

# TEST REPORT

**Applicant:** Xiaomi Communications Co., Ltd.  
**Address:** #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085  
**Equipment Type:** Mobile Phone  
**Model Name:** 2209116AG  
**Brand Name:** Redmi  
**FCC ID:** 2AFZZ16AG  
**Test Standard:** FCC 47 CFR Part 2.1093 (refer section 3.1)  
**Maximum SAR:** Head (1 g@0mm): 1.07 W/kg  
Body-worn (1 g@10mm): 0.68 W/kg  
Hotspot (1 g@10mm): 0.92 W/kg  
Specific (10 g@0mm): 2.42 W/kg  
**Test Date:** Aug. 05, 2022 – Aug. 19, 2022  
**Date of Issue:** Sep. 07, 2022

**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

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<b>Revision History</b>		
Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 07, 2022</u>	<u>Initial Issue</u>

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# 1 GENERAL INFORMATION

## 1.1 Test Laboratory

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

## 1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	<input checked="" type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	<input type="checkbox"/> 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

## 1.3 Test Environment Condition

Ambient Temperature	18°C to 25°C
Ambient Relative Humidity	30% to 70%

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

Applicant	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

### 2.2 Manufacturer Information

Manufacturer	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

### 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	2209116AG
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	P1.1
Software Version	MIUI 13
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A
EUT ID	S19; S22; S23
IMEI Number	S19: IMEI1#: 862244060089415; IMEI2#: 862244060089423 S22: IMEI1#: 862244060087898; IMEI2#: 862244060087906 S23: IMEI1#: 862244060089332; IMEI2#: 862244060089340
Note1: EUT ID is used to identify the test sample in the lab internally.	
Note2: It is performed to test SAR with the EUT S19 and S23 and conducted power with the EUT S22.	

### 2.5 Ancillary Equipment

Please refer the document “BL-SZ2270591-AW EUT external photo.pdf”.

## 2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/900/1800/1900 MHz 3G Network WCDMA/HSDPA/HSUPA/DC-HSDPA Band 1/2/4/5/8 4G Network LTE FDD Band 1/2/3/4/5/7/8/20/28/66 LTE TDD Band 38/40/41 LTE CA Uplink (UL): CA_3C, CA_7C, CA_38C, CA_40C, CA_41C Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40) 5G WIFI 802.11a, 802.11n(HT20/40) and 802.11ac(VHT20/40/80) U-NII-1/2A/2C/3, GPS, GLONASS, Galileo, BDS, FM receiver, NFC
<b>Note:</b> 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, 5G 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 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 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/HT40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz	5250 ~ 5350 MHz
Bluetooth	2402 ~ 2480 MHz		
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	N/A		
Hotspot Function	Support		

Power Reduction	Support	
Exposure Category	General Population/Uncontrolled exposure	
EUT Stage	Portable Device	
Product	Type	
	<input checked="" type="checkbox"/> Production unit	<input type="checkbox"/> Identical prototype
<p>Note:</p> <ol style="list-style-type: none"> <li>1. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4G transmitter for held-to-ear exposure conditions.</li> <li>2. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4G transmitter for near to body exposure conditions.</li> <li>3. The reduction power details please refer section 8.7.</li> </ol>		

### 3 SUMMARY OF TEST RESULT

#### 3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	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 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
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/ Controlled Exposure
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 SAR Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
		Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Head (0mm)	Body-worn (10mm)	Hotspot (10mm)
		1g SAR			1g SAR		
PCE	GSM 850	0.49	0.25	0.25	1.07	0.68	0.92
	GSM 1900	0.55	0.35	0.43			
	WCDMA Band 2	0.93	0.54	0.54			
	WCDMA Band 4	0.36	0.42	0.58			
	WCDMA Band 5	0.66	0.46	0.46			
	LTE Band 2	0.85	0.45	0.46			
	LTE Band 4	0.44	0.49	0.65			
	LTE Band 5	0.75	0.41	0.41			
	LTE Band 7	0.72	0.35	0.60			
	LTE Band 66	0.47	0.35	0.46			
	LTE Band 38	<b>1.07</b>	0.49	0.58			
LTE Band 41	0.81	0.47	0.62				
DTS	2.4G WLAN	0.55	0.30	0.30			
NII	5.2G WLAN	/	/	<b>0.92</b>			
	5.3G WLAN	0.59	<b>0.68</b>	/			
	5.6G WLAN	0.60	0.36	/			
	5.8G WLAN	0.37	0.45	0.45			
DSS	Bluetooth	0.29	0.05	0.05			
Limit (W/kg)		1.6			1.6		
Verdict		PASS					

## 3.3.2 Highest Simultaneous SAR

Equipment Class	Maximum Scaled SAR (W/kg)			
	Head 1g (0mm)	Body-worn 1g (0mm)	Hotspot 1g (10mm)	Specific 10g (0mm)
PCE	<b>1.59</b>	<b>1.27</b>	<b>1.57</b>	<b>3.60</b>
DTS	1.55	0.89	0.89	2.42
NII	<b>1.59</b>	<b>1.27</b>	<b>1.57</b>	<b>3.60</b>
DSS	<b>1.59</b>	<b>1.27</b>	<b>1.57</b>	<b>3.60</b>
Limit (W/Kg)	1.60	1.60	1.60	4.00
Verdict	Pass			
Note: The highest simultaneous SAR please refer section 13.2				

### 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 1.066 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 2.420 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 ( $\rho$ ). The equation description is as below:

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

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

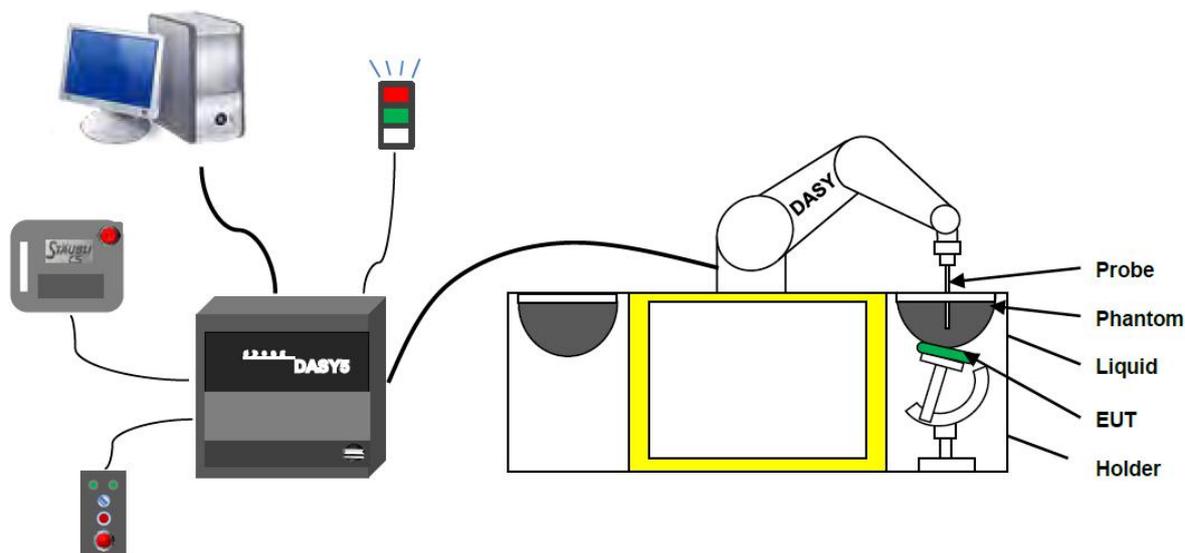
$$\mathbf{SAR} = \frac{\sigma E^2}{\rho}$$

Where:  $\sigma$  is the conductivity of the tissue,

$\rho$  is the mass density of the tissue and  $E$  is the RMS electrical field strength.

## 4.2 DASYSAR System

### 4.2.1 DASYSAR System Diagram



The DASYS5 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 DASYS5 measurement server.
6. The DASYS5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASYS5 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:

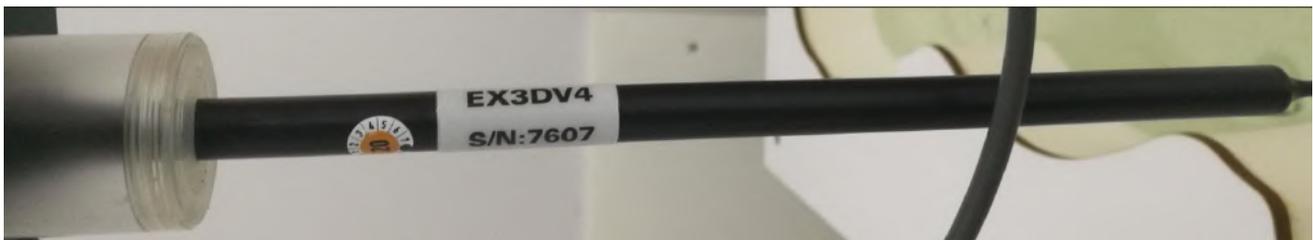


- High precision  
(repeatability  $\pm 0.02$  mm)
- High reliability  
(industrial design)
- Low maintenance costs  
(virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements  
(brush less synchron motors; no stepper motors)
- Low ELF interference  
(motor control fields 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: 7607 with following specifications is used.

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycoether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 6 GHz)
Directivity	$\pm 0.2$ dB in HSL (rotation around probe axis) ; $\pm 0.4$ dB in HSL (rotation normal to probe axis)
Dynamic range	5 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ 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

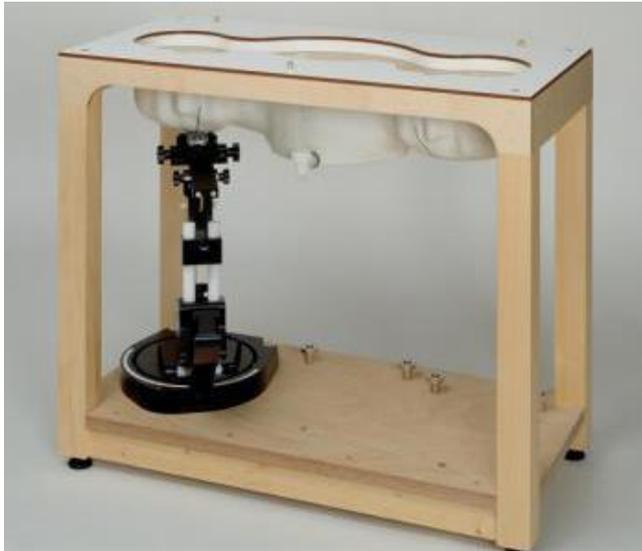
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



- Input Impedance: 200M $\Omega$
- 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



Serial Number	Material	Length	Height
SN 1857 SAM1	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.

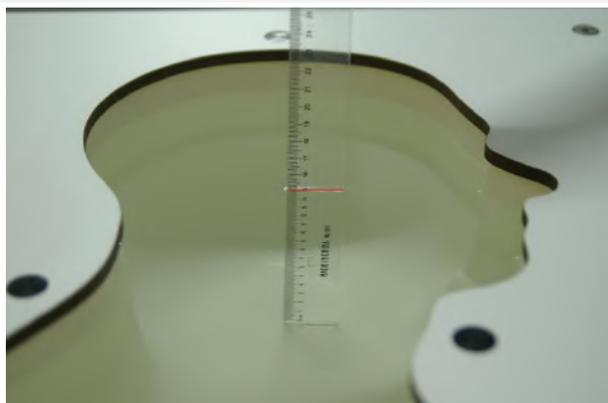


The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1°.

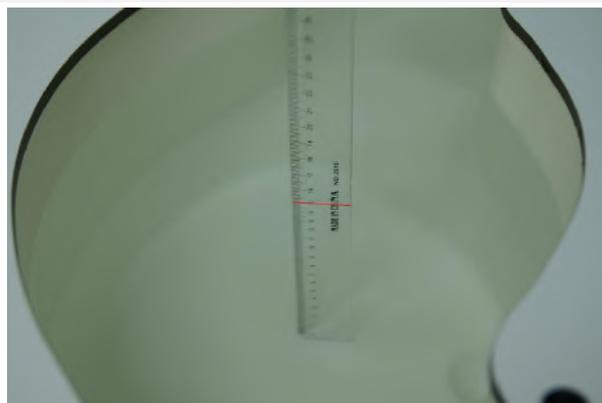
#### 4.2.7 Simulating Liquid

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 $\sigma$ (S/m)	Permittivity $\epsilon$
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 $\sigma$ (S/m)	Permittivity $\epsilon$
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 $\sigma$ (S/m)	Permittivity $\epsilon$
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 $\sigma$ (S/m)	Permittivity $\epsilon$
5200	78.60	21.40	/	5.54	47.86
5800	78.50	21.40	0.1	6.0	48.20

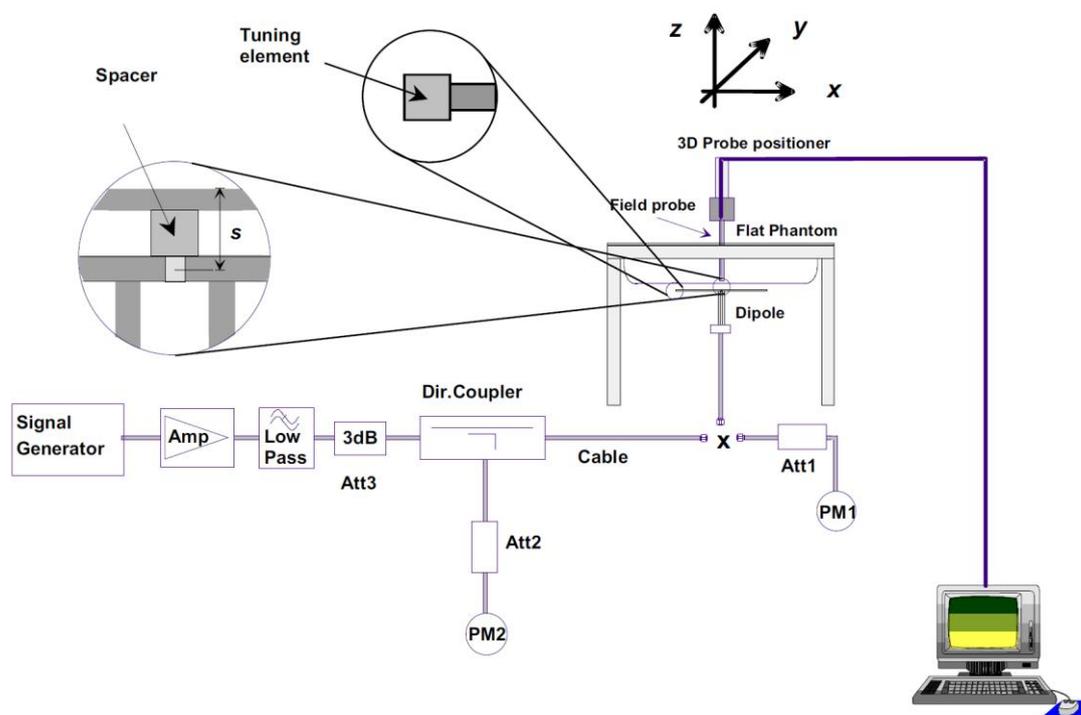
## 5 SYSTEM VERIFICATION

### 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

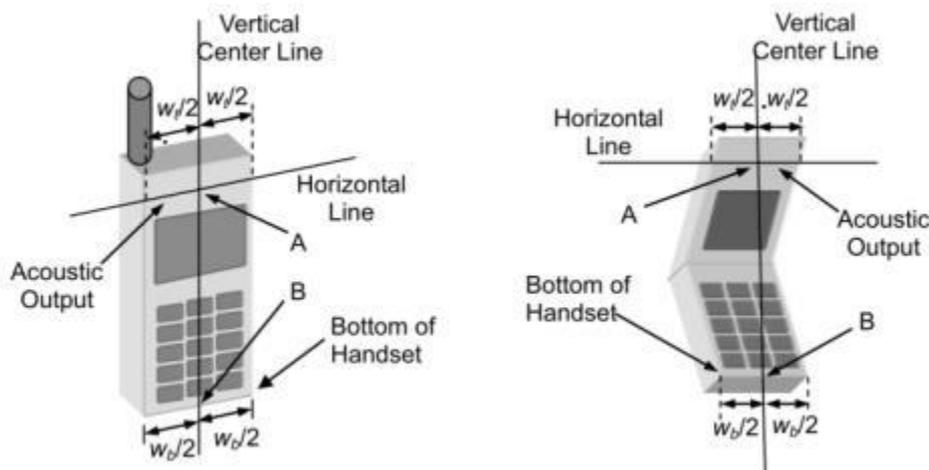
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

### 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

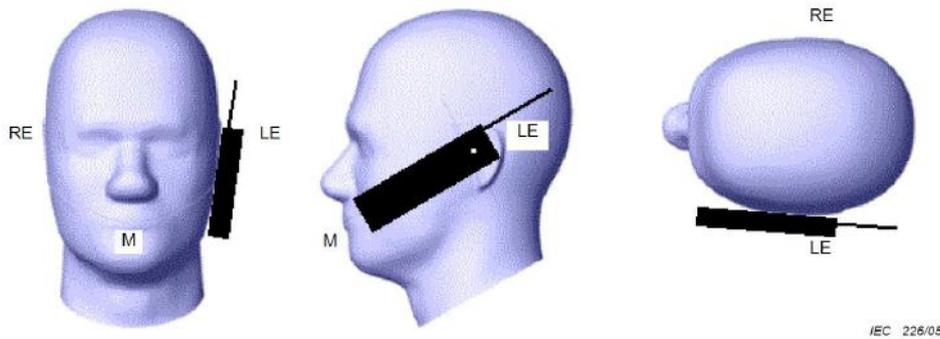
- The vertical center line passes through two points on the front side of the handset - the midpoint of the width  $w_t$  of the handset at the level of the acoustic output, and the midpoint of the width  $w_b$  of the bottom of the handset.
- The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- 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

- 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.
- 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.

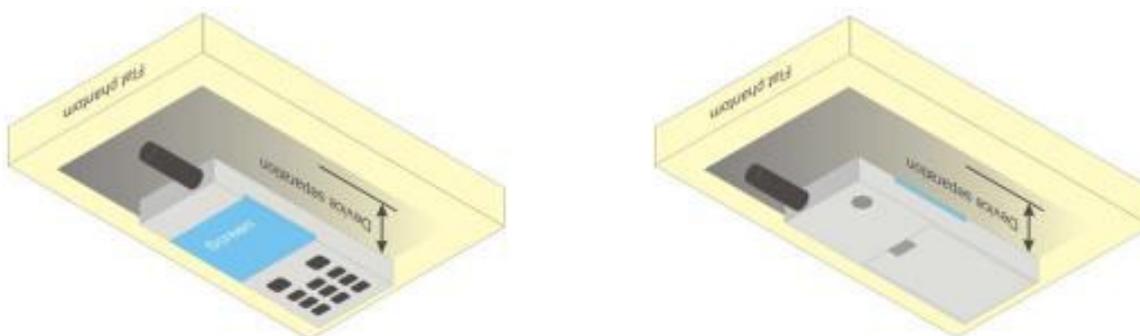


## 6.2 Body-worn Position Conditions

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.

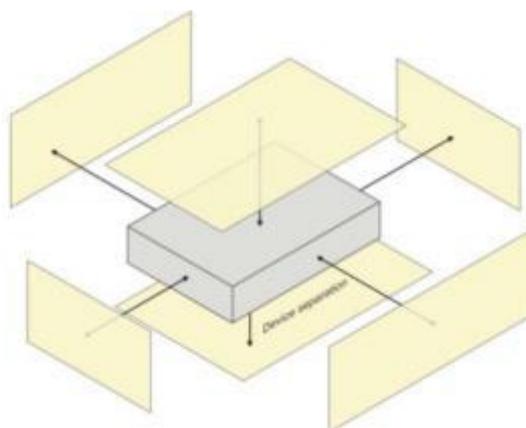
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. 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  $\leq 5$  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).



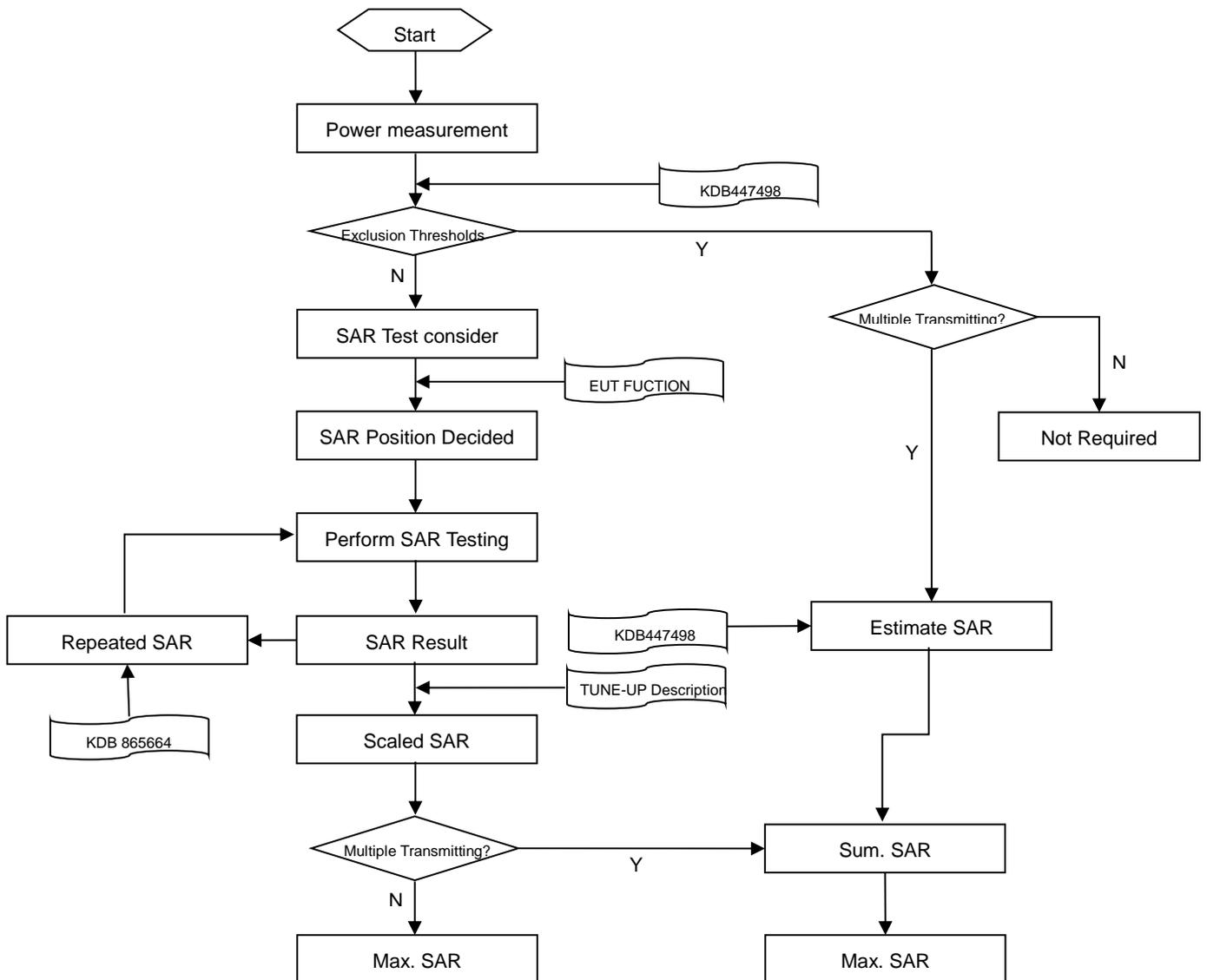
### 6.4 Product Specific 10g Exposure Consideration

According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at  $\leq 25$  mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

## 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. Both the 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.

		≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		30°±1°	20°±1°
Maximum area scan spatial resolution: $\Delta x$ Area , $\Delta y$ Area		≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x$ Zoom , $\Delta y$ Zoom		≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3–4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z$ Zoom (n)	≤ 5 mm	3–4 GHz: ≤ 4 mm
			4–5 GHz: ≤ 3 mm
	graded grid	≤ 4 mm	3–4 GHz: ≤ 3 mm
			4–5 GHz: ≤ 2.5 mm
	$\Delta z$ Zoom (1): between 1st two points closest to phantom surface		5–6 GHz: ≤ 2 mm
	$\Delta z$ Zoom (n>1): between subsequent points		≤ 1.5 · $\Delta z$ Zoom (n-1)
Minimum zoom scan volume	x, y, z	≥30 mm	3–4 GHz: ≥ 28 mm
			4–5 GHz: ≥ 25 mm
			5–6 GHz: ≥ 22 mm
<b>Note:</b> <ol style="list-style-type: none"> <li><math>\delta</math> is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.</li> <li>* 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.</li> </ol>			

### 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 to 16 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 OUTPUT POWER

### 8.1 GSM

Please refer the document "Conducted RF Output Power List.pdf".

### 8.2 WCDMA

Please refer the document "Conducted RF Output Power List.pdf".

### 8.3 LTE

Please refer the document "Conducted RF Output Power List.pdf".

### 8.4 Intra-Band Uplink CA Power

Note:

1. This devices supports intra-band uplink CA of 7C/38C/41C.
2. For intra-band uplink carrier aggregation power verification and measurement is selected highest PCC and SCC bandwidth combination to do and was according to 3GPP 36.52101 section 6.2.2A.1 and section 6.2.2A.2 test procedure.
3. For intra-band uplink CA output power was measured high / middle / low channel combination, and for SAR verification is selected highest output power combination with each exposure condition in each frequency band using the highest SAR configuration test in standalone LTE mode.

Please refer the document "Conducted RF Output Power List.pdf".

### 8.5 LTE Downlink CA Power

Please refer the document "Conducted RF Output Power List.pdf".

## 8.6 WIFI

### 8.6.1 2.4G WIFI Full power-Antenna.6

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	19.03	21.00	No
		6	2437	19.59	21.00	No
		11	2462	<b>19.76</b>	21.00	Yes
	802.11g	1	2412	18.02	20.00	No
		6	2437	18.31	20.00	No
		11	2462	18.33	20.00	No
	802.11n(HT20)	1	2412	18.01	20.00	No
		6	2437	18.16	20.00	No
		11	2462	18.16	20.00	No
	802.11n(HT40)	3	2422	14.16	15.50	No
		4	2427	14.73	16.00	No
		5	2432	16.43	17.50	No
		6	2437	16.53	17.50	No
		7	2442	16.50	17.50	No
8		2447	15.96	17.00	No	
9		2452	15.61	16.50	No	

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, 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  $\leq 1.2$  W/kg, OFDM SAR test is not required.

Adjusted SAR =  $0.548 * (35.48\text{mW}/44.67\text{mW}) = 0.435$  W/Kg, so 2.4G OFDM SAR test is not required.

## 8.6.2 2.4G WIFI Level 1-Antenna.6

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	14.68	16.50	No
		6	2437	15.18	16.50	No
		11	2462	<b>15.23</b>	16.50	Yes
	802.11g	1	2412	13.68	15.50	No
		6	2437	13.93	15.50	No
		11	2462	14.03	15.50	No
	802.11n(HT20)	1	2412	13.53	15.50	No
		6	2437	13.65	15.50	No
		11	2462	13.73	15.50	No
	802.11n(HT40)	3	2422	13.09	14.50	No
		4	2427	/	/	No
		5	2432	/	/	No
		6	2437	13.42	14.50	No
		7	2442	/	/	No
		8	2447	/	/	No
9		2452	13.53	14.50	No	

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, 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  $\leq 1.2$  W/kg, OFDM SAR test is not required.  
Adjusted SAR =  $0.548 * (35.48\text{mW}/44.67\text{mW}) = 0.435$  W/Kg, so 2.4G OFDM SAR test is not required.

## 8.6.3 2.4G WIFI Level 2-Antenna.6

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	19.03	21.00	No
		6	2437	19.59	21.00	No
		11	2462	<b>19.76</b>	21.00	Yes
	802.11g	1	2412	18.02	20.00	No
		6	2437	18.31	20.00	No
		11	2462	18.33	20.00	No
	802.11n(HT20)	1	2412	18.01	20.00	No
		6	2437	18.16	20.00	No
		11	2462	18.16	20.00	No
	802.11n(HT40)	3	2422	14.16	15.50	No
		4	2427	14.73	16.00	No
		5	2432	16.43	17.50	No
		6	2437	16.53	17.50	No
		7	2442	16.50	17.50	No
8		2447	15.96	17.00	No	
9		2452	15.61	16.50	No	

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, 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  $\leq 1.2$  W/kg, OFDM SAR test is not required.  
Adjusted SAR =  $0.298 * (100.00\text{mW}/125.89\text{mW}) = 0.237$  W/Kg, so 2.4G OFDM SAR test is not required.

## 8.6.4 5G WIFI Full power-Antenna.6

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	16.56	18.00	No
		44	5220	16.38	18.00	No
		48	5240	16.58	18.00	No
	802.11n(HT20)	36	5180	15.48	17.00	No
		44	5220	15.36	17.00	No
		48	5240	15.31	17.00	No
	802.11n(HT40)	38	5190	14.04	15.50	No
		46	5230	14.39	16.00	No
	802.11ac(VHT20)	36	5180	15.32	17.00	No
		44	5220	15.42	17.00	No
		48	5240	15.47	17.00	No
	802.11ac(VHT40)	38	5190	14.50	16.00	No
		46	5230	14.35	16.00	No
	802.11ac(VHT80)	42	5210	13.68	15.00	No
5.3 (5.25~5.35)	802.11a	52	5260	<b>16.61</b>	18.00	Yes
		60	5300	16.54	18.00	No
		64	5320	16.80	18.00	No
	802.11n(HT20)	52	5260	15.55	17.00	No
		60	5300	15.65	17.00	No
		64	5320	15.60	17.00	No
	802.11n(HT40)	54	5270	14.64	16.00	No
		62	5310	14.66	16.00	No
	802.11ac(VHT20)	52	5260	15.53	17.00	No
		60	5300	15.69	17.00	No
		64	5320	15.57	17.00	No
	802.11ac(VHT40)	54	5270	14.60	16.00	No
		62	5310	14.75	16.00	No
	802.11ac(VHT80)	58	5290	13.77	15.00	No
5.6 (5.47~5.725)	802.11a	100	5500	16.35	18.00	No
		116	5580	16.33	18.00	No
		140	5700	<b>16.65</b>	18.00	Yes
		144	5720	16.63	18.00	No
	802.11n(HT20)	100	5500	15.21	17.00	No
		116	5580	15.26	17.00	No
		140	5700	15.61	17.00	No
		144	5720	15.52	17.00	No

	802.11n(HT40)	102	5510	14.39	16.00	No	
		118	5590	14.40	16.00	No	
		134	5670	15.11	16.00	No	
		142	5710	14.59	16.00	No	
	802.11ac(VHT20)	100	5500	15.37	17.00	No	
		116	5580	15.30	17.00	No	
		140	5700	15.64	17.00	No	
		144	5720	15.54	17.00	No	
	802.11ac(VHT40)	102	5510	14.31	16.00	No	
		118	5590	14.31	16.00	No	
		134	5670	14.97	16.00	No	
		142	5710	14.66	16.00	No	
	802.11ac(VHT80)	106	5530	13.40	15.00	No	
		122	5610	13.40	15.00	No	
		138	5690	14.01	15.00	No	
	5.8 (5.725~5.850)	802.11a	149	5745	<b>16.24</b>	18.00	Yes
157			5785	16.02	18.00	No	
165			5825	16.14	18.00	No	
802.11n(HT20)		149	5745	15.23	17.00	No	
		157	5785	15.21	17.00	No	
		165	5825	15.02	17.00	No	
802.11n(HT40)		151	5755	14.49	16.00	No	
		159	5795	14.23	16.00	No	
802.11ac(VHT20)		149	5745	15.32	17.00	No	
		157	5785	15.11	17.00	No	
		165	5825	15.14	17.00	No	
802.11ac(VHT40)		151	5755	14.44	16.00	No	
		159	5795	14.25	16.00	No	
802.11ac(VHT80)		155	5775	13.10	15.00	No	
<p>Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is <math>\leq 1.2</math> W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.</p>							

## 8.6.5 5G WIFI Level 1-Antenna.6

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	10.14	11.50	No
		44	5220	9.89	11.50	No
		48	5240	10.27	11.50	No
	802.11n(HT20)	36	5180	9.20	10.50	No
		44	5220	8.89	10.50	No
		48	5240	8.93	10.50	No
	802.11n(HT40)	38	5190	8.11	9.50	No
		46	5230	8.06	9.50	No
	802.11ac(VHT20)	36	5180	9.01	10.50	No
		44	5220	8.90	10.50	No
		48	5240	8.99	10.50	No
	802.11ac(VHT40)	38	5190	8.11	9.50	No
		46	5230	7.94	9.50	No
	802.11ac(VHT80)	42	5210	7.34	8.50	No
5.3 (5.25~5.35)	802.11a	52	5260	<b>10.28</b>	11.50	Yes
		60	5300	10.26	11.50	No
		64	5320	10.27	11.50	No
	802.11n(HT20)	52	5260	9.15	10.50	No
		60	5300	9.39	10.50	No
		64	5320	9.12	10.50	No
	802.11n(HT40)	54	5270	8.10	9.50	No
		62	5310	8.23	9.50	No
	802.11ac(VHT20)	52	5260	9.09	10.50	No
		60	5300	9.38	10.50	No
		64	5320	9.32	10.50	No
	802.11ac(VHT40)	54	5270	8.28	9.50	No
		62	5310	8.48	9.50	No
	802.11ac(VHT80)	58	5290	7.48	8.50	No
5.6 (5.47~5.725)	802.11a	100	5500	13.40	15.00	No
		116	5580	13.52	15.00	No
		140	5700	<b>13.60</b>	15.00	Yes
		144	5720	13.58	15.00	No
	802.11n(HT20)	100	5500	12.34	14.00	No
		116	5580	12.34	14.00	No
		140	5700	12.66	14.00	No
		144	5720	12.59	14.00	No

	802.11n(HT40)	102	5510	11.54	13.00	No
		118	5590	11.65	13.00	No
		134	5670	12.23	13.00	No
		142	5710	11.84	13.00	No
	802.11ac(VHT20)	100	5500	12.54	14.00	No
		116	5580	12.30	14.00	No
		140	5700	12.89	14.00	No
		144	5720	12.57	14.00	No
	802.11ac(VHT40)	102	5510	11.26	13.00	No
		118	5590	11.47	13.00	No
		134	5670	12.17	13.00	No
		142	5710	11.82	13.00	No
	802.11ac(VHT80)	106	5530	10.58	12.00	No
		122	5610	10.36	12.00	No
		138	5690	11.14	12.00	No
	5.8 (5.725~5.850)	802.11a	149	5745	<b>13.37</b>	15.00
157			5785	13.12	15.00	No
165			5825	13.22	15.00	No
802.11n(HT20)		149	5745	12.30	14.00	No
		157	5785	12.42	14.00	No
		165	5825	12.17	14.00	No
802.11n(HT40)		151	5755	11.66	13.00	No
		159	5795	11.32	13.00	No
802.11ac(VHT20)		149	5745	12.57	14.00	No
		157	5785	12.16	14.00	No
		165	5825	12.38	14.00	No
802.11ac(VHT40)		151	5755	11.56	13.00	No
		159	5795	11.28	13.00	No
802.11ac(VHT80)		155	5775	10.13	12.00	No

Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.

## 8.6.6 5G WIFI Level 2-Antenna.6

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	16.56	18.00	Yes
		44	5220	16.38	18.00	Yes
		48	5240	<b>16.58</b>	18.00	Yes
	802.11n(HT20)	36	5180	15.48	17.00	No
		44	5220	15.36	17.00	No
		48	5240	15.31	17.00	No
	802.11n(HT40)	38	5190	14.04	15.50	No
		46	5230	14.39	16.00	No
	802.11ac(VHT20)	36	5180	15.32	17.00	No
		44	5220	15.42	17.00	No
		48	5240	15.47	17.00	No
	802.11ac(VHT40)	38	5190	14.50	16.00	No
		46	5230	14.35	16.00	No
	802.11ac(VHT80)	42	5210	13.68	15.00	No
5.3 (5.25~5.35)	802.11a	52	5260	16.61	18.00	No
		60	5300	16.54	18.00	No
		64	5320	<b>16.80</b>	18.00	Yes
	802.11n(HT20)	52	5260	15.55	17.00	No
		60	5300	15.65	17.00	No
		64	5320	15.60	17.00	No
	802.11n(HT40)	54	5270	14.64	16.00	No
		62	5310	14.66	16.00	No
	802.11ac(VHT20)	52	5260	15.53	17.00	No
		60	5300	15.69	17.00	No
		64	5320	15.57	17.00	No
	802.11ac(VHT40)	54	5270	14.60	16.00	No
		62	5310	14.75	16.00	No
	802.11ac(VHT80)	58	5290	13.77	15.00	No
5.6 (5.47~5.725)	802.11a	100	5500	16.35	18.00	No
		116	5580	16.33	18.00	No
		140	5700	<b>16.65</b>	18.00	Yes
		144	5720	16.63	18.00	No
	802.11n(HT20)	100	5500	15.21	17.00	No
		116	5580	15.26	17.00	No
		140	5700	15.61	17.00	No
		144	5720	15.52	17.00	No

	802.11n(HT40)	102	5510	14.39	16.00	No	
		118	5590	14.40	16.00	No	
		134	5670	15.11	16.00	No	
		142	5710	14.59	16.00	No	
	802.11ac(VHT20)	100	5500	15.37	17.00	No	
		116	5580	15.30	17.00	No	
		140	5700	15.64	17.00	No	
		144	5720	15.54	17.00	No	
	802.11ac(VHT40)	102	5510	14.31	16.00	No	
		118	5590	14.31	16.00	No	
		134	5670	14.97	16.00	No	
		142	5710	14.66	16.00	No	
	802.11ac(VHT80)	106	5530	13.40	15.00	No	
		122	5610	13.40	15.00	No	
		138	5690	14.01	15.00	No	
	5.8 (5.725~5.850)	802.11a	149	5745	<b>16.24</b>	18.00	Yes
157			5785	16.02	18.00	No	
165			5825	16.14	18.00	No	
802.11n(HT20)		149	5745	15.23	17.00	No	
		157	5785	15.21	17.00	No	
		165	5825	15.02	17.00	No	
802.11n(HT40)		151	5755	14.49	16.00	No	
		159	5795	14.23	16.00	No	
802.11ac(VHT20)		149	5745	15.32	17.00	No	
		157	5785	15.11	17.00	No	
		165	5825	15.14	17.00	No	
802.11ac(VHT40)		151	5755	14.44	16.00	No	
		159	5795	14.25	16.00	No	
802.11ac(VHT80)		155	5775	13.10	15.00	No	
<p>Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is <math>\leq 1.2</math> W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.</p>							

## 8.7 Bluetooth

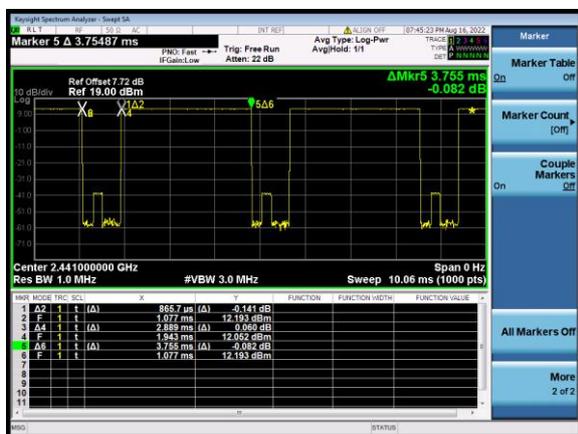
Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Conducted Power (dBm)	<b>12.90</b>	12.21	12.72	9.02	8.04	8.75
Tune-Up Limit (dBm)	14.00			10.00		
SAR Test Require.	Yes	N0	N0	N0	N0	N0
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Conducted Power (dBm)	9.02	8.20	8.84	/	/	/
Tune-Up Limit (dBm)	10.00			/		
SAR Test Require.	N0	N0	N0	/	/	/
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
Conducted Power (dBm)	4.79	5.41	4.57	5.04	5.64	4.76
Tune-Up Limit (dBm)	7.50			7.50		
SAR Test Require.	N0	N0	N0	N0	N0	N0

Note 1: Since bluetooth BR mode is the maximum output power mode, SAR measurements were performed with test software using DH5 modulation, and SAR measurement is not required for the EDR and LE. When the secondary mode is  $\leq 1/4$  dB higher than the primary mode.

Note: The Bluetooth duty cycle is 76.94 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

### Duty Cycle

#### GFSK



## 8.8 Power Reduction List

1. 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.
2. When device is making call in head, the power reduction will applied for SAR compliance.
3. When there is a voice call (including VOIP), and the audio is actively routed through the headset or speaker, which indicating the body exposure conditions will trigger the body exposure reduced the power.
4. When this device used data mode only, and the receiver will not work too, the reduced the power are same as body exposure.
5. The device employs proximity sensors that detect the presence of the user's body and Product Specific of the device. When these conditions are detected, Body and Limb reduced power will be active.
6. When the proximity sensors eorr, default scene reduced level DSI4 power.

