

TEST REPORT

Applicant: Shenzhen DO Intelligent Technology Co., Ltd
Address: 11th Floor, 3# Building, Guole Tech Park, Lirong Road, Dalang, Longhua District, Shenzhen 518109, China
Equipment Type: TD-LTE Wireless Data Terminal
Model Name: IDK01
Brand Name: IDO
FCC ID: 2AHFT7854
Test Standard: FCC 47 CFR Part 2.1093 (refer to section 3.1)
Maximum SAR: Front of Face (1 g@10mm): 1.04 W/kg
Extremity (10 g@0mm): 1.25 W/kg
Sample Arrival Date: Aug. 12, 2024
Test Date: Aug. 30, 2024 - Sep. 01, 2024
Date of Issue: Sep. 30, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Xu Rui**Checked by:** Liyao Zong**Approved by:** Tolan Tu

(Testing Director)



Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 30, 2024</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

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

1.3 Test Environment Condition

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

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Shenzhen DO Intelligent Technology Co., Ltd
Address	11th Floor, 3# Building, Guole Tech Park, Lirong Road, Dalang, Longhua District, Shenzhen 518109, China

2.2 Manufacturer Information

Manufacturer	Shenzhen DO Intelligent Technology Co., Ltd
Address	11th Floor, 3# Building, Guole Tech Park, Lirong Road, Dalang, Longhua District, Shenzhen 518109, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	TD-LTE Wireless Data Terminal
Model Name Under Test	IDK01
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	W303_MB V2
Software Version	IDK01_NA_0.2_240524
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	ZWDB
	Model No.	ZWD632833PV
	Serial No.	N/A
	Capacitance	800mAh
	Rated Voltage	3.8 V
	Limited Voltage	4.35 V
	Manufacturer	ZHONGSHAN ZHONGWANGDE NEW ENERGY TECHNOLOGY CO., LTD

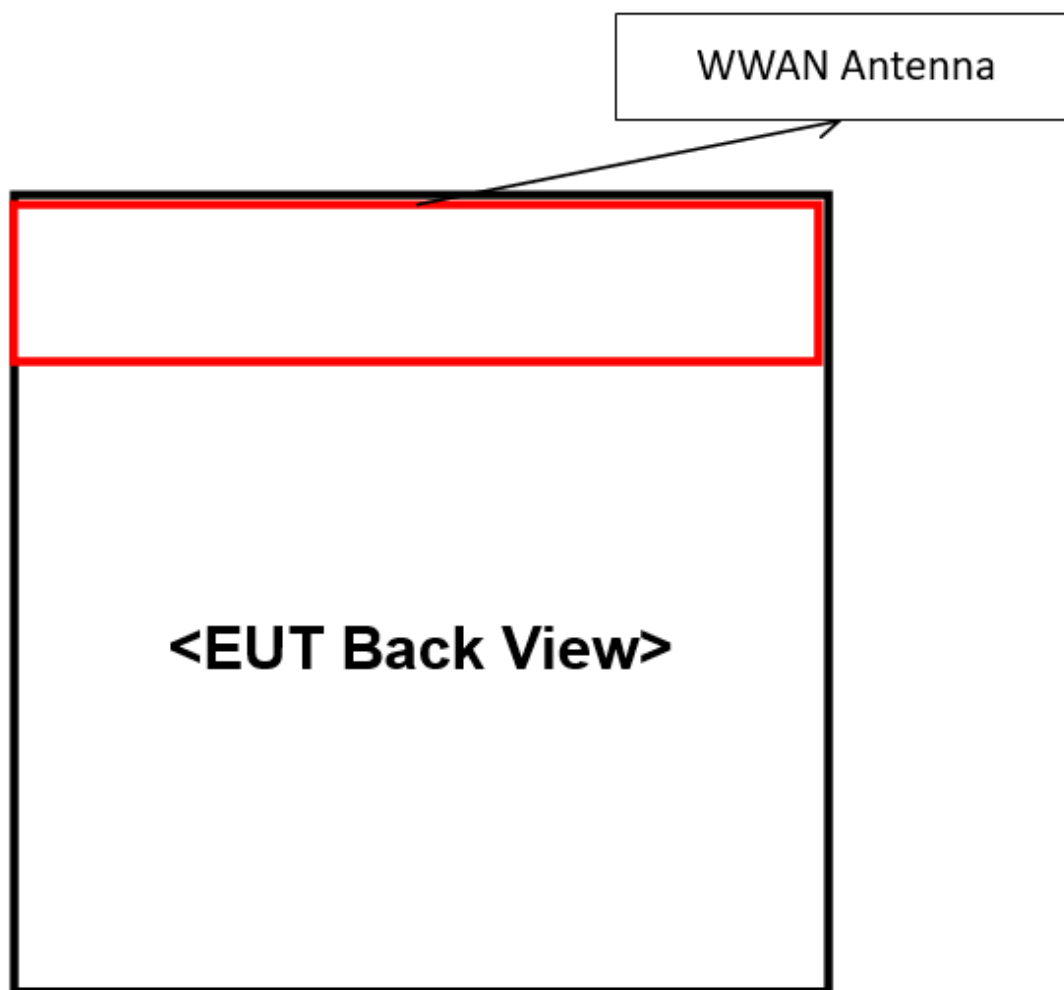
2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 4G Network FDD LTE Band 2/4/5/7/12/66 TDD LTE Band 38/41 GPS, GLONASS, BDS
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	GSM; LTE		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2555 ~ 2655 MHz	RX: 2555 ~ 2655 MHz
Antenna Type	WWAN	LDS	
Hotspot Function	N/A		
Exposure Category	General Population/Uncontrolled exposure		
Product Type	Portable Device		
EUT Type	☒ Production unit		☐ Identical prototype

2.6 Antenna location sketch



Antenna	Description	Support Bands
WWAN	2/4G TX Antenna	GSM 850/1900 LTE Band 2/4/5/7/12/66/38/41

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 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
7	KDB 865664 D02 v01r02	RF Exposure Reporting

Note: Compared with the EUT of test report BL-SZ2430243-701, the EUT of this report shows different things as below:

1. Replaced GNSS chip and antenna;
2. Replaced WWAN antenna;
3. Replaced camera;

Other hardware circuit and software are the same as EUT referred to in test report BL-SZ2430243-701.

Therefore, in addition to the above differences, power test data and EUT information are derived from the report BL-SZ2430243-701 published by Shenzhen BALUN Technology Co., Ltd. on Jun. 04, 2024, all other items were retest in this report.

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

Frequency Band		Maximum Report SAR	
		1g (W/kg)	10g (W/kg)
		Front of Face	Extremity
		(Separation 10mm)	(Separation 0mm)
PCE	GSM 850	0.42	0.60
	GSM 1900	0.63	0.56
	Band 2	1.04	1.25
	Band 4	0.91	0.89
	Band 5	0.17	0.28
	Band 7	0.51	1.05
	Band 12	0.05	0.08
	Band 66	0.62	0.73
	Band 38	0.55	0.52
	Band 41	0.72	0.74
Maximum Report SAR		1.04	1.25
Limits (W/kg)		1.6	4.0
Test Verdict		Pass	

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 1.04 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

The maximum 10 g SAR for the EUT in this report is 1.25 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:

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

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

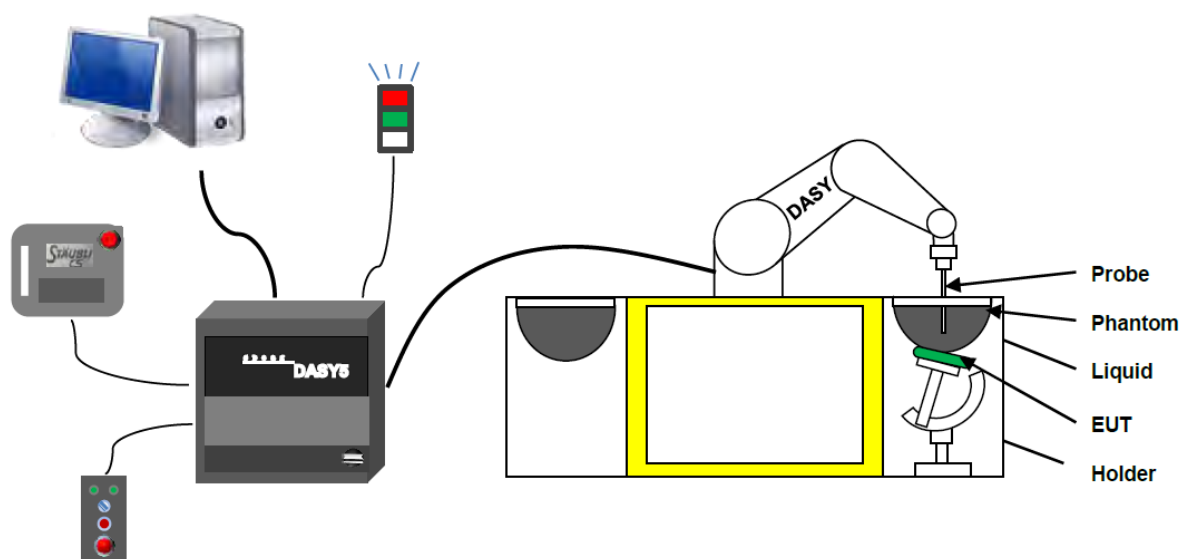
$$SAR = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

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



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

4.2.3 E-Field Probe

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

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection 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-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.



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

4.2.5 Phantoms

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



- Left hand
- Right hand
- Flat phantom

Photo of Phantom SN1576



Serial Number	Material	Length	Height
SN 1576 SAM	Vinylester, glass fiber reinforced	1000	500

4.2.6 Device Holder

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



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

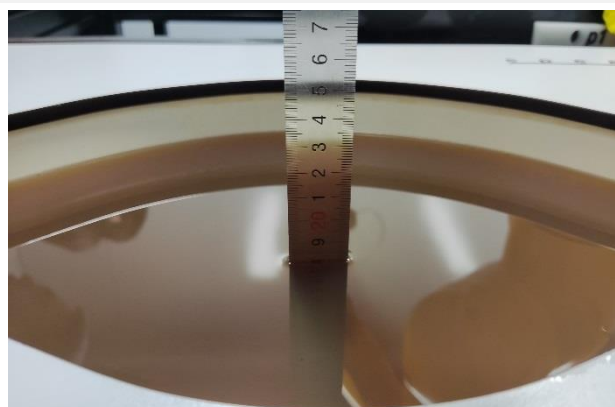
4.2.7 Simulating Liquid

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

Head Liquid Depth



Body Liquid Depth



The following table gives the recipes for tissue simulating liquid.

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

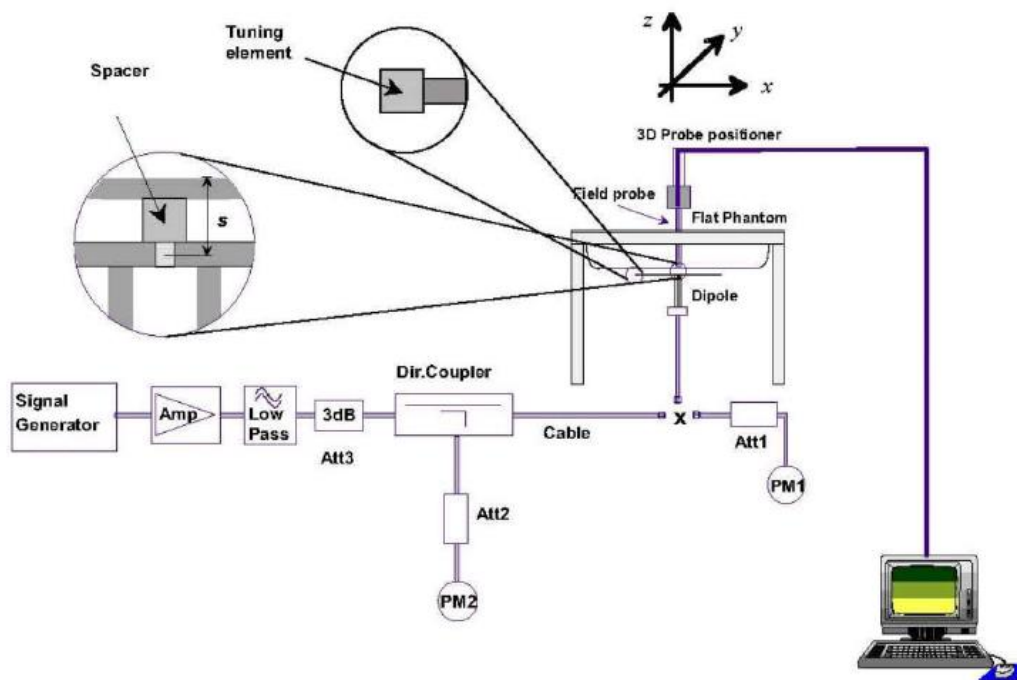
5 SYSTEM VERIFICATION

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

6.1 Front-of-face device

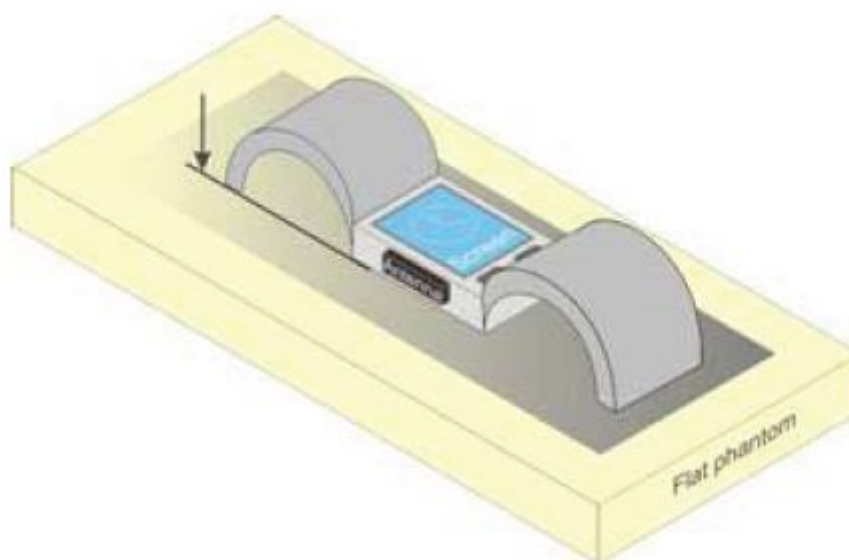
In these cases the device under test shall be positioned at the distance to the phantom surface that corresponds to the intended use as specified by the manufacturer in the user instructions. If the intended use is not specified, a separation distance of 25 mm between the phantom surface and the device shall be used.

