SAR Test Report

Report No.: STS2505224H01

Issued for

LEON TRADE(H.K.)CO.,LIMITED.

FLAT/RM 1201 12/F TAI SANG BANK BUILDING 130-132
DES VOEUX ROAD CENTRAL HK, China

Product Name:	14 inch Tablet
Brand Name:	Callsky
Model Name:	Ctab 14
Series Model(s):	Cpad 14, Ctab 14 Pro, Cpad 14 Pro, Ctab 14 Plus, Cpad 14 Plus
FCC ID:	2BPTB-CTAB14
Test Standard:	ANSI/IEEE Std. C95.1 FCC 47 CFR Part 2 (2.1093) IEEE Std. 1528-2013
Max. Report SAR (1g)	Body: 0.758 W/kg

TEST REPORT CERTIFICATION

Applicant's name ..... :	LEON TRADE(H.K.)CO.,LIMITED.
Address ..... :	FLAT/RM 1201 12/F TAI SANG BANK BUILDING 130-132 DES VOEUX ROAD CENTRAL HK, China
Manufacturer's Name ..... :	SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
Address ..... :	Room 501, Building 2, Baolong Specialized and Sophisticated Industrial Park, No.16 Baolong Third Road, Longgang, Shenzhen, China

Product description

Product name ..... :	14 inch Tablet
Brand name ..... :	Callsky
Model name ..... :	Ctab 14
Series Model(s) :	Cpad 14, Ctab 14 Pro, Cpad 14 Pro, Ctab 14 Plus, Cpad 14 Plus
Standards ..... :	ANSI/IEEE Std. C95.1 FCC 47 CFR Part 2 (2.1093) IEEE Std. 1528-2013

The device was tested by Shenzhen STS Test Services Co., Ltd. in accordance with the measurement methods and procedures specified in KDB 865664 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.

Date of Test ..... :	
Date (s) of performance of tests ..... :	19 Jun. 2025 ~ 21 Jun. 2025
Date of Issue ..... :	25 Jun. 2025
Test Result ..... :	**Pass**

Testing Engineer : Xin Liu

(Xin.Liu)

Technical Manager : Shi fan. long

(Shifan. Long)

Authorized Signatory : Bovey Yang

(Bovey Yang)

SHENZHEN STS TEST SERVICES CO., LTD. TESTING APPROVAL

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Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	25 Jun. 2025	STS2505224H01	ALL	Initial Issue

1. General Information

Environmental evaluation measurements of specific absorption rate (SAR) distributions in emulated human head and body tissues exposed to radio frequency (RF) radiation from wireless portable devices for compliance with the rules and regulations of the U.S. Federal Communications Commission (FCC).

1.1 EUT Description

Product Name	14 inch Tablet		
Brand Name	Callsky		
Model Name	Ctab 14		
Series Model	Cpad 14, Ctab 14 Pro, Cpad 14 Pro, Ctab 14 Plus, Cpad 14 Plus		
Model Difference	The PCB board, circuit, structure and internal of these models are the same, Only model number and colour is different for these model.		
Sample number	250509011-4		
Battery	Rated Voltage: Charge Limit Voltage: Capacity:		
Device Category	Portable		
Product stage	Production unit		
RF Exposure Environment	General Population / Uncontrolled		
Hardware Version	V1.0		
Software Version	V1.0		
Frequency Range	GSM 850: 824.2 MHz ~ 848.8 MHz PCS1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band 2: 1852.4 MHz ~ 1907.6 MHz WCDMA Band 5: 826.4 MHz ~ 846.6 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7:2500 MHz ~ 2570 MHz WLAN802.11b/g/n20: 2412 MHz ~ 2462 MHz WLAN 802.11n40: 2422 MHz ~ 2452 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5180 ~ 5240 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5745 ~ 5825 MHz BT: 2402 MHz to 2480 MHz		
Max. Reported SAR(1g): (Limit:1.6&4.0W/kg) Test distance: Body:0mm	Band	Mode	Body Worn (W/kg)
	PCB	GSM 850	0.114
	PCB	GSM 1900	0.504
	PCB	WCDMA Band II	0.319
	PCB	WCDMA Band V	0.551
	PCB	LTE Band 5	0.284
	PCB	LTE Band 7	0.740
	DTS	2.4G WLAN	0.478
	NII	5.2G WLAN	0.294
	NII	5.8G WLAN	0.758
1-g Sum SAR			1.498
Limit			1.6W/kg

FCC Equipment Class	Licensed Transmitter (PCB) Digital Transmission System (DTS) Unlicensed National Information Infrastructure TX(NII)
Operating Mode:	GSM: GSM Voice; GPRS/EGPRS Class 12 WCDMA: RMC, HSDPA, HSUPA Release 6 LTE: QPSK, 16QAM 2.4G WLAN : 802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM 5G WLAN: 802.11a(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11ac(OFDM):BPSK,QPSK,16-QAM,64-QAM,256-QAM Bluetooth: GFSK +π/4DQPSK+8DPSK BLE: GFSK
Antenna Specification:	GSM/WCDMA/LTE:FPC Antenna WLAN/BT: FPC Antenna
Hotspot Mode	Not Support
DTM Mode	Not Support
Note: 1. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power	

1.2 Test Environment

Ambient conditions in the SAR laboratory:

Items	Required
Temperature (℃)	18-25
Humidity (%RH)	30-70

1.3 Test Factory

ShenZhen STS Test Services Co.,Ltd.

101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration No.: 625569

IC Registration No.: 12108A

A2LA Certificate No.: 4338.01

2. Test Standards and Limits

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	IEEE Std C95.1, 2019	IEEE Standard for Safety Levels with Respect to Human Exposure to Electric,Magnetic, and Electromagnetic Fields,0 Hz to 300 GHz. It specifies the maximum exposure limit of 1.6 W/kg as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D04 v01	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices
5	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
7	FCC KDB 941225 D01 v03r01	SAR Measurement Procedures for 3G Devices
8	FCC KDB 941225 D05 v02r05	SAR for LTE Devices
9	FCC KDB 248227 D01 Wi-Fi SAR v02r02	SAR Considerations for 802.11 Devices

(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.

Population/Uncontrolled Environments:

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

Occupational/Controlled Environments:

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

NOTE

GENERAL POPULATION/UNCONTROLLED EXPOSURE

PARTIAL BODY LIMIT

1.6 W/kg

3. SAR Measurement System

3.1 Definition of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.
The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

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

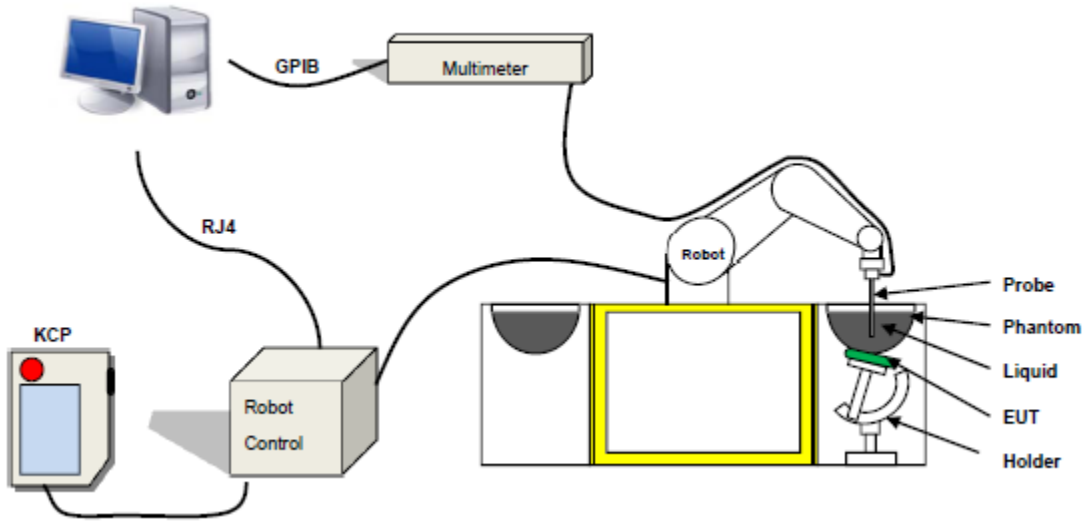
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

Where: σ is the conductivity of the tissue,
ρ is the mass density of the tissue and E is the RMS electrical field strength.

3.2 SAR System

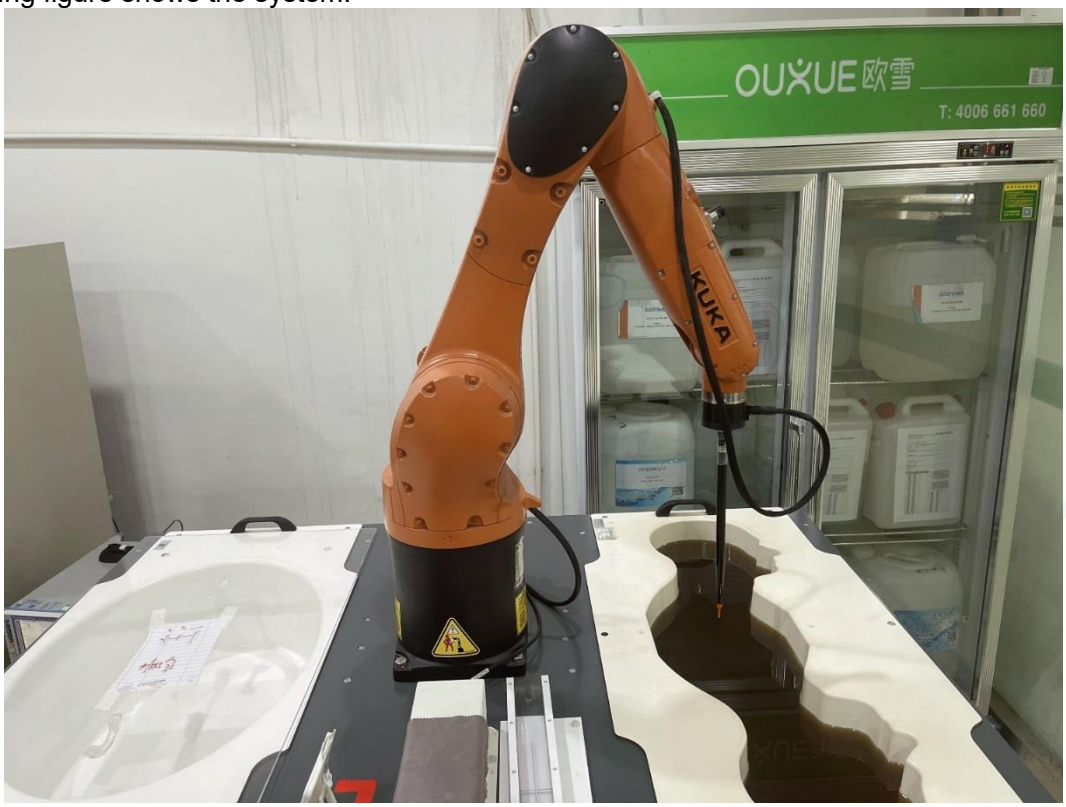
MVG SAR System Diagram:



COMOSAR is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The COMOSAR system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.



The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The Open SAR software computes the results to give a SAR value in a 1g or 10g mass.

3.2.1 Probe

For the measurements the Specific Dosimetric E-Field Probe SN 08/21 EPGO352 with following specifications is used

- Probe Length: 330 mm
- Length of Individual Dipoles: 2 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter: 2.5 mm
- Distance between dipole/probe extremity: 1 mm
- Dynamic range: 0.01-100 W/kg
- Probe linearity: 3%
- Axial Isotropy: < 0.10 dB
- Spherical Isotropy: < 0.10 dB
- Calibration range: 150 MHz to 6 GHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°

Figure 1-MVG COMOSAR Dosimetric E field Dipole

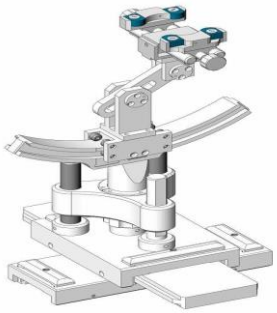
3.2.2 Phantom

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

SN 32/14 SAM115

Figure-SN 21/21 ELLI48

3.2.3 Device Holder



The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of ± 0.5 mm would produce a SAR uncertainty of ± 20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.4. Tissue Simulating Liquids

4. Tissue Simulating Liquids

4.1 Simulating Liquids Parameter Check

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine of the dielectric parameters are within the tolerances of the specified target values

The uncertainty due to the liquid conductivity and permittivity arises from two different sources. The first source of error is the deviation of the liquid conductivity from its target value (max _ 5 %) and the second source of error arises from the measurement procedures used to assess conductivity. The uncertainty shall be assessed using a rectangular probability For 1 g averaging, the maximum weighting coefficient for SAR is 0,5.

IEEE SCC-34/SC-2 RECOMMENDED TISSUE DIELECTRIC PARAMETERS

The head and body tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 have been incorporated in the following table.

Frequency	εr	σ 10g S/m
300	45.3	0.87
450	43.5	0.87
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
1450	40.5	1.20
1800 to 2000	40.0	1.40
2100	39.8	1.49
2450	39.2	1.80
2600	39.0	1.96
3000	38.5	2.40
3500	37.9	2.91
4000	37.4	3.43
4500	36.8	3.94
5000	36.2	4.45
5200	36.0	4.66
5400	35.8	4.86
5600	35.5	5.07
5800	35.3	5.27

The following table gives the recipes for tissue simulating liquid and the theoretical Conductivity/Permittivity.

Head (Reference IEEE1528)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ε
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0.1	0	44.9	1.80	39.2
2600	54.9	0	0	0.1	0	45.0	1.96	39.0
Frequency (MHz)	Water (%)	Hexyl Carbitol (%)			Triton X-100 (%)		Conductivity σ (S/m)	Permittivity ε
5200	62.52	17.24			17.24		4.66	36.0
5800	62.52	17.24			17.24		5.27	35.3
Body (From instrument manufacturer)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ε
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0.1	0	31.3	1.95	52.7
2600	68.2	0	0	0.1	0	31.7	2.16	52.5
Frequency(MHz)	Water	DGBE (%)			Salt (%)		Conductivity σ (S/m)	Permittivity ε
5200	78.60	21.40			/		5.30	49.00
5800	78.50	21.40			0.1		6.00	48.20

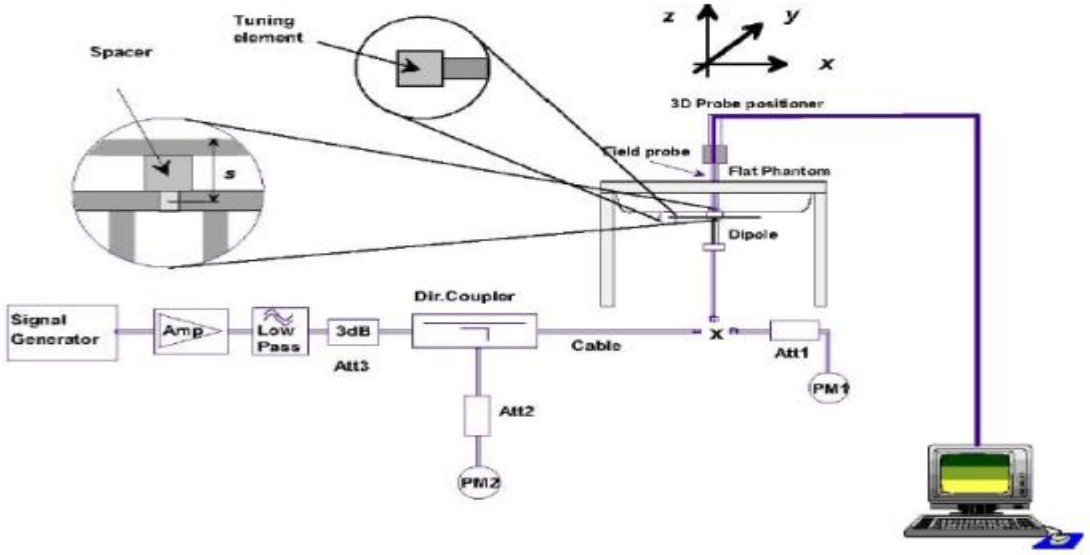
LIQUID MEASUREMENT RESULTS

Date	Ambient		Simulating Liquid		Parameters	Target	Measured	Deviation %	Limited %
	Temp. [°C]	Humidity %	Frequency (MHz)	Temp. [°C]					
2025-06-19	20.9	41	829	20.7	Permittivity	41.53	41.33	-0.48	±5
					Conductivity	0.90	0.90	0.08	±5
2025-06-19	20.9	41	835	20.6	Permittivity	41.50	41.42	-0.19	±5
					Conductivity	0.90	0.94	4.44	±5
2025-06-19	20.9	41	836.5	20.6	Permittivity	41.49	41.95	1.10	±5
					Conductivity	0.90	0.90	-0.02	±5
2025-06-19	20.9	42	836.4	20.6	Permittivity	41.49	41.19	-0.73	±5
					Conductivity	0.90	0.86	-4.46	±5
2025-06-19	21.0	42	848.8	20.7	Permittivity	41.44	41.13	-0.74	±5
					Conductivity	0.90	0.93	3.15	±5
2025-06-20	23.8	57	1850.2	23.5	Permittivity	39.93	40.83	2.26	±5
					Conductivity	1.43	1.42	-0.61	±5
2025-06-20	23.9	57	1900	23.7	Permittivity	39.86	40.21	0.89	±5
					Conductivity	1.46	1.42	-2.55	±5
2025-06-20	24.0	57	1907.6	23.6	Permittivity	39.85	39.97	0.31	±5
					Conductivity	1.46	1.47	0.58	±5
2025-06-20	24.0	57	2412	23.6	Permittivity	39.27	39.56	0.74	±5
					Conductivity	1.77	1.80	1.91	±5
2025-06-20	24.0	57	2450	23.6	Permittivity	39.20	39.36	0.41	±5
					Conductivity	1.80	1.78	-1.11	±5
2025-06-20	24.0	57	2510	23.6	Permittivity	39.12	38.99	-0.33	±5
					Conductivity	1.86	1.85	-0.75	±5
2025-06-20	24.0	57	2535	23.6	Permittivity	39.09	39.53	1.13	±5
					Conductivity	1.89	1.95	3.14	±5
2025-06-20	24.0	57	2560	23.6	Permittivity	39.05	38.95	-0.26	±5
					Conductivity	1.92	1.93	0.66	±5
2025-06-20	24.0	57	2600	23.6	Permittivity	39.00	39.88	2.26	±5
					Conductivity	1.96	1.98	1.02	±5
2025-06-21	21.3	42	5200	21.0	Permittivity	36.00	36.28	0.78	±5
					Conductivity	4.66	4.64	-0.43	±5
2025-06-21	21.3	42	5745	21.0	Permittivity	35.36	36.26	2.56	±5
					Conductivity	5.21	5.19	-0.43	±5
2025-06-21	21.3	42	5800	21.0	Permittivity	35.30	36.22	2.61	±5
					Conductivity	5.27	5.29	0.38	±5

5. SAR System Validation

5.1 Validation System

Each MVG system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the MVG software, enable the user to conduct the system performance check and system validation. System kit includes a dipole, and dipole device holder.
The system check verifies that the system operates within its specifications. It's performed daily or before every SAR measurement. The system check uses normal SAR measurement in the flat section of the phantom with a matched dipole at a specified distance. The system validation setup is shown as below.



5.2 Validation Result

Justification for Extended SAR Dipole Calibrations

Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining retum loss (>20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

Dipole		Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
SN 30/14 DIP0G835-332	Head Liquid	2023-07-04	-28.13	/	51.4	/
		2024-07-01	-28.43	1.07	52.62	2.37
SN 30/14 DIP1G900-333	Head Liquid	2023-07-04	-23.66	/	51.4	/
		2024-07-01	-23.62	-0.17	50.73	-1.30
SN 30/14 DIP2G450-335	Head Liquid	2023-07-04	-26.03	/	46.3	/
		2024-07-01	-26.42	1.50	47.25	2.05
SN 30/14 DIP2G600-336	Head Liquid	2023-07-04	-34.32	/	50.3	/
		2024-07-01	-34.78	1.34	49.61	-1.37
SN 13/14 WGA32	Head Liquid	2023-07-04	< -8.23	/	/	/
		2024-07-01	-13.17	/	/	/

Comparing to the original SAR value provided by MVG, the validation data should be within its specification of 10 %.

