TEST REPORT

Applicant:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address:	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China
Equipment Type:	Mobile Phone
Model Name:	A301OP
Brand Name:	OPPO
FCC ID:	R9C-A301OP
Test Standard:	FCC 47 CFR Part 2.1093 (refer section 3.1)
Maximum SAR:	Head (1 g): 1.03 W/kg Body (1 g): 0.52 W/kg Hotspot (1 g): 1.19 W/kg Specific (10 g): 2.65 W/kg
Sample Arrival Date:	Nov. 28, 2022
Test Date:	Nov. 30, 2022 – Dec. 01, 2022
Date of Issue:	Dec. 26, 2022

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Fan Huimin **Checked by:** Zong Liyao **Approved by:** Wei Yanquan (Chief Engineer)

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Dec. 26, 2022	Initial Issue

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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	☑ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 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℃ to 25℃
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

2.2 Manufacturer Information

Manufacturer	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

2.3 Factory Information

Factory	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

2.4 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	A301OP
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	11
Software Version	ColorOS V13.1.0
Dimensions (Approx.)	N/A
Weight (Approx.)	183g
EUT ID	S04, S05, S07, S08
IMEI Number	S04: 864527060056493
	S05: 864527060056238
	S07: 864527060052872
	S08: 864527060056071
Note1: EUT ID is used to identify the test sample in the lab internally. Note2: It is performed to test SAR with the EUT S04 and S05 and conducted power with the EUT S07.	

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	OPPO
	Model No.	BLP917
	Serial No.	N/A
	Capacity	Rated: 4400mAh/17.02Wh Typical: 4500mAhl/17.41Wh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45 V

2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 4/5 4G Network LTE FDD Band 4/5/12/17/26 LTE TDD Band 38/41 LTE CA Uplink (UL): 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, GPS, GLONASS, BDS, Galileo, FM receiver, NFC
Note: The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, And both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

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

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, 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 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 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 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 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)	2400 ~ 2483.5 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WWAN: Fix Internal Antenna WLAN: Fix Internal Antenna Bluetooth: Fix Internal Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		

EUT Stage	Portable Device	
Product	Type	
	☒ Production unit	☐ Identical prototype
Note: 1. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4/5G transmitter for held-to-ear exposure conditions. 2. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4/5G transmitter for near to body exposure conditions. 3. The reduction power details please refer section 8.7.		

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	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
5	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	KDB 941225 D05A v01r02	REL. 10 LTE SAR TEST GUIDANCE AND KDB INQUIRIES
8	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
9	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
10	KDB 865664 D02 v01r02	RF Exposure Reporting
11	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
12	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

Note: Compared with the EUT of test report BL-SZ22B0814-701, the EUT of this report update Model Name and FCC ID. Other hardware circuits and software are the same as EUT referred in test report BL-SZ22B0814-701.

Therefore, so all test data originate from the report BL-SZ22B0814-701, which was issued by Shenzhen BALUN Technology Co., Ltd. on Dec. 19, 2022.

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 (1 g Value)

Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
	Head	Body-worn Accessory	Hotspot	Head	Body-worn Accessory	Hotspot
GSM 850	0.57	**0.52**	1.16	1.08	0.52	1.19
GSM 1900	0.37	0.12	0.38			
WCDMA Band 4	0.52	0.30	0.85			
WCDMA Band 5	0.74	0.43	1.04			
LTE Band 4	0.79	0.30	0.89			
LTE Band 5	0.74	0.46	1.13			
LTE Band 12	0.60	0.19	0.48			
LTE Band 17	0.64	0.21	0.56			
LTE Band 26	0.76	0.36	0.92			
LTE Band 38	0.65	0.25	0.55			
LTE Band 41	0.86	0.32	0.61			
CA_41C	0.35	0.18	0.33			
2.4G WLAN	1.02	0.18	0.40			
5.2G WLAN	/	/	**1.19**			
5.3G WLAN	**1.03**	0.41	/			
5.6G WLAN	0.97	0.33	/			
Bluetooth	0.45	0.05	0.11			
Limit (W/kg)	1.6			1.6		
Verdict	PASS					

3.3.2 Highest Specific SAR (10 g Value)

Band	Maximum Scaled SAR (W/kg)	Maximum Report SAR (W/kg)
	Specific 10g	
WCDMA Band 4	1.62	2.65
LTE Band 4	1.97	
LTE Band 41	2.32	
5.3G WLAN	**2.65**	
5.6G WLAN	1.89	
Limit (W/kg)	4.0	4.0
Verdict	Pass	

3.3.3 Highest Simultaneous SAR

Note: The highest simultaneous SAR please refer section 12.

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 1.19 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 2.65 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

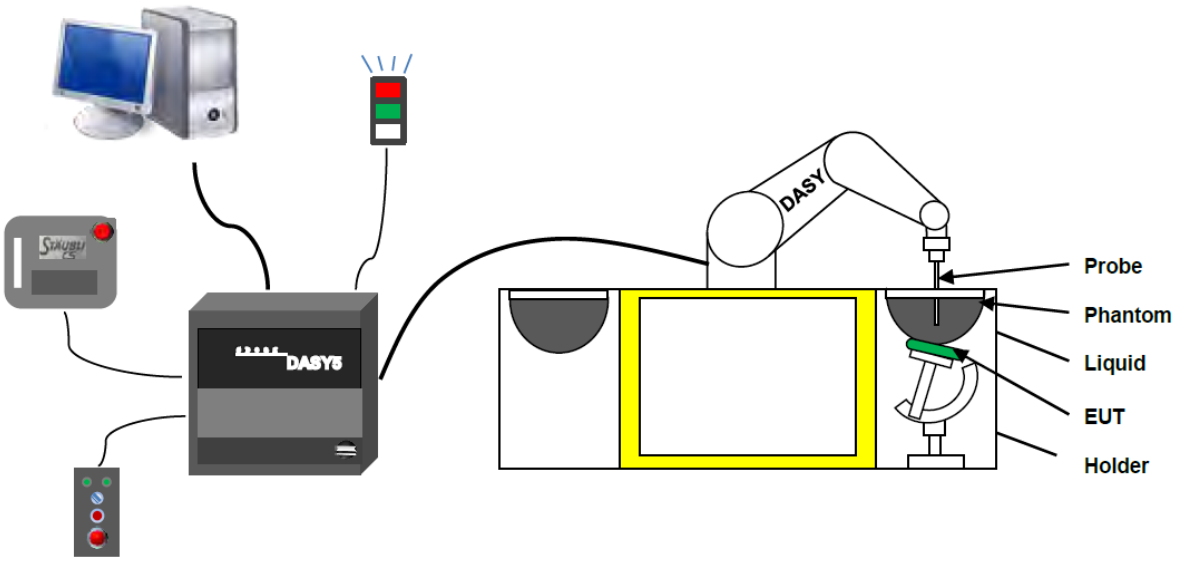
$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}\mathbf{E}^{2}}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

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

- High precision

  (repeatability ±0.02 mm)

- High reliability

  (industrial design)

- Low maintenance costs

  (virtually maintenance free due to direct drive gears; no belt drives)

- Jerk-free straight movements

  (brush less synchron motors; no stepper motors)

- Low ELF interference

  (motor control _elds shielded via the closed metallic construction shields)

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4-SN:7663 with following specifications is used.

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

E-Field Probe Calibration Process

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

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 systemBuilt-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 µW/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
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E-Field Probe Calibration Process

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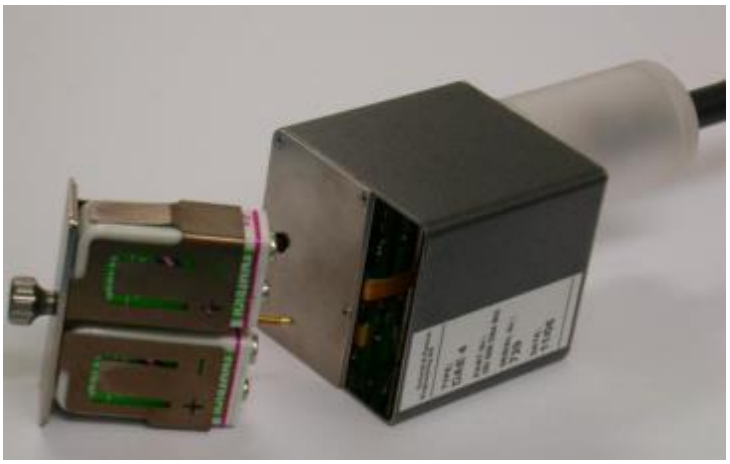
4.2.4 Data Acquisition Electronics

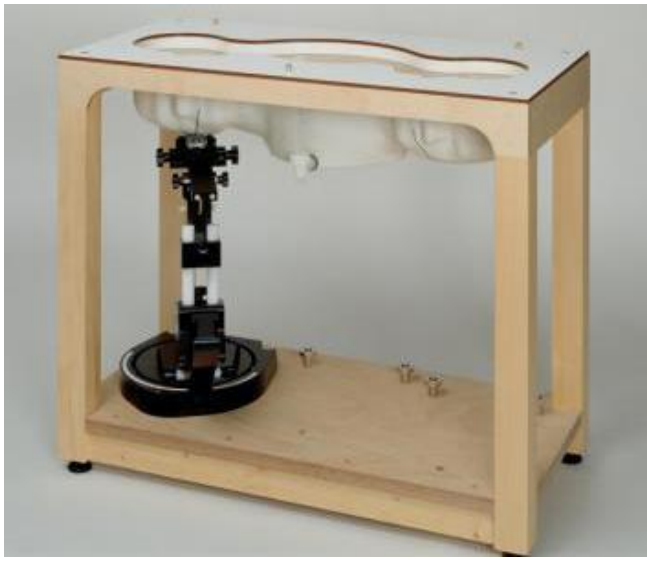
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



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

4.2.5 Phantoms

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



·Left hand

·Right hand

·Flat phantom

Photo of Phantom SN1857

Photo of Phantom SN1576

Serial Number	Material	Length	Height
SN 1857 SAM1	Vinylester, glass fiber reinforced	1000	500
SN 1576 SAM2	Vinylester, glass fiber reinforced	1000	500

4.2.6 Device Holder

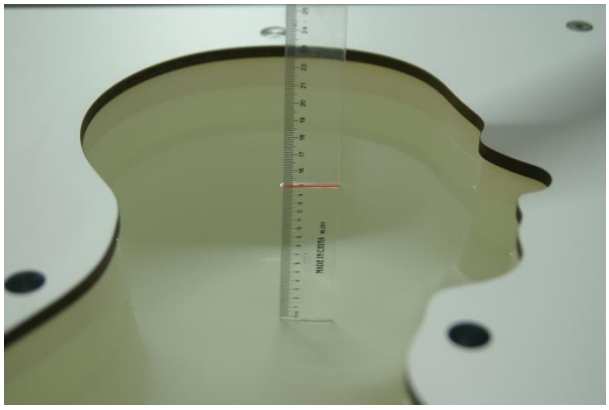
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three pair of bolts for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

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

4.2.7 Simulating Liquid

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

Head Liquid Depth



Body Liquid Depth

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

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

		(%)	(%)	σ (S/m)	ε
5200	78.60	21.40	/	5.54	47.86
5800	78.50	21.40	0.1	6.0	48.20

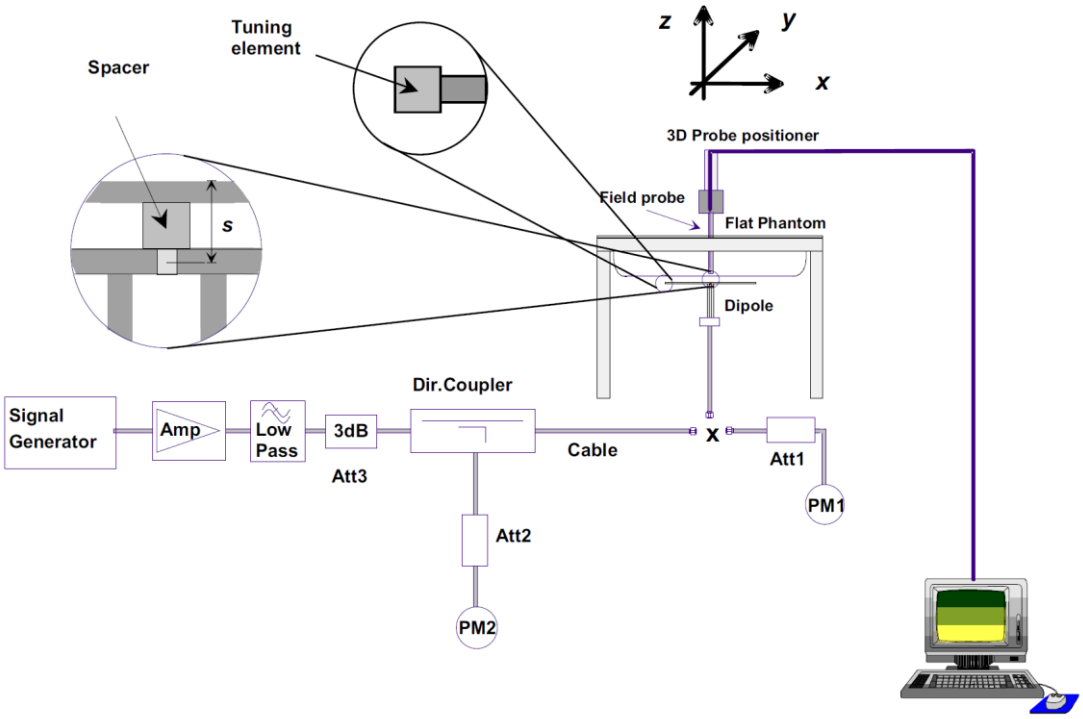
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

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

5.2 System Check Setup

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



6 TEST POSITION CONFIGURATIONS

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

6.1 Head Exposure Conditions

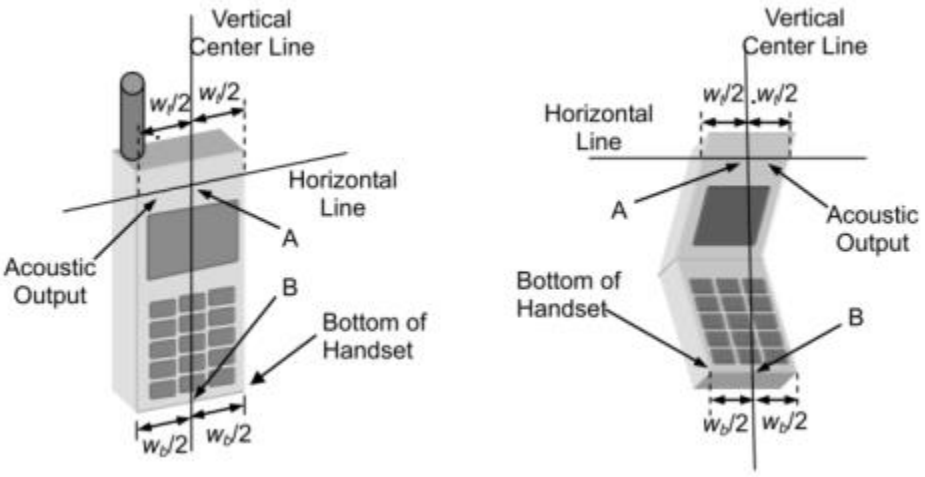
Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

6.1.1 Two Imaginary Lines on the Handset

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

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

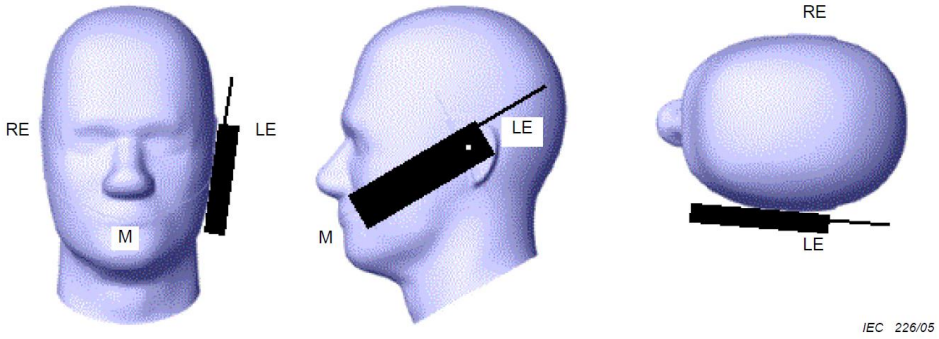
(c) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset,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



6.1.2 Cheek Position

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

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



6.1.3 Tilted Position

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

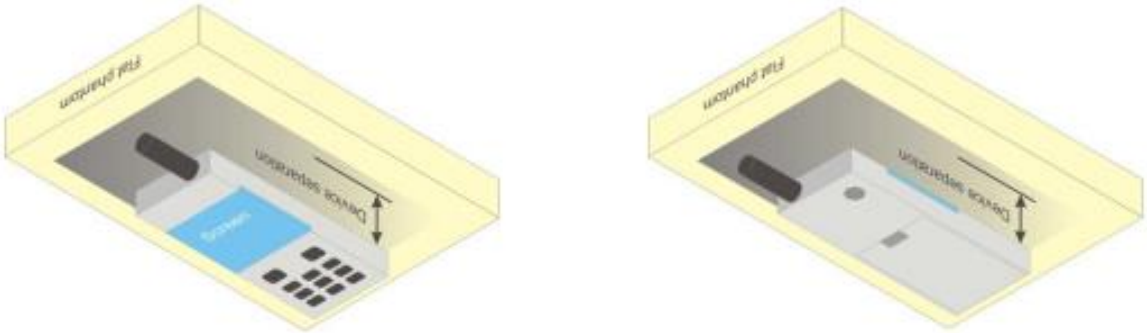
(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

6.2 Body-worn Position Conditions

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

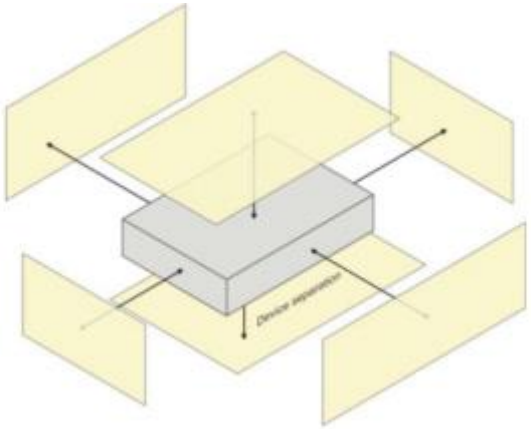
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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

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



6.3 Hotspot Mode Exposure Position Conditions

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



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 ≤ 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.

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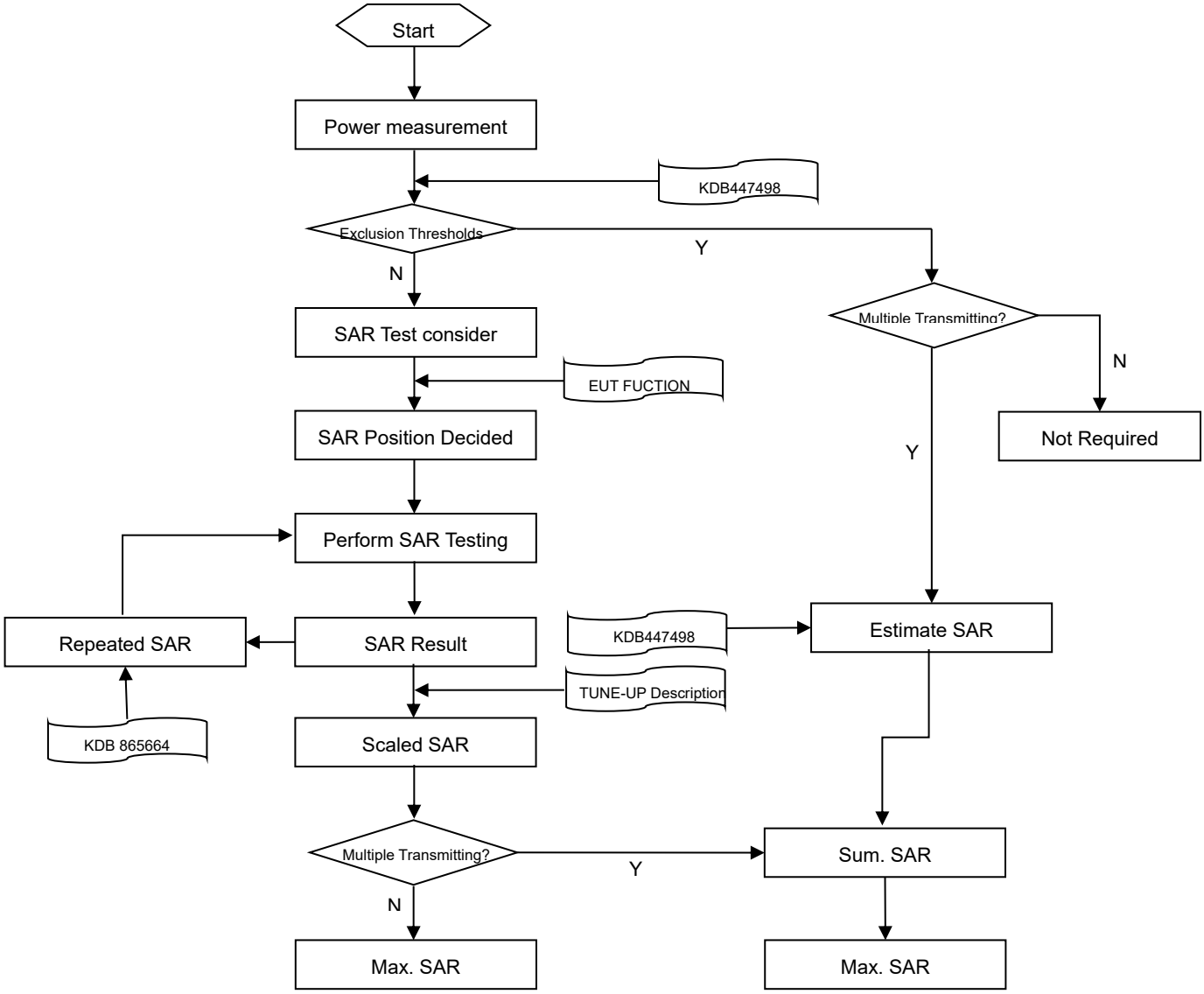
7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

<table>
<tr><th colspan="3"></th><th>≤3GHz</th><th>>3GHz</th></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5±1 mm</td><td>½·δ·ln(2)±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30°±1°</td><td>20°±1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx Area , Δy Area</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3–4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom</td><td>≤ 2 GHz: ≤ 8 mm
2 –3 GHz: ≤ 5 mm*</td><td>3–4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="6">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2" rowspan="3">uniform grid: Δz Zoom (n)</td><td rowspan="3">≤ 5 mm</td><td>3–4 GHz: ≤ 4 mm</td></tr>
<tr><td>4–5 GHz: ≤ 3 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="3">graded grid</td><td rowspan="2">Δz Zoom (1): between 1st two points closest to phantom surface</td><td rowspan="2">≤ 4 mm</td><td>3–4 GHz: ≤ 3 mm</td></tr>
<tr><td>4–5 GHz: ≤ 2.5 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td colspan="2">Δz Zoom (n>1): between subsequent points</td><td colspan="2">≤ 1.5·Δz Zoom (n-1)</td></tr>
<tr><td rowspan="3">Minimum zoom scan volume</td><td colspan="2" rowspan="3">x, y, z</td><td rowspan="3">≥30 mm</td><td>3–4 GHz: ≥ 28 mm</td></tr>
<tr><td>4–5 GHz: ≥ 25 mm</td></tr>
<tr><td>5–6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note:
1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

7.3 Measurement Procedure

The following steps are used for each test position

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

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

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

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

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

8 CONDUCTED RF OUPUT POWER

8.1 GSM

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 Normal Power

Note:
1. This devices supports intra-band uplink CA of 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 sectino6.2.2A.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 WIFI

8.5.1 2.4G WIFI Level 1

Band	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	15.07	16.50	Yes
		6	2437	15.44	16.50	Yes
		11	2462	**15.76**	16.50	Yes
	802.11g	1	2412	15.40	16.50	No
		6	2437	15.48	16.50	No
		11	2462	15.41	16.50	No
	802.11n(HT20)	1	2412	15.22	16.50	No
		6	2437	15.56	16.50	No
		11	2462	15.23	16.50	No
	802.11n(HT40)	3	2422	12.70	14.00	No
		6	2437	12.92	14.00	No
		9	2452	13.04	14.00	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 ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = 1.024 * (44.67mW/44.67mW) = 1.024 W/Kg, so 2.4G OFDM SAR test is not required.

8.5.2 2.4G WIFI Level 2

Band	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	12.24	13.00	Yes
		6	2437	**12.98**	13.00	Yes
		11	2462	12.45	13.00	Yes
	802.11g	1	2412	11.91	13.00	No
		6	2437	11.97	13.00	No
		11	2462	11.41	13.00	No
	802.11n(HT20)	1	2412	11.60	13.00	No
		6	2437	12.10	13.00	No
		11	2462	11.94	13.00	No
	802.11n(HT40)	3	2422	11.81	13.00	No
		6	2437	12.10	13.00	No
		9	2452	11.98	13.00	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 ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = 0.184 * (19.95mW/19.95mW) = 0.184 W/Kg, so 2.4G OFDM SAR test is not required.

8.5.3 2.4G WIFI Level 3

Band	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	15.07	17.00	Yes
		6	2437	15.44	17.00	Yes
		11	2462	**15.76**	17.00	Yes
	802.11g	1	2412	17.56	18.50	No
		6	2437	17.43	18.50	No
		11	2462	17.05	18.50	No
	802.11n(HT20)	1	2412	16.27	17.50	No
		6	2437	16.21	17.50	No
		11	2462	16.49	17.50	No
	802.11n(HT40)	3	2422	12.98	14.00	No
		6	2437	12.94	14.00	No
		9	2452	12.91	14.00	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 ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = 0.396 * (70.79mW/50.12mW) = 0.559 W/Kg, so 2.4G OFDM SAR test is not required.

8.5.4 2.4G WIFI Level 4

Band	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	15.07	16.50	Yes
		6	2437	15.44	16.50	Yes
		11	2462	**15.76**	16.50	Yes
	802.11g	1	2412	15.40	16.50	No
		6	2437	15.48	16.50	No
		11	2462	15.41	16.50	No
	802.11n(HT20)	1	2412	15.22	16.50	No
		6	2437	15.56	16.50	No
		11	2462	15.23	16.50	No
	802.11n(HT40)	3	2422	12.70	14.00	No
		6	2437	12.92	14.00	No
		9	2452	13.04	14.00	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 ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = 0.349 * (44.67mW/44.67mW) = 0.349 W/Kg, so 2.4G OFDM SAR test is not required.

8.5.5 5G WIFI Level 1

Band	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2	802.11a	36	5180	12.14	13.50	No
		44	5220	12.27	13.50	No
		48	5240	12.59	13.50	No
	802.11n(HT20)	36	5180	12.30	13.50	No
		44	5220	11.93	13.50	No
		48	5240	12.04	13.50	No
	802.11n(HT40)	38	5190	12.54	13.50	No
		46	5230	12.35	13.50	No
	802.11ac(VHT20)	36	5180	12.00	13.50	No
		44	5220	12.50	13.50	No
		48	5240	12.45	13.50	No
	802.11ac(VHT40)	38	5190	12.65	13.50	No
		46	5230	12.67	13.50	No
	802.11ac(VHT80)	42	5210	10.60	11.50	No
5.3	802.11a	52	5260	**12.25**	13.50	Yes
		60	5300	11.91	13.50	Yes
		64	5320	12.18	13.50	Yes
	802.11n(HT20)	52	5260	12.06	13.50	No
		60	5300	11.95	13.50	No
		64	5320	12.70	13.50	No
	802.11n(HT40)	54	5270	13.36	13.50	No
		62	5310	12.91	13.50	No
	802.11ac(VHT20)	52	5260	12.44	13.50	No
		60	5300	12.68	13.50	No
		64	5320	12.20	13.50	No
	802.11ac(VHT40)	54	5270	12.62	13.50	No
		62	5310	12.58	13.50	No
	802.11ac(VHT80)	58	5290	10.56	11.50	No
5.6	802.11a	100	5500	12.07	13.50	No
		116	5580	12.52	13.50	No
		140	5700	12.56	13.50	No
	802.11n(HT20)	100	5500	12.03	13.50	No
		116	5580	12.61	13.50	No
		140	5700	12.24	13.50	No
	802.11n(HT40)	102	5510	13.36	13.50	No
		118	5590	13.29	13.50	No

		134	5670	12.94	13.50	No
	802.11ac(VHT20)	100	5500	12.70	13.50	No
		116	5580	12.22	13.50	No
		140	5700	12.55	13.50	No
	802.11ac(VHT40)	102	5510	12.23	13.50	Yes
		118	5590	**12.64**	13.50	Yes
		134	5670	12.62	13.50	Yes
	802.11ac(VHT80)	106	5530	10.07	11.50	No
		122	5610	10.41	11.50	No
		138	5690	10.38	11.50	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 ≤ 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.						

8.5.6 5G WIFI Level 2

Band	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2	802.11a	36	5180	9.83	10.50	No
		44	5220	9.45	10.50	No
		48	5240	9.72	10.50	No
	802.11n(HT20)	36	5180	10.16	10.50	No
		44	5220	10.18	10.50	No
		48	5240	10	10.50	No
	802.11n(HT40)	38	5190	9.51	10.50	No
		46	5230	10	10.50	No
	802.11ac(VHT20)	36	5180	10.06	10.50	No
		44	5220	10.13	10.50	No
		48	5240	10.15	10.50	No
	802.11ac(VHT40)	38	5190	9.6	10.50	No
		46	5230	9.41	10.50	No
	802.11ac(VHT80)	42	5210	9.86	10.50	No
5.3	802.11a	52	5260	9.52	10.50	Yes
		60	5300	10.17	10.50	Yes
		64	5320	9.42	10.50	Yes
	802.11n(HT20)	52	5260	9.72	10.50	No
		60	5300	9.53	10.50	No
		64	5320	9.41	10.50	No
	802.11n(HT40)	54	5270	9.97	10.50	No
		62	5310	9.45	10.50	No
	802.11ac(VHT20)	52	5260	9.68	10.50	No
		60	5300	9.92	10.50	No
		64	5320	9.45	10.50	No
	802.11ac(VHT40)	54	5270	9.99	10.50	No
		62	5310	9.46	10.50	No
	802.11ac(VHT80)	58	5290	**10.24**	10.50	No
5.6	802.11a	100	5500	9.92	10.50	No
		116	5580	9.59	10.50	No
		140	5700	10.09	10.50	No
	802.11n(HT20)	100	5500	9.8	10.50	No
		116	5580	9.7	10.50	No
		140	5700	9.81	10.50	No
	802.11n(HT40)	102	5510	10.03	10.50	No
		118	5590	9.68	10.50	No

		134	5670	9.7	10.50	No
	802.11ac(VHT20)	100	5500	9.8	10.50	No
		116	5580	9.43	10.50	No
		140	5700	10.01	10.50	No
	802.11ac(VHT40)	102	5510	9.94	10.50	Yes
		118	5590	10.09	10.50	Yes
		134	5670	9.64	10.50	Yes
	802.11ac(VHT80)	106	5530	10.03	10.50	No
		122	5610	9.49	10.50	No
		138	5690	**10.38**	10.50	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 ≤ 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.						

8.5.7 5G WIFI Level 3

Band	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2	802.11a	36	5180	**17.12**	19.00	Yes
		44	5220	17.08	19.00	Yes
		48	5240	17.02	19.00	Yes
	802.11n(HT20)	36	5180	17.11	18.50	No
		44	5220	17.45	18.50	No
		48	5240	17.65	18.50	No
	802.11n(HT40)	38	5190	16.00	17.00	No
		46	5230	16.02	17.00	No
	802.11ac(VHT20)	36	5180	17.51	18.50	No
		44	5220	17.41	18.50	No
		48	5240	17.37	18.50	No
	802.11ac(VHT40)	38	5190	15.58	17.00	No
		46	5230	16.00	17.00	No
	802.11ac(VHT80)	42	5210	10.34	11.50	No
5.3	802.11a	52	5260	17.07	19.00	Yes
		60	5300	17.29	19.00	Yes
		64	5320	**17.46**	19.00	Yes
	802.11n(HT20)	52	5260	17.01	18.50	No
		60	5300	17.69	18.50	No
		64	5320	17.57	18.50	No
	802.11n(HT40)	54	5270	16.14	17.00	No
		62	5310	15.96	17.00	No
	802.11ac(VHT20)	52	5260	17.47	18.50	No
		60	5300	17.44	18.50	No
		64	5320	17.44	18.50	No
	802.11ac(VHT40)	54	5270	16.11	17.00	No
		62	5310	15.45	17.00	No
	802.11ac(VHT80)	58	5290	10.04	11.50	No
5.6	802.11a	100	5500	18.20	19.00	No
		116	5580	17.86	19.00	No
		140	5700	18.51	19.00	No
	802.11n(HT20)	100	5500	17.43	18.50	No
		116	5580	17.29	18.50	No
		140	5700	17.45	18.50	No
	802.11n(HT40)	102	5510	15.72	17.00	No
		118	5590	15.86	17.00	No

		134	5670	15.86	17.00	No
	802.11ac(VHT20)	100	5500	17.32	18.50	No
		116	5580	17.58	18.50	No
		140	5700	17.41	18.50	No
	802.11ac(VHT40)	102	5510	**16.07**	17.00	Yes
		118	5590	15.51	17.00	Yes
		134	5670	15.49	17.00	Yes
	802.11ac(VHT80)	106	5530	10.70	11.50	No
		122	5610	10.12	11.50	No
		138	5690	10.24	11.50	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 ≤ 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.						

8.5.8 5G WIFI Level 4

Band	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2	802.11a	36	5180	12.14	13.50	No
		44	5220	12.27	13.50	No
		48	5240	12.59	13.50	No
	802.11n(HT20)	36	5180	12.30	13.50	No
		44	5220	11.93	13.50	No
		48	5240	12.04	13.50	No
	802.11n(HT40)	38	5190	12.54	13.50	No
		46	5230	12.35	13.50	No
	802.11ac(VHT20)	36	5180	12.00	13.50	No
		44	5220	12.50	13.50	No
		48	5240	12.45	13.50	No
	802.11ac(VHT40)	38	5190	12.65	13.50	No
		46	5230	12.67	13.50	No
	802.11ac(VHT80)	42	5210	10.60	11.50	No
5.3	802.11a	52	5260	**12.25**	13.50	Yes
		60	5300	11.91	13.50	Yes
		64	5320	12.18	13.50	Yes
	802.11n(HT20)	52	5260	12.06	13.50	No
		60	5300	11.95	13.50	No
		64	5320	12.70	13.50	No
	802.11n(HT40)	54	5270	13.36	13.50	No
		62	5310	12.91	13.50	No
	802.11ac(VHT20)	52	5260	12.44	13.50	No
		60	5300	12.68	13.50	No
		64	5320	12.20	13.50	No
	802.11ac(VHT40)	54	5270	12.62	13.50	No
		62	5310	12.58	13.50	No
	802.11ac(VHT80)	58	5290	10.56	11.50	No
5.6	802.11a	100	5500	12.07	13.50	No
		116	5580	12.52	13.50	No
		140	5700	12.56	13.50	No
	802.11n(HT20)	100	5500	12.03	13.50	No
		116	5580	12.61	13.50	No
		140	5700	12.24	13.50	No
	802.11n(HT40)	102	5510	13.36	13.50	No
		118	5590	13.29	13.50	No

		134	5670	12.94	13.50	No
	802.11ac(VHT20)	100	5500	12.70	13.50	No
		116	5580	12.22	13.50	No
		140	5700	12.55	13.50	No
	802.11ac(VHT40)	102	5510	12.23	13.50	Yes
		118	5590	**12.64**	13.50	Yes
		134	5670	12.62	13.50	Yes
	802.11ac(VHT80)	106	5530	10.07	11.50	No
		122	5610	10.41	11.50	No
		138	5690	10.38	11.50	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 ≤ 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.						

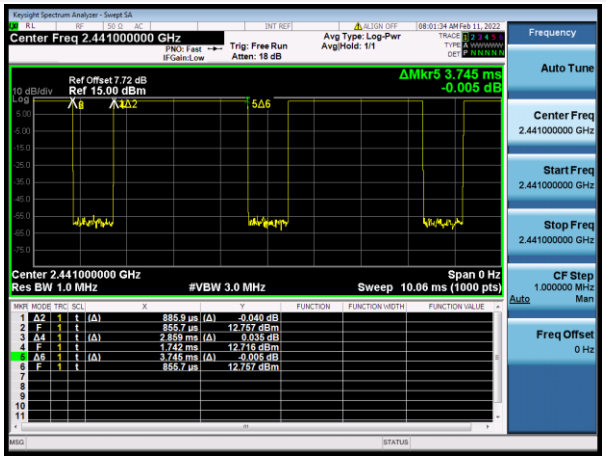
8.6 Bluetooth

Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	14.14	14.17	**14.48**	12.51	12.59	12.66
Tune-Up Limit (dBm)	15.00	15.00	15.00	15.00	15.00	15.00
SAR Test Require	Yes	Yes	Yes	No	No	No
Mode	8-DPSK			BLE		
Channel	0	39	78	0	19	39
Frequency (MHz)	2402	2441	2480	2402	2440	2480
Average Power (dBm)	12.53	12.59	12.75	7.51	7.87	9.08
Tune-Up Limit (dBm)	13.00	13.00	13.00	11.00	11.00	11.00
SAR Test Require	No	No	No	No	No	No

Note: The Bluetooth duty cycle is 76.34 % 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 Test plots

GFSK



8.7 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.This device uses the P-sensor to detect Body-worn, Hotspot and Specific state for Antenna7.
4. The power reduction state of the head is consistent with the power reduction of the body's P-Sensor trigger state

WWAN Antenna Reduced power level table

Reduced level	Receiver state	Transmitting conditions
State17	Off (Body scenario)	WWAN Use Only WWAN+WLAN/BT
State18	On (head scenario)	WWAN Use Only WWAN+WLAN/BT

WWAN Antenna Power table

Mode	Antenna	Full Power (dBm)	Receiver on		Receiver off	
			Head		Body	
			Standalone	Simultaneous transmission	Standalone	Simultaneous transmission
				WWAN+WLAN/BT		WWAN+WLAN/BT
			State18		State17	
GSM 850	Ant1	32.80	27.80		32.80	
GPRS850 1 Tx Slot	Ant1	32.80	27.80		32.80	
GPRS850 2 Tx Slots	Ant1	30.30	25.30		30.30	
GPRS850 3 Tx Slots	Ant1	28.30	23.80		28.30	
GPRS850 4 Tx Slots	Ant1	27.80	23.20		27.80	
EGPRS850 1 Tx Slot	Ant1	27.30	27.30		27.30	
EGPRS850 2 Tx Slots	Ant1	25.30	25.30		25.30	
EGPRS850 3 Tx Slots	Ant1	23.30	23.30		23.30	
EGPRS850 4 Tx Slots	Ant1	22.80	22.80		22.80	
GSM 850	Ant0	32.80	32.80		32.80	
GPRS850 1 Tx Slot	Ant0	32.80	32.80		32.80	

GPRS850 2 Tx Slots	Ant0	30.30	30.30	30.30
GPRS850 3 Tx Slots	Ant0	28.30	28.30	28.30
GPRS850 4 Tx Slots	Ant0	27.80	27.80	27.80
EGPRS850 1 Tx Slot	Ant0	27.30	27.30	27.30
EGPRS850 2 Tx Slots	Ant0	25.30	25.30	25.30
EGPRS850 3 Tx Slots	Ant0	23.30	23.30	23.30
EGPRS850 4 Tx Slots	Ant0	22.80	22.80	22.80
GSM 1900	Ant2	29.70	27.20	29.70
GPRS1900 1 Tx Slot	Ant2	29.70	27.20	29.70
GPRS1900 2 Tx Slots	Ant2	27.20	24.70	27.20
GPRS1900 3 Tx Slots	Ant2	25.20	22.70	25.20
GPRS1900 4 Tx Slots	Ant2	24.70	22.20	24.70
EGPRS1900 1 Tx Slot	Ant2	27.20	24.70	27.20
EGPRS1900 2 Tx Slots	Ant2	25.20	22.70	25.20
EGPRS1900 3 Tx Slots	Ant2	23.70	21.20	23.70
EGPRS1900 4 Tx Slots	Ant2	22.70	20.20	22.70
GSM 1900	Ant0	29.70	29.70	28.70
GPRS1900 1 Tx Slot	Ant0	29.70	29.70	28.70
GPRS1900 2 Tx Slots	Ant0	26.20	26.20	25.20
GPRS1900 3 Tx Slots	Ant0	24.70	24.70	23.70
GPRS1900 4 Tx Slots	Ant0	23.20	23.20	22.20
EGPRS1900 1 Tx Slot	Ant0	27.20	27.20	27.20
EGPRS1900 2 Tx Slots	Ant0	24.20	24.20	24.20
EGPRS1900 3 Tx Slots	Ant0	22.80	22.80	22.80
EGPRS1900 4 Tx Slots	Ant0	22.20	22.20	22.20
WCDMA Band4 RMC	Ant2	21.70	20.20	21.70
HSDPA Subtest-1	Ant2	20.70	19.20	20.70
HSDPA Subtest-2	Ant2	20.70	19.20	20.70
HSDPA Subtest-3	Ant2	20.20	18.70	20.20
HSDPA Subtest-4	Ant2	20.20	18.70	20.20

HSUPA Subtest-1	Ant2	20.70	19.20	20.70
HSUPA Subtest-2	Ant2	18.70	17.20	18.70
HSUPA Subtest-3	Ant2	19.70	18.20	19.70
HSUPA Subtest-4	Ant2	18.70	17.20	18.70
HSUPA Subtest-5	Ant2	20.70	19.20	20.70
WCDMA Band4 RMC	Ant0	24.20	24.20	21.70
HSDPA Subtest-1	Ant0	23.20	23.20	20.70
HSDPA Subtest-2	Ant0	23.20	23.20	20.70
HSDPA Subtest-3	Ant0	22.70	22.70	20.20
HSDPA Subtest-4	Ant0	22.70	22.70	20.20
HSUPA Subtest-1	Ant0	23.20	23.20	20.70
HSUPA Subtest-2	Ant0	20.70	20.70	18.70
HSUPA Subtest-3	Ant0	21.70	21.70	19.70
HSUPA Subtest-4	Ant0	20.70	20.70	18.70
HSUPA Subtest-5	Ant0	23.20	23.20	20.70
WCDMA Band5 RMC	Ant1	24.10	20.60	24.10
HSDPA Subtest-1	Ant1	23.10	19.60	23.10
HSDPA Subtest-2	Ant1	23.10	19.60	23.10
HSDPA Subtest-3	Ant1	22.60	19.10	22.60
HSDPA Subtest-4	Ant1	22.60	19.10	22.60
HSUPA Subtest-1	Ant1	23.10	19.60	23.10
HSUPA Subtest-2	Ant1	21.10	17.60	21.10
HSUPA Subtest-3	Ant1	22.10	18.60	22.10
HSUPA Subtest-4	Ant1	21.10	17.60	21.10
HSUPA Subtest-5	Ant1	23.10	19.60	23.10
WCDMA Band5 RMC	Ant0	24.60	24.60	24.60
HSDPA Subtest-1	Ant0	23.60	23.60	23.60
HSDPA Subtest-2	Ant0	23.60	23.60	23.60
HSDPA Subtest-3	Ant0	23.10	23.10	23.10
HSDPA Subtest-4	Ant0	23.10	23.10	23.10

