

TEST REPORT

Applicant: INFINIX MOBILITY LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL
CENTRE 19-25 SHAN MEI STREET FOTAN NT
HONGKONG
Equipment Type: Mobile phone
Model Name: X6837
Brand Name: Infinix
FCC ID: 2AIZN-YY5-X6837
Test Standard: FCC 47 CFR Part 2.1093
(refer to section 3.1)
Maximum SAR: Head (1 g@0mm): 1.15 W/kg
Body-worn (1 g@10mm): 0.79 W/kg
Hotspot (1 g@10mm): 0.66 W/kg
Specific (10 g@0mm): 1.10 W/kg
Sample Arrival Date: Sep. 25, 2023
Test Date: Oct. 02, 2023 - Oct. 19, 2023
Date of Issue: Nov. 17, 2023

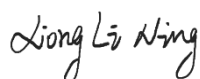
ISSUED BY:

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Approved by: Tolan Tu
(Testing Director)



Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Nov. 17, 2023</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☒ 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°C to 25°C
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	INFINIX MOBILITY LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.2 Manufacturer Information

Manufacturer	INFINIX MOBILITY LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile phone
Model Name Under Test	X6837
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	168.6mmx76.6mmx8.25mm
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	Infinix
	Model No.	BL-49JX
	Serial No.	N/A
	Capacity	4900mAh/18.96Wh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45 V

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/12/13/17/25/26/66 LTE TDD Band 38/41 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80) U-NII-1/2A/2C/3, GPS, GLONASS, BeiDou, Galileo, NFC, FM receiver
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 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 13	TX: 777 ~ 787 MHz	RX: 746 ~ 756 MHz
	LTE Band 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 MHz
	LTE Band 25	TX: 1850 ~ 1915 MHz	RX: 1930 ~ 1995 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g /n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	Bluetooth	2402 ~ 2480 MHz	

Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna	
DTM	N/A	
Hotspot Function	Support	
Power Reduction	Support	
Exposure Category	General Population/Uncontrolled exposure	
Product Type	Portable Device	
EUT 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 8.6.		

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 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
8	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	KDB 865664 D02 v01r02	RF Exposure Reporting
10	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
11	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

3.2 Device Category and SAR Limit

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

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

Table of Exposure Limits:

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

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)				Maximum Report SAR (W/kg)							
		Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)	Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)				
		1g SAR			10g SAR	1g SAR			10g SAR				
PCE	GSM 850	1.10	0.20	0.20	/	1.15	0.79	0.66	1.10				
	GSM 1900	1.15	0.26	0.26	/								
	WCDMA Band 2	0.75	0.22	0.22	/								
	WCDMA Band 4	0.36	0.09	0.11	/								
	WCDMA Band 5	0.60	0.15	0.15	/								
	LTE Band 5	0.58	0.17	0.17	/								
	LTE Band 7	0.95	0.66	0.66	/								
	LTE Band 12	0.25	0.10	0.12	/								
	LTE Band 13	0.49	0.26	0.26	/								
	LTE Band 25	1.15	0.24	0.25	/								
	LTE Band 26	0.54	0.13	0.13	/								
	LTE Band 66	0.45	0.15	0.14	/								
	LTE Band 38	0.58	0.55	0.17	/								
	LTE Band 41	0.95	0.79	0.66	/								
DTS	2.4G WLAN	0.49	0.32	0.32	/								
NII	5.2G WLAN	/	0.37	0.63	/								
	5.3G WLAN	1.14	/	/	1.10								
	5.6G WLAN	0.80	/	/	0.76								
	5.8G WLAN	0.88	0.31	0.55	/								
DSS	Bluetooth	0.39		0.25	/								
Limit (W/kg)		1.6			4.0					1.6			4.0
Verdict		PASS											

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 1.15 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

The maximum 10 g SAR for the EUT in this report is 1.10 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:

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

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

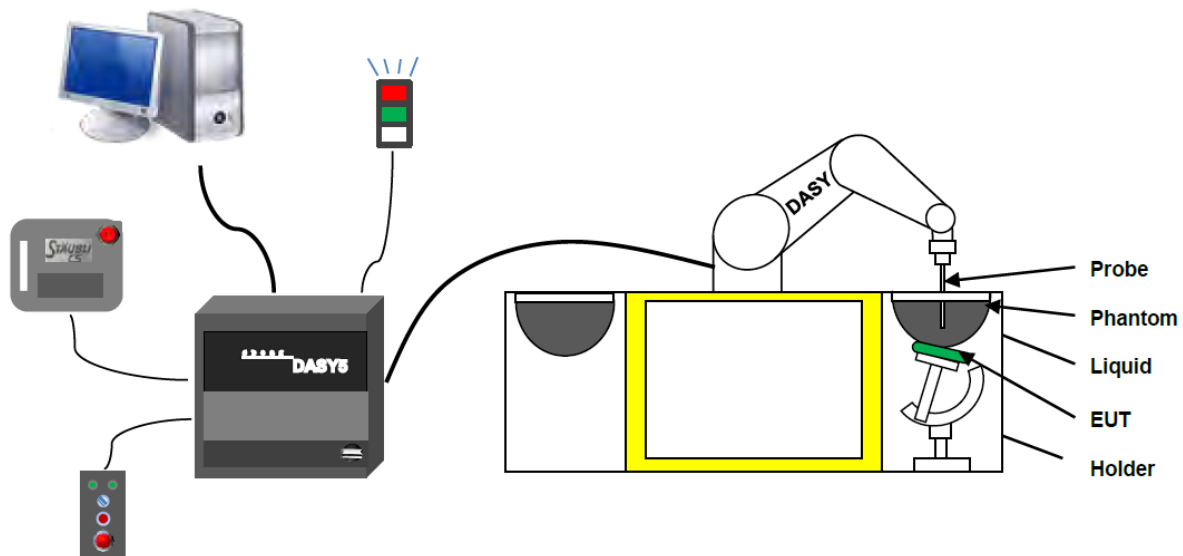
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

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



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

4.2.3 E-Field Probe

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

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-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 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)



E-Field Probe Calibration Process

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

4.2.4 Data Acquisition Electronics

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



- Input Impedance: 200M Ω
- The Inputs: Symmetrical and Floating
- Common 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 head
- Right head
- Flat phantom

Photo of Phantom SN1859



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

4.2.6 Device Holder

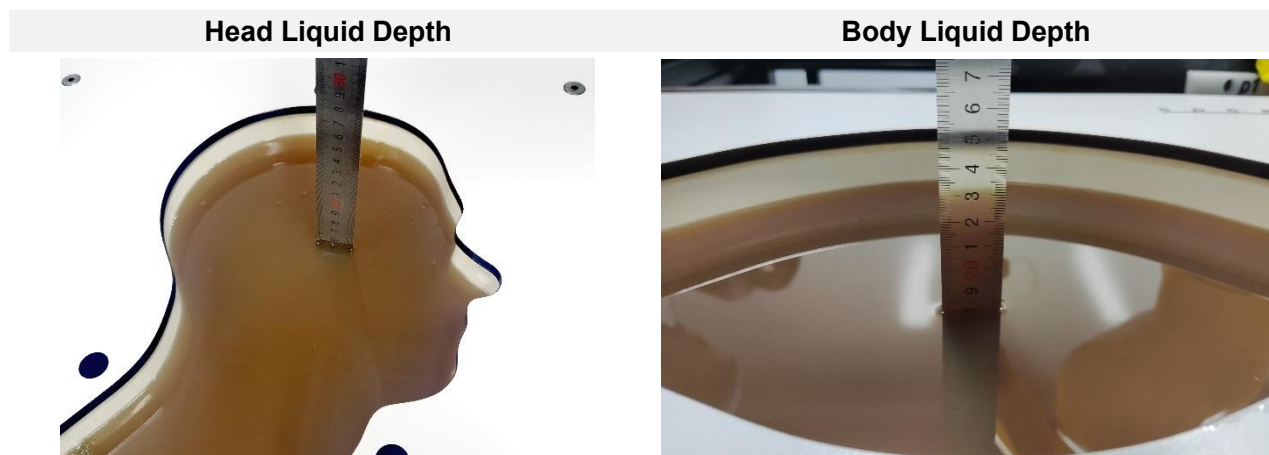
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for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



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

4.2.7 Simulating Liquid

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



The following table gives the recipes for tissue simulating liquid.

TSL	Manufacturer / Model	Freq Range (MHz)	Main Ingredients
Head WideBand	SPEAG HBBL600-10000V6	600-10000	Ethenediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxylated alcohol

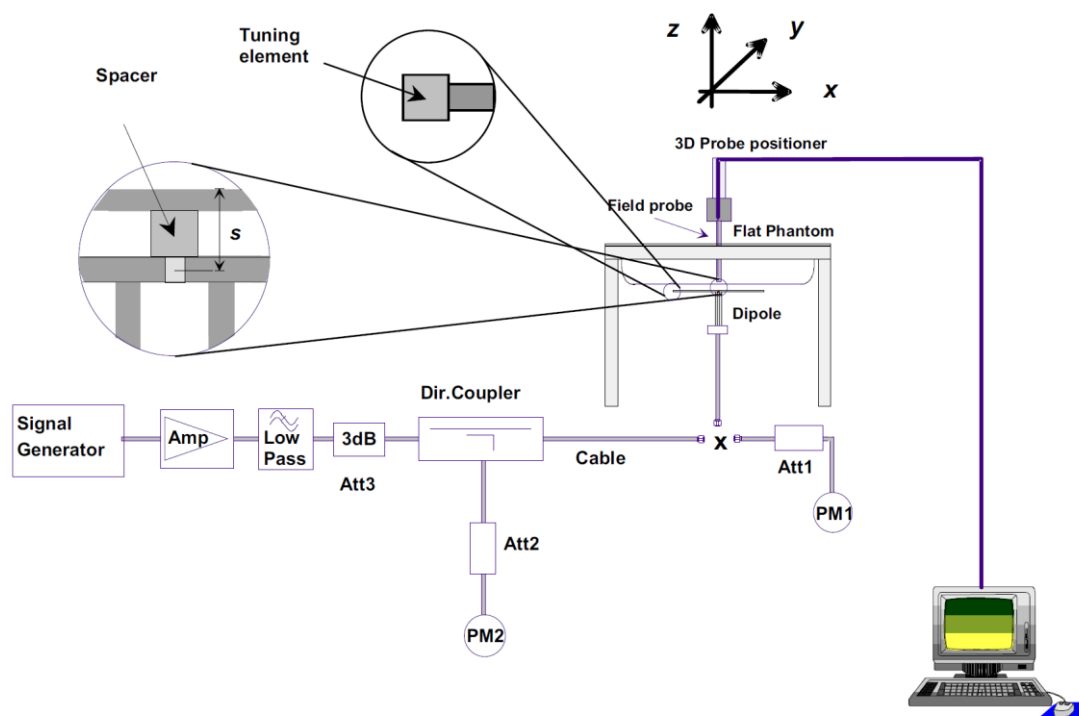
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

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

5.2 System Check Setup

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



6 TEST POSITION CONFIGURATIONS

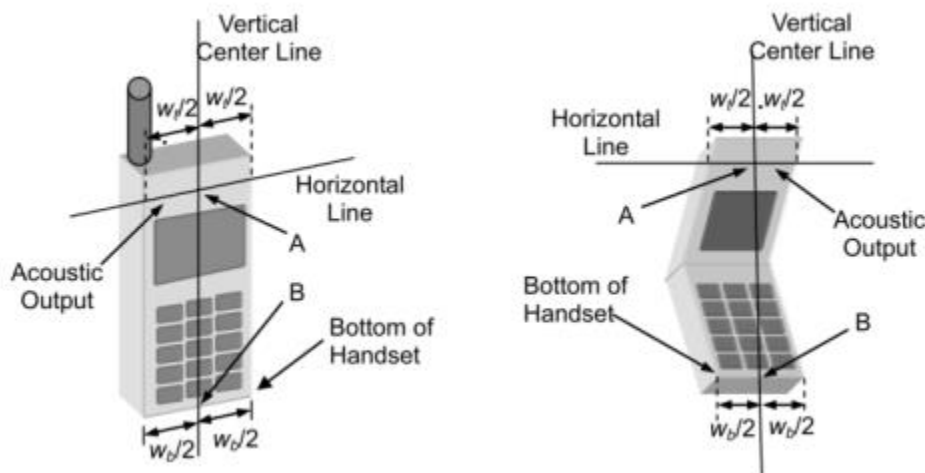
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

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

6.1.1 Two Imaginary Lines on the Handset

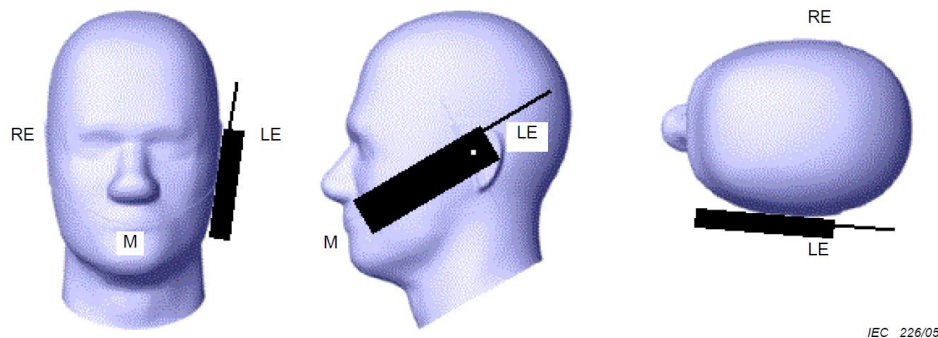
- The vertical center line passes through two points on the front side of the handset - the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the bottom of the handset.
- The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



6.1.2 Cheek Position

- To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek

of the phantom or until contact with the ear is lost.



IEC 226/05

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.

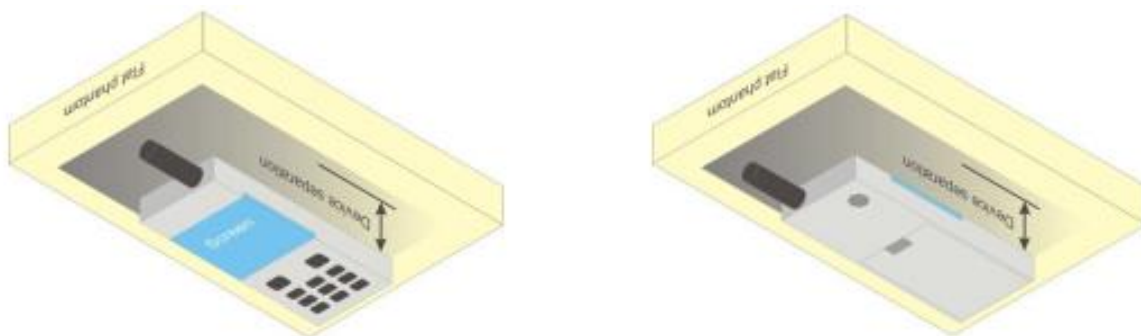


6.2 Body-worn Position Conditions

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.

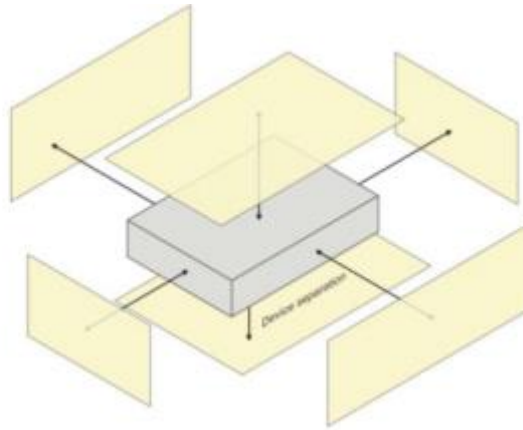
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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

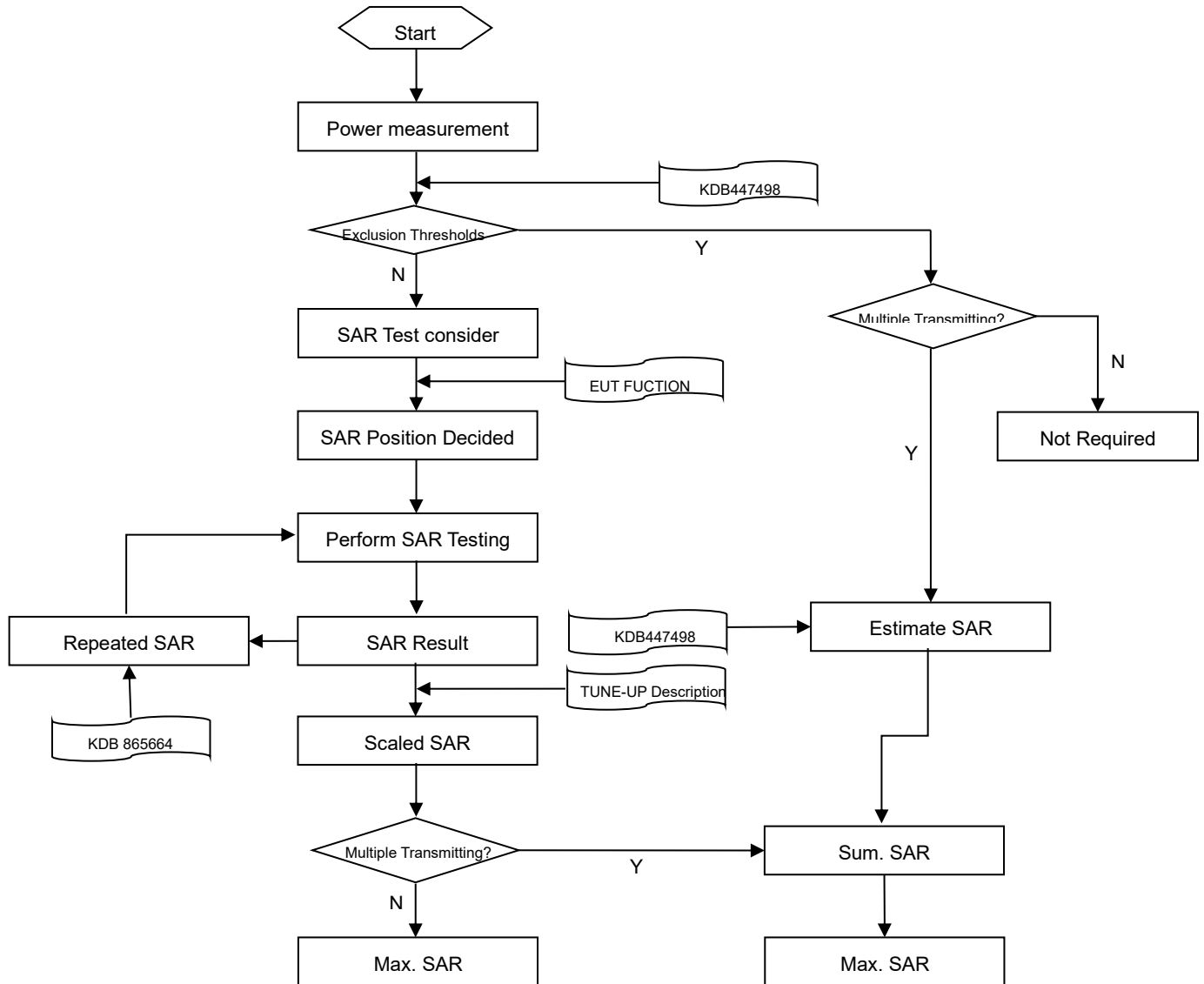
The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address 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.

6

6.

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

			≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30°±1°	20°±1°
Maximum area scan spatial resolution: Δx Area , Δy Area			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3–4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm
				4–5 GHz: ≤ 3 mm
				5–6 GHz: ≤ 2 mm
	graded grid	Δz Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
				4–5 GHz: ≤ 2.5 mm
				5–6 GHz: ≤ 2 mm
			Δz Zoom (n>1): between subsequent points	≤ 1.5·Δz Zoom (n-1)
Minimum zoom scan volume	x, y, z		≥30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm

Note:

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.

7.3 Measurement Procedure

The following steps are used for each test position

- a. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- c. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.4 Area & Zoom Scan Procedure

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

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

8 CONDUCTED RF 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 WIFI

8.4.1 2.4G WLAN ANT12

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	17.91	18.50	Yes
		6	2437	18.32	18.50	Yes
		11	2462	18.42	18.50	Yes
	802.11g	1	2412	14.94	15.00	No
		6	2437	17.11	17.50	No
		11	2462	16.96	17.50	No
	802.11n(HT20)	1	2412	14.49	15.00	No
		6	2437	16.99	17.50	No
		11	2462	15.51	17.50	No

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

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required.
Adjusted SAR = $0.488 * (70.79\text{mW}/31.62\text{mW}) = 1.093$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.2 2.4G WLAN ANT14

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	8.33	9.00	Yes
		6	2437	8.37	9.00	Yes
		11	2462	8.58	9.00	Yes
	802.11g	1	2412	8.36	9.00	No
		6	2437	8.32	9.00	No
		11	2462	8.45	9.00	No
	802.11n(HT20)	1	2412	8.32	9.00	No
		6	2437	8.34	9.00	No
		11	2462	8.41	9.00	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 = $0.265 * (7.94\text{mW}/7.94\text{mW}) = 0.265$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.3 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	13.17	13.50	No
		44	5220	13.27	13.50	No
		48	5240	13.28	13.50	No
	802.11n(HT20)	36	5180	13.03	13.50	No
		44	5220	13.11	13.50	No
		48	5240	13.19	13.50	No
	802.11n(HT40)	38	5190	13.04	13.50	No
		46	5230	13.14	13.50	No
	802.11ac(VHT20)	36	5180	13.07	13.50	No
		44	5220	13.05	13.50	No
		48	5240	13.16	13.50	No
	802.11ac(VHT40)	38	5190	13.35	13.50	No
		46	5230	13.07	13.50	No
	802.11ac(VHT80)	42	5210	12.03	13.50	Yes
5.3 (5.25~5.35)	802.11a	52	5260	13.32	13.50	No
		60	5300	13.06	13.50	No
		64	5320	13.11	13.50	No
	802.11n(HT20)	52	5260	13.21	13.50	No
		60	5300	13.37	13.50	No
		64	5320	13.40	13.50	No
	802.11n(HT40)	54	5270	13.15	13.50	No
		62	5310	12.62	13.50	No
	802.11ac(VHT20)	52	5260	13.23	13.50	No
		60	5300	13.25	13.50	No
		64	5320	13.35	13.50	No
	802.11ac(VHT40)	54	5270	13.13	13.50	No
		62	5310	13.16	13.50	No
	802.11ac(VHT80)	58	5290	12.21	13.50	Yes
5.6 (5.47~5.725)	802.11a	100	5500	13.22	13.50	No
		116	5580	13.39	13.50	No
		140	5700	13.32	13.50	No
	802.11n(HT20)	100	5500	13.18	13.50	No
		116	5580	13.35	13.50	No
		140	5700	13.21	13.50	No
	802.11n(HT40)	102	5510	10.19	10.50	No
		118	5590	13.34	13.50	No

	802.11ac(VHT20)	134	5670	13.08	13.50	No
		100	5500	13.13	13.50	No
		116	5580	13.31	13.50	No
		140	5700	13.16	13.50	No
	802.11ac(VHT40)	102	5510	13.11	13.50	No
		118	5590	13.35	13.50	No
		134	5670	13.11	13.50	No
	802.11ac(VHT80)	106	5530	10.54	11.00	No
		122	5690	13.12	13.50	Yes
5.8 (5.725~5.850)	802.11a	149	5745	13.36	13.50	No
		157	5785	13.39	13.50	No
		165	5825	13.03	13.50	No
	802.11n(HT20)	149	5745	13.25	13.50	No
		157	5785	13.32	13.50	No
		165	5825	13.21	13.50	No
	802.11n(HT40)	151	5755	13.25	13.50	No
		159	5795	13.31	13.50	No
	802.11ac(VHT20)	149	5745	13.30	13.50	No
		157	5785	13.15	13.50	No
		165	5825	13.18	13.50	No
	802.11ac(VHT40)	151	5755	13.29	13.50	No
		159	5795	13.32	13.50	No
	802.11ac(VHT80)	155	5775	13.01	13.50	Yes

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 Bluetooth

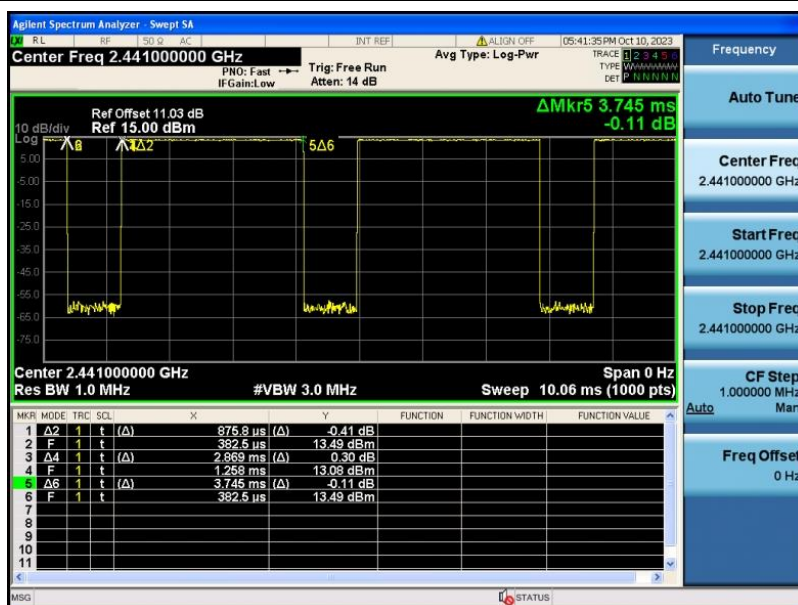
8.5.1 Bluetooth ANT12

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power(dBm)	13.37	13.06	12.82	9.44	9.17	9.26
Tune-Up Limit (dBm)	13.50	13.50	13.50	10.00	10.00	10.00
SAR Test Require	YES	YES	YES	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Average Power(dBm)	9.11	9.12	9.05	/	/	/
Tune-Up Limit (dBm)	10.00	10.00	10.00	/	/	/
SAR Test Require	NO	NO	NO	NO	NO	NO
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
Average Power(dBm)	-4.50	-3.54	4.16	-4.32	-3.45	-3.887
Tune-Up Limit (dBm)	-3.00	-3.00	-3.00	-3.00	-3.00	-3.00
SAR Test Require	NO	NO	NO	NO	NO	NO
Note 1: Since bluetooth BR mode is the maximum output power mode, SAR measurements were performed with test software using DH5 modulation, and SAR measurement is not required for the EDR and LE. When the secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode.						

8.5.2 Bluetooth ANT14

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power(dBm)	8.18	10.15	11.43	4.47	6.53	7.93
Tune-Up Limit (dBm)	9.00	11.00	12.00	5.00	7.00	8.00
SAR Test Require	YES	YES	YES	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Average Power(dBm)	4.56	6.36	8.09	/	/	/
Tune-Up Limit (dBm)	5.00	7.00	9.00	/	/	/
SAR Test Require	NO	NO	NO	NO	NO	NO
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
Average Power(dBm)	-5.11	-4.16	-5.14	-4.98	-4.08	-4.82
Tune-Up Limit (dBm)	-4.00	-4.00	-4.00	-4.00	-4.00	-4.00
SAR Test Require	NO	NO	NO	NO	NO	NO

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



The Bluetooth duty cycle is 76.6 % 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.