Date	Freq.	Power	Tested Value	Normalized SAR	Target SAR	Tolerance	Limit
	(MHz)	(mW)	(W/Kg)	(W/kg)	10g(W/kg)	(%)	(%)
2025-06-19	835	100	0.977	9.77	9.63	1.45	10
2025-06-20	1900	100	3.852	38.52	39.84	-3.31	10
2025-06-20	2450	100	5.700	57.00	54.70	4.20	10
2025-06-20	2600	100	5.441	54.41	56.19	-3.17	10
2025-06-21	5200	100	16.385	163.85	163.88	-0.02	10
2025-06-21	5800	100	19.034	190.34	188.95	0.74	10

Note:

1. The tolerance limit of System validation ±10%.
2. The dipole input power (forward power) was 100 mW.
3. The results are normalized to 1 W input power.

6. SAR Evaluation Procedures

The procedure for assessing the average SAR value consists of the following steps:
The following steps are used for each test position

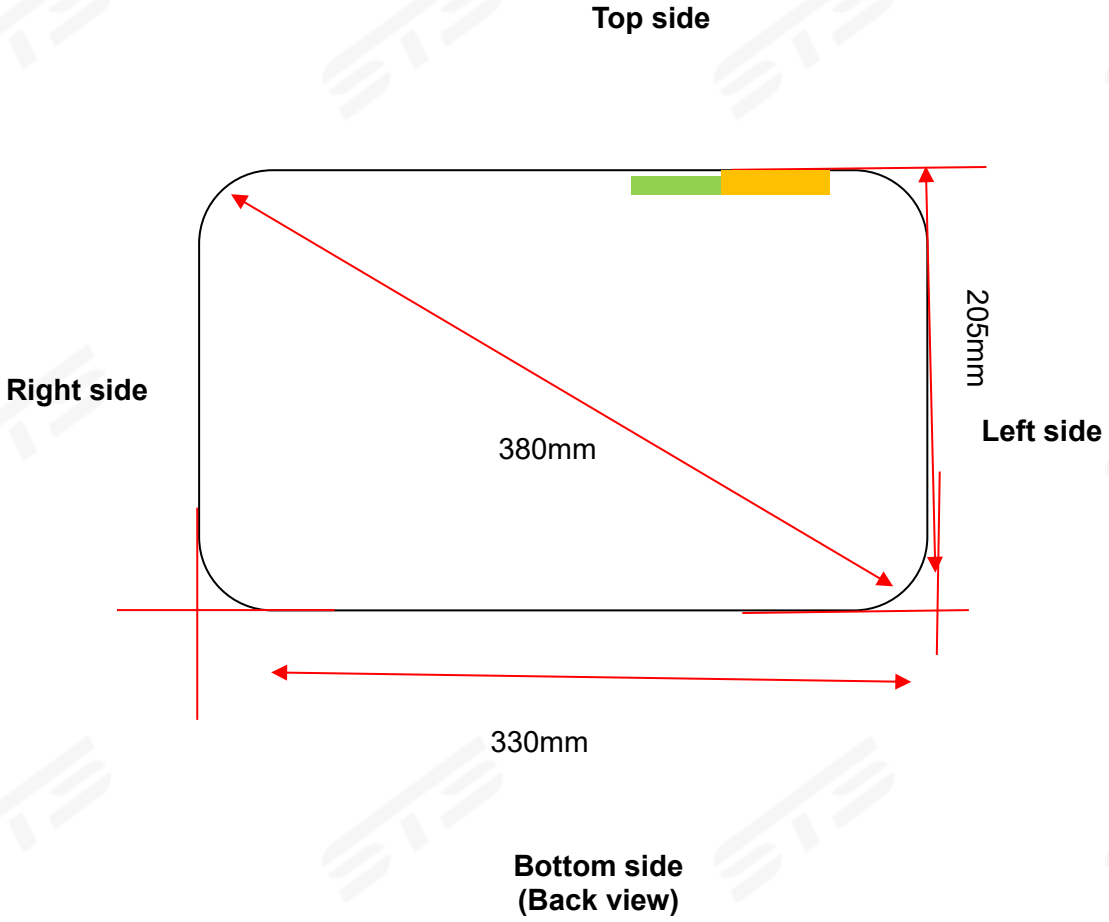
- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to16 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.

➢ Area Scan& Zoom Scan

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01 quoted below. When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7. EUT Antenna Location Sketch

It is a 14 inch Tablet, support GSM/WCDMA/LTE/WLAN/BT mode.



Antenna Separation Distance(cm)					
ANT	Back Side	Left Side	Right Side	Top Side	Bottom Side
WLAN/BT	≤0.5	≤0.5	26	≤0.5	22
WWAN	≤0.5	≤0.5	29.5	≤0.5	22

Note 1: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.

2. The edge of Phantom is more than 5cm away from the edge of EUT

7.1 SAR test exclusion consider table

The WLAN/WWAN SAR evaluation of Maximum power (dBm) summing tolerance.

Exposure Position	Wireless Interface	GSM850	PCS1900	WCDMA II	WCDMA V	LTE Band 5
	Calculated Frequency(GHz)	0.8488	1.8502	1.9706	0.8366	0.829
	Maximum Turn-up power (dBm)	29	29	24	24	24
	Maximum rated power(mW)	794.33	794.33	251.19	251.19	251.19
Back Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	9.04	3.44	3.27	9.22	9.34
	Testing required?	YES	YES	YES	YES	YES
Left Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	9.04	3.44	3.27	9.22	9.34
	Testing required?	YES	YES	YES	YES	YES
Right Side	Separation distance (cm)	29.5	29.5	29.5	29.5	29.5
	exclusion threshold(mW)	3012.39	6258.90	6292.29	2958.23	2924.59
	Testing required?	NO	NO	NO	NO	NO
Top Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	9.04	3.44	3.27	9.22	9.34
	Testing required?	YES	YES	YES	YES	YES
Bottom Side	Separation distance (cm)	22	22	22	22	22
	exclusion threshold(mW)	1983.39	3646.98	3651.74	1953.12	1934.28
	Testing required?	NO	NO	NO	NO	NO

Exposure Position	Wireless Interface	LTE Band 7	BT	2.4G WLAN	5.2G WLAN	5.8G WLAN
	Calculated Frequency(GHz)	2.51	2.402	2.412	5.2	5.745
	Maximum Turn-up power (dBm)	24	-1	15	14	11.5
	Maximum rated power(mW)	251.19	0.79	31.62	25.12	14.13
Back Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	2.69	2.79	2.78	1.50	1.39
	Testing required?	YES	NO	YES	YES	YES
Left Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	2.69	2.79	2.78	1.50	1.39
	Testing required?	YES	NO	YES	YES	YES
Right Side	Separation distance (cm)	29.5	26	26	26	26
	exclusion threshold(mW)	6422.09	5034.65	5035.85	5261.14	5291.10
	Testing required?	NO	NO	NO	NO	NO
Top Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	2.69	2.79	2.78	1.50	1.39
	Testing required?	YES	NO	YES	YES	YES
Bottom Side	Separation distance (cm)	22	22	22	22	22
	exclusion threshold(mW)	3670.07	3666.73	3667.04	3725.81	3733.51
	Testing required?	NO	NO	NO	NO	NO

Note：

1. maximum power is the source-based time-average power and represents the maximum RF output power among production units.
2. Per KDB 447498 D04, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D04, if the maximum time-averaged power available does not exceed 1 mW. This stand-alone SAR exemption test.

4. Per KDB 447498 D04, the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by:

$$P_{th}\ (\text{mW}) = \begin{cases} ERP_{20\ cm}(d/20\ \text{cm})^{x} & d \le 20\ \text{cm} \\ ERP_{20\ cm} & 20\ \text{cm} < d \le 40\ \text{cm} \end{cases}$$

Where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ cm}\sqrt{f}}\right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20\ cm}\ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases}$$

d = the separation distance (cm);

5. Per KDB 447498 D04, An alternative to the SAR-based exemption is using below table and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in below table to apply, R must be at least λ/2π, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of λ/4 or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

RF Source frequency (MHz)	Threshold ERP(watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

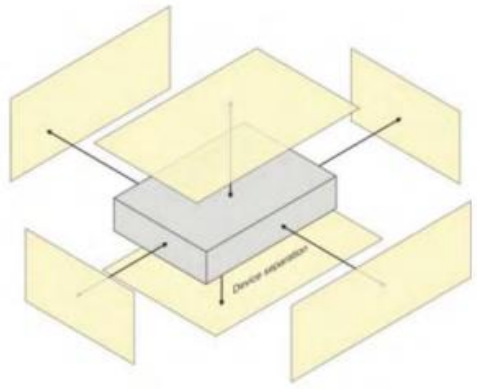
6. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion 8.for each frequency band ,testing at higher data rates and higher order modulations is not required when the maximum average output power for each of each of these configurations is less than 1/4db higher than those measured at the lower data rate than 11b mode ,thus the SAR can be excluded.
7. Per KDB 616217 D04, SAR evaluation for the front surface of tablet display screens are generally not necessary.
8. Per KDB 248227, as maximum rated power for U-NII-1＞U-NII-2A, U-NII-1 was chosen for SAR evaluation. Based on the measurements obtained, SAR measurements on U-NII-2A are not required as highest reported SAR from U-NII-1 band is≤1.2W/Kg.

8. EUT Test Position

This EUT was tested in Back Side, Left Side, Top Side.

8.1 Body-worn Position Conditions

Body-worn Position Conditions:
Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB Publication 447498 D04 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative *test separation distance* configuration may be used to support both SAR conditions. When the *reported* SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest *reported* SAR configuration for that wireless mode and frequency band should be repeated for the body-worn accessory with a headset attached to the handset.



9. Uncertainty

9.1 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEEE 1528: 2013.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

SATIMO Uncertainty- SN 08/21 EPGO352									
Measurement uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+- %)	10g Ui (+- %)	vi
Measurement System									
Probe calibration	E.2.1	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	0.71	0.71	0.07	0.07	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.71	0.71	0.42	0.42	∞
Boundary effect	E.2.3	0.80	R	1.73	1.00	1.00	0.46	0.46	∞
Linearity	E.2.4	1.25	R	1.73	1.00	1.00	0.72	0.72	∞
System detection limits	E.2.4	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Modulation response	E2.5	3.42	R	1.73	1.00	1.00	1.97	1.97	∞
Readout Electronics	E.2.6	0.26	N	1.00	1.00	1.00	0.26	0.26	∞
Response Time	E.2.7	0.17	R	1.73	1.00	1.00	0.10	0.10	∞
Integration Time	E.2.8	1.43	R	1.73	1.00	1.00	0.83	0.83	∞
RF ambient conditions-Noise	E.6.1	3.51	R	1.73	1.00	1.00	2.03	2.03	∞
RF ambient conditions-reflections	E.6.1	3.15	R	1.73	1.00	1.00	1.82	1.82	∞
Probe positioner mechanical tolerance	E.6.2	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.40	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.10	R	1.73	1.00	1.00	1.21	1.21	∞
Test sample Related									
Test sample positioning	E.4.2	3.10	N	1.00	1.00	1.00	3.10	3.10	∞
Device holder uncertainty	E.4.1	3.80	N	1.00	1.00	1.00	3.80	3.80	∞
Output power variation—SAR drift measurement	E.2.9	4.50	R	1.73	1.00	1.00	2.60	2.60	∞
SAR scaling	E.6.5	1.80	R	1.73	1.00	1.00	1.04	1.04	∞
Phantom and tissue parameters									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	3.70	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.90	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity measurement	E.3.3	2.40	R	1.73	0.78	0.71	1.08	0.98	M
Liquid permittivity measurement	E.3.3	4.10	N	1.00	0.78	0.71	3.20	2.91	M
Liquid conductivity—temperature uncertainty	E.3.4	2.70	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity—temperature uncertainty	E.3.4	4.80	N	1.00	0.23	0.26	1.10	1.25	∞
Combined Standard Uncertainty			RSS				10.08	9.59	
Expanded Uncertainty (95% Confidence interval)			K=2				19.58	19.18	

SATIMO Uncertainty- SN 08/21 EPGO352									
System Validation uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+- %)	10g Ui (+-%)	vi
Measurement System									
Probe calibration	E.2.1	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	1.00	1.00	0.10	0.10	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.00	0.00	0.00	0.00	∞
Boundary effect	E.2.3	0.80	R	1.73	1.00	1.00	0.46	0.46	∞
Linearity	E.2.4	1.25	R	1.73	1.00	1.00	0.72	0.72	∞
System detection limits	E.2.4	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Modulation response	E2.5	3.42	R	1.73	0.00	0.00	0.00	0.00	∞
Readout Electronics	E.2.6	0.26	N	1.00	1.00	1.00	0.26	0.26	∞
Response Time	E.2.7	0.17	R	1.73	0.00	0.00	0.00	0.00	∞
Integration Time	E.2.8	1.43	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions-Noise	E.6.1	3.51	R	1.73	1.00	1.00	2.03	2.03	∞
RF ambient conditions-reflections	E.6.1	3.15	R	1.73	1.00	1.00	1.82	1.82	∞
Probe positioner mechanical tolerance	E.6.2	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.40	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.10	R	1.73	1.00	1.00	1.21	1.21	∞
System validation source									
Deviation of experimental dipole from numerical dipole	E.6.4	4.80	N	1.00	1.00	1.00	4.80	4.80	∞
Input power and SAR drift measurement	8,6.6.4	5.10	R	1.73	1.00	1.00	2.94	2.94	∞
Dipole axis to liquid distance	8,E.6.6	2.40	R	1.73	1.00	1.00	1.39	1.39	∞
Phantom and set-up									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	3.70	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.90	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity (temperature uncertainty)	E.3.3	2.40	R	1.73	0.78	0.71	1.08	0.98	∞
Liquid conductivity (measured)	E.3.3	4.10	N	1.00	0.78	0.71	3.20	2.91	M
Liquid permittivity (temperature uncertainty)	E.3.4	2.70	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity (measured)	E.3.4	4.80	N	1.00	0.23	0.26	1.10	1.25	M
Combined Standard Uncertainty			RSS				9.72	9.52	
Expanded Uncertainty (95% Confidence interval)			K=2				19.44	19.03	

SATIMO Uncertainty- SN 08/21 EPGO352									
◦ System Check uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
		(+- %)							
Measurement System									
Probe calibration drift	E.2.1.3	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	0.00	0.00	0.00	0.00	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.00	0.00	0.00	0.00	∞
Boundary effect	E.2.3	0.8	R	1.73	0.00	0.00	0.00	0.00	∞
Linearity	E.2.4	1.25	R	1.73	0.00	0.00	0.00	0.00	∞
System detection limits	E.2.4	1.20	R	1.73	0.00	0.00	0.00	0.00	∞
Modulation response	E2.5	3.42	R	1.73	0.00	0.00	0.00	0.00	∞
Readout Electronics	E.2.6	0.26	N	1.00	0.00	0.00	0.00	0.00	∞
Response Time	E.2.7	0.17	R	1.73	0.00	0.00	0.00	0.00	∞
Integration Time	E.2.8	1.43	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions-Noise	E.6.1	3.51	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions-reflections	E.6.1	3.15	R	1.73	0.00	0.00	0.00	0.00	∞
Probe positioner mechanical tolerance	E.6.2	1.2	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.4	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	3.9	R	1.73	0.00	0.00	0.00	0.00	∞
System check source (dipole)									
Deviation of experimental dipoles	E.6.4	4.8	N	1.00	1.00	1.00	4.80	4.80	∞
Input power and SAR drift measurement	8,6.6.4	5.1	R	1.73	1.00	1.00	2.94	2.94	∞
Dipole axis to liquid distance	8,E.6.6	2.4	R	1.73	1.00	1.00	1.39	1.39	∞
Phantom and tissue parameters									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	3.7	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity measurement	E.3.3	2.4	R	1.73	0.78	0.71	1.08	0.98	∞
Liquid permittivity measurement	E.3.3	4.1	N	1.00	0.78	0.71	3.20	2.91	M
Liquid conductivity—temperature uncertainty	E.3.4	2.7	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity—temperature uncertainty	E.3.4	4.8	N	1.00	0.23	0.26	1.10	1.25	M
Combined Standard Uncertainty			RSS				5.56	5.20	
Expanded Uncertainty (95% Confidence interval)			K=2				11.12	10.41	

10. Conducted Power Measurement

10.1 Test Result

Burst Average Power (dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
GSM(GMSK, 1-Slot)	32.32	32.50	32.09	29.52	29.81	29.86
GPRS (GMSK, 1-Slot)	31.53	32.13	32.23	29.35	29.27	29.48
GPRS (GMSK, 2-Slot)	30.16	30.85	31.27	28.99	27.58	28.83
GPRS (GMSK, 3-Slot)	29.20	29.76	29.05	26.62	26.87	26.63
GPRS (GMSK, 4-Slot)	28.64	27.18	28.71	25.94	25.17	25.15
Remark: GPRS, CS4 coding scheme., MCS5 coding scheme. Multi-Slot Class 8, Support Max 4 downlink, 1 uplink, 5 working link Multi-Slot Class 10, Support Max 4 downlink, 2 uplink, 5 working link Multi-Slot Class 12, Support Max 4 downlink, 4 uplink, 5 working link						

Frame- Average Power(dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
GSM(GMSK, 1-Slot)	23.29	23.47	23.06	20.49	20.78	20.83
GPRS (GMSK, 1-Slot)	22.50	23.10	23.20	20.32	20.24	20.45
GPRS (GMSK, 2-Slot)	24.14	24.83	25.25	22.97	21.56	22.81
GPRS (GMSK, 3-Slot)	24.94	25.50	24.79	22.36	22.61	22.37
GPRS (GMSK, 4-Slot)	25.63	24.17	25.70	22.93	22.16	22.14
Remark : 1.SAR testing was performed on the maximum frame-averaged power mode. 2.The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum Burst - averaged power based on time slots. The calculated method is shown as below: Frame-averaged power = Burst averaged power (1 TX Slot) – 9.03 dB Frame-averaged power = Burst averaged power (2 TX Slots) – 6.02 dB Frame-averaged power = Burst averaged power (3 TX Slots) - 4.26 dB Frame-averaged power = Burst averaged power (4 TX Slots) – 3.01 dB						

WCDMA

Band	WCDMA Band 2			WCDMA Band 5		
Channel	9262	9400	9538	4132	4183	4233
Frequency (MHz)	1852.4	1880	1907.6	826.4	836.4	846.6
RMC 12.2Kbps	23.56	23.65	23.69	23.65	23.75	23.72
HSDPA Subtest-1	23.48	23.52	23.59	23.48	23.56	23.59
HSDPA Subtest-2	22.98	22.95	22.96	22.93	22.93	22.91
HSDPA Subtest-3	22.86	22.88	22.86	22.86	22.87	22.83
HSDPA Subtest-4	22.73	22.75	22.75	22.84	22.75	22.76
HSUPA Subtest-1	22.83	22.76	22.71	22.76	22.70	22.76
HSUPA Subtest-2	22.80	22.70	22.73	22.75	22.73	22.84
HSUPA Subtest-3	22.82	22.87	22.81	22.83	22.84	22.88
HSUPA Subtest-4	22.83	22.71	22.79	22.77	22.76	22.70
HSUPA Subtest-5	22.86	22.89	22.82	22.83	22.85	22.85

According to 3GPP 25.101 sub-clause 6.2.2, the maximum output power is allowed to be reduced by following the table.

Table 6.1A: UE maximum output power with HS-DPCCH and E-DCH

UE Transmit Channel Configuration	CM(db)	MPR(db)
For all combinations of ,DPDCH,DPCCH HS-DPDCH,E-DPDCH and E-DPCCH	0≤ CM≤3.5	MAX(CM-1,0)
Note: CM=1 for βc/βd=12/15, βhs/ βc=24/15.For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.		

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (a function of the combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH).

When E-DPDCH channels are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

The SW currently recalculates the cubic metric every time the beta gains on the E-DPDCH are reduced. The cubic metric will likely get lower each time this is done .However, there is no reported reduction of maximum output power in the HSUPA mode since the device also provides a compensation for the power back-off by increasing the gain of TX_AGC in the transceiver (PA) device.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.

LTE Conducted Power

General Note:

1. Anritsu CMW500 base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05, smaller bandwidth SAR testing is not required.