HSUPA Subtest-1	Ant0	23.60	23.60	23.60
HSUPA Subtest-2	Ant0	21.60	21.60	21.60
HSUPA Subtest-3	Ant0	22.60	22.60	22.60
HSUPA Subtest-4	Ant0	21.60	21.60	21.60
HSUPA Subtest-5	Ant0	23.60	23.60	23.60
LTE Band4	Ant2	22.00	21.00	22.00
LTE Band4	Ant0	24.50	24.50	22.50
LTE Band5	Ant1	24.30	20.80	24.30
LTE Band5	Ant0	24.80	24.80	24.80
LTE Band12	Ant1	24.00	23.00	24.00
LTE Band12	Ant0	24.00	24.00	24.00
LTE Band17	Ant1	24.00	23.00	24.00
LTE Band17	Ant0	24.00	24.00	24.00
LTE Band26	Ant1	24.90	20.90	24.90
LTE Band26	Ant0	24.90	24.90	24.90
LTE Band38	Ant2	23.50	22.00	23.50
LTE Band38	Ant0	24.00	24.00	24.00
LTE Band41	Ant2	26.00	23.50	26.00
LTE Band41	Ant3	20.00	15.00	20.00
LTE Band41	Ant0	26.00	26.00	26.00

WLAN Antenna7 Reduced power level table

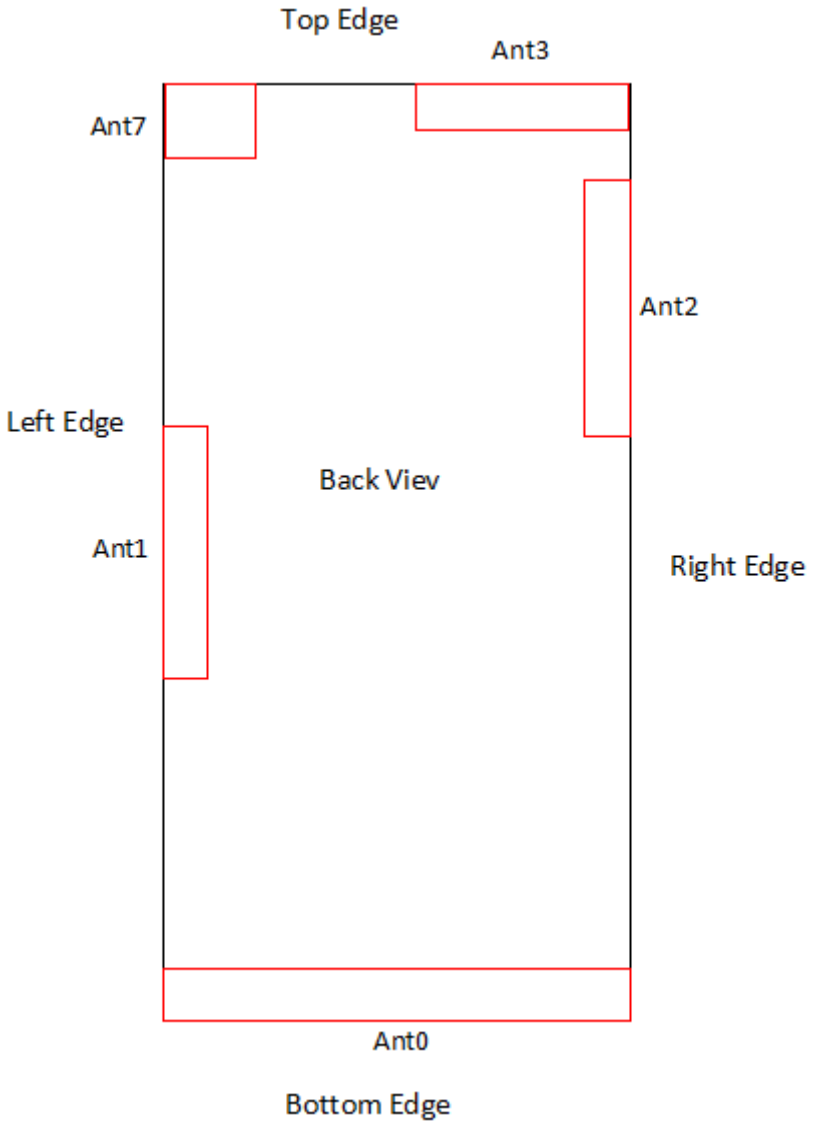
Reduced level	Receiver state	Transmitting conditions
Level 1	On (head scenario)	WLAN Use Only
Level 2	On (head scenario)	WWAN + WLAN
Level 3	Off (Body scenario)	WLAN Use Only
Level 4	Off (Body scenario)	WWAN + WLAN

WLAN Reduced power level table

Mode	Full Power (dBm)	WLAN Antenna			
		Receiver on		Receiver off	
		Head		Body	
		Standalone	Simultaneous transmission 2.4G+5G	Standalone	Simultaneous transmission 2.4G+5G
		Level 1	Level 2	Level 3	Level 4
2.4G WLAN 802.11b	17.00	16.50	13.00	17.00	16.50
2.4G WLAN 802.11g	18.50	16.50	13.00	18.50	16.50
2.4G WLAN 802.11n20	17.50	16.50	13.00	17.50	16.50
2.4G WLAN 802.11n40	14.00	14.00	13.00	14.00	14.00
2.4G WLAN 802.11ac20	17.50	16.50	13.00	17.50	16.50
2.4G WLAN 802.11ac40	15.00	15.00	13.00	15.00	15.00
5.2G WLAN 802.11a	19.00	13.50	10.50	19.00	13.50
5.2G WLAN 802.11n20	18.50	13.50	10.50	18.50	13.50
5.2G WLAN 802.11n40	17.00	13.50	10.50	17.00	13.50
5.2G WLAN 802.11ac20	18.50	13.50	10.50	18.50	13.50
5.2G WLAN 802.11ac40	17.00	13.50	10.50	17.00	13.50
5.2G WLAN 802.11ac80	11.50	11.50	10.50	11.50	11.50
5.3G WLAN 802.11a	19.00	13.50	10.50	19.00	13.50
5.3G WLAN 802.11n20	18.50	13.50	10.50	18.50	13.50

5.3G WLAN 802.11n40	17.00	13.50	10.50	17.00	13.50
5.3G WLAN 802.11ac20	18.50	13.50	10.50	18.50	13.50
5.3G WLAN 802.11ac40	17.00	13.50	10.50	17.00	13.50
5.3G WLAN 802.11ac80	11.50	11.50	10.50	11.50	11.50
5.6G WLAN 802.11a	19.00	13.50	10.50	19.00	13.50
5.6G WLAN 802.11n20	18.50	13.50	10.50	18.50	13.50
5.6G WLAN 802.11n40	17.00	13.50	10.50	17.00	13.50
5.6G WLAN 802.11ac20	18.50	13.50	10.50	18.50	13.50
5.6G WLAN 802.11ac40	17.00	13.50	10.50	17.00	13.50
5.6G WLAN 802.11ac80	11.50	11.50	10.50	11.50	11.50
Bluetooth	15.00	15.00	15.00	15.00	15.00

9 TEST EXCLUSION CONSIDERATION



Antenna	Support Bands
ANT0	GSM850/GSM1900
	WCDMA B4/5
	LTE B4/5/12/17/26/38/41
ANT1	GSM850
	WCDMA B5
	LTE B5/12/17/26
ANT2	GSM1900
	WCDMA B4
	LTE B4/38/41

ANT3	LTE B41
ANT7	WIFI2.4G/WIFI5G/BT

Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
ANT0	<5	<5	<5	<5	>25	<5
ANT1	<5	<5	<5	>25	>25	>25
ANT2	<5	<5	>25	<5	<5	>25
ANT3	<5	<5	>25	<5	<5	>25
ANT7	<5	<5	<5	>25	<5	>25

9.1 SAR Test Exclusion Consideration Table

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

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	32.80	1905.46	Yes	Yes	Yes	Yes	No	Yes
GSM 1900	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	Data	29.70	933.25	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 4	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	RMC	24.20	263.03	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	RMC	24.60	288.40	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	24.80	302.00	Yes	Yes	Yes	Yes	No	Yes
LTE Band 12	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 17	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 26	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	24.90	309.03	Yes	Yes	Yes	Yes	No	Yes
LTE Band 38	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 41	Distance to User			<5mm	<5mm	<5mm	<5mm	>25mm	<5mm
	QPSK	26.00	398.11	Yes	Yes	Yes	Yes	No	Yes

ANT 1

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	>25mm	>25mm	>25mm
	Data	32.80	1905.46	Yes	Yes	Yes	No	No	No
WCDMA Band 5	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	RMC	24.10	257.04	Yes	Yes	Yes	No	No	No
LTE Band 5	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	QPSK	24.30	269.15	Yes	Yes	Yes	No	No	No
LTE Band 12	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	QPSK	24.00	251.19	Yes	Yes	Yes	No	No	No
LTE Band 17	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	QPSK	24.00	251.19	Yes	Yes	Yes	No	No	No
LTE Band 26	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	QPSK	24.90	309.03	Yes	Yes	Yes	No	No	No

ANT 2

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 1900	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	Data	29.30	851.14	Yes	Yes	No	Yes	Yes	No
WCDMA Band 4	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	RMC	21.70	147.91	Yes	Yes	No	Yes	Yes	No
LTE Band 4	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	QPSK	22.00	158.49	Yes	Yes	No	Yes	Yes	No
LTE Band 38	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	QPSK	23.50	223.87	Yes	Yes	No	Yes	Yes	No
LTE Band 41	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	QPSK	26.00	398.11	Yes	Yes	No	Yes	Yes	No

ANT 3

Band	Mode	Max. Peak Power		Test Position Configurations					
				Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
		dBm	mW						
LTE Band 41	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	QPSK	22.00	158.49	Yes	Yes	No	Yes	Yes	No

ANT 7

Band	Mode	Max. Peak Power		Test Position Configurations					
				Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
		dBm	mW						
WLAN 2.4 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11b	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11g	18.50	70.79	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	17.50	56.23	Yes	Yes	Yes	No	Yes	No
	802.11n(HT40)	14.00	25.12	Yes	Yes	Yes	No	Yes	No
WLAN 5.2 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	19.00	79.43	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	18.50	70.79	Yes	Yes	Yes	No	Yes	No
	802.11n(HT40)	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT20)	18.50	70.79	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT40)	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT80)	11.50	14.13	Yes	Yes	Yes	No	Yes	No
WLAN 5.3 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	19.00	79.43	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	18.50	70.79	Yes	Yes	Yes	No	Yes	No
	802.11n(HT40)	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT20)	18.50	70.79	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT40)	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT80)	11.50	14.13	Yes	Yes	Yes	No	Yes	No
WLAN 5.8 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	19.00	79.43	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	18.50	70.79	Yes	Yes	Yes	No	Yes	No
	802.11n(HT40)	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT20)	18.50	70.79	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT40)	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11ac(VHT80)	11.50	14.13	Yes	Yes	Yes	No	Yes	No
Bluetooth	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	BT	15.00	31.62	Yes	Yes	Yes	No	Yes	No

Note:

1. Maximum power is the source-based time-average power and represents the maximum RF output power including tune-up tolerance among production units
2. Per KDB 447498 D01, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D01, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is < 5mm, 5mm is used to determine SAR exclusion threshold
4. Per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
   a. f(GHz) is the RF channel transmit frequency in GHz
   b. Power and distance are rounded to the nearest mW and mm before calculation
   c. The result is rounded to one decimal place for comparison
   d. For < 50 mm distance, we just calculate mW of the exclusion threshold value (3.0) to do compare.
   This formula is [3.0] / [√f(GHz)] ·[(min. test separation distance, mm)] = exclusion threshold of mW.
5. Per KDB 447498 D01, at 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following
   a. [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·(f(MHz)/150)] mW, at 100 MHz to 1500 MHz
   b. [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
6. Per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA /HSUPA /DC-HSDPA output power is < 0.25dB higher than RMC12.2Kbps, or reported SAR with RMC 12.2kbps setting is ≤ 1.2W/kg, HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
7. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
8. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
   a. When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
   b. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
9. 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 ≤ 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 ≤ 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.

10 TEST RESULT

10.1 GSM 850

Antenna	Reduced power 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.
Head													
Ant.1	state18	GPRS 4 slots	Left Cheek	0	190	836.6	0.04	0.328	23.08	23.20	1.028	0.337	/
	state18		Left Tilt	0	190	836.6	0.14	0.072	23.08	23.20	1.028	0.074	/
	state18		Right Cheek	0	190	836.6	-0.03	0.553	23.08	23.20	1.028	**0.569**	1#
	state18		Right Tilt	0	190	836.6	-0.13	0.118	23.08	23.20	1.028	0.121	/
Ant.0	state18	GPRS 4 slots	Left Cheek	0	128	824.2	0.17	0.195	27.50	27.80	1.072	0.209	/
	state18		Left Tilt	0	128	824.2	-0.19	0.107	27.50	27.80	1.072	0.115	/
	state18		Right Cheek	0	128	824.2	-0.02	0.128	27.50	27.80	1.072	0.137	/
	state18		Right Tilt	0	128	824.2	0.04	0.074	27.50	27.80	1.072	0.079	/
Body-worn													
Ant.1	state17	GPRS 4 slots	Front Side	15	190	836.6	-0.07	0.413	27.54	27.80	1.062	0.438	/
	state17		Back Side	15	190	836.6	-0.02	0.487	27.54	27.80	1.062	**0.517**	2#
Ant.0	state17	GPRS 4 slots	Front Side	15	128	824.2	0.05	0.160	27.50	27.80	1.072	0.171	/
	state17		Back Side	15	128	824.2	0.02	0.191	27.50	27.80	1.072	0.205	/
Hotspot													
Ant.1	state17	GPRS 4 slots	Front Side	10	190	836.6	-0.10	0.821	27.54	27.80	1.062	0.872	/
	state17			10	128	824.2	0.04	0.763	27.31	27.80	1.120	0.854	/
	state17			10	251	848.8	-0.09	0.749	27.19	27.80	1.151	0.862	/
	state17		Back Side	10	190	836.6	0.04	1.010	27.54	27.80	1.062	1.072	/
	state17			10	128	824.2	0.12	0.924	27.31	27.80	1.120	1.035	/
	state17			10	251	848.8	-0.08	0.975	27.19	27.80	1.151	1.122	/
	state17		Left Edge	10	190	836.6	0.07	1.090	27.54	27.80	1.062	**1.157**	3#
	state17			10	128	824.2	0.14	0.939	27.31	27.80	1.120	1.051	/
	state17			10	251	848.8	0.03	0.955	27.19	27.80	1.151	1.099	/
Ant.0	state17	GPRS 4 slots	Front Side	10	128	824.2	-0.03	0.298	27.50	27.80	1.072	0.319	/
	state17		Back Side	10	128	824.2	0.11	0.341	27.50	27.80	1.072	0.365	/
	state17		Left Edge	10	128	824.2	-0.13	0.191	27.50	27.80	1.072	0.205	/
	state17		Right Edge	10	128	824.2	0.15	0.280	27.50	27.80	1.072	0.300	/
	state17		Bottom Edge	10	128	824.2	0.00	0.294	27.50	27.80	1.072	0.315	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.2 GSM 1900

Antenna	Reduced power 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.
Head													
Ant.2	state18	GPRS 4 slots	Left Cheek	0	810	1909.8	0.11	0.299	21.33	22.20	1.222	0.365	/
	state18		Left Tilt	0	810	1909.8	-0.14	0.069	21.33	22.20	1.222	0.084	/
	state18		Right Cheek	0	810	1909.8	0.09	0.301	21.33	22.20	1.222	**0.368**	4#
	state18		Right Tilt	0	810	1909.8	0.06	0.117	21.33	22.20	1.222	0.143	/
Ant.0	state18	GPRS 1 slots	Left Cheek	0	810	1909.8	-0.03	0.072	29.62	29.70	1.019	0.073	/
	state18		Left Tilt	0	810	1909.8	0.04	0.045	29.62	29.70	1.019	0.046	/
	state18		Right Cheek	0	810	1909.8	0.06	0.041	29.62	29.70	1.019	0.042	/
	state18		Right Tilt	0	810	1909.8	-0.18	0.029	29.62	29.70	1.019	0.030	/
Body-worn													
Ant.2	state17	GPRS 4 slots	Front Side	15	810	1909.8	0.13	0.066	23.62	24.70	1.282	0.085	/
	state17		Back Side	15	810	1909.8	0.06	0.086	23.62	24.70	1.282	0.110	/
Ant.0	state17	GPRS 1 slots	Front Side	15	810	1909.8	0.03	0.078	28.69	28.70	1.002	0.078	/
	state17		Back Side	15	810	1909.8	0.07	0.123	28.69	28.70	1.002	**0.123**	5#
Hotspot													
Ant.2	state17	GPRS 4 slots	Front Side	10	810	1909.8	-0.03	0.175	23.62	24.70	1.282	0.224	/
	state17		Back Side	10	810	1909.8	0.08	0.211	23.62	24.70	1.282	0.271	/
	state17		Right Edge	10	810	1909.8	-0.12	0.279	23.62	24.70	1.282	0.358	/
	state17		Top Edge	10	810	1909.8	-0.08	0.040	23.62	24.70	1.282	0.051	/
Ant.0	state17	GPRS 1 slots	Front Side	10	810	1909.8	0.13	0.193	28.69	28.70	1.002	0.193	/
	state17		Back Side	10	810	1909.8	0.17	0.295	28.69	28.70	1.002	0.296	/
	state17		Left Edge	10	810	1909.8	-0.15	0.078	28.69	28.70	1.002	0.078	/
	state17		Right Edge	10	810	1909.8	0.10	0.092	28.69	28.70	1.002	0.092	/
	state17		Bottom Edge	10	810	1909.8	0.11	0.382	28.69	28.70	1.002	**0.383**	6#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.3WCDMA Band 4

Antenna	Reduced power 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.
Head													
Ant.2	state18	RMC	Left Cheek	0	1513	1752.6	0.19	0.413	19.77	20.20	1.104	0.456	/
	state18		Left Tilt	0	1513	1752.6	0.07	0.086	19.77	20.20	1.104	0.095	/
	state18		Right Cheek	0	1513	1752.6	0.09	0.475	19.77	20.20	1.104	**0.524**	7#
	state18		Right Tilt	0	1513	1752.6	0.15	0.123	19.77	20.20	1.104	0.136	/
Ant.0	state18	RMC	Left Cheek	0	1513	1752.6	-0.14	0.131	23.70	24.20	1.122	0.147	/
	state18		Left Tilt	0	1513	1752.6	-0.10	0.072	23.70	24.20	1.122	0.081	/
	state18		Right Cheek	0	1513	1752.6	-0.13	0.100	23.70	24.20	1.122	0.112	/
	state18		Right Tilt	0	1513	1752.6	0.02	0.053	23.70	24.20	1.122	0.059	/
Body-worn													
Ant.2	state17	RMC	Front Side	15	1513	1752.6	0.02	0.121	21.27	21.70	1.104	0.134	/
	state17		Back Side	15	1513	1752.6	-0.10	0.163	21.27	21.70	1.104	0.180	/
Ant.0	state17	RMC	Front Side	15	1513	1752.6	-0.11	0.210	21.24	21.70	1.112	0.233	/
	state17		Back Side	15	1513	1752.6	0.04	0.268	21.24	21.70	1.112	**0.298**	8#
Hotspot													
Ant.2	state17	RMC	Front Side	10	1513	1752.6	0.00	0.235	21.27	21.70	1.104	0.259	/
	state17		Back Side	10	1513	1752.6	0.15	0.307	21.27	21.70	1.104	0.339	/
	state17		Right Edge	10	1513	1752.6	0.19	0.503	21.27	21.70	1.104	0.555	/
	state17		Top Edge	10	1513	1752.6	0.00	0.051	21.27	21.70	1.104	0.056	/
Ant.0	state17	RMC	Front Side	10	1513	1752.6	-0.11	0.360	21.24	21.70	1.112	0.400	/
	state17		Back Side	10	1513	1752.6	-0.18	0.471	21.24	21.70	1.112	0.524	/
	state17		Left Edge	10	1513	1752.6	0.12	0.126	21.24	21.70	1.112	0.140	/
	state17		Right Edge	10	1513	1752.6	-0.03	0.064	21.24	21.70	1.112	0.071	/
	state17		Bottom Edge	10	1513	1752.6	0.18	0.728	21.24	21.70	1.112	0.809	/
	state17			10	1312	1712.4	0.11	0.663	21.10	21.70	1.148	0.761	/
	state17			10	1412	1732.4	0.00	0.755	21.18	21.70	1.127	0.851	**9#**
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

Antenna	Reduced power level	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.
Specific													
Ant.0	state17	RMC	Front Side	0	1513	1752.6	-0.01	1.292	21.24	21.70	1.112	1.436	/
	state17		Back Side	0	1513	1752.6	-0.04	1.428	21.24	21.70	1.112	1.588	/
	state17		Left Edge	0	1513	1752.6	-0.04	0.256	21.24	21.70	1.112	0.285	/
	state17		Right Edge	0	1513	1752.6	-0.08	0.167	21.24	21.70	1.112	0.186	/
	state17		Bottom Edge	0	1513	1752.6	0.02	1.460	21.24	21.70	1.112	1.623	**10#**
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.4WCDMA Band 5

Antenna	Reduced power 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.
Head													
Ant.1	state18	RMC	Left Cheek	0	4132	826.4	-0.16	0.391	20.27	20.60	1.079	0.422	/
	state18		Left Tilt	0	4132	826.4	-0.02	0.081	20.27	20.60	1.079	0.087	/
	state18		Right Cheek	0	4132	826.4	0.03	0.690	20.27	20.60	1.079	**0.744**	11#
	state18		Right Tilt	0	4182	836.4	0.15	0.113	20.27	20.60	1.079	0.122	/
Ant.0	state18	RMC	Left Cheek	0	4182	836.4	0.16	0.221	23.89	24.60	1.178	0.260	/
	state18		Left Tilt	0	4182	836.4	0.16	0.142	23.89	24.60	1.178	0.167	/
	state18		Right Cheek	0	4182	836.4	-0.07	0.192	23.89	24.60	1.178	0.226	/
	state18		Right Tilt	0	4182	836.4	0.12	0.101	23.89	24.60	1.178	0.119	/
Body-worn													
Ant.1	state17	RMC	Front Side	15	4132	826.4	0.07	0.338	23.74	24.10	1.086	0.367	/
	state17		Back Side	15	4132	826.4	0.05	0.399	23.74	24.10	1.086	**0.433**	12#
Ant.0	state17	RMC	Front Side	15	4182	836.4	0.03	0.194	24.24	24.60	1.086	0.211	/
	state17		Back Side	15	4182	836.4	-0.10	0.225	24.24	24.60	1.086	0.244	/
Hotspot													
Ant.1	state17	RMC	Front Side	10	4132	826.4	-0.12	0.668	23.74	24.10	1.086	0.726	/
	state17		Back Side	10	4132	826.4	-0.15	0.807	23.74	24.10	1.086	0.877	/
	state17			10	4182	836.4	0.09	0.753	23.72	24.10	1.091	0.822	/
	state17			10	4233	846.6	-0.13	0.782	23.68	24.10	1.102	0.861	/
	state17		Left Edge	10	4132	826.4	0.12	0.959	23.74	24.10	1.086	**1.042**	13#
	state17			10	4182	836.4	0.03	0.818	23.72	24.10	1.091	0.893	/
	state17			10	4233	846.6	0.17	0.895	23.68	24.10	1.102	0.986	/
Ant.0	state17	RMC	Front Side	10	4182	836.4	0.01	0.311	24.24	24.60	1.086	0.338	/
	state17		Back Side	10	4182	836.4	0.06	0.372	24.24	24.60	1.086	0.404	/
	state17		Left Edge	10	4182	836.4	-0.13	0.074	24.24	24.60	1.086	0.080	/
	state17		Right Edge	10	4182	836.4	-0.19	0.291	24.24	24.60	1.086	0.316	/
	state17		Bottom Edge	10	4182	836.4	-0.19	0.301	24.24	24.60	1.086	0.327	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.5 LTE Band 4 (20MHz Bandwidth)

Antenna	Reduced power level	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.
Head															
Ant.2	state18	QPSK	Left Cheek	0	20300	1745	1	High	-0.01	0.663	20.23	21.00	1.194	0.792	14#
	state18			0	20300	1745	50	High	-0.09	0.682	20.46	21.00	1.132	0.772	/
	state18		Left Tilt	0	20300	1745	1	High	0.04	0.072	20.23	21.00	1.194	0.086	/
	state18			0	20300	1745	50	High	-0.12	0.076	20.46	21.00	1.132	0.086	/
	state18		Right Cheek	0	20300	1745	1	High	-0.02	0.541	20.23	21.00	1.194	0.646	/
	state18			0	20300	1745	50	High	0.13	0.557	20.46	21.00	1.132	0.631	/
	state18		Right Tilt	0	20300	1745	1	High	0.09	0.102	20.23	21.00	1.194	0.122	/
	state18			0	20300	1745	50	High	-0.09	0.105	20.46	21.00	1.132	0.119	/
Ant.0	state18	QPSK	Left Cheek	0	20300	1745	1	High	0.01	0.122	23.59	24.50	1.233	0.150	/
	state18			0	20300	1745	50	Mid	-0.16	0.098	22.69	23.50	1.205	0.118	/
	state18		Left Tilt	0	20300	1745	1	High	0.01	0.078	23.59	24.50	1.233	0.096	/
	state18			0	20300	1745	50	Mid	-0.14	0.063	22.69	23.50	1.205	0.076	/
	state18		Right Cheek	0	20300	1745	1	High	0.12	0.092	23.59	24.50	1.233	0.113	/
	state18			0	20300	1745	50	Mid	0.08	0.072	22.69	23.50	1.205	0.087	/
	state18		Right Tilt	0	20300	1745	1	High	0.12	0.064	23.59	24.50	1.233	0.079	/
	state18			0	20300	1745	50	Mid	-0.17	0.052	22.69	23.50	1.205	0.063	/
Body-worn															
Ant.2	state17	QPSK	Front Side	15	20300	1745	1	High	0.13	0.114	21.33	22.00	1.167	0.133	/
	state17			15	20300	1745	50	High	0.08	0.118	21.38	22.00	1.153	0.136	/
	state17		Back Side	15	20300	1745	1	High	-0.03	0.155	21.33	22.00	1.167	0.181	/
	state17			15	20300	1745	50	High	-0.18	0.162	21.38	22.00	1.153	0.187	/
Ant.0	state17	QPSK	Front Side	15	20300	1745	1	High	-0.16	0.186	21.66	22.50	1.213	0.226	/
	state17			15	20300	1745	50	High	-0.12	0.190	21.68	22.50	1.208	0.229	/
	state17		Back Side	15	20300	1745	1	High	0.30	0.248	21.66	22.50	1.213	0.301	/
	state17			15	20300	1745	50	High	0.16	0.252	21.68	22.50	1.208	0.304	15#
Hotspot															
Ant.2	state17	QPSK	Front Side	10	20300	1745	1	High	-0.02	0.245	21.33	22.00	1.167	0.286	/
	state17			10	20300	1745	50	High	-0.13	0.253	21.38	22.00	1.153	0.292	/
	state17		Back Side	10	20300	1745	1	High	-0.08	0.317	21.33	22.00	1.167	0.370	/
	state17			10	20300	1745	50	High	0.07	0.328	21.38	22.00	1.153	0.378	/
	state17		Right Edge	10	20300	1745	1	High	-0.19	0.466	21.33	22.00	1.167	0.544	/
	state17			10	20300	1745	50	High	0.19	0.489	21.38	22.00	1.153	0.564	/
	state17		Top Edge	10	20300	1745	1	High	0.14	0.030	21.33	22.00	1.167	0.035	/
	state17			10	20300	1745	50	High	0.10	0.028	21.38	22.00	1.153	0.032	/
Ant.0	state17	QPSK	Front Side	10	20300	1745	1	High	-0.15	0.354	21.66	22.50	1.213	0.430	/
	state17			10	20300	1745	50	High	0.00	0.377	21.68	22.50	1.208	0.455	/
	state17		Back Side	10	20300	1745	1	High	0.00	0.478	21.66	22.50	1.213	0.580	/

	state17			10	20300	1745	50	High	0.15	0.489	21.68	22.50	1.208	0.591	/
	state17		Left Edge	10	20300	1745	1	High	-0.14	0.126	21.66	22.50	1.213	0.153	/
	state17			10	20300	1745	50	High	0.16	0.131	21.68	22.50	1.208	0.158	/
	state17		Right Edge	10	20300	1745	1	High	0.05	0.074	21.66	22.50	1.213	0.090	/
	state17			10	20300	1745	50	High	0.13	0.097	21.68	22.50	1.208	0.117	/
	state17		BottomEdge	10	20300	1745	1	High	-0.13	0.709	21.66	22.50	1.213	0.860	/
	state17			10	20175	1732.5	1	High	-0.08	0.634	21.59	22.50	1.233	0.782	/
	state17			10	20050	1720	1	High	0.10	0.711	21.61	22.50	1.227	0.873	/
	state17			10	20300	1745	50	High	0.08	0.738	21.68	22.50	1.208	0.891	16#
	state17			10	20175	1732.5	50	High	0.02	0.657	21.62	22.50	1.225	0.805	/
	state17			10	20050	1720	50	High	-0.11	0.725	21.64	22.50	1.219	0.884	/
	state17			10	20300	1745	100	Low	-0.07	0.649	21.69	22.50	1.205	0.782	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Reduced power level	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Specific															
	state17		Front Side	0	20300	1745	1	High	-0.04	1.110	21.66	22.50	1.213	1.347	/
	state17			0	20300	1745	50	High	0.02	1.140	21.68	22.50	1.208	1.377	/
	state17		Back Side	0	20300	1745	1	High	0.02	1.610	21.66	22.50	1.213	1.954	/
	state17			0	20300	1745	50	High	0.05	1.630	21.68	22.50	1.208	1.969	17#
	state17		Left Edge	0	20300	1745	1	High	0.11	0.256	21.66	22.50	1.213	0.311	/
Ant.0	state17	QPSK		0	20300	1745	50	High	0.04	0.265	21.68	22.50	1.208	0.320	/
	state17		Right Edge	0	20300	1745	1	High	0.02	0.165	21.66	22.50	1.213	0.200	/
	state17			0	20300	1745	50	High	-0.03	0.173	21.68	22.50	1.208	0.209	/
	state17		BottomEdge	0	20300	1745	1	High	0.07	1.530	21.66	22.50	1.213	1.856	/
	state17			0	20300	1745	50	High	-0.07	1.580	21.68	22.50	1.208	1.908	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.6 LTE Band 5 (10MHz Bandwidth)

Antenna	Reduced power level	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.
Head															
Ant.1	state18	QPSK	Left Cheek	0	20450	829	1	Mid	-0.16	0.357	20.22	20.80	1.143	0.408	/
	state18			0	20450	829	25	Mid	0.00	0.365	20.30	20.80	1.122	0.410	/
	state18		Left Tilt	0	20450	829	1	Mid	-0.05	0.052	20.22	20.80	1.143	0.059	/
	state18			0	20450	829	25	Mid	-0.10	0.057	20.30	20.80	1.122	0.064	/
	state18		Right Cheek	0	20450	829	1	Mid	-0.07	0.639	20.22	20.80	1.143	0.730	/
	state18			0	20450	829	25	Mid	0.09	0.658	20.30	20.80	1.122	0.738	18#
	state18		Right Tilt	0	20450	829	1	Mid	0.06	0.068	20.22	20.80	1.143	0.078	/
	state18			0	20450	829	25	Mid	0.12	0.074	20.30	20.80	1.122	0.083	/
Ant.0	state18	QPSK	Left Cheek	0	20525	836.5	1	Low	0.10	0.193	23.83	24.80	1.250	0.241	/
	state18			0	20525	836.5	25	Mid	0.10	0.156	22.89	23.80	1.233	0.192	/
	state18		Left Tilt	0	20525	836.5	1	Low	0.11	0.117	23.83	24.80	1.250	0.146	/
	state18			0	20525	836.5	25	Mid	-0.10	0.094	22.89	23.80	1.233	0.116	/
	state18		Right Cheek	0	20525	836.5	1	Low	0.11	0.144	23.83	24.80	1.250	0.180	/
	state18			0	20525	836.5	25	Mid	0.08	0.116	22.89	23.80	1.233	0.143	/
	state18		Right Tilt	0	20525	836.5	1	Low	-0.10	0.089	23.83	24.80	1.250	0.111	/
	state18			0	20525	836.5	25	Mid	0.04	0.072	22.89	23.80	1.233	0.089	/
Body-worn															
Ant.1	state17	QPSK	Front Side	15	20525	836.5	1	Mid	-0.16	0.328	23.65	24.30	1.161	0.381	/
	state17			15	20525	836.5	25	Mid	0.16	0.297	23.23	23.80	1.140	0.339	/
	state17		Back Side	15	20525	836.5	1	Mid	0.09	0.399	23.65	24.30	1.161	0.463	19#
	state17			15	20525	836.5	25	Mid	-0.12	0.348	23.23	23.80	1.140	0.397	/
Ant.0	state17	QPSK	Front Side	15	20525	836.5	1	Low	0.01	0.205	23.83	24.80	1.250	0.256	/
	state17			15	20525	836.5	25	Mid	0.15	0.163	22.89	23.80	1.233	0.201	/
	state17		Back Side	15	20525	836.5	1	Low	0.18	0.231	23.83	24.80	1.250	0.289	/
	state17			15	20525	836.5	25	Mid	0.12	0.190	22.89	23.80	1.233	0.234	/
Hotspot															
Ant.1	state17	QPSK	Front Side	10	20525	836.5	1	Mid	0.01	0.667	23.65	24.30	1.161	0.775	/
	state17			10	20525	836.5	25	Mid	-0.13	0.589	23.23	23.80	1.140	0.672	/
	state17		Back Side	10	20525	836.5	1	Mid	-0.08	0.808	23.65	24.30	1.161	0.938	/
	state17			10	20450	829	1	Mid	0.12	0.819	23.64	24.30	1.164	0.953	/
	state17			10	20600	844	1	Mid	-0.13	0.782	23.63	24.30	1.167	0.912	/
	state17			10	20525	836.5	25	Mid	0.05	0.695	23.23	23.80	1.140	0.792	/
	state17			10	20450	829	25	Mid	-0.19	0.704	23.21	23.80	1.146	0.806	/
	state17			10	20600	844	25	Mid	-0.04	0.689	23.19	23.80	1.151	0.793	/
	state17			10	20525	836.5	50	Low	0.12	0.711	23.26	23.80	1.132	0.805	/
	state17		Left Edge	10	20525	836.5	1	Mid	-0.08	0.951	23.65	24.30	1.161	1.105	/
	state17			10	20450	829	1	Mid	-0.03	0.974	23.64	24.30	1.164	**1.134**	20#

	state17			10	20600	844	1	Mid	-0.08	0.943	23.63	24.30	1.167	1.100	/
	state17			10	20525	836.5	25	Mid	-0.09	0.814	23.23	23.80	1.140	0.928	/
	state17			10	20450	829	25	Mid	-0.16	0.825	23.21	23.80	1.146	0.945	/
	state17			10	20600	844	25	Mid	0.07	0.807	23.19	23.80	1.151	0.929	/
	state17			10	20525	836.5	50	Low	-0.13	0.813	23.26	23.80	1.132	0.921	/
Ant.0	state17	QPSK	Front Side	10	20525	836.5	1	Low	-0.05	0.332	23.83	24.80	1.250	0.415	/
	state17			10	20525	836.5	25	Mid	0.19	0.267	22.89	23.80	1.233	0.329	/
	state17		Back Side	10	20525	836.5	1	Low	-0.13	0.377	23.83	24.80	1.250	0.471	/
	state17			10	20525	836.5	25	Mid	0.13	0.306	22.89	23.80	1.233	0.377	/
	state17		Left Edge	10	20525	836.5	1	Low	-0.05	0.085	23.83	24.80	1.250	0.106	/
	state17			10	20525	836.5	25	Mid	0.13	0.066	22.89	23.80	1.233	0.081	/
	state17		Right Edge	10	20525	836.5	1	Low	-0.05	0.300	23.83	24.80	1.250	0.375	/
	state17			10	20525	836.5	25	Mid	-0.02	0.242	22.89	23.80	1.233	0.298	/
	state17		Bottom Edge	10	20525	836.5	1	Low	0.08	0.304	23.83	24.80	1.250	0.380	/
	state17			10	20525	836.5	25	Mid	-0.06	0.249	22.89	23.80	1.233	0.307	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.7 LTE Band 12 (10MHz Bandwidth)

Antenna	Reduced power level	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.
Head															
Ant.1	state18	QPSK	Left Cheek	0	23060	704	1	High	0.08	0.287	22.29	23.00	1.178	0.338	/
	state18			0	23060	704	25	Mid	-0.08	0.292	22.40	23.00	1.148	0.335	/
	state18		Left Tilt	0	23095	707.5	1	High	0.04	0.052	22.29	23.00	1.178	0.061	/
	state18			0	23095	707.5	25	Mid	-0.07	0.056	22.40	23.00	1.148	0.064	/
	state18		Right Cheek	0	23095	707.5	1	High	0.19	0.513	22.29	23.00	1.178	**0.604**	21#
	state18			0	23095	707.5	25	Mid	0.14	0.522	22.40	23.00	1.148	0.599	/
	state18		Right Tilt	0	23095	707.5	1	High	-0.15	0.076	22.29	23.00	1.178	0.089	/
	state18			0	23095	707.5	25	Mid	0.01	0.081	22.40	23.00	1.148	0.093	/
Ant.0	state18	QPSK	Left Cheek	0	23095	707.5	1	Low	-0.03	0.114	23.08	24.00	1.236	0.141	/
	state18			0	23095	707.5	25	Mid	-0.19	0.092	22.21	23.00	1.199	0.110	/
	state18		Left Tilt	0	23095	707.5	1	Low	-0.18	0.070	23.08	24.00	1.236	0.087	/
	state18			0	23095	707.5	25	Mid	-0.04	0.058	22.21	23.00	1.199	0.070	/
	state18		Right Cheek	0	23095	707.5	1	Low	0.07	0.084	23.08	24.00	1.236	0.104	/
	state18			0	23095	707.5	25	Mid	0.14	0.069	22.21	23.00	1.199	0.083	/
	state18		Right Tilt	0	23095	707.5	1	Low	-0.09	0.054	23.08	24.00	1.236	0.067	/
	state18			0	23095	707.5	25	Mid	0.08	0.045	22.21	23.00	1.199	0.054	/
Body-worn															
Ant.1	state17	QPSK	Front Side	15	23060	704	1	Low	-0.16	0.122	23.23	24.00	1.194	0.146	/
	state17			15	23060	704	25	Mid	0.14	0.100	22.38	23.00	1.153	0.115	/
	state17		Back Side	15	23060	704	1	Low	-0.14	0.135	23.23	24.00	1.194	0.161	/
	state17			15	23060	704	25	Mid	-0.18	0.108	22.38	23.00	1.153	0.125	/
Ant.0	state17	QPSK	Front Side	15	23060	704	1	Mid	-0.17	0.129	23.08	24.00	1.236	0.159	/
	state17			15	23060	704	25	Mid	0.13	0.105	22.21	23.00	1.199	0.126	/
	state17		Back Side	15	23060	704	1	Mid	0.04	0.156	23.08	24.00	1.236	**0.193**	22#
	state17			15	23060	704	25	Mid	0.17	0.129	22.21	23.00	1.199	0.155	/
Hotspot															
Ant.1	state17	QPSK	Front Side	10	23060	704	1	Low	-0.14	0.222	23.23	24.00	1.194	0.265	/
	state17			10	23060	704	25	Mid	0.09	0.184	22.38	23.00	1.153	0.212	/
	state17		Back Side	10	23060	704	1	Low	0.14	0.252	23.23	24.00	1.194	0.301	/
	state17			10	23060	704	25	Mid	-0.10	0.208	22.38	23.00	1.153	0.240	/
	state17		Left Edge	10	23060	704	1	Low	-0.11	0.402	23.23	24.00	1.194	**0.480**	23#
	state17			10	23060	704	25	Mid	0.16	0.332	22.38	23.00	1.153	0.383	/
Ant.0	state17	QPSK	Front Side	10	23060	704	1	Mid	-0.03	0.130	23.08	24.00	1.236	0.161	/
	state17			10	23060	704	25	Mid	0.18	0.107	22.21	23.00	1.199	0.128	/
	state17		Back Side	10	23060	704	1	Mid	0.05	0.171	23.08	24.00	1.236	0.211	/
	state17			10	23060	704	25	Mid	0.08	0.139	22.21	23.00	1.199	0.167	/
	state17		Left Edge	10	23060	704	1	Mid	0.00	0.081	23.08	24.00	1.236	0.100	/

	state17			10	23060	704	25	Mid	-0.10	0.066	22.21	23.00	1.199	0.079	/
	state17		Right Edge	10	23060	704	1	Mid	0.10	0.209	23.08	24.00	1.236	0.258	/
	state17			10	23060	704	25	Mid	-0.08	0.174	22.21	23.00	1.199	0.209	/
	state17		Bottom Edge	10	23060	704	1	Mid	0.00	0.112	23.08	24.00	1.236	0.138	/
	state17			10	23060	704	25	Mid	-0.05	0.091	22.21	23.00	1.199	0.109	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.8 LTE Band 17 (10MHz Bandwidth)

Antenna	Reduced power level	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.
Head															
Ant.1	state18	QPSK	Left Cheek	0	23780	709	1	Low	-0.17	0.306	22.25	23.00	1.189	0.364	/
	state18			0	23800	711	25	Mid	0.01	0.314	22.39	23.00	1.151	0.361	/
	state18		Left Tilt	0	23780	709	1	Low	-0.15	0.059	22.25	23.00	1.189	0.070	/
	state18			0	23800	711	25	Mid	0.00	0.066	22.39	23.00	1.151	0.076	/
	state18		Right Cheek	0	23780	709	1	Low	-0.04	0.539	22.25	23.00	1.189	0.641	/
	state18			0	23800	711	25	Mid	0.09	0.558	22.39	23.00	1.151	**0.642**	24#
	state18		Right Tilt	0	23780	709	1	Low	-0.17	0.077	22.25	23.00	1.189	0.092	/
	state18			0	23800	711	25	Mid	-0.03	0.082	22.39	23.00	1.151	0.094	/
Ant.0	state18	QPSK	Left Cheek	0	23790	710	1	Low	0.19	0.137	23.19	24.00	1.205	0.165	/
	state18			0	23780	709	25	High	0.06	0.112	22.40	23.00	1.148	0.129	/
	state18		Left Tilt	0	23790	710	1	Low	0.00	0.082	23.19	24.00	1.205	0.099	/
	state18			0	23780	709	25	High	0.14	0.068	22.40	23.00	1.148	0.078	/
	state18		Right Cheek	0	23790	710	1	Low	0.13	0.064	23.19	24.00	1.205	0.077	/
	state18			0	23780	709	25	High	-0.11	0.052	22.40	23.00	1.148	0.060	/
	state18		Right Tilt	0	23790	710	1	Low	0.12	0.057	23.19	24.00	1.205	0.069	/
	state18			0	23780	709	25	High	-0.13	0.046	22.40	23.00	1.148	0.053	/
Body-worn															
Ant.1	state17	QPSK	Front Side	15	23790	710	1	Low	-0.01	0.136	23.19	24.00	1.205	0.164	/
	state17			15	23790	710	25	Mid	0.13	0.112	22.31	23.00	1.172	0.131	/
	state17		Back Side	15	23790	710	1	Low	0.17	0.152	23.19	24.00	1.205	0.183	/
	state17			15	23790	710	25	Mid	-0.18	0.126	22.31	23.00	1.172	0.148	/
Ant.0	state17	QPSK	Front Side	15	23790	710	1	Low	0.01	0.138	23.03	24.00	1.250	0.173	/
	state17			15	23790	710	25	Mid	0.06	0.113	22.15	23.00	1.216	0.137	/
	state17		Back Side	15	23790	710	1	Low	0.08	0.167	23.03	24.00	1.250	**0.209**	25#
	state17			15	23790	710	25	Mid	-0.16	0.137	22.15	23.00	1.216	0.167	/
Hotspot															
Ant.1	state17	QPSK	Front Side	10	23790	710	1	Low	0.12	0.243	23.19	24.00	1.205	0.293	/
	state17			10	23790	710	25	Mid	0.09	0.196	22.31	23.00	1.172	0.230	/
	state17		Back Side	10	23790	710	1	Low	-0.01	0.295	23.19	24.00	1.205	0.355	/
	state17			10	23790	710	25	Mid	-0.07	0.234	22.31	23.00	1.172	0.274	/
	state17		Left Edge	10	23790	710	1	Low	0.10	0.464	23.19	24.00	1.205	**0.559**	26#
	state17			10	23790	710	25	Mid	0.18	0.382	22.31	23.00	1.172	0.448	/
Ant.0	state17	QPSK	Front Side	10	23790	710	1	Low	0.04	0.143	23.03	24.00	1.250	0.179	/
	state17			10	23790	710	25	Mid	-0.09	0.113	22.15	23.00	1.216	0.137	/
	state17		Back Side	10	23790	710	1	Low	0.09	0.174	23.03	24.00	1.250	0.218	/
	state17			10	23790	710	25	Mid	0.10	0.145	22.15	23.00	1.216	0.176	/
	state17		Left Edge	10	23790	710	1	Low	0.03	0.233	23.03	24.00	1.250	0.291	/

	state17			10	23790	710	25	Mid	0.17	0.192	22.15	23.00	1.216	0.234	/
	state17		Right Edge	10	23790	710	1	Low	0.01	0.088	23.03	24.00	1.250	0.110	/
	state17			10	23790	710	25	Mid	-0.01	0.072	22.15	23.00	1.216	0.088	/
	state17		Bottom Edge	10	23790	710	1	Low	0.16	0.114	23.03	24.00	1.250	0.143	/
	state17			10	23790	710	25	Mid	-0.12	0.094	22.15	23.00	1.216	0.114	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.9 LTE Band 26 (15MHz Bandwidth)

