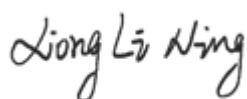


TEST REPORT

Applicant: INFINIX MOBILITY LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL
CENTRE 19-25 SHAN MEI STREET FOTAN NT,
Hong Kong
Equipment Type: Mobile Phone
Model Name: X6728
Brand Name: INFINIX
FCC ID: 2AIZN-X6728
Test Standard: FCC 47 CFR Part 2.1093
(refer section 3.1)
Maximum SAR: Head (1 g@0mm): 1.00W/kg
Body-worn (1 g@10): 0.37W/kg
Hotspot (1 g@10mm): 0.41W/kg
Extremity (10 g@0mm): 0.54 W/kg
Sample Arrival Date: Apr. 08, 2025
Test Date: May. 18, 2025 - May. 23, 2025
Date of Issue: May. 27, 2025

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Xiong Lining**Checked by:** Xu Rui**Approved by:** Tolan Tu
(Testing Director)

Revision History

<u>Version</u>	<u>Issue Date</u>	<u>Revisions Content</u>
<u>Rev. 01</u>	<u>May. 25, 2025</u>	<u>Initial Issue</u>
<u>Rev. 01</u>	<u>May. 27, 2025</u>	<u>Updated section 13.</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, Hong Kong

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, Hong Kong

2.3 Factory Information

Factory	SHENZHEN TECNO TECHNOLOGY CO., LTD.
Address	101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R. China

2.4 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	X6728
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	166.02*76.61*7.77mm
Weight (Approx.)	N/A

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	BL-50FX
	Serial No.	N/A
	Capacitance	Rated Capacity: 5060mAh Typical Capacity: 5160mAh
	Rated Voltage	3.92 V
	Limited Voltage	4.53 V
	Manufacturer	N/A

2.6 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, 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80), 5.8G SRD, GPS, GLONASS, BDS, Galileo, NFC
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 WIFI, 5G WIFI, Bluetooth, NFC		
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: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g/n(HT20)	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 WIFI: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		

Product Type	Portable Device	
EUT Type	☒ Production unit	☐ Identical prototype

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	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 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
10	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

3.2 Device Category and SAR Limit

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

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

Table of Exposure Limits:

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

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)				Maximum Report SAR (W/kg)			
		Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Extremity (0mm)	Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Extremity (0mm)
		1g SAR			10g SAR	1g SAR			10g SAR
PCE	GSM 850	1.00	0.24	0.24	/	1.00	0.37	0.41	0.54
	GSM 1900	0.48	0.18	0.30	/				
	WCDMA Band 2	0.40	0.17	0.25	/				
	WCDMA Band 4	0.25	0.17	0.22	/				
	WCDMA Band 5	0.51	0.20	0.20	/				
	LTE Band 2	0.50	0.18	0.28	/				
	LTE Band 4	0.56	0.20	0.27	/				
	LTE Band 5	0.35	0.11	0.12	/				
	LTE Band 7	0.13	0.09	0.09	/				
	LTE Band 41	0.15	0.10	0.13	/				
DTS	2.4G WIFI	0.37	0.17	0.17	/				
NII	5G WIFI	0.51	0.37	0.41	0.54				
DSS	Bluetooth	0.31	0.10	0.12	/				
Limit (W/kg)		1.6			4.0	1.6			4.0
Verdict		PASS							

Note: This device supports LTE B38 and LTE B41. Since the supported frequency span for LTE B38 falls completely within the supports frequency span for LTE B41, these LTE bands share the same transmission path, and B38 have lower or the same target power as LTE B41; Therefore, SAR was only assessed for LTE B41.

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)		
	Head 1g (0mm)	Body-worn 1g (5mm)	Hotspot 1g (10mm)
PCE	1.47	0.71	0.71
DTS	1.15	0.41	0.41
NII	1.47	0.71	0.71
DSS	1.47	0.71	0.71
Limit (W/Kg)	1.60	1.60	1.60
Verdict	Pass		

Note: The highest simultaneous SAR please refer section 12.2

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 1.00 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 0.54W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

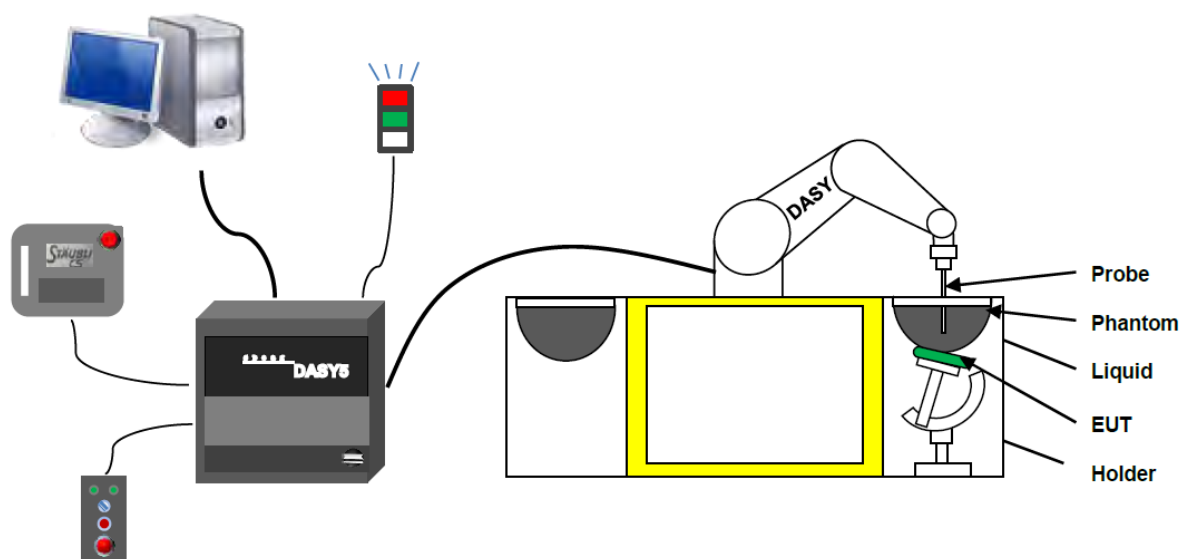
$$SAR = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

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



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

4.2.3 E-Field Probe

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

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection 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	10 MHz to 6 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)



E-Field Probe Calibration Process

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

4.2.4 Data Acquisition Electronics

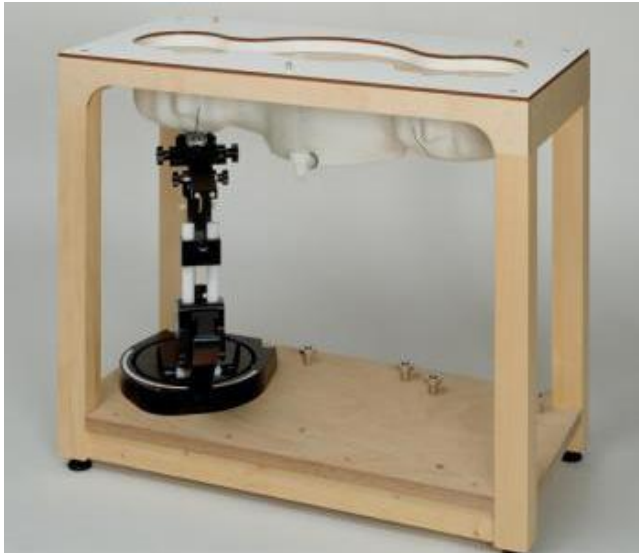
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through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



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

4.2.5 Phantoms

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



- Left head
- Right head
- Flat phantom

Photo of Phantom SN1857



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

4.2.6 Device Holder

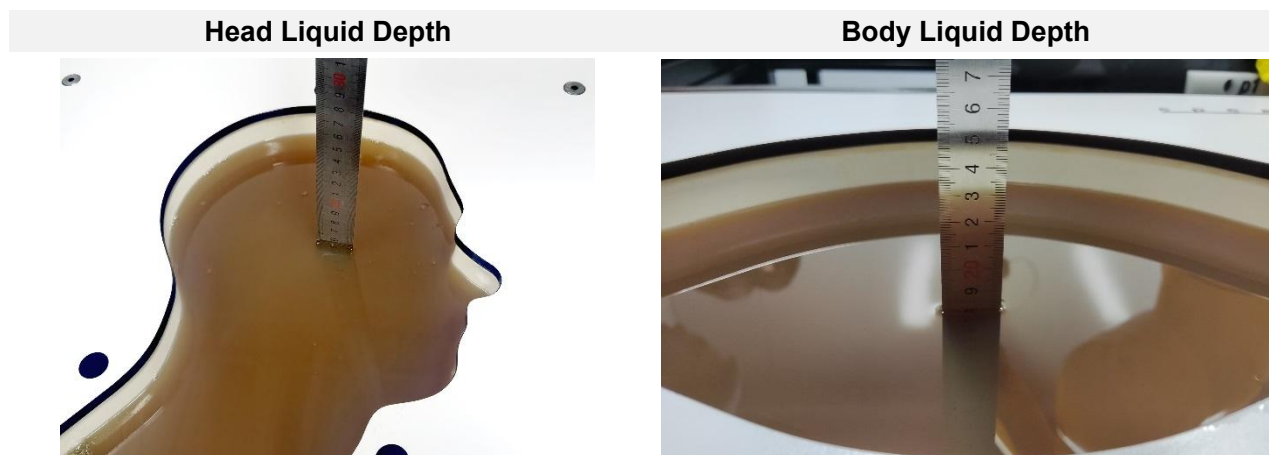
The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for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



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

4.2.7 Simulating Liquid

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



The following table gives the recipes for tissue simulating liquid.

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

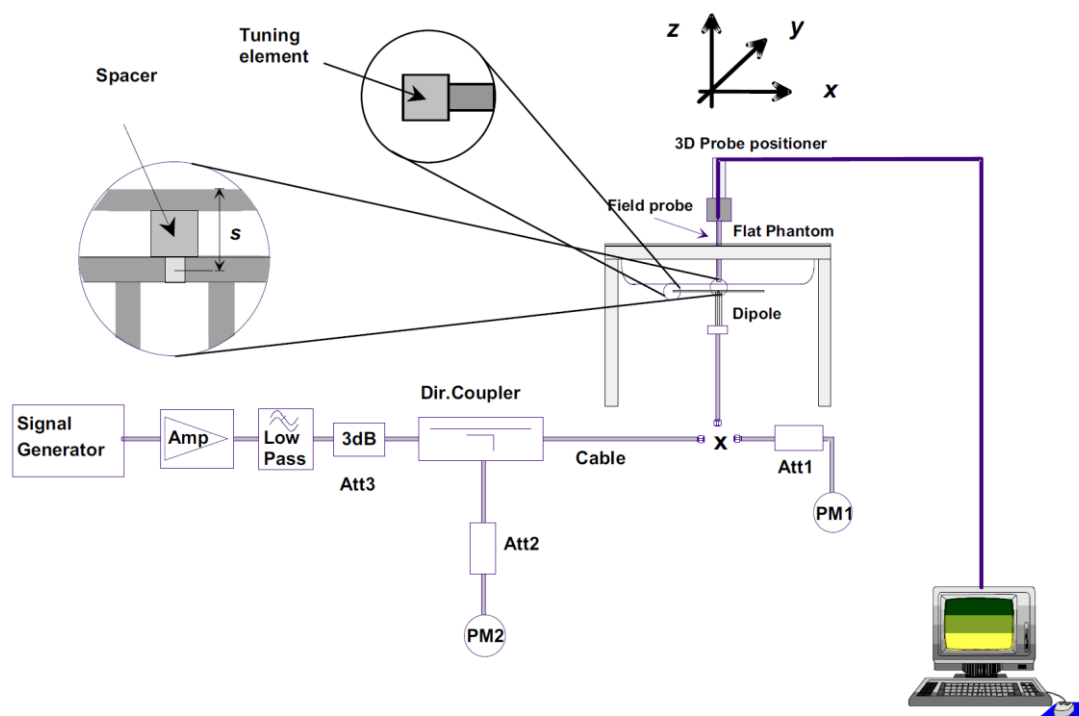
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

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

5.2 System Check Setup

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



6 TEST POSITION CONFIGURATIONS

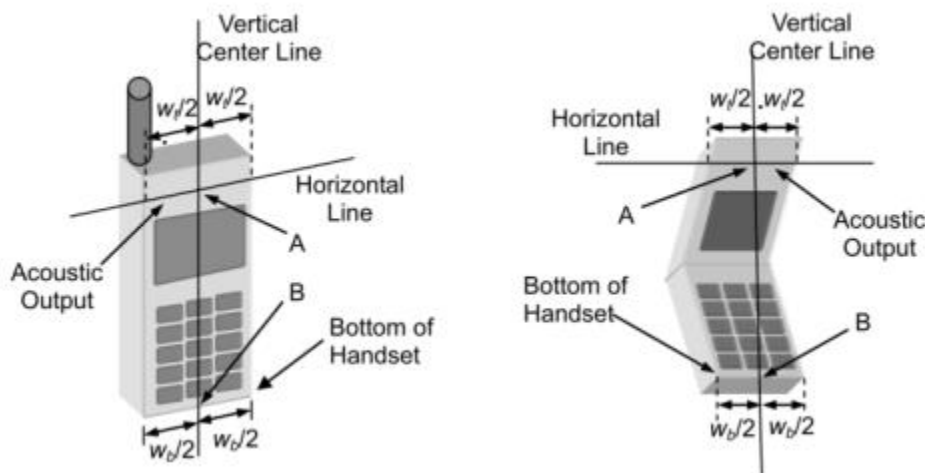
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

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

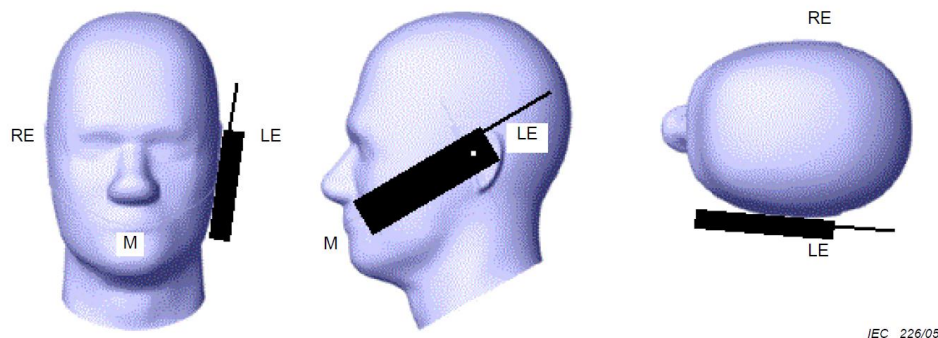
6.1.1 Two Imaginary Lines on the Handset