**WWAN Reduced power level table**

Reduced level	Receiver state	Transmitting	Sensor	Position	Antenna
		conditions			
DSI1	On (head scenario)	WWAN Use Only & WWAN + WLAN	/	Head	Ant.0
					Ant.4
DSI2	Off (Body-Worn & Hotspot & Extremity scenario)	WWAN Use Only & WWAN + WLAN	Off (Sensor1 or Sensor2)	Front Side; Back Side; Left Edge; Right Edge; Top Edge; Bottom Edge	Ant.0
					Ant.4
DSI3	Off (Body-Worn & Hotspot & Extremity scenario)	WWAN Use Only & WWAN + WLAN	On (Sensor1) +Off (Sensor2)	Bottom Edge	Ant.0
					Ant.4
DSI4	Off (Body-Worn & Hotspot & Extremity scenario)	WWAN Use Only & WWAN + WLAN	N/A (Sensor1) +On (Sensor2)	Front Side; Back Side; Top Edge	Ant.0
					Ant.4

**WLAN Reduced power level table**

Reduced level	Receiver state	Transmitting	Sensor	Position	Antenna
		conditions			
Level1	On (head scenario)	WLAN Use Only & WWAN + WLAN	/	Head	Ant.6
Level2	Off (Body-Worn & Hotspot & Extremity scenario)	WLAN Use Only & WWAN + WLAN	/	Front Side; Back Side; Left Edge; Right Edge; Top Edge; Bottom Edge	Ant.6

**WWAN Antenna Power table**

Mode	Antenna	WWAN Antenna									
		Full Power	Receiver on			Receiver off					
			Head		Body-Worn & Extremity			Body-Worn & Hotspot & Extremity			
			Standalone	Simultaneous transmission	Standalone			Simultaneous transmission			
				+2.4G/5GWLAN				+2.4G/5GWLAN			
Off	DSI1	DSI1	DSI2	DSI3	DSI4	DSI2	DSI3	DSI4			
GSM 850	Ant.4	33.50	32.50	32.50	33.50	33.50	33.50	33.50	33.50	33.50	
GPRS850 1 Tx Slot	Ant.4	33.50	32.50	32.50	33.50	33.50	33.50	33.50	33.50	33.50	
GPRS850 2 Tx Slots	Ant.4	32.00	30.50	30.50	32.00	32.00	32.00	32.00	32.00	32.00	
GPRS850 3 Tx Slots	Ant.4	30.50	29.00	29.00	30.50	30.50	30.50	30.50	30.50	30.50	
GPRS850 4 Tx Slots	Ant.4	28.50	27.00	27.00	28.50	28.50	28.50	28.50	28.50	28.50	
EGPRS850 1 Tx Slot	Ant.4	27.50	27.00	27.00	27.50	27.50	27.50	27.50	27.50	27.50	
EGPRS850 2 Tx Slots	Ant.4	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	
EGPRS850 3 Tx Slots	Ant.4	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	
EGPRS850 4 Tx Slots	Ant.4	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	
GSM 850	Ant.0	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	
GPRS850 1 Tx Slot	Ant.0	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	
GPRS850 2 Tx Slots	Ant.0	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	
GPRS850 3 Tx Slots	Ant.0	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	
GPRS850 4 Tx Slots	Ant.0	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50	
EGPRS850 1 Tx Slot	Ant.0	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	
EGPRS850 2 Tx Slots	Ant.0	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	
EGPRS850 3 Tx Slots	Ant.0	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	
EGPRS850 4 Tx Slots	Ant.0	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	21.50	
GSM 1900	Ant.4	31.00	29.50	29.50	31.00	31.00	29.50	31.00	31.00	29.50	
GPRS1900 1 Tx Slot	Ant.4	30.50	29.00	29.00	30.50	30.50	29.00	30.50	30.50	29.00	
GPRS1900 2 Tx Slots	Ant.4	29.00	27.00	27.00	29.00	29.00	27.00	29.00	29.00	27.00	
GPRS1900 3 Tx Slots	Ant.4	27.50	25.50	25.50	27.50	27.50	25.50	27.50	27.50	25.50	
GPRS1900 4 Tx Slots	Ant.4	26.00	24.00	24.00	26.00	26.00	24.00	26.00	26.00	24.00	
EGPRS1900 1 Tx Slot	Ant.4	26.50	26.50	26.50	26.50	26.50	26.50	26.50	26.50	26.50	
EGPRS1900 2 Tx Slots	Ant.4	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	

EGPRS1900 3 Tx Slots	Ant.4	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20
EGPRS1900 4 Tx Slots	Ant.4	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
GSM 1900	Ant.0	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00
GPRS1900 1 Tx Slot	Ant.0	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00
GPRS1900 2 Tx Slots	Ant.0	29.50	29.50	29.50	29.50	28.50	28.50	29.50	28.50	28.50
GPRS1900 3 Tx Slots	Ant.0	27.50	27.50	27.50	27.50	26.50	26.50	27.50	26.50	26.50
GPRS1900 4 Tx Slots	Ant.0	26.00	26.00	26.00	26.00	25.00	25.00	26.00	25.00	25.00
EGPRS1900 1 Tx Slot	Ant.0	26.80	26.80	26.80	26.80	26.80	26.80	26.80	26.80	26.80
EGPRS1900 2 Tx Slots	Ant.0	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
EGPRS1900 3 Tx Slots	Ant.0	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20
EGPRS1900 4 Tx Slots	Ant.0	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
WCDMA Band2 AMR	Ant.4	25.10	20.10	20.10	25.10	25.10	19.10	25.10	25.10	19.10
WCDMA Band2 RMC	Ant.4	25.10	20.10	20.10	25.10	25.10	19.10	25.10	25.10	19.10
HSDPA Subtest-1	Ant.4	24.60	19.60	19.60	24.60	24.60	18.60	24.60	24.60	18.60
HSDPA Subtest-2	Ant.4	24.60	19.60	19.60	24.60	24.60	18.60	24.60	24.60	18.60
HSDPA Subtest-3	Ant.4	24.10	19.10	19.10	24.10	24.10	18.10	24.10	24.10	18.10
HSDPA Subtest-4	Ant.4	24.10	19.10	19.10	24.10	24.10	18.10	24.10	24.10	18.10
DC-HSDPA Subtest-1	Ant.4	24.60	19.60	19.60	24.60	24.60	18.60	24.60	24.60	18.60
DC-HSDPA Subtest-2	Ant.4	24.60	19.60	19.60	24.60	24.60	18.60	24.60	24.60	18.60
DC-HSDPA Subtest-3	Ant.4	24.10	19.10	19.10	24.10	24.10	18.10	24.10	24.10	18.10
DC-HSDPA Subtest-4	Ant.4	24.10	19.10	19.10	24.10	24.10	18.10	24.10	24.10	18.10
HSUPA Subtest-1	Ant.4	24.60	19.60	19.60	24.60	24.60	18.60	24.60	24.60	18.60
HSUPA Subtest-2	Ant.4	22.60	17.60	17.60	22.60	22.60	16.60	22.60	22.60	16.60
HSUPA Subtest-3	Ant.4	23.60	18.60	18.60	23.60	23.60	17.60	23.60	23.60	17.60
HSUPA Subtest-4	Ant.4	22.60	17.60	17.60	22.60	22.60	16.60	22.60	22.60	16.60
HSUPA Subtest-5	Ant.4	24.60	19.60	19.60	24.60	24.60	18.60	24.60	24.60	18.60
WCDMA Band2 AMR	Ant.0	25.50	25.50	25.50	25.50	22.50	22.50	25.50	22.50	22.50
WCDMA Band2 RMC	Ant.0	25.50	25.50	25.50	25.50	22.50	22.50	25.50	22.50	22.50
HSDPA Subtest-1	Ant.0	25.00	25.00	25.00	25.00	22.00	22.00	25.00	22.00	22.00
HSDPA Subtest-2	Ant.0	25.00	25.00	25.00	25.00	22.00	22.00	25.00	22.00	22.00
HSDPA Subtest-3	Ant.0	24.50	24.50	24.50	24.50	21.50	21.50	24.50	21.50	21.50
HSDPA Subtest-4	Ant.0	24.50	24.50	24.50	24.50	21.50	21.50	24.50	21.50	21.50
DC-HSDPA Subtest-1	Ant.0	25.00	25.00	25.00	25.00	22.00	22.00	25.00	22.00	22.00
DC-HSDPA Subtest-2	Ant.0	25.00	25.00	25.00	25.00	22.00	22.00	25.00	22.00	22.00

DC-HSDPA Subtest-3	Ant.0	24.50	24.50	24.50	24.50	21.50	21.50	24.50	21.50	21.50
DC-HSDPA Subtest-4	Ant.0	24.50	24.50	24.50	24.50	21.50	21.50	24.50	21.50	21.50
HSUPA Subtest-1	Ant.0	25.00	25.00	25.00	25.00	22.00	22.00	25.00	22.00	22.00
HSUPA Subtest-2	Ant.0	23.00	23.00	23.00	23.00	20.00	20.00	23.00	20.00	20.00
HSUPA Subtest-3	Ant.0	24.00	24.00	24.00	24.00	21.00	21.00	24.00	21.00	21.00
HSUPA Subtest-4	Ant.0	23.00	23.00	23.00	23.00	20.00	20.00	23.00	20.00	20.00
HSUPA Subtest-5	Ant.0	25.00	25.00	25.00	25.00	22.00	22.00	25.00	22.00	22.00
WCDMA Band4 AMR	Ant.4	25.10	19.60	19.60	25.10	25.10	19.10	25.10	25.10	19.10
WCDMA Band4 RMC	Ant.4	25.10	19.60	19.60	25.10	25.10	19.10	25.10	25.10	19.10
HSDPA Subtest-1	Ant.4	24.60	19.10	19.10	24.60	24.60	18.60	24.60	24.60	18.60
HSDPA Subtest-2	Ant.4	24.60	19.10	19.10	24.60	24.60	18.60	24.60	24.60	18.60
HSDPA Subtest-3	Ant.4	23.60	18.10	18.10	23.60	23.60	17.60	23.60	23.60	17.60
HSDPA Subtest-4	Ant.4	24.10	18.60	18.60	24.10	24.10	18.10	24.10	24.10	18.10
DC-HSDPA Subtest-1	Ant.4	24.60	19.10	19.10	24.60	24.60	18.60	24.60	24.60	18.60
DC-HSDPA Subtest-2	Ant.4	24.60	19.10	19.10	24.60	24.60	18.60	24.60	24.60	18.60
DC-HSDPA Subtest-3	Ant.4	23.60	18.10	18.10	23.60	23.60	17.60	23.60	23.60	17.60
DC-HSDPA Subtest-4	Ant.4	24.10	18.60	18.60	24.10	24.10	18.10	24.10	24.10	18.10
HSUPA Subtest-1	Ant.4	24.60	19.10	19.10	24.60	24.60	18.60	24.60	24.60	18.60
HSUPA Subtest-2	Ant.4	22.60	17.10	17.10	22.60	22.60	16.60	22.60	22.60	16.60
HSUPA Subtest-3	Ant.4	23.60	18.10	18.10	23.60	23.60	17.60	23.60	23.60	17.60
HSUPA Subtest-4	Ant.4	22.60	17.10	17.10	22.60	22.60	16.60	22.60	22.60	16.60
HSUPA Subtest-5	Ant.4	24.60	19.10	19.10	24.60	24.60	18.60	24.60	24.60	18.60
WCDMA Band4 AMR	Ant.0	25.50	25.50	25.50	25.50	22.00	22.00	25.50	22.00	22.00
WCDMA Band4 RMC	Ant.0	25.50	25.50	25.50	25.50	22.00	22.00	25.50	22.00	22.00
HSDPA Subtest-1	Ant.0	25.00	25.00	25.00	25.00	21.50	21.50	25.00	21.50	21.50
HSDPA Subtest-2	Ant.0	25.00	25.00	25.00	25.00	21.50	21.50	25.00	21.50	21.50
HSDPA Subtest-3	Ant.0	24.00	24.00	24.00	24.00	20.50	20.50	24.00	20.50	20.50
HSDPA Subtest-4	Ant.0	24.50	24.50	24.50	24.50	21.00	21.00	24.50	21.00	21.00
DC-HSDPA Subtest-1	Ant.0	25.00	25.00	25.00	25.00	21.50	21.50	25.00	21.50	21.50
DC-HSDPA Subtest-2	Ant.0	25.00	25.00	25.00	25.00	21.50	21.50	25.00	21.50	21.50
DC-HSDPA Subtest-3	Ant.0	24.00	24.00	24.00	24.00	20.50	20.50	24.00	20.50	20.50
DC-HSDPA Subtest-4	Ant.0	24.50	24.50	24.50	24.50	21.00	21.00	24.50	21.00	21.00
HSUPA Subtest-1	Ant.0	25.00	25.00	25.00	25.00	21.50	21.50	25.00	21.50	21.50
HSUPA Subtest-2	Ant.0	23.00	23.00	23.00	23.00	19.50	19.50	23.00	19.50	19.50

HSUPA Subtest-3	Ant.0	24.00	24.00	24.00	24.00	20.50	20.50	24.00	20.50	20.50
HSUPA Subtest-4	Ant.0	23.00	23.00	23.00	23.00	19.50	19.50	23.00	19.50	19.50
HSUPA Subtest-5	Ant.0	25.00	25.00	25.00	25.00	21.50	21.50	25.00	21.50	21.50
WCDMA Band5 AMR	Ant.4	25.10	23.10	23.10	25.10	25.10	24.10	25.10	25.10	24.10
WCDMA Band5 RMC	Ant.4	25.10	23.10	23.10	25.10	25.10	24.10	25.10	25.10	24.10
HSDPA Subtest-1	Ant.4	24.10	22.10	22.10	24.10	24.10	23.10	24.10	24.10	23.10
HSDPA Subtest-2	Ant.4	24.10	22.10	22.10	24.10	24.10	23.10	24.10	24.10	23.10
HSDPA Subtest-3	Ant.4	23.10	21.10	21.10	23.10	23.10	22.10	23.10	23.10	22.10
HSDPA Subtest-4	Ant.4	23.10	21.10	21.10	23.10	23.10	22.10	23.10	23.10	22.10
DC-HSDPA Subtest-1	Ant.4	24.10	22.10	22.10	24.10	24.10	23.10	24.10	24.10	23.10
DC-HSDPA Subtest-2	Ant.4	24.10	22.10	22.10	24.10	24.10	23.10	24.10	24.10	23.10
DC-HSDPA Subtest-3	Ant.4	23.10	21.10	21.10	23.10	23.10	22.10	23.10	23.10	22.10
DC-HSDPA Subtest-4	Ant.4	23.10	21.10	21.10	23.10	23.10	22.10	23.10	23.10	22.10
HSUPA Subtest-1	Ant.4	24.10	22.10	22.10	24.10	24.10	23.10	24.10	24.10	23.10
HSUPA Subtest-2	Ant.4	22.10	20.10	20.10	22.10	22.10	21.10	22.10	22.10	21.10
HSUPA Subtest-3	Ant.4	23.10	21.10	21.10	23.10	23.10	22.10	23.10	23.10	22.10
HSUPA Subtest-4	Ant.4	22.10	20.10	20.10	22.10	22.10	21.10	22.10	22.10	21.10
HSUPA Subtest-5	Ant.4	24.10	22.10	22.10	24.10	24.10	23.10	24.10	24.10	23.10
WCDMA Band5 AMR	Ant.0	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50
WCDMA Band5 RMC	Ant.0	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50
HSDPA Subtest-1	Ant.0	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
HSDPA Subtest-2	Ant.0	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
HSDPA Subtest-3	Ant.0	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
HSDPA Subtest-4	Ant.0	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
DC-HSDPA Subtest-1	Ant.0	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
DC-HSDPA Subtest-2	Ant.0	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
DC-HSDPA Subtest-3	Ant.0	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
DC-HSDPA Subtest-4	Ant.0	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
HSUPA Subtest-1	Ant.0	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
HSUPA Subtest-2	Ant.0	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50
HSUPA Subtest-3	Ant.0	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50	23.50
HSUPA Subtest-4	Ant.0	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50
HSUPA Subtest-5	Ant.0	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band 2	Ant.4	25.10	20.10	20.10	25.10	25.10	22.10	25.10	25.10	22.10

LTE Band 2	Ant.0	25.50	25.50	25.50	25.50	22.50	22.50	25.50	22.50	22.50
LTE Band 4	Ant.4	25.10	20.60	20.60	25.10	25.10	20.60	25.10	25.10	20.60
LTE Band 4	Ant.0	25.50	25.50	25.50	25.50	22.50	22.50	25.50	22.50	22.50
LTE Band 5	Ant.4	25.20	23.70	23.70	25.20	25.20	25.20	25.20	25.20	25.20
LTE Band 5	Ant.0	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50
LTE Band 7	Ant.4	25.20	18.70	18.70	25.20	25.20	21.20	25.20	25.20	21.20
LTE Band 7	Ant.0	25.50	25.50	25.50	25.50	22.00	22.00	25.50	22.00	22.00
LTE Band 66	Ant.4	25.00	20.50	20.50	25.00	25.00	22.00	25.00	25.00	22.00
LTE Band 66	Ant.0	25.50	25.50	25.50	25.50	21.00	21.00	25.50	21.00	21.00
LTE Band 38	Ant.4	25.40	22.40	22.40	25.40	25.40	23.90	25.40	25.40	23.90
LTE Band 38	Ant.0	25.50	25.50	25.50	25.50	23.00	23.00	25.50	23.00	23.00
LTE Band 41	Ant.4	25.40	20.40	20.40	25.40	25.40	23.40	25.40	25.40	23.40
LTE Band 41	Ant.0	25.50	25.50	25.50	25.50	24.00	24.00	25.50	24.00	24.00

**WLAN Reduced power level table**

Mode	Antenna	WLAN Antenna						
		Full Power	Receiver on			Receiver off		
			Head		Body-Worn & Extremity	Hotspot	Standalone	Simultaneous transmission
			Standalone	Simultaneous transmission				
				Standalone	WWAN+2.4G/5GWLAN	Standalone	+2.4G/5GWLAN	
Off	Level1	Level1	Level2	Level2	Level2			
2.4G WLAN 802.11b	Ant.6	21.00	16.50	16.50	21.00	21.00	21.00	
2.4G WLAN 802.11g	Ant.6	20.00	15.50	15.50	20.00	20.00	20.00	
2.4G WLAN 802.11n20	Ant.6	20.00	15.50	15.50	20.00	20.00	20.00	
2.4G WLAN 802.11n40	Ant.6	17.50	14.50	14.50	17.50	17.50	17.50	
5.2G WLAN 802.11a	Ant.6	18.00	11.50	11.50	18.00	18.00	18.00	
5.2G WLAN 802.11n20	Ant.6	17.00	10.50	10.50	17.00	17.00	17.00	
5.2G WLAN 802.11n40	Ant.6	16.00	9.50	9.50	16.00	16.00	16.00	
5.2G WLAN 802.11ac20	Ant.6	17.00	10.50	10.50	17.00	17.00	17.00	
5.2G WLAN 802.11ac40	Ant.6	16.00	9.50	9.50	16.00	16.00	16.00	
5.2G WLAN 802.11ac80	Ant.6	15.00	8.50	8.50	15.00	15.00	15.00	
5.3G WLAN 802.11a	Ant.6	18.00	11.50	11.50	18.00	18.00	/	
5.3G WLAN 802.11n20	Ant.6	17.00	10.50	10.50	17.00	17.00	/	
5.3G WLAN 802.11n40	Ant.6	16.00	9.50	9.50	16.00	16.00	/	
5.3G WLAN 802.11ac20	Ant.6	17.00	10.50	10.50	17.00	17.00	/	
5.3G WLAN 802.11ac40	Ant.6	16.00	9.50	9.50	16.00	16.00	/	
5.3G WLAN 802.11ac80	Ant.6	15.00	8.50	8.50	15.00	15.00	/	
5.6G WLAN 802.11a	Ant.6	18.00	15.00	15.00	18.00	18.00	/	
5.6G WLAN 802.11n20	Ant.6	17.00	14.00	14.00	17.00	17.00	/	
5.6G WLAN 802.11n40	Ant.6	16.00	13.00	13.00	16.00	16.00	/	
5.6G WLAN 802.11ac20	Ant.6	17.00	14.00	14.00	17.00	17.00	/	
5.6G WLAN 802.11ac40	Ant.6	16.00	13.00	13.00	16.00	16.00	/	
5.6G WLAN 802.11ac80	Ant.6	15.00	12.00	12.00	15.00	15.00	/	
5.8G WLAN 802.11a	Ant.6	18.00	15.00	15.00	18.00	18.00	18.00	
5.8G WLAN 802.11n20	Ant.6	17.00	14.00	14.00	17.00	17.00	17.00	
5.8G WLAN 802.11n40	Ant.6	16.00	13.00	13.00	16.00	16.00	16.00	
5.8G WLAN 802.11ac20	Ant.6	17.00	14.00	14.00	17.00	17.00	17.00	

5.8G WLAN 802.11ac40	Ant.6	16.00	13.00	13.00	16.00	16.00	16.00
5.8G LAN 802.11ac80	Ant.6	15.00	12.00	12.00	15.00	15.00	15.00
Bluetooth	Ant.6	14.00	14.00	14.00	14.00	14.00	14.00

## 9 PROXIMITY SENSOR TRIGGERING TEST

### 9.1 Sensor layout

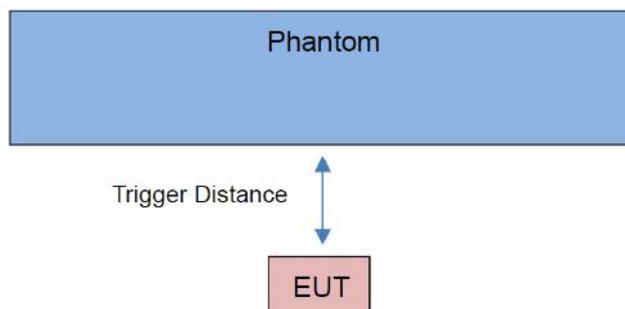
Please refer the document “BL-SZ2270591-AA.pdf”.

### 9.2 Procedures for determining proximity sensor distance

The device uses proximity sensors to reduce the maximum output power in selected wireless mode and operating configurations to ensure SAR compliance. The sensor implementation can identify and facilitate triggering different max power levels for different scenarios including the device held by hand(Extremity) and different exposure test positions test positions when the device is closed to a user’s body.

Proximity sensor triggering distance testing was performed, EUT moving further away from the phantom and EUT moving toward the phantom were both assessed, and the shortest triggering distances were reported and used for SAR assessment.

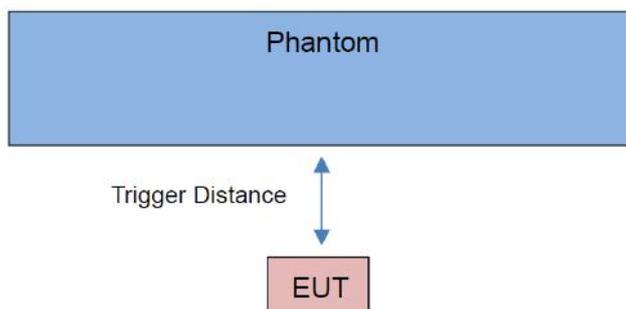
#### 9.2.1 proximity sensor 1



Distance in mm	1~10	11	12	13	14	15	16	17	18	19	20~25
Front Side	On	On	On	On	On	On	On	Off	Off	Off	Off
Back Side	On	On	On	On	On	On	On	Off	Off	Off	Off
Bottom Edge	On	On	On	On	On	On	On	Off	Off	Off	Off

Note: Power reduction is only applicable for Ant.0

### 9.2.2 proximity sensor 2



Distance in mm	1~10	11	12	13	14	15	16	17	18	19	20~25
Front Side	On	On	On	On	On	On	On	Off	Off	Off	Off
Back Side	On	On	On	On	On	On	On	Off	Off	Off	Off
Top Edge	On	On	On	On	On	On	On	Off	Off	Off	Off

Note: Power reduction is only applicable for Ant.4

### 9.2.3 Procedures for determining EUT tilt angle influences to proximity sensor triggering

The influence of EUT tilt angles to proximity sensor 1 triggering was determined by positioning each EUT edge that contains a transmitting antenna 0, perpendicular to the flat phantom, at 16 mm separation for the front side, 16 mm separation for the back side, 16 mm separation for the bottom edge. Rotating the tablet around the edge next to the phantom in  $\leq 10^\circ$  increments until the tablet is  $\pm 45^\circ$  from the vertical position at  $0^\circ$ , and the maximum output power remains in the reduced mode.

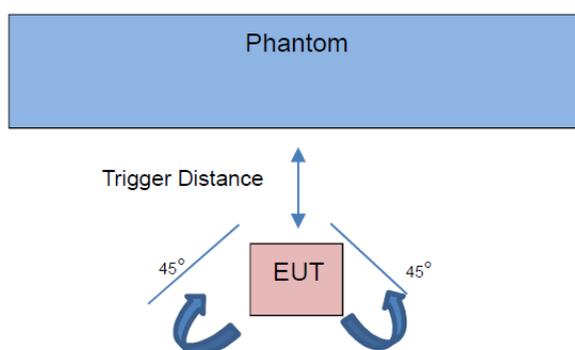


Table: Summary of Phone Tilt Angle Influence to Proximity Sensor Triggering

Antenna	Position	Minimum trigger distance at which power reduction was maintained over $\pm 45^\circ$	Power Reduction Status											
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°	
Ant.0	Bottom Edge	16mm	on	on	on	on	on	on	on	on	on	on	on	on

**For verification of compliance of power reduction scheme, additional SAR test with EUT transmitting at full RF power at a separation of “the triggering distance – 1 mm”**

Ant.0 of proximity sensor 1

EUT Sides	Additional SAR test Distance in mm
Front Side	15
Back Side	15
Bottom Edge	15

**9.2.4 Procedures for determining EUT tilt angle influences to proximity sensor triggering**

The influence of EUT tilt angles to proximity sensor 2 triggering was determined by positioning each EUT edge that contains a transmitting antenna 4, perpendicular to the flat phantom, at 16 mm separation for the front side, 16 mm separation for the back side, 16 mm separation for the top edge. Rotating the tablet around the edge next to the phantom in  $\leq 10^\circ$  increments until the tablet is  $\pm 45^\circ$  from the vertical position at  $0^\circ$ , and the maximum output power remains in the reduced mode.

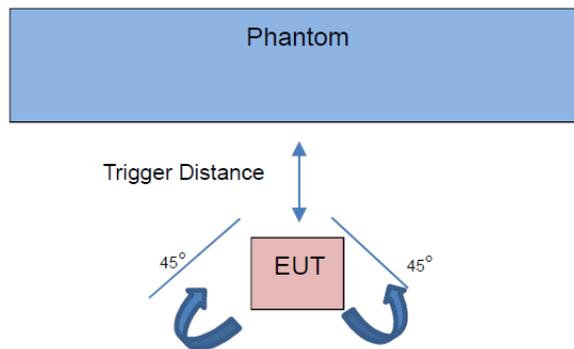


Table: Summary of Phone Tilt Angle Influence to Proximity Sensor Triggering

Antenna	Position	Minimum trigger distance at which power reduction was maintained over $\pm 45^\circ$	Power Reduction Status											
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°	
Ant.4	Top Edge	16mm	on	on	on	on	on	on	on	on	on	on	on	

**For verification of compliance of power reduction scheme, additional SAR test with EUT transmitting at full RF power at a separation of “the triggering distance – 1 mm”**

Ant.4 of proximity sensor 2

EUT Sides	Additional SAR test Distance in mm
Front Side	15
Back Side	15
Top Edge	15

## 10 TEST EXCLUSION CONSIDERATION

Please refer the document “BL-SZ2270591-AA.pdf”.

## 10.1 SAR Test Exclusion Consideration Table

According with FCC KDB 447498 D04, Appendix B, The SAR-based exemption formula applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW), this Device SAR test configurations consider as following :

ANT 0

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	>25mm	<5mm
	Data	34.00	2511.89	Yes	Yes	Yes	Yes	No	Yes
GSM 1900	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	Data	31.00	1258.93	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 2	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	RMC	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 4	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	RMC	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	RMC	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
LTE Band 2	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
LTE Band 7	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
LTE Band 66	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
LTE Band 38	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes
LTE Band 41	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	25.50	354.31	Yes	Yes	Yes	Yes	No	Yes

ANT 4

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	>25mm	<5mm	<5mm	>25mm	
	Data	33.50	2238.72	Yes	Yes	No	Yes	Yes	No
GSM 1900	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	Data	31.00	1258.93	Yes	Yes	No	Yes	Yes	No
WCDMA Band 2	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	RMC	25.10	323.59	Yes	Yes	No	Yes	Yes	No
WCDMA Band 4	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	RMC	25.10	323.59	Yes	Yes	No	Yes	Yes	No
WCDMA Band 5	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	RMC	25.10	323.59	Yes	Yes	No	Yes	Yes	No
LTE Band 2	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	QPSK	25.10	323.59	Yes	Yes	No	Yes	Yes	No
LTE Band 4	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	QPSK	25.10	323.59	Yes	Yes	No	Yes	Yes	No
LTE Band 5	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	QPSK	25.20	331.13	Yes	Yes	No	Yes	Yes	No
LTE Band 7	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	QPSK	25.20	331.13	Yes	Yes	No	Yes	Yes	No
LTE Band 66	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	QPSK	25.00	316.23	Yes	Yes	No	Yes	Yes	No
LTE Band 38	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	QPSK	25.40	346.74	Yes	Yes	No	Yes	Yes	No
LTE Band 41	Distance to User		<5mm	<5mm	>25mm	<5mm	<5mm	>25mm	
	QPSK	25.40	346.74	Yes	Yes	No	Yes	Yes	No

## ANT6

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User		<5mm	<5mm	<5mm	>25mm	<5mm	>25mm	
	802.11b	21.00	125.89	Yes	Yes	Yes	No	Yes	No
	802.11g	20.00	100.00	No	No	No	No	No	No
	802.11n(HT20)	20.00	100.00	No	No	No	No	No	No
	802.11n(HT40)	17.50	56.23	No	No	No	No	No	No
WLAN 5.2 G	Distance to User		<5mm	<5mm	<5mm	>25mm	<5mm	>25mm	
	802.11a	18.00	63.10	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT20)	17.00	50.12	No	No	No	No	No	No
	802.11ac(VHT40)	16.00	39.81	No	No	No	No	No	No
WLAN 5.3 G	Distance to User		<5mm	<5mm	<5mm	>25mm	<5mm	>25mm	
	802.11a	18.00	63.10	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT20)	17.00	50.12	No	No	No	No	No	No
	802.11ac(VHT40)	16.00	39.81	No	No	No	No	No	No
WLAN 5.6 G	Distance to User		<5mm	<5mm	<5mm	>25mm	<5mm	>25mm	
	802.11a	18.00	63.10	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT20)	17.00	50.12	No	No	No	No	No	No
	802.11ac(VHT40)	16.00	39.81	No	No	No	No	No	No
WLAN 5.8 G	Distance to User		<5mm	<5mm	<5mm	>25mm	<5mm	>25mm	
	802.11a	18.00	63.10	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	16.00	39.81	No	No	No	No	No	No
	802.11ac(VHT20)	17.00	50.12	No	No	No	No	No	No
	802.11ac(VHT40)	16.00	39.81	No	No	No	No	No	No

## Note:

- Maximum power is the source-based time-average power and represents the maximum RF output power including tune-up tolerance among production units
- Per KDB 447498 D04, 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 D04, 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 D04, for separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive), the threshold Pth (mW) is given by Following:

$$P_{th}(mW) = \begin{cases} ERP_{20cm}(d/20cm)^x & d \leq 20cm \\ ERP_{20cm} & 20cm < d \leq 40cm \end{cases}$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20cm}\sqrt{f}} \right)$$

- a. f(GHz) is the RF channel transmit frequency in GHz
- b. d is the separation distance (cm), The result is rounded to one decimal place for comparison
- c.  $ERP_{20cm}$  are determined by:

$$ERP_{20cm}(mW) = f(x) = \begin{cases} 2040f & 0.3GHz \leq f < 1.5GHz \\ 3060 & 1.5GHz \leq f \leq 6GHz \end{cases}$$

5. 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  $\leq 1.2W/kg$ , HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
6. 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
7. 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  $\leq 1.2 W/kg$ .
8. Per KDB 248227 D01 SAR is not required for the following U-NII-1 and U-NII-2A bands conditions.
  - a. When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is  $\leq 1.2 W/kg$ , SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
  - b. When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is  $\leq 1.2 W/kg$ , SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

# 11 TEST RESULT

## 11.1 GSM 850

Antenna	Power Reduction Level	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.
<b>Head</b>													
Ant.4	DSI1	GPRS 3 slots	Left Cheek	0	128	824.2	0.11	0.315	27.23	29.00	1.503	0.473	/
Ant.4	DSI1	GPRS 3 slots	Left Tilt	0	128	824.2	-0.14	0.261	27.23	29.00	1.503	0.392	/
Ant.4	DSI1	GPRS 3 slots	Right Cheek	0	128	824.2	-0.04	0.329	27.23	29.00	1.503	<b>0.494</b>	<b>1#</b>
Ant.4	DSI1	GPRS 3 slots	Right Tilt	0	128	824.2	-0.07	0.258	27.23	29.00	1.503	0.388	/
Ant.0	DSI1	GPRS 3 slots	Left Cheek	0	251	848.8	-0.15	0.093	29.28	30.50	1.324	0.123	/
Ant.0	DSI1	GPRS 3 slots	Left Tilt	0	251	848.8	-0.19	0.045	29.28	30.50	1.324	0.060	/
Ant.0	DSI1	GPRS 3 slots	Right Cheek	0	251	848.8	0.01	0.106	29.28	30.50	1.324	0.140	/
Ant.0	DSI1	GPRS 3 slots	Right Tilt	0	251	848.8	-0.12	0.051	29.28	30.50	1.324	0.068	/
<b>Body-worn&amp;Hotspot</b>													
Ant.4	DSI4	GPRS 3 slots	Front Side	10	251	848.8	0.07	0.168	29.70	30.50	1.202	0.202	/
Ant.4	DSI4	GPRS 3 slots	Back Side	10	251	848.8	-0.13	0.205	29.70	30.50	1.202	<b>0.246</b>	<b>2#</b>
Ant.4	DSI2	GPRS 3 slots	Right Edge	10	251	848.8	0.12	0.095	29.70	30.50	1.202	0.114	/
Ant.4	DSI4	GPRS 3 slots	Top Edge	10	251	848.8	-0.17	0.196	29.70	30.50	1.202	0.236	/
Ant.0	DSI4	GPRS 3 slots	Front Side	10	251	848.8	0.18	0.118	29.28	30.50	1.324	0.156	/
Ant.0	DSI4	GPRS 3 slots	Back Side	10	251	848.8	0.11	0.185	29.28	30.50	1.324	0.245	/
Ant.0	DSI2	GPRS 3 slots	Left Edge	10	251	848.8	-0.03	0.113	29.28	30.50	1.324	0.150	/
Ant.0	DSI2	GPRS 3 slots	Right Edge	10	251	848.8	0.19	0.053	29.28	30.50	1.324	0.070	/
Ant.0	DSI3	GPRS 3 slots	Bottom Edge	10	251	848.8	0.03	0.152	29.28	30.50	1.324	0.201	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

## 11.2 GSM 1900

Antenna	Power Reduction Level	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.
<b>Head</b>													
Ant.4	DSI1	GPRS 3 slots	Left Cheek	0	661	1880.0	-0.05	0.271	23.99	25.50	1.416	0.384	/
Ant.4	DSI1	GPRS 3 slots	Left Tilt	0	661	1880.0	0.11	0.335	23.99	25.50	1.416	0.474	/
Ant.4	DSI1	GPRS 3 slots	Right Cheek	0	661	1880.0	-0.02	0.391	23.99	25.50	1.416	<b>0.554</b>	<b>3#</b>
Ant.4	DSI1	GPRS 3 slots	Right Tilt	0	661	1880.0	-0.15	0.368	23.99	25.50	1.416	0.521	/
Ant.0	DSI1	GPRS 2 slots	Left Cheek	0	661	1880.0	-0.19	0.065	27.94	29.50	1.432	0.093	/
Ant.0	DSI1	GPRS 2 slots	Left Tilt	0	661	1880.0	-0.13	0.053	27.94	29.50	1.432	0.076	/
Ant.0	DSI1	GPRS 2 slots	Right Cheek	0	661	1880.0	-0.06	0.061	27.94	29.50	1.432	0.087	/
Ant.0	DSI1	GPRS 2 slots	Right Tilt	0	661	1880.0	-0.02	0.045	27.94	29.50	1.432	0.064	/
<b>Body-worn&amp;Hotspot</b>													
Ant.4	DSI4	GPRS 3 slots	Front Side	10	661	1880.0	-0.17	0.159	23.99	25.50	1.416	0.225	/
Ant.4	DSI4	GPRS 3 slots	Back Side	10	661	1880.0	0.09	0.232	23.99	25.50	1.416	0.329	/
Ant.4	DSI2	GPRS 3 slots	Right Edge	10	810	1909.8	-0.05	0.154	25.92	27.50	1.439	0.222	/
Ant.4	DSI4	GPRS 3 slots	Top Edge	10	661	1880.0	-0.02	0.301	23.99	25.50	1.416	<b>0.426</b>	<b>4#</b>
Ant.0	DSI4	GPRS 2 slots	Front Side	10	661	1880.0	0.05	0.091	27.00	28.50	1.413	0.129	/
Ant.0	DSI4	GPRS 2 slots	Back Side	10	661	1880.0	0.13	0.244	27.00	28.50	1.413	0.345	/
Ant.0	DSI2	GPRS 2 slots	Left Edge	10	661	1880.0	-0.14	0.052	27.94	29.50	1.432	0.074	/
Ant.0	DSI2	GPRS 2 slots	Right Edge	10	661	1880.0	-0.14	0.103	27.94	29.50	1.432	0.147	/
Ant.0	DSI3	GPRS 2 slots	Bottom Edge	10	661	1880.0	0.09	0.224	27.00	28.50	1.413	0.317	/
<b>P-sensor</b>													
Ant.4	Full power	GPRS 3 slots	Front Side	15	810	1909.8	0.15	0.118	25.92	27.50	1.439	0.170	/
Ant.4	Full power	GPRS 3 slots	Back Side	15	810	1909.8	0.14	0.161	25.92	27.50	1.439	0.232	/
Ant.4	Full power	GPRS 3 slots	Top Edge	15	810	1909.8	-0.03	0.228	25.92	27.50	1.439	0.328	/
Ant.0	Full power	GPRS 2 slots	Front Side	15	661	1880.0	-0.11	0.106	27.94	29.50	1.432	0.152	/
Ant.0	Full power	GPRS 2 slots	Back Side	15	661	1880.0	-0.02	0.204	27.94	29.50	1.432	0.292	/
Ant.0	Full power	GPRS 2 slots	Bottom Edge	15	661	1880.0	-0.18	0.216	27.94	29.50	1.432	0.309	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

### 11.3WCDMA Band 2

Antenna	Power Reducteion	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.
<b>Head</b>													
Ant.4	DSI1	RMC	Left Cheek	0	9400	1880.0	0.02	0.500	19.15	20.10	1.245	0.623	/
Ant.4	DSI1	RMC	Left Tilt	0	9400	1880.0	-0.06	0.646	19.15	20.10	1.245	0.804	/
Ant.4	DSI1	RMC	Right Cheek	0	9400	1880.0	-0.18	0.747	19.15	20.10	1.245	<b>0.930</b>	5#
Ant.4	DSI1	RMC	Right Tilt	0	9400	1880.0	-0.02	0.678	19.15	20.10	1.245	0.844	/
Ant.4	DSI1	RMC	Left Tilt	0	9262	1852.4	-0.16	0.549	18.81	20.10	1.346	0.739	/
Ant.4	DSI1	RMC	Left Tilt	0	9538	1907.6	-0.08	0.585	18.92	20.10	1.312	0.768	/
Ant.4	DSI1	RMC	Right Cheek	0	9262	1852.4	0.19	0.634	18.81	20.10	1.346	0.853	/
Ant.4	DSI1	RMC	Right Cheek	0	9538	1907.6	0.07	0.681	18.92	20.10	1.312	0.893	/
Ant.4	DSI1	RMC	Right Tilt	0	9262	1852.4	0.04	0.575	18.81	20.10	1.346	0.774	/
Ant.4	DSI1	RMC	Right Tilt	0	9538	1907.6	-0.13	0.620	18.92	20.10	1.312	0.813	/
Ant.0	DSI1	RMC	Left Cheek	0	9400	1880.0	-0.03	0.120	24.66	25.50	1.213	0.146	/
Ant.0	DSI1	RMC	Left Tilt	0	9400	1880.0	-0.15	0.103	24.66	25.50	1.213	0.125	/
Ant.0	DSI1	RMC	Right Cheek	0	9400	1880.0	-0.16	0.128	24.66	25.50	1.213	0.155	/
Ant.0	DSI1	RMC	Right Tilt	0	9400	1880.0	-0.09	0.085	24.66	25.50	1.213	0.103	/
<b>Body-worn&amp;Hotspot</b>													
Ant.4	DSI4	RMC	Front Side	10	9400	1880.0	0.15	0.120	18.01	19.10	1.285	0.154	/
Ant.4	DSI4	RMC	Back Side	10	9400	1880.0	-0.19	0.165	18.01	19.10	1.285	0.212	/
Ant.4	DSI2	RMC	Right Edge	10	9400	1880.0	-0.12	0.316	24.04	25.10	1.276	0.403	/
Ant.4	DSI4	RMC	Top Edge	10	9400	1880.0	0.05	0.214	18.01	19.00	1.256	0.269	/
Ant.0	DSI4	RMC	Front Side	10	9400	1880.0	-0.01	0.191	21.63	22.50	1.222	0.233	/
Ant.0	DSI4	RMC	Back Side	10	9400	1880.0	-0.13	0.440	21.63	22.50	1.222	<b>0.538</b>	6#
Ant.0	DSI2	RMC	Left Edge	10	9400	1880.0	0.15	0.093	24.66	25.50	1.213	0.113	/
Ant.0	DSI2	RMC	Right Edge	10	9400	1880.0	-0.05	0.173	24.66	25.50	1.213	0.210	/
Ant.0	DSI3	RMC	Bottom Edge	10	9400	1880.0	-0.07	0.332	21.63	22.50	1.222	0.406	/
<b>P-sensor</b>													
Ant.4	Full power	RMC	Front Side	15	9400	1880.0	-0.03	0.284	24.04	25.10	1.276	0.362	/
Ant.4	Full power	RMC	Back Side	15	9400	1880.0	-0.14	0.371	24.04	25.10	1.276	0.473	/
Ant.4	Full power	RMC	Top Edge	15	9400	1880.0	0.11	0.520	24.04	25.10	1.276	0.664	/
Ant.0	Full power	RMC	Front Side	15	9400	1880.0	-0.07	0.213	24.66	25.50	1.213	0.258	/
Ant.0	Full power	RMC	Back Side	15	9400	1880.0	0.02	0.363	24.66	25.50	1.213	0.440	/
Ant.0	Full power	RMC	Bottom Edge	15	9400	1880.0	0.13	0.405	24.66	25.50	1.213	0.491	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

### 11.4WCDMA Band 4

Antenna	Power Reducteion	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.
<b>Head</b>													
Ant.4	DSI1	RMC	Left Cheek	0	1412	1732.4	-0.10	0.182	18.37	19.60	1.327	0.242	/
Ant.4	DSI1	RMC	Left Tilt	0	1412	1732.4	-0.16	0.238	18.37	19.60	1.327	0.316	/
Ant.4	DSI1	RMC	Right Cheek	0	1412	1732.4	-0.11	0.223	18.37	19.60	1.327	0.296	/
Ant.4	DSI1	RMC	Right Tilt	0	1412	1732.4	-0.05	0.271	18.37	19.60	1.327	<b>0.360</b>	<b>7#</b>
Ant.0	DSI1	RMC	Left Cheek	0	1513	1752.6	0.19	0.091	24.35	25.50	1.303	0.119	/
Ant.0	DSI1	RMC	Left Tilt	0	1513	1752.6	-0.11	0.068	24.35	25.50	1.303	0.089	/
Ant.0	DSI1	RMC	Right Cheek	0	1513	1752.6	-0.05	0.119	24.35	25.50	1.303	0.155	/
Ant.0	DSI1	RMC	Right Tilt	0	1513	1752.6	-0.16	0.073	24.35	25.50	1.303	0.095	/
<b>Body-worn&amp;Hotspot</b>													
Ant.4	DSI4	RMC	Front Side	10	1513	1752.6	-0.08	0.050	17.77	19.10	1.358	0.068	/
Ant.4	DSI4	RMC	Back Side	10	1513	1752.6	-0.03	0.075	17.77	19.10	1.358	0.102	/
Ant.4	DSI2	RMC	Right Edge	10	1513	1752.6	0.03	0.166	23.86	25.10	1.330	0.221	/
Ant.4	DSI4	RMC	Top Edge	10	1513	1752.6	-0.01	0.124	17.77	19.10	1.358	0.168	/
Ant.0	DSI4	RMC	Front Side	10	1412	1732.4	-0.19	0.136	20.79	22.00	1.321	0.180	/
Ant.0	DSI4	RMC	Back Side	10	1412	1732.4	-0.03	0.318	20.79	22.00	1.321	0.420	/
Ant.0	DSI2	RMC	Left Edge	10	1513	1752.6	0.17	0.123	24.35	25.50	1.303	0.160	/
Ant.0	DSI2	RMC	Right Edge	10	1513	1752.6	0.18	0.186	24.35	25.50	1.303	0.242	/
Ant.0	DSI3	RMC	Bottom Edge	10	1412	1732.4	-0.14	0.441	20.79	22.00	1.321	<b>0.583</b>	<b>8#</b>
<b>P-sensor</b>													
Ant.4	Full power	RMC	Front Side	15	1513	1752.6	0.19	0.110	23.86	25.10	1.330	0.146	/
Ant.4	Full power	RMC	Back Side	15	1513	1752.6	0.00	0.135	23.86	25.10	1.330	0.180	/
Ant.4	Full power	RMC	Top Edge	15	1513	1752.6	-0.13	0.219	23.86	25.10	1.330	0.291	/
Ant.0	Full power	RMC	Front Side	15	1513	1752.6	-0.06	0.168	24.35	25.50	1.303	0.219	/
Ant.0	Full power	RMC	Back Side	15	1513	1752.6	-0.17	0.425	24.35	25.50	1.303	0.554	/
Ant.0	Full power	RMC	Bottom Edge	15	1513	1752.6	0.13	0.611	24.35	25.50	1.303	0.796	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

Antenna	Power Reducteion	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
<b>Specific</b>													
Ant.0	DSI3	RMC	Bottom Edge	0	1412	1732.4	-0.03	1.630	20.79	22.00	1.321	<b>2.153</b>	<b>9#</b>
Ant.0	DSI3	RMC	Bottom Edge	0	1312	1712.4	0.12	1.560	20.77	22.00	1.327	2.070	/
Ant.0	DSI3	RMC	Bottom Edge	0	1513	1752.6	0.09	1.600	20.79	22.00	1.321	2.114	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

### 11.5WCDMA Band 5

Antenna	Power Reducteion	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.
<b>Head</b>													
Ant.4	DSI1	RMC	Left Cheek	0	4182	836.4	-0.13	0.503	22.22	23.10	1.225	0.616	/
Ant.4	DSI1	RMC	Left Tilt	0	4182	836.4	0.11	0.405	22.22	23.10	1.225	0.496	/
Ant.4	DSI1	RMC	Right Cheek	0	4182	836.4	-0.01	0.539	22.22	23.10	1.225	<b>0.660</b>	10#
Ant.4	DSI1	RMC	Right Tilt	0	4182	836.4	0.00	0.400	22.22	23.10	1.225	0.490	/
Ant.0	DSI1	RMC	Left Cheek	0	4182	836.4	-0.07	0.146	24.52	25.50	1.253	0.183	/
Ant.0	DSI1	RMC	Left Tilt	0	4182	836.4	-0.13	0.069	24.52	25.50	1.253	0.086	/
Ant.0	DSI1	RMC	Right Cheek	0	4182	836.4	0.08	0.179	24.52	25.50	1.253	0.224	/
Ant.0	DSI1	RMC	Right Tilt	0	4182	836.4	-0.07	0.103	24.52	25.50	1.253	0.129	/
<b>Body-worn&amp;Hotspot</b>													
Ant.4	DSI4	RMC	Front Side	10	4182	836.4	0.12	0.164	23.17	24.10	1.239	0.203	/
Ant.4	DSI4	RMC	Back Side	10	4182	836.4	0.01	0.279	23.17	24.10	1.239	0.346	/
Ant.4	DSI2	RMC	Right Edge	10	4182	836.4	-0.09	0.118	24.22	25.10	1.225	0.145	/
Ant.4	DSI4	RMC	Top Edge	10	4182	836.4	-0.10	0.152	23.17	24.10	1.239	0.188	/
Ant.0	DSI4	RMC	Front Side	10	4182	836.4	-0.07	0.214	24.52	25.50	1.253	0.268	/
Ant.0	DSI4	RMC	Back Side	10	4182	836.4	0.01	0.365	24.52	25.50	1.253	<b>0.457</b>	11#
Ant.0	DSI2	RMC	Left Edge	10	4182	836.4	0.10	0.171	24.52	25.50	1.253	0.214	/
Ant.0	DSI2	RMC	Right Edge	10	4182	836.4	-0.03	0.086	24.52	25.50	1.253	0.108	/
Ant.0	DSI3	RMC	Bottom Edge	10	4182	836.4	-0.15	0.282	24.52	25.50	1.253	0.353	/
<b>P-sensor</b>													
Ant.4	Full power	RMC	Front Side	15	4182	836.4	0.05	0.159	24.22	25.10	1.225	0.195	/
Ant.4	Full power	RMC	Back Side	15	4182	836.4	-0.03	0.193	24.22	25.10	1.225	0.236	/
Ant.4	Full power	RMC	Top Edge	15	4182	836.4	0.07	0.118	24.22	25.10	1.225	0.145	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