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	23.84	23.08	23.73
1.4	1	2		23.75	23.4	23.92
1.4	1	5		23.74	23.8	**23.98**
1.4	3	0		22.48	22.35	22.37
1.4	3	1		22.3	22.48	22.02
1.4	3	2		22.52	22.29	22.35
1.4	6	0		22.41	22.38	22.72
1.4	1	0	16-QAM	22.11	22.64	22.53
1.4	1	2		22.41	22.51	22.73
1.4	1	5		22.34	22.32	22.41
1.4	3	0		21.62	21.28	21.68
1.4	3	1		21.44	21.47	21.52
1.4	3	2		21.8	21.4	21.58
1.4	6	0		21.65	21.81	21.63
3	1	0	QPSK	23.48	23.51	23.58
3	1	7		23.2	23.84	23.41
3	1	14		23.57	23.67	23.31
3	8	0		22.5	22.4	22.24
3	8	4		22.11	22.38	22.35
3	8	7		22.51	22.27	22.21
3	15	0		22.18	22.54	22.32
3	1	0	16-QAM	22.55	22.21	22.37
3	1	7		22.28	22.47	22.51
3	1	14		22.31	22.49	22.47
3	8	0		21.45	21.32	21.38
3	8	4		21.36	21.49	21.59
3	8	7		21.45	21.31	21.27
3	15	0		21.47	21.42	21.49

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	23.33	23.85	23.25
5	1	12		23.37	23.78	23.51
5	1	24		23.69	23.37	23.72
5	12	0		22.3	22.23	22.13
5	12	6		22.65	22.23	22.62
5	12	11		22.55	22.47	22.61
5	25	0		22.54	22.31	22.34
5	1	0	16-QAM	22.62	22.02	22.47
5	1	12		22.31	22.37	22.31
5	1	24		22.3	22.57	22.16
5	12	0		21.32	21.55	21.56
5	12	6		21.53	21.52	21.4
5	12	11		21.37	21.39	21.56
5	25	0		21.77	21.5	21.53
10	1	0	QPSK	**23.91**	23.39	23.76
10	1	24		23.74	23.51	23.59
10	1	49		23.84	23.42	23.28
10	25	0		22.49	22.42	22.51
10	25	12		22.32	22.47	22.33
10	25	24		22.4	22.63	22.47
10	50	0		22.51	22.17	22.37
10	1	0	16-QAM	22.58	22.16	22.62
10	1	24		22.23	22.45	22.25
10	1	49		22.39	22.29	22.52
10	25	0		21.54	21.47	21.22
10	25	12		21.31	21.58	21.2
10	25	24		21.41	21.53	21.38
10	50	0		21.59	21.71	21.39

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	23.54	23.62	23.26
5	1	12		23.65	23.55	23.75
5	1	24		23.36	**23.9**	23.34
5	12	0		22.44	22.03	22.27
5	12	6		22.62	22.63	22.29
5	12	11		22.09	22.48	22.36
5	25	0		22.41	22.22	22.42
5	1	0	16-QAM	22.12	22.57	22.43
5	1	12		22.56	22.54	22.29
5	1	24		22.56	22.22	22.34
5	12	0		21.37	21.67	21.48
5	12	6		21.67	21.5	21.8
5	12	11		21.67	21.66	21.28
5	25	0		21.77	21.43	21.5
10	1	0	QPSK	23.61	23.77	23.13
10	1	24		23.46	23.85	23.39
10	1	49		23.18	23.39	23.84
10	25	0		22.68	22.5	22.41
10	25	12		22.24	22.37	22.3
10	25	24		22.47	22.23	22.47
10	50	0		22.65	22.47	22.37
10	1	0	16-QAM	22.47	22.47	22.61
10	1	24		22.17	22.2	22.57
10	1	49		22.26	22.33	22.15
10	25	0		21.66	21.32	21.17
10	25	12		21.51	21.5	21.32
10	25	24		21.47	21.28	21.46
10	50	0		21.54	21.76	21.44

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	23.87	23.66	23.92
15	1	37		23.36	23.31	23.71
15	1	74		23.13	23.67	23.35
15	36	0		22.36	22.03	22.26
15	36	18		22.38	22.57	22.3
15	36	39		22.57	22.34	22.23
15	75	0		22.11	22.34	22.5
15	1	0	16-QAM	22.41	22.41	22.38
15	1	38		22.31	22.21	22.38
15	1	75		22.52	22.45	22.43
15	36	0		21.47	21.68	21.61
15	36	18		21.39	21.28	21.46
15	36	39		21.19	21.54	21.37
15	75	0		21.52	21.63	21.44
20	1	0	QPSK	23.89	23.33	23.8
20	1	49		23.56	23.33	23.73
20	1	99		**23.97**	23.94	23.13
20	50	0		22.07	22.62	22.41
20	50	24		22.48	22.59	22.38
20	50	49		22.49	22.5	22.32
20	100	0		22.66	22.66	22.49
20	1	0	16-QAM	22.55	22.26	22.32
20	1	49		22.72	22.57	22.42
20	1	99		22.23	22.62	22.39
20	50	0		21.47	21.34	21.52
20	50	24		21.71	21.54	21.51
20	50	49		21.32	21.29	21.55
20	100	0		21.56	21.63	21.44

2.4G WLAN

2.4GWIFI				
Mode	Channel Number	Frequency (MHz)	Peak power [dBm]	Output Power (mW)
802.11b	1	2412	14.53	28.38
	6	2437	13.25	21.13
	11	2462	13.38	21.78
802.11g	1	2412	13.18	20.80
	6	2437	12.43	17.50
	11	2462	12.14	16.37
802.11 n20	1	2412	13.35	21.63
	6	2437	12.38	17.30
	11	2462	12.09	16.18
802.11 n40	3	2422	12.4	17.38
	6	2437	11.76	15.00
	9	2452	12.83	19.19

BT

BT				
Mode	Channel Number	Frequency (MHz)	Peak power [dBm]	Output Power (mW)
GFSK(1Mbps)	0	2402	-0.14	0.97
	39	2441	-0.29	0.94
	78	2480	-0.37	0.92
π/4-QPSK(2Mbps)	0	2402	-0.94	0.81
	39	2441	-1.11	0.77
	78	2480	-1.13	0.77
8DPSK(3Mbps)	0	2402	-0.55	0.88
	39	2441	-0.72	0.85
	78	2480	-0.74	0.84

BLE

BLE				
Mode	Channel Number	Frequency (MHz)	Peak power [dBm]	Output Power (mW)
GFSK(1Mbps)	0	2402	-3.58	0.44
	19	2440	-3.71	0.43
	39	2480	-3.84	0.41
GFSK(2Mbps)	0	2402	-3.55	0.44
	19	2440	-3.61	0.44
	39	2480	-3.82	0.41

5.2G

5.2G WLAN				
Mode	Channel Number	Frequency (MHz)	Peak power [dBm]	Output Power (mW)
802.11a	36	5180	13.59	22.86
	40	5200	13.87	24.38
	48	5240	13.03	20.09
802.11 n-HT20	36	5180	13.49	22.34
	40	5200	13.06	20.23
	48	5240	13.17	20.75
802.11 n-HT40	38	5190	12.97	19.82
	46	5230	12.57	18.07
802.11ac-VHT20	36	5180	12.96	19.77
	40	5200	13.03	20.09
	48	5240	13.09	20.37
802.11ac-VHT40	38	5190	13.27	21.23
	46	5230	12.77	18.92
802.11ac-VHT80	42	5210	13.69	23.39

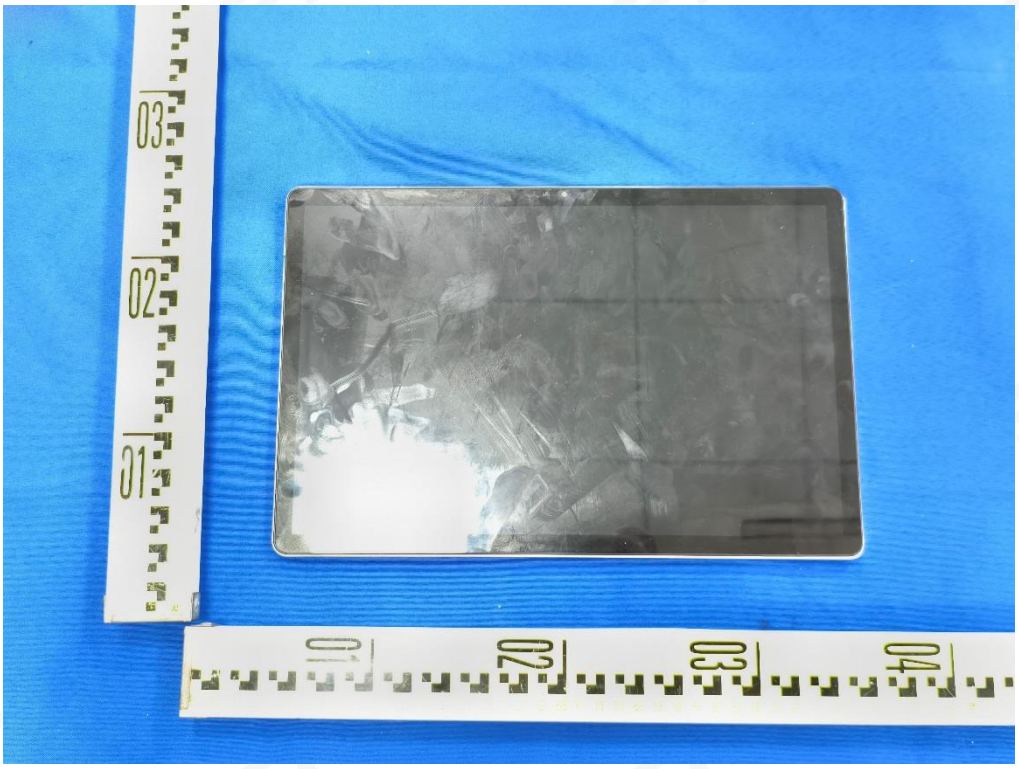
5.8G

5.8G WLAN				
Mode	Channel Number	Frequency (MHz)	Peak power [dBm]	Output Power (mW)
802.11a	149	5745	11.21	13.21
	157	5785	10.25	10.59
	165	5825	10.17	10.40
802.11 n-HT20	149	5745	10.85	12.16
	157	5785	10.6	11.48
	165	5825	9.78	9.51
802.11 n-HT40	151	5755	10.53	11.30
	159	5795	10.72	11.80
802.11ac-VHT20	149	5745	11.1	12.88
	157	5785	10.47	11.14
	165	5825	9.76	9.46
802.11ac-VHT40	151	5755	10.31	10.74
	159	5795	10.1	10.23
802.11ac-VHT80	155	5775	11.02	12.65

11. EUT and Test Setup Photo

11.1 EUT Photo

Front side

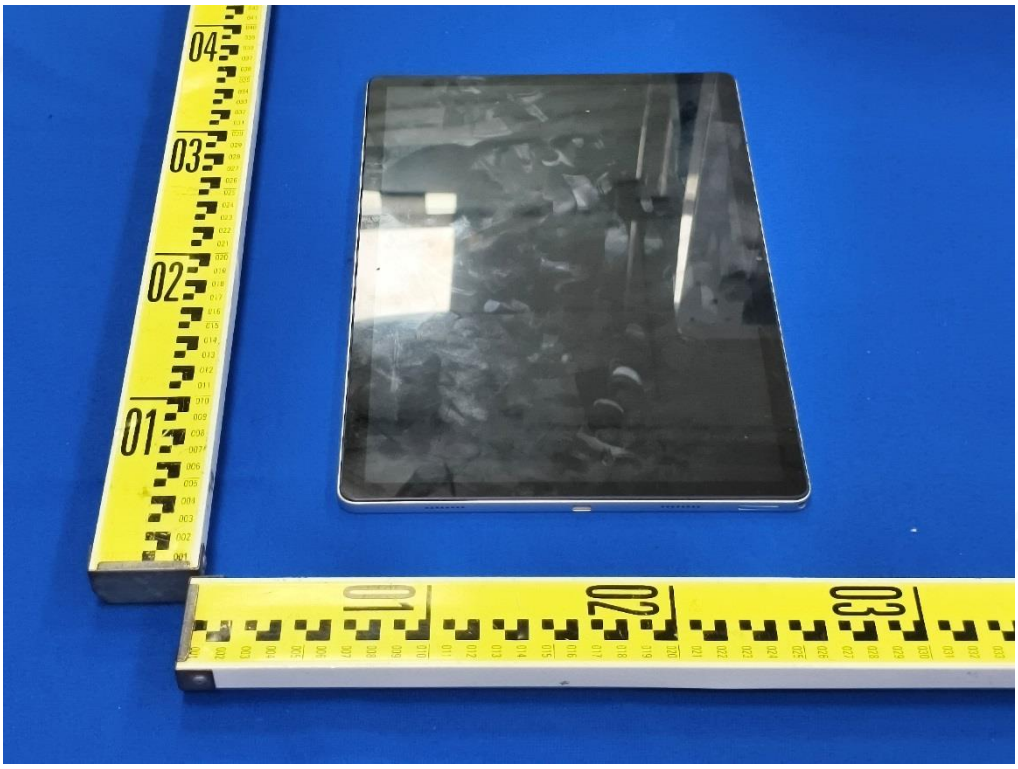


Back side

Top side

Bottom side

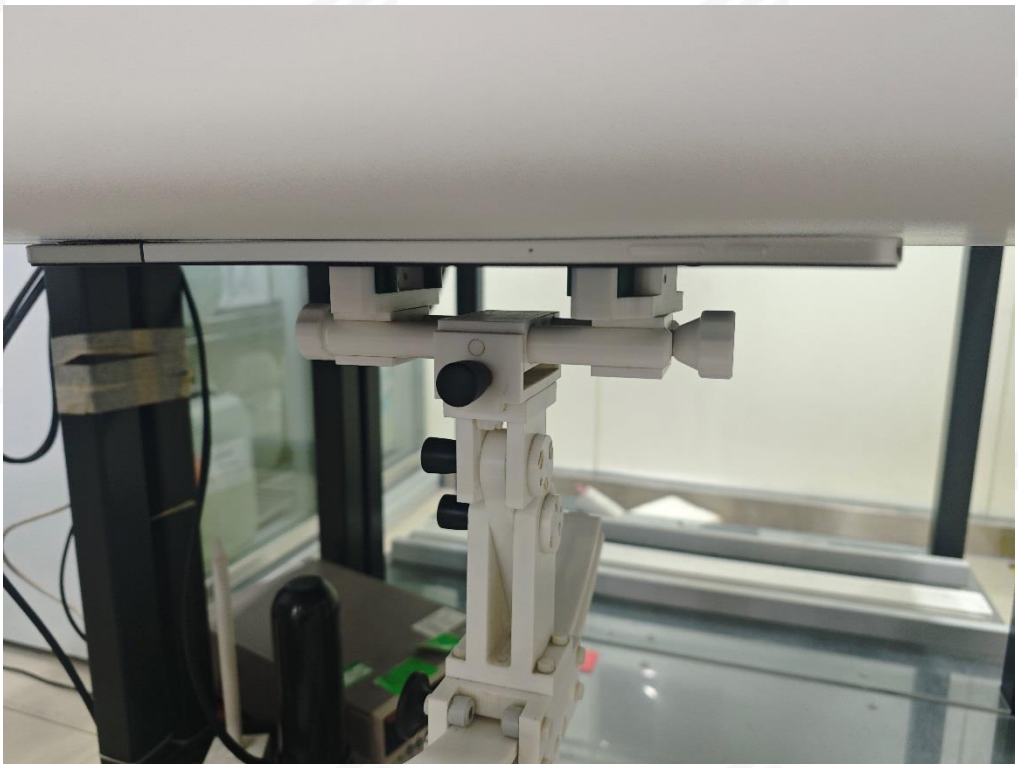
Left side



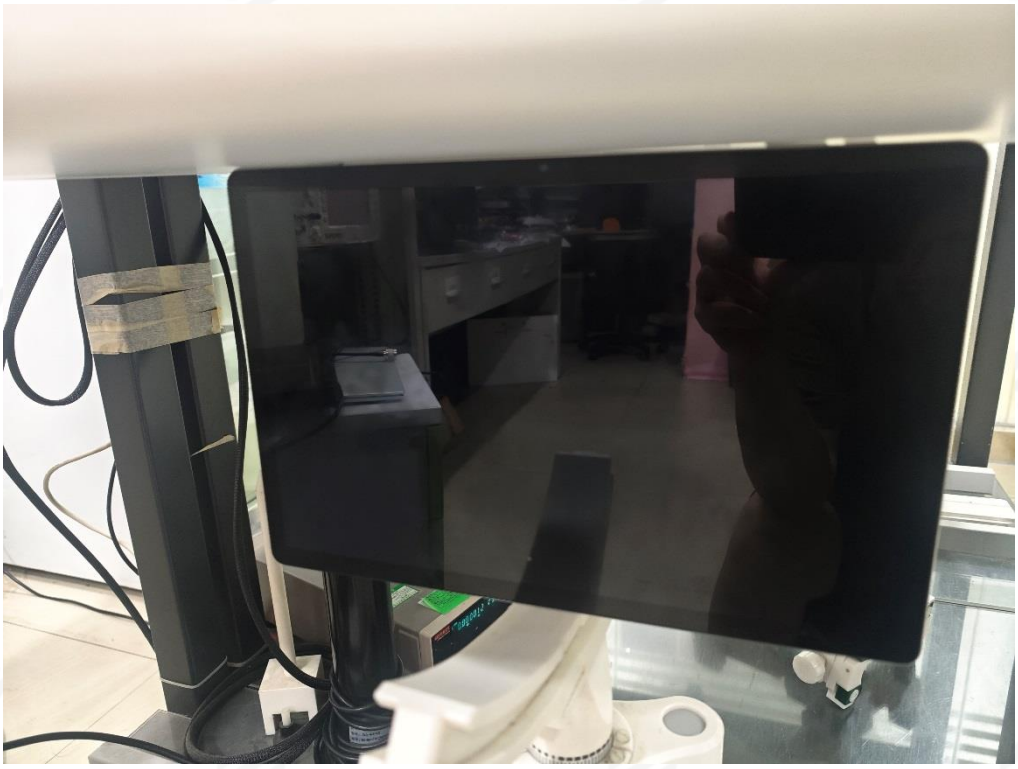
Right side

11.2 Setup Photo

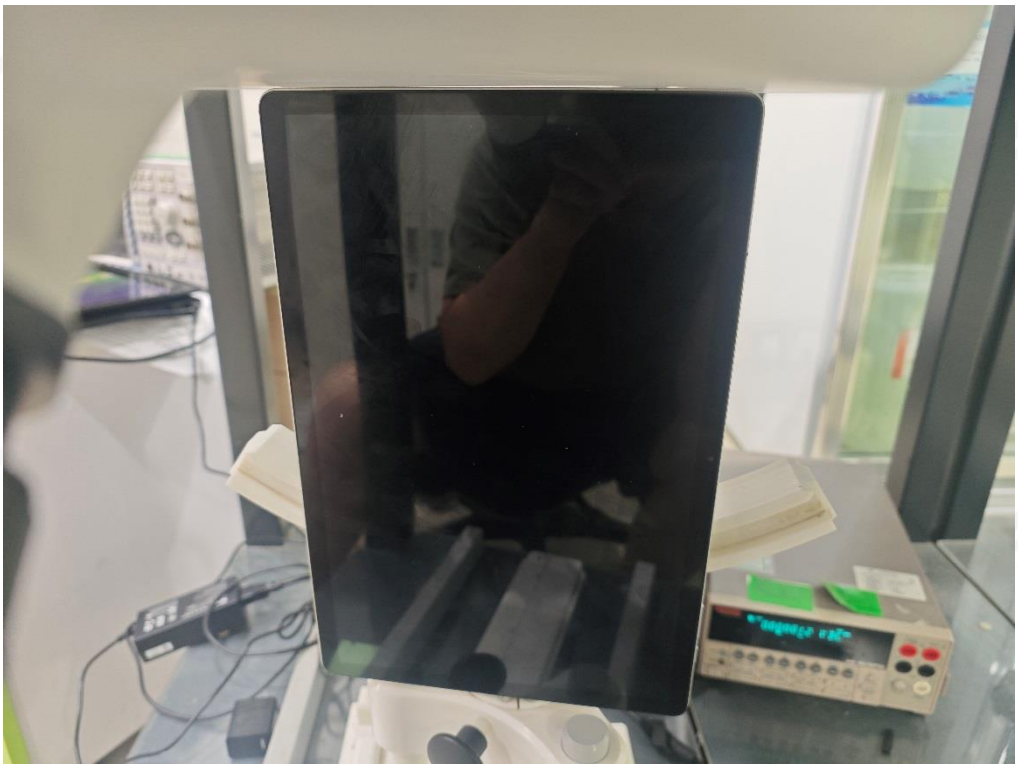
Back Side (separation distance is 0mm)



