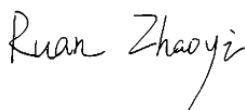


TEST REPORT

Applicant: Hangzhou Sunyard Technology Co., Ltd.
Address: Sunyard Science & Technology Building, 3888
Jiangnan Ave., Binjiang Dist., Hangzhou, China
Equipment Type: Android POS Terminal
Model Name: S200
Brand Name: SUNYARD
FCC ID: 2BFZW-S200
Test Standard: FCC 47 CFR Part 2.1093
(refer to section 3.1)
Maximum SAR: Body-worn (1 g@10mm): 0.23 W/kg
Hotspot (1 g@10mm): 1.45 W/kg
Specific (10 g@0mm): 2.12 W/kg
Sample Arrival Date: Apr. 12, 2024
Test Date: May 08, 2024 - May 30, 2024
Date of Issue: Jun. 28, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Ruan Zhaoyi**Checked by:** Xu Rui**Approved by:** Tolan Tu
(Testing Director)

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jun. 20, 2024</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Jun. 28, 2024</u>	<u>Updated Note in Section 2.5</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	9
3.1	Test Standards	9
3.2	Device Category and SAR Limit.....	10
3.3	Test Result Summary.....	11
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	Body-worn Position Conditions	22
6.2	Hotspot Mode Exposure Position Conditions	23

6.3	Product Specific 10g Exposure Consideration	24
7	MEASUREMENT PROCEDURE	25
7.1	Measurement Process Diagram	25
7.2	SAR Scan General Requirement	26
7.3	Measurement Procedure	27
7.4	Area & Zoom Scan Procedure	27
8	CONDUCTED RF OUPUT POWER	28
8.1	GSM	28
8.2	WCDMA	28
8.3	LTE	28
8.4	WIFI	29
8.5	Bluetooth	31
8.6	Power Reduction List	32
9	PROXIMITY SENSOR TRIGGERING TEST	34
9.1	Procedures for determining proximity sensor distance	34
9.2	Procedures for determining EUT tilt angle influences to proximity sensor triggering ...	36
10	TEST EXCLUSION CONSIDERATION	37
11	TEST RESULT	39
11.1	GSM 850	39
11.2	GSM 1900	40
11.3	WCDMA Band 2	41
11.4	WCDMA Band 4	42
11.5	WCDMA Band 5	43
11.6	LTE Band 2 (20MHz Bandwidth)	44
11.7	LTE Band 4 (20MHz Bandwidth)	45
11.8	LTE Band 5 (10MHz Bandwidth)	46
11.9	LTE Band 7 (20MHz Bandwidth)	47
11.10	LTE Band 12 (10MHz Bandwidth)	48
11.11	LTE Band 17 (10MHz Bandwidth)	49
11.12	LTE Band 66 (20MHz Bandwidth)	50

11.13	LTE Band 38 (20MHz Bandwidth)	51
11.14	LTE Band 41 (20MHz Bandwidth)	52
11.15	WIFI 2.4GHz.....	53
11.16	WIFI 5GHz.....	54
11.17	Bluetooth	55
11.18	NFC SAR.....	56
12	SAR Measurement Variability.....	58
13	SIMULTANEOUS TRANSMISSION	60
13.1	Simultaneous Transmission Mode Consider	60
13.2	Sum SAR of Simultaneous Transmission	61
14	TEST EQUIPMENTS LIST	66
ANNEX A	SIMULATING LIQUID VERIFICATION RESULT	67
ANNEX B	SYSTEM CHECK RESULT	68
ANNEX C	TEST DATA.....	95
ANNEX D	EUT EXTERNAL PHOTOS	167
ANNEX E	SAR TEST SETUP PHOTOS.....	167
ANNEX F	CALIBRATION REPORT	167
ANNEX G	TUNE-UP PROCEDURE	167

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	Hangzhou Sunyard Technology Co., Ltd.
Address	Sunyard Science & Technology Building, 3888 Jiangnan Ave., Binjiang Dist., Hangzhou, China

2.2 Manufacturer Information

Manufacturer	Hangzhou Sunyard Technology Co., Ltd.
Address	Sunyard Science & Technology Building, 3888 Jiangnan Ave., Binjiang Dist., Hangzhou, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	Android POS Terminal
Model Name Under Test	S200
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	S1-00-10-01-01
Software Version	SP6987A_V002_20240328_userdebug
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Battery Name	N/A
	Brand Name	SUNYARD
	Model No.	33P00QA
	Capacitance	3350mAh
	Rated Voltage	7.2V
	Limit Charge Voltage	8.4V

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/12/17/66 LTE TDD Band 38/41 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g and 802.11n(HT20/40) 5G WIFI 802.11a, 802.11n(HT20/40) and 802.11ac(VHT20/40/80) U-NII-1/3, NFC
Note: The EUT is a POS Terminal, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

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

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, 5G WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 17	TX: 704 ~ 716 MHz	RX: 734 ~ 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: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g /n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz	
		5725 ~ 5850 MHz	
Bluetooth	2402 ~ 2480 MHz		
Antenna Type	WWAN: Monopole Antenna WLAN: Monopole Antenna Bluetooth: Monopole Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		

Product Type	Portable Device	
EUT Type	☒ Production unit	☐ Identical prototype
Note: 1. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4G transmitter for held-to-ear exposure conditions. 2. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4G transmitter for near to body exposure conditions. 3. The reduction power details please refer section 8.6.		

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	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)	Specific (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)
		1g SAR		10g SAR	1g SAR		10g SAR
PCB	GSM 850	0.08	0.43	1.89	0.23	1.45	2.12
	GSM 1900	0.14	1.42	2.12			
	WCDMA Band 2	0.06	0.84	0.96			
	WCDMA Band 4	0.02	0.29	0.93			
	WCDMA Band 5	0.10	0.71	2.09			
	LTE Band 2	0.11	1.45	1.37			
	LTE Band 4	0.08	0.32	1.34			
	LTE Band 5	0.09	0.47	1.63			
	LTE Band 7	0.05	0.31	0.42			
	LTE Band 12	0.10	0.41	1.53			
	LTE Band 17	0.08	0.35	1.35			
	LTE Band 66	0.03	0.40	0.96			
	LTE Band 38	0.03	0.21	0.18			
	LTE Band 41	0.02	0.14	0.20			
DTS	2.4G WIFI	0.23	1.02	1.47			
NII	5.2G WIFI	0.10	0.31	0.33			
	5.8G WIFI	0.09	0.53	0.52			
DSS	Bluetooth	0.02	0.07	0.16			
Limit (W/kg)		1.60		4.00	1.60		4.00
Verdict		Pass					

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)		
	Body-worn 1g (0mm)	Hotspot 1g (10mm)	Specific 10g (0mm)
PCB	0.47	1.55	2.12
DTS	0.47	1.55	2.12
NII	0.47	1.55	2.12
DSS	0.24	1.45	2.12
Limit (W/Kg)	1.60		4.00
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 1.45 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 2.12 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

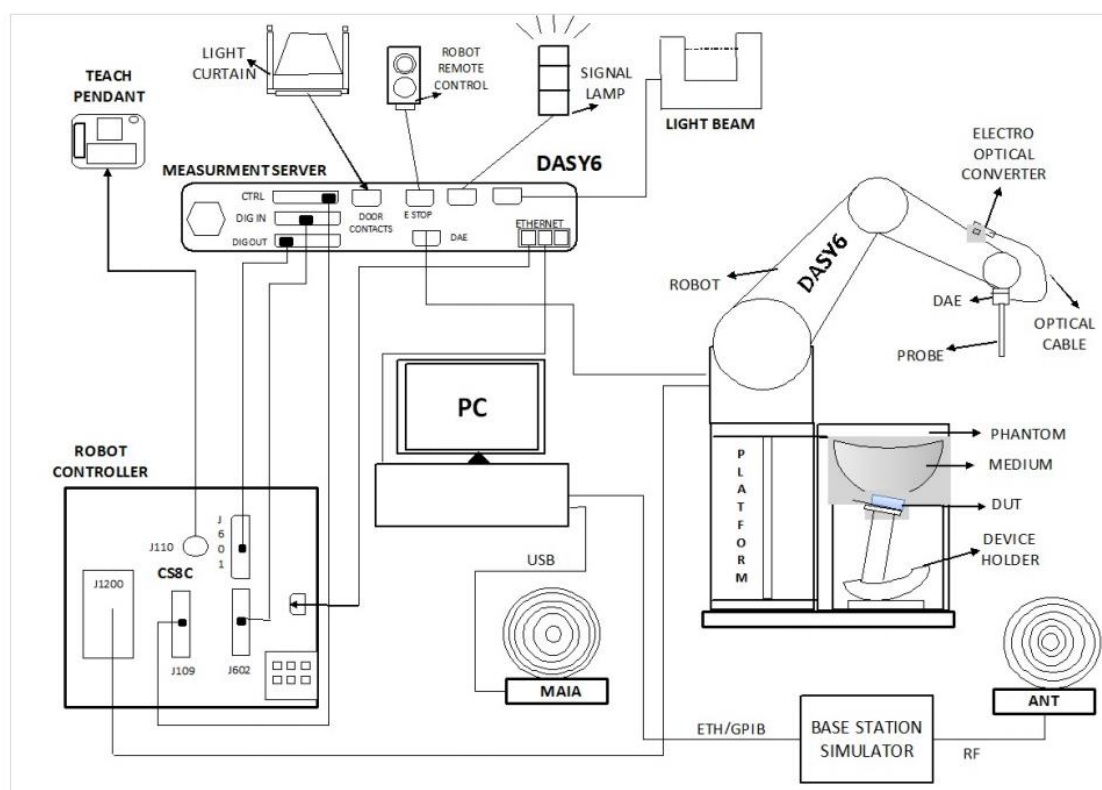
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

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

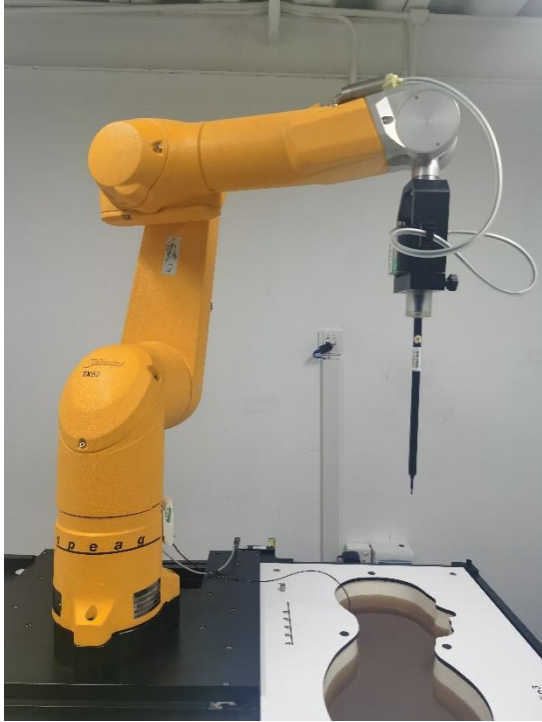


The DASY system for performing compliance tests consists of the following items:

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: 7607 with following specifications is used.

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	4 MHz to 10 GHz; Linearity: ± 0.2 dB
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 IEC/IEEE 62209-1528 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 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 head
- Right head
- Flat phantom

Photo of Phantom SN1859



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

4.2.6 Device Holder

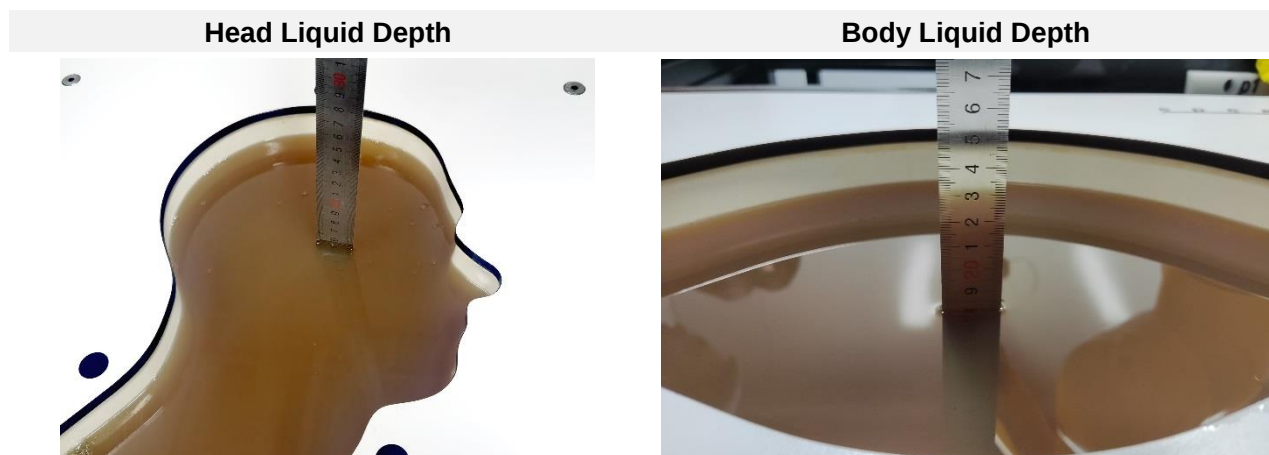
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for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



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

4.2.7 Simulating Liquid

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



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

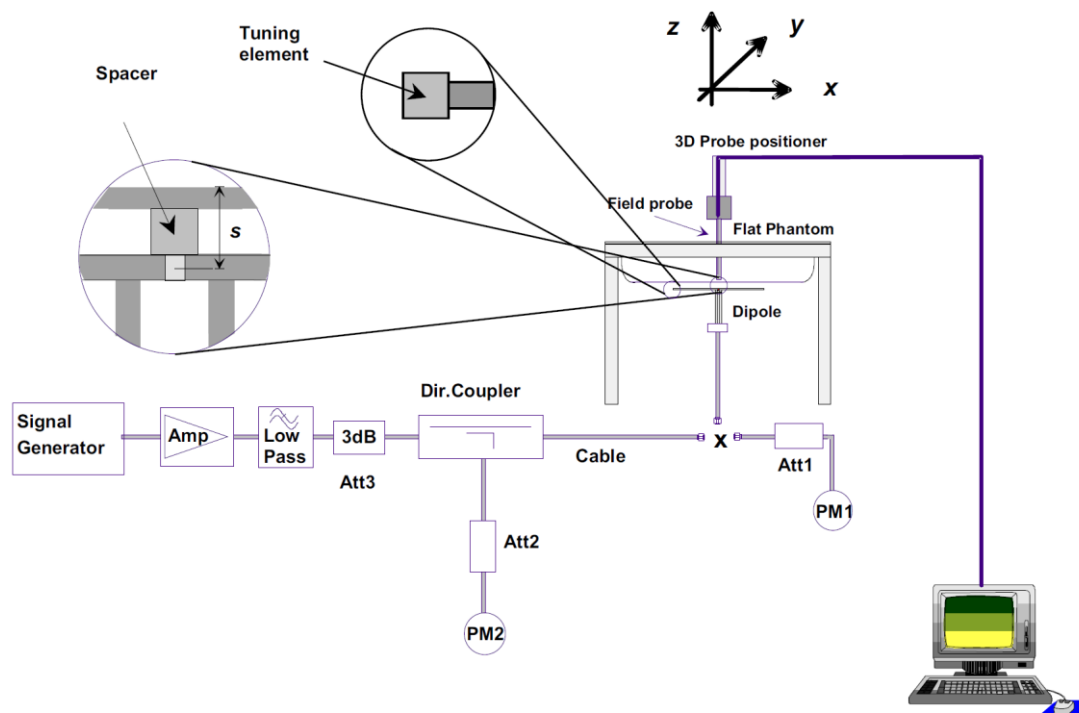
5 SYSTEM VERIFICATION

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

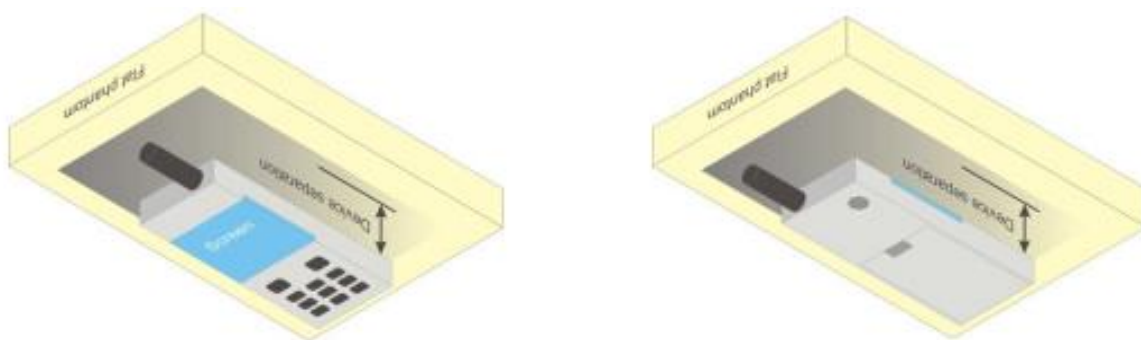
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 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.

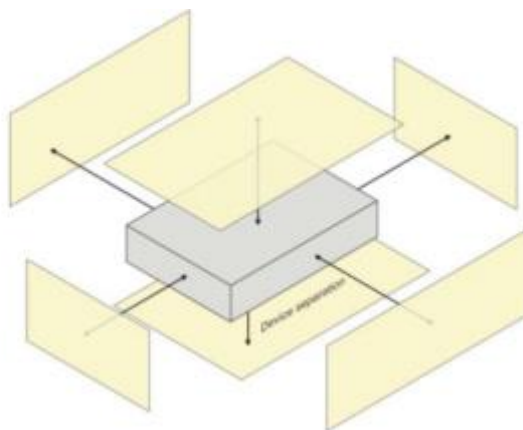
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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



6.2 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).



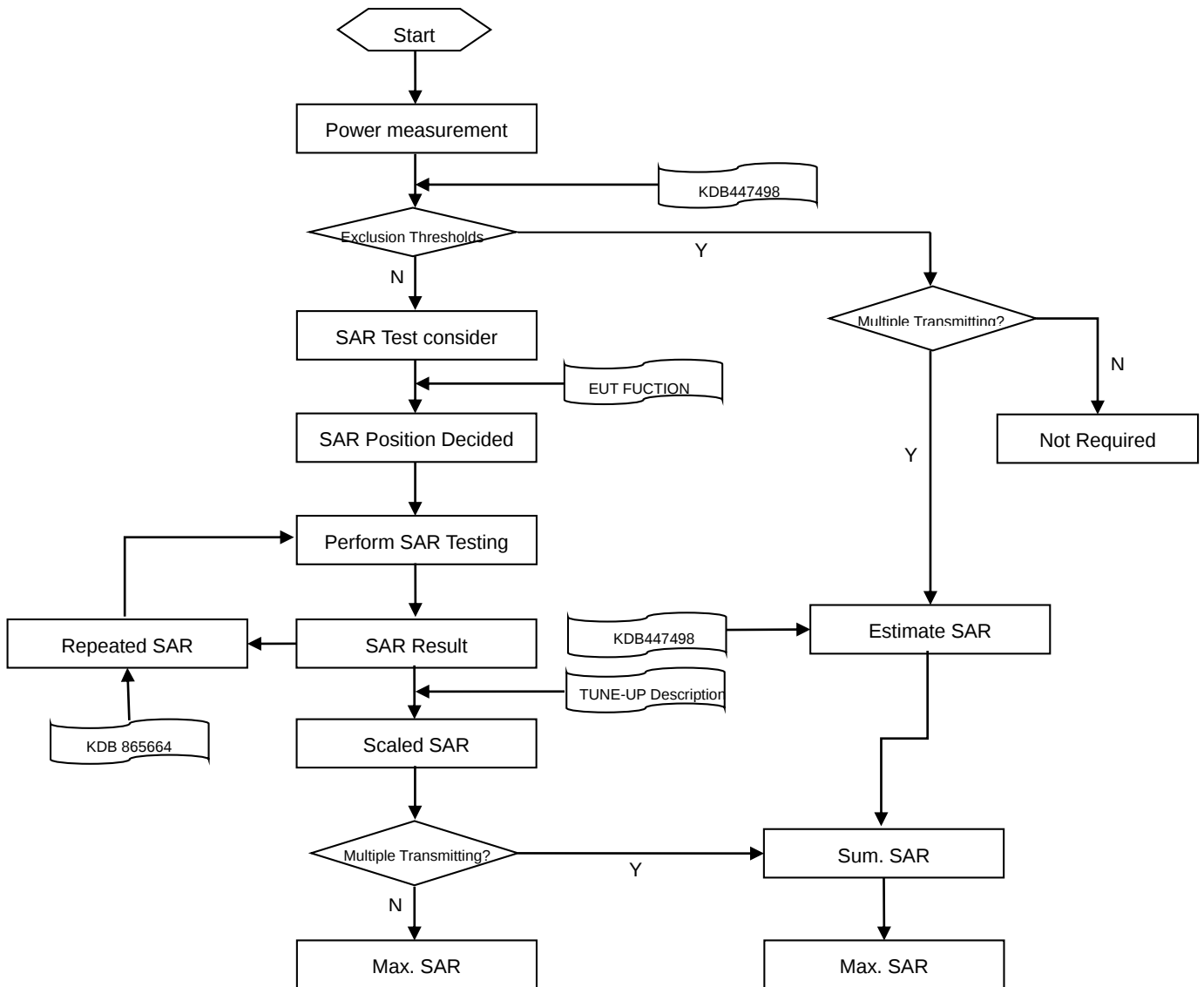
6.3 Product Specific 10g Exposure Consideration

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.

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	½·δ·ln(2)±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-SZ2440362-AP.pdf”.

8.2 WCDMA

Please refer the document “BL-SZ2440362-AP.pdf”.

8.3 LTE

Please refer the document “BL-SZ2440362-AP.pdf”.

