TEST REPORT

Applicant:	Blackshark Technologies (Nanchang) Co., Ltd.
Address:	Room 815-1, 8th floor, Block A, Huajiang Building, No.1 Tsinghua Science Park, Nanchang City, China
Equipment Type:	5G Digital Mobile Phone
Model Name:	SHARK KSR-H0
Brand Name:	BLACK SHARK
FCC ID:	2A2ZHKSR-H0
Test Standard:	47 CFR Part 2.1093 (refer section 3.1)
Maximum SAR:	Head (1 g): 0.854 W/kg Body (1 g): 0.269 W/kg Hotspot (1 g): 1.069 W/kg Specific (10 g): 2.331 W/kg
Test Date:	Dec. 07, 2021 - Jan. 14, 2022
Date of Issue:	Feb. 21, 2022

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Miao Yan **Checked by:** Zong Liyao **Approved by:** Wei Yanquan

Miao Yan

Liyao Zong

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Feb. 11, 2022	Initial Issue
Rev. 02	Feb. 21, 2022	Update the technical information in section 2.5 and the addresses of the applicant and manufacturer & add highest simultaneous SAR in section 3.3.3

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1 GENERAL INFORMATION

1.1 Identification of the Testing Laboratory

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

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Blackshark Technologies (Nanchang) Co., Ltd.
Address	Room 815-1, 8th floor, Block A, Huajiang Building, No.1 Tsinghua Science Park, Nanchang City, China

2.2 Manufacturer Information

Manufacturer	Blackshark Technologies (Nanchang) Co., Ltd.
Address	Room 815-1, 8th floor, Block A, Huajiang Building, No.1 Tsinghua Science Park, Nanchang City, China

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	5G Digital Mobile Phone
Model Name Under Test	SHARK KSR-H0
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	P1
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	BS08FA
	Serial No.	N/A
	Capacity	2180 mAh
	Rated Voltage	7.74 V
	Limit Charge Voltage	8.90 V

2.6 Technical Information

Network and Wireless connectivity	G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 EVDO Rel. 0/Rev. A Band Class 0 4G Network LTE FDD Band 5/7 LTE TDD Band 38/41 LTE CA Uplink (UL): CA_7C 5G Network SA: NR n41/n77/n78 NSA(EN-DC): DC_5A_n78A, DC_7A_n78A, DC_38A_n78A Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40), 802.11ax(HE20/40) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80), 802.11ax(HE20/40/80/160) U-NII-1/2A/2C/3, GPS, GLONASS, BDS, Galileo, FM Receiver, NFC
Note: The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA, LTE and NR, 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, NR; 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
	CDMA BC0	TX: 824.025 ~ 848.985 MHz	RX: 869.025 ~ 893.985 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	n41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	n77	TX: 3450 ~ 3980 MHz	RX: 3450 ~ 3980 MHz
	n78	TX: 3700 ~ 3800 MHz	RX: 3700 ~ 3800 MHz
	802.11b/g /n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11ax(HE20/40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40/ VHT80/VHT160)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	802.11ax (HE20/40/80/160)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	

		5470 ~ 5725 MHz
		5725 ~ 5850 MHz
	Bluetooth	2402 ~ 5480 MHz
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna	
DTM	N/A	
Hotspot Function	Support	
Power Reduction	Support	
Exposure Category	General Population/Uncontrolled exposure	
EUT Stage	Portable Device	
Product	Type	
	☒ 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 8.10.		

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D01 v06	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	FCC KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	FCC KDB 941225 D06 v02r01	SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
8	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
10	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
11	KDB 248227 D01 v02r02	SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters

3.2 Device Category and SAR Limit

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

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

Table of Exposure Limits:

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

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR (1 g Value)

Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
	Head	Body-worn Accessory	Hotspot	Head	Body-worn Accessory	Hotspot
GSM 850	0.725	0.138	0.279	0.854	0.269	1.069
GSM 1900	0.828	0.099	0.901			
WCDMA Band 2	0.655	0.084	0.554			
WCDMA Band 4	0.718	0.117	0.486			
WCDMA Band 5	**0.854**	0.215	0.403			
CDMA BC0	0.798	0.176	0.350			
LTE Band 5	0.459	0.247	0.386			
LTE Band 7	0.429	0.100	0.516			
LTE Band 38	0.519	0.139	0.439			
LTE Band 41	0.786	0.097	0.722			
n41	0.751	0.181	**1.069**			
n77	0.630	0.229	0.832			
n78	0.377	**0.269**	0.793			
2.4G WLAN	0.236	0.128	0.221			
5.2G WLAN	/	/	0.366			
5.3G WLAN	0.056	0.078	/			
5.6G WLAN	0.078	0.191	/			
5.8G WLAN	0.105	0.188	0.353			
Bluetooth	0.195	0.018	0.044			
Limit (W/kg)	1.6			1.6		
Verdict	Pass					

3.3.2 Highest Specific SAR (10 g Value)

Band	Maximum Scaled SAR (W/kg)	Maximum Report SAR (W/kg)
	Specific 10g	
5.3G WLAN	1.547	2.331
5.6G WLAN	**2.331**	
Limit (W/kg)	4.0	4.0
Verdict	Pass	

3.3.3 Highest Simultaneous SAR

Position	Simultaneous Configuration	Simultaneous SAR (W/kg)	Limit (W/kg)	Verdict
Head (1g)	WCDMA B5 + 5G WIFI + Bluetooth	1.096	1.6	Pass
Body-worn Accessory (1g)	LTE 5 + 5G n78 + 5G WIFI + Bluetooth	0.749	1.6	Pass
Hotspot (1g)	GSM 1900 + 2.4G WIFI + 5G WIFI	1.459	1.6	Pass

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 1.069 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.
The maximum 10 g SAR for the EUT in this report is 2.331 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

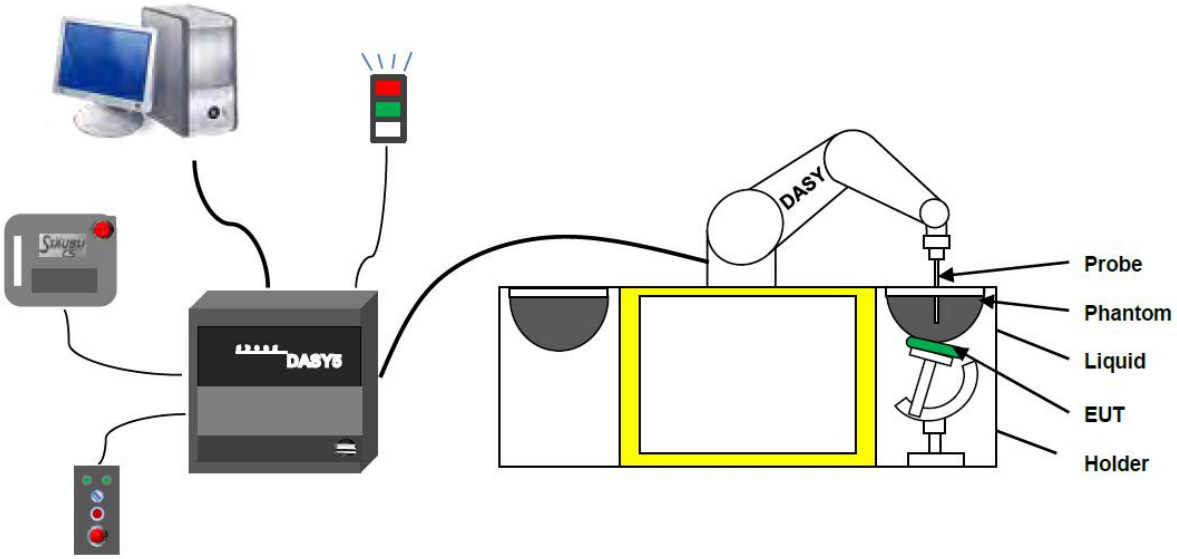
$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}\mathbf{E}^{2}}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

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

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

4.2.3 E-Field Probe

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

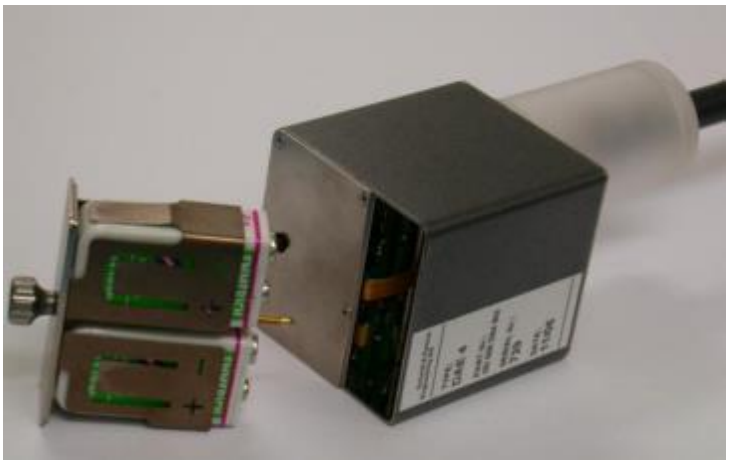
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection systemBuilt-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz;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

E-Field Probe Calibration Process

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

4.2.4 Data Acquisition Electronics

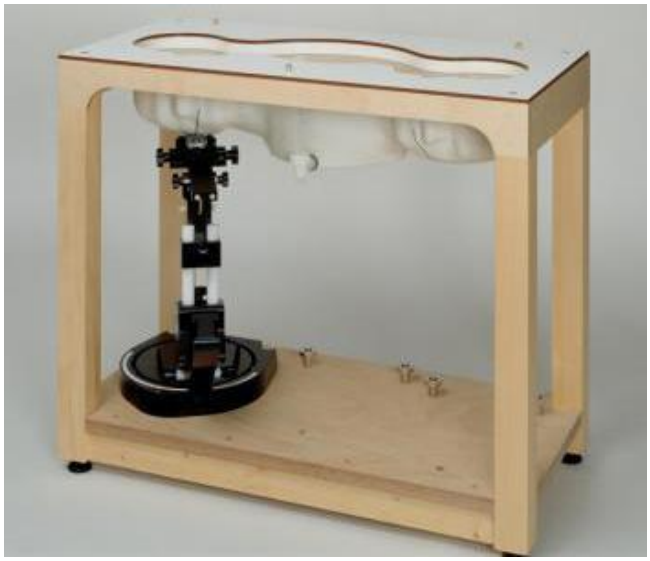
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



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

4.2.5 Phantoms

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



- Left hand
- Right hand
- Flat phantom

Photo of Phantom SN1859

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

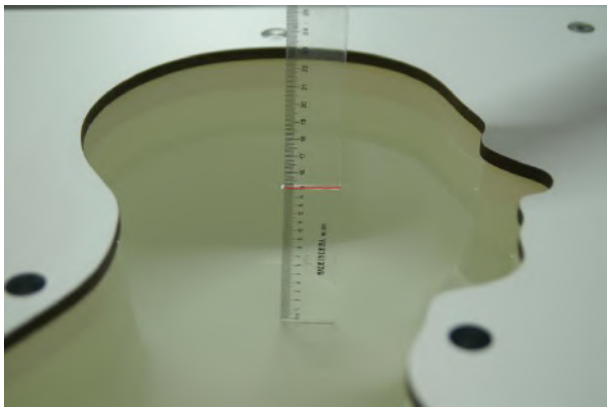
4.2.6 Device Holder

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

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

4.2.7 Simulating Liquid

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

Head Liquid Depth	Body Liquid Depth
	

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

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

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

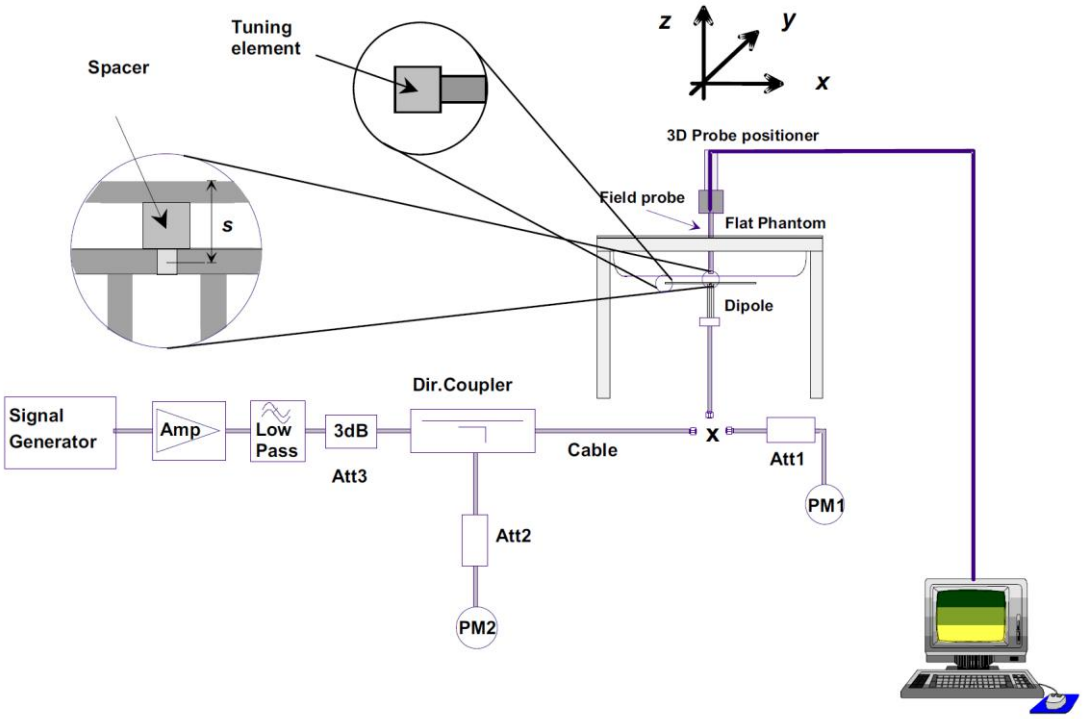
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

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

5.2 System Check Setup

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



6 TEST POSITION CONFIGURATIONS

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

6.1 Head Exposure Conditions

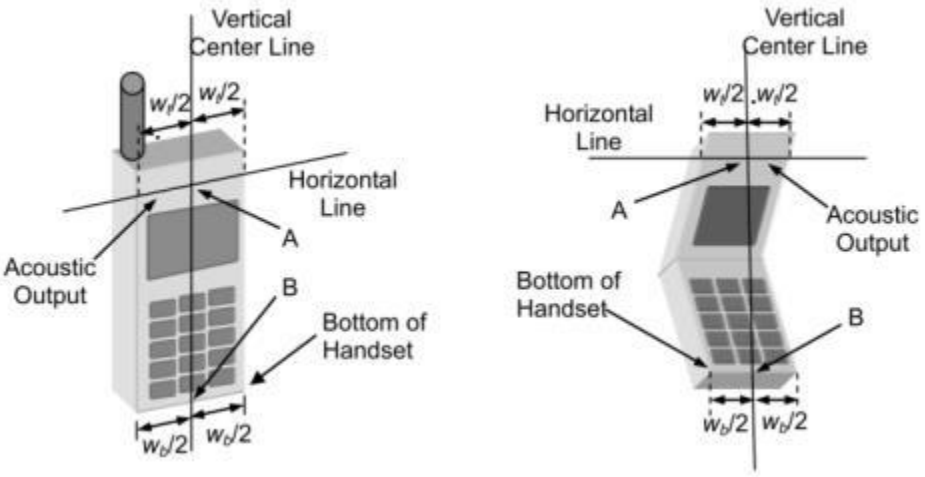
Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

6.1.1 Two Imaginary Lines on the Handset

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

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

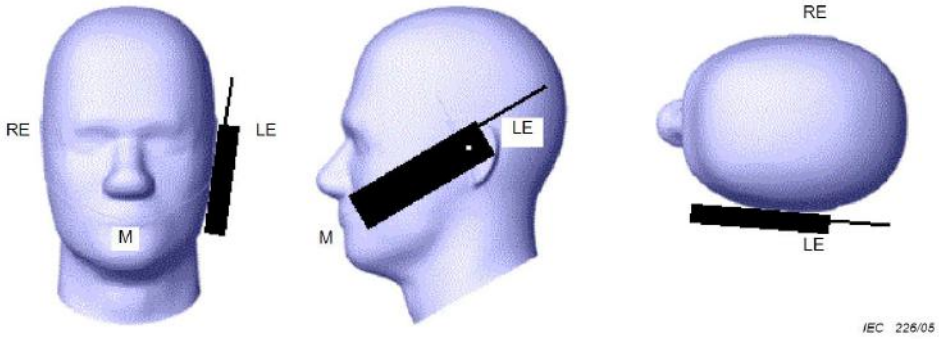
(c) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset,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



6.1.2 Cheek Position

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

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



6.1.3 Tilted Position

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

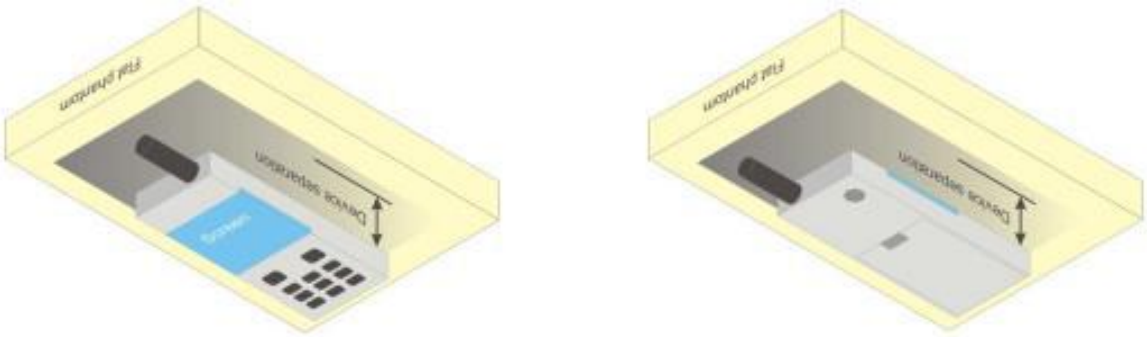
(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

6.2 Body-worn Position Conditions

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

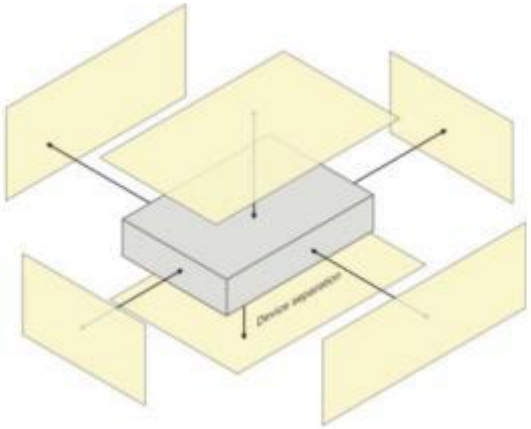
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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

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



6.3 Hotspot Mode Exposure Position Conditions

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



6.4 Product Specific 10g Exposure Consideration

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

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

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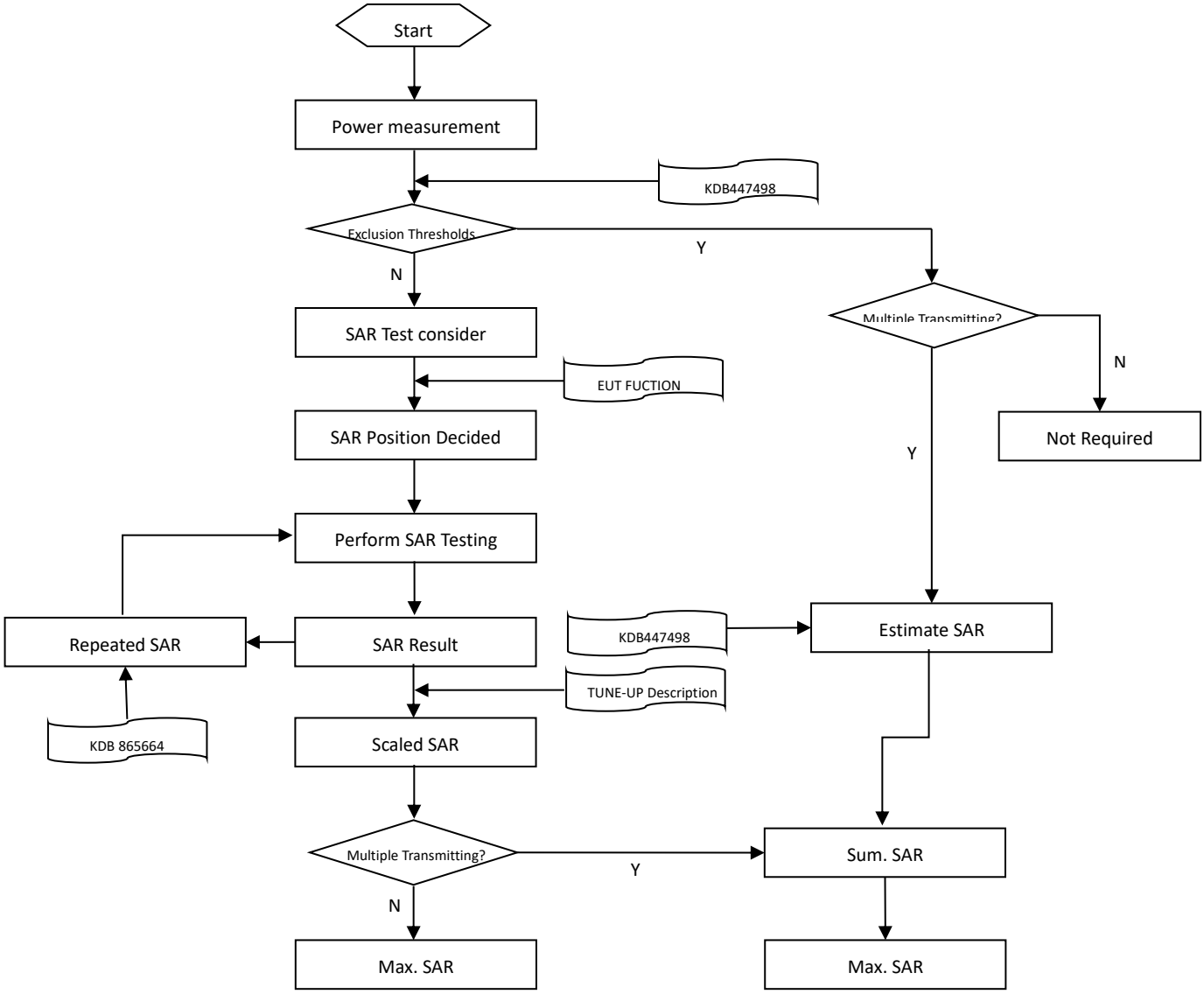
7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

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

7.3 Measurement Procedure

The following steps are used for each test position

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

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

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

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

7.4 Area & Zoom Scan Procedure

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

8 CONDUCTED RF OUPUT POWER

8.1 GSM

Please refer the document “Conducted RF Output Power List.pdf”.

8.2 WCDMA

Please refer the document “Conducted RF Output Power List.pdf”.

8.3 LTE

Please refer the document “Conducted RF Output Power List.pdf”.

8.4 TDD LTE (HPUE) Linearity Data Analysis

LTE Band 41(HPUE)-Linearity Data for Head Exposure Condition		
	LTE Band 41 (Power Class3)	LTE Band 41 (Power Class2)
Maximum Tune up Power(dBm)	18	20
Scaled 1g SAR (W/Kg)	0.769	0.786
Duty Cycle (%)	63.3	43.3
Frame Averaged (mW)	39.94	43.30
Linearity SAR (W/Kg)	0.834	N/A
% Deviation from Expected Linearity	N/A	-5.72%

LTE Band 41(HPUE)-Linearity Data for Body-worn Exposure Condition		
	LTE Band 41 (Power Class3)	LTE Band 41 (Power Class2)
Maximum Tune up Power(dBm)	18	20
Scaled 1g SAR (W/Kg)	0.094	0.097
Duty Cycle (%)	63.3	43.3
Frame Averaged (mW)	39.94	43.30
Linearity SAR (W/Kg)	0.102	N/A
% Deviation from Expected Linearity	N/A	-4.82%

LTE Band 41(HPUE)-Linearity Data for Hotspot Exposure Condition		
	LTE Band 41 (Power Class3)	LTE Band 41 (Power Class2)
Maximum Tune up Power(dBm)	19.5	21.5
Scaled 1g SAR (W/Kg)	0.705	0.722
Duty Cycle (%)	63.3	43.3
Frame Averaged (mW)	56.42	61.16
Linearity SAR (W/Kg)	0.764	N/A
% Deviation from Expected Linearity	N/A	-5.54%

Note:

1. The device can adjust uplink/downlink configuration automatically according to the transmitting power class level for LTE band 41.
2. According to TCB Workshop May 2017, Rel. 14 has introduced HPUE Power Class 2 for Band 41. HPUE Power Class 2 does not support uplink downlink configurations 0 and 6.
3. Power class 3 is expected to be the dominant use configuration; therefore, SAR should be tested as normally required.
4. Power class 2 is tested using the highest SAR test configuration in power class 3 of each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in power class 2.
5. Separate SAR testing for Power Class 2 is not required when
    a) The reported SAR vs. output power can be linearly scaled with < 10%
    b) Discrepancy between power classes and all reported 10g SAR are < 1.75 W/kg (The same procedures should be adapted for measurements according to extremity limits by applying a factor of 2.5 for extremity exposure.)

8.5 Intra-Band Uplink CA Power

Note:
1. This devices supports intra-band uplink CA of 7C/38C/41C.
2. For intra-band uplink carrier aggregation power verification and measurement is selected highest PCC and SCC bandwidth combination to do and was according to 3GPP 36.52101 sectino6.2.2A.1 and section 6.2.2A.2 test procedure.
3. For intra-band uplink CA output power was measured high / middle / low channel combination, and for SAR verification is selected highest output power combination with each exposure condition in each frequency band using the highest SAR configuration test in standalone LTE mode.

Please refer the document “Conducted RF Output Power List.pdf”.

8.6 LTE Downlink Carrier Aggregation Setup Configurations

LTE Carrier Aggregation (CA) was defined in 3GPP release 10 and higher. The LTE device in CA mode has one Primary Component Carrier (PCC) and one or more Secondary Component Carriers (SCC). PCC acts as the anchor carrier and can optionally cross-schedule data transmission on SCC. The RRC connection is only handled by one cell, the PCC for downlink and uplink communications. After making a data connection to the PCC, the LTE device adds the SCC on the downlink only. All uplink communications and acknowledgements remain identical to release 8 specifications on the PCC. The combinations of downlink carrier aggregation supported by this device are listed in below.

Please refer the document “Conducted RF Output Power List.pdf”.

8.7 5G NR

Please refer the document “Conducted RF Output Power List.pdf”.

8.8 WIFI

8.8.1 2.4G WIFI-SISO 1 (Level 1)

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	11.46	12.00	Yes
		6	2437	**11.47**	12.00	Yes
		11	2462	11.23	12.00	Yes
	802.11g	1	2412	10.47	11.00	No
		6	2437	10.48	11.00	No
		11	2462	10.54	11.00	No
	802.11n(HT20)	1	2412	10.31	11.00	No
		6	2437	10.49	11.00	No
		11	2462	10.59	11.00	No
	802.11n(HT40)	3	2422	10.54	11.00	No
		6	2437	10.47	11.00	No
		9	2452	10.36	11.00	No
	802.11ax(HE20)	1	2412	10.49	11.00	No
		6	2437	10.59	11.00	No
		11	2462	10.54	11.00	No
	802.11ax(HE40)	3	2422	10.54	11.00	No
		6	2437	10.40	11.00	No
		9	2452	10.57	11.00	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/ax) 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 than 802.11ax.

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 = 0.236 * (12.59mW/15.85mW) = 0.187 W/Kg, so 2.4G OFDM SAR test is not required.

8.8.2 2.4G WIFI-SISO 2 (Level 1)

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	**11.65**	12.00	Yes
		6	2437	11.53	12.00	Yes
		11	2462	11.55	12.00	Yes
	802.11g	1	2412	10.50	11.00	No
		6	2437	10.38	11.00	No
		11	2462	10.48	11.00	No
	802.11n(HT20)	1	2412	10.60	11.00	No
		6	2437	10.53	11.00	No
		11	2462	10.55	11.00	No
	802.11n(HT40)	3	2422	10.38	11.00	No
		6	2437	10.31	11.00	No
		9	2452	10.43	11.00	No
	802.11ax(HE20)	1	2412	10.42	11.00	No
		6	2437	10.55	11.00	No
		11	2462	10.33	11.00	No
	802.11ax(HE40)	3	2422	10.50	11.00	No
		6	2437	10.41	11.00	No
		9	2452	10.56	11.00	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/ax) 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 than 802.11ax.

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 = 0.236 * (12.59mW/15.85mW) = 0.187 W/Kg, so 2.4G OFDM SAR test is not required.

8.8.3 2.4G WIFI-MIMO 1 (Level 1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11n(HT20)	1	2412	7.74	8.00	No
		6	2437	7.59	8.00	No
		11	2462	7.71	8.00	No
	802.11n(HT40)	3	2422	7.78	8.00	No
		6	2437	7.66	8.00	No
		9	2452	7.82	8.00	No
	802.11ax(HE20)	1	2412	7.58	8.00	No
		6	2437	7.75	8.00	No
		11	2462	7.82	8.00	No
	802.11ax(HE40)	3	2422	7.59	8.00	No
		6	2437	7.66	8.00	No
		9	2452	7.77	8.00	No

8.8.4 2.4G WIFI-MIMO 2 (Level 1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11n(HT20)	1	2412	7.71	8.00	No
		6	2437	7.64	8.00	No
		11	2462	7.63	8.00	No
	802.11n(HT40)	3	2422	7.58	8.00	No
		6	2437	7.72	8.00	No
		9	2452	7.75	8.00	No
	802.11ax(HE20)	1	2412	7.67	8.00	No
		6	2437	7.82	8.00	No
		11	2462	7.80	8.00	No
	802.11ax(HE40)	3	2422	7.71	8.00	No
		6	2437	7.84	8.00	No
		9	2452	7.70	8.00	No

8.8.5 2.4G WIFI-SISO 1 (Level 2)

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	17.46	18.00	Yes
		6	2437	**17.51**	18.00	Yes
		11	2462	17.42	18.00	Yes
	802.11g	1	2412	16.45	17.00	No
		6	2437	16.50	17.00	No
		11	2462	16.39	17.00	No
	802.11n(HT20)	1	2412	16.45	17.00	No
		6	2437	16.53	17.00	No
		11	2462	16.41	17.00	No
	802.11n(HT40)	3	2422	16.54	17.00	No
		6	2437	16.53	17.00	No
		9	2452	16.39	17.00	No
	802.11ax(HE20)	1	2412	16.46	17.00	No
		6	2437	16.55	17.00	No
		11	2462	16.37	17.00	No
	802.11ax(HE40)	3	2422	16.42	17.00	No
		6	2437	16.56	17.00	No
		9	2452	16.41	17.00	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/ax) 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 than 802.11ax.

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 = 0.236 * (50.12mW/63.10mW) = 0.187 W/Kg, so 2.4G OFDM SAR test is not required.

8.8.6 2.4G WIFI-SISO 2 (Level 2)

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	17.35	18.00	Yes
		6	2437	17.39	18.00	Yes
		11	2462	**17.42**	18.00	Yes
	802.11g	1	2412	16.34	17.00	No
		6	2437	16.55	17.00	No
		11	2462	16.51	17.00	No
	802.11n(HT20)	1	2412	16.38	17.00	No
		6	2437	16.46	17.00	No
		11	2462	16.40	17.00	No
	802.11n(HT40)	3	2422	16.45	17.00	No
		6	2437	16.54	17.00	No
		9	2452	15.44	17.00	No
	802.11ax(HE20)	1	2412	16.49	17.00	No
		6	2437	16.47	17.00	No
		11	2462	16.39	17.00	No
	802.11ax(HE40)	3	2422	16.44	17.00	No
		6	2437	16.49	17.00	No
		9	2452	15.12	17.00	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/ax) 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 than 802.11ax.

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 = 0.236 * (50.12mW/63.10mW) = 0.187 W/Kg, so 2.4G OFDM SAR test is not required.

8.8.7 2.4G WIFI-MIMO 1 (Level 2)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11n(HT20)	1	2412	13.68	14.00	No
		6	2437	13.72	14.00	No
		11	2462	13.51	14.00	No
	802.11n(HT40)	3	2422	13.68	14.00	No
		6	2437	13.71	14.00	No
		9	2452	13.75	14.00	No
	802.11ax(HE20)	1	2412	13.76	14.00	No
		6	2437	13.77	14.00	No
		11	2462	13.61	14.00	No
	802.11ax(HE40)	3	2422	13.50	14.00	No
		6	2437	13.72	14.00	No
		9	2452	13.65	14.00	No

8.8.8 2.4G WIFI-MIMO 2 (Level 2)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11n(HT20)	1	2412	13.68	14.00	No
		6	2437	13.73	14.00	No
		11	2462	13.68	14.00	No
	802.11n(HT40)	3	2422	13.74	14.00	No
		6	2437	13.80	14.00	No
		9	2452	13.76	14.00	No
	802.11ax(HE20)	1	2412	13.71	14.00	No
		6	2437	13.72	14.00	No
		11	2462	13.76	14.00	No
	802.11ax(HE40)	3	2422	13.73	14.00	No
		6	2437	13.77	14.00	No
		9	2452	13.73	14.00	No

8.8.9 5G WIFI-SISO 1 (Level 1)

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	7.62	8.00	No
		44	5220	7.47	8.00	No
		48	5240	7.39	8.00	No
	802.11n(HT20)	36	5180	7.07	7.50	No
		44	5220	7.08	7.50	No
		48	5240	7.28	7.50	No
	802.11n(HT40)	38	5190	7.11	7.50	No
		46	5230	7.27	7.50	No
	802.11ac(VHT20)	36	5180	7.26	7.50	No
		44	5220	7.06	7.50	No
		48	5240	7.11	7.50	No
	802.11ac(VHT40)	38	5190	7.17	7.50	No
		46	5230	7.01	7.50	No
	802.11ac(VHT80)	42	5210	7.30	7.50	No
	802.11ac(VHT160)	50	5250	7.16	7.50	No
	802.11ax(HE20)	36	5180	6.66	7.00	No
		44	5220	6.53	7.00	No
		48	5240	6.69	7.00	No
	802.11ax(HE40)	38	5190	6.60	7.00	No
		46	5230	6.71	7.00	No
	802.11ax(HE80)	42	5210	6.64	7.00	No
	802.11ax(HE160)	50	5250	6.63	7.00	No
5.3 (5.25~5.35)	802.11a	52	5260	**7.53**	8.00	Yes
		60	5300	7.45	8.00	Yes
		64	5320	7.52	8.00	Yes
	802.11n(HT20)	52	5260	7.19	7.50	No
		60	5300	7.15	7.50	No
		64	5320	7.02	7.50	No
	802.11n(HT40)	54	5270	7.02	7.50	No
		62	5310	7.10	7.50	No
	802.11ac(VHT20)	52	5260	7.02	7.50	No
		60	5300	7.01	7.50	No
		64	5320	7.14	7.50	No
	802.11ac(VHT40)	54	5270	7.02	7.50	No
		62	5310	7.16	7.50	No
	802.11ac(VHT80)	58	5290	7.18	7.50	No

	802.11ax(HE20)	52	5260	6.72	7.00	No
		60	5300	6.56	7.00	No
		64	5320	6.70	7.00	No
	802.11ax(HE40)	54	5270	6.62	7.00	No
		62	5310	6.68	7.00	No
	802.11ax(HE80)	58	5290	6.74	7.00	No
5.6 (5.47~5.725)	802.11a	100	5500	**7.72**	8.00	Yes
		116	5580	7.54	8.00	Yes
		140	5700	7.63	8.00	Yes
	802.11n(HT20)	100	5500	7.08	7.50	No
		116	5580	7.08	7.50	No
		140	5700	7.30	7.50	No
	802.11n(HT40)	102	5510	7.15	7.50	No
		118	5590	7.17	7.50	No
		134	5670	7.12	7.50	No
	802.11ac(VHT20)	100	5500	7.11	7.50	No
		116	5580	7.21	7.50	No
		140	5700	7.04	7.50	No
	802.11ac(VHT40)	102	5510	7.23	7.50	No
		118	5590	7.19	7.50	No
		134	5670	7.15	7.50	No
	802.11ac(VHT80)	106	5530	7.12	7.50	No
		122	5610	7.12	7.50	No
		138	5690	7.21	7.50	No
	802.11ac(VHT160)	114	5570	7.01	7.50	No
	802.11ax(HE20)	100	5500	6.75	7.00	No
		116	5580	6.73	7.00	No
		140	5700	6.69	7.00	No
	802.11ax(HE40)	102	5510	6.63	7.00	No
		118	5590	6.53	7.00	No
		134	5670	6.66	7.00	No
	802.11ax(HE80)	106	5530	6.72	7.00	No
		122	5610	6.65	7.00	No
		138	5690	6.71	7.00	No
	802.11ax(HE160)	114	5570	6.61	7.00	No
5.8 (5.725~5.850)	802.11a	149	5745	**7.86**	8.00	Yes
		157	5785	7.82	8.00	Yes
		165	5825	7.85	8.00	Yes
	802.11n(HT20)	149	5745	7.10	7.50	No

		157	5785	7.19	7.50	No
		165	5825	7.20	7.50	No
	802.11n(HT40)	151	5755	7.14	7.50	No
		159	5795	7.08	7.50	No
	802.11ac(VHT20)	149	5745	7.09	7.50	No
		157	5785	7.30	7.50	No
		165	5825	7.22	7.50	No
	802.11ac(VHT40)	151	5755	7.09	7.50	No
		159	5795	7.16	7.50	No
	802.11ac(VHT80)	155	5775	7.05	7.50	No
	802.11ax(HE20)	149	5745	6.74	7.00	No
		157	5785	6.71	7.00	No
		165	5825	6.59	7.00	No
	802.11ax(HE40)	151	5755	6.75	7.00	No
		159	5795	6.67	7.00	No
	802.11ax(HE80)	155	5775	6.66	7.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 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.						

8.8.10 5G WIFI-SISO 2 (Level 1)

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	7.62	8.00	No
		44	5220	7.68	8.00	No
		48	5240	7.57	8.00	No
	802.11n(HT20)	36	5180	7.26	7.50	No
		44	5220	7.11	7.50	No
		48	5240	7.04	7.50	No
	802.11n(HT40)	38	5190	7.11	7.50	No
		46	5230	7.20	7.50	No
	802.11ac(VHT20)	36	5180	7.20	7.50	No
		44	5220	7.28	7.50	No
		48	5240	7.25	7.50	No
	802.11ac(VHT40)	38	5190	7.27	7.50	No
		46	5230	7.08	7.50	No
	802.11ac(VHT80)	42	5210	7.22	7.50	No
	802.11ac(VHT160)	50	5250	7.18	7.50	No
	802.11ax(HE20)	36	5180	6.60	7.00	No
		44	5220	6.55	7.00	No
		48	5240	6.53	7.00	No
	802.11ax(HE40)	38	5190	6.72	7.00	No
		46	5230	6.60	7.00	No
	802.11ax(HE80)	42	5210	6.76	7.00	No
	802.11ax(HE160)	50	5250	6.60	7.00	No
5.3 (5.25~5.35)	802.11a	52	5260	7.62	8.00	Yes
		60	5300	7.79	8.00	Yes
		64	5320	**7.83**	8.00	Yes
	802.11n(HT20)	52	5260	7.05	7.50	No
		60	5300	7.18	7.50	No
		64	5320	7.27	7.50	No
	802.11n(HT40)	54	5270	7.12	7.50	No
		62	5310	7.13	7.50	No
	802.11ac(VHT20)	52	5260	7.16	7.50	No
		60	5300	7.07	7.50	No
		64	5320	7.08	7.50	No
	802.11ac(VHT40)	54	5270	7.24	7.50	No
		62	5310	7.15	7.50	No
	802.11ac(VHT80)	58	5290	7.09	7.50	No

	802.11ax(HE20)	52	5260	6.65	7.00	No
		60	5300	6.67	7.00	No
		64	5320	6.72	7.00	No
	802.11ax(HE40)	54	5270	6.62	7.00	No
		62	5310	6.57	7.00	No
	802.11ax(HE80)	58	5290	6.75	7.00	No
5.6 (5.47~5.725)	802.11a	100	5500	**7.54**	8.00	Yes
		116	5580	7.53	8.00	Yes
		140	5700	7.48	8.00	Yes
	802.11n(HT20)	100	5500	7.11	7.50	No
		116	5580	7.12	7.50	No
		140	5700	7.11	7.50	No
	802.11n(HT40)	102	5510	7.16	7.50	No
		118	5590	7.30	7.50	No
		134	5670	7.28	7.50	No
	802.11ac(VHT20)	100	5500	7.15	7.50	No
		116	5580	7.26	7.50	No
		140	5700	7.29	7.50	No
	802.11ac(VHT40)	102	5510	7.08	7.50	No
		118	5590	7.10	7.50	No
		134	5670	7.30	7.50	No
	802.11ac(VHT80)	106	5530	7.23	7.50	No
		122	5610	7.09	7.50	No
		138	5690	7.15	7.50	No
	802.11ac(VHT160)	114	5570	7.09	7.50	No
	802.11ax(HE20)	100	5500	6.58	7.00	No
		116	5580	6.77	7.00	No
		140	5700	6.58	7.00	No
	802.11ax(HE40)	102	5510	6.54	7.00	No
		118	5590	6.67	7.00	No
		134	5670	6.72	7.00	No
	802.11ax(HE80)	106	5530	6.52	7.00	No
		122	5610	6.77	7.00	No
		138	5690	7.75	7.00	No
	802.11ax(HE160)	114	5570	6.71	7.00	No
5.8 (5.725~5.850)	802.11a	149	5745	7.64	8.00	Yes
		157	5785	**7.92**	8.00	Yes
		165	5825	7.82	8.00	Yes
	802.11n(HT20)	149	5745	7.11	7.50	No

		157	5785	7.13	7.50	No
		165	5825	7.02	7.50	No
	802.11n(HT40)	151	5755	7.25	7.50	No
		159	5795	7.08	7.50	No
	802.11ac(VHT20)	149	5745	7.11	7.50	No
		157	5785	7.02	7.50	No
		165	5825	7.11	7.50	No
	802.11ac(VHT40)	151	5755	7.03	7.50	No
		159	5795	7.17	7.50	No
	802.11ac(VHT80)	155	5775	7.26	7.50	No
	802.11ax(HE20)	149	5745	6.57	7.00	No
		157	5785	6.80	7.00	No
		165	5825	6.61	7.00	No
	802.11ax(HE40)	151	5755	6.77	7.00	No
		159	5795	6.74	7.00	No
	802.11ax(HE80)	155	5775	6.65	7.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 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.						

8.8.11 5G WIFI-MIMO 1 (Level 1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11n(HT20)	36	5180	4.19	4.50	No
		44	5220	4.08	4.50	No
		48	5240	4.20	4.50	No
	802.11n(HT40)	38	5190	4.19	4.50	No
		46	5230	4.19	4.50	No
	802.11ac(VHT20)	36	5180	4.17	4.50	No
		44	5220	4.19	4.50	No
		48	5240	4.29	4.50	No
	802.11ac(VHT40)	38	5190	4.18	4.50	No
		46	5230	4.13	4.50	No
	802.11ac(VHT80)	42	5210	4.17	4.50	No
	802.11ac(VHT160)	50	5250	4.27	4.50	No
	802.11ax(HE20)	36	5180	3.66	4.00	No
		44	5220	3.76	4.00	No
		48	5240	3.64	4.00	No
	802.11ax(HE40)	38	5190	3.75	4.00	No
		46	5230	3.83	4.00	No
	802.11ax(HE80)	42	5210	3.59	4.00	No
	802.11ax(HE160)	50	5250	3.66	4.00	No
5.3 (5.25~5.35)	802.11n(HT20)	52	5260	4.13	4.50	No
		60	5300	4.20	4.50	No
		64	5320	4.10	4.50	No
	802.11n(HT40)	54	5270	4.26	4.50	No
		62	5310	4.15	4.50	No
	802.11ac(VHT20)	52	5260	4.13	4.50	No
		60	5300	4.21	4.50	No
		64	5320	4.20	4.50	No
	802.11ac(VHT40)	54	5270	4.08	4.50	No
		62	5310	4.34	4.50	No
	802.11ac(VHT80)	58	5290	4.34	4.50	No
	802.11ax(HE20)	52	5260	3.75	4.00	No
		60	5300	3.58	4.00	No
		64	5320	3.67	4.00	No
	802.11ax(HE40)	54	5270	3.80	4.00	No
		62	5310	3.77	4.00	No
	802.11ax(HE80)	58	5290	3.63	4.00	No

5.6 (5.47~5.725)	802.11n(HT20)	100	5500	4.26	4.50	No
		116	5580	4.12	4.50	No
		140	5700	4.26	4.50	No
	802.11n(HT40)	102	5510	4.33	4.50	No
		118	5590	4.31	4.50	No
		134	5670	4.16	4.50	No
	802.11ac(VHT20)	100	5500	4.13	4.50	No
		116	5580	4.22	4.50	No
		140	5700	4.18	4.50	No
	802.11ac(VHT40)	102	5510	4.26	4.50	No
		118	5590	4.32	4.50	No
		134	5670	4.28	4.50	No
	802.11ac(VHT80)	106	5530	4.15	4.50	No
		122	5610	4.34	4.50	No
		138	5690	4.32	4.50	No
	802.11ac(VHT160)	114	5570	4.31	4.50	No
	802.11ax(HE20)	100	5500	3.74	4.00	No
		116	5580	3.60	4.00	No
		140	5700	3.73	4.00	No
	802.11ax(HE40)	102	5510	3.79	4.00	No
		118	5590	3.64	4.00	No
		134	5670	3.60	4.00	No
	802.11ax(HE80)	106	5530	3.76	4.00	No
		122	5610	3.68	4.00	No
		138	5690	3.67	4.00	No
	802.11ax(HE160)	114	5570	3.71	4.00	No
5.8 (5.725~5.850)	802.11n(HT20)	149	5745	4.13	4.50	No
		157	5785	4.11	4.50	No
		165	5825	4.24	4.50	No
	802.11n(HT40)	151	5755	4.26	4.50	No
		159	5795	4.09	4.50	No
	802.11ac(VHT20)	149	5745	4.25	4.50	No
		157	5785	4.15	4.50	No
		165	5825	4.33	4.50	No
	802.11ac(VHT40)	151	5755	4.24	4.50	No
		159	5795	4.33	4.50	No
	802.11ac(VHT80)	155	5775	4.13	4.50	No
	802.11ax(HE20)	149	5745	3.73	4.00	No
		157	5785	3.78	4.00	No

		165	5825	3.73	4.00	No
	802.11ax(HE40)	151	5755	3.66	4.00	No
		159	5795	3.67	4.00	No
	802.11ax(HE80)	155	5775	3.66	4.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 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.						

8.8.12 5G WIFI-MIMO 2 (Level 1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11n(HT20)	36	5180	4.30	4.50	No
		44	5220	4.29	4.50	No
		48	5240	4.12	4.50	No
	802.11n(HT40)	38	5190	4.28	4.50	No
		46	5230	4.09	4.50	No
	802.11ac(VHT20)	36	5180	4.17	4.50	No
		44	5220	4.34	4.50	No
		48	5240	4.23	4.50	No
	802.11ac(VHT40)	38	5190	4.09	4.50	No
		46	5230	4.34	4.50	No
	802.11ac(VHT80)	42	5210	4.20	4.50	No
	802.11ac(VHT160)	50	5250	4.12	4.50	No
	802.11ax(HE20)	36	5180	3.80	4.00	No
		44	5220	3.63	4.00	No
		48	5240	3.84	4.00	No
	802.11ax(HE40)	38	5190	3.62	4.00	No
		46	5230	3.59	4.00	No
	802.11ax(HE80)	42	5210	3.67	4.00	No
	802.11ax(HE160)	50	5250	3.76	4.00	No
5.3 (5.25~5.35)	802.11n(HT20)	52	5260	4.10	4.50	No
		60	5300	4.12	4.50	No
		64	5320	4.30	4.50	No
	802.11n(HT40)	54	5270	4.28	4.50	No
		62	5310	4.30	4.50	No
	802.11ac(VHT20)	52	5260	4.34	4.50	No
		60	5300	4.16	4.50	No
		64	5320	4.23	4.50	No
	802.11ac(VHT40)	54	5270	4.11	4.50	No
		62	5310	4.24	4.50	No
	802.11ac(VHT80)	58	5290	4.17	4.50	No
	802.11ax(HE20)	52	5260	3.83	4.00	No
		60	5300	3.84	4.00	No
		64	5320	3.69	4.00	No
	802.11ax(HE40)	54	5270	3.65	4.00	No
		62	5310	3.59	4.00	No
	802.11ax(HE80)	58	5290	3.70	4.00	No

5.6 (5.47~5.725)	802.11n(HT20)	100	5500	4.11	4.50	No
		116	5580	4.19	4.50	No
		140	5700	4.18	4.50	No
	802.11n(HT40)	102	5510	4.28	4.50	No
		118	5590	4.11	4.50	No
		134	5670	4.11	4.50	No
	802.11ac(VHT20)	100	5500	4.11	4.50	No
		116	5580	4.12	4.50	No
		140	5700	4.18	4.50	No
	802.11ac(VHT40)	102	5510	4.26	4.50	No
		118	5590	4.20	4.50	No
		134	5670	4.26	4.50	No
	802.11ac(VHT80)	106	5530	4.28	4.50	No
		122	5610	4.16	4.50	No
		138	5690	4.22	4.50	No
	802.11ac(VHT160)	114	5570	4.09	4.50	No
	802.11ax(HE20)	100	5500	3.77	4.00	No
		116	5580	3.71	4.00	No
		140	5700	3.62	4.00	No
	802.11ax(HE40)	102	5510	3.69	4.00	No
		118	5590	3.65	4.00	No
		134	5670	3.59	4.00	No
	802.11ax(HE80)	106	5530	3.70	4.00	No
		122	5610	3.78	4.00	No
		138	5690	3.73	4.00	No
	802.11ax(HE160)	114	5570	3.72	4.00	No
5.8 (5.725~5.850)	802.11n(HT20)	149	5745	4.21	4.50	No
		157	5785	4.29	4.50	No
		165	5825	4.19	4.50	No
	802.11n(HT40)	151	5755	4.12	4.50	No
		159	5795	4.17	4.50	No
	802.11ac(VHT20)	149	5745	4.30	4.50	No
		157	5785	4.24	4.50	No
		165	5825	4.32	4.50	No
	802.11ac(VHT40)	151	5755	4.24	4.50	No
		159	5795	4.25	4.50	No
	802.11ac(VHT80)	155	5775	4.16	4.50	No
	802.11ax(HE20)	149	5745	3.81	4.00	No
		157	5785	3.63	4.00	No

		165	5825	3.67	4.00	No
	802.11ax(HE40)	151	5755	3.78	4.00	No
		159	5795	3.84	4.00	No
	802.11ax(HE80)	155	5775	3.64	4.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 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.						