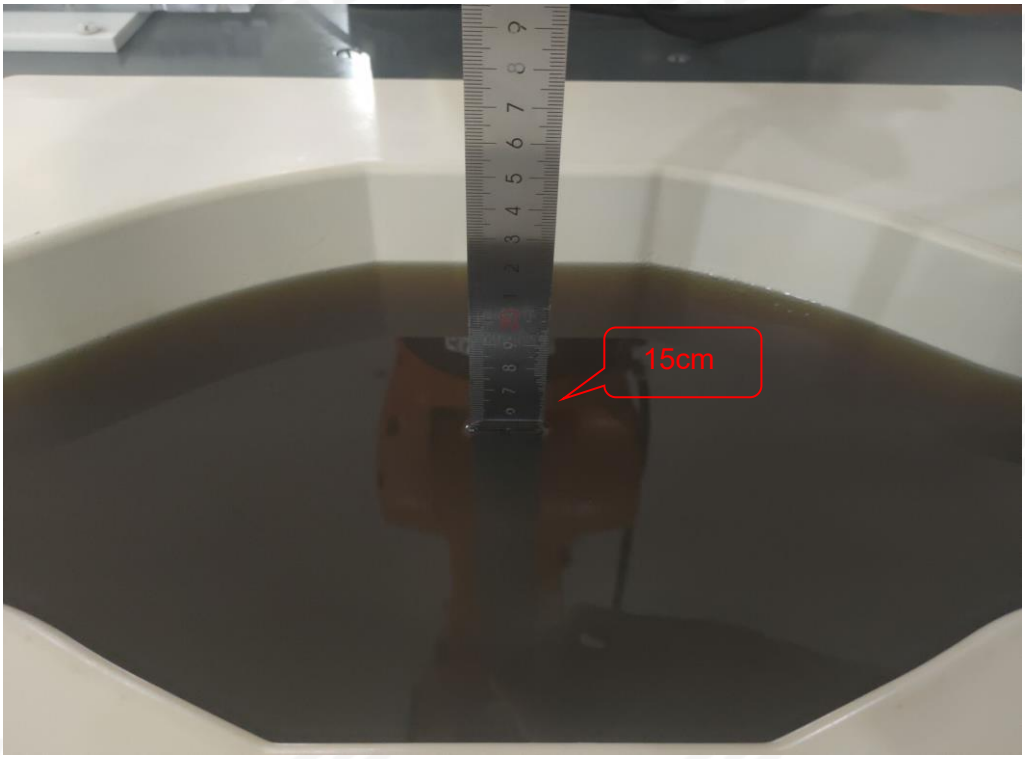
Top side(separation distance is 0mm)



Left Side (separation distance is 0mm)



Liquid depth (15 cm)



12. SAR Result Summary

12.1 Body SAR

Band	Model	Test Position	Freq.	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaling Factor	Scaled SAR (W/Kg)	Meas.No.
GSM850	GPRS Data-4 Slot	Back Side	848.8	0.107	3.79	29.00	28.71	1.069	**0.114**	**1**
		Left Side	848.8	0.084	-2.81	29.00	28.71	1.069	0.090	/
		Top Side	848.8	0.065	-1.67	29.00	28.71	1.069	0.069	/
GSM1900	GPRS Data-4 Slot	Back Side	1850.2	0.503	2.15	29.00	28.99	1.002	**0.504**	**2**
		Left Side	1850.2	0.456	-2.47	29.00	28.99	1.002	0.457	/
		Top Side	1850.2	0.287	1.74	29.00	28.99	1.002	0.288	/
WCDMA Band II	RMC	Back Side	1907.6	0.297	0.25	24.00	23.69	1.074	**0.319**	**3**
		Left Side	1907.6	0.252	3.74	24.00	23.69	1.074	0.271	/
		Top Side	1907.6	0.106	1.58	24.00	23.69	1.074	0.114	/
WCDMA Band V	RMC	Back Side	836.4	0.520	3.26	24.00	23.75	1.059	**0.551**	**4**
		Left Side	836.4	0.443	-2.10	24.00	23.75	1.059	0.469	/
		Top Side	836.4	0.178	1.77	24.00	23.75	1.059	0.189	/
2.4GHz WLAN	802.11b	Back Side	2412	0.429	0.35	15.00	14.53	1.114	**0.478**	**7**
		Left Side	2412	0.386	3.08	15.00	14.53	1.114	0.430	/
		Top Side	2412	0.212	2.90	15.00	14.53	1.114	0.236	/
5.2GHz WLAN	802.11a	Back Side	5200	0.285	-0.64	14.00	13.87	1.030	**0.294**	**8**
		Left Side	5200	0.212	0.75	14.00	13.87	1.030	0.218	/
		Top Side	5200	0.096	2.70	14.00	13.87	1.030	0.099	/
5.8GHz WLAN	802.11a	Back Side	5745	0.709	-2.29	11.50	11.21	1.069	**0.758**	**9**
		Left Side	5745	0.663	-3.57	11.50	11.21	1.069	0.709	/
		Top Side	5745	0.352	0.07	11.50	11.21	1.069	0.376	/

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaling Factor	Scaled SAR (W/Kg)	Meas.No.
LTE Band 5	10M	QPSK	1	0	Back Side	829	0.278	-2.56	24	23.91	1.021	**0.284**	**5**
			25	0	Back Side	836.5	0.222	-1.62	23	22.63	1.089	0.242	/
			1	0	Left Side	829	0.230	-0.07	24	23.91	1.021	0.235	**/**
			25	0	Left Side	836.5	0.216	-2.65	23	22.63	1.089	0.235	/
			1	0	Top Side	829	0.103	3.12	24	23.91	1.021	0.105	/
			25	0	Top Side	836.5	0.084	0.66	23	22.63	1.089	0.091	/
LTE Band 7	20M	QPSK	1	0	Back Side	2510	0.735	-1.62	24	23.97	1.007	0.740	6
			1	0	Back Side	2535	0.684	-0.11	24	23.94	1.014	0.694	/
			1	0	Back Side	2560	0.578	2.47	24	23.13	1.222	0.706	/
			50	0	Back Side	2535	0.625	-1.75	23	22.62	1.091	0.682	/
			1	0	Left Side	2510	0.618	-1.40	24	23.97	1.007	0.622	**/**
			50	0	Left Side	2535	0.574	-1.85	23	22.62	1.091	0.626	**/**
			1	0	Top Side	2510	0.224	-2.51	24	23.97	1.007	0.226	**/**
			50	0	Top Side	2535	0.189	-1.54	23	22.62	1.091	0.206	/

Note:

1. The test separation of all above table is 0mm.
2. Per KDB 447498 D04, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. Scaled SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
3. When the user enables the personal Wireless router functions for the handsets, actual operations include simultaneous transmission of both the Wi-Fi transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The “Portable Hotspot” feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

12.2 Simultaneous Multi-band Transmission Evaluation

Application Simultaneous Transmission information:

Position	Simultaneous State
Body	1.GSM + 2.4GHz WLAN/5GHz WLAN
	2. WCDMA + 2.4GHz WLAN/5GHz WLAN
	2. LTE + 2.4GHz WLAN/5GHz WLAN

NOTE:

1. Bluetooth and WLAN can't simultaneous transmission at the same time.
2. For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
3. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
4. KDB 447498 / 4.3.2 (2) 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: a) (max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f (GHz) /x] W/kg for test separation distances≤ 50 mm; Where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR. b) 0.4W/Kg for 1-g SAR and 1.0W/Kg for 10-g SAR, when the separation distance is >50mm.

Estimated SAR		Maximum Average Power		Dis.	Frequency(GHz)	Stand alone SAR(1g) [W/kg]
		dBm	mW			
BT	Body	0.5	1.122	5	2.402	0.046

Simultaneous Mode	Position	Mode	Max. 1-g SAR	1-g Sum SAR
			(W/kg)	(W/kg)
GSM + 2.4G WLAN	Body	GSM	0.504	0.982
		2.4G WLAN	0.478	
GSM + 5G WLAN	Body	GSM	0.504	1.262
		5G WLAN	0.758	
WCDMA + 2.4G WLAN	Body	WCDMA	0.551	1.029
		2.4G WLAN	0.478	
WCDMA + 5G WLAN	Body	WCDMA	0.551	1.309
		5G WLAN	0.758	
LTE + 2.4G WLAN	Body	LTE	0.740	1.218
		2.4G WLAN	0.478	
LTE + 5G WLAN	Body	LTE	0.740	1.498
		5G WLAN	0.758	
GSM+ BT	Body	GSM	0.504	0.550
		BT	0.046	
WCDMA + BT	Body	WCDMA	0.551	0.597
		BT	0.046	
LTE +BT	Body	LTE	0.740	0.786
		BT	0.046	

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna.

When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR-1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR-1g 1.6 W/kg), SAR test exclusion is determined by the SPLSR.

13. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
835MHz Dipole	MVG	SID835	SN 30/14 DIP0G835-332	2023.07.04	2026.07.03
1900MHz Dipole	MVG	SID1900	SN 30/14 DIP1G900-333	2023.09.14	2026.09.13
2450MHzDipole	MVG	SID2450	SN 30/14 DIP2G450-335	2023.07.04	2026.07.03
2600MHz Dipole	MVG	SID2600	SN 30/14 DIP2G600-336	2023.07.04	2026.07.03
Waveguide	MVG	SWG5500	SN 13/14 WGA32	2023.07.04	2026.07.03
E-Field Probe	MVG	SSE2	SN 08/21 EPGO352	2024.09.18	2025.09.17
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2024.09.18	2025.09.17
Antenna	MVG	ANTA3	SN 07/13 ZNTA52	N/A	N/A
Phantom1	MVG	SAM	SN 32/14 SAM115	N/A	N/A
Phantom3	MVG	SAM	SN 21/21 ELLI48	N/A	N/A
Phone holder	MVG	N/A	SN 32/14 MSH97	N/A	N/A
Laptop holder	MVG	N/A	SN 32/14 LSH29	N/A	N/A
Attenuator	Agilent	HXT-10-8-SMA	240327017	2025-02-22	2026-02-21
Directional coupler	Xi'an Xingbo	XBOH-OA08-20dB	211123-4-3	2025-02-22	2026-02-21
Network Analyzer	Agilent	E5071C	MY46520378	2024-09-25	2025-09-26
Multi Meter	Keithley	Multi Meter 2000	4050073	2024-09-25	2025-09-26
Signal Generator	Agilent	N5182A	MY50140530	2024-09-25	2025-09-26
Wireless Communication Test Set	Agilent	8960-E5515C	MY48360751	2025-02-22	2026-02-21
Wireless Communication Test Set	R&S	CMW500	156324	2024-09-25	2025-09-26
Power Amplifier	DESAY	ZHL-42W	9638	2024-09-25	2025-09-26
Power Meter	R&S	NRP	100510	2024-09-25	2025-09-26
Power Sensor	R&S	NRP-Z11	101919	2024-09-25	2025-09-26
Power Sensor	Keysight	U2021XA	MY56280002	2024-09-25	2025-09-26
Temperature hygrometer	SuWei	SW-108	N/A	2024.10.15	2025.10.14
Thermograph	Elitech	RC-4	S/N EF7176501537	2024.10.15	2025.10.14

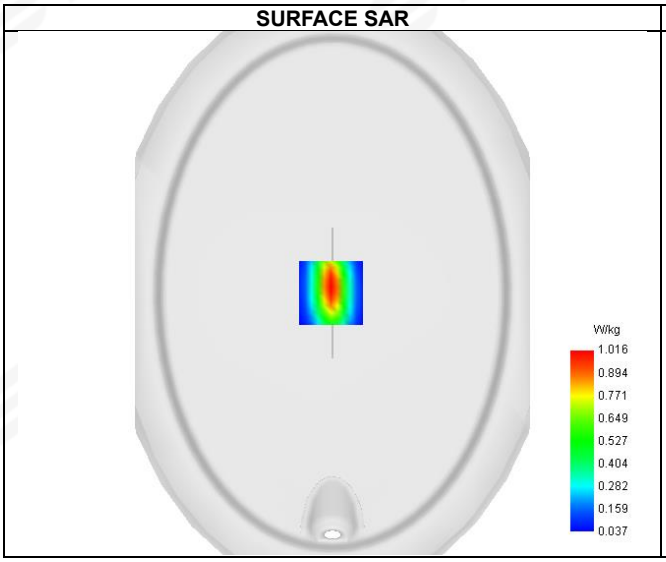
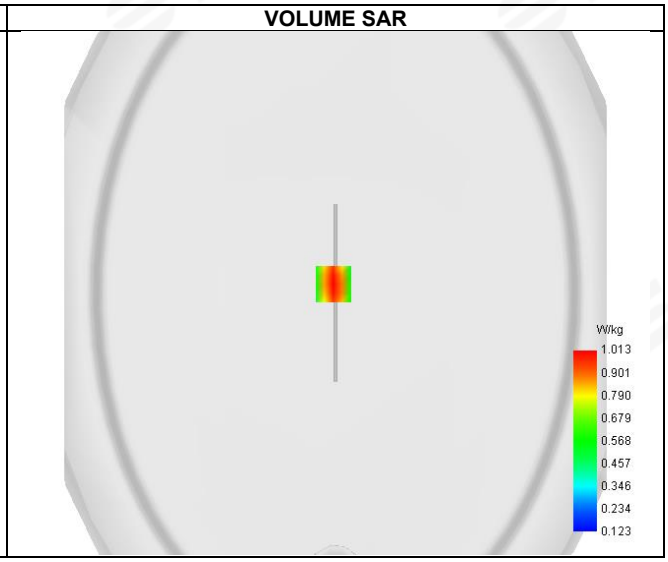
Appendix A. System Validation Plots

System Performance Check Data (835MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-06-19

Experimental conditions.

Device Position	Validation plane
Band	835 MHz
Channels	-
Signal	CW
Frequency (MHz)	835
Relative permittivity	41.42
Conductivity (S/m)	0.94
Probe	SN 08/21 EPGO352
ConvF	1.44
Crest factor:	1:1

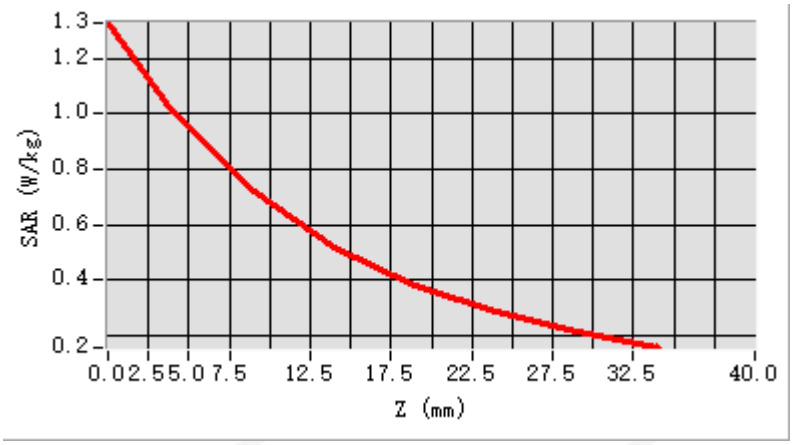
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-2.00, Y=8.00 ; SAR Peak: 1.34 W/kg

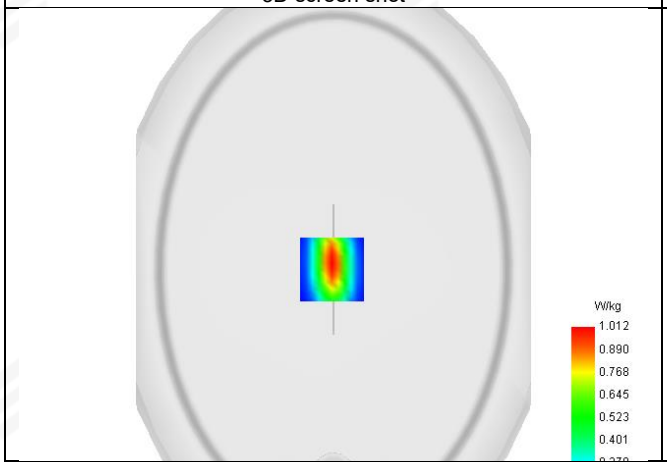
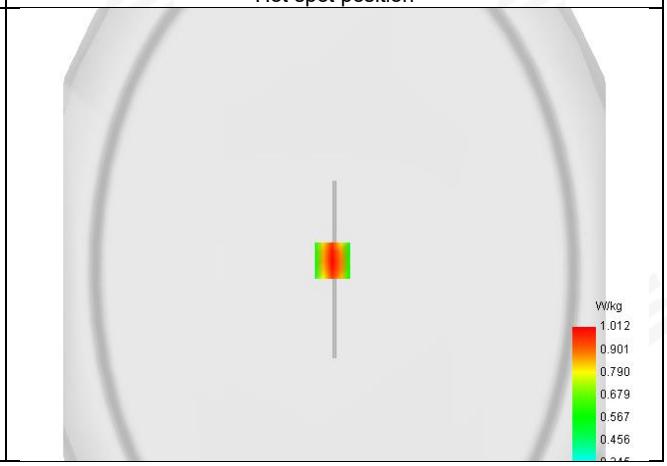
D. SAR 1g & 10g

SAR 10g (W/Kg)	0.601
SAR 1g (W/Kg)	0.977
Callskytal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	71.442687

E. Z Axis Scan



F. 3D Image

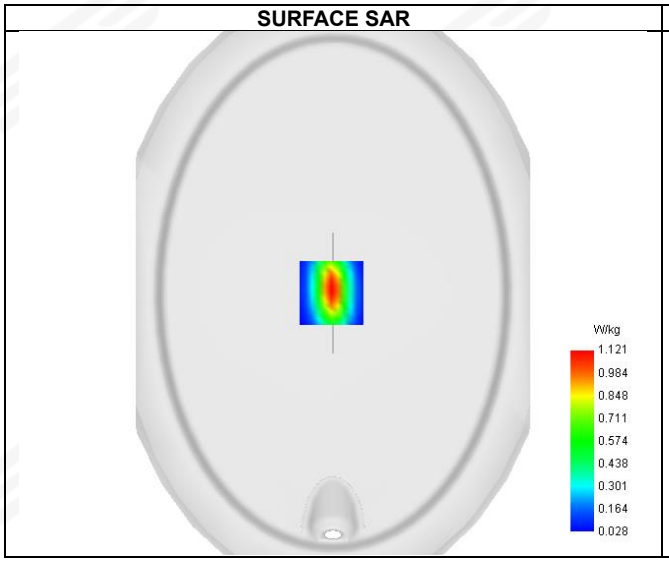
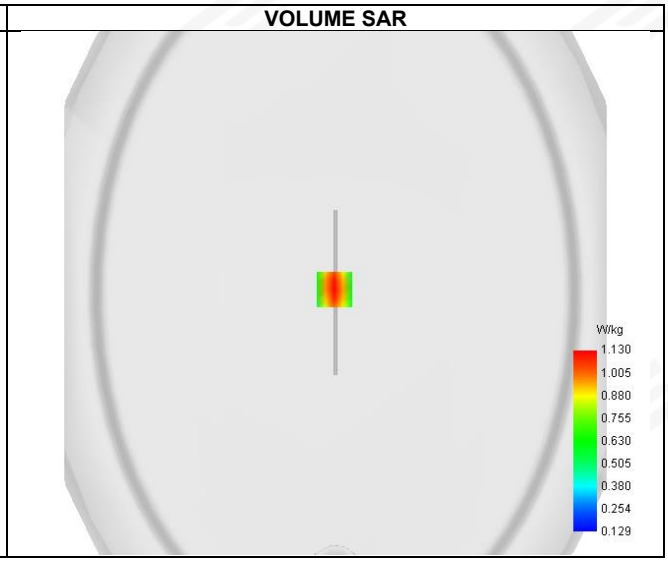
3D screen shot	Hot spot position
	

System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-06-20

Experimental conditions.

