SAR EVALUATION REPORT

For

QUANZHOU BINQI ELECTRONIC TECHNOLOGY CO.LTD

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FCC ID: 2BNNE-BQ-V6

Report Type:	**Product Name:**
Original Report	4G LTE POC RADIO

Report Number:	RXM251016050-20B
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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	RXM251016050-20B	R1V1	2026-04-07	Initial Release

EUT Information	
Applicant:	QUANZHOU BINQI ELECTRONIC TECHNOLOGY CO.LTD
Product Type	Protable
Exposure Category:	Population / Uncontrolled
Body-Worn Accessories:	Belt Clip
Operation Mode :	FDD-LTE
Power Supply:	DC 3.7V from battery
Normal Operation:	Head/Body Supported
Frequency Band:	LTE Band 2: 1850-1910 MHz(TX), 1930-1990 MHz(RX) LTE Band 4: 1710-1755 MHz(TX), 2110-2155 MHz(RX) LTE Band 5: 824-849 MHz(TX), 869-894 MHz(RX) LTE Band 7: 2500-2570 MHz(TX), 2620-2690 MHz(RX) LTE Band 66: 1710-1780 MHz(TX), 2110-2180 MHz(RX)
Tested Model:	BQ-V6
Series Model:	N/A
Dimensions (L×W×H):	134 × 58× 32 mm
Product name:	4G LTE POC RADIO
Serial Number:	RXM251016050-1
Test Date:	2026-04-01

MODE	Max. SAR Level(s) Reported(W/kg)	Limit
LTE Band 2	0.22 W/kg 1g Head SAR 0.52 W/kg 1g Body SAR	**1.6 W/kg**
LTE Band 5	0.11 W/kg 1g Head SAR 0.22 W/kg 1g Body SAR	
LTE Band 7	0.26 W/kg 1g Head SAR 0.53 W/kg 1g Body SAR	
LTE Band 66&4	0.28 W/kg 1g Head SAR 0.41 W/kg 1g Body SAR	
Applicable Standards		
FCC 47 CFR part 2.1093 Radiofrequency radiation exposure evaluation: portable devices		
▲RF Exposure Procedures: TCB Workshop April 2019		
IEEE 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		
KDB procedures KDB 447498 D01 General RF Exposure Guidance v06 KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04 KDB 865664 D02 RF Exposure Reporting v01r02 KDB 941225 D05 SAR for LTE Devices v02r05		
Note: This wireless device has been shown to be capable of compliance for localized specific absorption rate (SAR) for General Population/Uncontrolled Exposure limits specified in **FCC 47 CFR part 2.1093** and has been tested in accordance with the measurement procedures specified in IEEE 1528-2013 and RF exposure KDB procedures. **The results and statements contained in this report pertain only to the device(s) evaluated.**		

All measurement and test data in this report was gathered from production sample serial number: RXM251016050-1 (Assigned by the BACL (Kunshan). The EUT supplied by the applicant was received on 2025-10-16.)

REFERENCE, STANDARDS, AND GUIDELINES

FCC:

The Report and Order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For consumer products, the applicable limit is 1.6 mW/g as recommended by the ANSI/IEEE standard C95.1-1992 [6] for an uncontrolled environment (Paragraph 65). According to the Supplement C of OET Bulletin 65 “Evaluating Compliance with FCC Guide-lines for Human Exposure to Radio frequency Electromagnetic Fields", released on Jun 29, 2001 by the FCC, the device should be evaluated at maximum output power (radiated from the antenna) under “worst-case” conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

This report describes the methodology and results of experiments performed on wireless data terminal. The objective was to determine if there is RF radiation and if radiation is found, what is the extent of radiation with respect to safety limits. SAR (Specific Absorption Rate) is the measure of RF exposure determined by the amount of RF energy absorbed by human body (or its parts) – to determine how the RF energy couples to the body or head which is a primary health concern for body worn devices. The limit below which the exposure to RF is considered safe by regulatory bodies in North America is 1.6 mW/g average over 1 gram of tissue mass.

SAR Limits

FCC Limit

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 1 g of tissue)	1.60	8.0
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

Population/Uncontrolled Environments are defined as locations where there is the exposure of individual who have no knowledge or control of their exposure.

Occupational/Controlled Environments are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure (i.e. as a result of employment or occupation).

General Population/Uncontrolled environments Spatial Peak limit 1.6W/kg applied to the EUT.

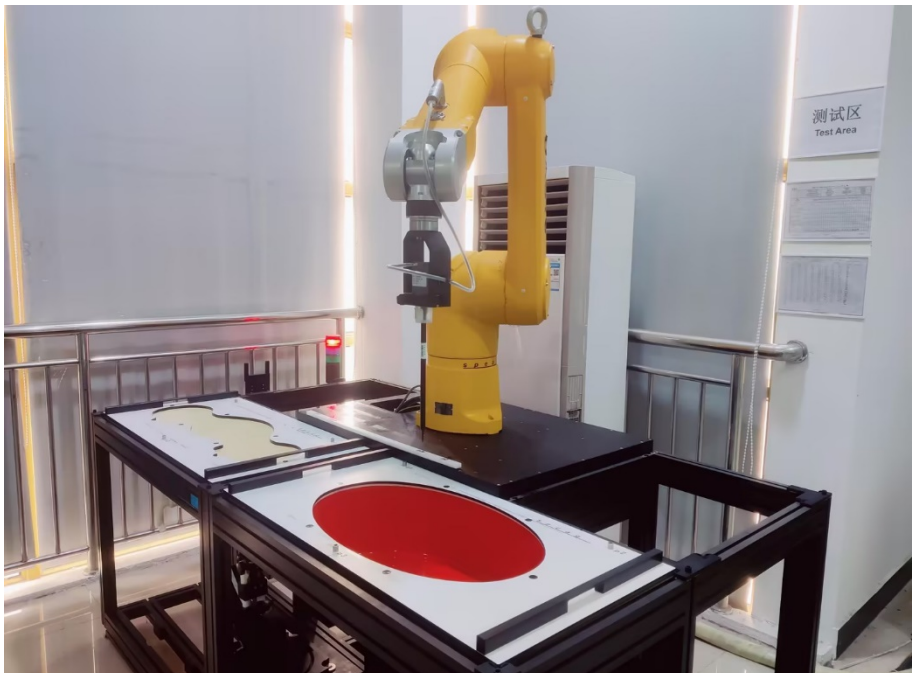
FACILITIES

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN5055.

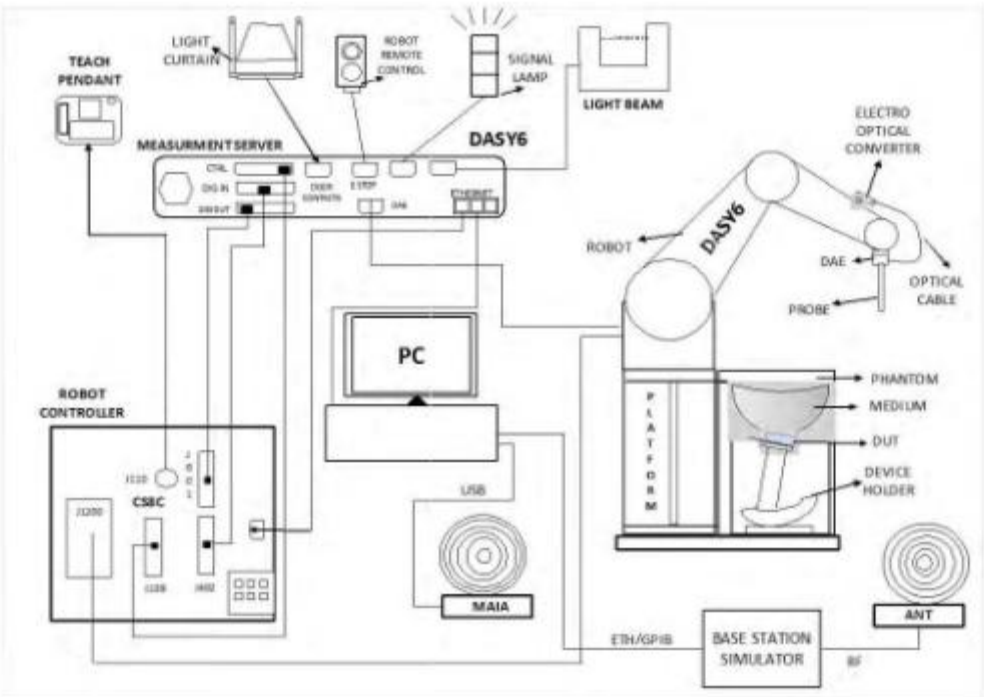
DESCRIPTION OF TEST SYSTEM

These measurements were performed with the automated near-field scanning system DASY6 from Schmid & Partner Engineering AG (SPEAG) which is the Fifth generation of the system shown in the figure hereinafter:



DASY6 System Description

The DASY6 system for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot (Staubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal application, 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.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7 professional operating system and the DASY52 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

DASY6 Measurement Server

The DASY6 measurement server is based on a PC/104 CPU board with a 400 MHz Intel ULV Celeron, 128 MB chip-disk and 128 MB RAM. The necessary circuits for communication with the DAE4 (or DAE3) electronics box, as well as the 16-bit AD converter system for optical detection and digital I/O interface are contained on the DASY6 I/O board, which is directly connected to the PC/104 bus of the CPU board.

The measurement server performs all real-time data evaluations of field measurements and surface detection, controls robot movements, and handles safety operations. The PC operating system cannot interfere with these time-critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program- controlled robot movements. Furthermore, the measurement server is equipped with an expansion port, which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Connection of devices from any other supplier could seriously damage the measurement server.

Data Acquisition Electronics

The data acquisition electronics (DAE4) 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.

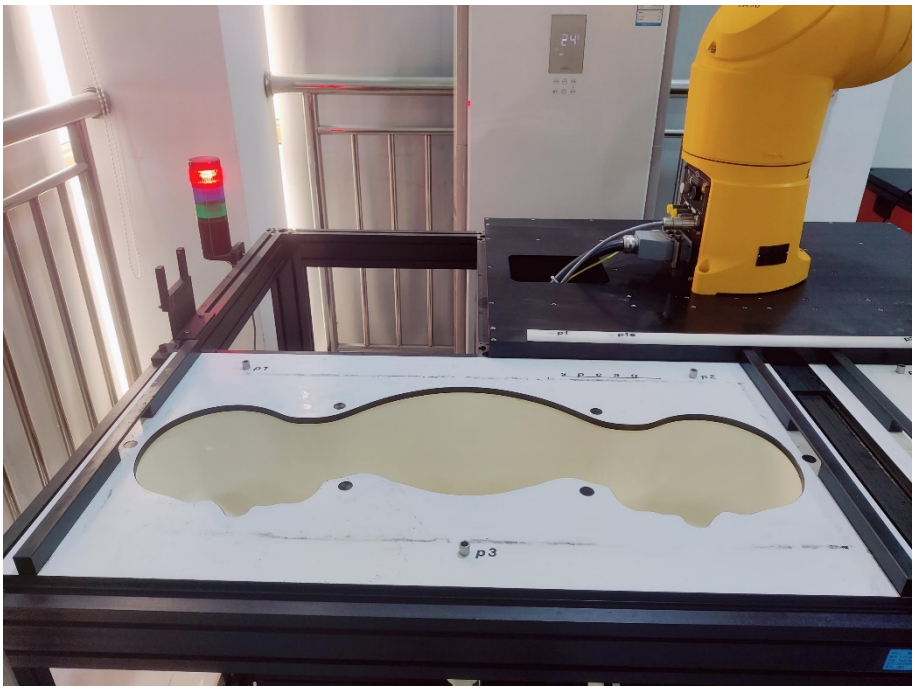
The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

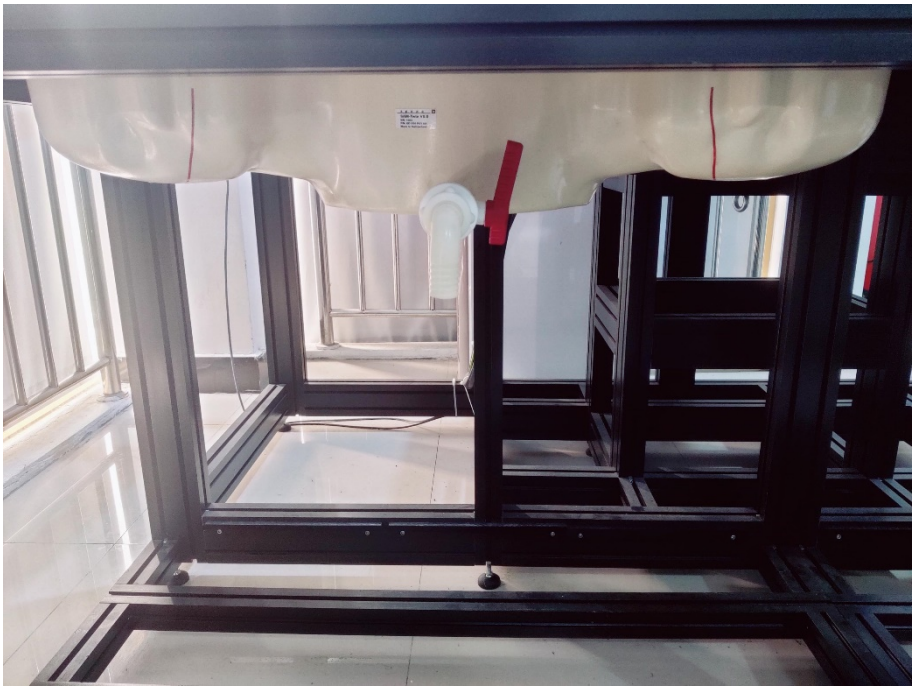
The input impedance of both the DAE4 as well as of the DAE3 box is 200MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