8.6 Power Reduction List

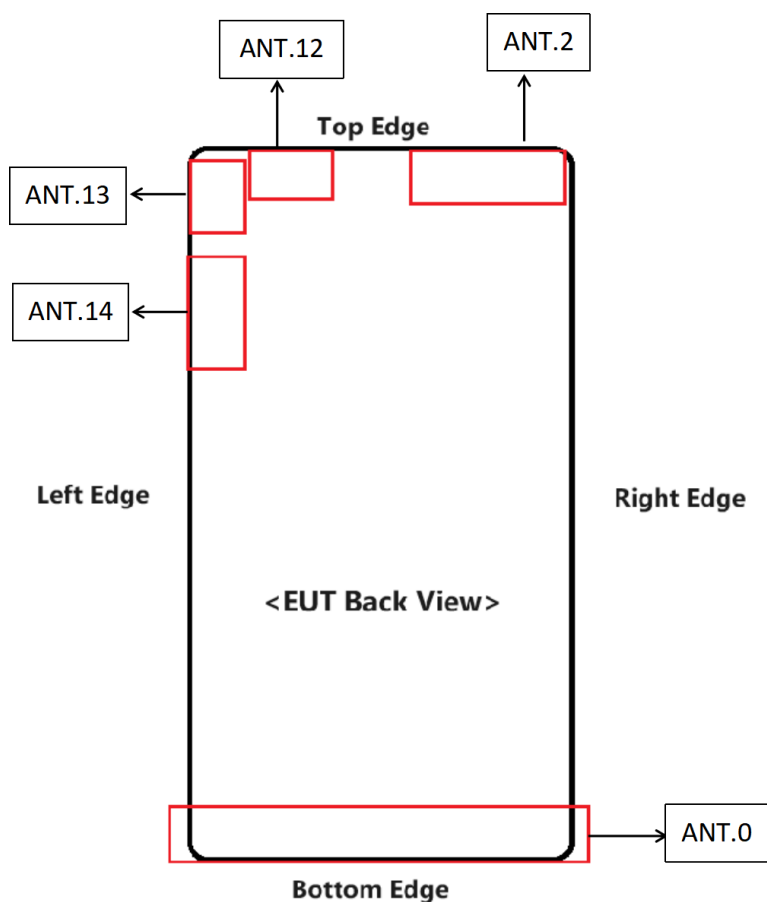
Mode	WWAN Antenna2
	Full Power
GSM 850	33.00
GPRS850 1 Tx Slot	33.00
GPRS850 2 Tx Slots	32.00
GPRS850 3 Tx Slots	30.00
GPRS850 4 Tx Slots	29.00
EGPRS850 1 Tx Slot	27.00
EGPRS850 2 Tx Slots	26.00
EGPRS850 3 Tx Slots	23.50
EGPRS850 4 Tx Slots	22.50
GSM 1900	29.00
GPRS1900 1 Tx Slot	29.00
GPRS1900 2 Tx Slots	27.50
GPRS1900 3 Tx Slots	26.00
GPRS1900 4 Tx Slots	25.50
EGPRS1900 1 Tx Slot	26.00
EGPRS1900 2 Tx Slots	25.00
EGPRS1900 3 Tx Slots	23.00
EGPRS1900 4 Tx Slots	22.00
WCDMA Band2 RMC	22.00
AMR	22.00
HSDPA Subtest-1	22.00
HSDPA Subtest-2	22.00
HSDPA Subtest-3	21.50
HSDPA Subtest-4	21.50
DC-HSDPA Subtest-1	22.00
DC-HSDPA Subtest-2	22.00
DC-HSDPA Subtest-3	21.50
DC-HSDPA Subtest-4	21.50
HSUPA Subtest-1	20.00
HSUPA Subtest-2	20.00
HSUPA Subtest-3	21.00
HSUPA Subtest-4	19.50
HSUPA Subtest-5	21.00
HSPA+	20.00
WCDMA Band4 RMC	22.00
AMR	22.00
HSDPA Subtest-1	22.00
HSDPA Subtest-2	22.00
HSDPA Subtest-3	21.50

HSDPA Subtest-4	21.50
DC-HSDPA Subtest-1	22.00
DC-HSDPA Subtest-2	22.00
DC-HSDPA Subtest-3	21.50
DC-HSDPA Subtest-4	21.50
HSUPA Subtest-1	20.00
HSUPA Subtest-2	20.00
HSUPA Subtest-3	21.00
HSUPA Subtest-4	19.50
HSUPA Subtest-5	21.00
HSPA+	20.00
WCDMA Band5 RMC	23.00
AMR	23.00
HSDPA Subtest-1	23.00
HSDPA Subtest-2	23.00
HSDPA Subtest-3	22.50
HSDPA Subtest-4	22.50
DC-HSDPA Subtest-1	23.00
DC-HSDPA Subtest-2	23.00
DC-HSDPA Subtest-3	22.50
DC-HSDPA Subtest-4	22.50
HSUPA Subtest-1	21.00
HSUPA Subtest-2	21.00
HSUPA Subtest-3	22.00
HSUPA Subtest-4	20.50
HSUPA Subtest-5	22.00
HSPA+	21.00
LTE Band2	23.00
LTE Band4	23.00
LTE Band5	23.50
LTE Band7	22.50
LTE Band12	23.00
LTE Band13	23.00
LTE Band17	23.00
LTE Band25	23.00
LTE Band26	23.50
LTE Band66	23.00
LTE Band38	22.00
LTE Band41	20.00

Mode	WLAN Antenna12
	Full Power
2.4G WLAN 802.11b	18.50
2.4G WLAN 802.11g	17.50
2.4G WLAN 802.11n20	17.50
5.2G WLAN 802.11a	13.50
5.2G WLAN 802.11n20	13.50
5.2G WLAN 802.11n40	13.50
5.2G WLAN 802.11ac20	13.50
5.2G WLAN 802.11ac40	13.50
5.2G WLAN 802.11ac80	13.50
5.3G WLAN 802.11a	13.50
5.3G WLAN 802.11n20	13.50
5.3G WLAN 802.11n40	13.50
5.3G WLAN 802.11ac20	13.50
5.3G WLAN 802.11ac40	13.50
5.3G WLAN 802.11ac80	13.50
5.6G WLAN 802.11a	13.50
5.6G WLAN 802.11n20	13.50
5.6G WLAN 802.11n40	13.50
5.6G WLAN 802.11ac20	13.50
5.6G WLAN 802.11ac40	13.50
5.6G WLAN 802.11ac80	13.50
5.8G WLAN 802.11a	13.50
5.8G WLAN 802.11n20	13.50
5.8G WLAN 802.11n40	13.50
5.8G WLAN 802.11ac20	13.50
5.8G WLAN 802.11ac40	13.50
5.8G WLAN 802.11ac80	13.50
Bluetooth	13.50

Mode	WLAN Antenna14
	Full Power
2.4G WLAN 802.11b	11.50
2.4G WLAN 802.11g	11.50
2.4G WLAN 802.11n20	11.50
Bluetooth	10.50

9 TEST EXCLUSION CONSIDERATION



Antenna	Support Bands
Antenna 2	GSM850/1900,
	WCDMA 2/4/5,
	LTE B2/4/5/7/12/13/17/25/26/38/41/66,
Antenna 0	Receive only: GSM850/1900,
	Receive only: WCDMA 2/4/5,
	Receive only: LTE B2/4/5/7/12/13/17/25/26/38/41/66,
Antenna 12	WIFI2.4G/5G; Bluetooth
Antenna 13	GPS_L1
Antenna 14	WIFI2.4G; Bluetooth

9.1 SAR Test Exclusion Consideration Table

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

Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
Ant.2	<25	<25	>25	<25	<25	>25
Ant.12	<25	<25	<25	>25	<25	>25
Ant.14	<25	<25	<25	>25	<25	>25

Note: 1.Per KDB 941225 DO6, When the overall length and width of a device is > 9 cm *5 cm, a test separation distance of 10 mm is required for hotspot mode SAR measurements and hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.

10 TEST RESULT

Note: This device supports both LTE Band 2/4/17 and Band 25/66/12. Since the supported frequency span for LTE Band 2/4/17 falls completely within the supports frequency span for LTE Band 25/66/12, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE Band 25/66/12.

10.1 GSM 850

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT2	DATA 2 Slots	Left Cheek	0	251	848.8	0.04	0.438	31.76	32.00	1.057	0.463	/
ANT2	DATA 2 Slots	Left Tilt	0	251	848.8	-0.05	0.405	31.76	32.00	1.057	0.428	/
ANT2	DATA 2 Slots	Right Cheek	0	251	848.8	-0.01	1.040	31.76	32.00	1.057	1.099	1#
ANT2	DATA 2 Slots	Right Tilt	0	251	848.8	-0.02	0.685	31.76	32.00	1.057	0.724	/
ANT2	DATA 2 Slots	Right Cheek	0	190	836.6	0.13	0.825	31.76	32.00	1.057	0.872	/
ANT2	DATA 2 Slots	Right Cheek	0	128	824.2	-0.10	0.623	31.76	32.00	1.057	0.659	/
Body-worn&Hotspot												
ANT2	Voice	Front Side	10	251	848.8	-0.01	0.063	32.70	33.00	1.072	0.068	/
ANT2	Voice	Back Side	10	251	848.8	-0.02	0.186	32.70	33.00	1.072	0.199	2#
ANT2	DATA 2 Slots	Front Side	10	251	848.8	-0.05	0.092	28.78	29.00	1.052	0.097	/
ANT2	DATA 2 Slots	Back Side	10	251	848.8	-0.18	0.188	28.78	29.00	1.052	0.198	/
ANT2	DATA 2 Slots	Right Edge	10	251	848.8	-0.12	0.058	28.78	29.00	1.052	0.061	/
ANT2	DATA 2 Slots	Top Edge	10	251	848.8	0.19	0.126	28.78	29.00	1.052	0.133	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.2 GSM 1900

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT2	DATA 4 Slots	Left Cheek	0	512	1850.2	-0.16	0.625	25.49	25.50	1.002	0.626	/
ANT2	DATA 4 Slots	Left Tilt	0	512	1850.2	-0.16	0.435	25.49	25.50	1.002	0.436	/
ANT2	DATA 4 Slots	Right Cheek	0	512	1850.2	-0.07	1.030	25.49	25.50	1.002	1.032	/
ANT2	DATA 4 Slots	Right Tilt	0	512	1850.2	0.11	0.868	25.49	25.50	1.002	0.870	/
ANT2	DATA 4 Slots	Right Cheek	0	661	1880.0	0.01	1.010	25.40	25.50	1.023	1.033	/
ANT2	DATA 4 Slots	Right Cheek	0	810	1909.8	-0.03	1.120	25.38	25.50	1.028	1.151	3#
ANT2	DATA 4 Slots	Right Tilt	0	661	1880.0	0.14	0.854	25.40	25.50	1.023	0.874	/
ANT2	DATA 4 Slots	Right Tilt	0	810	1909.8	-0.05	0.874	25.38	25.50	1.028	0.898	/
Body-worn&Hotspot												
ANT2	Voice	Front Side	10	661	1880.0	-0.18	0.074	27.98	29.00	1.265	0.094	/
ANT2	Voice	Back Side	10	661	1880.0	0.01	0.133	27.98	29.00	1.265	0.168	/
ANT2	DATA 4 Slots	Front Side	10	512	1850.2	-0.05	0.160	25.49	25.50	1.002	0.160	/
ANT2	DATA 4 Slots	Back Side	10	512	1850.2	-0.11	0.263	25.49	25.50	1.002	0.264	4#
ANT2	DATA 4 Slots	Right Edge	10	512	1850.2	0.06	0.145	25.49	25.50	1.002	0.145	/
ANT2	DATA 4 Slots	Top Edge	10	512	1850.2	0.12	0.233	25.49	25.50	1.002	0.233	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.3WCDMA Band 2

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT2	RMC	Left Cheek	0	9400	1880.0	-0.07	0.407	21.76	22.00	1.057	0.430	/
ANT2	RMC	Left Tilt	0	9400	1880.0	-0.03	0.390	21.76	22.00	1.057	0.412	/
ANT2	RMC	Right Cheek	0	9400	1880.0	-0.10	0.714	21.76	22.00	1.057	0.755	5#
ANT2	RMC	Right Tilt	0	9400	1880.0	0.13	0.560	21.76	22.00	1.057	0.592	/
Body-worn&Hotspot												
ANT2	RMC	Front Side	10	9400	1880.0	0.08	0.148	21.76	22.00	1.057	0.156	/
ANT2	RMC	Back Side	10	9400	1880.0	0.09	0.210	21.76	22.00	1.057	0.222	6#
ANT2	RMC	Right Edge	10	9400	1880.0	-0.01	0.140	21.76	22.00	1.057	0.148	/
ANT2	RMC	Top Edge	10	9400	1880.0	0.05	0.207	21.76	22.00	1.057	0.219	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.4WCDMA Band 4

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT2	RMC	Left Cheek	0	1513	1752.6	-0.07	0.192	21.78	22.00	1.052	0.202	/
ANT2	RMC	Left Tilt	0	1513	1752.6	0.13	0.180	21.78	22.00	1.052	0.189	/
ANT2	RMC	Right Cheek	0	1513	1752.6	0.11	0.345	21.78	22.00	1.052	0.363	7#
ANT2	RMC	Right Tilt	0	1513	1752.6	-0.10	0.272	21.78	22.00	1.052	0.286	/
Body-worn&Hotspot												
ANT2	RMC	Front Side	10	1513	1752.6	0.17	0.050	21.78	22.00	1.052	0.053	/
ANT2	RMC	Back Side	10	1513	1752.6	-0.16	0.085	21.78	22.00	1.052	0.089	/
ANT2	RMC	Right Edge	10	1513	1752.6	0.02	0.022	21.78	22.00	1.052	0.023	/
ANT2	RMC	Top Edge	10	1513	1752.6	0.19	0.107	21.78	22.00	1.052	0.113	8#
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.5WCDMA Band 5

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT2	RMC	Left Cheek	0	4233	846.6	0.11	0.305	22.75	23.00	1.059	0.323	/
ANT2	RMC	Left Tilt	0	4233	846.6	-0.04	0.272	22.75	23.00	1.059	0.288	/
ANT2	RMC	Right Cheek	0	4233	846.6	-0.19	0.565	22.75	23.00	1.059	0.598	9#
ANT2	RMC	Right Tilt	0	4233	846.6	0.05	0.503	22.75	23.00	1.059	0.533	/
Body-worn&Hotspot												
ANT2	RMC	Front Side	10	4233	846.6	-0.07	0.074	22.75	23.00	1.059	0.078	/
ANT2	RMC	Back Side	10	4233	846.6	0.08	0.141	22.75	23.00	1.059	0.149	10#
ANT2	RMC	Right Edge	10	4233	846.6	0.05	0.051	22.75	23.00	1.059	0.054	/
ANT2	RMC	Top Edge	10	4233	846.6	-0.17	0.085	22.75	23.00	1.059	0.090	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.6LTE Band 5 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	20600	844	1	Mid.	0.11	0.253	22.88	23.50	1.153	0.292	/
ANT2	QPSK	Left Cheek	0	20600	844	50	Mid.	0.12	0.193	21.88	22.50	1.153	0.223	/
ANT2	QPSK	Left Tilt	0	20600	844	1	Mid.	0.18	0.213	22.88	23.50	1.153	0.246	/
ANT2	QPSK	Left Tilt	0	20600	844	50	Mid.	0.16	0.206	21.88	22.50	1.153	0.238	/
ANT2	QPSK	Right Cheek	0	20600	844	1	Mid.	-0.08	0.501	22.88	23.50	1.153	0.578	11#
ANT2	QPSK	Right Cheek	0	20600	844	50	Mid.	-0.15	0.368	21.88	22.50	1.153	0.424	/
ANT2	QPSK	Right Tilt	0	20600	844	1	Mid.	-0.03	0.389	22.88	23.50	1.153	0.449	/
ANT2	QPSK	Right Tilt	0	20600	844	50	Mid.	0.18	0.300	21.88	22.50	1.153	0.346	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	20600	844	1	Mid.	-0.02	0.142	22.88	23.50	1.153	0.164	/
ANT2	QPSK	Front Side	10	20600	844	50	Mid.	-0.06	0.108	21.88	22.50	1.153	0.125	/
ANT2	QPSK	Back Side	10	20600	844	1	Mid.	-0.10	0.146	22.88	23.50	1.153	0.168	12#
ANT2	QPSK	Back Side	10	20600	844	50	Mid.	-0.03	0.123	21.88	22.50	1.153	0.142	/
ANT2	QPSK	Right Edge	10	20600	844	1	Mid.	0.16	0.097	22.88	23.50	1.153	0.112	/
ANT2	QPSK	Right Edge	10	20600	844	50	Mid.	-0.17	0.075	21.88	22.50	1.153	0.086	/
ANT2	QPSK	Top Edge	10	20600	844	1	Mid.	0.02	0.135	22.88	23.50	1.153	0.156	/
ANT2	QPSK	Top Edge	10	20600	844	50	Mid.	0.04	0.110	21.88	22.50	1.153	0.127	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.7LTE Band 7 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	21350	2560	1	Mid.	-0.19	0.351	22.38	22.50	1.028	0.361	/
ANT2	QPSK	Left Cheek	0	21100	2535	50	Mid.	0.06	0.305	20.94	21.50	1.138	0.347	/
ANT2	QPSK	Left Tilt	0	21350	2560	1	Mid.	-0.08	0.358	22.38	22.50	1.028	0.368	/
ANT2	QPSK	Left Tilt	0	21100	2535	50	Mid.	0.14	0.311	20.94	21.50	1.138	0.354	/
ANT2	QPSK	Right Cheek	0	21350	2560	1	Mid.	-0.03	0.835	22.38	22.50	1.028	0.858	/
ANT2	QPSK	Right Cheek	0	21100	2535	50	Mid.	-0.02	0.720	20.94	21.50	1.138	0.819	/
ANT2	QPSK	Right Tilt	0	20850	2510	1	Mid.	0.08	0.775	22.38	22.50	1.028	0.797	/
ANT2	QPSK	Right Tilt	0	20850	2510	50	Mid.	-0.01	0.681	20.94	21.50	1.138	0.775	/
ANT2	QPSK	Right Cheek	0	20850	2510	1	Mid.	-0.01	0.881	22.16	22.50	1.081	0.952	13#
ANT2	QPSK	Right Cheek	0	21100	2510	1	Mid.	-0.07	0.871	22.27	22.50	1.054	0.918	/
ANT2	QPSK	Right Cheek	0	20850	2510	50	Mid.	0.05	0.745	20.87	21.50	1.156	0.861	/
ANT2	QPSK	Right Cheek	0	21350	2560	50	Mid.	0.08	0.732	20.88	21.50	1.153	0.844	/
ANT2	QPSK	Right Cheek	0	21100	2510	100	Low	0.08	0.732	20.78	21.50	1.180	0.864	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	21350	2560	1	Mid.	0.01	0.183	22.38	22.50	1.028	0.188	/
ANT2	QPSK	Front Side	10	21100	2535	50	Mid.	-0.16	0.156	20.94	21.50	1.138	0.178	/
ANT2	QPSK	Back Side	10	21350	2560	1	Mid.	0.01	0.646	22.38	22.50	1.028	0.664	14#
ANT2	QPSK	Back Side	10	21100	2535	50	Mid.	-0.07	0.486	20.94	21.50	1.138	0.553	/
ANT2	QPSK	Right Edge	10	21350	2560	1	Mid.	0.19	0.293	22.38	22.50	1.028	0.301	/
ANT2	QPSK	Right Edge	10	21100	2535	50	Mid.	0.18	0.256	20.94	21.50	1.138	0.291	/
ANT2	QPSK	Top Edge	10	21350	2560	1	Mid.	-0.14	0.428	22.38	22.50	1.028	0.440	/
ANT2	QPSK	Top Edge	10	21100	2535	50	Mid.	0.11	0.357	20.94	21.50	1.138	0.406	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.8LTE Band 12 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	23130	711	1	Mid.	-0.17	0.104	22.06	23.00	1.242	0.129	/
ANT2	QPSK	Left Cheek	0	23095	707.5	50	Mid.	-0.07	0.087	21.03	22.00	1.250	0.109	/
ANT2	QPSK	Left Tilt	0	23130	711	1	Mid.	0.15	0.096	22.06	23.00	1.242	0.119	/
ANT2	QPSK	Left Tilt	0	23130	707.5	50	Mid.	-0.18	0.079	21.03	22.00	1.250	0.099	/
ANT2	QPSK	Right Cheek	0	23130	711	1	Mid.	-0.12	0.198	22.06	23.00	1.242	0.246	15#
ANT2	QPSK	Right Cheek	0	23130	707.5	50	Mid.	0.04	0.173	21.03	22.00	1.250	0.216	/
ANT2	QPSK	Right Tilt	0	23130	711	1	Mid.	0.03	0.182	22.06	23.00	1.242	0.226	/
ANT2	QPSK	Right Tilt	0	23130	707.5	50	Mid.	0.02	0.154	21.03	22.00	1.250	0.193	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	23130	711	1	Mid.	-0.03	0.040	22.06	23.00	1.242	0.050	/
ANT2	QPSK	Front Side	10	23130	707.5	50	Mid.	-0.10	0.030	21.03	22.00	1.250	0.038	/
ANT2	QPSK	Back Side	10	23130	711	1	Mid.	-0.07	0.082	22.06	23.00	1.242	0.102	/
ANT2	QPSK	Back Side	10	23130	707.5	50	Mid.	-0.19	0.064	21.03	22.00	1.250	0.080	/
ANT2	QPSK	Right Edge	10	23130	711	1	Mid.	-0.09	0.095	22.06	23.00	1.242	0.118	16#
ANT2	QPSK	Right Edge	10	23130	707.5	50	Mid.	0.13	0.049	21.03	22.00	1.250	0.061	/
ANT2	QPSK	Top Edge	10	23130	711	1	Mid.	-0.15	0.047	22.06	23.00	1.242	0.058	/
ANT2	QPSK	Top Edge	10	23130	707.5	50	Mid.	0.07	0.022	21.03	22.00	1.250	0.028	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.9LTE Band 13 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	23230	782	1	Mid.	-0.06	0.203	21.77	23.00	1.327	0.269	/
ANT2	QPSK	Left Cheek	0	23230	782	50	Mid.	0.14	0.163	20.96	22.00	1.271	0.207	/
ANT2	QPSK	Left Tilt	0	23230	782	1	Mid.	0.00	0.193	21.77	23.00	1.327	0.256	/
ANT2	QPSK	Left Tilt	0	23230	782	50	Mid.	-0.03	0.153	20.96	22.00	1.271	0.194	/
ANT2	QPSK	Right Cheek	0	23230	782	1	Mid.	-0.09	0.372	21.77	23.00	1.327	0.494	17#
ANT2	QPSK	Right Cheek	0	23230	782	50	Mid.	-0.19	0.311	20.96	22.00	1.271	0.395	/
ANT2	QPSK	Right Tilt	0	23230	782	1	Mid.	-0.17	0.336	21.77	23.00	1.327	0.446	/
ANT2	QPSK	Right Tilt	0	23230	782	50	Mid.	0.07	0.275	20.96	22.00	1.271	0.350	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	23230	782	1	Mid.	-0.08	0.096	21.77	23.00	1.327	0.127	/
ANT2	QPSK	Front Side	10	23230	782	50	Mid.	0.09	0.079	20.96	22.00	1.271	0.100	/
ANT2	QPSK	Back Side	10	23230	782	1	Mid.	-0.03	0.195	21.77	23.00	1.327	0.259	18#
ANT2	QPSK	Back Side	10	23230	782	50	Mid.	0.12	0.140	20.96	22.00	1.271	0.178	/
ANT2	QPSK	Right Edge	10	23230	782	1	Mid.	-0.05	0.122	21.77	23.00	1.327	0.162	/
ANT2	QPSK	Right Edge	10	23230	782	50	Mid.	-0.10	0.094	20.96	22.00	1.271	0.119	/
ANT2	QPSK	Top Edge	10	23230	782	1	Mid.	-0.03	0.139	21.77	23.00	1.327	0.184	/
ANT2	QPSK	Top Edge	10	23230	782	50	Mid.	0.00	0.111	20.96	22.00	1.271	0.141	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.10 LTE Band 25 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	26340	1880	1	Mid.	-0.17	0.424	22.61	23.00	1.094	0.464	/
ANT2	QPSK	Left Cheek	0	26340	1880	50	Mid.	-0.16	0.363	21.56	22.00	1.107	0.402	/
ANT2	QPSK	Left Tilt	0	26340	1880	1	Mid.	0.10	0.408	22.61	23.00	1.094	0.446	/
ANT2	QPSK	Left Tilt	0	26340	1880	50	Mid.	-0.07	0.347	21.56	22.00	1.107	0.384	/
ANT2	QPSK	Right Cheek	0	26340	1880	1	Mid.	-0.01	0.774	22.61	23.00	1.094	0.847	/
ANT2	QPSK	Right Cheek	0	26340	1880	50	Mid.	-0.11	0.664	21.56	22.00	1.107	0.735	/
ANT2	QPSK	Right Tilt	0	26340	1880	1	Mid.	0.05	0.591	22.61	23.00	1.094	0.647	/
ANT2	QPSK	Right Tilt	0	26340	1880	50	Mid.	0.19	0.512	21.56	22.00	1.107	0.567	/
ANT2	QPSK	Right Cheek	0	26140	1860	1	Mid.	-0.18	0.659	22.41	23.00	1.146	0.755	/
ANT2	QPSK	Right Cheek	0	26590	1905	1	Mid.	-0.06	1.020	22.48	23.00	1.127	1.150	19#
ANT2	QPSK	Right Cheek	0	26340	1880	100	Low	0.09	0.619	21.53	22.00	1.114	0.690	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	26340	1880	1	Mid.	0.03	0.167	22.61	23.00	1.094	0.183	/
ANT2	QPSK	Front Side	10	26340	1880	50	Mid.	0.03	0.143	21.56	22.00	1.107	0.158	/
ANT2	QPSK	Back Side	10	26340	1880	1	Mid.	0.17	0.219	22.61	23.00	1.094	0.240	/
ANT2	QPSK	Back Side	10	26340	1880	50	Mid.	0.08	0.186	21.56	22.00	1.107	0.206	/
ANT2	QPSK	Right Edge	10	26340	1880	1	Mid.	0.12	0.164	22.61	23.00	1.094	0.179	/
ANT2	QPSK	Right Edge	10	26340	1880	50	Mid.	0.14	0.144	21.56	22.00	1.107	0.159	/
ANT2	QPSK	Top Edge	10	26340	1880	1	Mid.	-0.18	0.226	22.61	23.00	1.094	0.247	20#
ANT2	QPSK	Top Edge	10	26340	1880	50	Mid.	-0.13	0.203	21.56	22.00	1.107	0.225	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.11 LTE Band 26 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	26965	841.5	1	Mid.	0.12	0.254	22.56	23.50	1.242	0.315	/
ANT2	QPSK	Left Cheek	0	26865	831.5	50	High	0.08	0.202	21.48	22.50	1.265	0.256	/
ANT2	QPSK	Left Tilt	0	26965	841.5	1	Mid.	0.07	0.214	22.56	23.50	1.242	0.266	/
ANT2	QPSK	Left Tilt	0	26865	831.5	50	High	-0.05	0.170	21.48	22.50	1.265	0.215	/
ANT2	QPSK	Right Cheek	0	26965	841.5	1	Mid.	-0.08	0.437	22.56	23.50	1.242	0.543	21#
ANT2	QPSK	Right Cheek	0	26865	831.5	50	High	0.08	0.339	21.48	22.50	1.265	0.429	/
ANT2	QPSK	Right Tilt	0	26965	841.5	1	Mid.	0.12	0.385	22.56	23.50	1.242	0.478	/
ANT2	QPSK	Right Tilt	0	26865	831.5	50	High	0.14	0.302	21.48	22.50	1.265	0.382	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	26965	841.5	1	Mid.	0.00	0.093	22.56	23.50	1.242	0.116	/
ANT2	QPSK	Front Side	10	26865	831.5	50	High	-0.10	0.077	21.48	22.50	1.265	0.097	/
ANT2	QPSK	Back Side	10	26965	841.5	1	Mid.	-0.09	0.103	22.56	23.50	1.242	0.128	/
ANT2	QPSK	Back Side	10	26865	831.5	50	High	0.11	0.085	21.48	22.50	1.265	0.108	/
ANT2	QPSK	Right Edge	10	26965	841.5	1	Mid.	0.19	0.058	22.56	23.50	1.242	0.072	/
ANT2	QPSK	Right Edge	10	26865	831.5	50	High	-0.02	0.042	21.48	22.50	1.265	0.053	/
ANT2	QPSK	Top Edge	10	26965	841.5	1	Mid.	-0.12	0.106	22.56	23.50	1.242	0.132	22#
ANT2	QPSK	Top Edge	10	26865	831.5	50	High	0.05	0.085	21.48	22.50	1.265	0.108	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.12 LTE Band 66 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	132572	1770	1	Mid.	0.09	0.244	22.70	23.00	1.072	0.262	/
ANT2	QPSK	Left Cheek	0	132572	1770	50	Mid.	-0.08	0.166	21.70	22.00	1.072	0.178	/
ANT2	QPSK	Left Tilt	0	132572	1770	1	Mid.	0.15	0.230	22.70	23.00	1.072	0.247	/
ANT2	QPSK	Left Tilt	0	132572	1770	50	Mid.	-0.02	0.176	21.70	22.00	1.072	0.189	/
ANT2	QPSK	Right Cheek	0	132572	1770	1	Mid.	-0.06	0.416	22.70	23.00	1.072	0.446	23#
ANT2	QPSK	Right Cheek	0	132572	1770	50	Mid.	-0.10	0.281	21.70	22.00	1.072	0.301	/
ANT2	QPSK	Right Tilt	0	132572	1770	1	Mid.	-0.09	0.331	22.70	23.00	1.072	0.355	/
ANT2	QPSK	Right Tilt	0	132572	1770	50	Mid.	-0.08	0.248	21.70	22.00	1.072	0.266	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	132572	1770	1	Mid.	0.16	0.082	22.70	23.00	1.072	0.088	/
ANT2	QPSK	Front Side	10	132572	1770	50	Mid.	0.12	0.061	21.70	22.00	1.072	0.065	/
ANT2	QPSK	Back Side	10	132572	1770	1	Mid.	-0.06	0.135	22.70	23.00	1.072	0.145	24#
ANT2	QPSK	Back Side	10	132572	1770	50	Mid.	-0.15	0.112	21.70	22.00	1.072	0.120	/
ANT2	QPSK	Right Edge	10	132572	1770	1	Mid.	0.09	0.061	22.70	23.00	1.072	0.065	/
ANT2	QPSK	Right Edge	10	132572	1770	50	Mid.	0.03	0.049	21.70	22.00	1.072	0.053	/
ANT2	QPSK	Top Edge	10	132572	1770	1	Mid.	-0.12	0.124	22.70	23.00	1.072	0.133	/
ANT2	QPSK	Top Edge	10	132572	1770	50	Mid.	-0.12	0.118	21.70	22.00	1.072	0.126	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.13 LTE Band 38 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	37850	2580	1	Mid.	-0.03	0.345	21.56	22.00	1.107	0.382	/
ANT2	QPSK	Left Cheek	0	37850	2580	50	Mid.	-0.16	0.259	20.47	21.00	1.130	0.293	/
ANT2	QPSK	Left Tilt	0	37850	2580	1	Mid.	0.17	0.405	21.56	22.00	1.107	0.448	/
ANT2	QPSK	Left Tilt	0	37850	2580	50	Mid.	0.19	0.326	20.47	21.00	1.130	0.368	/
ANT2	QPSK	Right Cheek	0	37850	2580	1	Mid.	-0.10	0.761	21.56	22.00	1.107	0.842	/
ANT2	QPSK	Right Cheek	0	37850	2580	50	Mid.	-0.02	0.575	20.47	21.00	1.130	0.650	/
ANT2	QPSK	Right Tilt	0	37850	2580	1	Mid.	0.08	0.859	21.56	22.00	1.107	0.951	25#
ANT2	QPSK	Right Tilt	0	37850	2580	50	Mid.	-0.16	0.656	20.47	21.00	1.130	0.741	/
ANT2	QPSK	Right Cheek	0	38000	2595	1	Mid.	0.05	0.484	21.35	22.00	1.161	0.562	/
ANT2	QPSK	Right Cheek	0	38150	2610	1	Mid.	0.08	0.595	21.44	22.00	1.138	0.677	/
ANT2	QPSK	Right Cheek	0	38150	2610	100	Low	-0.03	0.523	20.40	21.00	1.148	0.600	/
ANT2	QPSK	Right Tilt	0	38000	2595	1	Mid.	0.07	0.581	21.35	22.00	1.161	0.675	/
ANT2	QPSK	Right Tilt	0	38150	2610	1	Mid.	0.04	0.723	21.44	22.00	1.138	0.823	/
ANT2	QPSK	Right Tilt	0	38150	2610	100	Low	0.11	0.645	20.40	21.00	1.148	0.740	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	37850	2580	1	Mid.	0.19	0.210	21.56	22.00	1.107	0.232	/
ANT2	QPSK	Front Side	10	37850	2580	50	Low	0.05	0.181	20.47	21.00	1.130	0.205	/
ANT2	QPSK	Back Side	10	37850	2580	1	Mid.	0.02	0.497	21.56	22.00	1.107	0.550	26#
ANT2	QPSK	Back Side	10	37850	2580	50	Low	-0.08	0.445	21.56	22.00	1.107	0.493	/
ANT2	QPSK	Right Edge	10	37850	2580	1	Mid.	0.15	0.187	21.56	22.00	1.107	0.207	/
ANT2	QPSK	Right Edge	10	37850	2580	50	Low	0.11	0.144	21.56	22.00	1.107	0.159	/
ANT2	QPSK	Top Edge	10	37850	2580	1	Mid.	0.08	0.386	21.56	22.00	1.107	0.427	/
ANT2	QPSK	Top Edge	10	37850	2580	50	Low	-0.16	0.335	21.56	22.00	1.107	0.371	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.14 LTE Band 41 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT2	QPSK	Left Cheek	0	39750	2506	1	Mid.	-0.19	0.300	18.85	20.00	1.303	0.391	/
ANT2	QPSK	Left Cheek	0	39750	2506	50	Mid.	0.13	0.235	17.81	19.00	1.315	0.309	/
ANT2	QPSK	Left Tilt	0	39750	2506	1	Mid.	-0.15	0.302	18.85	20.00	1.303	0.394	/
ANT2	QPSK	Left Tilt	0	39750	2506	50	Mid.	-0.18	0.265	17.81	19.00	1.315	0.348	/
ANT2	QPSK	Right Cheek	0	39750	2506	1	Mid.	0.14	0.605	18.85	20.00	1.303	0.788	/
ANT2	QPSK	Right Cheek	0	39750	2506	50	Mid.	-0.04	0.492	17.81	19.00	1.315	0.647	/
ANT2	QPSK	Right Tilt	0	39750	2506	1	Mid.	0.12	0.623	18.85	20.00	1.303	0.812	/
ANT2	QPSK	Right Tilt	0	39750	2506	50	Mid.	-0.15	0.565	17.81	19.00	1.315	0.743	/
ANT2	QPSK	Right Tilt	0	40185	2549.5	1	Mid.	-0.16	0.612	18.76	20.00	1.330	0.814	/
ANT2	QPSK	Right Tilt	0	40620	2593	1	Mid.	0.17	0.614	18.79	20.00	1.321	0.811	/
ANT2	QPSK	Right Tilt	0	41055	2636.5	1	Mid.	0.12	0.641	18.81	20.00	1.315	0.843	/
ANT2	QPSK	Right Tilt	0	41490	2680	1	High	0.09	0.654	18.60	20.00	1.380	0.903	27#
ANT2	QPSK	Right Tilt	0	40620	2593	100	Low	0.08	0.638	17.72	19.00	1.343	0.857	/
Body-worn&Hotspot														
ANT2	QPSK	Front Side	10	39750	2506	1	Mid.	0.03	0.134	18.85	20.00	1.303	0.175	/
ANT2	QPSK	Front Side	10	39750	2506	50	Low	0.00	0.113	17.81	19.00	1.315	0.149	/
ANT2	QPSK	Back Side	10	39750	2506	1	Mid.	0.09	0.605	18.85	20.00	1.303	0.788	28#
ANT2	QPSK	Back Side	0	39750	2506	1	Mid.	-0.07	0.588	17.81	19.00	1.315	0.773	/
ANT2	QPSK	Right Edge	10	39750	2506	1	Mid.	-0.15	0.100	18.85	20.00	1.303	0.130	/
ANT2	QPSK	Right Edge	10	39750	2506	50	Low	0.18	0.080	17.81	19.00	1.315	0.105	/
ANT2	QPSK	Top Edge	10	39750	2506	1	Mid.	0.06	0.375	18.85	20.00	1.303	0.489	/
ANT2	QPSK	Top Edge	10	39750	2506	50	Low	0.00	0.307	17.81	19.00	1.315	0.404	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.15 WIFI 2.4GHz

