

TEST REPORT

Applicant: INFINIX MOBILITY LIMITED

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

Equipment Type: Mobile phone

Model Name: X6850B

Brand Name: Infinix

FCC ID: 2AIZN-X6850B

Test Standard: FCC 47 CFR Part 2.1093
(refer to section 3.1)

Maximum SAR: Head (1 g@0mm): 0.80 W/kg
Body-worn (1 g@10mm): 0.33 W/kg
Hotspot (1 g@10mm): 0.33 W/kg
Specific (10 g@0mm): 0.70 W/kg

Sample Arrival Date: Feb. 01, 2024

Test Date: Feb. 01, 2024 - Mar. 22, 2024

Date of Issue: Apr. 02, 2024

ISSUED BY:

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Mar. 29, 2024</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Apr. 02, 2024</u>	<u>Add NFC Evaluation.</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

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

1.3 Test Environment Condition

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

2 PRODUCT INFORMATION

2.1 Applicant Information

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

2.2 Manufacturer Information

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

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile phone
Model Name Under Test	X6850B
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	BL-49OX
	Serial No.	N/A
	Capacity	Rated: 4900mAh/18.96Wh Typical: 5000mAh/19.35Wh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45 V

2.5 Technical Information

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

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

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, 5G WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2535 ~ 2655 MHz	RX: 2535 ~ 2655 MHz
	802.11b/g /n(HT20/40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
Bluetooth	2402 ~ 2480 MHz		
NFC	13.56 MHz		
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna NFC: Coil Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		

Exposure Category	General Population/Uncontrolled exposure	
Product Type	Portable Device	
EUT Type	☒ Production unit	☐ Identical prototype

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
5	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
8	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	KDB 865664 D02 v01r02	RF Exposure Reporting
10	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
11	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

3.2 Device Category and SAR Limit

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

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

Table of Exposure Limits:

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

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)				Maximum Report SAR (W/kg)			
		Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)	Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)
		1g SAR			10g SAR	1g SAR			10g SAR
PCE	GSM 850	0.27	0.33	0.33	/	0.80	0.33	0.33	0.70
	GSM 1900	0.80	0.28	0.28	/				
	WCDMA Band 2	0.78	0.24	0.24	/				
	WCDMA Band 4	0.57	0.18	0.18	/				
	WCDMA Band 5	0.14	0.18	0.18	/				
	LTE Band 2	0.49	0.19	0.19	/				
	LTE Band 4	0.57	0.21	0.21	/				
	LTE Band 5	0.15	0.20	0.20	/				
	LTE Band 7	0.79	0.21	0.21	/				
	LTE Band 38	0.51	0.13	0.13	/				
	LTE Band 41	0.65	0.18	0.18	/				
DTS	2.4G WLAN	0.42	0.23	0.23	/				
NII	5.2G WLAN	/	0.08	/	/				
	5.3G WLAN	0.26	0.14	0.14	0.38				
	5.6G WLAN	0.30	0.10	/	0.70				
	5.8G WLAN	0.26	0.15	0.15	/				
DSS	Bluetooth	0.34	0.04	0.04	/				
Limit (W/kg)		1.6			4.0	1.6			4.0
Verdict		PASS							

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 0.80 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 0.70 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

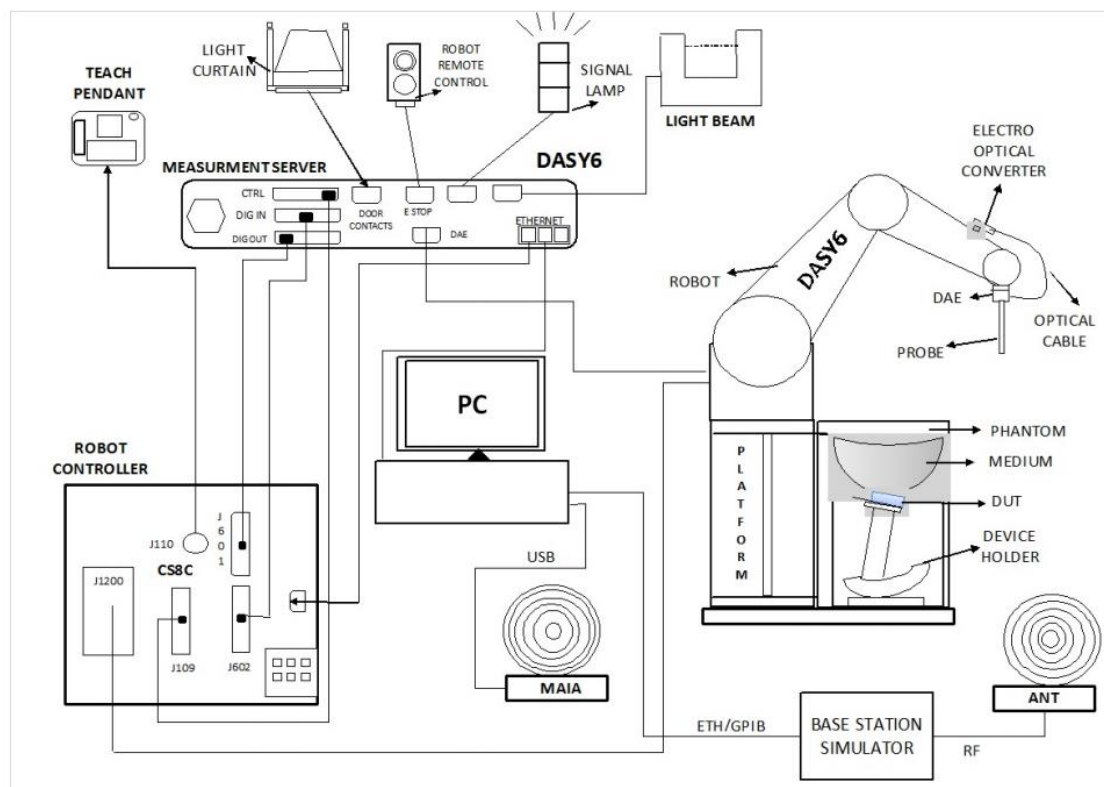
$$SAR = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram

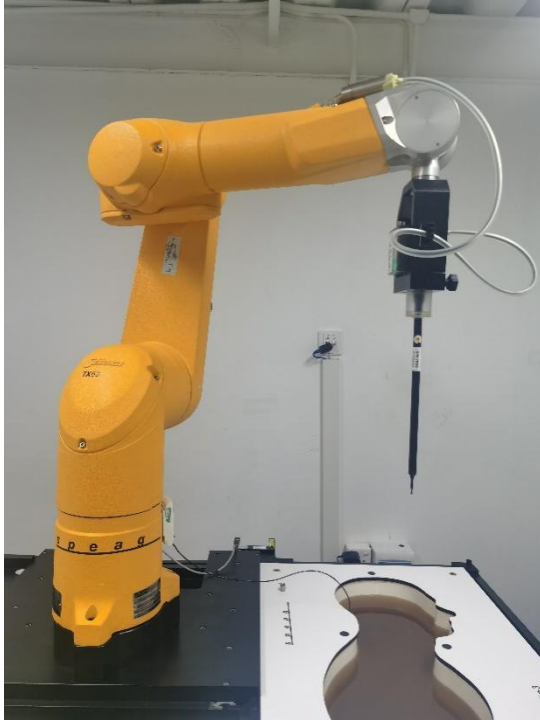


The DASY system for performing compliance tests consists of the following items:

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

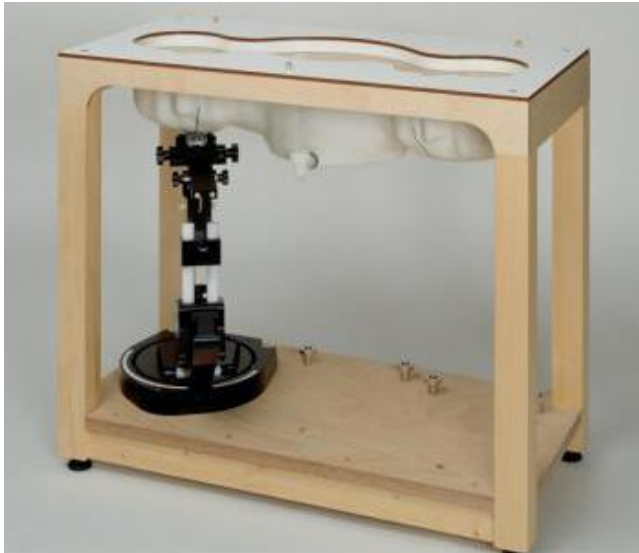
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through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



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

4.2.5 Phantoms

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



- Left head
- Right head
- Flat phantom

Photo of Phantom SN1859



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

4.2.6 Device Holder

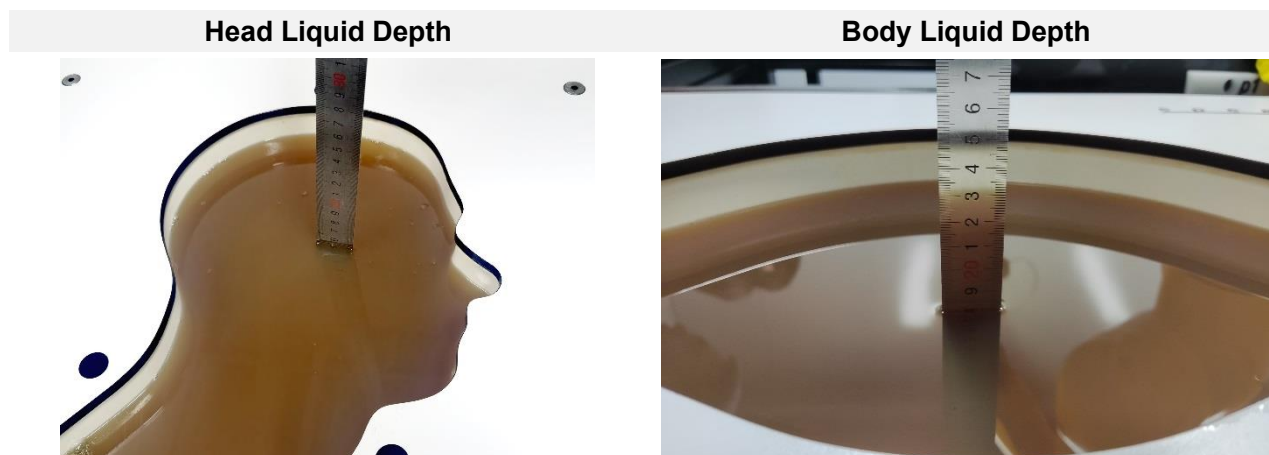
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for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



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

4.2.7 Simulating Liquid

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



The following table gives the recipes for tissue simulating liquid.

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

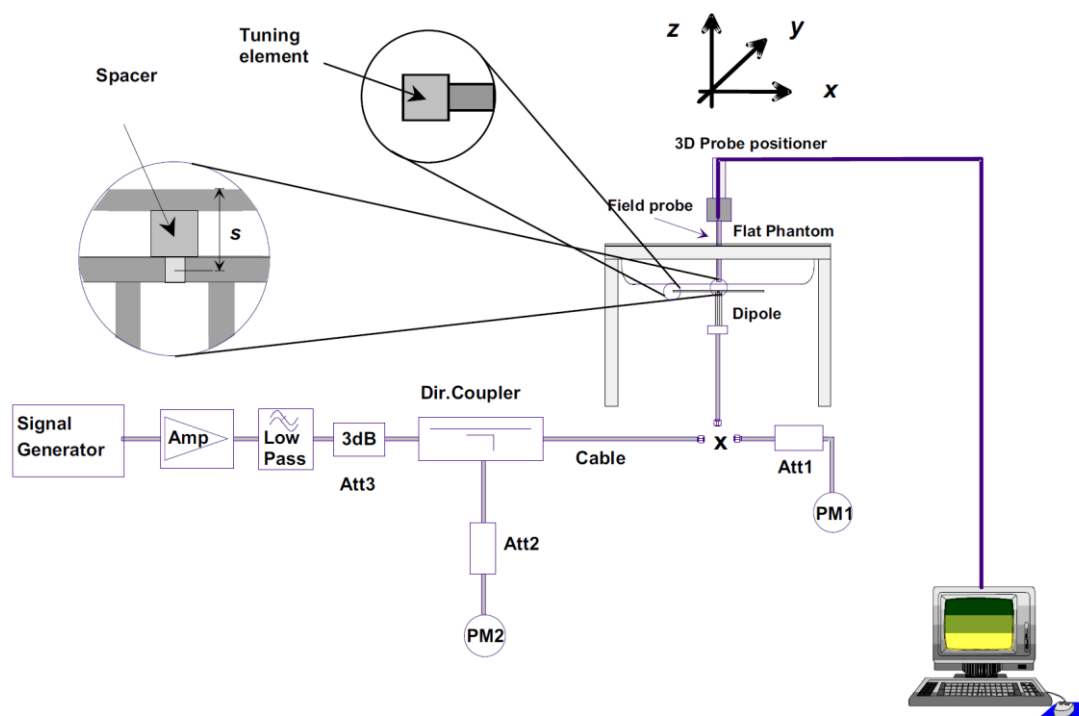
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

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

5.2 System Check Setup

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



6 TEST POSITION CONFIGURATIONS

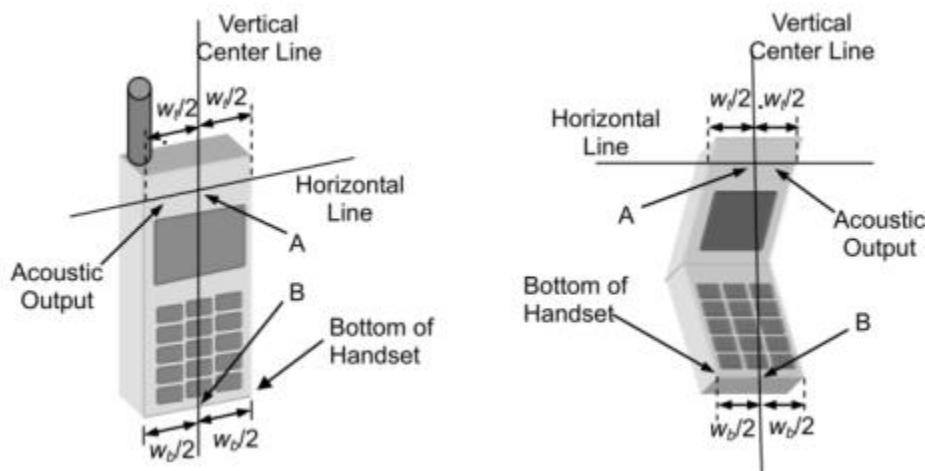
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

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

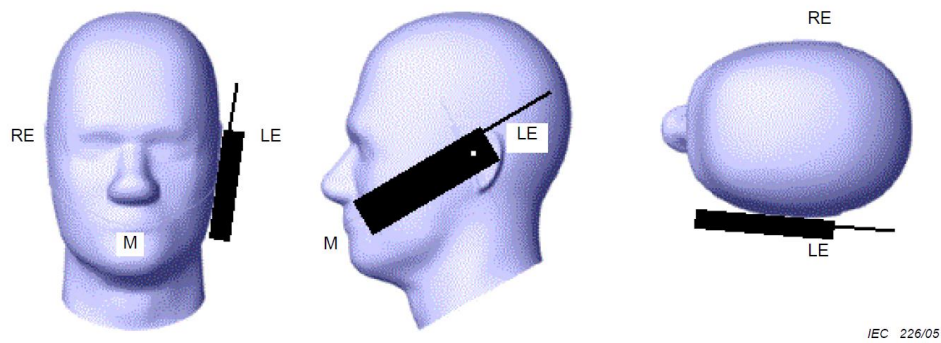
6.1.1 Two Imaginary Lines on the Handset

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



6.1.2 Cheek Position

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



6.1.3 Tilted Position

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

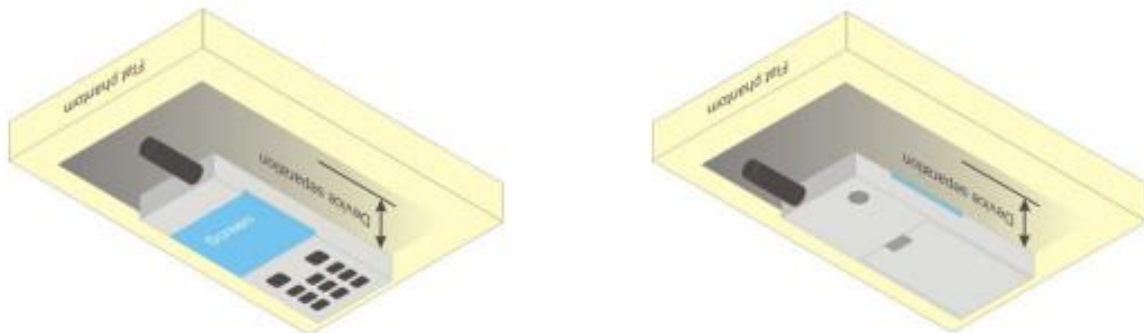


6.2 Body-worn Position Conditions

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

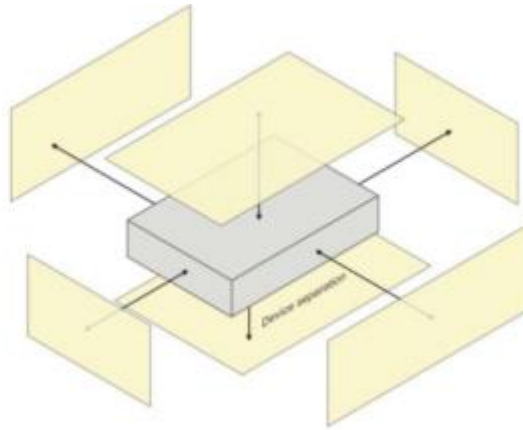
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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

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



6.3 Hotspot Mode Exposure Position Conditions

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



6.4 Product Specific 10g Exposure Consideration

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

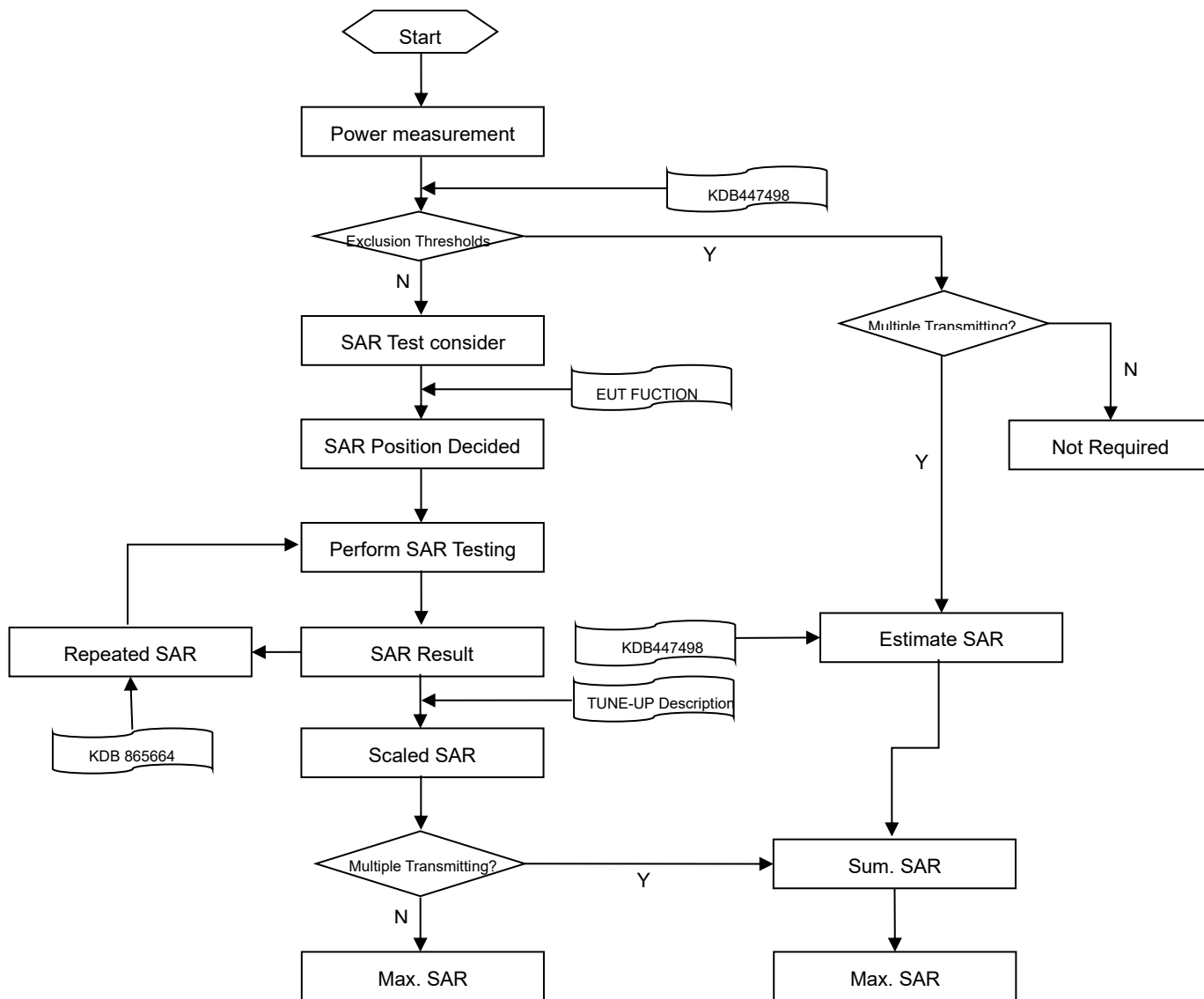
The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address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

6

6.

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

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

Note:

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

7.3 Measurement Procedure

The following steps are used for each test position

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

7.4 Area & Zoom Scan Procedure

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

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

8 CONDUCTED RF OUPUT POWER

8.1 GSM

Please refer the document “BL-SZ2420033-AP Power List.pdf”.

8.2 WCDMA

Please refer the document “BL-SZ2420033-AP Power List.pdf”.

8.3 LTE

Please refer the document “BL-SZ2420033-AP Power List.pdf”.