## 11.6LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reducteion	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head</b>															
Ant.4	DSI1	QPSK	Left Cheek	0	18900	1880	1	Mid	0.04	0.440	19.20	20.10	1.230	0.541	/
Ant.4	DSI1	QPSK	Left Cheek	0	18900	1880	50	Mid	0.10	0.462	19.27	20.10	1.211	0.559	/
Ant.4	DSI1	QPSK	Left Tilt	0	18900	1880	1	Mid	-0.14	0.571	19.20	20.10	1.230	0.702	/
Ant.4	DSI1	QPSK	Left Tilt	0	18900	1880	50	Mid	-0.03	0.593	19.27	20.10	1.211	0.718	/
Ant.4	DSI1	QPSK	Right Cheek	0	18900	1880	1	Mid	-0.18	0.693	19.20	20.10	1.230	<b>0.852</b>	12#
Ant.4	DSI1	QPSK	Right Cheek	0	18900	1880	50	Mid	0.05	0.700	19.27	20.10	1.211	0.848	/
Ant.4	DSI1	QPSK	Right Tilt	0	18900	1880	1	Mid	-0.02	0.578	19.20	20.10	1.230	0.711	/
Ant.4	DSI1	QPSK	Right Tilt	0	18900	1880	50	Mid	-0.14	0.601	19.27	20.10	1.211	0.728	/
Ant.4	DSI1	QPSK	Right Cheek	0	18700	1860	1	High	0.13	0.605	18.92	20.10	1.312	0.794	/
Ant.4	DSI1	QPSK	Right Cheek	0	19100	1900	1	Mid	0.09	0.658	18.99	20.10	1.291	0.849	/
Ant.4	DSI1	QPSK	Right Cheek	0	18700	1860	50	High	-0.02	0.639	18.99	20.10	1.291	0.825	/
Ant.4	DSI1	QPSK	Right Cheek	0	19100	1900	50	Low	-0.01	0.676	19.10	20.10	1.259	0.851	/
Ant.4	DSI1	QPSK	Right Cheek	0	18900	1880	100	Low	-0.16	0.610	19.18	20.10	1.236	0.754	/
Ant.0	DSI1	QPSK	Left Cheek	0	18900	1880	1	Mid	-0.15	0.109	24.82	25.50	1.169	0.127	/
Ant.0	DSI1	QPSK	Left Cheek	0	18900	1880	50	High	0.18	0.096	23.80	24.50	1.175	0.113	/
Ant.0	DSI1	QPSK	Left Tilt	0	18900	1880	1	Mid	0.12	0.100	24.82	25.50	1.169	0.117	/
Ant.0	DSI1	QPSK	Left Tilt	0	18900	1880	50	High	-0.11	0.082	23.80	24.50	1.175	0.096	/
Ant.0	DSI1	QPSK	Right Cheek	0	18900	1880	1	Mid	-0.11	0.121	24.82	25.50	1.169	0.141	/
Ant.0	DSI1	QPSK	Right Cheek	0	18900	1880	50	High	-0.15	0.096	23.80	24.50	1.175	0.113	/
Ant.0	DSI1	QPSK	Right Tilt	0	18900	1880	1	Mid	0.13	0.093	24.82	25.50	1.169	0.109	/
Ant.0	DSI1	QPSK	Right Tilt	0	18900	1880	50	High	0.09	0.070	23.80	24.50	1.175	0.082	/
<b>Body-worn&amp;Hotspot</b>															
Ant.4	DSI4	QPSK	Front Side	10	18900	1880	1	Mid	0.05	0.259	21.23	22.10	1.222	0.316	/
Ant.4	DSI4	QPSK	Front Side	10	18900	1880	50	Mid	-0.18	0.262	21.29	22.10	1.205	0.316	/
Ant.4	DSI4	QPSK	Back Side	10	18900	1880	1	Mid	0.15	0.357	21.23	22.10	1.222	0.436	/
Ant.4	DSI4	QPSK	Back Side	10	18900	1880	50	Mid	-0.18	0.369	21.29	22.10	1.205	0.445	/
Ant.4	DSI2	QPSK	Right Edge	10	18900	1880	1	Mid	0.14	0.348	24.27	25.10	1.211	0.421	/
Ant.4	DSI2	QPSK	Right Edge	10	18900	1880	50	Mid	0.10	0.286	23.31	24.10	1.199	0.343	/
Ant.4	DSI4	QPSK	Top Edge	10	18900	1880	1	Mid	-0.17	0.375	21.23	22.10	1.222	0.458	/
Ant.4	DSI4	QPSK	Top Edge	10	18900	1880	50	Mid	-0.07	0.384	21.29	22.10	1.205	<b>0.463</b>	13#
Ant.0	DSI4	QPSK	Front Side	10	18900	1880	1	Mid	-0.17	0.187	21.73	22.50	1.194	0.223	/
Ant.0	DSI4	QPSK	Front Side	10	18900	1880	50	Low	-0.12	0.201	21.82	22.50	1.169	0.235	/
Ant.0	DSI4	QPSK	Back Side	10	18900	1880	1	Mid	0.03	0.349	21.73	22.50	1.194	0.417	/
Ant.0	DSI4	QPSK	Back Side	10	18900	1880	50	Low	0.12	0.369	21.82	22.50	1.169	0.431	/
Ant.0	DSI2	QPSK	Left Edge	10	18900	1880	1	Mid	0.01	0.082	24.82	25.50	1.169	0.096	/
Ant.0	DSI2	QPSK	Left Edge	10	18900	1880	50	High	-0.09	0.070	23.80	24.50	1.175	0.082	/

Ant.0	DSI2	QPSK	Right Edge	10	18900	1880	1	Mid	0.16	0.191	24.82	25.50	1.169	0.223	/
Ant.0	DSI2	QPSK	Right Edge	10	18900	1880	50	High	0.02	0.162	23.80	24.50	1.175	0.190	/
Ant.0	DSI3	QPSK	Bottom Edge	10	18900	1880	1	Mid	-0.04	0.360	21.73	22.50	1.194	0.430	/
Ant.0	DSI3	QPSK	Bottom Edge	10	18900	1880	50	Low	-0.04	0.357	21.82	22.50	1.169	0.417	/
<b>P-sensor</b>															
Ant.4	Full power	QPSK	Front Side	15	18900	1880	1	Mid	-0.01	0.300	24.27	25.10	1.211	0.363	/
Ant.4	Full power	QPSK	Front Side	15	18900	1880	50	Mid	-0.12	0.236	23.31	24.10	1.199	0.283	/
Ant.4	Full power	QPSK	Back Side	15	18900	1880	1	Mid	0.06	0.376	24.27	25.10	1.211	0.455	/
Ant.4	Full power	QPSK	Back Side	15	18900	1880	50	Mid	-0.08	0.323	23.31	24.10	1.199	0.387	/
Ant.4	Full power	QPSK	Top Edge	15	18900	1880	1	Mid	0.14	0.580	24.27	25.10	1.211	0.702	/
Ant.4	Full power	QPSK	Top Edge	15	18900	1880	50	Mid	-0.09	0.468	23.31	24.10	1.199	0.561	/
Ant.0	Full power	QPSK	Front Side	15	18900	1880	1	Mid	-0.12	0.220	24.82	25.50	1.169	0.257	/
Ant.0	Full power	QPSK	Front Side	15	18900	1880	50	High	0.13	0.186	23.80	24.50	1.175	0.219	/
Ant.0	Full power	QPSK	Back Side	15	18900	1880	1	Mid	-0.04	0.391	24.82	25.50	1.169	0.457	/
Ant.0	Full power	QPSK	Back Side	15	18900	1880	50	High	0.09	0.325	23.80	24.50	1.175	0.382	/
Ant.0	Full power	QPSK	Bottom Edge	15	18900	1880	1	Mid	-0.17	0.414	24.82	25.50	1.169	0.484	/
Ant.0	Full power	QPSK	Bottom Edge	15	18900	1880	50	High	0.11	0.329	23.80	24.50	1.175	0.387	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

### 11.7LTE Band 4 (20MHz Bandwidth)

Antenna	Power Reducteion	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head</b>															
Ant.4	DS11	QPSK	Left Cheek	0	20175	1732.5	1	Low	0.17	0.224	19.51	20.60	1.285	0.288	/
Ant.4	DS11	QPSK	Left Cheek	0	20175	1732.5	50	Low	-0.04	0.230	19.60	20.60	1.259	0.290	/
Ant.4	DS11	QPSK	Left Tilt	0	20175	1732.5	1	Low	-0.19	0.300	19.51	20.60	1.285	0.386	/
Ant.4	DS11	QPSK	Left Tilt	0	20175	1732.5	50	Low	0.14	0.315	19.60	20.60	1.259	0.397	/
Ant.4	DS11	QPSK	Right Cheek	0	20175	1732.5	1	Low	0.02	0.286	19.51	20.60	1.285	0.368	/
Ant.4	DS11	QPSK	Right Cheek	0	20175	1732.5	50	Low	0.09	0.292	19.60	20.60	1.259	0.368	/
Ant.4	DS11	QPSK	Right Tilt	0	20175	1732.5	1	Low	0.01	0.335	19.51	20.60	1.285	0.430	/
Ant.4	DS11	QPSK	Right Tilt	0	20175	1732.5	50	Low	-0.05	0.352	19.60	20.60	1.259	<b>0.443</b>	14#
Ant.0	DS11	QPSK	Left Cheek	0	20175	1732.5	1	Low	0.13	0.094	24.40	25.50	1.288	0.121	/
Ant.0	DS11	QPSK	Left Cheek	0	20175	1732.5	50	Low	-0.11	0.073	23.50	24.50	1.259	0.092	/
Ant.0	DS11	QPSK	Left Tilt	0	20175	1732.5	1	Low	-0.10	0.075	24.40	25.50	1.288	0.097	/
Ant.0	DS11	QPSK	Left Tilt	0	20175	1732.5	50	Low	-0.08	0.058	23.50	24.50	1.259	0.073	/
Ant.0	DS11	QPSK	Right Cheek	0	20175	1732.5	1	Low	0.03	0.121	24.40	25.50	1.288	0.156	/
Ant.0	DS11	QPSK	Right Cheek	0	20175	1732.5	50	Low	-0.17	0.095	23.50	24.50	1.259	0.120	/
Ant.0	DS11	QPSK	Right Tilt	0	20175	1732.5	1	Low	-0.02	0.080	24.40	25.50	1.288	0.103	/
Ant.0	DS11	QPSK	Right Tilt	0	20175	1732.5	50	Low	-0.05	0.061	23.50	24.50	1.259	0.077	/
<b>Body-worn&amp;Hotspot</b>															
Ant.4	DS14	QPSK	Front Side	10	20175	1732.5	1	Low	-0.04	0.073	19.51	20.60	1.285	0.094	/
Ant.4	DS14	QPSK	Front Side	10	20175	1732.5	50	Low	-0.10	0.074	19.60	20.60	1.259	0.093	/
Ant.4	DS14	QPSK	Back Side	10	20175	1732.5	1	Low	0.16	0.103	19.51	20.60	1.285	0.132	/
Ant.4	DS14	QPSK	Back Side	10	20175	1732.5	50	Low	-0.19	0.107	19.60	20.60	1.259	0.135	/
Ant.4	DS12	QPSK	Right Edge	10	20175	1732.5	1	Low	-0.12	0.150	24.01	25.10	1.285	0.193	/
Ant.4	DS12	QPSK	Right Edge	10	20175	1732.5	50	Mid	-0.19	0.121	23.10	24.10	1.259	0.152	/
Ant.4	DS14	QPSK	Top Edge	10	20175	1732.5	1	Low	0.06	0.146	19.51	20.60	1.285	0.188	/
Ant.4	DS14	QPSK	Top Edge	10	20175	1732.5	50	Low	-0.11	0.151	19.60	20.60	1.259	0.190	/
Ant.0	DS14	QPSK	Front Side	10	20175	1732.5	1	High	-0.17	0.109	20.94	22.50	1.432	0.156	/
Ant.0	DS14	QPSK	Front Side	10	20175	1732.5	50	Low	-0.14	0.116	21.10	22.50	1.380	0.160	/
Ant.0	DS14	QPSK	Back Side	10	20175	1732.5	1	High	0.02	0.339	20.94	22.50	1.432	0.485	/
Ant.0	DS14	QPSK	Back Side	10	20175	1732.5	50	Low	0.13	0.330	21.10	22.50	1.380	0.455	/
Ant.0	DS12	QPSK	Left Edge	10	20175	1732.5	1	Low	0.02	0.126	24.40	25.50	1.288	0.162	/
Ant.0	DS12	QPSK	Left Edge	10	20175	1732.5	50	Low	0.01	0.103	23.50	24.50	1.259	0.130	/
Ant.0	DS12	QPSK	Right Edge	10	20175	1732.5	1	Low	0.19	0.148	24.40	25.50	1.288	0.191	/
Ant.0	DS12	QPSK	Right Edge	10	20175	1732.5	50	Low	0.05	0.117	23.50	24.50	1.259	0.147	/
Ant.0	DS13	QPSK	Bottom Edge	10	20175	1732.5	1	High	-0.17	0.452	20.94	22.50	1.432	<b>0.647</b>	15#
Ant.0	DS13	QPSK	Bottom Edge	10	20175	1732.5	50	Low	-0.02	0.462	21.10	22.50	1.380	0.638	/
<b>P-sensor</b>															

Ant.4	Full power	QPSK	Front Side	15	20175	1732.5	1	Low	0.08	0.103	24.01	25.10	1.285	0.132	/
Ant.4	Full power	QPSK	Front Side	15	20175	1732.5	50	Mid	-0.15	0.081	23.10	24.10	1.259	0.102	/
Ant.4	Full power	QPSK	Back Side	15	20175	1732.5	1	Low	-0.16	0.128	24.01	25.10	1.285	0.164	/
Ant.4	Full power	QPSK	Back Side	15	20175	1732.5	50	Mid	0.12	0.105	23.10	24.10	1.259	0.132	/
Ant.4	Full power	QPSK	Top Edge	15	20175	1732.5	1	Low	-0.04	0.204	24.01	25.10	1.285	0.262	/
Ant.4	Full power	QPSK	Top Edge	15	20175	1732.5	50	Mid	-0.03	0.163	23.10	24.10	1.259	0.205	/
Ant.0	Full power	QPSK	Front Side	15	20175	1732.5	1	Low	0.18	0.199	24.40	25.50	1.288	0.256	/
Ant.0	Full power	QPSK	Front Side	15	20175	1732.5	50	Low	-0.06	0.145	23.50	24.50	1.259	0.183	/
Ant.0	Full power	QPSK	Back Side	15	20175	1732.5	1	Low	-0.16	0.480	24.40	25.50	1.288	0.618	/
Ant.0	Full power	QPSK	Back Side	15	20175	1732.5	50	Low	0.11	0.413	23.50	24.50	1.259	0.520	/
Ant.0	Full power	QPSK	Bottom Edge	15	20175	1732.5	1	Low	0.14	0.608	24.40	25.50	1.288	0.783	/
Ant.0	Full power	QPSK	Bottom Edge	15	20175	1732.5	50	Low	0.10	0.487	23.50	24.50	1.259	0.613	/

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

Antenna	Power Reducteion	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.
<b>Specific</b>															
Ant.0	DSI3	QPSK	Bottom Edge	0	20175	1732.5	1	High	-0.04	1.690	20.94	22.50	1.432	<b>2.420</b>	16#
Ant.0	DSI3	QPSK	Bottom Edge	0	20175	1732.5	50	Low	-0.13	1.740	21.10	22.50	1.380	2.401	/
Ant.0	DSI3	QPSK	Bottom Edge	0	20050	1720	1	Mid	0.09	1.610	20.84	22.50	1.466	2.360	/
Ant.0	DSI3	QPSK	Bottom Edge	0	20300	1745	1	High	-0.12	1.530	20.75	22.50	1.496	2.289	/
Ant.0	DSI3	QPSK	Bottom Edge	0	20050	1720	50	High	-0.14	1.640	21.01	22.50	1.409	2.311	/
Ant.0	DSI3	QPSK	Bottom Edge	0	20300	1745	50	High	-0.04	1.580	20.87	22.50	1.455	2.299	/
Ant.0	DSI3	QPSK	Bottom Edge	0	20175	1732.5	100	Low	-0.16	1.550	21.02	22.50	1.406	2.179	/

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

### 11.8LTE Band 5 (10MHz Bandwidth)

Antenna	Power Reducteion	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head</b>															
Ant.4	DS11	QPSK	Left Cheek	0	20600	844	1	High	-0.17	0.550	22.87	23.70	1.211	0.666	/
Ant.4	DS11	QPSK	Left Cheek	0	20600	844	25	Mid	0.09	0.578	22.83	23.70	1.222	0.706	/
Ant.4	DS11	QPSK	Left Tilt	0	20600	844	1	High	-0.18	0.466	22.87	23.70	1.211	0.564	/
Ant.4	DS11	QPSK	Left Tilt	0	20600	844	25	Mid	0.18	0.506	22.83	23.70	1.222	0.618	/
Ant.4	DS11	QPSK	Right Cheek	0	20600	844	1	High	0.19	0.584	22.87	23.70	1.211	0.707	/
Ant.4	DS11	QPSK	Right Cheek	0	20600	844	25	Mid	-0.07	0.617	22.83	23.70	1.222	<b>0.754</b>	17#
Ant.4	DS11	QPSK	Right Tilt	0	20600	844	1	High	-0.11	0.435	22.87	23.70	1.211	0.527	/
Ant.4	DS11	QPSK	Right Tilt	0	20600	844	25	Mid	-0.10	0.480	22.83	23.70	1.222	0.587	/
Ant.0	DS11	QPSK	Left Cheek	0	20600	844	1	High	0.19	0.148	24.65	25.50	1.216	0.180	/
Ant.0	DS11	QPSK	Left Cheek	0	20600	844	25	Mid	0.19	0.125	23.58	24.50	1.236	0.155	/
Ant.0	DS11	QPSK	Left Tilt	0	20600	844	1	High	0.11	0.071	24.65	25.50	1.216	0.086	/
Ant.0	DS11	QPSK	Left Tilt	0	20600	844	25	Mid	-0.19	0.056	23.58	24.50	1.236	0.069	/
Ant.0	DS11	QPSK	Right Cheek	0	20600	844	1	High	-0.05	0.185	24.65	25.50	1.216	0.225	/
Ant.0	DS11	QPSK	Right Cheek	0	20600	844	25	Mid	-0.17	0.141	23.58	24.50	1.236	0.174	/
Ant.0	DS11	QPSK	Right Tilt	0	20600	844	1	High	0.08	0.083	24.65	25.50	1.216	0.101	/
Ant.0	DS11	QPSK	Right Tilt	0	20600	844	25	Mid	-0.04	0.064	23.58	24.50	1.236	0.079	/
<b>Body-worn&amp;Hotspot</b>															
Ant.4	DS14	QPSK	Front Side	10	20600	844	1	High	0.18	0.190	24.40	25.20	1.202	0.228	/
Ant.4	DS14	QPSK	Front Side	10	20450	829	25	Mid	-0.03	0.161	23.35	24.20	1.216	0.196	/
Ant.4	DS14	QPSK	Back Side	10	20600	844	1	High	0.18	0.295	24.40	25.20	1.202	0.355	/
Ant.4	DS14	QPSK	Back Side	10	20450	829	25	Mid	0.15	0.250	23.35	24.20	1.216	0.304	/
Ant.4	DS12	QPSK	Right Edge	10	20600	844	1	High	-0.05	0.091	24.40	25.20	1.202	0.109	/
Ant.4	DS12	QPSK	Right Edge	10	20450	829	25	Mid	0.07	0.075	23.35	24.20	1.216	0.091	/
Ant.4	DS14	QPSK	Top Edge	10	20600	844	1	High	-0.03	0.224	24.40	25.20	1.202	0.269	/
Ant.4	DS14	QPSK	Top Edge	10	20450	829	25	Mid	0.00	0.185	23.35	24.20	1.216	0.225	/
Ant.0	DS14	QPSK	Front Side	10	20600	844	1	High	-0.18	0.211	24.65	25.50	1.216	0.257	/
Ant.0	DS14	QPSK	Front Side	10	20600	844	25	Mid	0.05	0.175	23.58	24.50	1.236	0.216	/
Ant.0	DS14	QPSK	Back Side	10	20600	844	1	High	0.08	0.339	24.65	25.50	1.216	<b>0.412</b>	18#
Ant.0	DS14	QPSK	Back Side	10	20600	844	25	Mid	0.02	0.276	23.58	24.50	1.236	0.341	/
Ant.0	DS12	QPSK	Left Edge	10	20600	844	1	High	0.10	0.168	24.65	25.50	1.216	0.204	/
Ant.0	DS12	QPSK	Left Edge	10	20600	844	25	Mid	0.02	0.139	23.58	24.50	1.236	0.172	/
Ant.0	DS12	QPSK	Right Edge	10	20600	844	1	High	-0.08	0.093	24.65	25.50	1.216	0.113	/
Ant.0	DS12	QPSK	Right Edge	10	20600	844	25	Mid	-0.03	0.072	23.58	24.50	1.236	0.089	/
Ant.0	DS13	QPSK	Bottom Edge	10	20600	844	1	High	-0.11	0.300	24.65	25.50	1.216	0.365	/
Ant.0	DS13	QPSK	Bottom Edge	10	20600	844	25	Mid	0.00	0.248	23.58	24.50	1.236	0.307	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

### 11.9LTE Band 7 (20MHz Bandwidth)

Antenna	Power Reducteion	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head</b>															
Ant.4	DS11	QPSK	Left Cheek	0	21100	2535	1	High	-0.15	0.330	17.90	18.70	1.202	0.397	/
Ant.4	DS11	QPSK	Left Cheek	0	20850	2510	50	High	0.18	0.368	17.94	18.70	1.191	0.438	/
Ant.4	DS11	QPSK	Left Tilt	0	21100	2535	1	High	0.05	0.401	17.90	18.70	1.202	0.482	/
Ant.4	DS11	QPSK	Left Tilt	0	20850	2510	50	High	0.18	0.445	17.94	18.70	1.191	0.530	/
Ant.4	DS11	QPSK	Right Cheek	0	21100	2535	1	High	-0.14	0.552	17.90	18.70	1.202	0.664	/
Ant.4	DS11	QPSK	Right Cheek	0	20850	2510	50	High	-0.12	0.602	17.94	18.70	1.191	<b>0.717</b>	19#
Ant.4	DS11	QPSK	Right Tilt	0	21100	2535	1	High	0.05	0.472	17.90	18.70	1.202	0.567	/
Ant.4	DS11	QPSK	Right Tilt	0	20850	2510	50	High	-0.09	0.519	17.94	18.70	1.191	0.618	/
Ant.0	DS11	QPSK	Left Cheek	0	20850	2510	1	High	0.11	0.156	24.67	25.50	1.211	0.189	/
Ant.0	DS11	QPSK	Left Cheek	0	20850	2510	50	Mid	-0.03	0.134	23.75	24.50	1.189	0.159	/
Ant.0	DS11	QPSK	Left Tilt	0	20850	2510	1	High	-0.18	0.080	24.67	25.50	1.211	0.097	/
Ant.0	DS11	QPSK	Left Tilt	0	20850	2510	50	Mid	0.00	0.069	23.75	24.50	1.189	0.082	/
Ant.0	DS11	QPSK	Right Cheek	0	20850	2510	1	High	0.19	0.075	24.67	25.50	1.211	0.091	/
Ant.0	DS11	QPSK	Right Cheek	0	20850	2510	50	Mid	0.17	0.061	23.75	24.50	1.189	0.073	/
Ant.0	DS11	QPSK	Right Tilt	0	20850	2510	1	High	-0.05	0.053	24.67	25.50	1.211	0.064	/
Ant.0	DS11	QPSK	Right Tilt	0	20850	2510	50	Mid	-0.05	0.043	23.75	24.50	1.189	0.051	/
<b>Body-worn&amp;Hotspot</b>															
Ant.4	DS14	QPSK	Front Side	10	20850	2510	1	High	0.14	0.208	20.60	21.20	1.148	0.239	/
Ant.4	DS14	QPSK	Front Side	10	20850	2510	50	Low	-0.09	0.213	20.68	21.20	1.127	0.240	/
Ant.4	DS14	QPSK	Back Side	10	20850	2510	1	High	0.04	0.282	20.60	21.20	1.148	0.324	/
Ant.4	DS14	QPSK	Back Side	10	20850	2510	50	Low	-0.16	0.293	20.68	21.20	1.127	0.330	/
Ant.4	DS12	QPSK	Right Edge	10	21100	2535	1	Mid	0.02	0.345	24.89	25.20	1.074	0.371	/
Ant.4	DS12	QPSK	Right Edge	10	21350	2560	50	Mid	0.17	0.298	23.88	24.20	1.076	0.321	/
Ant.4	DS14	QPSK	Top Edge	10	20850	2510	1	High	0.10	0.523	20.60	21.20	1.148	<b>0.600</b>	20#
Ant.4	DS14	QPSK	Top Edge	10	20850	2510	50	Low	-0.14	0.511	20.68	21.20	1.127	0.576	/
Ant.0	DS14	QPSK	Front Side	10	21100	2535	1	Low	0.11	0.138	21.28	22.00	1.180	0.163	/
Ant.0	DS14	QPSK	Front Side	10	20850	2510	50	Low	-0.03	0.144	21.36	22.00	1.159	0.167	/
Ant.0	DS14	QPSK	Back Side	10	21100	2535	1	Low	0.06	0.293	21.28	22.00	1.180	0.346	/
Ant.0	DS14	QPSK	Back Side	10	20850	2510	50	Low	-0.09	0.296	21.36	22.00	1.159	0.343	/
Ant.0	DS12	QPSK	Left Edge	10	20850	2510	1	High	0.17	0.109	24.67	25.50	1.211	0.132	/
Ant.0	DS12	QPSK	Left Edge	10	20850	2510	50	Mid	0.08	0.083	23.75	24.50	1.189	0.099	/
Ant.0	DS12	QPSK	Right Edge	10	20850	2510	1	High	-0.06	0.148	24.67	25.50	1.211	0.179	/
Ant.0	DS12	QPSK	Right Edge	10	20850	2510	50	Mid	0.00	0.115	23.75	24.50	1.189	0.137	/
Ant.0	DS13	QPSK	Bottom Edge	10	21100	2535	1	Low	-0.16	0.270	21.28	22.00	1.180	0.319	/
Ant.0	DS13	QPSK	Bottom Edge	10	20850	2510	50	Low	0.02	0.267	21.36	22.00	1.159	0.309	/
<b>P-sensor</b>															

Ant.4	Full power	QPSK	Front Side	15	21100	2535	1	Mid	0.16	0.486	24.89	25.20	1.074	0.522	/
Ant.4	Full power	QPSK	Front Side	15	21350	2560	50	Mid	-0.17	0.379	23.88	24.20	1.076	0.408	/
Ant.4	Full power	QPSK	Back Side	15	21100	2535	1	Mid	0.08	0.658	24.89	25.20	1.074	0.707	/
Ant.4	Full power	QPSK	Back Side	15	21350	2560	50	Mid	0.05	0.530	23.88	24.20	1.076	0.570	/
Ant.4	Full power	QPSK	Top Edge	15	21100	2535	1	Mid	-0.10	0.864	24.89	25.20	1.074	0.928	/
Ant.4	Full power	QPSK	Top Edge	15	21350	2560	50	Mid	-0.16	0.697	23.88	24.20	1.076	0.750	/
Ant.0	Full power	QPSK	Front Side	15	20850	2510	1	High	-0.13	0.189	24.67	25.50	1.211	0.229	/
Ant.0	Full power	QPSK	Front Side	15	20850	2510	50	Mid	0.12	0.158	23.75	24.50	1.189	0.188	/
Ant.0	Full power	QPSK	Back Side	15	20850	2510	1	High	0.12	0.334	24.67	25.50	1.211	0.404	/
Ant.0	Full power	QPSK	Back Side	15	20850	2510	50	Mid	-0.16	0.275	23.75	24.50	1.189	0.327	/
Ant.0	Full power	QPSK	Bottom Edge	15	20850	2510	1	High	0.04	0.306	24.67	25.50	1.211	0.371	/
Ant.0	Full power	QPSK	Bottom Edge	15	20850	2510	50	Mid	-0.18	0.255	23.75	24.50	1.189	0.303	/

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

Antenna	Power Reducteion	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.
<b>Specific</b>															
Ant.4	DSI4	QPSK	Top Edge	0	20850	2510	1	High	0.19	1.910	20.60	21.20	1.148	2.193	/
Ant.4	DSI4	QPSK	Top Edge	0	20850	2510	50	Low	-0.05	1.940	20.68	21.20	1.127	2.186	/
Ant.4	DSI4	QPSK	Top Edge	0	21100	2535	1	High	-0.06	1.940	20.56	21.20	1.159	2.248	/
Ant.4	DSI4	QPSK	Top Edge	0	21350	2560	1	Mid	-0.07	1.960	20.56	21.20	1.159	<b>2.272</b>	21#
Ant.4	DSI4	QPSK	Top Edge	0	21100	2535	50	Mid	-0.05	1.850	20.59	21.20	1.151	2.129	/
Ant.4	DSI4	QPSK	Top Edge	0	21350	2560	50	Mid	-0.18	1.900	20.51	21.20	1.172	2.227	/
Ant.4	DSI4	QPSK	Top Edge	0	20850	2510	100	Low	-0.16	1.820	20.63	21.20	1.140	2.075	/

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

## 11.10 LTE Band 7 Worse case for CA Test

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head-CA</b>															
Ant.4	DS11	QPSK	Right Cheek	0	20850 +21048	2510 +2649.8	1+1	High +Low	-0.19	0.559	17.68	18.70	1.265	0.707	22#
<b>Hotspot-CA</b>															
Ant.4	DS14	QPSK	Top Edge	10	20850 +21048	2510 +2649.8	1+1	High +Low	0.02	0.424	20.48	21.20	1.180	0.500	23#
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.
<b>Specific-CA</b>															
Ant.4	DS14	QPSK	Top Edge	0	21350 +21152	2560 +2540.2	1+1	High +Low	0.08	1.33	20.55	21.20	1.161	1.544	24#
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

### 11.11 LTE Band 66 (20MHz Bandwidth)

Antenna	Power Reducteion	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head</b>															
Ant.4	DS11	QPSK	Left Cheek	0	132572	1770	1	High	0.08	0.233	19.50	20.50	1.259	0.293	/
Ant.4	DS11	QPSK	Left Cheek	0	132322	1745	50	Low	0.00	0.240	19.56	20.50	1.242	0.298	/
Ant.4	DS11	QPSK	Left Tilt	0	132572	1770	1	High	0.02	0.316	19.50	20.50	1.259	0.398	/
Ant.4	DS11	QPSK	Left Tilt	0	132322	1745	50	Low	0.14	0.325	19.56	20.50	1.242	0.404	/
Ant.4	DS11	QPSK	Right Cheek	0	132572	1770	1	High	0.12	0.281	19.50	20.50	1.259	0.354	/
Ant.4	DS11	QPSK	Right Cheek	0	132322	1745	50	Low	0.05	0.290	19.56	20.50	1.242	0.360	/
Ant.4	DS11	QPSK	Right Tilt	0	132572	1770	1	High	0.17	0.365	19.50	20.50	1.259	0.460	/
Ant.4	DS11	QPSK	Right Tilt	0	132322	1745	50	Low	-0.07	0.379	19.56	20.50	1.242	<b>0.471</b>	25#
Ant.0	DS11	QPSK	Left Cheek	0	132572	1770	1	High	0.02	0.085	24.66	25.50	1.213	0.103	/
Ant.0	DS11	QPSK	Left Cheek	0	132572	1770	50	High	-0.04	0.074	23.46	24.50	1.271	0.094	/
Ant.0	DS11	QPSK	Left Tilt	0	132572	1770	1	High	-0.16	0.068	24.66	25.50	1.213	0.082	/
Ant.0	DS11	QPSK	Left Tilt	0	132572	1770	50	High	-0.19	0.059	23.46	24.50	1.271	0.075	/
Ant.0	DS11	QPSK	Right Cheek	0	132572	1770	1	High	0.04	0.114	24.66	25.50	1.213	0.138	/
Ant.0	DS11	QPSK	Right Cheek	0	132572	1770	50	High	0.14	0.096	23.46	24.50	1.271	0.122	/
Ant.0	DS11	QPSK	Right Tilt	0	132572	1770	1	High	-0.05	0.064	24.66	25.50	1.213	0.078	/
Ant.0	DS11	QPSK	Right Tilt	0	132572	1770	50	High	-0.08	0.060	23.46	24.50	1.271	0.076	/
<b>Body-worn&amp;Hotspot</b>															
Ant.4	DS14	QPSK	Front Side	10	132572	1770	1	High	-0.01	0.091	21.01	22.00	1.256	0.114	/
Ant.4	DS14	QPSK	Front Side	10	132322	1745	50	Low	-0.12	0.093	21.02	22.00	1.253	0.117	/
Ant.4	DS14	QPSK	Back Side	10	132572	1770	1	High	0.13	0.126	21.01	22.00	1.256	0.158	/
Ant.4	DS14	QPSK	Back Side	10	132322	1745	50	Low	0.08	0.131	21.02	22.00	1.253	0.164	/
Ant.4	DS12	QPSK	Right Edge	10	132572	1770	1	High	0.19	0.140	24.37	25.00	1.156	0.162	/
Ant.4	DS12	QPSK	Right Edge	10	132572	1770	50	High	-0.14	0.115	23.13	24.00	1.222	0.141	/
Ant.4	DS14	QPSK	Top Edge	10	132572	1770	1	High	0.18	0.168	21.01	22.00	1.256	0.211	/
Ant.4	DS14	QPSK	Top Edge	10	132322	1745	50	Low	0.15	0.174	21.02	22.00	1.253	0.218	/
Ant.0	DS14	QPSK	Front Side	10	132572	1770	1	High	-0.02	0.108	19.95	21.00	1.274	0.138	/
Ant.0	DS14	QPSK	Front Side	10	132322	1745	50	Low	0.07	0.112	20.02	21.00	1.253	0.140	/
Ant.0	DS14	QPSK	Back Side	10	132572	1770	1	High	0.09	0.275	19.95	21.00	1.274	0.350	/
Ant.0	DS14	QPSK	Back Side	10	132322	1745	50	Low	0.08	0.268	20.02	21.00	1.253	0.336	/
Ant.0	DS12	QPSK	Left Edge	10	132572	1770	1	High	-0.13	0.117	24.66	25.50	1.213	0.142	/
Ant.0	DS12	QPSK	Left Edge	10	132572	1770	50	High	-0.05	0.096	23.46	24.50	1.271	0.122	/
Ant.0	DS12	QPSK	Right Edge	10	132572	1770	1	High	-0.01	0.121	24.66	25.50	1.213	0.147	/
Ant.0	DS12	QPSK	Right Edge	10	132572	1770	50	High	-0.19	0.103	23.46	24.50	1.271	0.131	/
Ant.0	DS13	QPSK	Bottom Edge	10	132572	1770	1	High	0.15	0.351	19.95	21.00	1.274	0.447	/
Ant.0	DS13	QPSK	Bottom Edge	10	132322	1745	50	Low	0.12	0.364	20.02	21.00	1.253	<b>0.456</b>	26#
<b>P-sensor</b>															

Ant.4	Full power	QPSK	Front Side	15	132572	1770	1	High	0.03	0.105	24.37	25.00	1.156	0.121	/
Ant.4	Full power	QPSK	Front Side	15	132572	1770	50	High	-0.04	0.090	23.13	24.00	1.222	0.110	/
Ant.4	Full power	QPSK	Back Side	15	132572	1770	1	High	-0.14	0.118	24.37	25.00	1.156	0.136	/
Ant.4	Full power	QPSK	Back Side	15	132572	1770	50	High	0.00	0.101	23.13	24.00	1.222	0.123	/
Ant.4	Full power	QPSK	Top Edge	15	132572	1770	1	High	-0.11	0.216	24.37	25.00	1.156	0.250	/
Ant.4	Full power	QPSK	Top Edge	15	132572	1770	50	High	-0.11	0.186	23.13	24.00	1.222	0.227	/
Ant.0	Full power	QPSK	Front Side	15	132572	1770	1	High	0.07	0.177	24.66	25.50	1.213	0.215	/
Ant.0	Full power	QPSK	Front Side	15	132572	1770	50	High	0.08	0.139	23.46	24.50	1.271	0.177	/
Ant.0	Full power	QPSK	Back Side	15	132572	1770	1	High	-0.05	0.435	24.66	25.50	1.213	0.528	/
Ant.0	Full power	QPSK	Back Side	15	132572	1770	50	High	0.10	0.360	23.46	24.50	1.271	0.458	/
Ant.0	Full power	QPSK	Bottom Edge	15	132572	1770	1	High	0.19	0.598	24.66	25.50	1.213	0.725	/
Ant.0	Full power	QPSK	Bottom Edge	15	132572	1770	50	High	0.06	0.513	23.46	24.50	1.271	0.652	/

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

Antenna	Power Reducteion	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.
<b>Specific</b>															
Ant.0	DSI3	QPSK	Bottom Edge	0	132572	1770	1	High	0.05	1.350	19.95	21.00	1.274	<b>1.720</b>	27#
Ant.0	DSI3	QPSK	Bottom Edge	0	132322	1745	50	Low	-0.13	1.370	20.02	21.00	1.253	1.717	/

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

### 11.12 LTE Band 38 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head</b>															
Ant.4	DS11	QPSK	Left Cheek	0	38150	2610	1	Low	0.07	0.477	21.81	22.40	1.146	0.547	/
Ant.4	DS11	QPSK	Left Cheek	0	38000	2595	50	Low	0.19	0.490	21.80	22.40	1.148	0.563	/
Ant.4	DS11	QPSK	Left Tilt	0	38150	2610	1	Low	0.04	0.563	21.81	22.40	1.146	0.645	/
Ant.4	DS11	QPSK	Left Tilt	0	38000	2595	50	Mid	0.03	0.580	21.80	22.40	1.148	0.666	/
Ant.4	DS11	QPSK	Right Cheek	0	38150	2610	1	Low	0.11	0.770	21.81	22.40	1.146	0.882	/
Ant.4	DS11	QPSK	Right Cheek	0	38000	2595	50	Mid	0.00	0.791	21.80	22.40	1.148	0.908	/
Ant.4	DS11	QPSK	Right Tilt	0	38150	2610	1	Low	0.01	0.717	21.81	22.40	1.146	0.822	/
Ant.4	DS11	QPSK	Right Tilt	0	38000	2595	50	Mid	-0.02	0.723	21.80	22.40	1.148	0.830	/
Ant.4	DS11	QPSK	Right Cheek	0	37850	2580	1	High	-0.06	0.907	21.70	22.40	1.175	<b>1.066</b>	28#
Ant.4	DS11	QPSK	Right Cheek	0	38000	2595	1	High	-0.03	0.758	21.77	22.40	1.156	0.876	/
Ant.4	DS11	QPSK	Right Cheek	0	37850	2580	50	High	-0.08	0.845	21.70	22.40	1.175	0.993	/
Ant.4	DS11	QPSK	Right Cheek	0	38150	2610	50	Mid	0.09	0.799	21.75	22.40	1.161	0.928	/
Ant.4	DS11	QPSK	Right Cheek	0	38000	2595	100	Low	-0.04	0.766	21.81	22.40	1.146	0.878	/
Ant.4	DS11	QPSK	Right Tilt	0	37850	2580	1	High	-0.13	0.900	22.55	22.40	0.966	0.869	/
Ant.4	DS11	QPSK	Right Tilt	0	38000	2595	1	High	0.16	0.768	22.64	22.40	0.946	0.727	/
Ant.4	DS11	QPSK	Right Tilt	0	37850	2580	50	High	0.13	0.842	22.63	22.40	0.948	0.798	/
Ant.4	DS11	QPSK	Right Tilt	0	38150	2610	50	Low	0.09	0.811	22.63	22.40	0.948	0.769	/
Ant.4	DS11	QPSK	Right Tilt	0	38000	2595	100	Low	0.06	0.783	22.66	22.40	0.942	0.738	/
Ant.0	DS11	QPSK	Left Cheek	0	38150	2610	1	Low	0.14	0.103	24.99	25.50	1.125	0.116	/
Ant.0	DS11	QPSK	Left Cheek	0	38000	2595	50	Low	0.02	0.083	24.01	24.50	1.119	0.093	/
Ant.0	DS11	QPSK	Left Tilt	0	38150	2610	1	Low	-0.12	0.052	24.99	25.50	1.125	0.059	/
Ant.0	DS11	QPSK	Left Tilt	0	38000	2595	50	Low	-0.18	0.041	24.01	24.50	1.119	0.046	/
Ant.0	DS11	QPSK	Right Cheek	0	38150	2610	1	Low	0.09	0.048	24.99	25.50	1.125	0.054	/
Ant.0	DS11	QPSK	Right Cheek	0	38000	2595	50	Low	-0.16	0.035	24.01	24.50	1.119	0.039	/
Ant.0	DS11	QPSK	Right Tilt	0	38150	2610	1	Low	-0.10	0.042	24.99	25.50	1.125	0.047	/
Ant.0	DS11	QPSK	Right Tilt	0	38000	2595	50	Low	0.13	0.030	24.01	24.50	1.119	0.034	/
<b>Body-worn&amp;Hotspot</b>															
Ant.4	DS14	QPSK	Front Side	10	38150	2610	1	Low	0.04	0.201	23.16	23.90	1.186	0.238	/
Ant.4	DS14	QPSK	Front Side	10	38000	2595	50	Mid	-0.03	0.194	23.16	23.90	1.186	0.230	/
Ant.4	DS14	QPSK	Back Side	10	38150	2610	1	Low	-0.16	0.415	23.16	23.90	1.186	0.492	/
Ant.4	DS14	QPSK	Back Side	10	38000	2595	50	Mid	-0.06	0.401	23.16	23.90	1.186	0.476	/
Ant.4	DS12	QPSK	Right Edge	10	38150	2610	1	Low	-0.02	0.246	24.82	25.40	1.143	0.281	/
Ant.4	DS12	QPSK	Right Edge	10	38000	2595	50	Mid	0.10	0.185	23.80	24.40	1.148	0.212	/
Ant.4	DS14	QPSK	Top Edge	10	38150	2610	1	Low	-0.13	0.492	23.16	23.90	1.186	<b>0.584</b>	29#
Ant.4	DS14	QPSK	Top Edge	10	38000	2595	50	Mid	0.16	0.485	23.16	23.90	1.186	0.575	/
Ant.0	DS14	QPSK	Front Side	10	38150	2610	1	Low	0.07	0.110	22.44	23.00	1.138	0.125	/

Ant.0	DSI4	QPSK	Front Side	10	38000	2595	50	Low	0.02	0.108	22.48	23.00	1.127	0.122	/
Ant.0	DSI4	QPSK	Back Side	10	38150	2610	1	Low	0.05	0.218	22.44	23.00	1.138	0.248	/
Ant.0	DSI4	QPSK	Back Side	10	38000	2595	50	Low	0.17	0.210	22.48	23.00	1.127	0.237	/
Ant.0	DSI2	QPSK	Left Edge	10	38150	2610	1	Low	0.19	0.054	24.99	25.50	1.125	0.061	/
Ant.0	DSI2	QPSK	Left Edge	10	38000	2595	50	Low	0.00	0.032	24.01	24.50	1.119	0.036	/
Ant.0	DSI2	QPSK	Right Edge	10	38150	2610	1	Low	-0.08	0.075	24.99	25.50	1.125	0.084	/
Ant.0	DSI2	QPSK	Right Edge	10	38000	2595	50	Low	-0.12	0.046	24.01	24.50	1.119	0.051	/
Ant.0	DSI3	QPSK	Bottom Edge	10	38150	2610	1	Low	0.08	0.185	22.44	23.00	1.138	0.211	/
Ant.0	DSI3	QPSK	Bottom Edge	10	38000	2595	50	Low	-0.07	0.185	22.48	23.00	1.127	0.208	/
<b>P-sensor</b>															
Ant.4	Full power	QPSK	Front Side	15	38150	2610	1	Low	-0.01	0.173	24.82	25.40	1.143	0.198	/
Ant.4	Full power	QPSK	Front Side	15	38000	2595	50	Mid	0.06	0.144	23.80	24.40	1.148	0.165	/
Ant.4	Full power	QPSK	Back Side	15	38150	2610	1	Low	-0.15	0.323	24.82	25.40	1.143	0.369	/
Ant.4	Full power	QPSK	Back Side	15	38000	2595	50	Mid	0.15	0.290	23.80	24.40	1.148	0.333	/
Ant.4	Full power	QPSK	Top Edge	15	38150	2610	1	Low	0.10	0.442	24.82	25.40	1.143	0.505	/
Ant.4	Full power	QPSK	Top Edge	15	38000	2595	50	Mid	0.10	0.368	23.80	24.40	1.148	0.422	/
Ant.0	Full power	QPSK	Front Side	15	38150	2610	1	Low	0.10	0.104	24.99	25.50	1.125	0.117	/
Ant.0	Full power	QPSK	Front Side	15	38000	2595	50	Low	0.04	0.081	24.01	24.50	1.119	0.091	/
Ant.0	Full power	QPSK	Back Side	15	38150	2610	1	Low	0.03	0.162	24.99	25.50	1.125	0.182	/
Ant.0	Full power	QPSK	Back Side	15	38000	2595	50	Low	0.02	0.127	24.01	24.50	1.119	0.142	/
Ant.0	Full power	QPSK	Bottom Edge	15	38150	2610	1	Low	0.03	0.166	24.99	25.50	1.125	0.187	/
Ant.0	Full power	QPSK	Bottom Edge	15	38000	2595	50	Low	0.02	0.134	24.01	24.50	1.119	0.150	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

### 11.13 LTE Band 38 Worse case for CA Test

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head-CA</b>															
Ant.4	DSI1	QPSK	Right Cheek	0	37850 +38048	2580 +2599.8	1+1	High +Low	-0.19	0.653	21.45	22.40	1.245	0.813	30#
<b>Hotspot-CA</b>															
Ant.4	DSI4	QPSK	Top Edge	10	38150 +37952	2610 +2590.2	1+1	Low +High	0.05	0.457	23.04	23.90	1.219	0.557	31#
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