8.8.13 5G WIFI-SISO 1 (Level 2)

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	16.78	17.00	No
		44	5220	16.61	17.00	No
		48	5240	16.65	17.00	No
	802.11n(HT20)	36	5180	16.05	16.50	No
		44	5220	16.16	16.50	No
		48	5240	16.09	16.50	No
	802.11n(HT40)	38	5190	16.11	16.50	No
		46	5230	16.33	16.50	No
	802.11ac(VHT20)	36	5180	16.01	16.50	No
		44	5220	16.00	16.50	No
		48	5240	16.24	16.50	No
	802.11ac(VHT40)	38	5190	16.10	16.50	No
		46	5230	16.33	16.50	No
	802.11ac(VHT80)	42	5210	16.05	16.50	No
	802.11ac(VHT160)	50	5250	16.06	16.50	No
	802.11ax(HE20)	36	5180	15.51	16.00	No
		44	5220	15.71	16.00	No
		48	5240	15.78	16.00	No
	802.11ax(HE40)	38	5190	15.71	16.00	No
		46	5230	15.53	16.00	No
	802.11ax(HE80)	42	5210	15.71	16.00	No
	802.11ax(HE160)	50	5250	15.64	16.00	No
5.3 (5.25~5.35)	802.11a	52	5260	**16.72**	17.00	Yes
		60	5300	16.68	17.00	Yes
		64	5320	16.61	17.00	Yes
	802.11n(HT20)	52	5260	16.31	16.50	No
		60	5300	16.23	16.50	No
		64	5320	16.01	16.50	No
	802.11n(HT40)	54	5270	16.18	16.50	No
		62	5310	16.31	16.50	No
	802.11ac(VHT20)	52	5260	16.17	16.50	No
		60	5300	16.21	16.50	No
		64	5320	16.07	16.50	No
	802.11ac(VHT40)	54	5270	16.38	16.50	No
		62	5310	16.31	16.50	No
	802.11ac(VHT80)	58	5290	16.23	16.50	No

	802.11ax(HE20)	52	5260	15.86	16.00	No
		60	5300	15.69	16.00	No
		64	5320	15.67	16.00	No
	802.11ax(HE40)	54	5270	15.61	16.00	No
		62	5310	15.63	16.00	No
	802.11ax(HE80)	58	5290	15.53	16.00	No
5.6 (5.47~5.725)	802.11a	100	5500	**16.73**	17.00	Yes
		104	5520	16.68	17.00	No
		116	5580	16.46	17.00	Yes
		136	5680	16.53	17.00	No
		140	5700	16.54	17.00	Yes
	802.11n(HT20)	100	5500	16.24	16.50	No
		116	5580	16.31	16.50	No
		140	5700	16.02	16.50	No
	802.11n(HT40)	102	5510	16.33	16.50	No
		118	5590	16.05	16.50	No
		134	5670	16.31	16.50	No
	802.11ac(VHT20)	100	5500	16.25	16.50	No
		116	5580	16.34	16.50	No
		140	5700	16.39	16.50	No
	802.11ac(VHT40)	102	5510	16.16	16.50	No
		118	5590	16.06	16.50	No
		134	5670	16.13	16.50	No
	802.11ac(VHT80)	106	5530	16.16	16.50	No
		122	5610	16.21	16.50	No
		138	5690	13.29	14.00	No
	802.11ac(VHT160)	114	5570	16.21	16.50	No
	802.11ax(HE20)	100	5500	15.61	16.00	No
		116	5580	15.51	16.00	No
		140	5700	15.61	16.00	No
	802.11ax(HE40)	102	5510	15.60	16.00	No
		118	5590	15.77	16.00	No
		134	5670	15.60	16.00	No
	802.11ax(HE80)	106	5530	15.54	16.00	No
		122	5610	15.43	16.00	No
		138	5690	12.83	13.00	No
	802.11ax(HE160)	114	5570	15.66	16.00	No
5.8 (5.725~5.850)	802.11a	149	5745	13.62	14.00	Yes
		157	5785	13.40	14.00	Yes

		165	5825	**13.70**	14.00	Yes
	802.11n(HT20)	149	5745	13.41	14.00	No
		157	5785	13.33	14.00	No
		165	5825	13.43	14.00	No
	802.11n(HT40)	151	5755	13.14	14.00	No
		159	5795	13.06	14.00	No
	802.11ac(VHT20)	149	5745	13.27	14.00	No
		157	5785	13.18	14.00	No
		165	5825	13.35	14.00	No
	802.11ac(VHT40)	151	5755	13.10	14.00	No
		159	5795	13.12	14.00	No
	802.11ac(VHT80)	155	5775	12.50	13.50	No
	802.11ax(HE20)	149	5745	12.61	13.00	No
		157	5785	12.58	13.00	No
		165	5825	12.85	13.00	No
	802.11ax(HE40)	151	5755	12.52	13.00	No
		159	5795	12.73	13.00	No
	802.11ax(HE80)	155	5775	12.45	13.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 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.						

8.8.14 5G WIFI-SISO 2 (Level 2)

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	16.74	17.00	No
		44	5220	16.83	17.00	No
		48	5240	16.46	17.00	No
	802.11n(HT20)	36	5180	16.11	16.50	No
		44	5220	16.03	16.50	No
		48	5240	16.08	16.50	No
	802.11n(HT40)	38	5190	13.86	14.00	No
		46	5230	16.24	16.50	No
	802.11ac(VHT20)	36	5180	16.26	16.50	No
		44	5220	16.38	16.50	No
		48	5240	16.03	16.50	No
	802.11ac(VHT40)	38	5190	13.36	14.00	No
		46	5230	16.11	16.50	No
	802.11ac(VHT80)	42	5210	12.47	13.00	No
	802.11ac(VHT160)	50	5250	10.79	11.00	No
	802.11ax(HE20)	36	5180	15.51	16.00	No
		44	5220	15.42	16.00	No
		48	5240	15.39	16.00	No
	802.11ax(HE40)	38	5190	13.77	14.00	No
		46	5230	15.41	16.00	No
	802.11ax(HE80)	42	5210	11.91	12.00	No
	802.11ax(HE160)	50	5250	10.79	11.00	No
5.3 (5.25~5.35)	802.11a	52	5260	**16.72**	17.00	Yes
		60	5300	16.52	17.00	Yes
		64	5320	14.64	15.00	Yes
	802.11n(HT20)	52	5260	15.94	16.50	No
		60	5300	16.15	16.50	No
		64	5320	14.13	15.00	No
	802.11n(HT40)	54	5270	16.23	16.50	No
		62	5310	13.25	14.00	No
	802.11ac(VHT20)	52	5260	16.33	16.50	No
		60	5300	16.05	16.50	No
		64	5320	14.78	15.00	No
	802.11ac(VHT40)	54	5270	16.33	16.50	No
		62	5310	13.31	14.00	No
	802.11ac(VHT80)	58	5290	14.21	15.00	No

	802.11ax(HE20)	52	5260	15.54	16.00	No
		60	5300	15.35	16.00	No
		64	5320	14.16	15.00	No
	802.11ax(HE40)	54	5270	15.49	16.00	No
		62	5310	12.80	13.00	No
	802.11ax(HE80)	58	5290	13.56	14.00	No
\5.6 (5.47~5.725)	802.11a	100	5500	13.78	14.00	No
		104	5520	16.50	17.00	Yes
		116	5580	**16.56**	17.00	Yes
		136	5680	16.44	17.00	Yes
		140	5700	13.37	14.00	No
	802.11n(HT20)	100	5500	13.95	14.00	No
		116	5580	16.15	16.50	No
		140	5700	13.26	14.00	No
	802.11n(HT40)	102	5510	11.27	12.00	No
		118	5590	16.31	16.50	No
		134	5670	16.14	16.50	No
	802.11ac(VHT20)	100	5500	13.91	14.00	No
		116	5580	16.32	16.50	No
		140	5700	13.60	14.00	No
	802.11ac(VHT40)	102	5510	10.79	11.00	No
		118	5590	15.87	16.50	No
		134	5670	13.11	14.00	No
	802.11ac(VHT80)	106	5530	9.14	10.00	No
		122	5610	16.35	16.50	No
		138	5690	13.22	14.00	No
	802.11ac(VHT160)	114	5570	10.35	11.00	No
	802.11ax(HE20)	100	5500	12.60	13.00	No
		116	5580	15.42	16.00	No
		140	5700	12.63	13.00	No
	802.11ax(HE40)	102	5510	11.15	12.00	No
		118	5590	15.50	16.00	No
		134	5670	15.42	16.00	No
	802.11ax(HE80)	106	5530	8.67	9.00	No
		122	5610	15.75	16.00	No
		138	5690	12.60	13.00	No
	802.11ax(HE160)	114	5570	10.73	11.00	No
5.8 (5.725~5.850)	802.11a	149	5745	13.82	14.00	Yes
		157	5785	**13.89**	14.00	Yes

		165	5825	13.59	14.00	Yes
	802.11n(HT20)	149	5745	13.42	14.00	No
		157	5785	13.15	14.00	No
		165	5825	13.13	14.00	No
	802.11n(HT40)	151	5755	13.09	14.00	No
		159	5795	13.23	14.00	No
	802.11ac(VHT20)	149	5745	13.45	14.00	No
		157	5785	13.29	14.00	No
		165	5825	13.51	14.00	No
	802.11ac(VHT40)	151	5755	13.15	14.00	No
		159	5795	13.24	14.00	No
	802.11ac(VHT80)	155	5775	13.26	13.50	No
	802.11ax(HE20)	149	5745	12.89	13.00	No
		157	5785	12.75	13.00	No
		165	5825	12.68	13.00	No
	802.11ax(HE40)	151	5755	12.67	13.00	No
		159	5795	12.59	13.00	No
	802.11ax(HE80)	155	5775	12.45	13.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 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.						

8.8.15 5G WIFI-MIMO 1 (Level 2)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11n(HT20)	36	5180	12.71	13.50	No
		44	5220	13.11	13.50	No
		48	5240	13.37	13.50	No
	802.11n(HT40)	38	5190	12.77	13.50	No
		46	5230	13.27	13.50	No
	802.11ac(VHT20)	36	5180	12.77	13.50	No
		44	5220	13.46	13.50	No
		48	5240	13.33	13.50	No
	802.11ac(VHT40)	38	5190	12.79	13.50	No
		46	5230	13.06	13.50	No
	802.11ac(VHT80)	42	5210	11.27	12.00	No
	802.11ac(VHT160)	50	5250	9.03	10.00	No
	802.11ax(HE20)	36	5180	12.51	13.00	No
		44	5220	12.82	13.00	No
		48	5240	12.75	13.00	No
	802.11ax(HE40)	38	5190	12.51	13.00	No
		46	5230	12.69	13.00	No
	802.11ax(HE80)	42	5210	10.48	11.00	No
	802.11ax(HE160)	50	5250	9.31	10.00	No
5.3 (5.25~5.35)	802.11n(HT20)	52	5260	13.14	13.50	No
		60	5300	13.35	13.50	No
		64	5320	13.10	13.50	No
	802.11n(HT40)	54	5270	13.27	13.50	No
		62	5310	13.03	13.50	No
	802.11ac(VHT20)	52	5260	12.98	13.50	No
		60	5300	13.04	13.50	No
		64	5320	12.83	13.50	No
	802.11ac(VHT40)	54	5270	12.98	13.50	No
		62	5310	13.12	13.50	No
	802.11ac(VHT80)	58	5290	13.23	13.50	No
	802.11ax(HE20)	52	5260	12.26	13.00	No
		60	5300	12.36	13.00	No
		64	5320	12.85	13.00	No
	802.11ax(HE40)	54	5270	12.83	13.00	No
		62	5310	12.62	13.00	No
	802.11ax(HE80)	58	5290	12.56	13.00	No

5.6 (5.47~5.725)	802.11n(HT20)	100	5500	13.17	13.50	No
		116	5580	13.17	13.50	No
		140	5700	13.02	13.50	No
	802.11n(HT40)	102	5510	10.21	11.00	No
		118	5590	13.04	13.50	No
		134	5670	13.33	13.50	No
	802.11ac(VHT20)	100	5500	13.12	13.50	No
		116	5580	13.21	13.50	No
		140	5700	13.00	13.50	No
	802.11ac(VHT40)	102	5510	10.25	11.00	No
		118	5590	13.35	13.50	No
		134	5670	12.95	13.50	No
	802.11ac(VHT80)	106	5530	8.17	10.00	No
		122	5610	13.01	13.50	No
		138	5690	16.31	16.50	No
	802.11ac(VHT160)	114	5570	7.07	8.00	No
	802.11ax(HE20)	100	5500	12.87	13.00	No
		116	5580	12.76	13.00	No
		140	5700	8.50	9.00	No
	802.11ax(HE40)	102	5510	10.06	11.00	No
		118	5590	12.67	13.00	No
		134	5670	12.24	13.00	No
	802.11ax(HE80)	106	5530	7.51	9.00	No
		122	5610	12.77	13.00	No
		138	5690	15.84	16.00	No
	802.11ax(HE160)	114	5570	7.42	9.00	No
5.8 (5.725~5.850)	802.11n(HT20)	149	5745	10.15	11.00	No
		157	5785	10.53	11.00	No
		165	5825	10.89	11.00	No
	802.11n(HT40)	151	5755	10.16	11.00	No
		159	5795	10.73	11.00	No
	802.11ac(VHT20)	149	5745	10.18	11.00	No
		157	5785	10.08	11.00	No
		165	5825	10.24	11.00	No
	802.11ac(VHT40)	151	5755	10.19	11.00	No
		159	5795	10.06	11.00	No
	802.11ac(VHT80)	155	5775	10.57	11.00	No
	802.11ax(HE20)	149	5745	10.03	11.00	No
		157	5785	10.11	11.00	No

		165	5825	10.22	11.00	No
	802.11ax(HE40)	151	5755	9.90	10.00	No
		159	5795	9.97	10.00	No
	802.11ax(HE80)	155	5775	9.81	10.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 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.						

8.8.16 5G WIFI-MIMO 2 (Level 2)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11n(HT20)	36	5180	12.79	13.50	No
		44	5220	13.10	13.50	No
		48	5240	12.95	13.50	No
	802.11n(HT40)	38	5190	13.24	13.50	No
		46	5230	13.32	13.50	No
	802.11ac(VHT20)	36	5180	13.10	13.50	No
		44	5220	12.93	13.50	No
		48	5240	13.06	13.50	No
	802.11ac(VHT40)	38	5190	13.34	13.50	No
		46	5230	13.27	13.50	No
	802.11ac(VHT80)	42	5210	11.34	12.00	No
	802.11ac(VHT160)	50	5250	8.91	10.00	No
	802.11ax(HE20)	36	5180	12.62	13.00	No
		44	5220	12.65	13.00	No
		48	5240	12.76	13.00	No
	802.11ax(HE40)	38	5190	12.47	13.00	No
		46	5230	12.44	13.00	No
	802.11ax(HE80)	42	5210	10.61	11.00	No
	802.11ax(HE160)	50	5250	9.34	10.00	No
5.3 (5.25~5.35)	802.11n(HT20)	52	5260	13.38	13.50	No
		60	5300	13.03	13.50	No
		64	5320	13.39	13.50	No
	802.11n(HT40)	54	5270	13.31	13.50	No
		62	5310	13.06	13.50	No
	802.11ac(VHT20)	52	5260	13.41	13.50	No
		60	5300	12.37	13.50	No
		64	5320	13.25	13.50	No
	802.11ac(VHT40)	54	5270	12.99	13.50	No
		62	5310	13.03	13.50	No
	802.11ac(VHT80)	58	5290	12.55	13.50	No
	802.11ax(HE20)	52	5260	12.71	13.00	No
		60	5300	12.86	13.00	No
		64	5320	12.77	13.00	No
	802.11ax(HE40)	54	5270	12.73	13.00	No
		62	5310	12.56	13.00	No
	802.11ax(HE80)	58	5290	12.71	13.00	No

5.6 (5.47~5.725)	802.11n(HT20)	100	5500	13.16	13.50	No
		116	5580	12.92	13.50	No
		140	5700	13.23	13.50	No
	802.11n(HT40)	102	5510	9.91	11.00	No
		118	5590	13.33	13.50	No
		134	5670	12.89	13.50	No
	802.11ac(VHT20)	100	5500	13.04	13.50	No
		116	5580	13.30	13.50	No
		140	5700	13.03	13.50	No
	802.11ac(VHT40)	102	5510	10.24	11.00	No
		118	5590	12.84	13.50	No
		134	5670	12.68	13.50	No
	802.11ac(VHT80)	106	5530	9.17	10.00	No
		122	5610	12.96	13.50	No
		138	5690	16.31	16.50	No
	802.11ac(VHT160)	114	5570	7.85	8.00	No
	802.11ax(HE20)	100	5500	12.38	13.00	No
		116	5580	12.58	13.00	No
		140	5700	7.02	9.00	No
	802.11ax(HE40)	102	5510	10.03	11.00	No
		118	5590	12.83	13.00	No
		134	5670	12.70	13.00	No
	802.11ax(HE80)	106	5530	8.56	9.00	No
		122	5610	12.56	13.00	No
		138	5690	15.69	16.00	No
	802.11ax(HE160)	114	5570	8.32	9.00	No
5.8 (5.725~5.850)	802.11n(HT20)	149	5745	10.48	11.00	No
		157	5785	10.56	11.00	No
		165	5825	10.42	11.00	No
	802.11n(HT40)	151	5755	10.05	11.00	No
		159	5795	10.14	11.00	No
	802.11ac(VHT20)	149	5745	10.86	11.00	No
		157	5785	10.05	11.00	No
		165	5825	11.03	11.00	No
	802.11ac(VHT40)	151	5755	11.01	11.00	No
		159	5795	10.16	11.00	No
	802.11ac(VHT80)	155	5775	9.68	11.00	No
	802.11ax(HE20)	149	5745	10.46	11.00	No
		157	5785	9.56	11.00	No

		165	5825	9.75	11.00	No
	802.11ax(HE40)	151	5755	9.78	10.00	No
		159	5795	9.57	10.00	No
	802.11ax(HE80)	155	5775	9.26	10.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 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.						

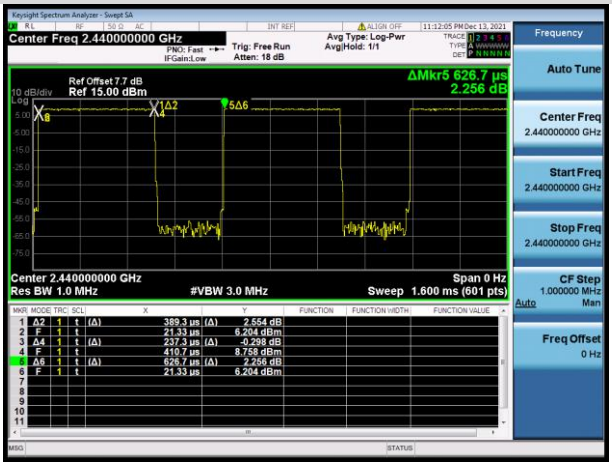
8.9 Bluetooth

Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	7.42	8.96	7.53	7.25	7.57	8.11
Tune-Up Limit (dBm)	9.00			9.00		
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Average Power (dBm)	7.42	8.51	7.07	/	/	/
Tune-Up Limit (dBm)	9.00			/		
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
Average Power (dBm)	7.73	**8.97**	7.55	7.86	9.09	7.72
Tune-Up Limit (dBm)	9.50			9.50		

Note: The Bluetooth duty cycle is 62.13 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle Test plots

BLE-1Mbps



8.10 Power Reduction List

1. This mobile phone device supports the receiver detection mechanism. This device uses the receiver to indicate whether the user is making a call in head.
2. When device is making call in head, the power reduction will applied for SAR compliance.
3. When there is a voice call (including VOIP), and the audio is actively routed through the headset or speaker, which indicating the body exposure conditions will trigger the body exposure reduced the power.
4. When this device used data mode only, and the receiver will not work too, the reduced the power are same as body exposure.

Reduced Power Level Table

Reduced level	Receiver state	Transmitting conditions
Level1	On (head scenario)	WWAN / WLAN Use Only WWAN + WLAN
Level2	Off (Body scenario)	WWAN / WLAN Use Only WWAN + WLAN

1. This mobile phone device supports the receiver detection mechanism. This device uses the receiver to indicate whether the user is making a call in head or body.
2. When there is a voice call (including VOIP) and the audio is actively routed through the earpiece receiver, which indicating the head exposure condition it will trigger the head exposure reduced the power.
3. When there is a voice call (including VOIP), and the audio is actively routed through the headset or speaker, which indicating the body exposure conditions will trigger the body exposure reduced the power.
4. When this device used data mode only, and the receiver will not work too, the reduced the power are same as body exposure.

WWAN Antenna Power Table

WWAN Antenna			
Mode	Antenna	Receiver on	Receiver off
		Head	Body
		Standalone & Simultaneous transmission	Standalone & Simultaneous transmission
		Level 1	Level 2
GSM 850	Ant1	33.00	33.00
GPRS850 1 Tx Slot	Ant1	33.00	33.00
GPRS850 2 Tx Slots	Ant1	30.50	30.50
GPRS850 3 Tx Slots	Ant1	28.50	28.50
GPRS850 4 Tx Slots	Ant1	26.00	26.00
EGPRS850 1 Tx Slot	Ant1	29.00	29.00
EGPRS850 2 Tx Slots	Ant1	28.00	28.00
EGPRS850 3 Tx Slots	Ant1	26.00	26.00
EGPRS850 4 Tx Slots	Ant1	24.50	24.50
GSM 850	Ant0	33.00	33.00
GPRS850 1 Tx Slot	Ant0	33.00	33.00
GPRS850 2 Tx Slots	Ant0	30.50	30.50
GPRS850 3 Tx Slots	Ant0	28.50	28.50
GPRS850 4 Tx Slots	Ant0	26.00	26.00
EGPRS850 1 Tx Slot	Ant0	29.00	29.00
EGPRS850 2 Tx Slots	Ant0	28.00	28.00
EGPRS850 3 Tx Slots	Ant0	26.00	26.00
EGPRS850 4 Tx Slots	Ant0	24.50	24.50
GSM 1900	Ant1	29.00	28.50
GPRS1900 1 Tx Slot	Ant1	28.50	28.50
GPRS1900 2 Tx Slots	Ant1	28.50	28.50
GPRS1900 3 Tx Slots	Ant1	26.00	26.00
GPRS1900 4 Tx Slots	Ant1	24.00	23.50

EGPRS1900 1 Tx Slot	Ant1	28.00	28.00
EGPRS1900 2 Tx Slots	Ant1	27.00	27.00
EGPRS1900 3 Tx Slots	Ant1	25.00	25.00
EGPRS1900 4 Tx Slots	Ant1	23.00	23.00
GSM 1900	Ant2	29.50	28.50
GPRS1900 1 Tx Slot	Ant2	29.50	28.50
GPRS1900 2 Tx Slots	Ant2	29.00	28.00
GPRS1900 3 Tx Slots	Ant2	27.00	27.00
GPRS1900 4 Tx Slots	Ant2	25.00	24.50
EGPRS1900 1 Tx Slot	Ant2	29.00	28.50
EGPRS1900 2 Tx Slots	Ant2	28.00	27.50
EGPRS1900 3 Tx Slots	Ant2	26.00	25.50
EGPRS1900 4 Tx Slots	Ant2	24.00	24.00
WCDMA Band2 RMC	Ant1	20.00	20.00
HSDPA Subtest-1	Ant1	19.00	19.00
HSDPA Subtest-2	Ant1	19.00	19.00
HSDPA Subtest-3	Ant1	18.50	18.50
HSDPA Subtest-4	Ant1	18.50	18.50
HSUPA Subtest-1	Ant1	17.50	19.00
HSUPA Subtest-2	Ant1	16.00	17.00
HSUPA Subtest-3	Ant1	16.50	18.00
HSUPA Subtest-4	Ant1	15.50	17.00
HSUPA Subtest-5	Ant1	17.50	19.00
WCDMA Band2 RMC	Ant2	21.00	20.00
HSDPA Subtest-1	Ant2	20.00	19.00
HSDPA Subtest-2	Ant2	20.00	19.00
HSDPA Subtest-3	Ant2	19.50	18.50
HSDPA Subtest-4	Ant2	19.50	18.50
HSUPA Subtest-1	Ant2	20.00	19.00
HSUPA Subtest-2	Ant2	18.00	17.00
HSUPA Subtest-3	Ant2	19.00	18.00
HSUPA Subtest-4	Ant2	18.00	17.00
HSUPA Subtest-5	Ant2	20.00	19.00
WCDMA Band4 RMC	Ant1	18.50	18.50
HSDPA Subtest-1	Ant1	17.50	17.50
HSDPA Subtest-2	Ant1	17.50	17.50
HSDPA Subtest-3	Ant1	17.00	17.00
HSDPA Subtest-4	Ant1	17.00	17.00
HSUPA Subtest-1	Ant1	19.00	17.50
HSUPA Subtest-2	Ant1	17.00	15.50
HSUPA Subtest-3	Ant1	18.00	16.50

HSUPA Subtest-4	Ant1	17.00	15.50
HSUPA Subtest-5	Ant1	19.00	17.50
WCDMA Band4 RMC	Ant2	20.00	20.00
HSDPA Subtest-1	Ant2	19.00	19.00
HSDPA Subtest-2	Ant2	19.50	19.00
HSDPA Subtest-3	Ant2	18.50	18.50
HSDPA Subtest-4	Ant2	18.50	18.50
HSUPA Subtest-1	Ant2	19.00	19.00
HSUPA Subtest-2	Ant2	17.50	17.00
HSUPA Subtest-3	Ant2	18.00	18.50
HSUPA Subtest-4	Ant2	17.50	17.00
HSUPA Subtest-5	Ant2	19.00	19.00
WCDMA Band5 RMC	Ant1	24.00	24.00
HSDPA Subtest-1	Ant1	23.00	23.00
HSDPA Subtest-2	Ant1	23.00	23.00
HSDPA Subtest-3	Ant1	22.50	22.50
HSDPA Subtest-4	Ant1	22.50	22.50
HSUPA Subtest-1	Ant1	24.00	24.00
HSUPA Subtest-2	Ant1	22.00	22.00
HSUPA Subtest-3	Ant1	23.00	23.00
HSUPA Subtest-4	Ant1	22.00	22.00
HSUPA Subtest-5	Ant0	24.00	24.00
WCDMA Band5 RMC	Ant0	24.00	24.00
HSDPA Subtest-1	Ant0	23.00	23.00
HSDPA Subtest-2	Ant0	23.00	23.00
HSDPA Subtest-3	Ant0	22.50	22.50
HSDPA Subtest-4	Ant0	23.00	23.00
HSUPA Subtest-1	Ant0	23.00	23.00
HSUPA Subtest-2	Ant0	21.00	21.00
HSUPA Subtest-3	Ant0	22.00	22.00
HSUPA Subtest-4	Ant0	21.00	21.00
HSUPA Subtest-5	Ant0	23.00	23.00
CDMA BC0	Ant1	24.00	24.00
CDMA BC0	Ant0	24.50	24.50
LTE Band5	Ant1	21.50	24.00
LTE Band5	Ant0	22.00	24.00
LTE Band7	Ant1	16.00	16.00
LTE Band7	Ant2	17.00	19.50
LTE Band38	Ant1	19.00	16.00
LTE Band38	Ant2	20.50	17.00
LTE Band41（PC2）	Ant1	20.00	20.00

LTE Band41（PC3）	Ant1	18.00	18.00
LTE Band41（PC2）	Ant2	21.50	21.50
LTE Band41（PC3）	Ant2	19.50	19.50

SA&ENDC Antenna Power Table

SA&ENDC Antenna				
Mode	Band	Antenna	Receiver on	Receiver off
			Head	Body&Limbs
			Standalone & Simultaneous transmission	Standalone & Simultaneous transmission
			Level 1	Level 2
5G NR n41 SA (PC2&3)	n41	Ant5	17.00	21.00
5G NR n77 SA (PC2&3) 3700-3980MHz	n77	Ant5	16.00	21.00
5G NR n77 SA (PC2&3) 3450-3550MHz	n77	Ant5	16.00	21.00
5G NR n78 SA (PC2&3) 3700-3800MHz	n78	Ant5	12.50	21.00
5G NR n78 SA (PC2&3) 3450-3550MHz	n78	Ant5	12.50	21.00
DC_5A+n78A	n78	Ant5	12.50	21.00
	LTE Band5	Ant1	21.50	24.00
DC_5A+n78A	n78	Ant5	12.50	21.00
	LTE Band5	Ant0	22.00	24.00
DC_7A+n78A	n78	Ant5	12.50	21.00
	LTE Band7	Ant1	16.00	16.00
DC_7A+n78A	n78	Ant5	12.50	21.00
	LTE Band7	Ant2	17.00	19.50
DC_38A+n78A	n78	Ant5	12.50	21.00
	LTE Band38	Ant1	19.00	16.00
DC_38A+n78A	n78	Ant5	12.50	21.00
	LTE Band38	Ant0	20.50	17.00

ENDC Antenna Power Table

EN-DC Configurations	E-UTRA	NR	Antenna Configurations	
	Band	Band	1	2
DC_5A+n78A	LTE Band5	n78	LTE Ant.0	LTE Ant.1
			NR Ant.5	NR Ant.5
DC_7A+n78A	LTE Band7	n78	LTE Ant.2	LTE Ant.1
			NR Ant.5	NR Ant.5
DC_38A+n78A	LTE Band38	n78	LTE Ant.2	LTE Ant.1
			NR Ant.5	NR Ant.5

WLAN Antenna Reduced Power Level Table

WLAN Antenna 3		
Mode	Receiver on	Receiver off
	Head	Body&Limbs
	Standalone & Simultaneous transmission	Standalone & Simultaneous transmission
	Level1	Level2
2.4G WLAN 802.11b	12.00	18.00
2.4G WLAN 802.11g	11.00	17.00
2.4G WLAN 802.11n20	11.00	17.00
2.4G WLAN 802.11n40	11.00	17.00
2.4G WLAN 802.11ax20	11.00	17.00
2.4G WLAN 802.11ax40	11.00	17.00
5.2G WLAN 802.11a	8.00	17.00
5.2G WLAN 802.11n20	7.50	16.50
5.2G WLAN 802.11n40	7.50	16.50
5.2G WLAN 802.11ac20	7.50	16.50
5.2G WLAN 802.11ac40	7.50	16.50
5.2G WLAN 802.11ac80	7.50	16.50
5.2G WLAN 802.11ac160	7.50	16.50
5.2G WLAN 802.11ax20	7.00	16.00
5.2G WLAN 802.11ax40	7.00	16.00
5.2G WLAN 802.11ax80	7.00	16.00
5.2G WLAN 802.11ax160	7.00	16.00
5.3G WLAN 802.11a	8.00	17.00
5.3G WLAN 802.11n20	7.50	16.50
5.3G WLAN 802.11n40	7.50	16.50
5.3G WLAN 802.11ac20	7.50	16.50
5.3G WLAN 802.11ac40	7.50	16.50
5.3G WLAN 802.11ac80	7.50	16.50
5.3G WLAN 802.11ax20	7.00	16.00
5.3G WLAN 802.11ax40	7.00	16.00
5.3G WLAN 802.11ax80	7.00	16.00
5.6G WLAN 802.11a	8.00	17.00
5.6G WLAN 802.11n20	7.50	16.50
5.6G WLAN 802.11n40	7.50	16.50
5.6G WLAN 802.11ac20	7.50	16.50
5.6G WLAN 802.11ac40	7.50	16.50
5.6G WLAN 802.11ac80	7.50	16.50
5.6G WLAN 802.11ac160	7.50	16.50

5.2&5.3G WLAN 802.11ax20	7.00	16.00
5.2&5.3G WLAN 802.11ax40	7.00	16.00
5.2&5.3G WLAN 802.11ax80	7.00	16.00
5.2&5.3G WLAN 802.11ax160	7.00	16.00
5.8G WLAN 802.11a	8.00	14.00
5.8G WLAN 802.11n20	7.50	13.50
5.8G WLAN 802.11n40	7.50	13.50
5.8G WLAN 802.11ac20	7.50	13.50
5.8G WLAN 802.11ac40	7.50	13.50
5.8G LAN 802.11ac80	7.50	13.50
5.2&5.3G WLAN 802.11ax20	7.00	13.00
5.2&5.3G WLAN 802.11ax40	7.00	13.00
5.2&5.3G WLAN 802.11ax80	7.00	13.00
Bluetooth	9.50	9.50

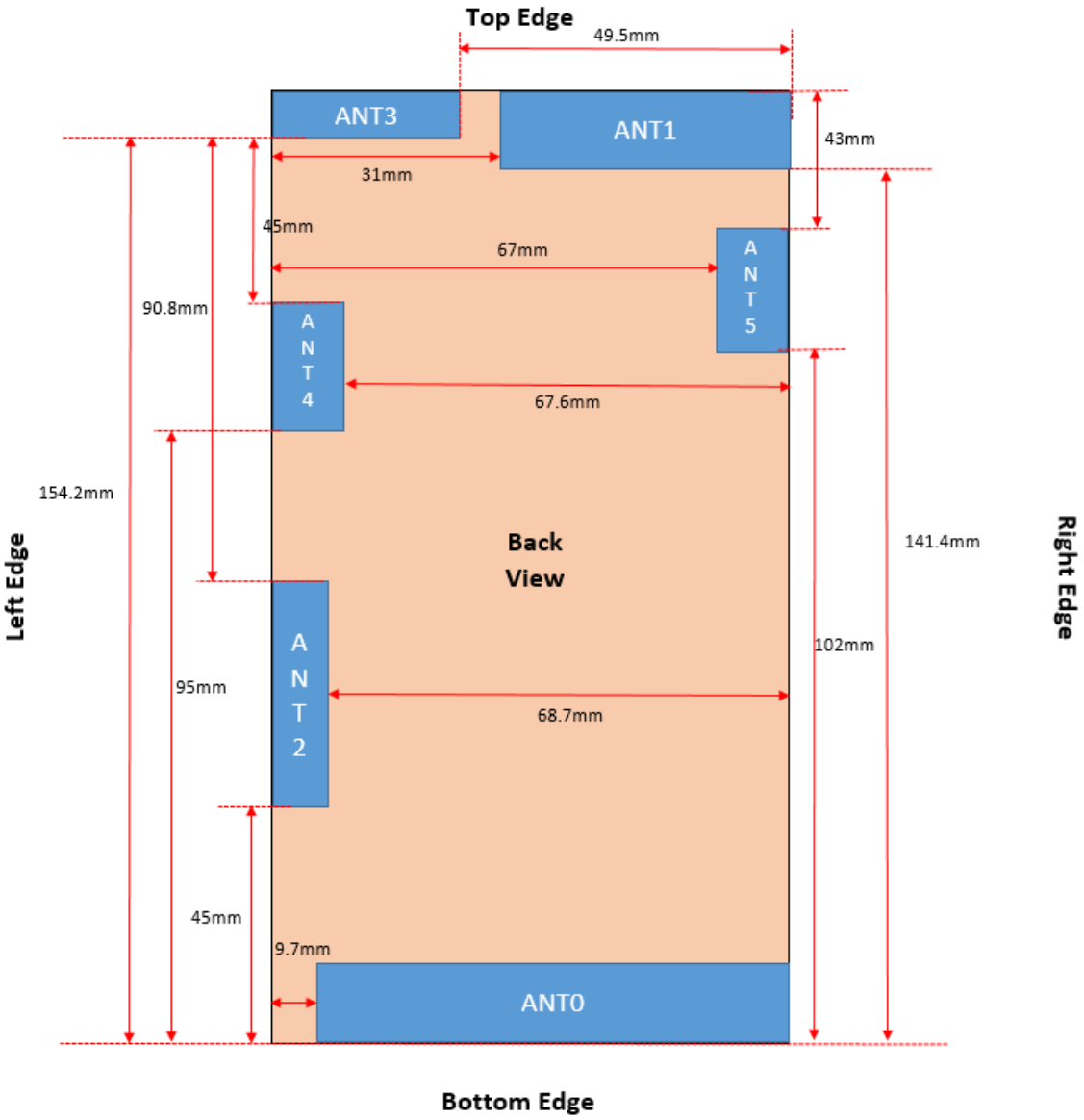
WLAN Antenna 4		
Mode	Receiver on	Receiver off
	Head	Body&Limbs
	Standalone & Simultaneous transmission	Standalone & Simultaneous transmission
	Level1	Level2
2.4G WLAN 802.11b	12.00	18.00
2.4G WLAN 802.11g	11.00	17.00
2.4G WLAN 802.11n20	11.00	17.00
2.4G WLAN 802.11n40	11.00	17.00
2.4G WLAN 802.11ax20	11.00	17.00
2.4G WLAN 802.11ax40	11.00	17.00
5.2G WLAN 802.11a	8.00	17.00
5.2G WLAN 802.11n20	7.50	16.50
5.2G WLAN 802.11n40	7.50	16.50
5.2G WLAN 802.11ac20	7.50	16.50
5.2G WLAN 802.11ac40	7.50	16.50
5.2G WLAN 802.11ac80	7.50	13.00
5.2G WLAN 802.11ac160	7.50	11.00
5.2G WLAN 802.11ax20	7.00	16.00
5.2G WLAN 802.11ax40	7.00	16.00
5.2G WLAN 802.11ax80	7.00	12.00
5.2G WLAN 802.11ax160	7.00	11.00
5.3G WLAN 802.11a	8.00	17.00
5.3G WLAN 802.11n20	7.50	16.50

5.3G WLAN 802.11n40	7.50	16.50
5.3G WLAN 802.11ac20	7.50	16.50
5.3G WLAN 802.11ac40	7.50	16.50
5.3G WLAN 802.11ac80	7.50	15.00
5.3G WLAN 802.11ax20	7.00	16.00
5.3G WLAN 802.11ax40	7.00	16.00
5.3G WLAN 802.11ax80	7.00	14.00
5.6G WLAN 802.11a	8.00	17.00
5.6G WLAN 802.11n20	7.50	16.50
5.6G WLAN 802.11n40	7.50	16.50
5.6G WLAN 802.11ac20	7.50	16.50
5.6G WLAN 802.11ac40	7.50	16.50
5.6G WLAN 802.11ac80	7.50	16.50
5.6G WLAN 802.11ac160	7.50	11.00
5.2&5.3G WLAN 802.11ax20	7.00	16.00
5.2&5.3G WLAN 802.11ax40	7.00	16.00
5.2&5.3G WLAN 802.11ax80	7.00	16.00
5.2&5.3G WLAN 802.11ax160	7.00	11.00
5.8G WLAN 802.11a	8.00	14.00
5.8G WLAN 802.11n20	7.50	13.50
5.8G WLAN 802.11n40	7.50	13.50
5.8G WLAN 802.11ac20	7.50	13.50
5.8G WLAN 802.11ac40	7.50	13.50
5.8G LAN 802.11ac80	7.50	13.50
5.2&5.3G WLAN 802.11ax20	7.00	13.00
5.2&5.3G WLAN 802.11ax40	7.00	13.00
5.2&5.3G WLAN 802.11ax80	7.00	13.00

WLAN Antenna 3&4		
Mode	Receiver on	Receiver off
	Head	Body&Limbs
	Standalone & Simultaneous transmission	Standalone & Simultaneous transmission
	Level1	Level2
2.4G WLAN 802.11b	/	/
2.4G WLAN 802.11g	/	/
2.4G WLAN 802.11n20	8.00	14.00
2.4G WLAN 802.11n40	8.00	14.00
2.4G WLAN 802.11ax20	8.00	14.00
2.4G WLAN 802.11ax40	8.00	14.00

5.2G WLAN 802.11a	/	/
5.2G WLAN 802.11n20	4.50	13.50
5.2G WLAN 802.11n40	4.50	13.50
5.2G WLAN 802.11ac20	4.50	13.50
5.2G WLAN 802.11ac40	4.50	13.50
5.2G WLAN 802.11ac80	4.50	12.00
5.2G WLAN 802.11ac160	4.50	10.00
5.2G WLAN 802.11ax20	4.00	13.00
5.2G WLAN 802.11ax40	4.00	13.00
5.2G WLAN 802.11ax80	4.00	11.00
5.2G WLAN 802.11ax160	4.00	10.00
5.3G WLAN 802.11a	/	/
5.3G WLAN 802.11n20	4.50	13.50
5.3G WLAN 802.11n40	4.50	13.50
5.3G WLAN 802.11ac20	4.50	13.50
5.3G WLAN 802.11ac40	4.50	13.50
5.3G WLAN 802.11ac80	4.50	13.50
5.3G WLAN 802.11ax20	4.00	13.00
5.3G WLAN 802.11ax40	4.00	13.00
5.3G WLAN 802.11ax80	4.00	13.00
5.6G WLAN 802.11a	/	/
5.6G WLAN 802.11n20	4.50	13.50
5.6G WLAN 802.11n40	4.50	13.50
5.6G WLAN 802.11ac20	4.50	13.50
5.6G WLAN 802.11ac40	4.50	13.50
5.6G WLAN 802.11ac80	4.50	13.50
5.6G WLAN 802.11ac160	4.50	8.00
5.2&5.3G WLAN 802.11ax20	4.00	13.00
5.2&5.3G WLAN 802.11ax40	4.00	13.00
5.2&5.3G WLAN 802.11ax80	4.00	13.00
5.2&5.3G WLAN 802.11ax160	4.00	9.00
5.8G WLAN 802.11a	/	/
5.8G WLAN 802.11n20	4.50	13.50
5.8G WLAN 802.11n40	4.50	13.50
5.8G WLAN 802.11ac20	4.50	13.50
5.8G WLAN 802.11ac40	4.50	13.50
5.8G LAN 802.11ac80	4.50	13.50
5.2&5.3G WLAN 802.11ax20	4.00	13.00
5.2&5.3G WLAN 802.11ax40	4.00	13.00
5.2&5.3G WLAN 802.11ax80	4.00	13.00

9 TEST EXCLUSION CONSIDERATION



Antenna	Support Bands
ANT0	GSM850
	WCDMA B5; BC0
	LTE B5
ANT1	GSM850/1900
	WCDMA B2/4/5; BC0
	LTE B5/7/38/41
ANT2	GSM1900
	WCDMA B2/4
	LTE B7/38/41
ANT3	WIFI 2.4G; WIFI5G; BT
ANT4	WIFI 2.4G; WIFI5G
ANT5	5G n41/77/78

Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
ANT0	<5	<5	9.7	<5	>25	<5
ANT1	<5	<5	>25	<5	<5	>25
ANT2	<5	<5	<5	>25	>25	>25
ANT3	<5	<5	<5	>25	<5	>25
ANT4	<5	<5	<5	>25	>25	>25
ANT5	<5	<5	>25	<5	>25	>25

9.1 SAR Test Exclusion Consideration Table

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

ANT0

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 850	Distance to User			<5mm	<5mm	9.7mm	<5mm	>25mm	<5mm
	Data	30.50	1122.02	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User			<5mm	<5mm	9.7mm	<5mm	>25mm	<5mm
	RMC	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
CDMA BC0	Distance to User			<5mm	<5mm	9.7mm	<5mm	>25mm	<5mm
	RMC	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<5mm	<5mm	9.7mm	<5mm	>25mm	<5mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes

ANT1

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 850	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	Data	30.50	1122.02	Yes	Yes	No	Yes	Yes	No
GSM 1900	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	Data	28.50	707.95	Yes	Yes	No	Yes	Yes	No
WCDMA Band 2	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	RMC	20.00	100.00	Yes	Yes	No	Yes	Yes	No
WCDMA Band 4	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	RMC	18.50	70.79	Yes	Yes	No	Yes	Yes	No
WCDMA Band 5	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	RMC	24.00	251.19	Yes	Yes	No	Yes	Yes	No
CDMA BC0	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	RMC	24.00	251.19	Yes	Yes	No	Yes	Yes	No
LTE Band 5	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	QPSK	24.50	281.84	Yes	Yes	No	Yes	Yes	No
LTE Band 7	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	QPSK	16.00	39.81	Yes	Yes	No	Yes	Yes	No
LTE Band 38	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	QPSK	19.00	79.43	Yes	Yes	No	Yes	Yes	No
LTE Band 41	Distance to User			<5mm	<5mm	>25mm	<5mm	<5mm	>25mm
	QPSK	18.00	63.10	Yes	Yes	No	Yes	Yes	No

ANT2

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 1900	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	Data	29.00	794.33	Yes	Yes	Yes	No	No	No
WCDMA Band 2	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	RMC	21.00	125.89	Yes	Yes	Yes	No	No	No
WCDMA Band 4	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	RMC	20.00	100.00	Yes	Yes	Yes	No	No	No
LTE Band 7	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	QPSK	19.50	89.13	Yes	Yes	Yes	No	No	No
LTE Band 38	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	QPSK	20.50	112.20	Yes	Yes	Yes	No	No	No
LTE Band 41	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	QPSK	21.50	141.25	Yes	Yes	Yes	No	No	No

ANT3

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11b	18.00	63.10	Yes	Yes	Yes	No	Yes	No
	802.11g	17.00	50.12	No	No	No	No	No	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	17.00	50.12	No	No	No	No	No	No
	802.11ax(HE20)	17.00	50.12	No	No	No	No	No	No
	802.11ax(HE40)	17.00	50.12	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	16.50	44.67	No	No	No	No	No	No
	802.11n(HT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT20)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT80)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT160)	16.50	44.67	No	No	No	No	No	No
	802.11ax(HE20)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE40)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE80)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE160)	16.00	39.81	No	No	No	No	No	No
WLAN	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm

5.3 G	802.11a	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	16.50	44.67	No	No	No	No	No	No
	802.11n(HT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT20)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT80)	16.50	44.67	No	No	No	No	No	No
	802.11ax(HE20)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE40)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE80)	16.00	39.81	No	No	No	No	No	No
WLAN 5.6 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	17.00	50.12	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	16.50	44.67	No	No	No	No	No	No
	802.11n(HT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT20)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT80)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT160)	16.50	44.67	No	No	No	No	No	No
	802.11ax(HE20)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE40)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE80)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE160)	16.00	39.81	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	802.11a	14.00	25.12	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	14.00	25.12	No	No	No	No	No	No
	802.11n(HT40)	14.00	25.12	No	No	No	No	No	No
	802.11ac(VHT20)	14.00	25.12	No	No	No	No	No	No
	802.11ac(VHT40)	14.00	25.12	No	No	No	No	No	No
	802.11ac(VHT80)	13.50	22.39	No	No	No	No	No	No
	802.11ax(HE20)	13.00	19.95	No	No	No	No	No	No
	802.11ax(HE40)	13.00	19.95	No	No	No	No	No	No
	802.11ax(HE80)	13.00	19.95	No	No	No	No	No	No
Bluetooth	Distance to User			<5mm	<5mm	<5mm	>25mm	<5mm	>25mm
	BR+EDR	9.00	7.94	No	No	No	No	No	No
	BLE	9.50	8.91	Yes	Yes	Yes	No	Yes	No

ANT4

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	802.11b	18.00	63.10	Yes	Yes	Yes	No	No	No
	802.11g	17.00	50.12	No	No	No	No	No	No
	802.11n(HT20)	17.00	50.12	No	No	No	No	No	No
	802.11n(HT40)	17.00	50.12	No	No	No	No	No	No
	802.11ax(HE20)	17.00	50.12	No	No	No	No	No	No
	802.11ax(HE40)	17.00	50.12	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	802.11a	17.00	50.12	Yes	Yes	Yes	No	No	No
	802.11n(HT20)	16.50	44.67	No	No	No	No	No	No
	802.11n(HT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT20)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT80)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT160)	16.50	44.67	No	No	No	No	No	No
	802.11ax(HE20)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE40)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE80)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE160)	16.00	39.81	No	No	No	No	No	No
WLAN 5.3 G	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	802.11a	17.00	50.12	Yes	Yes	Yes	No	No	No
	802.11n(HT20)	16.50	44.67	No	No	No	No	No	No
	802.11n(HT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT20)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT80)	16.50	44.67	No	No	No	No	No	No
	802.11ax(HE20)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE40)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE80)	16.00	39.81	No	No	No	No	No	No
WLAN 5.6 G	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	802.11a	17.00	50.12	Yes	Yes	Yes	No	No	No
	802.11n(HT20)	16.50	44.67	No	No	No	No	No	No
	802.11n(HT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT20)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT40)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT80)	16.50	44.67	No	No	No	No	No	No
	802.11ac(VHT160)	16.50	44.67	No	No	No	No	No	No

	802.11ax(HE20)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE40)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE80)	16.00	39.81	No	No	No	No	No	No
	802.11ax(HE160)	16.00	39.81	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<5mm	<5mm	<5mm	>25mm	>25mm	>25mm
	802.11a	14.00	25.12	Yes	Yes	Yes	No	No	No
	802.11n(HT20)	14.00	25.12	No	No	No	No	No	No
	802.11n(HT40)	14.00	25.12	No	No	No	No	No	No
	802.11ac(VHT20)	14.00	25.12	No	No	No	No	No	No
	802.11ac(VHT40)	14.00	25.12	No	No	No	No	No	No
	802.11ac(VHT80)	13.50	22.39	No	No	No	No	No	No
	802.11ax(HE20)	13.00	19.95	No	No	No	No	No	No
	802.11ax(HE40)	13.00	19.95	No	No	No	No	No	No
	802.11ax(HE80)	13.00	19.95	No	No	No	No	No	No

ANT5

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
n41	Distance to User			<5mm	<5mm	>25mm	<5mm	>25mm	>25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	No	Yes	No	No
n77	Distance to User			<5mm	<5mm	>25mm	<5mm	>25mm	>25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	No	Yes	No	No
n78	Distance to User			<5mm	<5mm	>25mm	<5mm	>25mm	>25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	No	Yes	No	No

Note:

1. Maximum power is the source-based time-average power and represents the maximum RF output power including tune-up tolerance among production units
2. Per KDB 447498 D01, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D01, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is < 5mm, 5mm is used to determine SAR exclusion threshold
4. Per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
   a. f(GHz) is the RF channel transmit frequency in GHz
   b. Power and distance are rounded to the nearest mW and mm before calculation
   c. The result is rounded to one decimal place for comparison
   d. For < 50 mm distance, we just calculate mW of the exclusion threshold value (3.0) to do compare.
   This formula is [3.0] / [√f(GHz)] ·[(min. test separation distance, mm)] = exclusion threshold of mW.
5. Per KDB 447498 D01, at 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following
   a. [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·(f(MHz)/150)] mW, at 100 MHz to 1500 MHz
   b. [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
6. Per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA /HSUPA /DC-HSDPA output power is < 0.25dB higher than RMC12.2Kbps, or reported SAR with RMC 12.2kbps setting is ≤ 1.2W/kg, HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
7. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
8. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
   a. When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
   b. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
9. Per KDB 248227 D01 SAR is not required for the following U-NII-1 and U-NII-2A bands conditions.
   a. When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
   b. When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

10 TEST RESULT

10.1 GSM 850

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	GPRS (2slots)	Left Cheek	0	251	848.8	-0.09	0.567	30.09	30.50	1.099	0.623	/
	Level1		Left Tilt	0	251	848.8	-0.13	0.453	30.09	30.50	1.099	0.498	/
	Level1		Right Cheek	0	251	848.8	-0.08	0.660	30.09	30.50	1.099	**0.725**	1#
	Level1		Right Tilt	0	251	848.8	0.08	0.652	30.09	30.50	1.099	0.717	/
Ant.0	Level1	GPRS (2slots)	Left Cheek	0	251	848.8	-0.16	0.152	30.22	30.50	1.068	0.162	/
	Level1		Left Tilt	0	251	848.8	-0.10	0.077	30.22	30.50	1.068	0.082	/
	Level1		Right Cheek	0	251	848.8	0.04	0.098	30.22	30.50	1.068	0.105	/
	Level1		Right Tilt	0	251	848.8	0.18	0.050	30.22	30.50	1.068	0.053	/
Body-worn Accessory													
Ant.1	Level2	GPRS (2slots)	Front Side	15	251	848.8	0.10	0.102	30.09	30.50	1.099	0.112	/
	Level2		Back Side	15	251	848.8	0.08	0.126	30.09	30.50	1.099	**0.138**	2#
Ant.0	Level2	GPRS (2slots)	Front Side	15	251	848.8	-0.18	0.099	30.22	30.50	1.068	0.106	/
	Level2		Back Side	15	251	848.8	-0.10	0.111	30.22	30.50	1.068	0.119	/
Hotspot													
Ant.1	Level2	GPRS (2slots)	Front Side	10	251	848.8	0.06	0.194	30.09	30.50	1.099	0.213	/
	Level2		Back Side	10	251	848.8	0.08	0.254	30.09	30.50	1.099	**0.279**	3#
	Level2		Right Edge	10	251	848.8	0.16	0.116	30.09	30.50	1.099	0.127	/
	Level2		Top Edge	10	251	848.8	-0.13	0.220	30.09	30.50	1.099	0.242	/
Ant.0	Level2	GPRS (2slots)	Front Side	10	251	848.8	0.08	0.134	30.22	30.50	1.068	0.143	/
	Level2		Back Side	10	251	848.8	0.13	0.154	30.22	30.50	1.068	0.164	/
	Level2		Left Edge	10	251	848.8	0.02	0.070	30.22	30.50	1.068	0.075	/
	Level2		Right Edge	10	251	848.8	-0.08	0.165	30.22	30.50	1.068	0.176	/
	Level2		Bottom Edge	10	251	848.8	-0.13	0.137	30.22	30.50	1.068	0.146	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.2 GSM 1900