8.4 WIFI

8.4.1 2.4G WIFI- SISO-1-MAIN

Band (GHz)	Mode	Channel	Freq. (MHz)	AV Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	12.19	13.00	No
		6	2437	12.93	13.00	Yes
		11	2462	12.65	13.00	No
	802.11g	1	2412	10.11	11.00	No
		6	2437	10.52	11.00	No
		11	2462	10.39	11.00	No
	802.11n(HT20)	1	2412	10.13	11.00	No
		6	2437	10.62	11.00	No
		11	2462	10.45	11.00	No
	802.11n(HT40)	3	2422	8.69	9.00	No
		6	2437	8.81	9.00	No
		9	2452	8.62	9.00	No

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

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required.
Adjusted SAR = $0.403 * (12.59\text{mW}/19.95\text{mW}) = 0.254$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.2 2.4G WIFI- SISO-2-AUX

Band (GHz)	Mode	Channel	Freq. (MHz)	AV Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	13.40	14.00	No
		6	2437	13.91	14.00	Yes
		11	2462	13.82	14.00	No
	802.11g	1	2412	11.43	12.00	No
		6	2437	11.89	12.00	No
		11	2462	11.62	12.00	No
	802.11n(HT20)	1	2412	11.33	12.00	No
		6	2437	11.86	12.00	No
		11	2462	11.61	12.00	No
	802.11n(HT40)	3	2422	9.84	10.00	No
		6	2437	9.81	10.00	No
		9	2452	9.73	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 = $0.416 * (15.85\text{mW}/25.12\text{mW}) = 0.262$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.3 5G WIFI-SISO-1-MAIN

Band (GHz)	Mode	Channel	Freq. (MHz)	AV Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	10.28	11.00	No
		44	5220	10.56	11.00	No
		48	5240	10.10	11.00	No
	802.11n(HT20)	36	5180	10.19	11.00	No
		44	5220	9.91	11.00	No
		48	5240	10.46	11.00	No
	802.11n(HT40)	38	5190	10.52	11.00	No
		46	5230	10.57	11.00	No
	802.11ac(VHT20)	36	5180	10.16	11.00	No
		44	5220	10.35	11.00	No
		48	5240	9.96	11.00	No
	802.11ac(VHT40)	38	5190	10.35	11.00	No
		46	5230	10.37	11.00	No
	802.11ac(VHT80)	42	5210	9.79	11.00	Yes
5.3 (5.25~5.35)	802.11a	52	5260	10.60	11.00	No
		60	5300	10.14	11.00	No
		64	5320	10.07	11.00	No
	802.11n(HT20)	52	5260	10.43	11.00	No
		60	5300	10.44	11.00	No
		64	5320	10.43	11.00	No
	802.11n(HT40)	54	5270	10.53	11.00	No
		62	5310	10.10	11.00	No
	802.11ac(VHT20)	52	5260	10.56	11.00	No
		60	5300	10.17	11.00	No
		64	5320	10.13	11.00	No
	802.11ac(VHT40)	54	5270	10.52	11.00	No
		62	5310	10.09	11.00	No
	802.11ac(VHT80)	58	5290	10.18	11.00	Yes
5.6 (5.47~5.725)	802.11a	100	5500	12.77	13.00	No
		116	5580	12.27	13.00	No
		140	5700	12.13	13.00	No
	802.11n(HT20)	100	5500	12.65	13.00	No
		116	5580	12.15	13.00	No
		140	5700	12.01	13.00	No
	802.11n(HT40)	102	5510	12.61	13.00	No
		118	5590	12.02	13.00	No

		134	5670	11.96	13.00	No
	802.11ac(VHT20)	100	5500	12.72	13.00	No
		116	5580	12.26	13.00	No
		140	5700	12.06	13.00	No
	802.11ac(VHT40)	102	5510	12.27	13.00	No
		118	5590	12.16	13.00	No
		134	5670	11.96	13.00	No
	802.11ac(VHT80)	106	5530	12.03	13.00	Yes
		122	5690	11.81	13.00	No
	5.8 (5.725~5.850)	802.11a	149	5745	12.64	13.00
157			5785	11.96	13.00	No
165			5825	11.85	13.00	No
802.11n(HT20)		149	5745	12.32	13.00	No
		157	5785	11.95	13.00	No
		165	5825	11.72	13.00	No
802.11n(HT40)		151	5755	11.75	13.00	No
		159	5795	11.63	13.00	No
802.11ac(VHT20)		149	5745	12.33	13.00	No
		157	5785	11.95	13.00	No
		165	5825	11.82	13.00	No
802.11ac(VHT40)		151	5755	11.85	13.00	No
		159	5795	12.06	13.00	No
802.11ac(VHT80)		155	5775	11.72	13.00	Yes

Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.

8.4.4 5G WIFI-SISO-2-AUX

Band (GHz)	Mode	Channel	Freq. (MHz)	AV Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	13.19	14.00	No
		44	5220	13.75	14.00	No
		48	5240	12.92	14.00	No
	802.11n(HT20)	36	5180	13.56	14.00	No
		44	5220	13.59	14.00	No
		48	5240	13.23	14.00	No
	802.11n(HT40)	38	5190	13.74	14.00	No
		46	5230	13.56	14.00	No
	802.11ac(VHT20)	36	5180	13.46	14.00	No
		44	5220	13.22	14.00	No
		48	5240	13.56	14.00	No
	802.11ac(VHT40)	38	5190	13.41	14.00	No
		46	5230	13.15	14.00	No
	802.11ac(VHT80)	42	5210	12.71	14.00	Yes
5.3 (5.25~5.35)	802.11a	52	5260	13.66	14.00	No
		60	5300	13.59	14.00	No
		64	5320	13.62	14.00	No
	802.11n(HT20)	52	5260	13.71	14.00	No
		60	5300	13.41	14.00	No
		64	5320	13.42	14.00	No
	802.11n(HT40)	54	5270	13.06	14.00	No
		62	5310	13.14	14.00	No
	802.11ac(VHT20)	52	5260	13.15	14.00	No
		60	5300	13.34	14.00	No
		64	5320	13.25	14.00	No
	802.11ac(VHT40)	54	5270	13.59	14.00	No
		62	5310	13.31	14.00	No
	802.11ac(VHT80)	58	5290	13.16	14.00	Yes
5.6 (5.47~5.725)	802.11a	100	5500	14.07	15.00	No
		116	5580	13.51	15.00	No
		140	5700	13.89	15.00	No
	802.11n(HT20)	100	5500	13.82	15.00	No
		116	5580	13.52	15.00	No
		140	5700	13.63	15.00	No
	802.11n(HT40)	102	5510	13.42	15.00	No
		118	5590	13.48	15.00	No

	802.11ac(VHT20)	134	5670	13.52	15.00	No
		100	5500	14.02	15.00	No
		116	5580	13.71	15.00	No
		140	5700	13.72	15.00	No
	802.11ac(VHT40)	102	5510	13.95	15.00	No
		118	5590	13.59	15.00	No
		134	5670	13.57	15.00	No
	802.11ac(VHT80)	106	5530	13.21	15.00	No
		122	5690	13.29	15.00	Yes
5.8 (5.725~5.850)	802.11a	149	5745	13.97	15.00	No
		157	5785	13.55	15.00	No
		165	5825	13.56	15.00	No
	802.11n(HT20)	149	5745	13.48	15.00	No
		157	5785	13.55	15.00	No
		165	5825	13.67	15.00	No
	802.11n(HT40)	151	5755	13.88	15.00	No
		159	5795	13.41	15.00	No
	802.11ac(VHT20)	149	5745	13.45	15.00	No
		157	5785	13.61	15.00	No
		165	5825	13.31	15.00	No
	802.11ac(VHT40)	151	5755	14.11	15.00	No
		159	5795	13.89	15.00	No
	802.11ac(VHT80)	155	5775	13.97	15.00	Yes

Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.

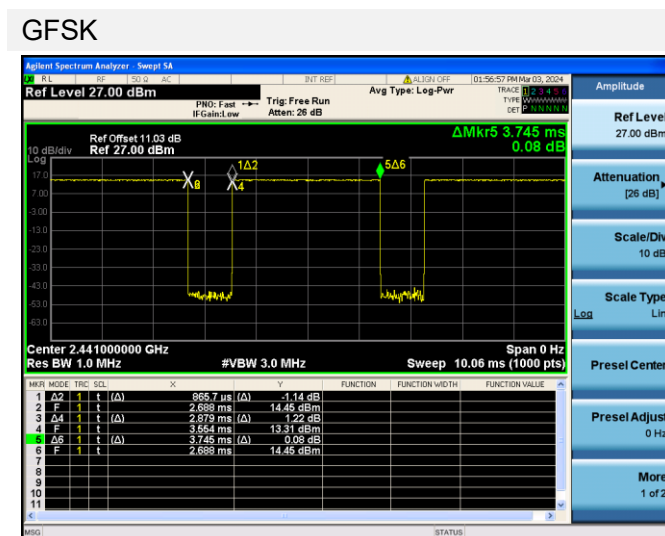
8.5 Bluetooth- MAIN

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
AV Power (dBm)	9.25	9.82	9.34	7.10	8.84	9.09
Tune-Up Limit (dBm)	10.00	10.00	10.00	9.00	10.00	10.00
SAR Test Require	NO	YES	NO	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
AV Power (dBm)	7.03	8.89	9.09	/	/	/
Tune-Up Limit (dBm)	10.00	10.00	10.00	/	/	/
SAR Test Require	NO	NO	NO	/	/	/
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
AV Power (dBm)	-4.07	-2.92	-3.14	-3.97	-2.86	-2.67
Tune-Up Limit (dBm)	-3.00	-2.00	-3.00	-3.00	-2.00	-2.00
SAR Test Require	NO	NO	NO	NO	NO	NO

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

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



8.6 Bluetooth-AUX

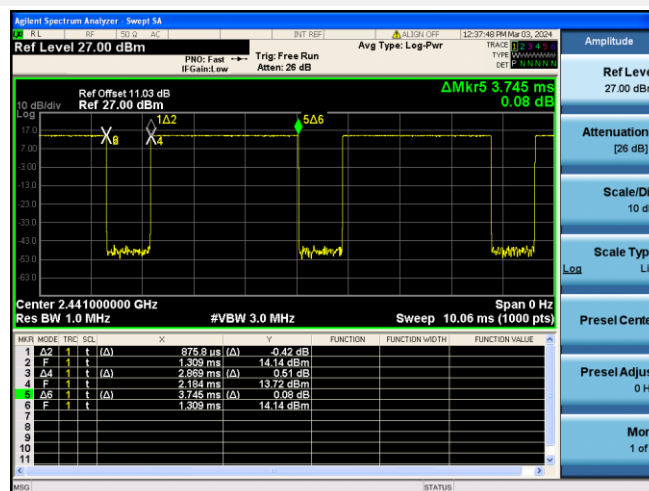
Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
AV Power (dBm)	14.79	14.12	13.47	10.29	10.62	10.11
Tune-Up Limit (dBm)	15.00	15.00	15.00	11.00	11.00	11.00
SAR Test Require	YES	NO	NO	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
AV Power (dBm)	10.17	10.27	9.93	/	/	/
Tune-Up Limit (dBm)	11.00	11.00	11.00	/	/	/
SAR Test Require	NO	NO	NO	/	/	/
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
AV Power (dBm)	-3.95	-3.07	-2.98	-3.79	-2.99	-2.62
Tune-Up Limit (dBm)	-3.00	-3.00	-2.00	-3.00	-2.00	-2.00
SAR Test Require	NO	NO	NO	NO	NO	NO

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

Note: The Bluetooth BT DH5 duty cycle is 76.61 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle

GFSK



9 TEST EXCLUSION CONSIDERATION

Please refer the document “BL-SZ2420033-AI EUT internal photo.pdf”.

Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
Ant.0	<25	<25	<25	>25	>25	<25
Ant.4	<25	<25	>25	<25	<25	>25
Ant.12	<25	<25	<25	>25	<25	>25
Ant.14	<25	<25	<25	>25	<25	>25

Note: 1. Per KDB 941225 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.

10 TEST RESULT

10.1GSM 850

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT0	DATA 4 Slots	Left Cheek	0	251	848.8	-0.02	0.179	29.20	30.00	1.202	0.215	/
ANT0	DATA 4 Slots	Left Tilt	0	251	848.8	0.17	0.112	29.20	30.00	1.202	0.135	/
ANT0	DATA 4 Slots	Right Cheek	0	251	848.8	-0.16	0.222	29.20	30.00	1.202	0.267	1#
ANT0	DATA 4 Slots	Right Tilt	0	251	848.8	0.00	0.121	29.20	30.00	1.202	0.145	/
Body-worn&Hotspot												
ANT0	DATA 4 Slots	Front Side	10	251	848.8	-0.16	0.188	29.20	30.00	1.202	0.226	/
ANT0	DATA 4 Slots	Back Side	10	251	848.8	-0.04	0.271	29.20	30.00	1.202	0.326	2#
ANT0	DATA 4 Slots	Left Edge	10	251	848.8	-0.02	0.165	29.20	30.00	1.202	0.198	/
ANT0	DATA 4 Slots	Bottom Edge	10	251	848.8	-0.04	0.161	29.20	30.00	1.202	0.194	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.2GSM 1900

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT4	DATA 2 Slots	Left Cheek	0	661	1880.0	-0.06	0.460	23.38	24.00	1.153	0.531	/
ANT4	DATA 2 Slots	Left Tilt	0	661	1880.0	0.01	0.462	23.38	24.00	1.153	0.533	/
ANT4	DATA 2 Slots	Right Cheek	0	661	1880.0	-0.08	0.682	23.38	24.00	1.153	0.787	/
ANT4	DATA 2 Slots	Right Tilt	0	661	1880.0	0.06	0.671	23.38	24.00	1.153	0.774	/
ANT4	DATA 2 Slots	Right Cheek	0	512	1850.2	-0.01	0.687	23.32	24.00	1.169	0.803	3#
ANT4	DATA 2 Slots	Right Cheek	0	810	1909.8	0.18	0.671	23.25	24.00	1.189	0.797	/
Body-worn&Hotspot												
ANT4	DATA 2 Slots	Front Side	10	661	1880.0	-0.17	0.175	23.38	24.00	1.153	0.202	/
ANT4	DATA 2 Slots	Back Side	10	661	1880.0	0.02	0.192	23.38	24.00	1.153	0.221	/
ANT4	DATA 2 Slots	Right Edge	10	661	1880.0	0.14	0.071	23.38	24.00	1.153	0.082	/
ANT4	DATA 2 Slots	Top Edge	10	661	1880.0	-0.10	0.243	23.38	24.00	1.153	0.280	4#
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.3WCDMA Band 2

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT4	RMC	Left Cheek	0	9400	1880.0	0.11	0.355	16.10	17.00	1.230	0.437	/
ANT4	RMC	Left Tilt	0	9400	1880.0	0.09	0.378	16.10	17.00	1.230	0.465	/
ANT4	RMC	Right Cheek	0	9400	1880.0	-0.07	0.595	16.10	17.00	1.230	0.732	/
ANT4	RMC	Right Tilt	0	9400	1880.0	0.15	0.558	16.10	17.00	1.230	0.686	/
ANT4	RMC	Right Cheek	0	9262	1852.4	-0.02	0.627	16.03	17.00	1.250	0.784	5#
ANT4	RMC	Right Cheek	0	9538	1907.6	0.17	0.570	16.10	17.00	1.230	0.701	/
Body-worn&Hotspot												
ANT4	RMC	Front Side	10	9400	1880.0	0.06	0.117	16.10	17.00	1.230	0.144	/
ANT4	RMC	Back Side	10	9400	1880.0	0.02	0.151	16.10	17.00	1.230	0.186	/
ANT4	RMC	Right Edge	10	9400	1880.0	0.00	0.051	16.10	17.00	1.230	0.063	/
ANT4	RMC	Top Edge	10	9400	1880.0	-0.13	0.193	16.10	17.00	1.230	0.237	6#
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.4WCDMA Band 4

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT4	RMC	Left Cheek	0	1513	1752.6	0.11	0.312	15.80	16.00	1.047	0.327	/
ANT4	RMC	Left Tilt	0	1513	1752.6	-0.10	0.361	15.80	16.00	1.047	0.378	/
ANT4	RMC	Right Cheek	0	1513	1752.6	0.00	0.547	15.80	16.00	1.047	0.573	7#
ANT4	RMC	Right Tilt	0	1513	1752.6	0.03	0.503	15.80	16.00	1.047	0.527	/
Body-worn&Hotspot												
ANT4	RMC	Front Side	10	1513	1752.6	0.12	0.100	15.80	16.00	1.047	0.105	/
ANT4	RMC	Back Side	10	1513	1752.6	-0.11	0.140	15.80	16.00	1.047	0.147	/
ANT4	RMC	Right Edge	10	1513	1752.6	-0.07	0.047	15.80	16.00	1.047	0.049	/
ANT4	RMC	Top Edge	10	1513	1752.6	-0.12	0.176	15.80	16.00	1.047	0.184	8#
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.5WCDMA Band 5