### 11.14 LTE Band 41 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
<b>Head</b>															
Ant.4	DS11	QPSK	Left Cheek	0	40620	2593	1	High	0.18	0.421	19.71	20.40	1.172	0.493	/
Ant.4	DS11	QPSK	Left Cheek	0	40620	2593	50	Low	0.14	0.430	19.66	20.40	1.186	0.510	/
Ant.4	DS11	QPSK	Left Tilt	0	40620	2593	1	High	-0.14	0.494	19.71	20.40	1.172	0.579	/
Ant.4	DS11	QPSK	Left Tilt	0	40620	2593	50	Low	-0.07	0.510	19.66	20.40	1.186	0.605	/
Ant.4	DS11	QPSK	Right Cheek	0	40620	2593	1	High	0.10	0.653	19.71	20.40	1.172	0.765	/
Ant.4	DS11	QPSK	Right Cheek	0	40620	2593	50	Low	-0.06	0.683	19.66	20.40	1.186	<b>0.810</b>	32#
Ant.4	DS11	QPSK	Right Tilt	0	40620	2593	1	High	0.13	0.612	19.71	20.40	1.172	0.717	/
Ant.4	DS11	QPSK	Right Tilt	0	40620	2593	50	Low	0.05	0.635	19.66	20.40	1.186	0.753	/
Ant.4	DS11	QPSK	Right Cheek	0	39750	2506	50	Low	-0.10	0.603	19.31	20.40	1.285	0.775	/
Ant.4	DS11	QPSK	Right Cheek	0	40185	2549.5	50	Low	-0.05	0.630	19.64	20.40	1.191	0.750	/
Ant.4	DS11	QPSK	Right Cheek	0	41490	2680	50	Low	0.10	0.592	19.56	20.40	1.213	0.718	/
Ant.4	DS11	QPSK	Right Cheek	0	41055	2636.5	50	High	0.09	0.596	19.55	20.40	1.216	0.725	/
Ant.4	DS11	QPSK	Right Cheek	0	40620	2593	100	Low	-0.09	0.605	19.63	20.40	1.194	0.722	/
Ant.0	DS11	QPSK	Left Cheek	0	40620	2593	1	Low	0.01	0.106	25.04	25.50	1.112	0.118	/
Ant.0	DS11	QPSK	Left Cheek	0	40620	2593	50	Low	-0.15	0.086	24.07	24.50	1.104	0.095	/
Ant.0	DS11	QPSK	Left Tilt	0	40620	2593	1	Low	0.18	0.052	25.04	25.50	1.112	0.058	/
Ant.0	DS11	QPSK	Left Tilt	0	40620	2593	50	Low	0.12	0.041	24.07	24.50	1.104	0.045	/
Ant.0	DS11	QPSK	Right Cheek	0	40620	2593	1	Low	0.10	0.048	25.04	25.50	1.112	0.053	/
Ant.0	DS11	QPSK	Right Cheek	0	40620	2593	50	Low	0.04	0.032	24.07	24.50	1.104	0.035	/
Ant.0	DS11	QPSK	Right Tilt	0	40620	2593	1	Low	-0.01	0.043	25.04	25.50	1.112	0.048	/
Ant.0	DS11	QPSK	Right Tilt	0	40620	2593	50	Low	0.10	0.028	24.07	24.50	1.104	0.031	/
<b>Body-worn&amp;Hotspot</b>															
Ant.4	DS14	QPSK	Front Side	10	40620	2593	1	High	-0.02	0.213	22.71	23.40	1.172	0.250	/
Ant.4	DS14	QPSK	Front Side	10	40620	2593	50	Mid	-0.16	0.206	22.68	23.40	1.180	0.243	/
Ant.4	DS14	QPSK	Back Side	10	40620	2593	1	High	0.00	0.403	22.71	23.40	1.172	0.472	/
Ant.4	DS14	QPSK	Back Side	10	40620	2593	50	Mid	0.12	0.390	22.68	23.40	1.180	0.460	/
Ant.4	DS12	QPSK	Right Edge	10	40620	2593	1	High	0.19	0.293	24.87	25.40	1.130	0.331	/
Ant.4	DS12	QPSK	Right Edge	10	40620	2593	50	Low	0.04	0.226	23.81	24.40	1.146	0.259	/
Ant.4	DS14	QPSK	Top Edge	10	40620	2593	1	High	-0.02	0.529	22.71	23.40	1.172	<b>0.620</b>	33#
Ant.4	DS14	QPSK	Top Edge	10	40620	2593	50	Mid	-0.07	0.515	22.68	23.40	1.180	0.608	/
Ant.0	DS14	QPSK	Front Side	10	40620	2593	1	Low	-0.02	0.138	23.56	24.00	1.107	0.153	/
Ant.0	DS14	QPSK	Front Side	10	40620	2593	50	Mid	0.09	0.121	23.48	24.00	1.127	0.136	/
Ant.0	DS14	QPSK	Back Side	10	40620	2593	1	Low	-0.13	0.259	23.56	24.00	1.107	0.287	/
Ant.0	DS14	QPSK	Back Side	10	40620	2593	50	Mid	0.11	0.278	23.48	24.00	1.127	0.313	/
Ant.0	DS12	QPSK	Left Edge	10	40620	2593	1	Low	-0.17	0.046	25.04	25.50	1.112	0.051	/
Ant.0	DS12	QPSK	Left Edge	10	40620	2593	50	Low	0.18	0.032	24.07	24.50	1.104	0.035	/

Ant.0	DSI2	QPSK	Right Edge	10	40620	2593	1	Low	0.01	0.071	25.04	25.50	1.112	0.079	/
Ant.0	DSI2	QPSK	Right Edge	10	40620	2593	50	Low	0.15	0.054	24.07	24.50	1.104	0.060	/
Ant.0	DSI3	QPSK	Bottom Edge	10	40620	2593	1	Low	-0.07	0.278	23.56	24.00	1.107	0.308	/
Ant.0	DSI3	QPSK	Bottom Edge	10	40620	2593	50	Mid	-0.18	0.273	23.48	24.00	1.127	0.308	/
<b>P-sensor</b>															
Ant.4	Full power	QPSK	Front Side	15	40620	2593	1	High	-0.18	0.209	24.87	25.40	1.130	0.236	/
Ant.4	Full power	QPSK	Front Side	15	40620	2593	50	Low	-0.16	0.168	23.81	24.40	1.146	0.193	/
Ant.4	Full power	QPSK	Back Side	15	40620	2593	1	High	-0.09	0.356	24.87	25.40	1.130	0.402	/
Ant.4	Full power	QPSK	Back Side	15	40620	2593	50	Low	-0.02	0.285	23.81	24.40	1.146	0.327	/
Ant.4	Full power	QPSK	Top Edge	15	40620	2593	1	High	-0.16	0.554	24.87	25.40	1.130	0.626	/
Ant.4	Full power	QPSK	Top Edge	15	40620	2593	50	Low	0.08	0.458	23.81	24.40	1.146	0.525	/
Ant.0	Full power	QPSK	Front Side	15	40620	2593	1	Low	-0.04	0.112	25.04	25.50	1.112	0.125	/
Ant.0	Full power	QPSK	Front Side	15	40620	2593	50	Low	-0.12	0.087	24.07	24.50	1.104	0.096	/
Ant.0	Full power	QPSK	Back Side	15	40620	2593	1	Low	-0.12	0.151	25.04	25.50	1.112	0.168	/
Ant.0	Full power	QPSK	Back Side	15	40620	2593	50	Low	-0.07	0.120	24.07	24.50	1.104	0.132	/
Ant.0	Full power	QPSK	Bottom Edge	15	40620	2593	1	Low	-0.13	0.175	25.04	25.50	1.112	0.195	/
Ant.0	Full power	QPSK	Bottom Edge	15	40620	2593	50	Low	-0.06	0.134	24.07	24.50	1.104	0.148	/

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

### 11.15 LTE Band 41 Worse case for CA Test

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.
<b>Head-CA</b>															
Ant.4	DSI1	QPSK	Right Cheek	0	40620 +40818	2593 +2612.8	1+1	High +Low	-0.15	0.472	19.60	20.40	1.202	0.567	34#
<b>Hotspot-CA</b>															
Ant.4	DSI4	QPSK	Top Edge	10	40620 +40818	2593 +2612.8	1+1	High +Low	0.05	0.458	22.21	23.40	1.315	0.602	35#

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

### 11.16 WIFI 2.4GHZ

Mode	Power Reduction	Fre. Band	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	Duty cycle Setting	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>																
Ant.6	Level1	2.4G	802.11 b	Left Cheek	0	11	2462	-0.07	0.404	15.23	16.50	1.340	98.80	1.012	<b>0.548</b>	36#
Ant.6	Level1	2.4G	802.11 b	Left Tilt	0	11	2462	0.16	0.302	15.23	16.50	1.340	98.80	1.012	0.410	/
Ant.6	Level1	2.4G	802.11 b	Right Cheek	0	11	2462	0.18	0.145	15.23	16.50	1.340	98.80	1.012	0.197	/
Ant.6	Level1	2.4G	802.11 b	Right Tilt	0	11	2462	0.19	0.133	15.23	16.50	1.340	98.80	1.012	0.180	/
<b>Body-worn&amp;Hotspot</b>																
Ant.6	Level2	2.4G	802.11 b	Front Side	10	11	2462	0.13	0.179	19.76	21.00	1.330	98.80	1.012	0.241	/
Ant.6	Level2	2.4G	802.11 b	Back Side	10	11	2462	0.05	0.221	19.76	21.00	1.330	98.80	1.012	<b>0.297</b>	37#
Ant.6	Level2	2.4G	802.11 b	Left Edge	10	11	2462	0.17	0.198	19.76	21.00	1.330	98.80	1.012	0.267	/
Ant.6	Level2	2.4G	802.11 b	Top Edge	10	11	2462	-0.01	0.162	19.76	21.00	1.330	98.80	1.012	0.218	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

### 11.17 WIFI 5GHz

Mode	Power Reduction	Freq. Band	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	Duty cycle Setting	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>																
Ant.6	Level1	5.3G	802.11a	Left Cheek	0	52	5260	-0.16	0.358	10.28	11.50	1.324	97.20	1.029	0.488	/
Ant.6	Level1	5.3G	802.11a	Left Tilt	0	52	5260	0.11	0.434	10.28	11.50	1.324	97.20	1.029	<b>0.591</b>	38#
Ant.6	Level1	5.3G	802.11a	Right Cheek	0	52	5260	-0.13	0.207	10.28	11.50	1.324	97.20	1.029	0.282	/
Ant.6	Level1	5.3G	802.11a	Right Tilt	0	52	5260	0.15	0.241	10.28	11.50	1.324	97.20	1.029	0.328	/
Ant.6	Level1	5.6G	802.11a	Left Cheek	0	140	5700	-0.08	0.379	13.60	15.00	1.380	97.20	1.029	0.538	/
Ant.6	Level1	5.6G	802.11a	Left Tilt	0	140	5700	0.03	0.421	13.60	15.00	1.380	97.20	1.029	<b>0.598</b>	39#
Ant.6	Level1	5.6G	802.11a	Right Cheek	0	140	5700	-0.03	0.250	13.60	15.00	1.380	97.20	1.029	0.355	/
Ant.6	Level1	5.6G	802.11a	Right Tilt	0	140	5700	0.12	0.289	13.60	15.00	1.380	97.20	1.029	0.410	/
Ant.6	Level1	5.8G	802.11a	Left Cheek	0	149	5745	0.18	0.235	13.37	15.00	1.455	97.20	1.029	0.352	/
Ant.6	Level1	5.8G	802.11a	Left Tilt	0	149	5745	-0.14	0.248	13.37	15.00	1.455	97.20	1.029	<b>0.371</b>	40#
Ant.6	Level1	5.8G	802.11a	Right Cheek	0	149	5745	0.03	0.180	13.37	15.00	1.455	97.20	1.029	0.269	/
Ant.6	Level1	5.8G	802.11a	Right Tilt	0	149	5745	0.04	0.213	13.37	15.00	1.455	97.20	1.029	0.319	/
<b>Body-worn</b>																
Ant.6	Level2	5.3G	802.11a	Front Side	10	64	5320	0.12	0.283	16.80	18.00	1.318	97.20	1.029	0.384	/
Ant.6	Level2	5.3G	802.11a	Back Side	10	64	5320	0.04	0.503	16.80	18.00	1.318	97.20	1.029	<b>0.682</b>	41#
Ant.6	Level2	5.6G	802.11a	Front Side	10	140	5700	0.16	0.139	16.65	18.00	1.365	97.20	1.029	0.195	/
Ant.6	Level2	5.6G	802.11a	Back Side	10	140	5700	0.16	0.257	16.65	18.00	1.365	97.20	1.029	<b>0.361</b>	42#
Ant.6	Level2	5.8G	802.11a	Front Side	10	149	5745	-0.16	0.160	16.24	18.00	1.500	97.20	1.029	0.247	/
Ant.6	Level2	5.8G	802.11a	Back Side	10	149	5745	0.10	0.291	16.24	18.00	1.500	97.20	1.029	<b>0.449</b>	43#
<b>Hotspot</b>																
Ant.6	Level2	5.2G	802.11a	Front Side	10	48	5240	0.09	0.201	16.58	18.00	1.387	97.20	1.029	0.287	/
Ant.6	Level2	5.2G	802.11a	Back Side	10	48	5240	-0.14	0.476	16.58	18.00	1.387	97.20	1.029	0.679	/
Ant.6	Level2	5.2G	802.11a	Left Edge	10	48	5240	-0.13	0.175	16.58	18.00	1.387	97.20	1.029	0.250	/
Ant.6	Level2	5.2G	802.11a	Top Edge	10	48	5240	0.13	0.580	16.58	18.00	1.387	97.20	1.029	0.828	/
Ant.6	Level2	5.2G	802.11a	Top Edge	10	36	5180	-0.15	0.639	16.56	18.00	1.393	97.20	1.029	<b>0.916</b>	44#
Ant.6	Level2	5.2G	802.11a	Top Edge	10	44	5220	-0.11	0.565	16.38	18.00	1.452	97.20	1.029	0.844	/
Ant.6	Level2	5.8G	802.11a	Front Side	10	149	5745	-0.16	0.160	16.24	18.00	1.500	97.20	1.029	0.247	/
Ant.6	Level2	5.8G	802.11a	Back Side	10	149	5745	0.10	0.291	16.24	18.00	1.500	97.20	1.029	<b>0.449</b>	45#
Ant.6	Level2	5.8G	802.11a	Left Edge	10	149	5745	-0.13	0.138	16.24	18.00	1.500	97.20	1.029	0.213	/
Ant.6	Level2	5.8G	802.11a	Top Edge	10	149	5745	0.10	0.281	16.24	18.00	1.500	97.20	1.029	0.434	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Fre. Band	Power Reduction	Fre. Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle Setting	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
<b>Specific</b>																
Ant.6	Level2	5.3G	802.11a	Front Side	0	64	5320	-0.13	0.475	16.80	18.00	1.318	97.20	1.029	0.644	/
Ant.6	Level2	5.3G	802.11a	Back Side	0	64	5320	-0.17	0.360	16.80	18.00	1.318	97.20	1.029	0.488	/
Ant.6	Level2	5.3G	802.11a	Left Edge	0	64	5320	-0.07	0.203	16.80	18.00	1.318	97.20	1.029	0.275	/
Ant.6	Level2	5.3G	802.11a	Top Edge	0	64	5320	0.10	0.978	16.80	18.00	1.318	97.20	1.029	<b>1.326</b>	46#
Ant.6	Level2	5.6G	802.11a	Front Side	0	140	5700	0.01	0.263	16.65	18.00	1.365	97.20	1.029	0.369	/
Ant.6	Level2	5.6G	802.11a	Back Side	0	140	5700	0.14	0.234	16.65	18.00	1.365	97.20	1.029	0.329	/
Ant.6	Level2	5.6G	802.11a	Left Edge	0	140	5700	-0.18	0.105	16.65	18.00	1.365	97.20	1.029	0.147	/
Ant.6	Level2	5.6G	802.11a	Top Edge	0	140	5700	-0.04	0.527	16.65	18.00	1.365	97.20	1.029	<b>0.740</b>	47#
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

## 11.18 Bluetooth

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	Duty cycle Setting	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
<b>Head</b>													
DH5	Left Cheek	0	0	2402	0.08	0.175	12.90	14.00	1.288	76.94	1.300	<b>0.293</b>	48#
DH5	Left Tilt	0	0	2402	-0.12	0.110	12.90	14.00	1.288	76.94	1.300	0.184	/
DH5	Right Cheek	0	0	2402	0.05	0.063	12.90	14.00	1.288	76.94	1.300	0.105	/
DH5	Right Tilt	0	0	2402	-0.14	0.052	12.90	14.00	1.288	76.94	1.300	0.087	/
<b>Body-worn&amp;Hotspot</b>													
DH5	Front Side	10	0	2402	0.00	0.022	12.90	14.00	1.288	76.94	1.300	0.037	/
DH5	Back Side	10	0	2402	0.12	0.029	12.90	14.00	1.288	76.94	1.300	<b>0.049</b>	49#
DH5	Left Edge	10	0	2402	-0.07	0.022	12.90	14.00	1.288	76.94	1.300	0.037	/
DH5	Top Edge	10	0	2402	0.13	0.020	12.90	14.00	1.288	76.94	1.300	0.033	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

## 12 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  $\leq 1.45$  W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is  $\leq 1.10$ , 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  $\geq 0.80$  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  $\geq 1.45$  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  $\geq 1.5$  W/kg, perform a third repeated measurement.

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated <sup>1st</sup> Measured SAR (W/kg)	Largest to Smallest SAR Radio
2600	LTE band 38	Head	Right Cheek	0.907	Yes	0.895	1.01
Note: The ratio of largest to smallest SAR for the original and first repeated measurements is $< 1.20$ , the second repeated measurement. Is not required.							

## 13 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).

### 13.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot	Extremity
1	WLAN 2.4G + Bluetooth	Yes	Yes	Yes	Yes
2	WLAN 5G + Bluetooth	Yes	Yes	Yes	Yes
3	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4	WWAN + WLAN 2.4G + Bluetooth	Yes	Yes	Yes	Yes
5	WWAN + WLAN 5G + Bluetooth	Yes	Yes	Yes	Yes

**Note:**

- Two WWAN antennas can switch automatically, but two WWAN antenna can't transmit simultaneously.
- 2.4G WLAN can transmit simultaneously with Bluetooth, but can't transmit simultaneously with 5G WLAN.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
- The maximum SAR summation is calculated based on the same configuration and test position.
- The simultaneous transmission combinations of the more antennas contain combinations of less antennas, so only the worst simultaneous transmission combinations is shown in this report.
- This device 2.4GHz WLAN/5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz WLAN/5.5GHz WLAN supports WiFi Direct (GC only)

## 13.2 Sum SAR of Simultaneous Transmission

### 13.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN 2.4G and WLAN 5G

Band	Power Reduction	Antenna	Position	Stand alone SAR				SUM SAR	
				1	2	3	4	(1+2+4)	(1+3+4)
				WWAN	2.4GWIFI Ant.6	5GWIFI Max Ant.6	Bluetooth Ant.6		
GSM850	DSI1	Ant.4	Left Cheek	0.473	0.548	0.538	0.293	1.314	1.304
	DSI1	Ant.4	Left Tilt	0.392	0.409	0.598	0.184	0.985	1.174
	DSI1	Ant.4	Right Cheek	0.494	0.197	0.355	0.105	0.796	0.954
	DSI1	Ant.4	Right Tilt	0.388	0.180	0.410	0.087	0.655	0.885
GSM850	DSI1	Ant.0	Left Cheek	0.123	0.548	0.538	0.293	0.964	0.954
	DSI1	Ant.0	Left Tilt	0.060	0.409	0.598	0.184	0.653	0.842
	DSI1	Ant.0	Right Cheek	0.140	0.197	0.355	0.105	0.442	0.600
	DSI1	Ant.0	Right Tilt	0.068	0.180	0.410	0.087	0.335	0.565
GSM 1900	DSI1	Ant.4	Left Cheek	0.384	0.548	0.538	0.293	1.225	1.215
	DSI1	Ant.4	Left Tilt	0.474	0.409	0.598	0.184	1.067	1.256
	DSI1	Ant.4	Right Cheek	0.554	0.197	0.355	0.105	0.856	1.014
	DSI1	Ant.4	Right Tilt	0.521	0.180	0.410	0.087	0.788	1.018
GSM 1900	DSI1	Ant.0	Left Cheek	0.093	0.548	0.538	0.293	0.934	0.924
	DSI1	Ant.0	Left Tilt	0.076	0.409	0.598	0.184	0.669	0.858
	DSI1	Ant.0	Right Cheek	0.087	0.197	0.355	0.105	0.389	0.547
	DSI1	Ant.0	Right Tilt	0.064	0.180	0.410	0.087	0.331	0.561
WCDMA B2	DSI1	Ant.4	Left Cheek	0.622	0.548	0.538	0.293	1.463	1.453
	DSI1	Ant.4	Left Tilt	0.804	0.409	0.598	0.184	1.397	<b>1.586</b>
	DSI1	Ant.4	Right Cheek	0.930	0.197	0.355	0.105	1.232	1.390
	DSI1	Ant.4	Right Tilt	0.844	0.180	0.410	0.087	1.111	1.341
WCDMA B2	DSI1	Ant.0	Left Cheek	0.146	0.548	0.538	0.293	0.987	0.977
	DSI1	Ant.0	Left Tilt	0.125	0.409	0.598	0.184	0.718	0.907
	DSI1	Ant.0	Right Cheek	0.155	0.197	0.355	0.105	0.457	0.615
	DSI1	Ant.0	Right Tilt	0.103	0.180	0.410	0.087	0.370	0.600
WCDMA B4	DSI1	Ant.4	Left Cheek	0.242	0.548	0.538	0.293	1.083	1.073
	DSI1	Ant.4	Left Tilt	0.316	0.409	0.598	0.184	0.909	1.098

	DSI1	Ant.4	Right Cheek	0.296	0.197	0.355	0.105	0.598	0.756
	DSI1	Ant.4	Right Tilt	0.360	0.180	0.410	0.087	0.627	0.857
WCDMA B4	DSI1	Ant.0	Left Cheek	0.119	0.548	0.538	0.293	0.960	0.950
	DSI1	Ant.0	Left Tilt	0.089	0.409	0.598	0.184	0.682	0.871
	DSI1	Ant.0	Right Cheek	0.155	0.197	0.355	0.105	0.457	0.615
	DSI1	Ant.0	Right Tilt	0.095	0.180	0.410	0.087	0.362	0.592
WCDMA B5	DSI1	Ant.4	Left Cheek	0.616	0.548	0.538	0.293	1.457	1.447
	DSI1	Ant.4	Left Tilt	0.496	0.409	0.598	0.184	1.089	1.278
	DSI1	Ant.4	Right Cheek	0.660	0.197	0.355	0.105	0.962	1.120
	DSI1	Ant.4	Right Tilt	0.490	0.180	0.410	0.087	0.757	0.987
WCDMA B5	DSI1	Ant.0	Left Cheek	0.183	0.548	0.538	0.293	1.024	1.014
	DSI1	Ant.0	Left Tilt	0.086	0.409	0.598	0.184	0.679	0.868
	DSI1	Ant.0	Right Cheek	0.224	0.197	0.355	0.105	0.526	0.684
	DSI1	Ant.0	Right Tilt	0.129	0.180	0.410	0.087	0.396	0.626
LTE B2	DSI1	Ant.4	Left Cheek	0.559	0.548	0.538	0.293	1.400	1.390
	DSI1	Ant.4	Left Tilt	0.718	0.409	0.598	0.184	1.311	1.500
	DSI1	Ant.4	Right Cheek	0.853	0.197	0.355	0.105	1.155	1.313
	DSI1	Ant.4	Right Tilt	0.728	0.180	0.410	0.087	0.995	1.225
LTE B2	DSI1	Ant.0	Left Cheek	0.127	0.548	0.538	0.293	0.968	0.958
	DSI1	Ant.0	Left Tilt	0.117	0.409	0.598	0.184	0.710	0.899
	DSI1	Ant.0	Right Cheek	0.142	0.197	0.355	0.105	0.444	0.602
	DSI1	Ant.0	Right Tilt	0.109	0.180	0.410	0.087	0.376	0.606
LTE B4	DSI1	Ant.4	Left Cheek	0.290	0.548	0.538	0.293	1.131	1.121
	DSI1	Ant.4	Left Tilt	0.397	0.409	0.598	0.184	0.990	1.179
	DSI1	Ant.4	Right Cheek	0.368	0.197	0.355	0.105	0.670	0.828
	DSI1	Ant.4	Right Tilt	0.443	0.180	0.410	0.087	0.710	0.940
LTE B4	DSI1	Ant.0	Left Cheek	0.121	0.548	0.538	0.293	0.962	0.952
	DSI1	Ant.0	Left Tilt	0.097	0.409	0.598	0.184	0.690	0.879
	DSI1	Ant.0	Right Cheek	0.156	0.197	0.355	0.105	0.458	0.616
	DSI1	Ant.0	Right Tilt	0.103	0.180	0.410	0.087	0.370	0.600
LTE B5	DSI1	Ant.4	Left Cheek	0.706	0.548	0.538	0.293	1.547	1.537
	DSI1	Ant.4	Left Tilt	0.618	0.409	0.598	0.184	1.211	1.400
	DSI1	Ant.4	Right Cheek	0.754	0.197	0.355	0.105	1.056	1.214
	DSI1	Ant.4	Right Tilt	0.586	0.180	0.410	0.087	0.853	1.083

LTE B5	DSI1	Ant.0	Left Cheek	0.180	0.548	0.538	0.293	1.021	1.011
	DSI1	Ant.0	Left Tilt	0.086	0.409	0.598	0.184	0.679	0.868
	DSI1	Ant.0	Right Cheek	0.225	0.197	0.355	0.105	0.527	0.685
	DSI1	Ant.0	Right Tilt	0.101	0.180	0.410	0.087	0.368	0.598
LTE B7	DSI1	Ant.4	Left Cheek	0.438	0.548	0.538	0.293	1.279	1.269
	DSI1	Ant.4	Left Tilt	0.530	0.409	0.598	0.184	1.123	1.312
	DSI1	Ant.4	Right Cheek	0.717	0.197	0.355	0.105	1.019	1.177
	DSI1	Ant.4	Right Tilt	0.618	0.180	0.410	0.087	0.885	1.115
LTE B7	DSI1	Ant.0	Left Cheek	0.189	0.548	0.538	0.293	1.030	1.020
	DSI1	Ant.0	Left Tilt	0.097	0.409	0.598	0.184	0.690	0.879
	DSI1	Ant.0	Right Cheek	0.091	0.197	0.355	0.105	0.393	0.551
	DSI1	Ant.0	Right Tilt	0.064	0.180	0.410	0.087	0.331	0.561
LTE B66	DSI1	Ant.4	Left Cheek	0.298	0.548	0.538	0.293	1.139	1.129
	DSI1	Ant.4	Left Tilt	0.404	0.409	0.598	0.184	0.997	1.186
	DSI1	Ant.4	Right Cheek	0.360	0.197	0.355	0.105	0.662	0.820
	DSI1	Ant.4	Right Tilt	0.471	0.180	0.410	0.087	0.738	0.968
LTE B66	DSI1	Ant.0	Left Cheek	0.103	0.548	0.538	0.293	0.944	0.934
	DSI1	Ant.0	Left Tilt	0.083	0.409	0.598	0.184	0.676	0.865
	DSI1	Ant.0	Right Cheek	0.138	0.197	0.355	0.105	0.440	0.598
	DSI1	Ant.0	Right Tilt	0.078	0.180	0.410	0.087	0.345	0.575
LTE B38	DSI1	Ant.4	Left Cheek	0.563	0.548	0.538	0.293	1.404	1.394
	DSI1	Ant.4	Left Tilt	0.666	0.409	0.598	0.184	1.259	1.448
	DSI1	Ant.4	Right Cheek	1.066	0.197	0.355	0.105	1.368	1.526
	DSI1	Ant.4	Right Tilt	0.869	0.180	0.410	0.087	1.136	1.366
LTE B38	DSI1	Ant.0	Left Cheek	0.116	0.548	0.538	0.293	0.957	0.947
	DSI1	Ant.0	Left Tilt	0.058	0.409	0.598	0.184	0.651	0.840
	DSI1	Ant.0	Right Cheek	0.054	0.197	0.355	0.105	0.356	0.514
	DSI1	Ant.0	Right Tilt	0.047	0.180	0.410	0.087	0.314	0.544
LTE B41	DSI1	Ant.4	Left Cheek	0.510	0.548	0.538	0.293	1.351	1.341
	DSI1	Ant.4	Left Tilt	0.605	0.409	0.598	0.184	1.198	1.387
	DSI1	Ant.4	Right Cheek	0.810	0.197	0.355	0.105	1.112	1.270
	DSI1	Ant.4	Right Tilt	0.753	0.180	0.410	0.087	1.020	1.250
LTE B41	DSI1	Ant.0	Left Cheek	0.118	0.548	0.538	0.293	0.959	0.949
	DSI1	Ant.0	Left Tilt	0.058	0.409	0.598	0.184	0.651	0.840

	DSI1	Ant.0	Right Cheek	0.053	0.197	0.355	0.105	0.355	0.513
	DSI1	Ant.0	Right Tilt	0.048	0.180	0.410	0.087	0.315	0.545

## Note:

1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.586 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

### 13.2.2 Body-Worn Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN 2.4G and WLAN 5G

Band	Power Reduction	Antenna	Position	Stand alone SAR				SUM SAR	
				1	2	3	4	(1+2+4)	(1+3+4)
				WWAN	2.4GWIFI Ant.6	5GWIFI Max Ant.6	Bluetooth Ant.6		
GSM850	DSI4	Ant.4	Front Side 10mm	0.202	0.241	0.384	0.037	0.480	0.623
	DSI4	Ant.4	Back Side 10mm	0.246	0.298	0.682	0.049	0.593	0.977
GSM850	DSI4	Ant.0	Front Side 10mm	0.156	0.241	0.384	0.037	0.434	0.577
	DSI4	Ant.0	Back Side 10mm	0.245	0.298	0.682	0.049	0.592	0.976
GSM 1900	DSI4	Ant.4	Front Side 10mm	0.225	0.241	0.384	0.037	0.503	0.646
	DSI4	Ant.4	Back Side 10mm	0.329	0.298	0.682	0.049	0.676	1.06
GSM 1900	DSI4	Ant.0	Front Side 10mm	0.129	0.241	0.384	0.037	0.407	0.550
	DSI4	Ant.0	Back Side 10mm	0.345	0.298	0.682	0.049	0.692	1.076
WCDMA B2	DSI4	Ant.4	Front Side 10mm	0.154	0.241	0.384	0.037	0.432	0.575
	DSI4	Ant.4	Back Side 10mm	0.212	0.298	0.682	0.049	0.559	0.943
WCDMA B2	DSI4	Ant.0	Front Side 10mm	0.233	0.241	0.384	0.037	0.511	0.654
	DSI4	Ant.0	Back Side 10mm	0.538	0.298	0.682	0.049	0.885	<b>1.269</b>
WCDMA B4	DSI4	Ant.4	Front Side 10mm	0.068	0.241	0.384	0.037	0.346	0.489
	DSI4	Ant.4	Back Side 10mm	0.102	0.298	0.682	0.049	0.449	0.833
WCDMA B4	DSI4	Ant.0	Front Side 10mm	0.180	0.241	0.384	0.037	0.458	0.601
	DSI4	Ant.0	Back Side 10mm	0.420	0.298	0.682	0.049	0.767	1.151
WCDMA B5	DSI4	Ant.4	Front Side 10mm	0.203	0.241	0.384	0.037	0.481	0.624
	DSI4	Ant.4	Back Side 10mm	0.346	0.298	0.682	0.049	0.693	1.077
WCDMA B5	DSI4	Ant.0	Front Side 10mm	0.268	0.241	0.384	0.037	0.546	0.689
	DSI4	Ant.0	Back Side 10mm	0.457	0.298	0.682	0.049	0.804	1.188
LTE B2	DSI4	Ant.4	Front Side 10mm	0.316	0.241	0.384	0.037	0.594	0.737
	DSI4	Ant.4	Back Side 10mm	0.445	0.298	0.682	0.049	0.792	1.176
LTE B2	DSI4	Ant.0	Front Side 10mm	0.235	0.241	0.384	0.037	0.513	0.656
	DSI4	Ant.0	Back Side 10mm	0.432	0.298	0.682	0.049	0.779	1.163
LTE B4	DSI4	Ant.4	Front Side 10mm	0.094	0.241	0.384	0.037	0.372	0.515
	DSI4	Ant.4	Back Side 10mm	0.135	0.298	0.682	0.049	0.482	0.866
LTE B4	DSI4	Ant.0	Front Side 10mm	0.160	0.241	0.384	0.037	0.438	0.581
	DSI4	Ant.0	Back Side 10mm	0.486	0.298	0.682	0.049	0.833	1.217

LTE B5	DSI4	Ant.4	Front Side 10mm	0.228	0.241	0.384	0.037	0.506	0.649
	DSI4	Ant.4	Back Side 10mm	0.355	0.298	0.682	0.049	0.702	1.086
LTE B5	DSI4	Ant.0	Front Side 10mm	0.257	0.241	0.384	0.037	0.535	0.678
	DSI4	Ant.0	Back Side 10mm	0.412	0.298	0.682	0.049	0.759	1.143
LTE B7	DSI4	Ant.4	Front Side 10mm	0.240	0.241	0.384	0.037	0.518	0.661
	DSI4	Ant.4	Back Side 10mm	0.330	0.298	0.682	0.049	0.677	1.061
LTE B7	DSI4	Ant.0	Front Side 10mm	0.167	0.241	0.384	0.037	0.445	0.588
	DSI4	Ant.0	Back Side 10mm	0.346	0.298	0.682	0.049	0.693	1.077
LTE B66	DSI4	Ant.4	Front Side 10mm	0.117	0.241	0.384	0.037	0.395	0.538
	DSI4	Ant.4	Back Side 10mm	0.164	0.298	0.682	0.049	0.511	0.895
LTE B66	DSI4	Ant.0	Front Side 10mm	0.140	0.241	0.384	0.037	0.418	0.561
	DSI4	Ant.0	Back Side 10mm	0.350	0.298	0.682	0.049	0.697	1.081
LTE B38	DSI4	Ant.4	Front Side 10mm	0.238	0.241	0.384	0.037	0.516	0.659
	DSI4	Ant.4	Back Side 10mm	0.492	0.298	0.682	0.049	0.839	1.223
LTE B38	DSI4	Ant.0	Front Side 10mm	0.125	0.241	0.384	0.037	0.403	0.546
	DSI4	Ant.0	Back Side 10mm	0.248	0.298	0.682	0.049	0.595	0.979
LTE B41	DSI4	Ant.4	Front Side 10mm	0.250	0.241	0.384	0.037	0.528	0.671
	DSI4	Ant.4	Back Side 10mm	0.472	0.298	0.682	0.049	0.819	1.203
LTE B41	DSI4	Ant.0	Front Side 10mm	0.153	0.241	0.384	0.037	0.431	0.574
	DSI4	Ant.0	Back Side 10mm	0.313	0.298	0.682	0.049	0.660	1.044

## Note:

1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.269 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

### 13.2.3 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN 2.4G and WLAN 5G

Band	Power Reduction	Antenna	Position	Stand alone SAR				SUM SAR	
				1	2	3	4	(1+2+4)	(1+3+4)
				WWAN	2.4GWIFI Ant.6	5GWIFI Max Ant.6	Bluetooth Ant.6		
GSM850	DSI4	Ant.4	Front Side 10mm	0.202	0.241	0.287	0.037	0.480	0.526
	DSI4	Ant.4	Back Side 10mm	0.246	0.298	0.679	0.049	0.593	0.974
	DSI4	Ant.4	Right Edge 10mm	0.114	/	/	/	0.114	0.114
	DSI4	Ant.4	Top Edge 10mm	0.236	0.218	0.916	0.033	0.487	1.185
GSM850	DSI4	Ant.0	Front Side 10mm	0.156	0.241	0.287	0.037	0.434	0.480
	DSI4	Ant.0	Back Side 10mm	0.245	0.298	0.679	0.049	0.592	0.973
	DSI4	Ant.0	Left Edge 10mm	0.150	0.267	0.250	0.037	0.454	0.437
	DSI4	Ant.0	Right Edge 10mm	0.070	/	/	/	0.070	0.070
	DSI3	Ant.0	Bottom Edge 10mm	0.201	/	/	/	0.201	0.201
GSM 1900	DSI4	Ant.4	Front Side 10mm	0.225	0.241	0.287	0.037	0.503	0.549
	DSI4	Ant.4	Back Side 10mm	0.329	0.298	0.679	0.049	0.676	1.057
	DSI4	Ant.4	Right Edge 10mm	0.222	/	/	/	0.222	0.222
	DSI4	Ant.4	Top Edge 10mm	0.426	0.218	0.916	0.033	0.677	1.375
GSM 1900	DSI4	Ant.0	Front Side 10mm	0.129	0.241	0.287	0.037	0.407	0.453
	DSI4	Ant.0	Back Side 10mm	0.345	0.298	0.679	0.049	0.692	1.073
	DSI4	Ant.0	Left Edge 10mm	0.074	0.267	0.250	0.037	0.378	0.361
	DSI4	Ant.0	Right Edge 10mm	0.147	/	/	/	0.147	0.147
	DSI3	Ant.0	Bottom Edge 10mm	0.317	/	/	/	0.317	0.317
WCDMA B2	DSI4	Ant.4	Front Side 10mm	0.154	0.241	0.287	0.037	0.432	0.478
	DSI4	Ant.4	Back Side 10mm	0.212	0.298	0.679	0.049	0.559	0.940
	DSI4	Ant.4	Right Edge 10mm	0.403	/	/	/	0.403	0.403
	DSI4	Ant.4	Top Edge 10mm	0.269	0.218	0.916	0.033	0.520	1.218
WCDMA B2	DSI4	Ant.0	Front Side 10mm	0.233	0.241	0.287	0.037	0.511	0.557
	DSI4	Ant.0	Back Side 10mm	0.538	0.298	0.679	0.049	0.885	1.266
	DSI4	Ant.0	Left Edge 10mm	0.113	0.267	0.250	0.037	0.417	0.400
	DSI4	Ant.0	Right Edge 10mm	0.210	/	/	/	0.210	0.210
	DSI3	Ant.0	Bottom Edge 10mm	0.406	/	/	/	0.406	0.406

WCDMA B4	DSI4	Ant.4	Front Side 10mm	0.068	0.241	0.287	0.037	0.346	0.392
	DSI4	Ant.4	Back Side 10mm	0.102	0.298	0.679	0.049	0.449	0.830
	DSI4	Ant.4	Right Edge 10mm	0.221	/	/	/	0.221	0.221
	DSI4	Ant.4	Top Edge 10mm	0.168	0.218	0.916	0.033	0.419	1.117
WCDMA B4	DSI4	Ant.0	Front Side 10mm	0.180	0.241	0.287	0.037	0.458	0.504
	DSI4	Ant.0	Back Side 10mm	0.420	0.298	0.679	0.049	0.767	1.148
	DSI4	Ant.0	Left Edge 10mm	0.160	0.267	0.250	0.037	0.464	0.447
	DSI4	Ant.0	Right Edge 10mm	0.242	/	/	/	0.242	0.242
	DSI3	Ant.0	Bottom Edge 10mm	0.583	/	/	/	0.583	0.583
WCDMA B5	DSI4	Ant.4	Front Side 10mm	0.203	0.241	0.287	0.037	0.481	0.527
	DSI4	Ant.4	Back Side 10mm	0.346	0.298	0.679	0.049	0.693	1.074
	DSI4	Ant.4	Right Edge 10mm	0.145	/	/	/	0.145	0.145
	DSI4	Ant.4	Top Edge 10mm	0.188	0.218	0.916	0.033	0.439	1.137
WCDMA B5	DSI4	Ant.0	Front Side 10mm	0.268	0.241	0.287	0.037	0.546	0.592
	DSI4	Ant.0	Back Side 10mm	0.457	0.298	0.679	0.049	0.804	1.185
	DSI4	Ant.0	Left Edge 10mm	0.214	0.267	0.250	0.037	0.518	0.501
	DSI4	Ant.0	Right Edge 10mm	0.108	/	/	/	0.108	0.108
	DSI3	Ant.0	Bottom Edge 10mm	0.353	/	/	/	0.353	0.353
LTE B2	DSI4	Ant.4	Front Side 10mm	0.316	0.241	0.287	0.037	0.594	0.640
	DSI4	Ant.4	Back Side 10mm	0.445	0.298	0.679	0.049	0.792	1.173
	DSI4	Ant.4	Right Edge 10mm	0.421	/	/	/	0.421	0.421
	DSI4	Ant.4	Top Edge 10mm	0.463	0.218	0.916	0.033	0.714	1.412
LTE B2	DSI4	Ant.0	Front Side 10mm	0.235	0.241	0.287	0.037	0.513	0.559
	DSI4	Ant.0	Back Side 10mm	0.432	0.298	0.679	0.049	0.779	1.160
	DSI4	Ant.0	Left Edge 10mm	0.096	0.267	0.250	0.037	0.400	0.383
	DSI4	Ant.0	Right Edge 10mm	0.223	/	/	/	0.223	0.223
	DSI3	Ant.0	Bottom Edge 10mm	0.430	/	/	/	0.430	0.430
LTE B4	DSI4	Ant.4	Front Side 10mm	0.094	0.241	0.287	0.037	0.372	0.418
	DSI4	Ant.4	Back Side 10mm	0.135	0.298	0.679	0.049	0.482	0.863
	DSI4	Ant.4	Right Edge 10mm	0.193	/	/	/	0.193	0.193
	DSI4	Ant.4	Top Edge 10mm	0.190	0.218	0.916	0.033	0.441	1.139
LTE B4	DSI4	Ant.0	Front Side 10mm	0.160	0.241	0.287	0.037	0.438	0.484
	DSI4	Ant.0	Back Side 10mm	0.486	0.298	0.679	0.049	0.833	1.214
	DSI4	Ant.0	Left Edge 10mm	0.162	0.267	0.250	0.037	0.466	0.449

	DSI4	Ant.0	Right Edge 10mm	0.191	/	/	/	0.191	0.191
	DSI3	Ant.0	Bottom Edge 10mm	0.647	/	/	/	0.647	0.647
LTE B5	DSI4	Ant.4	Front Side 10mm	0.228	0.241	0.287	0.037	0.506	0.552
	DSI4	Ant.4	Back Side 10mm	0.355	0.298	0.679	0.049	0.702	1.083
	DSI4	Ant.4	Right Edge 10mm	0.109	/	/	/	0.109	0.109
	DSI4	Ant.4	Top Edge 10mm	0.269	0.218	0.916	0.033	0.520	1.218
LTE B5	DSI4	Ant.0	Front Side 10mm	0.257	0.241	0.287	0.037	0.535	0.581
	DSI4	Ant.0	Back Side 10mm	0.412	0.298	0.679	0.049	0.759	1.140
	DSI4	Ant.0	Left Edge 10mm	0.204	0.267	0.250	0.037	0.508	0.491
	DSI4	Ant.0	Right Edge 10mm	0.113	/	/	/	0.113	0.113
	DSI3	Ant.0	Bottom Edge 10mm	0.365	/	/	/	0.365	0.365
LTE B7	DSI4	Ant.4	Front Side 10mm	0.240	0.241	0.287	0.037	0.518	0.564
	DSI4	Ant.4	Back Side 10mm	0.330	0.298	0.679	0.049	0.677	1.058
	DSI4	Ant.4	Right Edge 10mm	0.371	/	/	/	0.371	0.371
	DSI4	Ant.4	Top Edge 10mm	0.600	0.218	0.916	0.033	0.851	1.549
LTE B7	DSI4	Ant.0	Front Side 10mm	0.167	0.241	0.287	0.037	0.445	0.491
	DSI4	Ant.0	Back Side 10mm	0.346	0.298	0.679	0.049	0.693	1.074
	DSI4	Ant.0	Left Edge 10mm	0.132	0.267	0.250	0.037	0.436	0.419
	DSI4	Ant.0	Right Edge 10mm	0.179	/	/	/	0.179	0.179
	DSI3	Ant.0	Bottom Edge 10mm	0.319	/	/	/	0.319	0.319
LTE B66	DSI4	Ant.4	Front Side 10mm	0.117	0.241	0.287	0.037	0.395	0.441
	DSI4	Ant.4	Back Side 10mm	0.164	0.298	0.679	0.049	0.511	0.892
	DSI4	Ant.4	Right Edge 10mm	0.162	/	/	/	0.162	0.162
	DSI4	Ant.4	Top Edge 10mm	0.218	0.218	0.916	0.033	0.469	1.167
LTE B66	DSI4	Ant.0	Front Side 10mm	0.140	0.241	0.287	0.037	0.418	0.464
	DSI4	Ant.0	Back Side 10mm	0.350	0.298	0.679	0.049	0.697	1.078
	DSI4	Ant.0	Left Edge 10mm	0.142	0.267	0.250	0.037	0.446	0.429
	DSI4	Ant.0	Right Edge 10mm	0.147	/	/	/	0.147	0.147
	DSI3	Ant.0	Bottom Edge 10mm	0.456	/	/	/	0.456	0.456
LTE B38	DSI4	Ant.4	Front Side 10mm	0.238	0.241	0.287	0.037	0.516	0.562
	DSI4	Ant.4	Back Side 10mm	0.492	0.298	0.679	0.049	0.839	1.220
	DSI4	Ant.4	Right Edge 10mm	0.281	/	/	/	0.281	0.281
	DSI4	Ant.4	Top Edge 10mm	0.583	0.218	0.916	0.033	0.834	1.532
LTE B38	DSI4	Ant.0	Front Side 10mm	0.125	0.241	0.287	0.037	0.403	0.449

	DSI4	Ant.0	Back Side 10mm	0.248	0.298	0.679	0.049	0.595	0.976
	DSI4	Ant.0	Left Edge 10mm	0.061	0.267	0.250	0.037	0.365	0.348
	DSI4	Ant.0	Right Edge 10mm	0.084	/	/	/	0.084	0.084
	DSI3	Ant.0	Bottom Edge 10mm	0.210	/	/	/	0.210	0.210
LTE B41	DSI4	Ant.4	Front Side 10mm	0.250	0.241	0.287	0.037	0.528	0.574
	DSI4	Ant.4	Back Side 10mm	0.472	0.298	0.679	0.049	0.819	1.200
	DSI4	Ant.4	Right Edge 10mm	0.331	/	/	/	0.331	0.331
	DSI4	Ant.4	Top Edge 10mm	0.620	0.218	0.916	0.033	0.871	<b>1.569</b>
LTE B41	DSI4	Ant.0	Front Side 10mm	0.153	0.241	0.287	0.037	0.431	0.477
	DSI4	Ant.0	Back Side 10mm	0.313	0.298	0.679	0.049	0.660	1.041
	DSI4	Ant.0	Left Edge 10mm	0.051	0.267	0.250	0.037	0.355	0.338
	DSI4	Ant.0	Right Edge 10mm	0.079	/	/	/	0.079	0.079
	DSI3	Ant.0	Bottom Edge 10mm	0.308	/	/	/	0.308	0.308

## Note:

1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 1.569 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

### 13.2.4 Specific Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN 2.4G and WLAN 5G

Band	Power Reduction	Antenna	Position	Stand alone SAR				SUM SAR	
				1	2	3	4	(1+2+4)	(1+3+4)
				WWAN	2.4GWIFI Ant.6	5GWIFI Max Ant.6	Bluetooth Ant.6		
WCDMA B4	DSI3	Ant.0	Bottom Edge 0mm	2.154	/	/	/	2.154	2.154
LTE B4	DSI3	Ant.0	Bottom Edge 0mm	2.420	/	/	/	2.420	2.420
LTE B7	DSI4	Ant.4	Top Edge 0mm	2.271	/	1.326	/	2.271	<b>3.597</b>
LTE B66	DSI3	Ant.0	Bottom Edge 0mm	1.719	/	/	/	1.719	1.719

Note:

- 1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.
- 2: The highest Summed 10g SAR is 3.597 W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test is not required.

