

FCC SAR EVALUATION REPORT

**In accordance with the requirements of
FCC 47 CFR Part 2(2.1093), ANSI/IEEE C95.1-1992 and
IEEE Std 1528-2013**

Product Name : Tablet

Trademark : ulefone

Model Name : Armor Pad 5 Ultra

GQ8000, Armor Pad 5 Pro, Armor Pad 5, Armor

Family Model : Pad 5E, Armor Pad 5S, Armor Pad 5 Lite, Armor
Pad 5 Pro+, Armor Pad 5s, Armor Pad 5s Pro

FCC ID : 2AT9T-8000

Report No. : S25062002102001

Prepared for

Shenzhen Ulefone Technology CO., LTD.

7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District,
Shenzhen City, Guangdong Province China

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street,
Baoan District, Shenzhen, Guangdong, People's Republic of China

Tel. 0755-23200050 Website: <http://www.ntek.org.cn>

TEST RESULT CERTIFICATION**Applicant's name** Shenzhen Ulefone Technology CO., LTD.Address..... 7A01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City,
Guangdong Province China**Manufacturer's Name** Shenzhen Gotron Electronic CO.,LTD.Address..... 7B01, Building A, Block 1, Anhongji Tianyao Plaza, Longhua District, Shenzhen City,
Guangdong Province China**Product description**

Product name..... Tablet

Trademark ulefone

Model Name Armor Pad 5 Ultra

Family Model..... GQ8000, Armor Pad 5 Ultra, Armor Pad 5 Pro, Armor Pad 5, Armor Pad 5E,
Armor Pad 5S, Armor Pad 5 Lite, Armor Pad 5 Pro+, Armor Pad 5s, Armor Pad
5s Pro

FCC 47 CFR Part 2(2.1093);

ANSI/IEEE C95.1-1992

Standards IEEE Std 1528-2013;

Published RF exposure KDB procedures

This device described above has been tested by Shenzhen NTEK. In accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 and KDB 865664 D01. Testing has shown that this device is capable of compliance with localized specific absorption rate (SAR) specified in FCC 47 CFR Part 2(2.1093) and ANSI/IEEE C95.1-1992. The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

This report shall not be reproduced except in full, without the written approval of Shenzhen NTEK, this document may be altered or revised by Shenzhen NTEK, personal only, and shall be noted in the revision of the document.

Test Sample Number..... S250620021005

Date of Test

Date (s) of performance of tests.. Jul. 10, 2025 ~ Jul. 30, 2025

Date of Issue Aug.26, 2025

Test Result **Pass**Prepared By : Owen Xiao
Owen Xiao
(Project Engineer)Reviewed By : Aaron Cheng
Aaron Cheng
(Supervisor)Approved By : Alex Li
Alex Li
(Manager)

※ ※ Revision History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	Aug.26, 2025	Owen Xiao

TABLE OF CONTENTS

1. General Information	6
1.1. RF exposure limits.....	6
1.2. Statement of Compliance	7
1.3. EUT Description	7
1.4. Test specification(s).....	9
1.5. Ambient Condition.....	9
2. SAR Measurement System	10
2.1. SATIMO SAR Measurement Set-up Diagram	10
2.2. Robot	11
2.3. E-Field Probe.....	12
2.3.1. E-Field Probe Calibration	12
2.4. SAM phantoms	13
2.4.1. Technical Data	14
2.5. Device Holder	15
2.6. Test Equipment List	16
3. SAR Measurement Procedures	18
3.1. Power Reference	18
3.2. Area scan & Zoom scan.....	18
3.3. Description of interpolation/extrapolation scheme	20
3.4. Volumetric Scan.....	20
3.5. Power Drift	20
4. System Verification Procedure	21
4.1. Tissue Verification	21
4.1.1. Tissue Dielectric Parameter Check Results	22
4.2. System Verification Procedure	23
4.2.1. System Verification Results.....	24
5. SAR Measurement variability and uncertainty	25
5.1. SAR measurement variability.....	25
5.2. SAR measurement uncertainty	25
6. RF Exposure Positions	26
6.1. Tablet host platform exposure conditions.....	26
7. RF Output Power	27
7.1. GSM Conducted Power	27
7.2. WCDMA Conducted Power	28
7.3. LTE Conducted Power	29
7.4. WLAN & Bluetooth Output Power	43
7.4.1. Output Power Results Of WLAN	43
7.4.2. Output Power Results Of Bluetooth	46
7.5. NFC	46
8. Antenna Location.....	47

9. Stand-alone SAR test exclusion.....	59
10. SAR Results	60
10.1. SAR measurement results.....	60
10.1.1. SAR measurement Result of GSM850.....	60
10.1.2. SAR measurement Result of GSM1900.....	61
10.1.3. SAR measurement Result of WCDMA Band 2.....	61
1.1.1. SAR measurement Result of WCDMA Band 4.....	62
1.1.2. SAR measurement Result of WCDMA Band 5.....	63
1.1.3. SAR measurement Result of LTE Band 2	64
1.1.4. SAR measurement Result of LTE Band 4	65
1.1.5. SAR measurement Result of LTE Band 5	66
1.1.6. SAR measurement Result of LTE Band 12	68
1.1.7. SAR measurement Result of LTE Band 17	69
1.1.8. SAR measurement Result of LTE Band 41	71
1.1.1. SAR measurement Result of LTE Band 66	72
1.1.2. SAR measurement Result of WLAN 2.4G	74
1.1.3. SAR measurement Result of WLAN 5.2G	76
1.1.4. SAR measurement Result of WLAN 5.3G	78
1.1.5. SAR measurement Result of WLAN 5.8G	80
1.2. SAR Summation Scenario.....	82
2. Appendix A. Photo documentation.....	83
3. Appendix B. System Check Plots	84
4. Appendix C. Plots of High SAR Measurement.....	103
5. Appendix D. Calibration Certificate	152

1. General Information

1.1. RF exposure limits

(A).Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

(B).Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

NOTE: **Whole-Body SAR** is averaged over the entire body, **partial-body SAR** is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube. **SAR for hands, wrists, feet and ankles** is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

Occupational/Controlled Environments:

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

General Population/Uncontrolled Environments:

Are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

NOTE
TRUNK LIMIT
1.6 W/kg
APPLIED TO THIS EUT

1.2. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Armor Pad 5 Ultra are as follows.

RF Exposure Conditions		Equipment Class -Highest Reported SAR (W/kg)				Max. Reported SAR (W/kg)
		PCB	DTS	NII	DSS	
1-g Body-Worn (Separation distance of 0mm)		1.01	0.485	0.503	0.334	1.01
1-g Hotspot (Separation distance of 0mm)		1.01	0.485	0.503	0.334	1.01
Max Simultaneous Tx	Body-Worn	1.513	1.495	1.513	1.344	1.513
	Hotspot	1.513	1.495	1.513	1.344	1.513

Note: The Max Simultaneous Tx is calculated based on the same configuration and test position. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR Part 2(2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 & KDB 865664 D01.

1.3. EUT Description

Device Information	
Product Name	Tablet
Trade Name	ulefone
Model Name	Armor Pad 5 Ultra
Family Model	GQ8000, Armor Pad 5 Ultra, Armor Pad 5 Pro, Armor Pad 5, Armor Pad 5E, Armor Pad 5S, Armor Pad 5 Lite, Armor Pad 5 Pro+, Armor Pad 5s, Armor Pad 5s Pro
Model Difference	All models are the same circuit and RF module, except for model names.
FCC ID	2AT9T-8000
Device Phase	Identical Prototype
Exposure Category	General population / Uncontrolled environment
Antenna	Antenna 1: FPC Antenna; Antenna 2: FPC Antenna
Battery	DC 7.74V, 12100mAh, 93.654Wh
Rating(s)	DC 7.74V from battery or DC 5V/9V/12V/15V/20V from adapter
Hardware version	N/A
Software version	N/A
Device Operating Configurations	

Supporting Mode(s)	GSM 850/1900, WCDMA Band 2/4/5, LTE Band 2/4/5/7/17/41/66, WLAN 2.4G/5G, Bluetooth, NFC		
Test Modulation	GSM(GMSK/8PSK), WCDMA(QPSK), LTE(QPSK/16QAM), NFC(ASK), LAN(DSSS/OFDM), Bluetooth(GFSK, $\pi/4$ -DQPSK, 8DPSK)		
Device Class	B		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM 850	824-849	869-894
	GSM 1900	1850-1910	1930-1990
	WCDMA Band 2	1850-1910	1930-1990
	WCDMA Band 4	1710-1755	2110-2155
	WCDMA Band 5	824-849	869-894
	LTE Band 2	1850-1910	1930-1990
	LTE Band 4	1710-1755	2110-2155
	LTE Band 5	824-849	869-894
	LTE Band 12	699-716	729-746
	LTE Band 17	704-716	734-746
	LTE Band 41	2535-2655	
	LTE Band 66	1710-1780	
	WLAN 2.4G	2412-2462	
	WLAN 5.2G	5180-5240	
	WLAN 5.3G	5260-5320	
	WLAN 5.8G	5745-5825	
	Bluetooth	2402-2480	
	NFC	13.56	
GPRS Multislot Class(12)	Max Number of Timeslots in Uplink		4
	Max Number of Timeslots in Downlink		4
	Max Total Timeslot		5
EGPRS Multislot Class(12)	Max Number of Timeslots in Uplink		4
	Max Number of Timeslots in Downlink		4
	Max Total Timeslot		5
Power Class	4, tested with power level 5(GSM 850)		
	1, tested with power level 0(GSM 1900)		
	3, tested with power control "all 1"(WCDMA Band 2)		
	3, tested with power control "all 1"(WCDMA Band 5)		
	3, tested with power control all Max.(LTE Band 2)		
	3, tested with power control all Max.(LTE Band 4)		
	3, tested with power control all Max.(LTE Band 5)		
	3, tested with power control all Max.(LTE Band 7)		
	3, tested with power control all Max.(LTE Band 17)		
	3, tested with power control all Max.(LTE Band 41)		

1.4. Test specification(s)

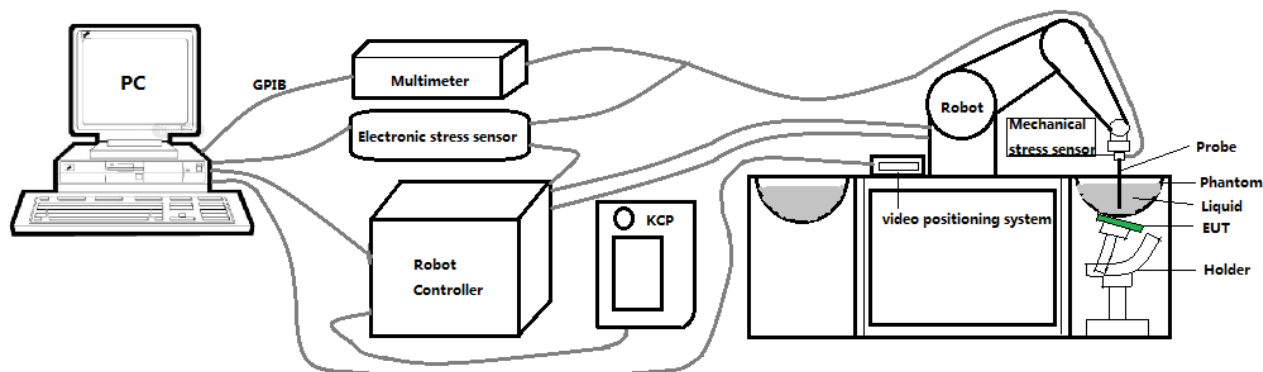
FCC 47 CFR Part 2(2.1093)
ANSI/IEEE C95.1-1992
IEEE Std 1528-2013
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04;
KDB 865664 D02 RF Exposure Reporting v01r02;
KDB 447498 D01 General RF Exposure Guidance v06;
KDB 248227 D01 802.11 Wi-Fi SAR v02r02;
KDB 941225 D01 3G SAR Procedures v02r01;
KDB 941225 D05 SAR for LTE Devices v01r02;
KDB 616217 D04 SAR for laptop and tablets v01r02

1.5. Ambient Condition

Ambient temperature	20°C – 24°C
Relative Humidity	30% – 70%

2. SAR Measurement System

2.1. SATIMO SAR Measurement Set-up Diagram



These measurements were performed with the automated near-field scanning system OPENSAR from SATIMO. The system is based on a high precision robot (working range: 901 mm), which positions the probes with a positional repeatability of better than ± 0.03 mm. The SAR measurements were conducted with dosimetric probe (manufactured by SATIMO), designed in the classical triangular configuration and optimized for dosimetric evaluation.

The first step of the field measurement is the evaluation of the voltages induced on the probe by the device under test. Probe diode detectors are nonlinear. Below the diode compression point, the output voltage is proportional to the square of the applied E-field; above the diode compression point, it is linear to the applied E-field. The compression point depends on the diode, and a calibration procedure is necessary for each sensor of the probe.

The Keithley multimeter reads the voltage of each sensor and send these three values to the PC. The corresponding E field value is calculated using the probe calibration factors, which are stored in the working directory. This evaluation includes linearization of the diode characteristics. The field calculation is done separately for each sensor. Each component of the E field is displayed on the "Dipole Area Scan Interface" and the total E field is displayed on the "3D Interface"

2.2. Robot

The SATIMO SAR system uses the high precision robots from KUKA. For the 6-axis controller system, the robot controller version (KUKA) from KUKA is used. The KUKA robot series have many features that are important for our application:



- High precision (repeatability ± 0.03 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)

2.3. E-Field Probe

This E-field detection probe is composed of three orthogonal dipoles linked to special Schottky diodes with low detection thresholds. The probe allows the measurement of electric fields in liquids such as the one defined in the IEEE and CENELEC standards.

For the measurements the Specific Dosimetric E-Field Probe 0725-EPGO-448 with following specifications is used



- Dynamic range: 0.01-100 W/kg
 - Tip Diameter : 2.5 mm
 - Distance between probe tip and sensor center: 1 mm
 - Distance between sensor center and the inner phantom surface: 2 mm (repeatability better than ± 1 mm).
 - Probe linearity: ± 0.08 dB
 - Axial isotropy: ± 0.01 dB
 - Hemispherical Isotropy: ± 0.01 dB
 - Calibration range: 650MHz to 5900MHz for head & body simulating liquid.
 - Lower detection limit: 8mW/kg
- Angle between probe axis (evaluation axis) and surface normal line: less than 30° .

2.3.1. E-Field Probe Calibration

Each probe needs to be calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy shall be evaluated and within ± 0.25 dB. The sensitivity parameters (Norm X, Norm Y, and Norm Z), the diode compression parameter (DCP) and the conversion factor (Conv F) of the probe are tested. The calibration data can be referred to appendix D of this report.

2.4. SAM phantoms

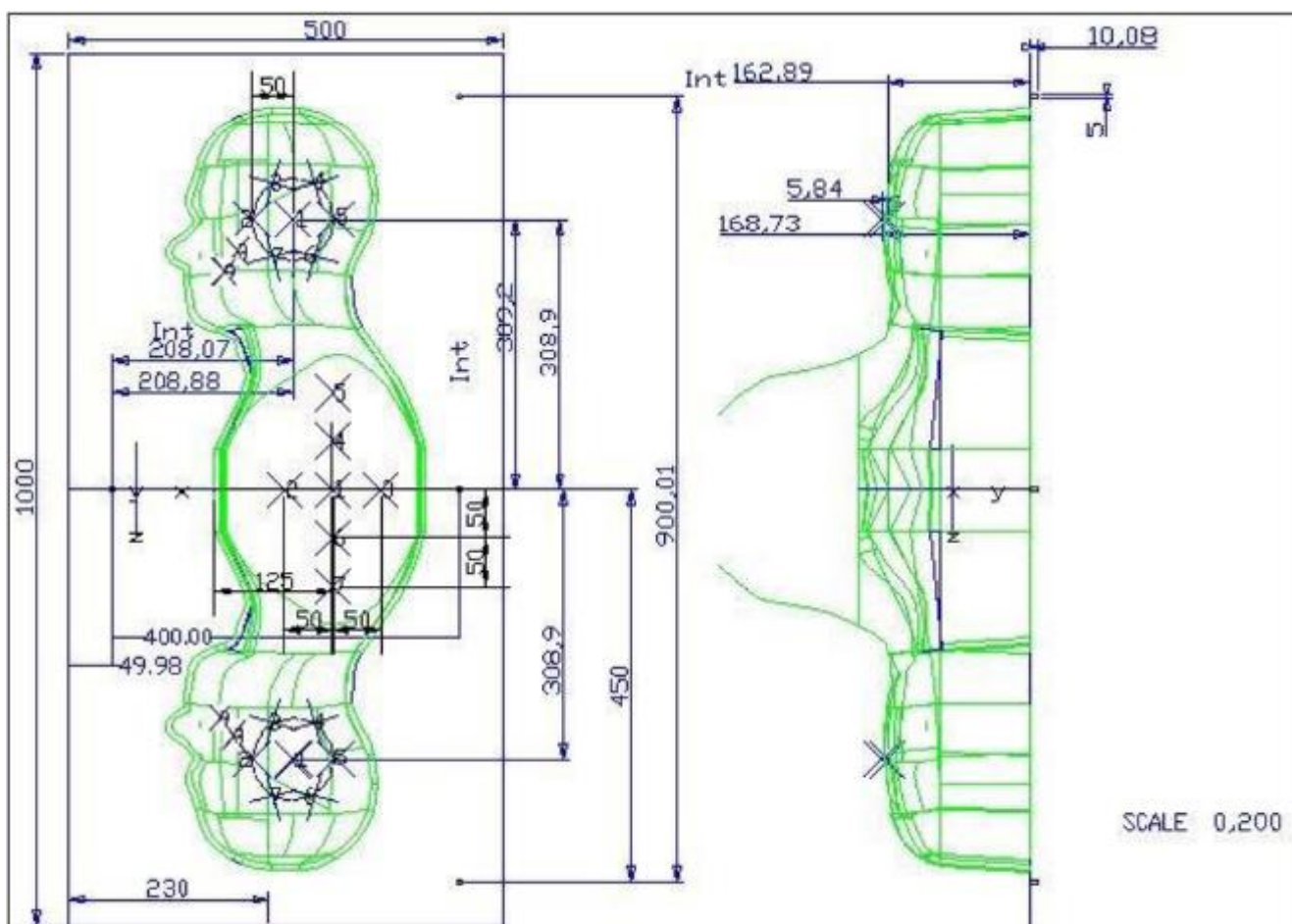
Photo of SAM phantom SN 16/15 SAM119



The SAM phantom is used to measure the SAR relative to people exposed to electro-magnetic field radiated by mobile phones.

2.4.1. Technical Data

Serial Number	Shell thickness	Filling volume	Dimensions	Positionner Material	Permittivity	Loss Tangent
SN 16/15 SAM119	2 mm ±0.2 mm	27 liters	Length:1000 mm Width:500 mm Height:200 mm	Gelcoat with fiberglass	3.4	0.02

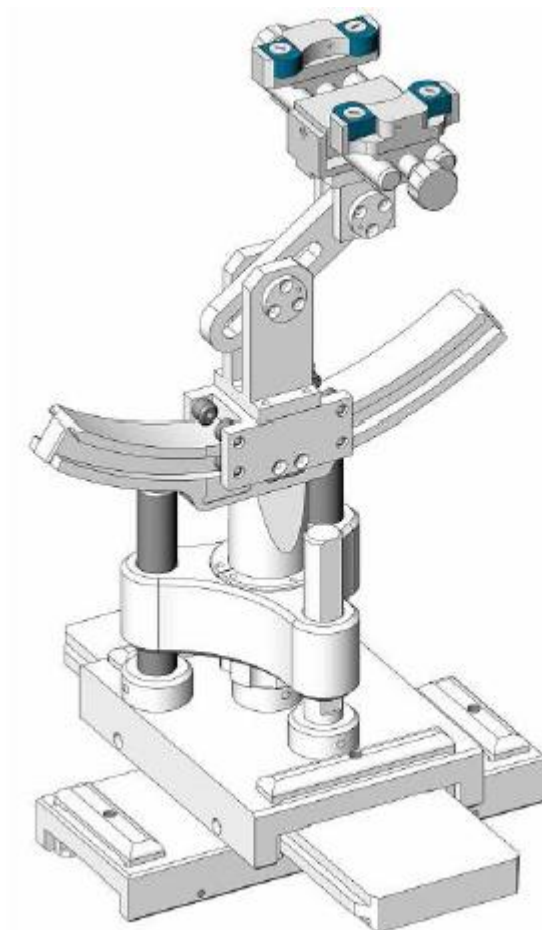


Serial Number	Left Head(mm)		Right Head(mm)		Flat Part(mm)	
SN 16/15 SAM119	2	2.02	2	2.08	1	2.09
	3	2.05	3	2.06	2	2.06
	4	2.07	4	2.07	3	2.08
	5	2.08	5	2.08	4	2.10
	6	2.05	6	2.07	5	2.10
	7	2.05	7	2.05	6	2.07
	8	2.07	8	2.06	7	2.07
	9	2.08	9	2.06	-	-

The test, based on ultrasonic system, allows measuring the thickness with an accuracy of 10 μm .

2.5. Device Holder

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



Serial Number	Holder Material	Permittivity	Loss Tangent
SN 16/15 MSH100	Delrin	3.7	0.005

2.6. Test Equipment List

This table gives a complete overview of the SAR measurement equipment.

Devices used during the test described are marked ☒

	Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
					Last Cal.	Due Date
☒	MVG	E FIELD PROBE	SSE2	0725-EPGO-448	Apr. 15, 2025	Apr. 14, 2026
☒	MVG	750 MHz Dipole	SID750	SN 03/15 DIP 0G750-355	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	835 MHz Dipole	SID835	SN 03/15 DIP 0G835-347	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	900 MHz Dipole	SID900	SN 03/15 DIP 0G900-348	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	1800 MHz Dipole	SID1800	SN 03/15 DIP 1G800-349	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	1900 MHz Dipole	SID1900	SN 03/15 DIP 1G900-350	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	2000 MHz Dipole	SID2000	SN 03/15 DIP 2G000-351	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	2450 MHz Dipole	SID2450	SN 03/15 DIP 2G450-352	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	2600 MHz Dipole	SID2600	SN 03/15 DIP 2G600-356	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	3500 MHz Dipole	SID3500	SN 09/12 DIP 3G500-360	Oct. 15, 2022	Oct. 14, 2025
☐	MVG	3700 MHz Dipole	SID3700	SN 09/12 DIP 3G/700-361	Oct. 15 2022	Oct. 14 2025
☒	MVG	5000 MHz Dipole	SWG5500	SN 13/14 WGA 33	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	Liquid measurement Kit	SCLMP	SN 21/15 OCPG 72	NCR	NCR
☒	MVG	Power Amplifier	N/A	AMPLISAR_28/14_003	NCR	NCR
☒	KEITHLEY	Millivoltmeter	2000	4072790	Nov. 29, 2024	Nov. 28, 2025
☒	R&S	Universal radio communication tester	CMU200	105747	Apr. 17, 2025	Apr. 16, 2026
☒	R&S	Wideband	CMW500	103917	May. 12,	May. 11,

		radio communication tester			2025	2026
☐	Anritsu	4G LTE comprehensive tester	MT8821C	6262192315	July.17 2024	July.16 2025
☐	Anritsu	5G NR comprehensive tester	MT8000A	6262186364	July.17 2024	July.16 2025
☒	HP	Network Analyzer	E5071C	LPS-461	Oct. 15, 2024	Oct. 14, 2025
☒	Agilent	Calibration Kit	85033E	N/A	May. 31, 2024	May. 30, 2027
☒	Agilent	MXG Vector Signal Generator	N5182A	MY47070317	Apr. 17, 2025	Apr. 16, 2026
☒	Agilent	Power sensor	E9301A	LES-413-C	May. 6, 2025	May. 5, 2026
☒	Agilent	Power sensor	E9301A	US39212148	Apr. 17, 2025	Apr. 16, 2026
☒	MCLI/USA	Directional Coupler	CB11-20	0D2L51502	Apr. 26, 2024	Apr. 25, 2027
☒	N/A	Thermometer	N/A	LES-085	Mar. 27, 2023	Mar. 26, 2026
☒	MVG	SAM Phantom	SSM2	SN 16/15 SAM119	NCR	NCR
☒	MVG	Device Holder	SMPPD	SN 16/15 MSH100	NCR	NCR

Measurement Software

Manufacturer	Software Name	Software Version
SATIMO	OpenSAR	V5.3.15.11

3. SAR Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

- (a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
- (b) Read the WWAN RF power level from the base station simulator.
- (c) For WLAN/Bluetooth power measurement, use engineering software to configure EUT WLAN/Bluetooth continuously transmission, at maximum RF power in each supported wireless interface and frequency band.
- (d) Connect EUT RF port through RF cable to the power meter, and measure WLAN/Bluetooth output power.

<SAR measurement>

- (a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/Bluetooth continuously transmission, at maximum RF power, in the highest power channel.
- (b) Place the EUT in the positions as Appendix A demonstrates.
- (c) Set scan area, grid size and other setting on the OPENSAR software.
- (d) Measure SAR results for the highest power channel on each testing position.
- (e) Find out the largest SAR result on these testing positions of each band.
- (f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg.

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

3.1. Power Reference

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

3.2. Area scan & Zoom scan

The area scan is a 2D scan to find the hot spot location on the DUT. The zoom scan is a 3D scan above the hot spot to calculate the 1g and 10g SAR value.

Measurement of the SAR distribution with a grid of 8 to 16 mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8 * 4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

From the scanned SAR distribution, identify the position of the maximum SAR value, in addition identify the positions of any local maxima with SAR values within 2 dB of the maximum value that will not be within the zoom scan of other peaks; additional peaks shall be measured only when the primary peak is within 2 dB of the SAR compliance limit (e.g., 1 W/kg for 1.6 W/kg 1 g limit, or 1.26 W/kg for 2 W/kg, 10 g limit).

Area scan & Zoom scan scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

			$\leq 3\text{ GHz}$	$> 3\text{ GHz}$
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			$5 \pm 1\text{ mm}$	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5\text{ mm}$
Maximum probe angle from probe axis to phantom surface normal at the measurement location			$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$			$\leq 2\text{ GHz}: \leq 15\text{ mm}$ $2 - 3\text{ GHz}: \leq 12\text{ mm}$	$3 - 4\text{ GHz}: \leq 12\text{ mm}$ $4 - 6\text{ GHz}: \leq 10\text{ mm}$
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			$\leq 2\text{ GHz}: \leq 8\text{ mm}$ $2 - 3\text{ GHz}: \leq 5\text{ mm}^*$	$3 - 4\text{ GHz}: \leq 5\text{ mm}^*$ $4 - 6\text{ GHz}: \leq 4\text{ mm}^*$
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		$\leq 5\text{ mm}$	$3 - 4\text{ GHz}: \leq 4\text{ mm}$ $4 - 5\text{ GHz}: \leq 3\text{ mm}$ $5 - 6\text{ GHz}: \leq 2\text{ mm}$
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	$\leq 4\text{ mm}$	$3 - 4\text{ GHz}: \leq 3\text{ mm}$ $4 - 5\text{ GHz}: \leq 2.5\text{ mm}$ $5 - 6\text{ GHz}: \leq 2\text{ mm}$
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		$\geq 30\text{ mm}$	$3 - 4\text{ GHz}: \geq 28\text{ mm}$ $4 - 5\text{ GHz}: \geq 25\text{ mm}$ $5 - 6\text{ GHz}: \geq 22\text{ mm}$
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.				
* When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is $\leq 1.4\text{ W/kg}$, $\leq 8\text{ mm}$, $\leq 7\text{ mm}$ and $\leq 5\text{ mm}$ zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

3.3. Description of interpolation/extrapolation scheme

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimise measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is used to determine this highest local SAR value. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1 mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10 grams and 1 gram requires a very fine resolution in the three dimensional scanned data array.

3.4. Volumetric Scan

The volumetric scan consists to a full 3D scan over a specific area. This 3D scan is useful for multi Tx SAR measurement. Indeed, it is possible with OpenSAR to add, point by point, several volumetric scans to calculate the SAR value of the combined measurement as it is defined in the standard IEEE1528 and IEC62209.

3.5. Power Drift

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In OpenSAR measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in V/m. If the power drifts more than $\pm 5\%$, the SAR will be retested.

4. System Verification Procedure

4.1. Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Ingredients (% of weight)	Head Tissue								
Frequency Band (MHz)	750	835	900	1800	1900	2000	2450	2600	5000
Water	34.40	34.40	34.40	55.36	55.36	71.88	71.88	71.88	65.53
NaCl	0.79	0.79	0.79	0.35	0.35	0.16	0.16	0.16	0.00
1,2-Propanediol	64.81	64.81	64.81	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	30.45	30.45	19.97	19.97	19.97	17.24
DGBE	0.00	0.00	0.00	13.84	13.84	7.99	7.99	7.99	0.00

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid depth from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm.

Photo of Liquid depth for Head Position	Photo of Liquid depth for Body Position
	

4.1.1. Tissue Dielectric Parameter Check Results

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 5\%$ of the target values.

Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Delta(%)		Liquid Temp.	Test Date
		ϵ_r	σ (S/m)	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)		
Head 750	750	41.90	0.89	40.59	0.89	-3.14	-0.45	21.9 °C	Jun. 26, 2025
Head 835	835	41.50	0.90	42.03	0.92	1.27	1.89	21.5 °C	Jun. 27, 2025
Head 1800	1800	40.00	1.40	39.00	1.40	-2.50	-0.07	21.7 °C	Jun. 28, 2025
Head 1900	1900	40.00	1.40	38.21	1.43	-4.48	2.36	21.1 °C	Jun. 29, 2025
Head 2450	2450	39.20	1.80	38.30	1.82	-2.30	1.33	21.8 °C	Jun. 30, 2025
Head 2600	2600	39.01	1.96	39.26	1.93	0.64	-1.53	21.7 °C	Jun. 24, 2025
Head 5200	5200	36.00	4.66	37.29	4.56	3.59	-2.25	21.9 °C	Jul. 10, 2025
Head 5400	5400	35.80	4.86	35.20	4.94	-1.68	1.67	21.3 °C	Jul. 11, 2025
Head 5800	5800	35.30	5.27	35.90	5.10	1.69	-3.19	21.2 °C	Jul. 12, 2025

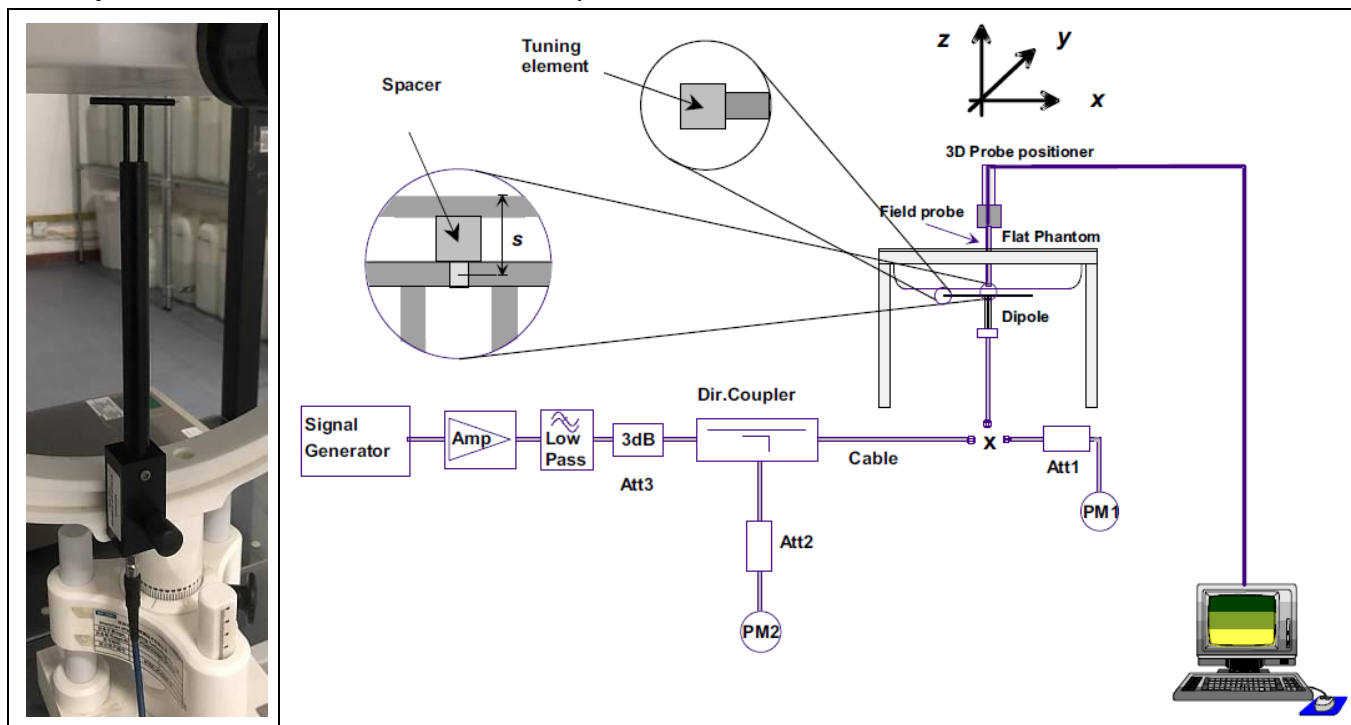
NOTE: 1. The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.

2. Tested by : Max Zhou , Jack Peng

4.2. System Verification Procedure

The system verification is performed for verifying the accuracy of the complete measurement system and performance of the software. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. To adjust this power a power meter is used. The power sensor is connected to the cable before the system verification to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the system verification to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot).

The system verification is shown as below picture:



4.2.1. System Verification Results

Comparing to the original SAR value provided by SATIMO, the verification data should be within its specification of $\pm 10\%$. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance verification can meet the variation criterion and the plots can be referred to Appendix B of this report.

System Verification	Target SAR (1W)		Measured SAR			Measured SAR		Delta (%)		Liquid Temp.	Test Date
						(Normalized to 1W)					
	1-g (W/Kg)	10-g (W/Kg)	Input Power (mW)	1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)	1-g (%)	10-g (%)		
750MHz	8.60	5.78	100.00	0.86	0.55	8.61	5.48	0.12	-5.19	21.9 °C	Jun. 26, 2025
835MHz	9.40	6.28	100.00	0.96	0.58	9.62	5.83	2.34	-7.17	21.5 °C	Jun. 27, 2025
1800MHz	37.06	20.01	100.00	3.82	1.93	38.16	19.27	2.97	-3.70	21.7 °C	Jun. 28, 2025
1900MHz	39.69	20.92	100.00	3.92	1.93	39.15	19.28	-1.36	-7.84	21.1 °C	Jun. 29, 2025
2450MHz	50.05	23.80	100.00	4.88	2.13	48.78	21.27	-2.54	-10.63	21.8 °C	Jun. 30, 2025
2600MHz	54.16	24.85	100.00	5.31	2.28	53.08	22.75	-1.99	-8.45	21.7 °C	Jun. 24, 2025
5200MHz	162.59	56.21	10.00	1.65	0.61	165.00	60.80	1.48	8.17	21.9 °C	Jul. 10, 2025
5400MHz	159.81	55.00	10.00	1.59	0.54	159.30	53.80	-0.32	-2.18	21.3 °C	Jul. 11, 2025
5800MHz	182.20	61.32	10.00	1.79	0.60	179.00	59.80	-1.76	-2.48	21.2 °C	Jul. 12, 2025

NOTE: Tested by : Max Zhou, Jack Peng

5. SAR Measurement variability and uncertainty

5.1. SAR measurement variability

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

5.2. SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

6. RF Exposure Positions

6.1. Tablet host platform exposure conditions

Refer to KDB616217 D04, when the modular approach is used, transmitters and modules must be initially tested for standalone operations in generic host conditions according to the following minimum test separation distance and antenna installation requirements for incorporation in the tablet platform. The separation distance required for incorporation in qualified hosts is described in KDB 447498; item 5) of section 4.1 and item 1) of section 5.2.2 etc.

- ≤ 5 mm between the antenna and user for both back surface and edge exposure conditions
- the antennas used by the host must have been tested for equipment approval or qualify for SAR test exclusion
- the antenna polarization, physical orientation, rotation and installation configurations used by the host must have been tested for compliance or qualify for test exclusion
- when the *SAR Test Exclusion Threshold* in KDB 447498 applies, a *test separation distance* of 5 mm is required to determine test exclusion for the tablet platform

The antennas embedded in tablets are typically ≤ 5 mm from the outer housing. The required antenna to user test separation distance is a “not to exceed test” distance required to apply the modular approach. Instead of the typical zero gap tablet edge test requirement between the edge of a tablet and the user, when an antenna has been tested at ≤ 5 mm according to the modular approach it can be incorporated into tablets with at least twice the tested distance from the outer housing of the tablet edge; otherwise, the tablet edge zero gap test requirement applies. When the dedicated host approach is applied, the back surface and edges of the tablet should be tested for SAR compliance with the tablet touching the phantom.