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head												
ANT0	RMC	Left Cheek	0	4233	846.6	-0.09	0.121	22.97	23.00	1.007	0.122	/
ANT0	RMC	Left Tilt	0	4233	846.6	-0.15	0.066	22.97	23.00	1.007	0.066	/
ANT0	RMC	Right Cheek	0	4233	846.6	-0.05	0.139	22.97	23.00	1.007	0.140	9#
ANT0	RMC	Right Tilt	0	4233	846.6	-0.04	0.079	22.97	23.00	1.007	0.080	/
Body-worn&Hotspot												
ANT0	RMC	Front Side	10	4233	846.6	0.14	0.129	22.97	23.00	1.007	0.130	/
ANT0	RMC	Back Side	10	4233	846.6	-0.04	0.178	22.97	23.00	1.007	0.179	10#
ANT0	RMC	Left Edge	10	4233	846.6	-0.12	0.101	22.97	23.00	1.007	0.102	/
ANT0	RMC	Bottom Edge	10	4233	846.6	-0.08	0.096	22.97	23.00	1.007	0.097	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.6LTE Band 2 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT4	QPSK	Left Cheek	0	18900	1880	1	MID	0.06	0.295	15.42	16.00	1.143	0.337	/
ANT4	QPSK	Left Cheek	0	18900	1880	50	HIGH	-0.08	0.240	14.39	15.00	1.151	0.276	/
ANT4	QPSK	Left Tilt	0	18900	1880	1	MID	0.14	0.320	15.42	16.00	1.143	0.366	/
ANT4	QPSK	Left Tilt	0	18900	1880	50	HIGH	-0.11	0.259	14.39	15.00	1.151	0.298	/
ANT4	QPSK	Right Cheek	0	18900	1880	1	MID	-0.01	0.433	15.42	16.00	1.143	0.495	11#
ANT4	QPSK	Right Cheek	0	18900	1880	50	HIGH	-0.13	0.399	14.39	15.00	1.151	0.459	/
ANT4	QPSK	Right Tilt	0	18900	1880	1	MID	-0.09	0.411	15.42	16.00	1.143	0.470	/
ANT4	QPSK	Right Tilt	0	18900	1880	50	HIGH	0.05	0.360	14.39	15.00	1.151	0.414	/
Body-worn&Hotspot														
ANT4	QPSK	Front Side	10	18900	1880	1	MID	-0.02	0.100	15.42	16.00	1.143	0.114	/
ANT4	QPSK	Front Side	10	18900	1880	50	HIGH	-0.17	0.078	14.39	15.00	1.151	0.090	/
ANT4	QPSK	Back Side	10	18900	1880	1	MID	0.01	0.125	15.42	16.00	1.143	0.143	/
ANT4	QPSK	Back Side	10	18900	1880	50	HIGH	0.02	0.102	14.39	15.00	1.151	0.117	/
ANT4	QPSK	Right Edge	10	18900	1880	1	MID	-0.03	0.043	15.42	16.00	1.143	0.049	/
ANT4	QPSK	Right Edge	10	18900	1880	50	HIGH	0.17	0.028	14.39	15.00	1.151	0.032	/
ANT4	QPSK	Top Edge	10	18900	1880	1	MID	-0.14	0.166	15.42	16.00	1.143	0.190	12#
ANT4	QPSK	Top Edge	10	18900	1880	50	HIGH	-0.05	0.143	14.39	15.00	1.151	0.165	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.7LTE Band 4 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT4	QPSK	Left Cheek	0	20175	1732.5	1	MID	0.05	0.289	15.98	17.00	1.265	0.366	/
ANT4	QPSK	Left Cheek	0	20175	1732.5	50	MID	0.05	0.240	15.03	16.00	1.250	0.300	/
ANT4	QPSK	Left Tilt	0	20175	1732.5	1	MID	0.02	0.331	15.98	17.00	1.265	0.419	/
ANT4	QPSK	Left Tilt	0	20175	1732.5	50	MID	-0.07	0.277	15.03	16.00	1.250	0.346	/
ANT4	QPSK	Right Cheek	0	20175	1732.5	1	MID	-0.08	0.434	15.98	17.00	1.265	0.549	/
ANT4	QPSK	Right Cheek	0	20175	1732.5	50	MID	-0.07	0.408	15.03	16.00	1.250	0.510	/
ANT4	QPSK	Right Tilt	0	20175	1732.5	1	MID	-0.01	0.453	15.98	17.00	1.265	0.573	13#
ANT4	QPSK	Right Tilt	0	20175	1732.5	50	MID	0.02	0.416	15.03	16.00	1.250	0.520	/
Body-worn&Hotspot														
ANT4	QPSK	Front Side	10	20175	1732.5	1	MID	-0.18	0.096	15.98	17.00	1.265	0.121	/
ANT4	QPSK	Front Side	10	20175	1732.5	50	MID	-0.17	0.079	15.03	16.00	1.250	0.099	/
ANT4	QPSK	Back Side	10	20175	1732.5	1	MID	-0.07	0.120	15.98	17.00	1.265	0.152	/
ANT4	QPSK	Back Side	10	20175	1732.5	50	MID	-0.11	0.099	15.03	16.00	1.250	0.124	/
ANT4	QPSK	Right Edge	10	20175	1732.5	1	MID	0.06	0.040	15.98	17.00	1.265	0.051	/
ANT4	QPSK	Right Edge	10	20175	1732.5	50	MID	-0.14	0.038	15.03	16.00	1.250	0.048	/
ANT4	QPSK	Top Edge	10	20175	1732.5	1	MID	-0.13	0.163	15.98	17.00	1.265	0.206	14#
ANT4	QPSK	Top Edge	10	20175	1732.5	50	MID	0.08	0.147	15.03	16.00	1.250	0.184	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.8LTE Band 5 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT0	QPSK	Left Cheek	0	20600	844	1	MID	0.08	0.122	23.49	24.00	1.125	0.137	/
ANT0	QPSK	Left Cheek	0	20600	844	25	MID	0.07	0.099	22.51	23.00	1.119	0.111	/
ANT0	QPSK	Left Tilt	0	20600	844	1	MID	-0.11	0.062	23.49	24.00	1.125	0.070	/
ANT0	QPSK	Left Tilt	0	20600	844	25	MID	0.04	0.046	22.51	23.00	1.119	0.051	/
ANT0	QPSK	Right Cheek	0	20600	844	1	MID	0.05	0.131	23.49	24.00	1.125	0.147	15#
ANT0	QPSK	Right Cheek	0	20600	844	25	MID	0.10	0.098	22.51	23.00	1.119	0.110	/
ANT0	QPSK	Right Tilt	0	20600	844	1	MID	-0.13	0.073	23.49	24.00	1.125	0.082	/
ANT0	QPSK	Right Tilt	0	20600	844	25	MID	0.03	0.064	22.51	23.00	1.119	0.072	/
Body-worn&Hotspot														
ANT0	QPSK	Front Side	10	20600	844	1	MID	0.13	0.089	23.49	24.00	1.125	0.100	/
ANT0	QPSK	Front Side	10	20600	844	25	MID	0.19	0.082	22.51	23.00	1.119	0.092	/
ANT0	QPSK	Back Side	10	20600	844	1	MID	-0.01	0.174	23.49	24.00	1.125	0.196	16#
ANT0	QPSK	Back Side	10	20600	844	25	MID	0.02	0.165	22.51	23.00	1.119	0.185	/
ANT0	QPSK	Left Edge	10	20600	844	1	MID	-0.07	0.026	23.49	24.00	1.125	0.029	/
ANT0	QPSK	Left Edge	10	20600	844	25	MID	-0.09	0.019	22.51	23.00	1.119	0.021	/
ANT0	QPSK	Bottom Edge	10	20600	844	1	MID	0.07	0.143	23.49	24.00	1.125	0.161	/
ANT0	QPSK	Bottom Edge	10	20600	844	25	MID	-0.10	0.128	22.51	23.00	1.119	0.143	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.9LTE Band 7 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT4	QPSK	Left Cheek	0	21350	2560	1	MID	0.01	0.357	15.68	16.50	1.208	0.431	/
ANT4	QPSK	Left Cheek	0	21350	2560	50	HIGH	-0.04	0.287	14.67	15.50	1.211	0.347	/
ANT4	QPSK	Left Tilt	0	21350	2560	1	MID	-0.09	0.408	15.68	16.50	1.208	0.493	/
ANT4	QPSK	Left Tilt	0	21350	2560	50	HIGH	-0.05	0.338	14.67	15.50	1.211	0.409	/
ANT4	QPSK	Right Cheek	0	21350	2560	1	MID	-0.18	0.600	15.68	16.50	1.208	0.725	/
ANT4	QPSK	Right Cheek	0	21350	2560	50	HIGH	-0.13	0.521	14.67	15.50	1.211	0.631	/
ANT4	QPSK	Right Tilt	0	21350	2560	1	MID	0.00	0.653	15.68	16.50	1.208	0.789	17#
ANT4	QPSK	Right Tilt	0	21350	2560	50	HIGH	-0.16	0.536	14.67	15.50	1.211	0.649	/
Body-worn&Hotspot														
ANT4	QPSK	Front Side	10	21350	2560	1	MID	-0.08	0.128	15.68	16.50	1.208	0.155	/
ANT4	QPSK	Front Side	10	21100	2535	50	HIGH	0.05	0.103	14.67	15.50	1.211	0.125	/
ANT4	QPSK	Back Side	10	21350	2560	1	MID	0.07	0.149	15.68	16.50	1.208	0.180	/
ANT4	QPSK	Back Side	10	21100	2535	50	HIGH	0.15	0.129	14.67	15.50	1.211	0.156	/
ANT4	QPSK	Right Edge	10	21350	2560	1	MID	0.17	0.042	15.68	16.50	1.208	0.051	/
ANT4	QPSK	Right Edge	10	21100	2535	50	HIGH	0.02	0.030	14.67	15.50	1.211	0.036	/
ANT4	QPSK	Top Edge	10	21350	2560	1	MID	-0.04	0.173	15.68	16.50	1.208	0.209	18#
ANT4	QPSK	Top Edge	10	21100	2535	50	HIGH	0.05	0.146	14.67	15.50	1.211	0.177	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.10 LTE Band 38 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT4	QPSK	Left Cheek	0	37850	2580	1	MID	-0.01	0.214	15.74	16.50	1.191	0.255	/
ANT4	QPSK	Left Cheek	0	37850	2580	50	MID	0.17	0.180	14.69	15.50	1.205	0.217	/
ANT4	QPSK	Left Tilt	0	37850	2580	1	MID	-0.18	0.229	15.74	16.50	1.191	0.273	/
ANT4	QPSK	Left Tilt	0	37850	2580	50	MID	0.18	0.185	14.69	15.50	1.205	0.223	/
ANT4	QPSK	Right Cheek	0	37850	2580	1	MID	0.08	0.326	15.74	16.50	1.191	0.388	/
ANT4	QPSK	Right Cheek	0	37850	2580	50	MID	0.17	0.259	14.69	15.50	1.205	0.312	/
ANT4	QPSK	Right Tilt	0	37850	2580	1	MID	-0.02	0.427	15.74	16.50	1.191	0.509	19#
ANT4	QPSK	Right Tilt	0	37850	2580	50	MID	-0.06	0.275	14.69	15.50	1.205	0.331	/
Body-worn&Hotspot														
ANT4	QPSK	Front Side	10	37850	2580	1	MID	0.13	0.080	15.74	16.50	1.191	0.095	/
ANT4	QPSK	Front Side	10	37850	2580	50	MID	-0.15	0.065	14.69	15.50	1.205	0.078	/
ANT4	QPSK	Back Side	10	37850	2580	1	MID	0.04	0.099	15.74	16.50	1.191	0.118	/
ANT4	QPSK	Back Side	10	37850	2580	50	MID	0.15	0.082	14.69	15.50	1.205	0.099	/
ANT4	QPSK	Right Edge	10	37850	2580	1	MID	0.04	0.032	15.74	16.50	1.191	0.038	/
ANT4	QPSK	Right Edge	10	37850	2580	50	MID	0.06	0.025	14.69	15.50	1.205	0.030	/
ANT4	QPSK	Top Edge	10	37850	2580	1	MID	-0.03	0.112	15.74	16.50	1.191	0.133	20#
ANT4	QPSK	Top Edge	10	37850	2580	50	MID	0.05	0.102	14.69	15.50	1.205	0.123	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.11 LTE Band 41 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Tune- up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
ANT4	QPSK	Left Cheek	0	40140	2545	1	MID	-0.13	0.281	16.98	17.50	1.127	0.317	/
ANT4	QPSK	Left Cheek	0	40140	2545	50	HIGH	-0.13	0.207	15.85	16.50	1.161	0.240	/
ANT4	QPSK	Left Tilt	0	40140	2545	1	MID	0.00	0.312	16.98	17.50	1.127	0.352	/
ANT4	QPSK	Left Tilt	0	40140	2545	50	HIGH	0.08	0.212	15.85	16.50	1.161	0.246	/
ANT4	QPSK	Right Cheek	0	40140	2545	1	MID	0.18	0.423	16.98	17.50	1.127	0.477	/
ANT4	QPSK	Right Cheek	0	40140	2545	50	HIGH	0.14	0.335	15.85	16.50	1.161	0.389	/
ANT4	QPSK	Right Tilt	0	40140	2545	1	MID	0.01	0.573	16.98	17.50	1.127	0.646	21#
ANT4	QPSK	Right Tilt	0	40140	2545	50	HIGH	0.08	0.494	15.85	16.50	1.161	0.574	/
Body-worn&Hotspot														
ANT4	QPSK	Front Side	10	40140	2545	1	MID	-0.10	0.113	16.98	17.50	1.127	0.127	/
ANT4	QPSK	Front Side	10	40140	2545	50	HIGH	0.09	0.081	15.85	16.50	1.161	0.094	/
ANT4	QPSK	Back Side	10	40140	2545	1	MID	0.14	0.132	16.98	17.50	1.127	0.149	/
ANT4	QPSK	Back Side	10	40140	2545	50	HIGH	0.03	0.099	15.85	16.50	1.161	0.115	/
ANT4	QPSK	Right Edge	10	40140	2545	1	MID	-0.12	0.035	16.98	17.50	1.127	0.039	/
ANT4	QPSK	Right Edge	10	40140	2545	50	HIGH	0.14	0.022	15.85	16.50	1.161	0.026	/
ANT4	QPSK	Top Edge	10	40140	2545	1	MID	0.05	0.162	16.98	17.50	1.127	0.183	22#
ANT4	QPSK	Top Edge	10	40140	2545	50	HIGH	0.02	0.136	15.85	16.50	1.161	0.158	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.12 WIFI 2.4GHZ

Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
802.11b	ANT12	Left Cheek	0	6	2437	-0.18	0.351	12.93	13.00	1.016	99.46	1.005	0.359	/
	ANT12	Left Tilt	0	6	2437	0.17	0.394	12.93	13.00	1.016	99.46	1.005	0.403	/
	ANT12	Right Cheek	0	6	2437	0.07	0.227	12.93	13.00	1.016	99.46	1.005	0.232	/
	ANT12	Right Tilt	0	6	2437	-0.14	0.236	12.93	13.00	1.016	99.46	1.005	0.241	/
802.11b	ANT14	Left Cheek	0	6	2437	-0.05	0.405	13.91	14.00	1.021	99.46	1.005	0.416	23#
	ANT14	Left Tilt	0	6	2437	0.02	0.225	13.91	14.00	1.021	99.46	1.005	0.231	/
	ANT14	Right Cheek	0	6	2437	0.00	0.106	13.91	14.00	1.021	99.46	1.005	0.109	/
	ANT14	Right Tilt	0	6	2437	-0.18	0.087	13.91	14.00	1.021	99.46	1.005	0.089	/
Hotspot														
802.11b	ANT12	Front Side	10	6	2437	-0.16	0.120	12.93	13.00	1.016	99.46	1.005	0.123	/
	ANT12	Back Side	10	6	2437	-0.11	0.132	12.93	13.00	1.016	99.46	1.005	0.135	/
	ANT12	Left Edge	10	6	2437	-0.05	0.017	12.93	13.00	1.016	99.46	1.005	0.017	/
	ANT12	Top Edge	10	6	2437	0.07	0.042	12.93	13.00	1.016	99.46	1.005	0.043	/
802.11b	ANT14	Front Side	10	6	2437	0.03	0.127	13.91	14.00	1.021	99.46	1.005	0.130	/
	ANT14	Back Side	10	6	2437	-0.08	0.226	13.91	14.00	1.021	99.46	1.005	0.232	24#
	ANT14	Left Edge	10	6	2437	-0.04	0.170	13.91	14.00	1.021	99.46	1.005	0.175	/
	ANT14	Top Edge	10	6	2437	0.18	0.099	13.91	14.00	1.021	99.46	1.005	0.102	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.13 WIFI 5GHz

Fre. Band	Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
5.3G	802.11ac80	ANT12	Left Cheek	0	58	5290	0.17	0.138	10.18	11.00	1.208	90.24	1.108	0.185	/
		ANT12	Left Tilt	0	58	5290	-0.11	0.167	10.18	11.00	1.208	90.24	1.108	0.224	/
		ANT12	Right Cheek	0	58	5290	0.17	0.154	10.18	11.00	1.208	90.24	1.108	0.206	/
		ANT12	Right Tilt	0	58	5290	-0.12	0.194	10.18	11.00	1.208	90.24	1.108	0.260	25#
5.3G	802.11ac80	ANT14	Left Cheek	0	58	5290	0.03	0.164	13.16	14.00	1.213	90.24	1.108	0.221	/
		ANT14	Left Tilt	0	58	5290	-0.02	0.147	13.16	14.00	1.213	90.24	1.108	0.198	/
		ANT14	Right Cheek	0	58	5290	0.09	0.097	13.16	14.00	1.213	90.24	1.108	0.130	/
		ANT14	Right Tilt	0	58	5290	0.03	0.096	13.16	14.00	1.213	90.24	1.108	0.129	/
5.6G	802.11ac80	ANT12	Left Cheek	0	106	5530	0.08	0.142	12.03	13.00	1.250	90.24	1.108	0.197	/
		ANT12	Left Tilt	0	106	5530	-0.01	0.169	12.03	13.00	1.250	90.24	1.108	0.234	/
		ANT12	Right Cheek	0	106	5530	0.16	0.157	12.03	13.00	1.250	90.24	1.108	0.218	/
		ANT12	Right Tilt	0	106	5530	0.01	0.213	12.03	13.00	1.250	90.24	1.108	0.295	26#
5.6G	802.11ac80	ANT14	Left Cheek	0	122	5610	-0.04	0.172	13.29	15.00	1.483	90.24	1.108	0.283	/
		ANT14	Left Tilt	0	122	5610	0.01	0.171	13.29	15.00	1.483	90.24	1.108	0.281	/
		ANT14	Right Cheek	0	122	5610	-0.13	0.102	13.29	15.00	1.483	90.24	1.108	0.168	/
		ANT14	Right Tilt	0	122	5610	-0.06	0.116	13.29	15.00	1.483	90.24	1.108	0.191	/
5.8G	802.11ac80	ANT12	Left Cheek	0	155	5775	-0.03	0.151	11.72	13.00	1.343	90.24	1.108	0.225	/
		ANT12	Left Tilt	0	155	5775	0.00	0.162	11.72	13.00	1.343	90.24	1.108	0.241	/
		ANT12	Right Cheek	0	155	5775	-0.03	0.141	11.72	13.00	1.343	90.24	1.108	0.210	/
		ANT12	Right Tilt	0	155	5775	-0.16	0.165	11.72	13.00	1.343	90.24	1.108	0.246	/
5.8G	802.11ac80	ANT14	Left Cheek	0	155	5775	-0.11	0.173	13.97	15.00	1.268	90.24	1.108	0.243	/
		ANT14	Left Tilt	0	155	5775	-0.02	0.182	13.97	15.00	1.268	90.24	1.108	0.256	27#
		ANT14	Right Cheek	0	155	5775	-0.01	0.115	13.97	15.00	1.268	90.24	1.108	0.162	/
		ANT14	Right Tilt	0	155	5775	0.16	0.137	13.97	15.00	1.268	90.24	1.108	0.192	/
Body-worn															
5.3G	802.11ac80	ANT12	Front Side	10	58	5290	-0.11	0.027	10.18	11.00	1.208	90.24	1.108	0.036	/
		ANT12	Back Side	10	58	5290	-0.03	0.058	10.18	11.00	1.208	90.24	1.108	0.078	28#
5.3G	802.11ac80	ANT14	Front Side	10	58	5290	-0.15	0.021	13.16	14.00	1.213	90.24	1.108	0.028	/
		ANT14	Back Side	10	58	5290	-0.10	0.033	13.16	14.00	1.213	90.24	1.108	0.044	/
5.6G	802.11ac80	ANT12	Front Side	10	106	5530	-0.08	0.031	12.03	13.00	1.250	90.24	1.108	0.043	/
		ANT12	Back Side	10	106	5530	0.11	0.075	12.03	13.00	1.250	90.24	1.108	0.104	29#
5.6G	802.11ac80	ANT14	Front Side	10	122	5610	0.09	0.024	13.29	15.00	1.483	90.24	1.108	0.039	/
		ANT14	Back Side	10	122	5610	-0.04	0.056	13.29	15.00	1.483	90.24	1.108	0.092	/
Hotspot															
5.2G	802.11ac80	ANT12	Front Side	10	42	5210	-0.16	0.034	9.79	11.00	1.321	90.24	1.108	0.050	/
		ANT12	Back Side	10	42	5210	0.05	0.061	9.79	11.00	1.321	90.24	1.108	0.089	/

		ANT12	Left Edge	10	42	5210	0.17	0.014	9.79	11.00	1.321	90.24	1.108	0.020	/
		ANT12	Top Edge	10	42	5210	0.03	0.096	9.79	11.00	1.321	90.24	1.108	0.141	30#
5.2G	802.11ac80	ANT14	Front Side	10	42	5210	-0.06	0.049	12.71	14.00	1.346	90.24	1.108	0.073	/
		ANT14	Back Side	10	42	5210	0.03	0.075	12.71	14.00	1.346	90.24	1.108	0.112	/
		ANT14	Left Edge	10	42	5210	-0.01	0.057	12.71	14.00	1.346	90.24	1.108	0.085	/
		ANT14	Top Edge	10	42	5210	0.04	0.091	12.71	14.00	1.346	90.24	1.108	0.136	/
5.8G	802.11ac80	ANT12	Front Side	10	155	5775	0.12	0.033	11.72	13.00	1.343	90.24	1.108	0.049	/
		ANT12	Back Side	10	155	5775	-0.04	0.049	11.72	13.00	1.343	90.24	1.108	0.073	/
		ANT12	Left Edge	10	155	5775	-0.07	0.014	11.72	13.00	1.343	90.24	1.108	0.021	/
		ANT12	Top Edge	10	155	5775	0.07	0.101	11.72	13.00	1.343	90.24	1.108	0.150	31#
5.8G	802.11ac80	ANT14	Front Side	10	155	5775	0.06	0.050	13.97	15.00	1.268	90.24	1.108	0.070	/
		ANT14	Back Side	10	155	5775	0.05	0.078	13.97	15.00	1.268	90.24	1.108	0.110	/
		ANT14	Left Edge	10	155	5775	0.13	0.091	13.97	15.00	1.268	90.24	1.108	0.128	/
		ANT14	Top Edge	10	155	5775	-0.12	0.098	13.97	15.00	1.268	90.24	1.108	0.138	/

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

Fre. Band	Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	10g Scaled SAR (W/kg)	Meas. No.
Specific															
5.3G	802.11ac80	ANT12	Front Side	0	58	5290	0.02	0.102	10.18	11.00	1.208	90.24	1.108	0.137	/
		ANT12	Back Side	0	58	5290	0.00	0.104	10.18	11.00	1.208	90.24	1.108	0.139	/
		ANT12	Left Edge	0	58	5290	-0.16	0.012	10.18	11.00	1.208	90.24	1.108	0.016	/
		ANT12	Top Edge	0	58	5290	-0.09	0.283	10.18	11.00	1.208	90.24	1.108	0.379	32#
5.3G	802.11ac80	ANT14	Front Side	0	58	5290	-0.06	0.089	13.16	14.00	1.213	90.24	1.108	0.120	/
		ANT14	Back Side	0	58	5290	0.17	0.086	13.16	14.00	1.213	90.24	1.108	0.116	/
		ANT14	Left Edge	0	58	5290	-0.08	0.174	13.16	14.00	1.213	90.24	1.108	0.234	/
		ANT14	Top Edge	0	58	5290	-0.16	0.012	13.16	14.00	1.213	90.24	1.108	0.016	/
5.6G	802.11ac80	ANT12	Front Side	0	106	5530	-0.09	0.164	12.03	13.00	1.250	90.24	1.108	0.227	/
		ANT12	Back Side	0	106	5530	-0.12	0.158	12.03	13.00	1.250	90.24	1.108	0.219	/
		ANT12	Left Edge	0	106	5530	0.06	0.019	12.03	13.00	1.250	90.24	1.108	0.026	/
		ANT12	Top Edge	0	106	5530	-0.02	0.506	12.03	13.00	1.250	90.24	1.108	0.701	33#
5.6G	802.11ac80	ANT14	Front Side	0	122	5610	0.05	0.166	13.29	15.00	1.483	90.24	1.108	0.273	/
		ANT14	Back Side	0	122	5610	0.01	0.155	13.29	15.00	1.483	90.24	1.108	0.255	/
		ANT14	Left Edge	0	122	5610	-0.18	0.405	13.29	15.00	1.483	90.24	1.108	0.665	/
		ANT14	Top Edge	0	122	5610	0.18	0.289	13.29	15.00	1.483	90.24	1.108	0.475	/

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

10.14 Bluetooth

Mode	Position	Antenna	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
DH5	Left Cheek	ANT12	0	39	2441	0.02	0.105	9.82	10.00	1.042	76.88	1.301	0.142	/
	Left Tilt	ANT12	0	39	2441	-0.07	0.114	9.82	10.00	1.042	76.88	1.301	0.155	/
	Right Cheek	ANT12	0	39	2441	0.15	0.097	9.82	10.00	1.042	76.88	1.301	0.132	/
	Right Tilt	ANT12	0	39	2441	0.06	0.089	9.82	10.00	1.042	76.88	1.301	0.121	/
DH5	Left Cheek	ANT14	0	0	2402	0.15	0.246	14.79	15.00	1.050	76.61	1.305	0.337	34#
	Left Tilt	ANT14	0	0	2402	0.12	0.203	14.79	15.00	1.050	76.61	1.305	0.278	/
	Right Cheek	ANT14	0	0	2402	-0.09	0.162	14.79	15.00	1.050	76.61	1.305	0.222	/
	Right Tilt	ANT14	0	0	2402	0.10	0.155	14.79	15.00	1.050	76.61	1.305	0.212	/
Body-worn&Hotspot														
DH5	Front Side	ANT12	10	39	2441	0.02	0.014	9.82	10.00	1.042	76.88	1.301	0.019	/
	Back Side	ANT12	10	39	2441	-0.09	0.029	9.82	10.00	1.042	76.88	1.301	0.039	35#
	Left Edge	ANT12	10	39	2441	0.11	0.006	9.82	10.00	1.042	76.88	1.301	0.008	/
	Top Edge	ANT12	10	39	2441	0.05	0.015	9.82	10.00	1.042	76.88	1.301	0.020	/
DH5	Front Side	ANT14	10	0	2402	-0.05	0.015	14.79	15.00	1.050	76.61	1.305	0.021	/
	Back Side	ANT14	10	0	2402	0.17	0.026	14.79	15.00	1.050	76.61	1.305	0.036	/
	Left Edge	ANT14	10	0	2402	-0.03	0.025	14.79	15.00	1.050	76.61	1.305	0.034	/
	Top Edge	ANT14	10	0	2402	0.19	0.012	14.79	15.00	1.050	76.61	1.305	0.016	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.15 NFC SAR

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

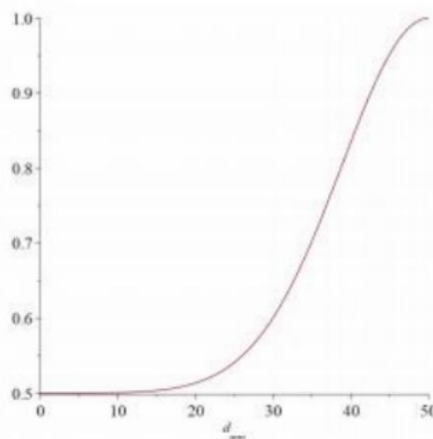
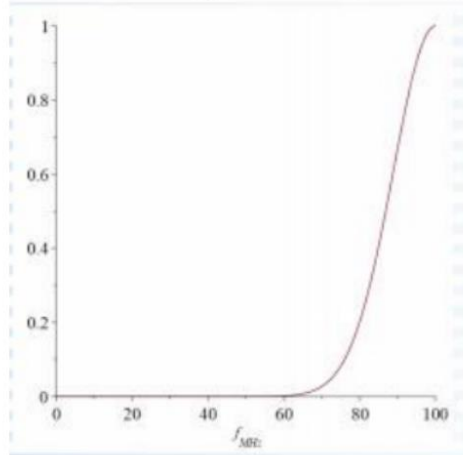
$$P_{7X}(d_{mm}, f_{MHz}) := \begin{cases} P_{6S}(d_{mm}, f_{MHz}) & f_{MHz} \leq 100 \\ P_{6to7}(d_{mm}, f_{MHz}) & 100 < f_{MHz} \leq 300 \\ P_7(d_{mm}, f_{MHz}) & 300 < f_{MHz} \end{cases}$$

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.