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	GPRS (2slots)	Left Cheek	0	512	1850.2	-0.11	0.458	28.14	28.50	1.087	0.498	/
	Level1		Left Tilt	0	512	1850.2	-0.11	0.297	28.14	28.50	1.087	0.323	/
	Level1		Right Cheek	0	512	1850.2	-0.19	0.762	28.14	28.50	1.087	**0.828**	4#
	Level1			0	661	1880.0	0.06	0.714	28.00	28.50	1.122	0.801	/
	Level1			0	810	1909.8	-0.09	0.733	27.98	28.50	1.128	0.827	/
	Level1		Right Tilt	0	512	1850.2	0.00	0.514	28.14	28.50	1.087	0.559	/
Ant.2	Level1	GPRS (2slots)	Left Cheek	0	512	1850.2	-0.09	0.152	28.92	29.00	1.020	0.155	/
	Level1		Left Tilt	0	512	1850.2	0.04	0.051	28.92	29.00	1.020	0.052	/
	Level1		Right Cheek	0	512	1850.2	0.15	0.417	28.92	29.00	1.020	0.425	/
	Level1		Right Tilt	0	512	1850.2	-0.05	0.048	28.92	29.00	1.020	0.049	/
Body-worn Accessory													
Ant.1	Level2	GPRS (2slots)	Front Side	15	810	1909.8	-0.05	0.053	28.02	28.50	1.118	0.059	/
	Level2		Back Side	15	810	1909.8	0.11	0.084	28.02	28.50	1.118	0.094	/
Ant.2	Level2	GPRS (3slots)	Front Side	15	512	1850.2	0.02	0.072	26.65	27.00	1.083	0.078	/
	Level2		Back Side	15	512	1850.2	0.10	0.092	26.65	27.00	1.083	**0.099**	5#
Hotspot													
Ant.1	Level2	GPRS (2slots)	Front Side	10	810	1909.8	-0.10	0.167	28.02	28.50	1.118	0.187	/
	Level2		Back Side	10	810	1909.8	0.10	0.192	28.02	28.50	1.118	0.215	/
	Level2		Right Edge	10	810	1909.8	-0.13	0.173	28.02	28.50	1.118	0.194	/
	Level2		Top Edge	10	810	1909.8	-0.08	0.141	28.02	28.50	1.118	0.158	/
Ant.2	Level2	GPRS (3slots)	Front Side	10	512	1850.2	-0.07	0.276	26.65	27.00	1.083	0.299	/
	Level2		Back Side	10	512	1850.2	-0.06	0.253	26.65	27.00	1.083	0.275	/
	Level2		Left Edge	10	512	1850.2	-0.12	0.832	26.65	27.00	1.083	**0.901**	6#
	Level2			10	661	1880.0	0.04	0.806	26.65	27.00	1.083	0.873	/
	Level2			10	810	1909.8	0.09	0.764	26.65	27.00	1.083	0.828	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.3WCDMA Band 2

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	RMC	Left Cheek	0	9400	1880.0	0.05	0.267	19.59	20.00	1.099	0.294	/
	Level1		Left Tilt	0	9400	1880.0	-0.17	0.203	19.59	20.00	1.099	0.223	/
	Level1		Right Cheek	0	9400	1880.0	0.14	0.596	19.59	20.00	1.099	**0.655**	7#
	Level1		Right Tilt	0	9400	1880.0	0.10	0.339	19.59	20.00	1.099	0.372	/
Ant.2	Level1	RMC	Left Cheek	0	9400	1880.0	-0.07	0.163	20.98	21.00	1.005	0.164	/
	Level1		Left Tilt	0	9400	1880.0	0.05	0.045	20.98	21.00	1.005	0.045	/
	Level1		Right Cheek	0	9400	1880.0	0.03	0.394	20.98	21.00	1.005	0.396	/
	Level1		Right Tilt	0	9400	1880.0	-0.02	0.059	20.98	21.00	1.005	0.059	/
Body-worn Accessory													
Ant.1	Level2	RMC	Front Side	15	9400	1880.0	-0.17	0.044	19.65	20.00	1.084	0.048	/
	Level2		Back Side	15	9400	1880.0	0.16	0.052	19.65	20.00	1.084	0.056	/
Ant.2	Level2	RMC	Front Side	15	9400	1880.0	-0.01	0.081	19.97	20.00	1.007	0.082	/
	Level2		Back Side	15	9400	1880.0	0.04	0.083	19.97	20.00	1.007	**0.084**	8#
Hotspot													
Ant.1	Level2	RMC	Front Side	10	9400	1880.0	0.06	0.096	19.65	20.00	1.084	0.105	/
	Level2		Back Side	10	9400	1880.0	-0.18	0.112	19.65	20.00	1.084	0.121	/
	Level2		Right Edge	10	9400	1880.0	-0.06	0.110	19.65	20.00	1.084	0.119	/
	Level2		Top Edge	10	9400	1880.0	0.15	0.079	19.65	20.00	1.084	0.086	/
Ant.2	Level2	RMC	Front Side	10	9400	1880.0	0.11	0.183	19.97	20.00	1.007	0.185	/
	Level2		Back Side	10	9400	1880.0	0.16	0.171	19.97	20.00	1.007	0.172	/
	Level2		Left Edge	10	9400	1880.0	0.06	0.550	19.97	20.00	1.007	**0.554**	9#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.4WCDMA Band 4

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	RMC	Left Cheek	0	1412	1732.4	-0.05	0.152	18.44	18.50	1.014	0.154	/
	Level1		Left Tilt	0	1412	1732.4	-0.10	0.195	18.44	18.50	1.014	0.198	/
	Level1		Right Cheek	0	1412	1732.4	0.07	0.412	18.44	18.50	1.014	0.418	/
	Level1		Right Tilt	0	1412	1732.4	0.15	0.378	18.44	18.50	1.014	0.383	/
Ant.2	Level1	RMC	Left Cheek	0	1412	1732.4	0.07	0.232	19.97	20.00	1.007	0.233	/
	Level1		Left Tilt	0	1412	1732.4	-0.15	0.078	19.97	20.00	1.007	0.078	/
	Level1		Right Cheek	0	1412	1732.4	0.12	0.713	19.97	20.00	1.007	**0.718**	10#
	Level1		Right Tilt	0	1412	1732.4	-0.14	0.092	19.97	20.00	1.007	0.093	/
Body-worn Accessory													
Ant.1	Level2	RMC	Front Side	15	1412	1732.4	0.13	0.022	18.34	18.50	1.038	0.023	/
	Level2		Back Side	15	1412	1732.4	-0.02	0.026	18.34	18.50	1.038	0.027	/
Ant.2	Level2	RMC	Front Side	15	1312	1712.4	-0.10	0.095	19.97	20.00	1.007	0.096	/
	Level2		Back Side	15	1312	1712.4	0.03	0.116	19.97	20.00	1.007	**0.117**	11#
Hotspot													
Ant.1	Level2	RMC	Front Side	10	1412	1732.4	0.19	0.043	18.34	18.50	1.038	0.045	/
	Level2		Back Side	10	1412	1732.4	-0.15	0.050	18.34	18.50	1.038	0.051	/
	Level2		Right Edge	10	1412	1732.4	0.00	0.045	18.34	18.50	1.038	0.046	/
	Level2		Top Edge	10	1412	1732.4	-0.12	0.099	18.34	18.50	1.038	0.103	/
Ant.2	Level2	RMC	Front Side	10	1312	1712.4	-0.19	0.230	19.97	20.00	1.007	0.232	/
	Level2		Back Side	10	1312	1712.4	-0.05	0.204	19.97	20.00	1.007	0.206	/
	Level2		Left Edge	10	1312	1712.4	0.05	0.483	19.97	20.00	1.007	**0.486**	12#
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.5WCDMA Band 5

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	RMC	Left Cheek	0	4182	836.4	-0.05	0.634	23.81	24.00	1.045	0.662	/
	Level1		Left Tilt	0	4182	836.4	-0.19	0.545	23.81	24.00	1.045	0.569	/
	Level1		Right Cheek	0	4182	836.4	0.01	0.817	23.81	24.00	1.045	**0.854**	13#
	Level1			0	4132	826.4	-0.16	0.522	22.05	24.00	1.567	0.818	/
	Level1			0	4233	846.6	0.09	0.745	23.65	24.00	1.084	0.808	/
	Level1		Right Tilt	0	4182	836.4	0.01	0.779	23.81	24.00	1.045	0.813	/
	Level1			0	4132	826.4	0.17	0.474	22.05	24.00	1.567	0.743	/
	Level1			0	4233	846.6	0.09	0.671	23.65	24.00	1.084	0.727	/
Ant.0	Level1	RMC	Left Cheek	0	4182	836.4	-0.07	0.263	23.83	24.00	1.040	0.273	/
	Level1		Left Tilt	0	4182	836.4	0.19	0.131	23.83	24.00	1.040	0.136	/
	Level1		Right Cheek	0	4182	836.4	0.18	0.172	23.83	24.00	1.040	0.179	/
	Level1		Right Tilt	0	4182	836.4	-0.05	0.102	23.83	24.00	1.040	0.106	/
Body-worn Accessory													
Ant.1	Level2	RMC	Front Side	15	4182	836.4	0.14	0.155	23.81	24.00	1.045	0.162	/
	Level2		Back Side	15	4182	836.4	-0.14	0.206	23.81	24.00	1.045	**0.215**	14#
Ant.0	Level2	RMC	Front Side	15	4182	836.4	-0.01	0.130	23.83	24.00	1.040	0.135	/
	Level2		Back Side	15	4182	836.4	0.16	0.151	23.83	24.00	1.040	0.157	/
Hotspot													
Ant.1	Level2	RMC	Front Side	10	4182	836.4	0.02	0.302	23.81	24.00	1.045	0.316	/
	Level2		Back Side	10	4182	836.4	0.09	0.386	23.81	24.00	1.045	**0.403**	15#
	Level2		Right Edge	10	4182	836.4	-0.06	0.212	23.81	24.00	1.045	0.221	/
	Level2		Top Edge	10	4182	836.4	0.02	0.350	23.81	24.00	1.045	0.366	/
Ant.0	Level2	RMC	Front Side	10	4182	836.4	-0.18	0.208	23.83	24.00	1.040	0.216	/
	Level2		Back Side	10	4182	836.4	-0.19	0.243	23.83	24.00	1.040	0.253	/
	Level2		Left Edge	10	4182	836.4	0.18	0.112	23.83	24.00	1.040	0.116	/
	Level2		Right Edge	10	4182	836.4	-0.02	0.238	23.83	24.00	1.040	0.248	/
	Level2		Bottom Edge	10	4182	836.4	-0.13	0.217	23.83	24.00	1.040	0.226	/

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

10.6 CDMA BC0

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	RMC	Left Cheek	0	777	848.3	-0.19	0.590	23.89	24.00	1.026	0.605	/
	Level1		Left Tilt	0	777	848.3	0.06	0.562	23.89	24.00	1.026	0.576	/
	Level1		Right Cheek	0	777	848.3	0.01	0.778	23.89	24.00	1.026	**0.798**	16#
	Level1		Right Tilt	0	777	848.3	-0.06	0.767	23.89	24.00	1.026	0.787	/
Ant.0	Level1	RMC	Left Cheek	0	777	848.3	0.03	0.231	24.11	24.50	1.094	0.253	/
	Level1		Left Tilt	0	777	848.3	-0.10	0.116	24.11	24.50	1.094	0.127	/
	Level1		Right Cheek	0	777	848.3	0.16	0.145	24.11	24.50	1.094	0.159	/
	Level1		Right Tilt	0	777	848.3	0.04	0.083	24.11	24.50	1.094	0.091	/
Body-worn Accessory													
Ant.1	Level2	RMC	Front Side	15	777	848.3	-0.15	0.135	23.89	24.00	1.026	0.138	/
	Level2		Back Side	15	777	848.3	-0.07	0.172	23.89	24.00	1.026	**0.176**	17#
Ant.0	Level2	RMC	Front Side	15	777	848.3	0.06	0.114	24.11	24.50	1.094	0.125	/
	Level2		Back Side	15	777	848.3	-0.11	0.131	24.11	24.50	1.094	0.143	/
Hotspot													
Ant.1	Level2	RMC	Front Side	10	777	848.3	0.06	0.267	23.89	24.00	1.026	0.274	/
	Level2		Back Side	10	777	848.3	-0.02	0.341	23.89	24.00	1.026	**0.350**	18#
	Level2		Right Edge	10	777	848.3	-0.07	0.184	23.89	24.00	1.026	0.189	/
	Level2		Top Edge	10	777	848.3	0.16	0.305	23.89	24.00	1.026	0.313	/
Ant.0	Level2	RMC	Front Side	10	777	848.3	0.19	0.182	24.11	24.50	1.094	0.199	/
	Level2		Back Side	10	777	848.3	-0.02	0.214	24.11	24.50	1.094	0.234	/
	Level2		Left Edge	10	777	848.3	0.00	0.098	24.11	24.50	1.094	0.107	/
	Level2		Right Edge	10	777	848.3	0.07	0.207	24.11	24.50	1.094	0.226	/
	Level2		Bottom Edge	10	777	848.3	-0.05	0.195	24.11	24.50	1.094	0.213	/

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

10.7 LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	20450	829	1	Low	-0.07	0.340	21.46	21.50	1.009	0.343	/
	Level1			0	20450	829	25	Mid	-0.19	0.279	20.48	21.00	1.127	0.314	/
	Level1		Left Tilt	0	20450	829	1	Low	-0.05	0.313	21.46	21.50	1.009	0.316	/
	Level1			0	20450	829	25	Mid	0.19	0.252	20.48	21.00	1.127	0.284	/
	Level1		Right Cheek	0	20450	829	1	Low	-0.03	0.455	21.46	21.50	1.009	**0.459**	19#
	Level1			0	20450	829	25	Mid	0.06	0.368	20.48	21.00	1.127	0.415	/
	Level1		Right Tilt	0	20450	829	1	Low	-0.02	0.409	21.46	21.50	1.009	0.413	/
	Level1			0	20450	829	25	Mid	-0.09	0.329	20.48	21.00	1.127	0.371	/
Ant.0	Level1	QPSK	Left Cheek	0	20525	836.5	1	Low	-0.09	0.132	21.60	22.00	1.096	0.145	/
	Level1			0	20450	829	25	Mid	-0.04	0.106	20.64	21.50	1.219	0.129	/
	Level1		Left Tilt	0	20525	836.5	1	Low	0.16	0.077	21.60	22.00	1.096	0.084	/
	Level1			0	20450	829	25	Mid	0.05	0.060	20.64	21.50	1.219	0.073	/
	Level1		Right Cheek	0	20525	836.5	1	Low	0.04	0.103	21.60	22.00	1.096	0.113	/
	Level1			0	20450	829	25	Mid	-0.09	0.081	20.64	21.50	1.219	0.099	/
	Level1		Right Tilt	0	20525	836.5	1	Low	0.13	0.059	21.60	22.00	1.096	0.065	/
	Level1			0	20450	829	25	Mid	0.10	0.047	20.64	21.50	1.219	0.057	/
Body-worn Accessory															
Ant.1	Level2	QPSK	Front Side	15	20600	844	1	Mid	0.04	0.146	23.50	24.00	1.122	0.164	/
	Level2			15	20600	844	25	Low	0.02	0.118	22.52	23.50	1.253	0.148	/
	Level2		Back Side	15	20600	844	1	Mid	0.08	0.175	23.50	24.00	1.122	0.196	/
	Level2			15	20600	844	25	Low	0.02	0.137	22.52	23.50	1.253	0.172	/
Ant.0	Level2	QPSK	Front Side	15	20525	836.5	1	High	-0.17	0.146	23.54	24.00	1.112	0.162	/
	Level2			15	20600	844	25	High	-0.01	0.115	22.61	23.50	1.227	0.141	/
	Level2		Back Side	15	20525	836.5	1	High	-0.05	0.198	23.54	24.50	1.247	**0.247**	20#
	Level2			15	20600	844	25	High	0.01	0.158	22.61	23.50	1.227	0.194	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	20600	844	1	Mid	0.17	0.293	23.50	24.50	1.259	0.369	/
	Level2			10	20600	844	25	Low	0.09	0.237	22.52	23.50	1.253	0.297	/
	Level2		Back Side	10	20600	844	1	Mid	0.09	0.307	23.50	24.50	1.259	**0.386**	21#
	Level2			10	20600	844	25	Low	0.02	0.247	22.52	23.50	1.253	0.310	/
	Level2		Right Edge	10	20600	844	1	Mid	-0.02	0.206	23.50	24.50	1.259	0.259	/
	Level2			10	20600	844	25	Low	-0.05	0.163	22.52	23.50	1.253	0.204	/
	Level2		Top Edge	10	20600	844	1	Mid	0.09	0.289	23.50	24.50	1.259	0.364	/
	Level2			10	20600	844	25	Low	0.05	0.230	22.52	23.50	1.253	0.288	/
Ant.0	Level2	QPSK	Front Side	10	20525	836.5	1	High	0.18	0.190	23.54	24.00	1.112	0.211	/
	Level2			10	20600	844	25	High	-0.01	0.152	22.61	23.50	1.227	0.187	/

	Level2		Back Side	10	20525	836.5	1	High	0.13	0.223	23.54	24.00	1.112	0.248	/
	Level2			10	20600	844	25	High	-0.10	0.180	22.61	23.50	1.227	0.221	/
	Level2		Left Edge	10	20525	836.5	1	High	-0.17	0.113	23.54	24.00	1.112	0.126	/
	Level2			10	20600	844	25	High	-0.05	0.089	22.61	23.50	1.227	0.109	/
	Level2		Right Edge	10	20525	836.5	1	High	0.18	0.252	23.54	24.00	1.112	0.280	/
	Level2			10	20600	844	25	High	-0.02	0.198	22.61	23.50	1.227	0.243	/
	Level2		Bottom Edge	10	20525	836.5	1	High	0.15	0.199	23.54	24.00	1.112	0.221	/
	Level2			10	20600	844	25	High	-0.02	0.160	22.61	23.50	1.227	0.196	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.8 LTE Band 7 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	21350	2560	1	Mid	-0.12	0.122	15.17	16.00	1.211	0.148	/
	Level1			0	21350	2560	50	High	-0.19	0.096	14.35	15.00	1.161	0.111	/
	Level1		Left Tilt	0	21350	2560	1	Mid	0.08	0.148	15.17	16.00	1.211	0.179	/
	Level1			0	21350	2560	50	High	-0.06	0.117	14.35	15.00	1.161	0.136	/
	Level1		Right Cheek	0	21350	2560	1	Mid	0.05	0.354	15.17	16.00	1.211	**0.429**	22#
	Level1			0	21350	2560	50	High	-0.08	0.273	14.35	15.00	1.161	0.317	/
	Level1		Right Tilt	0	21350	2560	1	Mid	-0.13	0.236	15.17	16.00	1.211	0.286	/
	Level1			0	21350	2560	50	High	0.14	0.186	14.35	15.00	1.161	0.216	/
Ant.2	Level1	QPSK	Left Cheek	0	21350	2560	1	High	0.11	0.065	16.38	17.00	1.153	0.075	/
	Level1			0	21350	2560	50	High	0.10	0.053	15.56	16.50	1.242	0.066	/
	Level1		Left Tilt	0	21350	2560	1	High	0.11	0.024	16.38	17.00	1.153	0.028	/
	Level1			0	21350	2560	50	High	0.04	0.019	15.56	16.50	1.242	0.024	/
	Level1		Right Cheek	0	21350	2560	1	High	0.01	0.161	16.38	17.00	1.153	0.186	/
	Level1			0	21350	2560	1	High	0.17	0.132	15.56	16.50	1.242	0.164	/
	Level1		Right Tilt	0	21350	2560	1	High	-0.07	0.021	16.38	17.00	1.153	0.025	/
	Level1			0	21350	2560	50	High	-0.04	0.017	15.56	16.50	1.242	0.021	/
Body-worn Accessory															
Ant.1	Level2	QPSK	Front Side	15	21350	2560	1	Mid	-0.10	0.081	15.17	16.00	1.211	0.098	/
	Level2			15	21350	2560	50	High	0.19	0.066	14.30	15.00	1.175	0.078	/
	Level2		Back Side	15	21350	2560	1	Mid	-0.09	0.083	15.17	16.00	1.211	**0.100**	23#
	Level2			15	21350	2560	50	High	-0.11	0.069	14.30	15.00	1.175	0.081	/
Ant.2	Level2	QPSK	Front Side	15	21350	2560	1	Mid	0.03	0.055	19.19	19.50	1.074	0.059	/
	Level2			15	21350	2560	50	Mid	0.06	0.048	18.41	19.00	1.146	0.055	/
	Level2		Back Side	15	21350	2560	1	Mid	0.09	0.061	19.19	19.50	1.074	0.066	/
	Level2			15	21350	2560	50	Mid	-0.15	0.052	18.41	19.00	1.146	0.060	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	21350	2560	1	Mid	-0.14	0.183	15.17	16.00	1.211	0.221	/
	Level2			10	21350	2560	50	High	-0.06	0.148	14.30	15.00	1.175	0.174	/
	Level2		Back Side	10	21350	2560	1	Mid	-0.09	0.169	15.17	16.00	1.211	0.205	/
	Level2			10	21350	2560	50	High	0.17	0.134	14.30	15.00	1.175	0.157	/
	Level2		Right Edge	10	21350	2560	1	Mid	0.13	0.426	15.17	16.00	1.211	**0.516**	24#
	Level2			10	21350	2560	50	High	0.04	0.348	14.30	15.00	1.175	0.409	/
	Level2		Top Edge	10	21350	2560	1	Mid	0.07	0.215	15.17	16.00	1.211	0.260	/
	Level2			10	21350	2560	50	High	-0.14	0.175	14.30	15.00	1.175	0.206	/
Ant.2	Level2	QPSK	Front Side	10	21350	2560	1	Mid	-0.06	0.188	19.19	19.50	1.074	0.202	/
	Level2			10	21350	2560	50	Mid	-0.18	0.162	18.41	19.00	1.146	0.186	/

	Level2		Back Side	10	21350	2560	1	Mid	0.10	0.173	19.19	19.50	1.074	0.186	/
	Level2			10	21350	2560	50	Mid	-0.11	0.145	18.41	19.00	1.146	0.166	/
	Level2		left Edge	10	21350	2560	1	Mid	-0.04	0.460	19.19	19.50	1.074	0.494	/
	Level2			10	21350	2560	50	Mid	0.15	0.389	18.41	19.00	1.146	0.446	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.9 LTE Band 7 (20MHz Bandwidth) Worse case for CA Test

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Right Cheek	0	21350 +21152	2560 +2540.2	1+0	Low +Low	0.09	0.306	15.03	16.00	1.250	0.383	/
Body-worn Accessory															
Ant.1	Level2	QPSK	Back Side	15	21350 +21152	2560 +2540.2	1+0	Low +Low	0.12	0.066	14.89	16.00	1.291	0.085	/
Hotspot															
Ant.1	Level2	QPSK	Back Side	10	21350 +21152	2560 +2540.2	1+0	Low +Low	-0.07	0.384	14.89	16.00	1.291	0.496	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.10 LTE Band 38 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	38150	2610	1	Low	-0.15	0.114	18.06	19.00	1.242	0.142	/
	Level1			0	38150	2610	50	Mid	-0.03	0.093	17.06	18.00	1.242	0.115	/
	Level1		Left Tilt	0	38150	2610	1	Low	0.09	0.136	18.06	19.00	1.242	0.169	/
	Level1			0	38150	2610	50	Mid	-0.09	0.109	17.06	18.00	1.242	0.135	/
	Level1		Right Cheek	0	38150	2610	1	Low	-0.01	0.418	18.06	19.00	1.242	**0.519**	25#
	Level1			0	38150	2610	1	Mid	0.09	0.345	17.06	18.00	1.242	0.428	/
	Level1		Right Tilt	0	38150	2610	1	Low	0.16	0.302	18.06	19.00	1.242	0.375	/
	Level1			0	38150	2610	1	Mid	0.02	0.242	17.06	18.00	1.242	0.300	/
Ant.2	Level1	QPSK	Left Cheek	0	37850	2580	1	Low	0.06	0.085	19.34	20.50	1.306	0.110	/
	Level1			0	37850	2580	50	Low	0.12	0.068	18.41	19.50	1.285	0.087	/
	Level1		Left Tilt	0	37850	2580	1	Low	0.07	0.013	19.34	20.50	1.306	0.016	/
	Level1			0	37850	2580	50	Low	0.14	0.010	18.41	19.50	1.285	0.013	/
	Level1		Right Cheek	0	37850	2580	1	Low	-0.15	0.181	19.34	20.50	1.306	0.236	/
	Level1			0	38000	2595	1	Low	0.17	0.148	18.41	19.50	1.285	0.190	/
	Level1		Right Tilt	0	37850	2580	1	Low	-0.05	0.021	19.34	20.50	1.306	0.028	/
	Level1			0	37850	2580	50	Low	0.02	0.017	18.41	19.50	1.285	0.022	/
Body-worn Accessory															
Ant.1	Level2	QPSK	Front Side	15	37850	2580	1	Low	-0.05	0.042	15.78	16.00	1.052	0.044	/
	Level2			15	37850	2580	50	Low	-0.10	0.034	14.95	15.50	1.135	0.039	/
	Level2		Back Side	15	37850	2580	1	Low	-0.12	0.045	15.78	16.00	1.052	0.047	/
	Level2			15	37850	2580	50	Low	-0.19	0.037	14.95	15.50	1.135	0.042	/
Ant.2	Level2	QPSK	Front Side	15	38000	2595	1	Low	0.16	0.124	16.90	17.00	1.023	0.127	/
	Level2			15	37850	2580	50	Low	-0.09	0.103	16.15	16.50	1.084	0.112	/
	Level2		Back Side	15	38000	2595	1	Low	0.02	0.136	16.90	17.00	1.023	**0.139**	26#
	Level2			15	37850	2580	50	Low	0.19	0.112	16.15	16.50	1.084	0.121	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	37850	2580	1	Low	0.09	0.144	15.78	16.00	1.052	0.151	/
	Level2			10	37850	2580	50	Low	0.05	0.120	14.95	15.50	1.135	0.136	/
	Level2		Back Side	10	37850	2580	1	Low	-0.15	0.159	15.78	16.00	1.052	0.167	/
	Level2			10	37850	2580	50	Low	-0.09	0.136	14.95	15.50	1.135	0.154	/
	Level2		Right Edge	10	37850	2580	1	Low	0.17	0.374	15.78	16.00	1.052	0.393	/
	Level2			10	37850	2580	50	Low	0.13	0.312	14.95	15.50	1.135	0.354	/
	Level2		Top Edge	10	37850	2580	1	Low	-0.06	0.185	15.78	16.00	1.052	0.195	/
	Level2			10	37850	2580	50	Low	-0.14	0.156	14.95	15.50	1.135	0.177	/
Ant.2	Level2	QPSK	Front Side	10	38000	2595	1	Low	-0.08	0.243	16.90	17.00	1.023	0.249	/
	Level2			10	37850	2580	50	Low	0.18	0.196	16.15	16.50	1.084	0.212	/

	Level2		Back Side	10	38000	2595	1	Low	0.14	0.284	16.90	17.00	1.023	0.291	/
	Level2			10	37850	2580	50	Low	-0.16	0.229	16.15	16.50	1.084	0.248	/
	Level2		left Edge	10	38000	2595	1	Low	-0.12	0.429	16.90	17.00	1.023	**0.439**	27#
	Level2			10	37850	2580	50	Low	0.15	0.365	16.15	16.50	1.084	0.396	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.11 LTE Band 41 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.1 (PC3)	Level1	QPSK	Left Cheek	0	40620	2593	1	Low	-0.19	0.232	17.79	18.00	1.050	0.243	/
	Level1			0	40620	2593	50	Low	0.03	0.183	16.80	17.00	1.047	0.192	/
	Level1		Left Tilt	0	40620	2593	1	Low	-0.01	0.304	17.79	18.00	1.050	0.319	/
	Level1			0	40620	2593	50	Low	0.07	0.245	16.80	17.00	1.047	0.257	/
	Level1		Right Cheek	0	40620	2593	1	Low	0.04	0.733	17.79	18.00	1.050	0.769	/
	Level1			0	40620	2593	50	Low	0.00	0.613	16.80	17.00	1.047	0.642	/
	Level1		Right Tilt	0	40620	2593	1	Low	0.10	0.625	17.79	18.00	1.050	0.656	/
	Level1			0	40620	2593	50	Low	-0.16	0.515	16.80	17.00	1.047	0.539	/
Ant.2 (PC3)	Level1	QPSK	Left Cheek	0	40620	2593	1	Low	0.03	0.129	19.00	19.50	1.122	0.145	/
	Level1			0	40620	2593	50	Low	-0.17	0.107	18.03	18.50	1.114	0.119	/
	Level1		Left Tilt	0	40620	2593	1	Low	-0.05	0.035	19.00	19.50	1.122	0.039	/
	Level1			0	40620	2593	50	Low	0.08	0.028	18.03	18.50	1.114	0.031	/
	Level1		Right Cheek	0	40620	2593	1	Low	0.19	0.287	19.00	19.50	1.122	0.322	/
	Level1			0	40620	2593	50	Low	-0.06	0.236	18.03	18.50	1.114	0.263	/
	Level1		Right Tilt	0	40620	2593	1	Low	0.15	0.048	19.00	19.50	1.122	0.054	/
	Level1			0	40620	2593	50	Low	-0.01	0.039	18.03	18.50	1.114	0.043	/
Body-worn Accessory															
Ant.1 (PC3)	Level2	QPSK	Front Side	15	40620	2593	1	Low	0.08	0.080	17.72	18.00	1.067	0.085	/
	Level2			15	40620	2593	50	Low	0.11	0.067	16.77	17.00	1.054	0.071	/
	Level2		Back Side	15	40620	2593	1	Low	0.17	0.088	17.72	18.00	1.067	0.094	/
	Level2			15	40620	2593	50	Low	0.13	0.071	16.77	17.00	1.054	0.075	/
Ant.2 (PC3)	Level2	QPSK	Front Side	15	40620	2593	1	Low	0.05	0.074	21.23	21.50	1.064	0.079	/
	Level2			15	40620	2593	50	Low	0.04	0.062	20.22	20.50	1.067	0.066	/
	Level2		Back Side	15	40620	2593	1	Low	0.10	0.080	21.23	21.50	1.064	0.085	/
	Level2			15	40620	2593	50	Low	-0.12	0.065	20.22	20.50	1.067	0.069	/
Hotspot															
Ant.1 (PC3)	Level2	QPSK	Front Side	10	40620	2593	1	Low	-0.16	0.176	17.72	18.00	1.067	0.188	/
	Level2			10	40620	2593	50	Low	0.17	0.142	16.77	17.00	1.054	0.150	/
	Level2		Back Side	10	40620	2593	1	Low	-0.02	0.185	17.72	18.00	1.067	0.197	/
	Level2			10	40620	2593	50	Low	0.01	0.149	16.77	17.00	1.054	0.157	/
	Level2		Right Edge	10	40620	2593	1	Low	-0.09	0.423	17.72	18.00	1.067	0.451	/
	Level2			10	40620	2593	50	Low	0.06	0.348	16.77	17.00	1.054	0.367	/
	Level2		Top Edge	10	40620	2593	1	Low	-0.09	0.223	17.72	18.00	1.067	0.238	/
	Level2			10	40620	2593	50	Low	0.06	0.182	16.77	17.00	1.054	0.192	/
Ant.2 (PC3)	Level2	QPSK	Front Side	10	40620	2593	1	Low	0.12	0.292	19.04	19.50	1.112	0.325	/
	Level2			10	40620	2593	50	Low	0.05	0.237	18.05	18.50	1.109	0.263	/

	Level2		Back Side	10	40620	2593	1	Low	0.11	0.335	19.04	19.50	1.112	0.372	/
	Level2			10	40620	2593	50	Low	-0.12	0.273	18.05	18.50	1.109	0.303	/
	Level2		Left Edge	10	40620	2593	1	Low	0.04	0.634	19.04	19.50	1.112	0.705	/
	Level2			10	40620	2593	50	Low	-0.03	0.508	18.05	18.50	1.109	0.563	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.12 LTE Band 41 (20MHz Bandwidth) Worse case for PC2 Test

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Right Cheek	0	40620	2593	1	Low	0.02	0.742	19.75	20.00	1.059	0.786	28#
Body-worn Accessory															
Ant.1	Level2	QPSK	Back Side	15	40620	2593	1	Low	0.06	0.092	19.75	20.00	1.059	0.097	29#
Hotspot															
Ant.2	Level2	QPSK	Left Edge	10	40620	2593	1	Low	-0.11	0.674	21.20	21.50	1.072	0.722	30#
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.13 5G n41 (100MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	VRB Length	VRB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.5	Level1	DFT-s-OFDM BPSK	Left Cheek	0	518598	2592.99	1	1	-0.19	0.395	16.84	17.00	1.038	0.410	/
	Level1			0	518598	2592.99	135	69	-0.04	0.392	16.81	17.00	1.045	0.410	/
	Level1		Left Tilt	0	518598	2592.99	1	1	-0.13	0.108	16.84	17.00	1.038	0.112	/
	Level1			0	518598	2592.99	135	69	-0.07	0.104	16.81	17.00	1.045	0.109	/
	Level1		Right Cheek	0	518598	2592.99	1	1	-0.04	0.724	16.84	17.00	1.038	**0.751**	31#
	Level1			0	518598	2592.99	135	69	-0.04	0.715	16.81	17.00	1.045	0.747	/
	Level1		Right Tilt	0	518598	2592.99	1	1	0.18	0.184	16.84	17.00	1.038	0.191	/
	Level1			0	518598	2592.99	135	69	-0.11	0.179	16.81	17.00	1.045	0.187	/
Body-worn Accessory															
Ant.5	Level2	DFT-s-OFDM BPSK	Front Side	15	518598	2592.99	1	1	0.13	0.126	20.68	21.00	1.076	0.136	/
	Level2			15	518598	2592.99	135	69	-0.18	0.122	20.70	21.00	1.072	0.131	/
	Level2		Back Side	15	518598	2592.99	1	1	0.09	0.168	20.68	21.00	1.076	**0.181**	32#
	Level2			15	518598	2592.99	135	69	-0.16	0.160	20.70	21.00	1.072	0.171	/
Hotspot															
Ant.5	Level2	DFT-s-OFDM BPSK	Front Side	10	518598	2592.99	1	1	0.02	0.317	20.68	21.00	1.076	0.341	/
	Level2			10	518598	2592.99	135	69	0.10	0.308	20.70	21.00	1.072	0.330	/
	Level2		Back Side	10	518598	2592.99	1	1	-0.08	0.344	20.68	21.00	1.076	0.370	/
	Level2			10	518598	2592.99	135	69	0.19	0.329	20.70	21.00	1.072	0.353	/
	Level2		Right Edge	10	518598	2592.99	1	1	-0.07	0.954	20.68	21.00	1.076	1.027	/
	Level2			10	509202	2546.01	1	1	-0.14	0.968	20.67	21.00	1.079	1.044	/
	Level2			10	513900	2569.5	1	1	-0.08	0.972	20.60	21.00	1.096	1.066	/
	Level2			10	523302	2616.51	1	1	0.03	0.949	20.67	21.00	1.079	1.024	/
	Level2			10	528000	2640	1	1	-0.07	0.986	20.65	21.00	1.084	**1.069**	33#
	Level2			10	518598	2592.99	135	69	0.19	0.973	20.70	21.00	1.072	1.043	/
	Level2			10	509202	2546.01	135	69	-0.12	0.948	20.68	21.00	1.076	1.020	/
	Level2			10	513900	2569.5	135	69	-0.17	0.957	20.63	21.00	1.089	1.042	/
	Level2			10	523302	2616.51	135	69	0.19	0.962	20.68	21.00	1.076	1.036	/
	Level2			10	528000	2640	135	69	0.18	0.938	20.62	21.00	1.091	1.024	/
	Level2			10	518598	2592.99	270	0	-0.17	0.955	20.69	21.00	1.074	1.026	/

Note:

1. Since PC2 and PC3 have the same Tune up power, we choose PC3 for testing.

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

10.14 5G n77 (100MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	VRB Length	VRB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.5 (3700-3980)	Level1	DFT-s-OFDM BPSK	Left Cheek	0	656000	3840	1	1	-0.05	0.537	15.82	16.00	1.042	0.560	/
	Level1			0	656000	3840	135	138	-0.01	0.484	15.80	16.00	1.047	0.507	/
	Level1		Left Tilt	0	656000	3840	1	1	-0.17	0.072	15.82	16.00	1.042	0.075	/
	Level1			0	656000	3840	135	138	-0.02	0.068	15.80	16.00	1.047	0.071	/
	Level1		Right Cheek	0	656000	3840	1	1	-0.16	0.476	15.82	16.00	1.042	0.496	/
	Level1			0	656000	3840	135	138	-0.05	0.469	15.80	16.00	1.047	0.491	/
	Level1		Right Tilt	0	656000	3840	1	1	-0.04	0.073	15.82	16.00	1.042	0.076	/
	Level1			0	656000	3840	135	138	0.05	0.062	15.80	16.00	1.047	0.065	/
Ant.5 (3450-3550)	Level1	DFT-s-OFDM BPSK	Left Cheek	0	633332	3499.98	1	1	0.13	0.591	15.72	16.00	1.067	**0.630**	34#
	Level1			0	633332	3499.98	135	0	0.13	0.586	15.79	16.00	1.050	0.615	/
	Level1		Left Tilt	0	633332	3499.98	1	1	0.12	0.128	15.72	16.00	1.067	0.137	/
	Level1			0	633332	3499.98	135	0	0.02	0.119	15.79	16.00	1.050	0.125	/
	Level1		Right Cheek	0	633332	3499.98	1	1	-0.06	0.532	15.72	16.00	1.067	0.567	/
	Level1			0	633332	3499.98	135	0	0.01	0.512	15.79	16.00	1.050	0.537	/
	Level1		Right Tilt	0	633332	3499.98	1	1	0.12	0.142	15.72	16.00	1.067	0.151	/
	Level1			0	633332	3499.98	135	0	-0.13	0.136	15.79	16.00	1.050	0.143	/
Body-worn Accessory															
Ant.5 (3700-3980)	Level2	DFT-s-OFDM BPSK	Front Side	15	656000	3840	1	137	0.07	0.054	19.58	21.00	1.387	0.075	/
	Level2			15	656000	3840	135	69	-0.15	0.049	19.53	21.00	1.403	0.069	/
	Level2		Back Side	15	656000	3840	1	137	0.19	0.069	19.58	21.00	1.387	0.095	/
	Level2			15	656000	3840	135	69	-0.12	0.063	19.53	21.00	1.403	0.088	/
Ant.5 (3450-3550)	Level2	DFT-s-OFDM BPSK	Front Side	15	633332	3499.98	1	137	-0.03	0.141	19.69	21.00	1.352	0.191	/
	Level2			15	633332	3499.98	135	138	-0.19	0.137	19.67	21.00	1.358	0.186	/
	Level2		Back Side	15	633332	3499.98	1	137	0.16	0.169	19.69	21.00	1.352	**0.229**	35#
	Level2			15	633332	3499.98	135	138	-0.01	0.157	19.67	21.00	1.358	0.213	/
Hotspot															
Ant.5 (3700-3980)	Level2	DFT-s-OFDM BPSK	Front Side	10	656000	3840	1	137	0.01	0.154	19.58	21.00	1.387	0.214	/
	Level2			10	656000	3840	135	69	0.08	0.148	19.53	21.00	1.403	0.208	/
	Level2		Back Side	10	656000	3840	1	137	0.15	0.147	19.58	21.00	1.387	0.204	/
	Level2			10	656000	3840	135	69	0.02	0.144	19.53	21.00	1.403	0.202	/
	Level2		Right Edge	10	656000	3840	1	137	0.18	0.428	19.58	21.00	1.387	0.594	/
	Level2			10	656000	3840	135	69	-0.17	0.420	19.53	21.00	1.403	0.589	/
Ant.5 (3450-3550)	Level2	DFT-s-OFDM BPSK	Front Side	10	633332	3499.98	1	137	0.10	0.278	19.69	21.00	1.352	0.376	/
	Level2			10	633332	3499.98	135	138	-0.03	0.262	19.67	21.00	1.358	0.356	/
	Level2		Back Side	10	633332	3499.98	1	137	0.01	0.293	19.69	21.00	1.352	0.396	/
	Level2			10	633332	3499.98	135	138	0.02	0.270	19.67	21.00	1.358	0.367	/

	Level2		Right Edge	10	633332	3499.98	1	137	-0.02	0.615	19.69	21.00	1.352	**0.832**	35#
	Level2			10	633332	3499.98	135	138	0.02	0.611	19.67	21.00	1.358	0.830	/

Note:

1. Since PC2 and PC3 have the same Tune up power, we choose PC3 for testing.

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

10.15 5G n78 (100MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	VRB Length	VRB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.5 (3700-3800)	Level1	DFT-s-OFDM BPSK	Left Cheek	0	650000	3750	1	1	-0.14	0.303	12.32	12.50	1.042	0.316	/
	Level1			0	650000	3750	135	0	-0.08	0.300	12.22	12.50	1.067	0.320	/
	Level1		Left Tilt	0	650000	3750	1	1	0.04	0.047	12.32	12.50	1.042	0.049	/
	Level1			0	650000	3750	135	0	-0.06	0.045	12.22	12.50	1.067	0.048	/
	Level1		Right Cheek	0	650000	3750	1	1	-0.07	0.220	12.32	12.50	1.042	0.229	/
	Level1			0	650000	3750	135	0	0.02	0.214	12.22	12.50	1.067	0.228	/
	Level1		Right Tilt	0	650000	3750	1	1	0.02	0.089	12.32	12.50	1.042	0.093	/
	Level1			0	650000	3750	135	0	-0.19	0.082	12.22	12.50	1.067	0.087	/
Ant.5 (3450-3550)	Level1	DFT-s-OFDM BPSK	Left Cheek	0	633332	3499.98	1	137	0.03	0.344	12.10	12.50	1.096	**0.377**	37#
	Level1			0	633332	3499.98	135	138	0.02	0.338	12.12	12.50	1.091	0.369	/
	Level1		Left Tilt	0	633332	3499.98	1	137	-0.07	0.048	12.10	12.50	1.096	0.053	/
	Level1			0	633332	3499.98	135	138	0.00	0.044	12.12	12.50	1.091	0.048	/
	Level1		Right Cheek	0	633332	3499.98	1	137	0.11	0.267	12.10	12.50	1.096	0.293	/
	Level1			0	633332	3499.98	135	138	-0.18	0.259	12.12	12.50	1.091	0.283	/
	Level1		Right Tilt	0	633332	3499.98	1	137	-0.15	0.091	12.10	12.50	1.096	0.100	/
	Level1			0	633332	3499.98	135	138	0.17	0.089	12.12	12.50	0.061	0.005	/
Body-worn Accessory															
Ant.5 (3700-3800)	Level2	DFT-s-OFDM BPSK	Front Side	15	650000	3750	1	271	-0.11	0.107	19.08	21.00	1.556	0.166	/
	Level2			15	650000	3750	135	0	0.04	0.103	19.29	21.00	1.483	0.153	/
	Level2		Back Side	15	650000	3750	1	271	0.15	0.145	19.08	21.00	1.556	0.226	/
	Level2			15	650000	3750	135	0	0.10	0.136	19.29	21.00	1.483	0.202	/
Ant.5 (3450-3550)	Level2	DFT-s-OFDM BPSK	Front Side	15	633332	3499.98	1	137	0.02	0.152	19.30	21.00	1.479	0.225	/
	Level2			15	633332	3499.98	135	0	0.12	0.148	19.19	21.00	1.517	0.225	/
	Level2		Back Side	15	633332	3499.98	1	137	0.12	0.182	19.30	21.00	1.479	**0.269**	38#
	Level2			15	633332	3499.98	135	0	0.02	0.175	19.19	21.00	1.517	0.265	/
Hotspot															
Ant.5 (3700-3800)	Level2	DFT-s-OFDM BPSK	Front Side	10	650000	3750	1	271	0.19	0.209	19.08	21.00	1.556	0.325	/
	Level2			10	650000	3750	135	0	-0.17	0.196	19.29	21.00	1.483	0.291	/
	Level2		Back Side	10	650000	3750	1	271	-0.15	0.272	19.08	21.00	1.556	0.423	/
	Level2			10	650000	3750	135	0	-0.16	0.264	19.29	21.00	1.483	0.391	/
	Level2		Right Edge	10	650000	3750	1	271	-0.12	0.415	19.08	21.00	1.556	0.646	/
	Level2			10	650000	3750	135	0	-0.10	0.394	19.29	21.00	1.483	0.584	/
Ant.5 (3450-3550)	Level2	DFT-s-OFDM BPSK	Front Side	10	633332	3499.98	1	137	0.02	0.247	19.30	21.00	1.479	0.365	/
	Level2			10	633332	3499.98	135	0	-0.04	0.242	19.19	21.00	1.517	0.367	/
	Level2		Back Side	10	633332	3499.98	1	137	0.13	0.324	19.30	21.00	1.479	0.479	/
	Level2			10	633332	3499.98	135	0	0.16	0.311	19.19	21.00	1.517	0.472	/

	Level2		Right Edge	10	633332	3499.98	1	137	-0.07	0.536	19.30	21.00	1.479	**0.793**	39#
	Level2			10	633332	3499.98	135	0	-0.11	0.520	19.19	21.00	1.517	0.789	/

Note:

1. Since PC2 and PC3 have the same Tune up power, we choose PC3 for testing.

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

10.16 WIFI 2.4GHz

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle Setting	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.3	Level1	802.11 b	Left Cheek	0	6	2437	-0.03	0.121	11.47	12.00	1.130	98.78	1.012	0.138	/
	Level1		Left Tilt	0	6	2437	-0.11	0.112	11.47	12.00	1.130	98.78	1.012	0.128	/
	Level1		Right Cheek	0	6	2437	-0.19	0.044	11.47	12.00	1.130	98.78	1.012	0.050	/
	Level1		Right Tilt	0	6	2437	0.13	0.041	11.47	12.00	1.130	98.78	1.012	0.047	/
Ant.4	Level1	802.11 b	Left Cheek	0	1	2412	0.06	0.215	11.65	12.00	1.084	98.78	1.012	**0.236**	40#
	Level1		Left Tilt	0	1	2412	-0.15	0.054	11.65	12.00	1.084	98.78	1.012	0.059	/
	Level1		Right Cheek	0	1	2412	0.10	0.163	11.65	12.00	1.084	98.78	1.012	0.179	/
	Level1		Right Tilt	0	1	2412	-0.08	0.007	11.65	12.00	1.084	98.78	1.012	0.008	/
Body-worn Accessory															
Ant.3	Level2	802.11 b	Front Side	15	6	2437	-0.13	0.074	17.51	18.00	1.119	98.78	1.012	0.084	/
	Level2		Back Side	15	6	2437	0.01	0.085	17.51	18.00	1.119	98.78	1.012	0.096	/
Ant.4	Level2	802.11 b	Front Side	15	11	2462	0.09	0.102	17.42	18.00	1.143	98.78	1.012	0.118	/
	Level2		Back Side	15	11	2462	0.06	0.111	17.42	18.00	1.143	98.78	1.012	**0.128**	41#
Hotspot															
Ant.3	Level2	802.11 b	Front Side	10	6	2437	-0.12	0.087	17.51	18.00	1.119	98.78	1.012	0.098	/
	Level2		Back Side	10	6	2437	0.19	0.168	17.51	18.00	1.119	98.78	1.012	0.190	/
	Level2		Left Edge	10	6	2437	-0.07	0.169	17.51	18.00	1.119	98.78	1.012	0.192	/
	Level2		Top Edge	10	6	2437	-0.07	0.195	17.51	18.00	1.119	98.78	1.012	**0.221**	42#
Ant.4	Level2	802.11 b	Front Side	10	11	2462	0.14	0.171	17.42	18.00	1.143	98.78	1.012	0.198	/
	Level2		Back Side	10	11	2462	-0.17	0.160	17.42	18.00	1.143	98.78	1.012	0.185	/
	Level2		Left Edge	10	11	2462	-0.01	0.165	17.42	18.00	1.143	98.78	1.012	0.191	/
	Level2		Top Edge	10	11	2462	0.18	0.094	17.42	18.00	1.143	98.78	1.012	0.109	/

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

10.17 WIFI 5GHz

Antenna	Power Reduction	Fre. Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle Setting	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant. 3	Level1	5.3G	802.11 a	Left Cheek	0	52	5260	0.16	0.050	7.53	8.00	1.114	99.24	1.008	**0.056**	43#
	Level1			Left Tilt	0	52	5260	-0.12	0.044	7.53	8.00	1.114	99.24	1.008	0.050	/
	Level1			Right Cheek	0	52	5260	-0.04	0.023	7.53	8.00	1.114	99.24	1.008	0.025	/
	Level1			Right Tilt	0	52	5260	0.09	0.022	7.53	8.00	1.114	99.24	1.008	0.025	/
Ant. 4	Level1	5.3G	802.11 a	Left Cheek	0	64	5320	0.15	0.019	7.83	8.00	1.040	99.24	1.008	0.020	/
	Level1			Left Tilt	0	64	5320	-0.02	0.006	7.83	8.00	1.040	99.24	1.008	0.006	/
	Level1			Right Cheek	0	64	5320	0.09	0.022	7.83	8.00	1.040	99.24	1.008	0.023	/
	Level1			Right Tilt	0	64	5320	0.02	0.007	7.83	8.00	1.040	99.24	1.008	0.007	/
Ant. 3	Level1	5.6G	802.11 a	Left Cheek	0	100	5500	0.15	0.072	7.72	8.00	1.067	99.24	1.008	**0.078**	44#
	Level1			Left Tilt	0	100	5500	0.18	0.041	7.72	8.00	1.067	99.24	1.008	0.044	/
	Level1			Right Cheek	0	100	5500	0.11	0.038	7.72	8.00	1.067	99.24	1.008	0.041	/
	Level1			Right Tilt	0	100	5500	-0.02	0.037	7.72	8.00	1.067	99.24	1.008	0.040	/
Ant. 4	Level1	5.6G	802.11 a	Left Cheek	0	100	5500	0.10	0.040	7.54	8.00	1.112	99.24	1.008	0.045	/
	Level1			Left Tilt	0	100	5500	-0.15	0.014	7.54	8.00	1.112	99.24	1.008	0.016	/
	Level1			Right Cheek	0	100	5500	0.06	0.041	7.54	8.00	1.112	99.24	1.008	0.046	/
	Level1			Right Tilt	0	100	5500	-0.18	0.007	7.54	8.00	1.112	99.24	1.008	0.008	/
Ant. 3	Level1	5.8G	802.11 a	Left Cheek	0	149	5745	0.02	0.101	7.86	8.00	1.033	99.24	1.008	**0.105**	45#
	Level1			Left Tilt	0	149	5745	-0.12	0.096	7.86	8.00	1.033	99.24	1.008	0.100	/
	Level1			Right Cheek	0	149	5745	-0.13	0.049	7.86	8.00	1.033	99.24	1.008	0.051	/
	Level1			Right Tilt	0	149	5745	0.16	0.048	7.86	8.00	1.033	99.24	1.008	0.050	/
Ant. 4	Level1	5.8G	802.11 a	Left Cheek	0	157	5785	-0.01	0.029	7.92	8.00	1.019	99.24	1.008	0.030	/
	Level1			Left Tilt	0	157	5785	0.05	0.008	7.92	8.00	1.019	99.24	1.008	0.008	/
	Level1			Right Cheek	0	157	5785	-0.19	0.039	7.92	8.00	1.019	99.24	1.008	0.040	/
	Level1			Right Tilt	0	157	5785	-0.19	0.007	7.92	8.00	1.019	99.24	1.008	0.007	/
Body-worn Accessory																
Ant. 3	Level2	5.3G	802.11 a	Front Side	15	52	5260	-0.01	0.071	16.72	17.00	1.067	99.24	1.008	0.076	/
	Level2			Back Side	15	52	5260	-0.15	0.069	16.72	17.00	1.067	99.24	1.008	0.074	/
Ant. 4	Level2	5.3G	802.11 a	Front Side	15	64	5320	0.00	0.074	16.81	17.00	1.045	99.24	1.008	**0.078**	46#
	Level2			Back Side	15	64	5320	0.04	0.072	16.81	17.00	1.045	99.24	1.008	0.076	/
Ant. 3	Level2	5.6G	802.11 a	Front Side	15	100	5500	-0.01	0.082	16.73	17.00	1.064	99.24	1.008	0.088	/
	Level2			Back Side	15	100	5500	0.14	0.079	16.73	17.00	1.064	99.24	1.008	0.085	/
Ant. 4	Level2	5.6G	802.11 a	Front Side	15	116	5580	0.00	0.171	16.56	17.00	1.107	99.24	1.008	**0.191**	47#
	Level2			Back Side	15	116	5580	0.09	0.169	16.56	17.00	1.107	99.24	1.008	0.188	/
Ant. 3	Level2	5.8G	802.11 a	Front Side	15	165	5825	-0.11	0.068	13.70	14.00	1.072	99.24	1.008	0.073	/
	Level2			Back Side	15	165	5825	0.01	0.064	13.70	14.00	1.072	99.24	1.008	0.069	/
Ant.	Level2	5.8G	802.11	Front Side	15	157	5785	-0.18	0.181	13.89	14.00	1.026	99.24	1.008	0.187	/

4	Level2		a	Back Side	15	157	5785	0.16	0.182	13.89	14.00	1.026	99.24	1.008	**0.188**	48#
Hotspot																
Ant. 3	Level2	5.2G	802.11 a	Front Side	10	36	5180	-0.12	0.093	16.78	17.00	1.052	99.24	1.008	0.099	/
	Level2			Back Side	10	36	5180	0.00	0.086	16.78	17.00	1.052	99.24	1.008	0.091	/
	Level2			Left Edge	10	36	5180	-0.03	0.038	16.78	17.00	1.052	99.24	1.008	0.040	/
	Level2			Top Edge	10	36	5180	-0.14	0.068	16.78	17.00	1.052	99.24	1.008	0.072	/
Ant. 4	Level2	5.2G	802.11 a	Front Side	10	44	5220	-0.08	0.096	16.83	17.00	1.040	99.24	1.008	0.101	/
	Level2			Back Side	10	44	5220	0.16	0.126	16.83	17.00	1.040	99.24	1.008	0.132	/
	Level2			Left Edge	10	44	5220	0.17	0.349	16.83	17.00	1.040	99.24	1.008	**0.366**	49#
	Level2			Top Edge	10	44	5220	0.14	0.042	16.83	17.00	1.040	99.24	1.008	0.044	/
Ant. 3	Level2	5.8G	802.11 a	Front Side	10	165	5825	-0.01	0.098	13.70	14.00	1.072	99.24	1.008	0.106	/
	Level2			Back Side	10	165	5825	0.01	0.085	13.70	14.00	1.072	99.24	1.008	0.092	/
	Level2			Left Edge	10	165	5825	0.11	0.038	13.70	14.00	1.072	99.24	1.008	0.041	/
	Level2			Top Edge	10	165	5825	-0.14	0.072	13.70	14.00	1.072	99.24	1.008	0.078	/
Ant. 4	Level2	5.8G	802.11 a	Front Side	10	157	5785	0.03	0.188	13.89	14.00	1.026	99.24	1.008	0.194	/
	Level2			Back Side	10	157	5785	-0.13	0.288	13.89	14.00	1.026	99.24	1.008	0.298	/
	Level2			Left Edge	10	157	5785	0.04	0.342	13.89	14.00	1.026	99.24	1.008	**0.353**	50#
	Level2			Top Edge	10	157	5785	0.17	0.081	13.89	14.00	1.026	99.24	1.008	0.084	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Power Reduction	Fre. Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle Setting	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Head																
Ant. 3	Level2	5.3G	802.11 a	Front Side	0	52	5260	0.16	0.497	16.72	17.00	1.067	99.24	1.008	0.534	/
	Level2			Back Side	0	52	5260	0.08	0.358	16.72	17.00	1.067	99.24	1.008	0.385	/
	Level2			Left Edge	0	52	5260	-0.17	0.063	16.72	17.00	1.067	99.24	1.008	0.068	/
	Level2			Top Edge	0	52	5260	0.00	0.215	16.72	17.00	1.067	99.24	1.008	0.231	/
Ant. 4	Level2	5.3G	802.11 a	Front Side	0	64	5320	-0.11	0.815	16.81	17.00	1.045	99.24	1.008	0.858	/
	Level2			Back Side	0	64	5320	0.04	0.512	16.81	17.00	1.045	99.24	1.008	0.539	/
	Level2			Left Edge	0	64	5320	-0.05	1.470	16.81	17.00	1.045	99.24	1.008	**1.547**	51#
	Level2			Top Edge	0	64	5320	0.16	0.105	16.81	17.00	1.045	99.24	1.008	0.111	/
Ant. 3	Level2	5.6G	802.11 a	Front Side	0	100	5500	-0.18	0.607	16.73	17.00	1.064	99.24	1.008	0.651	/
	Level2			Back Side	0	100	5500	0.19	0.514	16.73	17.00	1.064	99.24	1.008	0.551	/
	Level2			Left Edge	0	100	5500	-0.07	0.076	16.73	17.00	1.064	99.24	1.008	0.081	/
	Level2			Top Edge	0	100	5500	0.11	0.260	16.73	17.00	1.064	99.24	1.008	0.279	/
Ant. 4	Level2	5.6G	802.11 a	Front Side	0	116	5580	-0.15	1.060	16.56	17.00	1.107	99.24	1.008	1.182	/
	Level2			Back Side	0	116	5580	-0.01	0.626	16.56	17.00	1.107	99.24	1.008	0.698	/
	Level2			Left Edge	0	116	5580	-0.08	2.090	16.56	17.00	1.107	99.24	1.008	**2.331**	52#
	Level2			Top Edge	0	116	5580	-0.08	0.129	16.56	17.00	1.107	99.24	1.008	0.144	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

10.18 Bluetooth

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle Setting	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.3	Level1	BLE-1Mbps	Left Cheek	0	19	2440	0.09	0.107	8.97	9.50	1.130	62.12	1.610	**0.195**	53#
	Level1		Left Tilt	0	19	2440	0.04	0.094	8.97	9.50	1.130	62.12	1.610	0.171	/
	Level1		Right Cheek	0	19	2440	-0.19	0.083	8.97	9.50	1.130	62.12	1.610	0.151	/
	Level1		Right Tilt	0	19	2440	0.10	0.065	8.97	9.50	1.130	62.12	1.610	0.118	/
Body-worn Accessory															
Ant.3	Level2	BLE-1Mbps	Front Side	15	19	2440	0.05	0.007	8.97	9.50	1.130	62.12	1.610	0.013	/
	Level2		Back Side	15	19	2440	-0.06	0.010	8.97	9.50	1.130	62.12	1.610	**0.018**	54#
Hotspot															
Ant.3	Level2	BLE-1Mbps	Front Side	10	19	2440	0.06	0.023	8.97	9.50	1.130	62.12	1.610	0.042	/
	Level2		Back Side	10	19	2440	-0.15	0.019	8.97	9.50	1.130	62.12	1.610	0.035	/
	Level2		Left Edge	10	19	2440	0.16	0.017	8.97	9.50	1.130	62.12	1.610	0.031	/
	Level2		Top Edge	10	19	2440	0.05	0.024	8.97	9.50	1.130	62.12	1.610	**0.044**	55#
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated 1th Measured SAR (W/kg)	Largest to Smallest SAR Radio
1850.2	GSM 1900	Hotspot	Left Edge	0.832	Yes	0.824	1.01
836.4	WCDMA Band 5	Head	Right Cheek	0.817	Yes	0.801	1.02
2640	5G n41	Hotspot	Right Edge	0.986	Yes	0.975	1.01
Note: The ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20, the second repeated measurement. is not required.							