## 14 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	2021/05/17	2024/05/16
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2021/05/17	2024/05/16
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d193	2021/05/20	2024/05/19
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2021/05/19	2024/05/18
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2021/05/19	2024/05/18
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2021/05/18	2024/05/17
E-Field Probe	Speag	EX3DV4	SN: 7607	2022/07/04	2023/07/13
Data Acquisition Electronics	Speag	DAE4	SN: 878	2022/06/13	2023/06/12
Signal Generator	R&S	SMB100A	182396	2021/12/20	2022/12/19
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2021/09/08	2022/09/07
Power Sensor	R&S	NRV-Z4	100381	2021/09/08	2022/09/07
Power Sensor	R&S	NRV-Z2	100211	2021/09/08	2022/09/07
Wireless Communication Test Set	Anritsu	MT8820C	6201502974	2021/01/04	2023/01/03
Network Analyzer	Agilent	E5071C	MY46103472	2021/12/29	2022/12/28
Thermometer	Elitech	RC-4HC	EF720B004801	2021/12/22	2022/12/21
Thermometer	Elitech	RC-4HC	EF720B004815	2021/12/22	2022/12/21
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	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
<p>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:</p> <ol style="list-style-type: none"> <li>1. There is no physical damage on the dipole;</li> <li>2. System validation with specific dipole is within 10% of calibrated value;</li> <li>3. Return-loss in within 20% of calibrated measurement.</li> <li>4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.</li> </ol>					

## 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.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity ( $\sigma$ ) (S/m)	Meas. Permittivity ( $\epsilon$ )	Target Conductivity ( $\sigma$ ) (S/m)	Target Permittivity ( $\epsilon$ )	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2022.08.05	Head	835	21.5	0.90	42.17	0.90	41.50	0.00	1.61
2022.08.08	Head	835	21.6	0.92	42.56	0.90	41.50	2.22	2.55
2022.08.08	Head	1750	21.6	1.39	39.54	1.37	40.08	1.46	-1.35
2022.08.09	Head	1750	21.5	1.35	38.74	1.37	40.08	-1.46	-3.34
2022.08.10	Head	1900	21.4	1.42	38.97	1.40	40.00	1.43	-2.58
2022.08.11	Head	1900	21.3	1.41	40.32	1.40	40.00	0.71	0.80
2022.08.12	Head	2450	21.7	1.79	38.47	1.80	39.20	-0.56	-1.86
2022.08.15	Head	2600	21.6	1.94	39.47	1.96	39.01	-1.02	1.18
2022.08.16	Head	2600	21.3	2.02	37.70	1.96	39.01	3.06	-3.36
2022.08.17	Head	5250	21.4	4.65	35.62	4.66	35.99	-1.27	-0.86
2022.08.18	Head	5600	21.5	4.99	35.67	5.07	35.53	-1.58	0.39
2022.08.19	Head	5750	21.7	5.06	35.72	5.27	35.30	-3.07	1.02

Note: The tolerance limit of Conductivity and Permittivity is  $\pm 5\%$ .

## 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).

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2022.08.05	Head	835	100	0.966	9.66	9.76	-1.02
2022.08.08	Head	835	100	0.985	9.85	9.76	0.92
2022.08.08	Head	1750	100	3.610	36.10	36.70	-1.63
2022.08.09	Head	1750	100	3.740	37.40	36.70	1.91
2022.08.10	Head	1900	100	4.110	41.10	40.30	1.99
2022.08.11	Head	1900	100	4.180	41.80	40.30	3.72
2022.08.12	Head	2450	100	5.390	53.90	53.00	1.70
2022.08.15	Head	2600	100	5.350	53.50	56.80	-5.81
2022.08.16	Head	2600	100	5.810	58.10	56.80	2.29
2022.08.17	Head	5250	100	7.960	79.60	77.80	2.31
2022.08.18	Head	5600	100	8.510	85.10	81.20	4.80
2022.08.19	Head	5750	100	8.190	81.90	77.20	6.09

Note: The tolerance limit of System validation  $\pm 10\%$ .

## Head liquid 10g

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2022.08.08	1750	100	1.880	18.80	19.10	-1.57
2022.08.09	1750	100	1.950	19.50	19.10	2.09
2022.08.15	2600	100	2.320	23.20	24.80	-6.45
2022.08.17	5250	100	2.310	23.10	22.10	4.52
2022.08.18	5600	100	2.410	24.10	23.10	4.33

Note: The tolerance limit of System validation  $\pm 10\%$ .

## System Performance Check Data (835MHz Head)

Date: 2022.08.05

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.904 \text{ S/m}$ ;  $\epsilon_r = 42.172$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.44, 10.44, 10.44); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 835 100mW/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.997 W/kg

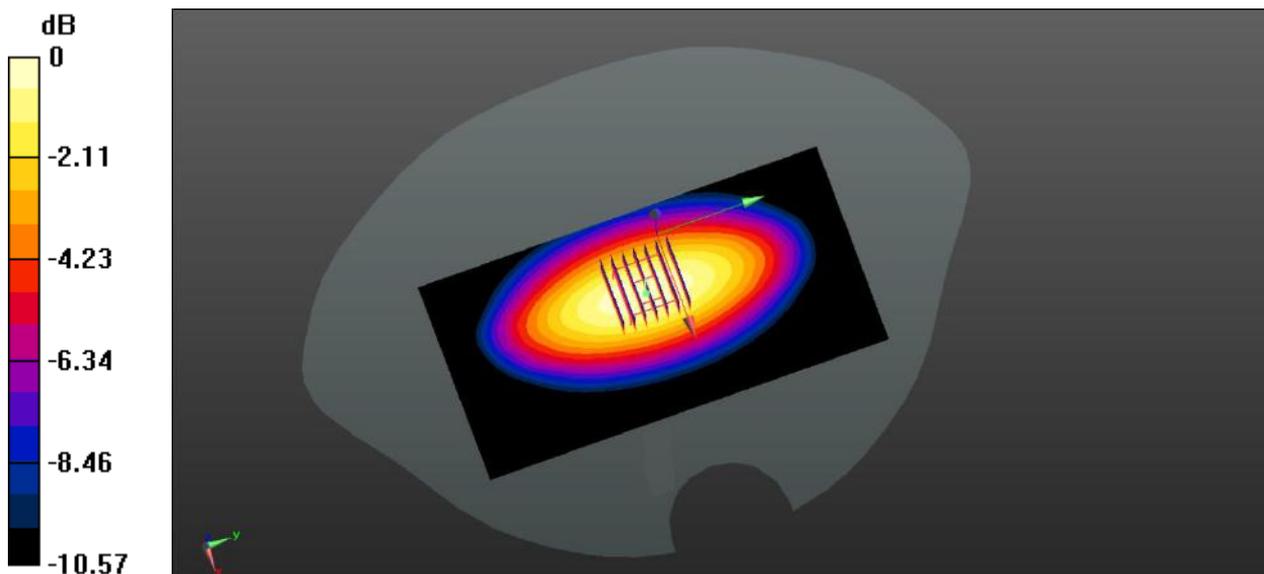
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 31.13 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.15 W/kg

**SAR(1 g) = 0.966 W/kg; SAR(10 g) = 0.632 W/kg**

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



0 dB = 0.971 W/kg

## System Performance Check Data (835MHz Head)

Date: 2022.08.08

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.915 \text{ S/m}$ ;  $\epsilon_r = 42.561$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.44, 10.44, 10.44); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 835 100mW/Area Scan (61x101x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.13 W/kg

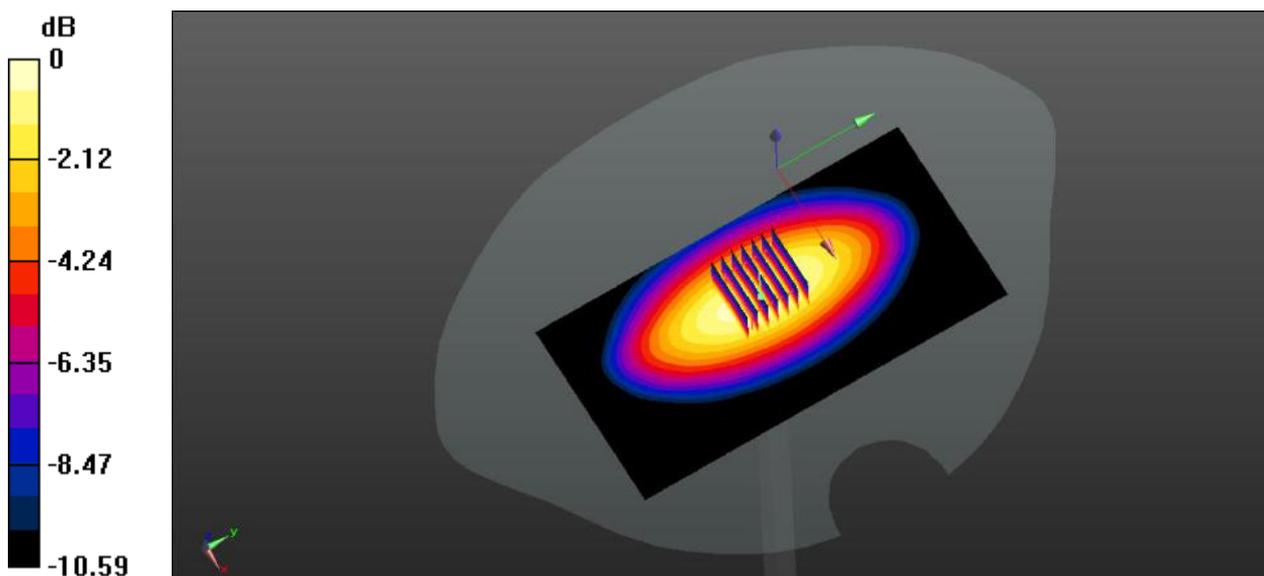
**CW 835 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 34.68 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.985 W/kg; SAR(10 g) = 0.644 W/kg**

Maximum value of SAR (measured) = 1.28 W/kg



0 dB = 1.28 W/kg

## System Performance Check Data (1750MHz Head)

Date: 2022.08.08

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

Medium parameters used (interpolated):  $f = 1750$  MHz;  $\sigma = 1.388$  S/m;  $\epsilon_r = 39.541$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW1750 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.19 W/kg

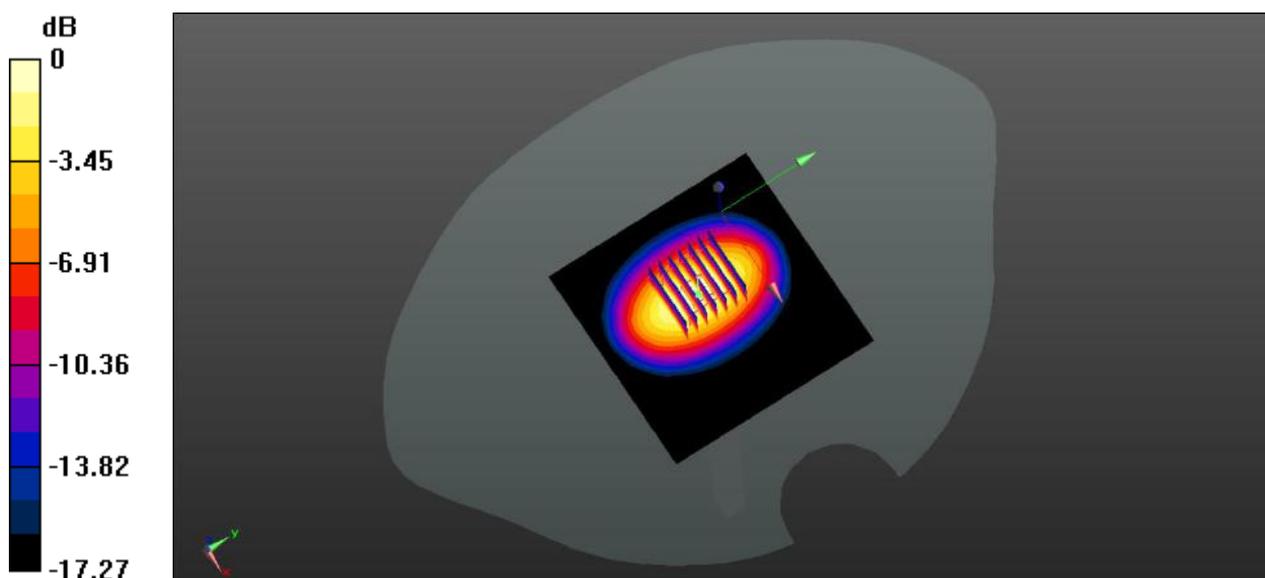
**CW1750 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.21 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 6.37 W/kg

**SAR(1 g) = 3.61 W/kg; SAR(10 g) = 1.88 W/kg**

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



0 dB = 4.32 W/kg

## System Performance Check Data (1750MHz Head)

Date: 2022.08.09

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

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.345$  S/m;  $\epsilon_r = 38.742$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW1750 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.54 W/kg

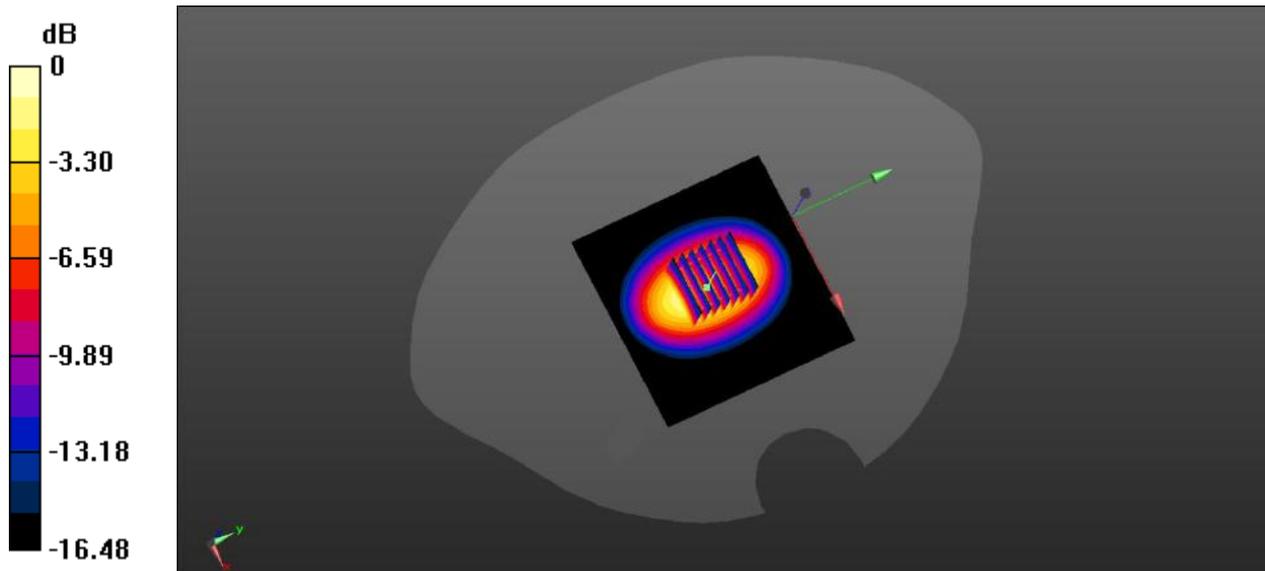
**CW1750 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 42.67 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 6.28 W/kg

**SAR(1 g) = 3.74 W/kg; SAR(10 g) = 1.95 W/kg**

Maximum value of SAR (measured) = 4.51 W/kg



0 dB = 4.51 W/kg

## System Performance Check Data (1900MHz Head)

Date: 2022.08.10

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.419$  S/m;  $\epsilon_r = 38.97$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.1°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.4, 8.4, 8.4); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW1900 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 4.18 W/kg

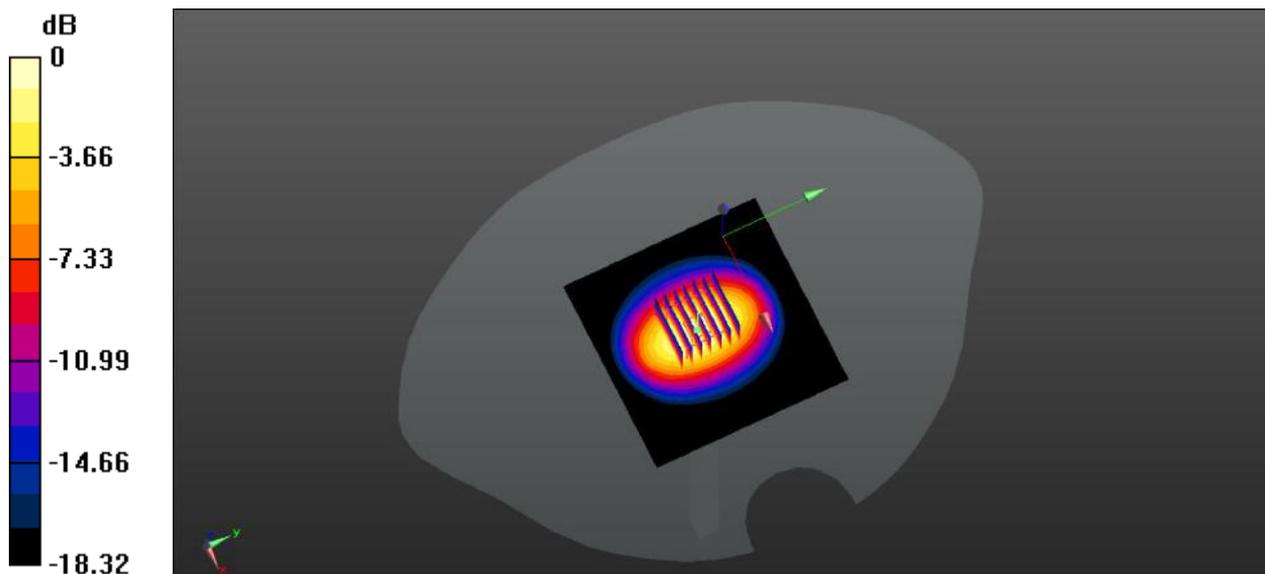
**CW1900 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.14 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 6.29 W/kg

**SAR(1 g) = 4.11 W/kg; SAR(10 g) = 2.09 W/kg**

Maximum value of SAR (measured) = 4.19 W/kg



0 dB = 4.19 W/kg

## System Performance Check Data (1900MHz Head)

Date: 2022.08.11

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.41$  S/m;  $\epsilon_r = 40.315$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.4, 8.4, 8.4); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- 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) = 4.25 W/kg

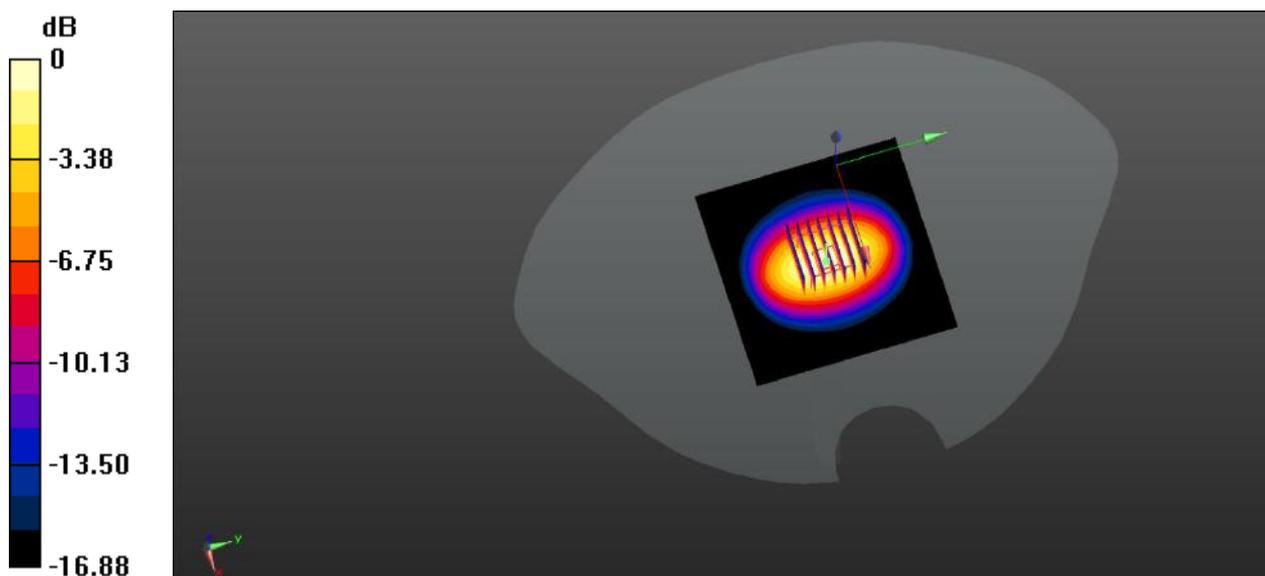
**CW 1900 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 7.11 W/kg

**SAR(1 g) = 4.18 W/kg; SAR(10 g) = 2.16 W/kg**

Maximum value of SAR (measured) = 4.22 W/kg



0 dB = 4.22 W/kg

## System Performance Check Data (2450MHz Head)

Date: 2022.08.12

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

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.79$  S/m;  $\epsilon_r = 38.469$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.79, 7.79, 7.79); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW2450 100mw/Area Scan (101x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 5.68 W/kg

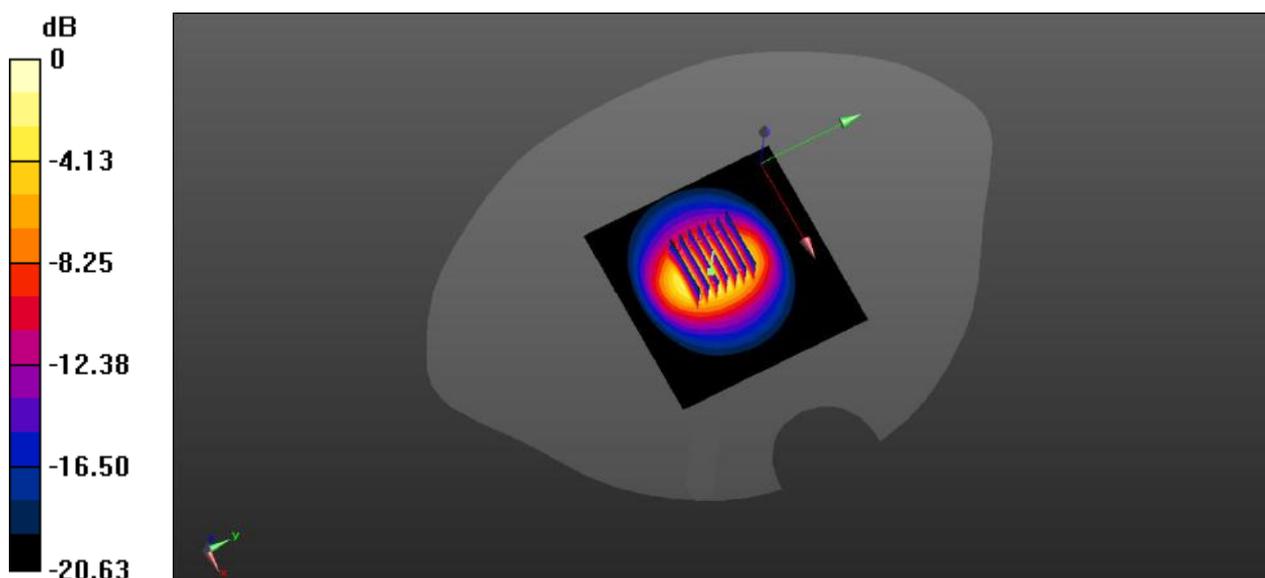
**CW2450 100mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.19 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 11.1 W/kg

**SAR(1 g) = 5.39 W/kg; SAR(10 g) = 2.34 W/kg**

Maximum value of SAR (measured) = 5.74 W/kg



0 dB = 5.74 W/kg

## System Performance Check Data (2600MHz Head)

Date: 2022.08.15

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.941$  S/m;  $\epsilon_r = 39.469$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; 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) = 6.13 W/kg

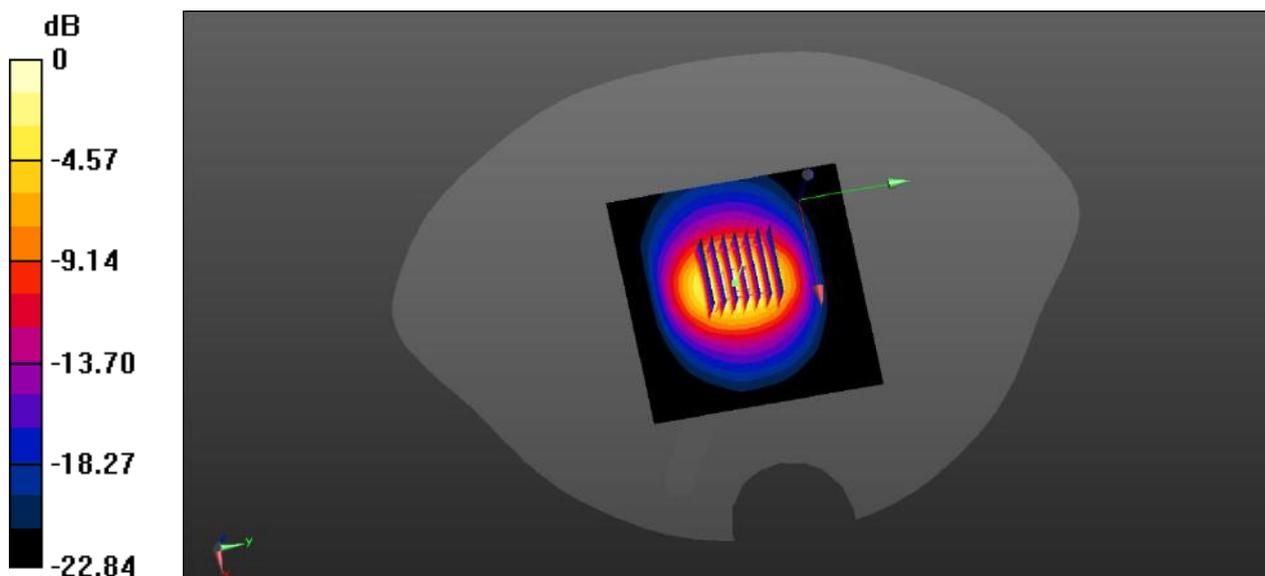
**CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.38 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 11.3 W/kg

**SAR(1 g) = 5.35 W/kg; SAR(10 g) = 2.32 W/kg**

Maximum value of SAR (measured) = 6.85 W/kg



0 dB = 6.85 W/kg

## System Performance Check Data (2600MHz Head)

Date: 2022.08.16

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

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.018$  S/m;  $\epsilon_r = 37.703$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; 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) = 6.52 W/kg

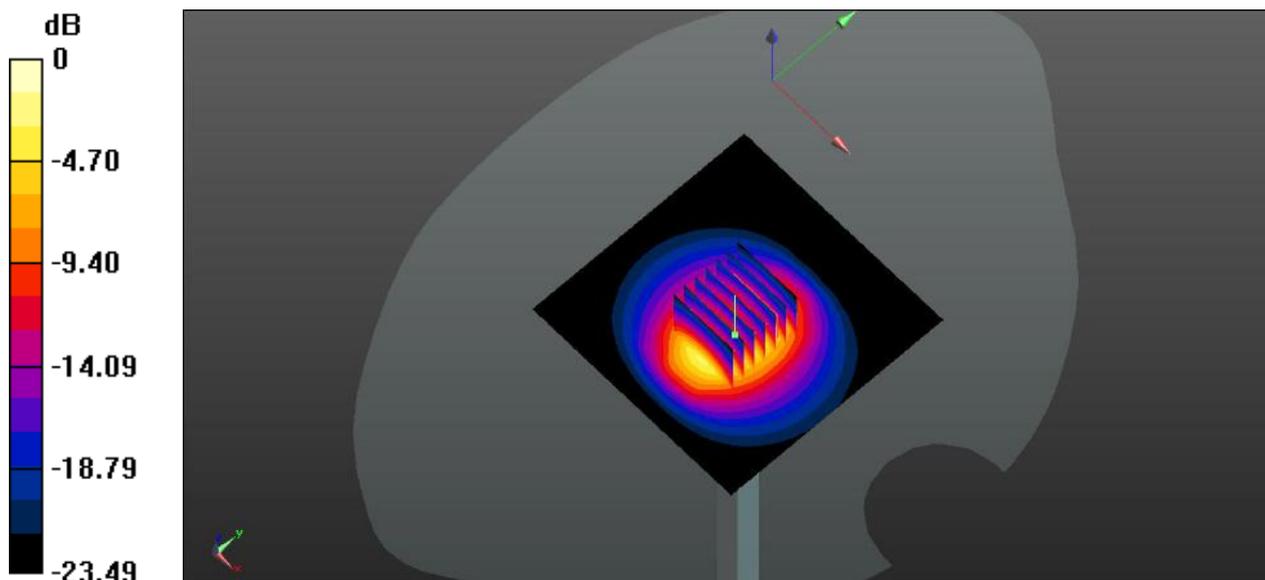
**CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 46.12 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 12.3 W/kg

**SAR(1 g) = 5.81 W/kg; SAR(10 g) = 2.52 W/kg**

Maximum value of SAR (measured) = 6.18 W/kg



0 dB = 6.18 W/kg

## System Performance Check Data (5250MHz Head)

Date: 2022.08.17

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.65$  S/m;  $\epsilon_r = 35.616$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.45, 5.45, 5.45); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 5250/Area Scan (81x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 7.51 W/kg

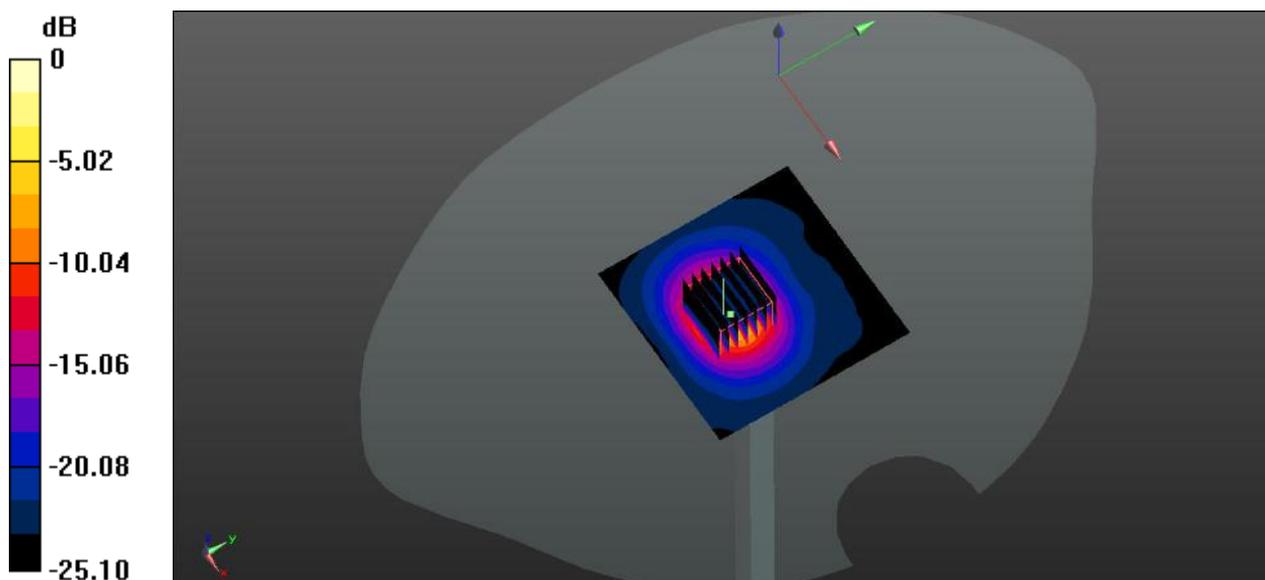
**CW 5250/Zoom Scan (7x7x15)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 23.21 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 30.2 W/kg

**SAR(1 g) = 7.96 W/kg; SAR(10 g) = 2.31 W/kg**

Maximum value of SAR (measured) = 14.5 W/kg



0 dB = 14.5 W/kg

## System Performance Check Data (5600MHz Head)

Date: 2022.08.18

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 4.994$  S/m;  $\epsilon_r = 35.672$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(4.9, 4.9, 4.9); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 5600 100mW /Area Scan (81x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.03 W/kg

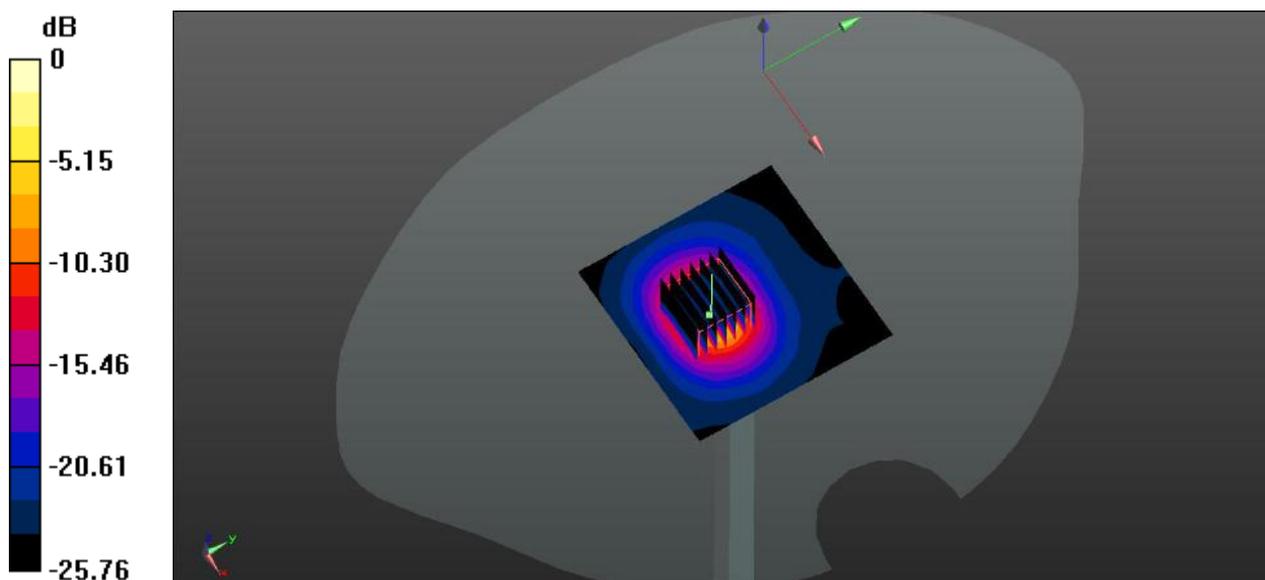
**CW 5600 100mW /Zoom Scan (7x7x15)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 25.24 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 38.21 W/kg

**SAR(1 g) = 8.51 W/kg; SAR(10 g) = 2.41 W/kg**

Maximum value of SAR (measured) = 15.4 W/kg



0 dB = 15.4 W/kg

## System Performance Check Data (5750MHz Head)

Date: 2022.08.19

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.057$  S/m;  $\epsilon_r = 35.718$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5, 5, 5); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW5750 100mw/Area Scan (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.22 W/kg

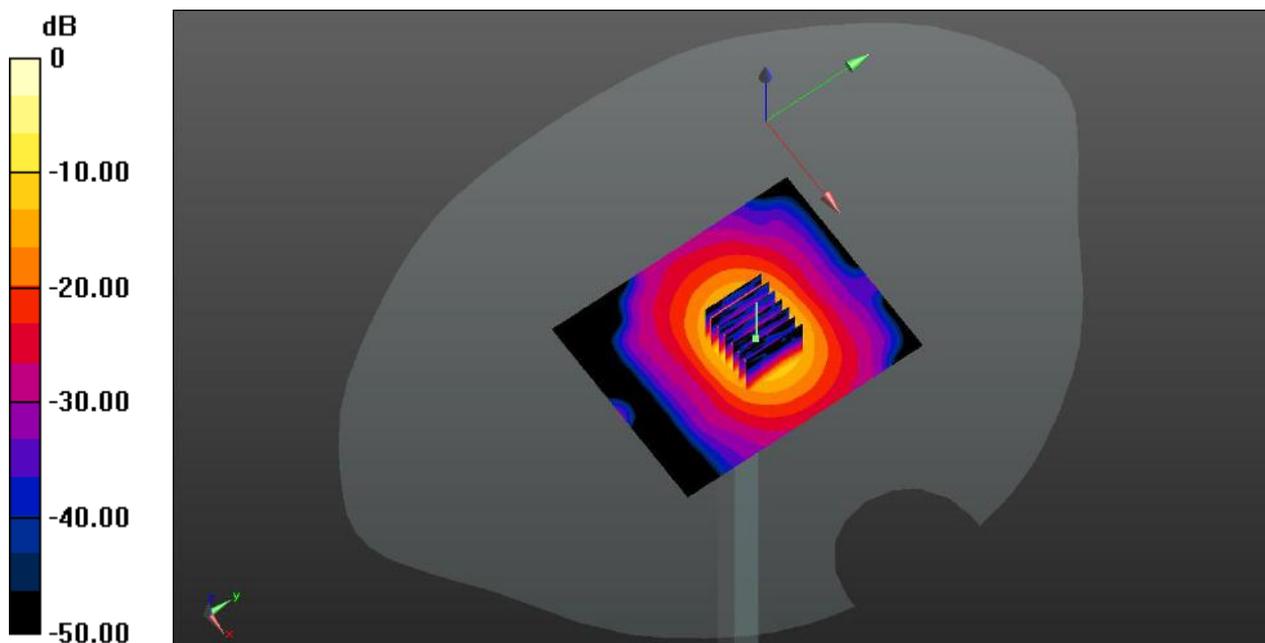
**CW5750 100mw/Zoom Scan (7x7x21)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 32.05 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 35.8 W/kg

**SAR(1 g) = 8.19 W/kg; SAR(10 g) = 2.32 W/kg**

Maximum value of SAR (measured) = 16.4 W/kg



0 dB = 16.4 W/kg

## ANNEX C TEST DATA

### Meas.1 Right Head with Cheek on Low Channel in GPRS850 3slots mode with Antenna4

Date: 2022.08.05

Communication System Band: GPRS850; Frequency: 824.2 MHz; Duty Cycle: 1:2.77

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.9$  S/m;  $\epsilon_r = 42.554$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.44, 10.44, 10.44); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch128/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

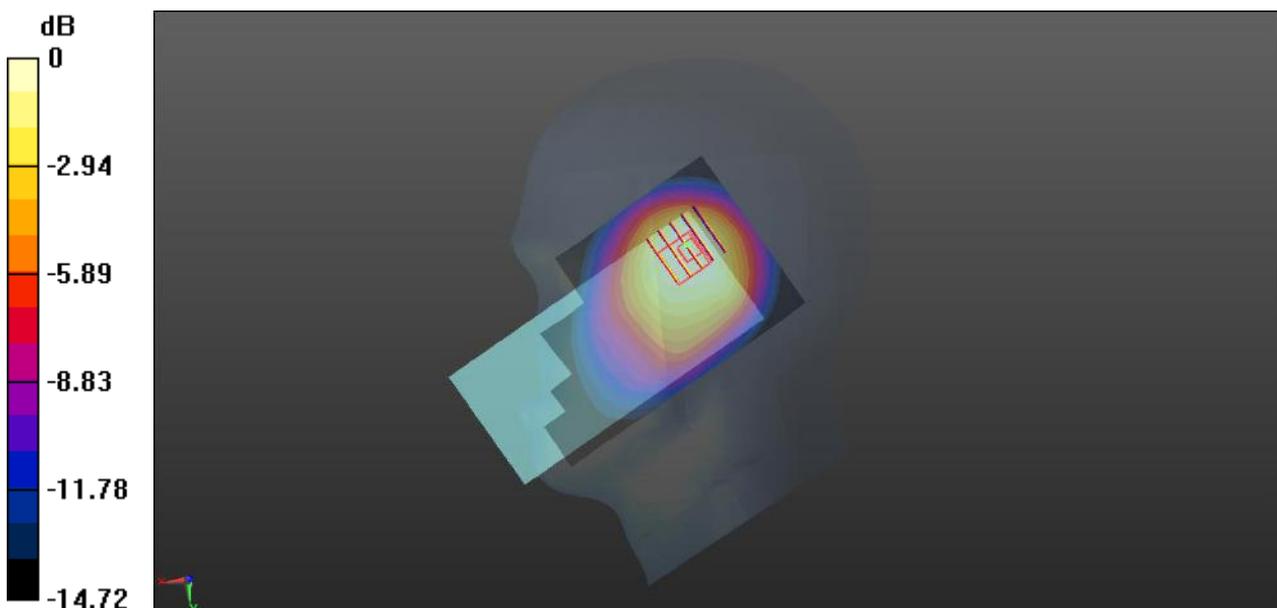
**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.36 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.523 W/kg

**SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.219 W/kg**

Maximum value of SAR (measured) = 0.343 W/kg



0 dB = 0.343 W/kg

**Meas.2 Body Plane with Back Side 10mm on High Channel in GPRS850 3slots mode with Antenna4**

Date: 2022.08.05

Communication System Band: GPRS850; Frequency: 848.8 MHz; Duty Cycle: 1:2.77

Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.926$  S/m;  $\epsilon_r = 41.542$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.44, 10.44, 10.44); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- 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) = 0.274 W/kg

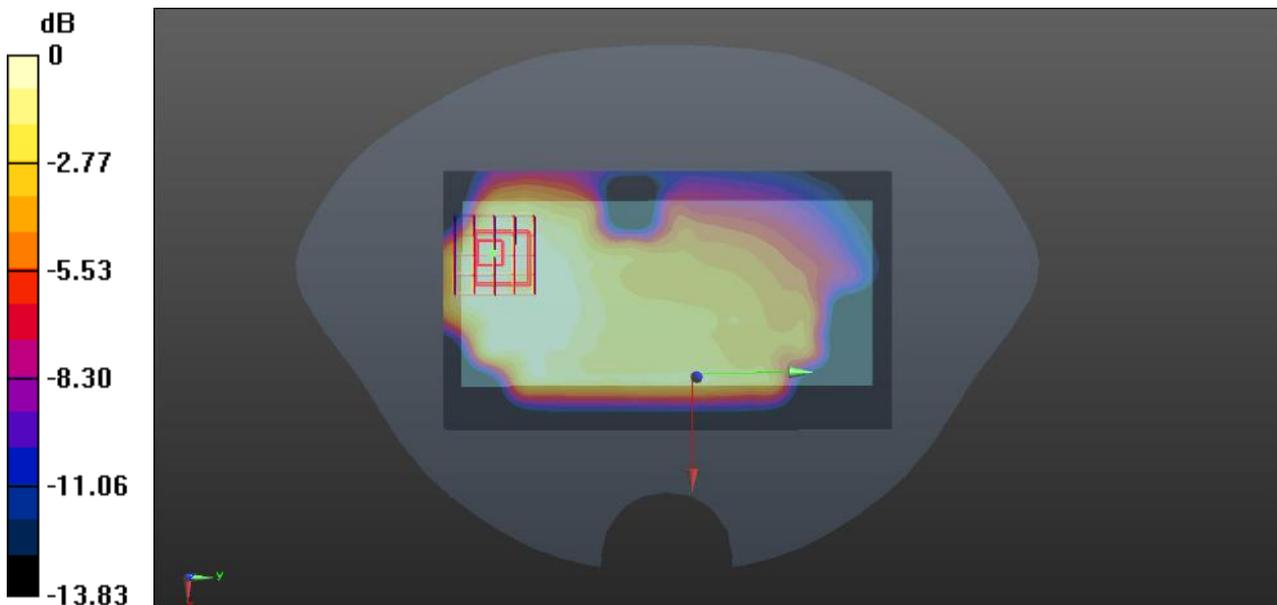
**Ch251/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.84 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.339 W/kg

**SAR(1 g) = 0.205 W/kg; SAR(10 g) = 0.128 W/kg**

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



0 dB = 0.223 W/kg

**Meas.3 Right Head with Cheek on Middle Channel in GPRS1900 3slots mode with Antenna4**

Date: 2022.08.10

Communication System Band: GPRS1900; Frequency: 1880 MHz; Duty Cycle: 1:2.77

Medium parameters used (interpolated):  $f = 1880$  MHz;  $\sigma = 1.418$  S/m;  $\epsilon_r = 39.048$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.1°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.4, 8.4, 8.4); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- 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) = 0.481 W/kg

