SAR Test Report

Report No.:STS2412014H02

Issued for

Guangzhou MUNBYN Information Technology Co., Ltd.

Unit L3A01-4, No. 31-6, Xicha Road, Baiyun District, Guangzhou, Guangdong Province, China.

Product Name:	Android Barcode Scanner
Brand Name:	MUNBYN
Model Name:	AS01
Series Model(s):	AS02, AS03, AS04, AS05, MTP210, TS210.
FCC ID:	2BF4EAS01
Test Standard:	ANSI/IEEE Std. C95.1 FCC 47 CFR Part 2 (2.1093) IEEE Std. 1528-2013
Max. Report SAR (1g)	Head: 0.433 W/kg Body: 0.755 W/kg

TEST REPORT CERTIFICATION

Applicant's name	:	Guangzhou MUNBYN Information Technology Co., Ltd.
Address	:	Unit L3A01-4, No. 31-6, Xicha Road, Baiyun District, Guangzhou, Guangdong Province, China.
Manufacturer's Name	:	Guangzhou MUNBYN Information Technology Co., Ltd.
Address	:	Unit L3A01-4, No. 31-6, Xicha Road, Baiyun District, Guangzhou, Guangdong Province, China.

Product description

Product name	:	Android Barcode Scanner
Brand name	:	MUNBYN
Model name	:	AS01
Series Model	:	AS02, AS03, AS04, AS05, MTP210, TS210.
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	:	01 Jan 2025 ~ 13 Jan 2025
Date of Issue	:	22 Jan 2025
Test Result	:	**Pass**

Testing Engineer : Xin Liu

(Xin.Liu)

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(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	22 Jan 2025	STS2412014H02	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	Android Barcode Scanner
Brand Name	MUNBYN
Model Name	AS01
Series Model	AS02, AS03, AS04, AS05, MTP210, TS210.
Model Difference	Just the model is different
Battery	Model: B01 Brand: N/A Rated Voltage: 3.85V Charge Limit Voltage: 4.4V Capacity: 7000mAh
Device Category	Portable
Product stage	Production unit
RF Exposure Environment	General Population / Uncontrolled
Hardware Version	P1
Software Version	MY_PDA_AS01_A14_241205_GL_v1.0.0_SMT
Frequency Range	GSM 850: 824 MHz ~ 849 MHz PCS1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV:1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2482.5 MHz ~ 2580 MHz LTE Band 38: 2552.5 MHz ~ 2630 MHz LTE Band 40: 2282.5 MHz ~ 2410 MHz LTE Band 41: 2478.5 MHz ~ 2700 MHz WLAN802.11b/g/n20/ax20: 2412 to2472MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80/ac160/ax20/ax40/ax80/ax160: 5150 to 5250 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80/ac160/ax20/ax40/ax80/ax160: 5250 to 5350 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80/ac160/ax20/ax40/ax80/ax160: 5470 to 5725 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80/ac160/ax20/ax40/ax80/ax160: 5725 to 5850 MHz Bluetooth: 2402 MHz to 2480 MHz GPS: 1575.42MHz GALILEO: 1575.42 MHz GLONASS:1602 MHz BeiDou: 1561.098MHz FM: 87.5 MHz to 108 MHz NFC: 13.56MHz

	Band	Mode	Head (W/kg)	Body Worn and Hotspot (W/kg)
Max. Reported SAR(1g): (Limit:1.6W/kg) Test distance: Head:0mm Body:10mm	PCE	GSM 850	0.256	0.110
	PCE	GSM 1900	0.159	0.239
	PCE	WCDMA Band II	0.302	0.634
	PCE	WCDMA Band V	0.226	0.479
	PCE	WCDMA Band IV	0.290	0.275
	PCE	LTE Band 2	0.269	0.471
	PCE	LTE Band 4	0.219	0.212
	PCE	LTE Band 5	0.268	0.248
	PCE	LTE Band 7	0.207	0.755
	PCE	LTE Band 38	0.272	0.323
	PCE	LTE Band 40	0.253	0.232
	PCE	LTE Band 41	0.222	0.573
	PCE	2.4G WLAN ANT_A	0.162	0.114
	DTS	5.2G WLAN ANT_A	0.354	0.249
	DTS	5.3G WLAN ANT_A	0.295	0.204
	DTS	5.6G WLAN ANT_A	0.122	0.197
	DTS	5.8G WLAN ANT_A	0.084	0.178
	DSS	BT	0.072	0.107
	PCE	2.4G WLAN ANT_B	0.124	0.116
	DTS	5.2G WLAN ANT_B	0.433	0.230
	DTS	5.3G WLAN ANT_B	0.283	0.212
	DTS	5.6G WLAN ANT_B	0.176	0.119
	DTS	5.8G WLAN ANT_B	0.089	0.144
1-g Sum SAR			0.689	1.115
FCC Equipment Class	Licensed Portable Transmitter Held to Ear (PCE) Part 15 Spread Spectrum Transmitter (DSS) Digital Transmission System (DTS)			
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 802.11ax(OFDM, OFDMA):BPSK,QPSK,16-QAM,64-QAM,256-QAM,1024QAM Bluetooth: GFSK +π/4DQPSK+8DPSK BLE: GFSK GPS:BPSK GALILEO:CBOC GLONASS:FDMA BeiDou:QPSK FM:FM NFC:ASK			

Antenna Specification:	GSM/WCDMA/LTE: PIFA Antenna Bluetooth: PIFA Antenna WLAN: PIFA Antenna GPS/GALILEO/GLONASS/BeiDou: PIFA Antenna FM: Earphone Antenna NFC: Coil Antenna
SIM Card	Support dual-SIM, dual standby, the multiple SIM card with two lines cannot transmitting at the same time
Hotspot Mode	Support
DTM Mode	Not Support

Note:
1. The dual SIM card mobile has 2 SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (Single active)
2. After pre-scan two SIM cards power, we found test result of the SIM1 was the worse, so we chose SIM1 card to perform all tests.
3. 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.

A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong 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	ANSI/IEEE Std. C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	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 941225 D06 v02r01	Hotspot Mode SAR
10	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
11	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:

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

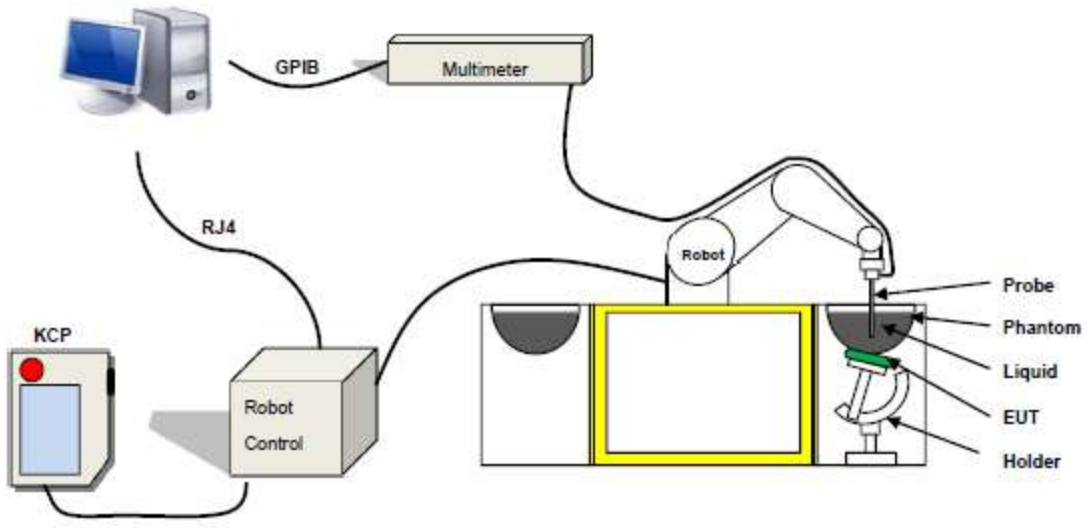
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

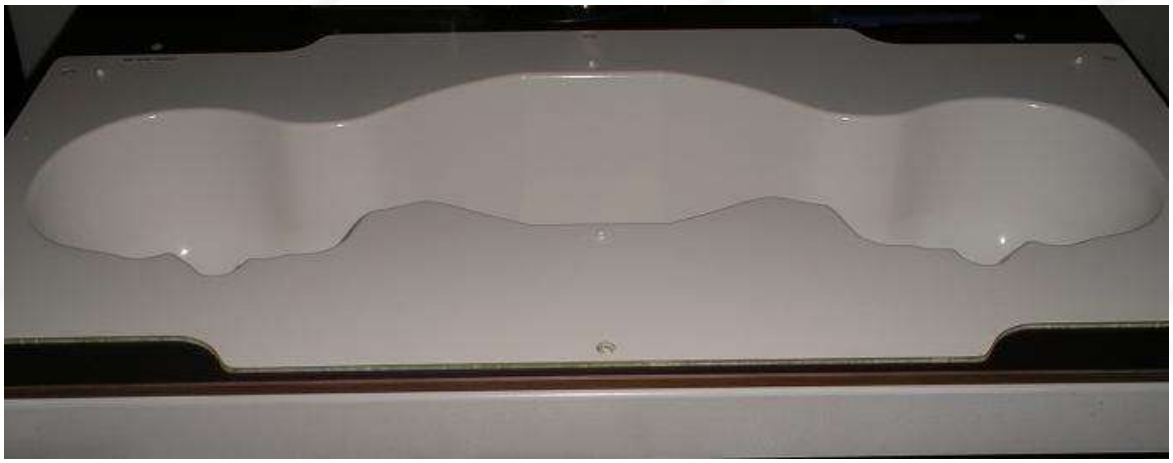


Figure-SN 21/21 ELLI48

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 head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

Head Tissue

Frequency (MHz)	cellulose	DGBE	HEC	NaCl	Preventol	Sugar	X100	Water	Conductivity	Permittivity
	%	%	%	%	%	%	%	%	σ	εr
750	0.2	/	/	1.4	0.2	57.0	/	41.1	0.89	41.9
835	0.2	/	/	1.4	0.2	57.9	/	40.3	0.90	41.5
900	0.2	/	/	1.4	0.2	57.9	/	40.3	0.97	41.5
1800	/	44.5	/	0.3	/	/	30.45	55.2	1.4	40.0
1900	/	44.5	/	0.3	/	/	30.45	55.2	1.4	40.0
2000	/	44.5	/	0.3	/	/	/	55.2	1.4	40.0
2450	/	44.9	/	0.1	/	/	/	55.0	1.80	39.2
2600	/	45.0	/	0.1	/	/	/	54.9	1.96	39.0

Body Tissue

Frequency (MHz)	cellulose	DGBE	HEC	NaCl	Preventol	Sugar	X100	Water	Conductivity	Permittivity
	%	%	%	%	%	%	%	%	σ	εr
750	0.2	/	/	0.9	0.1	47.2	/	51.7	0.96	55.5
835	0.2	/	/	0.9	0.1	48.2	/	50.8	0.97	55.2
900	0.2	/	/	0.9	0.1	48.2	/	50.8	1.05	55.0
1800	/	29.4	/	0.4	/	/	30.45	70.2	1.52	53.3
1900	/	29.4	/	0.4	/	/	30.45	70.2	1.52	53.3
2000	/	29.4	/	0.4	/	/	/	70.2	1.52	53.3
2450	/	31.3	/	0.1	/	/	/	68.6	1.95	52.7
2600	/	31.7	/	0.1	/	/	/	68.2	2.16	52.3

Tissue dielectric parameters for head and body phantoms				
Frequency	εr		σ S/m	
	Head	Body	Head	Body
300	45.3	58.2	0.87	0.92
450	43.5	56.7	0.87	0.94
900	41.5	55.0	0.97	1.05
1450	40.5	54.0	1.20	1.30
1800	40.0	53.3	1.40	1.52
2450	39.2	52.7	1.80	1.95
3000	38.5	52.0	2.40	2.73
5800	35.3	48.2	5.27	6.00

LIQUID MEASUREMENT RESULTS

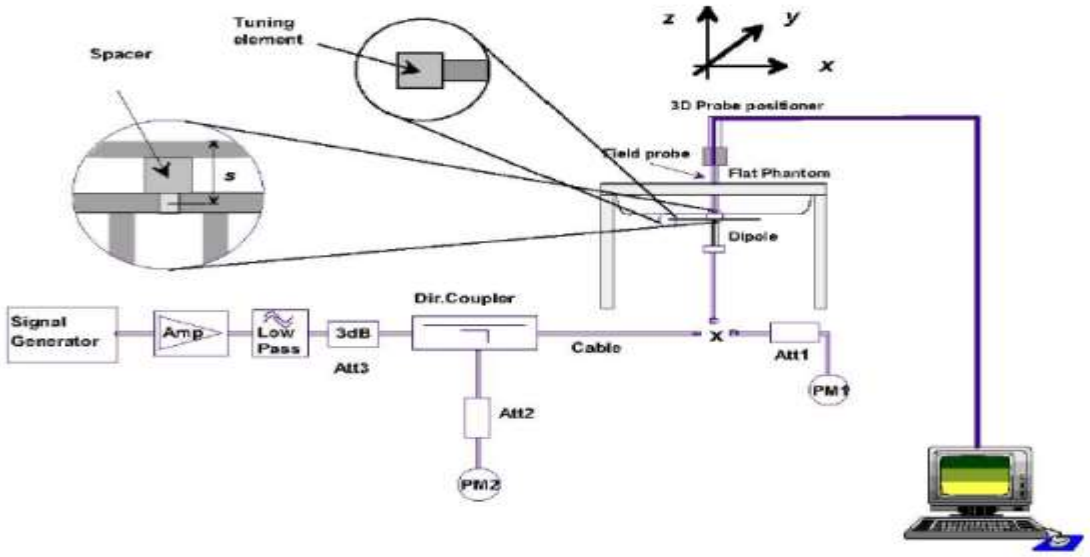
Date	Ambient		Simulating Liquid		Parameters	Target	Measured	Deviation %	Limited %
	Temp. [°C]	Humidity %	Frequency (MHz)	Temp. [°C]					
2025-01-07	20.1	60	824.2	19.8	Permittivity	41.55	41.39	-0.39	±5
					Conductivity	0.90	0.88	-2.08	±5
2025-01-07	20.2	60	835	20.0	Permittivity	41.50	40.81	-1.66	±5
					Conductivity	0.90	0.92	2.22	±5
2025-01-07	20.2	60	844	19.9	Permittivity	41.46	41.12	-0.81	±5
					Conductivity	0.90	0.94	4.32	±5
2025-01-07	20.3	61	846.6	20.1	Permittivity	41.45	40.98	-1.12	±5
					Conductivity	0.90	0.89	-1.26	±5
2025-01-08	20.9	48	1720	20.7	Permittivity	40.11	40.65	1.34	±5
					Conductivity	1.35	1.38	1.90	±5
2025-01-08	20.9	48	1745	20.5	Permittivity	40.08	41.13	2.62	±5
					Conductivity	1.37	1.38	0.84	±5
2025-01-08	21.0	49	1752.4	20.7	Permittivity	40.07	40.55	1.20	±5
					Conductivity	1.37	1.35	-1.66	±5
2025-01-08	21.1	49	1800	20.8	Permittivity	40.00	41.15	2.88	±5
					Conductivity	1.40	1.42	1.43	±5
2025-01-09	23.8	46	1850.2	23.5	Permittivity	40.00	40.33	0.82	±5
					Conductivity	1.40	1.41	0.71	±5
2025-01-09	23.8	46	1852.4	23.5	Permittivity	40.00	40.68	1.70	±5
					Conductivity	1.40	1.44	2.86	±5
2025-01-09	23.8	46	1860	23.4	Permittivity	40.00	39.87	-0.33	±5
					Conductivity	1.40	1.43	2.14	±5
2025-01-09	23.9	46	1900	23.6	Permittivity	40.00	39.88	-0.30	±5
					Conductivity	1.40	1.42	1.43	±5
2025-01-10	23.6	41	2350	23.3	Permittivity	39.38	39.80	1.07	±5
					Conductivity	1.71	1.66	-2.99	±5
2025-01-10	23.6	41	2441	23.3	Permittivity	39.22	40.50	3.27	±5
					Conductivity	1.79	1.81	1.00	±5
2025-01-10	23.6	41	2442	23.3	Permittivity	39.21	39.72	1.29	±5
					Conductivity	1.79	1.78	-0.72	±5
2025-01-10	23.7	41	2450	23.3	Permittivity	39.20	40.13	2.37	±5
					Conductivity	1.80	1.77	-1.67	±5
2025-01-10	23.7	41	2462	23.4	Permittivity	39.18	39.65	1.20	±5
					Conductivity	1.81	1.87	3.28	±5

2025-01-11	20.1	43	2535	19.8	Permittivity	39.09	40.09	2.57	±5
					Conductivity	1.89	1.90	0.49	±5
2025-01-11	20.2	43	2560	19.9	Permittivity	39.05	39.58	1.35	±5
					Conductivity	1.92	1.95	1.70	±5
2025-01-11	20.2	43	2580	19.9	Permittivity	39.03	39.74	1.83	±5
					Conductivity	1.94	1.93	-0.45	±5
2025-01-11	20.2	44	2600	19.9	Permittivity	39.00	40.41	3.62	±5
					Conductivity	1.96	1.97	0.51	±5
2025-01-11	20.2	44	2610	19.9	Permittivity	38.99	39.96	2.50	±5
					Conductivity	1.97	2.00	1.49	±5
2025-01-11	20.3	44	2680	20.0	Permittivity	38.89	39.55	1.69	±5
					Conductivity	2.05	2.08	1.69	±5
2025-01-12	20.7	43	5200	20.4	Permittivity	36.00	36.08	0.22	±5
					Conductivity	4.66	4.68	0.43	±5
2025-01-12	20.7	43	5250	20.4	Permittivity	35.95	36.80	2.36	±5
					Conductivity	4.71	4.72	0.16	±5
2025-01-12	20.7	60	5300	20.4	Permittivity	35.90	36.84	2.62	±5
					Conductivity	4.76	4.75	-0.21	±5
2025-01-12	20.7	60	5310	20.4	Permittivity	35.89	35.90	0.03	±5
					Conductivity	4.77	4.73	-0.84	±5
2025-01-13	23.5	40	5510	23.2	Permittivity	35.66	36.49	2.32	±5
					Conductivity	4.97	4.91	-1.26	±5
2025-01-13	23.5	40	5600	23.2	Permittivity	35.55	36.37	2.31	±5
					Conductivity	5.07	5.12	1.09	±5
2025-01-13	23.5	44	5795	23.2	Permittivity	35.31	36.46	3.27	±5
					Conductivity	5.26	5.21	-1.04	±5
2025-01-13	23.5	44	5800	23.2	Permittivity	35.30	36.18	2.49	±5
					Conductivity	5.27	5.23	-0.76	±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

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)	1g(W/kg)	(%)	(%)
2025-01-07	835	100	0.969	9.69	9.63	0.62	10
2025-01-08	1800	100	3.958	39.58	38.40	3.07	10
2025-01-09	1900	100	3.870	38.70	39.84	-2.86	10
2025-01-10	2450	100	5.271	52.71	54.70	-3.64	10
2025-01-11	2600	100	5.524	55.24	56.19	-1.69	10
2025-01-12	5200	100	16.332	163.32	163.88	-0.34	10
2025-01-12	5300	100	16.824	168.24	172.23	-2.32	10
2025-01-13	5600	100	17.396	173.96	181.28	-4.04	10
2025-01-13	5800	100	18.991	189.91	188.95	0.51	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

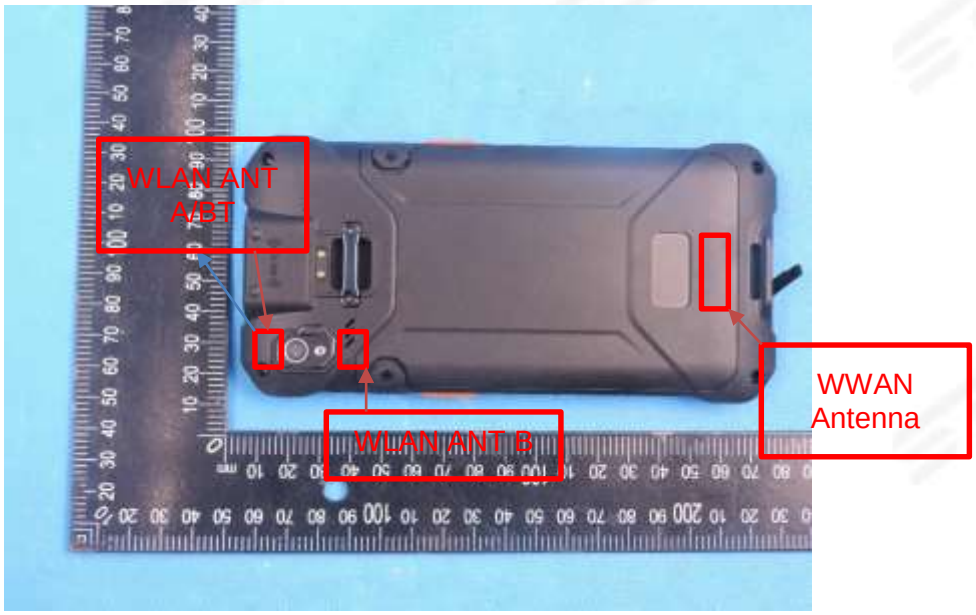
- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible 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 Smart phone, support GSM/WCDMA/LTE/WLAN/BT mode.



Antenna Separation Distance(cm)						
ANT	Back Side	Front Side	Left Side	Right Side	Top Side	Bottom Side
WLAN A/BT	1	0.5	5.5	1	0.5	16
WLAN B	1	0.5	7	0.5	3.5	13
WWAN	1	0.5	3	3.5	14.5	1.5

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

7.1 SAR test exclusion consider table

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

	Wireless Interface	GSM850	PCS1900	WCDMA II	WCDMA V	WCDMA IV
Exposure Position	Calculated Frequency(GHz)	0.8242	1.8502	1.8524	1.7524	0.8466
	Maximum Turn-up power (dBm)	32.5	29	24	24	24
	Maximum rated power(mW)	1778.28	794.33	251.19	251.19	251.19
Back Side	Separation distance (cm)	1	1	1	1	1
	exclusion threshold(mW)	24.95	12.31	12.30	12.17	20.47
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	9.42	3.44	3.43	3.27	6.43
	Testing required?	YES	YES	YES	YES	YES
Left Edge	Separation distance (cm)	3	3	3	3	3
	exclusion threshold(mW)	116.85	93.06	93.01	97.81	128.42
	Testing required?	YES	YES	YES	YES	YES
Right Edge	Separation distance (cm)	3.5	3.5	3.5	3.5	3.5
	exclusion threshold(mW)	145.12	123.60	123.54	131.03	166.16
	Testing required?	YES	YES	YES	YES	YES
Top Edge	Separation distance (cm)	14.5	14.5	14.5	14.5	14.5
	exclusion threshold(mW)	1069.95	1692.69	1692.55	1942.38	1787.68
	Testing required?	YES	NO	NO	NO	NO
Bottom Edge	Separation distance (cm)	1.5	1.5	1.5	1.5	1.5
	exclusion threshold(mW)	44.11	25.97	25.95	26.26	40.32
	Testing required?	YES	YES	YES	YES	YES

Exposure Position	Wireless Interface	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 38
	Calculated Frequency(GHz)	1.86	1.7325	0.844	2.535	2.58
	Maximum Turn-up power (dBm)	23.5	23	24.5	24.5	23
	Maximum rated power(mW)	223.87	199.53	281.84	281.84	199.53
Back Side	Separation distance (cm)	1	1	1	1	1
	exclusion threshold(mW)	12.27	12.85	24.39	10.03	9.92
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	3.42	3.62	9.11	2.67	2.63
	Testing required?	YES	YES	YES	YES	YES
Left Edge	Separation distance (cm)	3	3	3	3	3
	exclusion threshold(mW)	92.86	95.61	116.20	81.74	81.15
	Testing required?	YES	YES	YES	YES	YES
Right Edge	Separation distance (cm)	3.5	3.5	3.5	3.5	3.5
	exclusion threshold(mW)	123.35	126.71	144.66	109.71	206.72
	Testing required?	YES	YES	YES	YES	NO
Top Edge	Separation distance (cm)	14.5	14.5	14.5	14.5	14.5
	exclusion threshold(mW)	1692.07	1700.48	1090.22	1655.88	1653.85
	Testing required?	NO	NO	NO	NO	NO
Bottom Edge	Separation distance (cm)	1.5	1.5	1.5	1.5	1.5
	exclusion threshold(mW)	25.90	26.95	43.40	21.76	21.54
	Testing required?	YES	YES	YES	YES	YES

Exposure Position	Wireless Interface	LTE Band 38	LTE Band 40	LTE Band 41	BT	2.4G WLAN ANT A	5.2G WLAN ANT A
	Calculated Frequency(GHz)	2.58	23.5	2.506	2.441	2.462	5.25
	Maximum Turn-up power (dBm)	23	23.5	22.5	12	11	12.5
	Maximum rated power(mW)	199.53	223.87	177.83	15.85	12.59	17.78
Back Side	Separation distance (cm)	1	1	1	1	1	1
	exclusion threshold(mW)	9.92	2.36	10.11	10.28	10.22	6.25
	Testing required?	YES	YES	YES	YES	YES	YES
Front Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	2.63	0.45	2.69	2.75	2.73	1.49
	Testing required?	YES	YES	YES	YES	YES	YES
Left Edge	Separation distance (cm)	3	3	3	5.5	5.5	5.5
	exclusion threshold(mW)	81.15	32.66	82.13	262.84	262.21	212.06
	Testing required?	YES	YES	YES	NO	NO	NO
Right Edge	Separation distance (cm)	3.5	3.5	3.5	1	1	1
	exclusion threshold(mW)	206.72	47.23	110.19	10.28	10.22	6.25
	Testing required?	NO	YES	YES	YES	YES	YES
Top Edge	Separation distance (cm)	14.5	14.5	14.5	0.5	0.5	0.5
	exclusion threshold(mW)	1653.85	1417.41	1657.21	2.75	2.73	1.49
	Testing required?	NO	NO	NO	YES	YES	YES
Bottom Edge	Separation distance (cm)	1.5	1.5	1.5	16	16	16
	exclusion threshold(mW)	21.54	6.22	21.90	2001.99	2001.16	1929.06
	Testing required?	YES	YES	YES	NO	NO	NO

	Wireless Interface	5.3G WLAN ANT A	5.6G WLAN ANT A	5.8G WLAN ANT A	2.4G WLAN ANT B	5.2G WLAN ANT B	5.3G WLAN ANT B	5.6G WLAN ANT B	5.8G WLAN ANT B
Exposure Position	Calculated Frequency(GHz)	5.31	5.51	5.795	2.462	5.25	5.31	5.53	5.795
	Maximum Turn-up power (dBm)	12	13	11.5	12	12.5	12	12.5	12
	Maximum rated power(mW)	15.85	19.95	14.13	15.85	17.78	15.85	17.78	15.85
Back Side	Separation distance (cm)	1	1	1	1	1	1	1	1
	exclusion threshold(mW)	6.20	6.05	5.86	10.22	6.25	6.20	6.04	5.86
	Testing required?	YES	YES	YES	YES	YES	YES	YES	YES
Front Side	Separation distance (cm)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	1.48	1.43	1.38	2.73	1.49	1.48	1.43	1.38
	Testing required?	YES	YES	YES	YES	YES	YES	YES	YES
Left Side	Separation distance (cm)	5.5	5.5	5.5	7	7	7	7	7
	exclusion threshold(mW)	211.39	209.21	206.27	414.94	349.15	348.25	345.04	341.38
	Testing required?	NO	NO	NO	NO	NO	NO	NO	NO
Right Side	Separation distance (cm)	1	1	1	0.5	0.5	0.5	0.5	0.5
	exclusion threshold(mW)	6.20	6.05	5.86	2.73	1.49	1.48	1.43	1.38
	Testing required?	YES	YES	YES	YES	YES	YES	YES	YES
Top Side	Separation distance (cm)	0.5	0.5	0.5	3.5	3.5	3.5	3.5	3.5
	exclusion threshold(mW)	1.48	1.43	1.38	110.93	83.29	82.93	81.67	80.23
	Testing required?	YES	YES	YES	NO	NO	NO	NO	NO
Bottom Side	Separation distance (cm)	16	16	16	13	13	13	13	13
	exclusion threshold(mW)	1928.00	1924.55	1919.85	1347.89	1255.72	1254.38	1249.63	1244.17
	Testing required?	NO	NO	NO	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.

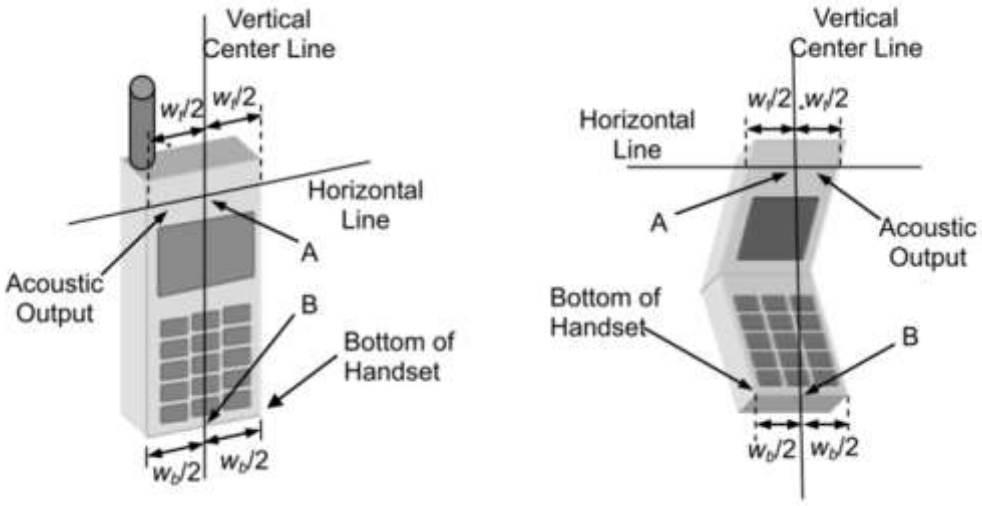
6. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion 8.for each frequency band ,testing at higher data rates and higher order modulations is not required when the maximum average output power for each of each of these configurations is less than 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-2A＞U-NII-1, U-NII-2A was chosen for SAR evaluation. Based on the measurements obtained, SAR measurements on U-NII-1 are not required as highest reported SAR from U-NII-2A band is≤1.2W/Kg.

8. EUT Test Position

This EUT was tested in Right Cheek, Right Titled, Left Cheek, Left Titled, Front Face and Rear Face.

8.1 Define Two Imaginary Lines on the Handset

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



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

Title Position

(1)To position the device in the “cheek” position described above.

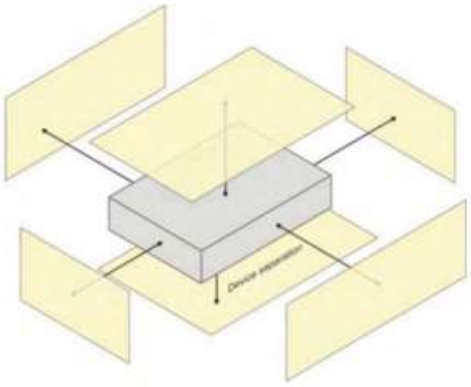
(2) While maintaining the device in the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until with the ear is lost.

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 D01 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.

8.2 Hotspot mode exposure position condition

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



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)	32.85	32.53	32.63	29.33	29.37	29.21
GPRS (GMSK, 1-Slot)	32.87	32.52	32.66	29.31	29.30	29.16
GPRS (GMSK, 2-Slot)	32.78	32.43	32.50	29.21	29.24	29.05
GPRS (GMSK, 3-Slot)	32.59	32.18	32.31	29.10	29.04	28.85
GPRS (GMSK, 4-Slot)	32.38	31.99	32.07	28.93	28.86	28.66
EGPRS(8PSK, 1-Slot)	25.96	25.81	26.06	23.98	23.85	24.39
EGPRS(8PSK, 2-Slot)	25.69	25.81	25.57	24.26	24.51	23.64
EGPRS(8PSK, 3-Slot)	25.75	25.83	25.50	23.86	23.76	23.84
EGPRS(8PSK, 4-Slot)	25.58	25.60	25.35	23.74	23.59	23.51

Remark: GPRS, CS4 coding scheme. EGPRS, 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)	23.82	23.50	23.60	20.30	20.34	20.18
GPRS (GMSK, 1-Slot)	23.84	23.49	23.63	20.28	20.27	20.13
GPRS (GMSK, 2-Slot)	26.76	26.41	26.48	23.19	23.22	23.03
GPRS (GMSK, 3-Slot)	28.33	27.92	28.05	24.84	24.78	24.59
GPRS (GMSK, 4-Slot)	29.37	28.98	29.06	25.92	25.85	25.65
EGPRS(8PSK, 1-Slot)	16.93	16.78	17.03	14.95	14.82	15.36
EGPRS(8PSK, 2-Slot)	19.67	19.79	19.55	18.24	18.49	17.62
EGPRS(8PSK, 3-Slot)	21.49	21.57	21.24	19.60	19.50	19.58
EGPRS(8PSK, 4-Slot)	22.57	22.59	22.34	20.73	20.58	20.50

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			WCDMA Band 4		
Channel	9262	9400	9538	4132	4183	4233	1312	1413	1513
Frequency (MHz)	1852.4	1880	1907.6	826.4	836.6	846.6	1712.6	1740	1752.4
RMC 12.2Kbps	23.56	23.49	23.49	23.46	23.53	23.62	23.58	23.62	23.86
HSDPA Subtest-1	22.21	21.95	20.90	22.42	22.16	20.93	22.52	22.25	21.11
HSDPA Subtest-2	21.07	22.23	22.03	21.23	22.37	22.22	21.19	22.66	22.29
HSDPA Subtest-3	20.93	20.53	22.12	21.46	21.62	22.62	21.34	21.35	22.71
HSDPA Subtest-4	21.81	20.75	20.75	22.32	21.67	21.32	22.61	21.25	21.40
HSUPA Subtest-1	21.09	21.26	21.19	21.69	21.46	21.53	21.56	21.48	21.51
HSUPA Subtest-2	21.95	21.07	21.56	22.38	21.38	21.70	22.17	21.37	21.95
HSUPA Subtest-3	21.19	21.17	22.09	21.41	21.38	22.16	21.58	21.54	22.38
HSUPA Subtest-4	21.23	21.41	20.67	21.36	21.80	21.13	21.37	22.05	21.32
HSUPA Subtest-5	21.10	21.82	20.94	21.32	22.50	21.40	21.63	22.57	21.70

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 $\beta c/\beta d$=12/15, $\beta hs/\beta c$=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.