7. RF Output Power

7.1. GSM Conducted Power

Band GSM850	Burst-Averaged output Power (dBm)				Frame-Averaged output Power (dBm)			
Tx Channel	Tune -	128	189	251	Tune -	128	189	251
Frequency (MHz)	up (dBm)	824.2	836.4	848.8	up (dBm)	824.2	836.4	848.8
GSM (GMSK)	32.81	32.93	32.53	23.97	23.78	23.90	23.50	32.81
GPRS(GMSK,1 Tx slot)	32.76	32.88	32.47	23.97	23.73	23.85	23.44	32.76
GPRS(GMSK,2 Tx slot)	31.83	31.94	31.52	25.98	25.81	25.92	25.50	31.83
GPRS(GMSK,3 Tx slot)	29.81	29.95	29.54	25.74	25.55	25.69	25.28	29.81
GPRS(GMSK,4 Tx slot)	28.68	28.84	28.44	25.99	25.67	25.83	25.43	28.68
EGPRS(8PSK,1 Tx slot)	26.82	26.64	27.32	18.47	17.79	17.61	18.29	26.82
EGPRS(8PSK,2 Tx slot)	26.17	25.93	26.39	20.48	20.15	19.91	20.37	26.17
EGPRS(8PSK,3 Tx slot)	23.80	23.84	24.02	20.24	19.54	19.58	19.76	23.80
EGPRS(8PSK,4 Tx slot)	23.09	22.93	23.00	20.49	20.08	19.92	19.99	23.09
Band GSM1900	Burst-Averaged output Power (dBm)				Frame-Averaged output Power (dBm)			
Tx Channel	Tune -	512	661	810	Tune -	512	661	810
Frequency (MHz)	up (dBm)	1850.2	1880	1909.8	up (dBm)	1850.2	1880	1909.8
GSM (GMSK)	29.39	29.29	29.25	20.47	20.36	20.26	20.22	29.39
GPRS(GMSK,1 Tx slot)	29.33	29.24	29.21	20.47	20.30	20.21	20.18	29.33
GPRS(GMSK,2 Tx slot)	28.58	28.49	28.46	22.98	22.56	22.47	22.44	28.58
GPRS(GMSK,3 Tx slot)	26.80	26.76	26.75	22.74	22.54	22.50	22.49	26.80
GPRS(GMSK,4 Tx slot)	25.75	25.68	25.67	22.99	22.74	22.67	22.66	25.75
EGPRS(8PSK,1 Tx slot)	25.43	25.49	25.88	16.97	16.40	16.46	16.85	25.43
EGPRS(8PSK,2 Tx slot)	25.18	24.91	25.00	19.48	19.16	18.89	18.98	25.18
EGPRS(8PSK,3 Tx slot)	22.47	23.16	23.08	19.24	18.21	18.90	18.82	22.47
EGPRS(8PSK,4 Tx slot)	21.32	21.35	21.56	18.99	18.31	18.34	18.55	21.32

Note: The frame-averaged power is linearly scaled the maximum burst averaged power over 8 time slots. The calculated method are shown as below:

Frame-averaged power = Maximum burst averaged power (1 Tx Slot) - 9.03 dB

Frame-averaged power = Maximum burst averaged power (2 Tx Slots) - 6.02 dB

Frame-averaged power = Maximum burst averaged power (3 Tx Slots) - 4.26 dB

Frame-averaged power = Maximum burst averaged power (4 Tx Slots) - 3.01 dB

7.2. WCDMA Conducted Power

WCDMA Band 2		Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	9262	9400	9538	
Frequency (MHz)		1852.4	1880	1907.6	
RMC12.2K	23.50	23.18	23.27	23.42	
HSDPA Sub 1	21.50	20.91	21.11	21.10	
HSDPA Sub 2	21.00	20.43	20.71	20.64	
HSDPA Sub 3	20.00	19.04	19.54	19.52	
HSDPA Sub 4	20.00	19.45	19.59	19.29	
HSUPA Sub 1	21.00	19.90	20.89	20.86	
HSUPA Sub 2	21.00	20.75	20.92	20.96	
HSUPA Sub 3	20.00	19.08	19.82	19.84	
HSUPA Sub 4	21.50	20.83	21.03	21.07	
HSUPA Sub 5	20.50	19.42	20.46	20.34	
WCDMA Band 4		Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	4132	4182	4233	
Frequency (MHz)		826.4	836.4	846.6	
RMC12.2K	22.50	22.11	22.07	21.94	
HSDPA Sub 1	21.50	21.21	21.13	21.03	
HSDPA Sub 2	21.00	20.81	20.67	20.62	
HSDPA Sub 3	20.00	19.60	19.49	19.33	
HSDPA Sub 4	20.00	19.86	19.81	19.51	
HSUPA Sub 1	21.50	20.11	21.01	20.93	
HSUPA Sub 2	21.50	21.14	20.97	20.94	
HSUPA Sub 3	20.50	19.55	20.01	19.63	
HSUPA Sub 4	21.50	21.21	21.16	21.07	
HSUPA Sub 5	20.50	19.78	20.47	20.34	
WCDMA Band 5		Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	4132	4182	4233	
Frequency (MHz)		826.4	836.4	846.6	
RMC12.2K	22.50	22.11	22.07	21.94	
HSDPA Sub 1	21.50	21.21	21.13	21.03	
HSDPA Sub 2	21.00	20.81	20.67	20.62	
HSDPA Sub 3	20.00	19.60	19.49	19.33	
HSDPA Sub 4	20.00	19.86	19.81	19.51	
HSUPA Sub 1	21.50	20.11	21.01	20.93	

HSUPA Sub 2	21.50	21.14	20.97	20.94
HSUPA Sub 3	20.50	19.55	20.01	19.63
HSUPA Sub 4	21.50	21.21	21.16	21.07
HSUPA Sub 5	20.50	19.78	20.47	20.34

7.3. LTE Conducted Power

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18607/1850.7	18900/1880	19193/1909.3
LTE Band 2	1.4MHz	QPSK	1	0	23.00	21.65	21.97	22.46
			1	2	23.00	21.65	21.96	22.45
			1	5	23.00	21.61	21.90	22.50
			3	0	23.00	21.69	21.94	22.55
			3	1	23.00	21.67	21.97	22.44
			3	2	23.00	21.68	21.97	22.48
			6	0	22.00	20.63	21.03	21.52
		16QAM	1	0	22.00	20.78	21.11	21.61
			1	2	22.00	20.92	21.28	21.45
			1	5	22.00	20.80	21.15	21.65
			3	0	22.00	20.63	20.93	21.58
			3	1	22.00	20.69	21.07	21.42
			3	2	22.00	20.69	20.97	21.55
			6	0	21.00	19.92	20.17	20.70
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18615/1851.5	18900/1880	19185/1908.5
LTE Band 2	3MHz	QPSK	1	0	23.00	21.81	22.01	22.48
			1	7	23.00	21.82	22.05	22.47
			1	14	23.00	21.85	22.10	22.57
			8	0	22.00	20.93	21.13	21.57
			8	4	22.00	20.89	21.11	21.55
			8	7	22.00	20.85	21.05	21.59
			15	0	22.00	20.94	21.06	21.58
		16QAM	1	0	22.00	21.06	21.21	21.70
			1	7	22.00	21.05	21.30	21.69
			1	14	22.00	21.05	21.24	21.64
			8	0	21.00	20.05	20.23	20.70
			8	4	21.00	20.03	20.25	20.71
			8	7	21.00	19.99	20.20	20.77
			15	0	21.00	19.96	20.18	20.64

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18625/1852.5	18900/1880	19175/1907.5
LTE Band 2	5MHz	QPSK	1	0	23.00	21.90	22.12	22.53
			1	12	23.00	21.95	21.99	22.52
			1	24	23.00	21.97	22.05	22.61
			12	0	22.00	20.99	21.10	21.59
			12	6	22.00	20.95	21.09	21.61
			12	11	22.00	20.94	21.08	21.60
			25	0	22.00	20.94	21.09	21.62
		16QAM	1	0	22.00	21.22	21.29	21.62
			1	12	22.00	21.10	21.18	21.80
			1	24	22.00	21.13	21.24	21.76
			12	0	21.00	20.06	20.22	20.67
			12	6	21.00	20.05	20.17	20.65
			12	11	21.00	20.01	20.13	20.66
			25	0	21.00	20.01	20.16	20.61
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18650/1855	18900/1880	19150/1905
LTE Band 2	10MHz	QPSK	1	0	23.00	21.91	22.08	22.41
			1	24	23.00	21.92	22.01	22.53
			1	49	23.00	21.90	22.04	22.59
			25	0	22.00	20.93	21.17	21.59
			25	12	22.00	20.89	21.10	21.61
			25	24	22.00	20.96	21.10	21.63
			50	0	22.00	20.94	21.10	21.56
		16QAM	1	0	22.00	20.95	21.41	21.48
			1	24	22.00	21.15	21.37	21.88
			1	49	22.00	21.22	21.23	21.88
			25	0	21.00	19.98	20.22	20.66
			25	12	21.00	19.98	20.10	20.62
			25	24	21.00	20.08	20.09	20.62
			50	0	21.00	20.03	20.15	20.64
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18675/1857.5	18900/1880	19125/1902.5
LTE Band 2	15MHz	QPSK	1	0	23.00	21.96	22.21	22.38
			1	37	23.00	22.05	22.13	22.53
			1	74	23.00	22.07	22.13	22.66

			36	0	22.00	20.96	21.18	21.47
			36	18	22.00	21.00	21.09	21.56
			36	37	22.00	21.03	21.11	21.63
			75	0	22.00	21.04	21.13	21.56
		16QAM	1	0	22.00	21.17	21.37	21.63
			1	37	22.00	21.07	21.28	21.83
			1	74	22.00	21.34	21.37	21.89
			36	0	21.00	20.05	20.20	20.57
			36	18	21.00	20.11	20.20	20.66
			36	37	21.00	20.17	20.17	20.70
			75	0	21.00	20.08	20.21	20.65
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18700/1860	18900/1880	19100/1900
LTE Band 2	20MHz	QPSK	1	0	23.00	21.93	22.11	22.29
			1	49	23.00	22.05	22.13	22.48
			1	99	23.00	22.11	22.17	22.65
			50	0	22.00	21.04	21.24	21.46
			50	24	22.00	21.11	21.15	21.55
			50	49	22.00	21.23	21.17	21.59
			100	0	22.00	21.06	21.22	21.54
		16QAM	1	0	22.00	21.10	21.40	21.53
			1	49	22.00	21.24	21.32	21.68
			1	99	22.00	21.27	21.25	21.91
			50	0	21.00	20.09	20.29	20.47
			50	24	21.00	20.17	20.25	20.61
			50	49	21.00	20.23	20.22	20.67
			100	0	21.00	20.15	20.20	20.55

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19957/1710.7	20175/1732.5	20393/1754.3
LTE Band 4	1.4MHz	QPSK	1	0	22.50	21.86	22.27	22.33
			1	2	22.50	21.95	22.30	22.38
			1	5	22.50	21.99	22.30	22.38
			3	0	22.50	21.89	22.28	22.35
			3	1	22.50	21.92	22.23	22.33
			3	2	22.50	22.04	22.25	22.43
			6	0	21.50	21.02	21.26	21.42
		16QAM	1	0	22.00	21.21	21.51	21.60

			1	2	22.00	21.06	21.57	21.62
			1	5	22.00	21.24	21.55	21.57
			3	0	21.50	20.94	21.27	21.44
			3	1	21.50	20.98	21.30	21.31
			3	2	21.50	20.87	21.38	21.39
			6	0	21.00	20.22	20.57	20.60
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19965/1711.5	20175/1732.5	20385/1753.5
LTE Band 4	3MHz	QPSK	1	0	22.50	21.94	22.35	22.30
			1	7	22.50	21.89	22.32	22.33
			1	14	22.50	21.96	22.30	22.43
			8	0	21.50	21.04	21.39	21.38
			8	4	21.50	20.96	21.36	21.38
			8	7	21.50	21.00	21.38	21.40
			15	0	21.50	20.99	21.38	21.38
		16QAM	1	0	22.00	21.19	21.60	21.54
			1	7	22.00	21.14	21.51	21.37
			1	14	22.00	21.15	21.55	21.52
			8	0	21.00	20.25	20.61	20.58
			8	4	21.00	20.24	20.58	20.59
			8	7	21.00	20.28	20.54	20.61
			15	0	21.00	20.22	20.52	20.55
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19975/1712.5	20175/1732.5	20375/1752.5
LTE Band 4	5MHz	QPSK	1	0	22.50	22.04	22.42	22.28
			1	12	22.50	22.05	22.43	22.36
			1	24	22.50	22.04	22.39	22.42
			12	0	21.50	21.06	21.46	21.39
			12	6	21.50	20.99	21.44	21.46
			12	11	21.50	21.00	21.44	21.44
			25	0	21.50	21.07	21.46	21.43
		16QAM	1	0	22.00	21.31	21.70	21.45
			1	12	22.00	21.21	21.61	21.54
			1	24	22.00	21.31	21.65	21.72
			12	0	21.00	20.27	20.63	20.57
			12	6	21.00	20.21	20.58	20.55
			12	11	21.00	20.27	20.56	20.59
			25	0	21.00	20.24	20.56	20.58

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20000/1715	20175/1732.5	20350/1750
LTE Band 4	10MHz	QPSK	1	0	22.50	22.03	22.45	22.20
			1	24	22.50	22.03	22.41	22.34
			1	49	22.50	22.19	22.38	22.43
			25	0	21.50	21.06	21.42	21.32
			25	12	21.50	21.08	21.38	21.34
			25	24	21.50	21.19	21.38	21.40
			50	0	21.50	21.10	21.42	21.37
		16QAM	1	0	22.00	21.25	21.57	21.52
			1	24	22.00	21.32	21.58	21.49
			1	49	22.00	21.46	21.62	21.63
			25	0	21.00	20.23	20.56	20.46
			25	12	21.00	20.26	20.50	20.46
			25	24	21.00	20.30	20.50	20.54
			50	0	21.00	20.25	20.51	20.48
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20025/1717.5	20175/1732.5	20325/1747.5
LTE Band 4	15MHz	QPSK	1	0	22.50	22.04	22.47	22.30
			1	37	22.50	22.22	22.44	22.37
			1	74	22.50	22.49	22.36	22.47
			36	0	21.50	21.16	21.49	21.35
			36	18	21.50	21.22	21.44	21.36
			36	37	21.50	21.33	21.42	21.44
			75	0	21.50	21.24	21.46	21.43
		16QAM	1	0	22.00	21.31	21.79	21.49
			1	37	22.00	21.48	21.74	21.56
			1	74	22.00	21.70	21.54	21.74
			36	0	21.00	20.31	20.60	20.37
			36	18	21.00	20.35	20.57	20.47
			36	37	21.00	20.47	20.53	20.54
			75	0	21.00	20.41	20.58	20.52
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20050/1720	20175/1732.5	20300/1745
LTE Band 4	20MHz	QPSK	1	0	23.00	22.06	22.26	22.28
			1	49	23.00	22.27	22.50	22.31
			1	99	23.00	22.49	22.31	22.48

			50	0	22.00	21.25	21.51	21.34
			50	24	22.00	21.36	21.53	21.38
			50	49	22.00	21.46	21.43	21.45
			100	0	21.50	21.34	21.47	21.37
		16QAM	1	0	22.00	21.23	21.51	21.54
			1	49	22.00	21.65	21.76	21.66
			1	99	22.00	21.75	21.59	21.70
			50	0	21.00	20.34	20.59	20.44
			50	24	21.00	20.49	20.58	20.50
			50	49	21.00	20.61	20.53	20.58
			100	0	21.00	20.45	20.56	20.49

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20407/824.7	20525/836.5	20643/848.3
LTE Band 5	1.4MHz	QPSK	1	0	23.50	22.99	23.01	22.86
			1	2	23.50	22.81	22.98	22.83
			1	5	23.50	22.83	23.00	22.88
			3	0	23.50	22.94	23.04	22.88
			3	1	23.50	22.86	22.96	22.84
			3	2	23.50	22.95	23.01	22.86
			6	0	22.50	21.86	22.05	21.89
		16QAM	1	0	22.50	22.05	22.33	22.12
			1	2	22.50	21.93	22.25	22.13
			1	5	22.50	22.04	22.22	22.06
			3	0	22.50	21.92	22.07	22.01
			3	1	22.50	21.89	22.09	21.81
			3	2	22.50	21.87	22.00	21.86
			6	0	21.50	21.03	21.12	20.94
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20415/825.5	20525/836.5	20635/847.5
LTE Band 5	3MHz	QPSK	1	0	23.50	22.93	23.04	22.89
			1	7	23.50	22.88	22.97	22.88
			1	14	23.50	22.83	22.97	22.87
			8	0	22.50	21.94	22.06	21.95
			8	4	22.50	21.90	22.01	21.88
			8	7	22.50	21.91	22.03	21.91
			15	0	22.50	21.90	22.02	21.91
		16QAM	1	0	22.50	22.16	22.24	22.11

			1	7	22.50	22.16	22.31	22.06
			1	14	22.50	22.01	22.22	21.97
			8	0	21.50	21.00	21.14	21.03
			8	4	21.50	20.96	21.03	21.00
			8	7	21.50	20.95	21.03	20.91
			15	0	21.50	20.90	21.03	20.98
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20425/826.5	20525/836.5	20625/846.5
LTE Band 5	5MHz	QPSK	1	0	23.50	22.88	23.05	22.93
			1	12	23.50	22.88	22.98	22.94
			1	24	23.50	22.91	23.03	22.89
			12	0	22.50	22.01	22.09	22.02
			12	6	22.50	22.02	22.06	21.97
			12	11	22.50	21.97	22.05	21.91
			25	0	22.50	22.01	22.09	22.00
		16QAM	1	0	22.50	22.07	22.26	22.24
			1	12	22.50	22.08	22.26	22.16
			1	24	22.50	22.10	22.29	22.19
			12	0	21.50	20.96	21.11	21.08
			12	6	21.50	21.03	21.10	20.99
			12	11	21.50	21.04	21.04	21.00
			25	0	21.50	21.04	21.09	21.00
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20450/829	20525/836.5	20600/844
LTE Band 5	10MHz	QPSK	1	0	23.50	22.83	22.97	23.04
			1	24	23.50	22.92	23.02	22.91
			1	49	23.50	22.90	23.00	22.83
			25	0	22.50	21.97	22.04	21.99
			25	12	22.50	21.95	22.03	21.98
			25	24	22.50	21.97	22.05	21.97
			50	0	22.50	21.95	22.02	22.01
		16QAM	1	0	22.50	22.04	22.21	22.32
			1	24	22.50	22.10	22.31	22.17
			1	49	22.50	22.12	22.35	22.16
			25	0	21.50	20.95	21.04	21.05
			25	12	21.50	20.95	21.05	21.01
			25	24	21.50	20.99	21.06	20.97
			50	0	21.50	20.97	21.07	20.98

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23017/699.7	23095/707.5	23173/715.3
LTE Band 12	1.4MHz	QPSK	1	0	23.00	22.95	22.82	22.71
			1	2	23.00	22.94	22.87	22.68
			1	5	23.00	22.97	22.85	22.76
			3	0	23.50	22.98	22.89	22.72
			3	1	23.50	22.98	22.89	22.82
			3	2	23.50	23.01	22.89	22.81
			6	0	22.00	21.99	21.88	21.80
		16QAM	1	0	22.50	22.23	22.04	21.96
			1	2	22.50	22.14	22.12	21.90
			1	5	22.50	22.18	22.14	21.96
			3	0	22.00	21.92	21.87	21.79
			3	1	22.00	21.96	21.93	21.78
			3	2	22.00	21.97	21.90	21.84
			6	0	21.50	21.08	20.94	20.88
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23025/700.5	23095/707.5	23165/714.5
LTE Band 12	3MHz	QPSK	1	0	23.00	23.00	22.77	22.75
			1	7	23.00	22.99	22.87	22.67
			1	14	23.00	22.87	22.86	22.70
			8	0	22.00	21.98	21.86	21.82
			8	4	22.00	21.95	21.87	21.76
			8	7	22.00	21.98	21.82	21.76
			15	0	22.00	21.98	21.87	21.78
		16QAM	1	0	22.50	22.26	22.13	21.97
			1	7	22.50	22.19	22.04	21.96
			1	14	22.50	22.03	22.08	21.96
			8	0	21.50	21.08	20.96	20.90
			8	4	21.50	20.99	20.95	20.82
			8	7	21.50	21.04	20.92	20.90
			15	0	21.00	20.97	20.92	20.82
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23035/701.5	23095/707.5	23155/713.5
LTE Band 12	5MHz	QPSK	1	0	23.00	22.58	22.96	22.93
			1	12	23.00	22.96	22.87	22.75
			1	24	23.00	22.89	22.93	22.85

			12	0	22.50	22.06	21.94	21.89
			12	6	22.50	21.94	21.95	21.85
			12	11	22.50	21.93	21.93	21.87
			25	0	22.00	22.00	21.97	21.87
		16QAM	1	0	22.50	22.27	22.27	22.17
			1	12	22.50	22.20	22.21	22.05
			1	24	22.50	22.04	22.20	22.08
			12	0	21.50	21.09	20.95	20.89
			12	6	21.50	21.00	20.95	20.83
			12	11	21.50	20.93	20.97	20.89
			25	0	21.00	20.99	20.97	20.90
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23060/704	23095/707.5	23130/711
LTE Band 12	10MHz	QPSK	1	0	23.00	22.98	22.92	22.87
			1	24	23.00	22.82	22.95	22.82
			1	49	23.00	22.90	22.80	22.75
			25	0	22.00	21.98	21.89	21.94
			25	12	22.00	21.90	21.91	21.88
			25	24	22.00	21.94	21.85	21.81
			50	0	22.00	21.97	21.86	21.90
		16QAM	1	0	22.50	22.24	22.14	22.11
			1	24	22.50	22.02	22.17	22.02
			1	49	22.50	22.15	22.13	21.99
			25	0	21.00	21.00	20.92	20.98
			25	12	21.00	20.94	20.95	20.86
			25	24	21.00	20.95	20.86	20.80
			50	0	21.00	20.96	20.88	20.93

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23755/706.5	23790/710	23825/713.5
LTE Band 17	5MHz	QPSK	1	0	23.00	22.88	22.75	22.79
			1	12	23.00	22.74	22.69	22.69
			1	24	23.00	22.84	22.67	22.69
			12	0	22.00	21.87	21.87	21.80
			12	6	22.00	21.82	21.81	21.79
			12	11	22.00	21.80	21.76	21.72
			25	0	22.00	21.85	21.83	21.78
		16QAM	1	0	22.50	22.06	21.92	21.92

			1	12	22.50	22.10	21.95	21.93
			1	24	22.50	21.93	21.87	21.92
			12	0	21.00	20.85	20.87	20.82
			12	6	21.00	20.85	20.82	20.76
			12	11	21.00	20.80	20.78	20.75
			25	0	21.00	20.87	20.84	20.79
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23780/709	23790/710	23800/711
LTE Band 17	10MHz	QPSK	1	0	23.00	22.77	22.78	22.76
			1	24	23.00	22.90	22.77	22.65
			1	49	23.00	22.69	22.73	22.70
			25	0	22.00	21.81	21.83	21.84
			25	12	22.00	21.78	21.77	21.74
			25	24	22.00	21.72	21.70	21.68
			50	0	22.00	21.78	21.78	21.78
		16QAM	1	0	22.50	22.10	22.06	22.08
			1	24	22.50	22.10	21.90	22.02
			1	49	22.50	22.00	21.94	21.81
			25	0	21.00	20.79	20.82	20.83
			25	12	21.00	20.80	20.76	20.75
			25	24	21.00	20.70	20.72	20.70
			50	0	21.00	20.78	20.77	20.78

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)			
			RB Size	RB Offset		40065/2537.5	40370/2568	40640/2595	41215/2652.5
LTE Band 41	5MHz	QPSK	1	0	24.00	23.09	23.69	23.34	23.66
			1	12	24.00	23.05	23.78	23.28	23.6
			1	24	24.00	23.06	23.18	23.3	23.65
			12	0	24.00	23.07	23.91	23.27	23.62
			12	6	24.00	23.05	23.32	23.23	23.58
			12	11	24.00	23.04	23.45	23.23	23.58
			25	0	24.00	23.06	23.18	23.29	23.62
		16QAM	1	0	24.00	23.26	23.15	23.5	23.81
			1	12	24.00	23.24	23.67	23.44	23.79
			1	24	24.00	23.23	22.97	23.43	23.79

			12	0	24.00	23.09	22.64	23.33	23.66
			12	6	24.00	23.06	21.54	23.31	23.64
			12	11	24.00	23.06	22.1	23.29	23.64
			25	0	24.00	23.09	23.24	23.32	23.65
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)			
			RB Size	RB Offset		40090/2540	40370/2568	40640/2595	41190/2650
LTE Band 41	10MHz	QPSK	1	0	24.00	23.17	23.87	23.41	23.7
			1	24	24.00	23.09	23.58	23.32	23.64
			1	49	24.00	23.09	23.18	23.29	23.67
			25	0	25.00	23.09	24.24	23.33	23.66
			25	12	25.00	23.06	24.57	23.28	23.62
			25	24	25.00	23.02	23.52	23.27	23.6
			50	0	24.00	23.04	23.33	23.3	23.63
		16QAM	1	0	24.50	23.35	24.26	23.58	23.87
			1	24	24.50	23.25	23.55	23.47	23.81
			1	49	24.50	23.25	24.23	23.48	23.83
			25	0	24.00	23.1	23.43	23.35	23.68
			25	12	24.00	23.04	22.55	23.29	23.62
			25	24	24.00	23.03	22.87	23.28	23.64
			50	0	24.00	23.09	22.81	23.33	23.68
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)			
			RB Size	RB Offset		40115/2542.5	40370/2568	40640/2595	41165/2647.5
LTE Band 41	15MHz	QPSK	1	0	24.00	23.21	23.38	23.46	23.69
			1	37	24.00	23.13	23.43	23.37	23.7
			1	74	24.00	23.14	23.39	23.33	23.71
			36	0	24.00	23.07	23.15	23.34	23.64
			36	18	24.00	23	23.15	23.28	23.61
			36	37	24.00	23	22.64	23.26	23.62
			75	0	24.00	23.06	23.38	23.31	23.65
		16QAM	1	0	24.00	23.35	23.33	23.63	23.89
			1	37	24.00	23.26	23.23	23.55	23.88

			1	74	24.00	23.29	23.02	23.49	23.85
			36	0	24.00	23.06	22.77	23.34	23.64
			36	18	24.00	23.01	23.04	23.29	23.61
			36	37	24.00	22.99	22.51	23.26	23.6
			75	0	24.00	23.09	22.77	23.36	23.7
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)			
			RB Size	RB Offset		40140/2545	40370/2568	40640/2595	41140/2645
LTE Band 41	20MHz	QPSK	1	0	24.00	23.22	23.08	23.48	23.67
			1	49	24.00	23.09	23.23	23.41	23.71
			1	99	24.00	23.23	23.37	23.34	23.72
			50	0	24.00	23.12	23.8	23.41	23.7
			50	24	24.00	23.07	23.18	23.36	23.7
			50	49	24.00	23.1	23.24	23.33	23.66
			100	0	24.00	23.11	23.57	23.37	23.68
		16QAM	1	0	24.00	23.38	22.46	23.65	23.86
			1	49	24.00	23.28	23.12	23.58	23.9
			1	99	24.00	23.4	22.95	23.53	23.89
			50	0	24.00	23.15	23.8	23.45	23.73
			50	24	24.00	23.08	21.83	23.39	23.73
			50	49	24.00	23.13	23.8	23.37	23.72
			100	0	24.00	23.14	23.52	23.39	23.7

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131979/1710.7	132322/1745	132665/1779.3
LTE Band 66	1.4MHz	QPSK	1	0	22.50	21.83	22.01	22.26
			1	2	22.50	21.78	21.94	22.20
			1	5	22.50	21.77	22.01	22.19
			3	0	22.50	21.87	21.95	22.30
			3	1	22.50	21.83	21.90	22.25
			3	2	22.50	21.84	21.94	22.24
			6	0	21.50	20.85	20.98	21.29
		16QAM	1	0	21.50	21.08	21.17	21.37
			1	2	21.50	20.99	21.26	21.41

			1	5	21.50	21.09	21.25	21.47
			3	0	21.50	20.78	20.85	21.26
			3	1	21.50	20.78	20.89	21.23
			3	2	21.50	20.87	20.88	21.29
			6	0	20.50	20.08	20.14	20.45
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131987/1711.5	132322/1745	132657/1778.5
LTE Band 66	3MHz	QPSK	1	0	22.50	21.66	21.84	22.27
			1	7	22.50	21.67	21.91	22.24
			1	14	22.50	21.65	21.89	22.26
			8	0	21.50	20.75	20.90	21.35
			8	4	21.50	20.72	20.91	21.32
			8	7	21.50	20.71	20.95	21.34
			15	0	21.50	20.75	20.94	21.30
		16QAM	1	0	22.00	21.01	21.15	21.57
			1	7	22.00	20.87	21.01	21.46
			1	14	22.00	20.90	21.25	21.56
			8	0	21.00	19.92	20.09	20.54
			8	4	21.00	19.91	20.13	20.45
			8	7	21.00	19.92	20.12	20.48
			15	0	20.50	19.85	20.06	20.45
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131997/1712.5	132322/1745	132647/1777.5
LTE Band 66	5MHz	QPSK	1	0	22.50	21.85	22.03	22.38
			1	12	22.50	21.74	21.93	22.37
			1	24	22.50	21.77	22.01	22.31
			12	0	21.50	20.85	21.01	21.37
			12	6	21.50	20.82	21.00	21.37
			12	11	21.50	20.85	20.98	21.34
			25	0	21.50	20.86	21.03	21.37
		16QAM	1	0	22.00	21.04	21.18	21.60
			1	12	22.00	21.07	21.18	21.49
			1	24	22.00	21.02	21.26	21.38
			12	0	21.00	19.94	20.14	20.51
			12	6	21.00	19.95	20.14	20.51
			12	11	21.00	19.94	20.11	20.51

			25	0	21.00	20.01	20.12	20.51
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		132022/1715	132322/1745	132622/1775
LTE Band 66	10MHz	QPSK	1	0	22.50	21.77	21.95	22.30
			1	24	22.50	21.71	21.92	22.27
			1	49	22.50	22.01	22.02	22.34
			25	0	21.50	20.81	20.99	21.36
			25	12	21.50	20.84	20.96	21.33
			25	24	21.50	20.90	21.02	21.29
			50	0	21.50	20.86	21.01	21.30
		16QAM	1	0	22.00	21.05	21.22	21.59
			1	24	22.00	21.04	21.14	21.47
			1	49	22.00	21.21	21.25	21.52
			25	0	20.50	19.94	20.05	20.47
			25	12	20.50	19.98	20.04	20.43
			25	24	20.50	19.98	20.06	20.41
			50	0	20.50	19.93	20.09	20.46
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		132047/1717.5	132322/1745	132597/1772.5
LTE Band 66	15MHz	QPSK	1	0	22.50	21.84	22.06	22.33
			1	37	22.50	21.90	22.02	22.34
			1	74	22.50	22.15	22.16	22.26
			36	0	21.50	20.81	21.01	21.35
			36	18	21.50	20.94	20.98	21.33
			36	37	21.50	21.09	21.07	21.31
			75	0	21.50	20.96	21.05	21.32
		16QAM	1	0	22.00	21.01	21.35	21.50
			1	37	22.00	21.21	21.33	21.67
			1	74	22.00	21.41	21.44	21.42
			36	0	20.50	19.95	20.13	20.44
			36	18	20.50	20.06	20.09	20.45
			36	37	20.50	20.11	20.11	20.38
			75	0	20.50	19.99	20.15	20.45
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		

			RB Size	RB Offset		132072/1720	132322/1745	132572/1770
LTE Band 66	20MHz	QPSK	1	0	22.50	21.71	22.11	22.30
			1	49	22.50	22.03	22.06	22.27
			1	99	22.50	22.17	22.20	22.28
			50	0	21.50	20.95	21.10	21.39
			50	24	21.50	21.09	21.09	21.38
			50	49	21.50	21.23	21.12	21.35
			100	0	21.50	21.11	21.15	21.36
		16QAM	1	0	22.00	21.11	21.36	21.47
			1	49	22.00	21.33	21.35	21.49
			1	99	22.00	21.49	21.51	21.42
			50	0	20.50	20.03	20.14	20.45
			50	24	20.50	20.18	20.15	20.46
			50	49	20.50	20.24	20.17	20.41
			100	0	20.50	20.02	20.16	20.37

7.4. WLAN & Bluetooth Output Power

7.4.1. Output Power Results Of WLAN

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11b	1	2412	15.50	15.19	16.50	16.41	/	/
	6	2437	15.50	15.44	16.50	15.90	/	/
	11	2462	15.50	15.15	16.50	16.44	/	/
802.11g	1	2412	15.50	14.81	16.00	15.80	/	/
	6	2437	15.50	15.17	16.00	14.54	/	/
	11	2462	15.50	14.65	16.00	14.53	/	/
802.11n HT20	1	2412	13.50	12.86	13.00	12.90	17.00	16.59
	6	2437	13.50	13.04	13.00	12.77	17.00	16.44
	11	2462	13.50	12.63	13.00	12.68	17.00	16.33
802.11n HT40	3	2422	13.50	12.90	13.00	12.72	17.50	16.93
	6	2437	13.50	13.00	13.00	12.78	17.50	16.90
	9	2452	13.50	13.17	13.00	12.80	17.50	17.15
802.11ax HE20	1	2412	13.50	13.11	13.50	13.13	16.50	16.22
	6	2437	13.50	13.46	13.50	12.99	16.50	16.05
	11	2462	13.50	12.81	13.50	12.97	16.50	16.00

802.11ax HE40	3	2422	14.00	13.19	13.50	12.92	17.00	16.60
	6	2437	14.00	13.28	13.50	13.03	17.00	16.47
	9	2452	14.00	13.53	13.50	13.03	17.00	16.68

NOTE: Power measurement results of WLAN 2.4G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11a	36	5180	7.50	6.51	7.50	7.27	/	/
	40	5200	7.50	6.50	7.50	7.28	/	/
	48	5240	7.50	7.07	7.50	7.23	/	/
802.11n HT20	36	5180	7.00	6.34	7.50	7.08	10.50	9.74
	40	5200	7.00	6.52	7.50	7.19	10.50	9.91
	48	5240	7.00	6.94	7.50	7.18	10.50	10.29
802.11n HT40	38	5190	7.50	6.85	7.50	7.32	10.50	10.14
	46	5230	7.50	7.19	7.50	7.08	10.50	10.36
802.11ac VHT20	36	5180	7.50	6.45	7.00	6.96	10.50	9.75
	40	5200	7.50	6.40	7.00	7.00	10.50	9.89
	48	5240	7.50	7.11	7.00	6.95	10.50	10.25
802.11ac VHT40	38	5190	7.50	6.64	7.50	7.39	10.50	10.15
	46	5230	7.50	7.06	7.50	7.09	10.50	10.29
802.11ac VHT80	42	5210	6.50	6.34	7.00	6.71	10.00	9.81
802.11ax HE20	36	5180	7.50	6.58	7.50	7.33	10.50	10.01
	40	5200	7.50	6.55	7.50	7.35	10.50	9.91
	48	5240	7.50	7.22	7.50	7.23	10.50	10.34
802.11ax HE40	38	5190	7.50	6.93	8.00	7.71	10.50	10.26
	46	5230	7.50	7.46	8.00	7.51	10.50	10.49
802.11ax HE80	42	5210	7.00	6.90	7.50	7.24	10.50	10.12

NOTE: Power measurement results of WLAN 5.2G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11a	52	5260	7.50	7.23	8.00	7.59	/	/
	56	5280	7.50	7.19	8.00	7.66	/	/
	64	5320	7.50	6.71	8.00	7.24	/	/
802.11n	52	5260	7.50	7.17	8.00	7.45	11.00	10.63

HT20	56	5280	7.50	7.27	8.00	7.56	11.00	10.47
	64	5320	7.50	6.69	8.00	7.13	11.00	10.14
802.11n HT40	54	5270	7.50	7.10	8.00	7.56	11.00	10.66
	62	5310	7.50	6.97	8.00	7.48	11.00	10.34
802.11ac VHT20	52	5260	7.50	7.25	8.00	7.42	11.00	10.62
	56	5280	7.50	7.15	8.00	7.56	11.00	10.50
	64	5320	7.50	6.37	8.00	7.11	11.00	10.03
802.11ac VHT40	54	5270	7.50	7.24	8.00	7.58	11.00	10.62
	62	5310	7.50	7.02	8.00	7.40	11.00	10.39
802.11ac VHT80	58	5290	7.00	6.73	7.50	7.19	10.00	9.99
802.11ax HE20	52	5260	7.50	7.23	8.00	7.74	11.00	10.79
	56	5280	7.50	7.37	8.00	7.70	11.00	10.75
	64	5320	7.50	6.87	8.00	7.25	11.00	10.19
802.11ax HE40	54	5270	8.00	7.57	8.00	7.84	11.00	10.88
	62	5310	8.00	7.30	8.00	7.57	11.00	10.50
802.11ax HE80	58	5290	7.00	6.90	8.00	7.63	10.50	10.32

NOTE: Power measurement results of WLAN 5.3G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11a	149	5745	8.00	7.31	9.00	8.54	/	/
	157	5785	8.00	7.78	9.00	8.96	/	/
	165	5825	8.00	7.56	9.00	8.94	/	/
802.11n HT20	149	5745	8.00	7.14	9.00	8.42	12.00	11.09
	157	5785	8.00	7.65	9.00	8.82	12.00	11.59
	165	5825	8.00	7.53	9.00	8.83	12.00	11.57
802.11n HT40	151	5755	8.00	7.57	9.00	8.84	11.50	11.43
	159	5795	8.00	7.87	9.00	8.89	11.50	11.49
802.11ac VHT20	149	5745	8.00	7.11	9.00	8.41	12.00	11.13
	157	5785	8.00	7.92	9.00	8.82	12.00	11.58
	165	5825	8.00	7.64	9.00	8.82	12.00	11.52
802.11ac VHT40	151	5755	8.00	7.48	9.00	8.86	12.00	11.41
	159	5795	8.00	7.83	9.00	8.86	12.00	11.6
802.11ac VHT80	155	5775	8.00	7.53	9.00	8.66	11.50	11.45

802.11ax HE20	149	5745	8.00	7.38	9.50	8.46	12.00	11.33
	157	5785	8.00	8	9.50	8.98	12.00	11.85
	165	5825	8.00	7.71	9.50	9.03	12.00	11.65
802.11ax HE40	151	5755	8.50	7.84	9.50	8.69	12.00	11.62
	159	5795	8.50	8.08	9.50	9.21	12.00	11.89
802.11ax HE80	155	5775	8.00	7.93	9.00	8.94	12.00	11.62

NOTE: Power measurement results of WLAN 5.8G.

7.4.2. Output Power Results Of Bluetooth

BLE	Output Power (dBm)				
	Data Rates	Tune-up (dBm)	Channe		
			0CH	19CH	39CH
	1M	-1.00	-1.97	-1.16	-2.16
	2M	-1.00	-1.93	-1.12	-1.87

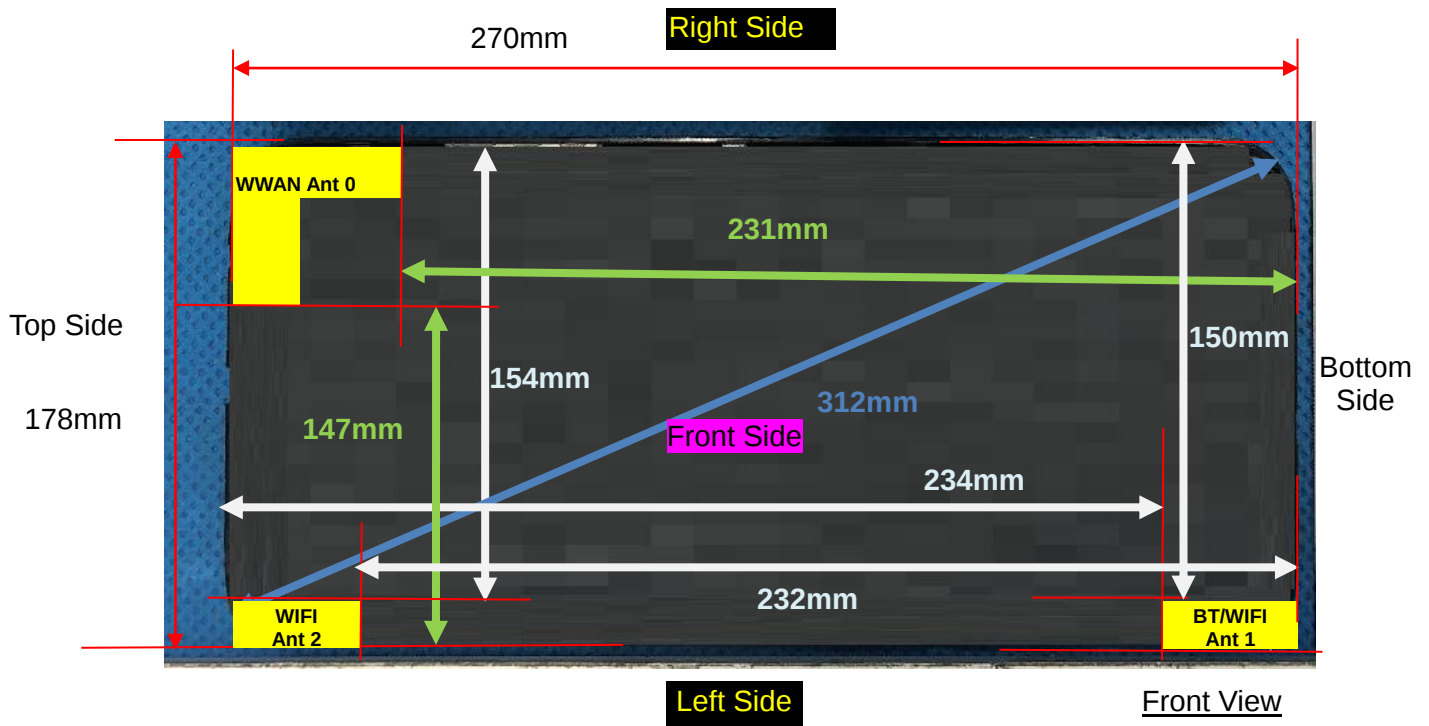
BR+EDR	Output Power (dBm)				
	Data Rates	Tune-up (dBm)	Channel		
			0CH	39CH	78CH
	1M	9.00	8.14	8.84	7.68
	2M	8.00	7.04	7.74	7.07
	3M	9.00	7.21	8.02	7.19

Output Power Results Of Bluetooth

7.5. NFC

Channel Freq (MHz)	Min Distance (mm)	Max power (dBm)	tune-up power (dBm)	Max power (mW)	Limits (mW)	SAR Test Exclusion
13.56	0	-26.54	-26.54 ± 1	0.00279	443	Yes

8. Antenna Location



Note: Since the confidentiality request of EUT, the antenna location example diagram see as above.

Distance of the Antenna to the EUT surface/edge						
Antennas	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
WWAN Ant 0	5	5	147	5	5	231
WLAN & Bluetooth Ant 1	5	5	5	150	234	5
WLAN Ant 2	5	5	5	154	5	232

Note: When the minimum separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Positions for WLAN & Bluetooth Ant 1 SAR tests		
Test separation distances ≤ 50 mm		
Exposure Positions	Tune-up Maximum power of WLAN 2.4G	
	15.50dBm	35.48mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00

	SAR testing required?	YES
Bottom Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of WLAN 5.2G	
	7.50dBm	5.62mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.3G	
	8.00dBm	6.31mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.8G	
	8.50dBm	7.08mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	6.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	6.00
	SAR testing required?	YES

Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	6.00
	SAR testing required?	YES
Bottom Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	6.00
	SAR testing required?	YES
Positions for WLAN & Bluetooth Ant 2 SAR tests		
Test separation distances $\leq$ 50 mm		
Exposure Positions	Tune-up Maximum power of WLAN 2.4G	
	16.50dBm	44.67mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Left Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of WLAN 5.2G	
	8.00dBm	6.31mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Left Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.3G	
	8.00dBm	3.98mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00

	SAR testing required?	NO
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Left Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	7.00
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.8G	
	9.50dBm	8.91mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	6.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	6.00
	SAR testing required?	YES
Left Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	6.00
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	6.00
	SAR testing required?	YES
Positions for WWAN Ant 0 SAR tests		
Test separation distances ≤ 50 mm		
Exposure Positions	Tune-up Maximum power of GSM 850	
	29.00dBm	794.33
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES

Exposure Positions	Tune-up Maximum power of GSM 1900	
	26.00dBm	398.11
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of WCDMA Band 2	
	23.50dBm	223.87mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of WCDMA Band 4	
	22.00dBm	158.49mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11
	SAR testing required?	YES

Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of WCDMA Band 5	
	22.50dBm	177.83mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of LTE Band 2	
	23.00dBm	199.53 mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	11.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of LTE Band 4	
	23.00dBm	199.53 mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	12.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	12.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5

	SAR exclusion threshold (mW)	12
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	12.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of LTE Band 5	
	23.50dBm	223.87mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	16.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of LTE Band 12	
	23.00dBm	199.53mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	22.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	22.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	179
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	22.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of LTE Band 17	
	23.00dBm	199.53mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	22.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	22.00

	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	22
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	22.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of LTE Band 41	
	24.00dBm	251.19mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	10.00
	SAR testing required?	YES
Exposure Positions	Tune-up Maximum power of LTE Band 66	
	22.50dBm	177.83mW
Front Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	12.00
	SAR testing required?	YES
Back Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	12.00
	SAR testing required?	YES
Right Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	12.00
	SAR testing required?	YES
Top Side	Antenna to user(mm)	5
	SAR exclusion threshold (mW)	12.00
	SAR testing required?	YES

NOTE: Refer to section 4.3.1 of KDB 447498 D01.

