

TEST REPORT

Applicant: Hoperun mMax Digital Inc.
Address: 5151 California Ave., Suite 100, Irvine CA 92617, USA
Equipment Type: LD2
Model Name: LD2
Brand Name: mMax Digital
FCC ID: 2BFFBLD2
Test Standard: FCC 47 CFR Part 2.1093
(refer to section 3.1)
Maximum SAR: Body-worn (1 g@10mm): 1.17 W/kg
Hotspot (1 g@10mm): 1.18 W/kg
Extremity (10 g@0mm): 2.57 W/kg
Sample Arrival Date: Aug. 15, 2023
Test Date: Aug. 16, 2023 - Sep. 04, 2023
Date of Issue: Mar. 27, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Zhang Jiwei**Checked by:** Xu Rui**Approved by:** Tolan Tu
(Testing Director)

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 27, 2023</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Mar. 27, 2024</u>	<u>Update brand name, FCC ID number, applicant and manufacturer information.</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION.....	5
1.1	Test Laboratory	5
1.2	Test Location	5
1.3	Test Environment Condition.....	5
2	PRODUCT INFORMATION	6
2.1	Applicant Information	6
2.2	Manufacturer Information.....	6
2.3	General Description for Equipment under Test (EUT).....	6
2.4	Ancillary Equipment.....	6
2.5	Technical Information	7
3	SUMMARY OF TEST RESULT	8
3.1	Test Standards	8
3.2	Device Category and SAR Limit	9
3.3	Test Result Summary	10
3.4	Test Uncertainty	12
4	MEASUREMENT SYSTEM	13
4.1	Specific Absorption Rate (SAR) Definition	13
4.2	DASY SAR System	14
5	SYSTEM VERIFICATION	21
5.1	Purpose of System Check	21
5.2	System Check Setup	21
6	TEST POSITION CONFIGURATIONS	22
6.1	Head Exposure Conditions	22

6.2	Body-worn Position Conditions	24
6.3	Hotspot Mode Exposure Position Conditions	25
6.4	Product Specific 10g Exposure Consideration	25
7	MEASUREMENT PROCEDURE	26
7.1	Measurement Process Diagram	26
7.2	SAR Scan General Requirement	27
7.3	Measurement Procedure	28
7.4	Area & Zoom Scan Procedure	28
8	CONDUCTED RF OUPUT POWER	29
8.1	WCDMA	29
8.2	LTE.....	29
8.3	WIFI.....	30
8.4	Bluetooth	31
9	TEST EXCLUSION CONSIDERATION	32
10	TEST RESULT	33
10.1	WCDMA Band 2	33
10.2	WCDMA Band 4	34
10.3	WCDMA Band 5	35
10.4	LTE Band 2 (20MHz Bandwidth)	36
10.5	LTE Band 4 (20MHz Bandwidth)	38
10.6	LTE Band 5 (10MHz Bandwidth)	40
10.7	LTE Band 12 (10MHz Bandwidth).....	41
10.8	LTE Band 13 (10MHz Bandwidth).....	42
10.9	LTE Band 66 (20MHz Bandwidth).....	43
10.10	LTE Band 71 (20MHz Bandwidth).....	45
10.11	WIFI 2.4GHz.....	46
10.12	Bluetooth	47
11	SAR Measurement Variability	48
12	SIMULTANEOUS TRANSMISSION.....	50
12.1	Simultaneous Transmission Mode Consider	50

12.2	Sum SAR of Simultaneous Transmission	51
13	TEST EQUIPMENTS LIST	56
ANNEX A	SIMULATING LIQUID VERIFICATION RESULT	57
ANNEX B	SYSTEM CHECK RESULT	58
ANNEX C	TEST DATA.....	69
ANNEX D	EUT EXTERNAL PHOTOS.....	93
ANNEX E	SAR TEST SETUP PHOTOS	93
ANNEX F	CALIBRATION REPORT	93

1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

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

1.3 Test Environment Condition

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

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Hoperun mMax Digital Inc.
Address	5151 California Ave., Suite 100, Irvine CA 92617, USA

2.2 Manufacturer Information

Manufacturer	Hoperun mMax Digital Inc.
Address	5151 California Ave., Suite 100, Irvine CA 92617, USA

2.3 General Description for Equipment under Test (EUT)

EUT Name	LD2
Model Name Under Test	LD2
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	V01
Software Version	LTE_S0223_N_5507_0.002.00
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	178200178
	Serial No.	N/A
	Capacitance	2500mAh
	Rated Voltage	3.8Vdc
	Limited Voltage	4.35Vdc
	Manufacturer	Zhongshan Tianmao Battery Co., Ltd.

2.5 Technical Information

Network and Wireless connectivity	3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/12/13/66/71 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40) GPS, GLONASS
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	WCDMA, LTE, 2.4G WLAN, Bluetooth		
Frequency Range	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 13	TX: 777 ~ 787 MHz	RX: 746 ~ 756 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	LTE Band 71	TX: 663 ~ 698 MHz	RX: 617 ~ 652 MHz
	802.11b/g /n(HT20/40)	2412 ~ 2462 MHz	
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WWAN: Loop Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		
Product Type	Portable Device		
EUT Type	☒ Production unit	☐ Identical prototype	

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	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
4	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
5	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
6	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
7	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
8	KDB 865664 D02 v01r02	RF Exposure Reporting
9	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
10	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

3.2 Device Category and SAR Limit

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

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

Table of Exposure Limits:

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

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
		Body-worn (10mm)	Hotspot (10mm)	Extremity (0mm)	Body-worn (10mm)	Hotspot (10mm)	Extremity (0mm)
		1g SAR		10g SAR	1g SAR		10g SAR
PCE	WCDMA Band 2	1.17	1.17	2.41	1.17	1.18	2.57
	WCDMA Band 4	0.64	1.18	2.57			
	WCDMA Band 5	0.38	0.38	0.62			
	LTE Band 2	1.15	1.15	2.52			
	LTE Band 4	0.62	1.10	2.18			
	LTE Band 5	0.51	0.51	0.83			
	LTE Band 12	0.71	0.71	0.94			
	LTE Band 13	0.51	0.51	0.57			
	LTE Band 66	0.58	1.08	2.25			
	LTE Band 71	0.44	0.44	0.48			
DTS	2.4G WLAN	0.18	0.18	0.53			
DSS	Bluetooth	0.02	0.02	0.04			
Limit (W/kg)		1.6		4.0	1.6		4.0
Verdict		PASS					

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)		
	Body-worn (10mm)	Hotspot (10mm)	Extremity (0mm)
PCE	1.35	1.35	3.05
DTS	1.35	1.35	3.05
DSS	1.18	1.18	2.57
Limit (W/Kg)	1.6		4.0
Verdict	Pass		
Note: The highest simultaneous SAR please refer section 12.2			

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 1.18 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 2.57 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

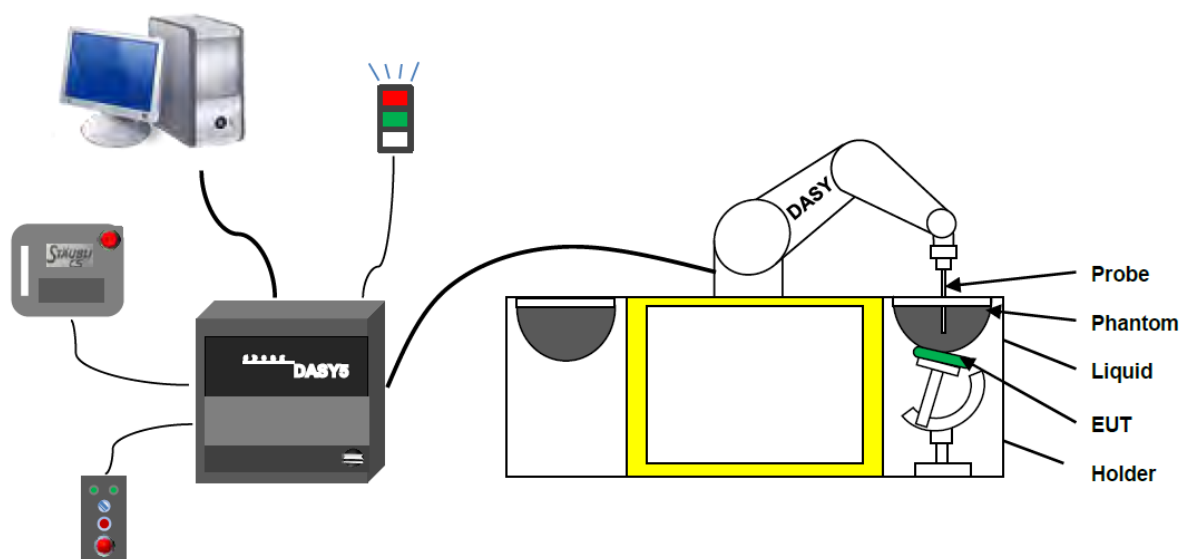
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

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



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

4.2.3 E-Field Probe

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

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



E-Field Probe Calibration Process

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

4.2.4 Data Acquisition Electronics

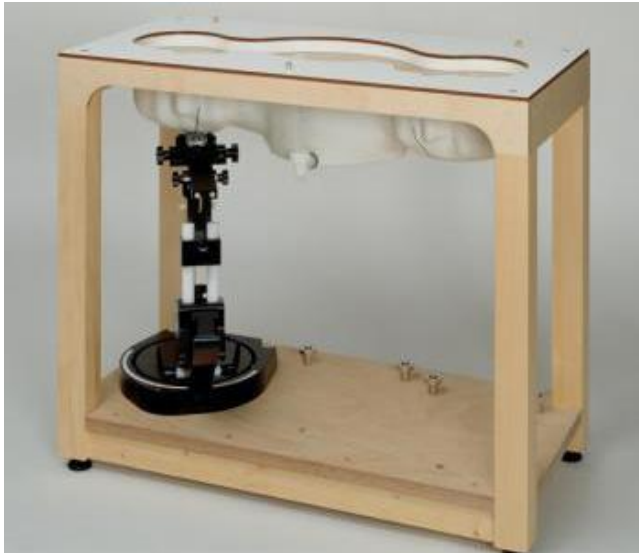
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through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



- Input Impedance: 200M Ω m
- The Inputs: Symmetrical and Floating
- Common Mode Rejection: Above 80dB

4.2.5 Phantoms

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



- Left head
- Right head
- Flat phantom

Photo of Phantom SN1857



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

4.2.6 Device Holder

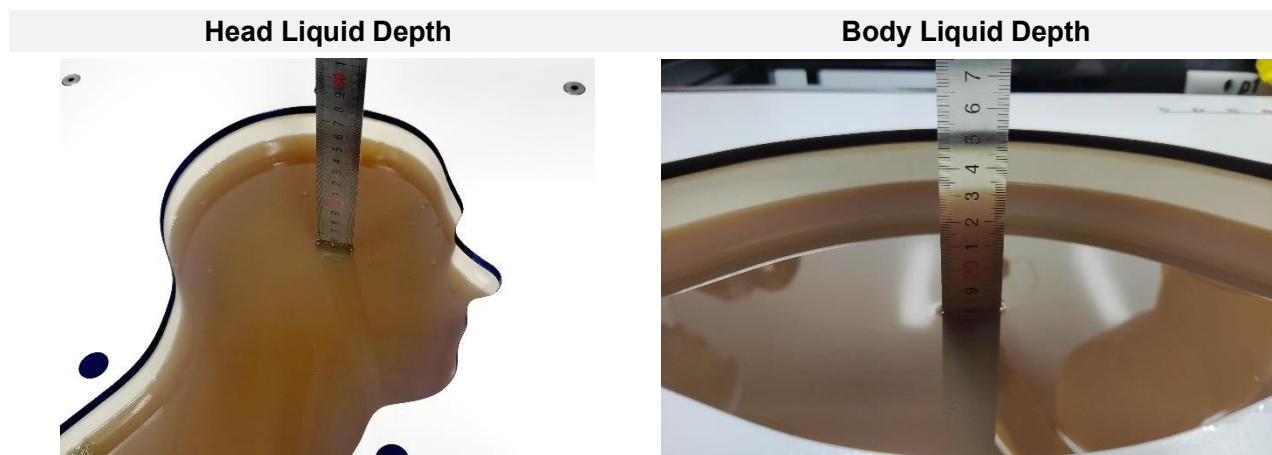
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for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



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

4.2.7 Simulating Liquid

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



The following table gives the recipes for tissue simulating liquid.

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

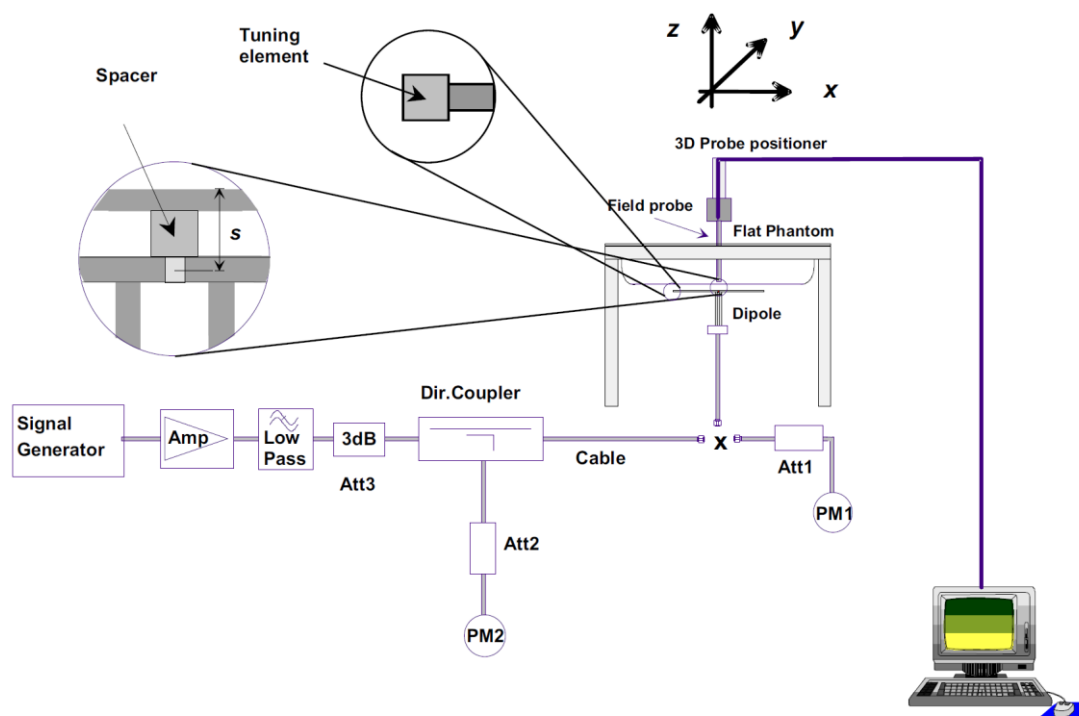
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

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

5.2 System Check Setup

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



6 TEST POSITION CONFIGURATIONS

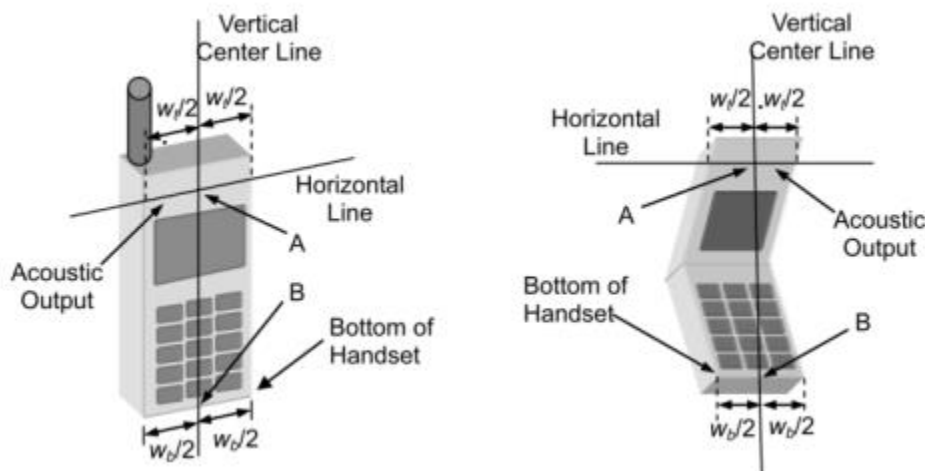
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

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

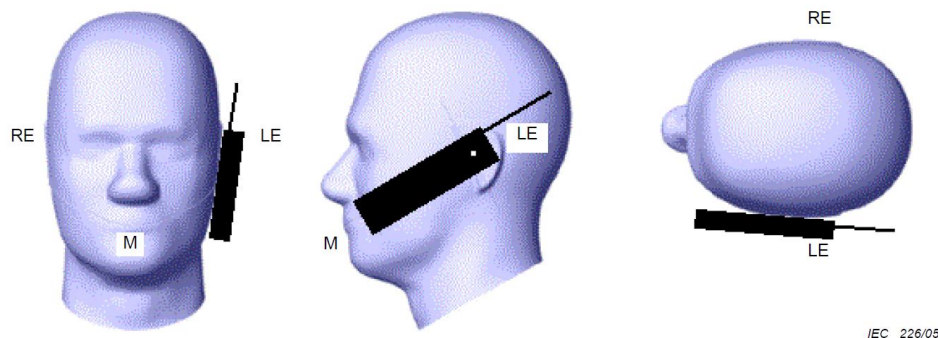
6.1.1 Two Imaginary Lines on the Handset

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



6.1.2 Cheek Position

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



6.1.3 Tilted Position

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

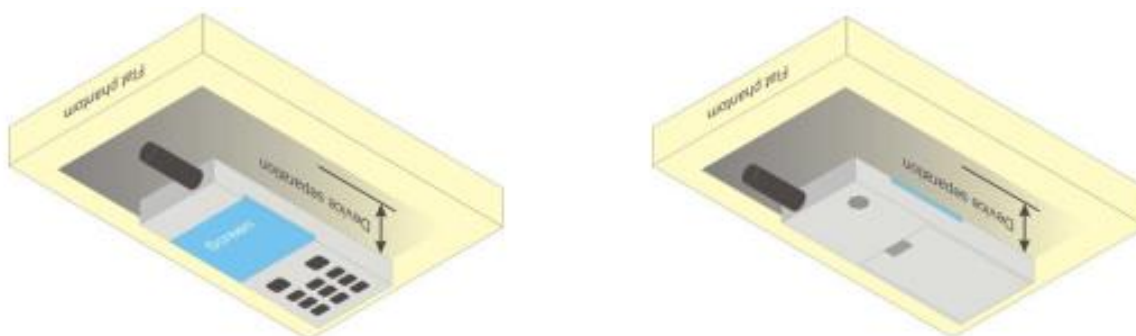


6.2 Body-worn Position Conditions

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

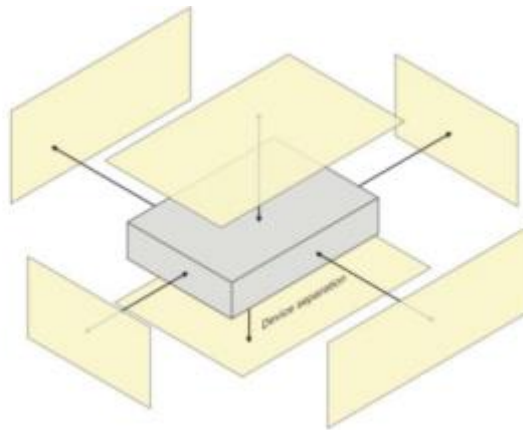
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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