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

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

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



d≤50mm				
f Max(MHz)	100		d Max(mm)	50
f MHz	13.56		d(mm)	5
△f(MHz)	100		△d	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	55.63	10	6	-23.17
Note: 1. Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies ≤ 30 MHz). 2. ERP = $55.63 + 20 \cdot \log(10) - 104.8 + 6 = -23.17$ (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]		
P _{meas} .(dBm)	-23.17	P _{meas} .(mW)	0.00482
P _{th} .(mW)	443.13		
NFC Estimated 1g SAR [W/kg]	<0.001		

10.15.1 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 1g SAR value for Simultaneous Transmission is 1.566 [W/kg]. Therefore, the worst TER = (1.566+0.001)/1.6 = 0.979 < 1, the NFC SAR transmit simultaneously Pass.

11 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Note: For 1g SAR, the highest measured 1g SAR is $0.687 < 0.80$ W/kg, repeated measurement is not required.

12 SIMULTANEOUS TRANSMISSION

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

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot	Specific
1	WWAN+WIFI2.4G(Chain0)+WIFI 5G(Chain0)+Bluetooth(Chain0)	Yes	Yes	Yes	Yes
2	WWAN+WIFI2.4G(Chain1)+WIFI 5G(Chain1)+Bluetooth(Chain1)	Yes	Yes	Yes	Yes

Note:

1. When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
2. The maximum SAR summation is calculated based on the same configuration and test position.

12.2 Sum SAR of Simultaneous Transmission

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

Band	Antenna	Position	Stand alone SAR							SUM SAR	
			1	2	3	4	5	6	7	Sum SAR (1+2+4+6)	Sum SAR (1+3+5+7)
			WWAN	2.4GWIFI ANT12	2.4GWIFI ANT14	5GWIFI ANT12 MAX	5GWIFI ANT14 MAX	BT ANT12	BT ANT14		
GSM850	ANT0	Left Cheek	0.215	0.359	0.416	0.225	0.283	0.142	0.337	0.941	1.250
		Left Tilt	0.135	0.403	0.231	0.241	0.281	0.155	0.278	0.933	0.925
		Right Cheek	0.267	0.232	0.109	0.218	0.168	0.132	0.222	0.848	0.765
		Right Tilt	0.145	0.241	0.089	0.295	0.192	0.121	0.212	0.802	0.639
GSM1900	ANT4	Left Cheek	0.531	0.359	0.416	0.225	0.283	0.142	0.337	1.257	1.566
		Left Tilt	0.533	0.403	0.231	0.241	0.281	0.155	0.278	1.331	1.323
		Right Cheek	0.803	0.232	0.109	0.218	0.168	0.132	0.222	1.384	1.301
		Right Tilt	0.774	0.241	0.089	0.295	0.192	0.121	0.212	1.431	1.268
WCDMA B2	ANT4	Left Cheek	0.437	0.359	0.416	0.225	0.283	0.142	0.337	1.163	1.472
		Left Tilt	0.465	0.403	0.231	0.241	0.281	0.155	0.278	1.263	1.255
		Right Cheek	0.784	0.232	0.109	0.218	0.168	0.132	0.222	1.365	1.282
		Right Tilt	0.686	0.241	0.089	0.295	0.192	0.121	0.212	1.343	1.180
WCDMA B4	ANT4	Left Cheek	0.327	0.359	0.416	0.225	0.283	0.142	0.337	1.053	1.362
		Left Tilt	0.378	0.403	0.231	0.241	0.281	0.155	0.278	1.176	1.168
		Right Cheek	0.573	0.232	0.109	0.218	0.168	0.132	0.222	1.154	1.071
		Right Tilt	0.527	0.241	0.089	0.295	0.192	0.121	0.212	1.184	1.021
WCDMA B5	ANT0	Left Cheek	0.122	0.359	0.416	0.225	0.283	0.142	0.337	0.848	1.157
		Left Tilt	0.066	0.403	0.231	0.241	0.281	0.155	0.278	0.864	0.856
		Right Cheek	0.14	0.232	0.109	0.218	0.168	0.132	0.222	0.721	0.638
		Right Tilt	0.08	0.241	0.089	0.295	0.192	0.121	0.212	0.737	0.574
LTE B2	ANT4	Left Cheek	0.337	0.359	0.416	0.225	0.283	0.142	0.337	1.063	1.372
		Left Tilt	0.366	0.403	0.231	0.241	0.281	0.155	0.278	1.164	1.156
		Right Cheek	0.495	0.232	0.109	0.218	0.168	0.132	0.222	1.076	0.993
		Right Tilt	0.47	0.241	0.089	0.295	0.192	0.121	0.212	1.127	0.964
LTE B4	ANT4	Left Cheek	0.366	0.359	0.416	0.225	0.283	0.142	0.337	1.092	1.401
		Left Tilt	0.419	0.403	0.231	0.241	0.281	0.155	0.278	1.217	1.209
		Right Cheek	0.549	0.232	0.109	0.218	0.168	0.132	0.222	1.130	1.047
		Right Tilt	0.573	0.241	0.089	0.295	0.192	0.121	0.212	1.230	1.067
LTE B5	ANT0	Left Cheek	0.137	0.359	0.416	0.225	0.283	0.142	0.337	0.863	1.172
		Left Tilt	0.07	0.403	0.231	0.241	0.281	0.155	0.278	0.868	0.860
		Right Cheek	0.147	0.232	0.109	0.218	0.168	0.132	0.222	0.728	0.645
		Right Tilt	0.082	0.241	0.089	0.295	0.192	0.121	0.212	0.739	0.576
LTE B7	ANT4	Left Cheek	0.431	0.359	0.416	0.225	0.283	0.142	0.337	1.157	1.466
		Left Tilt	0.493	0.403	0.231	0.241	0.281	0.155	0.278	1.291	1.283

		Right Cheek	0.725	0.232	0.109	0.218	0.168	0.132	0.222	1.306	1.223
		Right Tilt	0.789	0.241	0.089	0.295	0.192	0.121	0.212	1.446	1.283
LTE B38	ANT4	Left Cheek	0.255	0.359	0.416	0.225	0.283	0.142	0.337	0.981	1.290
		Left Tilt	0.273	0.403	0.231	0.241	0.281	0.155	0.278	1.071	1.063
		Right Cheek	0.388	0.232	0.109	0.218	0.168	0.132	0.222	0.969	0.886
		Right Tilt	0.509	0.241	0.089	0.295	0.192	0.121	0.212	1.166	1.003
LTE B41	ANT4	Left Cheek	0.317	0.359	0.416	0.225	0.283	0.142	0.337	1.043	1.352
		Left Tilt	0.352	0.403	0.231	0.241	0.281	0.155	0.278	1.150	1.142
		Right Cheek	0.477	0.232	0.109	0.218	0.168	0.132	0.222	1.058	0.975
		Right Tilt	0.646	0.241	0.089	0.295	0.192	0.121	0.212	1.303	1.140

Note:

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

2: The highest Summed 1g SAR is 1.566 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

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

Band	Antenna	Position	Stand alone SAR													SUM SAR	
			1	2	3				4				5	6	7		
			WWAN	2.4G WIFI ANT12	2.4G WIFI ANT14	5.2G WIFI ANT12	5.6G WIFI ANT12	5.8G WIFI ANT12	5GWIFI ANT12 MAX	5.2G WIFI ANT12	5.6G WIFI ANT12	5.8G WIFI ANT12	5GWIFI ANT12 MAX	BT ANT12	BT ANT14	Sum SAR (1+2+4+6)	Sum SAR (1+3+5+7)
GSM850	ANT0	Front Side 10mm	0.226	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.417	0.450
		Back Side 10mm	0.326	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.604	0.705
		Left Edge 10mm	0.198	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.244	0.535
		Bottom Edge 10mm	0.194	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.408	0.450
GSM1900	ANT4	Front Side 10mm	0.202	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.393	0.426
		Back Side 10mm	0.221	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.499	0.600
		Right Edge 10mm	0.082	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.128	0.419
		Top Edge 10mm	0.280	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.494	0.536
WCDMA B2	ANT4	Front Side 10mm	0.144	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.335	0.368
		Back Side 10mm	0.186	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.464	0.565
		Right Edge 10mm	0.063	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.109	0.400
		Top Edge 10mm	0.237	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.451	0.493
WCDMA B4	ANT4	Front Side 10mm	0.105	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.296	0.329
		Back Side 10mm	0.147	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.425	0.526
		Right Edge 10mm	0.049	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.095	0.386
		Top Edge 10mm	0.184	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.398	0.440
WCDMA B5	ANT0	Front Side 10mm	0.130	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.321	0.354
		Back Side 10mm	0.179	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.457	0.558
		Left Edge 10mm	0.102	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.148	0.439
		Bottom Edge 10mm	0.097	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.311	0.353
LTE B2	ANT4	Front Side 10mm	0.114	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.305	0.338
		Back Side 10mm	0.143	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.421	0.522
		Right Edge 10mm	0.049	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.095	0.386
		Top Edge 10mm	0.190	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.404	0.446
LTE B4	ANT4	Front Side 10mm	0.121	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.312	0.345
		Back Side 10mm	0.152	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.430	0.531
		Right Edge 10mm	0.051	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.097	0.388
		Top Edge 10mm	0.206	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.420	0.462
LTE B5	ANT0	Front Side 10mm	0.100	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.291	0.324
		Back Side 10mm	0.196	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.474	0.575
		Left Edge 10mm	0.029	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.075	0.366
		Bottom Edge 10mm	0.161	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.375	0.417
LTE B7	ANT4	Front Side 10mm	0.155	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.346	0.379
		Back Side 10mm	0.180	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.458	0.559
		Right Edge 10mm	0.051	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.097	0.388

		Top Edge 10mm	0.209	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.423	0.465
LTE B38	ANT4	Front Side 10mm	0.095	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.286	0.319
		Back Side 10mm	0.118	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.396	0.497
		Right Edge 10mm	0.038	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.084	0.375
		Top Edge 10mm	0.133	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.347	0.389
LTE B41	ANT4	Front Side 10mm	0.127	0.123	0.130	0.050	0.043	0.049	0.050	0.073	0.039	0.070	0.073	0.019	0.021	0.318	0.351
		Back Side 10mm	0.149	0.135	0.232	0.089	0.104	0.073	0.104	0.112	0.092	0.110	0.112	0.039	0.036	0.427	0.528
		Right Edge 10mm	0.039	0.017	0.175	0.020	0.000	0.021	0.021	0.085	0.000	0.128	0.128	0.008	0.034	0.085	0.376
		Top Edge 10mm	0.183	0.043	0.102	0.141	0.000	0.150	0.150	0.136	0.000	0.138	0.138	0.020	0.016	0.396	0.438
Note:																	
1: The simultaneous transmission combinations of the three antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.																	
2: The highest Summed 1g SAR is 0.705 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.																	

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	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: 4d187	2021/05/17	2024/05/17
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2021/05/17	2024/05/17
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d193	2021/05/20	2024/05/20
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2021/05/19	2024/05/19
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2021/05/19	2024/05/19
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2021/05/18	2024/05/18
E-Field Probe	Speag	EX3DV4	SN: 7607	2023/07/04	2024/07/04
Data Acquisition Electronicsr	Speag	DAE4	SN: 878	2023/03/23	2024/03/23
Signal Generator	R&S	SMB100A	177746	2023/05/10	2024/05/10
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	Anritsu	MT8820C	6201144551	2023/06/29	2024/06/29
Network Analyzer	Agilent	E5071C	MY46103472	2023/11/14	2024/11/14
Thermometer	Elitech	RC-4	EF5238001628	2023/10/09	2024/10/09
Thermometer	Elitech	RC-4HC	EF7239002652	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 (%)
2024.02.01	Head	835	21.3	0.89	40.90	0.90	41.50	-1.56	-1.46
2024.03.15	Head	1750	21.3	1.34	39.46	1.37	40.08	-2.26	-1.54
2024.03.20	Head	2450	21.4	1.81	39.63	1.80	39.20	0.39	1.11
2024.03.16	Head	2600	21.3	1.95	39.12	1.96	39.01	-0.61	0.27
2024.03.17	Head	2600	21.5	1.94	38.43	1.96	39.01	-1.28	-1.48
2024.03.21	Head	5250	21.9	4.61	36.58	4.71	35.93	-2.19	1.82
2024.03.21	Head	5600	21.8	5.04	35.00	5.07	35.53	-0.59	-1.48
2024.03.22	Head	5750	21.3	5.20	34.69	5.22	35.36	-0.42	-1.89

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 (%)
2024.02.01	Head	835	100	0.99	9.88	9.76	1.23
2024.03.15	Head	1750	100	3.77	37.70	36.70	2.72
2024.03.20	Head	2450	100	5.22	52.20	53.00	-1.51
2024.03.16	Head	2600	100	5.70	57.00	56.80	0.35
2024.03.17	Head	2600	100	5.61	56.10	56.80	-1.23
2024.03.21	Head	5250	100	7.62	76.20	77.80	-2.06
2024.03.21	Head	5600	100	7.99	79.90	81.20	-1.60
2024.03.22	Head	5750	100	7.92	79.20	77.20	2.59

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

Head liquid 10g

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2024.03.21	5250	100	2.150	21.50	22.10	-2.71
2024.03.21	5600	100	2.320	23.20	23.10	0.43
2024.03.22	5750	100	2.230	22.30	21.70	2.76
Note: The tolerance limit of System validation $\pm 10\%$.						

System Performance Check Data (835MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD835V2, 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 Conductivit y [S/m]	TSL Permittivity	Ambient Temperatur e [°C]	Liquid Temperatur e [°C]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.89	40.9	22.4	21.3

Hardware Setup

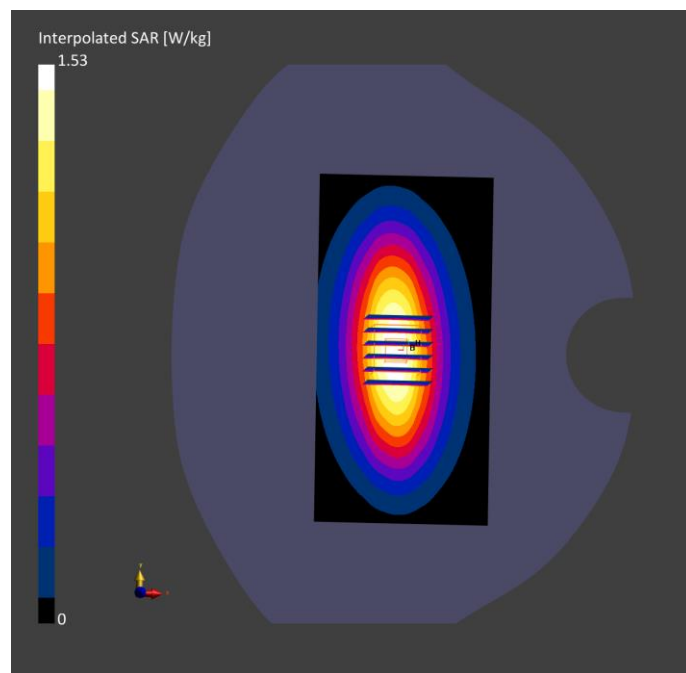
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-02-01	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-02-01	2024-02-01
psSAR1g [W/kg]	1.01	0.988
psSAR10g [W/kg]	0.651	0.644
Power Drift [dB]	-0.04	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		84.3
Dist 3dB Peak [mm]		13.1



System Performance Check Data (835MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD835V2, 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 Conductivit y [S/m]	TSL Permittivity	Ambient Temperatur e [°C]	Liquid Temperatur e [°C]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.90	40.9	22.2	21.5

Hardware Setup

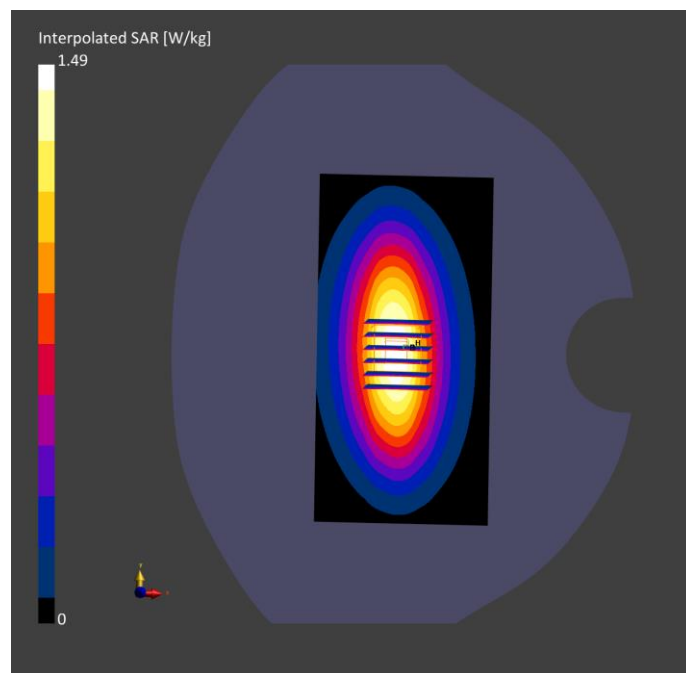
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-02-02	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-02-02	2024-02-02
psSAR1g [W/kg]	0.974	0.978
psSAR10g [W/kg]	0.635	0.639
Power Drift [dB]	-0.11	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		85.8
Dist 3dB Peak [mm]		13.1



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivit y [S/m]	TSL Permittivity	Ambient Temperatur e [°C]	Liquid Temperatur e [°C]
Flat, HSL		D1750	CW, 0--	1750.0, 50	8.52	1.34	39.5	22.3	21.3

Hardware Setup

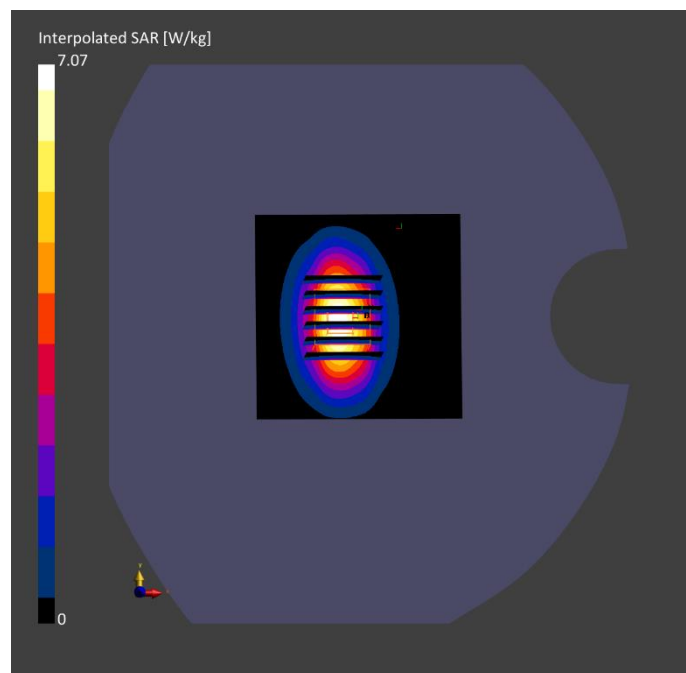
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-03-15	2024-03-15
psSAR1g [W/kg]	3.61	3.77
psSAR10g [W/kg]	2.18	1.97
Power Drift [dB]	-0.02	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.6
Dist 3dB Peak [mm]		10.6



System Performance Check Data (1900MHz)

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 Conductivit y [S/m]	TSL Permittivity	Ambient Temperatur e [°C]	Liquid Temperatur e [°C]
Flat, HSL		D1900	CW, 0--	1900.0, 50	7.98	1.43	39.6	22.1	21.7

Hardware Setup

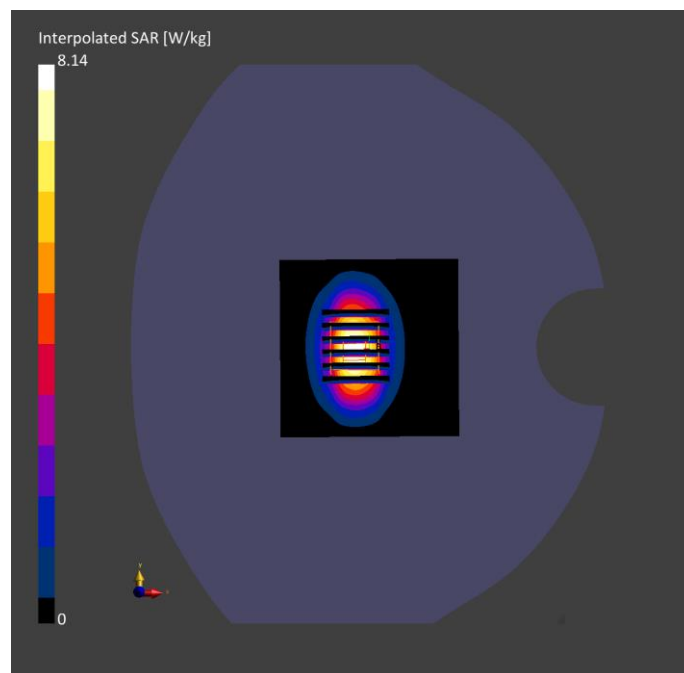
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-03-14	2024-03-14
psSAR1g [W/kg]	4.22	4.14
psSAR10g [W/kg]	2.23	2.09
Power Drift [dB]	-0.11	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.4
Dist 3dB Peak [mm]		9.1



System Performance Check Data (1900MHz)

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 Conductivit y [S/m]	TSL Permittivity	Ambient Temperatur e [°C]	Liquid Temperatur e [°C]
Flat, HSL		D1900	CW, 0--	1900.0, 50	7.98	1.41	40.6	22.2	21.5

Hardware Setup

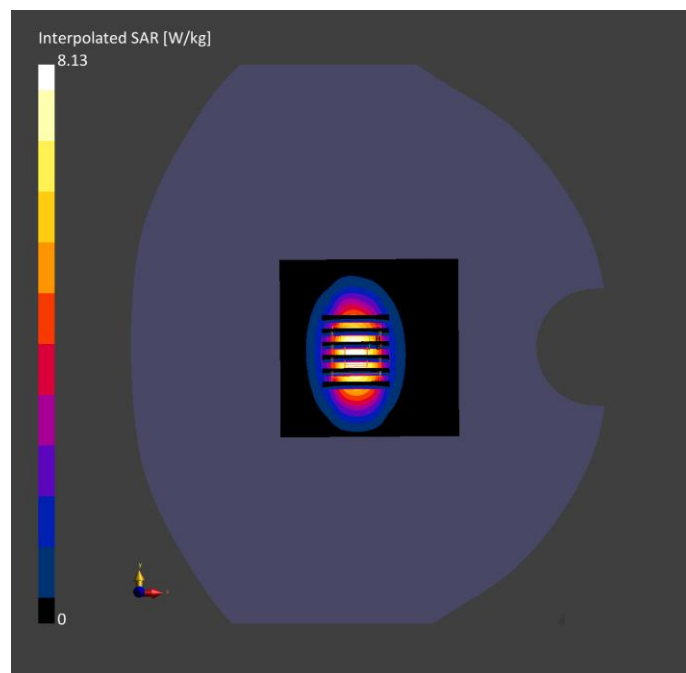
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-03-13	2024-03-13
psSAR1g [W/kg]	4.14	4.08
psSAR10g [W/kg]	2.15	2.01
Power Drift [dB]	-0.04	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor		
[dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.2
Dist 3dB Peak [mm]		9.4



