

SAR TEST REPORT

For

Urocomm International Limited

Macaroon LTE Mobile Router

Model No.: SE2 ; Macaroon SE2

Brand: macaroon

The MAX SAR(10g)	
Body SAR	0.585W/Kg

Test distance	
Body SAR	10mm

Prepared for: Urocomm International Limited
SUITE 1601,16TH FLOOR CHINACHEM HOLLYWOOD
CENTRE 1-13 HOLLYWOOD ROAD CENTRAL HK

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Date of Test : Jan.28~Mar.09, 2026
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APPENDIX A (Graph Result- UMTS & E-UTRA)

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APPENDIX D (Test Photos)

SAR TEST REPORT

Applicant : Urocomm International Limited
Manufacturer : Urocomm International Limited
Product : Macaroon LTE Mobile Router
Model No. : SE2 ; Macaroon SE2
Brand : macaroon
Test Voltage : DC 3.7V

Measurement Standard Used:

比吸収率 (S A R) の測定方法 別表第七十九

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the MIC Notice No.88 Appendix No.79 Requirement.

This report applies to single evaluation of one sample of above mentioned product. And shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test: Jan.28~Mar.09, 2026 Date of Report: Jun.24, 2026

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REPORT REVISION HISTORY

Edition No.	Revision	Issue Date	Report No.
Original	Initial issue of report	Mar.17, 2026	ACS-SJ26002
Rev.01	Add Model: Macaroon SE2	Jun.24, 2026	ACS-SJ26002

Remark:

1. This report is an additional version with original report number ACS-SJ26002. The differences with original report please see the above table.
2. Through evaluation of the above difference, all tests items didn't need to be re-performed.
3. This report is based on report of ACS-SJ26002.

1. GENERAL INFORMATION

1.1. Description of Equipment Under Test

Applicant	Urocomm International Limited
Applicant Address	SUITE 1601,16TH FLOOR CHINACHEM HOLLYWOOD CENTRE 1-13 HOLLYWOOD ROAD CENTRAL HK
Manufacturer	Urocomm International Limited
Manufacturer Address	SUITE 1601,16TH FLOOR CHINACHEM HOLLYWOOD CENTRE 1-13 HOLLYWOOD ROAD CENTRAL HK
Factory	Shenzhen Sailin Electronic Technology Co., Ltd
Factory Address	4th and 6th floors, Building B7, Yintian Industrial Zone, Yantian Community, Xixiang Street, Bao'an District, Shenzhen
Product	Macaroon LTE Mobile Router
Model No.	SE2; Macaroon SE2 Model differences (Declared by the Applicant): Only model name different.
Test Model	SE2
Brand	macaroon
Sample Type	Prototype production
Date of Receipt	Dec.25, 2025
Date of Test	Jan.28~Mar.09, 2026

1.2. Feature of Equipment Under Test

Product Feature & Specification			
Product	Macaroon LTE Mobile Router		
Model No.	SE2		
Power Source	☒ Commercial Power	AC V	
	☒ External Power Source	DC 5V	
	☒ Li-ion polymer Battery	DC 3.7V	
	☐ UM battery	DC V	
WLAN			
WLAN Support Category/ Frequency Range	☒ Article 2-1-19 /2400MHz ~ 2483.5MHz		
	☐ Article 2-1-19-2 /2471MHz ~ 2497MHz		
	☐ Article 2-1-19-3 /5150MHz ~ 5250MHz		
	☐ Article 2-1-19-3 /5250MHz ~ 5350MHz		
	☐ Article 2-1-19-3 /5470MHz ~ 5730MHz		
Type of Modulation	☒ Direct Spreading (DS)		
	☒ Orthogonal frequency-division multiplexing (OFDM)		
	☐ Frequency Hopping (FH)		
RF Technology	☐ 802.11a	☒ 802.11b	☒ 802.11g
	☒ 802.11n-HT20	☐ 802.11ac-VHT20	☒ 802.11ax-HE20
	☒ 802.11n-HT40	☐ 802.11ac-VHT40	☒ 802.11ax-HE40
	☐ 802.11ac-VHT80	☐ 802.11ax-HE80	
	☐ 802.11ac-VHT160	☐ 802.11ax-HE160	
UMTS			
Support Band / 3GPP Band	☐ 700M Band		
	☐ 850M Band	☐ Band 5	☐ Band 6 ☐ Band 19
	☒ 900M Band	☒ Band 8	
	☐ 1.5G Band	☐ Band 11	☐ Band 21
	☐ 1.7G Band	☐ Band 3	☐ Band 9
	☒ 2.1G Band	☒ Band 1	
Modulation Type	QPSK, 16QAM		

E-UTRA

Support Band/ 3GPP Band	☒ 700M Band	☒ Band 28
	☒ 850M Band	☐ Band 5 ☒ Band 18 ☒ Band 19 ☒ Band 26
	☒ 900M Band	☒ Band 8
	☐ 1.5G Band	☐ Band 11 ☐ Band 21
	☒ 1.8G Band	☒ Band 3 ☐ Band 9
	☒ 2.1G Band	☒ Band 1
	☒ 2.3G Band	☒ Band 40
	☒ TDD Band	☒ Band 34 ☒ Band 39 ☒ Band 41 ☐ Band 42

Modulation Type QPSK, 16QAM

Antenna Information

Antenna Type	PIFA Antenna
Antenna Peak Gain	WLAN 2.4GHz Peak Gain: -0.25dBi Max UMTS Peak Gain: Band 1: 0.52dBi; Band 8:-0.45dBi LTE Peak Gain: Band 1: 0.52dBi Band 3: -0.37dBi Band 8: -0.45dBi Band 18: -1.31dBi Band 19: -1.31dBi Band 26: -1.31dBi Band 28: -2.76dBi Band 34: -0.35dBi Band 39: 0.39dBi Band 40: 0.44dBi Band 41: 1.11dBi

2. GENERAL DESCRIPTION

2.1. Product Description For EUT

Please refer to section 1.2

2.2. Applied Standards

The Specific Absorption Rate (SAR) testing specification, method and procedure for this device is in accordance with the following standards:

MIC Notice No.88 Appendix No.79

2.3. Device Category and SAR Limits

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 2.0 W/kg as averaged over any 10 gram of tissue.

2.4. Test Conditions

2.4.1. Ambient Condition

Ambient Temperature	20 to 24 °C
Humidity	< 60 %

2.4.2. Test Configuration

The distance between the EUT and the antenna of the emulator is larger than 50 cm and the output power radiated from the emulator antenna is at least 30dB smaller than the output power of EUT. The EUT was set from the emulator to radiate maximum output power during all tests.

2.4.3. Simultaneous Transmission Description

Function	Type
Support	UMTS+WIFI2.4G*
Support	LTE+WIFI2.4G

Note: According to exploratory test, * stands for worse mode and reported.

2.5. Exposure Positions Consideration



Sides for SAR tests						
Band	Body					
	Back	Front	Top	Bottom	Left	Right
WiFi 2.4GHz	√	√	√	×	√	√
UMTS	√	√	√	√	√	√
E-UTRA	√	√	√	√	√	√

Note: The side remark with X, because the results from the pre-tests on three sides were relatively low, hence they were not included in the report.

2.6. Block Diagram of connection between EUT and simulators



(EUT: Macaroon LTE Mobile Router)

2.7. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date	Calibration Body	Cal Method (Note)
1.	DASY5 SAR Test System	Speag	TX60 L speag	F09/5B1H1/01	NCR	NCR	NCR	N/A
2.	Power meter	Anritsu	ML2487A	6K00003262	2025.06.09	2026.06.08	CCIC	c)
3.	Power Sensor	Anritsu	MA2491A	032516	2025.06.09	2026.06.08	CCIC	c)
4.	Dipole Validation Kits	Speag	D750V3	1159	2025.06.18	2028.06.17	CTTL	c)
5.	Dipole Validation Kits	Speag	D900V2	1d088	2023.05.23	2026.05.22	CTTL	c)
6.	Dipole Validation Kits	Speag	D1800V2	2d186	2023.05.23	2026.05.22	CTTL	c)
7.	Dipole Validation Kits	Speag	D2000V2	1055	2023.05.24	2026.05.23	CTTL	c)
8.	Dipole Validation Kits	Speag	D2300V2	1040	2023.02.01	2026.01.31	CTTL	c)
9.	Dipole Validation Kits	Speag	D2450V2	862	2023.05.18	2026.05.17	CTTL	c)
10.	Dipole Validation Kits	Speag	D2600V2	1123	2025.06.17	2028.06.16	CTTL	c)
11.	Attenuator(20dB)	MCL	VAT-20W2-2W	1527-001	2025.09.15	2026.09.14	CCIC	d)
12.	ENA SERIES NETWORK ANALYZER	Agilent	E5071C	MY46316760	2025.09.15	2026.09.14	CCIC	c)
13.	Date Acquisition Electronics	Speag	DAE4	899	2025.06.19	2026.06.18	CTTL	c)
14.	E-Field Probe	Speag	EX3DV4	7957	2025.10.06	2026.10.05	Schmid & Partner Engineering AG	E-Field Probe
15.	Signal Generator	Rohde & Schwarz	SMB100A	181375	2026.03.03	2027.03.02	CCIC	c)
16.	Radio Communication Analyzer	Anritsu	MT8821C	6201547828	2026.03.03	2027.03.02	CCIC	c)
17.	Attenuator(20dB)	MCL	VAT-20W2-2W	1527-002	2025.09.15	2026.09.14	CCIC	c)
18.	Test Software	Schmid&Partner Englinnering AG	DASY5	52.8.7.1137	NCR	NCR	NCR	N/A

Note: NCR means no calibration required (calibrated with system).

Note1: Calibration Method

- a): Calibration conducted by the National Institute of Information and Communications Technology ~ NICT ~ or a designated calibration agency under Article 102-18 paragraph (1) ~ TELEC Engineering Center, Intertek Japan K.K., Keysight Technologies, Inc ~.
- b): Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) ~ Japan Calibration Service System ~
- c): Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1) ~ TELEC Engineering Center, Intertek Japan K.K., Keysight Technologies, Inc ~.
- d): Calibration conducted by using other equipment that listed above from a) to c)

Note 2: CCIC (Shenzhen) Metrology & Testing Service Co.,Ltd

Addr : ShengHui Hongxing Chuangzhi Square, Tongren Road, TianliaoCommunity, Yutang Street, Guangming District, Shenzhen

Note 3: Dipole antenna calibration interval is 3year, annual check result to be follow(Refer to KDB 865664 D01 Section 3.2.2 Diploe calibration)

Dipole: 2450V2-SN862

Antenna Parameters with Head TSL

Date	2024.05.16	2025.05.17
Impedance, Transformed to Feed point	48.0Ω-6.11jΩ	48.45Ω-6.19jΩ
Return Loss	-23.21dB	-24.13dB

Dipole: D2000V2-SN1055

Antenna Parameters with Head TSL

Date	2024.05.21	2025.05.27
Impedance, Transformed to Feed point	48.11Ω-1.43jΩ	47.69Ω-1.11jΩ
Return Loss	-32.1dB	-34.5dB

Dipole: D900V2-SN: 1d088

Antenna Parameters with Head TSL

Date	2024.05.15	2025.05.25
Impedance, Transformed to Feed point	48.79Ω-7.22jΩ	49.13Ω-7.87jΩ
Return Loss	-21.1dB	-22.4dB

Dipole:D1800V2-SN:2d186

Antenna Parameters with Head TSL

Date	2024.05.20	2025.05.18
Inpedance, Transformed to Feed point	46.9Ω-2.57jΩ	47.7Ω-3.38jΩ
Return Loss	-29.0dB	-33dB

Dipole: D2300V2-SN1040

Antenna Parameters with Head TSL

Date	2024.01.21	2025.01.27
Inpedance, Transformed to Feed point	48.24Ω-3.43jΩ	46.21Ω-2.01jΩ
Return Loss	-26.1dB	-25.67dB

2.8. Laboratory Environment

Temperature	Min:20°C,Max.25°C
Relative humidity	Min. = 45%, Max. = 70%
Note: Ambient noise is checked and found very low and in compliance with requirement of standards.	

2.9. Measurement Uncertainty

Test Item	Uncertainty
Uncertainty for SAR test	1g: ± 21.2
	10g: ± 20.7
Uncertainty for SAR tissue fluid	Conductivity: ± 21.1
	Dielectric properties: ± 20.6
Uncertainty for test site temperature and humidity	$\pm 0.6^{\circ}\text{C}$

Source	Type	Uncertainty Value (%)	Probability Distribution	K	C1(1g)	C1(10g)	Standard uncertainty u _i (%)1g	Standard uncertainty u _i (%)10g	Degree of freedom V _{eff} or V _i
Measurement system repeatability	A	0.5	N	1		1	0.5	0.5	9
Probe calibration	B	5.9	N	1	1	1	5.9	5.9	∞
Isotropy	B	4.7	R	√3	1	1	2.7	2.7	∞
Linearity	B	4.7	R	√3	1	1	2.7	2.7	∞
Probe modulation response	B	0	R	√3	1	1	0	0	∞
Detection limits	B	1.0	R	√3	1	1	0.6	0.6	∞
Boundary effect	B	1.9	R	√3	1	1	1.1	1.1	∞
Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
Response time	B	0	R	√3	1	1	0	0	∞
Integration time	B	4.32	R	√3	1	1	2.5	2.5	∞
RF ambient conditions – noise	B	0	R	√3	1	1	0	0	∞
RF ambient conditions – reflections	B	3	R	√3	1	1	1.73	1.73	∞
Probe positioner mech. restrictions	B	0.4	R	√3	1	1	0.2	0.2	∞
Probe positioning with respect to phantom shell	B	2.9	R	√3	1	1	1.7	1.7	∞
Post-processing	B	0	R	√3	1	1	0	0	∞
Test sample related									
Device holder uncertainty	A	2.94	N	1	1	1	2.94	2.94	M-1
Test sample positioning	A	4.1	N	1	1	1	4.1	4.1	M-1
Power scaling	B	5.0	R	√3	1	1	2.9	2.9	∞
Drift of output power (measured SAR drift)	B	5.0	R	√3	1	1	2.9	2.9	∞
Phantom and set-up									
Phantom uncertainty (shape and thickness tolerances)	B	4.0	R	√3	1	1	2.3	2.1	∞
Algorithm for correcting SAR for deviations in permittivity and conductivity	B	1.9	N	1	1	0.84	1.9	1.6	∞
Liquid conductivity (meas.)	A	0.55	N	1	0.78	0.71	0.24	0.21	M-1
Liquid permittivity (meas.)	A	0.19	N	1	0.23	0.26	0.09	0.06	M
Liquid permittivity – temperature uncertainty	A	5.0	R	√3	0.78	0.71	1.4	1.1	∞
Liquid conductivity – temperature uncertainty	A	5.0	R	√3	0.23	0.26	1.2	0.8	∞
Combined standard uncertainty	$u_c = \sqrt{\sum_{i=1}^{23} c_i^2 u_i^2}$						10.57	10.32	
Expanded uncertainty (95 % conf. interval)	$u_E = 2u_c$		N	K=2			21.14	20.64	

3. MEASURE PROCEDURES

3.1. General description of test procedures

For the 802.11b/g SAR body tests, a communication link is set up with the test mode software for WIFI mode test. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode. Each channel should be tested at the lowest data rate.

Testing at higher data rates is not required when the maximum average output power is less than 0.25dB higher than those measured at the lowest data rate. SAR is not required for 802.11g channels when the maximum average output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels. The same test procedure for 802.11a/n/ac/ax mode

a communication link is establish and Low, Middle, High channel at the necessary position was tested for UMTS and E-UTRA mode.

4. SAR MEASUREMENTS SYSTEM

4.1. SAR Measurement Set-up

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 It issue 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. A computer operating Windows 2003.
- (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.

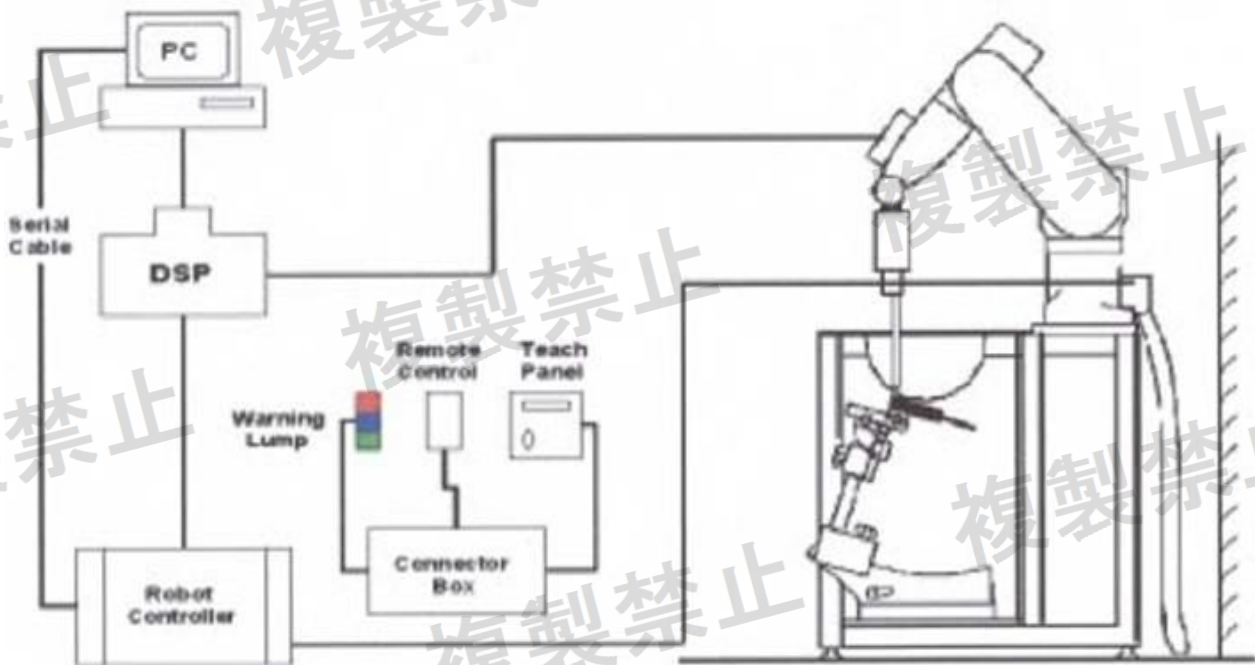


Figure 4.1 SAR Lab Test Measurement Set-up

4.2. ELI Phantom

Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. 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 is compatible with all SPEAG dosimetric probes and dipoles.