Positions for WLAN & Bluetooth Ant 1 SAR tests		
Test separation distances > 50 mm		
Exposure Positions	Tune-up Maximum power of WLAN 2.4G	
	15.50dBm	35.48mW
Right Side	Antenna to user(mm)	150
	SAR exclusion threshold (mW)	1096
	SAR testing required?	NO
Top Side	Antenna to user(mm)	234
	SAR exclusion threshold (mW)	1936
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.2G	
	7.50dBm	5.62mW
Right Side	Antenna to user(mm)	150
	SAR exclusion threshold (mW)	1066
	SAR testing required?	NO
Top Side	Antenna to user(mm)	234
	SAR exclusion threshold (mW)	1906
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.3G	
	8.00dBm	6.31mW
Right Side	Antenna to user(mm)	150
	SAR exclusion threshold (mW)	1066
	SAR testing required?	NO
Top Side	Antenna to user(mm)	234
	SAR exclusion threshold (mW)	1906
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.8G	
	8.50dBm	7.08mW
Right Side	Antenna to user(mm)	150
	SAR exclusion threshold (mW)	1062
	SAR testing required?	NO
Top Side	Antenna to user(mm)	234
	SAR exclusion threshold (mW)	1902
	SAR testing required?	NO
Positions for WLAN & Bluetooth Ant 2 SAR tests		
Test separation distances > 50 mm		
Exposure Positions	Tune-up Maximum power of WLAN 2.4G	
	16.50dBm	44.67mW
Right Side	Antenna to user(mm)	154

	SAR exclusion threshold (mW)	1136
	SAR testing required?	NO
Top Side	Antenna to user(mm)	232
	SAR exclusion threshold (mW)	1916
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.2G	
	8.00dBm	6.31mW
Right Side	Antenna to user(mm)	154
	SAR exclusion threshold (mW)	1106
	SAR testing required?	NO
Top Side	Antenna to user(mm)	232
	SAR exclusion threshold (mW)	1886
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.3G	
	8.00dBm	3.98mW
Right Side	Antenna to user(mm)	154
	SAR exclusion threshold (mW)	1106
	SAR testing required?	NO
Top Side	Antenna to user(mm)	232
	SAR exclusion threshold (mW)	1886
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WLAN 5.8G	
	9.50dBm	8.91mW
Right Side	Antenna to user(mm)	154
	SAR exclusion threshold (mW)	1102
	SAR testing required?	NO
Top Side	Antenna to user(mm)	232
	SAR exclusion threshold (mW)	1882
	SAR testing required?	NO
Positions for WWAN Ant 0 SAR tests		
Test separation distances > 50 mm		
Exposure Positions	Tune-up Maximum power of GSM 850	
	29.00dBm	794.33mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1134
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1974
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of GSM 1900	

	26.00dBm	398.11mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1079
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1919
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WCDMA Band 2	
	23.50dBm	223.87mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1079
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1919
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WCDMA Band 4	
	22.00dBm	158.49mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1092
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1932
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of WCDMA Band 5	
	22.50dBm	177.83mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1134
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1974
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of LTE Band 2	
	23.00dBm	199.53 mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1079
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1919
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of LTE Band 4	

	23.00dBm	199.53 mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1092
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1932
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of LTE Band 5	
	23.50dBm	223.87mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1134
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1974
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of LTE Band 12	
	23.00dBm	199.53mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1194
	SAR testing required?	NO
Left Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	2034
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of LTE Band 17	
	23.00dBm	199.53mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1194
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	2034
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of LTE Band 41	
	24.00dBm	251.19mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1066
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1906
	SAR testing required?	NO
Exposure Positions	Tune-up Maximum power of LTE Band 66	

	22.50dBm	177.83mW
Left Side	Antenna to user(mm)	147
	SAR exclusion threshold (mW)	1092
	SAR testing required?	NO
Bottom Side	Antenna to user(mm)	231
	SAR exclusion threshold (mW)	1932
	SAR testing required?	NO

NOTE: Refer to section 4.3.1 of KDB 447498 D01.

9. Stand-alone SAR test exclusion

Refer to FCC KDB 447498D01, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	P_{max} (dBm)	P_{max} (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR exclusion threshold (mW)	SAR test exclusion
Bluetooth	9.00	7.943	5	2.480	2.502	3	Yes

NOTE: Standalone SAR test exclusion for Bluetooth.

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}/x] \text{ W/kg}$ for test separation distances $\leq 50\text{mm}$, where $x = 7.5$ for 1-g SAR and $x = 18.75$ for 10-g SAR.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	Position	P_{max} (dBm)	P_{max} (mW)	Distance (mm)	f (GHz)	x	Estimated SAR (W/Kg)
Bluetooth	Body	9.00	7.943	5	2.48	7.5	0.334
Bluetooth	Hotspot	9.00	7.943	5	2.48	7.5	0.334

NOTE: Estimated SAR calculation for Bluetooth

10. SAR Results

10.1. SAR measurement results

10.1.1. SAR measurement Result of GSM850

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	189/836.4	GPRS(GMSK 4TS)	0.756	0.433	0.14	28.84	29.00	0.784	2025/6/27	1#
Back Side	189/836.4	GPRS(GMSK 4TS)	0.520	0.298	-1.22	28.84	29.00	0.540	2025/6/27	

NOTE: 1.Body-Worn SAR test results of GSM850

2.Tested by : Max Zhou

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	189/836.4	GPRS(GMSK 4TS)	0.756	0.433	0.14	28.84	29.00	0.784	2025/6/27	1#
Back Side	189/836.4	GPRS(GMSK 4TS)	0.520	0.298	-1.22	28.84	29.00	0.540	2025/6/27	
Left Side	189/836.4	GPRS(GMSK 4TS)	0.080	0.046	-2.88	28.84	29.00	0.083	2025/6/27	
Right Side	189/836.4	GPRS(GMSK 4TS)	0.234	0.131	3.01	28.84	29.00	0.243	2025/6/27	
Bottom Side	189/836.4	GPRS(GMSK 4TS)	0.480	0.275	-1.31	28.84	29.00	0.498	2025/6/27	
Front Side	128/824.2	GPRS(GMSK 4TS)	0.715	0.351	-1.63	28.68	29.00	0.770	2025/6/24	
Front Side	251/848.8	GPRS(GMSK 4TS)	0.671	0.329	0.85	28.44	29.00	0.763	2025/6/24	
Front Side Repeated	189/836.4	GPRS(GMSK 4TS)	0.746	0.427	-1.18	28.84	29.00	0.774	2025/7/10	

NOTE: 1.Hotspot SAR test results of GSM850

2.Tested by : Max Zhou

10.1.2. SAR measurement Result of GSM1900

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	661/1880	GPRS(GMSK 4TS)	0.382	0.195	-4.83	25.68	26.00	0.411	2025/6/29	2#
Back Side	661/1880	GPRS(GMSK 4TS)	0.226	0.113	3.64	25.68	26.00	0.243	2025/6/29	

NOTE:1. Body-Worn SAR test results of GSM1900

2. Tested by : Max Zhou

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	661/1880	GPRS(GMSK 4TS)	0.382	0.195	-4.83	25.68	26.00	0.411	2025/6/29	2#
Back Side	661/1880	GPRS(GMSK 4TS)	0.226	0.113	3.64	25.68	26.00	0.243	2025/6/29	
Left Side	661/1880	GPRS(GMSK 4TS)	0.043	0.022	-2.59	25.68	26.00	0.046	2025/6/29	
Right Side	661/1880	GPRS(GMSK 4TS)	0.369	0.181	1.05	25.68	26.00	0.397	2025/6/29	
Bottom Side	661/1880	GPRS(GMSK 4TS)	0.168	0.084	1.50	25.68	26.00	0.181	2025/6/29	

NOTE: 1. Hotspot SAR test results of GSM1900

2. Tested by : Max Zhou

10.1.3. SAR measurement Result of WCDMA Band 2

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	9400/1880	RMC12.2K	0.768	0.387	-1.32	23.27	23.50	0.810	2025/6/29	3#
Back Side	9400/1880	RMC12.2K	0.424	0.214	3.18	23.27	23.50	0.447	2025/6/29	

NOTE: 1. Body-Worn SAR test results of WCDMA Band 2

2. Tested by : Max Zhou

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	9400/1880	RMC12.2K	0.768	0.387	-1.32	23.27	23.50	0.810	2025/6/29	3#
Back Side	9400/1880	RMC12.2K	0.424	0.214	3.18	23.27	23.50	0.447	2025/6/29	
Left Side	9400/1880	RMC12.2K	0.077	0.038	-3.51	23.27	23.50	0.081	2025/6/29	
Right Side	9400/1880	RMC12.2K	0.729	0.360	1.08	23.27	23.50	0.769	2025/6/29	
Bottom Side	9400/1880	RMC12.2K	0.312	0.153	0.60	23.27	23.50	0.329	2025/6/29	
Front Side	9262/1852.4	RMC12.2K	0.729	0.364	-1.61	23.18	23.50	0.785	2025/6/29	
Front Side	9538/1907.6	RMC12.2K	0.736	0.363	-1.92	23.42	23.50	0.750	2025/6/29	
Front Side Repeated	9400/1880	RMC12.2K	0.764	0.383	-3.96	23.27	23.50	0.806	2025/6/29	

NOTE: 1.Hotspot SAR test results of WCDMA Band 2

2.Tested by : Max Zhou

1.1.1. SAR measurement Result of WCDMA Band 4

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	1413/1732.6	RMC12.2K	0.711	0.378	1.68	21.35	22.00	0.826	2025/6/28	
Back Side	1413/1732.6	RMC12.2K	0.407	0.214	-1.12	21.35	22.00	0.473	2025/6/28	

NOTE:1. Body-Worn SAR test results of WCDMA Band 4

2.Tested by : Jack Peng

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front	1413/1732.6	RMC12.2K	0.711	0.378	1.68	21.35	22.00	0.826	2025/6/28	

Side										
Back Side	1413/1732.6	RMC12.2K	0.407	0.214	-1.12	21.35	22.00	0.473	2025/6/28	
Left Side	1413/1732.6	RMC12.2K	0.074	0.039	-0.65	21.35	22.00	0.086	2025/6/28	
Right Side	1413/1732.6	RMC12.2K	0.648	0.334	1.04	21.35	22.00	0.753	2025/6/28	
Bottom Side	1413/1732.6	RMC12.2K	0.304	0.155	1.44	21.35	22.00	0.353	2025/6/28	
Front Side	1312/1712.4	RMC12.2K	0.756	0.398	-1.65	21.57	22.00	0.835	2025/6/28	4#
Front Side	1513/1752.6	RMC12.2K	0.736	0.384	-2.81	21.52	22.00	0.822	2025/6/28	
Front Side Repeated	1413/1732.6	RMC12.2K	0.751	0.392	-1.47	21.57	22.00	0.829	2025/6/28	

NOTE:1. Hotspot SAR test results of WCDMA Band 4

2. Tested by : Jack Peng

1.1.2. SAR measurement Result of WCDMA Band 5

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	4182/836.4	RMC12.2K	0.820	0.465	-2.41	22.07	22.50	0.905	2025/6/27	5#
Back Side	4182/836.4	RMC12.2K	0.566	0.318	2.78	22.07	22.50	0.625	2025/6/27	

NOTE:1. Body-Worn SAR test results of WCDMA Band 5

2. Tested by : Jack Peng

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	4182/836.4	RMC12.2K	0.820	0.465	-2.41	22.07	22.50	0.905	2025/6/27	5#
Back Side	4182/836.4	RMC12.2K	0.566	0.318	2.78	22.07	22.50	0.625	2025/6/27	
Left Side	4182/836.4	RMC12.2K	0.086	0.048	-1.03	22.07	22.50	0.095	2025/6/27	
Right Side	4182/836.4	RMC12.2K	0.255	0.137	-0.77	22.07	22.50	0.282	2025/6/27	

Bottom Side	4182/836.4	RMC12.2K	0.510	0.283	0.55	22.07	22.50	0.563	2025/6/27	
Back Side	4132/826.4	RMC12.2K	0.765	0.421	-1.90	22.11	22.50	0.837	2025/6/27	
Back Side	4233/846.6	RMC12.2K	0.791	0.444	3.42	21.94	22.50	0.900	2025/6/27	
BackSide Repeated	4182/836.4	RMC12.2K	0.812	0.447	-0.71	22.07	22.50	0.897	2025/6/27	

NOTE:1. Hotspot SAR test results of WCDMA Band 5

2. Tested by : Jack Peng

1.1.3. SAR measurement Result of LTE Band 2

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	18900/1880	20M QPSK(1,99)	0.739	0.374	0.63	22.17	23.00	0.895	2025/6/29	18#
Back Side	18900/1880	20M QPSK(1,99)	0.407	0.206	-1.09	22.17	23.00	0.493	2025/6/29	
50%RB										
Front Side	18900/1880	20M QPSK(50,0)	0.430	0.189	-3.35	21.24	22.00	0.512	2025/6/29	
Back Side	18900/1880	20M QPSK(50,0)	0.229	0.117	1.78	21.24	22.00	0.273	2025/6/29	

NOTE: 1.Body-Worn SAR test results of LTE Band 2

2. Tested by : Max Zhou

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	18900/1880	20M QPSK(1,99)	0.739	0.374	0.63	22.17	23.00	0.895	2025/6/29	18#
Back Side	18900/1880	20M QPSK(1,99)	0.407	0.206	-1.09	22.17	23.00	0.493	2025/6/29	
Left Side	18900/1880	20M QPSK(1,99)	0.075	0.038	3.14	22.17	23.00	0.091	2025/6/29	
Right	18900/1880	20M	0.702	0.341	3.79	22.17	23.00	0.850	2025/6/29	

Side		QPSK(1,99)								
Bottom Side	18900/1880	20M QPSK(1,99)	0.304	0.154	0.03	22.17	23.00	0.368	2025/6/29	
Front Side	18900/1880	20M QPSK(1,99)	0.708	0.351	-1.48	22.11	23.00	0.869	2025/7/11	
Front Side	18900/1880	20M QPSK(1,99)	0.721	0.364	-0.87	22.65	23.00	0.782	2025/7/11	
Front Side	18900/1880	20M QPSK(1,99)	0.732	0.368	-1.75	22.17	23.00	0.886	2025/7/12	
50%RB										
Front Side	18900/1880	20M QPSK(50,0)	0.430	0.189	-3.35	21.24	22.00	0.512	2025/6/29	
Back Side	18900/1880	20M QPSK(50,0)	0.229	0.117	1.78	21.24	22.00	0.273	2025/6/29	
Left Side	18900/1880	20M QPSK(50,0)	0.044	0.022	-2.11	21.24	22.00	0.052	2025/6/29	
Right Side	18900/1880	20M QPSK(50,0)	0.385	0.177	-0.52	21.24	22.00	0.459	2025/6/29	
Bottom Side	18900/1880	20M QPSK(50,0)	0.175	0.083	3.00	21.24	22.00	0.208	2025/6/29	
100%RB										
Front Side	18900/1880	20M QPSK(100,0)	0.351	0.161	-1.57	21.22	22.00	0.420	2025/6/29	

NOTE: 1.Hotspot SAR test results of LTE Band 2
2. Tested by : Max Zhou

1.1.4. SAR measurement Result of LTE Band 4

Test Position of Body-Wor n with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Powe r Drift (±5%)	Conducted power (dBm)	Tune- up power (dBm)	Scale d SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
			1RB							
Front Side	20175/1732.5	20M QPSK(1,49)	0.669	0.352	-3.43	22.50	23.00	0.751	2025/6/28	19#
Back Side	20175/1732.5	20M QPSK(1,49)	0.374	0.193	1.14	22.50	23.00	0.420	2025/6/28	
Front Side										
Front	20175/1732.5	20M	0.377	0.185	-4.41	21.53	22.00	0.420	2025/6/28	

Side		QPSK(50,24)								
Back Side	20175/1732.5	20M QPSK(50,24)	0.212	0.115	4.65	21.53	22.00	0.236	2025/6/28	

NOTE: Body-Worn SAR test results of LTE Band 4

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	20175/1732.5	20M QPSK(1,49)	0.669	0.352	-3.43	22.50	23.00	0.751	2025/6/28	19#
Back Side	20175/1732.5	20M QPSK(1,49)	0.374	0.193	1.14	22.50	23.00	0.420	2025/6/28	
Left Side	20175/1732.5	20M QPSK(1,49)	0.071	0.037	1.43	22.50	23.00	0.080	2025/6/28	
Right Side	20175/1732.5	20M QPSK(1,49)	0.603	0.301	0.87	22.50	23.00	0.677	2025/6/28	
Bottom Side	20175/1732.5	20M QPSK(1,49)	0.268	0.141	-2.17	22.50	23.00	0.301	2025/6/28	
50%RB										
Front Side	20175/1732.5	20M QPSK(50,24)	0.377	0.185	-4.41	21.53	22.00	0.420	2025/6/28	
Back Side	20175/1732.5	20M QPSK(50,24)	0.212	0.115	4.65	21.53	22.00	0.236	2025/6/28	
Left Side	20175/1732.5	20M QPSK(50,24)	0.037	0.019	4.73	21.53	22.00	0.041	2025/6/28	
Right Side	20175/1732.5	20M QPSK(50,24)	0.332	0.158	-0.61	21.53	22.00	0.370	2025/6/28	
Bottom Side	20175/1732.5	20M QPSK(50,24)	0.151	0.075	-1.87	21.53	22.00	0.168	2025/6/28	

NOTE: 1.Hotspot SAR test results of LTE Band 4

2. Tested by : Max Zhou

1.1.5. SAR measurement Result of LTE Band 5

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						

1RB										
Front Side	20525/836.5	10M QPSK(1,24)	0.863	0.498	-1.35	23.02	23.50	0.964	2025/6/27	20#
Back Side	20525/836.5	10M QPSK(1,24)	0.592	0.335	3.71	23.02	23.50	0.661	2025/6/27	
50%RB										
Front Side	20525/836.5	10M QPSK(25,24)	0.456	0.250	-4.18	22.05	22.50	0.506	2025/6/27	Front Side
Back Side	20525/836.5	10M QPSK(25,24)	0.309	0.195	-1.04	22.05	22.50	0.343	2025/6/27	Back Side

NOTE: 1.Body-Worn SAR test results of LTE Band 5
2.Tested by : Max Zhou

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	20525/836.5	10M QPSK(1,24)	0.863	0.498	-1.35	23.02	23.50	0.964	2025/6/27	20#
Back Side	20525/836.5	10M QPSK(1,24)	0.592	0.335	3.71	23.02	23.50	0.661	2025/6/27	
Left Side	20525/836.5	10M QPSK(1,24)	0.087	0.050	-0.72	23.02	23.50	0.097	2025/6/27	
Right Side	20525/836.5	10M QPSK(1,24)	0.273	0.150	2.68	23.02	23.50	0.305	2025/6/27	
Bottom Side	20525/836.5	10M QPSK(1,24)	0.528	0.296	2.79	23.02	23.50	0.590	2025/6/27	
Front Side	20450/829	10M QPSK(1,24)	0.827	0.477	1.57	22.92	23.50	0.945	2025/6/27	
Front Side	20600/844	10M QPSK(25,24)	0.825	0.451	0.66	22.91	23.50	0.945	2025/6/27	
FrontSide Repeated	20525/836.5	10M QPSK(25,24)	0.858	0.493	-4.98	23.02	23.50	0.958	2025/6/27	
50%RB										
Front Side	20525/836.5	10M QPSK(25,24)	0.456	0.250	-4.18	22.05	22.50	0.506	2025/6/27	
Back Side	20525/836.5	10M QPSK(25,24)	0.309	0.195	-1.04	22.05	22.50	0.343	2025/6/27	
Left Side	20525/836.5	10M	0.046	0.029	-3.80	22.05	22.50	0.051	2025/6/27	

		QPSK(25,24)								
Right Side	20525/836.5	10M QPSK(25,24)	0.158	0.078	-3.23	22.05	22.50	0.175	2025/6/27	
Bottom Side	20525/836.5	10M QPSK(25,24)	0.274	0.169	-3.99	22.05	22.50	0.304	2025/6/27	
100%RB										
Back Side	20525/836.5	20M QPSK(100,0)	0.409	0.223	-1.96	22.02	22.50	0.457	2025/6/27	

NOTE: 1.Hotspot SAR test results of LTE Band 5
2.Tested by : Max Zhou

1.1.6. SAR measurement Result of LTE Band 12

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	23095/707.5	10M QPSK(1,24)	0.852	0.483	0.31	22.95	23.00	0.862	2025/6/26	21#
Back Side	23095/707.5	10M QPSK(1,24)	0.559	0.301	-0.14	22.95	23.00	0.565	2025/6/26	
50%RB										
Front Side	23095/707.5	10M QPSK(2512)	0.494	0.253	-1.88	21.91	22.00	0.504	2025/6/26	
Back Side	23095/707.5	10M QPSK(2512)	0.281	0.151	-4.32	21.91	22.00	0.287	2025/6/26	

NOTE: 1.Body-Worn SAR test results of LTE Band 12
2.Tested by : Max Zhou

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	23095/707.5	10M QPSK(1,24)	0.852	0.483	0.31	22.95	23.00	0.862	2025/6/26	21#
Back Side	23095/707.5	10M QPSK(1,24)	0.559	0.301	-0.14	22.95	23.00	0.565	2025/6/26	
Left Side	23095/707.5	10M QPSK(1,24)	0.088	0.049	3.25	22.95	23.00	0.089	2025/6/26	
Right	23095/707.5	10M	0.258	0.145	-2.12	22.95	23.00	0.261	2025/6/26	

Side		QPSK(1,24)								
Bottom Side	23095/707.5	10M QPSK(1,24)	0.516	0.293	0.27	22.95	23.00	0.522	2025/6/26	
Front Side	23060/704	10M QPSK(1,24)	0.801	0.445	3.53	22.82	23.00	0.835	2025/6/26	
Front Side	23130/711	10M QPSK(1,24)	0.800	0.431	-1.71	22.82	23.00	0.834	2025/6/26	
FrontSide Repeated	23095/707.5	10M QPSK(1,24)	0.851	0.482	2.93	22.95	23.00	0.861	2025/6/26	
50%RB										
Front Side	23095/707.5	10M QPSK(2512)	0.494	0.253	-1.88	21.91	22.00	0.504	2025/6/26	
Back Side	23095/707.5	10M QPSK(2512)	0.281	0.151	-4.32	21.91	22.00	0.287	2025/6/26	
Left Side	23095/707.5	10M QPSK(2512)	0.045	0.025	-1.37	21.91	22.00	0.046	2025/6/26	
Right Side	23095/707.5	10M QPSK(2512)	0.133	0.087	0.22	21.91	22.00	0.136	2025/6/26	
Bottom Side	23095/707.5	10M QPSK(2512)	0.265	0.176	-1.78	21.91	22.00	0.271	2025/6/26	
100%RB										
Front Side	23095/707.5	20M QPSK(100,0)	0.412	0.226	-0.75	21.86	22.00	0.425	2025/6/26	

NOTE: 1.Hotspot SAR test results of LTE Band 12
2.Tested by : Max Zhou

1.1.7. SAR measurement Result of LTE Band 17

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	23790/710	10M QPSK(1,0)	0.827	0.473	-0.83	22.78	23.00	0.870	2025/6/26	22#
Back Side	23790/710	10M QPSK(1,0)	0.566	0.324	3.83	22.78	23.00	0.595	2025/6/26	
50%RB										
Front Side	23790/710	10M QPSK(25,0)	0.418	0.264	-4.95	21.83	22.00	0.435	2025/6/26	
Back Side	23790/710	10M	0.301	0.182	-4.02	21.83	22.00	0.313	2025/6/26	

		QPSK(25,0)								
--	--	------------	--	--	--	--	--	--	--	--

NOTE: 1.Body-Worn SAR test results of LTE Band 17
2.Tested by : Jack Peng

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	23790/710	10M QPSK(1,0)	0.827	0.473	-0.83	22.78	23.00	0.870	2025/6/26	22#
Back Side	23790/710	10M QPSK(1,0)	0.566	0.324	3.83	22.78	23.00	0.595	2025/6/26	
Left Side	23790/710	10M QPSK(1,0)	0.087	0.049	3.98	22.78	23.00	0.092	2025/6/26	
Right Side	23790/710	10M QPSK(1,0)	0.249	0.135	-0.22	22.78	23.00	0.262	2025/6/26	
Bottom Side	23790/710	10M QPSK(1,0)	0.510	0.277	1.36	22.78	23.00	0.537	2025/6/26	
Front Side	23780/709	10M QPSK(1,0)	0.774	0.425	0.56	22.77	23.00	0.816	2025/6/26	
Front Side	23800/711	10M QPSK(25,0)	0.791	0.430	3.43	22.76	23.00	0.836	2025/6/26	
FrontSide Repeated	23790/710	10M QPSK(25,0)	0.822	0.470	3.51	22.78	23.00	0.865	2025/6/26	
50%RB										
Front Side	23790/710	10M QPSK(25,0)	0.418	0.264	-4.95	21.83	22.00	0.435	2025/6/26	
Back Side	23790/710	10M QPSK(25,0)	0.301	0.182	-4.02	21.83	22.00	0.313	2025/6/26	
Left Side	23790/710	10M QPSK(25,0)	0.048	0.029	-3.78	21.83	22.00	0.050	2025/6/26	
Right Side	23790/710	10M QPSK(25,0)	0.149	0.074	-4.03	21.83	22.00	0.155	2025/6/26	
Bottom Side	23790/710	10M QPSK(25,0)	0.284	0.158	0.64	21.83	22.00	0.295	2025/6/26	
100%RB										
Front Side	23790/710	20M QPSK(100,0)	0.407	0.229	4.80	21.78	22.00	0.428	2025/6/26	

NOTE: 1.Hotspot SAR test results of LTE Band 17
2.Tested by : Jack Peng

1.1.8. SAR measurement Result of LTE Band 41

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	40640/2595	20M QPSK(1,0)	0.896	0.372	2.66	23.48	24.00	1.010	2025/6/24	23#
Back Side	40640/2595	20M QPSK(1,0)	0.138	0.055	-0.18	23.48	24.00	0.156	2025/6/24	
Front Side	40140/2545	20M QPSK(1,0)	0.837	0.330	-3.02	23.22	24.00	1.002	2025/6/24	
Front Side	41140/2615	20M QPSK(1,0)	0.828	0.330	3.84	23.67	24.00	0.893	2025/6/24	
FrontSide Repeated	40620/2593	20M QPSK(50,0)	0.895	0.370	1.94	23.48	24.00	1.009	2025/6/24	
50%RB										
Front Side	40640/2595	20M QPSK(50,0)	0.497	0.191	3.37	23.41	24.00	0.569	2025/6/24	
Back Side	40640/2595	20M QPSK(50,0)	0.080	0.028	-3.45	23.41	24.00	0.092	2025/6/24	

NOTE: 1.Body-Worn SAR test results of LTE Band 41

2.Tested by : Max Zhou

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	40640/2595	20M QPSK(1,0)	0.896	0.372	2.66	23.48	24.00	1.010	2025/6/24	23#
Back Side	40640/2595	20M QPSK(1,0)	0.138	0.055	-0.18	23.48	24.00	0.156	2025/6/24	
Left Side	40640/2595	20M QPSK(1,0)	0.046	0.018	-3.82	23.48	24.00	0.052	2025/6/24	
Right Side	40640/2595	20M QPSK(1,0)	0.009	0.007	0.31	23.48	24.00	0.010	2025/6/24	
Bottom	40640/2595	20M	0.828	0.337	-1.99	23.48	24.00	0.933	2025/6/24	

Side		QPSK(1,0)								
Front Side	40140/2545	20M QPSK(1,0)	0.837	0.330	-3.02	23.22	24.00	1.002	2025/6/24	
Front Side	41140/2615	20M QPSK(1,0)	0.828	0.330	3.84	23.67	24.00	0.893	2025/6/24	
FrontSide Repeated	40620/2593	20M QPSK(50,0)	0.895	0.370	1.94	23.48	24.00	1.009	2025/6/24	
50%RB										
Front Side	40620/2593	20M QPSK(50,0)	0.025	0.009	-3.76	24.80	25.00	0.026	2025/7/18	
Back Side	40620/2593	20M QPSK(50,0)	0.223	0.084	0.55	24.80	25.00	0.234	2025/7/18	
Left Side	40620/2593	20M QPSK(50,0)	0.007	0.005	-1.70	24.80	25.00	0.007	2025/7/18	
Right Side	40620/2593	20M QPSK(50,0)	0.012	0.009	0.94	24.80	25.00	0.013	2025/7/18	
Bottom Side	40620/2593	20M QPSK(50,0)	0.098	0.038	1.87	24.80	25.00	0.103	2025/7/18	
100%RB										
Front Side	40640/2595	20M QPSK(100,0)	0.487	0.190	0.90	23.37	24.00	0.563	2025/6/24	

NOTE:1. Hotspot SAR test results of LTE Band 41
2. Tested by : Max Zhou

1.1.1. SAR measurement Result of LTE Band 66

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	132322/1745	20M QPSK(1,99)	0.750	0.370	-0.14	22.20	22.50	0.804	2025/6/28	24#
Back Side	132322/1745	20M QPSK(1,99)	0.413	0.198	1.16	22.20	22.50	0.443	2025/6/28	
Front Side	132072/1720	20M QPSK(1,99)	0.736	0.354	-0.36	22.17	22.50	0.794	2025/6/28	
Front Side	132572/1770	20M QPSK(1,99)	0.741	0.363	-2.48	22.28	22.50	0.780	2025/6/28	
FrontSide Repeated	132322/1745	20M QPSK(1,99)	0.746	0.365	-1.68	22.20	22.50	0.799	2025/6/28	
50%RB										
Front Side	132322/1745	20M	0.422	0.190	0.77	21.12	21.50	0.461	2025/6/28	

		QPSK(50,49)								
Back Side	132322/1745	20M QPSK(50,49)	0.217	0.114	2.07	21.12	21.50	0.237	2025/6/28	

NOTE: 1.Body-Worn SAR test results of Band 66

2.Tested by : Max Zhou

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducte d Power (dBm)	Tune-u p Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plo t
			1-g	10-g						
1RB										
Front Side	132322/1745	20M QPSK(1,99)	0.75 0	0.370	-0.14	22.20	22.50	0.804	2025/6/2 8	24#
Back Side	132322/1745	20M QPSK(1,99)	0.41 3	0.198	1.16	22.20	22.50	0.443	2025/6/2 8	
Left Side	132322/1745	20M QPSK(1,99)	0.08 0	0.039	-0.13	22.20	22.50	0.086	2025/6/2 8	
Right Side	132322/1745	20M QPSK(1,99)	0.72 0	0.345	3.50	22.20	22.50	0.771	2025/6/2 8	
Bottom Side	132322/1745	20M QPSK(1,99)	0.30 8	0.146	2.68	22.20	22.50	0.330	2025/6/2 8	
Front Side	132072/1720	20M QPSK(1,99)	0.73 6	0.354	-0.36	22.17	22.50	0.794	2025/6/2 8	
Front Side	132572/1770	20M QPSK(1,99)	0.74 1	0.363	-2.48	22.28	22.50	0.780	2025/6/2 8	
FrontSid e Repeate d	132322/1745	20M QPSK(1,99)	0.74 6	0.365	-1.68	22.20	22.50	0.799	2025/6/2 8	
50%RB										
Front Side	132322/1745	20M QPSK(50,49)	0.42 2	0.190	0.77	21.12	21.50	0.461	2025/6/2 8	
Back Side	132322/1745	20M QPSK(50,49)	0.21 7	0.114	2.07	21.12	21.50	0.237	2025/6/2 8	
Left Side	132322/1745	20M QPSK(50,49)	0.04 8	0.021	4.43	21.12	21.50	0.052	2025/6/2 8	
Right Side	132322/1745	20M QPSK(50,49)	0.38 7	0.182	-1.47	21.12	21.50	0.422	2025/6/2 8	
Bottom Side	132322/1745	20M QPSK(50,49)	0.17 0	0.075	-2.25	21.12	21.50	0.186	2025/6/2 8	

100%RB										
Front Side	132322/1745	20M QPSK(50,49)	0.35 8	0.164	-1.45	21.15	21.50	0.388	2025/6/28	

NOTE:1. Hotspot SAR test results of Band 66
2. Tested by : Max Zhou

1.1.2. SAR measurement Result of WLAN 2.4G

Ant1

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	6/2437	802.11b	0.422	0.189	-4.12	15.44	15.50	0.428	2025/6/30	17#
Back Side	6/2437	802.11b	0.129	0.055	-3.51	15.44	15.50	0.131	2025/6/30	

NOTE: 1.Body-Worn SAR test results of WLAN 2.4G
2. Tested by : Max Zhou

Ant1

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	6/2437	802.11b	0.422	0.189	-4.12	15.44	15.50	0.428	2025/6/30	17#
Back Side	6/2437	802.11b	0.129	0.055	-3.51	15.44	15.50	0.131	2025/6/30	
Left Side	6/2437	802.11b	0.188	0.083	-2.25	15.44	15.50	0.191	2025/6/30	
Top Side	6/2437	802.11b	0.352	0.154	-0.52	15.44	15.50	0.357	2025/6/30	

NOTE:1. Hotspot SAR test results of WLAN 2.4G
2. Tested by : Max Zhou

Ant2

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	11/2462	802.11b	0.245	0.091	-0.56	16.44	16.50	0.248	2025/6/30	15#
Back Side	11/2462	802.11b	0.078	0.028	-1.55	16.44	16.50	0.079	2025/6/30	

NOTE: 1.Body-Worn SAR test results of WLAN 2.4G
2. Tested by : Max Zhou

Ant2

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	11/2462	802.11b	0.245	0.091	-0.56	16.44	16.50	0.248	2025/6/30	15#

Back Side	11/2462	802.11b	0.078	0.028	-1.55	16.44	16.50	0.079	2025/6/30	
Right Side	11/2462	802.11b	0.100	0.037	-3.47	16.44	16.50	0.101	2025/6/30	
Top Side	11/2462	802.11b	0.232	0.084	-3.71	16.44	16.50	0.235	2025/6/30	

NOTE:1. Hotspot SAR test results of WLAN 2.4G
2. Tested by : Max Zhou

MIMO

Test Position of Body-Worn with 0mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	6/2437	802.11n HT40	0.422	0.204	-0.27	16.90	17.50	0.485	2025/6/30	16#
Back Side	6/2437	802.11n HT40	0.153	0.064	-2.88	16.90	17.50	0.176	2025/6/30	

NOTE: 1.Body-Worn SAR test results of WLAN 2.4G
2. Tested by : Max Zhou

MIMO

Test Position of Hotspot with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	6/2437	802.11n HT40	0.422	0.204	-0.27	16.90	17.50	0.485	2025/6/30	16#
Back Side	6/2437	802.11n HT40	0.153	0.064	-2.88	16.90	17.50	0.176	2025/6/30	
Right Side	6/2437	802.11n HT40	0.212	0.086	-0.92	16.90	17.50	0.243	2025/6/30	
Left Side	6/2437	802.11n HT40	0.196	0.082	-3.09	16.90	17.50	0.225	2025/6/30	
Top Side	6/2437	802.11n HT40	0.408	0.164	-0.86	16.90	17.50	0.468	2025/6/30	

NOTE:1. Hotspot SAR test results of WLAN 2.4G
2. Tested by : Max Zhou

1.1.3. SAR measurement Result of WLAN 5.2G

Ant 1

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	48/5240	802.11a	0.309	0.106	-1.38	7.07	7.50	0.341	2025/7/10	8#
Back Side	48/5240	802.11a	0.099	0.032	3.94	7.07	7.50	0.109	2025/7/10	

NOTE: 1.Body-Worn SAR test results of WLAN 5.2G

2. Tested by : Max Zhou

Ant 1

Test Position of Hotspot with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	48/5240	802.11a	0.309	0.106	-1.38	7.07	7.50	0.341	2025/7/10	8#
Back Side	48/5240	802.11a	0.099	0.032	3.94	7.07	7.50	0.109	2025/7/10	
Left Side	48/5240	802.11a	0.248	0.083	1.02	7.07	7.50	0.274	2025/7/10	
Top Side	48/5240	802.11a	0.210	0.072	-3.58	7.07	7.50	0.232	2025/7/10	

NOTE: 1.Hotspot SAR test results of WLAN 5.2G

2. Tested by : Max Zhou

Ant 2

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	38/5190	802.11ax HE40	0.432	0.163	-0.06	7.71	8.00	0.462	2025/7/10	7#
Back Side	38/5190	802.11ax HE40	0.212	0.070	0.00	7.71	8.00	0.227	2025/7/10	

NOTE: 1.Body-Worn SAR test results of WLAN 5.2G

2. Tested by : Max Zhou

Ant 2

Test Position of Hotspot with	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						

0mm										
Front Side	38/5190	802.11ax HE40	0.432	0.163	-0.06	7.71	8.00	0.462	2025/7/10	7#
Back Side	38/5190	802.11ax HE40	0.212	0.070	0.00	7.71	8.00	0.227	2025/7/10	
Right Side	38/5190	802.11ax HE40	0.312	0.102	2.16	7.71	8.00	0.334	2025/7/10	
Top Side	38/5190	802.11ax HE40	0.383	0.130	0.54	7.71	8.00	0.409	2025/7/10	

NOTE: 1.Hotspot SAR test results of WLAN 5.2G
2.Tested by : Max Zhou

MIMO

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	40/5200	802.11n HT20	0.404	0.147	4.40	9.91	10.50	0.463	2025/7/10	6#
Back Side	40/5200	802.11n HT20	0.132	0.048	-1.79	9.91	10.50	0.151	2025/7/10	

NOTE: 1.Body-Worn SAR test results of WLAN 5.2G
2.Tested by : Max Zhou

MIMO

Test Position of Hotspot with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	40/5200	802.11n HT20	0.404	0.147	4.40	9.91	10.50	0.463	2025/7/10	6#
Back Side	40/5200	802.11n HT20	0.132	0.048	-1.79	9.91	10.50	0.151	2025/7/10	
Left Side	40/5200	802.11n HT20	0.176	0.061	0.77	9.91	10.50	0.202	2025/7/10	
Right Side	40/5200	802.11n HT20	0.176	0.063	3.23	9.91	10.50	0.202	2025/7/10	
Top Side	40/5200	802.11n HT20	0.344	0.120	-1.61	9.91	10.50	0.394	2025/7/10	

NOTE: 1.Hotspot SAR test results of WLAN 5.2G
2.Tested by : Max Zhou

1.1.4. SAR measurement Result of WLAN 5.3G

Ant1

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	56/5280	802.11ax HE40	0.344	0.114	-2.63	7.57	8.00	0.380	2025/7/11	9#
Back Side	56/5280	802.11ax HE40	0.114	0.036	-2.90	7.57	8.00	0.126	2025/7/11	

NOTE: 1.Body-Worn SAR test results of WLAN 5.3G

2. Tested by : Max Zhou

Ant1

Test Position of Hotspot with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	56/5280	802.11ax HE40	0.344	0.114	-2.63	7.57	8.00	0.380	2025/7/11	9#
Back Side	56/5280	802.11ax HE40	0.114	0.036	-2.90	7.57	8.00	0.126	2025/7/11	
Left Side	56/5280	802.11ax HE40	0.304	0.101	2.42	7.57	8.00	0.336	2025/7/11	
Top Side	56/5280	802.11ax HE40	0.234	0.074	0.96	7.57	8.00	0.258	2025/7/11	

NOTE: 1.Hotspot SAR test results of WLAN 5.3G

2. Tested by : Max Zhou

Ant2

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	56/5280	802.11a	0.436	0.144	2.52	7.66	8.00	0.472	2025/7/11	10#
Back Side	56/5280	802.11a	0.180	0.057	0.00	7.66	8.00	0.195	2025/7/11	

NOTE: 1.Body-Worn SAR test results of WLAN 5.3G

2. Tested by : Max Zhou

Ant2

Test Position of	Test channel /Freq	Mode	SAR Value		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g	Date	Plot
			(W/kg)							
			1-g	10-g						

Hotspot with 0mm								(W/Kg)		
Front Side	56/5280	802.11a	0.436	0.144	2.52	7.66	8.00	0.472	2025/7/11	10#
Back Side	56/5280	802.11a	0.180	0.057	0.00	7.66	8.00	0.195	2025/7/11	
Right Side	56/5280	802.11a	0.270	0.086	1.25	7.66	8.00	0.292	2025/7/11	
Top Side	56/5280	802.11a	0.360	0.115	0.94	7.66	8.00	0.389	2025/7/11	

NOTE: 1.Hotspot SAR test results of WLAN 5.3G
2.Tested by : Max Zhou

MIMO

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	56/5280	802.11a	0.445	0.179	-0.05	10.47	11.00	0.503	2025/7/11	11#
Back Side	56/5280	802.11a	0.168	0.055	0.16	10.47	11.00	0.190	2025/7/11	

NOTE: 1.Body-Worn SAR test results of WLAN 5.3G
2.Tested by : Max Zhou

MIMO

Test Position of Hotspot with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	56/5280	802.11a	0.445	0.179	-0.05	10.47	11.00	0.503	2025/7/11	11#
Back Side	56/5280	802.11a	0.168	0.055	0.16	10.47	11.00	0.190	2025/7/11	
Left Side	56/5280	802.11a	0.228	0.073	3.85	10.47	11.00	0.258	2025/7/11	
Right Side	56/5280	802.11a	0.232	0.076	-0.13	10.47	11.00	0.262	2025/7/11	
Top Side	56/5280	802.11a	0.364	0.145	-1.62	10.47	11.00	0.411	2025/7/11	

NOTE: 1.Hotspot SAR test results of WLAN 5.3G
2.Tested by : Max Zhou

**1.1.5. SAR measurement Result of WLAN 5.8G
Ant1**

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	159/5795	802.11ax HE40	0.319	0.121	-1.10	8.08	8.50	0.351	2025/7/12	12#
Back Side	159/5795	802.11ax HE40	0.102	0.038	1.71	8.08	8.50	0.112	2025/7/12	

NOTE:1. Body-Worn SAR test results of WLAN 5.8G

2. Tested by : Max Zhou

Ant1

Test Position of Hotspot with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	159/5795	802.11ax HE40	0.319	0.121	-1.10	8.08	8.50	0.351	2025/7/12	12#
Back Side	159/5795	802.11ax HE40	0.102	0.038	1.71	8.08	8.50	0.112	2025/7/12	
Left Side	159/5795	802.11ax HE40	0.272	0.101	0.10	8.08	8.50	0.300	2025/7/12	
Top Side	159/5795	802.11ax HE40	0.198	0.072	2.16	8.08	8.50	0.218	2025/7/12	

NOTE: 1. Hotspot SAR test results of WLAN 5.8G

2. Tested by : Max Zhou

Ant2

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	159/5795	802.11ax HE40	0.441	0.220	-2.73	9.21	9.50	0.471	2025/7/12	14#
Back Side	159/5795	802.11ax HE40	0.296	0.092	0.00	9.21	9.50	0.316	2025/7/12	