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



6.3 Hotspot Mode Exposure Position Conditions

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



6.4 Product Specific 10g Exposure Consideration

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

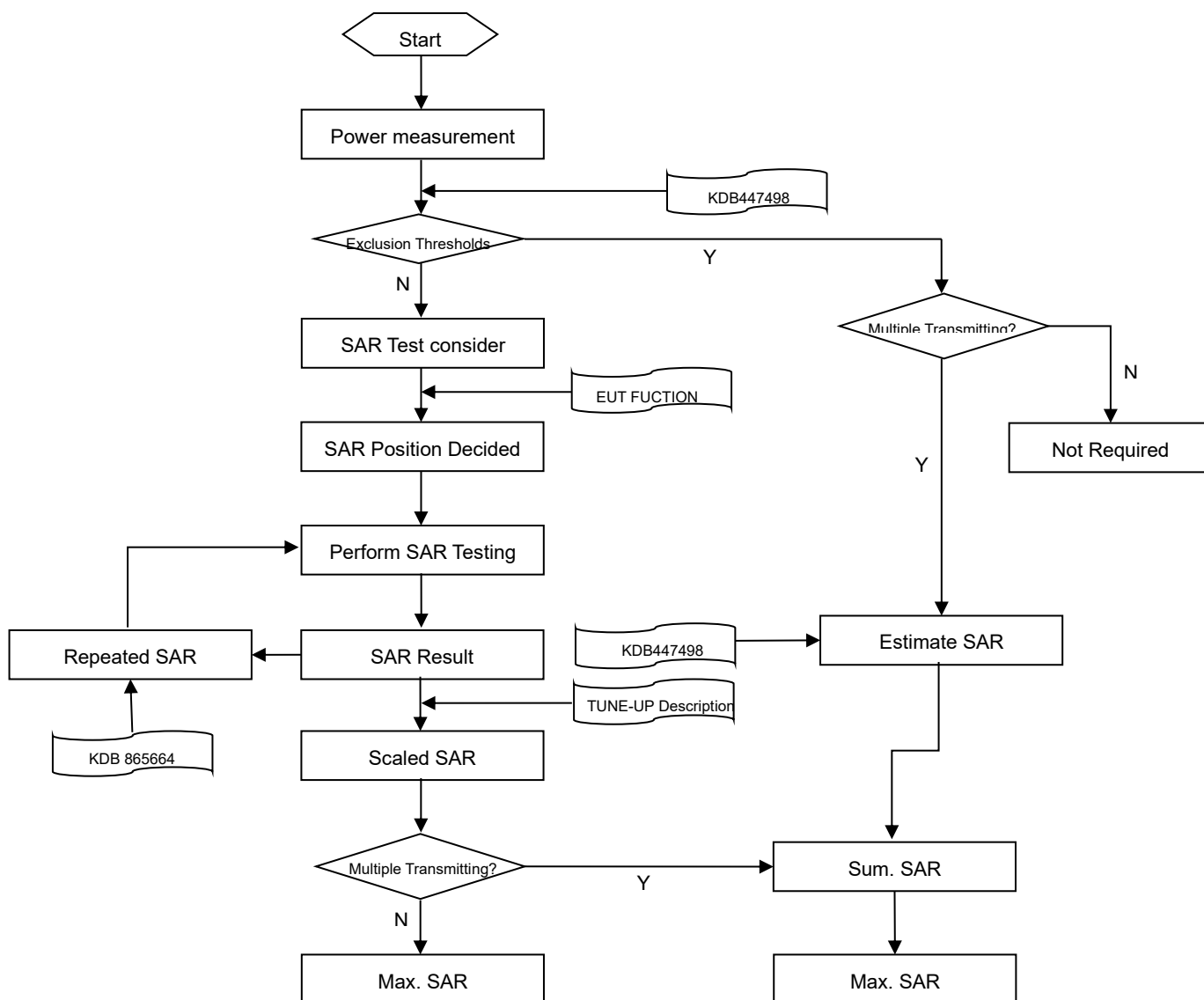
The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address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

6

6.

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

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

Note:

1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7.3 Measurement Procedure

The following steps are used for each test position

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

7.4 Area & Zoom Scan Procedure

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

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

8 CONDUCTED RF OUPUT POWER

8.1 WCDMA

Please refer the document “BL-SZ2380525-701 Conducted RF Output Power List.pdf”.

8.2 LTE

Please refer the document “BL-SZ2380525-701 Conducted RF Output Power List.pdf”.

8.3 WIFI

8.3.1 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	17.69	19.00	No
		2	2417	18.43	20.00	No
		6	2437	18.51	20.00	No
		11	2462	18.67	20.00	Yes
	802.11g	1	2412	16.88	19.00	No
		2	2417	17.79	19.00	No
		6	2437	17.85	19.00	No
		10	2457	17.68	19.00	No
		11	2462	15.21	17.00	No
	802.11n(HT20)	1	2412	16.97	19.00	No
		2	2417	17.63	19.00	No
		6	2437	17.67	19.00	No
		10	2457	17.62	19.00	No
		11	2462	14.78	16.00	No
	802.11n(HT40)	3	2422	14.50	16.00	No
		6	2437	14.91	16.00	No
		9	2452	13.04	15.00	No

Note: According KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions. 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.

Adjusted SAR = Report SAR * (max power (OFDM)/ max power (DSSS)) = $0.177 * (79.43 \text{ mw}) / (100 \text{ mw}) = 0.141 \text{ W/kg}$, so the 2.4GHz OFDM SAR test is not required.

8.4 Bluetooth

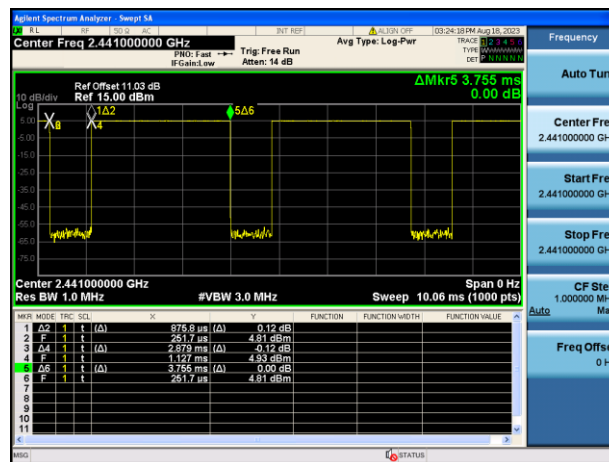
Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Conducted Power(dBm)	4.96	6.59	5.69	4.26	5.84	4.88
Tune-Up Limit (dBm)	6.00	7.50	6.50	5.00	6.50	6.00
SAR Test Require	YES	YES	YES	NO	NO	NO
Mode	8-DPSK			BLE-1Mbps		
Channel	0	39	78	0	19	39
Frequency (MHz)	2402	2441	2480	2402	2440	2480
Conducted Power(dBm)	4.38	6.03	5.07	4.84	6.44	5.55
Tune-Up Limit (dBm)	5.00	7.00	6.00	6.00	7.00	6.50
SAR Test Require	NO	NO	NO	NO	NO	NO

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

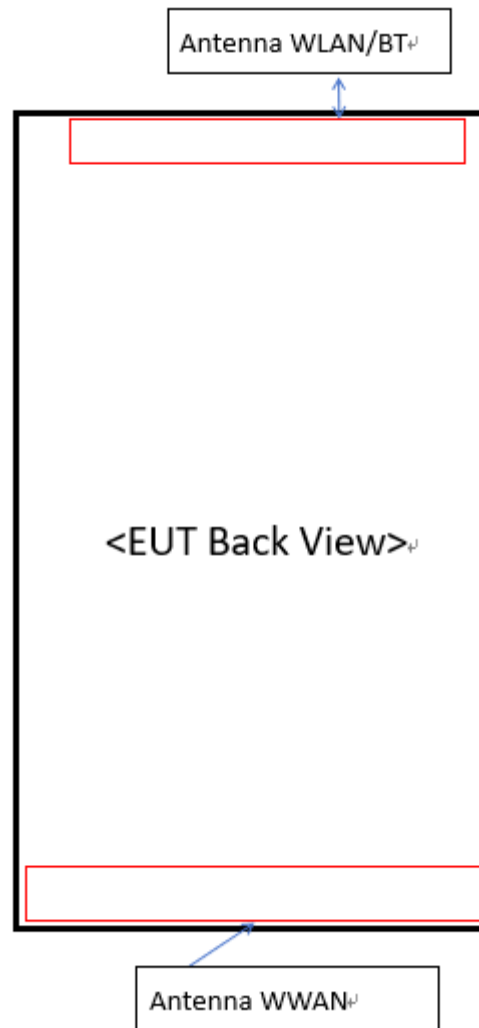
The Bluetooth duty cycle GFSK is 76.68 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle

GFSK



9 TEST EXCLUSION CONSIDERATION



Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
WWAN	<25	<25	<25	<25	>25	<25
WLAN/BT	<25	<25	<25	<25	<25	>25

10 TEST RESULT

10.1WCDMA Band 2

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot												
WWAN	RMC	Front Side	10	9262	1852.4	0.00	1.060	23.57	24.00	1.104	1.170	1#
		Back Side	10	9262	1852.4	-0.19	0.389	23.57	24.00	1.104	0.429	/
		Left Edge	10	9262	1852.4	-0.16	0.452	23.57	24.00	1.104	0.499	/
		Right Edge	10	9262	1852.4	-0.08	0.104	23.57	24.00	1.104	0.115	/
		Top Edge	10	9262	1852.4	0.19	0.048	23.57	24.00	1.104	0.053	/
		Bottom Edge	10	9262	1852.4	0.01	0.885	23.57	24.00	1.104	0.977	/
		Front Side	10	9400	1880	-0.09	1.010	23.50	24.00	1.122	1.133	/
		Front Side	10	9538	1907.6	-0.01	0.990	23.46	24.00	1.132	1.121	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity												
WWAN	RMC	Front Side	0	9262	1852.4	0.08	1.900	23.57	24.00	1.104	2.098	/
		Back Side	0	9262	1852.4	0.15	0.953	23.57	24.00	1.104	1.052	/
		Left Edge	0	9262	1852.4	-0.02	1.000	23.57	24.00	1.104	1.104	/
		Right Edge	0	9262	1852.4	-0.06	0.282	23.57	24.00	1.104	0.311	/
		Top Edge	0	9262	1852.4	-0.04	0.137	23.57	24.00	1.104	0.151	/
		Bottom Edge	0	9262	1852.4	-0.02	2.180	23.57	24.00	1.104	2.407	2#
		Front Side	0	9400	1880	-0.11	1.980	23.50	24.00	1.122	2.222	/
		Front Side	0	9538	1907.6	-0.13	2.000	23.46	24.00	1.132	2.264	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.2WCDMA Band 4

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot												
WWAN	RMC	Front Side	10	1412	1732.4	-0.15	0.586	22.65	23.00	1.084	0.635	/
		Back Side	10	1412	1732.4	0.07	0.189	22.65	23.00	1.084	0.205	/
		Left Edge	10	1412	1732.4	0.03	0.123	22.65	23.00	1.084	0.133	/
		Right Edge	10	1412	1732.4	-0.15	0.064	22.65	23.00	1.084	0.069	/
		Top Edge	10	1412	1732.4	0.05	0.026	22.65	23.00	1.084	0.028	/
		Bottom Edge	10	1412	1732.4	0.14	0.945	22.65	23.00	1.084	1.024	/
		Bottom Edge	10	1312	1712.4	0.02	1.060	22.52	23.00	1.117	1.184	3#
		Bottom Edge	10	1513	1752.6	0.18	0.976	22.62	23.00	1.091	1.065	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity												
WWAN	RMC	Front Side	0	1412	1732.4	0.15	1.630	22.65	23.00	1.084	1.767	/
		Back Side	0	1412	1732.4	-0.07	0.401	22.65	23.00	1.084	0.435	/
		Left Edge	0	1412	1732.4	0.06	0.325	22.65	23.00	1.084	0.352	/
		Right Edge	0	1412	1732.4	-0.13	0.194	22.65	23.00	1.084	0.210	/
		Top Edge	0	1412	1732.4	-0.17	0.055	22.65	23.00	1.084	0.060	/
		Bottom Edge	0	1412	1732.4	-0.07	2.100	22.65	23.00	1.084	2.276	/
		Bottom Edge	0	1312	1712.4	0.06	2.300	22.52	23.00	1.117	2.569	4#
		Bottom Edge	0	1513	1752.6	-0.02	2.190	22.62	23.00	1.091	2.389	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.3WCDMA Band 5