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



6.1.2 Cheek Position

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



6.1.3 Tilted Position

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

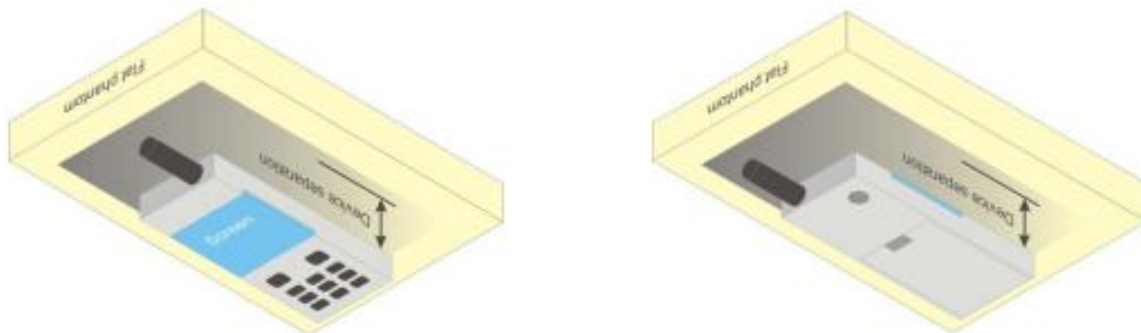


6.2 Body-worn Position Conditions

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

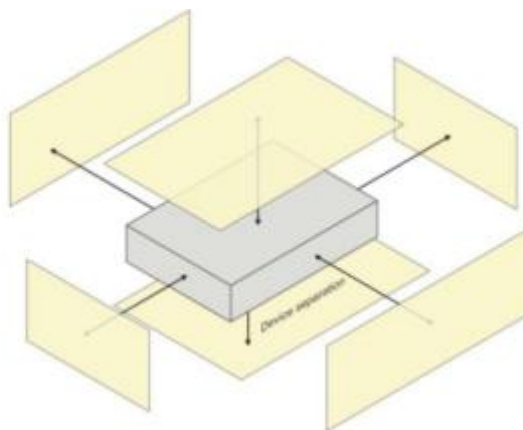
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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

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



6.3 Hotspot Mode Exposure Position Conditions

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



6.4 Product Specific 10g Exposure Consideration

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

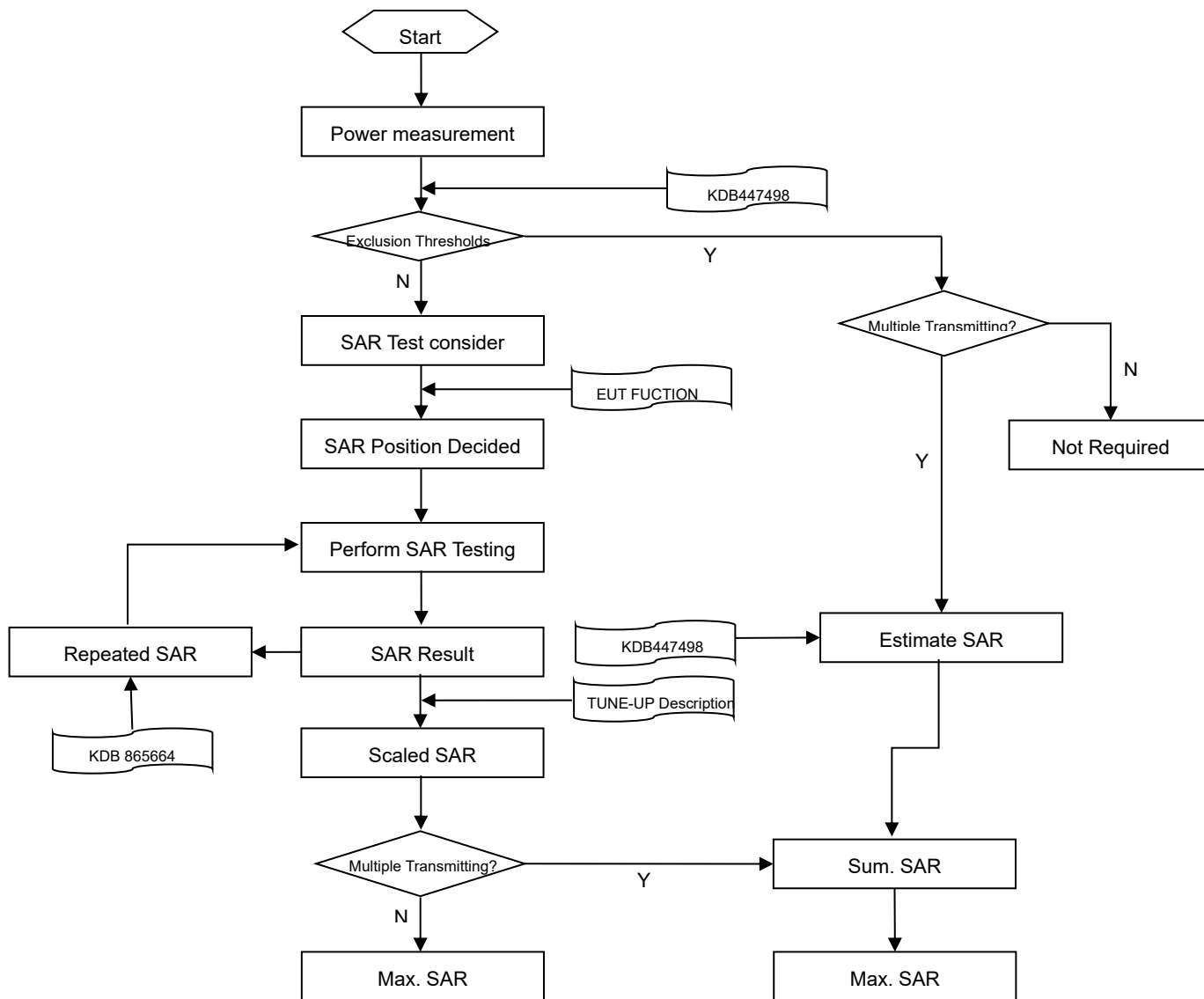
The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address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

6

6.

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

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

Note:

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

7.3 Measurement Procedure

The following steps are used for each test position

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

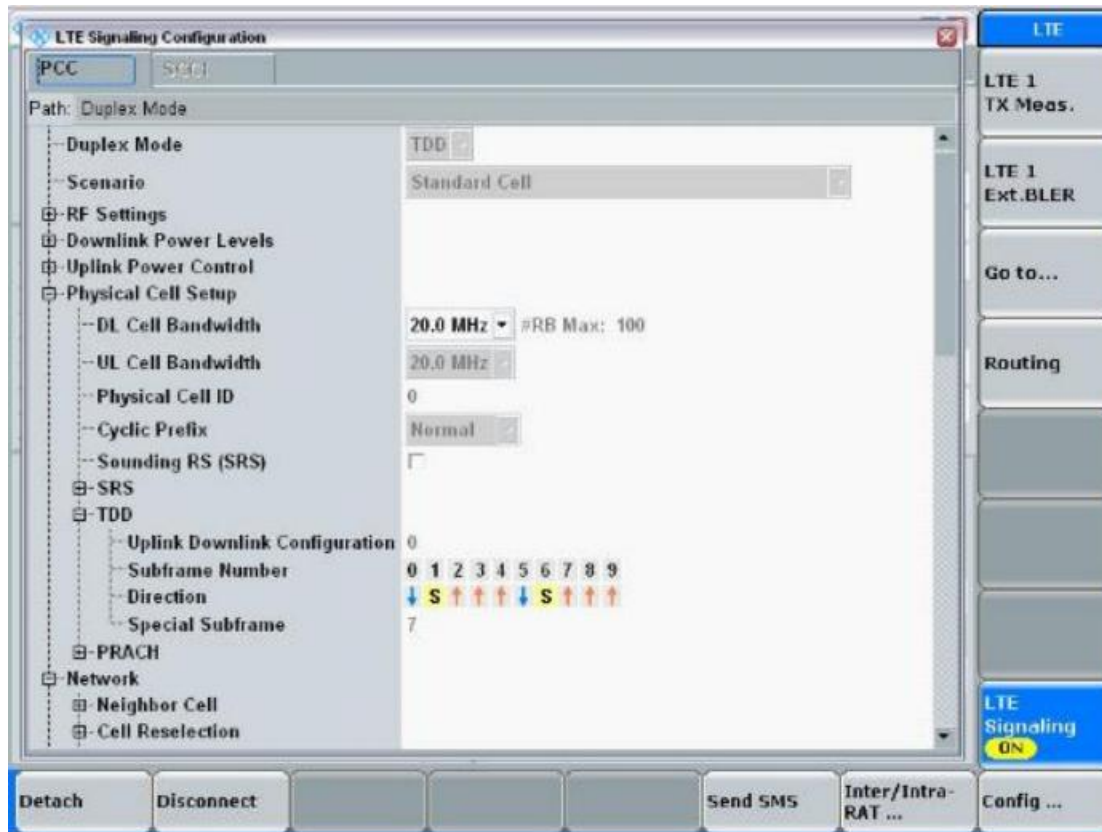
7.4 Area & Zoom Scan Procedure

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

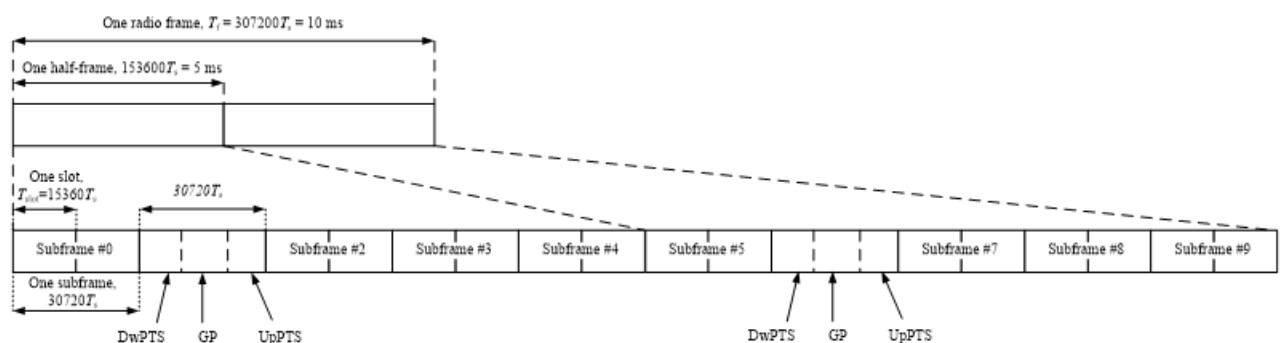
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7.5 LTE (TDD) Considerations

During TDD-LTE SAR testing, the EUT was commanded to transmit on maximum output power and maximum transmitting bandwidth. The uplink and downlink slot configuration as below in one radio frame.



According to 3GPP Per 3GPP TS 36.211. Each radio frame of length ($T_f = 307200 \cdot T_s = 10\text{ms}$) of two half-frames of length ($153600 \cdot T_s = 5\text{ms}$). Each half-frame consists of five sub-frames of length ($30720 \cdot T_s = 1\text{ms}$)



And the special sub-frame with the three fields DwPTS, GP and UpPTS.

The length of DwPTS and UpPTS is given by below table subject to the total length of DwPTS, GP and UpPTS being equal to $30720 \cdot T_s = 1\text{ms}$.

Configuration of special sub-frame (lengths of DwPTS/GP/UpPTS)

Special sub-frame configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21592 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$2560 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21592 \cdot T_s$			$12800 \cdot T_s$	-	-
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$			-		

For special sub-frame uplink time we used the largest cyclic prefix for duty cycle calculate;

Maximum uplink time of one special sub-frame=(largest cyclic prefix)/(one sub-frame of length)* time of one sub-frame= $5120 \cdot T_s / 30720 \cdot T_s \cdot 1\text{ms} = 0.167\text{ms}$

One radio frame with 6 uplink sub-frames and two special sub-frame,

there for the maximum Uplink time in one radio frame is: $6 \cdot 1\text{ ms} + 2 \cdot 0.167\text{ ms} = 6.334\text{ms}$

So, the duty cycle for TDD-LTE is: $6.334\text{ms} / 10\text{ms} = 1: 1.58$

8 CONDUCTED RF OUPUT POWER

8.1 GSM

Please refer the document “BL-SH2540336-AP Power List.pdf”.

8.2 WCDMA

Please refer the document “BL-SH2540336-AP Power List.pdf”.

8.3 LTE

Please refer the document “BL-SH2540336-AP Power List.pdf”.

8.4 WIFI

8.4.1 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	14.21	15.00	No
		6	2437	13.53	14.50	No
		11	2462	14.53	15.50	Yes
	802.11g	1	2412	14.20	15.00	No
		6	2437	14.10	15.00	No
		11	2462	14.12	15.00	No
	802.11n(HT20)	1	2412	14.11	15.00	No
		6	2437	13.84	15.00	No
		11	2462	13.91	15.00	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 = $0.369 * (35.48\text{mW}/31.62\text{mW}) = 0.329$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.2 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	16.71	17.50	No
		44	5220	17.49	18.50	No
		48	5240	17.59	18.50	Yes
	802.11n(HT20)	36	5180	16.66	17.50	No
		44	5220	17.38	18.50	No
		48	5240	17.50	18.50	No
	802.11n(HT40)	38	5190	15.69	16.50	No
		46	5230	17.45	18.50	No
	802.11ac(VHT20)	36	5180	16.30	17.50	No
		44	5220	16.21	17.50	No
		48	5240	16.30	17.50	No
	802.11ac(VHT40)	38	5190	15.63	16.50	No
		46	5230	16.37	17.50	No
	802.11ac(VHT80)	42	5210	14.58	15.50	No
5.3 (5.25~5.35)	802.11a	52	5260	17.54	18.50	No
		60	5300	17.42	18.50	No
		64	5320	17.56	18.50	Yes
	802.11n(HT20)	52	5260	17.40	18.50	No
		60	5300	17.36	18.50	No
		64	5320	16.85	18.00	No
	802.11n(HT40)	54	5270	17.14	18.00	No
		62	5310	15.78	16.50	No
	802.11ac(VHT20)	52	5260	16.25	17.50	No
		60	5300	16.23	17.50	No
		64	5320	16.39	17.50	No
	802.11ac(VHT40)	54	5270	16.27	17.50	No
		62	5310	15.75	16.50	No
	802.11ac(VHT80)	58	5290	13.63	14.50	No
5.6 (5.47~5.725)	802.11a	100	5500	14.75	15.50	No
		116	5580	16.88	18.00	Yes
		140	5700	14.33	15.00	No
	802.11n(HT20)	100	5500	14.81	15.50	No
		116	5580	14.56	15.50	No
		140	5700	12.25	13.00	No
	802.11n(HT40)	102	5510	12.64	13.50	No
		118	5590	14.48	15.00	No

	802.11ac(VHT20)	134	5670	14.32	15.00	No
		100	5500	14.73	15.50	No
		116	5580	14.54	15.50	No
		140	5700	12.12	13.00	No
	802.11ac(VHT40)	102	5510	12.61	13.50	No
		118	5590	14.64	15.50	No
		134	5670	14.28	15.50	No
	802.11ac(VHT80)	106	5530	13.64	14.50	No
		122	5690	15.71	16.50	No
	5.8 (5.725~5.850)	802.11a	149	5745	17.46	Yes
			157	5785	17.44	No
			165	5825	17.40	No
		802.11n(HT20)	149	5745	17.37	No
			157	5785	17.34	No
			165	5825	17.21	No
		802.11n(HT40)	151	5755	17.29	No
			159	5795	17.19	No
		802.11ac(VHT20)	149	5745	16.28	No
			157	5785	16.30	No
			165	5825	15.90	No
		802.11ac(VHT40)	151	5755	16.30	No
			159	5795	16.33	No
		802.11ac(VHT80)	155	5775	16.35	No