12 SIMULTANEOUS TRANSMISSION

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

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
1	5GHz WLAN ANT3 + Bluetooth	Yes	Yes	Yes
2	5GHz WLAN ANT4 + Bluetooth	Yes	Yes	Yes
3	5GHz WLAN MIMO + Bluetooth	Yes	Yes	Yes
4	2.4GHz WLAN ANT3 + 5GHz WLAN ANT3	Yes	Yes	Yes
5	2.4GHz WLAN ANT3 + 5GHz WLAN ANT4	Yes	Yes	Yes
6	2.4GHz WLAN ANT4 + 5GHz WLAN ANT3	Yes	Yes	Yes
7	2.4GHz WLAN ANT4 + 5GHz WLAN ANT4	Yes	Yes	Yes
8	WWAN + 2.4GHz WLAN SISO/MIMO	Yes	Yes	Yes
9	LTE + 5G NR + 2.4GHz WLAN SISO/MIMO	Yes	Yes	Yes
10	WWAN + 5GHz WLAN SISO/MIMO	Yes	Yes	Yes
11	LTE + 5G NR + 5GHz WLAN SISO/MIMO	Yes	Yes	Yes
12	WWAN + 5GHz WLAN ANT3 + Bluetooth	Yes	Yes	Yes
13	WWAN + 5GHz WLAN ANT4 + Bluetooth	Yes	Yes	Yes
14	WWAN + 5GHz WLAN MIMO + Bluetooth	Yes	Yes	Yes
15	LTE + 5G NR + 5GHz WLAN ANT3 + Bluetooth	Yes	Yes	Yes
16	LTE + 5G NR + 5GHz WLAN ANT4 + Bluetooth	Yes	Yes	Yes
17	LTE + 5G NR + 5GHz WLAN MIMO + Bluetooth	Yes	Yes	Yes
18	WWAN + 2.4GHz WLAN ANT3 + 5GHz WLAN ANT3	Yes	Yes	Yes
19	WWAN + 2.4GHz WLAN ANT3 + 5GHz WLAN ANT4	Yes	Yes	Yes
20	WWAN + 2.4GHz WLAN ANT4 + 5GHz WLAN ANT3	Yes	Yes	Yes
21	WWAN + 2.4GHz WLAN ANT4 + 5GHz WLAN ANT4	Yes	Yes	Yes
22	LTE + 5G NR + 2.4GHz WLAN ANT3 + 5GHz WLAN ANT3	Yes	Yes	Yes
23	LTE + 5G NR + 2.4GHz WLAN ANT3 + 5GHz WLAN ANT4	Yes	Yes	Yes
24	LTE + 5G NR + 2.4GHz WLAN ANT4 + 5GHz WLAN ANT3	Yes	Yes	Yes
25	LTE + 5G NR + 2.4GHz WLAN ANT4 + 5GHz WLAN ANT4	Yes	Yes	Yes

Note:

1. 2G&3G&4G&5G share the same antenna and can’t transmit simultaneously.
2. WWAN antennas can switch automatically, but can't transmit simultaneously.
3. The maximum SAR summation is calculated based on the same configuration and test position.
4. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
5. This device 2.4GHz WLAN/5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz WLAN/5.5GHz WLAN supports WiFi Direct (GC only).

12.2 Sum SAR of Simultaneous Transmission

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

Band	Antenna	Position	Stand alone SAR						SUM SAR					
			1	2	3	4	5	6						
			WWAN	2.4G WIFI (ANT3)	2.4G WIFI (ANT4)	5G WIFI (ANT3)	5G WIFI (ANT4)	Bluetooth	Sum SAR (1+2+3)	Sum SAR (1+4+5+6)	Sum SAR (1+2+4)	Sum SAR (1+2+5)	Sum SAR (1+3+4)	Sum SAR (1+3+5)
GSM850	Ant.1	Left Cheek	0.623	0.138	0.236	0.105	0.030	0.195	0.997	0.953	0.867	0.791	0.964	0.889
	Ant.1	Left Tilt	0.498	0.128	0.059	0.100	0.008	0.171	0.685	0.777	0.726	0.634	0.657	0.565
	Ant.1	Right Cheek	0.725	0.050	0.179	0.051	0.040	0.151	0.954	0.967	0.826	0.815	0.955	0.943
	Ant.1	Right Tilt	0.717	0.047	0.008	0.050	0.007	0.118	0.772	0.892	0.814	0.771	0.775	0.732
GSM850	Ant.0	Left Cheek	0.162	0.138	0.236	0.105	0.030	0.195	0.536	0.492	0.406	0.330	0.503	0.428
	Ant.0	Left Tilt	0.082	0.128	0.059	0.100	0.008	0.171	0.269	0.361	0.310	0.218	0.241	0.149
	Ant.0	Right Cheek	0.105	0.050	0.179	0.051	0.040	0.151	0.334	0.347	0.206	0.195	0.335	0.323
	Ant.0	Right Tilt	0.053	0.047	0.008	0.050	0.007	0.118	0.108	0.228	0.150	0.107	0.111	0.068
GSM 1900	Ant.1	Left Cheek	0.498	0.138	0.236	0.105	0.030	0.195	0.872	0.828	0.742	0.666	0.839	0.764
	Ant.1	Left Tilt	0.323	0.128	0.059	0.100	0.008	0.171	0.510	0.602	0.551	0.459	0.482	0.390
	Ant.1	Right Cheek	0.828	0.050	0.179	0.051	0.040	0.151	1.057	1.070	0.929	0.918	1.058	1.046
	Ant.1	Right Tilt	0.559	0.047	0.008	0.050	0.007	0.118	0.614	0.734	0.656	0.613	0.617	0.574
GSM 1900	Ant.2	Left Cheek	0.155	0.138	0.236	0.105	0.030	0.195	0.529	0.485	0.399	0.323	0.496	0.421
	Ant.2	Left Tilt	0.052	0.128	0.059	0.100	0.008	0.171	0.239	0.331	0.280	0.188	0.211	0.119
	Ant.2	Right Cheek	0.425	0.050	0.179	0.051	0.040	0.151	0.654	0.667	0.526	0.515	0.655	0.643
	Ant.2	Right Tilt	0.049	0.047	0.008	0.050	0.007	0.118	0.104	0.224	0.146	0.103	0.107	0.064
WCDMA B2	Ant.1	Left Cheek	0.294	0.138	0.236	0.105	0.030	0.195	0.668	0.624	0.538	0.462	0.635	0.560
	Ant.1	Left Tilt	0.223	0.128	0.059	0.100	0.008	0.171	0.410	0.502	0.451	0.359	0.382	0.290
	Ant.1	Right Cheek	0.655	0.050	0.179	0.051	0.040	0.151	0.884	0.897	0.756	0.745	0.885	0.873
	Ant.1	Right Tilt	0.372	0.047	0.008	0.050	0.007	0.118	0.427	0.547	0.469	0.426	0.430	0.387
WCDMA B2	Ant.2	Left Cheek	0.164	0.138	0.236	0.105	0.030	0.195	0.538	0.494	0.408	0.332	0.505	0.430
	Ant.2	Left Tilt	0.045	0.128	0.059	0.100	0.008	0.171	0.232	0.324	0.273	0.181	0.204	0.112
	Ant.2	Right Cheek	0.396	0.050	0.179	0.051	0.040	0.151	0.625	0.638	0.497	0.486	0.626	0.614
	Ant.2	Right Tilt	0.059	0.047	0.008	0.050	0.007	0.118	0.114	0.234	0.156	0.113	0.117	0.074
WCDMA B4	Ant.1	Left Cheek	0.154	0.138	0.236	0.105	0.030	0.195	0.528	0.484	0.398	0.322	0.495	0.420
	Ant.1	Left Tilt	0.198	0.128	0.059	0.100	0.008	0.171	0.385	0.477	0.426	0.334	0.357	0.265
	Ant.1	Right Cheek	0.418	0.050	0.179	0.051	0.040	0.151	0.647	0.660	0.519	0.508	0.648	0.636
	Ant.1	Right Tilt	0.383	0.047	0.008	0.050	0.007	0.118	0.438	0.558	0.480	0.437	0.441	0.398
WCDMA B4	Ant.2	Left Cheek	0.233	0.138	0.236	0.105	0.030	0.195	0.607	0.563	0.477	0.401	0.574	0.499
	Ant.2	Left Tilt	0.078	0.128	0.059	0.100	0.008	0.171	0.265	0.357	0.306	0.214	0.237	0.145
	Ant.2	Right Cheek	0.718	0.050	0.179	0.051	0.040	0.151	0.947	0.960	0.819	0.808	0.948	0.936
	Ant.2	Right Tilt	0.093	0.047	0.008	0.050	0.007	0.118	0.148	0.268	0.190	0.147	0.151	0.108
WCDMA B5	Ant.1	Left Cheek	0.662	0.138	0.236	0.105	0.030	0.195	1.036	0.992	0.906	0.830	1.003	0.928
	Ant.1	Left Tilt	0.569	0.128	0.059	0.100	0.008	0.171	0.756	0.848	0.797	0.705	0.728	0.636
	Ant.1	Right Cheek	0.854	0.050	0.179	0.051	0.040	0.151	1.083	**1.096**	0.955	0.944	1.084	1.072

	Ant.1	Right Tilt	0.813	0.047	0.008	0.050	0.007	0.118	0.868	0.988	0.910	0.867	0.871	0.828
WCDMA B5	Ant.0	Left Cheek	0.273	0.138	0.236	0.105	0.030	0.195	0.647	0.603	0.517	0.441	0.614	0.539
	Ant.0	Left Tilt	0.136	0.128	0.059	0.100	0.008	0.171	0.323	0.415	0.364	0.272	0.295	0.203
	Ant.0	Right Cheek	0.179	0.050	0.179	0.051	0.040	0.151	0.408	0.421	0.280	0.269	0.409	0.397
	Ant.0	Right Tilt	0.106	0.047	0.008	0.050	0.007	0.118	0.161	0.281	0.203	0.160	0.164	0.121
CDMA BC0	Ant.1	Left Cheek	0.605	0.138	0.236	0.105	0.030	0.195	0.979	0.935	0.849	0.773	0.946	0.871
	Ant.1	Left Tilt	0.576	0.128	0.059	0.100	0.008	0.171	0.763	0.855	0.804	0.712	0.735	0.643
	Ant.1	Right Cheek	0.798	0.050	0.179	0.051	0.040	0.151	1.027	1.040	0.899	0.888	1.028	1.016
	Ant.1	Right Tilt	0.787	0.047	0.008	0.050	0.007	0.118	0.842	0.962	0.884	0.841	0.845	0.802
CDMA BC0	Ant.0	Left Cheek	0.253	0.138	0.236	0.105	0.030	0.195	0.627	0.583	0.497	0.421	0.594	0.519
	Ant.0	Left Tilt	0.127	0.128	0.059	0.100	0.008	0.171	0.314	0.406	0.355	0.263	0.286	0.194
	Ant.0	Right Cheek	0.159	0.050	0.179	0.051	0.040	0.151	0.388	0.401	0.260	0.249	0.389	0.377
	Ant.0	Right Tilt	0.091	0.047	0.008	0.050	0.007	0.118	0.146	0.266	0.188	0.145	0.149	0.106
LTE B5	Ant.1	Left Cheek	0.343	0.138	0.236	0.105	0.030	0.195	0.717	0.673	0.587	0.511	0.684	0.609
	Ant.1	Left Tilt	0.316	0.128	0.059	0.100	0.008	0.171	0.503	0.595	0.544	0.452	0.475	0.383
	Ant.1	Right Cheek	0.459	0.050	0.179	0.051	0.040	0.151	0.688	0.701	0.560	0.549	0.689	0.677
	Ant.1	Right Tilt	0.413	0.047	0.008	0.050	0.007	0.118	0.468	0.588	0.510	0.467	0.471	0.428
LTE B5	Ant.0	Left Cheek	0.145	0.138	0.236	0.105	0.030	0.195	0.519	0.475	0.389	0.313	0.486	0.411
	Ant.0	Left Tilt	0.084	0.128	0.059	0.100	0.008	0.171	0.271	0.363	0.312	0.220	0.243	0.151
	Ant.0	Right Cheek	0.113	0.050	0.179	0.051	0.040	0.151	0.342	0.355	0.214	0.203	0.343	0.331
	Ant.0	Right Tilt	0.065	0.047	0.008	0.050	0.007	0.118	0.120	0.240	0.162	0.119	0.123	0.080
LTE B7	Ant.1	Left Cheek	0.148	0.138	0.236	0.105	0.030	0.195	0.522	0.478	0.392	0.316	0.489	0.414
	Ant.1	Left Tilt	0.179	0.128	0.059	0.100	0.008	0.171	0.366	0.458	0.407	0.315	0.338	0.246
	Ant.1	Right Cheek	0.429	0.050	0.179	0.051	0.040	0.151	0.658	0.671	0.530	0.519	0.659	0.647
	Ant.1	Right Tilt	0.286	0.047	0.008	0.050	0.007	0.118	0.341	0.461	0.383	0.340	0.344	0.301
LTE B7	Ant.2	Left Cheek	0.075	0.138	0.236	0.105	0.030	0.195	0.449	0.405	0.319	0.243	0.416	0.341
	Ant.2	Left Tilt	0.028	0.128	0.059	0.100	0.008	0.171	0.215	0.307	0.256	0.164	0.187	0.095
	Ant.2	Right Cheek	0.186	0.050	0.179	0.051	0.040	0.151	0.415	0.428	0.287	0.276	0.416	0.404
	Ant.2	Right Tilt	0.025	0.047	0.008	0.050	0.007	0.118	0.080	0.200	0.122	0.079	0.083	0.040
LTE B38	Ant.1	Left Cheek	0.142	0.138	0.236	0.105	0.030	0.195	0.516	0.472	0.386	0.310	0.483	0.408
	Ant.1	Left Tilt	0.169	0.128	0.059	0.100	0.008	0.171	0.356	0.448	0.397	0.305	0.328	0.236
	Ant.1	Right Cheek	0.519	0.050	0.179	0.051	0.040	0.151	0.748	0.761	0.620	0.609	0.749	0.737
	Ant.1	Right Tilt	0.375	0.047	0.008	0.050	0.007	0.118	0.430	0.550	0.472	0.429	0.433	0.390
LTE B38	Ant.2	Left Cheek	0.110	0.138	0.236	0.105	0.030	0.195	0.484	0.440	0.354	0.278	0.451	0.376
	Ant.2	Left Tilt	0.016	0.128	0.059	0.100	0.008	0.171	0.203	0.295	0.244	0.152	0.175	0.083
	Ant.2	Right Cheek	0.236	0.050	0.179	0.051	0.040	0.151	0.465	0.478	0.337	0.326	0.466	0.454
	Ant.2	Right Tilt	0.028	0.047	0.008	0.050	0.007	0.118	0.083	0.203	0.125	0.082	0.086	0.043
LTE B41	Ant.1	Left Cheek	0.243	0.138	0.236	0.105	0.030	0.195	0.617	0.573	0.487	0.411	0.584	0.509
	Ant.1	Left Tilt	0.319	0.128	0.059	0.100	0.008	0.171	0.506	0.598	0.547	0.455	0.478	0.386
	Ant.1	Right Cheek	0.769	0.050	0.179	0.051	0.040	0.151	0.998	1.011	0.870	0.859	0.999	0.987
	Ant.1	Right Tilt	0.656	0.047	0.008	0.050	0.007	0.118	0.711	0.831	0.753	0.710	0.714	0.671
LTE B41	Ant.2	Left Cheek	0.145	0.138	0.236	0.105	0.030	0.195	0.519	0.475	0.389	0.313	0.486	0.411
	Ant.2	Left Tilt	0.039	0.128	0.059	0.100	0.008	0.171	0.226	0.318	0.267	0.175	0.198	0.106

	Ant.2	Right Cheek	0.322	0.050	0.179	0.051	0.040	0.151	0.551	0.564	0.423	0.412	0.552	0.540
	Ant.2	Right Tilt	0.054	0.047	0.008	0.050	0.007	0.118	0.109	0.229	0.151	0.108	0.112	0.069
5G N41	Ant.5	Left Cheek	0.410	0.138	0.236	0.105	0.030	0.195	0.784	0.740	0.654	0.578	0.751	0.676
	Ant.5	Left Tilt	0.112	0.128	0.059	0.100	0.008	0.171	0.299	0.391	0.340	0.248	0.271	0.179
	Ant.5	Right Cheek	0.751	0.050	0.179	0.051	0.040	0.151	0.980	0.993	0.852	0.841	0.981	0.969
	Ant.5	Right Tilt	0.191	0.047	0.008	0.050	0.007	0.118	0.246	0.366	0.288	0.245	0.249	0.206
5G N77	Ant.5	Left Cheek	0.630	0.138	0.236	0.105	0.030	0.195	1.004	0.960	0.874	0.798	0.971	0.896
	Ant.5	Left Tilt	0.137	0.128	0.059	0.100	0.008	0.171	0.324	0.416	0.365	0.273	0.296	0.204
	Ant.5	Right Cheek	0.567	0.050	0.179	0.051	0.040	0.151	0.796	0.809	0.668	0.657	0.797	0.785
	Ant.5	Right Tilt	0.151	0.047	0.008	0.050	0.007	0.118	0.206	0.326	0.248	0.205	0.209	0.166
5G N78	Ant.5	Left Cheek	0.377	0.138	0.236	0.105	0.030	0.195	0.751	0.707	0.621	0.545	0.718	0.643
	Ant.5	Left Tilt	0.053	0.128	0.059	0.100	0.008	0.171	0.240	0.332	0.281	0.189	0.212	0.120
	Ant.5	Right Cheek	0.293	0.050	0.179	0.051	0.040	0.151	0.522	0.535	0.394	0.383	0.523	0.511
	Ant.5	Right Tilt	0.100	0.047	0.008	0.050	0.007	0.118	0.155	0.275	0.197	0.154	0.158	0.115

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

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

Band	Antenna	Position	Stand alone SAR						SUM SAR					
			1	2	3	4	5	6						
			WWAN	2.4G WIFI (ANT3)	2.4G WIFI (ANT4)	5G WIFI (ANT3)	5G WIFI (ANT4)	Bluetooth	Sum SAR (1+2+3)	Sum SAR (1+4+5+6)	Sum SAR (1+2+4)	Sum SAR (1+2+5)	Sum SAR (1+3+4)	Sum SAR (1+3+5)
GSM850	Ant.1	Front Side 15mm	0.112	0.084	0.118	0.118	0.221	0.013	0.314	0.463	0.313	0.416	0.348	0.451
	Ant.1	Back Side 15mm	0.138	0.096	0.128	0.112	0.222	0.018	0.362	0.490	0.346	0.456	0.379	0.488
GSM850	Ant.0	Front Side 15mm	0.106	0.084	0.118	0.118	0.221	0.013	0.308	0.457	0.307	0.410	0.342	0.445
	Ant.0	Back Side 15mm	0.119	0.096	0.128	0.112	0.222	0.018	0.343	0.471	0.327	0.437	0.360	0.469
GSM 1900	Ant.1	Front Side 15mm	0.059	0.084	0.118	0.118	0.221	0.013	0.261	0.410	0.260	0.363	0.295	0.398
	Ant.1	Back Side 15mm	0.094	0.096	0.128	0.112	0.222	0.018	0.318	0.446	0.302	0.412	0.335	0.444
GSM 1900	Ant.2	Front Side 15mm	0.078	0.084	0.118	0.118	0.221	0.013	0.280	0.429	0.279	0.382	0.314	0.417
	Ant.2	Back Side 15mm	0.099	0.096	0.128	0.112	0.222	0.018	0.323	0.451	0.307	0.417	0.340	0.449
WCDMA B2	Ant.1	Front Side 15mm	0.048	0.084	0.118	0.118	0.221	0.013	0.250	0.399	0.249	0.352	0.284	0.387
	Ant.1	Back Side 15mm	0.056	0.096	0.128	0.112	0.222	0.018	0.280	0.408	0.264	0.374	0.297	0.406
WCDMA B2	Ant.2	Front Side 15mm	0.082	0.084	0.118	0.118	0.221	0.013	0.284	0.433	0.283	0.386	0.318	0.421
	Ant.2	Back Side 15mm	0.084	0.096	0.128	0.112	0.222	0.018	0.308	0.436	0.292	0.402	0.325	0.434
WCDMA B4	Ant.1	Front Side 15mm	0.023	0.084	0.118	0.118	0.221	0.013	0.225	0.374	0.224	0.327	0.259	0.362
	Ant.1	Back Side 15mm	0.027	0.096	0.128	0.112	0.222	0.018	0.251	0.379	0.235	0.345	0.268	0.377
WCDMA B4	Ant.2	Front Side 15mm	0.096	0.084	0.118	0.118	0.221	0.013	0.298	0.447	0.297	0.400	0.332	0.435
	Ant.2	Back Side 15mm	0.117	0.096	0.128	0.112	0.222	0.018	0.341	0.469	0.325	0.435	0.358	0.467
WCDMA B5	Ant.1	Front Side 15mm	0.162	0.084	0.118	0.118	0.221	0.013	0.364	0.513	0.363	0.466	0.398	0.501
	Ant.1	Back Side 15mm	0.215	0.096	0.128	0.112	0.222	0.018	0.439	0.567	0.423	0.533	0.456	0.565
WCDMA B5	Ant.0	Front Side 15mm	0.135	0.084	0.118	0.118	0.221	0.013	0.337	0.486	0.336	0.439	0.371	0.474
	Ant.0	Back Side 15mm	0.157	0.096	0.128	0.112	0.222	0.018	0.381	0.509	0.365	0.475	0.398	0.507
CDMA BC0	Ant.1	Front Side 15mm	0.138	0.084	0.118	0.118	0.221	0.013	0.340	0.489	0.339	0.442	0.374	0.477
	Ant.1	Back Side 15mm	0.176	0.096	0.128	0.112	0.222	0.018	0.400	0.528	0.384	0.494	0.417	0.526
CDMA BC0	Ant.0	Front Side 15mm	0.125	0.084	0.118	0.118	0.221	0.013	0.327	0.476	0.326	0.429	0.361	0.464
	Ant.0	Back Side 15mm	0.143	0.096	0.128	0.112	0.222	0.018	0.367	0.495	0.351	0.461	0.384	0.493
LTE B5	Ant.1	Front Side 15mm	0.164	0.084	0.118	0.118	0.221	0.013	0.366	0.515	0.365	0.468	0.400	0.503
	Ant.1	Back Side 15mm	0.196	0.096	0.128	0.112	0.222	0.018	0.420	0.548	0.404	0.514	0.437	0.546
LTE B5	Ant.0	Front Side 15mm	0.162	0.084	0.118	0.118	0.221	0.013	0.364	0.513	0.363	0.466	0.398	0.501
	Ant.0	Back Side 15mm	0.247	0.096	0.128	0.112	0.222	0.018	0.471	0.599	0.455	0.565	0.488	0.597
LTE B7	Ant.1	Front Side 15mm	0.098	0.084	0.118	0.118	0.221	0.013	0.300	0.449	0.299	0.402	0.334	0.437
	Ant.1	Back Side 15mm	0.100	0.096	0.128	0.112	0.222	0.018	0.324	0.452	0.308	0.418	0.341	0.450
LTE B7	Ant.2	Front Side 15mm	0.059	0.084	0.118	0.118	0.221	0.013	0.261	0.410	0.260	0.363	0.295	0.398
	Ant.2	Back Side 15mm	0.066	0.096	0.128	0.112	0.222	0.018	0.290	0.418	0.274	0.384	0.307	0.416
LTE B38	Ant.1	Front Side 15mm	0.044	0.084	0.118	0.118	0.221	0.013	0.246	0.395	0.245	0.348	0.280	0.383
	Ant.1	Back Side 15mm	0.047	0.096	0.128	0.112	0.222	0.018	0.271	0.399	0.255	0.365	0.288	0.397
LTE B38	Ant.2	Front Side 15mm	0.127	0.084	0.118	0.118	0.221	0.013	0.329	0.478	0.328	0.431	0.363	0.466
	Ant.2	Back Side 15mm	0.139	0.096	0.128	0.112	0.222	0.018	0.363	0.491	0.347	0.457	0.380	0.489

LTE B41	Ant.1	Front Side 15mm	0.085	0.084	0.118	0.118	0.221	0.013	0.287	0.436	0.286	0.389	0.321	0.424
	Ant.1	Back Side 15mm	0.094	0.096	0.128	0.112	0.222	0.018	0.318	0.446	0.302	0.412	0.335	0.444
LTE B41	Ant.2	Front Side 15mm	0.079	0.084	0.118	0.118	0.221	0.013	0.281	0.430	0.280	0.383	0.315	0.418
	Ant.2	Back Side 15mm	0.085	0.096	0.128	0.112	0.222	0.018	0.309	0.437	0.293	0.403	0.326	0.435
5G N41	Ant.5	Front Side 15mm	0.136	0.084	0.118	0.118	0.221	0.013	0.338	0.487	0.337	0.440	0.372	0.475
	Ant.5	Back Side 15mm	0.181	0.096	0.128	0.112	0.222	0.018	0.405	0.533	0.389	0.499	0.422	0.531
5G N77	Ant.5	Front Side 15mm	0.191	0.084	0.118	0.118	0.221	0.013	0.393	0.542	0.392	0.495	0.427	0.530
	Ant.5	Back Side 15mm	0.229	0.096	0.128	0.112	0.222	0.018	0.453	0.581	0.437	0.547	0.470	0.579
5G N78	Ant.5	Front Side 15mm	0.225	0.084	0.118	0.118	0.221	0.013	0.427	0.576	0.426	0.529	0.461	0.564
	Ant.5	Back Side 15mm	0.269	0.096	0.128	0.112	0.222	0.018	0.493	**0.621**	0.477	0.587	0.510	0.619

Note:

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

2: The highest Summed 1g SAR is 0.621 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

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

Band	Antenna	Position	Stand alone SAR						SUM SAR					
			1	2	3	4	5	6						
			WWAN	2.4G WIFI (ANT3)	2.4G WIFI (ANT4)	5G WIFI (ANT3)	5G WIFI (ANT4)	Bluetooth	Sum SAR (1+2+3)	Sum SAR (1+4+5+6)	Sum SAR (1+2+4)	Sum SAR (1+2+5)	Sum SAR (1+3+4)	Sum SAR (1+3+5)
GSM850	Ant.1	Front Side 10mm	0.213	0.098	0.198	0.108	0.203	0.042	0.509	0.566	0.419	0.514	0.519	0.614
	Ant.1	Back Side 10mm	0.279	0.190	0.185	0.093	0.311	0.035	0.655	0.718	0.563	0.780	0.558	0.775
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.557	0.233	0.557
	Ant.1	Right Edge 10mm	0.127	0.000	0.000	0.000	0.000	0.000	0.127	0.127	0.127	0.127	0.127	0.127
	Ant.1	Top Edge 10mm	0.242	0.221	0.109	0.079	0.087	0.044	0.572	0.452	0.542	0.550	0.430	0.438
GSM850	Ant.0	Front Side 10mm	0.143	0.098	0.198	0.108	0.203	0.042	0.439	0.496	0.349	0.444	0.449	0.544
	Ant.0	Back Side 10mm	0.164	0.190	0.185	0.093	0.311	0.035	0.540	0.603	0.448	0.665	0.443	0.660
	Ant.0	Left Edge 10mm	0.075	0.192	0.191	0.042	0.366	0.031	0.457	0.514	0.308	0.633	0.308	0.632
	Ant.0	Right Edge 10mm	0.176	0.000	0.000	0.000	0.000	0.000	0.176	0.176	0.176	0.176	0.176	0.176
	Ant.0	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
	Ant.0	Bottom Edge 10mm	0.146	0.000	0.000	0.000	0.000	0.000	0.146	0.146	0.146	0.146	0.146	0.146
GSM 1900	Ant.1	Front Side 10mm	0.187	0.098	0.198	0.108	0.203	0.042	0.483	0.540	0.393	0.488	0.493	0.588
	Ant.1	Back Side 10mm	0.215	0.190	0.185	0.093	0.311	0.035	0.591	0.654	0.499	0.716	0.494	0.711
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.194	0.000	0.000	0.000	0.000	0.000	0.194	0.194	0.194	0.194	0.194	0.194
	Ant.1	Top Edge 10mm	0.158	0.221	0.109	0.079	0.087	0.044	0.488	0.368	0.458	0.466	0.346	0.354
GSM 1900	Ant.2	Front Side 10mm	0.299	0.098	0.198	0.108	0.203	0.042	0.595	0.652	0.505	0.600	0.605	0.700
	Ant.2	Back Side 10mm	0.275	0.190	0.185	0.093	0.311	0.035	0.651	0.714	0.559	0.776	0.554	0.771
	Ant.2	Left Edge 10mm	0.901	0.192	0.191	0.042	0.366	0.031	1.283	1.340	1.134	**1.459**	1.134	1.458
	Ant.2	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
WCDMA B2	Ant.1	Front Side 10mm	0.105	0.098	0.198	0.108	0.203	0.042	0.401	0.458	0.311	0.406	0.411	0.506
	Ant.1	Back Side 10mm	0.121	0.190	0.185	0.093	0.311	0.035	0.497	0.560	0.405	0.622	0.400	0.617
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.119	0.000	0.000	0.000	0.000	0.000	0.119	0.119	0.119	0.119	0.119	0.119
	Ant.1	Top Edge 10mm	0.086	0.221	0.109	0.079	0.087	0.044	0.416	0.296	0.386	0.394	0.274	0.282
WCDMA B2	Ant.2	Front Side 10mm	0.185	0.098	0.198	0.108	0.203	0.042	0.481	0.538	0.391	0.486	0.491	0.586
	Ant.2	Back Side 10mm	0.172	0.190	0.185	0.093	0.311	0.035	0.548	0.611	0.456	0.673	0.451	0.668
	Ant.2	Left Edge 10mm	0.554	0.192	0.191	0.042	0.366	0.031	0.936	0.993	0.787	1.112	0.787	1.111
	Ant.2	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
WCDMA B4	Ant.1	Front Side 10mm	0.045	0.098	0.198	0.108	0.203	0.042	0.341	0.398	0.251	0.346	0.351	0.446
	Ant.1	Back Side 10mm	0.051	0.190	0.185	0.093	0.311	0.035	0.427	0.490	0.335	0.552	0.330	0.547
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.046	0.000	0.000	0.000	0.000	0.000	0.046	0.046	0.046	0.046	0.046	0.046
	Ant.1	Top Edge 10mm	0.103	0.221	0.109	0.079	0.087	0.044	0.433	0.313	0.403	0.411	0.291	0.299
WCDMA B4	Ant.2	Front Side 10mm	0.232	0.098	0.198	0.108	0.203	0.042	0.528	0.585	0.438	0.533	0.538	0.633
	Ant.2	Back Side 10mm	0.206	0.190	0.185	0.093	0.311	0.035	0.582	0.645	0.490	0.707	0.485	0.702

	Ant.2	Left Edge 10mm	0.486	0.192	0.191	0.042	0.366	0.031	0.868	0.925	0.719	1.044	0.719	1.043
	Ant.2	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
WCDMA B5	Ant.1	Front Side 10mm	0.316	0.098	0.198	0.108	0.203	0.042	0.612	0.669	0.522	0.617	0.622	0.717
	Ant.1	Back Side 10mm	0.403	0.190	0.185	0.093	0.311	0.035	0.779	0.842	0.687	0.904	0.682	0.899
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.221	0.000	0.000	0.000	0.000	0.000	0.221	0.221	0.221	0.221	0.221	0.221
	Ant.1	Top Edge 10mm	0.366	0.221	0.109	0.079	0.087	0.044	0.696	0.576	0.666	0.674	0.554	0.562
WCDMA B5	Ant.0	Front Side 10mm	0.216	0.098	0.198	0.108	0.203	0.042	0.512	0.569	0.422	0.517	0.522	0.617
	Ant.0	Back Side 10mm	0.253	0.190	0.185	0.093	0.311	0.035	0.629	0.692	0.537	0.754	0.532	0.749
	Ant.0	Left Edge 10mm	0.116	0.192	0.191	0.042	0.366	0.031	0.498	0.555	0.349	0.674	0.349	0.673
	Ant.0	Right Edge 10mm	0.248	0.000	0.000	0.000	0.000	0.000	0.248	0.248	0.248	0.248	0.248	0.248
	Ant.0	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
	Ant.0	Bottom Edge 10mm	0.226	0.000	0.000	0.000	0.000	0.000	0.226	0.226	0.226	0.226	0.226	0.226
CDMA BC0	Ant.1	Front Side 10mm	0.274	0.098	0.198	0.108	0.203	0.042	0.570	0.627	0.480	0.575	0.580	0.675
	Ant.1	Back Side 10mm	0.350	0.190	0.185	0.093	0.311	0.035	0.726	0.789	0.634	0.851	0.629	0.846
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.189	0.000	0.000	0.000	0.000	0.000	0.189	0.189	0.189	0.189	0.189	0.189
	Ant.1	Top Edge 10mm	0.313	0.221	0.109	0.079	0.087	0.044	0.643	0.523	0.613	0.621	0.501	0.509
CDMA BC0	Ant.0	Front Side 10mm	0.199	0.098	0.198	0.108	0.203	0.042	0.495	0.552	0.405	0.500	0.505	0.600
	Ant.0	Back Side 10mm	0.234	0.190	0.185	0.093	0.311	0.035	0.610	0.673	0.518	0.735	0.513	0.730
	Ant.0	Left Edge 10mm	0.107	0.192	0.191	0.042	0.366	0.031	0.489	0.546	0.340	0.665	0.340	0.664
	Ant.0	Right Edge 10mm	0.226	0.000	0.000	0.000	0.000	0.000	0.226	0.226	0.226	0.226	0.226	0.226
	Ant.0	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
	Ant.0	Bottom Edge 10mm	0.213	0.000	0.000	0.000	0.000	0.000	0.213	0.213	0.213	0.213	0.213	0.213
LTE B5	Ant.1	Front Side 10mm	0.369	0.098	0.198	0.108	0.203	0.042	0.665	0.722	0.575	0.670	0.675	0.770
	Ant.1	Back Side 10mm	0.386	0.190	0.185	0.093	0.311	0.035	0.762	0.825	0.670	0.887	0.665	0.882
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.259	0.000	0.000	0.000	0.000	0.000	0.259	0.259	0.259	0.259	0.259	0.259
	Ant.1	Top Edge 10mm	0.364	0.221	0.109	0.079	0.087	0.044	0.694	0.574	0.664	0.672	0.552	0.560
LTE B5	Ant.0	Front Side 10mm	0.211	0.098	0.198	0.108	0.203	0.042	0.507	0.564	0.417	0.512	0.517	0.612
	Ant.0	Back Side 10mm	0.248	0.190	0.185	0.093	0.311	0.035	0.624	0.687	0.532	0.749	0.527	0.744
	Ant.0	Left Edge 10mm	0.126	0.192	0.191	0.042	0.366	0.031	0.508	0.565	0.359	0.684	0.359	0.683
	Ant.0	Right Edge 10mm	0.280	0.000	0.000	0.000	0.000	0.000	0.280	0.280	0.280	0.280	0.280	0.280
	Ant.0	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
	Ant.0	Bottom Edge 10mm	0.221	0.000	0.000	0.000	0.000	0.000	0.221	0.221	0.221	0.221	0.221	0.221
LTE B7	Ant.1	Front Side 10mm	0.221	0.098	0.198	0.108	0.203	0.042	0.517	0.574	0.427	0.522	0.527	0.622
	Ant.1	Back Side 10mm	0.205	0.190	0.185	0.093	0.311	0.035	0.581	0.644	0.489	0.706	0.484	0.701
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.516	0.000	0.000	0.000	0.000	0.000	0.516	0.516	0.516	0.516	0.516	0.516
	Ant.1	Top Edge 10mm	0.260	0.221	0.109	0.079	0.087	0.044	0.590	0.470	0.560	0.568	0.448	0.456
LTE B7	Ant.2	Front Side 10mm	0.202	0.098	0.198	0.108	0.203	0.042	0.498	0.555	0.408	0.503	0.508	0.603
	Ant.2	Back Side 10mm	0.186	0.190	0.185	0.093	0.311	0.035	0.562	0.625	0.470	0.687	0.465	0.682
	Ant.2	Left Edge 10mm	0.494	0.192	0.191	0.042	0.366	0.031	0.876	0.933	0.727	1.052	0.727	1.051

	Ant.2	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
LTE B38	Ant.1	Front Side 10mm	0.151	0.098	0.198	0.108	0.203	0.042	0.447	0.504	0.357	0.452	0.457	0.552
	Ant.1	Back Side 10mm	0.167	0.190	0.185	0.093	0.311	0.035	0.543	0.606	0.451	0.668	0.446	0.663
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.393	0.000	0.000	0.000	0.000	0.000	0.393	0.393	0.393	0.393	0.393	0.393
	Ant.1	Top Edge 10mm	0.195	0.221	0.109	0.079	0.087	0.044	0.525	0.405	0.495	0.503	0.383	0.391
LTE B38	Ant.2	Front Side 10mm	0.249	0.098	0.198	0.108	0.203	0.042	0.545	0.602	0.455	0.550	0.555	0.650
	Ant.2	Back Side 10mm	0.291	0.190	0.185	0.093	0.311	0.035	0.667	0.730	0.575	0.792	0.570	0.787
	Ant.2	Left Edge 10mm	0.439	0.192	0.191	0.042	0.366	0.031	0.821	0.878	0.672	0.997	0.672	0.996
	Ant.2	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
LTE B41	Ant.1	Front Side 10mm	0.188	0.098	0.198	0.108	0.203	0.042	0.484	0.541	0.394	0.489	0.494	0.589
	Ant.1	Back Side 10mm	0.197	0.190	0.185	0.093	0.311	0.035	0.573	0.636	0.481	0.698	0.476	0.693
	Ant.1	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.1	Right Edge 10mm	0.451	0.000	0.000	0.000	0.000	0.000	0.451	0.451	0.451	0.451	0.451	0.451
	Ant.1	Top Edge 10mm	0.238	0.221	0.109	0.079	0.087	0.044	0.568	0.448	0.538	0.546	0.426	0.434
LTE B41	Ant.2	Front Side 10mm	0.325	0.098	0.198	0.108	0.203	0.042	0.621	0.678	0.531	0.626	0.631	0.726
	Ant.2	Back Side 10mm	0.372	0.190	0.185	0.093	0.311	0.035	0.748	0.811	0.656	0.873	0.651	0.868
	Ant.2	Left Edge 10mm	0.705	0.192	0.191	0.042	0.366	0.031	1.087	1.144	0.938	1.263	0.938	1.262
	Ant.2	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
5G N41	Ant.5	Front Side 10mm	0.341	0.098	0.198	0.108	0.203	0.042	0.637	0.694	0.547	0.642	0.647	0.742
	Ant.5	Back Side 10mm	0.370	0.190	0.185	0.093	0.311	0.035	0.746	0.809	0.654	0.871	0.649	0.866
	Ant.5	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.5	Right Edge 10mm	1.069	0.000	0.000	0.000	0.000	0.000	1.069	1.069	1.069	1.069	1.069	1.069
	Ant.5	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
5G N77	Ant.5	Front Side 10mm	0.376	0.098	0.198	0.108	0.203	0.042	0.672	0.729	0.582	0.677	0.682	0.777
	Ant.5	Back Side 10mm	0.396	0.190	0.185	0.093	0.311	0.035	0.772	0.835	0.680	0.897	0.675	0.892
	Ant.5	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.5	Right Edge 10mm	0.832	0.000	0.000	0.000	0.000	0.000	0.832	0.832	0.832	0.832	0.832	0.832
	Ant.5	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196
5G N78	Ant.5	Front Side 10mm	0.365	0.098	0.198	0.108	0.203	0.042	0.661	0.718	0.571	0.666	0.671	0.766
	Ant.5	Back Side 10mm	0.479	0.190	0.185	0.093	0.311	0.035	0.855	0.918	0.763	0.980	0.758	0.975
	Ant.5	Left Edge 10mm	0.000	0.192	0.191	0.042	0.366	0.031	0.382	0.439	0.233	0.558	0.233	0.557
	Ant.5	Right Edge 10mm	0.793	0.000	0.000	0.000	0.000	0.000	0.793	0.793	0.793	0.793	0.793	0.793
	Ant.5	Top Edge 10mm	0.000	0.221	0.109	0.079	0.087	0.044	0.330	0.210	0.300	0.308	0.188	0.196

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

12.2.4 Head Simultaneous Transmission SAR Evaluation for EN-DC with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR							SUM SAR						
			1	2	3	4	5	6	7							
			WWAN	N78 (ANT5)	2.4G WIFI (ANT3)	2.4G WIFI (ANT4)	5G WIFI (ANT3)	5G WIFI (ANT4)	Bluetooth	Sum SAR (1+2)	Sum SAR (1+2+3+4)	Sum SAR (1+2+5+6+7)	Sum SAR (1+2+3+5)	Sum SAR (1+2+3+6)	Sum SAR (1+2+4+5)	Sum SAR (1+2+4+6)
LTE B5	Ant.1	Left Cheek	0.343	0.377	0.138	0.236	0.105	0.030	0.195	0.720	**1.094**	1.050	0.964	0.888	1.061	0.986
	Ant.1	Left Tilt	0.316	0.053	0.128	0.059	0.100	0.008	0.171	0.369	0.556	0.648	0.597	0.505	0.528	0.436
	Ant.1	Right Cheek	0.459	0.293	0.050	0.179	0.051	0.040	0.151	0.752	0.981	0.994	0.853	0.842	0.982	0.970
	Ant.1	Right Tilt	0.413	0.100	0.047	0.008	0.050	0.007	0.118	0.513	0.568	0.688	0.610	0.567	0.571	0.528
LTE B5	Ant.0	Left Cheek	0.145	0.377	0.138	0.236	0.105	0.030	0.195	0.522	0.896	0.852	0.766	0.690	0.863	0.788
	Ant.0	Left Tilt	0.084	0.053	0.128	0.059	0.100	0.008	0.171	0.137	0.324	0.416	0.365	0.273	0.296	0.204
	Ant.0	Right Cheek	0.113	0.293	0.050	0.179	0.051	0.040	0.151	0.406	0.635	0.648	0.507	0.496	0.636	0.624
	Ant.0	Right Tilt	0.065	0.100	0.047	0.008	0.050	0.007	0.118	0.165	0.220	0.340	0.262	0.219	0.223	0.180
LTE B7	Ant.1	Left Cheek	0.148	0.377	0.138	0.236	0.105	0.030	0.195	0.525	0.899	0.855	0.769	0.693	0.866	0.791
	Ant.1	Left Tilt	0.179	0.053	0.128	0.059	0.100	0.008	0.171	0.232	0.419	0.511	0.460	0.368	0.391	0.299
	Ant.1	Right Cheek	0.429	0.293	0.050	0.179	0.051	0.040	0.151	0.722	0.951	0.964	0.823	0.812	0.952	0.940
	Ant.1	Right Tilt	0.286	0.100	0.047	0.008	0.050	0.007	0.118	0.386	0.441	0.561	0.483	0.440	0.444	0.401
LTE B7	Ant.2	Left Cheek	0.075	0.377	0.138	0.236	0.105	0.030	0.195	0.452	0.826	0.782	0.696	0.620	0.793	0.718
	Ant.2	Left Tilt	0.028	0.053	0.128	0.059	0.100	0.008	0.171	0.081	0.268	0.360	0.309	0.217	0.240	0.148
	Ant.2	Right Cheek	0.186	0.293	0.050	0.179	0.051	0.040	0.151	0.479	0.708	0.721	0.580	0.569	0.709	0.697
	Ant.2	Right Tilt	0.025	0.100	0.047	0.008	0.050	0.007	0.118	0.125	0.180	0.300	0.222	0.179	0.183	0.140
LTE B38	Ant.1	Left Cheek	0.142	0.377	0.138	0.236	0.105	0.030	0.195	0.519	0.893	0.849	0.763	0.687	0.860	0.785
	Ant.1	Left Tilt	0.169	0.053	0.128	0.059	0.100	0.008	0.171	0.222	0.409	0.501	0.450	0.358	0.381	0.289
	Ant.1	Right Cheek	0.519	0.293	0.050	0.179	0.051	0.040	0.151	0.812	1.041	1.054	0.913	0.902	1.042	1.030
	Ant.1	Right Tilt	0.375	0.100	0.047	0.008	0.050	0.007	0.118	0.475	0.530	0.650	0.572	0.529	0.533	0.490
LTE B38	Ant.2	Left Cheek	0.110	0.377	0.138	0.236	0.105	0.030	0.195	0.487	0.861	0.817	0.731	0.655	0.828	0.753
	Ant.2	Left Tilt	0.016	0.053	0.128	0.059	0.100	0.008	0.171	0.069	0.256	0.348	0.297	0.205	0.228	0.136
	Ant.2	Right Cheek	0.236	0.293	0.050	0.179	0.051	0.040	0.151	0.529	0.758	0.771	0.630	0.619	0.759	0.747
	Ant.2	Right Tilt	0.028	0.100	0.047	0.008	0.050	0.007	0.118	0.128	0.183	0.303	0.225	0.182	0.186	0.143