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot												
WWAN	RMC	Front Side	10	4233	846.6	-0.08	0.289	24.36	25.00	1.159	0.335	/
		Back Side	10	4233	846.6	-0.11	0.326	24.36	25.00	1.159	0.378	5#
		Left Edge	10	4233	846.6	0.12	0.305	24.36	25.00	1.159	0.353	/
		Right Edge	10	4233	846.6	-0.13	0.286	24.36	25.00	1.159	0.331	/
		Top Edge	10	4233	846.6	0.05	0.089	24.36	25.00	1.159	0.103	/
		Bottom Edge	10	4233	846.6	-0.19	0.272	24.36	25.00	1.159	0.315	/
		Back Side	10	4132	826.4	-0.04	0.306	24.33	25.00	1.167	0.357	/
		Back Side	10	4182	836.4	0.18	0.320	24.33	25.00	1.167	0.373	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity												
WWAN	RMC	Front Side	0	4233	846.6	-0.05	0.501	24.36	25.00	1.159	0.581	/
		Back Side	0	4233	846.6	-0.15	0.413	24.36	25.00	1.159	0.479	/
		Left Edge	0	4233	846.6	-0.05	0.273	24.36	25.00	1.159	0.316	/
		Right Edge	0	4233	846.6	0.14	0.363	24.36	25.00	1.159	0.421	/
		Top Edge	0	4233	846.6	0.12	0.125	24.36	25.00	1.159	0.145	/
		Bottom Edge	0	4233	846.6	-0.18	0.283	24.36	25.00	1.159	0.328	/
		Front Side	0	4132	826.4	0.07	0.529	24.33	25.00	1.167	0.617	6#
		Front Side	0	4182	836.4	-0.06	0.492	24.33	25.00	1.167	0.574	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.4LTE Band 2 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot														
WWAN	QPSK	Front Side	10	18900	1880	1	Mid	-0.01	1.040	24.05	24.50	1.109	1.153	7#
		Back Side	10	18900	1880	1	Mid	-0.17	0.259	24.05	24.50	1.109	0.287	/
		Left Edge	10	18900	1880	1	Mid	0.06	0.374	24.05	24.50	1.109	0.415	/
		Right Edge	10	18900	1880	1	Mid	-0.10	0.082	24.05	24.50	1.109	0.091	/
		Top Edge	10	18900	1880	1	Mid	0.06	0.038	24.05	24.50	1.109	0.042	/
		Bottom Edge	10	18900	1880	1	Mid	-0.01	0.753	24.05	24.50	1.109	0.835	/
		Front Side	10	18700	1860	1	Mid	0.18	1.010	23.94	24.50	1.138	1.149	/
		Front Side	10	19100	1900	1	Mid	-0.05	0.985	24.09	24.50	1.099	1.083	/
		Bottom Edge	10	18700	1860	1	Mid	-0.04	0.740	23.94	24.50	1.138	0.842	/
		Bottom Edge	10	19100	1900	1	Mid	-0.08	0.726	24.09	24.50	1.099	0.798	/
		Front Side	10	18900	1880	50	Mid	-0.01	0.896	23.42	24.50	1.282	1.149	/
		Back Side	10	18900	1880	50	Mid	0.15	0.238	23.42	24.50	1.282	0.305	/
		Left Edge	10	18900	1880	50	Mid	0.08	0.330	23.42	24.50	1.282	0.423	/
		Right Edge	10	18900	1880	50	Mid	0.07	0.076	23.42	24.50	1.282	0.097	/
		Top Edge	10	18900	1880	50	Mid	-0.06	0.035	23.42	24.50	1.282	0.045	/
		Bottom Edge	10	18900	1880	50	Mid	0.05	0.622	23.42	24.50	1.282	0.797	/
		Front Side	10	18700	1860	50	Low	-0.02	0.880	23.40	24.50	1.288	1.133	/
		Front Side	10	19100	1900	50	Mid	0.11	0.835	23.37	24.50	1.297	1.083	/
		Front Side	10	19100	1900	100	Low	-0.05	0.856	23.36	24.50	1.300	1.113	/
		Bottom Edge	10	19100	1900	100	Low	-0.14	0.649	23.36	24.50	1.300	0.844	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity														
WWAN	QPSK	Front Side	0	18900	1880	1	Mid	-0.09	2.270	24.05	24.50	1.109	2.517	8#
		Back Side	0	18900	1880	1	Mid	0.06	1.010	24.05	24.50	1.109	1.120	/
		Left Edge	0	18900	1880	1	Mid	-0.12	1.140	24.05	24.50	1.109	1.264	/
		Right Edge	0	18900	1880	1	Mid	-0.04	0.293	24.05	24.50	1.109	0.325	/
		Top Edge	0	18900	1880	1	Mid	0.02	0.155	24.05	24.50	1.109	0.172	/
		Bottom Edge	0	18900	1880	1	Mid	0.02	1.850	24.05	24.50	1.109	2.052	/
		Front Side	0	18700	1860	1	Mid	0.15	2.200	23.94	24.50	1.138	2.504	/
		Front Side	0	19100	1900	1	Mid	0.03	2.110	24.09	24.50	1.099	2.319	/
		Bottom Edge	0	18700	1860	1	Mid	-0.10	1.760	23.94	24.50	1.138	2.003	/
		Bottom Edge	0	19100	1900	1	Mid	0.15	1.780	24.09	24.50	1.099	1.956	/
		Front Side	0	18900	1880	50	Mid	-0.10	1.960	23.42	24.50	1.282	2.513	/
		Back Side	0	18900	1880	50	Mid	0.15	0.892	23.42	24.50	1.282	1.144	/
		Left Edge	0	18900	1880	50	Mid	0.180	1.000	23.42	24.50	1.282	1.282	/
		Right Edge	0	18900	1880	50	Mid	0.05	0.253	23.42	24.50	1.282	0.324	/
		Top Edge	0	18900	1880	50	Mid	0.15	0.135	23.42	24.50	1.282	0.173	/
		Bottom Edge	0	18900	1880	50	Mid	0.09	1.590	23.42	24.50	1.282	2.038	/
		Front Side	0	18700	1860	50	Low	0.08	1.910	23.40	24.50	1.288	2.460	/
		Front Side	0	19100	1900	50	Mid	0.18	1.820	23.37	24.50	1.297	2.361	/
		Bottom Edge	0	18700	1860	50	Low	0.08	1.550	23.40	24.50	1.288	1.996	/
		Bottom Edge	0	19100	1900	50	Mid	0.18	1.500	23.37	24.50	1.297	1.946	/
		Front Side	0	19100	1900	100	Low	0.18	1.860	23.36	24.50	1.300	2.418	/
		Bottom Edge	0	19100	1900	100	Low	0.18	1.520	23.36	24.50	1.300	1.976	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.5LTE Band 4 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot														
WWAN	QPSK	Front Side	10	20175	1732.5	1	Mid	-0.07	0.578	22.24	22.50	1.062	0.614	/
		Back Side	10	20175	1732.5	1	Mid	-0.19	0.156	22.24	22.50	1.062	0.166	/
		Left Edge	10	20175	1732.5	1	Mid	0.07	0.091	22.24	22.50	1.062	0.097	/
		Right Edge	10	20175	1732.5	1	Mid	-0.18	0.053	22.24	22.50	1.062	0.056	/
		Top Edge	10	20175	1732.5	1	Mid	0.19	0.016	22.24	22.50	1.062	0.017	/
		Bottom Edge	10	20175	1732.5	1	Mid	0.12	1.040	22.24	22.50	1.062	1.104	9#
		Bottom Edge	10	20050	1720	1	Mid	-0.02	0.976	22.24	22.50	1.062	1.037	/
		Bottom Edge	10	20300	1745	1	Mid	0.14	0.989	22.21	22.50	1.069	1.057	/
		Front Side	10	20175	1732.5	50	Low	-0.18	0.511	21.68	22.50	1.208	0.617	/
		Back Side	10	20175	1732.5	50	Low	-0.11	0.135	21.68	22.50	1.208	0.163	/
		Left Edge	10	20175	1732.5	50	Low	0.09	0.076	21.68	22.50	1.208	0.092	/
		Right Edge	10	20175	1732.5	50	Low	-0.18	0.046	21.68	22.50	1.208	0.056	/
		Top Edge	10	20175	1732.5	50	Low	-0.13	0.014	21.68	22.50	1.208	0.017	/
		Bottom Edge	10	20175	1732.5	50	Low	0.06	0.912	21.68	22.50	1.208	1.102	/
		Bottom Edge	10	20050	1720	50	Low	-0.13	0.870	21.67	22.50	1.211	1.054	/
		Bottom Edge	10	20300	1745	50	Mid	0.11	0.856	21.56	22.50	1.242	1.063	/
		Bottom Edge	10	20050	1720	100	Low	-0.06	0.863	21.71	22.50	1.199	1.035	/
		Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity														
WWAN	QPSK	Front Side	0	20175	1732.5	1	Mid	-0.17	1.410	22.24	22.50	1.062	1.497	/
		Back Side	0	20175	1732.5	1	Mid	-0.03	0.313	22.24	22.50	1.062	0.332	/
		Left Edge	0	20175	1732.5	1	Mid	0.03	0.245	22.24	22.50	1.062	0.260	/
		Right Edge	0	20175	1732.5	1	Mid	0.02	0.165	22.24	22.50	1.062	0.175	/
		Top Edge	0	20175	1732.5	1	Mid	-0.07	0.042	22.24	22.50	1.062	0.045	/
		Bottom Edge	0	20175	1732.5	1	Mid	0.10	1.910	22.24	22.50	1.062	2.028	/
		Bottom Edge	0	20050	1720	1	Mid	-0.01	2.050	22.24	22.50	1.062	2.177	10#
		Bottom Edge	0	20300	1745	1	Mid	0.12	1.940	22.21	22.50	1.069	2.074	/
		Front Side	0	20175	1732.5	50	Low	0.10	1.200	21.68	22.50	1.208	1.450	/
		Back Side	0	20175	1732.5	50	Low	-0.12	0.256	21.68	22.50	1.208	0.309	/
		Left Edge	0	20175	1732.5	50	Low	-0.03	0.214	21.68	22.50	1.208	0.259	/
		Right Edge	0	20175	1732.5	50	Low	0.13	0.145	21.68	22.50	1.208	0.175	/
		Top Edge	0	20175	1732.5	50	Low	0.03	0.038	21.68	22.50	1.208	0.046	/
		Bottom Edge	0	20175	1732.5	50	Low	-0.12	1.620	21.68	22.50	1.208	1.957	/
		Bottom Edge	0	20050	1720	50	Low	-0.07	1.780	21.67	22.50	1.211	2.156	/
		Bottom Edge	0	20300	1745	50	Mid	-0.01	1.710	21.56	22.50	1.242	2.124	/
		Bottom Edge	0	20050	1720	100	Low	-0.16	1.710	21.71	22.50	1.199	2.050	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.6LTE Band 5 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot														
WWAN	QPSK	Front Side	10	20525	836.5	1	Mid	0.17	0.299	23.79	25.50	1.483	0.443	/
		Back Side	10	20525	836.5	1	Mid	0.12	0.342	23.79	25.50	1.483	0.507	11#
		Left Edge	10	20525	836.5	1	Mid	0.12	0.302	23.79	25.50	1.483	0.448	/
		Right Edge	10	20525	836.5	1	Mid	0.02	0.297	23.79	25.50	1.483	0.440	/
		Top Edge	10	20525	836.5	1	Mid	-0.05	0.094	23.79	25.50	1.483	0.139	/
		Bottom Edge	10	20525	836.5	1	Mid	-0.12	0.250	23.79	25.50	1.483	0.371	/
		Front Side	10	20525	836.5	25	High	-0.08	0.235	22.70	24.50	1.514	0.356	/
		Back Side	10	20525	836.5	25	High	-0.12	0.270	22.70	24.50	1.514	0.409	/
		Left Edge	10	20525	836.5	25	High	0.14	0.243	22.70	24.50	1.514	0.368	/
		Right Edge	10	20525	836.5	25	High	-0.06	0.243	22.70	24.50	1.514	0.368	/
		Top Edge	10	20525	836.5	25	High	0.11	0.076	22.70	24.50	1.514	0.115	/
		Bottom Edge	10	20525	836.5	25	High	-0.12	0.196	22.70	24.50	1.514	0.297	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity														
WWAN	QPSK	Front Side	0	20525	836.5	1	Mid	-0.16	0.558	23.79	25.50	1.483	0.828	12#
		Back Side	0	20525	836.5	1	Mid	0.06	0.481	23.79	25.50	1.483	0.713	/
		Left Edge	0	20525	836.5	1	Mid	0.07	0.340	23.79	25.50	1.483	0.504	/
		Right Edge	0	20525	836.5	1	Mid	-0.11	0.395	23.79	25.50	1.483	0.586	/
		Top Edge	0	20525	836.5	1	Mid	-0.10	0.138	23.79	25.50	1.483	0.205	/
		Bottom Edge	0	20525	836.5	1	Mid	-0.16	0.271	23.79	25.50	1.483	0.402	/
		Front Side	0	20525	836.5	25	High	0.19	0.440	22.70	24.50	1.514	0.666	/
		Back Side	0	20525	836.5	25	High	0.13	0.385	22.70	24.50	1.514	0.583	/
		Left Edge	0	20525	836.5	25	High	-0.15	0.274	22.70	24.50	1.514	0.415	/
		Right Edge	0	20525	836.5	25	High	0.04	0.316	22.70	24.50	1.514	0.478	/
		Top Edge	0	20525	836.5	25	High	0.18	0.106	22.70	24.50	1.514	0.160	/
		Bottom Edge	0	20525	836.5	25	High	-0.07	0.211	22.70	24.50	1.514	0.319	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.7LTE Band 12 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot														
WWAN	QPSK	Front Side	10	23095	707.5	1	Mid	0.07	0.386	23.77	25.50	1.489	0.575	/
		Back Side	10	23095	707.5	1	Mid	-0.03	0.475	23.77	25.50	1.489	0.707	13#
		Left Edge	10	23095	707.5	1	Mid	0.11	0.332	23.77	25.50	1.489	0.494	/
		Right Edge	10	23095	707.5	1	Mid	-0.19	0.298	23.77	25.50	1.489	0.444	/
		Top Edge	10	23095	707.5	1	Mid	0.19	0.027	23.77	25.50	1.489	0.040	/
		Bottom Edge	10	23095	707.5	1	Mid	-0.17	0.056	23.77	25.50	1.489	0.083	/
		Front Side	10	23095	707.5	25	Mid	0.09	0.302	22.66	24.50	1.528	0.461	/
		Back Side	10	23095	707.5	25	Mid	0.12	0.370	22.66	24.50	1.528	0.565	/
		Left Edge	10	23095	707.5	25	Mid	-0.17	0.271	22.66	24.50	1.528	0.414	/
		Right Edge	10	23095	707.5	25	Mid	0.16	0.240	22.66	24.50	1.528	0.367	/
		Top Edge	10	23095	707.5	25	Mid	0.14	0.022	22.66	24.50	1.528	0.034	/
		Bottom Edge	10	23095	707.5	25	Mid	0.05	0.045	22.66	24.50	1.528	0.069	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity														
WWAN	QPSK	Front Side	0	23095	707.5	1	Mid	-0.05	0.496	23.77	25.50	1.489	0.739	/
		Back Side	0	23095	707.5	1	Mid	0.06	0.632	23.77	25.50	1.489	0.941	14#
		Left Edge	0	23095	707.5	1	Mid	0.01	0.504	23.77	25.50	1.489	0.750	/
		Right Edge	0	23095	707.5	1	Mid	-0.12	0.502	23.77	25.50	1.489	0.747	/
		Top Edge	0	23095	707.5	1	Mid	0.00	0.057	23.77	25.50	1.489	0.085	/
		Bottom Edge	0	23095	707.5	1	Mid	-0.14	0.112	23.77	25.50	1.489	0.167	/
		Front Side	0	23095	707.5	25	Mid	0.04	0.391	22.66	24.50	1.528	0.597	/
		Back Side	0	23095	707.5	25	Mid	0.13	0.489	22.66	24.50	1.528	0.747	/
		Left Edge	0	23095	707.5	25	Mid	0.16	0.400	22.66	24.50	1.528	0.611	/
		Right Edge	0	23095	707.5	25	Mid	-0.02	0.396	22.66	24.50	1.528	0.605	/
		Top Edge	0	23095	707.5	25	Mid	-0.09	0.045	22.66	24.50	1.528	0.069	/
		Bottom Edge	0	23095	707.5	25	Mid	0.07	0.085	22.66	24.50	1.528	0.130	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.8LTE Band 13 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot														
WWAN	QPSK	Front Side	10	23230	782	1	Mid	-0.11	0.275	23.77	25.50	1.489	0.409	/
		Back Side	10	23230	782	1	Mid	-0.12	0.343	23.77	25.50	1.489	0.511	15#
		Left Edge	10	23230	782	1	Mid	-0.02	0.235	23.77	25.50	1.489	0.350	/
		Right Edge	10	23230	782	1	Mid	0.11	0.223	23.77	25.50	1.489	0.332	/
		Top Edge	10	23230	782	1	Mid	0.14	0.022	23.77	25.50	1.489	0.033	/
		Bottom Edge	10	23230	782	1	Mid	-0.11	0.055	23.77	25.50	1.489	0.082	/
		Front Side	10	23230	782	25	Low	-0.07	0.223	22.73	24.50	1.503	0.335	/
		Back Side	10	23230	782	25	Low	-0.14	0.275	22.73	24.50	1.503	0.413	/
		Left Edge	10	23230	782	25	Low	0.09	0.184	22.73	24.50	1.503	0.277	/
		Right Edge	10	23230	782	25	Low	0.18	0.179	22.73	24.50	1.503	0.269	/
		Top Edge	10	23230	782	25	Low	0.11	0.016	22.73	24.50	1.503	0.024	/
		Bottom Edge	10	23230	782	25	Low	0.16	0.042	22.73	24.50	1.503	0.063	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity														
WWAN	QPSK	Front Side	0	23230	782	1	Mid	-0.08	0.282	23.77	25.50	1.489	0.420	/
		Back Side	0	23230	782	1	Mid	0.03	0.380	23.77	25.50	1.489	0.566	16#
		Left Edge	0	23230	782	1	Mid	-0.16	0.275	23.77	25.50	1.489	0.409	/
		Right Edge	0	23230	782	1	Mid	-0.16	0.312	23.77	25.50	1.489	0.465	/
		Top Edge	0	23230	782	1	Mid	0.13	0.039	23.77	25.50	1.489	0.058	/
		Bottom Edge	0	23230	782	1	Mid	-0.14	0.282	23.77	25.50	1.489	0.420	/
		Front Side	0	23230	782	25	Low	0.02	0.229	22.73	24.50	1.503	0.344	/
		Back Side	0	23230	782	25	Low	0.10	0.312	22.73	24.50	1.503	0.469	/
		Left Edge	0	23230	782	25	Low	-0.16	0.234	22.73	24.50	1.503	0.352	/
		Right Edge	0	23230	782	25	Low	0.11	0.251	22.73	24.50	1.503	0.377	/
		Top Edge	0	23230	782	25	Low	-0.11	0.033	22.73	24.50	1.503	0.050	/
		Bottom Edge	0	23230	782	25	Low	-0.19	0.228	22.73	24.50	1.503	0.343	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.9LTE Band 66 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot														
WWAN	QPSK	Front Side	10	132322	1745	1	Mid	-0.04	0.554	22.38	22.50	1.028	0.570	/
		Back Side	10	132322	1745	1	Mid	0.16	0.160	22.38	22.50	1.028	0.164	/
		Left Edge	10	132322	1745	1	Mid	-0.08	0.095	22.38	22.50	1.028	0.098	/
		Right Edge	10	132322	1745	1	Mid	-0.05	0.051	22.38	22.50	1.028	0.052	/
		Top Edge	10	132322	1745	1	Mid	-0.14	0.015	22.38	22.50	1.028	0.015	/
		Bottom Edge	10	132322	1745	1	Mid	-0.08	1.050	22.38	22.50	1.028	1.079	17#
		Bottom Edge	10	132072	1720	1	Mid	0.11	1.020	22.34	22.50	1.038	1.059	/
		Bottom Edge	10	132572	1770	1	Mid	0.02	0.980	22.34	22.50	1.038	1.017	/
		Front Side	10	132572	1770	50	Mid	-0.14	0.479	21.70	22.50	1.202	0.576	/
		Back Side	10	132572	1770	50	Mid	0.13	0.136	21.70	22.50	1.202	0.163	/
		Left Edge	10	132572	1770	50	Mid	-0.08	0.082	21.70	22.50	1.202	0.099	/
		Right Edge	10	132572	1770	50	Mid	-0.13	0.045	21.70	22.50	1.202	0.054	/
		Top Edge	10	132572	1770	50	Mid	0.00	0.014	21.70	22.50	1.202	0.017	/
		Bottom Edge	10	132572	1770	50	Mid	-0.02	0.893	21.70	22.50	1.202	1.073	/
		Bottom Edge	10	132072	1720	50	Mid	-0.01	0.859	21.58	22.50	1.236	1.062	/
		Bottom Edge	10	132322	1745	50	Mid	0.01	0.874	21.69	22.50	1.205	1.053	/
		Bottom Edge	10	132572	1770	100	Low	0.01	0.867	21.74	22.50	1.191	1.033	/
		Note: Refer to ANNEX C for the detailed test data for each test configuration.												

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity														
WWAN	QPSK	Front Side	0	132322	1745	1	Mid	-0.04	1.480	22.38	22.50	1.028	1.521	/
		Back Side	0	132322	1745	1	Mid	0.02	0.351	22.38	22.50	1.028	0.361	/
		Left Edge	0	132322	1745	1	Mid	0.02	0.359	22.38	22.50	1.028	0.369	/
		Right Edge	0	132322	1745	1	Mid	-0.05	0.174	22.38	22.50	1.028	0.179	/
		Top Edge	0	132322	1745	1	Mid	0.17	0.045	22.38	22.50	1.028	0.046	/
		Bottom Edge	0	132322	1745	1	Mid	0.06	2.020	22.38	22.50	1.028	2.077	/
		Bottom Edge	0	132072	1720	1	Mid	-0.03	2.170	22.34	22.50	1.038	2.252	18#
		Bottom Edge	0	132572	1770	1	Mid	-0.11	2.020	22.34	22.50	1.038	2.097	/
		Front Side	0	132572	1770	50	Mid	-0.15	1.300	21.70	22.50	1.202	1.563	/
		Back Side	0	132572	1770	50	Mid	0.10	0.301	21.70	22.50	1.202	0.362	/
		Left Edge	0	132572	1770	50	Mid	0.06	0.305	21.70	22.50	1.202	0.367	/
		Right Edge	0	132572	1770	50	Mid	0.00	0.145	21.70	22.50	1.202	0.174	/
		Top Edge	0	132572	1770	50	Mid	-0.02	0.036	21.70	22.50	1.202	0.043	/
		Bottom Edge	0	132572	1770	50	Mid	-0.18	1.710	21.70	22.50	1.202	2.055	/
		Bottom Edge	0	132072	1720	50	Mid	0.07	1.820	21.58	22.50	1.236	2.250	/
		Bottom Edge	0	132322	1745	50	Mid	-0.18	1.780	21.69	22.50	1.205	2.145	/
		Bottom Edge	0	132572	1770	100	Low	0.04	1.750	21.74	22.50	1.191	2.084	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.10 LTE Band 71 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-Worn&Hotspot														
WWAN	QPSK	Front Side	10	133297	680.5	1	Mid	0.19	0.268	24.48	25.50	1.265	0.339	/
		Back Side	10	133297	680.5	1	Mid	0.02	0.344	24.48	25.50	1.265	0.435	19#
		Left Edge	10	133297	680.5	1	Mid	0.01	0.241	24.48	25.50	1.265	0.305	/
		Right Edge	10	133297	680.5	1	Mid	-0.08	0.256	24.48	25.50	1.265	0.324	/
		Top Edge	10	133297	680.5	1	Mid	-0.15	0.024	24.48	25.50	1.265	0.030	/
		Bottom Edge	10	133297	680.5	1	Mid	0.03	0.055	24.48	25.50	1.265	0.070	/
		Front Side	10	133372	688	50	Mid	-0.16	0.211	23.40	24.50	1.288	0.272	/
		Back Side	10	133372	688	50	Mid	-0.07	0.270	23.40	24.50	1.288	0.348	/
		Left Edge	10	133372	688	50	Mid	-0.12	0.189	23.40	24.50	1.288	0.243	/
		Right Edge	10	133372	688	50	Mid	-0.05	0.201	23.40	24.50	1.288	0.259	/
		Top Edge	10	133372	688	50	Mid	-0.02	0.018	23.40	24.50	1.288	0.023	/
		Bottom Edge	10	133372	688	50	Mid	-0.08	0.042	23.40	24.50	1.288	0.054	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity														
WWAN	QPSK	Front Side	0	133297	680.5	1	Mid	0.00	0.294	24.48	25.50	1.265	0.372	/
		Back Side	0	133297	680.5	1	Mid	-0.12	0.382	24.48	25.50	1.265	0.483	20#
		Left Edge	0	133297	680.5	1	Mid	0.09	0.280	24.48	25.50	1.265	0.354	/
		Right Edge	0	133297	680.5	1	Mid	-0.09	0.306	24.48	25.50	1.265	0.387	/
		Top Edge	0	133297	680.5	1	Mid	-0.14	0.038	24.48	25.50	1.265	0.048	/
		Bottom Edge	0	133297	680.5	1	Mid	0.01	0.318	24.48	25.50	1.265	0.402	/
		Front Side	0	133372	688	50	Mid	0.10	0.237	23.40	24.50	1.288	0.305	/
		Back Side	0	133372	688	50	Mid	-0.08	0.310	23.40	24.50	1.288	0.399	/
		Left Edge	0	133372	688	50	Mid	-0.07	0.225	23.40	24.50	1.288	0.290	/
		Right Edge	0	133372	688	50	Mid	0.08	0.246	23.40	24.50	1.288	0.317	/
		Top Edge	0	133372	688	50	Mid	-0.04	0.031	23.40	24.50	1.288	0.040	/
		Bottom Edge	0	133372	688	50	Mid	0.15	0.258	23.40	24.50	1.288	0.332	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.11 WIFI 2.4GHZ

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-worn&Hotspot														
WLAN	802.11 b	Front Side	10	11	2462	0.05	0.130	18.67	20.00	1.358	99.46	1.005	0.177	21#
		Back Side	10	11	2462	0.12	0.129	18.67	20.00	1.358	99.46	1.005	0.176	/
		Left Edge	10	11	2462	-0.10	0.065	18.67	20.00	1.358	99.46	1.005	0.089	/
		Right Edge	10	11	2462	-0.12	0.013	18.67	20.00	1.358	99.46	1.005	0.018	/
		Top Edge	10	11	2462	0.12	0.026	18.67	20.00	1.358	99.46	1.005	0.035	/
		Bottom Edge	10	11	2462	0.02	0.006	18.67	20.00	1.358	99.46	1.005	0.008	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Extremity														
WLAN	802.11 b	Front Side	0	11	2462	0.15	0.387	18.67	20.00	1.358	99.46	1.005	0.528	22#
		Back Side	0	11	2462	-0.02	0.173	18.67	20.00	1.358	99.46	1.005	0.236	/
		Left Edge	0	11	2462	0.11	0.129	18.67	20.00	1.358	99.46	1.005	0.176	/
		Right Edge	0	11	2462	-0.19	0.038	18.67	20.00	1.358	99.46	1.005	0.052	/
		Top Edge	0	11	2462	0.16	0.296	18.67	20.00	1.358	99.46	1.005	0.404	/
		Bottom Edge	0	11	2462	0.15	0.038	18.67	20.00	1.358	99.46	1.005	0.052	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.12 Bluetooth

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Body-worn&Hotspot														
BT	DH5	Front Side	10	39	2441	0.16	0.011	6.59	7.50	1.233	76.68	1.304	0.014	/
		Back Side	10	39	2441	-0.19	0.012	6.59	7.50	1.233	76.68	1.304	0.015	23#
		Left Edge	10	39	2441	0.10	0.000	6.59	7.50	1.233	76.68	1.304	0.000	/
		Right Edge	10	39	2441	-0.02	0.000	6.59	7.50	1.233	76.68	1.304	0.000	/
		Top Edge	10	39	2441	0.07	0.005	6.59	7.50	1.233	76.68	1.304	0.006	/
		Bottom Edge	10	39	2441	0.16	0.000	6.59	7.50	1.233	76.68	1.304	0.000	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Extremity														
BT	DH5	Front Side	0	39	2441	-0.08	0.030	6.59	7.50	1.233	76.68	1.304	0.037	24#
		Back Side	0	39	2441	-0.19	0.012	6.59	7.50	1.233	76.68	1.304	0.015	/
		Left Edge	0	39	2441	-0.16	0.000	6.59	7.50	1.233	76.68	1.304	0.000	/
		Right Edge	0	39	2441	0.19	0.000	6.59	7.50	1.233	76.68	1.304	0.000	/
		Top Edge	0	39	2441	0.02	0.020	6.59	7.50	1.233	76.68	1.304	0.025	/
		Bottom Edge	0	39	2441	0.03	0.000	6.59	7.50	1.233	76.68	1.304	0.000	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated ^{1st} Measured SAR (W/kg)	Largest to Smallest SAR Radio
1852.4	WCDMA Band2	Body-Worn&Hotspot	Front Side	1.060	Yes	1.05	1.01
1852.4	WCDMA Band2	Extremity	Bottom Edge	2.180	Yes	2.1	1.04
1712.4	WCDMA Band4	Hotspot	Bottom Edge	1.060	Yes	1.02	1.04
1712.4	WCDMA Band4	Extremity	Bottom Edge	2.300	Yes	2.24	1.03
1880	LTE Band2	Body-Worn&Hotspot	Front Side	1.040	Yes	1.01	1.03
1880	LTE Band2	Extremity	Front Side	2.270	Yes	2.19	1.04
1732.5	LTE Band4	Hotspot	Bottom Edge	1.040	Yes	1.04	1.00
1720	LTE Band4	Extremity	Bottom Edge	2.050	Yes	1.98	1.04
1745	LTE Band66	Hotspot	Bottom Edge	1.050	Yes	1.03	1.02
1720	LTE Band66	Extremity	Bottom Edge	2.170	Yes	2.13	1.02

Note: The ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20, the second repeated measurement. is not required.