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

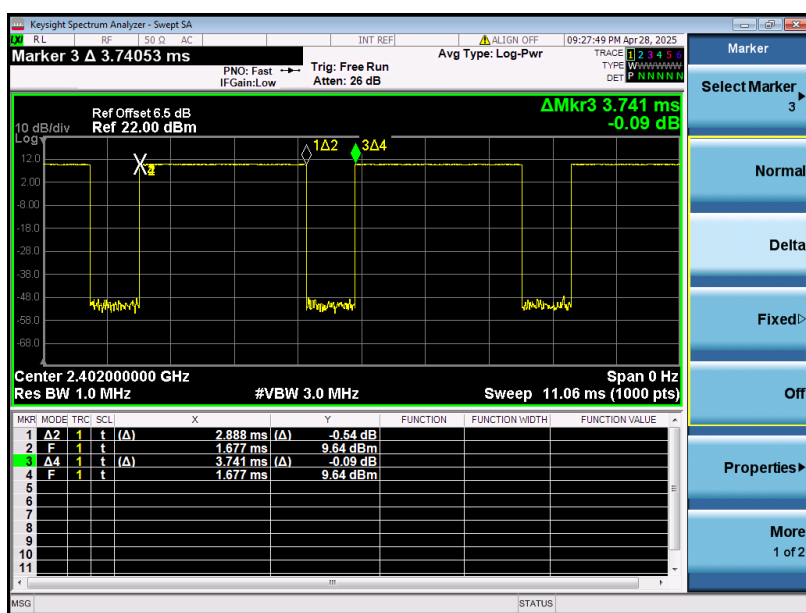
8.5 Bluetooth

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Conducted Power (dBm)	9.71	13.15	13.75	9.19	12.51	13.72
Tune-Up Limit (dBm)	10.50	14.00	14.50	10.00	13.50	14.50
SAR Test Require	NO	NO	YES	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Conducted Power (dBm)	9.27	12.51	13.72	/	/	/
Tune-Up Limit (dBm)	10.00	13.50	14.50	/		
SAR Test Require	NO	NO	NO	NO	NO	NO
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	1	19	38
Frequency (MHz)	2402	2440	2480	2404	2440	2478
Conducted Power (dBm)	-2.91	-1.24	-2.38	-2.69	-1.16	-2.07
Tune-Up Limit (dBm)	-2.00	0.00	-1.50	-1.50	0.00	-1.00
SAR Test Require	NO	NO	NO	NO	NO	NO

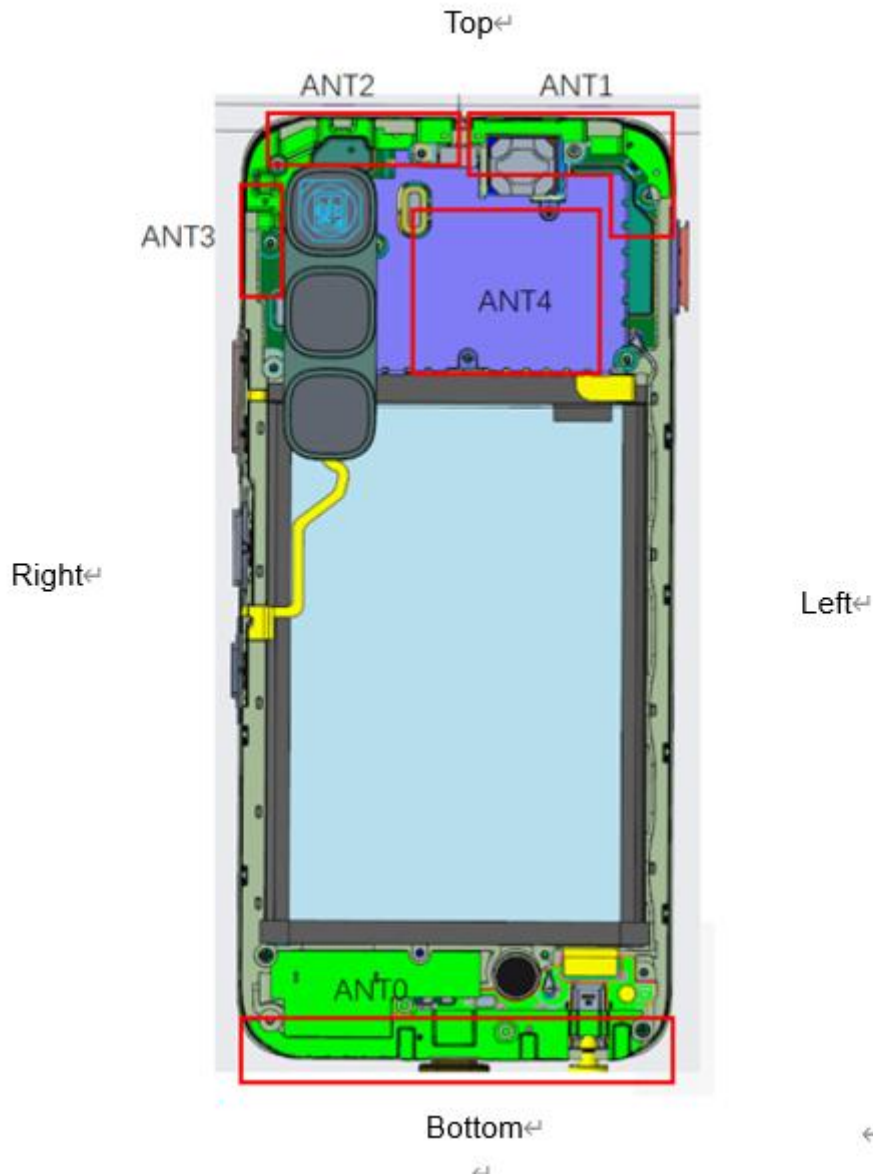
Note 1: Since Bluetooth BR mode is the maximum output power mode, SAR measurements were performed with test software using DH5 modulation, and SAR measurement is not required for the EDR and LE. When the secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode.

Note: The Bluetooth duty cycle is 77.2 % 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



9 TEST EXCLUSION CONSIDERATION



<EUT Back View>

Antenna	Support Bands
ANT 0	GSM 850/1900; WCDMA B2/4/5; LTE B2/4/5/7/38/41
ANT 1	GSM 850/1900; WCDMA B2/4/5; LTE B2/4/5/7/38/41
ANT 2	GPS
ANT 3	2.4G/5G WLAN, BT
ANT 4	NFC

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 1	<25	<25	<25	>25	<25	>25
ANT 3	<25	<25	>25	<25	<25	>25

Note: 1. Per KDB 941225 DO6, 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

10.1 GSM 850

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head												
Ant.0	Left cheek	0mm	GPRS 3TX	190	836.6	-0.08	0.021	20.12	21.00	1.225	0.026	/
	Left tilt			190	836.6	-0.11	0.017	20.12	21.00	1.225	0.021	/
	Right cheek			190	836.6	-0.12	0.028	20.12	21.00	1.225	0.034	/
	Right tilt			190	836.6	0.07	0.022	20.12	21.00	1.225	0.027	/
Ant.1	Left cheek	0mm	GPRS 3TX	190	836.6	-0.10	0.756	19.46	20.50	1.271	0.961	/
	Left tilt			190	836.6	-0.04	0.709	19.46	20.50	1.271	0.901	/
	Right cheek			190	836.6	0.14	0.843	19.46	20.50	1.271	1.071	/
	Right cheek			128	824.2	-0.20	0.825	19.40	20.50	1.288	1.063	/
	Right cheek			251	848.8	-0.12	0.855	19.31	20.50	1.315	1.125	1
	Right cheek			251	848.8	-0.17	0.821	19.31	20.50	1.315	1.080	repeat
	Right tilt			190	836.6	-0.06	0.826	19.46	20.50	1.271	1.049	/
Body-worn& Hotspot												
Ant.0	Front side	10mm	GPRS 3TX	190	836.6	-0.18	0.021	20.12	21.00	1.225	0.026	/
	Back side			190	836.6	-0.13	0.018	20.12	21.00	1.225	0.022	/
	Left side			190	836.6	0.05	0.015	20.12	21.00	1.225	0.018	/
	Right side			190	836.6	0.01	0.017	20.12	21.00	1.225	0.021	/
	Bottom side			190	836.6	0.07	0.029	20.12	21.00	1.225	0.036	/
Ant.1	Front side	10mm	GPRS 3TX	190	836.6	-0.18	0.164	19.46	20.50	1.271	0.208	/
	Back side			190	836.6	0.11	0.209	19.46	20.50	1.271	0.266	/
	Left side			190	836.6	-0.06	0.071	19.46	20.50	1.271	0.090	/
	Top side			190	836.6	-0.10	0.216	19.46	20.50	1.271	0.274	2
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.2 GSM 1900

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head												
Ant.0	Left cheek	0mm	GPRS 2TX	661	1880	0.16	0.021	18.64	19.50	1.219	0.026	/
	Left tilt			661	1880	0.14	0.018	18.64	19.50	1.219	0.022	/
	Right cheek			661	1880	-0.03	0.028	18.64	19.50	1.219	0.034	/
	Right tilt			661	1880	0.07	0.022	18.64	19.50	1.219	0.027	/
Ant.1	Left cheek	0mm	GPRS 2TX	661	1880	0.15	0.170	18.59	19.50	1.233	0.210	/
	Left tilt			661	1880	-0.12	0.206	18.59	19.50	1.233	0.254	/
	Right cheek			661	1880	-0.12	0.288	18.59	19.50	1.233	0.355	/
	Right tilt			661	1880	0.02	0.388	18.59	19.50	1.233	0.478	3
Body-worn& Hotspot												
Ant.0	Front side	10mm	GPRS 2TX	661	1880	-0.11	0.023	18.64	19.50	1.219	0.028	/
	Back side			661	1880	0.12	0.059	18.64	19.50	1.219	0.072	/
	Left side			661	1880	0.16	0.030	18.64	19.50	1.219	0.037	/
	Right side			661	1880	-0.09	0.035	18.64	19.50	1.219	0.043	/
	Bottom side			661	1880	-0.17	0.054	18.64	19.50	1.219	0.066	/
Ant.1	Front side	10mm	GPRS 2TX	661	1880	-0.03	0.104	18.59	19.50	1.233	0.128	/
	Back side			661	1880	-0.05	0.144	18.59	19.50	1.233	0.178	/
	Left side			661	1880	-0.14	0.065	18.59	19.50	1.233	0.080	/
	Top side			661	1880	-0.01	0.243	18.59	19.50	1.233	0.300	4
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.3WCDMA Band 2

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head												
Ant0	Left cheek	0mm	RMC	9400	1880	0.06	0.023	11.05	12.00	1.245	0.029	/
	Left tilt			9400	1880	0.17	0.020	11.05	12.00	1.245	0.025	/
	Right cheek			9400	1880	-0.08	0.029	11.05	12.00	1.245	0.036	/
	Right tilt			9400	1880	-0.06	0.024	11.05	12.00	1.245	0.030	/
Ant1	Left cheek	0mm	RMC	9400	1880	0.15	0.170	11.20	12.00	1.202	0.204	/
	Left tilt			9400	1880	-0.09	0.207	11.20	12.00	1.202	0.249	/
	Right cheek			9400	1880	0.18	0.277	11.20	12.00	1.202	0.333	/
	Right tilt			9400	1880	-0.10	0.331	11.20	12.00	1.202	0.398	5
Body-worn& Hotspot												
Ant0	Front side	10mm	RMC	9400	1880	0.18	0.025	11.05	12.00	1.245	0.031	/
	Back side			9400	1880	0.17	0.045	11.05	12.00	1.245	0.056	/
	Left side			9400	1880	-0.01	0.025	11.05	12.00	1.245	0.031	/
	Right side			9400	1880	-0.01	0.030	11.05	12.00	1.245	0.037	/
	Bottom side			9400	1880	0.19	0.054	11.05	12.00	1.245	0.067	/
Ant1	Front side	10mm	RMC	9400	1880	0.14	0.077	11.20	12.00	1.202	0.093	/
	Back side			9400	1880	-0.06	0.144	11.20	12.00	1.202	0.173	/
	Left side			9400	1880	-0.12	0.058	11.20	12.00	1.202	0.070	/
	Top side			9400	1880	-0.14	0.206	11.20	12.00	1.202	0.248	6
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.4WCDMA Band 4

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head												
Ant0	Left cheek	0mm	RMC	1412	1732.4	0.16	0.024	12.69	13.50	1.205	0.029	/
	Left tilt			1412	1732.4	0.14	0.020	12.69	13.50	1.205	0.024	/
	Right cheek			1412	1732.4	-0.03	0.030	12.69	13.50	1.205	0.036	/
	Right tilt			1412	1732.4	0.07	0.028	12.69	13.50	1.205	0.034	/
Ant1	Left cheek	0mm	RMC	1412	1732.4	0.15	0.197	12.62	13.50	1.225	0.241	/
	Left tilt			1412	1732.4	-0.12	0.243	12.62	13.50	1.225	0.298	/
	Right cheek			1412	1732.4	-0.12	0.312	12.62	13.50	1.225	0.382	/
	Right tilt			1412	1732.4	0.04	0.372	12.62	13.50	1.225	0.456	7
Body-worn& Hotspot												
Ant0	Front side	10mm	RMC	1412	1732.4	-0.11	0.028	12.69	13.50	1.205	0.034	/
	Back side			1412	1732.4	0.12	0.061	12.69	13.50	1.205	0.074	/
	Left side			1412	1732.4	0.16	0.030	12.69	13.50	1.205	0.036	/
	Right side			1412	1732.4	-0.09	0.020	12.69	13.50	1.205	0.024	/
	Bottom side			1412	1732.4	-0.17	0.071	12.69	13.50	1.205	0.086	/
Ant1	Front side	10mm	RMC	1412	1732.4	-0.03	0.089	12.62	13.50	1.225	0.109	/
	Back side			1412	1732.4	-0.05	0.136	12.62	13.50	1.225	0.167	/
	Left side			1412	1732.4	-0.14	0.056	12.62	13.50	1.225	0.069	/
	Top side			1412	1732.4	-0.01	0.183	12.62	13.50	1.225	0.224	8
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.5WCDMA Band 5