Figure 4.2 Top View of Twin Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)
Shell Thickness	2.0 ± 0.2 mm (bottom plate)
Dimensions	Major axis: 600 mm Minor axis: 400 mm
Filling Volume	approx. 30 liters
Wooden Support	SPEAG standard phantom table

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. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters.

On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

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

- *Water-sugar based liquid
- *Glycol based liquids

4.3. Device Holder for SAM Twin Phantom

The SAR in the Phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source in 5 mm distance, a positioning uncertainty of $\pm 0.5\text{mm}$ would produce a SAR uncertainty of $\pm 20\%$. An accurate device position is therefore crucial for accurate and repeatable measurement. The position in which the devices must be measured, are defined by the standards.

The DASY5 device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

The DASY5 device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon_r=3$ and loss tangent $\tan \delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

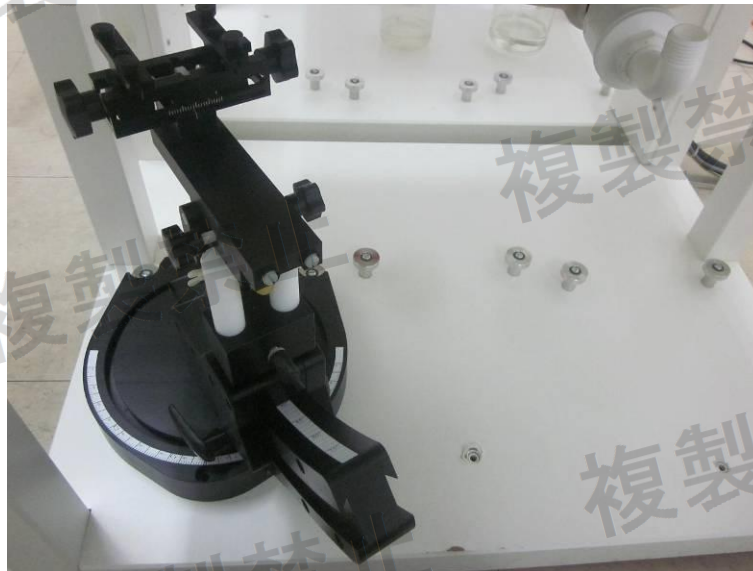


Figure 4.3 Device Holder

4.4. DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

4.4.1. EX3DV4 Probe Specification



Figure 4.4 EX3DV4 E-field Probe

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Overall length: PRS-T2 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 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). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

4.5. E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy was evaluated and found to be better than $\pm 0.25\text{dB}$. The sensitivity parameters (Norm X, Norm Y, Norm Z), the diode compression parameter (DCP) and the conversion factor (Conv F) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies below 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$\text{SAR} = C \frac{\Delta T}{\Delta t}$$

Where: Δt = Exposure time (30 seconds),
 C = Heat capacity of tissue (brain or muscle),
 ΔT = Temperature increase due to RF exposure.
Or

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

Where:
 σ = Simulated tissue conductivity,
 ρ = Tissue density (kg/m^3).

4.6. Scanning procedure

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

The "reference" and "drift" measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the EUT's output power and should vary max. $\pm 5\%$.

The "surface check" measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above $\pm 0.1\text{mm}$). To prevent wrong results tests are only executed when the liquid is free of air bubbles.

The difference between the optical surface detection and the actual surface depends on the Probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within $\pm 30^\circ$.)

Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values before running a detailed measurement around the hot spot. Before starting the area scan a grid spacing of 15 mm x 15 mm is set. During the scan the distance of the probe to the phantom remains unchanged.

After finishing area scan, the field maxima within a range of 2 dB will be ascertained.

Zoom Scan

Zoom Scans are used to estimate the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The default Zoom Scan is done by 7x7x7 points within a cube whose base is centered around the maxima found in the preceding area scan.

Spatial Peak Detection

The procedure for spatial peak SAR evaluation has been implemented and can determine values of masses of 1g and 10g, as well as for user-specific masses. The DASY5 system allows evaluations that combine measured data and robot positions, such as:

- maximum search
- extrapolation
- boundary correction
- peak search for averaged SAR

During a maximum search, global and local maxima searches are automatically performed in 2-D after each Area Scan measurement with at least 6 measurement points. It is based on the evaluation of the local SAR gradient calculated by the Quadratic Shepard's method. The algorithm will find the global maximum and all local maxima within -2 dB of the global maxima for all SAR distributions.

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. Several measurements at different distances are necessary for the extrapolation. Extrapolation routines require at least 10 measurement points in 3-D space. They are used in the Zoom Scan to obtain SAR values between the lowest measurement points and the inner phantom surface. The routine uses the modified Quadratic Sheppard's method for extrapolation. For a grid using 7x7x7 measurement points with 5mm resolution amounting to 343 measurement points, the uncertainty of the extrapolation routines is less than 1% for 1g and 10g cubes.

A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube 7x7x7 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 5mm steps.

5. DATA STORAGE AND EVALUATION

5.1. Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension ".DA4". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

5.2. Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters: - Sensitivity Normi, ai0, ai1, ai2
 - Conversion factor ConvFi
 - Diode compression point Dcpi

Device parameters: - Frequency
 - Crest factor cf

Media parameters: - Conductivity
 - Density

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the millimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used. The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot c f / d c p i$$

With V_i = compensated signal of channel i ($i = x, y, z$)

U_i = input signal of channel i ($i = x, y, z$)

cf = crest factor of exciting field (DASY parameter)

dcpi = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes: $E_i = (V_i / \text{Norm}_i \cdot \text{ConvF})^{1/2}$

H-field probes: $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1} f + a_{i2} f^2) / f$

With V_i = compensated signal of channel i ($i = x, y, z$)

Norm_i = sensor sensitivity of channel i ($i = x, y, z$)

ConvF = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{\text{tot}} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = E_{\text{tot}}^2 \cdot \frac{\sigma}{\rho \cdot 1000}$$

With

SAR = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

= conductivity in [mho/m] or [Siemens/m]

= equivalent tissue density in g/cm³

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{\text{pwe}} = E_{\text{tot}}^2 / 3770 \quad \text{or} \quad P_{\text{pwe}} = H_{\text{tot}}^2 \cdot 37.7$$

with P_{pwe} = equivalent power density of a plane wave in mW/cm²

E_{tot} = total electric field strength in V/m

H_{tot} = total magnetic field strength in A/m

6. SYSTEM CHECK

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured every day using the dielectric probe kit and the network analyzer. A system check measurement was made following the determination of the dielectric parameters of the simulates, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system check results (dielectric parameters and SAR values) are given in the ANNEX A.

System check results have to be equal or near the values determined during dipole calibration with the relevant liquids and test system ($\pm 10\%$).

System check is performed regularly on all frequency bands where tests are performed with the DASY5 system.

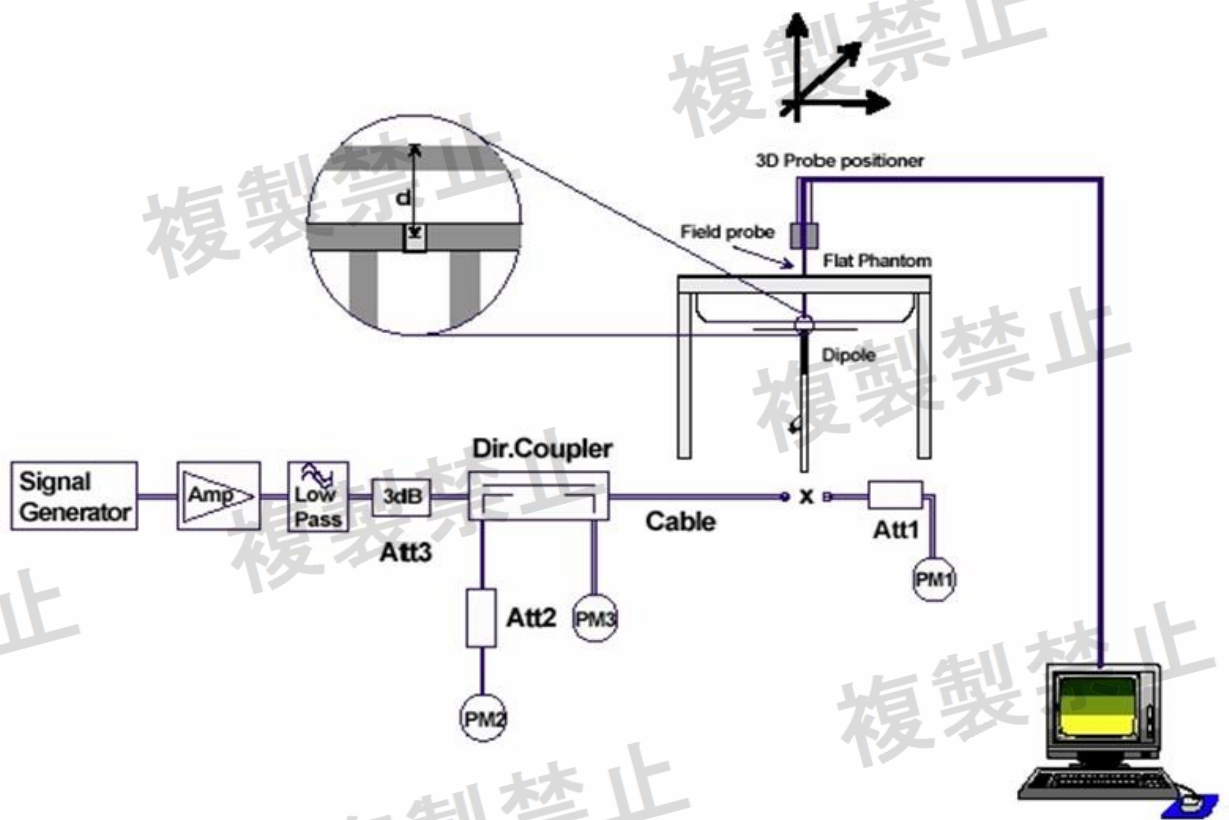


Figure 6.1: System Check Set-up

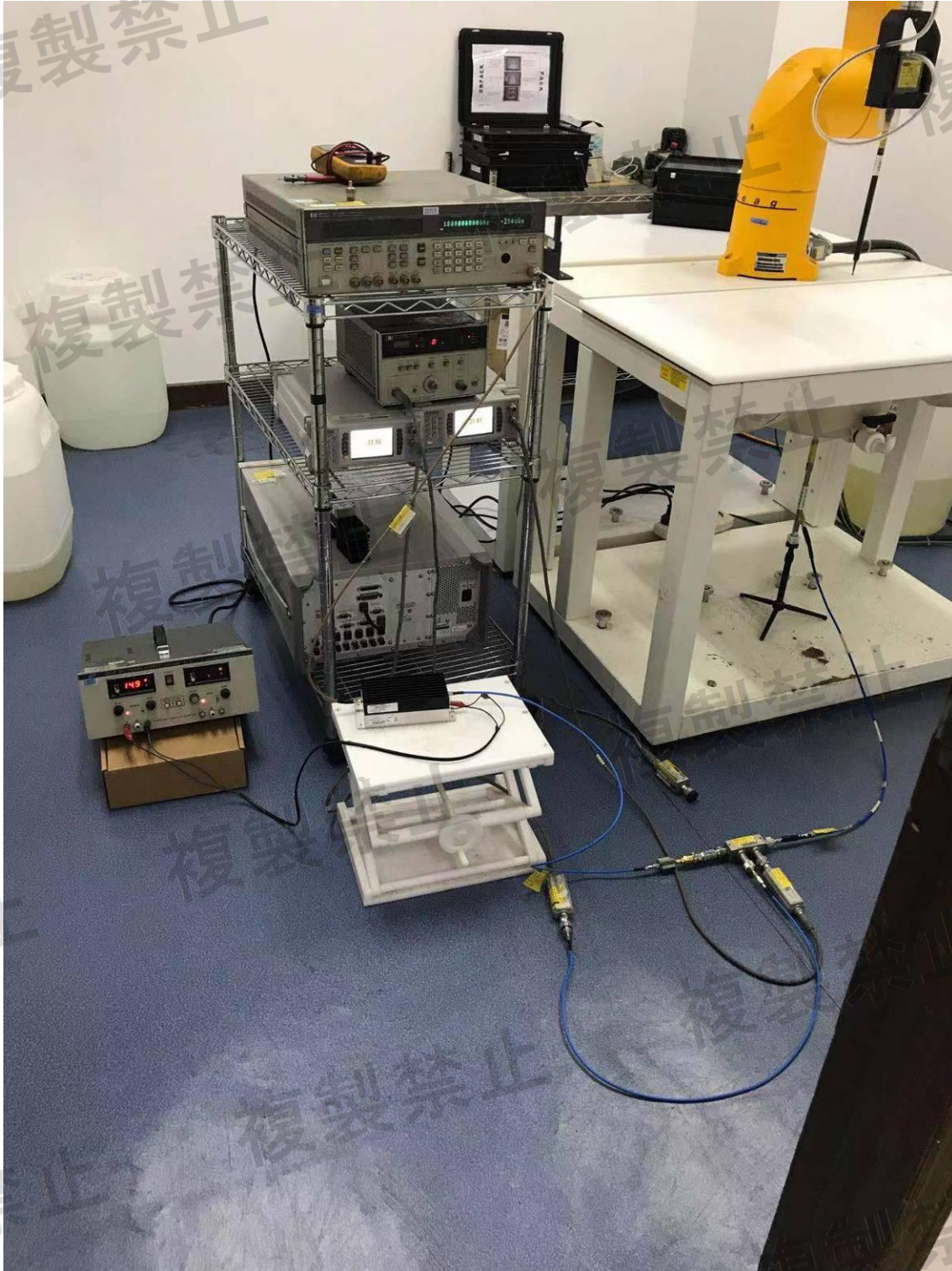


Figure 6.3: photos of system

7. TEST RESULTS

7.1. Output power

(WLAN 2.4G)

Test Mode	CH	Power Setting	Channel Power (dBm)
11b	CH1	17	14.61
	CH7		14.40
	CH13		15.23
11g	CH1	16	9.13
	CH7		8.90
	CH13		9.31
11n HT20	CH1	15	9.08
	CH7		9.05
	CH13		9.30
11n HT40	CH3	15	9.25
	CH7		8.91
	CH11		9.52
11ax HE20	CH1	15	8.36
	CH7		8.05
	CH13		8.31
11ax HE40	CH3	15	8.11
	CH7		8.34
	CH11		8.68

(UMTS)

Band	Channel	WCDMA (dBm)	HSPA (dBm)
1	9613	22.25	22.35
	9750	22.31	22.15
	9887	22.32	21.14
8	2813	22.62	22.04
	2837	22.60	22.12
	2862	22.59	22.13

(LTE)

Band	Bandwidth (MHz)	Channel	Power (dBm)
1	5	18042	22.72
		18309	22.89
		18575	22.75
	20	18257	22.79
		18379	22.81
		18500	22.72
1(NTN)	5	18025	22.71
		18033	22.72
		18041	22.72
1(KDDI-ADD)	15	18125	22.87
	20	18100	22.83
3	3	19215	22.91
		19575	22.90
		19935	22.80
	5	19225	22.91
		19575	22.93
		19925	22.85
	20	19300	22.80
		19575	22.84
		19850	22.87
8	3	21665	23.25
		21725	23.22
		21785	23.24
	5	21675	23.25
		21725	23.26
		21775	23.27
	10	21700	22.27
		21725	23.23
		21750	23.30
18	5	23875	23.24
		23925	23.23
		23975	23.22
	15	23925	23.20
19	5	24025	23.26
		24075	23.28
		24125	23.18
	15	24075	23.19
26	3	26715	23.25
		26850	23.28
		26985	23.02
	5	26725	23.33
		26850	23.22
		26975	23.17
	15	26775	23.32
		26850	23.26
		26925	23.22

Band	Bandwidth (MHz)	Channel	Power (dBm)
28	3	27345	23.01
		27495	23.03
		27645	22.92
	5	27385	23.11
		27510	23.01
		27635	23.05
	10	27410	23.11
		27510	22.88
		27610	23.02
	15	27435	23.18
		27510	22.98
		27585	23.06
	20	27460	23.09
		27510	23.13
		27560	23.03
34	5	36225	21.50
		36275	21.58
		36325	21.54
	10	36250	21.52
		36275	21.51
		36300	21.48
	15	36275	21.61
		38360	19.65
		38441	19.60
39	5	38541	19.71
		38591	19.72
		38566	19.79
	10	38975	19.56
		39150	20.21
40	5	39325	20.09
		39050	19.54
		39150	19.93
	20	39250	20.25
		40165	22.12
41	5	40690	19.11
		41215	20.13
		40240	22.11
	20	40690	19.63
		41140	19.56

7.2. System Check & Tissue simulating liquid

Frequency	Description	SAR		Dielectric Parameters (±10% for window)		Temp
		1g	10g	ϵ_r	σ (s/m)	°C
750MHz	Recommended value	2.08 1.68896-2.47104	1.37 1.11381-1.62619	42.0 37.8-46.2	0.90 0.81-0.99	/
	Measurement value 2026-03-04	2.37	1.45	41.86	0.9	22.03
900MHz	Recommended value	2.67 2.16804-3.17196	1.73 1.40649-2.05351	41.5 37.35-45.65	0.97 0.873-1.067	/
	Measurement value 2026-03-07	2.65	1.81	40.75	0.95	22.03
1800MHz	Recommended value	9.97 8.09564-11.84436	5.28 4.29264-6.26736	40.2 36.18-44.22	1.423 1.2807-1.5653	/
	Measurement value 2026-02-25	10.36	5.53	40.24	1.359	22.01
2000MHz	Recommended value	10.2 8.2824-12.1176	5.16 4.19508-6.12492	40.0 36-44	1.40 1.26-1.54	/
	Measurement value 2026-03-02	10.79	5.52	39.6	1.46	22.03
2300MHz	Recommended value	12.0 9.744-14.256	5.73 4.65849-6.80151	39.44 35.496-43.384	1.628 1.4652-1.7908	/
	Measurement value 2026-01-28	12.22	5.64	39.51	1.653	22.05
2450MHz	Recommended value	13.5 10.962-16.038	6.29 5.11377-7.46623	39.2 35.28-43.12	1.80 1.62-1.98	/
	Measurement value 2026-03-09	12.36	5.48	39.2	1.8	22.05
2600MHz	Recommended value	13.9 11.12-16.68	6.18 4.944-7.416	39.68 35.712-43.648	1.997 1.7973-2.1967	/
	Measurement value 2026-02-26	14.22	6.14	38	2.06	22.03