EX3DV4 E-Field Probes

Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI

SAM Twin Phantom

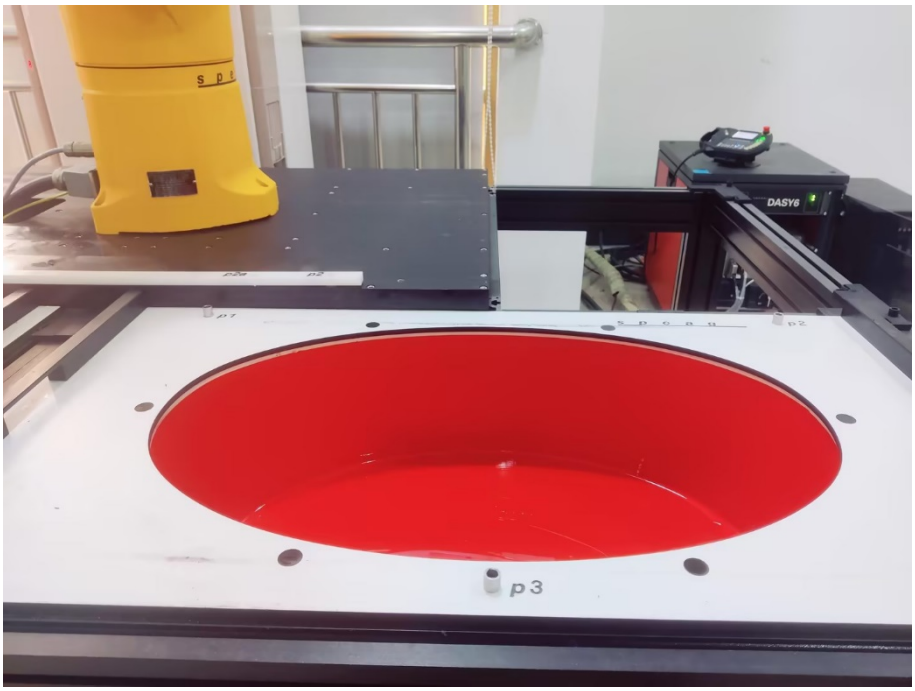




The SAM Twin Phantom (shown in front of DASY6) is a fiberglass shell phantom with shell thickness 2 mm, except in the ear region where the thickness is increased to 6 mm. The phantom has three measurement areas: 1) Left Head, 2) Right Head, and 3) Flat Section. For larger devices, the use of the ELI-Phantom (shown behind DASY6) is required. For devices such as glasses with a wireless link, the Face Down Phantom is the most suitable (between the SAM Twin and ELI phantoms).
When the phantom is mounted inside allocated slot of the DASY6 platform, phantom reference points can be taught directly in the DASY5 V5.2 software. When the DASY6 platform is used to mount the Phantom, some of the phantom teaching points cannot be reached by the robot in DASY5 V5.2. A special tool called P1a-P2aX-Former is provided to transform two of the three points, P1 and P2, to reachable locations. To use these new teaching points, a revised phantom configuration file is required.

In addition to our standard broadband liquids, the phantom can be used with the following tissue simulating liquids:
Sugar-water-based liquids can be left permanently in the phantom. Always cover the liquid when the system is not in use to prevent changes in liquid parameters due to water evaporation.
DGBE-based liquids should be used with care. As DGBE is a softener for most plastics, the liquid should be taken out of the phantom, and the phantom should be dried when the system is not in use (desirable at least once a week).
Do not use other organic solvents without previously testing the solvent resistivity of the phantom.
Approximately 25 liters of liquid is required to fill the SAM Twin phantom.

ELI Phantom



The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30MHz to 6 GHz. ELI is fully compatible with the latest draft of the standard IEEE 1528:2013 and the use of all known tissue simulating liquids. ELI has been optimized for performance and can be integrated into a SPEAG standard phantom table. A cover is provided to prevent evaporation of water and changes in liquid parameters. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points.

The phantom can be used with the following tissue simulating liquids:

- Sugar-water-based liquids can be left permanently in the phantom. Always cover the liquid when the system is not in use to prevent changes in liquid parameters due to water evaporation.

- DGBE-based liquids should be used with care. As DGBE is a softener for most plastics, the liquid should be taken out of the phantom, and the phantom should be dried when the system is not in use (desirable at least once a week).

- Do not use other organic solvents without previously testing the solvent resistivity of the phantom.

Approximately 25 liters of liquid is required to _fill the ELI phantom.

Robots

The DASY6 system uses the high-precision industrial robots TX60L, TX90XL, and RX160L from St aubli SA (France). The TX robot family - the successor of the well-known RX robot family - continues to offer the features important for DASY6 applications:

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

The robots are controlled by the Staubli CS8c robot controllers. All information regarding the use and maintenance of the robot arm and the robot controller is provided

Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 15mm 2 step integral, with 1.5mm interpolation used to locate the peak SAR area used for zoom scan assessments.

Where the system identifies multiple SAR peaks (which are within 25% of peak value) the system will provide the user with the option of assessing each peak location individually for zoom scan averaging.

Zoom Scan (Cube Scan Averaging)

The averaging zoom scan volume utilized in the DASY5 software is in the shape of a cube and the side dimension of a 1 g or 10 g mass is dependent on the density of the liquid representing the simulated tissue. A density of 1000 kg/m^3 is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1g cube is 10mm,with the side length of the 10g cube is 21.5mm.

When the cube intersects with the surface of the phantom, it is oriented so that 3 vertices touch the surface of the shell or the center of a face is tangent to the surface. The face of the cube closest to the surface is modified in order to conform to the tangent surface.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of 7 x7 x 7 (5mmx5mmx5mm) providing a volume of 30 mm in the X & Y & Z axis.

Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE 1528:2013

Recommended Tissue Dielectric Parameters for Head liquid

Table 2 – Dielectric properties of the tissue-equivalent medium

Frequency MHz	Real part of the complex relative permittivity, ε_r'	Conductivity, σ S/m	Penetration depth (E-field), δ mm
4	55,0	0,75	293,0
13	55,0	0,75	165,5
30	55,0	0,75	112,8
150	52,3	0,76	62,0
300	45,3	0,87	46,1
450	43,5	0,87	43,0
750	41,9	0,89	39,8
835	41,5	0,90	39,0
900	41,5	0,97	36,2
1 450	40,5	1,20	28,6
1 800	40,0	1,40	24,3
1 900	40,0	1,40	24,3
1 950	40,0	1,40	24,3
2 000	40,0	1,40	24,3
2 100	39,8	1,49	22,8
2 450	39,2	1,80	18,7
2 600	39,0	1,96	17,2
3 000	38,5	2,40	14,0
3 500	37,9	2,91	11,4
4 000	37,4	3,43	10,0
4 500	36,8	3,94	9,7

Frequency MHz	Real part of the complex relative permittivity, ε'_r	Conductivity, σ S/m	Penetration depth (E-field), δ mm
5 000	*36,2*	*4,45*	1,5
5 200	*36,0*	*4,66*	8,4
5 400	*35,8*	*4,86*	8,1
5 600	*35,5*	*5,07*	7,5
5 800	35,3	5,27	7,3
6 000	*35,1*	*5,48*	7,0
6 500	*34,5*	*6,07*	6,7
7 000	*33,9*	*6,65*	6,4
7 500	*33,3*	*7,24*	6,1
8 000	*32,7*	*7,84*	5,9
8 500	*32,1*	*8,46*	5,3
9 000	*31,6*	*9,08*	4,8
9 500	*31,0*	*9,71*	4,4
10 000	*30,4*	*10,40*	4,0
NOTE For convenience, permittivity and conductivity values are linearly interpolated for frequencies that are not a part of the original data from Drossos et al. [2]. They are shown in italics in Table 2. The italicized values are linearly interpolated (below 5800 MHz) or extrapolated (above 5800 MHz) from the non-italicized values that are immediately above and below these values.			

EQUIPMENT LIST AND CALIBRATION

Equipments List & Calibration Information

Equipment	Model	S/N	Calibration Date	Calibration Due Date
DASY5 Test Software	DASY52 52.10.4.1535	N/A	N/A	N/A
DASY6 Measurement Server	DASY6 6.0.31	N/A	N/A	N/A
Data Acquisition Electronics	DAE4	527	2025/05/16	2026/05/15
E-Field Probe	EX3DV4	7557	2025/05/16	2026/05/15
Mounting Device	MD4HHTV5	SD 000 H01 KA	N/A	N/A
Twin-SAM Phantom	QD 000 P41 Ax	1963	N/A	N/A
Dipole, 835MHz	D835V2	445	2025/06/10	2028/06/09
Dipole,1750MHz	D1750V2	1140	2024/06/17	2027/06/16
Dipole,1900MHz	D1900V2	5d206	2024/06/15	2027/06/14
Dipole,2600MHz	D2600V2	1162	2025/06/11	2028/06/10
Simulated Tissue LiquidHead	HBBL600-6000V6	180611-3	Each Time	
Network Analyzer	E5071B	SG42400155	2025/04/08	2026/04/07
Dielectric Assessment Kit	DAK-3.5	SM DAK 300AB	N/A	N/A
Signal Generator	SMBV100A	261558	2025/04/08	2026/04/07
Power Amplifier	ZHL-5W-202-S+	416402204	N/A	N/A
Power Amplifier	ZVE-8G+	558401902	N/A	N/A
Directional Coupler	4242-10	3307	N/A	N/A
Attenuator	10dB	10 dB-01	2025/04/08	2026/04/07
Attenuator	10dB	10 dB-02	2025/04/09	2026/04/08
Radio Communication Analyzer	MT8820C	6200930956	2025/04/08	2026/04/07
Hygrothermograph	HD-7W	202408A000201	2025/04/11	2026/04/10
Thermometer	UL-IL01	N/A	2025/04/08	2026/04/07
Power Meter	E4419B	MY41291878	2025/04/08	2026/04/07
Power Meter	E4419B	GB43312421	2025/04/08	2026/04/07

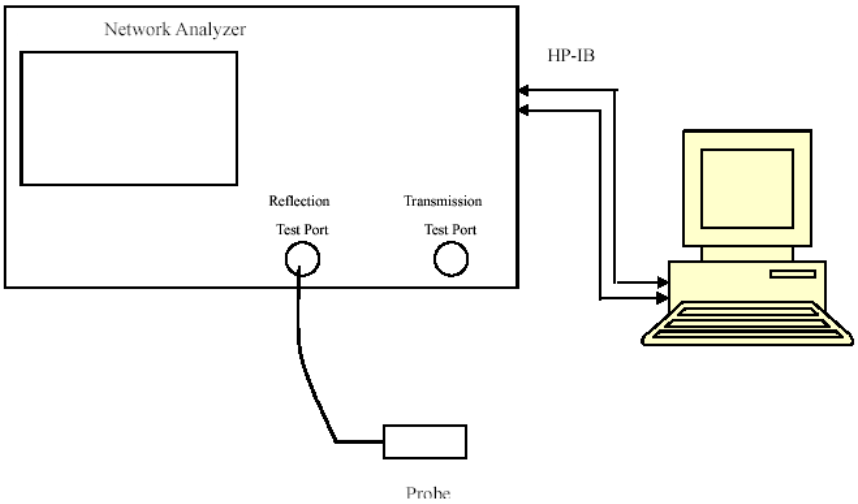
The Dipole calibration methods and procedures used were as detailed in:

FCC KDB Publication Number: “KDB865664 D01 SAR Measurement 100 MHz to 6 GHz”

1. The return-loss does not deviate more than 20% from the previous measurement and meets the required 20 dB minimum return-loss requirement.
2. The measurement of real or imaginary parts of impedance does not deviate more than 5Ω from the previous measurement.

SAR MEASUREMENT SYSTEM VERIFICATION

Liquid Verification



Liquid Verification Setup Block Diagram

Liquid Verification Results

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		σ (S/m)	ε_r	σ (S/m)	ε_r	Δ σ	Δ ε_r	
835	Simulated Tissue Liquid Head	0.919	41.511	0.900	41.500	2.11	0.03	±5
836.5	Simulated Tissue Liquid Head	0.920	41.498	0.901	41.500	2.11	0.00	±5
829	Simulated Tissue Liquid Head	0.912	41.584	0.899	41.504	1.45	0.19	±5
844	Simulated Tissue Liquid Head	0.927	41.398	0.904	41.500	2.54	-0.25	±5

Liquid Verification above was performed on 2026/04/01.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		σ (S/m)	ε_r	σ (S/m)	ε_r	Δ σ	Δ ε_r	
1750	Simulated Tissue Liquid Head	1.366	41.029	1.370	40.100	-0.29	2.32	±5
1745	Simulated Tissue Liquid Head	1.361	41.050	1.384	40.046	-1.66	2.51	±5
1720	Simulated Tissue Liquid Head	1.336	41.179	1.369	40.089	-2.41	2.72	±5
1770	Simulated Tissue Liquid Head	1.384	40.948	1.395	40.015	-0.79	2.33	±5

Liquid Verification above was performed on 2026/04/01.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		σ (S/m)	ε_r	σ (S/m)	ε_r	Δ σ	Δ ε_r	
1900	Simulated Tissue Liquid Head	1.412	39.798	1.400	40.000	0.86	-0.50	±5
1880	Simulated Tissue Liquid Head	1.391	39.878	1.400	40.000	-0.64	-0.31	±5
1860	Simulated Tissue Liquid Head	1.372	39.975	1.400	40.000	-2.00	-0.06	±5

Liquid Verification above was performed on 2026/04/01.