This distance corresponds to the 95 % percentile of the nose protrusion distance obtained in the anthropomorphic survey of Gordon et al.

6.2 Limb-worn device

A limb-worn device is a unit whose intended use includes being strapped to the arm or leg of the user while transmitting (except in idle mode). It is similar to a body-worn device. Therefore, the test positions of 6.1.4.4 also apply. The strap shall be opened so that it is divided into two parts as shown in Figure 10. The device shall be positioned directly against the phantom surface with the strap straightened as much as possible and the back of the device towards the phantom.

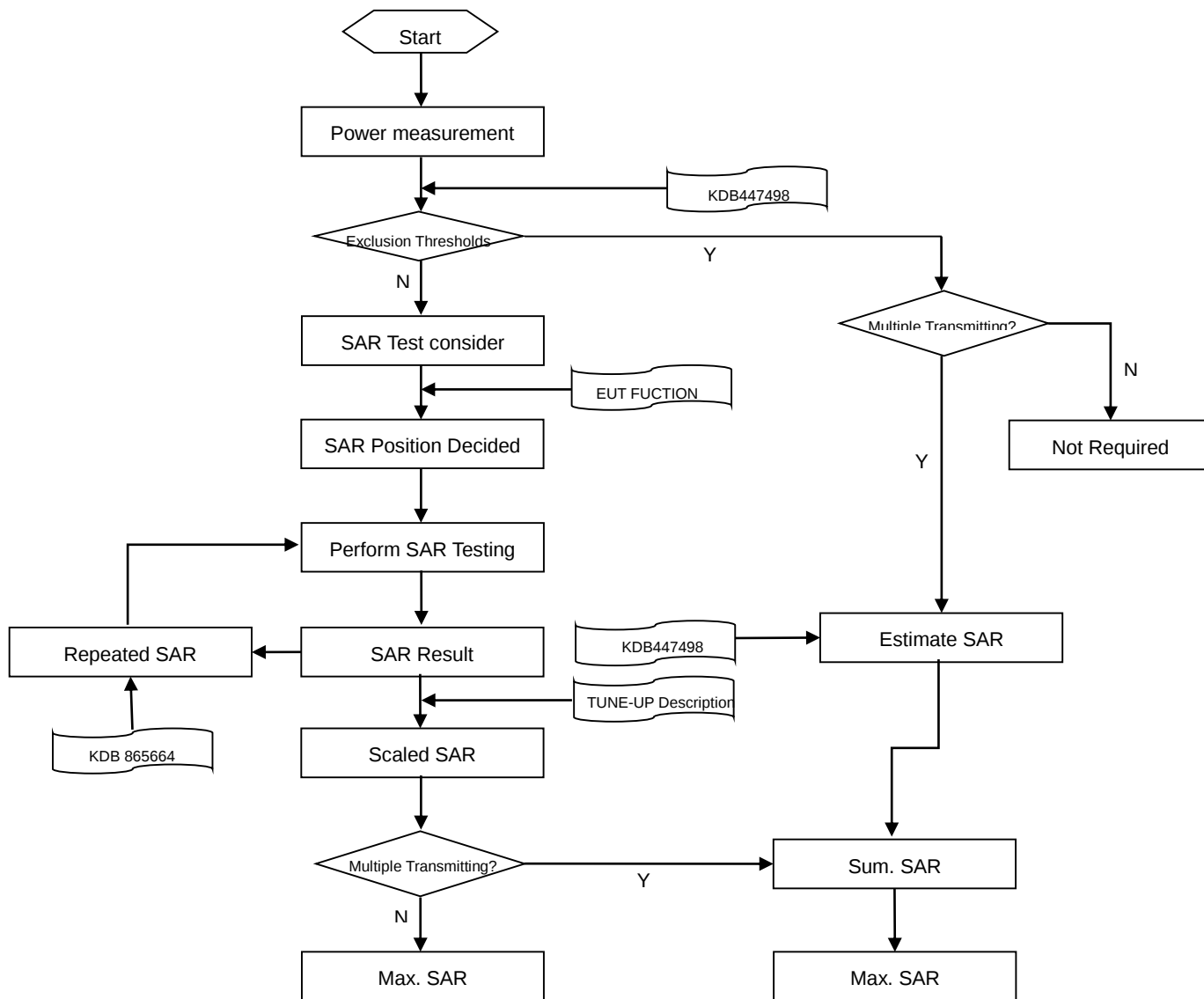
If the strap cannot normally be opened to allow placing in direct contact with the phantom surface, it may be necessary to break the strap of the device but ensuring to not damage the antenna.



Test position for limb-worn devices

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 GSM

Please refer the document “BL-SZ2480878-AP.pdf”.

8.2 LTE

Please refer the document “BL-SZ2480878-AP.pdf”.

9 TEST RESULT

9.1 GSM 850

9.1.1 GSM 850 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face											
GPRS 2Slots	Front Side	10	251	848.8	-0.12	0.371	33.47	34.00	1.130	0.419	1#
		10	128	824.2	0.07	0.310	33.31	34.00	1.172	0.363	/
		10	190	836.6	0.07	0.348	33.36	34.00	1.159	0.403	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.											

9.1.2 GSM 850 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity											
GPRS 2Slots	Back Side	0	251	848.8	0.01	0.453	33.47	34.00	1.130	0.512	/
		0	128	824.2	0.03	0.509	33.31	34.00	1.172	0.597	2#
		0	190	836.6	0.02	0.477	33.36	34.00	1.159	0.553	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.											

9.2 GSM 1900

9.2.1 GSM 1900 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face											
GPRS 3Slots	Front Side	10	512	1850.2	0.05	0.462	27.13	28.50	1.371	0.633	3#
		10	661	1880	0.02	0.448	27.34	28.50	1.306	0.585	/
		10	810	1909.8	0.01	0.422	27.56	28.50	1.242	0.524	/

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

9.2.2 GSM 1900 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity											
GPRS 3Slots	Back Side	0	512	1850.2	-0.01	0.373	26.75	28.50	1.496	0.558	4#
		0	661	1880	0.03	0.342	26.72	28.50	1.507	0.515	/
		0	810	1909.8	-0.12	0.274	26.50	28.50	1.585	0.434	/

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

9.3 LTE Band 2 (20MHz Bandwidth)

9.3.1 LTE Band 2 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face													
QPSK	Front Side	10	18700	1860	1	Low	0.06	0.774	23.31	24.50	1.315	1.018	/
		10	18900	1880	1	High	0.07	0.685	22.82	24.50	1.472	1.008	/
		10	19100	1900	1	Low	0.09	0.750	23.09	24.50	1.384	1.038	5#
		10	19100	1900	50	Low	-0.13	0.685	22.40	23.50	1.288	0.882	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.3.2 LTE Band 2 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity													
QPSK	Back Side	0	18700	1860	1	Low	0.09	0.950	23.31	24.50	1.315	1.249	6#
		0	18900	1880	1	High	0.09	0.795	22.82	24.50	1.472	1.170	/
		0	19100	1900	1	Low	0.17	0.797	23.09	24.50	1.384	1.103	/
		0	19100	1900	50	Low	-0.08	0.701	22.40	23.50	1.288	0.903	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.4 LTE Band 4 (20MHz Bandwidth)

9.4.1 LTE Band 4 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face													
QPSK	Front Side	10	20175	1732.5	1	Mid	-0.05	0.806	23.99	24.50	1.125	0.907	7#
		10	20050	1720	1	High	-0.11	0.754	23.97	24.50	1.130	0.852	/
		10	20300	1745	1	High	0.11	0.681	23.98	24.50	1.127	0.767	/
		10	20300	1745	50	Mid	-0.01	0.486	22.86	23.50	1.159	0.563	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.4.2 LTE Band 4 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity													
QPSK	Back Side	0	20175	1732.5	1	Mid	0.09	0.734	23.99	24.50	1.125	0.826	/
		0	20050	1720	1	High	0.04	0.791	23.97	24.50	1.130	0.894	8#
		0	20300	1745	1	High	-0.07	0.635	23.98	24.50	1.127	0.716	/
		0	20300	1745	50	Mid	0.09	0.477	22.86	23.50	1.159	0.553	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.5 LTE Band 5 (10MHz Bandwidth)

9.5.1 LTE Band 5 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face													
QPSK	Front Side	10	20450	829	1	High	-0.10	0.123	23.60	25.00	1.380	0.170	/
		10	20525	836.5	1	Mid	0.04	0.125	23.58	25.00	1.387	0.173	9#
		10	20600	844	1	Low	0.08	0.111	23.56	25.00	1.393	0.155	/
		10	20600	844	25	Mid	-0.13	0.099	22.33	24.00	1.469	0.145	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.5.2 LTE Band 5 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity													
QPSK	Back Side	0	20450	829	1	High	0.06	0.203	23.60	25.00	1.380	0.280	10#
		0	20525	836.5	1	Mid	-0.08	0.187	23.58	25.00	1.387	0.259	/
		0	20600	844	1	Low	0.01	0.153	23.56	25.00	1.393	0.213	/
		0	20600	844	25	Mid	-0.10	0.126	22.33	24.00	1.469	0.185	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.6 LTE Band 7 (20MHz Bandwidth)

9.6.1 LTE Band 7 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face													
QPSK	Front Side	10	21350	2560	1	Low	-0.11	0.213	23.34	24.50	1.306	0.278	/
		10	20850	2510	1	Low	-0.05	0.334	23.33	24.50	1.309	0.437	/
		10	21100	2535	1	High	-0.01	0.366	23.07	24.50	1.390	0.509	11#
		10	21350	2560	50	Low	0.00	0.289	22.07	23.50	1.390	0.402	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.6.2 LTE Band 7 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity													
QPSK	Back Side	0	21350	2560	1	Low	0.15	0.463	23.34	24.50	1.306	0.605	/
		0	20850	2510	1	Low	0.12	0.709	23.33	24.50	1.309	0.928	/
		0	21100	2535	1	High	0.07	0.756	23.07	24.50	1.390	1.051	12#
		0	21350	2560	50	Low	0.06	0.575	22.07	23.50	1.390	0.799	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.7 LTE Band 12 (10MHz Bandwidth)

9.7.1 LTE Band 12 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face													
QPSK	Front Side	10	23130	711	1	Low	0.01	0.035	23.57	25.00	1.390	0.049	13#
		10	23060	704	1	Low	-0.13	0.021	23.46	25.00	1.426	0.030	/
		10	23095	707.5	1	Low	0.06	0.022	23.48	25.00	1.419	0.031	/
		10	23060	704	25	Mid	-0.02	0.024	22.36	24.00	1.459	0.035	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.7.2 LTE Band 12 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity													
QPSK	Back Side	0	23130	711	1	Low	-0.03	0.059	23.57	25.00	1.390	0.082	14#
		0	23060	704	1	Low	0.13	0.038	23.46	25.00	1.426	0.054	/
		0	23095	707.5	1	Low	0.12	0.032	23.48	25.00	1.419	0.045	/
		0	23060	704	25	Mid	-0.09	0.035	22.36	24.00	1.459	0.051	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.8 LTE Band 66 (20MHz Bandwidth)

9.8.1 LTE Band 66 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face													
QPSK	Front Side	10	132572	1770	1	Mid	0.04	0.453	24.00	24.50	1.122	0.508	/
		10	132072	1720	1	Mid	0.02	0.533	23.83	24.50	1.167	0.622	15#
		10	132322	1745	1	High	0.01	0.468	23.93	24.50	1.140	0.534	/
		10	132322	1745	50	Mid	-0.07	0.335	22.71	24.50	1.510	0.506	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.8.2 LTE Band 66 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity													
QPSK	Back Side	0	132572	1770	1	Mid	0.04	0.592	24.00	24.50	1.122	0.664	/
		0	132072	1720	1	Mid	0.07	0.627	23.83	24.50	1.167	0.732	16#
		0	132322	1745	1	High	-0.15	0.533	23.93	24.50	1.140	0.608	/
		0	132322	1745	50	Mid	-0.02	0.40	22.710	24.50	1.510	0.604	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.9 LTE Band 38 (20MHz Bandwidth)

9.9.1 LTE Band 38 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face													
QPSK	Front Side	10	38150	2610	1	Mid	-0.08	0.443	24.10	24.50	1.096	0.486	/
		10	37850	2580	1	Mid	0.12	0.487	23.96	24.50	1.132	0.551	17#
		10	38000	2595	1	Mid	-0.11	0.453	23.94	24.50	1.138	0.516	/
		10	38150	2610	50	Mid	0.09	0.352	22.82	24.50	1.472	0.518	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.9.2 LTE Band 38 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity													
QPSK	Back Side	0	38150	2610	1	Mid	0.15	0.398	24.10	24.50	1.096	0.436	/
		0	37850	2580	1	Mid	-0.08	0.457	23.96	24.50	1.132	0.517	18#
		0	38000	2595	1	Mid	0.07	0.419	23.94	24.50	1.138	0.477	/
		0	38150	2610	50	Mid	-0.06	0.329	22.82	24.50	1.472	0.484	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.10LTE Band 41 (20MHz Bandwidth)

9.10.1 LTE Band 41 Front of Face SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Front of Face													
QPSK	Front Side	10	41140	2645	1	Mid	-0.09	0.438	24.06	24.50	1.107	0.485	/
		10	40140	2545	1	Mid	-0.04	0.608	23.78	24.50	1.180	0.717	19#
		10	40640	2595	1	Mid	-0.12	0.532	23.95	24.50	1.135	0.604	/
		10	41140	2645	50	Mid	0.09	0.340	22.84	24.50	1.466	0.498	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

9.10.2 LTE Band 41 Extremity SAR

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity													
QPSK	Back Side	0	41140	2645	1	Mid	0.17	0.397	24.06	24.50	1.107	0.439	/
		0	40140	2545	1	Mid	-0.05	0.627	23.78	24.50	1.180	0.740	20#
		0	40640	2595	1	Mid	0.03	0.526	23.95	24.50	1.135	0.597	/
		0	41140	2645	50	Mid	0.07	0.310	22.84	24.50	1.466	0.454	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated ^{1st} Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1732.5	LTE band 4	Front of Face	Front Side	0.806	Yes	0.775	1.04
Note 1: The ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20, the second repeated measurement is not required. Note 2: For product specific 10g SAR, the highest measured 10g SAR is $0.95 < 2.00$ W/kg, repeated measurement is not required.							