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	Body-worn&Hotspot	Extremity
1	WWAN + BT	Yes	Yes
2	WWAN + WLAN 2.4GHz	Yes	Yes

Note:

1. WWAN antennas can switch automatically, the standards supported by WWAN are (WCDMA/LTE).
2. The maximum SAR summation is calculated based on the same configuration and test position.
3. The simultaneous transmission combinations of multiple antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations is shown in this report.

12.2 Sum SAR of Simultaneous Transmission

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

Band	Position	Stand alone SAR			SUM SAR	
		1	2	3	1+2	1+3
		WWAN	2.4GWIFI	Bluetooth		
WCDMA B2	Front Side 10mm	1.170	0.177	0.014	1.347	1.184
	Back Side 10mm	0.429	0.176	0.015	0.605	0.444
WCDMA B4	Front Side 10mm	0.635	0.177	0.014	0.812	0.649
	Back Side 10mm	0.205	0.176	0.015	0.381	0.220
WCDMA B5	Front Side 10mm	0.335	0.177	0.014	0.512	0.349
	Back Side 10mm	0.378	0.176	0.015	0.554	0.393
LTE B2	Front Side 10mm	1.153	0.177	0.014	1.330	1.167
	Back Side 10mm	0.305	0.176	0.015	0.481	0.320
LTE B4	Front Side 10mm	0.617	0.177	0.014	0.794	0.631
	Back Side 10mm	0.166	0.176	0.015	0.342	0.181
LTE B5	Front Side 10mm	0.443	0.177	0.014	0.620	0.457
	Back Side 10mm	0.507	0.176	0.015	0.683	0.522
LTE B12	Front Side 10mm	0.575	0.177	0.014	0.752	0.589
	Back Side 10mm	0.707	0.176	0.015	0.883	0.722
LTE B13	Front Side 10mm	0.409	0.177	0.014	0.586	0.423
	Back Side 10mm	0.511	0.176	0.015	0.687	0.526
LTE B66	Front Side 10mm	0.576	0.177	0.014	0.753	0.590
	Back Side 10mm	0.164	0.176	0.015	0.340	0.179
LTE B71	Front Side 10mm	0.339	0.177	0.014	0.516	0.353
	Back Side 10mm	0.435	0.176	0.015	0.611	0.450

Note:

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

2: The highest Summed 1g SAR is 1.347 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

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

Band	Position	Stand alone SAR			SUM SAR	
		1	2	3	1+2	1+3
		WWAN	2.4GWIFI	Bluetooth		
WCDMA B2	Front Side 10mm	1.170	0.177	0.014	1.347	1.184
	Back Side 10mm	0.429	0.176	0.015	0.605	0.444
	Left Edge10mm	0.499	0.089	0.000	0.588	0.499
	Right Edge 10mm	0.115	0.018	0.000	0.133	0.115
	Top Edge 10mm	0.053	0.035	0.006	0.088	0.059
	Bottom Edge 10mm	0.977	0.008	0.000	0.985	0.977
WCDMA B4	Front Side 10mm	0.635	0.177	0.014	0.812	0.649
	Back Side 10mm	0.205	0.176	0.015	0.381	0.220
	Left Edge10mm	0.133	0.089	0.000	0.222	0.133
	Right Edge 10mm	0.069	0.018	0.000	0.087	0.069
	Top Edge 10mm	0.028	0.035	0.006	0.063	0.034
	Bottom Edge 10mm	1.184	0.008	0.000	1.192	1.184
WCDMA B5	Front Side 10mm	0.335	0.177	0.014	0.512	0.349
	Back Side 10mm	0.378	0.176	0.015	0.554	0.393
	Left Edge10mm	0.353	0.089	0.000	0.442	0.353
	Right Edge 10mm	0.331	0.018	0.000	0.349	0.331
	Top Edge 10mm	0.103	0.035	0.006	0.138	0.109
	Bottom Edge 10mm	0.315	0.008	0.000	0.323	0.315
LTE B2	Front Side 10mm	1.153	0.177	0.014	1.330	1.167
	Back Side 10mm	0.305	0.176	0.015	0.481	0.320
	Left Edge10mm	0.423	0.089	0.000	0.512	0.423
	Right Edge 10mm	0.097	0.018	0.000	0.115	0.097
	Top Edge 10mm	0.045	0.035	0.006	0.080	0.051
	Bottom Edge 10mm	0.844	0.008	0.000	0.852	0.844
LTE B4	Front Side 10mm	0.617	0.177	0.014	0.794	0.631
	Back Side 10mm	0.166	0.176	0.015	0.342	0.181
	Left Edge10mm	0.097	0.089	0.000	0.186	0.097
	Right Edge 10mm	0.056	0.018	0.000	0.074	0.056
	Top Edge 10mm	0.017	0.035	0.006	0.052	0.023
	Bottom Edge 10mm	1.104	0.008	0.000	1.112	1.104
LTE B5	Front Side 10mm	0.443	0.177	0.014	0.620	0.457
	Back Side 10mm	0.507	0.176	0.015	0.683	0.522
	Left Edge10mm	0.448	0.089	0.000	0.537	0.448
	Right Edge 10mm	0.440	0.018	0.000	0.458	0.440
	Top Edge 10mm	0.139	0.035	0.006	0.174	0.145

	Bottom Edge 10mm	0.371	0.008	0.000	0.379	0.371
LTE B12	Front Side 10mm	0.575	0.177	0.014	0.752	0.589
	Back Side 10mm	0.707	0.176	0.015	0.883	0.722
	Left Edge10mm	0.494	0.089	0.000	0.583	0.494
	Right Edge 10mm	0.444	0.018	0.000	0.462	0.444
	Top Edge 10mm	0.040	0.035	0.006	0.075	0.046
	Bottom Edge 10mm	0.083	0.008	0.000	0.091	0.083
LTE B13	Front Side 10mm	0.409	0.177	0.014	0.586	0.423
	Back Side 10mm	0.511	0.176	0.015	0.687	0.526
	Left Edge10mm	0.350	0.089	0.000	0.439	0.350
	Right Edge 10mm	0.332	0.018	0.000	0.350	0.332
	Top Edge 10mm	0.033	0.035	0.006	0.068	0.039
	Bottom Edge 10mm	0.082	0.008	0.000	0.090	0.082
LTE B66	Front Side 10mm	0.576	0.177	0.014	0.753	0.590
	Back Side 10mm	0.164	0.176	0.015	0.340	0.179
	Left Edge10mm	0.099	0.089	0.000	0.188	0.099
	Right Edge 10mm	0.054	0.018	0.000	0.072	0.054
	Top Edge 10mm	0.017	0.035	0.006	0.052	0.023
	Bottom Edge 10mm	1.079	0.008	0.000	1.087	1.079
LTE B71	Front Side 10mm	0.339	0.177	0.014	0.516	0.353
	Back Side 10mm	0.435	0.176	0.015	0.611	0.450
	Left Edge10mm	0.305	0.089	0.000	0.394	0.305
	Right Edge 10mm	0.324	0.018	0.000	0.342	0.324
	Top Edge 10mm	0.030	0.035	0.006	0.065	0.036
	Bottom Edge 10mm	0.070	0.008	0.000	0.078	0.070

Note:

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

2: The highest Summed 1g SAR is 1.347 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

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

Band	Position	Stand alone SAR			SUM SAR	
		1	2	3	1+2	1+3
		WWAN	2.4GWIFI	Bluetooth		
WCDMA B2	Front Side 0mm	2.098	0.528	0.037	2.626	2.135
	Back Side 0mm	1.052	0.236	0.015	1.288	1.067
	Left Edge0mm	1.104	0.176	0.000	1.280	1.104
	Right Edge 0mm	0.311	0.052	0.000	0.363	0.311
	Top Edge 0mm	0.151	0.404	0.025	0.555	0.176
	Bottom Edge 0mm	2.407	0.052	0.000	2.459	2.407
WCDMA B4	Front Side 0mm	1.767	0.528	0.037	2.295	1.804
	Back Side 0mm	0.435	0.236	0.015	0.671	0.450
	Left Edge0mm	0.352	0.176	0.000	0.528	0.352
	Right Edge 0mm	0.210	0.052	0.000	0.262	0.210
	Top Edge 0mm	0.060	0.404	0.025	0.464	0.085
	Bottom Edge 0mm	2.569	0.052	0.000	2.621	2.569
WCDMA B5	Front Side 0mm	0.617	0.528	0.037	1.145	0.654
	Back Side 0mm	0.479	0.236	0.015	0.715	0.494
	Left Edge0mm	0.316	0.176	0.000	0.492	0.316
	Right Edge 0mm	0.421	0.052	0.000	0.473	0.421
	Top Edge 0mm	0.145	0.404	0.025	0.549	0.170
	Bottom Edge 0mm	0.328	0.052	0.000	0.380	0.328
LTE B2	Front Side 0mm	2.517	0.528	0.037	3.045	2.554
	Back Side 0mm	1.144	0.236	0.015	1.380	1.159
	Left Edge0mm	1.282	0.176	0.000	1.458	1.282
	Right Edge 0mm	0.325	0.052	0.000	0.377	0.325
	Top Edge 0mm	0.173	0.404	0.025	0.577	0.198
	Bottom Edge 0mm	2.052	0.052	0.000	2.104	2.052
LTE B4	Front Side 0mm	1.497	0.528	0.037	2.025	1.534
	Back Side 0mm	0.332	0.236	0.015	0.568	0.347
	Left Edge0mm	0.260	0.176	0.000	0.436	0.260
	Right Edge 0mm	0.175	0.052	0.000	0.227	0.175
	Top Edge 0mm	0.046	0.404	0.025	0.450	0.071
	Bottom Edge 0mm	2.177	0.052	0.000	2.229	2.177
LTE B5	Front Side 0mm	0.828	0.528	0.037	1.356	0.865
	Back Side 0mm	0.713	0.236	0.015	0.949	0.728
	Left Edge0mm	0.504	0.176	0.000	0.680	0.504
	Right Edge 0mm	0.586	0.052	0.000	0.638	0.586
	Top Edge 0mm	0.205	0.404	0.025	0.609	0.230

	Bottom Edge 0mm	0.402	0.052	0.000	0.454	0.402
LTE B12	Front Side 0mm	0.739	0.528	0.037	1.267	0.776
	Back Side 0mm	0.941	0.236	0.015	1.177	0.956
	Left Edge0mm	0.750	0.176	0.000	0.926	0.750
	Right Edge 0mm	0.747	0.052	0.000	0.799	0.747
	Top Edge 0mm	0.085	0.404	0.025	0.489	0.110
	Bottom Edge 0mm	0.167	0.052	0.000	0.219	0.167
LTE B13	Front Side 0mm	0.420	0.528	0.037	0.948	0.457
	Back Side 0mm	0.566	0.236	0.015	0.802	0.581
	Left Edge0mm	0.409	0.176	0.000	0.585	0.409
	Right Edge 0mm	0.465	0.052	0.000	0.517	0.465
	Top Edge 0mm	0.058	0.404	0.025	0.462	0.083
	Bottom Edge 0mm	0.420	0.052	0.000	0.472	0.420
LTE B66	Front Side 0mm	1.563	0.528	0.037	2.091	1.600
	Back Side 0mm	0.362	0.236	0.015	0.598	0.377
	Left Edge0mm	0.369	0.176	0.000	0.545	0.369
	Right Edge 0mm	0.179	0.052	0.000	0.231	0.179
	Top Edge 0mm	0.046	0.404	0.025	0.450	0.071
	Bottom Edge 0mm	2.252	0.052	0.000	2.304	2.252
LTE B71	Front Side 0mm	0.372	0.528	0.037	0.900	0.409
	Back Side 0mm	0.483	0.236	0.015	0.719	0.498
	Left Edge0mm	0.354	0.176	0.000	0.530	0.354
	Right Edge 0mm	0.387	0.052	0.000	0.439	0.387
	Top Edge 0mm	0.048	0.404	0.025	0.452	0.073
	Bottom Edge 0mm	0.402	0.052	0.000	0.454	0.402

Note:

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

2: The highest Summed 10g SAR is 3.045 W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test is not required.

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1201	2020/11/11	2023/11/10
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2021/05/17	2024/05/16
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2021/05/17	2024/05/16
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d193	2021/05/20	2024/05/19
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2021/05/19	2024/05/18
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2021/05/19	2024/05/18
E-Field Probe	Speag	EX3DV4	SN: 7510	2023/01/19	2024/01/18
Data Acquisition Electronicsr	Speag	DAE4	SN: 1454	2023/03/20	2024/03/19
Signal Generator	R&S	SMB100A	177746	2023/05/10	2024/05/09
Power Meter	R&S	NRVD-B2	7250BJ-0112/2011	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z4	100381	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z2	100211	2023/09/05	2024/09/04
Wireless Communication Test Set	Anritsu	MT8820C	6201502974	2022/12/28	2023/12/27
Network Analyzer	Agilent	E5071C	MY46103472	2022/12/06	2023/12/05
Thermometer	Elitech	RC-4HC	EF7225003029	2023/07/14	2024/07/13
Thermometer	Elitech	RC-4HC	EF720B004820	2022/11/25	2023/11/24
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1857	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using a DAK3.5 Dielectric Probe Kit.

Head liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2023.08.16	Head	750	21.7	0.92	40.86	0.89	41.94	3.37	-2.58
2023.08.22	Head	750	21.3	0.90	41.23	0.89	41.94	1.12	-1.69
2023.08.17	Head	835	21.3	0.88	41.55	0.90	41.50	-2.22	0.12
2023.08.23	Head	835	21.1	0.91	41.45	0.90	41.50	1.11	-0.12
2023.08.18	Head	1750	21.4	1.35	39.66	1.37	40.08	-1.46	-1.05
2023.08.19	Head	1750	21.4	1.35	40.41	1.37	40.08	-1.46	0.82
2023.09.01	Head	1750	21.2	1.36	39.58	1.37	40.08	-0.73	-1.25
2023.08.20	Head	1900	21.3	1.39	39.79	1.40	40.00	-0.71	-0.53
2023.09.04	Head	1900	21.9	1.37	39.84	1.40	40.00	-2.14	-0.40
2023.08.21	Head	2450	21.6	1.78	39.71	1.80	39.20	-1.11	1.30

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

ANNEX B SYSTEM CHECK RESULT

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

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2023.08.16	Head	750	100	0.807	8.07	8.29	-2.65
2023.08.22	Head	750	100	0.810	8.10	8.29	-2.29
2023.08.17	Head	835	100	0.978	9.78	9.76	0.20
2023.08.23	Head	835	100	0.987	9.87	9.76	1.13
2023.08.18	Head	1750	100	3.64	36.40	36.70	-0.82
2023.08.19	Head	1750	100	3.73	37.30	36.70	1.63
2023.09.01	Head	1750	100	3.68	36.80	36.70	0.27
2023.08.20	Head	1900	100	3.95	39.50	40.30	-1.99
2023.09.04	Head	1900	100	4.03	40.30	40.30	0.00
2023.08.21	Head	2450	100	5.12	51.20	53.00	-3.40

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

Head liquid 10g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2023.08.16	Head	750	100	0.530	5.30	5.38	-1.49
2023.08.22	Head	750	100	0.528	5.28	5.38	-1.86
2023.08.17	Head	835	100	0.650	6.50	6.34	2.52
2023.08.23	Head	835	100	0.651	6.51	6.34	2.68
2023.08.18	Head	1750	100	1.87	18.70	19.10	-2.09
2023.08.19	Head	1750	100	1.94	19.40	19.10	1.57
2023.09.01	Head	1750	100	1.85	18.50	19.10	-3.14
2023.08.20	Head	1900	100	2.01	20.10	20.30	-0.99
2023.09.04	Head	1900	100	2.07	20.70	20.30	1.97
2023.08.21	Head	2450	100	2.47	24.70	24.10	2.49

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

System Performance Check Data (750MHz)

Date: 2023.08.22

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

Medium parameters used (extrapolated): $f = 750$ MHz; $\sigma = 0.904$ S/m; $\epsilon_r = 41.23$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