Antenna	Reduced power level	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.
Head															
Ant.1	state18	QPSK	Left Cheek	0	26965	841.5	1	Low	0.11	0.399	20.25	20.90	1.161	0.463	/
	state18			0	26765	821.5	36	High	0.13	0.405	20.31	20.90	1.146	0.464	/
	state18		Left Tilt	0	26965	841.5	1	Low	-0.17	0.064	20.25	20.90	1.161	0.074	/
	state18			0	26765	821.5	36	High	0.02	0.068	20.31	20.90	1.146	0.078	/
	state18		Right Cheek	0	26965	841.5	1	Low	1.16	0.650	20.25	20.90	1.161	**0.755**	27#
	state18			0	26765	821.5	1	High	-0.17	0.657	20.31	20.90	1.146	0.753	/
	state18		Right Tilt	0	26965	841.5	1	Low	-0.14	0.077	20.25	20.90	1.161	0.089	/
	state18			0	26765	821.5	36	High	0.09	0.080	20.31	20.90	1.146	0.092	/
Ant.0	state18	QPSK	Left Cheek	0	26765	821.5	1	Low	-0.05	0.140	24.23	24.90	1.167	0.163	/
	state18			0	26765	821.5	36	Mid	-0.09	0.115	23.23	23.90	1.167	0.134	/
	state18		Left Tilt	0	26765	821.5	1	Low	0.01	0.085	24.23	24.90	1.167	0.099	/
	state18			0	26765	821.5	36	Mid	-0.06	0.070	23.23	23.90	1.167	0.082	/
	state18		Right Cheek	0	26765	821.5	1	Low	-0.06	0.108	24.23	24.90	1.167	0.126	/
	state18			0	26765	821.5	36	Mid	0.13	0.090	23.23	23.90	1.167	0.105	/
	state18		Right Tilt	0	26765	821.5	1	Low	0.17	0.064	24.23	24.90	1.167	0.075	/
	state18			0	26765	821.5	36	Mid	-0.14	0.053	23.23	23.90	1.167	0.062	/
Body-worn															
Ant.1	state17	QPSK	Front Side	15	26965	841.5	1	Low	-0.01	0.260	24.19	24.90	1.178	0.306	/
	state17			15	26865	831.5	36	High	0.16	0.214	23.26	23.90	1.159	0.248	/
	state17		Back Side	15	26965	841.5	1	Low	0.08	0.307	24.19	24.90	1.178	**0.362**	28#
	state17			15	26865	831.5	36	High	-0.18	0.247	23.26	23.90	1.159	0.286	/
Ant.0	state17	QPSK	Front Side	15	26865	831.5	1	Low	-0.06	0.170	23.81	24.90	1.285	0.218	/
	state17			15	26865	831.5	36	Mid	0.14	0.140	22.87	23.90	1.268	0.177	/
	state17		Back Side	15	26865	831.5	1	Low	0.10	0.197	23.81	24.90	1.285	0.253	/
	state17			15	26865	831.5	36	Mid	0.16	0.158	22.87	23.90	1.268	0.200	/
Hotspot															
Ant.1	state17	QPSK	Front Side	10	26965	841.5	1	Low	-0.04	0.484	24.19	24.90	1.178	0.570	/
	state17			10	26865	831.5	36	High	0.09	0.386	23.26	23.90	1.159	0.447	/
	state17		Back Side	10	26965	841.5	1	Low	0.01	0.610	24.19	24.90	1.178	0.718	/
	state17			10	26865	831.5	36	High	0.05	0.494	23.26	23.90	1.159	0.572	/
	state17		Left Edge	10	26965	841.5	1	Low	-0.19	0.768	24.19	24.90	1.178	0.904	/
	state17			10	26765	821.5	1	Mid	0.13	0.754	24.13	24.90	1.194	0.900	/
	state17			10	26865	831.5	1	Low	-0.09	0.781	24.17	24.90	1.183	**0.924**	29#
	state17			10	26865	831.5	36	High	-0.03	0.642	23.26	23.90	1.159	0.744	/
	state17			10	26965	841.5	72	Low	-0.10	0.664	23.22	23.90	1.169	0.777	/
Ant.0	state17	QPSK	Front Side	10	26865	831.5	1	Low	-0.05	0.250	23.81	24.90	1.285	0.321	/
	state17			10	26865	831.5	36	Mid	-0.17	0.202	22.87	23.90	1.268	0.256	/

	state17		Back Side	10	26865	831.5	1	Low	0.13	0.304	23.81	24.90	1.285	0.391	/
	state17			10	26865	831.5	36	Mid	-0.17	0.243	22.87	23.90	1.268	0.308	/
	state17		Left Edge	10	26865	831.5	1	Low	-0.11	0.078	23.81	24.90	1.285	0.100	/
	state17			10	26865	831.5	36	Mid	0.18	0.064	22.87	23.90	1.268	0.081	/
	state17		Right Edge	10	26865	831.5	1	Low	0.07	0.244	23.81	24.90	1.285	0.314	/
	state17			10	26865	831.5	36	Mid	-0.09	0.203	22.87	23.90	1.268	0.257	/
	state17		Bottom Edge	10	26865	831.5	1	Low	-0.07	0.254	23.81	24.90	1.285	0.326	/
	state17			10	26865	831.5	36	Mid	-0.18	0.207	22.87	23.90	1.268	0.262	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.10 LTE Band 38 (20MHz Bandwidth)

Antenna	Reduced power level	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.
Head															
Ant.2	state18	QPSK	Left Cheek	0	37850	2580	1	Mid	0.15	0.584	21.53	22.00	1.114	**0.651**	30#
	state18			0	37850	2580	50	Mid	-0.13	0.595	21.67	22.00	1.079	0.642	/
	state18		Left Tilt	0	37850	2580	1	Mid	-0.19	0.132	21.53	22.00	1.114	0.147	/
	state18			0	37850	2580	50	Mid	-0.10	0.136	21.67	22.00	1.079	0.147	/
	state18		Right Cheek	0	37850	2580	1	Mid	0.05	0.551	21.53	22.00	1.114	0.614	/
	state18			0	37850	2580	50	Mid	-0.12	0.566	21.67	22.00	1.079	0.611	/
	state18		Right Tilt	0	37850	2580	1	Mid	-0.15	0.278	21.53	22.00	1.114	0.310	/
	state18			0	37850	2580	50	Mid	-0.03	0.286	21.67	22.00	1.079	0.309	/
Ant.0	state18	QPSK	Left Cheek	0	37850	2580	1	High	0.15	0.035	23.02	24.00	1.253	0.044	/
	state18			0	38000	2595	50	Low	0.15	0.028	22.09	23.00	1.233	0.035	/
	state18		Left Tilt	0	38000	2595	1	High	0.19	0.026	23.02	24.00	1.253	0.033	/
	state18			0	38000	2595	50	Low	0.01	0.021	22.09	23.00	1.233	0.026	/
	state18		Right Cheek	0	38000	2595	1	High	0.10	0.028	23.02	24.00	1.253	0.035	/
	state18			0	38000	2595	50	Low	-0.01	0.023	22.09	23.00	1.233	0.028	/
	state18		Right Tilt	0	38000	2595	1	High	0.03	0.019	23.02	24.00	1.253	0.024	/
	state18			0	38000	2595	50	Low	-0.02	0.015	22.09	23.00	1.233	0.018	/
Body-worn															
Ant.2	state17	QPSK	Front Side	15	37850	2580	1	Mid	0.04	0.115	22.42	23.50	1.282	0.147	/
	state17			15	37850	2580	50	Mid	0.19	0.103	22.05	23.00	1.245	0.128	/
	state17		Back Side	15	38150	2610	1	Mid	-0.19	0.113	22.42	23.50	1.282	0.145	/
	state17			15	37850	2580	50	Mid	-0.19	0.098	22.05	23.00	1.245	0.122	/
Ant.0	state17	QPSK	Front Side	15	38000	2595	1	Low	-0.16	0.129	22.91	24.00	1.285	0.166	/
	state17			15	38000	2595	50	High	-0.15	0.106	22.05	23.00	1.245	0.132	/
	state17		Back Side	15	38000	2595	1	Low	0.02	0.195	22.91	24.00	1.285	**0.251**	31#
	state17			15	38000	2595	50	High	-0.19	0.160	22.05	23.00	1.245	0.199	/
Hotspot															
Ant.2	state17	QPSK	Front Side	10	37850	2580	1	Mid	-0.08	0.230	22.42	23.50	1.282	0.295	/
	state17			10	37850	2580	50	Mid	-0.01	0.202	22.05	23.00	1.245	0.251	/
	state17		Back Side	10	37850	2580	1	Mid	0.19	0.259	22.42	23.50	1.282	0.332	/
	state17			10	37850	2580	50	Mid	-0.13	0.226	22.05	23.00	1.245	0.281	/
	state17		Right Edge	10	37850	2580	1	Mid	0.02	0.362	22.42	23.50	1.282	0.464	/
	state17			10	37850	2580	50	Mid	-0.02	0.329	22.05	23.00	1.245	0.409	/
	state17		Top Edge	10	37850	2580	1	Mid	-0.09	0.097	22.42	23.50	1.282	0.124	/
	state17			10	37850	2580	50	Mid	0.02	0.085	22.05	23.00	1.245	0.106	/
Ant.0	state17	QPSK	Front Side	10	37850	2580	1	Low	0.00	0.286	22.91	24.00	1.285	0.368	/
	state17			10	37850	2580	50	High	0.19	0.235	22.05	23.00	1.245	0.292	/
	state17		Back Side	10	37850	2580	1	Low	0.03	0.424	22.91	24.00	1.285	**0.545**	32#

	state17			10	37850	2580	50	High	0.14	0.350	22.05	23.00	1.245	0.436	/
	state17		Left Edge	10	37850	2580	1	Low	-0.08	0.078	22.91	24.00	1.285	0.100	/
	state17			10	37850	2580	50	High	0.14	0.063	22.05	23.00	1.245	0.078	/
	state17		Right Edge	10	37850	2580	1	Low	0.10	0.057	22.91	24.00	1.285	0.073	/
	state17			10	37850	2580	50	High	-0.18	0.046	22.05	23.00	1.245	0.057	/
	state17		Bottom Edge	10	37850	2580	1	Low	0.08	0.354	22.91	24.00	1.285	0.455	/
	state17			10	37850	2580	50	High	0.04	0.291	22.05	23.00	1.245	0.362	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.11 LTE Band 41 (20MHz Bandwidth)

Antenna	Reduced power level	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.
Head															
Ant.2	state18	QPSK	Left Cheek	0	40620	2593	1	Low	-0.09	0.541	22.74	23.50	1.191	0.644	/
	state18			0	40620	2593	50	Low	-0.04	0.447	22.76	23.50	1.186	0.530	/
	state18		Left Tilt	0	40620	2593	1	Low	0.06	0.117	22.74	23.50	1.191	0.139	/
	state18			0	40620	2593	50	Low	0.13	0.093	22.76	23.50	1.186	0.110	/
	state18		Right Cheek	0	40620	2593	1	Low	0.14	0.465	22.74	23.50	1.191	0.554	/
	state18			0	40620	2593	50	Low	0.01	0.380	22.76	23.50	1.186	0.451	/
	state18		Right Tilt	0	40620	2593	1	Low	0.00	0.255	22.74	23.50	1.191	0.304	/
	state18			0	40620	2593	50	Low	-0.04	0.202	22.76	23.50	1.186	0.240	/
Ant.0	state18	QPSK	Left Cheek	0	40620	2593	1	High	0.10	0.036	24.56	26.00	1.393	0.050	/
	state18			0	40620	2593	50	High	0.13	0.030	24.12	25.00	1.225	0.037	/
	state18		Left Tilt	0	40620	2593	1	High	-0.02	0.025	24.56	26.00	1.393	0.035	/
	state18			0	40620	2593	50	High	-0.09	0.019	24.12	25.00	1.225	0.023	/
	state18		Right Cheek	0	40620	2593	1	High	-0.19	0.027	24.56	26.00	1.393	0.038	/
	state18			0	40620	2593	50	High	0.03	0.021	24.12	25.00	1.225	0.026	/
	state18		Right Tilt	0	40620	2593	1	High	0.15	0.019	24.56	26.00	1.393	0.026	/
	state18			0	40620	2593	50	High	-0.05	0.015	24.12	25.00	1.225	0.018	/
Ant.3	state18	QPSK	Left Cheek	0	40620	2593	1	Mid	0.15	0.245	14.35	15.00	1.161	0.285	/
	state18			0	40620	2593	50	High	0.10	0.238	14.47	15.00	1.130	0.269	/
	state18		Left Tilt	0	40620	2593	1	Mid	0.15	0.269	14.35	15.00	1.161	0.312	/
	state18			0	40620	2593	50	High	-0.19	0.263	14.47	15.00	1.130	0.297	/
	state18		Right Cheek	0	40620	2593	1	Mid	-0.10	0.718	14.35	15.00	1.161	0.834	/
	state18			0	39750	2506	1	Mid	-0.12	0.699	14.29	15.00	1.178	0.823	/
	state18			0	40185	2549.5	1	High	-0.09	0.701	14.31	15.00	1.172	0.822	/
	state18			0	41055	2636.5	1	Low	0.13	0.705	14.16	15.00	1.213	0.855	/
	state18			0	41490	2680	1	Mid	0.15	0.695	14.34	15.00	1.164	0.809	/
	state18			0	40620	2593	50	High	-0.02	0.709	14.47	15.00	1.130	0.801	/
	state18			0	39750	2506	50	High	-0.11	0.694	14.35	15.00	1.161	0.806	/
	state18			0	40185	2549.5	50	High	0.03	0.679	14.40	15.00	1.148	0.780	/
	state18			0	41055	2636.5	50	High	0.07	0.682	14.36	15.00	1.159	0.790	/
	state18			0	41490	2680	50	Mid	0.10	0.701	14.31	15.00	1.172	0.822	/
	state18			0	40620	2593	100	Mid	-0.15	0.704	14.42	15.00	1.143	0.805	/
	state18		Right Tilt	0	40620	2593	1	Mid	0.18	0.739	14.35	15.00	1.161	**0.858**	33#
	state18			0	39750	2506	1	Mid	0.13	0.714	14.29	15.00	1.178	0.841	/
	state18			0	40185	2549.5	1	High	-0.09	0.688	14.31	15.00	1.172	0.806	/
	state18			0	41055	2636.5	1	Low	-0.19	0.659	14.16	15.00	1.213	0.800	/
	state18			0	41490	2680	1	Mid	0.03	0.682	14.34	15.00	1.164	0.794	/
	state18			0	40620	2593	50	High	0.03	0.719	14.47	15.00	1.130	0.812	/

	state18			0	39750	2506	50	High	-0.02	0.732	14.35	15.00	1.161	0.850	/
	state18			0	40185	2549.5	50	High	0.11	0.698	14.40	15.00	1.148	0.801	/
	state18			0	41055	2636.5	50	High	-0.07	0.720	14.36	15.00	1.159	0.834	/
	state18			0	41490	2680	50	Mid	0.03	0.712	14.31	15.00	1.172	0.835	/
	state18			0	40620	2593	100	Mid	-0.12	0.733	14.42	15.00	1.143	0.838	/
Body-worn															
Ant.2	state17	QPSK	Front Side	15	40620	2593	1	Low	0.08	0.182	24.47	26.00	1.422	0.259	/
	state17			15	40620	2593	50	Mid	0.16	0.149	24.09	25.00	1.233	0.184	/
	state17		Back Side	15	40620	2593	1	Low	-0.01	0.200	24.47	26.00	1.422	0.284	/
	state17			15	40620	2593	50	Mid	0.10	0.162	24.09	25.00	1.233	0.200	/
Ant.0	state17	QPSK	Front Side	15	41490	2593	1	High	-0.12	0.181	24.56	26.00	1.393	0.252	/
	state17			15	41490	2593	50	High	-0.17	0.145	24.12	25.00	1.225	0.178	/
	state17		Back Side	15	41490	2593	1	High	-0.08	0.231	24.56	26.00	1.393	**0.322**	34#
	state17			15	41490	2593	50	High	0.02	0.224	24.12	25.00	1.225	0.274	/
Ant.3	state17	QPSK	Front Side	15	40620	2593	1	Mid	0.01	0.155	20.52	22.00	1.406	0.218	/
	state17			15	40620	2593	50	Mid	-0.15	0.149	20.59	22.00	1.384	0.206	/
	state17		Back Side	15	40620	2593	1	Mid	0.15	0.191	20.52	22.00	1.406	0.269	/
	state17			15	40620	2593	50	Mid	-0.19	0.185	20.59	22.00	1.384	0.256	/
Hotspot															
Ant.2	state17	QPSK	Front Side	10	40620	2593	1	Low	-0.06	0.209	24.47	26.00	1.422	0.297	/
	state17			10	40620	2593	50	Mid	0.07	0.169	24.09	25.00	1.233	0.208	/
	state17		Back Side	10	40620	2593	1	Low	0.19	0.202	24.47	26.00	1.422	0.287	/
	state17			10	40620	2593	50	Mid	0.09	0.161	24.09	25.00	1.233	0.199	/
	state17		Right Edge	10	40620	2593	1	Low	-0.07	0.399	24.47	26.00	1.422	0.568	/
	state17			10	40620	2593	50	Mid	0.10	0.328	24.09	25.00	1.233	0.404	/
	state17		Top Edge	10	40620	2593	1	Low	-0.17	0.083	24.47	26.00	1.422	0.118	/
	state17			10	40620	2593	50	Mid	0.17	0.068	24.09	25.00	1.233	0.084	/
Ant.0	state17	QPSK	Front Side	10	41490	2593	1	High	0.04	0.202	24.56	26.00	1.393	0.281	/
	state17			10	41490	2593	50	High	0.16	0.164	24.12	25.00	1.225	0.201	/
	state17		Back Side	10	41490	2593	1	High	0.04	0.331	24.56	26.00	1.393	0.461	/
	state17			10	41490	2593	50	High	0.14	0.267	24.12	25.00	1.225	0.327	/
	state17		Left Edge	10	41490	2593	1	High	0.16	0.064	24.56	26.00	1.393	0.089	/
	state17			10	41490	2593	50	High	-0.04	0.050	24.12	25.00	1.225	0.061	/
	state17		Right Edge	10	41490	2593	1	High	-0.17	0.045	24.56	26.00	1.393	0.063	/
	state17			10	41490	2593	50	High	0.07	0.037	24.12	25.00	1.225	0.045	/
	state17		Bottom Edge	10	41490	2593	1	High	-0.01	0.285	24.56	26.00	1.393	0.397	/
	state17			10	41490	2593	50	High	0.00	0.228	24.12	25.00	1.225	0.279	/
Ant.3	state17	QPSK	Front Side	10	40620	2593	1	Mid	0.17	0.190	20.52	22.00	1.406	0.267	/
	state17			10	40620	2593	50	Mid	0.10	0.188	20.59	22.00	1.384	0.260	/
	state17		Back Side	10	40620	2593	1	Mid	0.14	0.252	20.52	22.00	1.406	0.354	/
	state17			10	40620	2593	50	Mid	-0.01	0.243	20.59	22.00	1.384	0.336	/
	state17		Right Edge	10	40620	2593	1	Mid	0.06	0.117	20.52	22.00	1.406	0.165	/
	state17			10	40620	2593	50	Mid	-0.18	0.109	20.59	22.00	1.384	0.151	/

	state17		Top Edge	10	40620	2593	1	Mid	0.11	0.430	20.52	22.00	1.406	**0.605**	35#
	state17			10	40620	2593	50	Mid	-0.05	0.428	20.59	22.00	1.384	0.592	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Reduced power level	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	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.
Specific															
Ant.3	state17	QPSK	Front Side	0	41490	2593	1	Mid	-0.09	1.340	20.52	22.00	1.406	1.884	/
	state17			0	41490	2593	50	Mid	0.06	1.320	20.59	22.00	1.384	1.826	/
	state17		Back Side	0	41490	2593	1	Mid	0.18	1.420	20.52	22.00	1.406	1.997	/
	state17			0	41490	2593	50	Mid	0.10	1.390	20.59	22.00	1.384	1.923	/
	state17		Right Edge	0	41490	2593	1	Mid	-0.08	0.754	20.52	22.00	1.406	1.060	/
	state17			0	41490	2593	50	Mid	-0.12	0.739	20.59	22.00	1.384	1.022	/
	state17		Top Edge	0	40620	2593	1	Mid	0.16	1.650	20.52	22.00	1.406	**2.320**	36#
	state17			0	39750	2506	1	Low	-0.10	1.600	20.41	22.00	1.442	2.307	/
	state17			0	40185	2549.5	1	High	-0.04	1.560	20.42	22.00	1.439	2.245	/
	state17			0	41055	2636.5	1	High	-0.02	1.580	20.44	22.00	1.432	2.263	/
	state17			0	41490	2680	1	Low	-0.01	1.550	20.27	22.00	1.489	2.309	/
	state17			0	40620	2593	50	Mid	0.16	1.570	20.59	22.00	1.384	2.172	/
	state17			0	39750	2506	50	High	0.05	1.590	20.44	22.00	1.432	2.277	/
	state17			0	40185	2549.5	50	Mid	-0.17	1.540	20.39	22.00	1.449	2.231	/
	state17			0	41055	2636.5	50	Mid	-0.16	1.510	20.46	22.00	1.426	2.153	/
	state17			0	41490	2680	50	Low	0.14	1.490	20.49	22.00	1.416	2.110	/
	state17			0	40620	2593	100	Low	-0.19	1.520	20.42	22.00	1.439	2.187	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.12 LTE Band 41 Worse case for CA Test

Antenna	Reduced power level	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.
Head-CA															
Ant.3	state18	QPSK	Left Cheek	0	40620 +40818	2593 +2612.8	1+0	Low +Low	0.07	0.414	14.13	15.00	1.222	0.506	/
Body-worn-CA															
Ant.0	state17	QPSK	Back Side	15	41490 +41292	2680 +2660.2	1+0	Low +Low	0.09	0.117	24.26	26.00	1.493	0.175	/
Hotspot-CA															
Ant.3	state17	QPSK	Top Edge	10	40620 +40818	2593 +2612.8	1+0	Low +Low	0.12	0.264	20.38	22.00	1.452	0.383	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.13 WIFI 2.4GHz

Mode	Reduced power 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	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.7	Level1	802.11 b	Left Cheek	0	11	2462	-0.18	0.728	15.76	16.50	1.186	99.20	1.008	0.870	/
	Level1			0	1	2412	0.07	0.709	15.07	16.50	1.390	99.20	1.008	0.993	/
	Level1			0	6	2437	0.04	0.796	15.44	16.50	1.276	99.20	1.008	**1.024**	37#
	Level1		Left Tilt	0	11	2462	-0.01	0.662	15.76	16.50	1.186	99.20	1.008	0.791	/
	Level1		Right Cheek	0	11	2462	0.14	0.395	15.76	16.50	1.186	99.20	1.008	0.472	/
	Level1		Right Tilt	0	11	2462	0.06	0.543	15.76	16.50	1.186	99.20	1.008	0.649	/
Ant.7	Level2	802.11 b	Left Cheek	0	6	2437	0.19	0.329	12.98	13.00	1.005	99.20	1.008	0.333	/
	Level2		Left Tilt	0	6	2437	-0.09	0.294	12.98	13.00	1.005	99.20	1.008	0.298	/
	Level2		Right Cheek	0	6	2437	0.19	0.169	12.98	13.00	1.005	99.20	1.008	0.171	/
	Level2		Right Tilt	0	6	2437	0.06	0.238	12.98	13.00	1.005	99.20	1.008	0.241	/
Body-worn															
Ant.7	Level3	802.11 b	Front Side	15	11	2462	0.04	0.095	15.76	17.00	1.330	98.17	1.019	0.129	/
	Level3		Back Side	15	11	2462	0.14	0.136	15.76	17.00	1.330	98.17	1.019	**0.184**	38#
Hotspot															
Ant.7	Level3	802.11 b	Front Side	10	11	2462	0.02	0.139	15.76	17.00	1.330	98.17	1.019	0.188	/
	Level3		Back Side	10	11	2462	0.03	0.205	15.76	17.00	1.330	98.17	1.019	0.278	/
	Level3		Left Edge	10	11	2462	-0.01	0.078	15.76	17.00	1.330	98.17	1.019	0.106	/
	Level3		Top Edge	10	11	2462	0.17	0.292	15.76	17.00	1.330	98.17	1.019	**0.396**	39#
Ant.7	Level4	802.11 b	Front Side	10	11	2462	0.02	0.139	15.76	16.50	1.186	99.20	1.008	0.166	/
	Level4		Back Side	10	11	2462	0.03	0.205	15.76	16.50	1.186	99.20	1.008	0.245	/
	Level4		Left Edge	10	11	2462	-0.01	0.078	15.76	16.50	1.186	99.20	1.008	0.093	/
	Level4		Top Edge	10	11	2462	0.17	0.292	15.76	16.50	1.186	99.20	1.008	0.349	/

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

10.14 WIFI 5GHz

Fre. Band	Reduced power level	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 (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.7	Level1	5.3G	802.11n (HT40)	Left Cheek	0	54	5270	-0.07	0.820	13.36	13.50	1.033	96.47	1.037	0.878	/
	Level1				0	62	5310	0.17	0.789	12.91	13.50	1.146	96.47	1.037	0.937	/
	Level1			Left Tilt	0	54	5270	0.17	0.960	13.36	13.50	1.033	96.47	1.037	**1.028**	40#
	Level1				0	62	5310	0.15	0.824	12.91	13.50	1.146	96.47	1.037	0.978	/
	Level1			Right Cheek	0	54	5270	0.12	0.492	13.36	13.50	1.033	96.47	1.037	0.527	/
	Level1			Right Tilt	0	54	5270	-0.01	0.536	13.36	13.50	1.033	96.47	1.037	0.574	/
Ant.7	Level2	5.3G	802.11ac (VHT80)	Left Cheek	0	58	5290	-0.05	0.346	10.24	10.50	1.062	92.99	1.075	0.348	/
	Level2			Left Tilt	0	58	5290	0.09	0.383	10.24	10.50	1.062	92.99	1.075	0.373	/
	Level2			Right Cheek	0	58	5290	-0.17	0.195	10.24	10.50	1.062	92.99	1.075	0.188	/
	Level2			Right Tilt	0	58	5290	-0.01	0.214	10.24	10.50	1.062	92.99	1.075	0.207	/
Ant.7	Level1	5.6G	802.11n (HT40)	Left Cheek	0	102	5510	-0.03	0.856	13.36	13.50	1.033	96.47	1.037	0.917	/
	Level1				0	110	5550	-0.05	0.834	13.29	13.50	1.050	96.47	1.037	0.907	/
	Level1				0	134	5670	-0.08	0.772	12.94	13.50	1.138	96.47	1.037	0.910	/
	Level1			Left Tilt	0	102	5510	-0.12	0.908	13.36	13.50	1.033	96.47	1.037	**0.972**	41#
	Level1				0	110	5550	-0.07	0.892	13.29	13.50	1.050	96.47	1.037	0.970	/
	Level1				0	134	5670	-0.13	0.814	12.94	13.50	1.138	96.47	1.037	0.960	/
	Level1			Right Cheek	0	102	5510	0.14	0.504	13.36	13.50	1.033	96.47	1.037	0.540	/
	Level1			Right Tilt	0	102	5510	-0.13	0.556	13.36	13.50	1.033	96.47	1.037	0.595	/
Ant.7	Level2	5.6G	802.11ac (VHT80)	Left Cheek	0	122	5610	-0.06	0.355	10.38	10.50	1.028	92.99	1.075	0.337	/
	Level2			Left Tilt	0	122	5610	0.04	0.375	10.38	10.50	1.028	92.99	1.075	0.344	/
	Level2			Right Cheek	0	122	5610	-0.01	0.204	10.38	10.50	1.028	92.99	1.075	0.203	/
	Level2			Right Tilt	0	122	5610	0.17	0.223	10.38	10.50	1.028	92.99	1.075	0.213	/
Body-worn																
Ant.7	Level3	5.3G	802.11a	Front Side	15	64	5320	-0.01	0.265	17.46	19.00	1.426	98.30	1.017	0.384	/
	Level3			Back Side	15	64	5320	0.00	0.280	17.46	19.00	1.426	98.30	1.017	**0.406**	42#
Ant.7	Level3	5.6G	802.11a	Front Side	15	140	5700	-0.11	0.221	18.51	19.00	1.119	98.30	1.017	0.252	/
	Level3			Back Side	15	140	5700	-0.18	0.289	18.51	19.00	1.119	98.30	1.017	**0.329**	43#
Hotspot																
Ant.7	Level3	5.2G	802.11a	Front Side	10	36	5180	-0.06	0.371	17.12	19.00	1.542	98.30	1.017	0.582	/
	Level3			Back Side	10	36	5180	0.01	0.415	17.12	19.00	1.542	98.30	1.017	0.651	/
	Level3			Left Edge	10	36	5180	0.08	0.125	17.12	19.00	1.542	98.30	1.017	0.196	/
	Level3			Top Edge	10	36	5180	0.11	0.759	17.12	19.00	1.542	98.30	1.017	**1.190**	44#
Ant.7	Level4	5.2G	802.11n (HT40)	Front Side	10	38	5190	0.04	0.105	13.27	13.50	1.054	96.47	1.037	0.115	/
	Level4			Back Side	10	38	5190	-0.06	0.117	13.27	13.50	1.054	96.47	1.037	0.128	/
	Level4			Left Edge	10	38	5190	-0.04	0.035	13.27	13.50	1.054	96.47	1.037	0.038	/
	Level4			Top Edge	10	38	5190	0.10	0.214	13.27	13.50	1.054	96.47	1.037	0.234	/

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

Fre. Band	Reduced power level	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 (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Specific																
Ant.7	Level3	5.3G	802.11a	Front Side	0	64	5320	-0.09	1.830	17.46	19.00	1.426	98.30	1.017	2.654	45#
	Level3			Back Side	0	64	5320	0.13	1.298	17.46	19.00	1.426	98.30	1.017	1.882	/
	Level3			Left Edge	0	64	5320	0.12	0.167	17.46	19.00	1.426	98.30	1.017	0.242	/
	Level3			Top Edge	0	64	5320	0.02	1.410	17.46	19.00	1.426	98.30	1.017	2.045	/
Ant.7	Level4	5.3G	802.11n (HT40)	Front Side	0	54	5270	-0.04	0.517	13.36	13.50	1.033	96.47	1.037	0.553	/
	Level4			Back Side	0	54	5270	-0.12	0.367	13.36	13.50	1.033	96.47	1.037	0.393	/
	Level4			Left Edge	0	54	5270	-0.17	0.047	13.36	13.50	1.033	96.47	1.037	0.050	/
	Level4			Top Edge	0	54	5270	-0.10	0.398	13.36	13.50	1.033	96.47	1.037	0.426	/
Ant.7	Level3	5.6G	802.11a	Front Side	0	140	5700	0.00	1.660	18.51	19.00	1.119	98.30	1.017	**1.890**	46#
	Level3			Back Side	0	140	5700	-0.03	1.098	18.51	19.00	1.119	98.30	1.017	1.250	/
	Level3			Left Edge	0	140	5700	-0.13	0.180	18.51	19.00	1.119	98.30	1.017	0.205	/
	Level3			Top Edge	0	140	5700	0.05	1.640	18.51	19.00	1.119	98.30	1.017	1.868	/
Ant.7	Level4	5.6G	802.11n (HT40)	Front Side	0	102	5510	-0.08	0.469	13.36	13.50	1.033	96.47	1.037	0.502	/
	Level4			Back Side	0	102	5510	0.01	0.310	13.36	13.50	1.033	96.47	1.037	0.332	/
	Level4			Left Edge	0	102	5510	0.05	0.051	13.36	13.50	1.033	96.47	1.037	0.055	/
	Level4			Top Edge	0	102	5510	0.03	0.463	13.36	13.50	1.033	96.47	1.037	0.496	/

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

10.15 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 (%)	1g Scaled SAR (W/kg)	Meas. No.
Head													
DH5	Left Cheek	0	78	2480	0.12	0.305	14.48	15.00	1.127	76.34	1.310	**0.450**	47#
	Left Tilt	0	78	2480	-0.10	0.263	14.48	15.00	1.127	76.34	1.310	0.388	/
	Right Cheek	0	78	2480	-0.12	0.163	14.48	15.00	1.127	76.34	1.310	0.241	/
	Right Tilt	0	78	2480	-0.11	0.207	14.48	15.00	1.127	76.34	1.310	0.306	/
Body													
DH5	Front Side	15	78	2480	-0.18	0.019	14.48	15.00	1.127	76.34	1.310	0.028	/
	Back Side	15	78	2480	0.14	0.032	14.48	15.00	1.127	76.34	1.310	**0.047**	48#
Hotspot													
DH5	Front Side	10	78	2480	-0.03	0.047	14.48	15.00	1.127	76.34	1.310	0.069	/
	Back Side	10	78	2480	-0.08	0.062	14.48	15.00	1.127	76.34	1.310	0.092	/
	Left Edge	10	78	2480	-0.03	0.035	14.48	15.00	1.127	76.34	1.310	0.052	/
	Top Edge	10	78	2480	0.09	0.073	14.48	15.00	1.127	76.34	1.310	**0.108**	49#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.16 Worst Case of GSM 850 SAR

Antenna	Reduced power level	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(%)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Body-worn													
Ant.1	state17	DATA 4 slots	Back Side	15	190	836.6	-0.16	0.412	27.54	27.80	1.062	**0.438**	50#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.17 Worst Case of WIFI 5GHz

Fre. Band	Reduced power level	Fre. Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(%)	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.
Head																
Ant.7	Level1	5.3G	802.11n (HT40)	Left Tilt	0	54	5270	-0.14	0.798	13.36	13.50	1.033	96.47	1.037	**0.855**	51#
Hotspot																
Ant.7	Level3	5.2G	802.11a	Top Edge	10	36	5180	0.12	0.719	17.12	19.00	1.542	98.30	1.017	**1.128**	52#
Fre. Band	Reduced power level	Fre. Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(%)	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.
Specific																
Ant.7	Level3	5.3G	802.11a	Front Side	0	64	5320	0.18	1.810	17.46	19.00	1.426	98.30	1.017	**2.625**	53#
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated^{1th} Measured SAR (W/kg)	Largest to Smallest SAR Radio
850	GSM 850	Hotspot	Left Edge	1.090	Yes	1.085	1.00
1750	WCDMA band 4	Specific	Bottom Edge	1.460	Yes	1.450	1.01
850	WCDMA band 5	Hotspot	Left Edge	0.959	Yes	0.950	1.01
1750	LTE band 4	Specific	Back Side	1.630	Yes	1.621	1.01
850	LTE band 5	Hotspot	Left Edge	0.974	Yes	0.962	1.01
2600	LTE band 41	Specific	Top Edge	1.650	Yes	1.643	1.00
5250	5G WIFI	Specific	Front Side	1.830	Yes	1.818	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.							

12 SIMULTANEOUS TRANSMISSION

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

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
1	WIFI5G + BT	Yes	Yes	Yes
2	WWAN + WIFI2.4G	Yes	Yes	Yes
3	WWAN + BT	Yes	Yes	Yes
4	WWAN + WIFI5G	Yes	Yes	Yes
5	WWAN + WIFI2.4G	Yes	Yes	Yes
6	WWAN + WIFI5G+BT	Yes	Yes	Yes
7	WWAN + WLAN 2.4GHz(chain 0)	Yes	Yes	Yes
8	WWAN + WLAN 5GHz(chain 0)	Yes	Yes	Yes
9	WWAN + BT	Yes	Yes	Yes

Note:

1. 2G&3G&4G share the same antenna and can’t transmit simultaneously.
2. 2.4G WLAN can’t transmit simultaneously with Bluetooth or 5G WLAN.
3. Two WWAN antennas can switch automatically, but up and down antenna can't transmit simultaneously.
4. The maximum SAR summation is calculated based on the same configuration and test position.
5. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
6. 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)

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	MAX2.4GWIFI	MAX5GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3+4)
GSM850	Ant.1	Left Cheek	0.337	0.328	0.396	0.450	0.665	0.733
	Ant.1	Left Tilt	0.074	0.320	0.440	0.388	0.394	0.514
	Ant.1	Right Cheek	0.569	0.317	0.226	0.241	0.886	0.795
	Ant.1	Right Tilt	0.121	0.259	0.247	0.306	0.380	0.368
GSM850	Ant.0	Left Cheek	0.209	0.328	0.396	0.450	0.537	0.605
	Ant.0	Left Tilt	0.115	0.320	0.440	0.388	0.435	0.555
	Ant.0	Right Cheek	0.137	0.317	0.226	0.241	0.454	0.363
	Ant.0	Right Tilt	0.079	0.259	0.247	0.306	0.338	0.326
GSM1900	Ant.2	Left Cheek	0.365	0.328	0.396	0.450	0.693	0.761
	Ant.2	Left Tilt	0.084	0.320	0.440	0.388	0.404	0.524
	Ant.2	Right Cheek	0.368	0.317	0.226	0.241	0.685	0.594
	Ant.2	Right Tilt	0.143	0.259	0.247	0.306	0.402	0.390
GSM1900	Ant.0	Left Cheek	0.073	0.328	0.396	0.450	0.401	0.469
	Ant.0	Left Tilt	0.046	0.320	0.440	0.388	0.366	0.486
	Ant.0	Right Cheek	0.042	0.317	0.226	0.241	0.359	0.268
	Ant.0	Right Tilt	0.030	0.259	0.247	0.306	0.289	0.277
WCDMA B4	Ant.2	Left Cheek	0.456	0.328	0.396	0.450	0.784	0.852
	Ant.2	Left Tilt	0.095	0.320	0.440	0.388	0.415	0.535
	Ant.2	Right Cheek	0.524	0.317	0.226	0.241	0.841	0.750
	Ant.2	Right Tilt	0.136	0.259	0.247	0.306	0.395	0.383
WCDMA B4	Ant.0	Left Cheek	0.147	0.328	0.396	0.450	0.475	0.543
	Ant.0	Left Tilt	0.081	0.320	0.440	0.388	0.401	0.521
	Ant.0	Right Cheek	0.112	0.317	0.226	0.241	0.429	0.338
	Ant.0	Right Tilt	0.059	0.259	0.247	0.306	0.318	0.306
WCDMA B5	Ant.1	Left Cheek	0.422	0.328	0.396	0.450	0.750	0.818
	Ant.1	Left Tilt	0.087	0.320	0.440	0.388	0.407	0.527
	Ant.1	Right Cheek	0.744	0.317	0.226	0.241	1.061	0.970
	Ant.1	Right Tilt	0.122	0.259	0.247	0.306	0.381	0.369
WCDMA B5	Ant.0	Left Cheek	0.260	0.328	0.396	0.450	0.588	0.656
	Ant.0	Left Tilt	0.167	0.320	0.440	0.388	0.487	0.607
	Ant.0	Right Cheek	0.226	0.317	0.226	0.241	0.543	0.452
	Ant.0	Right Tilt	0.119	0.259	0.247	0.306	0.378	0.366
LTE B4	Ant.2	Left Cheek	0.792	0.328	0.396	0.450	1.120	1.188
	Ant.2	Left Tilt	0.086	0.320	0.440	0.388	0.406	0.526
	Ant.2	Right Cheek	0.646	0.317	0.226	0.241	0.963	0.872

	Ant.2	Right Tilt	0.122	0.259	0.247	0.306	0.381	0.369
LTE B4	Ant.0	Left Cheek	0.150	0.328	0.396	0.450	0.478	0.546
	Ant.0	Left Tilt	0.096	0.320	0.440	0.388	0.416	0.536
	Ant.0	Right Cheek	0.113	0.317	0.226	0.241	0.430	0.339
	Ant.0	Right Tilt	0.079	0.259	0.247	0.306	0.338	0.326
LTE B5	Ant.1	Left Cheek	0.410	0.328	0.396	0.450	0.738	0.806
	Ant.1	Left Tilt	0.064	0.320	0.440	0.388	0.384	0.504
	Ant.1	Right Cheek	0.738	0.317	0.226	0.241	1.055	0.964
	Ant.1	Right Tilt	0.083	0.259	0.247	0.306	0.342	0.330
LTE B5	Ant.0	Left Cheek	0.241	0.328	0.396	0.450	0.569	0.637
	Ant.0	Left Tilt	0.146	0.320	0.440	0.388	0.466	0.974
	Ant.0	Right Cheek	0.180	0.317	0.226	0.241	0.497	0.647
	Ant.0	Right Tilt	0.111	0.259	0.247	0.306	0.370	0.664
LTE B12	Ant.1	Left Cheek	0.338	0.328	0.396	0.450	0.666	1.184
	Ant.1	Left Tilt	0.064	0.320	0.440	0.388	0.384	0.892
	Ant.1	Right Cheek	0.604	0.317	0.226	0.241	0.921	1.071
	Ant.1	Right Tilt	0.093	0.259	0.247	0.306	0.352	0.646
LTE B12	Ant.0	Left Cheek	0.141	0.328	0.396	0.450	0.469	0.987
	Ant.0	Left Tilt	0.087	0.320	0.440	0.388	0.407	0.915
	Ant.0	Right Cheek	0.104	0.317	0.226	0.241	0.421	0.571
	Ant.0	Right Tilt	0.067	0.259	0.247	0.306	0.326	0.620
LTE B17	Ant.1	Left Cheek	0.364	0.328	0.396	0.450	0.692	1.210
	Ant.1	Left Tilt	0.076	0.320	0.440	0.388	0.396	0.904
	Ant.1	Right Cheek	0.642	0.317	0.226	0.241	0.959	1.109
	Ant.1	Right Tilt	0.094	0.259	0.247	0.306	0.353	0.647
LTE B17	Ant.0	Left Cheek	0.165	0.333	0.396	0.450	0.498	1.011
	Ant.0	Left Tilt	0.099	0.298	0.440	0.388	0.397	0.927
	Ant.0	Right Cheek	0.077	0.171	0.226	0.241	0.248	0.544
	Ant.0	Right Tilt	0.069	0.241	0.247	0.306	0.310	0.622
LTE B26	Ant.1	Left Cheek	0.464	0.333	0.396	0.450	0.797	1.310
	Ant.1	Left Tilt	0.078	0.298	0.440	0.388	0.376	0.906
	Ant.1	Right Cheek	0.755	0.171	0.226	0.241	0.926	1.222
	Ant.1	Right Tilt	0.092	0.241	0.247	0.306	0.333	0.645
LTE B26	Ant.0	Left Cheek	0.163	0.333	0.396	0.450	0.496	1.009
	Ant.0	Left Tilt	0.099	0.298	0.440	0.388	0.397	0.927
	Ant.0	Right Cheek	0.126	0.171	0.226	0.241	0.297	0.593
	Ant.0	Right Tilt	0.075	0.241	0.247	0.306	0.316	0.628
LTE B38	Ant.2	Left Cheek	0.651	0.333	0.396	0.450	0.984	**1.497**
	Ant.2	Left Tilt	0.147	0.298	0.440	0.388	0.445	0.975
	Ant.2	Right Cheek	0.614	0.171	0.226	0.241	0.785	1.081
	Ant.2	Right Tilt	0.310	0.241	0.247	0.306	0.551	0.863
LTE B38	Ant.0	Left Cheek	0.044	0.333	0.396	0.450	0.377	0.890
	Ant.0	Left Tilt	0.033	0.298	0.440	0.388	0.331	0.861