11 SIMULTANEOUS TRANSMISSION

Note: The product has only one antenna for WWAN, so simultaneous transmission evaluation is not required in this report.

12 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: 1208	2024/08/19	2027/08/18
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2024/05/08	2027/05/07
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2024/05/08	2027/05/07
1950MHz Validation Dipole	Speag	D1950V3	SN: 1240	2024/08/22	2027/08/21
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2024/05/07	2027/05/06
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2024/05/08	2027/05/07
Data Acquisition Electronicsr	Speag	DAE4	SN: 1711	2024/03/18	2025/03/17
E-Field Probe	Speag	EX3DV4	SN: 7510	2024/06/25	2025/06/24
Power Meter	R&S	NRVD-B2	835843/014	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z4	100381	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z2	100211	2023/09/05	2024/09/04
Wireless Communication Test Set	Anritsu	MT8820C	6201502991	2023/11/14	2024/11/13
Network Analyzer	Agilent	E5071C	MY46103472	2023/11/14	2024/11/13
Thermometer	Elitech	RC-4	EF5238001628	2023/10/09	2024/10/08
Thermometer	Elitech	RC-4HC	EF7239002652	2023/11/17	2024/11/16
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Phantom	Speag	SAM	SN: 1576	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using 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 (%)
2024.08.30	Head	750	21.3	0.91	41.57	0.89	41.94	2.25	-0.88
2024.08.30	Head	835	21.3	0.90	41.26	0.90	41.50	0.00	-0.58
2024.08.31	Head	1750	21.5	1.39	39.97	1.37	40.08	1.46	-0.27
2024.08.31	Head	1950	21.5	1.43	38.68	1.40	40.00	2.14	-3.30
2024.09.01	Head	2600	21.6	2.00	38.25	1.96	39.01	2.04	-1.95

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 (%)
2024.08.30	Head	750	100	0.88	8.81	8.46	4.14
2024.08.30	Head	835	100	0.98	9.83	9.74	0.92
2024.08.31	Head	1750	100	3.85	38.50	37.00	4.05
2024.08.31	Head	1950	100	4.27	42.70	41.70	2.40
2024.09.01	Head	2600	100	5.74	57.40	55.90	2.68

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 (%)
2024.08.30	Head	750	100	0.571	5.71	5.70	0.18
2024.08.30	Head	835	100	0.645	6.45	6.43	0.31
2024.08.31	Head	1750	100	1.920	19.20	19.70	-2.54
2024.08.31	Head	1950	100	2.040	20.40	21.70	-5.99
2024.09.01	Head	2600	100	2.550	25.50	25.40	0.39

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

System Performance Check Data (750MHz)

Date: 2024.08.30

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

Medium parameters used (extrapolated): $f = 750$ MHz; $\sigma = 0.912$ S/m; $\epsilon_r = 41.568$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.29, 10.29, 10.29); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- 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) = 0.925 W/kg

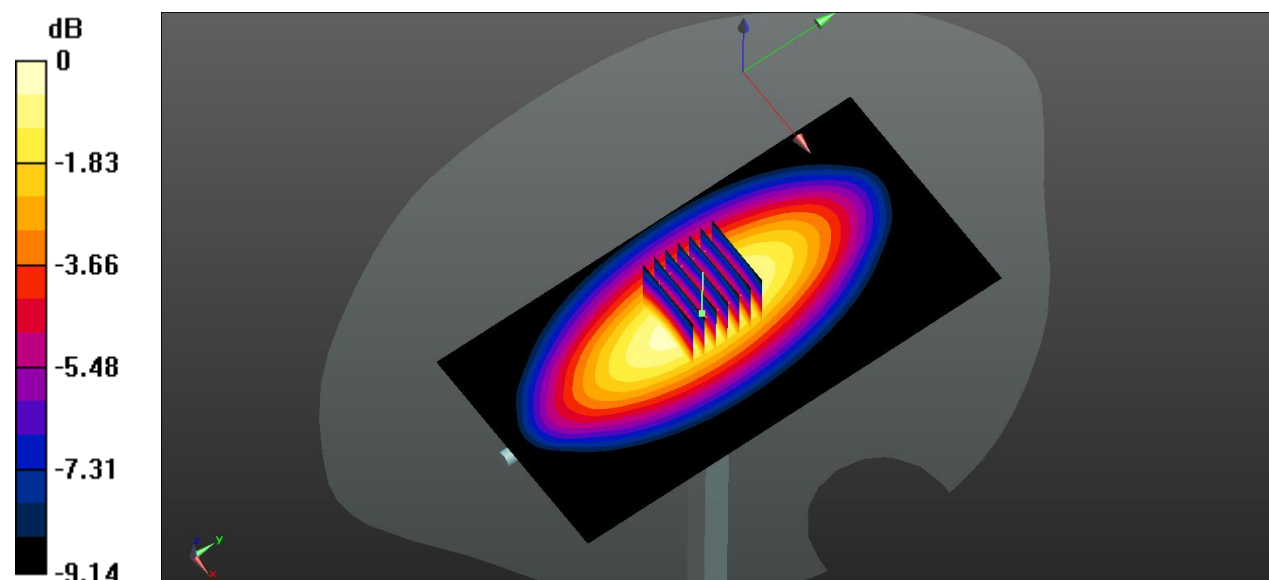
CW 750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 28.78 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.881 W/kg; SAR(10 g) = 0.571 W/kg

Maximum value of SAR (measured) = 0.934 W/kg



0 dB = 0.934 W/kg

System Performance Check Data (835MHz)

Date: 2024.08.30

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.898 \text{ S/m}$; $\epsilon_r = 41.263$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.99, 9.99, 9.99); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 835/Area Scan (61x81x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

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

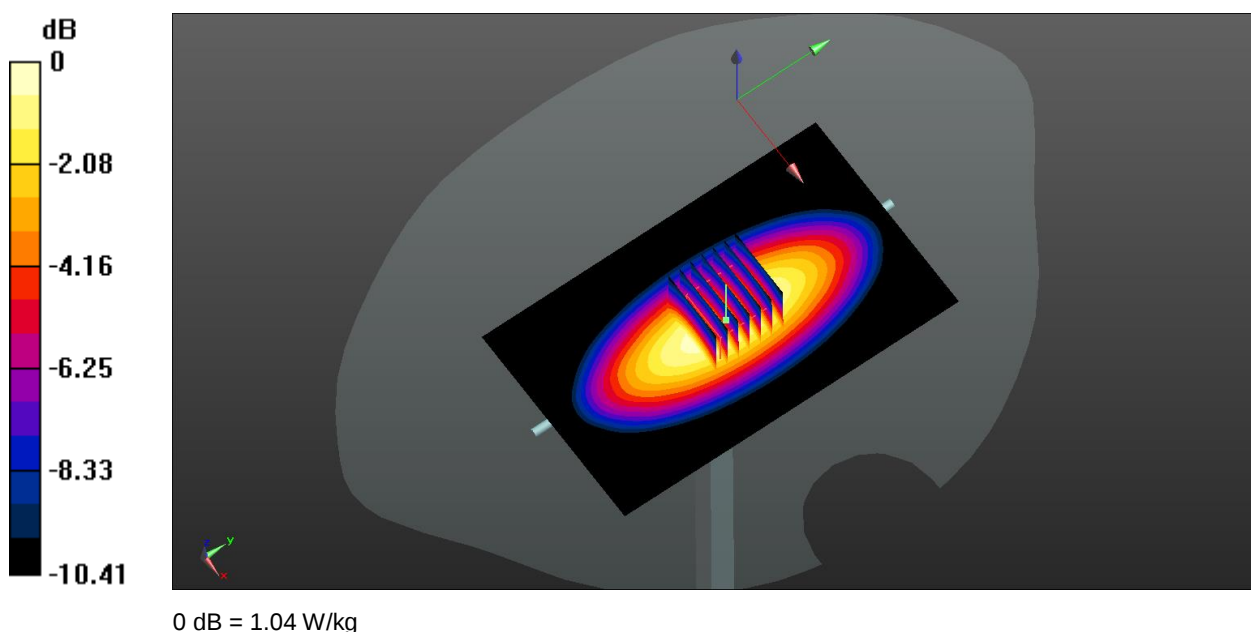
CW 835/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.51 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.983 W/kg; SAR(10 g) = 0.645 W/kg

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



System Performance Check Data (1750MHz)

Date: 2024.08.31

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

Medium parameters used (interpolated): $f = 1750$ MHz; $\sigma = 1.391$ S/m; $\epsilon_r = 39.968$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- 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) = 4.27 W/kg

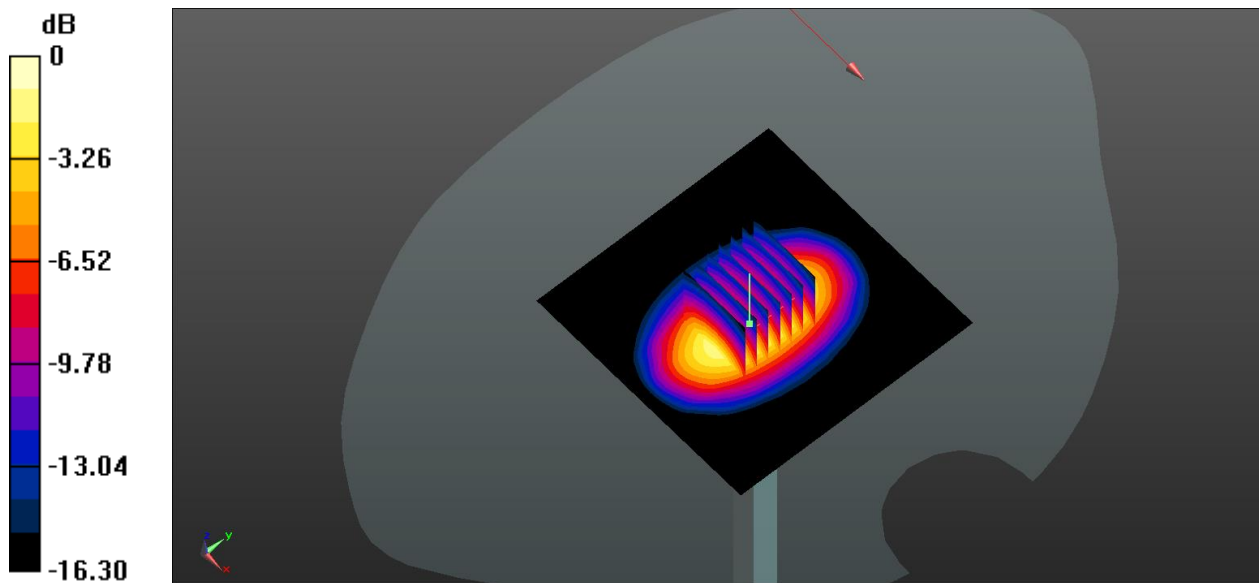
CW 1750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 54.28 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 6.96 W/kg

SAR(1 g) = 3.85 W/kg; SAR(10 g) = 1.92 W/kg

Maximum value of SAR (measured) = 4.27 W/kg



0 dB = 4.27 W/kg

System Performance Check Data (1950MHz)

Date: 2024.08.31

Communication System Band: D1950 (1950.0 MHz); Frequency: 1950 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1950$ MHz; $\sigma = 1.428$ S/m; $\epsilon_r = 38.684$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.33, 8.33, 8.33); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1950/Area Scan (101x101x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 462 W/kg

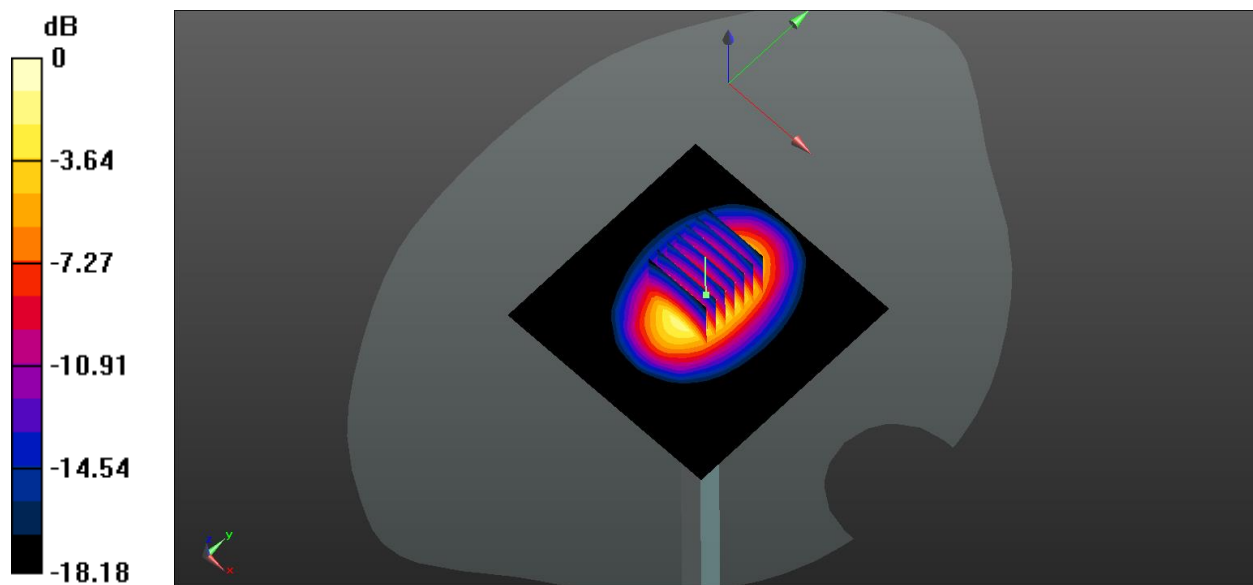
CW 1950/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 53.01 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 7.45 W/kg

SAR(1 g) = 4.27 W/kg; SAR(10 g) = 2.04 W/kg

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



0 dB = 4.42 W/kg

System Performance Check Data (2600MHz)

Date: 2024.09.01

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

Medium parameters used (interpolated): $f = 2600$ MHz; $\sigma = 1.999$ S/m; $\epsilon_r = 38.253$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.59, 7.59, 7.59); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