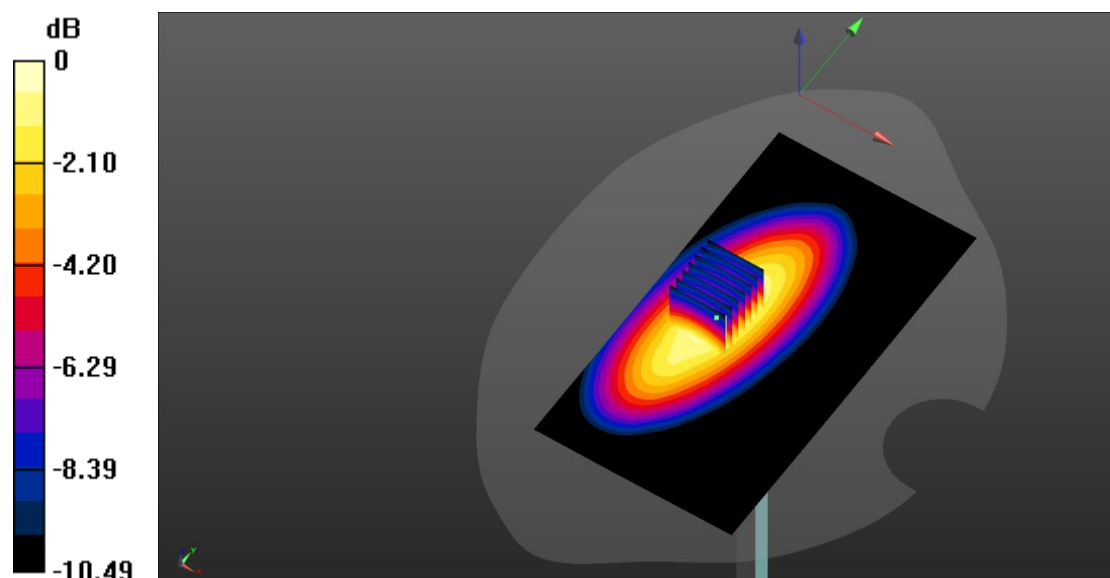
CW 750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 30.05 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.810 W/kg; SAR(10 g) = 0.528 W/kg

Maximum value of SAR (measured) = 0.901 W/kg



0 dB = 0.901 W/kg

System Performance Check Data (835MHz)

Date: 2023.08.17

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

Medium parameters used: $f = 835$ MHz; $\sigma = 0.878$ S/m; $\epsilon_r = 41.545$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

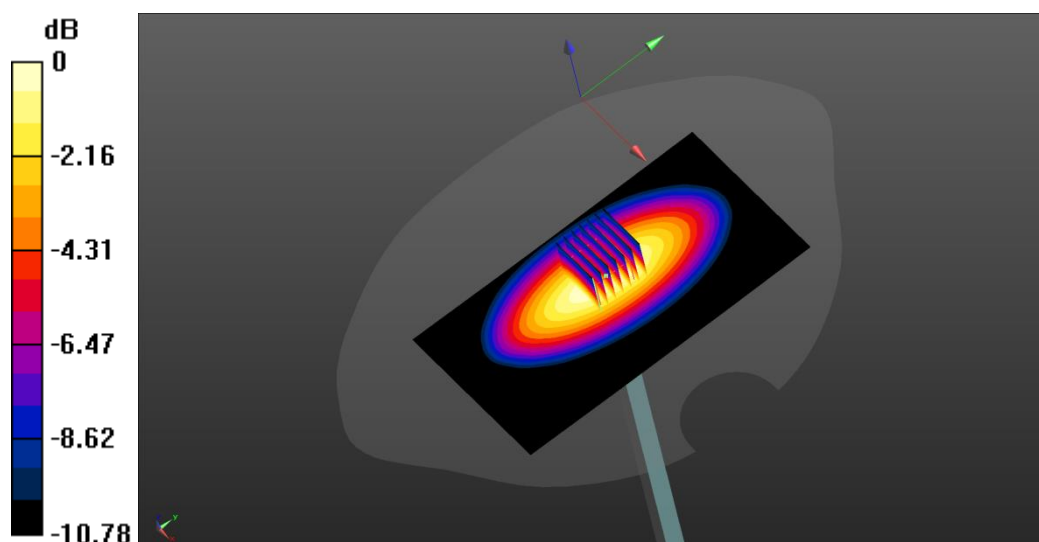
CW 835/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 36.32 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 0.978 W/kg; SAR(10 g) = 0.650 W/kg

Maximum value of SAR (measured) = 1.11 W/kg



0 dB = 1.11 W/kg

System Performance Check Data (835MHz)

Date: 2023.08.23

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

Medium parameters used: $f = 835$ MHz; $\sigma = 0.906$ S/m; $\epsilon_r = 41.45$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

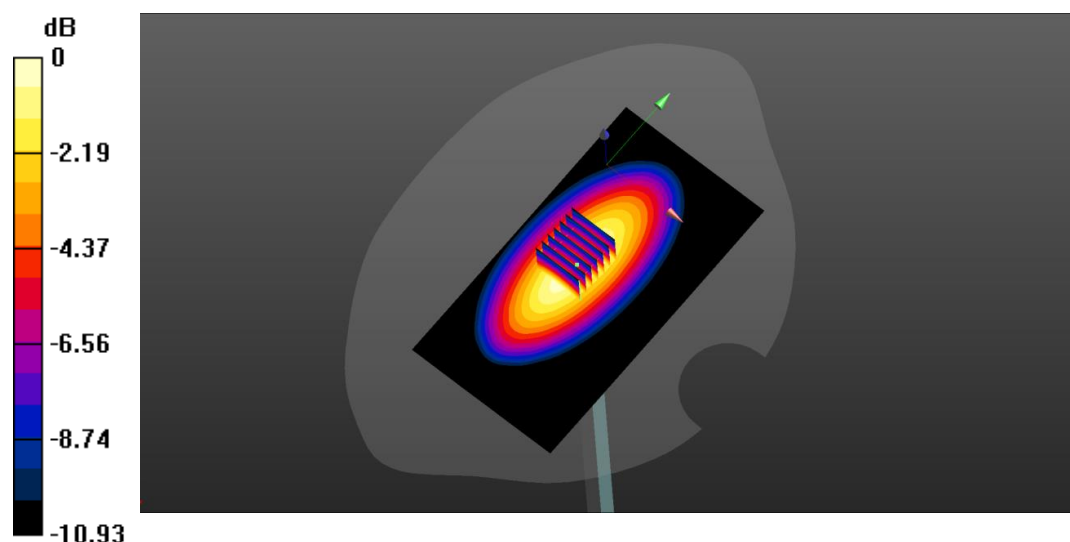
CW 835/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.19 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.987 W/kg; SAR(10 g) = 0.651 W/kg

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



0 dB = 1.13 W/kg

System Performance Check Data (1750MHz)

Date: 2023.09.01

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

Medium parameters used (interpolated): $f = 1750$ MHz; $\sigma = 1.361$ S/m; $\epsilon_r = 39.58$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

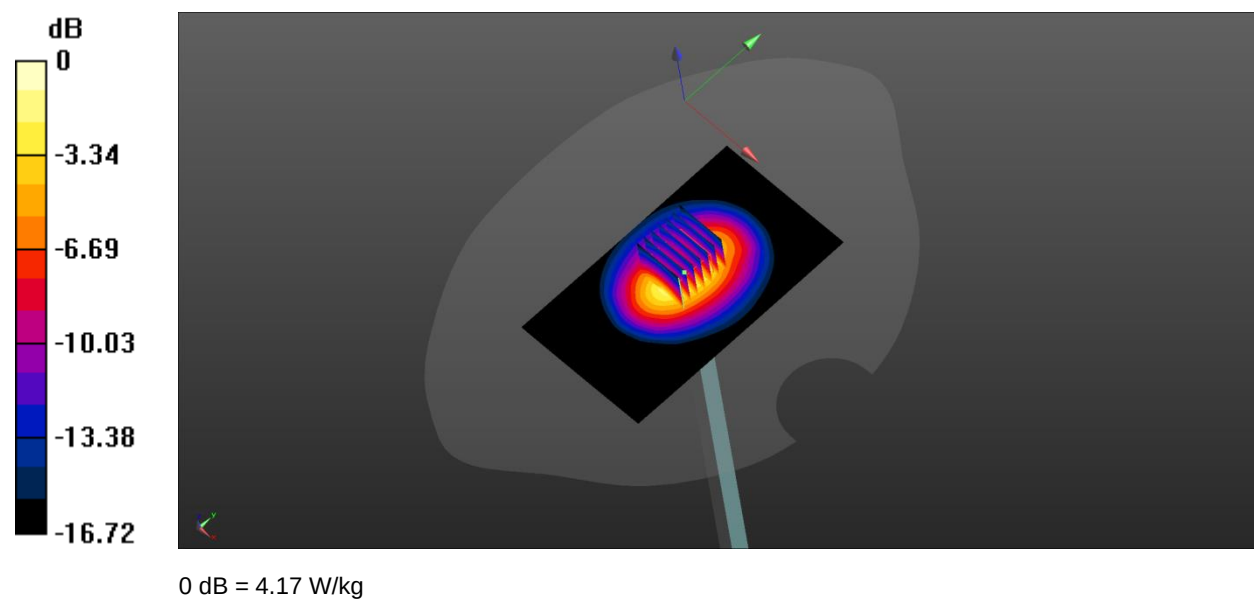
CW1750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 42.77 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 6.69 W/kg

SAR(1 g) = 3.68 W/kg; SAR(10 g) = 1.85 W/kg

Maximum value of SAR (measured) = 4.17 W/kg



System Performance Check Data (1750MHz)

Date: 2023.08.19

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.349$ S/m; $\epsilon_r = 40.406$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

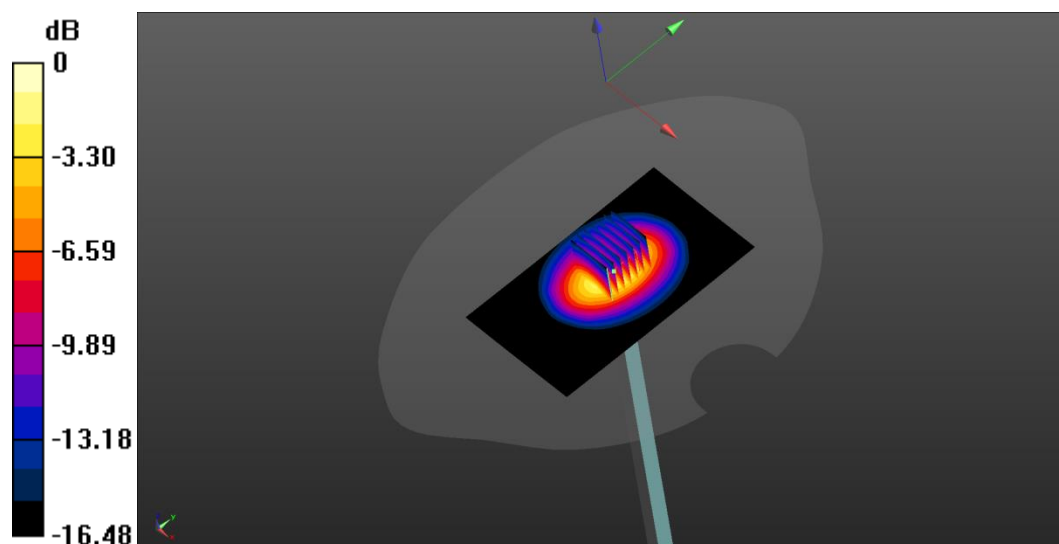
CW 1750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.17 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 7.14 W/kg

SAR(1 g) = 3.73 W/kg; SAR(10 g) = 1.94 W/kg

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



0 dB = 4.18 W/kg

System Performance Check Data (1750MHz)

Date: 2023.08.18

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.353$ S/m; $\epsilon_r = 39.658$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

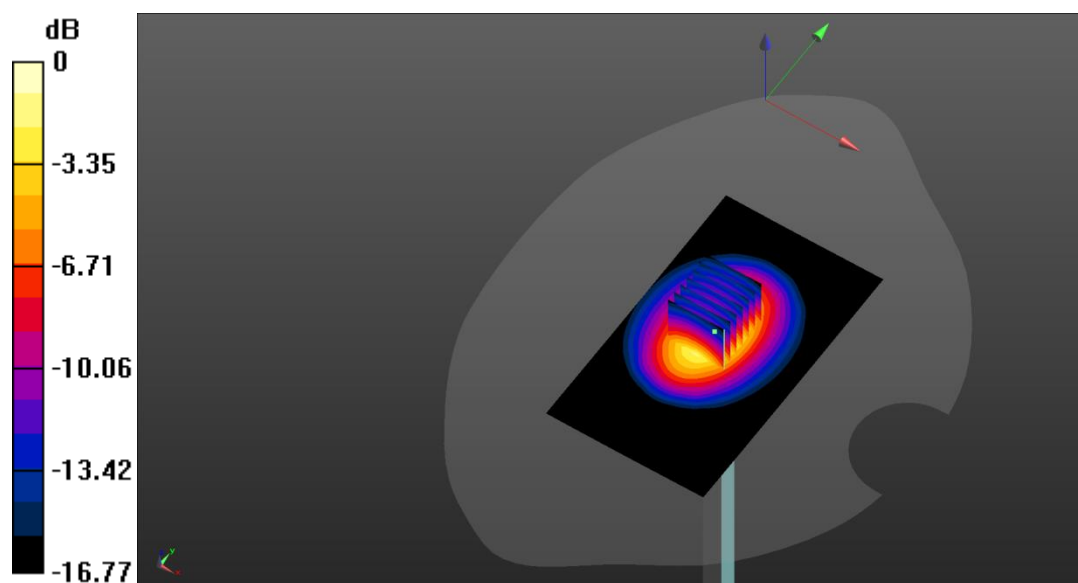
CW 1750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.04 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 7.25 W/kg

SAR(1 g) = 3.64 W/kg; SAR(10 g) = 1.87 W/kg

Maximum value of SAR (measured) = 4.33 W/kg



0 dB = 4.33 W/kg

System Performance Check Data (1900MHz)

Date: 2023.09.04

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 39.838$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

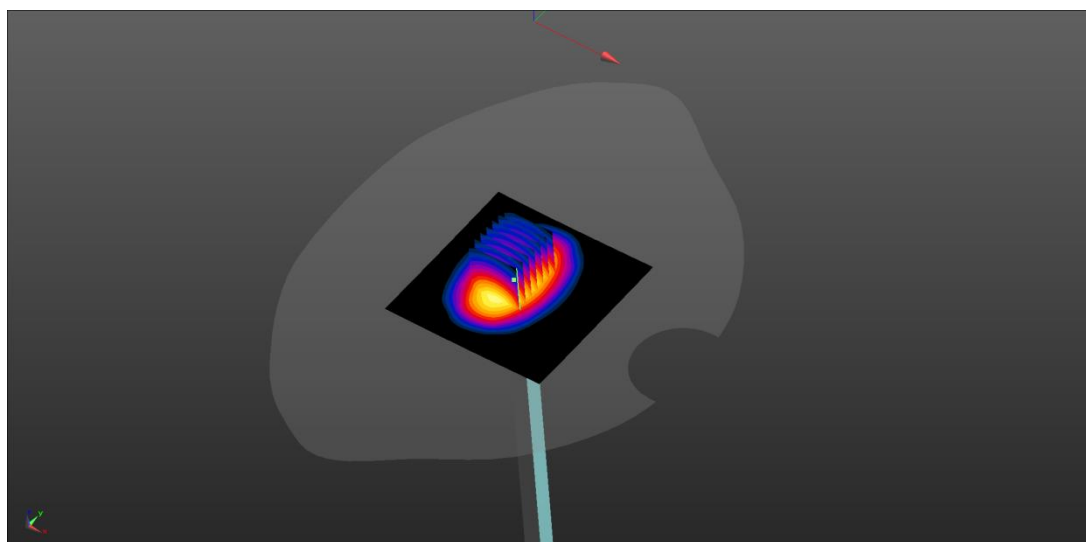
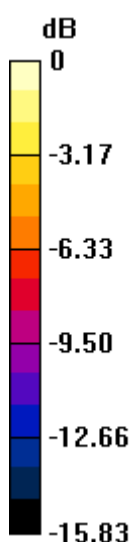
CW1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.73 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 7.22 W/kg

SAR(1 g) = 4.03 W/kg; SAR(10 g) = 2.07 W/kg

Maximum value of SAR (measured) = 4.55 W/kg



0 dB = 4.55 W/kg

System Performance Check Data (1900MHz)

Date: 2023.08.20

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.39$ S/m; $\epsilon_r = 39.792$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

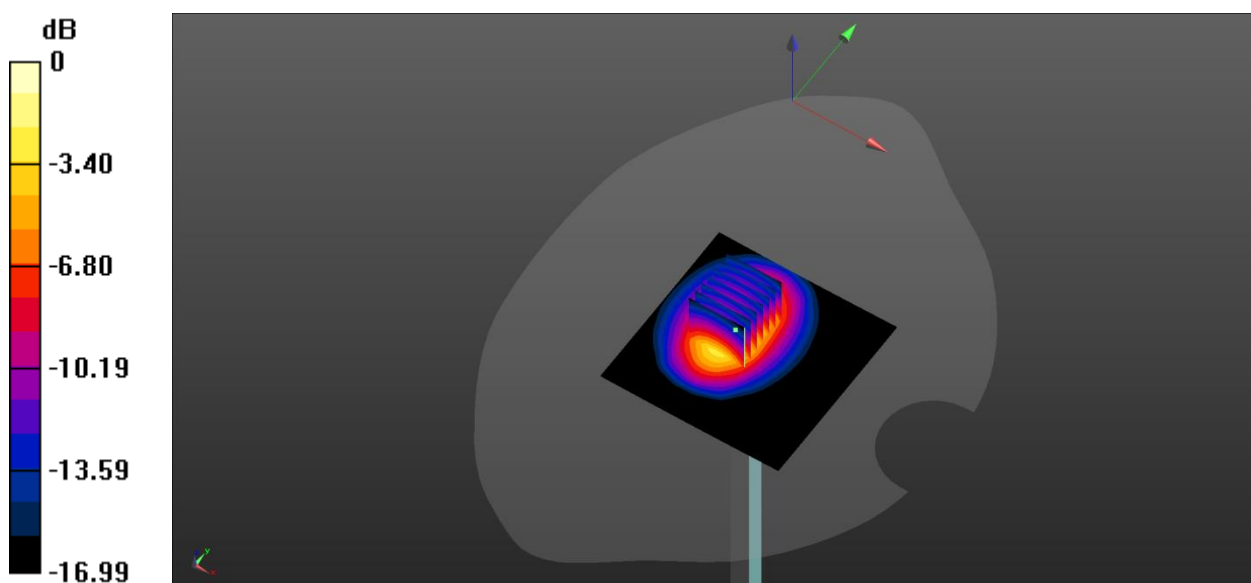
CW1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.42 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 7.18 W/kg

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

Maximum value of SAR (measured) = 4.48 W/kg



0 dB = 4.48 W/kg

System Performance Check Data (2450MHz)

Date: 2023.08.21

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.778$ S/m; $\epsilon_r = 39.708$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 6.24 W/kg

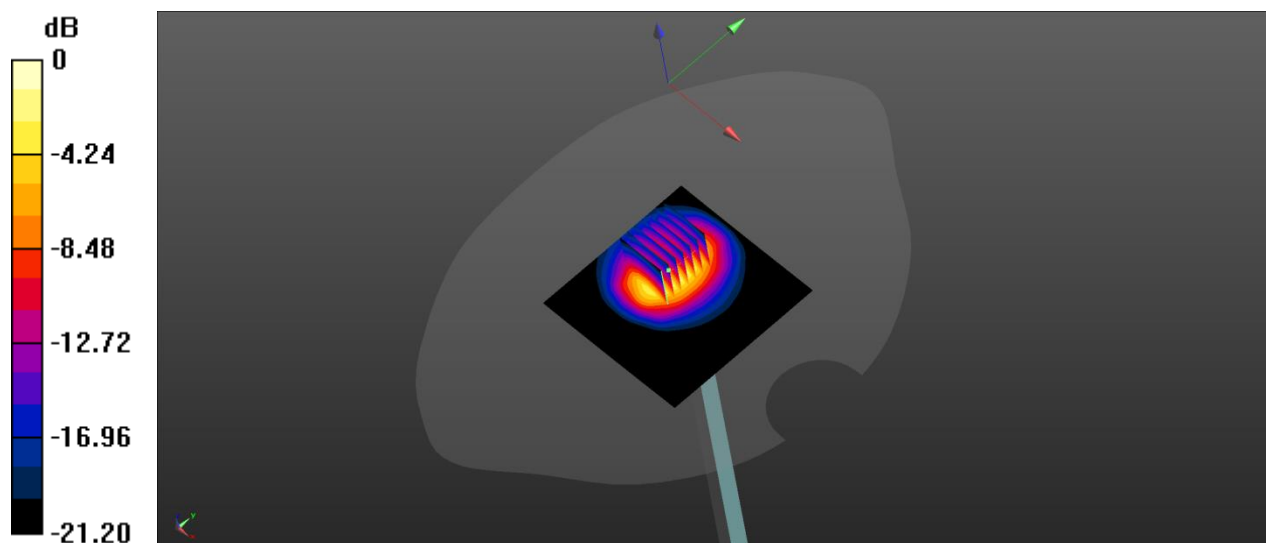
CW2450/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.83 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 11.9 W/kg