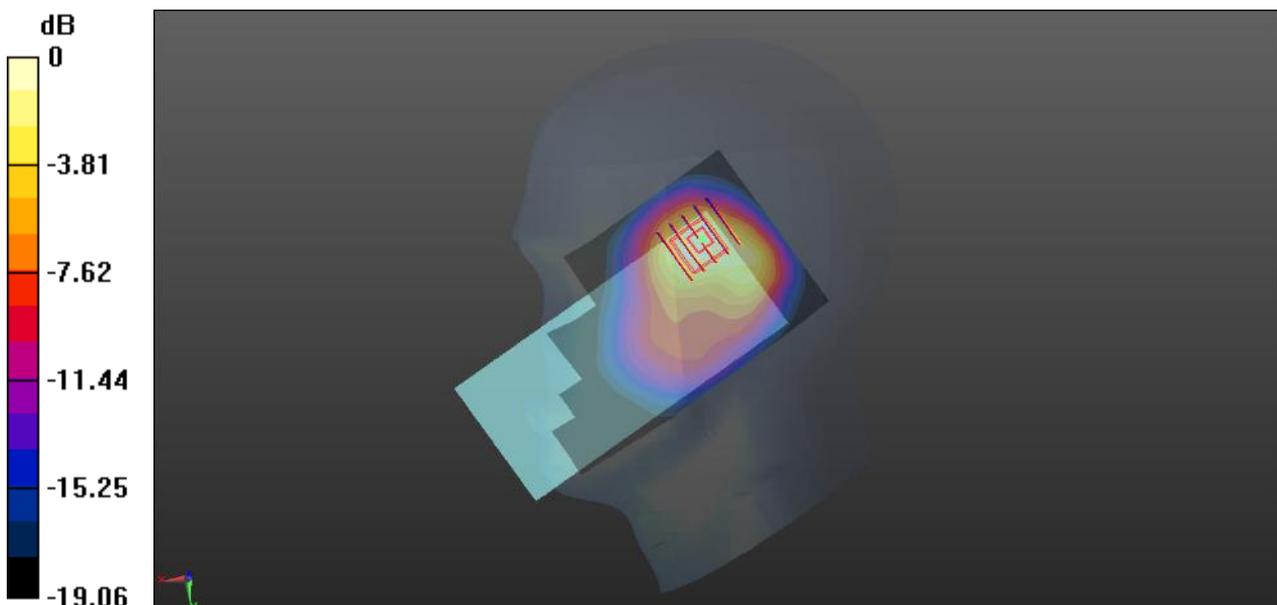
**Ch661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.20 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.710 W/kg

**SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.210 W/kg**

Maximum value of SAR (measured) = 0.441 W/kg



0 dB = 0.441 W/kg

**Meas.4 Body Plane with Top Edge 10mm on Middle Channel in GPRS1900 3Slots mode with Antenna4**

Date: 2022.08.10

Communication System Band: GPRS1900; Frequency: 1880 MHz; Duty Cycle: 1:2.77

Medium parameters used (interpolated):  $f = 1880$  MHz;  $\sigma = 1.418$  S/m;  $\epsilon_r = 39.048$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.1°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.4, 8.4, 8.4); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch661/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.343 W/kg

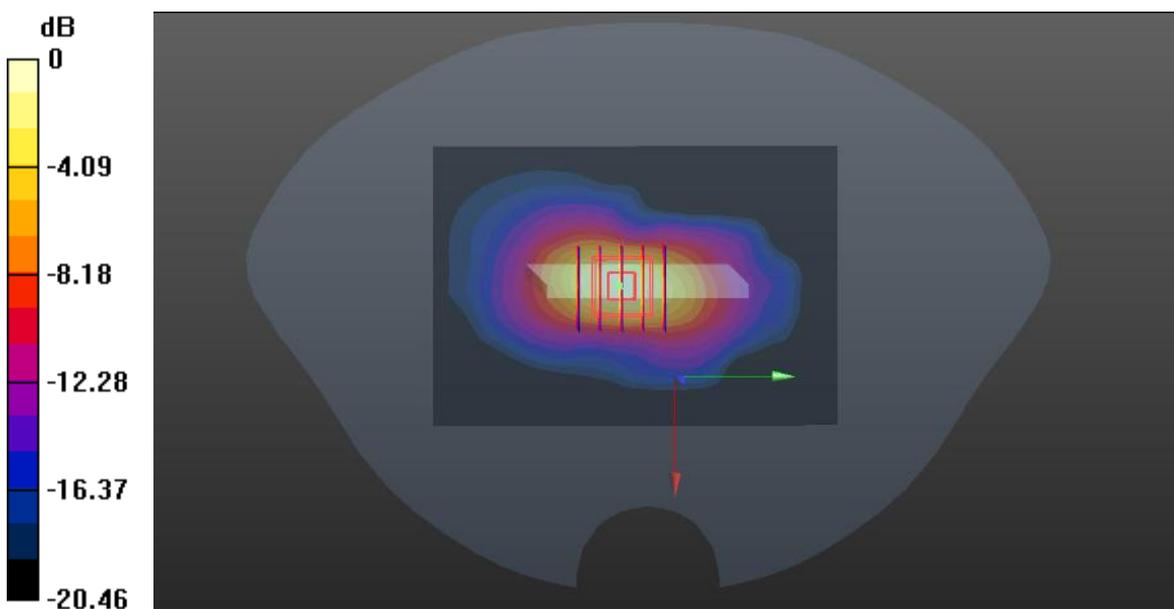
**Ch661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.84 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.536 W/kg

**SAR(1 g) = 0.301 W/kg; SAR(10 g) = 0.151 W/kg**

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



0 dB = 0.346 W/kg

**Meas.5 Right Head with Cheek on Middle Channel in WCDMA Band2 mode with Antenna4**

Date: 2022.08.10

Communication System Band: BAND 2; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1880$  MHz;  $\sigma = 1.418$  S/m;  $\epsilon_r = 39.048$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.1°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.4, 8.4, 8.4); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9400/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.838 W/kg

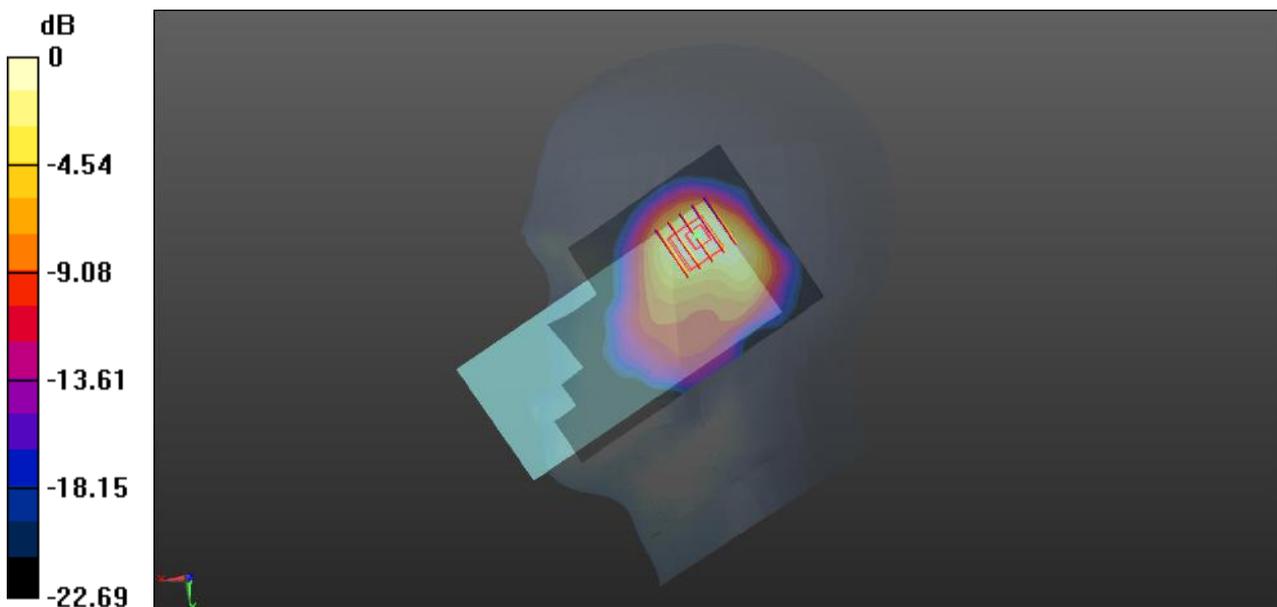
**Ch9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.38 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.36 W/kg

**SAR(1 g) = 0.747 W/kg; SAR(10 g) = 0.392 W/kg**

Maximum value of SAR (measured) = 0.841 W/kg



0 dB = 0.841 W/kg

**Meas.6 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band2 mode with Antenna0**

Date: 2022.08.10

Communication System Band: BAND 2; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1880$  MHz;  $\sigma = 1.418$  S/m;  $\epsilon_r = 39.048$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.1°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.4, 8.4, 8.4); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9400/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.551 W/kg

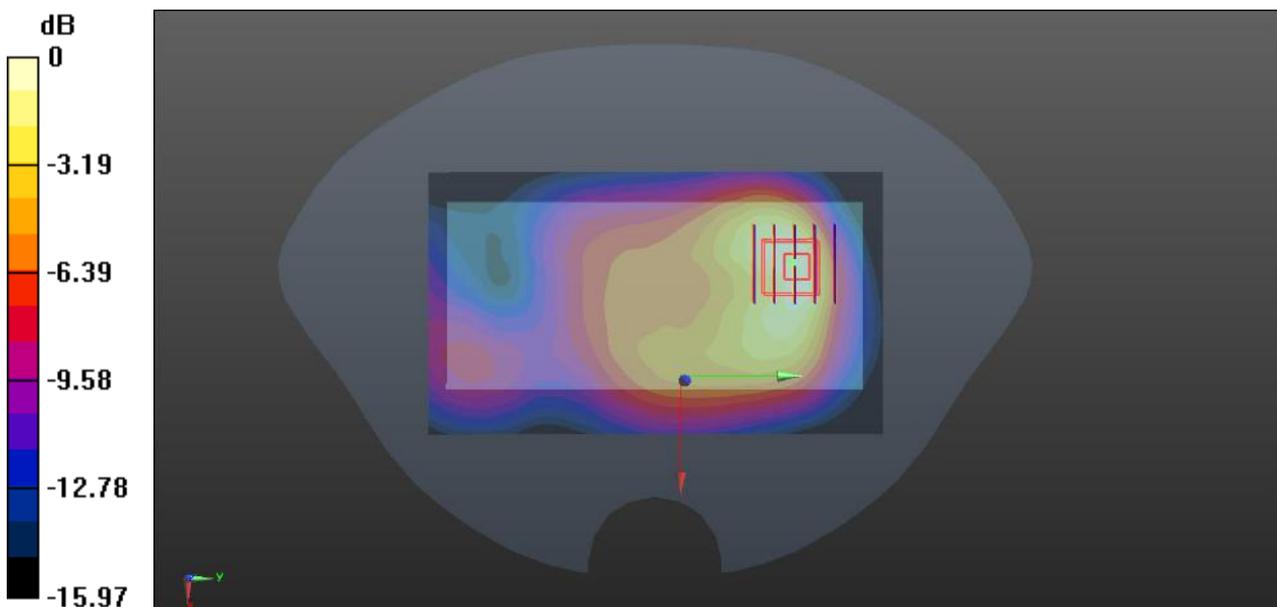
**Ch9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.31 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.803 W/kg

**SAR(1 g) = 0.440 W/kg; SAR(10 g) = 0.242 W/kg**

Maximum value of SAR (measured) = 0.484 W/kg



0 dB = 0.484 W/kg

**Meas.7 Right Head with Tilt on Middle Channel in WCDMA Band4 mode with Antenna4**

Date: 2022.08.08

Communication System Band: BAND 4; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.375$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- 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) = 0.257 W/kg

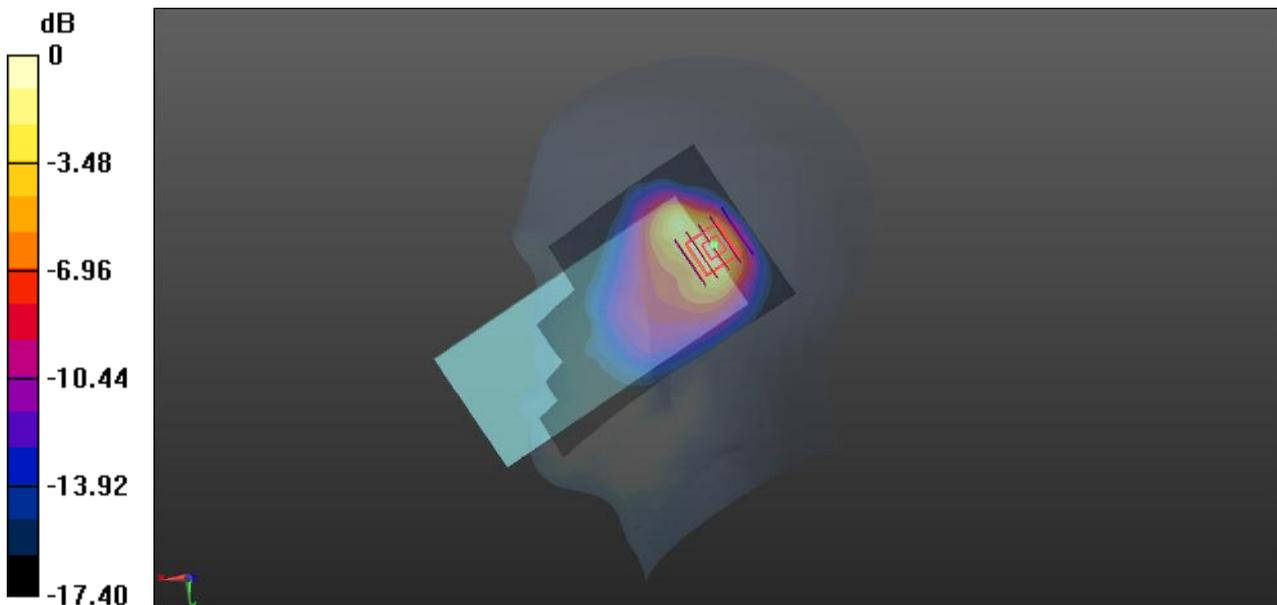
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.35 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.497 W/kg

**SAR(1 g) = 0.271 W/kg; SAR(10 g) = 0.135 W/kg**

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



0 dB = 0.324 W/kg

**Meas.8 Body Plane with Bottom Edge 10mm on Middle Channel in WCDMA Band4 mode with Antenna0**

Date: 2022.08.08

Communication System Band: BAND 4; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.375$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch1412/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.514 W/kg

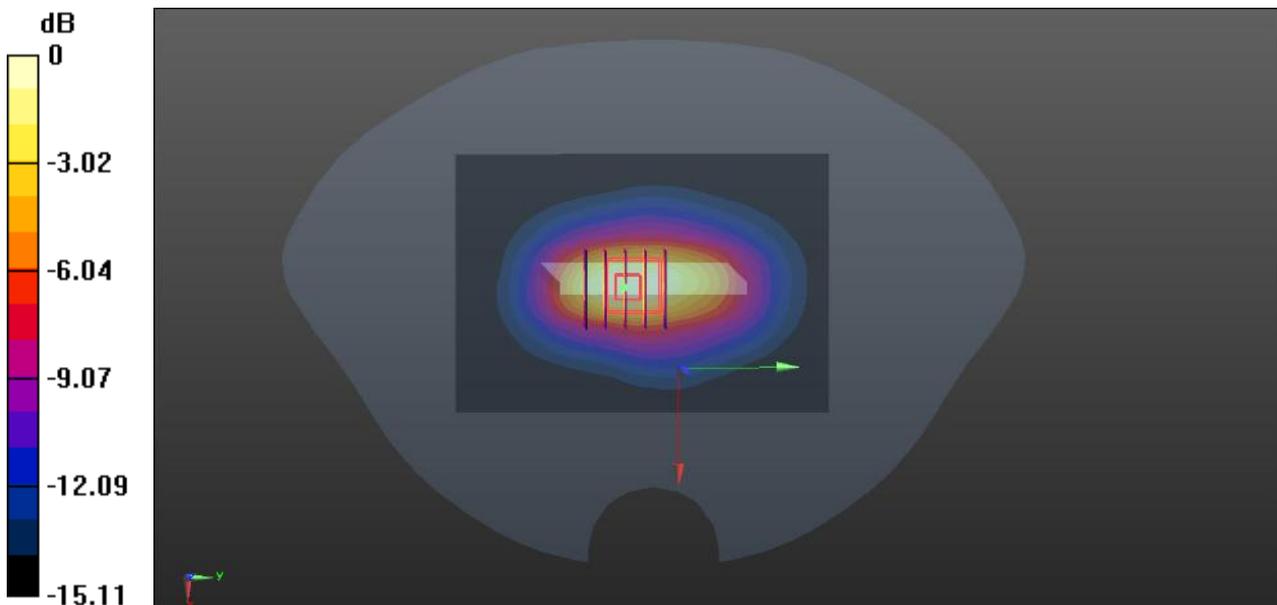
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.25 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.742 W/kg

**SAR(1 g) = 0.441 W/kg; SAR(10 g) = 0.244 W/kg**

Maximum value of SAR (measured) = 0.493 W/kg



0 dB = 0.493 W/kg

**Meas.9 Body Plane with Bottom Edge 0mm on Middle Channel in WCDMA Band4 mode with Antenna0**

Date: 2022.08.08

Communication System Band: BAND 4; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.375$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch1412/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 4.68 W/kg

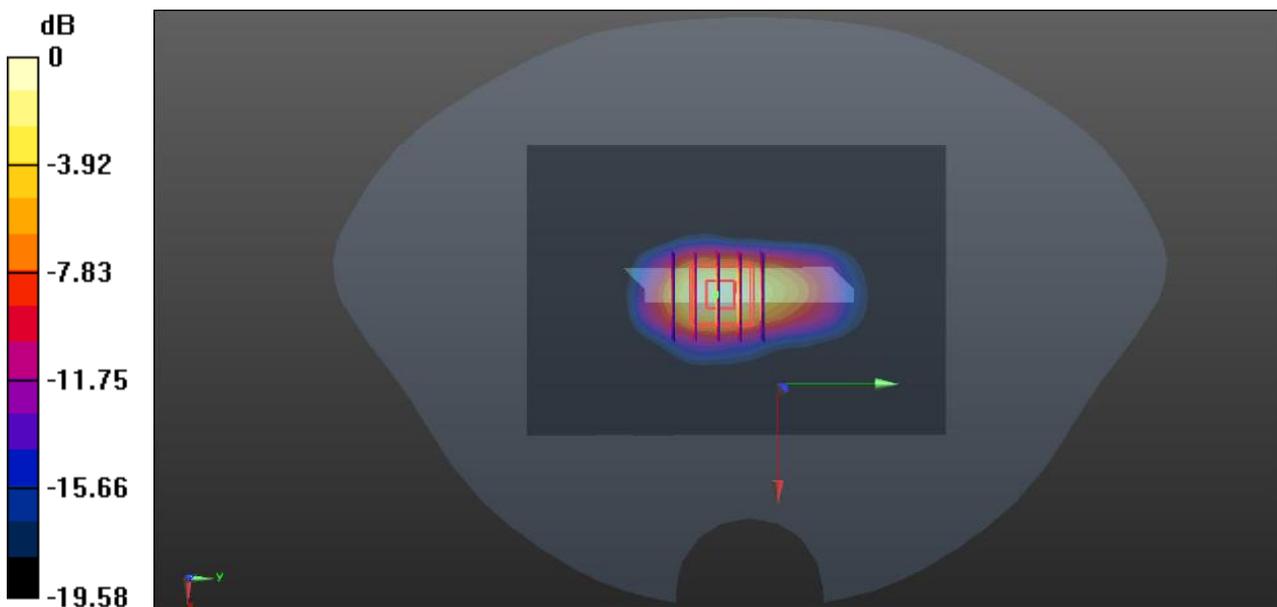
**Ch1412/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 43.64 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 7.97 W/kg

**SAR(1 g) = 3.67 W/kg; SAR(10 g) = 1.63 W/kg**

Maximum value of SAR (measured) = 4.31 W/kg



0 dB = 4.31 W/kg

**Meas.10 Right Head with Cheek on Middle Channel in WCDMA Band5 mode with Antenna4**

Date: 2022.08.05

Communication System Band: BAND 5; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.907$  S/m;  $\epsilon_r = 41.961$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.44, 10.44, 10.44); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch4182/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.633 W/kg

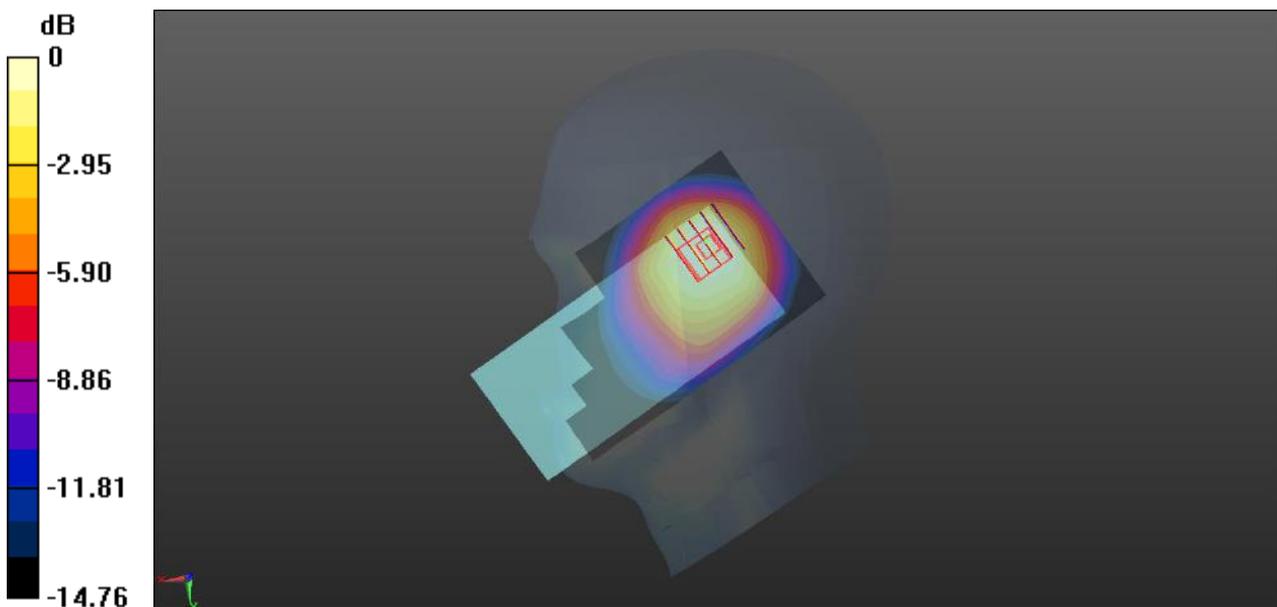
**Ch4182/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.85 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.837 W/kg

**SAR(1 g) = 0.539 W/kg; SAR(10 g) = 0.359 W/kg**

Maximum value of SAR (measured) = 0.571 W/kg



0 dB = 0.571 W/kg

**Meas.11 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band5 mode with Antenna0**

Date: 2022.08.05

Communication System Band: BAND 5; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.907$  S/m;  $\epsilon_r = 41.961$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.44, 10.44, 10.44); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch4182/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.409 W/kg

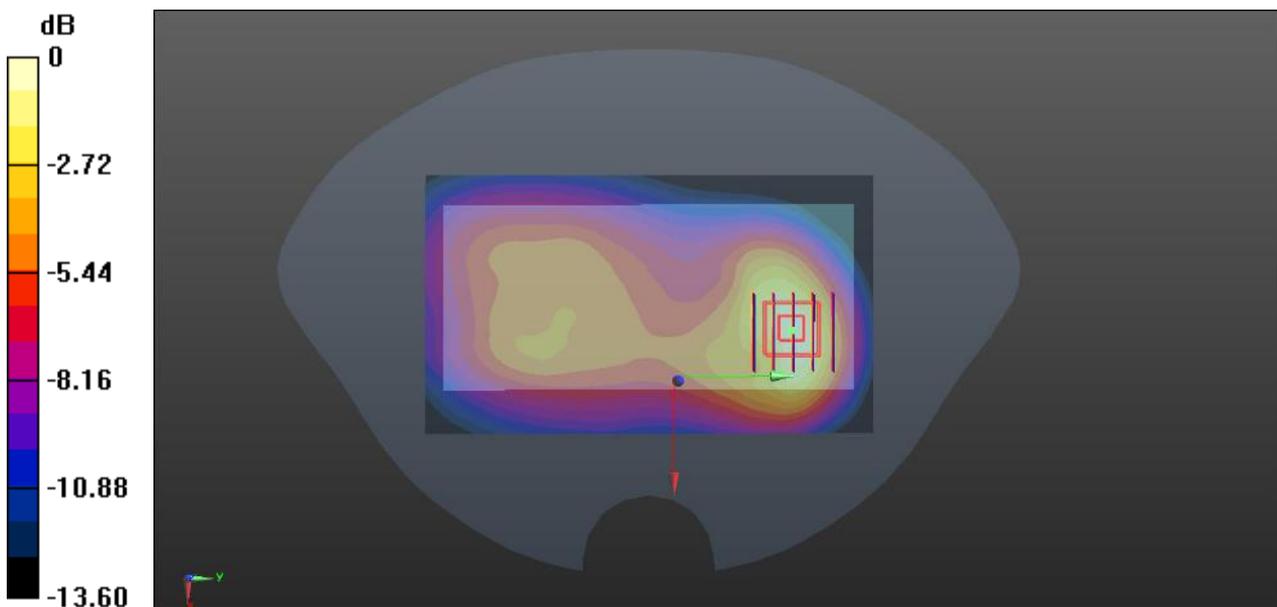
**Ch4182/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.19 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.658 W/kg

**SAR(1 g) = 0.365 W/kg; SAR(10 g) = 0.206 W/kg**

Maximum value of SAR (measured) = 0.408 W/kg



0 dB = 0.408 W/kg

**Meas.12 Right Head with Cheek on Middle Channel in LTE Band2 mode with Antenna4**

Date: 2022.08.11

Communication System Band: BAND 2; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1880$  MHz;  $\sigma = 1.409$  S/m;  $\epsilon_r = 40.558$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.4, 8.4, 8.4); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- 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) = 0.839 W/kg

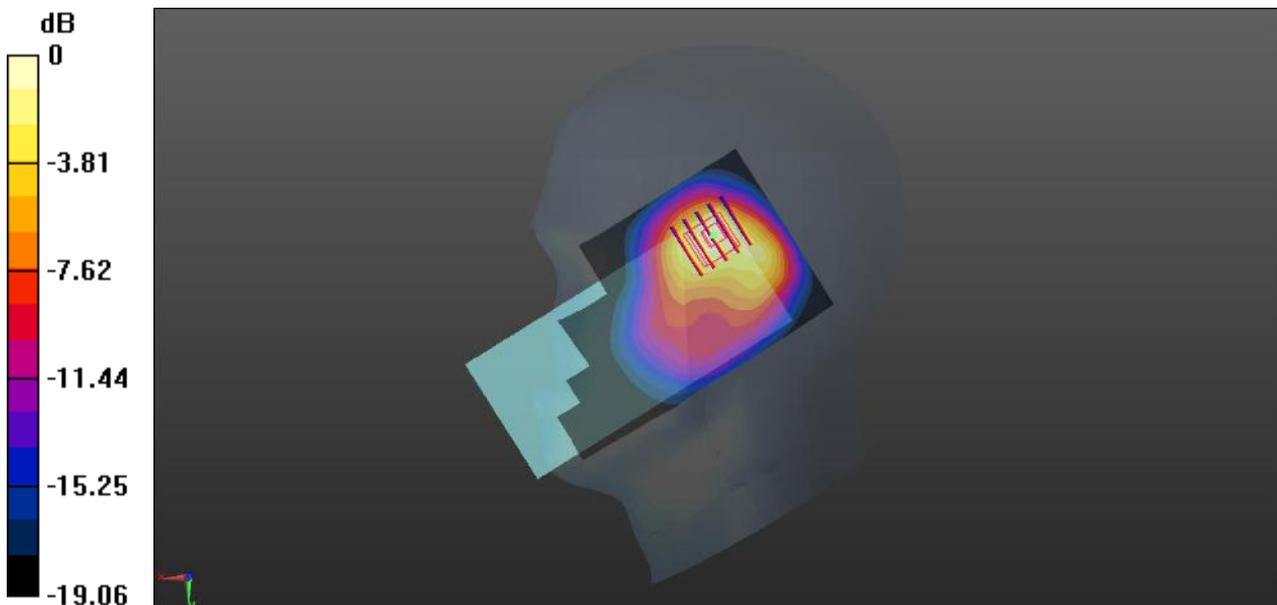
**Ch18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.87 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.27 W/kg

**SAR(1 g) = 0.693 W/kg; SAR(10 g) = 0.369 W/kg**

Maximum value of SAR (measured) = 0.783 W/kg



0 dB = 0.783 W/kg

### Meas.13 Body Plane with Top Edge 10mm on Middle Channel in LTE Band2 mode with Antenna4

Date: 2022.08.11

Communication System Band: BAND 2; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1880$  MHz;  $\sigma = 1.409$  S/m;  $\epsilon_r = 40.558$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.4, 8.4, 8.4); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch18900/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.438 W/kg

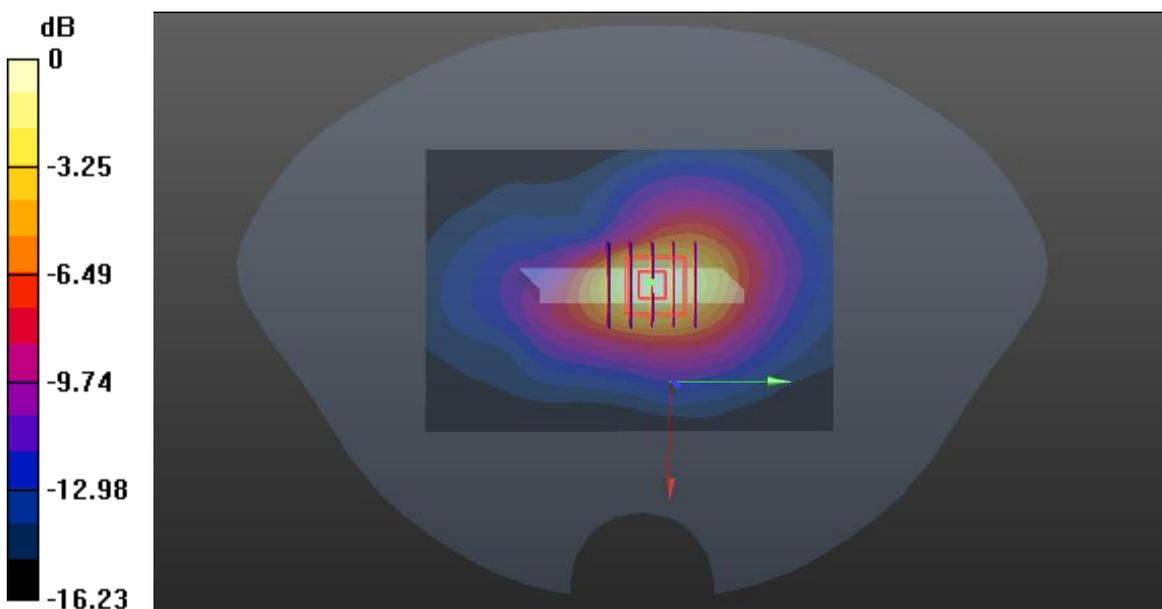
**Ch18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.47 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.648 W/kg

**SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.206 W/kg**

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



0 dB = 0.434 W/kg

**Meas.14 Right Head with Cheek on Middle Channel in LTE Band4 mode with Antenna4**

Date: 2022.08.09

Communication System Band: BAND 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.33$  S/m;  $\epsilon_r = 39.25$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- 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) = 0.345 W/kg

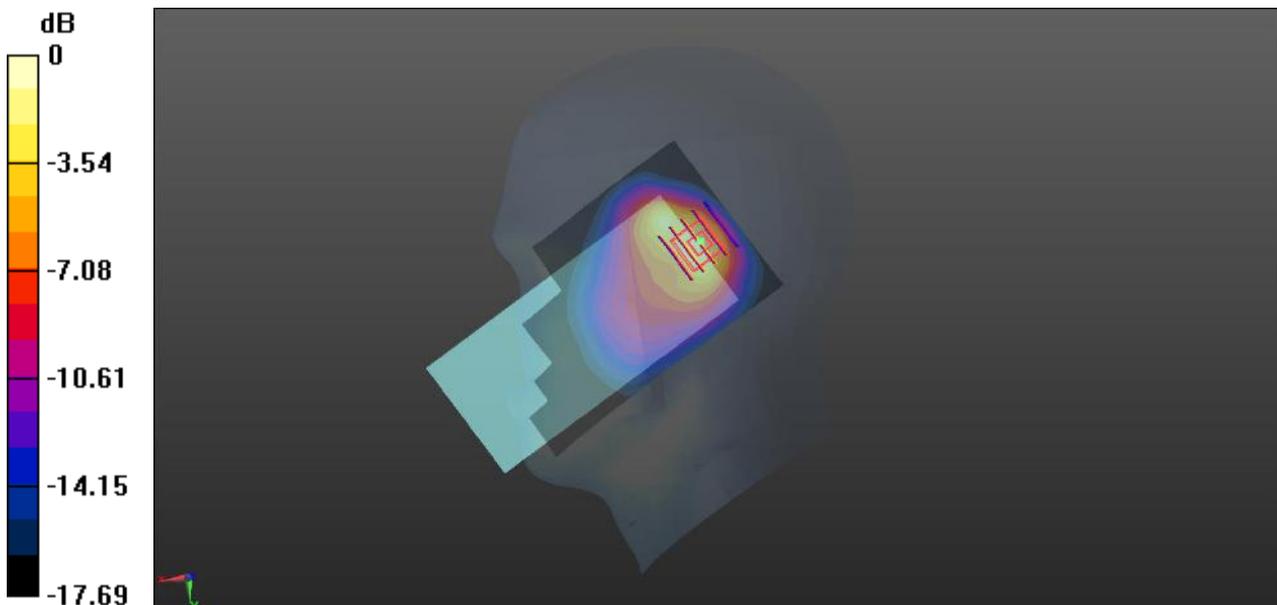
**Ch20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.09 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.650 W/kg

**SAR(1 g) = 0.352 W/kg; SAR(10 g) = 0.176 W/kg**

Maximum value of SAR (measured) = 0.417 W/kg



0 dB = 0.417 W/kg

**Meas.15 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band4 mode with Antenna0**

Date: 2022.08.09

Communication System Band: BAND 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.33$  S/m;  $\epsilon_r = 39.25$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20175/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.531 W/kg

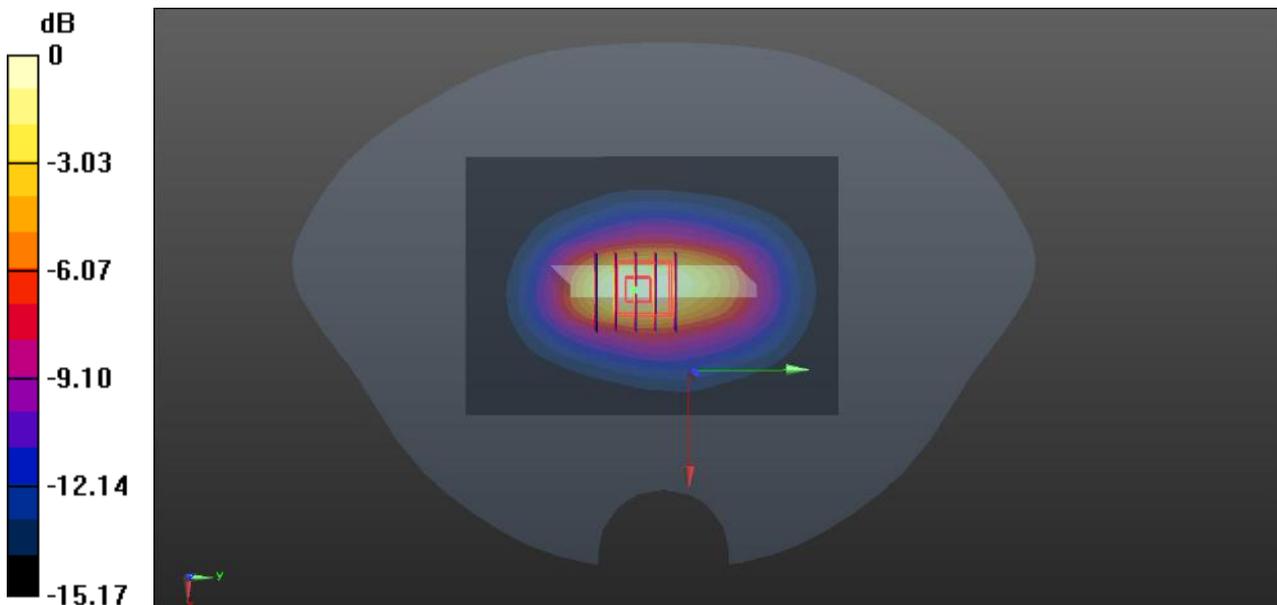
**Ch20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.77 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.756 W/kg

**SAR(1 g) = 0.452 W/kg; SAR(10 g) = 0.251 W/kg**

Maximum value of SAR (measured) = 0.505 W/kg



0 dB = 0.505 W/kg

**Meas.16 Body Plane with Bottom Edge 0mm on Middle Channel in LTE Band4 mode with Antenna0**

Date: 2022.08.09

Communication System Band: BAND 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.33$  S/m;  $\epsilon_r = 39.25$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20175/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 4.74 W/kg

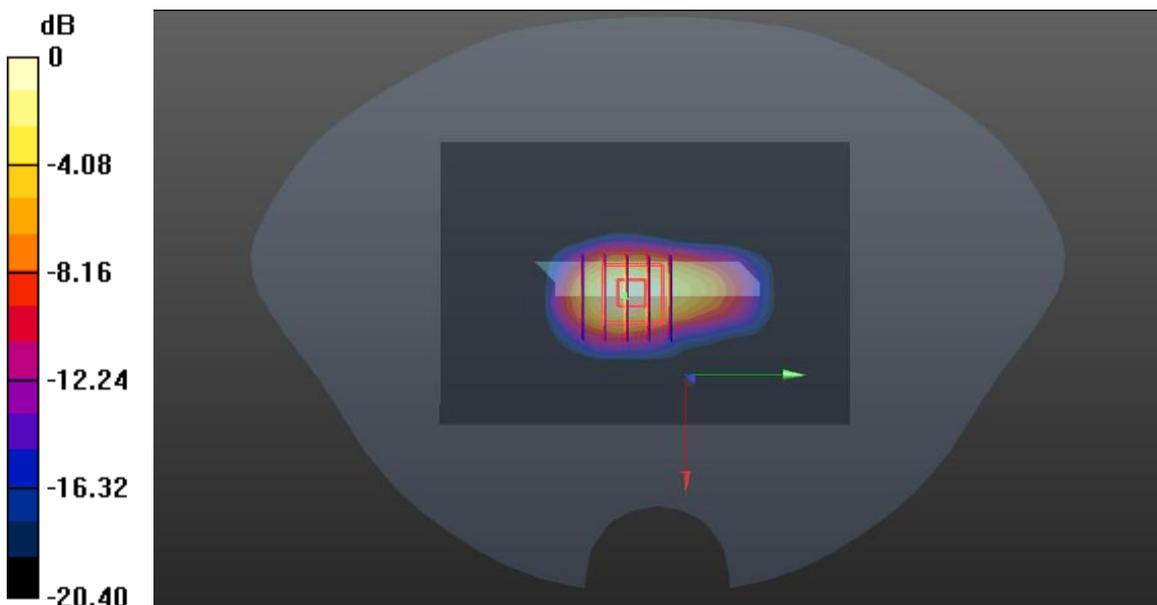
**Ch20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.16 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 8.13 W/kg

**SAR(1 g) = 3.77 W/kg; SAR(10 g) = 1.69 W/kg**

Maximum value of SAR (measured) = 4.38 W/kg



0 dB = 4.38 W/kg

**Meas.17 Right Head with Cheek on High Channel in LTE Band5 mode with Antenna4**

Date: 2022.08.08

Communication System Band: BAND 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.927$  S/m;  $\epsilon_r = 42.094$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.44, 10.44, 10.44); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- 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) = 0.727 W/kg

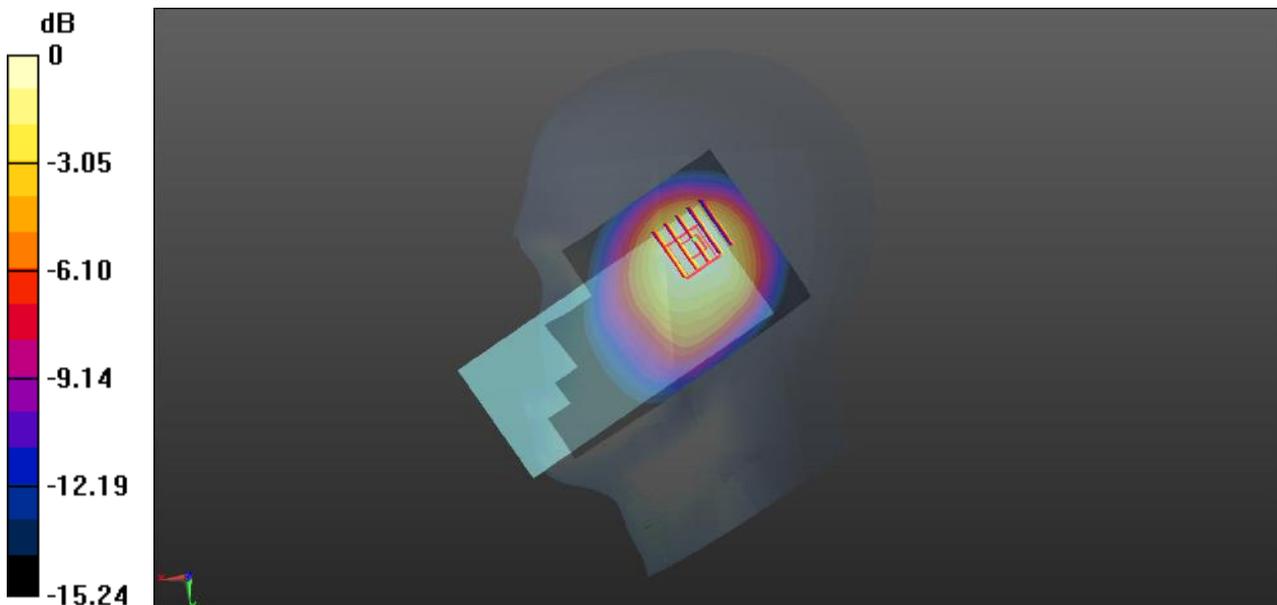
**Ch20600/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.23 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.968 W/kg

**SAR(1 g) = 0.617 W/kg; SAR(10 g) = 0.411 W/kg**

Maximum value of SAR (measured) = 0.647 W/kg



0 dB = 0.647 W/kg

**Meas.18 Body Plane with Back Side 10mm on Middle Channel in LTE Band5 mode with Antenna0**

Date: 2022.08.08

Communication System Band: BAND 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.927$  S/m;  $\epsilon_r = 42.094$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(10.44, 10.44, 10.44); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20525/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.360 W/kg

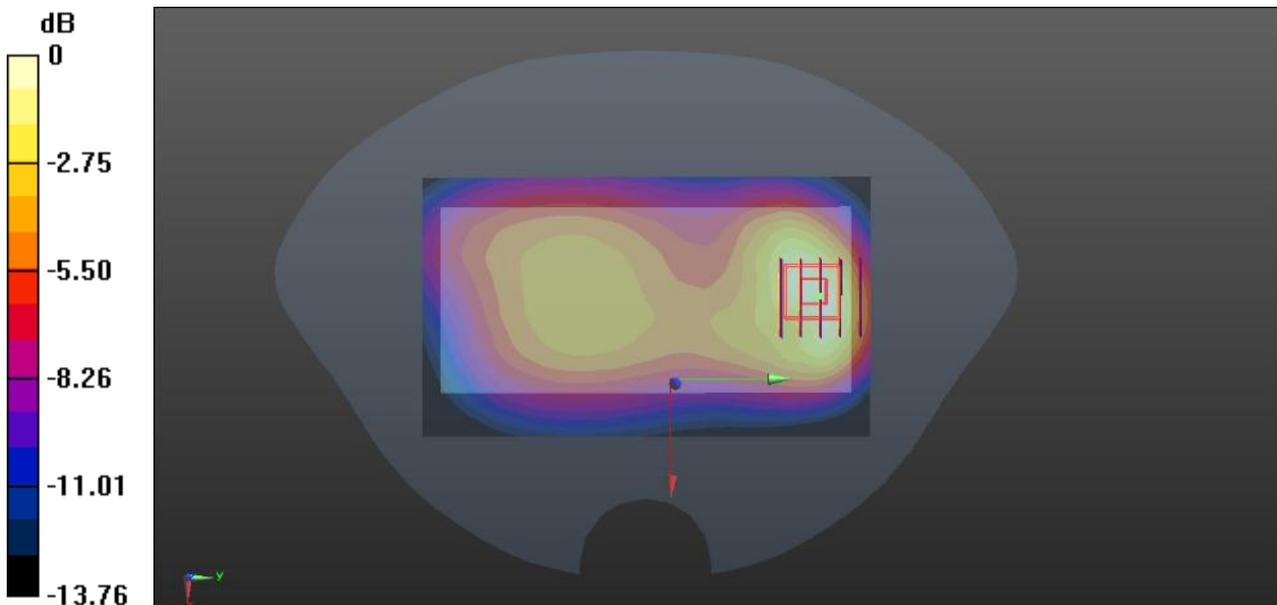
**Ch20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.34 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.601 W/kg

**SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.194 W/kg**

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



0 dB = 0.374 W/kg

**Meas.19 Right Head with Cheek on Low Channel in LTE Band7 mode with Antenna4**

Date: 2022.08.15

Communication System Band: BAND 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2510$  MHz;  $\sigma = 1.827$  S/m;  $\epsilon_r = 39.987$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20850/Area Scan (91x141x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.729 W/kg