	Ant.0	Right Cheek	0.035	0.171	0.226	0.241	0.206	0.502
	Ant.0	Right Tilt	0.024	0.241	0.247	0.306	0.265	0.577
LTE B41	Ant.2	Left Cheek	0.644	0.333	0.396	0.450	0.977	1.490
	Ant.2	Left Tilt	0.139	0.298	0.440	0.388	0.437	0.967
	Ant.2	Right Cheek	0.554	0.171	0.226	0.241	0.725	1.021
	Ant.2	Right Tilt	0.304	0.241	0.247	0.306	0.545	0.857
LTE B41	Ant.0	Left Cheek	0.050	0.333	0.396	0.450	0.383	0.896
	Ant.0	Left Tilt	0.035	0.298	0.440	0.388	0.333	0.863
	Ant.0	Right Cheek	0.038	0.171	0.226	0.241	0.209	0.505
	Ant.0	Right Tilt	0.026	0.241	0.247	0.306	0.267	0.579
LTE B41	Ant.3	Left Cheek	0.285	0.333	0.348	0.450	0.618	1.083
	Ant.3	Left Tilt	0.312	0.298	0.440	0.388	0.610	1.140
	Ant.3	Right Cheek	0.855	0.171	0.203	0.241	1.026	1.299
	Ant.3	Right Tilt	0.858	0.241	0.213	0.306	1.099	1.377

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 1.497 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.2 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	MAX5GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3+4)
GSM850	Ant.1	Front Side 10mm	0.872	0.166	0.115	0.069	1.038	1.056
	Ant.1	Back Side 10mm	1.122	0.245	0.128	0.092	**1.367**	1.342
	Ant.1	Left Edge 10mm	1.157	0.093	0.038	0.052	1.250	1.247
	Ant.1	Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
	Ant.1	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.1	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
GSM850	Ant.0	Front Side 10mm	0.319	0.166	0.115	0.069	0.485	0.503
	Ant.0	Back Side 10mm	0.365	0.245	0.128	0.092	0.610	0.585
	Ant.0	Left Edge 10mm	0.205	0.093	0.038	0.052	0.298	0.295
	Ant.0	Right Edge 10mm	0.300	0.000	0.000	0.000	0.300	0.300
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.315	0.000	0.000	0.000	0.315	0.315
GSM1900	Ant.2	Front Side 10mm	0.224	0.166	0.115	0.069	0.390	0.408
	Ant.2	Back Side 10mm	0.271	0.245	0.128	0.092	0.516	0.491
	Ant.2	Left Edge 10mm	0.000	0.093	0.038	0.052	0.093	0.090
	Ant.2	Right Edge 10mm	0.358	0.000	0.000	0.000	0.358	0.358
	Ant.2	Top Edge 10mm	0.051	0.349	0.234	0.108	0.400	0.393
	Ant.2	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
GSM1900	Ant.0	Front Side 10mm	0.193	0.166	0.115	0.069	0.359	0.377
	Ant.0	Back Side 10mm	0.296	0.245	0.128	0.092	0.541	0.516
	Ant.0	Left Edge 10mm	0.078	0.093	0.038	0.052	0.171	0.168
	Ant.0	Right Edge 10mm	0.092	0.000	0.000	0.000	0.092	0.092
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.383	0.000	0.000	0.000	0.383	0.383
WCDMA B4	Ant.2	Front Side 10mm	0.259	0.166	0.115	0.069	0.425	0.443
	Ant.2	Back Side 10mm	0.339	0.245	0.128	0.092	0.584	0.559
	Ant.2	Left Edge 10mm	0.000	0.093	0.038	0.052	0.093	0.090
	Ant.2	Right Edge 10mm	0.555	0.000	0.000	0.000	0.555	0.555
	Ant.2	Top Edge 10mm	0.056	0.349	0.234	0.108	0.405	0.398
	Ant.2	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B4	Ant.0	Front Side 10mm	0.400	0.166	0.115	0.069	0.566	0.584
	Ant.0	Back Side 10mm	0.524	0.245	0.128	0.092	0.769	0.744
	Ant.0	Left Edge 10mm	0.140	0.093	0.038	0.052	0.233	0.230
	Ant.0	Right Edge 10mm	0.071	0.000	0.000	0.000	0.071	0.071
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.851	0.000	0.000	0.000	0.851	0.851

WCDMA B5	Ant.1	Front Side 10mm	0.726	0.166	0.115	0.069	0.892	0.910
	Ant.1	Back Side 10mm	0.877	0.245	0.128	0.092	1.122	1.097
	Ant.1	Left Edge 10mm	1.042	0.093	0.038	0.052	1.135	1.132
	Ant.1	Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
	Ant.1	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.1	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B5	Ant.0	Front Side 10mm	0.338	0.166	0.115	0.069	0.504	0.522
	Ant.0	Back Side 10mm	0.404	0.245	0.128	0.092	0.649	0.624
	Ant.0	Left Edge 10mm	0.080	0.093	0.038	0.052	0.173	0.170
	Ant.0	Right Edge 10mm	0.316	0.000	0.000	0.000	0.316	0.316
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.327	0.000	0.000	0.000	0.327	0.327
LTE B4	Ant.2	Front Side 10mm	0.292	0.166	0.115	0.069	0.458	0.476
	Ant.2	Back Side 10mm	0.378	0.245	0.128	0.092	0.623	0.598
	Ant.2	Left Edge 10mm	0.000	0.093	0.038	0.052	0.093	0.090
	Ant.2	Right Edge 10mm	0.564	0.000	0.000	0.000	0.564	0.564
	Ant.2	Top Edge 10mm	0.035	0.349	0.234	0.108	0.384	0.377
	Ant.2	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B4	Ant.0	Front Side 10mm	0.455	0.166	0.115	0.069	0.621	0.639
	Ant.0	Back Side 10mm	0.591	0.245	0.128	0.092	0.836	0.811
	Ant.0	Left Edge 10mm	0.158	0.093	0.038	0.052	0.251	0.248
	Ant.0	Right Edge 10mm	0.117	0.000	0.000	0.000	0.117	0.117
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.891	0.000	0.000	0.000	0.891	0.891
LTE B5	Ant.1	Front Side 10mm	0.775	0.166	0.115	0.069	0.941	0.959
	Ant.1	Back Side 10mm	0.953	0.245	0.128	0.092	1.198	1.173
	Ant.1	Left Edge 10mm	1.134	0.093	0.038	0.052	1.227	1.224
	Ant.1	Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
	Ant.1	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.1	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B5	Ant.0	Front Side 10mm	0.415	0.166	0.115	0.069	0.581	0.599
	Ant.0	Back Side 10mm	0.471	0.245	0.128	0.092	0.716	0.691
	Ant.0	Left Edge 10mm	0.106	0.093	0.038	0.052	0.199	0.196
	Ant.0	Right Edge 10mm	0.375	0.000	0.000	0.000	0.375	0.375
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.380	0.000	0.000	0.000	0.380	0.380
LTE B12	Ant.1	Front Side 10mm	0.265	0.166	0.115	0.069	0.431	0.449
	Ant.1	Back Side 10mm	0.301	0.245	0.128	0.092	0.546	0.521
	Ant.1	Left Edge 10mm	0.480	0.093	0.038	0.052	0.573	0.570
	Ant.1	Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
	Ant.1	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.1	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B12	Ant.0	Front Side 10mm	0.161	0.166	0.115	0.069	0.327	0.345

	Ant.0	Back Side 10mm	0.211	0.245	0.128	0.092	0.456	0.431
	Ant.0	Left Edge 10mm	0.100	0.093	0.038	0.052	0.193	0.190
	Ant.0	Right Edge 10mm	0.258	0.000	0.000	0.000	0.258	0.258
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.138	0.000	0.000	0.000	0.138	0.138
LTE B17	Ant.1	Front Side 10mm	0.293	0.166	0.115	0.069	0.459	0.477
	Ant.1	Back Side 10mm	0.355	0.245	0.128	0.092	0.600	0.575
	Ant.1	Left Edge 10mm	0.559	0.093	0.038	0.052	0.652	0.649
	Ant.1	Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
	Ant.1	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.1	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B17	Ant.0	Front Side 10mm	0.179	0.166	0.115	0.069	0.345	0.363
	Ant.0	Back Side 10mm	0.218	0.245	0.128	0.092	0.463	0.438
	Ant.0	Left Edge 10mm	0.291	0.093	0.038	0.052	0.384	0.381
	Ant.0	Right Edge 10mm	0.110	0.000	0.000	0.000	0.110	0.110
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.143	0.000	0.000	0.000	0.143	0.143
LTE B26	Ant.1	Front Side 10mm	0.570	0.166	0.115	0.069	0.736	0.754
	Ant.1	Back Side 10mm	0.718	0.245	0.128	0.092	0.963	0.938
	Ant.1	Left Edge 10mm	0.924	0.093	0.038	0.052	1.017	1.014
	Ant.1	Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
	Ant.1	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.1	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B26	Ant.0	Front Side 10mm	0.321	0.166	0.115	0.069	0.487	0.505
	Ant.0	Back Side 10mm	0.391	0.245	0.128	0.092	0.636	0.611
	Ant.0	Left Edge 10mm	0.100	0.093	0.038	0.052	0.193	0.190
	Ant.0	Right Edge 10mm	0.314	0.000	0.000	0.000	0.314	0.314
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.326	0.000	0.000	0.000	0.326	0.326
LTE B38	Ant.2	Front Side 10mm	0.295	0.166	0.115	0.069	0.461	0.479
	Ant.2	Back Side 10mm	0.332	0.245	0.128	0.092	0.577	0.552
	Ant.2	Left Edge 10mm	0.000	0.093	0.038	0.052	0.093	0.090
	Ant.2	Right Edge 10mm	0.464	0.000	0.000	0.000	0.464	0.464
	Ant.2	Top Edge 10mm	0.124	0.349	0.234	0.108	0.473	0.466
	Ant.2	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B38	Ant.0	Front Side 10mm	0.368	0.166	0.115	0.069	0.534	0.552
	Ant.0	Back Side 10mm	0.545	0.245	0.128	0.092	0.790	0.765
	Ant.0	Left Edge 10mm	0.100	0.093	0.038	0.052	0.193	0.190
	Ant.0	Right Edge 10mm	0.073	0.000	0.000	0.000	0.073	0.073
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.455	0.000	0.000	0.000	0.455	0.455
LTE B41	Ant.2	Front Side 10mm	0.297	0.166	0.115	0.069	0.463	0.481
	Ant.2	Back Side 10mm	0.287	0.245	0.128	0.092	0.532	0.507

	Ant.2	Left Edge 10mm	0.000	0.093	0.038	0.052	0.093	0.090
	Ant.2	Right Edge 10mm	0.568	0.000	0.000	0.000	0.568	0.568
	Ant.2	Top Edge 10mm	0.118	0.349	0.234	0.108	0.467	0.460
	Ant.2	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B41	Ant.0	Front Side 10mm	0.281	0.166	0.115	0.069	0.447	0.465
	Ant.0	Back Side 10mm	0.461	0.245	0.128	0.092	0.706	0.681
	Ant.0	Left Edge 10mm	0.089	0.093	0.038	0.052	0.182	0.179
	Ant.0	Right Edge 10mm	0.063	0.000	0.000	0.000	0.063	0.063
	Ant.0	Top Edge 10mm	0.000	0.349	0.234	0.108	0.349	0.342
	Ant.0	Bottom Edge 10mm	0.397	0.000	0.000	0.000	0.397	0.397
LTE B41	Ant.3	Front Side 10mm	0.267	0.166	0.115	0.069	0.433	0.451
	Ant.3	Back Side 10mm	0.354	0.245	0.128	0.092	0.599	0.574
	Ant.3	Left Edge 10mm	0.165	0.093	0.038	0.052	0.258	0.255
	Ant.3	Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
	Ant.3	Top Edge 10mm	0.605	0.349	0.234	0.108	0.954	0.947
	Ant.3	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000

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 1.367 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.3 Body-worn Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	MAX5GWIFI	Bluetooth	Sum SAR (1+2)	Sum SAR (1+3+4)
GSM850	Ant.1	Front Side 15mm	0.438	0.129	0.384	0.028	0.567	0.850
	Ant.1	Back Side 15mm	0.517	0.184	0.406	0.047	0.701	**0.970**
GSM850	Ant.0	Front Side 15mm	0.171	0.129	0.384	0.028	0.300	0.583
	Ant.0	Back Side 15mm	0.205	0.184	0.406	0.047	0.389	0.658
GSM1900	Ant.2	Front Side 15mm	0.085	0.129	0.384	0.028	0.214	0.497
	Ant.2	Back Side 15mm	0.110	0.184	0.406	0.047	0.294	0.563
GSM1900	Ant.0	Front Side 15mm	0.078	0.129	0.384	0.028	0.207	0.490
	Ant.0	Back Side 15mm	0.123	0.184	0.406	0.047	0.307	0.576
WCDMA B4	Ant.2	Front Side 15mm	0.134	0.129	0.384	0.028	0.263	0.546
	Ant.2	Back Side 15mm	0.180	0.184	0.406	0.047	0.364	0.633
WCDMA B4	Ant.0	Front Side 15mm	0.233	0.129	0.384	0.028	0.362	0.645
	Ant.0	Back Side 15mm	0.298	0.184	0.406	0.047	0.482	0.751
WCDMA B5	Ant.1	Front Side 15mm	0.367	0.129	0.384	0.028	0.496	0.779
	Ant.1	Back Side 15mm	0.433	0.184	0.406	0.047	0.617	0.886
WCDMA B5	Ant.0	Front Side 15mm	0.211	0.129	0.384	0.028	0.340	0.623
	Ant.0	Back Side 15mm	0.244	0.184	0.406	0.047	0.428	0.697
LTE B4	Ant.2	Front Side 15mm	0.136	0.129	0.384	0.028	0.265	0.548
	Ant.2	Back Side 15mm	0.187	0.184	0.406	0.047	0.371	0.640
LTE B4	Ant.0	Front Side 15mm	0.229	0.129	0.384	0.028	0.358	0.641
	Ant.0	Back Side 15mm	0.304	0.184	0.406	0.047	0.488	0.757
LTE B5	Ant.1	Front Side 15mm	0.381	0.129	0.384	0.028	0.510	0.793
	Ant.1	Back Side 15mm	0.463	0.184	0.406	0.047	0.647	0.916
LTE B5	Ant.0	Front Side 15mm	0.256	0.129	0.384	0.028	0.385	0.668
	Ant.0	Back Side 15mm	0.289	0.184	0.406	0.047	0.473	0.742
LTE 12	Ant.1	Front Side 15mm	0.146	0.129	0.384	0.028	0.275	0.558
	Ant.1	Back Side 15mm	0.161	0.184	0.406	0.047	0.345	0.614
LTE 12	Ant.0	Front Side 15mm	0.159	0.129	0.384	0.028	0.288	0.571
	Ant.0	Back Side 15mm	0.193	0.184	0.406	0.047	0.377	0.646
LTE 17	Ant.1	Front Side 15mm	0.164	0.129	0.384	0.028	0.293	0.576
	Ant.1	Back Side 15mm	0.183	0.184	0.406	0.047	0.367	0.636
LTE 17	Ant.0	Front Side 15mm	0.173	0.129	0.384	0.028	0.302	0.585
	Ant.0	Back Side 15mm	0.209	0.184	0.406	0.047	0.393	0.662
LTE B26	Ant.1	Front Side 15mm	0.306	0.129	0.384	0.028	0.435	0.718
	Ant.1	Back Side 15mm	0.362	0.184	0.406	0.047	0.546	0.815
LTE B26	Ant.0	Front Side 15mm	0.218	0.129	0.384	0.028	0.347	0.630
	Ant.0	Back Side 15mm	0.253	0.184	0.406	0.047	0.437	0.706

LTE B38	Ant.2	Front Side 15mm	0.147	0.129	0.384	0.028	0.276	0.559
	Ant.2	Back Side 15mm	0.145	0.184	0.406	0.047	0.329	0.598
LTE B38	Ant.0	Front Side 15mm	0.166	0.129	0.384	0.028	0.295	0.578
	Ant.0	Back Side 15mm	0.251	0.184	0.406	0.047	0.435	0.704
LTE B41	Ant.2	Front Side 15mm	0.259	0.129	0.384	0.028	0.388	0.671
	Ant.2	Back Side 15mm	0.284	0.184	0.406	0.047	0.468	0.737
LTE B41	Ant.0	Front Side 15mm	0.252	0.129	0.384	0.028	0.381	0.664
	Ant.0	Back Side 15mm	0.322	0.184	0.406	0.047	0.506	0.775
LTE B41	Ant.3	Front Side 15mm	0.218	0.129	0.384	0.028	0.347	0.630
	Ant.3	Back Side 15mm	0.269	0.184	0.406	0.047	0.453	0.722

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 0.970 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.4 Specific Simultaneous Transmission SAR Evaluation for WWAN Antenna with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR		SUM SAR
			1	3	
			WWAN	MAX5GWIFI	Sum SAR (1+3)
WCDMA B4	Ant.0	Front Side 0mm	1.436	0.553	1.989
	Ant.0	Back Side 0mm	1.588	0.393	1.981
	Ant.0	Left Edge 0mm	0.285	0.055	0.340
	Ant.0	Right Edge 0mm	0.186	0.000	0.186
	Ant.0	Top Edge 0mm	0.000	0.496	0.496
	Ant.0	Bottom Edge 0mm	1.623	0.000	1.623
LTE B4	Ant.0	Front Side 0mm	1.377	0.553	1.930
	Ant.0	Back Side 0mm	1.969	0.393	2.362
	Ant.0	Left Edge 0mm	0.320	0.055	0.375
	Ant.0	Right Edge 0mm	0.209	0.000	0.209
	Ant.0	Top Edge 0mm	0.000	0.496	0.496
	Ant.0	Bottom Edge 0mm	1.908	0.000	1.908
LTE B41	Ant.3	Front Side 0mm	1.884	0.553	2.437
	Ant.3	Back Side 0mm	1.997	0.393	2.390
	Ant.3	Left Edge 0mm	1.060	0.055	1.115
	Ant.3	Right Edge 0mm	0.000	0.000	0.000
	Ant.3	Top Edge 0mm	2.320	0.496	**2.816**
	Ant.3	Bottom Edge 0mm	0.000	0.000	0.000

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 2.816 W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test is not required.

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1201	2020/11/11	2023/11/10
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: 7663	2021/07/23	2022/07/22
E-Field Probe	Speag	EX3DV4	SN: 7607	2022/07/04	2023/07/03
Data Acquisition Electronics	Data Acquisition Electronicsr	Speag	DAE4	SN: 878	2022/06/13
Signal Generator	R&S	SMB100A	177746	2022/05/19	2023/05/18
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2022/09/06	2023/09/05
Power Sensor	R&S	NRV-Z4	100381	2022/09/06	2023/09/05
Power Sensor	R&S	NRV-Z2	100211	2022/09/06	2023/09/05
Wireless Communication Test Set	Anritsu	MT8820C	6201502974	2022/01/04	2023/01/03
Wireless Communication Test Set	Anritsu	MT8820C	6201502991	2021/03/16	2022/03/15
Network Analyzer	Agilent	E5071B	MY42404001	2021/04/01	2022/03/31
Network Analyzer	Agilent	E5071C	MY46103472	2021/12/29	2022/12/28
Thermometer	Elitech	RC-4HC	EF720B004820	2021/12/01	2022/11/30
Thermometer	Elitech	RC-4HC	EF720B004811	2022/11/25	2023/11/24
Thermometer	Elitech	RC-4HC	EF720B004817	2022/11/18	2023/11/17
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 25/13 OCPG56	N/A	N/A
Phantom1	Speag	SAM	SN: 1857	N/A	N/A
Phantom2	Speag	SAM	SN: 1576	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

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

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (℃)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ε)	Target Conductivity (σ) (S/m)	Target Permittivity (ε)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2022.02.11	Head	750	21.4	0.90	41.80	0.89	41.94	1.12	-0.33
2022.02.12	Head	750	21.3	0.91	41.75	0.89	41.94	2.25	-0.45
2022.02.13	Head	835	21.2	0.90	41.81	0.90	41.50	0.00	0.75
2022.02.05	Head	835	21.3	0.90	41.78	0.90	41.50	0.00	0.67
2022.02.08	Head	835	21.4	0.90	41.89	0.90	41.50	0.00	0.94
2022.02.10	Head	835	21.3	0.90	41.96	0.90	41.50	0.00	1.11
2022.02.07	Head	1750	21.3	1.37	40.11	1.37	40.08	0.00	0.07
2022.02.09	Head	1750	21.3	1.38	40.22	1.37	40.08	0.73	0.35
2022.02.06	Head	1900	21.1	1.40	39.86	1.40	40.00	0.00	-0.35
2022.02.16	Head	2450	21.6	1.80	39.51	1.80	39.20	0.00	0.79
2022.02.14	Head	2600	21.6	1.97	38.40	1.96	39.01	0.51	-1.56
2022.02.15	Head	2600	21.3	1.98	38.41	1.96	39.01	1.02	-1.54
2022.02.17	Head	5250	21.4	4.70	35.71	4.66	35.99	0.86	-0.78
2022.02.18	Head	5600	21.2	5.05	35.30	5.07	35.53	-0.39	-0.65
2022.11.30	Head	835	21.5	0.90	41.78	0.90	41.50	0.00	0.67
2022.12.01	Head	5250	21.5	4.70	35.93	4.71	35.93	-0.21	0.00
Note: The tolerance limit of Conductivity and Permittivity is± 5%.									

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by SPEAG, the validation data should be within itsspecification 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 (%)
2022.02.11	Head	750	100	0.857	8.57	8.29	3.38
2022.02.12	Head	750	100	0.844	8.44	8.29	1.81
2022.02.13	Head	835	100	0.959	9.59	9.49	1.05
2022.02.05	Head	835	100	0.972	9.72	9.49	2.42
2022.02.08	Head	835	100	0.997	9.97	9.49	5.06
2022.02.10	Head	835	100	0.985	9.85	9.49	3.79
2022.02.07	Head	1750	100	3.770	37.70	36.80	2.45
2022.02.09	Head	1750	100	3.540	35.40	36.80	-3.80
2022.02.06	Head	1900	100	3.950	39.50	39.40	0.25
2022.02.16	Head	2450	100	5.380	53.80	52.60	2.28
2022.02.14	Head	2600	100	5.540	55.40	56.30	-1.60
2022.02.15	Head	2600	100	5.670	56.70	56.30	0.71
2022.02.17	Head	5250	100	7.820	78.20	73.90	5.82
2022.02.18	Head	5600	100	8.290	82.90	76.90	7.80
2022.11.30	Head	835	100	0.933	9.33	9.76	-4.71
2022.12.01	Head	5250	100	7.520	75.20	77.8	-3.34
Note: The tolerance limit of System validation ±10%.							

Head liquid 10g

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2022.02.07	1750	100	1.970	19.70	19.80	-0.51
2022.02.09	1750	100	1.890	18.90	19.80	-4.55
2022.02.14	2600	100	2.390	23.90	25.10	-4.78
2022.02.15	2600	100	2.510	25.10	25.10	0.00
2022.02.17	5250	100	2.150	21.50	20.70	3.86
2022.02.18	5600	100	2.370	23.70	22.60	4.87
Note: The tolerance limit of System validation ±10%.						

System Performance Check Data (750MHz Head)

Date: 2022.02.11

Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used (extrapolated): f = 750 MHz; σ = 0.904 S/m; ε_r = 41.798; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.41, 10.41, 10.41); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

CW 750 100mW/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.858 W/kg

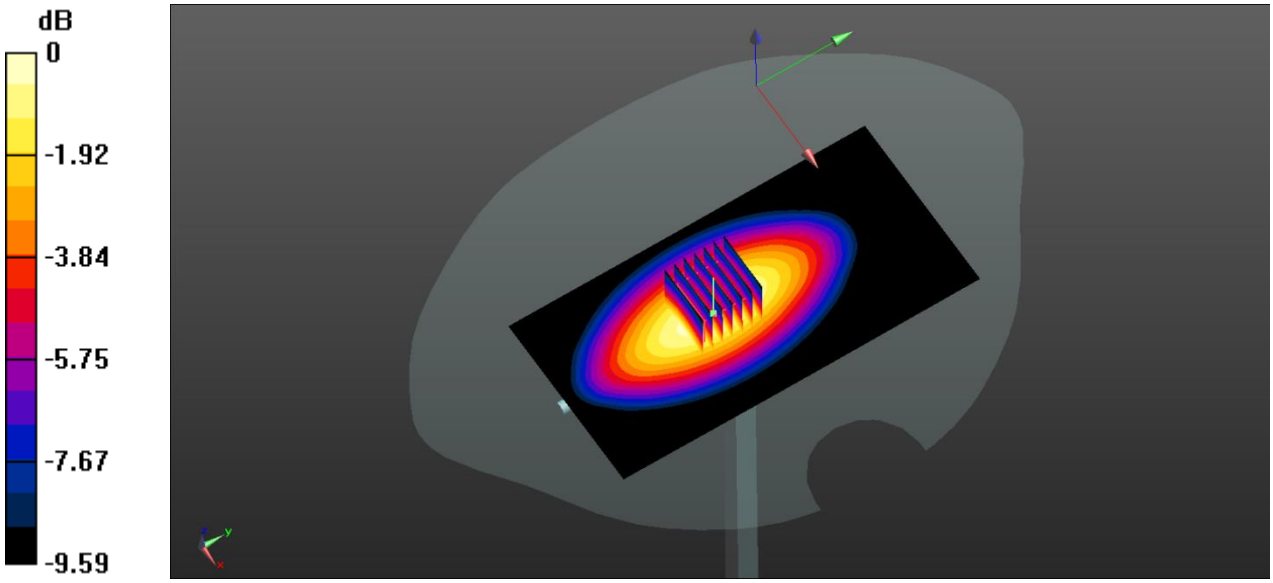
CW 750 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.52 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.857 W/kg; SAR(10 g) = 0.544 W/kg

Maximum value of SAR (measured) = 0.866 W/kg



0 dB = 0.866 W/kg

System Performance Check Data (750MHz Head)

Date: 2022.02.12

Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used (extrapolated): f = 750 MHz; σ = 0.906 S/m; ε_r = 41.748; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.41, 10.41, 10.41); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

CW 750 100mW/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.885 W/kg

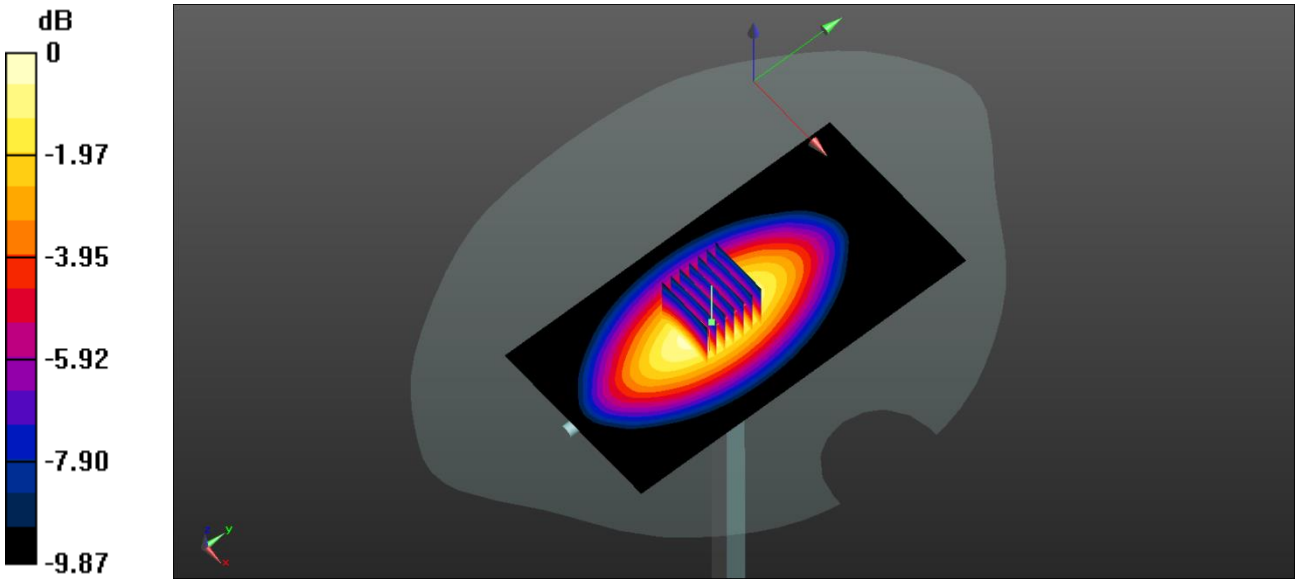
CW 750 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.35 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.844 W/kg; SAR(10 g) = 0.529 W/kg

Maximum value of SAR (measured) = 0.876 W/kg



0 dB = 0.876 W/kg

System Performance Check Data (835MHz Head)

Date: 2022.02.13

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

Medium parameters used: f = 835 MHz; σ = 0.904 S/m; ε_r = 41.811; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

CW 835 100mW HEAD/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

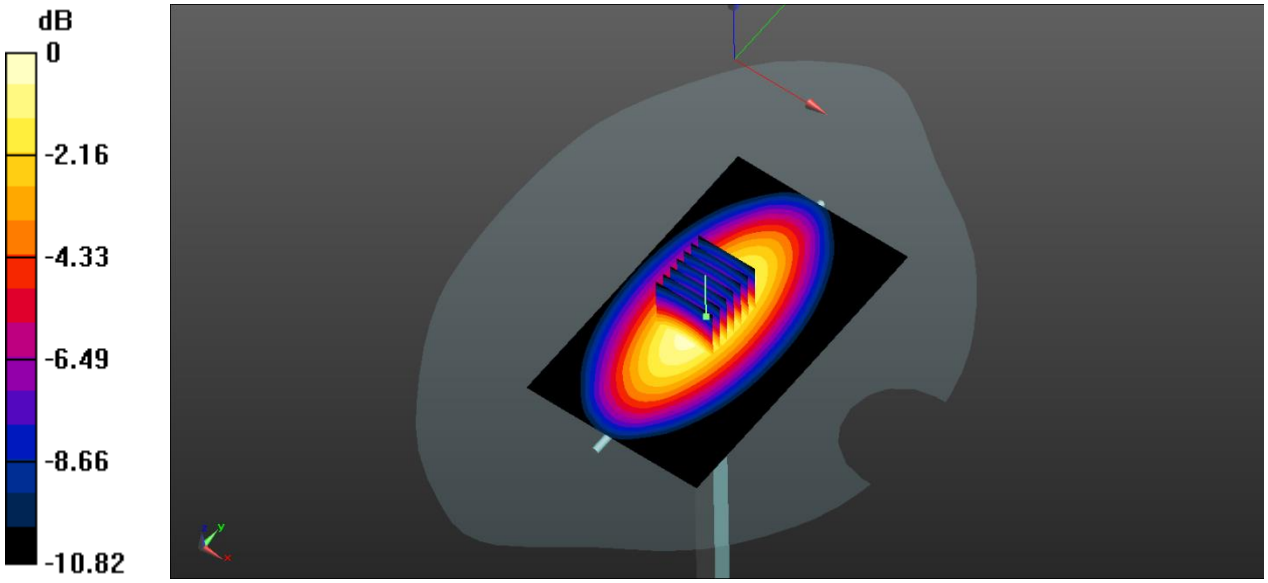
CW 835 100mW HEAD/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.18 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.959 W/kg; SAR(10 g) = 0.615 W/kg

Maximum value of SAR (measured) = 0.991 W/kg



0 dB = 0.991 W/kg

System Performance Check Data (835MHz Head)

Date: 2022.02.05

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

Medium parameters used: f = 835 MHz; σ = 0.895 S/m; ε_r = 41.779; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.992 W/kg

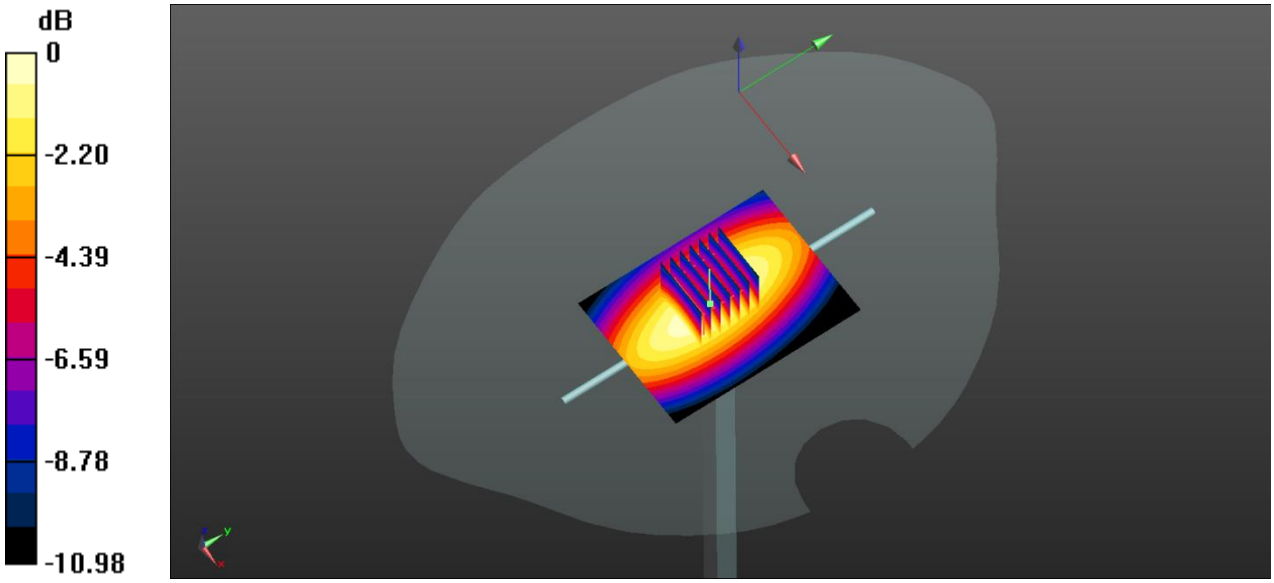
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.58 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.972 W/kg; SAR(10 g) = 0.625 W/kg

Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg

System Performance Check Data (835MHz Head)

Date: 2022.02.08

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

Medium parameters used: f = 835 MHz; σ = 0.902 S/m; ε_r = 41.891; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.981 W/kg

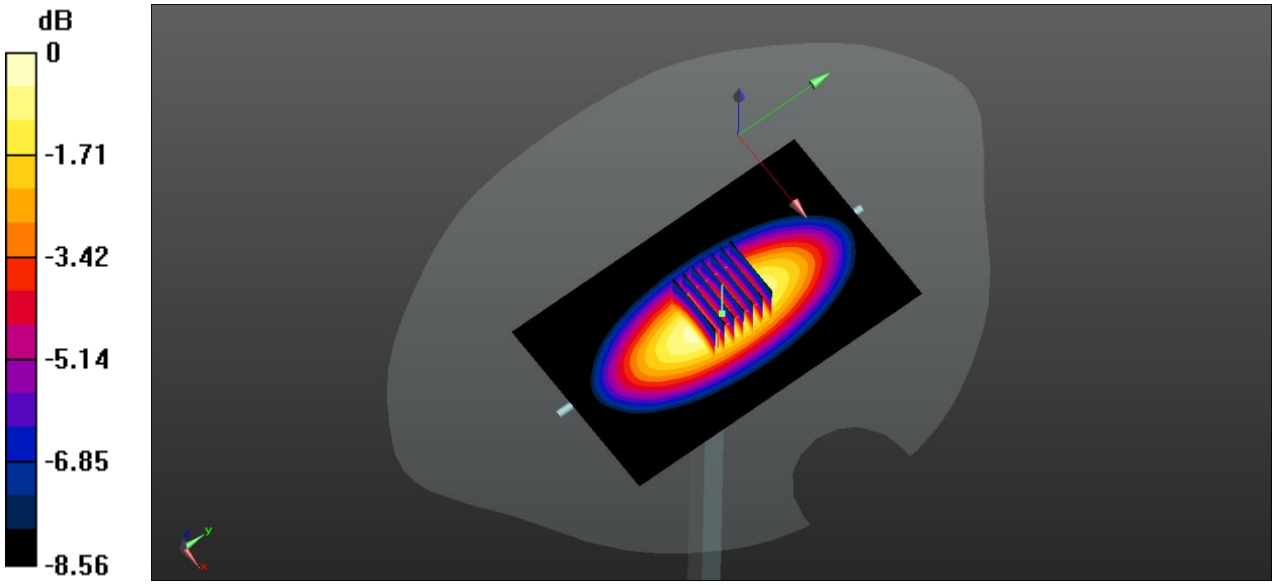
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.06 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.997 W/kg; SAR(10 g) = 0.647 W/kg

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



0 dB = 1.03 W/kg

System Performance Check Data (835MHz Head)

Date: 2022.02.10

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

Medium parameters used: f = 835 MHz; σ = 0.896 S/m; ε_r = 41.963; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.990 W/kg

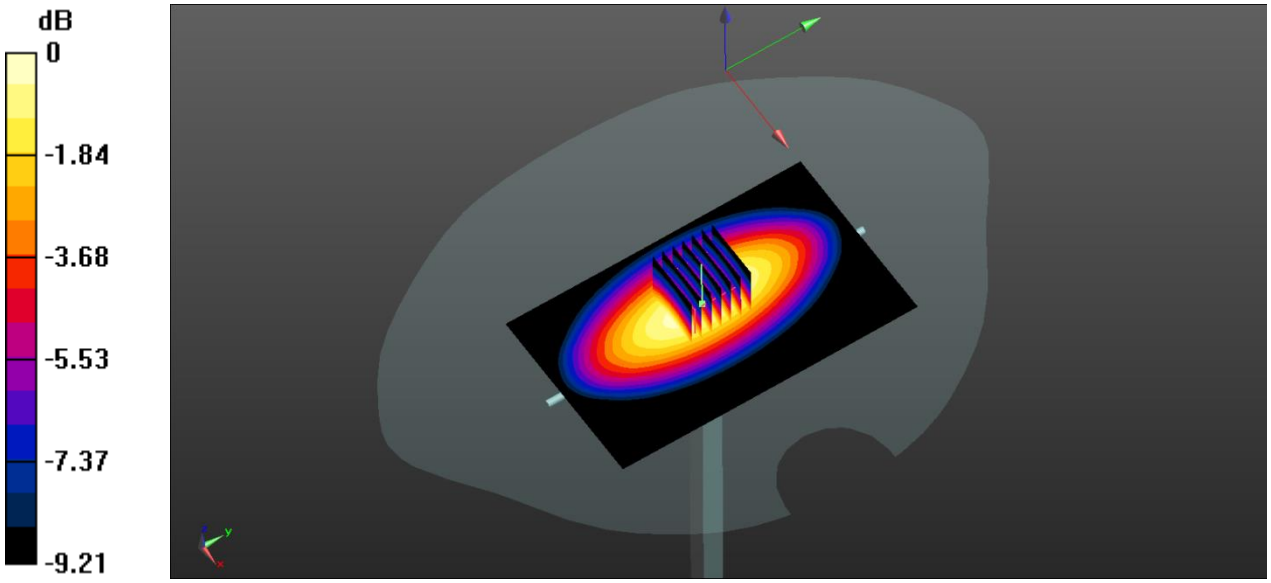
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.63 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.985 W/kg; SAR(10 g) = 0.636 W/kg

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



0 dB = 1.02 W/kg

System Performance Check Data (1750MHz Head)

Date: 2022.02.07

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

Medium parameters used: f = 1750 MHz; σ = 1.374 S/m; ε_r = 40.107; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 4.03 W/kg

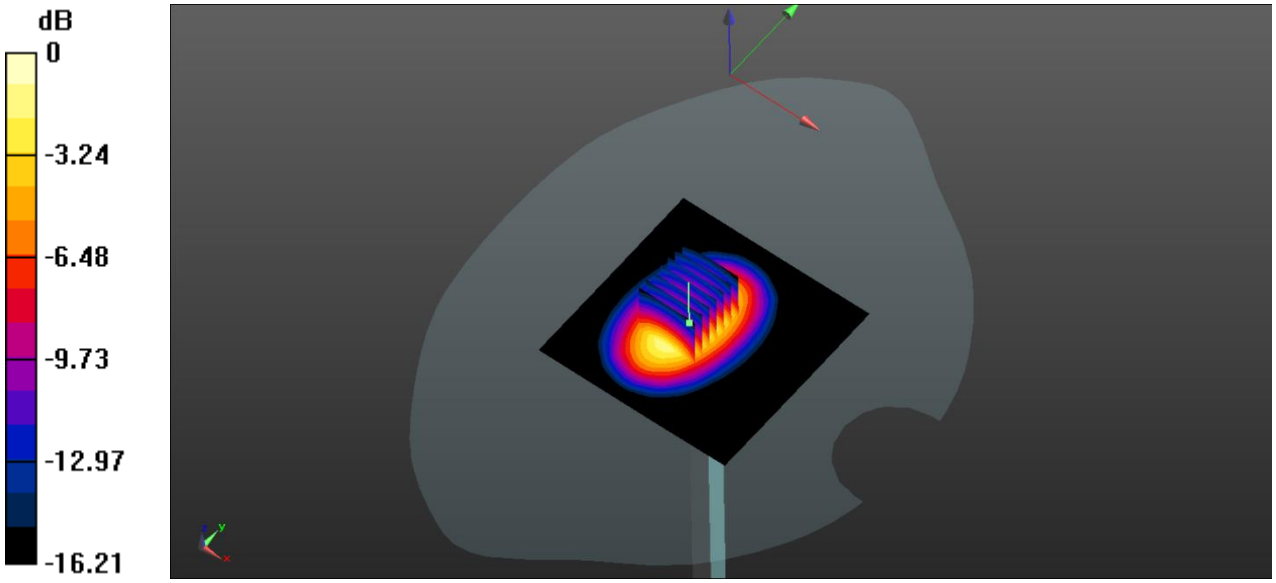
CW 1750 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 48.41 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 6.75 W/kg

SAR(1 g) = 3.77 W/kg; SAR(10 g) = 1.97 W/kg

Maximum value of SAR (measured) = 3.88 W/kg



0 dB = 3.88 W/kg

System Performance Check Data (1750MHz Head)

Date: 2022.02.09

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

Medium parameters used (interpolated): f = 1750 MHz; σ = 1.383 S/m; ε_r = 40.222; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 4.37 W/kg

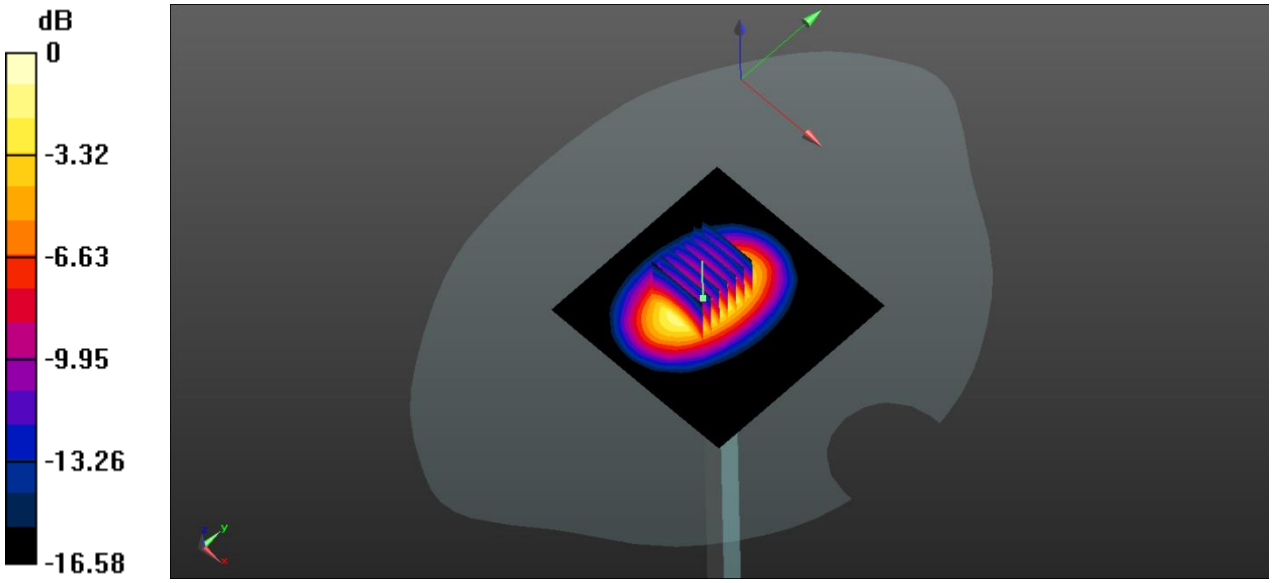
CW1750 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.81 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 7.04 W/kg