Test Laboratory: Audix SAR Lab

Date: 05/03/2026

CW 750

DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1159

Communication System: UID 0, CW (0); Communication System Band: D750 (750.0 MHz);

Frequency: 750 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.9 \text{ S/m}$; $\epsilon_r = 41.86$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(9.4, 9.61, 9.97); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CW 750MHz/Area Scan (61x91x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$

Maximum value of SAR (interpolated) = 2.64 W/kg

Configuration/CW 750MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

$dx=5 \text{ mm}$, $dy=5 \text{ mm}$, $dz=5 \text{ mm}$

Reference Value = 55.11 V/m ; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 3.16 W/kg

SAR(1 g) = 2.37 W/kg ; SAR(10 g) = 1.45 W/kg

Maximum value of SAR (measured) = 2.71 W/kg



Test Laboratory: Audix SAR Lab

Date: 08/03/2026

CW 900

DUT: Dipole 900 MHz D900V2; Type: D900V2; Serial: D900V2 - SN:1d088

Communication System: UID 0, CW (0); Communication System Band: D900 (900.0 MHz);

Frequency: 900 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 40.75$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(9.12, 9.33, 9.67); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CW 900MHz/Area Scan (61x71x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$

Maximum value of SAR (interpolated) = 2.83 W/kg

Configuration/CW 900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

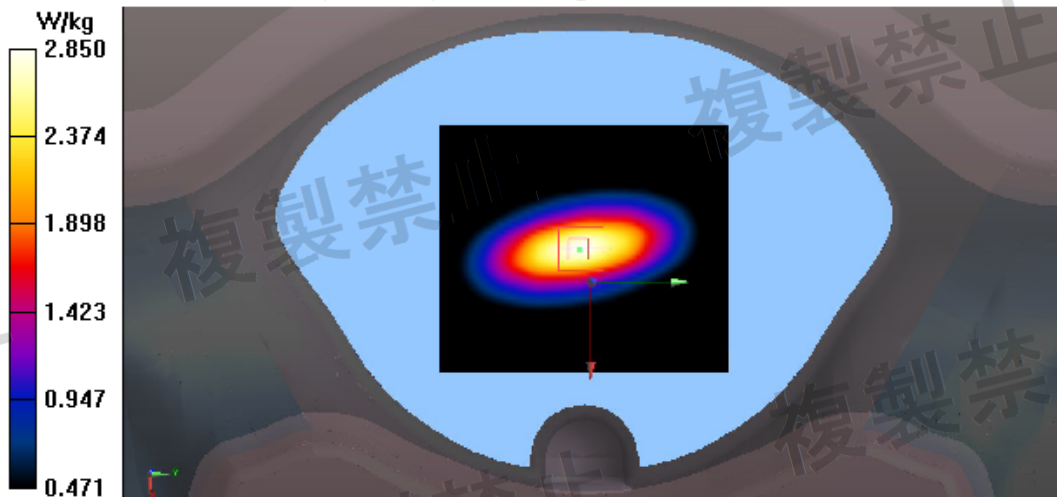
$dx=5 \text{ mm}$, $dy=5 \text{ mm}$, $dz=5 \text{ mm}$

Reference Value = 54.77 V/m ; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 3.84 W/kg

SAR(1 g) = 2.65 W/kg ; SAR(10 g) = 1.81 W/kg

Maximum value of SAR (measured) = 2.85 W/kg



Test Laboratory: Audix SAR Lab

Date: 25/02/2026

CW 1800

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN: 2d186

Communication System: UID 0, CW (0); Communication System Band: D1800 (1800.0

MHz); Frequency: 1800 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.359 \text{ S/m}$; $\epsilon_r = 40.24$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.68, 7.86, 8.15); Calibrated: 19/06/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CW 1800MHz/Area Scan (61x71x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$

Maximum value of SAR (interpolated) = 12.86 W/kg

Configuration/CW 1800MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

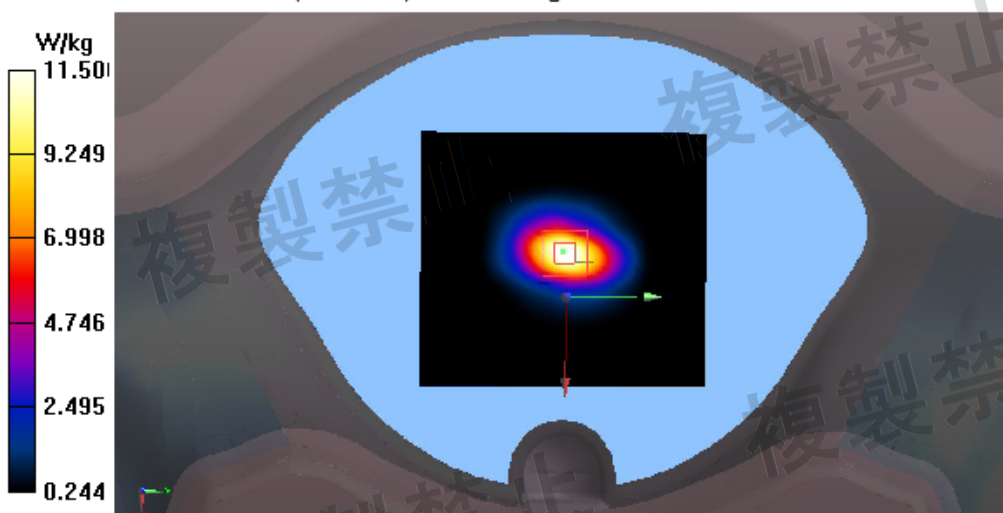
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 90.26 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.74 W/kg

SAR(1 g) = 10.36 W/kg; SAR(10 g) = 5.53 W/kg

Maximum value of SAR (measured) = 11.5 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CW 2000

DUT: Dipole 2000 MHz D2000V2; Type: D2000V2; Serial: D2000V2 - SN:1055

Communication System: UID 0, CW (0); Communication System Band: D2000 (2000.0

MHz); Frequency: 2000 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2000 \text{ MHz}$; $\sigma = 1.46 \text{ S/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7351; ConvF(7.49, 7.51, 8.26); Calibrated: 19/06/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CW 2000MHz/Area Scan (61x71x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$

Maximum value of SAR (interpolated) = 13.74 W/kg

Configuration/CW 2000MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

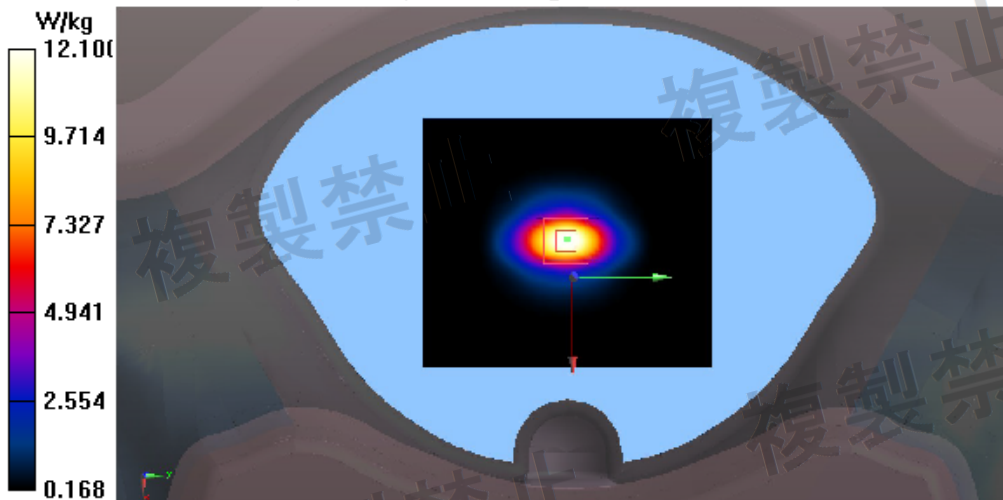
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 91.44 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 20.43 W/kg

SAR(1 g) = 10.79 W/kg; SAR(10 g) = 5.52 W/kg

Maximum value of SAR (measured) = 12.1 W/kg



Test Laboratory: Audix SAR Lab

Date: 28/1/2026

CW 2300

DUT: Dipole 2300 MHz D2300V2; Type: D2300V2; Serial: D2300V2 - SN:1040

Communication System: UID 0, CW (0); Communication System Band: D2300 (2300.0 MHz); Frequency: 2300 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2300$ MHz; $\sigma = 1.653$ S/m; $\epsilon_r = 39.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.23, 7.4, 7.67); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CW 2300MHz/Area Scan (61x71x1): Interpolated grid: $dx=2.000$ mm, $dy=2.000$ mm

Maximum value of SAR (interpolated) = 15.62 W/kg

Configuration/CW 2300MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

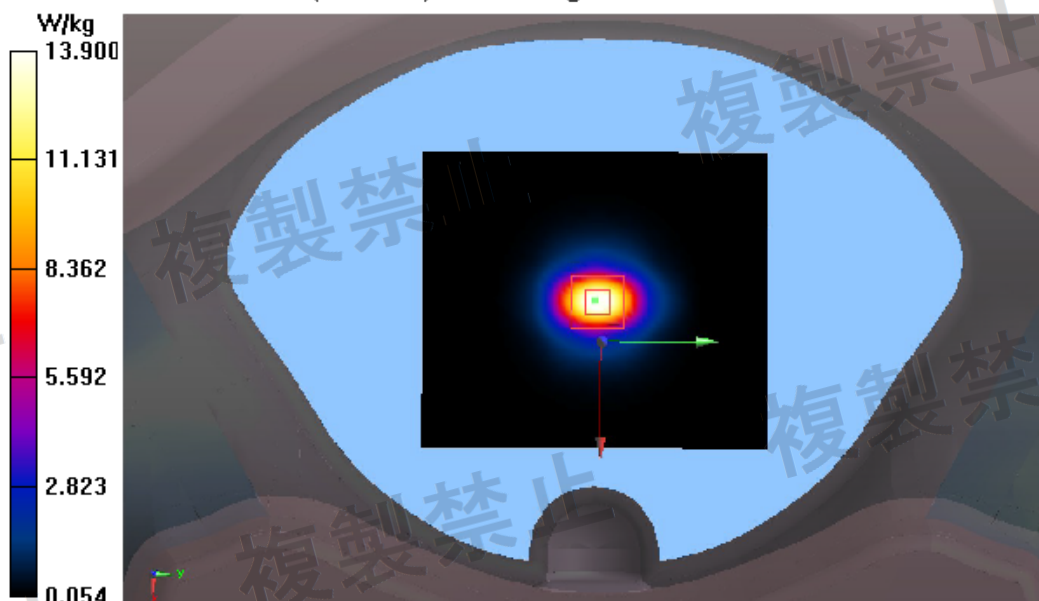
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 31.25 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 26.0 W/kg

SAR(1 g) = 12.22 W/kg; SAR(10 g) = 5.64 W/kg

Maximum value of SAR (measured) = 13.9 W/kg



Test Laboratory: Audix SAR Lab

Date: 09/03/2026

CW 2450

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:862

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.8$ S/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7351; ConvF(6.91, 6.93, 7.62); Calibrated: 19/06/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CW 2450MHz/Area Scan (61x71x1): Interpolated grid: $dx=2.000$ mm, $dy=2.000$ mm

Maximum value of SAR (interpolated) = 15.51 W/kg

Configuration/CW 2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

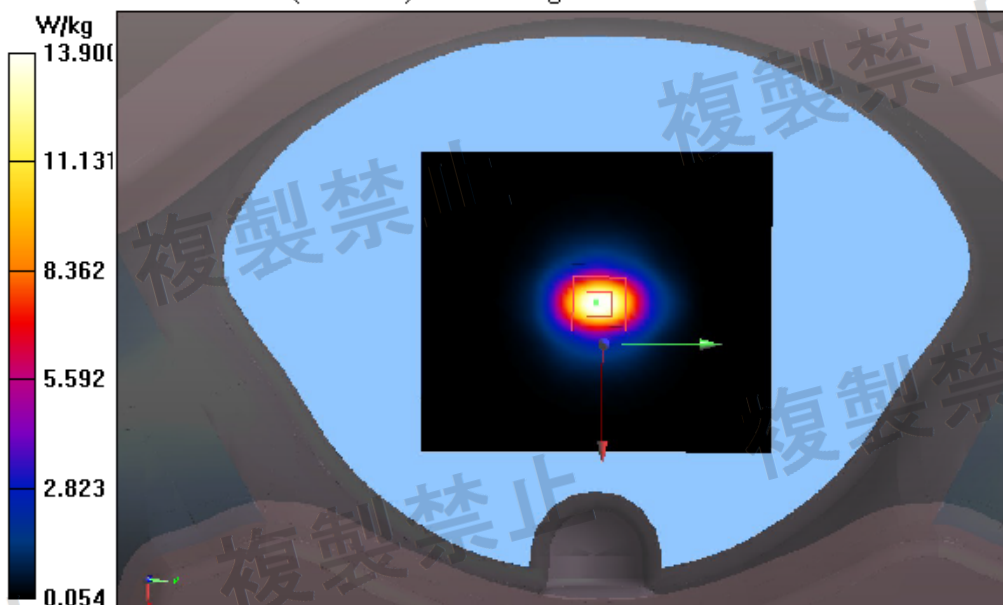
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 88.14 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 28.0 W/kg

SAR(1 g) = 12.36 W/kg; SAR(10 g) = 5.48 W/kg

Maximum value of SAR (measured) = 13.9 W/kg



Test Laboratory: Audix SAR Lab

Date: 26/02/2026

CW 2600

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1123

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0

MHz); Frequency: 2600 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 2.06 \text{ S/m}$; $\epsilon_r = 38$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.17, 7.33, 7.6); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CW 2600MHz/Area Scan (61x71x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$

Maximum value of SAR (interpolated) = 18.42 W/kg

Configuration/CW 2600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

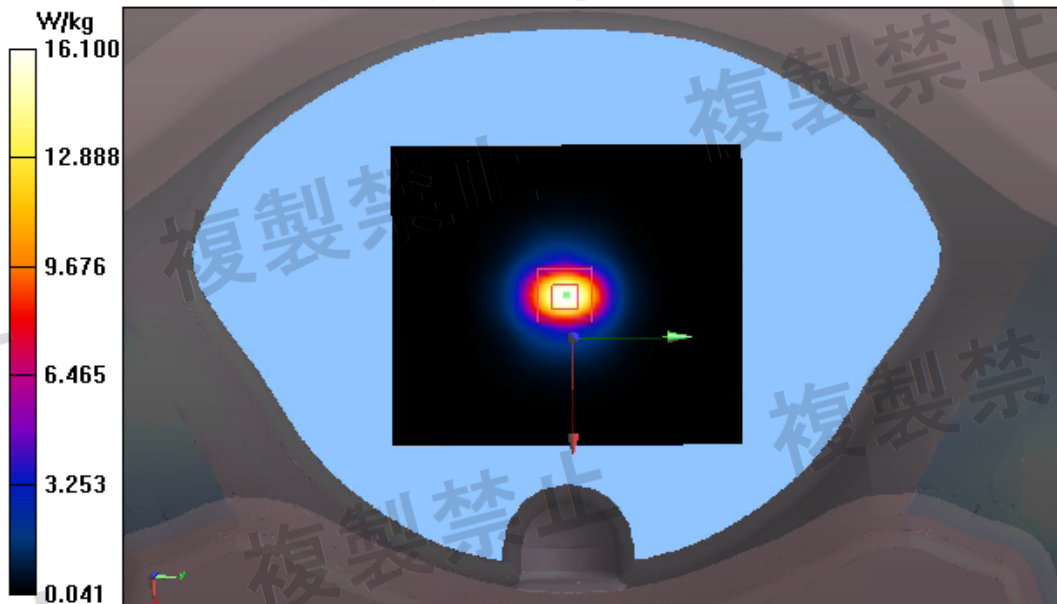
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 88.52 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 34.2 W/kg