2.4G WLAN

2.4GWIFI				
Mode	Channel Number	Frequency (MHz)	ANT_A Average Power (dBm)	ANT_B Average Power (dBm)
802.11b	1	2412	11.82	11.26
	7	2437	10.63	11.15
	11	2462	11.92	11.55
802.11g	1	2412	10.30	10.49
	7	2437	9.16	10.61
	11	2462	10.06	10.86
802.11 n-HT20	1	2412	10.31	10.59
	7	2437	8.97	10.35
	11	2462	10.10	10.79
802.11ax-HE20	1	2412	10.42	10.64
	7	2437	9.29	10.99
	11	2462	10.38	11.10

Bluetooth

BT				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	8.59	7.23
	39	2441	11.78	15.07
	78	2480	9.48	8.87
π/4-QPSK(2Mbps)	0	2402	7.41	5.51
	39	2441	10.31	10.74
	78	2480	8.14	6.52
8DPSK(3Mbps)	0	2402	7.74	5.94
	39	2441	10.74	11.86
	78	2480	8.51	7.10

BLE

BLE				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	2.18	1.65
	19	2440	5.05	3.20
	39	2480	4.63	2.90
GFSK(2Mbps)	0	2402	2.05	1.60
	19	2440	5.06	3.21
	39	2480	4.59	2.88

NFC

NFC		
Mode	Output Power (dBm)	Output Power (mW)
ASK	-49.4	0.00

5.2G WLAN				
Mode	Channel Number	Frequency (MHz)	ANT_A Average Power (dBm)	ANT_B Average Power (dBm)
802.11a	36	5180	11.08	10.94
	40	5200	11.09	11.13
	48	5240	11.35	11.44
802.11 n-HT20	36	5180	11.08	10.75
	40	5200	10.91	11.06
	48	5240	11.21	11.37
802.11 n-HT40	38	5190	11.56	11.32
	46	5230	11.54	11.74
802.11ac-VHT20	36	5180	11.05	10.92
	40	5200	10.94	11.10
	48	5240	11.15	11.47
802.11ac-VHT40	38	5190	11.58	11.34
	46	5230	11.55	11.64
802.11ac-VHT80	42	5210	11.48	11.49
802.11ac-VHT160	50	5250	12.04	12.06
802.11ax-HE160	50	5250	11.86	11.94
802.11ax-HE20	36	5180	11.14	10.88
	40	5200	11.09	11.07
	48	5240	11.23	11.52
802.11ax-HE40	38	5190	11.23	11.06
	46	5230	11.32	11.48
802.11ax-HE80	42	5210	11.10	11.21

5.3G WLAN				
Mode	Channel Number	Frequency (MHz)	ANT_A Average Power (dBm)	ANT_B Average Power (dBm)
802.11a	52	5260	11.34	11.50
	60	5300	11.42	11.63
	64	5320	11.32	11.58
802.11 n-HT20	52	5260	11.20	11.24
	60	5300	11.27	11.46
	64	5320	11.22	11.54
802.11 n-HT40	54	5270	11.63	11.70
	62	5310	11.68	11.86
802.11ac-VHT20	52	5260	11.18	11.25
	60	5300	11.20	11.42
	64	5320	11.16	11.50
802.11ac-VHT40	54	5270	11.60	11.76
	62	5310	11.65	11.80
802.11ac-VHT80	58	5290	11.38	11.70
802.11ax-HE20	52	5260	11.29	11.53
	60	5300	11.25	11.65
	64	5320	11.24	11.65
802.11ax-HE40	54	5270	11.37	11.45
	62	5310	11.42	11.60
802.11ac-VHT80	58	5290	11.12	11.42

5.6G WLAN				
Mode	Channel Number	Frequency (MHz)	ANT_A Average Power (dBm)	ANT_B Average Power (dBm)
802.11a	100	5500	12.13	10.83
	116	5580	10.97	11.26
	140	5700	10.99	10.79
802.11 n-HT20	100	5500	12.03	11.47
	116	5580	10.93	11.16
	140	5700	10.90	10.28
802.11 n-HT40	102	5510	12.47	11.82
	110	5550	11.83	11.31
	134	5670	11.60	10.48
802.11ac-VHT20	100	5500	12.01	11.12
	116	5580	10.90	10.23
	140	5700	10.96	10.10
802.11ac-VHT40	102	5510	12.54	11.06
	110	5550	11.83	11.77
	134	5670	11.49	11.14
802.11ac-VHT80	106	5530	12.24	12.45
	122	5610	11.21	11.92
802.11ac-VHT160	140	5700	11.55	12.24
802.11ax-HE160	140	5700	11.69	12.03
802.11ax-HE20	100	5500	11.86	11.88
	116	5580	10.88	11.60
	140	5700	10.96	11.04
802.11ax-HE40	102	5510	12.25	12.08
	110	5550	11.54	11.96
	134	5670	11.23	11.29
802.11ax-HE80	100	5500	12.01	11.12
	116	5580	11.97	12.19
	140	5700	11.10	11.69

5.8G WLAN				
Mode	Channel Number	Frequency (MHz)	ANT_A Average Power (dBm)	ANT_B Average Power (dBm)
802.11a	149	5745	11.02	11.25
	157	5785	11.05	10.51
	165	5825	11.34	10.36
802.11 n-HT20	149	5745	10.86	11.13
	157	5785	10.96	11.32
	165	5825	11.21	11.22
802.11 n-HT40	151	5755	11.32	11.61
	159	5795	11.39	11.69
802.11ac-VHT20	149	5745	11.03	11.12
	157	5785	10.96	11.42
	165	5825	11.34	11.15
802.11ac-VHT40	151	5755	11.18	11.67
	159	5795	11.33	11.57
802.11ac-VHT80	155	5775	11.01	11.42
802.11ax-HE20	149	5745	10.99	11.31
	157	5785	11.02	11.40
	165	5825	11.36	11.23
802.11ax-HE40	151	5755	11.35	11.62
	159	5795	11.43	11.53
802.11ac-VHT80	155	5775	11.08	11.44

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 $\leqslant$ 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 $\leqslant$ 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 $\leqslant$ 1.45 W/kg; Per KDB 941225 D05, smaller bandwidth SAR testing is not required.

LTE Band 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	22.23	22.36	21.99
1.4	1	2		22.33	**22.47**	22.23
1.4	1	5		22.29	22.41	22.04
1.4	3	0		22.35	22.43	22.31
1.4	3	1		**22.41**	**22.47**	22.37
1.4	3	2		22.31	22.33	22.35
1.4	6	0		21.26	21.4	21.32
1.4	1	0	16-QAM	21.51	21.18	21.05
1.4	1	2		21.19	21.26	21.21
1.4	1	5		21.09	21.12	21.13
1.4	3	0		21.04	21.19	21.24
1.4	3	1		21.11	21.34	21.38
1.4	3	2		21.1	21.28	21.32
1.4	6	0		20.5	20.5	20.38
3	1	0	QPSK	22.42	22.27	22.23
3	1	7		**22.74**	22.36	22.51
3	1	14		22.54	21.9	22.5
3	8	0		21.27	21.42	21.16
3	8	4		21.3	21.31	21.19
3	8	7		21.26	21.37	21.11
3	15	0		21.32	21.34	21.13
3	1	0	16-QAM	21.07	21.23	21.07
3	1	7		21.15	21.27	21.32
3	1	14		21.16	21.17	20.94
3	8	0		20.07	20.11	20.06
3	8	4		20.09	20.19	20.09
3	8	7		20.04	20.27	19.93
3	15	0		20.18	20.11	20.06

LTE BAND 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.05	21.89	22.15
5	1	12		**22.56**	22.19	22.21
5	1	24		22.09	21.72	21.97
5	12	0		21.27	21.31	21.19
5	12	6		21.24	21.32	21.18
5	12	11		21.23	21.31	21.19
5	25	0		21.17	21.37	21.15
5	1	0	16-QAM	21.22	20.89	20.96
5	1	12		20.99	21.21	21.48
5	1	24		20.86	20.83	20.96
5	12	0		19.78	20.13	20.04
5	12	6		19.89	20.05	20.08
5	12	11		19.8	20.06	20.15
5	25	0		20.21	20.31	20.07
10	1	0	QPSK	22.46	22.12	22.36
10	1	24		22.56	22.24	**22.64**
10	1	49		22.18	22.13	22.23
10	25	0		21.33	21.36	21.32
10	25	12		21.2	21.34	21.38
10	25	24		21.23	21.34	21.2
10	50	0		21.28	21.41	21.32
10	1	0	16-QAM	21.03	21.21	21.16
10	1	24		21.07	21.24	21.31
10	1	49		20.93	21.14	20.99
10	25	0		20.41	20.5	20.14
10	25	12		20.41	20.49	20.3
10	25	24		20.42	20.44	20.22
10	50	0		20.4	20.46	20.25

LTE BAND 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	22.25	22.18	22.15
15	1	37		22.69	22.59	**22.98**
15	1	74		22.07	22	22.32
15	36	0		21.23	21.34	21.17
15	36	18		21.24	21.37	21.32
15	36	39		21.25	21.26	21.2
15	75	0		21.26	21.41	21.25
15	1	0	16-QAM	21.01	21.42	21.32
15	1	38		22.06	22.33	22.1
15	1	75		21.03	21.22	21.24
15	36	0		20.43	20.38	20.17
15	36	18		20.44	20.33	20.05
15	36	39		20.31	20.31	20.02
15	75	0		20.25	20.44	20.16
20	1	0	QPSK	22.08	**23.01**	22.12
20	1	49		22.11	22.73	22.2
20	1	99		21.92	22.31	21.98
20	50	0		21.22	21.33	21.29
20	50	24		21.23	21.3	21.27
20	50	49		21.16	21.34	21.25
20	100	0		21.14	21.29	21.33
20	1	0	16-QAM	21.11	20.96	21.38
20	1	49		21.21	22.15	21.44
20	1	99		20.93	21.64	21.3
20	50	0		20.34	20.41	20.34
20	50	24		20.26	20.34	20.35
20	50	49		20.23	20.34	20.27
20	100	0		20.17	20.24	20.24

LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	22.37	22.25	22.12
1.4	1	2		22.27	22.29	22.12
1.4	1	5		22.16	22.4	22.15
1.4	3	0		22.39	22.16	22.23
1.4	3	1		22.3	22.26	22.34
1.4	3	2		22.35	22.28	22.22
1.4	6	0		21.38	21.31	21.31
1.4	1	0	16-QAM	21.61	20.89	21.1
1.4	1	2		21.27	21.02	21.31
1.4	1	5		21.11	21.02	21.25
1.4	3	0		21.03	21.03	21.24
1.4	3	1		21.15	21.15	21.48
1.4	3	2		21.09	21.17	21.38
1.4	6	0		20.56	20.37	20.49
3	1	0	QPSK	22.33	21.91	22.45
3	1	7		**22.71**	22.26	22.54
3	1	14		22.43	22.02	22.4
3	8	0		21.39	21.25	21.19
3	8	4		21.36	21.29	21.22
3	8	7		21.31	21.34	21.26
3	15	0		21.31	21.24	21.27
3	1	0	16-QAM	21.05	21.14	21.38
3	1	7		21.14	21.29	21.83
3	1	14		21.1	21.24	21.49
3	8	0		20.27	20.46	20.19
3	8	4		20.25	20.4	20.17
3	8	7		20.21	20.55	20.18
3	15	0		20.08	20.4	20.21

LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.1	21.6	22.17
5	1	12		22.51	22.03	22.43
5	1	24		22.22	21.7	22.15
5	12	0		21.27	21.09	21.2
5	12	6		21.26	21.15	21.23
5	12	11		21.27	21.24	21.34
5	25	0		21.22	21.13	21.18
5	1	0	16-QAM	20.9	20.73	20.81
5	1	12		21.45	21.16	21.19
5	1	24		20.94	20.82	20.95
5	12	0		20.19	20.14	20.07
5	12	6		20.2	20.14	20.1
5	12	11		20.19	20.18	20.3
5	25	0		20.09	19.97	20.31
10	1	0	QPSK	22.09	21.98	22.35
10	1	24		22.55	22.09	**22.69**
10	1	49		22.23	21.82	22.38
10	25	0		21.3	21.18	21.3
10	25	12		21.26	21.11	21.3
10	25	24		21.23	21.07	21.21
10	50	0		21.28	21.19	21.18
10	1	0	16-QAM	20.98	21.11	21.27
10	1	24		21.23	21.78	21.62
10	1	49		20.91	21.06	21.21
10	25	0		20.38	20.14	20.35
10	25	12		20.46	20.29	20.42
10	25	24		20.44	20.26	20.19
10	50	0		20.41	20.41	20.23

LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	22.19	22.07	22.26
15	1	37		22.76	22.48	22.63
15	1	74		22.45	22.11	22.15
15	36	0		21.22	21.27	21.21
15	36	18		21.24	21.17	21.22
15	36	39		21.33	21.08	21.29
15	75	0		21.26	21.12	21.24
15	1	0	16-QAM	20.99	21.1	21.51
15	1	38		20.97	21.58	22.36
15	1	75		21.06	21.27	21.49
15	36	0		20.17	20.23	20.24
15	36	18		20.47	20.15	20.26
15	36	39		20.46	20.16	20.25
15	75	0		20.39	20.16	20.28
20	1	0	QPSK	21.97	22.42	22.1
20	1	49		22.2	22.63	22.39
20	1	99		22.02	**22.84**	22.15
20	50	0		21.3	21.2	21.35
20	50	24		21.29	21.13	21.3
20	50	49		21.3	21.15	21.19
20	100	0		21.24	21.24	21.28
20	1	0	16-QAM	20.86	21.92	21.2
20	1	49		21.41	22.05	21.41
20	1	99		21.06	20.92	21.43
20	50	0		20.32	20.21	20.34
20	50	24		20.34	20.17	20.38
20	50	49		20.36	20.12	20.27
20	100	0		20.4	20.19	20.22

LTE BAND 5

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
1.4	1	0	QPSK	23.44	23.56	23.38
1.4	1	2		23.43	23.6	23.31
1.4	1	5		23.32	23.54	23.31
1.4	3	0		23.38	23.55	23.59
1.4	3	1		23.51	23.66	23.56
1.4	3	2		23.35	23.44	23.4
1.4	6	0		22.35	22.37	22.42
1.4	1	0	16-QAM	22.71	22.23	22.56
1.4	1	2		22.54	22.26	22.51
1.4	1	5		22.7	22.1	22.42
1.4	3	0		22.22	22.16	22.71
1.4	3	1		22.19	22.39	22.69
1.4	3	2		22.07	22.26	22.48
1.4	6	0		21.61	21.52	21.69
3	1	0	QPSK	23.53	23.37	23.74
3	1	7		**23.93**	23.49	23.9
3	1	14		23.44	23.22	23.24
3	8	0		22.28	22.66	22.56
3	8	4		22.15	22.48	22.64
3	8	7		22.12	22.5	22.56
3	15	0		22.16	22.48	22.53
3	1	0	16-QAM	22.19	22.33	22.68
3	1	7		22.02	22.99	22.79
3	1	14		21.89	22.42	22.35
3	8	0		21.22	21.73	21.57
3	8	4		21.16	21.75	21.58
3	8	7		21.09	21.69	21.6
3	15	0		21.02	21.68	21.58

LTE BAND 5

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	23.19	23.04	23.47
5	1	12		23.62	23.53	**23.81**
5	1	24		23.22	23.01	22.87
5	12	0		22.21	22.44	22.6
5	12	6		22.26	22.53	22.59
5	12	11		22.34	22.47	22.45
5	25	0		22.29	22.51	22.53
5	1	0	16-QAM	22.39	21.99	22.06
5	1	12		22.31	22.59	22.58
5	1	24		21.84	22.12	21.95
5	12	0		21.12	21.55	21.84
5	12	6		21.28	21.55	21.85
5	12	11		21.38	21.37	21.4
5	25	0		21.12	21.3	21.51
10	1	0	QPSK	23.3	23.15	23.57
10	1	24		23.77	23.35	**24.05**
10	1	49		23.27	23.35	22.81
10	25	0		22.26	22.35	22.56
10	25	12		22.41	22.5	22.61
10	25	24		22.37	22.53	22.61
10	50	0		22.32	22.44	22.62
10	1	0	16-QAM	22.08	22.13	22.71
10	1	24		22.18	22.72	22.87
10	1	49		21.9	22.46	22.13
10	25	0		21.33	21.58	21.65
10	25	12		21.58	21.73	21.8
10	25	24		21.45	21.76	21.6
10	50	0		21.33	21.49	21.65

LTE BAND 7

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.85	22.83	22.67
5	1	12		23.3	23.23	23.01
5	1	24		23.02	22.72	22.63
5	12	0		22.09	22.14	21.88
5	12	6		22.13	22.29	21.95
5	12	11		22.18	22.27	21.94
5	25	0		22.14	22.25	21.97
5	1	0	16-QAM	21.58	21.76	21.46
5	1	12		22.15	22.32	22.02
5	1	24		21.51	21.89	21.31
5	12	0		21.02	21.2	20.64
5	12	6		20.98	21.18	20.89
5	12	11		20.99	21.12	20.7
5	25	0		21.13	20.93	20.7
10	1	0	QPSK	22.72	22.91	22.88
10	1	24		**23.42**	22.98	23.41
10	1	49		22.71	22.98	22.99
10	25	0		21.94	22.17	22.06
10	25	12		21.9	22.15	22.06
10	25	24		21.9	22.1	22.05
10	50	0		21.87	22.18	22.07
10	1	0	16-QAM	21.59	22.42	22.11
10	1	24		21.78	22.39	22.37
10	1	49		21.45	22.21	22.1
10	25	0		21	21.25	21.15
10	25	12		20.98	21.28	21.17
10	25	24		20.9	21.05	21.13
10	50	0		20.69	21.01	21.04

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	22.7	22.92	22.48
15	1	37		23.27	23.43	23.73
15	1	74		22.73	23.05	23.09
15	36	0		21.98	22.22	22.21
15	36	18		21.86	22.2	22.09
15	36	39		21.82	22.12	22.07
15	75	0		21.91	22.14	22.06
15	1	0	16-QAM	21.95	22.01	21.46
15	1	38		21.57	23.07	22.76
15	1	75		21.5	22.16	22.26
15	36	0		20.79	21.16	21.21
15	36	18		20.95	21.13	20.97
15	36	39		20.83	21.03	20.96
15	75	0		20.73	21.1	20.97
20	1	0	QPSK	21.81	22.35	21.1
20	1	49		22.79	**24.05**	22.66
20	1	99		21.95	22.43	22.29
20	50	0		21.93	22.21	22.26
20	50	24		21.81	22.23	22.17
20	50	49		21.91	22.18	22.11
20	100	0		21.81	22.21	22.1
20	1	0	16-QAM	20.96	21.36	20.07
20	1	49		22.01	23.1	21.7
20	1	99		21.18	21.49	21.31
20	50	0		20.88	21.25	21.25
20	50	24		20.86	21.19	21.11
20	50	49		20.96	21.13	20.99
20	100	0		20.77	21.14	21.04

LTE BAND 38

LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	21.86	21.29	21.76
5	1	12		**22.51**	21.76	21.91
5	1	24		21.75	21.25	21.71
5	12	0		21.05	20.72	20.96
5	12	6		21.02	20.7	21.03
5	12	11		21	20.69	21.1
5	25	0		21.03	20.72	21.14
5	1	0	16-QAM	20.95	20.93	20.98
5	1	12		20.99	21.35	21.25
5	1	24		20.84	20.94	21.02
5	12	0		19.8	19.71	20.16
5	12	6		20.01	19.71	20.33
5	12	11		19.77	19.66	20.33
5	25	0		20.01	19.85	20.16
10	1	0	QPSK	21.98	21.64	22.01
10	1	24		22.21	21.88	22.28
10	1	49		22.07	21.58	22.21
10	25	0		21.15	20.9	21.16
10	25	12		21.05	20.89	21.15
10	25	24		21.1	20.81	21.16
10	50	0		21.11	20.84	21.1
10	1	0	16-QAM	21.41	21.2	20.88
10	1	24		20.94	21.31	21.23
10	1	49		21.03	21.22	20.84
10	25	0		20.08	19.81	20.06
10	25	12		20.09	19.89	20.11
10	25	24		19.95	19.91	20.02
10	50	0		19.99	19.85	20.11

LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	22.15	21.64	21.94
15	1	37		22.34	21.71	22.34
15	1	74		21.92	21.54	21.92
15	36	0		21.06	20.87	21.06
15	36	18		21.03	20.88	21.05
15	36	39		20.99	20.8	21.07
15	75	0		21.05	20.79	21.16
15	1	0	16-QAM	21.39	21.23	21.32
15	1	38		20.94	21.44	21.58
15	1	75		21.14	21.08	21.17
15	36	0		19.97	19.86	20.05
15	36	18		19.78	19.79	19.92
15	36	39		19.75	19.72	19.85
15	75	0		19.99	19.85	20.17
20	1	0	QPSK	21.7	22.01	**22.56**
20	1	49		21.73	22.06	22.4
20	1	99		21.6	21.94	21.97
20	50	0		21.18	21.04	21.04
20	50	24		21.1	20.92	21.12
20	50	49		21.07	20.84	21.03
20	100	0		21.11	20.93	21.03
20	1	0	16-QAM	21.46	21.63	20.56
20	1	49		21.4	21.68	20.72
20	1	99		21.32	21.43	20.36
20	50	0		20.27	19.83	19.94
20	50	24		20.19	19.91	20.02
20	50	49		20.16	19.93	20.05
20	100	0		20.16	19.81	20.11

LTE BAND 40

LTE Band 40 Maximum Average Power [dBm] 2315-2350M						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	22.42	21.97	22.39
5	1	12		22.84	**22.95**	22.59
5	1	24		22.43	22.2	22.34
5	12	0		21.67	21.6	21.64
5	12	6		21.66	21.65	21.65
5	12	11		21.66	21.65	21.63
5	25	0		21.6	21.69	21.7
5	1	0	16-QAM	21.22	21.77	21.48
5	1	12		21.75	22.22	21.79
5	1	24		21.84	21.89	21.52
5	12	0		20.6	20.57	20.49
5	12	6		20.62	20.6	20.53
5	12	11		20.6	20.58	20.6
5	25	0		20.52	20.47	20.57
10	1	0	QPSK	N/A	22.46	N/A
10	1	24		N/A	**23.02**	N/A
10	1	49		N/A	22.51	N/A
10	25	0		N/A	21.62	N/A
10	25	12		N/A	21.74	N/A
10	25	24		N/A	21.75	N/A
10	50	0		N/A	21.72	N/A
10	1	0	16-QAM	N/A	21.87	N/A
10	1	24		N/A	21.76	N/A
10	1	49		N/A	21.56	N/A
10	25	0		N/A	20.51	N/A
10	25	12		N/A	20.54	N/A
10	25	24		N/A	20.51	N/A
10	50	0		N/A	20.66	N/A

LTE Band 40 Maximum Average Power [dBm] 2350-2360M						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	21.84	22.14	22.29
5	1	12		22.45	22.2	23.07
5	1	24		22.01	22.09	22.29
5	12	0		21.5	21.52	21.57
5	12	6		21.57	21.47	21.51
5	12	11		21.54	21.47	21.52
5	25	0		21.49	21.5	21.46
5	1	0	16-QAM	21.63	21.34	21.1
5	1	12		22.13	21.59	21.55
5	1	24		21.52	21.3	21.42
5	12	0		20.46	20.36	20.31
5	12	6		20.42	20.54	20.26
5	12	11		20.39	20.42	20.26
5	25	0		20.38	20.43	20.42
10	1	0	QPSK	N/A	22.36	N/A
10	1	24		N/A	22.84	N/A
10	1	49		N/A	**23.14**	N/A
10	25	0		N/A	21.52	N/A
10	25	12		N/A	21.55	N/A
10	25	24		N/A	21.5	N/A
10	50	0		N/A	21.55	N/A
10	1	0	16-QAM	N/A	21.77	N/A
10	1	24		N/A	21.38	N/A
10	1	49		N/A	21.39	N/A
10	25	0		N/A	20.4	N/A
10	25	12		N/A	20.35	N/A
10	25	24		N/A	20.31	N/A
10	50	0		N/A	20.28	N/A

LTE BAND 41

LTE Band 41 Maximum Average Power [dBm] 2555-2655M						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
5	1	0	QPSK	21.29	21.37	21.73
5	1	12		21.82	21.38	22.18
5	1	24		21.55	21.34	21.7
5	12	0		21.05	20.71	20.96
5	12	6		21.06	20.77	20.92
5	12	11		21.08	20.75	20.91
5	25	0		20.99	20.68	20.88
5	1	0	16-QAM	21.13	20.61	20.82
5	1	12		21.77	20.88	21.02
5	1	24		21.4	20.58	20.86
5	12	0		20.09	19.97	19.94
5	12	6		20.08	19.83	19.91
5	12	11		20.18	19.92	19.89
5	25	0		20.17	19.61	20.05
10	1	0	QPSK	22.01	21.34	21.86
10	1	24		21.94	21.69	**22.2**
10	1	49		22.06	21.28	21.9
10	25	0		21.08	20.69	20.85
10	25	12		21.17	20.76	20.9
10	25	24		21.17	20.79	20.92
10	50	0		21.13	20.72	20.96
10	1	0	16-QAM	21.04	21.08	20.65
10	1	24		21.4	21.17	20.85
10	1	49		21.11	20.93	20.66
10	25	0		20.05	19.67	19.84
10	25	12		20.09	19.63	19.9
10	25	24		20.12	19.55	19.92
10	50	0		20.35	19.79	19.98

LTE Band 41 Maximum Average Power [dBm] 2555-2655M						
BW [MHz]	**RB Size**	**RB Offset**	**Mod**	**Lowest**	**Middle**	**Highest**
15	1	0	QPSK	21.99	21.53	21.72
15	1	37		22.2	21.53	22.07
15	1	74		22	21.36	21.87
15	36	0		21.05	20.76	20.97
15	36	18		21	20.69	20.95
15	36	39		21.03	20.64	21.03
15	75	0		21.03	20.69	21.02
15	1	0	16-QAM	21.22	21.26	21.27
15	1	38		21.02	21.3	21.47
15	1	75		20.96	20.98	21.32
15	36	0		19.86	19.73	19.92
15	36	18		19.82	19.76	19.7
15	36	39		19.84	19.64	19.69
15	75	0		20.16	19.84	19.95
20	1	0	QPSK	21.3	21.67	21.91
20	1	49		21.7	21.79	22.19
20	1	99		21.32	21.68	**22.23**
20	50	0		21.05	20.75	20.87
20	50	24		21.06	20.7	21.01
20	50	49		21.02	20.65	21.13
20	100	0		21.01	20.76	20.95
20	1	0	16-QAM	21.19	21.41	20.19
20	1	49		21.35	21.54	20.34
20	1	99		21.23	21.35	20.47
20	50	0		20.22	19.79	19.87
20	50	24		20.18	19.85	19.88
20	50	49		20.2	19.83	20.03
20	100	0		20.14	19.66	20.05