NOTE:1. Body-Worn SAR test results of WLAN 5.8G

2. Tested by : Max Zhou

Ant2

Test Position of Hotspot with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	159/5795	802.11ax HE40	0.441	0.220	-2.73	9.21	9.50	0.471	2025/7/12	14#
Back Side	159/5795	802.11ax HE40	0.296	0.092	0.00	9.21	9.50	0.316	2025/7/12	
Right Side	159/5795	802.11ax HE40	0.244	0.141	2.41	9.21	9.50	0.261	2025/7/12	
Top Side	159/5795	802.11ax HE40	0.333	0.170	2.08	9.21	9.50	0.356	2025/7/12	

NOTE: 1.Hotspot SAR test results of WLAN 5.8G
2.Tested by : Max Zhou

MIMO

Test Position of Body-Worn with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	157/5785	802.11a	0.440	0.169	1.22	11.59	12.00	0.484	2025/7/12	13#
Back Side	157/5785	802.11a	0.153	0.052	3.77	11.59	12.00	0.168	2025/7/12	

NOTE:1. Body-Worn SAR test results of WLAN 5.8G
2.Tested by : Max Zhou

MIMO

Test Position of Hotspot with 0mm	Test channel /Freq	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	157/5785	802.11a	0.440	0.169	1.22	11.59	12.00	0.484	2025/7/12	13#
Back Side	157/5785	802.11a	0.153	0.052	3.77	11.59	12.00	0.168	2025/7/12	
Left Side	157/5785	802.11a	0.204	0.072	1.06	11.59	12.00	0.224	2025/7/12	
Right	157/5785	802.11a	0.192	0.068	-2.45	11.59	12.00	0.211	2025/7/12	

Side										
------	--	--	--	--	--	--	--	--	--	--

NOTE: 1.Hotspot SAR test results of WLAN 5.8G
2.Tested by : Max Zhou

1.2. SAR Summation Scenario

Per KDB 447498 D01, simultaneous transmission SAR is compliant if,

- Scalar SAR summation $< 1.6\text{W/kg}$.
- $\text{SPLSR} = (\text{SAR}_1 + \text{SAR}_2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates of the extrapolated peak SAR locations in the zoom scan. If $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WWAN	DTS			
Hotspot	Front Side	1.01	0.485	1.495	N/A	N/A
	Back Side	0.9	0.176	1.076	N/A	N/A
Body	Front Side	1.01	0.485	1.495	N/A	N/A
	Back Side	0.9	0.176	1.076	N/A	N/A
	Left Side	0.097	0.225	0.322	N/A	N/A
	Right Side	0.85	0.243	1.093	N/A	N/A
	Top Side	0	0.468	0.468	N/A	N/A
	Bottom Side	0.933	N/A	0.933	N/A	N/A

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WWAN	NII			
Hotspot	Front Side	1.01	0.503	1.513	N/A	N/A
	Back Side	0.9	0.316	1.216	N/A	N/A
Body	Front Side	1.01	0.503	1.513	N/A	N/A
	Back Side	0.9	0.316	1.216	N/A	N/A
	Left Side	0.097	0.336	0.433	N/A	N/A
	Right Side	0.85	0.334	1.184	N/A	N/A
	Top Side	0	0.457	0.457	N/A	N/A
	Bottom Side	0.933	N/A	0.933	N/A	N/A

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WWAN	DSS			
Hotspot	Front Side	1.01	0.334	1.344	N/A	N/A
	Back Side	0.9	0.334	1.234	N/A	N/A
Body	Front Side	1.01	0.334	1.344	N/A	N/A

	Back Side	0.9	0.334	1.234	N/A	N/A
	Left Side	0.097	0.334	0.431	N/A	N/A
	Right Side	0.85	0.334	1.184	N/A	N/A
	Top Side	0	0.334	0.334	N/A	N/A
	Bottom Side	0.933	N/A	0.933	N/A	N/A

2. Appendix A. Photo documentation

Refer to appendix Test Setup photo---SAR

3. Appendix B. System Check Plots

Table of contents
MEASUREMENT 1 System Performance Check - 750MHz
MEASUREMENT 2 System Performance Check - 835MHz
MEASUREMENT 3 System Performance Check - 1800MHz
MEASUREMENT 4 System Performance Check - 1900MHz
MEASUREMENT 5 System Performance Check - 2450MHz
MEASUREMENT 6 System Performance Check - 2600MHz
MEASUREMENT 7 System Performance Check - 5200MHz
MEASUREMENT 8 System Performance Check - 5400MHz
MEASUREMENT 9 System Performance Check - 5800MHz

1# System check at 750 MHz
Date of measurement: 26/6/2025

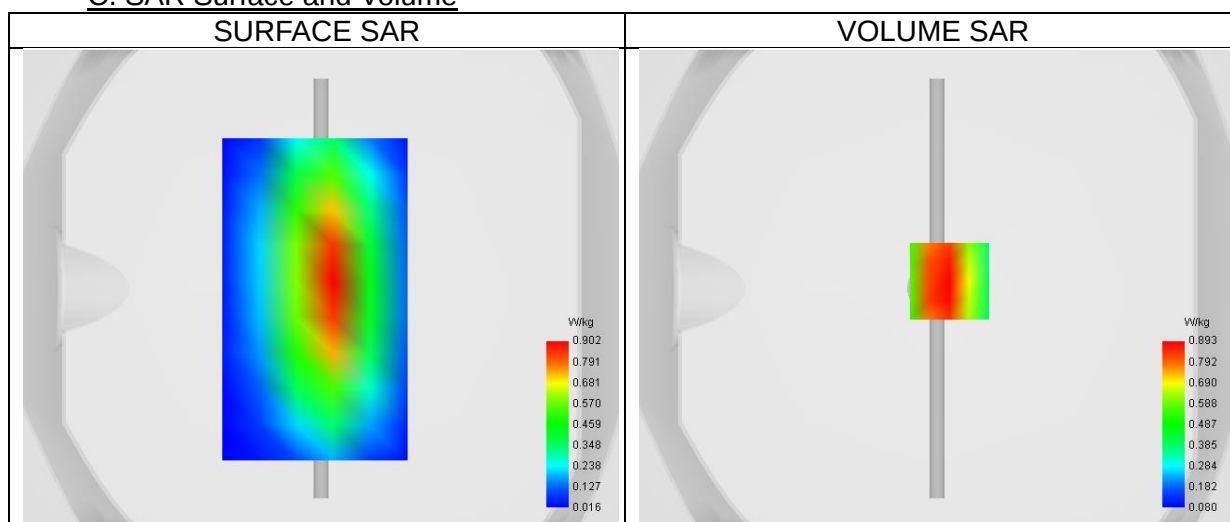
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.39
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW750
Signal	CW
Channels/Frequency	Middle

B. Permittivity

Middle TX Frequency (MHz)	750.00
Relative permittivity (real part)	40.59
Relative permittivity (imaginary part)	21.26
Conductivity (S/m)	0.89

C. SAR Surface and Volume



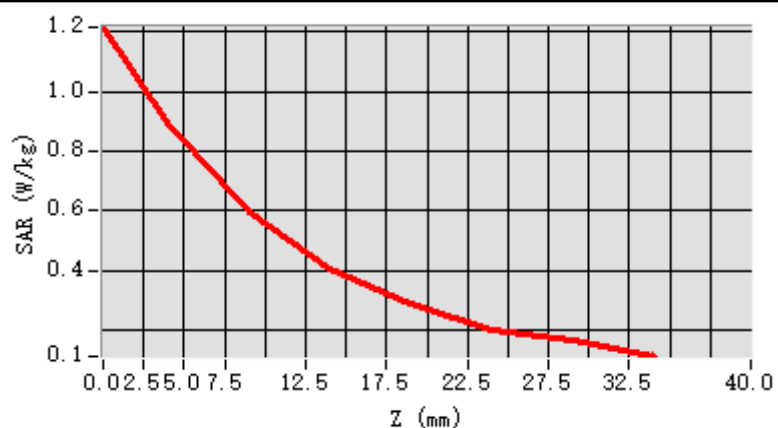
Maximum location: X=5.00, Y=3.00 ; SAR Peak: 1.25 W/kg

D. SAR 1g & 10g

SAR 10g (W/Kg)	0.548
SAR 1g (W/Kg)	0.861
Variation (%)	-0.74
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	66.93

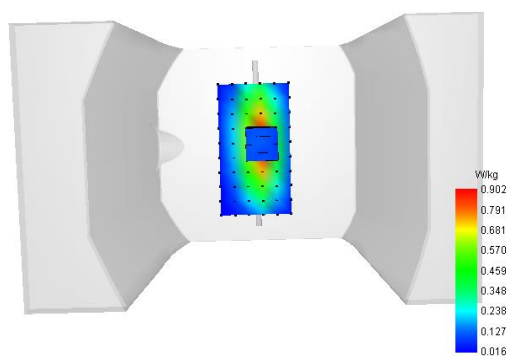
E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.214	0.893	0.598	0.407	0.288	0.205	0.168

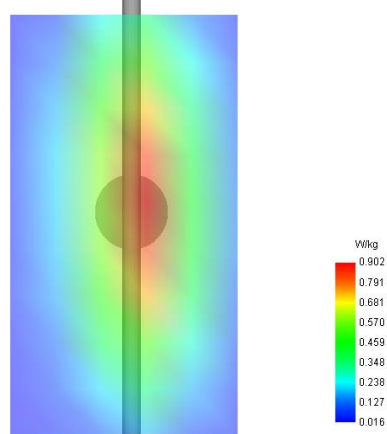


F. 3D Image

3D screen shot



Hot spot position



2# System check at 835 MHz
Date of measurement: 27/6/2025

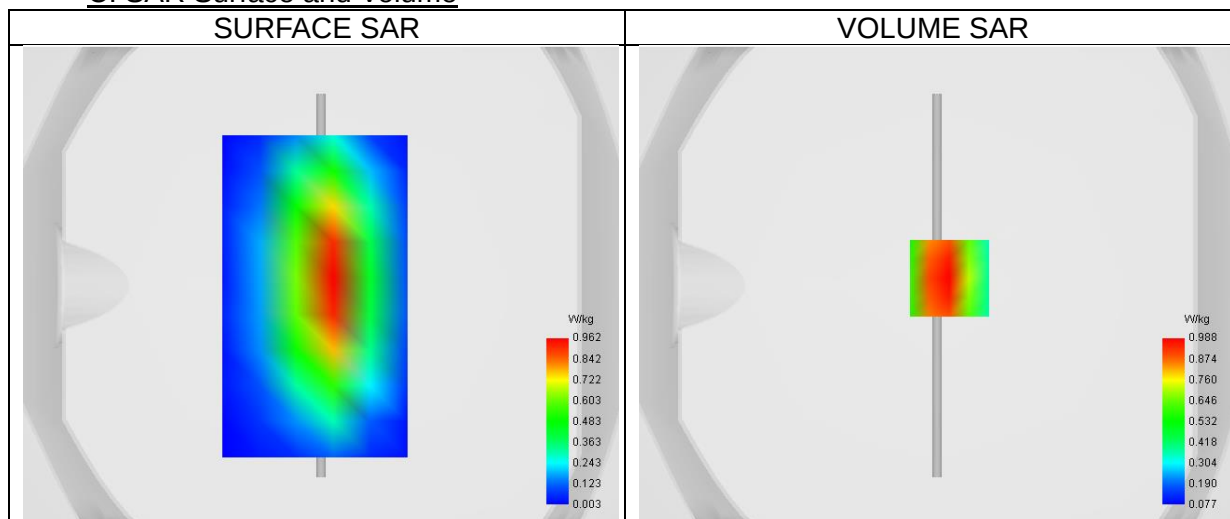
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.32
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW835
Signal	CW
Channels/Frequency	Middle

B. Permittivity

Middle TX Frequency (MHz)	835.00
Relative permittivity (real part)	42.02
Relative permittivity (imaginary part)	19.78
Conductivity (S/m)	0.92

C. SAR Surface and Volume



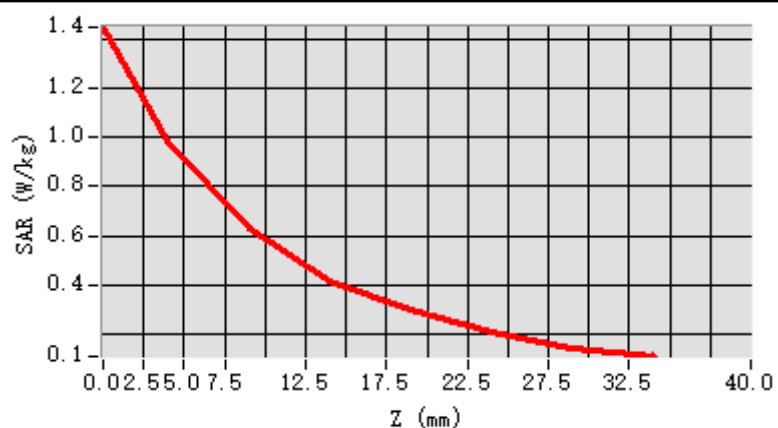
Maximum location: X=5.00, Y=3.00 ; SAR Peak: 1.47 W/kg

D. SAR 1g & 10g

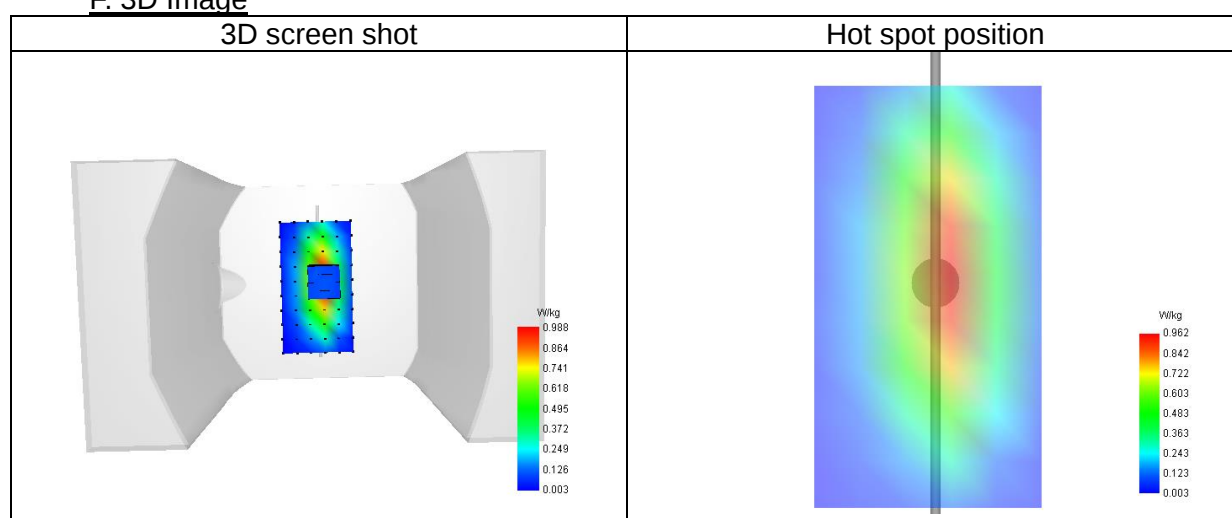
SAR 10g (W/Kg)	0.583
SAR 1g (W/Kg)	0.962
Variation (%)	-0.65
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	63.59

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.450	0.988	0.628	0.418	0.299	0.206	0.146



F. 3D Image



3# System check at 1800 MHz
Date of measurement: 28/6/2025

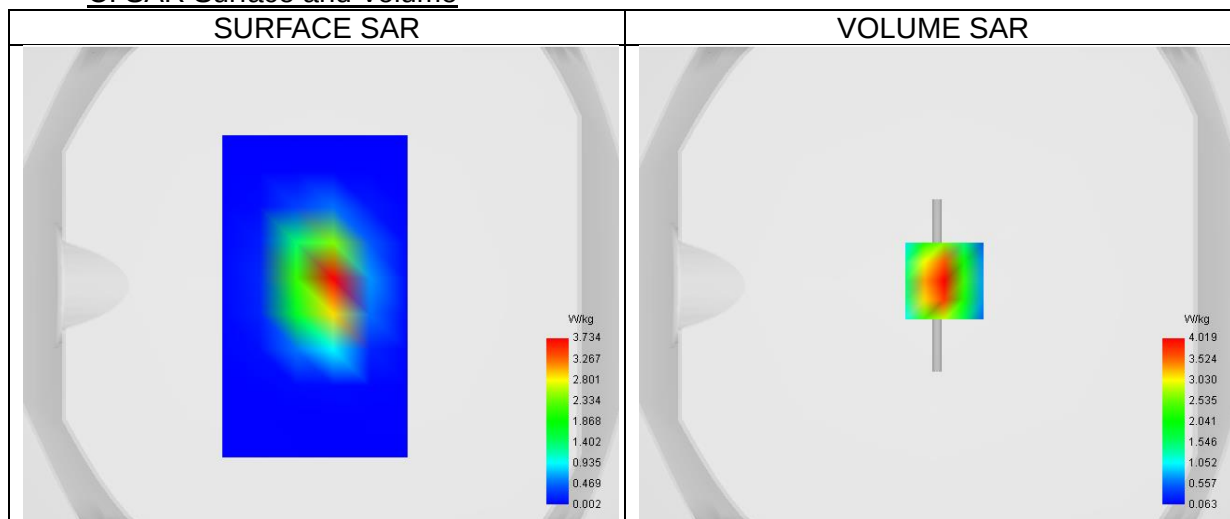
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.50
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Signal	CW
Channels/Frequency	Middle

B. Permittivity

Middle TX Frequency (MHz)	1800.00
Relative permittivity (real part)	39.00
Relative permittivity (imaginary part)	13.99
Conductivity (S/m)	1.40

C. SAR Surface and Volume



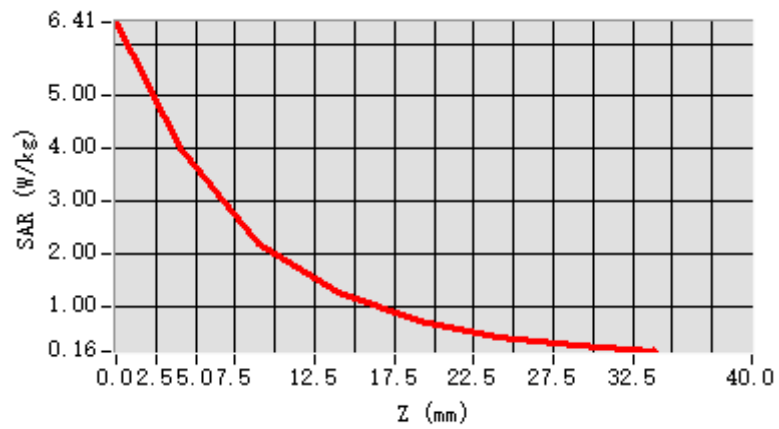
Maximum location: X=3.00, Y=2.00 ; SAR Peak: 6.49 W/kg

D. SAR 1g & 10g

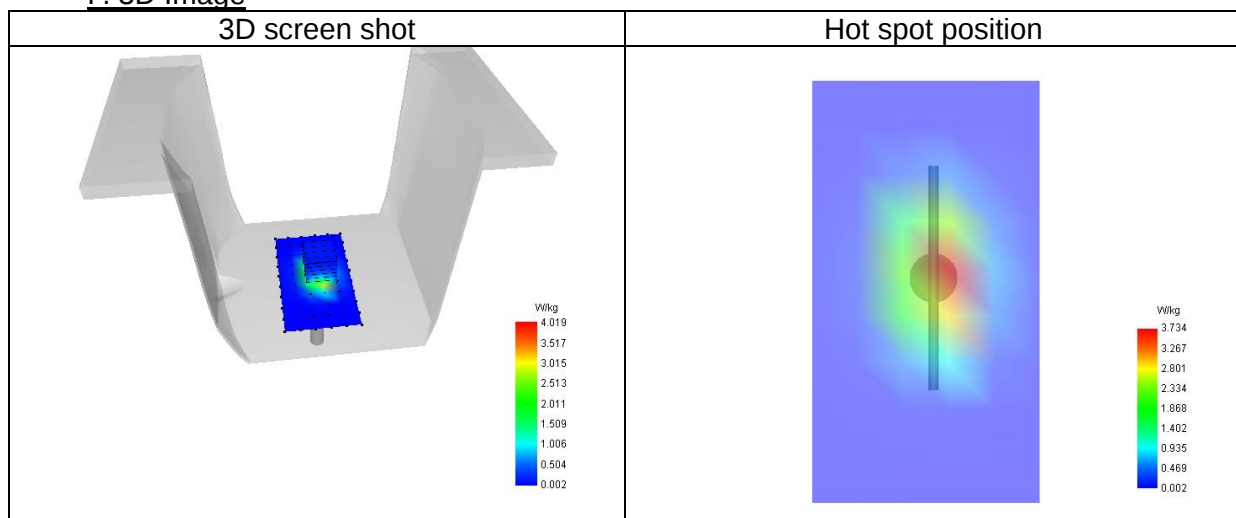
SAR 10g (W/Kg)	1.927
SAR 1g (W/Kg)	3.816
Variation (%)	-0.08
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	54.62

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.407	4.019	2.195	1.262	0.736	0.437	0.263



F. 3D Image



4# System check at 1900 MHz
Date of measurement: 29/6/2025

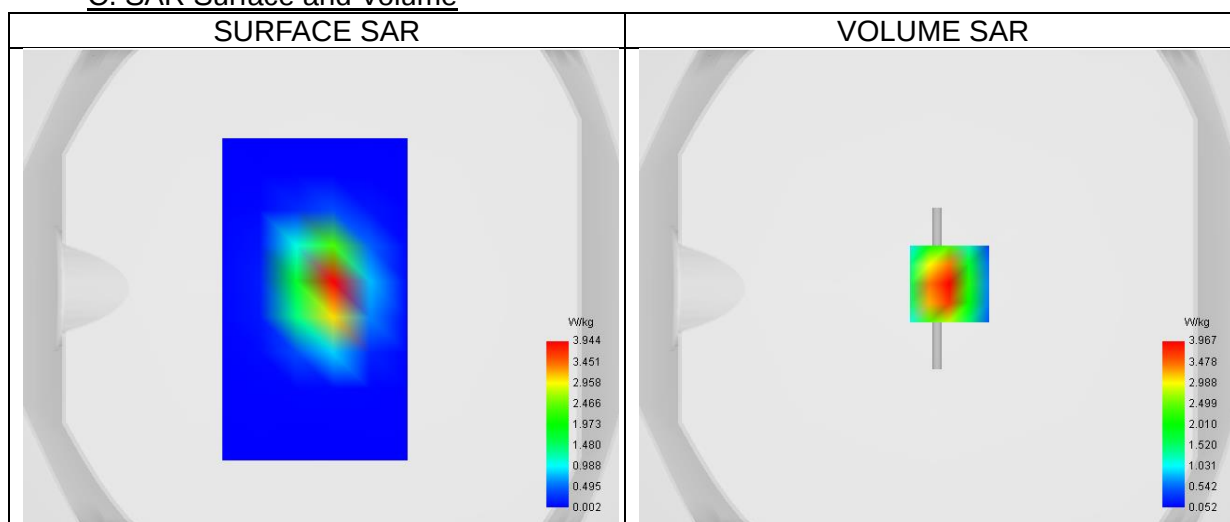
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.58
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Signal	CW
Channels/Frequency	Middle

B. Permittivity

Middle TX Frequency (MHz)	1900.00
Relative permittivity (real part)	38.21
Relative permittivity (imaginary part)	13.58
Conductivity (S/m)	1.43

C. SAR Surface and Volume



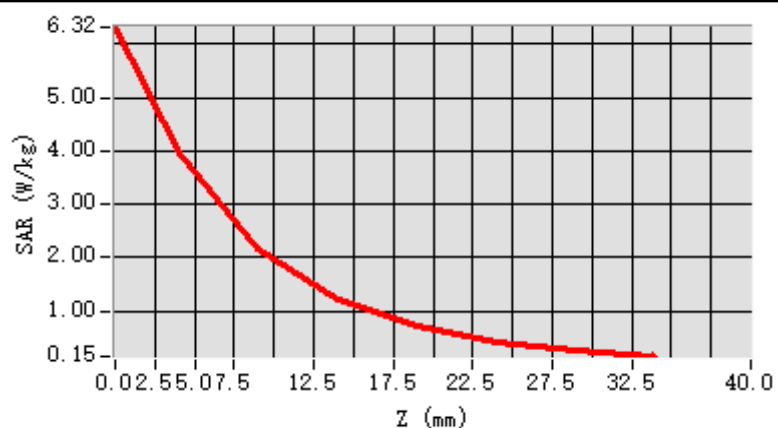
Maximum location: X=5.00, Y=2.00 ; SAR Peak: 6.50 W/kg

D. SAR 1g & 10g

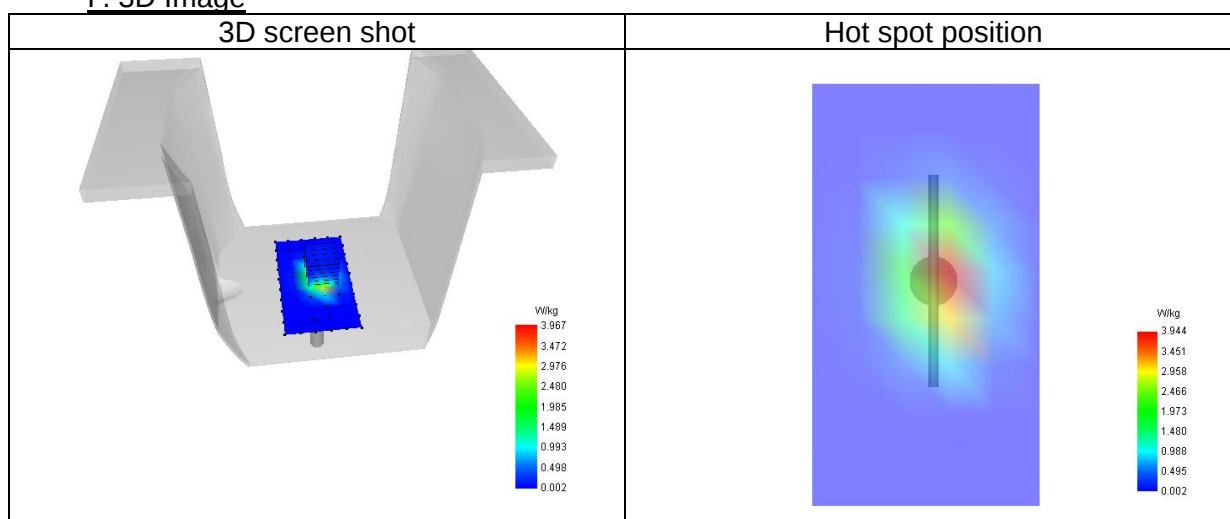
SAR 10g (W/Kg)	1.928
SAR 1g (W/Kg)	3.915
Variation (%)	-0.20
Horizontal validation criteria: minimum distance (mm)	11.31
Vertical validation criteria: SAR ratio M2/M1 (%)	54.49

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.321	3.967	2.162	1.225	0.704	0.414	0.245



F. 3D Image



5# System check at 2450 MHz
Date of measurement: 30/6/2025

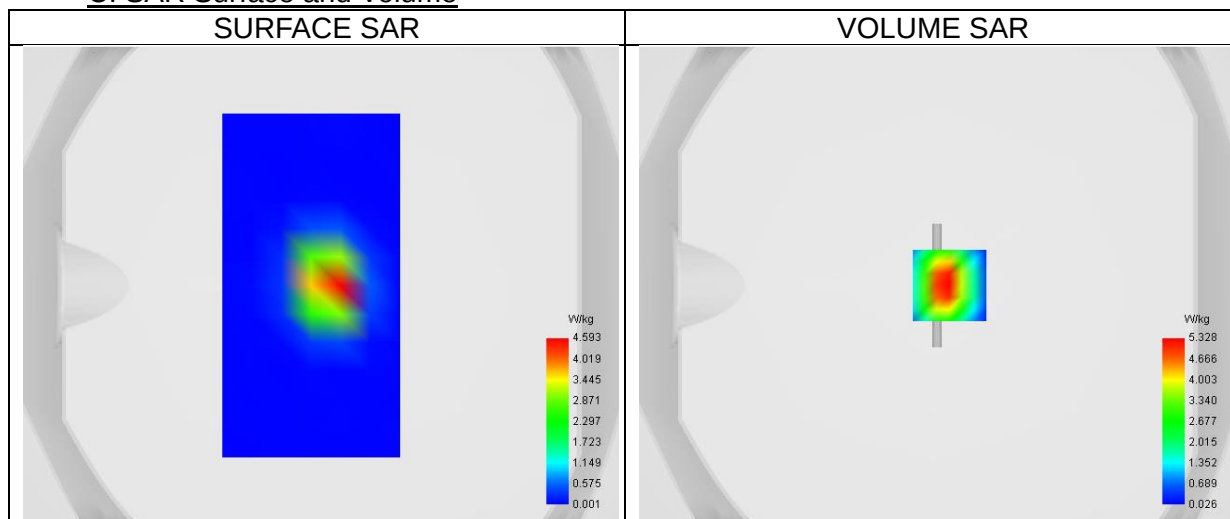
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.63
Area Scan	dx=12mm dy=12mm, Complete
Zoom Scan	7x7x7,dx=5mm dy=5mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW2450
Signal	CW
Channels/Frequency	Middle

B. Permittivity

Middle TX Frequency (MHz)	2450.00
Relative permittivity (real part)	38.30
Relative permittivity (imaginary part)	13.40
Conductivity (S/m)	1.82

C. SAR Surface and Volume



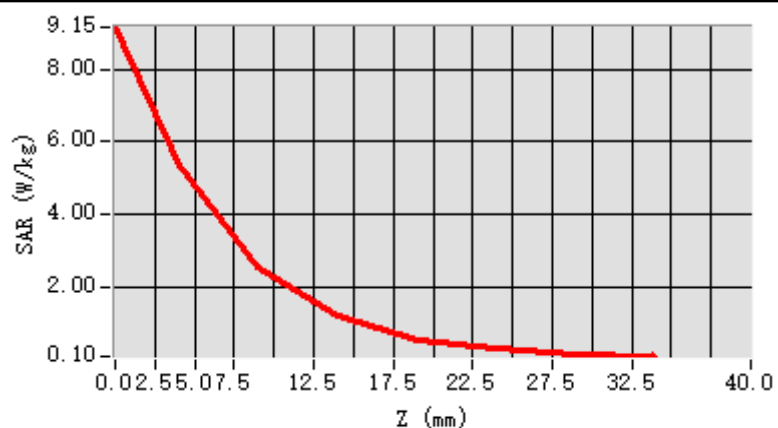
Maximum location: X=5.00, Y=0.00 ; SAR Peak: 9.30 W/kg

D. SAR 1g & 10g

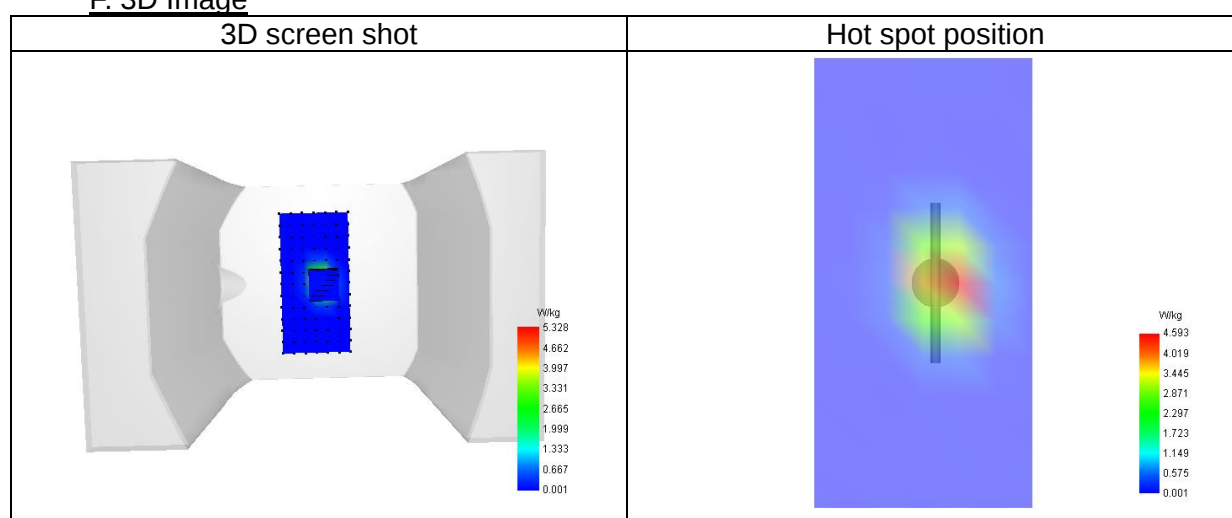
SAR 10g (W/Kg)	2.127
SAR 1g (W/Kg)	4.878
Variation (%)	-0.62
Horizontal validation criteria: minimum distance (mm)	10.00
Vertical validation criteria: SAR ratio M2/M1 (%)	47.56

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.149	5.328	2.534	1.200	0.561	0.304	0.142



F. 3D Image



6# System check at 2600 MHz
Date of measurement: 24/6/2025

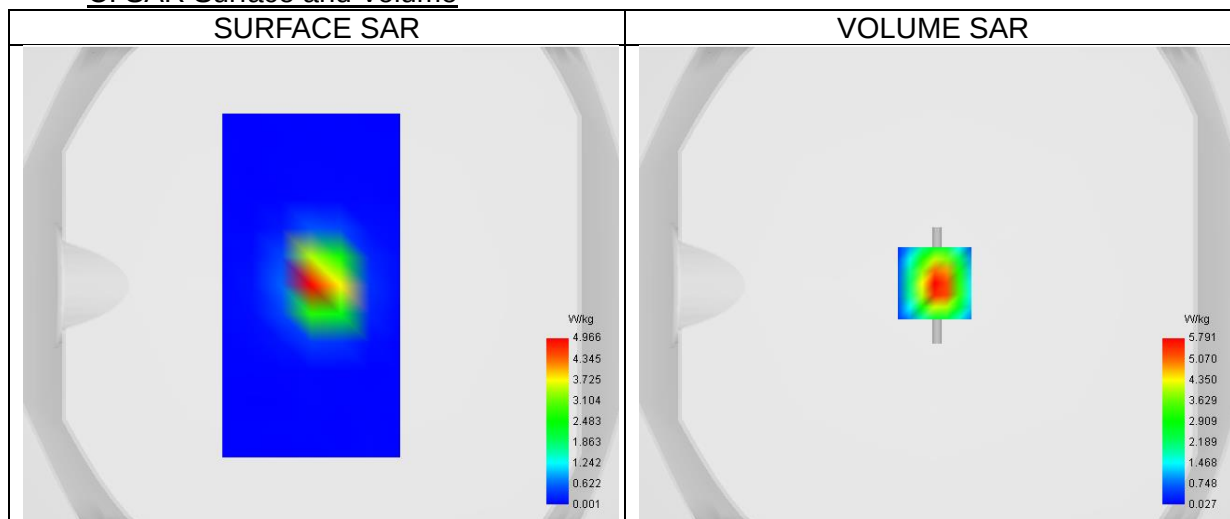
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.52
Area Scan	dx=12mm dy=12mm, Complete
Zoom Scan	7x7x7,dx=5mm dy=5mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Signal	CW
Channels/Frequency	Middle

B. Permittivity

Middle TX Frequency (MHz)	2600.00
Relative permittivity (real part)	39.26
Relative permittivity (imaginary part)	13.39
Conductivity (S/m)	1.93

C. SAR Surface and Volume



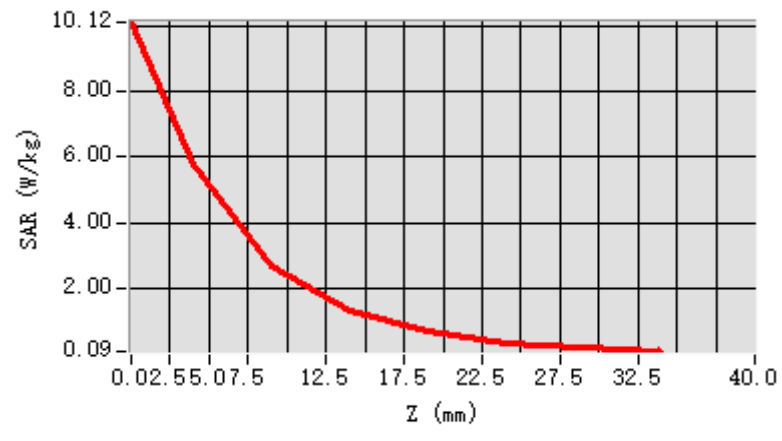
Maximum location: X=-1.00, Y=1.00 ; SAR Peak: 10.16 W/kg

D. SAR 1g & 10g

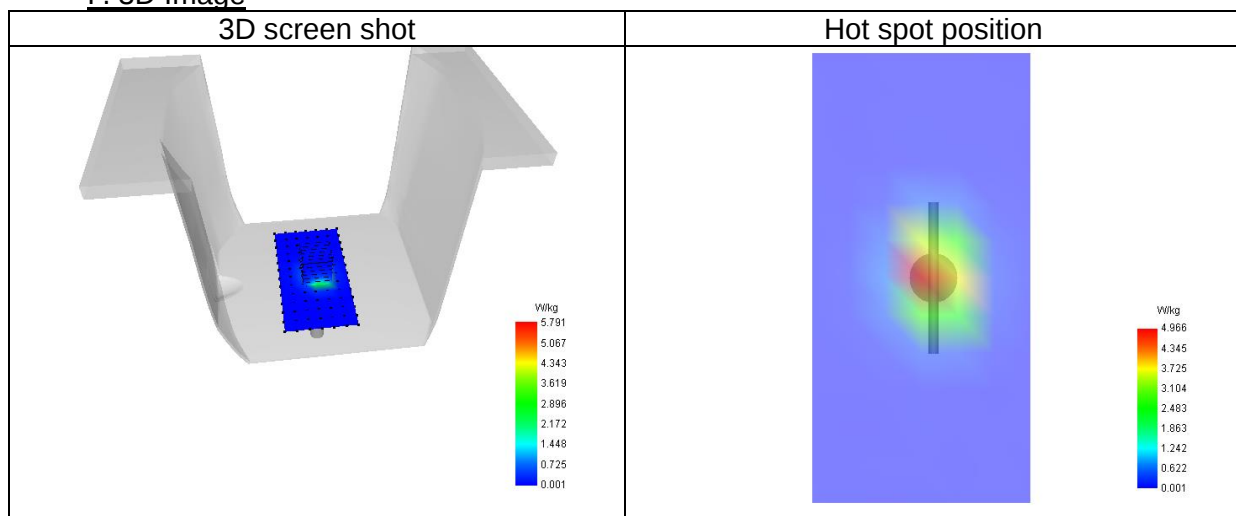
SAR 10g (W/Kg)	2.275
SAR 1g (W/Kg)	5.308
Variation (%)	-3.64
Horizontal validation criteria: minimum distance (mm)	10.00
Vertical validation criteria: SAR ratio M2/M1 (%)	46.60

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	10.116	5.791	2.698	1.349	0.691	0.349	0.198



F. 3D Image



7# System check at 5200 MHz3
3Date of measurement: 10/7/2025

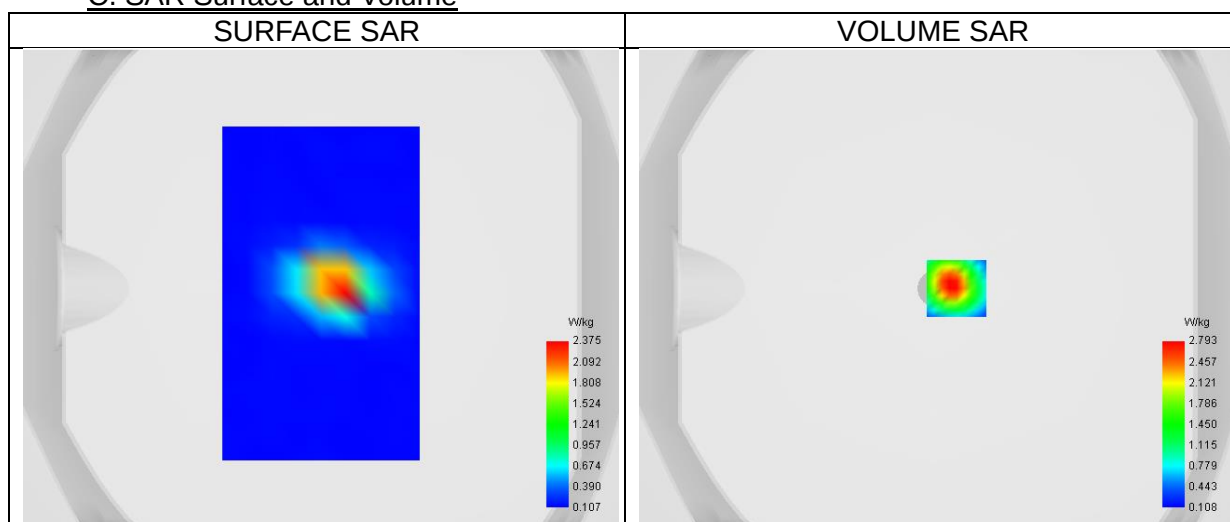
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.37
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	9x9x16,dx=3mm dy=3mm dz=1.5mm,Complete
Phantom	Validation plane
Device Position	Body
Band	CW5200
Channels/Frequency	Middle
Signal	CW

B. Permittivity

Middle TX Frequency (MHz)	5200.000
Relative permittivity (real part)	37.29
Relative permittivity (imaginary part)	15.77
Conductivity (S/m)	4.56