SAR(1 g) = 3.54 W/kg; SAR(10 g) = 1.89 W/kg

Maximum value of SAR (measured) = 3.93 W/kg



0 dB = 3.93 W/kg

System Performance Check Data (1900MHz Head)

Date: 2022.02.06

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

Medium parameters used: f = 1900 MHz; σ = 1.4 S/m; ε_r = 39.864; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 4.65 W/kg

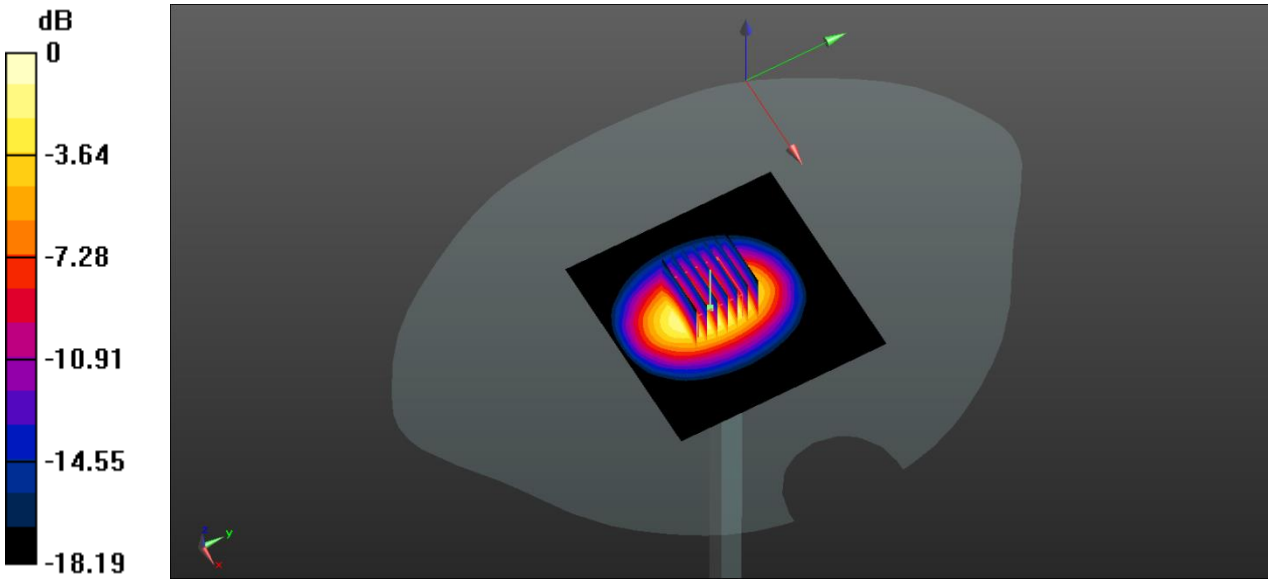
CW 1900 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.52 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 7.36 W/kg

SAR(1 g) = 3.95 W/kg; SAR(10 g) = 2.01 W/kg

Maximum value of SAR (measured) = 4.50 W/kg



0 dB = 4.50 W/kg

System Performance Check Data (2450MHz Head)

Date: 2022.02.16

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

Medium parameters used: f = 2450 MHz; σ = 1.803 S/m; ε_r = 39.509; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 6.32 W/kg

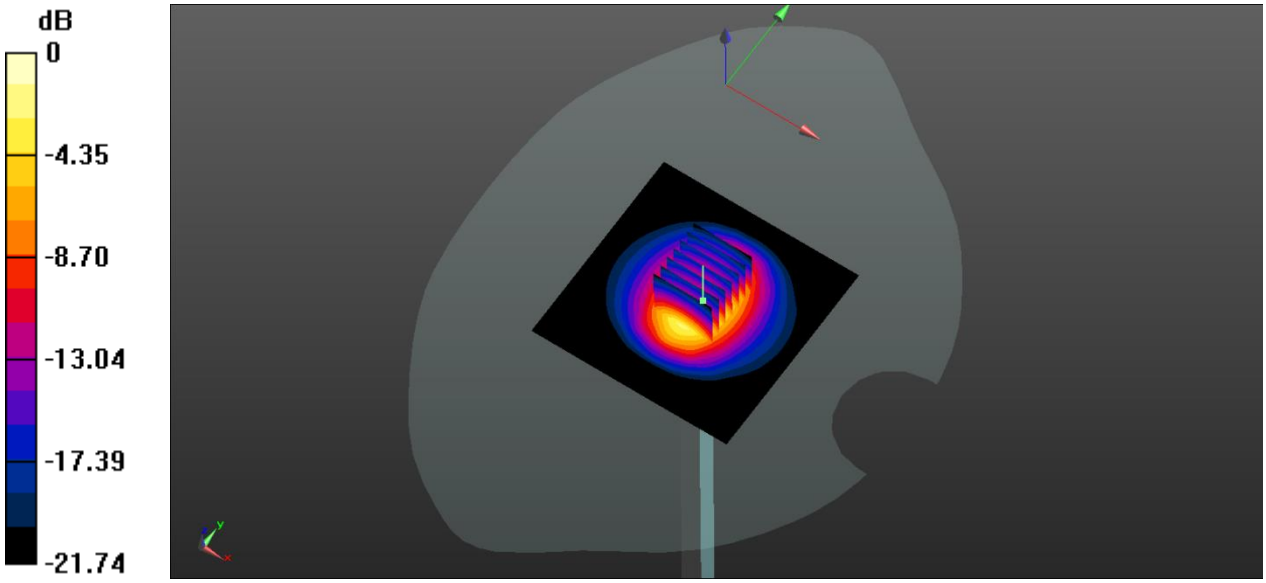
CW 2450 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.07 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 11.7 W/kg

SAR(1 g) = 5.38 W/kg; SAR(10 g) = 2.51 W/kg

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



0 dB = 6.07 W/kg

System Performance Check Data (2600MHz Head)

Date: 2022.02.14

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

Medium parameters used (extrapolated): f = 2600 MHz; σ = 1.971 S/m; ε_r = 38.396; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 6.60 W/kg

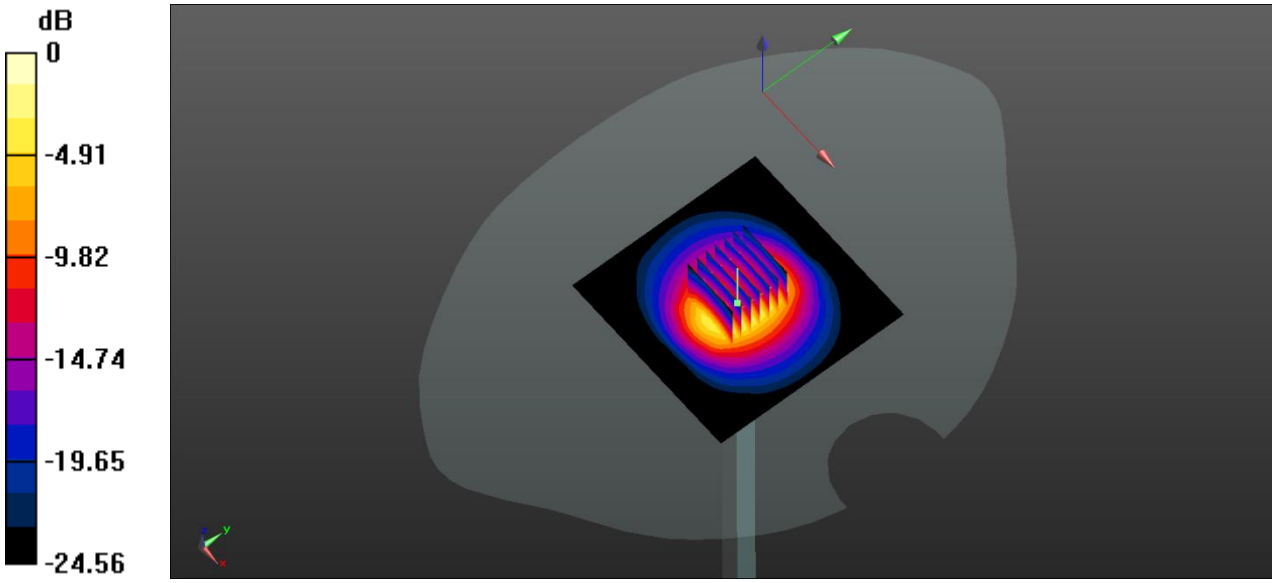
CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 45.73 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 12.5 W/kg

SAR(1 g) = 5.54 W/kg; SAR(10 g) = 2.39 W/kg

Maximum value of SAR (measured) = 6.62 W/kg



0 dB = 6.62 W/kg

System Performance Check Data (2600MHz Head)

Date: 2022.02.15

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

Medium parameters used (extrapolated): f = 2600 MHz; σ = 1.976 S/m; ε_r = 38.409; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 6.46 W/kg

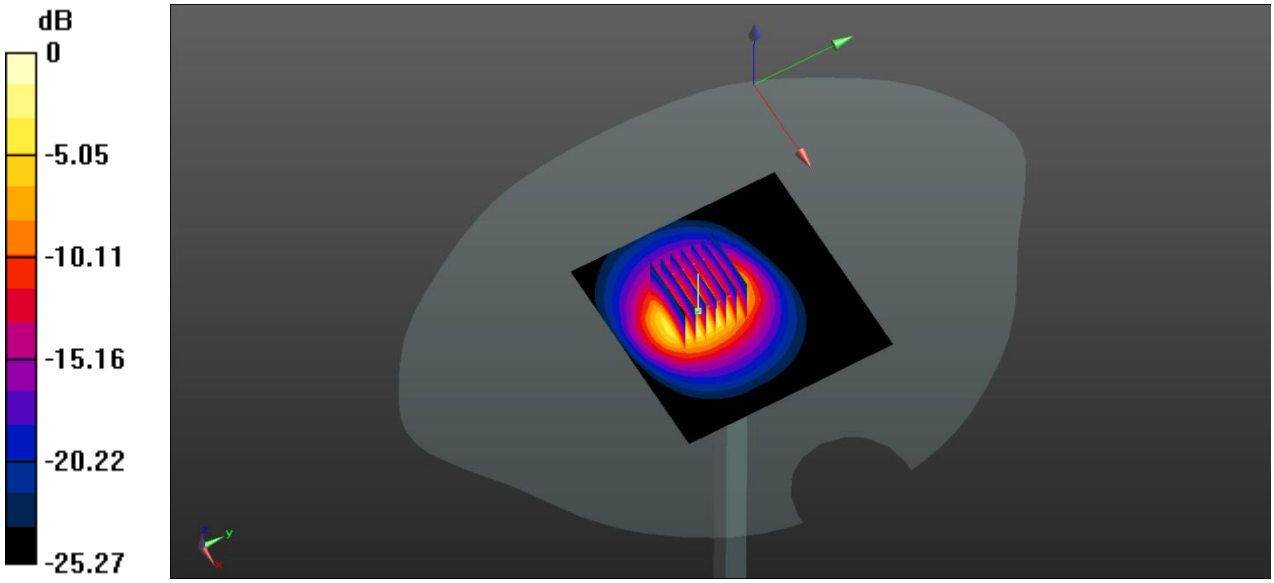
CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.55 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 5.67 W/kg; SAR(10 g) = 2.51 W/kg

Maximum value of SAR (measured) = 6.40 W/kg



0 dB = 6.40 W/kg

System Performance Check Data (5250MHz Head)

Date: 2022.02.17

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

Medium parameters used: f = 5250 MHz; σ = 4.696 S/m; ε_r = 35.707; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.72, 5.72, 5.72); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

CW 5250 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.11 W/kg

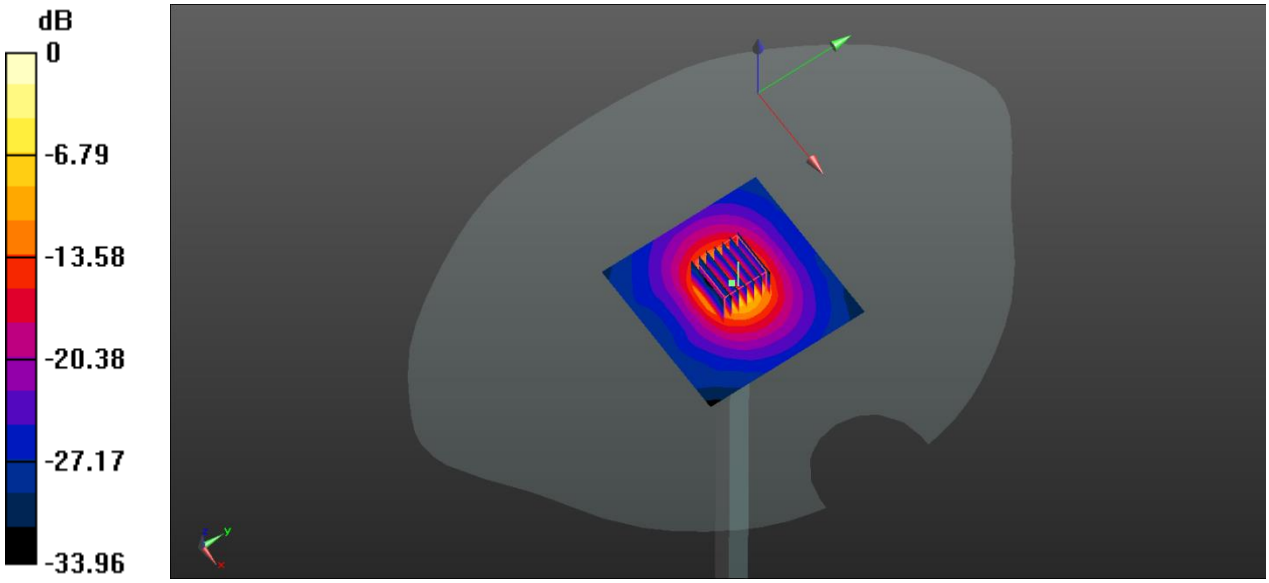
CW 5250 100mW/Zoom Scan (7x7x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 36.55 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 31.8 W/kg

SAR(1 g) = 7.82 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 14.8 W/kg



0 dB = 14.8 W/kg

System Performance Check Data (5600MHz Head)

Date: 2022.02.18

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

Medium parameters used: f = 5600 MHz; σ = 5.052 S/m; ε_r = 35.301; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.1, 5.1, 5.1); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 9.13 W/kg

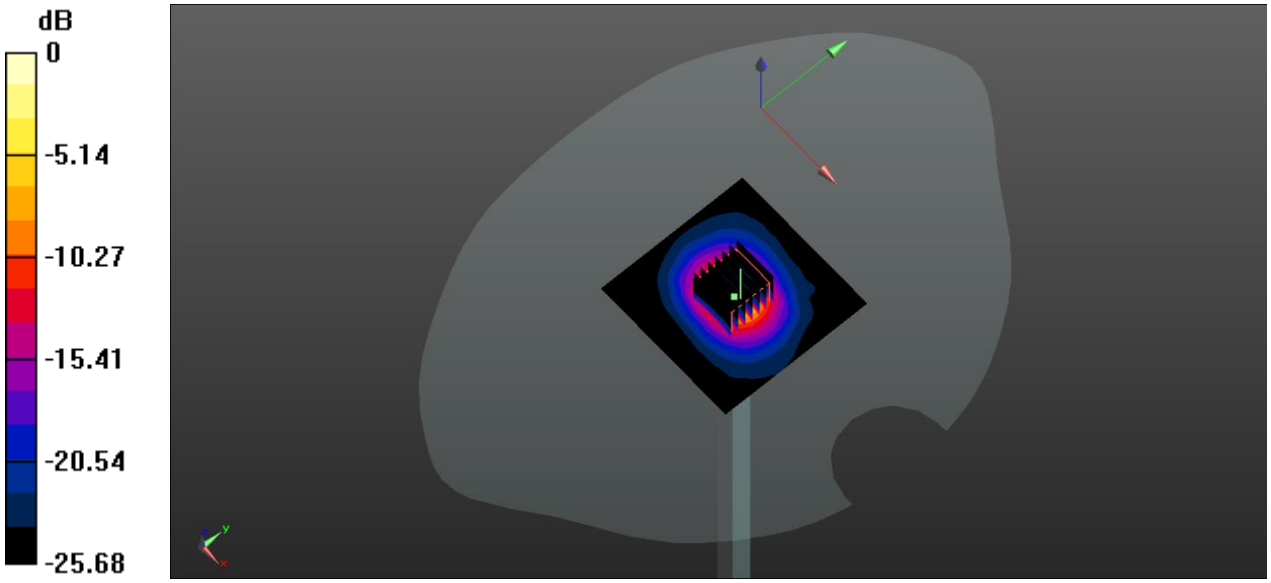
CW 5600 100mW /Zoom Scan (7x7x15)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 22.84 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 38.21 W/kg

SAR(1 g) = 8.29 W/kg; SAR(10 g) = 2.37 W/kg

Maximum value of SAR (measured) = 17.5 W/kg



0 dB = 17.5 W/kg

System Performance Check Data (835MHz Head)

Date: 2022.11.30

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

Medium parameters used: f = 835 MHz; σ = 0.903 S/m; ε_r = 41.783; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3℃ Liquid Temperature:21.5℃

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: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.979 W/kg

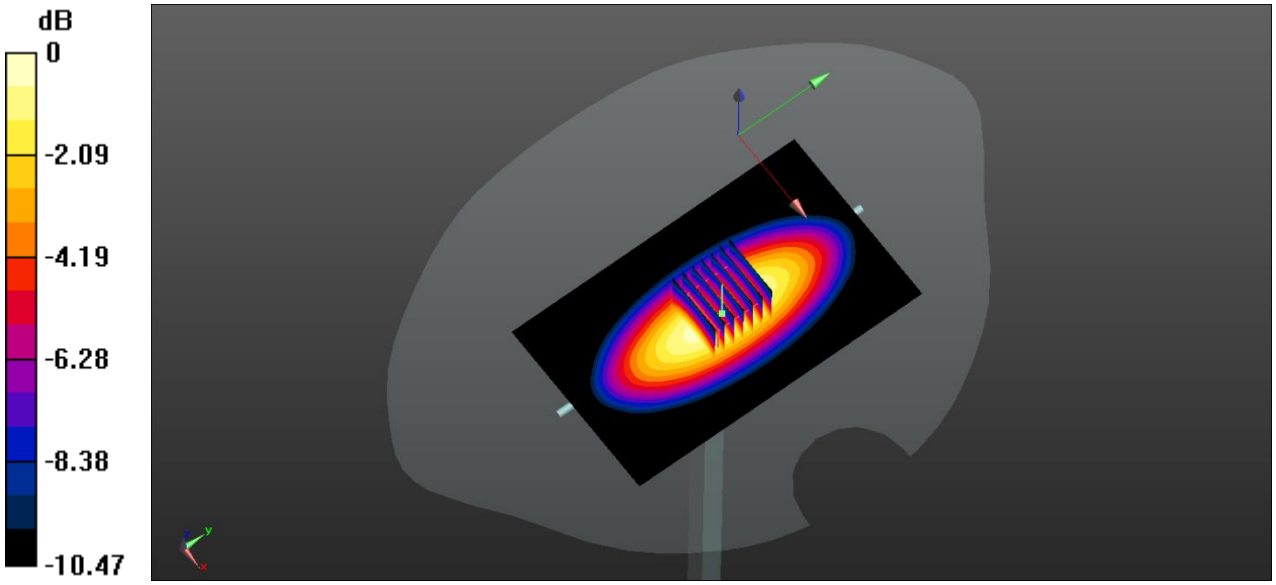
CW 835/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.95 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.933 W/kg; SAR(10 g) = 0.607 W/kg

Maximum value of SAR (measured) = 0.991 W/kg



0 dB = 0.991 W/kg

System Performance Check Data (5250MHz Head)

Date: 2022.12.01

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

Medium parameters used: f = 5250 MHz; σ = 4.701 S/m; ε_r = 35.929; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4℃ Liquid Temperature:21.5℃

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: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 5250/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.15 W/kg

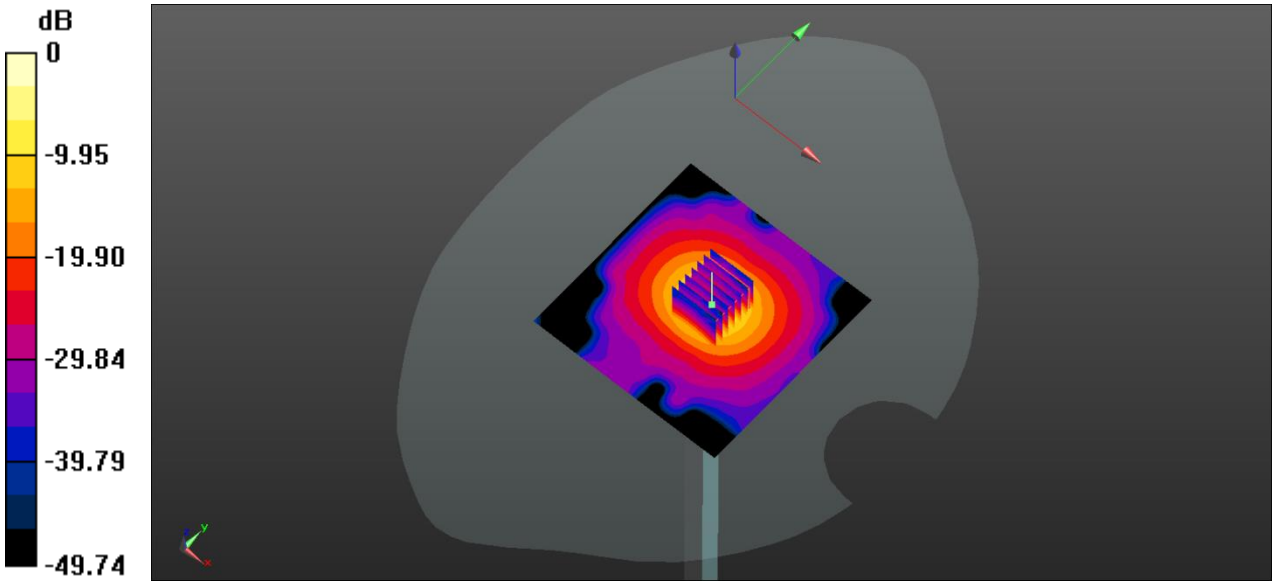
CW 5250/Zoom Scan (7x7x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 36.57 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 31.85 W/kg

SAR(1 g) = 7.52 W/kg; SAR(10 g) = 2.14 W/kg

Maximum value of SAR (measured) = 18.85 W/kg



0 dB = 18.85 W/kg

ANNEX C TEST DATA

Meas.1 Right Head with Cheek on Middle Channel in GPRS850 4Slots mode with Antenna1

Date: 2022.02.05

Communication System Band: GPRS850; Frequency: 836.6 MHz;Duty Cycle: 1:2.0797

Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.897 S/m; ε_r = 41.739; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch190/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.663 W/kg

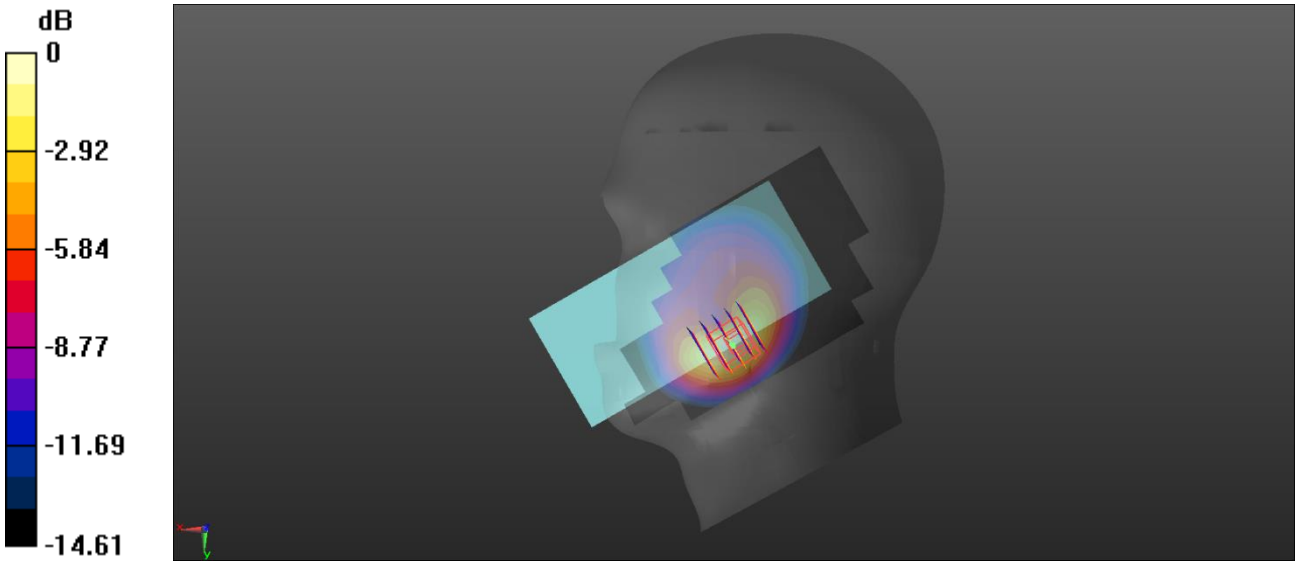
Ch190/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.288 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.553 W/kg; SAR(10 g) = 0.293 W/kg

Maximum value of SAR (measured) = 0.617 W/kg



0 dB = 0.617 W/kg

Meas.2 Body Plane with Back Side on Middle Channel in GPRS850 4Slots Mode with Antenna1

Date: 2022.02.05

Communication System Band: GPRS850; Frequency: 836.6 MHz;Duty Cycle: 1:2.0797

Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.897 S/m; ε_r = 41.739; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch190/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.533 W/kg

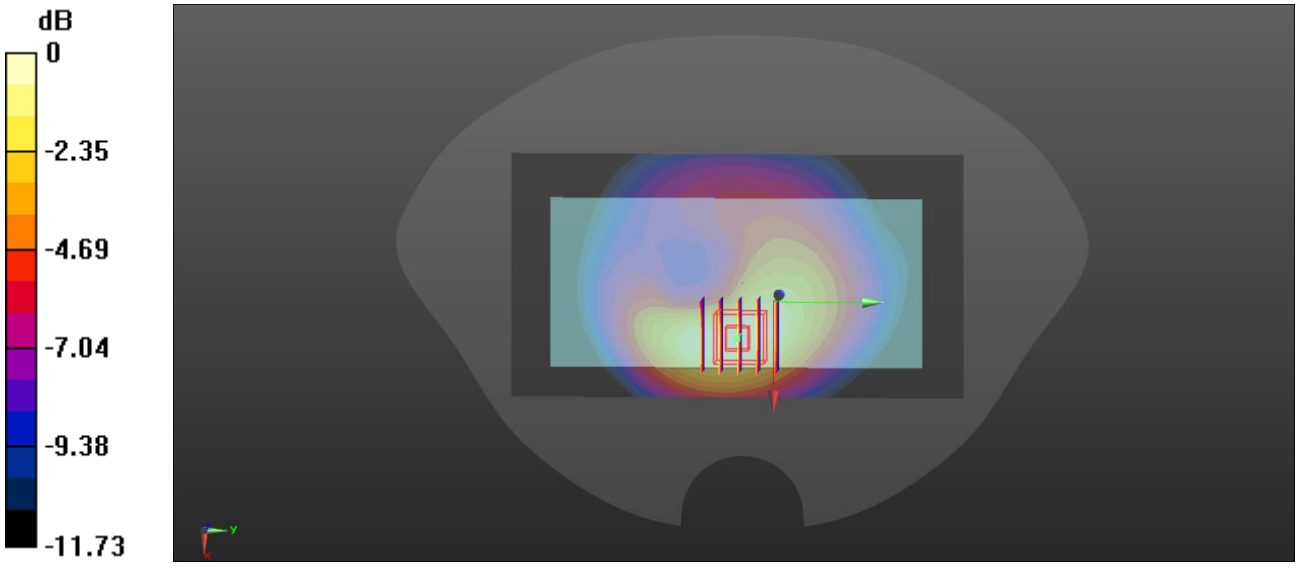
Ch190/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.16 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.740 W/kg

SAR(1 g) = 0.487 W/kg; SAR(10 g) = 0.312 W/kg

Maximum value of SAR (measured) = 0.530 W/kg



0 dB = 0.530 W/kg

Meas.3 Body Plane with Left Edge 10mm on Middle Channel in GPRS850 4Slots mode with Antenna1

Date: 2022.02.05

Communication System Band: GPRS850; Frequency: 836.6 MHz;Duty Cycle: 1:2.0797

Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.897 S/m; ε_r = 41.739; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch190/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.20 W/kg

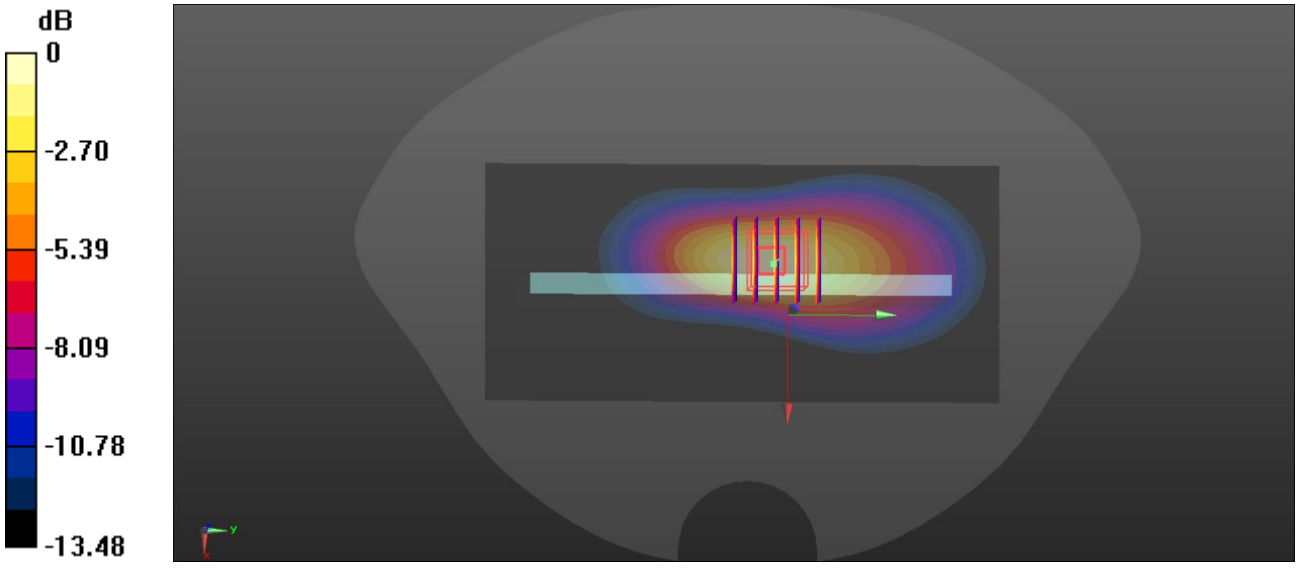
Ch190/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.03 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.622 W/kg

Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg

Meas.4 Right Head with Cheek on High Channel in GPRS1900 4Slots Mode with Antenna2

Date: 2022.02.06

Communication System Band: GPRS 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:2.0797

Medium parameters used (interpolated): f = 1909.8 MHz; σ = 1.404 S/m; ε_r = 39.693; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch810/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.355 W/kg

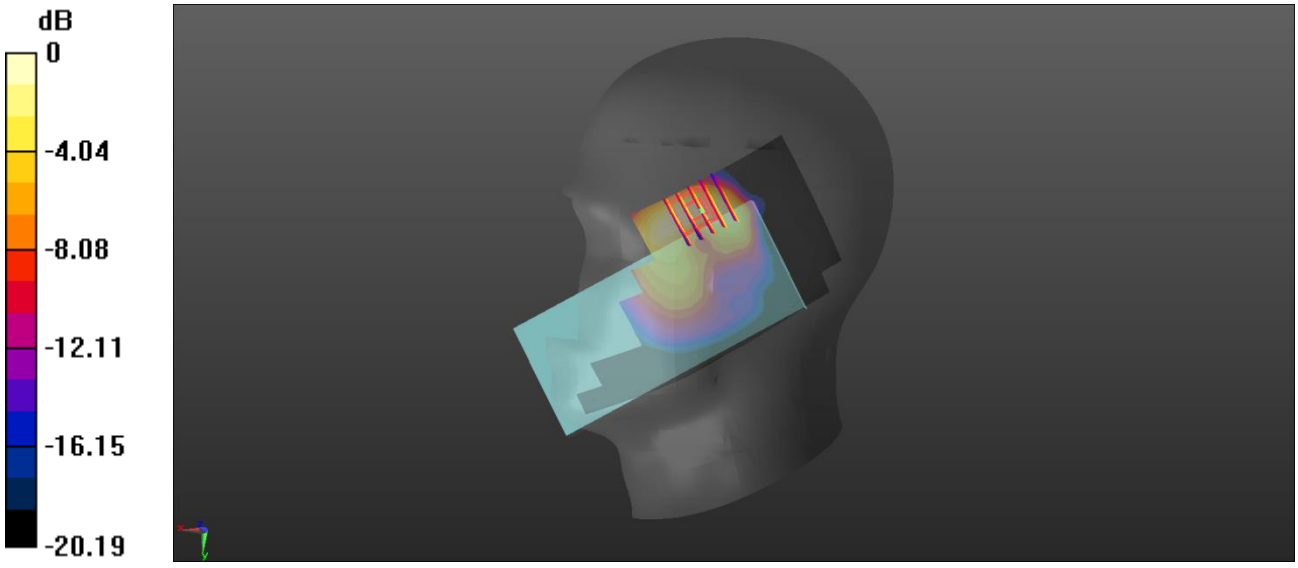
Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.138 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.562 W/kg

SAR(1 g) = 0.301 W/kg; SAR(10 g) = 0.155 W/kg

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



0 dB = 0.359 W/kg

Meas.5 Body Plane with Back Side 15mm on High Channel in GPRS1900 4Slots Mode with Antenna0

Date: 2022.02.06

Communication System Band: GPRS 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:2.0797

Medium parameters used (interpolated): f = 1909.8 MHz; σ = 1.404 S/m; ε_r = 39.693; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch810/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.136 W/kg

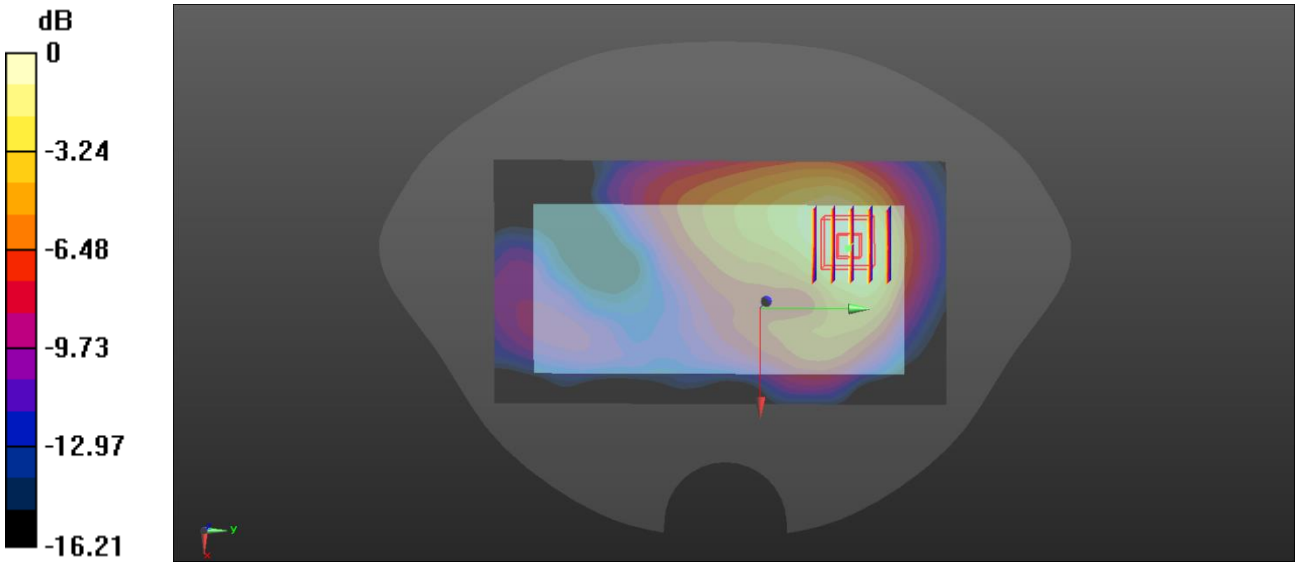
Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.033 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.194 W/kg

SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.075 W/kg

Maximum value of SAR (measured) = 0.134 W/kg



0 dB = 0.134 W/kg

Meas.6 Body Plane with Bottom Edge 10mm on High Channel in GPRS1900 4Slots mode with Antenna0

Date: 2022.02.06

Communication System Band: GPRS 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:2.0797

Medium parameters used (interpolated): f = 1909.8 MHz; σ = 1.404 S/m; ε_r = 39.693; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch810/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.449 W/kg

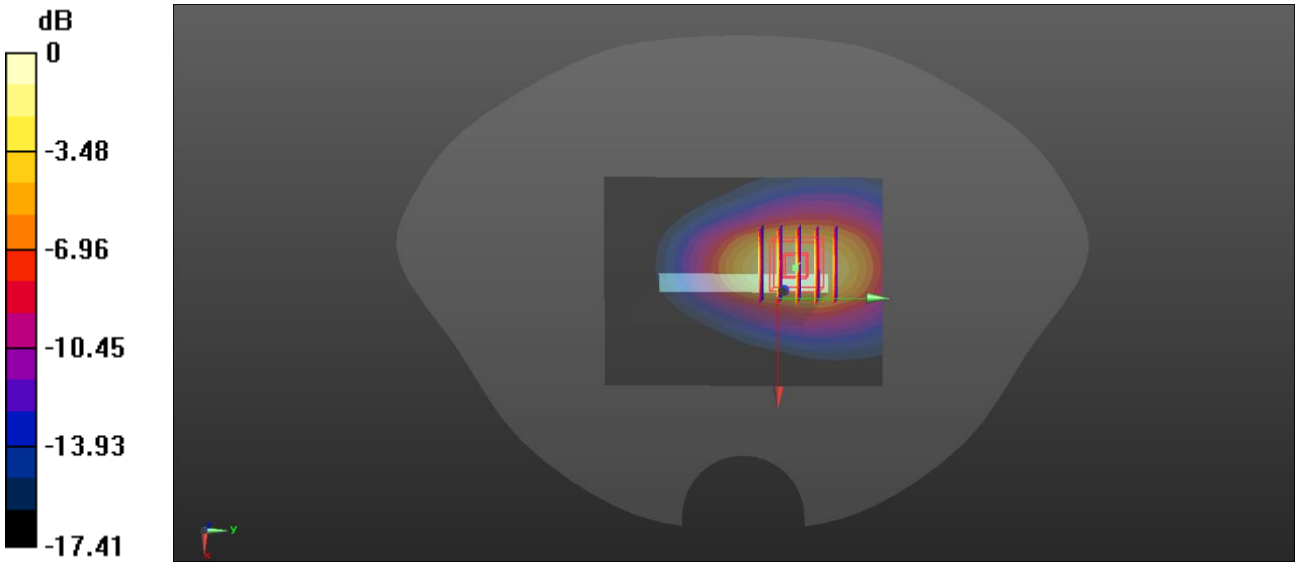
Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.75 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.654 W/kg

SAR(1 g) = 0.382 W/kg; SAR(10 g) = 0.209 W/kg

Maximum value of SAR (measured) = 0.426 W/kg



0 dB = 0.426 W/kg

Meas.7 Right Head with Cheek on High Channel in WCDMA B4 Mode with Antenna2

Date: 2022.02.07

Communication System Band: IV; Frequency: 1752.6 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1752.6 MHz; σ = 1.377 S/m; ε_r = 40.067; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch1513/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.528 W/kg

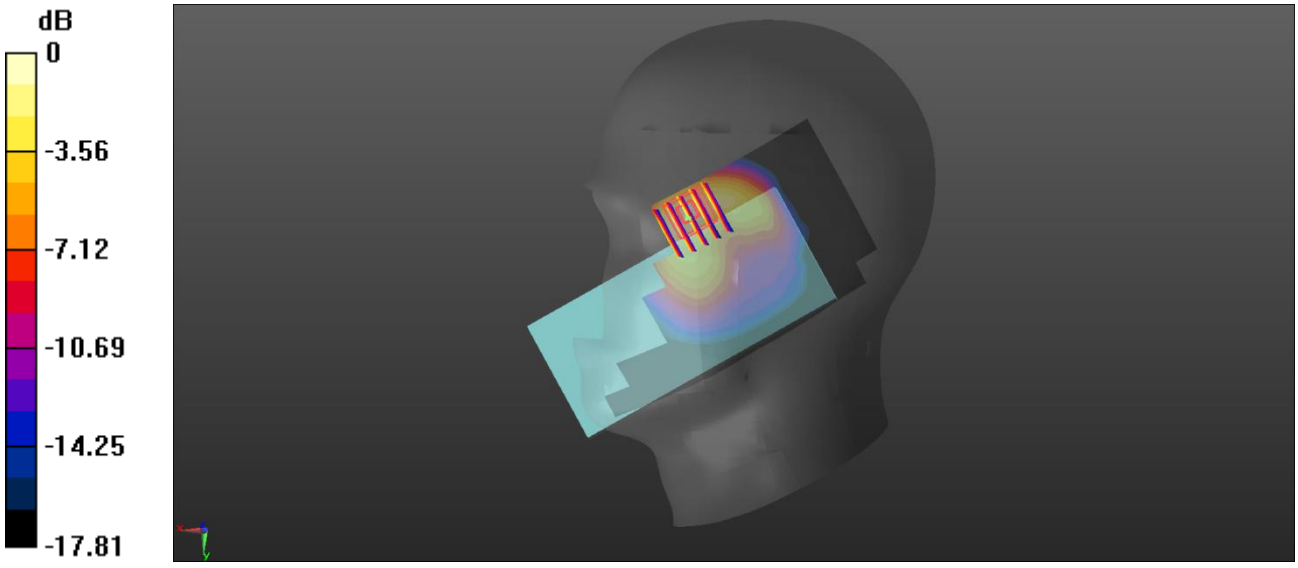
Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.094 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.877 W/kg

SAR(1 g) = 0.475 W/kg; SAR(10 g) = 0.246 W/kg

Maximum value of SAR (measured) = 0.494 W/kg



0 dB = 0.528 W/kg

Meas.8 Body Plane with Back Side 15mm on High Channel in WCDMA Band4 mode with Antenna0

Date: 2022.02.07

Communication System Band: IV; Frequency: 1752.6 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1752.6 MHz; σ = 1.377 S/m; ε_r = 40.067; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch1513/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