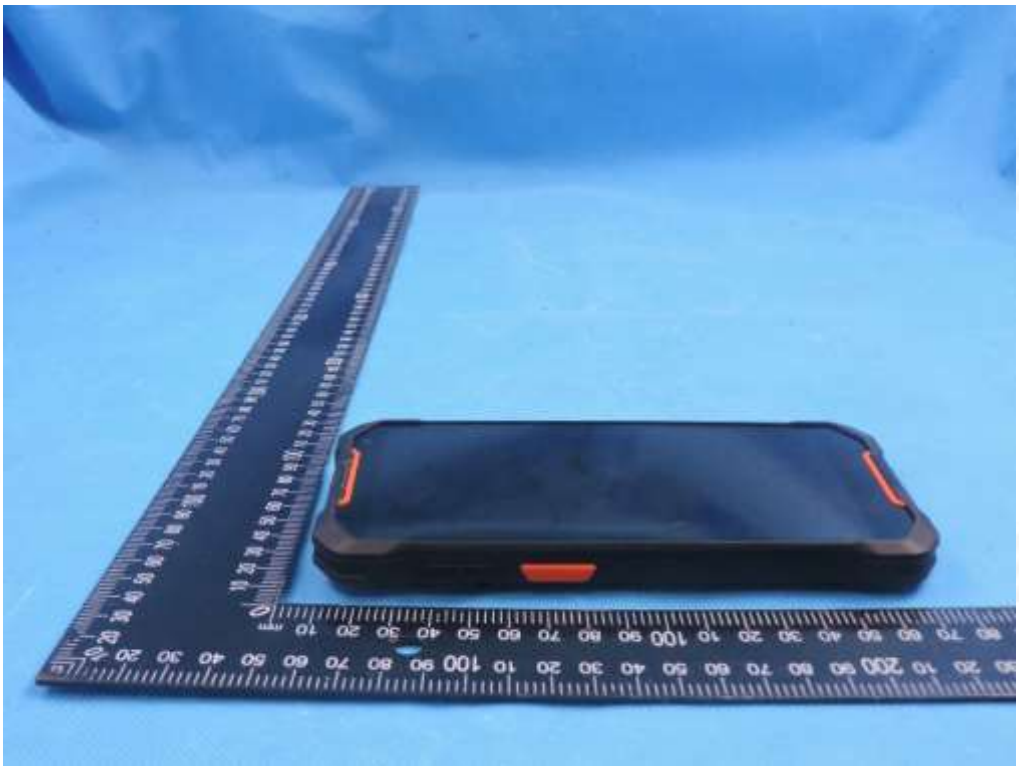
11. EUT and Test Setup Photo

11.1 EUT Photo

Front side

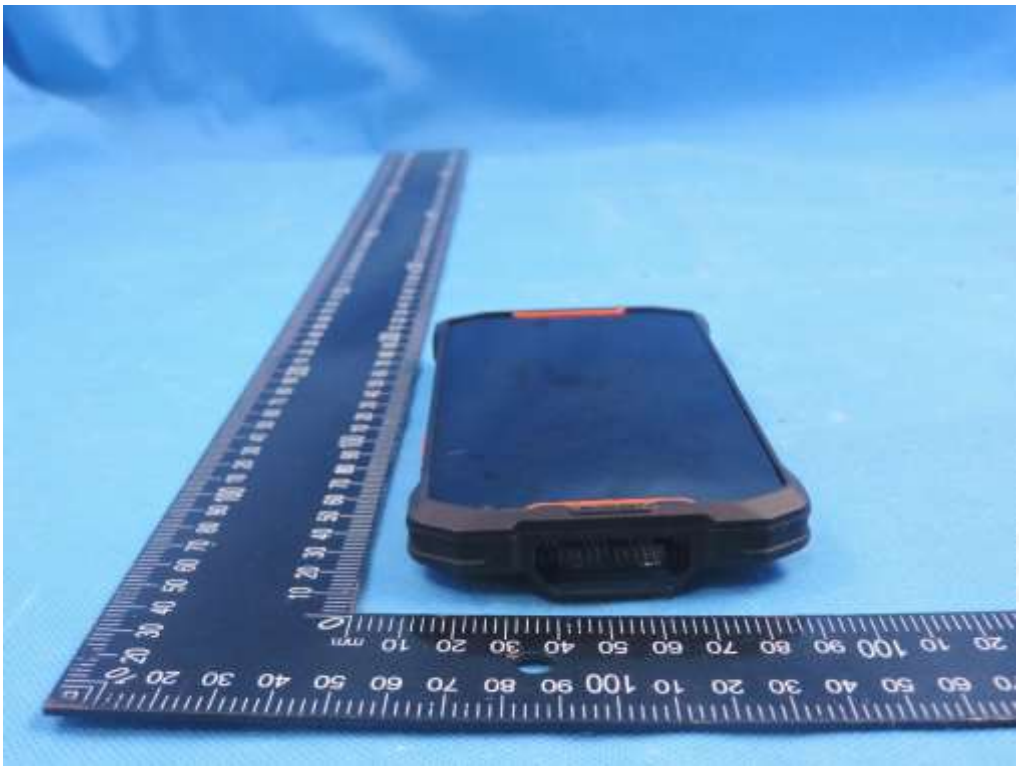
Back side

Left Edge

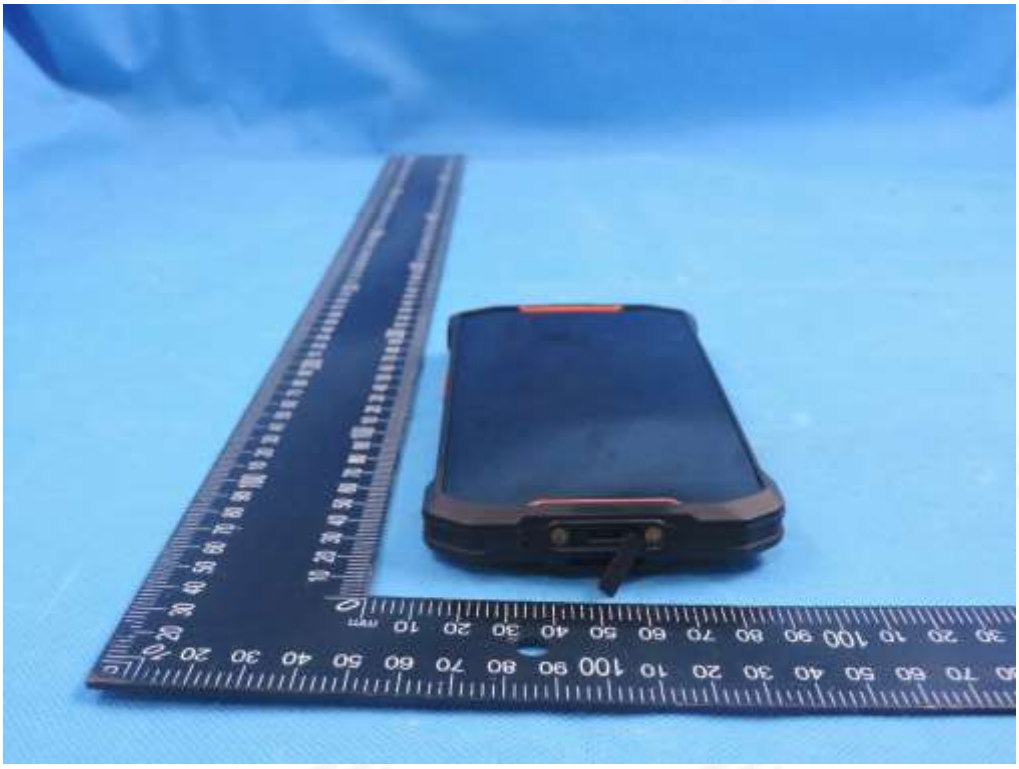


Right Edge

Top Edge



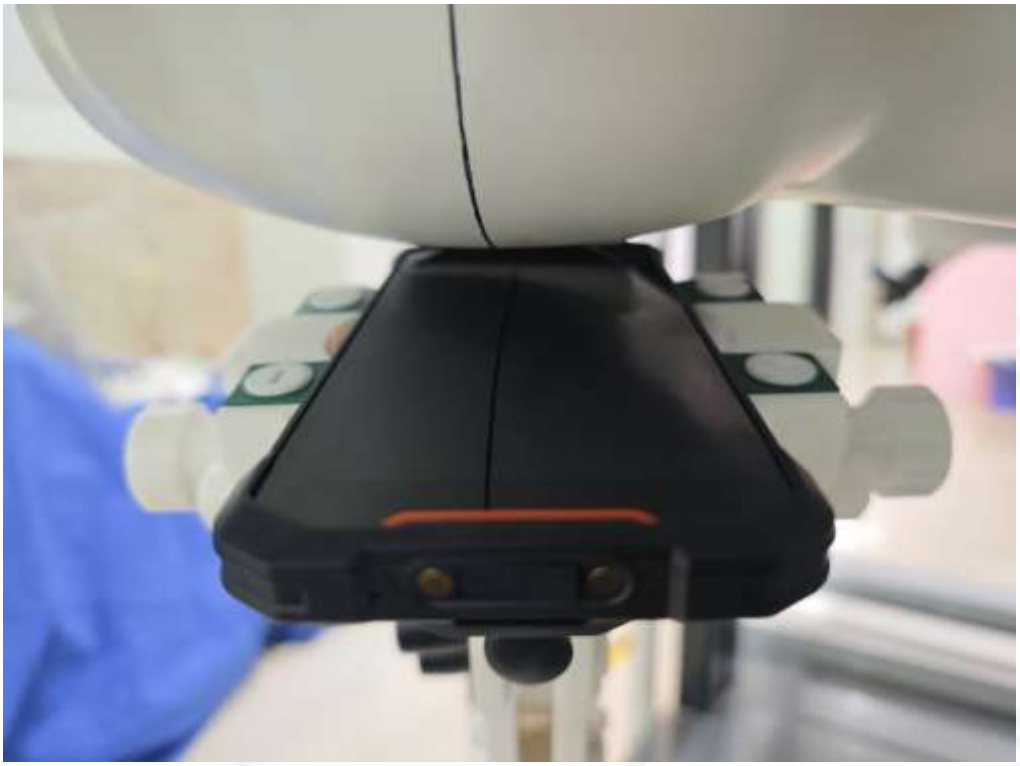
Bottom Edge



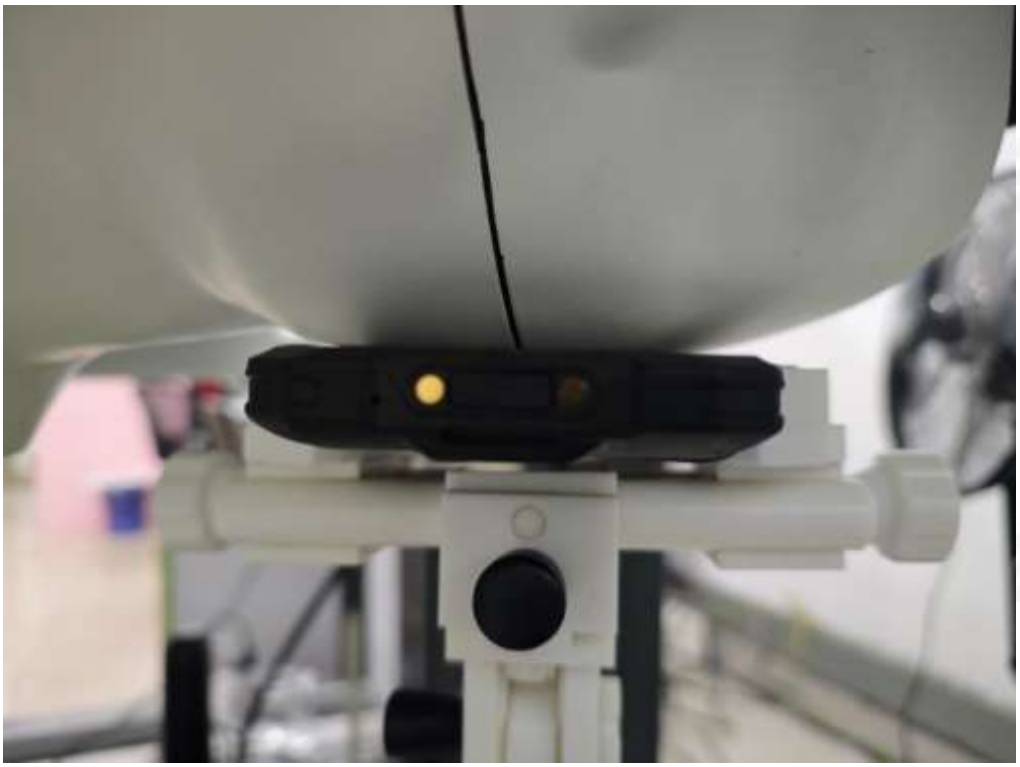
11.2 Setup Photo

Right Cheek

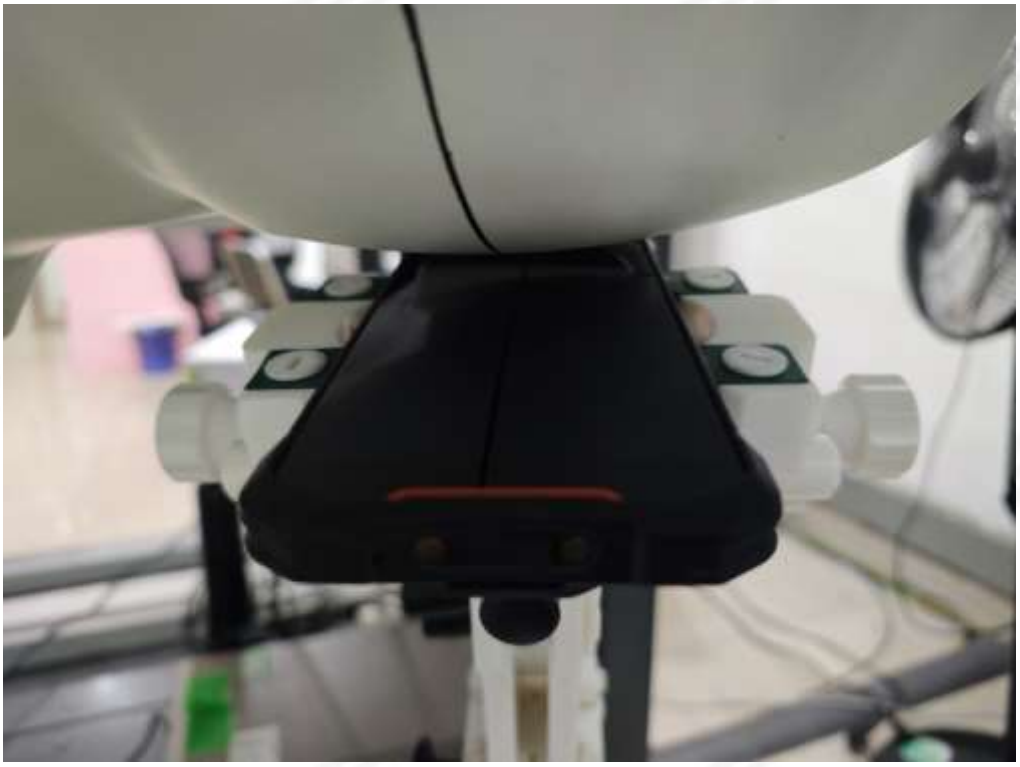
Right Tilt



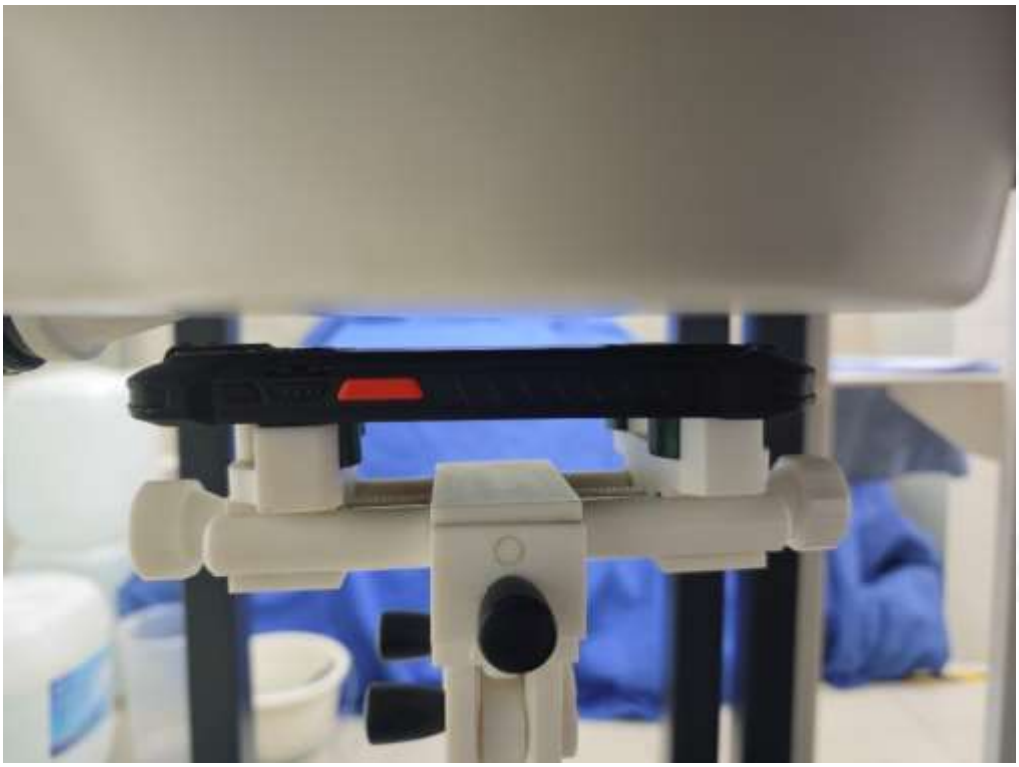
Left Cheek



Left Tilt

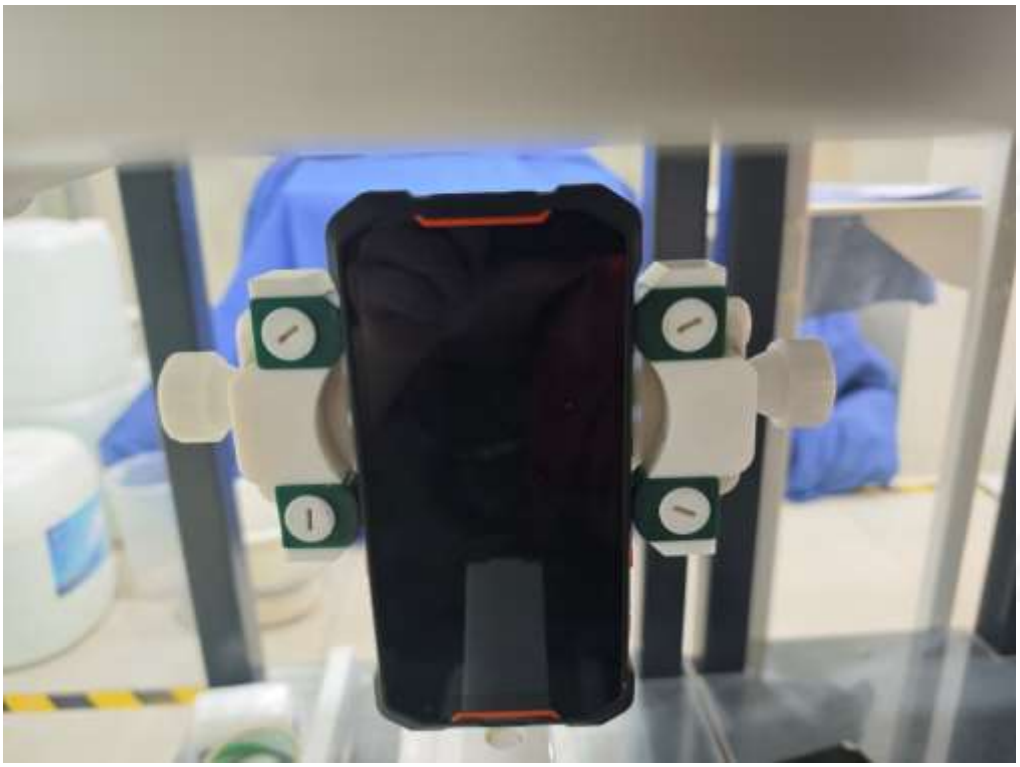


Body Front side(separation distance is 10mm)

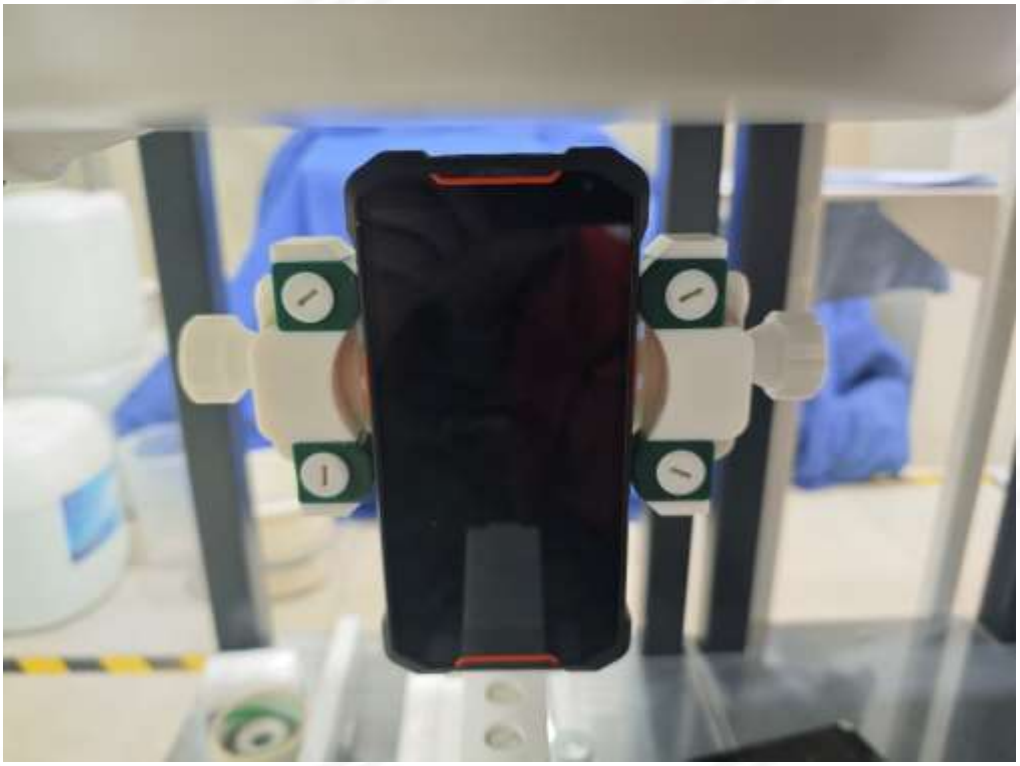


Body Back side(separation distance is 10mm)

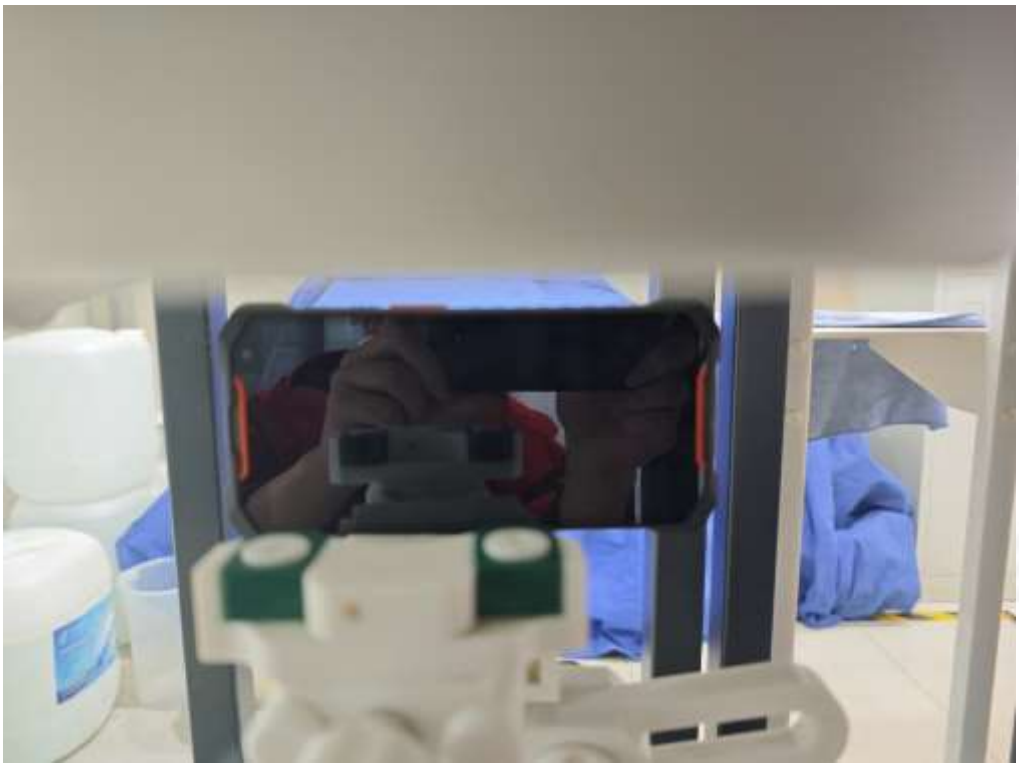
Body Left side(separation distance is 10mm)



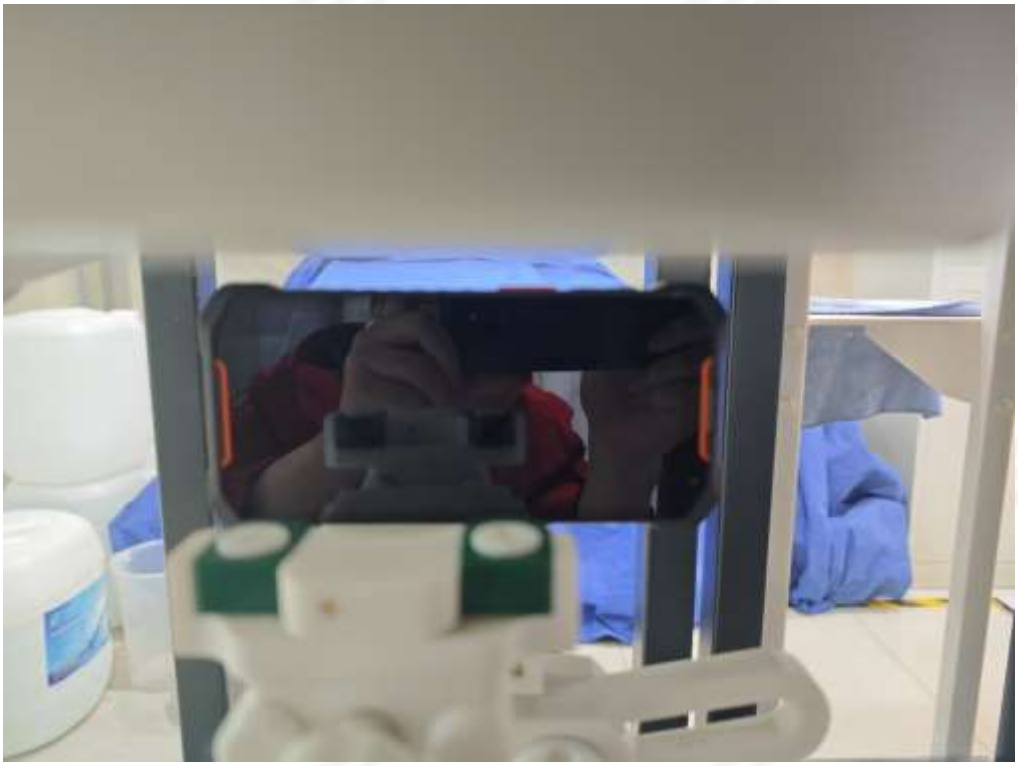
Body Right side(separation distance is 10mm)



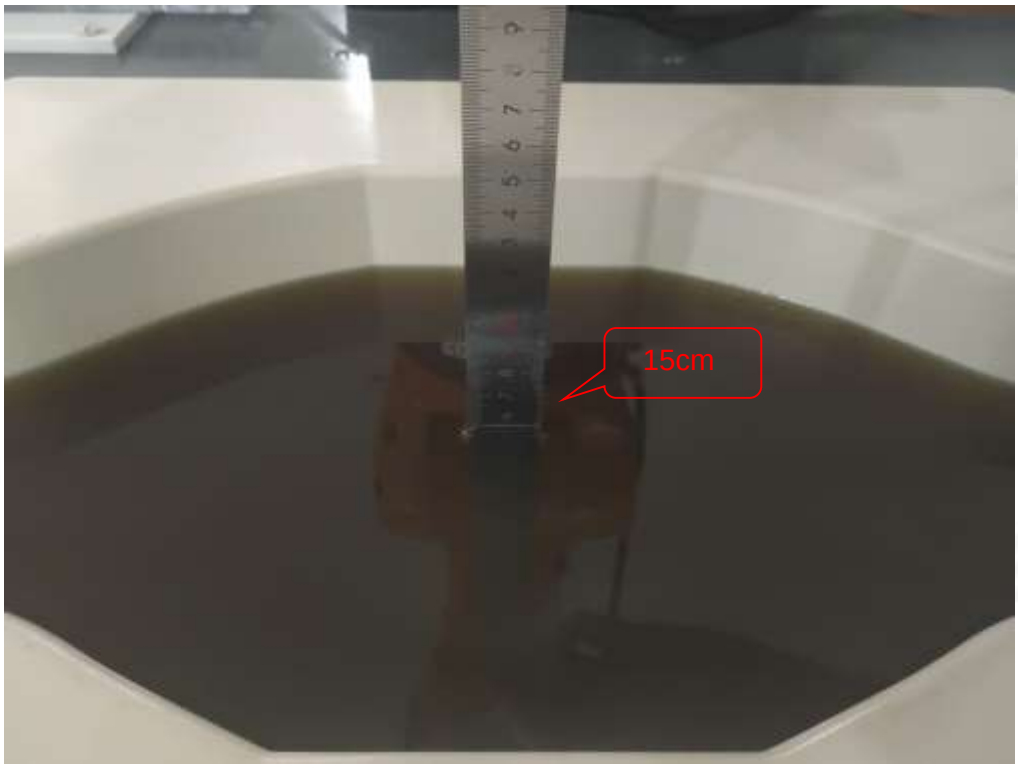
Body Bottom side(separation distance is 10mm)



Body Top side(separation distance is 10mm)



Liquid depth (15 cm)



12. SAR Result Summary

12.1 Head 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	Right Cheek	824.2	0.249	3.60	32.50	**32.38**	1.028	**0.256**	1
		Right Tilt	824.2	0.160	-3.68	32.50	32.38	1.028	0.164	/
		Left Cheek	824.2	0.224	1.65	32.50	32.38	1.028	0.230	***I***
		Left Tilt	824.2	0.143	-1.44	32.50	32.38	1.028	0.147	/
GSM1900	GPRS Data-4 Slot	Right Cheek	1850.2	0.156	0.36	29.00	28.93	1.016	0.159	3
		Right Tilt	1850.2	0.059	0.35	29.00	28.93	1.016	0.060	/
		Left Cheek	1850.2	0.144	3.86	29.00	28.93	1.016	0.146	***I***
		Left Tilt	1850.2	0.048	3.85	29.00	28.93	1.016	0.049	/
WCDMA Band II	RMC	Right Cheek	1852.4	0.273	2.74	24.00	23.56	1.107	0.302	5
		Right Tilt	1852.4	0.124	-1.66	24.00	23.56	1.107	0.137	/
		Left Cheek	1852.4	0.247	-3.86	24.00	23.56	1.107	0.273	***I***
		Left Tilt	1852.4	0.087	2.52	24.00	23.56	1.107	0.096	/
WCDMA Band V	RMC	Right Cheek	1752.4	0.207	2.01	24.00	23.62	1.091	0.226	7
		Right Tilt	1752.4	0.110	-3.48	24.00	23.62	1.091	0.120	/
		Left Cheek	1752.4	0.178	0.64	24.00	23.62	1.091	0.194	***I***
		Left Tilt	1752.4	0.087	-2.64	24.00	23.62	1.091	0.095	/
WCDMA Band IV	RMC	Right Cheek	846.6	0.281	-0.54	24.00	23.86	1.033	0.290	9
		Right Tilt	846.6	0.114	-2.27	24.00	23.86	1.033	0.118	/
		Left Cheek	846.6	0.264	0.54	24.00	23.86	1.033	0.273	***I***
		Left Tilt	846.6	0.087	-2.34	24.00	23.86	1.033	0.090	/

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 2	20M	QPSK	1	0	Right Cheek	1860	0.240	1.32	23.5	23.01	1.119	0.269	11
			50	0	Right Cheek	1860	0.221	-2.71	22.5	22.31	1.045	0.231	/
			1	0	Right Tilt	1860	0.113	0.41	23.5	23.01	1.119	0.126	/
			50	0	Right Tilt	1860	0.094	-0.32	22.5	22.31	1.045	0.098	/
			1	0	Left Cheek	1860	0.214	-0.25	23.5	23.01	1.119	0.240	**/**
			50	0	Left Cheek	1860	0.187	0.73	22.5	22.31	1.045	0.195	/
			1	0	Left Tilt	1860	0.094	-0.33	23.5	23.01	1.119	0.105	/
			50	0	Left Tilt	1860	0.082	-0.77	22.5	22.31	1.045	0.086	/
LTE Band 4	20M	QPSK	1	0	Right Cheek	1720	0.211	1.30	23	22.84	1.038	0.219	13
			50	0	Right Cheek	1745	0.101	3.85	21.5	21.35	1.035	0.105	/
			1	0	Right Tilt	1720	0.197	3.46	23	22.84	1.038	0.204	/
			50	0	Right Tilt	1745	0.094	1.01	21.5	21.35	1.035	0.097	/
			1	0	Left Cheek	1720	0.200	3.45	23	22.84	1.038	0.208	**/**
			50	0	Left Cheek	1745	0.095	-3.07	21.5	21.35	1.035	0.098	/
			1	0	Left Tilt	1720	0.186	-0.10	23	22.84	1.038	0.193	/
			50	0	Left Tilt	1745	0.085	0.02	21.5	21.35	1.035	0.088	/
LTE Band 5	10M	QPSK	1	0	Right Cheek	844	0.242	2.33	24.5	24.05	1.109	0.268	15
			25	0	Right Cheek	844	0.121	-0.67	23	22.61	1.094	0.132	/
			1	0	Right Tilt	844	0.234	0.49	24.5	24.05	1.109	0.260	/
			25	0	Right Tilt	844	0.114	-2.20	23	22.61	1.094	0.125	/
			1	0	Left Cheek	844	0.234	1.11	24.5	24.05	1.109	0.260	**/**
			25	0	Left Cheek	844	0.117	3.04	23	22.61	1.094	0.128	/
			1	0	Left Tilt	844	0.214	-1.39	24.5	24.05	1.109	0.237	/
			25	0	Left Tilt	844	0.109	0.36	23	22.61	1.094	0.119	/
LTE Band 7	20M	QPSK	1	0	Right Cheek	2535	0.187	2.16	24.5	24.05	1.109	0.207	17
			50	0	Right Cheek	2560	0.074	0.29	22.5	22.26	1.057	0.078	/
			1	0	Right Tilt	2535	0.167	-2.96	24.5	24.05	1.109	0.185	/
			50	0	Right Tilt	2560	0.064	-0.32	22.5	22.26	1.057	0.068	/
			1	0	Left Cheek	2535	0.166	1.74	24.5	24.05	1.109	0.184	**/**
			50	0	Left Cheek	2560	0.065	1.50	22.5	22.26	1.057	0.069	/
			1	0	Left Tilt	2535	0.157	-3.11	24.5	24.05	1.109	0.174	/
			50	0	Left Tilt	2560	0.060	2.82	22.5	22.26	1.057	0.063	/

LTE Band 38	20M	QP SK	1	0	Right Cheek	2610	0.246	3.23	23	22.56	1.107	0.272	19
			50	0	Right Cheek	2580	0.222	0.15	21.5	21.28	1.052	0.234	/
			1	0	Right Tilt	2610	0.120	3.73	23	22.56	1.107	0.133	/
			50	0	Right Tilt	2580	0.115	-2.89	21.5	21.28	1.052	0.121	/
			1	0	Left Cheek	2610	0.232	-2.83	23	22.56	1.107	0.257	/
			50	0	Left Cheek	2580	0.214	0.53	21.5	21.28	1.052	0.225	/
			1	0	Left Tilt	2610	0.112	-1.26	23	22.56	1.107	0.124	/
			50	0	Left Tilt	2580	0.107	-2.99	21.5	21.28	1.052	0.113	/
LTE Band 40	20M	QP SK	1	0	Right Cheek	2350	0.233	1.84	23.5	23.14	1.086	0.253	21
			50	0	Right Cheek	2350	0.221	-3.42	22	21.55	1.109	0.245	/
			1	0	Right Tilt	2350	0.130	-2.49	23.5	23.14	1.086	0.141	/
			50	0	Right Tilt	2350	0.124	-3.35	22	21.55	1.109	0.138	/
			1	0	Left Cheek	2350	0.201	-3.24	23.5	23.14	1.086	0.218	/
			50	0	Left Cheek	2350	0.189	1.94	22	21.55	1.109	0.210	/
			1	0	Left Tilt	2350	0.122	2.00	23.5	23.14	1.086	0.133	/
			50	0	Left Tilt	2350	0.102	2.30	22	21.55	1.109	0.113	/
LTE Band 41	20M	QP SK	1	0	Right Cheek	2680	0.209	-3.92	22.5	22.23	1.064	0.222	23
			50	0	Right Cheek	2680	0.189	1.53	21.5	21.13	1.089	0.206	/
			1	0	Right Tilt	2680	0.095	-2.30	22.5	22.23	1.064	0.101	/
			50	0	Right Tilt	2680	0.087	-1.03	21.5	21.13	1.089	0.095	/
			1	0	Left Cheek	2680	0.201	1.87	22.5	22.23	1.064	0.214	/
			50	0	Left Cheek	2680	0.177	0.21	21.5	21.13	1.089	0.193	/
			1	0	Left Tilt	2680	0.087	2.75	22.5	22.23	1.064	0.093	/
			50	0	Left Tilt	2680	0.074	0.77	21.5	21.13	1.089	0.081	/

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.
2.4G WLAN ANT_A	802.11b	Right Cheek	2462	0.159	0.02	12.00	11.92	1.019	0.162	**25**
		Right Tilt	2462	0.062	2.15	12.00	11.92	1.019	0.063	/
		Left Cheek	2462	0.140	-2.28	12.00	11.92	1.019	0.143	/
		Left Tilt	2462	0.058	-3.24	12.00	11.92	1.019	0.059	/
BT	GFSK	Right Cheek	2441	0.068	-2.09	12.00	11.78	1.052	0.072	**27**
		Right Tilt	2441	0.023	-2.60	12.00	11.78	1.052	0.024	/
		Left Cheek	2441	0.060	0.83	12.00	11.78	1.052	0.063	/
		Left Tilt	2441	0.021	-0.74	12.00	11.78	1.052	0.022	/
5.2G WLAN ANT_A	802.11ac-VHT160	Right Cheek	5250	0.318	0.37	12.50	12.04	1.112	0.354	**29**
		Right Tilt	5250	0.124	-2.22	12.50	12.04	1.112	0.138	/
		Left Cheek	5250	0.284	1.06	12.50	12.04	1.112	0.316	/
		Left Tilt	5250	0.110	-0.76	12.50	12.04	1.112	0.122	/
5.3G WLAN ANT_A	802.11 n-HT40	Right Cheek	5310	0.274	1.01	12.00	11.68	1.076	0.295	**31**
		Right Tilt	5310	0.110	-1.81	12.00	11.68	1.076	0.118	/
		Left Cheek	5310	0.253	-3.47	12.00	11.68	1.076	0.272	/
		Left Tilt	5310	0.101	-2.42	12.00	11.68	1.076	0.109	/
5.6G WLAN ANT_A	802.11ac-VHT40	Right Cheek	5510	0.110	1.19	13.00	12.54	1.112	0.122	**33**
		Right Tilt	5510	0.051	-1.71	13.00	12.54	1.112	0.057	/
		Left Cheek	5510	0.102	1.01	13.00	12.54	1.112	0.113	/
		Left Tilt	5510	0.045	-0.58	13.00	12.54	1.112	0.050	/
5.8G WLAN ANT_A	802.11ax-HE40	Right Cheek	5795	0.083	0.26	11.50	11.43	1.016	0.084	**35**
		Right Tilt	5795	0.042	1.96	11.50	11.43	1.016	0.043	/
		Left Cheek	5795	0.075	3.20	11.50	11.43	1.016	0.076	/
		Left Tilt	5795	0.035	-3.42	11.50	11.43	1.016	0.036	/