Mode	Antenna	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 Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
802.11b	ANT12	Left Cheek	0	11	2462	0.02	0.477	18.42	18.50	1.019	99.5	1.005	0.488	29#
	ANT12	Left Tilt	0	11	2462	0.08	0.193	18.42	18.50	1.019	99.5	1.005	0.198	/
	ANT12	Right Cheek	0	11	2462	0.03	0.151	18.42	18.50	1.019	99.5	1.005	0.155	/
	ANT12	Right Tilt	0	11	2462	-0.05	0.104	18.42	18.50	1.019	99.5	1.005	0.107	/
802.11b	ANT14	Left Cheek	0	11	2462	0.18	0.186	8.58	9.00	1.102	99.5	1.005	0.206	/
	ANT14	Left Tilt	0	11	2462	0.03	0.239	8.58	9.00	1.102	99.5	1.005	0.265	/
	ANT14	Right Cheek	0	11	2462	0.12	0.151	8.58	9.00	1.102	99.5	1.005	0.167	/
	ANT14	Right Tilt	0	11	2462	-0.13	0.198	8.58	9.00	1.102	99.5	1.005	0.219	/
Hotspot														
802.11b	ANT12	Front Side	10	11	2462	0.06	0.117	18.42	18.50	1.019	99.5	1.005	0.120	/
	ANT12	Back Side	10	11	2462	0.07	0.314	18.42	18.50	1.019	99.5	1.005	0.322	30#
	ANT12	Left Edge	10	11	2462	0.08	0.195	18.42	18.50	1.019	99.5	1.005	0.200	/
	ANT12	Top Edge	10	11	2462	-0.04	0.095	18.42	18.50	1.019	99.5	1.005	0.097	/
802.11b	ANT14	Front Side	10	11	2462	-0.03	0.064	8.58	9.00	1.102	99.5	1.005	0.071	/
	ANT14	Back Side	10	11	2462	-0.18	0.085	8.58	9.00	1.102	99.5	1.005	0.094	/
	ANT14	Left Edge	10	11	2462	-0.06	0.012	8.58	9.00	1.102	99.5	1.005	0.013	/
	ANT14	Right Edge	10	11	2462	-0.02	0.012	8.58	9.00	1.102	99.5	1.005	0.013	/
	ANT14	Top Edge	10	11	2462	0.03	0.145	8.58	9.00	1.102	99.5	1.005	0.161	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.16 WIFI 5GHz

Fre. Band	Mode	Antenna	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 Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
5.3G	802.11ac80c80	ANT12	Left Cheek	0	58	5290	-0.11	0.601	12.21	13.50	1.346	97.5	1.026	0.830	/
		ANT12	Left Tilt	0	58	5290	0.09	0.824	12.21	13.50	1.346	97.5	1.026	1.138	31#
		ANT12	Right Cheek	0	58	5290	0.03	0.305	12.21	13.50	1.346	97.5	1.026	0.421	/
		ANT12	Right Tilt	0	58	5290	0.17	0.368	12.21	13.50	1.346	97.5	1.026	0.508	/
5.6G	802.11ac80c80	ANT12	Left Cheek	0	122	5610	0.09	0.615	13.12	13.50	1.091	97.5	1.026	0.688	/
		ANT12	Left Tilt	0	122	5610	0.07	0.712	13.12	13.50	1.091	97.5	1.026	0.797	32#
		ANT12	Right Cheek	0	122	5610	-0.11	0.329	13.12	13.50	1.091	97.5	1.026	0.368	/
		ANT12	Right Tilt	0	122	5610	0.05	0.381	13.12	13.50	1.091	97.5	1.026	0.426	/
5.8G	802.11ac80c80	ANT12	Left Cheek	0	155	5775	0.06	0.725	13.01	13.50	1.119	97.5	1.026	0.832	/
		ANT12	Left Tilt	0	155	5775	0.02	0.762	13.01	13.50	1.119	97.5	1.026	0.875	33#
		ANT12	Right Cheek	0	155	5775	-0.15	0.325	13.01	13.50	1.119	97.5	1.026	0.373	/
		ANT12	Right Tilt	0	155	5775	0.09	0.359	13.01	13.50	1.119	97.5	1.026	0.412	/
Hotspot															
5.2G	802.11ac80	ANT12	Front Side	10	42	5210	0.06	0.145	12.03	13.50	1.403	97.5	1.026	0.209	/
		ANT12	Back Side	10	42	5210	0.01	0.258	12.03	13.50	1.403	97.5	1.026	0.371	/
		ANT12	Left Edge	10	42	5210	0.05	0.146	12.03	13.50	1.403	97.5	1.026	0.210	/
		ANT12	Top Edge	10	42	5210	0.13	0.439	12.03	13.50	1.403	97.5	1.026	0.632	34#
5.8G	802.11ac80	ANT12	Front Side	10	155	5775	-0.17	0.188	13.01	13.50	1.119	97.5	1.026	0.216	/
		ANT12	Back Side	10	155	5775	0.03	0.269	13.01	13.50	1.119	97.5	1.026	0.309	/
		ANT12	Left Edge	10	155	5775	0.08	0.180	13.01	13.50	1.119	97.5	1.026	0.207	/
		ANT12	Top Edge	10	155	5775	0.09	0.477	13.01	13.50	1.119	97.5	1.026	0.548	35#
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Fre. Band	Mode	Antenna	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 Factor	10g Scaled SAR (W/kg)	Meas. No.
Specific															
5.3G	802.11ac80	ANT12	Front Side	0	58	5290	0.09	0.266	12.21	13.50	1.346	97.5	1.026	0.367	/
		ANT12	Back Side	0	58	5290	-0.11	0.171	12.21	13.50	1.346	97.5	1.026	0.236	/
		ANT12	Left Edge	0	58	5290	0.06	0.321	12.21	13.50	1.346	97.5	1.026	0.443	/
		ANT12	Top Edge	0	58	5290	-0.12	0.796	12.21	13.50	1.346	97.5	1.026	1.099	36#
5.6G	802.11ac80	ANT12	Front Side	0	122	5610	-0.17	0.174	13.12	13.50	1.091	97.5	1.026	0.195	/
		ANT12	Back Side	0	122	5610	0.09	0.278	13.12	13.50	1.091	97.5	1.026	0.311	/
		ANT12	Left Edge	0	122	5610	0.05	0.244	13.12	13.50	1.091	97.5	1.026	0.273	/
		ANT12	Top Edge	0	122	5610	-0.08	0.678	13.12	13.50	1.091	97.5	1.026	0.759	37#
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.17 Bluetooth

Mode	Position	Antenna	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 Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
DH5	Left Cheek	ANT12	0	0	2402	0.05	0.096	13.37	13.50	1.030	76.6	1.305	0.129	/
	Left Tilt	ANT12	0	0	2402	0.08	0.038	13.37	13.50	1.030	76.6	1.305	0.051	/
	Right Cheek	ANT12	0	0	2402	-0.14	0.028	13.37	13.50	1.030	76.6	1.305	0.038	/
	Right Tilt	ANT12	0	0	2402	0.15	0.021	13.37	13.50	1.030	76.6	1.305	0.028	/
DH5	Left Cheek	ANT14	0	78	2480	0.09	0.165	11.43	12.00	1.140	76.6	1.305	0.245	/
	Left Tilt	ANT14	0	78	2480	0.10	0.264	11.43	12.00	1.140	76.6	1.305	0.393	38#
	Right Cheek	ANT14	0	78	2480	0.02	0.145	11.43	12.00	1.140	76.6	1.305	0.216	/
	Right Tilt	ANT14	0	78	2480	0.03	0.168	11.43	12.00	1.140	76.6	1.305	0.250	/
Hotspot														
DH5	Front Side	ANT12	10	0	2402	-0.14	0.019	13.37	13.50	1.030	76.6	1.305	0.026	/
	Back Side	ANT12	10	0	2402	0.06	0.064	13.37	13.50	1.030	76.6	1.305	0.086	/
	Left Edge	ANT12	10	0	2402	0.08	0.041	13.37	13.50	1.030	76.6	1.305	0.055	/
	Top Edge	ANT12	10	0	2402	0.12	0.036	13.37	13.50	1.030	76.6	1.305	0.048	/
DH5	Front Side	ANT14	10	78	2480	0.06	0.061	11.43	12.00	1.140	76.6	1.305	0.091	/
	Back Side	ANT14	10	78	2480	-0.11	0.112	11.43	12.00	1.140	76.6	1.305	0.167	/
	Left Edge	ANT14	10	78	2480	0.06	0.010	11.43	12.00	1.140	76.6	1.305	0.015	/
	Right Edge	ANT14	10	78	2480	0.03	0.010	11.43	12.00	1.140	76.6	1.305	0.015	/
	Top Edge	ANT14	10	78	2480	0.03	0.171	11.43	12.00	1.140	76.6	1.305	0.254	39#
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 ^{1st} Measured SAR (W/kg)	Largest to Smallest SAR Ratio
850	GSM 850	Head	Right Cheek	1.040	Yes	0.998	1.04
1900	GSM 1900	Head	Right Cheek	1.120	Yes	1.060	1.06
1700	LTE band 7	Head	Right Cheek	0.881	Yes	0.875	1.01
2600	LTE band 25	Head	Right Cheek	1.020	Yes	0.995	1.03
2500	LTE band 38	Head	Right Cheek	0.859	Yes	0.846	1.02
5.3G	WLAN 5.3G	Head	Left Tilt	0.824	Yes	0.811	1.02

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.

Note: For product specific 10g SAR, the highest measured 10g SAR is $0.61 < 2.0$ W/kg, repeated measurement is not required.

12 SIMULTANEOUS TRANSMISSION

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

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Hotspot	Specific
1	WWAN + WIFI2.4G(Ant.12)+BT(Ant.12)	Yes	Yes	Yes
2	WWAN + WIFI2.4G(Ant.14)+BT(Ant.14)	Yes	Yes	Yes
3	WWAN + WIFI5G(Ant.14)	Yes	Yes	Yes

Note:

1. Two WWAN antennas can switch automatically, but two WWAN antenna can't transmit simultaneously.
2. When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
3. The maximum SAR summation is calculated based on the same configuration and test position.
4. The simultaneous transmission combinations of the more antennas contain combinations of less antennas, so only the worst simultaneous transmission combinations is shown in this report.

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN Mode and 2.4G WLAN and BT

Band	Antenna	Position	Stand alone SAR					SUM SAR	
			1	2	3	4	5	1+2+4	1+3+5
			WWAN	2.4G WIFI	2.4G WIFI	Bluetooth	Bluetooth	WWAN+2.4G WIFI(Ant.12) +BT(Ant.12)	WWAN+2.4G WIFI(Ant.14) +BT(Ant.14)
				Ant.12	Ant.14	Ant.12	Ant.14		
GSM850	ANT2	Left Cheek	0.463	0.488	0.206	0.129	0.245	1.080	0.914
GSM850	ANT2	Left Tilt	0.428	0.198	0.265	0.051	0.393	0.677	1.086
GSM850	ANT2	Right Cheek	1.099	0.155	0.167	0.038	0.216	1.292	1.482
GSM850	ANT2	Right Tilt	0.724	0.107	0.219	0.028	0.250	0.859	1.193
GSM 1900	ANT2	Left Cheek	0.626	0.488	0.206	0.129	0.245	1.243	1.077
GSM 1900	ANT2	Left Tilt	0.436	0.198	0.265	0.051	0.393	0.685	1.094
GSM 1900	ANT2	Right Cheek	1.151	0.155	0.167	0.038	0.216	1.344	1.534
GSM 1900	ANT2	Right Tilt	0.898	0.107	0.219	0.028	0.250	1.033	1.367
WCDMA B2	ANT2	Left Cheek	0.430	0.488	0.206	0.129	0.245	1.047	0.881
WCDMA B2	ANT2	Left Tilt	0.412	0.198	0.265	0.051	0.393	0.661	1.070
WCDMA B2	ANT2	Right Cheek	0.755	0.155	0.167	0.038	0.216	0.948	1.138
WCDMA B2	ANT2	Right Tilt	0.592	0.107	0.219	0.028	0.250	0.727	1.061
WCDMA B4	ANT2	Left Cheek	0.202	0.488	0.206	0.129	0.245	0.819	0.653
WCDMA B4	ANT2	Left Tilt	0.189	0.198	0.265	0.051	0.393	0.438	0.847
WCDMA B4	ANT2	Right Cheek	0.363	0.155	0.167	0.038	0.216	0.556	0.746
WCDMA B4	ANT2	Right Tilt	0.286	0.107	0.219	0.028	0.250	0.421	0.755
WCDMA B5	ANT2	Left Cheek	0.323	0.488	0.206	0.129	0.245	0.940	0.774
WCDMA B5	ANT2	Left Tilt	0.288	0.198	0.265	0.051	0.393	0.537	0.946
WCDMA B5	ANT2	Right Cheek	0.598	0.155	0.167	0.038	0.216	0.791	0.981
WCDMA B5	ANT2	Right Tilt	0.533	0.107	0.219	0.028	0.250	0.668	1.002
LTE B5	ANT2	Left Cheek	0.292	0.488	0.206	0.129	0.245	0.909	0.743
LTE B5	ANT2	Left Tilt	0.246	0.198	0.265	0.051	0.393	0.495	0.904
LTE B5	ANT2	Right Cheek	0.578	0.155	0.167	0.038	0.216	0.771	0.961
LTE B5	ANT2	Right Tilt	0.449	0.107	0.219	0.028	0.250	0.584	0.918
LTE B7	ANT2	Left Cheek	0.361	0.488	0.206	0.129	0.245	0.978	0.812
LTE B7	ANT2	Left Tilt	0.368	0.198	0.265	0.051	0.393	0.617	1.026
LTE B7	ANT2	Right Cheek	0.952	0.155	0.167	0.038	0.216	1.145	1.335
LTE B7	ANT2	Right Tilt	0.797	0.107	0.219	0.028	0.250	0.932	1.266
LTE B12	ANT2	Left Cheek	0.129	0.488	0.206	0.129	0.245	0.746	0.580
LTE B12	ANT2	Left Tilt	0.119	0.198	0.265	0.051	0.393	0.368	0.777
LTE B12	ANT2	Right Cheek	0.246	0.155	0.167	0.038	0.216	0.439	0.629
LTE B12	ANT2	Right Tilt	0.226	0.107	0.219	0.028	0.250	0.361	0.695
LTE B13	ANT2	Left Cheek	0.269	0.488	0.206	0.129	0.245	0.886	0.720

LTE B13	ANT2	Left Tilt	0.256	0.198	0.265	0.051	0.393	0.505	0.914
LTE B13	ANT2	Right Cheek	0.494	0.155	0.167	0.038	0.216	0.687	0.877
LTE B13	ANT2	Right Tilt	0.446	0.107	0.219	0.028	0.250	0.581	0.915
LTE B25	ANT2	Left Cheek	0.464	0.488	0.206	0.129	0.245	1.081	0.915
LTE B25	ANT2	Left Tilt	0.446	0.198	0.265	0.051	0.393	0.695	1.104
LTE B25	ANT2	Right Cheek	1.150	0.155	0.167	0.038	0.216	1.343	1.533
LTE B25	ANT2	Right Tilt	0.647	0.107	0.219	0.028	0.250	0.782	1.116
LTE B26	ANT2	Left Cheek	0.315	0.488	0.206	0.129	0.245	0.932	0.766
LTE B26	ANT2	Left Tilt	0.266	0.198	0.265	0.051	0.393	0.515	0.924
LTE B26	ANT2	Right Cheek	0.543	0.155	0.167	0.038	0.216	0.736	0.926
LTE B26	ANT2	Right Tilt	0.478	0.107	0.219	0.028	0.250	0.613	0.947
LTE B66	ANT2	Left Cheek	0.262	0.488	0.206	0.129	0.245	0.879	0.713
LTE B66	ANT2	Left Tilt	0.247	0.198	0.265	0.051	0.393	0.496	0.905
LTE B66	ANT2	Right Cheek	0.446	0.155	0.167	0.038	0.216	0.639	0.829
LTE B66	ANT2	Right Tilt	0.355	0.107	0.219	0.028	0.250	0.490	0.824
LTE B38	ANT2	Left Cheek	0.382	0.488	0.206	0.129	0.245	0.999	0.833
LTE B38	ANT2	Left Tilt	0.448	0.198	0.265	0.051	0.393	0.697	1.106
LTE B38	ANT2	Right Cheek	0.842	0.155	0.167	0.038	0.216	1.035	1.225
LTE B38	ANT2	Right Tilt	0.951	0.107	0.219	0.028	0.250	1.086	1.420
LTE B41	ANT2	Left Cheek	0.391	0.488	0.206	0.129	0.245	1.008	0.842
LTE B41	ANT2	Left Tilt	0.394	0.198	0.265	0.051	0.393	0.643	1.052
LTE B41	ANT2	Right Cheek	0.788	0.155	0.167	0.038	0.216	0.981	1.171
LTE B41	ANT2	Right Tilt	0.903	0.107	0.219	0.028	0.250	1.038	1.372

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

12.2.2 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Mode and 2.4G WLAN and BT

Band	Antenna	Position	Stand alone SAR					SUM SAR	
			1	2	3	4	5	1+2+4	1+3+5
			WWAN	2.4G WIFI	2.4G WIFI	Bluetooth	Bluetooth	WWAN+2.4G WIFI(Ant.12) +BT(Ant.12)	WWAN+2.4G WIFI(Ant.14) +BT(Ant.14)
				Ant.12	Ant.14	Ant.12	Ant.14		
GSM850	ANT2	Front Side 10mm	0.068	0.120	0.071	0.026	0.091	0.214	0.230
GSM850	ANT2	Back Side 10mm	0.199	0.322	0.094	0.086	0.167	0.607	0.460
GSM850	ANT2	Right Edge 10mm	0.061	0.200	0.013	0.055	0.015	0.316	0.089
GSM850	ANT2	Top Edge 10mm	0.133	0.097	0.161	0.048	0.254	0.278	0.548
GSM 1900	ANT2	Front Side 10mm	0.160	0.120	0.071	0.026	0.091	0.306	0.322
GSM 1900	ANT2	Back Side 10mm	0.264	0.322	0.094	0.086	0.167	0.672	0.525
GSM 1900	ANT2	Right Edge 10mm	0.145	0.200	0.013	0.055	0.015	0.400	0.173
GSM 1900	ANT2	Top Edge 10mm	0.233	0.097	0.161	0.048	0.254	0.378	0.648
WCDMA B2	ANT2	Front Side 10mm	0.156	0.120	0.071	0.026	0.091	0.302	0.318
WCDMA B2	ANT2	Back Side 10mm	0.222	0.322	0.094	0.086	0.167	0.630	0.483
WCDMA B2	ANT2	Right Edge 10mm	0.148	0.200	0.013	0.055	0.015	0.403	0.176
WCDMA B2	ANT2	Top Edge 10mm	0.219	0.097	0.161	0.048	0.254	0.364	0.634
WCDMA B4	ANT2	Front Side 10mm	0.053	0.120	0.071	0.026	0.091	0.199	0.215
WCDMA B4	ANT2	Back Side 10mm	0.089	0.322	0.094	0.086	0.167	0.497	0.350
WCDMA B4	ANT2	Right Edge 10mm	0.023	0.200	0.013	0.055	0.015	0.278	0.051
WCDMA B4	ANT2	Top Edge 10mm	0.113	0.097	0.161	0.048	0.254	0.258	0.528
WCDMA B5	ANT2	Front Side 10mm	0.078	0.120	0.071	0.026	0.091	0.224	0.240
WCDMA B5	ANT2	Back Side 10mm	0.149	0.322	0.094	0.086	0.167	0.557	0.410
WCDMA B5	ANT2	Right Edge 10mm	0.054	0.200	0.013	0.055	0.015	0.309	0.082
WCDMA B5	ANT2	Top Edge 10mm	0.090	0.097	0.161	0.048	0.254	0.235	0.505
LTE B5	ANT2	Front Side 10mm	0.164	0.120	0.071	0.026	0.091	0.310	0.326
LTE B5	ANT2	Back Side 10mm	0.168	0.322	0.094	0.086	0.167	0.576	0.429
LTE B5	ANT2	Right Edge 10mm	0.112	0.200	0.013	0.055	0.015	0.367	0.140
LTE B5	ANT2	Top Edge 10mm	0.156	0.097	0.161	0.048	0.254	0.301	0.571
LTE B7	ANT2	Front Side 10mm	0.188	0.120	0.071	0.026	0.091	0.334	0.350
LTE B7	ANT2	Back Side 10mm	0.664	0.322	0.094	0.086	0.167	1.072	0.925
LTE B7	ANT2	Right Edge 10mm	0.301	0.200	0.013	0.055	0.015	0.556	0.329
LTE B7	ANT2	Top Edge 10mm	0.440	0.097	0.161	0.048	0.254	0.585	0.855
LTE B12	ANT2	Front Side 10mm	0.050	0.120	0.071	0.026	0.091	0.196	0.212
LTE B12	ANT2	Back Side 10mm	0.102	0.322	0.094	0.086	0.167	0.510	0.363
LTE B12	ANT2	Right Edge 10mm	0.118	0.200	0.013	0.055	0.015	0.373	0.146
LTE B12	ANT2	Top Edge 10mm	0.058	0.097	0.161	0.048	0.254	0.203	0.473
LTE B13	ANT2	Front Side 10mm	0.127	0.120	0.071	0.026	0.091	0.273	0.289
LTE B13	ANT2	Back Side 10mm	0.259	0.322	0.094	0.086	0.167	0.667	0.520
LTE B13	ANT2	Right Edge 10mm	0.162	0.200	0.013	0.055	0.015	0.417	0.190

LTE B13	ANT2	Top Edge 10mm	0.184	0.097	0.161	0.048	0.254	0.329	0.599
LTE B25	ANT2	Front Side 10mm	0.183	0.120	0.071	0.026	0.091	0.329	0.345
LTE B25	ANT2	Back Side 10mm	0.240	0.322	0.094	0.086	0.167	0.648	0.501
LTE B25	ANT2	Right Edge 10mm	0.179	0.200	0.013	0.055	0.015	0.434	0.207
LTE B25	ANT2	Top Edge 10mm	0.247	0.097	0.161	0.048	0.254	0.392	0.662
LTE B26	ANT2	Front Side 10mm	0.116	0.120	0.071	0.026	0.091	0.262	0.278
LTE B26	ANT2	Back Side 10mm	0.128	0.322	0.094	0.086	0.167	0.536	0.389
LTE B26	ANT2	Right Edge 10mm	0.072	0.200	0.013	0.055	0.015	0.327	0.100
LTE B26	ANT2	Top Edge 10mm	0.132	0.097	0.161	0.048	0.254	0.277	0.547
LTE B66	ANT2	Front Side 10mm	0.088	0.120	0.071	0.026	0.091	0.234	0.250
LTE B66	ANT2	Back Side 10mm	0.145	0.322	0.094	0.086	0.167	0.553	0.406
LTE B66	ANT2	Right Edge 10mm	0.065	0.200	0.013	0.055	0.015	0.320	0.093
LTE B66	ANT2	Top Edge 10mm	0.133	0.097	0.161	0.048	0.254	0.278	0.548
LTE B38	ANT2	Front Side 10mm	0.232	0.120	0.071	0.026	0.091	0.378	0.394
LTE B38	ANT2	Back Side 10mm	0.550	0.322	0.094	0.086	0.167	0.958	0.811
LTE B38	ANT2	Right Edge 10mm	0.207	0.200	0.013	0.055	0.015	0.462	0.235
LTE B38	ANT2	Top Edge 10mm	0.427	0.097	0.161	0.048	0.254	0.572	0.842
LTE B41	ANT2	Front Side 10mm	0.175	0.120	0.071	0.026	0.091	0.321	0.337
LTE B41	ANT2	Back Side 10mm	0.788	0.322	0.094	0.086	0.167	1.196	1.049
LTE B41	ANT2	Right Edge 10mm	0.130	0.200	0.013	0.055	0.015	0.385	0.158
LTE B41	ANT2	Top Edge 10mm	0.489	0.097	0.161	0.048	0.254	0.634	0.904