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		σ (S/m)	ε_r	σ (S/m)	ε_r	Δ σ	Δ ε_r	
2600	Simulated Tissue Liquid Head	2.049	38.969	1.960	39.000	4.54	-0.08	±5
2535	Simulated Tissue Liquid Head	1.969	39.241	1.888	39.084	4.29	0.40	±5
2510	Simulated Tissue Liquid Head	1.937	39.344	1.861	39.117	4.08	0.58	±5
2560	Simulated Tissue Liquid Head	1.999	39.134	1.916	39.051	4.33	0.21	±5

Liquid Verification above was performed on 2026/04/01.

System Accuracy Verification

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ±10%. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

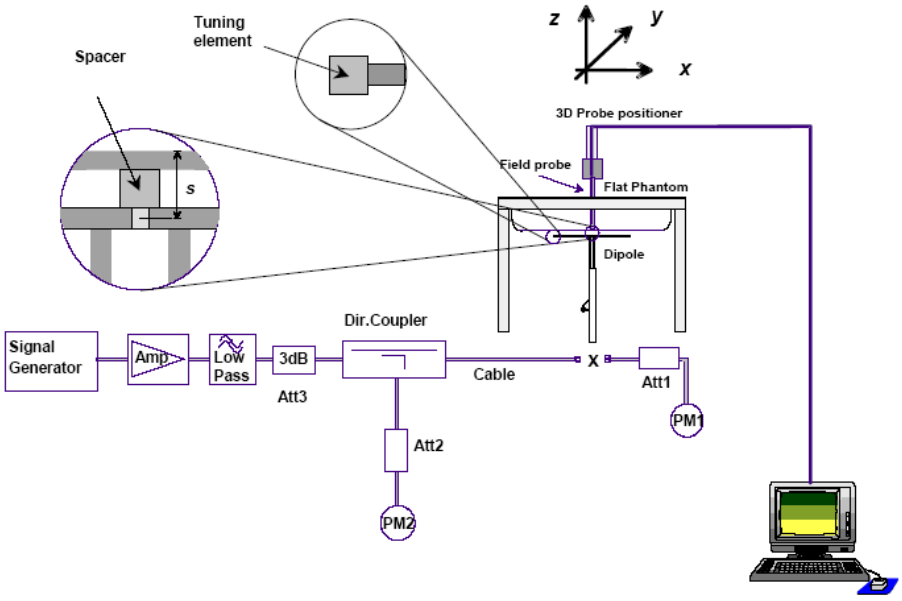
The spacing distance*s* in the **System Verification Setup Block Diagram** is given by the following:

a) s = 15 mm ± 0,2 mm for 300 MHz ≤ f ≤ 1 000 MHz;

b) s = 10 mm ± 0,2 mm for 1 000 MHz < f ≤ 3 000 MHz;

c) s = 10 mm ± 0,2 mm for 3 000 MHz < f ≤ 6 000 MHz.

System Verification Setup Block Diagram



System Accuracy Check Results

Date	Frequency Band	Liquid Type	Input Power (mW)	Measured SAR (W/kg)		Normalized to 1W (W/kg)	Target Value (W/kg)	Delta (%)	Tolerance (%)
2026/04/01	835MHz	Head	250	1g	2.42	9.68	9.50	1.89	±10
2026/04/01	1750MHz	Head	250	1g	9.41	37.64	36.00	4.56	±10
2026/04/01	1900MHz	Head	100	1g	4.06	40.6	39.20	3.57	±10
2026/04/01	2600MHz	Head	100	1g	5.42	54.2	54.60	-0.73	±10

The SAR values above are normalized to 1 Watt forward power.

SAR SYSTEM VALIDATION DATA

System Check_Head_835MHz

DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:445

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; σ = 0.919 S/m; ε_r = 41.511; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(9.97, 9.97, 9.97) @ 835 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=250mW/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.51 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.12 V/m; Power Drift = -0.03 dB

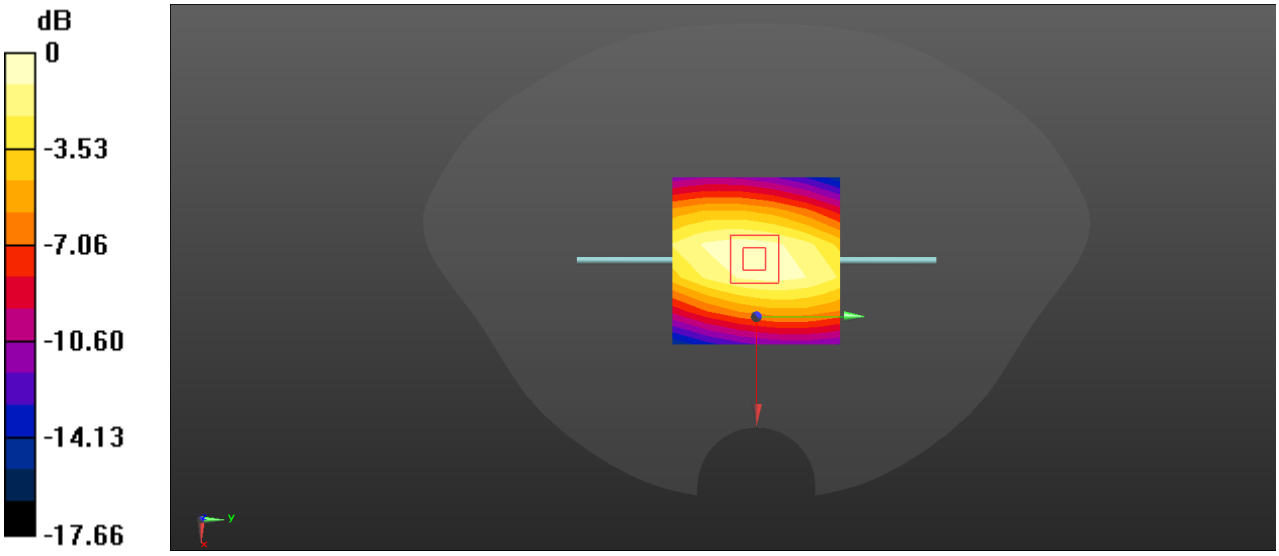
Peak SAR (extrapolated) = 3.55 W/kg

SAR(1 g) = 2.42 W/kg; SAR(10 g) = 1.59 W/kg

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 68%

Maximum value of SAR (measured) = 2.82 W/kg



0 dB = 2.82 W/kg = 4.50 dBW/kg

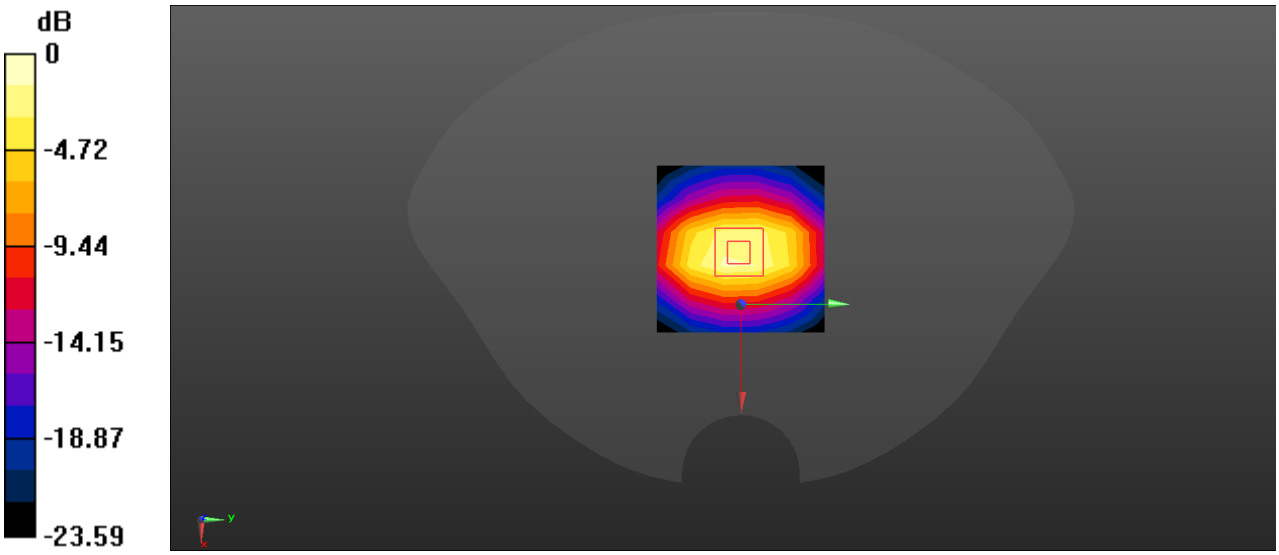
System Check_Head_1750MHz
DUT: Dipole 1750 MHz D1750V2; Type: D1750V2; Serial: D1750V2 - SN:1140

Communication System: UID 0, CW (0); Frequency: 1750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1750 MHz; σ = 1.366 S/m; ε_r = 41.029; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(8.34, 8.34, 8.34) @ 1750 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.43mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=250mW/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 8.84 W/kg
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 92.94 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 16.5 W/kg
SAR(1 g) = 9.41 W/kg; SAR(10 g) = 5.07 W/kg
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 57.7%
Maximum value of SAR (measured) = 11.8 W/kg



0 dB = 11.8 W/kg = 10.72 dBW/kg

System Check_Head_1900MHz

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d206

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.412 S/m; ε_r = 39.798; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(8.02, 8.02, 8.02) @ 1900 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=100mW/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 4.38 W/kg

Pin=100mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.11 V/m; Power Drift = -0.05 dB

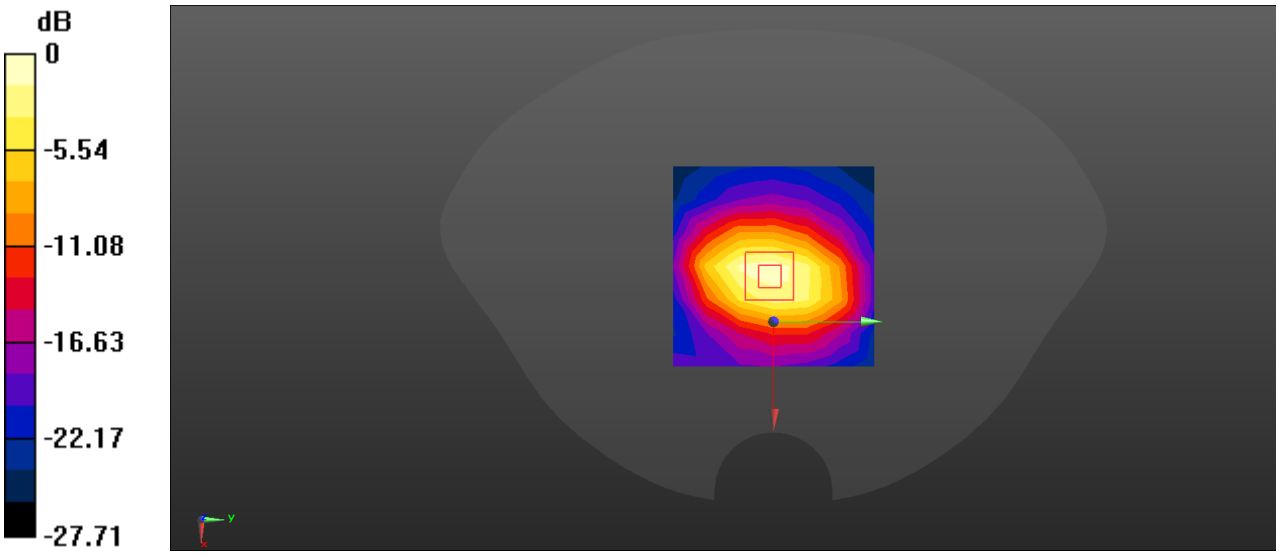
Peak SAR (extrapolated) = 7.16 W/kg

SAR(1 g) = 4.06 W/kg; SAR(10 g) = 2.16 W/kg

Smallest distance from peaks to all points 3 dB below = 10.7 mm

Ratio of SAR at M2 to SAR at M1 = 57.7%

Maximum value of SAR (measured) = 5.05 W/kg



0 dB = 5.05 W/kg = 7.03 dBW/kg

System Check_Head_2600MHz

DUT: D2600V2-1162; Type: D2600V2; Serial: D2600V2 - SN:1162

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2600 MHz; σ = 2.049 S/m; ε_r = 38.969; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(7.26, 7.26, 7.26) @ 2600 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=100mW/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 10.3 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 74.78 V/m; Power Drift = 0.05 dB