8.4 WIFI

8.4.1 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	13.94	14.50	Yes
		6	2437	14.33	14.50	Yes
		11	2462	17.38	19.00	Yes
	802.11g	1	2412	16.01	17.00	No
		6	2437	16.43	17.00	No
		11	2462	12.42	13.00	No
	802.11n(HT20)	1	2412	14.23	16.00	No
		6	2437	15.87	16.00	No
		11	2462	11.68	12.00	No
	802.11n(HT40)	3	2422	12.59	13.00	No
		6	2437	14.83	15.00	No
		9	2452	9.13	10.00	No

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

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

Adjusted SAR = $1.016 * (50.12\text{mW}/79.43\text{mW}) = 0.641$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.2 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	16.67	17.00	No
		44	5220	16.65	17.00	No
		48	5240	16.74	17.00	Yes
	802.11n(HT20)	36	5180	14.44	15.00	No
		44	5220	14.47	15.00	No
		48	5240	14.53	15.00	No
	802.11n(HT40)	38	5190	14.43	15.00	No
		46	5230	14.44	15.00	No
	802.11ac(VHT20)	36	5180	14.47	15.00	No
		44	5220	14.59	15.00	No
		48	5240	14.56	15.00	No
	802.11ac(VHT40)	38	5190	14.88	15.00	No
		46	5230	14.89	15.00	No
	802.11ac(VHT80)	42	5210	12.68	13.00	No
5.8 (5.725~5.850)	802.11a	149	5745	16.72	17.00	No
		157	5785	16.73	17.00	Yes
		165	5825	16.70	17.00	No
	802.11n(HT20)	149	5745	14.54	15.00	No
		157	5785	14.53	15.00	No
		165	5825	14.52	15.00	No
	802.11n(HT40)	151	5755	14.88	15.00	No
		159	5795	14.85	15.00	No
	802.11ac(VHT20)	149	5745	14.49	15.00	No
		157	5785	14.60	15.00	No
		165	5825	14.56	15.00	No
	802.11ac(VHT40)	151	5755	14.75	15.00	No
		159	5795	14.79	15.00	No
	802.11ac(VHT80)	155	5775	12.61	13.00	No

8.5 Bluetooth

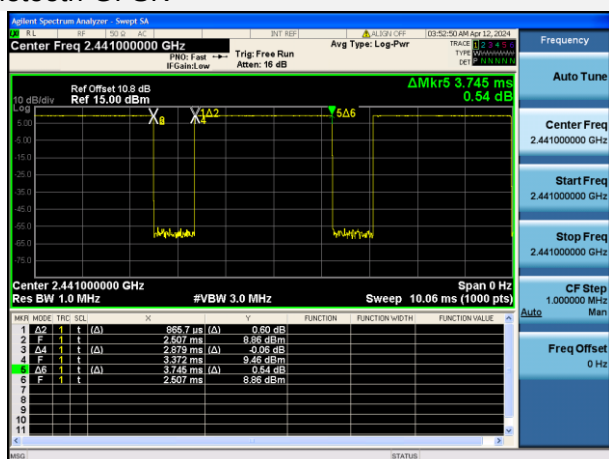
Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	9.17	8.97	9.02	5.73	5.46	5.73
Tune-Up Limit (dBm)	10.00	10.00	10.00	6.00	6.00	6.00
SAR Test Require	Yes	No	No	No	No	No
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Average Power (dBm)	5.75	5.46	5.68	/	/	/
Tune-Up Limit (dBm)	6.00	6.00	6.00	/	/	/
SAR Test Require	No	No	No	/	/	/
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	1	19	38
Frequency (MHz)	2402	2440	2480	2404	2440	2478
Average Power (dBm)	-2.98	-2.25	-2.79	-2.65	-2.23	-2.51
Tune-Up Limit (dBm)	-2.00	-2.00	-2.00	-2.00	-2.00	-2.00
SAR Test Require	No	No	No	No	No	No

Note: 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.

Note: The Bluetooth BT DH5 duty cycle is 76.88 % 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

Bluetooth-GFSK



8.6 Power Reduction List

The device employs proximity sensors that detect the presence of the user's body of the device. When these conditions are detected, Body reduced power will be active.

WWAN Reduced Power Level Table

Sensor State	Transmitting Conditions	Antenna	Position
On	WWAN/ WWAN + WLAN	Ant.1	Front Side; Back Side; Left Edge
Off	WWAN/ WWAN + WLAN	Ant.1	Right Edge; Top Edge; Bottom Edge

WWAN Antenna Power Table

Mode	Antenna	WWAN Antenna	
		Sensor on	Sensor off
GSM 850	Ant.1	30.50	33.50
GPRS850 1 Tx Slot	Ant.1	30.50	33.50
GPRS850 2 Tx Slots	Ant.1	30.00	33.00
GPRS850 3 Tx Slots	Ant.1	28.00	31.00
GPRS850 4 Tx Slots	Ant.1	27.50	30.00
EGPRS850 1 Tx Slot	Ant.1	30.50	30.50
EGPRS850 2 Tx Slots	Ant.1	29.50	29.50
EGPRS850 3 Tx Slots	Ant.1	27.50	27.50
EGPRS850 4 Tx Slots	Ant.1	26.50	26.50
GSM 1900	Ant.1	21.50	26.50
GPRS1900 1 Tx Slot	Ant.1	21.50	26.50
GPRS1900 2 Tx Slots	Ant.1	26.00	26.00
GPRS1900 3 Tx Slots	Ant.1	24.50	24.00
GPRS1900 4 Tx Slots	Ant.1	24.00	23.00
EGPRS1900 1 Tx Slot	Ant.1	28.50	26.00
EGPRS1900 2 Tx Slots	Ant.1	26.00	25.00
EGPRS1900 3 Tx Slots	Ant.1	24.00	22.50
EGPRS1900 4 Tx Slots	Ant.1	23.00	21.50
WCDMA Band2 AMR	Ant.1	16.00	18.50
WCDMA Band2 RMC	Ant.1	16.00	18.50
HSDPA Subtest-1	Ant.1	15.00	17.50
HSDPA Subtest-2	Ant.1	15.00	17.50
HSDPA Subtest-3	Ant.1	14.50	17.00
HSDPA Subtest-4	Ant.1	14.50	17.00
HSUPA Subtest-1	Ant.1	13.00	15.50
HSUPA Subtest-2	Ant.1	13.00	15.50
HSUPA Subtest-3	Ant.1	14.00	16.50
HSUPA Subtest-4	Ant.1	12.50	15.00
HSUPA Subtest-5	Ant.1	12.00	16.50

WCDMA Band4 AMR	Ant.1	16.50	22.00
WCDMA Band4 RMC	Ant.1	16.50	22.00
HSDPA Subtest-1	Ant.1	15.50	21.00
HSDPA Subtest-2	Ant.1	15.50	21.00
HSDPA Subtest-3	Ant.1	15.00	20.50
HSDPA Subtest-4	Ant.1	15.00	20.50
HSUPA Subtest-1	Ant.1	13.50	19.00
HSUPA Subtest-2	Ant.1	13.50	19.00
HSUPA Subtest-3	Ant.1	14.50	20.00
HSUPA Subtest-4	Ant.1	13.00	18.50
HSUPA Subtest-5	Ant.1	14.50	20.00
WCDMA Band5 AMR	Ant.1	23.50	23.50
WCDMA Band5 RMC	Ant.1	23.50	23.50
HSDPA Subtest-1	Ant.1	22.50	22.50
HSDPA Subtest-2	Ant.1	22.50	22.50
HSDPA Subtest-3	Ant.1	22.00	22.00
HSDPA Subtest-4	Ant.1	22.00	22.00
HSUPA Subtest-1	Ant.1	20.50	20.50
HSUPA Subtest-2	Ant.1	20.50	20.50
HSUPA Subtest-3	Ant.1	21.50	21.50
HSUPA Subtest-4	Ant.1	20.00	20.00
HSUPA Subtest-5	Ant.1	21.50	21.50
LTE Band2	Ant.1	18.00	18.50
LTE Band4	Ant.1	19.00	22.50
LTE Band5	Ant.1	24.00	24.00
LTE Band7	Ant.1	15.00	20.00
LTE Band12	Ant.1	24.00	24.00
LTE Band17	Ant.1	24.00	24.00
LTE Band66	Ant.1	17.00	17.00
LTE Band38	Ant.1	14.00	24.00
LTE Band41	Ant.1	14.00	24.00

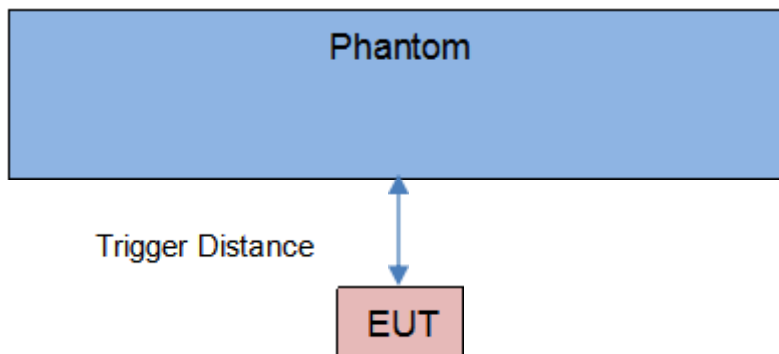
9 PROXIMITY SENSOR TRIGGERING TEST

9.1 Procedures for determining proximity sensor distance

The device uses one proximity sensors to reduce the maximum output power in selected wireless mode and operating configurations to ensure SAR compliance. The sensor implementation can identify and facilitate triggering different max power levels for different scenarios including the device held by hand(Extremity) and different exposure test positions test positions when the device is closed to a user's body.

Proximity sensor triggering distance testing was performed, EUT moving further away from the phantom and EUT moving toward the phantom were both assessed, and the shortest triggering distances were reported and used for SAR assessment. Note that while sensor is failed and it sets the output power to the lowest one in the sensor trigger state ,to make sure the SAR requirements can still be satisfied.

proximity sensor channel



EUT moving toward Phantom

Distance in mm	1~5	6~8	9	10	11	12	13	14	15	16	22
Front Side	On	On	On	On	On	On	On	On	On	Off	Off
Back Side	On	On	On	On	On	On	On	On	On	Off	Off
Left Edge	On	On	On	On	On	On	On	On	On	Off	Off

Note: Power reduction is only applicable for Ant.1

To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for EUT moving toward the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

Ant1 of proximity sensor channel

EUT Sides	Additional SAR test Distance in mm
Front Side	14
Back Side	14
Leftt Edge	14

9.2 Procedures for determining EUT tilt angle influences to proximity sensor triggering

The influence of EUT tilt angles to proximity sensor channel-1 triggering was determined by positioning each EUT edge that contains a transmitting antenna 1, perpendicular to the flat phantom, at 15 mm separation for the left edge.

Rotating the EUT around the edge next to the phantom in $\leq 10^\circ$ increments until the EUT is $\pm 45^\circ$ from the vertical position at 0° , and the maximum output power remains in the reduced mode.

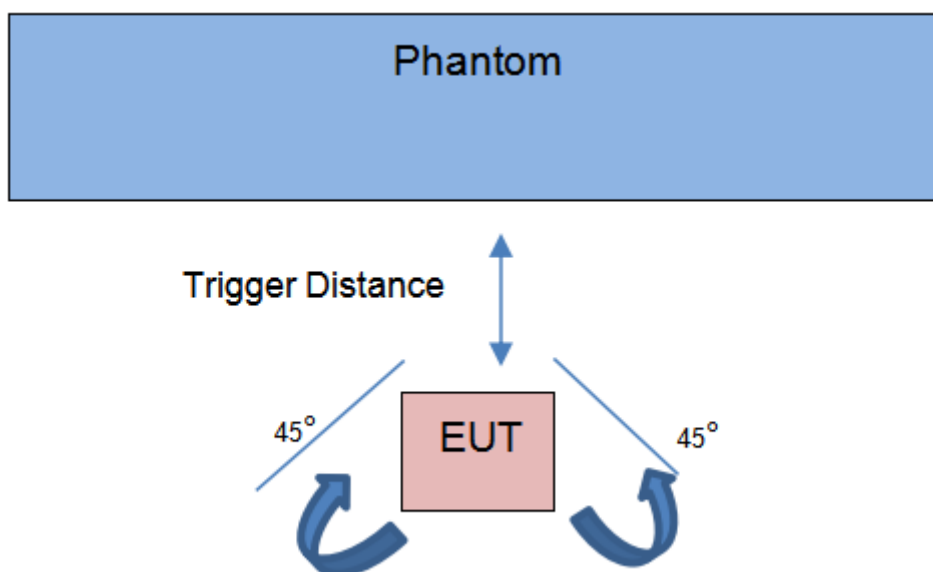
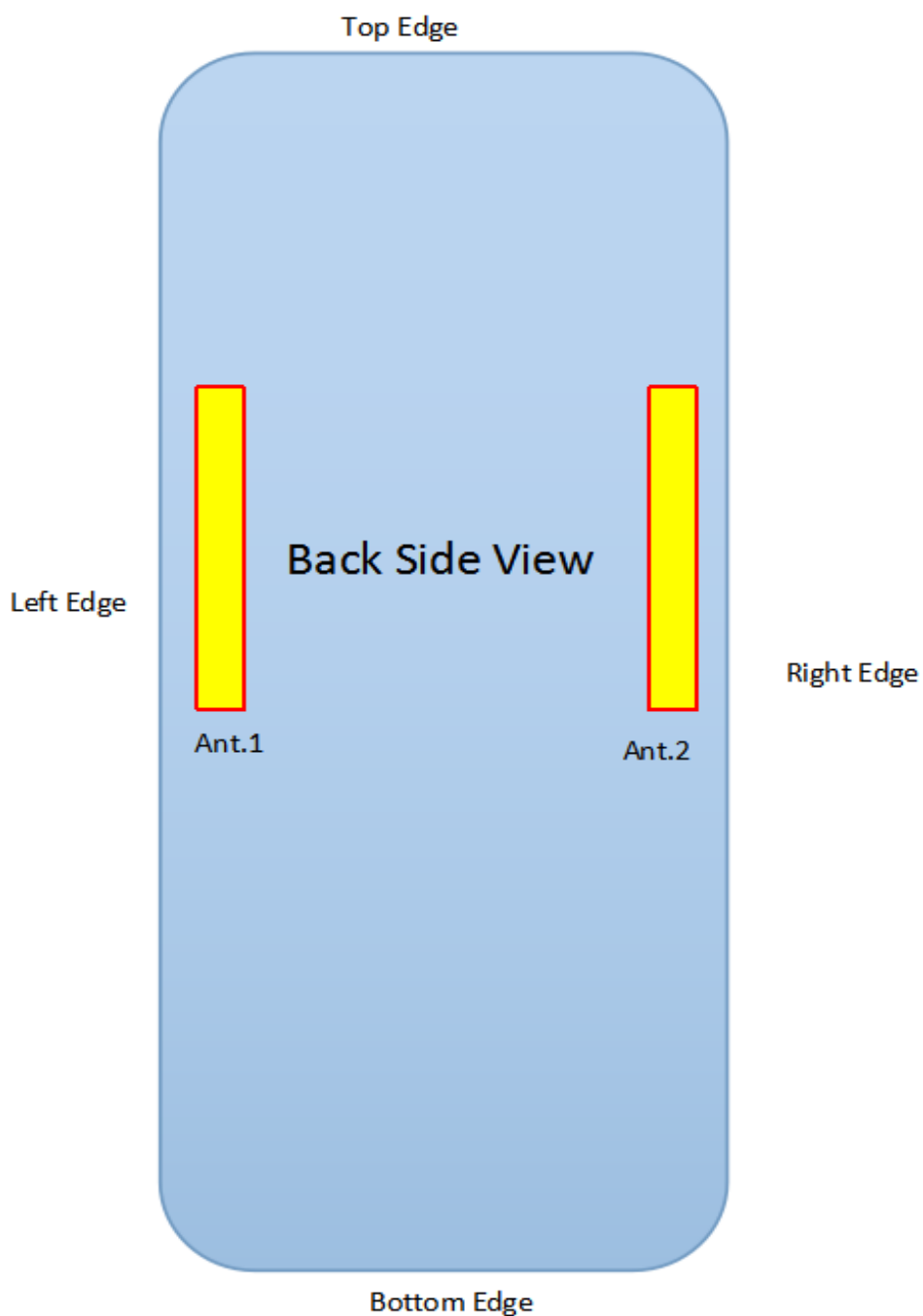


Table: Summary of Phone Tilt Angle Influence to Proximity Sensor Triggering(Left/Right/Top/Bottom edge)

Antenna	Posltion	Minimum trigger distance at which power reduction was maintained over ±45°	Power Reduction Status											
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°	
ANT1	Left edge	15mm	on	on	on	on	on	on	on	on	on	on	on	

10 TEST EXCLUSION CONSIDERATION



Antenna	Band
Ant.1	GSM 850
	GSM 1900
	WCDMA Band 2
	WCDMA Band 4
	WCDMA Band 5

	LTE Band 2
	LTE Band 4
	LTE Band 5
	LTE Band 7
	LTE Band 12
	LTE Band 17
	LTE Band 66
	LTE Band 38
	LTE Band 41
Ant.2	2.4G/5G WiFi;BT

Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
Ant.1	<25	<25	>25	>25	>25	>25
Ant.2	<25	<25	>25	<25	>25	>25

Note: Per KD8 941225 D06, When the overall length and width of a device is > 9 cm * 5 cm, a test separation distance of 10 mm is required for hotspot mode SAR measurements and hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.

11 TEST RESULT

11.1 GSM 850

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
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Body-worn&Hotspot

ANT1	On	GPRS 4Slots	Front Side	10	128	824.2	-0.08	0.041	26.66	27.50	1.213	0.050	/
	On		Back Side	10	128	824.2	0.08	0.064	26.66	27.50	1.213	0.078	/
	On		Left Edge	10	128	824.2	0.07	0.358	26.66	27.50	1.213	0.434	1#

Sensor-1

ANT1	Off	GPRS 2Slots	Front Side	14	190	836.6	-0.08	0.065	29.57	30.00	1.104	0.072	/
	Off	GPRS 2Slots	Back Side	14	190	836.6	-0.11	0.081	29.57	30.00	1.104	0.089	/
	Off	GPRS 2Slots	Left Edge	14	190	836.6	0.12	0.443	29.57	30.00	1.104	0.489	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
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Specific

ANT1	On	GPRS 4Slots	Front Side	0	128	824.2	0.06	0.061	26.66	27.50	1.213	0.074	/
	On		Back Side	0	128	824.2	-0.12	0.044	26.66	27.50	1.213	0.053	/
	On		Left Edge	0	128	824.2	-0.09	1.560	26.66	27.50	1.213	1.892	2#

11.2 GSM 1900

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot													
ANT1	On	GPRS 4slots	Front Side	10	512	1710.2	0.19	0.045	22.94	24.00	1.276	0.057	/
	On		Back Side	10	512	1710.2	-0.14	0.113	22.94	24.00	1.276	0.144	/
	On		Left Edge	10	512	1710.2	0.13	1.110	22.94	24.00	1.276	1.416	3#
	On		Left Edge	10	661	1880.0	0.03	1.060	22.93	24.00	1.279	1.356	/
	On		Left Edge	10	810	1769.8	-0.14	1.030	22.85	24.00	1.303	1.342	/
Sensor-1													
ANT1	Off	GPRS 2Slots	Front Side	14	661	1880.0	0.08	0.044	25.55	26.00	1.109	0.049	/
	Off		Back Side	14	661	1880.0	-0.02	0.102	25.55	26.00	1.109	0.113	/
	Off		Left Edge	14	661	1880.0	0.11	0.869	25.55	26.00	1.109	0.964	/
	Off		Left Edge	14	512	1710.2	0.08	0.798	24.25	26.00	1.496	1.194	/
	Off		Left Edge	14	810	1710.2	-0.16	0.822	25.35	26.00	1.161	0.954	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific													
ANT1	On	GPRS 4slots	Front Side	0	512	1710.2	0.08	0.083	22.94	24.00	1.276	0.106	/
	On		Back Side	0	512	1710.2	0.09	0.183	22.94	24.00	1.276	0.234	/
	On		Left Edge	0	512	1710.2	0.11	1.600	22.94	24.00	1.276	2.042	/
	On		Left Edge	0	661	1880.0	0.11	1.300	22.93	24.00	1.279	1.663	/
	On		Left Edge	0	810	1769.8	0.05	1.630	22.85	24.00	1.303	2.124	4#

11.3WCDMA Band 2

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot													
ANT1	On	RMC	Front Side	10	9538	1907.6	0.12	0.031	15.80	16.00	1.047	0.032	/
	On		Back Side	10	9538	1907.6	0.06	0.059	15.80	16.00	1.047	0.062	/
	On		Left Edge	10	9538	1907.6	0.00	0.803	15.80	16.00	1.047	0.841	5#
	On		Left Edge	10	9262	1852.4	0.05	0.608	15.39	16.00	1.151	0.700	/
	On		Left Edge	10	9400	1880.0	-0.05	0.758	15.64	16.00	1.086	0.823	/
Sensor-1													
ANT1	Off	RMC	Front Side	14	9538	1907.6	-0.06	0.030	17.98	18.50	1.127	0.034	/
	Off		Back Side	14	9538	1907.6	-0.06	0.055	17.98	18.50	1.127	0.062	/
	Off		Left Edge	14	9538	1907.6	-0.06	0.336	17.98	18.50	1.127	0.379	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific													
ANT1	On	RMC	Front Side	0	9538	1907.6	0.06	0.045	15.80	16.00	1.047	0.047	/
	On		Back Side	0	9538	1907.6	-0.04	0.078	15.80	16.00	1.047	0.082	/
	On		Left Edge	0	9538	1907.6	-0.04	0.918	15.80	16.00	1.047	0.961	6#

11.4WCDMA Band 4

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot													
ANT1	On	RMC	Front Side	10	1513	1752.6	0.05	0.014	15.55	16.50	1.245	0.017	/
	On		Back Side	10	1513	1752.6	0.05	0.018	15.55	16.50	1.245	0.022	/
	On		Left Edge	10	1513	1752.6	0.00	0.232	15.55	16.50	1.245	0.289	7#
Sensor-1													
ANT1	Off	RMC	Front Side	14	1513	1752.6	0.08	0.012	21.71	22.00	1.069	0.013	/
ANT1	Off	RMC	Back Side	14	1513	1752.6	-0.14	0.017	21.71	22.00	1.069	0.018	/
ANT1	Off	RMC	Left Edge	14	1513	1752.6	0.11	0.561	21.71	22.00	1.069	0.600	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific													
ANT1	On	RMC	Front Side	0	1513	1752.6	0.02	0.016	15.55	16.50	1.245	0.020	/
	On		Back Side	0	1513	1752.6	-0.19	0.021	15.55	16.50	1.245	0.026	/
	On		Left Edge	0	1513	1752.6	-0.03	0.746	15.55	16.50	1.245	0.929	8#

11.5WCDMA Band 5

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot													
ANT1	On	RMC	Front Side	10	4233	846.6	0.09	0.092	23.06	23.50	1.107	0.102	/
	On		Back Side	10	4233	846.6	0.13	0.082	23.06	23.50	1.107	0.091	/
	On		Left Edge	10	4233	846.6	-0.13	0.637	23.06	23.50	1.107	0.705	9#

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific													
ANT1	On	RMC	Front Side	0	4233	846.6	-0.10	0.110	23.06	23.50	1.107	0.122	/
	On		Back Side	0	4233	846.6	0.03	0.086	23.06	23.50	1.107	0.095	/
	On		Left Edge	0	4233	846.6	-0.16	1.890	23.06	23.50	1.107	2.092	10#
	On		Left Edge	0	4132	826.4	0.18	1.630	22.97	23.50	1.130	1.842	/
	On		Left Edge	0	4182	836.4	0.15	1.690	22.97	23.50	1.130	1.910	/

11.6LTE Band 2 (20MHz Bandwidth)

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
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Body-worn&Hotspot

ANT1	On	QPSK	Front Side	10	19100	1900	1	Low	-0.02	0.061	17.86	18.00	1.033	0.063	/
	On			10	19100	1900	50	Low	-0.03	0.049	16.72	17.00	1.067	0.052	/
	On		Back Side	10	19100	1900	1	Low	0.00	0.109	17.86	18.00	1.033	0.113	/
	On			10	19100	1900	50	Low	-0.10	0.096	16.72	17.00	1.067	0.102	/
	On		Left Edge	10	19100	1900	1	Low	0.02	1.400	17.86	18.00	1.033	1.446	11#
	On			10	19100	1900	50	Low	-0.01	1.280	16.72	17.00	1.067	1.366	/
	On			10	18700	1860	1	Low	0.12	1.050	17.77	18.00	1.054	1.107	/
	On			10	18900	1900	1	High	-0.18	1.230	17.84	18.00	1.038	1.277	/
	On			10	18700	1860	50	Low	0.00	0.868	16.48	17.00	1.127	0.978	/
	On			10	18900	1900	50	High	-0.06	1.080	16.72	17.00	1.067	1.152	/
	On			10	19100	1900	100	Low	0.12	1.180	16.48	17.00	1.127	1.330	/