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head												
Ant0	Left cheek	0mm	RMC	4182	836.4	0.16	0.036	20.03	21.00	1.250	0.045	/
	Left tilt			4182	836.4	0.14	0.030	20.03	21.00	1.250	0.038	/
	Right cheek			4182	836.4	-0.03	0.029	20.03	21.00	1.250	0.036	/
	Right tilt			4182	836.4	0.07	0.022	20.03	21.00	1.250	0.028	/
Ant1	Left cheek	0mm	RMC	4182	836.4	0.15	0.393	20.08	21.00	1.236	0.486	/
	Left tilt			4182	836.4	-0.12	0.370	20.08	21.00	1.236	0.457	/
	Right cheek			4182	836.4	0.08	0.415	20.08	21.00	1.236	0.513	9
	Right tilt			4182	836.4	0.02	0.402	20.08	21.00	1.236	0.497	/
Body-worn& Hotspot							0.12					
Ant0	Front side	10mm	RMC	4182	836.4	0.16	0.023	20.03	21.00	1.250	0.029	/
	Back side			4182	836.4	-0.09	0.063	20.03	21.00	1.250	0.079	/
	Left side			4182	836.4	0.19	0.022	20.03	21.00	1.250	0.028	/
	Right side			4182	836.4	-0.17	0.018	20.03	21.00	1.250	0.023	/
	Bottom side			4182	836.4	-0.13	0.064	20.03	21.00	1.250	0.080	/
Ant1	Front side	10mm	RMC	4182	836.4	-0.14	0.110	20.08	21.00	1.236	0.136	/
	Back side			4182	836.4	0.12	0.160	20.08	21.00	1.236	0.198	10
	Left side			4182	836.4	-0.01	0.053	20.08	21.00	1.236	0.066	/
	Top side			4182	836.4	0.15	0.140	20.08	21.00	1.236	0.173	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.6LTE Band 2(20MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	RB num.	RB Start	Power Drift (dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head														
Ant.0	Left cheek	0mm	QPSK	18900	1880	1	0	0.03	0.036	11.34	12.00	1.164	0.042	/
	Left tilt			18900	1880	1	0	0.07	0.032	11.34	12.00	1.164	0.037	/
	Right cheek			18900	1880	1	0	-0.10	0.028	11.34	12.00	1.164	0.033	/
	Right tilt			18900	1880	1	0	-0.07	0.025	11.34	12.00	1.164	0.029	/
	Left cheek			18900	1880	50	0	0.15	0.040	11.21	12.00	1.199	0.048	/
	Left tilt			18900	1880	50	0	-0.06	0.038	11.21	12.00	1.199	0.046	/
	Right cheek			18900	1880	50	0	-0.14	0.029	11.21	12.00	1.199	0.035	/
	Right tilt			18900	1880	50	0	-0.09	0.025	11.21	12.00	1.199	0.030	/
Ant.1	Left cheek	0mm	QPSK	18900	1880	1	0	0.07	0.165	11.49	12.50	1.262	0.208	/
	Left tilt			18900	1880	1	0	-0.01	0.198	11.49	12.50	1.262	0.250	/
	Right cheek			18900	1880	1	0	0.01	0.278	11.49	12.50	1.262	0.351	/
	Right tilt			18900	1880	1	0	-0.07	0.307	11.49	12.50	1.262	0.387	/
	Left cheek			18900	1880	50	0	0.14	0.168	11.38	12.50	1.294	0.217	/
	Left tilt			18900	1880	50	0	-0.17	0.203	11.38	12.50	1.294	0.263	/
	Right cheek			18900	1880	50	0	-0.15	0.314	11.38	12.50	1.294	0.406	/
	Right tilt			18900	1880	50	0	0.19	0.385	11.38	12.50	1.294	0.498	11
Body-worn& Hotspot														
Ant.0	Front side	10mm	QPSK	18900	1880	1	0	-0.12	0.031	11.34	12.00	1.164	0.036	/
	Back side			18900	1880	1	0	-0.02	0.050	11.34	12.00	1.164	0.058	/
	Left side			18900	1880	1	0	0.12	0.025	11.34	12.00	1.164	0.029	/
	Right side			18900	1880	1	0	0.14	0.028	11.34	12.00	1.164	0.033	/
	Bottom side			18900	1880	1	0	-0.06	0.051	11.34	12.00	1.164	0.059	/
	Front side			18900	1880	50	0	-0.08	0.028	11.21	12.00	1.199	0.034	/
	Back side			18900	1880	50	0	0.09	0.044	11.21	12.00	1.199	0.053	/
	Left side			18900	1880	50	0	-0.19	0.023	11.21	12.00	1.199	0.028	/
	Right side			18900	1880	50	0	-0.17	0.024	11.21	12.00	1.199	0.029	/
	Bottom side			18900	1880	50	0	0.15	0.048	11.21	12.00	1.199	0.058	/
Ant.1	Front side	10mm	QPSK	18900	1880	1	0	-0.14	0.077	11.49	12.50	1.262	0.097	/
	Back side			18900	1880	1	0	0.15	0.141	11.49	12.50	1.262	0.178	/
	Left side			18900	1880	1	0	0.12	0.036	11.49	12.50	1.262	0.045	/
	Top side			18900	1880	1	0	0.01	0.189	11.49	12.50	1.262	0.238	/
	Front side			18900	1880	50	0	0.05	0.075	11.38	12.50	1.294	0.097	/
	Back side			18900	1880	50	0	0.06	0.138	11.38	12.50	1.294	0.179	/
	Right side			18900	1880	50	0	-0.03	0.038	11.38	12.50	1.294	0.049	/
	Top side			18900	1880	50	0	-0.03	0.213	11.38	12.50	1.294	0.276	12
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.7LTE Band 4(20MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	RB num.	RB Start	Power Drift (dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head														
Ant.0	Left cheek	0mm	QPSK	20175	1732.5	1	0	0.18	0.045	13.46	14.50	1.271	0.057	/
	Left tilt			20175	1732.5	1	0	0.13	0.041	13.46	14.50	1.271	0.052	/
	Right cheek			20175	1732.5	1	0	0.06	0.036	13.46	14.50	1.271	0.046	/
	Right tilt			20175	1732.5	1	0	-0.09	0.032	13.46	14.50	1.271	0.041	/
	Left cheek			20175	1732.5	50	0	-0.12	0.047	13.39	14.50	1.291	0.061	/
	Left tilt			20175	1732.5	50	0	-0.12	0.044	13.39	14.50	1.291	0.057	/
	Right cheek			20175	1732.5	50	0	-0.05	0.039	13.39	14.50	1.291	0.050	/
	Right tilt			20175	1732.5	50	0	0.13	0.034	13.39	14.50	1.291	0.044	/
Ant.1	Left cheek	0mm	QPSK	20175	1732.5	1	0	-0.08	0.215	13.33	14.00	1.167	0.251	/
	Left tilt			20175	1732.5	1	0	-0.04	0.260	13.33	14.00	1.167	0.303	/
	Right cheek			20175	1732.5	1	0	0.13	0.356	13.33	14.00	1.167	0.415	/
	Right tilt			20175	1732.5	1	0	-0.19	0.379	13.33	14.00	1.167	0.442	/
	Left cheek			20175	1732.5	50	0	0.13	0.242	13.28	14.00	1.180	0.286	/
	Left tilt			20175	1732.5	50	0	-0.15	0.292	13.28	14.00	1.180	0.345	/
	Right cheek			20175	1732.5	50	0	0.10	0.381	13.28	14.00	1.180	0.450	/
	Right tilt			20175	1732.5	50	0	0.19	0.472	13.28	14.00	1.180	0.557	13
Body-worn& Hotspot														
Ant.0	Front side	10mm	QPSK	20175	1732.5	1	0	-0.10	0.023	13.46	14.50	1.271	0.029	/
	Back side			20175	1732.5	1	0	-0.08	0.068	13.46	14.50	1.271	0.086	/
	Left side			20175	1732.5	1	0	-0.06	0.035	13.46	14.50	1.271	0.044	/
	Right side			20175	1732.5	1	0	0.07	0.036	13.46	14.50	1.271	0.046	/
	Bottom side			20175	1732.5	1	0	0.17	0.075	13.46	14.50	1.271	0.095	/
	Front side			20175	1732.5	50	0	-0.05	0.025	13.39	14.50	1.291	0.032	/
	Back side			20175	1732.5	50	0	0.09	0.070	13.39	14.50	1.291	0.090	/
	Left side			20175	1732.5	50	0	0.16	0.037	13.39	14.50	1.291	0.048	/
	Right side			20175	1732.5	50	0	-0.13	0.033	13.39	14.50	1.291	0.043	/
	Bottom side			20175	1732.5	50	0	0.05	0.082	13.39	14.50	1.291	0.106	/
Ant.1	Front side	10mm	QPSK	20175	1732.5	1	0	-0.12	0.106	13.33	14.00	1.167	0.124	/
	Back side			20175	1732.5	1	0	0.15	0.151	13.33	14.00	1.167	0.176	/
	Left side			20175	1732.5	1	0	0.16	0.032	13.33	14.00	1.167	0.037	/
	Top side			20175	1732.5	1	0	0.16	0.211	13.33	14.00	1.167	0.246	/
	Front side			20175	1732.5	50	0	-0.04	0.113	13.28	14.00	1.180	0.133	/
	Back side			20175	1732.5	50	0	-0.06	0.169	13.28	14.00	1.180	0.199	/
	Left side			20175	1732.5	50	0	-0.13	0.036	13.28	14.00	1.180	0.042	/
	Top side			20175	1732.5	50	0	0.18	0.228	13.28	14.00	1.180	0.269	14
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.8LTE Band 5 (10MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	RB num	RB Start	Power Drift (dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas . no.
Head														
Ant.0	Left cheek	0mm	QPSK	20525	836.5	1	0	-0.07	0.052	18.36	19.00	1.159	0.060	/
	Left tilt			20525	836.5	1	0	-0.15	0.047	18.36	19.00	1.159	0.054	/
	Right cheek			20525	836.5	1	0	-0.15	0.040	18.36	19.00	1.159	0.046	/
	Right tilt			20525	836.5	1	0	-0.06	0.038	18.36	19.00	1.159	0.044	/
	Left cheek			20525	836.5	25	0	0.09	0.050	18.31	19.00	1.172	0.059	/
	Left tilt			20525	836.5	25	0	-0.10	0.046	18.31	19.00	1.172	0.054	/
	Right cheek			20525	836.5	25	0	0.10	0.039	18.31	19.00	1.172	0.046	/
	Right tilt			20525	836.5	25	0	-0.05	0.037	18.31	19.00	1.172	0.043	/
Ant. 1	Left cheek	0mm	QPSK	20525	836.5	1	0	-0.12	0.263	18.48	19.50	1.265	0.333	/
	Left tilt			20525	836.5	1	0	-0.02	0.248	18.48	19.50	1.265	0.314	/
	Right cheek			20525	836.5	1	0	-0.08	0.241	18.48	19.50	1.265	0.305	/
	Right tilt			20525	836.5	1	0	0.11	0.199	18.48	19.50	1.265	0.252	/
	Left cheek			20525	836.5	25	0	-0.11	0.262	18.39	19.50	1.291	0.338	/
	Left tilt			20525	836.5	25	0	0.12	0.259	18.39	19.50	1.291	0.334	/
	Right cheek			20525	836.5	25	0	0.10	0.269	18.39	19.50	1.291	0.347	15
	Right tilt			20525	836.5	25	0	0.09	0.214	18.39	19.50	1.291	0.276	/
Body-worn& Hotspot														
Ant.0	Front side	10m m	QPSK	20525	836.5	1	0	0.05	0.021	18.36	19.00	1.159	0.024	/
	Back side			20525	836.5	1	0	-0.14	0.032	18.36	19.00	1.159	0.037	/
	Left side			20525	836.5	1	0	-0.01	0.025	18.36	19.00	1.159	0.029	/
	Right side			20525	836.5	1	0	-0.09	0.030	18.36	19.00	1.159	0.035	/
	Bottom side			20525	836.5	1	0	-0.17	0.048	18.36	19.00	1.159	0.056	/
	Front side			20525	836.5	25	0	-0.08	0.023	18.31	19.00	1.172	0.027	/
	Back side			20525	836.5	25	0	-0.02	0.035	18.31	19.00	1.172	0.041	/
	Left side			20525	836.5	25	0	-0.18	0.027	18.31	19.00	1.172	0.032	/
	Right side			20525	836.5	25	0	-0.06	0.032	18.31	19.00	1.172	0.038	/
	Bottom side			20525	836.5	25	0	0.04	0.050	18.31	19.00	1.172	0.059	/
Ant. 1	Front side	10m m	QPSK	20525	836.5	1	0	0.02	0.074	18.48	19.50	1.265	0.094	/
	Back side			20525	836.5	1	0	0.17	0.087	18.48	19.50	1.265	0.110	/
	Left side			20525	836.5	1	0	-0.14	0.023	18.48	19.50	1.265	0.029	/
	Top side			20525	836.5	1	0	0.10	0.091	18.48	19.50	1.265	0.115	16
	Front side			20525	836.5	25	0	0.15	0.081	18.39	19.50	1.291	0.105	/
	Back side			20525	836.5	25	0	-0.07	0.085	18.39	19.50	1.291	0.110	/
	Left side			20525	836.5	25	0	-0.18	0.025	18.39	19.50	1.291	0.032	/
	Top side			20525	836.5	25	0	0.17	0.089	18.39	19.50	1.291	0.115	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.9LTE Band 7 (20MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	RB num.	RB Start	Power Drift (dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head														
Ant.0	Left cheek	0mm	QPSK	21350	2560	1	0	-0.13	0.018	9.36	10.00	1.159	0.021	/
	Left tilt			21350	2560	1	0	0.09	0.015	9.36	10.00	1.159	0.017	/
	Right cheek			21350	2560	1	0	0.11	0.014	9.36	10.00	1.159	0.016	/
	Right tilt			21350	2560	1	0	0.08	0.011	9.36	10.00	1.159	0.013	/
	Left cheek			21350	2560	50	0	0.18	0.021	9.09	10.00	1.233	0.026	/
	Left tilt			21350	2560	50	0	-0.01	0.019	9.09	10.00	1.233	0.023	/
	Right cheek			21350	2560	50	0	-0.15	0.017	9.09	10.00	1.233	0.021	/
	Right tilt			21350	2560	50	0	-0.15	0.016	9.09	10.00	1.233	0.020	/
Ant.1	Left cheek	0mm	QPSK	21350	2560	1	0	0.05	0.045	9.91	10.50	1.146	0.052	/
	Left tilt			21350	2560	1	0	0.16	0.052	9.91	10.50	1.146	0.060	/
	Right cheek			21350	2560	1	0	-0.11	0.094	9.91	10.50	1.146	0.108	/
	Right tilt			21350	2560	1	0	-0.17	0.105	9.91	10.50	1.146	0.120	/
	Left cheek			21350	2560	50	0	-0.02	0.045	9.82	10.50	1.169	0.053	/
	Left tilt			21350	2560	50	0	-0.01	0.061	9.82	10.50	1.169	0.071	/
	Right cheek			21350	2560	50	0	0.13	0.103	9.82	10.50	1.169	0.120	/
	Right tilt			21350	2560	50	0	-0.01	0.107	9.82	10.50	1.169	0.125	17
Body-worn& Hotspot														
Ant.0	Front side	10mm	QPSK	21350	2535	1	0	0.13	0.050	9.36	10.00	1.159	0.058	/
	Back side			21350	2535	1	0	0.08	0.068	9.36	10.00	1.159	0.079	/
	Left side			21350	2535	1	0	-0.13	0.026	9.36	10.00	1.159	0.030	/
	Right side			21350	2535	1	0	0.07	0.053	9.36	10.00	1.159	0.061	/
	Bottom side			21350	2535	1	0	-0.05	0.080	9.36	10.00	1.159	0.093	/
	Front side			21350	2535	50	0	0.07	0.025	9.09	10.00	1.233	0.031	/
	Back side			21350	2535	50	0	-0.14	0.075	9.09	10.00	1.233	0.092	/
	Left side			21350	2535	50	0	0.17	0.023	9.09	10.00	1.233	0.028	/
	Right side			21350	2535	50	0	-0.17	0.053	9.09	10.00	1.233	0.065	/
	Bottom side			21350	2535	50	0	0.03	0.077	9.09	10.00	1.233	0.095	18
Ant.1	Front side	10mm	QPSK	21350	2535	1	0	0.01	0.050	9.91	10.50	1.146	0.057	/
	Back side			21350	2535	1	0	0.19	0.067	9.91	10.50	1.146	0.077	/
	Left side			21350	2535	1	0	0.14	0.028	9.91	10.50	1.146	0.032	/
	Top side			21350	2535	1	0	-0.08	0.069	9.91	10.50	1.146	0.079	/
	Front side			21350	2535	50	0	-0.09	0.038	9.82	10.50	1.169	0.044	/
	Back side			21350	2535	50	0	0.05	0.075	9.82	10.50	1.169	0.088	/
	Left side			21350	2535	50	0	0.17	0.041	9.82	10.50	1.169	0.048	/
	Top side			21350	2535	50	0	-0.05	0.079	9.82	10.50	1.169	0.092	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.10 LTE Band 41 (20MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	RB num.	RB Start	Power Drift (dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. no.
Head														
Ant.0	Left cheek	0mm	QPSK	40640	2595	1	0	0.18	0.020	11.83	12.50	1.167	0.023	/
	Left tilt			40640	2595	1	0	-0.12	0.018	11.83	12.50	1.167	0.021	/
	Right cheek			40640	2595	1	0	-0.15	0.021	11.83	12.50	1.167	0.025	/
	Right tilt			40640	2595	1	0	-0.09	0.019	11.83	12.50	1.167	0.022	/
	Left cheek			40640	2595	50	0	0.14	0.022	11.56	12.50	1.242	0.027	/
	Left tilt			40640	2595	50	0	0.17	0.019	11.56	12.50	1.242	0.024	/
	Right cheek			40640	2595	50	0	0.02	0.023	11.56	12.50	1.242	0.029	/
	Right tilt			40640	2595	50	0	0.08	0.020	11.56	12.50	1.242	0.025	/
Ant.1	Left cheek	0mm	QPSK	40640	2595	1	0	-0.16	0.023	12.37	13.00	1.156	0.027	/
	Left tilt			40640	2595	1	0	0.12	0.041	12.37	13.00	1.156	0.047	/
	Right cheek			40640	2595	1	0	0.17	0.071	12.37	13.00	1.156	0.082	/
	Right tilt			40640	2595	1	0	-0.05	0.086	12.37	13.00	1.156	0.099	/
	Left cheek			40640	2595	50	0	0.13	0.020	12.33	13.00	1.167	0.023	/
	Left tilt			40640	2595	50	0	0.04	0.039	12.33	13.00	1.167	0.046	/
	Right cheek			40640	2595	50	0	0.08	0.075	12.33	13.00	1.167	0.088	/
	Right tilt			40640	2595	50	0	-0.09	0.126	12.33	13.00	1.167	0.147	19
Body-worn& Hotspot														
Ant.0	Front side	10mm	QPSK	40640	2595	1	50	0.07	0.026	11.83	12.50	1.167	0.030	/
	Back side			40640	2595	1	50	0.01	0.086	11.83	12.50	1.167	0.100	/
	Left side			40640	2595	1	50	0.12	0.050	11.83	12.50	1.167	0.058	/
	Right side			40640	2595	1	50	-0.06	0.028	11.83	12.50	1.167	0.033	/
	Bottom side			40640	2595	1	50	0.100	0.101	11.83	12.50	1.167	0.118	/
	Front side			40640	2595	50	0	0.19	0.028	11.56	12.50	1.242	0.035	/
	Back side			40640	2595	50	0	-0.19	0.092	11.56	12.50	1.242	0.114	/
	Left side			40640	2595	50	0	0.08	0.056	11.56	12.50	1.242	0.070	/
	Right side			40640	2595	50	0	0.03	0.056	11.56	12.50	1.242	0.070	/
	Bottom side			40640	2595	50	0	0.04	0.104	11.56	12.50	1.242	0.129	20
Ant.1	Front side	10mm	QPSK	40640	2595	1	50	0.02	0.050	12.37	13.00	1.156	0.058	/
	Back side			40640	2595	1	50	-0.01	0.075	12.37	13.00	1.156	0.087	/
	Left side			40640	2595	1	50	-0.01	0.038	12.37	13.00	1.156	0.044	/
	Top side			40640	2595	1	50	0.16	0.099	12.37	13.00	1.156	0.114	/
	Front side			40640	2595	50	0	0.12	0.056	12.33	13.00	1.167	0.065	/
	Back side			40640	2595	50	0	-0.06	0.087	12.33	13.00	1.167	0.102	/
	Left side			40640	2595	50	0	0.06	0.021	12.33	13.00	1.167	0.025	/
	Top side			40640	2595	50	0	0.14	0.099	12.33	13.00	1.167	0.116	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.11 WIFI 2.4GHz

Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Left cheek	0mm	802.11b	11	2462	0.15	0.292	14.53	15.50	1.250	99.17	1.008	0.368	21
Left tilt			11	2462	-0.08	0.258	14.53	15.50	1.250	99.17	1.008	0.325	/
Right cheek			11	2462	0.06	0.119	14.53	15.50	1.250	99.17	1.008	0.150	/
Right tilt			11	2462	-0.16	0.092	14.53	15.50	1.250	99.17	1.008	0.116	/
Body-worn& Hotspot													
Front side	10mm	802.11b	11	2462	0.06	0.038	14.53	15.50	1.250	99.17	1.008	0.048	/
Back side			11	2462	0.12	0.136	14.53	15.50	1.250	99.17	1.008	0.171	22
Right side			11	2462	0.05	0.116	14.53	15.50	1.250	99.17	1.008	0.146	/
Top side			11	2462	-0.04	0.020	14.53	15.50	1.250	99.17	1.008	0.025	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.12 WIFI 5GHz

Test Band	Test Position	Dist.	Test Mode	Test Channe	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
5.3G	Left cheek	0mm	802.11a	64	5320	0.07	0.348	17.56	18.50	1.242	96.87	1.032	0.446	23
	Left tilt			64	5320	0.11	0.273	17.56	18.50	1.242	96.87	1.032	0.350	/
	Right cheek			64	5320	-0.12	0.114	17.56	18.50	1.242	96.87	1.032	0.146	/
	Right tilt			64	5320	-0.03	0.115	17.56	18.50	1.242	96.87	1.032	0.147	/
5.6G	Left cheek	0mm	802.11a	116	5580	-0.18	0.379	16.88	18.00	1.294	96.87	1.032	0.506	24
	Left tilt			116	5580	-0.03	0.325	16.88	18.00	1.294	96.87	1.032	0.434	/
	Right cheek			116	5580	-0.03	0.139	16.88	18.00	1.294	96.87	1.032	0.186	/
	Right tilt			116	5580	-0.09	0.118	16.88	18.00	1.294	96.87	1.032	0.158	/
5.8G	Left cheek	0mm	802.11a	149	5745	0.01	0.303	17.46	18.50	1.271	96.87	1.032	0.397	25
	Left tilt			149	5745	0.18	0.238	17.46	18.50	1.271	96.87	1.032	0.312	/
	Right cheek			149	5745	0.15	0.136	17.46	18.50	1.271	96.87	1.032	0.178	/
	Right tilt			149	5745	0.11	0.094	17.46	18.50	1.271	96.87	1.032	0.123	/
Body-wron														
5.3G	Front side	10mm	802.11a	64	5320	-0.17	0.124	17.56	18.50	1.242	96.87	1.032	0.159	/
	Back side			64	5320	0.19	0.257	17.56	18.50	1.242	96.87	1.032	0.329	26
5.6G	Front side	10mm	802.11a	116	5580	0.15	0.137	16.88	18.00	1.294	96.87	1.032	0.183	/
	Back side			116	5580	-0.11	0.231	16.88	18.00	1.294	96.87	1.032	0.309	27
5.8G	Front side	10mm	802.11a	149	5745	0.12	0.126	17.46	18.50	1.271	96.87	1.032	0.165	/
	Back side			149	5745	-0.16	0.279	17.46	18.50	1.271	96.87	1.032	0.366	28
Hotspot														
5.2G	Front side	10mm	802.11a	48	5240	0.17	0.104	17.59	18.50	1.233	96.87	1.032	0.132	/
	Back side			48	5240	-0.18	0.172	17.59	18.50	1.233	96.87	1.032	0.219	/
	Right side			48	5240	-0.04	0.188	17.59	18.50	1.233	96.87	1.032	0.239	29
	Top side			48	5240	0.04	0.068	17.59	18.50	1.233	96.87	1.032	0.087	/
5.8G	Front side	10mm	802.11a	149	5745	0.12	0.126	17.46	18.50	1.271	96.87	1.032	0.165	/
	Back side			149	5745	-0.16	0.279	17.46	18.50	1.271	96.87	1.032	0.366	/
	Right side			149	5745	0.17	0.310	17.46	18.50	1.271	96.87	1.032	0.407	30
	Top side			149	5745	0.10	0.121	17.46	18.50	1.271	96.87	1.032	0.159	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

Test Band	Test Position	Dist.	Test Mode	Test Channe	Freq. (MHz)	Power Drift(dB)	Measured 10-g SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity														
5.3G	Front side	0mm	802.11a	64	5320	0.04	0.224	17.56	18.50	1.242	96.87	1.032	0.287	/
	Back side			64	5320	0.04	0.305	17.56	18.50	1.242	96.87	1.032	0.391	/
	Right side			64	5320	-0.18	0.309	17.56	18.50	1.242	96.87	1.032	0.396	31
	Top side			64	5320	-0.04	0.261	17.56	18.50	1.242	96.87	1.032	0.335	/
5.6G	Front side	0mm	802.11a	116	5580	-0.19	0.276	16.88	18.00	1.294	96.87	1.032	0.369	/
	Back side			116	5580	-0.10	0.375	16.88	18.00	1.294	96.87	1.032	0.501	/
	Right side			116	5580	-0.19	0.403	16.88	18.00	1.294	96.87	1.032	0.538	32
	Top side			116	5580	0.16	0.251	16.88	18.00	1.294	96.87	1.032	0.336	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.13 Bluetooth

Test Position	Dist.	Test Mode	Test Channel	Freq. (MHz)	Power Drift(dB)	Measured 1-g SAR (W/kg)	Meas. Power (dBm)	Tune-up Limit (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Left cheek	0mm	DH5	78	2480	0.03	0.177	13.75	15.00	1.333	77.20	1.295	0.306	33
Left tilt			78	2480	0.12	0.100	13.75	15.00	1.333	77.20	1.295	0.173	/
Right cheek			78	2480	-0.05	0.042	13.75	15.00	1.333	77.20	1.295	0.073	/
Right tilt			78	2480	0.09	0.021	13.75	15.00	1.333	77.20	1.295	0.036	/
Body-worn& Hotspot													
Front side	10mm	DH5	78	2480	0.12	0.025	13.75	15.00	1.333	77.20	1.295	0.043	/
Back side			78	2480	-0.14	0.059	13.75	15.00	1.333	77.20	1.295	0.102	/
Right side			78	2480	0.03	0.072	13.75	15.00	1.333	77.20	1.295	0.124	34
Top side			78	2480	0.15	0.027	13.75	15.00	1.333	77.20	1.295	0.047	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.14 NFC

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

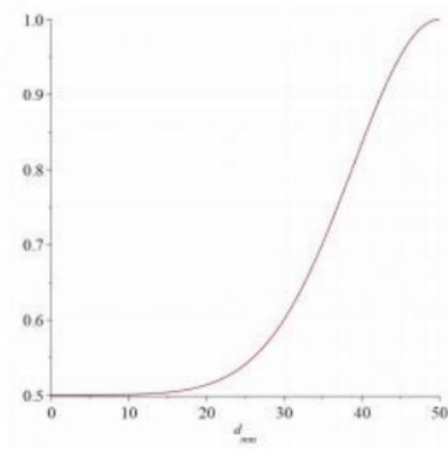
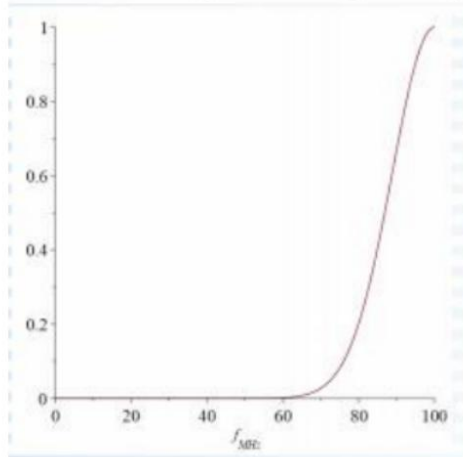
$$P_{7X}(d_{mm}, f_{MHz}) := \begin{cases} P_{6S}(d_{mm}, f_{MHz}) & f_{MHz} \leq 100 \\ P_{6to7}(d_{mm}, f_{MHz}) & 100 < f_{MHz} \leq 300 \\ P_7(d_{mm}, f_{MHz}) & 300 < f_{MHz} \end{cases}$$

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.

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

3. The smoothing functions Sf and Sd 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
Sf(fMHz)	0.000568861		Sd（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.				

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 EIRP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies $\leq$ 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 EIRP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship: $E = \text{EIRP} - 20\log D + 104.8$

where:

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

EIRP = 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	50.14	3	6	-28.66
Note: 1. Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies $\leq$ 30 MHz). 2.ERP= 50.14+20*Log(10) - 104.8 + 6 =-28.66 (dBm)					

According to the FCC KDB 447498 D04

Estimated SAR: SAR test =1.6 · Pant / Pth [W/kg]

Estimated SAR	1.6 · Pant / Pth [W/kg]		
Pmeas.(dBm)	-28.66	Pmeas.(mW)	0.001
Pth.(mW)	443.13		
NFC Estimated 1g SAR [W/kg]	<0.001		

11 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated ^{1st} Measured SAR (W/kg)	Largest to Smallest SAR Radio
850	GSM	Head	Right Cheek	0.855	Yes	0.821	1.04

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

12 SIMULTANEOUS TRANSMISSION

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

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
1	WWAN+2.4G WIFI	Yes	Yes	Yes
2	WWAN+BT	Yes	Yes	Yes
3	WWAN+5G WIFI	Yes	Yes	Yes
4	WWAN+5G WIFI+BT	Yes	Yes	Yes

Note:

1. WWAN antennas can switch automatically, the standards supported by WWAN are(GSM Voice/GPRS/EDGE/WCDMA/LTE).
2. 2.4G WIFI can't transmit simultaneously with Bluetooth or 5G WIFI.
3. When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
4. The maximum SAR summation is calculated based on the same configuration and test position.