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

12.2.5 Body-worn Simultaneous Transmission SAR Evaluation for EN-DC with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR							SUM SAR						
			1	2	3	4	5	6	7							
			WWAN	N78 (ANT5)	2.4G WIFI (ANT3)	2.4G WIFI (ANT4)	5G WIFI (ANT3)	5G WIFI (ANT4)	Bluetooth	Sum SAR (1+2)	Sum SAR (1+2+3+4)	Sum SAR (1+2+5+6+7)	Sum SAR (1+2+3+5)	Sum SAR (1+2+3+6)	Sum SAR (1+2+4+5)	Sum SAR (1+2+4+6)
LTE B5	Ant.1	Front Side 15mm	0.164	0.128	0.084	0.118	0.118	0.221	0.013	0.292	0.494	0.643	0.493	0.596	0.528	0.631
	Ant.1	Back Side 15mm	0.196	0.150	0.096	0.128	0.112	0.222	0.018	0.346	0.570	0.698	0.554	0.664	0.587	0.696
LTE B5	Ant.0	Front Side 15mm	0.162	0.128	0.084	0.118	0.118	0.221	0.013	0.290	0.492	0.641	0.491	0.594	0.526	0.629
	Ant.0	Back Side 15mm	0.247	0.150	0.096	0.128	0.112	0.222	0.018	0.397	0.621	**0.749**	0.605	0.715	0.638	0.747
LTE B7	Ant.1	Front Side 15mm	0.098	0.128	0.084	0.118	0.118	0.221	0.013	0.226	0.428	0.577	0.427	0.530	0.462	0.565
	Ant.1	Back Side 15mm	0.100	0.150	0.096	0.128	0.112	0.222	0.018	0.250	0.474	0.602	0.458	0.568	0.491	0.600
LTE B7	Ant.2	Front Side 15mm	0.059	0.128	0.084	0.118	0.118	0.221	0.013	0.187	0.389	0.538	0.388	0.491	0.423	0.526
	Ant.2	Back Side 15mm	0.066	0.150	0.096	0.128	0.112	0.222	0.018	0.216	0.440	0.568	0.424	0.534	0.457	0.566
LTE B38	Ant.1	Front Side 15mm	0.044	0.128	0.084	0.118	0.118	0.221	0.013	0.172	0.374	0.523	0.373	0.476	0.408	0.511
	Ant.1	Back Side 15mm	0.047	0.150	0.096	0.128	0.112	0.222	0.018	0.197	0.421	0.549	0.405	0.515	0.438	0.547
LTE B38	Ant.2	Front Side 15mm	0.127	0.128	0.084	0.118	0.118	0.221	0.013	0.255	0.457	0.606	0.456	0.559	0.491	0.594
	Ant.2	Back Side 15mm	0.139	0.150	0.096	0.128	0.112	0.222	0.018	0.289	0.513	0.641	0.497	0.607	0.530	0.639

Note:

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

2: The highest Summed 1g SAR is 0.749 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.6 Hotspot Simultaneous Transmission SAR Evaluation for EN-DC with WLAN and Bluetooth

Band	Antenna	Position	Stand alone SAR							SUM SAR						
			1	2	3	4	5	6	7							
			WWAN	N78 (ANT5)	2.4G WIFI (ANT3)	2.4G WIFI (ANT4)	5G WIFI (ANT3)	5G WIFI (ANT4)	Bluetooth	Sum SAR (1+2)	Sum SAR (1+2+3+4)	Sum SAR (1+2+5+6+7)	Sum SAR (1+2+3+5)	Sum SAR (1+2+3+6)	Sum SAR (1+2+4+5)	Sum SAR (1+2+4+6)
LTE B5	Ant.1	Front Side 10mm	0.369	0.206	0.098	0.198	0.108	0.203	0.042	0.575	0.871	0.928	0.781	0.876	0.881	0.976
	Ant.1	Back Side 10mm	0.386	0.266	0.190	0.185	0.093	0.311	0.035	0.652	1.028	1.091	0.936	**1.153**	0.931	1.148
	Ant.1	Left Edge 10mm	0.000	0.000	0.192	0.191	0.042	0.353	0.031	0.000	0.382	0.426	0.233	0.545	0.233	0.544
	Ant.1	Right Edge 10mm	0.259	0.445	0.000	0.000	0.000	0.000	0.000	0.704	0.704	0.704	0.704	0.704	0.704	0.704
	Ant.1	Top Edge 10mm	0.364	0.000	0.221	0.109	0.079	0.087	0.044	0.364	0.694	0.574	0.664	0.672	0.552	0.560
LTE B5	Ant.0	Front Side 10mm	0.211	0.206	0.098	0.198	0.108	0.203	0.042	0.417	0.713	0.770	0.623	0.718	0.723	0.818
	Ant.0	Back Side 10mm	0.248	0.266	0.190	0.185	0.093	0.311	0.035	0.514	0.890	0.953	0.798	1.015	0.793	1.010
	Ant.0	Left Edge 10mm	0.126	0.000	0.192	0.191	0.042	0.353	0.031	0.126	0.508	0.552	0.359	0.671	0.359	0.670
	Ant.0	Right Edge 10mm	0.280	0.445	0.000	0.000	0.000	0.000	0.000	0.725	0.725	0.725	0.725	0.725	0.725	0.725
	Ant.0	Top Edge 10mm	0.000	0.000	0.221	0.109	0.079	0.087	0.044	0.000	0.330	0.210	0.300	0.308	0.188	0.196
	Ant.0	Bottom Edge 10mm	0.221	0.000	0.000	0.000	0.000	0.000	0.000	0.221	0.221	0.221	0.221	0.221	0.221	0.221
LTE B7	Ant.1	Front Side 10mm	0.221	0.206	0.098	0.198	0.108	0.203	0.042	0.427	0.723	0.780	0.633	0.728	0.733	0.828
	Ant.1	Back Side 10mm	0.205	0.266	0.190	0.185	0.093	0.311	0.035	0.471	0.847	0.910	0.755	0.972	0.750	0.967
	Ant.1	Left Edge 10mm	0.000	0.000	0.192	0.191	0.042	0.353	0.031	0.000	0.382	0.426	0.233	0.545	0.233	0.544
	Ant.1	Right Edge 10mm	0.516	0.445	0.000	0.000	0.000	0.000	0.000	0.961	0.961	0.961	0.961	0.961	0.961	0.961
	Ant.1	Top Edge 10mm	0.260	0.000	0.221	0.109	0.079	0.087	0.044	0.260	0.590	0.470	0.560	0.568	0.448	0.456
LTE B7	Ant.2	Front Side 10mm	0.202	0.206	0.098	0.198	0.108	0.203	0.042	0.408	0.704	0.761	0.614	0.709	0.714	0.809
	Ant.2	Back Side 10mm	0.186	0.266	0.190	0.185	0.093	0.311	0.035	0.452	0.828	0.891	0.736	0.953	0.731	0.948
	Ant.2	Left Edge 10mm	0.494	0.000	0.192	0.191	0.042	0.353	0.031	0.494	0.876	0.920	0.727	1.039	0.727	1.038
	Ant.2	Right Edge 10mm	0.000	0.445	0.000	0.000	0.000	0.000	0.000	0.445	0.445	0.445	0.445	0.445	0.445	0.445
	Ant.2	Top Edge 10mm	0.000	0.000	0.221	0.109	0.079	0.087	0.044	0.000	0.330	0.210	0.300	0.308	0.188	0.196
LTE B38	Ant.1	Front Side 10mm	0.151	0.206	0.098	0.198	0.108	0.203	0.042	0.357	0.653	0.710	0.563	0.658	0.663	0.758
	Ant.1	Back Side 10mm	0.167	0.266	0.190	0.185	0.093	0.311	0.035	0.433	0.809	0.872	0.717	0.934	0.712	0.929
	Ant.1	Left Edge 10mm	0.000	0.000	0.192	0.191	0.042	0.353	0.031	0.000	0.382	0.426	0.233	0.545	0.233	0.544
	Ant.1	Right Edge 10mm	0.393	0.445	0.000	0.000	0.000	0.000	0.000	0.838	0.838	0.838	0.838	0.838	0.838	0.838
	Ant.1	Top Edge 10mm	0.195	0.000	0.221	0.109	0.079	0.087	0.044	0.195	0.525	0.405	0.495	0.503	0.383	0.391
LTE B38	Ant.2	Front Side 10mm	0.249	0.206	0.098	0.198	0.108	0.203	0.042	0.455	0.751	0.808	0.661	0.756	0.761	0.856
	Ant.2	Back Side 10mm	0.291	0.266	0.190	0.185	0.093	0.311	0.035	0.557	0.933	0.996	0.841	1.058	0.836	1.053
	Ant.2	Left Edge 10mm	0.439	0.000	0.192	0.191	0.042	0.353	0.031	0.439	0.821	0.865	0.672	0.984	0.672	0.983
	Ant.2	Right Edge 10mm	0.000	0.445	0.000	0.000	0.000	0.000	0.000	0.445	0.445	0.445	0.445	0.445	0.445	0.445
	Ant.2	Top Edge 10mm	0.000	0.000	0.221	0.109	0.079	0.087	0.044	0.000	0.330	0.210	0.300	0.308	0.188	0.196

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

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	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
3500MHz Validation Dipole	Speag	D3500V2	SN: 1115	2020/11/11	2023/11/10
3700MHz Validation Dipole	Speag	D3700V2	SN: 1086	2020/11/12	2023/11/11
3900MHz Validation Dipole	Speag	D3900V2	SN: 1059	2020/11/13	2023/11/12
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2021/05/18	2024/05/17
E-Field Probe	Speag	EX3DV4	SN: 7663	2021/07/23	2022/07/22
Data Acquisition Electronics	Speag	DAE4	SN: 878	2021/07/15	2022/07/14
Signal Generator	R&S	SMB100A	177746	2021/08/24	2022/08/23
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2021/09/08	2022/09/07
Power Sensor	R&S	NRV-Z4	100381	2021/09/08	2022/09/07
Power Sensor	R&S	NRV-Z2	100211	2021/09/08	2022/09/07
Wireless Communication Test Set	Anritsu	MT8820C	6201502974	2021/03/16	2022/03/15
Wireless Communication Test Set	Anritsu	MT8820C	6201502991	2021/03/16	2022/03/15
Network Analyzer	Agilent	E5071B	MY42404001	2021/04/01	2022/03/31
Thermometer	Elitech	RC-4HC	EF720B004820	2021/12/01	2022/11/30
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 25/13 OCPG56	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 an SCLMP Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (℃)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ε)	Target Conductivity (σ) (S/m)	Target Permittivity (ε)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2021.12.07	Head	835	21.3	0.89	42.16	0.90	41.50	-1.11	1.59
2021.12.08	Head	835	21.9	0.90	41.03	0.90	41.50	0.00	-1.13
2021.12.09	Head	1750	22.6	1.38	40.45	1.37	40.08	0.73	0.92
2021.12.12	Head	1900	21.5	1.44	38.82	1.40	40.00	2.86	-2.95
2021.12.15	Head	2450	21.9	1.83	39.39	1.80	39.20	1.67	0.48
2021.12.24	Head	2600	21.0	1.95	38.60	1.96	39.01	-0.51	-1.05
2021.12.31	Head	2600	21.4	1.93	40.08	1.96	39.01	-1.53	2.74
2022.01.02	Head	2600	21.7	1.93	39.82	1.96	39.01	-1.53	2.08
2022.01.08	Head	2600	21.3	2.00	38.18	1.96	39.01	2.04	-2.13
2022.01.09	Head	2600	21.4	2.04	37.50	1.96	39.01	4.08	-3.87
2022.01.10	Head	3500	21.4	2.89	37.44	2.91	37.93	-0.69	-1.29
2022.01.11	Head	3500	21.5	2.85	37.37	2.91	37.93	-2.06	-1.48
2022.01.11	Head	3700	21.5	3.06	36.92	3.12	37.70	-1.92	-2.07
2022.01.10	Head	3900	21.5	3.36	36.84	3.32	37.47	1.20	-1.68
2022.01.12	Head	5250	21.1	4.74	36.79	4.71	35.93	0.64	2.39
2022.01.13	Head	5600	21.4	4.97	34.89	5.07	35.53	-1.97	-1.80
2022.01.14	Head	5750	21.6	5.27	36.18	5.22	35.36	0.96	2.32
Note: The tolerance limit of Conductivity and Permittivity is± 5%.									

ANNEX B SYSTEM CHECK RESULT

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

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2021.12.07	Head	835	100	0.945	9.45	9.49	-0.42
2021.12.08	Head	835	100	0.993	9.93	9.49	4.64
2021.12.09	Head	1750	100	3.660	36.60	36.80	-0.54
2021.12.12	Head	1900	100	4.070	40.70	39.40	3.30
2021.12.15	Head	2450	100	5.320	53.20	52.60	1.14
2021.12.24	Head	2600	100	5.600	56.00	56.30	-0.53
2021.12.31	Head	2600	100	5.520	55.20	56.30	-1.95
2022.01.02	Head	2600	100	5.430	54.30	56.30	-3.55
2022.01.08	Head	2600	100	5.840	58.40	56.30	3.73
2022.01.09	Head	2600	100	5.590	55.90	56.30	-0.71
2022.01.10	Head	3500	100	6.340	63.40	67.60	-6.21
2022.01.11	Head	3500	100	6.720	67.20	67.60	-0.59
2022.01.11	Head	3700	100	6.520	65.20	68.10	-4.26
2022.01.10	Head	3900	100	6.860	68.60	69.30	-1.01
2022.01.12	Head	5250	100	7.530	75.30	77.80	-3.21
2022.01.13	Head	5600	100	7.890	78.90	81.20	-2.83
2022.01.14	Head	5750	100	7.800	78.00	77.20	1.04
Note: The tolerance limit of System validation ±10%.							

Head liquid 10g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2022.01.12	Head	5250	100	2.130	21.30	22.10	-3.62
2022.01.13	Head	5600	100	2.260	22.60	23.10	-2.16
Note: The tolerance limit of System validation ±10%.							

System Performance Check Data (835MHz)

Date: 2021.12.07

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

Medium parameters used: f = 835 MHz; σ = 0.892 S/m; ε_r = 42.157; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

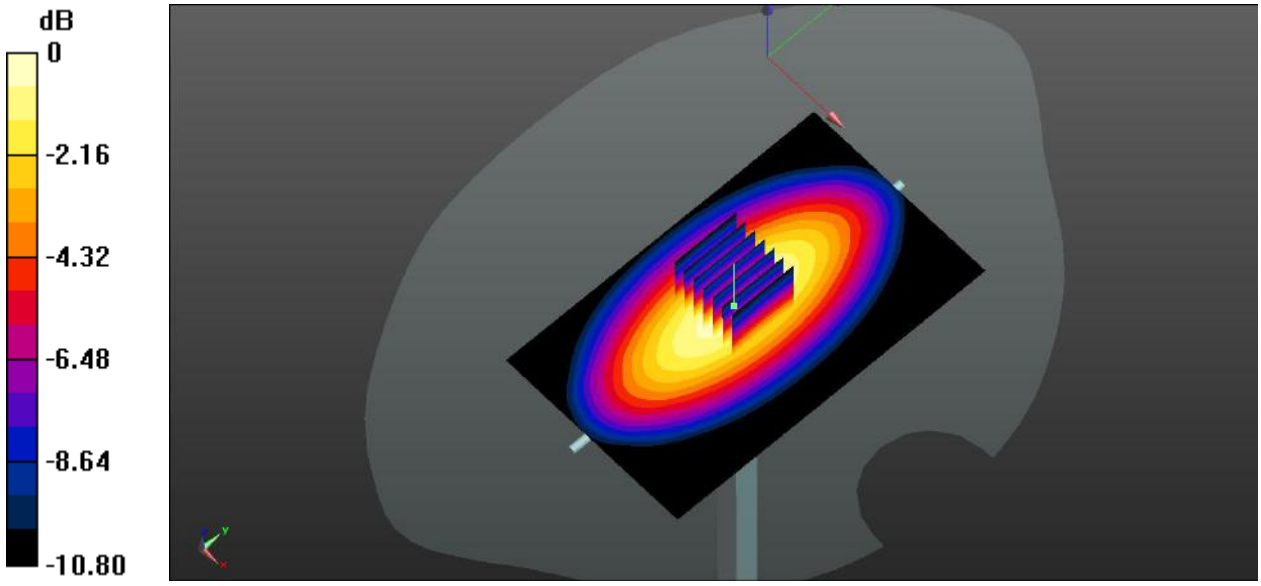
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.49 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.616 W/kg

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



0 dB = 1.02 W/kg

System Performance Check Data (835MHz)

Date: 2021.12.08

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

Medium parameters used: f = 835 MHz; σ = 0.902 S/m; ε_r = 41.032; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 1.04 W/kg

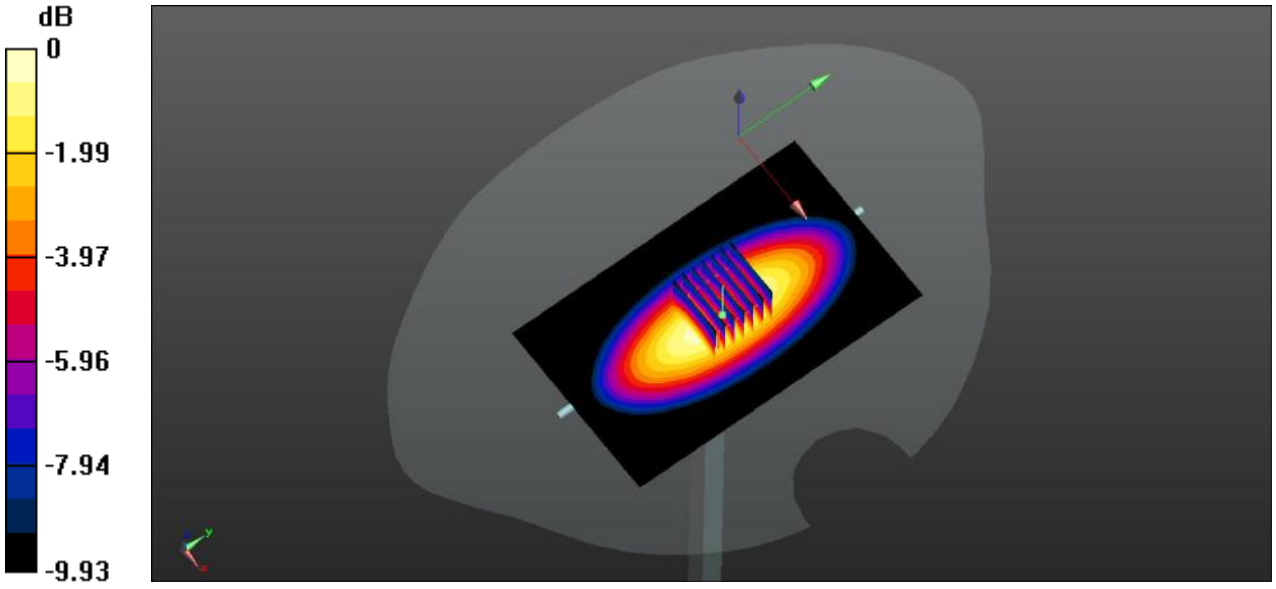
CW 835 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.97 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.993 W/kg; SAR(10 g) = 0.601 W/kg

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



0 dB = 1.09 W/kg

System Performance Check Data (1750MHz)

Date: 2021.12.09

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

Medium parameters used: f = 1750 MHz; σ = 1.378 S/m; ε_r = 40.454; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:22.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

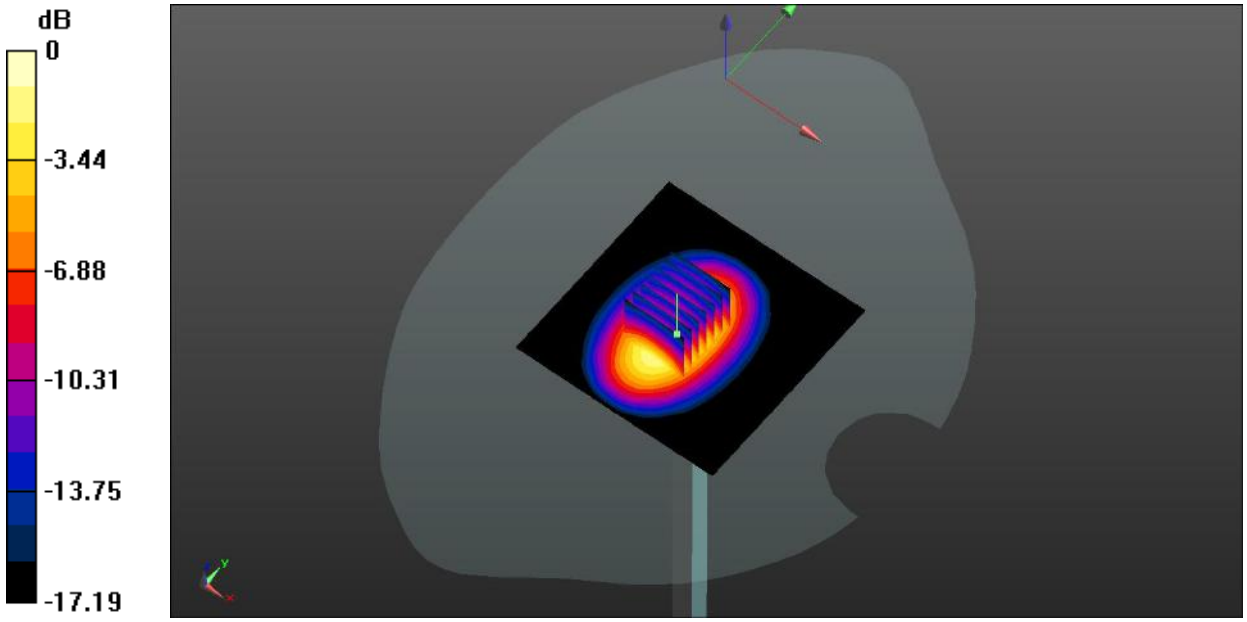
CW1750 100mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.35 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 7.03 W/kg

SAR(1 g) = 3.66 W/kg; SAR(10 g) = 1.94 W/kg

Maximum value of SAR (measured) = 4.24 W/kg



0 dB = 4.24 W/kg

System Performance Check Data (1900MHz)

Date: 2021.12.12

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

Medium parameters used: f = 1900 MHz; σ = 1.439 S/m; ε_r = 38.815; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 4.71 W/kg

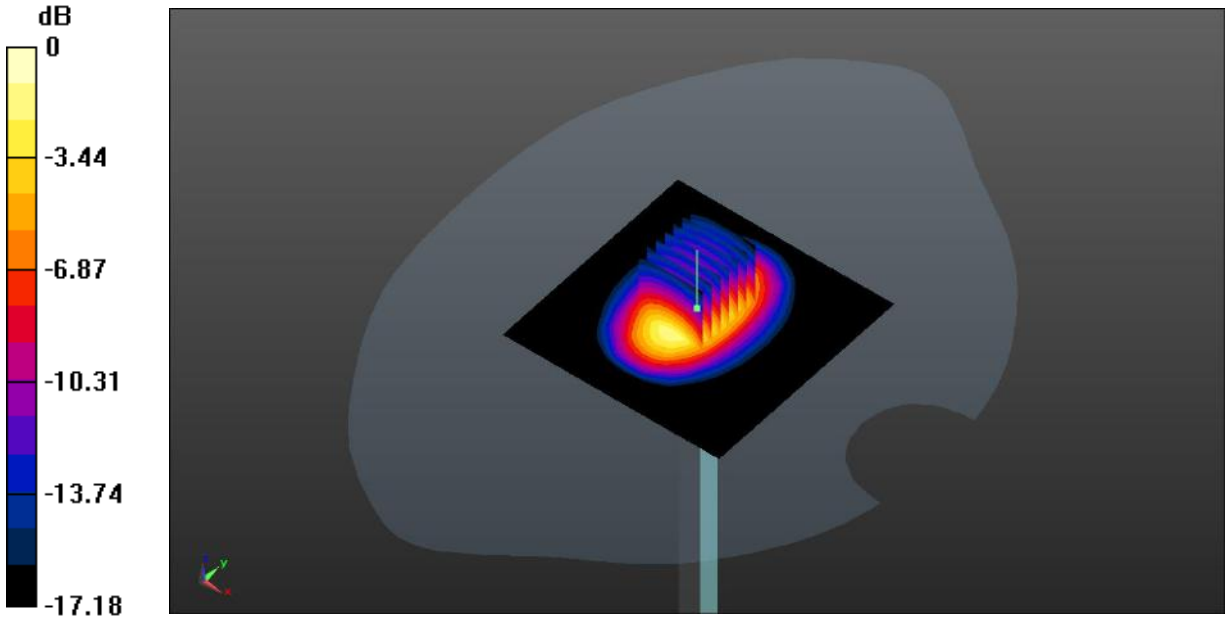
CW1900 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.13 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 7.42 W/kg

SAR(1 g) = 4.07 W/kg; SAR(10 g) = 1.93 W/kg

Maximum value of SAR (measured) = 4.62 W/kg



0 dB = 4.62 W/kg

System Performance Check Data (2450MHz)

Date: 2021.12.15

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

Medium parameters used: f = 2450 MHz; σ = 1.831 S/m; ε_r = 39.393; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 6.29 W/kg

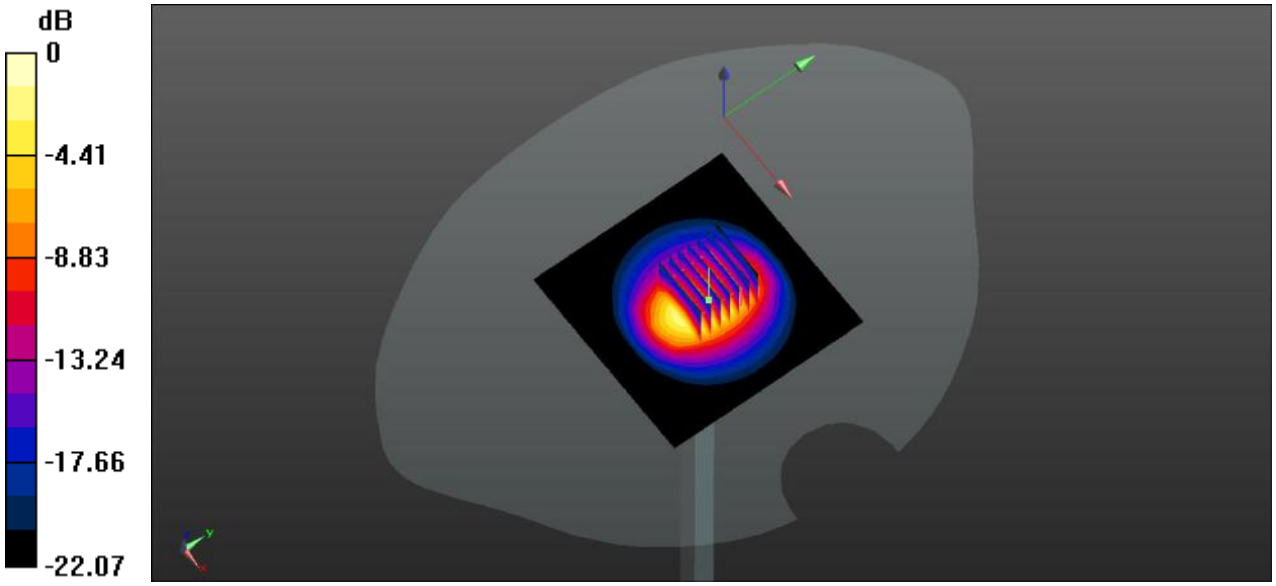
CW 2450 100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.66 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 12.3 W/kg

SAR(1 g) = 5.32 W/kg; SAR(10 g) = 2.41 W/kg

Maximum value of SAR (measured) = 6.31 W/kg



0 dB = 6.31 W/kg

System Performance Check Data (2600MHz)

Date: 2021.12.24

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

Medium parameters used (interpolated): f = 2600 MHz; σ = 1.948 S/m; ε_r = 38.595; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW2600 100mW /Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 6.61 W/kg

CW2600 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.17 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 12.1 W/kg

SAR(1 g) = 5.6 W/kg; SAR(10 g) = 2.52 W/kg

Maximum value of SAR (measured) = 6.78 W/kg

0 dB = 6.78 W/kg

System Performance Check Data (2600MHz)

Date: 2021.12.31

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

Medium parameters used (extrapolated): f = 2600 MHz; σ = 1.932 S/m; ε_r = 40.082; ρ = 1000 kg/m^3

Phantom section: Flat Section

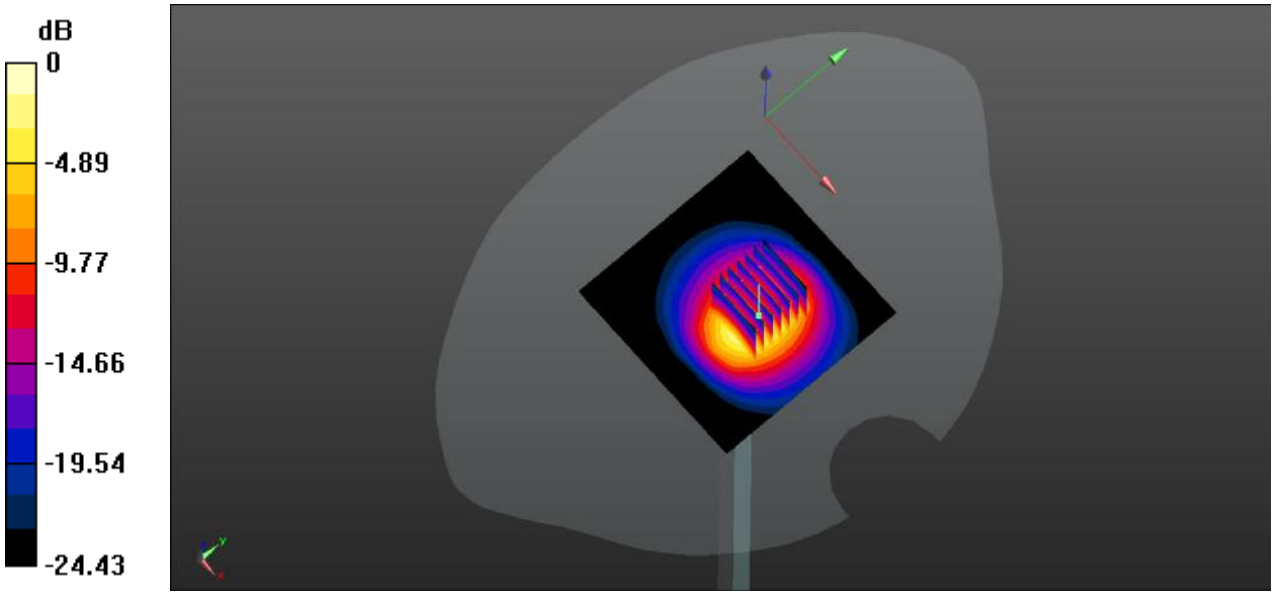
Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2600 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 6.45 W/kg

CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.11 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 12.7 W/kg
SAR(1 g) = 5.52 W/kg; SAR(10 g) = 2.35 W/kg
Maximum value of SAR (measured) = 6.34 W/kg



0 dB = 6.34 W/kg

System Performance Check Data (2600MHz)

Date: 2022.01.02

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

Medium parameters used: f = 2600 MHz; σ = 1.929 S/m; ε_r = 39.822; ρ = 1000 kg/m^3

Phantom section: Flat Section

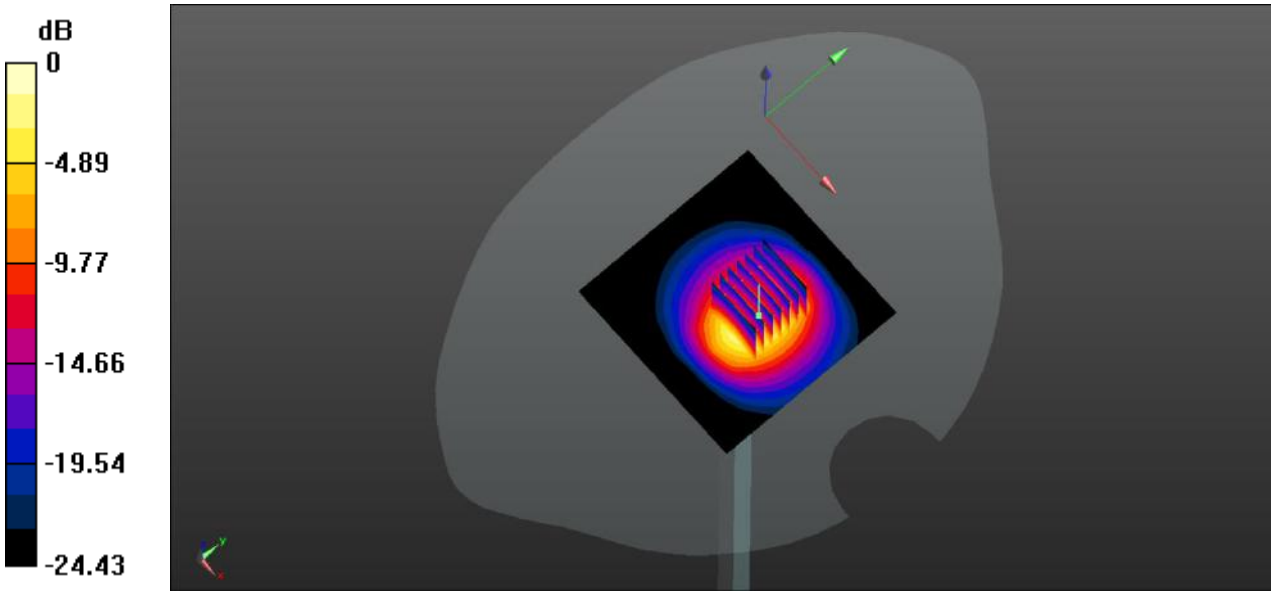
Ambient Temperature:22.8 Liquid Temperature:21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 2600 100mW/Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 6.38 W/kg

CW 2600 100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.43 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 13.2 W/kg
SAR(1 g) = 5.43 W/kg; SAR(10 g) = 2.51 W/kg
Maximum value of SAR (measured) = 6.37 W/kg



0 dB = 6.37 W/kg

System Performance Check Data (2600MHz)

Date: 2022.01.08

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

Medium parameters used: f = 2600 MHz; σ = 2.004 S/m; ε_r = 38.18; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

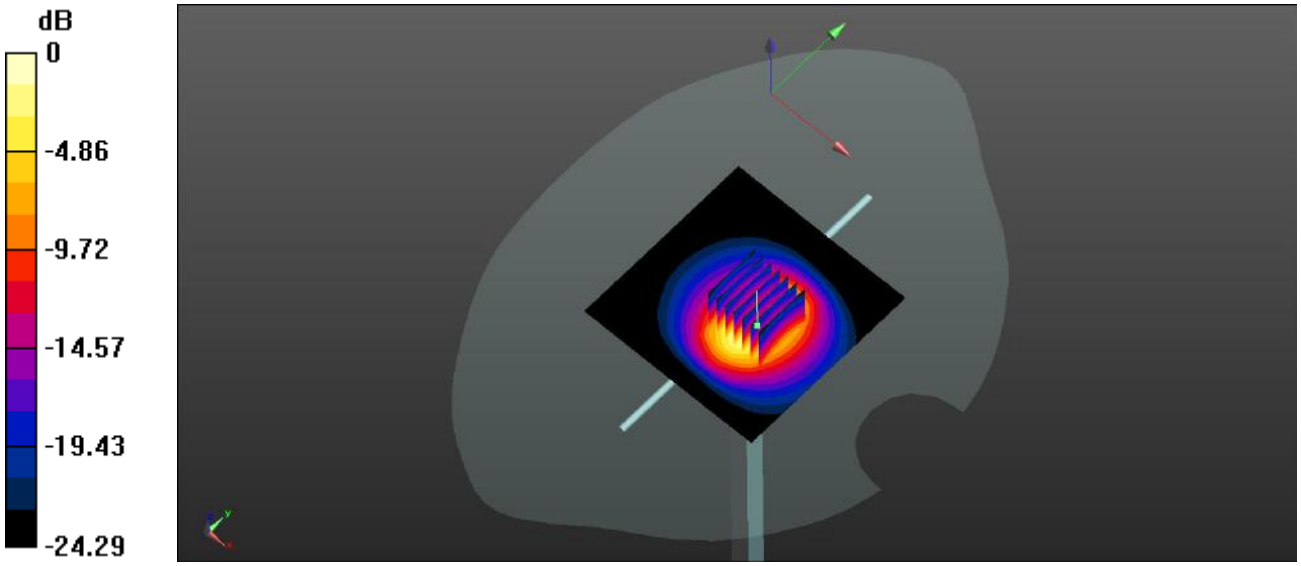
CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.73 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 13.1 W/kg

SAR(1 g) = 5.84 W/kg; SAR(10 g) = 2.42 W/kg

Maximum value of SAR (measured) = 6.63 W/kg



0 dB = 6.63 W/kg

System Performance Check Data (2600MHz)

Date: 2022.01.09

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

Medium parameters used (interpolated): f = 2600 MHz; σ = 2.035 S/m; ε_r = 37.498; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 6.52 W/kg

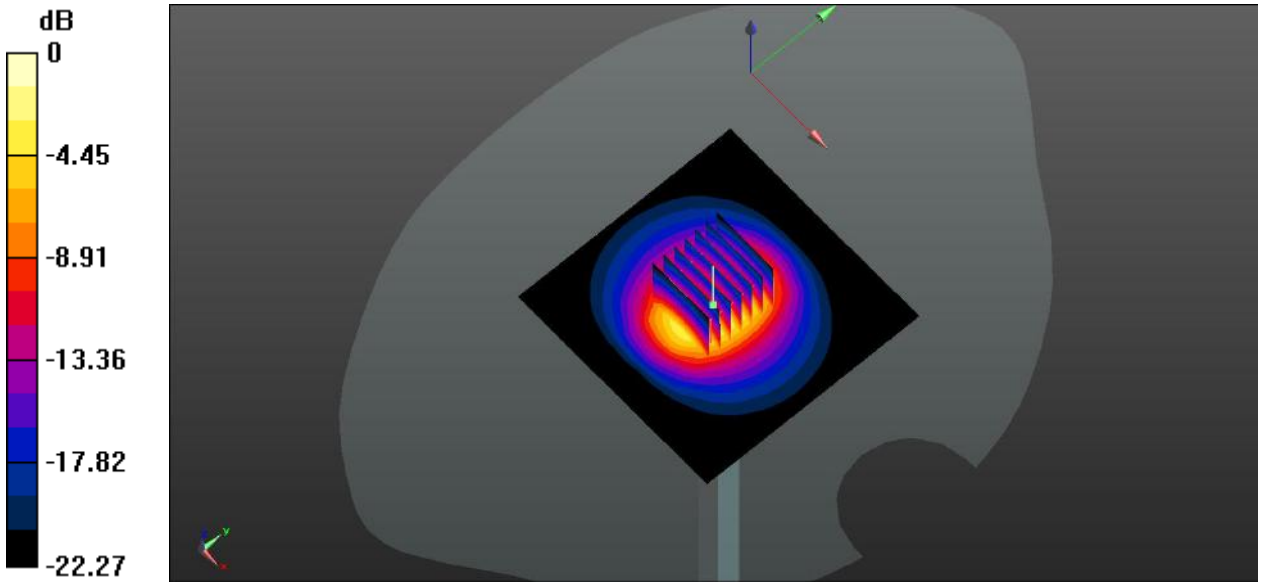
CW 2600 100mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.36 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 12.9 W/kg

SAR(1 g) = 5.59 W/kg; SAR(10 g) = 2.51 W/kg

Maximum value of SAR (measured) = 6.47 W/kg



0 dB = 6.47 W/kg

System Performance Check Data (3500MHz)

Date: 2022.01.10

Communication System Band: D3500 (3300.0 - 3600.0 MHz); Frequency: 3500 MHz;Duty Cycle: 1:1

Medium parameters used: f = 3500 MHz; σ = 2.894 S/m; ε_r = 37.437; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.1, 7.1, 7.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW3500 100mW/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.16 W/kg

CW3500 100mW/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 48.74 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 19.1 W/kg

SAR(1 g) = 6.34 W/kg; SAR(10 g) = 2.4 W/kg

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

0 dB = 11.1 W/kg

System Performance Check Data (3900MHz)

Date: 2022.01.10

Communication System Band: D3900 (3900.0 MHz); Frequency: 3900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 3900 MHz; σ = 3.359 S/m; ε_r = 36.837; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(6.95, 6.95, 6.95); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 3900 100mW/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.67 W/kg

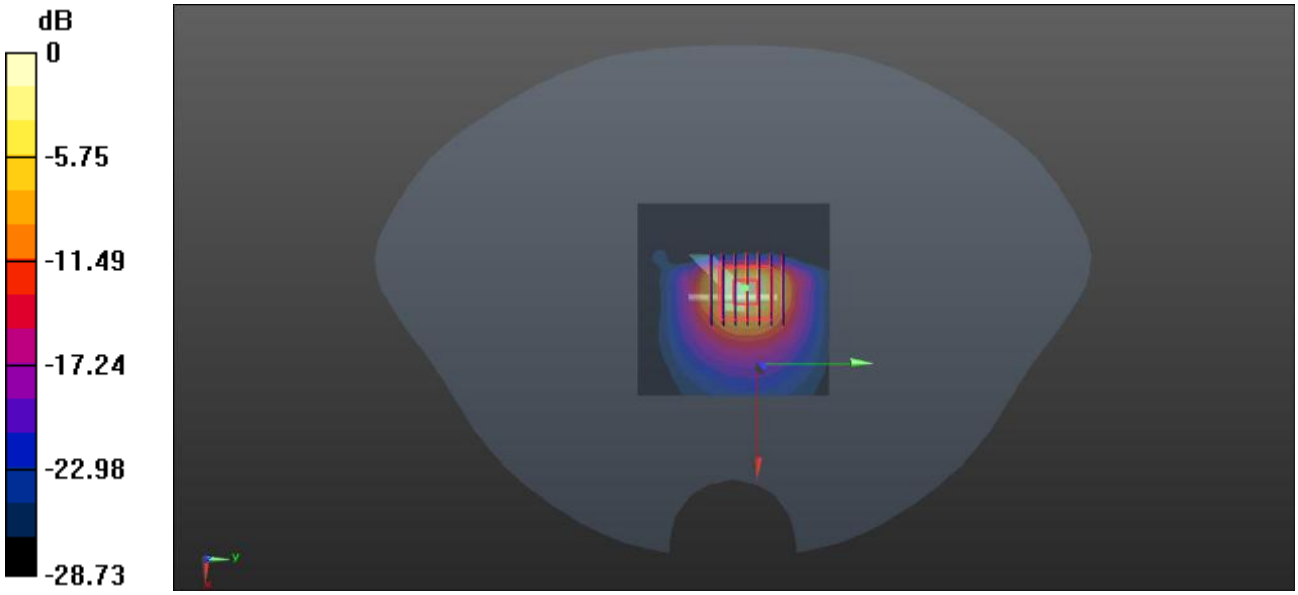
CW 3900 100mW/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 45.03 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 24.4 W/kg

SAR(1 g) = 6.86 W/kg; SAR(10 g) = 2.35 W/kg

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



0 dB = 12.4 W/kg

System Performance Check Data (3500MHz)

Date: 2022.01.11

Communication System Band: D3500 (3300.0 - 3600.0 MHz); Frequency: 3500 MHz;Duty Cycle: 1:1

Medium parameters used: f = 3500 MHz; σ = 2.848 S/m; ε_r = 37.37; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.1, 7.1, 7.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW3500 100mW/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.23 W/kg

CW3500 100mW/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 46.53 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 21.2 W/kg

SAR(1 g) = 6.72 W/kg; SAR(10 g) = 2.61 W/kg

Maximum value of SAR (measured) = 12.7 W/kg

0 dB = 12.7 W/kg

System Performance Check Data (3700MHz)

Date: 2022.01.11

Communication System Band: D3700 (3700.0 MHz); Frequency: 3700 MHz;Duty Cycle: 1:1

Medium parameters used: f = 3700 MHz; σ = 3.063 S/m; ε_r = 36.917; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7, 7, 7); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW3700 100mW/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.25 W/kg

CW3700 100mW/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm

Reference Value = 47.16 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 23.3 W/kg

SAR(1 g) = 6.52 W/kg; SAR(10 g) = 2.39 W/kg

Maximum value of SAR (measured) = 13.1 W/kg

0 dB = 13.1 W/kg

System Performance Check Data (5250MHz)

Date: 2022.01.12

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

Medium parameters used: f = 5250 MHz; σ = 4.739 S/m; ε_r = 36.792; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.72, 5.72, 5.72); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 5250 100mW/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 7.79 W/kg

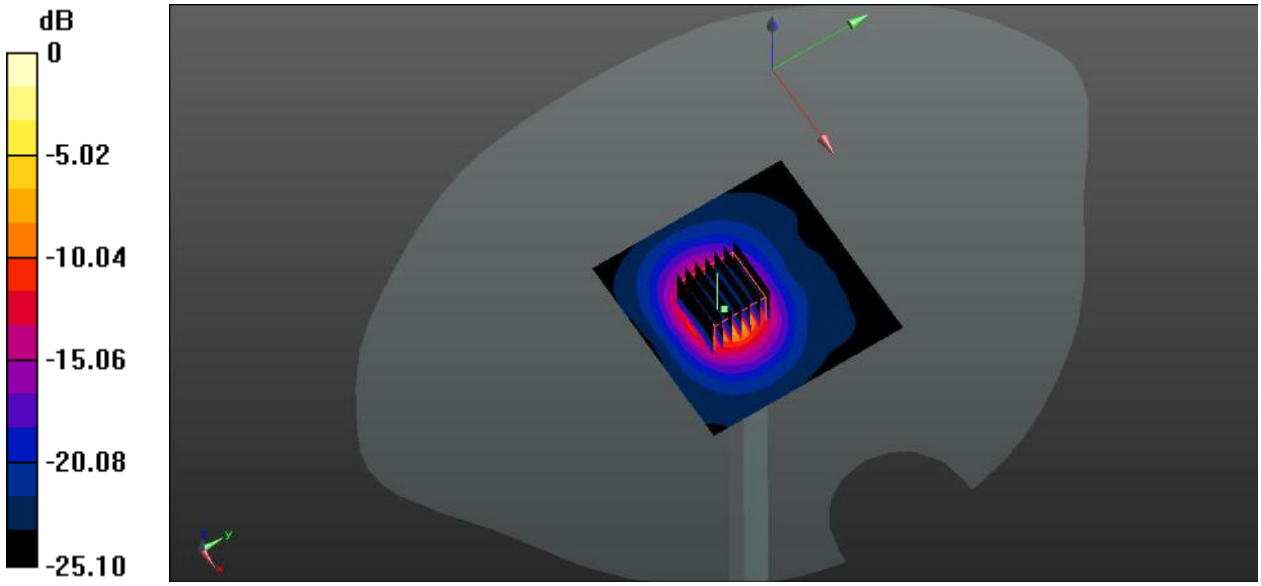
CW 5250 100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 26.34 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 32.3 W/kg

SAR(1 g) = 7.53 W/kg; SAR(10 g) = 2.13 W/kg

Maximum value of SAR (measured) = 14.7 W/kg



0 dB = 14.7 W/kg

System Performance Check Data (5600MHz)

Date: 2022.01.13

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

Medium parameters used: f = 5600 MHz; σ = 4.974 S/m; ε_r = 34.891; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.1, 5.1, 5.1); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 8.55 W/kg

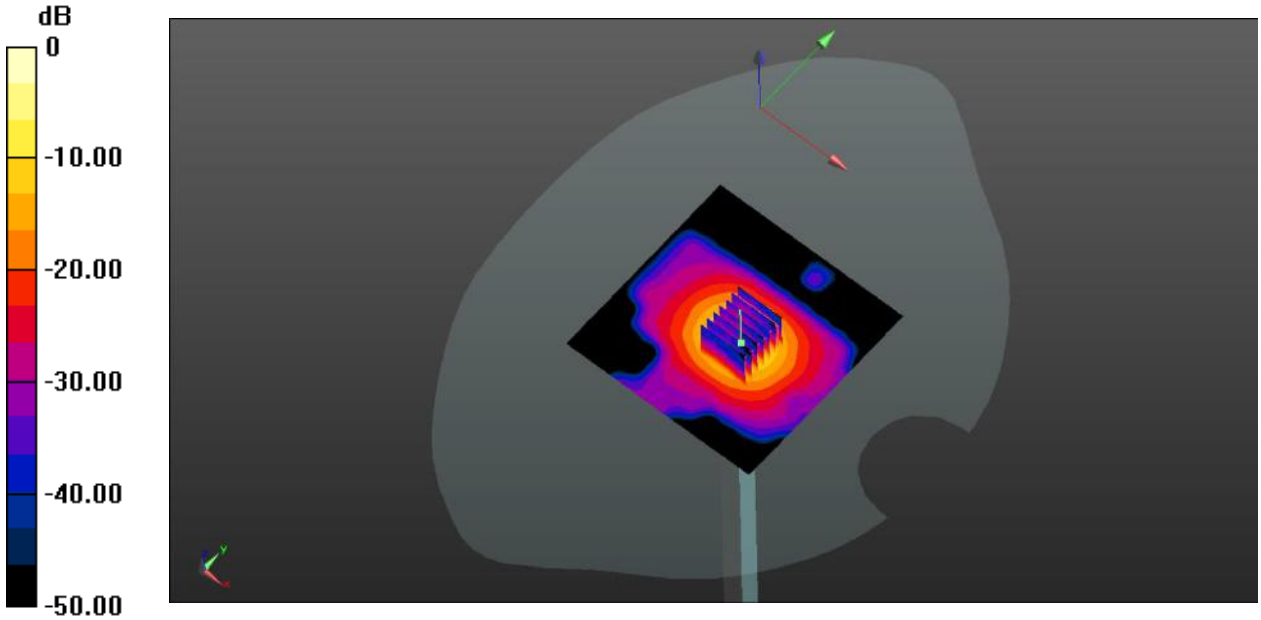
CW5600 100mW/Zoom Scan (7x7x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 33.17 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 36.8 W/kg

SAR(1 g) = 7.89 W/kg; SAR(10 g) = 2.26 W/kg

Maximum value of SAR (measured) = 20.1 W/kg



0 dB = 20.1 W/kg

System Performance Check Data (5750MHz)

Date: 2022.01.14

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

Medium parameters used: f = 5750 MHz; σ = 5.266 S/m; ε_r = 36.177; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.15, 5.15, 5.15); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 8.32 W/kg

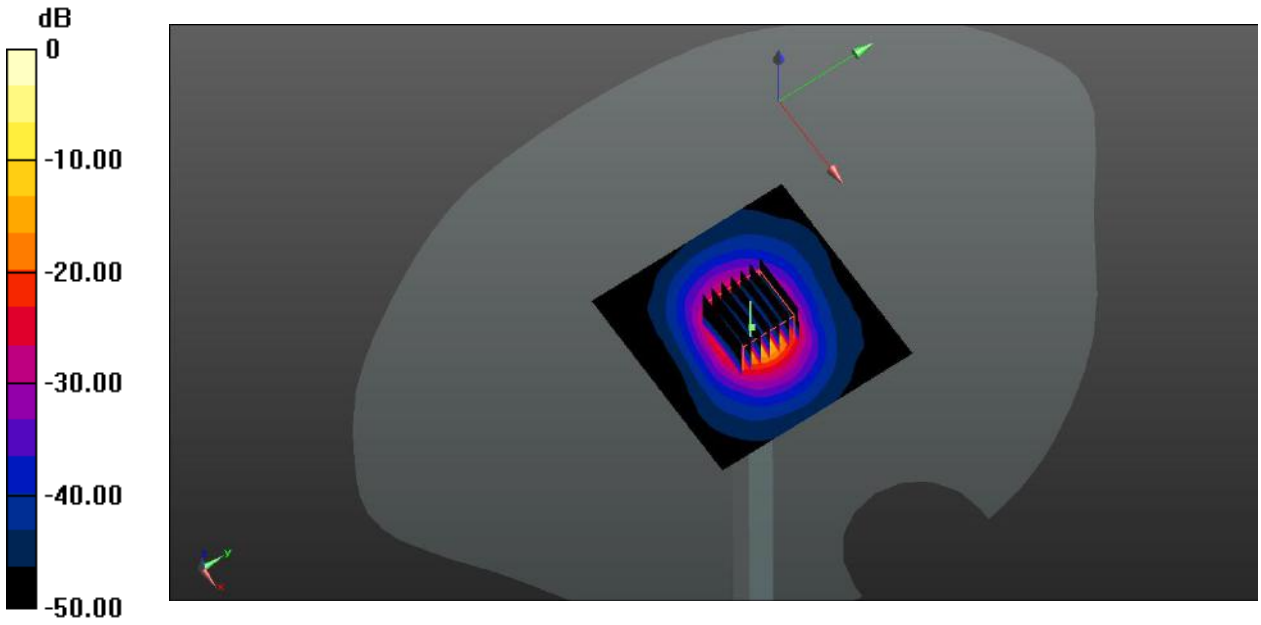
CW5750 100mw/Zoom Scan (7x7x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 32.37 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 39.2 W/kg