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

12.2.3 Head Simultaneous Transmission SAR Evaluation for WWAN Mode and 5G WLAN

Band	Antenna	Position	Stand alone SAR				SUM SAR		
			1	2	3	4	1+2	1+3	1+4
			WWAN	5.3G WIFI	5.6G WIFI	5.8G WIFI	WWAN+5.3G WIFI	WWAN+5.6G WIFI	WWAN+5.8G WIFI
GSM850	ANT2	Left Cheek	0.463	0.830	0.688	0.832	1.293	1.151	1.295
GSM850	ANT2	Left Tilt	0.428	1.138	0.797	0.875	1.566	1.225	1.303
GSM850	ANT2	Right Cheek	1.099	0.421	0.368	0.373	1.520	1.467	1.472
GSM850	ANT2	Right Tilt	0.724	0.508	0.426	0.412	1.232	1.150	1.136
GSM 1900	ANT2	Left Cheek	0.626	0.830	0.688	0.832	1.456	1.314	1.458
GSM 1900	ANT2	Left Tilt	0.436	1.138	0.797	0.875	1.574	1.233	1.311
GSM 1900	ANT2	Right Cheek	1.151	0.421	0.368	0.373	1.572	1.519	1.524
GSM 1900	ANT2	Right Tilt	0.898	0.508	0.426	0.412	1.406	1.324	1.310
WCDMA B2	ANT2	Left Cheek	0.430	0.830	0.688	0.832	1.260	1.118	1.262
WCDMA B2	ANT2	Left Tilt	0.412	1.138	0.797	0.875	1.550	1.209	1.287
WCDMA B2	ANT2	Right Cheek	0.755	0.421	0.368	0.373	1.176	1.123	1.128
WCDMA B2	ANT2	Right Tilt	0.592	0.508	0.426	0.412	1.100	1.018	1.004
WCDMA B4	ANT2	Left Cheek	0.202	0.830	0.688	0.832	1.032	0.890	1.034
WCDMA B4	ANT2	Left Tilt	0.189	1.138	0.797	0.875	1.327	0.986	1.064
WCDMA B4	ANT2	Right Cheek	0.363	0.421	0.368	0.373	0.784	0.731	0.736
WCDMA B4	ANT2	Right Tilt	0.286	0.508	0.426	0.412	0.794	0.712	0.698
WCDMA B5	ANT2	Left Cheek	0.323	0.830	0.688	0.832	1.153	1.011	1.155
WCDMA B5	ANT2	Left Tilt	0.288	1.138	0.797	0.875	1.426	1.085	1.163
WCDMA B5	ANT2	Right Cheek	0.598	0.421	0.368	0.373	1.019	0.966	0.971
WCDMA B5	ANT2	Right Tilt	0.533	0.508	0.426	0.412	1.041	0.959	0.945
LTE B5	ANT2	Left Cheek	0.292	0.830	0.688	0.832	1.122	0.980	1.124
LTE B5	ANT2	Left Tilt	0.246	1.138	0.797	0.875	1.384	1.043	1.121
LTE B5	ANT2	Right Cheek	0.578	0.421	0.368	0.373	0.999	0.946	0.951
LTE B5	ANT2	Right Tilt	0.449	0.508	0.426	0.412	0.957	0.875	0.861
LTE B7	ANT2	Left Cheek	0.361	0.830	0.688	0.832	1.191	1.049	1.193
LTE B7	ANT2	Left Tilt	0.368	1.138	0.797	0.875	1.506	1.165	1.243
LTE B7	ANT2	Right Cheek	0.952	0.421	0.368	0.373	1.373	1.320	1.325
LTE B7	ANT2	Right Tilt	0.797	0.508	0.426	0.412	1.305	1.223	1.209
LTE B12	ANT2	Left Cheek	0.129	0.830	0.688	0.832	0.959	0.817	0.961
LTE B12	ANT2	Left Tilt	0.119	1.138	0.797	0.875	1.257	0.916	0.994
LTE B12	ANT2	Right Cheek	0.246	0.421	0.368	0.373	0.667	0.614	0.619
LTE B12	ANT2	Right Tilt	0.226	0.508	0.426	0.412	0.734	0.652	0.638
LTE B13	ANT2	Left Cheek	0.269	0.830	0.688	0.832	1.099	0.957	1.101
LTE B13	ANT2	Left Tilt	0.256	1.138	0.797	0.875	1.394	1.053	1.131
LTE B13	ANT2	Right Cheek	0.494	0.421	0.368	0.373	0.915	0.862	0.867
LTE B13	ANT2	Right Tilt	0.446	0.508	0.426	0.412	0.954	0.872	0.858
LTE B25	ANT2	Left Cheek	0.464	0.830	0.688	0.832	1.294	1.152	1.296

LTE B25	ANT2	Left Tilt	0.446	1.138	0.797	0.875	1.584	1.243	1.321
LTE B25	ANT2	Right Cheek	1.150	0.421	0.368	0.373	1.571	1.518	1.523
LTE B25	ANT2	Right Tilt	0.647	0.508	0.426	0.412	1.155	1.073	1.059
LTE B26	ANT2	Left Cheek	0.315	0.830	0.688	0.832	1.145	1.003	1.147
LTE B26	ANT2	Left Tilt	0.266	1.138	0.797	0.875	1.404	1.063	1.141
LTE B26	ANT2	Right Cheek	0.543	0.421	0.368	0.373	0.964	0.911	0.916
LTE B26	ANT2	Right Tilt	0.478	0.508	0.426	0.412	0.986	0.904	0.890
LTE B66	ANT2	Left Cheek	0.262	0.830	0.688	0.832	1.092	0.950	1.094
LTE B66	ANT2	Left Tilt	0.247	1.138	0.797	0.875	1.385	1.044	1.122
LTE B66	ANT2	Right Cheek	0.446	0.421	0.368	0.373	0.867	0.814	0.819
LTE B66	ANT2	Right Tilt	0.355	0.508	0.426	0.412	0.863	0.781	0.767
LTE B38	ANT2	Left Cheek	0.382	0.830	0.688	0.832	1.212	1.070	1.214
LTE B38	ANT2	Left Tilt	0.448	1.138	0.797	0.875	1.586	1.245	1.323
LTE B38	ANT2	Right Cheek	0.842	0.421	0.368	0.373	1.263	1.210	1.215
LTE B38	ANT2	Right Tilt	0.951	0.508	0.426	0.412	1.459	1.377	1.363
LTE B41	ANT2	Left Cheek	0.391	0.830	0.688	0.832	1.221	1.079	1.223
LTE B41	ANT2	Left Tilt	0.394	1.138	0.797	0.875	1.532	1.191	1.269
LTE B41	ANT2	Right Cheek	0.788	0.421	0.368	0.373	1.209	1.156	1.161
LTE B41	ANT2	Right Tilt	0.903	0.508	0.426	0.412	1.411	1.329	1.315

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

12.2.4 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Mode and 5G WLAN

Band	Antenna	Position	Stand alone SAR			SUM SAR	
			1	2	4	1+2	1+3
			WWAN	5.2G WIFI	5.8G WIFI	WWAN+5.2G WIFI	WWAN+5.8G WIFI
GSM850	ANT2	Front Side 10mm	0.068	0.209	0.216	0.277	0.284
GSM850	ANT2	Back Side 10mm	0.199	0.371	0.309	0.570	0.508
GSM850	ANT2	Right Edge 10mm	0.061	0.210	0.207	0.271	0.268
GSM850	ANT2	Top Edge 10mm	0.133	0.632	0.548	0.765	0.681
GSM 1900	ANT2	Front Side 10mm	0.160	0.209	0.216	0.369	0.376
GSM 1900	ANT2	Back Side 10mm	0.264	0.371	0.309	0.635	0.573
GSM 1900	ANT2	Right Edge 10mm	0.145	0.210	0.207	0.355	0.352
GSM 1900	ANT2	Top Edge 10mm	0.233	0.632	0.548	0.865	0.781
WCDMA B2	ANT2	Front Side 10mm	0.156	0.209	0.216	0.365	0.372
WCDMA B2	ANT2	Back Side 10mm	0.222	0.371	0.309	0.593	0.531
WCDMA B2	ANT2	Right Edge 10mm	0.148	0.210	0.207	0.358	0.355
WCDMA B2	ANT2	Top Edge 10mm	0.219	0.632	0.548	0.851	0.767
WCDMA B4	ANT2	Front Side 10mm	0.053	0.209	0.216	0.262	0.269
WCDMA B4	ANT2	Back Side 10mm	0.089	0.371	0.309	0.460	0.398
WCDMA B4	ANT2	Right Edge 10mm	0.023	0.210	0.207	0.233	0.230
WCDMA B4	ANT2	Top Edge 10mm	0.113	0.632	0.548	0.745	0.661
WCDMA B5	ANT2	Front Side 10mm	0.078	0.209	0.216	0.287	0.294
WCDMA B5	ANT2	Back Side 10mm	0.149	0.371	0.309	0.520	0.458
WCDMA B5	ANT2	Right Edge 10mm	0.054	0.210	0.207	0.264	0.261
WCDMA B5	ANT2	Top Edge 10mm	0.090	0.632	0.548	0.722	0.638
LTE B5	ANT2	Front Side 10mm	0.164	0.209	0.216	0.373	0.380
LTE B5	ANT2	Back Side 10mm	0.168	0.371	0.309	0.539	0.477
LTE B5	ANT2	Right Edge 10mm	0.112	0.210	0.207	0.322	0.319
LTE B5	ANT2	Top Edge 10mm	0.156	0.632	0.548	0.788	0.704
LTE B7	ANT2	Front Side 10mm	0.188	0.209	0.216	0.397	0.404
LTE B7	ANT2	Back Side 10mm	0.664	0.371	0.309	1.035	0.973
LTE B7	ANT2	Right Edge 10mm	0.301	0.210	0.207	0.511	0.508
LTE B7	ANT2	Top Edge 10mm	0.440	0.632	0.548	1.072	0.988
LTE B12	ANT2	Front Side 10mm	0.050	0.209	0.216	0.259	0.266
LTE B12	ANT2	Back Side 10mm	0.102	0.371	0.309	0.473	0.411
LTE B12	ANT2	Right Edge 10mm	0.118	0.210	0.207	0.328	0.325
LTE B12	ANT2	Top Edge 10mm	0.058	0.632	0.548	0.690	0.606
LTE B13	ANT2	Front Side 10mm	0.127	0.209	0.216	0.336	0.343
LTE B13	ANT2	Back Side 10mm	0.259	0.371	0.309	0.630	0.568
LTE B13	ANT2	Right Edge 10mm	0.162	0.210	0.207	0.372	0.369
LTE B13	ANT2	Top Edge 10mm	0.184	0.632	0.548	0.816	0.732
LTE B25	ANT2	Front Side 10mm	0.183	0.209	0.216	0.392	0.399
LTE B25	ANT2	Back Side 10mm	0.240	0.371	0.309	0.611	0.549

LTE B25	ANT2	Right Edge 10mm	0.179	0.210	0.207	0.389	0.386
LTE B25	ANT2	Top Edge 10mm	0.247	0.632	0.548	0.879	0.795
LTE B26	ANT2	Front Side 10mm	0.116	0.209	0.216	0.325	0.332
LTE B26	ANT2	Back Side 10mm	0.128	0.371	0.309	0.499	0.437
LTE B26	ANT2	Right Edge 10mm	0.072	0.210	0.207	0.282	0.279
LTE B26	ANT2	Top Edge 10mm	0.132	0.632	0.548	0.764	0.680
LTE B66	ANT2	Front Side 10mm	0.088	0.209	0.216	0.297	0.304
LTE B66	ANT2	Back Side 10mm	0.145	0.371	0.309	0.516	0.454
LTE B66	ANT2	Right Edge 10mm	0.065	0.210	0.207	0.275	0.272
LTE B66	ANT2	Top Edge 10mm	0.133	0.632	0.548	0.765	0.681
LTE B38	ANT2	Front Side 10mm	0.232	0.209	0.216	0.441	0.448
LTE B38	ANT2	Back Side 10mm	0.550	0.371	0.309	0.921	0.859
LTE B38	ANT2	Right Edge 10mm	0.207	0.210	0.207	0.417	0.414
LTE B38	ANT2	Top Edge 10mm	0.427	0.632	0.548	1.059	0.975
LTE B41	ANT2	Front Side 10mm	0.175	0.209	0.216	0.384	0.391
LTE B41	ANT2	Back Side 10mm	0.788	0.371	0.309	1.159	1.097
LTE B41	ANT2	Right Edge 10mm	0.130	0.210	0.207	0.340	0.337
LTE B41	ANT2	Top Edge 10mm	0.489	0.632	0.548	1.121	1.037

Note: The highest Summed 1g SAR is 1.159 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
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: 7510	2023/01/19	2024/01/18
Data Acquisition Electronicsr	Speag	DAE4	SN: 1710	2023/01/30	2024/01/29
Signal Generator	R&S	SMB100A	182396	2023/09/05	2024/09/04
Power Meter	R&S	NRVD-B2	835843/014	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z4	100381	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z2	100211	2023/09/05	2024/09/04
Wireless Communication Test Set	Anritsu	MT8820C	6201502974	2022/12/28	2023/12/27
Network Analyzer	Agilent	E5071C	MY46103472	2022/12/06	2023/12/05
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	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1859	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 a DAK3.5 Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2023.10.03	Head	750	21.2	0.90	41.89	0.89	41.94	0.67	-0.13
2023.10.04	Head	835	21.5	0.90	41.74	0.90	41.50	0.00	0.57
2023.10.05	Head	835	21.6	0.89	41.95	0.90	41.50	-0.67	1.09
2023.10.09	Head	835	21.4	0.90	41.90	0.90	41.50	0.00	0.97
2023.10.07	Head	1750	21.5	1.38	40.01	1.37	40.08	0.44	-0.18
2023.10.06	Head	1900	21.6	1.40	39.81	1.40	40.00	-0.21	-0.49
2023.10.08	Head	1900	21.4	1.40	39.76	1.40	40.00	-0.14	-0.61
2023.10.16	Head	2450	21.6	1.80	39.49	1.80	39.20	0.00	0.74
2023.10.02	Head	2600	21.3	1.97	38.55	1.96	39.01	0.46	-1.19
2023.10.15	Head	2600	21.5	1.97	38.54	1.96	39.01	0.66	-1.22
2023.10.17	Head	5250	21.4	4.70	35.88	4.71	35.93	-0.21	-0.15
2023.10.18	Head	5600	21.5	5.06	35.15	5.07	35.53	-0.26	-1.07
2023.10.19	Head	5750	21.4	5.17	35.60	5.22	35.36	-0.92	0.67
Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.									

ANNEX B SYSTEM CHECK RESULT

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

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2023.10.03	Head	750	100	0.81	8.14	8.29	-1.80
2023.10.04	Head	835	100	0.95	9.45	9.76	-3.18
2023.10.05	Head	835	100	0.98	9.81	9.76	0.51
2023.10.09	Head	835	100	0.97	9.74	9.76	-0.20
2023.10.07	Head	1750	100	3.77	37.70	36.70	2.72
2023.10.06	Head	1900	100	4.11	41.10	40.30	1.99
2023.10.08	Head	1900	100	4.05	40.50	40.30	0.50
2023.10.16	Head	2450	100	5.06	50.60	53.00	-4.53
2023.10.02	Head	2600	100	5.45	54.50	56.80	-4.05
2023.10.15	Head	2600	100	5.66	56.60	56.80	-0.35
2023.10.17	Head	5250	100	7.44	74.40	77.80	-4.37
2023.10.18	Head	5600	100	8.56	85.60	81.20	5.42
2023.10.19	Head	5750	100	7.97	79.70	77.20	3.24
Note: The tolerance limit of System validation $\pm 10\%$.							

Head liquid 10g

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2023.10.17	5250	100	2.10	21.00	22.10	-4.98
2023.10.18	5600	100	2.41	24.10	23.10	4.33
2023.10.19	5750	100	2.27	22.70	21.70	4.61
Note: The tolerance limit of System validation $\pm 10\%$.						

System Performance Check Data (750MHz)

Date: 2023.10.03

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

Medium parameters used: $f = 750$ MHz; $\sigma = 0.896$ S/m; $\epsilon_r = 41.887$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.2

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 750 100mW/Area Scan (61x101x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.904 W/kg

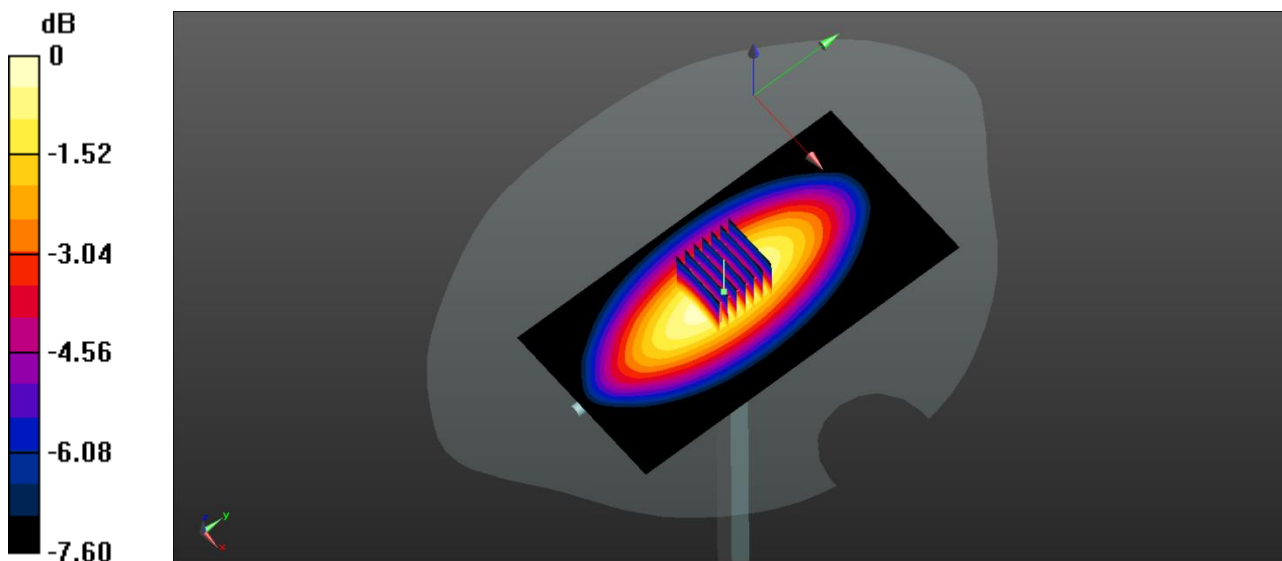
CW 750 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 32.16 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.814 W/kg; SAR(10 g) = 0.523 W/kg

Maximum value of SAR (measured) = 0.914 W/kg



0 dB = 0.914 W/kg

System Performance Check Data (835MHz)

Date: 2023.10.04

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.9 \text{ S/m}$; $\epsilon_r = 41.738$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.963 W/kg

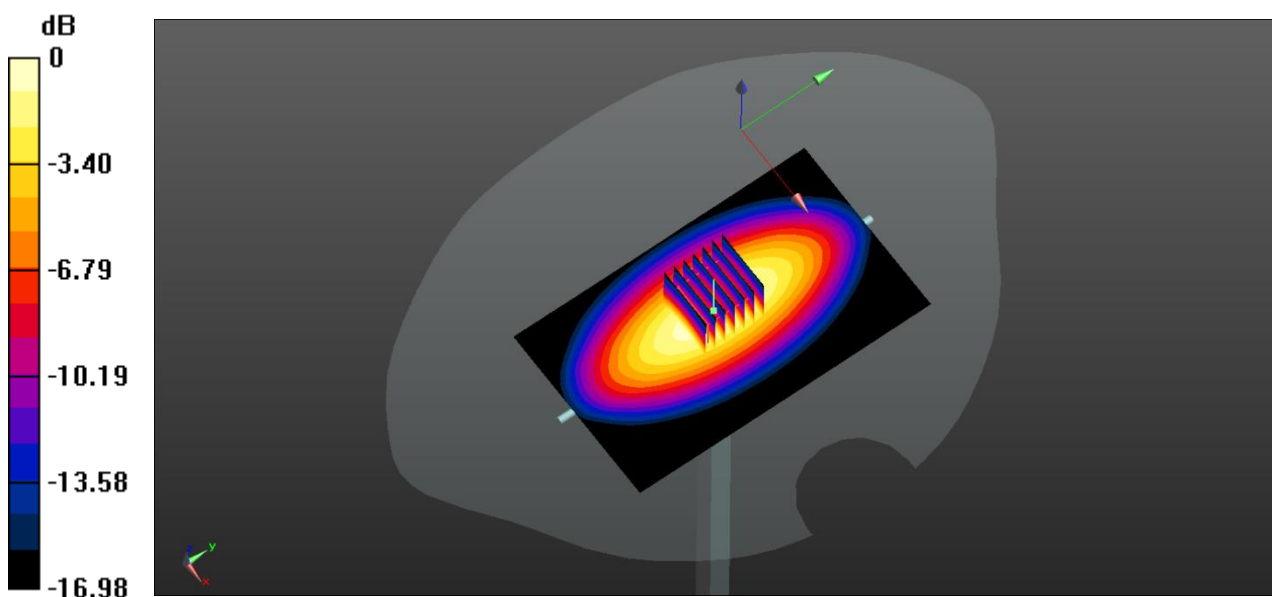
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 31.47 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.602 W/kg

Maximum value of SAR (measured) = 0.936 W/kg



0 dB = 0.936 W/kg

System Performance Check Data (835MHz)

Date: 2023.10.05

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

Medium parameters used: $f = 835$ MHz; $\sigma = 0.894$ S/m; $\epsilon_r = 41.953$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.988 W/kg

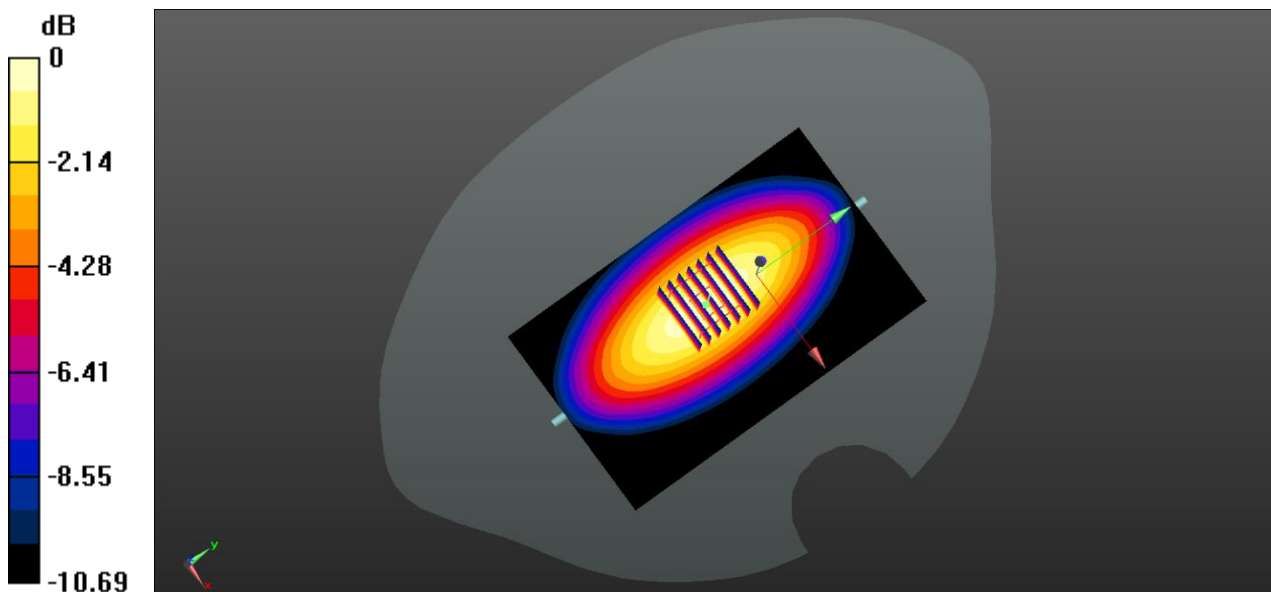
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 32.23 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.981 W/kg; SAR(10 g) = 0.641 W/kg

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



0 dB = 0.968 W/kg

System Performance Check Data (835MHz)

Date: 2023.10.09

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.9 \text{ S/m}$; $\epsilon_r = 41.903$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.5 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.967 W/kg

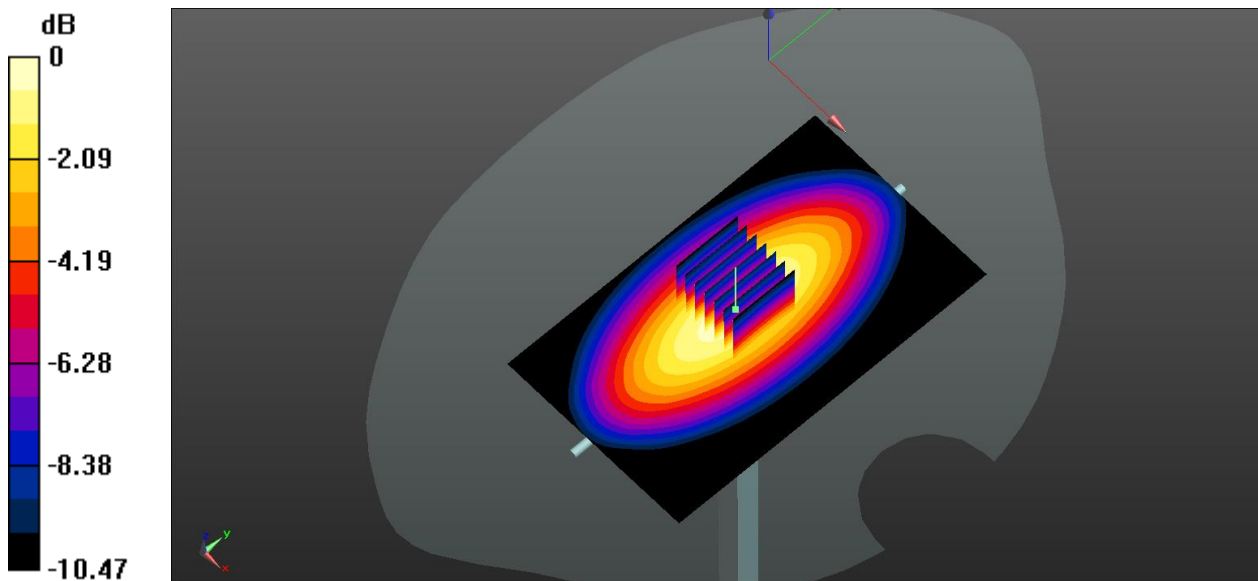
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.05 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.974 W/kg; SAR(10 g) = 0.623 W/kg

Maximum value of SAR (measured) = 0.948 W/kg



0 dB = 0.948 W/kg

System Performance Check Data (1750MHz)

Date: 2023.10.07

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

Medium parameters used (interpolated): $f = 1750$ MHz; $\sigma = 1.376$ S/m; $\epsilon_r = 40.008$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 4.42 W/kg

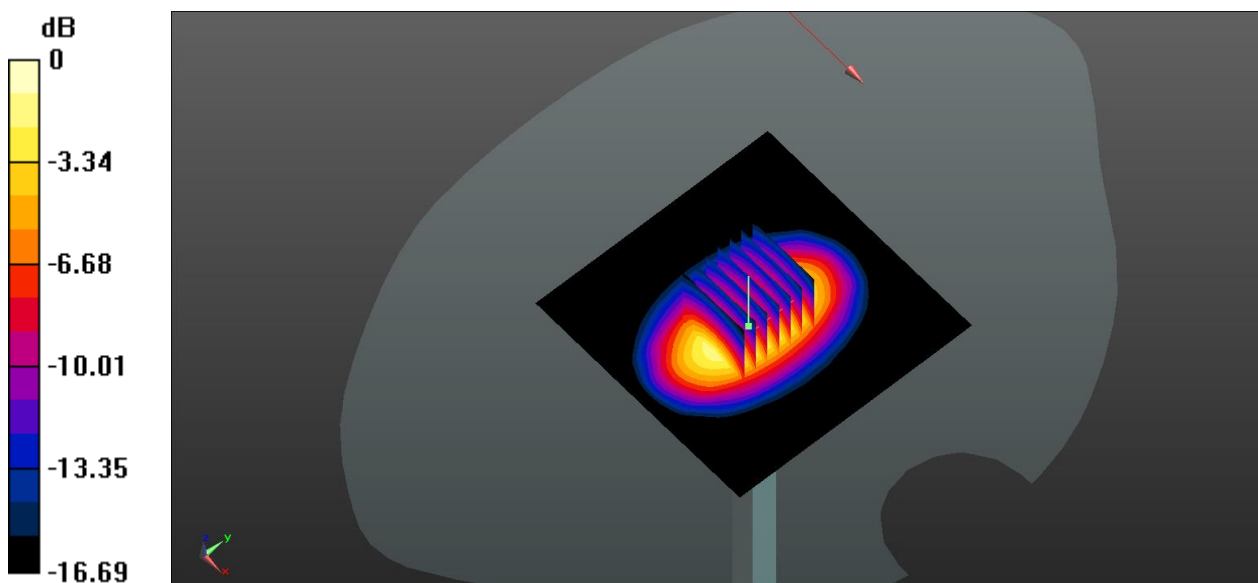
CW1750 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.11 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 7.14 W/kg

SAR(1 g) = 3.77 W/kg; SAR(10 g) = 1.98 W/kg

Maximum value of SAR (measured) = 4.21 W/kg



0 dB = 4.21 W/kg

System Performance Check Data (1900MHz)

Date: 2023.10.06

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.397$ S/m; $\epsilon_r = 39.805$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 4.56 W/kg