SAR(1 g) = 5.12 W/kg; SAR(10 g) = 2.47 W/kg

Maximum value of SAR (measured) = 6.13 W/kg



0 dB = 6.13 W/kg

ANNEX C TEST DATA

Meas.1 Body Plane with Front Side 10mm on Low Channel in WCDMA Band2 mode

Date: 2023.09.04

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

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.364$ S/m; $\epsilon_r = 40.36$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.26 W/kg

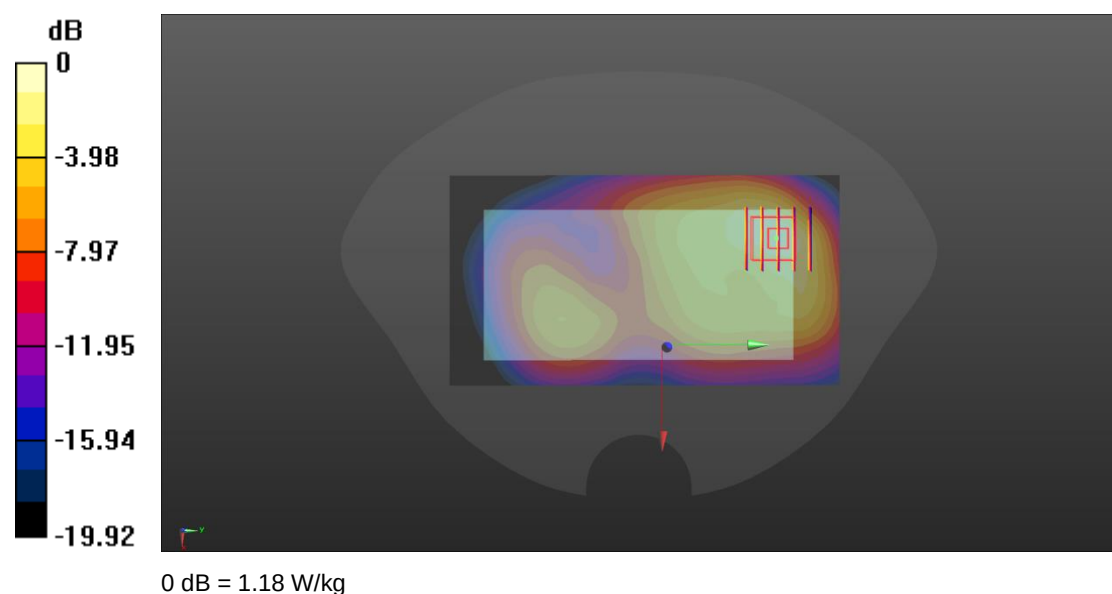
Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.50 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.587 W/kg

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



Meas.2 Body Plane with Bottom Edge 0mm on Low Channel in WCDMA Band2 mode

Date: 2023.09.04

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

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.364$ S/m; $\epsilon_r = 40.36$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

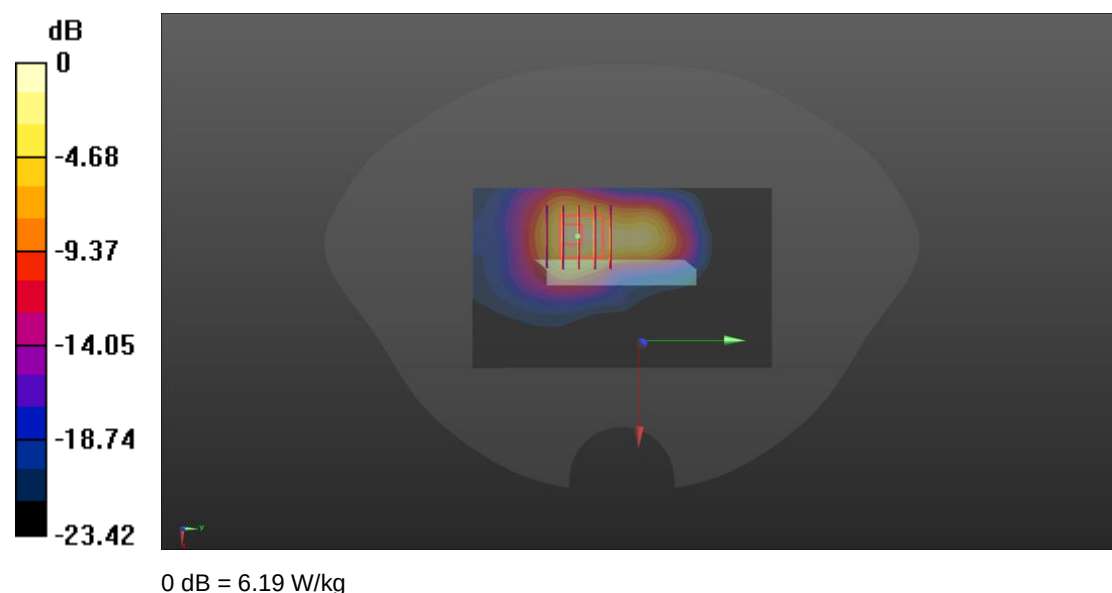
Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.955 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 12.4 W/kg

SAR(1 g) = 5.81 W/kg; SAR(10 g) = 2.18 W/kg

Maximum value of SAR (measured) = 6.19 W/kg



Meas.3 Body Plane with Bottom 10mm on Low Channel in WCDMA Band4 mode

Date: 2023.09.01

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

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.329$ S/m; $\epsilon_r = 40.301$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1312/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.27 W/kg

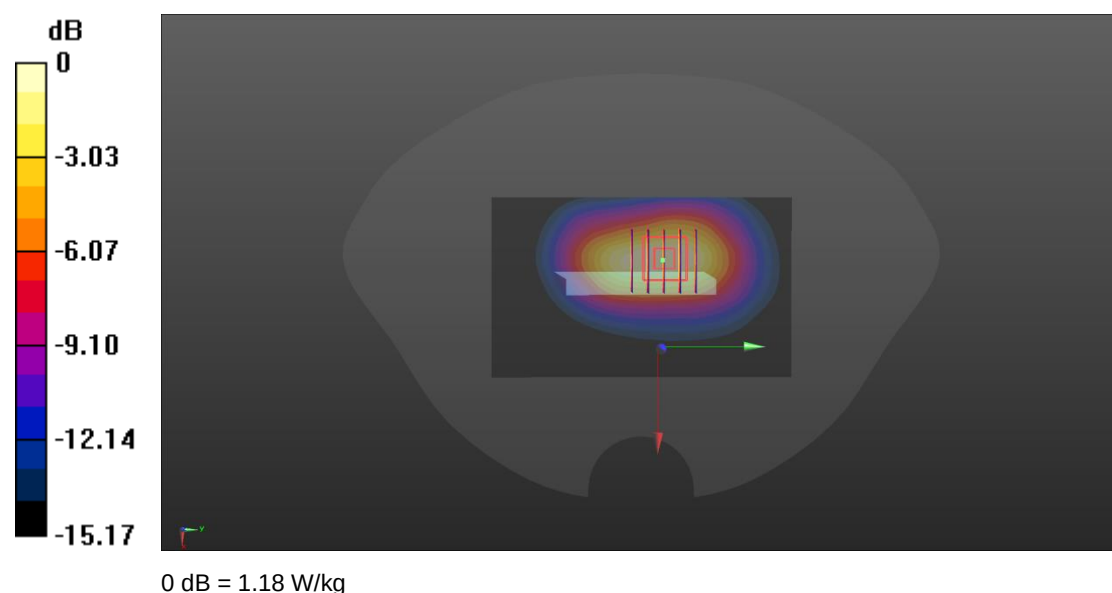
Ch1312/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.89 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.74 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.609 W/kg

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



Meas.4 Body Plane with Bottom 0mm on Low Channel in WCDMA Band4 mode

Date: 2023.09.01

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

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.329$ S/m; $\epsilon_r = 40.301$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1312/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 5.99 W/kg

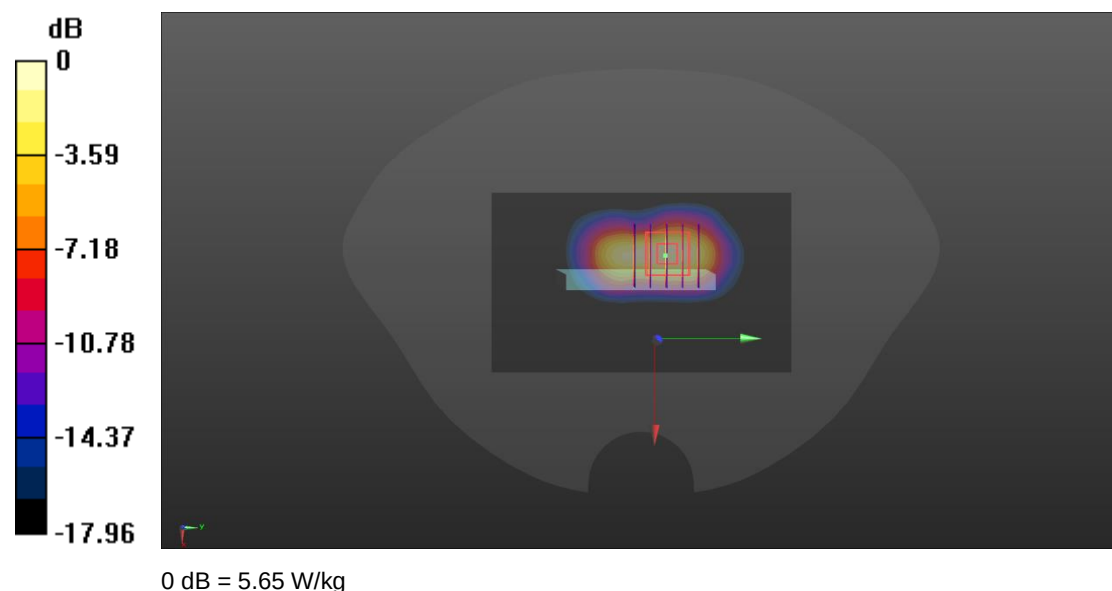
Ch1312/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.03 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 9.68 W/kg

SAR(1 g) = 4.85 W/kg; SAR(10 g) = 2.3 W/kg

Maximum value of SAR (measured) = 5.65 W/kg



Meas.5 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band5 mode

Date: 2023.08.17

Communication System Band: V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.895$ S/m; $\epsilon_r = 41.007$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.370 W/kg

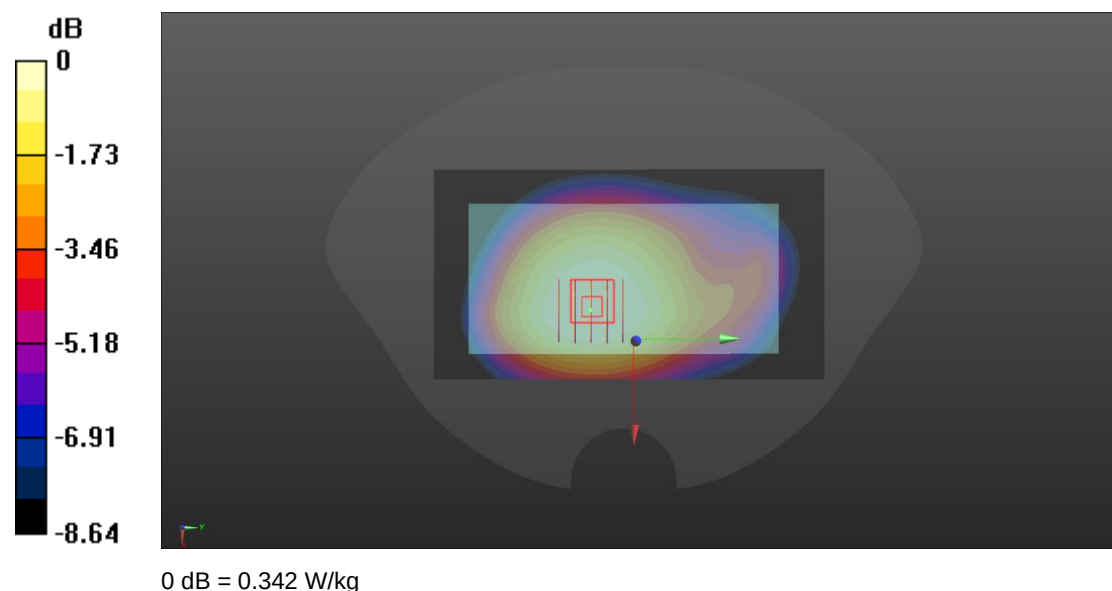
Ch4233/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.14 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.411 W/kg

SAR(1 g) = 0.326 W/kg; SAR(10 g) = 0.249 W/kg

Maximum value of SAR (measured) = 0.342 W/kg



Meas.6 Body Plane with Front Side 0mm on Low Channel in WCDMA Band5 mode

Date: 2023.08.17

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

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.876$ S/m; $\epsilon_r = 41.754$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

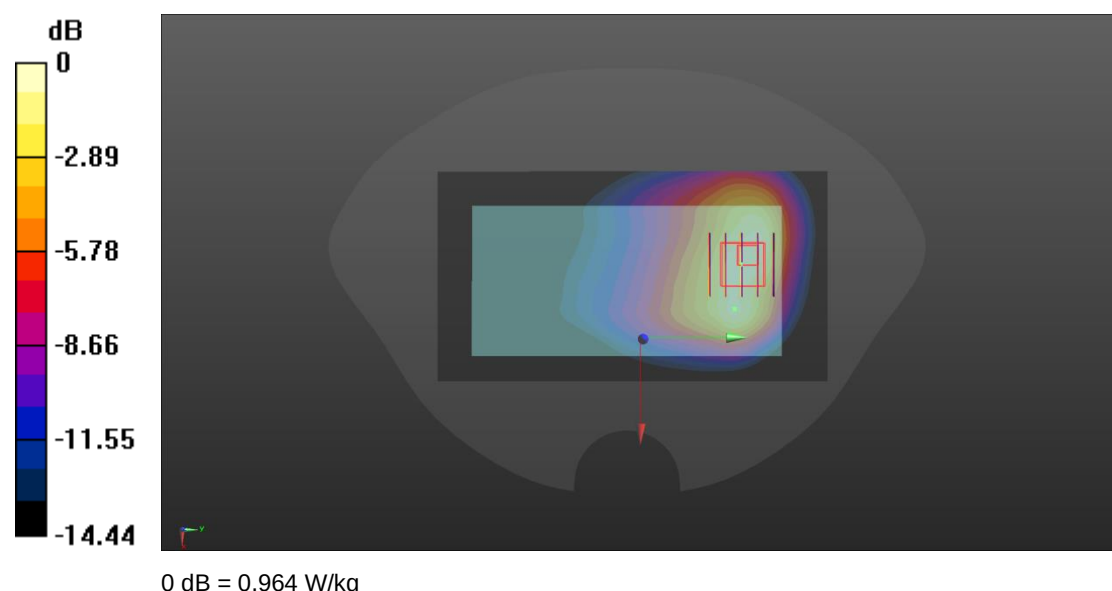
Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 10.57 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 0.929 W/kg; SAR(10 g) = 0.529 W/kg

Maximum value of SAR (measured) = 0.964 W/kg



Meas.7 Body Plane with Front Side 10mm on Middle Channel in LTE Band2 mode

Date: 2023.09.02

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

Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.365$ S/m; $\epsilon_r = 40.239$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18900/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.32 W/kg

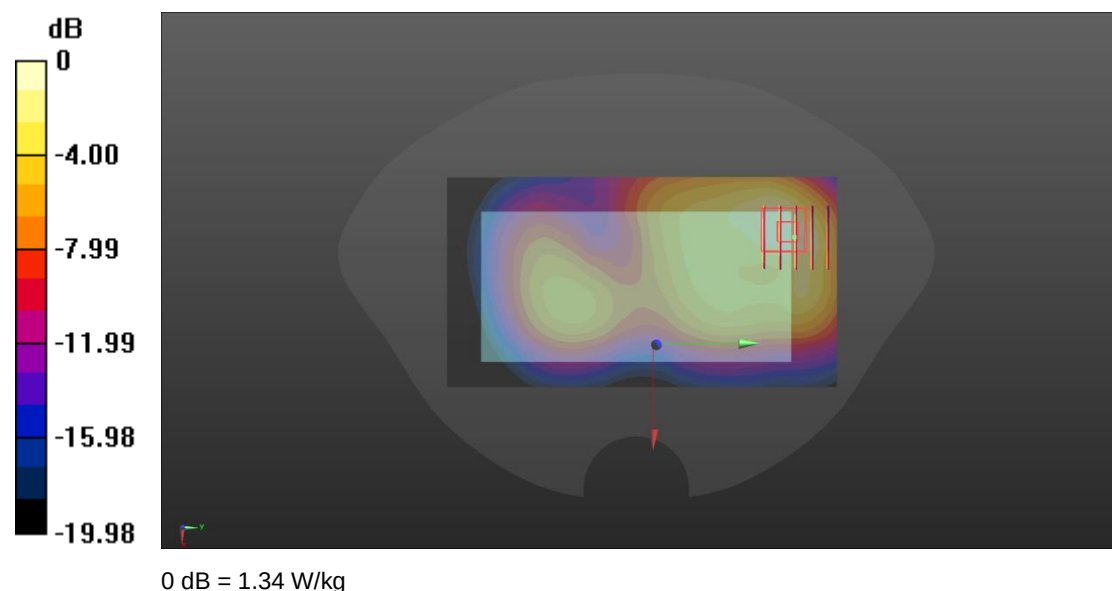
Ch18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.38 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.18 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.578 W/kg

Maximum value of SAR (measured) = 1.34 W/kg



Meas.8 Body Plane with Front Side 0mm on Middle Channel in LTE Band2 mode

Date: 2023.09.02

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

Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.365$ S/m; $\epsilon_r = 40.239$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.7°C Liquid Temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.21, 8.21, 8.21); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18900/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 6.22 W/kg

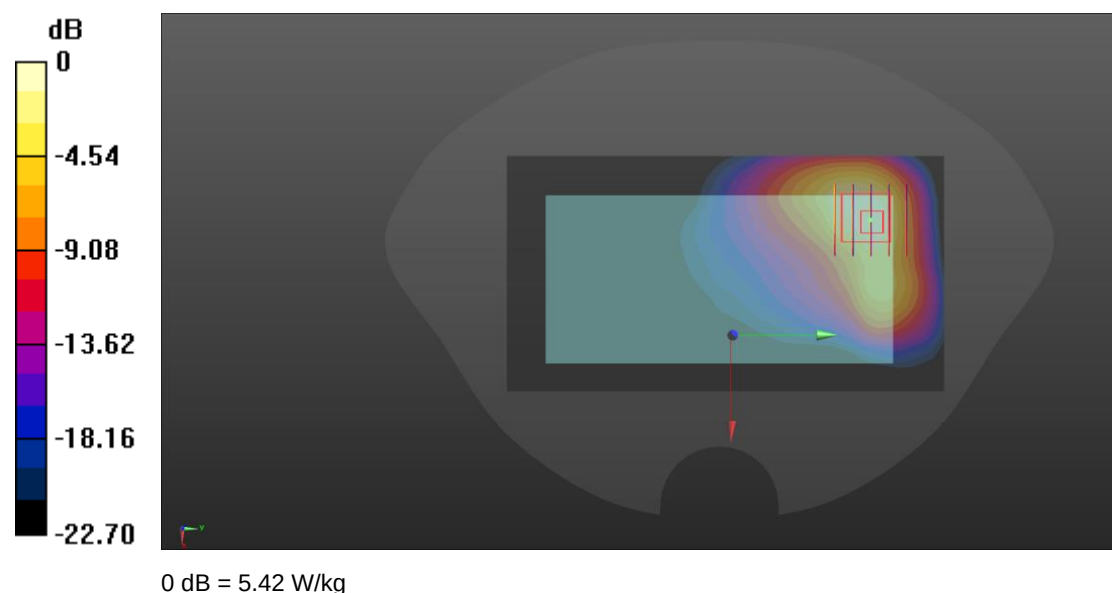
Ch18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.294 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 10.3 W/kg