SAR(1 g) = 14.22 W/kg; SAR(10 g) = 6.14 W/kg

Maximum value of SAR (measured) = 16.1 W/kg



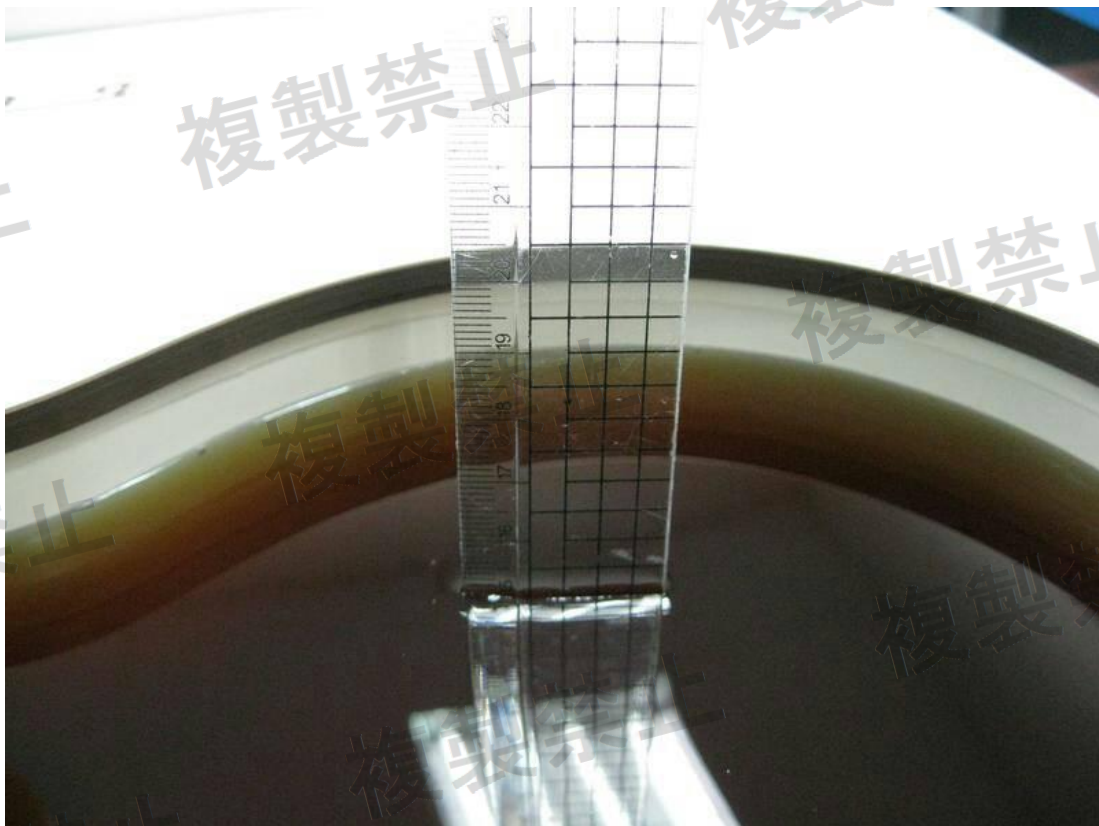
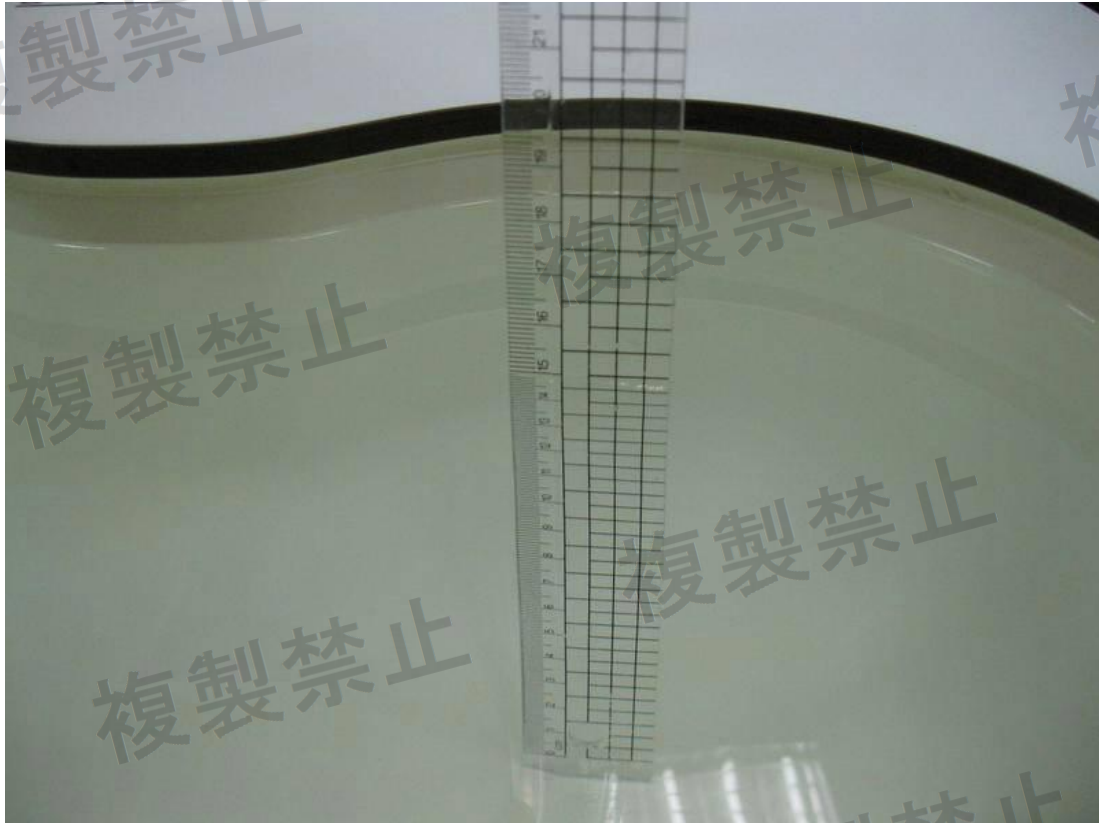


Figure 4.4: Liquid depth in the Flat Phantom

7.3. Test Results

Test Mode: WIFI 2.4GHz

Remark	Test Position	distance	Band	Mode	Test CH	SAR (W/kg) 1g	SAR (W/kg) 10g	Power Drift (dB)	Duty cycle	Conducted	Tune up	Factor	SAR 10g
/	Front	10mm	2.4G	11b	1	0.182	0.109	0.2	0.557	14.61	15	1.094	0.214
/	Front	10mm	2.4G	11b	7	0.187	0.112	0.18	0.557	14.4	15	1.1482	0.231
/	Back	10mm	2.4G	11b	13	0.117	0.072	-0.2	0.557	15.23	16	1.194	0.154
/	Front	10mm	2.4G	11b	13	0.19	0.114	0.15	0.557	15.23	16	1.194	0.245
/	Left	10mm	2.4G	11b	13	0.036	0.024	0.2	0.557	15.23	16	1.194	0.051
/	Right	10mm	2.4G	11b	13	0.024	0.016	0.06	0.557	15.23	16	1.194	0.034
/	Top	10mm	2.4G	11b	13	0.11	0.068	0.18	0.557	15.23	16	1.194	0.146

Conclusion: PASS

Note:

Factor= Tune up Power(W)/ Conducted Power(W)

Scaled-Final= Measured SAR*Factor*(1/Duty Cycle)

Test Mode: UMTS

Remark	Test Position	distance	Band	Test CH	SAR (W/kg) 1g	SAR (W/kg) 10g	Power Drift (dB)	Duty cycle	Conducted	Tune up	SAR 10g
/	Front	10mm	Band1	9613	0.307	0.286	0.04	1	22.25	23	0.34
/	Front	10mm	Band1	9750	0.305	0.288	-0.01	1	22.31	23	0.338
/	Back	10mm	Band1	9887	0.146	0.112	0.11	1	22.32	23	0.131
/	Bottom	10mm	Band1	9887	0.088	0.063	0.08	1	22.32	23	0.074
/	Front	10mm	Band1	9887	0.243	0.224	0.08	1	22.32	23	0.262
/	Left	10mm	Band1	9887	0.040	0.028	0.11	1	22.32	23	0.033
/	Right	10mm	Band1	9887	0.117	0.082	0.11	1	22.32	23	0.096
/	Top	10mm	Band1	9887	0.067	0.044	0.16	1	22.32	23	0.051
/	Back	10mm	Band8	2813	0.057	0.031	0.04	1	22.62	23	0.034
	Bottom	10mm	Band8	2813	0.081	0.06	0.03	1	22.62	23	0.065
/	Front	10mm	Band8	2813	0.173	0.104	0.06	1	22.62	23	0.114
/	Left	10mm	Band8	2813	0.035	0.015	-0.04	1	22.62	23	0.016
/	Right	10mm	Band8	2813	0.044	0.08	-0.02	1	22.62	23	0.087
/	Top	10mm	Band8	2813	0.05	0.025	0.08	1	22.62	23	0.027

Conclusion: PASS

Note:

Factor= Tune up Power(W)/ Conducted Power(W)

Scaled-Final= Measured SAR*Factor*(1/Duty Cycle)

Test Mode: E-UTRA

Remark	Test Position	distance	Band	Test CH	SAR (W/kg) 1g	SAR (W/kg) 10g	Power Drift (dB)	Duty cycle	Conducted	Tune up	SAR 10g
/	Back	10mm	Band1	18257	0.204	0.157	0.04	1	22.79	23	0.165
/	Back	10mm	Band1	18379	0.201	0.155	0.01	1	22.81	23	0.162
/	Bottom	10mm	Band1	18379	0.108	0.076	-0.13	1	22.81	23	0.079
/	Front	10mm	Band1	18379	0.194	0.115	0.05	1	22.81	23	0.12
/	Left	10mm	Band1	18379	0.054	0.037	0.14	1	22.81	23	0.039
/	Right	10mm	Band1	18379	0.126	0.088	0.13	1	22.81	23	0.092
/	Top	10mm	Band1	18379	0.072	0.047	0.19	1	22.81	23	0.049
/	Back	10mm	Band1	18500	0.200	0.154	0.01	1	22.72	23	0.164
/	Back	10mm	Band3	19575	0.145	0.131	-0.17	1	22.93	23	0.133
/	Bottom	10mm	Band3	19575	0.067	0.06	-0.15	1	22.93	23	0.061
/	Front	10mm	Band3	19575	0.031	0.017	-0.04	1	22.93	23	0.017
/	Left	10mm	Band3	19575	0.037	0.032	0.05	1	22.93	23	0.033
/	Right	10mm	Band3	19575	0.097	0.055	-0.09	1	22.93	23	0.056
/	Top	10mm	Band3	19575	0.07	0.035	-0.01	1	22.93	23	0.036
/	Back	10mm	Band8	21750	0.118	0.077	-0.14	1	23.30	24	0.09
/	Bottom	10mm	Band8	21750	0.087	0.068	-0.19	1	23.30	24	0.08
/	Front	10mm	Band8	21750	0.128	0.079	-0.02	1	23.30	24	0.093
/	Left	10mm	Band8	21750	0.051	0.033	-0.12	1	23.30	24	0.039
/	Right	10mm	Band8	21750	0.043	0.017	-0.02	1	23.30	24	0.02
/	Top	10mm	Band8	21750	0.031	0.011	-0.11	1	23.30	24	0.013
/	Back	10mm	Band26	26725	0.17	0.106	-0.01	1	23.33	24	0.124
/	Bottom	10mm	Band26	26725	0.066	0.033	-0.14	1	23.33	24	0.039
/	Front	10mm	Band26	26725	0.175	0.107	-0.14	1	23.33	24	0.125
/	Left	10mm	Band26	26725	0.065	0.034	0.10	1	23.33	24	0.04
/	Right	10mm	Band26	26725	0.098	0.081	0.04	1	23.33	24	0.095
/	Top	10mm	Band26	26725	0.048	0.01	0.12	1	23.33	24	0.012
/	Back	10mm	Band28	27435	0.203	0.121	-0.15	1	23.18	24	0.146
/	Bottom	10mm	Band28	27435	0.09	0.045	-0.17	1	23.18	24	0.054
/	Front	10mm	Band28	27435	0.153	0.083	-0.05	1	23.18	24	0.1
/	Left	10mm	Band28	27435	0.04	0.031	-0.04	1	23.18	24	0.037
/	Right	10mm	Band28	27435	0.114	0.074	-0.15	1	23.18	24	0.089
/	Top	10mm	Band28	27435	0.058	0.047	-0.08	1	23.18	24	0.057
/	Back	10mm	Band34	36275	0.215	0.105	-0.04	1	21.61	22	0.115
/	Bottom	10mm	Band34	36275	0.086	0.045	-0.20	1	21.61	22	0.049
/	Front	10mm	Band34	36275	0.102	0.051	-0.15	1	21.61	22	0.056
/	Left	10mm	Band34	36275	0.043	0.024	0.10	1	21.61	22	0.026
/	Right	10mm	Band34	36275	0.1	0.01	-0.14	1	21.61	22	0.011

	Top	10mm	Band34	36275	0.056	0.012	0.05	1	21.61	22	0.013
/	Back	10mm	Band39	38566	0.071	0.024	-0.02	1	19.79	20	0.025
/	Bottom	10mm	Band39	38566	0.043	0.018	-0.16	1	19.79	20	0.019
/	Front	10mm	Band39	38566	0.069	0.025	-0.02	1	19.79	20	0.026
/	Left	10mm	Band39	38566	0.035	0.022	-0.14	1	19.79	20	0.023
/	Right	10mm	Band39	38566	0.095	0.061	0.07	1	19.79	20	0.064
/	Top	10mm	Band39	38566	0.054	0.032	-0.08	1	19.79	20	0.034
/	Back	10mm	Band40	39250	0.142	0.092	-0.03	1	20.25	21	0.109
/	Bottom	10mm	Band40	39250	0.094	0.055	-0.18	1	20.25	21	0.065
/	Front	10mm	Band40	39250	0.135	0.088	-0.03	1	20.25	21	0.105
/	Left	10mm	Band40	39250	0.049	0.035	0.05	1	20.25	21	0.042
/	Right	10mm	Band40	39250	0.073	0.055	0.06	1	20.25	21	0.065
/	Top	10mm	Band40	39250	0.083	0.041	0.04	1	20.25	21	0.049
/	Back	10mm	Band41	40165	0.184	0.032	-0.07	1	22.12	23	0.039
/	Bottom	10mm	Band41	40165	0.215	0.062	-0.19	1	22.12	23	0.076
/	Front	10mm	Band41	40165	0.071	0.047	0.03	1	22.12	23	0.058
/	Left	10mm	Band41	40165	0.048	0.022	0.06	1	22.12	23	0.027
/	Right	10mm	Band41	40165	0.057	0.037	0.11	1	22.12	23	0.045
/	Top	10mm	Band41	40165	0.048	0.027	-0.10	1	22.12	23	0.033
Conclusion: PASS											
Note:											
Factor= Tune up Power(W)/ Conducted Power(W)											
Scaled-Final= Measured SAR*Factor*(1/Duty Cycle)											

Total SAR:

Test mode		Total SAR 10g	Limit
Position	WIFI2.4G		
Front	0.245	0.245	2W/kg
Back	0.154	0.154	
Top	0.146	0.146	
Bottom	0.000	0.000	
Left	0.051	0.051	
Right	0.034	0.034	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	UMTS Band1		
Front	0.245	0.340	0.585	2W/kg
Back	0.154	0.131	0.285	
Top	0.146	0.051	0.197	
Bottom	0.000	0.074	0.074	
Left	0.051	0.033	0.084	
Right	0.034	0.096	0.130	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	UMTS Band8		
Front	0.245	0.114	0.359	2W/kg
Back	0.154	0.034	0.188	
Top	0.146	0.027	0.173	
Bottom	0.000	0.065	0.065	
Left	0.051	0.016	0.067	
Right	0.034	0.087	0.121	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band1		
Front	0.245	0.120	0.365	2W/kg
Back	0.154	0.165	0.319	
Top	0.146	0.049	0.195	
Bottom	0.000	0.079	0.079	
Left	0.051	0.039	0.090	
Right	0.034	0.092	0.126	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band3		
Front	0.245	0.017	0.262	2W/kg
Back	0.154	0.133	0.287	
Top	0.146	0.036	0.182	
Bottom	0.000	0.061	0.061	
Left	0.051	0.033	0.084	
Right	0.034	0.056	0.090	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band8		
Front	0.245	0.093	0.338	2W/kg
Back	0.154	0.090	0.244	
Top	0.146	0.013	0.159	
Bottom	0.000	0.080	0.080	
Left	0.051	0.039	0.090	
Right	0.034	0.020	0.054	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band18		
Front	0.245	0.075	0.320	2W/kg
Back	0.154	0.020	0.174	
Top	0.146	0.043	0.189	
Bottom	0.000	0.076	0.076	
Left	0.051	0.013	0.064	
Right	0.034	0.105	0.139	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band19		
Front	0.245	0.111	0.356	2W/kg
Back	0.154	0.027	0.181	
Top	0.146	0.047	0.193	
Bottom	0.000	0.050	0.050	
Left	0.051	0.018	0.069	
Right	0.034	0.020	0.054	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band26		
Front	0.245	0.125	0.370	2W/kg
Back	0.154	0.124	0.278	
Top	0.146	0.012	0.158	
Bottom	0.000	0.039	0.039	
Left	0.051	0.040	0.091	
Right	0.034	0.095	0.129	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band28		
Front	0.245	0.100	0.345	2W/kg
Back	0.154	0.146	0.300	
Top	0.146	0.057	0.203	
Bottom	0.000	0.054	0.054	
Left	0.051	0.037	0.088	
Right	0.034	0.089	0.123	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band34		
Front	0.245	0.056	0.301	1.6W/kg
Back	0.154	0.115	0.269	
Top	0.146	0.013	0.159	
Bottom	0.000	0.049	0.049	
Left	0.051	0.026	0.077	
Right	0.034	0.011	0.045	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band39		
Front	0.245	0.026	0.271	2W/kg
Back	0.154	0.025	0.179	
Top	0.146	0.034	0.180	
Bottom	0.000	0.019	0.019	
Left	0.051	0.023	0.074	
Right	0.034	0.064	0.098	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band40		
Front	0.245	0.105	0.350	2W/kg
Back	0.154	0.109	0.263	
Top	0.146	0.049	0.195	
Bottom	0.000	0.065	0.065	
Left	0.051	0.042	0.093	
Right	0.034	0.065	0.099	

Test mode			Total SAR 10g	Limit
Position	WLAN 2.4G	LTE Band41		
Front	0.245	0.058	0.303	2W/kg
Back	0.154	0.039	0.193	
Top	0.146	0.033	0.179	
Bottom	0.000	0.076	0.076	
Left	0.051	0.027	0.078	
Right	0.034	0.045	0.079	

APPENDIX A

Graph Results (UMTS & E-UTRA)

Test Mode: UMTS Band 1

Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH9613(1922.6MHz Front)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UTD 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication System Band: Band Class I (IMT 2100MHz); Frequency: 1922.6 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1922.6 \text{ MHz}$; $\sigma = 1.493 \text{ S/m}$; $\epsilon_r = 39.54$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH9613(1922.6MHz Front)/Area Scan (61x61x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.290 W/kg

Configuration/CH9613(1922.6MHz Front)/Zoom Scan (5x5x7)/Cube 0:

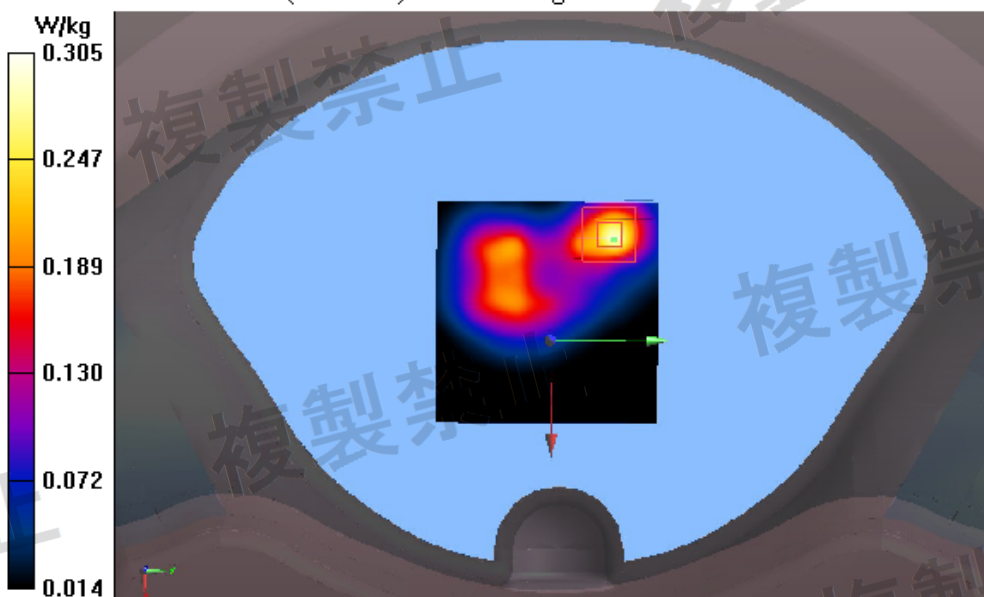
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.774 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.410 W/kg

SAR(1 g) = 0.286 W/kg; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.305 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH9750(1950MHz Front)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication

System Band: Band Class I (IMT 2100MHz); Frequency: 1950 MHz; Communication

System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1950 \text{ MHz}$; $\sigma = 1.52 \text{ S/m}$; $\epsilon_r = 39.411$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH9750(1950MHz Front)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.294 W/kg

Configuration/CH9750(1950MHz Front)/Zoom Scan (5x5x7)/Cube 0:

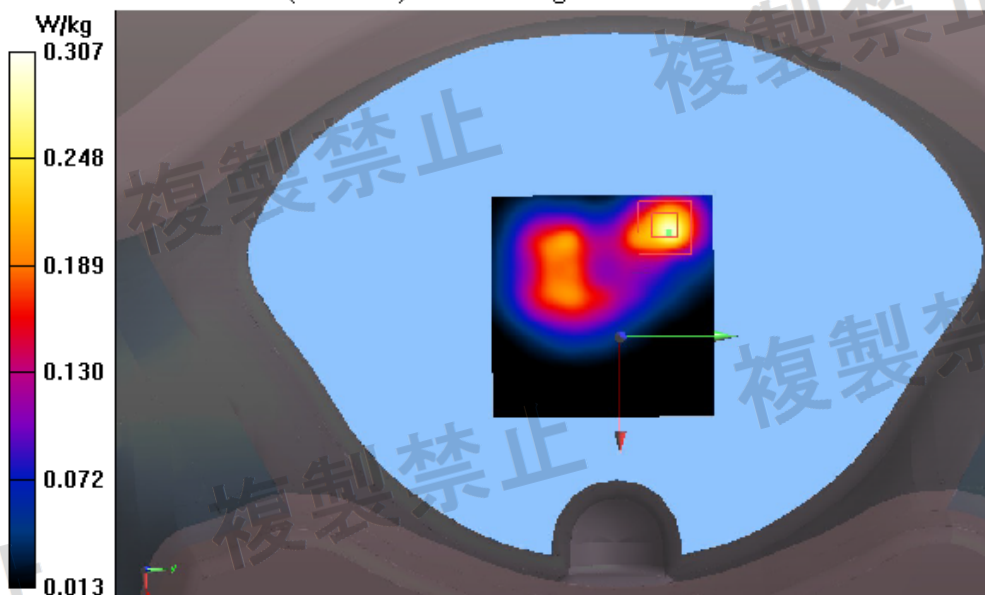
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.821 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.288 W/kg; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.307 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH9887(1977.4MHz Back)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication System Band: Band Class I (IMT 2100MHz); Frequency: 1977.4 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH9887(1977.4MHz Back)/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.168 W/kg

Configuration/CH9887(1977.4MHz Back)/Zoom Scan (5x5x7)/Cube 0:

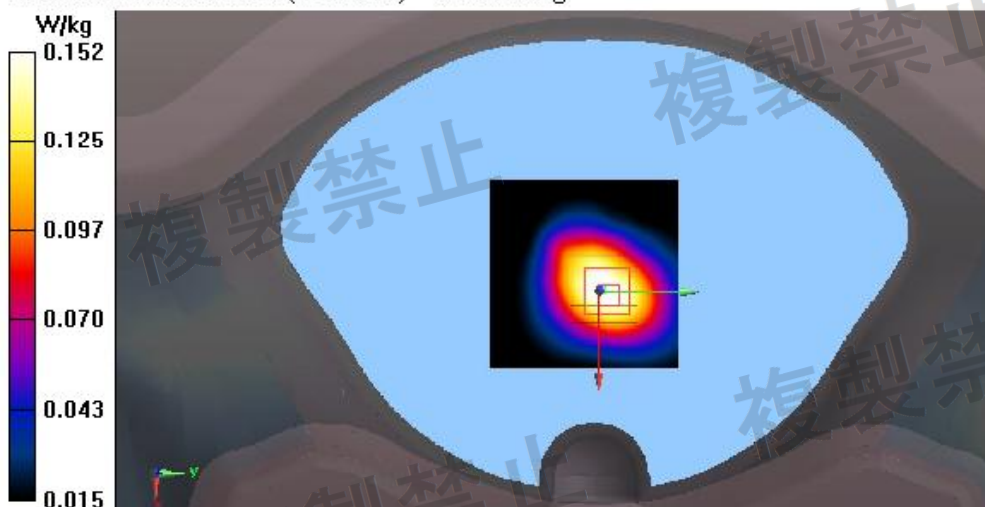
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.511 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.175 W/kg

SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.112 W/kg

Maximum value of SAR (measured) = 0.152 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH9887(1977.4MHz Bottom)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication System Band: Band Class I (IMT 2100MHz); Frequency: 1977.4 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH9887(1977.4MHz Bottom)/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0983 W/kg

Configuration/CH9887(1977.4MHz Bottom)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.513 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.120 W/kg

SAR(1 g) = 0.088 W/kg; SAR(10 g) = 0.063 W/kg

Maximum value of SAR (measured) = 0.0942 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH9887(1977.4MHz Front)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication System Band: Band Class I (IMT 2100MHz); Frequency: 1977.4 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH9887(1977.4MHz Front)/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.250 W/kg

Configuration/CH9887(1977.4MHz Front)/Zoom Scan (5x5x7)/Cube 0:

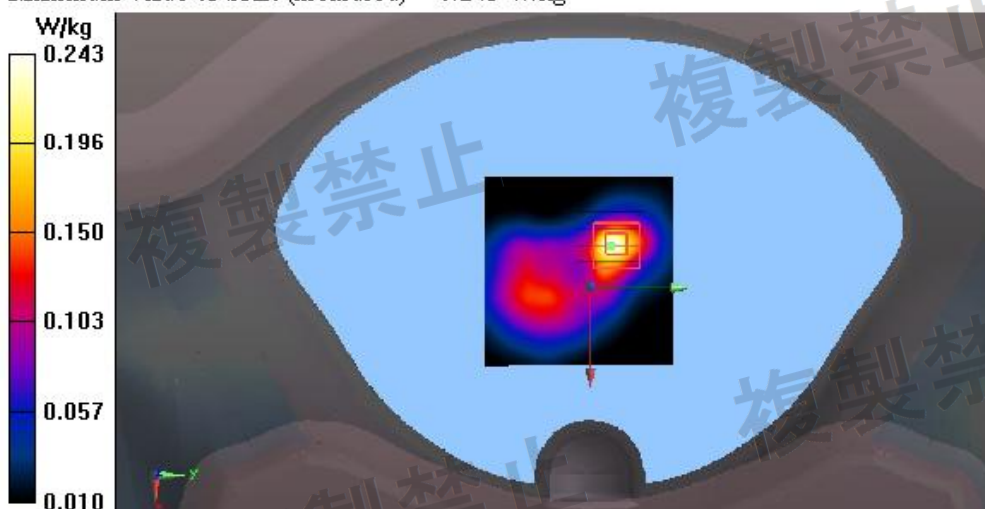
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.038 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.325 W/kg

SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.132 W/kg

Maximum value of SAR (measured) = 0.243 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH9887(1977.4MHz Left)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication System Band: Band Class I (IMT 2100MHz); Frequency: 1977.4 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH9887(1977.4MHz Left)/Area Scan (61x61x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0408 W/kg

Configuration/CH9887(1977.4MHz Left)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.190 V/m ; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.0480 W/kg

SAR(1 g) = 0.040 W/kg ; SAR(10 g) = 0.028 W/kg

Maximum value of SAR (measured) = 0.0422 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH9887(1977.4MHz Right)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication System Band: Band Class I (IMT 2100MHz); Frequency: 1977.4 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH9887(1977.4MHz Right)/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.122 W/kg

Configuration/CH9887(1977.4MHz Right)/Zoom Scan (5x5x7)/Cube 0:

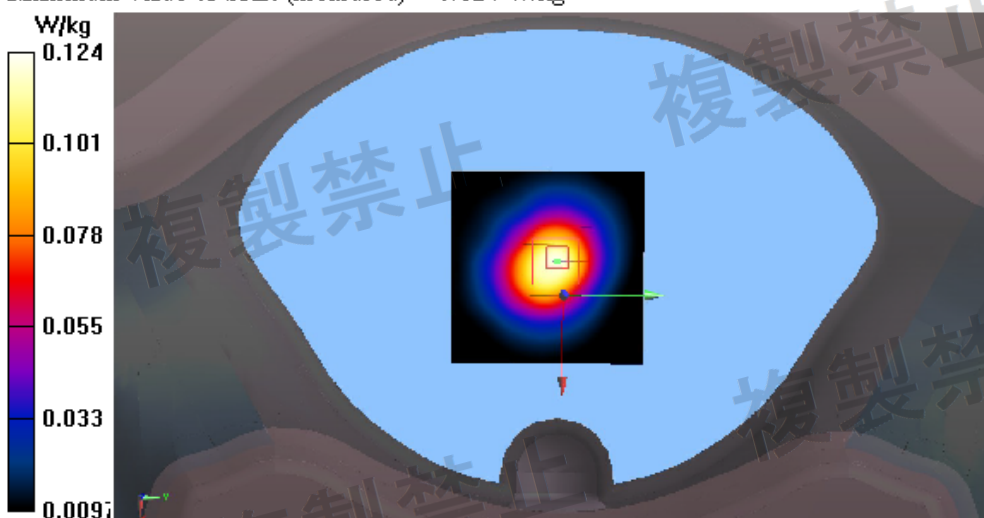
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.165 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.147 W/kg

SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.124 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH9887(1977.4MHz Top)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication

System Band: Band Class I (IMT 2100MHz); Frequency: 1977.4 MHz; Communication

System PAR: 0 dB

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH9887(1977.4MHz Top)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0717 W/kg

Configuration/CH9887(1977.4MHz Top)/Zoom Scan (5x5x7)/Cube 0:

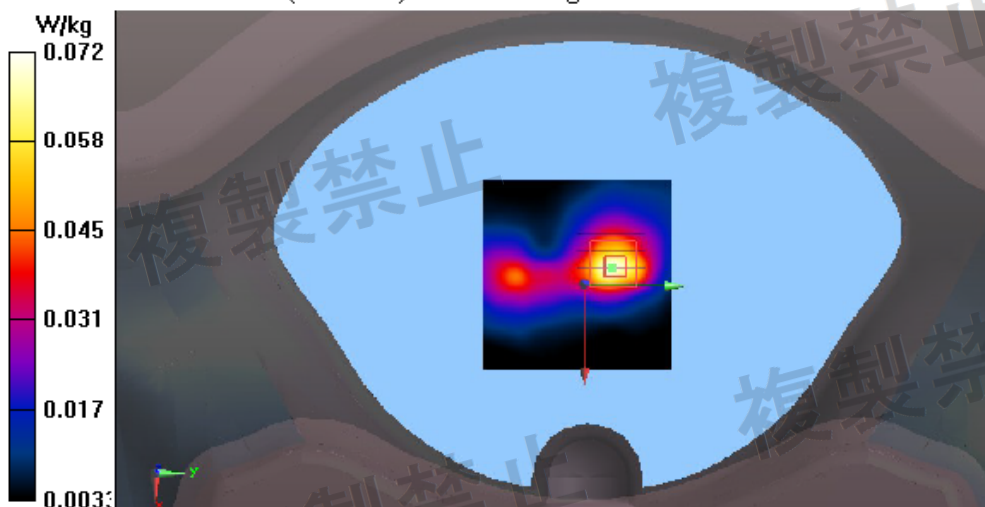
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.593 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.0880 W/kg

SAR(1 g) = 0.067 W/kg; SAR(10 g) = 0.044 W/kg

Maximum value of SAR (measured) = 0.0721 W/kg



Test Mode: UMTS Band 8

Test Laboratory: Audix SAR Lab

Date: 08/03/2026

CH2813(902.6MHz Front)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD,12.2Kbit/s) (0); Communication

System Band: Band 8; Frequency: 902.6 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 902.6 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 40.698$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(9.12, 9.33, 9.67); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH2813(902.6MHz Front)/Area Scan (61x81x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.251 W/kg

Configuration/CH2813(902.6MHz Front)/Zoom Scan (5x5x7)/Cube 0:

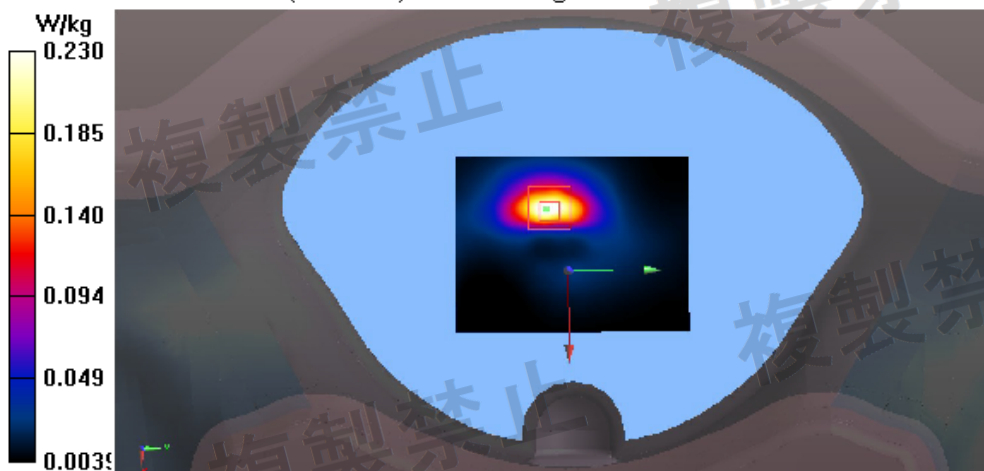
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.193 V/m ; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.337 W/kg

SAR(1 g) = 0.173 W/kg ; SAR(10 g) = 0.104 W/kg

Maximum value of SAR (measured) = 0.230 W/kg



Test Mode: E-UTRA Band 1

Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH18257(1945.7MHz Back)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, WCDMA(UMTS-FDD, 12.2Kbit/s) (0); Communication System Band: Band Class I (IMT 2100MHz); Frequency: 1945.7 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1945.7 \text{ MHz}$; $\sigma = 1.516 \text{ S/m}$; $\epsilon_r = 39.431$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18257(1945.7MHz Back)/Area Scan (61x61x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.229 W/kg

Configuration/CH18257(1945.7MHz Back)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.87 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.248 W/kg

SAR(1 g) = 0.204 W/kg; SAR(10 g) = 0.157 W/kg

Maximum value of SAR (measured) = 0.209 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH18379(1957.9MHz Back)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 1, E-UTRA/FDD (1920.0 - 1980.0 MHz); Frequency: 1957.9 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1957.9$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 39.374$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18379(1957.9MHz Back)/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.223 W/kg

Configuration/CH18379(1957.9MHz Back)/Zoom Scan (5x5x7)/Cube 0:

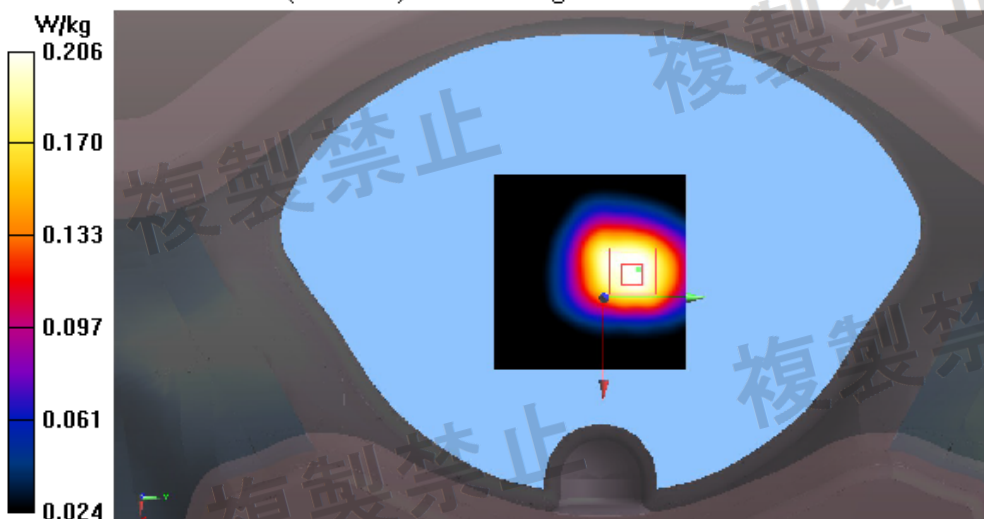
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 10.84 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.245 W/kg

SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.155 W/kg

Maximum value of SAR (measured) = 0.206 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH18379(1957.9MHz Bottom)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 1, E-UTRA/FDD (1920.0 - 1980.0 MHz); Frequency: 1957.9 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1957.9$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 39.374$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18379(1957.9MHz Bottom)/Area Scan (61x61x1):

Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.111 W/kg

Configuration/CH18379(1957.9MHz Bottom)/Zoom Scan (5x5x7)/Cube 0:

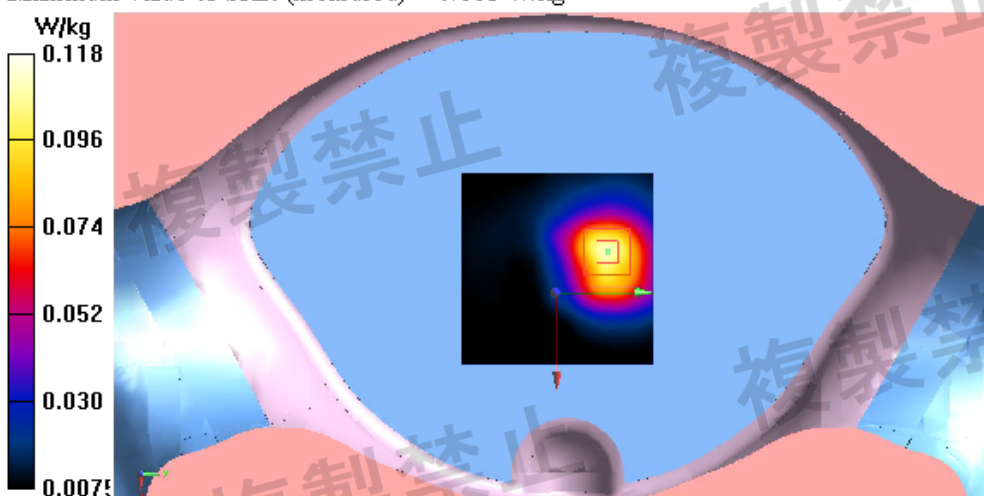
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.650 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.135 W/kg

SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.076 W/kg

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



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH18379(1957.9MHz Front)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 1, E-UTRA/FDD (1920.0 - 1980.0 MHz); Frequency: 1957.9 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1957.9$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 39.374$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18379(1957.9MHz Front)/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.192 W/kg

Configuration/CH18379(1957.9MHz Front)/Zoom Scan (5x5x7)/Cube 0:

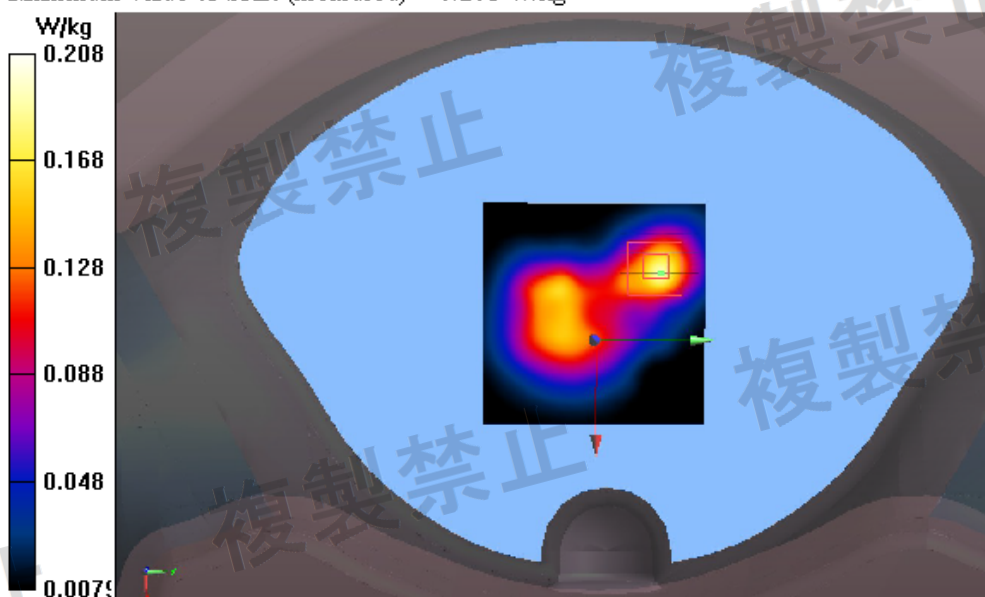
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 7.428 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.278 W/kg

SAR(1 g) = 0.194 W/kg; SAR(10 g) = 0.115 W/kg

Maximum value of SAR (measured) = 0.208 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH18379(1957.9MHz Left)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 1, E-UTRA/FDD (1920.0 - 1980.0 MHz); Frequency: 1957.9 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1957.9$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 39.374$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18379(1957.9MHz Left)/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.0582 W/kg

Configuration/CH18379(1957.9MHz Left)/Zoom Scan (5x5x7)/Cube 0:

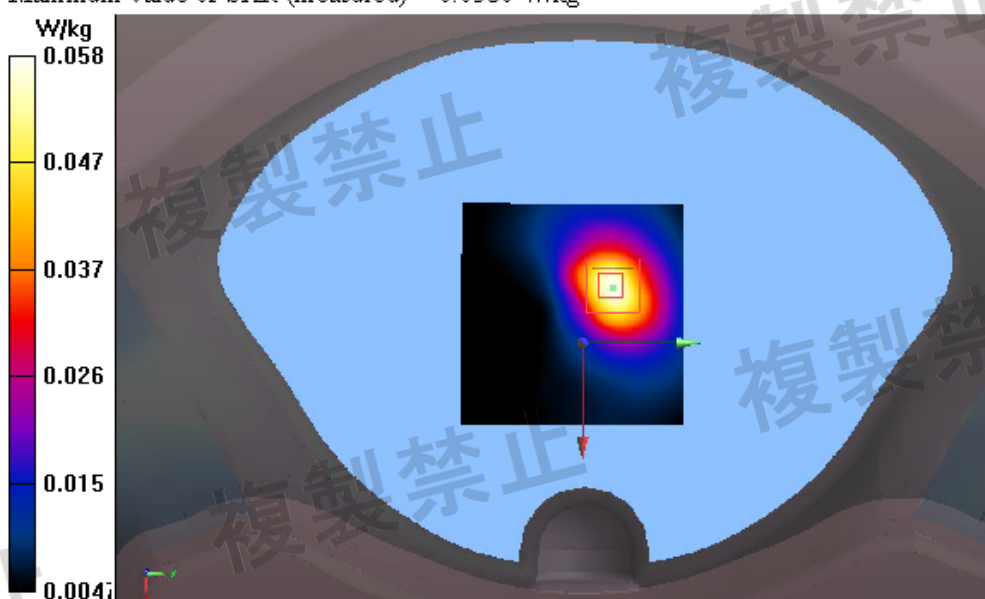
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.867 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.0690 W/kg

SAR(1 g) = 0.054 W/kg; SAR(10 g) = 0.037 W/kg

Maximum value of SAR (measured) = 0.0580 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH18379(1957.9MHz Right)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 1, E-UTRA/FDD (1920.0 - 1980.0 MHz); Frequency: 1957.9 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1957.9$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 39.374$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18379(1957.9MHz Right)/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.133 W/kg

Configuration/CH18379(1957.9MHz Right)/Zoom Scan (5x5x7)/Cube 0:

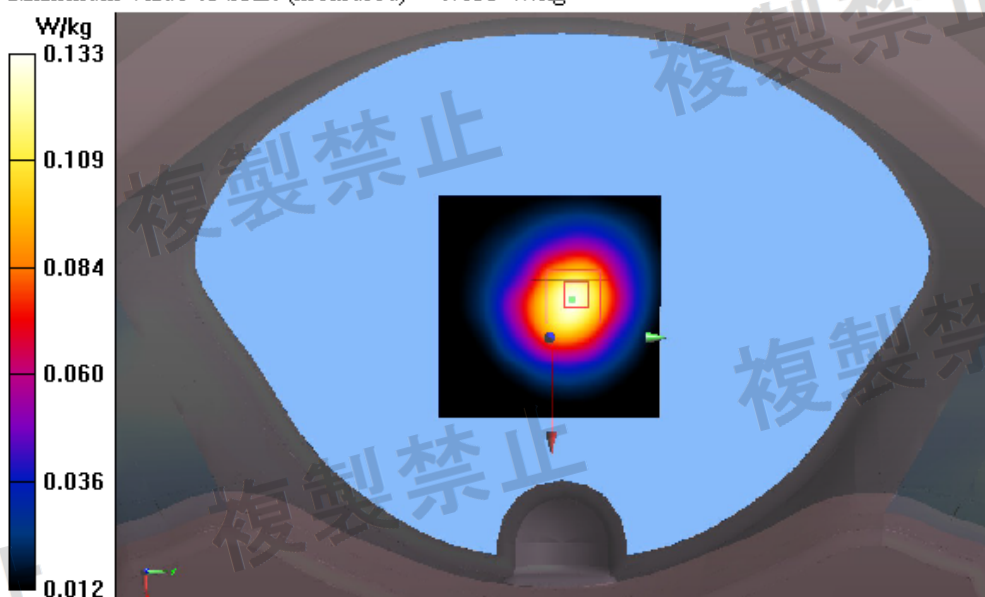
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.102 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.160 W/kg

SAR(1 g) = 0.126 W/kg; SAR(10 g) = 0.088 W/kg

Maximum value of SAR (measured) = 0.133 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH18379(1957.9MHz Top)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 1, E-UTRA/FDD (1920.0 - 1980.0 MHz); Frequency: 1957.9 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 1957.9$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 39.374$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18379(1957.9MHz Top)/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.0724 W/kg

Configuration/CH18379(1957.9MHz Top)/Zoom Scan (5x5x7)/Cube 0:

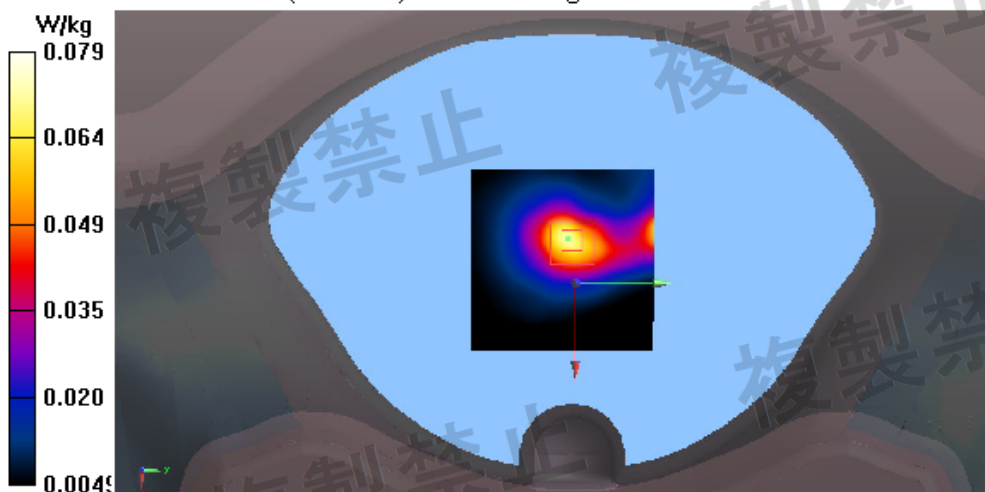
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.673 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.0980 W/kg

SAR(1 g) = 0.072 W/kg; SAR(10 g) = 0.047 W/kg

Maximum value of SAR (measured) = 0.0789 W/kg



Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH18500(1970MHz Back)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 1, E-UTRA/FDD (1920.0 - 1980.0 MHz); Frequency: 1970 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.48 \text{ S/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.47, 7.64, 7.92); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH18500(1970MHz Back)/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.225 W/kg

Configuration/CH18500(1970MHz Back)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.93 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.245 W/kg

SAR(1 g) = 0.200 W/kg; SAR(10 g) = 0.154 W/kg

Maximum value of SAR (measured) = 0.205 W/kg



Test Mode: E-UTRA Band 3

Test Laboratory: Audix SAR Lab

Date: 26/07/2025

CH19575(1747.5MHz Back)

DUT: Macaroon LTE Mobile Router M/N:SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 3, E-UTRA/FDD (1710.0 - 1785.0 MHz); Frequency: 1747.5 MHz; Communication System

PAR: 0 dB

Medium parameters used (interpolated): $f = 1747.5$ MHz; $\sigma = 1.377$ S/m; $\epsilon_r = 40.037$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3767; ConvF(8.3, 8.3, 8.3); Calibrated: 01/08/2024;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH19575(1747.5MHz Back)/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.156 W/kg

Configuration/CH19575(1747.5MHz Back)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 8.044 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.216 W/kg

SAR(1 g) = 0.145 W/kg; SAR(10 g) = 0.131 W/kg

Maximum value of SAR (measured) = 0.162 W/kg



Test Mode: E-UTRA Band 8

Test Laboratory: Audix SAR Lab

Date: 08/03/2026

CH21750(910MHz Front)

DUT: Macaroon LTE Mobile Router M/N:SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 8, E-UTRA/FDD (880.0 - 915.0 MHz); Frequency: 910 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 910 \text{ MHz}$; $\sigma = 0.954 \text{ S/m}$; $\epsilon_r = 40.638$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3767; ConvF(9.44, 9.44, 9.44); Calibrated: 01/08/2024;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH21750(910MHz Front)/Area Scan (61x81x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.130 W/kg

Configuration/CH21750(910MHz Front)/Zoom Scan (5x5x7)/Cube 0:

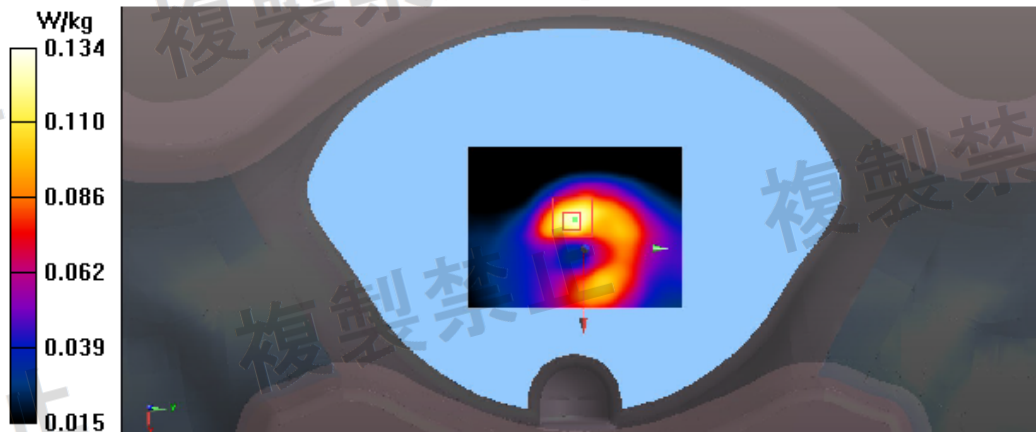
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.88 V/m ; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.179 W/kg

SAR(1 g) = 0.128 W/kg ; SAR(10 g) = 0.079 W/kg

Maximum value of SAR (measured) = 0.134 W/kg



Test Mode: E-UTRA Band 26

Test Laboratory: Audix SAR Lab

Date: 08/03/2026

CH26725(817.5MHz Front)

DUT: Macaroon LTE Mobile Router M/N:SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 26, E-UTRA/FDD (817.0 - 843.0 MHz); Frequency: 822.5 MHz; Communication System PAR: 0 dB

Medium parameters used (extrapolated): $f = 817.5 \text{ MHz}$; $\sigma = 0.879 \text{ S/m}$; $\epsilon_r = 41.649$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(9.15, 9.35, 9.7); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH26725(817.5MHz Front)/Area Scan (61x81x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.204 W/kg

Configuration/CH26725(817.5MHz Front)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.11 V/m ; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.259 W/kg

SAR(1 g) = 0.175 W/kg ; SAR(10 g) = 0.107 W/kg

Maximum value of SAR (measured) = 0.201 W/kg



Test Mode: E-UTRA Band 28

Test Laboratory: Audix SAR Lab

Date: 05/03/2026

CH27435(725.5MHz Back)

DUT: Macaroon LTE Mobile Router M/N:SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 28, E-UTRA/FDD (720.0 - 740.0 MHz); Frequency: 725.5 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 725.5 \text{ MHz}$; $\sigma = 0.872 \text{ S/m}$; $\epsilon_r = 41.83$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(9.4, 9.61, 9.97); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52; Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH27435(725.5MHz Back)/Area Scan (61x81x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.108 W/kg

Configuration/CH27435(725.5MHz Back)/Zoom Scan (5x5x7)/Cube 0:

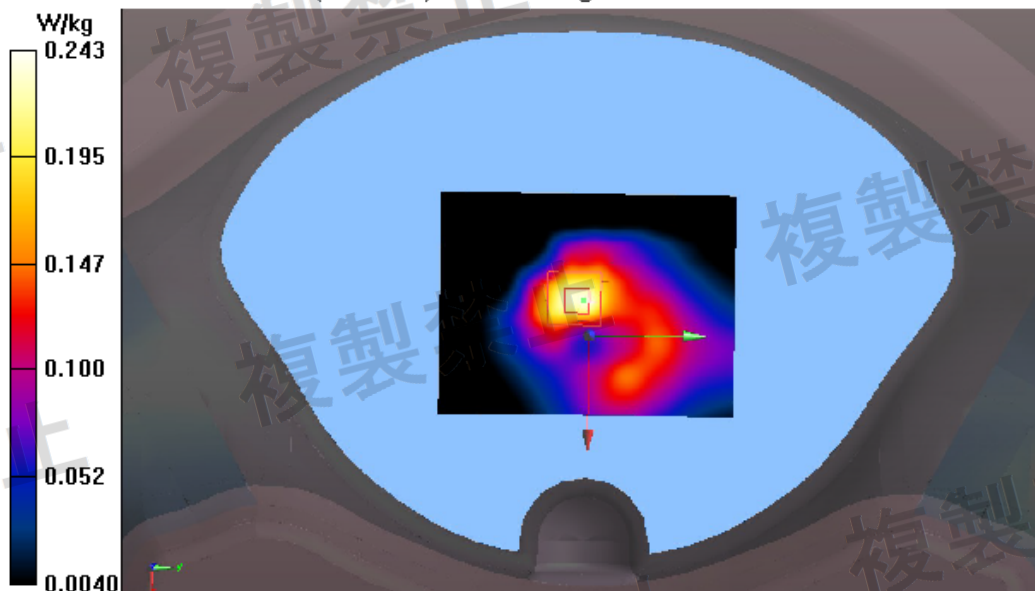
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.95 V/m ; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.203 W/kg ; SAR(10 g) = 0.121 W/kg