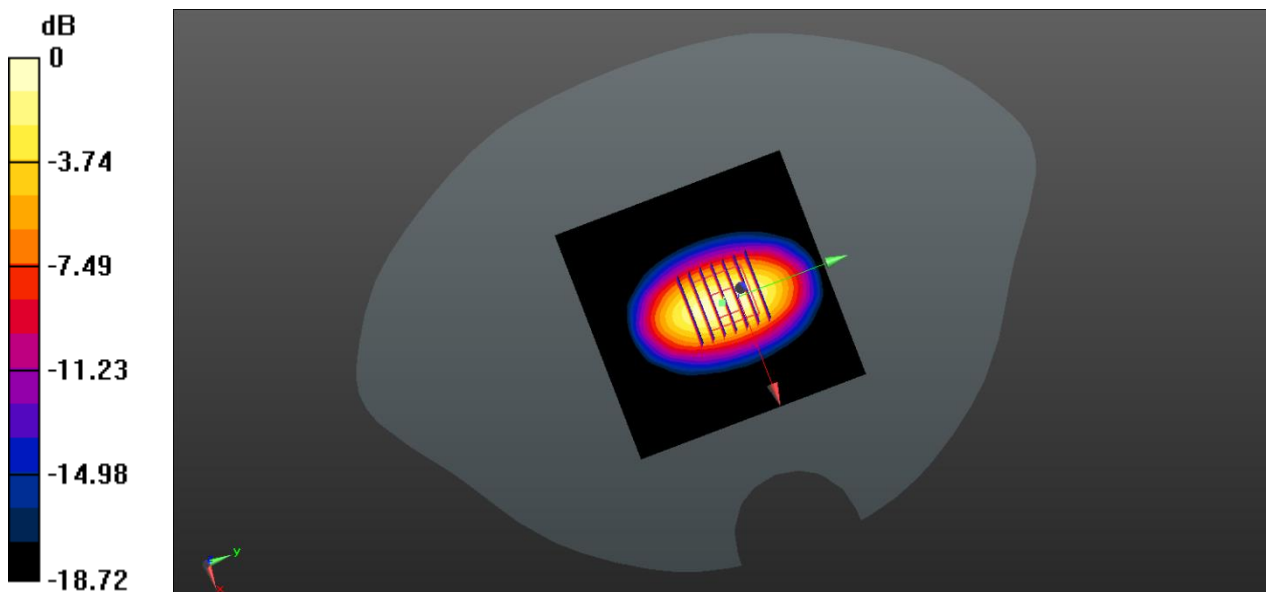
CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 58.95 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 7.52 W/kg

SAR(1 g) = 4.11 W/kg; SAR(10 g) = 2.06 W/kg

Maximum value of SAR (measured) = 4.58 W/kg



0 dB = 4.58 W/kg

System Performance Check Data (1900MHz)

Date: 2023.10.08

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 39.755$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.27, 8.27, 8.27); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

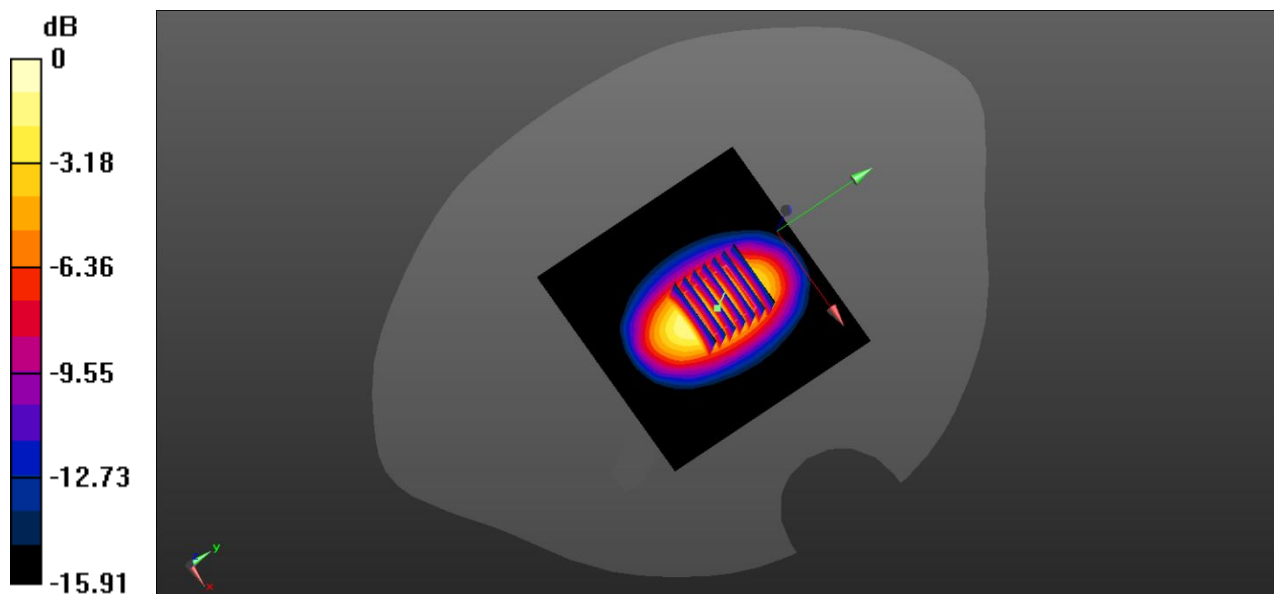
CW 1900 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.95 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 7.01 W/kg

SAR(1 g) = 4.05 W/kg; SAR(10 g) = 2.03 W/kg

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



System Performance Check Data (2450MHz)

Date: 2023.10.16

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.8$ S/m; $\epsilon_r = 39.491$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3 Liquid Temperature: 21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 5.83 W/kg

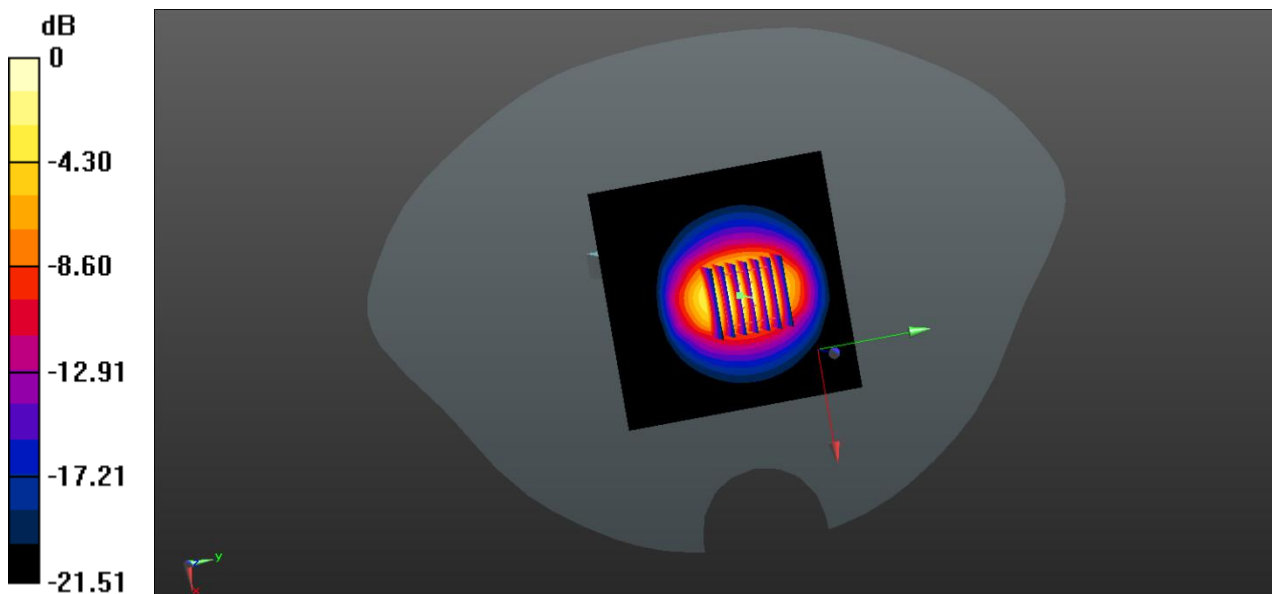
CW 2450 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 56.53 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 5.06 W/kg; SAR(10 g) = 2.28 W/kg

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



0 dB = 6.02 W/kg

System Performance Check Data (2600MHz)

Date: 2023.10.02

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

Medium parameters used (interpolated): $f = 2600$ MHz; $\sigma = 1.969$ S/m; $\epsilon_r = 38.546$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.6, 7.6, 7.6); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 6.37 W/kg

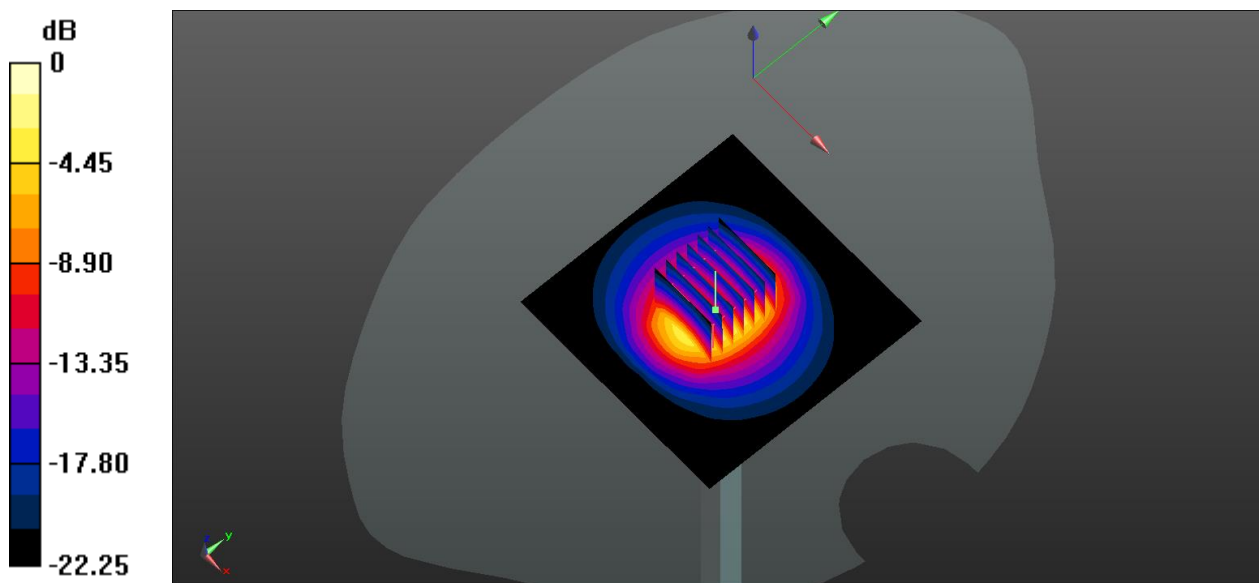
CW 2600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.28 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 12.9 W/kg

SAR(1 g) = 5.45 W/kg; SAR(10 g) = 2.38 W/kg

Maximum value of SAR (measured) = 6.28 W/kg



0 dB = 6.28 W/kg

System Performance Check Data (2600MHz)

Date: 2023.10.15

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

Medium parameters used (extrapolated): $f = 2600$ MHz; $\sigma = 1.973$ S/m; $\epsilon_r = 38.535$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.6, 7.6, 7.6); Calibrated: 2023.07.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 6.46 W/kg

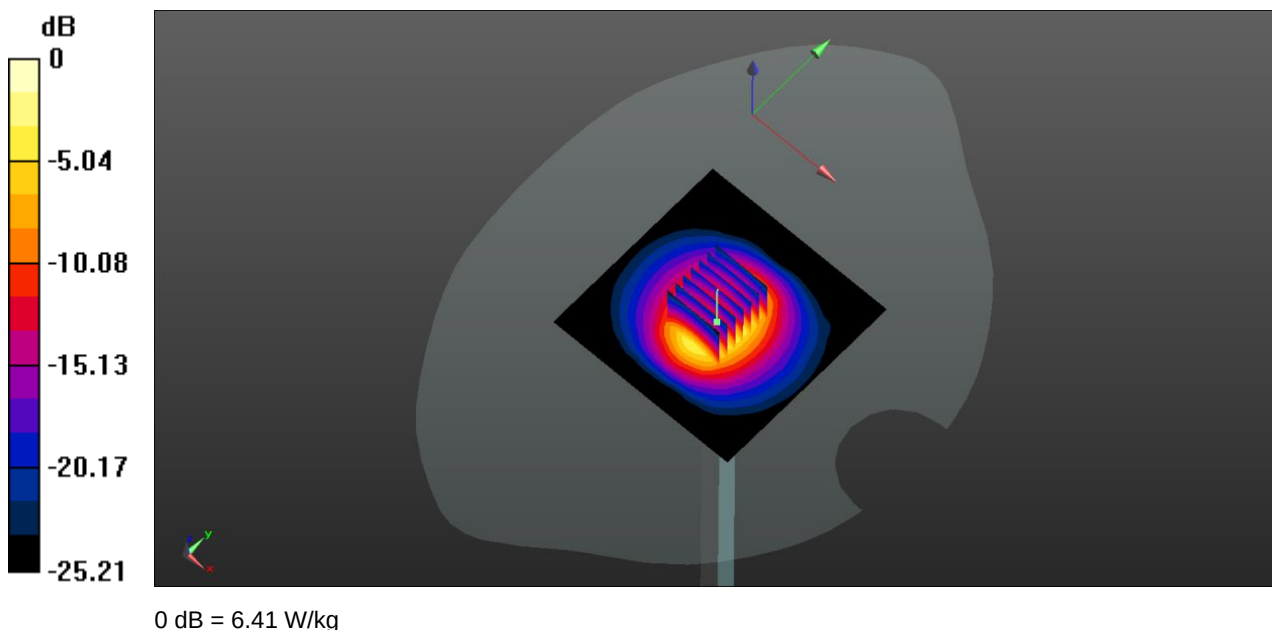
CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 5.66 W/kg; SAR(10 g) = 2.47 W/kg

Maximum value of SAR (measured) = 6.41 W/kg



System Performance Check Data (5250MHz)

Date: 2023.10.17

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

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.7$ S/m; $\epsilon_r = 35.875$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.67, 5.67, 5.67); Calibrated: 2023.07.04;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); 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) = 14.3 W/kg

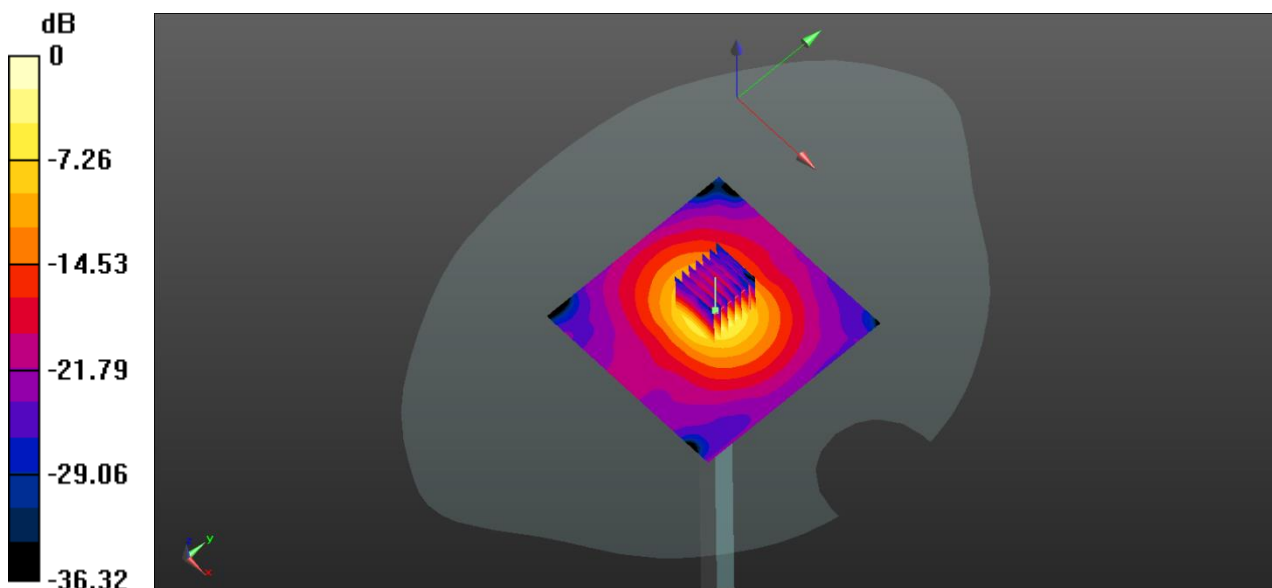
CW 5250 100mW/Zoom Scan (7x7x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 37.78 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 31.9 W/kg

SAR(1 g) = 7.44 W/kg; SAR(10 g) = 2.1 W/kg

Maximum value of SAR (measured) = 18.5 W/kg



0 dB = 18.5 W/kg

System Performance Check Data (5600MHz)

Date: 2023.10.18

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

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.057$ S/m; $\epsilon_r = 35.149$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7 Liquid Temperature: 21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.88, 4.88, 4.88); Calibrated: 2023.07.04;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW5600 HEAD 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.36 W/kg

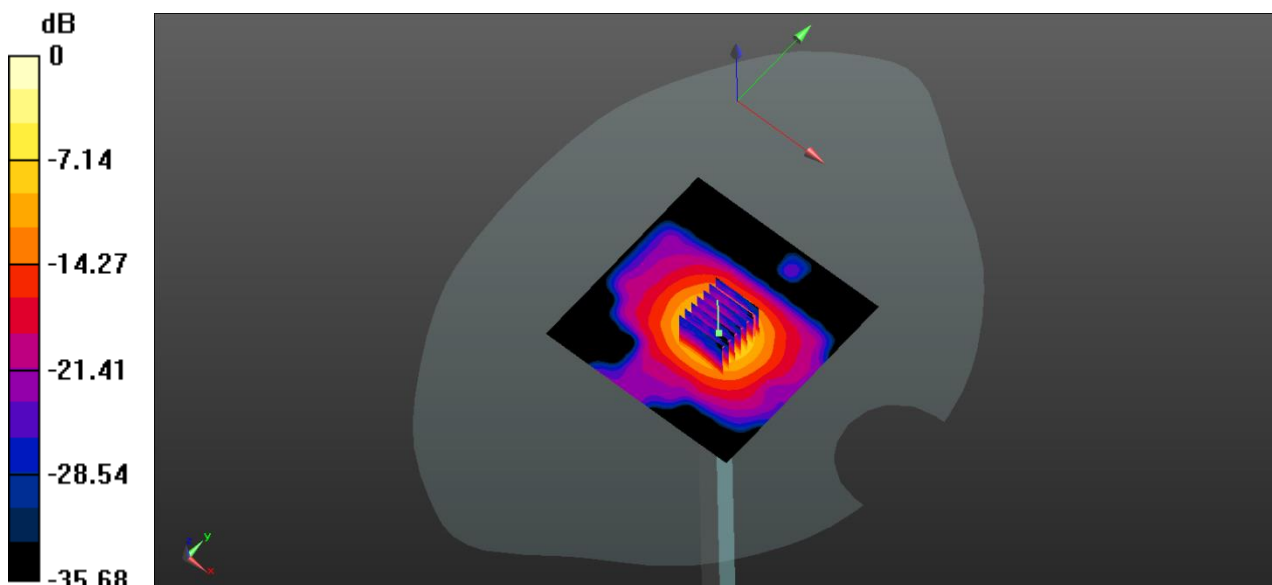
CW5600 HEAD 100mW/Zoom Scan (7x7x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 34.67 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 38.53 W/kg

SAR(1 g) = 8.56 W/kg; SAR(10 g) = 2.41 W/kg

Maximum value of SAR (measured) = 21.1 W/kg



0 dB = 21.1 W/kg

System Performance Check Data (5750MHz)

Date: 2023.10.19

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

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.172$ S/m; $\epsilon_r = 35.597$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.9 Liquid Temperature: 21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.83, 4.83, 4.83); Calibrated: 2023.07.04;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 5750 100mW/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.46 W/kg

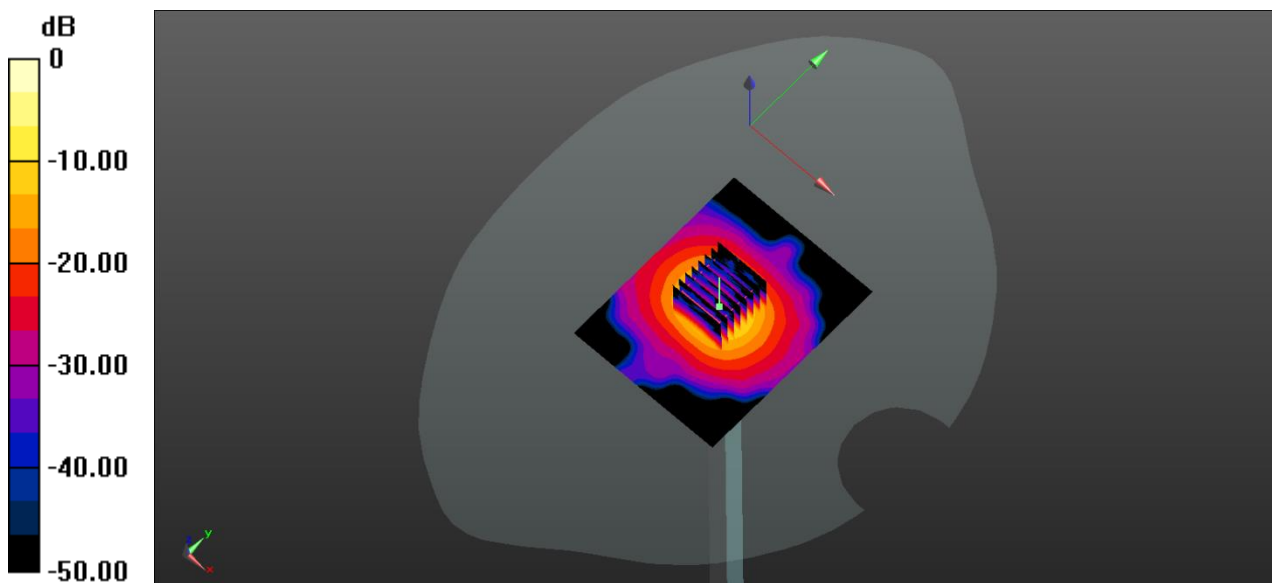
CW 5750 100mW/Zoom Scan (8x8x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 36.33 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 35.3 W/kg

SAR(1 g) = 7.97 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 19.3 W/kg



0 dB = 19.3 W/kg

ANNEX C TEST DATA

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

Date: 2023.10.04

Communication System Band: GSM850(824.0-849.0MHz); Frequency: 848.8 MHz;Duty Cycle: 1:4.1

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 42.372$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch251/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.08 W/kg

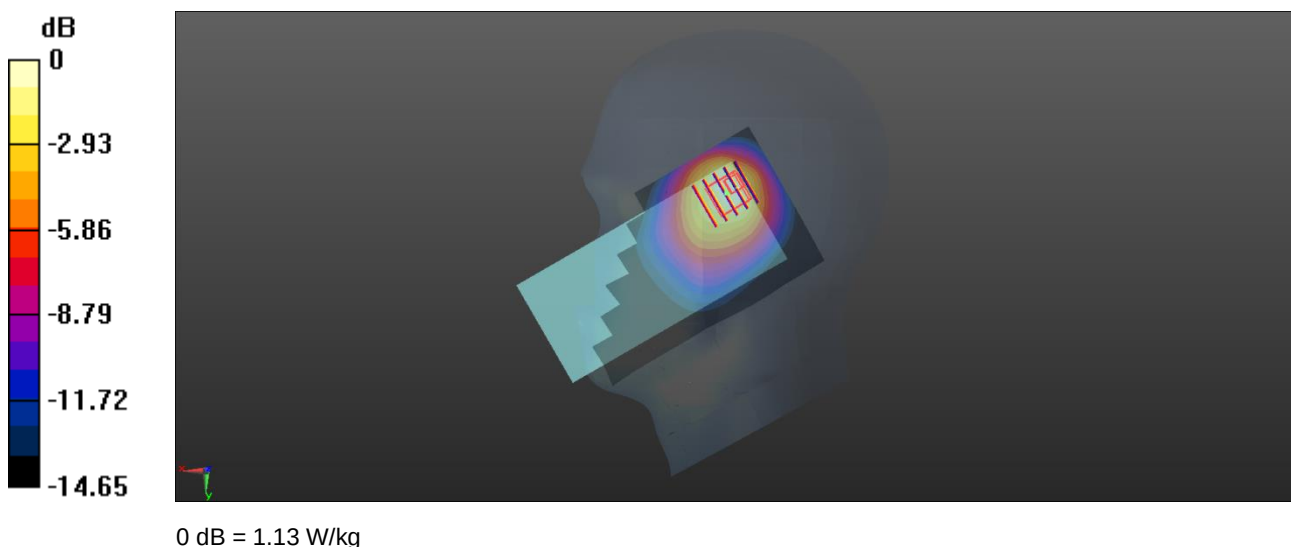
Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.03 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.49 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.569 W/kg

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



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

Date: 2023.10.04

Communication System Band: GSM850(824.0-849.0MHz); Frequency: 848.8 MHz; Duty Cycle: 1:4.1

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 42.372$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch251/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

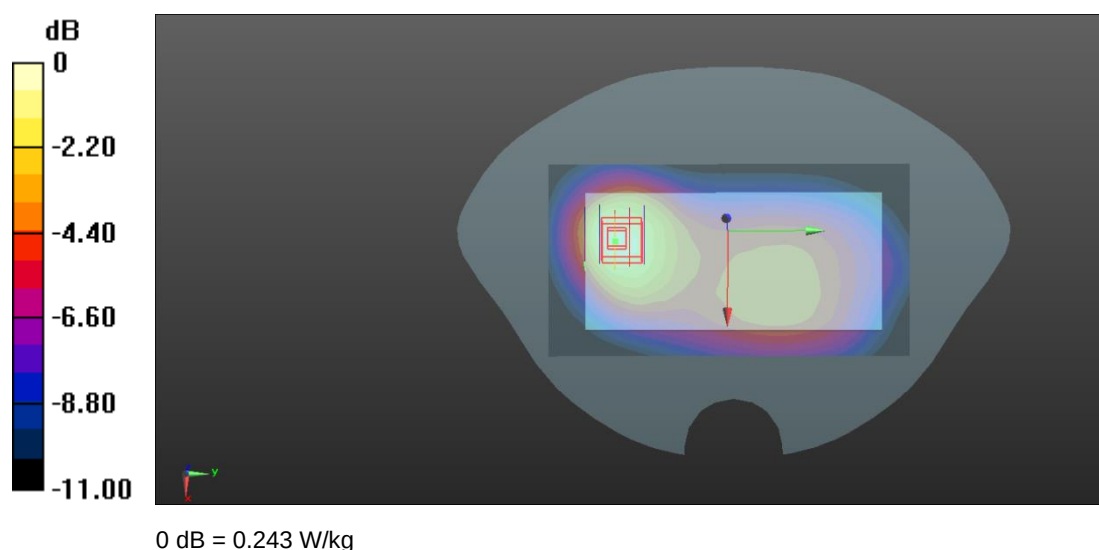
Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.582 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.304 W/kg

SAR(1 g) = 0.186 W/kg; SAR(10 g) = 0.119 W/kg

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



Meas.3 Right Head with Cheek on High Channel in GPRS1900 2Slots mode with Antenna 2

Date: 2023.10.06

Communication System Band: PCS1900(1850.0-1910.0MHz); Frequency: 1909.8 MHz;Duty Cycle: 1:4.1

Medium parameters used (interpolated): $f = 1909.8$ MHz; $\sigma = 1.401$ S/m; $\epsilon_r = 39.616$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

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

Maximum value of SAR (interpolated) = 1.35 W/kg

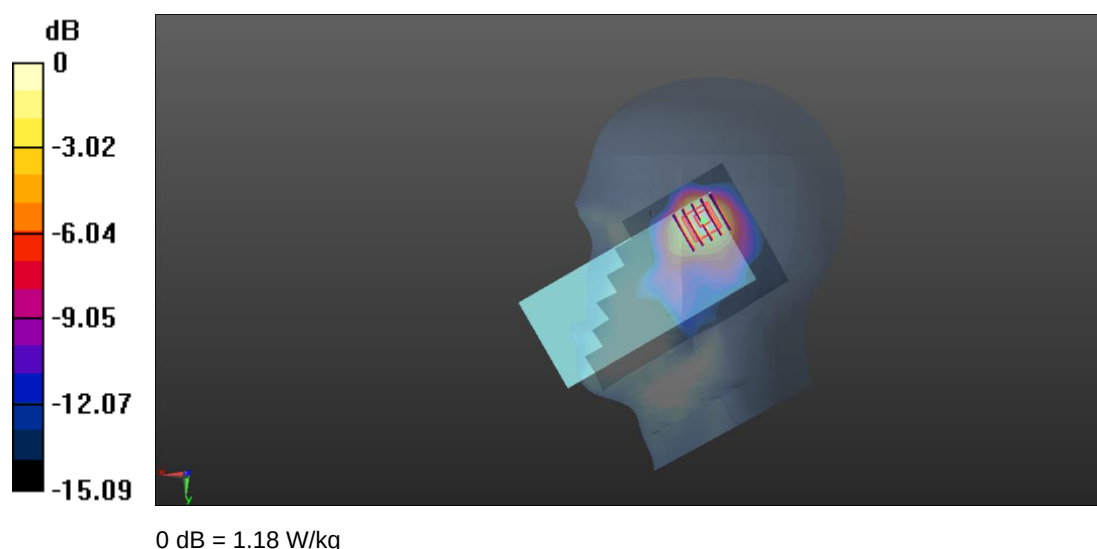
Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.07 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.11 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.605 W/kg