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Sum Head SAR of Simultaneous Transmission

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4G WIFI	5G WIFI Max.	Bluetooth	1+2	1+3+4
GSM850	Ant.0	Left cheek	0.026	0.368	0.506	0.306	0.394	0.838
		Left Tilt	0.021	0.325	0.434	0.173	0.346	0.628
		Right Cheek	0.034	0.150	0.186	0.073	0.184	0.293
		Right Tilt	0.027	0.116	0.158	0.036	0.143	0.221
	Ant.1	Left cheek	0.653	0.368	0.506	0.306	1.022	1.465
		Left Tilt	0.613	0.325	0.434	0.173	0.938	1.220
		Right Cheek	1.002	0.150	0.186	0.073	1.152	1.260
		Right Tilt	0.935	0.116	0.158	0.036	1.051	1.129
GSM1900	Ant.0	Left cheek	0.026	0.368	0.506	0.306	0.394	0.838
		Left Tilt	0.022	0.325	0.434	0.173	0.347	0.629
		Right Cheek	0.034	0.150	0.186	0.073	0.184	0.292
		Right Tilt	0.027	0.116	0.158	0.036	0.143	0.221
	Ant.1	Left cheek	0.210	0.368	0.506	0.306	0.578	1.022
		Left Tilt	0.254	0.325	0.434	0.173	0.579	0.861
		Right Cheek	0.355	0.150	0.186	0.073	0.505	0.613
		Right Tilt	0.478	0.116	0.158	0.036	0.594	0.672
WCDMA B2	Ant.0	Left cheek	0.029	0.368	0.506	0.306	0.397	0.841
		Left Tilt	0.025	0.325	0.434	0.173	0.350	0.632
		Right Cheek	0.036	0.150	0.186	0.073	0.186	0.294
		Right Tilt	0.030	0.116	0.158	0.036	0.146	0.224
	Ant.1	Left cheek	0.204	0.368	0.506	0.306	0.573	1.016
		Left Tilt	0.249	0.325	0.434	0.173	0.574	0.856
		Right Cheek	0.333	0.150	0.186	0.073	0.483	0.591
		Right Tilt	0.398	0.116	0.158	0.036	0.514	0.592
WCDMA B4	Ant.0	Left cheek	0.029	0.368	0.506	0.306	0.397	0.841
		Left Tilt	0.024	0.325	0.434	0.173	0.349	0.631
		Right Cheek	0.036	0.150	0.186	0.073	0.186	0.294
		Right Tilt	0.034	0.116	0.158	0.036	0.150	0.228
	Ant.1	Left cheek	0.241	0.368	0.506	0.306	0.609	1.053
		Left Tilt	0.298	0.325	0.434	0.173	0.623	0.904
		Right Cheek	0.382	0.150	0.186	0.073	0.532	0.640
		Right Tilt	0.456	0.116	0.158	0.036	0.572	0.649
WCDMA B5	Ant.0	Left cheek	0.045	0.368	0.506	0.306	0.413	0.857
		Left Tilt	0.038	0.325	0.434	0.173	0.363	0.644
		Right Cheek	0.036	0.150	0.186	0.073	0.186	0.294
		Right Tilt	0.028	0.116	0.158	0.036	0.143	0.221

	Ant.1	Left cheek	0.486	0.368	0.506	0.306	0.854	1.298
		Left Tilt	0.457	0.325	0.434	0.173	0.783	1.064
		Right Cheek	0.513	0.150	0.186	0.073	0.663	0.771
		Right Tilt	0.497	0.116	0.158	0.036	0.613	0.691
LTE B2	Ant.0	Left cheek	0.048	0.368	0.506	0.306	0.416	0.860
		Left Tilt	0.046	0.325	0.434	0.173	0.371	0.652
		Right Cheek	0.035	0.150	0.186	0.073	0.185	0.293
		Right Tilt	0.030	0.116	0.158	0.036	0.146	0.224
	Ant.1	Left cheek	0.217	0.368	0.506	0.306	0.586	1.029
		Left Tilt	0.263	0.325	0.434	0.173	0.588	0.870
		Right Cheek	0.406	0.150	0.186	0.073	0.556	0.665
		Right Tilt	0.498	0.116	0.158	0.036	0.614	0.692
LTE B4	Ant.0	Left cheek	0.061	0.368	0.506	0.306	0.429	0.873
		Left Tilt	0.057	0.325	0.434	0.173	0.382	0.664
		Right Cheek	0.050	0.150	0.186	0.073	0.200	0.309
		Right Tilt	0.044	0.116	0.158	0.036	0.160	0.238
	Ant.1	Left cheek	0.286	0.368	0.506	0.306	0.654	1.098
		Left Tilt	0.345	0.325	0.434	0.173	0.670	0.952
		Right Cheek	0.450	0.150	0.186	0.073	0.600	0.708
		Right Tilt	0.557	0.116	0.158	0.036	0.673	0.751
LTE B5	Ant.0	Left cheek	0.060	0.368	0.506	0.306	0.428	0.872
		Left Tilt	0.054	0.325	0.434	0.173	0.380	0.661
		Right Cheek	0.046	0.150	0.186	0.073	0.196	0.305
		Right Tilt	0.044	0.116	0.158	0.036	0.160	0.238
	Ant.1	Left cheek	0.338	0.368	0.506	0.306	0.706	1.150
		Left Tilt	0.334	0.325	0.434	0.173	0.660	0.941
		Right Cheek	0.347	0.150	0.186	0.073	0.497	0.606
		Right Tilt	0.276	0.116	0.158	0.036	0.392	0.470
LTE B7	Ant.0	Left cheek	0.026	0.368	0.506	0.306	0.394	0.838
		Left Tilt	0.023	0.325	0.434	0.173	0.349	0.630
		Right Cheek	0.021	0.150	0.186	0.073	0.171	0.279
		Right Tilt	0.020	0.116	0.158	0.036	0.136	0.214
	Ant.1	Left cheek	0.053	0.368	0.506	0.306	0.421	0.865
		Left Tilt	0.071	0.325	0.434	0.173	0.397	0.678
		Right Cheek	0.120	0.150	0.186	0.073	0.270	0.379
		Right Tilt	0.125	0.116	0.158	0.036	0.241	0.319
LTE 41	Ant.0	Left cheek	0.027	0.368	0.506	0.306	0.395	0.839
		Left Tilt	0.024	0.325	0.434	0.173	0.349	0.630
		Right Cheek	0.029	0.150	0.186	0.073	0.179	0.287
		Right Tilt	0.025	0.116	0.158	0.036	0.141	0.219
	Ant.1	Left cheek	0.027	0.368	0.506	0.306	0.395	0.839
		Left Tilt	0.047	0.325	0.434	0.173	0.373	0.654
		Right Cheek	0.088	0.150	0.186	0.073	0.238	0.346

		Right Tilt	0.147	0.116	0.158	0.036	0.263	0.341
Note: The highest Summed 1g SAR is 1.465 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.								

12.2.2 Sum Body-worn SAR of Simultaneous Transmission

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4G WIFI	5G WIFI Max	Bluetooth	1+2	1+3+4
GSM850	Ant.0	Front Side	0.026	0.048	0.183	0.043	0.074	0.252
		Back Side	0.022	0.171	0.366	0.102	0.194	0.490
	Ant.1	Front Side	0.186	0.048	0.183	0.043	0.234	0.412
		Back Side	0.237	0.171	0.366	0.102	0.408	0.705
GSM1900	Ant.0	Front Side	0.028	0.048	0.183	0.043	0.076	0.254
		Back Side	0.072	0.171	0.366	0.102	0.243	0.540
	Ant.1	Front Side	0.128	0.048	0.183	0.043	0.176	0.354
		Back Side	0.178	0.171	0.366	0.102	0.349	0.645
WCDMA B2	Ant.0	Front Side	0.031	0.048	0.183	0.043	0.079	0.257
		Back Side	0.056	0.171	0.366	0.102	0.227	0.524
	Ant.1	Front Side	0.093	0.048	0.183	0.043	0.140	0.319
		Back Side	0.173	0.171	0.366	0.102	0.345	0.641
WCDMA B4	Ant.0	Front Side	0.034	0.048	0.183	0.043	0.082	0.260
		Back Side	0.074	0.171	0.366	0.102	0.245	0.541
	Ant.1	Front Side	0.109	0.048	0.183	0.043	0.157	0.335
		Back Side	0.167	0.171	0.366	0.102	0.338	0.634
WCDMA B5	Ant.0	Front Side	0.029	0.048	0.183	0.043	0.077	0.255
		Back Side	0.079	0.171	0.366	0.102	0.250	0.547
	Ant.1	Front Side	0.136	0.048	0.183	0.043	0.184	0.362
		Back Side	0.198	0.171	0.366	0.102	0.369	0.666
LTE B2	Ant.0	Front Side	0.036	0.048	0.183	0.043	0.084	0.262
		Back Side	0.058	0.171	0.366	0.102	0.230	0.526
	Ant.1	Front Side	0.097	0.048	0.183	0.043	0.145	0.323
		Back Side	0.179	0.171	0.366	0.102	0.350	0.646
LTE B4	Ant.0	Front Side	0.032	0.048	0.183	0.043	0.080	0.258
		Back Side	0.090	0.171	0.366	0.102	0.262	0.558
	Ant.1	Front Side	0.133	0.048	0.183	0.043	0.181	0.360
		Back Side	0.199	0.171	0.366	0.102	0.371	0.667
LTE B5	Ant.0	Front Side	0.027	0.048	0.183	0.043	0.075	0.253
		Back Side	0.041	0.171	0.366	0.102	0.212	0.509
	Ant.1	Front Side	0.105	0.048	0.183	0.043	0.152	0.331
		Back Side	0.110	0.171	0.366	0.102	0.281	0.578
LTE B7	Ant.0	Front Side	0.058	0.048	0.183	0.043	0.106	0.284

	Ant.1	Back Side	0.092	0.171	0.366	0.102	0.264	0.560
		Front Side	0.057	0.048	0.183	0.043	0.105	0.283
		Back Side	0.088	0.171	0.366	0.102	0.259	0.556
LTE B41	Ant.0	Front Side	0.035	0.048	0.183	0.043	0.083	0.261
		Back Side	0.114	0.171	0.366	0.102	0.286	0.582
	Ant.1	Front Side	0.065	0.048	0.183	0.043	0.113	0.292
		Back Side	0.102	0.171	0.366	0.102	0.273	0.569

Note: The highest Summed 1g SAR is 0.705 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.3 Sum Hotspot SAR of Simultaneous Transmission

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	1+2	1+3+4
			WWAN	2.4G WIFI	5G WIFI Max	Bluetooth		
GSM850	Ant.0	Front Side	0.026	0.048	0.165	0.043	0.074	0.234
		Back Side	0.022	0.171	0.366	0.102	0.194	0.490
		Left Side	0.018	0.000	0.000	0.000	0.018	0.018
		Right Side	0.021	0.146	0.407	0.124	0.167	0.552
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.036	0.000	0.000	0.000	0.036	0.036
	Ant.1	Front Side	0.186	0.048	0.165	0.043	0.234	0.394
		Back Side	0.237	0.171	0.366	0.102	0.408	0.705
		Left Side	0.080	0.000	0.000	0.000	0.080	0.080
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.245	0.025	0.159	0.047	0.270	0.450
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
GSM1900	Ant.0	Front Side	0.028	0.048	0.165	0.043	0.076	0.236
		Back Side	0.072	0.171	0.366	0.102	0.243	0.540
		Left Side	0.037	0.000	0.000	0.000	0.037	0.037
		Right Side	0.043	0.146	0.407	0.124	0.189	0.574
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.066	0.000	0.000	0.000	0.066	0.066
	Ant.1	Front Side	0.128	0.048	0.165	0.043	0.176	0.337
		Back Side	0.178	0.171	0.366	0.102	0.349	0.645
		Left Side	0.080	0.000	0.000	0.000	0.080	0.080
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.300	0.025	0.159	0.047	0.325	0.505
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B2	Ant.0	Front Side	0.031	0.048	0.165	0.043	0.079	0.240
		Back Side	0.056	0.171	0.366	0.102	0.227	0.524
		Left Side	0.031	0.000	0.000	0.000	0.031	0.031

		Right Side	0.037	0.146	0.407	0.124	0.184	0.568
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.067	0.000	0.000	0.000	0.067	0.067
	Ant.1	Front Side	0.093	0.048	0.165	0.043	0.140	0.301
		Back Side	0.173	0.171	0.366	0.102	0.345	0.641
		Left Side	0.070	0.000	0.000	0.000	0.070	0.070
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.248	0.025	0.159	0.047	0.273	0.453
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B4	Ant.0	Front Side	0.034	0.048	0.165	0.043	0.082	0.242
		Back Side	0.074	0.171	0.366	0.102	0.245	0.541
		Left Side	0.036	0.000	0.000	0.000	0.036	0.036
		Right Side	0.024	0.146	0.407	0.124	0.170	0.555
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.086	0.000	0.000	0.000	0.086	0.086
	Ant.1	Front Side	0.109	0.048	0.165	0.043	0.157	0.317
		Back Side	0.167	0.171	0.366	0.102	0.338	0.634
		Left Side	0.069	0.000	0.000	0.000	0.069	0.069
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.224	0.025	0.159	0.047	0.249	0.429
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B5	Ant.0	Front Side	0.029	0.048	0.165	0.043	0.077	0.237
		Back Side	0.079	0.171	0.366	0.102	0.250	0.547
		Left Side	0.028	0.000	0.000	0.000	0.028	0.028
		Right Side	0.023	0.146	0.407	0.124	0.169	0.553
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.080	0.000	0.000	0.000	0.080	0.080
	Ant.1	Front Side	0.136	0.048	0.165	0.043	0.184	0.344
		Back Side	0.198	0.171	0.366	0.102	0.369	0.666
		Left Side	0.066	0.000	0.000	0.000	0.066	0.066
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.173	0.025	0.159	0.047	0.198	0.378
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
LTE B2	Ant.0	Front Side	0.036	0.048	0.165	0.043	0.084	0.245
		Back Side	0.058	0.171	0.366	0.102	0.230	0.526
		Left Side	0.029	0.000	0.000	0.000	0.029	0.029
		Right Side	0.033	0.146	0.407	0.124	0.179	0.564
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.059	0.000	0.000	0.000	0.059	0.059
	Ant.1	Front Side	0.097	0.048	0.165	0.043	0.145	0.306
		Back Side	0.179	0.171	0.366	0.102	0.350	0.646
		Left Side	0.045	0.000	0.000	0.000	0.045	0.045
		Right Side	0.049	0.146	0.407	0.124	0.195	0.580