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

Maximum value of SAR (interpolated) = 6.51 W/kg

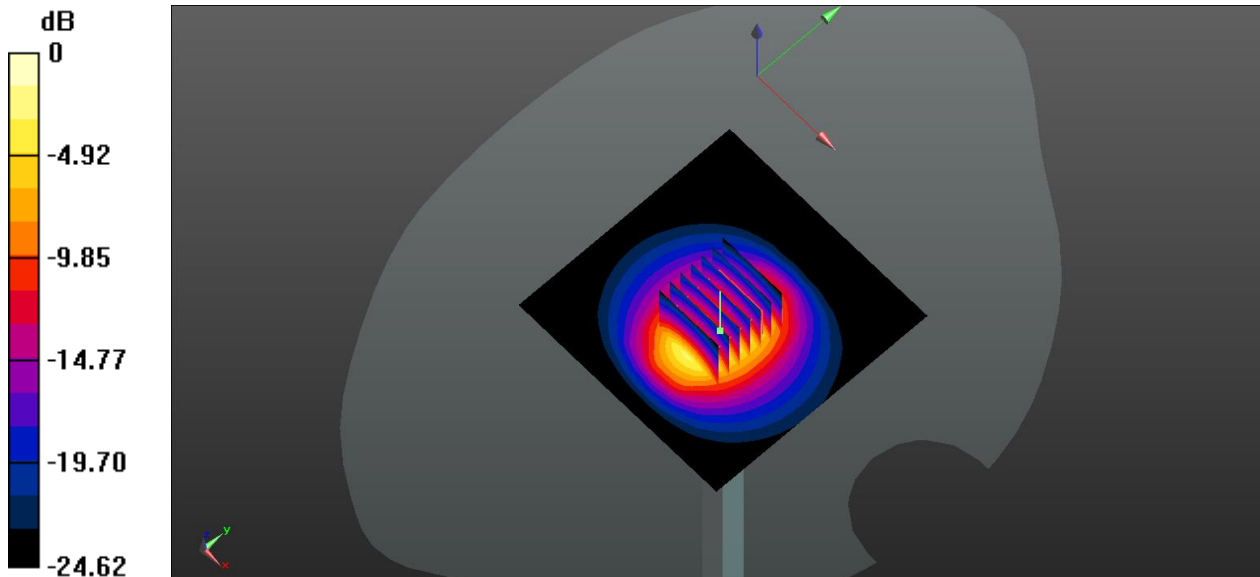
CW 2600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 45.72 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 12.4 W/kg

SAR(1 g) = 5.74 W/kg; SAR(10 g) = 2.55 W/kg

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



0 dB = 6.37 W/kg

ANNEX C TEST DATA

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

Date: 2024.08.30

Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.8 MHz; Duty Cycle: 1:4.1

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 40.097$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.99, 9.99, 9.99); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH251/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.403 W/kg

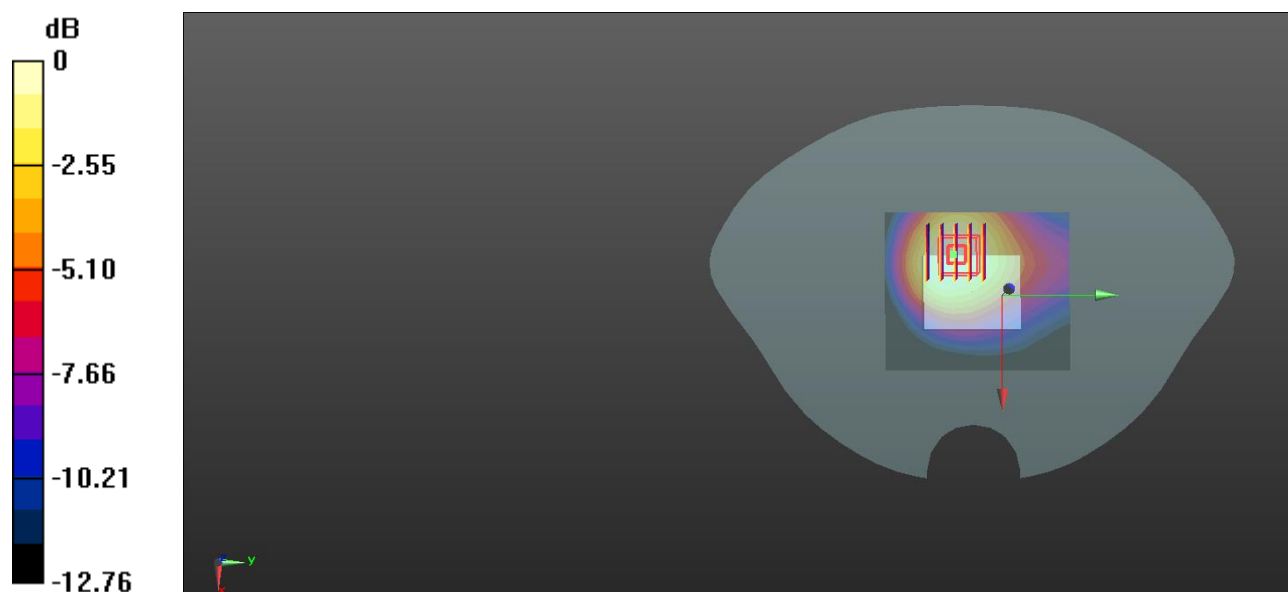
CH251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.17 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.534 W/kg

SAR(1 g) = 0.371 W/kg; SAR(10 g) = 0.249 W/kg

Maximum value of SAR (measured) = 0.398 W/kg



0 dB = 0.398 W/kg

Meas.2 Body Plane with Back Side 0mm on Low Channel in GPRS850 2Slots mode

Date: 2024.08.30

Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Duty Cycle: 1:4.1

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.887$ S/m; $\epsilon_r = 42.156$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.99, 9.99, 9.99); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH128/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.917 W/kg

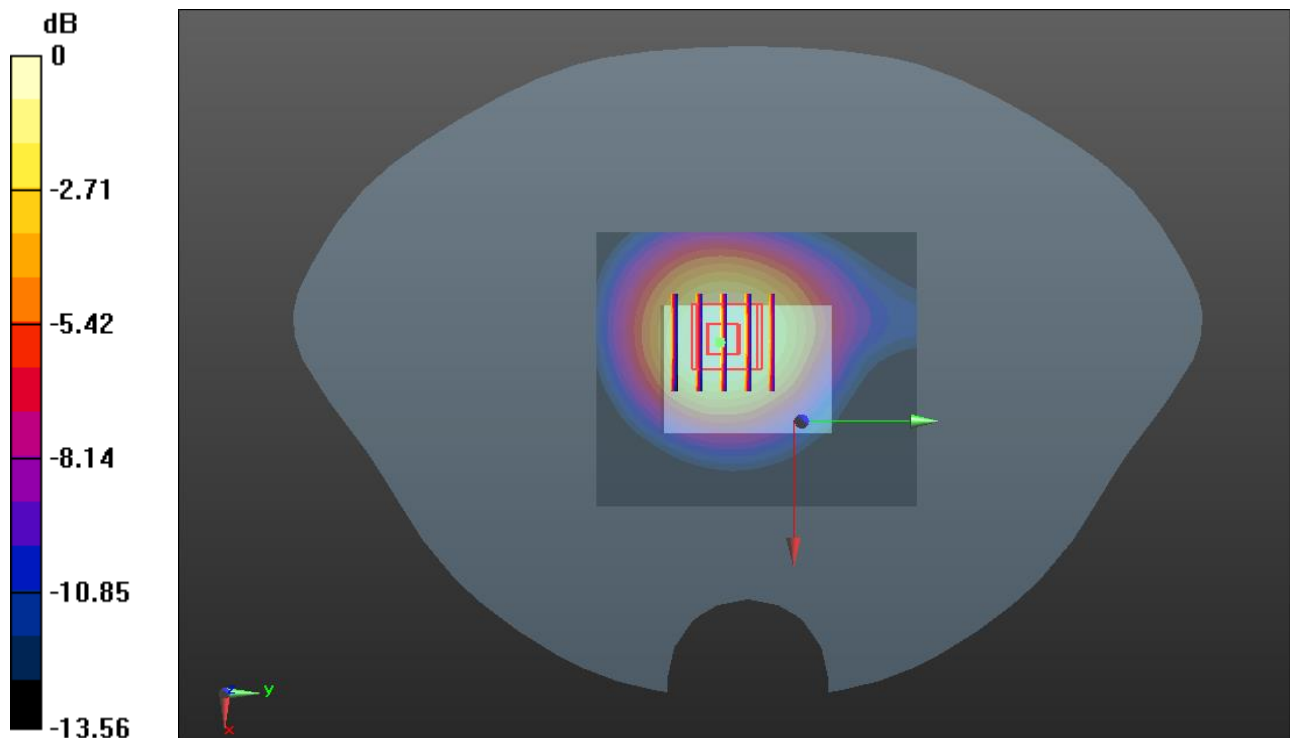
CH128/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.74 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.819 W/kg; SAR(10 g) = 0.509 W/kg

Maximum value of SAR (measured) = 0.889 W/kg



0 dB = 0.889 W/kg

Meas.3 Body Plane with Front Side 10mm on Low Channel in GPRS1900 3Slots mode

Date: 2024.08.31

Communication System Band: GSM1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2.77

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.356$ S/m; $\epsilon_r = 41.208$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.33, 8.33, 8.33); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH512/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.578 W/kg

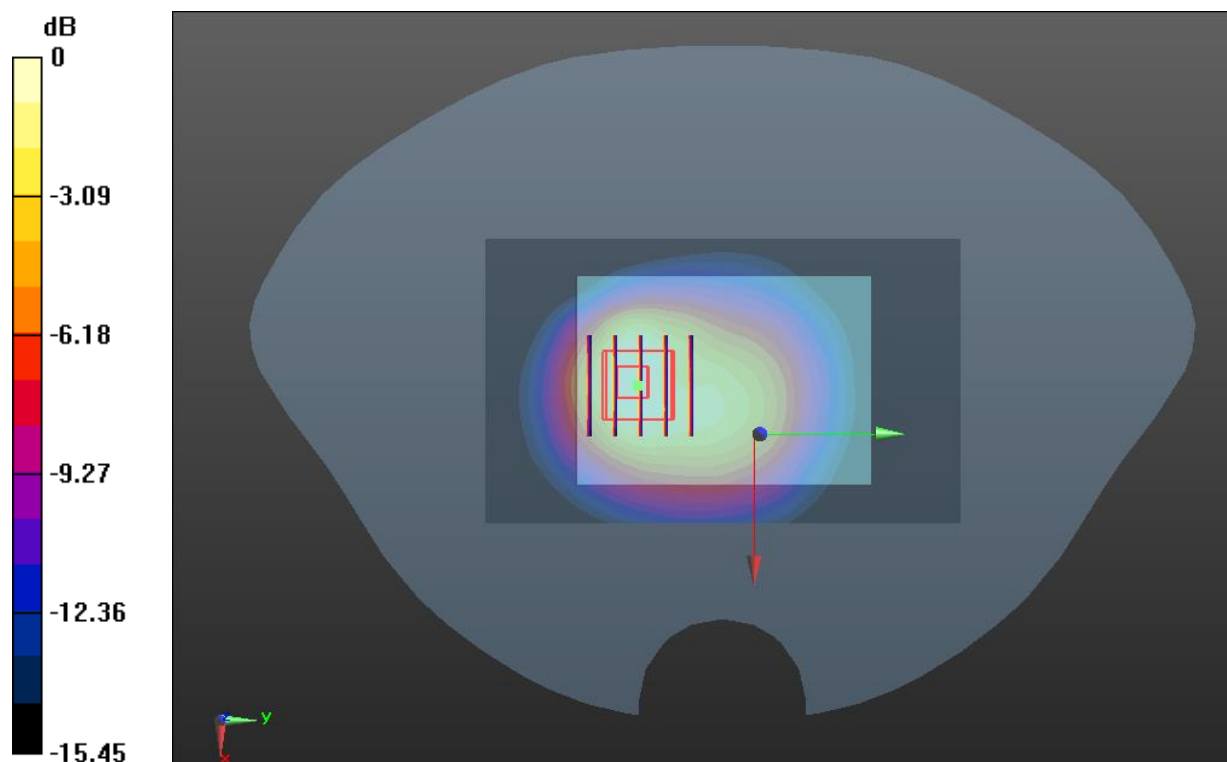
CH512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.89 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.782 W/kg

SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.260 W/kg

Maximum value of SAR (measured) = 0.507 W/kg



0 dB = 0.507 W/kg

Meas.4 Body Plane with Back Side 0mm on High Channel in GPRS1900 3Slots mode

Date: 2024.08.31

Communication System Band: GSM1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2.77

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.356$ S/m; $\epsilon_r = 41.208$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.33, 8.33, 8.33); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH512/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