Sensor-1

ANT1	Off	QPSK	Front Side	14	19100	1900	1	Mid	0.05	0.032	18.06	18.50	1.107	0.035	/
	Off			14	18900	1900	50	High	-0.01	0.027	17.07	17.50	1.104	0.030	/
	Off		Back Side	14	19100	1900	1	Mid	0.08	0.055	18.06	18.50	1.107	0.061	/
	Off			14	18900	1900	50	High	0.03	0.046	17.07	17.50	1.104	0.051	/
	Off		Left Edge	14	19100	1900	1	Mid	0.16	0.716	18.06	18.50	1.107	0.793	/
	Off			14	18900	1900	50	High	-0.04	0.599	17.07	17.50	1.104	0.661	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
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Specific

ANT1	On	QPSK	Front Side	0	19100	1900	1	Low	-0.07	0.066	17.84	18.00	1.038	0.069	/
	On			0	19100	1900	50	Low	0.11	0.053	16.72	17.00	1.067	0.057	/
	On		Back Side	0	19100	1900	1	Low	0.11	0.110	17.84	18.00	1.038	0.114	/
	On			0	19100	1900	50	Low	0.09	0.096	16.72	17.00	1.067	0.102	/
	On		Left Edge	0	19100	1900	1	Low	0.03	1.320	17.84	18.00	1.038	1.370	12#
	On			0	19100	1900	50	Low	-0.08	1.030	16.72	17.00	1.067	1.099	/

11.7LTE Band 4 (20MHz Bandwidth)

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot															
ANT1	On	QPSK	Front	10	20175	1732.5	1	Low	-0.04	0.053	18.27	19.00	1.183	0.063	/
	On		Side	10	20175	1732.5	50	Low	-0.08	0.043	17.01	18.00	1.256	0.054	/
	On		Back	10	20175	1732.5	1	Low	-0.02	0.067	18.27	19.00	1.183	0.079	/
	On		Side	10	20175	1732.5	50	Low	0.06	0.055	17.01	18.00	1.256	0.069	/
	On		Left	10	20175	1732.5	1	Low	-0.03	0.268	18.27	19.00	1.183	0.317	13#
	On		Edge	10	20175	1732.5	50	Low	-0.03	0.250	17.01	18.00	1.256	0.314	/
Sensor-1															
ANT1	Off	QPSK	Front	14	20300	1745	1	Mid	0.08	0.048	21.94	22.50	1.138	0.055	/
	Off		Side	14	20050	1720	50	Mid	-0.14	0.041	20.87	21.50	1.156	0.047	/
	Off		Back	14	20300	1745	1	Mid	0.03	0.062	21.94	22.50	1.138	0.071	/
	Off		Side	14	20050	1720	50	Mid	0.08	0.051	20.87	21.50	1.156	0.059	/
	Off		Left	14	20300	1745	1	Mid	0.06	0.260	21.94	22.50	1.138	0.296	/
	Off		Edge	14	20050	1720	50	Mid	0.11	0.186	20.87	21.50	1.156	0.215	/
Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
ANT1	On	QPSK	Front Side	0	20175	1732.5	1	Low	-0.05	0.024	18.27	19.00	1.183	0.028	/
	On			0	20175	1732.5	50	Low	-0.18	0.019	17.01	18.00	1.256	0.024	/
	On		Back Side	0	20175	1732.5	1	Low	0.04	0.024	18.27	19.00	1.183	0.028	/
	On			0	20175	1732.5	50	Low	0.16	0.022	17.01	18.00	1.256	0.028	/
	On		Left Edge	0	20175	1732.5	1	Low	0.00	1.130	18.27	19.00	1.183	1.337	14#
	On			0	20175	1732.5	50	Low	0.01	0.840	17.01	18.00	1.256	1.055	/

11.8LTE Band 5 (10MHz Bandwidth)

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot															
ANT1	On	QPSK	Front	10	20525	836.5	1	Low	0.08	0.060	23.09	24.00	1.233	0.074	/
	On			10	20525	836.5	50	High	-0.19	0.049	21.93	23.00	1.279	0.063	/
	On		Back	10	20525	836.5	1	Low	-0.10	0.076	23.09	24.00	1.233	0.094	/
	On			10	20525	836.5	50	High	0.07	0.049	21.93	23.00	1.279	0.063	/
	On		Left	10	20525	836.5	1	Low	-0.09	0.377	23.09	24.00	1.233	0.465	15#
	On			10	20525	836.5	50	High	-0.17	0.316	21.93	23.00	1.279	0.404	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
ANT1	On	QPSK	Front Side	0	20525	836.5	1	Low	-0.16	0.086	23.09	24.00	1.233	0.106	/
	On			0	20525	836.5	50	Low	0.08	0.069	21.93	23.00	1.279	0.088	/
	On		Back Side	0	20525	836.5	1	Low	-0.16	0.065	23.09	24.00	1.233	0.080	/
	On			0	20525	836.5	50	Low	0.01	0.049	21.93	23.00	1.279	0.063	/
	On		Left Edge	0	20525	836.5	1	Low	-0.02	1.320	23.09	24.00	1.233	1.628	16#
	On			0	20525	836.5	50	Low	0.12	1.010	21.93	23.00	1.279	1.292	/

11.9LTE Band 7 (20MHz Bandwidth)

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot															
ANT1	On	QPSK	Front	10	21100	2535	1	Mid	-0.05	0.014	13.78	15.00	1.324	0.019	/
	On		Side	10	21100	2535	50	Low	-0.03	0.011	12.78	14.00	1.324	0.015	/
	On		Back	10	21100	2535	1	Mid	0.03	0.039	13.78	15.00	1.324	0.052	/
	On		Side	10	21100	2535	50	Low	0.02	0.034	12.78	14.00	1.324	0.045	/
	On		Left	10	21100	2535	1	Mid	0.04	0.233	13.78	15.00	1.324	0.308	17#
	On		Edge	10	21100	2535	50	Low	-0.04	0.194	12.78	14.00	1.324	0.257	/
Sensor-1															
ANT1	Off	QPSK	Front	14	21100	2535	1	Mid	0.08	0.014	18.91	20.00	1.285	0.018	/
	Off		Side	14	21350	2560	50	Low	-0.14	0.009	17.84	19.00	1.306	0.012	/
	Off		Back	14	21100	2535	1	Mid	0.03	0.035	18.91	20.00	1.285	0.045	/
	Off		Side	14	21350	2560	50	Low	-0.15	0.030	17.84	19.00	1.306	0.039	/
	Off		Left	14	21100	2535	1	Mid	-0.01	0.137	18.91	20.00	1.285	0.176	/
	Off		Edge	14	21350	2560	50	Low	0.00	0.108	17.84	19.00	1.306	0.141	/
Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
ANT1	On	QPSK	Front Side	0	21100	2535	1	Low	-0.10	0.024	13.78	15.00	1.324	0.032	/
	On			0	21100	2535	50	Low	-0.13	0.018	12.78	14.00	1.324	0.024	/
	On		Back Side	0	21100	2535	1	Low	0.03	0.036	13.78	15.00	1.324	0.048	/
	On			0	21100	2535	50	Low	-0.10	0.034	12.78	14.00	1.324	0.045	/
	On		Left Edge	0	21100	2535	1	Low	-0.05	0.320	13.78	15.00	1.324	0.424	18#
	On			0	21100	2535	50	Low	-0.02	0.258	12.78	14.00	1.324	0.342	/

11.10 LTE Band 12 (10MHz Bandwidth)

Antenna	Position	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune- up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot															
ANT1	On	QPSK	Front	10	23095	707.5	1	Mid	-0.09	0.077	22.90	24.00	1.288	0.099	/
	On		Side	10	23095	707.5	25	Low	-0.13	0.060	21.77	23.00	1.327	0.080	/
	On		Back	10	23095	707.5	1	Mid	0.02	0.076	22.90	24.00	1.288	0.098	/
	On		Side	10	23095	707.5	25	Low	0.06	0.060	21.77	23.00	1.327	0.080	/
	On		Left	10	23095	707.5	1	Mid	0.01	0.321	22.90	24.00	1.288	0.413	19#
	On		Edge	10	23095	707.5	25	Low	0.08	0.249	21.77	23.00	1.327	0.330	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
ANT1	On	QPSK	Front Side	0	23095	707.5	1	Mid	-0.18	0.092	22.90	24.00	1.288	0.118	/
	On			0	23095	707.5	25	Low	0.09	0.074	21.77	23.00	1.327	0.098	/
	On		Back Side	0	23095	707.5	1	Mid	0.18	0.054	22.90	24.00	1.288	0.070	/
	On			0	23095	707.5	25	Low	-0.07	0.055	21.77	23.00	1.327	0.073	/
	On		Left Edge	0	23095	707.5	1	Mid	0.01	1.190	22.90	24.00	1.288	1.533	20#
	On			0	23095	707.5	25	Low	-0.19	0.960	21.77	23.00	1.327	1.274	/

11.11 LTE Band 17 (10MHz Bandwidth)

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot															
ANT1	On	QPSK	Front Side	10	23800	711	1	Mid	0.07	0.067	23.52	24.00	1.117	0.075	/
	On			10	23780	709	25	High	0.15	0.058	22.37	23.00	1.156	0.067	/
	On		Back Side	10	23800	711	1	Mid	0.12	0.066	23.52	24.00	1.117	0.074	/
	On			10	23780	709	25	High	-0.12	0.056	22.37	23.00	1.156	0.065	/
	On		Left Edge	10	23800	711	1	Mid	-0.01	0.311	23.52	24.00	1.117	0.347	21#
	On			10	23780	709	25	High	0.10	0.259	22.37	23.00	1.156	0.299	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
ANT1	On	QPSK	Front Side	0	23800	711	1	Mid	-0.04	0.081	23.52	24.00	1.117	0.090	/
	On			0	23780	709	25	High	-0.01	0.069	22.37	23.00	1.156	0.080	/
	On		Back Side	0	23800	711	1	Mid	0.11	0.060	23.52	24.00	1.117	0.067	/
	On			0	23780	709	25	High	-0.01	0.052	22.37	23.00	1.156	0.060	/
	On		Left Edge	0	23800	711	1	Mid	-0.01	1.210	23.52	24.00	1.117	1.352	22#
	On			0	23780	709	25	High	-0.17	0.899	22.37	23.00	1.156	1.039	/

11.12 LTE Band 66 (20MHz Bandwidth)

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot															
ANT1	On	QPSK	Front	10	132322	1745	1	Mid	0.18	0.021	16.44	17.00	1.138	0.024	/
	On		Side	10	132322	1745	50	Mid	0.11	0.017	16.37	17.00	1.156	0.020	/
	On		Back	10	132322	1745	1	Mid	-0.11	0.027	16.44	17.00	1.138	0.031	/
	On		Side	10	132322	1745	50	Mid	0.04	0.024	16.37	17.00	1.156	0.028	/
	On		Left	10	132322	1745	1	Mid	0.00	0.355	16.44	17.00	1.138	0.404	23#
	On		Edge	10	132322	1745	50	Mid	-0.08	0.288	16.37	17.00	1.156	0.333	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
ANT1	On	QPSK	Front Side	0	132322	1745	1	Mid	-0.18	0.017	16.44	17.00	1.138	0.019	/
	On			0	132322	1745	50	Mid	0.14	0.014	16.37	17.00	1.156	0.016	/
	On		Back Side	0	132322	1745	1	Mid	0.09	0.021	16.44	17.00	1.138	0.024	/
	On			0	132322	1745	50	Mid	-0.05	0.018	16.37	17.00	1.156	0.021	/
	On		Left Edge	0	132322	1745	1	Mid	-0.02	0.845	16.44	17.00	1.138	0.962	24#
	On			0	132322	1745	50	Mid	0.19	0.666	16.37	17.00	1.156	0.770	/

11.13 LTE Band 38 (20MHz Bandwidth)

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot															
ANT1	On	QPSK	Front Side	10	37850	2580	1	Mid	-0.18	0.008	13.38	14.00	1.153	0.009	/
	On			10	37850	2580	50	Low	0.11	0.007	12.44	13.00	1.138	0.008	/
	On		Back Side	10	37850	2580	1	Mid	-0.04	0.023	13.38	14.00	1.153	0.027	/
	On			10	37850	2580	50	Low	0.03	0.018	12.44	13.00	1.138	0.020	/
	On		Left Edge	10	37850	2580	1	Mid	-0.01	0.182	13.38	14.00	1.153	0.210	25#
	On			10	37850	2580	50	Low	-0.19	0.140	12.44	13.00	1.138	0.159	/
Sensor-1															
ANT1	Off	QPSK	Front Side	14	37850	2580	1	Mid	0.08	0.125	23.49	24.00	1.125	0.141	/
	Off			14	37850	2580	50	Mid	-0.01	0.105	22.29	23.00	1.178	0.124	/
	Off		Back Side	14	37850	2580	1	Mid	0.03	0.115	23.49	24.00	1.125	0.129	/
	Off			14	37850	2580	50	Mid	0.08	0.095	22.29	23.00	1.178	0.112	/
	Off		Left Edge	14	37850	2580	1	Mid	0.13	0.823	23.49	24.00	1.125	0.926	/
	Off			14	37850	2580	50	Mid	-0.04	0.679	22.29	23.00	1.178	0.800	/
	Off			14	38000	2595	1	Mid	0.12	0.794	23.36	24.00	1.159	0.920	/
	Off			14	38150	2610	1	Mid	-0.03	0.777	23.37	24.00	1.156	0.898	/
	Off			14	38000	2595	50	Low	0.06	0.613	22.20	23.00	1.202	0.737	/
	Off			14	38150	2610	50	Mid	0.05	0.661	22.08	23.00	1.236	0.817	/
	Off			14	37850	2580	100	Low	0.01	0.663	22.17	23.00	1.211	0.803	/
	Off														
Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
ANT1	On	QPSK	Front Side	0	37850	2580	1	Mid	0.17	0.009	13.38	14.00	1.153	0.010	/
	On			0	37850	2580	50	Low	-0.18	0.009	12.44	13.00	1.138	0.010	/
	On		Back Side	0	37850	2580	1	Mid	0.08	0.012	13.38	14.00	1.153	0.014	/
	On			0	37850	2580	50	Low	0.16	0.010	12.44	13.00	1.138	0.011	/
	On		Left Edge	0	37850	2580	1	Mid	-0.04	0.156	13.38	14.00	1.153	0.180	26#
	On			0	37850	2580	50	Low	-0.18	0.113	12.44	13.00	1.138	0.129	/

11.14 LTE Band 41 (20MHz Bandwidth)

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot															
ANT1	On	QPSK	Front Side	10	39750	2506	1	Mid	-0.01	0.007	13.58	14.00	1.102	0.008	/
	On			10	39750	2506	50	Mid	0.08	0.004	12.55	13.00	1.109	0.004	/
	On		Back Side	10	39750	2506	1	Mid	0.16	0.016	13.58	14.00	1.102	0.018	/
	On			10	39750	2506	50	Mid	-0.10	0.011	12.55	13.00	1.109	0.012	/
	On		Left Edge	10	39750	2506	1	Mid	0.01	0.123	13.58	14.00	1.102	0.136	27#
	On			10	39750	2506	50	Mid	0.02	0.085	12.55	13.00	1.109	0.094	/

Sensor-1															
ANT1	Off	QPSK	Front Side	14	39750	2506	1	Mid	0.05	0.085	23.50	24.00	1.122	0.095	/
	Off			14	39750	2506	50	High	-0.01	0.074	22.37	23.00	1.156	0.086	/
	Off		Back Side	14	39750	2506	1	Mid	0.03	0.068	23.50	24.00	1.122	0.076	/
	Off			14	39750	2506	50	High	0.08	0.058	22.37	23.00	1.156	0.067	/
	Off		Left Edge	14	39750	2506	1	Mid	-0.07	0.847	23.50	24.00	1.122	0.950	/
	Off			14	39750	2506	50	High	0.10	0.776	22.37	23.00	1.156	0.897	/
	Off			14	40185	2549.5	1	Mid	0.01	0.844	22.72	24.00	1.343	1.133	/
	Off			14	40620	2593	1	Mid	-0.11	0.816	23.33	24.00	1.167	0.952	/
	Off			14	41055	2636.5	1	Mid	0.00	0.798	22.77	24.00	1.327	1.059	/
	Off			14	41490	2680	1	Mid	-0.15	0.853	23.29	24.00	1.178	1.005	/
	Off			14	40185	2549.5	50	High	-0.14	0.682	21.79	23.00	1.321	0.901	/
	Off			14	40620	2593	50	Mid	-0.09	0.661	22.18	23.00	1.208	0.798	/
	Off			14	41055	2636.5	50	Mid	-0.07	0.756	21.61	23.00	1.377	1.041	/
	Off			14	41490	2680	50	Mid	0.05	0.711	21.99	23.00	1.262	0.897	/
	Off			14	39750	2506	100	Low	0.04	0.762	22.30	23.00	1.175	0.895	/

Antenna	Sensor state	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
ANT1	On	QPSK	Front Side	0	39750	2506	1	Mid	-0.17	0.011	13.58	14.00	1.102	0.012	/
	On			0	39750	2506	50	Mid	-0.09	0.009	12.55	13.00	1.109	0.010	/
	On		Back Side	0	39750	2506	1	Mid	-0.19	0.014	13.58	14.00	1.102	0.015	/
	On			0	39750	2506	50	Mid	-0.09	0.012	12.55	13.00	1.109	0.013	/
	On		Left Edge	0	39750	2506	1	Mid	-0.03	0.183	13.58	14.00	1.102	0.202	28#
	On			0	39750	2506	50	Mid	-0.14	0.138	12.55	13.00	1.109	0.153	/

11.15 WIFI 2.4GHz

Mode	Antenn a	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Report SAR (W/kg)	Meas No.
Body-worn&Hotspot-worn&Hotspot														
802.11 b	ANT1	Front Side	10	11	2462	0.05	0.058	17.38	19.00	1.452	99.46	1.005	0.084	/
		Back Side	10	11	2462	0.02	0.160	17.38	19.00	1.452	99.46	1.005	0.233	/
		Right Edge	10	11	2462	-0.05	0.696	17.38	19.00	1.452	99.46	1.005	1.016	29#
		Right Edge	10	1	2412	0.02	0.219	13.94	14.50	1.138	99.46	1.005	0.250	/
		Right Edge	10	6	2437	-0.05	0.268	14.33	14.50	1.040	99.46	1.005	0.280	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Mode	Antenn a	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Report SAR (W/kg)	Meas. No.
Specific														
802.11 b	ANT1	Front Side	0	11	2462	0.04	0.086	17.38	19.00	1.452	99.46	1.005	0.125	/
		Back Side	0	11	2462	-0.19	0.099	17.38	19.00	1.452	99.46	1.005	0.144	/
		Right Edge	0	11	2462	-0.03	1.010	17.38	19.00	1.452	99.46	1.005	1.474	30#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.16 WIFI 5GHz

Band	Mode	Antenn a	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot-worn&Hotspot															
5.2G	802.11 a	ANT1	Front Side	10	48	5240	0.16	0.050	16.74	17.00	1.062	96.87	1.032	0.055	/
			Back Side	10	48	5240	0.15	0.088	16.74	17.00	1.062	96.87	1.032	0.096	/
			Right Edge	10	48	5240	0.02	0.280	16.74	17.00	1.062	96.87	1.032	0.307	31#
5.8G	802.11 a	ANT1	Front Side	10	157	5785	0.16	0.042	16.73	17.00	1.064	96.87	1.032	0.046	/
			Back Side	10	157	5785	0.12	0.082	16.73	17.00	1.064	96.87	1.032	0.090	/
			Right Edge	10	157	5785	0.09	0.486	16.73	17.00	1.064	96.87	1.032	0.534	32#
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Band	Mode	Antenn a	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
5.2G	802.11 a	ANT1	Front Side	0	48	5240	0.01	0.054	16.74	17.00	1.062	96.87	1.032	0.059	/
			Back Side	0	48	5240	0.03	0.041	16.74	17.00	1.062	96.87	1.032	0.045	/
			Right Edge	0	48	5240	0.16	0.300	16.74	17.00	1.062	96.87	1.032	0.329	33#
5.8G	802.11 a	ANT1	Front Side	0	157	5785	0.04	0.028	16.73	17.00	1.064	96.87	1.032	0.031	/
			Back Side	0	157	5785	0.16	0.044	16.73	17.00	1.064	96.87	1.032	0.048	/
			Right Edge	0	157	5785	0.01	0.469	16.73	17.00	1.064	96.87	1.032	0.515	34#
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.17 Bluetooth

Mode	Antenn a	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Report SAR (W/kg)	Meas. No.
Body-worn&Hotspot														
DH5	ANT1	Front Side	10	0	2402	0.10	0.014	9.17	10.0	1.209	76.88	1.301	0.022	/
		Back Side	10	0	2402	-0.16	0.002	9.17	10.0	1.209	76.88	1.301	0.003	/
		Right Edge	10	0	2402	0.10	0.046	9.17	10.0	1.209	76.88	1.301	0.072	35#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Mode	Antenn a	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Report SAR (W/kg)	Meas No.
Specific														
DH5	ANT1	Front Side	0	0	2402	0.08	0.098	9.17	10.0	1.209	76.88	1.301	0.154	/
		Back Side	0	0	2402	0.09	0.070	9.17	10.0	1.209	76.88	1.301	0.110	/
		Right Edge	0	0	2402	-0.11	0.102	9.17	10.0	1.209	76.88	1.301	0.160	36#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11.18 NFC SAR

1. According to the 2022.04 TCBC Workshop meeting, the power threshold is $\leq 100\text{MHz}$, refer to P6s.

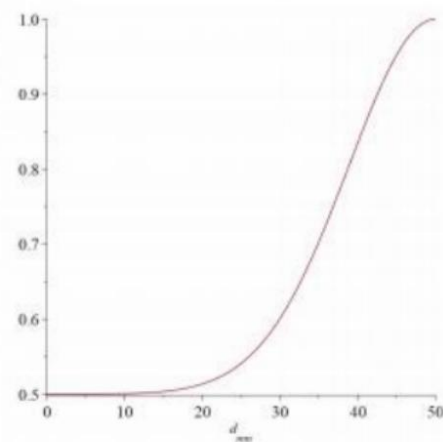
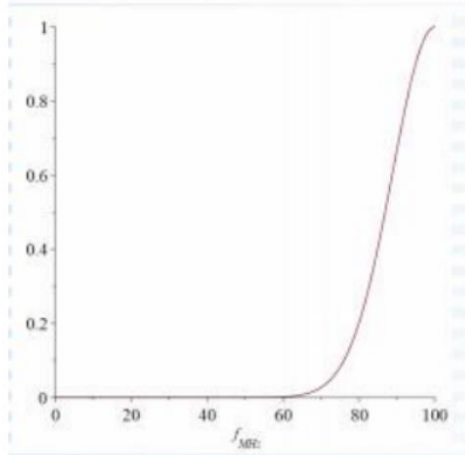
$$P_{7X}(d_{mm}, f_{\text{MHz}}) := \begin{cases} P_{6S}(d_{mm}, f_{\text{MHz}}) & f_{\text{MHz}} \leq 100 \\ P_{6to7}(d_{mm}, f_{\text{MHz}}) & 100 < f_{\text{MHz}} \leq 300 \\ P_7(d_{mm}, f_{\text{MHz}}) & 300 < f_{\text{MHz}} \end{cases}$$

2. For portable products, when using a distance of $\leq 50\text{mm}$, such as mobile phone NFC, P6s is calculated with the following formula calculate.

$$S_f(f_{\text{MHz}}) \cdot P_{431a}(d_{mm}, f_{\text{MHz}}) + (1 - S_f(f_{\text{MHz}})) \cdot S_d(d_{mm}) \cdot P_{431b1}(50., 100.) \cdot \left(1 + \log_{10}\left(\frac{100.}{f_{\text{MHz}}}\right)\right) \quad d_{mm} \leq 50 \text{ and } f_{\text{MHz}} \leq 100$$

3. The smoothing functions S_f and S_d in P6s calculate the limits based on KDB 447498 V06 and are calculated as follows.

$$S_f(f_{\text{MHz}}) := \exp\left(-10 \frac{(f_{\text{MHz}} - f_{\text{max}})^2}{\Delta f^2}\right) \quad S_d(d_{mm}) := 0.5 + 0.5 \cdot \exp\left(-10 \frac{(d_{mm} - d_{\text{max}})^2}{\Delta d^2}\right)$$



d≤50mm				
f Max (MHz)	100		d Max (mm)	50
f MHz	13.56		d (mm)	5
Δf (MHz)	100		Δd	50
S _f (f _{MHz})	0.000568861		S _d (dmm)	0.50015177
P6s (mW)	443.1257378			
Note: SAR testing is required when the distance is 5mm and the power is greater than 443.13mW.				