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.
2.4G WLAN ANT_B	802.11b	Right Cheek	2462	0.112	2.55	12.00	11.55	1.109	**0.124**	**37**
		Right Tilt	2462	0.052	1.77	12.00	11.55	1.109	0.058	/
		Left Cheek	2462	0.101	-0.98	12.00	11.55	1.109	0.112	/
		Left Tilt	2462	0.048	1.77	12.00	11.55	1.109	0.053	/
5.2G WLAN ANT_B	802.11ac-VHT160	Right Cheek	5250	0.391	1.52	12.50	12.06	1.107	**0.433**	**39**
		Right Tilt	5250	0.120	0.67	12.50	12.06	1.107	0.133	/
		Left Cheek	5250	0.341	-2.68	12.50	12.06	1.107	0.377	/
		Left Tilt	5250	0.116	-0.80	12.50	12.06	1.107	0.128	/
5.3G WLAN ANT_B	802.11 n-HT40	Right Cheek	5310	0.274	3.49	12.00	11.86	1.033	**0.283**	**41**
		Right Tilt	5310	0.140	-2.33	12.00	11.86	1.033	0.145	/
		Left Cheek	5310	0.253	1.03	12.00	11.86	1.033	0.261	/
		Left Tilt	5310	0.127	0.27	12.00	11.86	1.033	0.131	/
5.6G WLAN ANT_B	802.11ac-VHT80	Right Cheek	5530	0.174	3.47	12.50	12.45	1.012	**0.176**	**43**
		Right Tilt	5530	0.084	-1.39	12.50	12.45	1.012	0.085	/
		Left Cheek	5530	0.150	-1.20	12.50	12.45	1.012	0.152	/
		Left Tilt	5530	0.068	1.11	12.50	12.45	1.012	0.069	/
5.8G WLAN ANT_B	802.11 n-HT40	Right Cheek	5795	0.083	2.27	12.00	11.69	1.074	**0.089**	**45**
		Right Tilt	5795	0.040	0.59	12.00	11.69	1.074	0.043	/
		Left Cheek	5795	0.077	1.77	12.00	11.69	1.074	0.083	/
		Left Tilt	5795	0.035	-2.67	12.00	11.69	1.074	0.038	/

Note:

1. 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

2. Per KDB 248227- When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is $\leqslant$ 1.2 W/kg. (The highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power was **0.127** W/Kg for Head)
3. Per KDB 865664 D01, Repeated measurement is not required when the original highest measured SAR is <0.80 W/kg

12.2 Body-worn and Hotspot 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	Front Side	824.2	0.065	0.57	32.50	32.38	1.028	0.067	/
		Back Side	824.2	0.107	-0.03	32.50	32.38	1.028	0.110	2
		Left Side	824.2	0.033	2.88	32.50	32.38	1.028	0.034	/
		Right Side	824.2	0.045	2.69	32.50	32.38	1.028	0.046	/
		Top Side	824.2	0.024	-2.13	32.50	32.38	1.028	0.025	/
		Bottom Side	824.2	0.054	-2.49	32.50	32.38	1.028	0.056	/
GSM1900	GPRS Data-4 Slot	Front Side	1850.2	0.163	1.87	29.00	28.93	1.016	0.166	/
		Back Side	1850.2	0.235	0.73	29.00	28.93	1.016	0.239	4
		Left Side	1850.2	0.072	1.42	29.00	28.93	1.016	0.073	/
		Right Side	1850.2	0.068	-0.03	29.00	28.93	1.016	0.069	/
		Bottom Side	1850.2	0.103	3.49	29.00	28.93	1.016	**0.105**	/
WCDMA Band II	RMC	Front Side	1852.4	0.214	-2.17	24.00	23.56	1.107	0.237	/
		Back Side	1852.4	0.573	-3.72	24.00	23.56	1.107	0.634	6
		Left Side	1852.4	0.102	2.66	24.00	23.56	1.107	0.113	/
		Right Side	1852.4	0.089	-0.77	24.00	23.56	1.107	0.098	/
		Bottom Side	1852.4	0.221	-1.80	24.00	23.56	1.107	0.245	/
WCDMA Band IV	RMC	Front Side	1752.4	0.201	-0.11	24.00	23.62	1.091	0.219	/
		Back Side	1752.4	0.439	-0.88	24.00	23.62	1.091	**0.479**	8
		Left Side	1752.4	0.105	2.95	24.00	23.62	1.091	0.115	/
		Right Side	1752.4	0.074	-2.61	24.00	23.62	1.091	0.081	/
		Bottom Side	1752.4	0.176	-1.33	24.00	23.62	1.091	0.192	/
WCDMA Band V	RMC	Front Side	846.6	0.103	0.88	24.00	23.86	1.033	0.106	/
		Back Side	846.6	0.266	3.92	24.00	23.86	1.033	0.275	10
		Left Side	846.6	0.051	0.96	24.00	23.86	1.033	0.053	/
		Right Side	846.6	0.045	2.53	24.00	23.86	1.033	0.046	/
		Bottom Side	846.6	0.185	-2.50	24.00	23.86	1.033	0.191	/

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 2	20M	QPSK	1	0	Front side	1860	0.233	0.67	23.5	23.01	1.119	0.261	/
			50	0	Front side	1860	0.215	-1.16	22.5	22.31	1.045	0.225	/
			1	0	Back Side	1860	0.421	-3.47	23.5	23.01	1.119	0.471	**12**
			50	0	Back Side	1860	0.385	3.36	22.5	22.31	1.045	0.402	/
			1	0	Left Side	1860	0.144	-2.34	23.5	23.01	1.119	0.161	/
			50	0	Left Side	1860	0.152	-0.84	22.5	22.31	1.045	0.159	/
			1	0	Right Side	1860	0.136	-2.94	23.5	23.01	1.119	0.152	/
			50	0	Right Side	1860	0.122	1.74	22.5	22.31	1.045	0.127	/
			1	0	Bottom Side	1860	0.236	-1.09	23.5	23.01	1.119	0.264	***I***
			50	0	Bottom Side	1860	0.221	-2.79	22.5	22.31	1.045	0.231	/
LTE Band 4	20M	QPSK	1	0	Front side	1720	0.103	1.33	23	22.84	1.038	0.107	/
			50	0	Front side	1745	0.087	-2.89	21.5	21.35	1.035	0.090	/
			1	0	Back Side	1720	0.204	-1.45	23	22.84	1.038	0.212	**14**
			50	0	Back Side	1745	0.183	-3.83	21.5	21.35	1.035	0.189	/
			1	0	Left Side	1720	0.078	-2.14	23	22.84	1.038	0.081	/
			50	0	Left Side	1745	0.065	3.51	21.5	21.35	1.035	0.067	/
			1	0	Right Side	1720	0.080	0.41	23	22.84	1.038	0.083	/
			50	0	Right Side	1745	0.062	-3.89	21.5	21.35	1.035	0.064	/
			1	0	Bottom Side	1720	0.087	0.79	23	22.84	1.038	0.090	***I***
			50	0	Bottom Side	1745	0.074	-0.19	21.5	21.35	1.035	0.077	/
LTE Band 5	10M	QPSK	1	0	Front side	2535	0.160	-0.64	24.5	24.05	1.109	0.177	/
			25	0	Front side	2560	0.144	2.68	22.5	22.26	1.057	0.152	/
			1	0	Back Side	2535	0.224	0.07	24.5	24.05	1.109	**0.248**	**16**
			25	0	Back Side	2560	0.201	3.19	22.5	22.26	1.057	0.212	/
			1	0	Left Side	2535	0.104	0.98	24.5	24.05	1.109	0.115	/
			25	0	Left Side	2560	0.095	0.32	22.5	22.26	1.057	0.100	/
			1	0	Right Side	2535	0.096	2.66	24.5	24.05	1.109	0.106	/
			25	0	Right Side	2560	0.084	3.04	22.5	22.26	1.057	0.089	/
			1	0	Bottom Side	2535	0.112	-0.43	24.5	24.05	1.109	0.124	***I***
			25	0	Bottom Side	2560	0.089	3.10	22.5	22.26	1.057	0.094	/

LTE Band 7	10M	QPSK	1	0	Front side	2535	0.335	-0.18	24.5	24.05	1.109	0.372	/
			50	0	Front side	2560	0.302	-0.57	22.5	22.26	1.057	0.319	/
			1	0	Back Side	2535	0.681	1.30	24.5	24.05	1.109	**0.755**	**18**
			50	0	Back Side	2560	0.514	3.33	22.5	22.26	1.057	0.543	/
			1	0	Left Side	2535	0.212	-1.49	24.5	24.05	1.109	0.235	/
			50	0	Left Side	2560	0.230	-0.92	22.5	22.26	1.057	0.243	/
			1	0	Right Side	2535	0.220	-1.73	24.5	24.05	1.109	0.244	/
			50	0	Right Side	2560	0.194	-3.96	22.5	22.26	1.057	0.205	/
			1	0	Bottom Side	2535	0.170	0.23	24.5	24.05	1.109	0.189	**/**
			50	0	Bottom Side	2560	0.155	-0.28	22.5	22.26	1.057	0.164	/
LTE Band 38	20M	QPSK	1	0	Front side	2610	0.144	0.70	23	22.56	1.107	0.159	/
			50	0	Front side	2580	0.132	-3.05	21.5	21.28	1.052	0.139	/
			1	0	Back Side	2610	0.292	3.48	23	22.56	1.107	**0.323**	**20**
			50	0	Back Side	2580	0.274	3.21	21.5	21.28	1.052	0.288	/
			1	0	Left Side	2610	0.152	-1.34	23	22.56	1.107	0.168	/
			50	0	Left Side	2580	0.134	3.62	21.5	21.28	1.052	0.141	/
			1	0	Right Side	2610	0.120	2.44	23	22.56	1.107	0.133	/
			50	0	Right Side	2580	0.113	-1.99	21.5	21.28	1.052	0.119	/
			1	0	Bottom Side	2610	0.178	-1.54	23	22.56	1.107	0.197	**/**
			50	0	Bottom Side	2580	0.163	-3.14	21.5	21.28	1.052	0.171	/
LTE Band 40	20M	QPSK	1	0	Front side	2350	0.152	0.41	23.5	23.14	1.086	0.165	/
			50	0	Front side	2350	0.141	1.56	22	21.55	1.109	0.156	/
			1	0	Back Side	2350	0.214	2.23	23.5	23.14	1.086	0.232	**22**
			50	0	Back Side	2350	0.199	3.55	22	21.55	1.109	0.221	/
			1	0	Left Side	2350	0.110	1.69	23.5	23.14	1.086	0.120	/
			50	0	Left Side	2350	0.101	-0.46	22	21.55	1.109	0.112	/
			1	0	Right Side	2350	0.089	-3.63	23.5	23.14	1.086	0.097	/
			50	0	Right Side	2350	0.082	-2.90	22	21.55	1.109	0.091	/
			1	0	Bottom Side	2350	0.133	-3.56	23.5	23.14	1.086	**0.144**	**/**
			50	0	Bottom Side	2350	0.121	1.90	22	21.55	1.109	0.134	/

LTE Band 41	20M	QPSK	1	0	Front side	2680	0.225	3.69	22.5	22.23	1.064	0.239	/
			50	0	Front side	2680	0.210	-3.49	21.5	21.13	1.089	0.229	/
			1	0	Back Side	2680	0.538	1.64	22.5	22.23	1.064	**0.573**	**24**
			50	0	Back Side	2680	0.486	-2.35	21.5	21.13	1.089	0.529	/
			1	0	Left Side	2680	0.122	-0.92	22.5	22.23	1.064	0.130	/
			50	0	Left Side	2680	0.085	2.64	21.5	21.13	1.089	0.093	/
			1	0	Right Side	2680	0.152	-3.32	22.5	22.23	1.064	0.162	/
			50	0	Right Side	2680	0.143	1.38	21.5	21.13	1.089	0.156	/
			1	0	Bottom Side	2680	0.228	-2.01	22.5	22.23	1.064	0.243	**/**
			50	0	Bottom Side	2680	0.213	1.57	21.5	21.13	1.089	0.232	/

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.
2.4GHz WLAN ANT_A	802.11b	Front Side	2462	0.084	-0.15	12.00	11.55	1.109	0.093	/
		Back Side	2462	0.103	2.34	12.00	11.55	1.109	0.114	**26**
		Right Side	2462	0.062	-1.67	12.00	11.55	1.109	0.069	/
		Top Side	2462	0.054	-1.68	12.00	11.55	1.109	0.060	**/**
BT	GFSK	Front Side	2441	0.066	1.87	12.00	11.78	1.052	0.069	/
		Back Side	2441	0.102	-3.20	12.00	11.78	1.052	0.107	**28**
		Right Side	2441	0.059	0.19	12.00	11.78	1.052	0.062	/
		Top Side	2441	0.038	0.63	12.00	11.78	1.052	0.040	**/**
5.2GHz WLAN ANT_A	802.11ac-VHT160	Front Side	5250	0.112	-3.24	12.50	12.06	1.107	0.124	/
		Back Side	5250	0.225	2.39	12.50	12.06	1.107	0.249	**30**
		Right Side	5250	0.084	-2.13	12.50	12.06	1.107	0.093	/
		Top Side	5250	0.076	-0.99	12.50	12.06	1.107	0.084	**/**
5.3GHz WLAN ANT_A	802.11 n-HT40	Front Side	5310	0.121	2.48	12.00	11.86	1.033	0.125	/
		Back Side	5310	0.198	-0.43	12.00	11.86	1.033	0.204	**32**
		Right Side	5310	0.106	2.51	12.00	11.86	1.033	0.109	/
		Top Side	5310	0.096	-2.74	12.00	11.86	1.033	0.099	**/**
5.6GHz WLAN ANT_A	802.11ac-VHT40	Front Side	5510	0.103	3.32	13.00	12.54	1.112	0.115	/
		Back Side	5510	0.177	0.39	13.00	12.54	1.112	0.197	**34**
		Right Side	5510	0.082	-3.31	13.00	12.54	1.112	0.091	/
		Top Side	5510	0.096	1.66	13.00	12.54	1.112	0.107	**/**
5.8GHz WLAN ANT_A	802.11ax-HE40	Front Side	5795	0.109	0.74	12.00	11.69	1.074	0.117	/
		Back Side	5795	0.166	3.09	12.00	11.69	1.074	0.178	**36**
		Right Side	5795	0.125	-1.61	12.00	11.69	1.074	0.134	/
		Top Side	5795	0.091	3.08	12.00	11.69	1.074	0.098	**/**

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.
2.4GHz WLAN ANT_B	802.11b	Front Side	2462	0.078	1.36	12.00	11.55	1.109	0.087	/
		Back Side	2462	0.105	1.67	12.00	11.55	1.109	0.116	**38**
		Right Side	2462	0.086	2.00	12.00	11.55	1.109	0.095	/
5.2GHz WLAN ANT_B	802.11ac-VHT160	Front Side	5250	0.141	-1.56	12.50	12.06	1.107	0.156	/
		Back Side	5250	0.208	1.84	12.50	12.06	1.107	0.230	**40**
		Right Side	5250	0.120	1.44	12.50	12.06	1.107	0.133	/
5.3GHz WLAN ANT_B	802.11 n-HT40	Front Side	5310	0.122	-0.20	12.00	11.86	1.033	0.126	/
		Back Side	5310	0.205	-3.47	12.00	11.86	1.033	0.212	**42**
		Right Side	5310	0.106	1.86	12.00	11.86	1.033	0.109	/
5.6GHz WLAN ANT_B	802.11ac-VHT80	Front Side	5530	0.066	0.89	12.50	12.45	1.012	0.067	/
		Back Side	5530	0.118	-3.36	12.50	12.45	1.012	0.119	**44**
		Right Side	5530	0.080	-1.99	12.50	12.45	1.012	0.081	/
5.8GHz WLAN ANT_B	802.11 n-HT40	Front Side	5795	0.079	2.74	12.00	11.69	1.074	0.085	/
		Back Side	5795	0.134	-1.93	12.00	11.69	1.074	0.144	**46**
		Right Side	5795	0.068	-1.03	12.00	11.69	1.074	0.073	/

Note:

1. The test separation of all above table is 10mm.
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. Per KDB 248227- When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is $\leqslant$ 1.2 W/kg. (The highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power was **0.091** W/Kg for Body)
4. 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.

12.5 Simultaneous Multi-band Transmission Evaluation

Application Simultaneous Transmission information:

Position	Simultaneous State
Head	1.GSM+ 2.4/5G WIFI
	2.GSM+Bluetooth
	3.GSM+NFC
	4.WCDMA+ 2.4/5G WIFI
	5.WCDMA+Bluetooth
	6.WCDMA+NFC
	7.LTE+ 2.4/5G WIFI
	8.LTE+Bluetooth
	9.LTE+NFC
Body	1.GSM+ 2.4/5G WIFI
	2.GSM+Bluetooth
	3.GSM+NFC
	4.WCDMA+ 2.4/5G WIFI
	5.WCDMA+Bluetooth
	6.WCDMA+NFC
	7.LTE+ 2.4/5G WIFI
	8.LTE+Bluetooth
	9.LTE+NFC

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.

Simultaneous Mode	Position	Mode	Max. 1-g SAR (W/kg)	1-g Sum SAR (W/kg)
GSM + 2.4G WLAN ANT_A	Head	GSM	0.256	0.418
		2.4G WLAN	0.162	
	Body	GSM	0.239	0.353
		2.4G WLAN	0.114	
GSM + Bluetooth	Head	GSM	0.256	0.328
		Bluetooth	0.072	
	Body	GSM	0.239	0.346
		Bluetooth	0.107	
GSM + 5G WLAN ANT_A	Head	GSM	0.256	0.610
		5G WLAN	0.354	
	Body	GSM	0.239	0.488
		5G WLAN	0.249	
WCDMA + 2.4G WLAN ANT_A	Head	WCDMA	0.302	0.464
		2.4G WLAN	0.162	
	Body	WCDMA	0.479	0.593
		2.4G WLAN	0.114	
WCDMA + Bluetooth	Head	WCDMA	0.302	0.374
		Bluetooth	0.072	
	Body	WCDMA	0.479	0.586
		Bluetooth	0.107	
WCDMA + 5G WLAN ANT_A	Head	WCDMA	0.302	0.656
		5G WLAN	0.354	
	Body	WCDMA	0.479	0.728
		5G WLAN	0.249	
LTE + 2.4G WLAN ANT_A	Head	LTE	0.272	0.434
		2.4G WLAN	0.162	
	Body	LTE	0.866	0.980
		2.4G WLAN	0.114	
LTE + Bluetooth	Head	LTE	0.272	0.344
		Bluetooth	0.072	
	Body	LTE	0.866	0.973
		Bluetooth	0.107	
LTE + 5G WLAN ANT_A	Head	LTE	0.272	0.626
		5G WLAN	0.354	
	Body	LTE	0.866	1.115
		5G WLAN	0.249	

Simultaneous Mode	Position	Mode	Max. 1-g SAR (W/kg)	1-g Sum SAR (W/kg)
GSM + 2.4G WLAN ANT_B	Head	GSM	0.256	0.380
		2.4G WLAN	0.124	
	Body	GSM	0.239	0.355
		2.4G WLAN	0.116	
GSM + 5G WLAN ANT_B	Head	GSM	0.256	0.689
		5G WLAN	0.433	
	Body	GSM	0.239	0.469
		5G WLAN	0.230	
WCDMA + 2.4G WLAN ANT_B	Head	WCDMA	0.302	0.426
		2.4G WLAN	0.124	
	Body	WCDMA	0.479	0.595
		2.4G WLAN	0.116	
WCDMA + 5G WLAN ANT_B	Head	WCDMA	0.302	0.735
		5G WLAN	0.433	
	Body	WCDMA	0.479	0.709
		5G WLAN	0.230	
LTE + 2.4G WLAN ANT_B	Head	LTE	0.272	0.396
		2.4G WLAN	0.124	
	Body	LTE	0.866	0.982
		2.4G WLAN	0.116	
LTE + 5G WLAN ANT_B	Head	LTE	0.272	0.705
		5G WLAN	0.433	
	Body	LTE	0.866	1.096
		5G WLAN	0.230	

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
1800MHz Dipole	MVG	SID1800	5023-DIP1G800-747	2023.12.20	2026.12.19
1900MHz Dipole	MVG	SID1900	SN 06/23 DIP1G900-226	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	99899	DC-18GHz	N/A	N/A
Attenuator	Agilent	HXT-10-8-SMA	240327017	2024-04-08	2025-04-07
Directional coupler	Narda	4226-20	3305	N/A	N/A
Directional coupler	Xi'an Xingbo	XBOH-OA08-20dB	211123-4-3	2024-04-15	2025-04-14
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	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

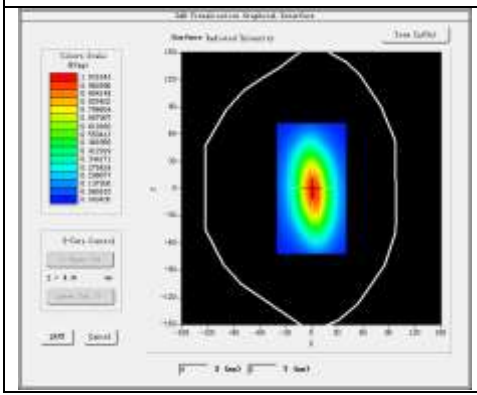
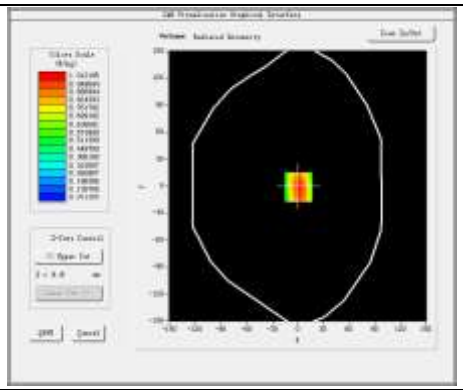
System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

Area scan resolution: dx=8mm, dy=8mm+
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-01-07

Experimental conditions

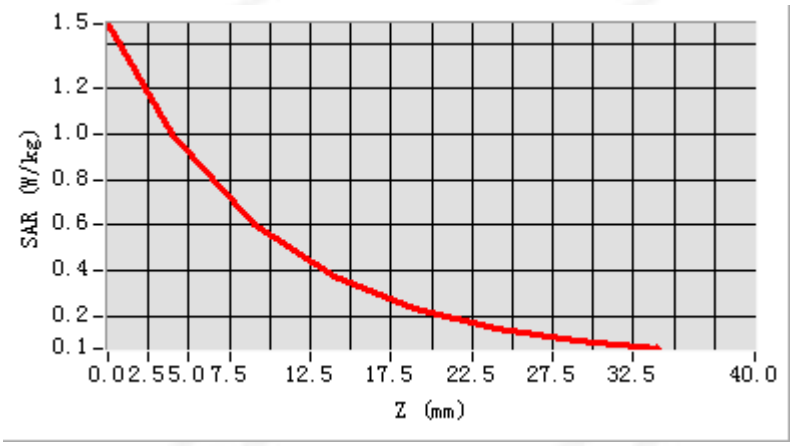
Phantom	Validation plane
Device Position	Dipole
Band	835MHz
Channels	Middle
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity	40.81
Conductivity (S/m)	0.92
Probe	SN 08/21 EPGO352
ConvF	1.44
Crest factor:	1:1

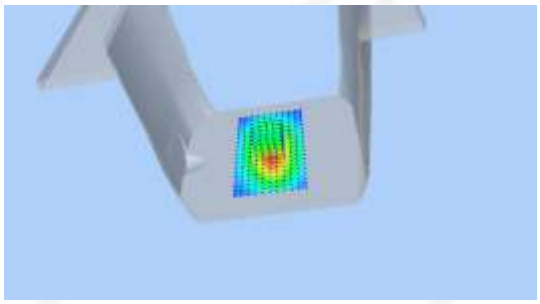
SURFACE SAR	VOLUME SAR
	

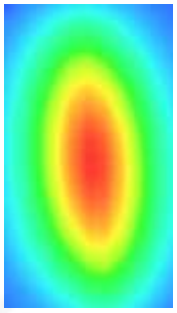
Maximum location: X=-7.00, Y=-1.00

SAR 10g (W/Kg)	0.663418
SAR 1g (W/Kg)	0.969458

Z Axis Scan


1.5
1.2
1.0
0.8
0.6
0.4
0.2
0.1
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)



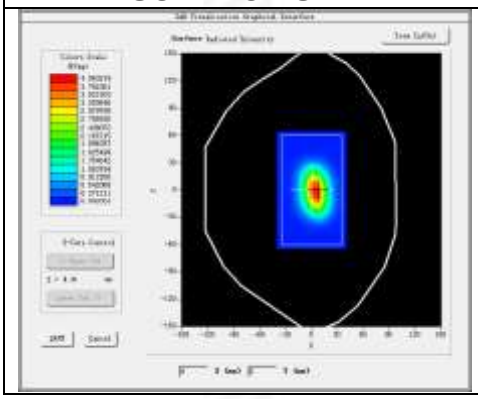
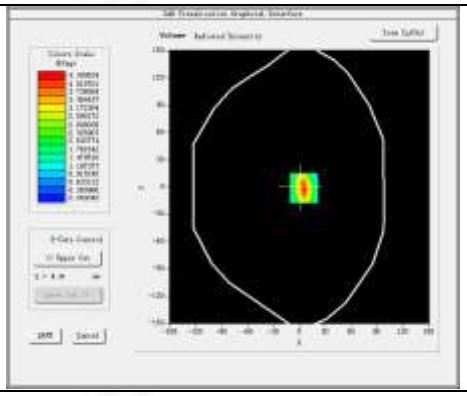


System Performance Check Data(1800MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-01-08

Experimental conditions.

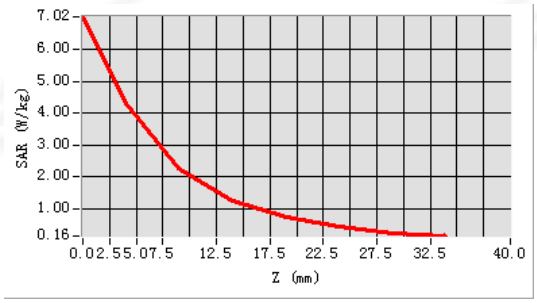
Phantom	Validation plane
Device Position	Dipole
Band	1800MHz
Channels	Middle
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity	41.15
Conductivity (S/m)	1.42
Probe	SN 08/21 EPGO352
ConvF	1.58
Crest factor:	1:1

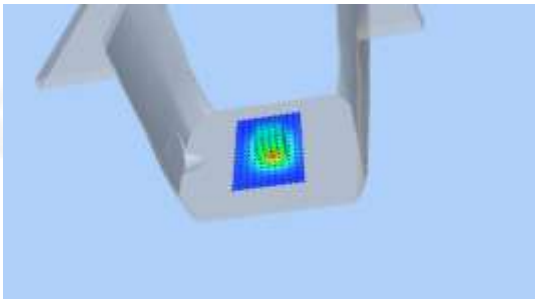
SURFACE SAR	VOLUME SAR
	

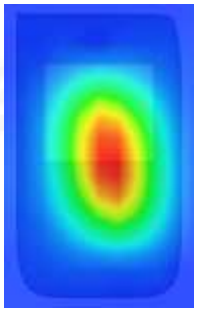
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	1.972312
SAR 1g (W/Kg)	3.958440

Z Axis Scan


7.02
6.00
5.00
4.00
3.00
2.00
1.00
0.16
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)



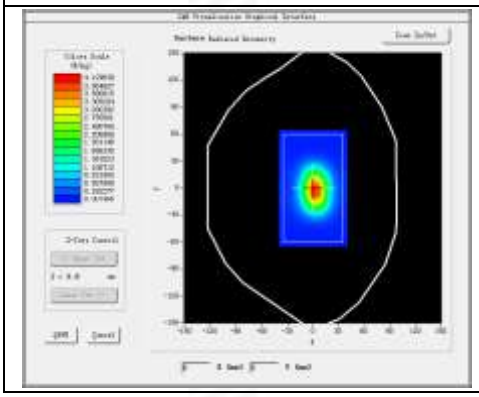
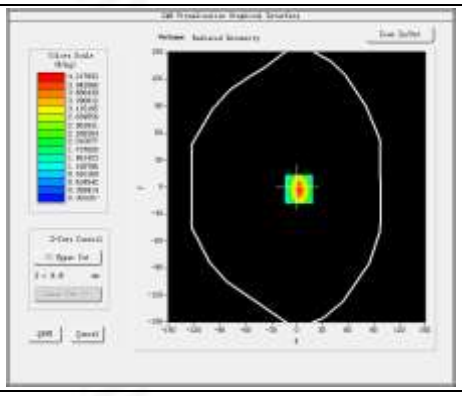


System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-01-09

Experimental conditions.

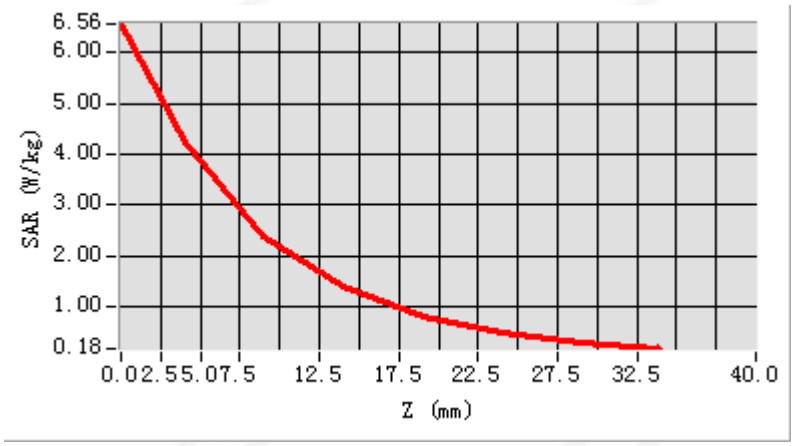
Phantom	Validation plane
Device Position	Dipole
Band	1900MHz
Channels	Middle
Signal	CW
Frequency (MHz)	1900MHz
Relative permittivity	39.88
Conductivity (S/m)	1.42
Probe	SN 08/21 EPGO352
ConvF	1.72
Crest factor:	1:1

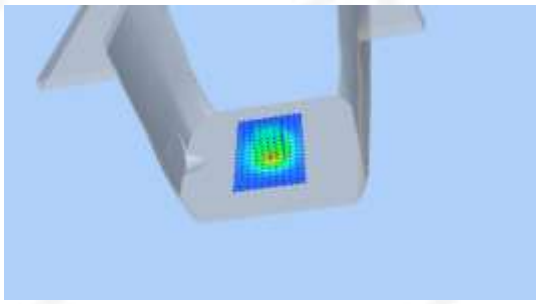
SURFACE SAR	VOLUME SAR
	

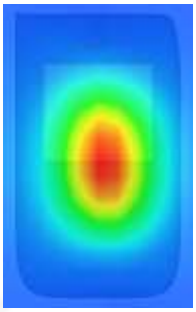
Maximum location: X=3.00, Y=-2.00

SAR 10g (W/Kg)	2.309732
SAR 1g (W/Kg)	3.870036

Z Axis Scan


6.56
6.00
5.00
4.00
3.00
2.00
1.00
0.18
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)



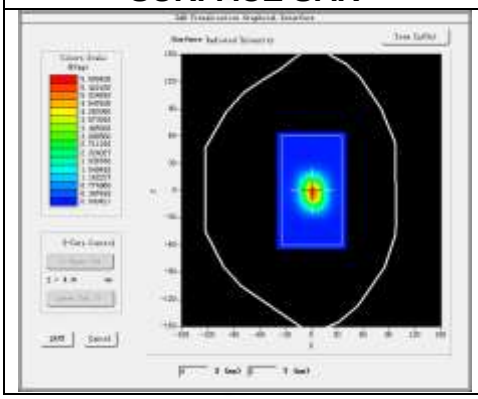
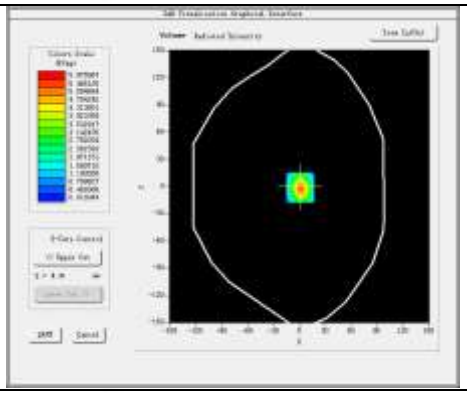


System Performance Check Data (2450MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-01-10

Experimental conditions.