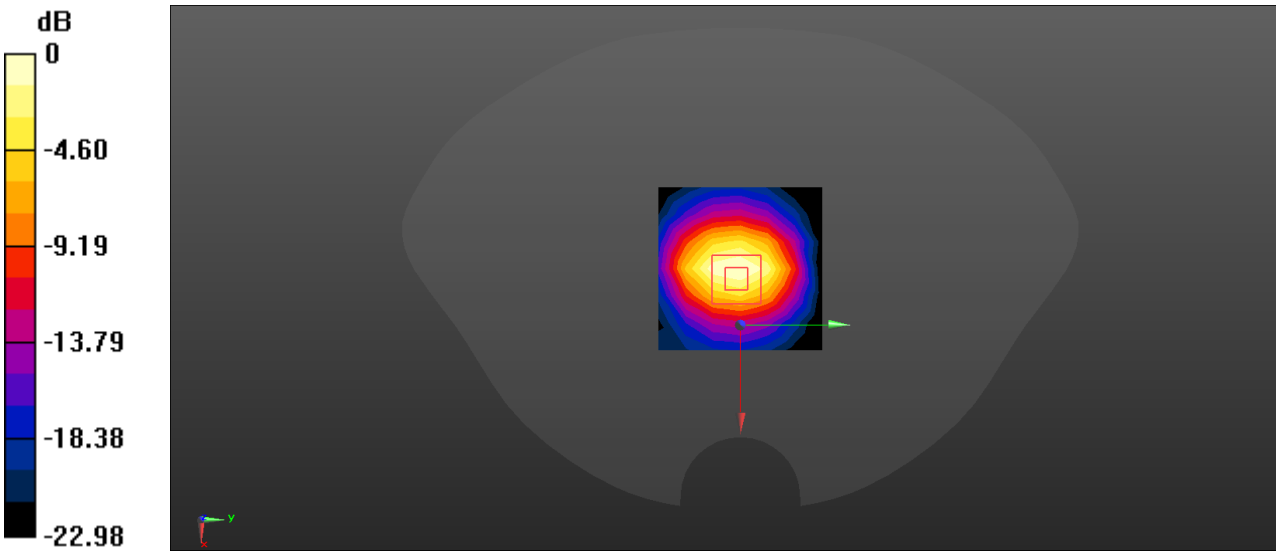
Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 5.42 W/kg; SAR(10 g) = 2.56 W/kg

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 50.8%

Maximum value of SAR (measured) = 8.78 W/kg

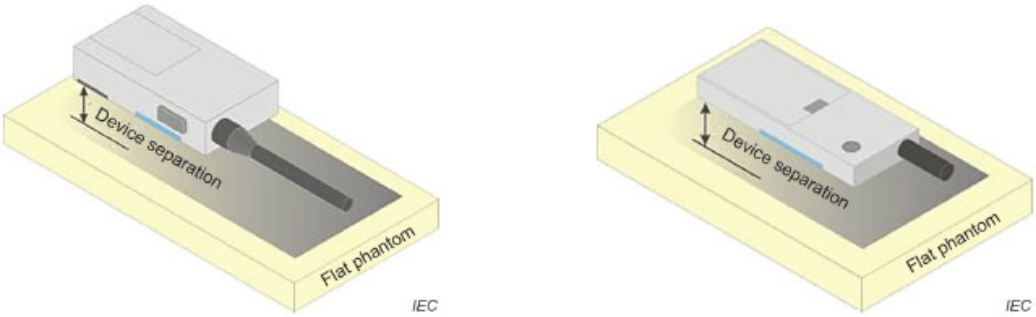


0 dB = 8.78 W/kg = 9.43 dBW/kg

EUT TEST STRATEGY AND METHODOLOGY

Test positions for Front-of-face configurations

Passive body-worn and audio accessories generally do not apply to the head SAR of PTT radios. Head SAR is measured with the front surface of the radio positioned at 2.5 cm parallel to a flat phantom. A phantom shell thickness of 2 mm is required. When the front of the radio has a contour or non-uniform surface with a variation of 1.0 cm or more, the average distance of such variations is used to establish the 2.5 cm test separation from the phantom.



b) Two-way radios

Figure 10 – Test positions for front-of-face devices

Test positions for body-worn and other configurations

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a headset output should be tested with a headset connected to the device. When multiple accessories that do not contain metallic components are supplied with the device, the device may be tested with only the accessory that dictates the closest spacing to the body. When multiple accessories that contain metallic components are supplied with the device, the device must be tested with each accessory that contains a unique metallic component. If multiple accessories share an identical metallic component (e.g., the same metallic belt-clip used with different holsters with no other metallic components), only the accessory that dictates the closest spacing to the body must be tested.

Body-worn accessories may not always be supplied or available as options for some devices that are intended to be authorized for body-worn use. A separation distance of 1.5 cm between the back of the device and a flat phantom is recommended for testing body-worn SAR compliance under such circumstances. Other separation distances may be used, but they should not exceed 2.5 cm. In these cases, the device may use body-worn accessories that provide a separation distance greater than that tested for the device provided however that the accessory contains no metallic components.

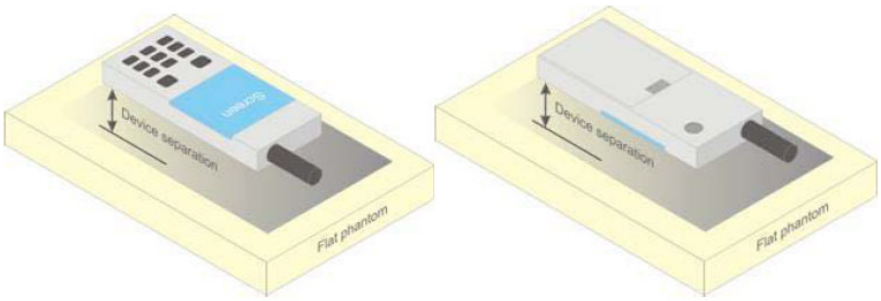


Figure 5 – Test positions for body-worn devices

Test Distance for SAR Evaluation

In this case the EUT(Equipment Under Test) is set directly against the phantom, the test distance is 0mm for Body Back mode; for Face Up mode the distance is 25mm.

SAR Evaluation Procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the ear point or central position was used as a reference value for assessing the power drop. The SAR at this point is measured at the start of the test and then again at the end of the testing.

Step 2: The SAR distribution at the exposed side of the head was measured at a distance of 4 mm from the inner surface of the shell. The area covered the entire dimension of the head or radiating structures of the EUT, the horizontal grid spacing was 15 mm x 15 mm, and the SAR distribution was determined by integrated grid of 1.5mm x 1.5mm. Based on these data, the area of the maximum absorption was determined by spline interpolation. The first Area Scan covers the entire dimension of the EUT to ensure that the hotspot was correctly identified.

Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7x 7 x 7 points. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

1) The data at the surface were extrapolated, since the center of the dipoles is 1.2 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

2) The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one dimensional splines with the “Not a knot"-condition (in x, y and z-directions). The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the averages.

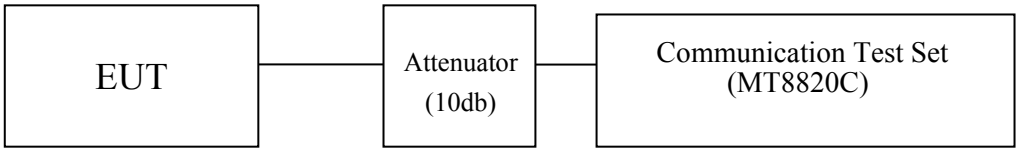
All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation was repeated.

CONDUCTED OUTPUT POWER MEASUREMENT

Test Procedure

The RF output of the transmitter was connected to the input of the Communication Test Set through Attenuator.



LTE

Radio Configuration

The power measurement was configured by the Wireless Communication Test Set.

FDD-LTE

For UE Power Class 1 and 3, the allowed Maximum Power Reduction (MPR) for the maximum output power in Table 6.2.2-1due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1.

Table 6.2.3E-1: Maximum Power Reduction (MPR) for category M1 UE for Power Class 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	>2	>2	>1	>4	-	-	≤ 1
QPSK	>5	>5	-	-	-	-	≤ 2
16 QAM	≤ 2	≤ 2	>1	>3	-	-	≤ 1
16QAM	>2	>2	>3	>5	-	-	≤ 2
NOTE: MPR only applicable for $N_{RB} \geq 1$							

For UE Power Class 1 and 3 the specific requirements and identified sub clauses are specified in Table 6.2.4-1 along with the allowed A-MPR values that may be used to meet these requirements. The allowed A-MPR values specified below in Table 6.2.4.-1 to 6.2.4-15 are in addition to the allowed MPR requirements specified in sub clause 6.2.3.

Table 6.2.4E-1: Additional Maximum Power Reduction (A-MPR) for category M1 UE

Network Signalling value	Requirements (subclause)	E-UTRA Band	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	Table 5.6-1	N/A
NS_03	6.6.2.2.1	2, 4	Table 5.6-1	N/A
NS_04	6.6.2.2.2	41	Table 6.2.4E-3	
NS_05	6.6.3.3.1	1	Table 5.6-1	N/A
NS_06	6.6.2.2.3	12, 13, 14, 85	Table 5.6-1	N/A
NS_07	6.6.2.2.3 6.6.3.3.2	13	Table 6.2.4E-4	
NS_08	6.6.3.3.3	19	Table 5.6-1	N/A
NS_09	6.6.3.3.4	21, 74	Table 5.6-1	N/A
NS_10		20	Table 5.6-1	N/A
NS_12	6.6.3.3.5	26	Table 6.2.4E-5	
NS_13	6.6.3.3.6	26	Table 5.6-1	N/A
NS_14	6.6.3.3.7	26	Table 5.6-1	N/A
NS_15	6.6.3.3.8	26	Table 6.2.4-9	
NS_16	6.6.3.3.9	27	Table 5.6-1	N/A
NS_17	6.6.3.3.10	28	Table 5.6-1	N/A
NS_18	6.6.3.3.11	28	Table 5.6-1	N/A
NS_22	6.6.3.3.16	42, 43	Table 5.6-1	N/A
NS_23	6.6.3.3.17	42, 43	Table 5.6-1	N/A
NS_27	6.6.2.2.5, 6.6.3.3.23	48	Table 5.6-1	N/A
NS_32	-	-	-	-
NS_35	6.6.2.2.7	71	Table 5.6-1	N/A
NS_38	6.6.3.3.29	74	Table 5.6-1	N/A
NS_39	6.6.3.3.30	74	Table 5.6-1	N/A
NS_56	6.6.3.3.35	24	Table 6.2.4E-25	

Note:
LTE Category is 1,16QAM only support up to maximum 27RB.

Maximum Target Output Power

Full Power Target power

Max Target Power(dBm)			
Mode/Band	Channel		
	Low	Middle	High
LTE Band 2(1RB)	25	25	25
LTE Band 2(50%RB)	23.5	23.5	23.5
LTE Band 2(100%RB)	23.5	23.5	23.5
LTE Band 66(1RB)	24	24	24
LTE Band 66(50%RB)	23	23	23
LTE Band 66(100%RB)	23	23	23
LTE Band 4(1RB)	24	24	24
LTE Band 4(50%RB)	23	23	23
LTE Band 4(100%RB)	23	23	23
LTE Band 5	24	24	24
LTE Band 7	24.5	24.5	24.5

Note：
1. The Maximum Target Power for LTE bands corresponds to their maximum power in QPSK modes with maximum bandwidth.

Test Results:

Maximum Output Power:

LTE Band 2

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4M	QPSK	1#0	24.46	24.06	24.32
		1#3	24.4	23.99	23.11
		1#5	24.44	24.03	23.1
		3#0	24.23	24.04	23.2
		3#1	24.23	24.05	23.11
		3#3	24.21	24.09	23.07
		6#0	23.18	23.18	23.19
	16-QAM	1#0	23.6	23.04	23.14
		1#3	23.56	23.05	23.07
		1#5	23.57	23.11	22.53
		3#0	23.56	23.38	23.43
		3#1	23.55	23.41	23.43
		3#3	23.49	23.41	23.36
		6#0	22.27	22.33	22.54
3M	QPSK	1#0	24.35	24.02	24.2
		1#8	24.3	24.12	24.45
		1#14	24.18	24.08	23.2
		8#0	23.24	23.24	23.21
		8#4	23.3	23.29	23.28
		8#7	23.19	23.3	23.3
		15#0	23.26	23.22	23.23
	16-QAM	1#0	23.1	23.19	23.38
		1#8	23.12	23.24	23.74
		1#14	22.93	23.19	23.41
		8#0	22.43	22.2	22.4
		8#4	22.42	22.26	22.54
		8#7	22.4	22.32	22.5
		15#0	22.31	22.18	22.34

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5M	QPSK	1#0	24.47	24.14	23.38
		1#12	24.36	24.2	24.09
		1#24	23.84	24.4	23.02
		12#0	23.22	23.19	22.69
		12#7	23.19	23.28	23.18
		12#13	22.88	23.27	23.23
		25#0	23.01	23.19	22.98
	16-QAM	1#0	23.37	23.33	22.91
		1#12	23.27	23.36	23.74
		1#24	22.83	23.52	23.68
		12#0	22.48	22.21	21.82
		12#7	22.46	22.26	22.33
		12#13	22.18	22.28	22.43
		25#0	22.24	22.14	22.2
10M	QPSK	1#0	24.44	23.97	22.31
		1#25	23.76	24.16	23.34
		1#49	23.25	24.29	23.6
		25#0	22.98	22.99	21.36
		25#12	22.76	23.24	22.33
		25#25	22.29	23.26	22.82
		50#0	22.6	23.03	22.35
	16-QAM	1#0	23.15	22.91	21.49
		1#25	22.53	23.3	22.6
		1#49	22.05	23.33	23.64
		12#0	23.31	23.05	21.31
		12#19	22.71	23.29	22.32
		12#38	22.38	23.42	23.32
		27#0	22.06	21.98	20.69
		27#11	21.94	22.15	21.5
		27#23	21.53	22.2	21.91