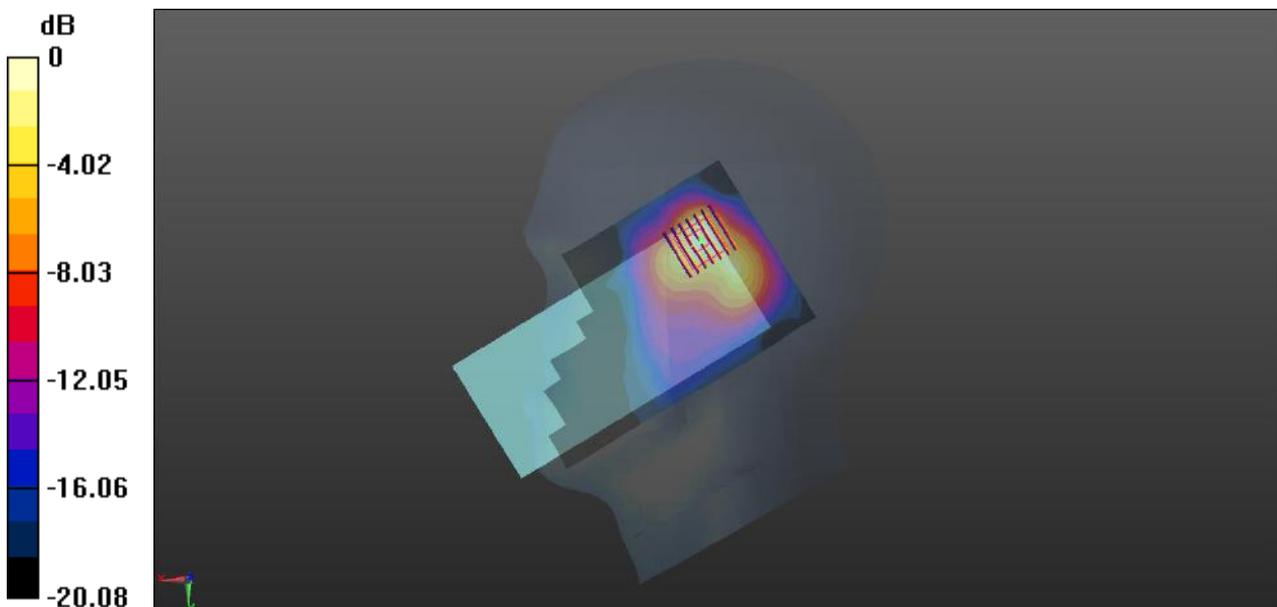
**Ch20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.10 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.34 W/kg

**SAR(1 g) = 0.602 W/kg; SAR(10 g) = 0.267 W/kg**

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



0 dB = 0.702 W/kg

**Meas.20 Body Plane with Top Edge 10mm on Low Channel in LTE Band7 mode with Antenna4**

Date: 2022.08.15

Communication System Band: BAND 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2510$  MHz;  $\sigma = 1.827$  S/m;  $\epsilon_r = 39.987$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20850/Area Scan (71x91x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.626 W/kg

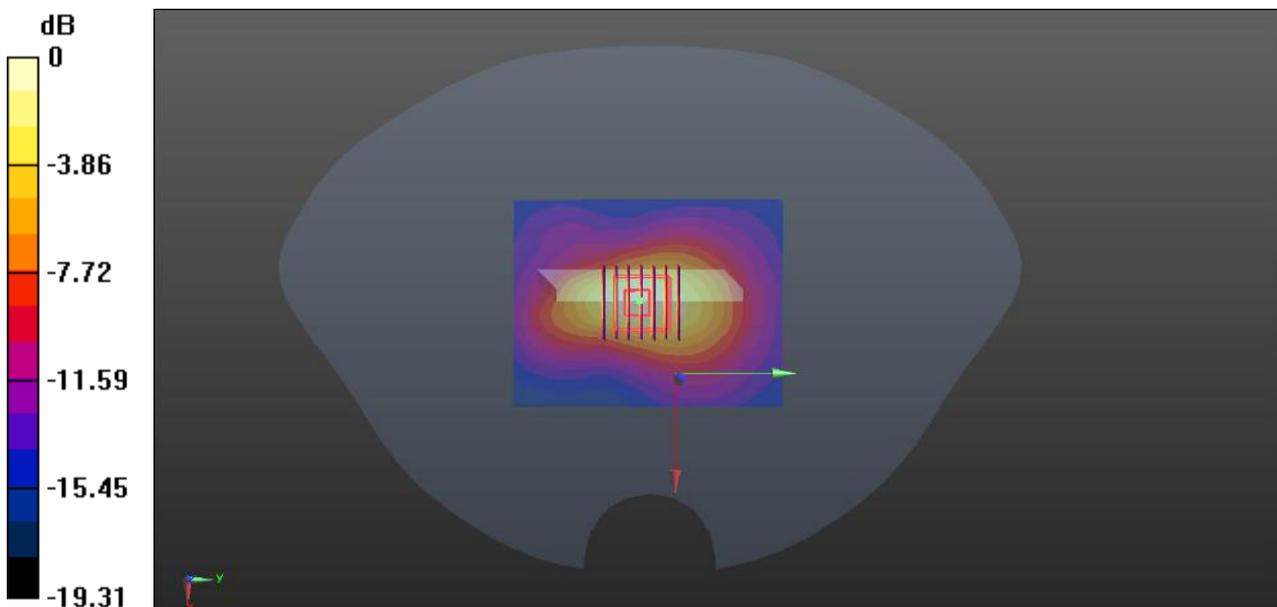
**Ch20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.68 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.523 W/kg; SAR(10 g) = 0.257 W/kg**

Maximum value of SAR (measured) = 0.594 W/kg



0 dB = 0.594 W/kg

**Meas.21 Body Plane with Top Edge 0mm on High Channel in LTE Band7 mode with Antenna4**

Date: 2022.08.15

Communication System Band: BAND 7; Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2560$  MHz;  $\sigma = 1.888$  S/m;  $\epsilon_r = 39.548$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch21350/Area Scan (71x91x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 7.22 W/kg

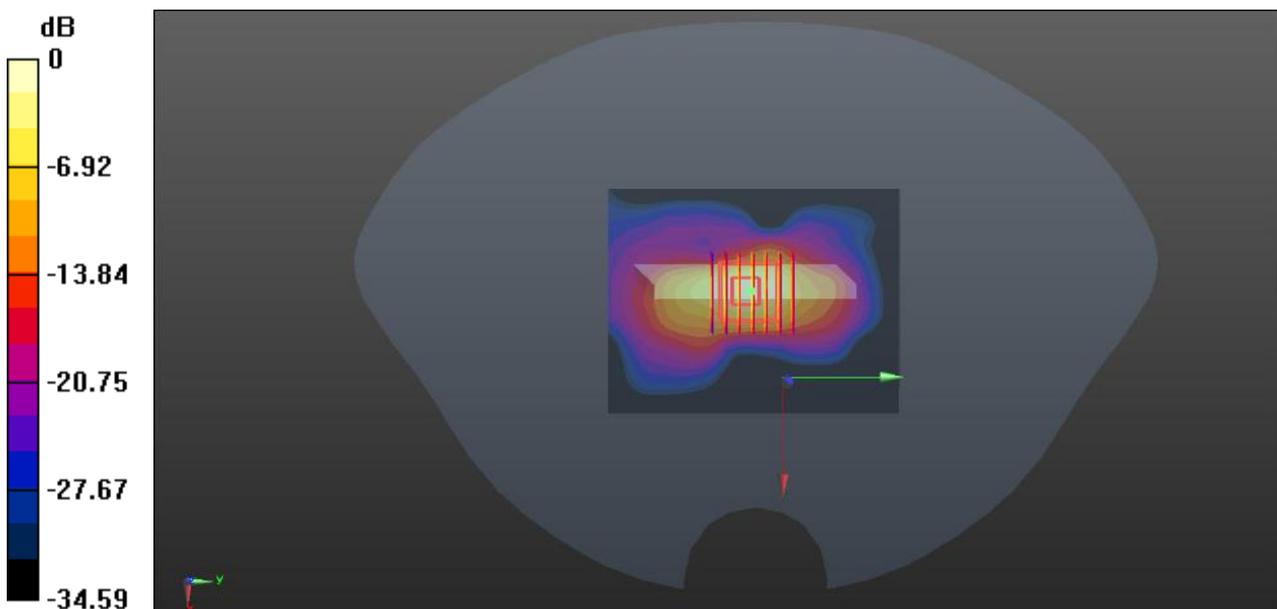
**Ch21350/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 42.88 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 14.0 W/kg

**SAR(1 g) = 5.8 W/kg; SAR(10 g) = 1.96 W/kg**

Maximum value of SAR (measured) = 6.65 W/kg



0 dB = 6.65 W/kg

**Meas.22 Right with Cheek on PCC20850+SCC21048 Channel in LTE Band7 mode with Antenna4**

Date: 2022.08.15

Communication System Band: BAND 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2510$  MHz;  $\sigma = 1.827$  S/m;  $\epsilon_r = 39.987$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20850/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.760 W/kg

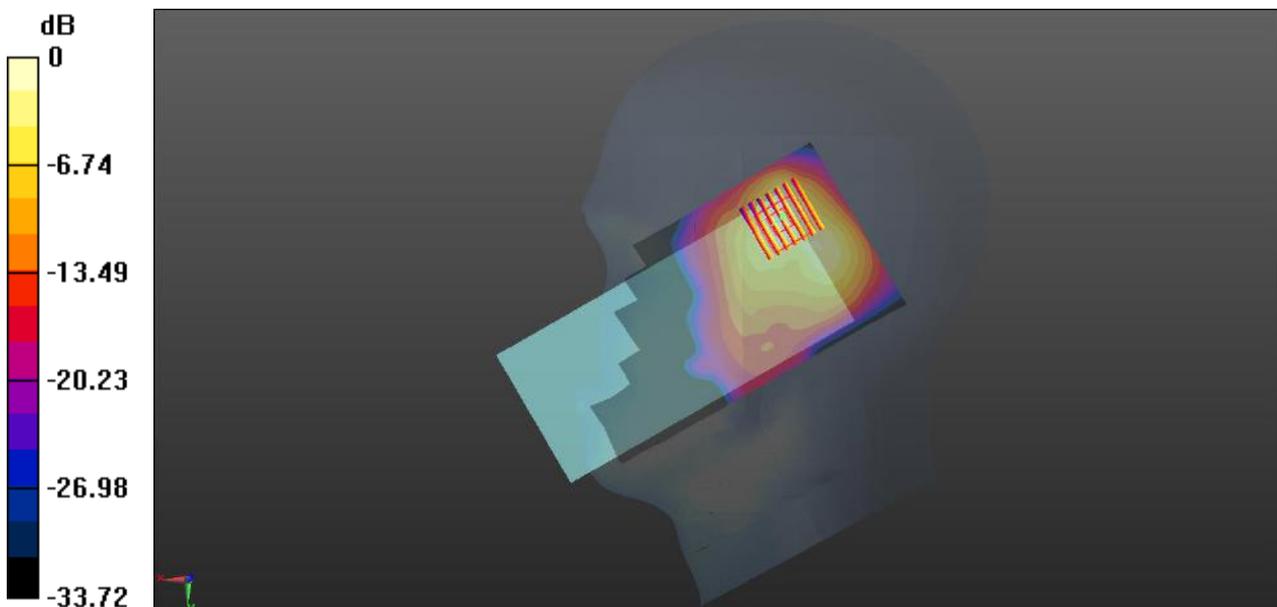
**Ch20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.83 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.33 W/kg

**SAR(1 g) = 0.559 W/kg; SAR(10 g) = 0.241 W/kg**

Maximum value of SAR (measured) = 0.677 W/kg



0 dB = 0.677 W/kg

**Meas.23 Body Plane with Top Edge 10mm on PCC20850+SCC21048 Channel in LTE Band7 mode with Antenna4**

Date: 2022.08.15

Communication System Band: BAND 7; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2510$  MHz;  $\sigma = 1.827$  S/m;  $\epsilon_r = 39.987$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20850/Area Scan (61x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.514 W/kg

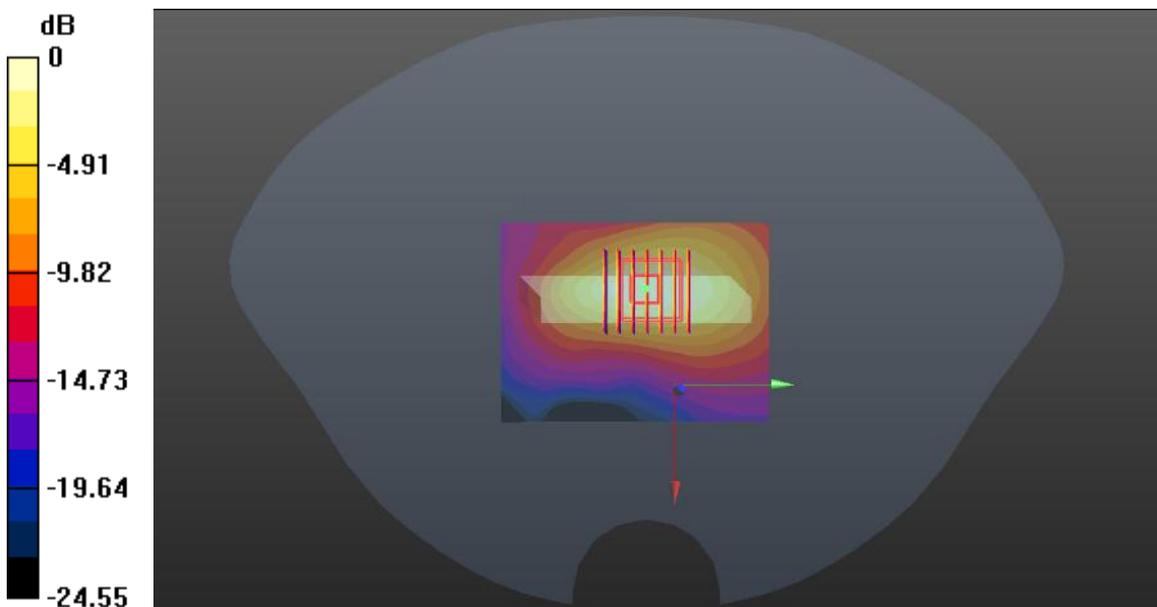
**Ch20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.93 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.818 W/kg

**SAR(1 g) = 0.424 W/kg; SAR(10 g) = 0.206 W/kg**

Maximum value of SAR (measured) = 0.485 W/kg



0 dB = 0.485 W/kg

**Meas.24 Body Plane with Top Edge 0mm on PCC21350+SCC21152 Channel in LTE Band7 mode with Antenna.4**

Date: 2022.08.15

Communication System Band: BAND 7; Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2560$  MHz;  $\sigma = 1.888$  S/m;  $\epsilon_r = 39.548$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch21350/Area Scan (61x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 4.18 W/kg

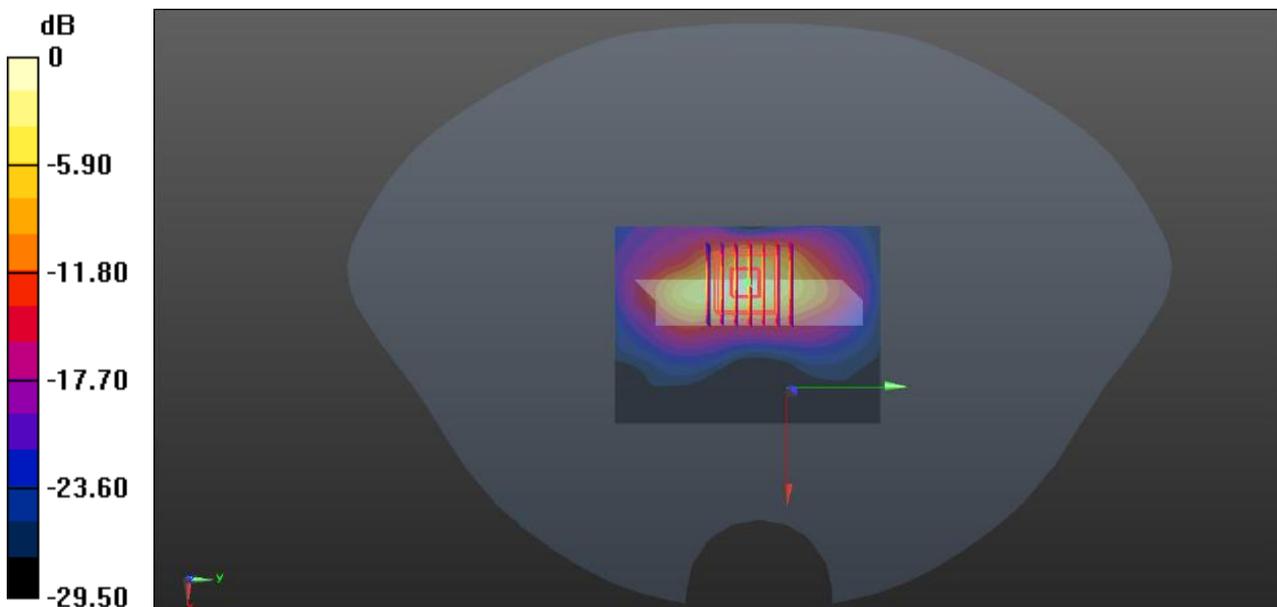
**Ch21350/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.11 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 9.47 W/kg

**SAR(1 g) = 3.68 W/kg; SAR(10 g) = 1.33 W/kg**

Maximum value of SAR (measured) = 4.63 W/kg



0 dB = 4.63 W/kg

**Meas.25 Right Head with Tilt on Middle Channel in LTE Band66 mode with Antenna4**

Date: 2022.08.09

Communication System Band: BAND 66; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.339$  S/m;  $\epsilon_r = 38.859$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch132322/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.381 W/kg

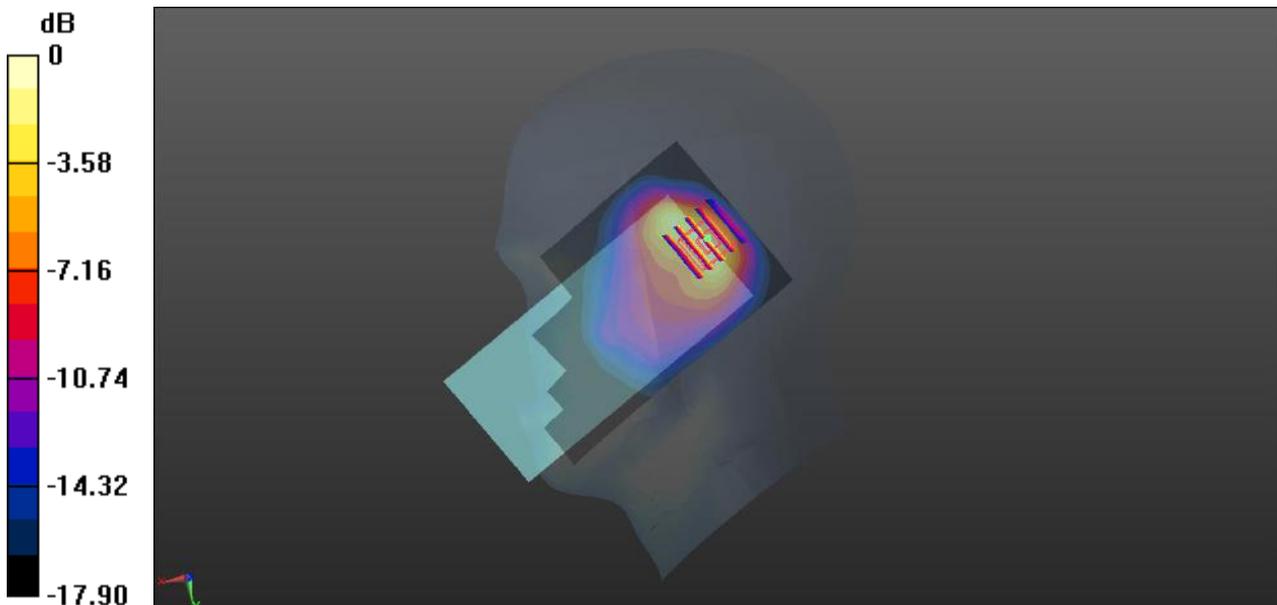
**Ch132322/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.34 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.701 W/kg

**SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.188 W/kg**

Maximum value of SAR (measured) = 0.448 W/kg



0 dB = 0.448 W/kg

**Meas.26 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band66 mode with Antenna0**

Date: 2022.08.09

Communication System Band: BAND 66; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.339$  S/m;  $\epsilon_r = 38.859$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch132322/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.418 W/kg

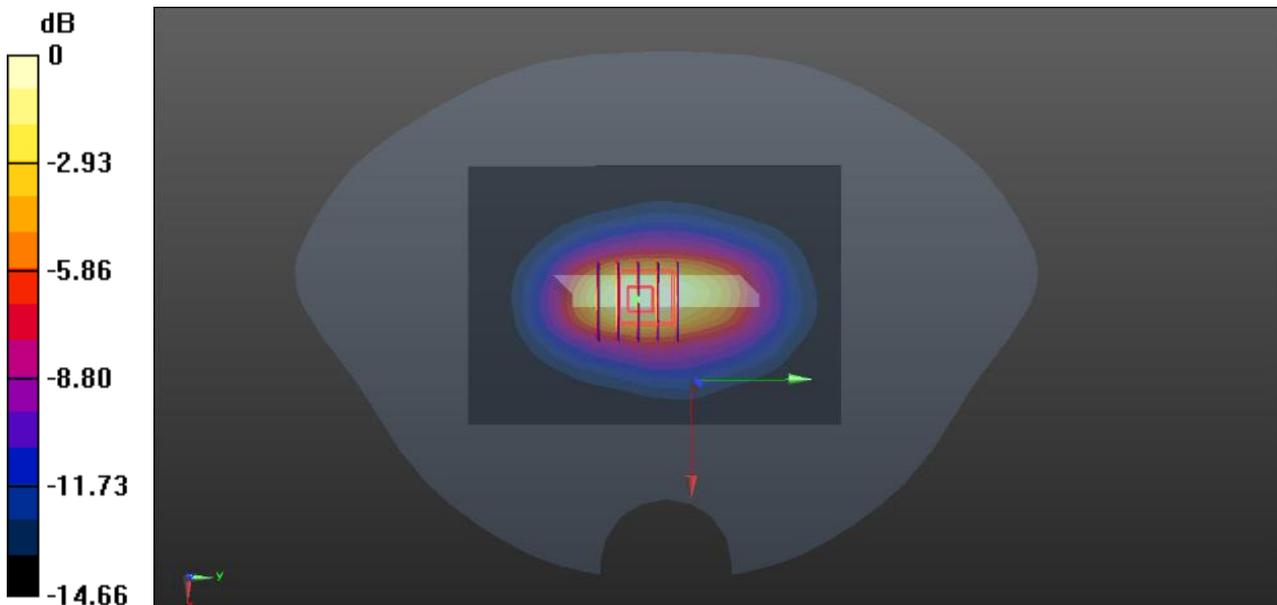
**Ch132322/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.56 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.612 W/kg

**SAR(1 g) = 0.364 W/kg; SAR(10 g) = 0.203 W/kg**

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



0 dB = 0.406 W/kg

**Meas.27 Body Plane with Bottom Edge 0mm on High Channel in LTE Band66 mode with Antenna0**

Date: 2022.08.09

Communication System Band: BAND 66; Frequency: 1770 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1770$  MHz;  $\sigma = 1.358$  S/m;  $\epsilon_r = 38.587$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(8.69, 8.69, 8.69); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch132572/Area Scan (71x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.85 W/kg

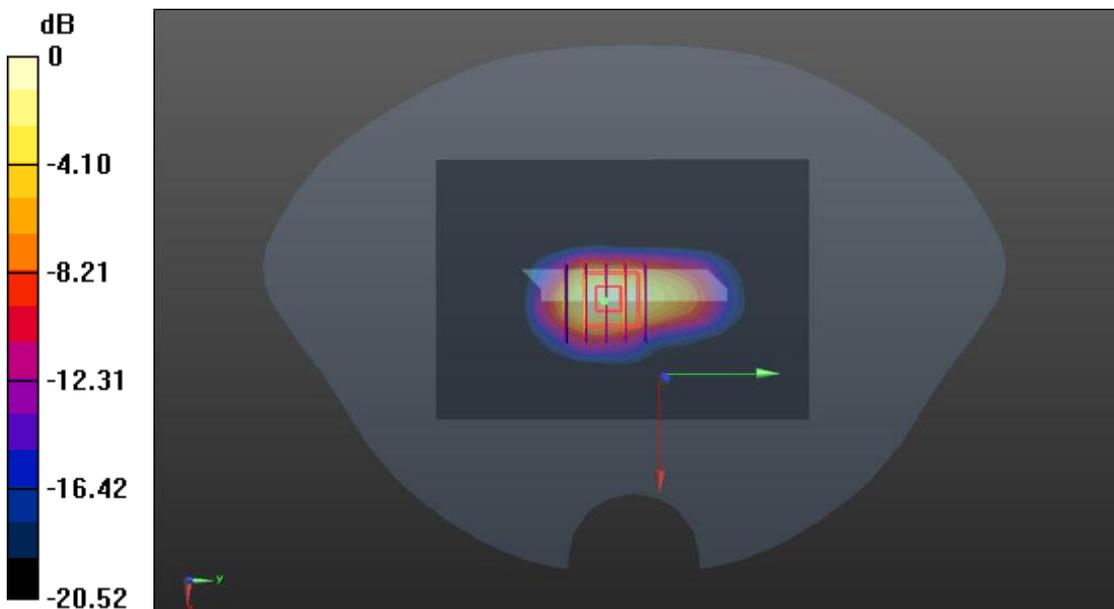
**Ch132572/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 44.72 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 6.65 W/kg

**SAR(1 g) = 3.04 W/kg; SAR(10 g) = 1.35 W/kg**

Maximum value of SAR (measured) = 3.55 W/kg



0 dB = 3.55 W/kg

**Meas.28 Right Head with Cheek on Low Channel in LTE Band38 mode with Antenna4**

Date: 2022.08.16

Communication System Band: BAND 38; Frequency: 2580 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated):  $f = 2580$  MHz;  $\sigma = 1.989$  S/m;  $\epsilon_r = 38.274$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch37850/Area Scan (91x141x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.58 W/kg

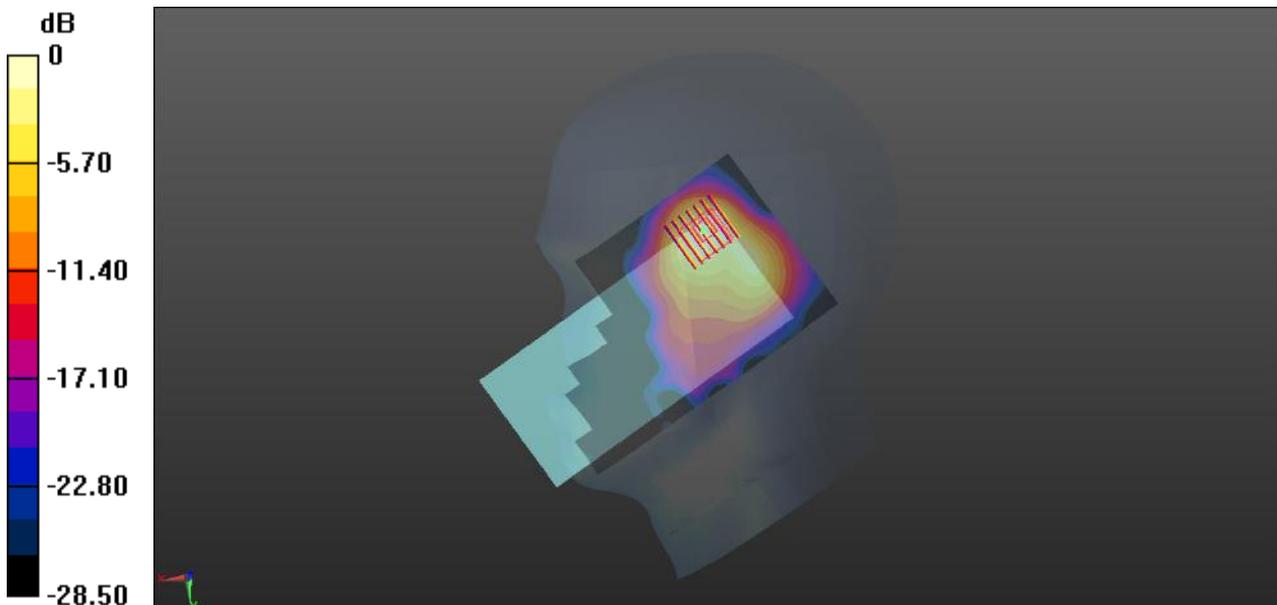
**Ch37850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.29 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.97 W/kg

**SAR(1 g) = 0.907 W/kg; SAR(10 g) = 0.430 W/kg**

Maximum value of SAR (measured) = 1.36 W/kg



0 dB = 1.36 W/kg

**Meas.29 Body Plane with Top Edge 10mm on High Channel in LTE Band38 mode with Antenna4**

Date: 2022.08.16

Communication System Band: BAND 38; Frequency: 2610 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated):  $f = 2610$  MHz;  $\sigma = 2.051$  S/m;  $\epsilon_r = 37.177$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch38150/Area Scan (81x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.562 W/kg

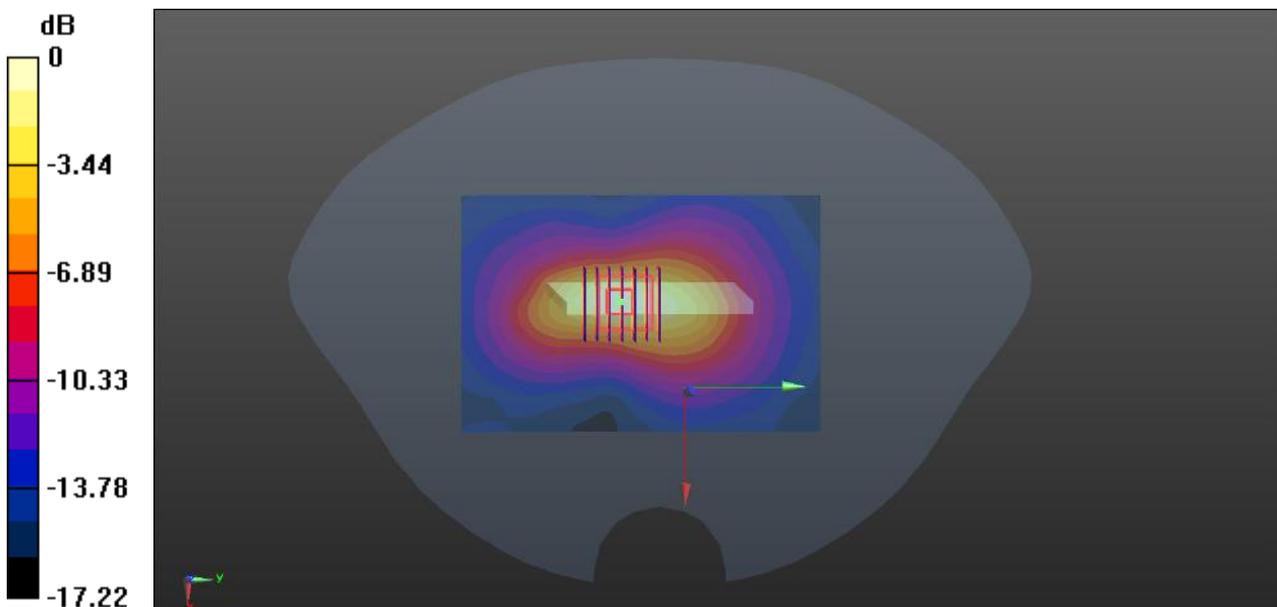
**Ch38150/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.28 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.942 W/kg

**SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.243 W/kg**

Maximum value of SAR (measured) = 0.557 W/kg



0 dB = 0.557 W/kg

**Meas.30 Right with Cheek on PCC37850+SCC38048 Channel in LTE Band38 mode with Antenna4**

Date: 2022.08.16

Communication System Band: BAND 38; Frequency: 2580 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated):  $f = 2580$  MHz;  $\sigma = 1.989$  S/m;  $\epsilon_r = 38.274$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch37850/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.852 W/kg

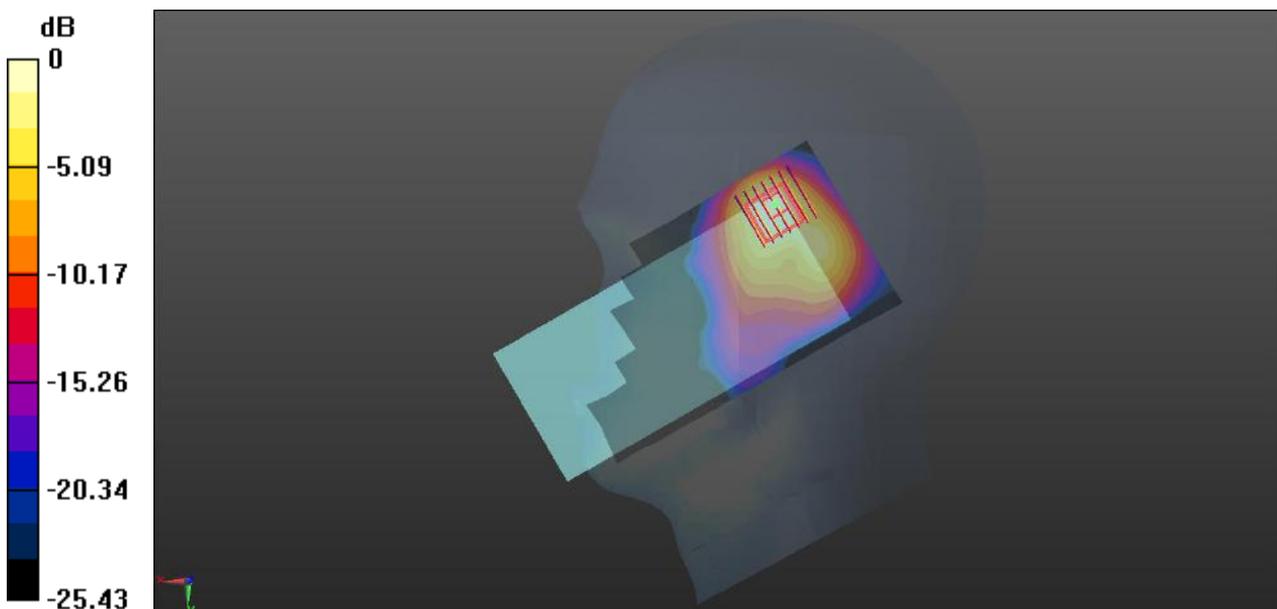
**Ch37850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.03 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.46 W/kg

**SAR(1 g) = 0.653 W/kg; SAR(10 g) = 0.302 W/kg**

Maximum value of SAR (measured) = 0.737 W/kg



0 dB = 0.737 W/kg

**Meas.31 Body Plane with Top Edge 10mm on PCC38150+SCC37952 Channel in LTE Band38 mode with Antenna.4**

Date: 2022.08.16

Communication System Band: BAND 38; Frequency: 2610 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated):  $f = 2610$  MHz;  $\sigma = 2.051$  S/m;  $\epsilon_r = 37.177$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch38150/Area Scan (61x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.529 W/kg

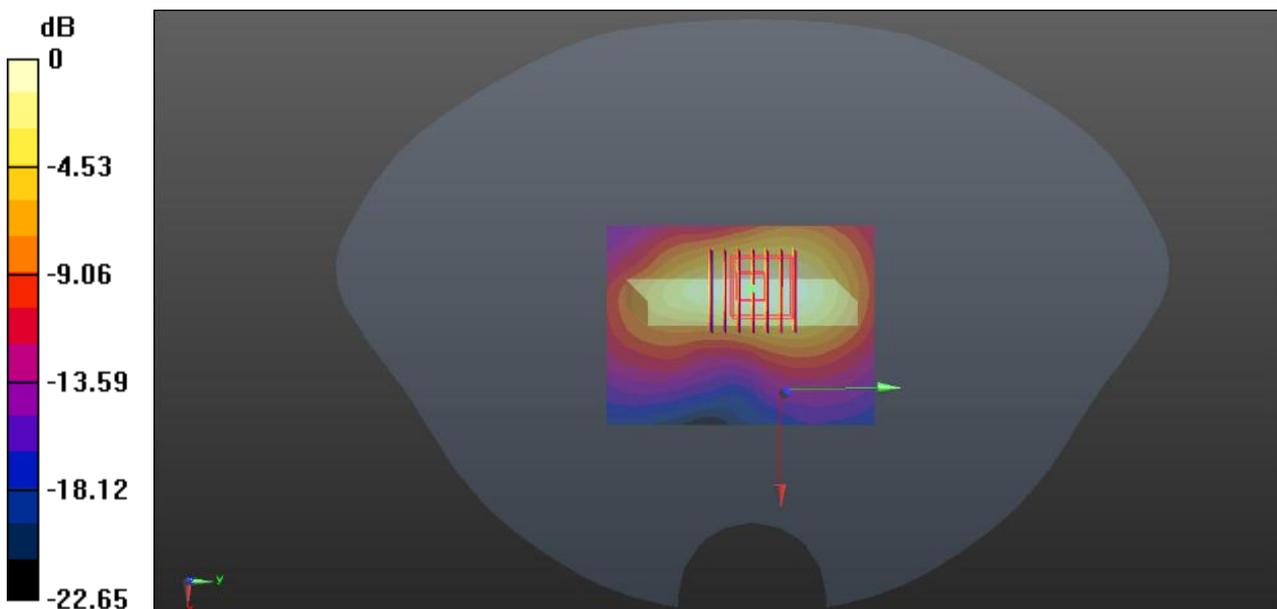
**Ch38150/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.10 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.869 W/kg

**SAR(1 g) = 0.457 W/kg; SAR(10 g) = 0.231 W/kg**

Maximum value of SAR (measured) = 0.515 W/kg



0 dB = 0.515 W/kg

**Meas.32 Right Head with Cheek on Middle Channel in LTE Band41 mode with Antenna4**

Date: 2022.08.16

Communication System Band: BAND 41; Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.006$  S/m;  $\epsilon_r = 38.083$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch40620/Area Scan (91x141x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.909 W/kg

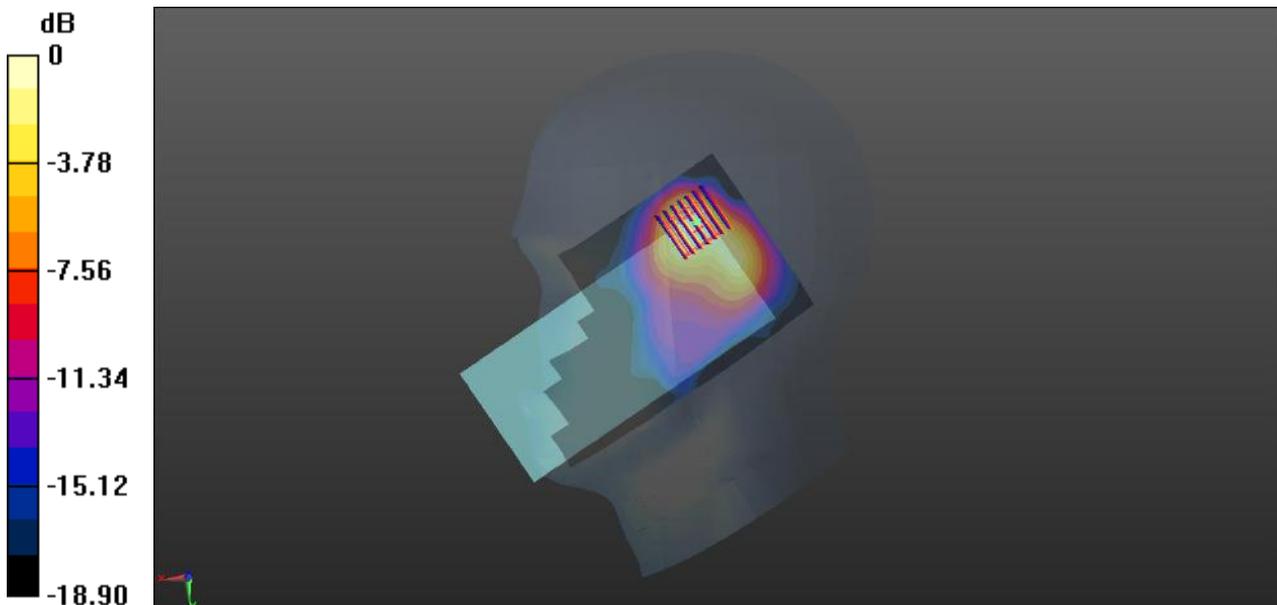
**Ch40620/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.57 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.50 W/kg

**SAR(1 g) = 0.683 W/kg; SAR(10 g) = 0.330 W/kg**

Maximum value of SAR (measured) = 0.745 W/kg



0 dB = 0.745 W/kg

**Meas.33 Body Plane with Top Edge 10mm on Middle Channel in LTE Band41 mode with Antenna4**

Date: 2022.08.16

Communication System Band: BAND 41; Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.006$  S/m;  $\epsilon_r = 38.083$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch40620/Area Scan (81x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.613 W/kg

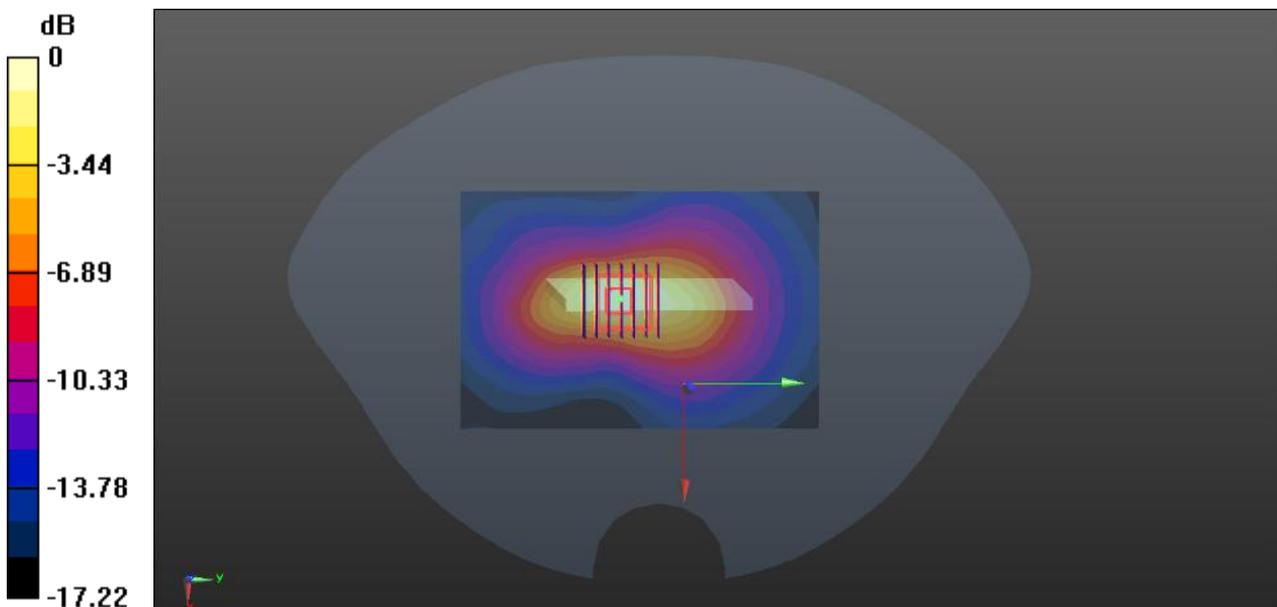
**Ch40620/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.35 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.529 W/kg; SAR(10 g) = 0.259 W/kg**

Maximum value of SAR (measured) = 0.602 W/kg



0 dB = 0.602 W/kg

**Meas.34 Right with Cheek on PCC40620+SCC40818 Channel in LTE Band41 mode with Antenna4**

Date: 2022.08.16

Communication System Band: BAND 41; Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.006$  S/m;  $\epsilon_r = 38.083$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch40620/Area Scan (81x161x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.607 W/kg

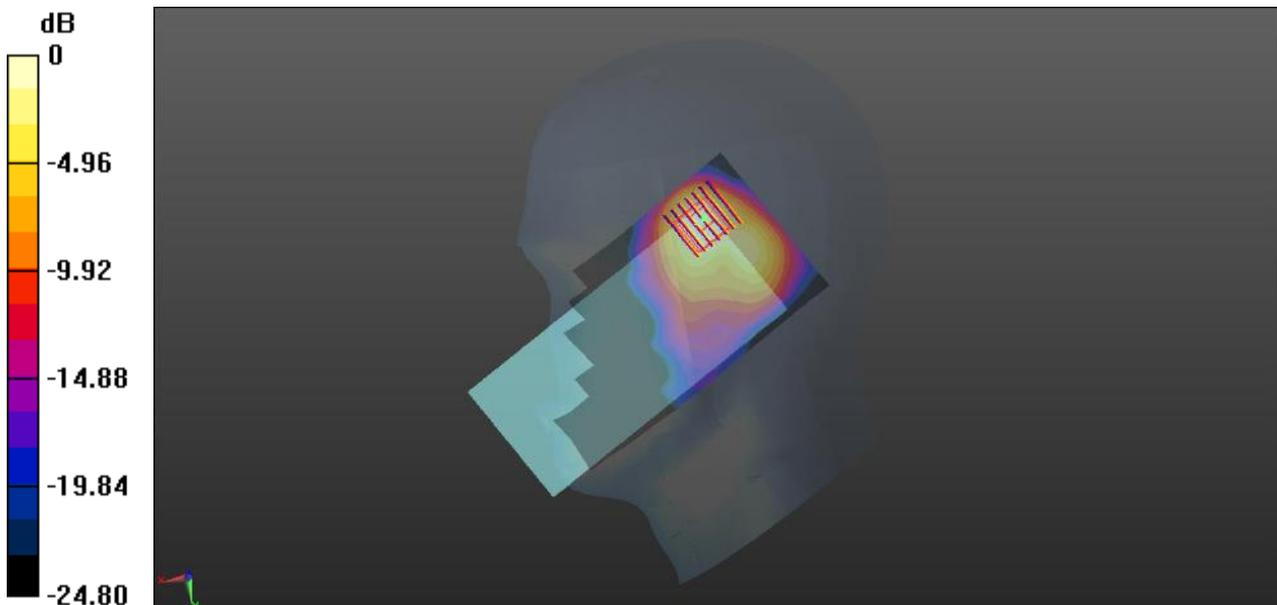
**Ch40620/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.15 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.472 W/kg; SAR(10 g) = 0.224 W/kg**