Device Position	Validation plane
Band	1900 MHz
Channels	-
Signal	CW
Frequency (MHz)	1900
Relative permittivity	40.21
Conductivity (S/m)	1.42
Probe	SN 08/21 EPGO352
ConvF	1.72
Crest factor:	1:1

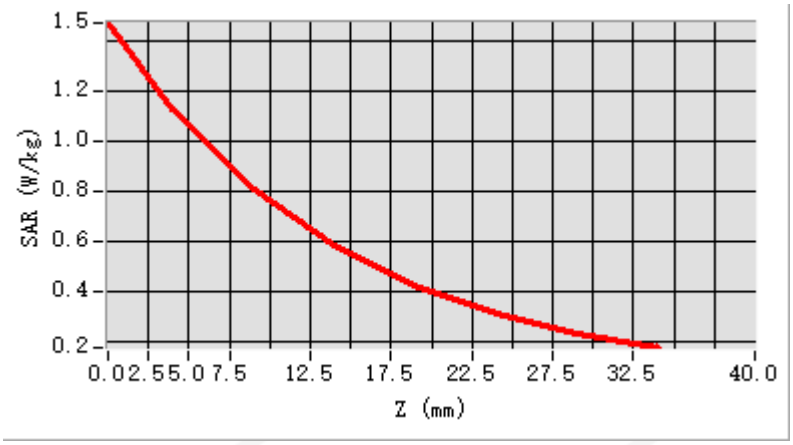
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-1.00, Y=3.00 ; SAR Peak: 1.47 W/kg

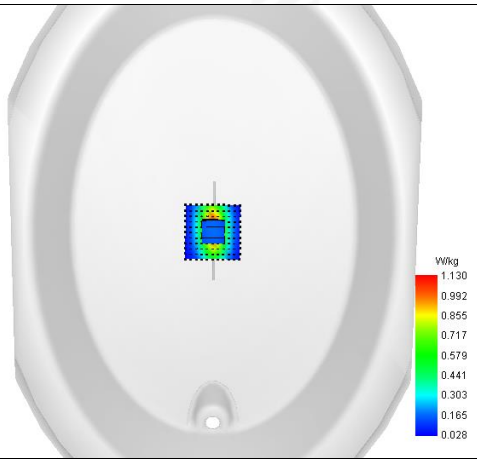
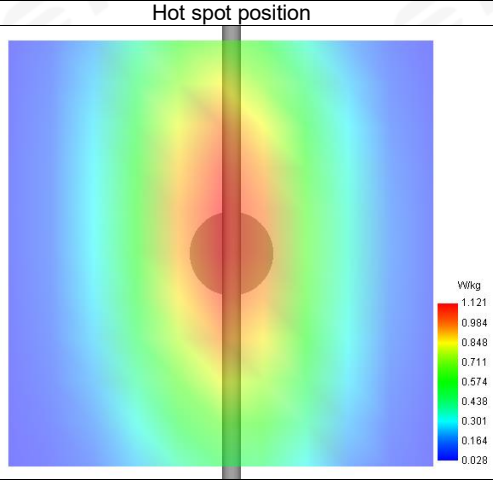
D. SAR 1g & 10g

SAR 10g (W/Kg)	2.001
SAR 1g (W/Kg)	3.852
Callskytal validation criteria: minimum distance (mm)	22.627417
Vertical validation criteria: SAR ratio M2/M1 (%)	71.642130

E. Z Axis Scan



F. 3D Image

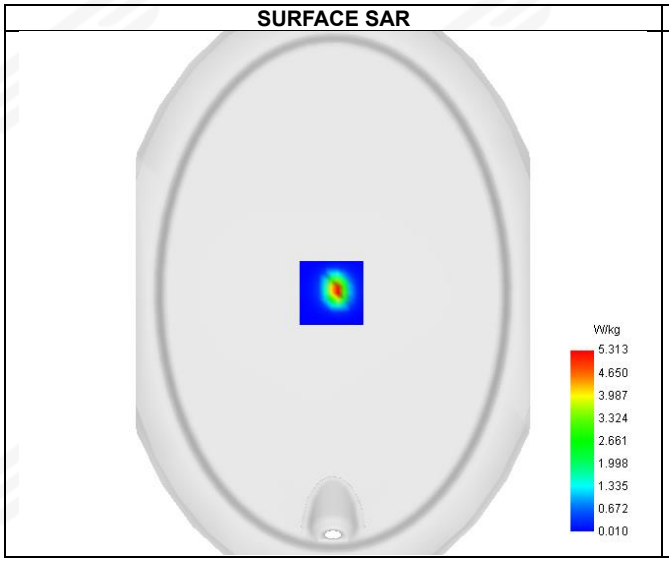
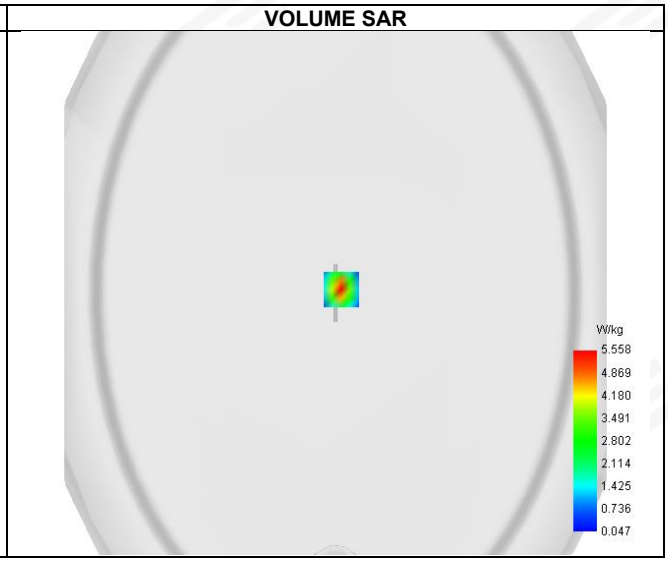
3D screen shot	Hot spot position
	

System Performance Check Data (2450MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-06-20

Experimental conditions.

Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity	39.36
Conductivity (S/m)	1.78
Probe	SN 08/21 EPGO352
ConvF	1.80
Crest factor:	1:1

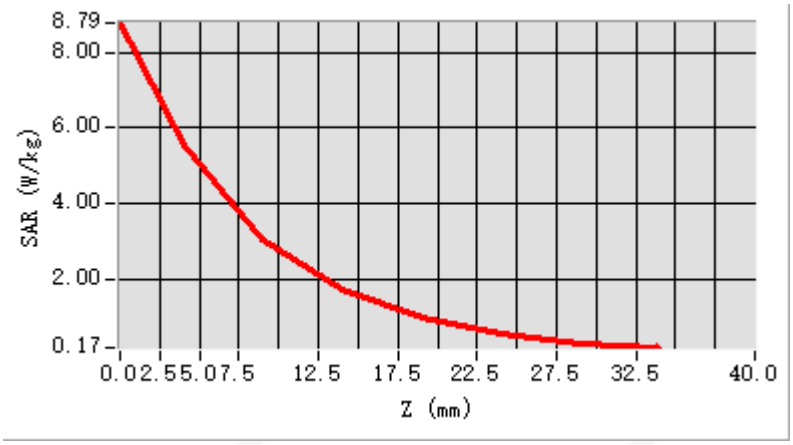
SURFACE SAR	VOLUME SAR
	

Maximum location: X=5.00, Y=3.00 ; SAR Peak: 8.73 W/kg

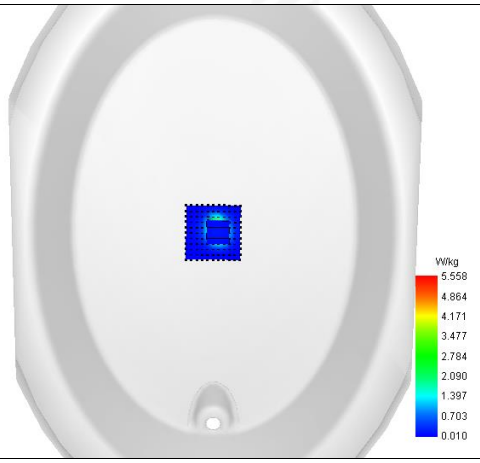
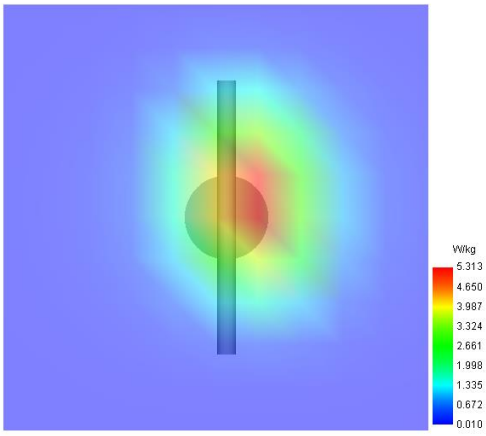
D. SAR 1g & 10g

SAR 10g (W/Kg)	2.537
SAR 1g (W/Kg)	5.700
Callskytal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	54.793971

E. Z Axis Scan



F. 3D Image

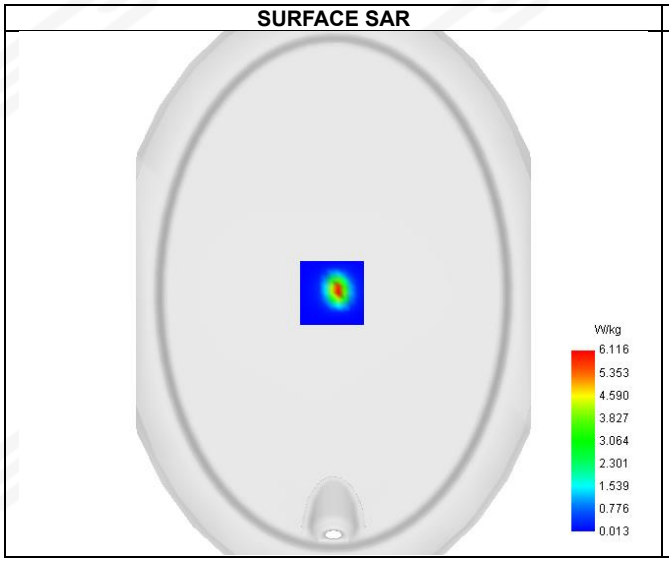
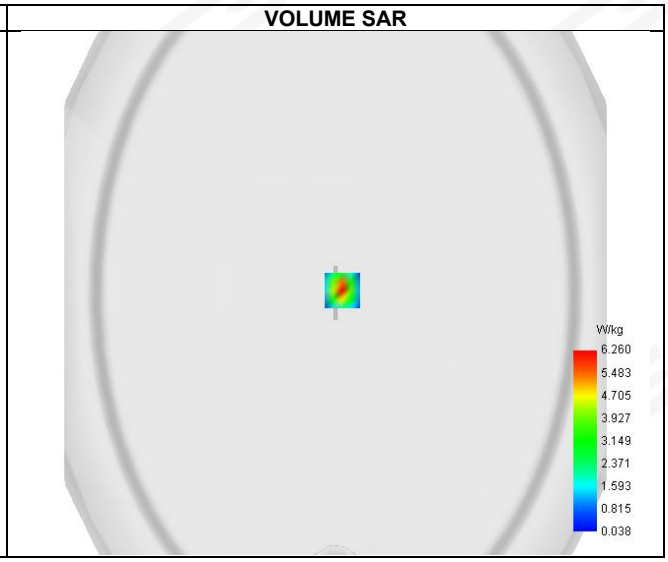
3D screen shot	Hot spot position
	

System Performance Check Data (2600MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-06-20

Experimental conditions.

Device Position	Validation plane
Band	2600 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity	39.88
Conductivity (S/m)	1.98
Probe	SN 08/21 EPGO352
ConvF	1.74
Crest factor:	1:1

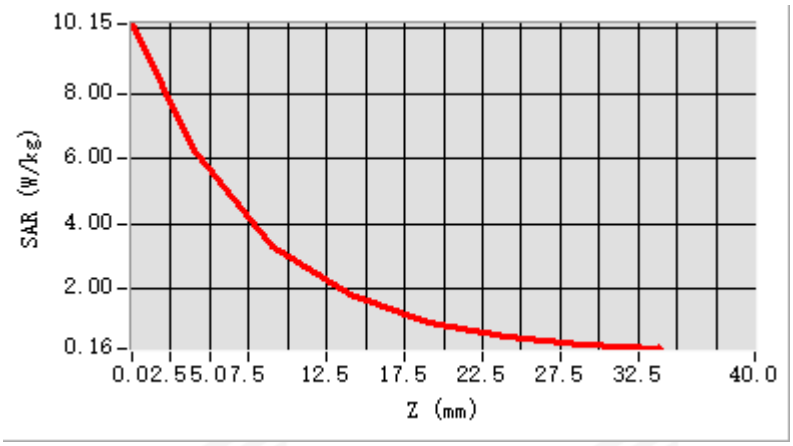
SURFACE SAR	VOLUME SAR
	

Maximum location: X=6.00, Y=2.00 ; SAR Peak: 10.15 W/kg

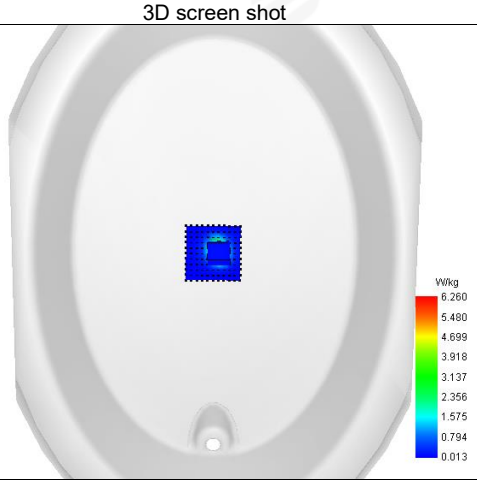
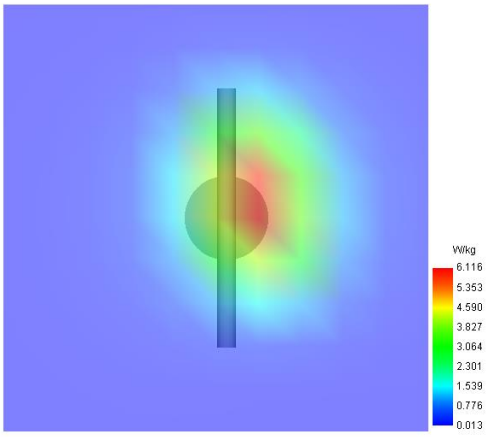
D. SAR 1g & 10g

SAR 10g (W/Kg)	2.358
SAR 1g (W/Kg)	5.441
Callskytal validation criteria: minimum distance (mm)	11.313708
Vertical validation criteria: SAR ratio M2/M1 (%)	52.645580

E. Z Axis Scan



F. 3D Image

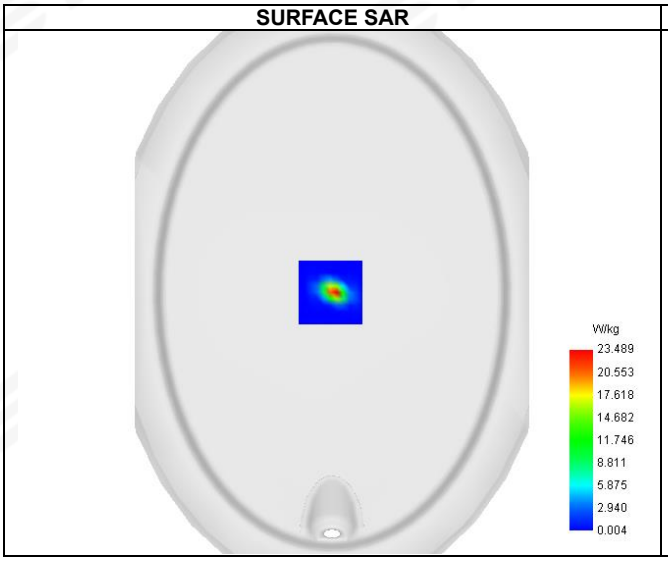
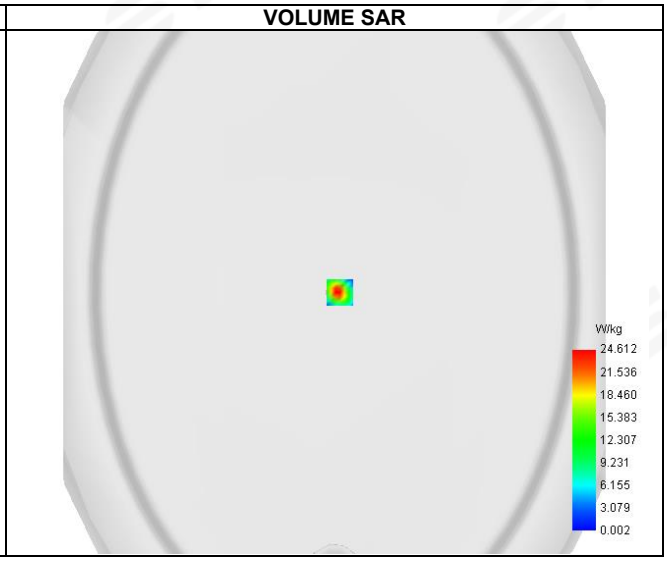
3D screen shot	Hot spot position
	

System Performance Check Data (5200MHz)

Type: Dipole measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm
Date of measurement: 2025-06-21

Experimental conditions.

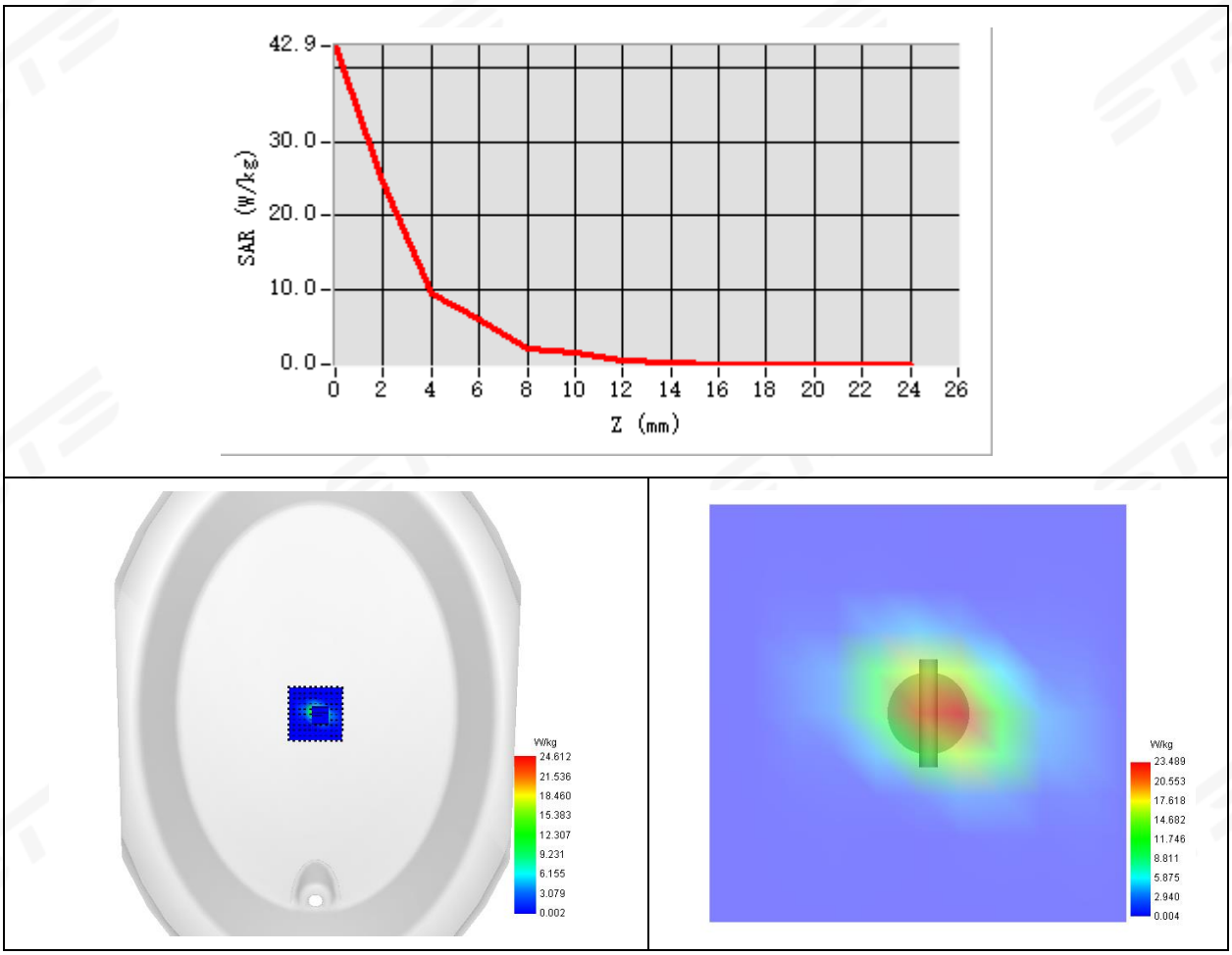
Phantom	Validation plane
Device Position	Dipole
Band	5200MHz
Channels	Middle
Signal	CW
Frequency (MHz)	5200
Relative permittivity	36.28
Conductivity (S/m)	4.64
Probe	SN 08/21 EPGO352
ConvF	1.33
Crest factor:	1:1