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
15M	QPSK	1#0	24.49	22.72	23.79
		1#37	23.52	22.66	24.35
		1#74	23.15	23.94	24.08
		36#0	22.87	21.33	23.08
		36#20	22.47	21.71	23.39
		36#39	22.25	22.77	23.46
		75#0	22.41	21.96	23.02
	16-QAM	1#0	23.26	21.82	23.42
		1#37	22.43	21.84	24.12
		1#74	22.18	23.5	23.77
		12#0	23.07	21.55	22.9
		12#31	22.46	21.83	23.56
		12#63	22.06	23.39	23.38
		27#0	22.07	20.43	21.75
		27#24	21.67	20.99	22.28
		27#48	21.39	22.14	22.23
20M	QPSK	1#0	24.44	24.53	24.39
		1#49	24.38	23.52	23.25
		1#99	24.52	23.57	24.25
		50#0	23.07	23.4	22.68
		50#24	23.3	22.49	22.67
		50#50	23.32	22.45	22.43
		100#0	23.04	22.9	22.6
	16-QAM	1#0	23.24	23.62	22.84
		1#49	23.72	22.71	21.75
		1#99	23.72	22.89	23.74
		12#0	22.86	23.19	22.23
		12#43	23.4	22.55	21.53
		12#88	23.19	22.44	23.31
		27#0	21.92	22.22	20.95
		27#37	22.29	21.84	20.58
		27#73	22.36	21.65	21.92

LTE Band 4

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4M	QPSK	1#0	23.43	23.15	23.06
		1#3	23.42	23.1	23
		1#5	23.58	23.1	22.99
		3#0	23.29	23.12	23.05
		3#1	23.3	23.13	23.04
		3#3	23.33	23.18	23.04
		6#0	22.21	22.16	22.08
	16-QAM	1#0	22.58	22.01	21.96
		1#3	22.69	21.97	21.95
		1#5	22.76	22.05	21.97
		3#0	22.58	22.31	22.31
		3#1	22.55	22.35	22.32
		3#3	22.62	22.26	22.34
		6#0	21.22	21.46	21.4
3M	QPSK	1#0	22.83	23.03	23.26
		1#8	23.01	23.14	23.31
		1#14	22.93	22.98	23.16
		8#0	22.02	22.14	22.1
		8#4	22.11	22.15	22.1
		8#7	22.17	22.11	22.1
		15#0	22.06	22.07	22.07
	16-QAM	1#0	21.82	22.06	22.55
		1#8	22.05	22.1	22.56
		1#14	22.1	21.99	22.34
		8#0	21.06	21.33	21.36
		8#4	21.25	21.28	21.28
		8#7	21.29	21.2	21.24
		15#0	21.18	21.22	21.22

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5M	QPSK	1#0	23.08	23.2	23.32
		1#12	23.2	23.21	23.17
		1#24	23.35	23.08	22.99
		12#0	22.14	22.04	22.15
		12#7	22.38	22.11	22.14
		12#13	22.4	22.03	22.03
		25#0	22.23	22.01	22.04
	16-QAM	1#0	22.07	22.27	22.92
		1#12	22.43	22.2	22.77
		1#24	22.61	22.15	22.63
		12#0	21.26	21.24	21.31
		12#7	21.5	21.26	21.37
		12#13	21.53	21.18	21.26
		25#0	21.3	21.12	21.3
10M	QPSK	1#0	23.01	23.23	23.4
		1#25	23.27	23.17	23.56
		1#49	23.5	22.98	23.16
		25#0	22.07	22.05	22.19
		25#12	22.44	22.12	22.29
		25#25	22.41	21.96	22.06
		50#0	22.2	21.97	22.08
	16-QAM	1#0	21.85	22.34	22.64
		1#25	22.31	22.14	22.74
		1#49	22.53	22.05	22.4
		12#0	22.24	22.25	22.32
		12#19	22.62	22.16	22.36
		12#38	22.69	22.11	22.18
		27#0	21.29	21.14	21.33
		27#11	21.5	21.24	21.46
		27#23	21.48	21.05	21.19

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
15M	QPSK	1#0	23.14	23.35	23.45
		1#37	23.61	23.14	23.63
		1#74	23.72	23.14	23.37
		36#0	22.31	22.2	22.32
		36#20	22.68	22.14	22.49
		36#39	22.67	22.1	22.32
		75#0	22.36	22.06	22.36
	16-QAM	1#0	22.2	22.43	22.74
		1#37	22.76	22.13	22.93
		1#74	22.79	22.24	22.55
		12#0	22.2	22.29	22.31
		12#31	22.81	22.2	22.57
		12#63	22.72	22.07	22.13
		27#0	21.33	21.29	21.43
		27#24	21.74	21.23	21.57
		27#48	21.85	21.18	21.3
20M	QPSK	1#0	23.73	23.46	23.48
		1#49	23.66	23.23	23.41
		1#99	22.94	23.14	22.99
		50#0	22.6	22.79	22.58
		50#24	22.74	22.26	22.43
		50#50	22.63	22.15	22.34
		100#0	22.41	22.14	22.27
	16-QAM	1#0	22.15	23.3	22.46
		1#49	23.15	22.98	22.81
		1#99	22.59	22.95	22.49
		12#0	21.99	22.57	22.06
		12#43	22.89	22.44	22.6
		12#88	22.22	22.24	22.16
		27#0	21.17	21.38	21.19
		27#37	21.99	21.27	21.58
		27#73	21.48	21.14	21.2

LTE Band 5

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4M	QPSK	1#0	23.28	23.36	23
		1#3	23.14	23.39	22.94
		1#5	23.07	23.47	23.09
		3#0	23.24	23.42	22.84
		3#1	23.25	23.43	22.85
		3#3	23.25	23.49	22.84
		6#0	22.27	22.57	22
	16-QAM	1#0	22.27	22.32	22.37
		1#3	22.17	22.42	22.42
		1#5	22.19	22.47	22.48
		3#0	22.62	22.72	22.34
		3#1	22.62	22.75	22.33
		3#3	22.54	22.82	22.38
		6#0	21.71	21.84	21.04
3M	QPSK	1#0	23.31	23.13	22.86
		1#8	22.87	23.43	22.95
		1#14	22.78	23.23	23.05
		8#0	22.28	22.48	21.88
		8#4	22.11	22.58	21.9
		8#7	22.04	22.59	21.94
		15#0	22.11	22.53	21.89
	16-QAM	1#0	22.23	22.35	22.19
		1#8	22	22.57	22.42
		1#14	21.79	22.4	22.45
		8#0	21.39	21.6	21.21
		8#4	21.26	21.71	21.24
		8#7	21.22	21.71	21.25
		15#0	21.21	21.68	21.12

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5M	QPSK	1#0	23.43	23.29	22.97
		1#12	22.92	23.5	22.87
		1#24	22.63	23.39	22.98
		12#0	22.12	22.41	21.97
		12#7	22.09	22.61	22.02
		12#13	21.84	22.59	22.01
		25#0	21.96	22.5	21.97
	16-QAM	1#0	22.46	22.45	22.64
		1#12	22.13	22.68	22.64
		1#24	21.87	22.58	22.78
		12#0	21.3	21.58	21.16
		12#7	21.25	21.78	21.24
		12#13	21.06	21.75	21.27
		25#0	21.08	21.64	21.2
10M	QPSK	1#0	23.56	23.58	23.64
		1#25	22.76	23.57	23.17
		1#49	23.07	23.4	23.27
		25#0	22.97	23.29	22.47
		25#12	22.14	22.64	22.18
		25#25	22.11	22.5	22.08
		50#0	22.11	22.44	22.1
	16-QAM	1#0	22.31	22.21	22.92
		1#25	21.86	22.72	22.61
		1#49	22.13	22.55	22.57
		12#0	22.28	22.39	22.6
		12#19	22.06	22.7	22.26
		12#38	22.22	22.53	22.25
		27#0	21.01	21.41	21.39
		27#11	21.14	21.69	21.34
		27#23	21.05	21.56	21.15

LTE Band 7

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5M	QPSK	1#0	23.31	24.08	23.36
		1#12	23.36	23.74	23.09
		1#24	23.46	23.56	22.99
		12#0	22.47	23.03	22.44
		12#7	22.58	23.05	22.4
		12#13	22.59	22.87	22.29
		25#0	22.49	22.96	22.32
	16-QAM	1#0	23.01	23.09	22.58
		1#12	23.13	23.06	22.43
		1#24	23.2	22.83	22.26
		12#0	21.67	22.24	21.74
		12#7	21.78	22.31	21.67
		12#13	21.77	22.11	21.58
		25#0	21.72	22.17	21.57
10M	QPSK	1#0	23.07	24.05	23.57
		1#25	23.33	23.71	23.5
		1#49	23.15	23.34	23.14
		25#0	22.2	22.99	22.43
		25#12	22.52	22.98	22.56
		25#25	22.36	22.77	22.31
		50#0	22.31	22.86	22.4
	16-QAM	1#0	22.07	23.12	22.84
		1#25	22.35	23	22.95
		1#49	22.31	22.56	22.56
		12#0	22.38	23.15	22.59
		12#19	22.58	23.01	22.63
		12#38	22.59	22.72	22.32
		27#0	21.41	22.14	21.7
		27#11	21.62	22.18	21.83
		27#23	21.53	21.96	21.61

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
15M	QPSK	1#0	23.22	23.98	23.46
		1#37	23.41	23.67	23.48
		1#74	23.4	23.23	23.13
		36#0	22.35	23.09	22.5
		36#20	22.48	23.05	22.59
		36#39	22.54	22.71	22.42
		75#0	22.41	22.94	22.48
	16-QAM	1#0	22.37	23.24	22.86
		1#37	22.61	23.01	22.95
		1#74	22.76	22.5	22.57
		12#0	22.29	23.1	22.46
		12#31	22.65	23.06	22.65
		12#63	22.62	22.45	22.26
		27#0	21.52	22.34	21.77
		27#24	21.77	22.27	21.91
		27#48	21.76	21.75	21.69
20M	QPSK	1#0	23.93	24.09	23.99
		1#49	23.24	23.63	23.38
		1#99	23.36	23.04	23.02
		50#0	23.31	23.94	23.67
		50#24	22.58	22.97	22.81
		50#50	22.56	22.58	22.68
		100#0	22.66	22.79	22.65
	16-QAM	1#0	22.4	23.64	22.96
		1#49	22.75	23.57	23.11
		1#99	22.95	22.92	22.68
		12#0	22.11	23.1	22.64
		12#43	22.54	23.12	22.95
		12#88	22.54	22.36	22.49
		27#0	21.4	22.17	21.83
		27#37	21.83	22.21	22.13
		27#73	21.78	21.51	21.8

LTE Band 66

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4M	QPSK	1#0	23.78	23.04	22.71
		1#3	23.71	23.03	22.81
		1#5	23.77	23.03	22.8
		3#0	23.64	23	22.84
		3#1	23.65	23.02	22.82
		3#3	23.63	23.04	22.87
		6#0	22.55	21.95	21.85
	16-QAM	1#0	22.97	21.79	21.72
		1#3	22.9	21.83	21.73
		1#5	22.98	21.84	21.85
		3#0	22.87	22.07	22.06
		3#1	22.81	22.14	22.07
		3#3	22.89	22.15	22.11
		6#0	21.49	21.25	21.18
3M	QPSK	1#0	23.5	22.81	22.39
		1#8	23.73	22.94	22.7
		1#14	23.59	22.96	22.65
		8#0	22.37	21.8	21.6
		8#4	22.41	21.87	21.73
		8#7	22.38	21.86	21.81
		15#0	22.36	21.91	21.63
	16-QAM	1#0	22.65	21.62	21.54
		1#8	22.87	21.73	21.68
		1#14	22.79	21.76	21.73
		8#0	21.54	20.96	20.76
		8#4	21.59	21.02	20.89
		8#7	21.52	21.02	20.97
		15#0	21.42	20.94	20.83

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
5M	QPSK	1#0	23.36	22.87	22.35
		1#12	23.44	22.99	22.62
		1#24	23.61	23.2	22.84
		12#0	22.34	21.81	21.28
		12#7	22.44	21.91	21.62
		12#13	22.51	21.92	21.61
		25#0	22.32	21.83	21.51
	16-QAM	1#0	22.94	21.89	21.37
		1#12	23.04	22	21.69
		1#24	23.26	22.22	21.99
		12#0	21.5	21.04	20.47
		12#7	21.56	21.09	20.79
		12#13	21.66	21.19	20.81
		25#0	21.47	20.93	20.66
10M	QPSK	1#0	23.55	22.61	22.12
		1#25	23.81	22.88	22.16
		1#49	23.79	23.08	22.67
		25#0	22.29	21.63	20.97
		25#12	22.59	21.88	21.25
		25#25	22.45	21.98	21.34
		50#0	22.35	21.74	21.13
	16-QAM	1#0	22.76	21.56	21.16
		1#25	23.07	21.77	21.28
		1#49	23.02	22.04	21.82
		12#0	22.4	21.69	21.12
		12#19	22.7	21.93	21.28
		12#38	22.63	22.26	21.73
		27#0	21.33	20.78	20.16
		27#11	21.53	21.01	20.33
		27#23	21.49	21.07	20.47

Test Bandwidth	Test Modulation	Resource Block & RB offset	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
15M	QPSK	1#0	23.02	22.82	22.49
		1#37	23.49	23.21	22.21
		1#74	23.15	23.38	22.86
		36#0	22.31	21.75	21.26
		36#20	22.65	21.97	21.24
		36#39	22.5	22.18	21.34
		75#0	22.39	21.83	21.26
	16-QAM	1#0	22.23	22.01	21.67
		1#37	22.48	22.38	21.36
		1#74	22.36	22.56	21.98
		12#0	22.19	21.54	21.51
		12#31	22.65	22.02	21.32
		12#63	22.29	22.09	21.62
		27#0	21.32	20.85	20.49
		27#24	21.59	21.19	20.42
		27#48	21.46	21.29	20.62
20M	QPSK	1#0	23.82	23.51	23.54
		1#49	23.51	22.89	22.18
		1#99	22.64	22.85	22.59
		50#0	22.48	22.6	21.43
		50#24	22.6	21.93	21.35
		50#50	22.12	22.09	21.14
		100#0	22.27	21.83	21.35
	16-QAM	1#0	22.61	21.8	22.26
		1#49	23.01	22.27	21.91
		1#99	22.15	22.32	22.36
		12#0	22.27	21.37	21.64
		12#43	22.76	22	21.43
		12#88	21.75	21.9	21.5
		27#0	21.33	20.68	20.4
		27#37	21.69	21.25	20.43
		27#73	20.89	21.09	20.23

Standalone SAR test exclusion considerations

Antennas Location:

SAR MEASUREMENT RESULTS

This page summarizes the results of the performed dosimetric evaluation.

