18.30	19.00	18.20	18.32	18.39	19.00
	50 (RB_Pos:25)	18.07	18.25	18.28	19.00	18.21	18.32	18.26	19.00
	50 (RB_Pos:50)	18.09	18.21	18.01	19.00	18.10	18.21	18.06	19.00
	100 (RB_Pos:0)	18.18	18.23	18.15	19.00	18.21	18.18	18.28	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18675	18900	19125		18675	18900	19125	
15 MHz	1 (RB_Pos:0)	18.09	18.20	18.22	19.00	18.04	18.51	18.70	19.00
	1 (RB_Pos:38)	18.18	18.25	18.20	19.00	18.13	18.63	18.68	19.00
	1 (RB_Pos:74)	18.03	18.11	18.13	19.00	17.89	18.39	18.51	19.00
	36 (RB_Pos:0)	18.20	18.34	18.49	19.00	18.21	18.34	18.33	19.00
	36 (RB_Pos:20)	18.20	18.28	18.33	19.00	18.08	18.30	18.28	19.00
	36 (RB_Pos:39)	18.22	18.35	18.26	19.00	18.08	18.30	18.25	19.00
	75 (RB_Pos:0)	18.13	18.39	18.34	19.00	18.11	18.21	18.31	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18650	18900	19150		18650	18900	19150	
10 MHz	1 (RB_Pos:0)	18.10	18.17	18.20	19.00	18.11	18.56	18.30	19.00
	1 (RB_Pos:25)	18.29	18.40	18.40	19.00	18.17	18.75	18.52	19.00
	1 (RB_Pos:49)	18.11	18.28	18.22	19.00	17.97	18.49	18.29	19.00
	25 (RB_Pos:0)	18.17	18.20	18.30	19.00	18.16	18.35	18.43	19.00
	25 (RB_Pos:12)	18.10	18.25	18.28	19.00	18.14	18.27	18.32	19.00
	25 (RB_Pos:25)	18.20	18.19	18.06	19.00	18.23	18.29	18.34	19.00
	50 (RB_Pos:0)	18.14	18.15	18.22	19.00	18.13	18.25	18.29	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18625	18900	19175		18625	18900	19175	
5 MHz	1 (RB_Pos:0)	18.06	18.11	18.14	19.00	18.16	18.57	18.36	19.00

	1 (RB_Pos:13)	18.09	18.15	18.26	19.00	18.24	18.60	18.36	19.00
	1 (RB_Pos:24)	17.97	18.09	18.14	19.00	18.27	18.56	18.27	19.00
	12 (RB_Pos:0)	18.12	18.08	18.21	19.00	18.06	18.31	18.37	19.00
	12 (RB_Pos:6)	18.02	18.15	18.15	19.00	18.17	18.32	18.38	19.00
	12 (RB_Pos:13)	18.08	18.05	18.16	19.00	18.19	18.25	18.17	19.00
	25 (RB_Pos:0)	17.97	18.16	18.06	19.00	18.15	18.20	18.12	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18615	18900	19185		18615	18900	19185	
3.0 MHz	1 (RB_Pos:0)	18.14	18.17	18.33	19.00	18.10	18.61	18.27	19.00
	1 (RB_Pos:8)	18.01	18.11	18.35	19.00	18.08	18.56	18.35	19.00
	1 (RB_Pos:14)	18.12	18.21	18.25	19.00	18.00	18.56	18.18	19.00
	8 (RB_Pos:0)	18.10	18.22	18.28	19.00	18.22	18.19	18.26	19.00
	8 (RB_Pos:3)	18.12	18.23	18.27	19.00	18.22	18.27	18.22	19.00
	8 (RB_Pos:7)	18.11	18.19	18.30	19.00	18.17	18.30	18.33	19.00
	15 (RB_Pos:0)	18.02	18.04	18.14	19.00	18.05	18.23	18.13	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	18607	18900	19193		18607	18900	19193	
1.4 MHz	1 (RB_Pos:0)	18.00	18.15	18.22	19.00	18.17	18.48	18.19	19.00
	1 (RB_Pos:3)	18.19	18.29	18.39	19.00	18.26	18.73	18.39	19.00
	1 (RB_Pos:5)	18.06	18.21	18.27	19.00	18.20	18.49	18.26	19.00
	3 (RB_Pos:0)	18.05	18.17	18.16	19.00	18.09	18.27	18.34	19.00
	3 (RB_Pos:1)	18.10	18.18	18.18	19.00	18.06	18.32	18.37	19.00
	3 (RB_Pos:3)	17.95	18.08	18.18	19.00	18.09	18.35	18.37	19.00
	6 (RB_Pos:0)	18.11	18.20	18.31	19.00	18.17	18.18	18.45	19.00

8.6.12 Power Reduced Level 1&2&3&4 of LTE Band 4

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	16.08	16.10	16.03	18.00	16.55	16.53	16.44	18.00
	1 (RB_Pos:50)	16.39	**16.45**	16.35	18.00	16.87	16.90	16.79	18.00
	1 (RB_Pos:99)	15.95	15.99	15.90	18.00	16.43	16.44	16.35	18.00
	50 (RB_Pos:0)	16.23	16.35	16.31	18.00	16.29	16.39	16.28	18.00
	50 (RB_Pos:25)	16.25	16.29	16.24	18.00	16.26	16.31	16.28	18.00
	50 (RB_Pos:50)	16.22	16.17	16.23	18.00	16.23	16.19	16.22	18.00
	100 (RB_Pos:0)	16.22	16.32	16.29	18.00	16.25	16.30	16.32	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up	16QAM			Tune up

	Channel	20025	20175	20325	limit (dBm)	20025	20175	20325	limit (dBm)
15 MHz	1 (RB_Pos:0)	16.17	16.27	16.19	18.00	16.13	16.58	16.65	18.00
	1 (RB_Pos:38)	16.21	16.25	16.23	18.00	16.21	16.61	16.71	18.00
	1 (RB_Pos:74)	16.03	16.08	16.09	18.00	16.01	16.47	16.54	18.00
	36 (RB_Pos:0)	16.25	16.35	16.30	18.00	16.22	16.39	16.26	18.00
	36 (RB_Pos:20)	16.27	16.34	16.28	18.00	16.25	16.38	16.30	18.00
	36 (RB_Pos:39)	16.26	16.22	16.22	18.00	16.17	16.21	16.18	18.00
	75 (RB_Pos:0)	16.25	16.30	16.26	18.00	16.23	16.33	16.25	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20000	20175	20350		20000	20175	20350	
10 MHz	1 (RB_Pos:0)	16.17	16.29	16.22	18.00	16.16	16.64	16.27	18.00
	1 (RB_Pos:25)	16.36	16.44	16.38	18.00	16.34	16.76	16.43	18.00
	1 (RB_Pos:49)	16.13	16.19	16.20	18.00	16.09	16.57	16.21	18.00
	25 (RB_Pos:0)	16.26	16.35	16.28	18.00	16.28	16.35	16.39	18.00
	25 (RB_Pos:12)	16.27	16.29	16.22	18.00	16.26	16.32	16.36	18.00
	25 (RB_Pos:25)	16.21	16.21	16.21	18.00	16.25	16.26	16.34	18.00
	50 (RB_Pos:0)	16.21	16.25	16.25	18.00	16.25	16.28	16.31	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	16.14	16.22	16.19	18.00	16.34	16.67	16.33	18.00
	1 (RB_Pos:13)	16.21	16.26	16.26	18.00	16.43	16.74	16.44	18.00
	1 (RB_Pos:24)	16.15	16.16	16.17	18.00	16.31	16.62	16.29	18.00
	12 (RB_Pos:0)	16.16	16.26	16.20	18.00	16.27	16.38	16.28	18.00
	12 (RB_Pos:6)	16.24	16.25	16.29	18.00	16.32	16.37	16.33	18.00
	12 (RB_Pos:13)	16.16	16.17	16.20	18.00	16.25	16.27	16.24	18.00
	25 (RB_Pos:0)	16.19	16.23	16.24	18.00	16.22	16.27	16.17	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19965	20175	20385		19965	20175	20385	
3.0 MHz	1 (RB_Pos:0)	16.19	16.23	16.28	18.00	16.18	16.60	16.33	18.00
	1 (RB_Pos:8)	16.16	16.24	16.21	18.00	16.12	16.61	16.30	18.00
	1 (RB_Pos:14)	16.16	16.19	16.23	18.00	16.14	16.59	16.23	18.00
	8 (RB_Pos:0)	16.21	16.26	16.22	18.00	16.34	16.31	16.30	18.00
	8 (RB_Pos:3)	16.27	16.27	16.29	18.00	16.38	16.34	16.35	18.00
	8 (RB_Pos:7)	16.17	16.21	16.22	18.00	16.32	16.29	16.29	18.00
	15 (RB_Pos:0)	16.21	16.22	16.25	18.00	16.25	16.23	16.23	18.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit	16QAM			Tune up limit
	Channel	19957	20175	20393		19957	20175	20393	

					(dBm)				(dBm)
1.4 MHz	1 (RB_Pos:0)	16.19	16.23	16.23	18.00	16.34	16.59	16.27	18.00
	1 (RB_Pos:3)	16.36	16.40	16.42	18.00	16.51	16.87	16.46	18.00
	1 (RB_Pos:5)	16.16	16.20	16.20	18.00	16.35	16.59	16.30	18.00
	3 (RB_Pos:0)	16.31	16.27	16.31	18.00	16.35	16.50	16.46	18.00
	3 (RB_Pos:1)	16.32	16.34	16.38	18.00	16.35	16.49	16.53	18.00
	3 (RB_Pos:3)	16.34	16.26	16.35	18.00	16.31	16.49	16.49	18.00
	6 (RB_Pos:0)	16.22	16.29	16.28	18.00	16.43	16.25	16.48	18.00

8.6.13 Power Reduced Level 5&6 of LTE Band 4

FDD LTE Band 4									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20050	20175	20300		20050	20175	20300	
20 MHz	1 (RB_Pos:0)	16.93	16.96	17.00	19.00	17.41	17.45	17.31	19.00
	1 (RB_Pos:50)	17.29	**17.43**	17.21	19.00	17.77	17.86	17.65	19.00
	1 (RB_Pos:99)	16.82	16.85	16.79	19.00	17.23	17.33	17.25	19.00
	50 (RB_Pos:0)	17.20	17.30	17.28	19.00	17.29	17.28	17.15	19.00
	50 (RB_Pos:25)	17.11	17.21	17.10	19.00	17.15	17.18	17.25	19.00
	50 (RB_Pos:50)	17.17	17.05	17.16	19.00	17.19	17.16	17.15	19.00
	100 (RB_Pos:0)	17.20	17.17	17.27	19.00	17.15	17.24	17.26	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20025	20175	20325		20025	20175	20325	
15 MHz	1 (RB_Pos:0)	17.14	17.15	17.11	19.00	17.11	17.55	17.58	19.00
	1 (RB_Pos:38)	17.17	17.16	17.19	19.00	17.18	17.50	17.66	19.00
	1 (RB_Pos:74)	16.98	17.07	17.08	19.00	17.00	17.42	17.48	19.00
	36 (RB_Pos:0)	17.13	17.21	17.29	19.00	17.09	17.31	17.17	19.00
	36 (RB_Pos:20)	17.22	17.34	17.15	19.00	17.18	17.37	17.27	19.00
	36 (RB_Pos:39)	17.26	17.19	17.18	19.00	17.09	17.19	17.18	19.00
	75 (RB_Pos:0)	17.22	17.29	17.19	19.00	17.13	17.32	17.23	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20000	20175	20350		20000	20175	20350	
10 MHz	1 (RB_Pos:0)	17.10	17.24	17.15	19.00	17.01	17.57	17.20	19.00
	1 (RB_Pos:25)	17.30	17.29	17.24	19.00	17.31	17.67	17.38	19.00
	1 (RB_Pos:49)	17.06	17.12	17.13	19.00	16.96	17.43	17.11	19.00
	25 (RB_Pos:0)	17.17	17.32	17.23	19.00	17.26	17.22	17.28	19.00
	25 (RB_Pos:12)	17.22	17.17	17.08	19.00	17.11	17.21	17.22	19.00
	25 (RB_Pos:25)	17.09	17.07	17.11	19.00	17.18	17.15	17.24	19.00
	50 (RB_Pos:0)	17.15	17.24	17.25	19.00	17.14	17.24	17.22	19.00

Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19975	20175	20375		19975	20175	20375	
5 MHz	1 (RB_Pos:0)	17.09	17.07	17.07	19.00	17.31	17.54	17.23	19.00
	1 (RB_Pos:13)	17.10	17.23	17.20	19.00	17.40	17.63	17.43	19.00
	1 (RB_Pos:24)	17.01	17.02	17.07	19.00	17.23	17.47	17.21	19.00
	12 (RB_Pos:0)	17.13	17.20	17.11	19.00	17.15	17.33	17.16	19.00
	12 (RB_Pos:6)	17.14	17.23	17.29	19.00	17.18	17.31	17.31	19.00
	12 (RB_Pos:13)	17.13	17.03	17.08	19.00	17.15	17.24	17.18	19.00
	25 (RB_Pos:0)	17.05	17.16	17.14	19.00	17.20	17.18	17.09	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19965	20175	20385		19965	20175	20385	
3.0 MHz	1 (RB_Pos:0)	17.19	17.10	17.17	19.00	17.18	17.51	17.23	19.00
	1 (RB_Pos:8)	17.06	17.17	17.09	19.00	17.10	17.55	17.20	19.00
	1 (RB_Pos:14)	17.06	17.11	17.23	19.00	17.10	17.58	17.09	19.00
	8 (RB_Pos:0)	17.18	17.24	17.11	19.00	17.23	17.17	17.22	19.00
	8 (RB_Pos:3)	17.17	17.14	17.23	19.00	17.23	17.22	17.27	19.00
	8 (RB_Pos:7)	17.14	17.13	17.13	19.00	17.30	17.17	17.27	19.00
	15 (RB_Pos:0)	17.10	17.17	17.20	19.00	17.22	17.08	17.14	19.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	19957	20175	20393		19957	20175	20393	
1.4 MHz	1 (RB_Pos:0)	17.06	17.10	17.20	19.00	17.32	17.58	17.19	19.00
	1 (RB_Pos:3)	17.32	17.29	17.33	19.00	17.47	17.74	17.40	19.00
	1 (RB_Pos:5)	17.09	17.16	17.07	19.00	17.21	17.45	17.23	19.00
	3 (RB_Pos:0)	17.25	17.15	17.21	19.00	17.27	17.39	17.38	19.00
	3 (RB_Pos:1)	17.25	17.21	17.33	19.00	17.33	17.36	17.45	19.00
	3 (RB_Pos:3)	17.31	17.19	17.27	19.00	17.21	17.45	17.38	19.00
	6 (RB_Pos:0)	17.09	17.29	17.14	19.00	17.35	17.14	17.43	19.00

8.6.14 Power Reduced Level 1&2&3&4 of LTE Band 5

FDD LTE Band 5									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20450	20525	20600		20450	20525	20600	
10 MHz	1 (RB_Pos:0)	18.62	18.66	18.67	20.00	18.62	19.02	18.73	20.00
	1 (RB_Pos:25)	18.75	18.70	**18.77**	20.00	18.78	19.18	18.85	20.00
	1 (RB_Pos:49)	18.62	18.56	18.61	20.00	18.57	19.00	18.65	20.00
	25 (RB_Pos:0)	18.66	18.68	18.77	20.00	18.69	18.82	18.81	20.00

	25 (RB_Pos:12)	18.68	18.67	18.67	20.00	18.71	18.74	18.79	20.00
	25 (RB_Pos:25)	18.66	18.71	18.67	20.00	18.66	18.82	18.75	20.00
	50 (RB_Pos:0)	18.68	18.75	18.69	20.00	18.65	18.76	18.76	20.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20425	20525	20625		20425	20525	20625	
5MHz	1 (RB_Pos:0)	18.63	18.60	18.59	20.00	18.81	19.08	18.73	20.00
	1 (RB_Pos:13)	18.69	18.69	18.70	20.00	18.94	19.18	18.78	20.00
	1 (RB_Pos:24)	18.64	18.52	18.57	20.00	18.79	19.00	18.71	20.00
	12 (RB_Pos:0)	18.59	18.65	18.60	20.00	18.69	18.81	18.71	20.00
	12 (RB_Pos:6)	18.72	18.72	18.70	20.00	18.75	18.82	18.76	20.00
	12 (RB_Pos:13)	18.62	18.65	18.64	20.00	18.68	18.79	18.67	20.00
	25 (RB_Pos:0)	18.63	18.68	18.67	20.00	18.65	18.77	18.59	20.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20415	20525	20635		20415	20525	20635	
3.0 MHz	1 (RB_Pos:0)	18.66	18.70	18.68	20.00	18.66	19.06	18.70	20.00
	1 (RB_Pos:8)	18.60	18.66	18.69	20.00	18.65	19.05	18.67	20.00
	1 (RB_Pos:14)	18.59	18.64	18.68	20.00	18.57	19.07	18.66	20.00
	8 (RB_Pos:0)	18.67	18.66	18.66	20.00	18.80	18.80	18.70	20.00
	8 (RB_Pos:3)	18.71	18.71	18.74	20.00	18.85	18.82	18.78	20.00
	8 (RB_Pos:7)	18.66	18.66	18.66	20.00	18.79	18.78	18.72	20.00
	15 (RB_Pos:0)	18.68	18.66	18.67	20.00	18.69	18.71	18.62	20.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20407	20525	20643		20407	20525	20643	
1.4MHz	1 (RB_Pos:0)	18.61	18.52	18.53	20.00	18.74	18.98	18.61	20.00
	1 (RB_Pos:3)	18.74	18.74	18.75	20.00	18.93	19.13	18.79	20.00
	1 (RB_Pos:5)	18.60	18.60	18.56	20.00	18.73	18.98	18.64	20.00
	3 (RB_Pos:0)	18.67	18.65	18.68	20.00	18.74	18.88	18.80	20.00
	3 (RB_Pos:1)	18.70	18.67	18.70	20.00	18.71	18.87	18.84	20.00
	3 (RB_Pos:3)	18.66	18.65	18.69	20.00	18.70	18.86	18.82	20.00
	6 (RB_Pos:0)	18.63	18.62	18.65	20.00	18.79	18.53	18.82	20.00

8.6.15 Power Reduced Level 1&2 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	13.96	14.04	14.01	16.00	14.44	14.51	14.47	16.00
	1 (RB_Pos:50)	14.35	14.35	**14.38**	16.00	14.79	14.73	14.80	16.00
	1 (RB_Pos:99)	13.94	13.91	14.02	16.00	14.39	14.39	14.38	16.00
	50 (RB_Pos:0)	14.17	14.21	14.19	16.00	14.44	14.47	14.36	16.00
	50 (RB_Pos:25)	14.29	14.29	14.31	16.00	14.65	14.66	14.73	16.00
	50 (RB_Pos:50)	14.29	14.25	14.18	16.00	14.35	14.46	14.21	16.00
	100 (RB_Pos:0)	14.14	14.24	14.28	16.00	14.48	14.43	14.43	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	14.06	14.26	14.37	16.00	14.11	14.62	14.72	16.00
	1 (RB_Pos:38)	14.33	14.23	14.24	16.00	14.27	14.59	14.69	16.00
	1 (RB_Pos:74)	14.01	14.08	14.21	16.00	14.01	14.42	14.59	16.00
	36 (RB_Pos:0)	14.15	14.29	14.30	16.00	14.03	14.52	14.76	16.00
	36 (RB_Pos:20)	14.21	14.26	14.35	16.00	14.11	14.60	14.63	16.00
	36 (RB_Pos:39)	14.36	14.21	14.28	16.00	13.95	14.35	14.60	16.00
	75 (RB_Pos:0)	14.34	14.25	14.35	16.00	13.91	14.32	14.59	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	14.20	14.19	14.20	16.00	14.30	14.52	14.45	16.00
	1 (RB_Pos:25)	14.27	14.30	14.43	16.00	14.36	14.66	14.56	16.00
	1 (RB_Pos:49)	14.27	14.24	14.21	16.00	14.21	14.54	14.35	16.00
	25 (RB_Pos:0)	14.32	14.26	14.29	16.00	14.24	14.37	14.27	16.00
	25 (RB_Pos:12)	14.31	14.22	14.35	16.00	14.27	14.57	14.37	16.00
	25 (RB_Pos:25)	14.43	14.16	14.35	16.00	14.27	14.45	14.29	16.00
	50 (RB_Pos:0)	14.37	14.25	14.29	16.00	14.17	14.43	14.30	16.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	14.19	14.10	14.14	16.00	14.31	14.55	14.30	16.00
	1 (RB_Pos:13)	14.34	14.24	14.26	16.00	14.41	14.68	14.49	16.00
	1 (RB_Pos:24)	14.16	14.21	14.23	16.00	14.26	14.66	14.38	16.00
	12 (RB_Pos:0)	14.09	14.25	14.12	16.00	14.31	14.67	14.32	16.00
	12 (RB_Pos:6)	14.24	14.25	14.36	16.00	14.26	14.71	14.40	16.00
	12 (RB_Pos:13)	14.20	14.25	14.28	16.00	14.24	14.57	14.16	16.00

	25 (RB_Pos:0)	14.20	14.29	14.37	16.00	14.23	14.54	14.33	16.00

8.6.16 Power Reduced Level 3&4 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	15.09	15.14	15.11	17.00	15.56	15.60	15.58	17.00
	1 (RB_Pos:50)	15.47	15.45	**15.49**	17.00	15.91	15.82	15.91	17.00
	1 (RB_Pos:99)	14.98	15.05	15.11	17.00	15.43	15.52	15.49	17.00
	50 (RB_Pos:0)	15.22	15.30	15.24	17.00	15.56	15.49	15.45	17.00
	50 (RB_Pos:25)	15.38	15.40	15.41	17.00	15.82	15.69	15.80	17.00
	50 (RB_Pos:50)	15.34	15.29	15.28	17.00	15.49	15.46	15.35	17.00
	100 (RB_Pos:0)	15.27	15.36	15.36	17.00	15.56	15.49	15.44	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	15.15	15.35	15.37	17.00	15.24	15.67	15.85	17.00
	1 (RB_Pos:38)	15.34	15.26	15.34	17.00	15.31	15.69	15.81	17.00
	1 (RB_Pos:74)	15.10	15.16	15.27	17.00	15.12	15.56	15.71	17.00
	36 (RB_Pos:0)	15.26	15.38	15.42	17.00	15.10	15.56	15.77	17.00
	36 (RB_Pos:20)	15.32	15.36	15.37	17.00	15.17	15.65	15.71	17.00
	36 (RB_Pos:39)	15.36	15.23	15.40	17.00	14.98	15.43	15.70	17.00
	75 (RB_Pos:0)	15.38	15.33	15.41	17.00	14.96	15.42	15.73	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	15.27	15.28	15.35	17.00	15.35	15.59	15.49	17.00
	1 (RB_Pos:25)	15.35	15.40	15.52	17.00	15.47	15.77	15.57	17.00
	1 (RB_Pos:49)	15.30	15.27	15.33	17.00	15.36	15.67	15.38	17.00
	25 (RB_Pos:0)	15.37	15.31	15.35	17.00	15.30	15.44	15.41	17.00
	25 (RB_Pos:12)	15.34	15.28	15.44	17.00	15.42	15.67	15.45	17.00
	25 (RB_Pos:25)	15.44	15.19	15.44	17.00	15.35	15.57	15.32	17.00
	50 (RB_Pos:0)	15.38	15.30	15.37	17.00	15.24	15.44	15.38	17.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	
5MHz	1 (RB_Pos:0)	15.23	15.21	15.20	17.00	15.39	15.69	15.44	17.00
	1 (RB_Pos:13)	15.39	15.35	15.40	17.00	15.50	15.83	15.51	17.00
	1 (RB_Pos:24)	15.28	15.26	15.25	17.00	15.35	15.74	15.44	17.00

	12 (RB_Pos:0)	15.22	15.27	15.24	17.00	15.36	15.68	15.44	17.00
	12 (RB_Pos:6)	15.33	15.29	15.36	17.00	15.39	15.77	15.49	17.00
	12 (RB_Pos:13)	15.34	15.27	15.42	17.00	15.25	15.60	15.31	17.00
	25 (RB_Pos:0)	15.27	15.35	15.40	17.00	15.33	15.67	15.35	17.00

8.6.17 Power Reduced Level 5&6 of LTE Band 7

FDD LTE Band 7									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20850	21100	21350		20850	21100	21350	
20MHz	1 (RB_Pos:0)	21.66	21.71	21.70	23.00	21.71	21.61	21.60	22.50
	1 (RB_Pos:50)	22.00	22.04	**22.09**	23.00	22.05	21.94	22.00	22.50
	1 (RB_Pos:99)	21.50	21.60	21.64	23.00	21.54	21.56	21.56	22.50
	50 (RB_Pos:0)	21.30	21.45	21.34	22.50	20.91	20.99	20.85	22.00
	50 (RB_Pos:25)	21.43	21.41	21.49	22.50	21.03	20.99	20.98	22.00
	50 (RB_Pos:50)	21.43	21.29	21.40	22.50	21.05	20.87	20.93	22.00
	100 (RB_Pos:0)	21.42	21.38	21.41	22.50	21.01	20.92	20.93	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20825	21100	21375		20825	21100	21375	
15MHz	1 (RB_Pos:0)	21.77	21.86	21.90	23.00	21.30	21.68	21.88	22.50
	1 (RB_Pos:38)	21.86	21.89	21.96	23.00	21.40	21.78	21.92	22.50
	1 (RB_Pos:74)	21.65	21.72	21.79	23.00	21.20	21.62	21.75	22.50
	36 (RB_Pos:0)	21.38	21.50	21.43	22.50	20.92	21.03	20.91	22.00
	36 (RB_Pos:20)	21.38	21.48	21.51	22.50	20.98	21.00	21.02	22.00
	36 (RB_Pos:39)	21.40	21.38	21.45	22.50	20.92	20.92	20.97	22.00
	75 (RB_Pos:0)	21.46	21.45	21.42	22.50	20.98	20.98	20.96	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20800	21100	21400		20800	21100	21400	
10MHz	1 (RB_Pos:0)	21.89	21.88	21.96	23.00	21.41	21.72	21.50	22.50
	1 (RB_Pos:25)	21.93	21.94	22.11	23.00	21.47	21.81	21.61	22.50
	1 (RB_Pos:49)	21.83	21.82	21.94	23.00	21.38	21.69	21.48	22.50
	25 (RB_Pos:0)	21.40	21.46	21.48	22.50	21.02	21.02	21.10	22.00
	25 (RB_Pos:12)	21.46	21.40	21.47	22.50	21.05	20.95	21.10	22.00
	25 (RB_Pos:25)	21.47	21.33	21.46	22.50	21.08	20.94	21.13	22.00
	50 (RB_Pos:0)	21.49	21.36	21.48	22.50	21.04	20.95	21.05	22.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	20775	21100	21425		20775	21100	21425	

5MHz	1 (RB_Pos:0)	21.80	21.83	21.85	23.00	21.50	21.78	21.50	22.50
	1 (RB_Pos:13)	21.89	21.92	21.94	23.00	21.60	21.87	21.61	22.50
	1 (RB_Pos:24)	21.79	21.78	21.83	23.00	21.49	21.75	21.52	22.50
	12 (RB_Pos:0)	21.35	21.40	21.37	22.50	21.03	21.03	21.02	22.00
	12 (RB_Pos:6)	21.41	21.41	21.49	22.50	21.04	21.06	21.10	22.00
	12 (RB_Pos:13)	21.36	21.33	21.45	22.50	20.98	20.94	21.01	22.00
	25 (RB_Pos:0)	21.40	21.36	21.43	22.50	21.00	20.96	20.96	22.00

8.6.18 Power Reduced Level 1&2&3&4 of LTE Band 38

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37850	38000	38150		37850	38000	38150	
20MHz	1 (RB_Pos:0)	18.74	18.74	18.81	20.00	19.10	18.94	19.14	20.00
	1 (RB_Pos:50)	19.17	19.19	**19.33**	20.00	19.49	19.38	19.62	20.00
	1 (RB_Pos:99)	18.60	18.68	18.78	20.00	18.94	18.92	19.12	20.00
	50 (RB_Pos:0)	19.01	19.05	19.05	20.00	19.02	19.07	19.05	20.00
	50 (RB_Pos:25)	18.97	19.00	19.04	20.00	18.97	19.00	19.08	20.00
	50 (RB_Pos:50)	18.89	18.90	18.97	20.00	18.89	18.91	19.02	20.00
	100 (RB_Pos:0)	18.93	19.00	19.04	20.00	18.96	18.98	19.02	20.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15MHz	1 (RB_Pos:0)	18.91	18.91	18.96	20.00	19.20	19.35	19.25	20.00
	1 (RB_Pos:38)	18.95	19.01	19.03	20.00	19.22	19.43	19.35	20.00
	1 (RB_Pos:74)	18.76	18.83	18.88	20.00	19.02	19.31	19.20	20.00
	36 (RB_Pos:0)	18.90	19.06	19.08	20.00	18.95	19.02	19.06	20.00
	36 (RB_Pos:20)	18.93	18.99	19.03	20.00	18.96	18.99	19.04	20.00
	36 (RB_Pos:39)	18.91	18.92	18.99	20.00	18.93	18.89	19.03	20.00
	75 (RB_Pos:0)	18.91	18.99	19.05	20.00	18.97	19.00	19.05	20.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	18.98	19.00	19.01	20.00	19.29	19.34	19.39	20.00
	1 (RB_Pos:25)	19.17	19.18	19.29	20.00	19.44	19.60	19.63	20.00
	1 (RB_Pos:49)	18.87	18.95	18.98	20.00	19.15	19.34	19.41	20.00
	25 (RB_Pos:0)	18.91	19.00	19.05	20.00	19.08	18.99	19.06	20.00
	25 (RB_Pos:12)	18.93	18.92	19.01	20.00	18.99	19.03	19.05	20.00
	25 (RB_Pos:25)	18.92	18.88	19.02	20.00	18.95	18.90	19.06	20.00
	50 (RB_Pos:0)	18.91	18.96	19.01	20.00	18.98	18.96	19.07	20.00
Bandwidth	RB Set	Power (dBm)							

(MHz)		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	
5MHz	1 (RB_Pos:0)	18.86	18.89	18.89	20.00	19.19	19.26	19.15	20.00
	1 (RB_Pos:13)	18.92	18.98	19.01	20.00	19.27	19.37	19.28	20.00
	1 (RB_Pos:24)	18.80	18.84	18.88	20.00	19.09	19.25	19.13	20.00
	12 (RB_Pos:0)	18.93	18.96	18.99	20.00	18.99	19.01	19.11	20.00
	12 (RB_Pos:6)	19.03	18.99	19.05	20.00	19.00	19.07	19.10	20.00
	12 (RB_Pos:13)	18.94	18.91	18.98	20.00	18.91	19.01	19.03	20.00
	25 (RB_Pos:0)	18.96	18.92	19.00	20.00	19.02	18.94	18.99	20.00

8.6.19 Power Reduced Level 5&6 of LTE Band 38

TDD LTE Band 38									
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37850	38000	38150		37850	38000	38150	
20MHz	1 (RB_Pos:0)	21.51	21.54	21.64	23.00	20.77	20.66	20.76	22.00
	1 (RB_Pos:50)	22.03	21.90	**22.08**	23.00	21.14	21.19	21.38	22.00
	1 (RB_Pos:99)	21.37	21.39	21.57	23.00	20.60	20.66	20.85	22.00
	50 (RB_Pos:0)	20.80	20.81	20.70	22.00	19.82	19.77	19.88	21.00
	50 (RB_Pos:25)	20.61	20.76	20.74	22.00	19.79	19.85	19.78	21.00
	50 (RB_Pos:50)	20.55	20.56	20.77	22.00	19.49	19.81	19.85	21.00
	100 (RB_Pos:0)	20.59	20.67	20.72	22.00	19.70	19.80	19.72	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37825	38000	38175		37825	38000	38175	
15MHz	1 (RB_Pos:0)	21.57	21.65	21.76	23.00	20.94	20.96	20.95	22.00
	1 (RB_Pos:38)	21.74	21.75	21.85	23.00	20.86	21.15	21.18	22.00
	1 (RB_Pos:74)	21.45	21.67	21.62	23.00	20.80	21.06	20.88	22.00
	36 (RB_Pos:0)	20.88	20.89	20.78	22.00	19.84	19.85	19.83	21.00
	36 (RB_Pos:20)	20.81	20.73	20.77	22.00	19.81	19.81	19.89	21.00
	36 (RB_Pos:39)	20.77	20.77	20.71	22.00	19.69	19.78	19.90	21.00
	75 (RB_Pos:0)	20.80	20.74	20.89	22.00	19.69	19.75	19.80	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37800	38000	38200		37800	38000	38200	
10MHz	1 (RB_Pos:0)	21.78	21.68	21.80	23.00	21.06	21.05	21.17	22.00
	1 (RB_Pos:25)	21.97	22.08	22.13	23.00	21.30	21.38	21.41	22.00
	1 (RB_Pos:49)	21.70	21.76	21.84	23.00	20.82	21.15	21.17	22.00
	25 (RB_Pos:0)	20.72	20.74	20.88	22.00	19.92	19.89	19.84	21.00
	25 (RB_Pos:12)	20.79	20.85	20.84	22.00	19.76	19.79	19.94	21.00

	25 (RB_Pos:25)	20.76	20.76	20.87	22.00	19.69	19.78	19.85	21.00
	50 (RB_Pos:0)	20.78	20.79	20.76	22.00	19.73	19.84	19.83	21.00
Bandwidth (MHz)	RB Set	Power (dBm)							
		QPSK			Tune up limit (dBm)	16QAM			Tune up limit (dBm)
	Channel	37775	38000	38225		37775	38000	38225	
5MHz	1 (RB_Pos:0)	21.61	21.70	21.76	23.00	20.84	20.89	21.11	22.00
	1 (RB_Pos:13)	21.72	21.78	21.89	23.00	21.02	21.08	21.31	22.00
	1 (RB_Pos:24)	21.70	21.69	21.74	23.00	20.80	20.87	21.14	22.00
	12 (RB_Pos:0)	20.75	20.73	20.82	22.00	19.87	19.75	19.88	21.00
	12 (RB_Pos:6)	20.74	20.84	20.85	22.00	19.90	19.75	19.93	21.00
	12 (RB_Pos:13)	20.66	20.74	20.83	22.00	19.75	19.74	19.92	21.00
	25 (RB_Pos:0)	20.68	20.74	20.78	22.00	19.80	19.76	19.81	21.00