SAR(1 g) = 7.8 W/kg; SAR(10 g) = 2.06 W/kg

Maximum value of SAR (measured) = 16.5 W/kg



0 dB = 16.5 W/kg

ANNEX C TEST DATA

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

Date: 2021.12.07

Communication System Band: GPRS850; Frequency: 848.8 MHz;Duty Cycle: 1:4.1

Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.905 S/m; ε_r = 42.496; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

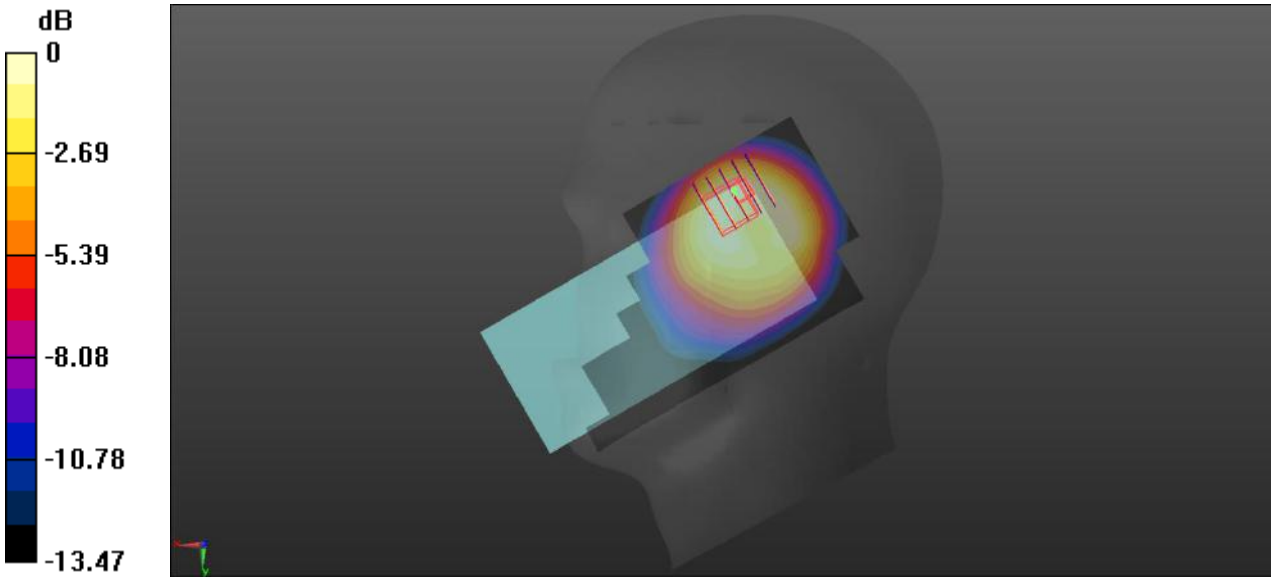
Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.40 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.660 W/kg; SAR(10 g) = 0.422 W/kg

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



0 dB = 0.729 W/kg

Meas.2 Body Plane with Back Side 15mm on High Channel in GPRS850 2Slots mode with Antenna 1

Date: 2021.12.07

Communication System Band: GPRS850; Frequency: 848.8 MHz;Duty Cycle: 1:4.1

Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.905 S/m; ε_r = 42.496; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

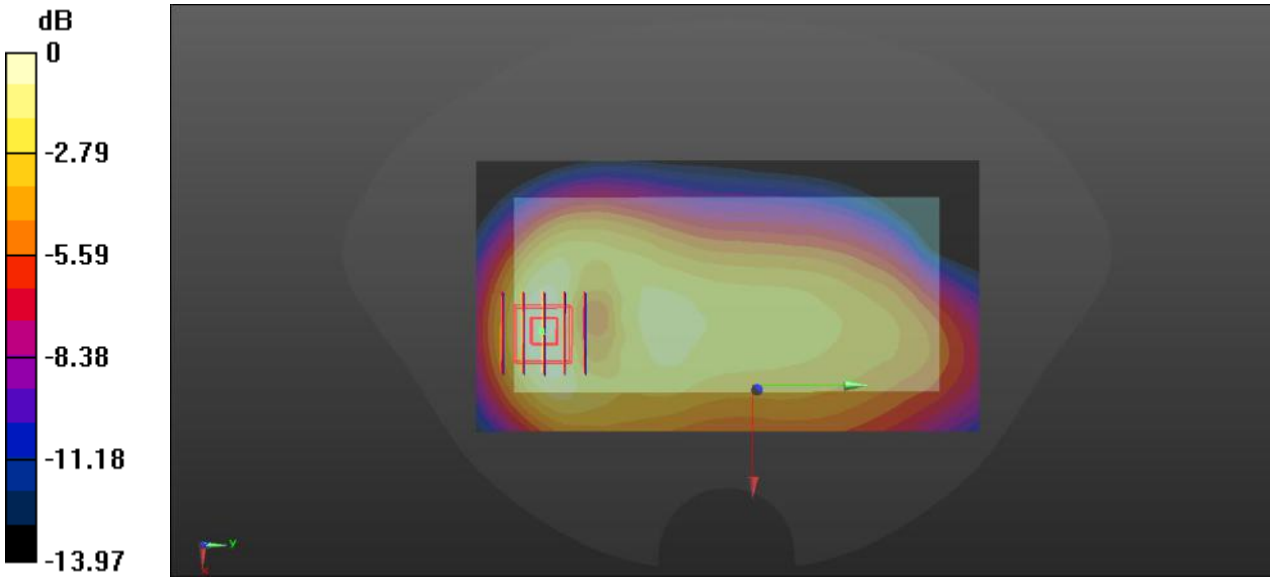
Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.007 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.198 W/kg

SAR(1 g) = 0.126 W/kg; SAR(10 g) = 0.077 W/kg

Maximum value of SAR (measured) = 0.137 W/kg



0 dB = 0.137 W/kg

Meas.3 Body Plane with Back Side 10mm on High Channel in GPRS850 2Slots mode with Antenna 1

Date: 2021.12.07

Communication System Band: GPRS850; Frequency: 848.8 MHz;Duty Cycle: 1:4.1

Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.905 S/m; ε_r = 42.496; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.250 W/kg

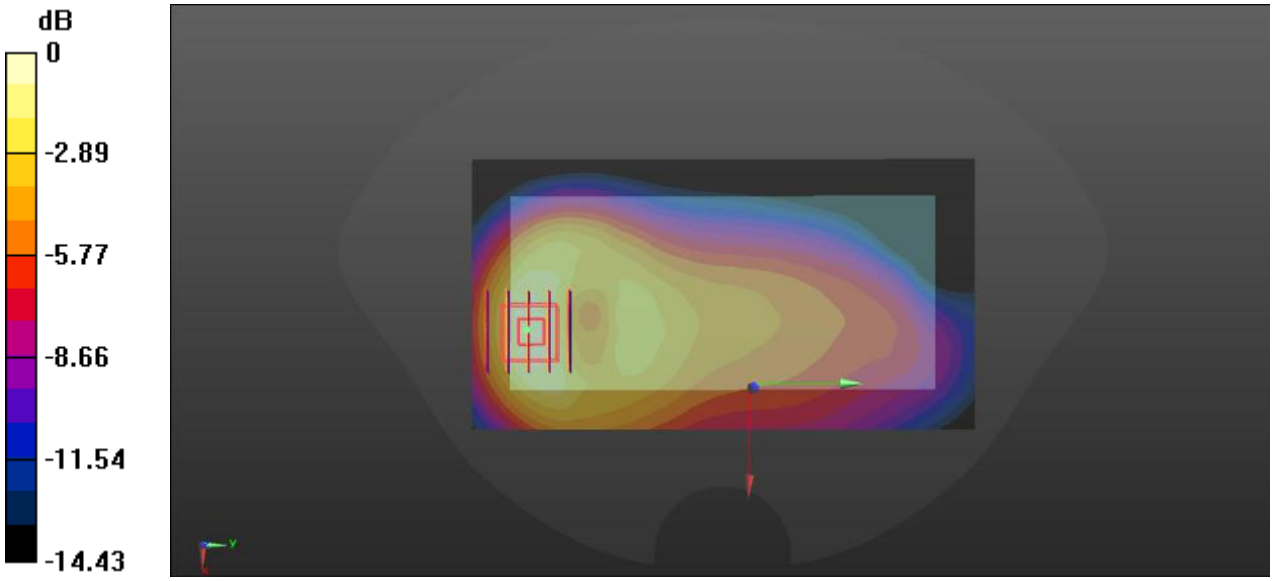
Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.25 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.429 W/kg

SAR(1 g) = 0.254 W/kg; SAR(10 g) = 0.147 W/kg

Maximum value of SAR (measured) = 0.272 W/kg



0 dB = 0.272 W/kg

Meas.4 Right Head with Cheek on Low Channel in GPRS1900 2Slots mode with Antenna 1

Date: 2021.12.12

Communication System Band: GPRS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4.1

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.428 S/m; ε_r = 39.6; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

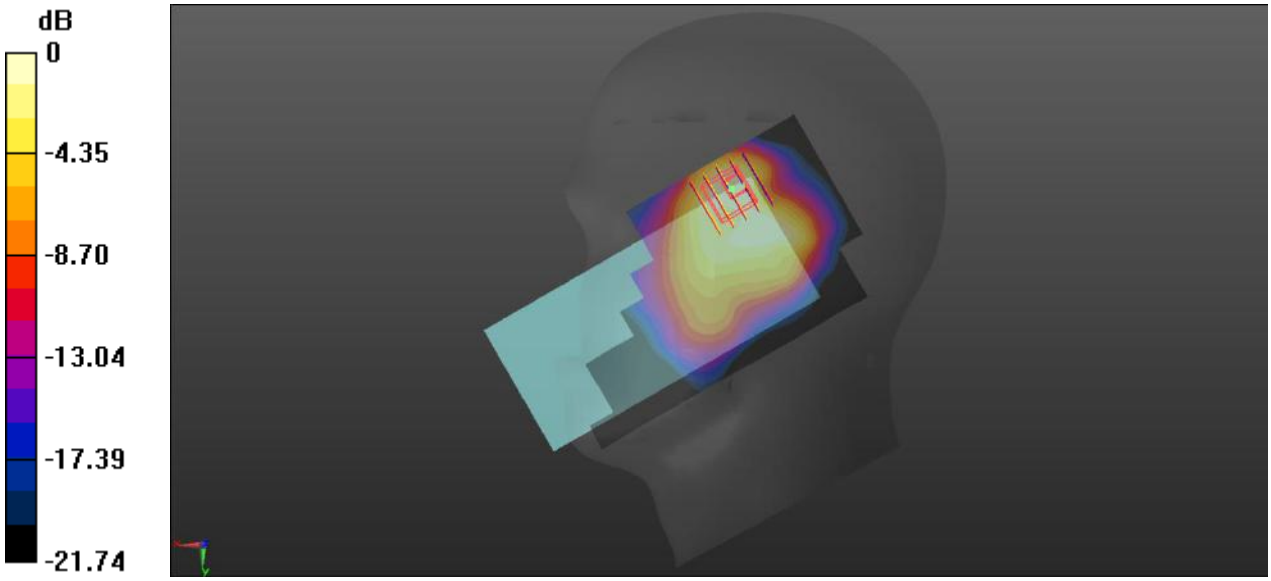
Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.73 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.762 W/kg; SAR(10 g) = 0.371 W/kg

Maximum value of SAR (measured) = 0.797 W/kg



0 dB = 0.797 W/kg

Meas.5 Body Plane with Back Side 15mm on Low Channel in GPRS1900 2Slots mode with Antenna 2

Date: 2021.12.12

Communication System Band: GPRS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4.1

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.428 S/m; ε_r = 39.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch512/Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.109 W/kg

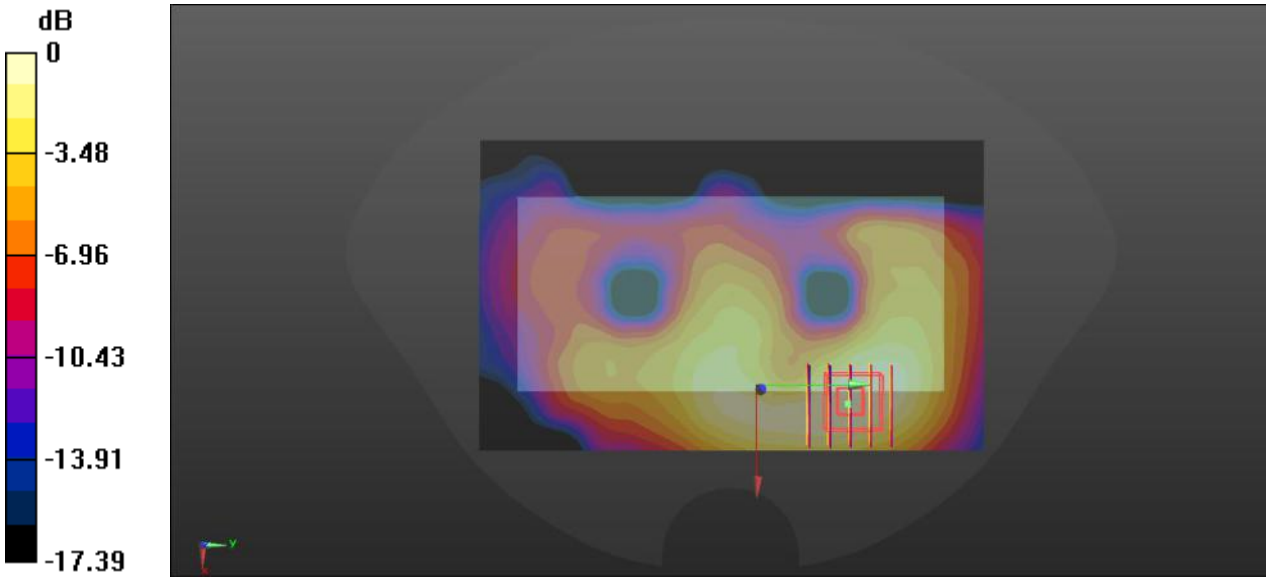
Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.841 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.137 W/kg

SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.057 W/kg

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



0 dB = 0.101 W/kg

Meas.6 Body Plane with Left Edge 10mm on Low Channel in GPRS1900 2Slots mode with Antenna 2

Date: 2021.12.12

Communication System Band: GPRS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4.1

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.428 S/m; ε_r = 39.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch512/Area Scan (51x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.984 W/kg

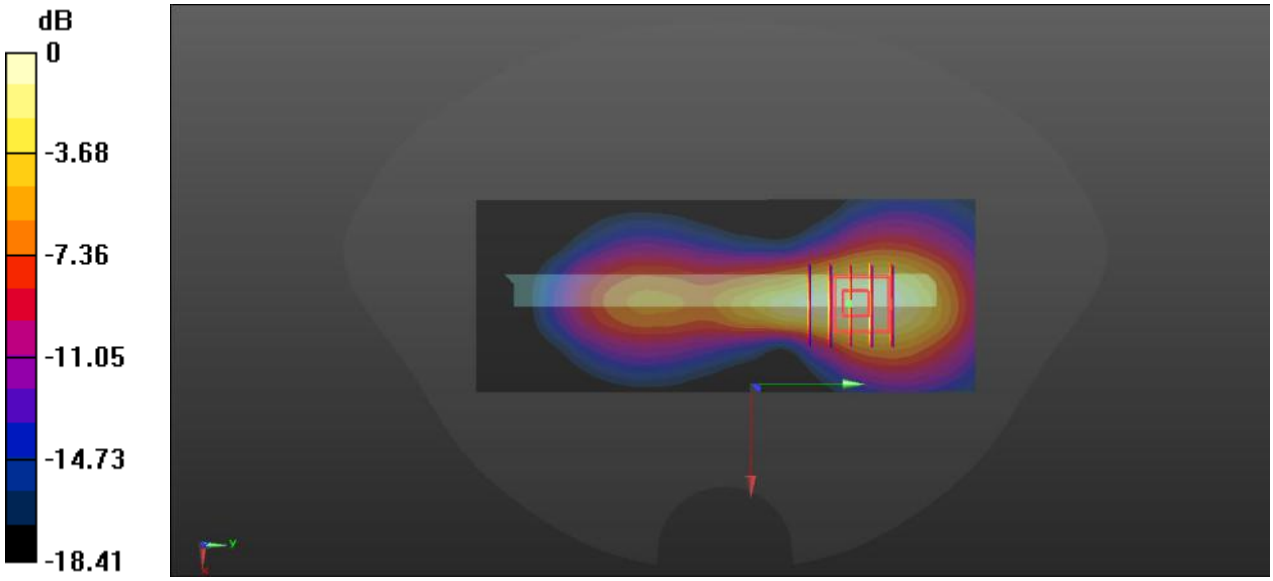
Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.80 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.832 W/kg; SAR(10 g) = 0.477 W/kg

Maximum value of SAR (measured) = 0.930 W/kg



0 dB = 0.930 W/kg

Meas.7 Right Head with Cheek on Middle Channel in WCDMA B2 mode with Antenna 1

Date: 2021.12.12

Communication System Band: II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1880 MHz; σ = 1.438 S/m; ε_r = 38.893; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.805 W/kg

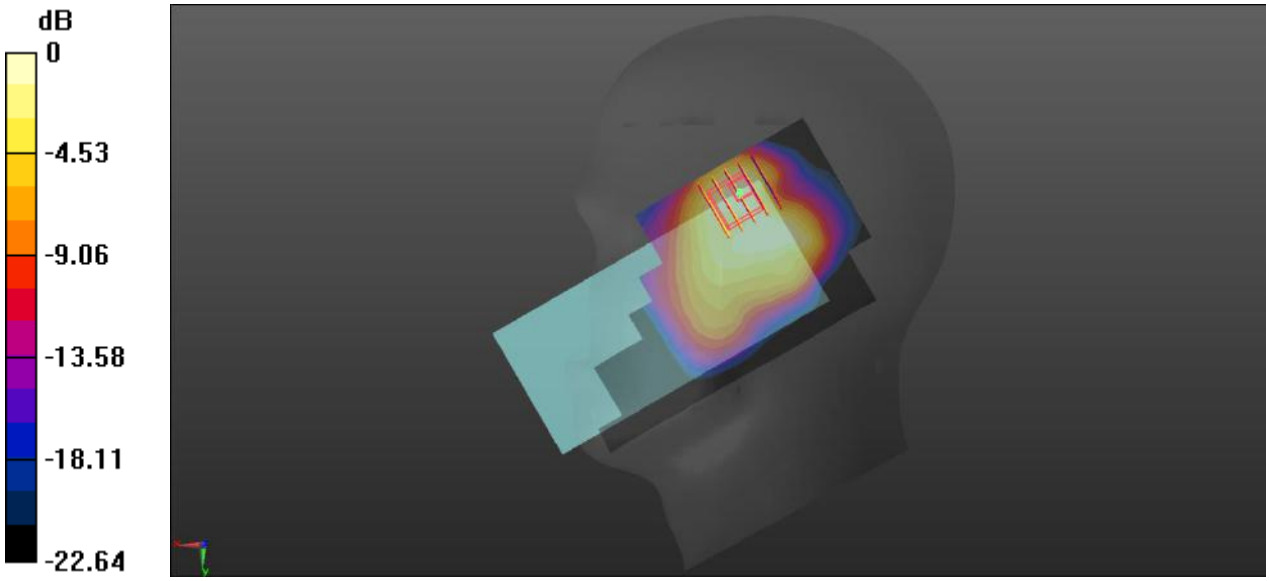
Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.26 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.596 W/kg; SAR(10 g) = 0.295 W/kg

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



0 dB = 0.640 W/kg

Meas.8 Body Plane with Back Side 15mm on Middle Channel in WCDMA B2 mode with Antenna 2

Date: 2021.12.12

Communication System Band: II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1880 MHz; σ = 1.438 S/m; ε_r = 38.893; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9400/Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0944 W/kg

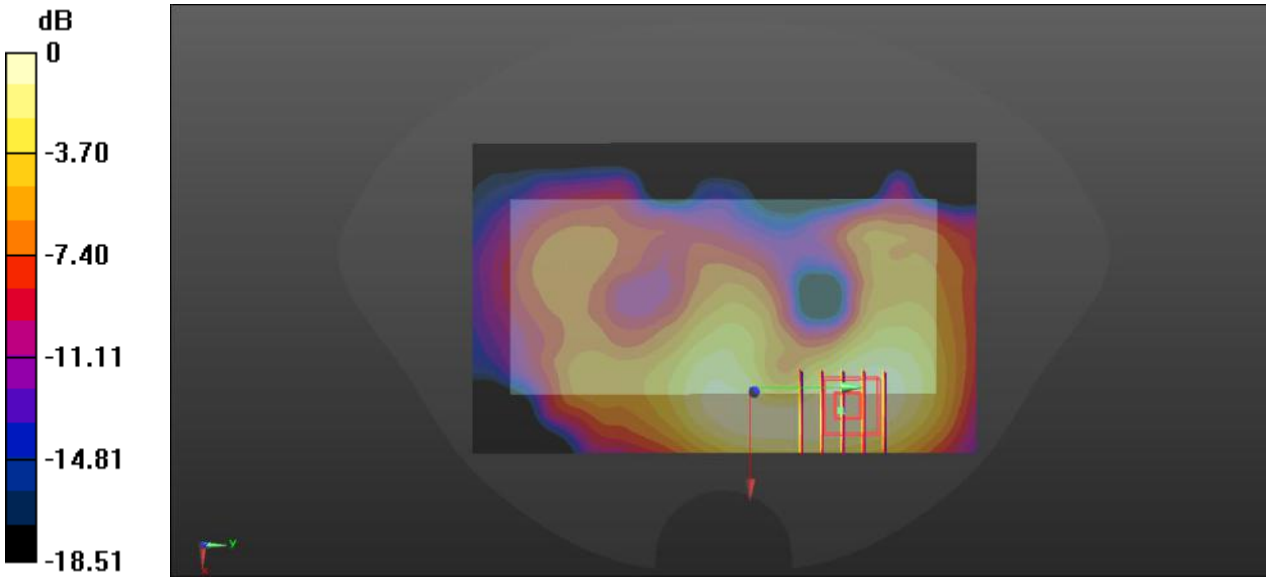
Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.019 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.125 W/kg

SAR(1 g) = 0.083 W/kg; SAR(10 g) = 0.051 W/kg

Maximum value of SAR (measured) = 0.0903 W/kg



0 dB = 0.0903 W/kg

Meas.9 Body Plane with Left Edge 10mm on Middle Channel in WCDMA B2 mode with Antenna 2

Date: 2021.12.12

Communication System Band: II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1880 MHz; σ = 1.438 S/m; ε_r = 38.893; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.57, 8.57, 8.57); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9400/Area Scan (51x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.646 W/kg

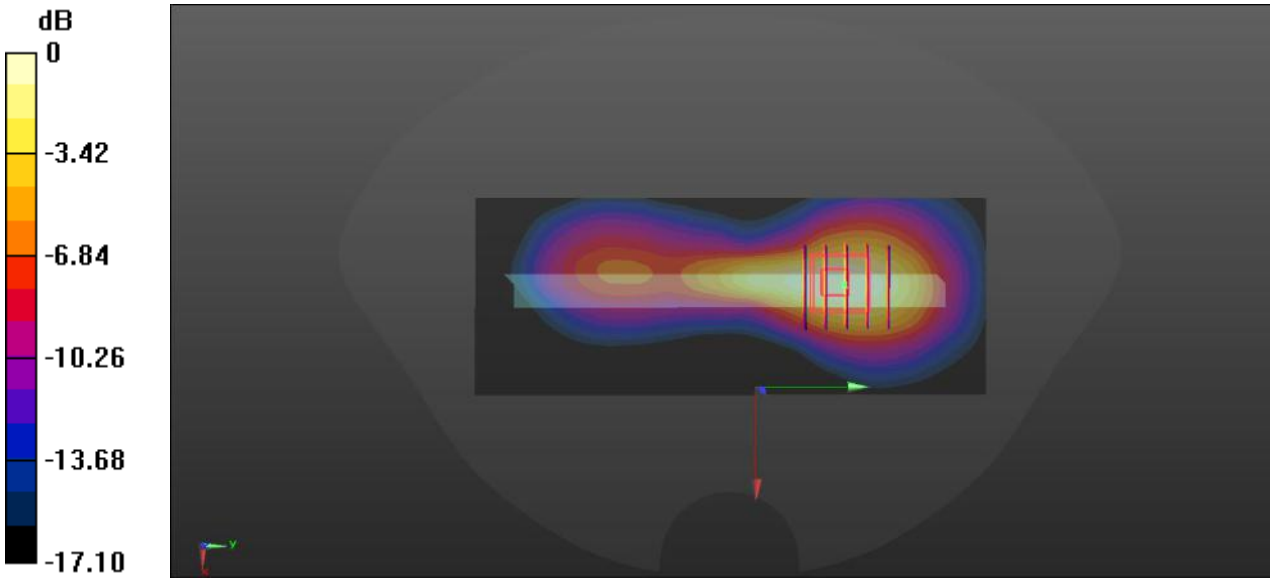
Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.06 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.863 W/kg

SAR(1 g) = 0.550 W/kg; SAR(10 g) = 0.313 W/kg

Maximum value of SAR (measured) = 0.609 W/kg



0 dB = 0.609 W/kg

Meas.10 Right Head with Cheek on Middle Channel in WCDMA B4 mode with Antenna 2

Date: 2021.12.09

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

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.365 S/m; ε_r = 40.698; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.7 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1412/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.791 W/kg

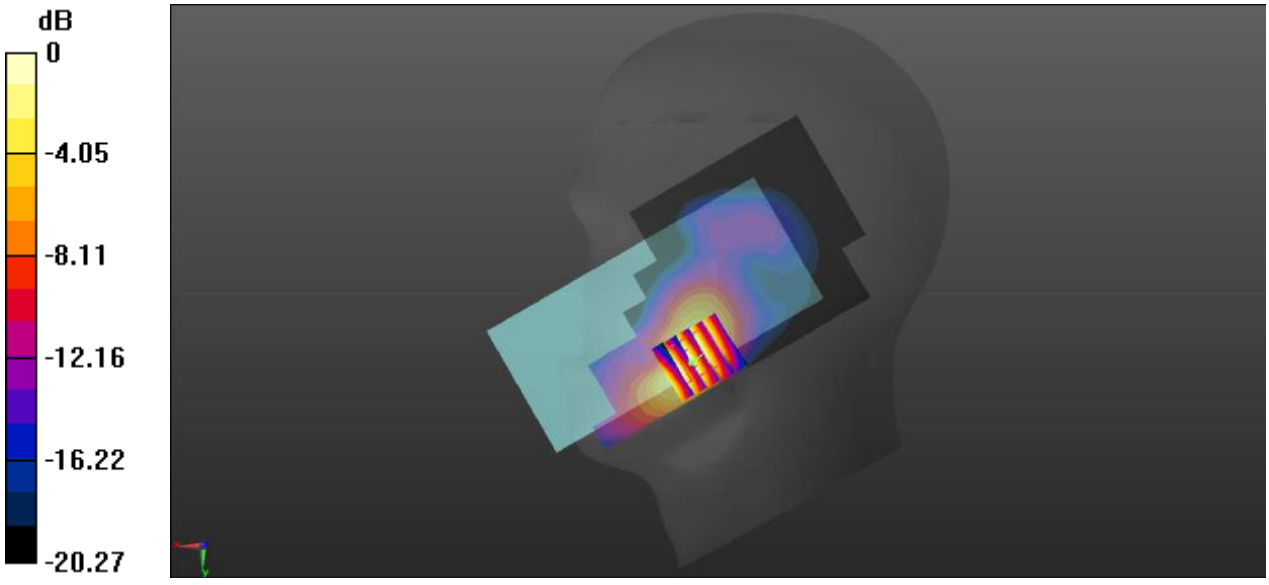
Ch1412/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.646 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.713 W/kg; SAR(10 g) = 0.368 W/kg

Maximum value of SAR (measured) = 0.802 W/kg



0 dB = 0.802 W/kg

Meas.11 Body Plane with Back Side 15mm on Low Channel in WCDMA B4 mode with Antenna 2

Date: 2021.12.09

Communication System Band: IV; Frequency: 1712.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.352 S/m; ε_r = 40.944; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1312/Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.127 W/kg

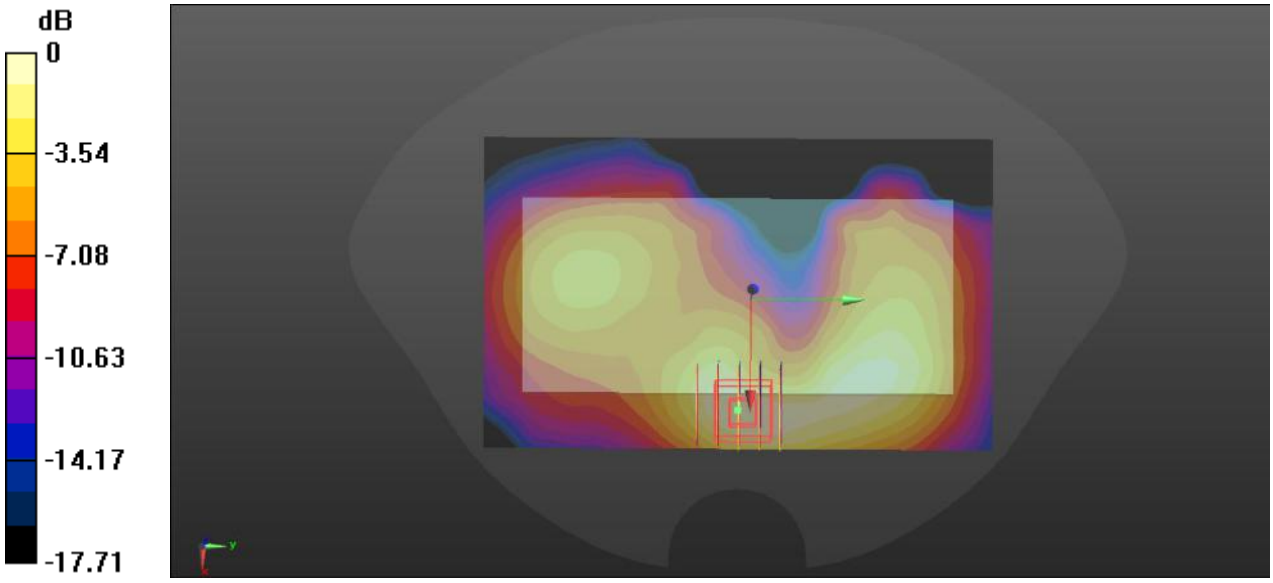
Ch1312/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.763 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.184 W/kg

SAR(1 g) = 0.116 W/kg; SAR(10 g) = 0.067 W/kg

Maximum value of SAR (measured) = 0.128 W/kg



0 dB = 0.128 W/kg

Meas.12 Body Plane with Left Edge 10mm on Low Channel in WCDMA B4 mode with Antenna 2

Date: 2021.12.09

Communication System Band: IV; Frequency: 1712.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.352 S/m; ε_r = 40.944; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.7 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.71, 8.71, 8.71); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1312/Area Scan (51x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

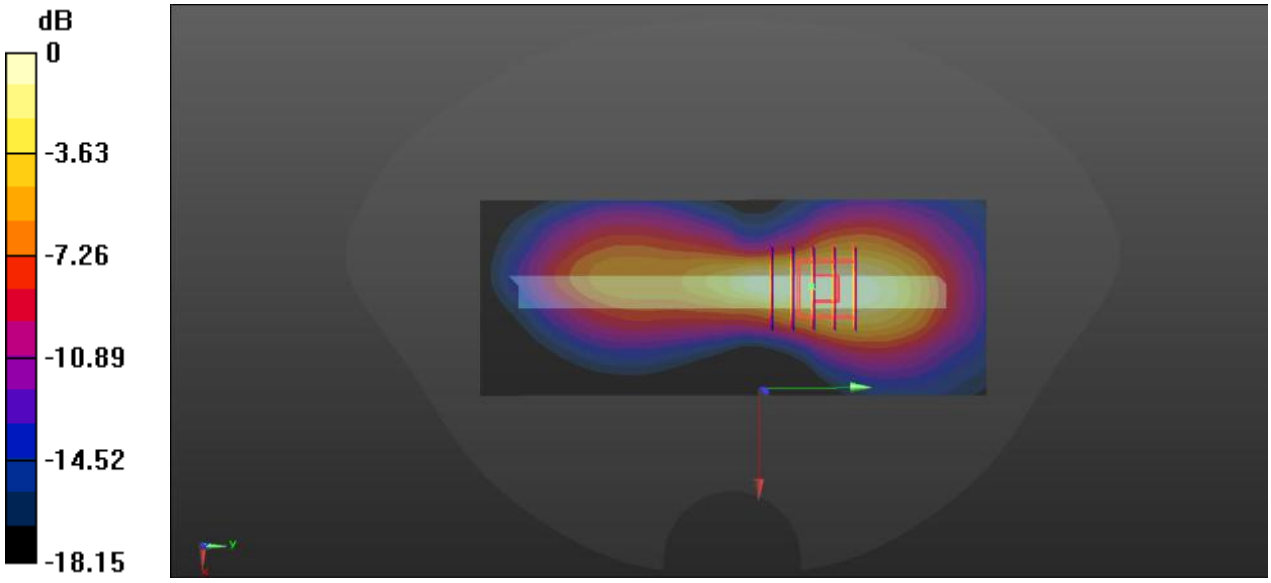
Ch1312/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.38 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.865 W/kg

SAR(1 g) = 0.483 W/kg; SAR(10 g) = 0.275 W/kg

Maximum value of SAR (measured) = 0.539 W/kg



0 dB = 0.539 W/kg

Meas.13 Right Head with Cheek on Middle Channel in WCDMA B5 mode with Antenna 1

Date: 2021.12.07

Communication System Band: V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.895 S/m; ε_r = 42.031; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4182/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

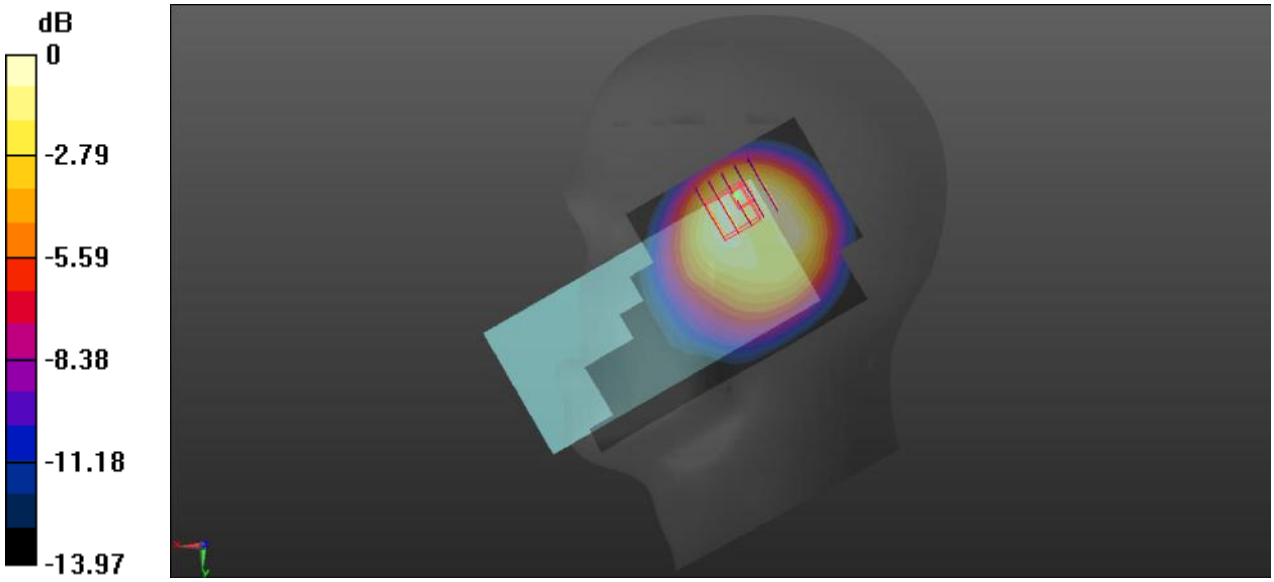
Ch4182/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.11 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.817 W/kg; SAR(10 g) = 0.507 W/kg

Maximum value of SAR (measured) = 0.908 W/kg



0 dB = 0.908 W/kg

Meas.14 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band5 mode with Antenna 1

Date: 2021.12.07

Communication System Band: V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.895 S/m; ε_r = 42.031; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.217 W/kg

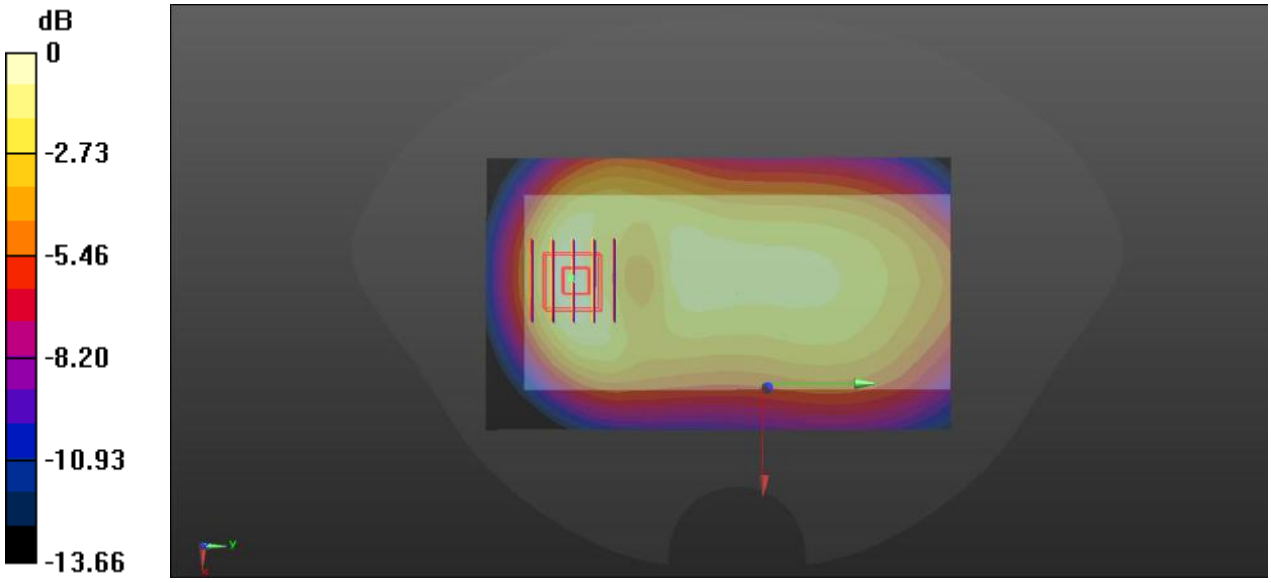
Ch4182/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.41 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.330 W/kg

SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.125 W/kg

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



0 dB = 0.223 W/kg

Meas.15 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band 5 mode with Antenna 1

Date: 2021.12.07

Communication System Band: V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.895 S/m; ε_r = 42.031; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4182/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.387 W/kg

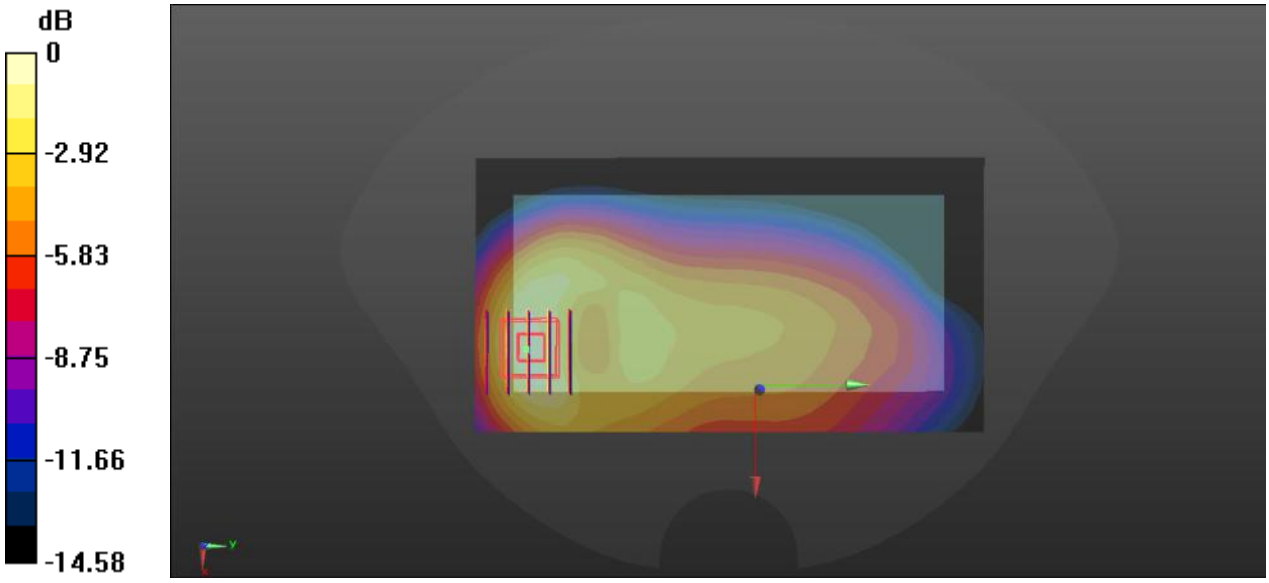
Ch4182/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.89 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.659 W/kg

SAR(1 g) = 0.386 W/kg; SAR(10 g) = 0.222 W/kg

Maximum value of SAR (measured) = 0.412 W/kg



0 dB = 0.412 W/kg

Meas.16 Right Head with Cheek on High Channel in BC0 mode with Antenna 1

Date: 2021.12.08

Communication System Band: CDMA BC0; Frequency: 848.3 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 848.3 MHz; σ = 0.913 S/m; ε_r = 41.321; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.8 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch777/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.850 W/kg

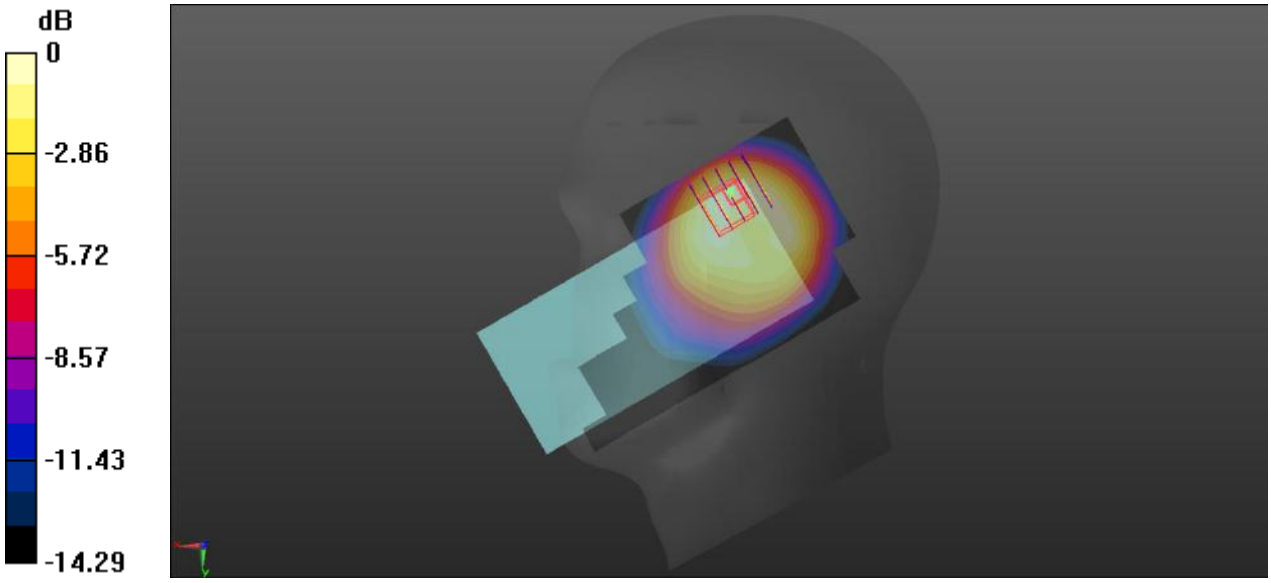
Ch777/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.87 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.778 W/kg; SAR(10 g) = 0.477 W/kg

Maximum value of SAR (measured) = 0.878 W/kg



0 dB = 0.878 W/kg

Meas.17 Body Plane with Back Side 15mm on High Channel in BC0 mode with Antenna 1

Date: 2021.12.08

Communication System Band: CDMA BC0; Frequency: 848.3 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 848.3 MHz; σ = 0.913 S/m; ε_r = 41.321; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch777/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.185 W/kg

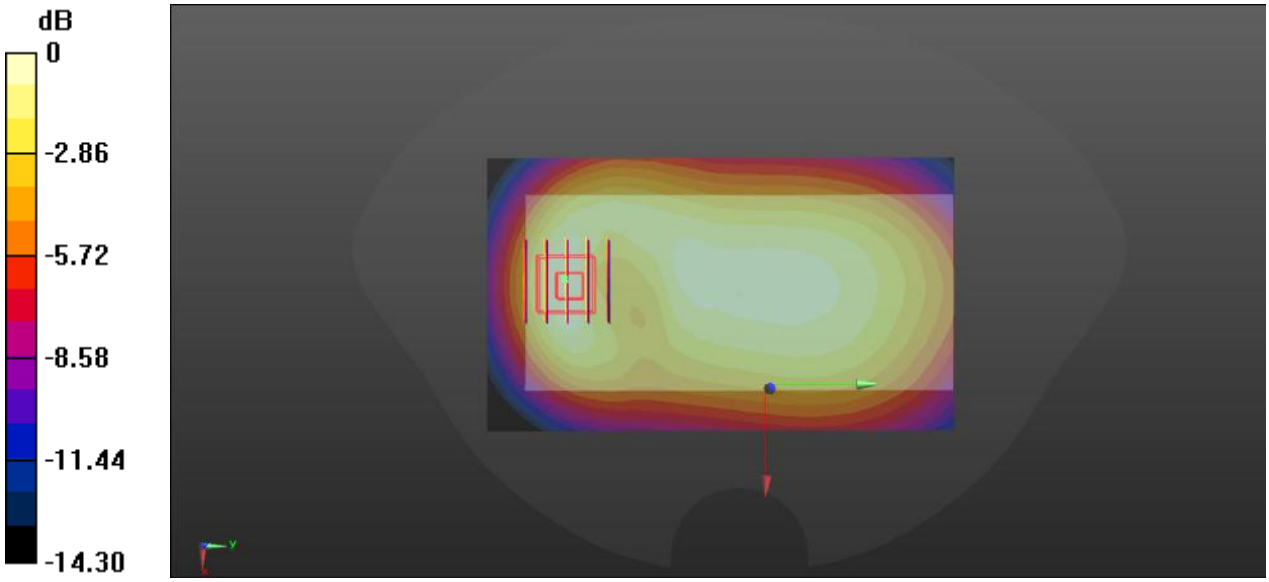
Ch777/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.14 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.279 W/kg

SAR(1 g) = 0.172 W/kg; SAR(10 g) = 0.104 W/kg

Maximum value of SAR (measured) = 0.185 W/kg



0 dB = 0.185 W/kg

Meas.18 Body Plane with Back Side 10mm on High Channel in BC0 mode with Antenna 1

Date: 2021.12.08

Communication System Band: CDMA BC0; Frequency: 848.3 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 848.3 MHz; σ = 0.913 S/m; ε_r = 41.321; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch777/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.357 W/kg

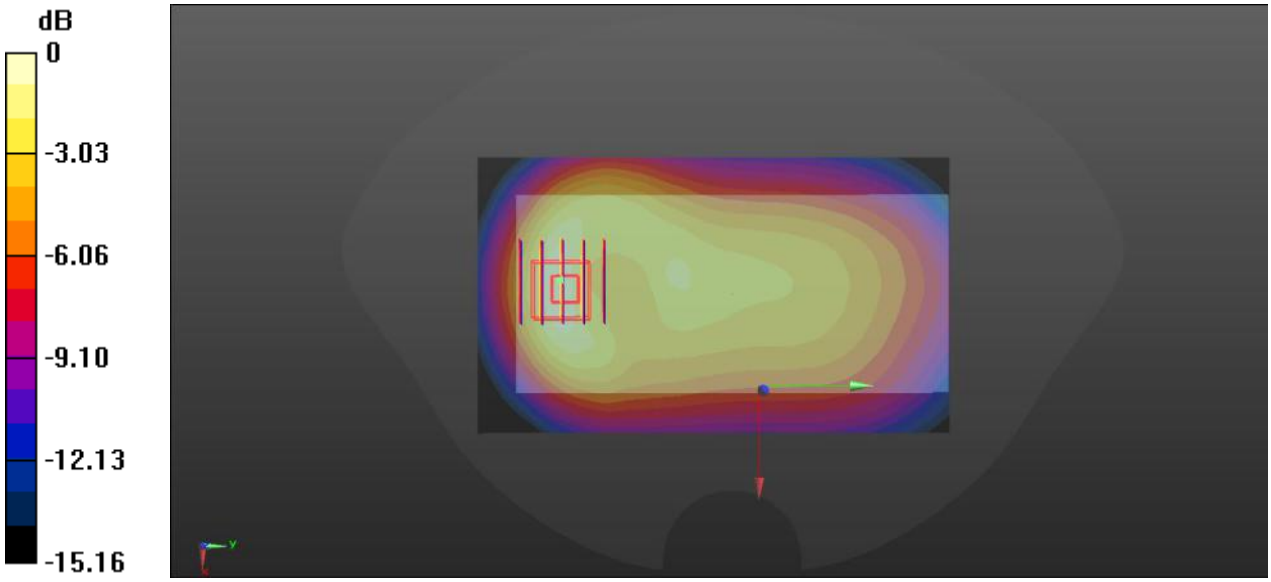
Ch777/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.07 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.590 W/kg

SAR(1 g) = 0.341 W/kg; SAR(10 g) = 0.196 W/kg

Maximum value of SAR (measured) = 0.366 W/kg



0 dB = 0.366 W/kg

Meas.19 Right Head with Cheek on Low Channel in LTE Band5 mode with Antenna 1

Date: 2021.12.08

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

Medium parameters used (interpolated): f = 829 MHz; σ = 0.9 S/m; ε_r = 41.114; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.8 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20450/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

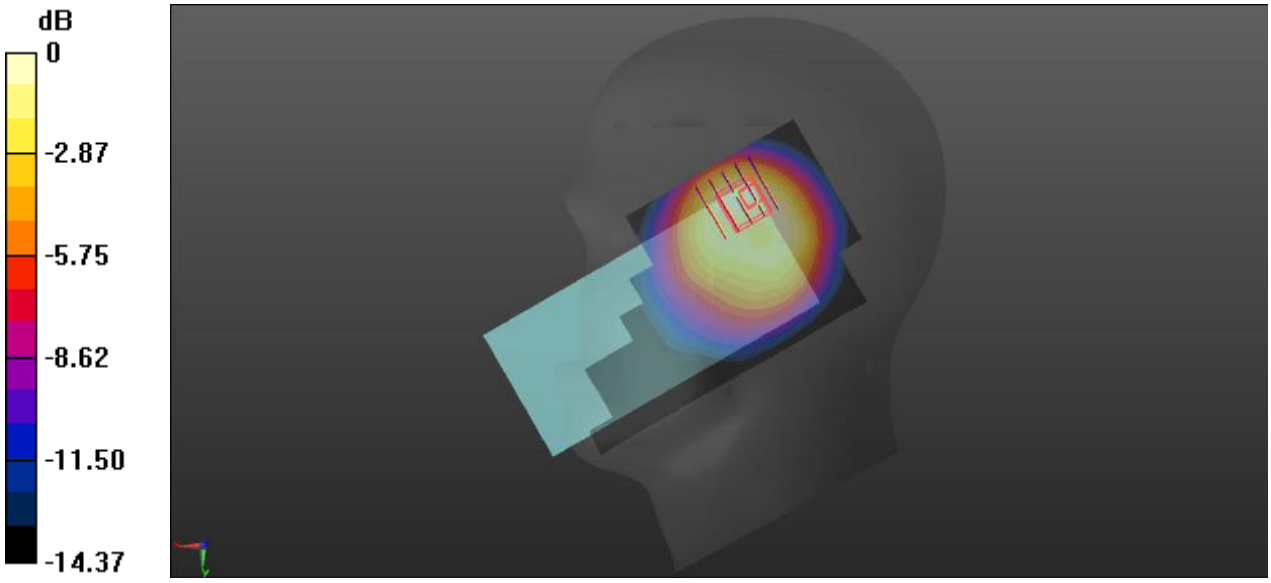
Ch20450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.17 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.962 W/kg