4. According to the ANSI C63.10 clause 11.12.2.2:

The value of maximum peak output power is according to the method described in ANSI C63.10 clause 11.12.2.2 General procedure for conducted measurements in restricted bands:

- a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the ERP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).
- d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the ERP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant ERP level to an equivalent electric field strength using the following relationship: $E = ERP - 20\log D + 104.8$

where:

E = electric field strength in dB μ V/m,

ERP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

Mode	f (MHz)	Max. E-Field strength (dB μ V/m)	D (m)	Ground reflection factor (dB)	ERP (dBm)
NFC (13.56MHz)	13.56	56.92	3	6	-32.34

Note:

1. Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies ≤ 30 MHz).
2. ERP = $56.92 + 20 \cdot \log(3) - 104.8 + 6 = -32.34$ (dBm)

According to the FCC KDB 447498 D04

Estimated SAR: SAR test = $1.6 \cdot P_{ant} / P_{th}$ [W/kg]

Estimated SAR	$1.6 \cdot P_{ant} / P_{th}$ [W/kg]		
Pmeas.(dBm)	-32.34	Pmeas.(mW)	0.00058
Pth.(mW)	443.13		
NFC Estimated 1g SAR [W/kg]	<0.001		

12 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
1710.2	GSM 1900	Hotspot	Left Edge	1.110	Yes	1.086	1.02
1907.6	WCDMA Band 2	Hotspot	Left Edge	0.803	Yes	0.784	1.02
1900	LTE Band 2	Hotspot	Left Edge	1.400	Yes	1.364	1.03
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.							

13 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).

13.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Body-worn&Hotspot	Specific
1	WWAN+BT+WIFI 5G	Yes	Yes
2	WWAN+WIFI 2.4G+WIFI 5G	Yes	Yes

Note:

1. WiFi 2.4G and Bluetooth share the same antenna, and can't transmit simultaneously.
2. When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
3. The maximum SAR summation is calculated based on the same configuration and test position.
4. The simultaneous transmission combinations of the more antennas contain combinations of less antennas, so only the worst simultaneous transmission combinations is shown in this report.

13.2 Sum SAR of Simultaneous Transmission

13.2.1 Body-worn&Hotspot Simultaneous Transmission SAR Evaluation for WWAN and WLAN and BT

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	1+2+3	1+3+4
			WWAN	2.4GWIFI	5GWIFI Max.	Bluetooth Max.		
GSM850	Ant.1	Front Side 10mm	0.049	0.084	0.055	0.022	0.188	0.126
		Back Side 10mm	0.077	0.233	0.096	0.003	0.406	0.176
		Left Edge 10mm	0.435	0.000	0.000	0.000	0.435	0.435
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
GSM1900	Ant.1	Front Side 10mm	0.057	0.084	0.055	0.022	0.196	0.134
		Back Side 10mm	0.144	0.233	0.096	0.003	0.473	0.243
		Left Edge 10mm	1.416	0.000	0.000	0.000	1.416	1.416
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
WCDMA B2	Ant.1	Front Side 10mm	0.033	0.084	0.055	0.022	0.172	0.110
		Back Side 10mm	0.061	0.233	0.096	0.003	0.390	0.160
		Left Edge 10mm	0.841	0.000	0.000	0.000	0.841	0.841
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
WCDMA B4	Ant.1	Front Side 10mm	0.017	0.084	0.055	0.022	0.156	0.094
		Back Side 10mm	0.022	0.233	0.096	0.003	0.351	0.121
		Left Edge 10mm	0.289	0.000	0.000	0.000	0.289	0.289
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
WCDMA B5	Ant.1	Front Side 10mm	0.102	0.084	0.055	0.022	0.241	0.179
		Back Side 10mm	0.091	0.233	0.096	0.003	0.420	0.190
		Left Edge 10mm	0.705	0.000	0.000	0.000	0.705	0.705
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B2	Ant.1	Front Side 10mm	0.063	0.084	0.055	0.022	0.202	0.140
		Back Side 10mm	0.113	0.233	0.096	0.003	0.442	0.212
		Left Edge 10mm	1.446	0.000	0.000	0.000	1.446	1.446
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B4	Ant.1	Front Side 10mm	0.062	0.084	0.055	0.022	0.201	0.139
		Back Side 10mm	0.079	0.233	0.096	0.003	0.408	0.178
		Left Edge 10mm	0.317	0.000	0.000	0.000	0.317	0.317
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B5	Ant.1	Front Side 10mm	0.074	0.084	0.055	0.022	0.213	0.151
		Back Side 10mm	0.094	0.233	0.096	0.003	0.423	0.193
		Left Edge 10mm	0.465	0.000	0.000	0.000	0.465	0.465
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B7	Ant.1	Front Side 10mm	0.018	0.084	0.055	0.022	0.157	0.095

		Back Side 10mm	0.052	0.233	0.096	0.003	0.381	0.151
		Left Edge 10mm	0.308	0.000	0.000	0.000	0.308	0.308
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B12	Ant.1	Front Side 10mm	0.099	0.084	0.055	0.022	0.238	0.176
		Back Side 10mm	0.098	0.233	0.096	0.003	0.427	0.197
		Left Edge 10mm	0.413	0.000	0.000	0.000	0.413	0.413
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B17	Ant.1	Front Side 10mm	0.075	0.084	0.055	0.022	0.214	0.152
		Back Side 10mm	0.074	0.233	0.096	0.003	0.403	0.173
		Left Edge 10mm	0.347	0.000	0.000	0.000	0.347	0.347
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B66	Ant.1	Front Side 10mm	0.024	0.084	0.055	0.022	0.163	0.101
		Back Side 10mm	0.031	0.233	0.096	0.003	0.360	0.130
		Left Edge 10mm	0.404	0.000	0.000	0.000	0.404	0.404
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B38	Ant.1	Front Side 10mm	0.009	0.084	0.055	0.022	0.148	0.086
		Back Side 10mm	0.026	0.233	0.096	0.003	0.355	0.125
		Left Edge 10mm	0.210	0.000	0.000	0.000	0.210	0.210
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606
LTE B40	Ant.1	Front Side 10mm	0.008	0.084	0.055	0.022	0.147	0.085
		Back Side 10mm	0.018	0.233	0.096	0.003	0.347	0.117
		Left Edge 10mm	0.136	0.000	0.000	0.000	0.136	0.136
		Right Edge 10mm	0.000	1.016	0.534	0.072	1.550	0.606

Note:

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

2: The highest Summed 1g SAR is 1.55 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13.2.2 Specific Simultaneous Transmission SAR Evaluation for WWAN and WLAN and BT

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5GWIFI Max.	Bluetooth	1+2+3	1+3+4
GSM850	Ant.1	Front Side 0mm	0.074	0.125	0.059	0.154	0.258	0.287
		Back Side 0mm	0.054	0.144	0.048	0.110	0.246	0.212
		Left Edge 0mm	1.894	0.000	0.000	0.000	1.894	1.894
		Right Edge 0mm	0.000	1.474	0.515	0.160	1.989	0.675
GSM1900	Ant.1	Front Side 0mm	0.106	0.125	0.059	0.154	0.290	0.319
		Back Side 0mm	0.233	0.144	0.048	0.110	0.425	0.391
		Left Edge 0mm	2.124	0.000	0.000	0.000	2.124	2.124
		Right Edge 0mm	0.046	1.474	0.515	0.160	2.035	0.721
WCDMA B2	Ant.1	Front Side 0mm	0.047	0.125	0.059	0.154	0.231	0.260
		Back Side 0mm	0.082	0.144	0.048	0.110	0.274	0.240
		Left Edge 0mm	0.961	0.000	0.000	0.000	0.961	0.961
		Right Edge 0mm	0.014	1.474	0.515	0.160	2.003	0.689
WCDMA B4	Ant.1	Front Side 0mm	0.019	0.125	0.059	0.154	0.203	0.232
		Back Side 0mm	0.026	0.144	0.048	0.110	0.218	0.184
		Left Edge 0mm	0.929	0.000	0.000	0.000	0.929	0.929
		Right Edge 0mm	0.006	1.474	0.515	0.160	1.995	0.681
WCDMA B5	Ant.1	Front Side 0mm	0.122	0.125	0.059	0.154	0.306	0.335
		Back Side 0mm	0.095	0.144	0.048	0.110	0.287	0.253
		Left Edge 0mm	2.092	0.000	0.000	0.000	2.092	2.092
		Right Edge 0mm	0.022	1.474	0.515	0.160	2.011	0.697
LTE B2	Ant.1	Front Side 0mm	0.068	0.125	0.059	0.154	0.252	0.281
		Back Side 0mm	0.114	0.144	0.048	0.110	0.306	0.272
		Left Edge 0mm	1.364	0.000	0.000	0.000	1.364	1.364
		Right Edge 0mm	0.022	1.474	0.515	0.160	2.011	0.697
LTE B4	Ant.1	Front Side 0mm	0.028	0.125	0.059	0.154	0.212	0.241
		Back Side 0mm	0.029	0.144	0.048	0.110	0.221	0.187
		Left Edge 0mm	1.337	0.000	0.000	0.000	1.337	1.337
		Right Edge 0mm	0.009	1.474	0.515	0.160	1.998	0.684
LTE B5	Ant.1	Front Side 0mm	0.105	0.125	0.059	0.154	0.289	0.318
		Back Side 0mm	0.080	0.144	0.048	0.110	0.272	0.238
		Left Edge 0mm	1.628	0.000	0.000	0.000	1.628	1.628
		Right Edge 0mm	0.020	1.474	0.515	0.160	2.009	0.695
LTE B7	Ant.1	Front Side 0mm	0.032	0.125	0.059	0.154	0.216	0.245
		Back Side 0mm	0.048	0.144	0.048	0.110	0.240	0.206
		Left Edge 0mm	0.424	0.000	0.000	0.000	0.424	0.424
		Right Edge 0mm	0.056	1.474	0.515	0.160	2.045	0.731

LTE B12	Ant.1	Front Side 0mm	0.119	0.125	0.059	0.154	0.303	0.332
		Back Side 0mm	0.072	0.144	0.048	0.110	0.264	0.230
		Left Edge 0mm	1.533	0.000	0.000	0.000	1.533	1.533
		Right Edge 0mm	0.005	1.474	0.515	0.160	1.994	0.680
LTE B17	Ant.1	Front Side 0mm	0.090	0.125	0.059	0.154	0.274	0.303
		Back Side 0mm	0.067	0.144	0.048	0.110	0.259	0.225
		Left Edge 0mm	1.352	0.000	0.000	0.000	1.352	1.352
		Right Edge 0mm	0.005	1.474	0.515	0.160	1.994	0.680
LTE B66	Ant.1	Front Side 0mm	0.020	0.125	0.059	0.154	0.204	0.233
		Back Side 0mm	0.024	0.144	0.048	0.110	0.216	0.182
		Left Edge 0mm	0.962	0.000	0.000	0.000	0.962	0.962
		Right Edge 0mm	0.005	1.474	0.515	0.160	1.994	0.680
LTE B38	Ant.1	Front Side 0mm	0.011	0.125	0.059	0.154	0.195	0.224
		Back Side 0mm	0.014	0.144	0.048	0.110	0.206	0.172
		Left Edge 0mm	0.180	0.000	0.000	0.000	0.180	0.180
		Right Edge 0mm	0.021	1.474	0.515	0.160	2.010	0.696
LTE B40	Ant.1	Front Side 0mm	0.012	0.125	0.059	0.154	0.196	0.225
		Back Side 0mm	0.016	0.144	0.048	0.110	0.208	0.174
		Left Edge 0mm	0.202	0.000	0.000	0.000	0.202	0.202
		Right Edge 0mm	0.023	1.474	0.515	0.160	2.012	0.698

Note:

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

2: The highest Summed 10g SAR is 2.124 W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test is not required.

13.2.3 Highest Total Exposure Ratio of Simultaneous Transmission

NFC multi-transmit requires the use of the TER formula:

$$TER = \sum_{k=1}^{N_s} \left(\frac{SAR_k}{SAR_{lim}} \right) + \sum_{k=1}^{N_f} \left(\frac{MPE_{field, k}}{MPE_{field, lim}} \right)^2 + \sum_{k=1}^{N_{PD}} \left(\frac{MPE_{PD, k}}{MPE_{PD, lim}} \right)$$

The maximum SAR value for Simultaneous Transmission is 1.550 [W/kg], Therefore, the worst TER = (1.550+0.001)/1.6 = 0.573 < 1, the NFC SAR transmit simultaneously Pass.

14 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	DASY6	16.0.0.116	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1208	2021/07/05	2024/07/05
835MHz Validation Dipole	Speag	D835V2	SN: 4d277	2021/09/09	2024/09/09
1750MHz Validation Dipole	Speag	D1750V2	SN: 1183	2021/07/06	2024/07/06
1950MHz Validation Dipole	Speag	D1950V2	SN: 1240	2021/09/13	2024/09/13
2450MHz Validation Dipole	Speag	D2450V2	SN: 1062	2021/07/05	2024/07/05
2600MHz Validation Dipole	Speag	D2600V2	SN: 1184	2021/07/05	2024/07/05
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1333	2021/09/14	2024/09/14
Data Acquisition Electronicsr	Speag	DAE4	SN: 1710	2024/01/03	2025/01/03
E-Field Probe	Speag	EX3DV4	SN: 7607	2023/07/04	2024/07/04
Signal Generator	R&S	SMB100A	177746	2024/04/24	2025/04/24
Power Meter	R&S	NRVD-B2	835843/014	2023/09/05	2024/09/05
Power Sensor	R&S	NRV-Z4	100381	2023/09/05	2024/09/05
Power Sensor	R&S	NRV-Z2	100211	2023/09/05	2024/09/05
Wireless Communication Test Set	R&S	CMW500	104946	2023/09/01	2024/09/01
Network Analyzer	Agilent	E5071C	MY46103472	2023/11/14	2024/11/14
Thermometer	Elitech	RC-4	EF5238001629	2023/10/09	2024/10/09
Thermometer	Elitech	RC-4HC	EF7239002655	2023/11/17	2024/11/17
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1859	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

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

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2024.05.08	Head	835	21.1	0.90	41.60	0.90	41.50	0.00	0.24
2024.05.10	Head	835	21.7	0.89	42.33	0.90	41.50	-1.11	2.00
2024.05.12	Head	750	21.4	0.90	40.91	0.89	41.94	1.12	-2.46
2024.05.14	Head	1750	21.8	1.40	39.98	1.37	40.08	2.19	-0.25
2024.05.16	Head	1750	21.3	1.41	40.96	1.37	40.08	2.92	2.20
2024.05.18	Head	1950	21.8	1.44	38.62	1.40	40.00	2.86	-3.45
2024.05.20	Head	1950	21.8	1.45	39.48	1.40	40.00	3.57	-1.30
2024.05.22	Head	2450	21.5	1.79	38.70	1.80	39.20	-0.56	-1.28
2024.05.24	Head	2600	21.5	1.91	38.20	1.96	39.01	-2.55	-2.08
2024.05.26	Head	2600	21.3	1.96	38.27	1.96	39.01	0.00	-1.90
2024.05.28	Head	5200	21.7	4.51	36.40	4.66	35.99	-3.22	1.14
2024.05.28	Head	5300	21.7	4.75	35.18	4.76	35.87	-0.21	-1.92
2024.05.30	Head	5800	21.6	5.35	36.07	5.27	35.30	1.52	2.18
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 (%)
2024.05.08	Head	835	100	0.986	9.86	9.72	1.44
2024.05.10	Head	835	100	0.996	9.96	9.72	2.47
2024.05.12	Head	750	100	0.868	8.68	8.51	2.00
2024.05.14	Head	1750	100	3.670	36.70	36.50	0.55
2024.05.16	Head	1750	100	3.680	36.80	36.50	0.82
2024.05.18	Head	1950	100	4.140	41.40	41.40	0.00
2024.05.20	Head	1950	100	4.160	41.60	41.40	0.48
2024.05.22	Head	2450	100	5.400	54.00	54.20	-0.37
2024.05.24	Head	2600	100	5.730	57.30	57.20	0.17
2024.05.26	Head	2600	100	5.790	57.90	57.20	1.22
2024.05.28	Head	5200	100	8.010	80.10	80.10	0.00
2024.05.28	Head	5300	100	8.100	81.00	81.80	-0.98
2024.05.30	Head	5800	100	8.060	80.60	82.30	-2.07
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 (%)
2024.05.08	Head	835	100	0.633	6.33	6.32	0.16
2024.05.10	Head	835	100	0.620	6.20	6.32	-1.90
2024.05.12	Head	750	100	0.567	5.67	5.58	1.61
2024.05.14	Head	1750	100	1.970	19.70	19.20	2.60
2024.05.16	Head	1750	100	1.960	19.60	19.20	2.08
2024.05.18	Head	1950	100	2.060	20.60	21.40	-3.74
2024.05.20	Head	1950	100	2.080	20.80	21.40	-2.80
2024.05.22	Head	2450	100	2.420	24.20	25.20	-3.97
2024.05.24	Head	2600	100	2.510	25.10	25.50	-1.57
2024.05.26	Head	2600	100	2.450	24.50	25.50	-3.92
2024.05.28	Head	5200	100	2.290	22.90	22.70	0.88
2024.05.28	Head	5300	100	2.320	23.20	23.40	-0.85
2024.05.30	Head	5800	100	2.250	22.50	23.10	-2.60
Note: The tolerance limit of System validation $\pm 10\%$.							

System Performance Check Data (750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D750V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

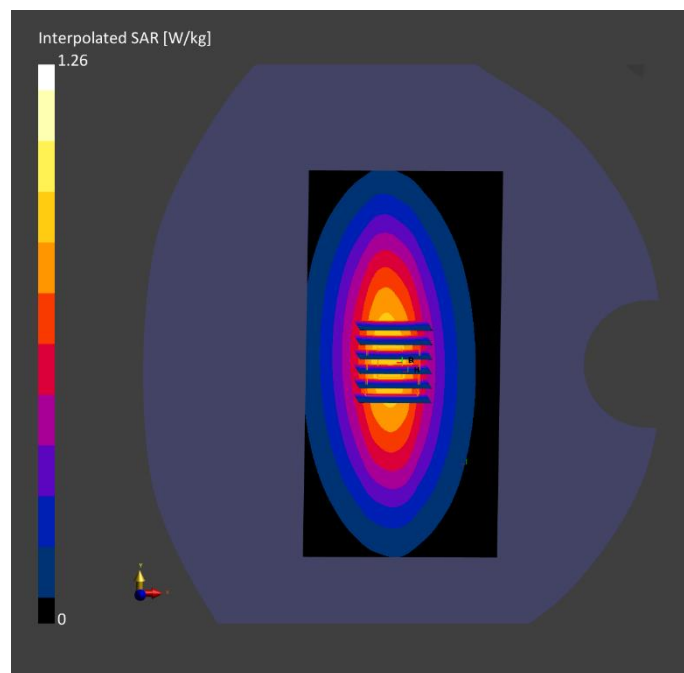
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD70 0	CW, 0--	750.0, 100	10.31	0.898	40.9	22.6	21.4

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05- 12	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0	Date	2024-05-12	2024-05-12
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	0.855	0.868
Sensor	3.0	1.4	psSAR10g [W/kg]	0.566	0.567
Surface [mm]			Power Drift [dB]	-0.07	0.04
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface	VMS + 6p	VMS + 6p	TSL	No correction	No correction
Detection			Correction		
Scan Method	Measured	Measured	M2/M1 [%]		86.7
			Dist 3dB Peak [mm]		20.4



System Performance Check Data (835MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D835V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

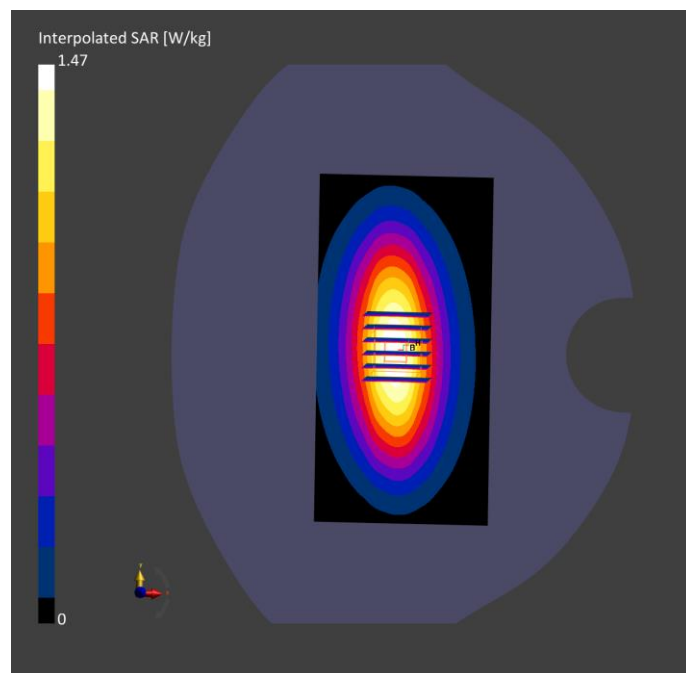
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD83 5	CW, 0--	835.0, 50	9.96	0.901	41.6	22.1	21.1

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 08	2024-05-	EX3DV4 - SN7607, 2023-07- 04		DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0	Date	2024-05-08	2024-05-08
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	0.995	0.986
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.632	0.633
Graded Grid	Yes	Yes	Power Drift [dB]	-0.04	0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		84.2
			Dist 3dB		13.4
			Peak [mm]		



System Performance Check Data (835MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D835V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