System Performance Check Data (2450MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D2450V2, SPEAG	40.0 x 8.0 x 8.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivit y [S/m]	TSL Permittivity	Ambient Temperatur e [°C]	Liquid Temperatur e [°C]
Flat, HSL		D2450	CW, 0--	2450.0, 50	7.47	1.81	39.6	22.6	21.4

Hardware Setup

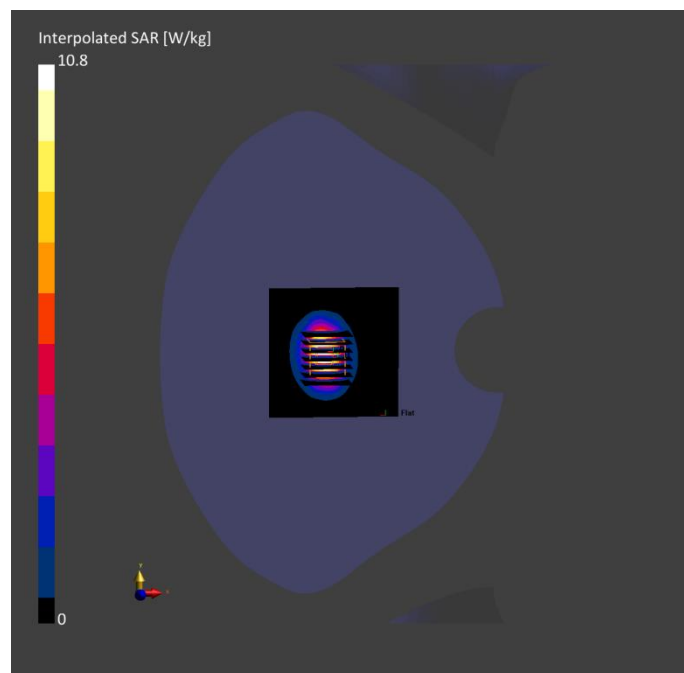
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBB60040000 2024-03-20	EXD044 SRR67,2023-07-04	DAE68878,2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
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	2024-03-20	2024-03-20
psSAR1g [W/kg]	5.32	5.22
psSAR10g [W/kg]	2.44	2.35
Power Drift [dB]	-0.07	-0.15
Power Scaling	Disabled	Disabled
Scaling Factor		
[dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.1
Dist 3dB Peak [mm]		9.1



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, 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 Conductivit y [S/m]	TSL Permittivity	Ambient Temperatur e [°C]	Liquid Temperatur e [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.41	1.95	39.1	22.4	21.3

Hardware Setup

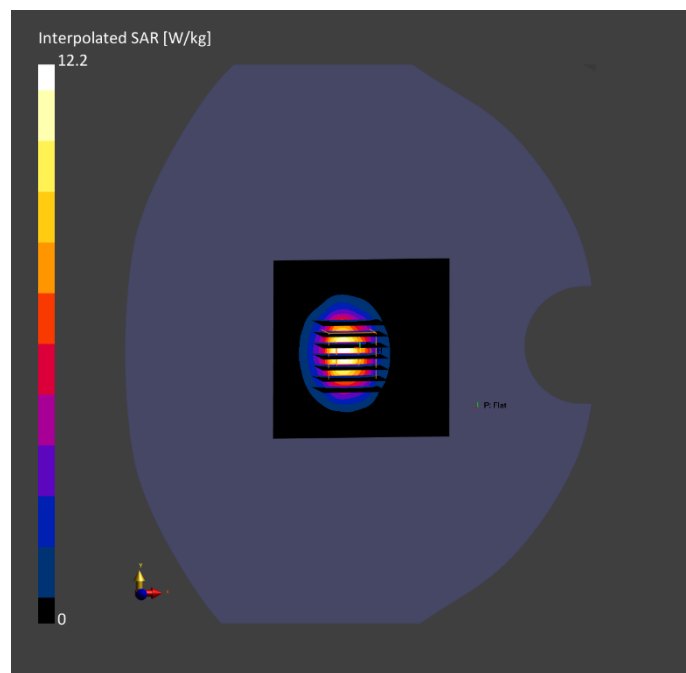
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-16	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
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	2024-03-16	2024-03-16
psSAR1g [W/kg]	5.71	5.7
psSAR10g [W/kg]	2.35	2.41
Power Drift [dB]	0.01	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor		
[dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.4
Dist 3dB Peak [mm]		9.3



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V2, 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 Conductivit y [S/m]	TSL Permittivity	Ambient Temperatur e [°C]	Liquid Temperatur e [°C]
Flat, HSL		CD2600 V2	CW, 0--	2600.0, 50	7.41	1.94	38.4	22.2	21.5

Hardware Setup

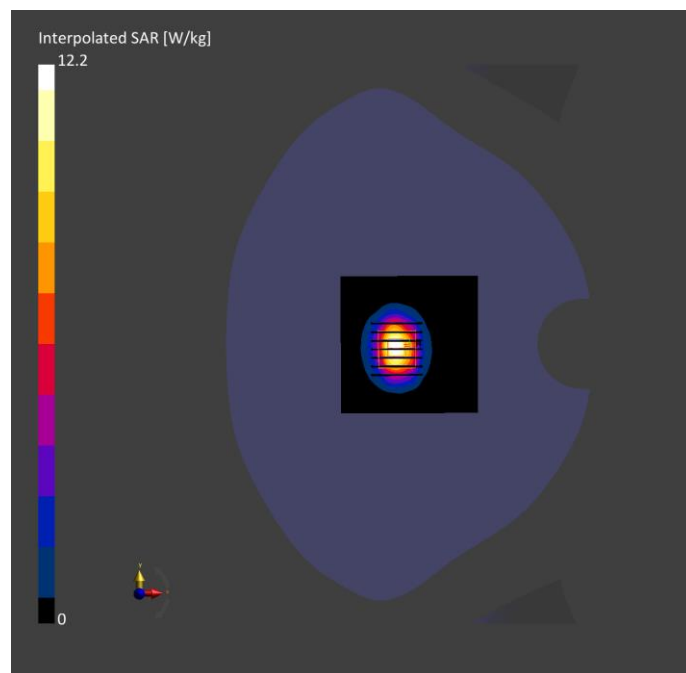
Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
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	2024-03-17	2024-03-17
psSAR1g [W/kg]	5.38	5.61
psSAR10g [W/kg]	2.22	2.46
Power Drift [dB]	0.05	0.07
Power Scaling	Disabled	Disabled
Scaling Factor		
[dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		82.3
Dist 3dB Peak [mm]		10.1



System Performance Check Data (5250MHz)

Device under Test Properties

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

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GHZ	CW, 0--	5250.0, 25	5.41	4.61	36.6	22.6	21.9

Hardware Setup

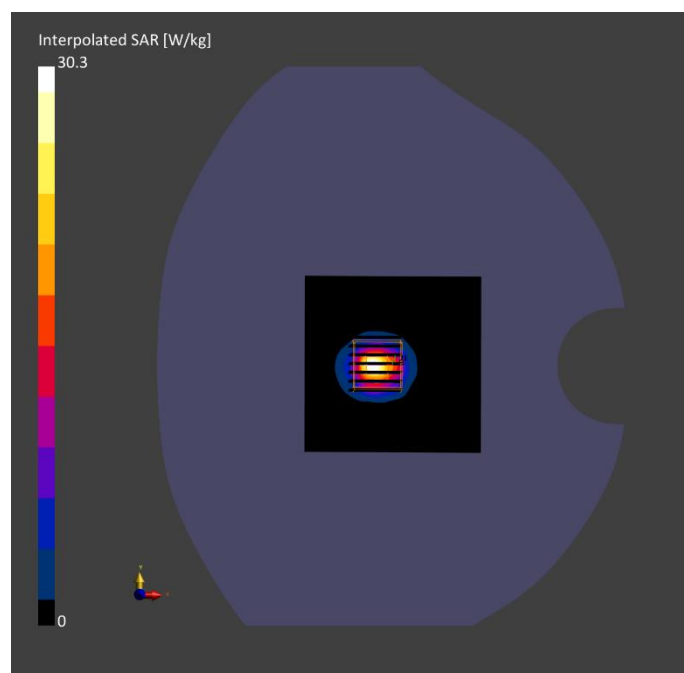
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-21	EX3DV4 - SN7607,	2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-21	2024-03-21
psSAR1g [W/kg]	7.42	7.62
psSAR10g [W/kg]	2.21	2.15
Power Drift [dB]	0.00	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor		
[dB]		
TSL	No correction	No correction
Correction		
M2/M1 [%]		66.5
Dist 3dB Peak [mm]		6.9



System Performance Check Data (5600MHz)

Device under Test Properties

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

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GHZ	CW, 0--	5600.0, 60	4.58	5.04	35.0	22.3	21.8

Hardware Setup

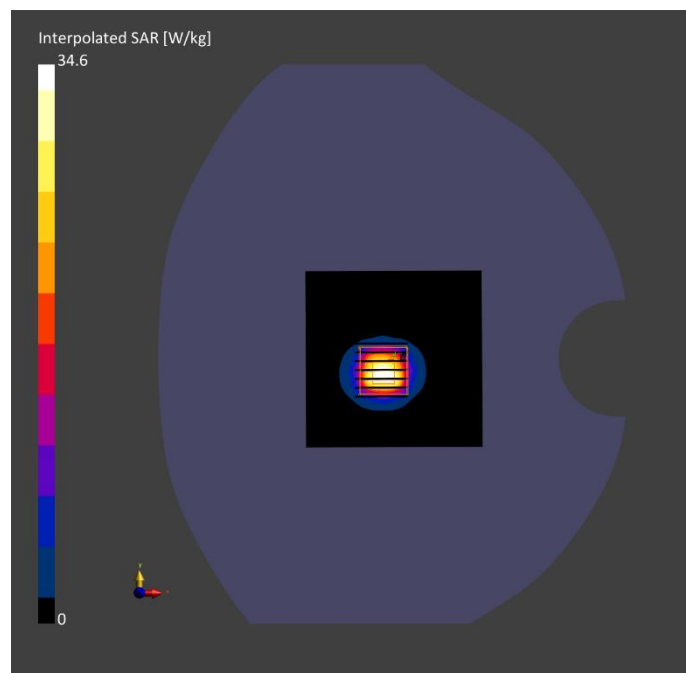
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-21	EX3DV4 - SN7607,	2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-21	2024-03-21
psSAR1g [W/kg]	7.06	7.99
psSAR10g [W/kg]	2.26	2.32
Power Drift [dB]	-0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor		
[dB]		
TSL	No correction	No correction
Correction		
M2/M1 [%]		62.1
Dist 3dB Peak [mm]		7.2



System Performance Check Data (5750MHz)

Device under Test Properties

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

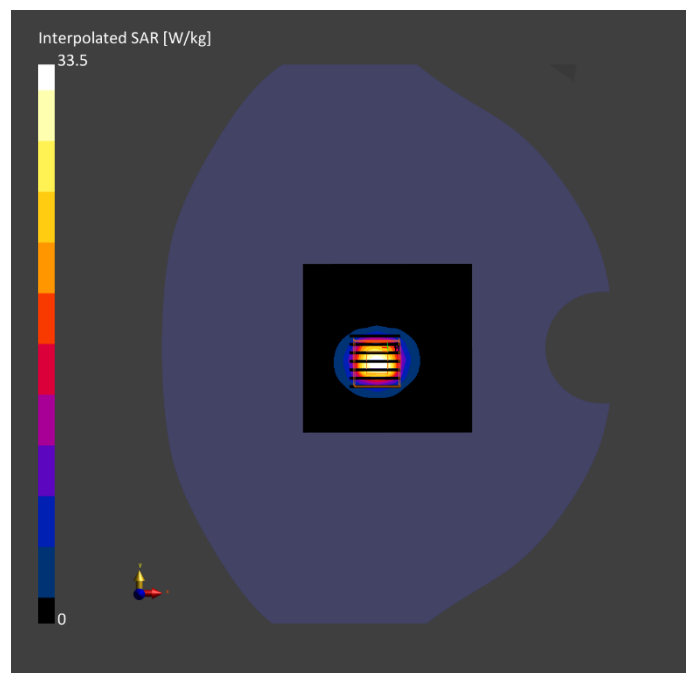
Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GHZ	CW, 0--	5750.0, 75	4.78	5.16	34.9	22.6	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	2024-03-22	EX3DV4 - SN7607,	2023-07-04	DAE4 Sn878, 2023-03-23

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	2024-03-22	2024-03-22
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR1g [W/kg]	6.53	7.92
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.09	2.23
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	0.01
Grading Ratio	1.5	1.4	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor		
Surface	VMS + 6p	VMS + 6p	[dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		60.1
			Dist 3dB Peak [mm]		7.4



ANNEX C TEST DATA

Meas.1 Right Head with Cheek on Middle Channel in GPRS850 4slots mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom	Position	Band	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Section, TSL	Distance [mm]		UID	Channel Number					
Right Head, HSL	CHEEK, 0.00	GSM 850	GSM, 10028-DAC	848.8, 251	9.96	0.91	40.3	22.4	21.3

Hardware Setup

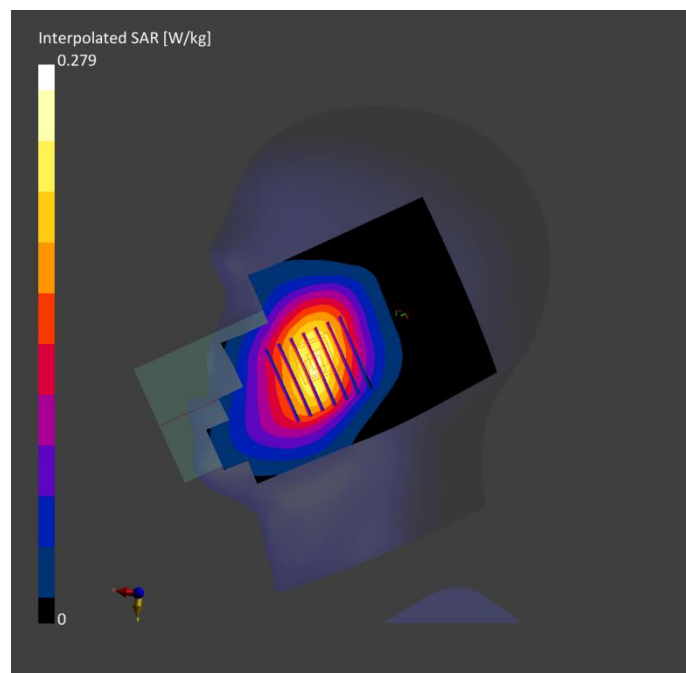
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-02-01	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 210.0	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		2024-02-01	2024-02-01
psSAR1g [W/kg]		0.206	0.222
psSAR10g [W/kg]		0.143	0.174
Power Drift [dB]		-0.01	-0.16
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction		No correction
M2/M1 [%]			80.7
Dist 3dB Peak [mm]			25.9



Meas.2 Body Plan with Back Side 10mm on Middle Channel in GPRS850 4Slots mode with Antenna 0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	BACK, 10.00	GSM, 850	GSM, 10058-DAC	848.8, 251	9.96	0.91	40.3	22.4	21.3

Hardware Setup

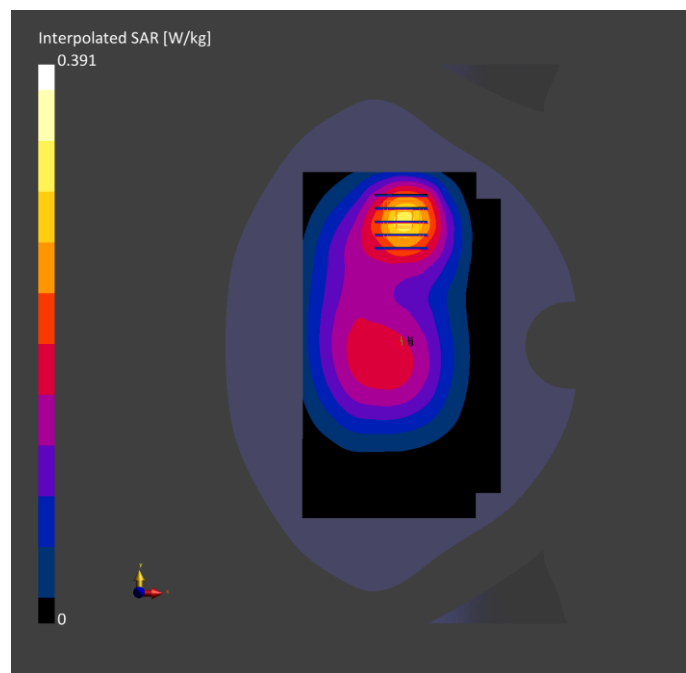
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-02-01	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 210.0	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 Surface		N/A	N/A
Detection		VMS + 6p	VMS + 6p
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-02-01	2024-02-01
psSAR1g [W/kg]		0.271	0.271
psSAR10g [W/kg]		0.178	0.177
Power Drift [dB]		-0.01	-0.04
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction		No correction
M2/M1 [%]			69.0
Dist 3dB Peak [mm]			20.9



Meas.3 Right Head with Cheek on Low Channel in GPRS1900 2slots mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	CHEEK, 0.00	PCS 1900	GSM, 10021-DAC	1850.2, 512	7.98	1.41	40.9	22.2	21.5

Hardware Setup

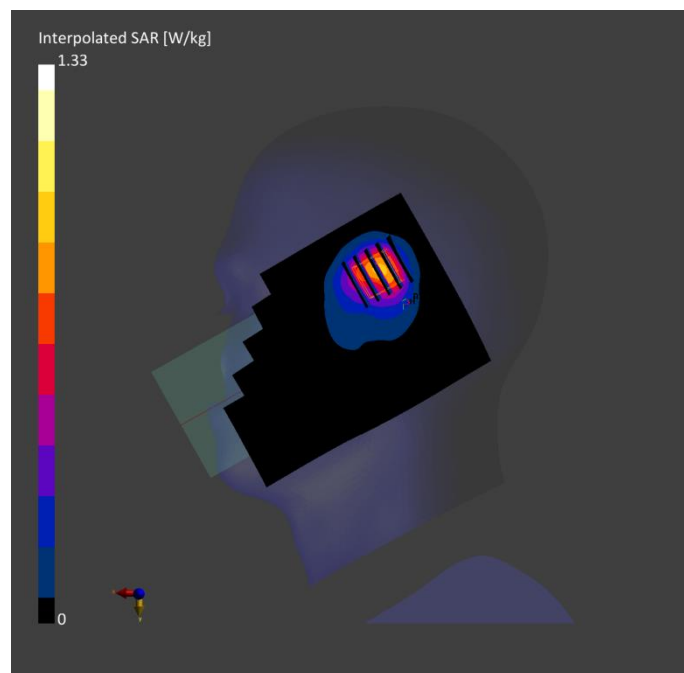
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-13	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 180.0	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 Surface		N/A	N/A
Detection		VMS + 6p	VMS + 6p
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-03-13	2024-03-13
psSAR1g [W/kg]		0.744	0.687
psSAR10g [W/kg]		0.416	0.383
Power Drift [dB]		-0.01	-0.01
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction		No correction
M2/M1 [%]			49.5
Dist 3dB Peak [mm]			8.0



Meas.4 Body Plan with Top Edge 10mm on Middle Channel in GPRS1900 2Slots mode with Antenna 4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE, TOP, 10.00	PCS 1900	GSM, 10021-DAC	1880.0, 661	7.98	1.41	40.7	22.2	21.5

Hardware Setup

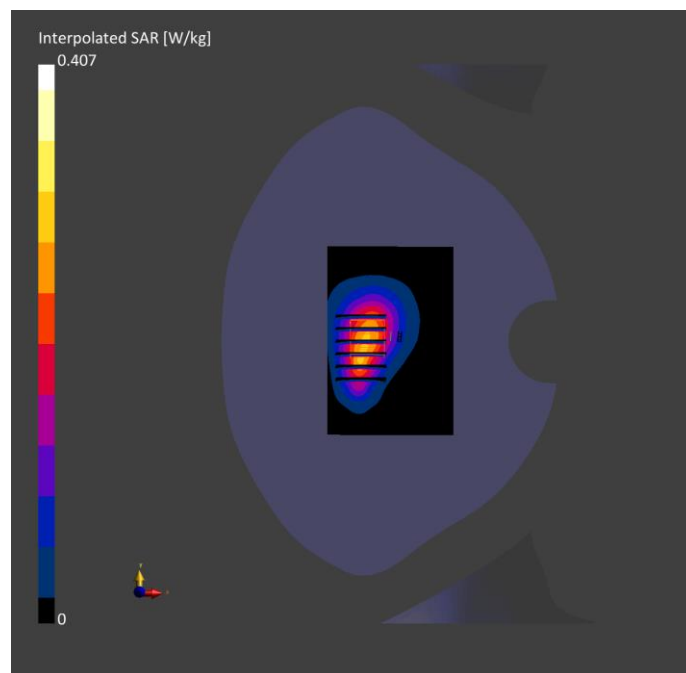
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-13	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		80.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]		10.0 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 Surface		N/A	N/A
Detection		VMS + 6p	VMS + 6p
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-03-13	2024-03-13
psSAR1g [W/kg]		0.232	0.243
psSAR10g [W/kg]		0.133	0.141
Power Drift [dB]		0.04	-0.10
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction		No correction
M2/M1 [%]			56.7
Dist 3dB Peak [mm]			11.2



Meas.5 Right Head with Cheek on Low Channel in WCDMA Band2 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	CHEEK, 0.00	Band 2	WCDMA, 10011-CAC	1852.4, 9262	7.98	1.41	40.4	22.1	21.7

Hardware Setup

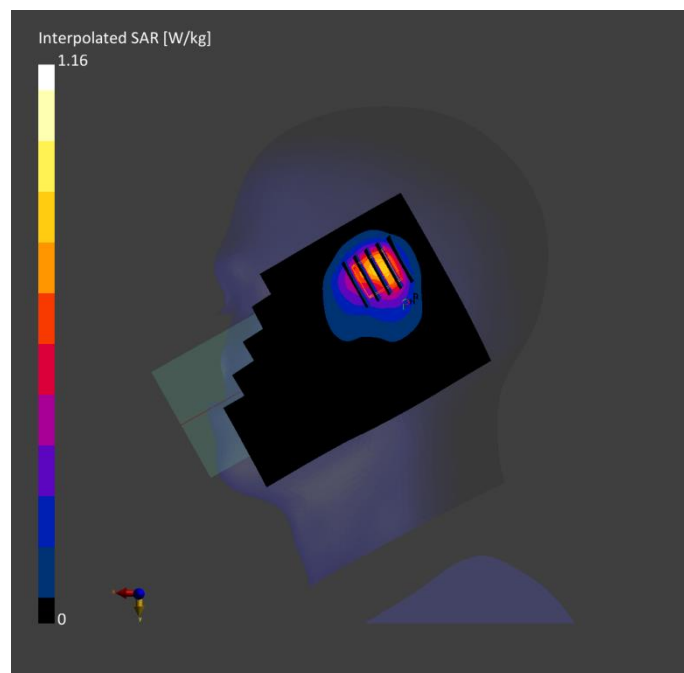
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-14	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-14	2024-03-14
psSAR1g [W/kg]	0.695	0.627
psSAR10g [W/kg]	0.387	0.349
Power Drift [dB]	0.00	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.3
Dist 3dB Peak [mm]		8.0