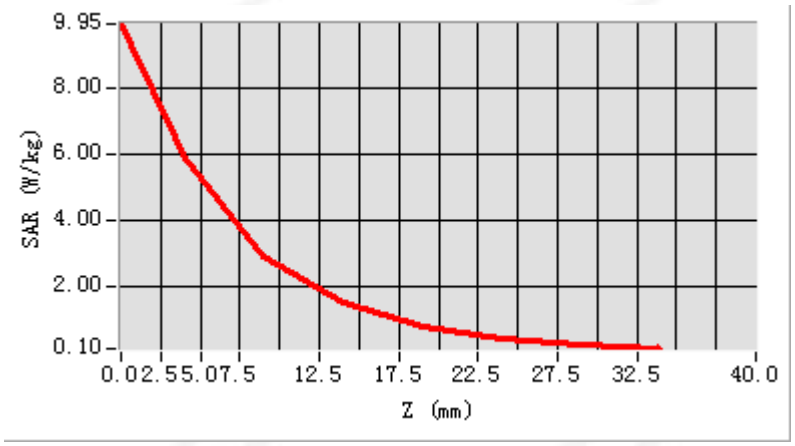
Phantom	Validation plane
Device Position	Dipole
Band	2450MHz
Channels	Middle
Signal	CW
Frequency (MHz)	2450
Relative permittivity	40.13
Conductivity (S/m)	1.77
Probe	SN 08/21 EPGO352
ConvF	1.80
Crest factor:	1:1

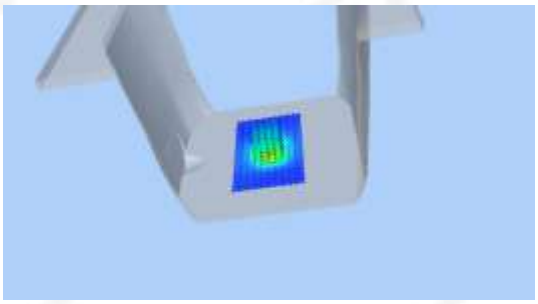
SURFACE SAR	VOLUME SAR
	

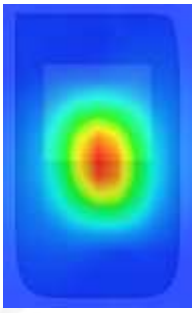
Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	2.375175
SAR 1g (W/Kg)	5.270936

Z Axis Scan


9.95
8.00
6.00
4.00
2.00
0.10
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)



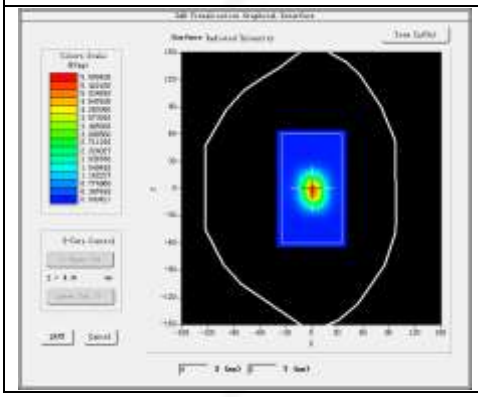
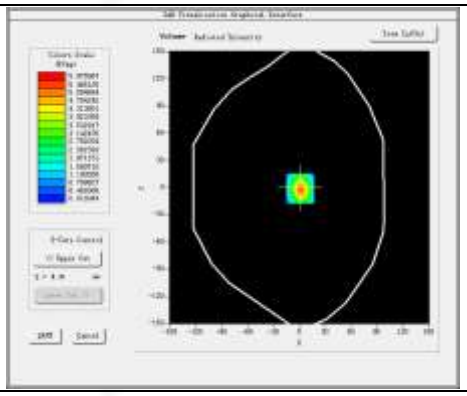


System Performance Check Data (2600MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2025-01-11

Experimental conditions.

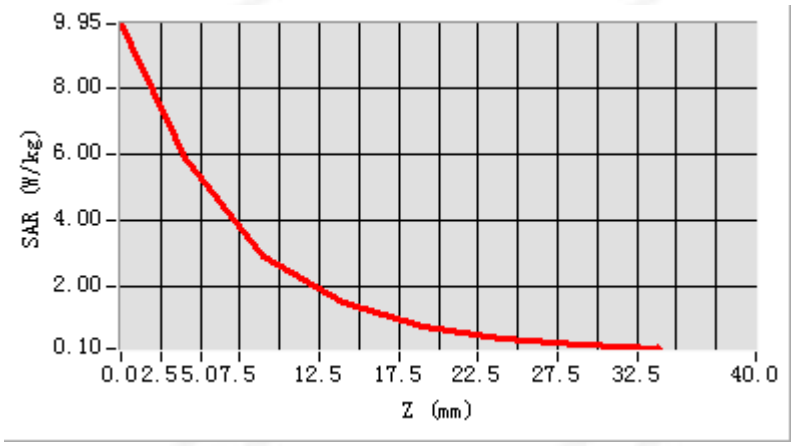
Phantom	Validation plane
Device Position	Dipole
Band	2600MHz
Channels	Middle
Signal	CW
Frequency (MHz)	2600
Relative permittivity	40.41
Conductivity (S/m)	1.97
Probe	SN 08/21 EPGO352
ConvF	1.74
Crest factor:	1:1

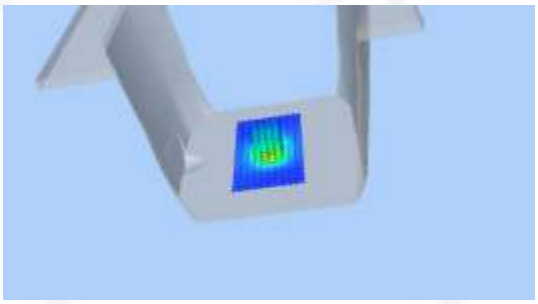
SURFACE SAR	VOLUME SAR
	

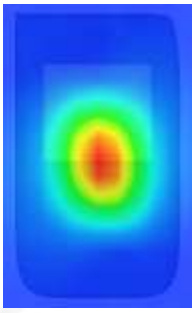
Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	2.343580
SAR 1g (W/Kg)	5.524226

Z Axis Scan


9.95
8.00
6.00
4.00
2.00
0.10
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)





System Performance Check Data (5200MHz)

Type: Phone measurement (Complete)

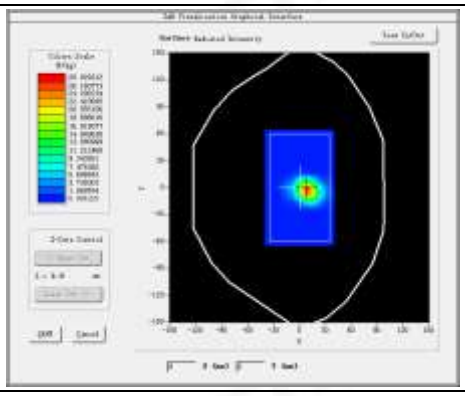
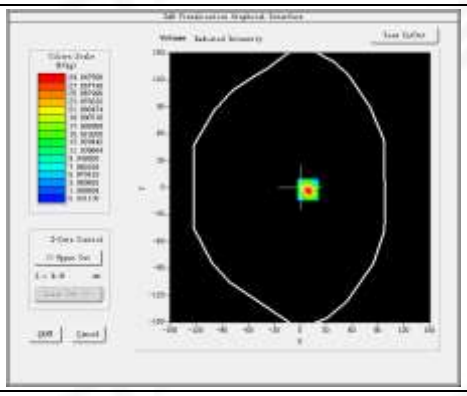
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2025-01-12

Experimental conditions.

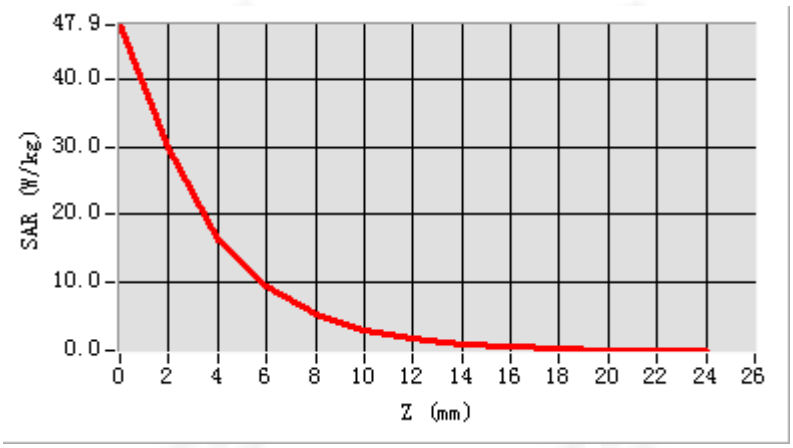
Device Position	Validation plane
Band	5200 MHz
Channels	-
Signal	CW
Frequency (MHz)	5200
Relative permittivity	36.08
Conductivity (S/m)	4.68
Probe	SN 08/21 EPGO352
ConvF	1.33
Crest factor:	1:1

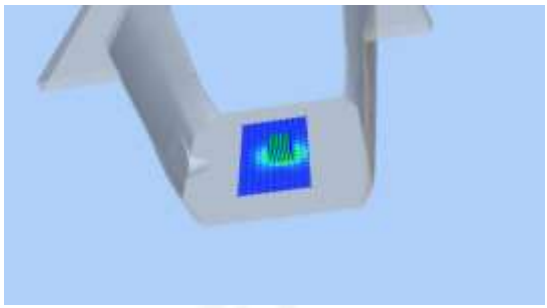
SURFACE SAR	VOLUME SAR
	

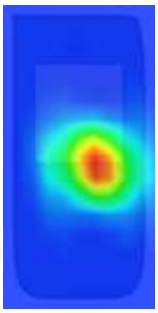
Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	5.529486
SAR 1g (W/Kg)	16.331598

Z Axis Scan







System Performance Check Data (5300MHz)

Type: Phone measurement (Complete)

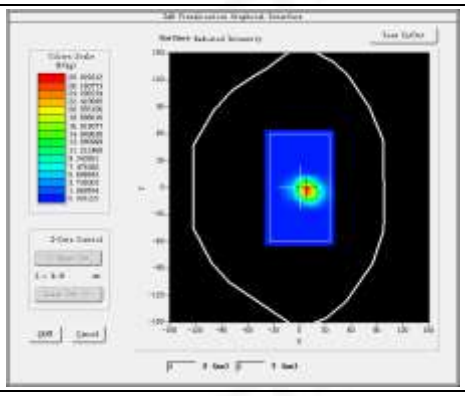
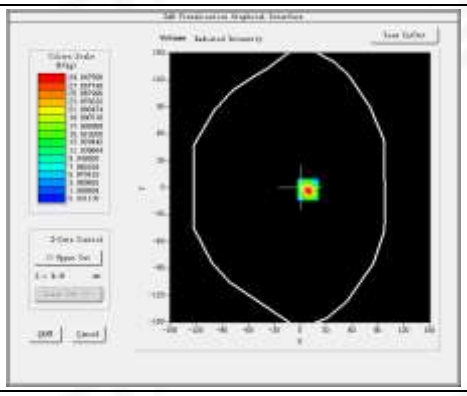
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2025-01-12

Experimental conditions.

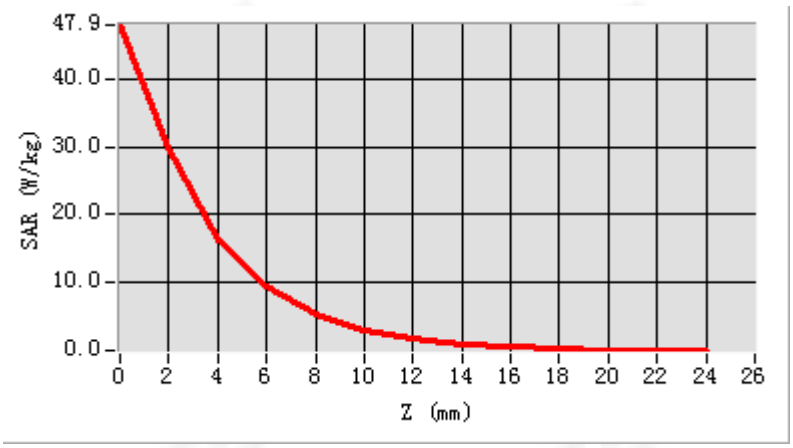
Device Position	Validation plane
Band	5300 MHz
Channels	-
Signal	CW
Frequency (MHz)	5300
Relative permittivity	36.84
Conductivity (S/m)	4.75
Probe	SN 08/21 EPGO352
ConvF	1.31
Crest factor:	1:1

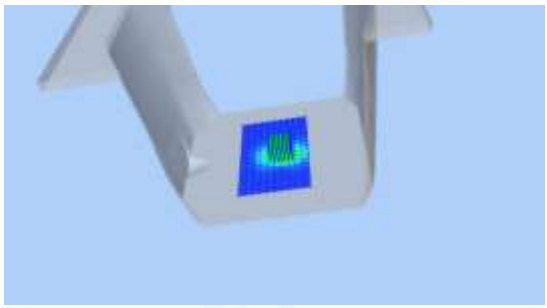
SURFACE SAR	VOLUME SAR
	

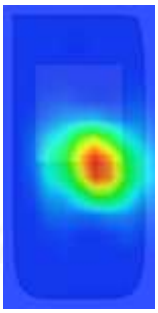
Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	6.025893
SAR 1g (W/Kg)	16.823562

Z Axis Scan







System Performance Check Data (5600MHz)

Type: Phone measurement (Complete)

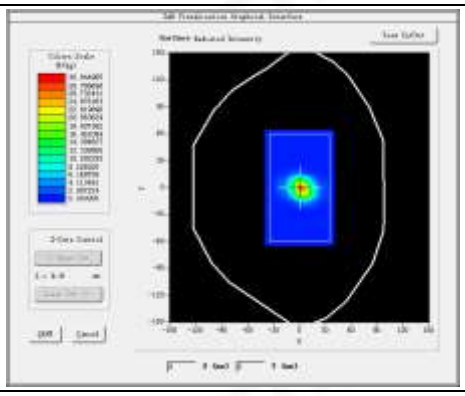
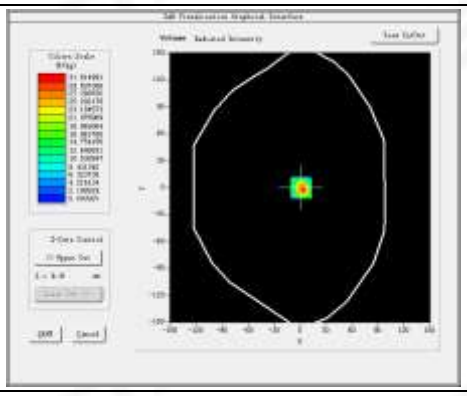
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2025-01-13

Experimental conditions.

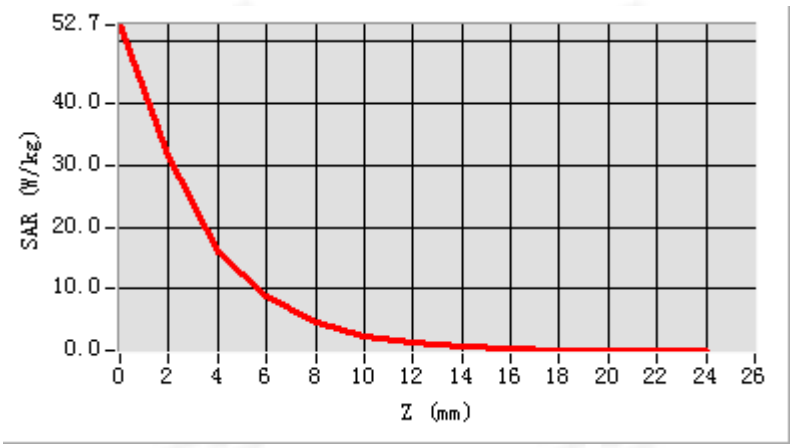
Device Position	Validation plane
Band	5600 MHz
Channels	-
Signal	CW
Frequency (MHz)	5600
Relative permittivity	36.37
Conductivity (S/m)	5.12
Probe	SN 08/21 EPGO352
ConvF	1.24
Crest factor:	1:1

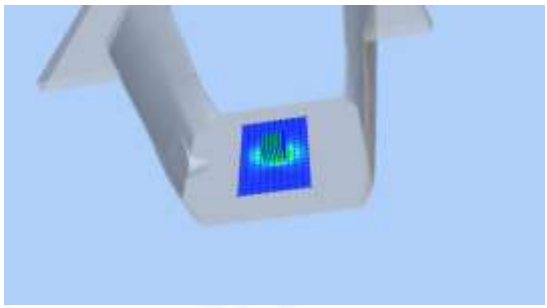
SURFACE SAR	VOLUME SAR
	

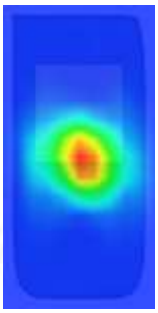
Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	6.651603
SAR 1g (W/Kg)	17.395689

Z Axis Scan







System Performance Check Data (5800MHz)

Type: Phone measurement (Complete)

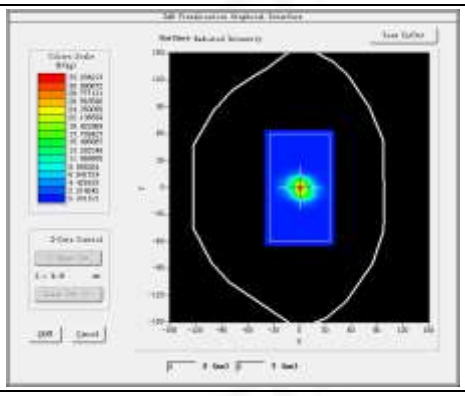
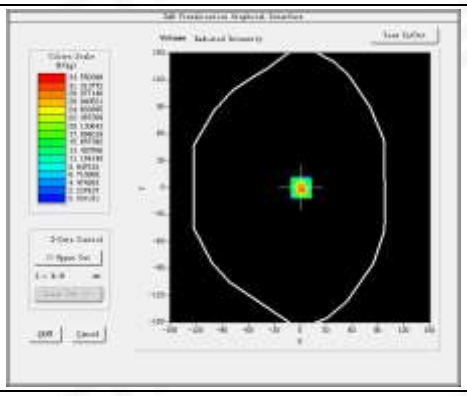
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2025-01-13

Experimental conditions.

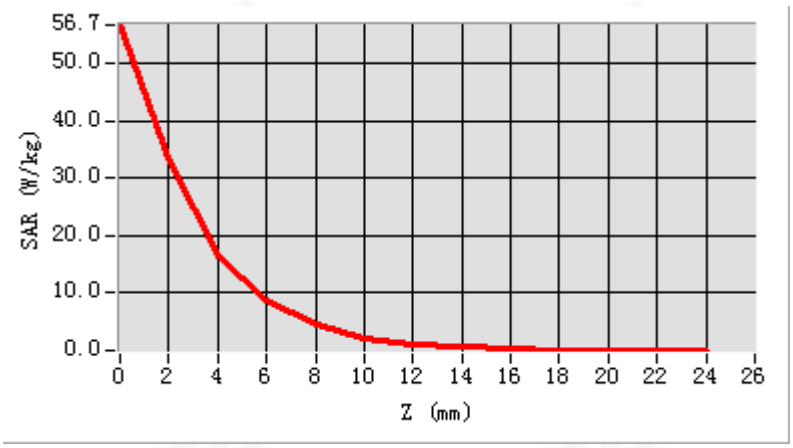
Device Position	Validation plane
Band	5800 MHz
Channels	-
Signal	CW
Frequency (MHz)	5800
Relative permittivity	36.18
Conductivity (S/m)	5.23
Probe	SN 08/21 EPGO352
ConvF	1.35
Crest factor:	1:1

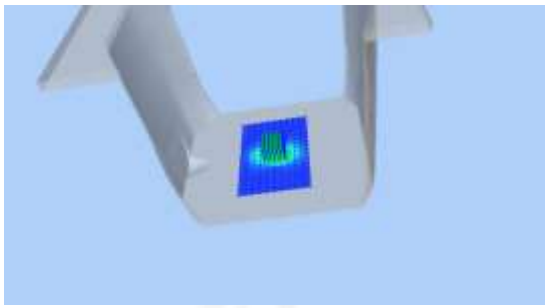
SURFACE SAR	VOLUME SAR
	

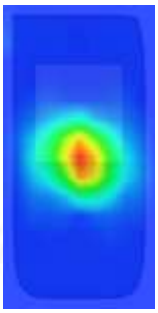
Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	6.340864
SAR 1g (W/Kg)	18.991325

Z Axis Scan


56.7
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)





Appendix B. SAR Test Plots

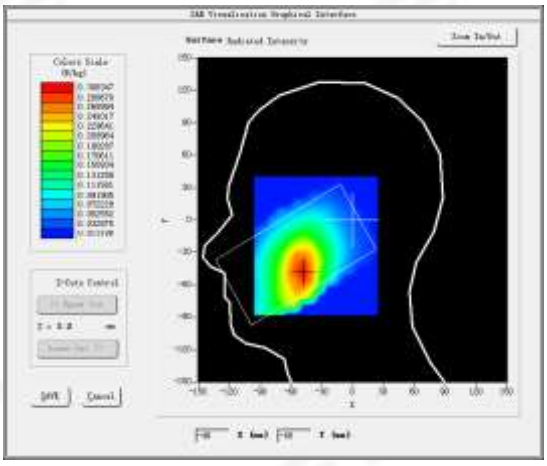
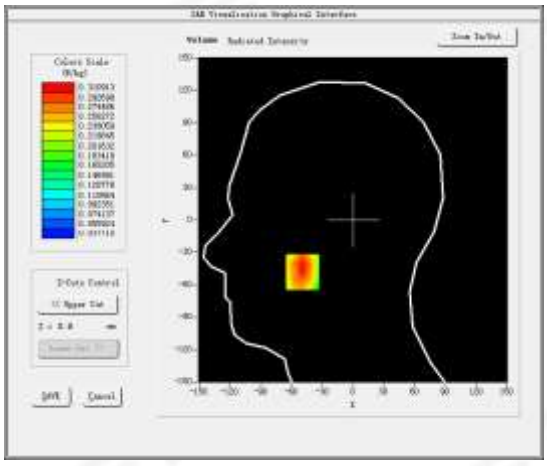
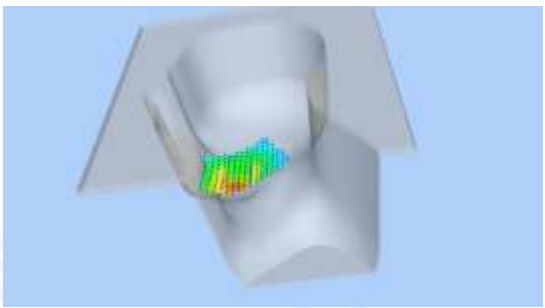
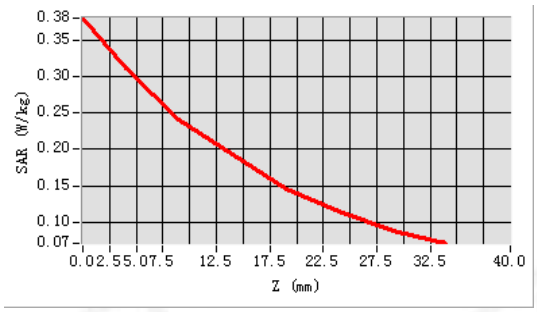
Plot 1: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-07
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	Right Cheek
Device Position	Cheek
Band	GPRS 850
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	824.2
Relative permittivity (real part)	41.39
Conductivity (S/m)	0.88

Maximum location: X=-49.00, Y=-48.00

SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.215190
SAR 1g (W/Kg)	0.303292

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

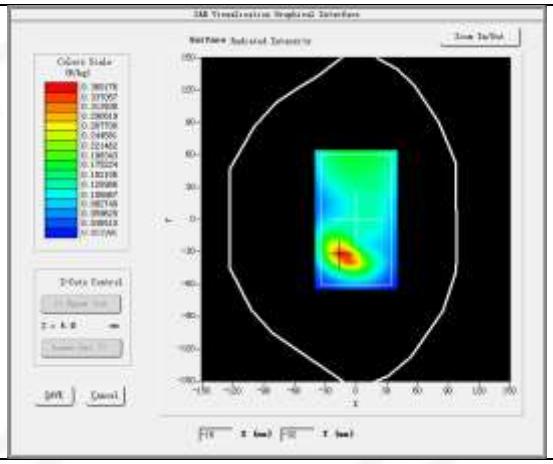
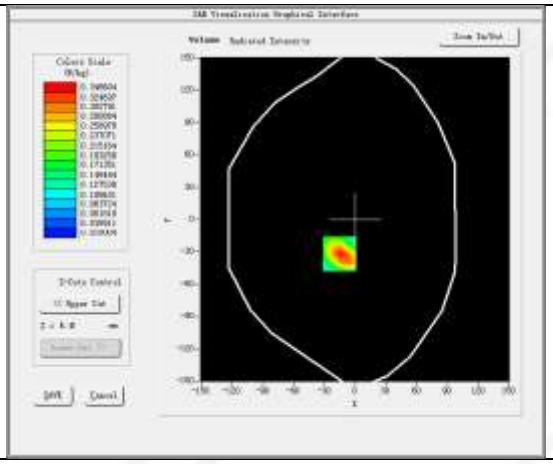
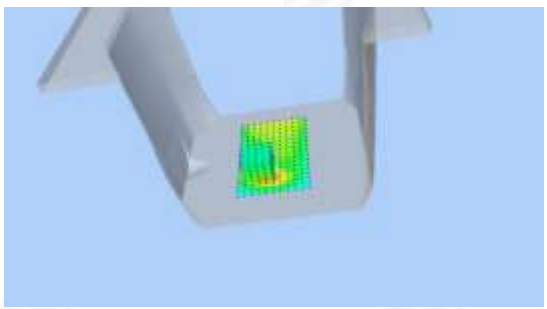
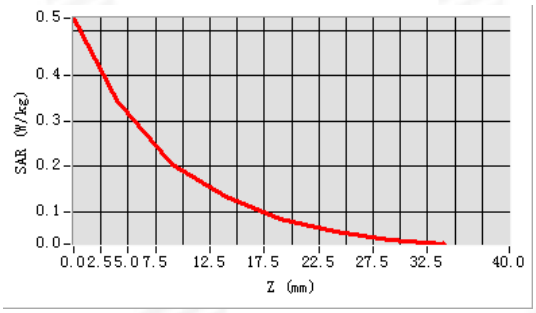
Plot 2: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-07
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	Back Side
Band	GPRS 850
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	824.2
Relative permittivity (real part)	41.39
Conductivity (S/m)	0.88

Maximum location: X=-15.00, Y=-32.00

SAR Peak: 0.52 W/kg

SAR 10g (W/Kg)	0.184706
SAR 1g (W/Kg)	0.331999

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

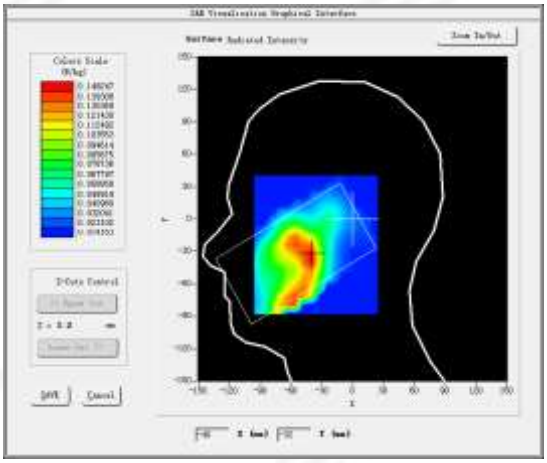
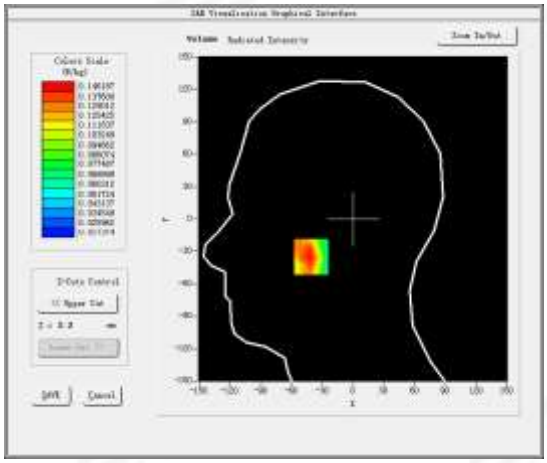
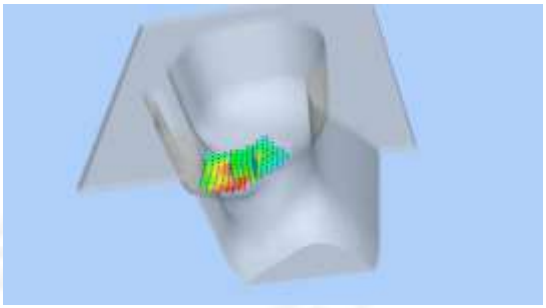
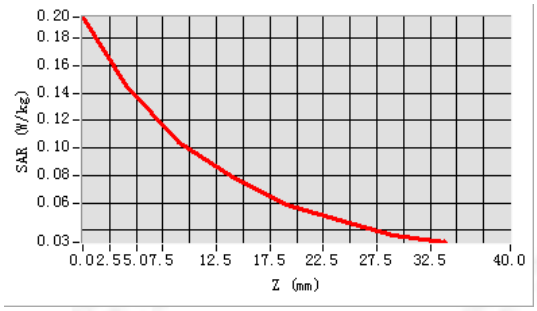
Plot 3: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-09
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	Right Cheek
Device Position	Cheek
Band	GPRS 1900
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1850.2
Relative permittivity (real part)	40.33
Conductivity (S/m)	1.41

Maximum location: X=-41.00, Y=-35.00

SAR Peak: 0.20 W/kg

SAR 10g (W/Kg)	0.094358
SAR 1g (W/Kg)	0.139556

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

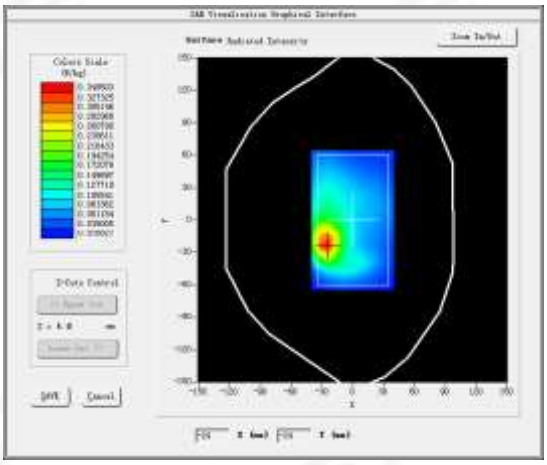
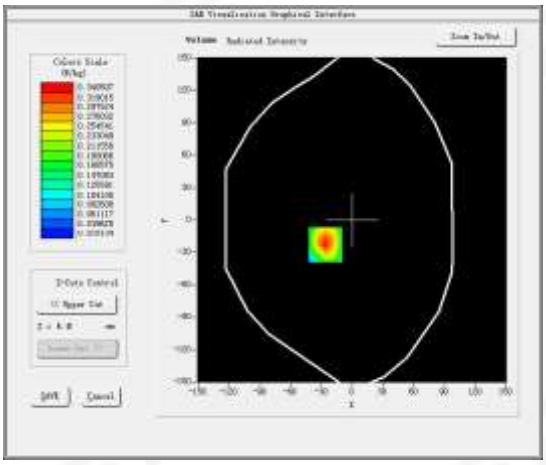
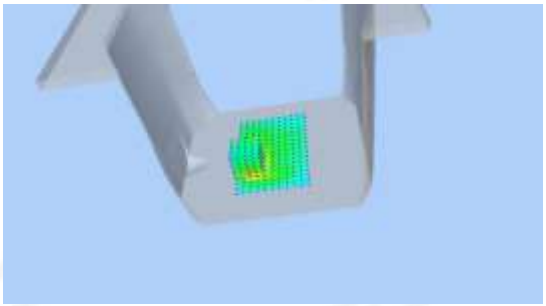
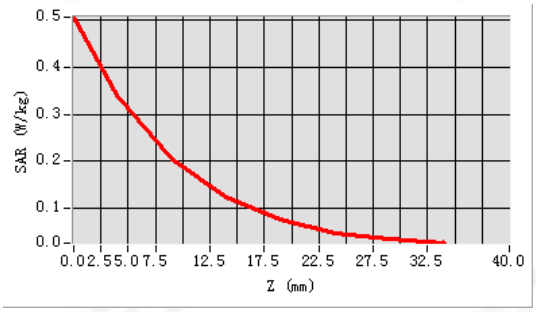
Plot 4: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-09
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	Back Side
Band	GPRS 1900
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1850.2
Relative permittivity (real part)	40.33
Conductivity (S/m)	1.41