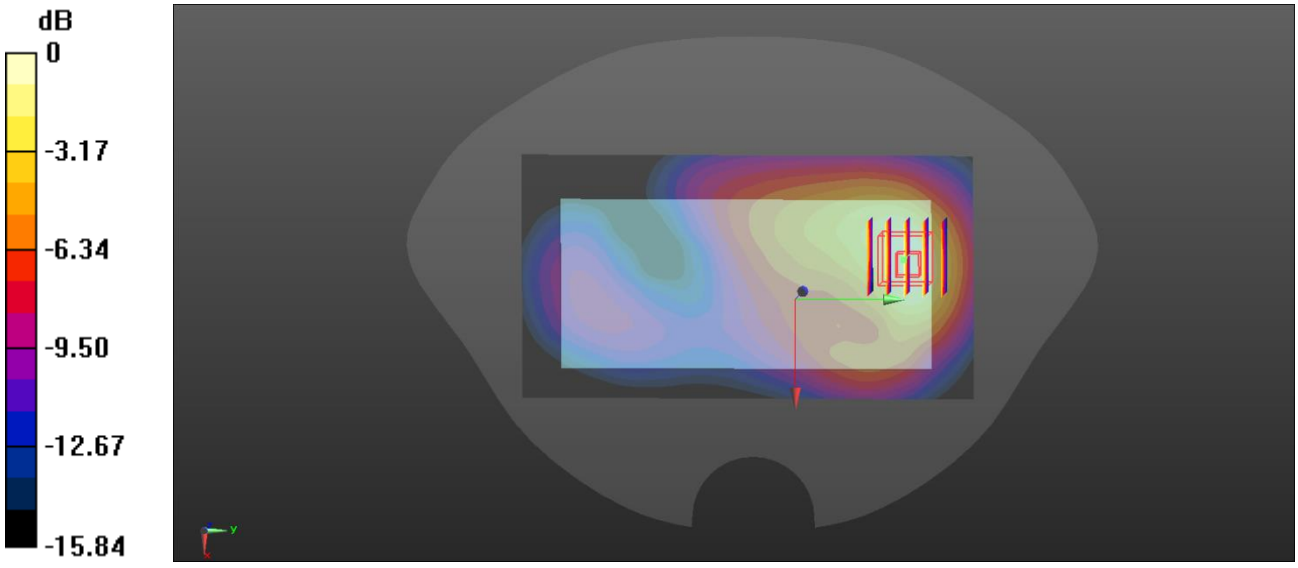
Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.796 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.427 W/kg

SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.161 W/kg

Maximum value of SAR (measured) = 0.292 W/kg



0 dB = 0.292 W/kg

Meas.9 Body Plane with Bottom Edge 10mm on Middle Channel in WCDMA Band4 mode with Antenna0

Date: 2022.02.07

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

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.353 S/m; ε_r = 40.377; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch1412/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.848 W/kg

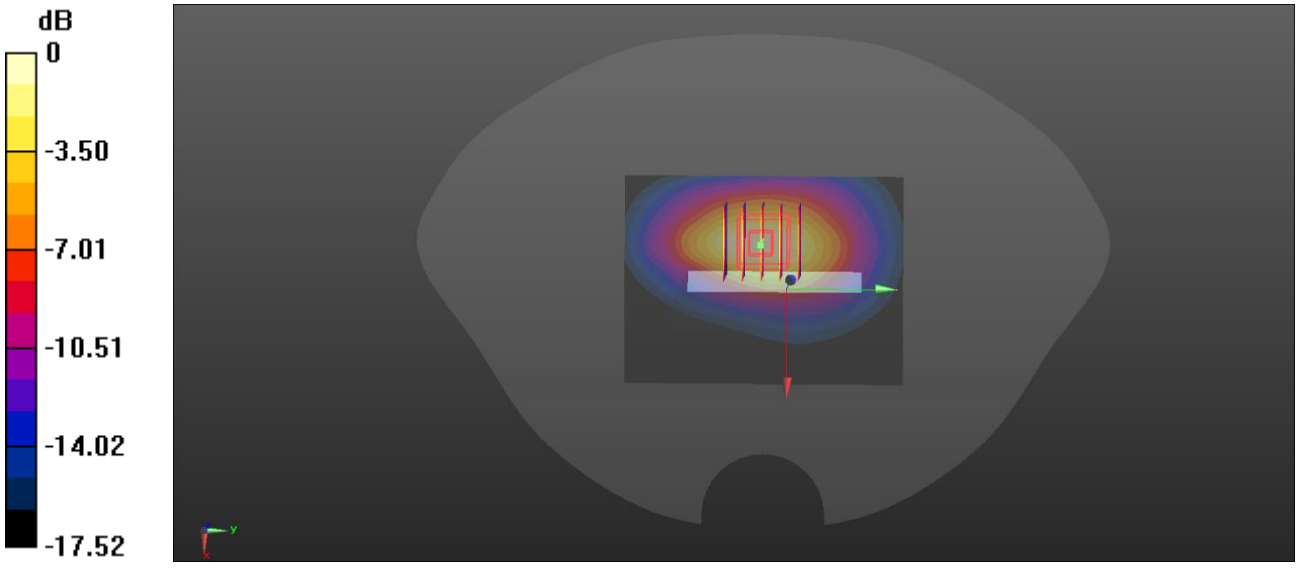
Ch1412/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.03 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.755 W/kg; SAR(10 g) = 0.415 W/kg

Maximum value of SAR (measured) = 0.846 W/kg



0 dB = 0.846 W/kg

Meas.10 Body Plane with Bottom Edge 0mm on High Channel in WCDMA Band4 mode with Antenna0

Date: 2022.02.07

Communication System Band: IV; Frequency: 1752.6 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1752.6 MHz; σ = 1.377 S/m; ε_r = 40.067; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch1513/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 4.25 W/kg

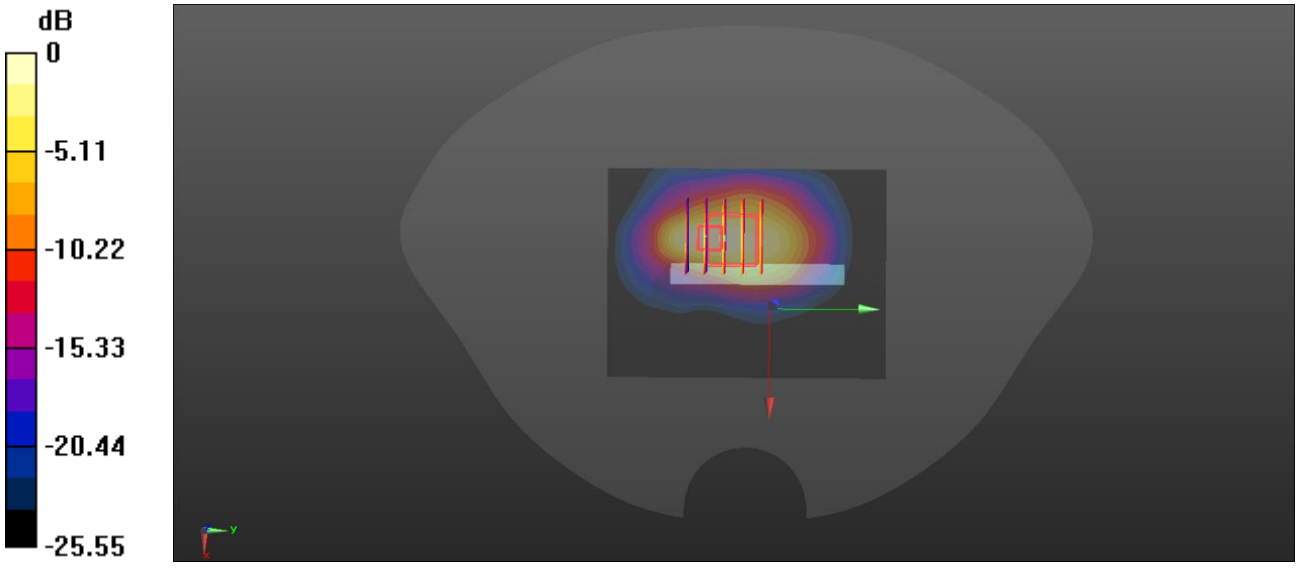
Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.89 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 7.75 W/kg

SAR(1 g) = 3.15 W/kg; SAR(10 g) = 1.46 W/kg

Maximum value of SAR (measured) = 4.14 W/kg



0 dB = 4.14 W/kg

Meas.11 Right Head with Cheek on Low Channel in WCDMA B5 Mode with Antenna1

Date: 2022.02.08

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

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.896 S/m; ε_r = 42.104; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.771 W/kg

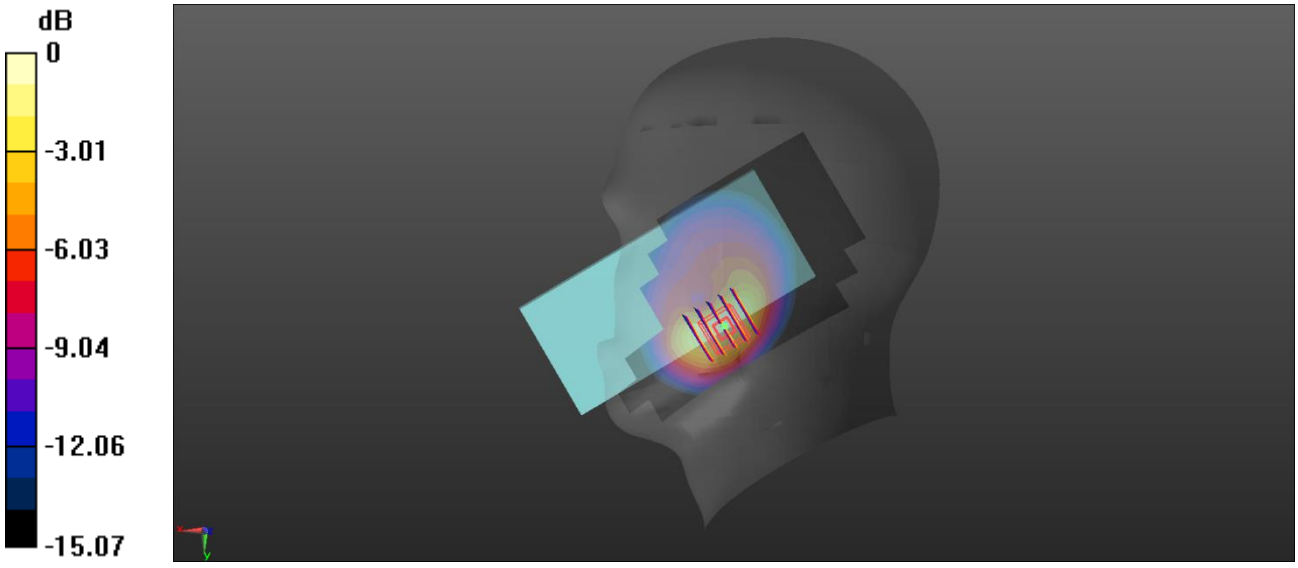
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.320 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.690 W/kg; SAR(10 g) = 0.367 W/kg

Maximum value of SAR (measured) = 0.766 W/kg



0 dB = 0.766 W/kg

Meas.12 Body Plane with Back Side 15mm on Low Channel in WCDMA Band5 mode with Antenna1

Date: 2022.02.08

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

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.896 S/m; ε_r = 42.104; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

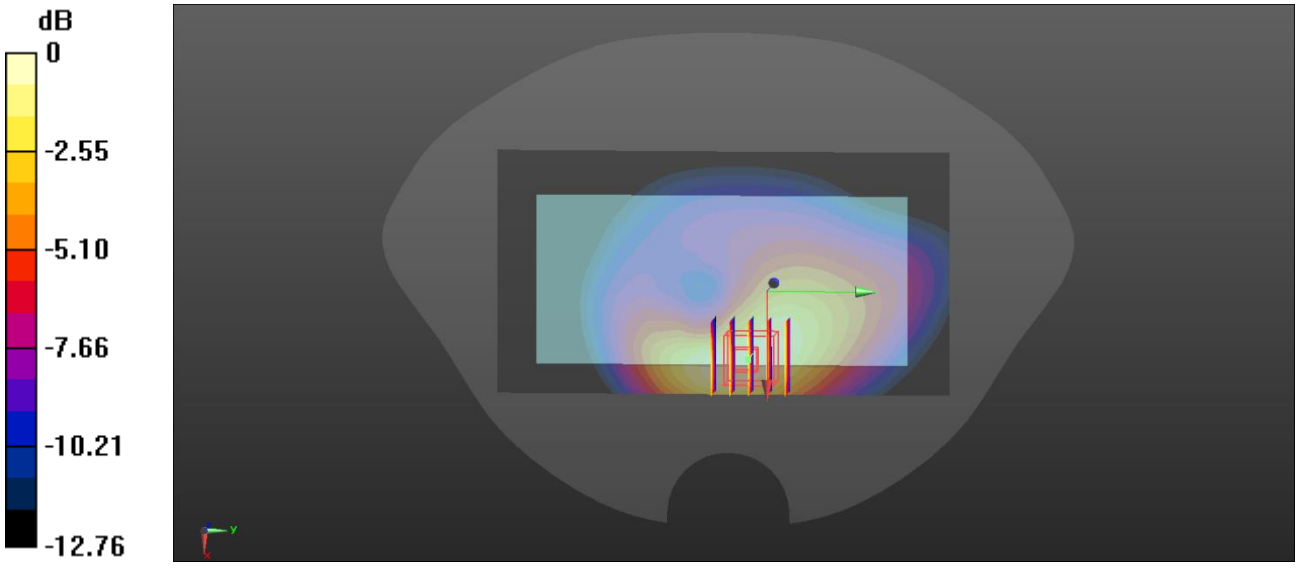
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.017 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.617 W/kg

SAR(1 g) = 0.399 W/kg; SAR(10 g) = 0.254 W/kg

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



0 dB = 0.434 W/kg

Meas.13 Body Plane with Left Edge 10mm on Low Channel in WCDMA Band5 mode with Antenna1

Date: 2022.02.08

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

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.896 S/m; ε_r = 42.104; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.09 W/kg

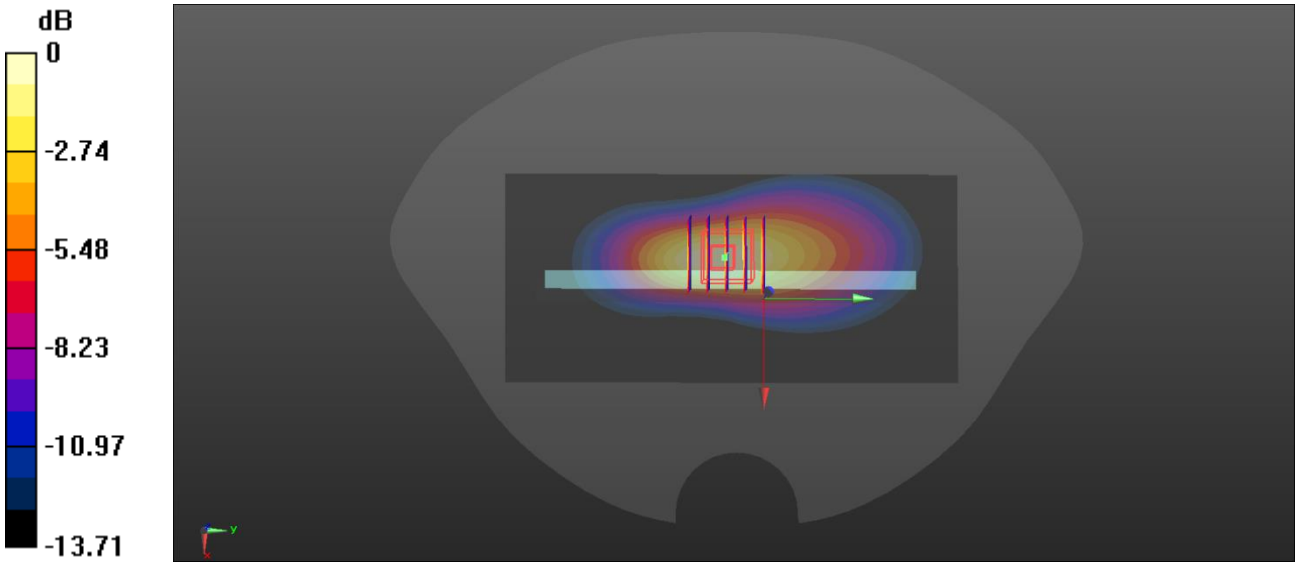
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.64 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 0.959 W/kg; SAR(10 g) = 0.541 W/kg

Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg

Meas.14 Left Head with Cheek on High Channel in LTE Band4 Mode with Antenna2

Date: 2022.02.09

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1745 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1745 MHz; σ = 1.377 S/m; ε_r = 40.317; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.1 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch20300/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.728 W/kg

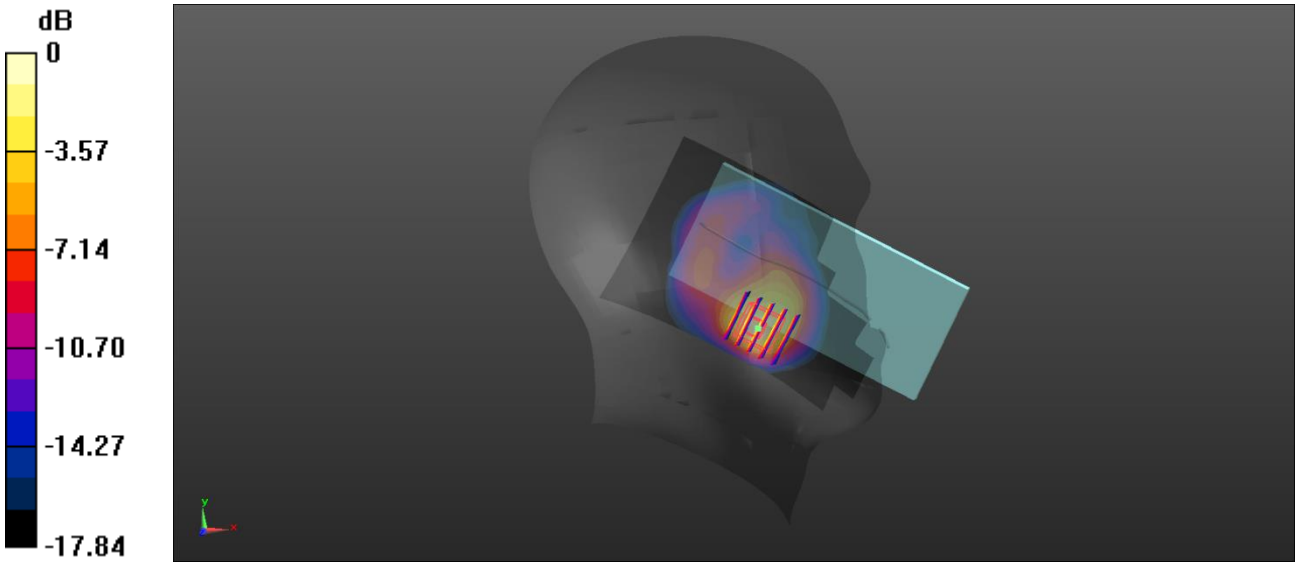
Ch20300/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.779 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.326 W/kg

Maximum value of SAR (measured) = 0.776 W/kg



0 dB = 0.776 W/kg

Meas.15 Body Plane with Back Side 15mm on High Channel in LTE Band4 mode with Antenna0

Date: 2022.02.09

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1745 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1745 MHz; σ = 1.377 S/m; ε_r = 40.317; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch20300/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.269 W/kg

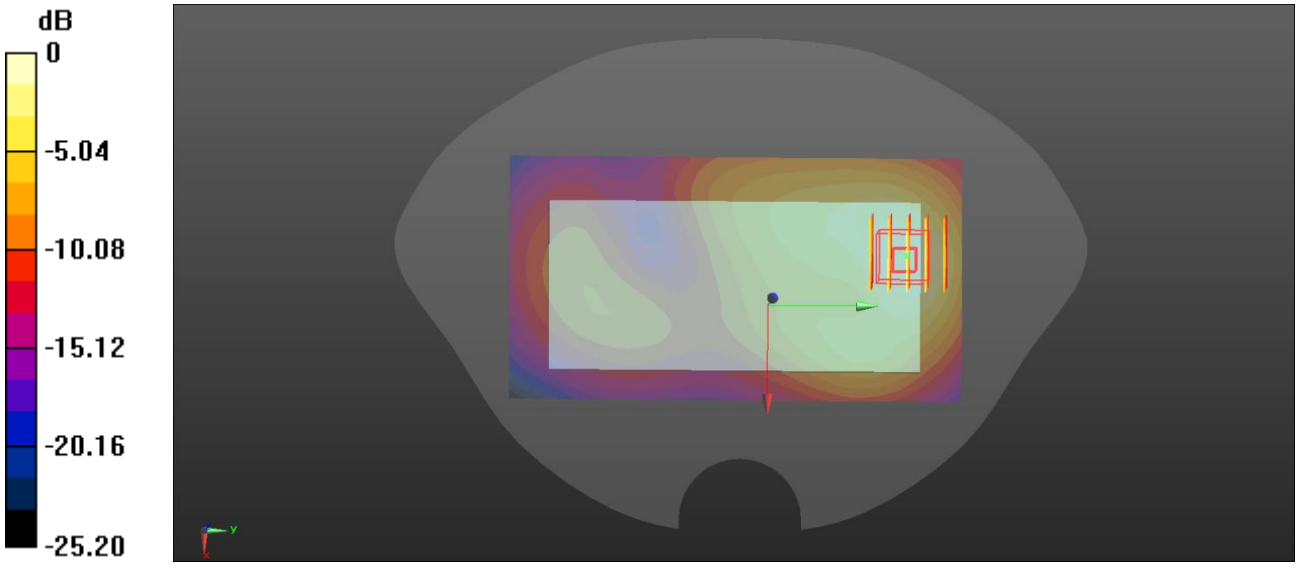
Ch20300/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.531 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.401 W/kg

SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.152 W/kg

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



0 dB = 0.276 W/kg

Meas.16 Body Plane with Bottom Edge 10mm on High Channel in LTE Band4 mode with Antenna0

Date: 2022.02.09

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1745 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1745 MHz; σ = 1.377 S/m; ε_r = 40.317; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch20300/Area Scan (41x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.869 W/kg

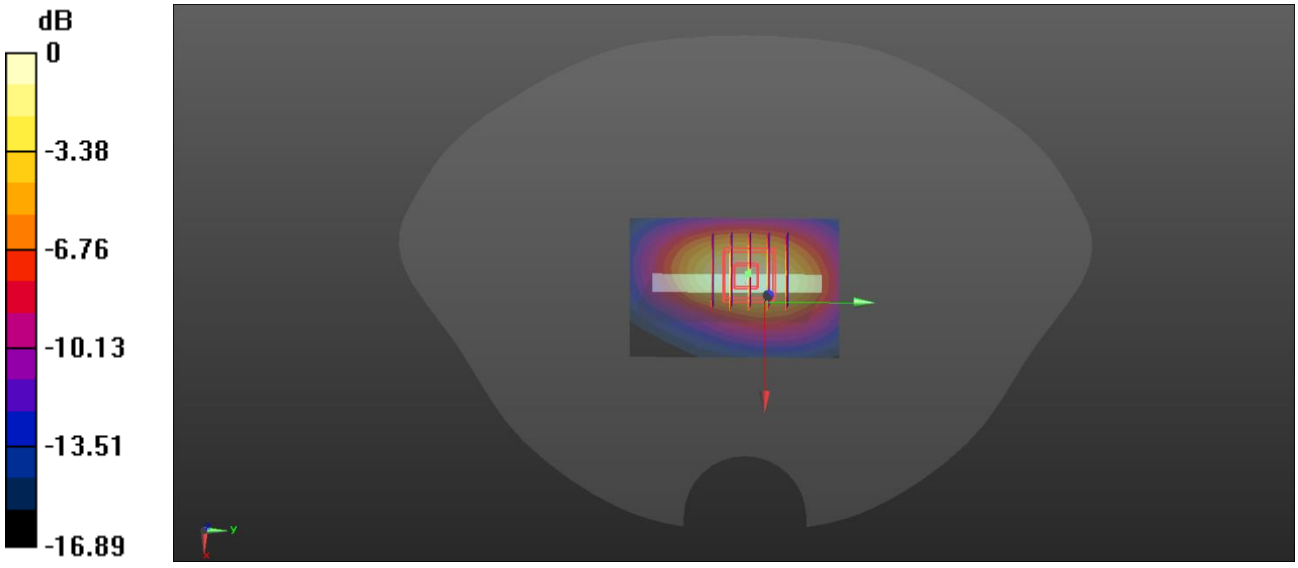
Ch20300/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.20 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.738 W/kg; SAR(10 g) = 0.404 W/kg

Maximum value of SAR (measured) = 0.821 W/kg



0 dB = 0.821 W/kg

Meas.17 Body Plane with Back Side 0mm on High Channel in LTE Band4 mode with Antenna0

Date: 2022.02.09

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1745 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1745 MHz; σ = 1.377 S/m; ε_r = 40.317; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch20300/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.72 W/kg

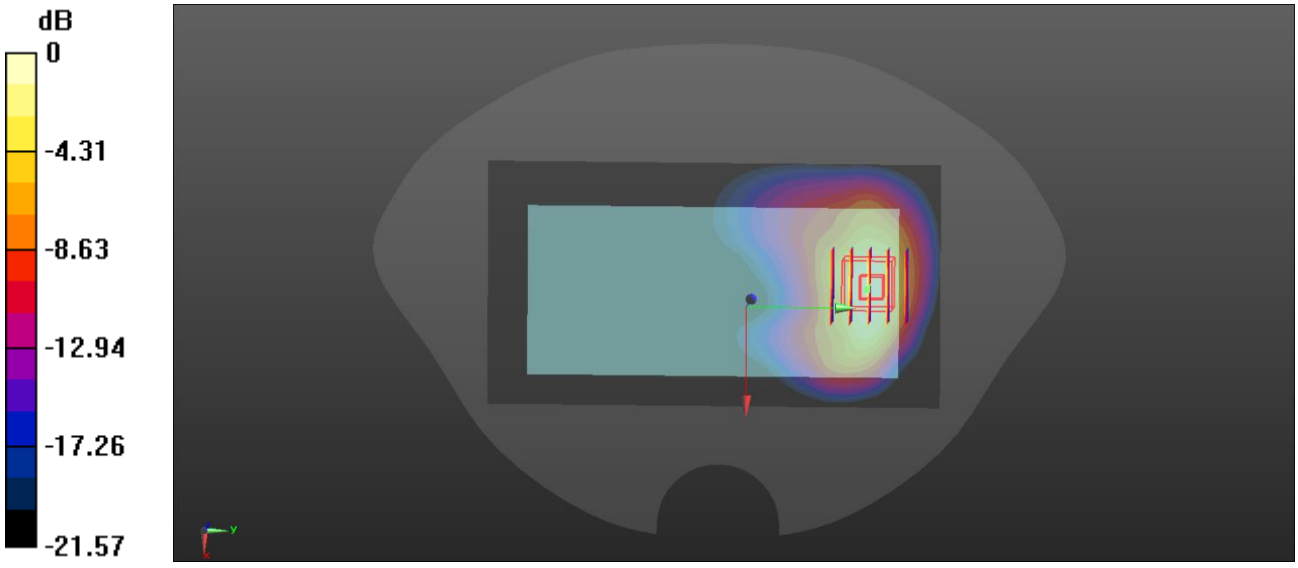
Ch20300/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.306 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 6.32 W/kg

SAR(1 g) = 3.25 W/kg; SAR(10 g) = 1.63 W/kg

Maximum value of SAR (measured) = 3.59 W/kg



0 dB = 3.59 W/kg

Meas.18 Right Head with Cheek on Low Channel in LTE Band5 Mode with Antenna1

Date: 2022.02.10

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f =829 MHz; σ = 0.892 S/m; ε_r = 42.109; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch20450/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.752 W/kg

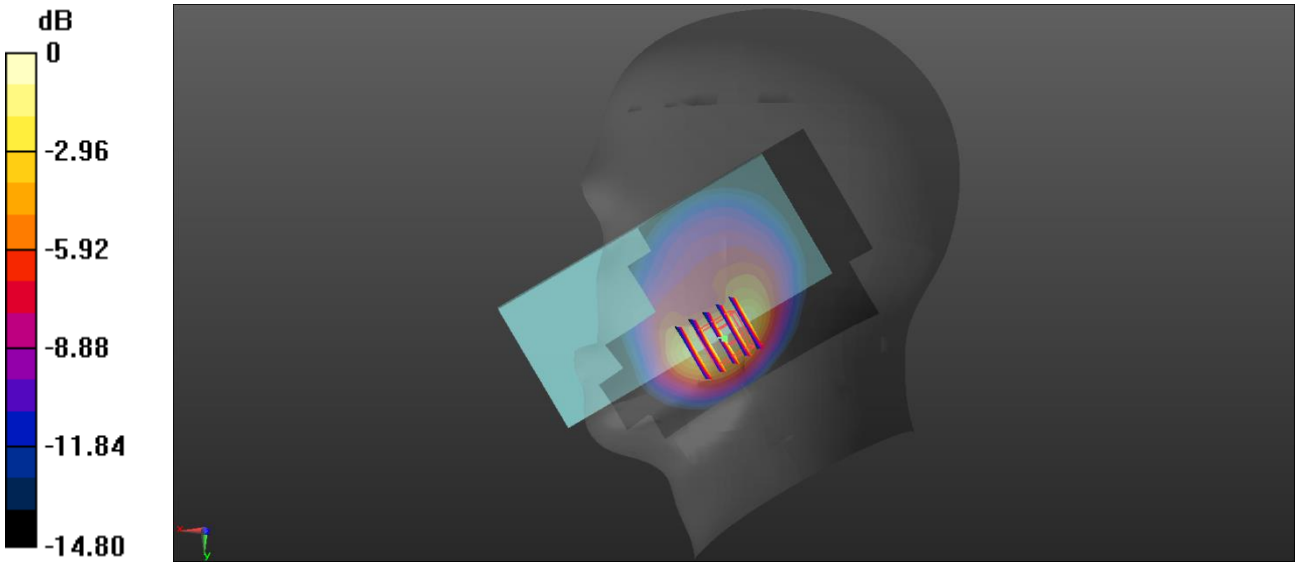
Ch20450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.917 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.658 W/kg; SAR(10 g) = 0.344 W/kg

Maximum value of SAR (measured) = 0.709 W/kg



0 dB = 0.709 W/kg

Meas.19 Body Plane with Back Side 15mm on Middle Channel in LTE Band5 mode with Antenna1

Date: 2022.02.10

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.898 S/m; ε_r = 41.909; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch20525/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.431 W/kg

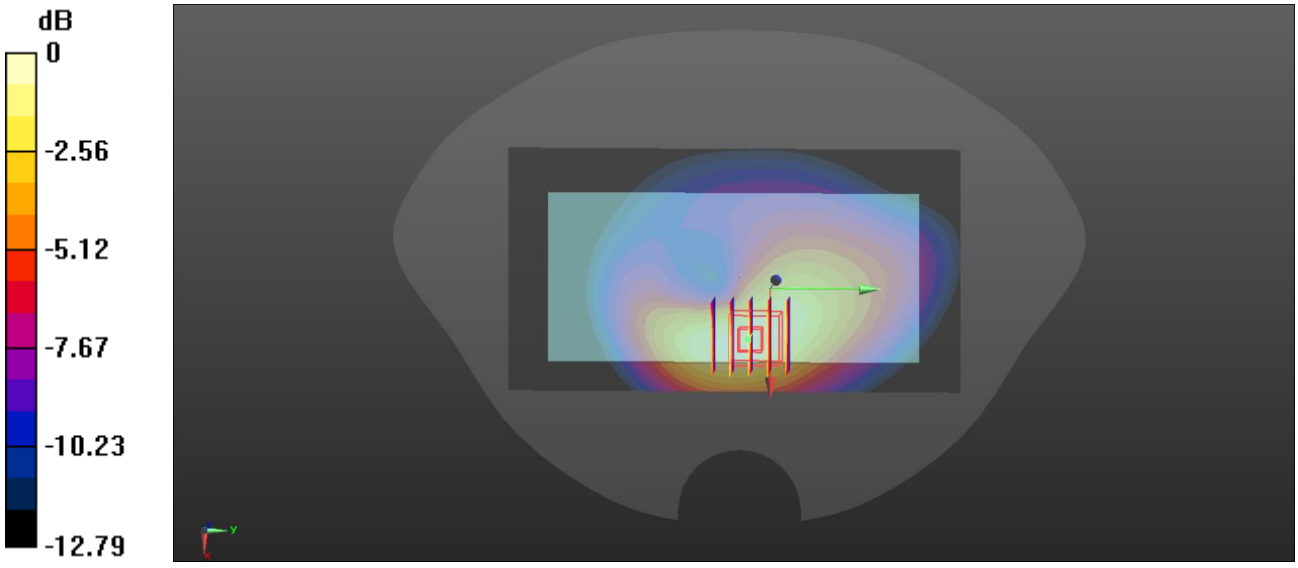
Ch20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.670 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.614 W/kg

SAR(1 g) = 0.399 W/kg; SAR(10 g) = 0.254 W/kg

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



0 dB = 0.434 W/kg

Meas.20 Body Plane with Left Edge 10mm on Low Channel in LTE Band5 mode with Antenna1

Date: 2022.02.10

Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 829 MHz; σ = 0.892 S/m; ε_r = 42.109; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch20450/Area Scan (51x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.07 W/kg

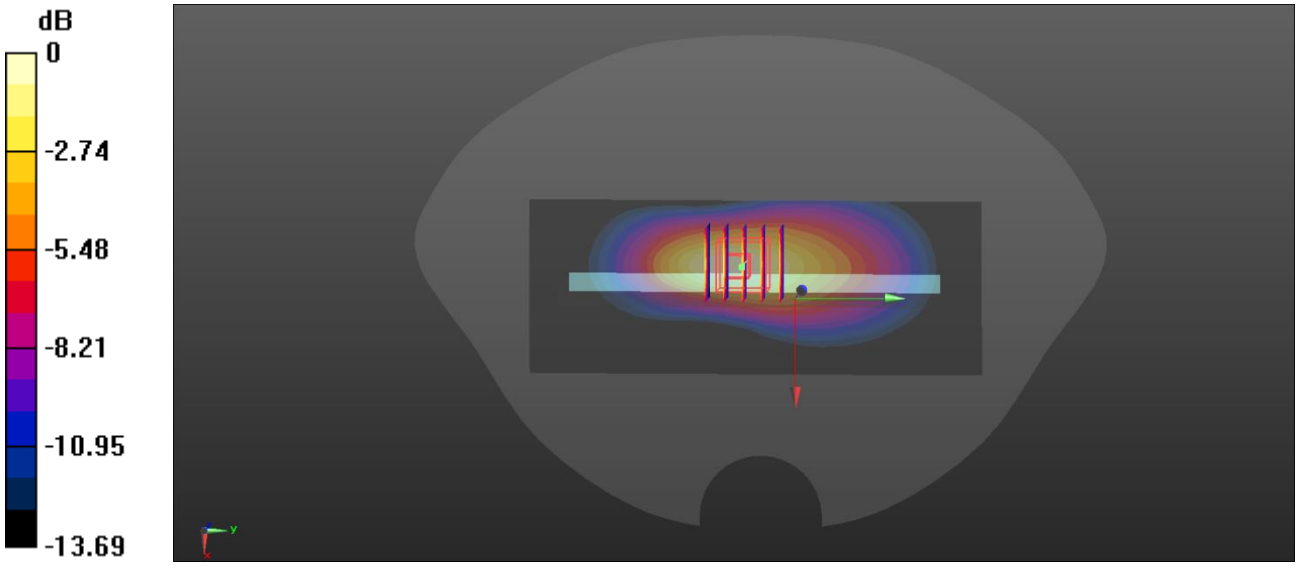
Ch20450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.04 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.974 W/kg; SAR(10 g) = 0.538 W/kg

Maximum value of SAR (measured) = 1.06 W/kg



0 dB = 1.06 W/kg

Meas.21 Right Head with Cheek on Middle Channel in LTE Band 12 mode with Antenna1

Date: 2022.02.11

Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 707.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.88 S/m; ε_r = 42.494; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.41, 10.41, 10.41); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch23095/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.598 W/kg

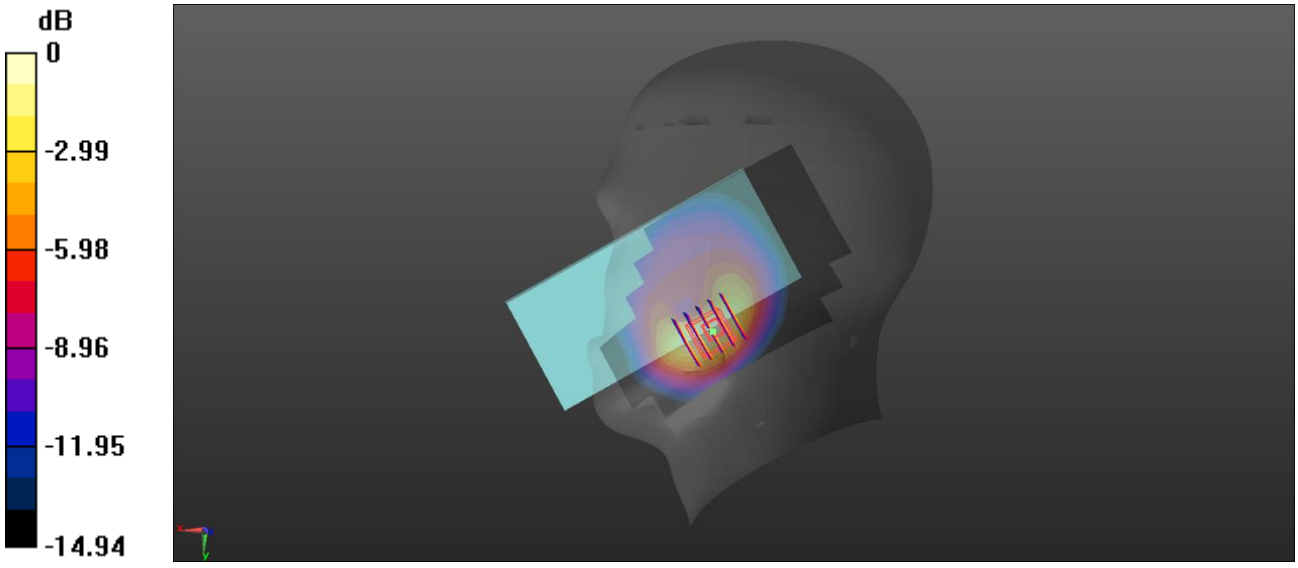
Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.232 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.513 W/kg; SAR(10 g) = 0.269 W/kg

Maximum value of SAR (measured) = 0.566 W/kg



0 dB = 0.566 W/kg

Meas.22 Body Plane with Back Side 15mm on Low Channel in LTE Band12 mode with Antenna0

Date: 2022.02.11

Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 704 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 704 MHz; σ = 0.877 S/m; ε_r = 42.552; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.41, 10.41, 10.41); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch23060/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.163 W/kg

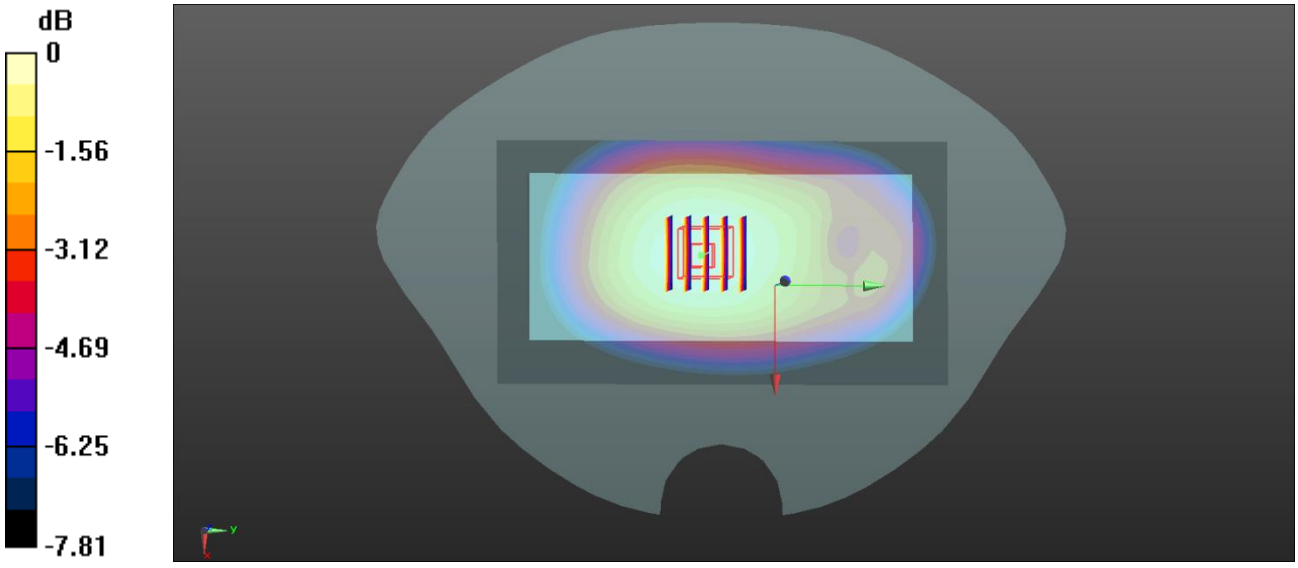
Ch23060/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.15 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.195 W/kg

SAR(1 g) = 0.156 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.163 W/kg



0 dB = 0.163 W/kg

Meas.23 Body Plane with Left Edge 10mm on Low Channel in LTE Band12 mode with Antenna1

Date: 2022.02.11

Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 704 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 704 MHz; σ = 0.877 S/m; ε_r = 42.552; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.41, 10.41, 10.41); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch23060/Area Scan (51x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.439 W/kg

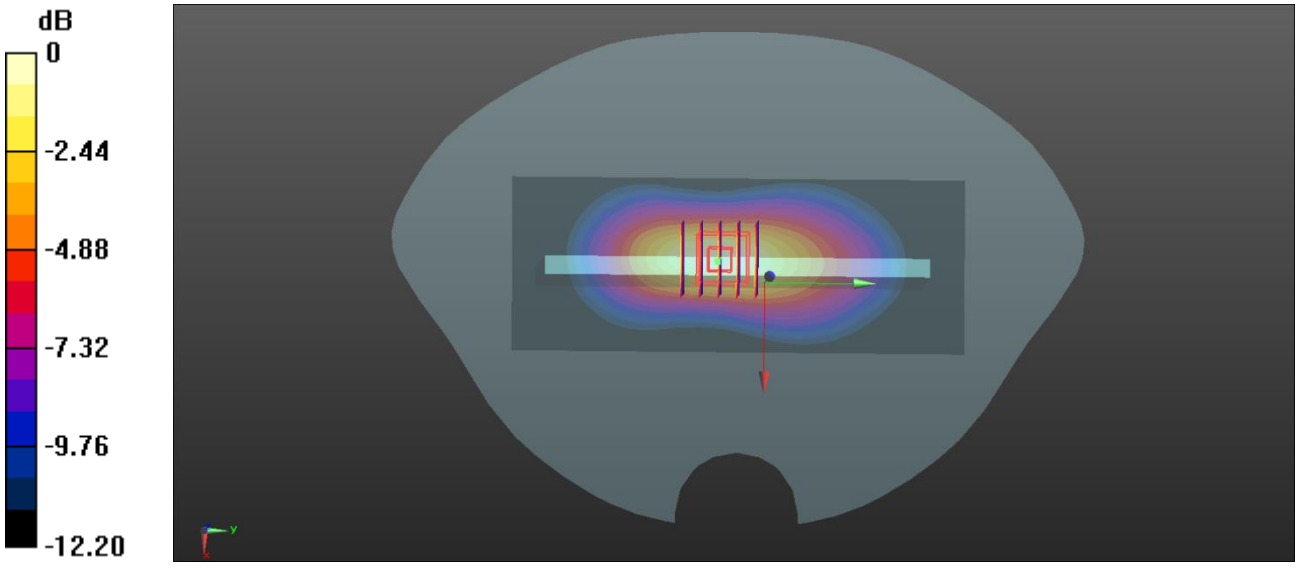
Ch23060/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.47 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.641 W/kg