Maximum value of SAR (measured) = 1.18 W/kg



Meas.4 Body Plane with Back Side 10mm on Low Channel in GPRS1900 2Slots mode with Antenna 2

Date: 2023.10.06

Communication System Band: PCS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2.0797

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 40.457$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch512/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.372 W/kg

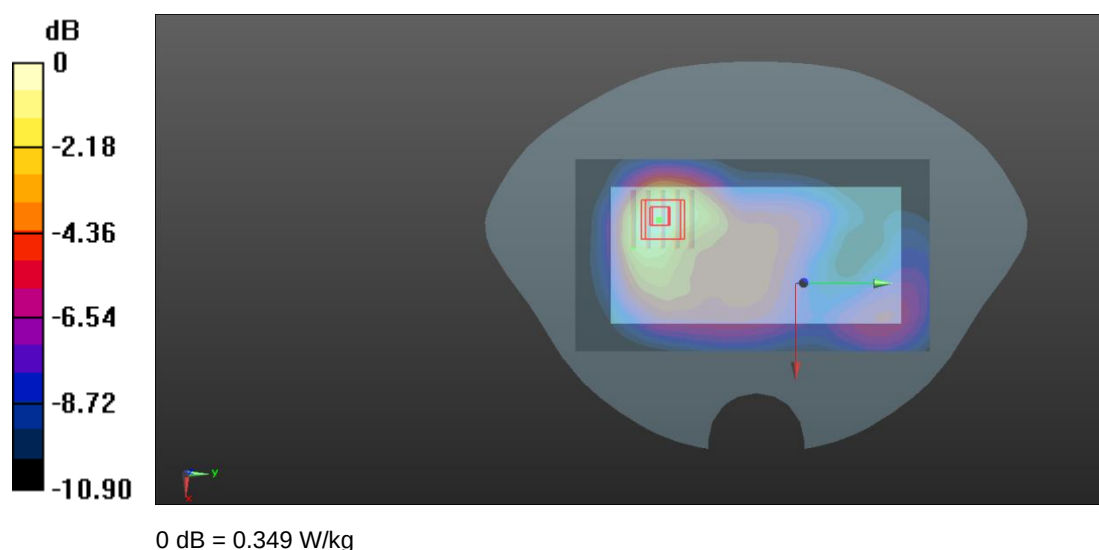
Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.706 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.430 W/kg

SAR(1 g) = 0.263 W/kg; SAR(10 g) = 0.161 W/kg

Maximum value of SAR (measured) = 0.349 W/kg



Meas.5 Right Head with Cheek on Middle Channel in WCDMA Band2 mode with Antenna 2

Date: 2023.10.06

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

Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.387$ S/m; $\epsilon_r = 40.07$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch9400/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.828 W/kg

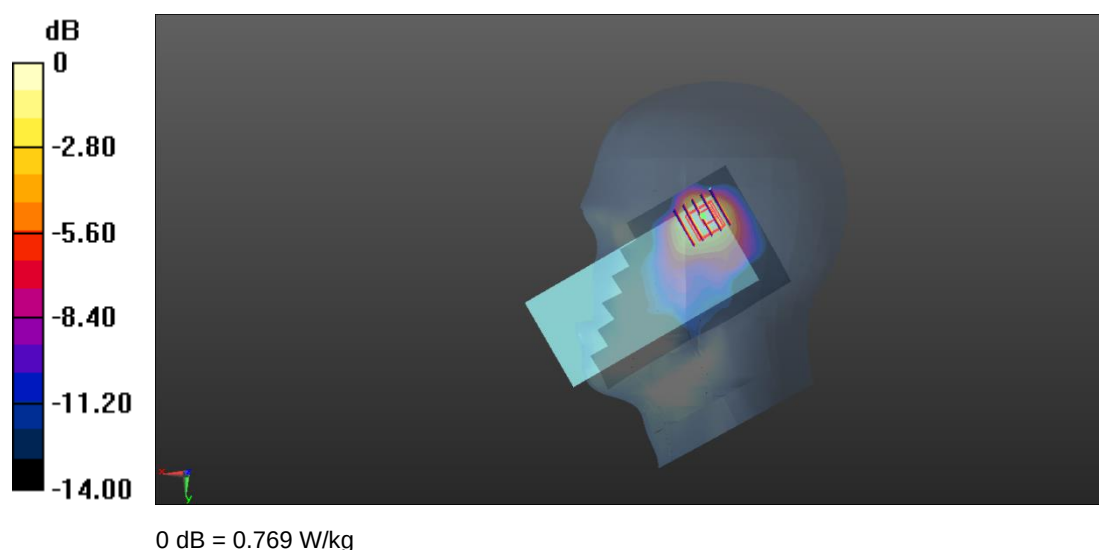
Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.76 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.714 W/kg; SAR(10 g) = 0.404 W/kg

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



Meas.6 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band2 mode with Antenna 2

Date: 2023.10.06

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

Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.387$ S/m; $\epsilon_r = 40.07$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch9400/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

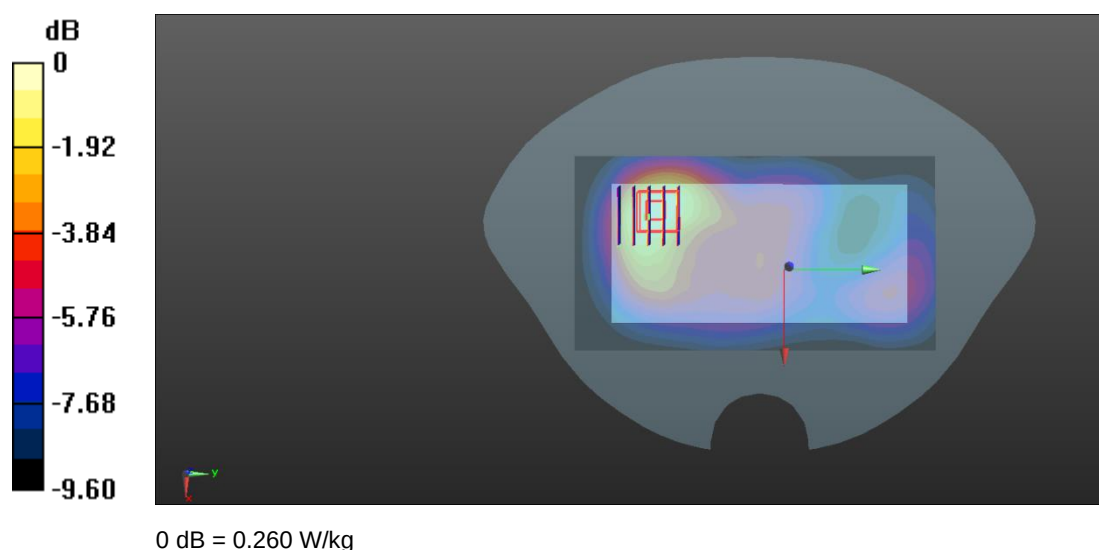
Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.527 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.325 W/kg

SAR(1 g) = 0.210 W/kg; SAR(10 g) = 0.133 W/kg

Maximum value of SAR (measured) = 0.260 W/kg



Meas.7 Right Head with Cheek on High Channel in WCDMA Band4 mode with Antenna 2

Date: 2023.10.07

Communication System Band: BAND 4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.379$ S/m; $\epsilon_r = 39.963$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

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

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

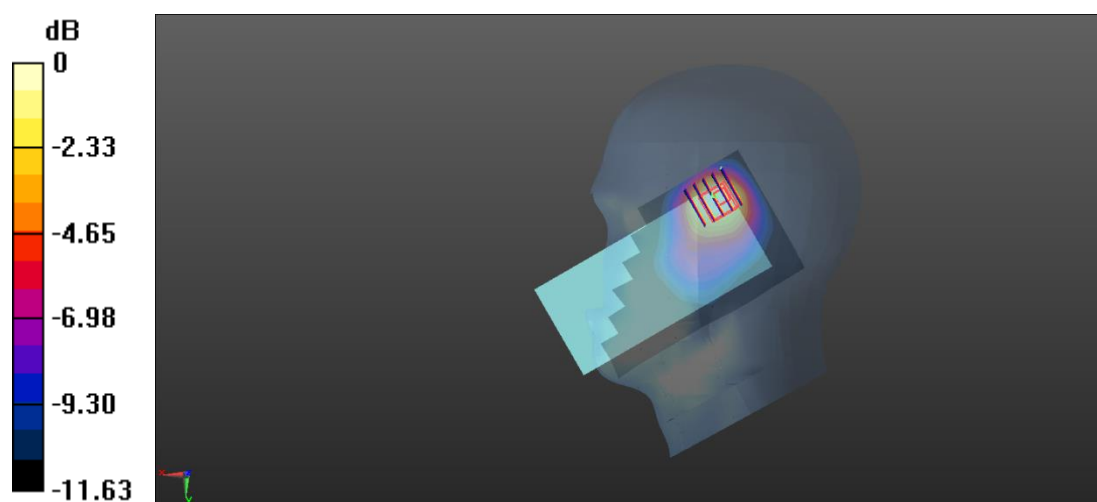
Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.117 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.647 W/kg

SAR(1 g) = 0.345 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.362 W/kg



0 dB = 0.362 W/kg

Meas.8 Body Plane with Top Edge 10mm on High Channel in WCDMA B4 mode with Antenna 2

Date: 2023.10.07

Communication System Band: BAND 4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.379$ S/m; $\epsilon_r = 39.963$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch1513/Area Scan (51x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.123 W/kg

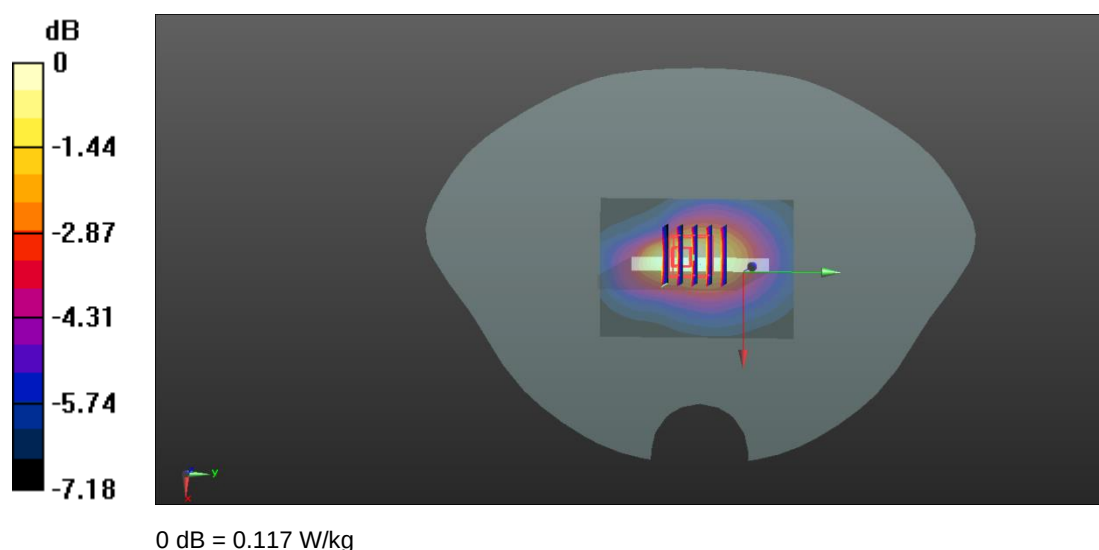
Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.465 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.166 W/kg

SAR(1 g) = 0.107 W/kg; SAR(10 g) = 0.071 W/kg

Maximum value of SAR (measured) = 0.117 W/kg



Meas.9 Right Head with Cheek on High Channel in WCDMA B5 mode with Antenna 2

Date: 2023.10.04

Communication System Band: BAND 5; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.911$ S/m; $\epsilon_r = 41.463$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch4233/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.630 W/kg

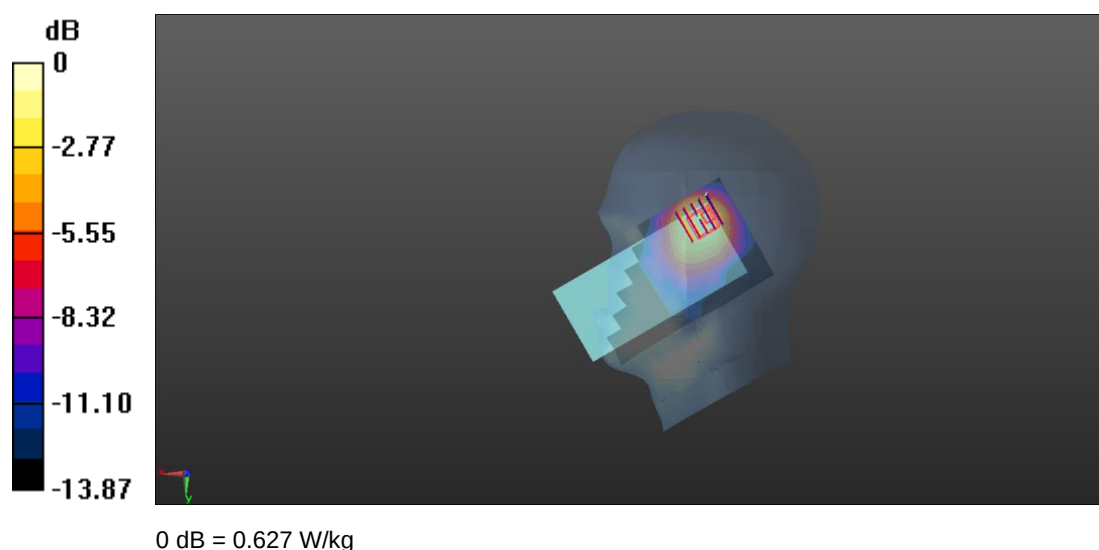
Ch4233/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.07 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.565 W/kg; SAR(10 g) = 0.321 W/kg

Maximum value of SAR (measured) = 0.627 W/kg



Meas.10 Body Plane with Back Side 10mm on High Channel in WCDMA B5 mode with Antenna 2

Date: 2023.10.04

Communication System Band: BAND 5; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.911$ S/m; $\epsilon_r = 41.463$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch4233/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

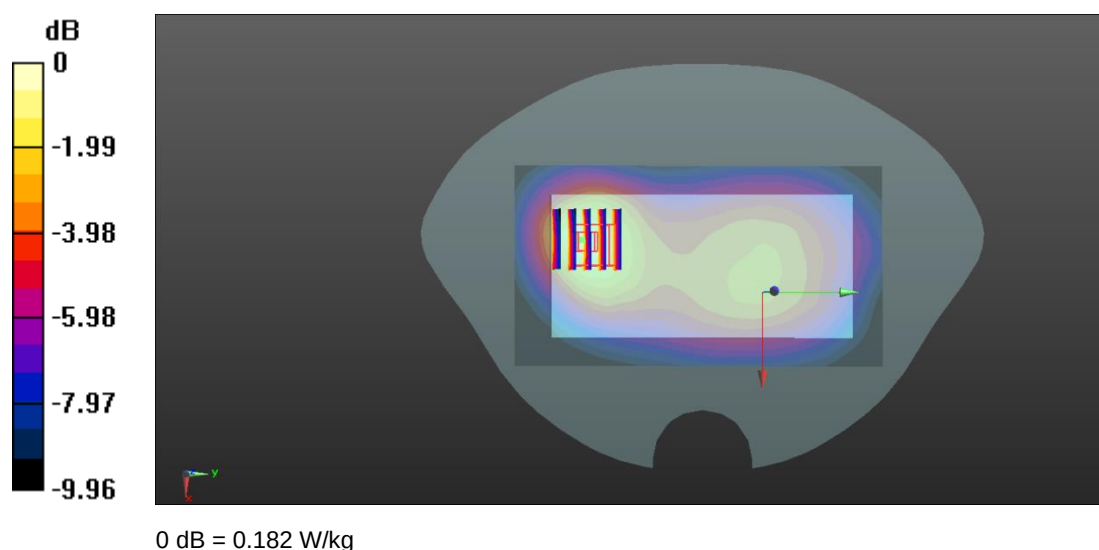
Ch4233/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.584 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.218 W/kg

SAR(1 g) = 0.141 W/kg; SAR(10 g) = 0.092 W/kg

Maximum value of SAR (measured) = 0.182 W/kg



Meas.11 Right Head with Cheek on High Channel in LTE Band5 mode with Antenna 2

Date: 2023.10.05

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

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 41.707$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch20600/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.561 W/kg

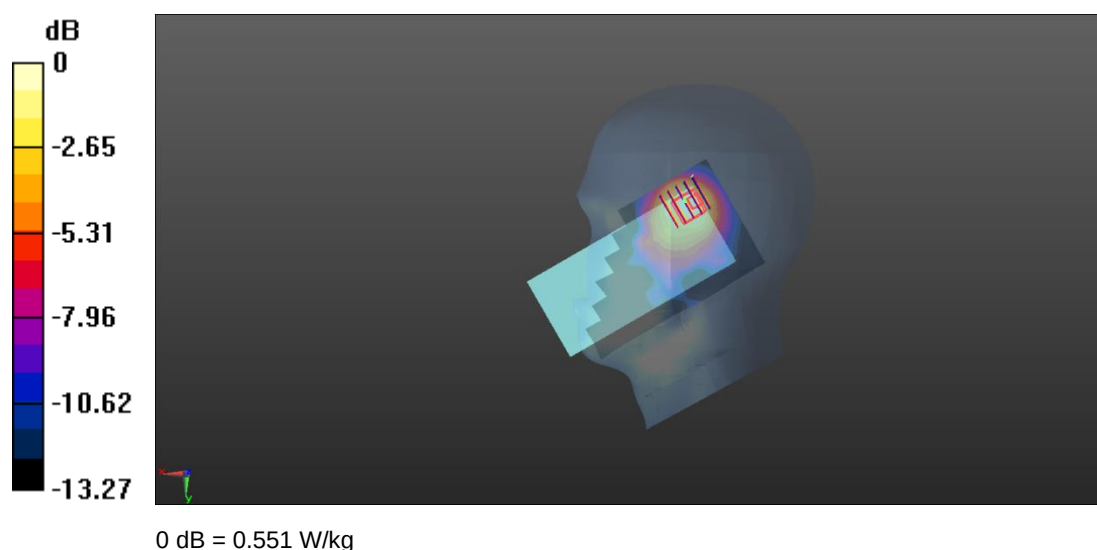
Ch20600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.14 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.501 W/kg; SAR(10 g) = 0.284 W/kg

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



Meas.12 Body Plane with Back Side 10mm on High Channel in LTE B5 mode with Antenna 2

Date: 2023.10.05

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

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 41.707$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch20600/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.192 W/kg

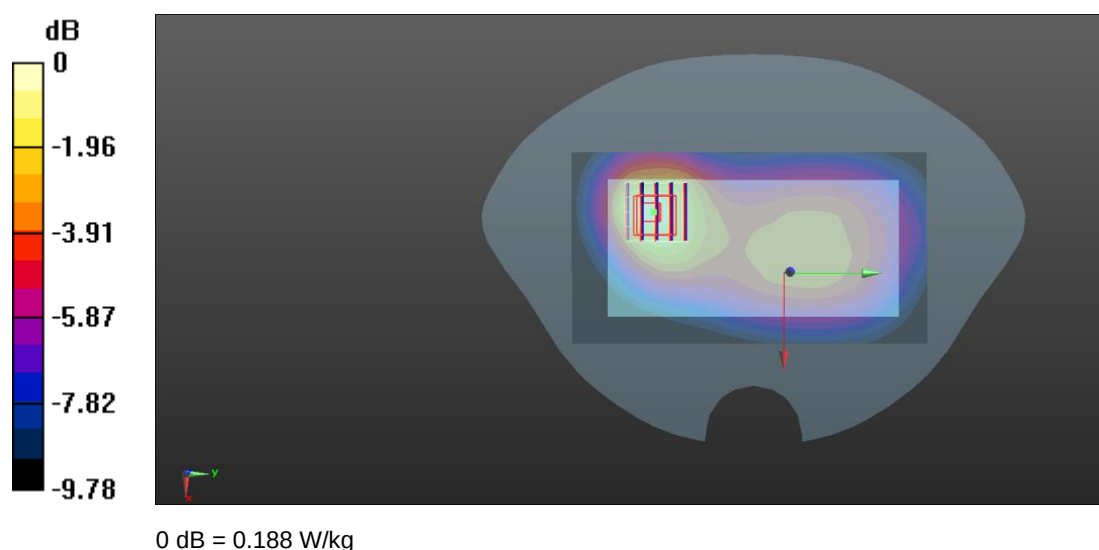
Ch20600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.746 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.232 W/kg

SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.095 W/kg

Maximum value of SAR (measured) = 0.188 W/kg



Meas.13 Right Head with Cheek on Low Channel in LTE Band7 mode with Antenna 2

Date: 2023.10.2

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

Medium parameters used (interpolated): $f = 2510$ MHz; $\sigma = 1.867$ S/m; $\epsilon_r = 39.242$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

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

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

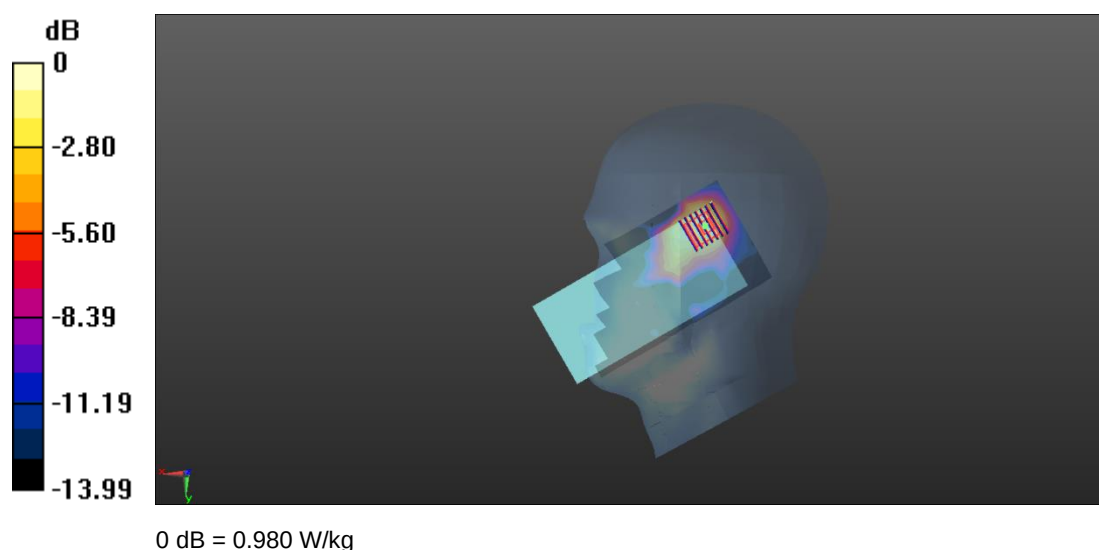
Ch20850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.39 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 0.881 W/kg; SAR(10 g) = 0.458 W/kg

Maximum value of SAR (measured) = 0.980 W/kg



Meas.14 Body Plane with Back Side 10mm on High Channel in LTE B7 mode with Antenna 2

Date: 2023.10.02

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

Medium parameters used (interpolated): $f = 2560$ MHz; $\sigma = 1.926$ S/m; $\epsilon_r = 38.873$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch21350/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.01 W/kg

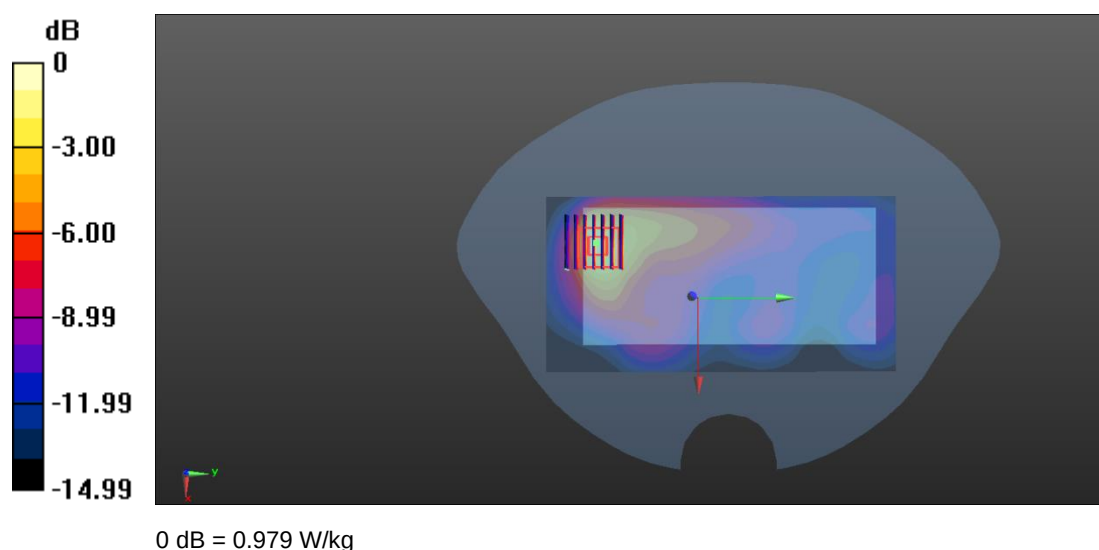
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.098 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.646 W/kg; SAR(10 g) = 0.315 W/kg

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



Meas.15 Right Head with Cheek on High Channel in LTE Band12 mode with Antenna 2

Date: 2023.10.03

Communication System Band: BAND 12; Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 42.412$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch23130/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

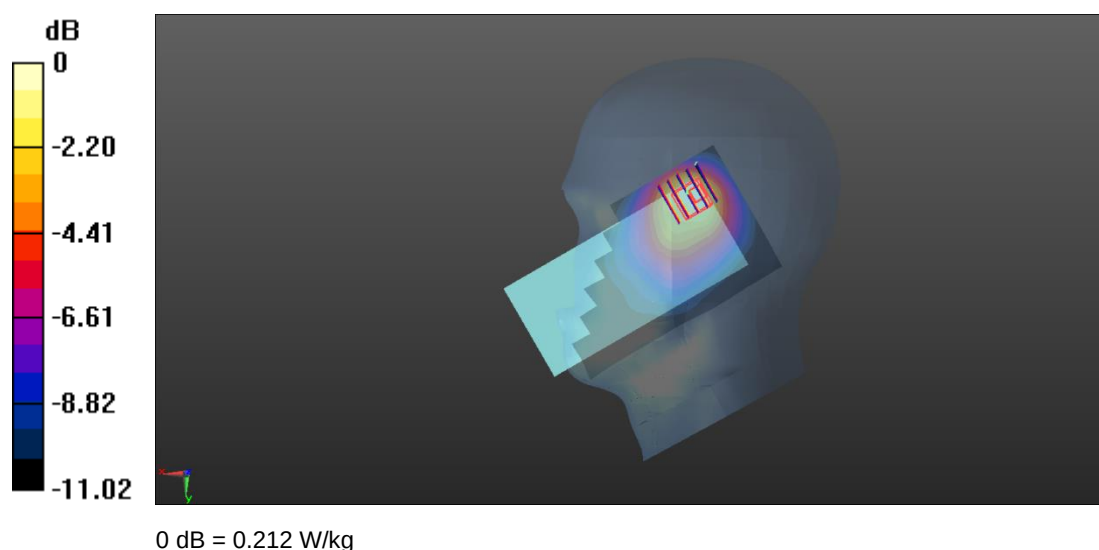
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.795 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.446 W/kg

SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.113 W/kg

Maximum value of SAR (measured) = 0.212 W/kg



Meas.16 Body Plane with Right Edge 10mm on High Channel in LTE B12 mode with Antenna 2

Date: 2023.10.03

Communication System Band: BAND 12; Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 42.412$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch23130/Area Scan (51x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.103 W/kg

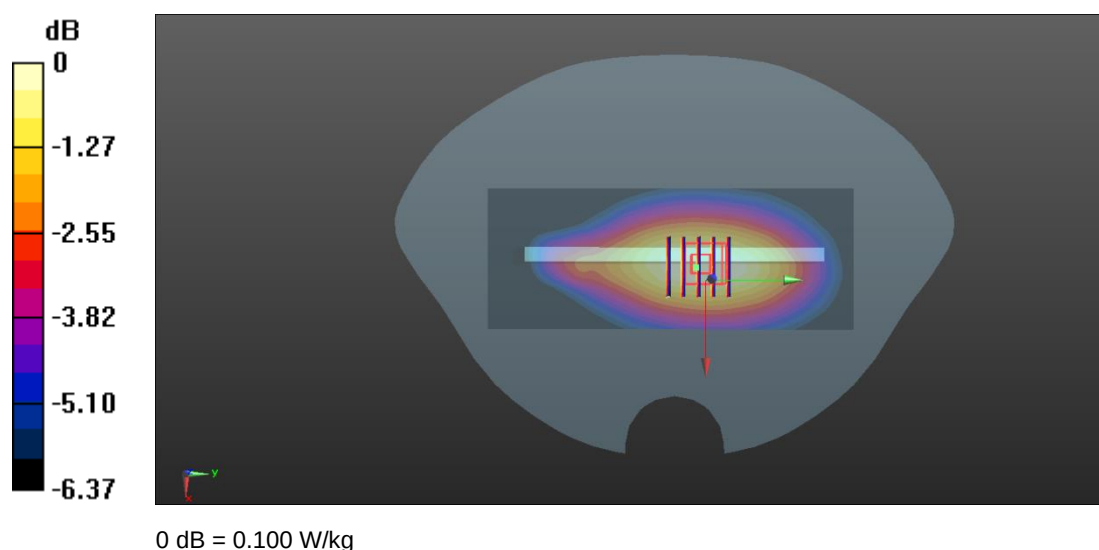
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.36 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.126 W/kg