8.6.20 Power Reduced Level 1&2&3&4 of LTE Band 41

TDD LTE Band 41										
Bandwidth (MHz)	RB Set	Power (dBm)								
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40140	40473	40807	41140		40140	40473	40807	41140	
20MHz	1 (RB_Pos:0)	18.73	18.74	18.69	18.91	20.00	19.09	18.95	18.87	19.26	20.00
	1 (RB_Pos:50)	19.22	19.19	19.16	**19.31**	20.00	19.58	19.49	19.48	19.65	20.00
	1 (RB_Pos:99)	18.60	18.65	18.56	18.75	20.00	19.02	19.07	19.02	19.08	20.00
	50 (RB_Pos:0)	18.98	18.96	18.90	19.05	20.00	18.97	19.09	18.96	19.05	20.00
	50 (RB_Pos:25)	18.99	19.04	18.92	18.98	20.00	19.06	19.09	19.07	19.07	20.00
	50 (RB_Pos:50)	18.84	18.98	18.87	19.05	20.00	19.06	19.05	18.93	18.91	20.00
	100 (RB_Pos:0)	18.99	19.02	19.01	18.93	20.00	19.02	19.06	19.02	18.96	20.00
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40115	40465	40815	41165		40115	40465	40815	41165	
15MHz	1 (RB_Pos:0)	18.93	18.95	18.95	18.96	20.00	19.21	19.39	19.29	19.29	20.00
	1 (RB_Pos:38)	18.98	19.03	18.91	19.00	20.00	19.27	19.51	19.38	19.30	20.00
	1 (RB_Pos:74)	18.84	18.89	18.88	18.82	20.00	19.17	19.36	19.32	19.12	20.00
	36 (RB_Pos:0)	18.92	19.01	18.98	19.01	20.00	18.95	18.99	18.89	19.05	20.00
	36 (RB_Pos:20)	18.95	18.95	18.93	19.04	20.00	18.95	18.99	18.86	19.03	20.00
	36 (RB_Pos:39)	18.94	18.92	18.90	18.95	20.00	18.99	18.95	18.81	18.94	20.00
	75 (RB_Pos:0)	18.93	18.97	18.84	19.07	20.00	18.98	19.01	19.01	19.00	20.00
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40090	40457	40823	41190		40090	40457	40823	41190	
10MHz	1 (RB_Pos:0)	18.96	19.00	18.99	19.01	20.00	19.26	19.44	19.34	19.39	20.00
	1 (RB_Pos:25)	19.19	19.23	19.14	19.21	20.00	19.48	19.71	19.62	19.56	20.00

	1 (RB_Pos:49)	18.92	18.99	18.85	18.98	20.00	19.26	19.45	19.33	19.30	20.00
	25 (RB_Pos:0)	18.99	19.02	18.90	19.09	20.00	19.03	19.07	18.95	19.07	20.00
	25 (RB_Pos:12)	18.96	18.94	18.90	18.96	20.00	19.03	19.03	18.93	18.99	20.00
	25 (RB_Pos:25)	19.01	18.97	18.89	18.90	20.00	19.05	19.05	18.91	18.94	20.00
	50 (RB_Pos:0)	19.00	19.02	18.93	18.97	20.00	19.06	19.08	19.01	19.05	20.00
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40065	40448	40832	41215		40065	40448	40832	41215	
5MHz	1 (RB_Pos:0)	18.85	18.83	18.75	18.88	20.00	19.11	19.17	19.09	19.23	20.00
	1 (RB_Pos:13)	18.97	18.99	18.93	19.02	20.00	19.26	19.32	19.28	19.34	20.00
	1 (RB_Pos:24)	18.84	18.83	18.81	18.85	20.00	19.06	19.18	19.03	19.21	20.00
	12 (RB_Pos:0)	18.95	18.95	18.86	18.97	20.00	19.03	18.97	18.89	19.03	20.00
	12 (RB_Pos:6)	18.99	18.99	18.98	19.01	20.00	19.15	19.03	18.89	19.07	20.00
	12 (RB_Pos:13)	18.95	18.90	18.85	18.89	20.00	19.01	18.96	18.90	18.95	20.00
	25 (RB_Pos:0)	18.92	18.96	18.92	18.91	20.00	18.99	19.05	18.99	18.94	20.00

8.6.21 Power Reduced Level 5&6 of LTE Band 41

TDD LTE Band 41											
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40140	40473	40807	41140		40140	40473	40807	41140	
20MHz	1 (RB_Pos:0)	21.26	21.27	21.03	21.68	23.00	20.74	20.49	20.52	20.99	22.00
	1 (RB_Pos:50)	21.68	21.73	21.51	**22.15**	23.00	21.16	21.06	20.92	21.45	22.00
	1 (RB_Pos:99)	21.09	21.07	21.19	21.66	23.00	20.54	20.55	20.65	20.91	22.00
	50 (RB_Pos:0)	20.28	20.62	20.33	20.82	22.00	19.70	19.89	19.67	19.96	21.00
	50 (RB_Pos:25)	20.42	20.50	20.44	20.76	22.00	19.78	19.87	19.86	19.85	21.00
	50 (RB_Pos:50)	20.41	20.37	20.41	20.69	22.00	19.79	19.82	19.82	19.74	21.00
	100 (RB_Pos:0)	20.38	20.57	20.52	20.72	22.00	19.69	19.91	19.81	19.79	21.00
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40115	40465	40815	41165		40115	40465	40815	41165	
15MHz	1 (RB_Pos:0)	21.53	21.64	21.61	21.86	23.00	20.88	21.12	20.89	21.04	22.00
	1 (RB_Pos:38)	21.59	21.71	21.68	21.91	23.00	20.92	21.15	21.13	21.16	22.00
	1 (RB_Pos:74)	21.42	21.55	21.52	21.74	23.00	20.77	21.20	21.09	20.94	22.00
	36 (RB_Pos:0)	20.57	20.82	20.55	20.96	22.00	19.67	19.87	19.78	19.83	21.00
	36 (RB_Pos:20)	20.72	20.68	20.70	20.84	22.00	19.75	19.86	19.81	19.91	21.00
	36 (RB_Pos:39)	20.66	20.66	20.60	20.75	22.00	19.55	19.82	19.71	19.77	21.00
	75 (RB_Pos:0)	20.67	20.72	20.55	20.85	22.00	19.71	19.81	19.75	19.85	21.00
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit	16QAM				Tune up limit
	Channel	40090	40457	40823	41190		40090	40457	40823	41190	

						(dBm)					(dBm)
10MHz	1 (RB_Pos:0)	21.67	21.68	21.67	21.93	23.00	20.85	21.15	21.12	21.20	22.00
	1 (RB_Pos:25)	21.92	22.09	22.00	22.09	23.00	21.16	21.47	21.46	21.45	22.00
	1 (RB_Pos:49)	21.53	21.71	21.67	21.75	23.00	20.78	21.19	21.11	21.12	22.00
	25 (RB_Pos:0)	20.58	20.84	20.71	20.78	22.00	19.62	19.96	19.84	19.85	21.00
	25 (RB_Pos:12)	20.68	20.83	20.78	20.72	22.00	19.66	19.91	19.95	19.78	21.00
	25 (RB_Pos:25)	20.69	20.85	20.65	20.78	22.00	19.72	19.86	19.84	19.83	21.00
	50 (RB_Pos:0)	20.69	20.75	20.87	20.84	22.00	19.79	19.99	19.98	19.89	21.00
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK				Tune up limit (dBm)	16QAM				Tune up limit (dBm)
	Channel	40065	40448	40832	41215		40065	40448	40832	41215	
5MHz	1 (RB_Pos:0)	21.54	21.53	21.50	21.71	23.00	20.79	20.83	20.81	21.04	22.00
	1 (RB_Pos:13)	21.72	21.72	21.66	21.88	23.00	20.83	21.02	20.93	21.19	22.00
	1 (RB_Pos:24)	21.51	21.53	21.41	21.72	23.00	20.68	20.99	20.79	21.03	22.00
	12 (RB_Pos:0)	20.56	20.77	20.67	20.75	22.00	19.73	19.72	19.68	19.84	21.00
	12 (RB_Pos:6)	20.74	20.79	20.66	20.81	22.00	19.71	19.80	19.74	19.86	21.00
	12 (RB_Pos:13)	20.56	20.66	20.62	20.82	22.00	19.69	19.84	19.84	19.84	21.00
	25 (RB_Pos:0)	20.61	20.77	20.59	20.77	22.00	19.68	19.82	19.82	19.81	21.00

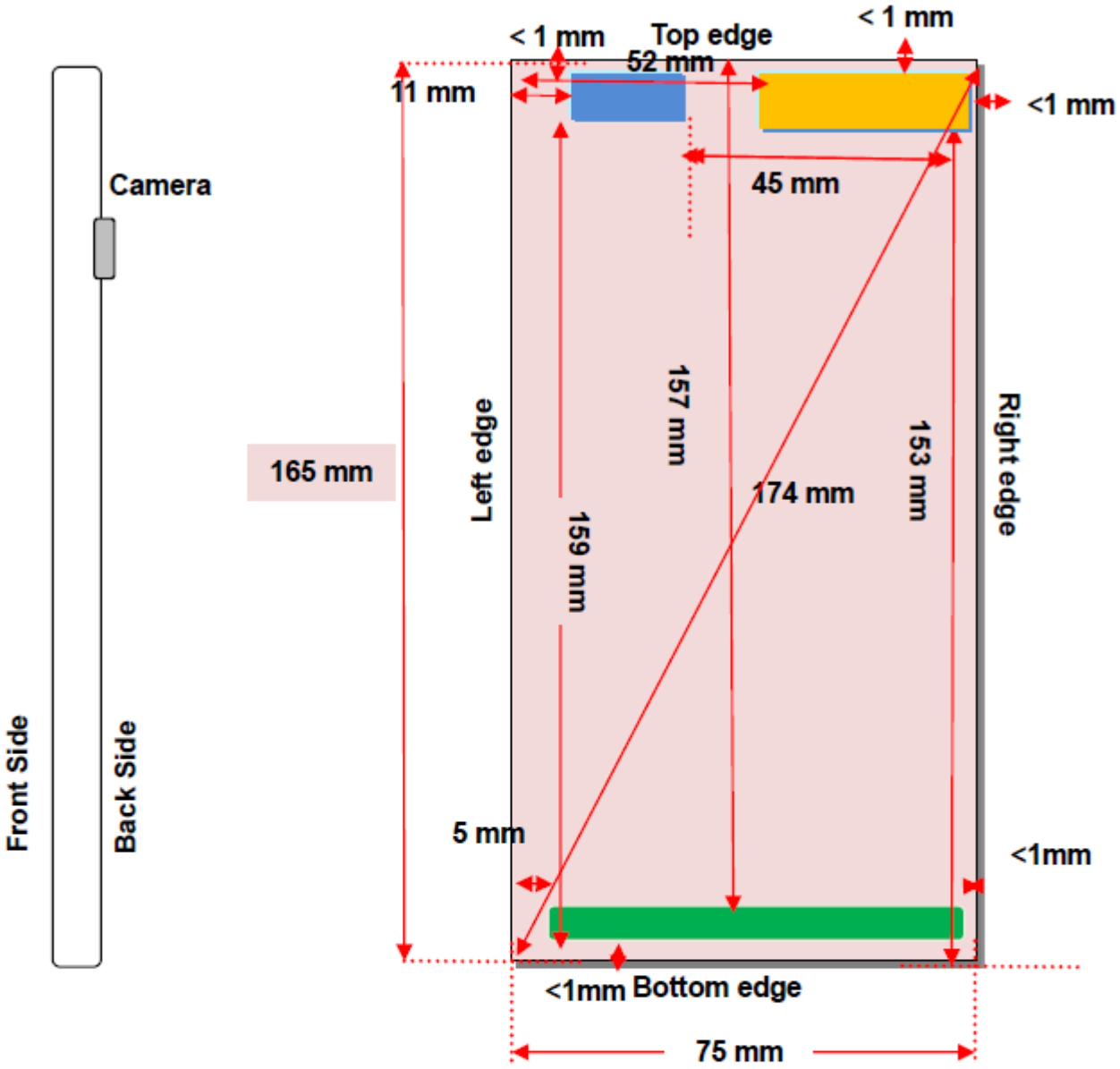
8.6.22 Power Reduced Level 1 of 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	16.33	18.00	Yes
		6	2437	16.36	18.00	Yes
		11	2462	**16.49**	18.00	Yes
	802.11g	1	2412	14.74	17.00	No
		6	2437	16.29	17.00	No
		11	2462	14.22	17.00	No
	802.11n(HT20)	1	2412	13.67	17.00	No
		6	2437	16.18	17.00	No
		11	2462	13.65	17.00	No

8.6.23 Power Reduced Level 2 of 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	14.14	16.00	No
		6	2437	14.22	16.00	No
		11	2462	**14.34**	16.00	Yes
	802.11g	1	2412	12.67	15.00	No
		6	2437	14.21	15.00	No
		11	2462	12.17	15.00	No
	802.11n(HT20)	1	2412	11.61	15.00	No
		6	2437	14.08	15.00	No
		11	2462	11.58	15.00	No

9 TEST EXCLUSION CONSIDERATION



WLAN/BT Antenna

WWAN Down Antenna

WWAN Up Antenna

EUT Back View

9.1 SAR Test Exclusion Consideration Table

According with FCC KDB 447498 D01, Appendix A, <SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm> Table, this Device SAR test configurations consider as following :

WWAN Up Antenna

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 850	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	Voice	33.50	2238.72	Yes	Yes	No	Yes	Yes	No
	Data	33.50	2238.72	Yes	Yes	No	Yes	Yes	No
GSM 1900	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	Voice	30.50	1122.02	Yes	Yes	No	Yes	Yes	No
	Data	30.50	1122.02	Yes	Yes	No	Yes	Yes	No
WCDMA Band 2	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	RMC	24.00	251.19	Yes	Yes	No	Yes	Yes	No
WCDMA Band 4	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	RMC	24.00	251.19	Yes	Yes	No	Yes	Yes	No
WCDMA Band 5	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	RMC	24.30	269.15	Yes	Yes	No	Yes	Yes	No
LTE Band 2	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 4	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 5	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 7	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 41	Distance to User			<5mm	<5mm	52mm	<5mm	<5mm	153mm
	VOIP	24.00	251.19	Yes	Yes	No	Yes	Yes	No

WWAN Down Antenna

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 850	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	Voice	33.50	2238.72	Yes	Yes	Yes	Yes	No	Yes
	Data	33.50	2238.72	Yes	Yes	Yes	Yes	No	Yes
GSM 1900	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	Voice	30.50	1122.02	Yes	Yes	Yes	Yes	No	Yes
	Data	30.50	1122.02	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 2	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	RMC	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 4	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	RMC	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	RMC	24.30	269.15	Yes	Yes	Yes	Yes	No	Yes
LTE Band 2	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 7	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 41	Distance to User			<5mm	<5mm	<5mm	<5mm	157mm	<5mm
	VOIP	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes

WLAN and Bluetooth

Band	Mode	Max. Peak Power		Test Position Configurations					
				Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User			<5mm	<5mm	11mm	45mm	<5mm	159mm
	802.11b	20.00	100.00	Yes	Yes	Yes	No	Yes	No
	802.11g	18.50	70.79	No	No	No	No	No	No
	802.11n(HT20)	18.50	70.79	No	No	No	No	No	No
Bluetooth	Distance to User			<5mm	<5mm	11mm	45mm	<5mm	159mm
	BT	12.00	15.85	Yes	Yes	Yes	No	Yes	No

Note:

1. Maximum power is the source-based time-average power and represents the maximum RF output power including tune-up tolerance among production units
2. Per KDB 447498 D01, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D01, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is

< 5mm, 5mm is used to determine SAR exclusion threshold

4. Per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
   a. f(GHz) is the RF channel transmit frequency in GHz
   b. Power and distance are rounded to the nearest mW and mm before calculation
   c. The result is rounded to one decimal place for comparison
   d. For < 50 mm distance, we just calculate mW of the exclusion threshold value (3.0) to do compare.
   This formula is [3.0] / [√f(GHz)] ·[(min. test separation distance, mm)] = exclusion threshold of mW.
5. Per KDB 447498 D01, at 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following
   a. [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·(f(MHz)/150)] mW, at 100 MHz to 1500 MHz
   b. [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
6. Per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA /HSUPA /DC-HSDPA output power is < 0.25dB higher than RMC12.2Kbps, or reported SAR with RMC 12.2kbps setting is ≤ 1.2W/kg, HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
7. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
8. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
   a. When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
   b. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

10 TEST RESULT

10.1 GSM 850

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Up	Off	GPRS (2slots)	Left Cheek	0	251	848.8	-0.14	0.403	30.63	31.50	1.222	0.492	/
	Off		Left Tilt	0	251	848.8	-0.15	0.331	30.63	31.50	1.222	0.404	/
	Off		Right Cheek	0	251	848.8	-0.04	0.486	30.63	31.50	1.222	**0.594**	1#
	Off		Right Tilt	0	251	848.8	0.04	0.392	30.63	31.50	1.222	0.479	/
Down	Off	GPRS (2slots)	Left Cheek	0	251	848.8	0.12	0.113	30.63	31.50	1.222	0.138	/
	Off		Left Tilt	0	251	848.8	0.15	0.054	30.63	31.50	1.222	0.066	/
	Off		Right Cheek	0	251	848.8	-0.07	0.118	30.63	31.50	1.222	0.144	/
	Off		Right Tilt	0	251	848.8	0.10	0.046	30.63	31.50	1.222	0.056	/
Body-worn Accessory													
Up	Off	Voice	Front Side	15	251	848.8	-0.15	0.049	32.16	33.50	1.361	0.067	/
	Off		Back Side	15	251	848.8	0.02	0.052	32.16	33.50	1.361	0.071	/
	Off	GPRS (2slots)	Front Side	15	251	848.8	0.16	0.055	30.63	31.50	1.222	0.067	/
	Off		Back Side	15	251	848.8	-0.01	0.060	30.63	31.50	1.222	0.073	/
Down	Level 5&6	Voice	Front Side	15	251	848.8	0.07	0.080	31.07	32.50	1.390	0.111	/
	Level 5&6		Back Side	15	251	848.8	-0.18	0.089	31.07	32.50	1.390	0.123	/
	Level 5&6	GPRS (2slots)	Front Side	15	251	848.8	-0.03	0.091	29.52	30.50	1.253	0.114	/
	Level 5&6		Back Side	15	251	848.8	-0.02	0.136	29.52	30.50	1.253	**0.170**	2#
Hotspot													
Up	Off	GPRS (2slots)	Front Side	10	251	848.8	0.06	0.068	30.63	31.50	1.222	0.083	/
	Off		Back Side	10	251	848.8	0.12	0.077	30.63	31.50	1.222	0.094	/
	Off		Left Edge	10	251	848.8	0.18	0.009	30.63	31.50	1.222	0.011	/
	Off		Right Edge	10	251	848.8	-0.04	0.019	30.63	31.50	1.222	0.023	/
	Off		Top Edge	10	251	848.8	-0.12	0.057	30.63	31.50	1.222	0.070	/
Down	Level 5&6	GPRS (2slots)	Front Side	10	251	848.8	0.06	0.130	29.52	30.50	1.253	0.163	/
	Level 5&6		Back Side	10	251	848.8	0.06	0.166	29.52	30.50	1.253	**0.208**	3#
	Level 5&6		Left Edge	10	251	848.8	-0.09	0.018	29.52	30.50	1.253	0.023	/
	Level 5&6		Right Edge	10	251	848.8	0.07	0.069	29.52	30.50	1.253	0.086	/
	Level 5&6		Bottom Edge	10	251	848.8	0.02	0.143	29.52	30.50	1.253	0.179	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

10.2 GSM 1900

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Up	Level 1&2	GPRS (4slots)	Left Cheek	0	512	1850.20	-0.06	0.414	20.39	22.00	1.449	0.600	/
	Level 1&2		Left Tilt	0	512	1850.20	0.09	0.505	20.39	22.00	1.449	0.732	/
	Level 1&2		Right Cheek	0	512	1850.20	-0.18	0.526	20.39	22.00	1.449	0.762	/
	Level 1&2		Right Tilt	0	512	1850.20	-0.08	0.726	20.39	22.00	1.449	1.052	/
	Level 1&2			0	661	1880.00	0.13	0.720	20.35	22.00	1.462	**1.053**	4#
	Level 1&2			0	810	1909.80	0.12	0.600	20.20	22.00	1.514	0.908	/
Down	Off	GPRS (4slots)	Left Cheek	0	512	1850.20	0.04	0.039	24.87	26.00	1.297	0.050	/
	Off		Left Tilt	0	512	1850.20	-0.03	0.032	24.87	26.00	1.297	0.042	/
	Off		Right Cheek	0	512	1850.20	-0.16	0.050	24.87	26.00	1.297	0.064	/
	Off		Right Tilt	0	512	1850.20	-0.07	0.041	24.87	26.00	1.297	0.053	/
Body-worn Accessory													
Up	Level 3&4	Voice	Front Side	15	512	1850.20	0.17	0.132	26.28	27.50	1.324	0.175	/
	Level 3&4		Back Side	15	512	1850.20	0.19	0.156	26.28	27.50	1.324	0.207	/
	Level 3&4	GPRS (4slots)	Front Side	15	512	1850.20	-0.07	0.166	20.39	22.00	1.449	0.240	/
	Level 3&4		Back Side	15	512	1850.20	0.16	0.197	20.39	22.00	1.449	0.285	/
Down	Level 5&6	Voice	Front Side	15	512	1850.20	0.05	0.060	26.28	27.50	1.324	0.080	/
	Level 5&6		Back Side	15	512	1850.20	0.03	0.183	26.28	27.50	1.324	0.242	/
	Level 5&6	GPRS (4slots)	Front Side	15	512	1850.20	-0.01	0.069	20.39	22.00	1.449	0.100	/
	Level 5&6		Back Side	15	512	1850.20	0.01	0.208	20.39	22.00	1.449	**0.301**	5#
Hotspot													
Up	Level 3&4	GPRS (4slots)	Front Side	10	512	1850.20	0.17	0.117	20.39	22.00	1.449	0.170	/
	Level 3&4		Back Side	10	512	1850.20	-0.11	0.159	20.39	22.00	1.449	0.230	/
	Level 3&4		Left Edge	10	512	1850.20	0.15	0.029	20.39	22.00	1.449	0.042	/
	Level 3&4		Right Edge	10	512	1850.20	0.01	0.044	20.39	22.00	1.449	0.064	/
	Level 3&4		Top Edge	10	512	1850.20	0.10	0.214	20.39	22.00	1.449	0.310	/
Down	Level 5&6	GPRS (4slots)	Front Side	10	512	1850.20	-0.10	0.104	20.39	22.00	1.449	0.151	/
	Level 5&6		Back Side	10	512	1850.20	0.15	0.352	20.39	22.00	1.449	0.510	/
	Level 5&6		Left Edge	10	512	1850.20	0.14	0.028	20.39	22.00	1.449	0.041	/
	Level 5&6		Right Edge	10	512	1850.20	-0.13	0.032	20.39	22.00	1.449	0.046	/
	Level 5&6		Bottom Edge	10	512	1850.20	0.14	0.367	20.39	22.00	1.449	**0.532**	6#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.3WCDMA Band 2

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Up	Level 1&2	RMC	Left Cheek	0	9262	1852.40	0.15	0.367	16.03	16.50	1.114	0.409	/
	Level 1&2		Left Tilt	0	9262	1852.40	0.01	0.448	16.03	16.50	1.114	0.499	/
	Level 1&2		Right Cheek	0	9262	1852.40	-0.02	0.467	16.03	16.50	1.114	0.520	/
	Level 1&2		Right Tilt	0	9262	1852.40	0.03	0.533	16.03	16.50	1.114	**0.594**	7#
Down	Off	RMC	Left Cheek	0	9262	1852.40	0.10	0.035	22.97	24.00	1.268	0.044	/
	Off		Left Tilt	0	9262	1852.40	0.01	0.029	22.97	24.00	1.268	0.037	/
	Off		Right Cheek	0	9262	1852.40	0.10	0.047	22.97	24.00	1.268	0.060	/
	Off		Right Tilt	0	9262	1852.40	-0.04	0.038	22.97	24.00	1.268	0.048	/
Body-worn Accessory													
Up	Level 3&4	RMC	Front Side	15	9262	1852.40	-0.11	0.045	17.44	18.00	1.138	0.051	/
	Level 3&4		Back Side	15	9262	1852.40	0.19	0.068	17.44	18.00	1.138	0.077	/
Down	Level 5&6	RMC	Front Side	15	9262	1852.40	-0.03	0.035	18.51	19.00	1.119	0.039	/
	Level 5&6		Back Side	15	9262	1852.40	0.03	0.130	18.51	19.00	1.119	**0.146**	8#
Hotspot													
Up	Level 3&4	RMC	Front Side	10	9262	1852.40	-0.01	0.157	17.44	18.00	1.138	0.179	/
	Level 3&4		Back Side	10	9262	1852.40	-0.08	0.213	17.44	18.00	1.138	0.242	/
	Level 3&4		Left Edge	10	9262	1852.40	-0.14	0.039	17.44	18.00	1.138	0.044	/
	Level 3&4		Right Edge	10	9262	1852.40	0.19	0.059	17.44	18.00	1.138	0.067	/
	Level 3&4		Top Edge	10	9262	1852.40	0.08	0.286	17.44	18.00	1.138	0.325	/
Down	Level 5&6	RMC	Front Side	10	9262	1852.40	0.17	0.067	18.51	19.00	1.119	0.075	/
	Level 5&6		Back Side	10	9262	1852.40	0.10	0.238	18.51	19.00	1.119	0.266	/
	Level 5&6		Left Edge	10	9262	1852.40	0.17	0.019	18.51	19.00	1.119	0.021	/
	Level 5&6		Right Edge	10	9262	1852.40	-0.01	0.021	18.51	19.00	1.119	0.024	/
	Level 5&6		Bottom Edge	10	9262	1852.40	-0.04	0.349	18.51	19.00	1.119	**0.391**	9#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Product Specific 10g SAR													
Up	Level 3&4	RMC	Front Side	0	9262	1852.40	0.06	0.464	17.44	18.00	1.138	0.528	/
	Level 3&4		Back Side	0	9262	1852.40	-0.05	0.630	17.44	18.00	1.138	0.717	/
	Level 3&4		Left Edge	0	9262	1852.40	0.11	0.115	17.44	18.00	1.138	0.131	/
	Level 3&4		Right Edge	0	9262	1852.40	-0.08	0.175	17.44	18.00	1.138	0.199	/
	Level 3&4		Top Edge	0	9262	1852.40	-0.19	0.846	17.44	18.00	1.138	0.962	/
Down	Level 5&6	RMC	Front Side	0	9262	1852.40	0.10	0.227	18.51	19.00	1.119	0.254	/
	Level 5&6		Back Side	0	9262	1852.40	-0.04	0.805	18.51	19.00	1.119	0.901	/
	Level 5&6		Left Edge	0	9262	1852.40	-0.07	0.064	18.51	19.00	1.119	0.072	/
	Level 5&6		Right Edge	0	9262	1852.40	-0.13	0.071	18.51	19.00	1.119	0.079	/
	Level 5&6		Bottom Edge	0	9262	1852.40	0.02	1.180	18.51	19.00	1.119	**1.321**	10#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.4WCDMA Band 4

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Up	Level 1&2	RMC	Left Cheek	0	1412	1732.40	0.03	0.218	16.50	17.50	1.259	0.274	/
	Level 1&2		Left Tilt	0	1412	1732.40	0.03	0.251	16.50	17.50	1.259	0.316	/
	Level 1&2		Right Cheek	0	1412	1732.40	0.06	0.310	16.50	17.50	1.259	0.390	/
	Level 1&2		Right Tilt	0	1412	1732.40	0.04	0.356	16.50	17.50	1.259	**0.448**	11#
Down	Off	RMC	Left Cheek	0	1412	1732.40	0.16	0.072	22.65	24.00	1.365	0.098	/
	Off		Left Tilt	0	1412	1732.40	0.12	0.059	22.65	24.00	1.365	0.081	/
	Off		Right Cheek	0	1412	1732.40	-0.14	0.084	22.65	24.00	1.365	0.115	/
	Off		Right Tilt	0	1412	1732.40	-0.03	0.075	22.65	24.00	1.365	0.102	/
Body-worn Accessory													
Up	Level 3&4	RMC	Front Side	15	1412	1732.40	-0.10	0.040	16.99	18.00	1.262	0.050	/
	Level 3&4		Back Side	15	1412	1732.40	0.14	0.049	16.99	18.00	1.262	0.061	/
Down	Level 5&6	RMC	Front Side	15	1412	1732.40	-0.10	0.035	17.95	19.00	1.274	0.045	/
	Level 5&6		Back Side	15	1412	1732.40	0.04	0.094	17.95	19.00	1.274	**0.120**	12#
Hotspot													
Up	Level 3&4	RMC	Front Side	10	1412	1732.40	0.10	0.091	16.99	18.00	1.262	0.115	/
	Level 3&4		Back Side	10	1412	1732.40	-0.02	0.107	16.99	18.00	1.262	0.135	/
	Level 3&4		Left Edge	10	1412	1732.40	0.07	0.028	16.99	18.00	1.262	0.035	/
	Level 3&4		Right Edge	10	1412	1732.40	-0.13	0.067	16.99	18.00	1.262	0.085	/
	Level 3&4		Top Edge	10	1412	1732.40	0.19	0.165	16.99	18.00	1.262	0.208	/
Down	Level 5&6	RMC	Front Side	10	1412	1732.40	0.13	0.073	17.95	19.00	1.274	0.093	/
	Level 5&6		Back Side	10	1412	1732.40	0.05	0.194	17.95	19.00	1.274	0.247	/
	Level 5&6		Left Edge	10	1412	1732.40	0.07	0.024	17.95	19.00	1.274	0.031	/
	Level 5&6		Right Edge	10	1412	1732.40	-0.08	0.028	17.95	19.00	1.274	0.036	/
	Level 5&6		Bottom Edge	10	1412	1732.40	0.15	0.297	17.95	19.00	1.274	**0.378**	13#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Product Specific 10g SAR													
Down	Level 5&6	RMC	Front Side	0	1412	1732.40	0.17	0.164	17.95	19.00	1.274	0.209	/
	Level 5&6		Back Side	0	1412	1732.40	0.12	0.437	17.95	19.00	1.274	0.557	/
	Level 5&6		Left Edge	0	1412	1732.40	0.17	0.054	17.95	19.00	1.274	0.069	/
	Level 5&6		Right Edge	0	1412	1732.40	-0.13	0.063	17.95	19.00	1.274	0.080	/
	Level 5&6		Bottom Edge	0	1412	1732.40	-0.03	0.669	17.95	19.00	1.274	**0.852**	14#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.5WCDMA Band 5

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Up	Off	RMC	Left Cheek	0	4132	826.40	-0.02	0.362	23.00	24.00	1.259	0.456	/
	Off		Left Tilt	0	4132	826.40	-0.01	0.293	23.00	24.00	1.259	0.369	/
	Off		Right Cheek	0	4132	826.40	0.00	0.441	23.00	24.00	1.259	**0.555**	15#
	Off		Right Tilt	0	4132	826.40	0.05	0.368	23.00	24.00	1.259	0.463	/
Down	Off	RMC	Left Cheek	0	4132	826.40	0.02	0.123	23.00	24.00	1.259	0.155	/
	Off		Left Tilt	0	4132	826.40	-0.13	0.055	23.00	24.00	1.259	0.069	/
	Off		Right Cheek	0	4132	826.40	0.09	0.127	23.00	24.00	1.259	0.160	/
	Off		Right Tilt	0	4132	826.40	0.17	0.051	23.00	24.00	1.259	0.064	/
Body-worn Accessory													
Up	Off	RMC	Front Side	15	4132	826.40	-0.05	0.108	23.00	24.00	1.259	0.136	/
	Off		Back Side	15	4132	826.40	-0.19	0.119	23.00	24.00	1.259	0.150	/
Down	Off	RMC	Front Side	15	4132	826.40	0.07	0.148	23.00	24.00	1.259	0.186	/
	Off		Back Side	15	4132	826.40	0.01	0.210	23.00	24.00	1.259	**0.264**	16#
Hotspot													
Up	Off	RMC	Front Side	10	4132	826.40	0.01	0.121	23.00	24.00	1.259	0.152	/
	Off		Back Side	10	4132	826.40	0.02	0.140	23.00	24.00	1.259	0.176	/
	Off		Left Edge	10	4132	826.40	-0.14	0.012	23.00	24.00	1.259	0.015	/
	Off		Right Edge	10	4132	826.40	-0.09	0.026	23.00	24.00	1.259	0.033	/
	Off		Top Edge	10	4132	826.40	-0.11	0.107	23.00	24.00	1.259	0.135	/
Down	Off	RMC	Front Side	10	4132	826.40	0.10	0.177	23.00	24.00	1.259	0.223	/
	Off		Back Side	10	4132	826.40	-0.09	0.226	23.00	24.00	1.259	**0.285**	17#
	Off		Left Edge	10	4132	826.40	0.08	0.022	23.00	24.00	1.259	0.028	/
	Off		Right Edge	10	4132	826.40	-0.13	0.080	23.00	24.00	1.259	0.101	/
	Off		Bottom Edge	10	4132	826.40	0.03	0.167	23.00	24.00	1.259	0.210	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.6 LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Up	Level 1&2	QPSK	Left Cheek	0	18900	1880	1	Mid	0.06	0.353	15.99	16.50	1.125	0.397	/
	Level 1&2			0	19100	1900	50	Low	-0.14	0.309	15.85	16.50	1.161	0.359	/
	Level 1&2		Left Tilt	0	18900	1880	1	Mid	-0.18	0.431	15.99	16.50	1.125	0.485	/
	Level 1&2			0	19100	1900	50	Low	0.08	0.377	15.85	16.50	1.161	0.438	/
	Level 1&2		Right Cheek	0	18900	1880	1	Mid	0.05	0.448	15.99	16.50	1.125	0.504	/
	Level 1&2			0	19100	1900	50	Low	-0.09	0.392	15.85	16.50	1.161	0.455	/
	Level 1&2		Right Tilt	0	18900	1880	1	Mid	0.18	0.558	15.99	16.50	1.125	**0.628**	18#
	Level 1&2			0	19100	1900	50	Low	0.01	0.500	15.85	16.50	1.161	0.581	/
Down	Off	QPSK	Left Cheek	0	18900	1880	1	Mid	-0.06	0.069	22.87	24.00	1.297	0.090	/
	Off			0	18700	1860	50	Mid	0.04	0.051	21.80	23.00	1.318	0.067	/
	Off		Left Tilt	0	18900	1880	1	Mid	-0.10	0.058	22.87	24.00	1.297	0.075	/
	Off			0	18700	1860	50	Mid	0.13	0.042	21.80	23.00	1.318	0.055	/
	Off		Right Cheek	0	18900	1880	1	Mid	0.08	0.089	22.87	24.00	1.297	0.115	/
	Off			0	18700	1860	50	Mid	0.07	0.073	21.80	23.00	1.318	0.096	/
	Off		Right Tilt	0	18900	1880	1	Mid	-0.14	0.073	22.87	24.00	1.297	0.095	/
	Off			0	18700	1860	50	Mid	-0.10	0.061	21.80	23.00	1.318	0.080	/
Body-worn Accessory															
Up	Level 3&4	QPSK	Front Side	15	18900	1880	1	Mid	0.14	0.090	17.40	18.00	1.148	0.103	/
	Level 3&4			15	19100	1900	50	Low	0.16	0.077	17.29	18.00	1.178	0.091	/
	Level 3&4		Back Side	15	18900	1880	1	Mid	0.10	0.095	17.40	18.00	1.148	0.109	/
	Level 3&4			15	19100	1900	50	Low	-0.07	0.091	17.29	18.00	1.178	0.107	/
Down	Level 5&6	QPSK	Front Side	15	18900	1880	1	Mid	-0.03	0.028	18.39	19.00	1.151	0.032	/
	Level 5&6			15	19100	1900	50	Low	-0.15	0.024	18.30	19.00	1.175	0.028	/
	Level 5&6		Back Side	15	18900	1880	1	Mid	-0.16	0.100	18.39	19.00	1.151	**0.115**	19#
	Level 5&6			15	19100	1900	50	Low	-0.10	0.088	18.30	19.00	1.175	0.103	/
Hotspot															
Up	Level 3&4	QPSK	Front Side	10	18900	1880	1	Mid	-0.16	0.148	17.40	18.00	1.148	0.170	/
	Level 3&4			10	19100	1900	50	Low	-0.17	0.127	17.29	18.00	1.178	0.150	/
	Level 3&4		Back Side	10	18900	1880	1	Mid	0.17	0.187	17.40	18.00	1.148	0.215	/
	Level 3&4			10	19100	1900	50	Low	0.14	0.159	17.29	18.00	1.178	0.187	/
	Level 3&4		Left Edge	10	18900	1880	1	Mid	0.13	0.026	17.40	18.00	1.148	0.030	/
	Level 3&4			10	19100	1900	50	Low	0.17	0.023	17.29	18.00	1.178	0.027	/
	Level 3&4		Right Edge	10	18900	1880	1	Mid	-0.01	0.057	17.40	18.00	1.148	0.065	/
	Level 3&4			10	19100	1900	50	Low	-0.02	0.051	17.29	18.00	1.178	0.060	/
	Level 3&4		Top Edge	10	18900	1880	1	Mid	0.05	0.264	17.40	18.00	1.148	0.303	/
	Level 3&4			10	19100	1900	50	Low	-0.04	0.257	17.29	18.00	1.178	0.303	/
Down	Level 5&6	QPSK	Front Side	10	18900	1880	1	Mid	0.00	0.075	18.39	19.00	1.151	0.086	/
	Level 5&6			10	19100	1900	50	Low	0.17	0.061	18.30	19.00	1.175	0.072	/
	Level 5&6		Back Side	10	18900	1880	1	Mid	-0.11	0.205	18.39	19.00	1.151	0.236	/