Meas.6 Body Plan with Top Edge 10mm on Middle Channel in WCDMA Band2 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	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 TOP, 10.00	Band 2	WCDMA, 10011-CAC	1880.0, 9400	7.98	1.43	39.8	22.1	21.7

Hardware Setup

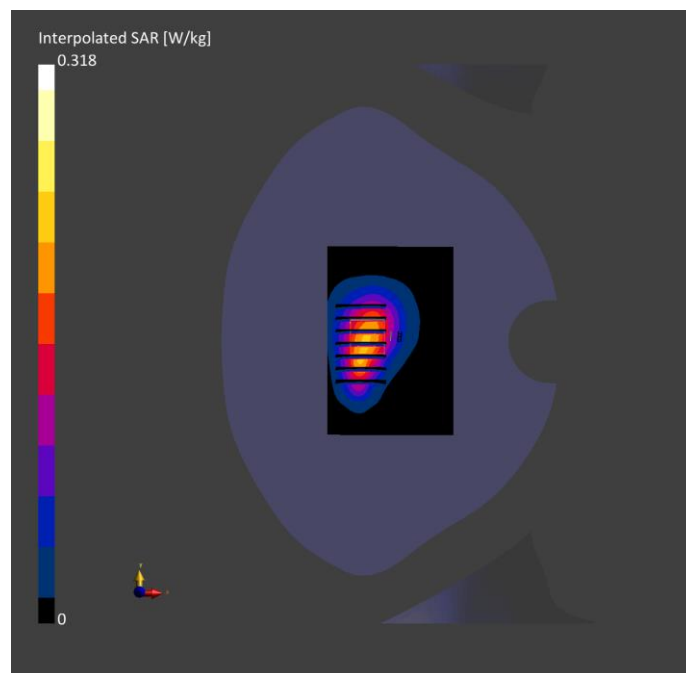
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-03-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	10.0 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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-14	2024-03-14
psSAR1g [W/kg]	0.181	0.193
psSAR10g [W/kg]	0.105	0.113
Power Drift [dB]	0.02	-0.13
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.3
Dist 3dB Peak [mm]		11.2



Meas.7 Right Head with Cheek on Middle Channel in WCDMA Band4 mode with Antenna 4**Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	CHEEK, 0.00	Band 4	WCDMA, 10011-CAC	1752.6, 1513	8.52	1.36	39.3	22.3	21.3

Hardware Setup

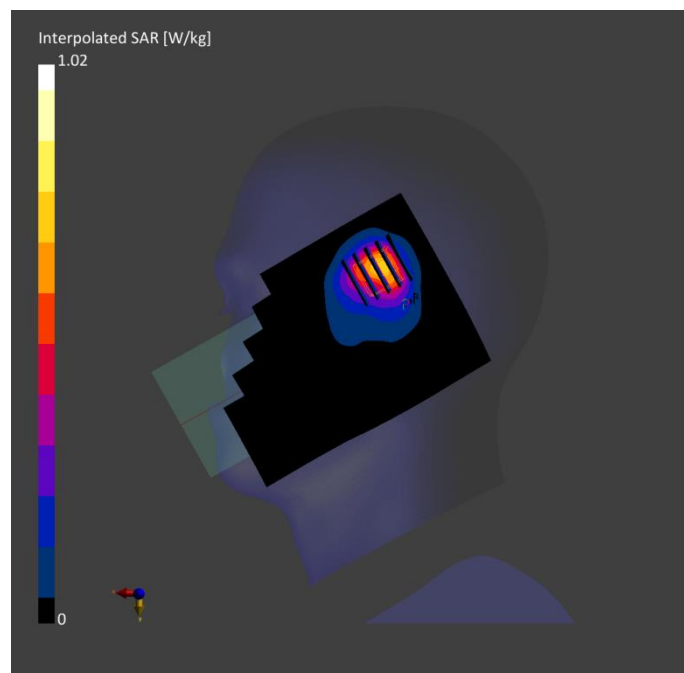
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-03-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-15	2024-03-15
psSAR1g [W/kg]	0.610	0.547
psSAR10g [W/kg]	0.341	0.303
Power Drift [dB]	-0.02	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.7
Dist 3dB Peak [mm]		8.0



Meas.8 Body Plan with Top Edge 10mm on Middle Channel in WCDMA Band4 mode with Antenna 4
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE TOP, 10.00	Band 4	WCDMA, 10011-CAC	1752.6, 1513	8.52	1.36	39.3	22.3	21.3

Hardware Setup

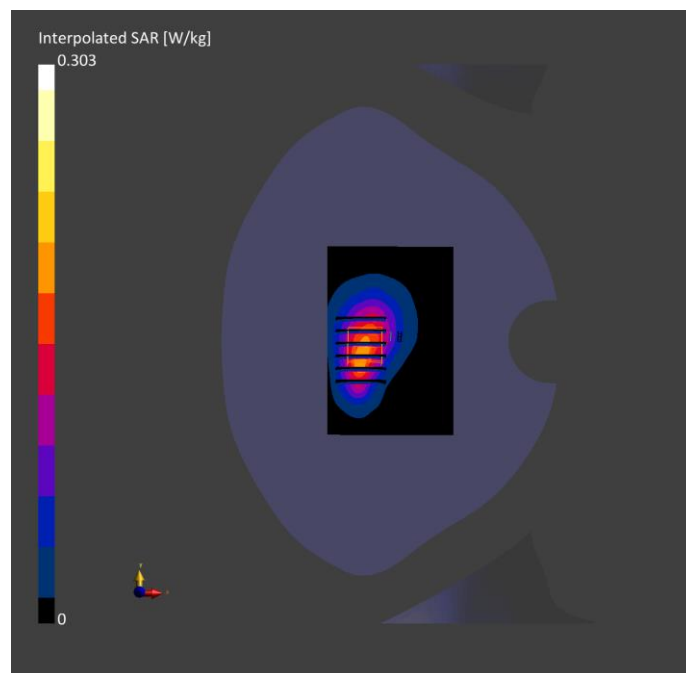
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-15	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	10.0 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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-15	2024-03-15
psSAR1g [W/kg]	0.160	0.176
psSAR10g [W/kg]	0.091	0.101
Power Drift [dB]	-0.02	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.4
Dist 3dB Peak [mm]		11.3



Meas.9 Right Head with Cheek on Middle Channel in WCDMA Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	CHEEK, 0.00	Band 5	WCDMA, 10011-CAC	846.6, 4233	9.96	0.903	40.4	22.4	21.3

Hardware Setup

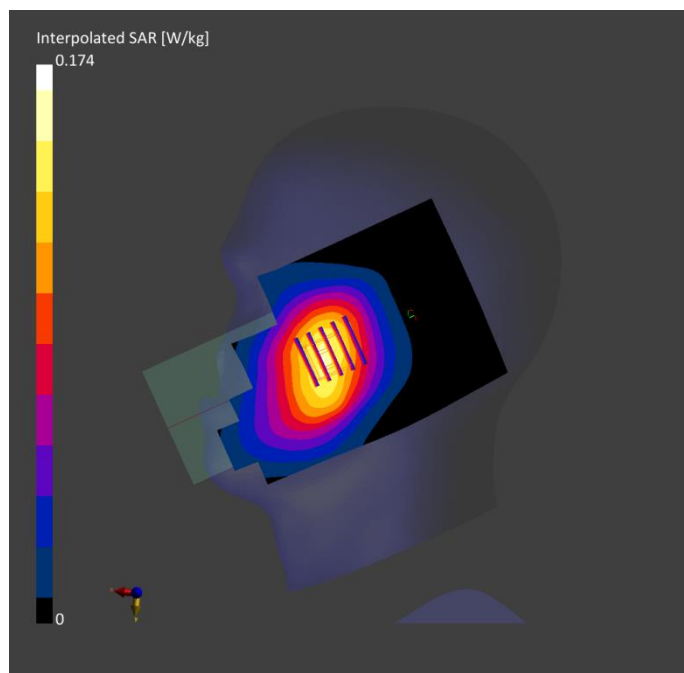
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-02-01	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-02-01	2024-02-01
psSAR1g [W/kg]	0.130	0.139
psSAR10g [W/kg]	0.090	0.109
Power Drift [dB]	0.00	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.8
Dist 3dB Peak [mm]		> 16.0



Meas.10 Body Plan with Back Side 10mm on Middle Channel in WCDMA Band5 mode with Antenna 0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	BACK, 10.00	Band 5	WCDMA, 10011-CAC	846.6, 4233	9.96	0.90	40.4	22.4	21.3

Hardware Setup

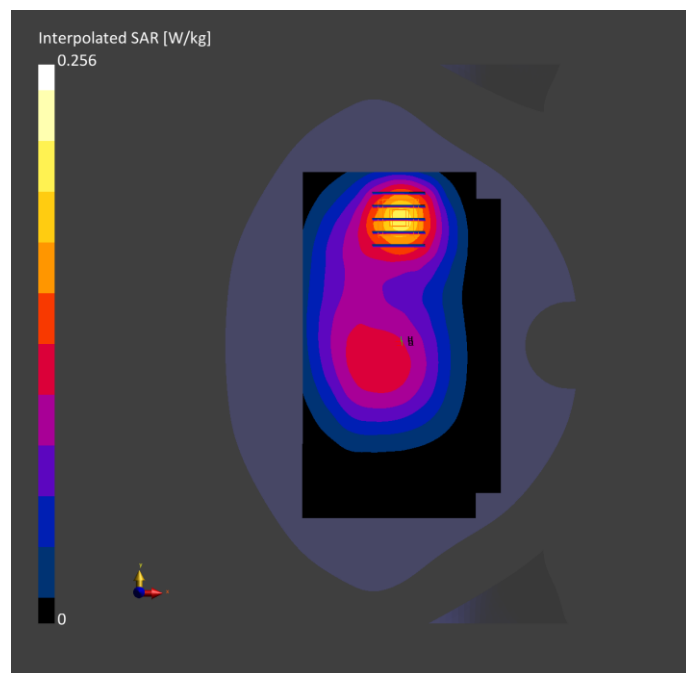
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-02-01	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-02-01	2024-02-01
psSAR1g [W/kg]	0.179	0.178
psSAR10g [W/kg]	0.117	0.117
Power Drift [dB]	-0.02	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		68.9
Dist 3dB Peak [mm]		21.5



Meas.11 Right Head with Cheek on Middle Channel in LTE Band2 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	CHEEK, 0.00	Band 2	LTE - FDD, 10169-CAF	1880.0, 18900	7.98	1.43	39.8	22.1	21.7

Hardware Setup

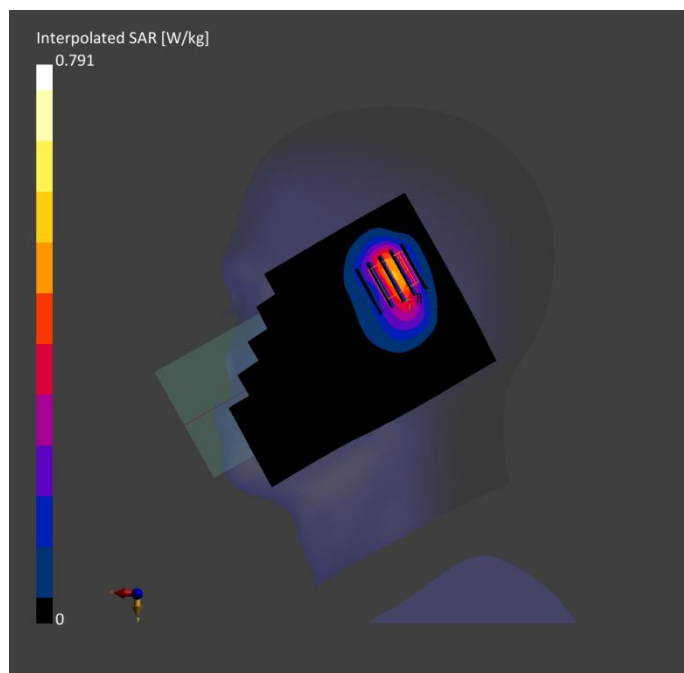
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-03-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-14	2024-03-14
psSAR1g [W/kg]	0.428	0.433
psSAR10g [W/kg]	0.231	0.224
Power Drift [dB]	0.02	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.5
Dist 3dB Peak [mm]		8.0



Meas.12 Body Plan with Top Edge 10mm on Middle Channel in LTE Band2 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE TOP, 10.00	Band 2	LTE - FDD, 10169-CAF	1880.0, 18900	7.98	1.43	39.8	22.1	21.7

Hardware Setup

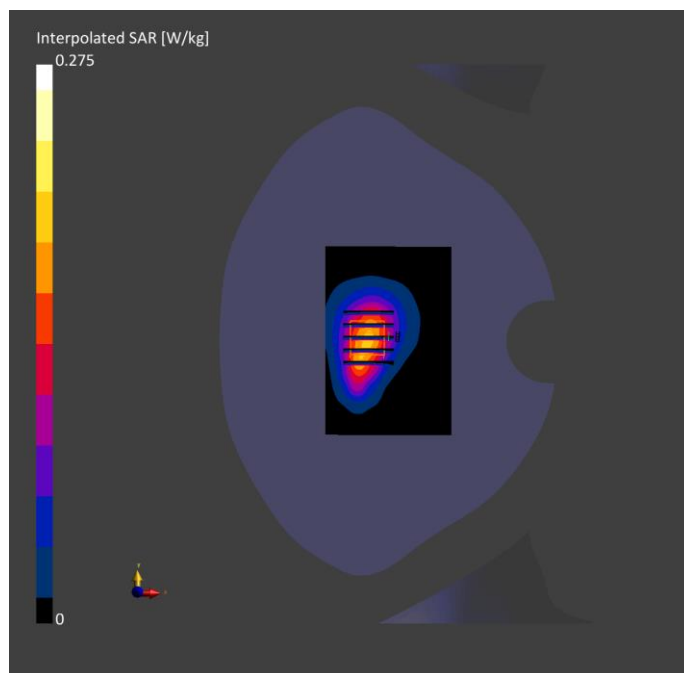
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-14	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	80.0 x 120.0	Grid Extents [mm]	32.0 x 32.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	Grid Steps [mm]	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	Sensor Surface [mm]	1.4
Graded Grid	Yes	Graded Grid	Yes
Grading Ratio	1.5	Grading Ratio	1.5
MAIA	N/A	MAIA	N/A
Surface	VMS + 6p	Surface	VMS + 6p
Detection		Detection	
Scan Method	Measured	Scan Method	Measured

Measurement Results

Area Scan		Zoom Scan	
Date	2024-03-14	Date	2024-03-14
psSAR1g [W/kg]	0.158	psSAR1g [W/kg]	0.166
psSAR10g [W/kg]	0.091	psSAR10g [W/kg]	0.096
Power Drift [dB]	-0.07	Power Drift [dB]	-0.14
Power Scaling	Disabled	Power Scaling	Disabled
Scaling Factor		Scaling Factor	
[dB]		[dB]	
TSL Correction	No correction	TSL Correction	No correction
M2/M1 [%]		M2/M1 [%]	60.1
Dist 3dB Peak [mm]		Dist 3dB Peak [mm]	11.5



Meas.13 Right Head with Cheek on Middle Channel in LTE Band4 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	CHEEK, 0.00	Band 4	LTE - FDD, 10169-CAF	1732.5, 20175	8.52	1.33	39.7	22.3	21.3

Hardware Setup

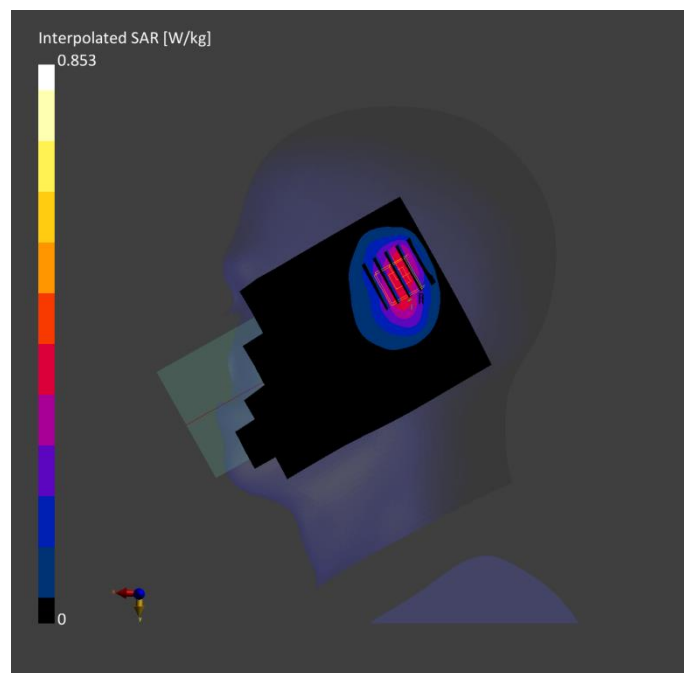
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-15	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 180.0	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		VMS + 6p	VMS + 6p
Detection			
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-03-15	2024-03-15
psSAR1g [W/kg]		0.346	0.453
psSAR10g [W/kg]		0.209	0.231
Power Drift [dB]		-0.01	-0.01
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction		No correction
M2/M1 [%]			51.2
Dist 3dB Peak [mm]			8.6



Meas.14 Body Plan with Top Edge 10mm on Middle Channel in LTE Band4 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE TOP, 10.00	Band 4	LTE - FDD, 10169-CAF	1732.5, 20175	8.52	1.33	39.7	22.3	21.3

Hardware Setup

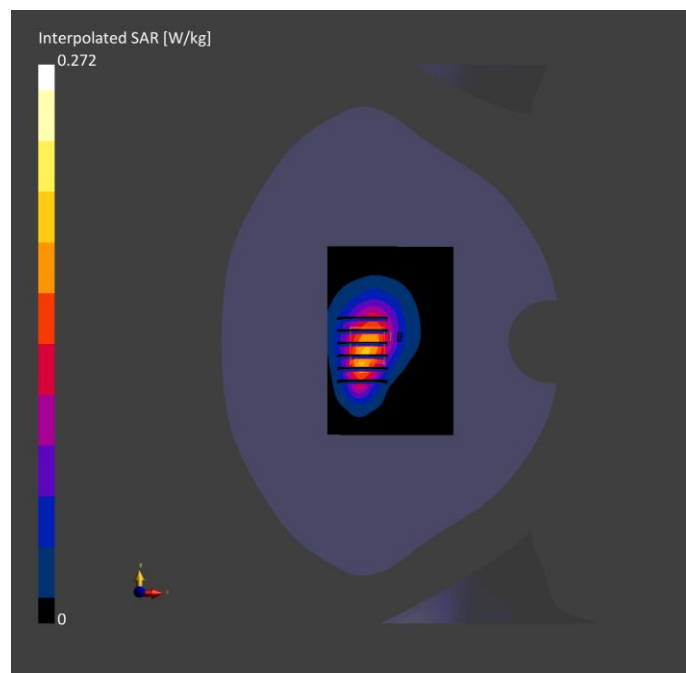
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-15	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	80.0 x 120.0	32.0 x 32.0 x 30.0	
Grid Steps [mm]	10.0 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	VMS + 6p	VMS + 6p	
Detection			
Scan Method	Measured	Measured	

Measurement Results

Area Scan		Zoom Scan	
Date	2024-03-15	2024-03-15	
psSAR1g [W/kg]	0.155	0.163	
psSAR10g [W/kg]	0.090	0.095	
Power Drift [dB]	-0.05	-0.13	
Power Scaling	Disabled	Disabled	
Scaling Factor [dB]			
TSL Correction	No correction	No correction	
M2/M1 [%]		58.8	
Dist 3dB Peak [mm]		12.2	



Meas.15 Right Head with Cheek on Low Channel in LTE Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	CHEEK, 0.00	Band 5	LTE - FDD, 10175-CAH	844.0, 20600	9.96	0.91	40.7	22.2	21.5

Hardware Setup

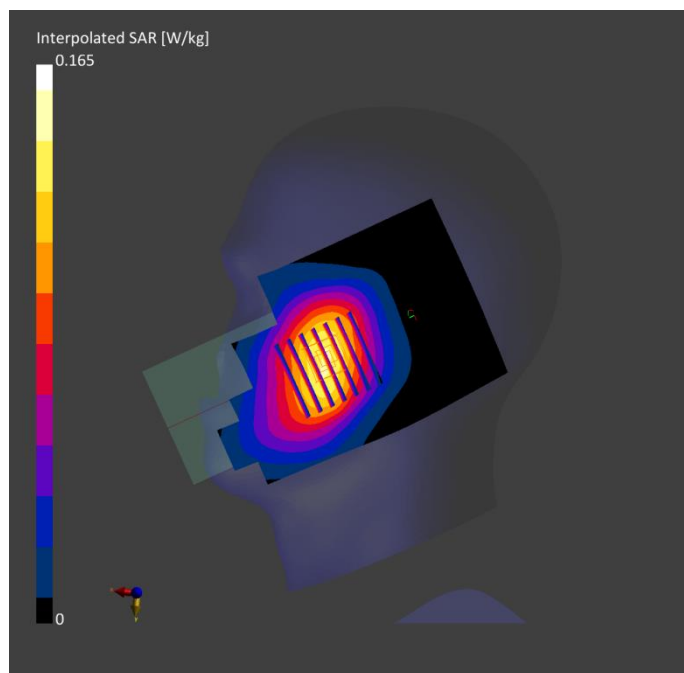
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-02-02	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	120.0 x 210.0	Grid Extents [mm]	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	Grid Steps [mm]	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	Sensor Surface [mm]	1.4
Graded Grid	Yes	Graded Grid	Yes
Grading Ratio	1.5	Grading Ratio	1.5
MAIA	N/A	MAIA	N/A
Surface	VMS + 6p	Surface	VMS + 6p
Detection		Detection	
Scan Method	Measured	Scan Method	Measured

Measurement Results

Area Scan		Zoom Scan	
Date	2024-02-02	Date	2024-02-02
psSAR1g [W/kg]	0.122	psSAR1g [W/kg]	0.131
psSAR10g [W/kg]	0.085	psSAR10g [W/kg]	0.103
Power Drift [dB]	-0.11	Power Drift [dB]	0.05
Power Scaling	Disabled	Power Scaling	Disabled
Scaling Factor		Scaling Factor	
[dB]		[dB]	
TSL Correction	No correction	TSL Correction	No correction
M2/M1 [%]		M2/M1 [%]	82.0
Dist 3dB Peak [mm]		Dist 3dB Peak [mm]	26.8



Meas.16 Body Plan with Back Side 10mm on High Channel in LTE Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	BACK, 10.00	Band 5	LTE - FDD, 10175-CAH	844.0, 20600	9.96	0.91	40.7	22.2	21.5