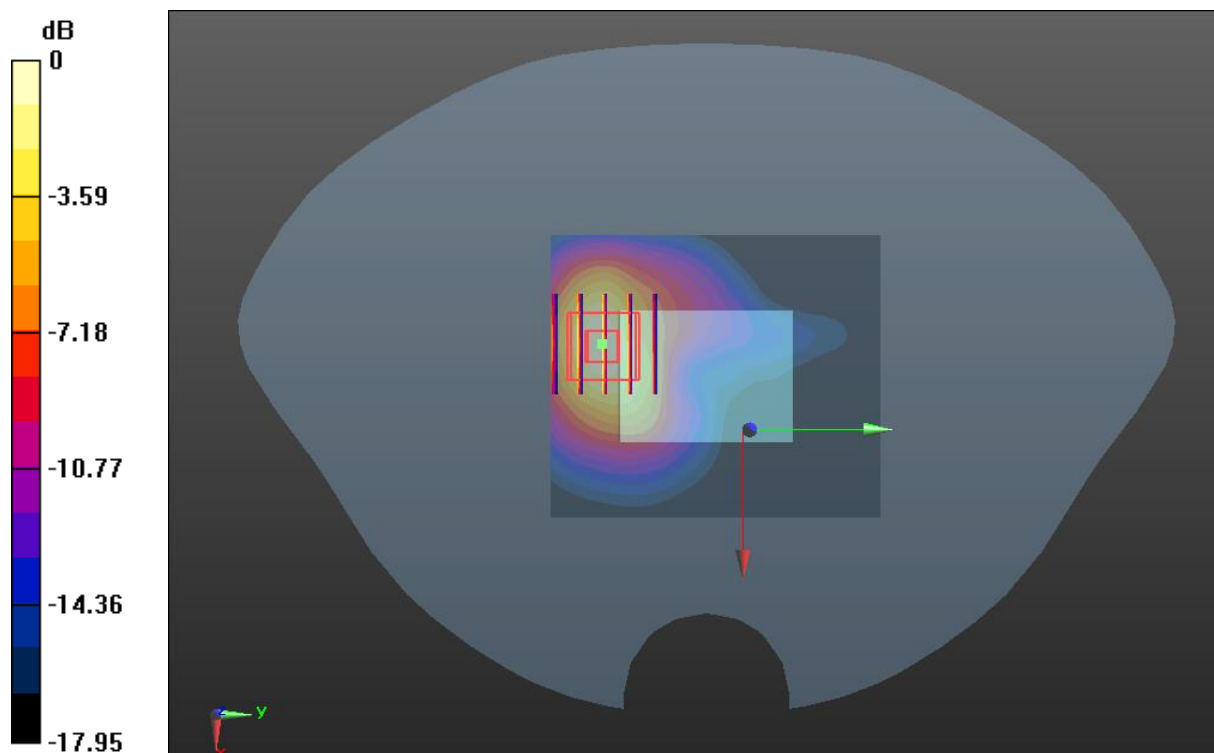
CH512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.631 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.732 W/kg; SAR(10 g) = 0.373 W/kg

Maximum value of SAR (measured) = 0.842 W/kg



0 dB = 0.842 W/kg

Meas.5 Body Plane with Front Side 10mm on High Channel in LTE Band2 mode

Date: 2024.08.31

Communication System Band: BAND 2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.378$ S/m; $\epsilon_r = 38.911$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.33, 8.33, 8.33); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH18700/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

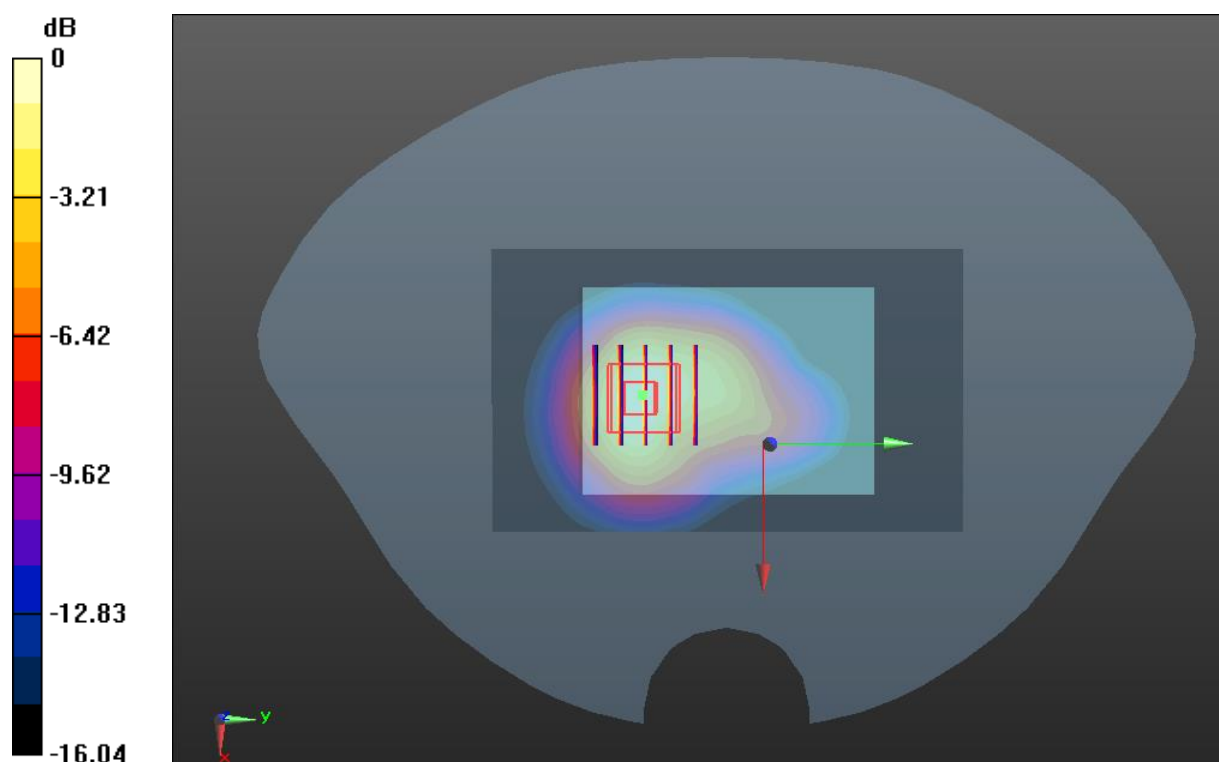
CH18700/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.42 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 0.75 W/kg; SAR(10 g) = 0.422 W/kg

Maximum value of SAR (measured) = 0.855 W/kg



0 dB = 0.855 W/kg

Meas.6 Body Plane with Back Side 0mm on Low Channel in LTE Band2 mode

Date: 2024.08.31

Communication System Band: BAND 2; Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1860$ MHz; $\sigma = 1.362$ S/m; $\epsilon_r = 40.764$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.33, 8.33, 8.33); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18700 2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.09 W/kg

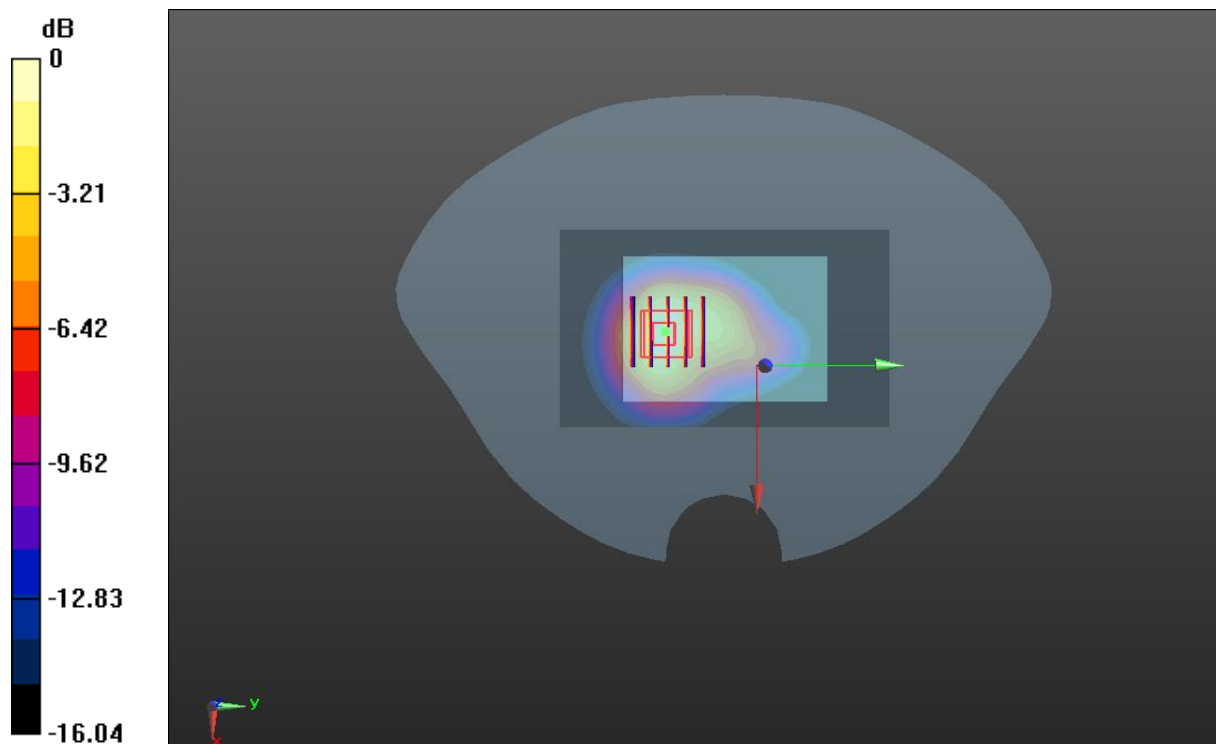
Configuration/CH18700 2/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.18 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 1.74 W/kg; SAR(10 g) = 0.950 W/kg

Maximum value of SAR (measured) = 1.95 W/kg



Meas.7 Body Plane with Front Side 10mm on Middle Channel in LTE Band4 mode

Date: 2024.08.31

Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 41.182$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH20175/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.947 W/kg

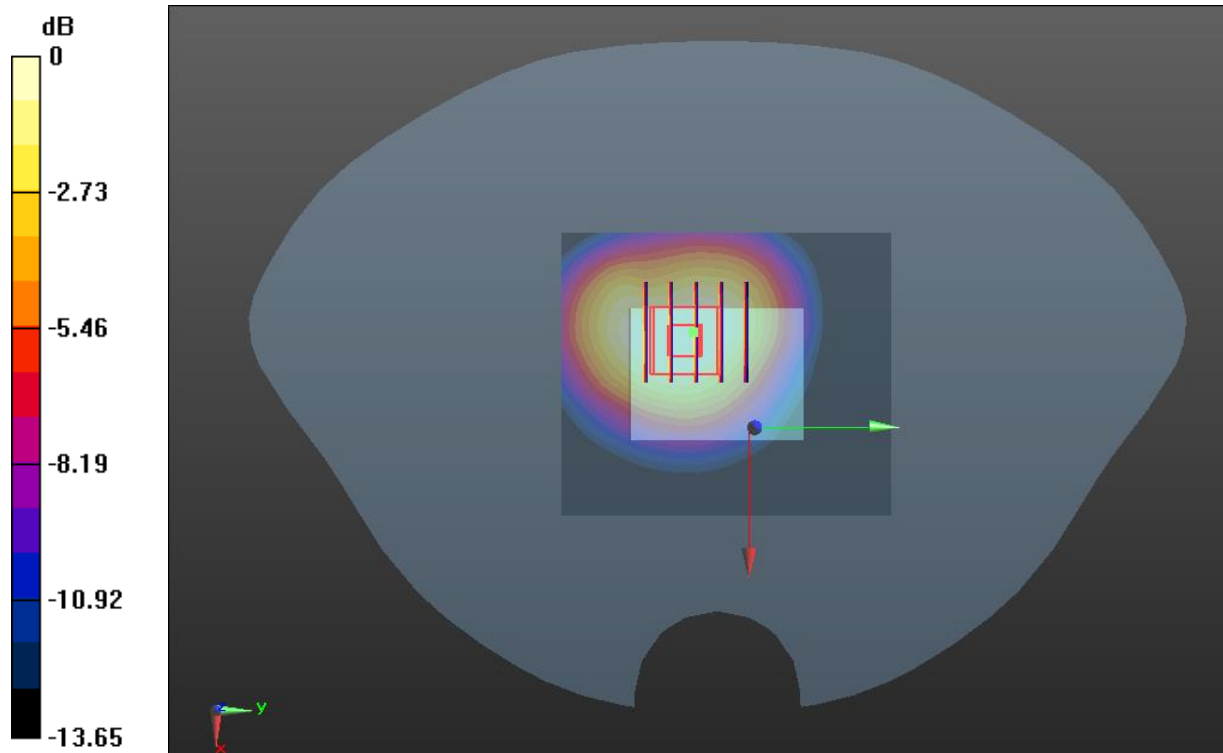
CH20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.00 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.806 W/kg; SAR(10 g) = 0.505 W/kg

Maximum value of SAR (measured) = 0.867 W/kg



0 dB = 0.867 W/kg

Meas.8 Body Plane with Back Side 0mm on Low Channel in LTE Band4 mode

Date: 2024.08.31

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

Medium parameters used (interpolated): $f = 1720$ MHz; $\sigma = 1.349$ S/m; $\epsilon_r = 41.238$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- 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) = 1.52 W/kg

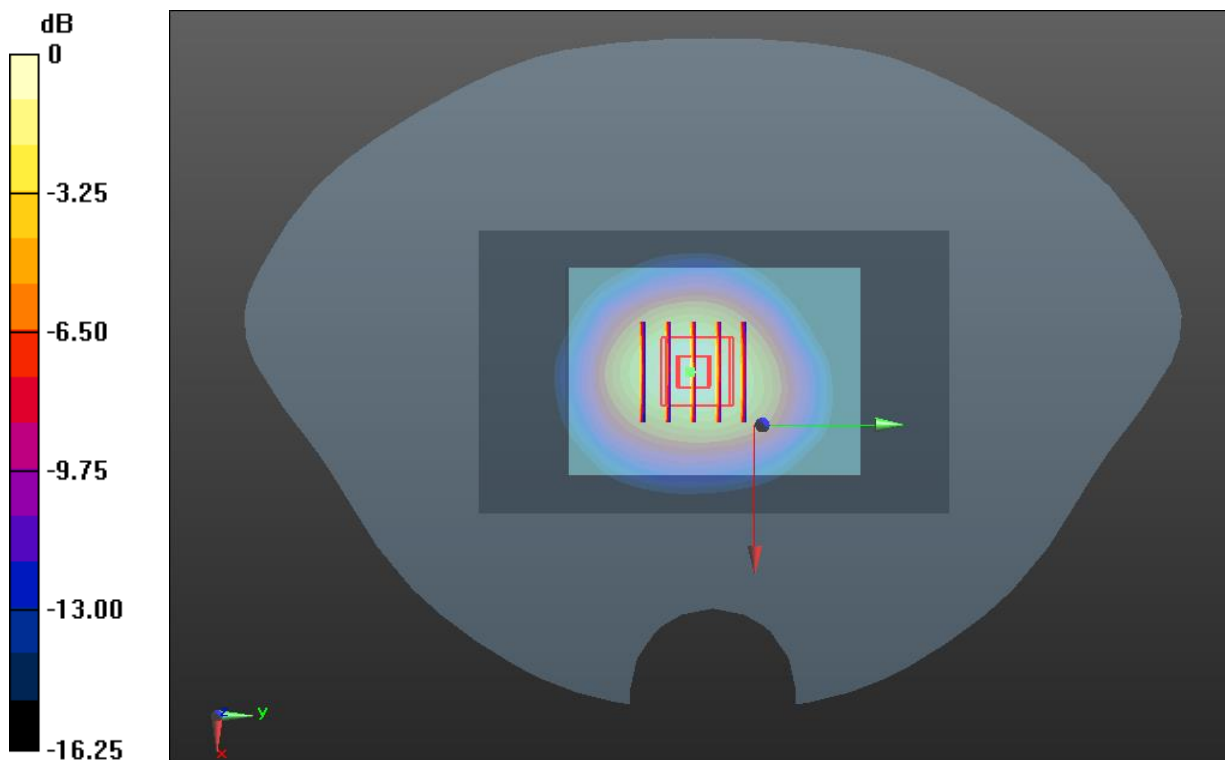
CH20050/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.67 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.11 W/kg