	Level 5&6			10	19100	1900	50	Low	-0.09	0.194	18.30	19.00	1.175	0.228	/
	Level 5&6		Left Edge	10	18900	1880	1	Mid	-0.10	0.030	18.39	19.00	1.151	0.035	/
	Level 5&6			10	19100	1900	50	Low	-0.06	0.027	18.30	19.00	1.175	0.032	/
	Level 5&6		Right Edge	10	18900	1880	1	Mid	-0.10	0.025	18.39	19.00	1.151	0.029	/
	Level 5&6			10	19100	1900	50	Low	-0.07	0.023	18.30	19.00	1.175	0.027	/
	Level 5&6		Bottom Edge	10	18900	1880	1	Mid	0.08	0.349	18.39	19.00	1.151	**0.402**	20#
	Level 5&6			10	19100	1900	50	Low	-0.06	0.305	18.30	19.00	1.175	0.358	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Product Specific 10g SAR															
Up	Level 3&4	QPSK	Front Side	0	18900	1880	1	Mid	0.18	0.441	17.40	18.00	1.148	0.506	/
	Level 3&4			0	19100	1900	50	Low	0.06	0.378	17.29	18.00	1.178	0.445	/
	Level 3&4		Back Side	0	18900	1880	1	Mid	-0.08	0.557	17.40	18.00	1.148	0.640	/
	Level 3&4			0	19100	1900	50	Low	0.01	0.474	17.29	18.00	1.178	0.558	/
	Level 3&4		Left Edge	0	18900	1880	1	Mid	0.11	0.075	17.40	18.00	1.148	0.086	/
	Level 3&4			0	19100	1900	50	Low	0.05	0.067	17.29	18.00	1.178	0.079	/
	Level 3&4		Right Edge	0	18900	1880	1	Mid	0.12	0.165	17.40	18.00	1.148	0.189	/
	Level 3&4			0	19100	1900	50	Low	-0.06	0.148	17.29	18.00	1.178	0.174	/
	Level 3&4		Top Edge	0	18900	1880	1	Mid	0.06	0.767	17.40	18.00	1.148	0.881	/
	Level 3&4			0	19100	1900	50	Low	-0.05	0.747	17.29	18.00	1.178	0.880	/
Down	Level 5&6	QPSK	Front Side	0	18900	1880	1	Mid	0.06	0.115	18.39	19.00	1.151	0.132	/
	Level 5&6			0	19100	1900	50	Low	-0.05	0.093	18.30	19.00	1.175	0.109	/
	Level 5&6		Back Side	0	18900	1880	1	Mid	0.15	0.313	18.39	19.00	1.151	0.360	/
	Level 5&6			0	19100	1900	50	Low	0.04	0.296	18.30	19.00	1.175	0.348	/
	Level 5&6		Left Edge	0	18900	1880	1	Mid	-0.12	0.087	18.39	19.00	1.151	0.100	/
	Level 5&6			0	19100	1900	50	Low	0.13	0.078	18.30	19.00	1.175	0.092	/
	Level 5&6		Right Edge	0	18900	1880	1	Mid	0.18	0.072	18.39	19.00	1.151	0.083	/
	Level 5&6			0	19100	1900	50	Low	-0.13	0.066	18.30	19.00	1.175	0.078	/
	Level 5&6		Bottom Edge	0	18900	1880	1	Mid	-0.18	1.010	18.39	19.00	1.151	**1.162**	21#
	Level 5&6			0	19100	1900	50	Low	-0.13	0.881	18.30	19.00	1.175	1.035	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.7 LTE Band 4 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Up	Level 1&2	QPSK	Left Cheek	0	20175	1732.5	1	Mid	0.10	0.246	16.45	18.00	1.429	0.352	/
	Level 1&2			0	20175	1732.5	50	Low	-0.12	0.232	16.35	18.00	1.462	0.339	/
	Level 1&2		Left Tilt	0	20175	1732.5	1	Mid	-0.04	0.280	16.45	18.00	1.429	0.400	/
	Level 1&2			0	20175	1732.5	50	Low	-0.11	0.265	16.35	18.00	1.462	0.387	/
	Level 1&2		Right Cheek	0	20175	1732.5	1	Mid	0.17	0.347	16.45	18.00	1.429	0.496	/
	Level 1&2			0	20175	1732.5	50	Low	-0.17	0.312	16.35	18.00	1.462	0.456	/
	Level 1&2		Right Tilt	0	20175	1732.5	1	Mid	0.03	0.428	16.45	18.00	1.429	**0.612**	22#
	Level 1&2			0	20175	1732.5	50	Low	-0.03	0.393	16.35	18.00	1.462	0.575	/
Down	Off	QPSK	Left Cheek	0	20175	1732.5	1	Mid	0.17	0.077	22.60	24.00	1.380	0.106	/
	Off			0	20175	1732.5	50	Low	0.07	0.065	21.46	23.00	1.426	0.093	/
	Off		Left Tilt	0	20175	1732.5	1	Mid	0.17	0.064	22.60	24.00	1.380	0.088	/
	Off			0	20175	1732.5	50	Low	-0.19	0.043	21.46	23.00	1.426	0.061	/
	Off		Right Cheek	0	20175	1732.5	1	Mid	0.03	0.099	22.60	24.00	1.380	0.137	/
	Off			0	20175	1732.5	50	Low	0.15	0.071	21.46	23.00	1.426	0.101	/
	Off		Right Tilt	0	20175	1732.5	1	Mid	0.00	0.081	22.60	24.00	1.380	0.112	/
	Off			0	20175	1732.5	50	Low	-0.18	0.065	21.46	23.00	1.426	0.093	/
Body-worn Accessory															
Up	Level 3&4	QPSK	Front Side	15	20175	1732.5	1	Mid	-0.06	0.050	16.45	18.00	1.429	0.071	/
	Level 3&4			15	20175	1732.5	50	Low	0.02	0.045	16.35	18.00	1.462	0.066	/
	Level 3&4		Back Side	15	20175	1732.5	1	Mid	0.03	0.052	16.45	18.00	1.429	0.074	/
	Level 3&4			15	20175	1732.5	50	Low	0.05	0.048	16.35	18.00	1.462	0.070	/
Down	Level 5&6	QPSK	Front Side	15	20175	1732.5	1	Mid	-0.07	0.043	17.43	19.00	1.435	0.062	/
	Level 5&6			15	20175	1732.5	50	Low	0.09	0.040	17.30	19.00	1.479	0.059	/
	Level 5&6		Back Side	15	20175	1732.5	1	Mid	0.11	0.138	17.43	19.00	1.435	**0.198**	23#
	Level 5&6			15	20175	1732.5	50	Low	-0.04	0.129	17.30	19.00	1.479	0.191	/
Hotspot															
Up	Level 3&4	QPSK	Front Side	10	20175	1732.5	1	Mid	-0.11	0.081	16.45	18.00	1.429	0.116	/
	Level 3&4			10	20175	1732.5	50	Low	0.08	0.071	16.35	18.00	1.462	0.104	/
	Level 3&4		Back Side	10	20175	1732.5	1	Mid	0.16	0.098	16.45	18.00	1.429	0.140	/
	Level 3&4			10	20175	1732.5	50	Low	0.09	0.089	16.35	18.00	1.462	0.130	/
	Level 3&4		Left Edge	10	20175	1732.5	1	Mid	-0.10	0.026	16.45	18.00	1.429	0.037	/
	Level 3&4			10	20175	1732.5	50	Low	0.19	0.019	16.35	18.00	1.462	0.028	/
	Level 3&4		Right Edge	10	20175	1732.5	1	Mid	-0.17	0.061	16.45	18.00	1.429	0.087	/
	Level 3&4			10	20175	1732.5	50	Low	-0.15	0.053	16.35	18.00	1.462	0.077	/
	Level 3&4		Top Edge	10	20175	1732.5	1	Mid	-0.01	0.127	16.45	18.00	1.429	0.181	/
	Level 3&4			10	20175	1732.5	50	Low	-0.12	0.109	16.35	18.00	1.462	0.159	
Down	Level 5&6	QPSK	Front Side	10	20175	1732.5	1	Mid	-0.06	0.098	17.43	19.00	1.435	0.141	/
	Level 5&6			10	20175	1732.5	50	Low	-0.08	0.073	17.30	19.00	1.479	0.108	/
	Level 5&6		Back Side	10	20175	1732.5	1	Mid	0.16	0.260	17.43	19.00	1.435	0.373	/

	Level 5&6			10	20175	1732.5	50	Low	-0.04	0.237	17.30	19.00	1.479	0.351	/
	Level 5&6		Left Edge	10	20175	1732.5	1	Mid	-0.03	0.032	17.43	19.00	1.435	0.046	/
	Level 5&6			10	20175	1732.5	50	Low	0.01	0.029	17.30	19.00	1.479	0.043	/
	Level 5&6		Right Edge	10	20175	1732.5	1	Mid	0.17	0.037	17.43	19.00	1.435	0.053	/
	Level 5&6			10	20175	1732.5	50	Low	0.01	0.035	17.30	19.00	1.479	0.052	/
	Level 5&6		Bottom Edge	10	20175	1732.5	1	Mid	0.18	0.333	17.43	19.00	1.435	**0.478**	24#
	Level 5&6			10	20175	1732.5	50	Low	0.02	0.288	17.30	19.00	1.479	0.426	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Product Specific 10g SAR															
Down	Level 5&6	QPSK	Front Side	0	20175	1732.5	1	Mid	-0.13	0.235	17.43	19.00	1.435	0.337	/
	Level 5&6			0	20175	1732.5	50	Low	-0.16	0.175	17.30	19.00	1.479	0.259	/
	Level 5&6		Back Side	0	20175	1732.5	1	Mid	-0.11	0.624	17.43	19.00	1.435	0.896	/
	Level 5&6			0	20175	1732.5	50	Low	0.13	0.569	17.30	19.00	1.479	0.842	/
	Level 5&6		Left Edge	0	20175	1732.5	1	Mid	-0.06	0.077	17.43	19.00	1.435	0.111	/
	Level 5&6			0	20175	1732.5	50	Low	-0.02	0.070	17.30	19.00	1.479	0.104	/
	Level 5&6		Right Edge	0	20175	1732.5	1	Mid	0.11	0.089	17.43	19.00	1.435	0.128	/
	Level 5&6			0	20175	1732.5	50	Low	0.02	0.084	17.30	19.00	1.479	0.124	/
	Level 5&6		Bottom Edge	0	20175	1732.5	1	Mid	0.17	0.806	17.43	19.00	1.435	**1.157**	25#
	Level 5&6			0	20175	1732.5	50	Low	-0.18	0.691	17.30	19.00	1.479	1.022	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.8 LTE Band 5 (10MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Up	Level 1&2	QPSK	Left Cheek	0	20600	844	1	Mid	0.11	0.119	18.77	19.00	1.054	0.125	/
	Level 1&2			0	20600	844	25	Low	0.10	0.103	18.77	19.00	1.054	0.109	/
	Level 1&2		Left Tilt	0	20600	844	1	Mid	0.04	0.096	18.77	19.00	1.054	0.101	/
	Level 1&2			0	20600	844	25	Low	0.14	0.092	18.77	19.00	1.054	0.097	/
	Level 1&2		Right Cheek	0	20600	844	1	Mid	0.01	0.149	18.77	19.00	1.054	**0.157**	26#
	Level 1&2			0	20600	844	25	Low	0.12	0.130	18.77	19.00	1.054	0.137	/
	Level 1&2		Right Tilt	0	20600	844	1	Mid	0.10	0.121	18.77	19.00	1.054	0.128	/
	Level 1&2			0	20600	844	25	Low	0.10	0.108	18.77	19.00	1.054	0.114	/
Down	Off	QPSK	Left Cheek	0	20600	844	1	Mid	0.10	0.115	22.71	24.00	1.346	0.155	/
	Off			0	20600	844	25	Low	0.10	0.108	21.70	23.00	1.349	0.123	/
	Off		Left Tilt	0	20600	844	1	Mid	-0.09	0.061	22.71	24.00	1.346	0.082	/
	Off			0	20600	844	25	Low	-0.01	0.057	21.70	23.00	1.349	0.068	/
	Off		Right Cheek	0	20600	844	1	Mid	-0.12	0.112	22.71	24.00	1.346	0.151	/
	Off			0	20600	844	25	Low	0.14	0.110	21.70	23.00	1.349	0.121	/
	Off		Right Tilt	0	20600	844	1	Mid	0.02	0.056	22.71	24.00	1.346	0.075	/
	Off			0	20600	844	25	Low	0.03	0.051	21.70	23.00	1.349	0.061	/
Body-worn Accessory															
Up	Level 3&4	QPSK	Front Side	15	20600	844	1	Mid	-0.06	0.029	18.77	19.00	1.054	0.031	/
	Level 3&4			15	20600	844	25	Low	0.02	0.025	18.77	19.00	1.054	0.026	/
	Level 3&4		Back Side	15	20600	844	1	Mid	-0.01	0.037	18.77	19.00	1.054	0.039	/
	Level 3&4			15	20600	844	25	Low	0.16	0.033	18.77	19.00	1.054	0.035	/
Down	Off	QPSK	Front Side	15	20600	844	1	Mid	0.10	0.114	22.71	24.00	1.346	0.153	/
	Off			15	20600	844	25	Low	0.03	0.094	21.70	23.00	1.349	0.127	/
	Off		Back Side	15	20600	844	1	Mid	-0.05	0.208	22.71	24.00	1.346	**0.280**	27#
	Off			15	20600	844	25	Low	0.10	0.151	21.70	23.00	1.349	0.204	/
Hotspot															
Up	Level 3&4	QPSK	Front Side	10	20600	844	1	Mid	-0.01	0.034	18.77	19.00	1.054	0.036	/
	Level 3&4			10	20600	844	25	Low	0.01	0.030	18.77	19.00	1.054	0.032	/
	Level 3&4		Back Side	10	20600	844	1	Mid	0.02	0.044	18.77	19.00	1.054	0.047	/
	Level 3&4			10	20600	844	25	Low	0.10	0.039	18.77	19.00	1.054	0.041	/
	Level 3&4		Left Edge	10	20600	844	1	Mid	0.18	0.008	18.77	19.00	1.054	0.008	/
	Level 3&4			10	20600	844	25	Low	-0.06	0.006	18.77	19.00	1.054	0.006	/
	Level 3&4		Right Edge	10	20600	844	1	Mid	-0.01	0.015	18.77	19.00	1.054	0.016	/
	Level 3&4			10	20600	844	25	Low	0.07	0.014	18.77	19.00	1.054	0.015	/
	Level 3&4		Top Edge	10	20600	844	1	Mid	-0.18	0.042	18.77	19.00	1.054	0.044	/
	Level 3&4			10	20600	844	25	Low	0.03	0.038	18.77	19.00	1.054	0.040	/
Down	Off	QPSK	Front Side	10	20600	844	1	Mid	-0.17	0.128	22.71	24.00	1.346	0.172	/
	Off			10	20600	844	25	Low	0.03	0.108	21.70	23.00	1.349	0.146	/
	Off		Back Side	10	20600	844	1	Mid	0.01	0.236	22.71	24.00	1.346	**0.318**	28#

	Off			10	20600	844	25	Low	-0.03	0.174	21.70	23.00	1.349	0.235	/
	Off		Left Edge	10	20600	844	1	Mid	0.17	0.076	22.71	24.00	1.346	0.102	/
	Off			10	20600	844	25	Low	0.10	0.060	21.70	23.00	1.349	0.081	/
	Off		Right Edge	10	20600	844	1	Mid	0.15	0.053	22.71	24.00	1.346	0.071	/
	Off			10	20600	844	25	Low	0.14	0.045	21.70	23.00	1.349	0.061	/
	Off		Bottom Edge	10	20600	844	1	Mid	0.11	0.160	22.71	24.00	1.346	0.215	/
	Off			10	20600	844	25	Low	-0.16	0.144	21.70	23.00	1.349	0.194	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.9 LTE Band 7 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Up	Level1&2	QPSK	Left Cheek	0	21350	2560	1	Mid	-0.18	0.333	14.38	16.00	1.452	0.484	/
	Level1&2			0	21350	2560	50	Mid	0.06	0.305	14.31	16.00	1.476	0.450	/
	Level1&2		Left Tilt	0	21350	2560	1	Mid	0.05	0.366	14.38	16.00	1.452	0.531	/
	Level1&2			0	21350	2560	50	Mid	0.04	0.335	14.31	16.00	1.476	0.494	/
	Level1&2		Right Cheek	0	21350	2560	1	Mid	0.07	0.412	14.38	16.00	1.452	0.598	/
	Level1&2			0	21350	2560	50	Mid	-0.09	0.377	14.31	16.00	1.476	0.556	/
	Level1&2		Right Tilt	0	21350	2560	1	Mid	-0.05	0.531	14.38	16.00	1.452	**0.771**	29#
	Level1&2			0	21350	2560	50	Mid	0.07	0.503	14.31	16.00	1.476	0.742	/
Down	Off	QPSK	Left Cheek	0	21350	2560	1	Mid	-0.05	0.044	23.02	24.00	1.253	0.055	/
	Off			0	21350	2560	50	Mid	0.08	0.040	21.90	23.00	1.288	0.041	/
	Off		Left Tilt	0	21350	2560	1	Mid	0.12	0.024	23.02	24.00	1.253	0.030	/
	Off			0	21350	2560	50	Mid	0.18	0.022	21.90	23.00	1.288	0.021	/
	Off		Right Cheek	0	21350	2560	1	Mid	-0.11	0.049	23.02	24.00	1.253	0.061	/
	Off			0	21350	2560	50	Mid	0.15	0.045	21.90	23.00	1.288	0.041	/
	Off		Right Tilt	0	21350	2560	1	Mid	-0.01	0.041	23.02	24.00	1.253	0.051	/
	Off			0	21350	2560	50	Mid	0.15	0.038	21.90	23.00	1.288	0.036	/
Body-worn Accessory															
Up	Level3&4	QPSK	Front Side	15	21350	2560	1	Mid	0.00	0.062	15.49	17.00	1.416	0.088	/
	Level3&4			15	21350	2560	50	Mid	-0.13	0.057	15.41	17.00	1.442	0.082	/
	Level3&4		Back Side	15	21350	2560	1	Mid	0.07	0.134	15.49	17.00	1.416	0.190	/
	Level3&4			15	21350	2560	50	Mid	-0.11	0.115	15.41	17.00	1.442	0.166	/
Down	Level5&6	QPSK	Front Side	15	21350	2560	1	Mid	-0.18	0.194	22.09	23.00	1.233	0.239	/
	Level5&6			15	21350	2560	50	Mid	0.00	0.165	21.49	22.50	1.262	0.208	/
	Level5&6		Back Side	15	21350	2560	1	Mid	0.04	0.285	22.09	23.00	1.233	**0.351**	30#
	Level5&6			15	21350	2560	50	Mid	-0.01	0.239	21.49	22.50	1.262	0.302	/
Hotspot															
Up	Level3&4	QPSK	Front Side	10	21350	2560	1	Mid	0.04	0.139	15.49	17.00	1.416	0.197	/
	Level3&4			10	21350	2560	50	Mid	0.00	0.126	15.41	17.00	1.442	0.182	/
	Level3&4		Back Side	10	21350	2560	1	Mid	-0.16	0.335	15.49	17.00	1.416	0.474	/
	Level3&4			10	21350	2560	50	Mid	-0.11	0.280	15.41	17.00	1.442	0.404	/
	Level3&4		Left Edge	10	21350	2560	1	Mid	-0.09	0.030	15.49	17.00	1.416	0.042	/
	Level3&4			10	21350	2560	50	Mid	0.06	0.027	15.41	17.00	1.442	0.039	/
	Level3&4		Right Edge	10	21350	2560	1	Mid	-0.17	0.111	15.49	17.00	1.416	0.157	/
	Level3&4			10	21350	2560	50	Mid	0.04	0.103	15.41	17.00	1.442	0.149	/
	Level3&4		Top Edge	10	21350	2560	1	Mid	-0.04	0.437	15.49	17.00	1.416	0.619	/
	Level3&4			10	21350	2560	50	Mid	-0.01	0.363	15.41	17.00	1.442	0.523	
Down	Level5&6	QPSK	Front Side	10	21350	2560	1	Mid	-0.08	0.333	22.09	23.00	1.233	0.411	/
	Level5&6			10	21350	2560	50	Mid	-0.02	0.300	21.49	22.50	1.262	0.379	/
	Level5&6		Back Side	10	21350	2560	1	Mid	0.12	0.522	22.09	23.00	1.233	0.644	/

	Level5&6			10	21350	2560	50	Mid	-0.02	0.508	21.49	22.50	1.262	0.641	/
	Level5&6		Left Edge	10	21350	2560	1	Mid	-0.13	0.101	22.09	23.00	1.233	0.125	/
	Level5&6			10	21350	2560	50	Mid	-0.13	0.087	21.49	22.50	1.262	0.110	/
	Level5&6		Right Edge	10	21350	2560	1	Mid	0.02	0.348	22.09	23.00	1.233	0.429	/
	Level5&6			10	21350	2560	50	Mid	-0.05	0.289	21.49	22.50	1.262	0.365	/
	Level5&6		Bottom Edge	10	21350	2560	1	Mid	0.15	0.568	22.09	23.00	1.233	**0.700**	31#
	Level5&6			10	21350	2560	50	Mid	-0.01	0.480	21.49	22.50	1.262	0.606	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Product Specific 10g SAR															
Up	Level3&4	QPSK	Front Side	0	21350	2560	1	Mid	-0.14	0.320	15.49	17.00	1.416	0.453	/
	Level3&4			0	21350	2560	50	Mid	0.17	0.290	15.41	17.00	1.442	0.418	/
	Level3&4		Back Side	0	21350	2560	1	Mid	0.03	0.771	15.49	17.00	1.416	**1.092**	32#
	Level3&4			0	21350	2560	50	Mid	-0.11	0.644	15.41	17.00	1.442	0.929	/
	Level3&4		Left Edge	0	21350	2560	1	Mid	0.00	0.037	15.49	17.00	1.416	0.052	/
	Level3&4			0	21350	2560	50	Mid	0.13	0.033	15.41	17.00	1.442	0.048	/
	Level3&4		Right Edge	0	21350	2560	1	Mid	-0.11	0.137	15.49	17.00	1.416	0.194	/
	Level3&4			0	21350	2560	50	Mid	0.19	0.127	15.41	17.00	1.442	0.183	/
	Level3&4		Top Edge	0	21350	2560	1	Mid	-0.10	0.538	15.49	17.00	1.416	0.762	/
	Level3&4			0	21350	2560	50	Mid	0.13	0.447	15.41	17.00	1.442	0.645	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.10 LTE Band 41 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Up	Level 1&2	QPSK	Left Cheek	0	41140	2645	1	Mid	-0.09	0.260	19.31	20.00	1.172	0.305	/
	Level 1&2			0	41140	2645	50	Low	0.00	0.195	19.05	20.00	1.245	0.243	/
	Level 1&2		Left Tilt	0	41140	2645	1	Mid	-0.12	0.285	19.31	20.00	1.172	0.334	/
	Level 1&2			0	41140	2645	50	Low	0.08	0.213	19.05	20.00	1.245	0.265	/
	Level 1&2		Right Cheek	0	41140	2645	1	Mid	0.11	0.322	19.31	20.00	1.172	0.377	/
	Level 1&2			0	41140	2645	50	Low	-0.02	0.240	19.05	20.00	1.245	0.299	/
	Level 1&2		Right Tilt	0	41140	2645	1	Mid	-0.14	0.389	19.31	20.00	1.172	**0.456**	33#
	Level 1&2			0	41140	2645	50	Low	-0.03	0.292	19.05	20.00	1.245	0.363	/
Down	Off	QPSK	Left Cheek	0	41140	2645	1	Mid	-0.09	0.038	23.42	24.00	1.143	0.043	/
	Off			0	41140	2645	50	Low	-0.13	0.029	22.06	23.00	1.242	0.036	/
	Off		Left Tilt	0	41140	2645	1	Mid	0.09	0.021	23.42	24.00	1.143	0.024	/
	Off			0	41140	2645	50	Low	0.07	0.015	22.06	23.00	1.242	0.019	/
	Off		Right Cheek	0	41140	2645	1	Mid	-0.19	0.043	23.42	24.00	1.143	0.049	/
	Off			0	41140	2645	50	Low	-0.03	0.031	22.06	23.00	1.242	0.038	/
	Off		Right Tilt	0	41140	2645	1	Mid	0.05	0.036	23.42	24.00	1.143	0.041	/
	Off			0	41140	2645	50	Low	0.03	0.028	22.06	23.00	1.242	0.035	/
Body-worn Accessory															
Up	Level 3&4	QPSK	Front Side	15	41140	2645	1	Mid	0.03	0.058	19.31	20.00	1.172	0.068	/
	Level 3&4			15	41140	2645	50	Low	-0.15	0.054	19.05	20.00	1.245	0.067	/
	Level 3&4		Back Side	15	41140	2645	1	Mid	0.09	0.089	19.31	20.00	1.172	0.104	/
	Level 3&4			15	41140	2645	50	Low	0.17	0.082	19.05	20.00	1.245	0.102	/
Down	Level 5&6	QPSK	Front Side	15	41140	2645	1	Mid	0.06	0.075	22.15	23.00	1.216	0.091	/
	Level 5&6			15	41140	2645	50	Low	-0.07	0.061	20.82	22.00	1.312	0.080	/
	Level 5&6		Back Side	15	41140	2645	1	Mid	0.01	0.155	22.15	23.00	1.216	**0.189**	34#
	Level 5&6			15	41140	2645	50	Low	-0.11	0.105	20.82	22.00	1.312	0.138	/
Hotspot															
Up	Level 3&4	QPSK	Front Side	10	41140	2645	1	Mid	0.05	0.110	19.31	20.00	1.172	0.129	/
	Level 3&4			10	41140	2645	50	Low	0.11	0.098	19.05	20.00	1.245	0.122	/
	Level 3&4		Back Side	10	41140	2645	1	Mid	0.19	0.204	19.31	20.00	1.172	0.239	/
	Level 3&4			10	41140	2645	50	Low	-0.07	0.183	19.05	20.00	1.245	0.228	/
	Level 3&4		Left Edge	10	41140	2645	1	Mid	-0.09	0.025	19.31	20.00	1.172	0.029	/
	Level 3&4			10	41140	2645	50	Low	-0.04	0.023	19.05	20.00	1.245	0.029	/
	Level 3&4		Right Edge	10	41140	2645	1	Mid	0.11	0.096	19.31	20.00	1.172	0.113	/
	Level 3&4			10	41140	2645	50	Low	-0.08	0.091	19.05	20.00	1.245	0.113	/
	Level 3&4		Top Edge	10	41140	2645	1	Mid	-0.04	0.228	19.31	20.00	1.172	0.267	/
	Level 3&4			10	41140	2645	50	Low	-0.17	0.212	19.05	20.00	1.245	0.264	/
Down	Level 5&6	QPSK	Front Side	10	41140	2645	1	Mid	0.19	0.071	22.15	23.00	1.216	0.086	/
	Level 5&6			10	41140	2645	50	Low	0.05	0.051	20.82	22.00	1.312	0.067	/
	Level 5&6		Back Side	10	41140	2645	1	Mid	0.13	0.219	22.15	23.00	1.216	0.266	/

	Level 5&6			10	41140	2645	50	Low	0.12	0.172	20.82	22.00	1.312	0.226	/
	Level 5&6		Left Edge	10	41140	2645	1	Mid	0.03	0.033	22.15	23.00	1.216	0.040	/
	Level 5&6			10	41140	2645	50	Low	0.18	0.028	20.82	22.00	1.312	0.037	/
	Level 5&6		Right Edge	10	41140	2645	1	Mid	-0.17	0.111	22.15	23.00	1.216	0.135	/
	Level 5&6			10	41140	2645	50	Low	0.14	0.095	20.82	22.00	1.312	0.125	/
	Level 5&6		Bottom Edge	10	41140	2645	1	Mid	0.15	0.288	22.15	23.00	1.216	**0.350**	35#
	Level 5&6			10	41140	2645	50	Low	0.13	0.243	20.82	22.00	1.312	0.319	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.11 WIFI 2.4GHz

Mode	Power Reduction	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
802.11 b	Level1	Left Cheek	0	11	2462	-0.09	0.646	16.49	18.00	1.416	99.31	1.007	0.921	/
	Level1		0	1	2412	-0.08	0.663	16.33	18.00	1.469	99.31	1.007	0.981	/
	Level1		0	6	2437	-0.12	0.670	16.36	18.00	1.459	99.31	1.007	0.984	/
	Level1	Left Tilt	0	11	2462	-0.04	0.726	16.49	18.00	1.416	99.31	1.007	1.035	/
	Level1		0	1	2412	0.00	0.747	16.33	18.00	1.469	99.31	1.007	**1.105**	36#
	Level1		0	6	2437	-0.08	0.749	16.36	18.00	1.459	99.31	1.007	1.100	/
	Level1	Right Cheek	0	11	2462	0.10	0.353	16.49	18.00	1.416	99.31	1.007	0.503	/
	Level1	Right Tilt	0	11	2462	0.05	0.455	16.49	18.00	1.416	99.31	1.007	0.649	/
802.11 b	Level2	Left Cheek	0	11	2462	-0.09	0.418	14.34	16.00	1.466	99.31	1.007	0.617	/
	Level2	Left Tilt	0	11	2462	-0.13	0.505	14.34	16.00	1.466	99.31	1.007	0.745	/
	Level2	Right Cheek	0	11	2462	0.10	0.228	14.34	16.00	1.466	99.31	1.007	0.336	/
	Level2	Right Tilt	0	11	2462	0.05	0.294	14.34	16.00	1.466	99.31	1.007	0.434	/
Body-worn Accessory														
802.11 b	Off	Front Side	15	11	2462	-0.04	0.079	18.09	20.00	1.552	99.31	1.007	0.123	/
	Off	Back Side	15	11	2462	0.17	0.185	18.09	20.00	1.552	99.31	1.007	**0.289**	37#
802.11 b	Level3	Front Side	15	11	2462	-0.14	0.027	14.34	16.00	1.466	99.31	1.007	0.040	/
	Level3	Back Side	15	11	2462	0.17	0.055	14.34	16.00	1.466	99.31	1.007	0.081	/
Hotspot														
802.11 b	Off	Front Side	10	11	2462	-0.04	0.181	18.09	20.00	1.552	99.31	1.007	0.283	/
	Off	Back Side	10	11	2462	0.07	0.367	18.09	20.00	1.552	99.31	1.007	0.574	/
	Off	Left Edge	10	11	2462	0.17	0.109	18.09	20.00	1.552	99.31	1.007	0.170	/
	Off	Right Edge	10	11	2462	0.15	0.012	18.09	20.00	1.552	99.31	1.007	0.019	/
	Off	Top Edge	10	11	2462	0.06	0.441	18.09	20.00	1.552	99.31	1.007	**0.689**	38#
802.11 b	Level3	Front Side	10	11	2462	-0.04	0.080	14.34	16.00	1.466	99.31	1.007	0.118	/
	Level3	Back Side	10	11	2462	0.07	0.163	14.34	16.00	1.466	99.31	1.007	0.240	/
	Level3	Left Edge	10	11	2462	0.17	0.048	14.34	16.00	1.466	99.31	1.007	0.071	/
	Level3	Right Edge	10	11	2462	-0.08	0.005	14.34	16.00	1.466	99.31	1.007	0.007	/
	Level3	Top Edge	10	11	2462	0.04	0.195	14.34	16.00	1.466	99.31	1.007	0.288	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.12 Bluetooth

Mode	Power Reduction	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
DH5	Off	Left Cheek	0	0	2402	-0.10	0.133	10.04	12.00	1.570	76.80	1.302	0.272	/
	Off	Left Tilt	0	0	2402	-0.16	0.156	10.04	12.00	1.570	76.80	1.302	**0.319**	39#
	Off	Right Cheek	0	0	2402	0.07	0.073	10.04	12.00	1.570	76.80	1.302	0.149	/
	Off	Right Tilt	0	0	2402	0.07	0.094	10.04	12.00	1.570	76.80	1.302	0.192	/
Body-worn Accessory														
DH5	Off	Front Side	15	0	2402	-0.12	0.014	10.04	12.00	1.570	76.80	1.302	0.029	/
	Off	Back Side	15	0	2402	0.11	0.028	10.04	12.00	1.570	76.80	1.302	**0.057**	40#
Hotspot														
DH5	Off	Front Side	10	0	2402	-0.16	0.030	10.04	12.00	1.570	76.80	1.302	0.061	/
	Off	Back Side	10	0	2402	0.02	0.061	10.04	12.00	1.570	76.80	1.302	**0.125**	41#
	Off	Left Edge	10	0	2402	-0.18	0.018	10.04	12.00	1.570	76.80	1.302	0.037	/
	Off	Right Edge	10	0	2402	-0.12	0.003	10.04	12.00	1.570	76.80	1.302	0.006	/
	Off	Top Edge	10	0	2402	0.04	0.060	10.04	12.00	1.570	76.80	1.302	0.123	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was 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. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10, the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
2. When the highest measured SAR is >= 0.80 W/kg, repeat that measurement once.
3. 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 >= 1.45 W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20, and the original, first or second repeated measurement is >= 1.5 W/kg, perform a third repeated measurement.