SAR(1 g) = 0.095 W/kg; SAR(10 g) = 0.071 W/kg

Maximum value of SAR (measured) = 0.100 W/kg



Meas.17 Right Head with Cheek on Middle Channel in LTE Band13 mode with Antenna 2

Date: 2023.10.03

Communication System Band: BAND 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 782 \text{ MHz}$; $\sigma = 0.901 \text{ S/m}$; $\epsilon_r = 41.745$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch23230/Area Scan (71x131x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

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

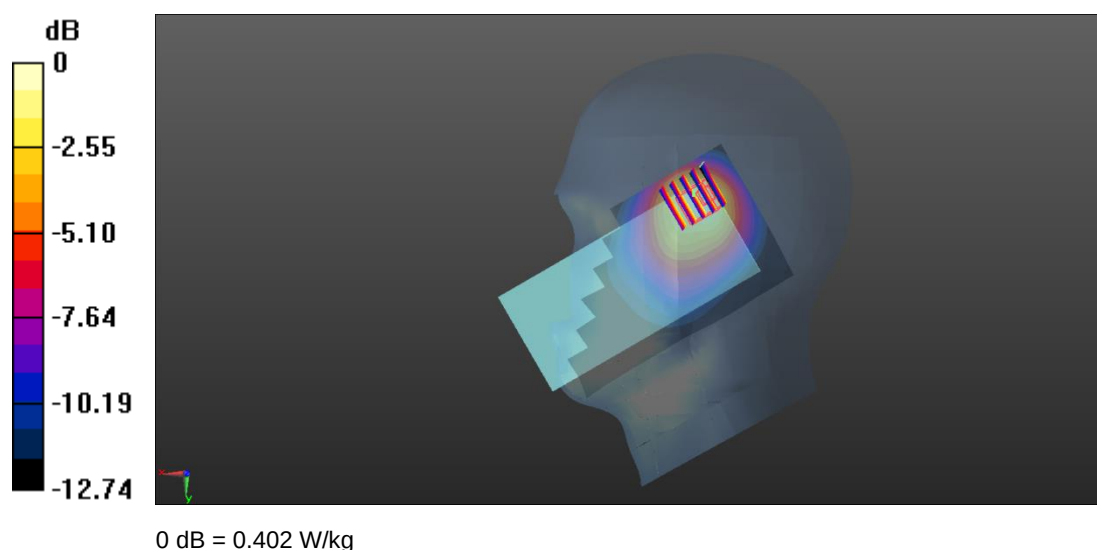
Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.66 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.830 W/kg

SAR(1 g) = 0.372 W/kg; SAR(10 g) = 0.212 W/kg

Maximum value of SAR (measured) = 0.402 W/kg



Meas.18 Body Plane with Back Side 10mm on Middle Channel in LTE B13 mode with Antenna 2

Date: 2023.10.03

Communication System Band: BAND 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 782 \text{ MHz}$; $\sigma = 0.901 \text{ S/m}$; $\epsilon_r = 41.745$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch23230/Area Scan (71x131x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.241 W/kg

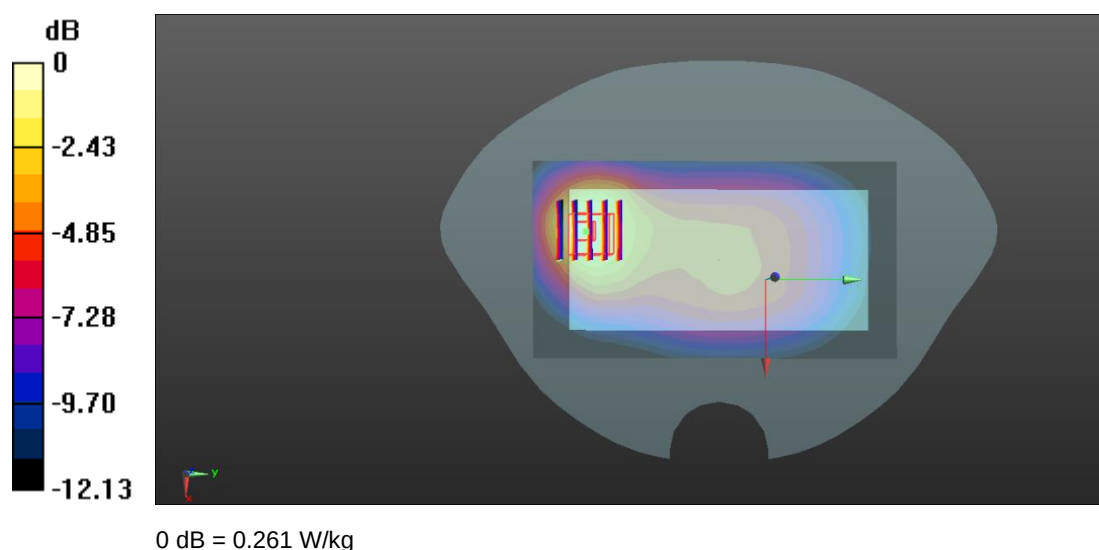
Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.566 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.345 W/kg

SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.121 W/kg

Maximum value of SAR (measured) = 0.261 W/kg



Meas.19 Right Head with Cheek on High Channel in LTE Band25 mode with Antenna 2

Date: 2023.10.08

Communication System Band: BAND 25; Frequency: 1905 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1905$ MHz; $\sigma = 1.403$ S/m; $\epsilon_r = 39.615$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.8°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch26590/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.18 W/kg

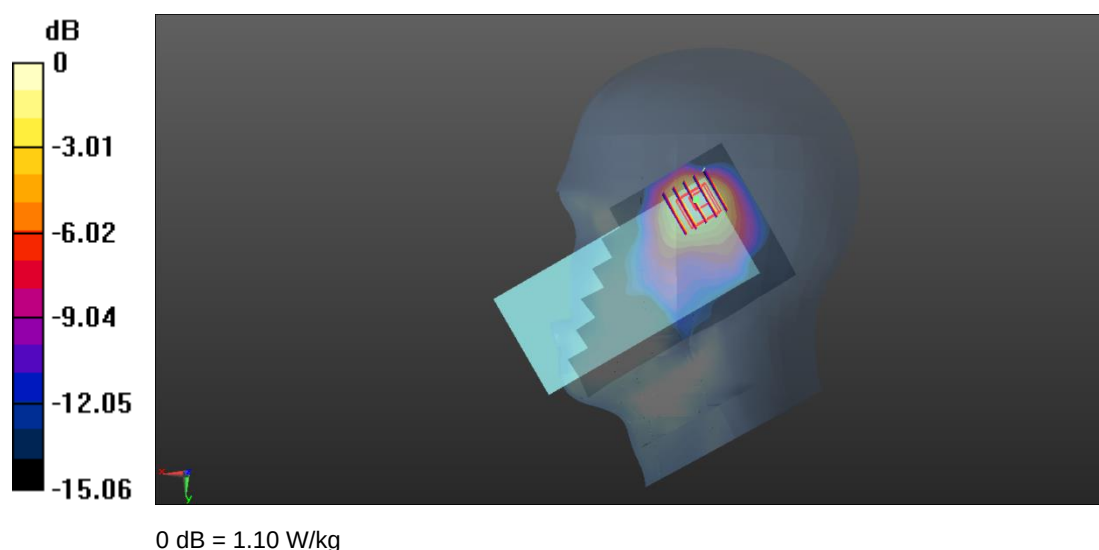
Ch26590/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.36 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.579 W/kg

Maximum value of SAR (measured) = 1.10 W/kg



Meas.20 Body Plane with Top Edge 10mm on Middle Channel in LTE B25 mode with Antenna 2

Date: 2023.10.08

Communication System Band: BAND 25; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.388$ S/m; $\epsilon_r = 40.023$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch26340/Area Scan (61x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.254 W/kg

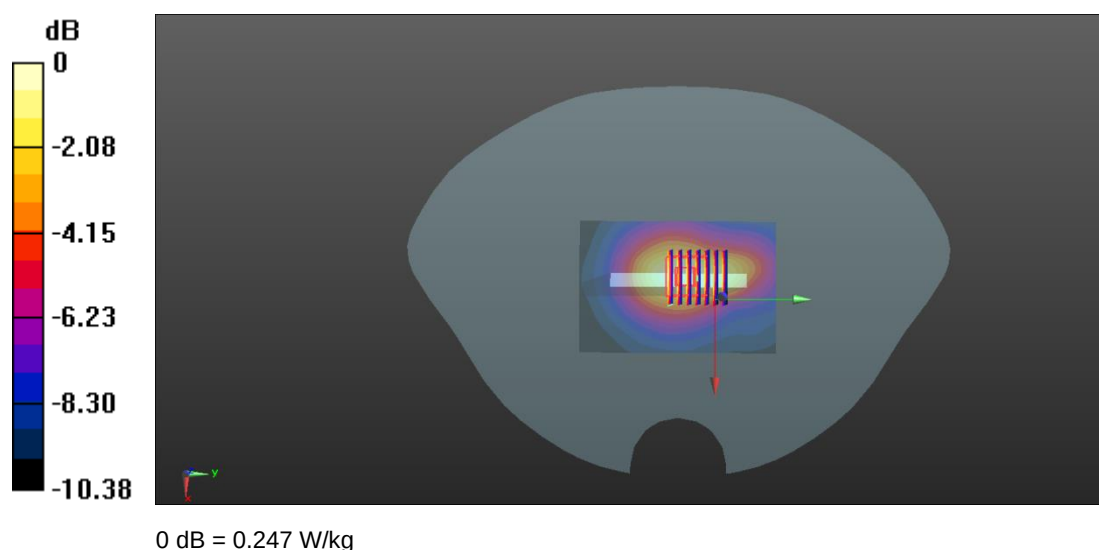
Ch26340/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.42 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.142 W/kg

Maximum value of SAR (measured) = 0.247 W/kg



Meas.21 Right Head with Cheek on High Channel in LTE Band26 mode with Antenna 2

Date: 2023.10.09

Communication System Band: BAND 26; Frequency: 841.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 841.5$ MHz; $\sigma = 0.906$ S/m; $\epsilon_r = 41.748$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

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

Maximum value of SAR (interpolated) = 0.477 W/kg

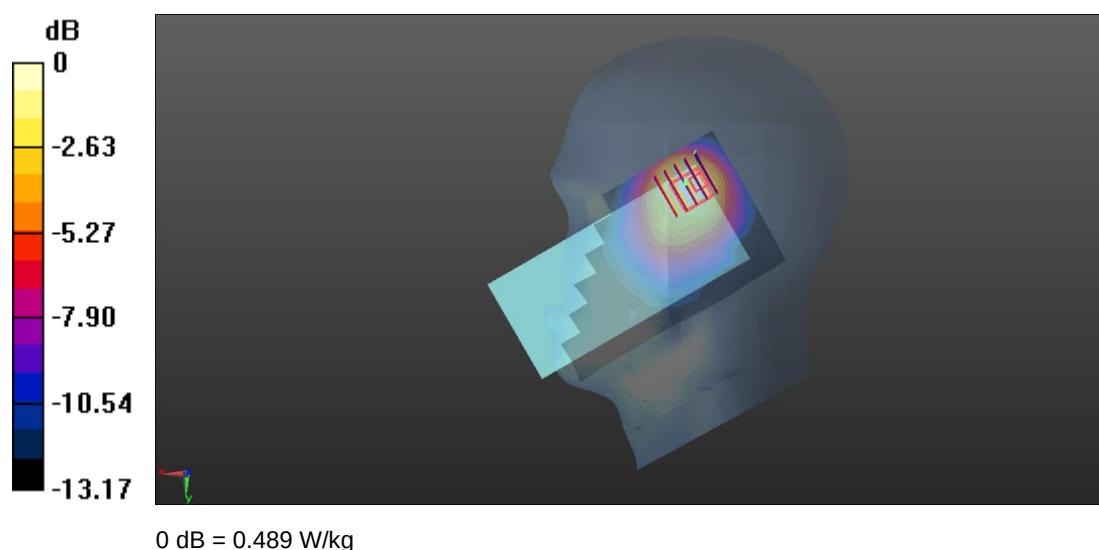
Ch26965/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.15 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.953 W/kg

SAR(1 g) = 0.437 W/kg; SAR(10 g) = 0.250 W/kg

Maximum value of SAR (measured) = 0.489 W/kg



Meas.22 Body Plane with Top Edge 10mm on Middle Channel in LTE B26 mode with Antenna 2

Date: 2023.10.09

Communication System Band: BAND 26; Frequency: 841.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 841.5$ MHz; $\sigma = 0.906$ S/m; $\epsilon_r = 41.748$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch26965/Area Scan (61x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.118 W/kg

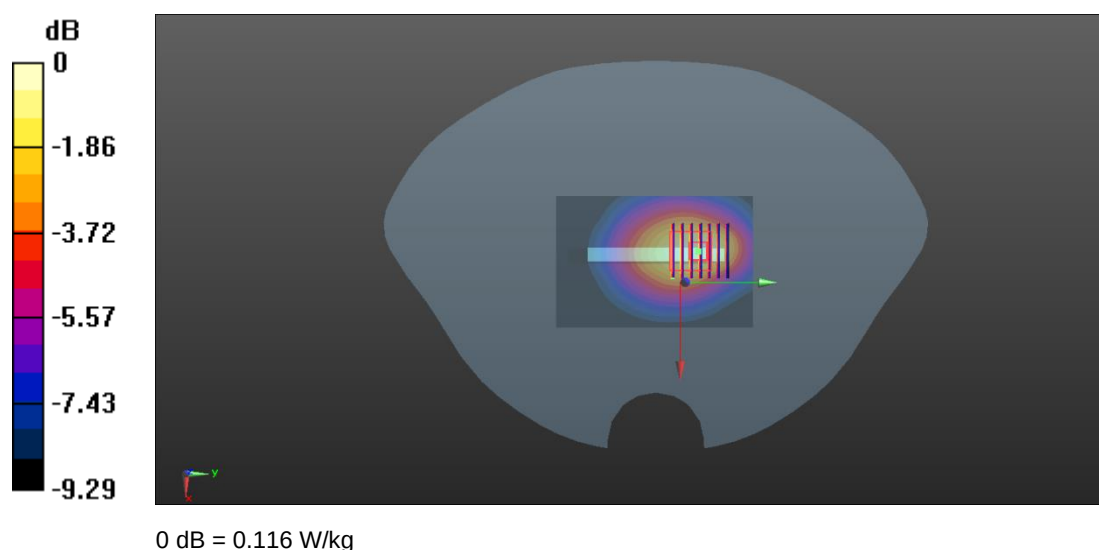
Ch26965/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.139 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.180 W/kg

SAR(1 g) = 0.106 W/kg; SAR(10 g) = 0.068 W/kg

Maximum value of SAR (measured) = 0.116 W/kg



Meas.23 Right Head with Cheek on High Channel in LTE Band66 mode with Antenna 2

Date: 2023.10.07

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

Medium parameters used (interpolated): $f = 1770$ MHz; $\sigma = 1.401$ S/m; $\epsilon_r = 39.728$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch132572/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.504 W/kg

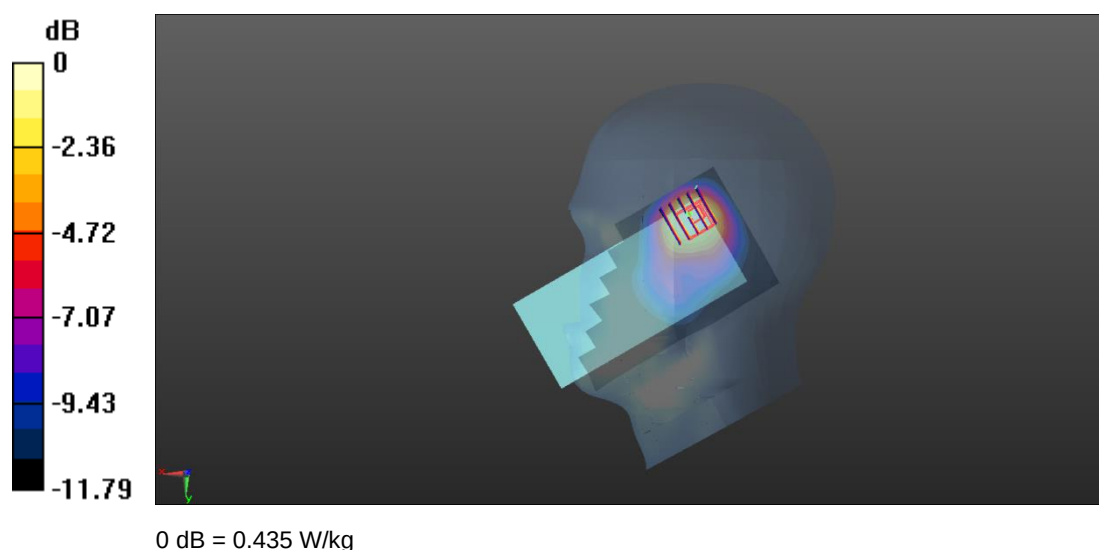
Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.36 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.767 W/kg

SAR(1 g) = 0.416 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.435 W/kg



Meas.24 Body Plane with Back Side 10mm on High Channel in LTE B66 mode with Antenna 2

Date: 2023.10.07

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

Medium parameters used (interpolated): $f = 1770$ MHz; $\sigma = 1.401$ S/m; $\epsilon_r = 39.728$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch132572/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.172 W/kg

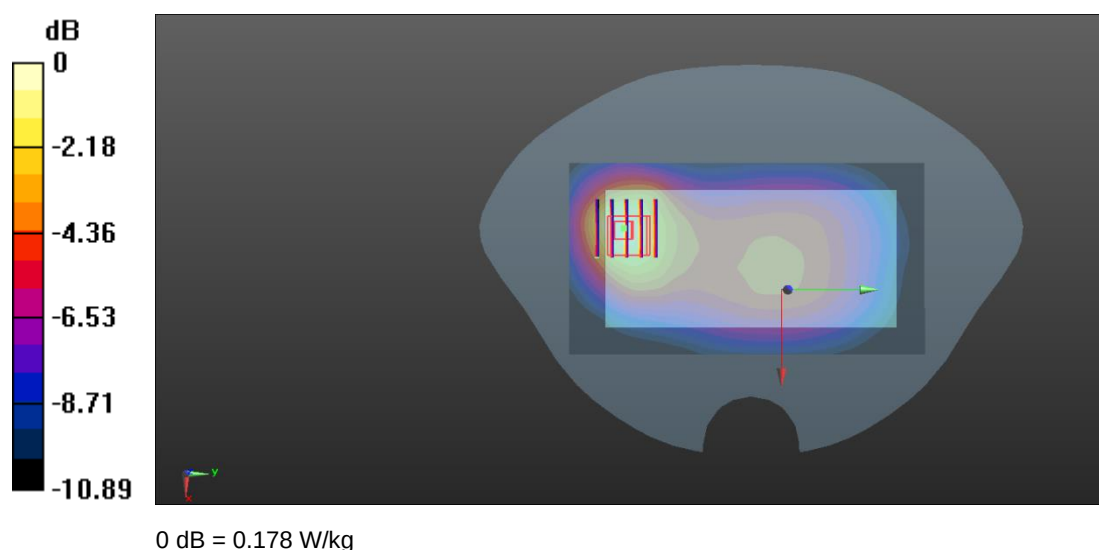
Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.215 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.221 W/kg

SAR(1 g) = 0.135 W/kg; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.178 W/kg



Meas.25 Right Head with Tilted on Low Channel in LTE Band38 mode with Antenna 2

Date: 2023.10.02

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

Medium parameters used (interpolated): $f = 2580$ MHz; $\sigma = 1.948$ S/m; $\epsilon_r = 38.734$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.6, 7.6, 7.6); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 1.10 W/kg

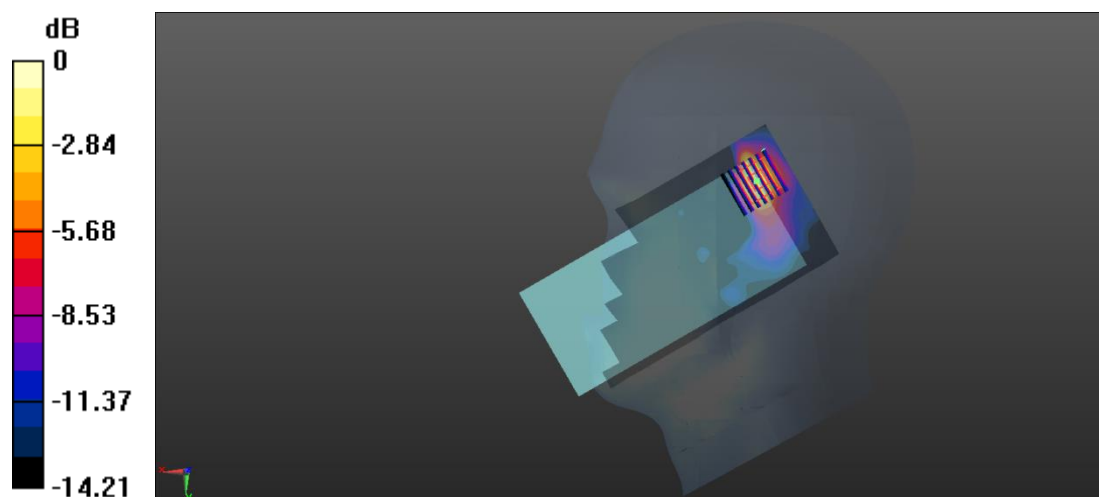
Ch37850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.17 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 0.859 W/kg; SAR(10 g) = 0.360 W/kg

Maximum value of SAR (measured) = 1.01 W/kg



0 dB = 1.01 W/kg

Meas.26 Body Plane with Back Side 10mm on Low Channel in LTE B38 mode with Antenna 2

Date: 2023.10.02

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

Medium parameters used (interpolated): $f = 2580$ MHz; $\sigma = 1.948$ S/m; $\epsilon_r = 38.734$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.6, 7.6, 7.6); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

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

Maximum value of SAR (interpolated) = 0.748 W/kg

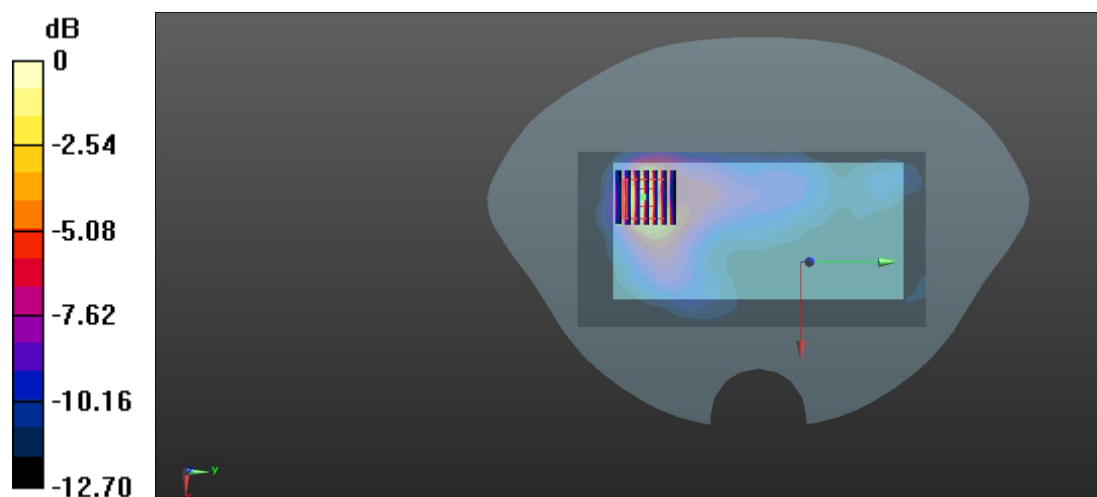
Ch37850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.787 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.991 W/kg

SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.237 W/kg

Maximum value of SAR (measured) = 0.746 W/kg



0 dB = 0.746 W/kg

Meas.27 Right Head with Tilted on High Channel in LTE Band41 mode with Antenna 2

Date: 2023.10.15

Communication System Band: BAND41; Frequency: 2680 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated): $f = 2680$ MHz; $\sigma = 2.066$ S/m; $\epsilon_r = 38.045$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.6, 7.6, 7.6); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); 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) = 0.820 W/kg

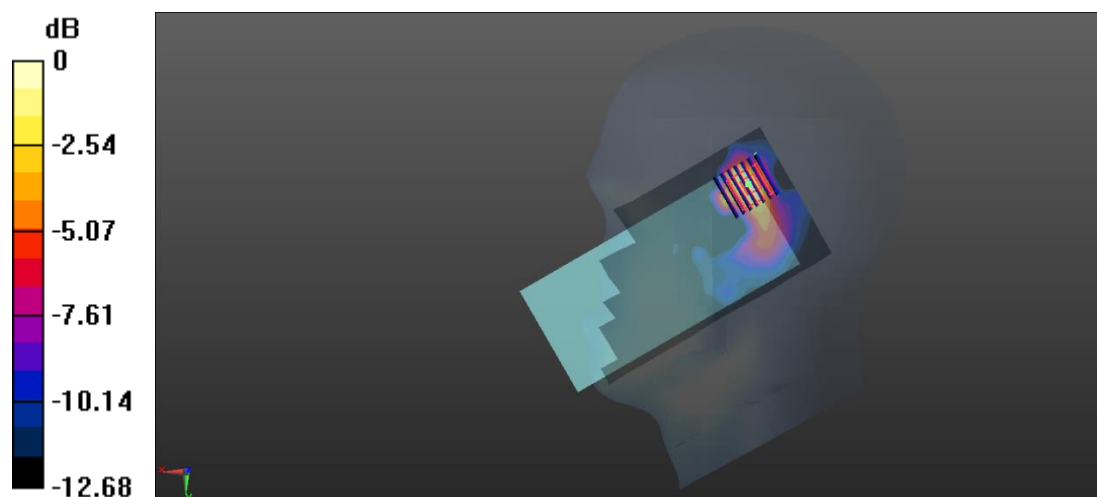
Ch41490/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.12 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.654 W/kg; SAR(10 g) = 0.284 W/kg

Maximum value of SAR (measured) = 0.773 W/kg



0 dB = 0.773 W/kg

Meas.28 Body Plane with Back Side 10mm on Low Channel in LTE B41 mode with Antenna 2

Date: 2023.10.15

Communication System Band: BAND41; Frequency: 2506 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2506$ MHz; $\sigma = 1.866$ S/m; $\epsilon_r = 39.266$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch39750/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

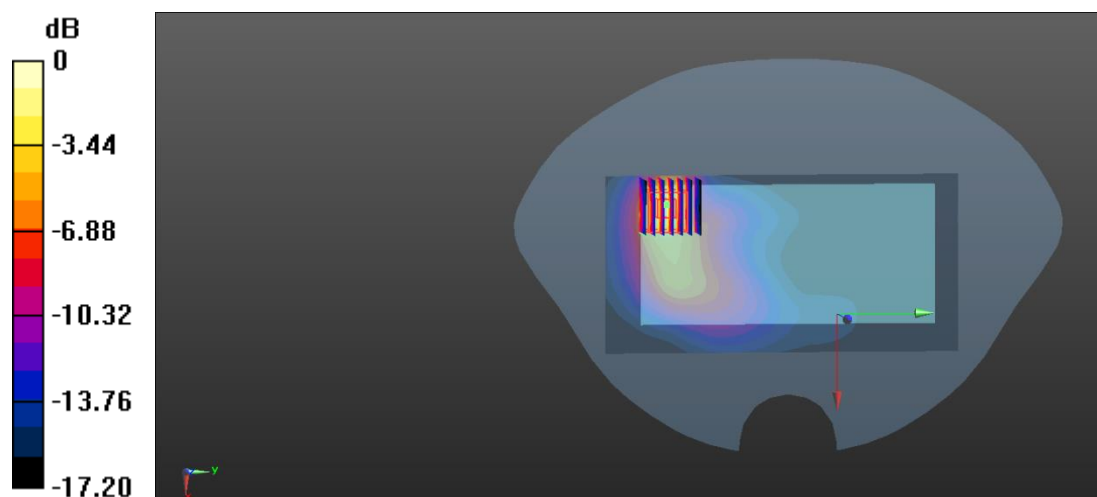
Ch39750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.442 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 2.73 W/kg

SAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.598 W/kg

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



0 dB = 2.05 W/kg

Meas.29 Left Head with Tilted on 11 Channel in IEE.802.11b mode with ANT12

Date: 2023.10.15

Communication System Band: WLAN(b); Frequency: 2462 MHz; Duty Cycle: 1:1.005

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.81$ S/m; $\epsilon_r = 39.42$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.808 W/kg