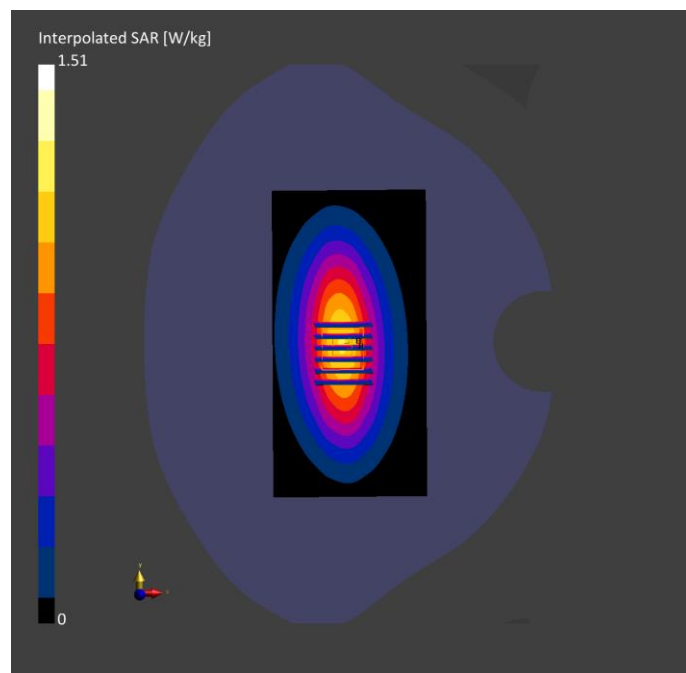
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD83 5	CW, 0--	835.0, 50	9.96	0.892	42.3	22.6	21.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0	Date	2024-05-10	2024-05-10
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	1.04	0.996
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.644	0.620
Graded Grid	Yes	Yes	Power Drift [dB]	-0.09	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		84.4
			Dist 3dB		13.1
			Peak [mm]		



System Performance Check Data (1750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1750V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

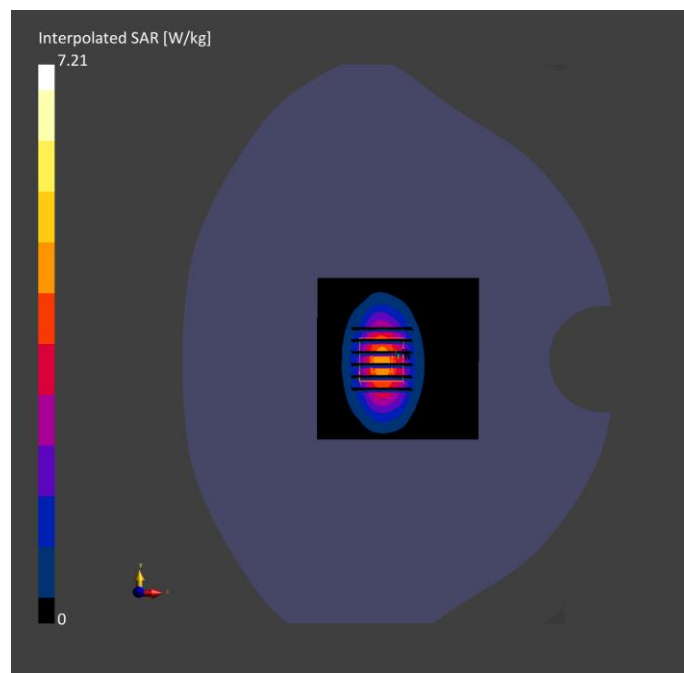
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D175 0	CW, 0--	1750.0, 50	8.52	1.40	40.0	22.8	21.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05- 14	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-14	2024-05-14
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	4.01	3.67
Sensor	3.0	1.4	psSAR10g [W/kg]	2.15	1.97
Surface [mm]			Power Drift [dB]	-0.04	-0.01
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL	No correction	No correction
Scan Method	Measured	Measured	Correction M2/M1 [%]		81.7
			Dist 3dB Peak [mm]		10.1



System Performance Check Data (1750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1750V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

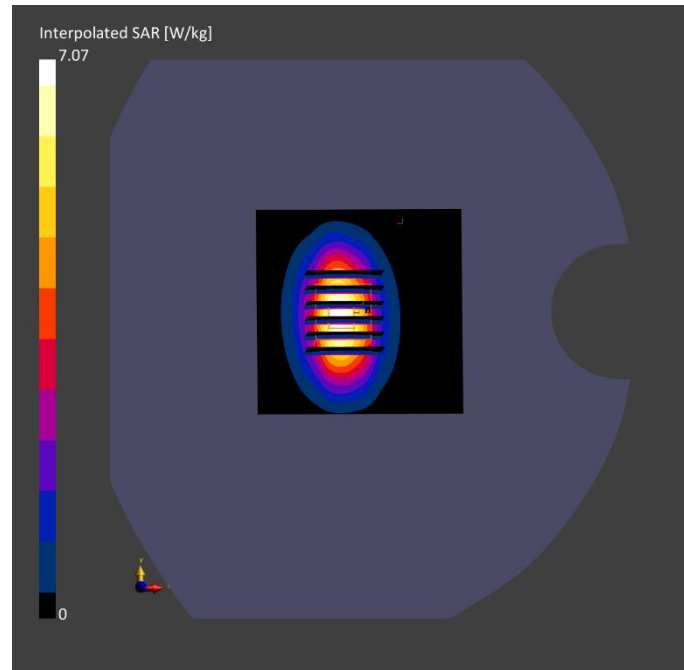
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D175 0	CW, 0--	1750.0, 50	8.52	1.41	41.0	22.9	21.3

Hardware Setup

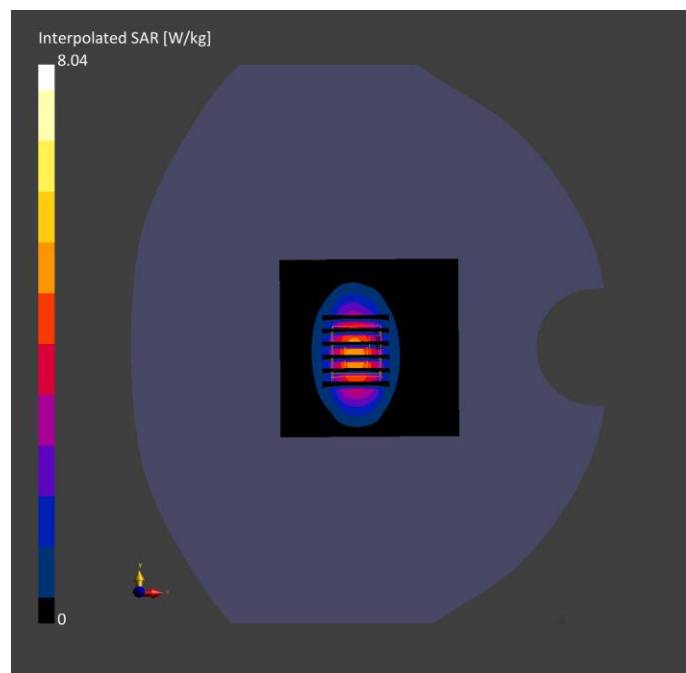
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05- 16	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-16	2024-05-16
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	3.77	3.68
Sensor	3.0	1.4	psSAR10g [W/kg]	2.05	1.96
Surface [mm]			Power Drift [dB]	-0.04	-0.02
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface	VMS + 6p	VMS + 6p	TSL	No correction	No correction
Detection			Correction		
Scan Method	Measured	Measured	M2/M1 [%]		81.9
			Dist 3dB Peak [mm]		10.7



System Performance Check Data (1950MHz)

Device under Test Properties									
Model, Manufacturer			Dimensions [mm]			DUT Type			
D1900V2, SPEAG			10.0 x 10.0 x 3.0			Dipole			
Exposure Conditions									
Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1950	CW, 0--	1950.0, 50	7.98	1.44	38.6	22.3	21.8
Hardware Setup									
Phantom		TSL, Measured Date			Probe, Calibration Date		DAE, Calibration Date		
Twin-SAM V5.0 (30deg probe tilt) - 1859		HBBL-600-10000 2024-05-18			EX3DV4 - SN7607, 2023-07-04		DAE4 Sn1710, 2024-01-03		
Scan Setup					Measurement Results				
		Area Scan	Zoom Scan				Area Scan	Zoom Scan	
Grid Extents [mm]		80.0 x 80.0	30.0 x 30.0 x 30.0		Date		2024-05-18	2024-05-18	
Grid Steps [mm]		10.0 x 10.0	6.0 x 6.0 x 1.5		psSAR1g [W/kg]		4.18	4.14	
Sensor Surface [mm]		3.0	1.4		psSAR10g [W/kg]		2.15	2.06	
Graded Grid		Yes	Yes		Power Drift [dB]		-0.07	-0.15	
Grading Ratio		1.5	1.5		Power		Disabled	Disabled	
MAIA		N/A	N/A		Scaling				
Surface Detection		VMS + 6p	VMS + 6p		Scaling Factor [dB]				
Scan Method		Measured	Measured		TSL Correction		No correction	No correction	
					M2/M1 [%]			81.6	
					Dist 3dB Peak [mm]			9.6	



System Performance Check Data (1950MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1900V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

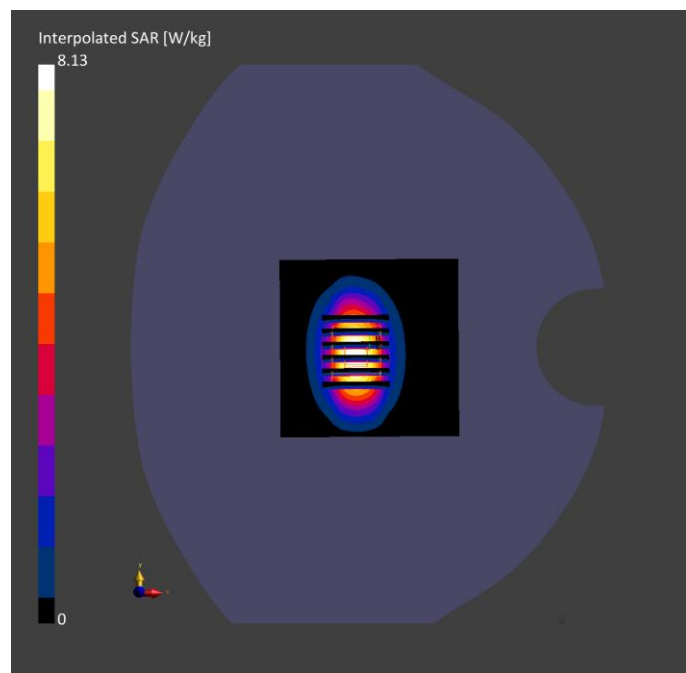
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D195 0	CW, 0--	1950.0, 50	7.98	1.45	39.5	22.7	21.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05- 20	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-20	2024-05-20
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	4.20	4.16
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.18	2.08
Graded Grid	Yes	Yes	Power Drift [dB]	-0.08	-0.15
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		81.9
			Dist 3dB		9.8
			Peak [mm]		



System Performance Check Data (2450MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D2450V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

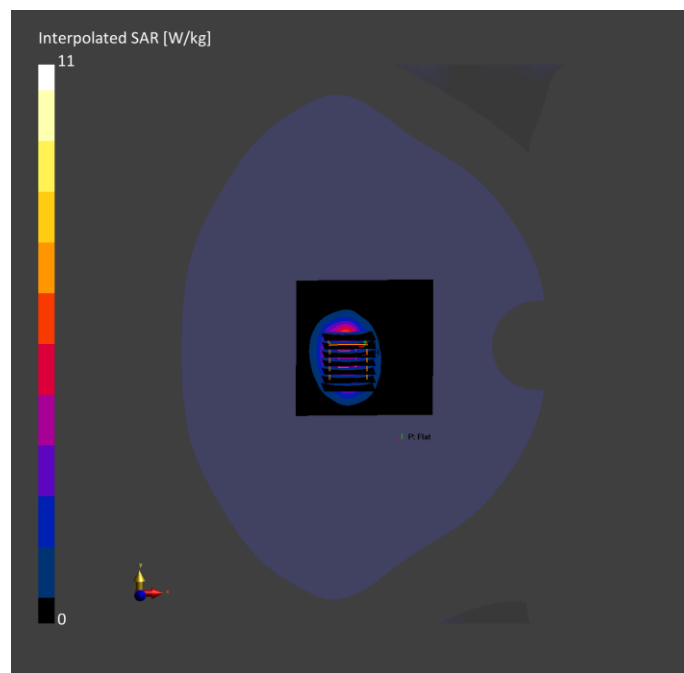
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D245 0	CW, 0--	2450.0, 2450	7.47	1.79	38.7	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05- 22	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-22	2024-05-22
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.42	5.40
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.48	2.42
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.01
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		80.5
			Dist 3dB Peak [mm]		8.8



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

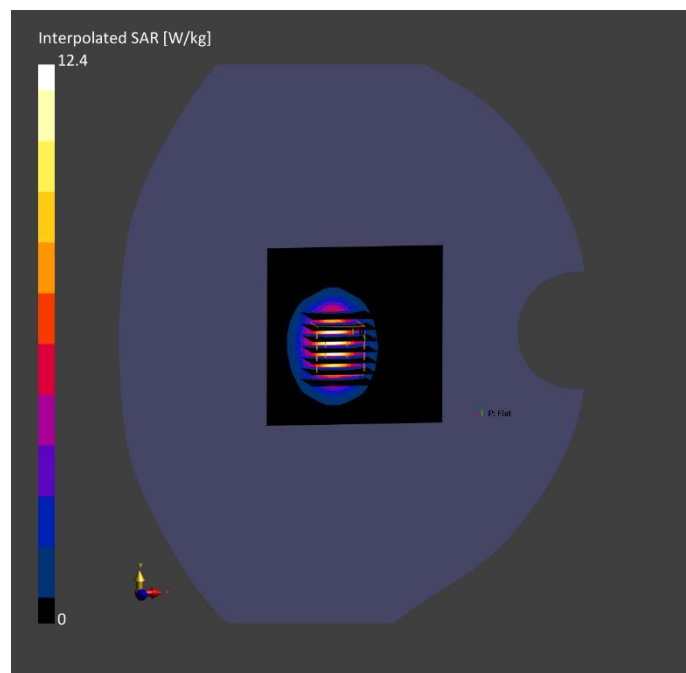
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D2600 V3	CW, 0--	2600.0, 50	7.41	1.91	38.2	22.9	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05- 24	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-24	2024-05-24
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.62	5.73
Sensor	3.0	1.4	psSAR10g [W/kg]	2.44	2.51
Surface [mm]			Power Drift [dB]	0.04	0.01
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		80.4
			Dist 3dB		8.9
			Peak [mm]		



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

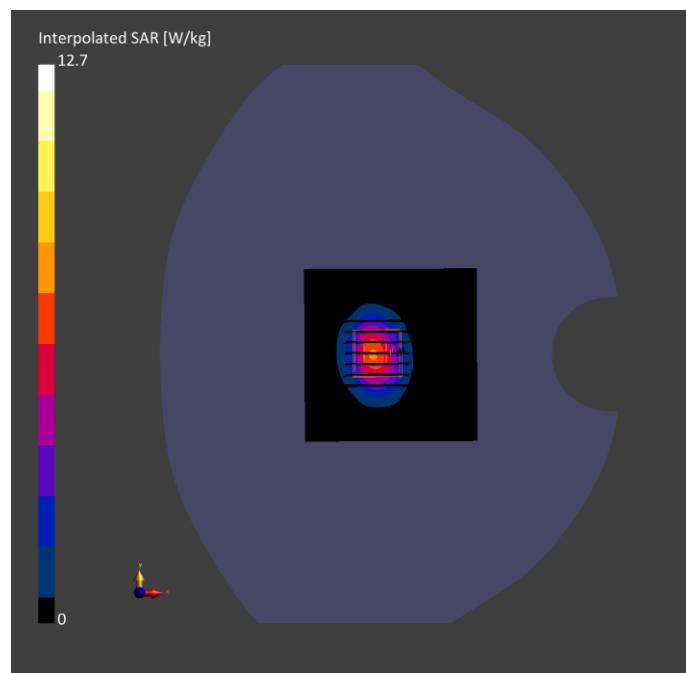
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D2600 V3	CW, 0--	2600.0, 50	7.41	1.96	38.3	22.5	21.3

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-26	2024-05-26
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.86	5.79
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.63	2.45
Graded Grid	Yes	Yes	Power Drift [dB]	0.02	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		78.4
			Dist 3dB		8.6
			Peak [mm]		



System Performance Check Data (5200MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

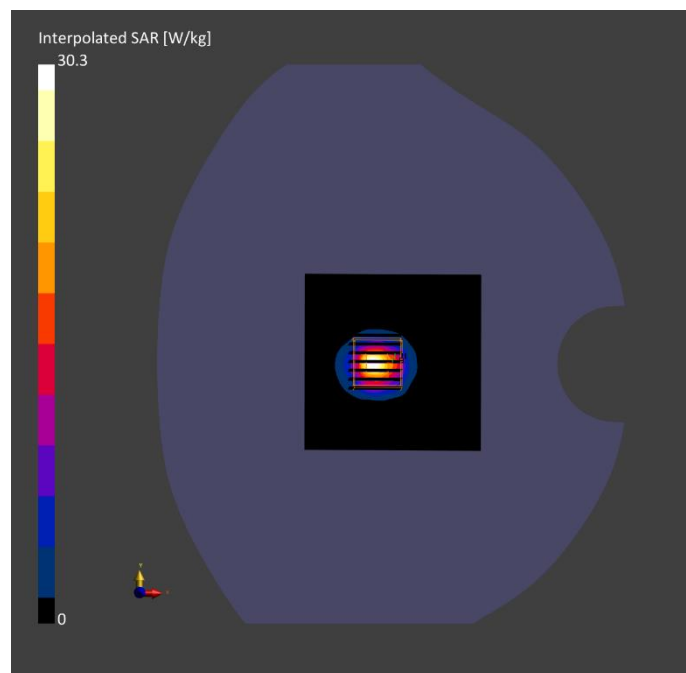
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		Validat ion band	CW, 0--	5200.0, 5200	5.41	4.51	36.4	22.4	21.7

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-28	EX3DV4 - SN7607,	2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0	Date	2024-05-28	2024-05-28
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR1g [W/kg]	7.98	8.01
Sensor	3.0	1.4	psSAR10g [W/kg]	2.25	2.29
Surface [mm]			Power Drift [dB]	-0.14	0.08
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.4	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		66.5
			Dist 3dB		6.9
			Peak [mm]		



System Performance Check Data (5300MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

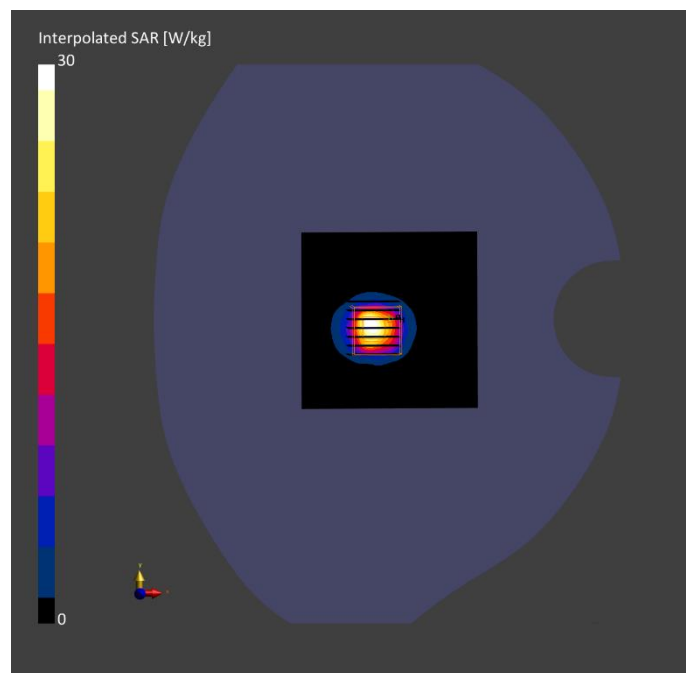
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		Validat ion band	CW, 0--	5300.0, 5300	5.41	4.75	35.2	22.4	21.7

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-28	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn1710, 2024-01-03	

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0	Date	2024-05-28	2024-05-28
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR1g [W/kg]	7.88	8.10
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.20	2.32
Graded Grid	Yes	Yes	Power Drift [dB]	0.02	0.09
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		67.6
			Dist 3dB		7.2
			Peak [mm]		



System Performance Check Data (5800MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

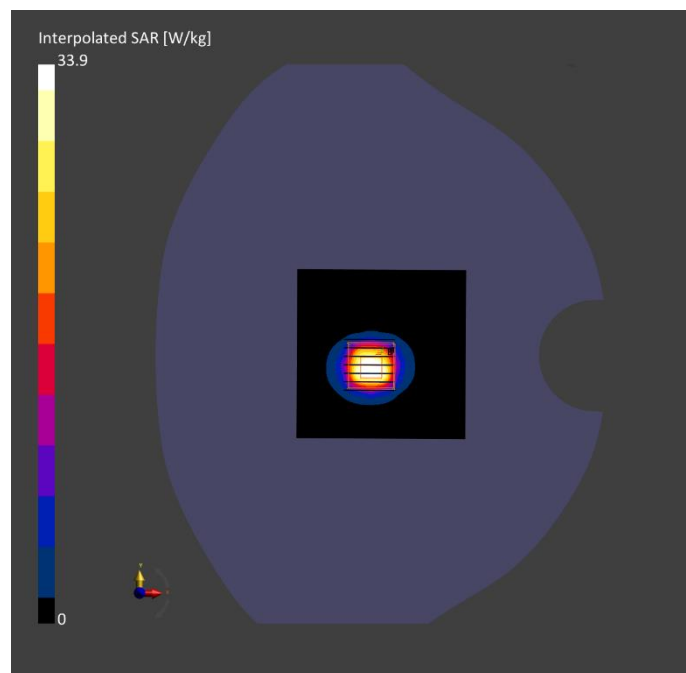
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		Validation band	CW, 0--	5800.0, 5800	4.78	5.35	36.1	22.6	21.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-30	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0	Date	2024-05-30	2024-05-30
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR1g [W/kg]	7.44	8.06
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.24	2.25
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.08
Grading Ratio	1.5	1.4	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		61.1
			Dist 3dB Peak [mm]		7.2



ANNEX C TEST DATA

Meas.1 Body Plan with Left Edge 10mm on Low Channel in GSM 850 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

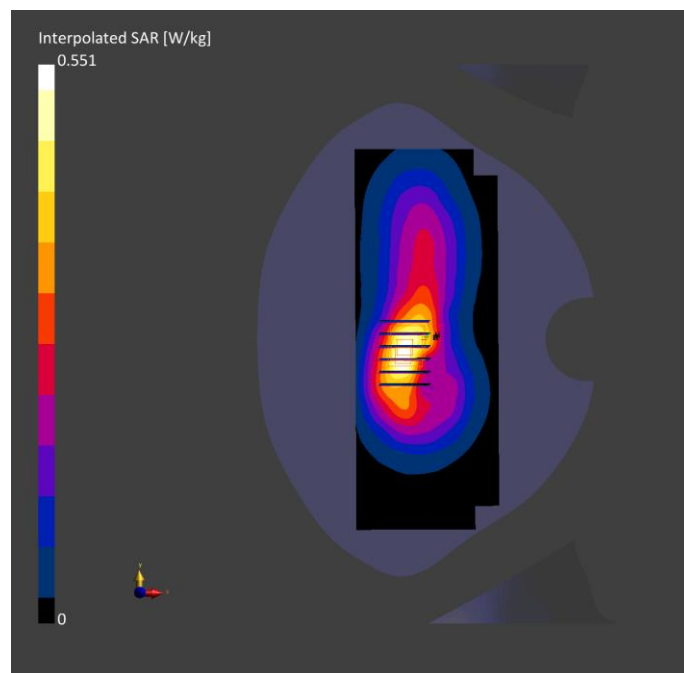
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	GS M 850	GSM, 10028 -DAC	848.8, 251	9.96	0.923	41.1	22.6	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-12	2024-05-12
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.334	0.358
Sensor	3.0	1.4	psSAR10g [W/kg]	0.212	0.218
Surface [mm]			Power Drift [dB]	-0.09	0.07
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		66.7
			Dist 3dB		13.8
			Peak [mm]		