SURFACE SAR	VOLUME SAR
	

Maximum location: X=5.00, Y=0.00 ; SAR Peak: 45.34 W/kg

SAR 10g (W/Kg)	6.133
SAR 1g (W/Kg)	16.385
Horizontal validation criteria: minimum distance (mm)	8.944272
Vertical validation criteria: SAR ratio M2/M1 (%)	49.873509

Z Axis Scan

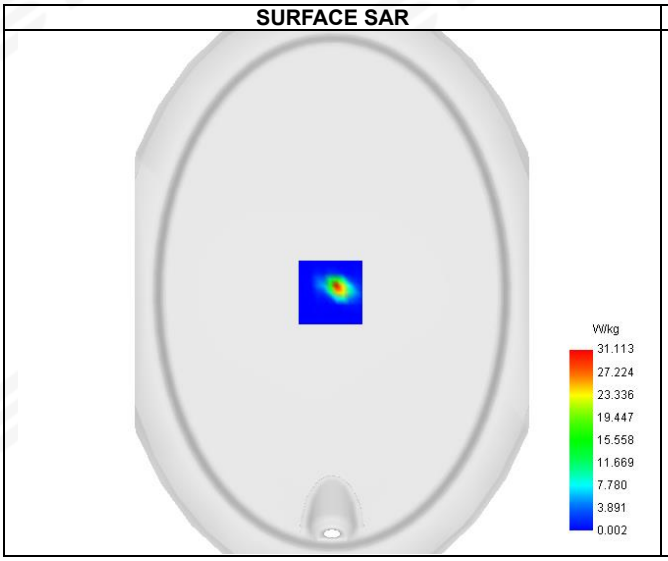
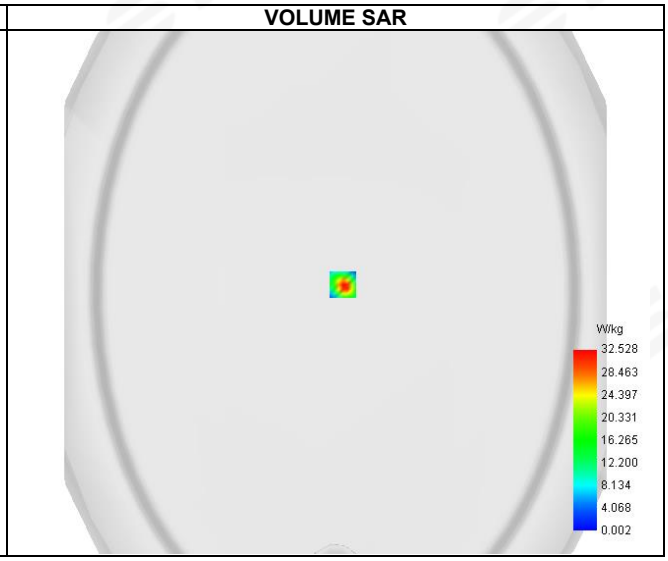

42.9
30.0
20.0
10.0
0.0
SAR (W/kg)
0 2 4 6 8 10 12 14 16 18 20 22 24 26
Z (mm)
W/kg
24.612
21.536
18.460
15.383
12.307
9.231
6.155
3.079
0.002
W/kg
23.489
20.553
17.618
14.682
11.746
8.811
5.875
2.940
0.004

System Performance Check Data (5800MHz)

Type: Dipole measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm
Date of measurement: 2025-06-21

Experimental conditions.

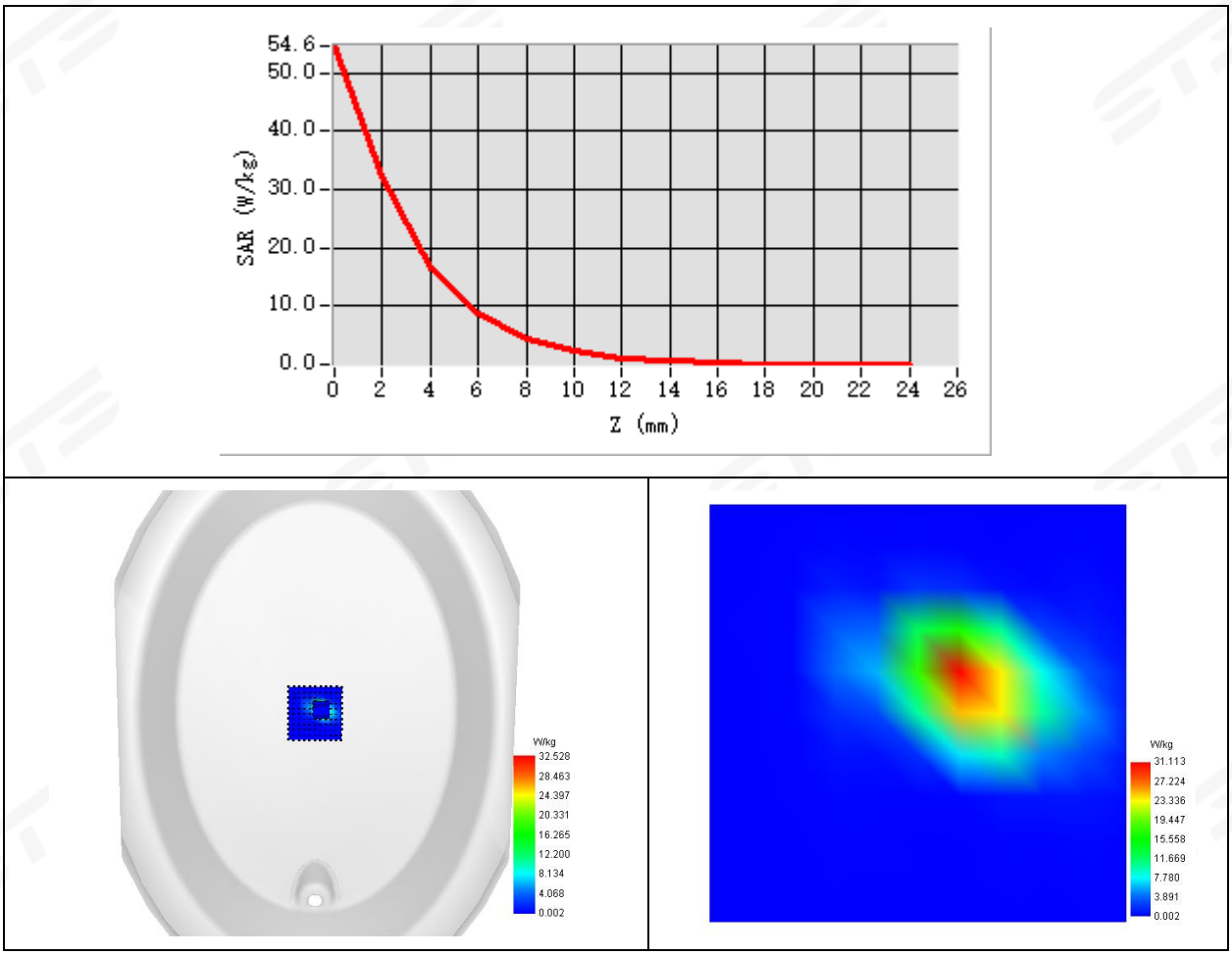
Phantom	Validation plane
Device Position	Dipole
Band	5800MHz
Channels	Middle
Signal	CW
Frequency (MHz)	5800
Relative permittivity	36.22
Conductivity (S/m)	5.29
Probe	SN 08/21 EPGO352
ConvF	1.35
Crest factor:	1:1

SURFACE SAR	VOLUME SAR
	

Maximum location: X=7.00, Y=7.00 ; SAR Peak: 58.68 W/kg

SAR 10g (W/Kg)	6.286
SAR 1g (W/Kg)	19.034
Horizontal validation criteria: minimum distance (mm)	8.944272
Vertical validation criteria: SAR ratio M2/M1 (%)	51.310896

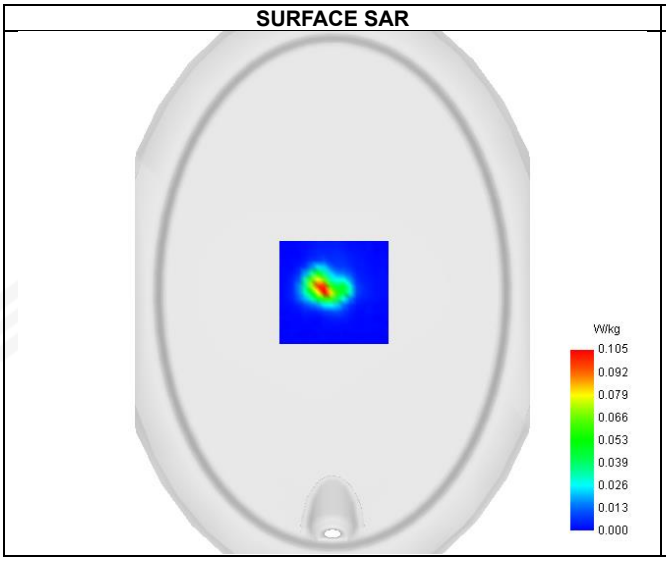
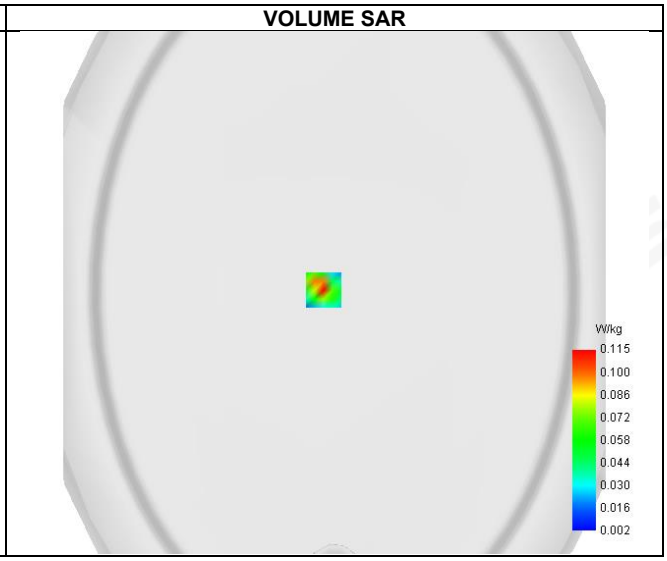
Z Axis Scan


54.6
50.0
40.0
30.0
20.0
10.0
0.0
SAR (W/kg)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
Z (mm)
W/kg
32.528
28.463
24.397
20.331
16.265
12.200
8.134
4.068
0.002
W/kg
31.113
27.224
23.336
19.447
15.558
11.669
7.780
3.891
0.002

Appendix B. SAR Test Plots

Plot 1: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-19
ConvF	1.44
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm
Phantom	Validation plane
Device Position	Bottom Side
Band	GPRS 850
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	848.8
Relative permittivity (real part)	41.13
Conductivity (S/m)	0.93

SURFACE SAR	VOLUME SAR
	

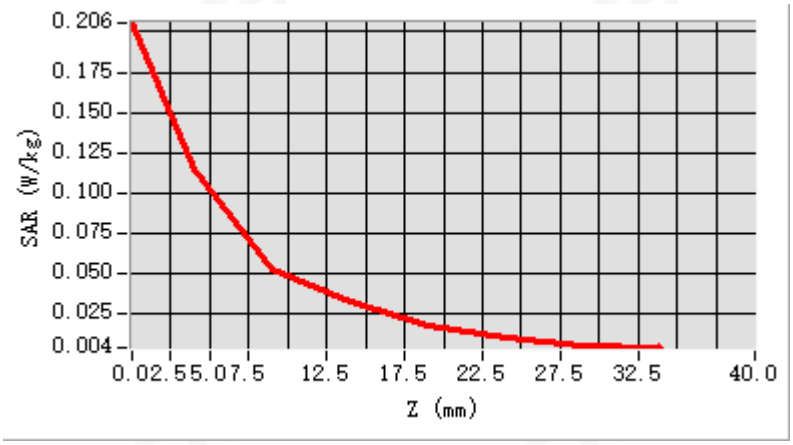
Maximum location: X=-10.00, Y=2.00 ; SAR Peak: 0.21 W/kg

D. SAR 1g & 10g

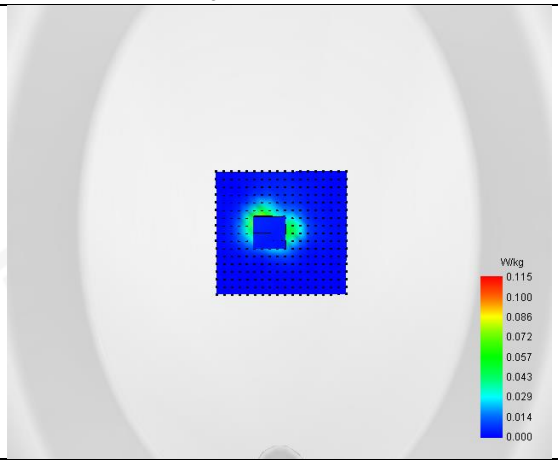
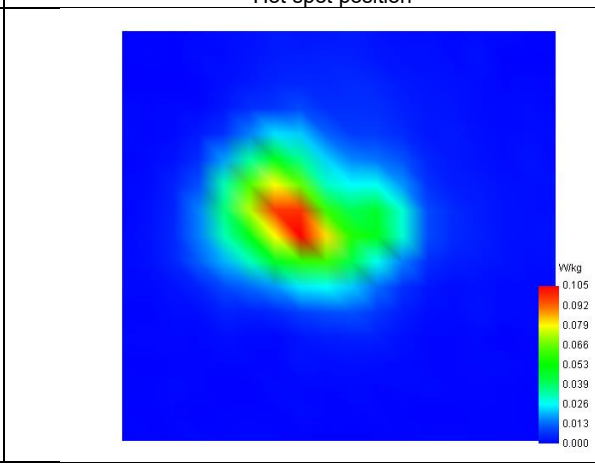
SAR 10g (W/Kg)	0.049
SAR 1g (W/Kg)	0.107
Horizontal validation criteria: minimum distance (mm)	11.313708
Vertical validation criteria: SAR ratio M2/M1 (%)	48.747158

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.206	0.115	0.053	0.033	0.018	0.010	0.006

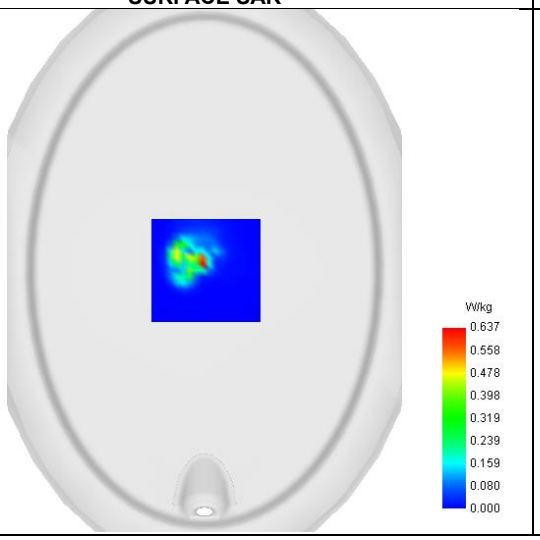
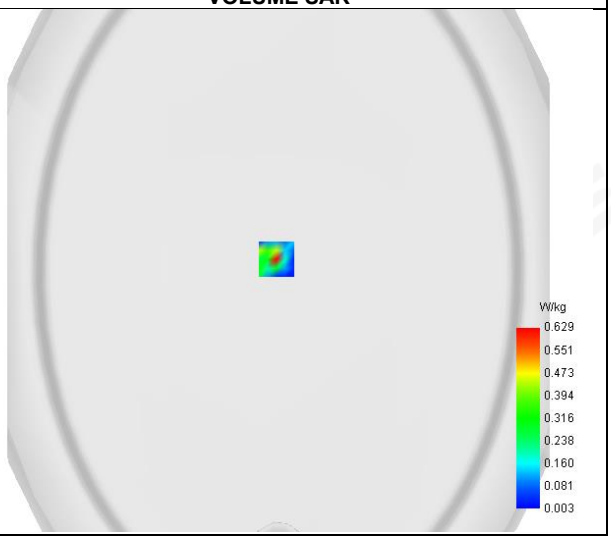


F. 3D Image

3D screen shot	Hot spot position
	

Plot 2: DUT: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-20
ConvF	1.72
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm
Phantom	Validation plane
Device Position	Bottom Side
Band	GPRS 1900
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1850.2
Relative permittivity (real part)	40.83
Conductivity (S/m)	1.42

SURFACE SAR	VOLUME SAR
	

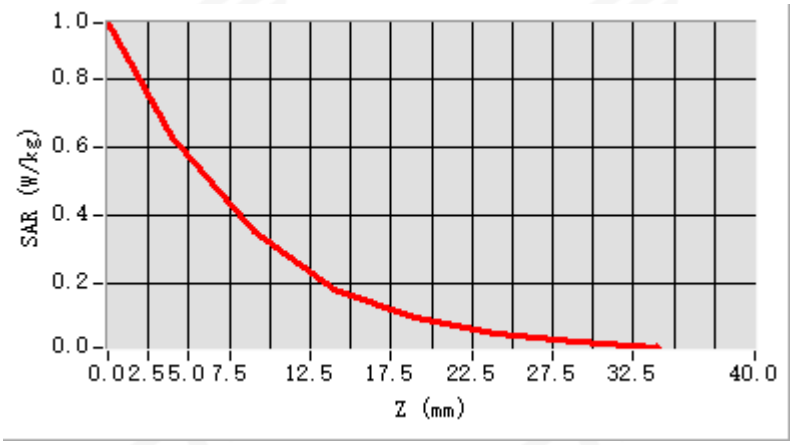
Maximum location: X=-2.00, Y=10.00 ; SAR Peak: 0.97 W/kg

D. SAR 1g & 10g

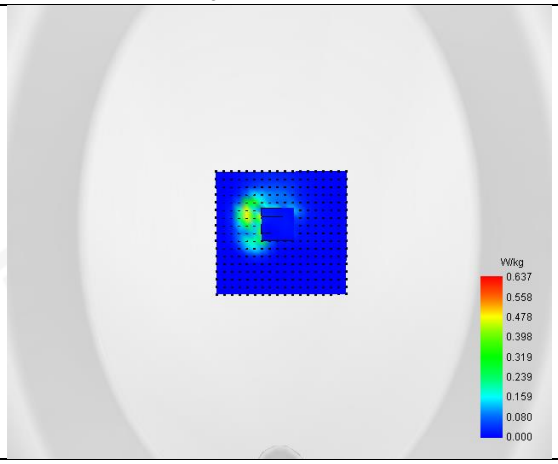
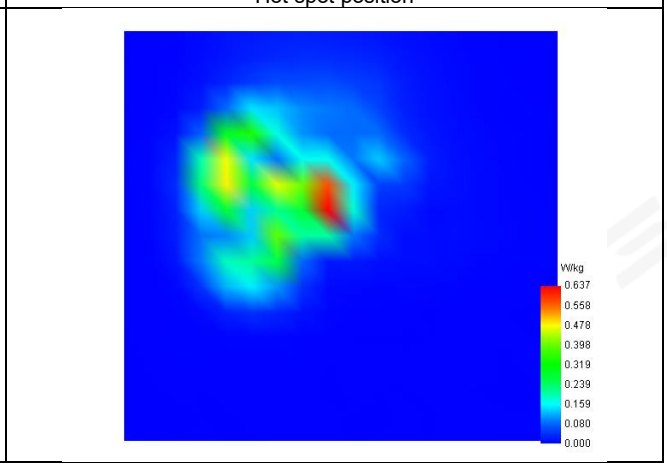
SAR 10g (W/Kg)	0.191
SAR 1g (W/Kg)	0.503
Horizontal validation criteria: minimum distance (mm)	8.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	56.281544

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.963	0.629	0.354	0.185	0.099	0.053	0.029