SAR(1 g) = 4.74 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 5.42 W/kg



Meas.9 Body Plane with Bottom 10mm on Middle Channel in LTE Band4 mode

Date: 2023.09.01

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

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.345$ S/m; $\epsilon_r = 39.939$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20175/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.24 W/kg

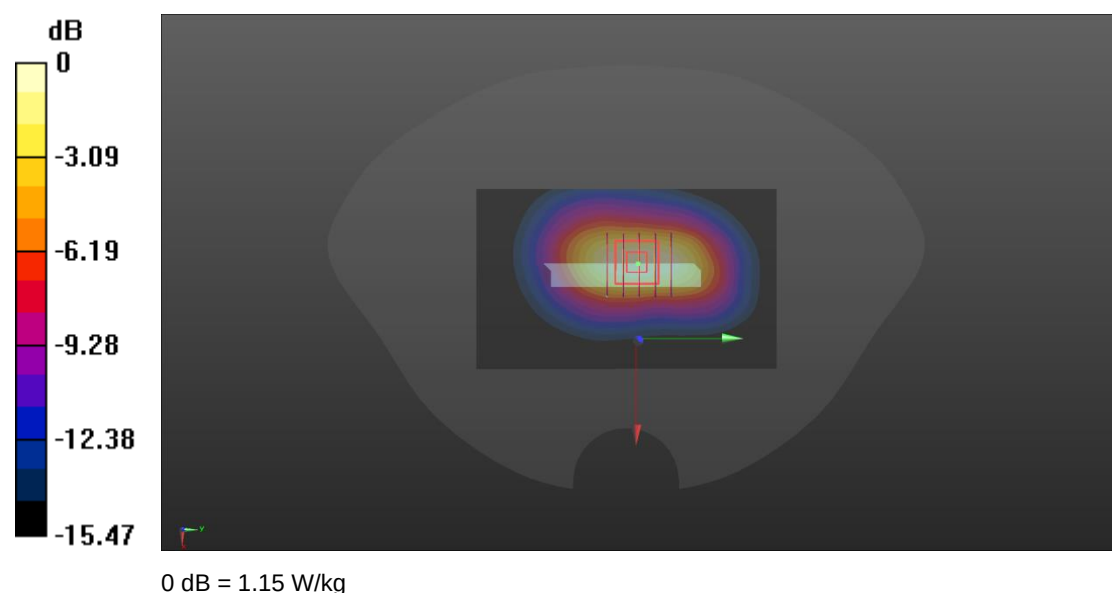
Ch20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.58 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.592 W/kg

Maximum value of SAR (measured) = 1.15 W/kg



Meas.10 Body Plane with Bottom 0mm on Low Channel in LTE Band4 mode

Date: 2023.09.01

Communication System Band: Band 4; Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1720$ MHz; $\sigma = 1.335$ S/m; $\epsilon_r = 40.22$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20050/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 5.21 W/kg

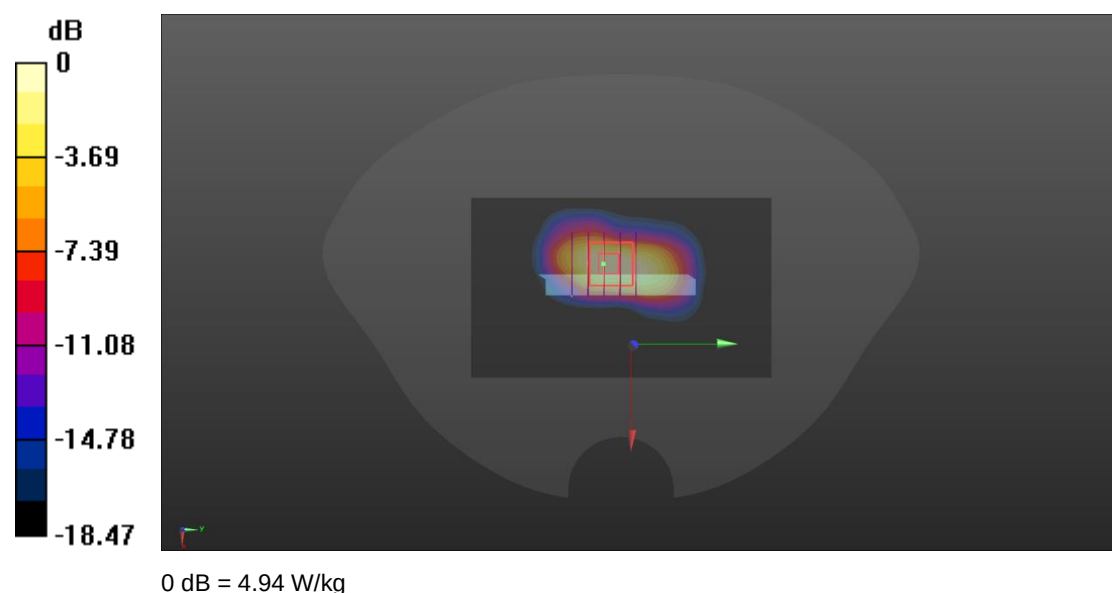
Ch20050/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 31.63 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 8.54 W/kg

SAR(1 g) = 4.28 W/kg; SAR(10 g) = 2.05 W/kg

Maximum value of SAR (measured) = 4.94 W/kg



Meas.11 Body Plane with Bask Side 10mm on Middle Channel in LTE Band5 mode

Date: 2023.08.17

Communication System Band: Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.884$ S/m; $\epsilon_r = 41.172$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

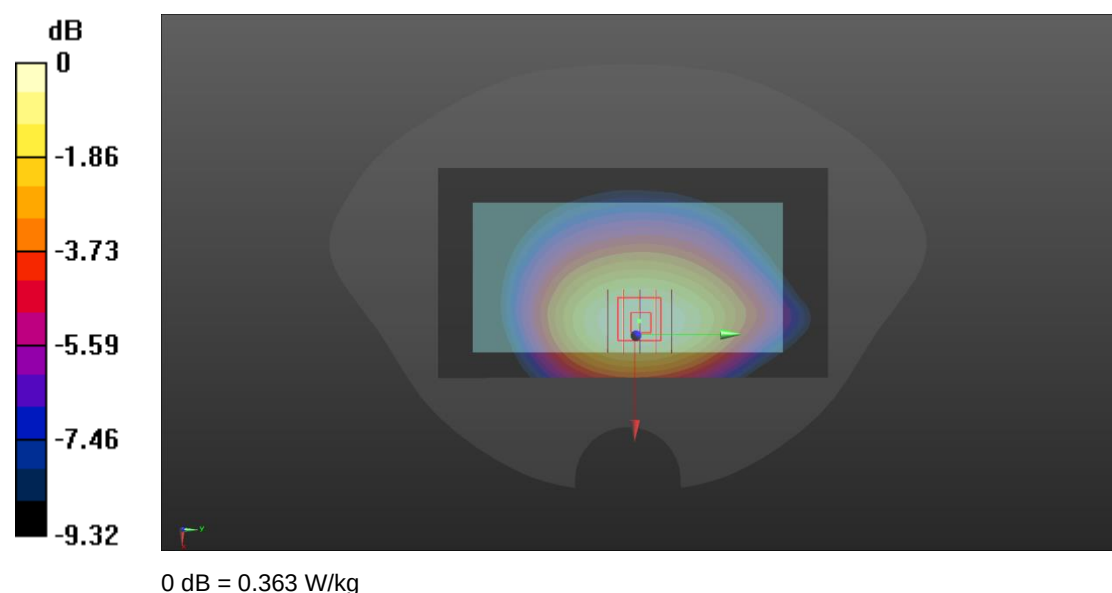
Ch20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.08 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.460 W/kg

SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.363 W/kg



Meas.12 Body Plane with Front Side 0mm on Low Channel in LTE Band5 mode

Date: 2023.08.17

Communication System Band: Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.884$ S/m; $\epsilon_r = 41.172$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.97, 9.97, 9.97); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

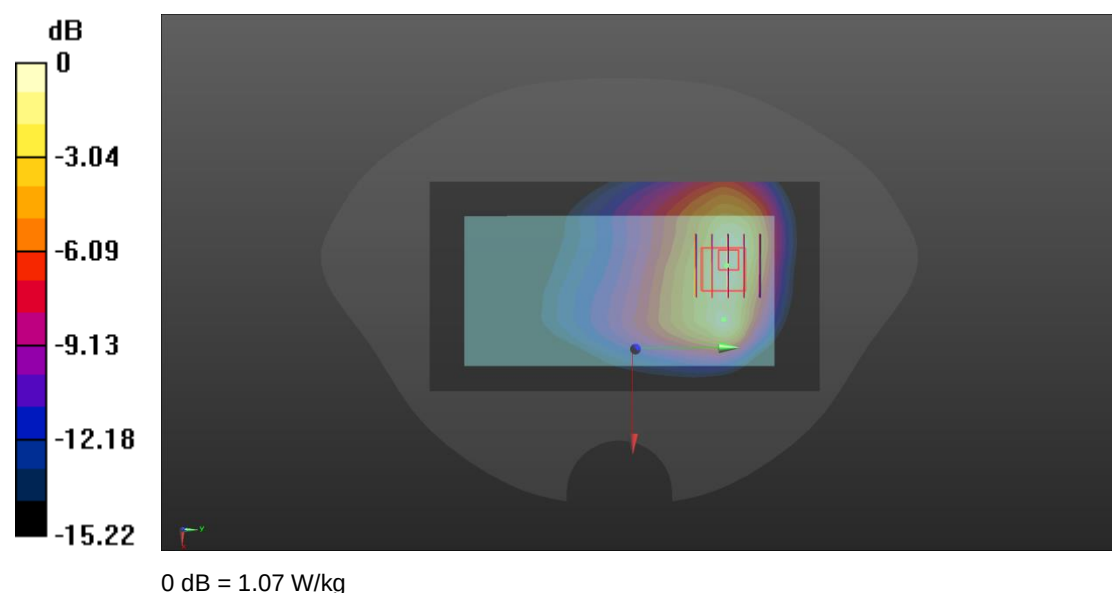
Ch20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.36 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 0.985 W/kg; SAR(10 g) = 0.558 W/kg

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



Meas.13 Body Plane with Bask Side 10mm on Middle Channel in LTE Band12 mode

Date: 2023.08.16

Communication System Band: Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.909$ S/m; $\epsilon_r = 41.689$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

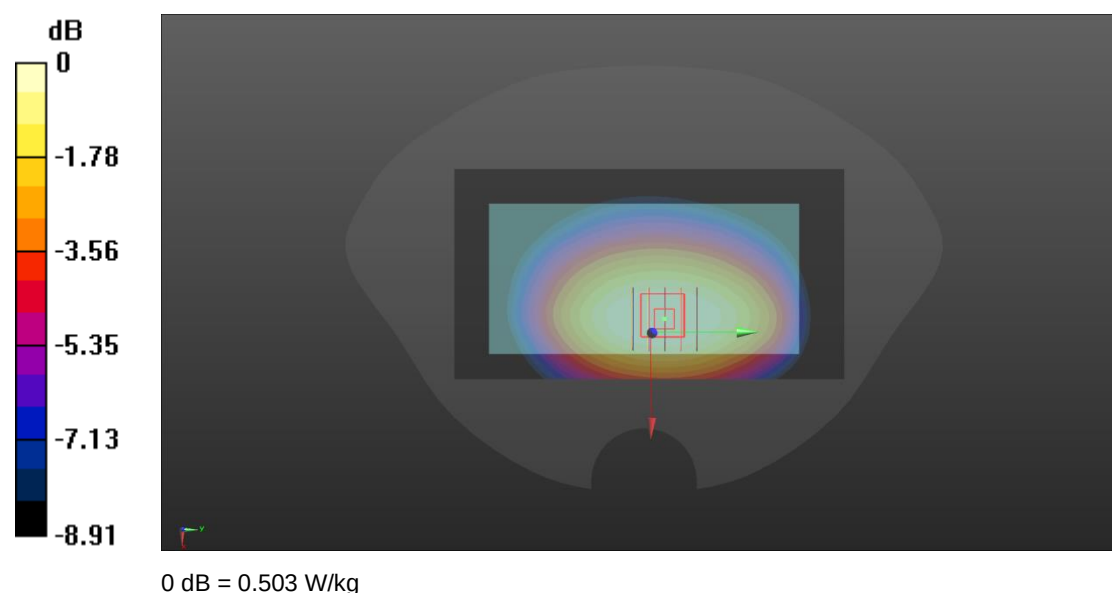
Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.56 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.635 W/kg

SAR(1 g) = 0.475 W/kg; SAR(10 g) = 0.345 W/kg

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



Meas.14 Body Plane with Bask Side 0mm on Middle Channel in LTE Band12 mode

Date: 2023.08.16

Communication System Band: Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.909$ S/m; $\epsilon_r = 41.689$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

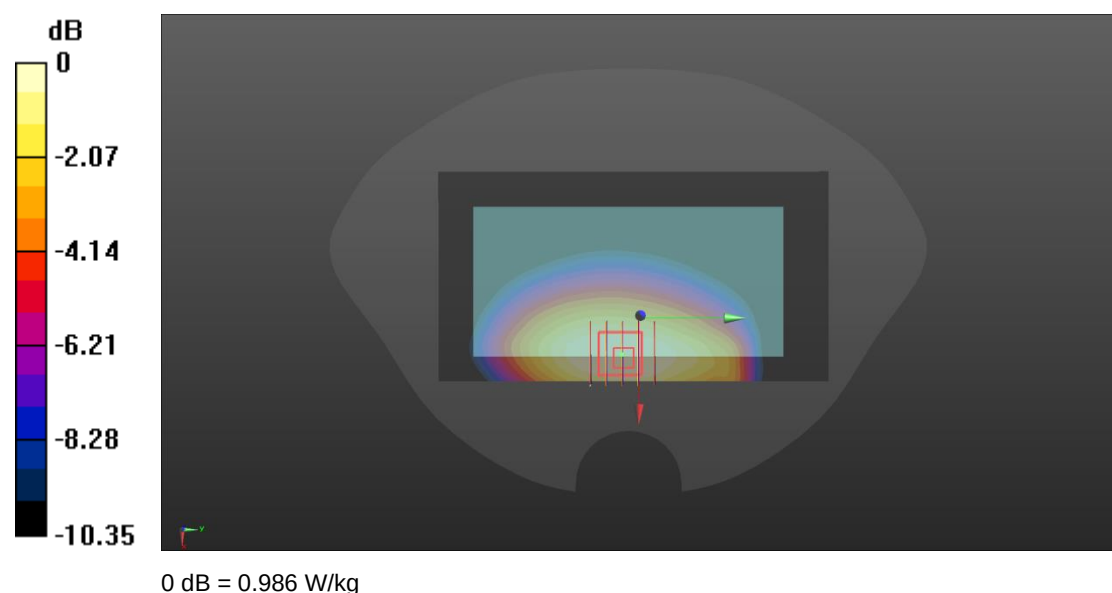
Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.57 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.927 W/kg; SAR(10 g) = 0.632 W/kg

Maximum value of SAR (measured) = 0.986 W/kg



Meas.15 Body Plane with Bask Side 10mm on Middle Channel in LTE Band13 mode

Date: 2023.08.16

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

Medium parameters used (interpolated): $f = 782 \text{ MHz}$; $\sigma = 0.919 \text{ S/m}$; $\epsilon_r = 41.022$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.375 W/kg

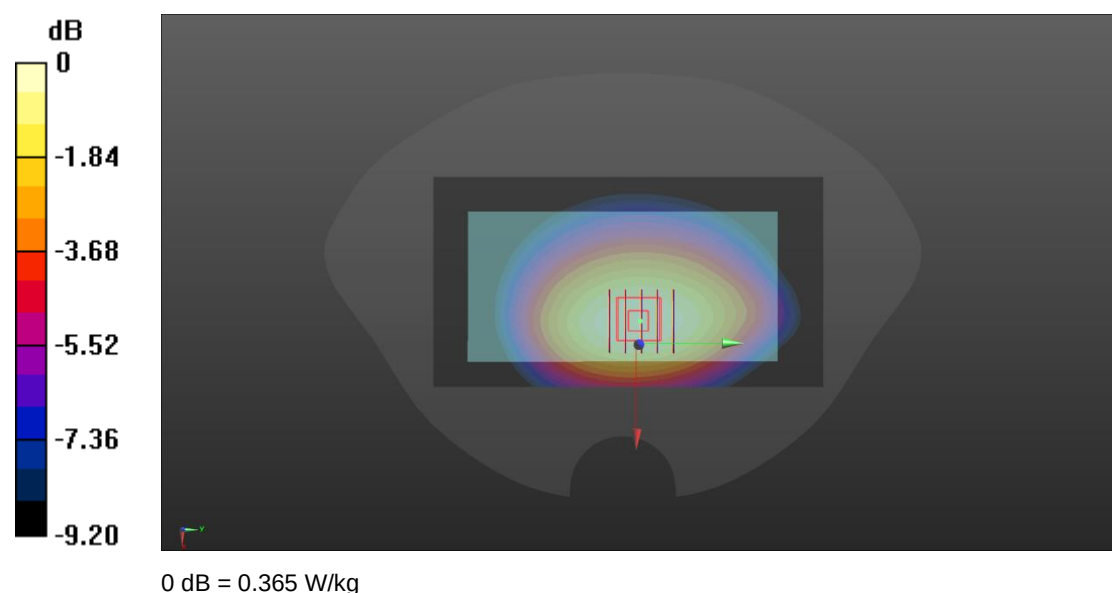
Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.35 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.461 W/kg

SAR(1 g) = 0.343 W/kg; SAR(10 g) = 0.247 W/kg

Maximum value of SAR (measured) = 0.365 W/kg



Meas.16 Body Plane with Bask Side 0mm on Middle Channel in LTE Band13 mode

Date: 2023.08.16

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

Medium parameters used (interpolated): $f = 782 \text{ MHz}$; $\sigma = 0.919 \text{ S/m}$; $\epsilon_r = 41.022$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.616 W/kg

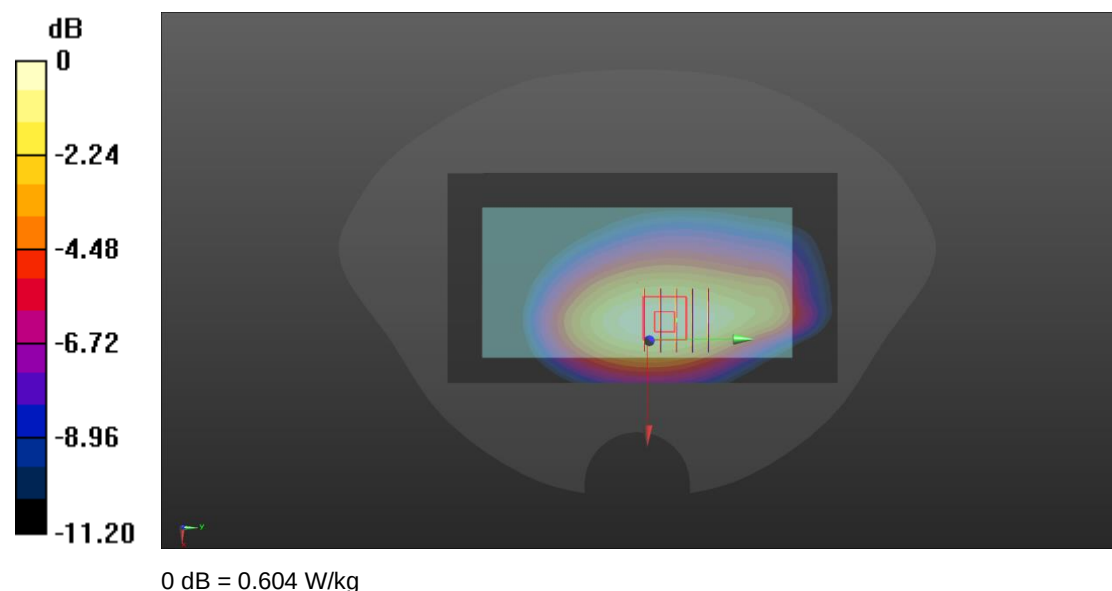
Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.08 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.835 W/kg