		Top Side	0.276	0.025	0.159	0.047	0.301	0.481
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
LTE B4	Ant.0	Front Side	0.032	0.048	0.165	0.043	0.080	0.241
		Back Side	0.090	0.171	0.366	0.102	0.262	0.558
		Left Side	0.048	0.000	0.000	0.000	0.048	0.048
		Right Side	0.046	0.146	0.407	0.124	0.192	0.577
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.106	0.000	0.000	0.000	0.106	0.106
	Ant.1	Front Side	0.133	0.048	0.165	0.043	0.181	0.342
		Back Side	0.199	0.171	0.366	0.102	0.371	0.667
		Left Side	0.042	0.000	0.000	0.000	0.042	0.042
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.269	0.025	0.159	0.047	0.294	0.474
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
LTE B5	Ant.0	Front Side	0.027	0.048	0.165	0.043	0.075	0.235
		Back Side	0.041	0.171	0.366	0.102	0.212	0.509
		Left Side	0.032	0.000	0.000	0.000	0.032	0.032
		Right Side	0.038	0.146	0.407	0.124	0.184	0.568
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.059	0.000	0.000	0.000	0.059	0.059
	Ant.1	Front Side	0.105	0.048	0.165	0.043	0.152	0.313
		Back Side	0.110	0.171	0.366	0.102	0.281	0.578
		Left Side	0.032	0.000	0.000	0.000	0.032	0.032
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.115	0.025	0.159	0.047	0.140	0.320
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
LTE B7	Ant.0	Front Side	0.058	0.048	0.165	0.043	0.106	0.266
		Back Side	0.092	0.171	0.366	0.102	0.264	0.560
		Left Side	0.030	0.000	0.000	0.000	0.030	0.030
		Right Side	0.065	0.146	0.407	0.124	0.212	0.596
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205
		Bottom Side	0.095	0.000	0.000	0.000	0.095	0.095
	Ant.1	Front Side	0.057	0.048	0.165	0.043	0.105	0.266
		Back Side	0.088	0.171	0.366	0.102	0.259	0.556
		Left Side	0.048	0.000	0.000	0.000	0.048	0.048
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.092	0.025	0.159	0.047	0.118	0.298
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
LTE B41	Ant.0	Front Side	0.035	0.048	0.165	0.043	0.083	0.243
		Back Side	0.114	0.171	0.366	0.102	0.286	0.582
		Left Side	0.070	0.000	0.000	0.000	0.070	0.070
		Right Side	0.070	0.146	0.407	0.124	0.216	0.600
		Top Side	0.000	0.025	0.159	0.047	0.025	0.205

		Bottom Side	0.129	0.000	0.000	0.000	0.129	0.129
	Ant.1	Front Side	0.065	0.048	0.165	0.043	0.113	0.274
		Back Side	0.102	0.171	0.366	0.102	0.273	0.569
		Left Side	0.044	0.000	0.000	0.000	0.044	0.044
		Right Side	0.000	0.146	0.407	0.124	0.146	0.531
		Top Side	0.116	0.025	0.159	0.047	0.141	0.321
		Bottom Side	0.000	0.000	0.000	0.000	0.000	0.000
Note: The highest Summed 1g SAR is 0.705 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.								

12.2.4 Highest Total Exposure Ratio of Simultaneous Transmission

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

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

maximum SAR value for Simultaneous Transmission is 1.465 [W/kg]. Therefore, the worst TER = (1.465+0.001)/1.6 = 0.916 < 1, the NFC SAR transmit simultaneously Pass.

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
835MHz Validation Dipole	Speag	D835V2	SN: 4d277	2024/08/30	2027/08/29
1750MHz Validation Dipole	Speag	D1750V2	SN: 1183	2024/09/03	2027/09/02
1950MHz Validation Dipole	Speag	D1950V3	SN: 1240	2024/08/22	2027/08/21
2450MHz Validation Dipole	Speag	D2450V2	SN: 1065	2024/09/05	2027/09/04
2600MHz Validation Dipole	Speag	D2600V2	SN: 1184	2024/08/30	2027/08/29
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1333	2024/09/04	2027/09/03
Data Acquisition Electronicsr	Speag	DAE4	SN: 878	2025/03/05	2026/03/04
E-Field Probe	Speag	EX3DV4	SN: 7893	2024/09/05	2025/09/04
Signal Generator	Keysight	N5173B	MY62150163	2024/08/12	2025/08/11
Power Meter	R&S	NRVD-B2	835843/014	2024/08/08	2025/08/07
Power Sensor	R&S	NRV-Z4	100381	2024/08/08	2025/08/07
Power Sensor	R&S	NRV-Z2	100211	2024/08/08	2025/08/07
Wireless Communication Test Set	Anritsu	MT8820C	6201502974	2024/08/01	2024/07/31
Network Analyzer	Agilent	E5071C	MY46103472	2024/09/11	2025/09/10
Thermometer	Elitech	RC-4HC	EF7216002985	2024/10/31	2025/10/30
Thermometer	Elitech	RC-4HC	EF720B004811	2024/10/31	2025/10/30
Power Amplifier	Mini-Circuits	ZVA-183W-S+	932502132	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1857	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 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 (%)
2025.5.20	Head	835	21.3	0.92	42.59	0.90	41.50	2.22	2.63
2025.5.22	Head	1750	21.5	1.40	39.48	1.37	40.08	2.19	-1.50
2025.5.21	Head	1950	20.9	1.46	39.19	1.40	40.00	4.29	-2.03
2025.5.22	Head	2450	21.5	1.83	38.66	1.80	39.20	1.67	-1.38
2025.5.23	Head	2600	20.6	1.98	38.33	1.96	39.01	1.02	-1.74
2025.5.18	Head	5300	20.4	4.79	35.19	4.76	35.87	0.63	-1.90
2025.5.19	Head	5600	21.7	4.96	34.58	5.07	35.53	-2.17	-2.67
2025.5.19	Head	5800	21.7	5.16	34.18	5.27	35.30	-2.09	-3.17

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 (%)
2025.5.20	Head	835	100	1.000	10.00	9.59	4.28
2025.5.22	Head	1750	100	3.860	38.60	36.50	5.75
2025.5.21	Head	1950	100	4.180	41.80	41.70	0.24
2025.5.22	Head	2450	100	5.040	50.40	52.60	-4.18
2025.5.23	Head	2600	100	5.520	55.20	55.30	-0.18
2025.5.18	Head	5300	100	8.150	81.50	79.00	3.16
2025.5.19	Head	5600	100	8.190	81.90	82.80	-1.09
2025.5.19	Head	5800	100	8.000	80.00	78.50	1.91

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

Head liquid 10g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2025.5.18	Head	5300	100	2.310	23.10	23.00	0.43
2025.5.19	Head	5600	100	2.300	23.00	24.00	-4.17

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

System Performance Check Data (835MHz)

Date: 2025/5/20

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.917 \text{ S/m}$; $\epsilon_r = 42.587$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7893; ConvF(8.85, 9.15, 9.38); Calibrated: 2024/9/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2025/3/5
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 835/Area Scan (71x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.35 W/kg

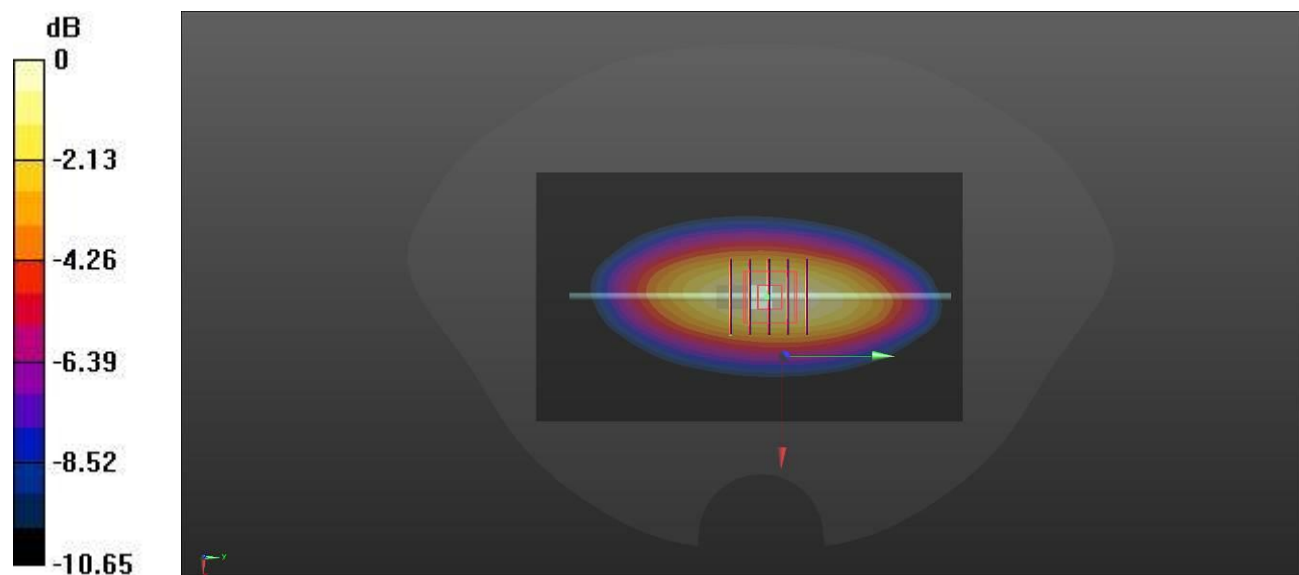
CW 835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.33 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 1 W/kg; SAR(10 g) = 0.656 W/kg

Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.38 W/kg

System Performance Check Data (1750MHz)

Date: 2025/5/22

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.395$ S/m; $\epsilon_r = 39.475$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7893; ConvF(7.57, 7.83, 8.02); Calibrated: 2024/9/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2025/3/5
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 1750/Area Scan (51x91x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 6.23 W/kg

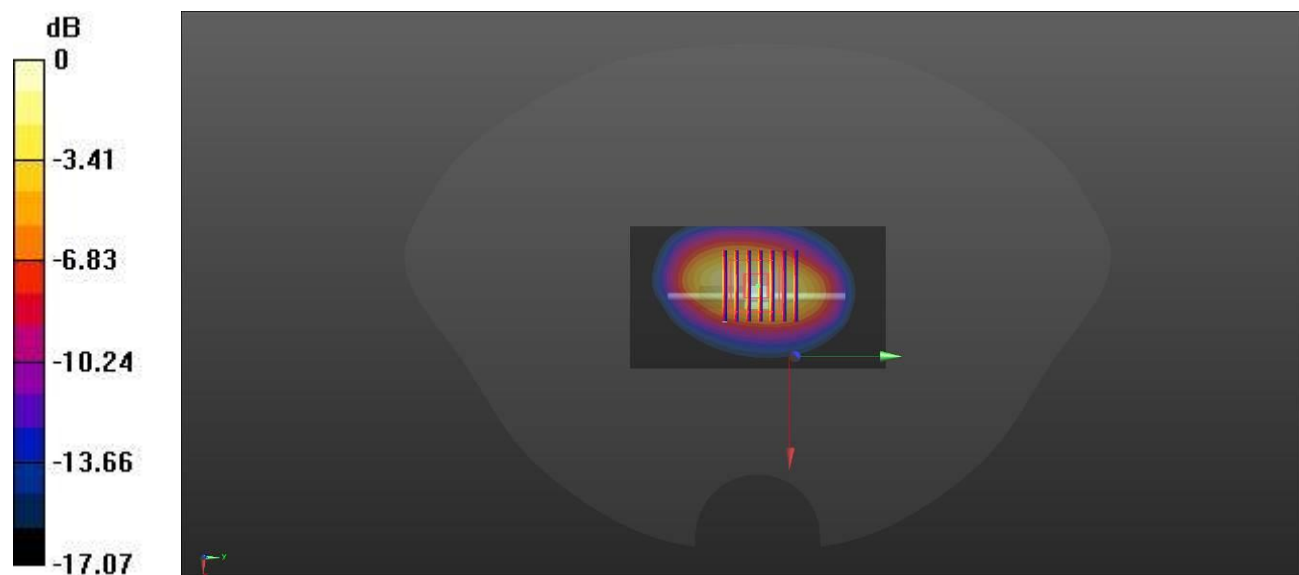
CW 1750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 51.77 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 7.35 W/kg

SAR(1 g) = 3.86 W/kg; SAR(10 g) = 2.03 W/kg

Maximum value of SAR (measured) = 6.06 W/kg



0 dB = 6.06 W/kg

System Performance Check Data (1950MHz)

Date: 2025/5/21

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

Medium parameters used: $f = 1950$ MHz; $\sigma = 1.456$ S/m; $\epsilon_r = 39.192$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 20.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7893; ConvF(7.34, 7.59, 7.78); Calibrated: 2024/9/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2025/3/5
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 1950/Area Scan (61x101x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 6.76 W/kg

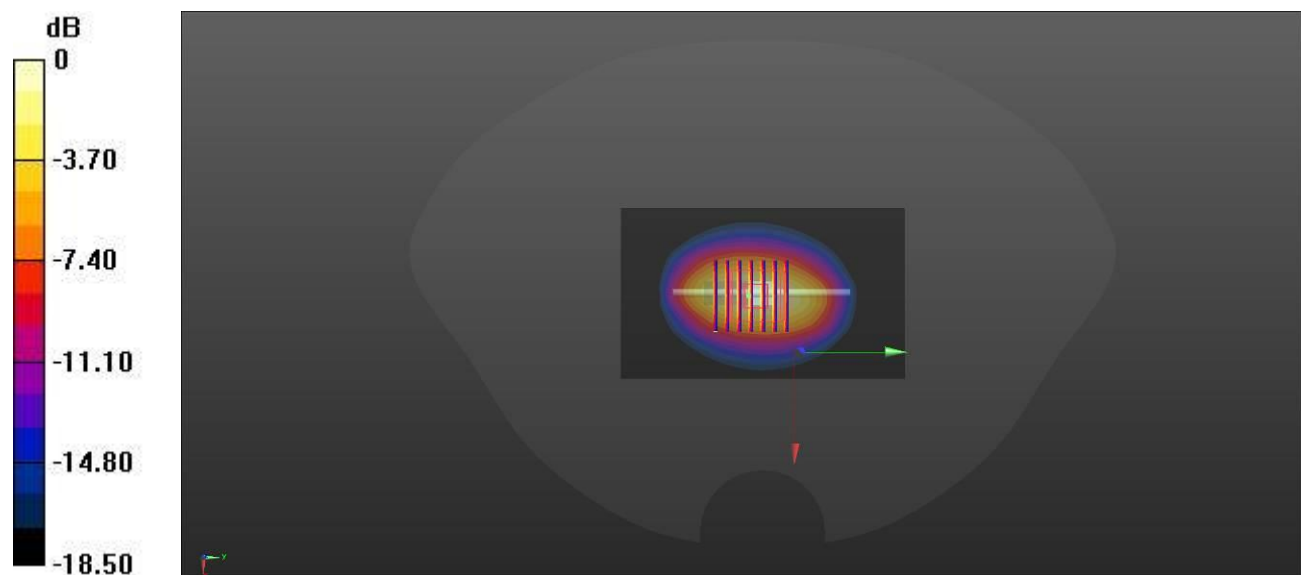
CW 1950/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 56.16 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 8.05 W/kg