Meas.2 Body Plan with Left Edge 0mm on Low Channel in GSM 850 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	GS M 850	GSM, 10028 -DAC	848.8, 251	9.96	0.923	41.1	22.6	21.4

Hardware Setup

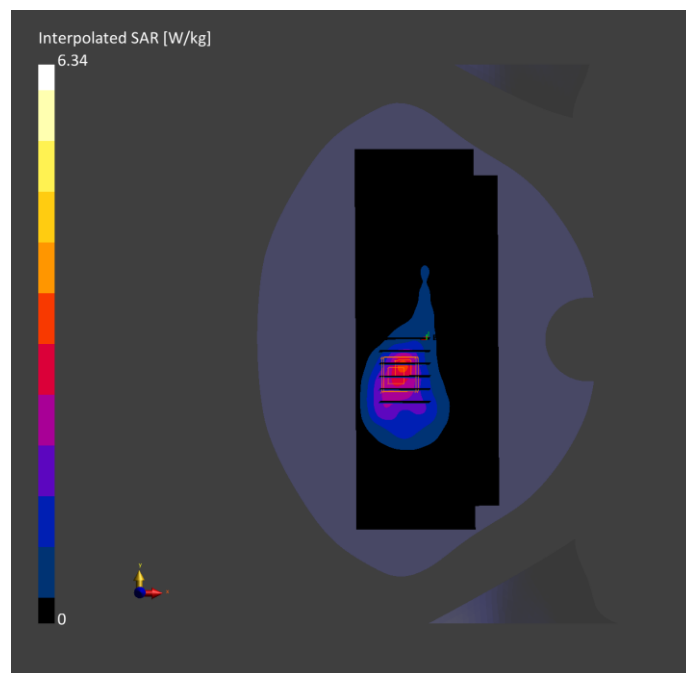
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-12	2024-05-12
psSAR1g [W/kg]	2.74	3.12
psSAR10g [W/kg]	1.65	1.56
Power Drift [dB]	0.11	-0.09
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		46.2
Dist 3dB Peak [mm]		8.0



Meas.3 Body Plan with Left Edge 10mm on Low Channel in GSM 1900 mode with Antenna 4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	PCS 190 0	GSM, 10028 -DAC	1850.2, 512	7.98	1.38	39.4	22.3	21.8

Hardware Setup

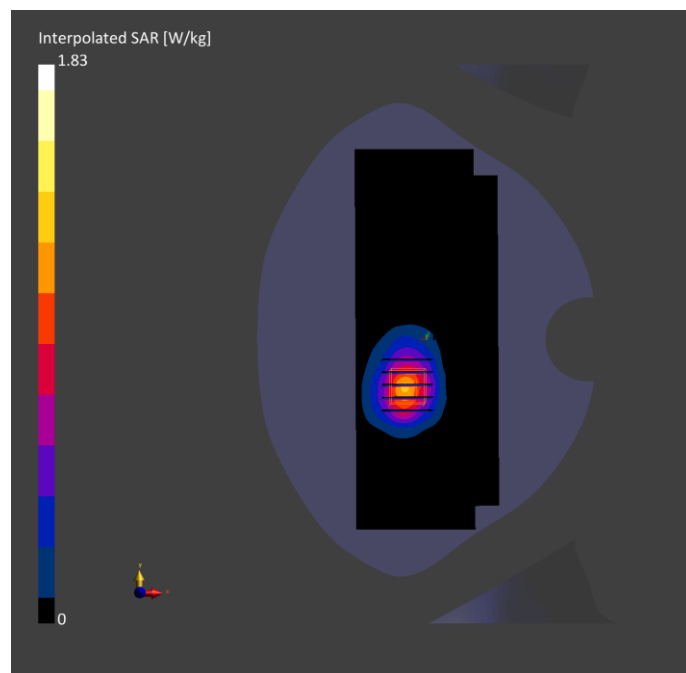
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 18	2024-05- 04	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-18	2024-05-18
psSAR1g [W/kg]	1.01	1.10
psSAR10g [W/kg]	0.558	0.635
Power Drift [dB]	0.01	0.13
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		63.9
Dist 3dB Peak [mm]		12.8



Meas.4 Body Plan with Left Edge 0mm on High Channel in GSM 1900 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	PCS 190 0	GSM, 10028 -DAC	1909.8, 810	7.98	1.43	38.7	22.3	21.8

Hardware Setup

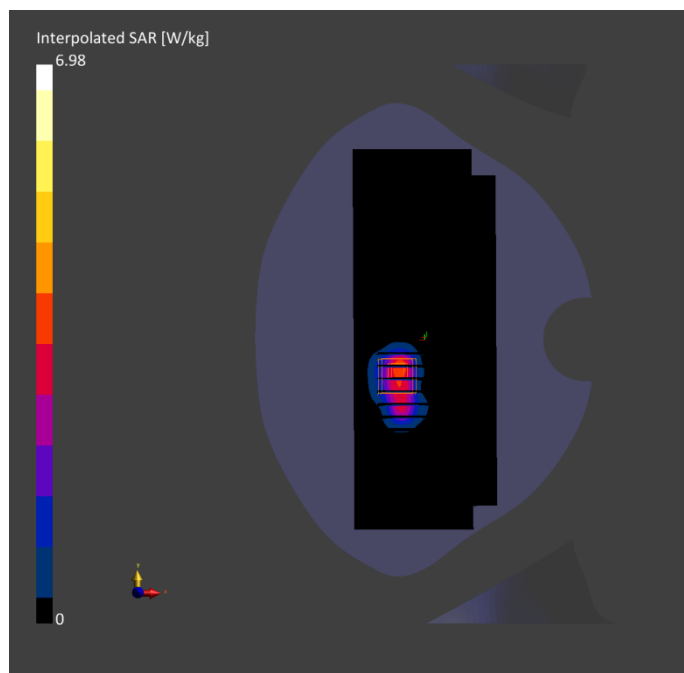
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-18	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-18	2024-05-18
psSAR1g [W/kg]	3.18	3.48
psSAR10g [W/kg]	1.59	1.63
Power Drift [dB]	-0.05	0.05
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		42.8
Dist 3dB Peak [mm]		7.2



Meas.5 Body Plan with Left Edge 10mm on High Channel in WCDMA Band2 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 2	WCDMA, 10097- CAC	1907.6, 9538	7.98	1.42	38.8	22.3	21.8

Hardware Setup

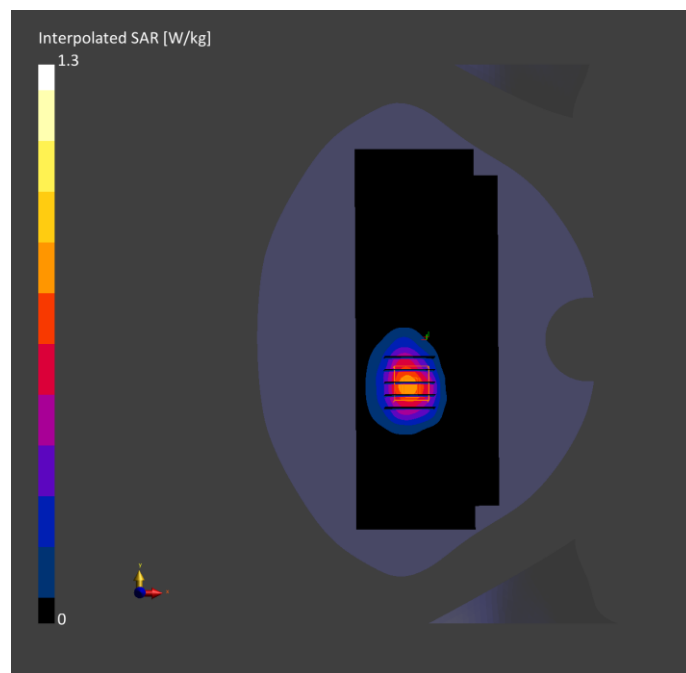
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-18	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-18	2024-05-18
psSAR1g [W/kg]	0.695	0.803
psSAR10g [W/kg]	0.385	0.444
Power Drift [dB]	-0.02	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		63.1
Dist 3dB Peak [mm]		11.3



Meas.6 Body Plan with Left Edge 0mm on High Channel in WCDMA Band2 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 2	WCDMA, 10097- CAC	1907.6, 9538	7.98	1.42	38.8	22.3	21.8

Hardware Setup

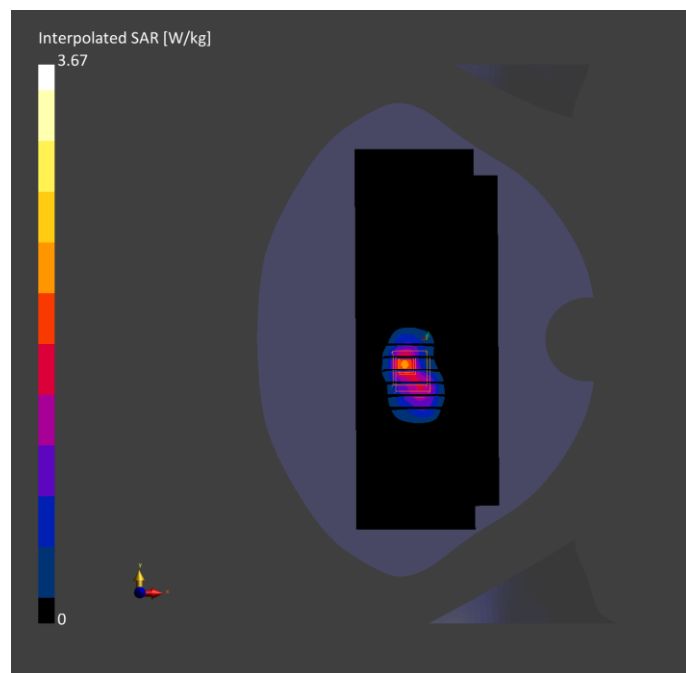
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-18	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-18	2024-05-18
psSAR1g [W/kg]	1.64	1.81
psSAR10g [W/kg]	0.807	0.918
Power Drift [dB]	0.01	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		45.9
Dist 3dB Peak [mm]		6.4



Meas.7 Body Plan with Left Edge 10mm on High Channel in WCDMA Band4 mode with Antenna 4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 4	WCDMA, 10011- CAC	1752.6, 1513	8.52	1.40	39.8	22.8	21.8

Hardware Setup

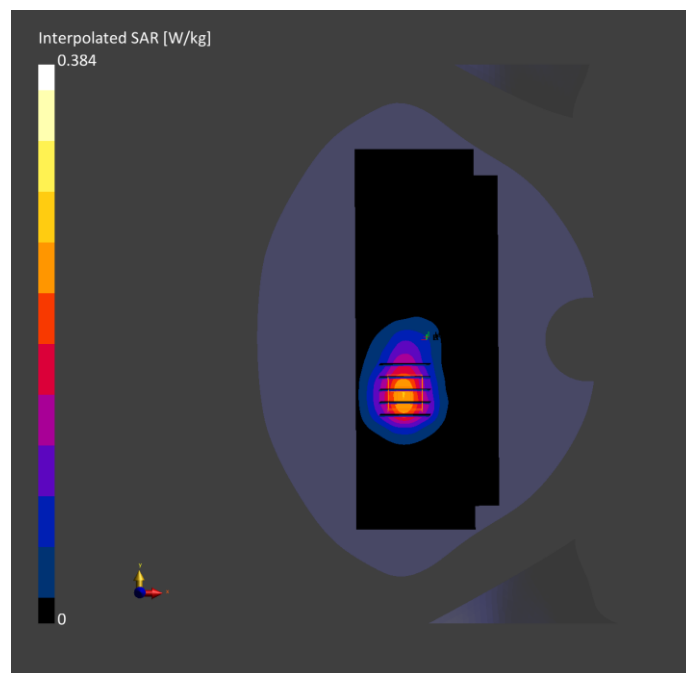
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-14	2024-05-14
psSAR1g [W/kg]	0.218	0.232
psSAR10g [W/kg]	0.124	0.134
Power Drift [dB]	0.01	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.0
Dist 3dB Peak [mm]		14.8



Meas.8 Body Plan with Left Edge 0mm on High Channel in WCDMA Band4 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 4	WCDMA, 10011- CAC	1752.6, 1513	8.52	1.40	39.8	22.8	21.8

Hardware Setup

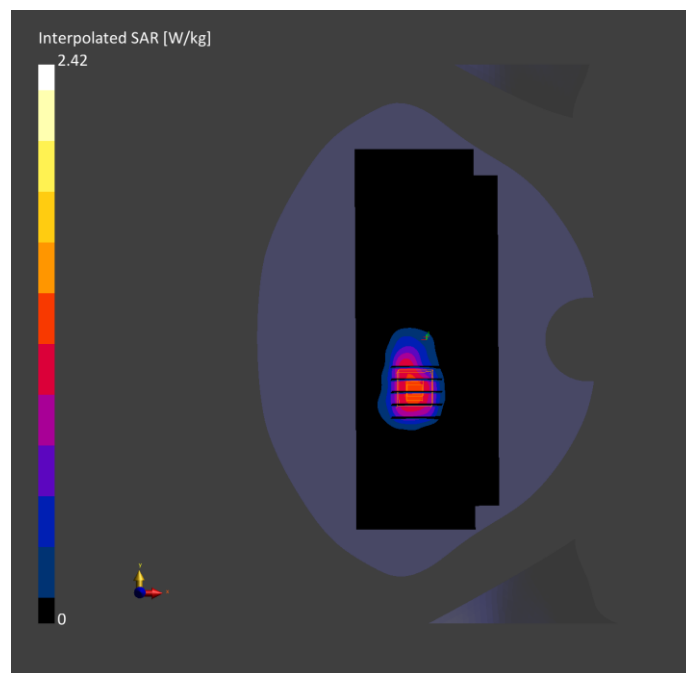
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-14	2024-05-14
psSAR1g [W/kg]	1.15	1.43
psSAR10g [W/kg]	0.665	0.746
Power Drift [dB]	0.00	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		62.1
Dist 3dB Peak [mm]		8.0



Meas.9 Body Plan with Left Edge 10mm on High Channel in WCDMA Band5 mode with Antenna 4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 5	WCDMA, 10011-CAC	846.6, 4233	9.96	0.920	41.3	22.1	21.1

Hardware Setup

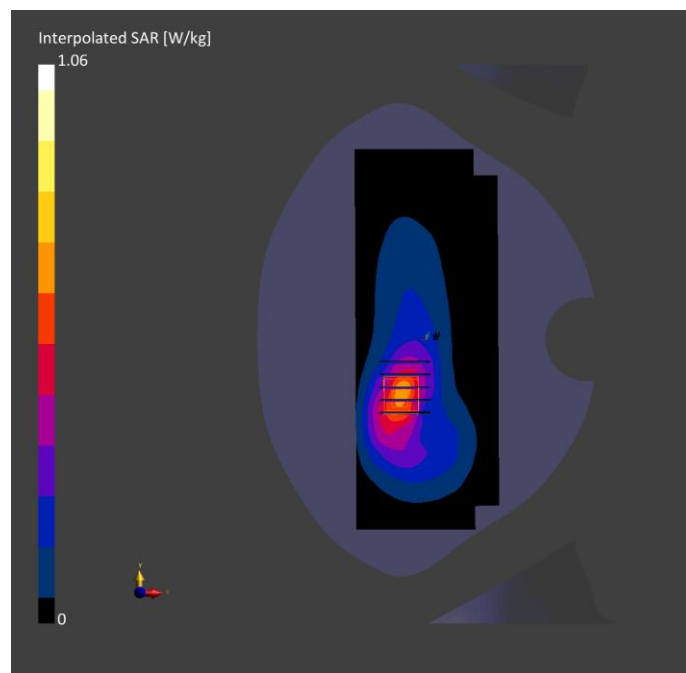
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-08	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-08	2024-05-08
psSAR1g [W/kg]	0.578	0.637
psSAR10g [W/kg]	0.364	0.371
Power Drift [dB]	-0.01	-0.13
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.0
Dist 3dB Peak [mm]		10.7



Meas.10 Body Plan with Left Edge 0mm on a High Channel in WCDMA Band5 mode with Antenna 4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 5	WCDMA, 10011- CAC	846.6, 4233	9.96	0.920	41.3	22.1	21.1

Hardware Setup

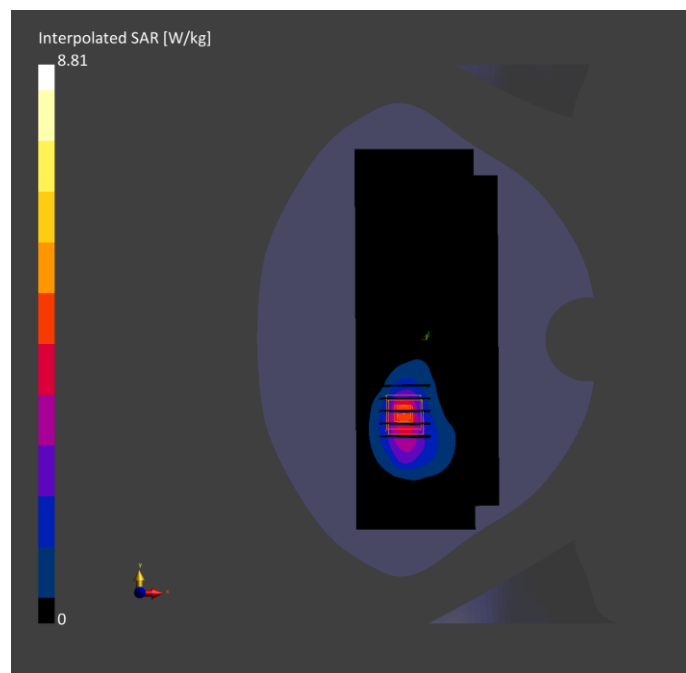
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-08	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-08	2024-05-08
psSAR1g [W/kg]	4.12	3.94
psSAR10g [W/kg]	2.35	1.89
Power Drift [dB]	-0.00	-0.16
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		40.6
Dist 3dB Peak [mm]		8.0



Meas.11 Body Plan with Left Edge 10mm on Middle Channel in LTE Band2 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

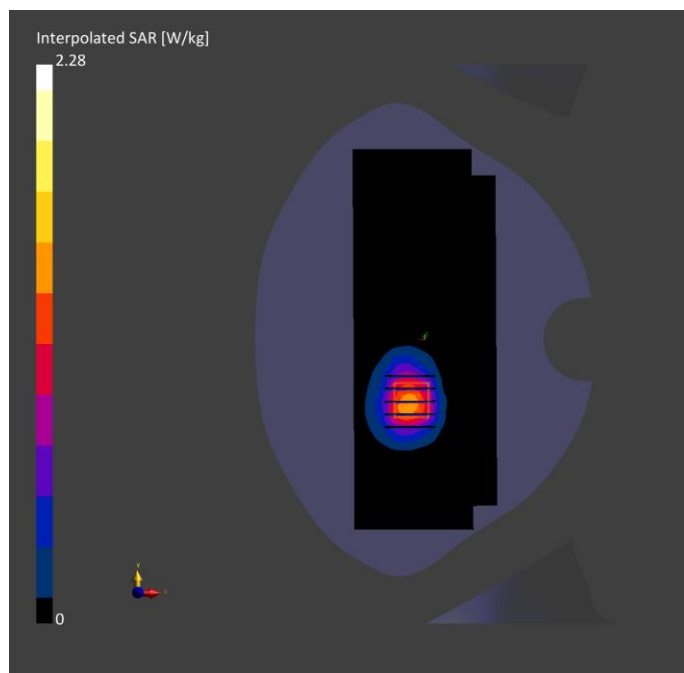
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 2	LTE- FDD, 10169 -CAF	1900.0, 19100	7.98	1.44	39.7	22.7	21.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-20	2024-05-20
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	1.23	1.40
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.692	0.780
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		62.8
			Dist 3dB		12.8
			Peak [mm]		



Meas.12 Body Plan with Left Edge 0mm on Middle Channel in LTE Band2 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

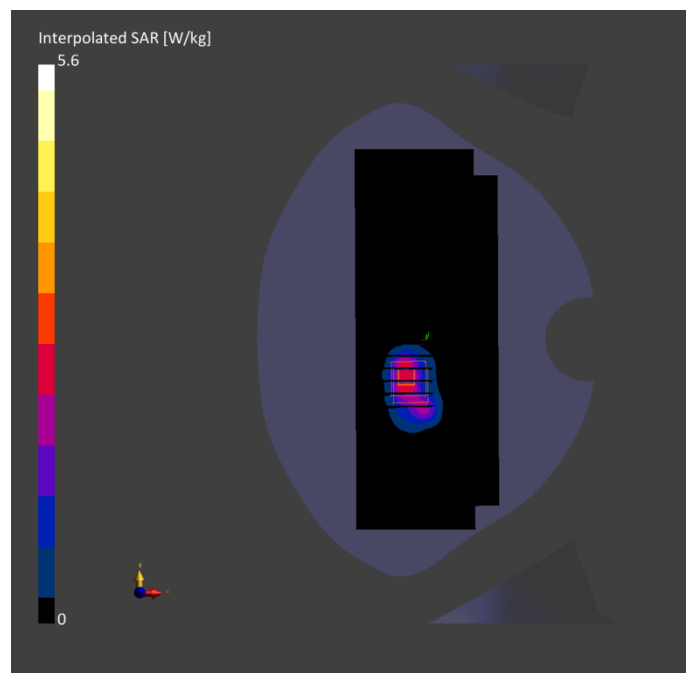
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 2	LTE- FDD, 10169 -CAF	1900.0, 19100	7.98	1.44	39.7	22.7	21.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-20	2024-05-20
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	2.23	2.70
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.15	1.32
Graded Grid	Yes	Yes	Power Drift [dB]	-0.00	0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		44.4
			Dist 3dB Peak [mm]		6.4



Meas.13 Body Plan with Left Edge 10mm on Middle Channel in LTE Band4 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

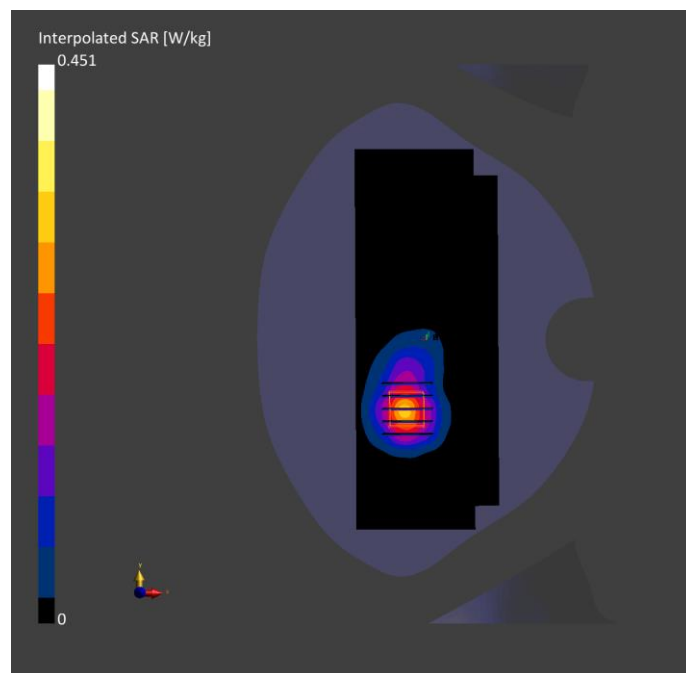
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 4	LTE- FDD, 10169 -CAF	1732.5, 20175	8.52	1.38	40.3	22.8	21.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-14	2024-05-14
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.259	0.268
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.143	0.153
Graded Grid	Yes	Yes	Power Drift [dB]	-0.06	-0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		58.9
			Dist 3dB Peak [mm]		13.2