Maximum location: X=-26.00, Y=-23.00

SAR Peak: 0.51 W/kg

SAR 10g (W/Kg)	0.180238
SAR 1g (W/Kg)	0.320804

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

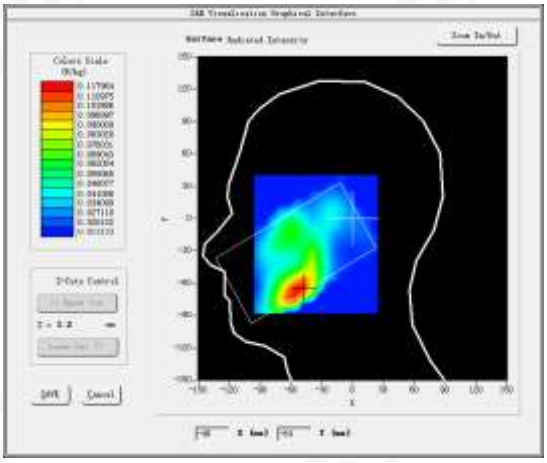
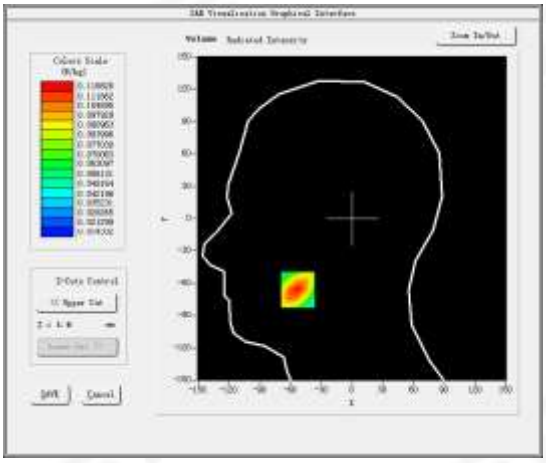
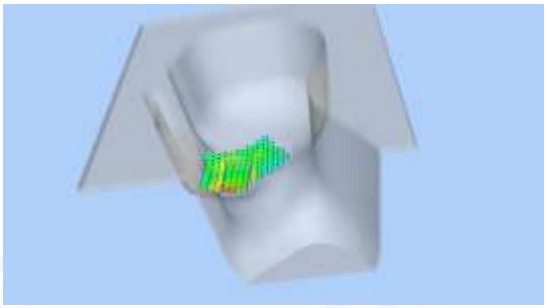
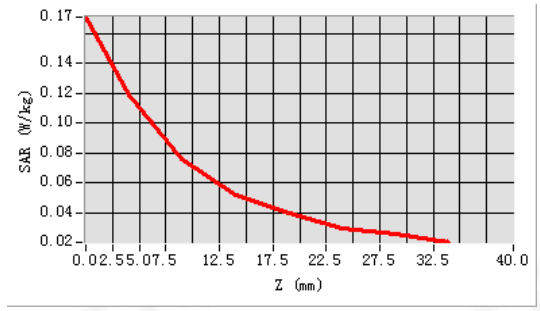
Plot 5: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-09
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	Right Cheek
Device Position	Cheek
Band	WCDMA II
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1852.4
Relative permittivity (real part)	40.68
Conductivity (S/m)	1.44

Maximum location: X=-53.00, Y=-66.00

SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.071912
SAR 1g (W/Kg)	0.116243

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

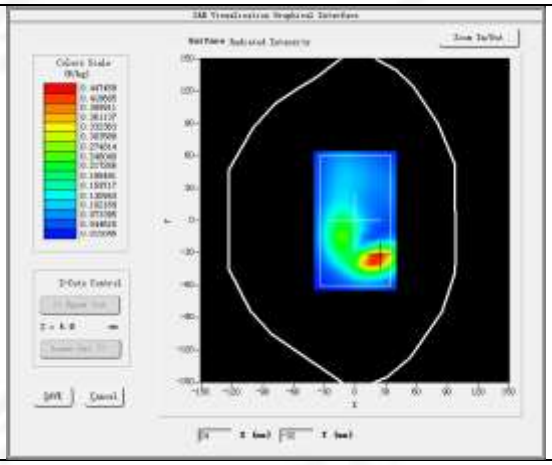
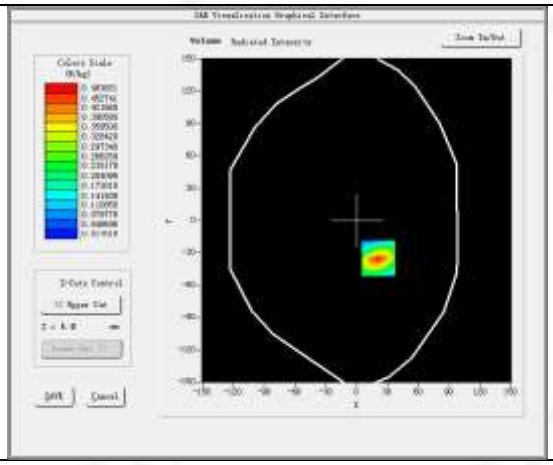
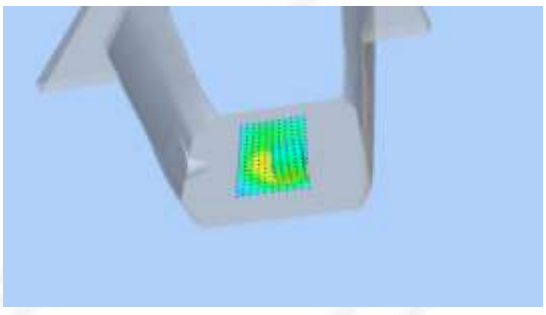
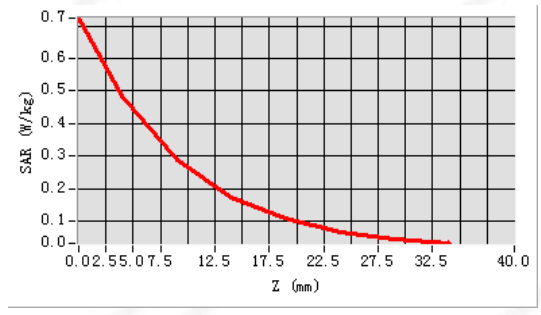
Plot 6: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-09
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	Back Side
Band	WCDMA II
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1852.4
Relative permittivity (real part)	40.68
Conductivity (S/m)	1.44

Maximum location: X=21.00, Y=-35.00

SAR Peak: 0.73 W/kg

SAR 10g (W/Kg)	0.235724
SAR 1g (W/Kg)	0.456549

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

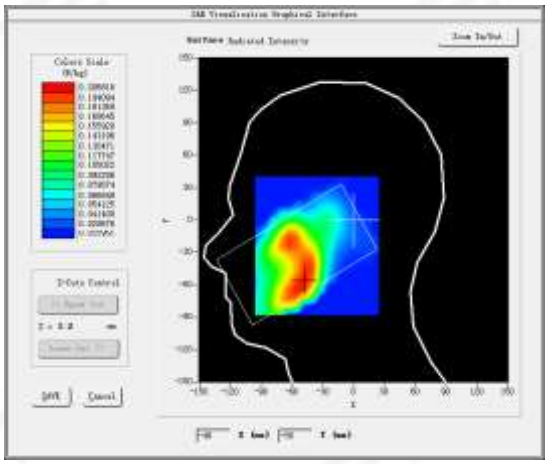
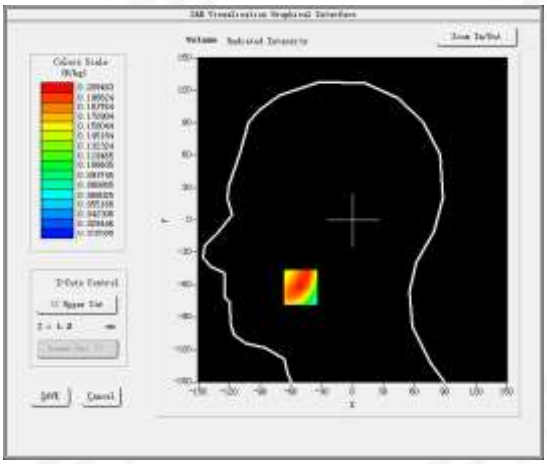
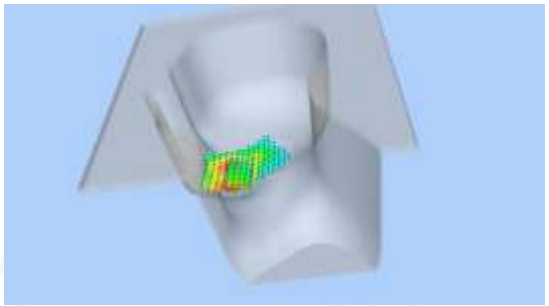
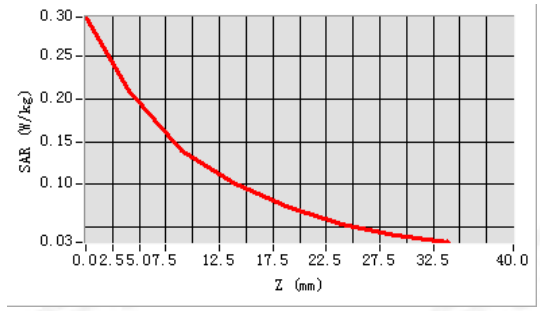
Plot 7: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-08
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	Right Cheek
Device Position	Cheek
Band	WCDMA IV
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	40.55
Conductivity (S/m)	1.35

Maximum location: X=-51.00, Y=-62.00

SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.130837
SAR 1g (W/Kg)	0.203337

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

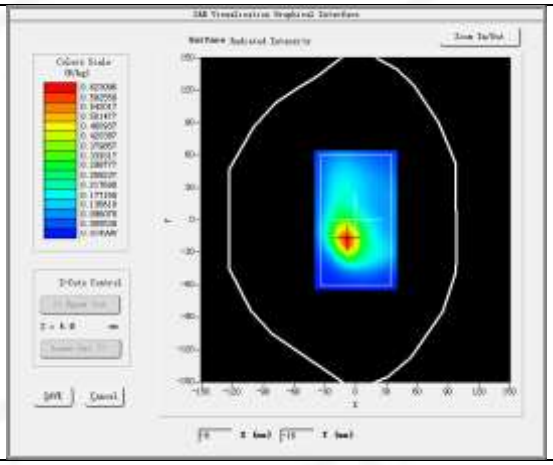
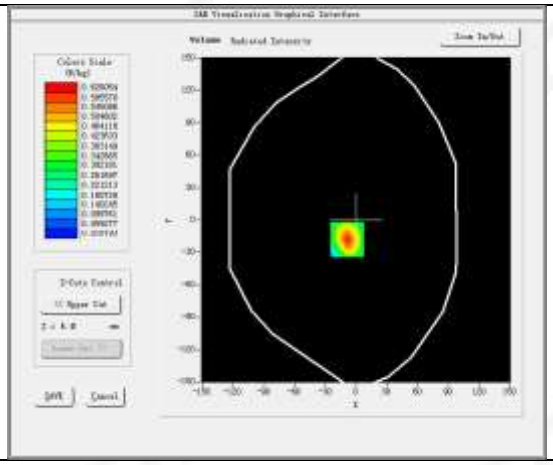
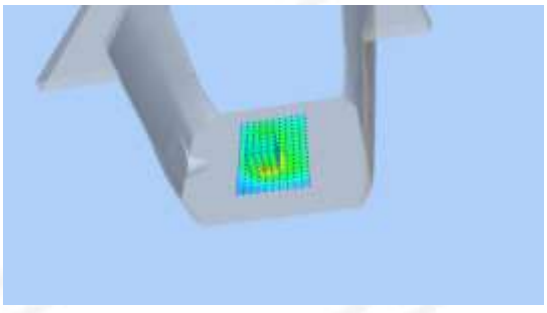
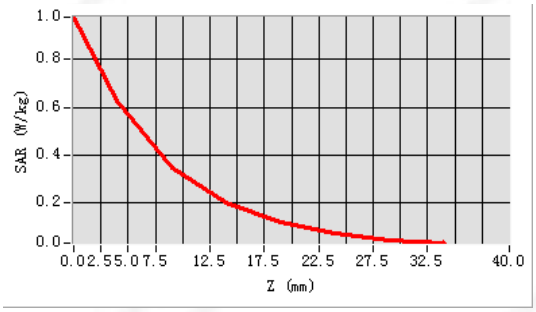
Plot 8: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-08
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	Back Side
Band	WCDMA IV
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	40.55
Conductivity (S/m)	1.35

Maximum location: X=-9.00, Y=-18.00

SAR Peak: 0.99 W/kg

SAR 10g (W/Kg)	0.312068
SAR 1g (W/Kg)	0.590569

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

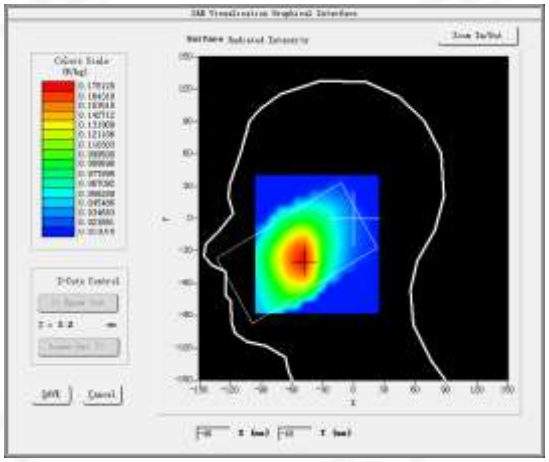
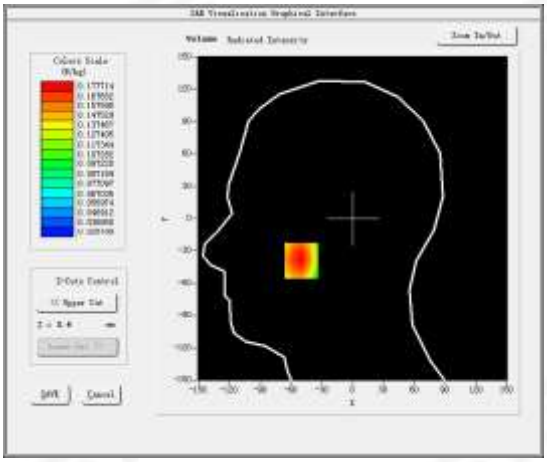
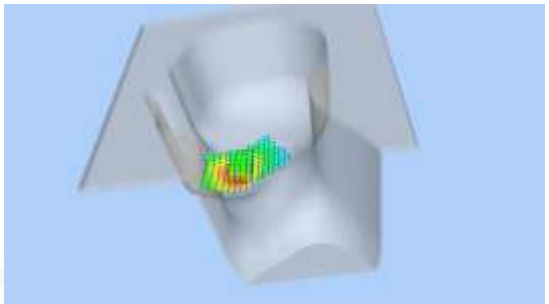
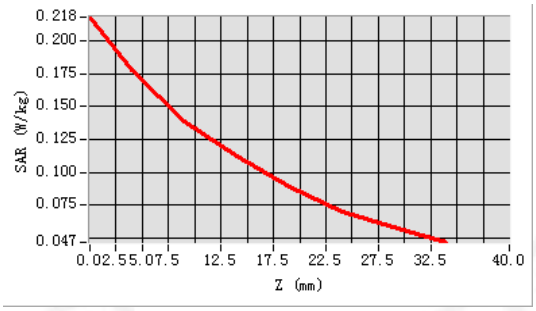
Plot 9: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-07
ConvF	1.58
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	Right Cheek
Device Position	Cheek
Band	WCDMA V
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	846.6
Relative permittivity (real part)	40.98
Conductivity (S/m)	0.89

Maximum location: X=-50.00, Y=-39.00

SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.128656
SAR 1g (W/Kg)	0.173645

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

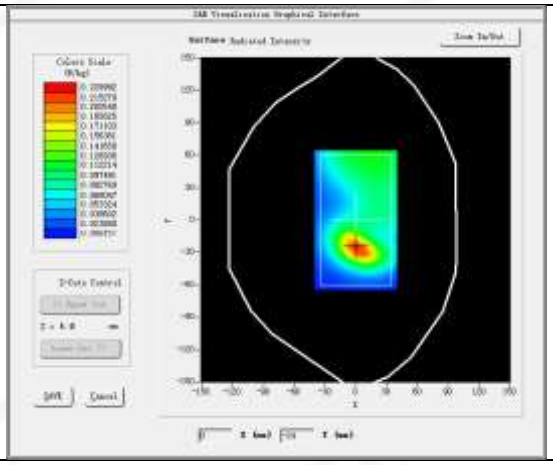
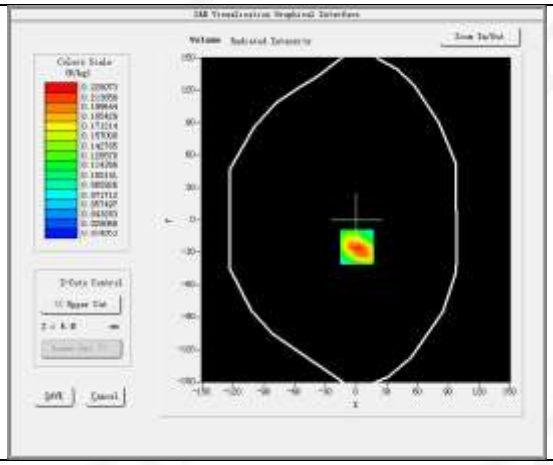
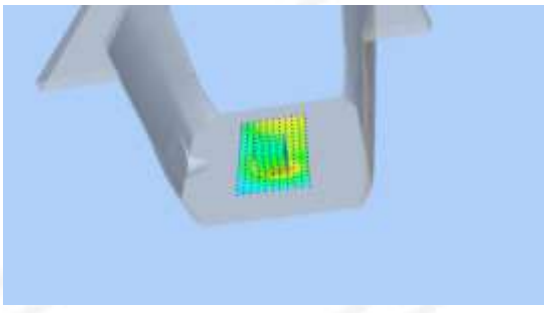
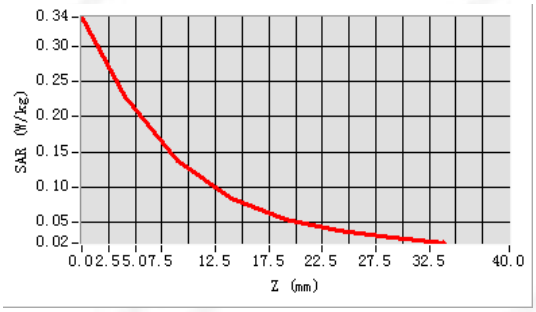
Plot 10: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-07
ConvF	1.58
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	Back Side
Band	WCDMA V
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	846.6
Relative permittivity (real part)	40.98
Conductivity (S/m)	0.89

Maximum location: X=1.00, Y=-25.00

SAR Peak: 0.35 W/kg

SAR 10g (W/Kg)	0.120298
SAR 1g (W/Kg)	0.217141

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

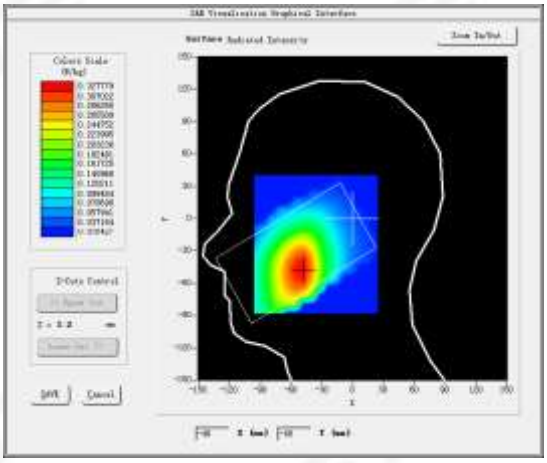
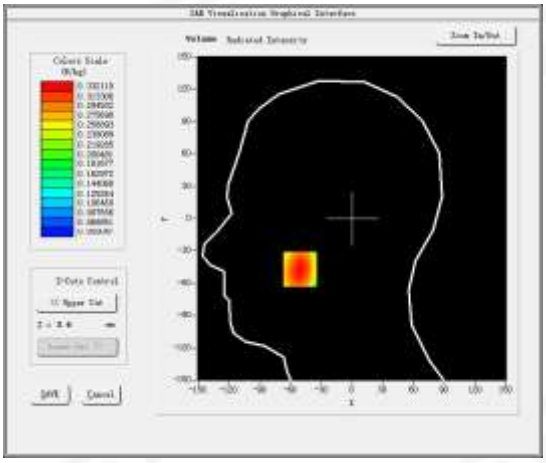
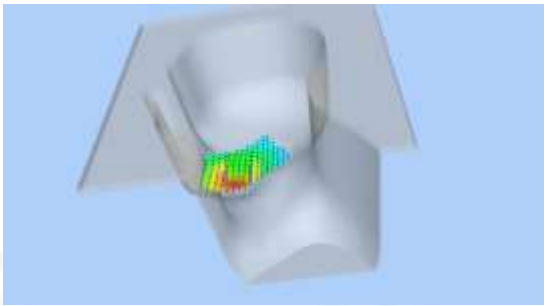
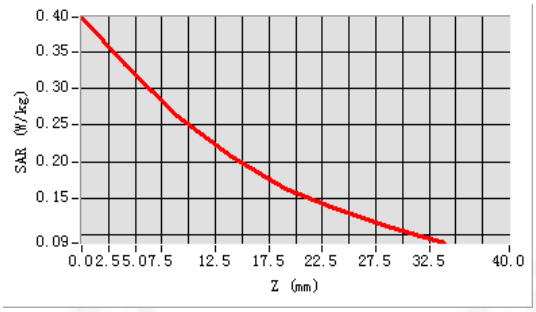
Plot 11: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-09
ConvF	1.58
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	Right Cheek
Device Position	Cheek
Band	LTE Band 2 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1860
Relative permittivity (real part)	39.87
Conductivity (S/m)	1.43

Maximum location: X=-51.00, Y=-47.00

SAR Peak: 0.41 W/kg

SAR 10g (W/Kg)	0.242516
SAR 1g (W/Kg)	0.328218

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

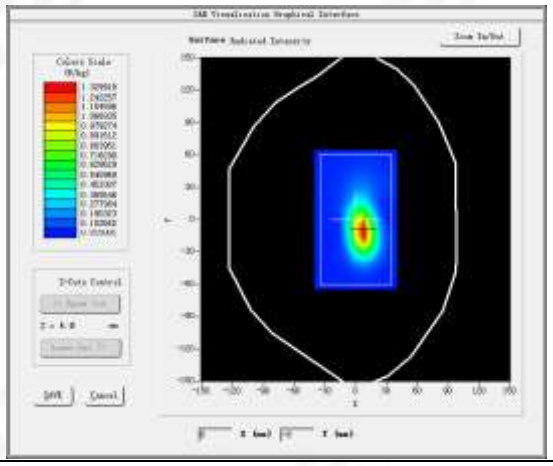
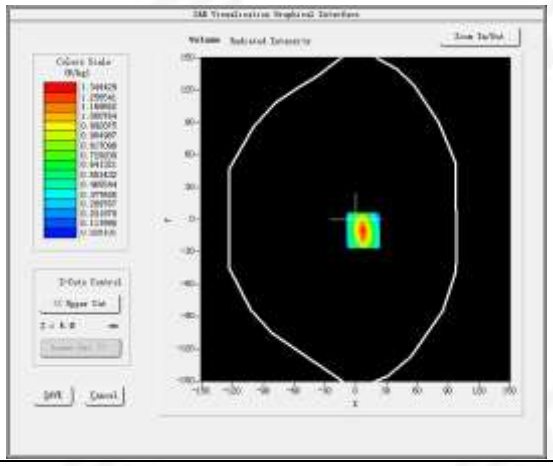
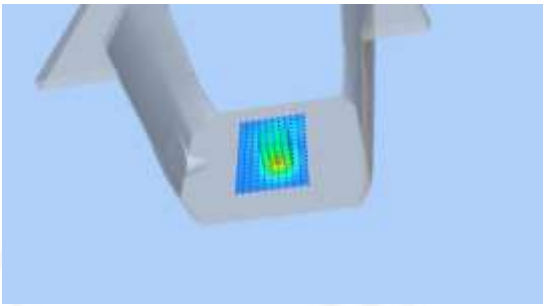
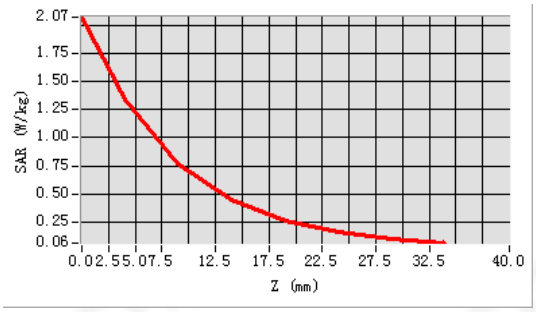
Plot 12: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-09
ConvF	1.58
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	Back Side
Band	LTE Band 2(RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1860
Relative permittivity (real part)	39.87
Conductivity (S/m)	1.43

Maximum location: X=7.00, Y=-10.00

SAR Peak: 2.06 W/kg

SAR 10g (W/Kg)	0.624784
SAR 1g (W/Kg)	1.257650

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

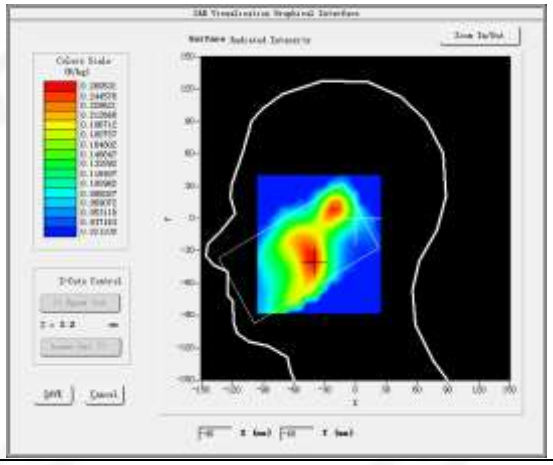
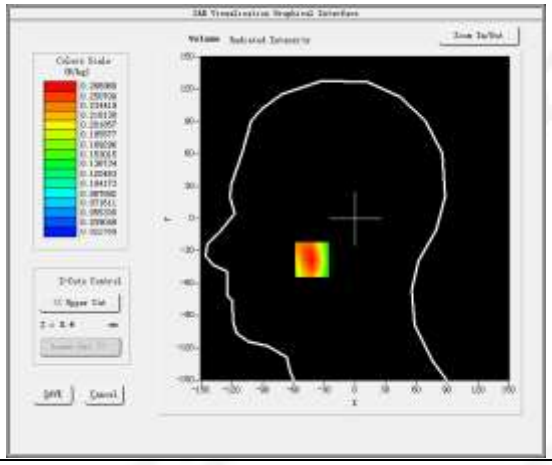
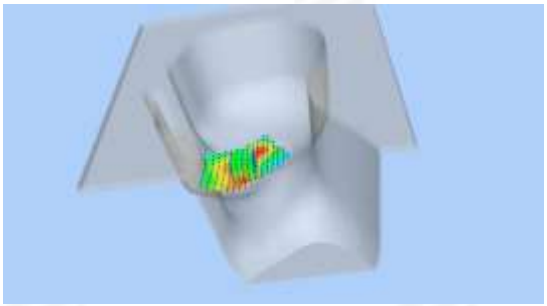
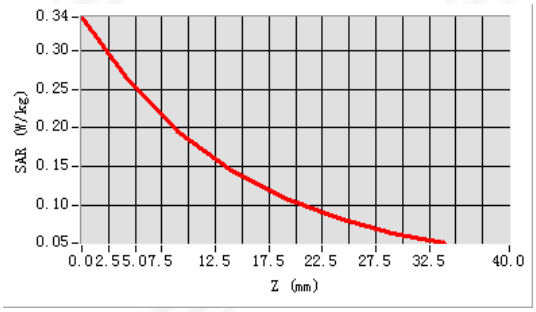
Plot 13: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-08
ConvF	1.58
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	Right Cheek
Band	LTE Band 4 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	40.65
Conductivity (S/m)	1.38

Maximum location: X=-42.00, Y=-38.00

SAR Peak: 0.34 W/kg

SAR 10g (W/Kg)	0.177405
SAR 1g (W/Kg)	0.260674

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

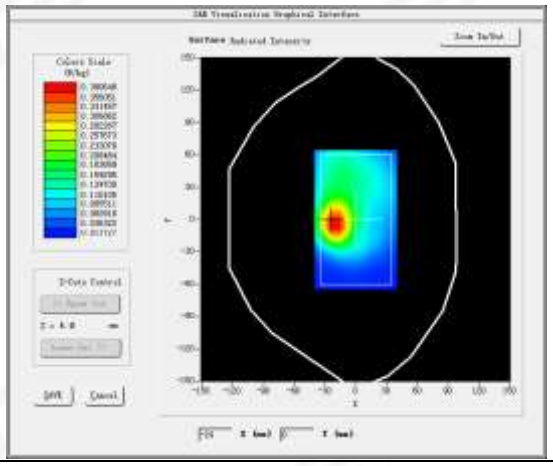
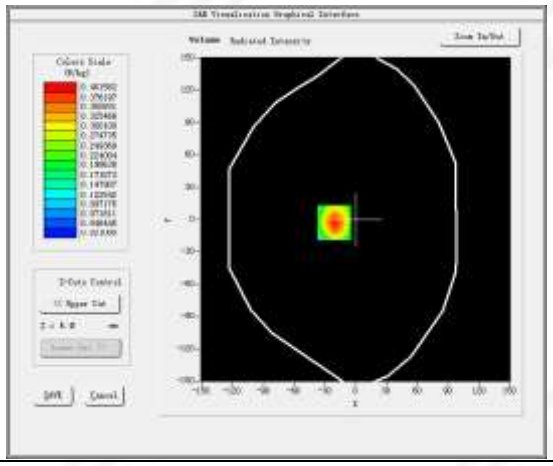
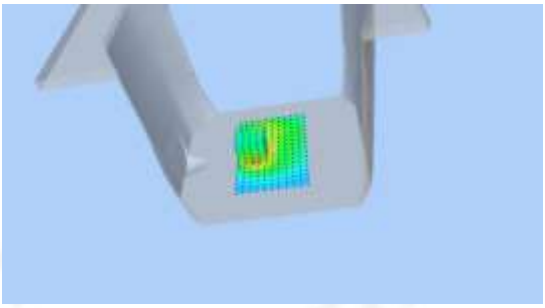
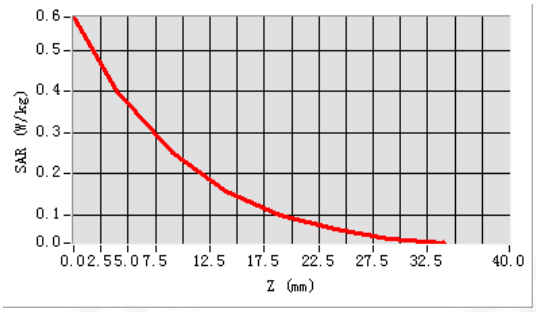
Plot 14: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-08
ConvF	1.58
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	Back Side
Band	LTE Band 4 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	40.65
Conductivity (S/m)	1.38

Maximum location: X=5.00, Y=2.00

SAR Peak: 0.45 W/kg

SAR 10g (W/Kg)	0.221335
SAR 1g (W/Kg)	0.467843

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

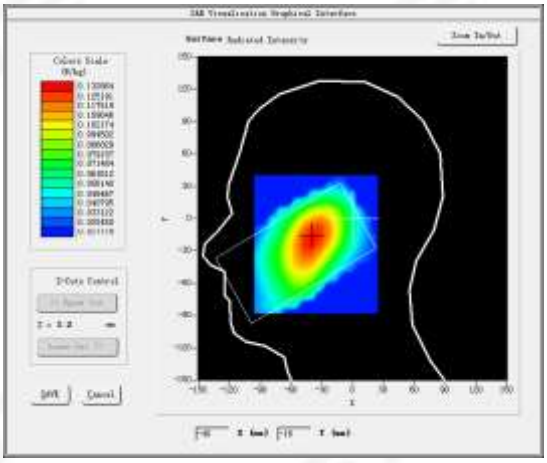
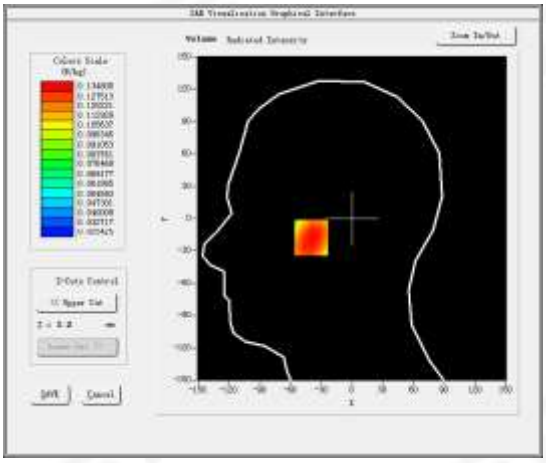
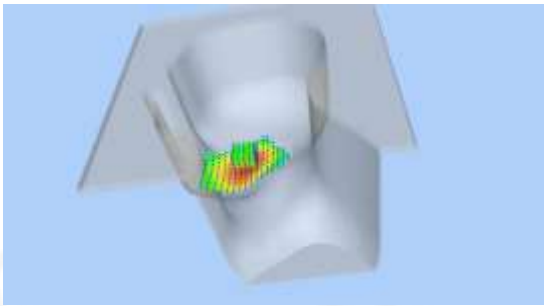
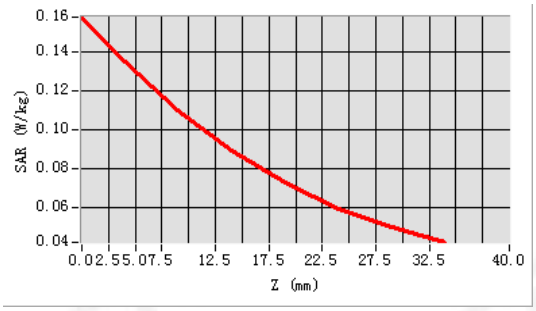
Plot 15: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-07
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	Right Cheek
Device Position	Cheek
Band	LTE Band 5 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	844
Relative permittivity (real part)	41.12
Conductivity (S/m)	0.94

Maximum location: X=-40.00, Y=-17.00

SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.101652
SAR 1g (W/Kg)	0.133035