SAR(1 g) = 1.35 W/kg; SAR(10 g) = 0.791 W/kg

Maximum value of SAR (measured) = 1.48 W/kg



0 dB = 1.48 W/kg

Meas.9 Body Plane with Front Side 10mm on Middle Channel in LTE Band5 mode

Date: 2024.08.30

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

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.883$ S/m; $\epsilon_r = 42.969$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.99, 9.99, 9.99); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH20450/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.135 W/kg

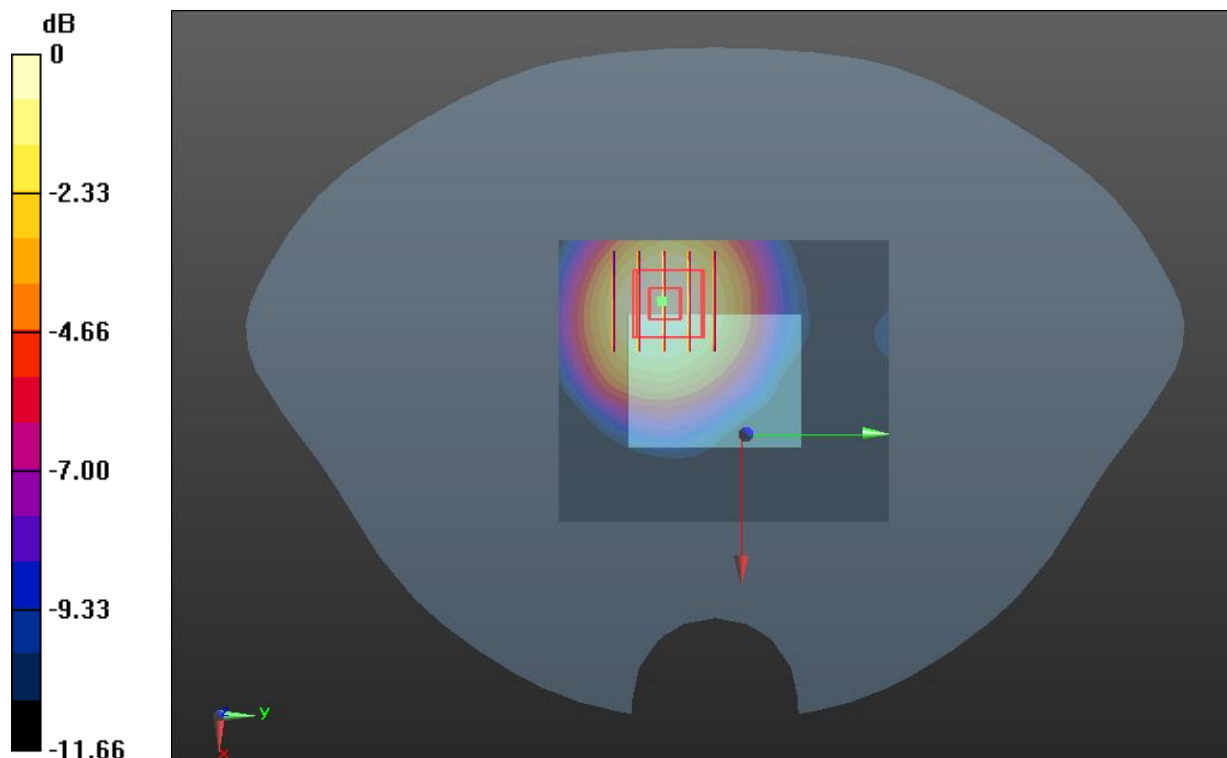
CH20450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.119 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.178 W/kg

SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.084 W/kg

Maximum value of SAR (measured) = 0.135 W/kg



0 dB = 0.135 W/kg

Meas.10 Body Plane with Back Side 0mm on Low Channel in LTE Band5 mode

Date: 2024.08.30

Communication System Band: BAND 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 829 \text{ MHz}$; $\sigma = 0.89 \text{ S/m}$; $\epsilon_r = 41.586$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(9.99, 9.99, 9.99); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH20450/Area Scan (61x101x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.345 W/kg

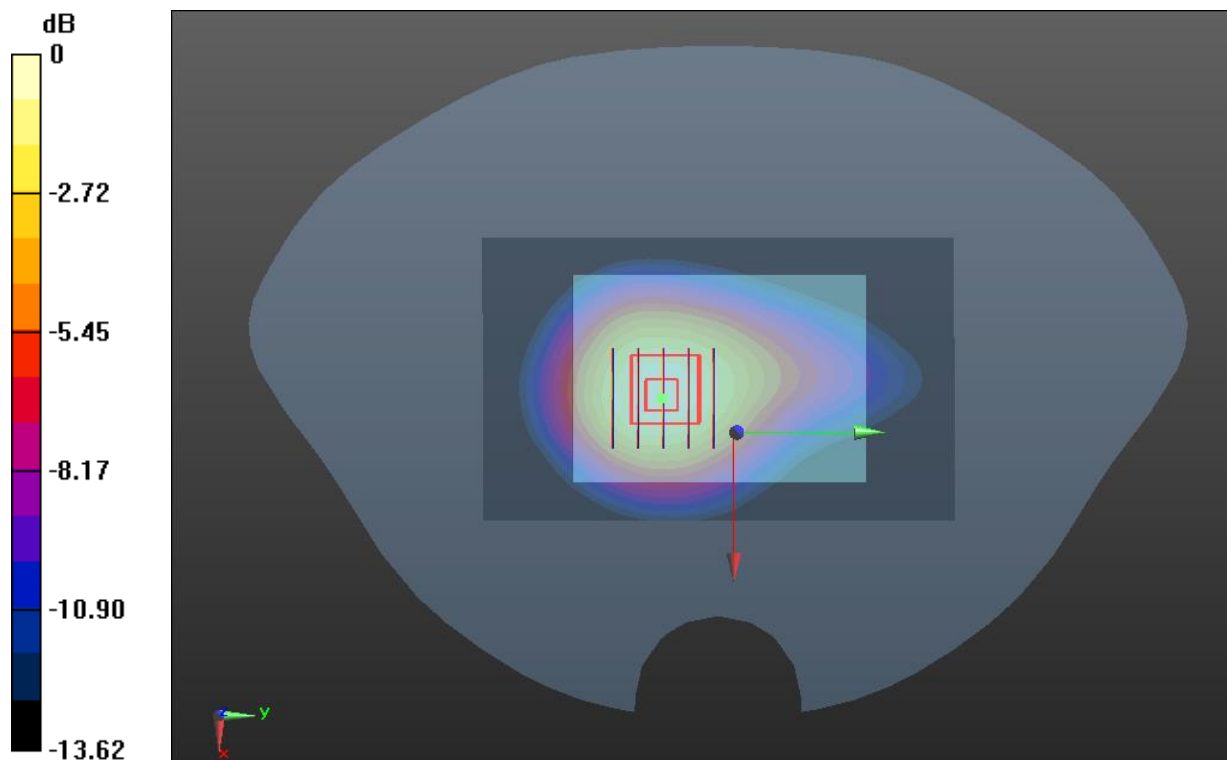
CH20450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.85 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.524 W/kg

SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.356 W/kg



0 dB = 0.356 W/kg

Meas.11 Body Plane with Front Side 10mm on Middle Channel in LTE Band7 mode

Date: 2024.09.01

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2535$ MHz; $\sigma = 1.881$ S/m; $\epsilon_r = 40.199$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH21100/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.844 W/kg

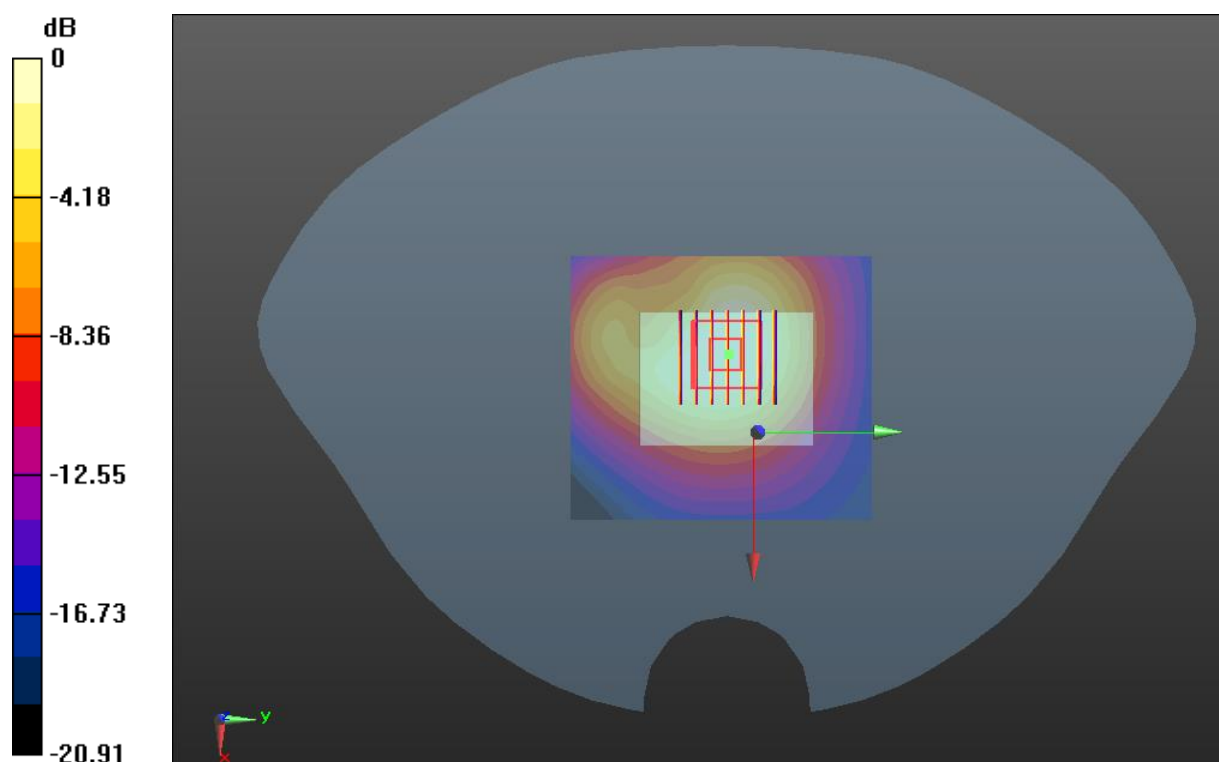
CH21100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.19 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.662 W/kg; SAR(10 g) = 0.366 W/kg

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



0 dB = 0.731 W/kg

Meas.12 Body Plane with Back Side 0mm on Middle Channel in LTE Band7 mode

Date: 2024.09.01

Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2535$ MHz; $\sigma = 1.881$ S/m; $\epsilon_r = 40.199$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH21100/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.75 W/kg

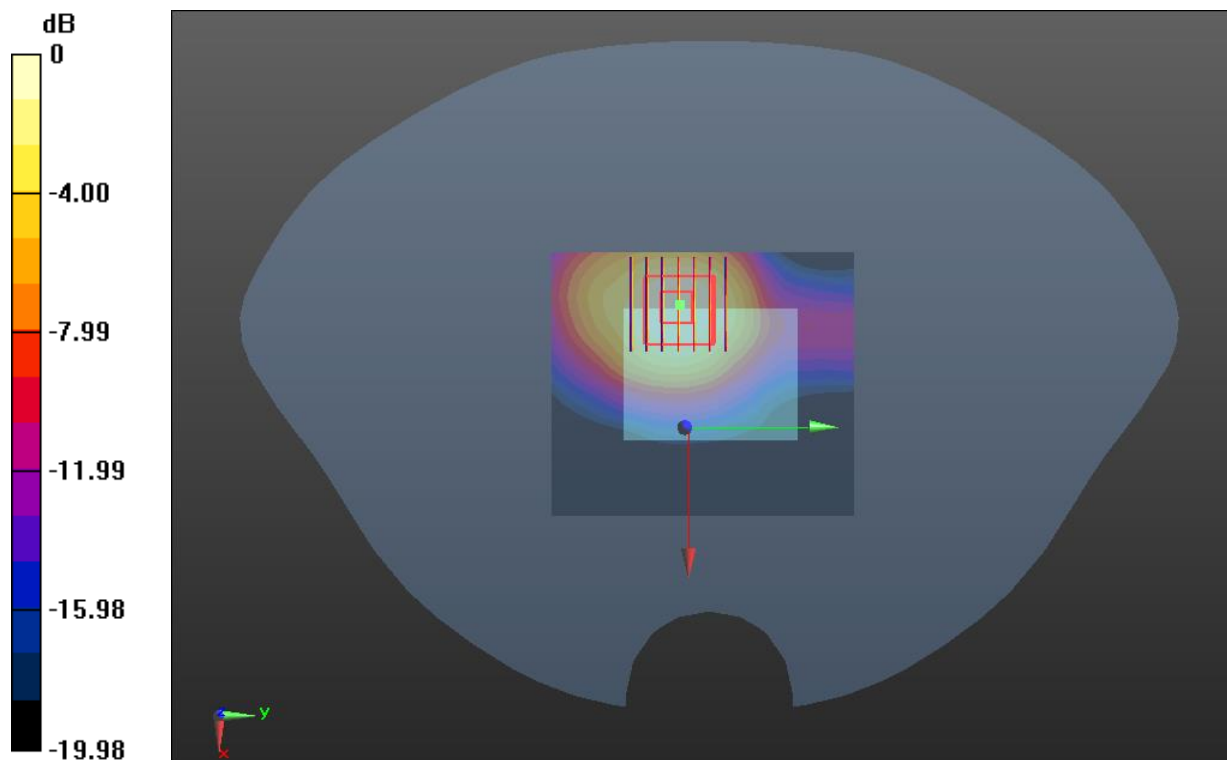
CH21100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.03 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.39 W/kg