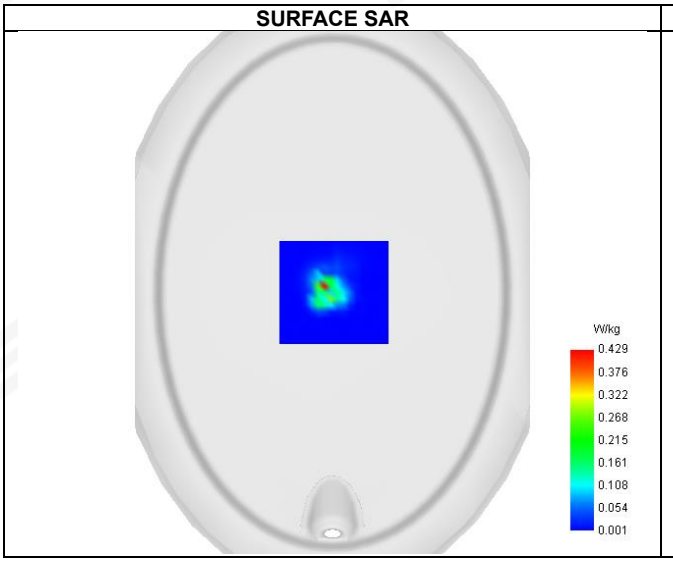
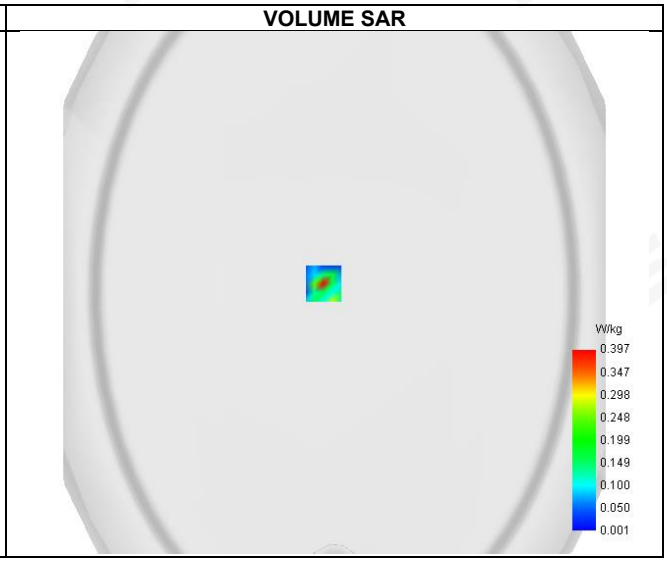


F. 3D Image

3D screen shot	Hot spot position
	

Plot 3: DUT: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-20
ConvF	1.72
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Body
Device Position	Back
Band	WCDMA II
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	39.97
Conductivity (S/m)	1.47

SURFACE SAR	VOLUME SAR
	

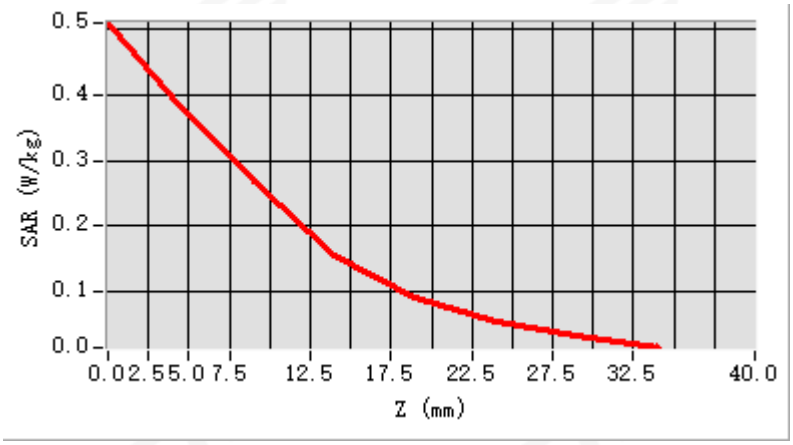
Maximum location: X=-10.00, Y=8.00 ; SAR Peak: 0.53 W/kg

D. SAR 1g & 10g

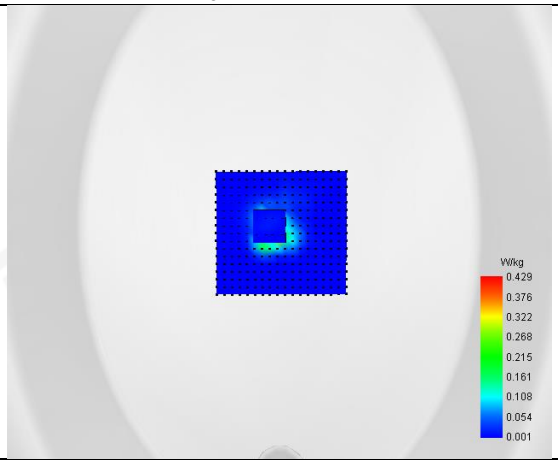
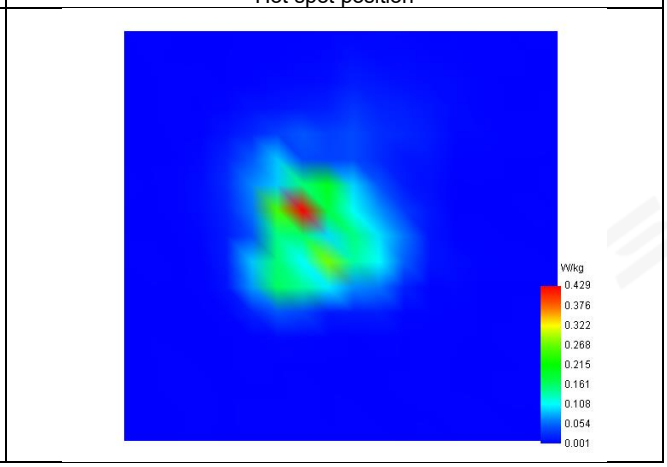
SAR 10g (W/Kg)	0.120
SAR 1g (W/Kg)	0.297
Horizontal validation criteria: minimum distance (mm)	8.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	67.540503

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.511	0.397	0.268	0.157	0.091	0.055	0.033

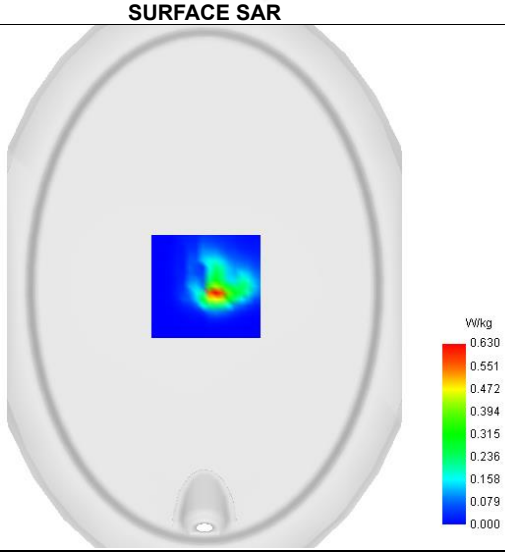
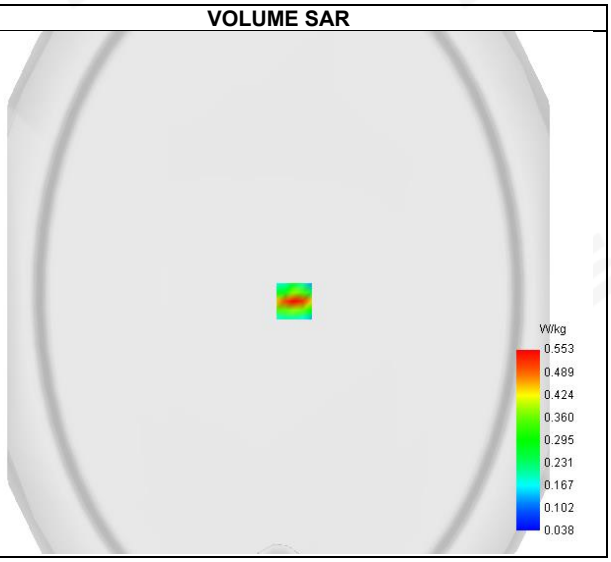


F. 3D Image

3D screen shot	Hot spot position
	

Plot 4: DUT: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-19
ConvF	1.48
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Body
Device Position	Back
Band	WCDMA V
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.4
Relative permittivity (real part)	41.19
Conductivity (S/m)	0.86

SURFACE SAR	VOLUME SAR
	

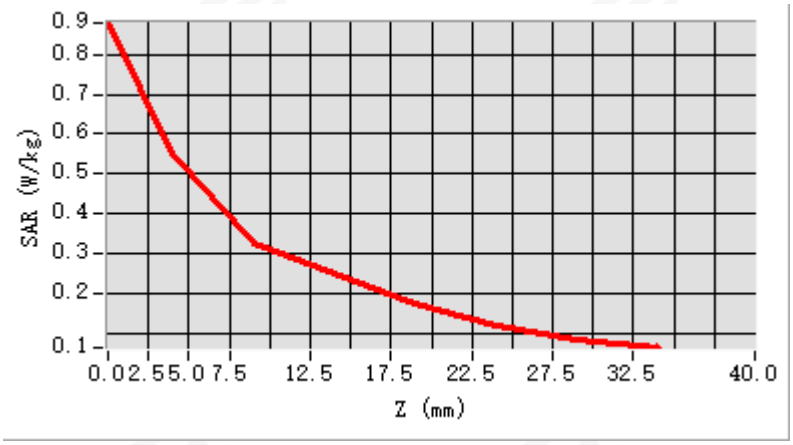
Maximum location: X=14.00, Y=-8.00 ; SAR Peak: 0.87 W/kg

D. SAR 1g & 10g

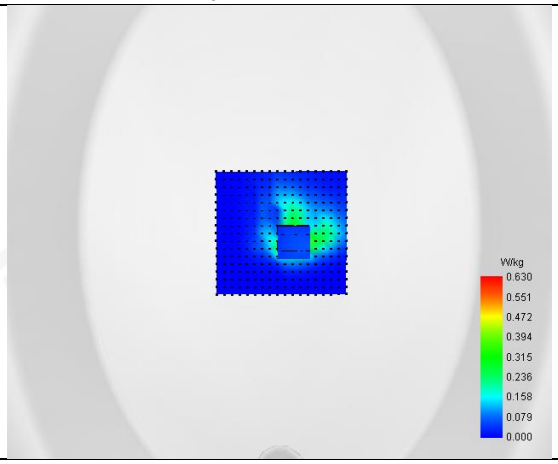
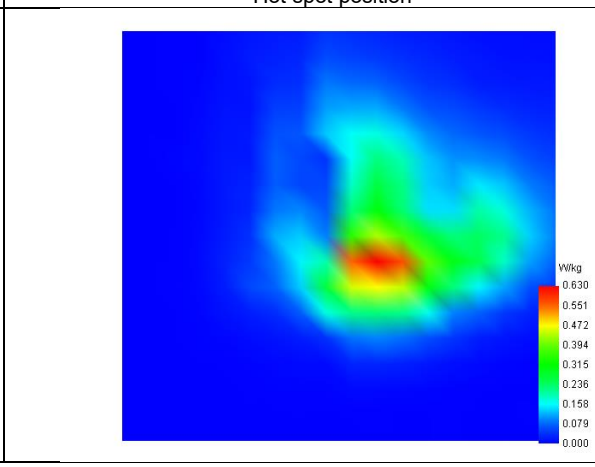
SAR 10g (W/Kg)	0.288
SAR 1g (W/Kg)	0.520
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	59.071725

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.879	0.553	0.326	0.252	0.175	0.121	0.084

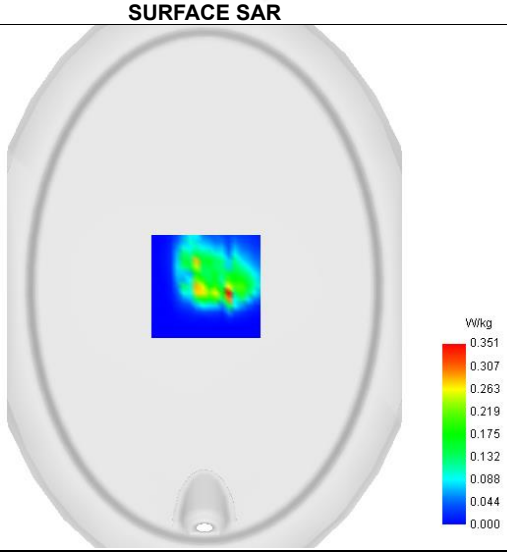
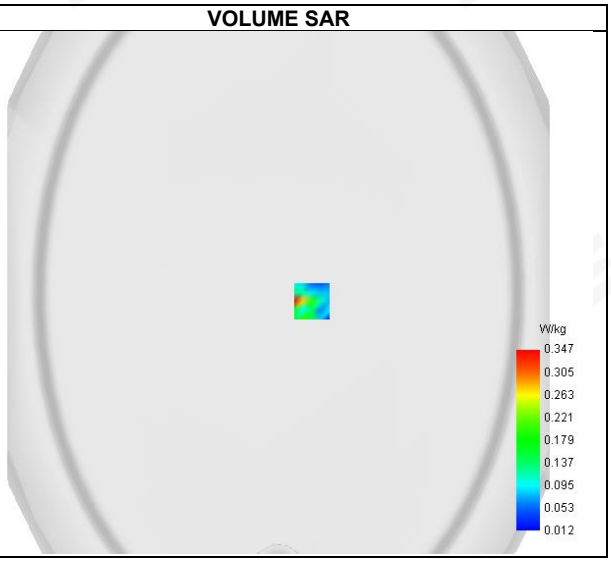


F. 3D Image

3D screen shot	Hot spot position
	

Plot 5: DUT: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-19
ConvF	1.44
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Body
Device Position	Back
Band	LTE band 5
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	829
Relative permittivity (real part)	41.33
Conductivity (S/m)	0.90

SURFACE SAR	VOLUME SAR
	

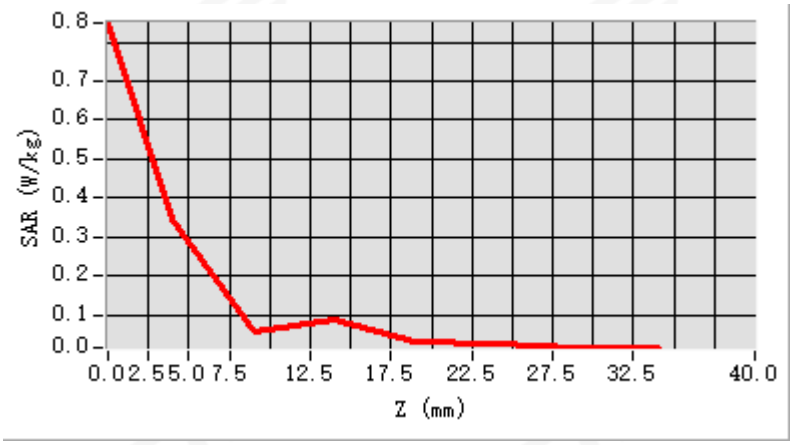
Maximum location: X=30.00, Y=-8.00 ; SAR Peak: 0.79 W/kg

D. SAR 1g & 10g

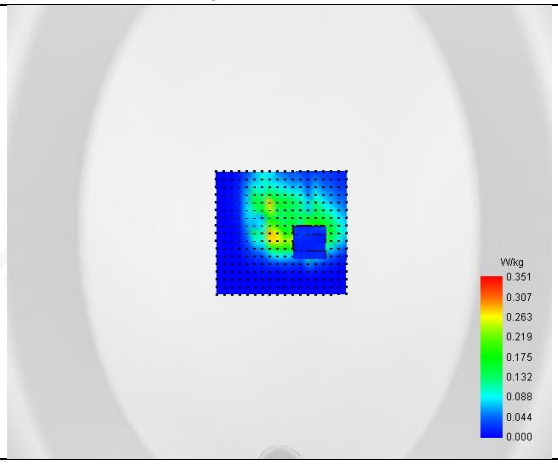
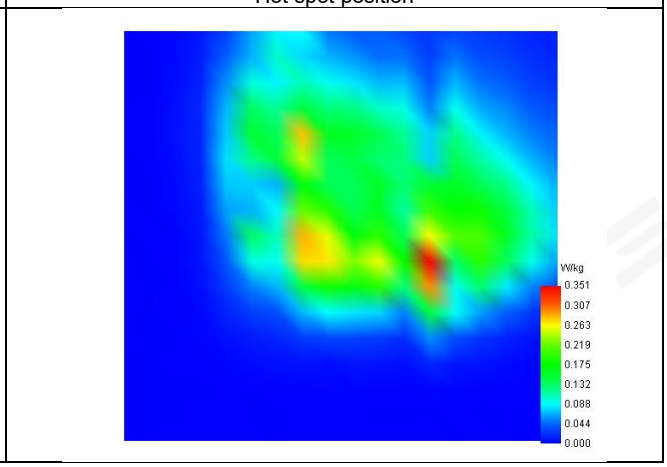
SAR 10g (W/Kg)	0.088
SAR 1g (W/Kg)	0.278
Horizontal validation criteria: minimum distance (mm)	8.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	38.995533

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.849	0.347	0.057	0.090	0.031	0.027	0.017

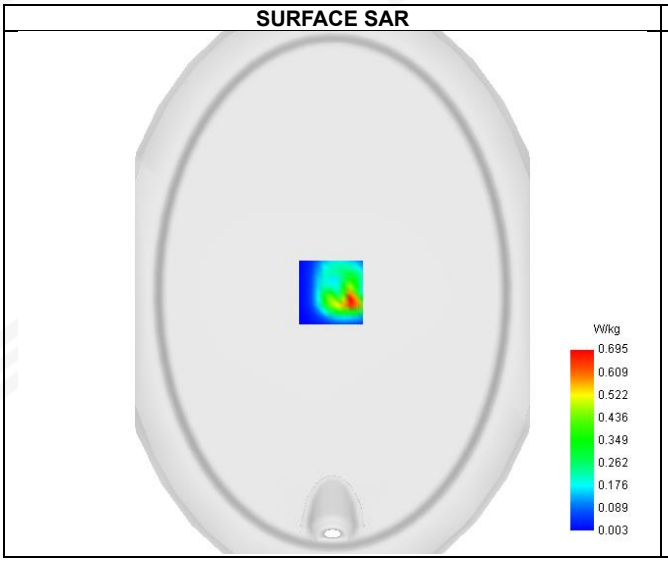
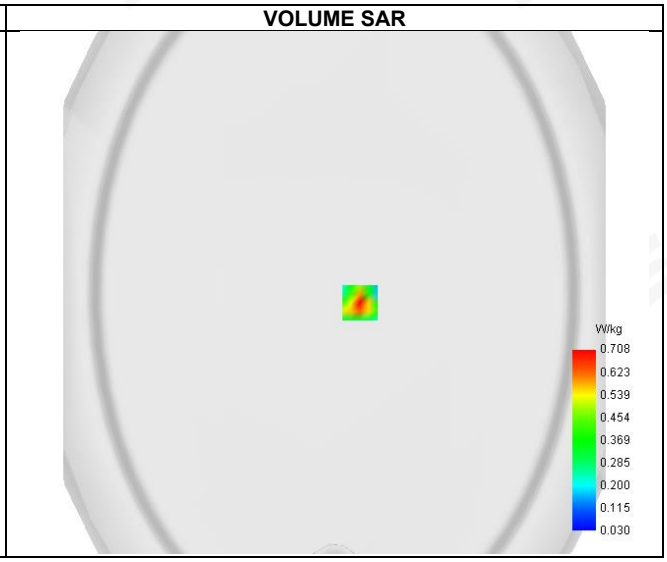


F. 3D Image

3D screen shot	Hot spot position
	

Plot 6: DUT: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-20
ConvF	1.74
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Body
Device Position	Back
Band	LTE band 7
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2510
Relative permittivity (real part)	38.99
Conductivity (S/m)	1.85

SURFACE SAR	VOLUME SAR
	

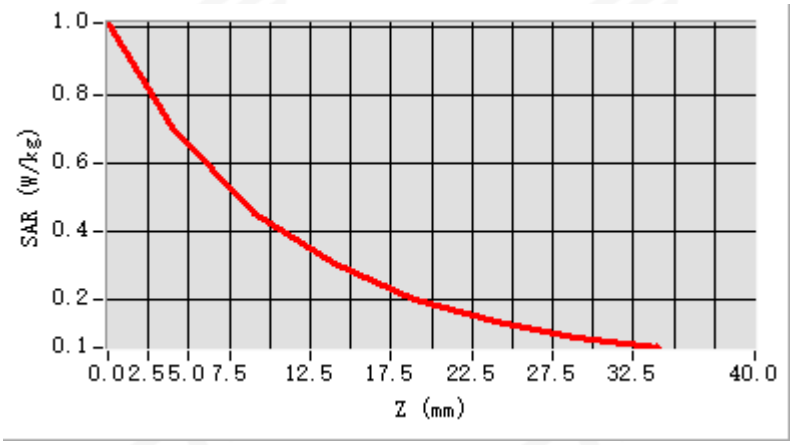
Maximum location: X=23.00, Y=-9.00 ; SAR Peak: 1.04 W/kg