C. SAR Surface and Volume



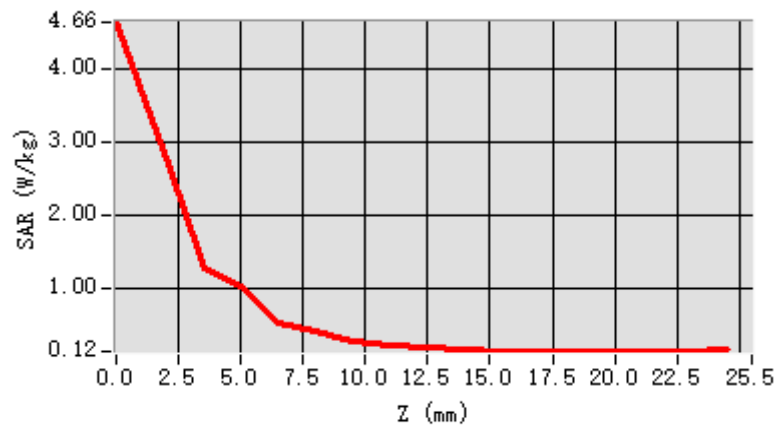
Maximum location: X=8.00, Y=0.00 ; SAR Peak: 5.11 W/kg

D. SAR 1g & 10g

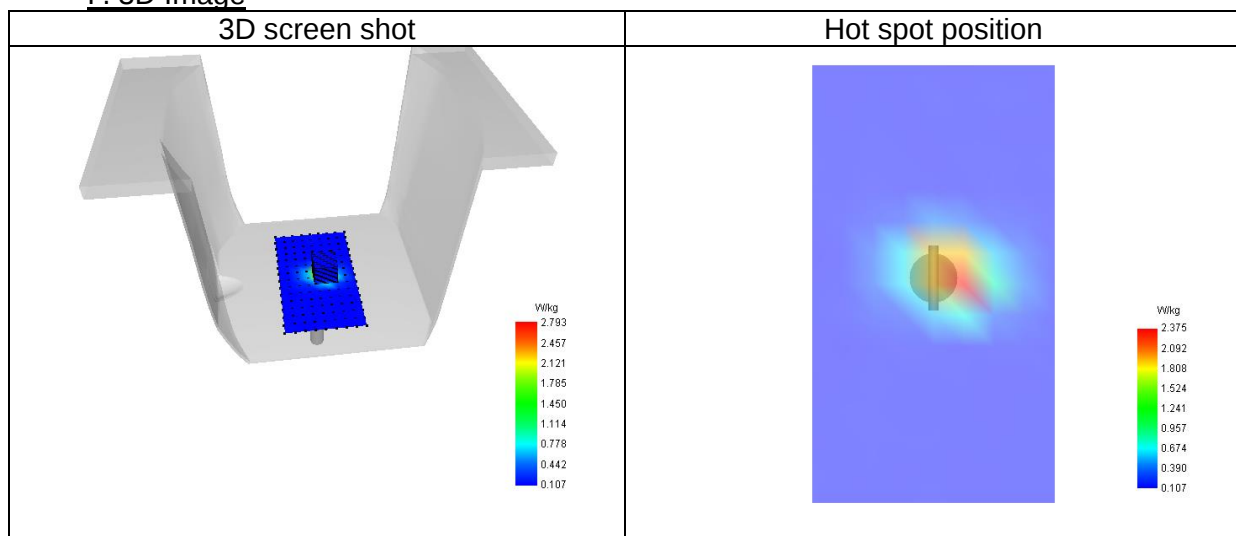
SAR 10g (W/Kg)	0.608
SAR 1g (W/Kg)	1.650
Variation (%)	-0.59
Horizontal validation criteria: minimum distance (mm)	9.49
Vertical validation criteria: SAR ratio M2/M1 (%)	58.25

E. Z Axis Scan

Z (mm)	0.0	2.0	3.5	5.0	6.5	8.0	9.5	11.	12.	14.	15.	17.	18.	20.	21.	23.
	0	0	0	0	0	0	0	00	50	00	50	00	50	00	50	00
SAR (W/Kg)	4.6	2.7	1.2	1.0	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	56	93	57	04	04	05	51	20	66	50	36	31	22	23	30	32



F. 3D Image



8# System check at 5400 MHz
Date of measurement: 11/7/2025

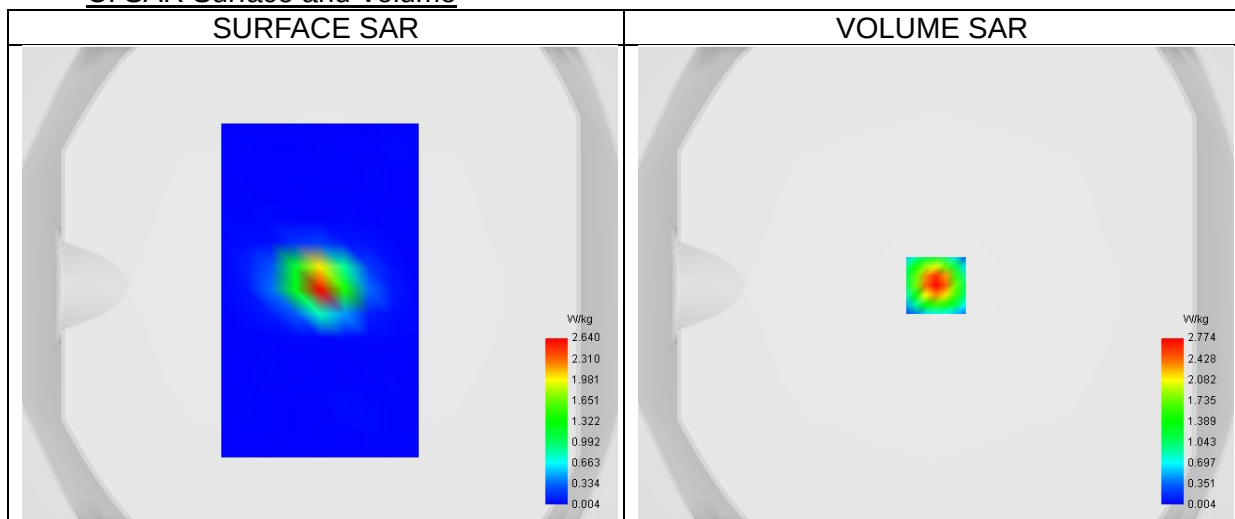
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.37
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW5400
Signal	CW
Channels/Frequency	Middle

B. Permittivity

Middle TX Frequency (MHz)	5400.00
Relative permittivity (real part)	35.20
Relative permittivity (imaginary part)	16.47
Conductivity (S/m)	4.94

C. SAR Surface and Volume



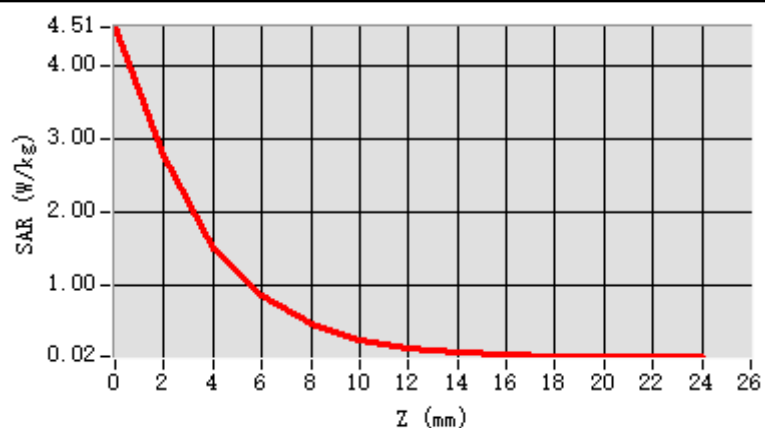
Maximum location: X=0.00, Y=0.00 ; SAR Peak: 4.80 W/kg

D. SAR 1g & 10g

SAR 10g (W/Kg)	0.538
SAR 1g (W/Kg)	1.593
Variation (%)	0.20
Horizontal validation criteria: minimum distance (mm)	11.31
Vertical validation criteria: SAR ratio M2/M1 (%)	54.04

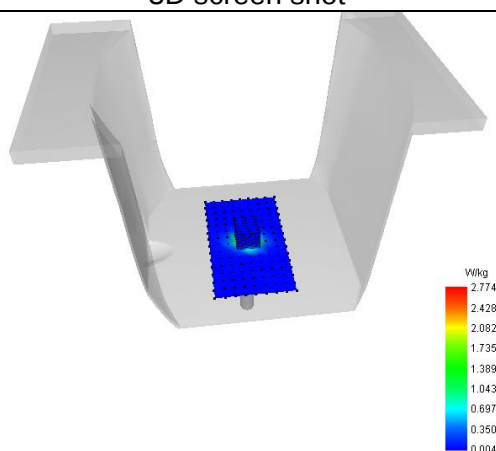
E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	4.51	2.77	1.49	0.84	0.45	0.22	0.12	0.06	0.04	0.02	0.02	0.01
	4	4	9	0	7	9	9	7	3	9	9	8

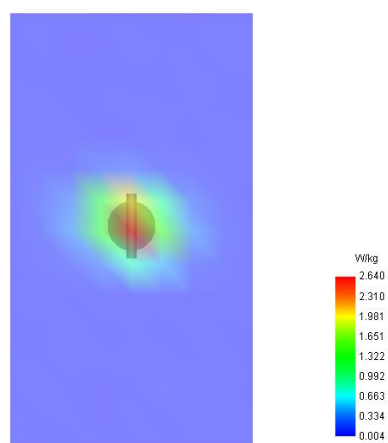


F. 3D Image

3D screen shot



Hot spot position



9# System check at 5800 MHz
Date of measurement: 12/7/2025

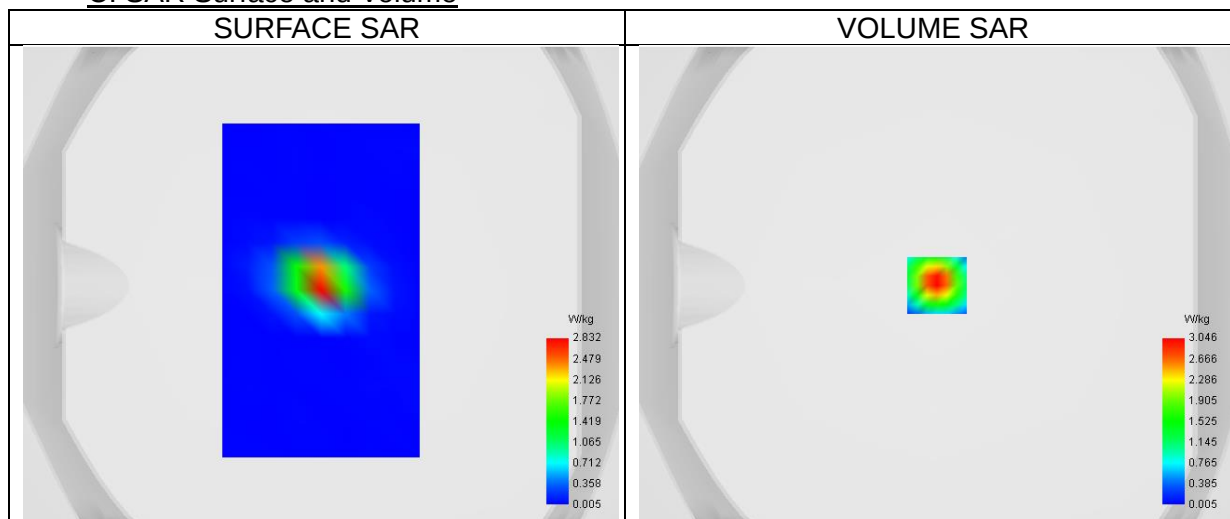
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.35
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Dipole
Band	CW5800
Signal	CW
Channels/Frequency	Middle

B. Permittivity

Middle TX Frequency (MHz)	5800.00
Relative permittivity (real part)	35.90
Relative permittivity (imaginary part)	15.84
Conductivity (S/m)	5.10

C. SAR Surface and Volume



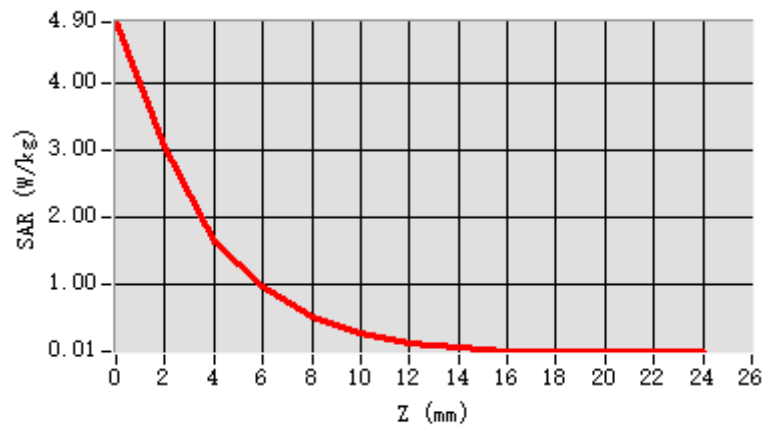
Maximum location: X=0.00, Y=0.00 ; SAR Peak: 5.35 W/kg

D. SAR 1g & 10g

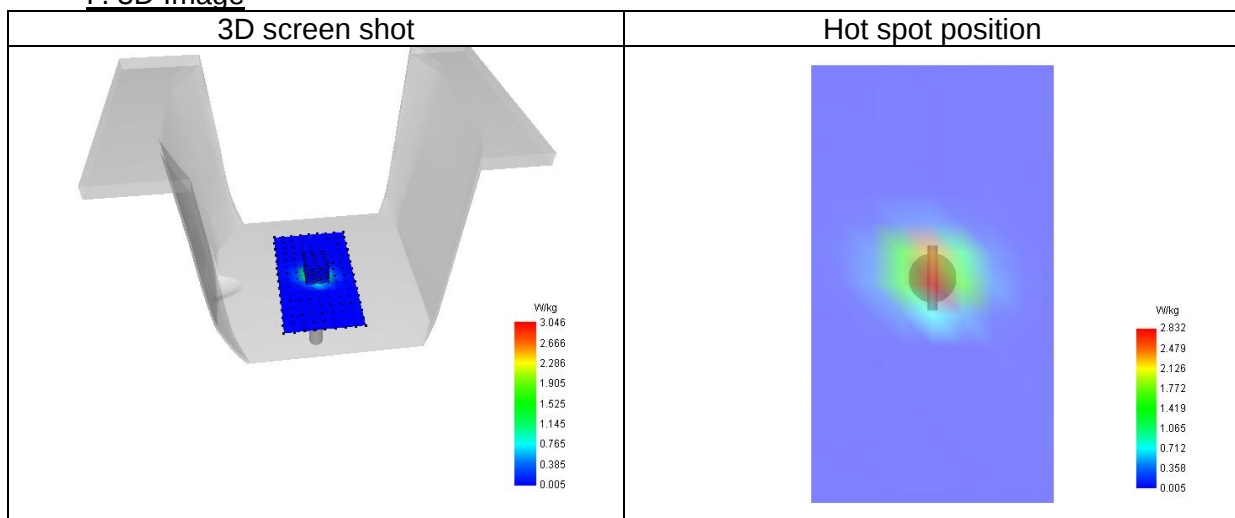
SAR 10g (W/Kg)	0.598
SAR 1g (W/Kg)	1.790
Variation (%)	-0.20
Horizontal validation criteria: minimum distance (mm)	8.94
Vertical validation criteria: SAR ratio M2/M1 (%)	54.31

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	4.89	3.04	1.65	0.96	0.52	0.27	0.13	0.07	0.01	0.01	0.01	0.01
	5	6	4	2	7	6	6	5	7	9	2	3



F. 3D Image



4. Appendix C. Plots of High SAR Measurement

Table of contents
1# SAR Measurement at GPRS850 (Body, Validation Plane)
2# SAR Measurement at GPRS1900 (Body, Validation Plane)
3# SAR Measurement at Band 2 (1900) (Body, Validation Plane)
4# SAR Measurement at Band 4 (1700) (Body, Validation Plane)
5# SAR Measurement at Band 5 (850) (Body, Validation Plane)
6# SAR Measurement at U-NII-1 (Body, Validation Plane)
7# SAR Measurement at U-NII-1 (Body, Validation Plane)
8# SAR Measurement at U-NII-1 (Body, Validation Plane)
9# SAR Measurement at U-NII-2a (Body, Validation Plane)
10# SAR Measurement at U-NII-2a (Body, Validation Plane)
11# SAR Measurement at U-NII-2a (Body, Validation Plane)
12# SAR Measurement at U-NII-3 (Body, Validation Plane)
13# SAR Measurement at U-NII-3 (Body, Validation Plane)
14# SAR Measurement at U-NII-3 (Body, Validation Plane)
15# SAR Measurement at ISM (Body, Validation Plane)
16# SAR Measurement at ISM (Body, Validation Plane)
17# SAR Measurement at ISM (Body, Validation Plane)
18# SAR Measurement at LTE band 2 (Body, Validation Plane)
19# SAR Measurement at LTE band 4 (Body, Validation Plane)
20# SAR Measurement at LTE band 5 (Body, Validation Plane)
21# SAR Measurement at LTE band 12 (Body, Validation Plane)
22# SAR Measurement at LTE band 17 (Body, Validation Plane)
23# SAR Measurement at LTE band 41 (Body, Validation Plane)
24# SAR Measurement at LTE band 66 (Body, Validation Plane)

1# SAR Measurement at GPRS850 (Body, Validation Plane)

Date of measurement: 27/6/2025

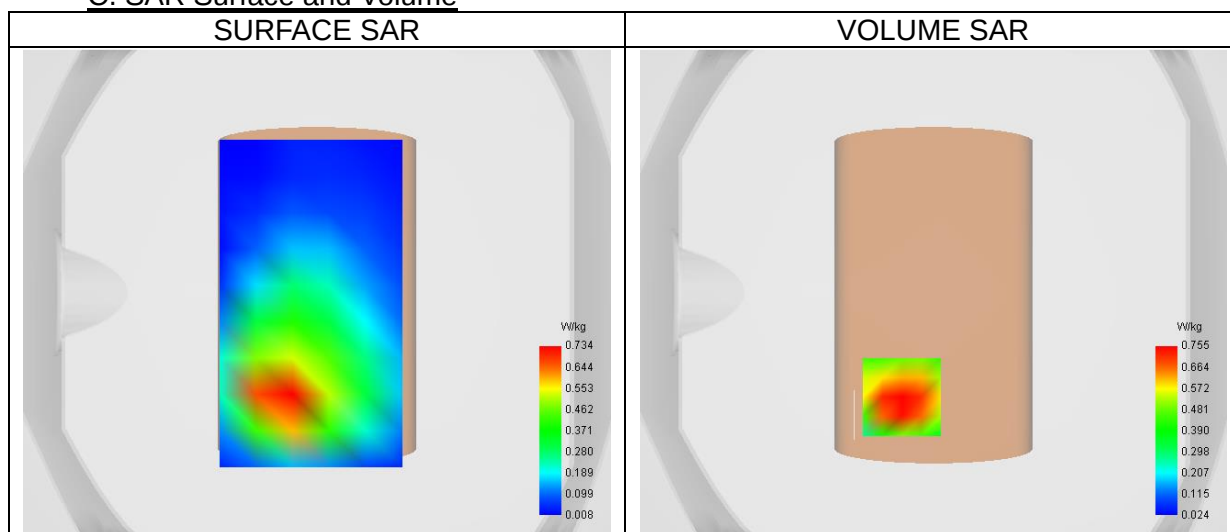
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.32
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Signal	TDMA (GPRS)
Channels/Frequency	Middle (189)/ frequency 836.40 Mhz

B. Permittivity

Middle TX Frequency (MHz)	836.40
Relative permittivity (real part)	41.94
Relative permittivity (imaginary part)	19.80
Conductivity (S/m)	0.92

C. SAR Surface and Volume



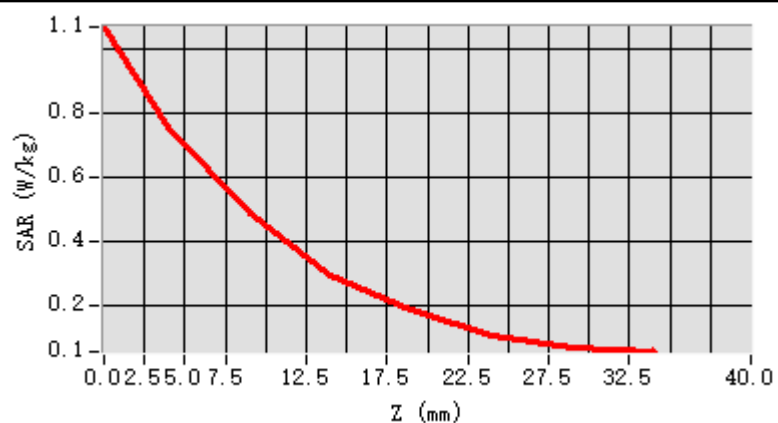
Maximum location: X=-13.00, Y=-43.00 ; SAR Peak: 1.18 W/kg

D. SAR 1g & 10g

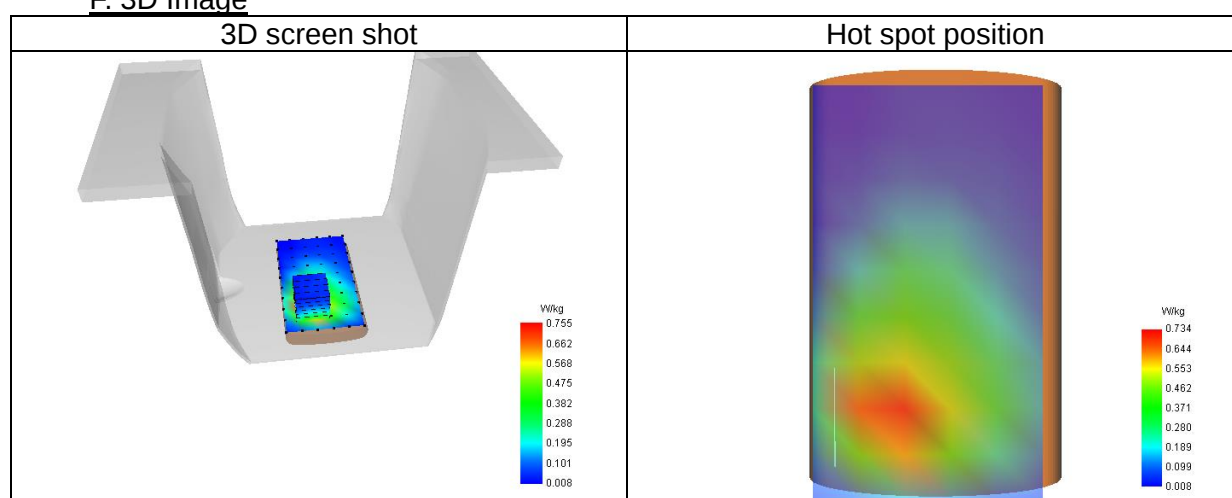
SAR 10g (W/Kg)	0.433
SAR 1g (W/Kg)	0.756
Variation (%)	0.14
Horizontal validation criteria: minimum distance (mm)	22.63
Vertical validation criteria: SAR ratio M2/M1 (%)	64.26

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.065	0.755	0.485	0.296	0.188	0.109	0.069



F. 3D Image



2# SAR Measurement at GPRS1900 (Body, Validation Plane)

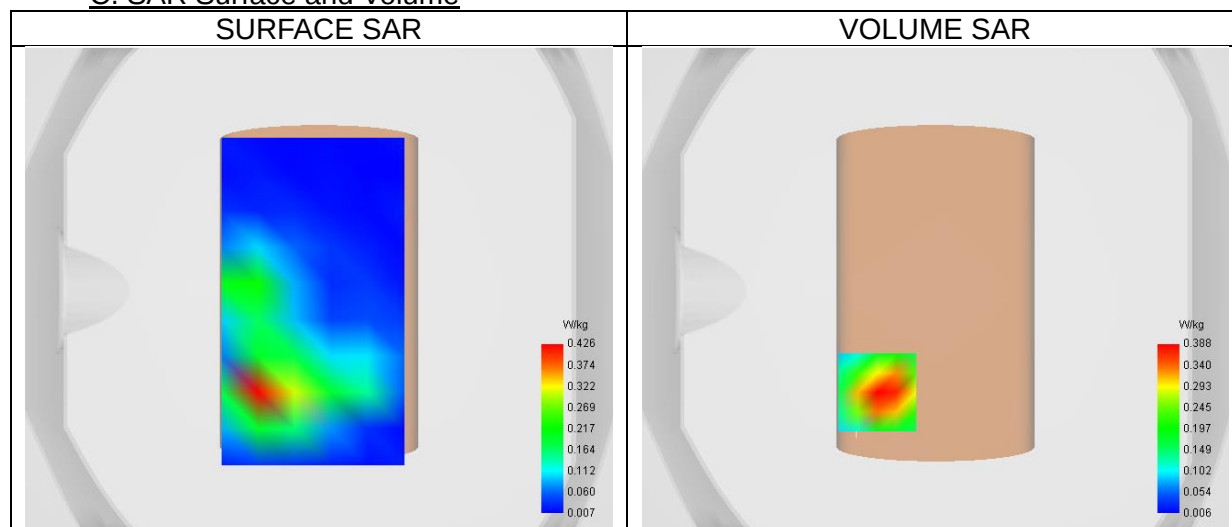
Date of measurement: 29/6/2025

A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.58
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7, dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Signal	TDMA (GPRS)
Channels/Frequency	Middle (661)/ frequency 1880.00 Mhz
Modulation	GMSK (CS-4)
TX-slots	4

B. Permittivity

Middle TX Frequency (MHz)	1880.00
Relative permittivity (real part)	38.29
Relative permittivity (imaginary part)	13.60
Conductivity (S/m)	1.42

C. SAR Surface and Volume

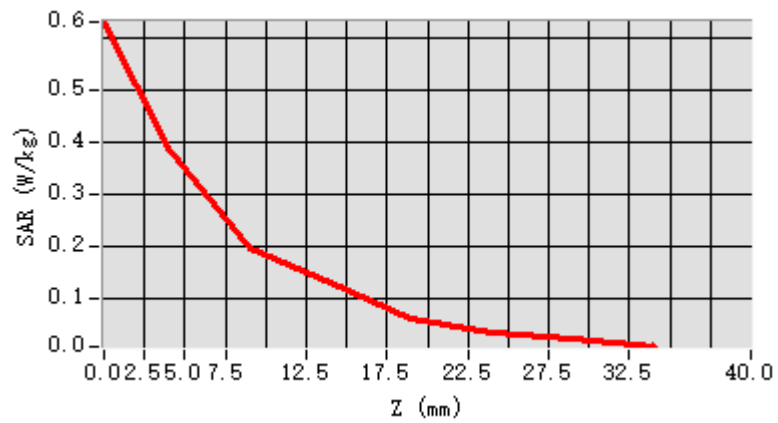
Maximum location: X=-24.00, Y=-42.00 ; SAR Peak: 0.64 W/kg

D. SAR 1g & 10g

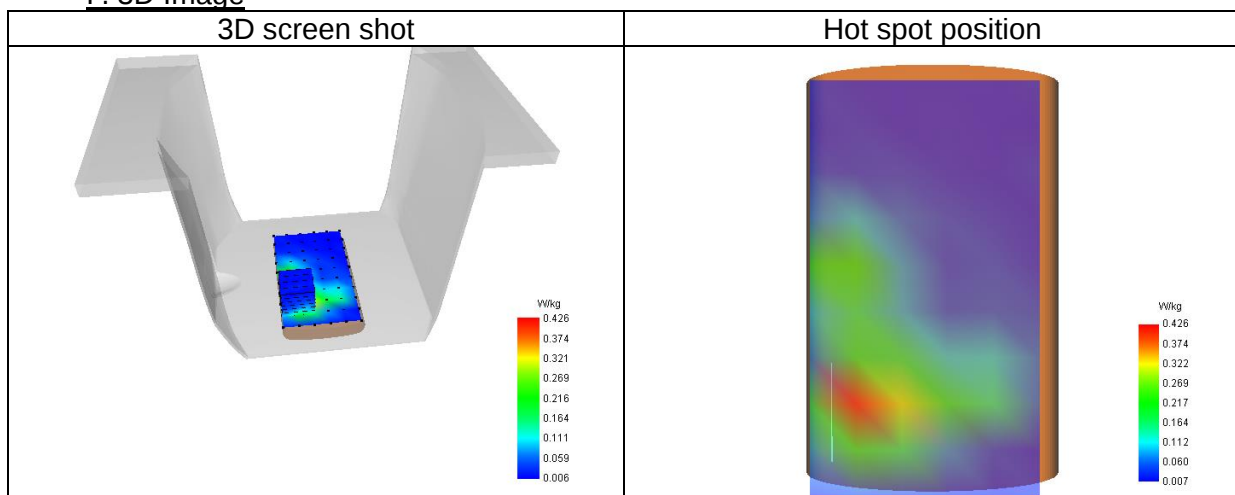
SAR 10g (W/Kg)	0.195
SAR 1g (W/Kg)	0.382
Variation (%)	-4.83
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	58.10

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.629	0.388	0.198	0.132	0.063	0.038	0.025



F. 3D Image



3# SAR Measurement at Band 2 (1900) (Body, Validation Plane)

Date of measurement: 29/6/2025

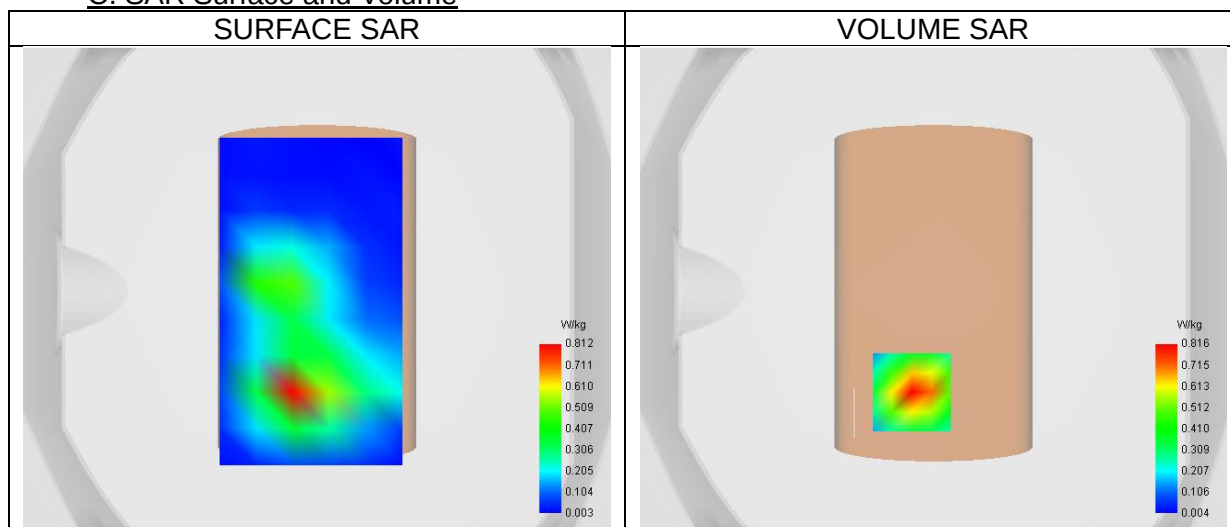
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.58
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	Band 2 (1900)
Signal	WCDMA
Channels/Frequency	Middle (9400)/ frequency 1880.00 Mhz
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	1880.00
Relative permittivity (real part)	38.29
Relative permittivity (imaginary part)	13.60
Conductivity (S/m)	1.42

C. SAR Surface and Volume



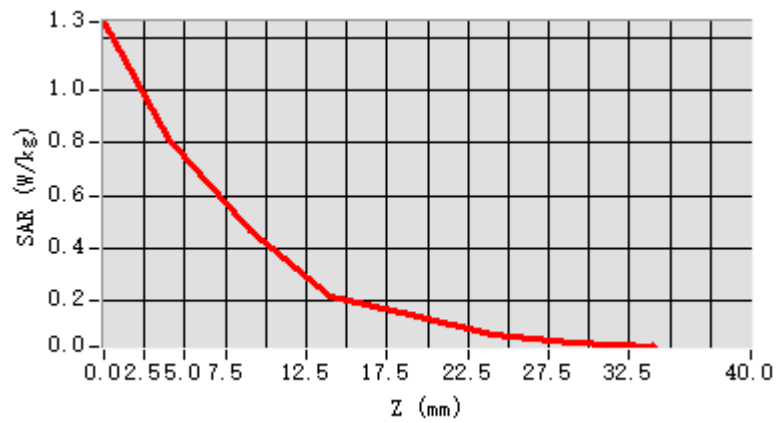
Maximum location: X=-9.00, Y=-42.00 ; SAR Peak: 1.27 W/kg

D. SAR 1g & 10g

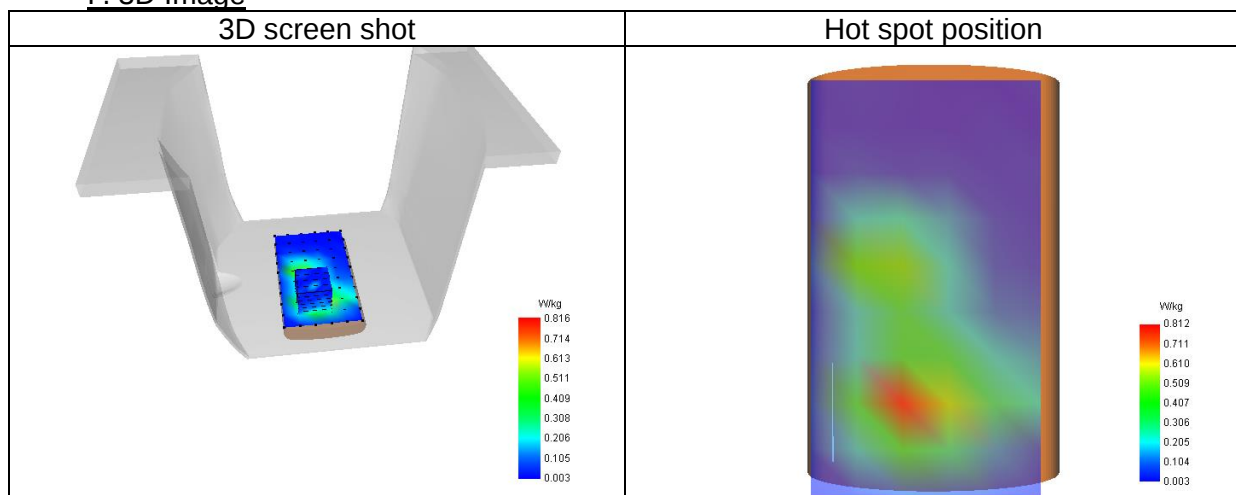
SAR 10g (W/Kg)	0.387
SAR 1g (W/Kg)	0.768
Variation (%)	-1.32
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	57.39

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.262	0.816	0.468	0.216	0.142	0.069	0.037



F. 3D Image



4# SAR Measurement at Band 4 (1700) (Body, Validation Plane)

Date of measurement: 28/6/2025

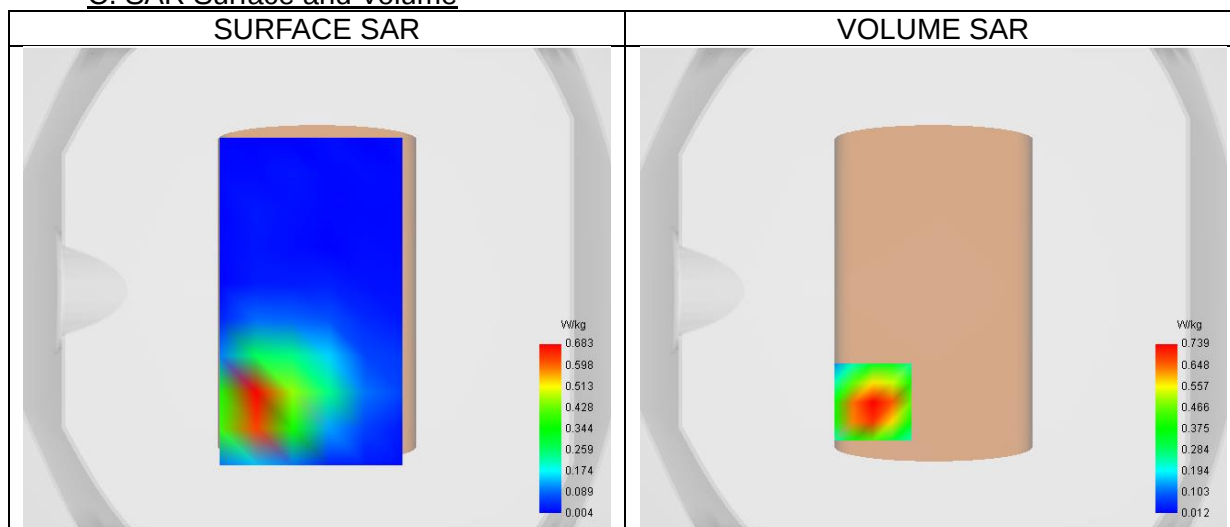
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.50
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	Band 4 (1700)
Signal	WCDMA
Channels/Frequency	Middle (1312)/ frequency 1712.40 Mhz
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	1732.60
Relative permittivity (real part)	39.47
Relative permittivity (imaginary part)	13.92
Conductivity (S/m)	1.34

C. SAR Surface and Volume



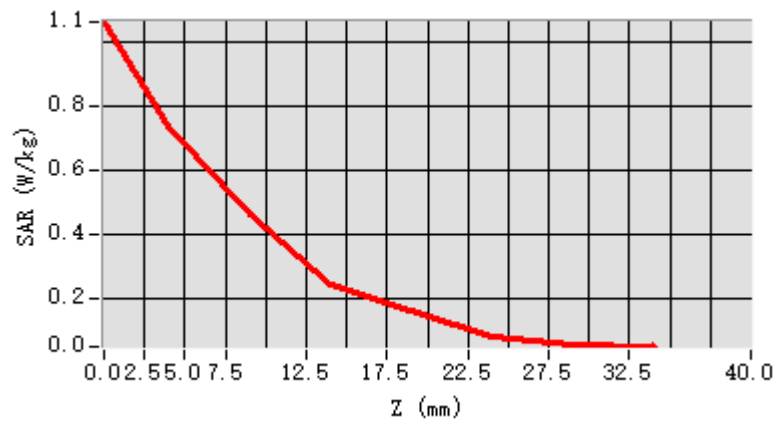
Maximum location: X=-25.00, Y=-46.00 ; SAR Peak: 1.15 W/kg

D. SAR 1g & 10g

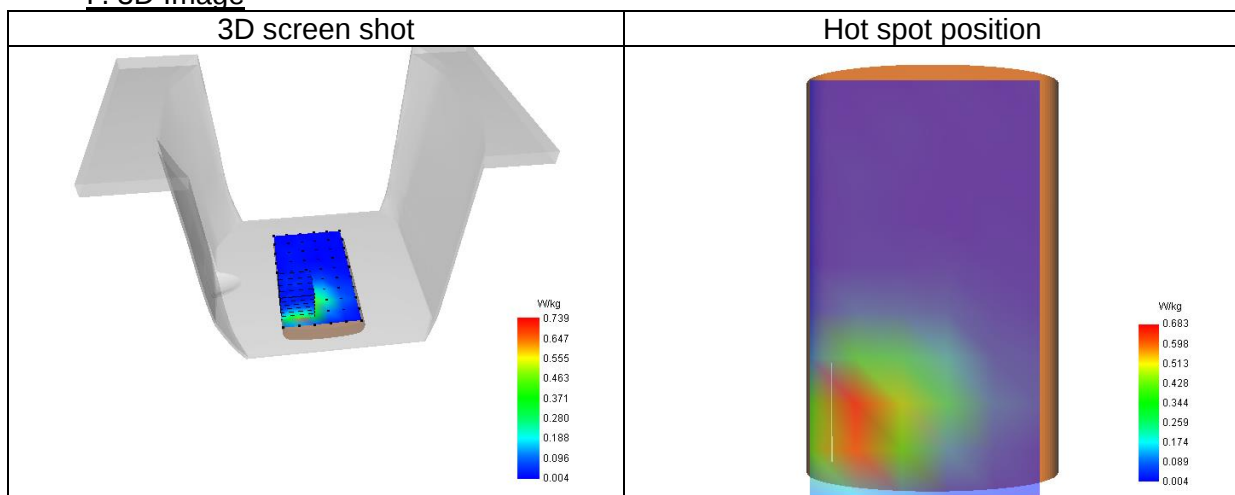
SAR 10g (W/Kg)	0.378
SAR 1g (W/Kg)	0.711
Variation (%)	1.68
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	62.59

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.061	0.739	0.462	0.244	0.163	0.083	0.058



F. 3D Image



5# SAR Measurement at Band 5 (850) (Body, Validation Plane)

Date of measurement: 27/6/2025

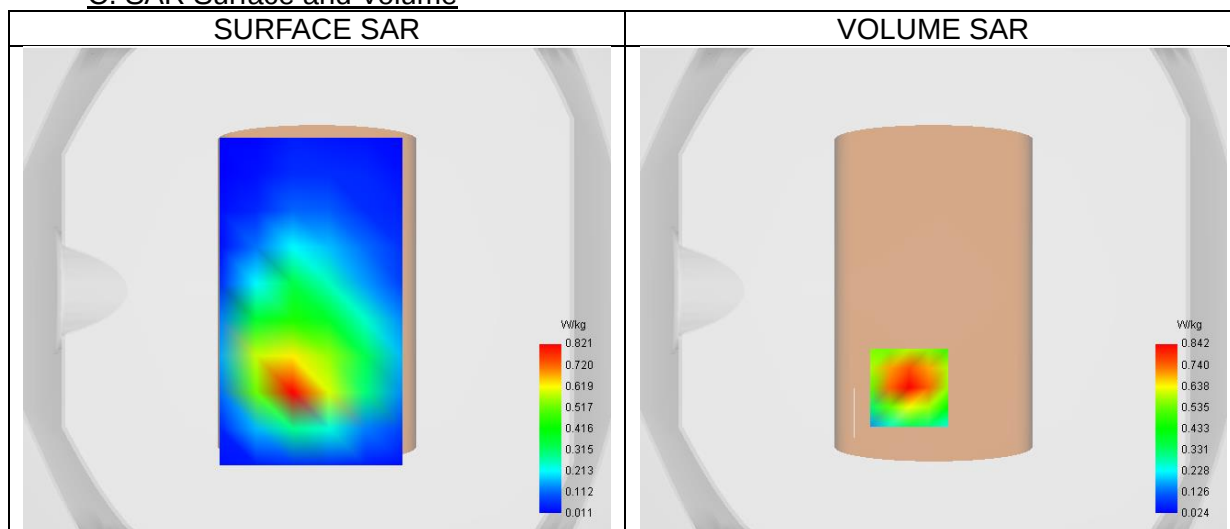
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.32
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	Band 5 (850)
Signal	WCDMA
Channels/Frequency	Middle (4182)/ frequency 836.40 Mhz
Mode	Release 99
Connection Type	RMC, 12.2 kbps