SAR(1 g) = 1.42 W/kg; SAR(10 g) = 0.756 W/kg

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



0 dB = 1.58 W/kg

Meas.13 Body Plane with Front Side 10mm on High Channel in LTE Band12 mode

Date: 2024.08.30

Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.894$ S/m; $\epsilon_r = 42.989$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.29, 10.29, 10.29); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH23130/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0388 W/kg

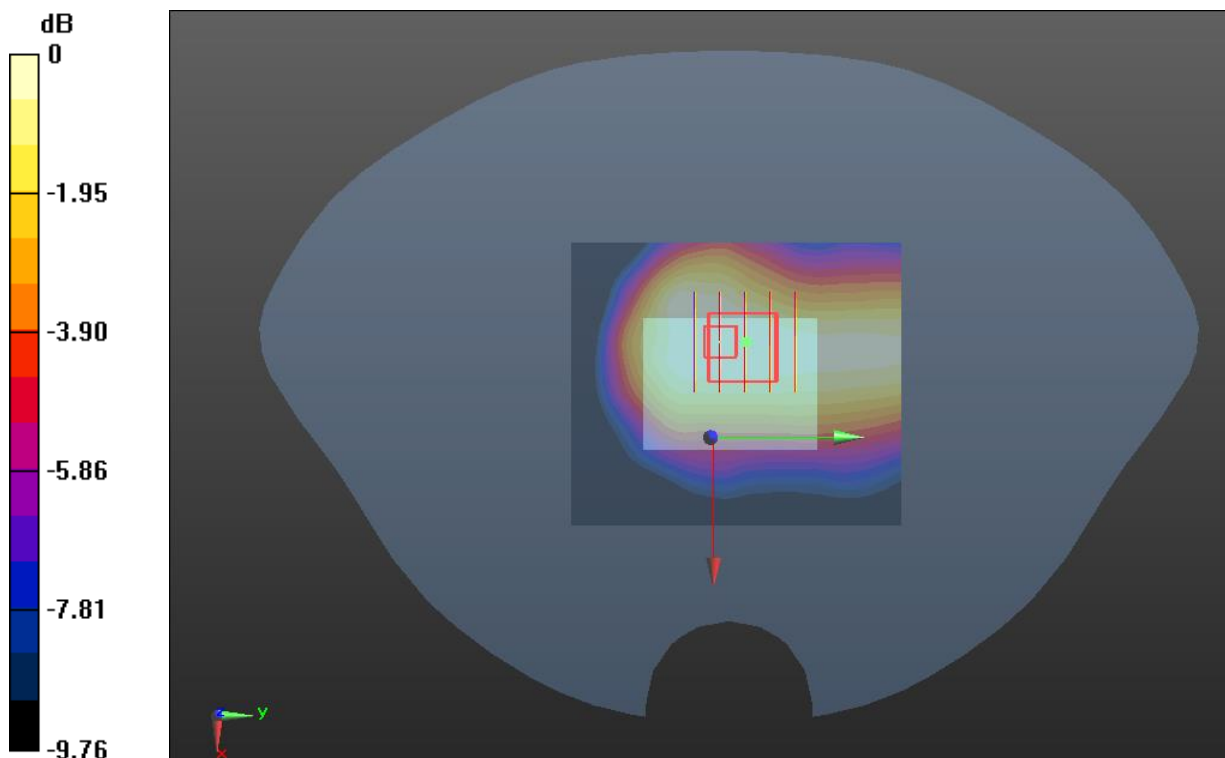
CH23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.161 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.0470 W/kg

SAR(1 g) = 0.035 W/kg; SAR(10 g) = 0.026 W/kg

Maximum value of SAR (measured) = 0.0379 W/kg



0 dB = 0.0379 W/kg

Meas.14 Body Plane with Back Side 0mm on High Channel in LTE Band12 mode

Date: 2024.08.30

Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.894$ S/m; $\epsilon_r = 42.989$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(10.29, 10.29, 10.29); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH23130/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

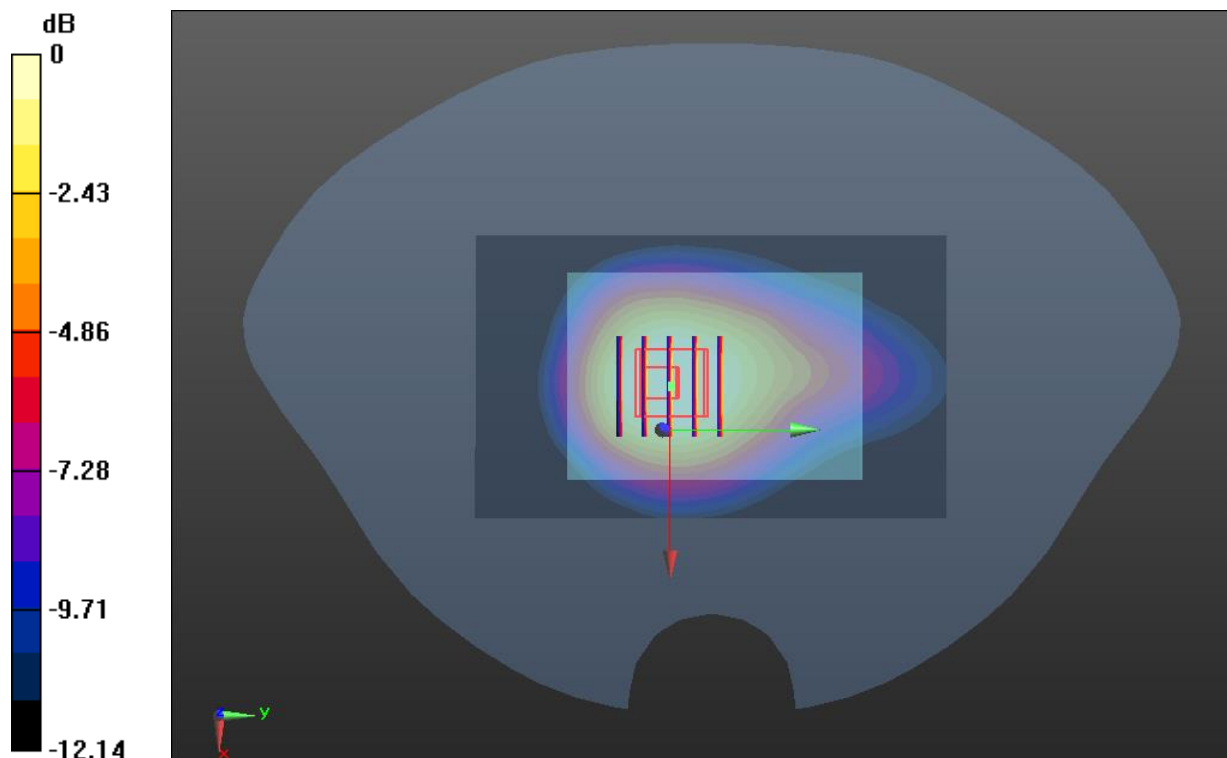
CH23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.00 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.149 W/kg

SAR(1 g) = 0.093 W/kg; SAR(10 g) = 0.059 W/kg

Maximum value of SAR (measured) = 0.0980 W/kg



0 dB = 0.0980 W/kg

Meas.15 Body Plane with Front Side 10mm on Low Channel in LTE Band66 mode

Date: 2024.08.31

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1780.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1720$ MHz; $\sigma = 1.349$ S/m; $\epsilon_r = 41.238$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH132072/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

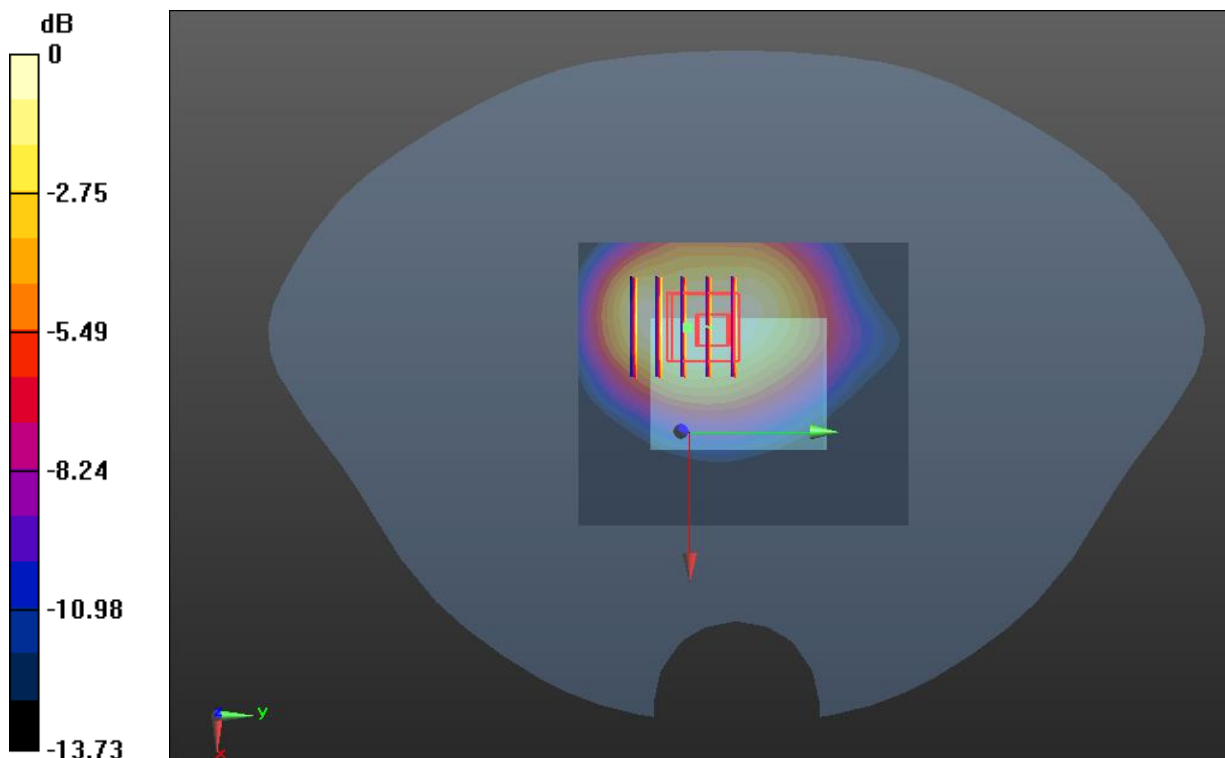
CH132072/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.02 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.822 W/kg

SAR(1 g) = 0.533 W/kg; SAR(10 g) = 0.336 W/kg

Maximum value of SAR (measured) = 0.583 W/kg



0 dB = 0.583 W/kg

Meas.16 Body Plane with Back Side 0mm on Low Channel in LTE Band66 mode

Date: 2024.08.31

Communication System Band: Band 66, E-UTRA/FDD (1710.0 - 1780.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1720$ MHz; $\sigma = 1.349$ S/m; $\epsilon_r = 41.238$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(8.67, 8.67, 8.67); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH132072/Area Scan (61x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

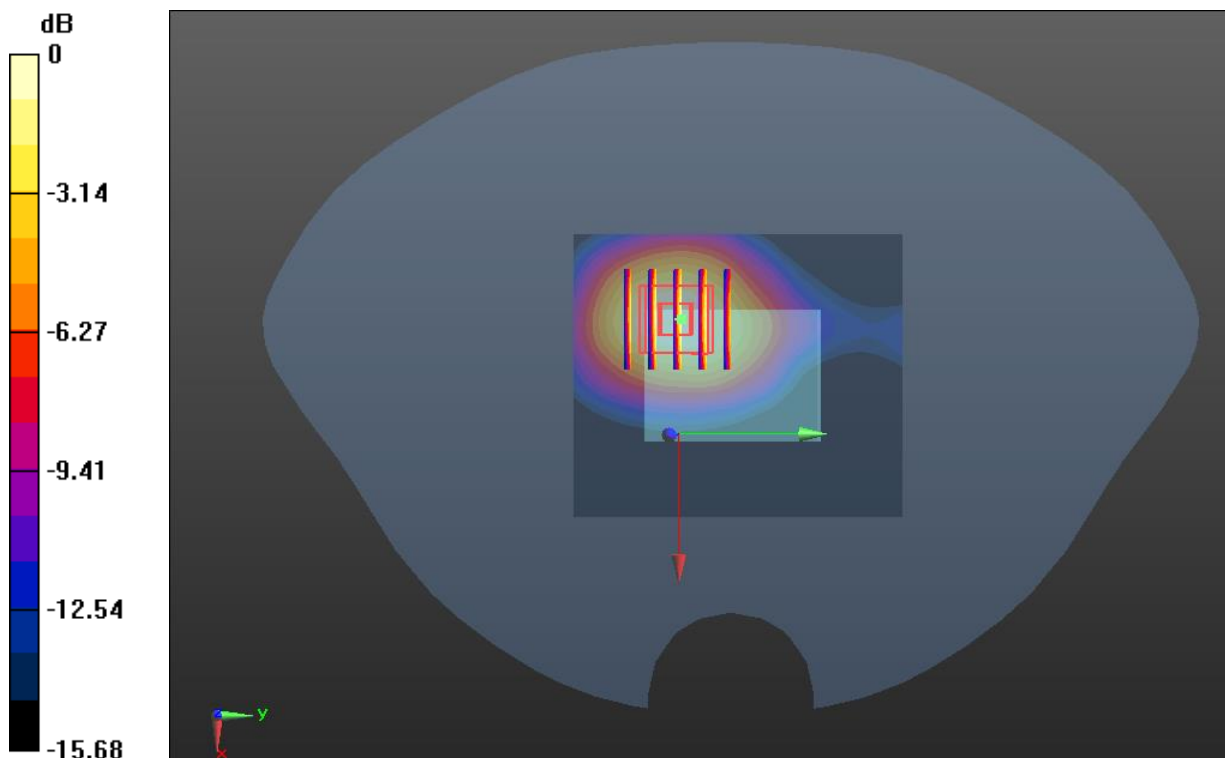
CH132072/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.86 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.627 W/kg