SAR Test Data

Environmental Conditions

Temperature:	22.1-23.2 ℃
Relative Humidity:	49 %
Test Date:	2026/04/01

Testing was performed by Allen sun and Jacky cai

LTE FDD Band 2:

EUT Position	Freq. (MHz)	Modulation Type	Bandwidth (MHz)	RB	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	Scaled Factor	Meas. (W/Kg)	Scaled SAR (W/Kg)	Limit (W/Kg)	Plot
Face up (25mm)	1880	QPSK	20M	1RB	24.53	25.00	1.114	**0.197**	**0.22**	1.6	**1#**
	1880	QPSK	20M	50%RB	23.40	23.50	1.023	0.171	0.18	1.6	/
Body Back with Belt Clip (0mm)	1880	QPSK	20M	1RB	24.53	25.00	1.114	**0.465**	**0.52**	1.6	**2#**
	1880	QPSK	20M	50%RB	23.40	23.50	1.023	0.414	0.42	1.6	/

LTE FDD Band 5:

EUT Position	Freq. (MHz)	Modulation Type	Bandwidth (MHz)	RB	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	Scaled Factor	Meas. (W/Kg)	Scaled SAR (W/Kg)	Limit (W/Kg)	Plot
Face up (25mm)	836.5	QPSK	10M	1RB	23.58	24.00	1.102	**0.096**	**0.11**	1.6	**3#**
	836.5	QPSK	10M	50%RB	23.29	24.00	1.178	0.078	0.09	1.6	/
Body Back with Belt Clip (0mm)	836.5	QPSK	10M	1RB	23.58	24.00	1.102	**0.201**	**0.22**	1.6	**4#**
	836.5	QPSK	10M	50%RB	23.29	24.00	1.178	0.161	0.19	1.6	/

LTE FDD Band 7:

EUT Position	Freq. (MHz)	Modulation Type	Bandwidth (MHz)	RB	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	Scaled Factor	Meas. (W/Kg)	Scaled SAR (W/Kg)	Limit (W/Kg)	Plot
Face up (25mm)	2535	QPSK	20M	1RB	24.09	24.50	1.099	**0.236**	**0.26**	1.6	**5#**
	2535	QPSK	20M	50%RB	23.94	24.50	1.138	0.212	0.24	1.6	/
Body Back with Belt Clip (0mm)	2535	QPSK	20M	1RB	24.09	24.50	1.099	**0.480**	**0.53**	1.6	**6#**
	2535	QPSK	20M	50%RB	23.94	24.50	1.138	0.431	0.49	1.6	/

LTE FDD Band 66&4:

EUT Position	Freq. (MHz)	Modulation Type	Bandwidth (MHz)	RB	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	Scaled Factor	Meas. (W/Kg)	Scaled SAR (W/Kg)	Limit (W/Kg)	Plot
Face up (25mm)	1745	QPSK	20M	1RB	23.51	24.00	1.119	**0.249**	**0.28**	1.6	**7#**
	1745	QPSK	20M	50%RB	22.60	23.00	1.096	0.172	0.19	1.6	/
Body Back with Belt Clip (0mm)	1745	QPSK	20M	1RB	23.51	24.00	1.119	**0.366**	**0.41**	1.6	**8#**
	1745	QPSK	20M	50%RB	22.60	23.00	1.096	0.262	0.29	1.6	/

Note:

1. When the SAR value is greater than half of the limit value, the other two channels should be tested
2. KDB 941225 D05- For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg.
3. KDB 941225 D05- other channel bandwidths SAR test is required when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.
4. LTE FDD Band 66 and LTE FDD Band 4 have the same power, we only tested the LTE FDD Band 66 because it has a larger frequency range, so the LTE FDD Band 4 does not need to be tested.

SAR SIMULTANEOUS TRANSMISSION DESCRIPTION

NOTE:
There is no multiple transmitters for the product, so simultaneous transmission need not to evaluate.

APPENDIX A SAR PLOTS OF SAR MEASUREMENT

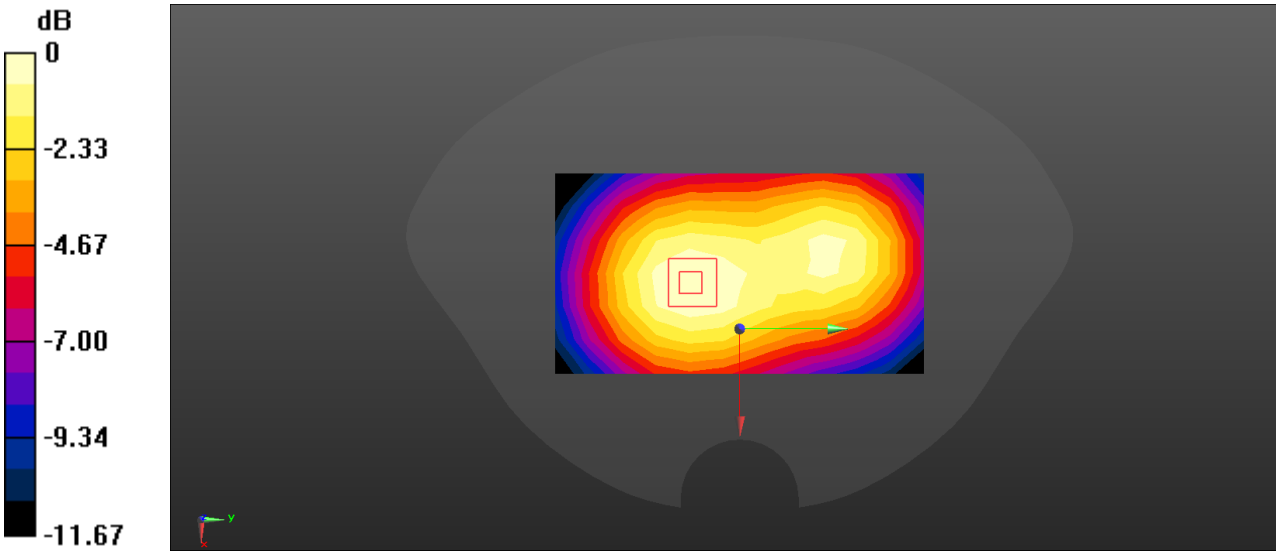
1#_LTE Band 2_20M_QPSK_1RB_0offset_Face up_25mm_Ch18900

Communication System: UID 0, FDD LTE 4G (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.391 S/m; ε_r = 39.878; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(8.02, 8.02, 8.02) @ 1880 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.265 W/kg
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.34 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.299 W/kg
SAR(1 g) = 0.197 W/kg; SAR(10 g) = 0.131 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 64.9%
Maximum value of SAR (measured) = 0.262 W/kg



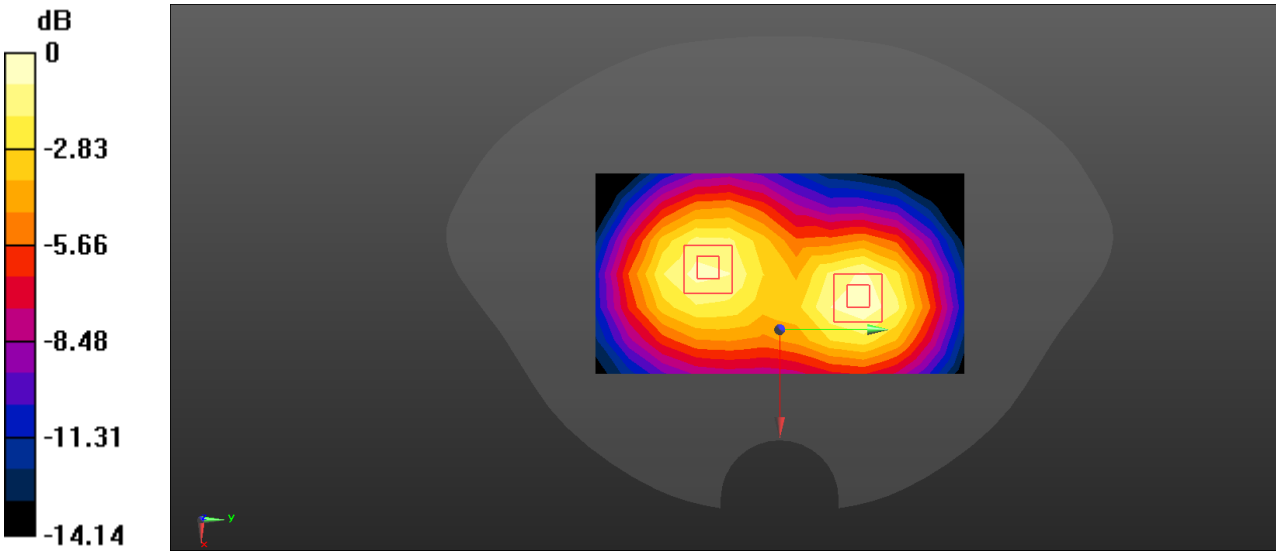
0 dB = 0.262 W/kg = -5.82 dBW/kg

2#_LTE Band 2_20M_QPSK_1RB_0offset_Body Back with Belt Clip_0mm_Ch18900

Communication System: UID 0, FDD LTE 4G (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.391 S/m; ε_r = 39.878; ρ = 1000 kg/m^3
DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(8.02, 8.02, 8.02) @ 1880 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.629 W/kg
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.86 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.750 W/kg
SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.287 W/kg
Smallest distance from peaks to all points 3 dB below = 20.5 mm
Ratio of SAR at M2 to SAR at M1 = 61.9%
Maximum value of SAR (measured) = 0.648 W/kg
Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.86 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.643 W/kg
SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.281 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 66.5%
Maximum value of SAR (measured) = 0.568 W/kg



0 dB = 0.648 W/kg = -1.88 dBW/kg

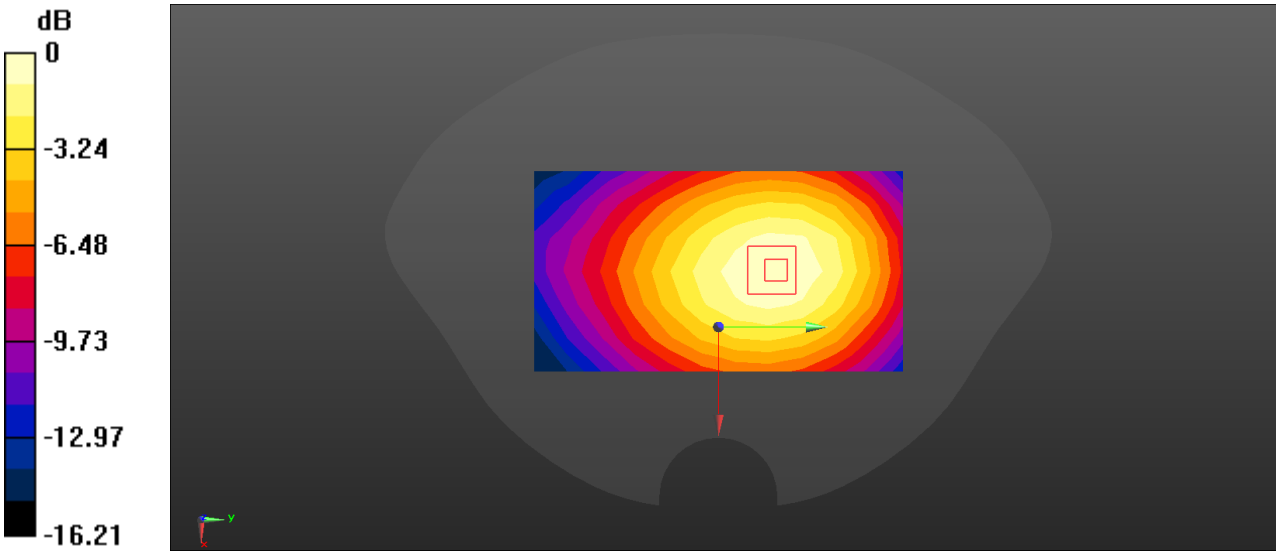
3#_LTE Band 5_10M_QPSK_1RB_0offset_Face up_25mm_Ch20525