Hardware Setup

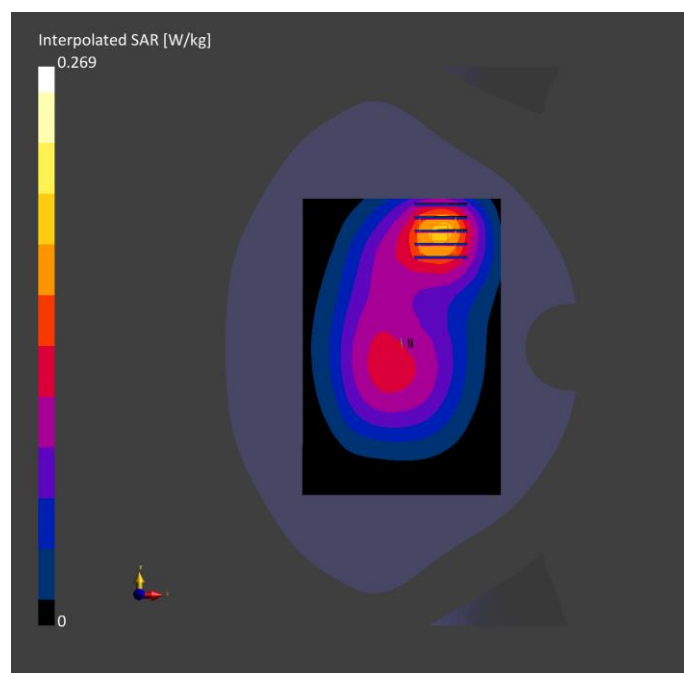
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-02-02	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	120.0 x 180.0	Grid Extents [mm]	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	Grid Steps [mm]	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	Sensor Surface [mm]	1.4
Graded Grid	Yes	Graded Grid	Yes
Grading Ratio	1.5	Grading Ratio	1.5
MAIA	N/A	MAIA	N/A
Surface	VMS + 6p	Surface	VMS + 6p
Detection		Detection	
Scan Method	Measured	Scan Method	Measured

Measurement Results

Area Scan		Zoom Scan	
Date	2024-02-02	Date	2024-02-02
psSAR1g [W/kg]	0.166	psSAR1g [W/kg]	0.174
psSAR10g [W/kg]	0.111	psSAR10g [W/kg]	0.113
Power Drift [dB]	-0.00	Power Drift [dB]	-0.01
Power Scaling	Disabled	Power Scaling	Disabled
Scaling Factor		Scaling Factor	
[dB]		[dB]	
TSL Correction	No correction	TSL Correction	No correction
M2/M1 [%]		M2/M1 [%]	63.4
Dist 3dB Peak [mm]		Dist 3dB Peak [mm]	21.5



Meas.17 Right Head with Tilt on High Channel in LTE Band7 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	TILT, 0.00	Band 7	LTE - FDD, 10169-CAF	2560.0, 21350	7.41	1.90	39.6	22.4	21.3

Hardware Setup

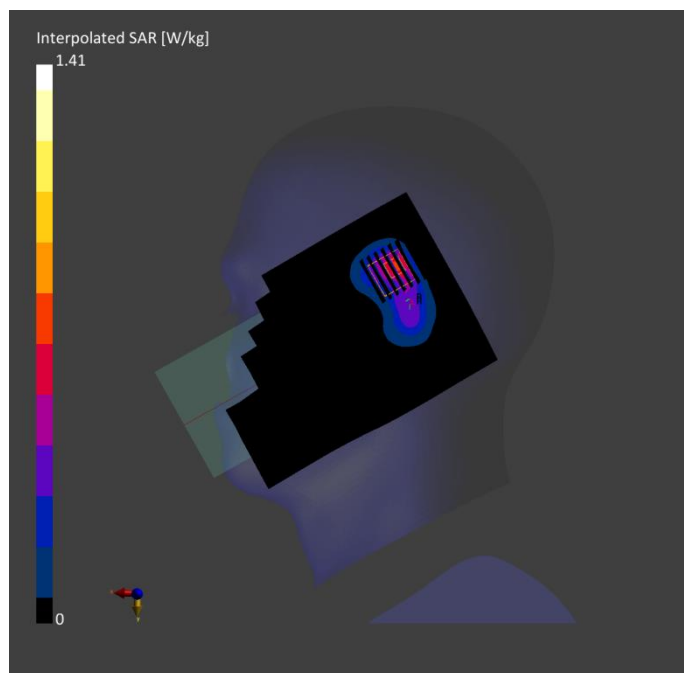
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-16	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 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	VMS + 6p	VMS + 6p	
Detection			
Scan Method	Measured	Measured	

Measurement Results

Area Scan		Zoom Scan	
Date	2024-03-16	2024-03-16	
psSAR1g [W/kg]	0.551	0.653	
psSAR10g [W/kg]	0.265	0.280	
Power Drift [dB]	-0.02	0.00	
Power Scaling	Disabled	Disabled	
Scaling Factor [dB]			
TSL Correction	No correction	No correction	
M2/M1 [%]		46.2	
Dist 3dB Peak [mm]		7.0	



Meas.18 Body Plan with Top Edge 10mm on High Channel in LTE Band7 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE TOP, 5.00	Band 7	LTE - FDD, 10169-CAF	2560.0, 21350	7.41	1.90	39.6	22.4	21.3

Hardware Setup

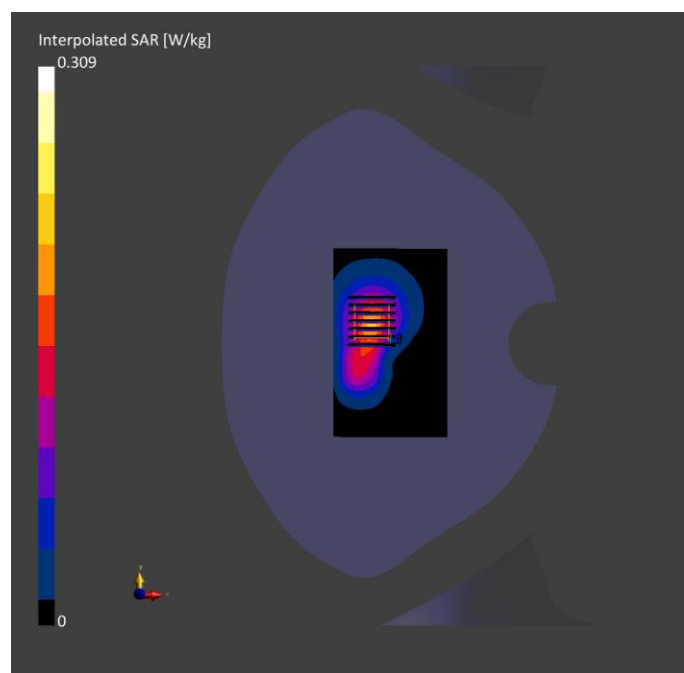
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-16	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-16	2024-03-16
psSAR1g [W/kg]	0.168	0.173
psSAR10g [W/kg]	0.086	0.091
Power Drift [dB]	-0.03	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.7
Dist 3dB Peak [mm]		11.4



Meas.19 Right Head with Tilt on Low Channel in LTE Band38 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	TILT, 0.00	Band 38	LTE - TDD, 10172-CAH	2580.0, 37850	7.41	1.92	39.5	22.4	21.3

Hardware Setup

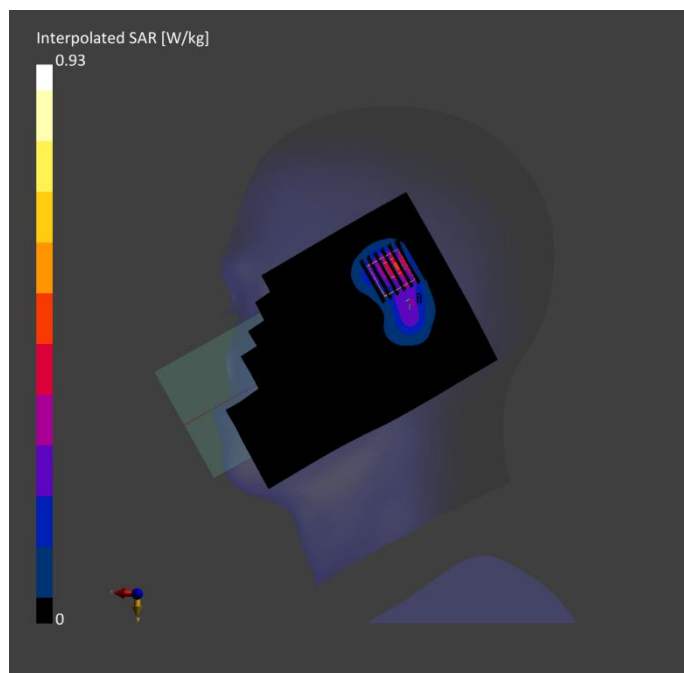
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-16	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	120.0 x 192.0	Grid Extents [mm]	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	Grid Steps [mm]	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	Sensor Surface [mm]	1.4
Graded Grid	Yes	Graded Grid	Yes
Grading Ratio	1.5	Grading Ratio	1.5
MAIA	N/A	MAIA	N/A
Surface Detection	VMS + 6p	Surface Detection	VMS + 6p
Scan Method	Measured	Scan Method	Measured

Measurement Results

Area Scan		Zoom Scan	
Date	2024-03-16	Date	2024-03-16
psSAR1g [W/kg]	0.357	psSAR1g [W/kg]	0.427
psSAR10g [W/kg]	0.171	psSAR10g [W/kg]	0.182
Power Drift [dB]	0.04	Power Drift [dB]	-0.02
Power Scaling	Disabled	Power Scaling	Disabled
Scaling Factor [dB]		Scaling Factor [dB]	
TSL Correction	No correction	TSL Correction	No correction
M2/M1 [%]		M2/M1 [%]	45.6
Dist 3dB Peak [mm]		Dist 3dB Peak [mm]	7.0



Meas.20 Body Plan with Top Edge 10mm on Low Channel in LTE Band38 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE TOP, 10.00	Band 38	LTE - TDD, 10172-CAH	2580.0, 37850	7.41	1.92	39.5	22.4	21.3

Hardware Setup

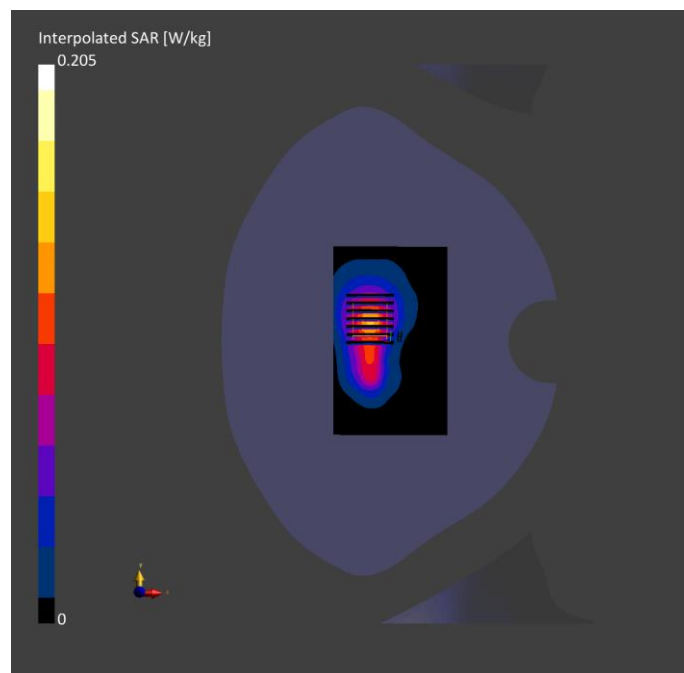
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-16	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0	
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	
Sensor Surface [mm]	3.0	1.4	
Graded Grid	Yes	Yes	
Grading Ratio	1.5	1.5	
MAIA	Y	Y	
Surface	VMS + 6p	VMS + 6p	
Detection			
Scan Method	Measured	Measured	

Measurement Results

Area Scan		Zoom Scan	
Date	2024-03-16	2024-03-16	
psSAR1g [W/kg]	0.109	0.112	
psSAR10g [W/kg]	0.055	0.058	
Power Drift [dB]	0.07	-0.03	
Power Scaling	Disabled	Disabled	
Scaling Factor [dB]			
TSL Correction	No correction	No correction	
M2/M1 [%]		53.1	
Dist 3dB Peak [mm]		11.4	



Meas.21 Right Head with Tilt on Low Channel in LTE Band41 mode with Antenna 4**Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Right Head, HSL	TILT, 0.00	Band 41	LTE - TDD, 10172-CAH	2545.0, 40140	7.41	1.86	39.0	22.2	21.5

Hardware Setup

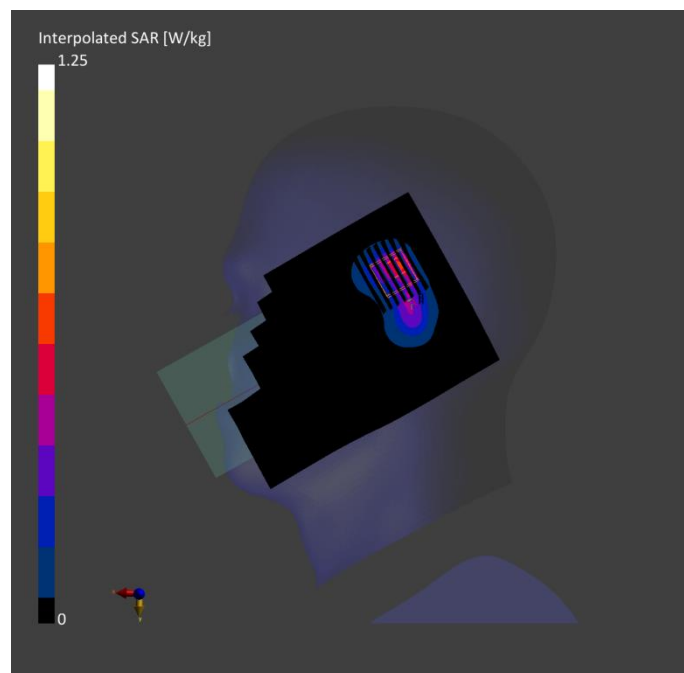
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-03-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-17	2024-03-17
psSAR1g [W/kg]	0.484	0.573
psSAR10g [W/kg]	0.233	0.246
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		45.8
Dist 3dB Peak [mm]		7.3



Meas.22 Body Plan with Top Edge 10mm on Low Channel in LTE Band41 mode with Antenna 4

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE TOP, 10.00	Band 41	LTE - TDD, 10172-CAH	2545.0, 40140	7.41	1.86	39.0	22.2	21.5

Hardware Setup

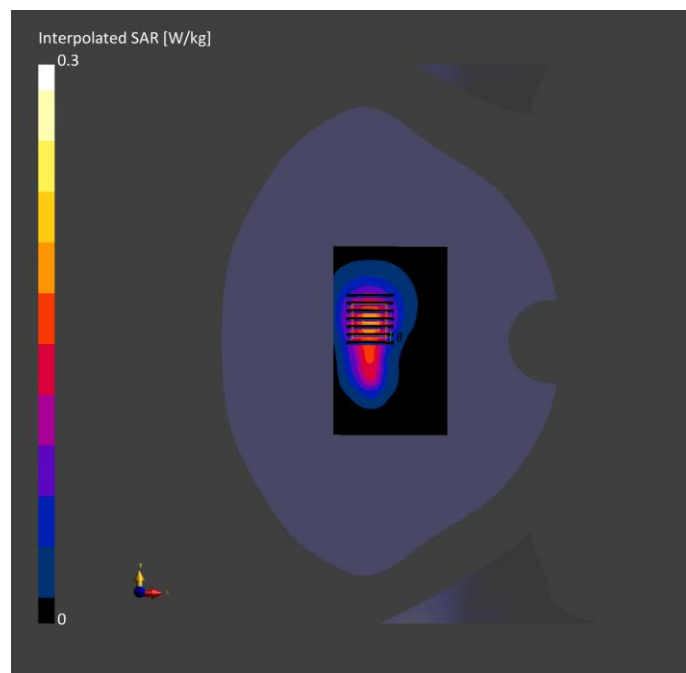
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-17	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	72.0 x 120.0	30.0 x 30.0 x 30.0	
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	
Sensor Surface [mm]	3.0	1.4	
Graded Grid	Yes	Yes	
Grading Ratio	1.5	1.5	
MAIA	Y	N/A	
Surface	VMS + 6p	VMS + 6p	
Detection			
Scan Method	Measured	Measured	

Measurement Results

Area Scan		Zoom Scan	
Date	2024-03-17	2024-03-17	
psSAR1g [W/kg]	0.157	0.162	
psSAR10g [W/kg]	0.080	0.085	
Power Drift [dB]	-0.01	0.05	
Power Scaling	Disabled	Disabled	
Scaling Factor [dB]			
TSL Correction	No correction	No correction	
M2/M1 [%]		53.1	
Dist 3dB Peak [mm]		12.1	



Meas.23 Left Head with Cheek on 6 Channel in IEEE802.11b mode with Antenna 14

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Section, Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Left Head, HSL	CHEEK, 0.00	WLAN, 2.4GHz	WLAN, 10012-CAB	2437.0, 6	7.47	1.79	39.8	22.6	21.4

Hardware Setup

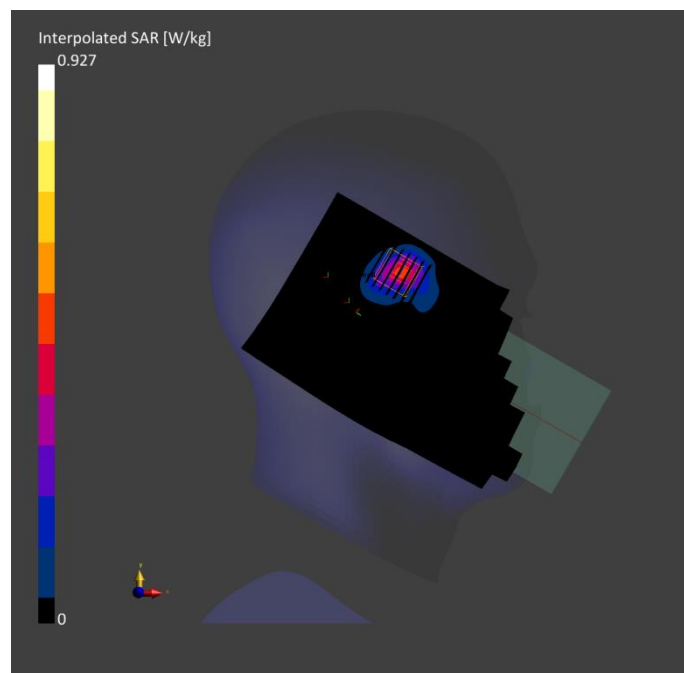
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-20	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-20	2024-03-20
psSAR1g [W/kg]	0.373	0.405
psSAR10g [W/kg]	0.172	0.176
Power Drift [dB]	-0.19	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		45.0
Dist 3dB Peak [mm]		6.7



Meas.24 Body Plan with Back Side 10mm on 6 Channel in IEEE802.11b mode with Antenna 14

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Section, Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	BACK, 10.00	WLAN 2.4GHz	WLAN, 10012-CAB	2437.0, 6	7.47	1.79	39.8	22.6	21.4

Hardware Setup

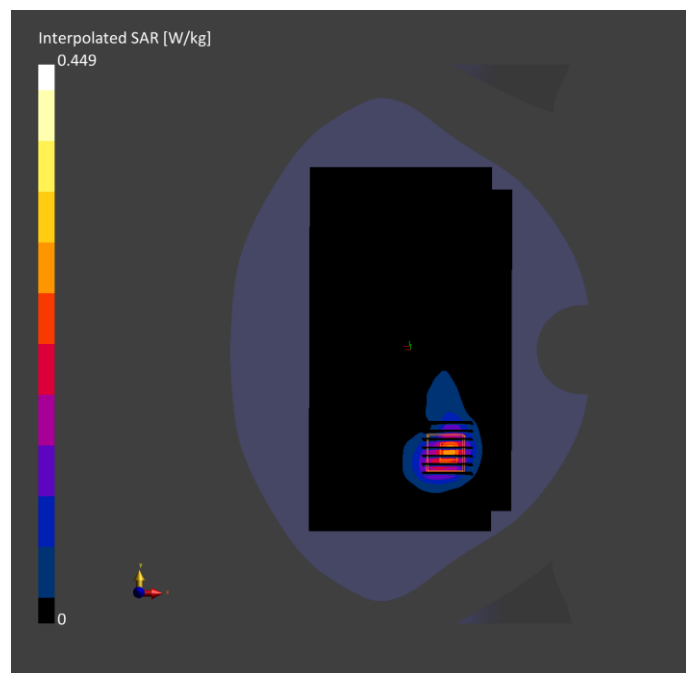
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-20	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-20	2024-03-20
psSAR1g [W/kg]	0.215	0.226
psSAR10g [W/kg]	0.101	0.107
Power Drift [dB]	-0.03	-0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.9
Dist 3dB Peak [mm]		8.5



Meas.25 Right Head with Tilt on 58 Channel in IEEE802.11 ac80 mode with Antenna 12

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	WLAN, 5GHz	WLAN, 10402-AAE	5290.0, 58	5.41	4.67	36.4	22.6	21.9

Hardware Setup

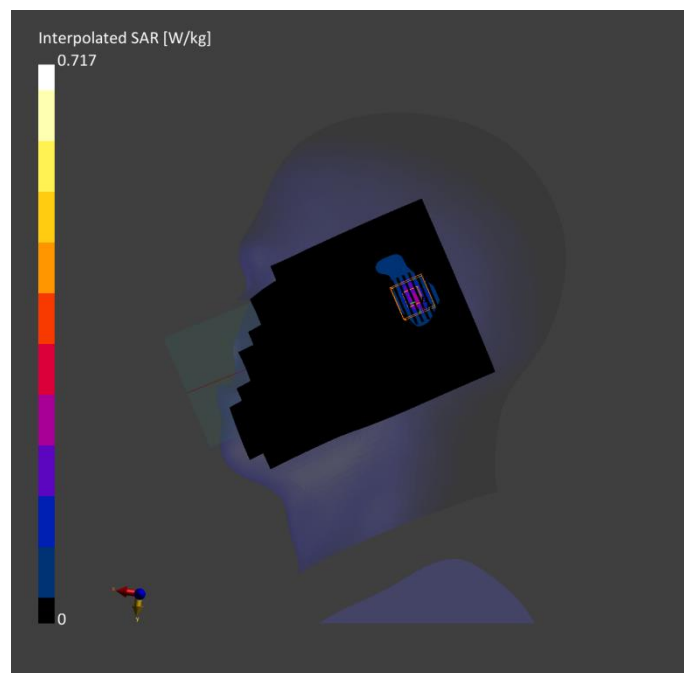
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-03-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-21	2024-03-21
psSAR1g [W/kg]	0.172	0.194
psSAR10g [W/kg]	0.056	0.060
Power Drift [dB]	0.09	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.4
Dist 3dB Peak [mm]		6.8