Note: The highest measured 1g SAR is 0.794 < 0.80 W/kg, repeated measurement is not required.

Note: The highest measured 10g SAR is 1.180 < 2.0 W/kg, repeated measurement is not required.

12 SIMULTANEOUS TRANSMISSION

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR 1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR 1g 1.6 W/kg), SAR test exclusion is determined by the SAR to Peak Location Ratio (SPLSR).

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot	Product Specific
1	GSM + WiFi 2.4G	Yes	Yes	Yes	Yes
2	GSM + Bluetooth	Yes	Yes	Yes	Yes
3	UMTS + WiFi 2.4G	Yes	Yes	Yes	Yes
4	UMTS + Bluetooth	Yes	Yes	Yes	Yes
5	LTE + WiFi 2.4G	Yes	Yes	Yes	Yes
6	LTE + Bluetooth	Yes	Yes	Yes	Yes

Note:

1. 2G&3G&4G share the same antenna and can't transmit simultaneously.
2. The Bluetooth and 2.4G WLAN share the same antenna, can't transmitting together.
3. Two WWAN antennas can switch automatically, but up and down antenna can't transmit simultaneously.
4. The maximum SAR summation is calculated based on the same configuration and test position.

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN DAT with WLAN

Band	Power Reduction	Position	Stand alone SAR			SUM SAR WWAN+2.4GWIFI	SUM SAR WWAN+Bluetooth
			1	2	3		
			WWAN	2.4GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3)
GSM 850	Off	Left Cheek	0.138	0.617	0.272	0.755	0.410
	Off	Left Tilt	0.066	0.745	0.319	0.811	0.385
	Off	Right Cheek	0.144	0.336	0.149	0.480	0.293
	Off	Right Tilt	0.056	0.434	0.192	0.490	0.248
GSM1900	Off	Left Cheek	0.050	0.617	0.272	0.667	0.322
	Off	Left Tilt	0.042	0.745	0.319	0.787	0.361
	Off	Right Cheek	0.064	0.336	0.149	0.400	0.213
	Off	Right Tilt	0.053	0.434	0.192	0.487	0.245
WCDMA B2	Off	Left Cheek	0.044	0.617	0.272	0.661	0.316
	Off	Left Tilt	0.037	0.745	0.319	0.782	0.356
	Off	Right Cheek	0.060	0.336	0.149	0.396	0.209
	Off	Right Tilt	0.048	0.434	0.192	0.482	0.240
WCDMA B4	Off	Left Cheek	0.098	0.617	0.272	0.715	0.370
	Off	Left Tilt	0.081	0.745	0.319	0.826	0.400
	Off	Right Cheek	0.115	0.336	0.149	0.451	0.264
	Off	Right Tilt	0.102	0.434	0.192	0.536	0.294
WCDMA B5	Off	Left Cheek	0.155	0.617	0.272	0.772	0.427
	Off	Left Tilt	0.069	0.745	0.319	0.814	0.388
	Off	Right Cheek	0.160	0.336	0.149	0.496	0.309
	Off	Right Tilt	0.064	0.434	0.192	0.498	0.256
LTE B2	Off	Left Cheek	0.090	0.617	0.272	0.707	0.362
	Off	Left Tilt	0.075	0.745	0.319	0.820	0.394
	Off	Right Cheek	0.115	0.336	0.149	0.451	0.264
	Off	Right Tilt	0.095	0.434	0.192	0.529	0.287
LTE B4	Off	Left Cheek	0.106	0.617	0.272	0.723	0.378
	Off	Left Tilt	0.088	0.745	0.319	**0.833**	0.407
	Off	Right Cheek	0.137	0.336	0.149	0.473	0.286
	Off	Right Tilt	0.112	0.434	0.192	0.546	0.304
LTE B5	Off	Left Cheek	0.155	0.617	0.272	0.772	0.427
	Off	Left Tilt	0.082	0.745	0.319	0.827	0.401
	Off	Right Cheek	0.151	0.336	0.149	0.487	0.300
	Off	Right Tilt	0.075	0.434	0.192	0.509	0.267
LTE B7	Off	Left Cheek	0.055	0.617	0.272	0.672	0.327
	Off	Left Tilt	0.030	0.745	0.319	0.775	0.349
	Off	Right Cheek	0.061	0.336	0.149	0.397	0.210
	Off	Right Tilt	0.051	0.434	0.192	0.485	0.243

LTE B41	Off	Left Cheek	0.043	0.617	0.272	0.660	0.315
	Off	Left Tilt	0.024	0.745	0.319	0.769	0.343
	Off	Right Cheek	0.049	0.336	0.149	0.385	0.198
	Off	Right Tilt	0.041	0.434	0.192	0.475	0.233

Note:

1: Only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 0.833 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.2 Body-worn Simultaneous Transmission SAR Evaluation for WWAN DAT with WLAN

Band	Power Reduction	Position	Stand alone SAR			SUM SAR WWAN+2.4GWIFI	SUM SAR WWAN+Bluetooth
			1	2	3		
			WWAN	2.4GWIFI	Bluetooth	Sum SAR （1+2）	Sum SAR （1+3）
GSM 850	Level 6	Front Side 15mm	0.114	0.040	0.029	0.154	0.143
	Level 6	Back Side 15mm	0.170	0.081	0.057	0.251	0.227
GSM1900	Level 6	Front Side 15mm	0.100	0.040	0.029	0.140	0.129
	Level 6	Back Side 15mm	0.301	0.081	0.057	0.382	0.358
WCDMA B2	Level 6	Front Side 15mm	0.039	0.040	0.029	0.079	0.068
	Level 6	Back Side 15mm	0.146	0.081	0.057	0.227	0.203
WCDMA B4	Level 6	Front Side 15mm	0.045	0.040	0.029	0.085	0.074
	Level 6	Back Side 15mm	0.120	0.081	0.057	0.201	0.177
WCDMA B5	Off	Front Side 15mm	0.186	0.040	0.029	0.226	0.215
	Off	Back Side 15mm	0.264	0.081	0.057	0.345	0.321
LTE B2	Level 6	Front Side 15mm	0.032	0.040	0.029	0.072	0.061
	Level 6	Back Side 15mm	0.115	0.081	0.057	0.196	0.172
LTE B4	Level 6	Front Side 15mm	0.062	0.040	0.029	0.102	0.091
	Level 6	Back Side 15mm	0.198	0.081	0.057	0.279	0.255
LTE B5	Off	Front Side 15mm	0.153	0.040	0.029	0.193	0.182
	Off	Back Side 15mm	0.280	0.081	0.057	0.361	0.337
LTE B7	Level 6	Front Side 15mm	0.239	0.040	0.029	0.279	0.268
	Level 6	Back Side 15mm	0.351	0.081	0.057	**0.432**	0.408
LTE B41	Level 6	Front Side 15mm	0.091	0.040	0.029	0.131	0.120
	Level 6	Back Side 15mm	0.189	0.081	0.057	0.270	0.246

Note:

1: Only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 0.432 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.3 Hotspot Simultaneous Transmission SAR Evaluation for WWAN DAT with WLAN

Band	Power Reduction	Position	Stand alone SAR			SUM SAR WWAN+2.4GWIFI	SUM SAR WWAN+Bluetooth
			1	2	3		
			WWAN	2.4GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3)
GSM 850	Level 6	Front Side 10mm	0.163	0.118	0.061	0.281	0.224
	Level 6	Back Side 10mm	0.208	0.240	0.125	0.448	0.333
	Level 6	Left Edge 10mm	0.023	0.071	0.037	0.094	0.060
	Level 6	Right Edge 10mm	0.086	0.007	0.006	0.093	0.092
	Level 6	Bottom Edge 10mm	0.179	0.400	0.400	0.579	0.579
GSM1900	Level 6	Front Side 10mm	0.151	0.118	0.061	0.269	0.212
	Level 6	Back Side 10mm	0.510	0.240	0.125	0.750	0.635
	Level 6	Left Edge 10mm	0.041	0.071	0.037	0.112	0.078
	Level 6	Right Edge 10mm	0.046	0.007	0.006	0.053	0.052
	Level 6	Bottom Edge 10mm	0.532	0.400	0.400	0.932	0.932
WCDMA B2	Level 6	Front Side 10mm	0.075	0.118	0.061	0.193	0.136
	Level 6	Back Side 10mm	0.266	0.240	0.125	0.506	0.391
	Level 6	Left Edge 10mm	0.021	0.071	0.037	0.092	0.058
	Level 6	Right Edge 10mm	0.024	0.007	0.006	0.031	0.030
	Level 6	Bottom Edge 10mm	0.391	0.400	0.400	0.791	0.791
WCDMA B4	Level 6	Front Side 10mm	0.093	0.118	0.061	0.211	0.154
	Level 6	Back Side 10mm	0.247	0.240	0.125	0.487	0.372
	Level 6	Left Edge 10mm	0.031	0.071	0.037	0.102	0.068
	Level 6	Right Edge 10mm	0.036	0.007	0.006	0.043	0.042
	Level 6	Bottom Edge 10mm	0.378	0.400	0.400	0.778	0.778
WCDMA B5	Off	Front Side 10mm	0.223	0.118	0.061	0.341	0.284
	Off	Back Side 10mm	0.285	0.240	0.125	0.525	0.410
	Off	Left Edge 10mm	0.028	0.071	0.037	0.099	0.065
	Off	Right Edge 10mm	0.101	0.007	0.006	0.108	0.107
	Off	Bottom Edge 10mm	0.210	0.400	0.400	0.610	0.610
LTE B2	Level 6	Front Side 10mm	0.086	0.118	0.061	0.204	0.147
	Level 6	Back Side 10mm	0.236	0.240	0.125	0.476	0.361
	Level 6	Left Edge 10mm	0.035	0.071	0.037	0.106	0.072
	Level 6	Right Edge 10mm	0.029	0.007	0.006	0.036	0.035
	Level 6	Bottom Edge 10mm	0.402	0.400	0.400	0.802	0.802
LTE B4	Level 6	Front Side 10mm	0.141	0.118	0.061	0.259	0.202
	Level 6	Back Side 10mm	0.373	0.240	0.125	0.613	0.498
	Level 6	Left Edge 10mm	0.046	0.071	0.037	0.117	0.083
	Level 6	Right Edge 10mm	0.053	0.007	0.006	0.060	0.059
	Level 6	Bottom Edge 10mm	0.478	0.400	0.400	0.878	0.878
LTE B5	Off	Front Side 10mm	0.172	0.118	0.061	0.290	0.233
	Off	Back Side 10mm	0.318	0.240	0.125	0.558	0.443
	Off	Left Edge 10mm	0.102	0.071	0.037	0.173	0.139

	Off	Right Edge 10mm	0.071	0.007	0.006	0.078	0.077
	Off	Bottom Edge 10mm	0.215	0.400	0.400	0.615	0.615
LTE B7	Level 6	Front Side 10mm	0.411	0.118	0.061	0.529	0.472
	Level 6	Back Side 10mm	0.644	0.240	0.125	0.884	0.769
	Level 6	Left Edge 10mm	0.125	0.071	0.037	0.196	0.162
	Level 6	Right Edge 10mm	0.429	0.007	0.006	0.436	0.435
	Level 6	Bottom Edge 10mm	0.700	0.400	0.400	**1.100**	**1.100**
LTE B41	Level 6	Front Side 10mm	0.086	0.118	0.061	0.204	0.147
	Level 6	Back Side 10mm	0.266	0.240	0.125	0.506	0.391
	Level 6	Left Edge 10mm	0.040	0.071	0.037	0.111	0.077
	Level 6	Right Edge 10mm	0.135	0.007	0.006	0.142	0.141
	Level 6	Bottom Edge 10mm	0.350	0.400	0.400	0.750	0.750

Note:

1: Only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.100 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.4 Head Simultaneous Transmission SAR Evaluation for WWAN UAT with WLAN

Band	Power Reduction	Position	Stand alone SAR			SUM SAR WWAN+2.4GWIFI	SUM SAR WWAN+Bluetooth
			1	2	3		
			WWAN	2.4GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3)
GSM 850	Off	Left Cheek	0.492	0.617	0.272	1.109	0.764
	Off	Left Tilt	0.404	0.745	0.319	1.149	0.723
	Off	Right Cheek	0.594	0.336	0.149	0.930	0.743
	Off	Right Tilt	0.479	0.434	0.192	0.913	0.671
GSM1900	Level 2	Left Cheek	0.600	0.617	0.272	1.217	0.872
	Level 2	Left Tilt	0.732	0.745	0.319	1.477	1.051
	Level 2	Right Cheek	0.762	0.336	0.149	1.098	0.911
	Level 2	Right Tilt	1.053	0.434	0.192	**1.487**	1.245
WCDMA B2	Level 2	Left Cheek	0.409	0.617	0.272	1.026	0.681
	Level 2	Left Tilt	0.499	0.745	0.319	1.244	0.818
	Level 2	Right Cheek	0.520	0.336	0.149	0.856	0.669
	Level 2	Right Tilt	0.594	0.434	0.192	1.028	0.786
WCDMA B4	Level 2	Left Cheek	0.274	0.617	0.272	0.891	0.546
	Level 2	Left Tilt	0.316	0.745	0.319	1.061	0.635
	Level 2	Right Cheek	0.390	0.336	0.149	0.726	0.539
	Level 2	Right Tilt	0.448	0.434	0.192	0.882	0.640
WCDMA B5	Off	Left Cheek	0.456	0.617	0.272	1.073	0.728
	Off	Left Tilt	0.369	0.745	0.319	1.114	0.688
	Off	Right Cheek	0.555	0.336	0.149	0.891	0.704
	Off	Right Tilt	0.463	0.434	0.192	0.897	0.655
LTE B2	Level 2	Left Cheek	0.397	0.617	0.272	1.014	0.669
	Level 2	Left Tilt	0.485	0.745	0.319	1.230	0.804
	Level 2	Right Cheek	0.504	0.336	0.149	0.840	0.653
	Level 2	Right Tilt	0.628	0.434	0.192	1.062	0.820
LTE B4	Level 2	Left Cheek	0.352	0.617	0.272	0.969	0.624
	Level 2	Left Tilt	0.400	0.745	0.319	1.145	0.719
	Level 2	Right Cheek	0.496	0.336	0.149	0.832	0.645
	Level 2	Right Tilt	0.612	0.434	0.192	1.046	0.804
LTE B5	Level 2	Left Cheek	0.125	0.617	0.272	0.742	0.397
	Level 2	Left Tilt	0.101	0.745	0.319	0.846	0.420
	Level 2	Right Cheek	0.157	0.336	0.149	0.493	0.306
	Level 2	Right Tilt	0.128	0.434	0.192	0.562	0.320
LTE B7	Level 2	Left Cheek	0.484	0.617	0.272	1.101	0.756
	Level 2	Left Tilt	0.531	0.745	0.319	1.276	0.850
	Level 2	Right Cheek	0.598	0.336	0.149	0.934	0.747
	Level 2	Right Tilt	0.771	0.434	0.192	1.205	0.963
LTE B41	Level 2	Left Cheek	0.305	0.617	0.272	0.922	0.577
	Level 2	Left Tilt	0.334	0.745	0.319	1.079	0.653

	Level 2	Right Cheek	0.377	0.336	0.149	0.713	0.526
	Level 2	Right Tilt	0.456	0.434	0.192	0.890	0.648

Note:

1: Only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.487 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.5 Body-worn Simultaneous Transmission SAR Evaluation for WWAN UAT with WLAN

Band	Power Reduction	Position	Stand alone SAR			SUM SAR WWAN+2.4GWIFI	SUM SAR WWAN+Bluetooth
			1	2	3		
			WWAN	2.4GWIFI	Bluetooth	Sum SAR （1+2）	Sum SAR （1+3）
GSM 850	Off	Front Side 15mm	0.067	0.040	0.029	0.107	0.096
	Off	Back Side 15mm	0.073	0.081	0.057	0.154	0.130
GSM1900	Level 4	Front Side 15mm	0.240	0.040	0.029	0.280	0.269
	Level 4	Back Side 15mm	0.285	0.081	0.057	**0.366**	0.342
WCDMA B2	Level 4	Front Side 15mm	0.051	0.040	0.029	0.091	0.080
	Level 4	Back Side 15mm	0.077	0.081	0.057	0.158	0.134
WCDMA B4	Level 4	Front Side 15mm	0.050	0.040	0.029	0.090	0.079
	Level 4	Back Side 15mm	0.061	0.081	0.057	0.142	0.118
WCDMA B5	Off	Front Side 15mm	0.136	0.040	0.029	0.176	0.165
	Off	Back Side 15mm	0.150	0.081	0.057	0.231	0.207
LTE B2	Level 4	Front Side 15mm	0.103	0.040	0.029	0.143	0.132
	Level 4	Back Side 15mm	0.109	0.081	0.057	0.190	0.166
LTE B4	Level 4	Front Side 15mm	0.071	0.040	0.029	0.111	0.100
	Level 4	Back Side 15mm	0.074	0.081	0.057	0.155	0.131
LTE B5	Level 4	Front Side 15mm	0.031	0.040	0.029	0.071	0.060
	Level 4	Back Side 15mm	0.039	0.081	0.057	0.120	0.096
LTE B7	Level 4	Front Side 15mm	0.088	0.040	0.029	0.128	0.117
	Level 4	Back Side 15mm	0.190	0.081	0.057	0.271	0.247
LTE B41	Level 4	Front Side 15mm	0.068	0.040	0.029	0.108	0.097
	Level 4	Back Side 15mm	0.104	0.081	0.057	0.185	0.161

Note:

1: Only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 0.366 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.6 Hotspot Simultaneous Transmission SAR Evaluation for WWAN UAT with WLAN

Band	Power Reduction	Position	Stand alone SAR			SUM SAR WWAN+2.4GWIFI	SUM SAR WWAN+Bluetooth
			1	2	3		
			WWAN	2.4GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3)
GSM 850	Off	Front Side 10mm	0.083	0.118	0.061	0.201	0.144
	Off	Back Side 10mm	0.094	0.240	0.125	0.334	0.219
	Off	Left Edge 10mm	0.011	0.071	0.037	0.082	0.048
	Off	Right Edge 10mm	0.023	0.007	0.006	0.030	0.029
	Off	Top Edge 10mm	0.070	0.288	0.123	0.358	0.193
GSM1900	Level 4	Front Side 10mm	0.170	0.118	0.061	0.288	0.231
	Level 4	Back Side 10mm	0.230	0.240	0.125	0.470	0.355
	Level 4	Left Edge 10mm	0.042	0.071	0.037	0.113	0.079
	Level 4	Right Edge 10mm	0.064	0.007	0.006	0.071	0.070
	Level 4	Top Edge 10mm	0.310	0.288	0.123	0.598	0.433
WCDMA B2	Level 4	Front Side 10mm	0.179	0.118	0.061	0.297	0.240
	Level 4	Back Side 10mm	0.242	0.240	0.125	0.482	0.367
	Level 4	Left Edge 10mm	0.044	0.071	0.037	0.115	0.081
	Level 4	Right Edge 10mm	0.067	0.007	0.006	0.074	0.073
	Level 4	Top Edge 10mm	0.325	0.288	0.123	0.613	0.448
WCDMA B4	Level 4	Front Side 10mm	0.115	0.118	0.061	0.233	0.176
	Level 4	Back Side 10mm	0.135	0.240	0.125	0.375	0.260
	Level 4	Left Edge 10mm	0.035	0.071	0.037	0.106	0.072
	Level 4	Right Edge 10mm	0.085	0.007	0.006	0.092	0.091
	Level 4	Top Edge 10mm	0.208	0.288	0.123	0.496	0.331
WCDMA B5	Off	Front Side 10mm	0.152	0.118	0.061	0.270	0.213
	Off	Back Side 10mm	0.176	0.240	0.125	0.416	0.301
	Off	Left Edge 10mm	0.015	0.071	0.037	0.086	0.052
	Off	Right Edge 10mm	0.033	0.007	0.006	0.040	0.039
	Off	Top Edge 10mm	0.135	0.288	0.123	0.423	0.258
LTE B2	Level 4	Front Side 10mm	0.170	0.118	0.061	0.288	0.231
	Level 4	Back Side 10mm	0.215	0.240	0.125	0.455	0.340
	Level 4	Left Edge 10mm	0.030	0.071	0.037	0.101	0.067
	Level 4	Right Edge 10mm	0.065	0.007	0.006	0.072	0.071
	Level 4	Top Edge 10mm	0.303	0.288	0.123	0.591	0.426
LTE B4	Level 4	Front Side 10mm	0.116	0.118	0.061	0.234	0.177
	Level 4	Back Side 10mm	0.140	0.240	0.125	0.380	0.265
	Level 4	Left Edge 10mm	0.037	0.071	0.037	0.108	0.074
	Level 4	Right Edge 10mm	0.087	0.007	0.006	0.094	0.093
	Level 4	Top Edge 10mm	0.181	0.288	0.123	0.469	0.304
LTE B5	Level 4	Front Side 10mm	0.036	0.118	0.061	0.154	0.097
	Level 4	Back Side 10mm	0.047	0.240	0.125	0.287	0.172
	Level 4	Left Edge 10mm	0.008	0.071	0.037	0.079	0.045

	Level 4	Right Edge 10mm	0.016	0.007	0.006	0.023	0.022
	Level 4	Top Edge 10mm	0.044	0.288	0.123	0.332	0.167
LTE B7	Level 4	Front Side 10mm	0.197	0.118	0.061	0.315	0.258
	Level 4	Back Side 10mm	0.474	0.240	0.125	0.714	0.599
	Level 4	Left Edge 10mm	0.042	0.071	0.037	0.113	0.079
	Level 4	Right Edge 10mm	0.157	0.007	0.006	0.164	0.163
	Level 4	Top Edge 10mm	0.619	0.288	0.123	**0.907**	0.742
LTE B41	Level 4	Front Side 10mm	0.129	0.118	0.061	0.247	0.190
	Level 4	Back Side 10mm	0.239	0.240	0.125	0.479	0.364
	Level 4	Left Edge 10mm	0.029	0.071	0.037	0.100	0.066
	Level 4	Right Edge 10mm	0.113	0.007	0.006	0.120	0.119
	Level 4	Top Edge 10mm	0.267	0.288	0.123	0.555	0.390

Note:

1: Only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 0.907 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2017/06/26	2020/06/25
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2017/07/01	2020/06/30
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d193	2017/06/30	2020/06/29
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2017/03/21	2020/03/20
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2017/07/10	2020/07/09
E-Field Probe	Speag	EX3DV4	SN: 7510	2019/08/02	2020/08/01
Data Acquisition Electronics	Speag	DAE4	SN: 1454	2019/08/02	2020/08/01
Signal Generator	R&S	SMBV100A	260592	2019/06/13	2020/06/12
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2019/10/30	2020/10/29
Power Sensor	R&S	NRV-Z4	100381	2019/10/30	2020/10/29
Power Sensor	R&S	NRV-Z2	100211	2019/10/30	2020/10/29
Network Analyzer	R&S	ZVL-6	101380	2019/06/20	2020/06/19
Thermometer	Elitech	RC-4HC	N/A	2019/11/02	2020/11/01
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 25/13 OCPG56	N/A	N/A
Phantom1	Speag	SAM	SN: 1859	N/A	N/A
Phantom2	Speag	SAM	SN: 1857	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

Note: For dipole antennas, BALUN has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.
4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an SCLMP Dielectric Probe Kit.

Date	Liquid Type	Fre. (MHz)	Temp. (℃)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ε)	Target Conductivity (σ) (S/m)	Target Permittivity (ε)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2019.12.27	Head	835	21.3	0.92	40.59	0.90	41.50	2.22	-2.19
2019.12.28	Head	835	20.8	0.90	40.94	0.90	41.50	0.00	-1.35
2019.12.29	Head	835	21.2	0.89	41.86	0.90	41.50	-1.11	0.87
2019.12.30	Head	1750	21.4	1.36	38.85	1.37	40.08	-0.73	-3.07
2019.12.31	Head	1750	21.3	1.40	39.55	1.37	40.08	2.19	-1.32
2020.01.02	Head	1900	21.2	1.44	40.56	1.40	40.00	2.86	1.40
2020.01.16	Head	1900	21.3	1.45	38.52	1.40	40.00	3.57	-3.70
2020.01.17	Head	1900	21.2	1.42	39.31	1.40	40.00	1.43	-1.72
2020.01.11	Head	2450	21.3	1.77	38.08	1.80	39.20	-1.67	-2.86
2020.01.19	Head	2600	21.0	2.03	40.05	1.96	39.01	3.57	2.67
2020.01.18	Head	2600	20.8	1.97	39.10	1.96	39.01	0.51	0.23
2020.01.06	Head	2600	21.1	1.97	38.39	1.96	39.01	0.51	-1.59
2020.01.05	Head	2600	21.0	1.99	37.86	1.96	39.01	1.53	-2.95
Note: The tolerance limit of Conductivity and Permittivity is± 5%.									

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by SPEAG, the validation data should be within its specification of 10 %(for 1 g).

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)	Targeted SAR(W/kg)	Tolerance (%)
2019.12.27	Head	835	100	0.911	9.11	9.75	-6.56	9.56	-4.71
2019.12.28	Head	835	100	0.943	9.43	9.75	-3.28	9.56	-1.36
2019.12.29	Head	835	100	0.935	9.35	9.75	-4.10	9.56	-2.20
2019.12.30	Head	1750	100	3.620	36.20	36.90	-1.90	36.40	-0.55
2019.12.31	Head	1750	100	3.630	36.30	36.90	-1.63	36.40	-0.27
2020.01.02	Head	1900	100	4.150	41.50	39.90	4.01	39.70	4.53
2020.01.16	Head	1900	100	4.290	42.90	39.90	7.52	39.70	8.06
2020.01.17	Head	1900	100	3.830	38.30	39.90	-4.01	39.70	-3.53
2020.01.11	Head	2450	100	5.450	54.50	52.40	4.01	52.40	4.01
2020.01.19	Head	2600	100	5.290	52.90	56.40	-6.21	55.30	-4.34
2020.01.18	Head	2600	100	5.680	56.80	56.40	0.71	55.30	2.71
2020.01.06	Head	2600	100	5.220	52.20	56.40	-7.45	55.30	-5.61
2020.01.05	Head	2600	100	5.190	51.90	56.40	-7.98	55.30	-6.15
Note: The tolerance limit of System validation ±10%.									

System Performance Check Data (835MHz Head)

Date: 2019.12.27

Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; σ = 0.923 S/m; ε_r = 40.586; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 835 100mW/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.971 W/kg

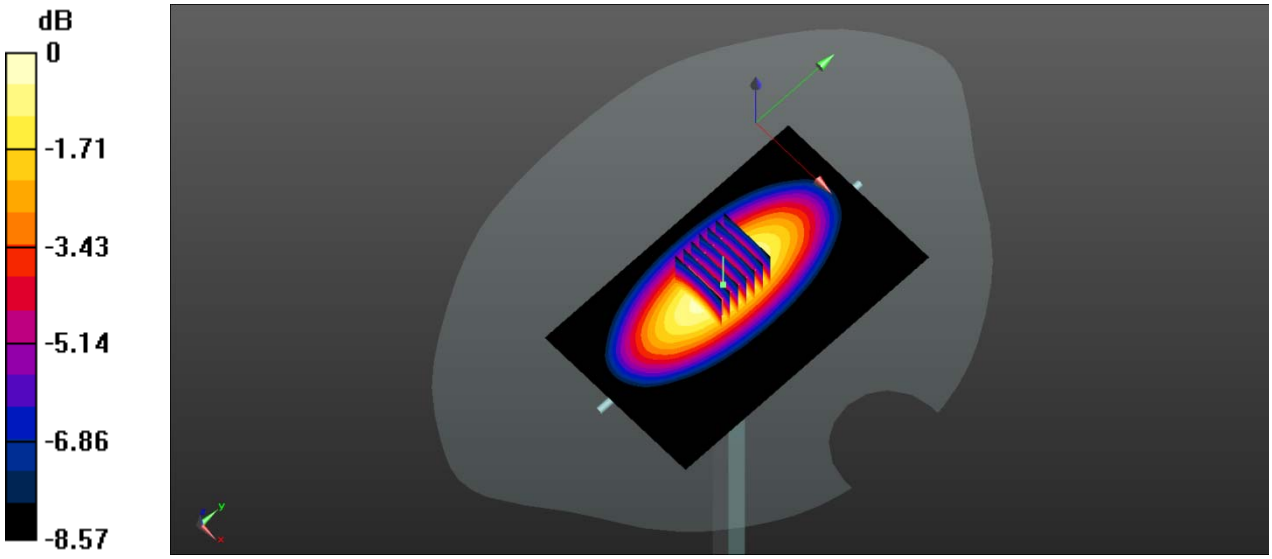
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.52 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.911 W/kg; SAR(10 g) = 0.628 W/kg

Maximum value of SAR (measured) = 0.978 W/kg



0 dB = 0.978 W/kg

System Performance Check Data (835MHz Head)

Date: 2019.12.28

Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; σ = 0.896 S/m; ε_r = 40.935; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 835 100mW/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.02 W/kg

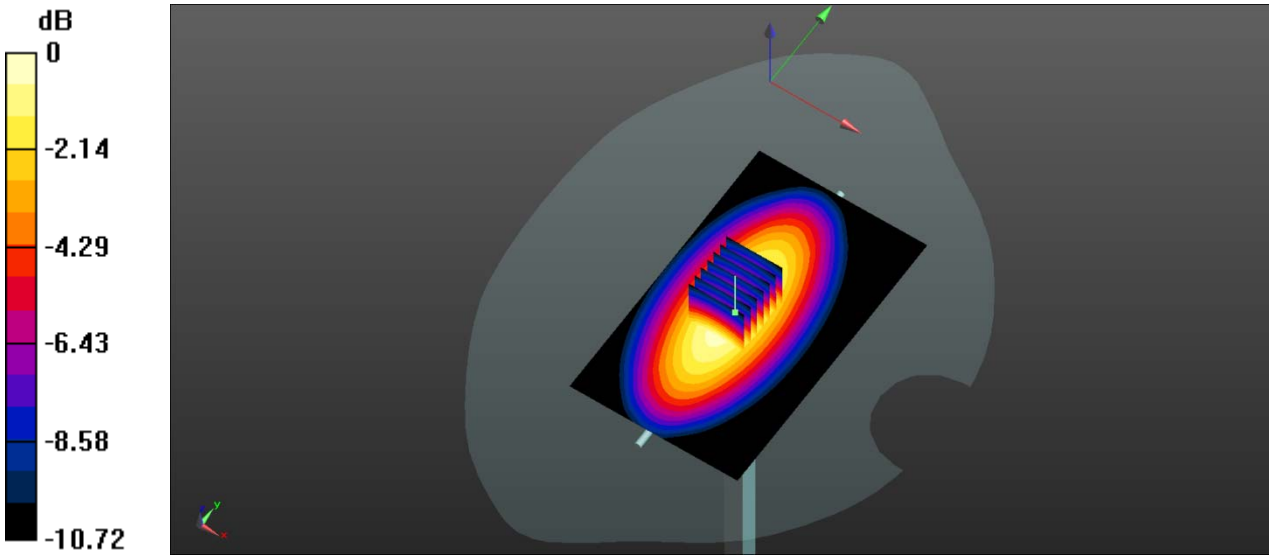
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.81 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.943 W/kg; SAR(10 g) = 0.614 W/kg

Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg

System Performance Check Data (835MHz Head)

Date: 2019.12.29

Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; σ = 0.886 S/m; ε_r = 41.856; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 835 100mW/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.998 W/kg