SAR(1 g) = 0.402 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.442 W/kg



0 dB = 0.442 W/kg

Meas.24 Right Head with Cheek on High Channel in LTE Band17 Mode with Antenna1

Date: 2022.02.12

Communication System Band: Band 17, E-UTRA/FDD (704.0 - 716.0 MHz); Frequency: 711 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 711 MHz; σ = 0.872 S/m; ε_r = 42.185; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.41, 10.41, 10.41); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch23800/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.651 W/kg

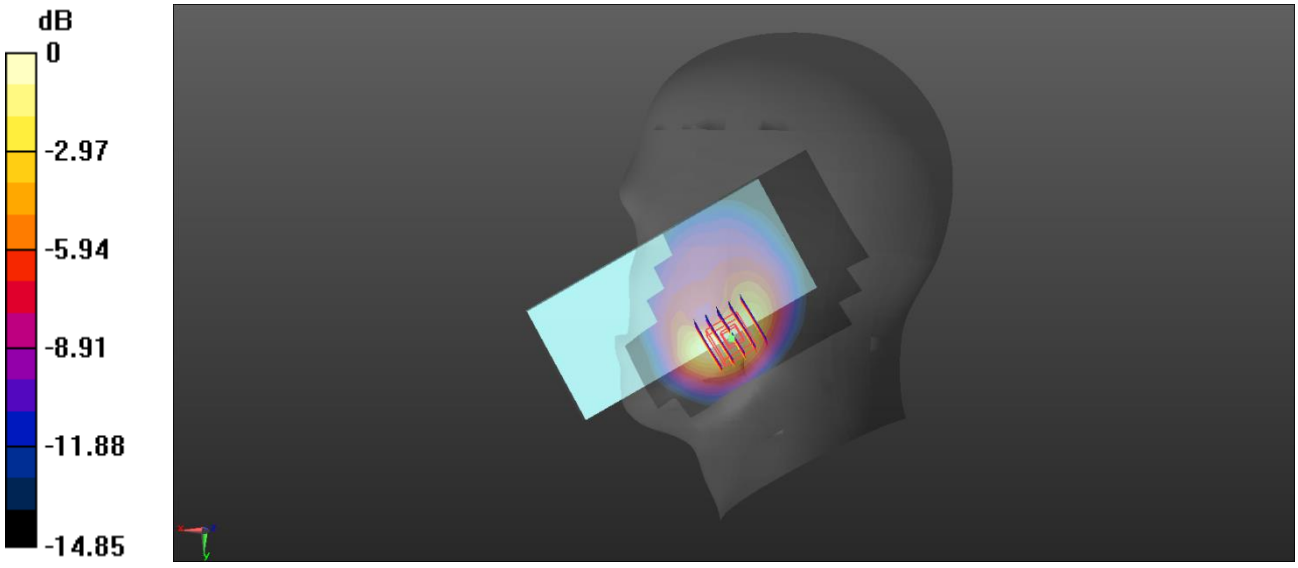
Ch23800/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.586 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.558 W/kg; SAR(10 g) = 0.293 W/kg

Maximum value of SAR (measured) = 0.614 W/kg



0 dB = 0.614 W/kg

Meas.25 Body Plane with Back Side 15mm on Middle Channel in LTE Band17 mode with Antenna0

Date: 2022.02.12

Communication System Band: Band 17, E-UTRA/FDD (704.0 - 716.0 MHz); Frequency: 710 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 710 MHz; σ = 0.875 S/m; ε_r = 42.215; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.41, 10.41, 10.41); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch23790/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

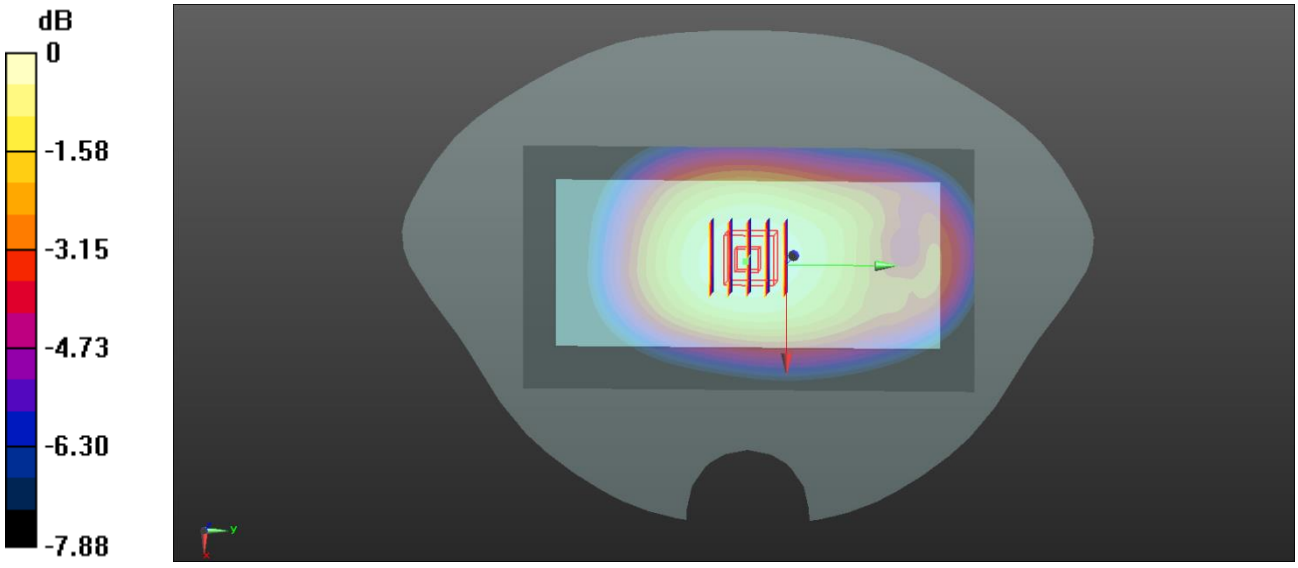
Ch23790/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.72 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.208 W/kg

SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.128 W/kg

Maximum value of SAR (measured) = 0.175 W/kg



0 dB = 0.175 W/kg

Meas.26 Body Plane with Left Edge 10mm on Middle Channel in LTE Band17 mode with Antenna1

Date: 2022.02.12

Communication System Band: Band 17, E-UTRA/FDD (704.0 - 716.0 MHz); Frequency: 710 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 710 MHz; σ = 0.875 S/m; ε_r = 42.215; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.41, 10.41, 10.41); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch23790/Area Scan (51x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.540 W/kg

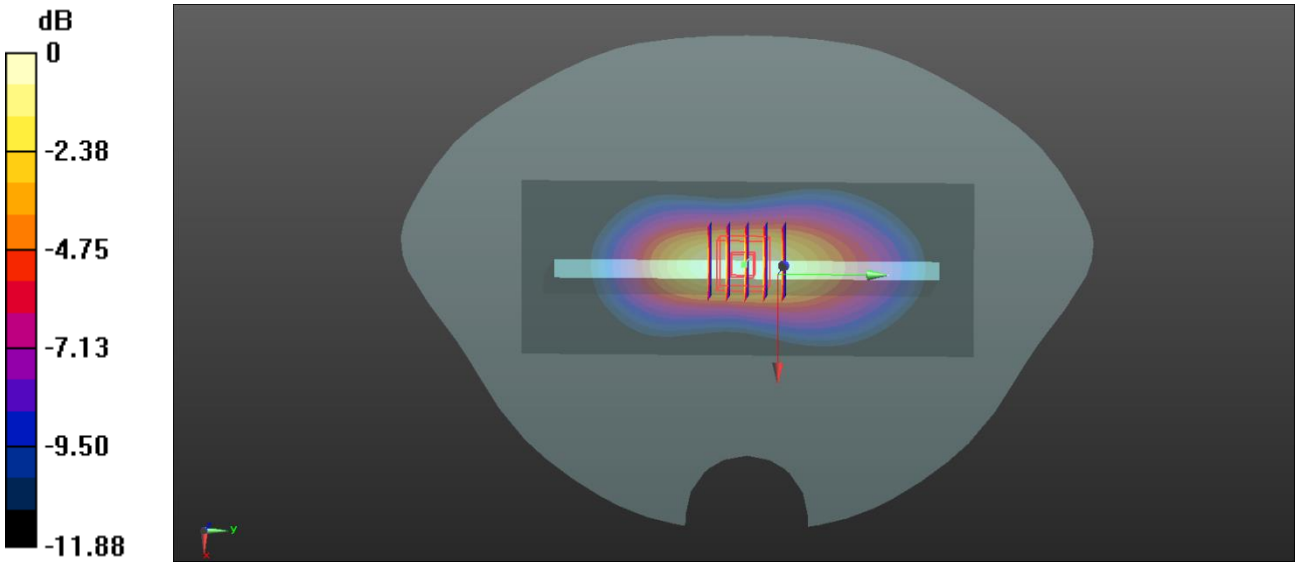
Ch23790/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.47 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.743 W/kg

SAR(1 g) = 0.464 W/kg; SAR(10 g) = 0.280 W/kg

Maximum value of SAR (measured) = 0.512 W/kg



0 dB = 0.512 W/kg

Meas.27 Right Head with Cheek on High Channel in LTE Band26 Mode with Antenna1

Date: 2022.02.13

Communication System Band: Band26; Frequency: 841.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.91 S/m; ε_r = 41.675; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch26965/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.752 W/kg

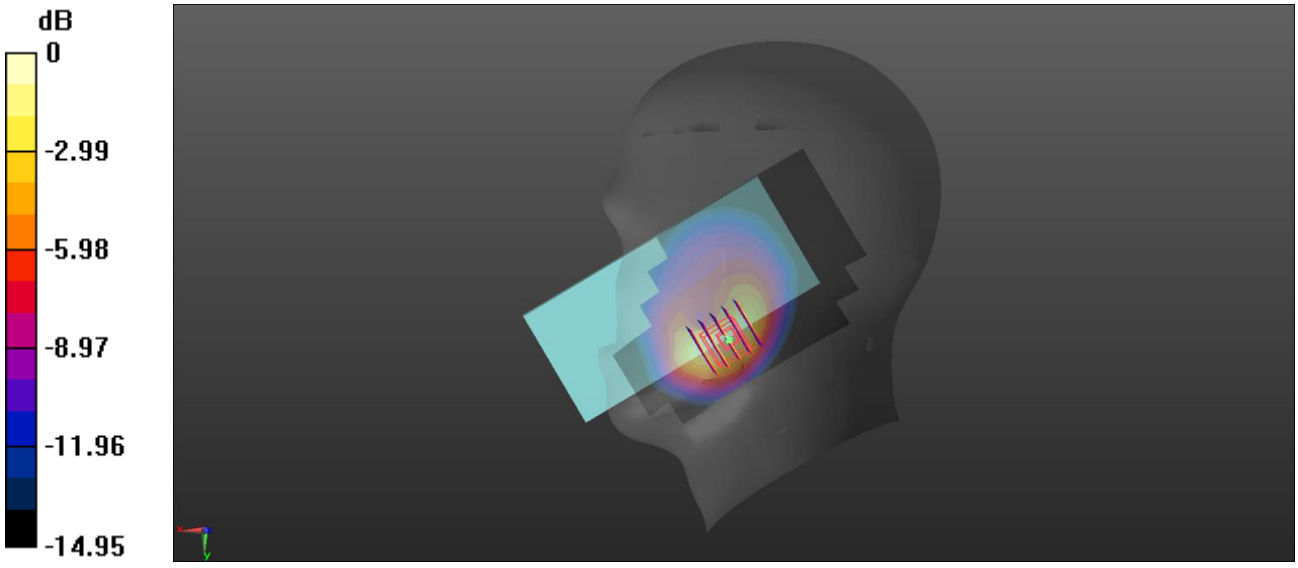
Ch26965/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.478 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.650 W/kg; SAR(10 g) = 0.342 W/kg

Maximum value of SAR (measured) = 0.713 W/kg



0 dB = 0.713 W/kg

Meas.28 Body Plane with Back Side 15mm on High Channel in LTE Band26 mode with Antenna1

Date: 2022.02.13

Communication System Band: Band26; Frequency: 841.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.91 S/m; ε_r = 41.675; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch26965/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.327 W/kg

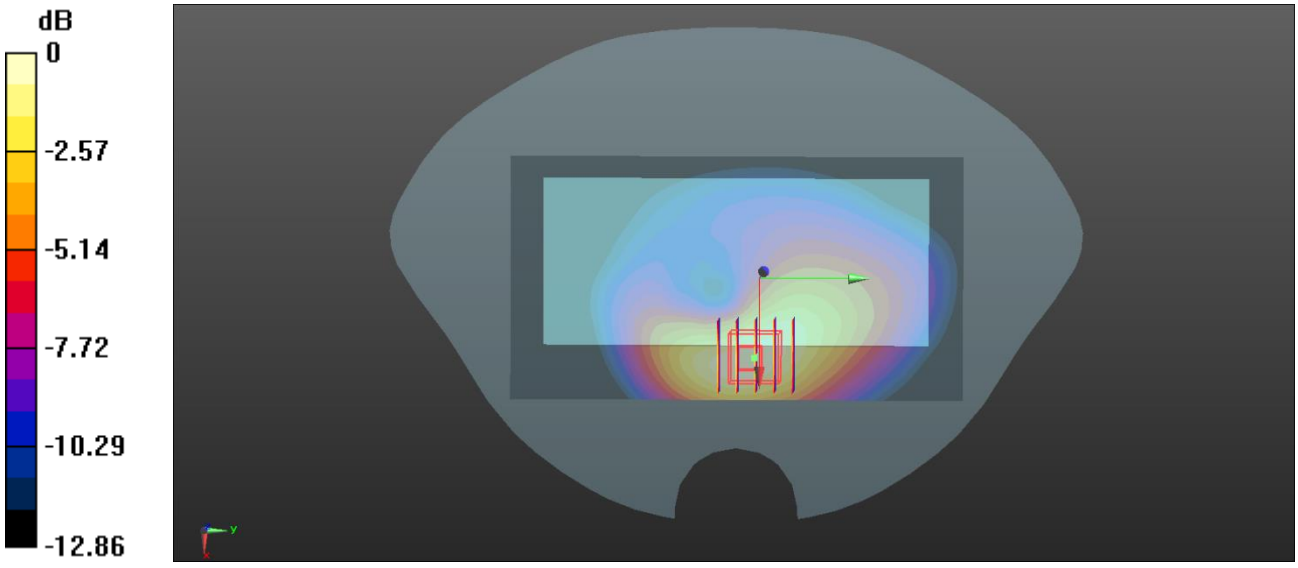
Ch26965/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.773 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.478 W/kg

SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.192 W/kg

Maximum value of SAR (measured) = 0.332 W/kg



0 dB = 0.332 W/kg

Meas.29 Body Plane with Left Edge 10mm on Middle Channel in LTE Band26 mode with Antenna1

Date: 2022.02.13

Communication System Band: Band26; Frequency: 831.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 831.5 MHz; σ = 0.902 S/m; ε_r = 41.91; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch26865/Area Scan (51x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.875 W/kg

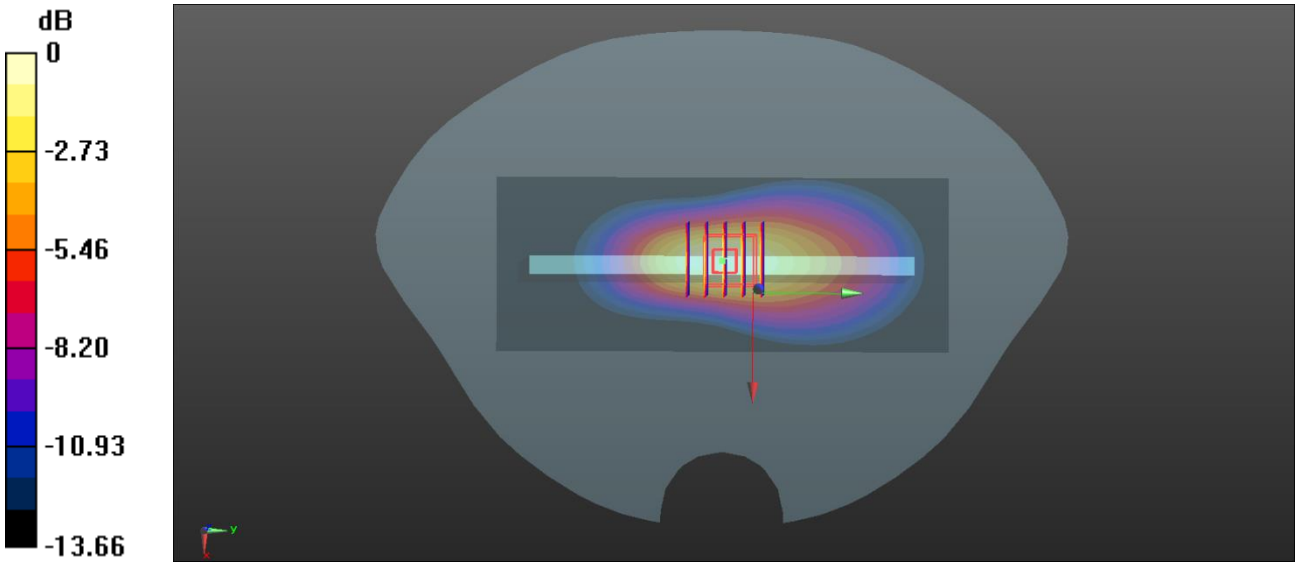
Configuration/Ch26865/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.58 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.768 W/kg; SAR(10 g) = 0.443 W/kg

Maximum value of SAR (measured) = 0.858 W/kg



0 dB = 0.858 W/kg

Meas.30 Left Head with Cheek on Low Channel in LTE Band38 mode with Antenna2

Date: 2022.02.14

Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); Frequency: 2580 MHz;Duty Cycle: 1:1.58

Medium parameters used (interpolated): f = 2580 MHz; σ = 1.945 S/m; ε_r = 38.56; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.3 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

CH37850/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.717 W/kg

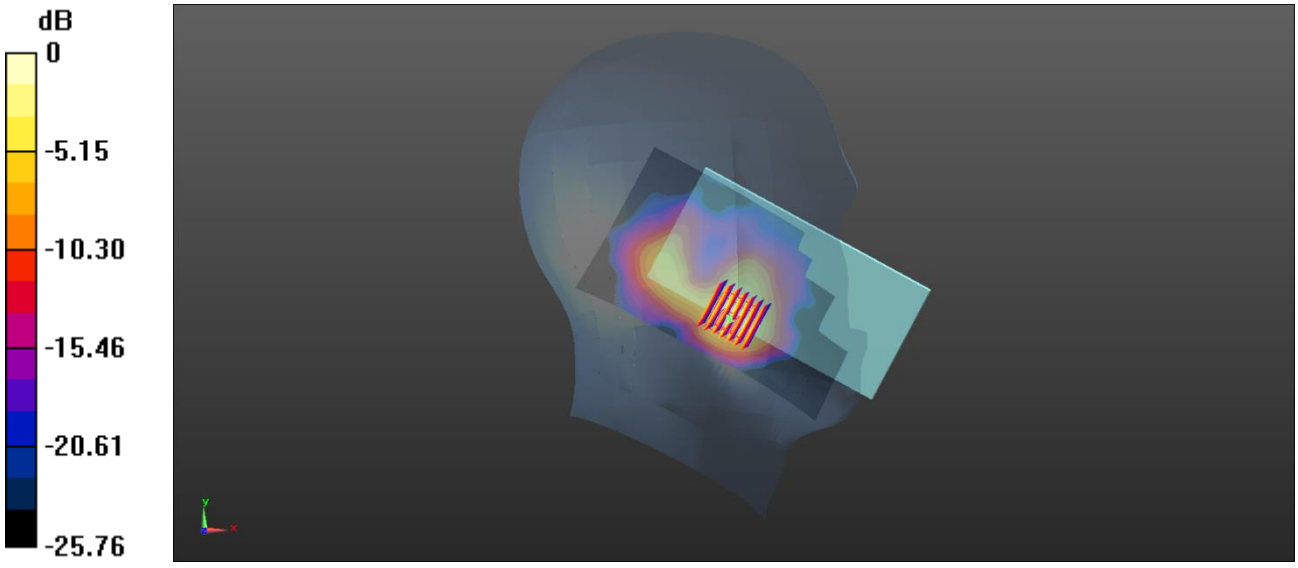
CH37850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.068 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.584 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 0.667 W/kg



0 dB = 0.667 W/kg

Meas.31 Body Plane with Back Side 15mm on Middle Channel in LTE Band38 mode with Antenna0

Date: 2022.02.14

Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); Frequency: 2595 MHz;Duty Cycle: 1:1.58

Medium parameters used (interpolated): f = 2595 MHz; σ = 1.963 S/m; ε_r = 38.444; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch38000/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.208 W/kg

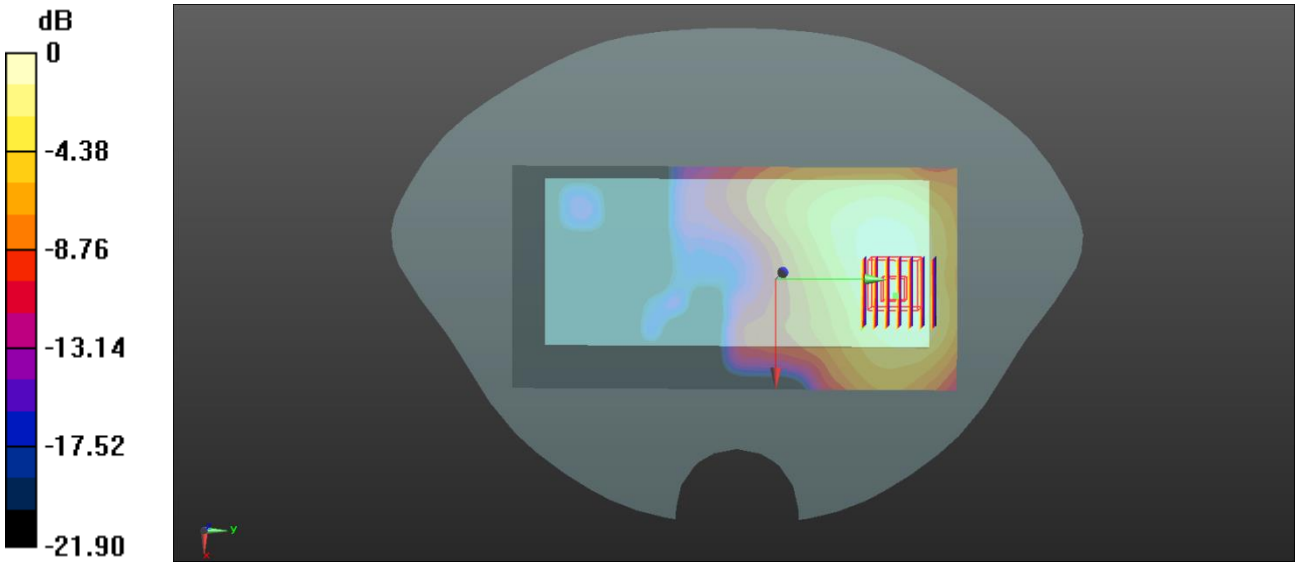
Ch38000/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.742 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.356 W/kg

SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.108 W/kg

Maximum value of SAR (measured) = 0.211 W/kg



0 dB = 0.208 W/kg

Meas.32 Body Plane with Back Side 10mm on Low Channel in LTE Band38 mode with Antenna0

Date: 2022.02.14

Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); Frequency: 2580 MHz;Duty Cycle: 1:1.58

Medium parameters used (interpolated): f = 2580 MHz; σ = 1.945 S/m; ε_r = 38.56; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 0.447 W/kg

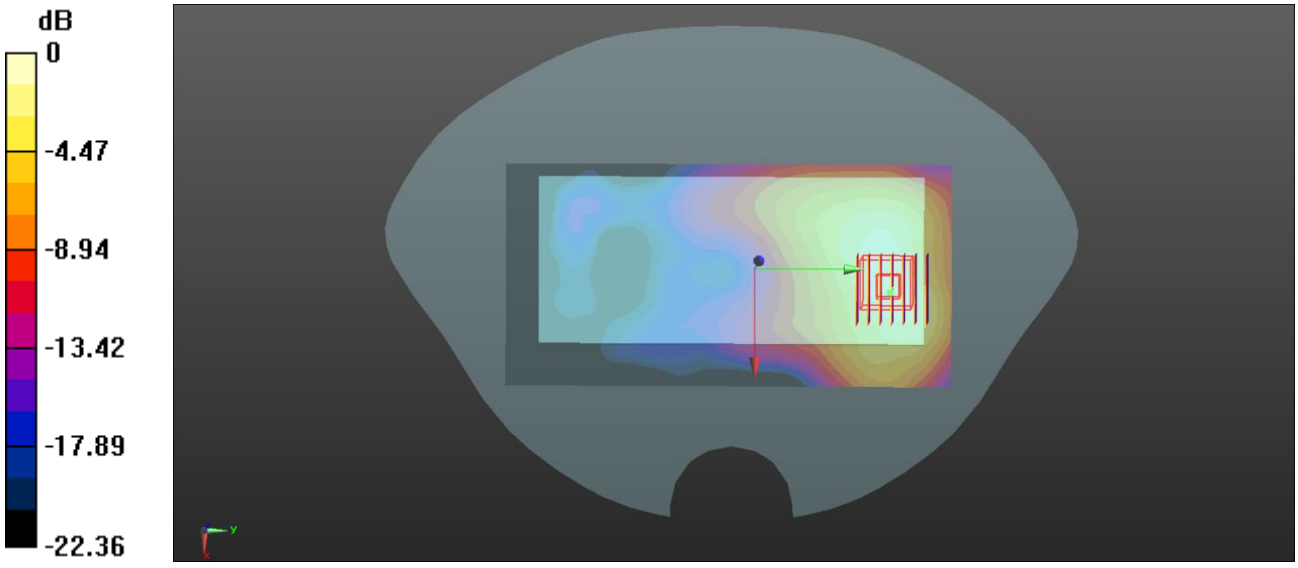
Ch37850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.462 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.777 W/kg

SAR(1 g) = 0.424 W/kg; SAR(10 g) = 0.225 W/kg

Maximum value of SAR (measured) = 0.466 W/kg



0 dB = 0.466 W/kg

Meas.33 Right Head with Tilt on Middle Channel in LTE Band41 Mode with Antenna3

Date: 2022.02.15

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used (interpolated): f = 2593 MHz; σ = 1.963 S/m; ε_r = 38.444; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 0.863 W/kg

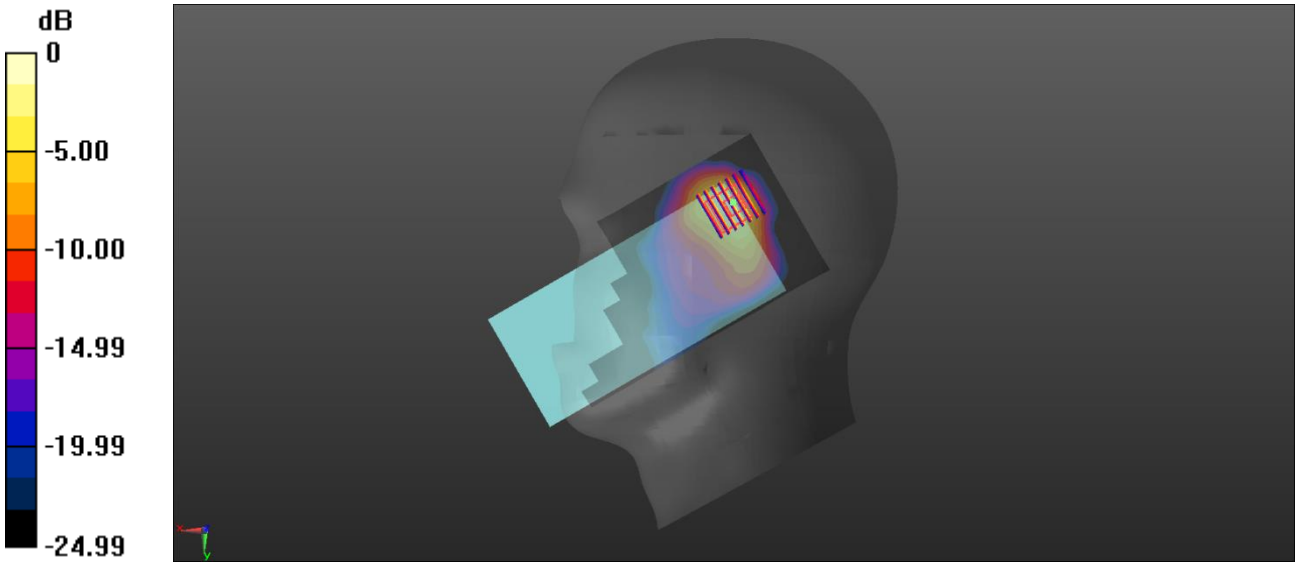
Ch40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.55 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 1.92 W/kg

SAR(1 g) = 0.739 W/kg; SAR(10 g) = 0.295 W/kg

Maximum value of SAR (measured) = 0.884 W/kg



0 dB = 0.884 W/kg

Meas.34 Body Plane with Back Side 15mm on High Channel in LTE Band41 mode with Antenna3

Date: 2022.02.15

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used (interpolated): f = 2680 MHz; σ = 2.069 S/m; ε_r = 37.919; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch41490/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

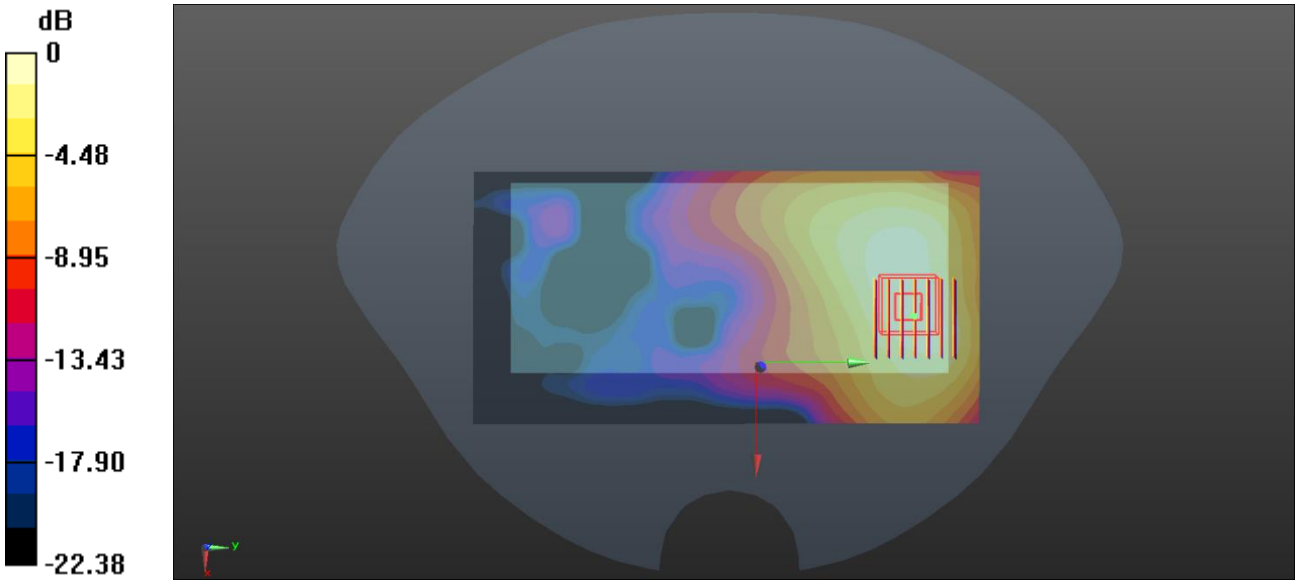
Ch41490/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.4410 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.419 W/kg

SAR(1 g) = 0.231 W/kg; SAR(10 g) = 0.128 W/kg

Maximum value of SAR (measured) = 0.251 W/kg



0 dB = 0.251 W/kg

Meas.35 Body Plane with Top Edge 10mm on Middle Channel in LTE Band 41 with Antenna 3

Date: 2022.02.15

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used (interpolated): f = 2593 MHz; σ = 1.969 S/m; ε_r = 38.464; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 0.491 W/kg

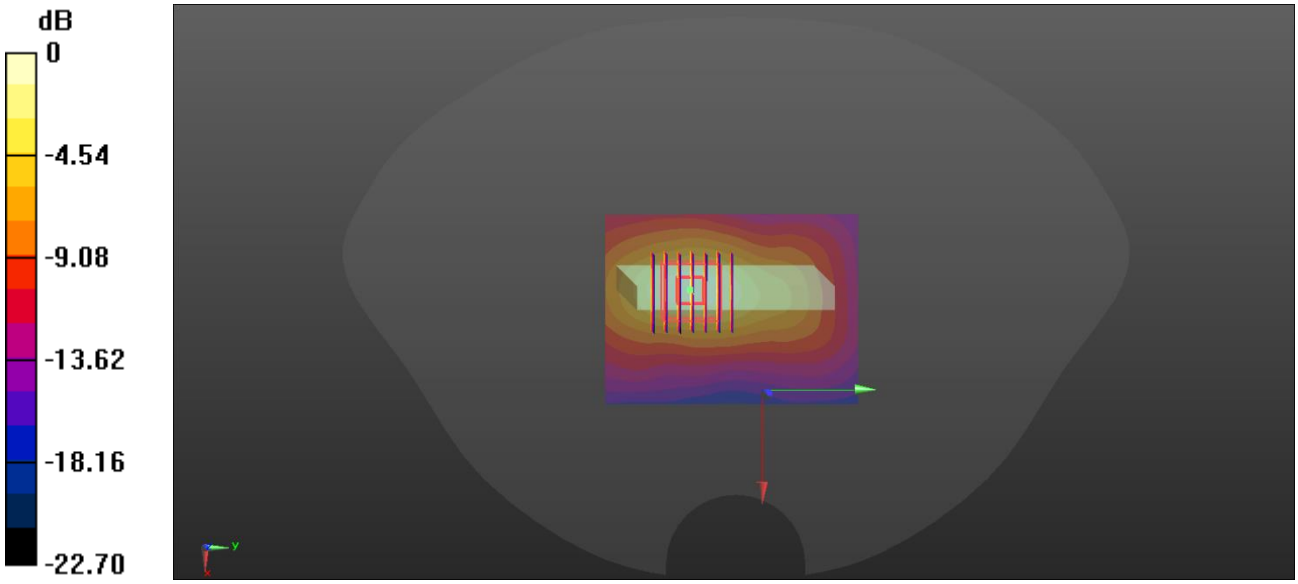
Ch40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.47 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.871 W/kg

SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.495 W/kg



0 dB = 0.495 W/kg

Meas.36 Body Plane with Top Edge 0mm on Middle Channel in LTE Band 41 with Antenna3

Date: 2022.02.15

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used (interpolated): f = 2593 MHz; σ = 1.969 S/m; ε_r = 38.464; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); 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) = 5.61 W/kg

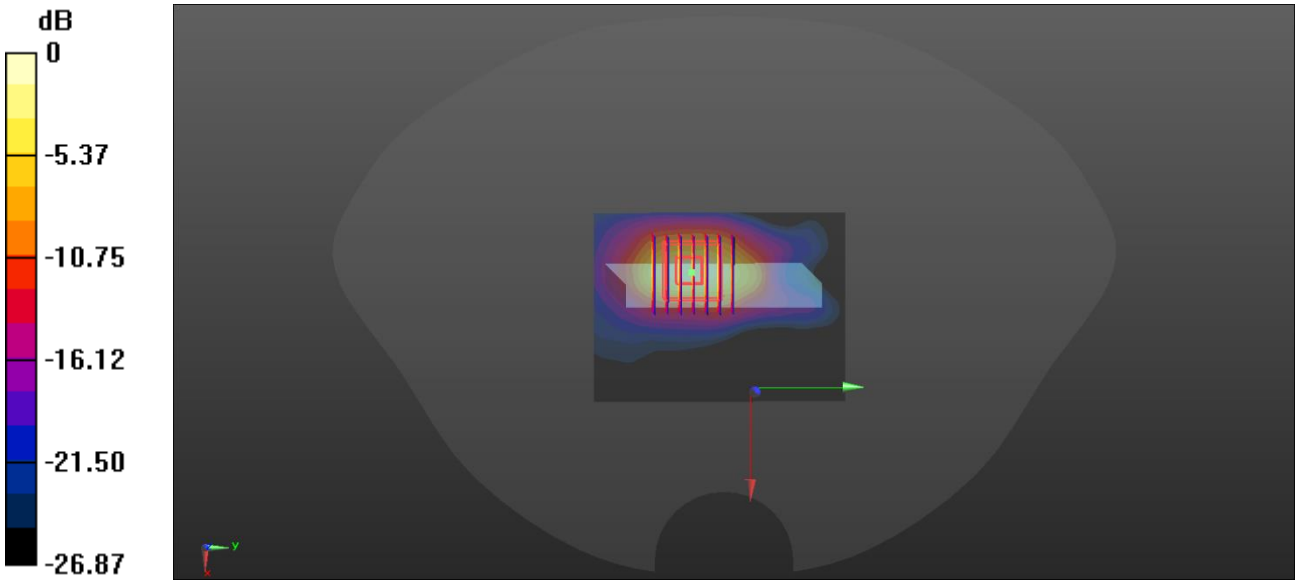
Ch40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.34 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 13.9 W/kg

SAR(1 g) = 4.66 W/kg; SAR(10 g) = 1.65 W/kg

Maximum value of SAR (measured) = 5.70 W/kg



0 dB = 5.70 W/kg

Meas.37 Left Head with Cheek on Channel Middle in IEEE802.11b mode with Antenna7

Date: 2022.02.16

Communication System Band: WLAN(b); Frequency: 2437 MHz;Duty Cycle: 1:1.008

Medium parameters used (interpolated): f = 2437 MHz; σ = 1.785 S/m; ε_r = 39.576; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.5 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

CH6/Area Scan (81x141x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

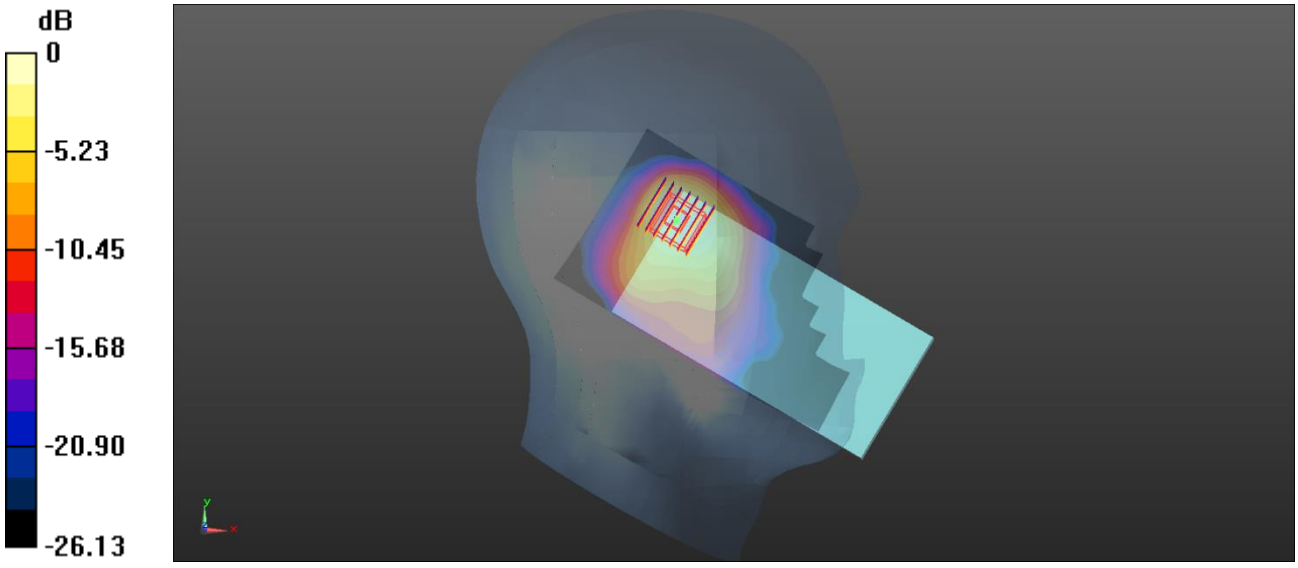
CH6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.66 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 0.796 W/kg; SAR(10 g) = 0.375 W/kg

Maximum value of SAR (measured) = 0.899 W/kg



0 dB = 0.899 W/kg

Meas.38 Body Plane with Back Side 15mm on Middle Channel in IEEE802.11b mode with Antenna7

Date: 2022.02.16

Communication System Band: WLAN(b); Frequency: 2437 MHz;Duty Cycle: 1:1.019

Medium parameters used (interpolated): f = 2437 MHz; σ = 1.785 S/m; ε_r = 39.576; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch6/Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm.