B. Permittivity

Middle TX Frequency (MHz)	836.40
Relative permittivity (real part)	41.94
Relative permittivity (imaginary part)	19.80
Conductivity (S/m)	0.92

C. SAR Surface and Volume



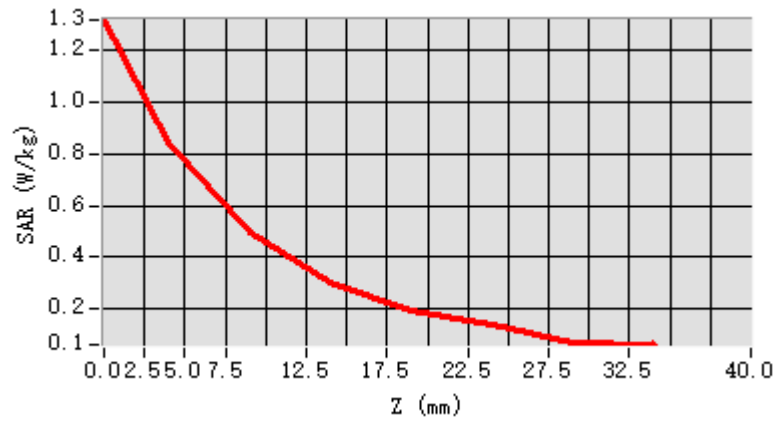
Maximum location: X=-10.00, Y=-40.00 ; SAR Peak: 1.32 W/kg

D. SAR 1g & 10g

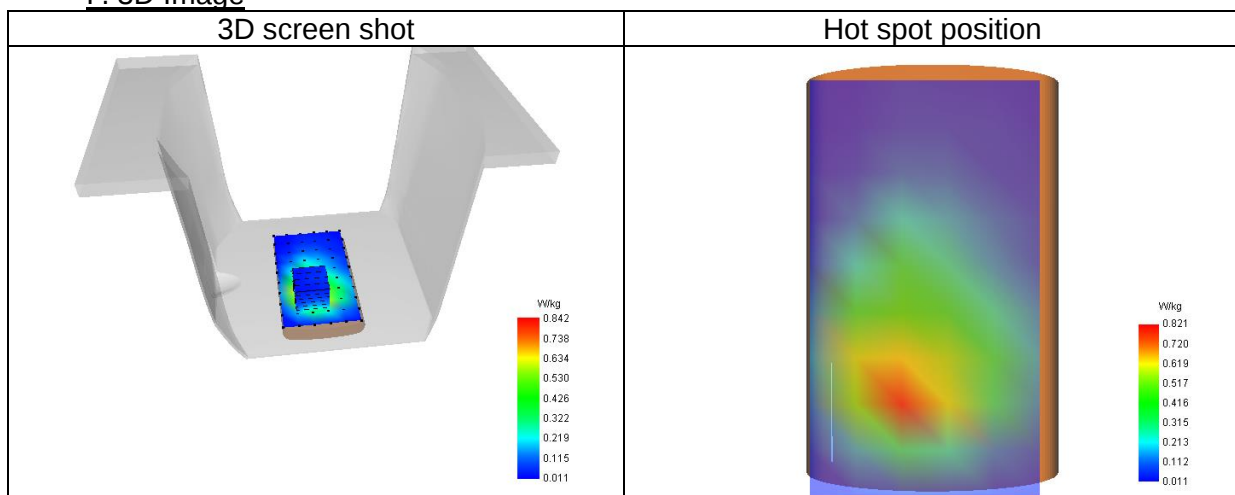
SAR 10g (W/Kg)	0.465
SAR 1g (W/Kg)	0.820
Variation (%)	-2.41
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	58.78

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.314	0.842	0.495	0.305	0.195	0.138	0.073



F. 3D Image



6# SAR Measurement at U-NII-1 (Body, Validation Plane)

Date of measurement: 10/7/2025

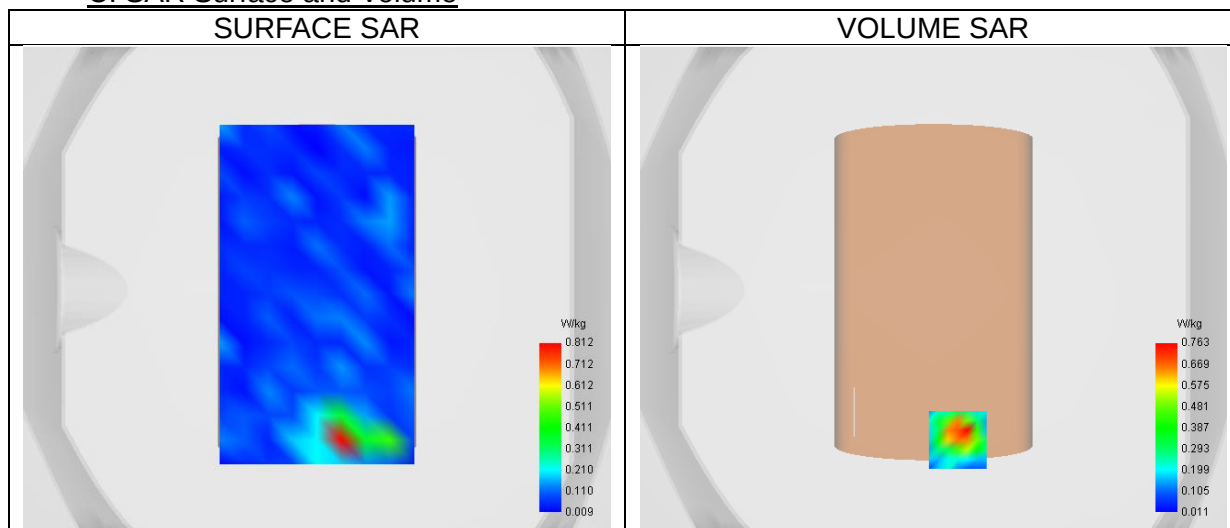
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.37
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-1
Signal	IEEE 802.11 a
Channels/Frequency	Middle (48)/ frequency 5240.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5240.00
Relative permittivity (real part)	37.12
Relative permittivity (imaginary part)	15.78
Conductivity (S/m)	4.59

C. SAR Surface and Volume



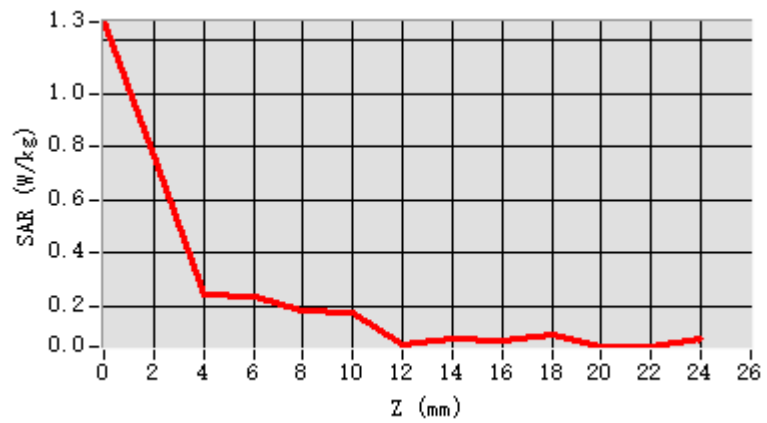
Maximum location: X=10.00, Y=-62.00 ; SAR Peak: 1.57 W/kg

D. SAR 1g & 10g

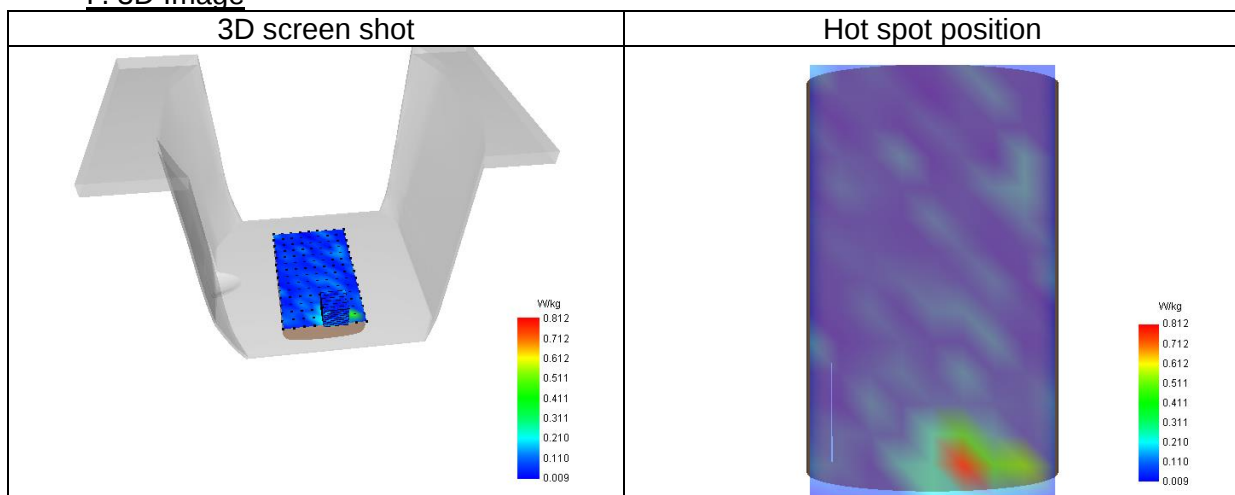
SAR 10g (W/Kg)	0.147
SAR 1g (W/Kg)	0.404
Variation (%)	4.40
Horizontal validation criteria: minimum distance (mm)	5.66
Vertical validation criteria: SAR ratio M2/M1 (%)	64.73

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	1.27	0.76	0.24	0.23	0.18	0.17	0.05	0.07	0.07	0.09	0.04	0.04
	2	3	5	2	2	7	3	6	1	4	6	7



F. 3D Image



7# SAR Measurement at U-NII-1 (Body, Validation Plane)

Date of measurement: 10/7/2025

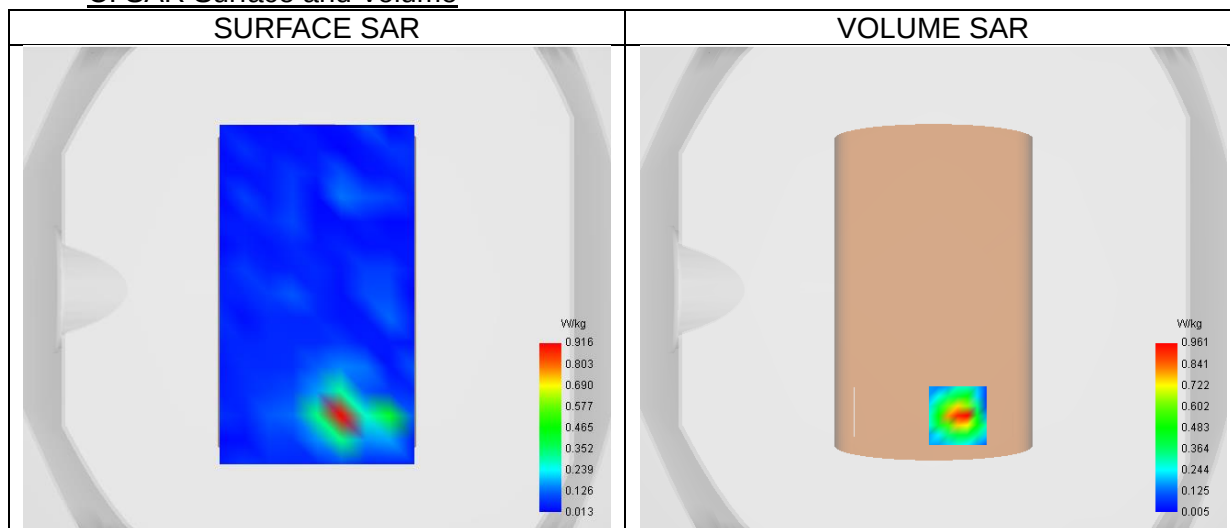
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.37
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-1
Signal	IEEE 802.11 ax
Channels/Frequency	Middle (38)/ frequency 5190.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5190.00
Relative permittivity (real part)	37.21
Relative permittivity (imaginary part)	15.58
Conductivity (S/m)	4.49

C. SAR Surface and Volume



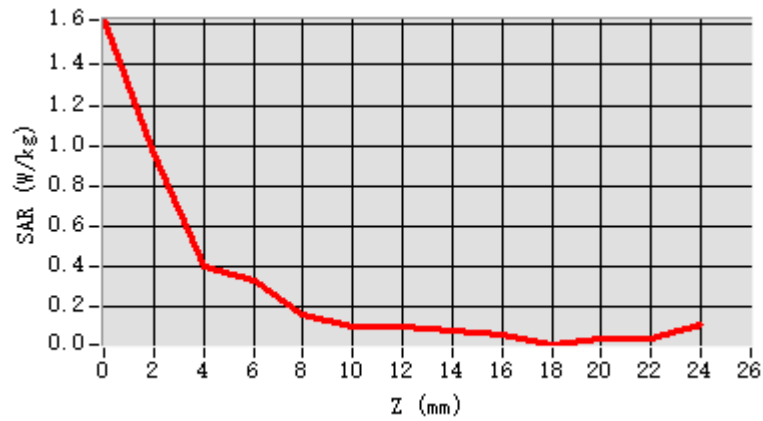
Maximum location: X=10.00, Y=-52.00 ; SAR Peak: 1.77 W/kg

D. SAR 1g & 10g

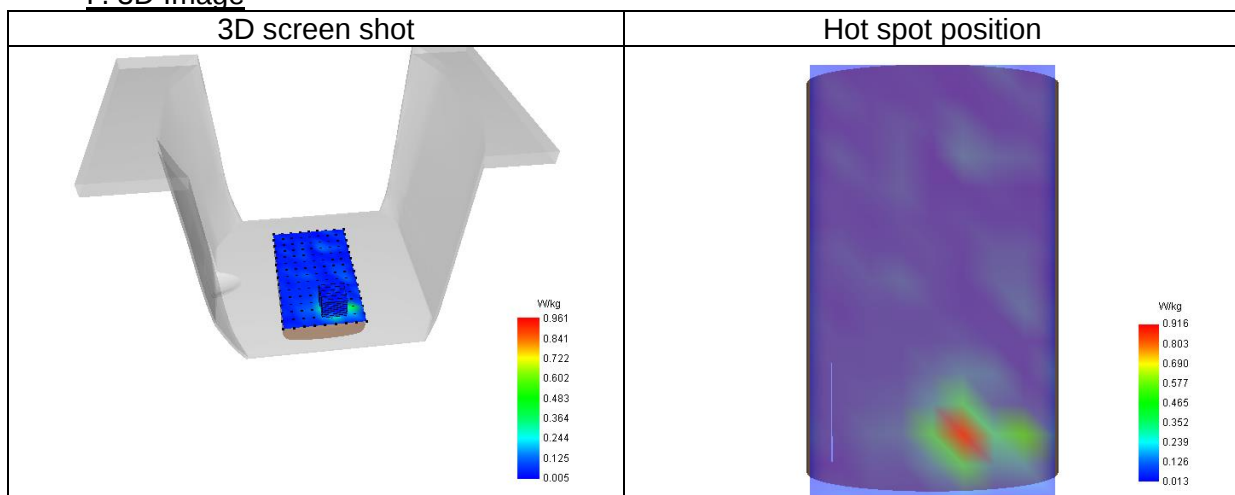
SAR 10g (W/Kg)	0.163
SAR 1g (W/Kg)	0.432
Variation (%)	-0.06
Horizontal validation criteria: minimum distance (mm)	4.00
Vertical validation criteria: SAR ratio M2/M1 (%)	53.17

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	1.62	0.96	0.39	0.33	0.16	0.10	0.10	0.08	0.05	0.01	0.04	0.04
	4	1	6	4	3	0	1	0	8	0	1	1



F. 3D Image



8# SAR Measurement at U-NII-1 (Body, Validation Plane)

Date of measurement: 10/7/2025

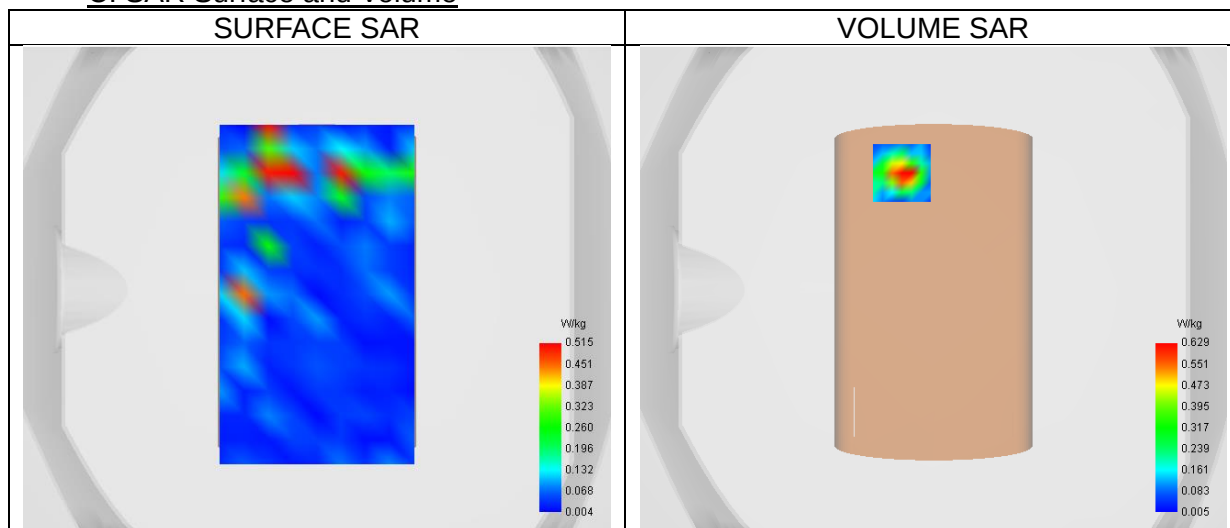
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.37
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-1
Signal	IEEE 802.11 a
Channels/Frequency	Middle (40)/ frequency 5200.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5200.00
Relative permittivity (real part)	37.29
Relative permittivity (imaginary part)	15.77
Conductivity (S/m)	4.56

C. SAR Surface and Volume



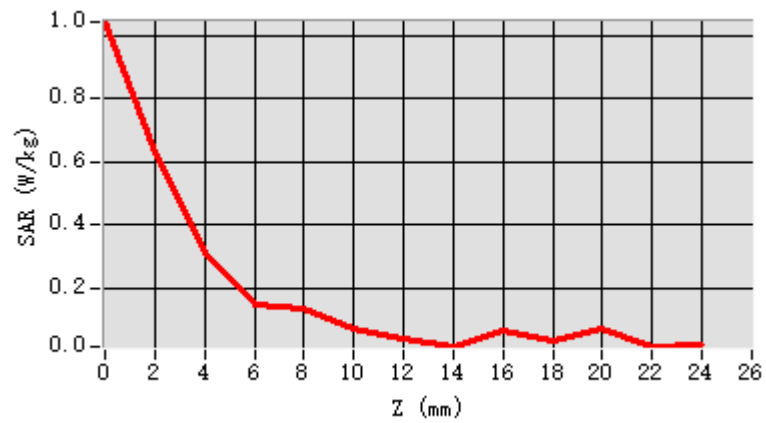
Maximum location: X=-13.00, Y=48.00 ; SAR Peak: 1.17 W/kg

D. SAR 1g & 10g

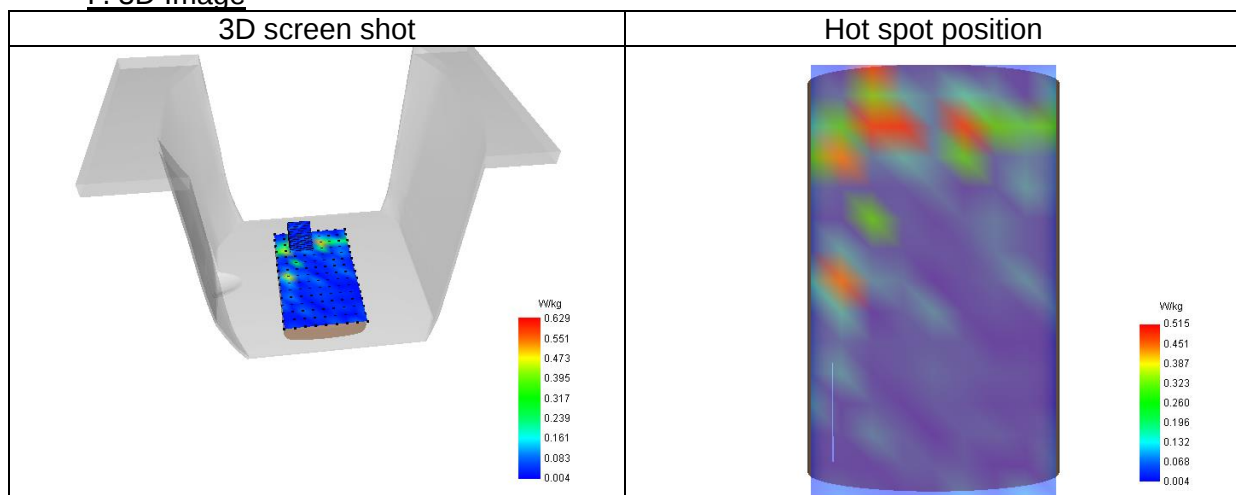
SAR 10g (W/Kg)	0.106
SAR 1g (W/Kg)	0.309
Variation (%)	-1.38
Horizontal validation criteria: minimum distance (mm)	5.66
Vertical validation criteria: SAR ratio M2/M1 (%)	64.60

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	1.04	0.62	0.31	0.14	0.13	0.07	0.04	0.01	0.06	0.03	0.07	0.01
	2	9	4	7	8	3	4	9	7	3	3	6



F. 3D Image



9# SAR Measurement at U-NII-2a (Body, Validation Plane)

Date of measurement: 11/7/2025

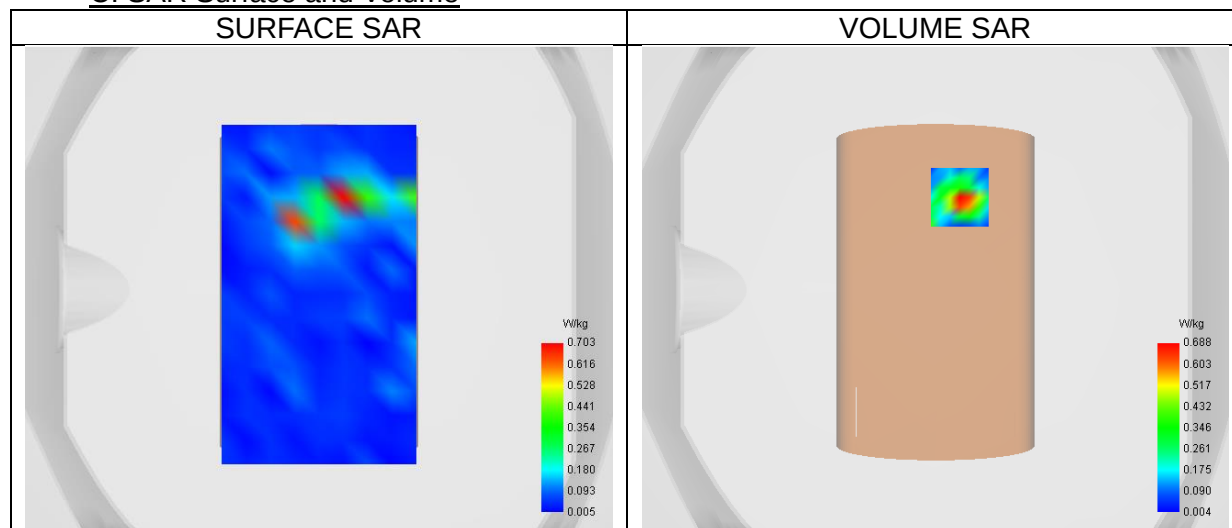
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.37
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-2a
Signal	IEEE 802.11 ax
Channels/Frequency	Middle (56)/ frequency 5280.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5280.00
Relative permittivity (real part)	35.55
Relative permittivity (imaginary part)	16.22
Conductivity (S/m)	4.76

C. SAR Surface and Volume



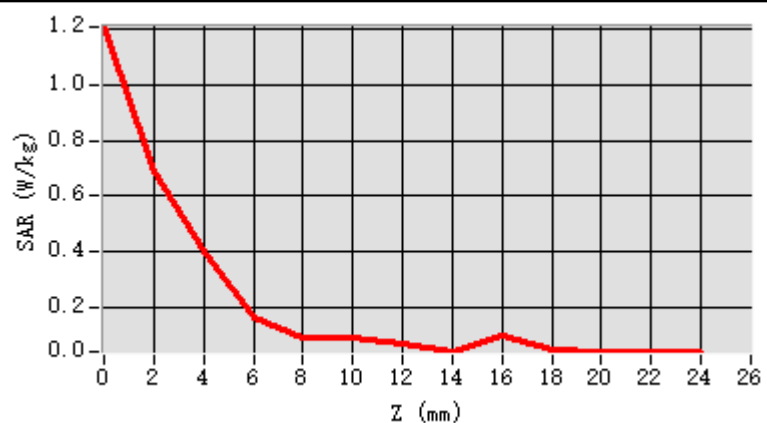
Maximum location: X=10.00, Y=38.00 ; SAR Peak: 1.48 W/kg

D. SAR 1g & 10g

SAR 10g (W/Kg)	0.114
SAR 1g (W/Kg)	0.344
Variation (%)	-2.63
Horizontal validation criteria: minimum distance (mm)	5.66
Vertical validation criteria: SAR ratio M2/M1 (%)	58.57

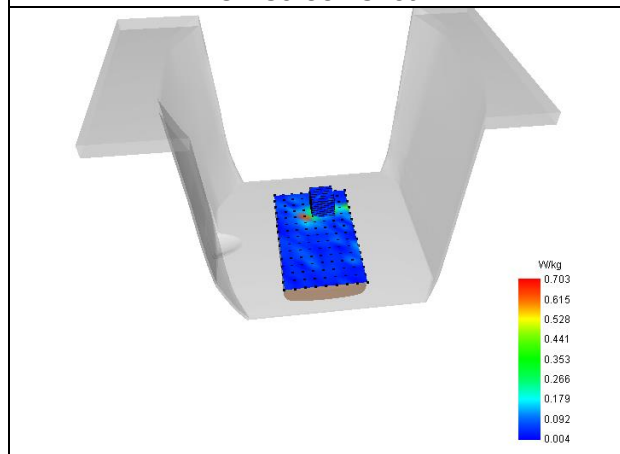
E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	1.20	0.68	0.40	0.16	0.08	0.08	0.07	0.04	0.09	0.04	0.04	0.04
	9	8	3	5	8	7	0	3	7	6	2	0

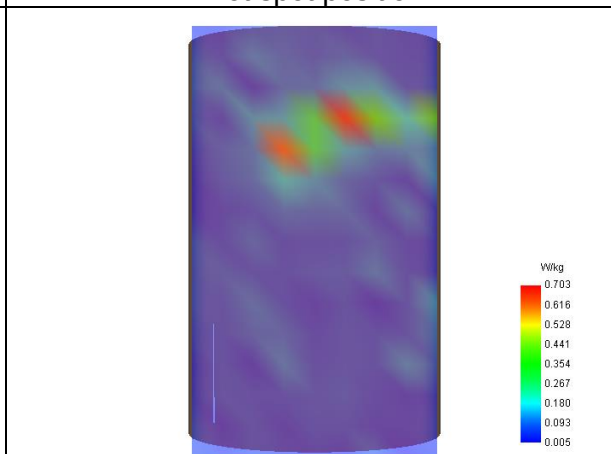


F. 3D Image

3D screen shot



Hot spot position



10# SAR Measurement at U-NII-2a (Body, Validation Plane)

Date of measurement: 11/7/2025

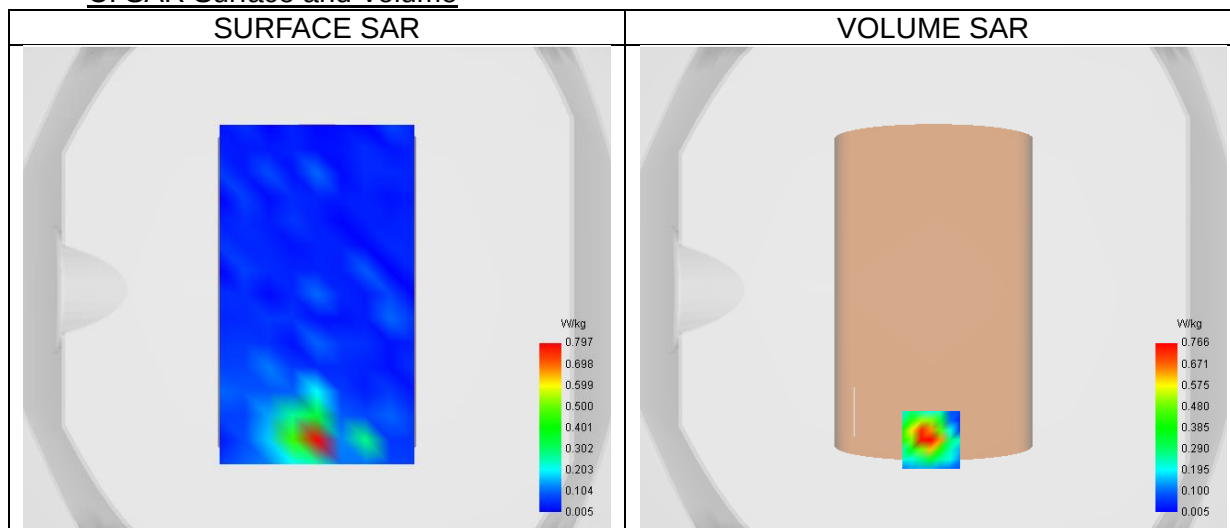
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.37
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-2a
Signal	IEEE 802.11 a
Channels/Frequency	Middle (56)/ frequency 5280.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5280.00
Relative permittivity (real part)	35.55
Relative permittivity (imaginary part)	16.22
Conductivity (S/m)	4.76

C. SAR Surface and Volume



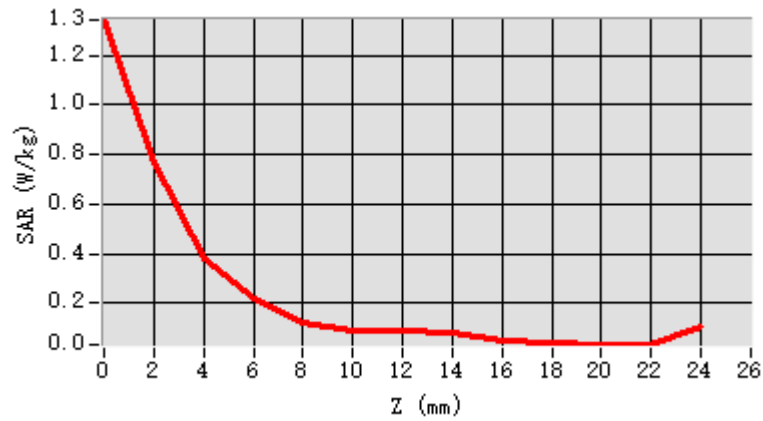
Maximum location: X=-1.00, Y=-62.00 ; SAR Peak: 1.55 W/kg

D. SAR 1g & 10g

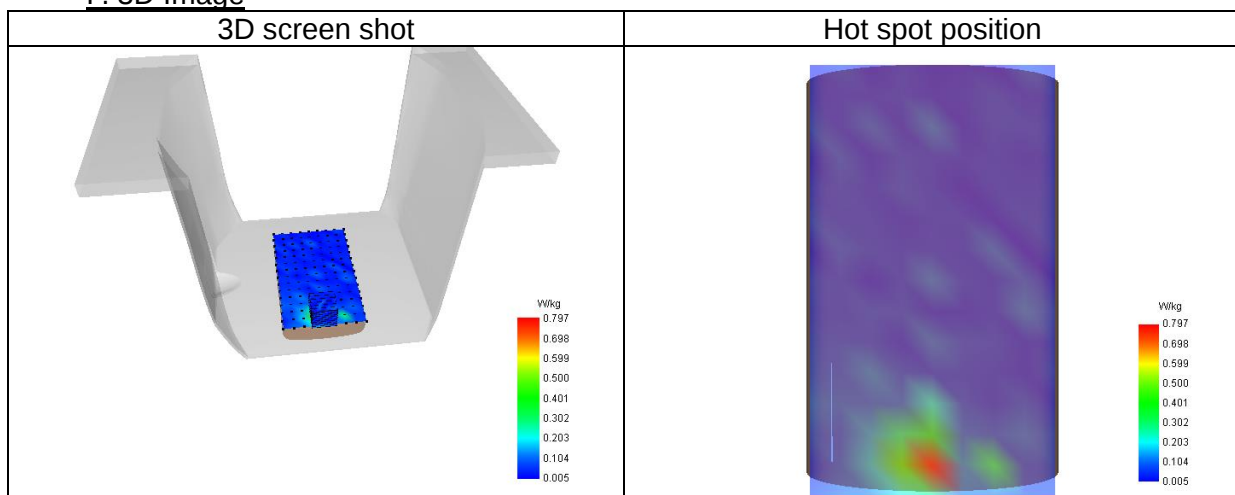
SAR 10g (W/Kg)	0.144
SAR 1g (W/Kg)	0.436
Variation (%)	2.52
Horizontal validation criteria: minimum distance (mm)	8.00
Vertical validation criteria: SAR ratio M2/M1 (%)	53.66

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	1.34	0.76	0.38	0.22	0.12	0.08	0.09	0.08	0.04	0.04	0.03	0.03
	2	6	0	1	6	8	2	2	6	4	7	4



F. 3D Image



11# SAR Measurement at U-NII-2a (Body, Validation Plane)

Date of measurement: 11/7/2025

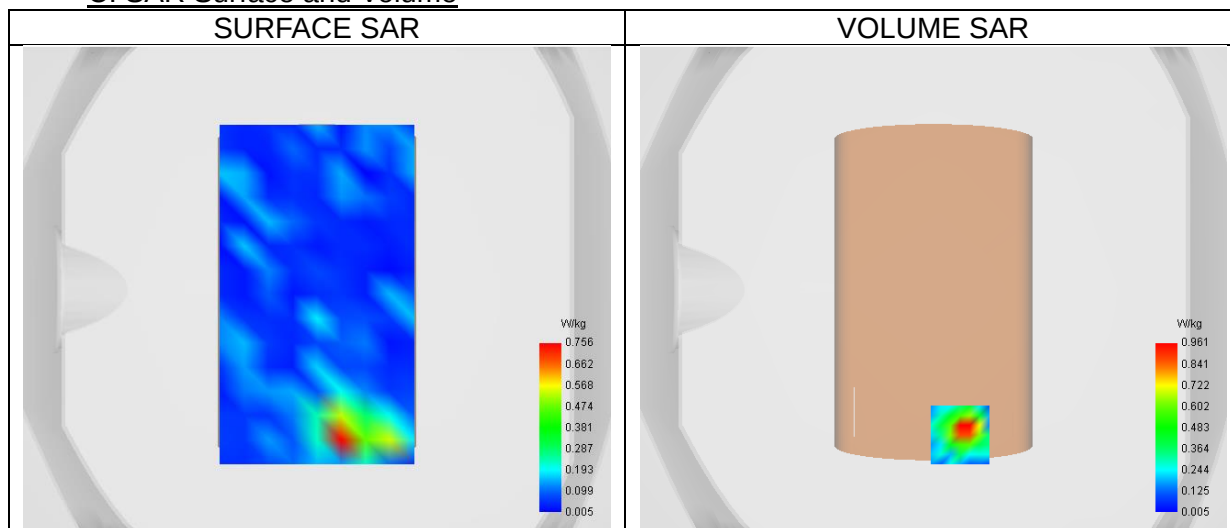
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.37
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-2a
Signal	IEEE 802.11 a
Channels/Frequency	Middle (56)/ frequency 5280.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5280.00
Relative permittivity (real part)	35.55
Relative permittivity (imaginary part)	16.22
Conductivity (S/m)	4.76

C. SAR Surface and Volume



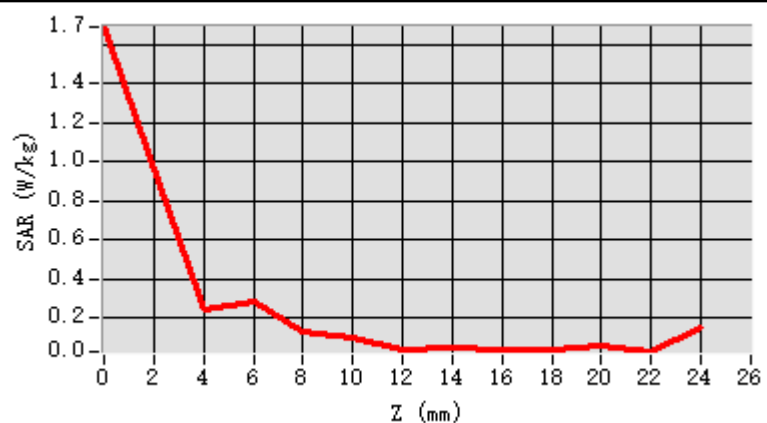
Maximum location: X=11.00, Y=-60.00 ; SAR Peak: 1.88 W/kg

D. SAR 1g & 10g

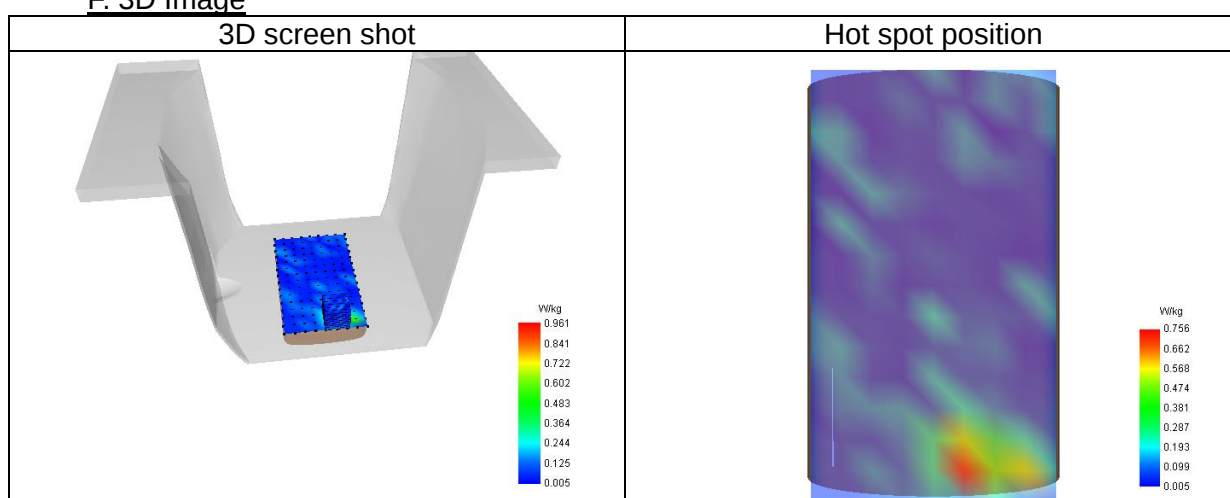
SAR 10g (W/Kg)	0.179
SAR 1g (W/Kg)	0.445
Variation (%)	-0.05
Horizontal validation criteria: minimum distance (mm)	5.66
Vertical validation criteria: SAR ratio M2/M1 (%)	60.96

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	1.68	0.96	0.23	0.28	0.12	0.09	0.03	0.04	0.03	0.04	0.05	0.02
	9	1	9	1	8	8	7	4	9	2	5	9



F. 3D Image



12# SAR Measurement at U-NII-3 (Body, Validation Plane)

Date of measurement: 12/7/2025

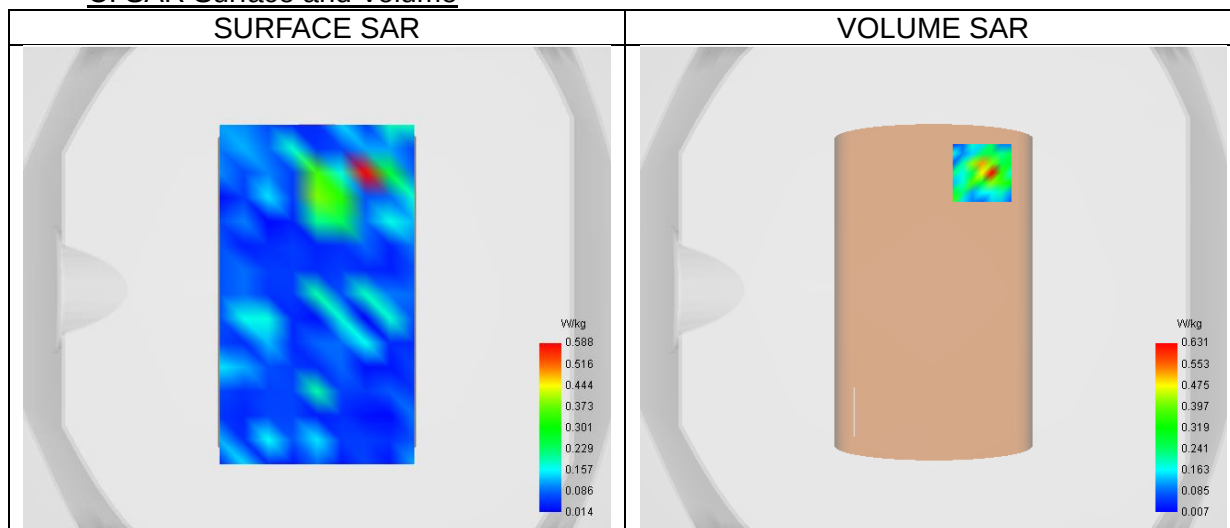
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.35
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-3
Signal	IEEE 802.11 ax
Channels/Frequency	Middle (159)/ frequency 5795.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5795.00
Relative permittivity (real part)	35.89
Relative permittivity (imaginary part)	15.88
Conductivity (S/m)	5.11