Meas.14 Body Plan with Left Edge 0mm on Middle Channel in LTE Band4 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

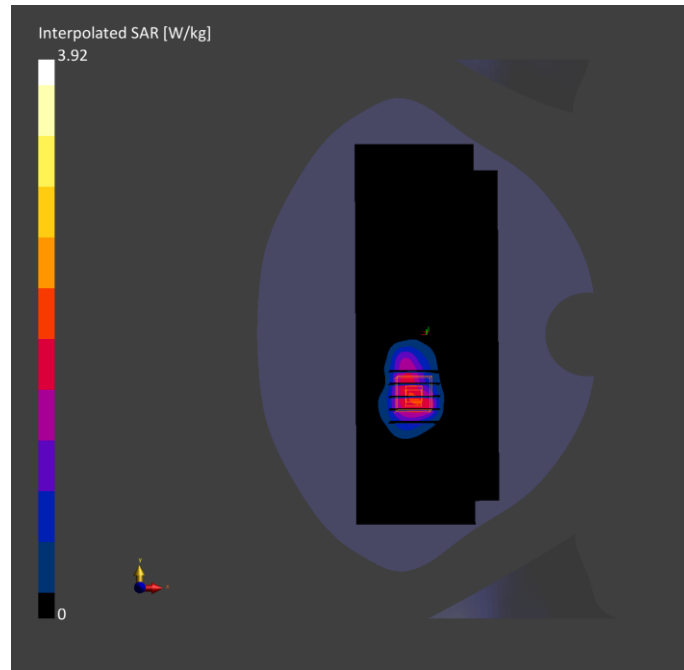
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 4	LTE- FDD, 10169 -CAF	1732.5, 20175	8.52	1.38	40.3	22.8	21.8

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-14	EX3DV4 - SN7607,	2023-07-04	DAE4 Sn1710,	2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-14	2024-05-14
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	1.71	2.22
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.961	1.13
Graded Grid	Yes	Yes	Power Drift [dB]	0.03	0.00
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		56.8
			Dist 3dB Peak [mm]		9.3



Meas.15 Body Plan with Left Edge 10mm on Middle Channel in LTE Band5 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

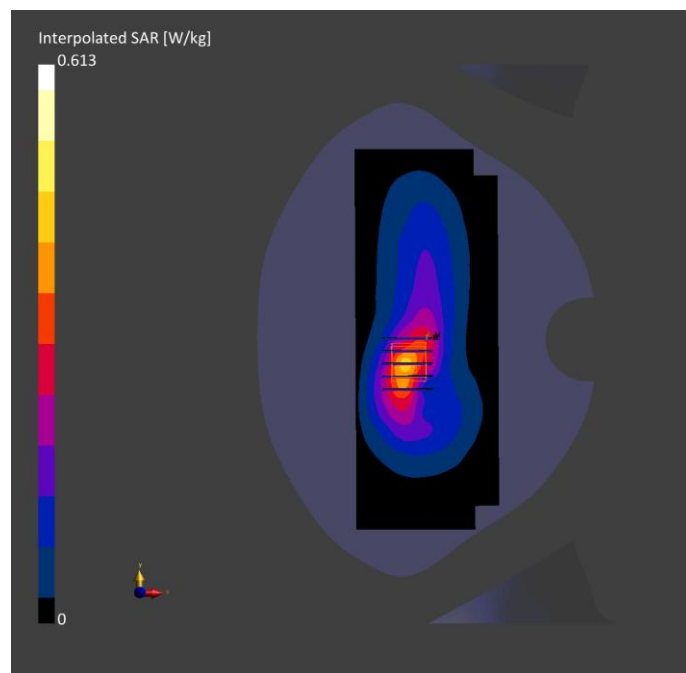
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 5	LTE- FDD, 10175 -CAH	836.5, 20525	9.96	0.896	42.1	22.6	21.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-10	2024-05-10
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.364	0.377
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.224	0.224
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	-0.09
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		61.6
			Dist 3dB Peak [mm]		12.2



Meas.16 Body Plan with Left Edge 0mm on Middle Channel in LTE Band5 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

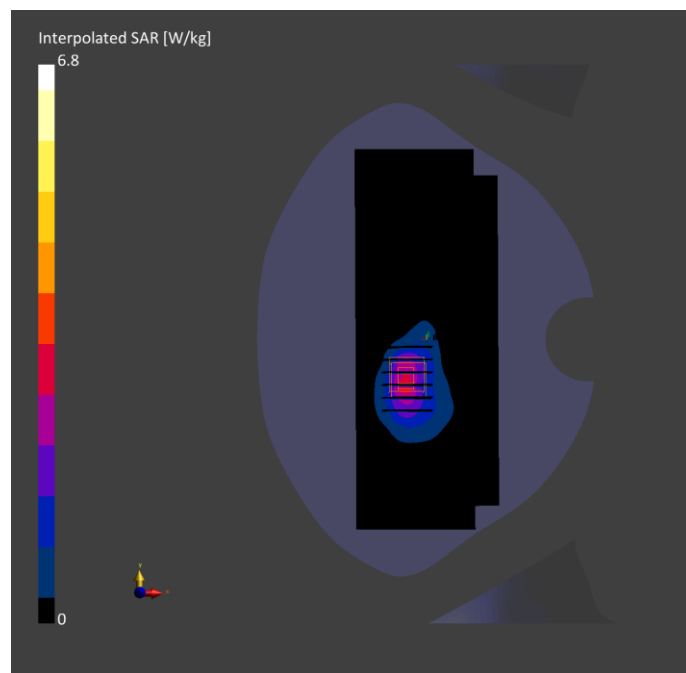
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 5	LTE- FDD, 10175 -CAH	836.5, 20525	9.96	0.896	42.1	22.6	21.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-10	2024-05-10
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	2.59	2.86
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.56	1.32
Graded Grid	Yes	Yes	Power Drift [dB]	-0.04	-0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		38.0
			Dist 3dB Peak [mm]		7.2



Meas.17 Body Plan with Left Edge 10mm on Middle Channel in LTE Band7 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

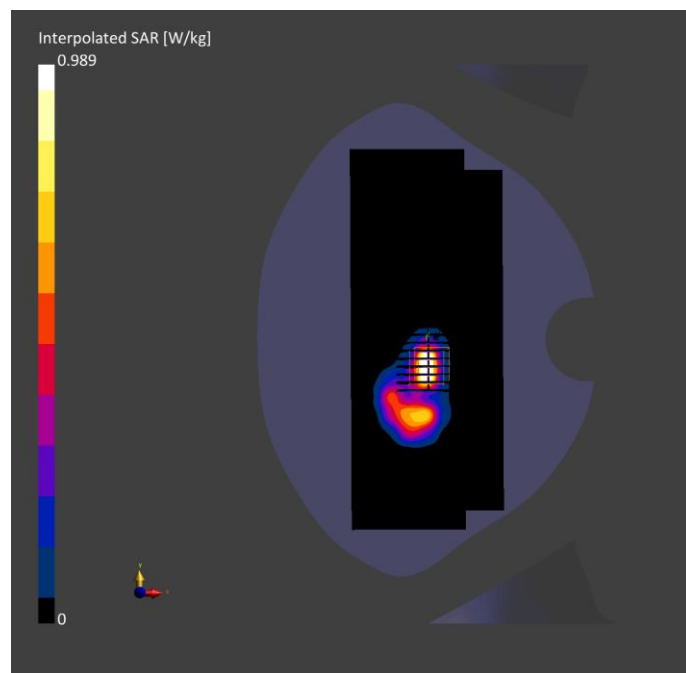
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 7	LTE- FDD, 10169 -CAF	2535.0, 21100	7.41	1.83	38.5	22.9	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-24	2024-05-24
Grid Steps [mm]	12.0 x 12.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.220	0.233
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.117	0.122
Graded Grid	Yes	Yes	Power Drift [dB]	0.04	0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		51.3
			Dist 3dB Peak [mm]		12.9



Meas.18 Body Plan with Left Edge 0mm on Middle Channel in LTE Band7 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

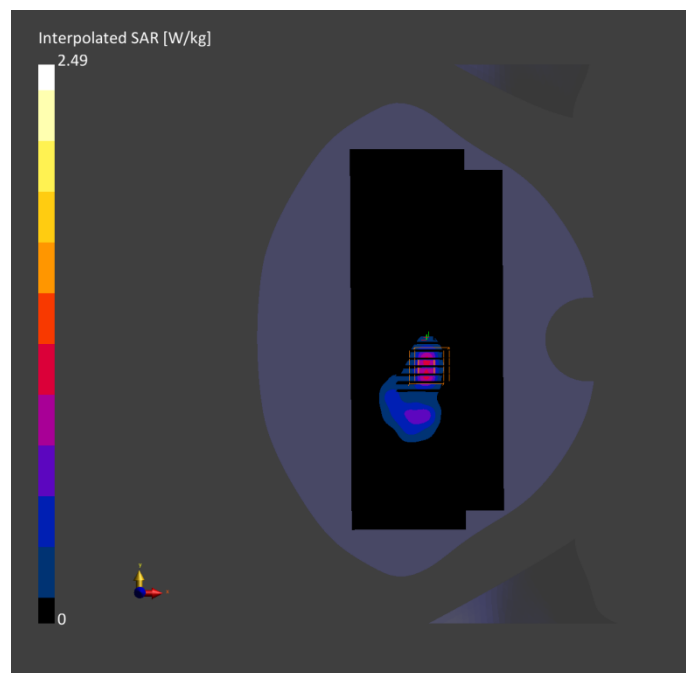
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 7	LTE- FDD, 10169 -CAF	2535.0, 21100	7.41	1.83	38.5	22.9	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 240.0	30.0 x 30.0 x 30.0	Date	2024-05-24	2024-05-24
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.832	0.988
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.330	0.320
Graded Grid	Yes	Yes	Power Drift [dB]	0.06	-0.05
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		44.8
			Dist 3dB Peak [mm]		6.0



Meas.19 Body Plan with Left Edge 10mm on Middle Channel in LTE Band12 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

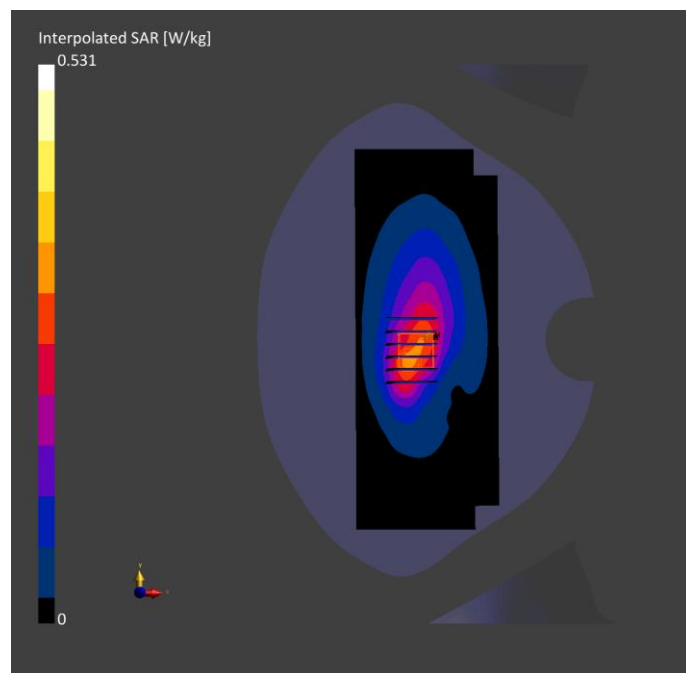
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 12	LTE- FDD, 10175 -CAH	707.5, 23095	10.31	0.887	41.4	22.6	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-12	2024-05-12
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.286	0.321
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.190	0.199
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		58.7
			Dist 3dB Peak [mm]		12.2



Meas.20 Body Plan with Left Edge 0mm on Middle Channel in LTE Band12 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

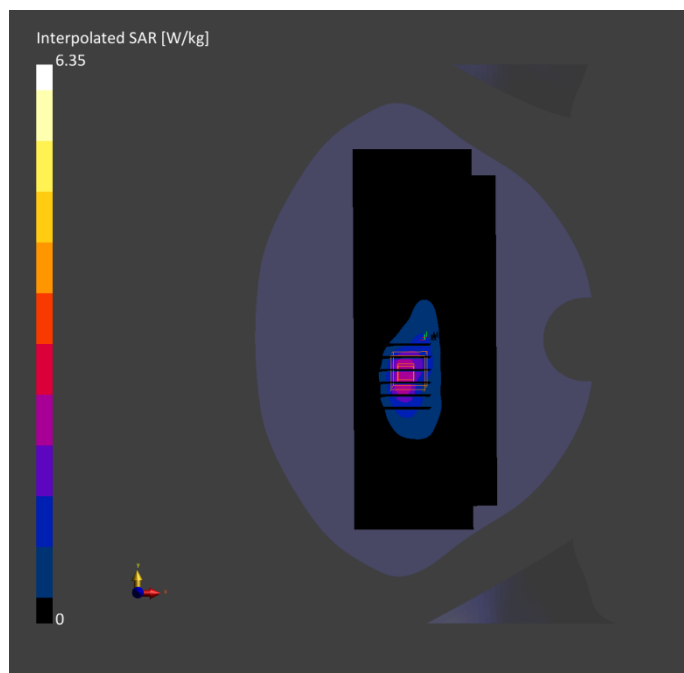
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 12	LTE- FDD, 10175 -CAH	707.5, 23095	10.31	0.887	41.4	22.6	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-12	2024-05-12
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	2.25	2.56
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.34	1.19
Graded Grid	Yes	Yes	Power Drift [dB]	0.10	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		36.4
			Dist 3dB Peak [mm]		6.4



Meas.21 Body Plan with Left Edge 10mm on High Channel in LTE Band17 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

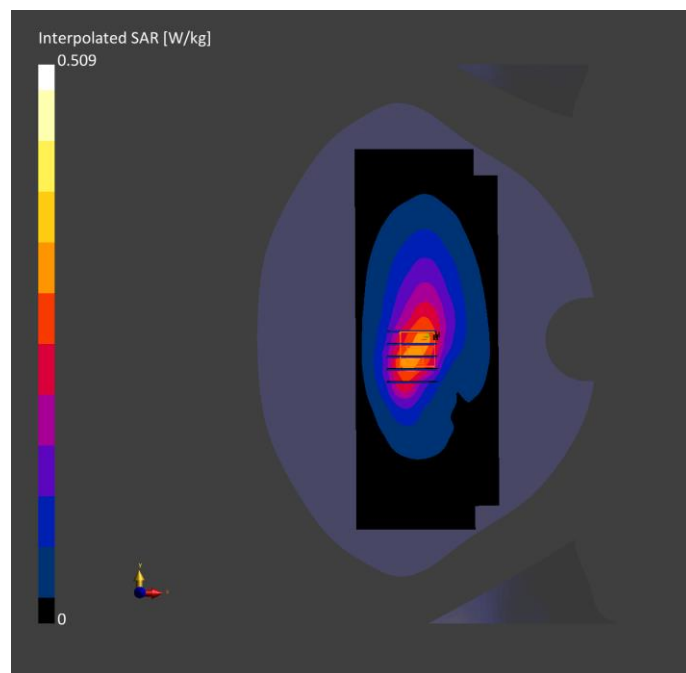
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band d 17	LTE- FDD, 10177 -CAJ	711.0, 23800	10.31	0.880	41.0	22.6	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05- 12	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-12	2024-05-12
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.284	0.311
Sensor	3.0	1.4	psSAR10g [W/kg]	0.190	0.189
Surface [mm]			Power Drift [dB]	0.00	-0.01
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		61.3
			Dist 3dB		12.5
			Peak [mm]		



Meas.22 Body Plan with Left Edge 0mm on High Channel in LTE Band17 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

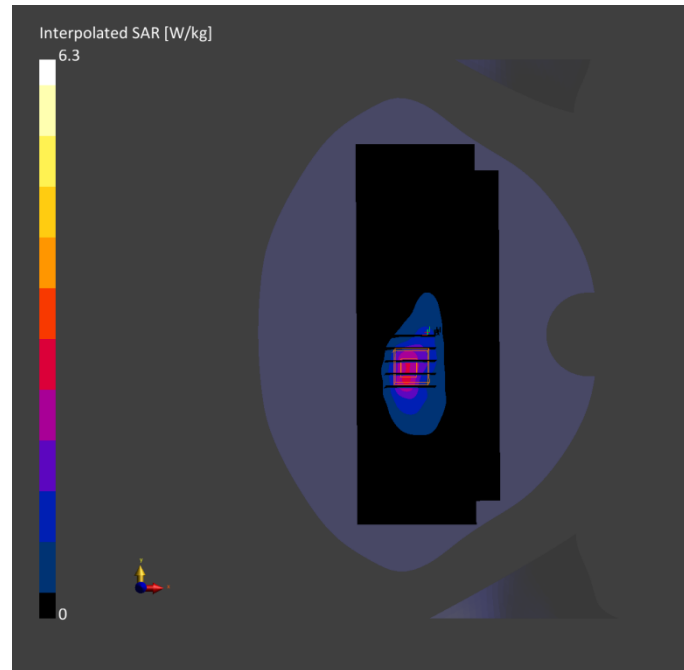
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 17	LTE- FDD, 10177 -CAJ	711.0, 23800	10.31	0.880	41.0	22.6	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-12	2024-05-12
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	2.35	2.64
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.40	1.21
Graded Grid	Yes	Yes	Power Drift [dB]	-1.29	0.00
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		37.2
			Dist 3dB Peak [mm]		6.6



Meas.23 Body Plan with Left Edge 10mm on Middle Channel in LTE Band66 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

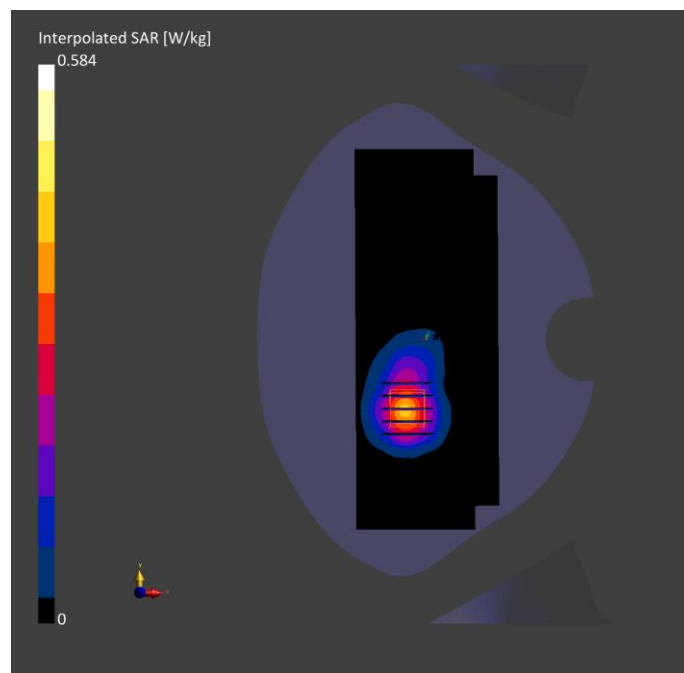
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 66	LTE- FDD, 10169 -CAF	1745.0, 132322	8.52	1.39	40.2	22.9	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-16	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-16	2024-05-16
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.333	0.355
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.187	0.205
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.00
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		62.0
			Dist 3dB Peak [mm]		12.9



Meas.24 Body Plan with Left Edge 0mm on Middle Channel in LTE Band66 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

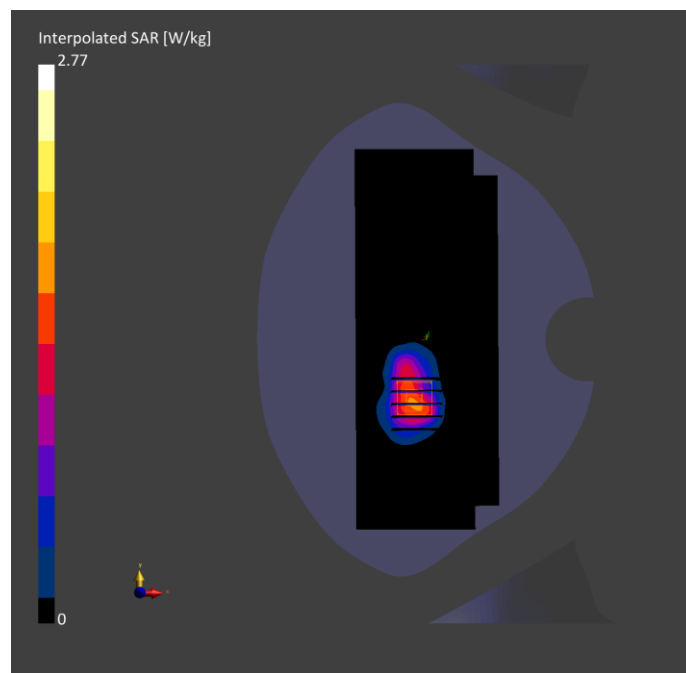
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 66	LTE- FDD, 10169 -CAF	1745.0, 132322	8.52	1.39	40.2	22.9	21.3

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-16	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn1710, 2024-01-03	

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-16	2024-05-16
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	1.42	1.61
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.794	0.845
Graded Grid	Yes	Yes	Power Drift [dB]	0.02	-0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		60.1
			Dist 3dB Peak [mm]		8.0



Meas.25 Body Plan with Left Edge 10mm on Low Channel in LTE Band38 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

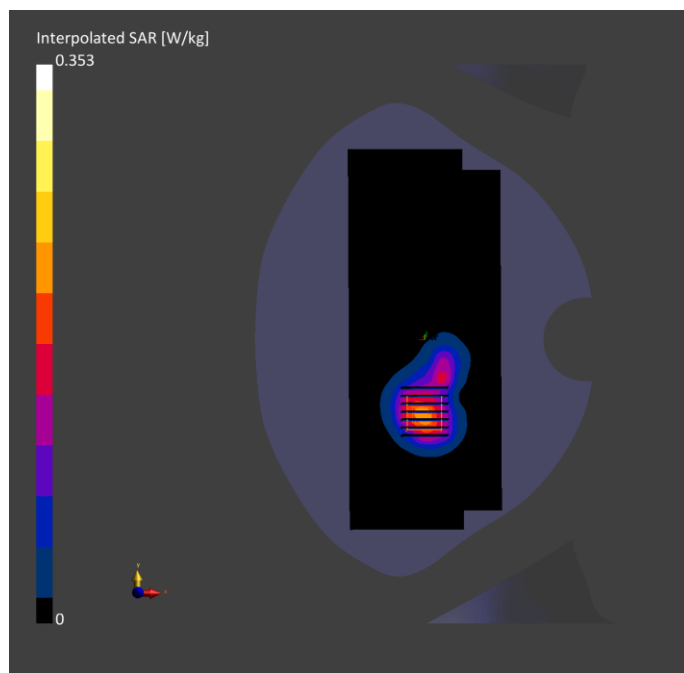
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 38	LTE- TDD, 10172 -CAH	2580.0, 37850	7.41	1.93	38.7	22.5	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000 2024-05-26	EX3DV4 - SN7664, 2023-09-23	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 240.0	30.0 x 30.0 x 30.0	Date	2024-05-26	2024-05-26
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.178	0.182
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.093	0.094
Graded Grid	Yes	Yes	Power Drift [dB]	-0.05	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		48.0
			Dist 3dB		11.4
			Peak [mm]		