SAR(1 g) = 0.455 W/kg; SAR(10 g) = 0.262 W/kg

Maximum value of SAR (measured) = 0.499 W/kg



0 dB = 0.499 W/kg

Meas.20 Body Plane with Back Side 15mm on Middle Channel in LTE Band5 mode with Antenna 0

Date: 2021.12.08

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

Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.905 S/m; ε_r = 40.786; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.207 W/kg

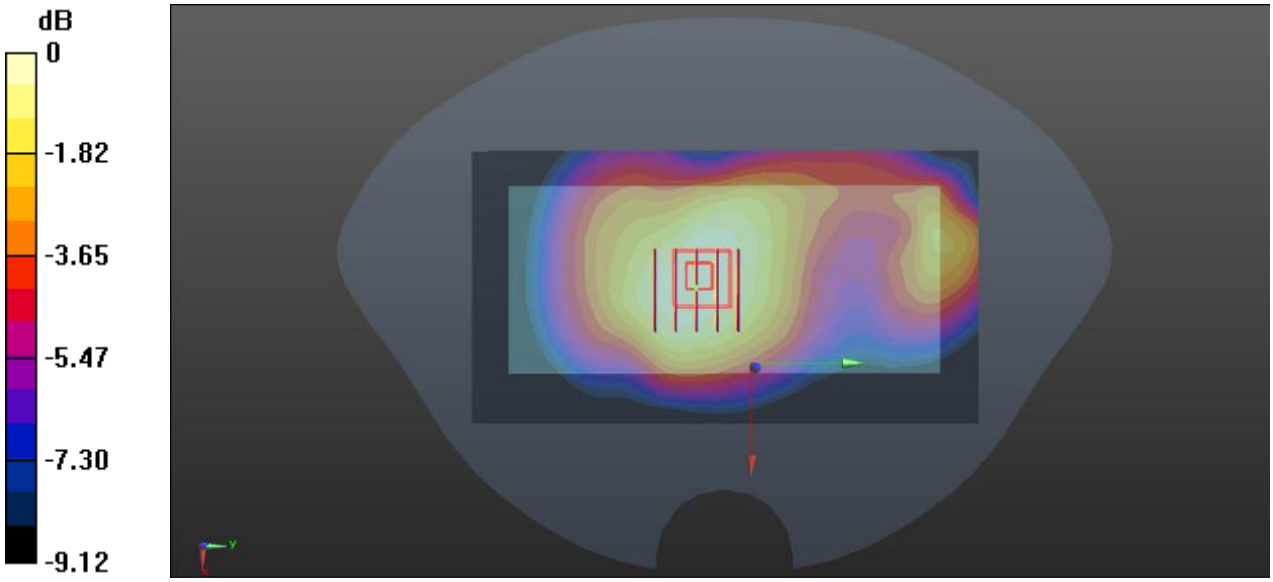
Ch20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.74 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.257 W/kg

SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.146 W/kg

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



0 dB = 0.208 W/kg

Meas.21 Body Plane with Back Side 10mm on High Channel in LTE Band5 mode with Antenna 1

Date: 2021.12.08

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

Medium parameters used (interpolated): f = 844 MHz; σ = 0.914 S/m; ε_r = 40.623; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.8 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(10.1, 10.1, 10.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.340 W/kg

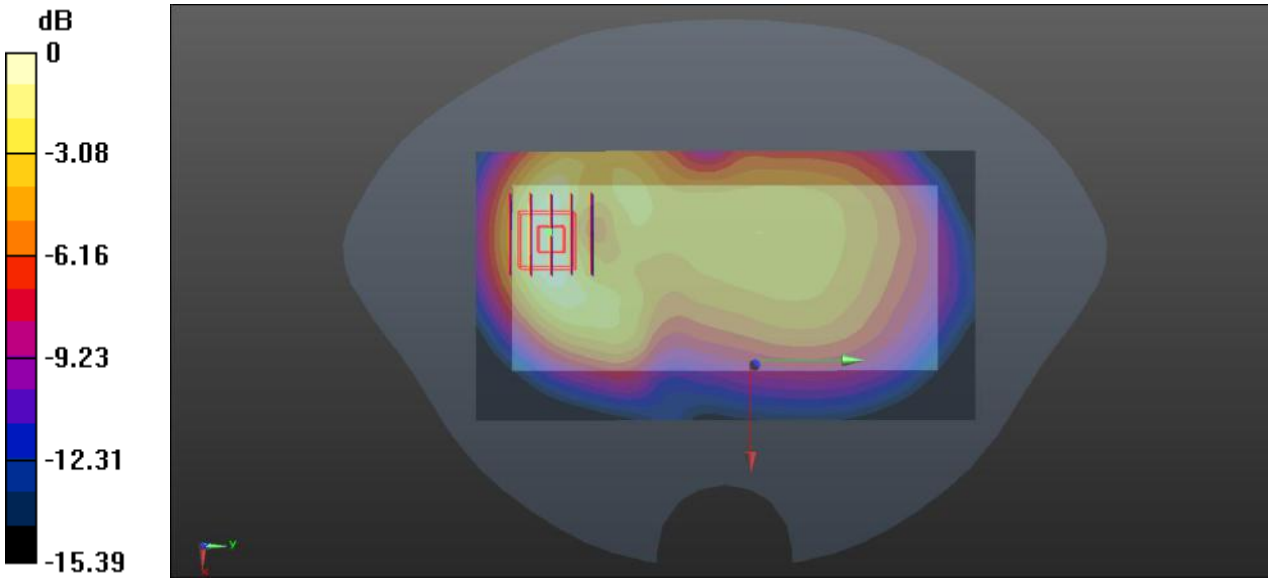
Ch20600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.91 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.545 W/kg

SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.174 W/kg

Maximum value of SAR (measured) = 0.338 W/kg



0 dB = 0.338 W/kg

Meas.22 Right Head with Cheek on High Channel in LTE Band7 mode with Antenna 1

Date: 2021.12.24

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

Medium parameters used (interpolated): f = 2560 MHz; σ = 1.899 S/m; ε_r = 38.711; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.1 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.394 W/kg

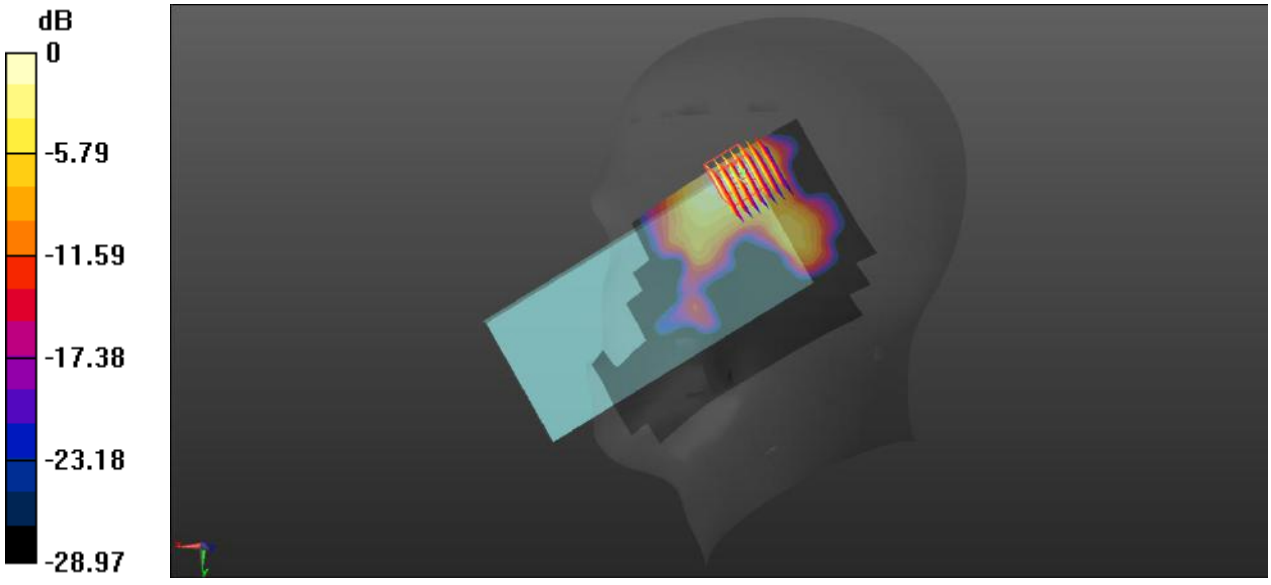
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.586 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.830 W/kg

SAR(1 g) = 0.354 W/kg; SAR(10 g) = 0.164 W/kg

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



0 dB = 0.406 W/kg

Meas.23 Body Plane with Back Side 15mm on High Channel in LTE Band7 mode with Antenna 1

Date: 2021.12.24

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

Medium parameters used (interpolated): f = 2560 MHz; σ = 1.899 S/m; ε_r = 38.711; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.0894 W/kg

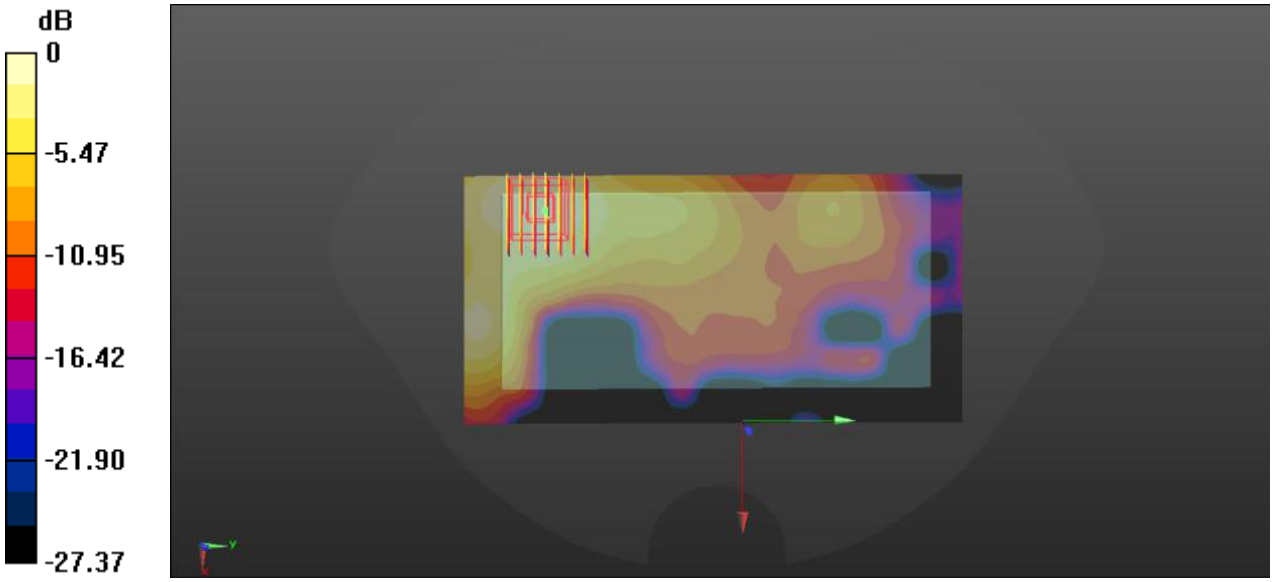
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.117 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.149 W/kg

SAR(1 g) = 0.083 W/kg; SAR(10 g) = 0.046 W/kg

Maximum value of SAR (measured) = 0.0902 W/kg



0 dB = 0.0902 W/kg

Meas.24 Body Plane with Right Edge 10mm on High Channel in LTE Band7 mode with Antenna 1

Date: 2021.12.24

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

Medium parameters used (interpolated): f = 2560 MHz; σ = 1.899 S/m; ε_r = 38.711; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (61x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

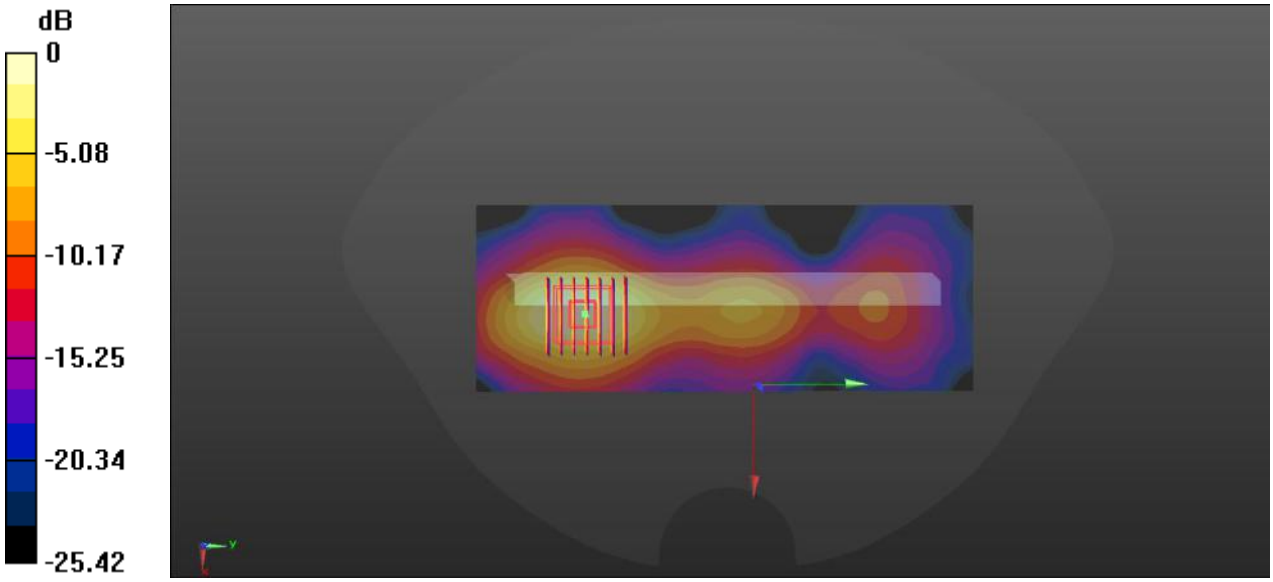
Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.619 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.839 W/kg

SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.205 W/kg

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



0 dB = 0.484 W/kg

Meas.25 Right Head with Cheek on High Channel in LTE Band38 mode with Antenna 1

Date: 2021.12.31

Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); Frequency: 2610 MHz;Duty Cycle: 1:1.58

Medium parameters used (interpolated): f = 2610 MHz; σ = 1.945 S/m; εr = 39.842; ρ = 1000 kg/m3

Phantom section: Right Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch38150/Area Scan (81x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.491 W/kg

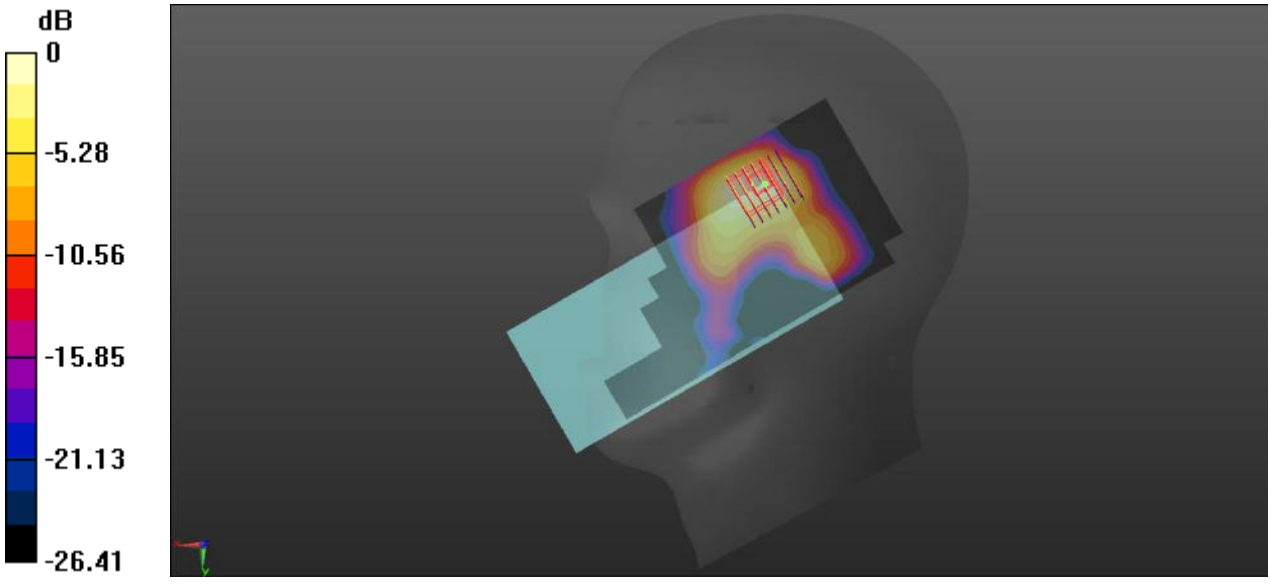
Ch38150/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.621 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.978 W/kg

SAR(1 g) = 0.418 W/kg; SAR(10 g) = 0.192 W/kg

Maximum value of SAR (measured) = 0.475 W/kg



0 dB = 0.475 W/kg

Meas.26 Body Plane with Back Side 15mm on Low Channel in LTE Band38 mode with Antenna 2

Date: 2021.12.31

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

Medium parameters used (interpolated): f = 2580 MHz; σ = 1.905 S/m; ε_r = 40.283; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

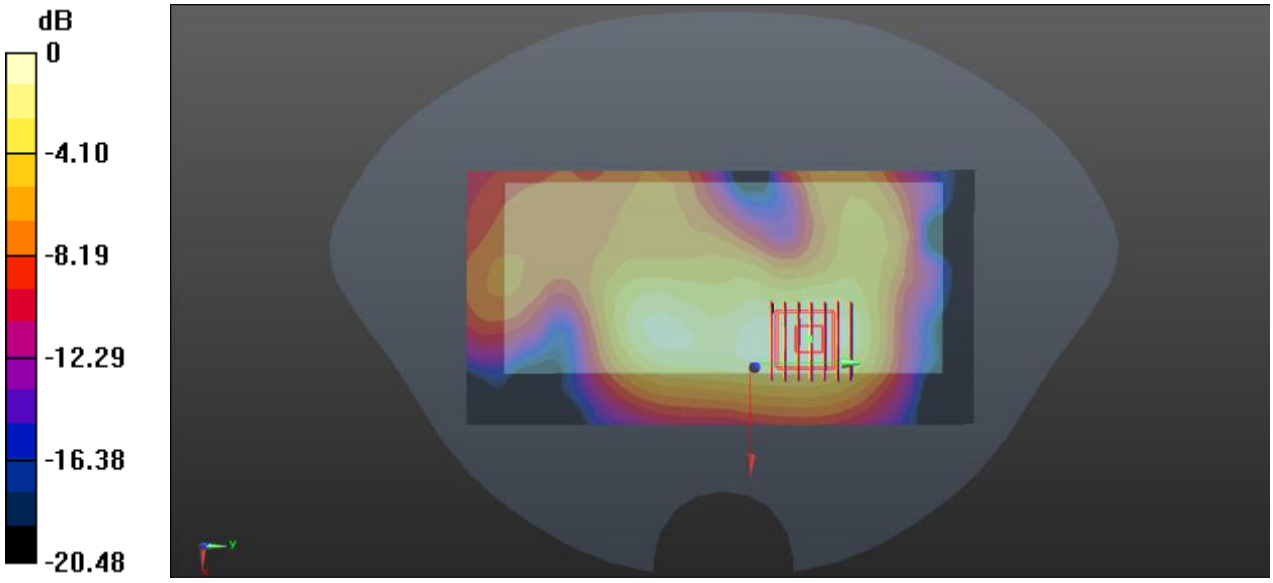
Ch37850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.341 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.248 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.075 W/kg

Maximum value of SAR (measured) = 0.150 W/kg



0 dB = 0.150 W/kg

Meas.27 Body Plane with Left Edge 10mm on Middle Channel in LTE Band38 mode with Antenna2

Date: 2021.12.31

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

Medium parameters used (interpolated): f = 2595 MHz; σ = 1.925 S/m; ε_r = 40.162; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.6 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch38000/Area Scan (51x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.537 W/kg

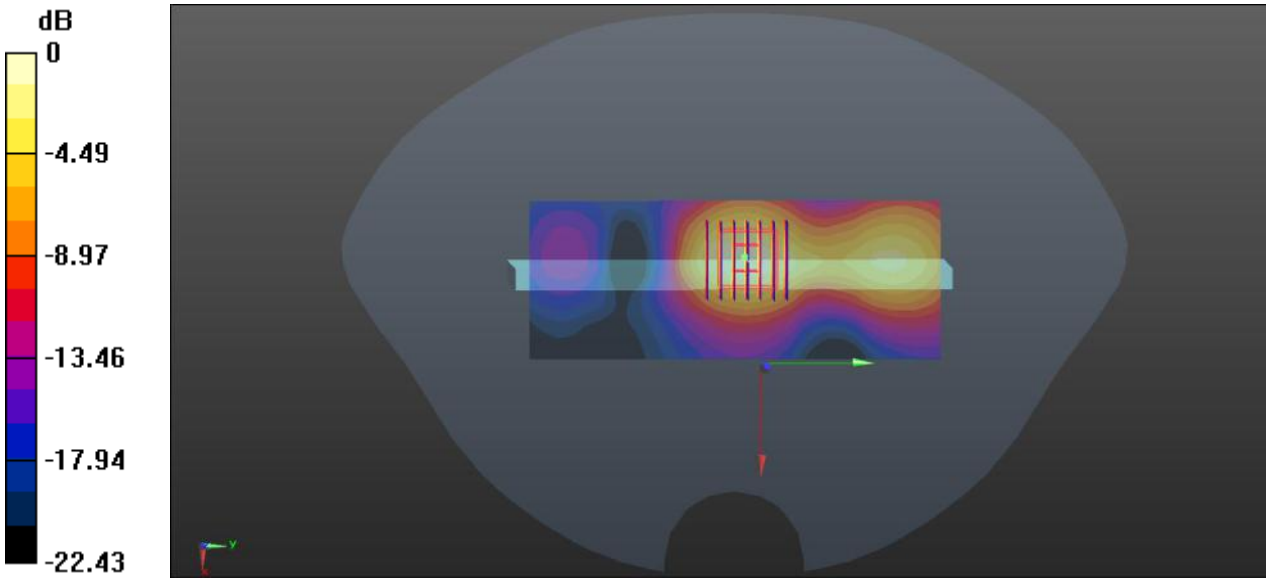
Ch38000/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.33 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.191 W/kg

Maximum value of SAR (measured) = 0.544 W/kg



0 dB = 0.544 W/kg

Meas.28 Right Head with Cheek on Middle Channel in LTE Band41 mode with Antenna 1

Date: 2022.01.02

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2593 MHz;Duty Cycle: 1:2.31

Medium parameters used (interpolated): f = 2593 MHz; σ = 1.919 S/m; ε_r = 39.942; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.8 Liquid Temperature:21.7

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.786 W/kg

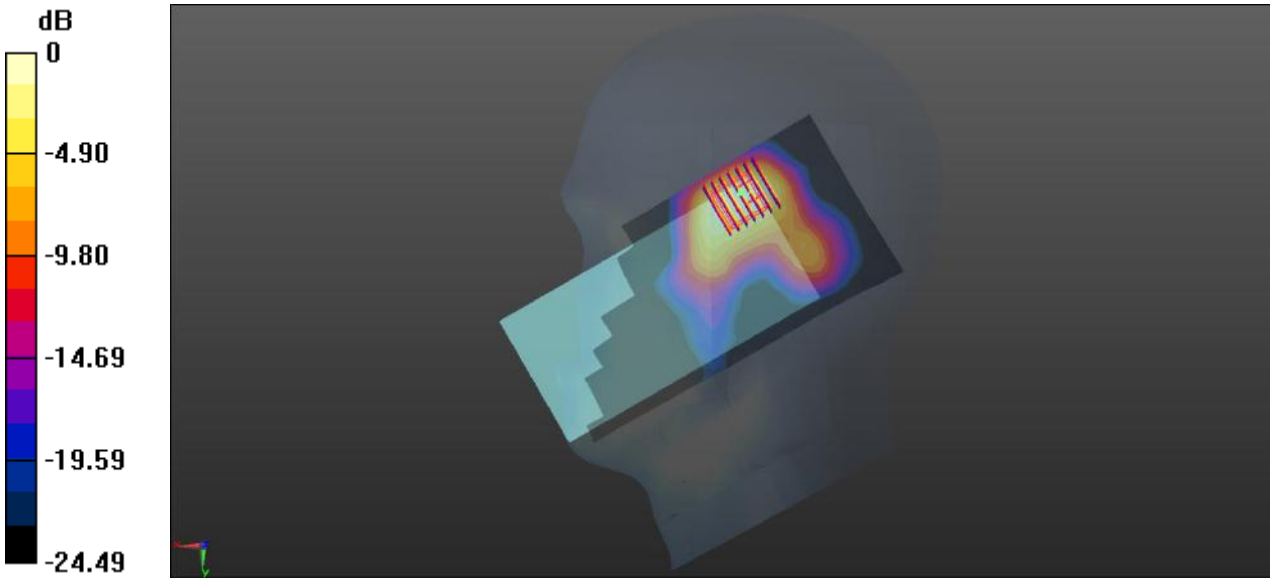
Ch40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.221 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.742 W/kg; SAR(10 g) = 0.366 W/kg

Maximum value of SAR (measured) = 0.893 W/kg



0 dB = 0.893 W/kg

Meas.29 Body Plane with Back Side 15mm on Middle Channel in LTE Band41 with Antenna 1

Date: 2022.01.08

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2593 MHz;Duty Cycle: 1:2.31

Medium parameters used (interpolated): f = 2593 MHz; σ = 1.992 S/m; εr = 38.295; ρ = 1000 kg/m3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.0956 W/kg

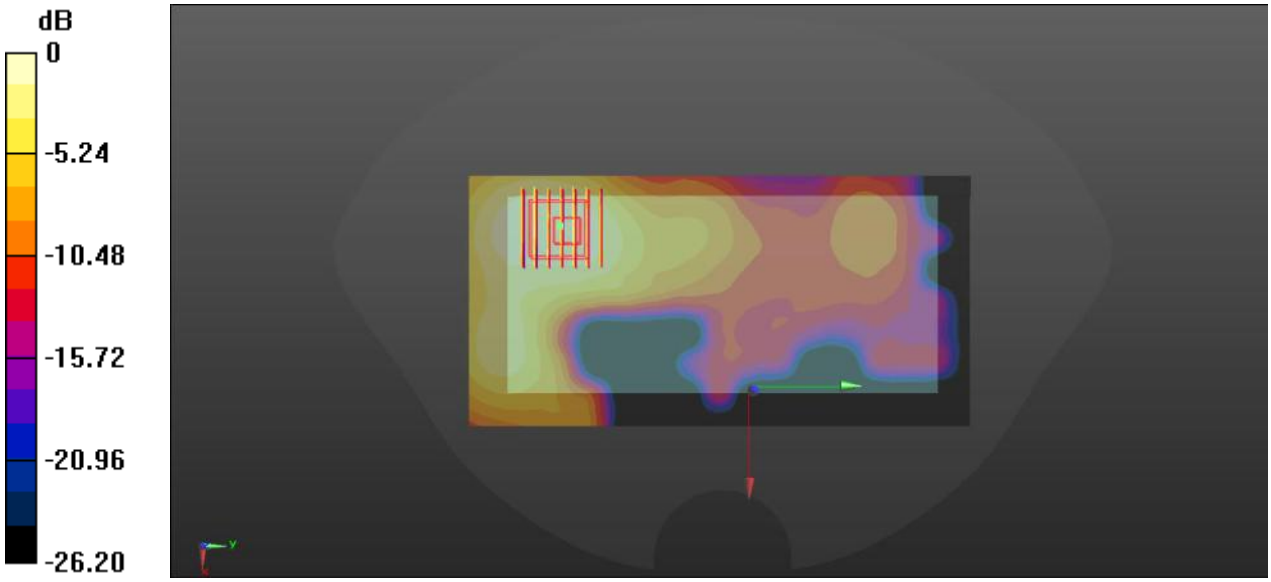
Ch40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.894 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.151 W/kg

SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.049 W/kg

Maximum value of SAR (measured) = 0.0970 W/kg



0 dB = 0.0970 W/kg

Meas.30 Body Plane with Left Edge 10mm on Middle Channel in LTE Band41 mode with Antenna2

Date: 2022.01.08

Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2593 MHz;Duty Cycle: 1:2.31

Medium parameters used (interpolated): f = 2593 MHz; σ = 1.992 S/m; εr = 38.295; ρ = 1000 kg/m3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.3

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch40620/Area Scan (51x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.731 W/kg

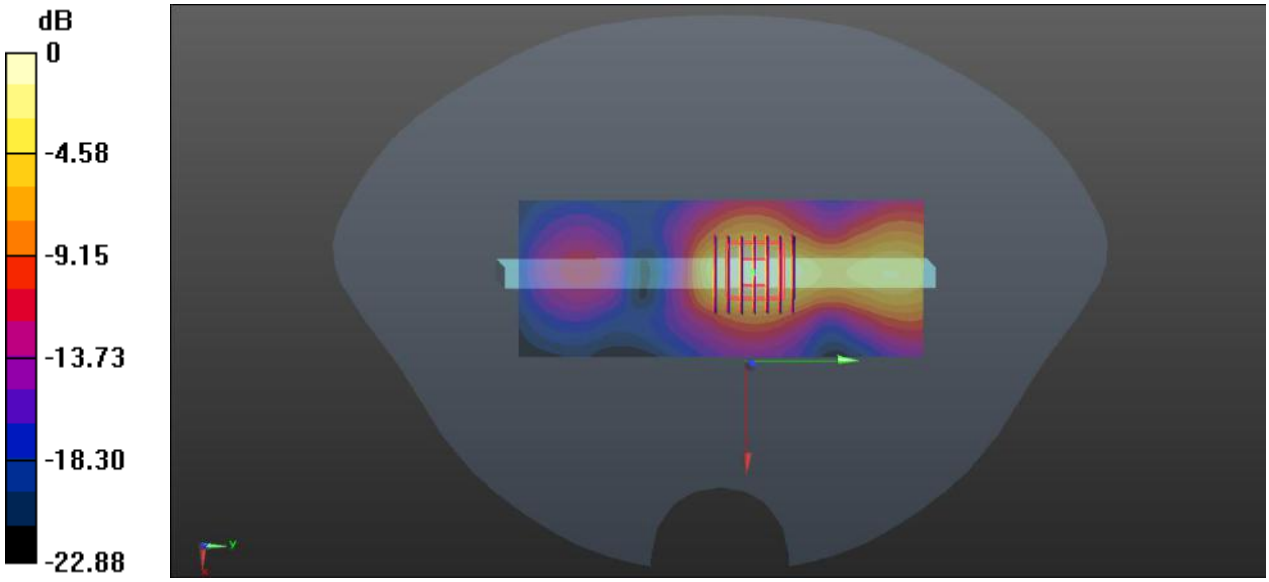
Ch40620/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.63 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.674 W/kg; SAR(10 g) = 0.326 W/kg

Maximum value of SAR (measured) = 0.727 W/kg



0 dB = 1.27 W/kg

Meas.31 Right Head with Cheek on Middle Channel in N41 mode with Antenna 5

Date: 2022.01.09

Communication System Band: N41; Frequency: 2592.99 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2592.99 MHz; σ = 2.023 S/m; ε_r = 37.573; ρ = 1000 kg/m^3

Phantom section: Right Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch518598/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.987 W/kg

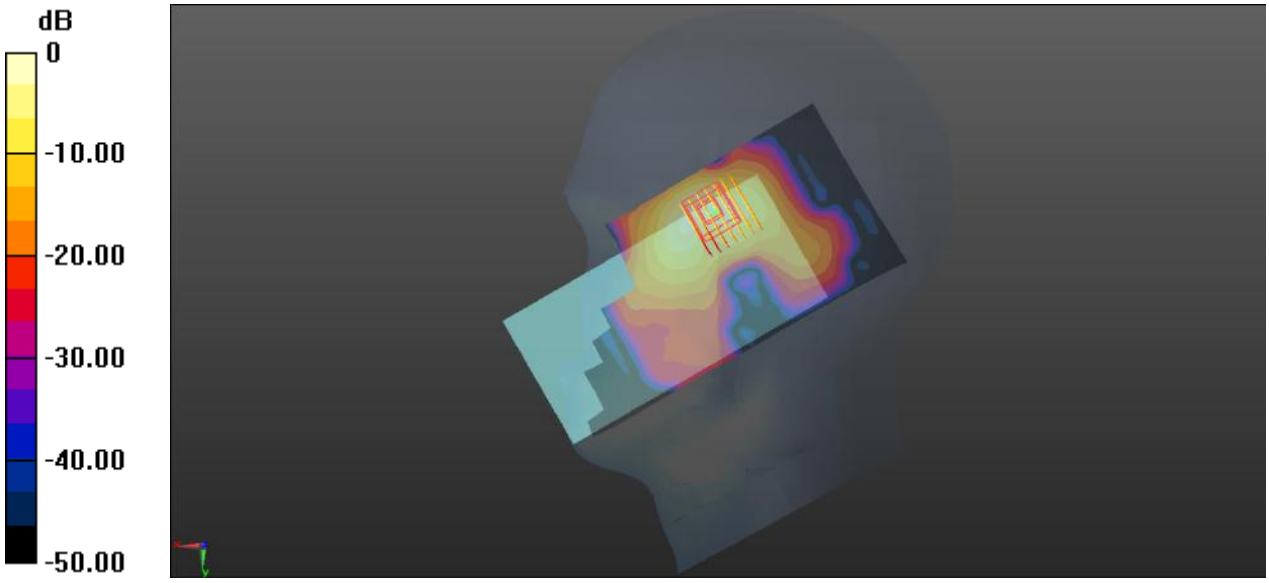
Ch518598/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.127 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.47 W/kg

SAR(1 g) = 0.724 W/kg; SAR(10 g) = 0.257 W/kg

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



0 dB = 0.998 W/kg

Meas.32 Body Plane with Back Side 15mm on Middle Channel in N41 mode with Antenna 5

Date: 2022.01.09

Communication System Band: N41; Frequency: 2592.99 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2592.99 MHz; σ = 2.023 S/m; ε_r = 37.573; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch518598/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.250 W/kg

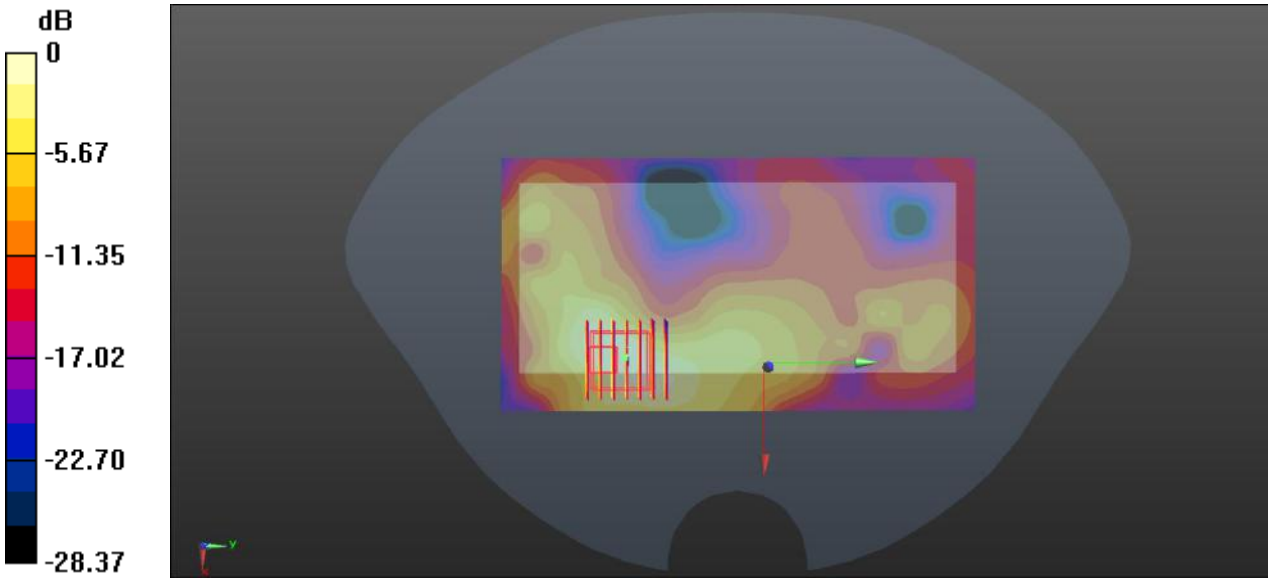
Ch518598/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.468 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.480 W/kg

SAR(1 g) = 0.168 W/kg; SAR(10 g) = 0.080 W/kg

Maximum value of SAR (measured) = 0.209 W/kg



0 dB = 0.209 W/kg

Meas.33 Body Plane with Right Edge 10mm on High Channel in N41 mode with Antenna 5

Date: 2022.01.09

Communication System Band: N41; Frequency: 2640 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2640 MHz; σ = 2.09 S/m; ε_r = 37.348; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.5 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.94, 7.94, 7.94); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch528000/Area Scan (61x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

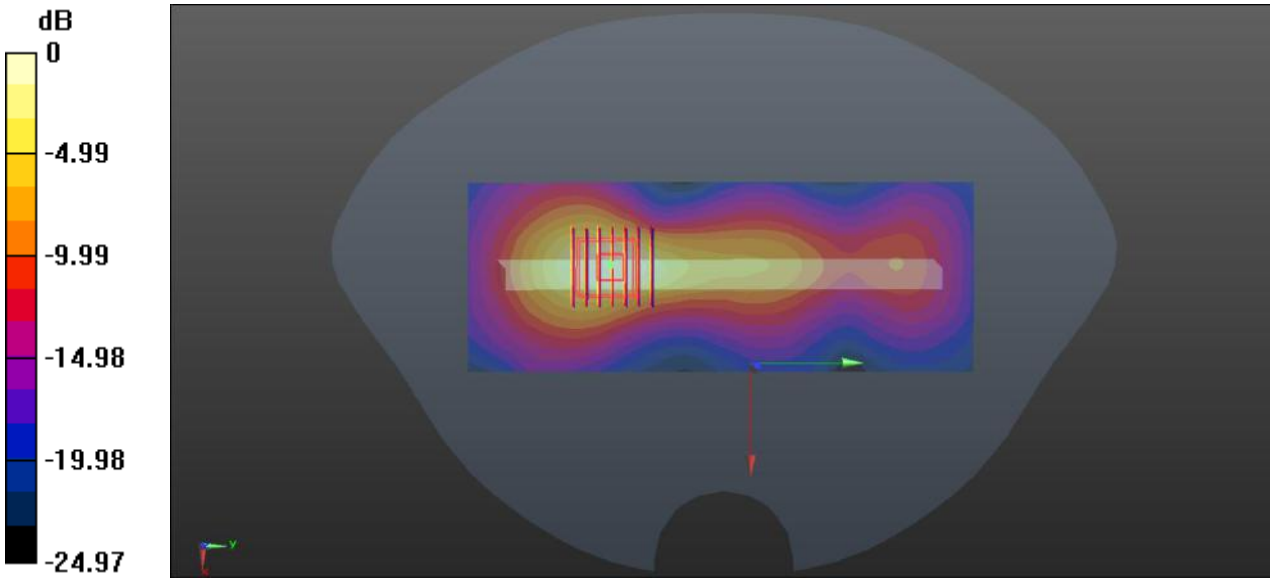
Ch528000/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.127 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.99 W/kg

SAR(1 g) = 0.986 W/kg; SAR(10 g) = 0.467 W/kg

Maximum value of SAR (measured) = 1.12 W/kg



0 dB = 1.12 W/kg

Meas.34 Left Head with Cheek on Middle Channel in N77 mode with Antenna 5

Date: 2022.01.10

Communication System Band: N77; Frequency: 3499.98 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 3499.98 MHz; σ = 2.876 S/m; ε_r = 38.193; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.4 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.1, 7.1, 7.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch633332/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.744 W/kg

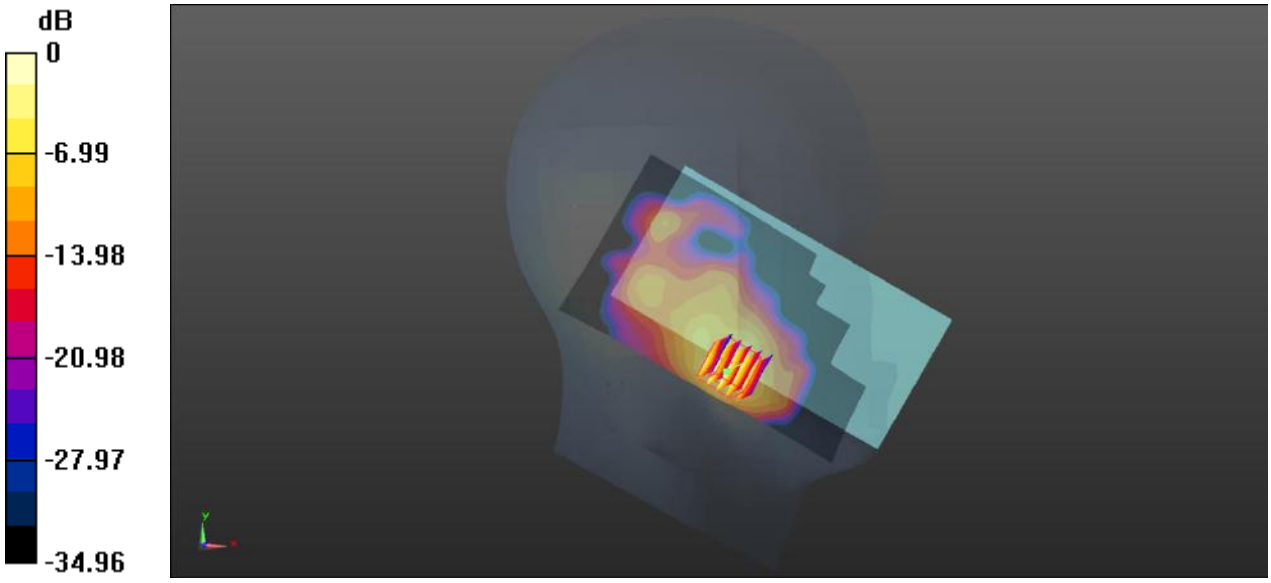
Ch633332/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=4mm

Reference Value = 2.061 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 0.591 W/kg; SAR(10 g) = 0.215 W/kg

Maximum value of SAR (measured) = 0.733 W/kg



0 dB = 0.733 W/kg

Meas.35 Body Plane with Back Side 15mm on Middle Channel in N77 mode with Antenna 5

Date: 2022.01.10

Communication System Band: n77; Frequency: 3499.98 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 3499.98 MHz; σ = 2.876 S/m; ε_r = 38.193; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.1, 7.1, 7.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch633332/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

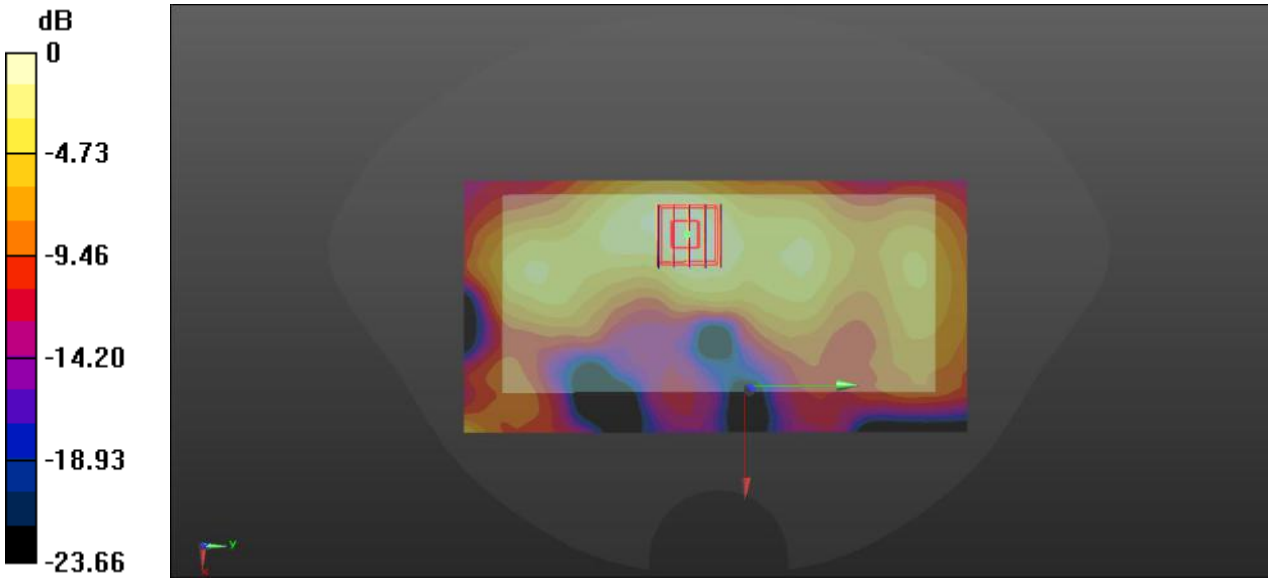
Ch633332/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=4mm

Reference Value = 4.393 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.358 W/kg

SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.080 W/kg

Maximum value of SAR (measured) = 0.191 W/kg



0 dB = 0.191 W/kg

Meas.36 Body Plane with Right Edge 10mm on Middle Channel in N77 mode with Antenna 5

Date: 2022.01.10

Communication System Band: N77; Frequency: 3499.98 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 3499.98 MHz; σ = 2.876 S/m; ε_r = 38.193; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.1, 7.1, 7.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch623332/Area Scan (61x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.716 W/kg

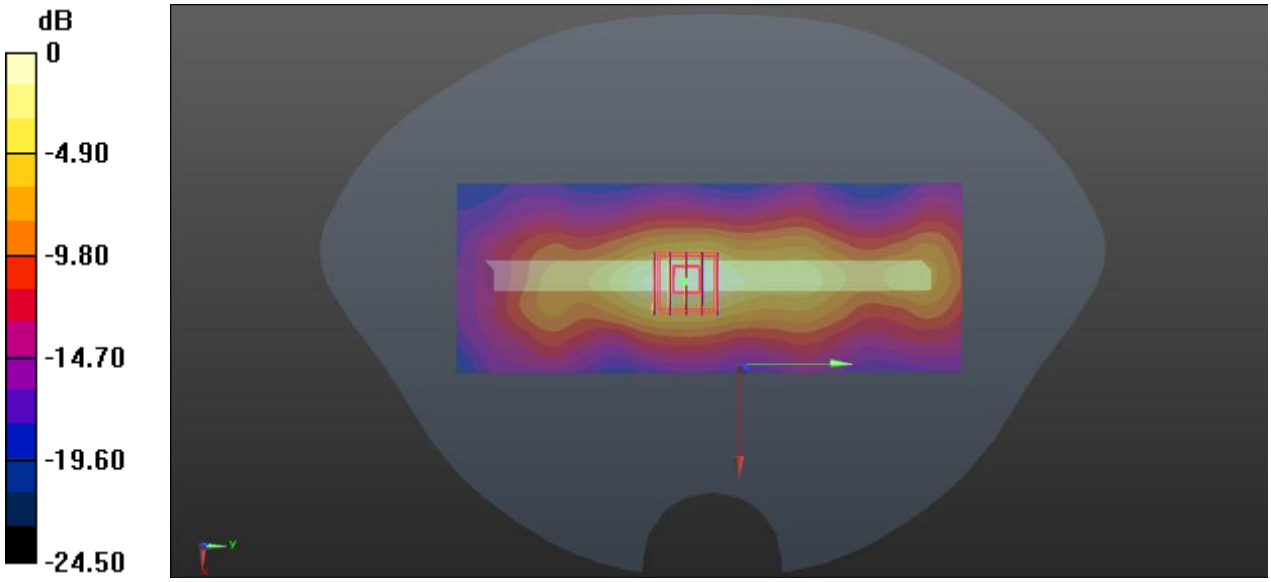
Ch623332/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=4mm

Reference Value = 13.84 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.259 W/kg

Maximum value of SAR (measured) = 0.708 W/kg



0 dB = 0.708 W/kg

Meas.37 Left Head with Cheek on Middle Channel in N78 mode with Antenna 5

Date: 2022.01.11

Communication System Band: N78; Frequency: 3499.98 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 3499.98 MHz; σ = 2.842 S/m; ε_r = 37.428; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.3 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.1, 7.1, 7.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch633332/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.335 W/kg

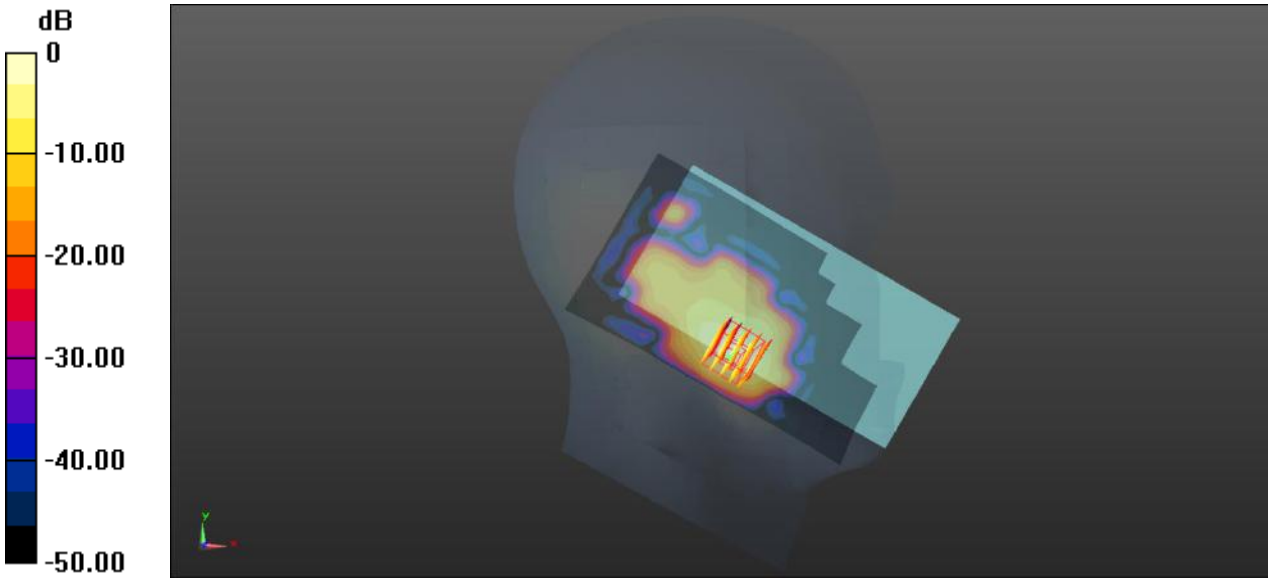
Ch633332/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=4mm

Reference Value = 0 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.344 W/kg; SAR(10 g) = 0.116 W/kg

Maximum value of SAR (measured) = 0.427 W/kg



0 dB = 0.427 W/kg

Meas.38 Body Plane with Back Side 15mm on Middle Channel in N78 mode with Antenna5

Date: 2022.01.11

Communication System Band: N78; Frequency: 3499.98 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 3499.98 MHz; σ = 2.842 S/m; ε_r = 37.428; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.1, 7.1, 7.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch633332/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.196 W/kg