Maximum value of SAR (measured) = 0.517 W/kg



0 dB = 0.517 W/kg

**Meas.35 Body Plane with Top Edge 10mm on PCC40620+SCC40818 Channel in LTE Band41 mode with Antenna4**

Date: 2022.08.16

Communication System Band: BAND 41; Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.006$  S/m;  $\epsilon_r = 38.083$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.56, 7.56, 7.56); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch40620/Area Scan (61x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.594 W/kg

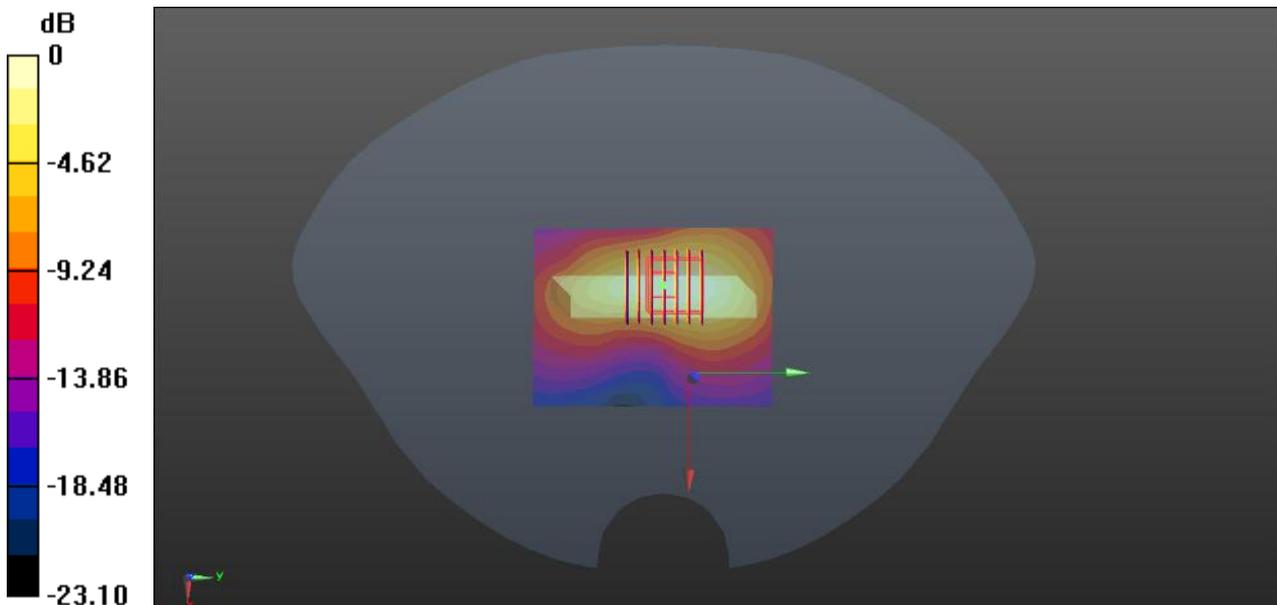
**Ch40620/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.95 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.985 W/kg

**SAR(1 g) = 0.458 W/kg; SAR(10 g) = 0.235 W/kg**

Maximum value of SAR (measured) = 0.581 W/kg



0 dB = 0.581 W/kg

**Meas.36 Left Head with Cheek on 11 Channel in IEEE802.11b mode with Antenna6**

Date: 2022.08.12

Communication System Band: 2.4G; Frequency: 2462 MHz; Duty Cycle: 1:1.012

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.805$  S/m;  $\epsilon_r = 38.392$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.79, 7.79, 7.79); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch11/Area Scan (91x141x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.501 W/kg

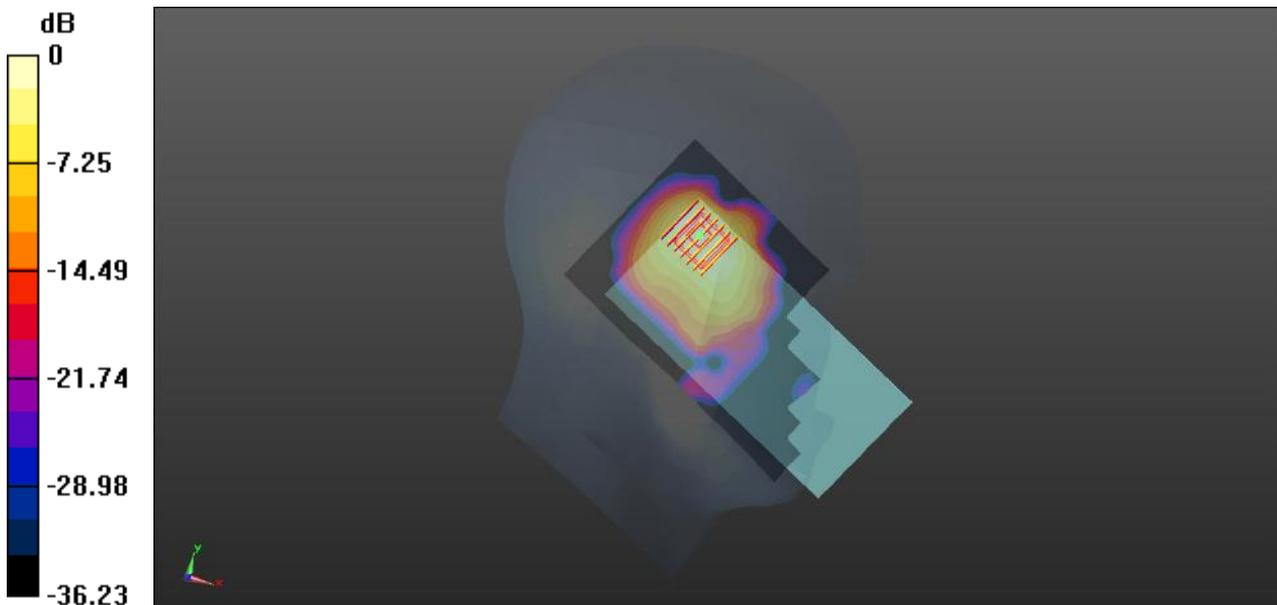
**Ch11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.649 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.812 W/kg

**SAR(1 g) = 0.404 W/kg; SAR(10 g) = 0.196 W/kg**

Maximum value of SAR (measured) = 0.469 W/kg



0 dB = 0.469 W/kg

**Meas.37 Body Plane with Back Side 10mm on 11 Channel in IEEE802.11b mode with Antenna6**

Date: 2022.08.12

Communication System Band: 2.4G; Frequency: 2462 MHz; Duty Cycle: 1:1.012

Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.805$  S/m;  $\epsilon_r = 38.392$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.79, 7.79, 7.79); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; 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) = 0.256 W/kg

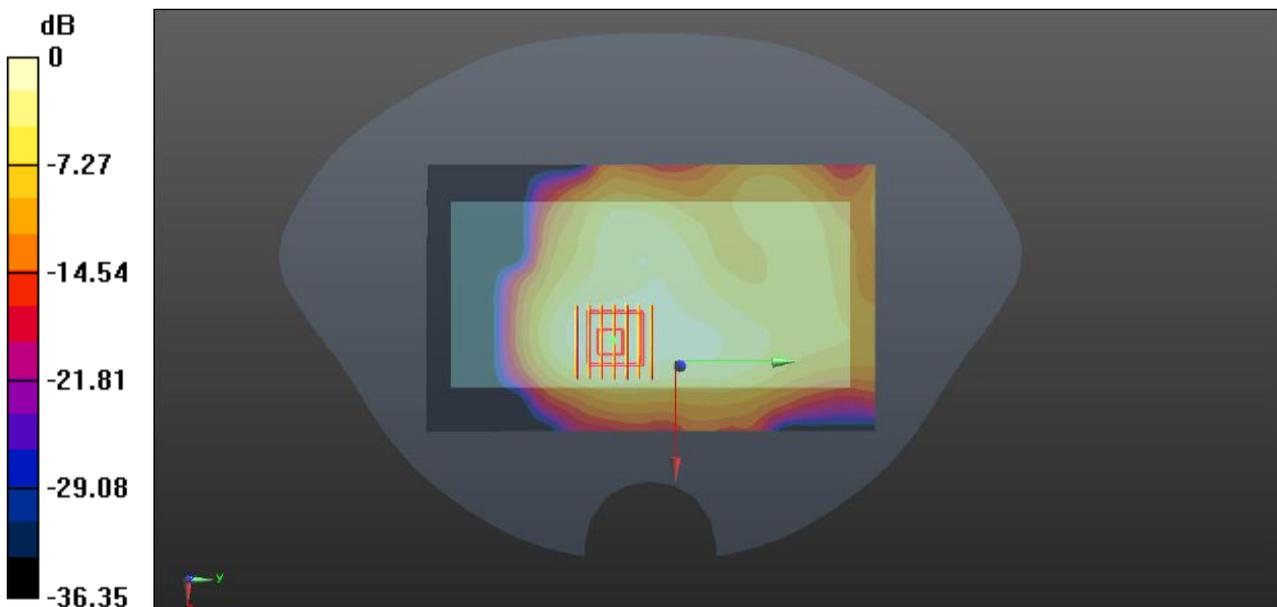
**Ch11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.689 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.442 W/kg

**SAR(1 g) = 0.221 W/kg; SAR(10 g) = 0.115 W/kg**

Maximum value of SAR (measured) = 0.239 W/kg



0 dB = 0.239 W/kg

**Meas.38 Left Head with Tilt on 52 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.17

Communication System Band: 5.3G; Frequency: 5260 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5260$  MHz;  $\sigma = 4.67$  S/m;  $\epsilon_r = 35.438$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.45, 5.45, 5.45); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch52/Area Scan (101x171x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.968 W/kg

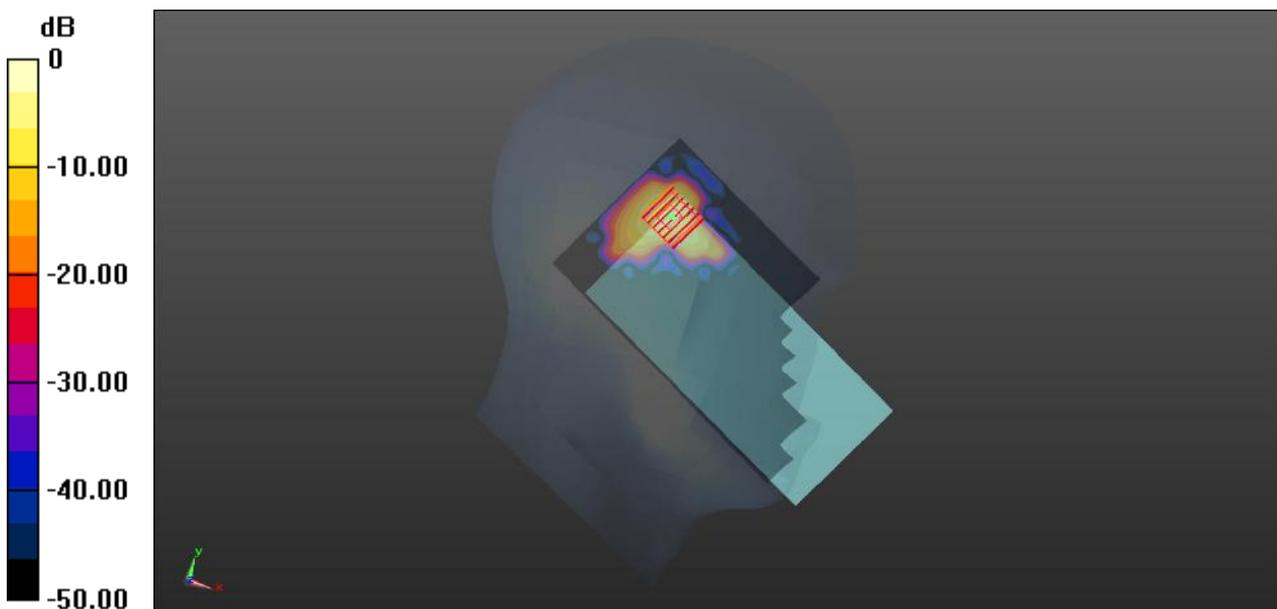
**Ch52/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.7890 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.90 W/kg

**SAR(1 g) = 0.434 W/kg; SAR(10 g) = 0.112 W/kg**

Maximum value of SAR (measured) = 0.931 W/kg



0 dB = 0.931 W/kg

**Meas.39 Left Head with Tilt on 140 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.18

Communication System Band: 5.6G; Frequency: 5700 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5700$  MHz;  $\sigma = 5.111$  S/m;  $\epsilon_r = 34.923$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5, 5, 5); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch140/Area Scan (101x171x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.928 W/kg

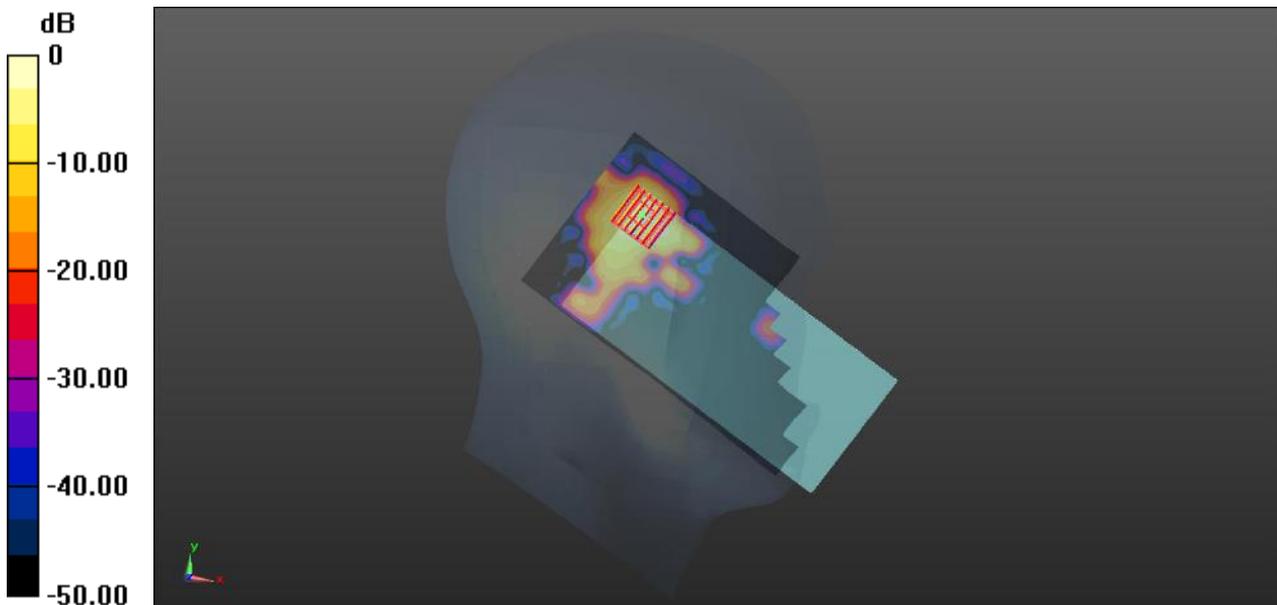
**Ch140/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.247 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.99 W/kg

**SAR(1 g) = 0.421 W/kg; SAR(10 g) = 0.110 W/kg**

Maximum value of SAR (measured) = 0.949 W/kg



0 dB = 0.949 W/kg

**Meas.40 Left Head with Tilt on 149 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.19

Communication System Band: 5.8G; Frequency: 5745 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5475$  MHz;  $\sigma = 5.042$  S/m;  $\epsilon_r = 35.825$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature:22.2°C Liquid Temperature:21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5, 5, 5); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch149/Area Scan (101x171x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.720 W/kg

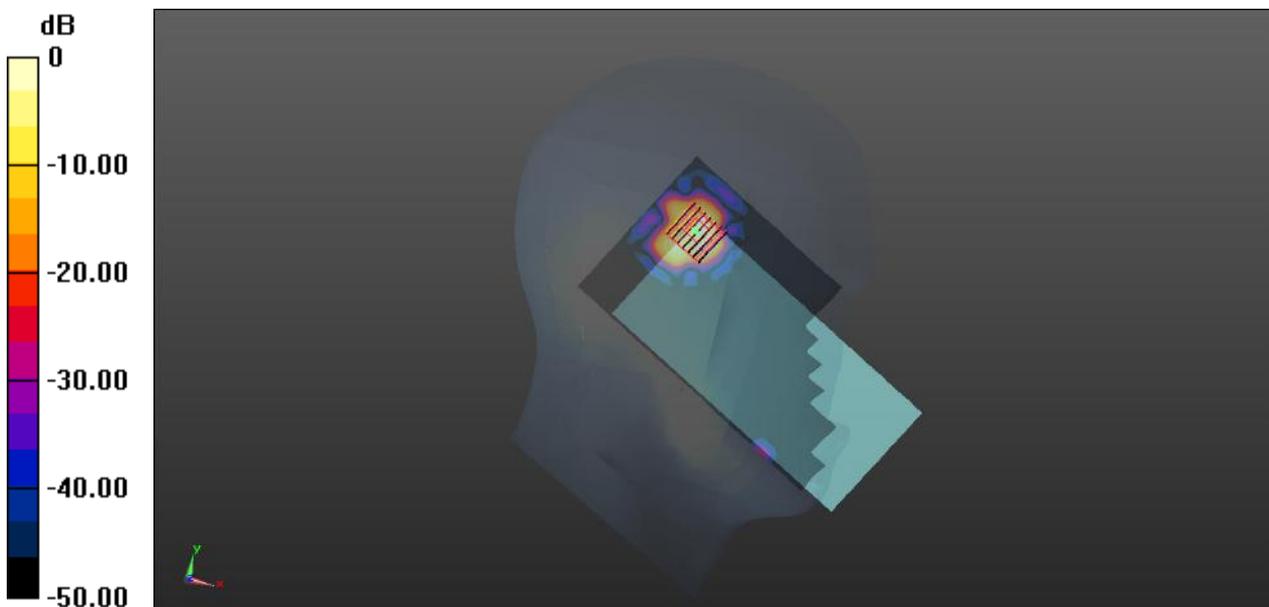
**Ch149/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.446 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.248 W/kg; SAR(10 g) = 0.062 W/kg**

Maximum value of SAR (measured) = 0.640 W/kg



0 dB = 0.640 W/kg

**Meas.41 Body Plane with Back Side 10mm on 64 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.17

Communication System Band: 5.3G; Frequency: 5320 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5320$  MHz;  $\sigma = 4.75$  S/m;  $\epsilon_r = 35.049$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.45, 5.45, 5.45); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch64/Area Scan (111x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.03 W/kg

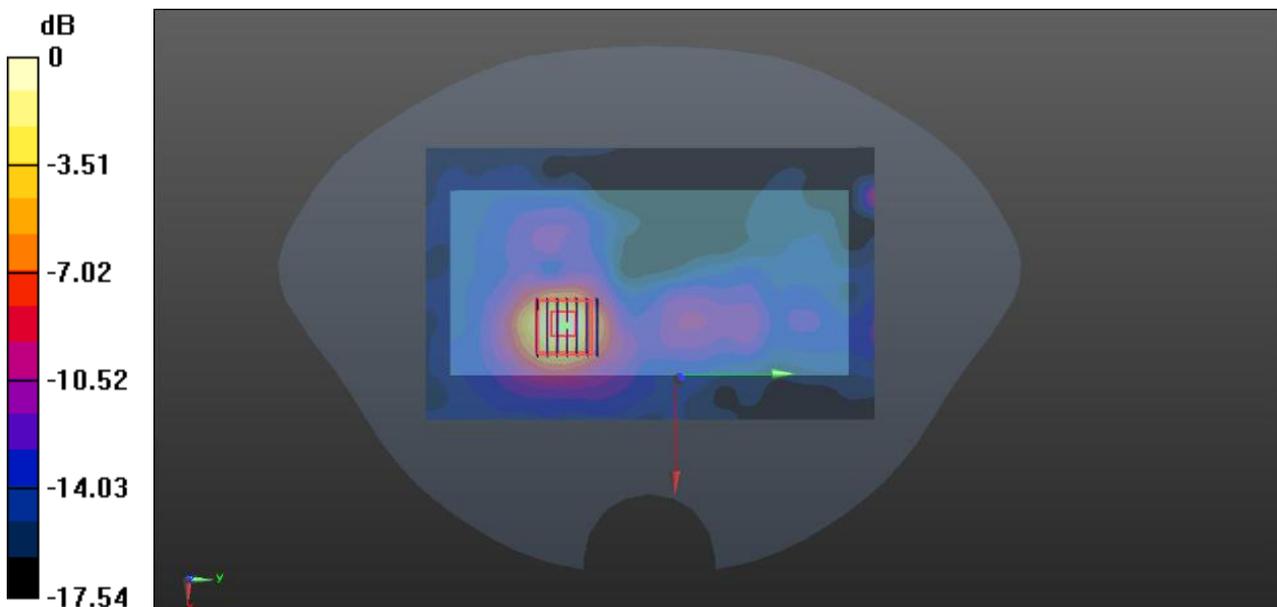
**Ch64/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.029 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.71 W/kg

**SAR(1 g) = 0.503 W/kg; SAR(10 g) = 0.181 W/kg**

Maximum value of SAR (measured) = 0.915 W/kg



0 dB = 0.915 W/kg

**Meas.42 Body Plane with Back Side 10mm on 140 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.18

Communication System Band: 5.6G; Frequency: 5700 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5700$  MHz;  $\sigma = 5.111$  S/m;  $\epsilon_r = 34.923$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5, 5, 5); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch140/Area Scan (111x181x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

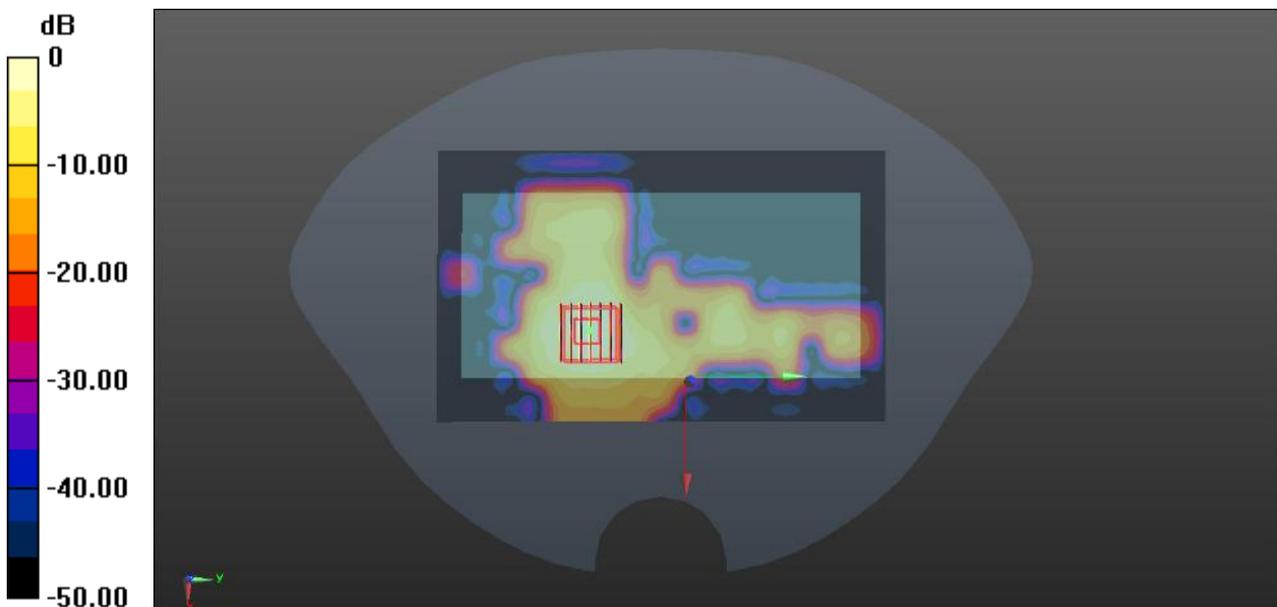
**Ch140/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.2490 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.976 W/kg

**SAR(1 g) = 0.257 W/kg; SAR(10 g) = 0.085 W/kg**

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



0 dB = 0.496 W/kg

**Meas.43 Body Plane with Back Side 10mm on 149 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.19

Communication System Band: 5.8G; Frequency: 5745 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5475$  MHz;  $\sigma = 5.042$  S/m;  $\epsilon_r = 35.825$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5, 5, 5); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch149/Area Scan (91x171x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.567 W/kg

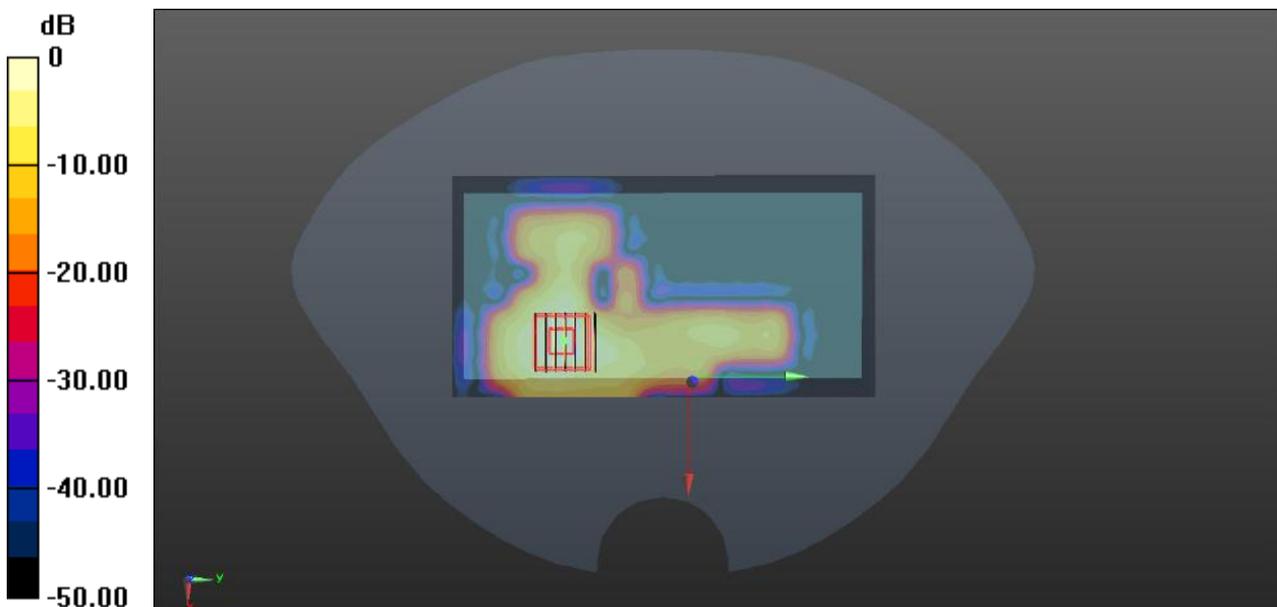
**Ch149/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.20 W/kg

**SAR(1 g) = 0.291 W/kg; SAR(10 g) = 0.090 W/kg**

Maximum value of SAR (measured) = 0.588 W/kg



0 dB = 0.588 W/kg

**Meas.44 Body Plane with Top Edge 10mm on 36 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.17

Communication System Band: 5.2G; Frequency: 5180 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5180$  MHz;  $\sigma = 4.547$  S/m;  $\epsilon_r = 35.938$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.45, 5.45, 5.45); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch36/Area Scan (91x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.17 W/kg

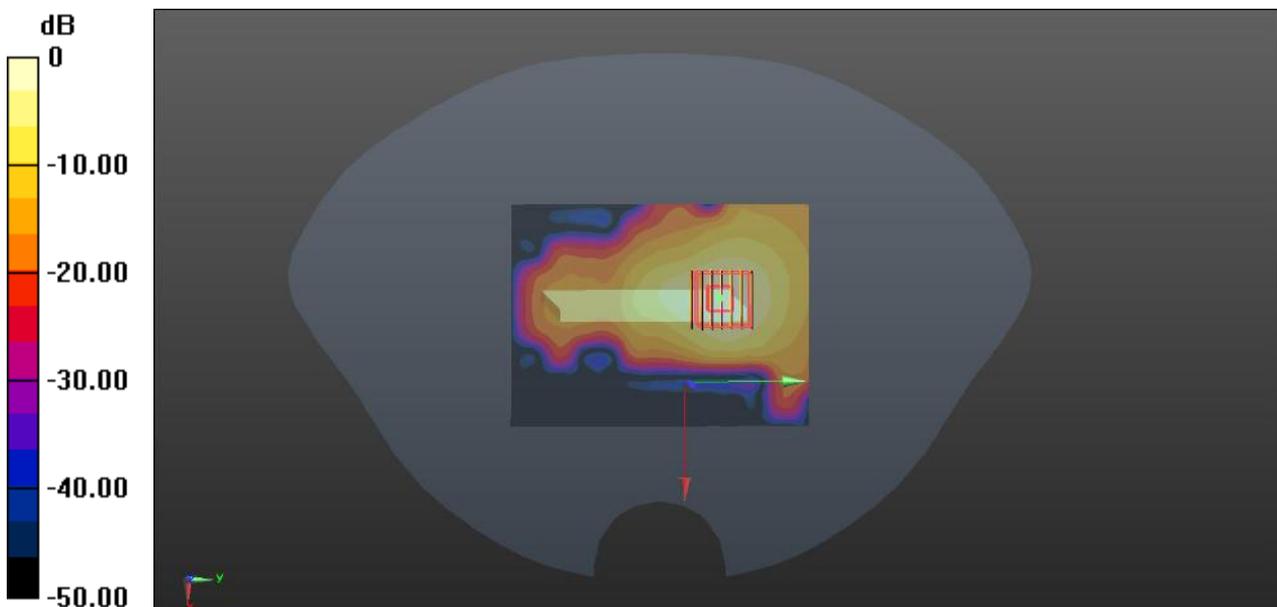
**Ch36/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.249 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 2.28 W/kg

**SAR(1 g) = 0.639 W/kg; SAR(10 g) = 0.223 W/kg**

Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg

**Meas.45 Body Plane with Back Side 10mm on 149 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.19

Communication System Band: 5.8G; Frequency: 5745 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5475$  MHz;  $\sigma = 5.042$  S/m;  $\epsilon_r = 35.825$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5, 5, 5); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch149/Area Scan (91x171x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.567 W/kg

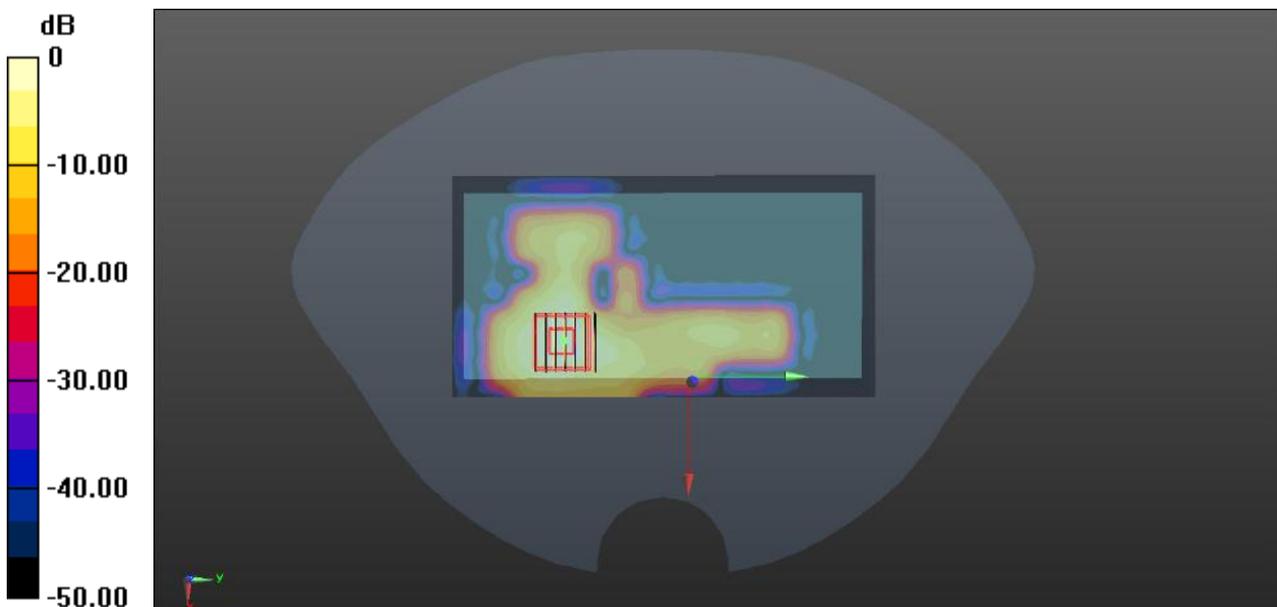
**Ch149/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.20 W/kg

**SAR(1 g) = 0.291 W/kg; SAR(10 g) = 0.090 W/kg**

Maximum value of SAR (measured) = 0.588 W/kg



0 dB = 0.588 W/kg

**Meas.46 Body Plane with Top Edge 0mm on 64 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.17

Communication System Band: 5.3G; Frequency: 5320 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5320$  MHz;  $\sigma = 4.75$  S/m;  $\epsilon_r = 35.049$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5.45, 5.45, 5.45); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch64/Area Scan (91x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 11.3 W/kg

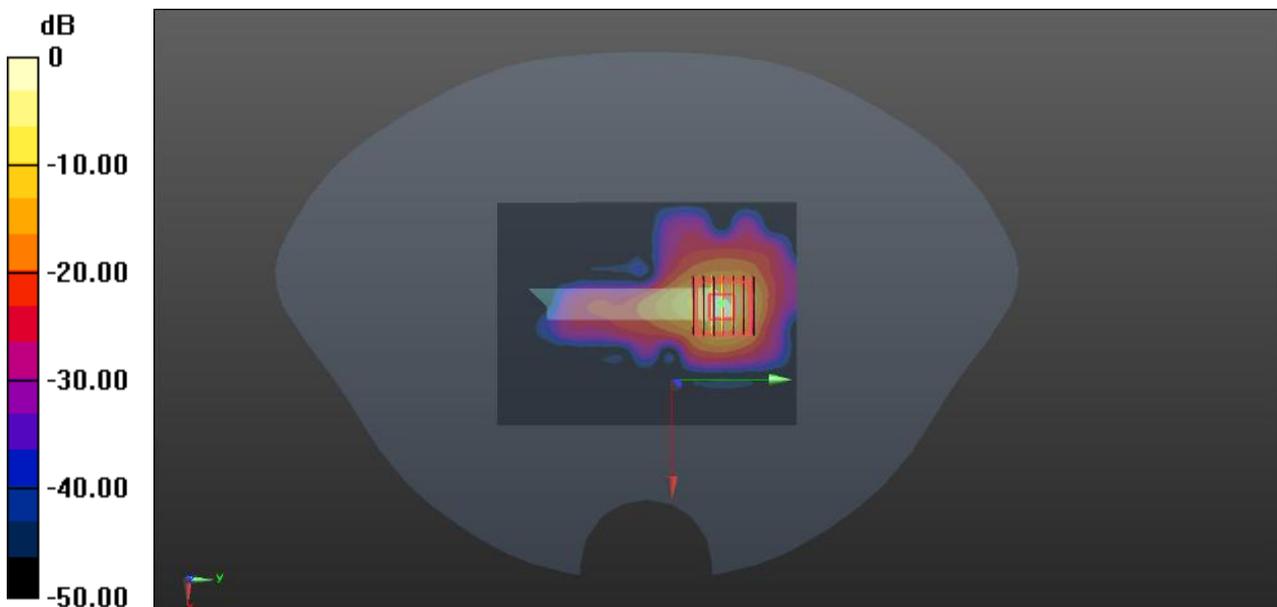
**Ch64/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.534 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 28.3 W/kg

**SAR(1 g) = 4.78 W/kg; SAR(10 g) = 0.978 W/kg**

Maximum value of SAR (measured) = 12.1 W/kg



0 dB = 12.1 W/kg

**Meas.47 Body Plane with Top Edge 0mm on 140 Channel in IEEE802.11a mode with Antenna6**

Date: 2022.08.18

Communication System Band: 5.6G; Frequency: 5700 MHz; Duty Cycle: 1:1.029

Medium parameters used (interpolated):  $f = 5700$  MHz;  $\sigma = 5.111$  S/m;  $\epsilon_r = 34.923$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(5, 5, 5); Calibrated: 2022/07/04
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch140/Area Scan (91x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 5.03 W/kg

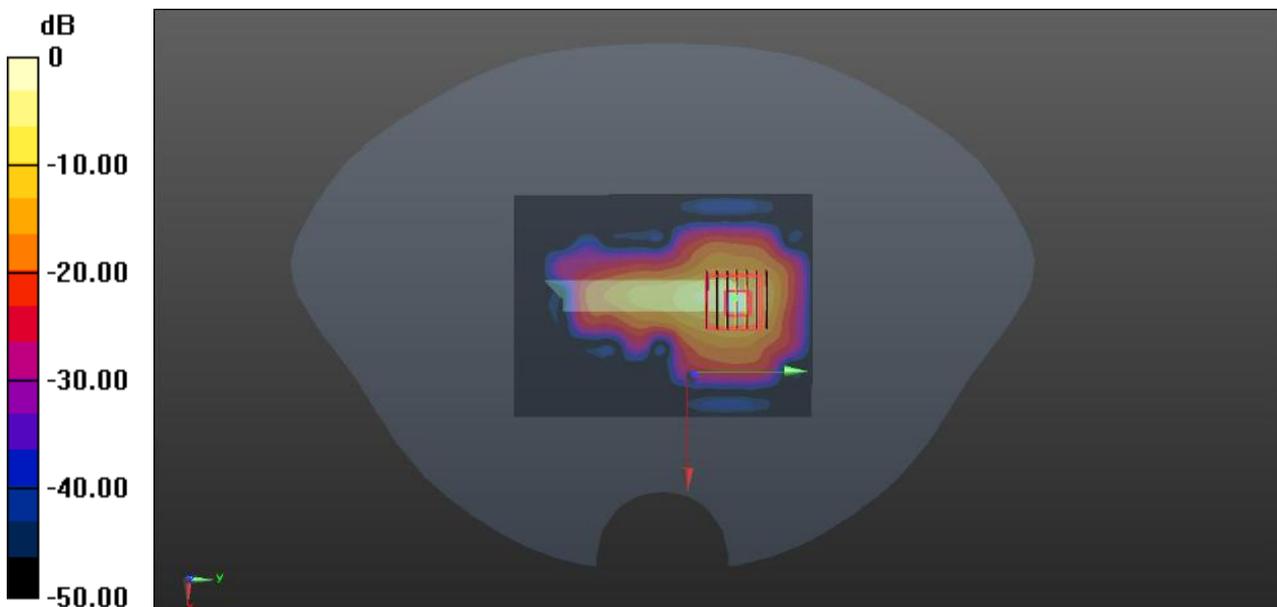
**Ch140/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.673 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 16.6 W/kg

**SAR(1 g) = 2.46 W/kg; SAR(10 g) = 0.527 W/kg**

Maximum value of SAR (measured) = 5.82 W/kg



0 dB = 5.82 W/kg

**Meas.48 Left Head with Cheek on 0 Channel in Bluetooth mode with Antenna6**

Date: 2022.08.12

Communication System Band: BT; Frequency: 2402 MHz; Duty Cycle: 1:1.3

Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.737$  S/m;  $\epsilon_r = 39.208$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.79, 7.79, 7.79); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CH0/Area Scan (91x141x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.342 W/kg

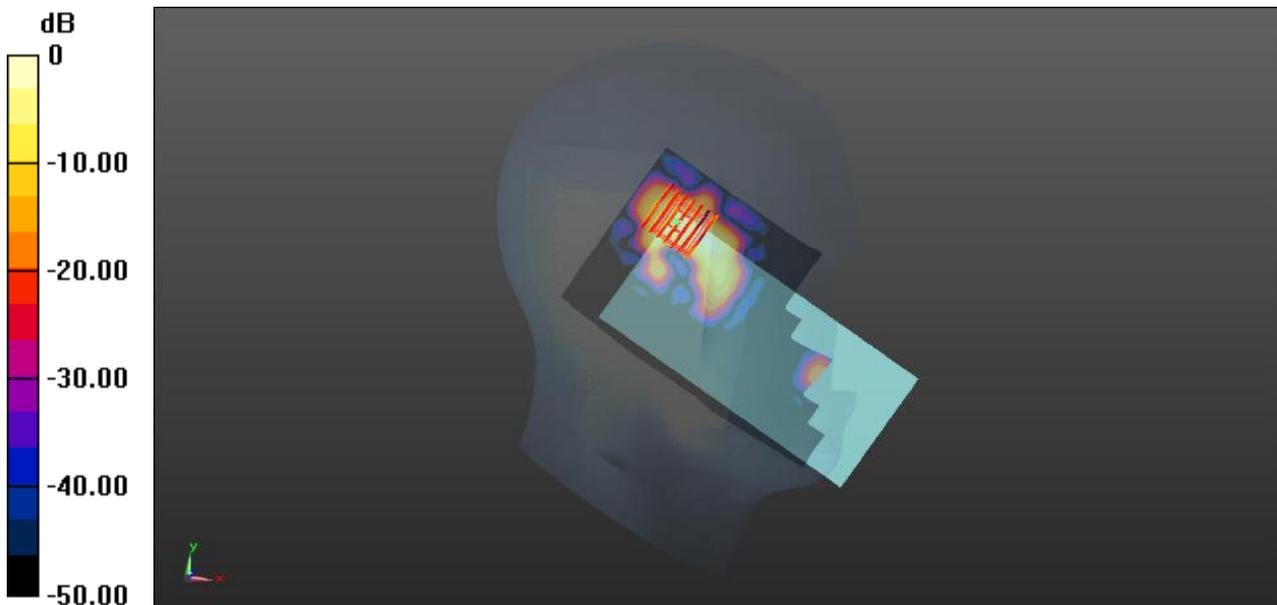
**CH0/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.789 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.809 W/kg

**SAR(1 g) = 0.175 W/kg; SAR(10 g) = 0.052 W/kg**

Maximum value of SAR (measured) = 0.379 W/kg



0 dB = 0.379 W/kg

**Meas.49 Body Plane with Back Side 10mm on 0 Channel in Bluetooth mode with Antenna6**

Date: 2022.08.12

Communication System Band: BT; Frequency: 2402 MHz; Duty Cycle: 1:1.3

Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.737$  S/m;  $\epsilon_r = 39.208$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7607; ConvF(7.79, 7.79, 7.79); Calibrated: 2022/07/04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2022/06/13
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CC; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch0/Area Scan (81x151x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0332 W/kg

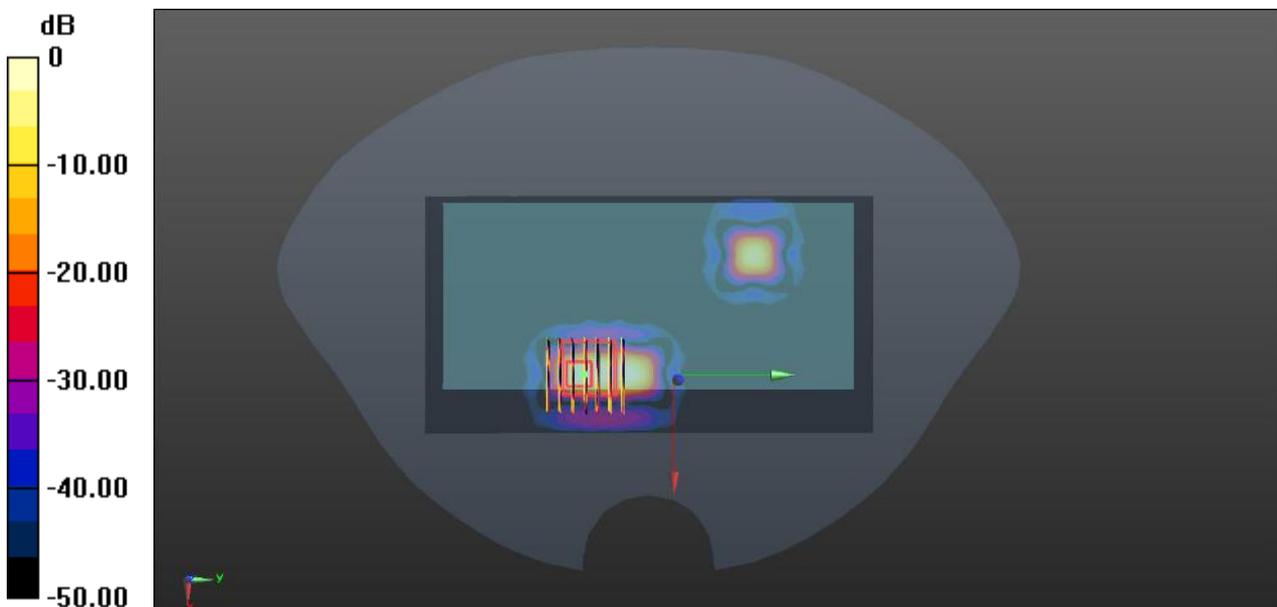
**Ch0/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.534 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.163 W/kg

**SAR(1 g) = 0.029 W/kg; SAR(10 g) = 0.009 W/kg**

Maximum value of SAR (measured) = 0.0311 W/kg



0 dB = 0.0311 W/kg

## **ANNEX D EUT EXTERNAL PHOTOS**

Please refer the document "BL-SZ2270591-AW.pdf".

## **ANNEX E SAR TEST SETUP PHOTOS**

Please refer the document "BL-SZ2270591-AS.pdf".

## **ANNEX F CALIBRATION REPORT**

Please refer the document "CALIBRATION REPORT.pdf".

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--END OF REPORT--