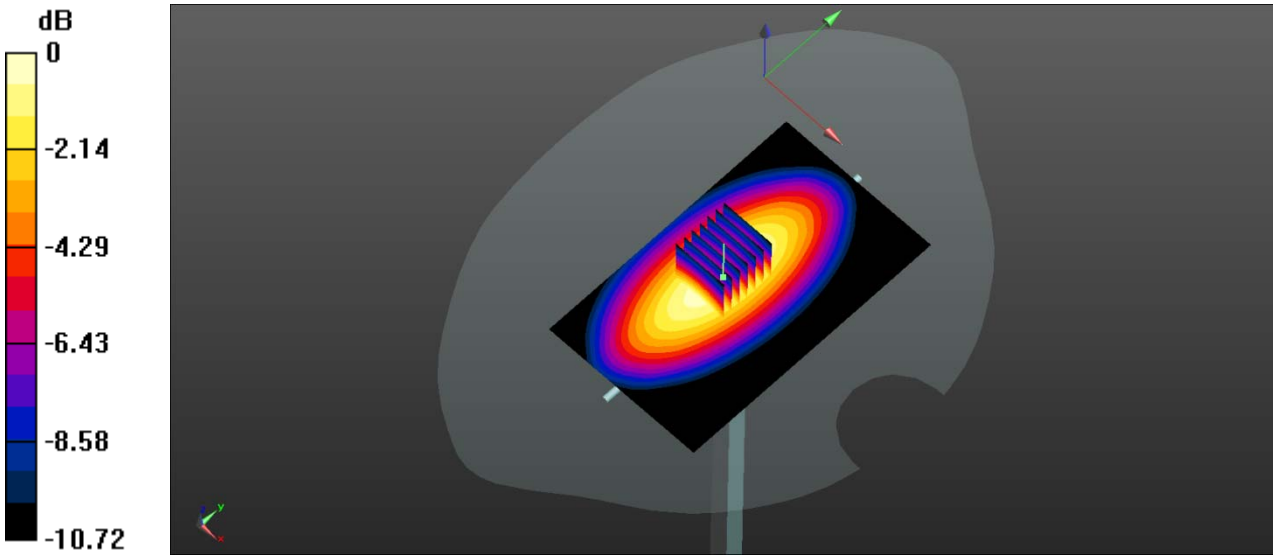
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.99 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.935 W/kg; SAR(10 g) = 0.608 W/kg

Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg

System Performance Check Data (1750MHz Head)

Date: 2019.12.30

Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; σ = 1.358 S/m; ε_r = 38.85; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1750 100mw/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.09 W/kg

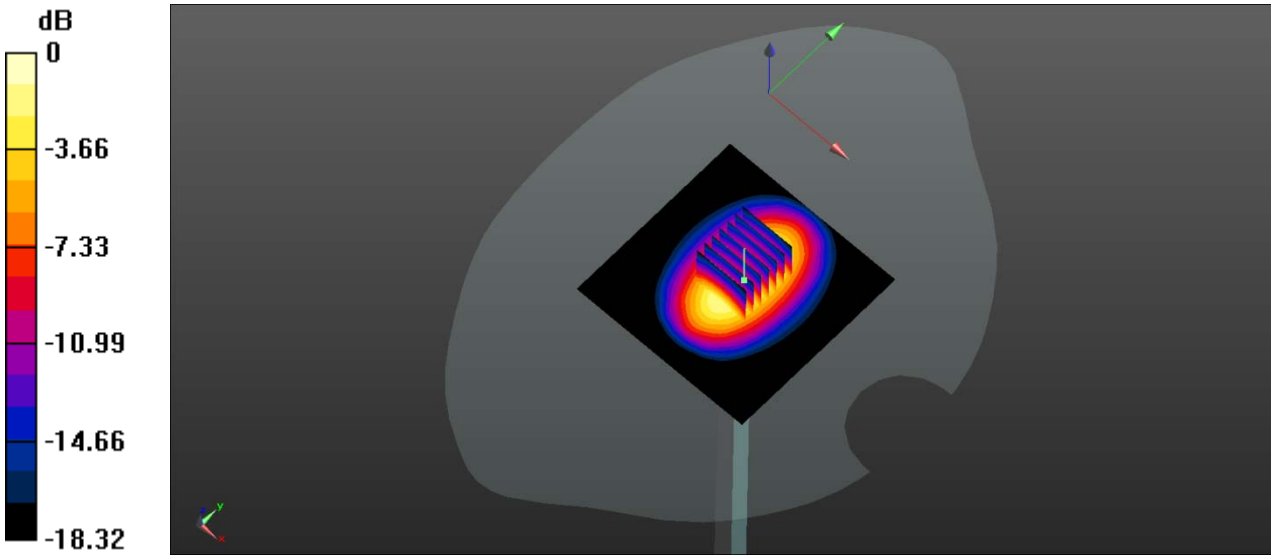
CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.24 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 7.04 W/kg

SAR(1 g) = 3.62 W/kg; SAR(10 g) = 1.86 W/kg

Maximum value of SAR (measured) = 4.06 W/kg



0 dB = 4.06 W/kg

System Performance Check Data (1750MHz Head)

Date: 2019.12.31

Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; σ = 1.402 S/m; ε_r = 39.55; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1750 100mw/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.09 W/kg

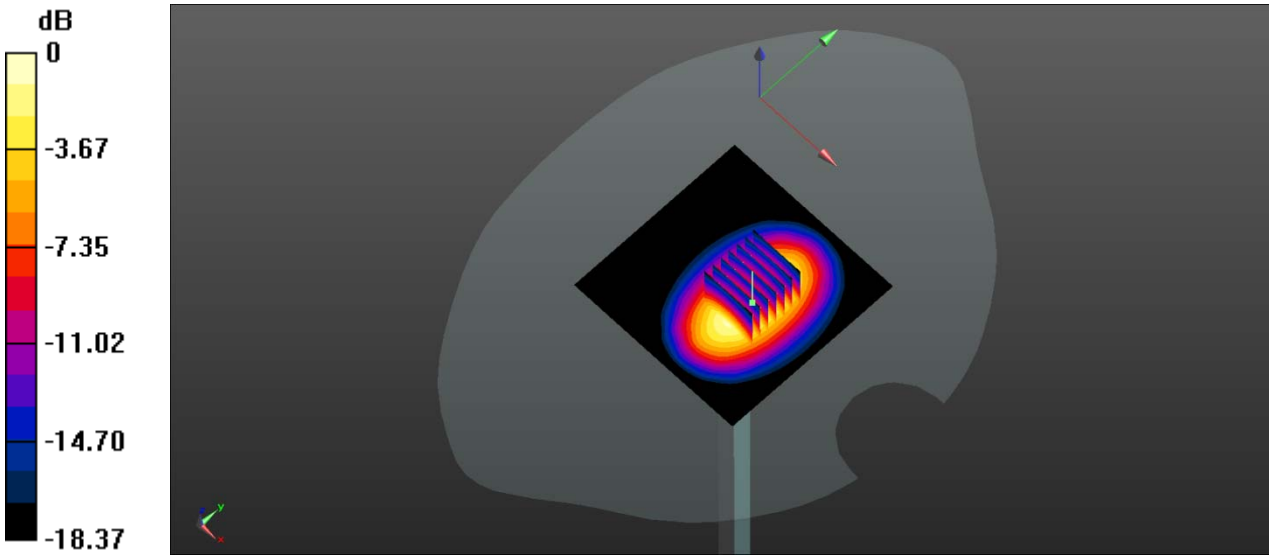
CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 37.81 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 7.05 W/kg

SAR(1 g) = 3.63 W/kg; SAR(10 g) = 1.87 W/kg

Maximum value of SAR (measured) = 4.09 W/kg



0 dB = 4.09 W/kg

System Performance Check Data (1900MHz Head)

Date: 2020.01.02

Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.435 S/m; ε_r = 40.56; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1900 100mw/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.73 W/kg

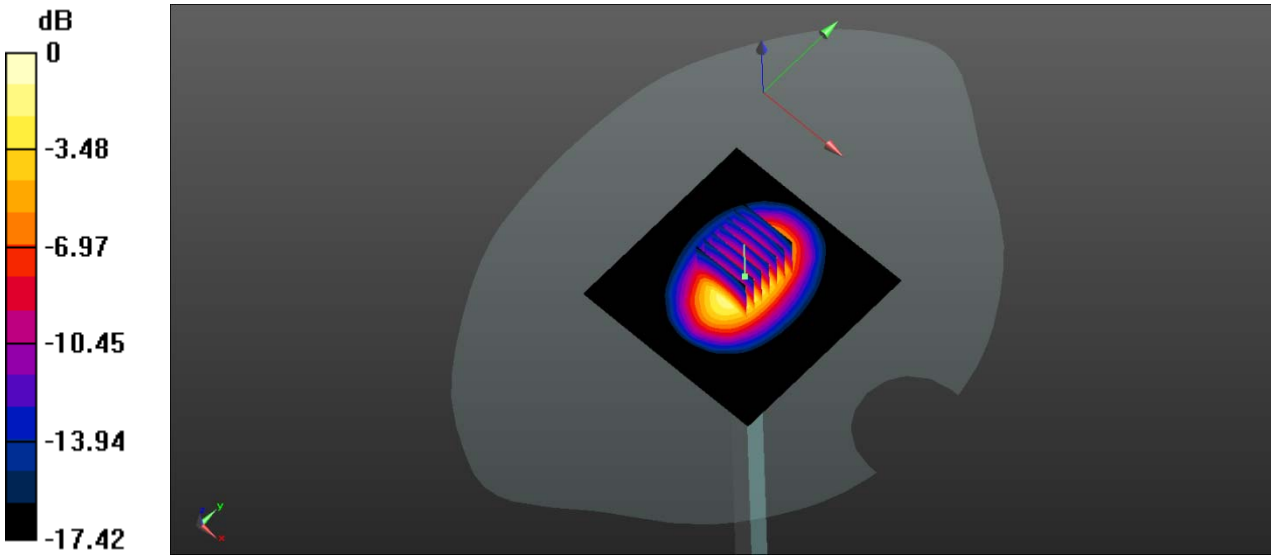
CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.32 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 7.78 W/kg

SAR(1 g) = 4.15 W/kg; SAR(10 g) = 2.16 W/kg

Maximum value of SAR (measured) = 4.67 W/kg



0 dB = 4.67 W/kg

System Performance Check Data (1900MHz Head)

Date: 2020.01.16

Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.45 S/m; ε_r = 38.52; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1900 100mw/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.79 W/kg

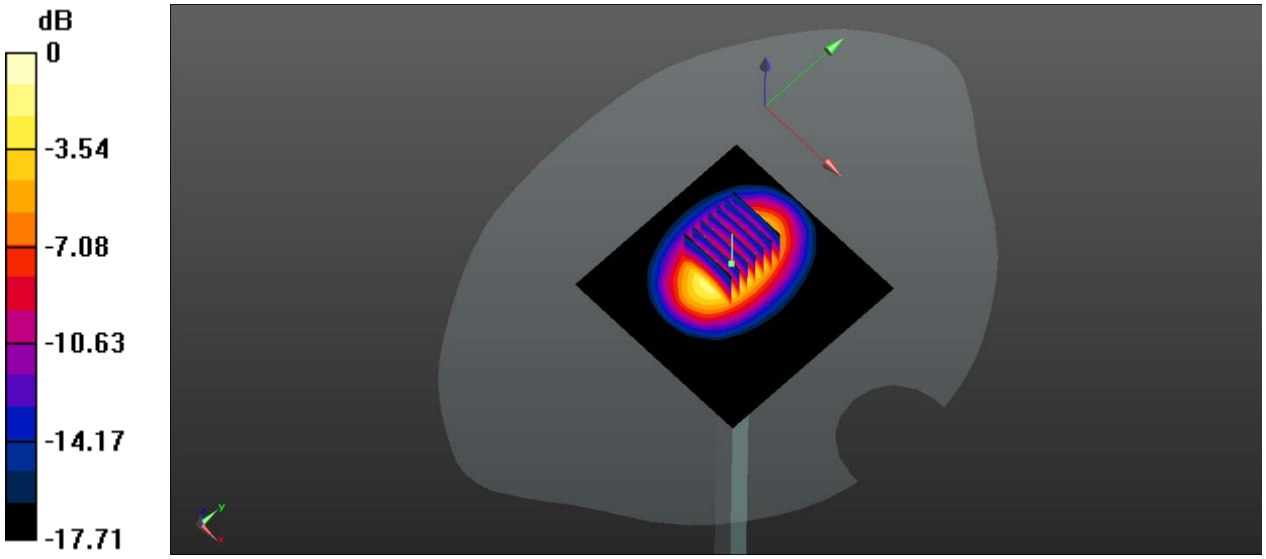
CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 45.05 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 8.23 W/kg

SAR(1 g) = 4.29 W/kg; SAR(10 g) = 2.18 W/kg

Maximum value of SAR (measured) = 4.76 W/kg



0 dB = 4.76 W/kg

System Performance Check Data (1900MHz Head)

Date: 2020.01.17

Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.421 S/m; ε_r = 39.305; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1900 100mw/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.32 W/kg

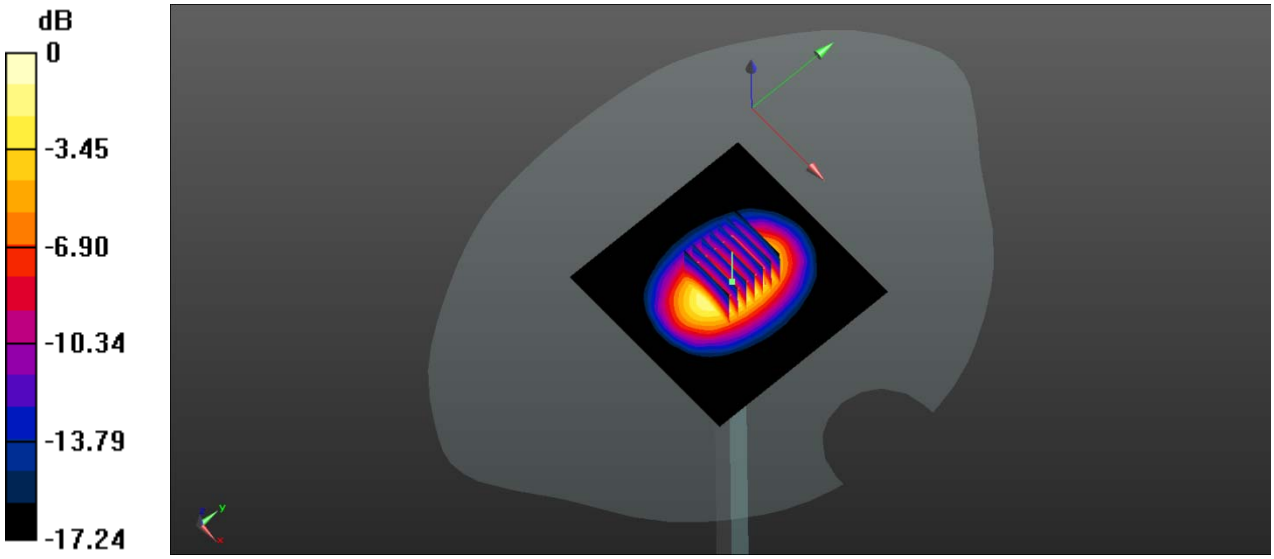
CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.58 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 7.16 W/kg

SAR(1 g) = 3.83 W/kg; SAR(10 g) = 1.98 W/kg

Maximum value of SAR (measured) = 4.30 W/kg



0 dB = 4.30 W/kg

System Performance Check Data (2450MHz Head)

Date: 2020.01.11

Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2450 MHz; σ = 1.77 S/m; ε_r = 38.075; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2450 100mw/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.21 W/kg

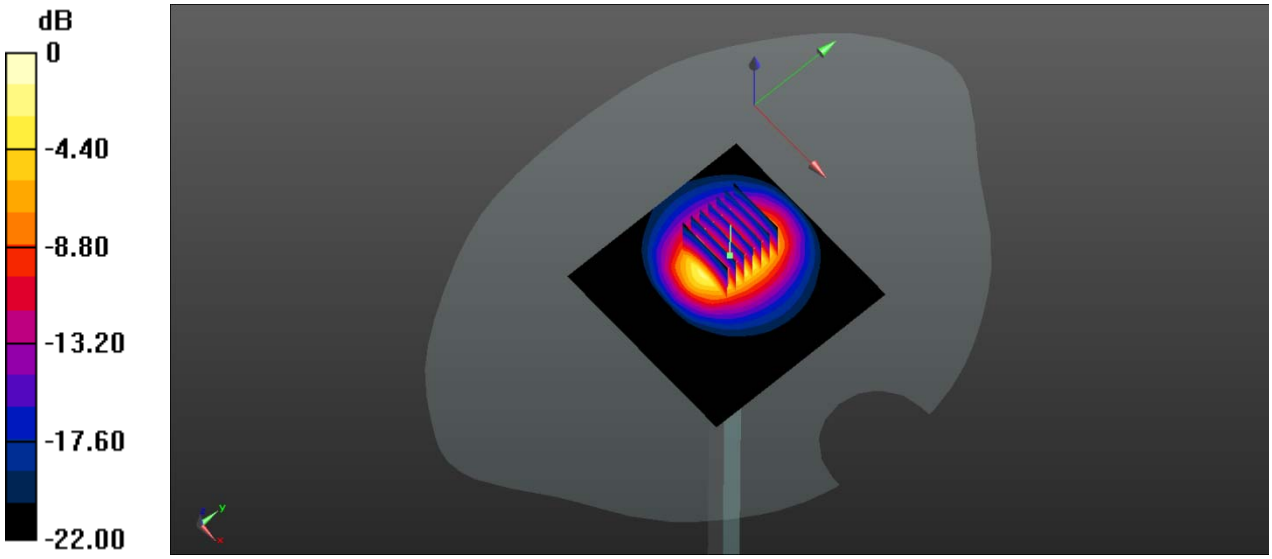
CW 2450 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.06 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 11.9 W/kg

SAR(1 g) = 5.45 W/kg; SAR(10 g) = 2.49 W/kg

Maximum value of SAR (measured) = 6.17 W/kg



0 dB = 6.17 W/kg

System Performance Check Data (2600MHz Head)

Date: 2020.01.19

Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used (extrapolated): f = 2600 MHz; σ = 2.03 S/m; ε_r = 40.05; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2600 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.25 W/kg

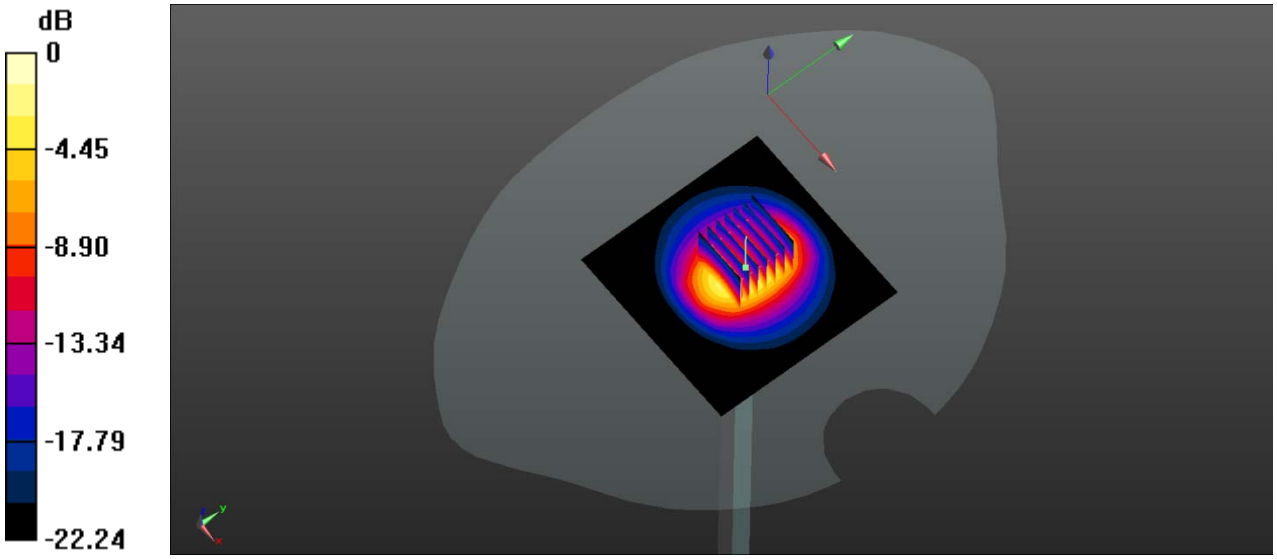
CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 37.58 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 12.1 W/kg

SAR(1 g) = 5.29 W/kg; SAR(10 g) = 2.41 W/kg

Maximum value of SAR (measured) = 6.07 W/kg



0 dB = 6.07 W/kg

System Performance Check Data (2600MHz Head)

Date: 2020.01.18

Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used (extrapolated): f = 2600 MHz; σ = 1.97 S/m; ε_r = 39.102; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2600 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.42 W/kg

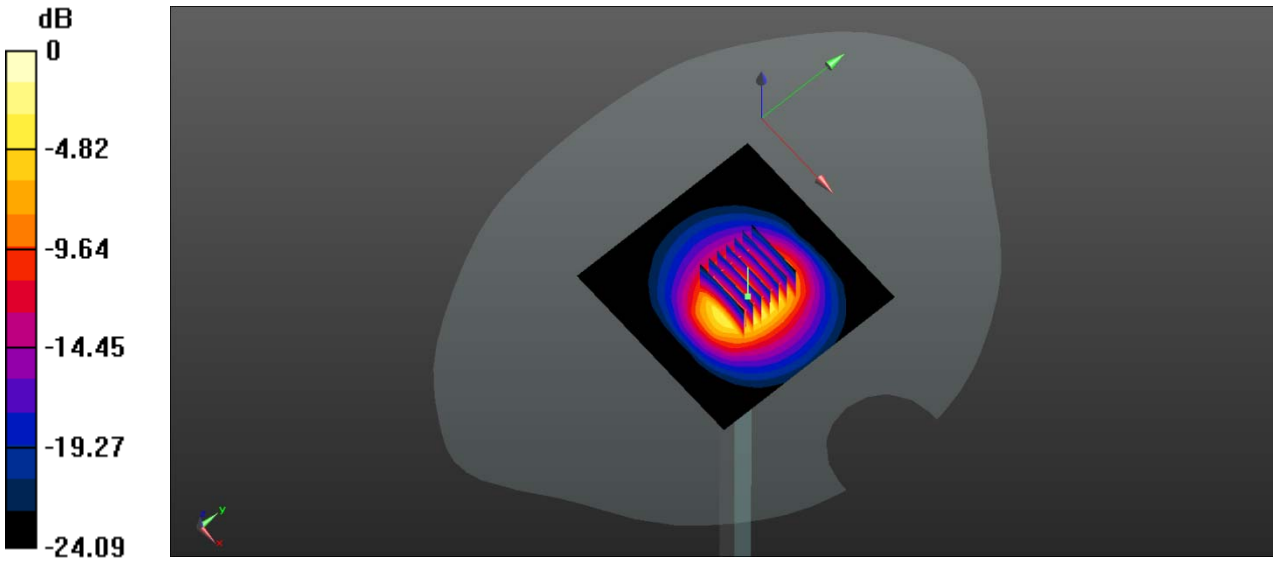
CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 47.91 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 5.68 W/kg; SAR(10 g) = 2.47 W/kg

Maximum value of SAR (measured) = 6.45 W/kg



0 dB = 6.45 W/kg

System Performance Check Data (2600MHz Head)

Date: 2020.01.06

Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2600 MHz; σ = 1.968 S/m; ε_r = 38.385; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2600 100mw/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.02 W/kg

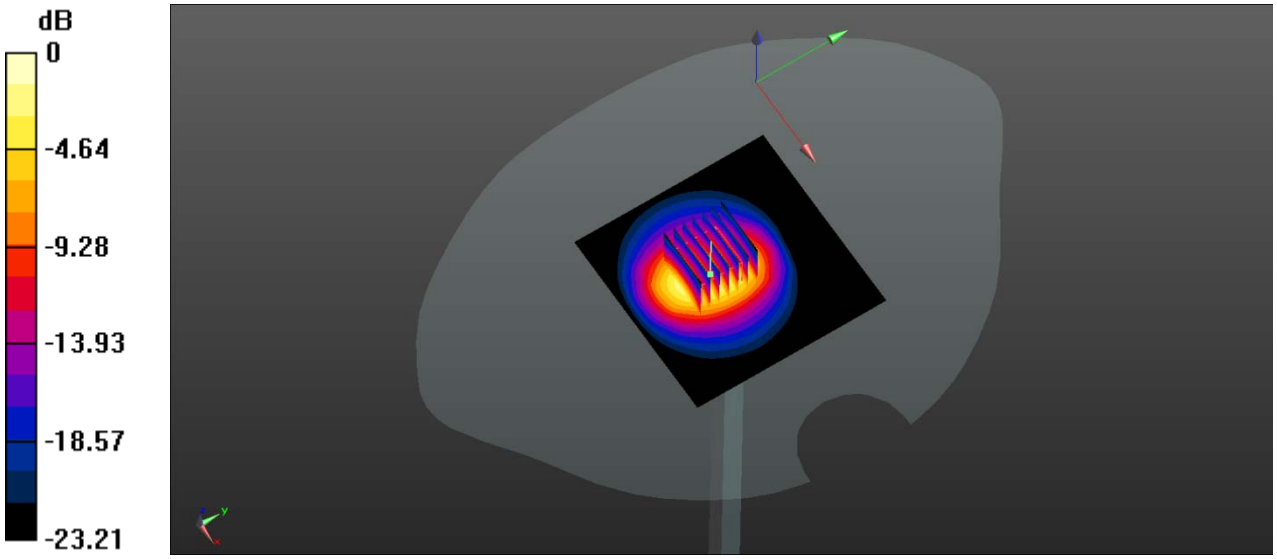
CW 2600 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.52 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 11.6 W/kg

SAR(1 g) = 5.22 W/kg; SAR(10 g) = 2.34 W/kg

Maximum value of SAR (measured) = 5.94 W/kg



0 dB = 5.94 W/kg

System Performance Check Data (2600MHz Head)

Date: 2020.01.05

Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2600 MHz; σ = 1.988 S/m; ε_r = 37.859; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2600 100mw/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 5.81 W/kg

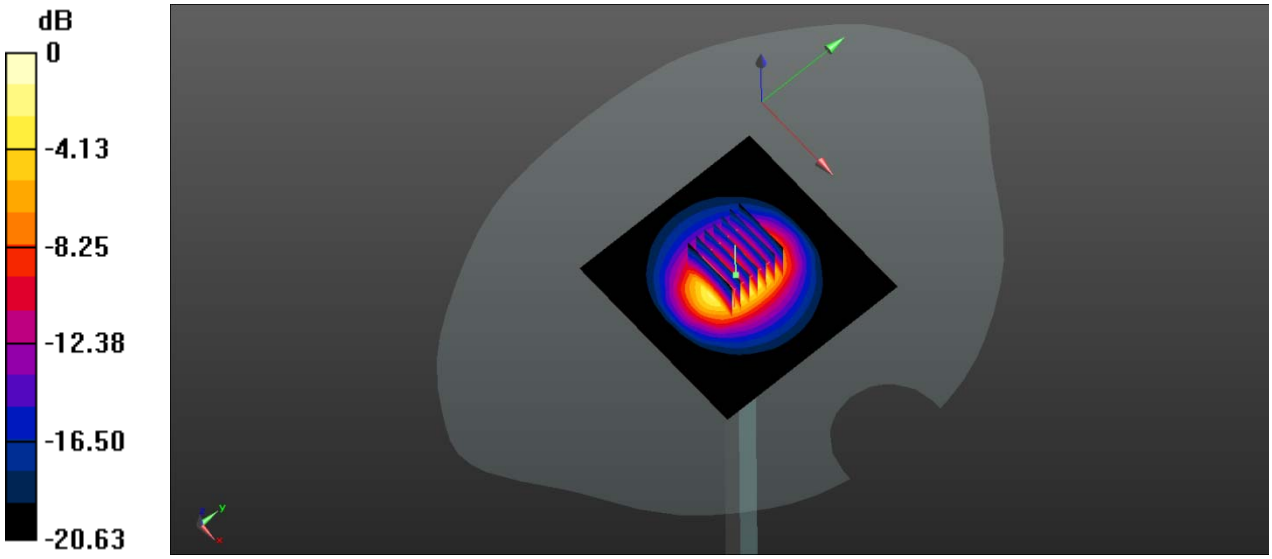
CW 2600 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.79 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 11.1 W/kg

SAR(1 g) = 5.19 W/kg; SAR(10 g) = 2.31 W/kg

Maximum value of SAR (measured) = 5.75 W/kg



0 dB = 5.75 W/kg

ANNEX C TEST DATA

MEAS.1 Right Head with Cheek on High Channel in GPRS850 2Slots mode with Up Antenna

Date: 2019.12.27

Communication System Band: GPRS 850; Frequency: 848.8 MHz;Duty Cycle: 1:4.15

Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.946 S/m; ε_r = 40.35; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch251/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.563 W/kg

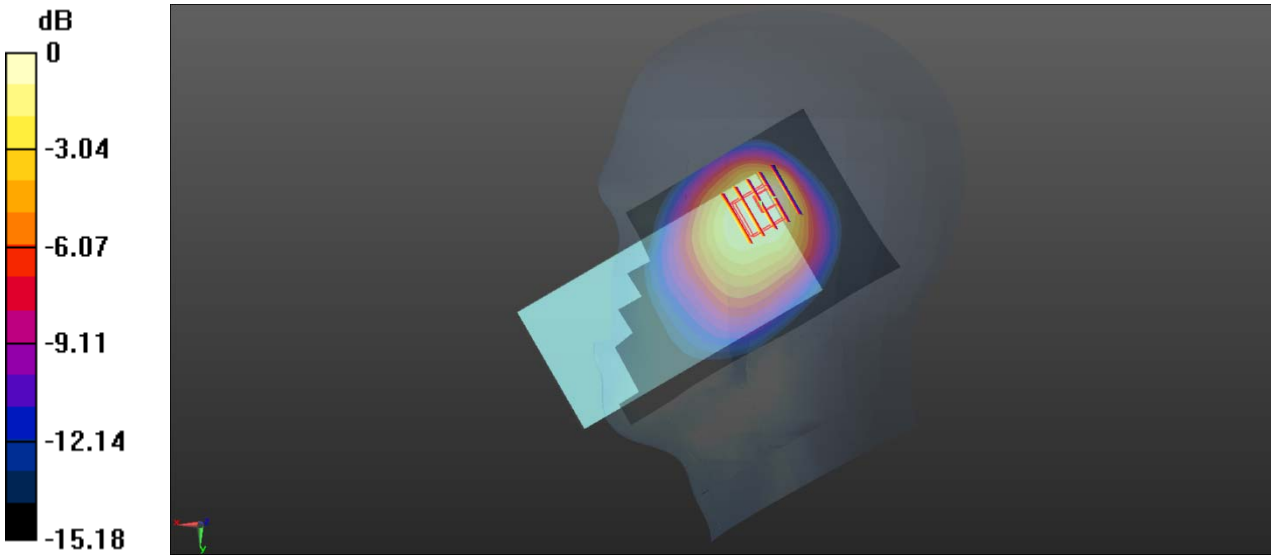
Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.31 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.841 W/kg

SAR(1 g) = 0.486 W/kg; SAR(10 g) = 0.312 W/kg

Maximum value of SAR (measured) = 0.508 W/kg



0 dB = 0.508 W/kg

MEAS.2 Body Plane with Back Side 15mm on High Channel in GPRS850 2Slots mode with Down Antenna

Date: 2019.12.27

Communication System Band: GPRS 850; Frequency: 848.8 MHz;Duty Cycle: 1:4.15

Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.946 S/m; ε_r = 40.35; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch251/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.142 W/kg

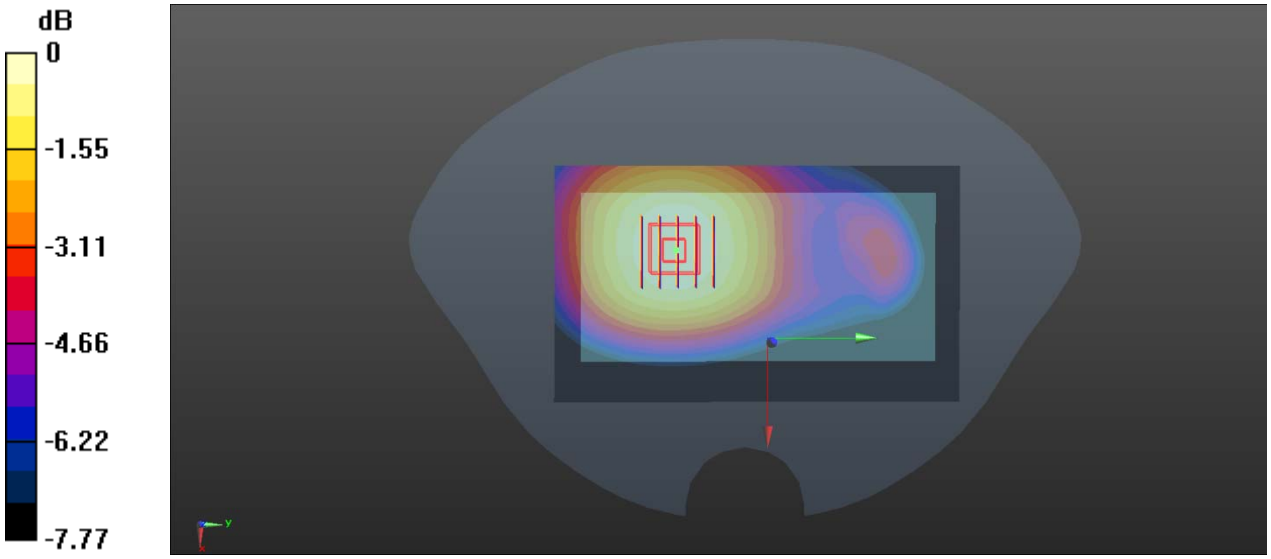
Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.58 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.169 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.104 W/kg

Maximum value of SAR (measured) = 0.142 W/kg



0 dB = 0.142 W/kg

MEAS.3 Body Plane with Back Side 10mm on High Channel in GPRS850 2Slots mode with Down Antenna

Date: 2019.12.27

Communication System Band: GPRS 850; Frequency: 848.8 MHz;Duty Cycle: 1:4.15

Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.946 S/m; ε_r = 40.35; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch251/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.174 W/kg