Meas.26 Body Plan with Left Edge 0mm on Low Channel in LTE Band38 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

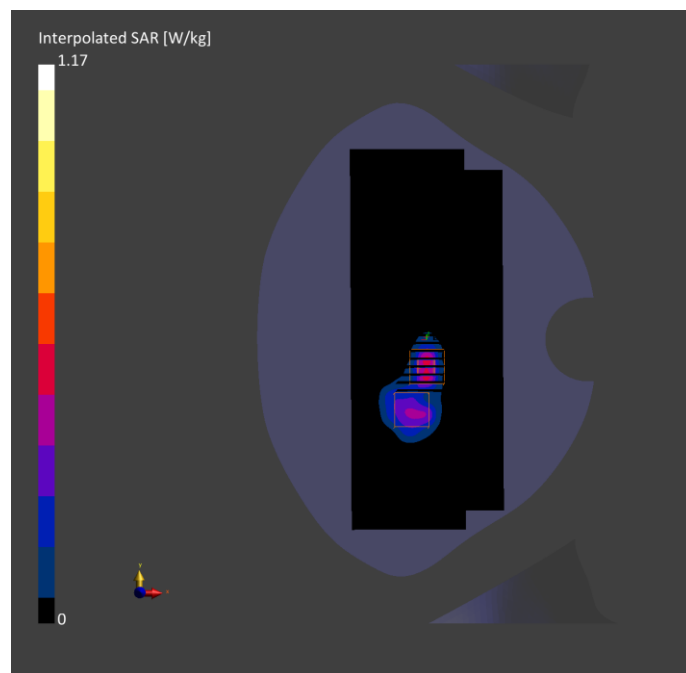
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 38	LTE- TDD, 10172 -CAH	2580.0, 37850	7.41	1.93	38.7	22.5	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 240.0	30.0 x 30.0 x 30.0	Date	2024-05-26	2024-05-26
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.392	0.455
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.162	0.156
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	-0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		39.4
			Dist 3dB Peak [mm]		5.8



Meas.27 Body Plan with Left Edge 10mm on Low Channel in LTE Band41 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

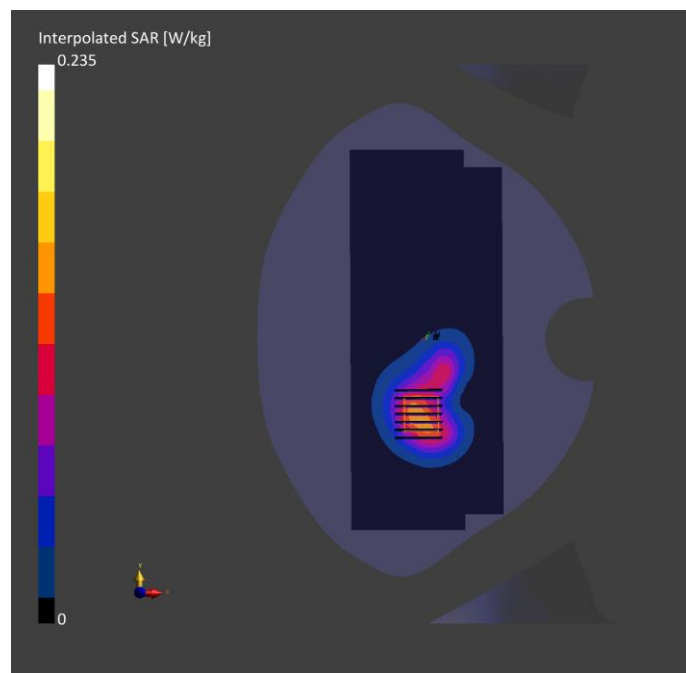
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	Band 41	LTE- TDD, 10172 -CAH	2506.0, 39750	7.41	1.84	39.4	22.5	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000 2024-05-26	EX3DV4 - SN7664, 2023-09-23	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 240.0	30.0 x 30.0 x 30.0	Date	2024-05-26	2024-05-26
Grid Steps [mm]	12.0 x 10.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.120	0.123
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.066	0.066
Graded Grid	Yes	Yes	Power Drift [dB]	-0.04	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface Detection	All points	All points	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		50.6
			Dist 3dB Peak [mm]		12.6



Meas.28 Body Plan with Left Edge 0mm on Low Channel in LTE Band41 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

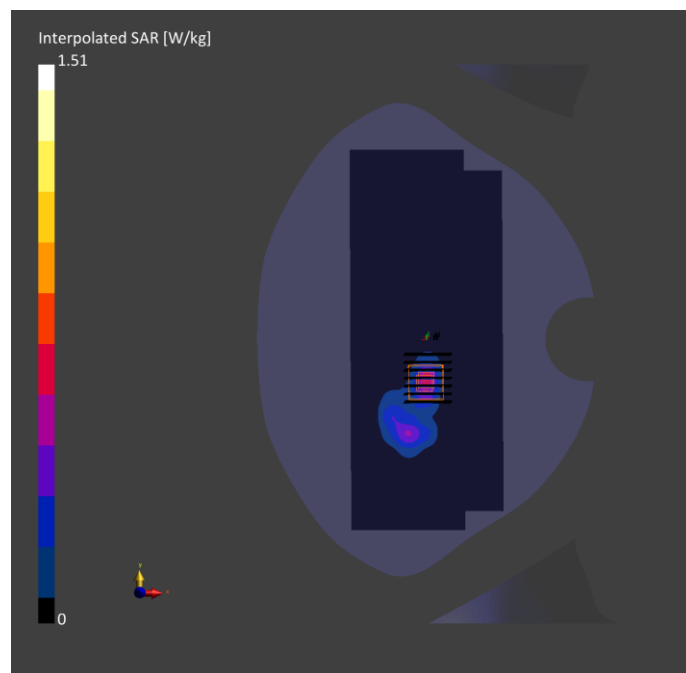
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 0.00	Band 41	LTE- TDD, 10172 -CAH	2506.0, 39750	7.41	1.84	39.4	22.5	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000 2024-05- 26	EX3DV4 - SN7664, 2023-09- 23	DAE4 Sn1711, 2024-03- 18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 240.0	30.0 x 30.0 x 30.0	Date	2024-05-26	2024-05-26
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.508	0.433
Sensor	3.0	1.4	psSAR10g [W/kg]	0.192	0.183
Surface [mm]			Power Drift [dB]	0.10	-0.03
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	All points	All points	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		37.8
			Dist 3dB Peak [mm]		6.3



Meas.29 Body Plan with Right Edge 10mm on 11 Channel in IEEE802.11b mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

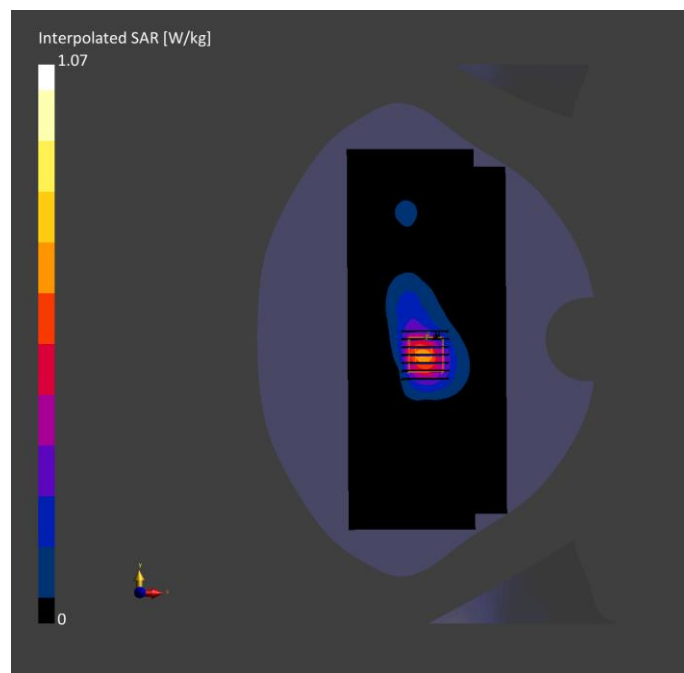
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE LEFT, 10.00	WLAN 2.4GHz	WLAN, 10415 -AAA	2462.0, 11	7.47	1.81	38.6	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000 2024-05-22	EX3DV4 - SN7664, 2023-09-23	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-22	2024-05-22
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.595	0.696
Sensor	3.0	1.4	psSAR10g [W/kg]	0.300	0.333
Surface [mm]			Power Drift [dB]	-0.05	-0.05
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	All points	All points	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		51.2
			Dist 3dB		9.1
			Peak [mm]		



Meas.30 Body Plan with Right Edge 0mm on 11 Channel in IEEE802.11b mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

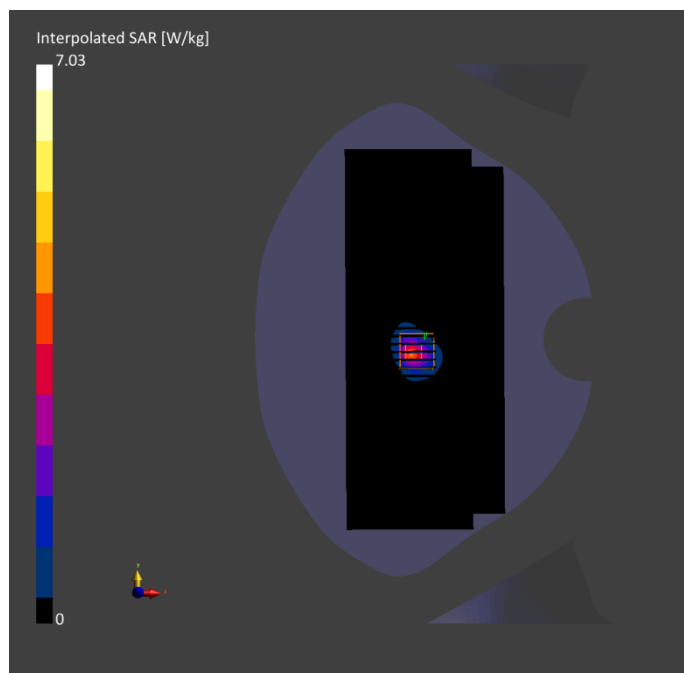
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 0.00	WLAN 2.4GH z	WLAN, 10415 -AAA	2462.0, 11	7.47	1.81	38.6	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000	2024-05-22	EX3DV4 - SN7664,	2023-09-23	DAE4 Sn1711,	2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 240.0	32.0 x 32.0 x 30.0	Date	2024-05-22	2024-05-22
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	2.40	2.58
Sensor	3.0	1.4	psSAR10g [W/kg]	0.953	1.01
Surface [mm]			Power Drift [dB]	0.02	-0.03
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	All points	All points	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		44.6
			Dist 3dB		6.6
			Peak [mm]		



Meas.31 Body Plan with Right Edge 10mm on 48 Channel in IEEE802.11a mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 10.00	WLA N 5GH z	WLA N, 10062 -CAE	5240.0, 48	5.41	4.68	35.8	22.4	21.7

Hardware Setup

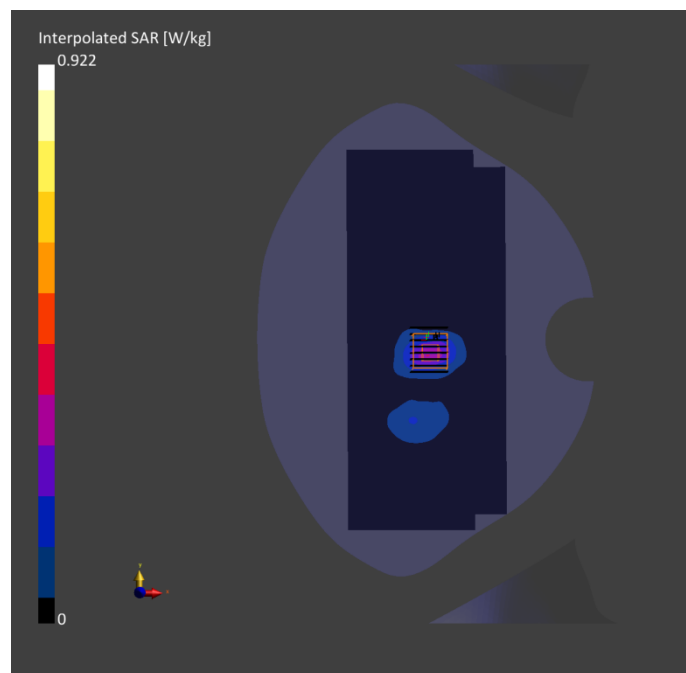
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000 2024-05-28	EX3DV4 - SN7664, 2023-09-23	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 240.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	Y
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-28	2024-05-28
psSAR1g [W/kg]	0.269	0.280
psSAR10g [W/kg]	0.099	0.102
Power Drift [dB]	0.28	0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.1
Dist 3dB Peak [mm]		8.8



Meas.32 Body Plan with Right Edge 10mm on 165 Channel in IEEE802.11a mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 10.00	WLA N 5GH z	WLA N, 10062 -CAE	5785.0, 157	4.78	5.33	36.2	22.6	21.6

Hardware Setup

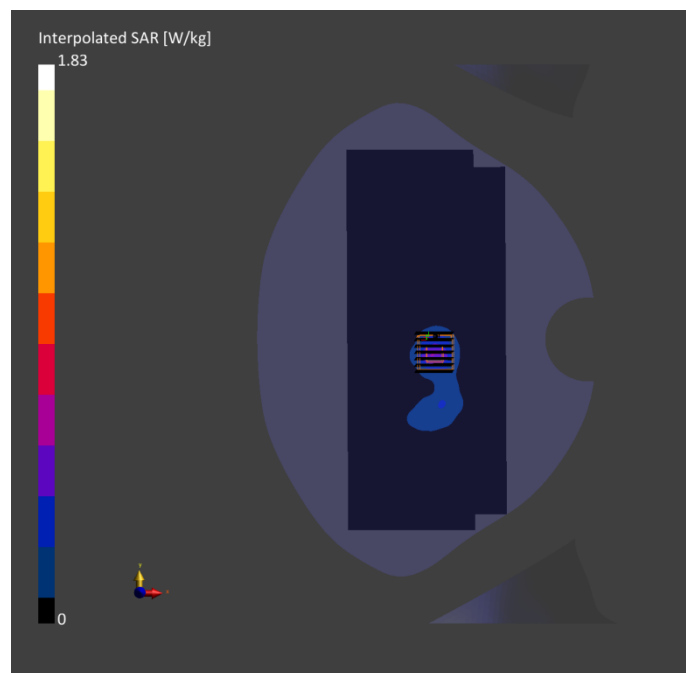
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000 2024-05-30	EX3DV4 - SN7664, 2023-09-23	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 240.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-30	2024-05-30
psSAR1g [W/kg]	0.455	0.486
psSAR10g [W/kg]	0.159	0.166
Power Drift [dB]	-0.77	0.09
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.6
Dist 3dB Peak [mm]		9.8



Meas.33 Body Plan with Right Edge 0mm on 48 Channel in IEEE802.11a mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 0.00	WLA N 5GH z	WLA N, 10062 -CAE	5240.0, 48	5.41	4.68	35.8	22.4	21.7

Hardware Setup

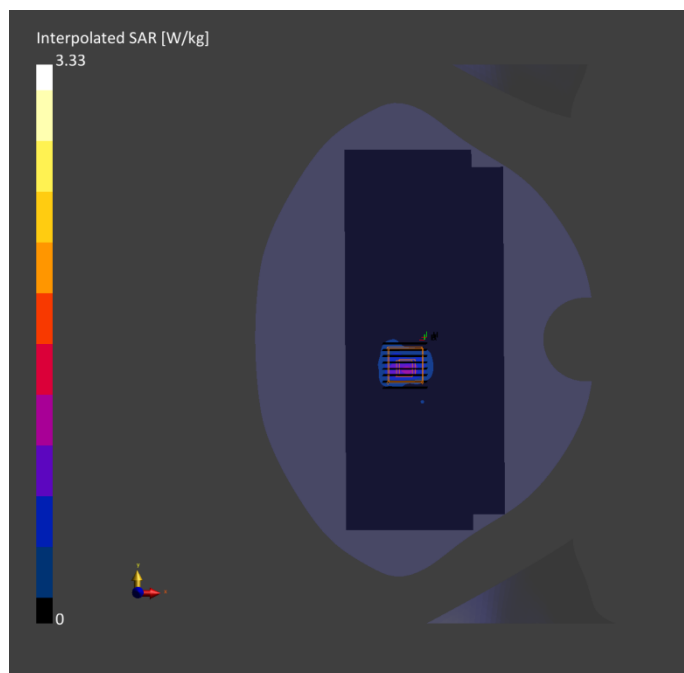
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000 2024-05-28	EX3DV4 - SN7664, 2023-09-23	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 240.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-28	2024-05-28
psSAR1g [W/kg]	0.805	0.911
psSAR10g [W/kg]	0.276	0.300
Power Drift [dB]	0.14	0.16
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.8
Dist 3dB Peak [mm]		5.1



Meas.34 Body Plan with Right Edge 0mm on 149 Channel in IEEE802.11a mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 0.00	WLA N 5GH z	WLA N, 10062 -CAE	5785.0, 149	4.78	5.33	36.2	22.6	21.6

Hardware Setup

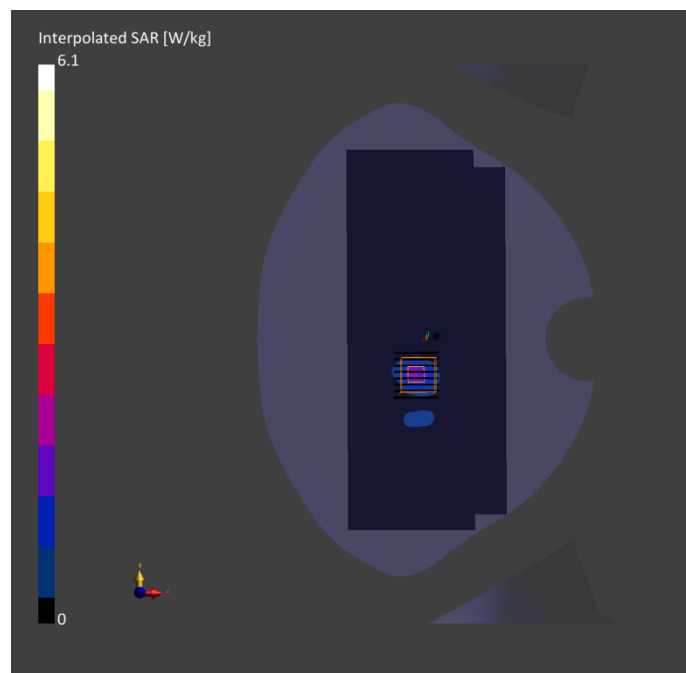
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2090	HBBL-600-10000 2024-05-30	EX3DV4 - SN7664, 2023-09-23	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 240.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-30	2024-05-30
psSAR1g [W/kg]	1.50	1.52
psSAR10g [W/kg]	0.470	0.469
Power Drift [dB]	-0.13	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction		No correction
M2/M1 [%]		50.5
Dist 3dB Peak [mm]		6.4



Meas.35 Body Plan with Right Edge 10mm on 0 Channel in Bluetooth mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

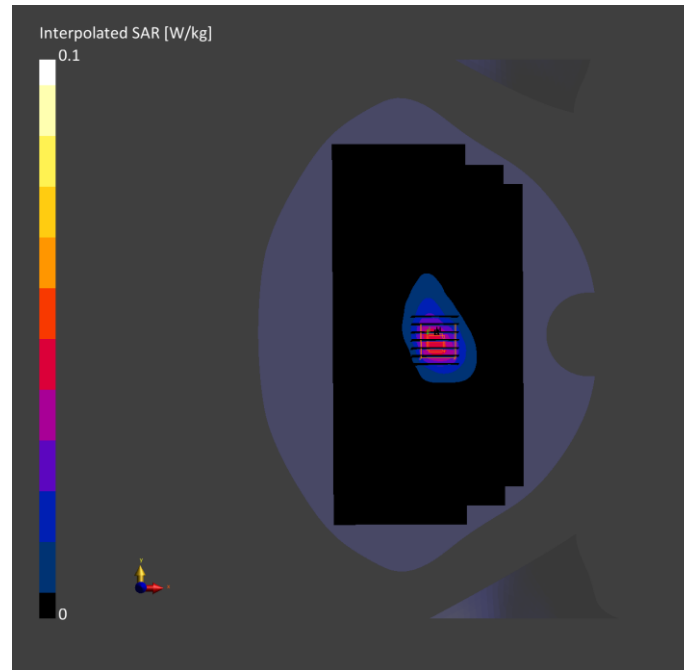
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 10.00	ISM 2.4 GHz Band	Bluetooth, 10032- CAA	2402.0, 0	7.47	1.74	39.1	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 240.0	30.0 x 30.0 x 30.0	Date	2024-05-22	2024-05-22
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.039	0.046
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.020	0.023
Graded Grid	Yes	Yes	Power Drift [dB]	-0.12	0.10
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		52.1
			Dist 3dB Peak [mm]		> 15.0



Meas.36 Body Plan with Right Edge 0mm on 0 Channel in Bluetooth mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S200	200.0 x 78.0 x 60.0	Point of Sales

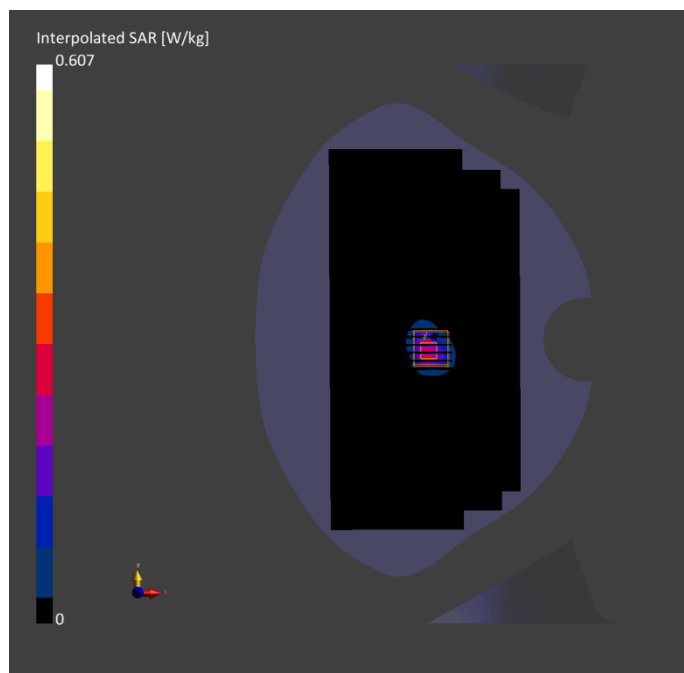
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE RIGHT, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032- CAA	2402.0, 0	7.47	1.74	39.1	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 240.0	30.0 x 30.0 x 30.0	Date	2024-05-22	2024-05-22
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.208	0.268
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.090	0.102
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	-0.11
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		44.2
			Dist 3dB Peak [mm]		6.3



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2440362-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2440362-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2440362-AC.pdf”.

ANNEX G TUNE-UP PROCEDURE

Please refer the document “BL-SZ2440362-AT.pdf”.

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