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



0 dB = 1.16 W/kg

Meas.17 Body Plane with Front Side 10mm on Low Channel in LTE Band38 mode

Date: 2024.09.01

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

Medium parameters used (interpolated): $f = 2580$ MHz; $\sigma = 1.959$ S/m; $\epsilon_r = 39.092$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.59, 7.59, 7.59); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH37850/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

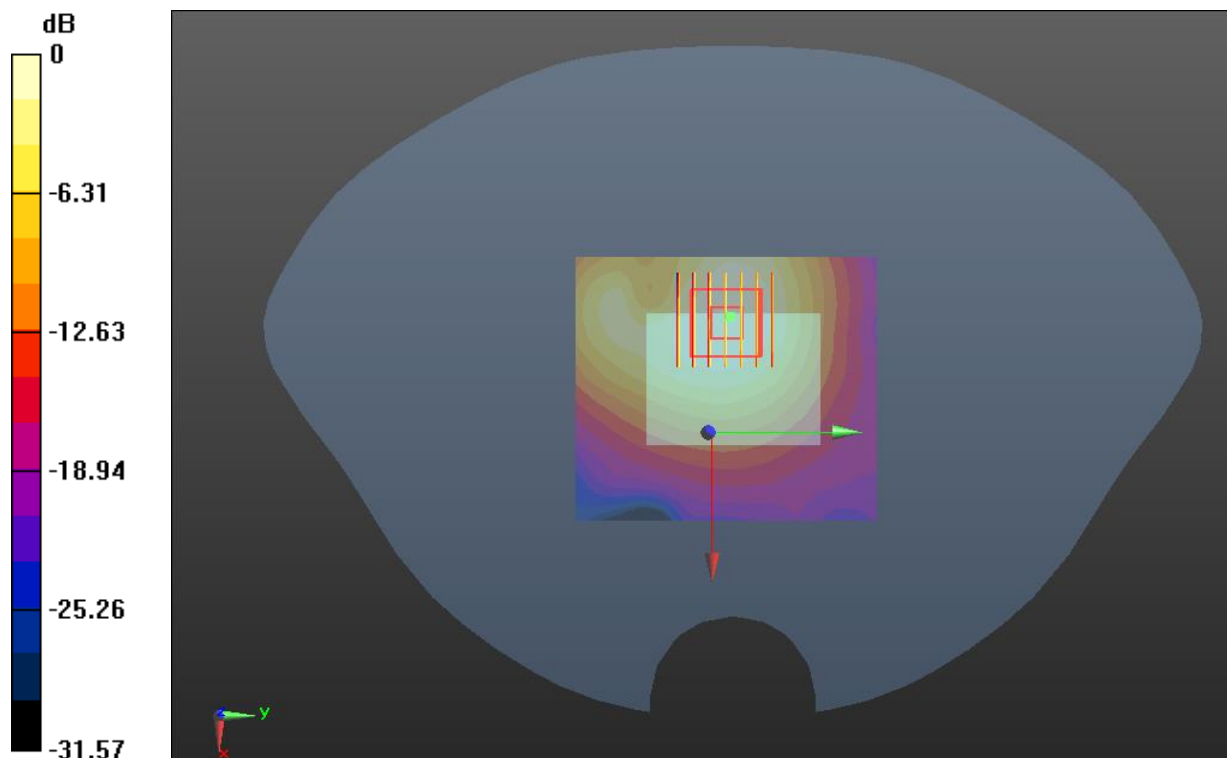
CH37850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.30 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.835 W/kg

SAR(1 g) = 0.487 W/kg; SAR(10 g) = 0.268 W/kg

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



0 dB = 0.533 W/kg

Meas.18 Body Plane with Back Side 0mm on Low Channel in LTE Band38 mode

Date: 2024.09.01

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

Medium parameters used (interpolated): $f = 2580$ MHz; $\sigma = 1.959$ S/m; $\epsilon_r = 39.092$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.59, 7.59, 7.59); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH37850/Area Scan (81x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.970 W/kg

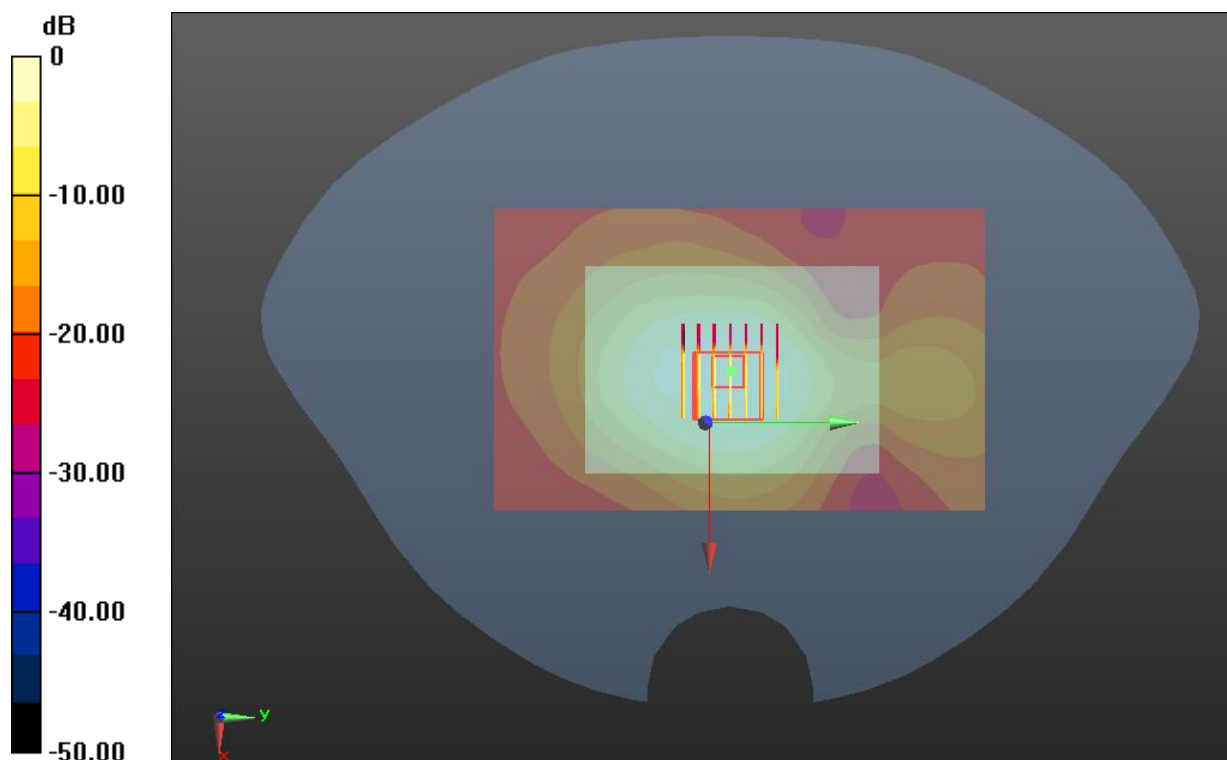
CH37850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.24 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 2.76 W/kg

SAR(1 g) = 0.976 W/kg; SAR(10 g) = 0.457 W/kg

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



0 dB = 0.909 W/kg

Meas.19 Body Plane with Front Side 10mm on Low Channel in LTE Band40 mode

Date: 2024.09.01

Communication System Band: BAND 40; Frequency: 2310 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated): $f = 2310$ MHz; $\sigma = 1.66$ S/m; $\epsilon_r = 40.278$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.93, 7.93, 7.93); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH38750/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

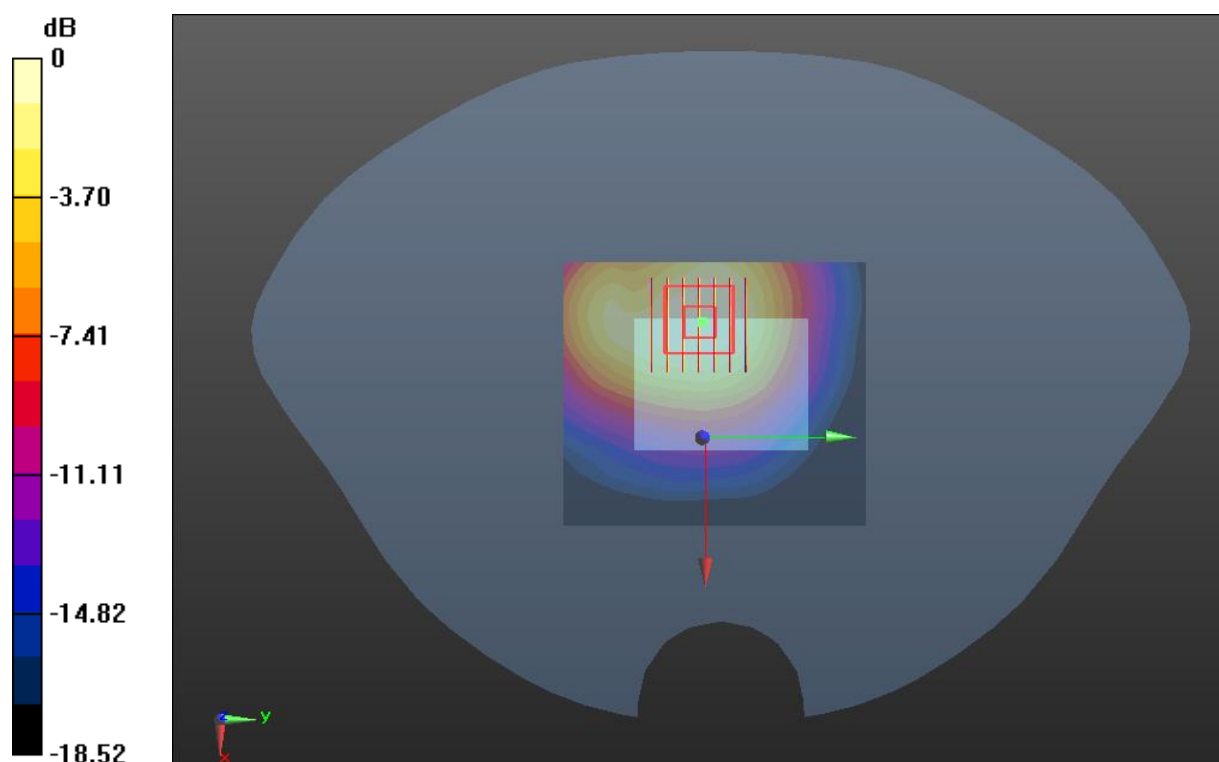
CH38750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.41 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.908 W/kg

SAR(1 g) = 0.559 W/kg; SAR(10 g) = 0.327 W/kg

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



0 dB = 0.608 W/kg

Meas.20 Body Plane with Back Side 0mm on Low Channel in LTE Band41 mode

Date: 2024.09.01

Communication System Band: BAND41; Frequency: 2545 MHz; Duty Cycle: 1:1.58

Medium parameters used (interpolated): $f = 2545$ MHz; $\sigma = 1.914$ S/m; $\epsilon_r = 40.085$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024.06.25;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1711; Calibrated: 2024.03.18
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1576
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CH40140/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.43 W/kg

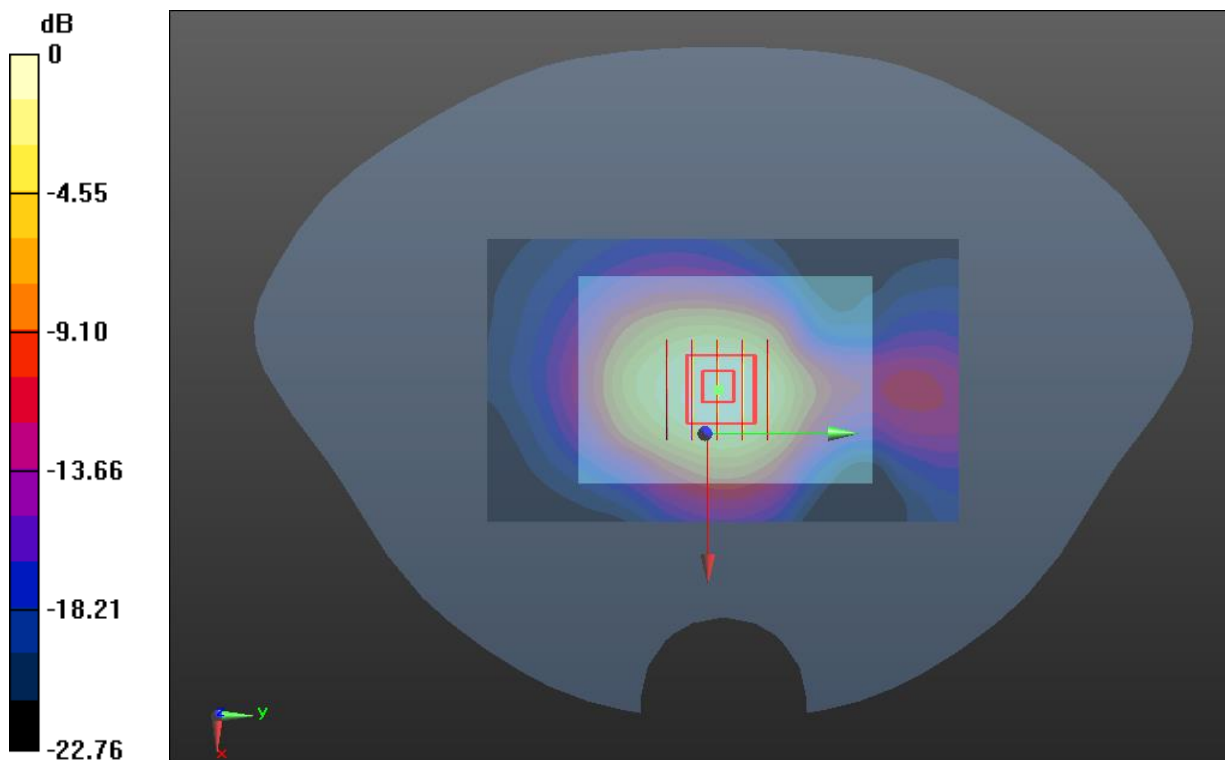
CH40140/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.37 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.14 W/kg

SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.627 W/kg

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



0 dB = 1.32 W/kg

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2480878-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2480878-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2480878-AC.pdf”.

ANNEX G TUNE-UP PROCEDURE

Please refer the document “BL-SZ2480878-AT.pdf”.

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