Meas.26 Right Head with Tilt on 106 Channel in IEEE802.11 ac80 mode with Antenna 12

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Right Head, HSL	TILT, 0.00	WLAN, 5GHz	WLAN, 10402-AAE	5530.0, 106	4.58	4.95	35.7	22.3	21.8

Hardware Setup

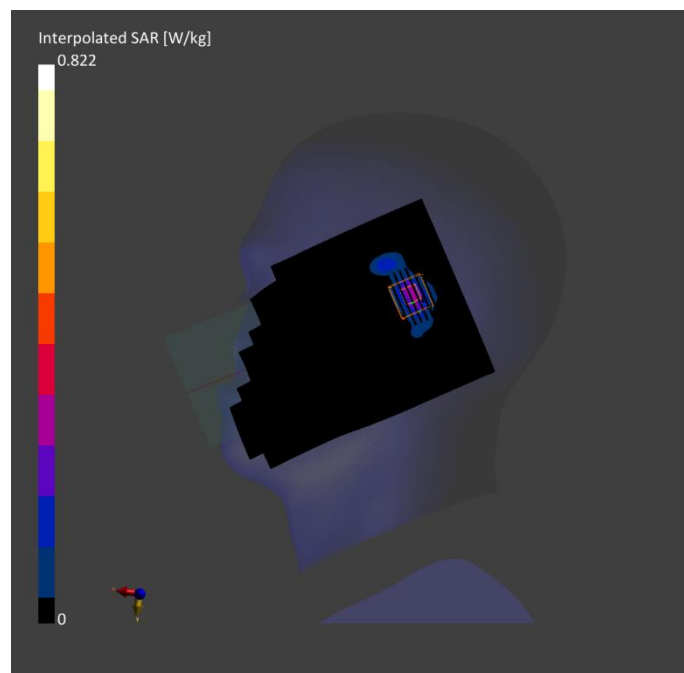
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-21	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 180.0	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		VMS + 6p	VMS + 6p
Detection			
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-03-21	2024-03-21
psSAR1g [W/kg]		0.206	0.213
psSAR10g [W/kg]		0.068	0.067
Power Drift [dB]		0.09	0.01
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction		No correction
M2/M1 [%]			49.1
Dist 3dB Peak [mm]			7.4



Meas.27 Left Head with Tilt on 155 Channel in IEEE802.11 ac80 mode with Antenna 14

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Section, TSL	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Left Head, HSL	CHEEK, 0.00	WLAN, 5GHz	WLAN, 10402-AAE	5775.0, 155	4.78	5.20	34.7	22.6	21.3

Hardware Setup

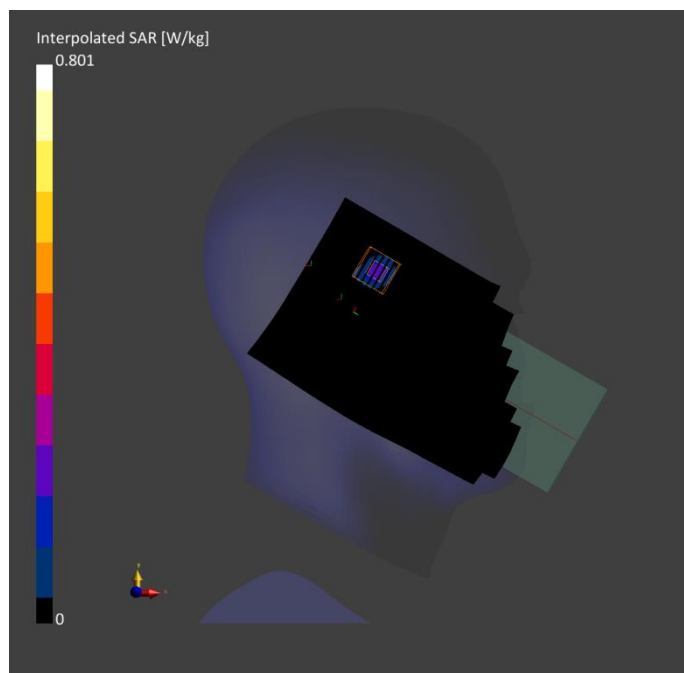
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-03-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	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	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-22	2024-03-22
psSAR1g [W/kg]	0.165	0.182
psSAR10g [W/kg]	0.046	0.045
Power Drift [dB]	-0.08	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.1
Dist 3dB Peak [mm]		5.7



Meas.28 Body Plan with Back Side 10mm on 58 Channel in IEEE802.11 ac80 mode with Antenna 12

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position	Band	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Section, TSL	Distance [mm]		UID	Channel Number					
Flat, HSL	BACK, 10.00	WLAN, 5GHz	10402-AAE	5290.0-58	5.41	4.67	36.4	22.6	21.9

Hardware Setup

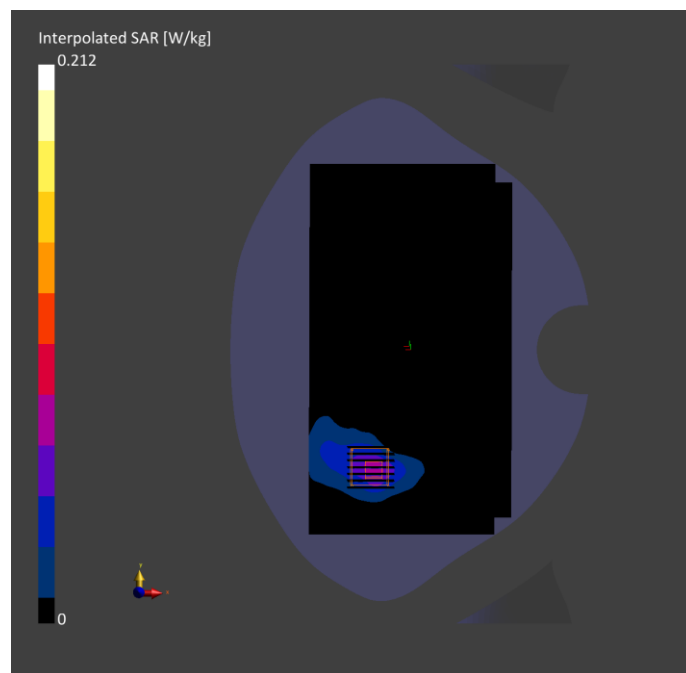
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-21	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 220.0	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 Surface		Y	Y
Detection		VMS + 6p	VMS + 6p
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-03-21	2024-03-21
psSAR1g [W/kg]		0.059	0.058
psSAR10g [W/kg]		0.023	0.022
Power Drift [dB]		-0.17	-0.03
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction		No correction	No correction
M2/M1 [%]			57.4
Dist 3dB Peak [mm]			8.4



Meas.29 Body Plan with Back Side 10mm on 106 Channel in IEEE802.11 ac80 mode with Antenna 12
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

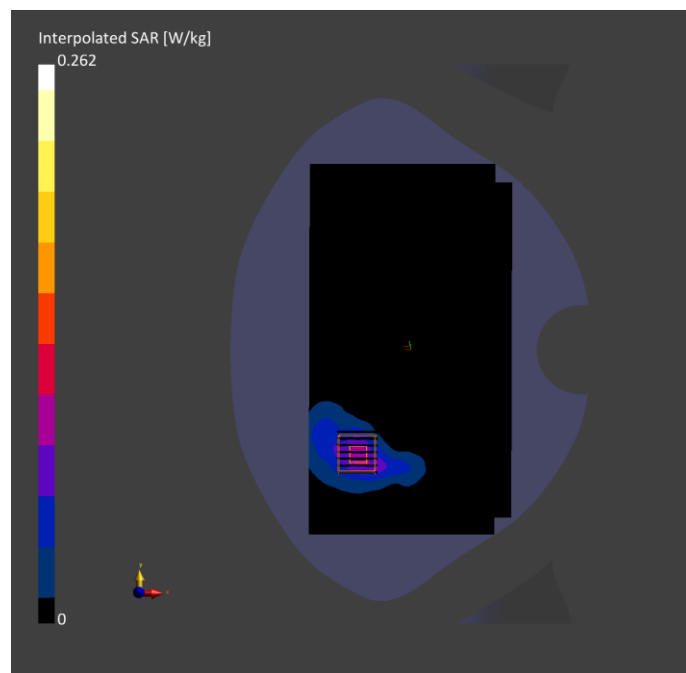
Phantom	Position, Test Section, Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	BACK, 10.00	WLAN, 5GHz	WLAN, 10402-AAE	5530.0, 106	4.58	4.95	35.7	22.3	21.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-03-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup
Measurement Results

		Area Scan	Zoom Scan			
Grid Extents [mm]		120.0 x 220.0	24.0 x 24.0 x 22.0	Date	2024-03-21	2024-03-21
Grid Steps [mm]		10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.074	0.075
Sensor Surface [mm]		3.0	1.4	psSAR10g [W/kg]	0.029	0.028
Graded Grid	Yes		Yes	Power Drift [dB]	-0.10	0.11
Grading Ratio	1.5		1.4	Power Scaling	Disabled	Disabled
MAIA	Y		Y	Scaling Factor		
Surface	VMS + 6p		VMS + 6p	[dB]		
Detection				TSL Correction	No correction	No correction
Scan Method	Measured		Measured	M2/M1 [%]		58.1
				Dist 3dB Peak [mm]		10.4



Meas.30 Body Plan with Top Edge 10mm on 42 Channel in IEEE802.11 ac80 mode with Antenna 12
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position	Band	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Section, TSL	Distance [mm]		UID	Channel Number					
Flat, HSL	EDGE TOP, 10.00	WLAN, 5GHz	10402-AAE	5210.0, 42	5.41	4.54	36.8	22.6	21.9

Hardware Setup

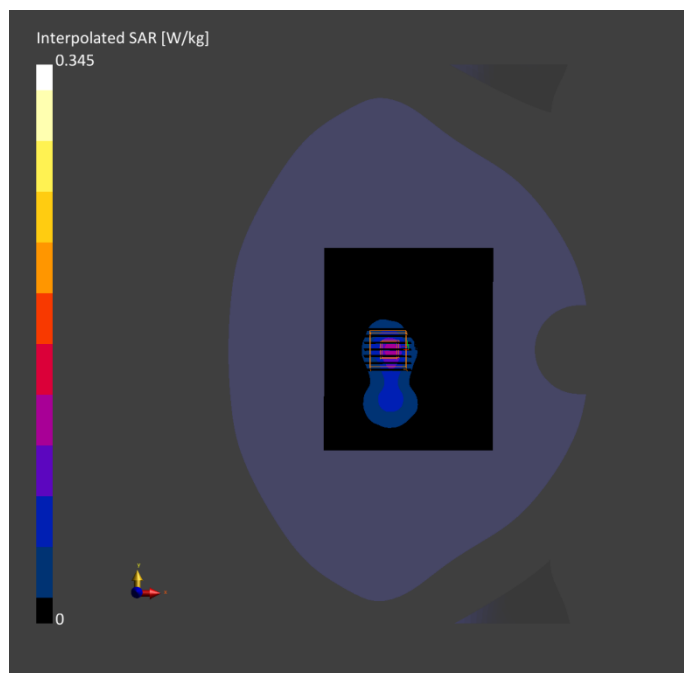
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-21	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

		Area Scan	Zoom Scan
Grid	Extents [mm]	100.0 x 120.0	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		VMS + 6p	VMS + 6p
Detection			
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-03-21	2024-03-21
psSAR1g		0.091	0.096
[W/kg]			
psSAR10g		0.031	0.033
[W/kg]			
Power Drift [dB]		-0.17	0.03
Power Scaling		Disabled	Disabled
Scaling Factor			
[dB]			
TSL Correction		No correction	No correction
M2/M1 [%]			51.0
Dist 3dB Peak			8.9
[mm]			



Meas.31 Body Plan with Top Edge 10mm on 155 Channel in IEEE802.11 ac80 mode with Antenna 12
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Section, Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE, TOP, 10.00	WLAN, 5GHz	10402-AAE	5775.0, 155	4.78	5.20	34.7	22.6	21.3

Hardware Setup

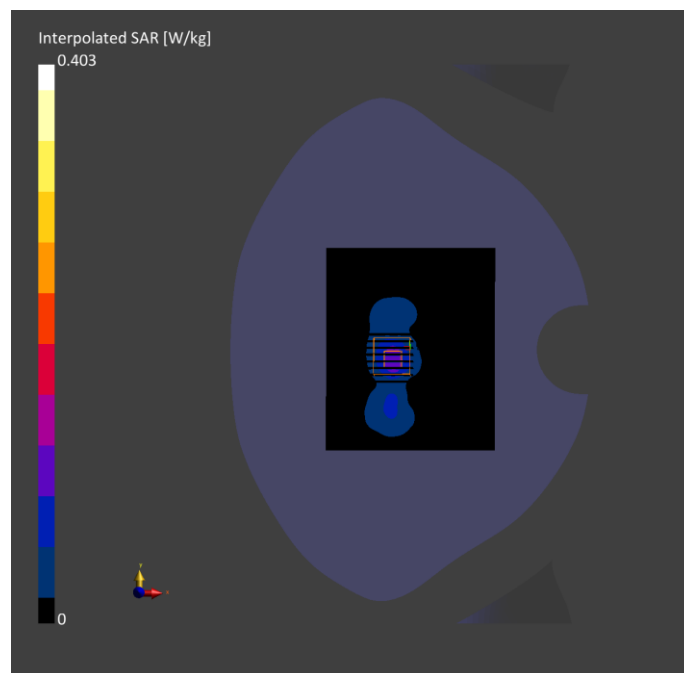
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-22	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		100.0 x 120.0	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 Surface		Y	Y
Detection		VMS + 6p	VMS + 6p
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-03-22	2024-03-22
psSAR1g [W/kg]		0.093	0.101
psSAR10g [W/kg]		0.033	0.034
Power Drift [dB]		-0.06	0.07
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction		No correction
M2/M1 [%]			50.3
Dist 3dB Peak [mm]			8.9



Meas.32 Body Plan with Top Edge 10mm on 58 Channel in IEEE802.11 ac80 mode with Antenna 12

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position, Test Section, Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature
Flat, HSL	EDGE TOP, 10.00	WLAN, 5GHz	WLAN, 10402-AAE	5290.0, 58	5.41	4.67	36.4	22.6	21.9

Hardware Setup

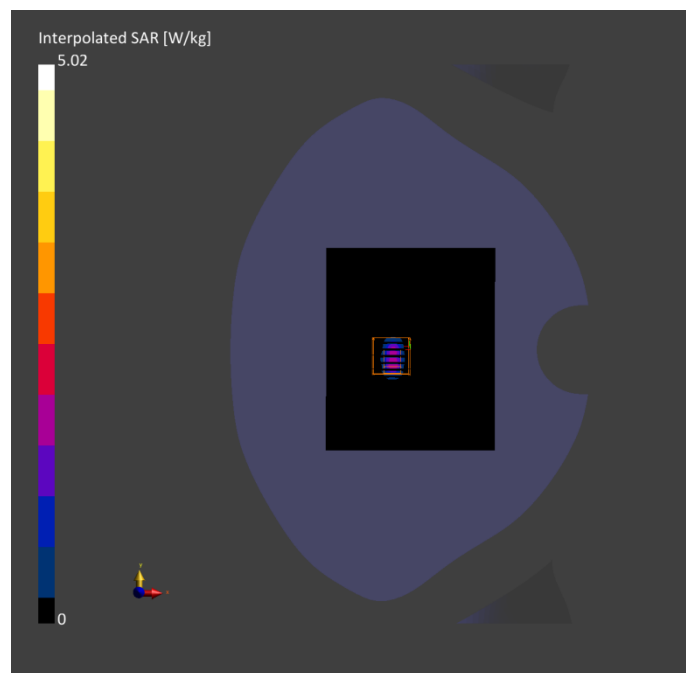
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-21	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		100.0 x 120.0	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 Surface		N/A	N/A
Detection		VMS + 6p	VMS + 6p
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-03-21	2024-03-21
psSAR1g [W/kg]		1.26	1.08
psSAR10g [W/kg]		0.300	0.283
Power Drift [dB]		0.00	-0.09
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction		No correction	No correction
M2/M1 [%]			44.0
Dist 3dB Peak [mm]			4.3



Meas.33 Body Plan with Top Edge 10mm on 106 Channel in IEEE802.11 ac80 mode with Antenna 12
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	Position	Band	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature	Liquid Temperature
Section, TSL	Distance [mm]		UID	Channel Number				[°C]	[°C]
Flat, HSL	EDGE TOP, 10.00	WLAN, 5GHz	10402-AAE	5530.0, 106	4.58	4.95	35.7	22.3	21.8

Hardware Setup

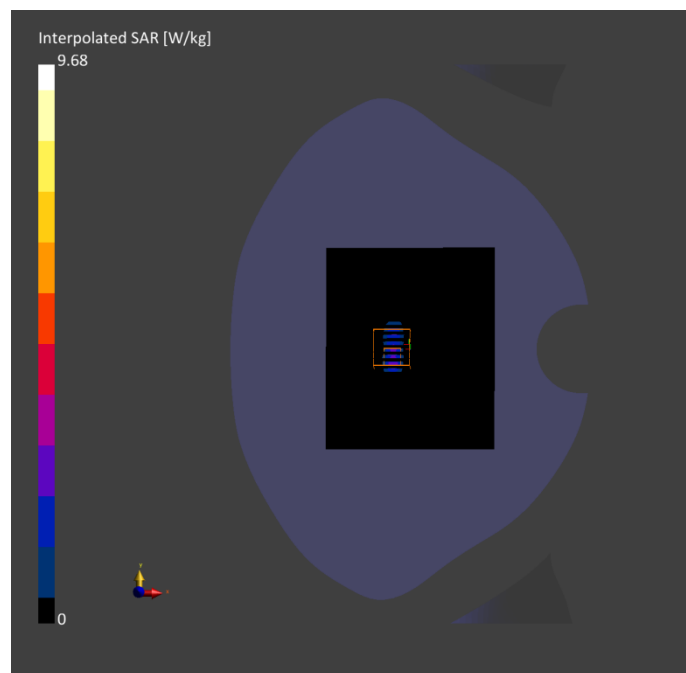
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-21	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 120.0	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 Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-21	2024-03-21
psSAR1g [W/kg]	1.78	1.92
psSAR10g [W/kg]	0.473	0.506
Power Drift [dB]	0.02	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		46.5
Dist 3dB Peak [mm]		3.2



Meas.34 Left Head with Tilt on 0 Channel in Bluetooth mode with Antenna 14

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	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]
Left Head, HSL	TILT, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.0, 0	7.47	1.76	40.0	22.6	21.4

Hardware Setup

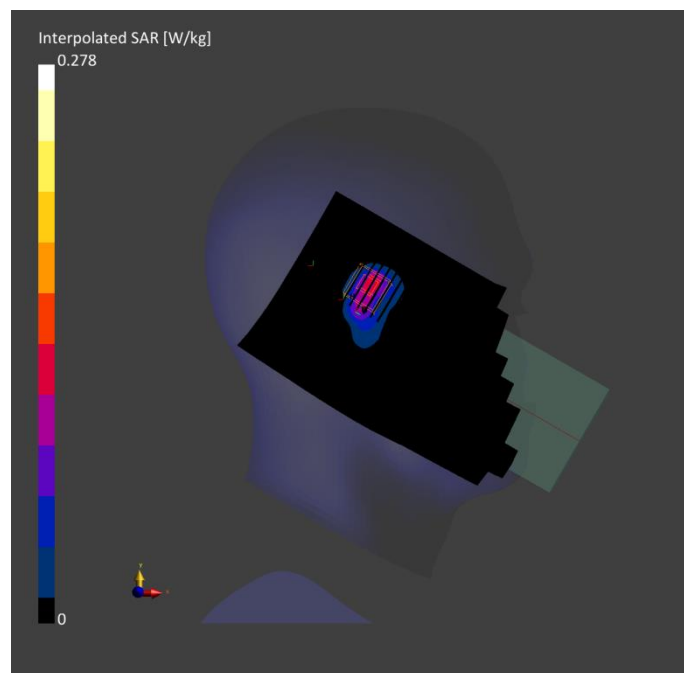
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-20	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

Area Scan		Zoom Scan	
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0	
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	
Sensor Surface [mm]	3.0	1.4	
Graded Grid	Yes	Yes	
Grading Ratio	1.5	1.5	
MAIA	Y	Y	
Surface	VMS + 6p	VMS + 6p	
Detection			
Scan Method	Measured	Measured	

Measurement Results

Area Scan		Zoom Scan	
Date	2024-03-20	2024-03-20	
psSAR1g [W/kg]	0.193	0.246	
psSAR10g [W/kg]	0.085	0.096	
Power Drift [dB]	-0.09	0.15	
Power Scaling	Disabled	Disabled	
Scaling Factor [dB]			
TSL Correction	No correction	No correction	
M2/M1 [%]		41.1	
Dist 3dB Peak [mm]		6.3	



Meas.35 Body Plan with Back Side 10mm on 0 Channel in Bluetooth mode with Antenna 12

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
X6850B	165.0 x 75.0 x 10.0	Phone

Exposure Conditions

Phantom	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	BACK, 10.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.0, 0	7.47	1.76	40.0	22.6	21.4

Hardware Setup

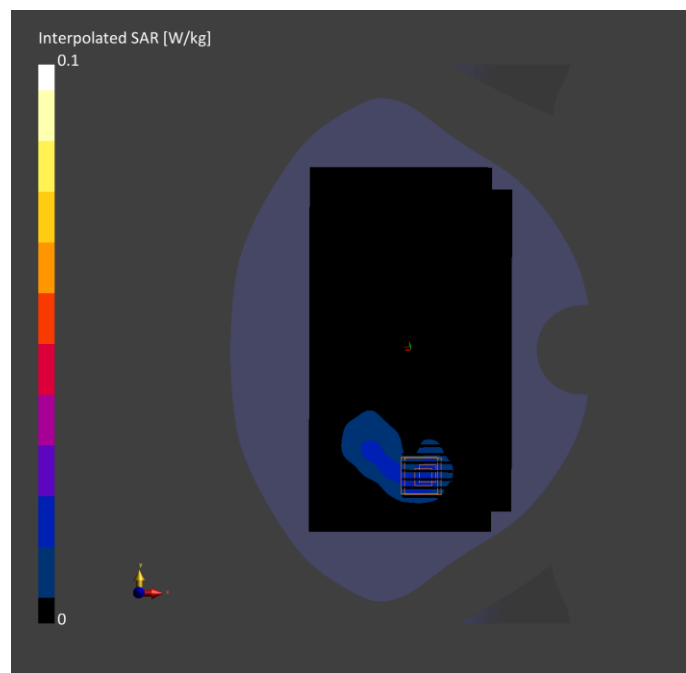
Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-03-20	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn878, 2023-03-23	

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-03-20	2024-03-20
psSAR1g [W/kg]	0.019	0.029
psSAR10g [W/kg]	0.01	0.013
Power Drift [dB]	-0.02	-0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.4
Dist 3dB Peak [mm]		> 15.0



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2420033-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2420033-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2420033-AC.pdf”.

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