SAR(1 g) = 0.565 W/kg; SAR(10 g) = 0.380 W/kg

Maximum value of SAR (measured) = 0.604 W/kg



Meas.17 Body Plane with Bottom 10mm on Low Channel in LTE Band66 mode

Date: 2023.09.01

Communication System Band: Band66; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1745$ MHz; $\sigma = 1.345$ S/m; $\epsilon_r = 40.568$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132322/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

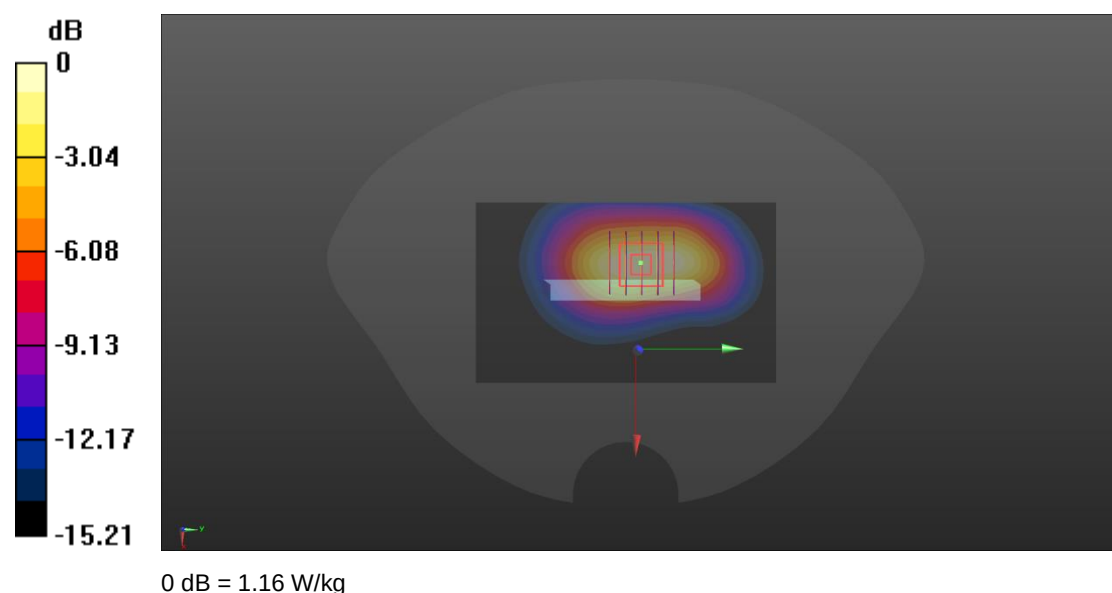
Ch132322/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.01 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.602 W/kg

Maximum value of SAR (measured) = 1.16 W/kg



Meas.18 Body Plane with Bottom 0mm on Low Channel in LTE Band66 mode

Date: 2023.09.01

Communication System Band: Band66; Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1720$ MHz; $\sigma = 1.329$ S/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.65, 8.65, 8.65); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132072/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 5.88 W/kg

Ch132072/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 59.08 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 9.06 W/kg

SAR(1 g) = 4.53 W/kg; SAR(10 g) = 2.17 W/kg

Maximum value of SAR (measured) = 5.11 W/kg



Meas.19 Body Plane with Bask Side 10mm on Middle Channel in LTE Band71 mode

Date: 2023.08.16

Communication System Band: Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 680.5$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 42.58$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch133297/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

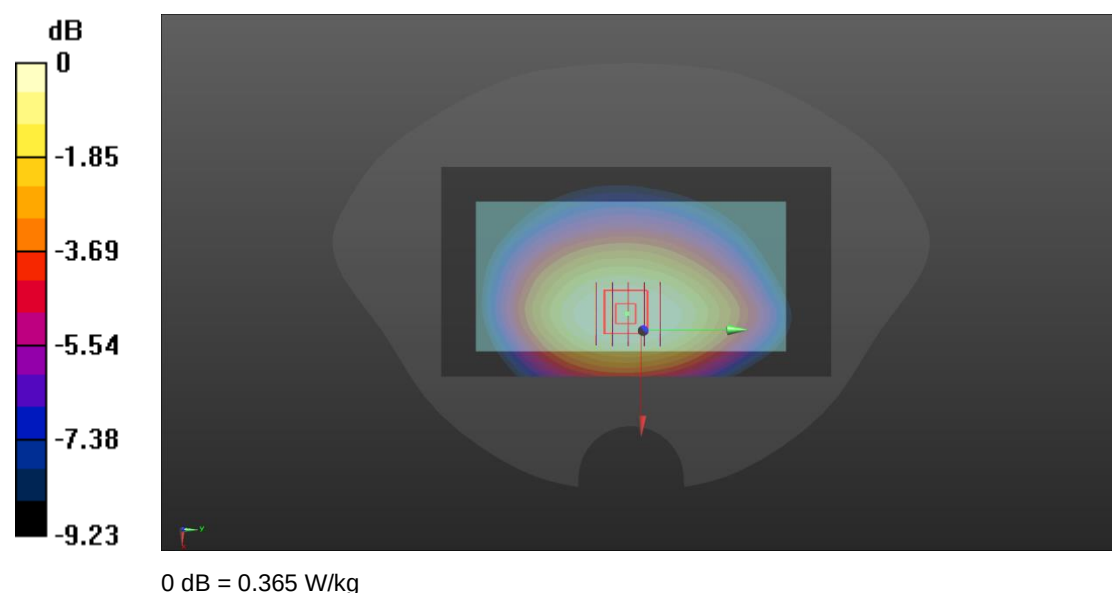
Ch133297/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.24 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.462 W/kg

SAR(1 g) = 0.344 W/kg; SAR(10 g) = 0.248 W/kg

Maximum value of SAR (measured) = 0.365 W/kg



Meas.20 Body Plane with Bask Side 0mm on Middle Channel in LTE Band71

Date: 2023.08.16

Communication System Band: Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 680.5$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 42.58$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.4, 10.4, 10.4); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch133297/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.582 W/kg

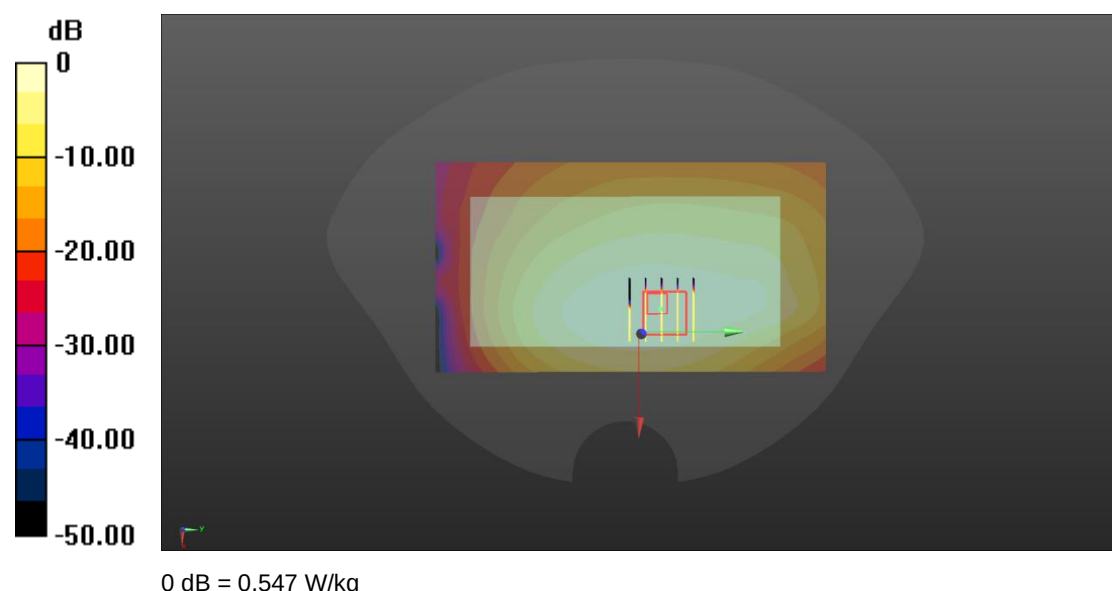
Ch133297/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.39 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.720 W/kg; SAR(10 g) = 0.382 W/kg

Maximum value of SAR (measured) = 0.547 W/kg



Meas.21 Body Plane with Front Side 10mm on 11 Channel in IEEE802.11b mode

Date: 2023.08.21

Communication System Band: WLAN(b); Frequency: 2462 MHz; Duty Cycle: 1:1.358

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.793$ S/m; $\epsilon_r = 39.47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.139 W/kg

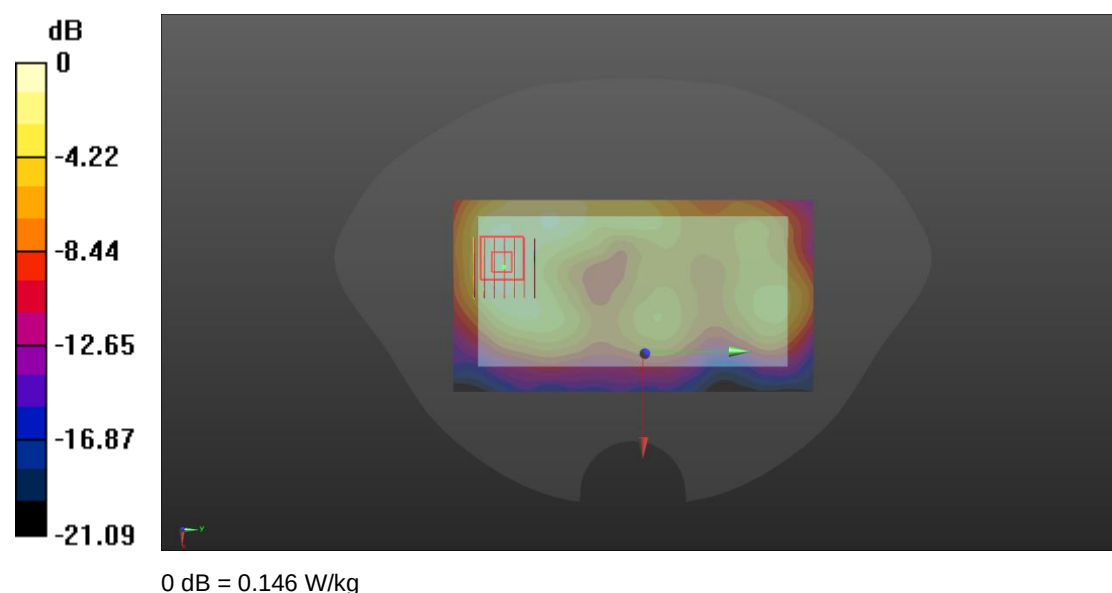
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.897 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.130 W/kg; SAR(10 g) = 0.068 W/kg

Maximum value of SAR (measured) = 0.146 W/kg



Meas.22 Body Plane with Front Side 0mm on 11 Channel in IEEE802.11b mode

Date: 2023.08.21

Communication System Band: WLAN(b); Frequency: 2462 MHz; Duty Cycle: 1:1.358

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.793$ S/m; $\epsilon_r = 39.47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.712 W/kg

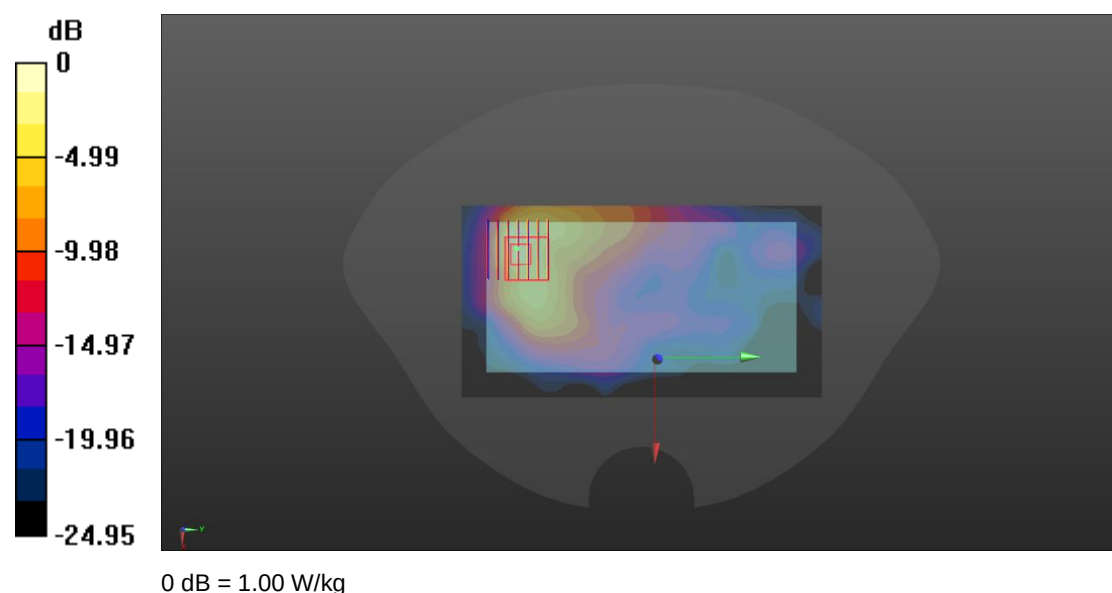
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.428 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.16 W/kg

SAR(1 g) = 0.870 W/kg; SAR(10 g) = 0.387 W/kg

Maximum value of SAR (measured) = 1.00 W/kg



Meas.23 Body Plane with Back Side 10mm on 39 Channel in Bluetooth mode

Date: 2023.08.21

Communication System Band: BT; Frequency: 2441 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.769$ S/m; $\epsilon_r = 39.788$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 0.0137 W/kg

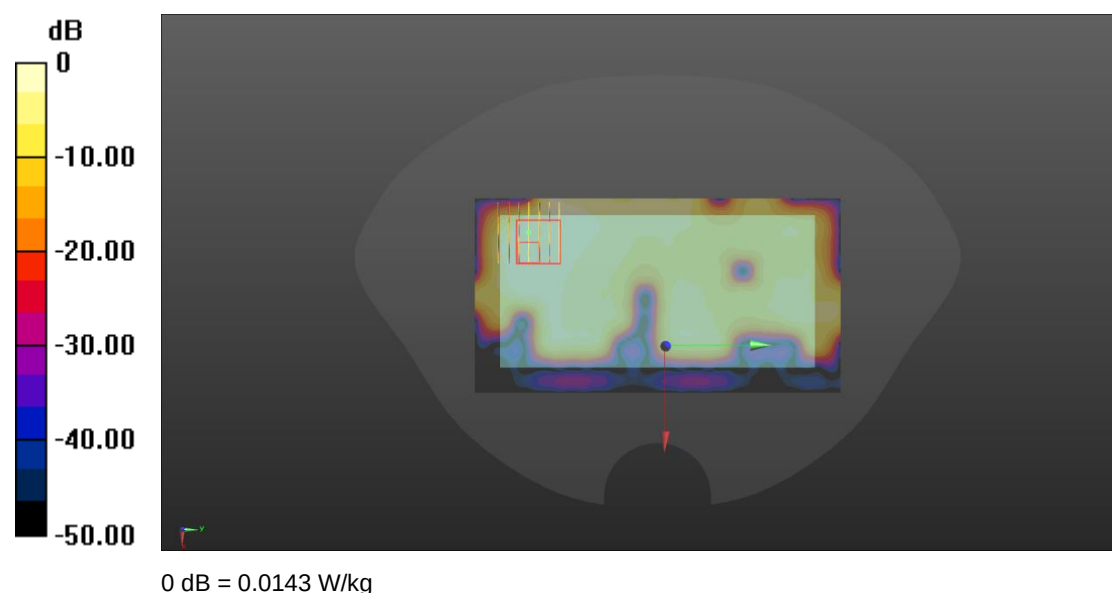
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.0240 W/kg

SAR(1 g) = 0.012 W/kg; SAR(10 g) = 0.00498 W/kg

Maximum value of SAR (measured) = 0.0143 W/kg



Meas.24 Body Plane with Front Side 0mm on 39 Channel in Bluetooth mode

Date: 2023.08.21

Communication System Band: BT; Frequency: 2441 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.769$ S/m; $\epsilon_r = 39.788$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.78, 7.78, 7.78); Calibrated: 2023.01.19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1454; Calibrated: 2023.03.20
- Phantom: SAM (20deg probe tilt) with CRP v5.0 Right 1857; Type: QD000P40CD; Serial: TP1857
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

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

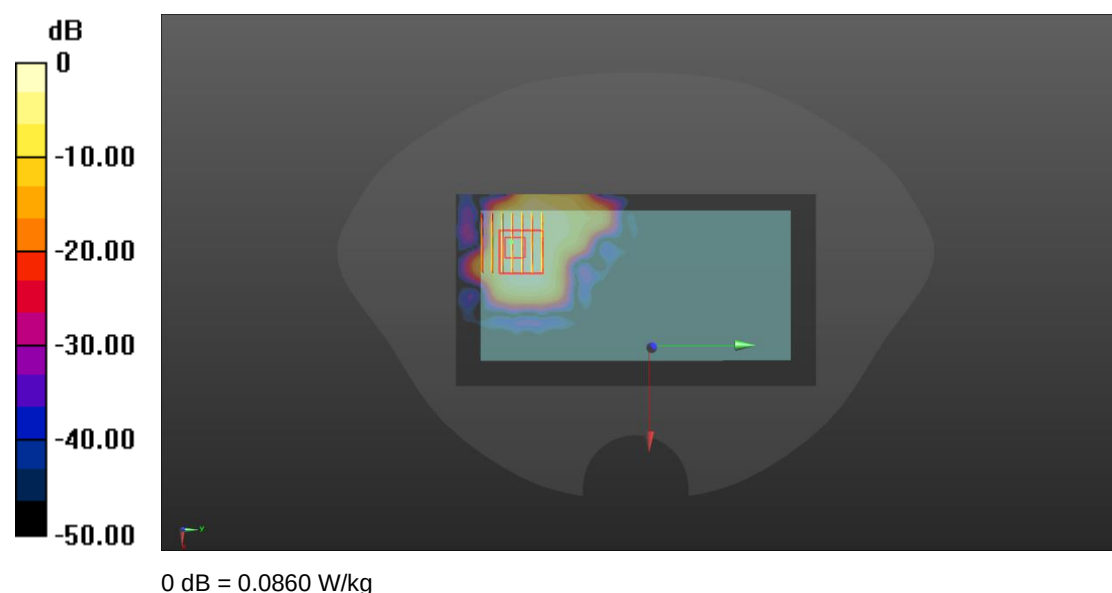
Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.196 W/kg

SAR(1 g) = 0.074 W/kg; SAR(10 g) = 0.030 W/kg

Maximum value of SAR (measured) = 0.0860 W/kg



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2380525-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2380525-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2380525-AC.pdf”.

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