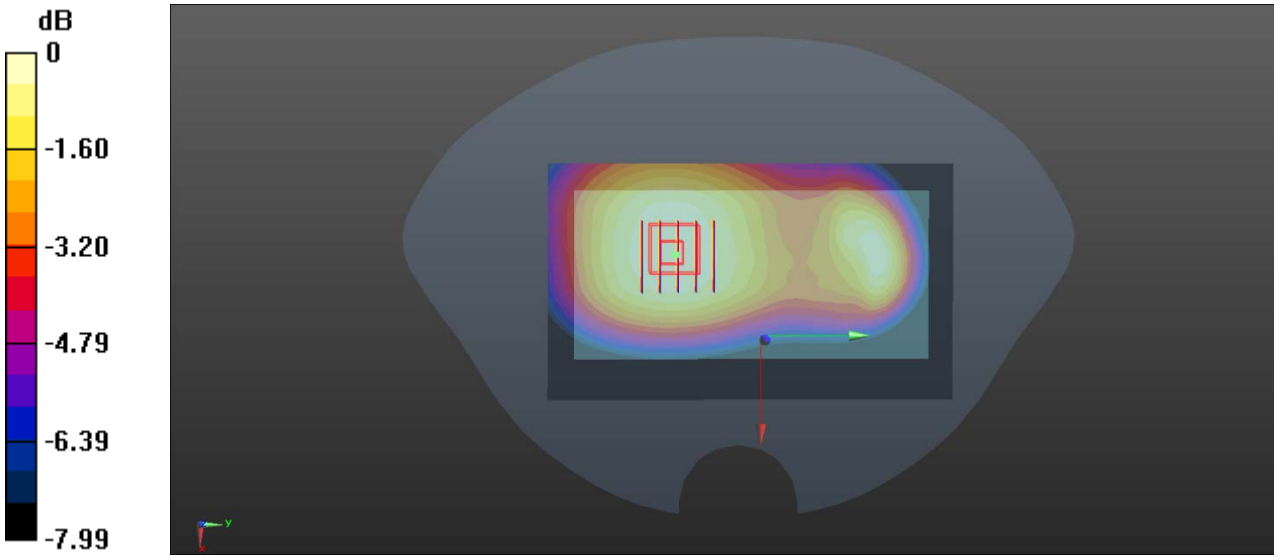
Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.32 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.205 W/kg

SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.128 W/kg

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



0 dB = 0.173 W/kg

MEAS.4 Right Head with Tilt on Middle Channel in GPRS1900 4Slots mode with Up Antenna

Date: 2020.01.02

Communication System Band: GPRS 1900; Frequency: 1880 MHz;Duty Cycle: 1:2.0

Medium parameters used: f = 1880 MHz; σ = 1.431 S/m; ε_r = 40.634; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch661/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.863 W/kg

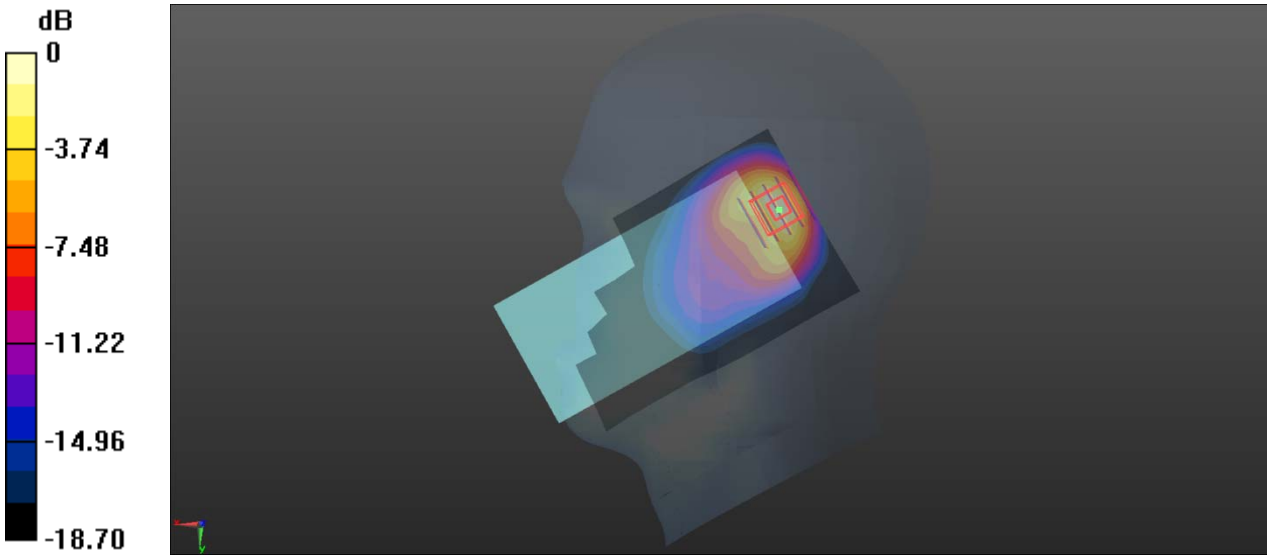
Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.99 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.720 W/kg; SAR(10 g) = 0.345 W/kg

Maximum value of SAR (measured) = 0.863 W/kg



0 dB = 0.863 W/kg

MEAS.5 Body Plane with Back Side 15mm on Low Channel in GPRS1900 4Slots mode with Down Antenna

Date: 2020.01.02

Communication System Band: GPRS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:2.0

Medium parameters used: f = 1850.2 MHz; σ = 1.42 S/m; ε_r = 40.938; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch512/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

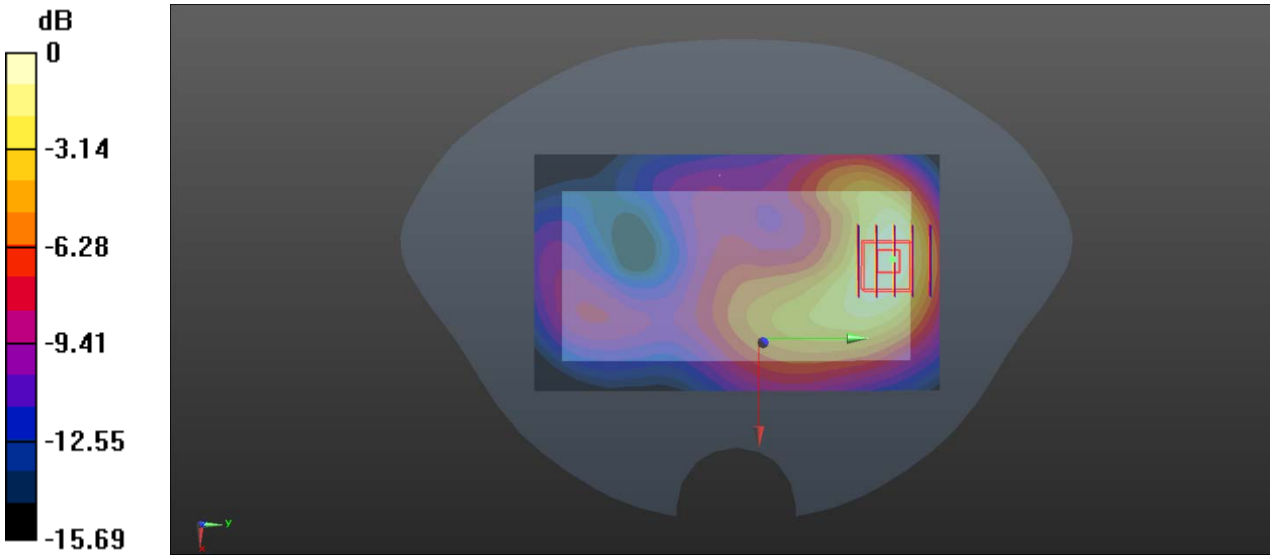
Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.562 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.332 W/kg

SAR(1 g) = 0.208 W/kg; SAR(10 g) = 0.123 W/kg

Maximum value of SAR (measured) = 0.225 W/kg



0 dB = 0.225 W/kg

MEAS.6 Body Plane with Bottom Edge 10mm on Low Channel in GPRS1900 4Slots mode with Down Antenna

Date: 2020.01.02

Communication System Band: GPRS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:2.0

Medium parameters used: f = 1850.2 MHz; σ = 1.42 S/m; ε_r = 40.938; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch512/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

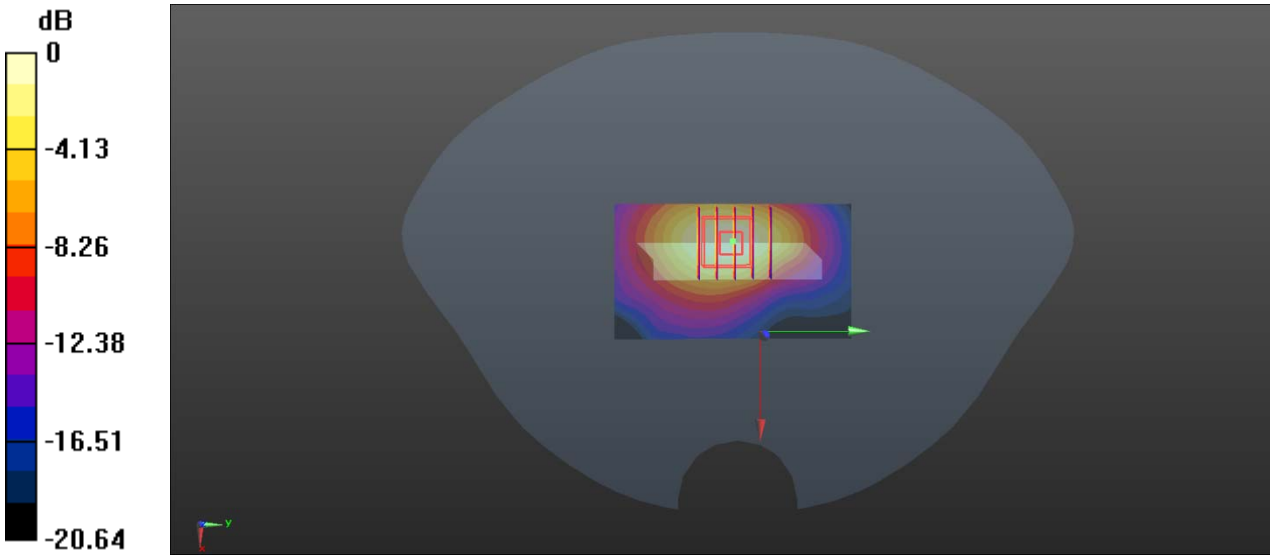
Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.884 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.638 W/kg

SAR(1 g) = 0.367 W/kg; SAR(10 g) = 0.197 W/kg

Maximum value of SAR (measured) = 0.406 W/kg



0 dB = 0.406 W/kg

MEAS.7 Right Head with Tilt on Low Channel in WCDMA Band 2 mode with Up Antenna

Date: 2020.01.16

Communication System Band: Ⅱ; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.425 S/m; ε_r = 39.24; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.657 W/kg

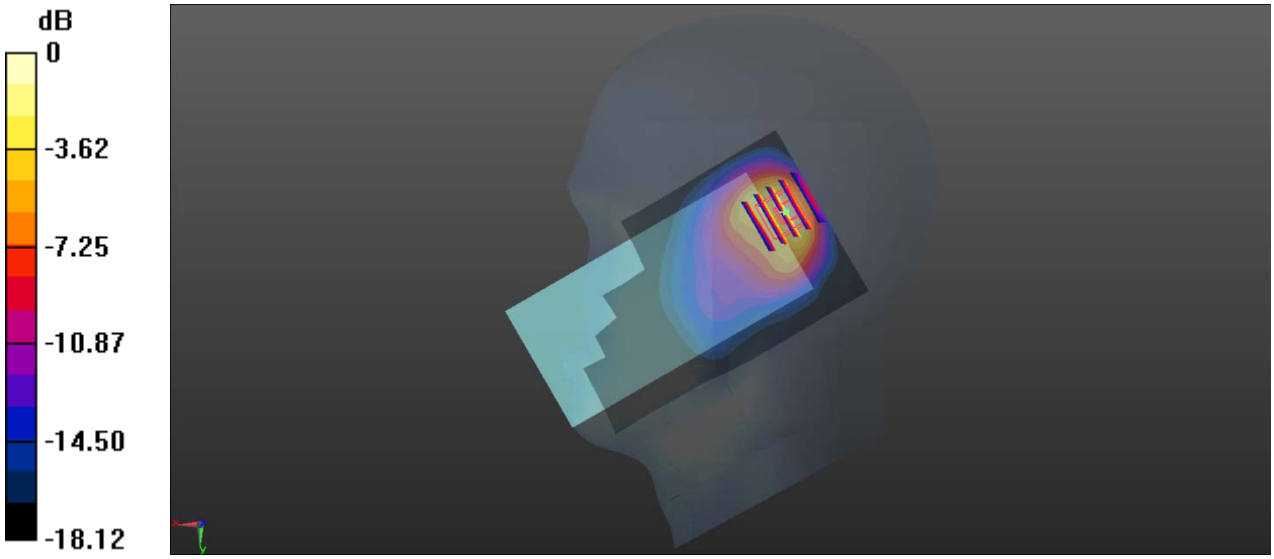
Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.71 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.533 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 0.641 W/kg



0 dB = 0.641 W/kg

MEAS.8 Body Plane with Back Side 15mm on Low Channel in WCDMA Band 2 mode with Down Antenna

Date: 2020.01.16

Communication System Band: Ⅱ; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.425 S/m; ε_r = 39.24; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.143 W/kg

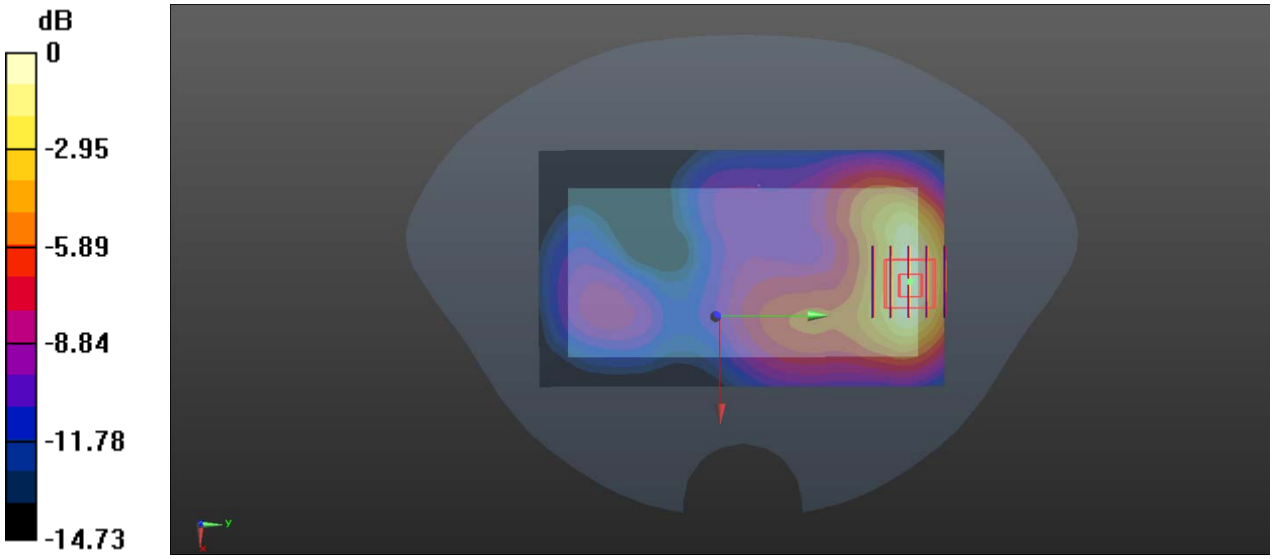
Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.270 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.209 W/kg

SAR(1 g) = 0.130 W/kg; SAR(10 g) = 0.075 W/kg

Maximum value of SAR (measured) = 0.143 W/kg



0 dB = 0.143 W/kg

MEAS.9 Body Plane with Bottom Edge 10mm on Low Channel in WCDMA Band 2 mode with Down Antenna

Date: 2020.01.16

Communication System Band: Ⅱ; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.425 S/m; ε_r = 39.24; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.405 W/kg

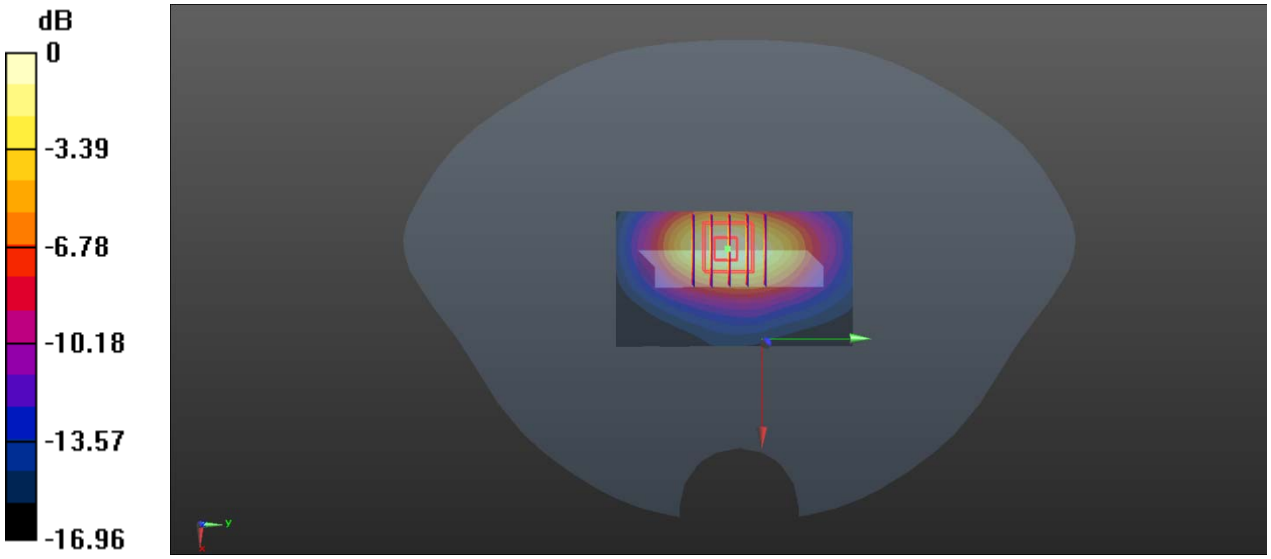
Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.837 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.609 W/kg

SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.186 W/kg

Maximum value of SAR (measured) = 0.392 W/kg



0 dB = 0.392 W/kg

MEAS.10 Body Plane with Bottom Edge 0mm on Low Channel in WCDMA Band 2 mode with Down Antenna

Date: 2020.01.16

Communication System Band: Ⅱ; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.425 S/m; ε_r = 39.24; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.52 W/kg

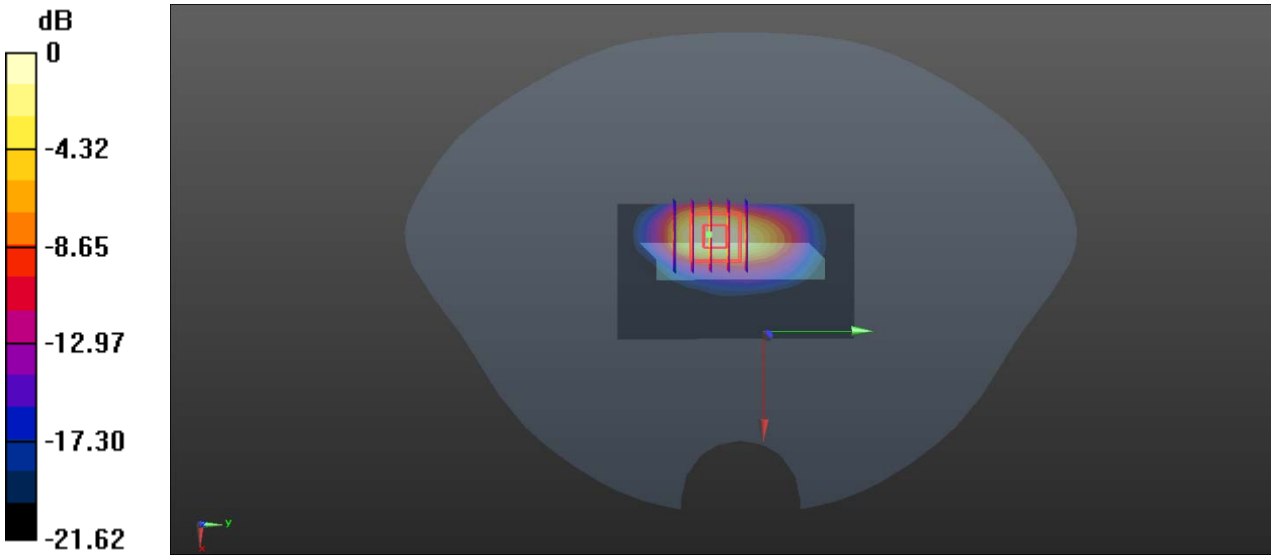
Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.68 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 6.41 W/kg

SAR(1 g) = 2.83 W/kg; SAR(10 g) = 1.18 W/kg

Maximum value of SAR (measured) = 3.30 W/kg



0 dB = 3.30 W/kg

MEAS.11 Right Head with Tilt on Middle Channel in WCDMA Band 4 mode with Up Antenna

Date: 2019.12.30

Communication System Band: Ⅳ; Frequency: 1732.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.338 S/m; ε_r = 39.23; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1412/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.434 W/kg

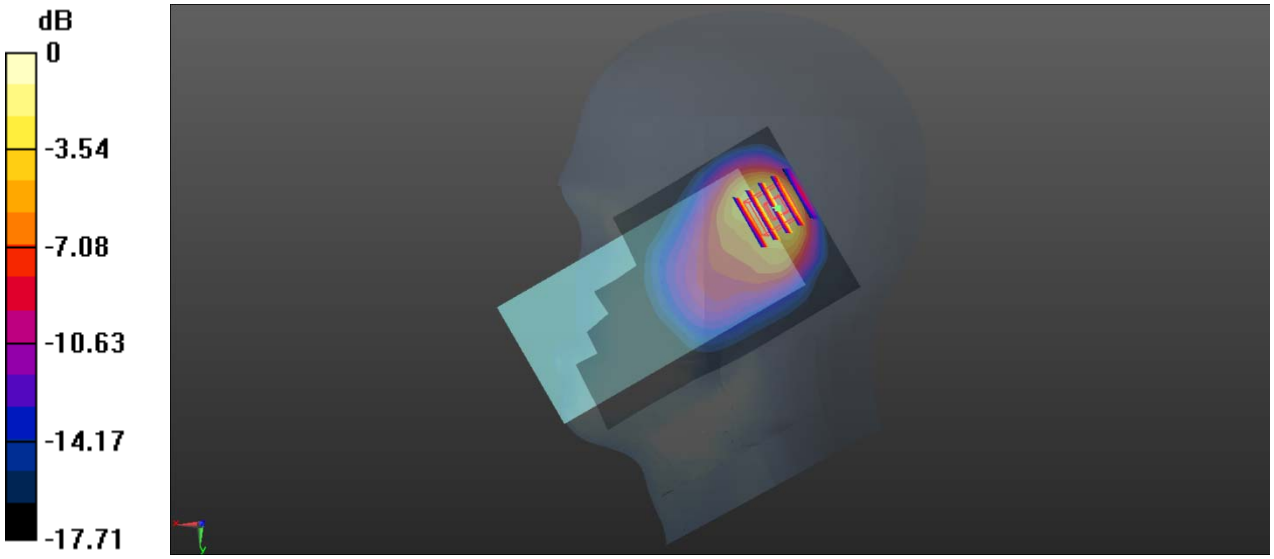
Ch1412/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.45 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.655 W/kg

SAR(1 g) = 0.356 W/kg; SAR(10 g) = 0.183 W/kg

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



0 dB = 0.422 W/kg

MEAS.12 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band 4 mode with Down Antenna

Date: 2019.12.30

Communication System Band: Ⅳ; Frequency: 1732.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.338 S/m; ε_r = 39.23; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1412/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.101 W/kg

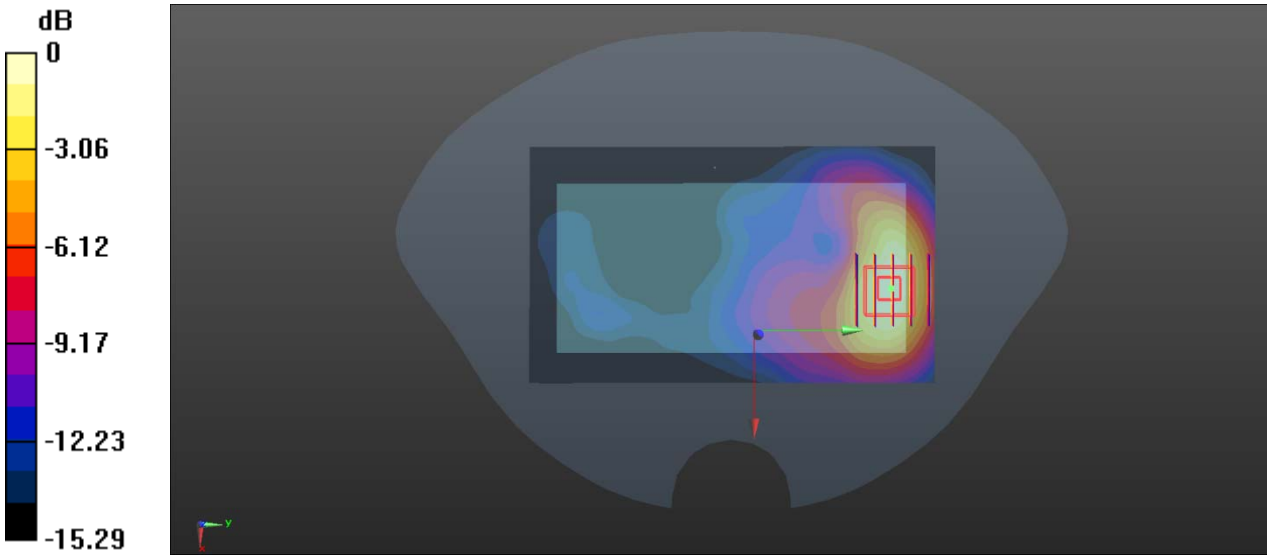
Ch1412/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.750 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.149 W/kg

SAR(1 g) = 0.094 W/kg; SAR(10 g) = 0.055 W/kg

Maximum value of SAR (measured) = 0.104 W/kg



0 dB = 0.104 W/kg

MEAS.13 Body Plane with Bottom Edge 10mm on Middle Channel in WCDMA Band 4 mode with Down Antenna

Date: 2019.12.30

Communication System Band: Ⅳ; Frequency: 1732.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.338 S/m; ε_r = 39.23; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1412/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.346 W/kg

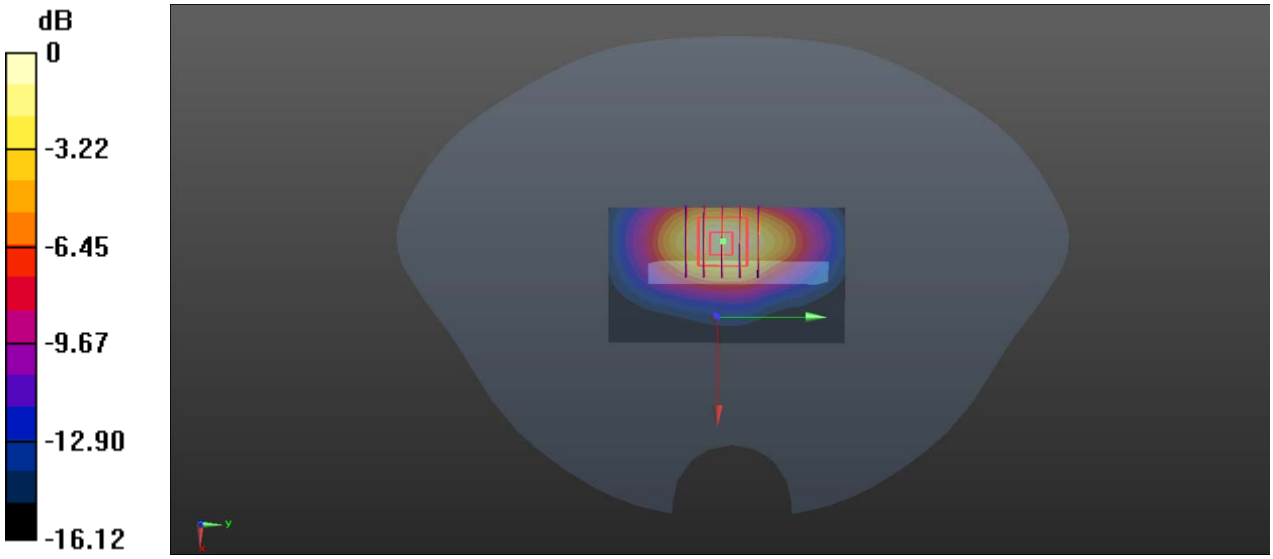
Ch1412/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.773 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.491 W/kg

SAR(1 g) = 0.297 W/kg; SAR(10 g) = 0.165 W/kg

Maximum value of SAR (measured) = 0.330 W/kg



0 dB = 0.330 W/kg

MEAS.14 Body Plane with Bottom Edge 0mm on Middle Channel in WCDMA Band 4 mode with Down Antenna

Date: 2019.12.30

Communication System Band: Ⅳ; Frequency: 1732.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.338 S/m; ε_r = 39.23; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1412/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.81 W/kg

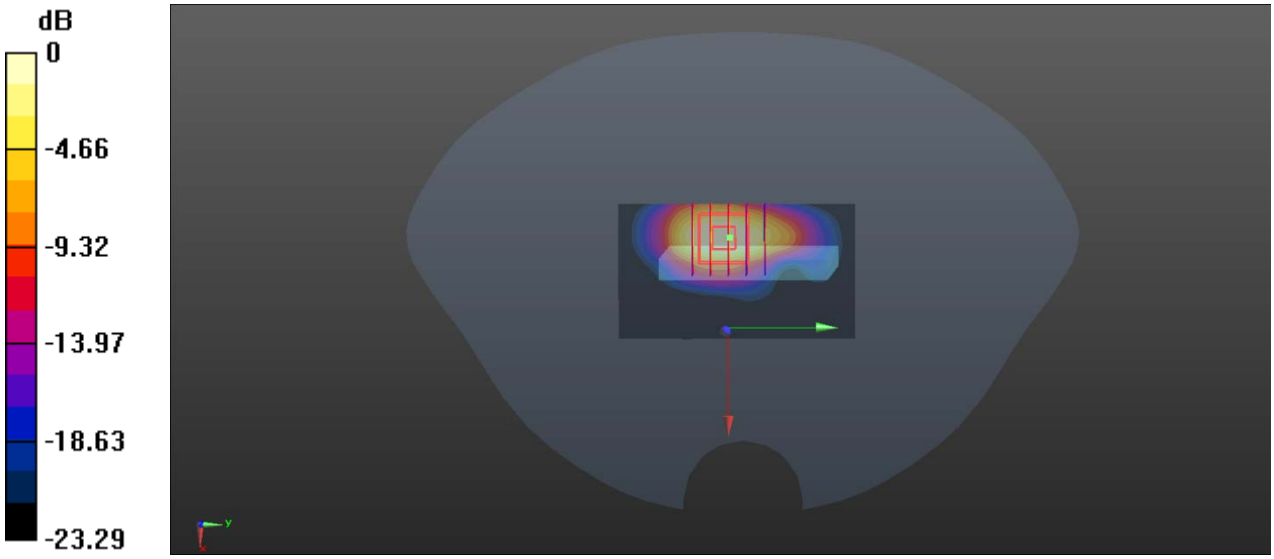
Ch1412/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.32 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.04 W/kg

SAR(1 g) = 1.47 W/kg; SAR(10 g) = 0.669 W/kg

Maximum value of SAR (measured) = 1.73 W/kg



0 dB = 1.73 W/kg

MEAS.15 Right Head with Cheek on Low Channel in WCDMA Band 5 mode with Up Antenna

Date: 2019.12.28

Communication System Band: V; Frequency: 826.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.891 S/m; ε_r = 41.092; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.2 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.488 W/kg

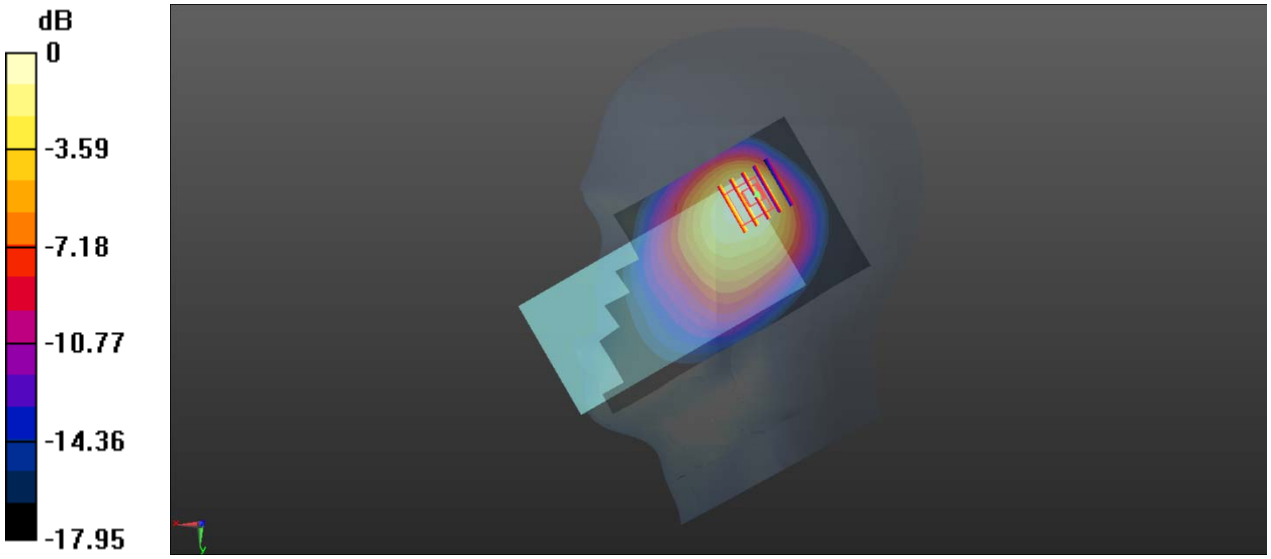
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.49 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.827 W/kg

SAR(1 g) = 0.441 W/kg; SAR(10 g) = 0.269 W/kg

Maximum value of SAR (measured) = 0.468 W/kg



0 dB = 0.468 W/kg

MEAS.16 Body Plane with Back Side 15mm on Low Channel in WCDMA Band 5 mode with Down Antenna

Date: 2019.12.28

Communication System Band: V; Frequency: 826.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.891 S/m; ε_r = 41.092; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.220 W/kg