SAR(1 g) = 4.18 W/kg; SAR(10 g) = 2.15 W/kg

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



0 dB = 6.61 W/kg

System Performance Check Data (2450MHz)

Date: 2025/5/22

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.834$ S/m; $\epsilon_r = 38.659$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7893; ConvF(6.98, 7.22, 7.4); Calibrated: 2024/9/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2025/3/5
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 2450/Area Scan (71x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 8.84 W/kg

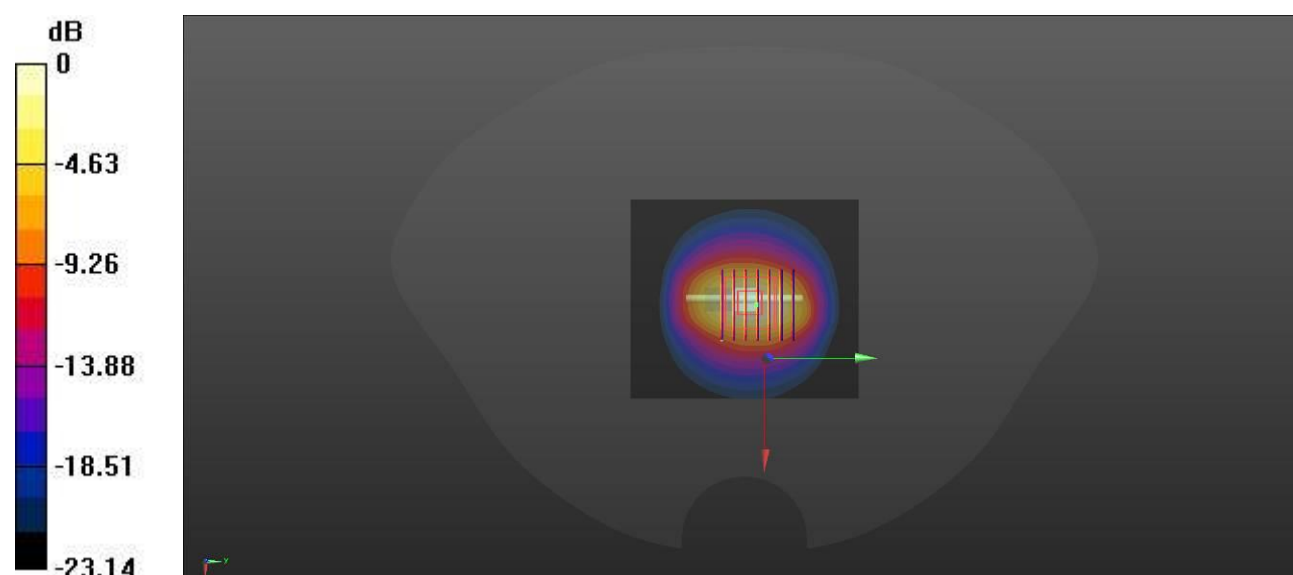
CW 2450/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 56.04 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 10.6 W/kg

SAR(1 g) = 5.04 W/kg; SAR(10 g) = 2.32 W/kg

Maximum value of SAR (measured) = 8.41 W/kg



0 dB = 8.41 W/kg

System Performance Check Data (2600MHz)

Date: 2025/5/23

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

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.975$ S/m; $\epsilon_r = 38.332$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 21.9°C Liquid Temperature: 20.6°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7893; ConvF(7.06, 7.3, 7.48); Calibrated: 2024/9/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2025/3/5
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 2600/Area Scan (71x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 9.74 W/kg

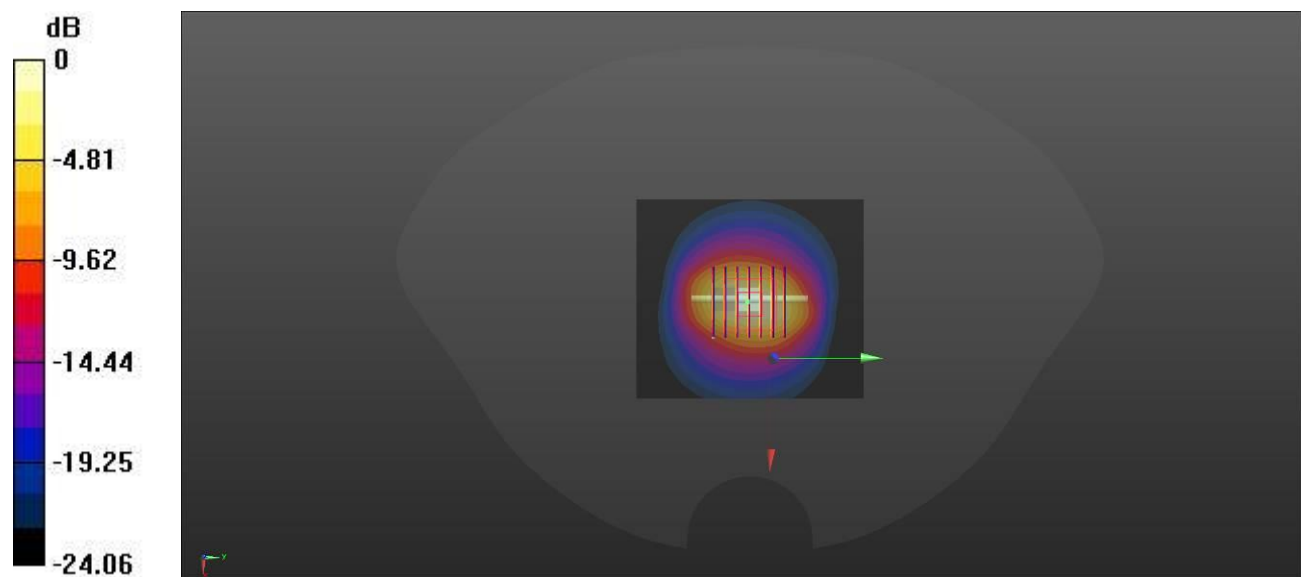
CW 2600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 57.40 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 12.1 W/kg

SAR(1 g) = 5.52 W/kg; SAR(10 g) = 2.45 W/kg

Maximum value of SAR (measured) = 9.57 W/kg



0 dB = 9.57 W/kg

System Performance Check Data (5300MHz)

Date: 2025/5/18

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.793$ S/m; $\epsilon_r = 35.188$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 21.8°C Liquid Temperature: 20.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7893; ConvF(5.44, 5.62, 5.76); Calibrated: 2024/9/5
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2025/3/5
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 5300/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 17.2 W/kg

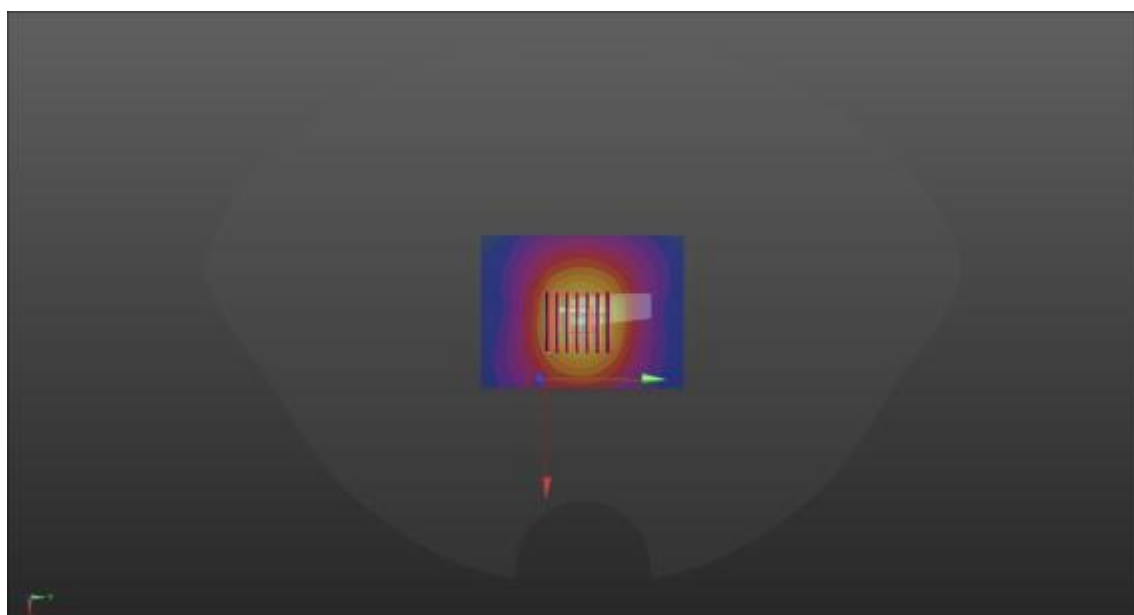
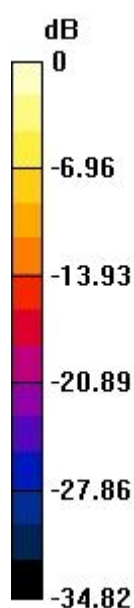
CW 5300/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 41.62 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 34.8 W/kg

SAR(1 g) = 8.15 W/kg; SAR(10 g) = 2.31 W/kg

Maximum value of SAR (measured) = 17.6 W/kg



0 dB = 17.6 W/kg

System Performance Check Data (5600MHz)

Date: 2025/5/19

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

Medium parameters used: $f = 5600$ MHz; $\sigma = 4.956$ S/m; $\epsilon_r = 34.579$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7893; ConvF(4.91, 5.08, 5.2); Calibrated: 2024/9/5
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2025/3/5
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 5600/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 17.4 W/kg

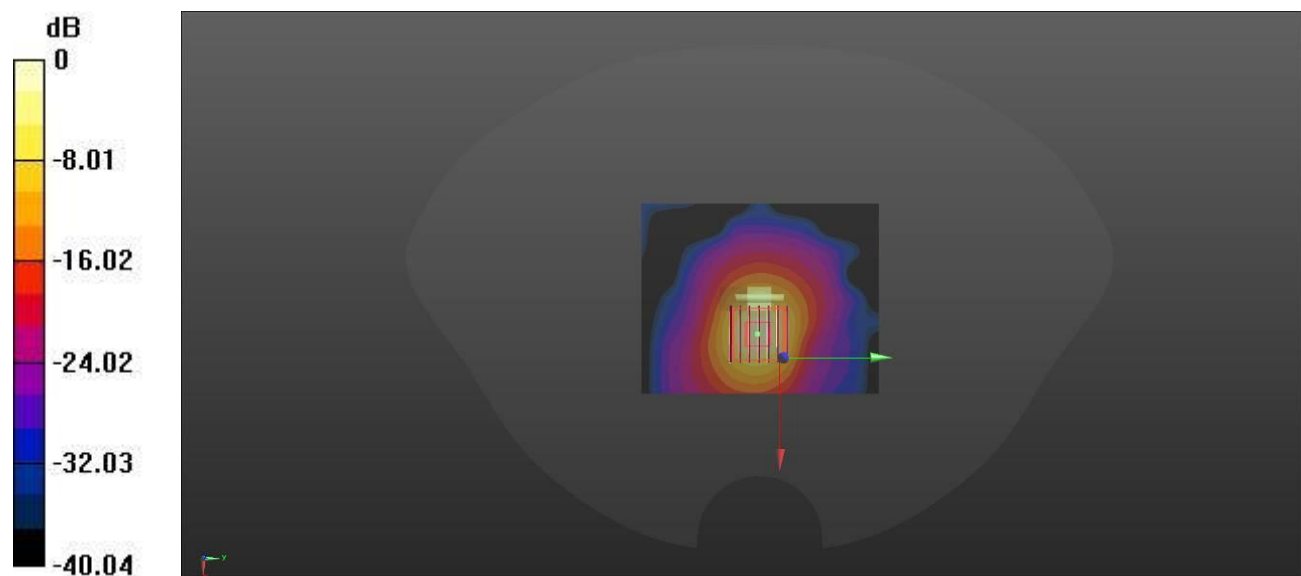
CW 5600/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 16.00 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 39.3 W/kg

SAR(1 g) = 8.19 W/kg; SAR(10 g) = 2.3 W/kg

Maximum value of SAR (measured) = 17.6 W/kg



0 dB = 17.6 W/kg

System Performance Check Data (5600MHz)

Date: 2025/5/19

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.159$ S/m; $\epsilon_r = 34.177$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7893; ConvF(4.98, 5.15, 5.27); Calibrated: 2024/9/5
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn878; Calibrated: 2025/3/5
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 5800/Area Scan (81x101x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 16.9 W/kg

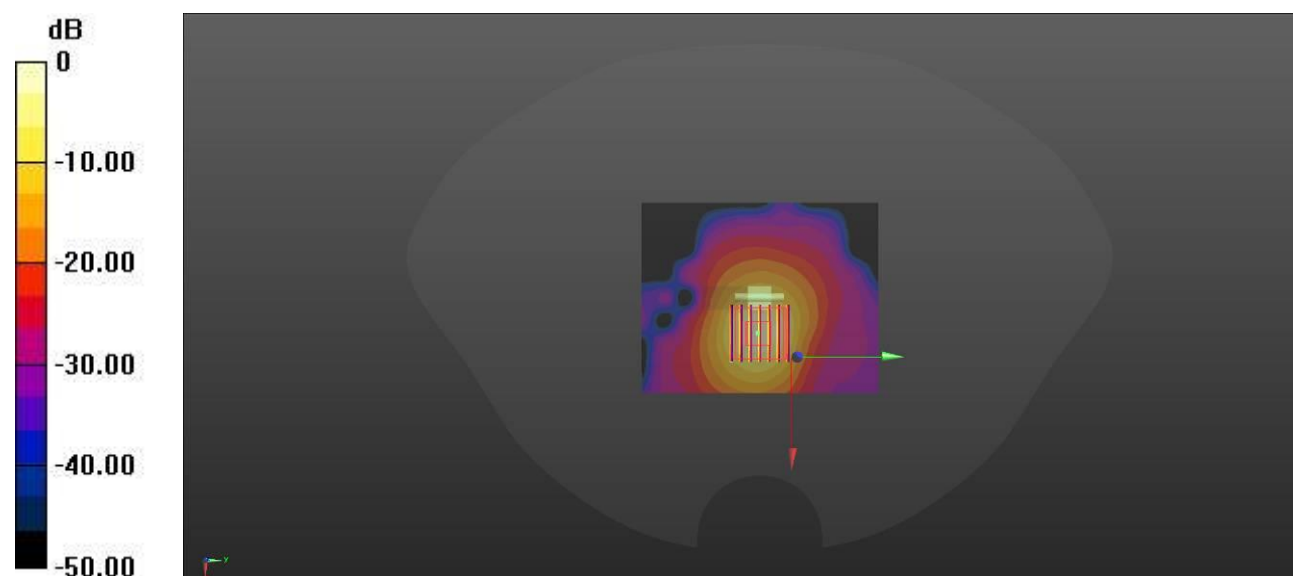
CW 5800/Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 15.97 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 37.1 W/kg

SAR(1 g) = 8 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 17.1 W/kg



0 dB = 17.1 W/kg

ANNEX C TEST DATA

Please refer the document “BL-SH2540336-AT.pdf”.

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2540336-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SH2540336-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SH2540336-AC.pdf”.

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