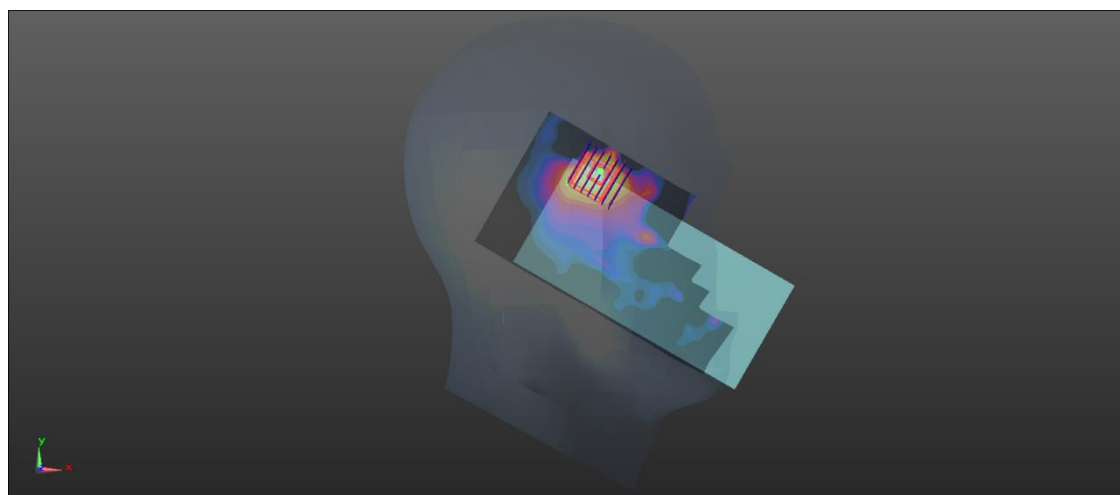
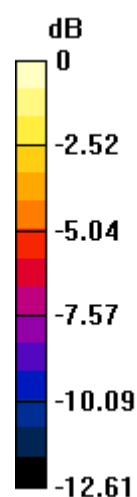
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.386 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.477 W/kg; SAR(10 g) = 0.224 W/kg

Maximum value of SAR (measured) = 0.561 W/kg



0 dB = 0.561 W/kg

Meas.30 Body Plane with Back Side 10mm on 11 Channel in IEEE802.11b mode with Antenna12

Date: 2023.10.16

Communication System Band: 2.4G; Frequency: 2462 MHz; Duty Cycle: 1:1.005

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.81$ S/m; $\epsilon_r = 39.42$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch11/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.465 W/kg

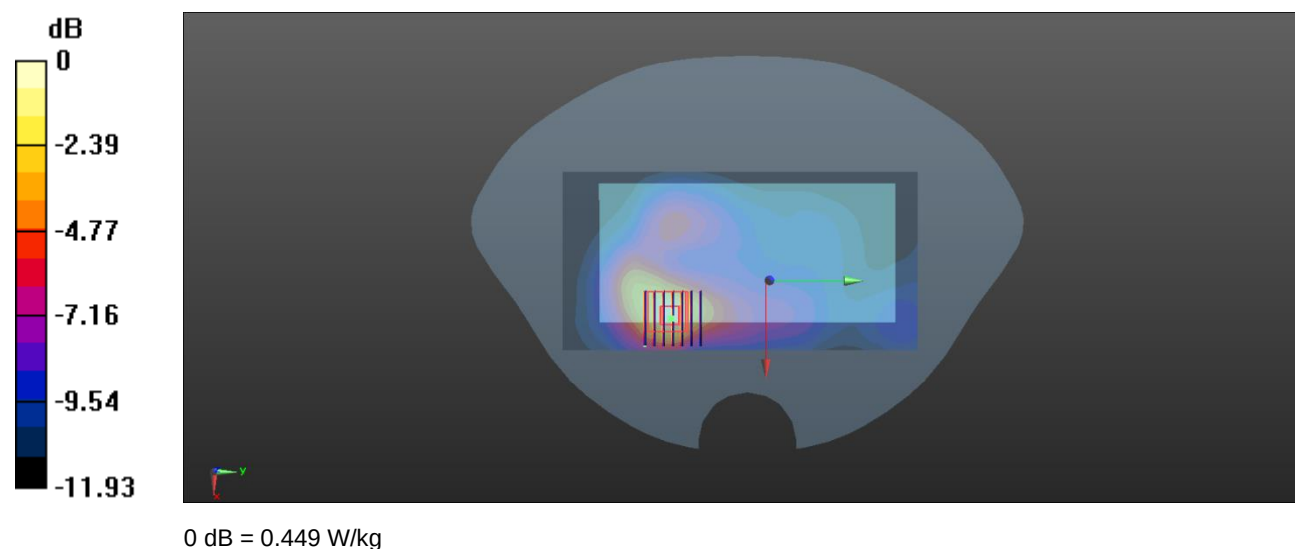
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.060 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.597 W/kg

SAR(1 g) = 0.314 W/kg; SAR(10 g) = 0.172 W/kg

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



Meas.31 Left Head with Cheek on 58 Channel in IEEE802.11ac80 with Antenna 12

Date: 2023.10.17

Communication System Band: 5.3G; Frequency: 5290 MHz; Duty Cycle: 1:1.026

Medium parameters used (interpolated): $f = 5290$ MHz; $\sigma = 4.789$ S/m; $\epsilon_r = 35.403$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.37, 5.37, 5.37); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch58/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.49 W/kg

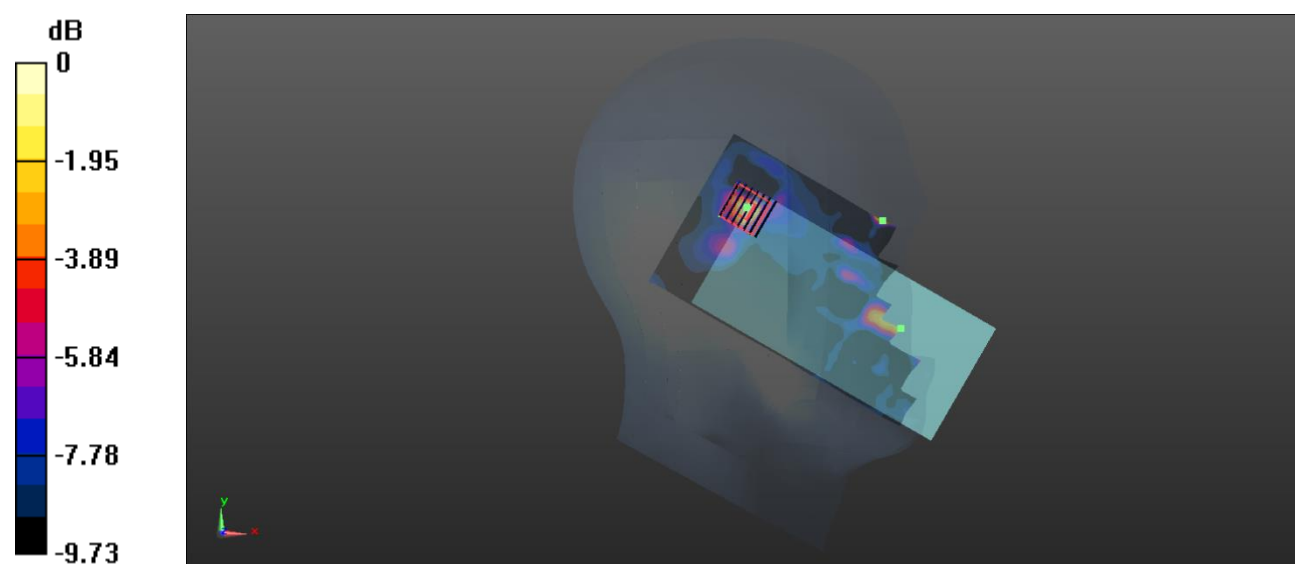
Ch58/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.852 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 4.65 W/kg

SAR(1 g) = 0.824 W/kg; SAR(10 g) = 0.284 W/kg

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



0 dB = 1.23 W/kg

Meas.32 Left Head with Cheek on 122 Channel in IEEE802.11ac80 with Antenna 12

Date: 2023.10.18

Communication System Band: 5.6G; Frequency: 5610 MHz; Duty Cycle: 1:1.026

Medium parameters used (interpolated): $f = 5610$ MHz; $\sigma = 5.075$ S/m; $\epsilon_r = 54.076$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.98, 4.98, 4.98); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch122/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.46 W/kg

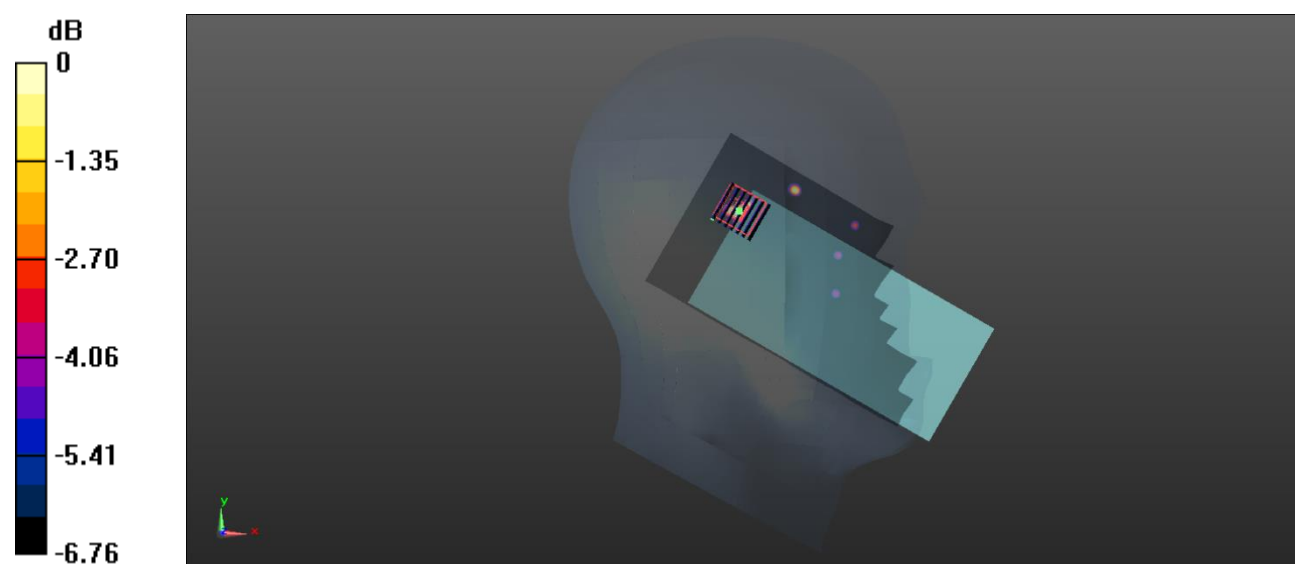
Ch122/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.185 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 3.65 W/kg

SAR(1 g) = 0.712 W/kg; SAR(10 g) = 0.308 W/kg

Maximum value of SAR (measured) = 0.770 W/kg



0 dB = 0.770 W/kg

Meas.33 Left Head with Cheek on 155 Channel in IEEE802.11ac80 with Antenna 12

Date: 2023.10.19

Communication System Band: 5.8G; Frequency: 5775 MHz; Duty Cycle: 1:1.026

Medium parameters used (interpolated): $f = 5775$ MHz; $\sigma = 5.222$ S/m; $\epsilon_r = 35.299$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.9°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.83, 4.83, 4.83); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch155/Area Scan (121x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

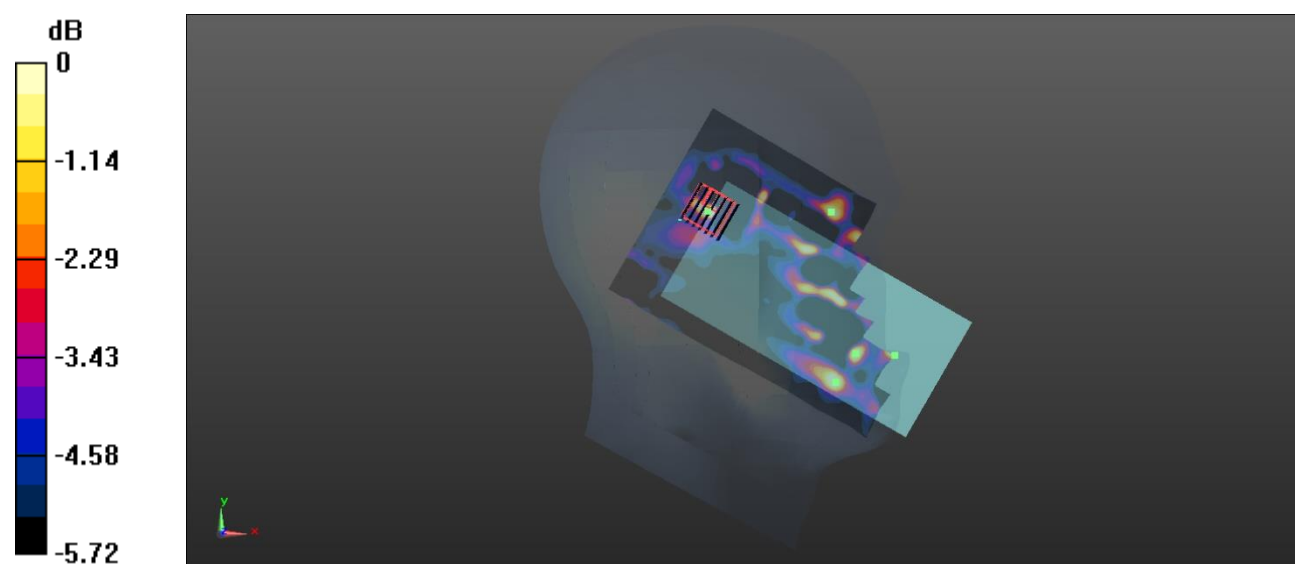
Ch155/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.284 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 10.6 W/kg

SAR(1 g) = 0.762 W/kg; SAR(10 g) = 0.269 W/kg

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



0 dB = 0.626 W/kg

Meas.34 Body Plane with Top Edge 10mm on 42 Channel in IEEE802.11ac80 mode with Antenna 12

Date: 2023.10.17

Communication System Band: 5.2G; Frequency: 5210 MHz; Duty Cycle: 1:1.026

Medium parameters used (interpolated): $f = 5210$ MHz; $\sigma = 4.626$ S/m; $\epsilon_r = 36.431$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.67, 5.67, 5.67); Calibrated: 2023.01.19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch42/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

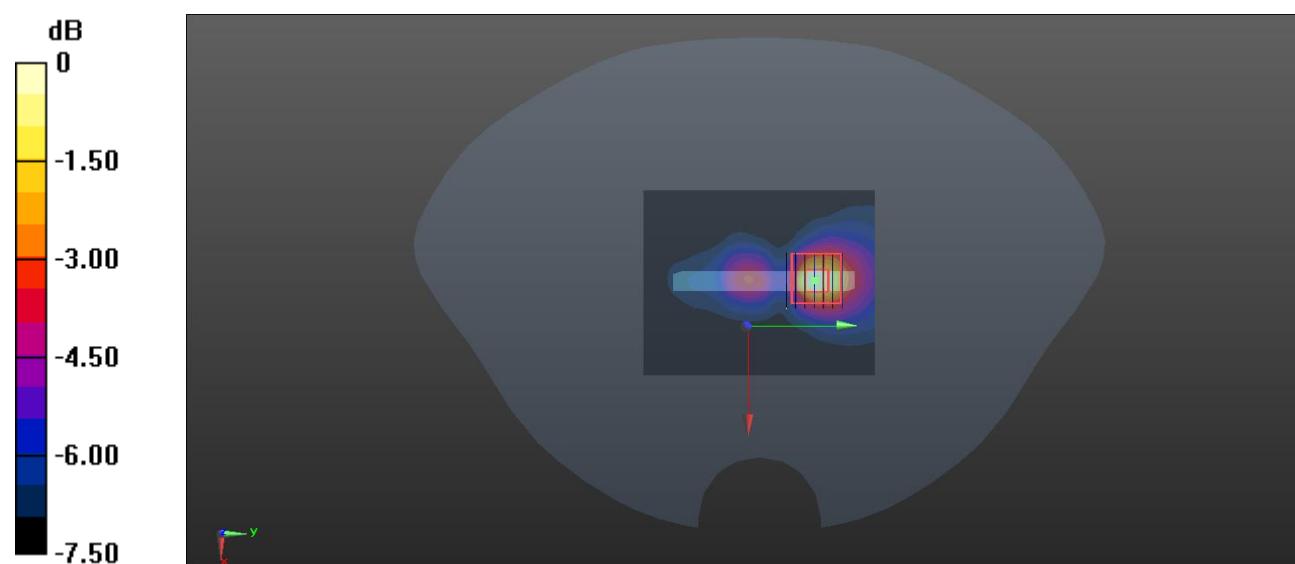
Ch42/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.043 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.439 W/kg; SAR(10 g) = 0.231 W/kg

Maximum value of SAR (measured) = 0.704 W/kg



0 dB = 0.704 W/kg

Meas.35 Body Plane with Top Edge 10mm on 155 Channel in IEEE802.11ac80 mode with Antenna 12

Date: 2023.10.19

Communication System Band: 5.8G; Frequency: 5775 MHz; Duty Cycle: 1:1.026

Medium parameters used (interpolated): $f = 5775$ MHz; $\sigma = 5.222$ S/m; $\epsilon_r = 35.299$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.9°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.83, 4.83, 4.83); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch155/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.756 W/kg

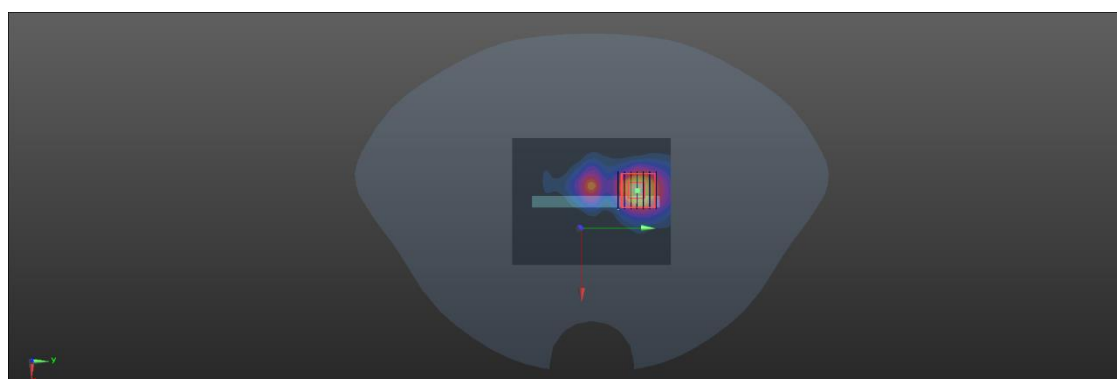
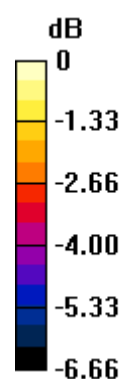
Ch155/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.423 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.477 W/kg; SAR(10 g) = 0.272 W/kg

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



0 dB = 0.769 W/kg

Meas.36 Body Plane with Top Edge 0mm on 58 Channel in IEEE802.11ac80 mode with Antenna 12

Date: 2023.10.17

Communication System Band: 5.3G; Frequency: 5290 MHz; Duty Cycle: 1:1.026

Medium parameters used (interpolated): $f = 5290$ MHz; $\sigma = 4.789$ S/m; $\epsilon_r = 35.403$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.6°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.37, 5.37, 5.37); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch58/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.27 W/kg

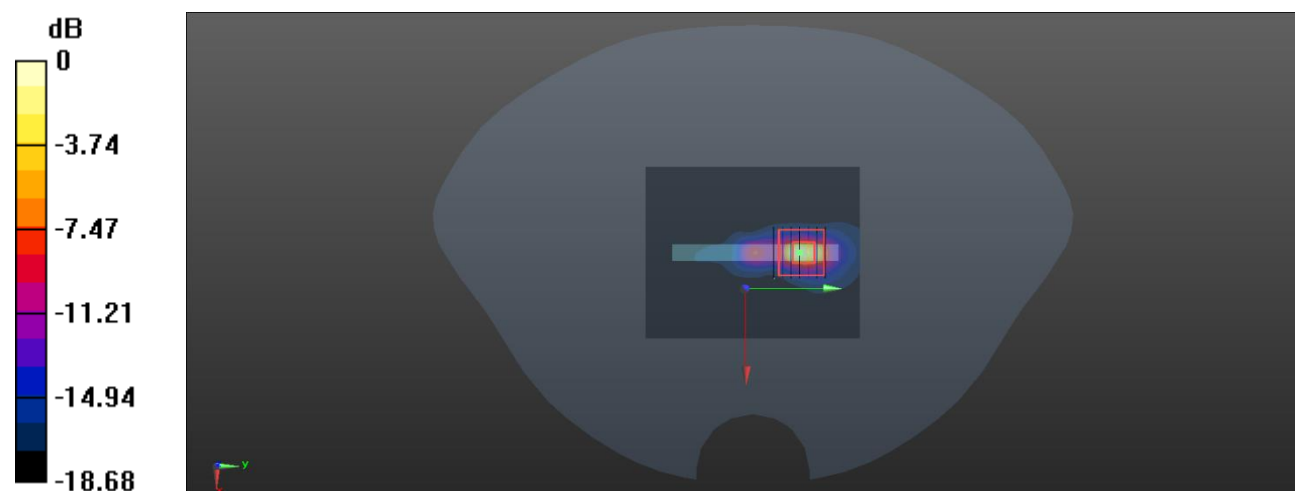
Ch58/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 12.60 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 24.5 W/kg

SAR(1 g) = 3.7 W/kg; SAR(10 g) = 0.796 W/kg

Maximum value of SAR (measured) = 9.91 W/kg



0 dB = 9.91 W/kg

Meas.37 Body Plane with Top Edge 0mm on 122 Channel in IEEE802.11ac80 mode with Antenna 12

Date: 2023.10.18

Communication System Band: 5.6G; Frequency: 5610 MHz; Duty Cycle: 1:1.026

Medium parameters used (interpolated): $f = 5610$ MHz; $\sigma = 5.075$ S/m; $\epsilon_r = 54.076$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(4.98, 4.98, 4.98); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.14 (7501)

Ch122/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.09 W/kg

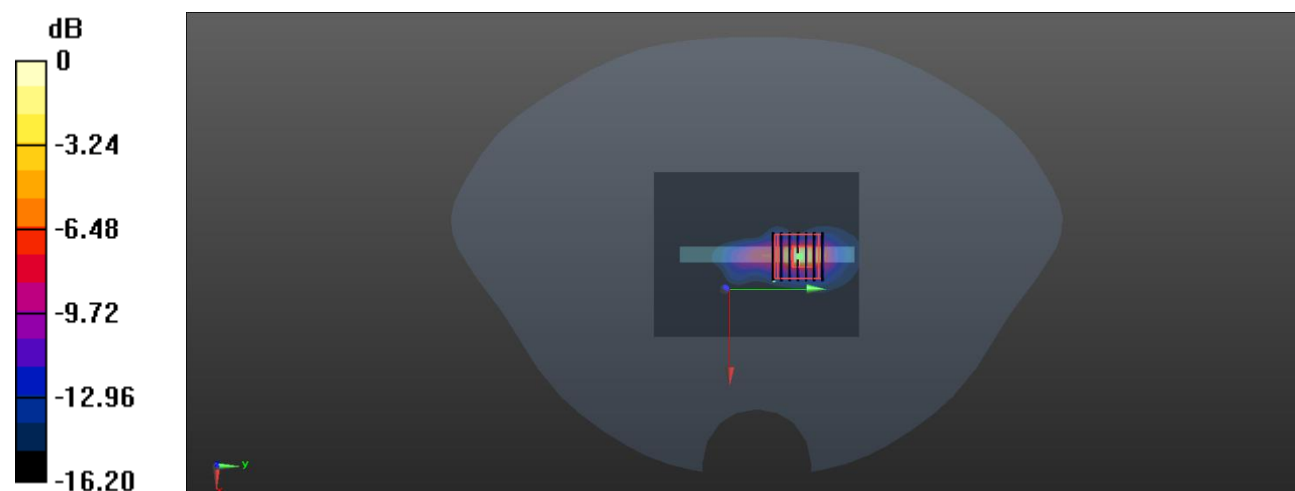
Ch122/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 11.16 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 2.67 W/kg; SAR(10 g) = 0.678 W/kg

Maximum value of SAR (measured) = 7.04 W/kg



0 dB = 7.04 W/kg

Meas.38 Left Head with Tilt on 78 Channel in Bluetooth mode with Antenna 14

Date: 2023.10.16

Communication System Band: BT; Frequency: 2480 MHz; Duty Cycle: 1:1.305

Medium parameters used (interpolated): $f = 2480$ MHz; $\sigma = 1.835$ S/m; $\epsilon_r = 39.281$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch78/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.453 W/kg

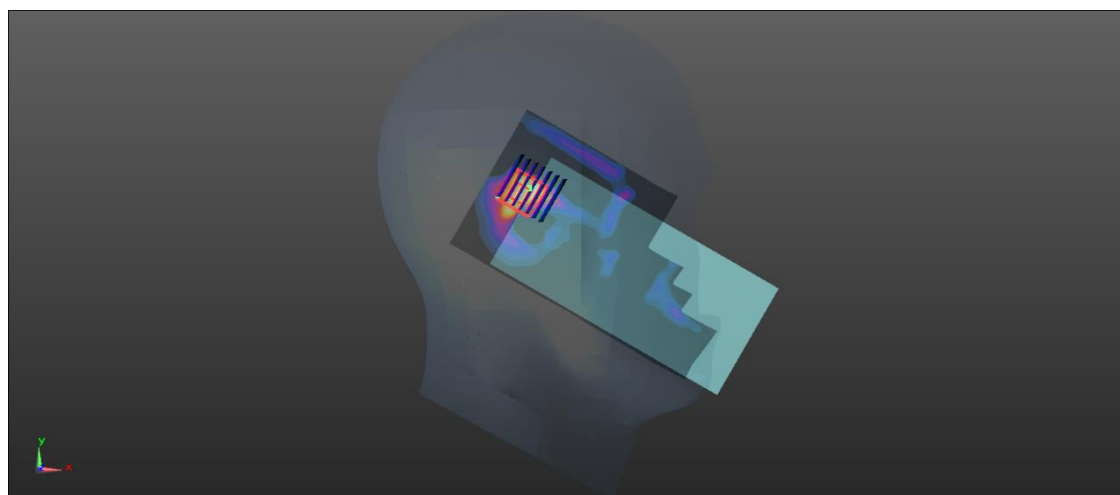
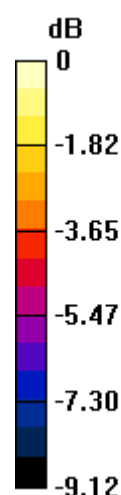
Ch78/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.907 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.133 W/kg

Maximum value of SAR (measured) = 0.289 W/kg



0 dB = 0.289 W/kg

Meas.39 Body Plane with Top Edge 10mm on 78 Channel in Bluetooth mode with Antenna 14

Date: 2023.10.16

Communication System Band: BT; Frequency: 2480 MHz; Duty Cycle: 1:1.305

Medium parameters used (interpolated): $f = 2480$ MHz; $\sigma = 1.835$ S/m; $\epsilon_r = 39.281$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1710; Calibrated: 2023.01.30
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1859; Type: QD000P40CC; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch78/Area Scan (61x91x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.199 W/kg

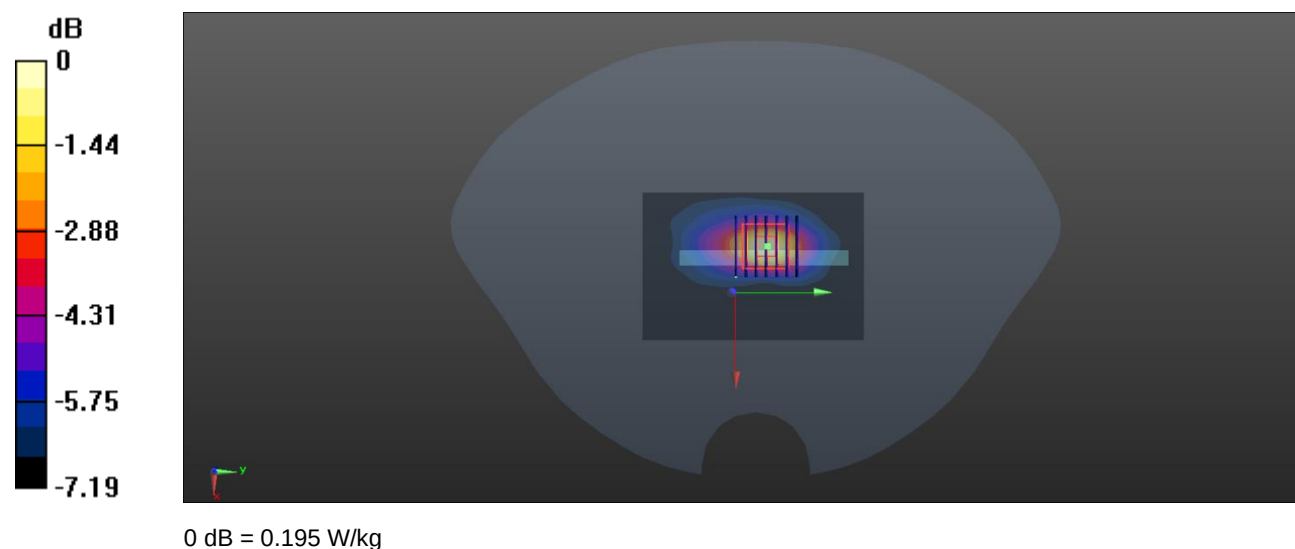
Ch78/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 8.778 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.296 W/kg

SAR(1 g) = 0.171 W/kg; SAR(10 g) = 0.097 W/kg

Maximum value of SAR (measured) = 0.195 W/kg



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2391126-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2391126-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2391126-AC.pdf”.

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--END OF REPORT--