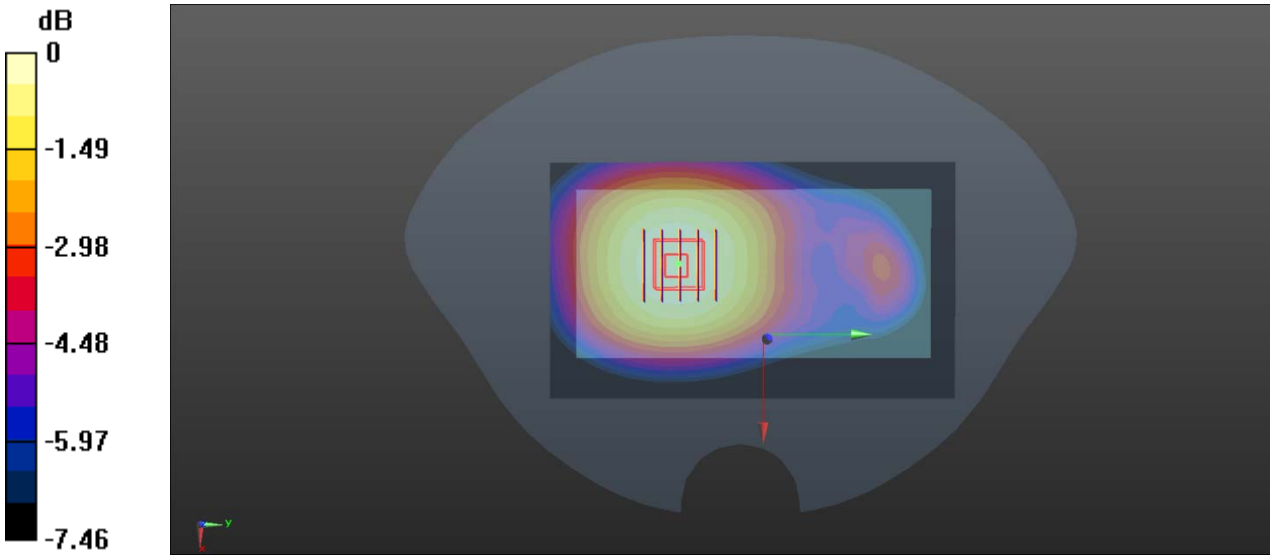
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.87 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.257 W/kg

SAR(1 g) = 0.210 W/kg; SAR(10 g) = 0.162 W/kg

Maximum value of SAR (measured) = 0.220 W/kg



0 dB = 0.220 W/kg

MEAS.17 Body Plane with Back Side 10mm on Low Channel in WCDMA Band 5 mode with Down Antenna

Date: 2019.12.28

Communication System Band: V; Frequency: 826.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.891 S/m; ε_r = 41.092; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.255 W/kg

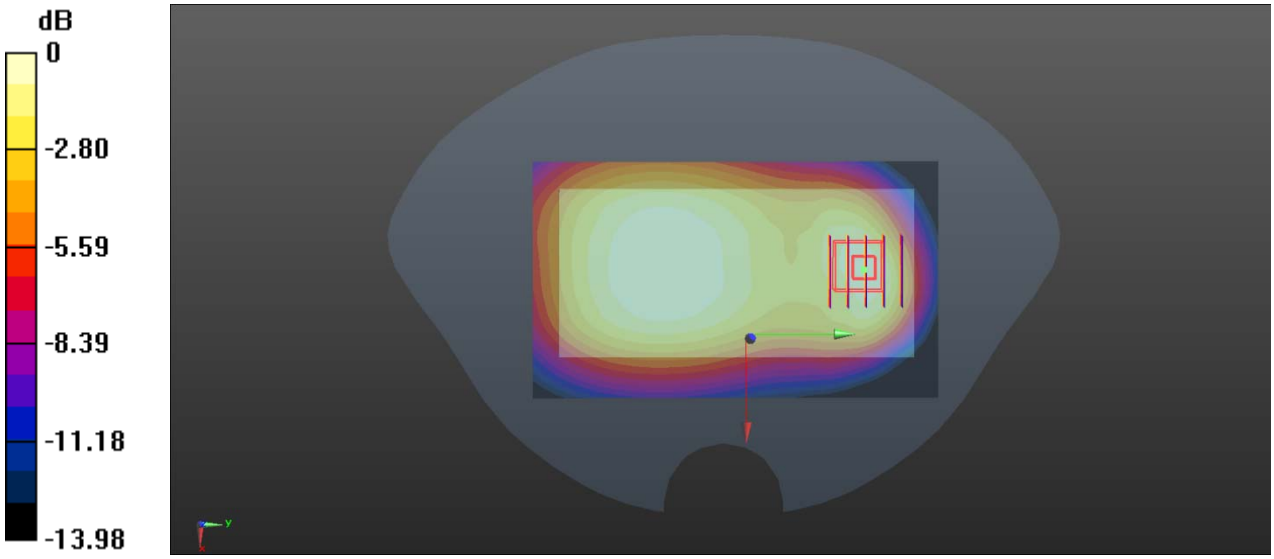
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.46 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.136 W/kg

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



0 dB = 0.248 W/kg

MEAS.18 Right Head with Cheek on Middle Channel in LTE Band 2 mode with Up Antenna

Date: 2020.01.17

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.416 S/m; ε_r = 39.535; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18900/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.672 W/kg

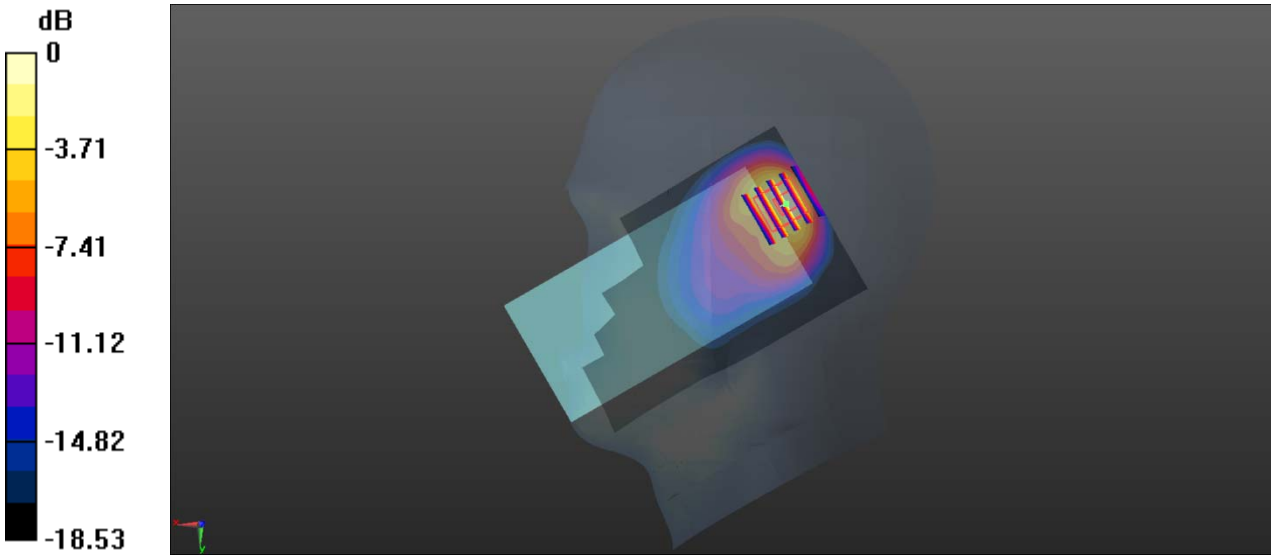
Ch18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.24 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.558 W/kg; SAR(10 g) = 0.266 W/kg

Maximum value of SAR (measured) = 0.673 W/kg



0 dB = 0.673 W/kg

MEAS.19 Body Plane with Back Side 15mm on Middle Channel in LTE Band 2 mode with Down Antenna

Date: 2020.01.17

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.416 S/m; ε_r = 39.535; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18900/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

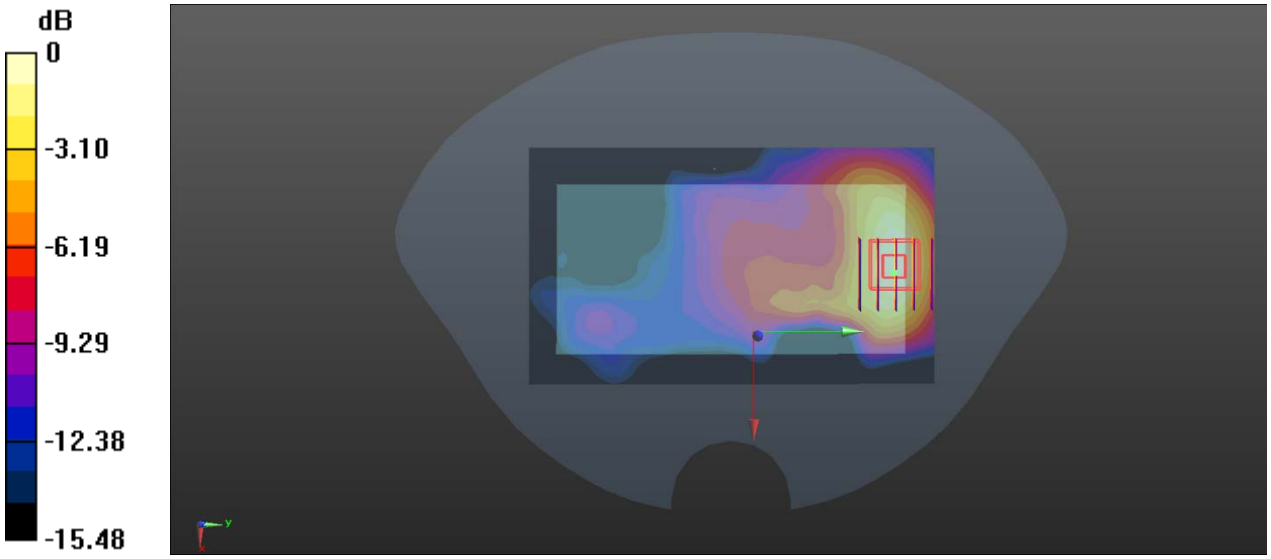
Ch18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.103 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.165 W/kg

SAR(1 g) = 0.100 W/kg; SAR(10 g) = 0.057 W/kg

Maximum value of SAR (measured) = 0.110 W/kg



0 dB = 0.110 W/kg

MEAS.20 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band 2 mode with Down Antenna

Date: 2020.01.17

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.416 S/m; ε_r = 39.535; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18900/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.405 W/kg

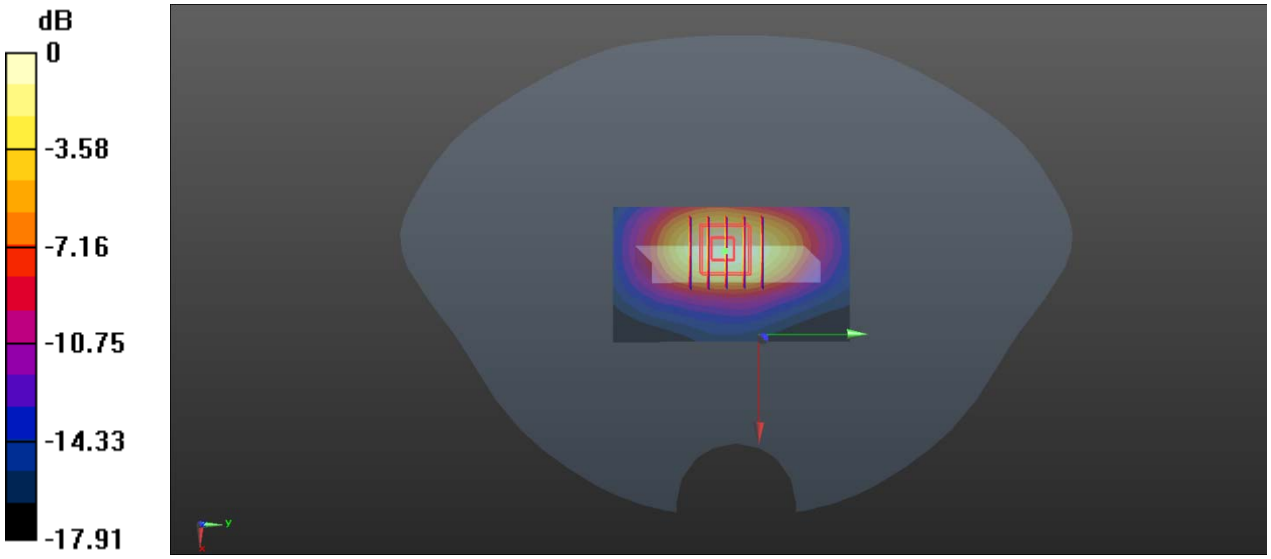
Ch18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.37 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.609 W/kg

SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.186 W/kg

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



0 dB = 0.389 W/kg

MEAS.21 Body Plane with Bottom Edge 0mm on Middle Channel in LTE Band 2 mode with Down Antenna

Date: 2020.01.17

Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.416 S/m; ε_r = 39.535; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.38, 8.38, 8.38); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18900/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.88 W/kg

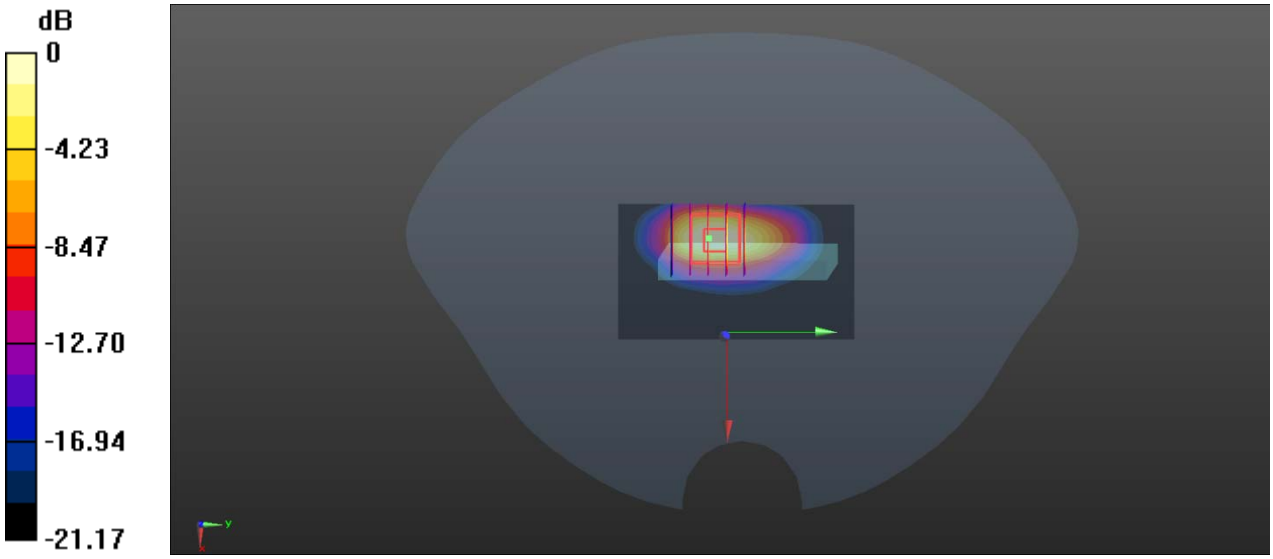
Ch18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.70 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 5.25 W/kg

SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.01 W/kg

Maximum value of SAR (measured) = 2.83 W/kg



0 dB = 2.83 W/kg

MEAS.22 Right Head with Tilt on Middle Channel in LTE Band 4 mode with Up Antenna

Date: 2019.12.31

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.38 S/m; ε_r = 39.882; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20175/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

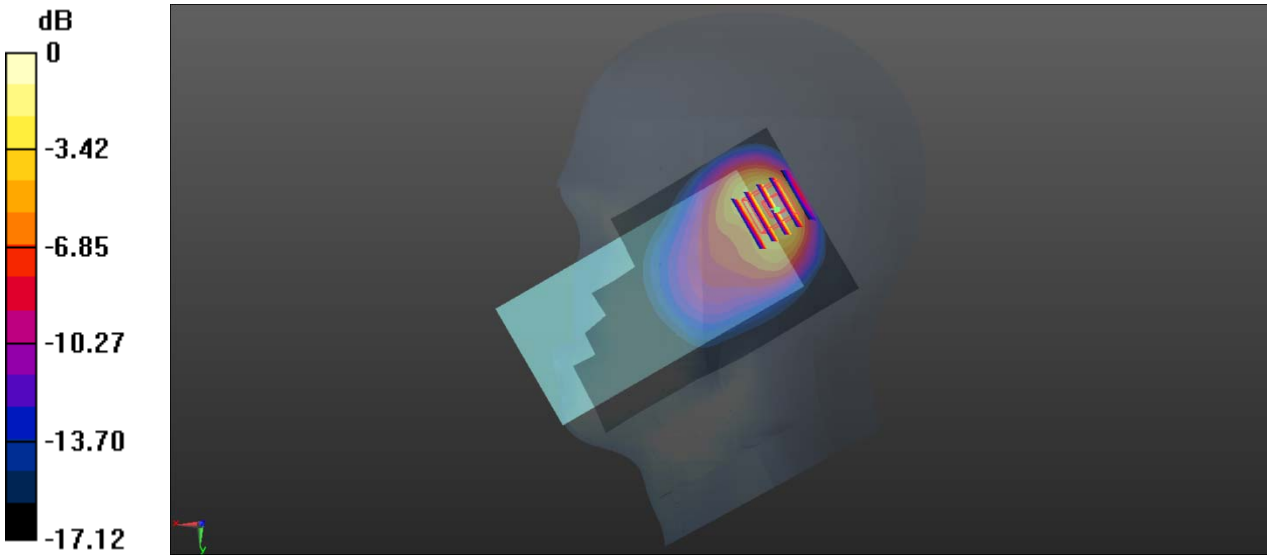
Ch20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.52 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.823 W/kg

SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.216 W/kg

Maximum value of SAR (measured) = 0.503 W/kg



0 dB = 0.503 W/kg

MEAS.23 Body Plane with Back Side 15mm on Middle Channel in LTE Band 4 mode with Down Antenna

Date: 2019.12.31

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.38 S/m; ε_r = 39.882; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20175/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

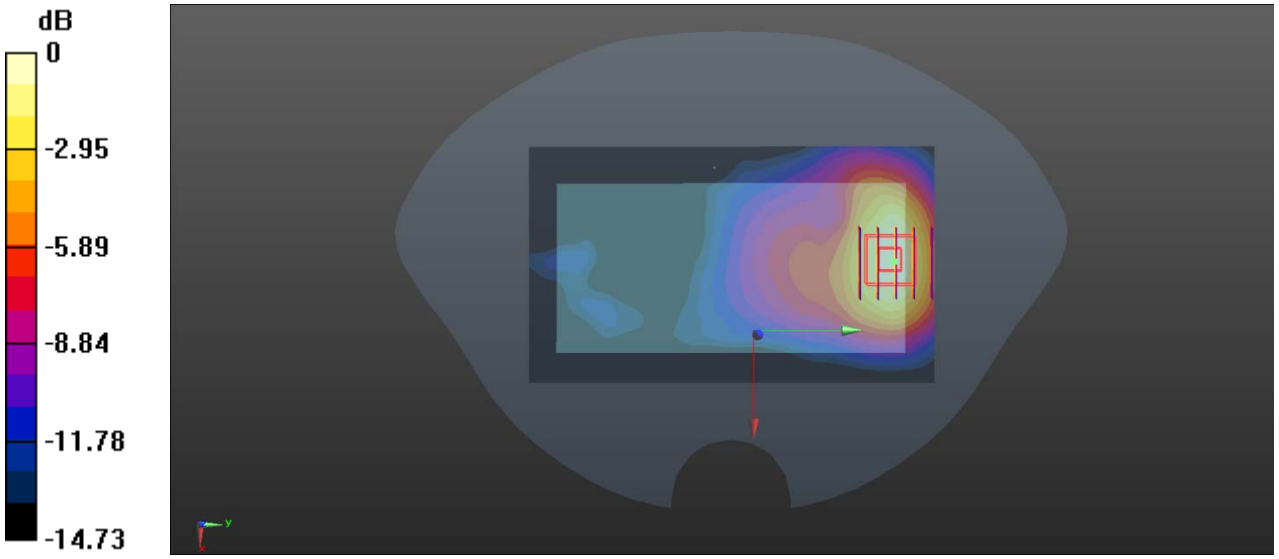
Ch20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.007 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.210 W/kg

SAR(1 g) = 0.138 W/kg; SAR(10 g) = 0.083 W/kg

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



0 dB = 0.151 W/kg

MEAS.24 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band 4 mode with Down Antenna

Date: 2019.12.31

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.38 S/m; ε_r = 39.882; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20175/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.391 W/kg

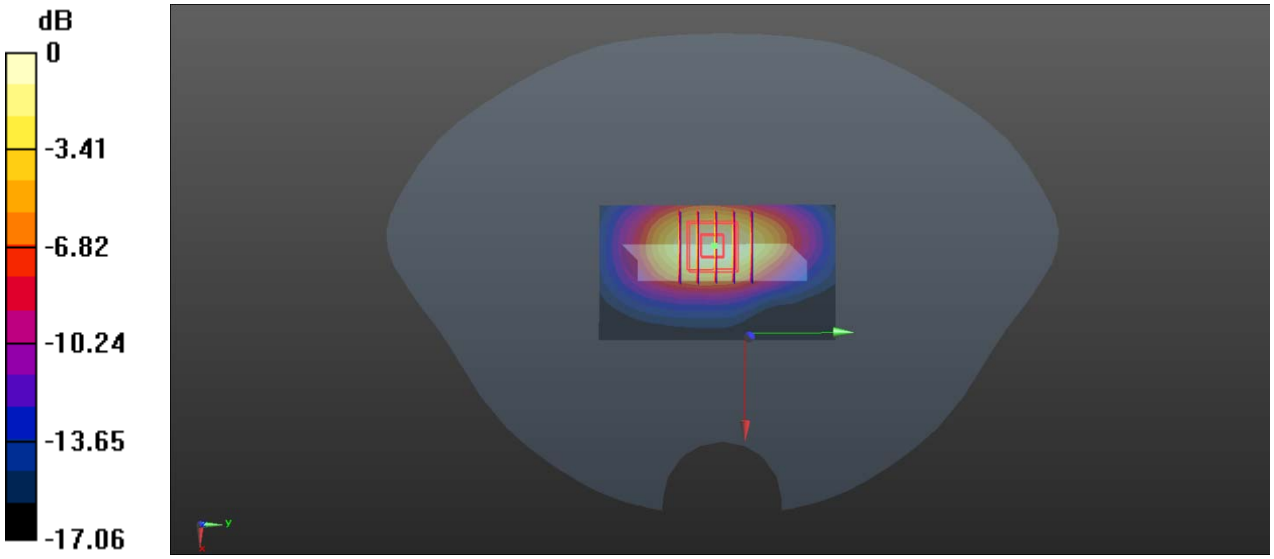
Ch20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.01 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.554 W/kg

SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.183 W/kg

Maximum value of SAR (measured) = 0.374 W/kg



0 dB = 0.374 W/kg

MEAS.25 Body Plane with Bottom Edge 0mm on Middle Channel in LTE Band 4 mode with Down Antenna

Date: 2019.12.31

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.38 S/m; ε_r = 39.882; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20175/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.13 W/kg

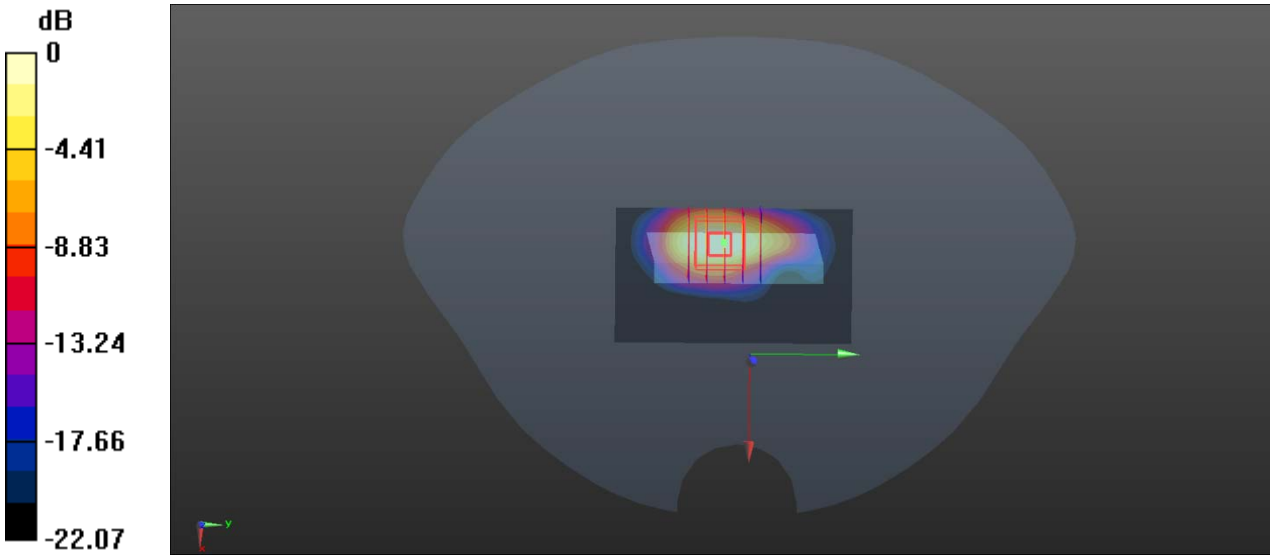
Ch20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.82 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 3.58 W/kg

SAR(1 g) = 1.76 W/kg; SAR(10 g) = 0.806 W/kg

Maximum value of SAR (measured) = 2.07 W/kg



0 dB = 2.07 W/kg

MEAS.26 Right Head with Cheek on High Channel in LTE Band 5 mode with Up Antenna

Date: 2019.12.29

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 844 MHz; σ = 0.906 S/m; ε_r = 41.725; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20600/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.160 W/kg

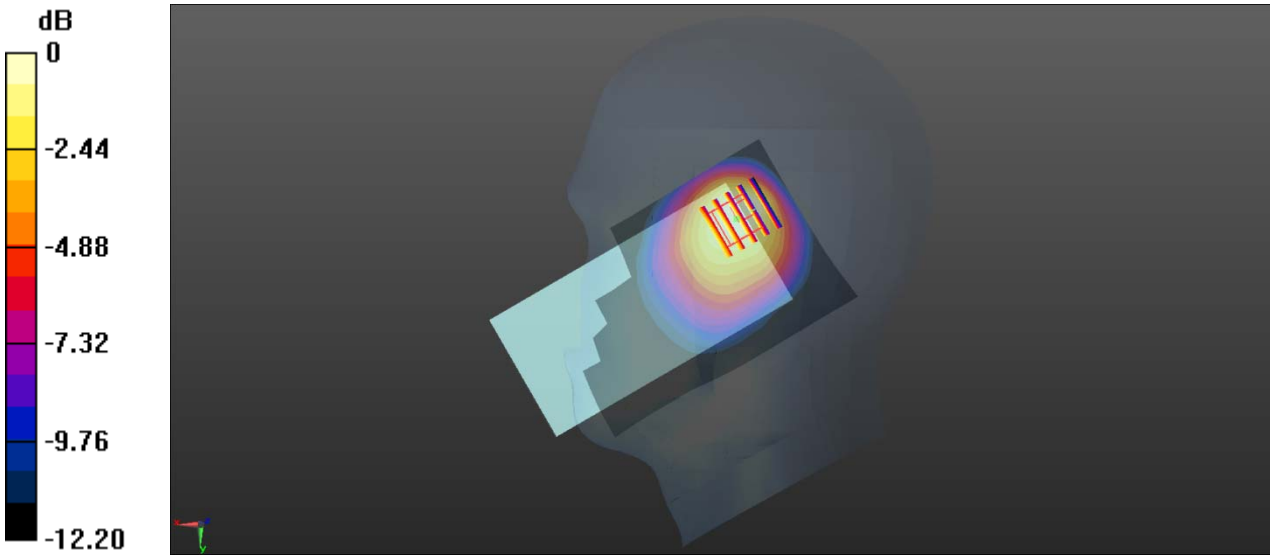
Ch20600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.83 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.239 W/kg

SAR(1 g) = 0.149 W/kg; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.155 W/kg



0 dB = 0.155 W/kg

MEAS.27 Body Plane with Back Side 15mm on High Channel in LTE Band 5 mode with Down Antenna

Date: 2019.12.29

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 844 MHz; σ = 0.906 S/m; ε_r = 41.725; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20600/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.215 W/kg

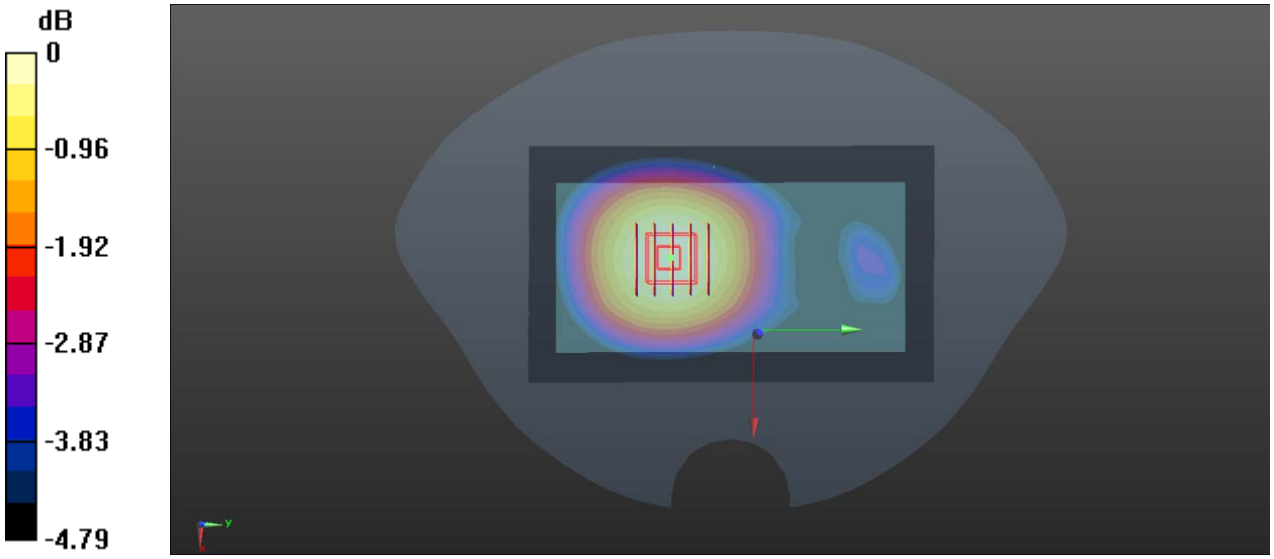
Ch20600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.98 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.231 W/kg

SAR(1 g) = 0.208 W/kg; SAR(10 g) = 0.176 W/kg

Maximum value of SAR (measured) = 0.214 W/kg



0 dB = 0.214 W/kg

MEAS.28 Body Plane with Back Side 10mm on High Channel in LTE Band 5 mode with Down Antenna

Date: 2019.12.29

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 844 MHz; σ = 0.906 S/m; ε_r = 41.725; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.02, 10.02, 10.02); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20600/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.243 W/kg

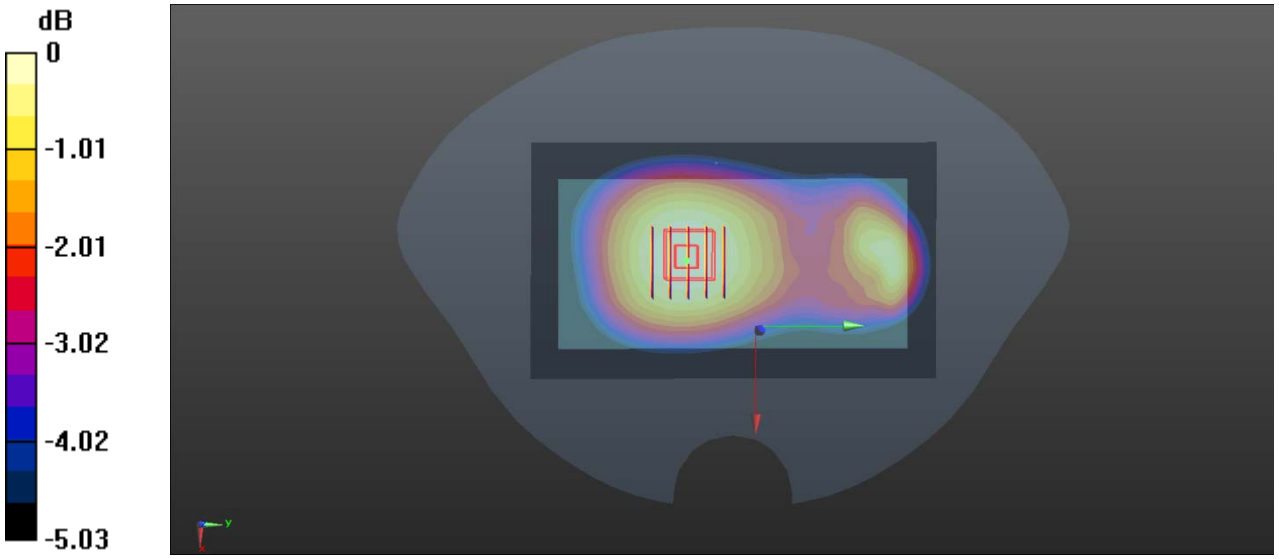
Ch20600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.50 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.259 W/kg

SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.203 W/kg

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



0 dB = 0.242 W/kg

MEAS.29 Right Head with Tilt on High Channel in LTE Band 7 mode with Up Antenna

Date: 2020.01.19

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2560 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2560 MHz; σ = 1.978 S/m; ε_r = 40.321; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.3 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.625 W/kg