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

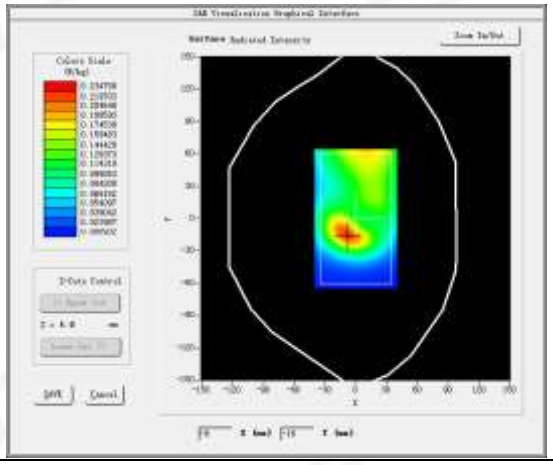
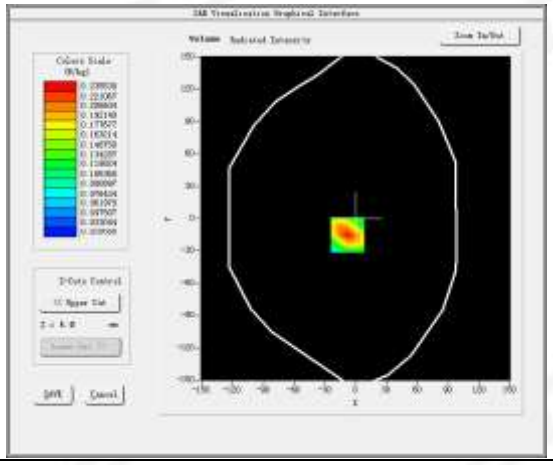
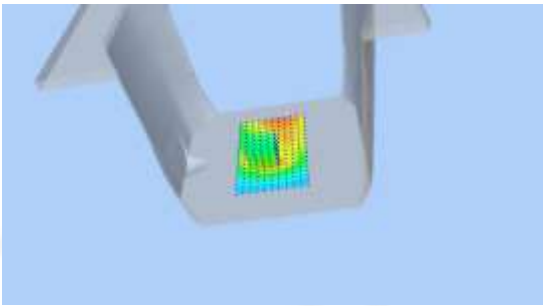
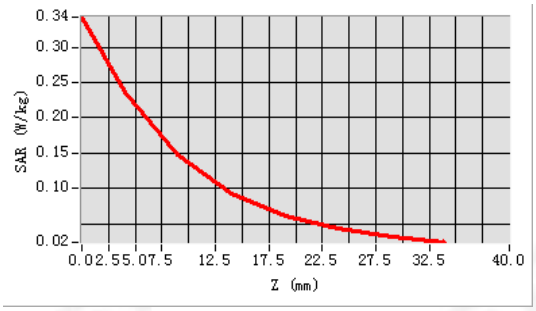
Plot 16: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-07
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	Back Side
Band	LTE Band 5 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	844
Relative permittivity (real part)	41.12
Conductivity (S/m)	0.94

Maximum location: X=-8.00, Y=-15.00

SAR Peak: 0.34 W/kg

SAR 10g (W/Kg)	0.130111
SAR 1g (W/Kg)	0.222125

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

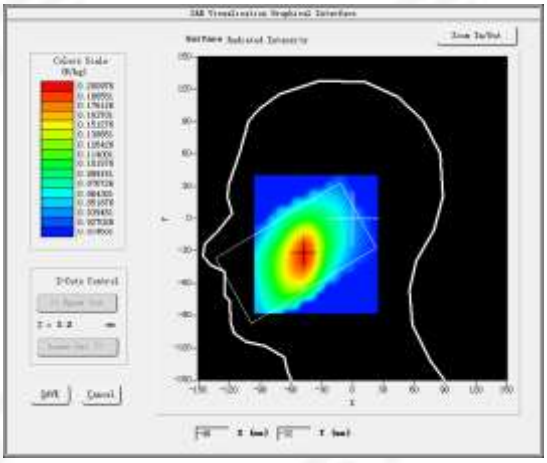
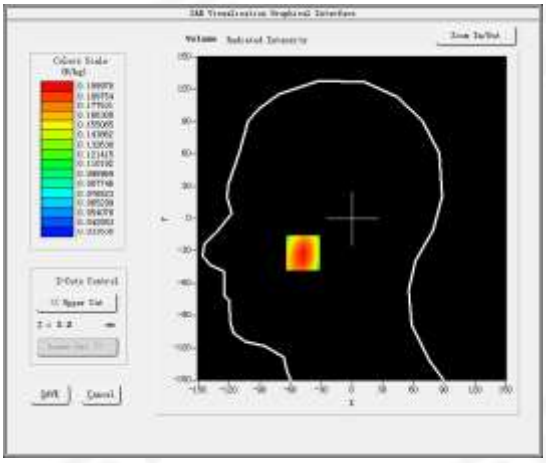
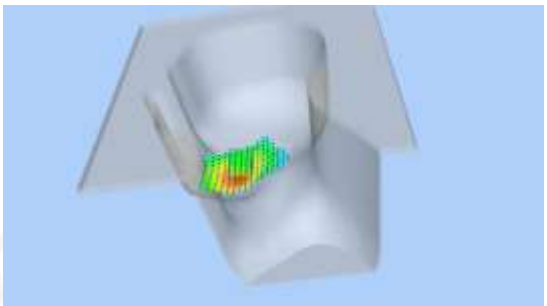
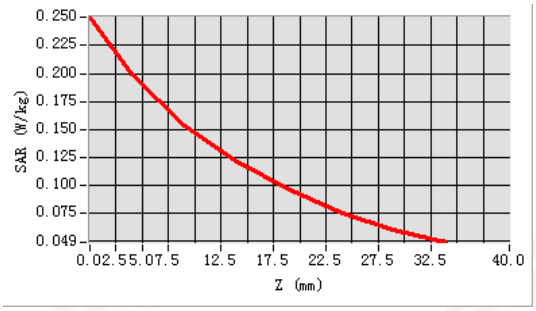
Plot 17: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-11
ConvF	1.74
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	Right Cheek
Device Position	Cheek
Band	LTE Band 7 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	42.91
Conductivity (S/m)	0.85

Maximum location: X=-48.00, Y=-32.00

SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.140874
SAR 1g (W/Kg)	0.192988

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

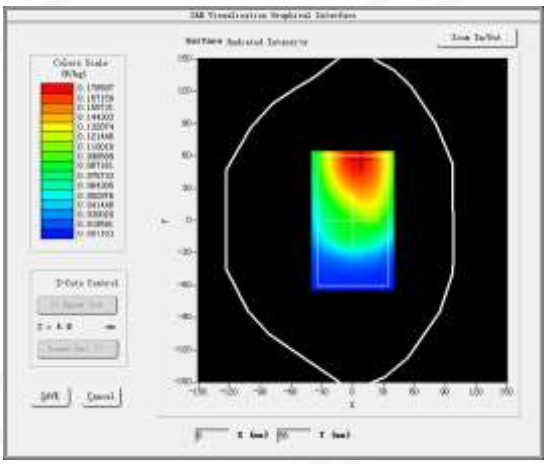
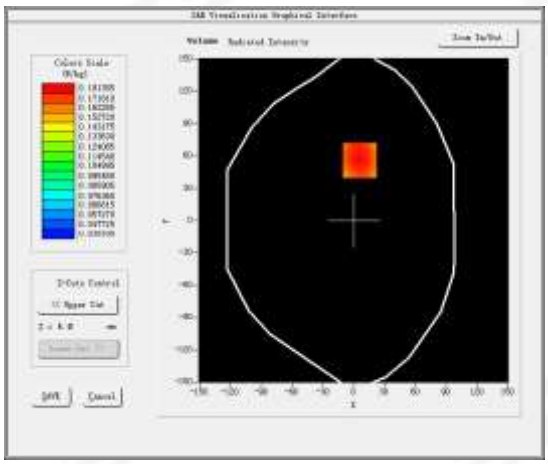
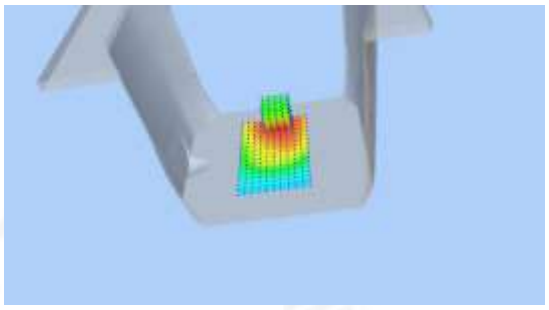
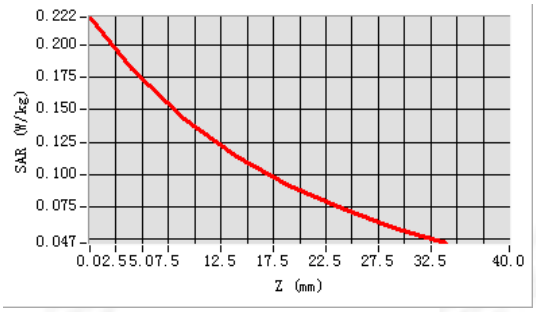
Plot 18: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-11
ConvF	1.74
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	Back Side
Band	LTE Band 7 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	42.91
Conductivity (S/m)	0.85

Maximum location: X=6.00, Y=56.00

SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.134940
SAR 1g (W/Kg)	0.176390

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

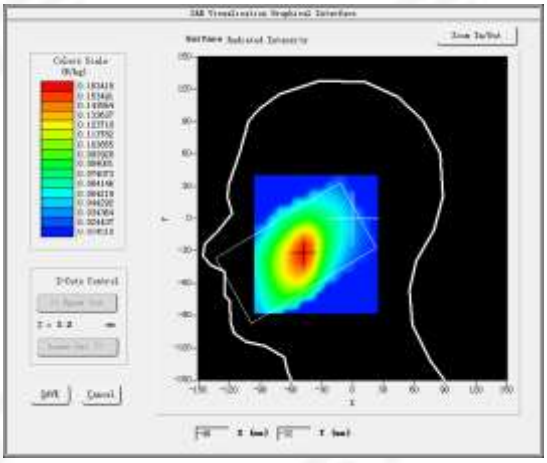
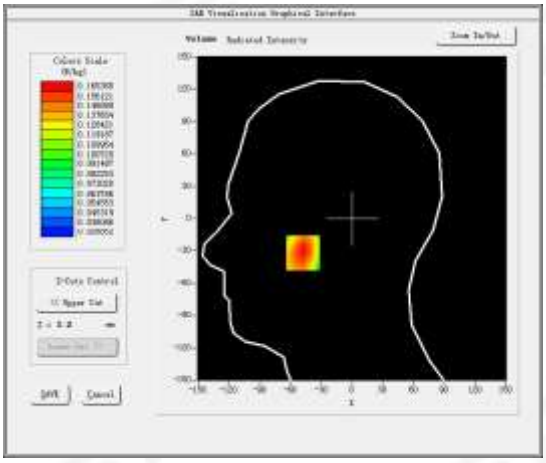
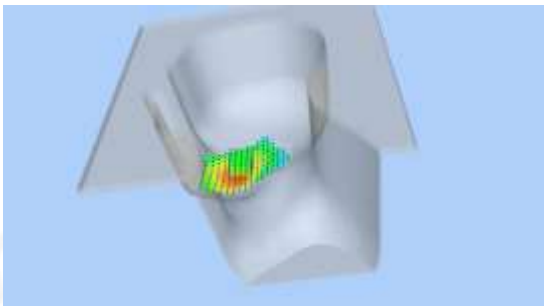
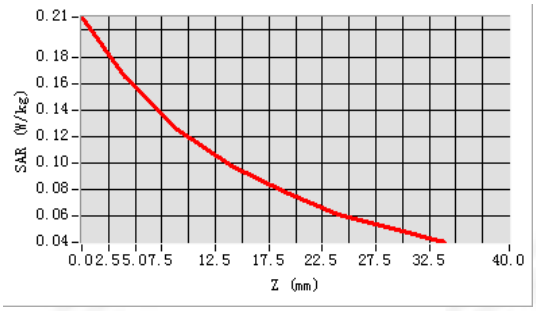
Plot 19: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-11
ConvF	1.74
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	Right Cheek
Device Position	Cheek
Band	LTE Band 38 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2610
Relative permittivity (real part)	39.96
Conductivity (S/m)	2.00

Maximum location: X=-48.00, Y=-32.00

SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.114890
SAR 1g (W/Kg)	0.160148

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

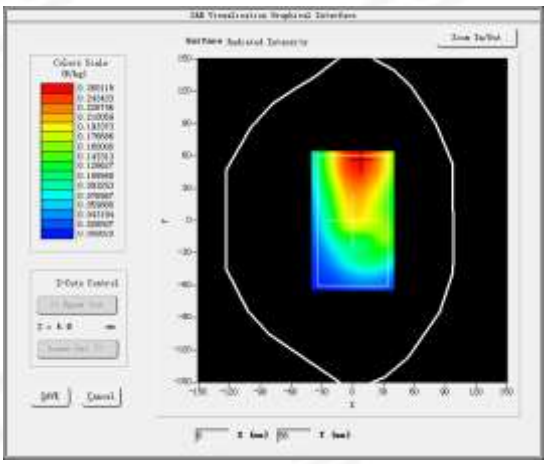
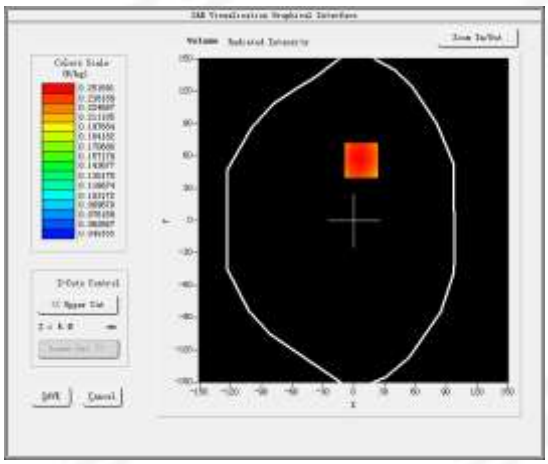
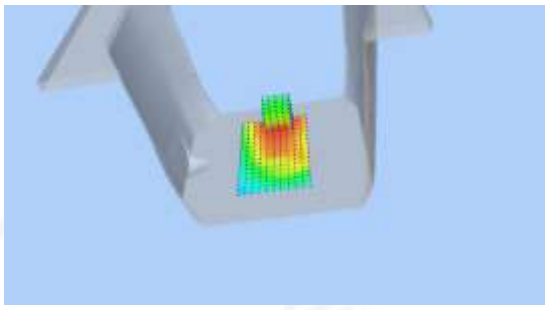
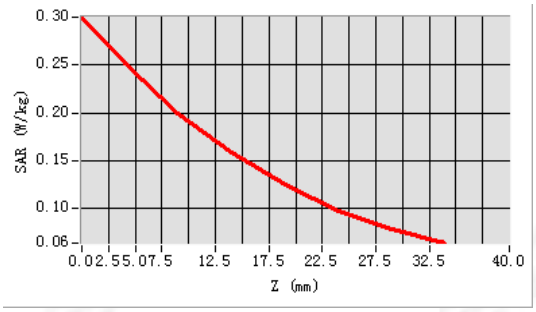
Plot 20: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-11
ConvF	1.74
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	Back Side
Band	LTE Band 38 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2610
Relative permittivity (real part)	39.96
Conductivity (S/m)	2.00

Maximum location: X=7.00, Y=56.00

SAR Peak: 0.31 W/kg

SAR 10g (W/Kg)	0.112202
SAR 1g (W/Kg)	0.186425

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

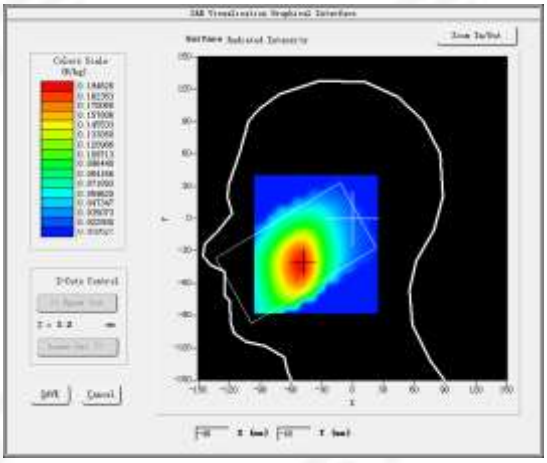
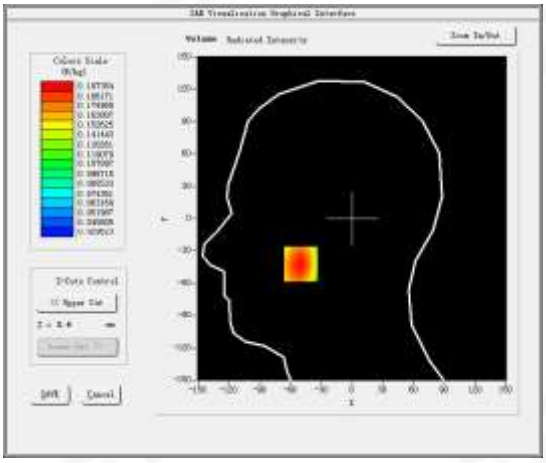
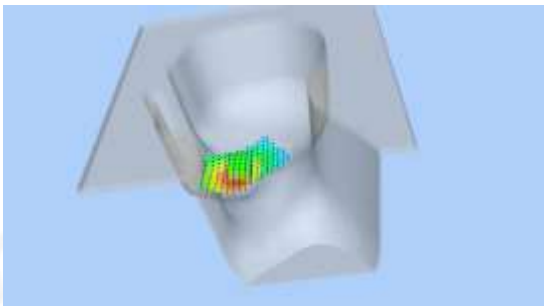
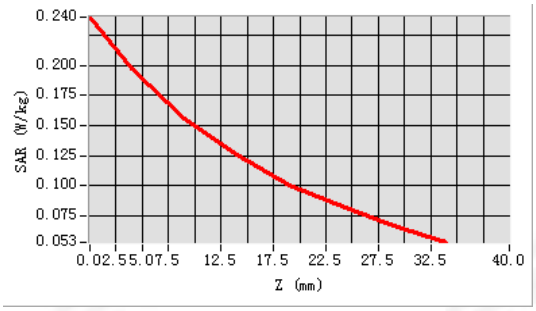
Plot 21: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-10
ConvF	1.80
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	Right Cheek
Device Position	Cheek
Band	LTE Band 40 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2350
Relative permittivity (real part)	39.80
Conductivity (S/m)	1.66

Maximum location: X=-50.00, Y=-42.00

SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.143437
SAR 1g (W/Kg)	0.190868

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

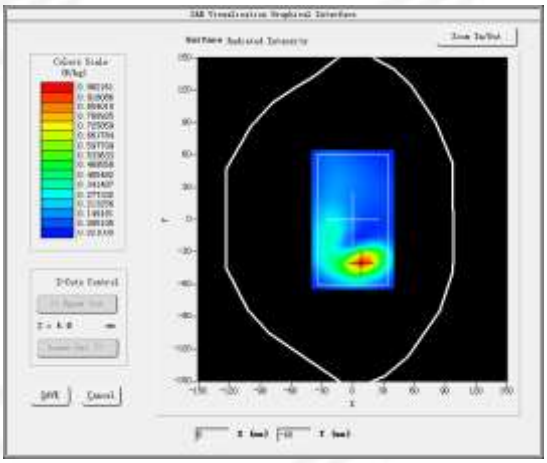
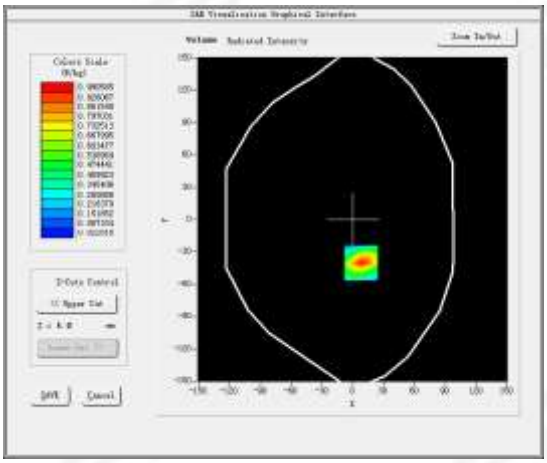
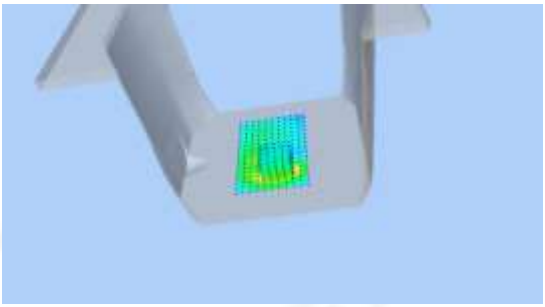
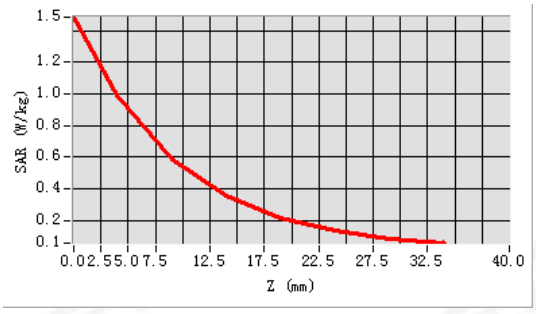
Plot 22: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-10
ConvF	1.80
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	Back Side
Band	LTE Band 40 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2350
Relative permittivity (real part)	39.80
Conductivity (S/m)	1.66

Maximum location: X=8.00, Y=-40.00

SAR Peak: 1.51 W/kg

SAR 10g (W/Kg)	0.473903
SAR 1g (W/Kg)	0.914679

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

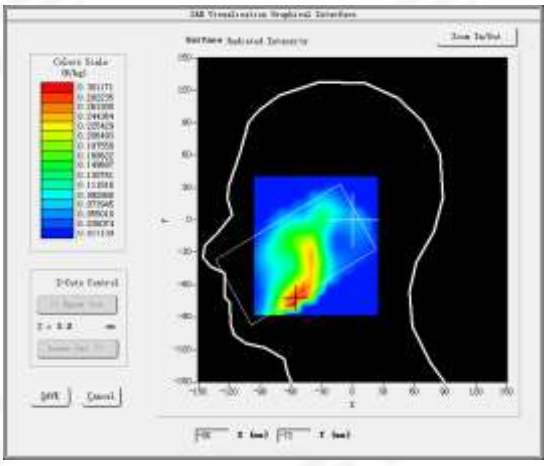
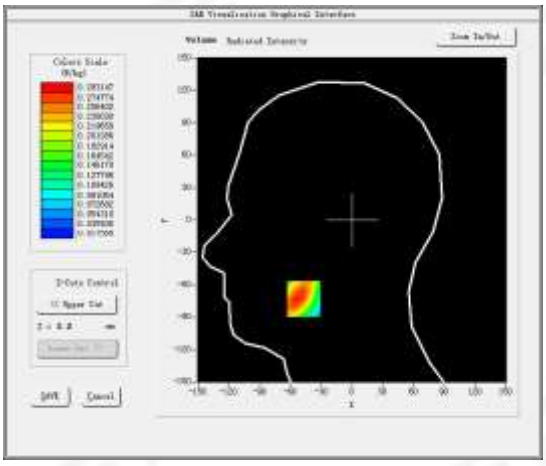
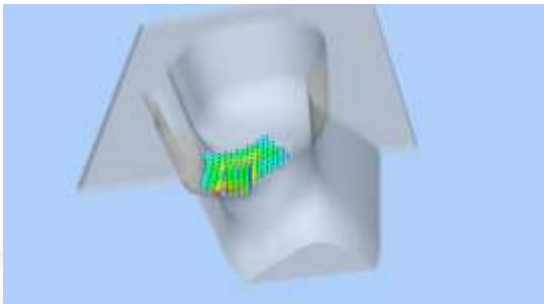
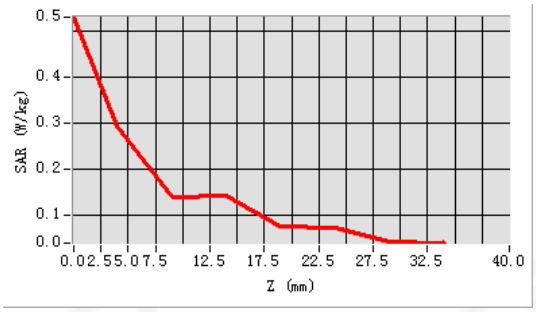
Plot 23: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-11
ConvF	1.74
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	Right Cheek
Device Position	Cheek
Band	LTE Band 41 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2680
Relative permittivity (real part)	39.55
Conductivity (S/m)	2.08

Maximum location: X=-47.00, Y=-73.00

SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.180429
SAR 1g (W/Kg)	0.281245

SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

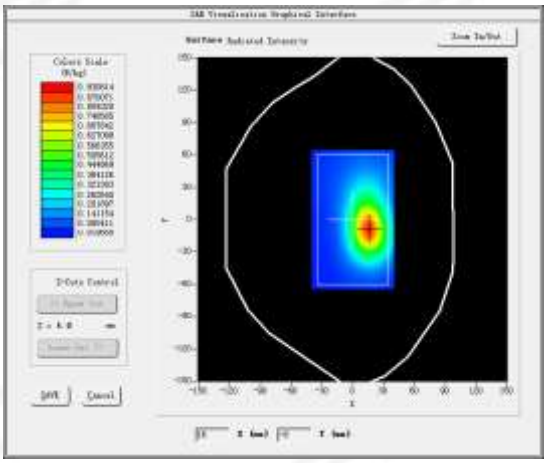
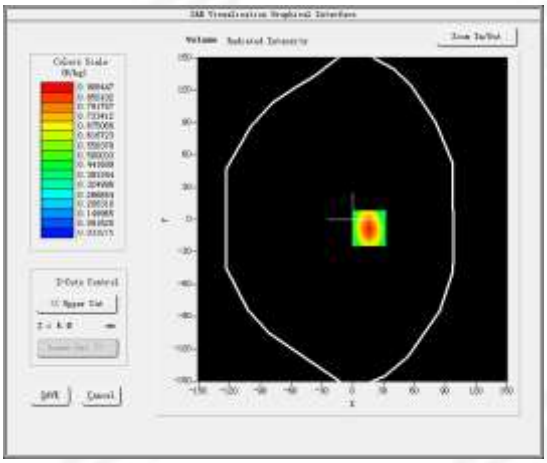
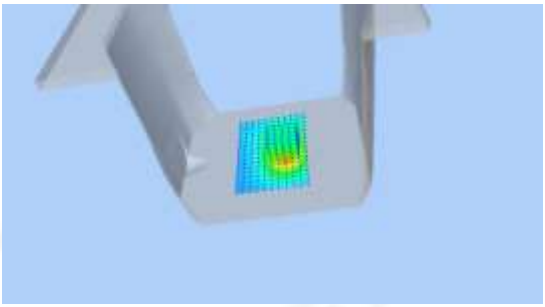
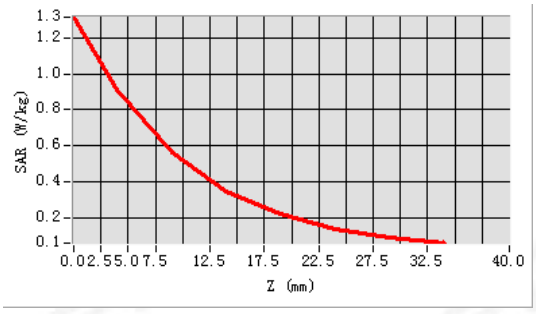
Plot 24: DUT: Android Barcode Scanner; EUT Model: AS01

Test Date	2025-01-11
ConvF	1.74
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	Back Side
Band	LTE Band 41 (RB 1)
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2680
Relative permittivity (real part)	39.55
Conductivity (S/m)	2.08

Maximum location: X=16.00, Y=-8.00

SAR Peak: 1.31 W/kg

SAR 10g (W/Kg)	0.492054
SAR 1g (W/Kg)	0.858368

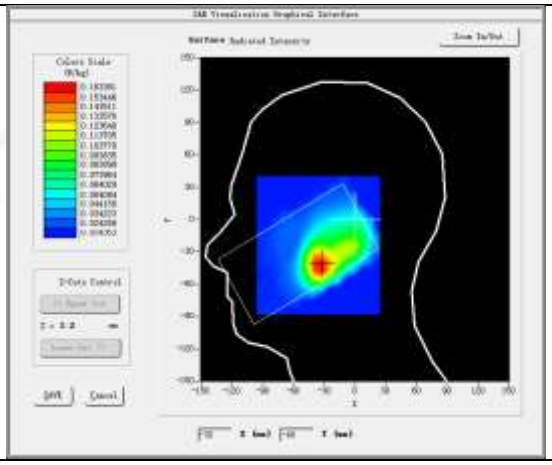
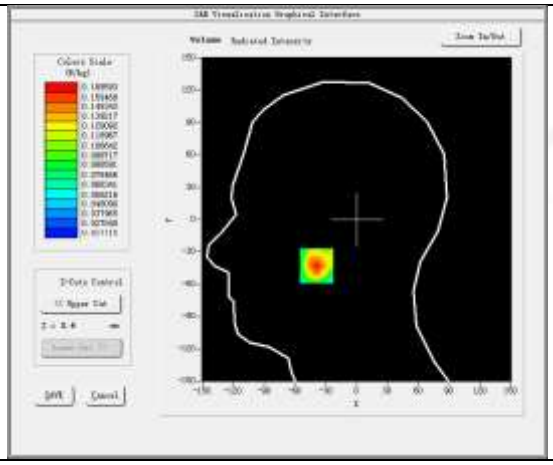
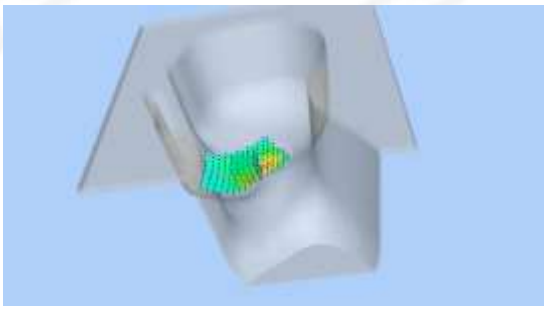
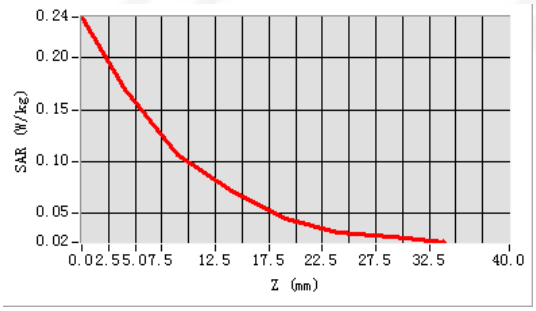
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 25: DUT: PDA; EUT Model: AS01

Test Date	2025-01-10
ConvF	1.80
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	Right Cheek
Device Position	Cheek
Band	2.4 WLAN ANT_A
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2462
Relative permittivity (real part)	39.65
Conductivity (S/m)	1.87

Maximum location: X=-34.00, Y=-43.00
SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.092275
SAR 1g (W/Kg)	0.159103

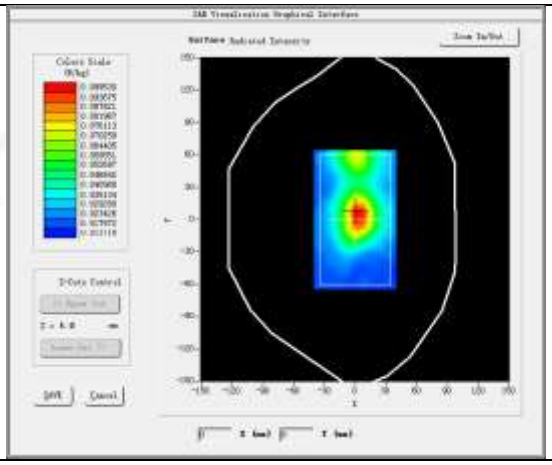
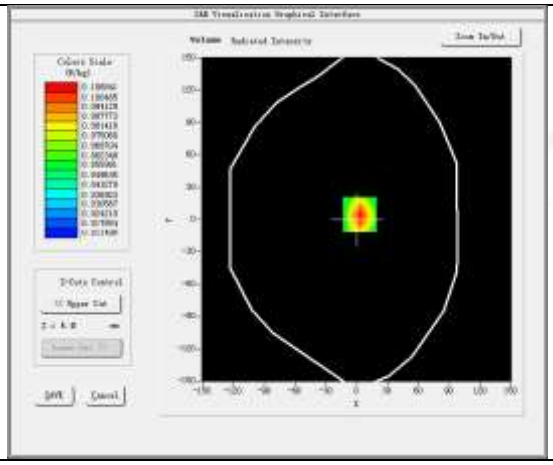
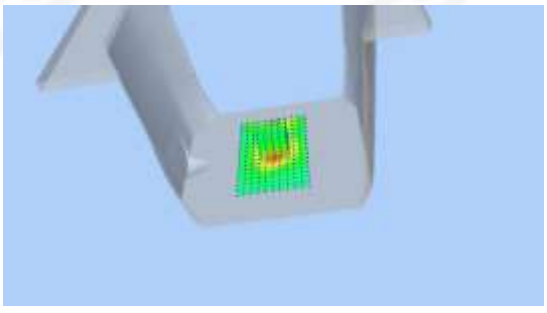
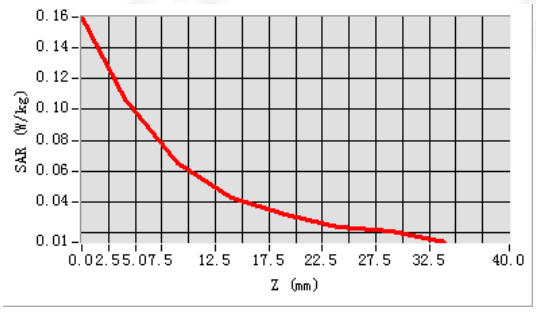
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 26: DUT: PDA; EUT Model: AS01

Test Date	2025-01-10
ConvF	1.80
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	Back Side
Band	2.4 WLAN ANT_A
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2462
Relative permittivity (real part)	39.65
Conductivity (S/m)	1.87

Maximum location: X=3.00, Y=5.00
SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.060746
SAR 1g (W/Kg)	0.103035