C. SAR Surface and Volume



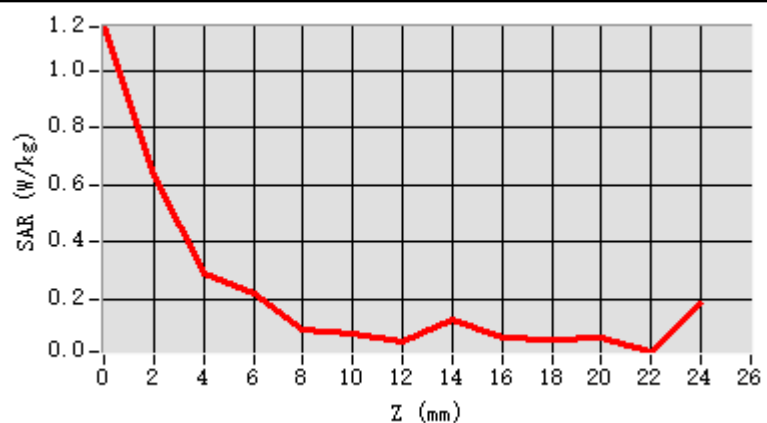
Maximum location: X=20.00, Y=48.00 ; SAR Peak: 1.44 W/kg

D. SAR 1g & 10g

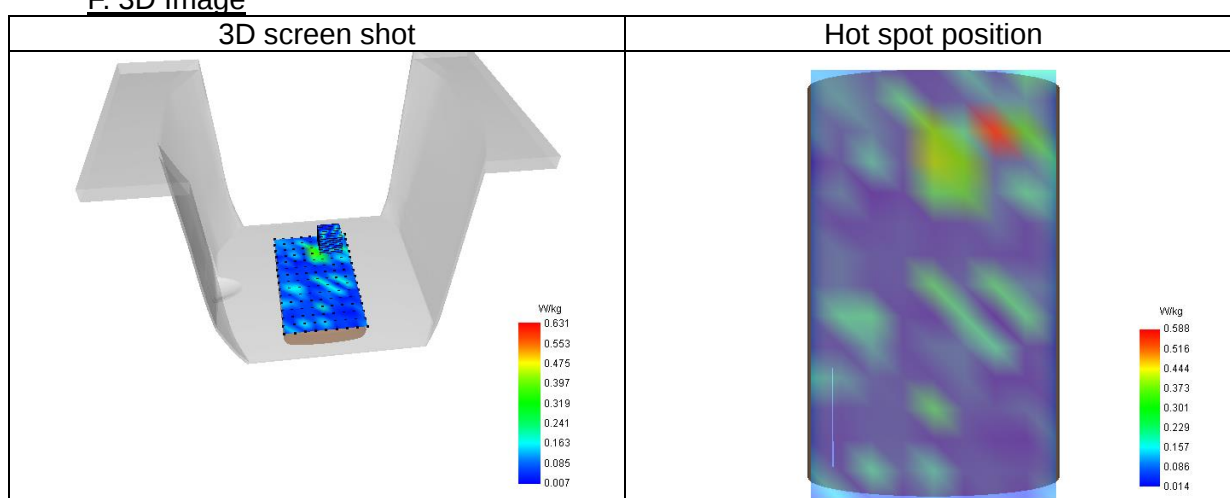
SAR 10g (W/Kg)	0.121
SAR 1g (W/Kg)	0.319
Variation (%)	-1.10
Horizontal validation criteria: minimum distance (mm)	5.66
Vertical validation criteria: SAR ratio M2/M1 (%)	52.78

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	1.15	0.63	0.28	0.21	0.09	0.07	0.05	0.12	0.06	0.05	0.06	0.01
	3	1	7	9	3	5	3	6	7	8	5	6



F. 3D Image



13# SAR Measurement at U-NII-3 (Body, Validation Plane)

Date of measurement: 12/7/2025

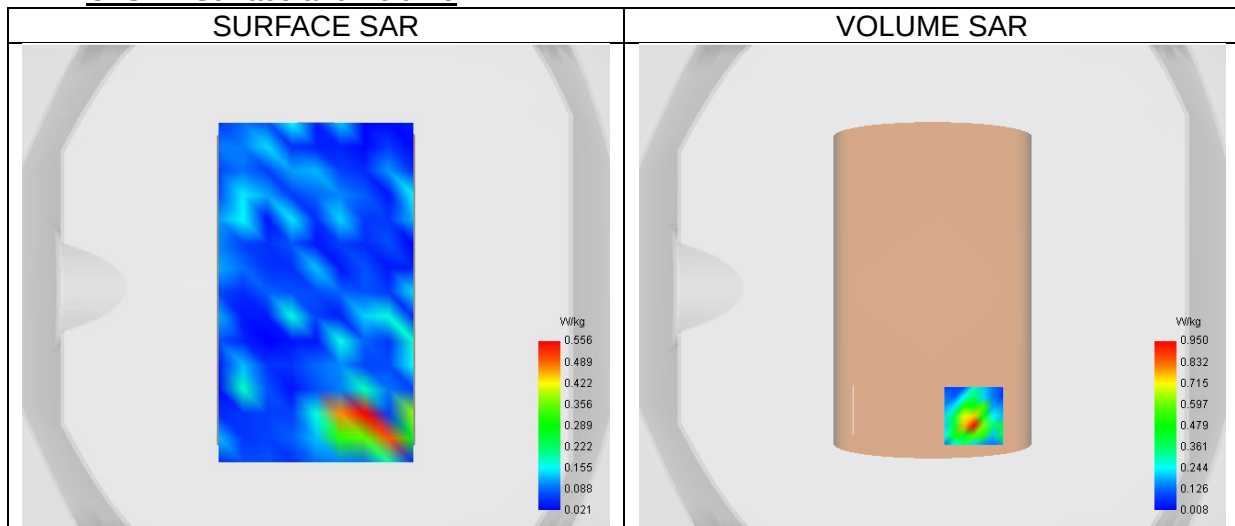
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.35
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-3
Signal	IEEE 802.11 a
Channels/Frequency	Middle (157)/ frequency 5785.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5785.00
Relative permittivity (real part)	35.97
Relative permittivity (imaginary part)	15.71
Conductivity (S/m)	5.05

C. SAR Surface and Volume



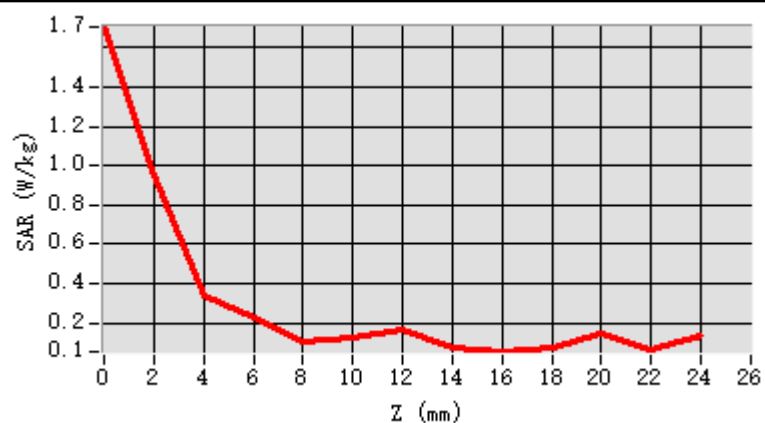
Maximum location: X=17.00, Y=-53.00 ; SAR Peak: 1.91 W/kg

D. SAR 1g & 10g

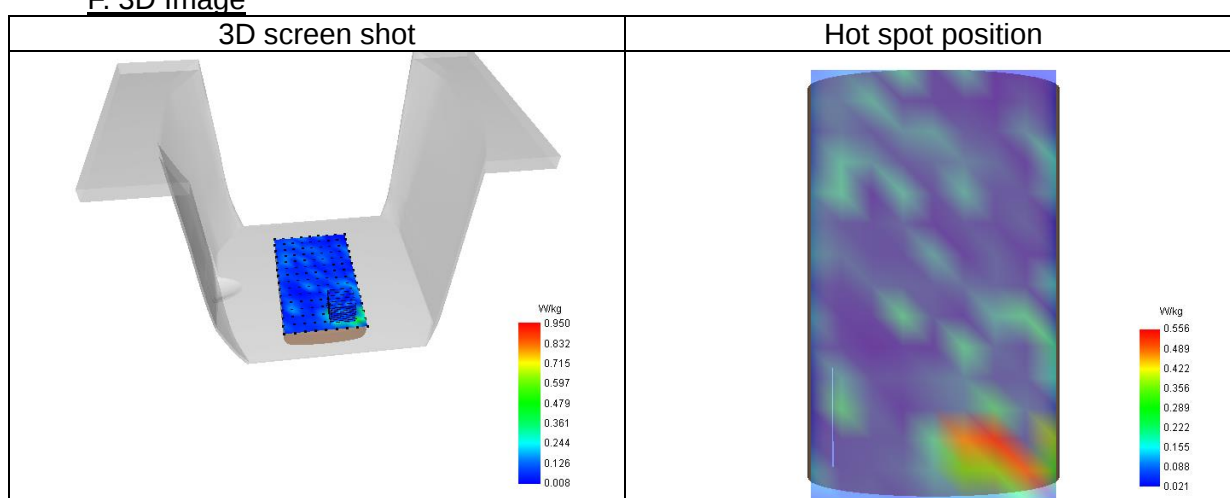
SAR 10g (W/Kg)	0.169
SAR 1g (W/Kg)	0.440
Variation (%)	1.22
Horizontal validation criteria: minimum distance (mm)	5.66
Vertical validation criteria: SAR ratio M2/M1 (%)	50.90

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	1.70	0.95	0.34	0.22	0.10	0.12	0.16	0.06	0.05	0.07	0.14	0.06
	6	0	0	5	5	2	2	9	3	8	6	6



F. 3D Image



14# SAR Measurement at U-NII-3 (Body, Validation Plane)

Date of measurement: 12/7/2025

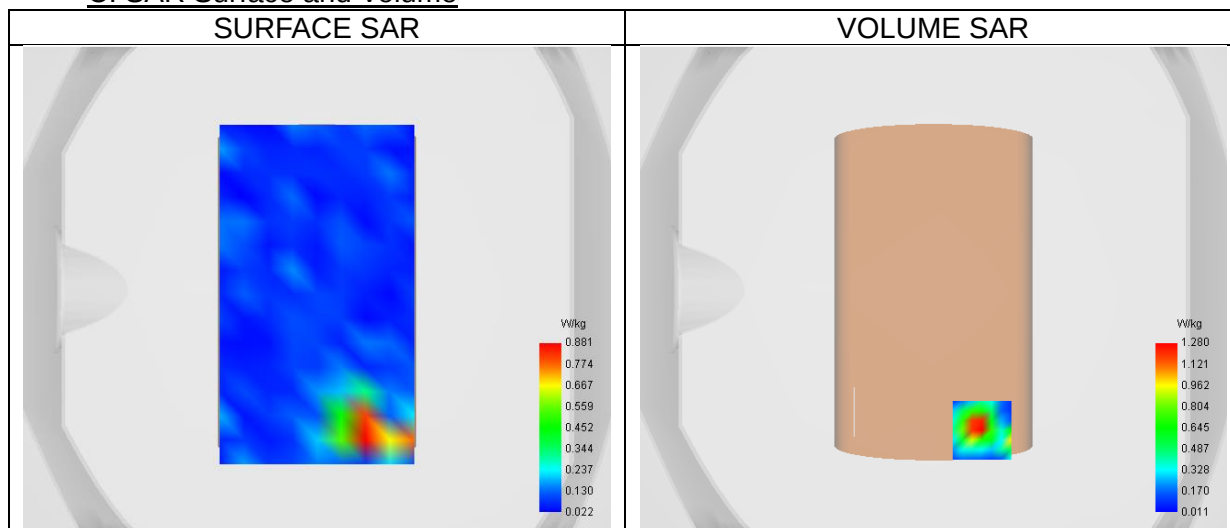
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.35
Area Scan	dx=10mm dy=10mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	U-NII-3
Signal	IEEE 802.11 ax
Channels/Frequency	Middle (157)/ frequency 5795.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	5795.00
Relative permittivity (real part)	35.89
Relative permittivity (imaginary part)	15.88
Conductivity (S/m)	5.11

C. SAR Surface and Volume



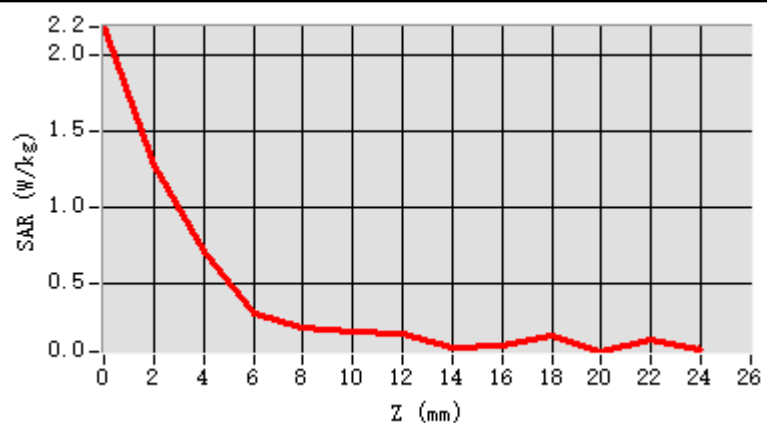
Maximum location: X=20.00, Y=-58.00 ; SAR Peak: 2.57 W/kg

D. SAR 1g & 10g

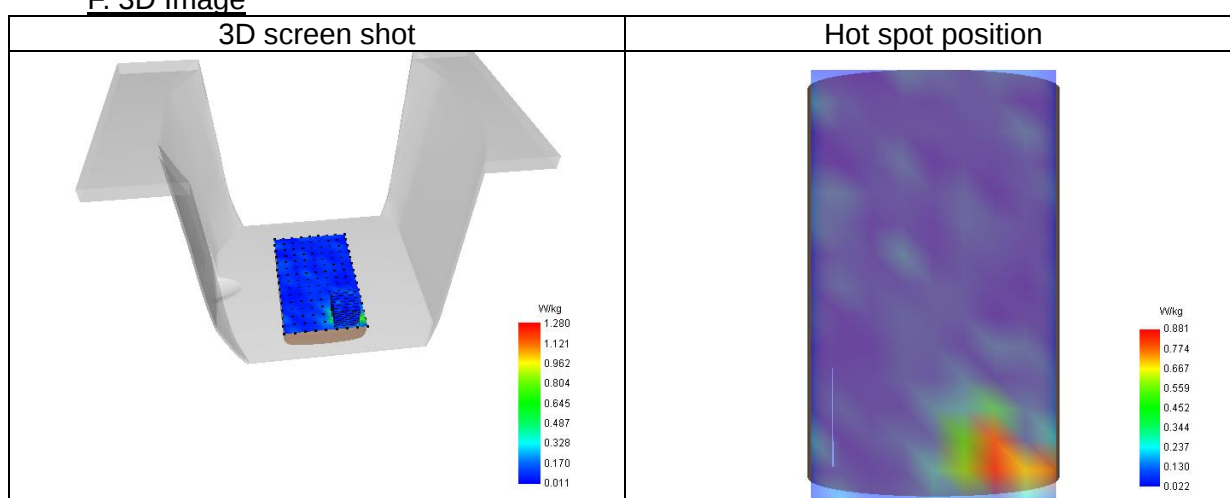
SAR 10g (W/Kg)	0.220
SAR 1g (W/Kg)	0.441
Variation (%)	-2.73
Horizontal validation criteria: minimum distance (mm)	5.66
Vertical validation criteria: SAR ratio M2/M1 (%)	55.07

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
						0	0	0	0	0	0	0
SAR (W/Kg)	2.18	1.28	0.70	0.30	0.20	0.17	0.16	0.07	0.09	0.15	0.04	0.12
	8	0	5	2	1	7	1	4	2	5	9	4



F. 3D Image



15# SAR Measurement at ISM (Body, Validation Plane)

Date of measurement: 30/6/2025

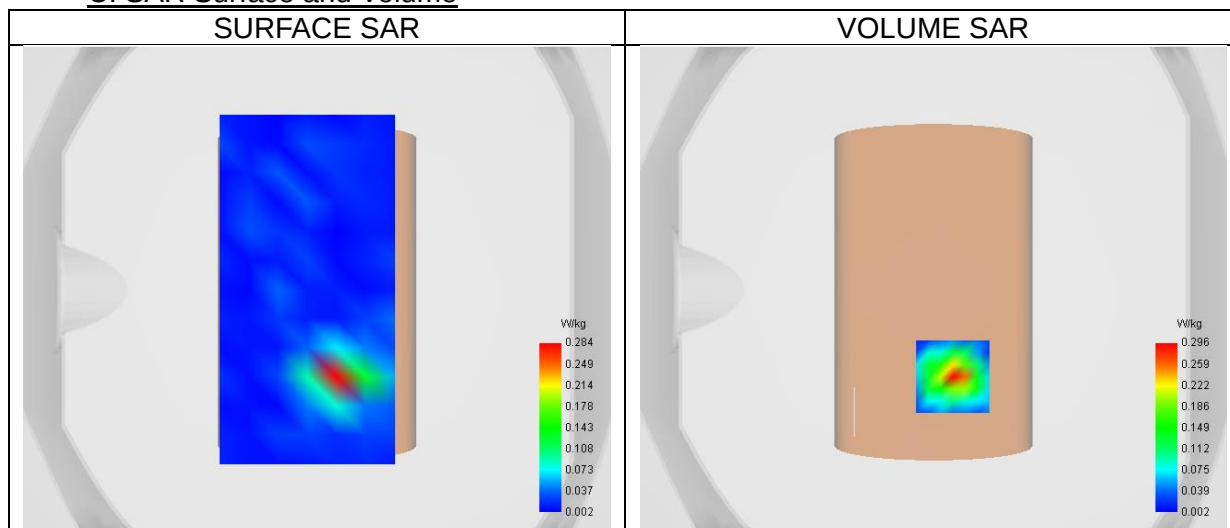
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.63
Area Scan	dx=12mm dy=12mm, Complete
Zoom Scan	7x7x7,dx=5mm dy=5mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	ISM
Signal	IEEE 802.11 b
Channels/Frequency	Middle (11)/ frequency 2462.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	2462.00
Relative permittivity (real part)	38.28
Relative permittivity (imaginary part)	13.46
Conductivity (S/m)	1.84

C. SAR Surface and Volume



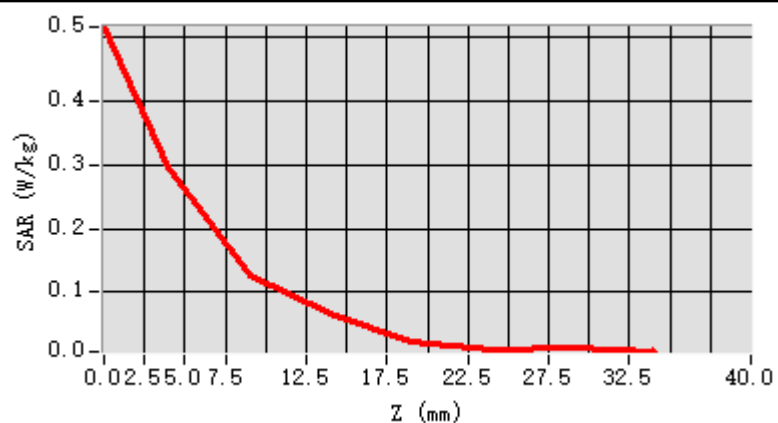
Maximum location: X=8.00, Y=-36.00 ; SAR Peak: 0.52 W/kg

D. SAR 1g & 10g

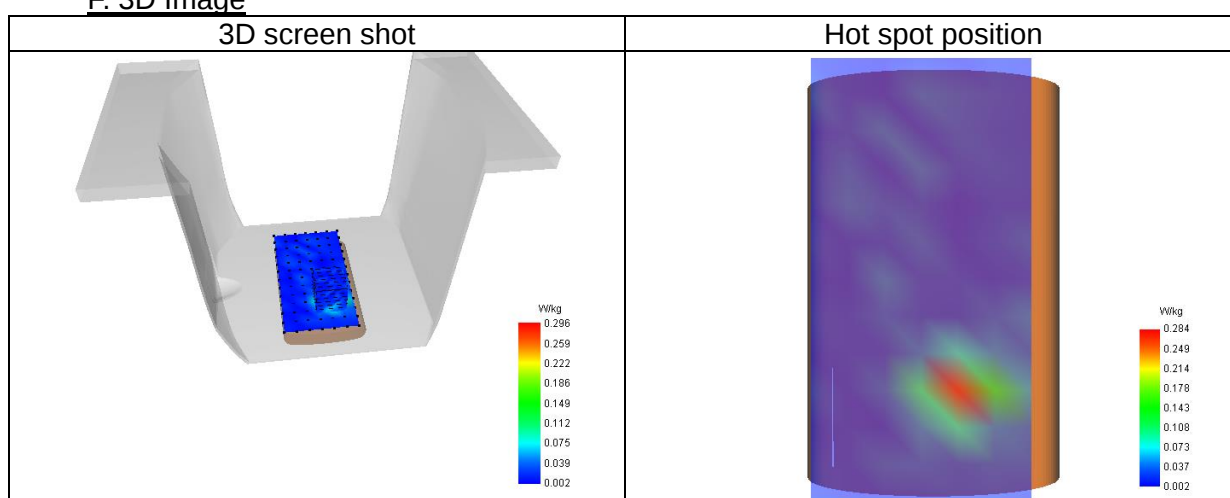
SAR 10g (W/Kg)	0.091
SAR 1g (W/Kg)	0.245
Variation (%)	-0.56
Horizontal validation criteria: minimum distance (mm)	10.00
Vertical validation criteria: SAR ratio M2/M1 (%)	43.18

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.517	0.296	0.128	0.066	0.022	0.010	0.012



F. 3D Image



16# SAR Measurement at ISM (Body, Validation Plane)

Date of measurement: 30/6/2025

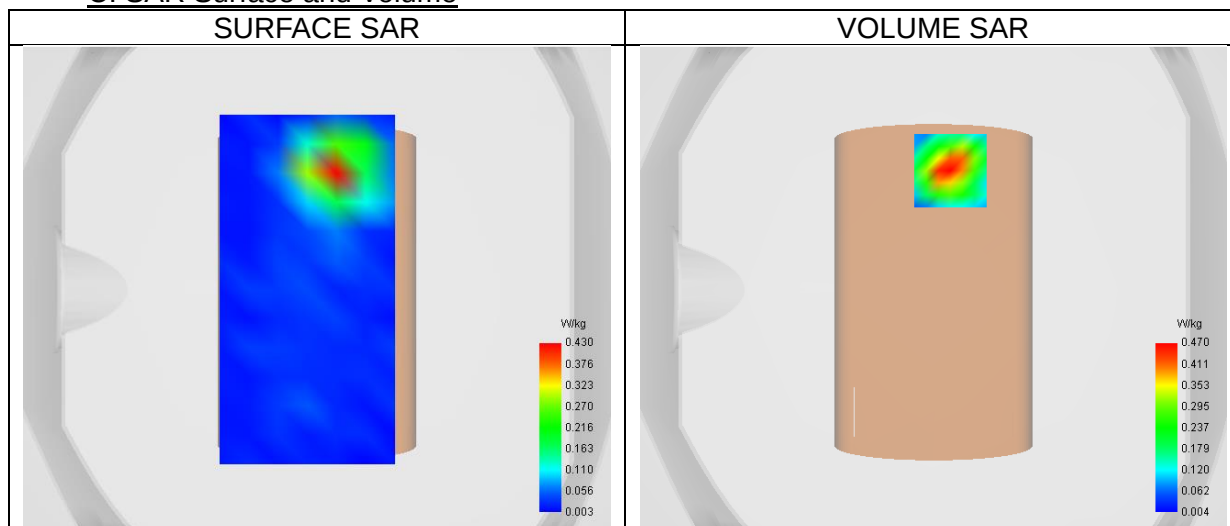
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.63
Area Scan	dx=12mm dy=12mm, Complete
Zoom Scan	7x7x7,dx=5mm dy=5mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	ISM
Signal	IEEE 802.11 n
Channels/Frequency	Middle (6)/ frequency 2437.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	2437.00
Relative permittivity (real part)	38.35
Relative permittivity (imaginary part)	13.32
Conductivity (S/m)	1.80

C. SAR Surface and Volume



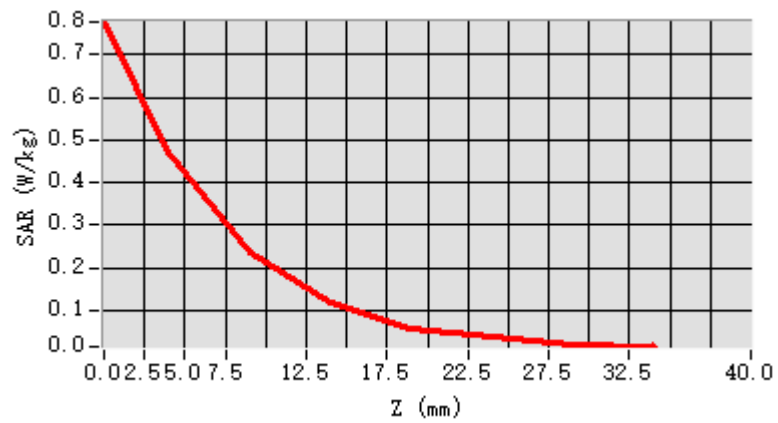
Maximum location: X=7.00, Y=49.00 ; SAR Peak: 0.80 W/kg

D. SAR 1g & 10g

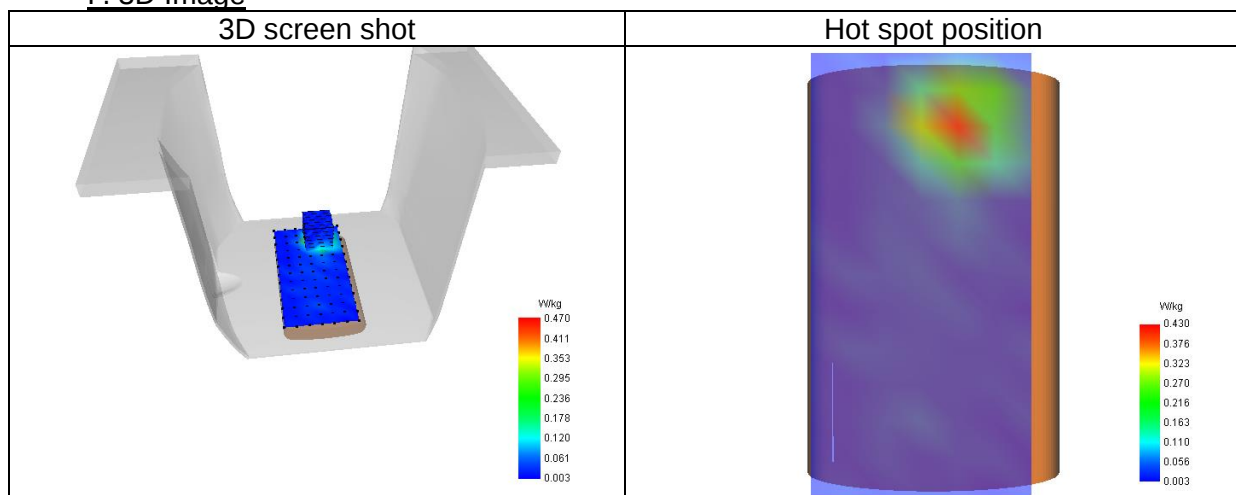
SAR 10g (W/Kg)	0.189
SAR 1g (W/Kg)	0.422
Variation (%)	-4.12
Horizontal validation criteria: minimum distance (mm)	11.18
Vertical validation criteria: SAR ratio M2/M1 (%)	50.40

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.778	0.470	0.237	0.120	0.058	0.038	0.020



F. 3D Image



17# SAR Measurement at ISM (Body, Validation Plane)

Date of measurement: 30/6/2025

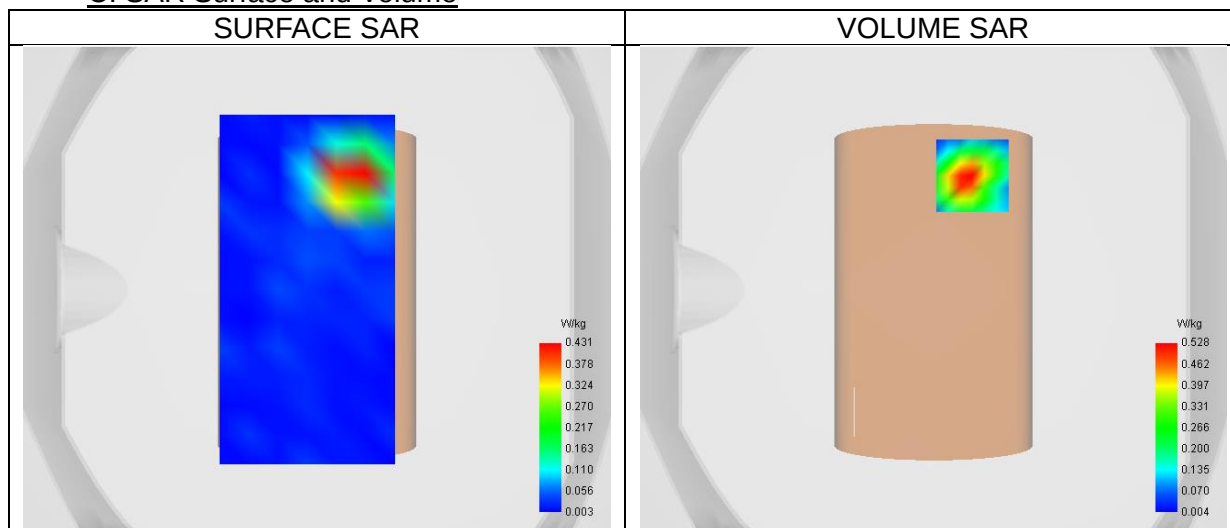
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.63
Area Scan	dx=12mm dy=12mm, Complete
Zoom Scan	7x7x7,dx=5mm dy=5mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	ISM
Signal	IEEE 802.11 b
Channels/Frequency	Middle (6)/ frequency 2437.00 Mhz

B. Permittivity

Middle TX Frequency (MHz)	2437.00
Relative permittivity (real part)	38.35
Relative permittivity (imaginary part)	13.32
Conductivity (S/m)	1.80

C. SAR Surface and Volume



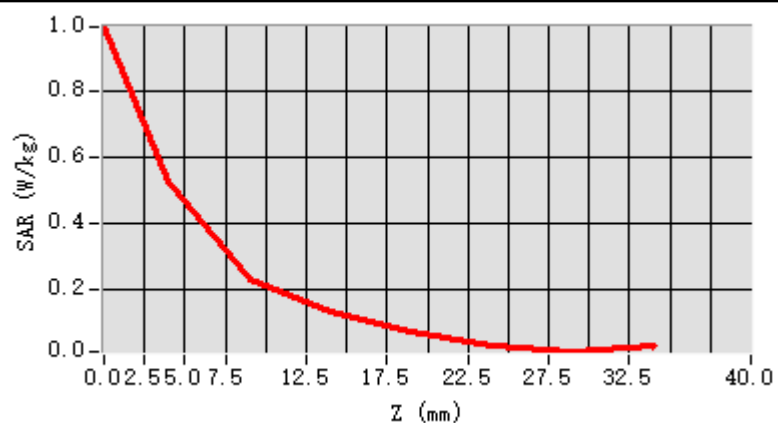
Maximum location: X=16.00, Y=47.00 ; SAR Peak: 0.97 W/kg

D. SAR 1g & 10g

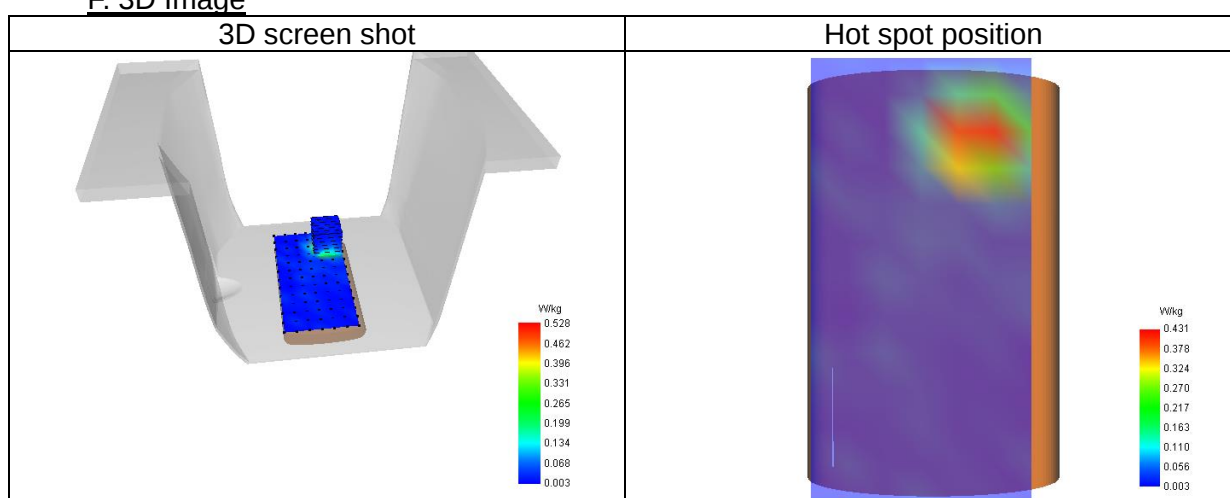
SAR 10g (W/Kg)	0.204
SAR 1g (W/Kg)	0.482
Variation (%)	-0.27
Horizontal validation criteria: minimum distance (mm)	10.00
Vertical validation criteria: SAR ratio M2/M1 (%)	47.28

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.994	0.528	0.228	0.133	0.073	0.033	0.012



F. 3D Image



18# SAR Measurement at LTE band 2 (Body, Validation Plane)

Date of measurement: 29/6/2025

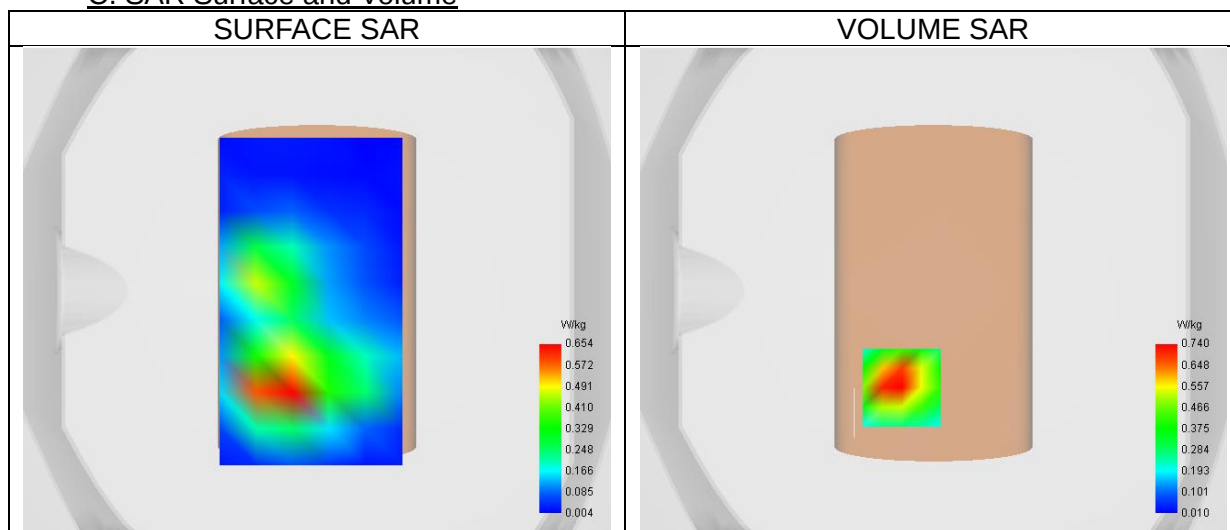
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.58
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 2
Signal	LTE FDD
Channel Center [EARFCN] / Channel Center [MHz]	Middle (18900)/ frequency 1880.00 Mhz
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
Middle TX Frequency (MHz)	1880.00

B. Permittivity

Middle TX Frequency (MHz)	1880.00
Relative permittivity (real part)	38.29
Relative permittivity (imaginary part)	13.60
Conductivity (S/m)	1.42

C. SAR Surface and Volume



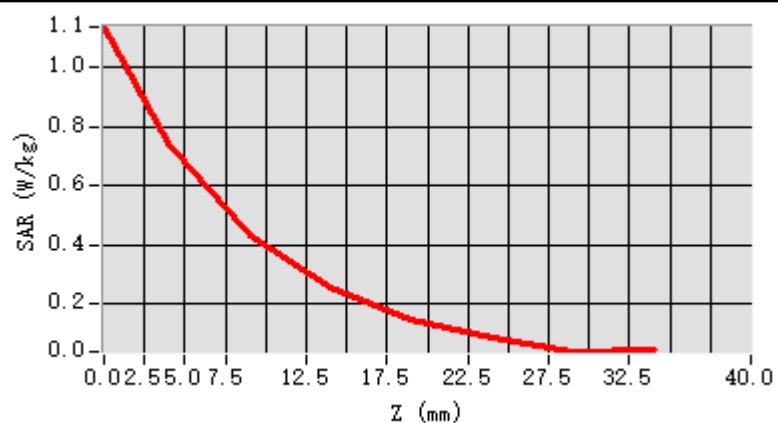
Maximum location: X=-13.00, Y=-40.00 ; SAR Peak: 1.24 W/kg

D. SAR 1g & 10g

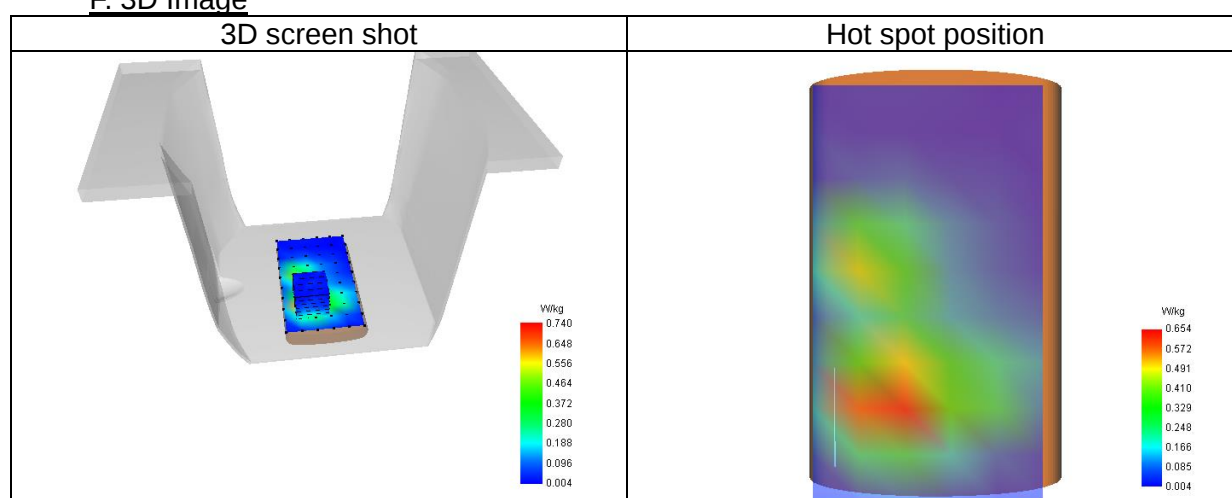
SAR 10g (W/Kg)	0.374
SAR 1g (W/Kg)	0.739
Variation (%)	0.63
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	58.75

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.135	0.740	0.435	0.259	0.148	0.089	0.040



F. 3D Image



19# SAR Measurement at LTE band 4 (Body, Validation Plane)

Date of measurement: 28/6/2025

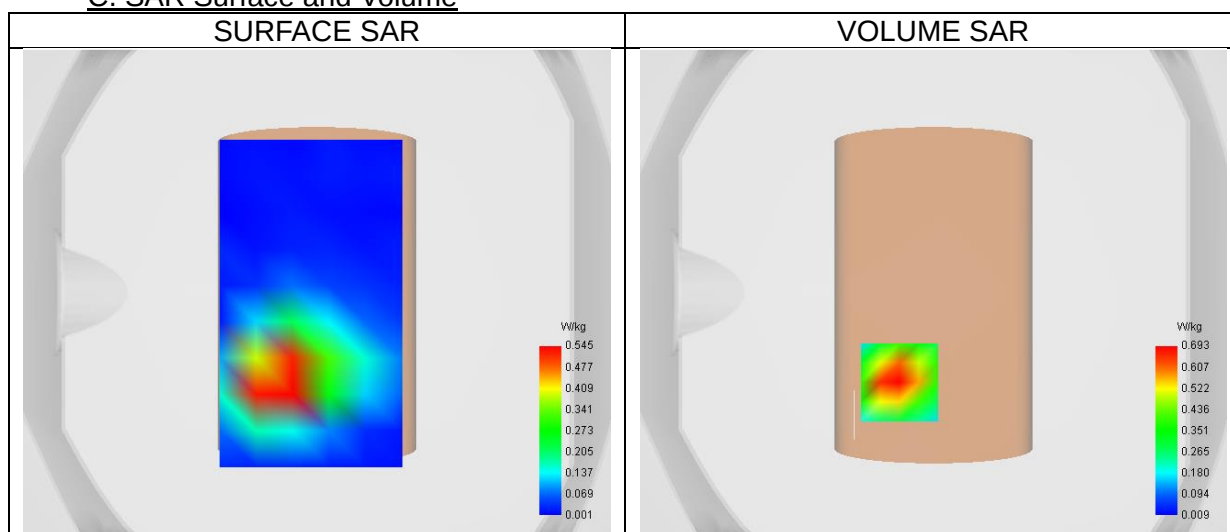
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.50
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 4
Signal	LTE FDD
Channel Center [EARFCN] / Channel Center [MHz]	Middle (20175)/ frequency 1732.50 Mhz
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
Middle TX Frequency (MHz)	1732.50