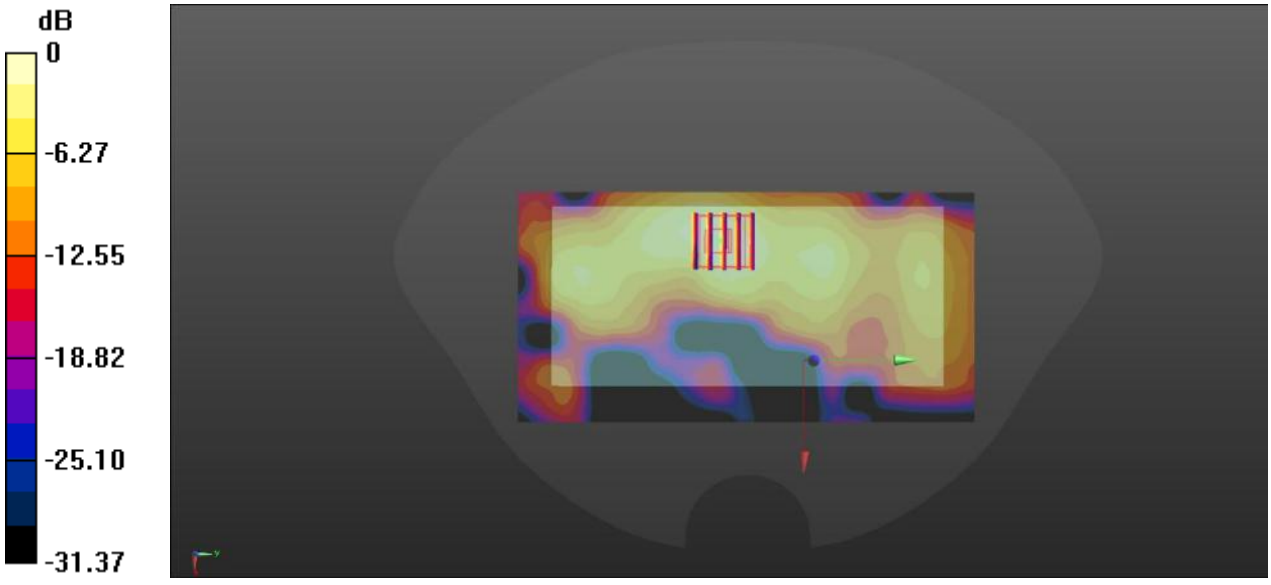
Ch633332/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=4mm

Reference Value = 3.912 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.327 W/kg

SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.092 W/kg

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



0 dB = 0.158 W/kg

Meas.39 Body Plane with Right Edge 10mm on Middle Channel in N78 mode with Antenna 5

Date: 2022.01.11

Communication System Band: N78; Frequency: 3499.98 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 3499.98 MHz; σ = 2.842 S/m; ε_r = 37.428; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.5

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(7.1, 7.1, 7.1); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch633332/Area Scan (61x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.552 W/kg

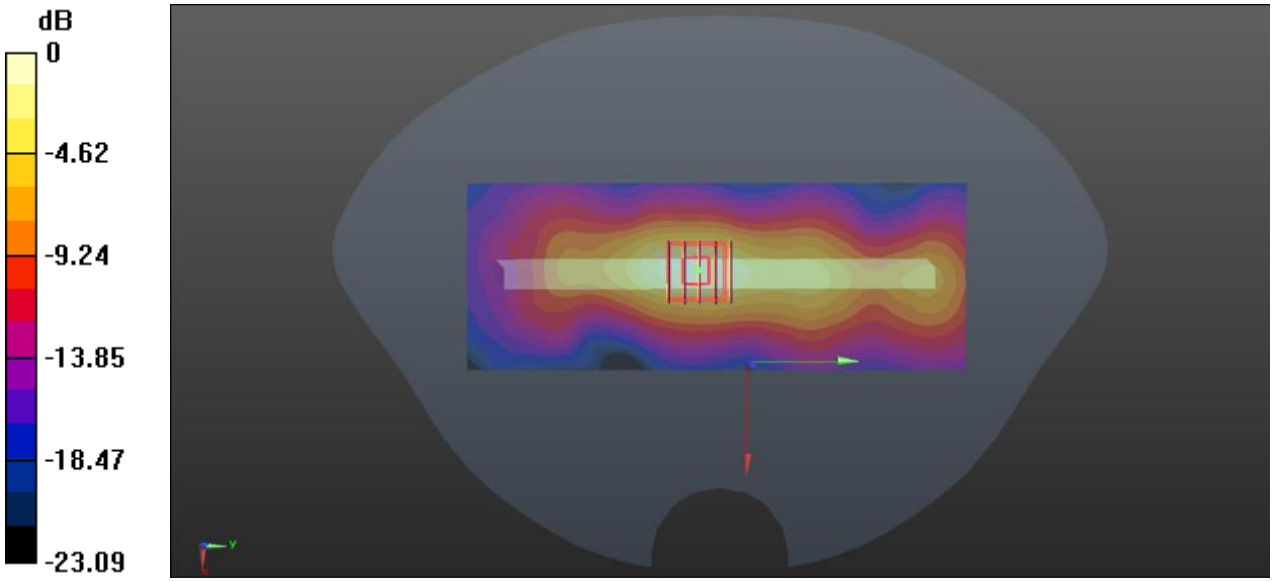
Ch633332/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=4mm

Reference Value = 9.138 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.938 W/kg

SAR(1 g) = 0.536 W/kg; SAR(10 g) = 0.204 W/kg

Maximum value of SAR (measured) = 0.608 W/kg



0 dB = 0.608 W/kg

Meas.40 Left Head with Cheek on Low Channel in IEEE802.11b mode with Antenna 4

Date: 2021.12.15

Communication System Band: WLAN(b); Frequency: 2412 MHz;Duty Cycle: 1:1.012

Medium parameters used (interpolated): f = 2412 MHz; σ = 1.787 S/m; ε_r = 39.95; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.1 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.246 W/kg

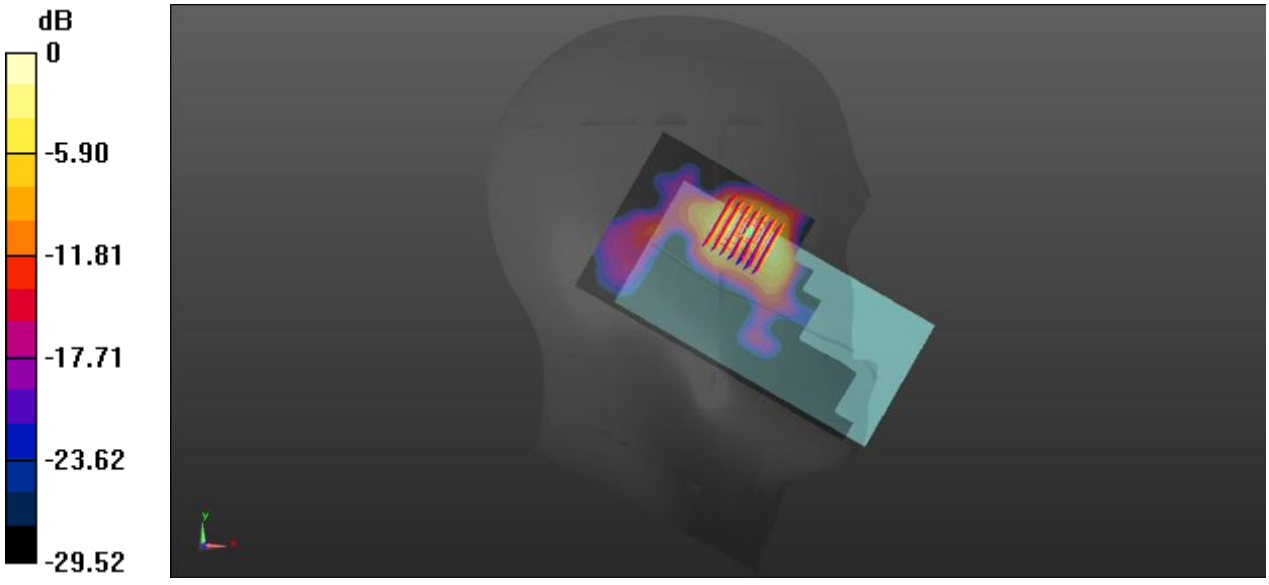
Ch1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.522 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.598 W/kg

SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.083 W/kg

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



0 dB = 0.260 W/kg

Meas.41 Body Plane with Back Side 15mm on High Channel in IEEE802.11b mode with Antenna 4

Date: 2021.12.15

Communication System Band: WLAN(b); Frequency: 2462 MHz;Duty Cycle: 1:1.012

Medium parameters used (interpolated): f = 2462 MHz; σ = 1.859 S/m; ε_r = 39.235; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.124 W/kg

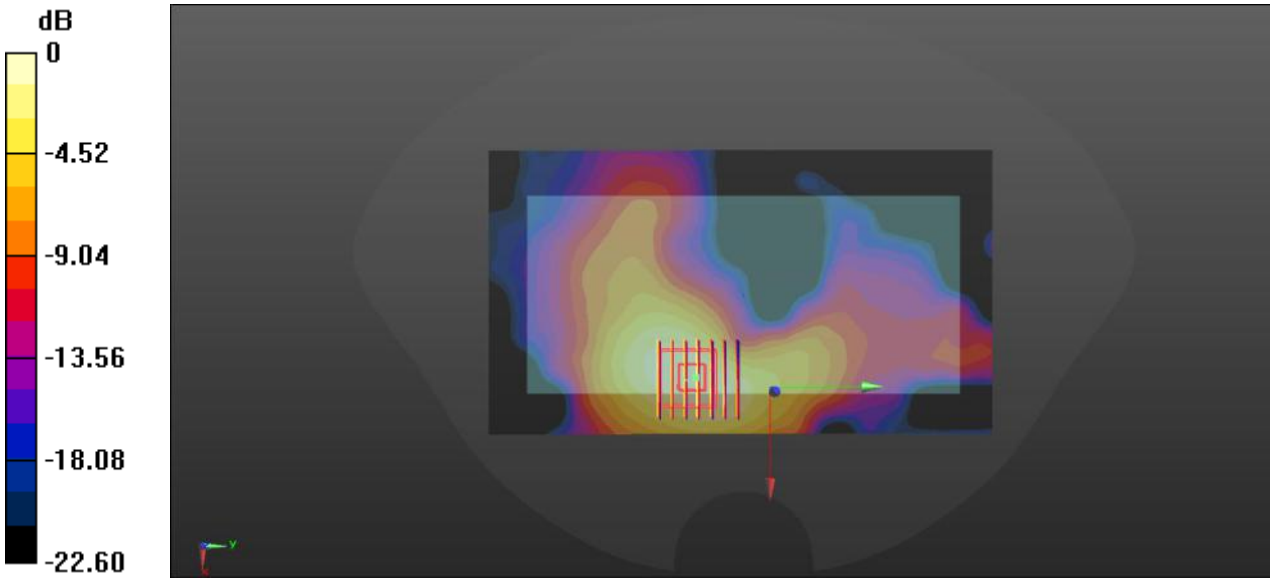
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.032 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.209 W/kg

SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.060 W/kg

Maximum value of SAR (measured) = 0.120 W/kg



0 dB = 0.120 W/kg

Meas.42 Body Plane with Top Edge 10mm on Middle Channel in IEEE802.11b mode with Antenna 3

Date: 2021.12.15

Communication System Band: WLAN(b); Frequency: 2437 MHz;Duty Cycle: 1:1.012

Medium parameters used (interpolated): f = 2437 MHz; σ = 1.816 S/m; ε_r = 39.75; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.233 W/kg

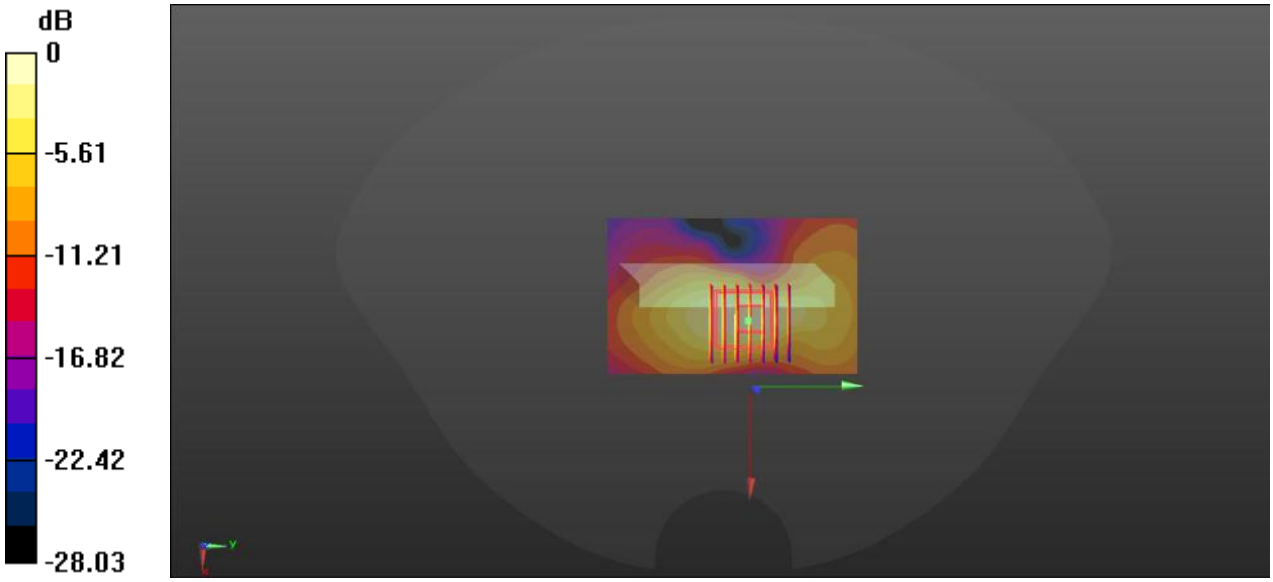
Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.568 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.396 W/kg

SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.088 W/kg

Maximum value of SAR (measured) = 0.226 W/kg



0 dB = 0.226 W/kg

Meas.43 Left Head with Cheek on 52 Channel in IEEE802.11a mode with Antenna 3

Date: 2022.01.12

Communication System Band: WLAN(a); Frequency: 5260 MHz;Duty Cycle: 1:1.008

Medium parameters used (interpolated): f = 5260 MHz; σ = 4.754 S/m; ε_r = 36.608; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.61, 5.61, 5.61); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch52/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0371 W/kg

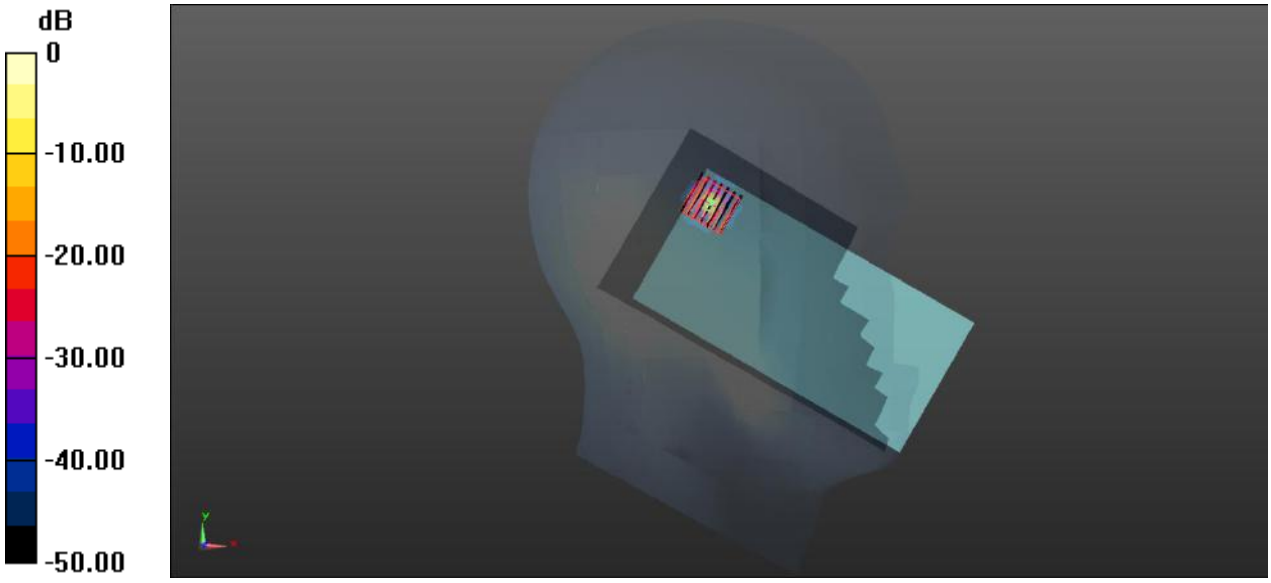
Ch52/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.238 W/kg

SAR(1 g) = 0.050 W/kg; SAR(10 g) = 0.011 W/kg

Maximum value of SAR (measured) = 0.119 W/kg



0 dB = 0.119 W/kg

Meas.44 Left Head with Cheek on 100 Channel in IEEE802.11a mode with Antenna 3

Date: 2022.01.13

Communication System Band: WLAN(a); Frequency: 5500 MHz;Duty Cycle: 1:1.008

Medium parameters used: f = 5500 MHz; σ = 4.844 S/m; ε_r = 35.818; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.2 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.3, 5.3, 5.3); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch100/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.137 W/kg

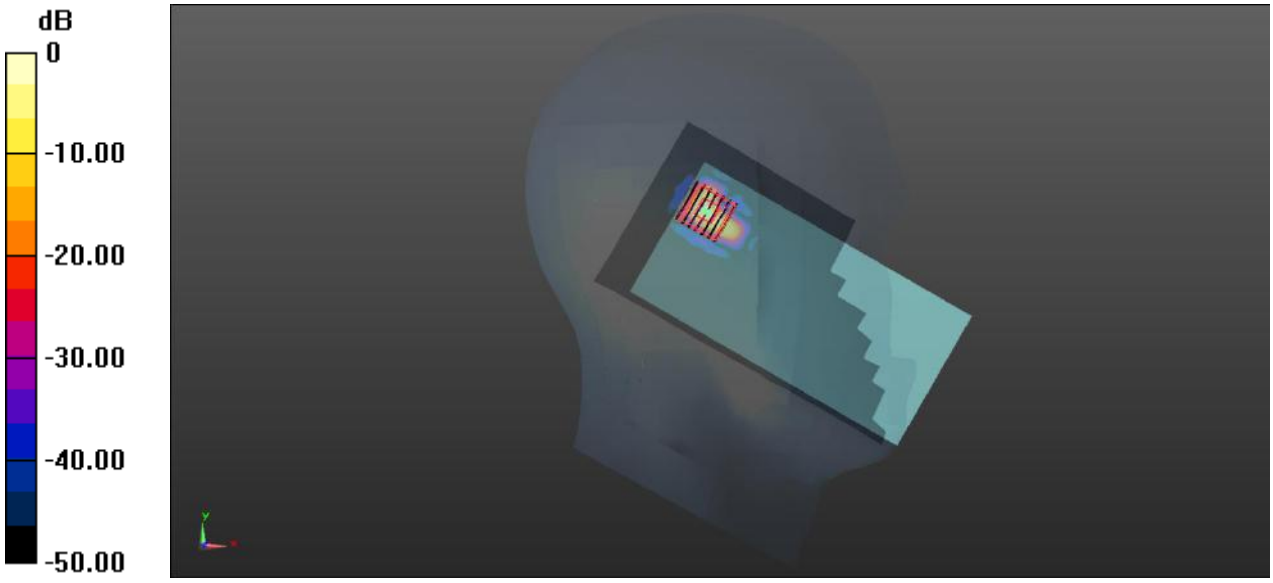
Ch100/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.072 W/kg; SAR(10 g) = 0.019 W/kg

Maximum value of SAR (measured) = 0.159 W/kg



0 dB = 0.159 W/kg

Meas.45 Left Head with Cheek on 149 Channel in IEEE802.11a mode with Antenna 3

Date: 2022.01.14

Communication System Band: WLAN(a); Frequency: 5745 MHz;Duty Cycle: 1:1.008

Medium parameters used (interpolated): f = 5745 MHz; σ = 5.25 S/m; ε_r = 36.249; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.4 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.15, 5.15, 5.15); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch149/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.201 W/kg

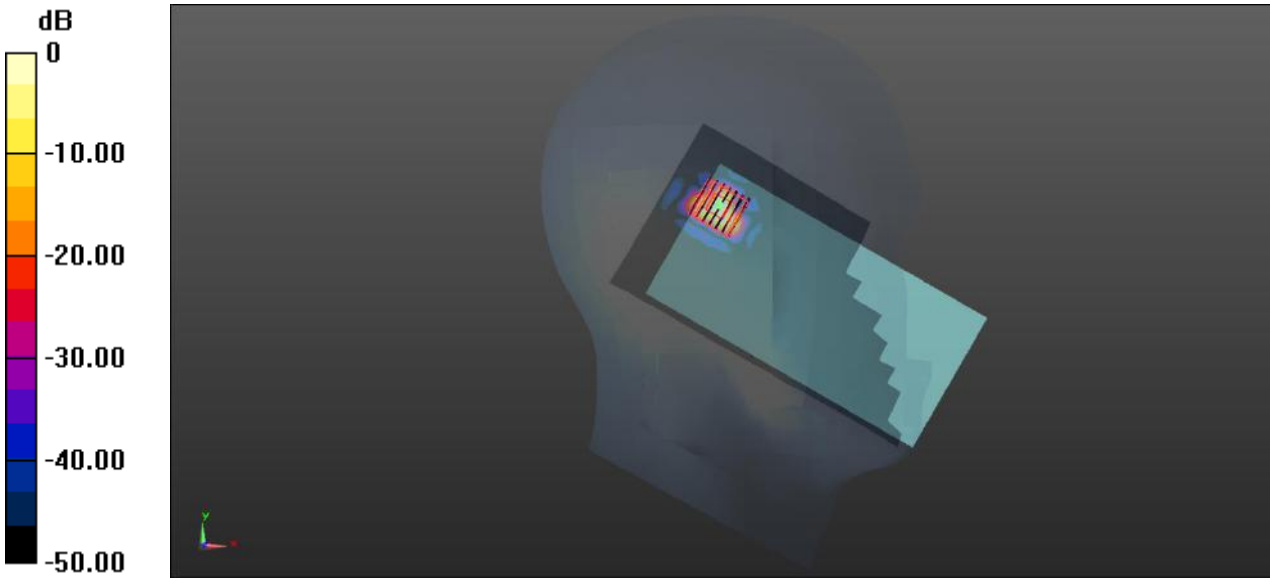
Ch149/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.486 W/kg

SAR(1 g) = 0.101 W/kg; SAR(10 g) = 0.029 W/kg

Maximum value of SAR (measured) = 0.232 W/kg



0 dB = 0.232 W/kg

Meas.46 Body Plane with Front Side 15mm on 64 Channel in IEEE802.11a mode with Antenna 4

Date: 2022.01.12

Communication System Band: WLAN(a); Frequency: 5320 MHz;Duty Cycle: 1:1.008

Medium parameters used (interpolated): f = 5320 MHz; σ = 4.845 S/m; ε_r = 36.315; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.61, 5.61, 5.61); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch64/Area Scan (91x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

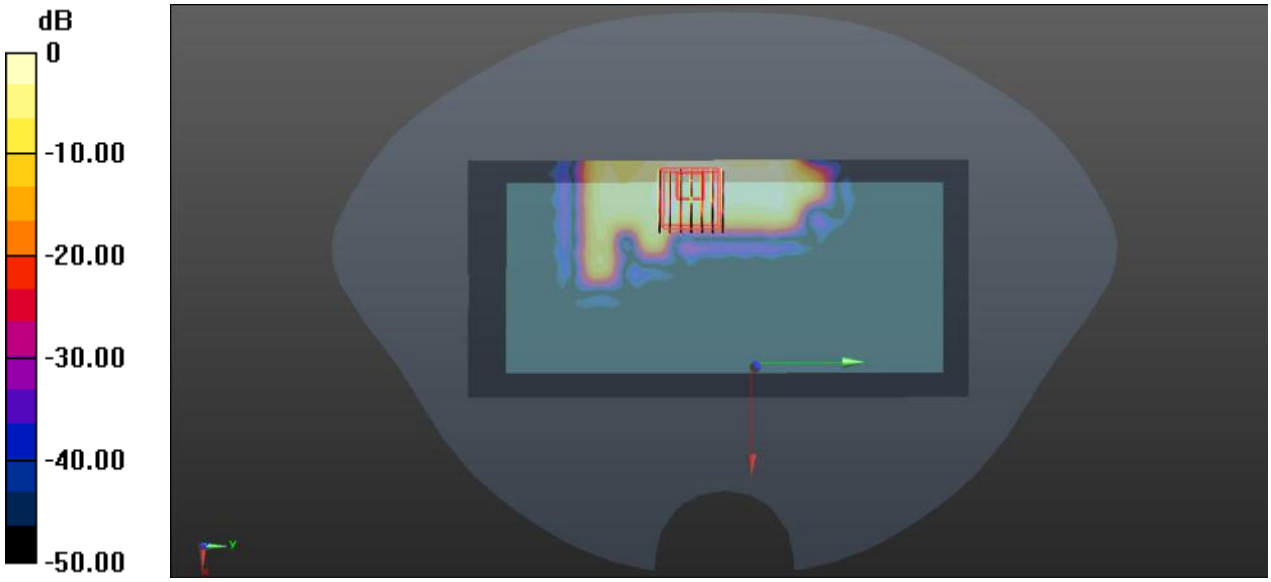
Ch64/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.074 W/kg; SAR(10 g) = 0.024 W/kg

Maximum value of SAR (measured) = 0.141 W/kg



0 dB = 0.141 W/kg

Meas.47 Body Plane with Front Side 15mm on 100 Channel in IEEE802.11a mode with Antenna4

Date: 2022.01.13

Communication System Band: WLAN(a); Frequency: 5500 MHz;Duty Cycle: 1:1.008

Medium parameters used: f = 5500 MHz; σ = 4.844 S/m; ε_r = 35.818; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.3, 5.3, 5.3); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch100/Area Scan (81x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.323 W/kg

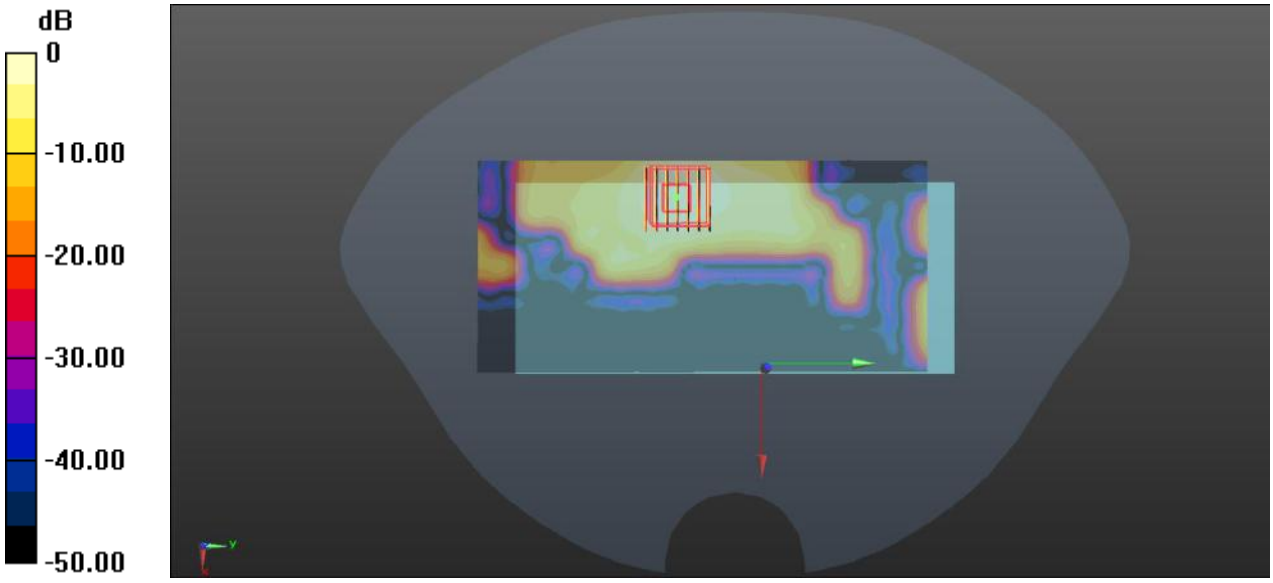
Ch100/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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

Peak SAR (extrapolated) = 0.649 W/kg

SAR(1 g) = 0.171 W/kg; SAR(10 g) = 0.064 W/kg

Maximum value of SAR (measured) = 0.326 W/kg



0 dB = 0.326 W/kg

Meas.48 Body Plane with Back Side 15mm on 157 Channel in IEEE802.11a mode with Antenna4

Date: 2022.01.14

Communication System Band: WLAN(a); Frequency: 5785 MHz;Duty Cycle: 1:1.008

Medium parameters used (interpolated): f = 5785 MHz; σ = 5.313 S/m; ε_r = 36.105; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.15, 5.15, 5.15); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch157/Area Scan (91x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.354 W/kg

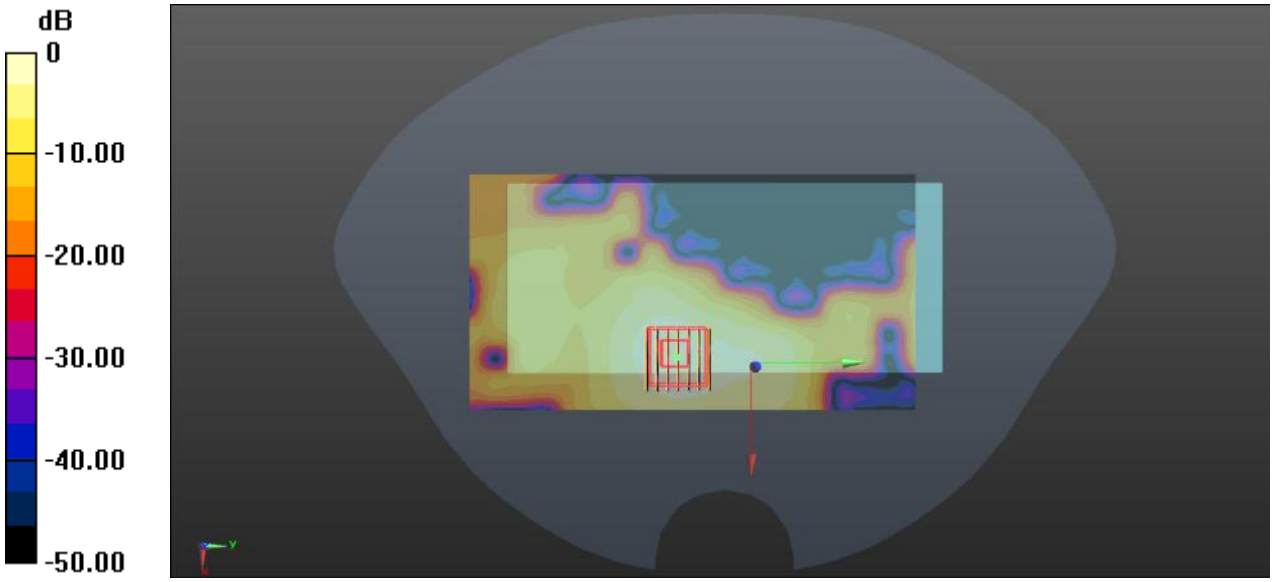
Ch157/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.745 W/kg

SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.071 W/kg

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



0 dB = 0.339 W/kg

Meas.49 Body Plane with Left Edge 10mm on Channel 44 in IEEE802.11a mode with Antenna4

Date: 2022.01.12

Communication System Band: WLAN(a); Frequency: 5220 MHz;Duty Cycle: 1:1.008

Medium parameters used (interpolated): f = 5220 MHz; σ = 4.684 S/m; ε_r = 37.104; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.72, 5.72, 5.72); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch44/Area Scan (61x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

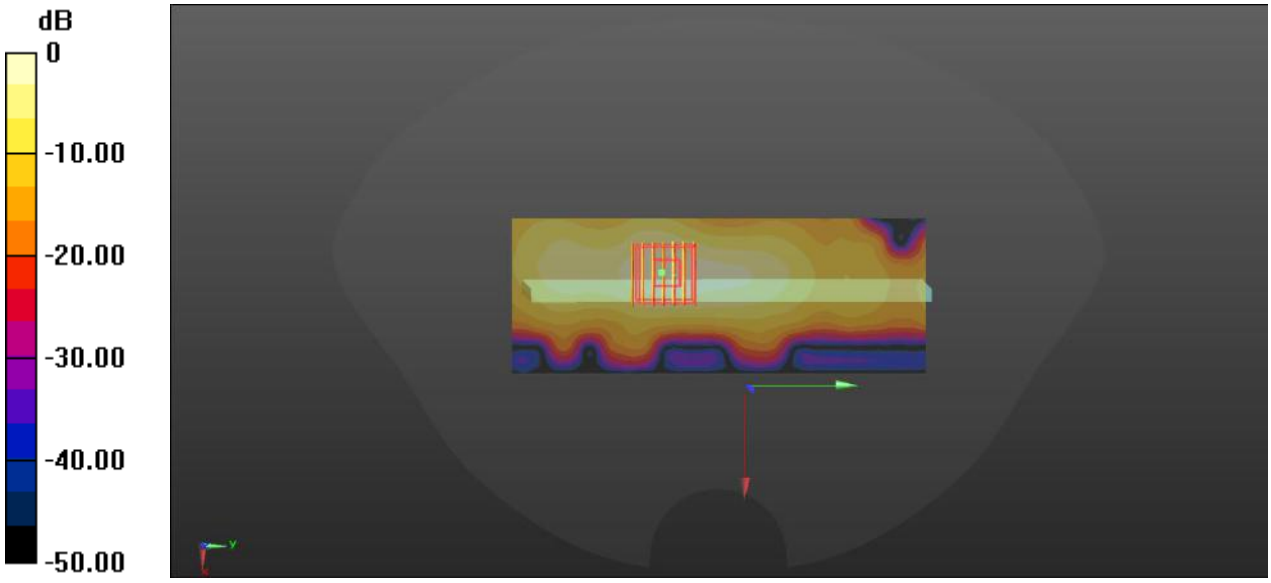
Ch44/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.142 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.130 W/kg

Maximum value of SAR (measured) = 0.645 W/kg



0 dB = 0.645 W/kg

Meas.50 Body Plane with Left Edge 10mm on Channel 157 in IEEE802.11a mode with Antenna4

Date: 2022.01.14

Communication System Band: WLAN(a); Frequency: 5785 MHz;Duty Cycle: 1:1.008

Medium parameters used (interpolated): f = 5785 MHz; σ = 5.313 S/m; ε_r = 36.105; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.4 Liquid Temperature:21.6

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.15, 5.15, 5.15); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch157/Area Scan (61x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.823 W/kg

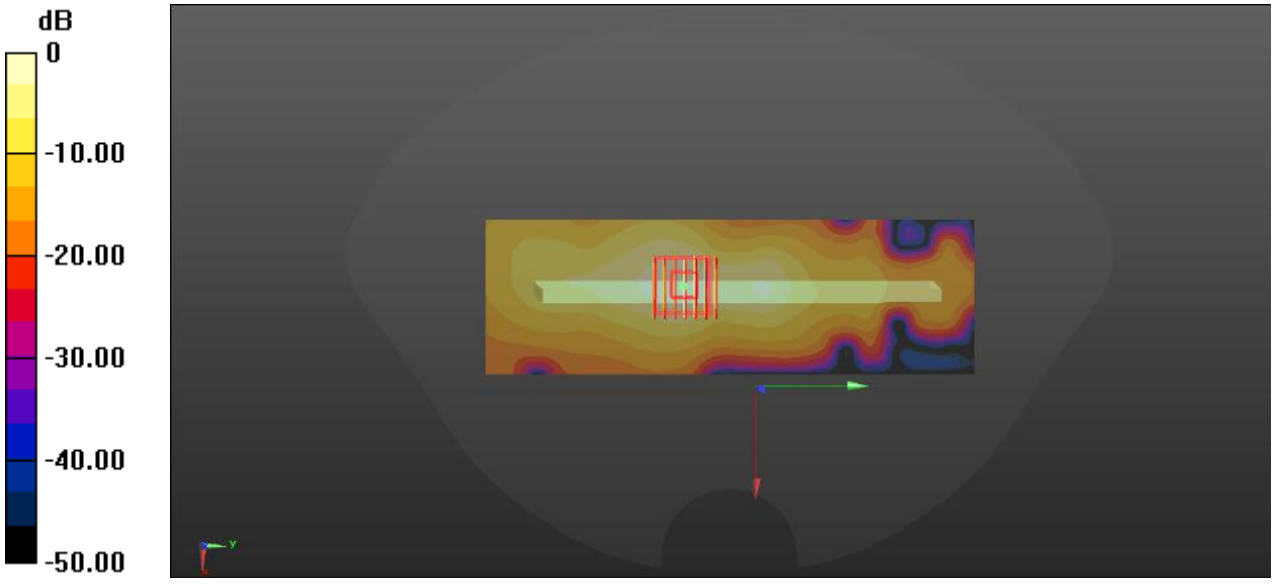
Ch157/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.895 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 0.416 W/kg; SAR(10 g) = 0.144 W/kg

Maximum value of SAR (measured) = 0.819 W/kg



0 dB = 0.819 W/kg

Meas.51 Body Plane with Left Edge 0mm on 64 Channel in IEEE802.11a mode with Antenna4

Date: 2022.01.12

Communication System Band: WLAN(a); Frequency: 5320 MHz;Duty Cycle: 1:1.008

Medium parameters used (interpolated): f = 5320 MHz; σ = 4.845 S/m; ε_r = 36.315; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.3 Liquid Temperature:21.1

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.61, 5.61, 5.61); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch64/Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 15.6 W/kg

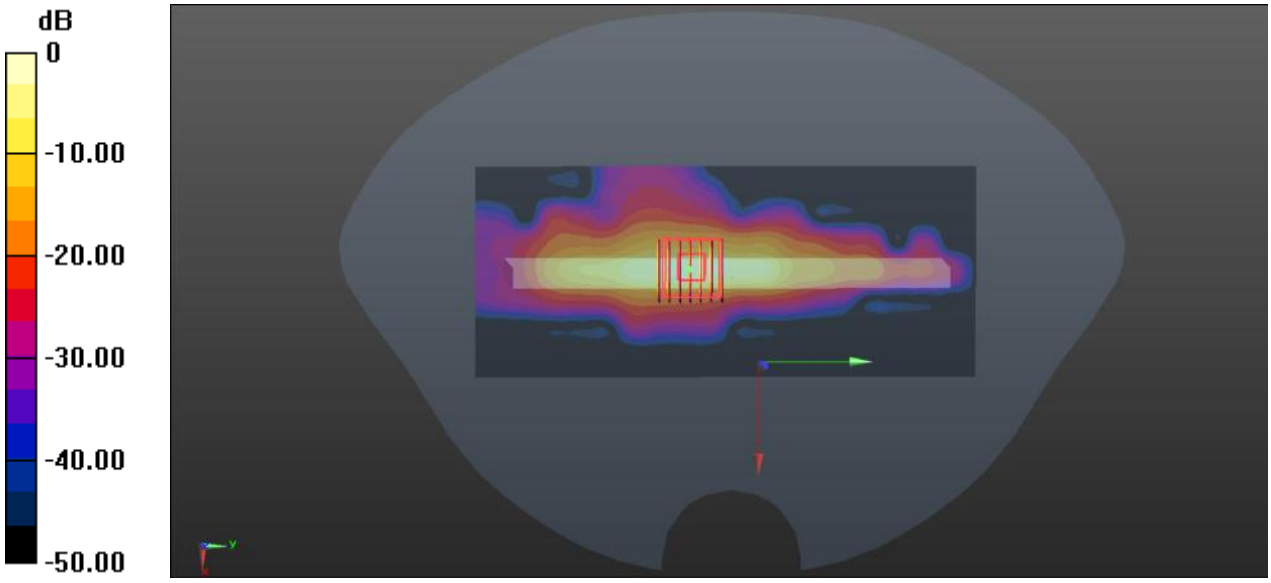
Ch64/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.176 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 36.5 W/kg

SAR(1 g) = 6.13 W/kg; SAR(10 g) = 1.47 W/kg

Maximum value of SAR (measured) = 15.0 W/kg



0 dB = 15.0 W/kg

Meas.52 Body Plane with Left Edge 0mm on Channel 116 in IEEE802.11a mode with Antenna4

Date: 2022.01.13

Communication System Band: WLAN(a); Frequency: 5580 MHz;Duty Cycle: 1:1.008

Medium parameters used: f = 5580 MHz; σ = 4.944 S/m; ε_r = 35.102; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.2 Liquid Temperature:21.4

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(5.1, 5.1, 5.1); Calibrated: 2021.07.23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch116/Area Scan (61x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 18.4 W/kg

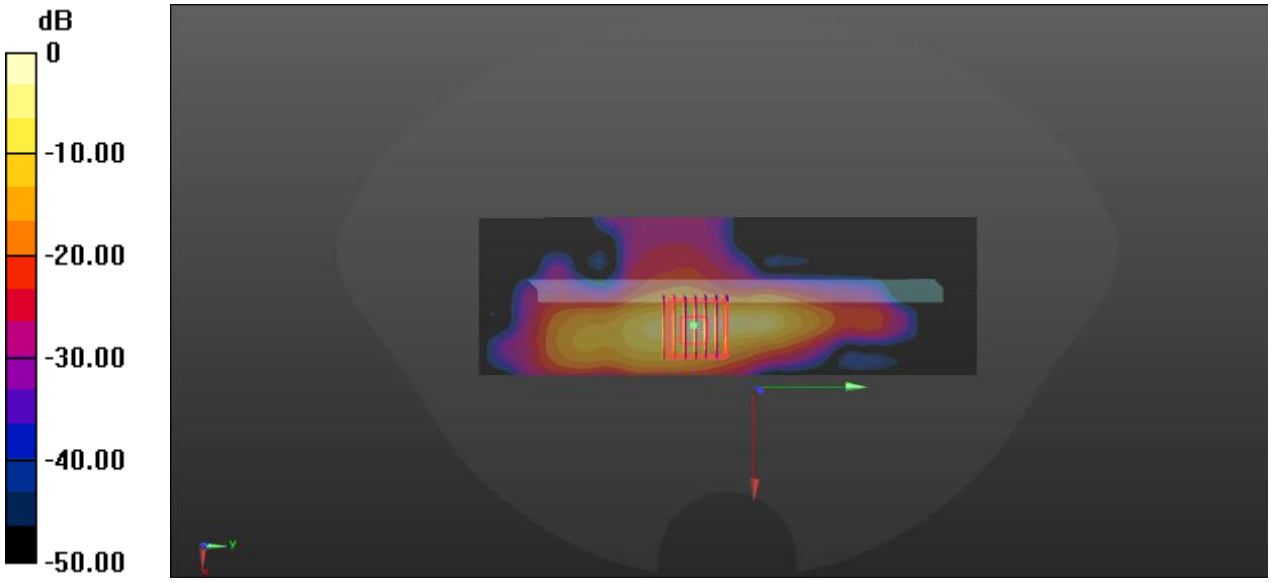
Ch116/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.565 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 57.8 W/kg

SAR(1 g) = 8.63 W/kg; SAR(10 g) = 2.09 W/kg

Maximum value of SAR (measured) = 21.6 W/kg



0 dB = 21.6 W/kg

Meas.53 Left Head with Cheek on Middle Channel in Bluetooth mode with Antenna 3

Date: 2021.12.15

Communication System Band: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.304

Medium parameters used (interpolated): f = 2441 MHz; σ = 1.82 S/m; ε_r = 39.551; ρ = 1000 kg/m^3

Phantom section: Left Section

Ambient Temperature:22.1 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

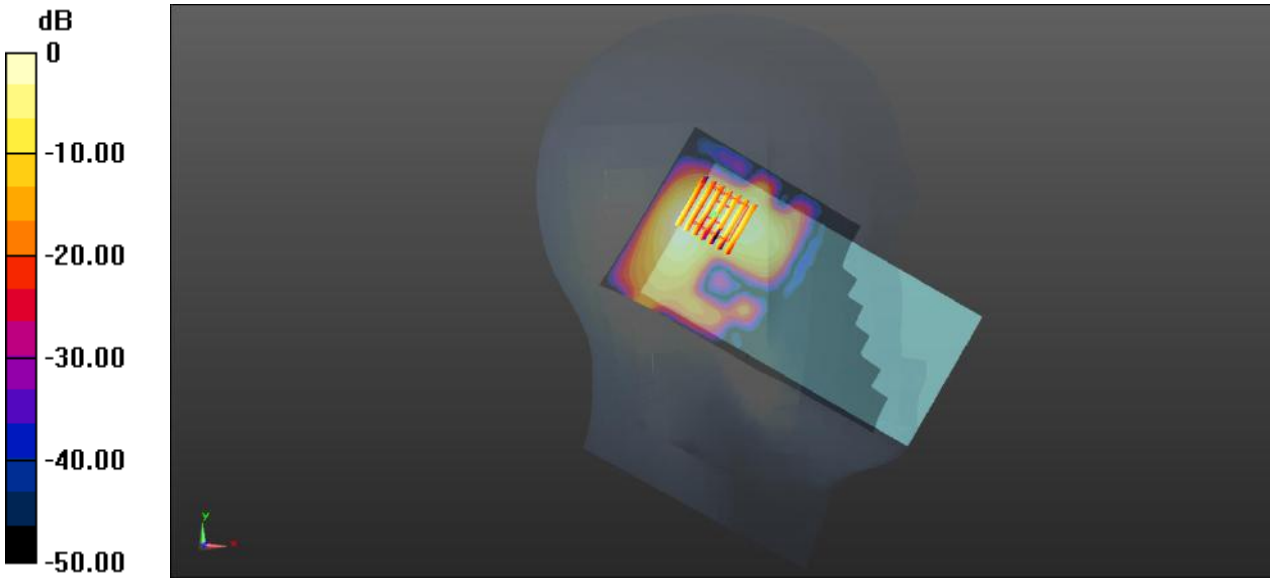
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.800 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.278 W/kg

SAR(1 g) = 0.107 W/kg; SAR(10 g) = 0.040 W/kg

Maximum value of SAR (measured) = 0.124 W/kg



0 dB = 0.124 W/kg

Meas.54 Body Plane with Back Side 15mm on Middle Channel in Bluetooth mode with Antenna 3

Date: 2021.12.15

Communication System Band: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.304

Medium parameters used (interpolated): f = 2441 MHz; σ = 1.82 S/m; ε_r = 39.551; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (81x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0185 W/kg

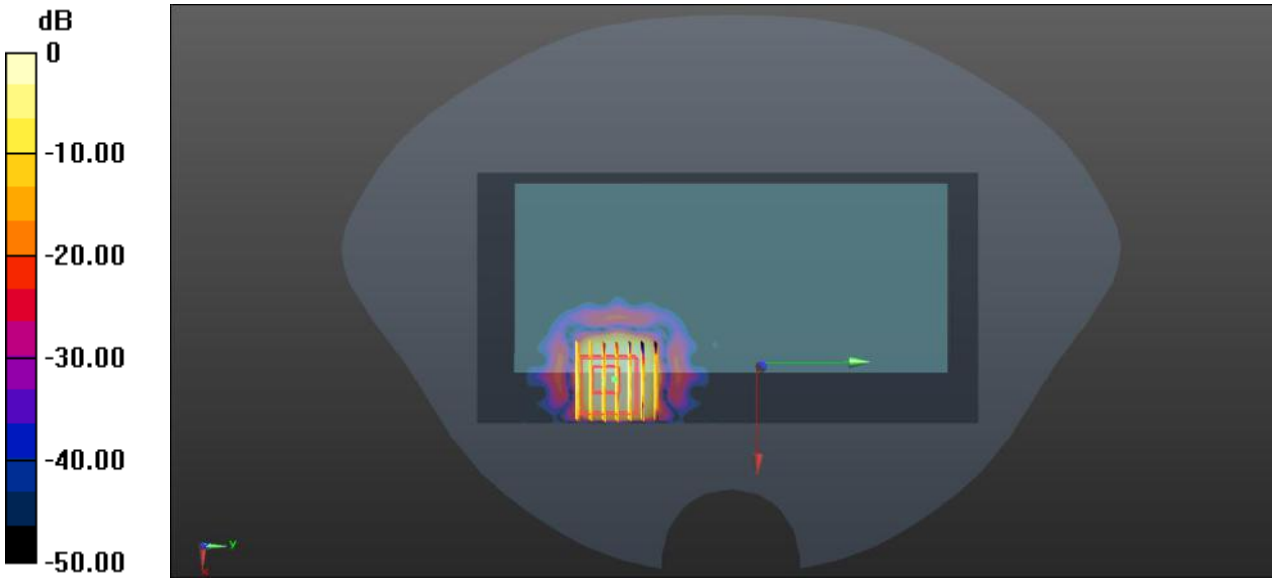
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.0190 W/kg

SAR(1 g) = 0.010 W/kg; SAR(10 g) = 0.00408 W/kg

Maximum value of SAR (measured) = 0.0123 W/kg



0 dB = 0.0123 W/kg

Meas.55 Body Plane with Top Edge 10mm on Middle Channel in Bluetooth mode with Antenna 3

Date: 2021.12.15

Communication System Band: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.304

Medium parameters used (interpolated): f = 2441 MHz; σ = 1.82 S/m; ε_r = 39.551; ρ = 1000 kg/m^3

Phantom section: Flat Section

Ambient Temperature:22.1 Liquid Temperature:21.9

DASY5 Configuration:

- Probe: EX3DV4 - SN7663; ConvF(8.19, 8.19, 8.19); Calibrated: 2021.07.23;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2021.07.15
- Phantom: SAM (30deg probe tilt) with CRP v5.0 on left 1859; Type: QD000P40CD; Serial: TP:1859
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (61x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0471 W/kg

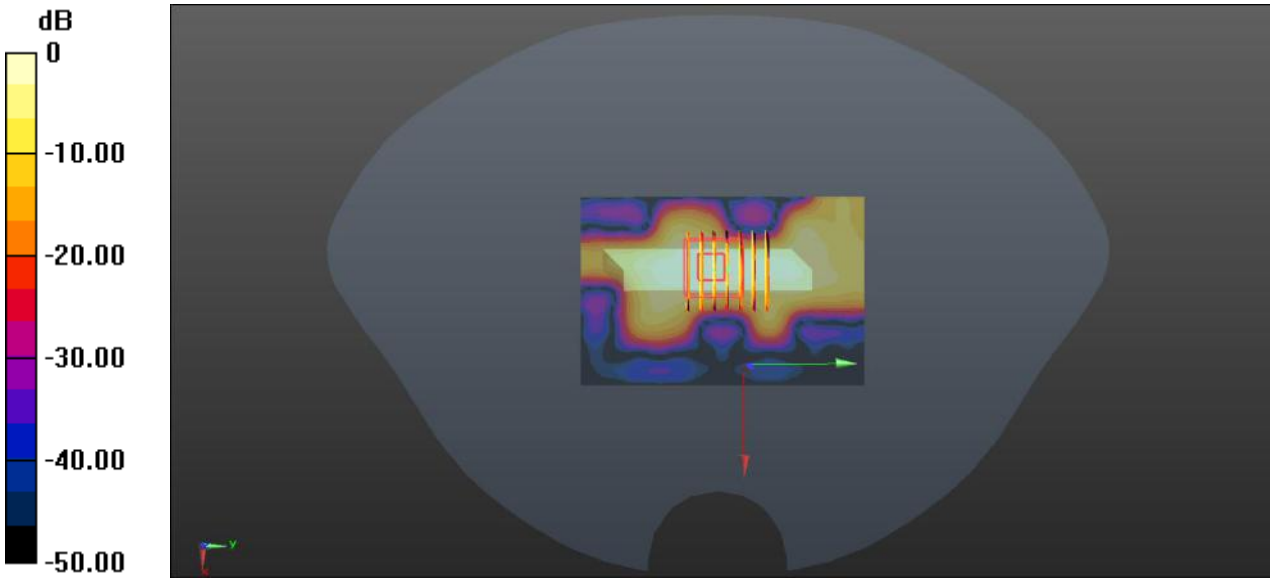
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.377 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.0480 W/kg

SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.00955 W/kg

Maximum value of SAR (measured) = 0.0297 W/kg



0 dB = 0.0297 W/kg

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-EC21C0184-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-EC21C0184-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “CALIBRATION REPORT.pdf”.

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--END OF REPORT--