Maximum value of SAR (measured) = 0.243 W/kg



Test Mode: E-UTRA Band 34

Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH36275(2017.5MHz Back)

DUT: Macaroon LTE Mobile Router M/N:SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 34,

E-UTRA/TDD (2010.0 - 2025.0 MHz); Frequency: 2017.5 MHz; Communication System

PAR: 0 dB

Medium parameters used: $f = 2017.5$ MHz; $\sigma = 1.411$ S/m; $\epsilon_r = 39.92$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(9.4, 9.61, 9.97); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH36275(2017.5MHz Back)/Area Scan (61x81x1): Interpolated

grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.151 W/kg

Configuration/CH36275(2017.5MHz Back)/Zoom Scan (5x5x7)/Cube 0:

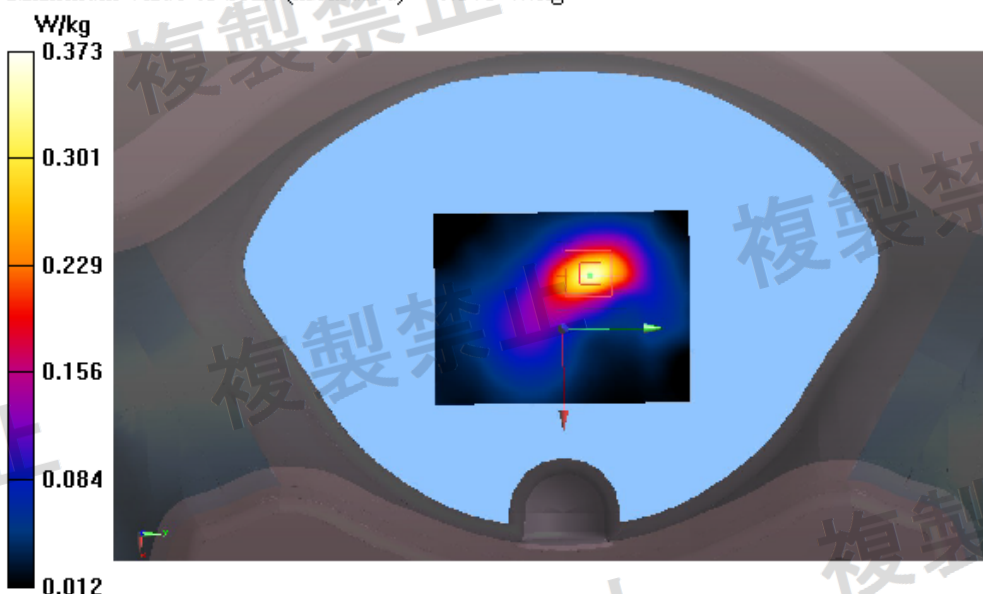
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 7.475 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.212 W/kg

SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.105 W/kg

Maximum value of SAR (measured) = 0.373 W/kg



Test Mode: E-UTRA Band 39

Test Laboratory: Audix SAR Lab

Date: 02/03/2026

CH38566(1911.6MHz Right)

DUT: Macaroon LTE Mobile Router M/N:SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 39,

E-UTRA/TDD (1880.0 - 1920.0 MHz); Frequency: 1911.6 MHz; Communication System

PAR: 0 dB

Medium parameters used (extrapolated): $f = 1911.6 \text{ MHz}$; $\sigma = 1.482 \text{ S/m}$; $\epsilon_r = 39.592$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.57, 7.74, 8.03); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH38566(1911.6MHz Top)/Area Scan (61x81x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.187 W/kg

Configuration/CH38566(1911.6MHz Top)/Zoom Scan (5x5x7)/Cube 0:

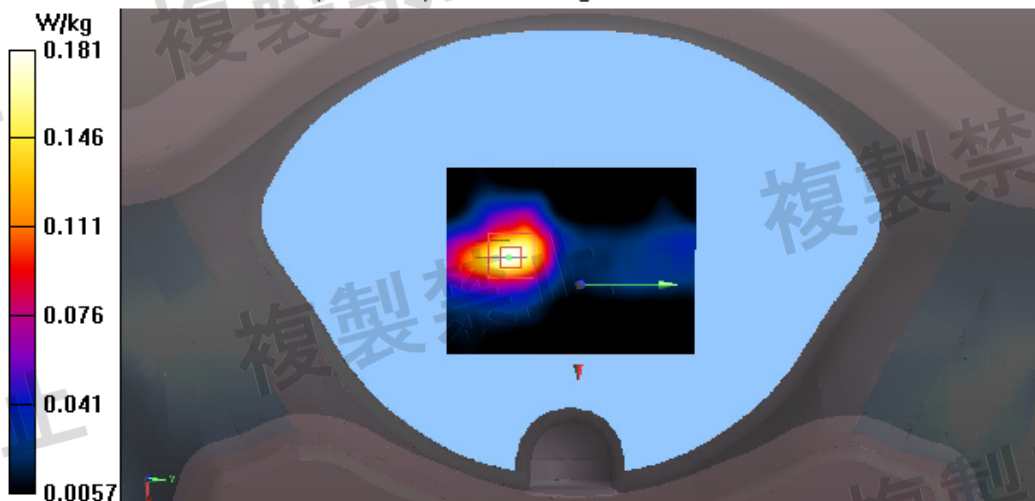
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.926 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.246 W/kg

SAR(1 g) = 0.095 W/kg ; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.181 W/kg



Test Mode: E-UTRA Band 40

Test Laboratory: Audix SAR Lab

Date: 28/1/2026

CH39250(2360MHz Back)

DUT: Macaroon LTE Mobile Router M/N:SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 40, E-UTRA/TDD (2300.0 - 2360.0 MHz); Frequency: 2360 MHz; Communication System

PAR: 0 dB

Medium parameters used: $f = 2360 \text{ MHz}$; $\sigma = 1.711 \text{ S/m}$; $\epsilon_r = 39.731$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.23, 7.4, 7.67); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52; Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH39250(2360MHz Back)/Area Scan (61x81x1): Interpolated

grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.239 W/kg

Configuration/CH39250(2360MHz Back)/Zoom Scan (5x5x7)/Cube 0:

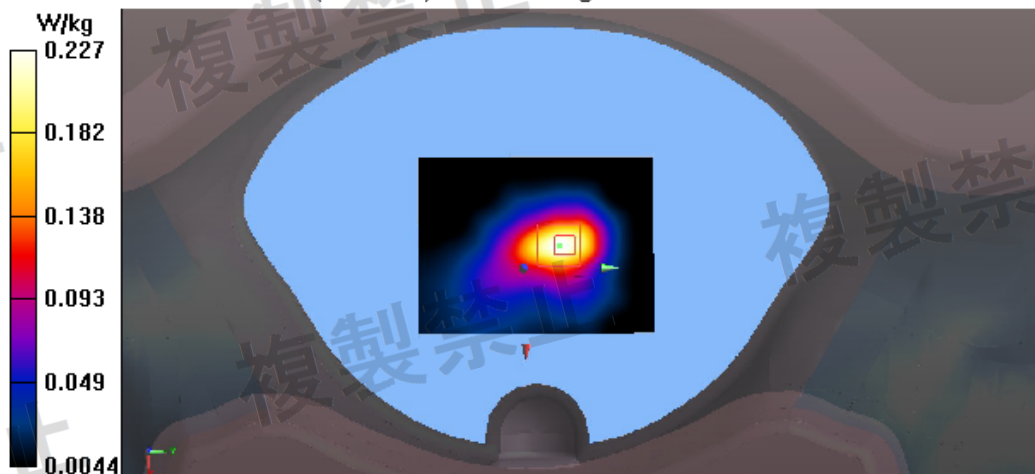
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.375 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.362 W/kg

SAR(1 g) = 0.142 W/kg ; SAR(10 g) = 0.092 W/kg

Maximum value of SAR (measured) = 0.227 W/kg



Test Mode: E-UTRA Band 41

Test Laboratory: Audix SAR Lab

Date: 26/02/2026

CH40165(2547.5MHz Bottom)

DUT: Macaroon LTE Mobile Router M/N:SE

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2547.5 MHz; Communication System

PAR: 0 dB

Medium parameters used: $f = 2547.5 \text{ MHz}$; $\sigma = 2.06 \text{ S/m}$; $\epsilon_r = 38$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.17, 7.33, 7.6); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52; Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH40165(2547.5MHz Bottom)/Area Scan (61x81x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.423 W/kg

Configuration/CH40165(2547.5MHz Bottom)/Zoom Scan (5x5x7)/Cube 0:

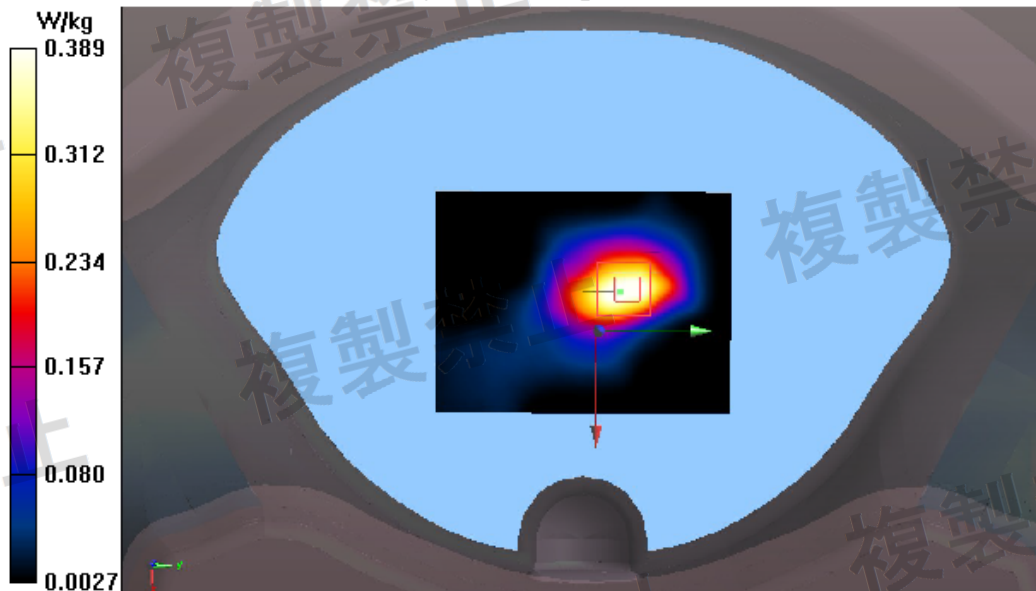
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.24 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.658 W/kg

SAR(1 g) = 0.215 W/kg ; SAR(10 g) = 0.062 W/kg

Maximum value of SAR (measured) = 0.389 W/kg



APPENDIX B

Graph Results (WIFI 2.4GHz)

Test Mode: WIFI 2.4GHz:

Test Laboratory: Audix SAR Lab

Date: 09/03/2026

CH1(2412MHz Front)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);

Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2412

MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.841$ S/m; $\epsilon_r = 38.849$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.1, 7.27, 7.53); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH1(2412MHz Front)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.191 W/kg

Configuration/CH1(2412MHz Front)/Zoom Scan (5x5x7)/Cube 0:

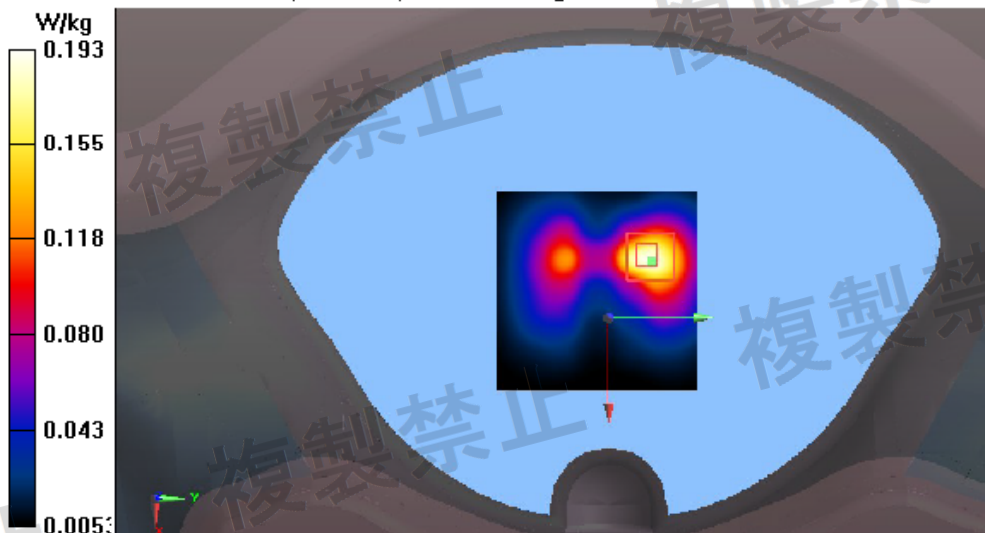
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.184 V/m; Power Drift = 0.20 dB

Peak SAR (extrapolated) = 0.260 W/kg

SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.193 W/kg



Test Laboratory: Audix SAR Lab

Date: 09/03/2026

CH7(2442MHz Front)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);

Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2442

MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2442 \text{ MHz}$; $\sigma = 1.879 \text{ S/m}$; $\epsilon_r = 38.731$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.1, 7.27, 7.53); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH7(2442MHz Front)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.199 W/kg

Configuration/CH7(2442MHz Front)/Zoom Scan (5x5x7)/Cube 0:

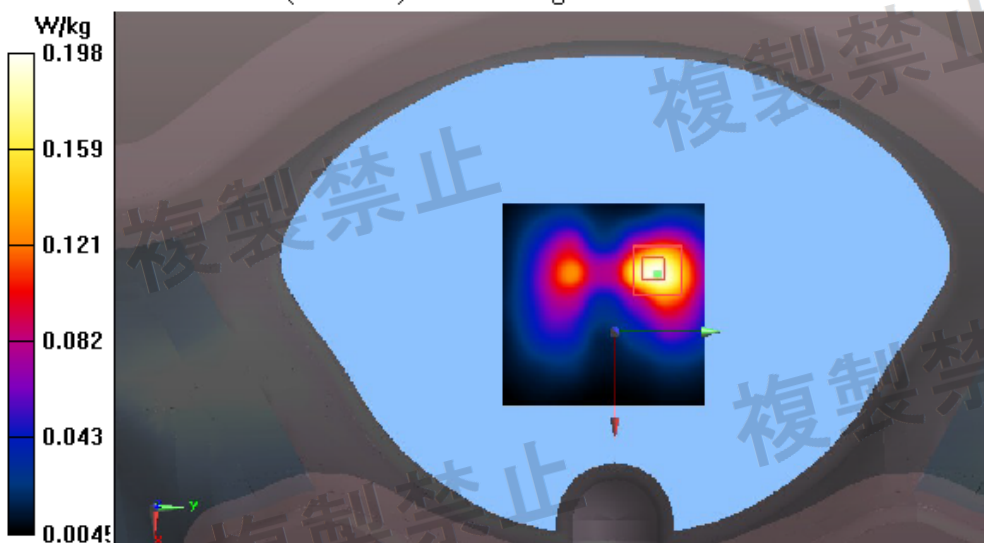
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.249 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.271 W/kg

SAR(1 g) = 0.187 W/kg; SAR(10 g) = 0.112 W/kg

Maximum value of SAR (measured) = 0.198 W/kg



Test Laboratory: Audix SAR Lab

Date: 09/03/2026

CH13(2472MHz Back)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);

Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2472

MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2472$ MHz; $\sigma = 1.908$ S/m; $\epsilon_r = 38.627$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.1, 7.27, 7.53); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH13(2472MHz Back)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.137 W/kg

Configuration/CH13(2472MHz Back)/Zoom Scan (5x5x7)/Cube 0:

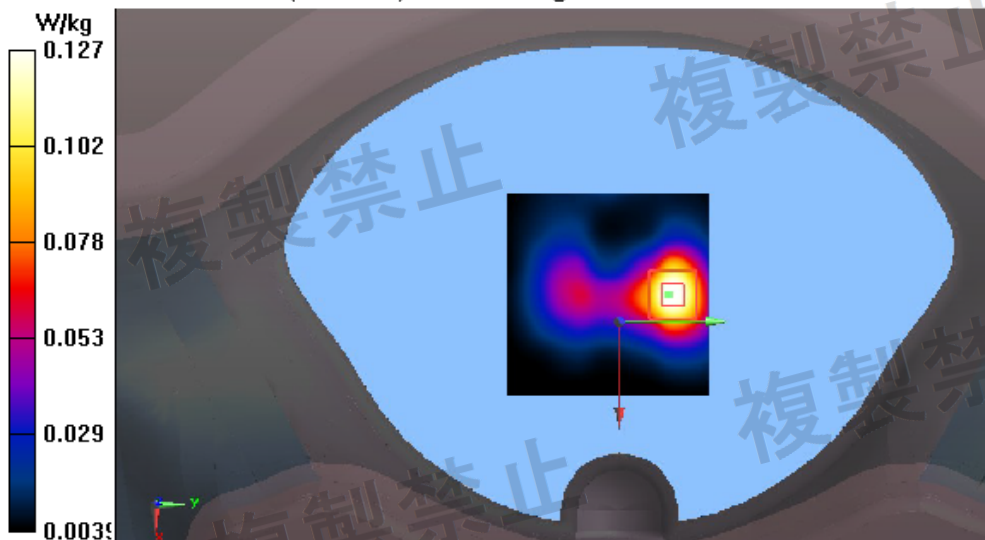
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.912 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.072 W/kg

Maximum value of SAR (measured) = 0.127 W/kg



Test Laboratory: Audix SAR Lab

Date: 09/03/2026

CH13(2472MHz Front)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);

Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2472

MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2472$ MHz; $\sigma = 1.908$ S/m; $\epsilon_r = 38.627$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.1, 7.27, 7.53); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH13(2472MHz Front)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.203 W/kg

Configuration/CH13(2472MHz Front)/Zoom Scan (5x5x7)/Cube 0:

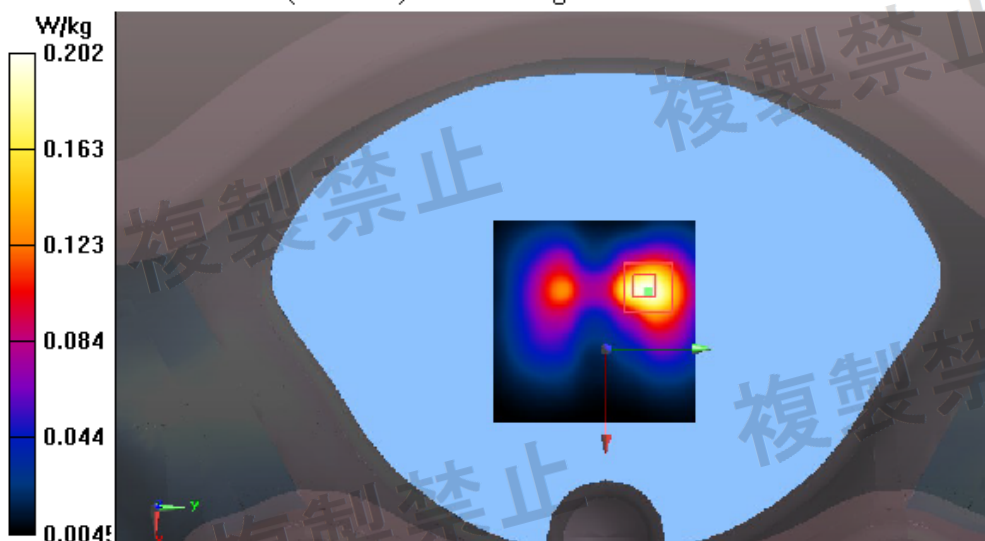
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.273 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.271 W/kg

SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.114 W/kg

Maximum value of SAR (measured) = 0.202 W/kg



Test Laboratory: Audix SAR Lab

Date: 09/03/2026

CH13(2472MHz Left)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);

Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2472

MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2472$ MHz; $\sigma = 1.908$ S/m; $\epsilon_r = 38.627$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.1, 7.27, 7.53); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH13(2472MHz Left)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.0367 W/kg

Configuration/CH13(2472MHz Left)/Zoom Scan (5x5x7)/Cube 0: Measurement

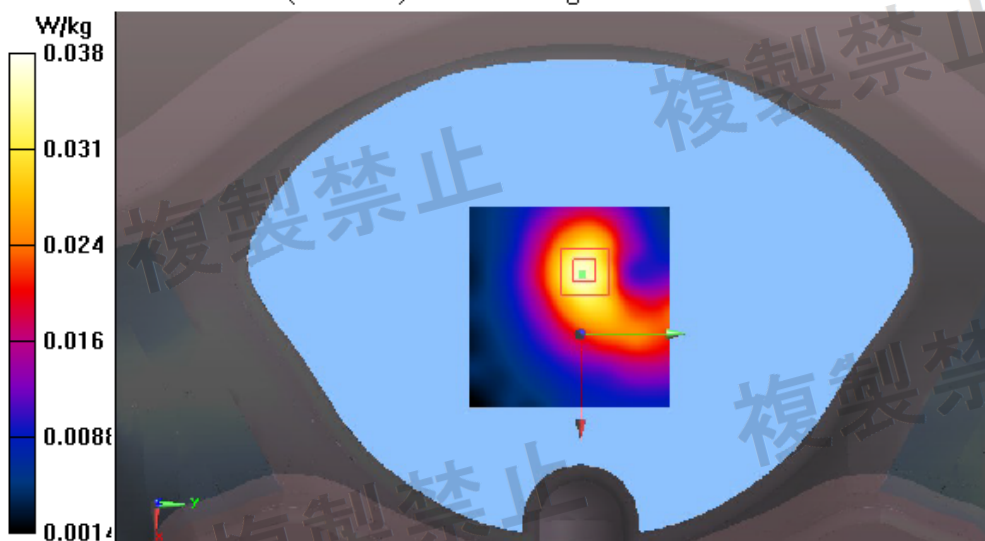
grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.252 V/m; Power Drift = 0.20 dB

Peak SAR (extrapolated) = 0.0490 W/kg

SAR(1 g) = 0.036 W/kg; SAR(10 g) = 0.024 W/kg

Maximum value of SAR (measured) = 0.0384 W/kg



Test Laboratory: Audix SAR Lab

Date: 09/03/2026

CH13(2472MHz Right)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);

Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2472

MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2472$ MHz; $\sigma = 1.908$ S/m; $\epsilon_r = 38.627$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.1, 7.27, 7.53); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH13(2472MHz Right)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.0255 W/kg

Configuration/CH13(2472MHz Right)/Zoom Scan (5x5x7)/Cube 0:

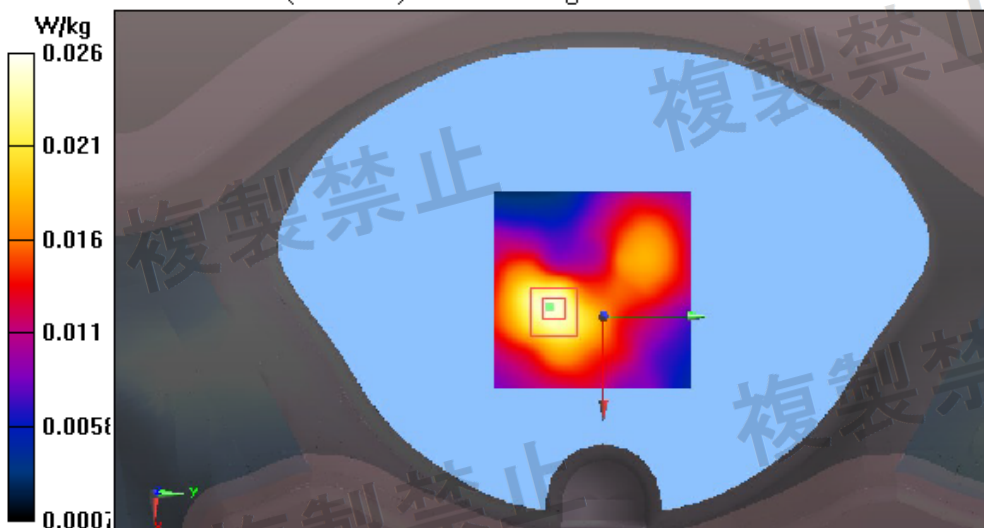
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 2.577 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.0330 W/kg

SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.016 W/kg

Maximum value of SAR (measured) = 0.0260 W/kg



Test Laboratory: Audix SAR Lab

Date: 09/03/2026

CH13(2472MHz Top)

DUT: Macaroon LTE Mobile Router M/N: SE

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);

Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2472

MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2472$ MHz; $\sigma = 1.908$ S/m; $\epsilon_r = 38.627$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7957; ConvF(7.1, 7.27, 7.53); Calibrated: 06/10/2025;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 19/06/2025
- Phantom: SAM 1; Type: SAM; Serial: TP-1543
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/CH13(2472MHz Top)/Area Scan (61x61x1): Interpolated grid:

$dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.123 W/kg

Configuration/CH13(2472MHz Top)/Zoom Scan (5x5x7)/Cube 0: Measurement

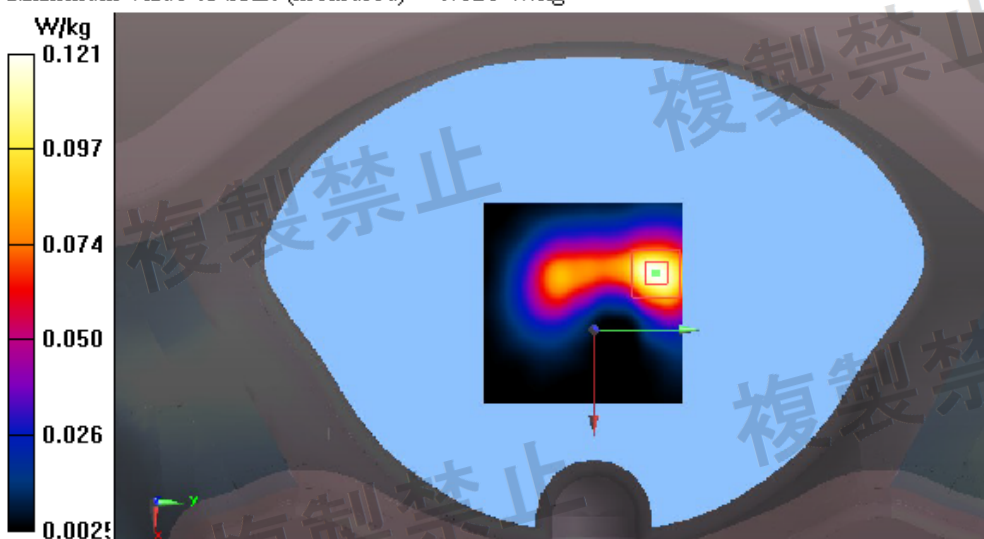
grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.866 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.151 W/kg

SAR(1 g) = 0.110 W/kg; SAR(10 g) = 0.068 W/kg

Maximum value of SAR (measured) = 0.121 W/kg



APPENDIX C

DASY Calibration Certificate



Add: No.52 HuaYuanBei Road, Haidian District, Beijing, 100191
Tel: +86-10-62304633-2117
E-mail: emf@caict.ac.cn http://www.caict.ac.cn



中国认可
国际互认
校准
CALIBRATION
CNAS L0570



Client: **Audix(Shenzhen)**

Certificate No: **25J02Z000412**

CALIBRATION CERTIFICATE

Object: **D750V3 - SN: 1159**

Calibration Procedure(s): **FF-Z11-003-01**
Calibration Procedures for dipole validation kits

Calibration date: **June 18, 2025**

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3) °C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

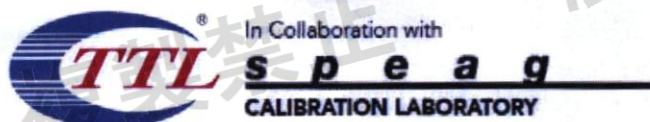
Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	16-May-25 (CTTL, No. 25J02X003423)	May-26
Power sensor NRP6A	101369	16-May-25 (CTTL, No. 25J02X003423)	May-26
Reference Probe EX3DV4	SN 3846	28-May-25(CTTL-SPEAG, No. 25J02Z000277)	May-26
DAE4	SN 1588	13-Sep-24(CTTL-SPEAG, No. 24J02Z000713)	Sep-25
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	19-Dec-24 (CTTL, No. 24J02X103931)	Dec-25
NetworkAnalyzer E5071C	MY46110673	18-Dec-24 (CTTL, No. 24J02X103932)	Dec-25
OCP DAKS	SN 0015	09-Oct-24(SPEAG, No. OCP-DAKS-0015_Oct24)	Oct -25

	Name	Function
Calibrated by:	Zhao Jing	SAR Test Engineer
Reviewed by:	Lin Jun	SAR Test Engineer
Approved by:	Qi Dianyuan	SAR Project Leader

Signature

Issued: June 25, 2025

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Tel: +86-10-62304633-2117
E-mail: emf@caict.ac.cn <http://www.caict.ac.cn>

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM _{x,y,z}
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure for The Assessment of Specific Absorption Rate of Human Exposure to Radio Frequency Fields from Hand-held and Body-mounted Wireless Communication Devices- Part 1528: Human Models, Instrumentation and Procedures (Frequency range of 4 MHz to 10 GHz)", October 2020
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- c) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.



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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.6 ± 6 %	0.91 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	—	—

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.15 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	8.46 W/kg ± 20 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.39 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	5.49 W/kg ± 20 % (k=2)



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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	52.2Ω- 1.61jΩ
Return Loss	- 31.6dB

General Antenna Parameters and Design

Electrical Delay (one direction)	0.940 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feed-point can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
 No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feed-point may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 2025-06-18

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1159

Communication System: UID 0, CW; Frequency: 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.908 \text{ S/m}$; $\epsilon_r = 41.58$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3846; ConvF(9.93, 9.93, 9.93) @ 750 MHz; Calibrated: 2025-05-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1588; Calibrated: 2024-09-13
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

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

Reference Value = 54.78 V/m; Power Drift = 0.03 dB

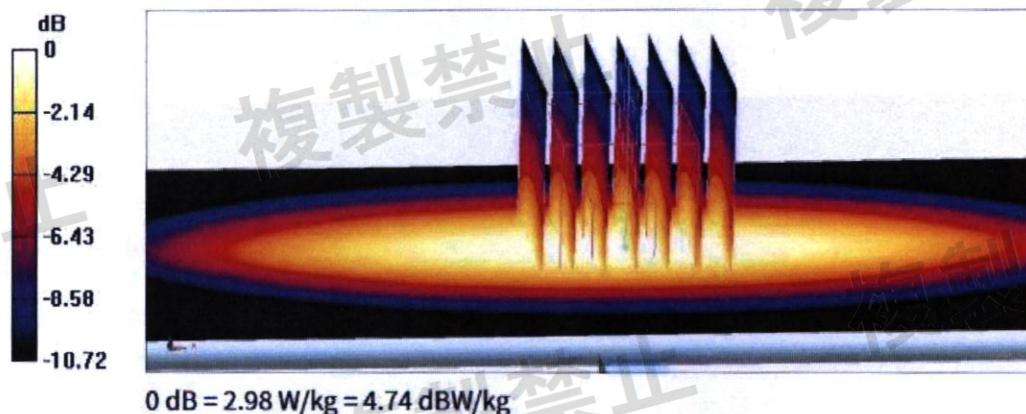
Peak SAR (extrapolated) = 3.49 W/kg

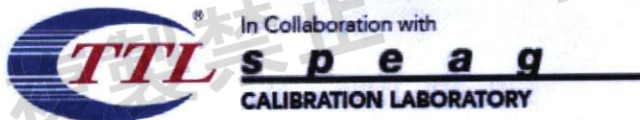
SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.39 W/kg

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 = 61.9%

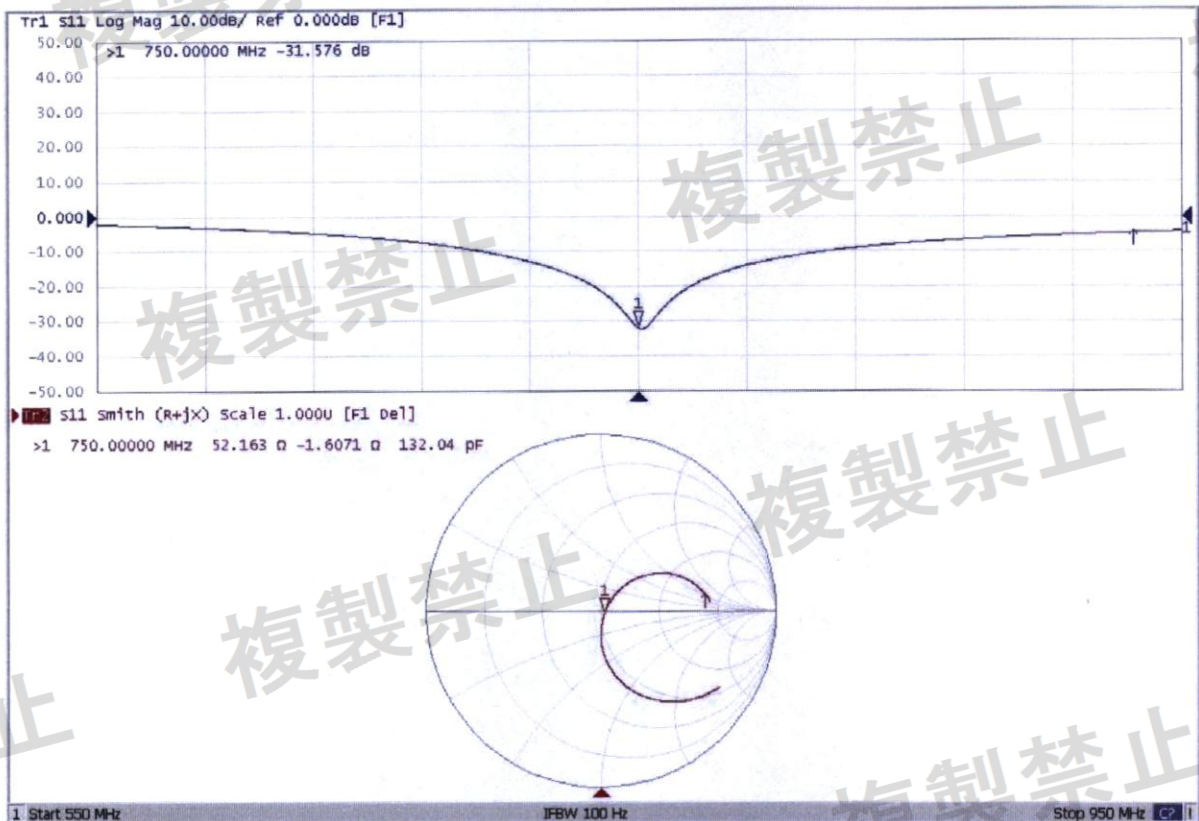
Maximum value of SAR (measured) = 2.98 W/kg

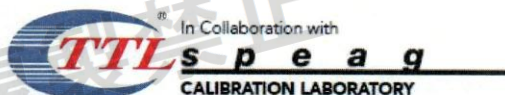




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Impedance Measurement Plot for Head TSL





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CNAS L0570



Client **audix**

Certificate No: **J23Z60241**

CALIBRATION CERTIFICATE

Object **D900V2 - SN: 1d088**

Calibration Procedure(s) **FF-Z11-003-01**
Calibration Procedures for dipole validation kits

Calibration date: **May 23, 2023**

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	22-Sep-22 (CTTL, No.J22X09561)	Sep-23
Power sensor NRP8S	104291	22-Sep-22 (CTTL, No.J22X09561)	Sep-23
Reference Probe EX3DV4	SN 3617	31-Mar-23(CTTL-SPEAG,No.Z23-60161)	Mar-24
DAE4	SN 1556	11-Jan-23(CTTL-SPEAG,No.Z23-60034)	Jan-24
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	05-Jan-23 (CTTL, No. J23X00107)	Jan-24
NetworkAnalyzer E5071C	MY46110673	10-Jan-23 (CTTL, No. J23X00104)	Jan-24

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: May 30, 2023

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Certificate No: J23Z60241

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	900 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.97 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.6 ± 6 %	0.95 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.67 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	10.8 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.73 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	6.99 W/kg ± 18.7 % (k=2)