D. SAR 1g & 10g

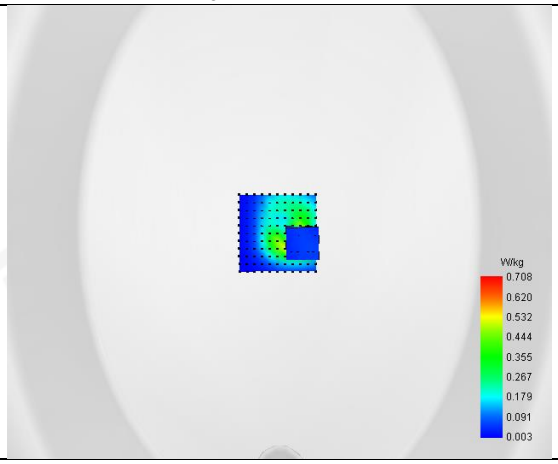
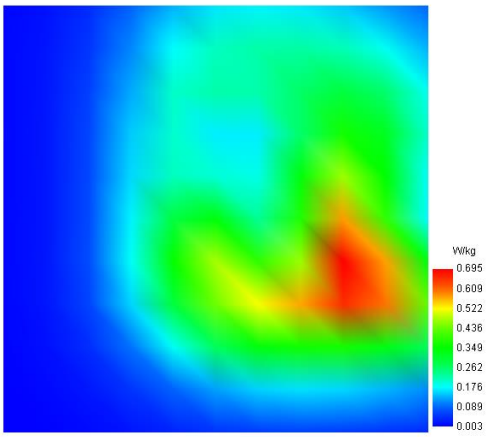
SAR 10g (W/Kg)	0.374
SAR 1g (W/Kg)	0.735
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	64.337672

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.012	0.708	0.456	0.308	0.205	0.136	0.090

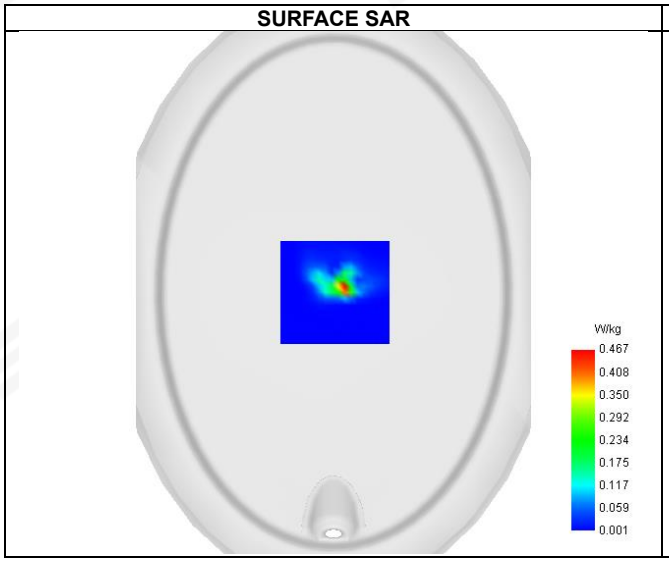
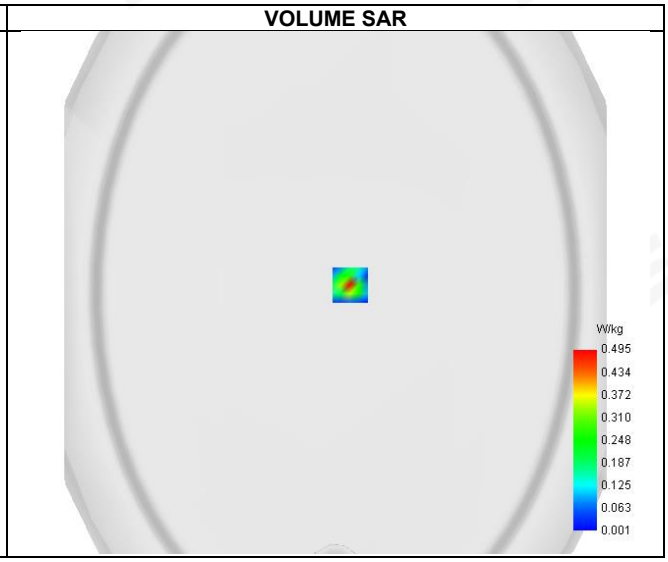


F. 3D Image

3D screen shot	Hot spot position
	

Plot 7: DUT: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-20
ConvF	1.80
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete
Phantom	Body
Device Position	Back
Band	2.4GHz WLAN
Signal	802.11b (Crest factor: 1.0)
Frequency (MHz)	2412
Relative permittivity (real part)	39.56
Conductivity (S/m)	1.80

SURFACE SAR	VOLUME SAR
	

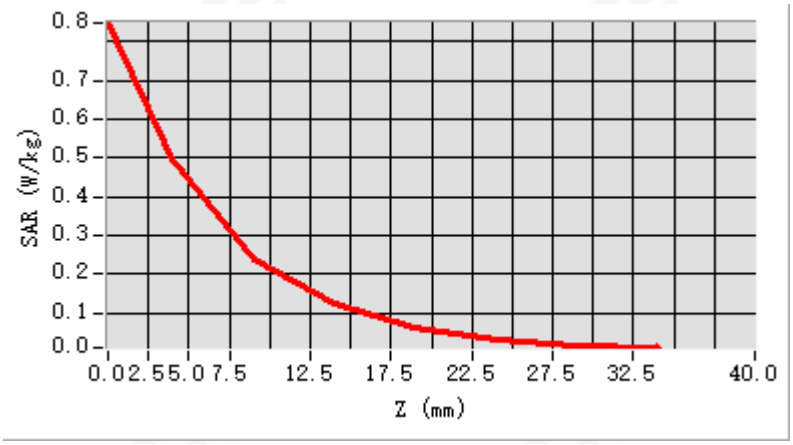
Maximum location: X=13.00, Y=7.00 ; SAR Peak: 0.85 W/kg

D. SAR 1g & 10g

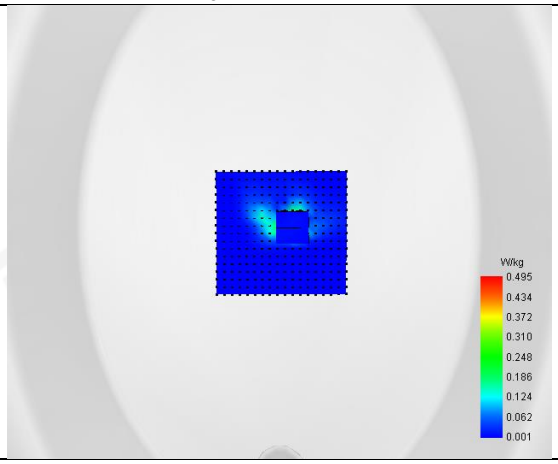
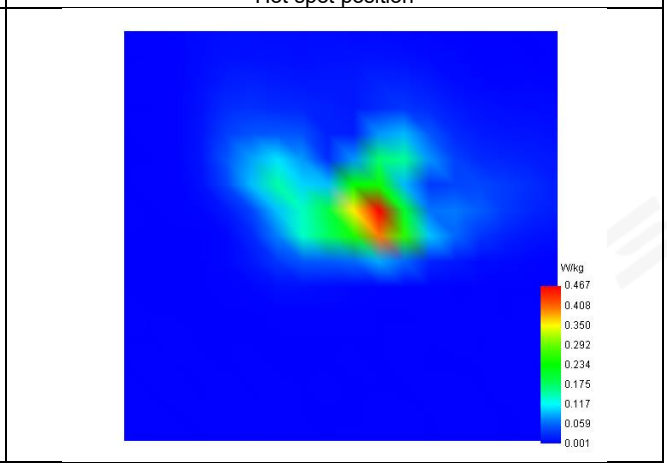
SAR 10g (W/Kg)	0.173
SAR 1g (W/Kg)	0.429
Horizontal validation criteria: minimum distance (mm)	11.313708
Vertical validation criteria: SAR ratio M2/M1 (%)	48.305482

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.848	0.495	0.239	0.125	0.063	0.032	0.016

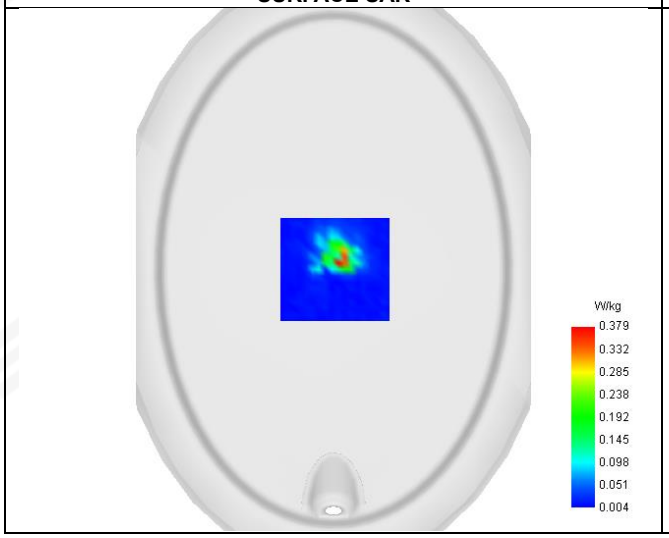
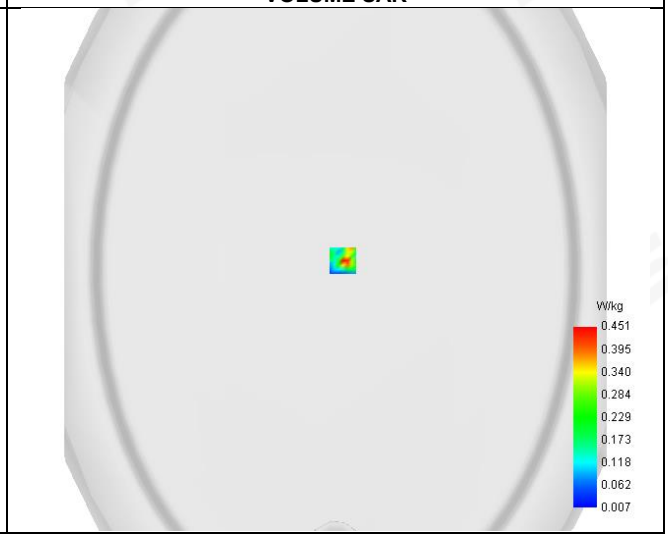


F. 3D Image

3D screen shot	Hot spot position
	

Plot 8: DUT: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-21
ConvF	1.33
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	7x7x12, dx=4mm, dy=4mm, dz=2mm,
Phantom	Validation plane
Device Position	Right Side
Band	5.2G WLAN
Signal	802.11a (Crest factor: 1.0)
Frequency (MHz)	5200
Relative permittivity (real part)	36.28
Conductivity (S/m)	4.64

SURFACE SAR	VOLUME SAR
	

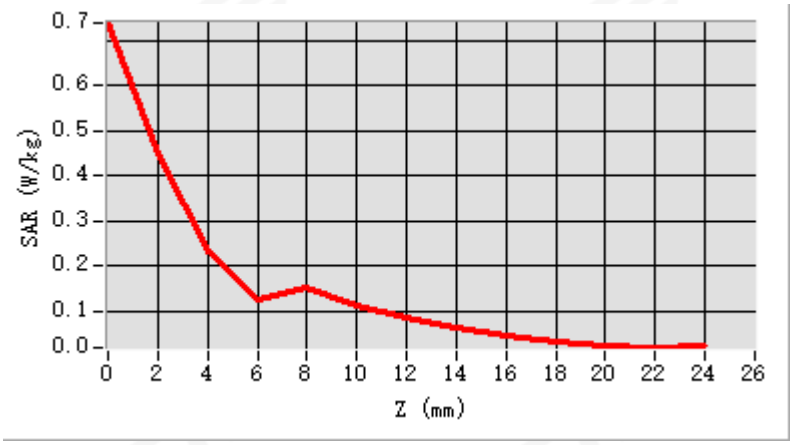
Maximum location: X=7.00, Y=8.00 ; SAR Peak: 0.96 W/kg

D. SAR 1g & 10g

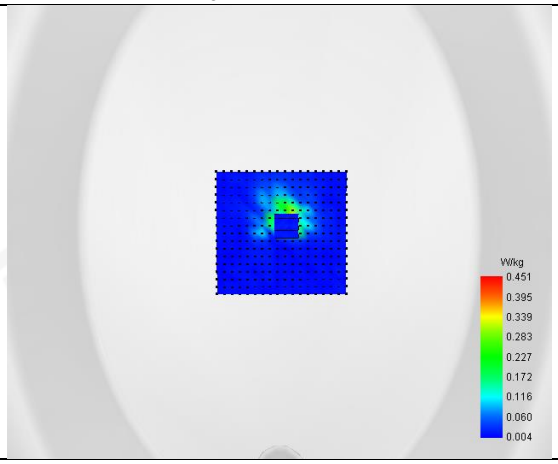
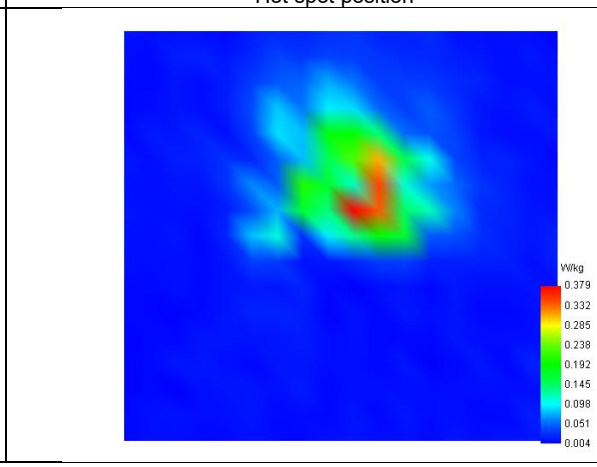
SAR 10g (W/Kg)	0.099
SAR 1g (W/Kg)	0.285
Horizontal validation criteria: minimum distance (mm)	5.656854
Vertical validation criteria: SAR ratio M2/M1 (%)	51.961800

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	0.740	0.451	0.234	0.127	0.153	0.114	0.085	0.063	0.047	0.035	0.026	0.019

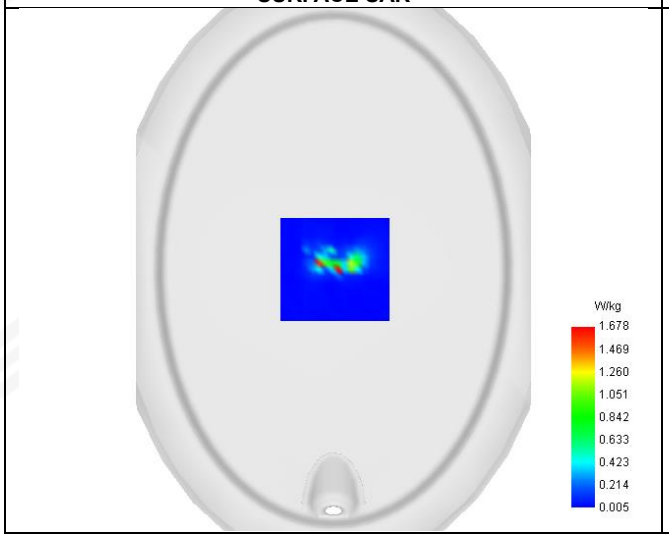
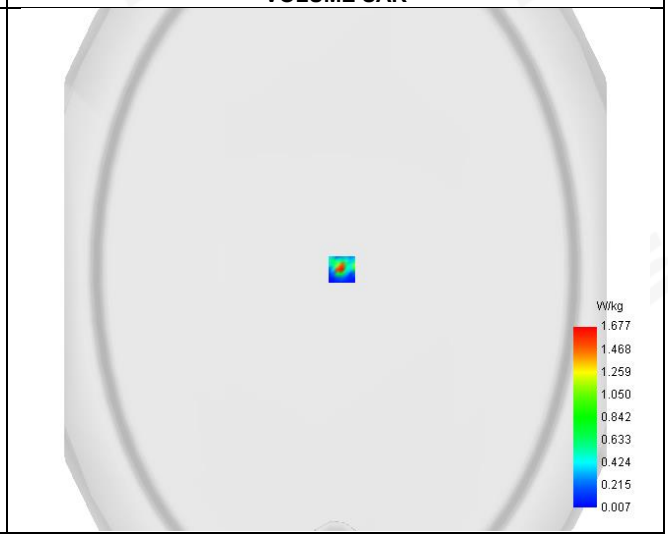


F. 3D Image

3D screen shot	Hot spot position
	

Plot 9: DUT: 14 inch Tablet; EUT Model: Ctab 14

Test Date	2025-06-21
ConvF	1.35
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	7x7x12, dx=4mm, dy=4mm, dz=2mm,
Phantom	Validation plane
Device Position	Right Side
Band	5.8G WLAN
Signal	802.11 n-HT40 (Crest factor: 1.0)
Frequency (MHz)	5745
Relative permittivity (real part)	36.26
Conductivity (S/m)	5.19

SURFACE SAR	VOLUME SAR
	

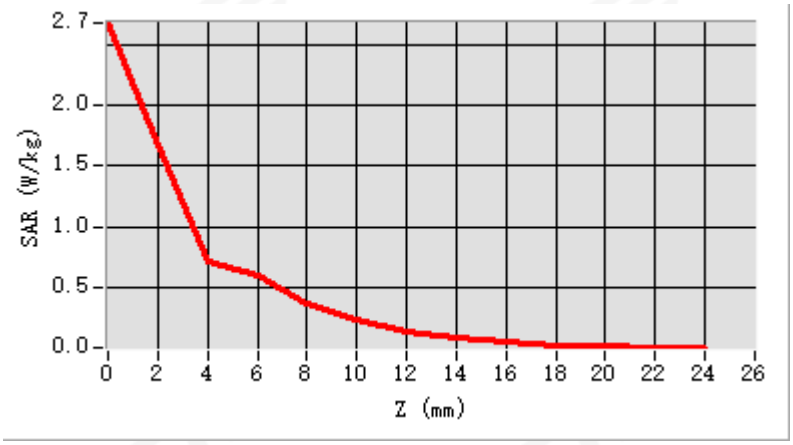
Maximum location: X=6.00, Y=0.00 ; SAR Peak: 4.35 W/kg

D. SAR 1g & 10g

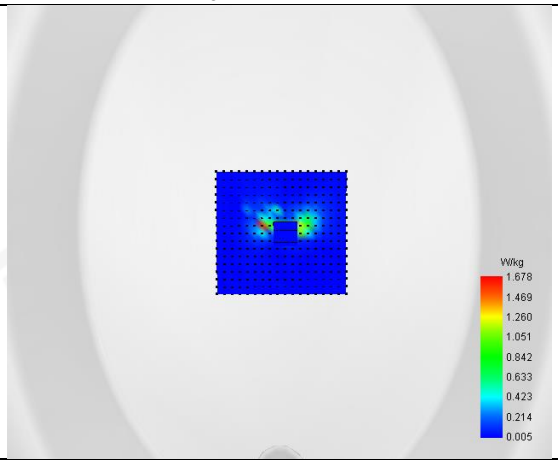
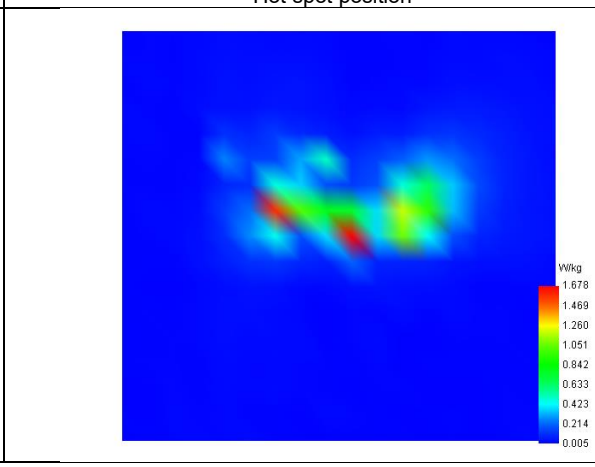
SAR 10g (W/Kg)	0.209
SAR 1g (W/Kg)	0.709
Horizontal validation criteria: minimum distance (mm)	4.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	43.028472

E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	2.672	1.677	0.722	0.598	0.377	0.237	0.149	0.094	0.059	0.037	0.024	0.015



F. 3D Image

3D screen shot	Hot spot position
	

Appendix C. Probe Calibration and Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※※END OF THE REPORT※※※※※