B. Permittivity

Middle TX Frequency (MHz)	1732.50
Relative permittivity (real part)	39.47
Relative permittivity (imaginary part)	13.93
Conductivity (S/m)	1.34

C. SAR Surface and Volume



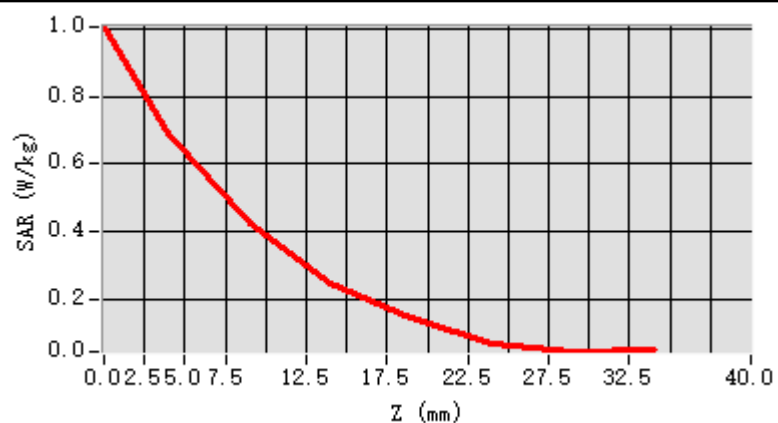
Maximum location: X=-14.00, Y=-37.00 ; SAR Peak: 1.11 W/kg

D. SAR 1g & 10g

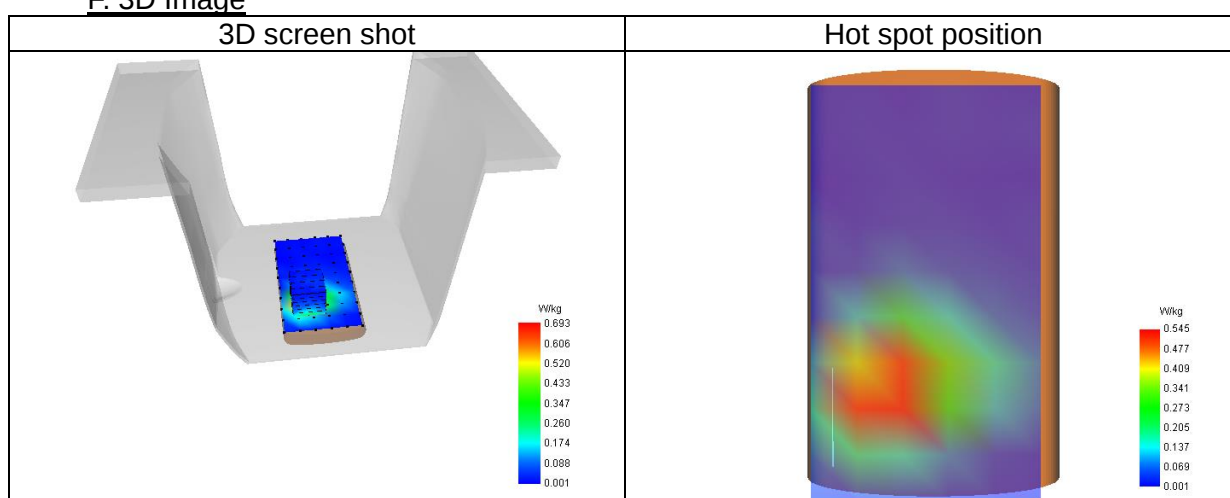
SAR 10g (W/Kg)	0.352
SAR 1g (W/Kg)	0.669
Variation (%)	-3.43
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	61.42

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.006	0.693	0.425	0.246	0.147	0.068	0.046



F. 3D Image



20# SAR Measurement at LTE band 5 (Body, Validation Plane)

Date of measurement: 27/6/2025

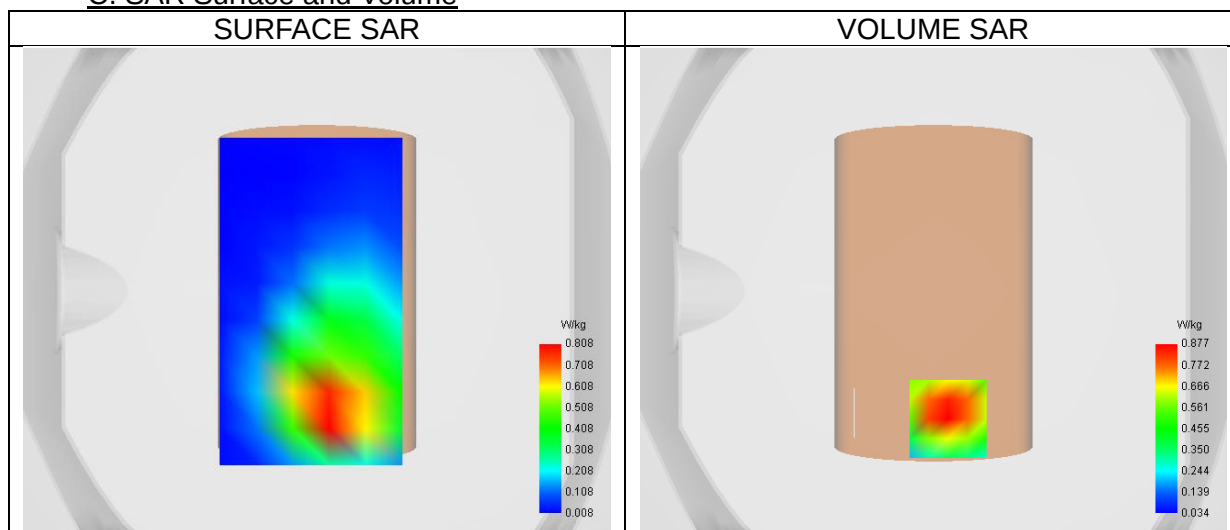
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.32
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 5
Signal	LTE FDD
Channel Center [EARFCN] / Channel Center [MHz]	Middle (20525)/ frequency 836.50 Mhz
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
Middle TX Frequency (MHz)	836.50

B. Permittivity

Middle TX Frequency (MHz)	836.50
Relative permittivity (real part)	41.94
Relative permittivity (imaginary part)	19.80
Conductivity (S/m)	0.92

C. SAR Surface and Volume



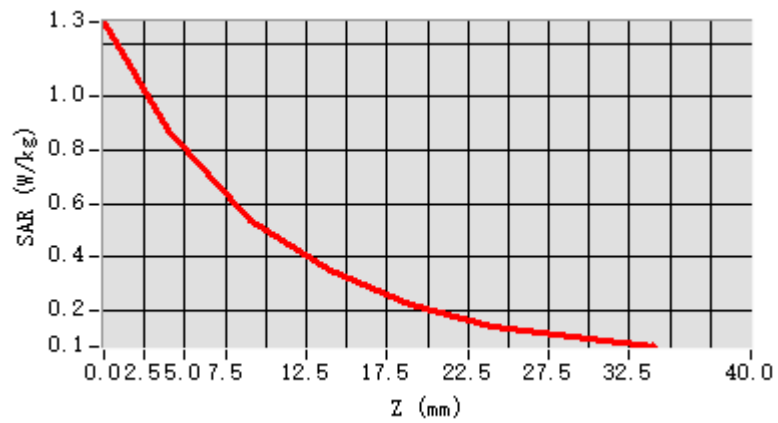
Maximum location: X=6.00, Y=-53.00 ; SAR Peak: 1.35 W/kg

D. SAR 1g & 10g

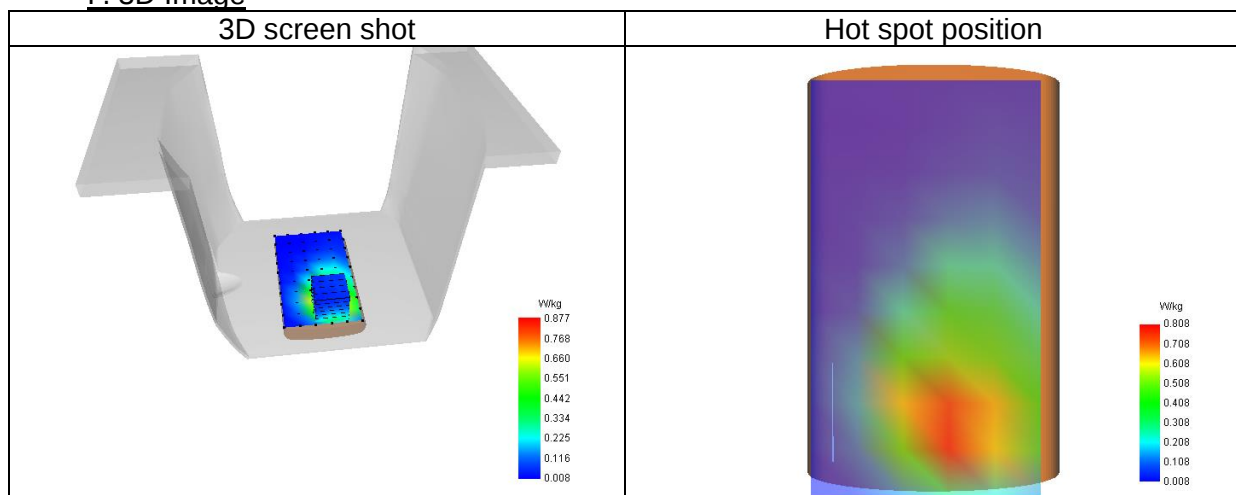
SAR 10g (W/Kg)	0.498
SAR 1g (W/Kg)	0.863
Variation (%)	-1.35
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	60.99

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.281	0.877	0.535	0.345	0.218	0.138	0.102



F. 3D Image



21# SAR Measurement at LTE band 12 (Body, Validation Plane)

Date of measurement: 26/6/2025

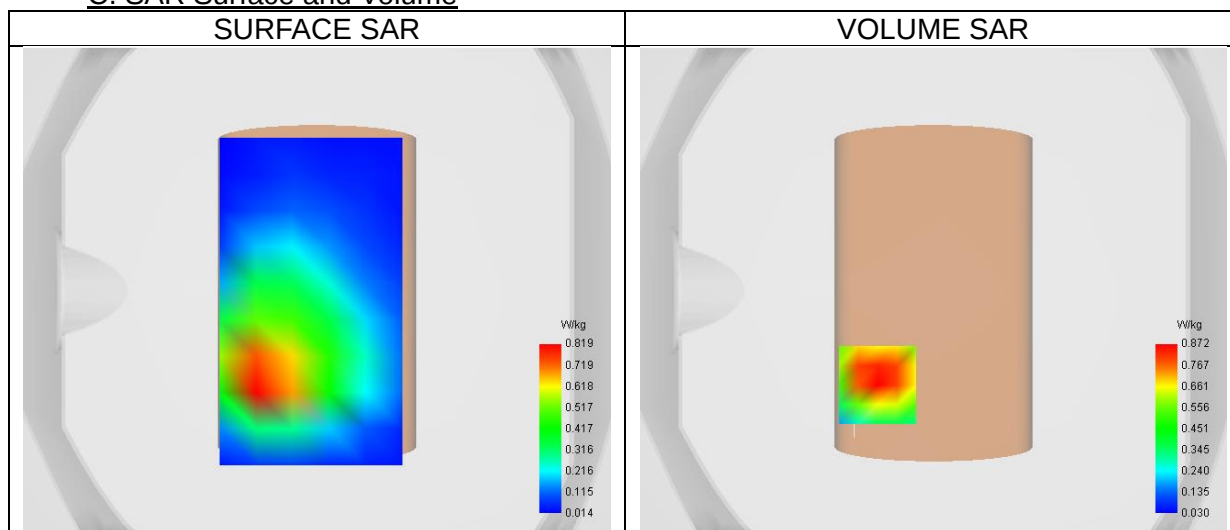
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.39
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 12
Signal	LTE FDD
Channel Center [EARFCN] / Channel Center [MHz]	Middle (23095)/ frequency 707.50 Mhz
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
Middle TX Frequency (MHz)	707.50

B. Permittivity

Middle TX Frequency (MHz)	707.50
Relative permittivity (real part)	41.13
Relative permittivity (imaginary part)	21.58
Conductivity (S/m)	0.85

C. SAR Surface and Volume



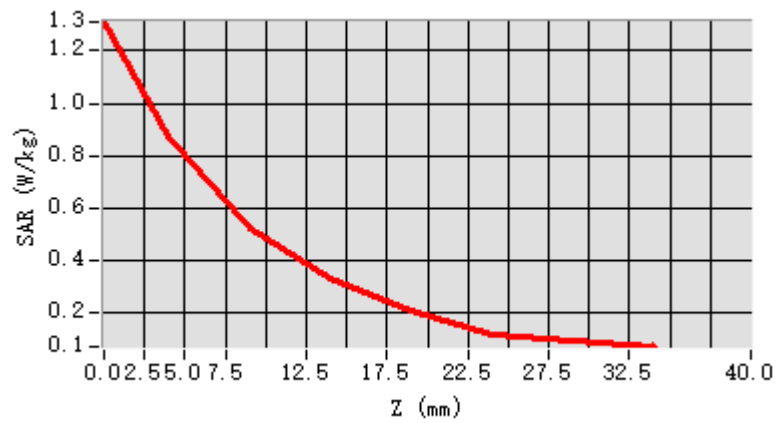
Maximum location: X=-23.00, Y=-39.00 ; SAR Peak: 1.36 W/kg

D. SAR 1g & 10g

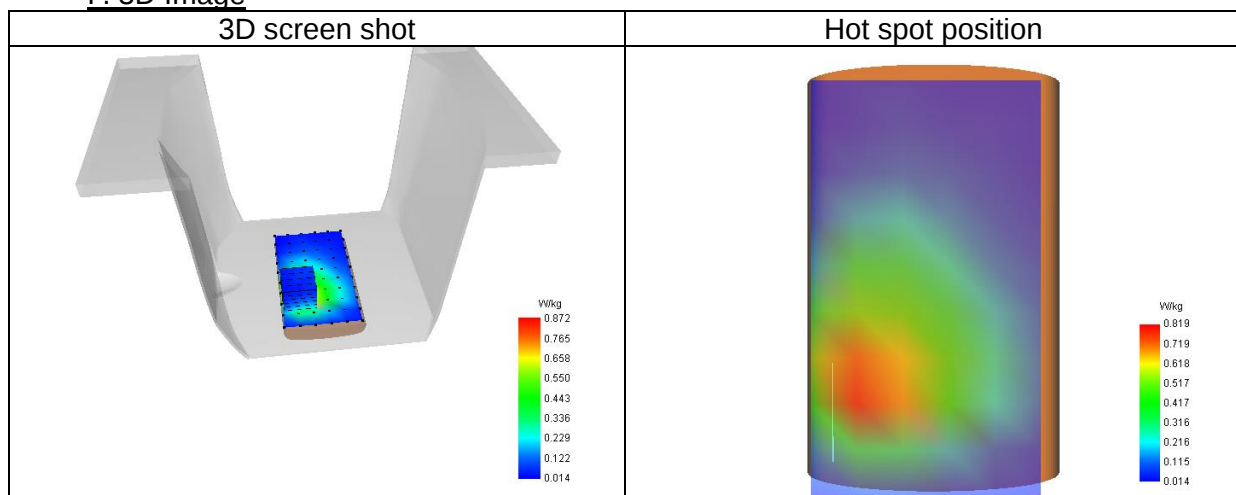
SAR 10g (W/Kg)	0.483
SAR 1g (W/Kg)	0.852
Variation (%)	0.31
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	60.30

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.309	0.872	0.520	0.330	0.215	0.119	0.095



F. 3D Image



22# SAR Measurement at LTE band 17 (Body, Validation Plane)

Date of measurement: 26/6/2025

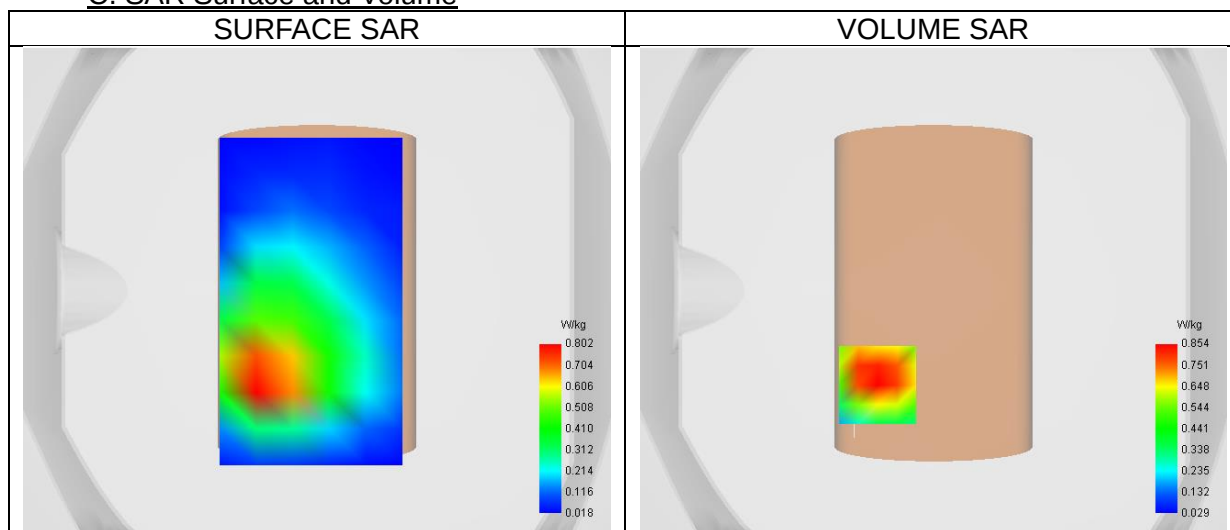
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.39
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 17
Signal	LTE FDD
Channel Center [EARFCN] / Channel Center [MHz]	Middle (23790)/ frequency 710.00 Mhz
Cell Bandwidth	10 Mhz
Modulation	SC-OFDM - QPSK
Middle TX Frequency (MHz)	710.00

B. Permittivity

Middle TX Frequency (MHz)	710.00
Relative permittivity (real part)	41.11
Relative permittivity (imaginary part)	21.52
Conductivity (S/m)	0.85

C. SAR Surface and Volume



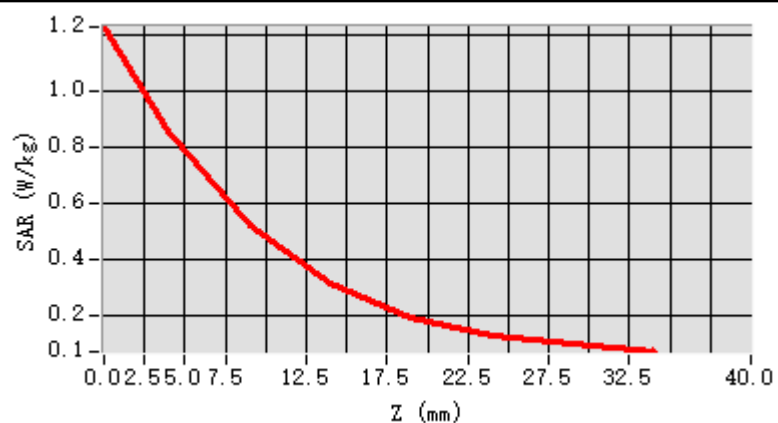
Maximum location: X=-23.00, Y=-39.00 ; SAR Peak: 1.32 W/kg

D. SAR 1g & 10g

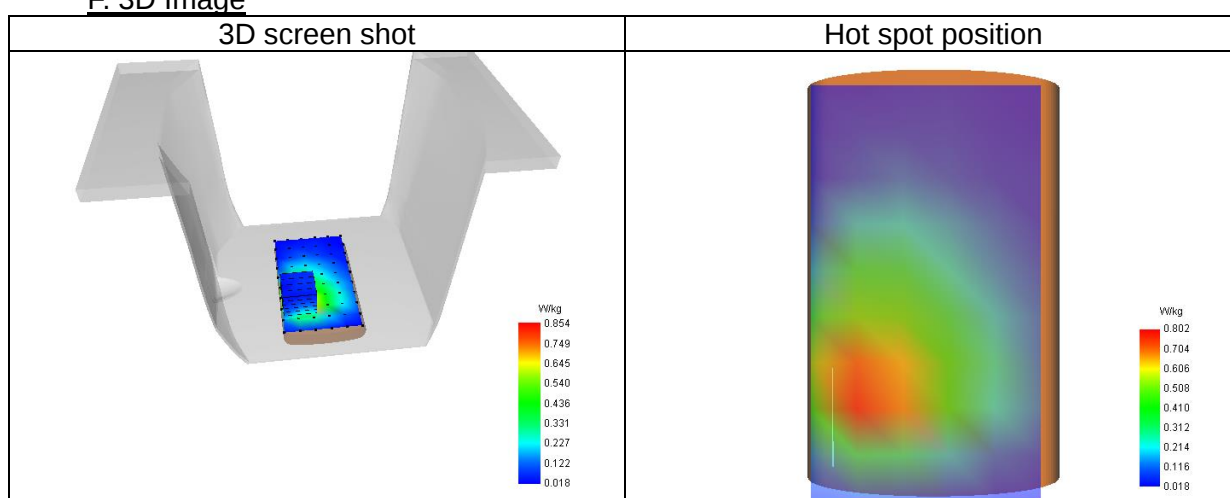
SAR 10g (W/Kg)	0.473
SAR 1g (W/Kg)	0.827
Variation (%)	-0.83
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	60.99

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.226	0.854	0.521	0.314	0.191	0.127	0.101



F. 3D Image



23# SAR Measurement at LTE band 41 (Body, Validation Plane)

Date of measurement: 24/6/2025

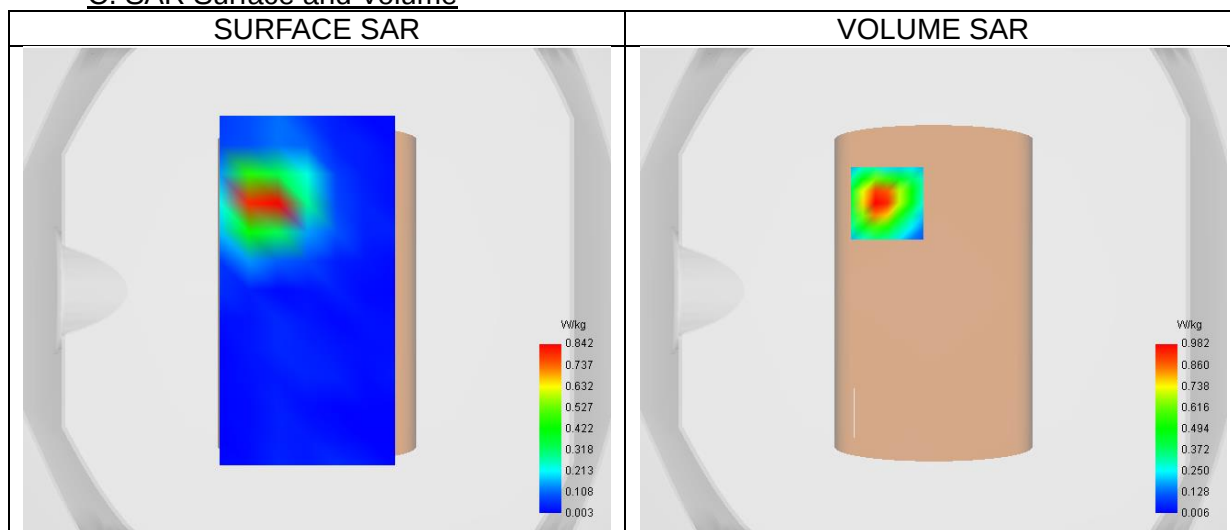
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.52
Area Scan	dx=12mm dy=12mm, Complete
Zoom Scan	7x7x7,dx=5mm dy=5mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 41
Signal	LTE TDD
Channel Center [EARFCN] / Channel Center [MHz]	Middle (40620)/ frequency 2593.00 Mhz
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
Middle TX Frequency (MHz)	2593.00

B. Permittivity

Middle TX Frequency (MHz)	2593.00
Relative permittivity (real part)	39.31
Relative permittivity (imaginary part)	13.42
Conductivity (S/m)	1.93

C. SAR Surface and Volume

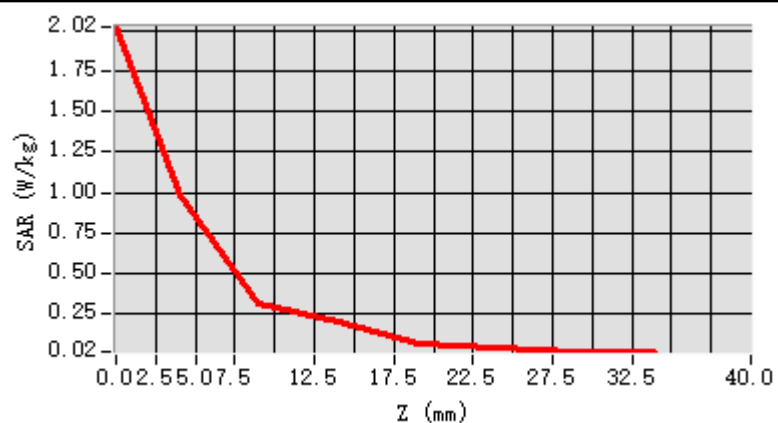


D. SAR 1g & 10g

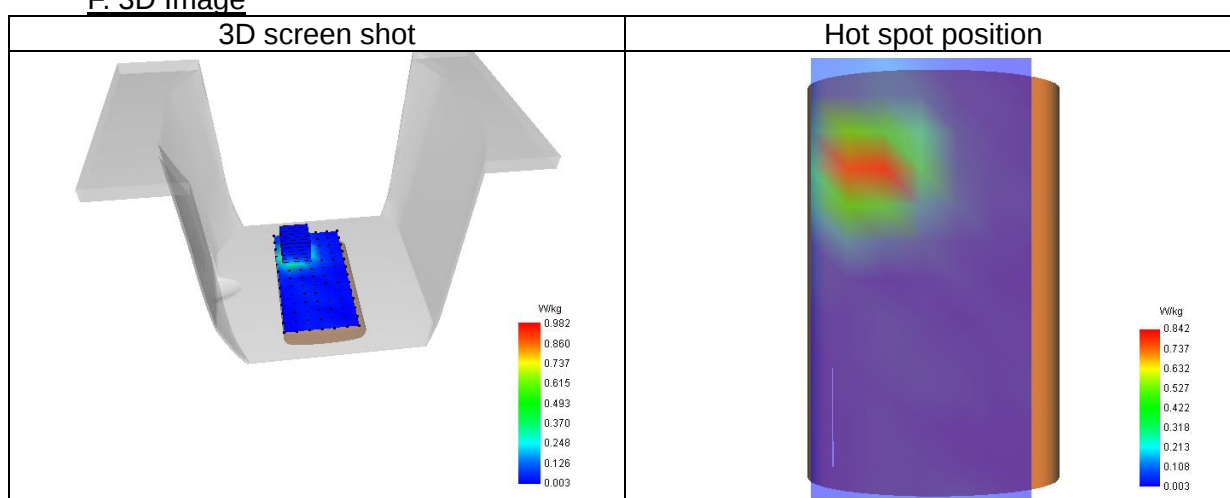
SAR 10g (W/Kg)	0.372
SAR 1g (W/Kg)	0.896
Variation (%)	2.66
Horizontal validation criteria: minimum distance (mm)	10.00
Vertical validation criteria: SAR ratio M2/M1 (%)	47.81

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	2.021	0.982	0.319	0.198	0.068	0.041	0.018



F. 3D Image



24# SAR Measurement at LTE band 66 (Body, Validation Plane)

Date of measurement: 28/6/2025

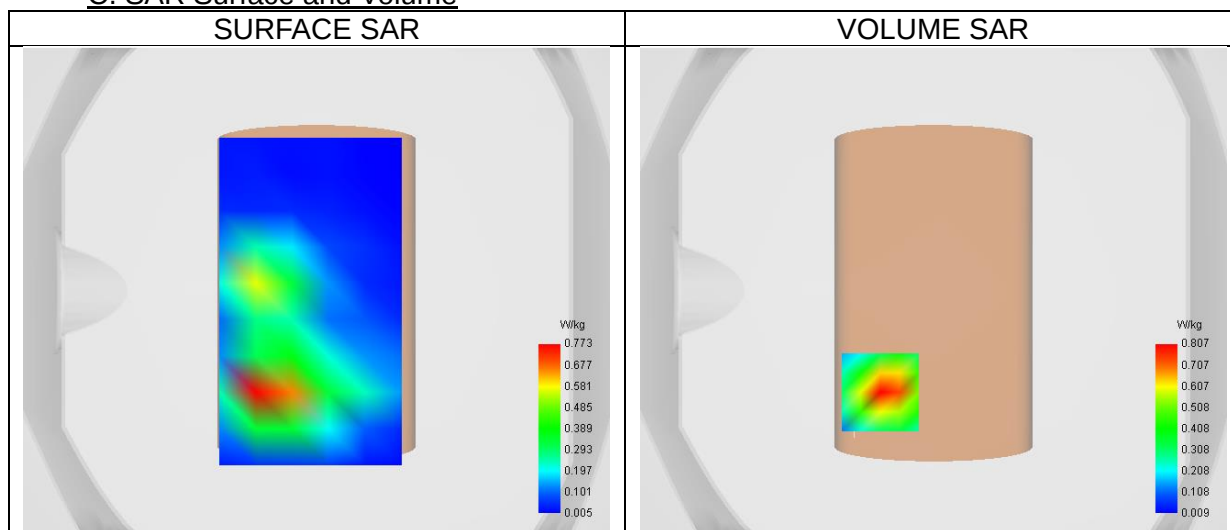
A. Experimental conditions.

Probe	0725-EPGO-448
ConvF	1.50
Area Scan	dx=15mm dy=15mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 66
Signal	LTE FDD
Channel Center [EARFCN] / Channel Center [MHz]	Middle (132322)/ frequency 1745.00 Mhz
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
Middle TX Frequency (MHz)	1745.00

B. Permittivity

Middle TX Frequency (MHz)	1745.00
Relative permittivity (real part)	39.40
Relative permittivity (imaginary part)	13.92
Conductivity (S/m)	1.35

C. SAR Surface and Volume



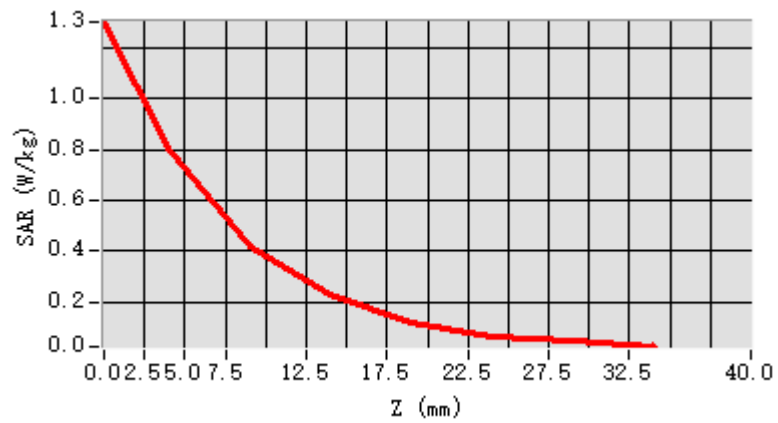
Maximum location: X=-22.00, Y=-42.00 ; SAR Peak: 1.30 W/kg

D. SAR 1g & 10g

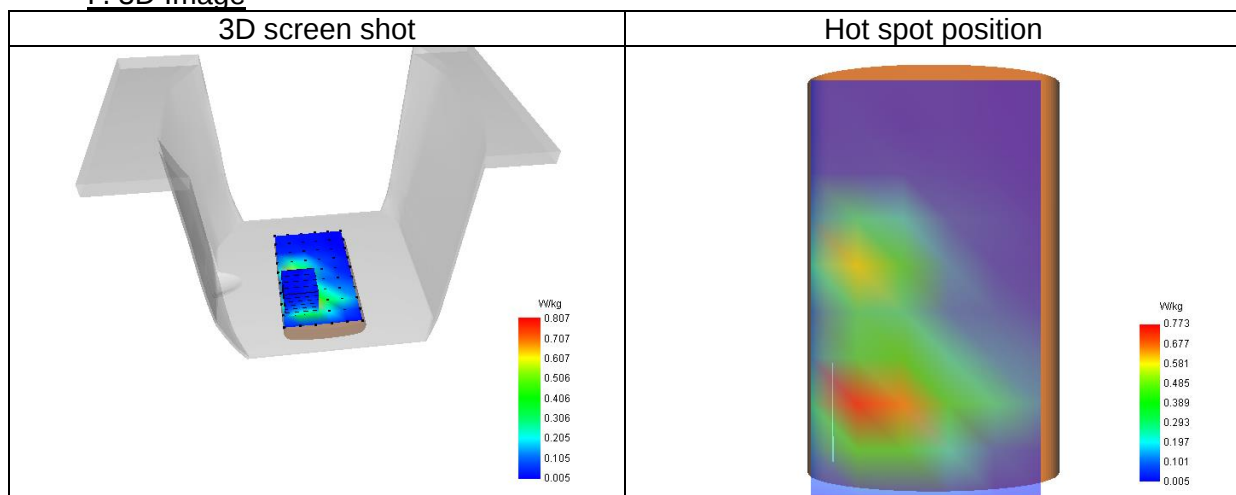
SAR 10g (W/Kg)	0.370
SAR 1g (W/Kg)	0.750
Variation (%)	-0.14
Horizontal validation criteria: minimum distance (mm)	16.00
Vertical validation criteria: SAR ratio M2/M1 (%)	53.40

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.301	0.807	0.419	0.232	0.119	0.063	0.045



F. 3D Image



5. Appendix D. Calibration Certificate

Table of contents
E Field Probe - 4024-EPGO-448
750 MHz Dipole - SN 03/15 DIP 0G750-355
835 MHz Dipole - SN 03/15 DIP 0G835-347
1800 MHz Dipole - SN 03/15 DIP 1G800-349
1900 MHz Dipole - SN 03/15 DIP 1G900-350
2300 MHz Dipole - SN 03/16 DIP 2G300-358
2450 MHz Dipole - SN 03/15 DIP 2G450-352
2600 MHz Dipole - SN 03/15 DIP 2G600-356
5000-6000 MHz Dipole - SN 13/14 WGA 33

Docusign Envelope ID: 8D8CB647-C2B4-4414-A550-C6E3F74EB7AD



COMOSAR E-Field Probe Calibration Report

Ref : ACR.108.1.25.BES.A

SHENZHEN NTEK TESTING TECHNOLOGY CO., LTD.

BUILDING E, FENDA SCIENCE PARK, SANWEI
COMMUNITY, XIXIANG STREET,
BAO'AN DISTRICT, SHENZHEN GUANGDONG, CHINA
MVG COMOSAR DOSIMETRIC E-FIELD PROBE
SERIAL NO.: 0725-EPGO-448

Calibrated at MVG

Z.I. de la pointe du diable

Technopôle Brest Iroise – 295 avenue Alexis de Rochon
29280 PLOUZANE - FRANCE

Calibration date: 04/15/2025



Accreditations #2-6789
Scope available on www.cofrac.fr

The use of the Cofrac brand and the accreditation references is prohibited from any reproduction.

Summary:

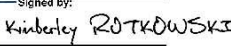
This document presents the method and results from an accredited COMOSAR Dosimetric E-Field Probe calibration performed at MVG, using the CALIPROBE test bench, for use with a MVG COMOSAR system only. The test results covered by accreditation are traceable to the International System of Units (SI).

DocuSign Envelope ID: 8D8CB647-C2B4-4414-A550-C6E3F74EB7AD



COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.108.1.25.BES.A

	Name	Function	Date	Signature
Prepared by :	Pedro Ruiz	Technical Manager	4/18/2025	
Checked & approved by:	Pedro Ruiz	Technical Manager	4/18/2025	
Authorized by:	Kim Rutkowski	Quality Manager	4/23/2025	Signed by:  2B686547AD1743*...

	Customer Name
Distribution :	SHENZHEN NTEK TESTING TECHNOLOGY CO., LTD.

Issue	Name	Date	Modifications
A	Pedro Ruiz	4/18/2025	Initial release

Page: 2/11

Template: ACR.DDD.N.YY.MVGB.ISSUE_COMOSAR Probe vM

This document shall not be reproduced, except in full or in part, without the written approval of MVG. The information contained herein is to be used only for the purpose for which it is submitted and is not to be released in whole or part without written approval of MVG.

Docusign Envelope ID: 8D8CB647-C2B4-4414-A550-C6E3F74EB7AD



COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.108.1.25.BES.A

TABLE OF CONTENTS

1	Device Under Test	4
2	Product Description	4
2.1	General Information	4
3	Measurement Method	4
3.1	Sensitivity	4
3.2	Linearity	5
3.3	Isotropy	5
3.4	Boundary Effect	5
3.5	Probe Modulation Response	6
4	Measurement Uncertainty	6
5	Calibration Results	6
5.1	Calibration in air	6
5.2	Calibration in liquid	7
6	Verification Results	8
7	List of Equipment	10

DocuSign Envelope ID: 8D8CB647-C2B4-4414-A550-C6E3F74EB7AD



COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.108.1.25.BES.A

1 DEVICE UNDER TEST

Device Under Test	
Device Type	COMOSAR DOSIMETRIC E FIELD PROBE
Manufacturer	MVG
Model	SSE2
Serial Number	0725-EPGO-448
Product Condition (new / used)	New
Frequency Range of Probe	0.15 GHz-7.5GHz
Resistance of Three Dipoles at Connector	Dipole 1: R1=0.191 MΩ Dipole 2: R2=0.212 MΩ Dipole 3: R3=0.208 MΩ

2 PRODUCT DESCRIPTION**2.1 GENERAL INFORMATION**

MVG's COMOSAR E field Probes are built in accordance to the IEC/IEEE 62209-1528 and FCC KDB865664 D01 standards.

**Figure 1 – MVG COMOSAR Dosimetric E field Probe**

Probe Length	330 mm
Length of Individual Dipoles	2 mm
Maximum external diameter	8 mm
Probe Tip External Diameter	2.5 mm
Distance between dipoles / probe extremity	1 mm

3 MEASUREMENT METHOD

The IEC/IEEE 62209-1528 and FCC KDB865664 D01 standards provide recommended practices for the probe calibrations, including the performance characteristics of interest and methods by which to assess their effect. All calibrations / measurements performed meet the fore-mentioned standards.

3.1 SENSITIVITY

The sensitivity factors of the three dipoles were determined using a two step calibration method (air and tissue simulating liquid) using waveguides as outlined in the standards for frequency range 600-7500MHz and using the calorimeter cell method (transfer method) as outlined in the standards for frequency 150-450 MHz.

DocuSign Envelope ID: 8D8CB647-C2B4-4414-A550-C6E3F74EB7AD



COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.108.1.25.BES.A

3.2 LINEARITY

The evaluation of the linearity was done in free space using the waveguide, performing a power sweep to cover the SAR range 0.01 W/kg to 100 W/kg.

3.3 ISOTROPY

The axial isotropy was evaluated by exposing the probe to a reference wave from a standard dipole with the dipole mounted under the flat phantom in the test configuration suggested for system validations and checks. The probe was rotated along its main axis from 0 to 360 degrees in 15-degree steps. The hemispherical isotropy is determined by inserting the probe in a thin plastic box filled with tissue-equivalent liquid, with the plastic box illuminated with the fields from a half wave dipole. The dipole is rotated about its axis (0°–180°) in 15° increments. At each step the probe is rotated about its axis (0°–360°).

3.4 BOUNDARY EFFECT

The boundary effect is defined as the deviation between the SAR measured data and the expected exponential decay in the liquid when the probe is oriented normal to the interface. To evaluate this effect, the liquid filled flat phantom is exposed to fields from either a reference dipole or waveguide. With the probe normal to the phantom surface, the peak spatial average SAR is measured and compared to the analytical value at the surface.

The boundary effect uncertainty can be estimated according to the following uncertainty approximation formula based on linear and exponential extrapolations between the surface and $d_{be} + d_{step}$ along lines that are approximately normal to the surface:

$$SAR_{uncertainty} [\%] = \delta SAR_{be} \frac{(d_{be} + d_{step})^2}{2d_{step}} \frac{(e^{-d_{be}/\delta} - e^{-d_{step}/\delta})}{\delta/2} \quad \text{for } (d_{be} + d_{step}) < 10 \text{ mm}$$

where

$SAR_{uncertainty}$	is the uncertainty in percent of the probe boundary effect
d_{be}	is the distance between the surface and the closest <i>zoom-scan</i> measurement point, in millimetre
Δ_{step}	is the separation distance between the first and second measurement points that are closest to the phantom surface, in millimetre, assuming the boundary effect at the second location is negligible
δ	is the minimum penetration depth in millimetres of the head tissue-equivalent liquids defined in this standard, i.e., $\delta \approx 14$ mm at 3 GHz;
ΔSAR_{be}	in percent of SAR is the deviation between the measured SAR value, at the distance d_{be} from the boundary, and the analytical SAR value.

The measured worst case boundary effect $SAR_{uncertainty}[\%]$ for scanning distances larger than 4mm is 1.0% Limit ,2%).