Communication System: UID 0, FDD LTE 4G (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.5 MHz; σ = 0.92 S/m; ε_r = 41.498; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(9.97, 9.97, 9.97) @ 836.5 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.119 W/kg
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.37 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.135 W/kg
SAR(1 g) = 0.096 W/kg; SAR(10 g) = 0.069 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 70.7%
Maximum value of SAR (measured) = 0.121 W/kg



0 dB = 0.121 W/kg = -9.17 dBW/kg

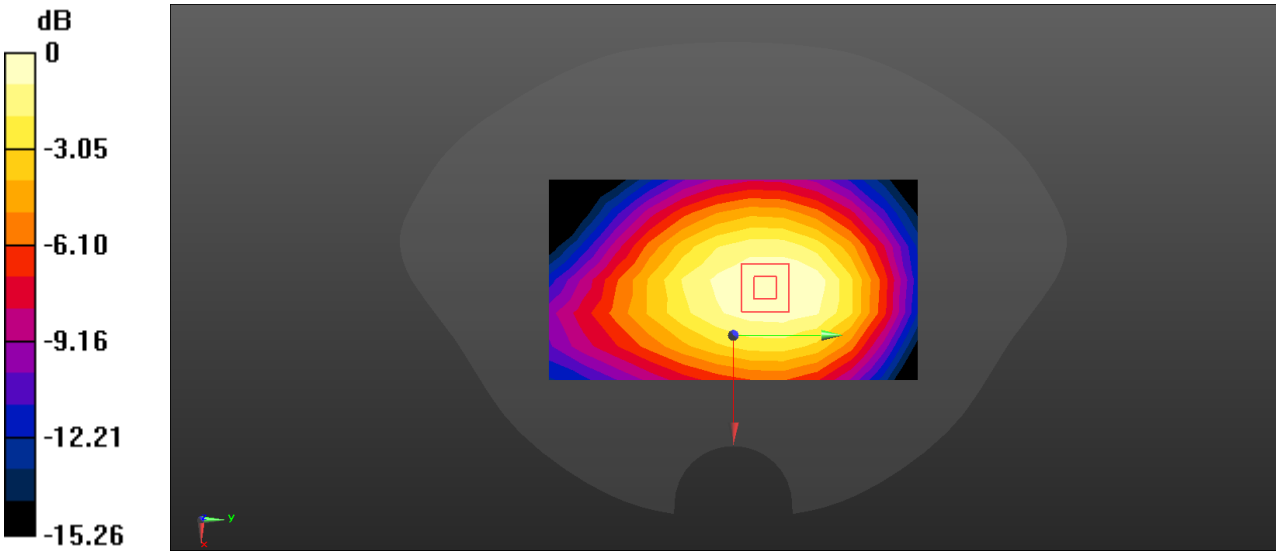
4#_LTE Band 5_10M_QPSK_1RB_0offset_Body Back with Belt Clip_0mm_Ch20525

Communication System: UID 0, FDD LTE 4G (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.5 MHz; σ = 0.92 S/m; ε_r = 41.498; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(9.97, 9.97, 9.97) @ 836.5 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.241 W/kg
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.22 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.281 W/kg
SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.147 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 72.9%
Maximum value of SAR (measured) = 0.249 W/kg



0 dB = 0.249 W/kg = -6.04 dBW/kg

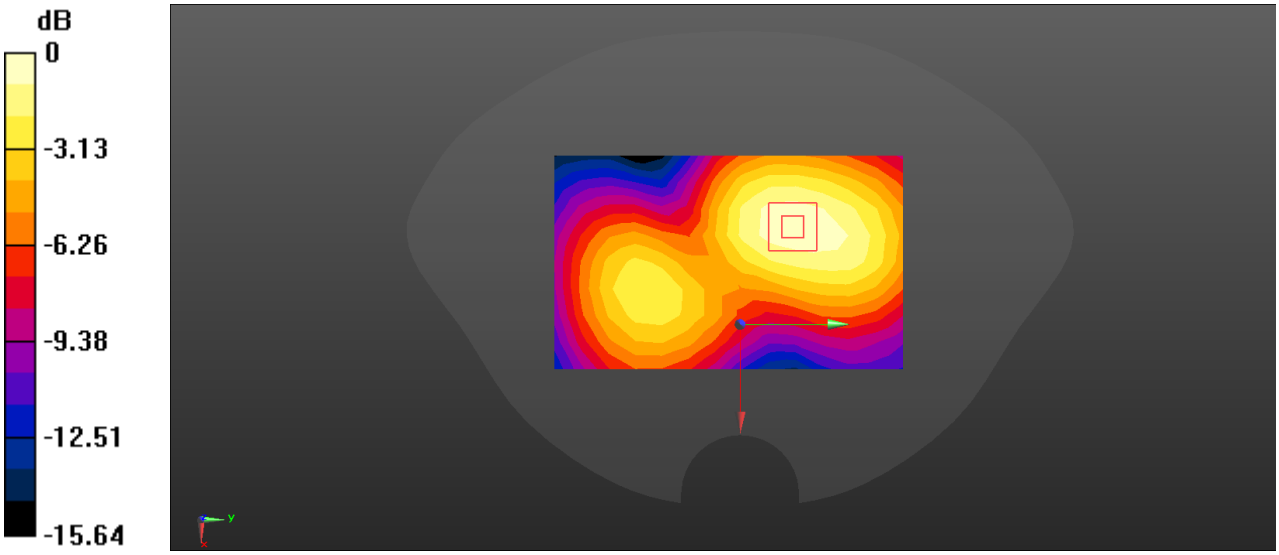
5#_LTE Band 7_20M_QPSK_1RB_0offset_Face up_25mm_Ch21100

Communication System: UID 0, FDD LTE 4G (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2535 MHz; σ = 1.969 S/m; ε_r = 39.241; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(7.26, 7.26, 7.26) @ 2535 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (9x14x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.323 W/kg
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.188 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.411 W/kg
SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.141 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)
Ratio of SAR at M2 to SAR at M1 = 56.4%
Maximum value of SAR (measured) = 0.346 W/kg



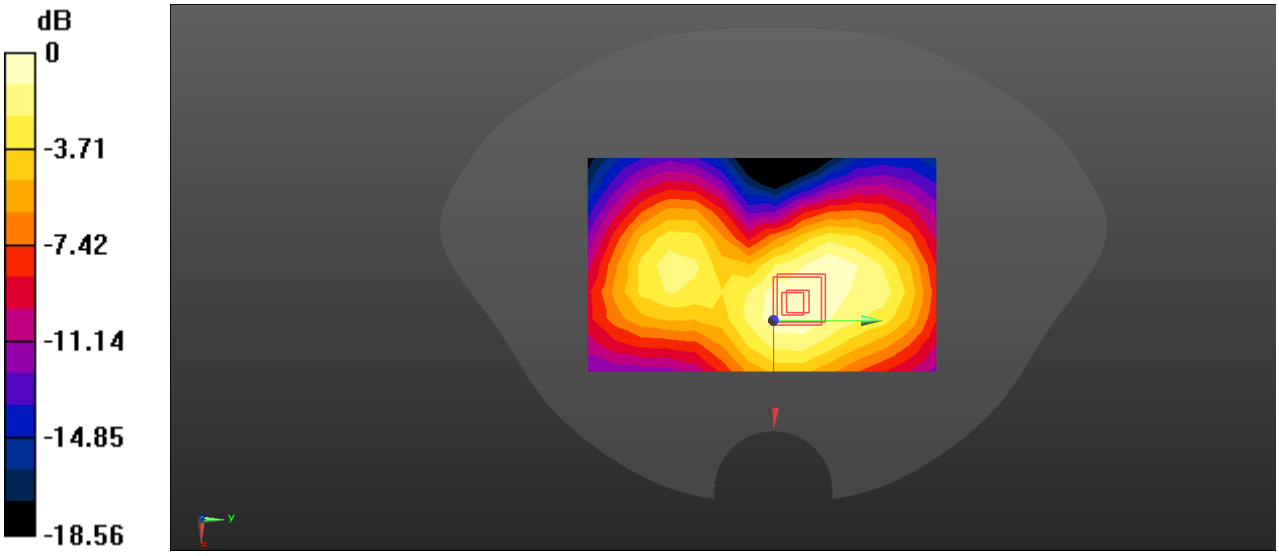
0 dB = 0.346 W/kg = -4.61 dBW/kg

6#_LTE Band 7_20M_QPSK_1RB_0offset_Body Back with Belt Clip_0mm_Ch21100

Communication System: UID 0, FDD LTE 4G (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2535 MHz; σ = 1.969 S/m; ε_r = 39.241; ρ = 1000 kg/m^3
DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(7.26, 7.26, 7.26) @ 2535 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (9x14x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.708 W/kg
Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.18 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.841 W/kg
SAR(1 g) = 0.480 W/kg; SAR(10 g) = 0.284 W/kg
Smallest distance from peaks to all points 3 dB below = 20.2 mm
Ratio of SAR at M2 to SAR at M1 = 56.4%
Maximum value of SAR (measured) = 0.707 W/kg
Zoom Scan (9x9x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.18 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.819 W/kg
SAR(1 g) = 0.474 W/kg; SAR(10 g) = 0.282 W/kg
Smallest distance from peaks to all points 3 dB below = 19.8 mm
Ratio of SAR at M2 to SAR at M1 = 57%
Maximum value of SAR (measured) = 0.689 W/kg



0 dB = 0.707 W/kg = -1.51 dBW/kg

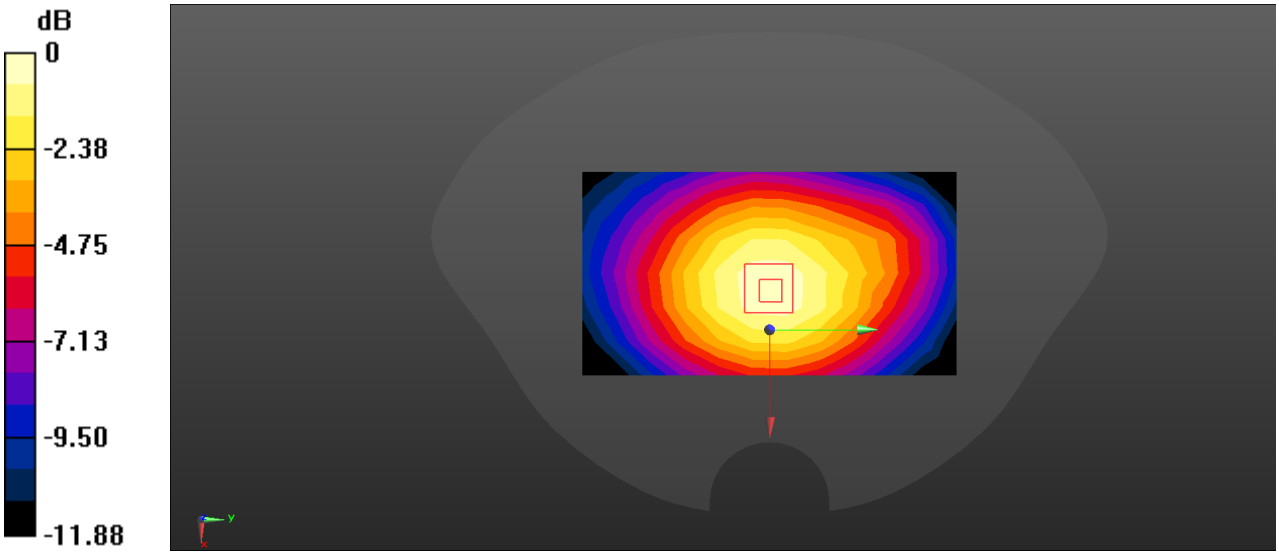
7#_LTE Band 66_20M_QPSK_1RB_0offset_Face up_25mm_Ch132322

Communication System: UID 0, FDD LTE 4G (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1745 MHz; σ = 1.361 S/m; ε_r = 41.05; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(8.34, 8.34, 8.34) @ 1745 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.306 W/kg
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.86 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.374 W/kg
SAR(1 g) = 0.249 W/kg; SAR(10 g) = 0.168 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 65.7%
Maximum value of SAR (measured) = 0.329 W/kg