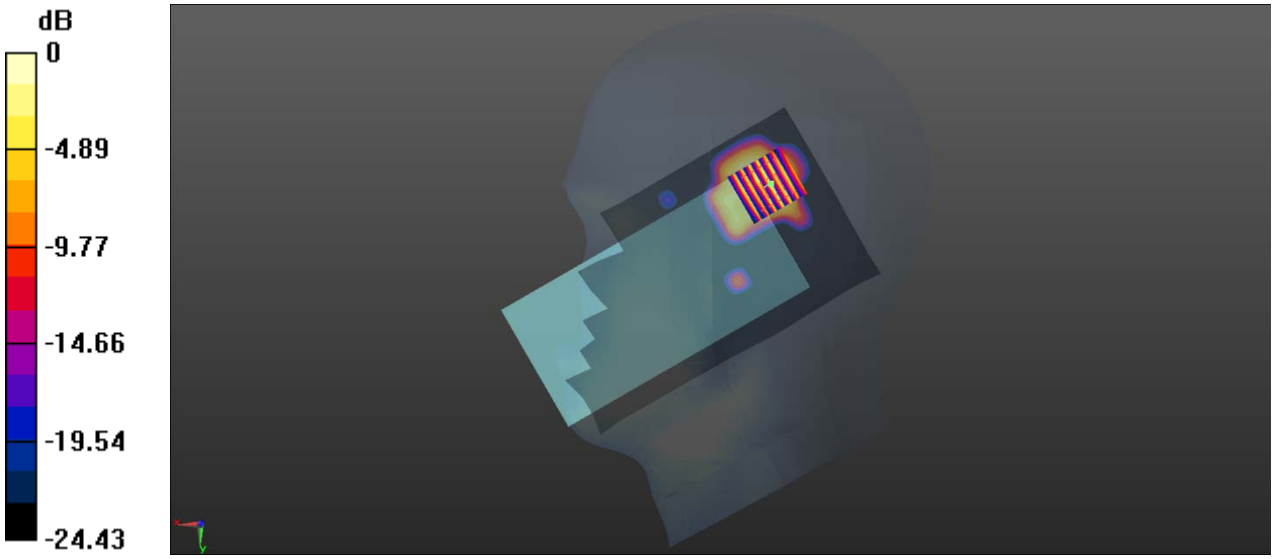
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.36 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.531 W/kg; SAR(10 g) = 0.219 W/kg

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



0 dB = 0.623 W/kg

MEAS.30 Body Plane with Back Side 15mm on High Channel in LTE Band 7 mode with Down Antenna

Date: 2020.01.18

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2560 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2560 MHz; σ = 1.91 S/m; ε_r = 39.446; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

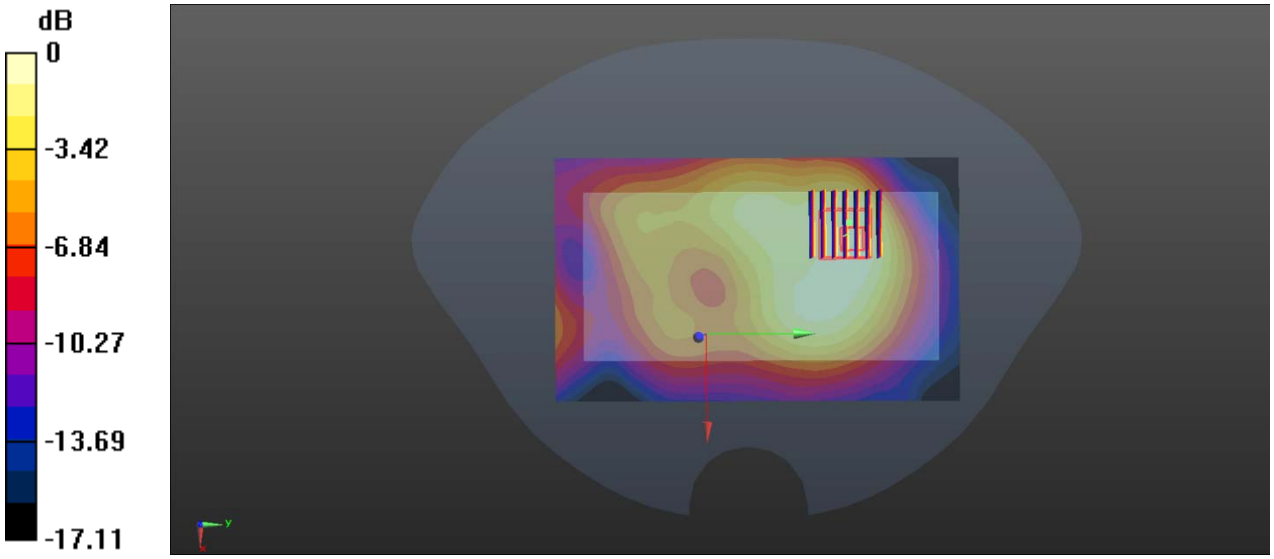
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.649 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.588 W/kg

SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.151 W/kg

Maximum value of SAR (measured) = 0.306 W/kg



0 dB = 0.306 W/kg

MEAS.31 Body Plane with Bottom Edge 10mm on High Channel in LTE Band 7 mode with Down Antenna

Date: 2020.01.18

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2560 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2560 MHz; σ = 1.91 S/m; ε_r = 39.446; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.669 W/kg

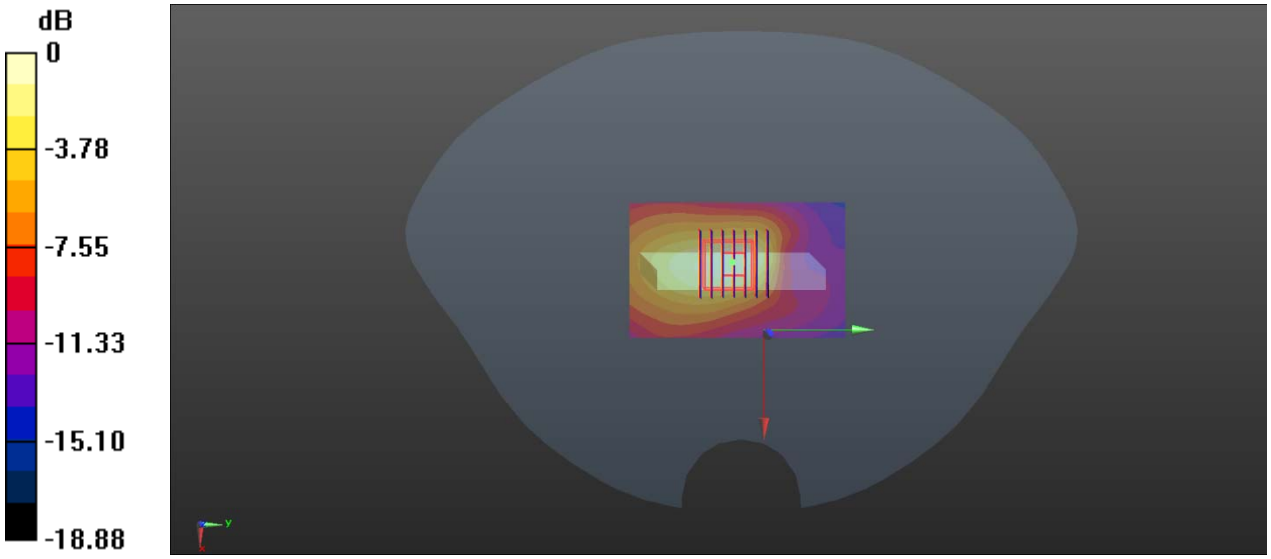
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.17 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.568 W/kg; SAR(10 g) = 0.270 W/kg

Maximum value of SAR (measured) = 0.637 W/kg



0 dB = 0.637 W/kg

MEAS.32 Body Plane with Back Side 0mm on High Channel in LTE Band 7 mode with Up Antenna

Date: 2020.01.19

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2560 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2560 MHz; σ = 1.978 S/m; ε_r = 40.321; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:20.8

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 2.58 W/kg

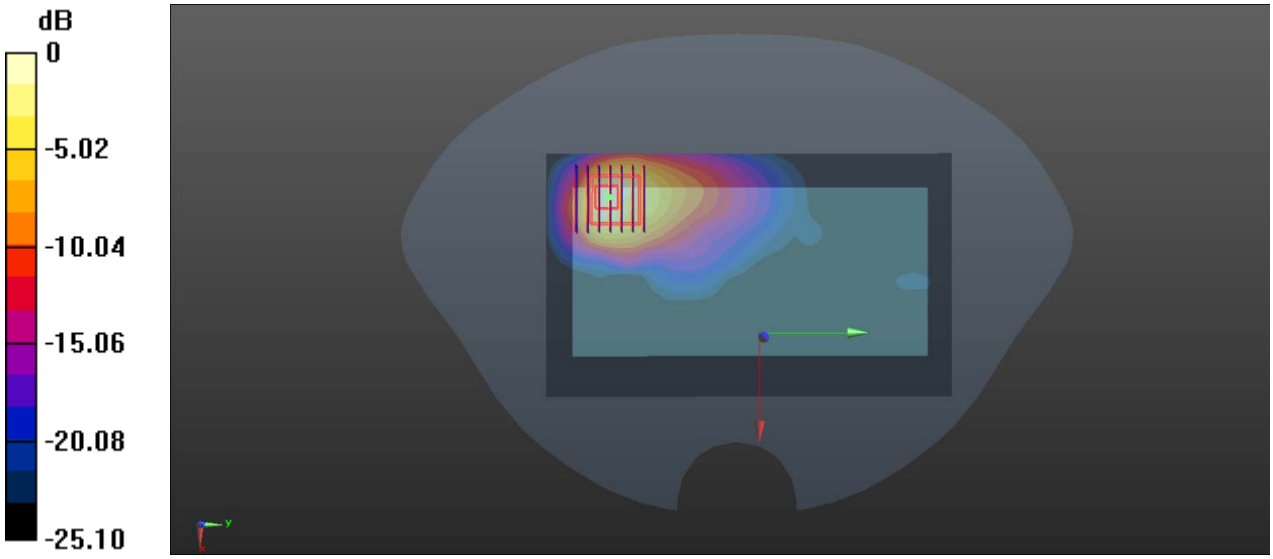
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.239 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 7.23 W/kg

SAR(1 g) = 2.03 W/kg; SAR(10 g) = 0.771 W/kg

Maximum value of SAR (measured) = 2.21 W/kg



0 dB = 2.21 W/kg

MEAS.33 Right Head with Tilt on High Channel in LTE Band 41 mode with Up Antenna

Date: 2020.01.06

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2645 MHz;Duty Cycle: 1:1.58

Medium parameters used (extrapolated): f = 2645 MHz; σ = 2.038 S/m; ε_r = 38.129; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch41140/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.433 W/kg

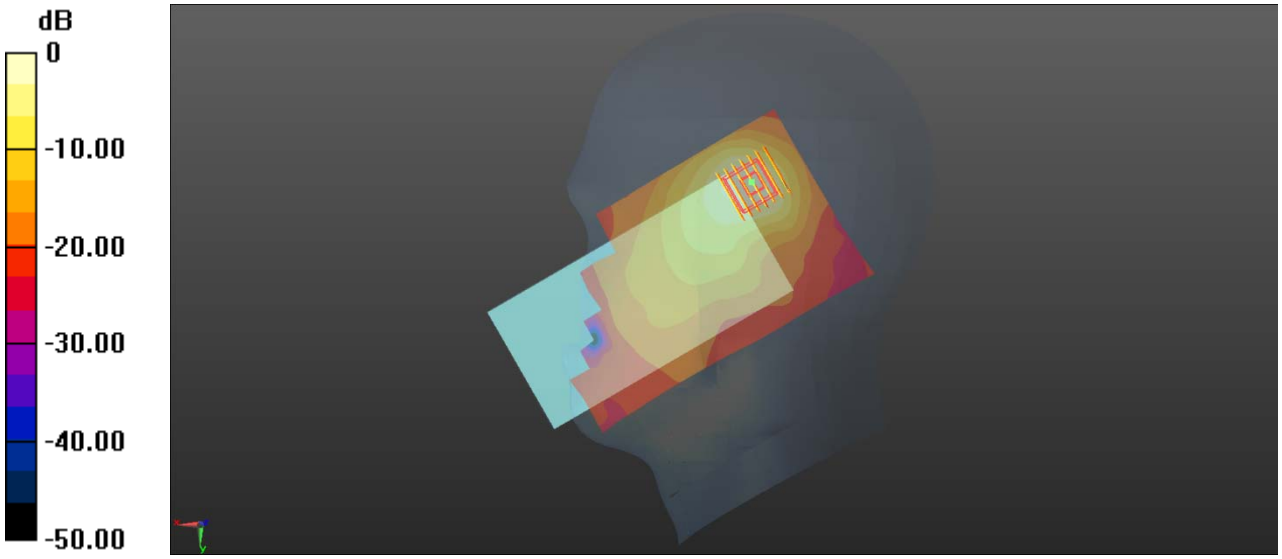
Ch41140/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.740 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.389 W/kg; SAR(10 g) = 0.161 W/kg

Maximum value of SAR (measured) = 0.433 W/kg



0 dB = 0.433 W/kg

MEAS.34 Body Plane with Back Side 15mm on High Channel in LTE Band 41 mode with Down Antenna

Date: 2020.01.05

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2645 MHz;Duty Cycle: 1:1.58

Medium parameters used (extrapolated): f = 2645 MHz; σ = 2.03 S/m; ε_r = 37.43; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch41140/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

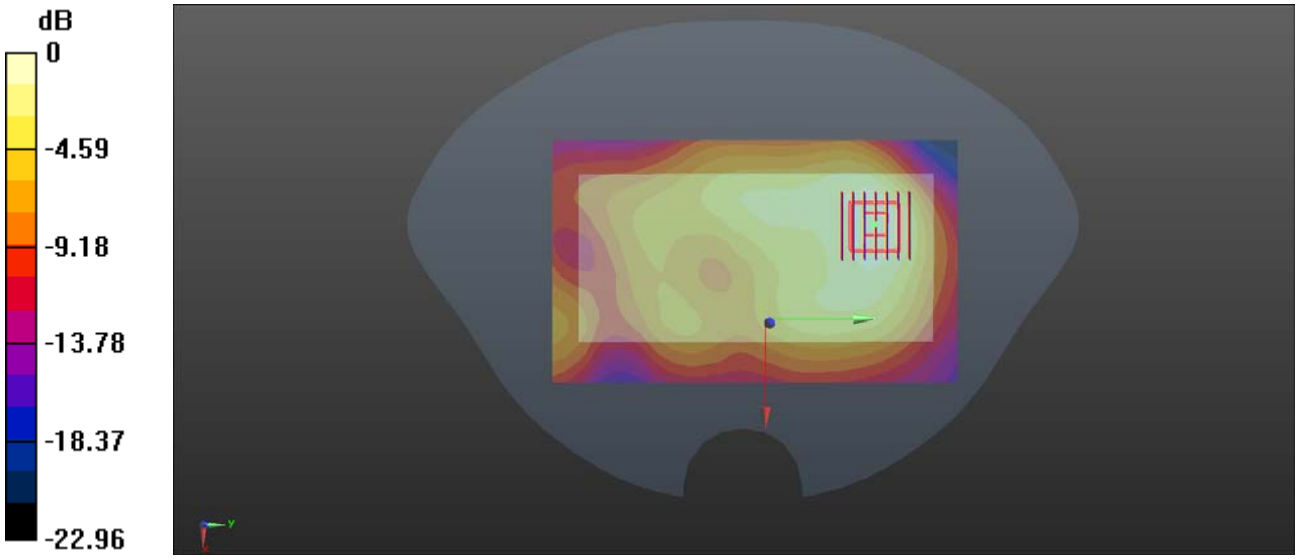
Ch41140/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.513 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.372 W/kg

SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.075 W/kg

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



0 dB = 0.165 W/kg

MEAS.35 Body Plane with Bottom Edge 10mm on High Channel in LTE Band 41 mode with Down Antenna

Date: 2020.01.05

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2645 MHz;Duty Cycle: 1:1.58

Medium parameters used (extrapolated): f = 2412; σ = 2.03 S/m; ε_r = 37.43; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.61, 7.61, 7.61); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch41140/Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

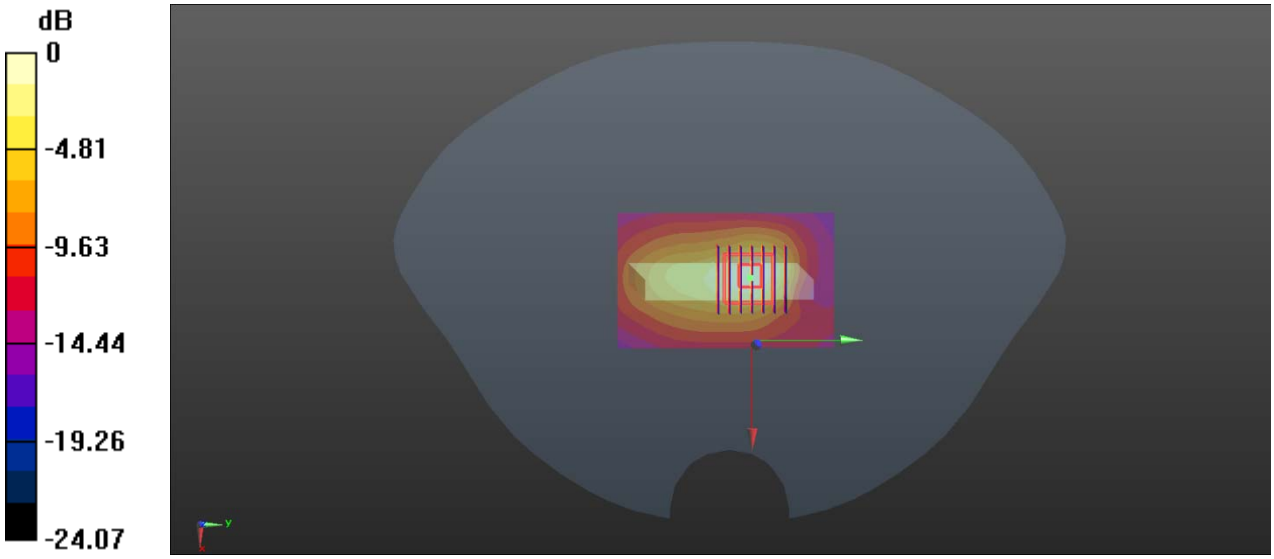
Ch41140/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.00 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.736 W/kg

SAR(1 g) = 0.288 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.324 W/kg



0 dB = 0.324 W/kg

MEAS.36 Left Head with Tilt on Low Channel in IEEE802.11b mode

Date: 2020.01.11

Communication System Band: WLAN(b); Frequency: 2412 MHz;Duty Cycle: 1:1.007

Medium parameters used (interpolated): f = 2412 MHz; σ = 1.724 S/m; ε_r = 38.288; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.894 W/kg

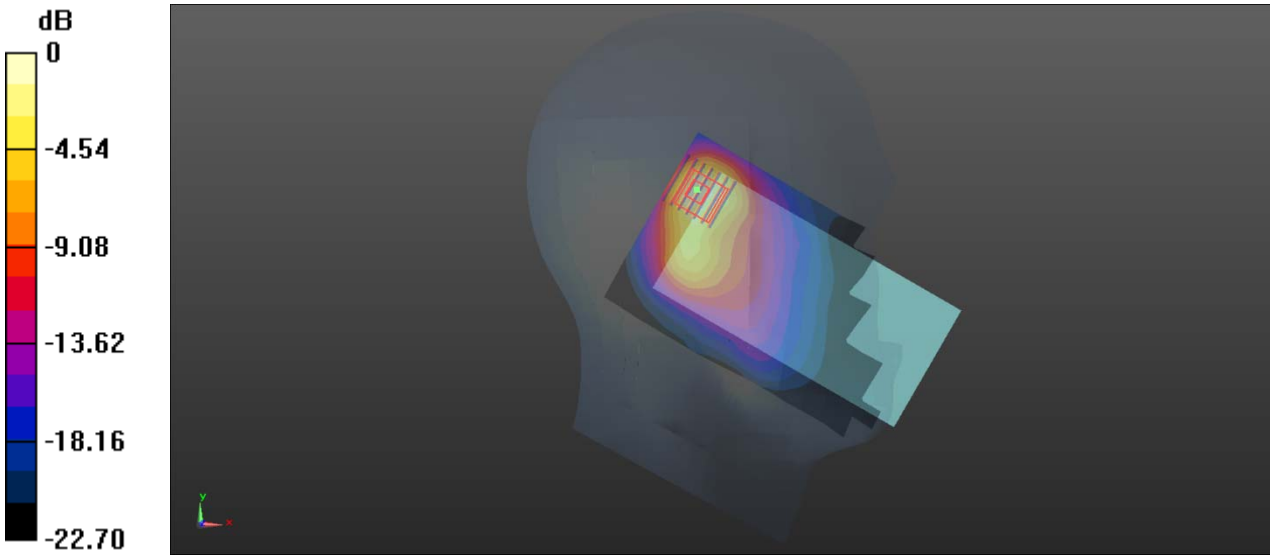
Ch1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.06 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 2.07 W/kg

SAR(1 g) = 0.747 W/kg; SAR(10 g) = 0.312 W/kg

Maximum value of SAR (measured) = 0.857 W/kg



0 dB = 0.857 W/kg

MEAS.37 Body Plane with Back Side 15mm on High Channel in IEEE802.11b mode

Date: 2020.01.11

Communication System Band: WLAN(b); Frequency: 2462 MHz;Duty Cycle: 1:1.007

Medium parameters used (interpolated): f = 2462 MHz; σ = 1.798 S/m; ε_r = 37.921; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.200 W/kg

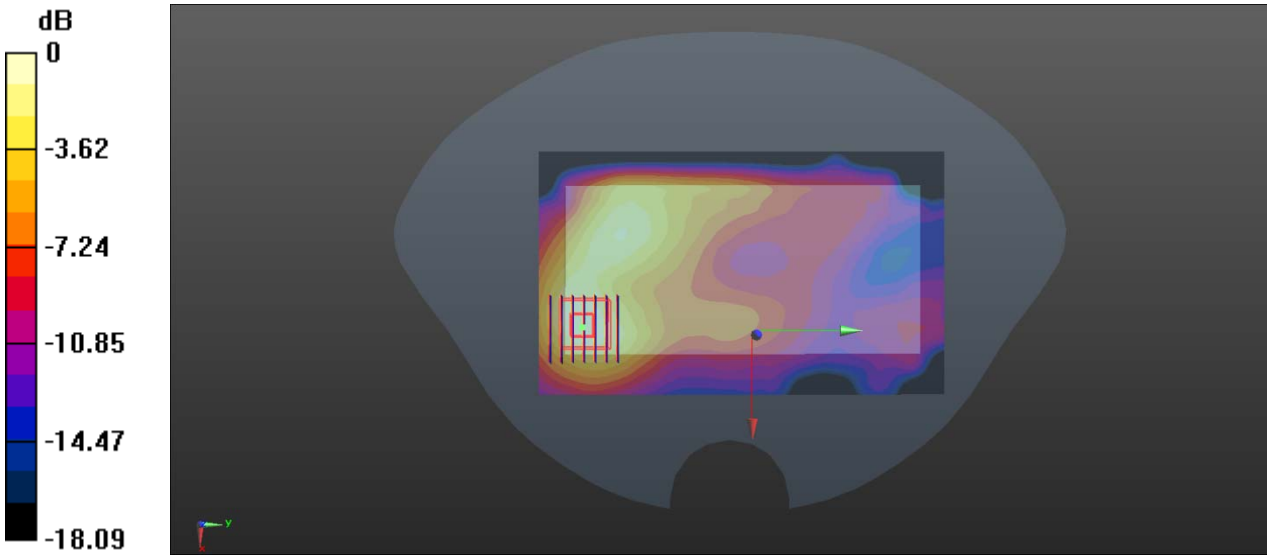
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.482 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.385 W/kg

SAR(1 g) = 0.185 W/kg; SAR(10 g) = 0.090 W/kg

Maximum value of SAR (measured) = 0.203 W/kg



0 dB = 0.203 W/kg

MEAS.38 Body Plane with Top Edge 10mm on High Channel in IEEE802.11b mode

Date: 2020.01.11

Communication System Band: WLAN(b); Frequency: 2462 MHz;Duty Cycle: 1:1.007

Medium parameters used (interpolated): f = 2462 MHz; σ = 1.798 S/m; ε_r = 37.921; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

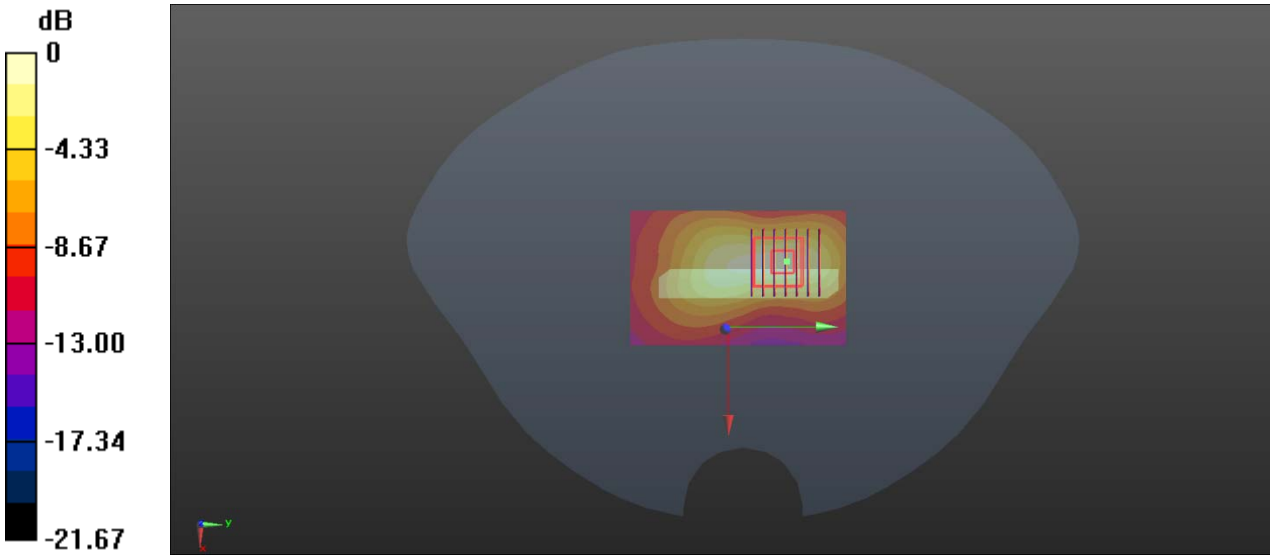
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.48 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.441 W/kg; SAR(10 g) = 0.196 W/kg

Maximum value of SAR (measured) = 0.507 W/kg



0 dB = 0.507 W/kg

MEAS.39 Left Head with Tilt on Low Channel in Bluetooth DH5 mode

Date: 2020.01.11

Communication System Band: BT; Frequency: 2402 MHz;Duty Cycle: 1:1.302

Medium parameters used: f = 2402 MHz; σ = 1.705 S/m; ε_r = 38.33; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch0/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.177 W/kg

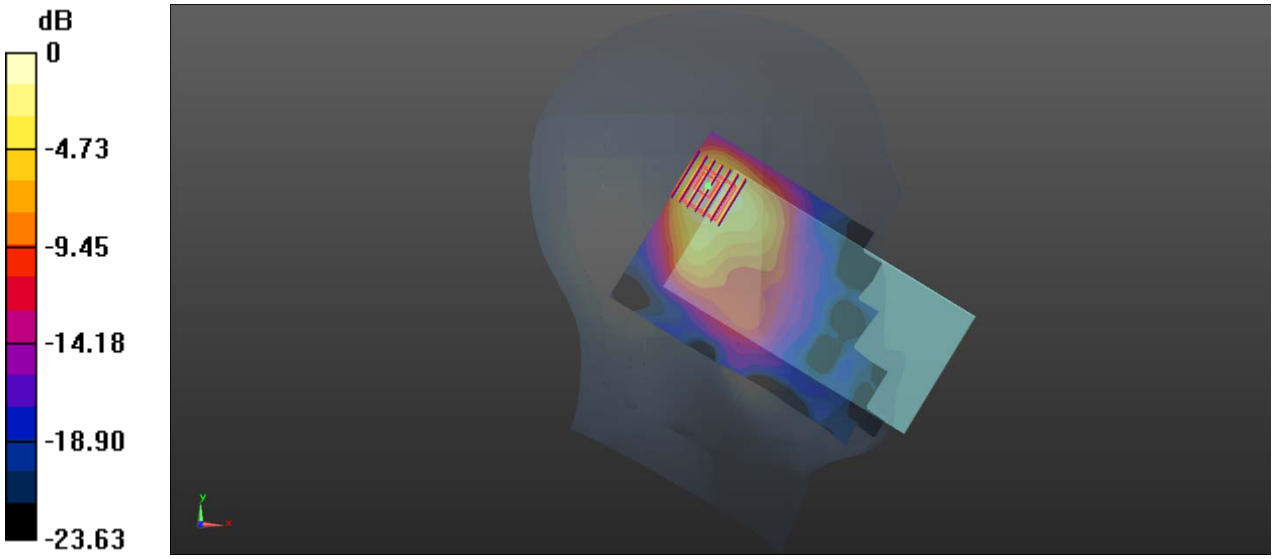
Ch0/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.201 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.390 W/kg

SAR(1 g) = 0.156 W/kg; SAR(10 g) = 0.069 W/kg

Maximum value of SAR (measured) = 0.158 W/kg



0 dB = 0.158 W/kg

MEAS.40 Body Plane with Back Side 15mm on Low Channel in Bluetooth DH5 mode

Date: 2020.01.11

Communication System Band: BT; Frequency: 2402 MHz;Duty Cycle: 1:1.302

Medium parameters used: f = 2402 MHz; σ = 1.705 S/m; ε_r = 38.33; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch0/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0305 W/kg

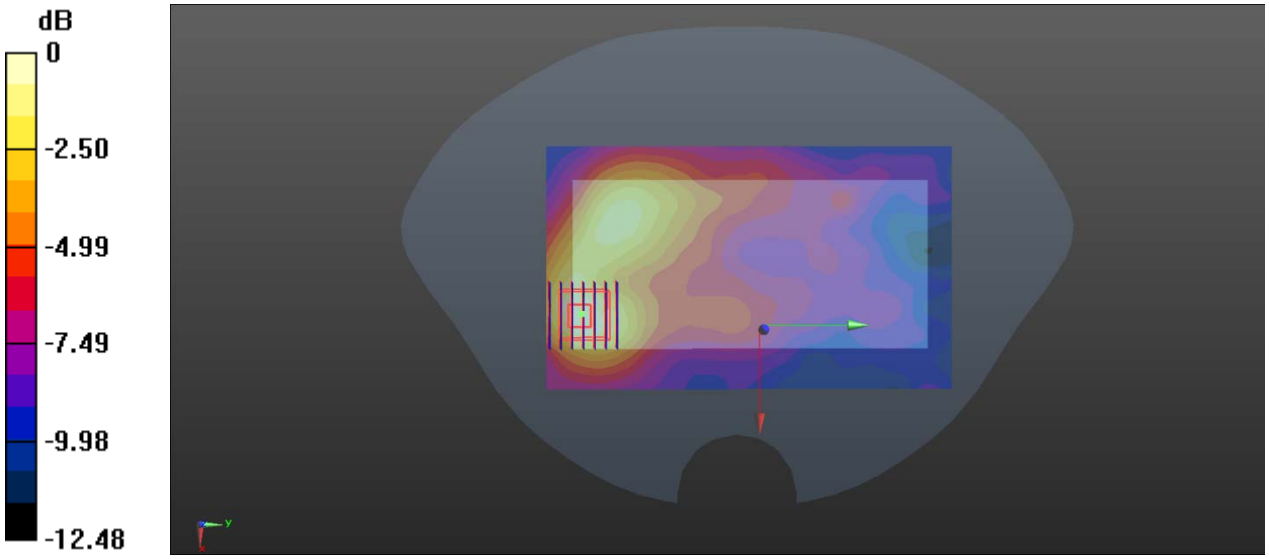
Ch0/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.706 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.0600 W/kg

SAR(1 g) = 0.028 W/kg; SAR(10 g) = 0.015 W/kg

Maximum value of SAR (measured) = 0.0300 W/kg



0 dB = 0.0300 W/kg

MEAS.41 Body Plane with Back Side 10mm on Low Channel in Bluetooth DH5 mode

Date: 2020.01.11

Communication System Band: BT; Frequency: 2402 MHz;Duty Cycle: 1:1.302

Medium parameters used: f = 2402 MHz; σ = 1.705 S/m; ε_r = 38.33; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.81, 7.81, 7.81); Calibrated: 2019.08.02;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2019.08.02
- Phantom: SAM (30deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch0/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0707 W/kg

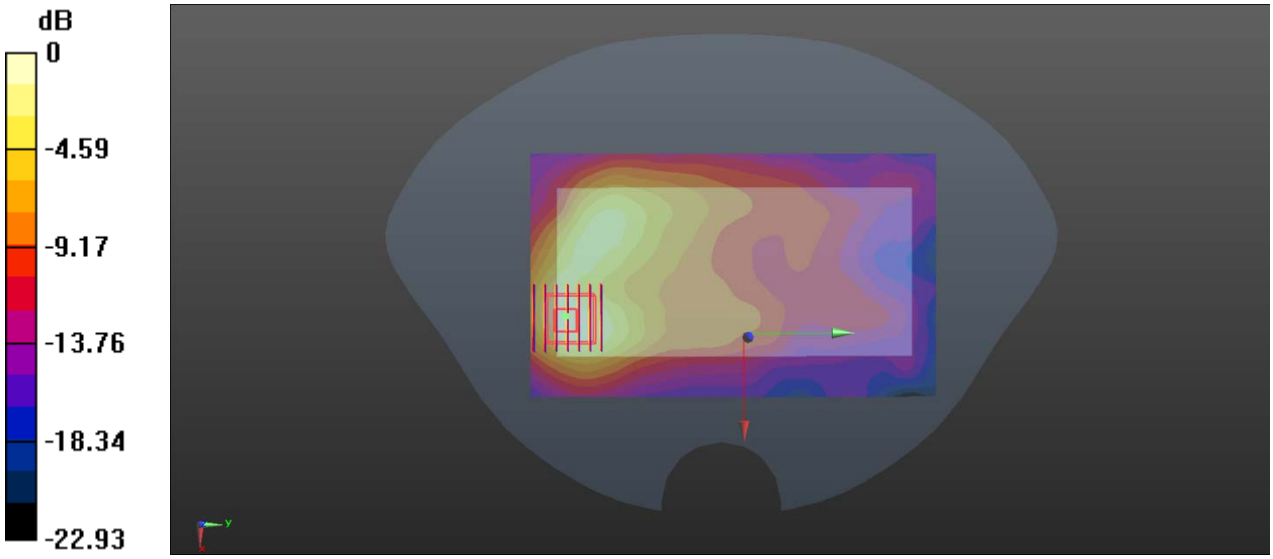
Ch0/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.972 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.143 W/kg

SAR(1 g) = 0.061 W/kg; SAR(10 g) = 0.029 W/kg

Maximum value of SAR (measured) = 0.0674 W/kg



0 dB = 0.0674 W/kg

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ19C0704-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ19C0704-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “CALIBRATION REPORT.pdf”.

--END OF REPORT--