Maximum value of SAR (interpolated) = 0.149 W/kg

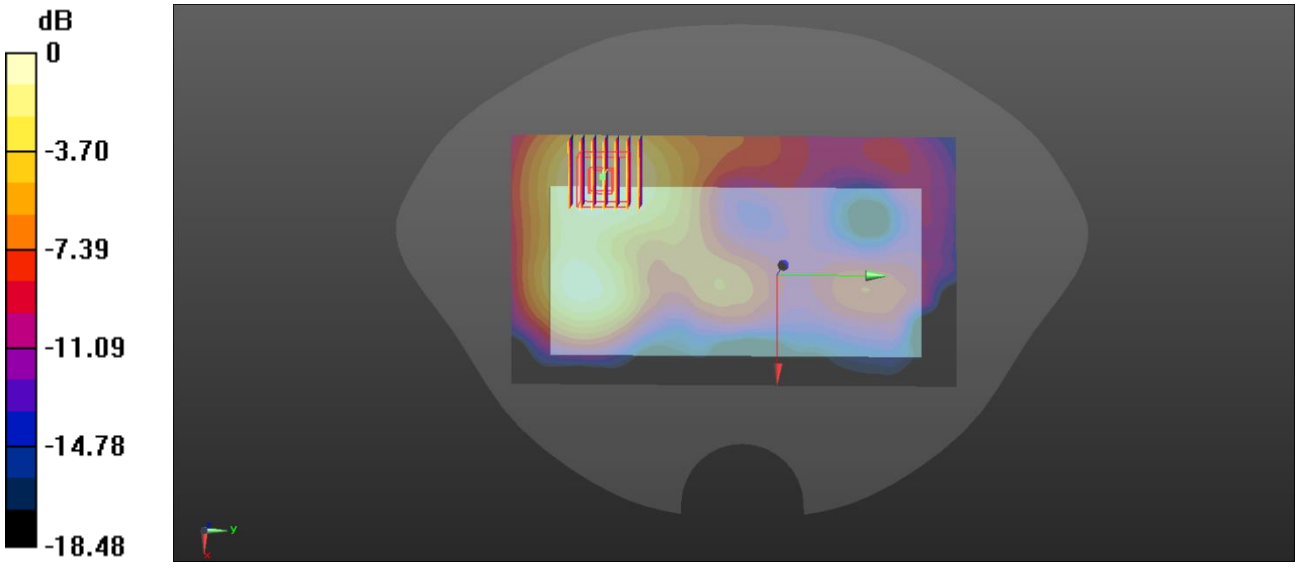
Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.895 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.239 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.079 W/kg

Maximum value of SAR (measured) = 0.148 W/kg



0 dB = 0.148 W/kg

Meas.39 Body Plane with Top Edge 0mm on Middle Channel in IEEE802.11b mode with Antenna7

Date: 2022.02.16

Communication System Band: WLAN(b); Frequency: 2437 MHz;Duty Cycle: 1:1.019

Medium parameters used (interpolated): f = 2437 MHz; σ = 1.785 S/m; ε_r = 39.576; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch6/Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

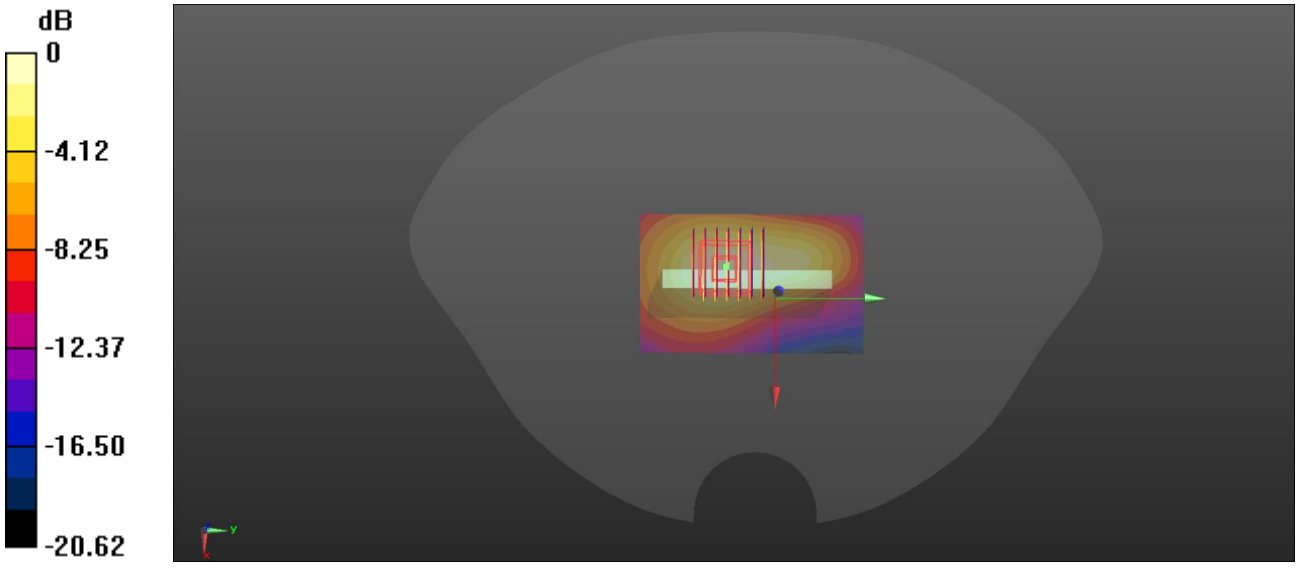
Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.11 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.533 W/kg

SAR(1 g) = 0.292 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 0.322 W/kg



0 dB = 0.322 W/kg

Meas.40 Left Head with Tilt on Channel 54 in IEEE802.11n40 mode with Antenna7

Date: 2022.02.17

Communication System Band: WLAN(n)40MHz; Frequency: 5270 MHz;Duty Cycle: 1:1.037

Medium parameters used (interpolated): f = 5270 MHz; σ = 4.741 S/m; ε_r = 35.467; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.4 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.72, 5.72, 5.72); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch54/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 2.11 W/kg

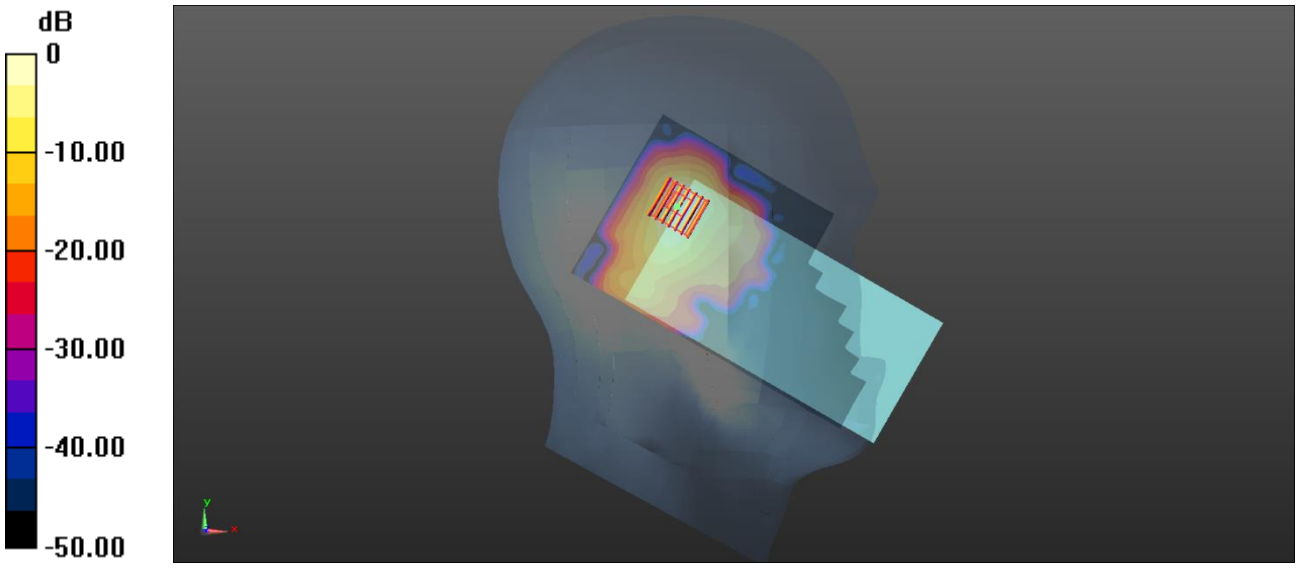
Ch54/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 8.147 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 4.39 W/kg

SAR(1 g) = 0.960 W/kg; SAR(10 g) = 0.283 W/kg

Maximum value of SAR (measured) = 2.05 W/kg



0 dB = 2.05 W/kg

Meas.41 Left Head with Tilt on Channel 102 in IEEE802.11n40 mode with Antenna7

Date: 2022.02.18

Communication System Band: WLAN(n)40MHz; Frequency: 5510 MHz;Duty Cycle: 1:1.037

Medium parameters used (interpolated): f = 5510 MHz; σ = 4.916 S/m; ε_r = 36.078; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.1 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.3, 5.3, 5.3); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch102/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 2.12 W/kg

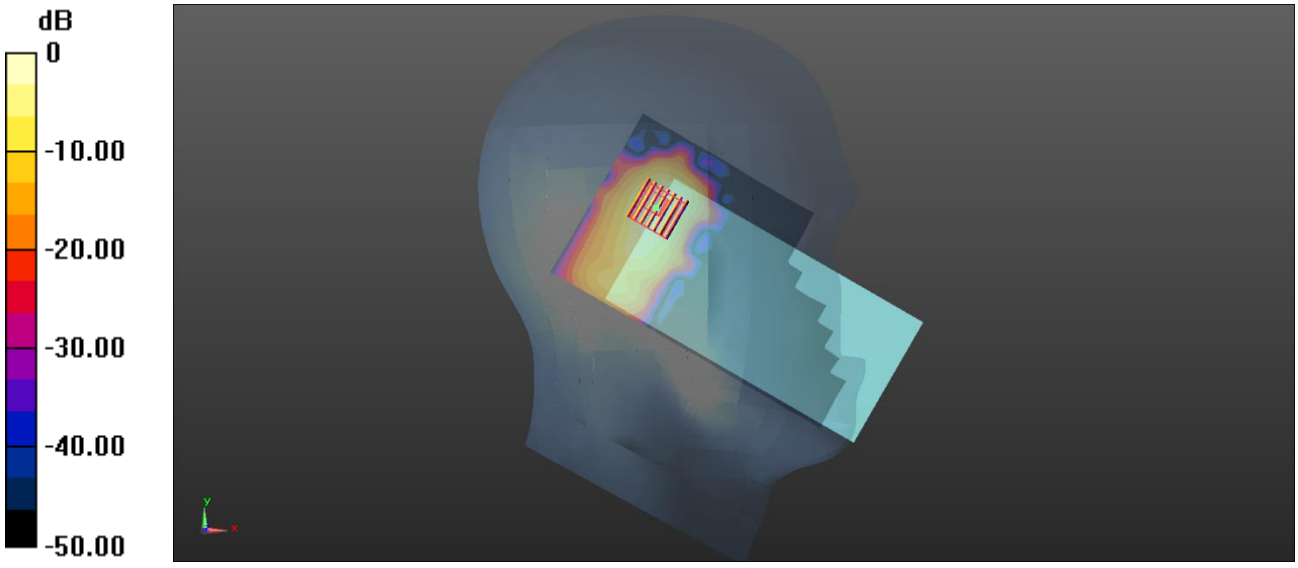
Ch102/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 8.807 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 4.21 W/kg

SAR(1 g) = 0.908 W/kg; SAR(10 g) = 0.302 W/kg

Maximum value of SAR (measured) = 1.93 W/kg



0 dB = 1.93 W/kg

Meas.42 Body Plane with Back Side 15mm on 64 Channel in IEEE802.11a mode with Antenna7

Date: 2022.02.17

Communication System Band: WLAN(a); Frequency: 5320 MHz;Duty Cycle: 1:1.017

Medium parameters used: f = 5320 MHz; σ = 4.837 S/m; ε_r = 34.985; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.61, 5.61, 5.61); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch64/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.528 W/kg

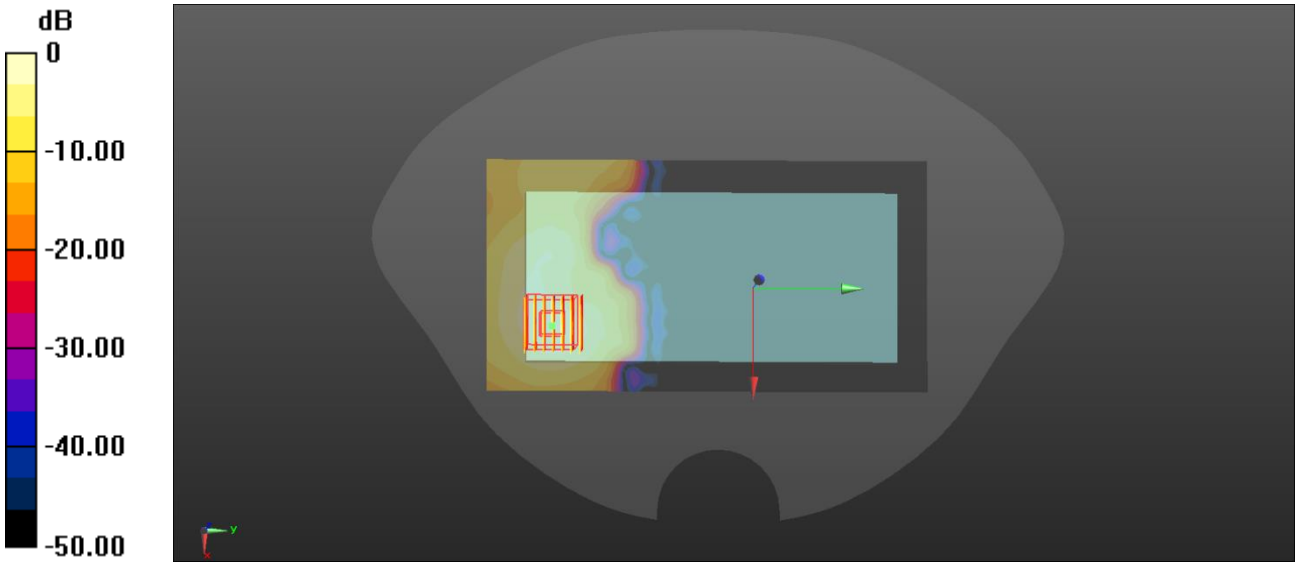
Ch64/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.975 W/kg

SAR(1 g) = 0.280 W/kg; SAR(10 g) = 0.107 W/kg

Maximum value of SAR (measured) = 0.510 W/kg



0 dB = 0.510 W/kg

Meas.43 Body Plane with Back Side 15mm on 140 Channel in IEEE802.11a mode with Antenna7

Date: 2022.02.18

Communication System Band: WLAN(a); Frequency: 5700 MHz;Duty Cycle: 1:1.017

Medium parameters used (interpolated): f = 5700 MHz; σ = 5.208 S/m; ε_r = 34.094; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.1, 5.1, 5.1); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch140/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.527 W/kg

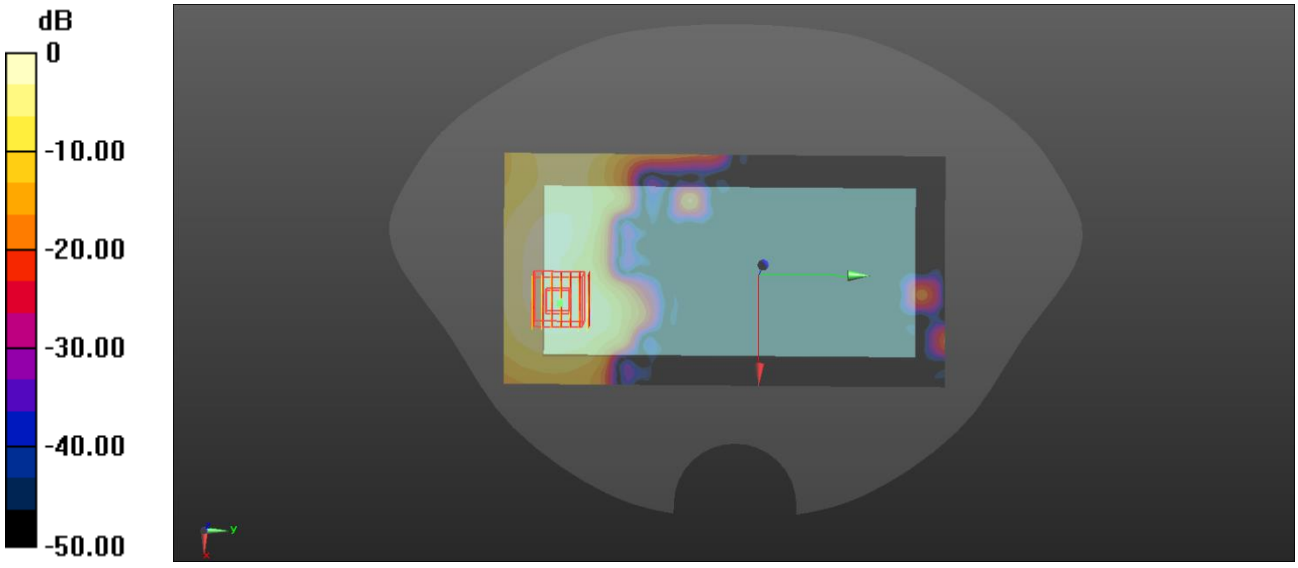
Ch140/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.289 W/kg; SAR(10 g) = 0.110 W/kg

Maximum value of SAR (measured) = 0.540 W/kg



0 dB = 0.540 W/kg

Meas.44 Body Plane with Top Edge 10mm on 36 Channel in IEEE802.11a mode with Antenna7

Date: 2022.02.17

Communication System Band: WLAN(a); Frequency: 5180 MHz;Duty Cycle: 1:1.017

Medium parameters used (interpolated): f = 5180 MHz; σ = 4.574 S/m; ε_r = 36.754; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.72, 5.72, 5.72); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch36/Area Scan (71x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.769 W/kg

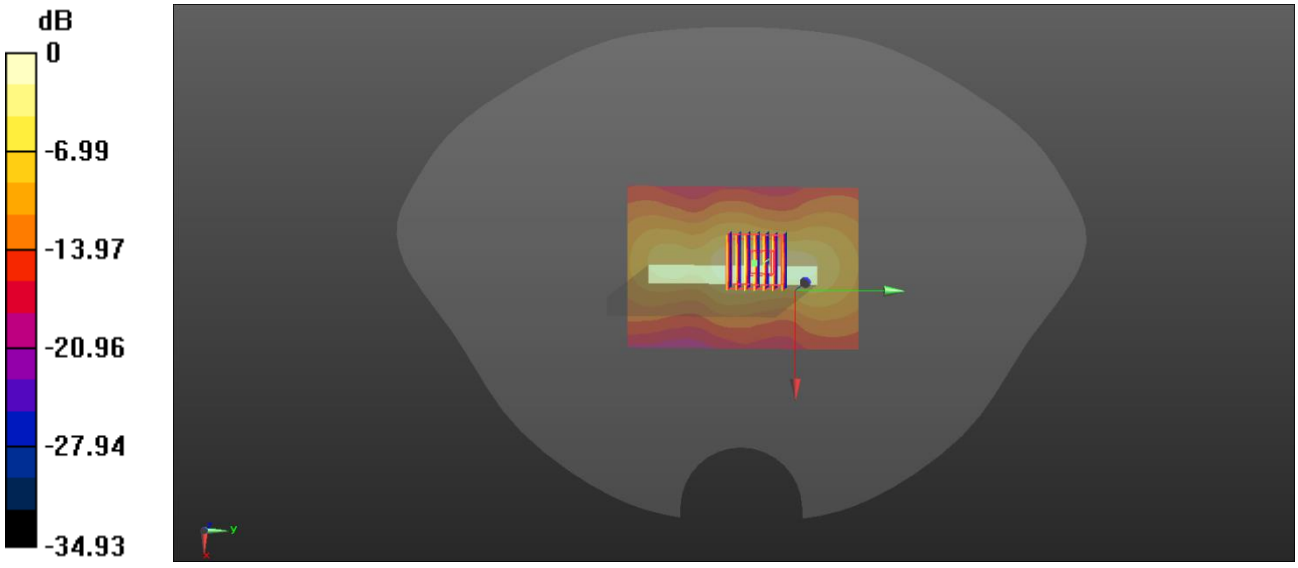
Ch36/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 11.97 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.91 W/kg

SAR(1 g) = 0.759 W/kg; SAR(10 g) = 0.296 W/kg

Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg

Meas.45 Body Plane with Front Side 0mm on 64 Channel in IEEE802.11a mode with Antenna7

Date: 2022.02.17

Communication System Band: WLAN(a); Frequency: 5320 MHz;Duty Cycle: 1:1.017

Medium parameters used: f = 5320 MHz; σ = 4.837 S/m; ε_r = 34.985; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.61, 5.61, 5.61); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch64/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 11.4 W/kg

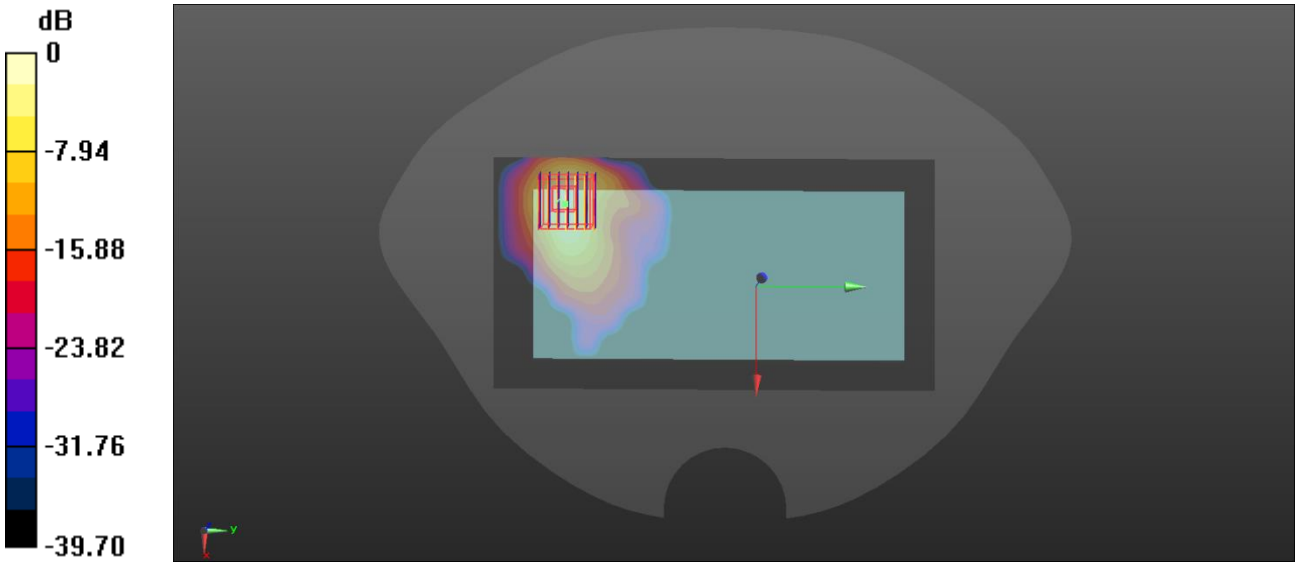
Ch64/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 30.3 W/kg

SAR(1 g) = 6.06 W/kg; SAR(10 g) = 1.83 W/kg

Maximum value of SAR (measured) = 12.4 W/kg



0 dB = 12.4 W/kg

Meas.46 Body Plane with Front Side 0mm on 140 Channel in IEEE802.11a mode with Antenna7

Date: 2022.02.18

Communication System Band: WLAN(a); Frequency: 5700 MHz;Duty Cycle: 1:1.017

Medium parameters used (interpolated): f = 5700 MHz; σ = 5.208 S/m; ε_r = 34.094; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.1, 5.1, 5.1); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch140/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 11.6 W/kg

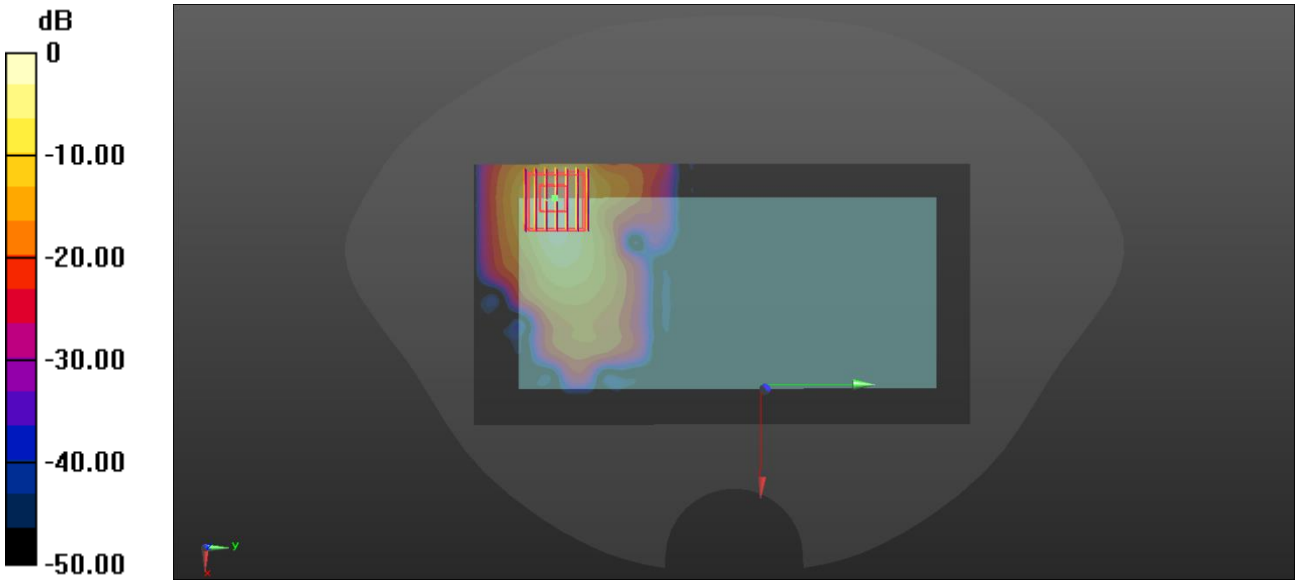
Ch140/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 27.2 W/kg

SAR(1 g) = 5.27 W/kg; SAR(10 g) = 1.66 W/kg

Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 11.1 W/kg

Meas.47 Left Head with Cheek on Middle Channel in Bluetooth mode with Antenna7

Date: 2022.02.16

Communication System Band: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.31

Medium parameters used (interpolated): f = 2441 MHz; σ = 1.793 S/m; ε_r = 39.584; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.5 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (81x141x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.379 W/kg

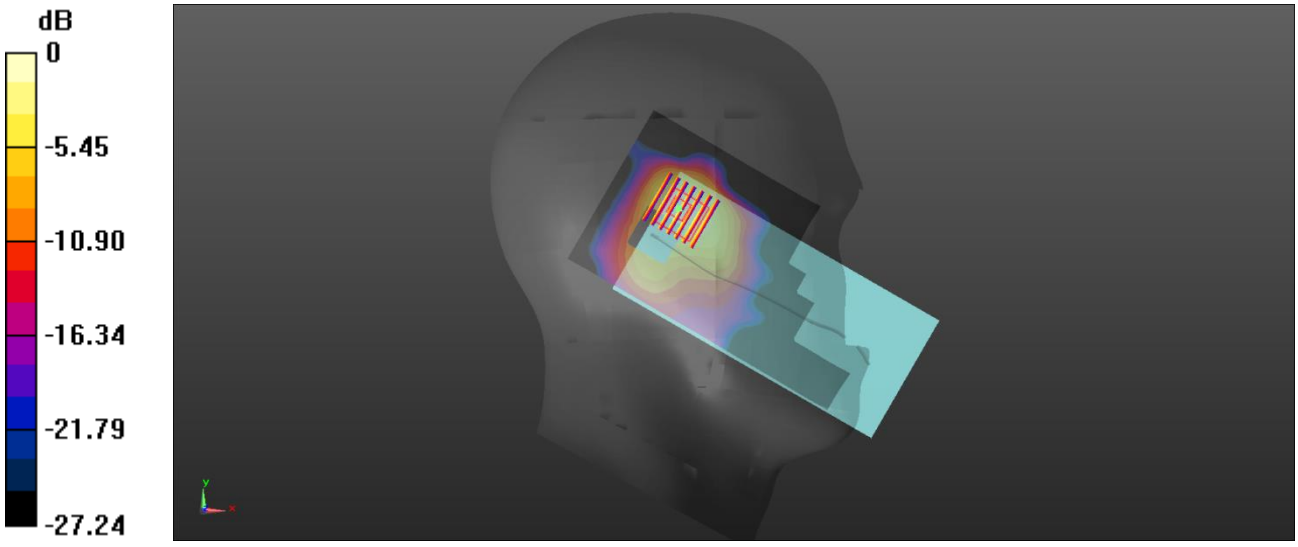
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.195 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.745 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.147 W/kg

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



0 dB = 0.389 W/kg

Meas.48 Body Plane with Back Side 15mm on Middle Channel in Bluetooth mode with Antenna7

Date: 2022.02.16

Communication System Band: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.31

Medium parameters used (interpolated): f = 2441 MHz; σ = 1.793 S/m; ε_r = 39.584; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0346 W/kg

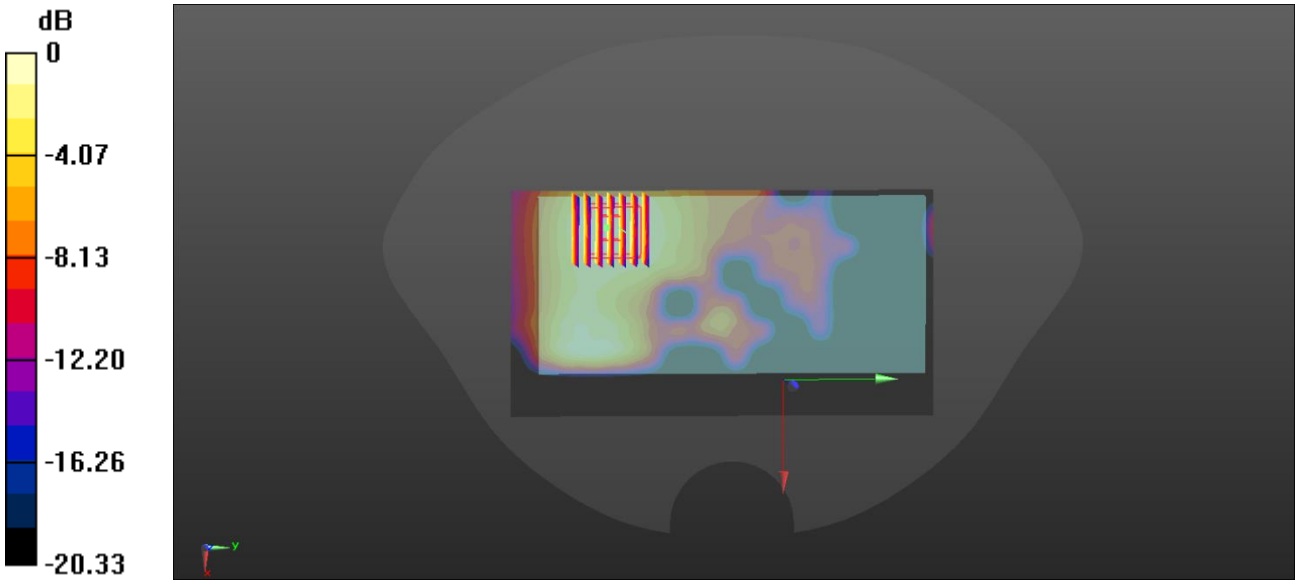
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.0560 W/kg

SAR(1 g) = 0.032 W/kg; SAR(10 g) = 0.018 W/kg.

Maximum value of SAR (measured) = 0.0345 W/kg



0 dB = 0.0345 W/kg

Meas.49 Body Plane with Top Edge 10mm on Middle Channel in Bluetooth mode with Antenna7

Date: 2022.02.16

Communication System Band: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.31

Medium parameters used (interpolated): f = 2441 MHz; σ = 1.793 S/m; ε_r = 39.584; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0807 W/kg

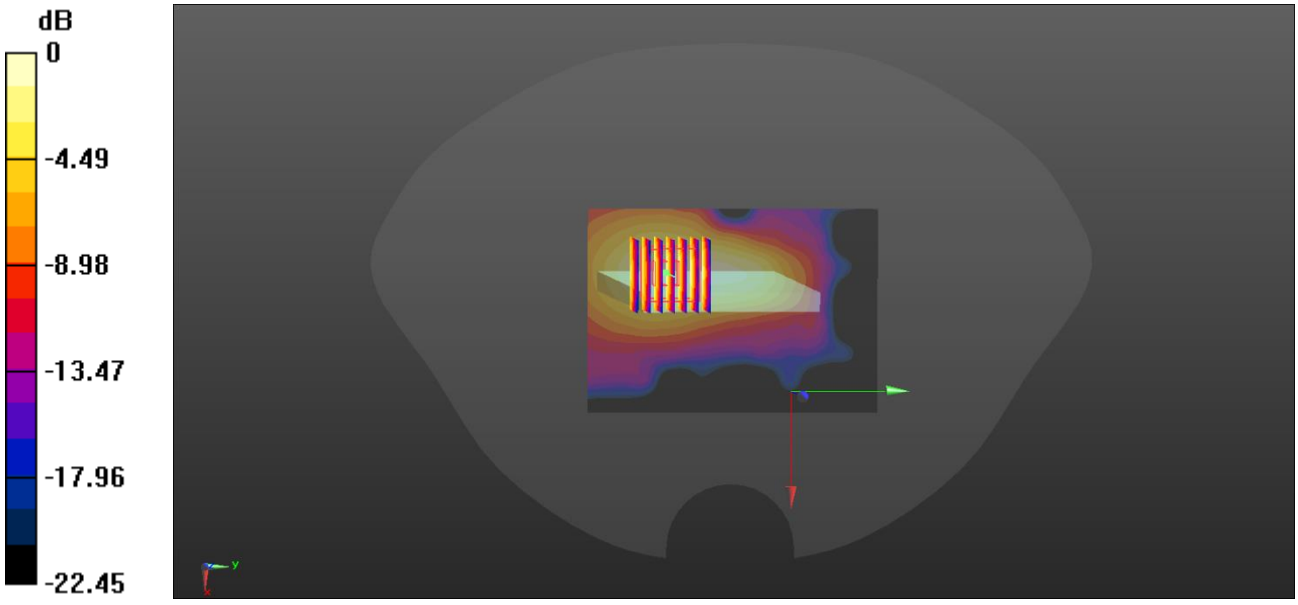
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.785 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.138 W/kg

SAR(1 g) = 0.073 W/kg; SAR(10 g) = 0.039 W/kg

Maximum value of SAR (measured) = 0.0818 W/kg



0 dB = 0.0818 W/kg

Meas.50 Body Plane with Back Side 15mm on Middle Channel in GPRS850 4Slots mode with Antenna 1

Date: 2022.11.30

Communication System Band: GPRS850; Frequency: 836.6 MHz;Duty Cycle: 1:2.08

Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.906 S/m; ε_r = 41.741; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3℃ Liquid Temperature:21.5℃

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: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch190/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.470 W/kg

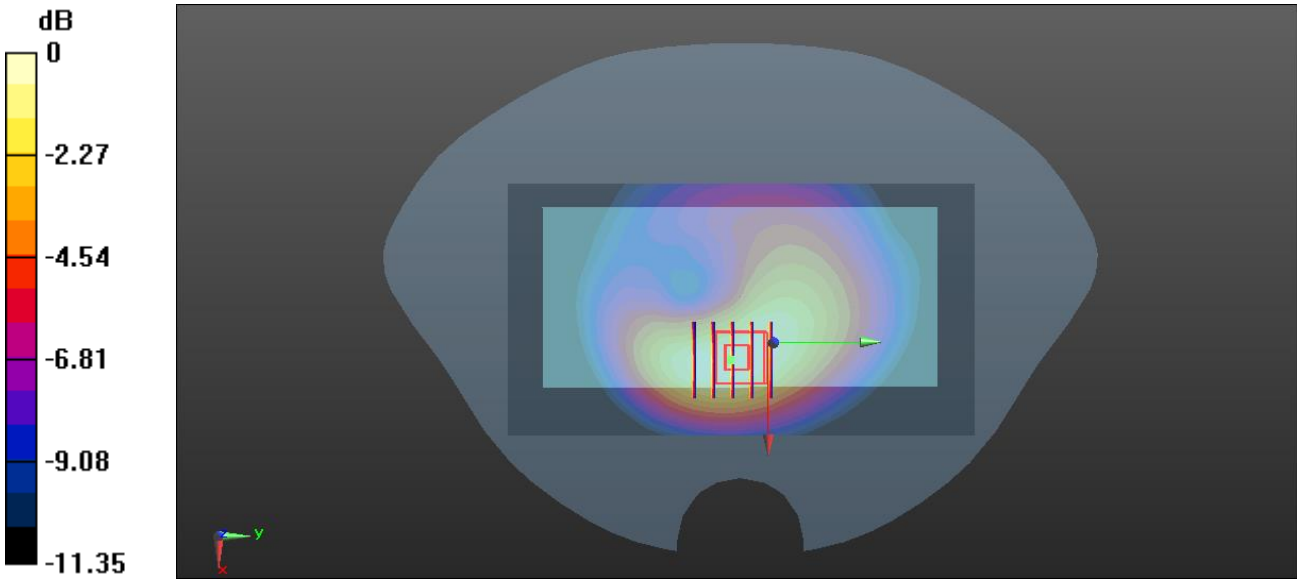
Ch190/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.24 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.620 W/kg

SAR(1 g) = 0.412 W/kg; SAR(10 g) = 0.270 W/kg

Maximum value of SAR (measured) = 0.445 W/kg



0 dB = 0.445 W/kg

Meas.51 Left Head with Tilt on 54 Channel in IEEE802.11HT40 mode with Antenna 7

Date: 2022.12.01

Communication System Band: WLAN(n)40MHz; Frequency: 5270 MHz;Duty Cycle: 1:1.037

Medium parameters used (interpolated): f = 5270 MHz; σ = 4.744 S/m; ε_r = 35.665; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.4℃ Liquid Temperature:21.5℃

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: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch54/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

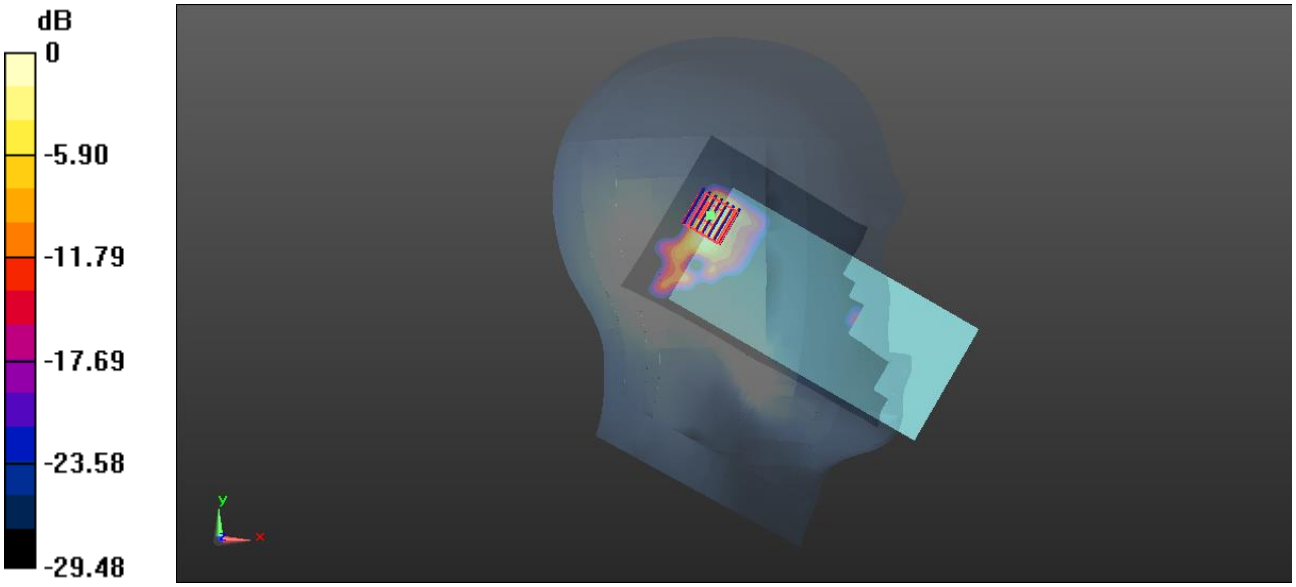
Ch54/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 11.42 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 3.74 W/kg

SAR(1 g) = 0.798 W/kg; SAR(10 g) = 0.238 W/kg

Maximum value of SAR (measured) = 1.80 W/kg



0 dB = 1.80 W/kg

Meas.52 Body Plane with Top Edge 10mm on 36 Channel in IEEE802.11a mode with Antenna 7

Date: 2022.12.01

Communication System Band: WLAN(a); Frequency: 5180 MHz;Duty Cycle: 1:1.017

Medium parameters used (interpolated): f = 5180 MHz; σ = 4.565 S/m; ε_r = 36.829; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4℃ Liquid Temperature:21.5℃

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: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch36/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.34 W/kg

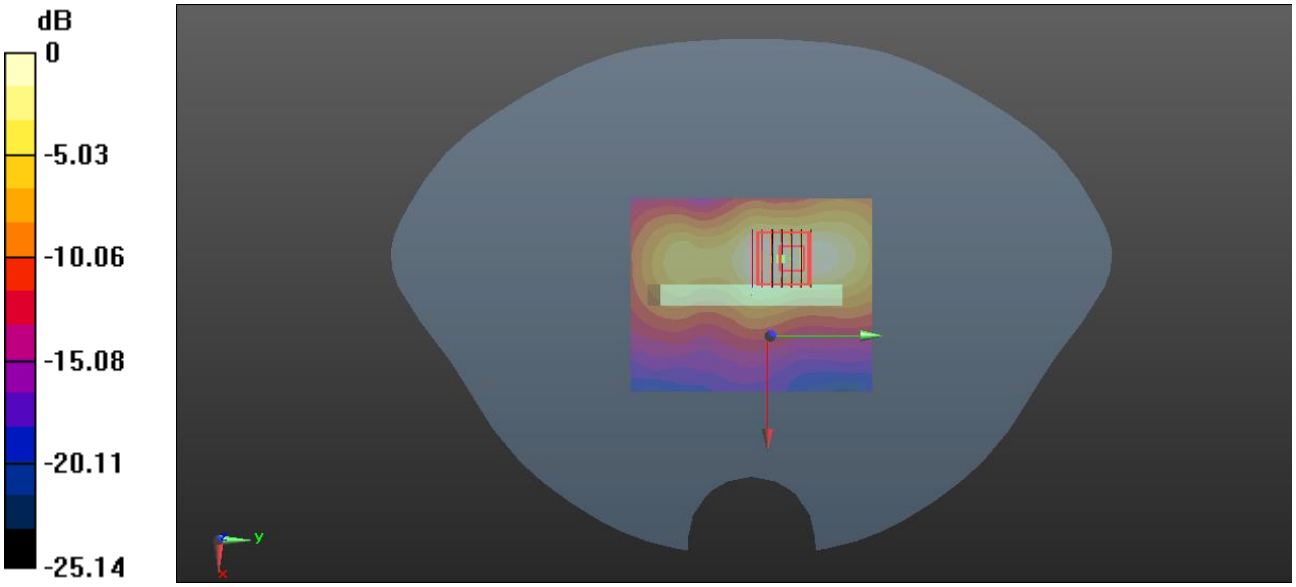
Ch36/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.882 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 2.51 W/kg

SAR(1 g) = 0.719 W/kg; SAR(10 g) = 0.289 W/kg

Maximum value of SAR (measured) = 1.31 W/kg



0 dB = 1.31 W/kg

Meas.53 Body Plane with Front Side 0mm on 64 Channel in IEEE802.11a mode with Antenna 7

Date: 2022.12.01

Communication System Band: WLAN(a); Frequency: 5320 MHz;Duty Cycle: 1:1.017

Medium parameters used (interpolated): f = 5320 MHz; σ = 4.849 S/m; ε_r = 35.004; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4℃ Liquid Temperature:21.5℃

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: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch64/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.8 W/kg

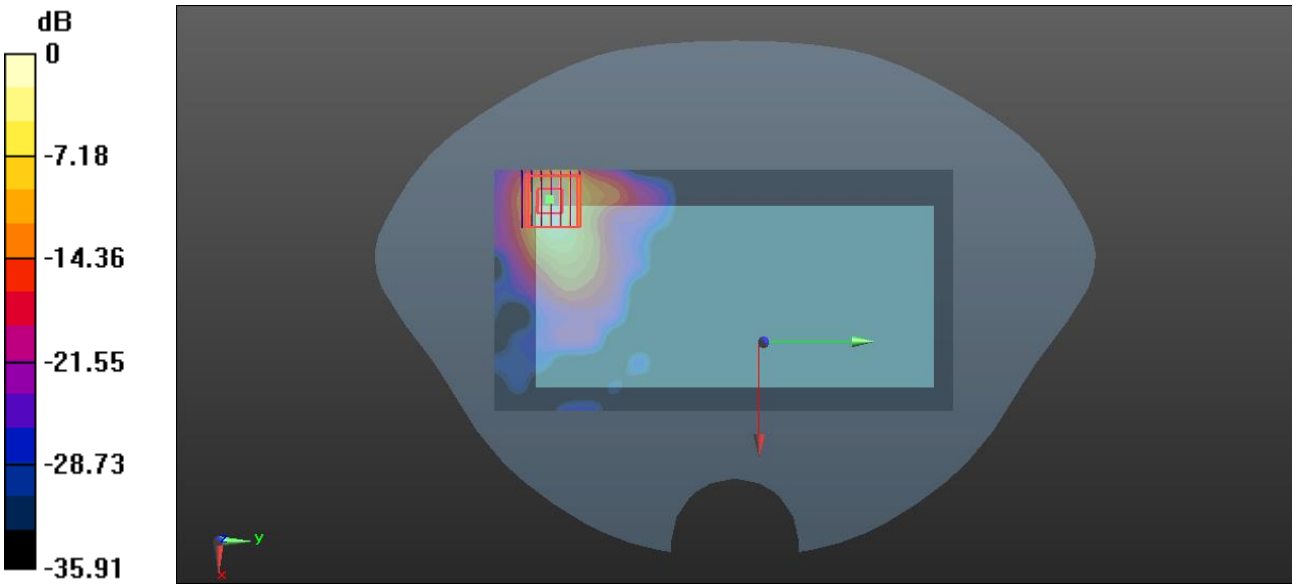
Ch64/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.3510 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 34.0 W/kg

SAR(1 g) = 6.37 W/kg; SAR(10 g) = 1.81 W/kg

Maximum value of SAR (measured) = 13.4 W/kg



0 dB = 13.4 W/kg

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ22B1218-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ22B1218-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “CALIBRATION REPORT.pdf”.

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