0 dB = 0.329 W/kg = -4.83 dBW/kg

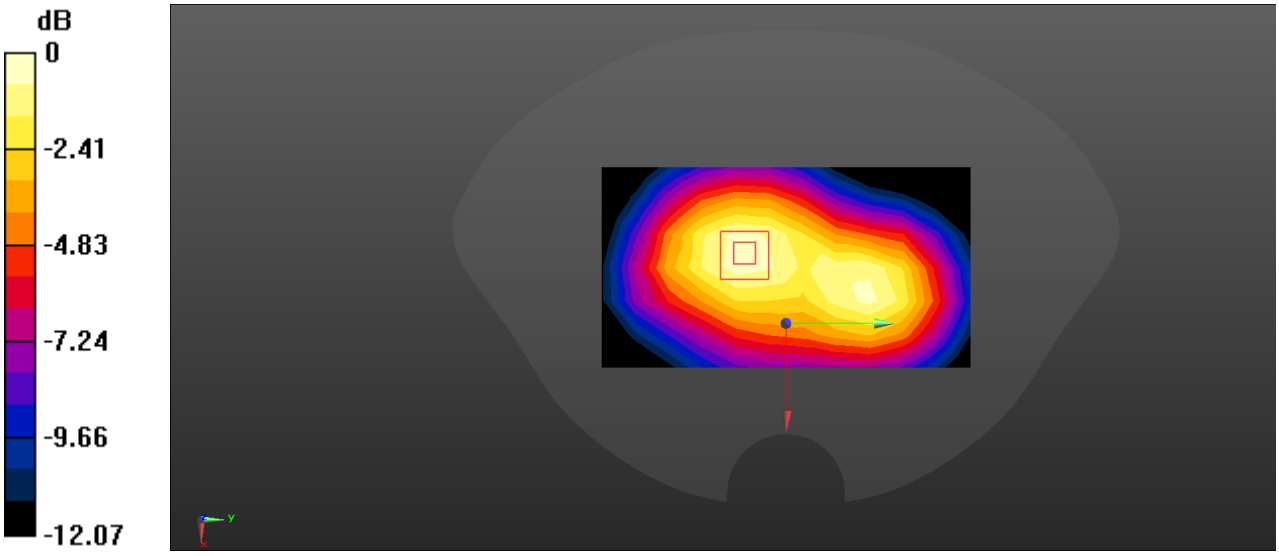
8#_LTE Band 66_20M_QPSK_1RB_0offset_Body Back with Belt Clip_0mm_Ch132322

Communication System: UID 0, FDD LTE 4G (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1745 MHz; σ = 1.361 S/m; ε_r = 41.05; ρ = 1000 kg/m^3

DASY5 Configuration:

- Probe: EX3DV4 - SN7557; ConvF(8.34, 8.34, 8.34) @ 1745 MHz; Calibrated: 5/16/2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 5/16/2025
- Phantom: Twin-SAM; Type: QD 000 P41 Ax; Serial: 1963
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.441 W/kg
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.32 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.541 W/kg
SAR(1 g) = 0.366 W/kg; SAR(10 g) = 0.243 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 67.4%
Maximum value of SAR (measured) = 0.481 W/kg



0 dB = 0.481 W/kg = -3.18 dBW/kg

APPENDIX B MEASUREMENT UNCERTAINTY

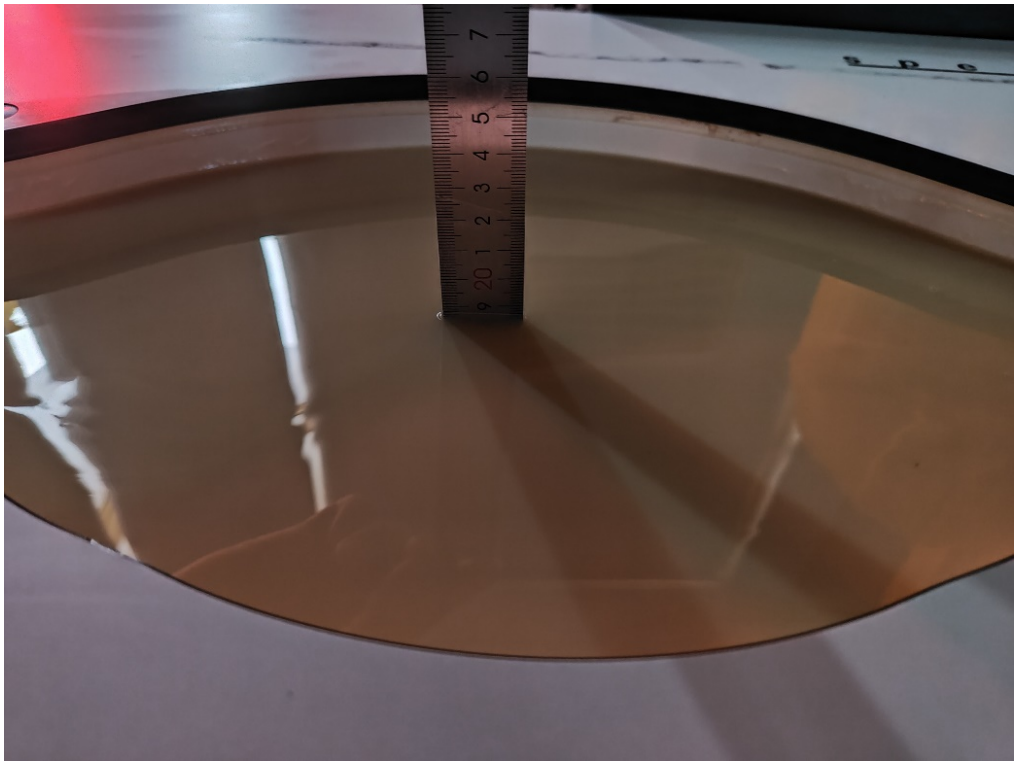
The uncertainty budget has been determined for the measurement system and is given in the following Table.

Measurement uncertainty evaluation for IEEE 1528:2013 SAR test

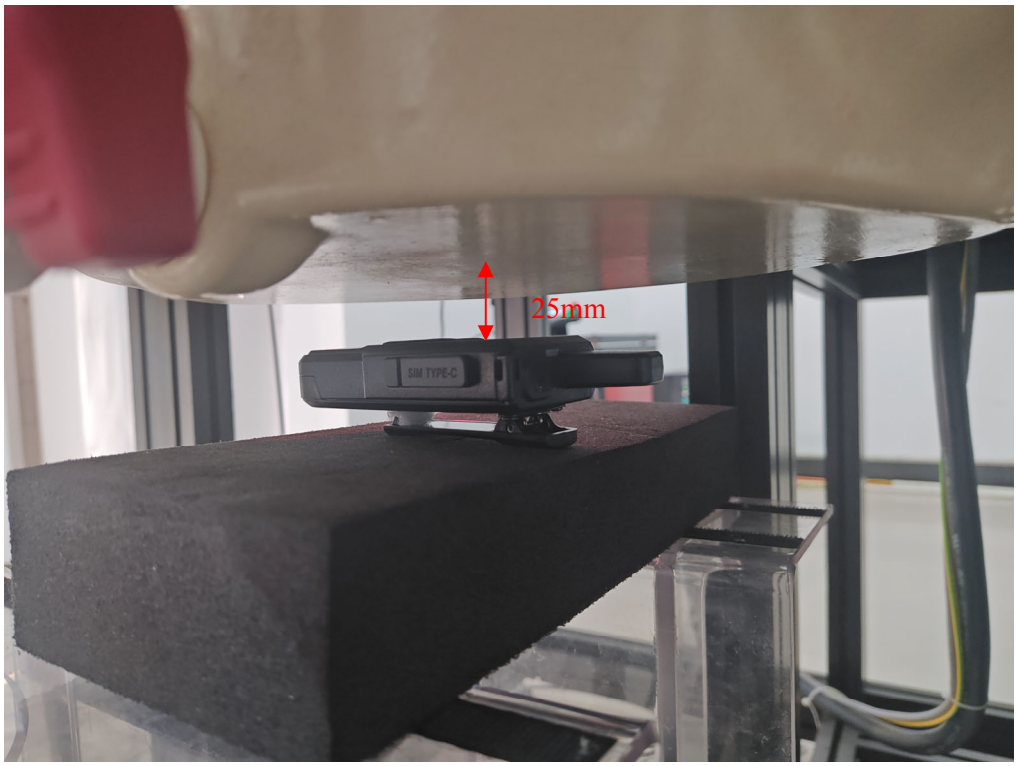
Uncertainty component	Tolerance/ uncertainty ± %	Probability distribution	Divisor	ci (1 g)	ci (10 g)	Standard uncertainty ± %, (1 g)	Standard uncertainty ± %, (10 g)
Measurement system							
Probe calibration(k=1)	6.55	N	1	1	1	6.6	6.6
Axial isotropy	4.7	R	√3	√0.5	√0.5	1.9	1.9
Hemispherical isotropy	9.6	R	√3	√0.5	√0.5	3.9	3.9
Boundary effect	1.0	R	√3	1	1	0.6	0.6
Linearity	4.7	R	√3	1	1	2.7	2.7
System detection limits	1.0	R	√3	1	1	0.6	0.6
Modulation response	0.0	R	√3	1	1	0.0	0.0
Readout electronics	0.3	N	1	1	1	0.3	0.3
Response time	0.0	R	√3	1	1	0.0	0.0
Integration time	0.0	R	√3	1	1	0.0	0.0
RF ambient conditions-noise	1.0	R	√3	1	1	0.6	0.6
RF ambient conditions-reflections	1.0	R	√3	1	1	0.6	0.6
Probe positioner mech. tolerance	0.8	R	√3	1	1	0.5	0.5
Probe positioning with respect to phantom shell	6.7	R	√3	1	1	3.9	3.9
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	2.0	R	√3	1	1	1.2	1.2
Test sample related							
Test sample positioning	3.5	N	1	1	1	3.5	3.5
Device holder uncertainty	4.8	N	1	1	1	4.8	4.8
Output power variation –SAR draft measurement	5.0	R	√3	1	1	2.9	2.9
SAR scaling	2.8	R	√3	1	1	1.6	1.6
Phantom and tissue parameters							
Phantom shell uncertainty– shape, thickness and permittivity	4.0	R	√3	1	1	2.3	2.3
Uncertainty in SAR correction for deviations in permittivity and conductivity	1.9	N	1	1	0.84	1.9	1.6
Liquid conductivity meas.	2.5	N	1	0.78	0.71	2.0	1.8
Liquid permittivity meas.	2.5	N	1	0.23	0.26	0.6	0.7
Liquid conductivity – temperature uncertainty	1.7	R	√3	0.78	0.71	0.8	0.7
Liquid permittivity – temperature uncertainty	0.3	R	√3	0.23	0.26	0.0	0.0
Combined standard uncertainty		RSS				12.2	12.1
Expanded uncertainty (95 % confidence interval)		k=2				24.4	24.2

APPENDIX C EUT TEST POSITION PHOTOS

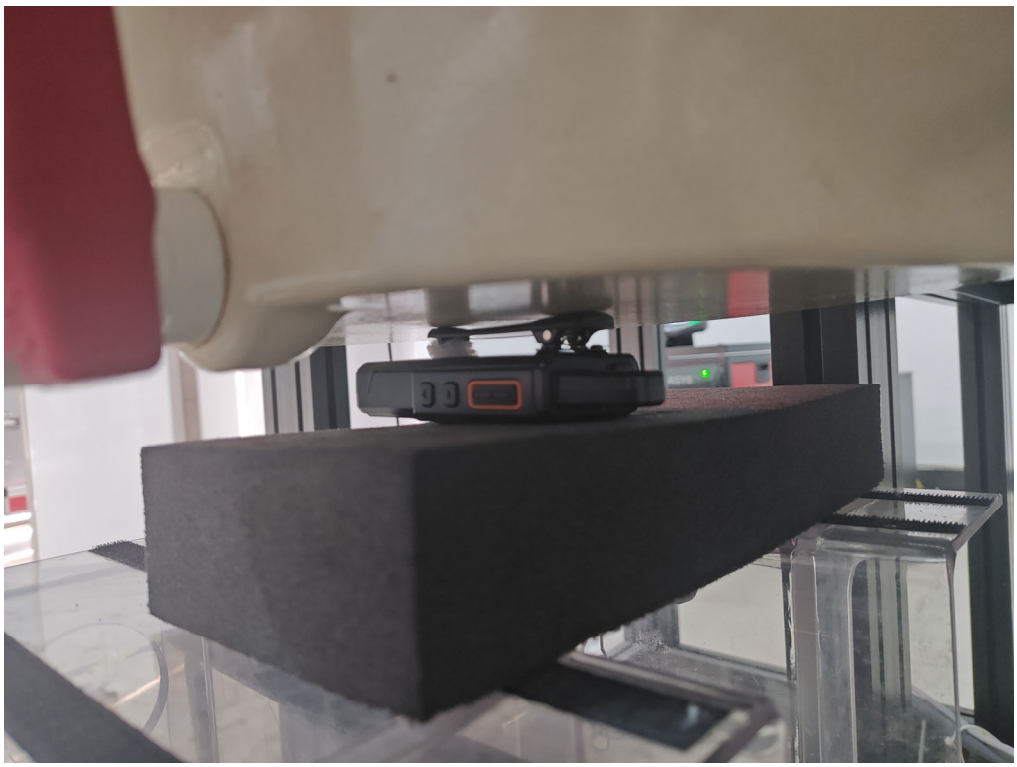
Liquid depth ≥ 15cm



WWAN Face up (25mm)



WWAN Body Back with Belt Clip (0mm)



APPENDIX D CALIBRATION CERTIFICATES

Please Refer to the Attachment.

APPENDIX E DIPOLE INTERMEDIATE CHECK

Please Refer to the Attachment.

Declarations

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with "★".

2. The test data was only valid for the test sample(s).

3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95.45% confidence interval.

6. This report may contain standards and test items that are not covered by the accreditation scope and shall be marked with an asterisk "▲".

******* END OF REPORT *******