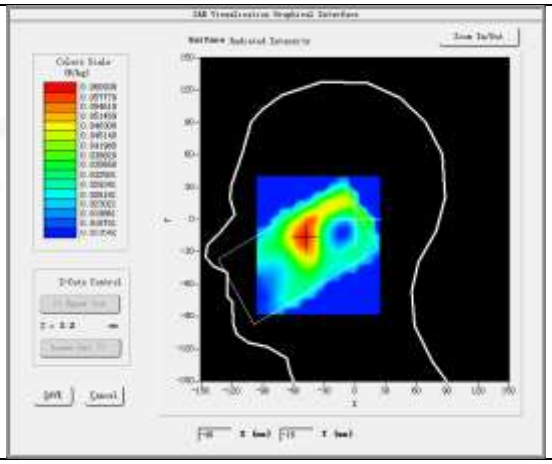
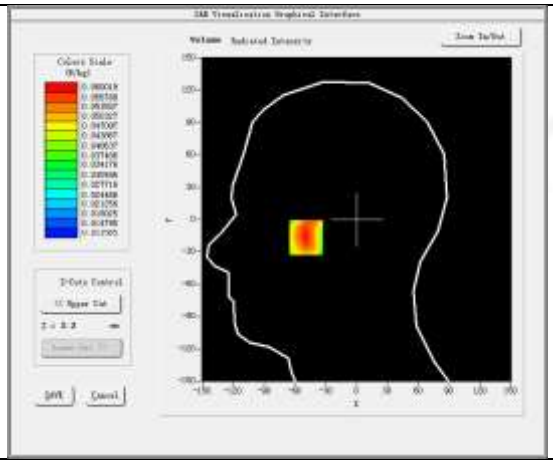
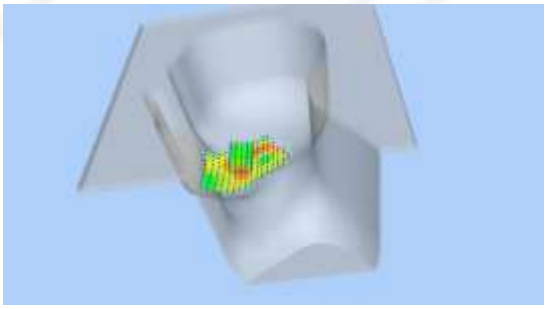
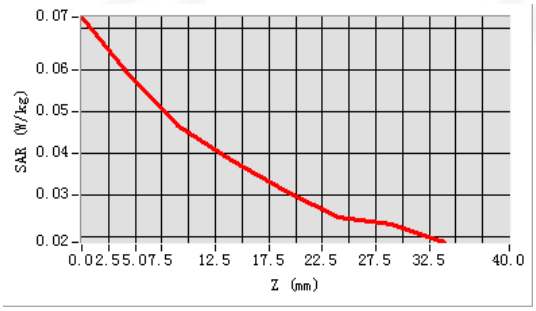
SURFACE SAR	VOLUME SAR
	
3D	**Z AZxis Scan**
	

Plot 27: DUT: PDA; EUT Model: AS01

Test Date	2025-01-10
ConvF	1.80
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	Right Cheek
Device Position	Cheek
Band	BT
Signal	GFSK (Crest factor: 1.0)
Frequency (MHz)	2441
Relative permittivity (real part)	40.50
Conductivity (S/m)	1.81

Maximum location: X=-49.00, Y=-16.00
SAR Peak: 0.08 W/kg

SAR 10g (W/Kg)	0.042471
SAR 1g (W/Kg)	0.068035

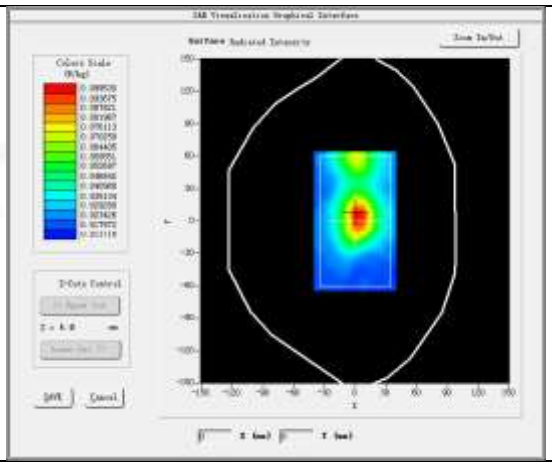
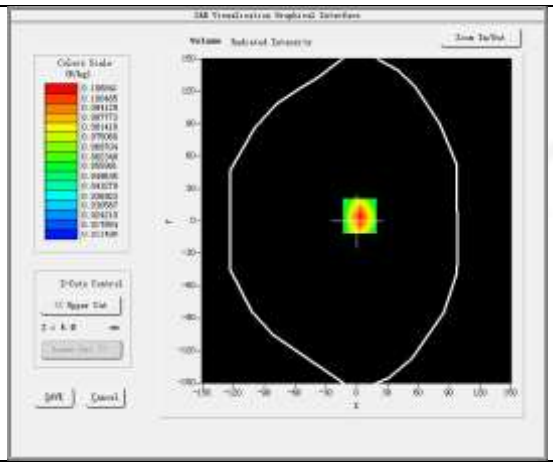
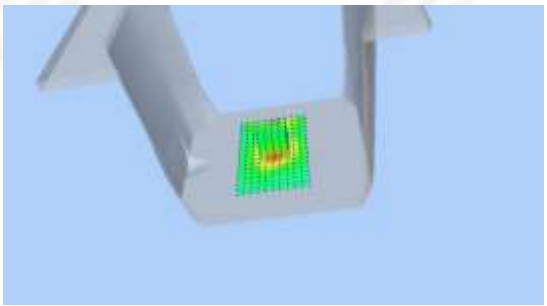
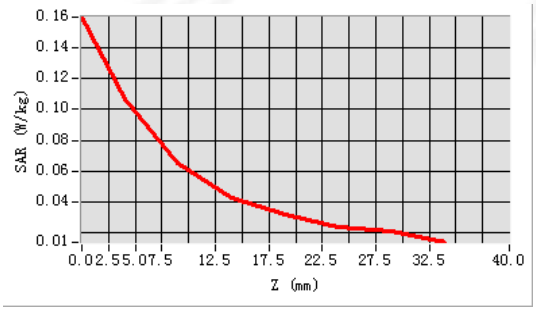
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 28: DUT: PDA; EUT Model: AS01

Test Date	2024-01-10
ConvF	1.80
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	Back Side
Band	BT
Signal	GFSK (Crest factor: 1.0)
Frequency (MHz)	2441
Relative permittivity (real part)	40.50
Conductivity (S/m)	1.81

Maximum location: X=3.00, Y=5.00
SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.060746
SAR 1g (W/Kg)	0.102035

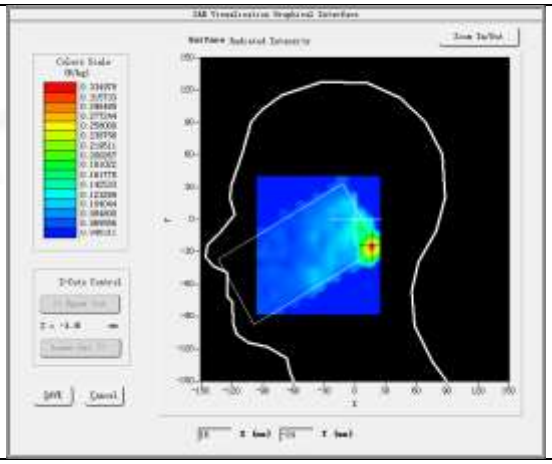
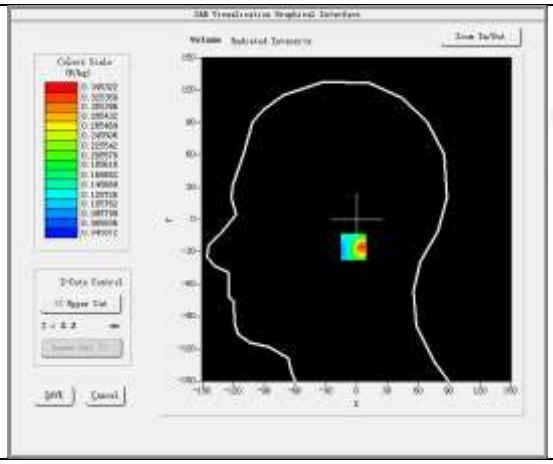
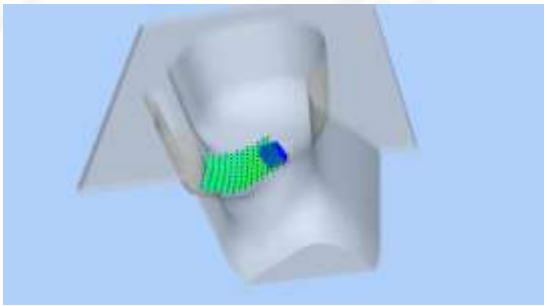
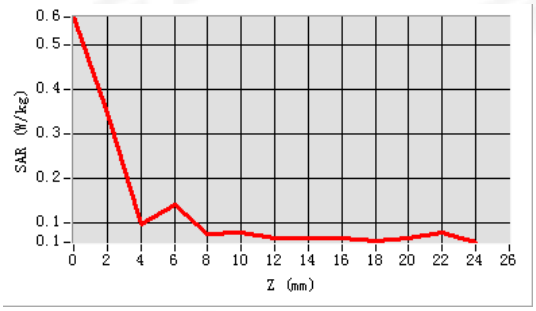
SURFACE SAR	VOLUME SAR
	
3D	**Z AZxis Scan**
	

Plot 29: DUT: PDA; EUT Model: AS01

Test Date	2025-01-12
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	Right Cheek
Device Position	Cheek
Band	5.2G WLAN ANT_A
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5250
Relative permittivity (real part)	36.80
Conductivity (S/m)	4.72

Maximum location: X=8.00, Y=-25.00
SAR Peak: 0.79 W/kg

SAR 10g (W/Kg)	0.140870
SAR 1g (W/Kg)	0.317690

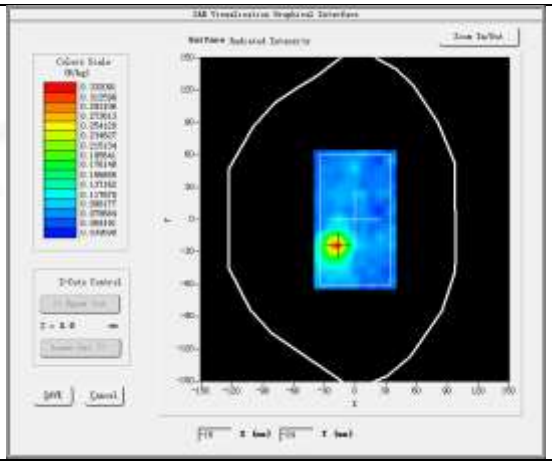
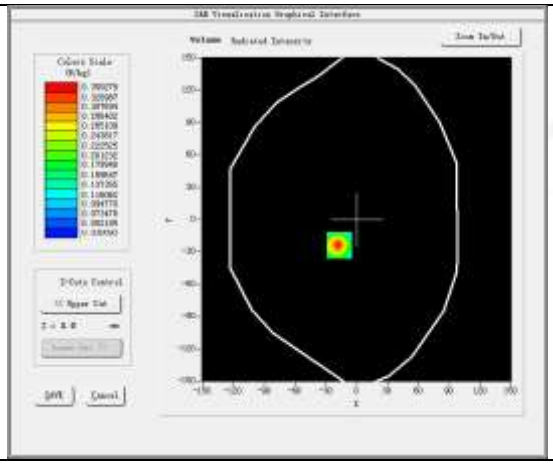
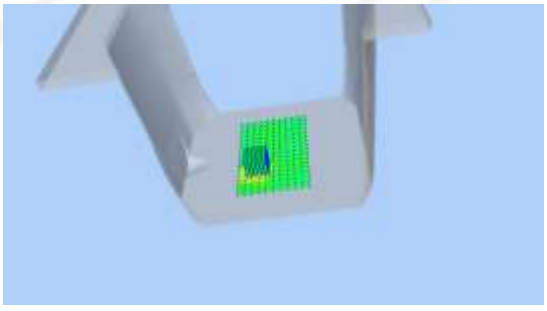
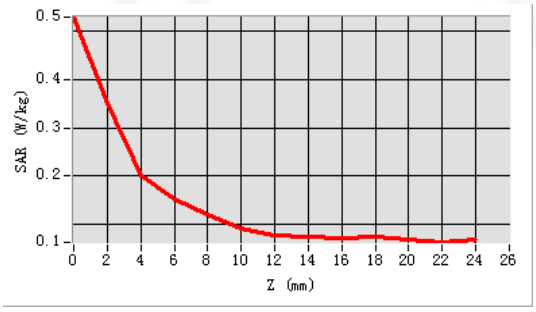
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 30: DUT: PDA; EUT Model: AS01

Test Date	2025-01-12
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	Back Side
Band	5.2G WLAN ANT_A
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5250
Relative permittivity (real part)	36.80
Conductivity (S/m)	4.72

Maximum location: X=-17.00, Y=-24.00
SAR Peak: 0.56 W/kg

SAR 10g (W/Kg)	0.122103
SAR 1g (W/Kg)	0.225019

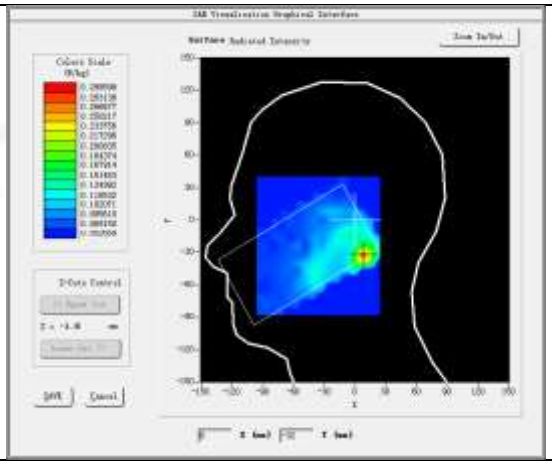
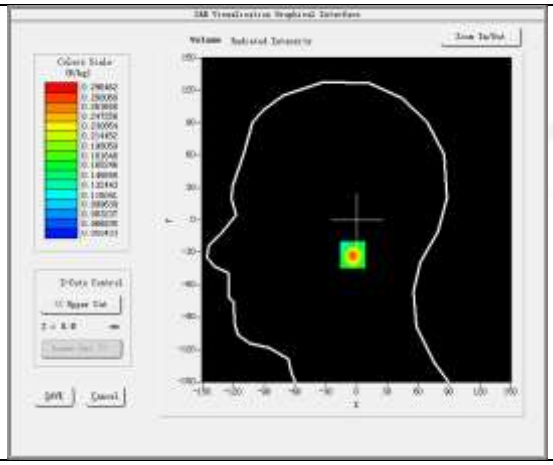
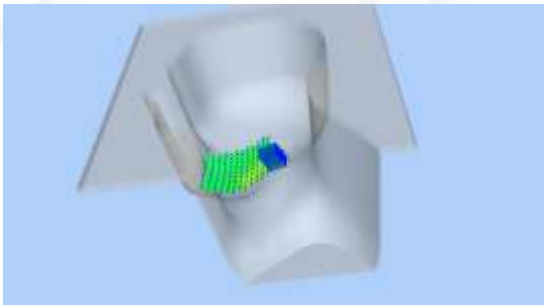
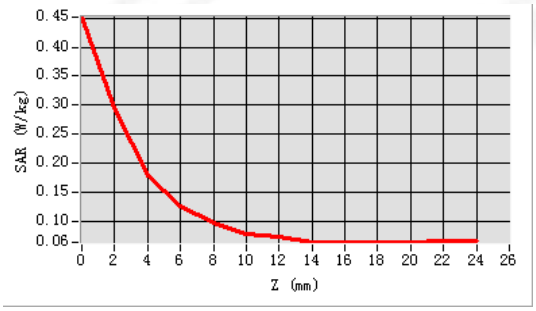
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 31: DUT: PDA; EUT Model: AS01

Test Date	2025-01-12
ConvF	1.31
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	Right Cheek
Device Position	Cheek
Band	5.3G WLAN ANT_A
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5310
Relative permittivity (real part)	35.90
Conductivity (S/m)	4.73

Maximum location: X=8.00, Y=-32.00
SAR Peak: 0.67 W/kg

SAR 10g (W/Kg)	0.132742
SAR 1g (W/Kg)	0.274021

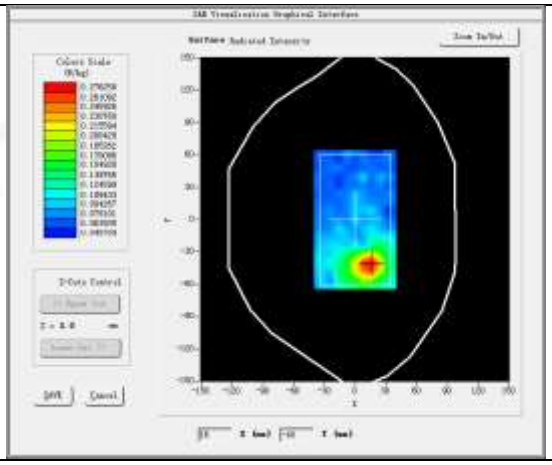
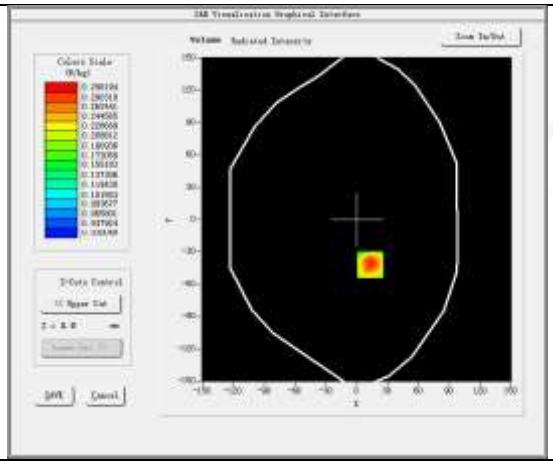
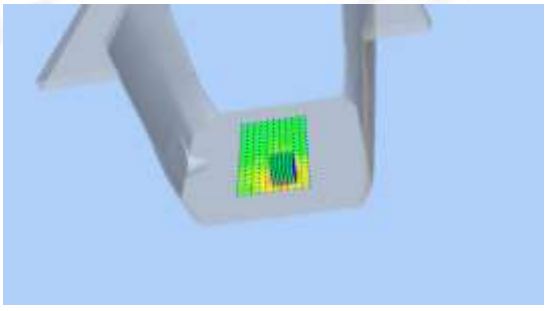
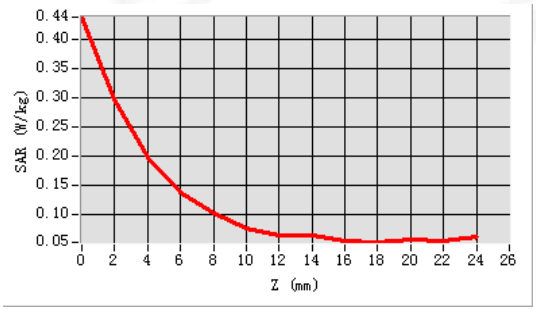
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 32: DUT: PDA; EUT Model: AS01

Test Date	2025-01-12
ConvF	1.31
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	Back Side
Band	5.3G WLAN ANT_A
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5310
Relative permittivity (real part)	35.90
Conductivity (S/m)	4.73

Maximum location: X=13.00, Y=-42.00
SAR Peak: 0.46 W/kg

SAR 10g (W/Kg)	0.115334
SAR 1g (W/Kg)	0.198000

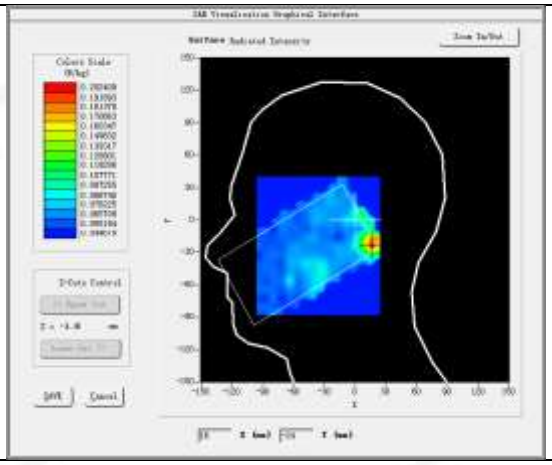
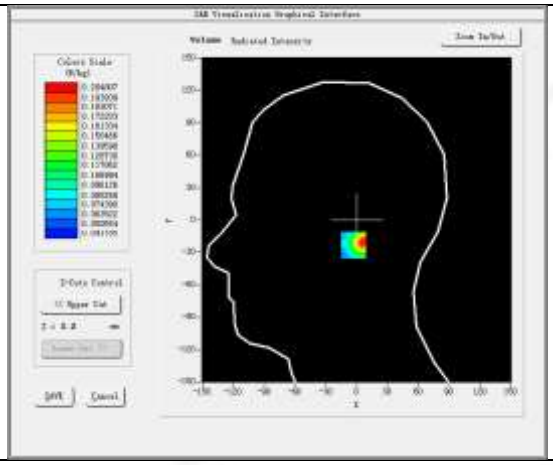
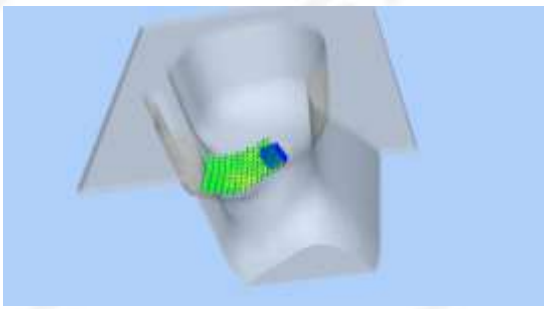
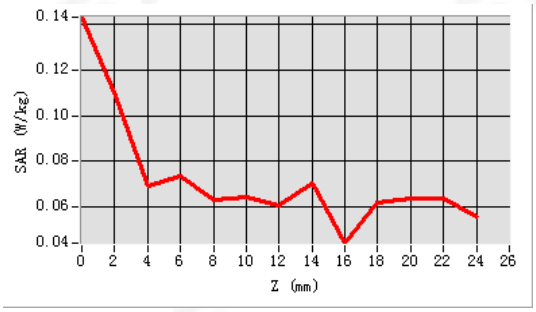
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 33: DUT: PDA; EUT Model: AS01

Test Date	2025-01-13
ConvF	1.24
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	Right Cheek
Device Position	Cheek
Band	5.6G WLAN ANT_A
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5510
Relative permittivity (real part)	36.49
Conductivity (S/m)	4.91

Maximum location: X=5.00, Y=-25.00
SAR Peak: 0.21 W/kg

SAR 10g (W/Kg)	0.078669
SAR 1g (W/Kg)	0.109678

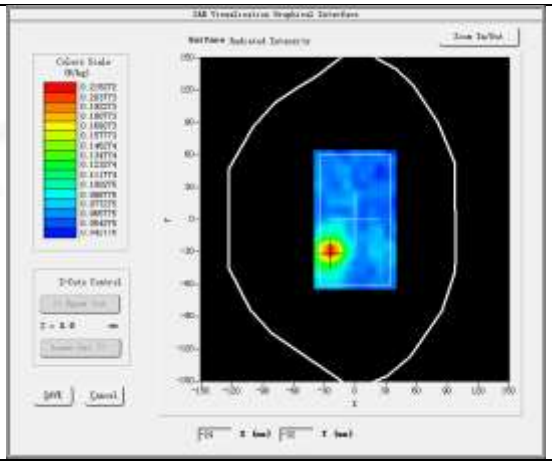
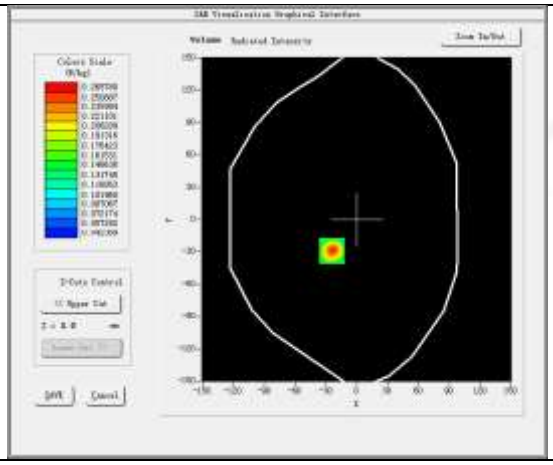
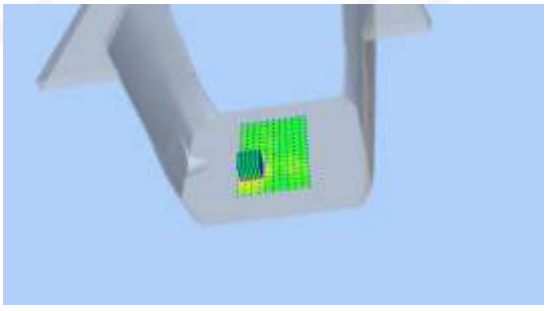
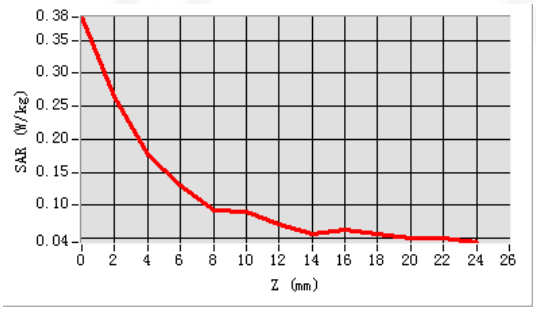
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 34: DUT: PDA; EUT Model: AS01

Test Date	2025-01-13
ConvF	1.24
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	Back Side
Band	5.6G WLAN ANT_A
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5510
Relative permittivity (real part)	36.49
Conductivity (S/m)	4.91

Maximum location: X=-24.00, Y=-29.00
SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.100095
SAR 1g (W/Kg)	0.177012

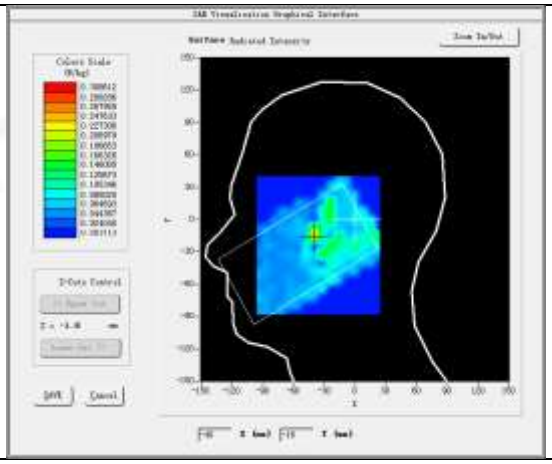
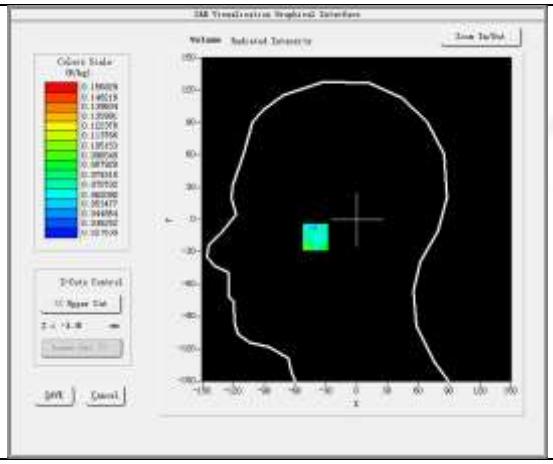
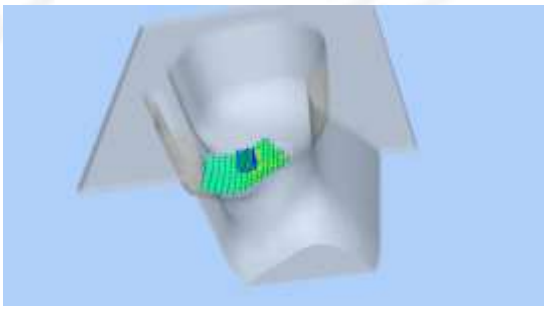
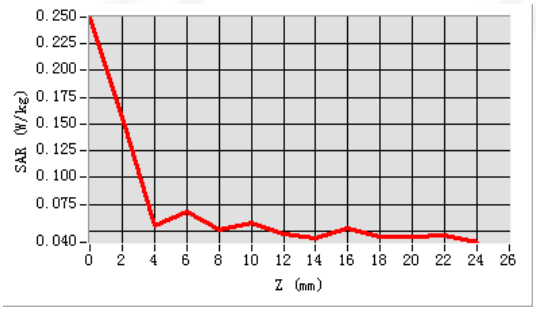
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 35: DUT: PDA; EUT Model: AS01

Test Date	2025-01-13
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	Right Cheek
Device Position	Cheek
Band	5.8G WLAN ANT_A
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5795
Relative permittivity (real part)	36.46
Conductivity (S/m)	5.21

Maximum location: X=-40.00, Y=-15.00
SAR Peak: 0.36 W/kg

SAR 10g (W/Kg)	0.058870
SAR 1g (W/Kg)	0.087714

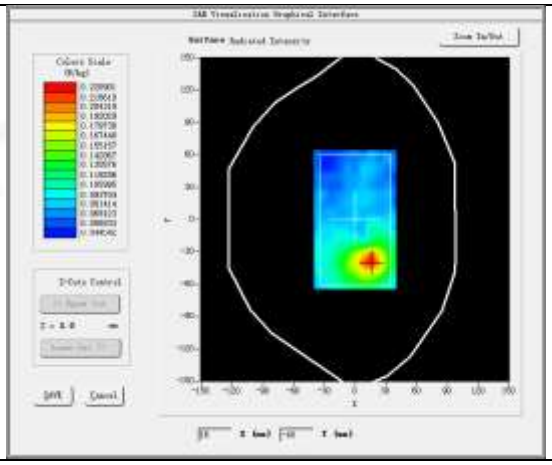
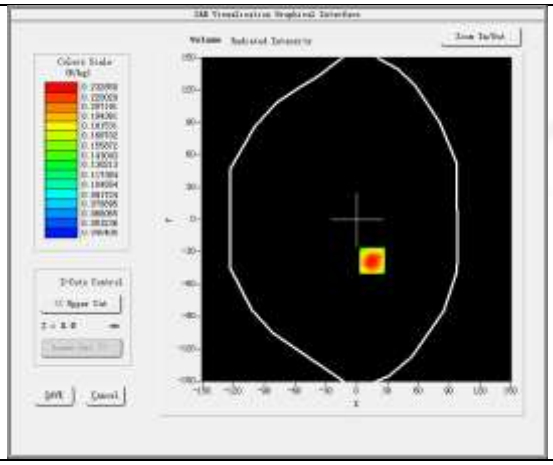
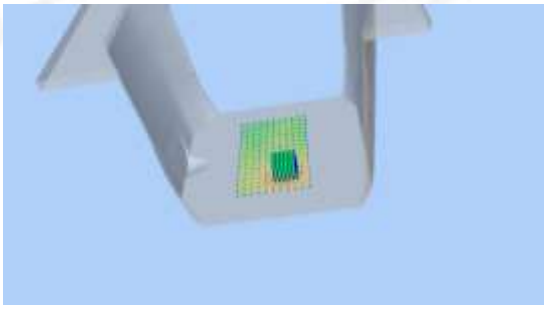
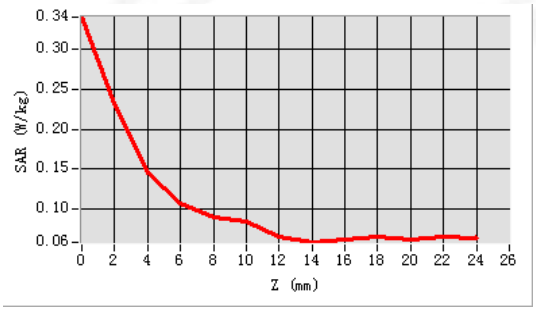
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 36: DUT: PDA; EUT Model: AS01

Test Date	2025-01-13
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	Back Side
Band	5.8G WLAN ANT_A
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5795
Relative permittivity (real part)	36.46
Conductivity (S/m)	5.21

Maximum location: X=15.00, Y=-38.00
SAR Peak: 0.38 W/kg

SAR 10g (W/Kg)	0.101032
SAR 1g (W/Kg)	0.165763

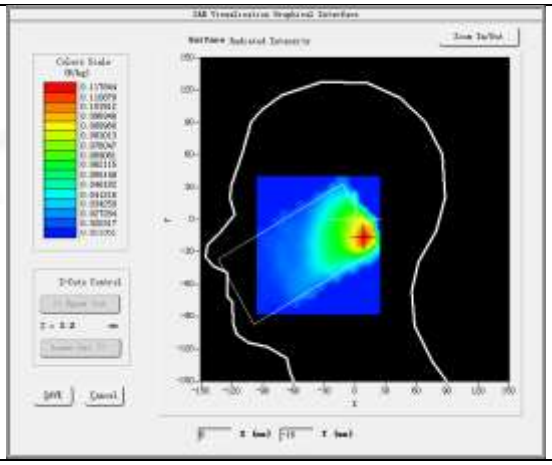
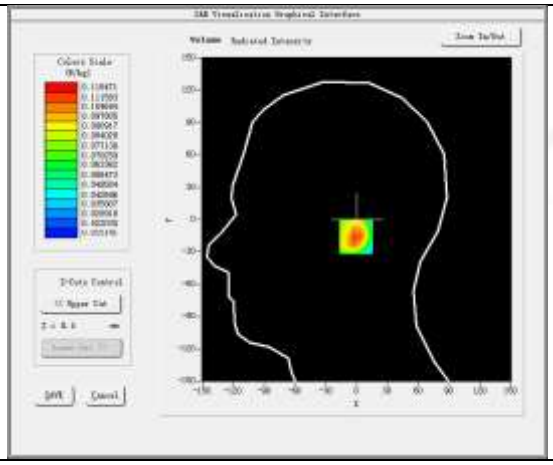
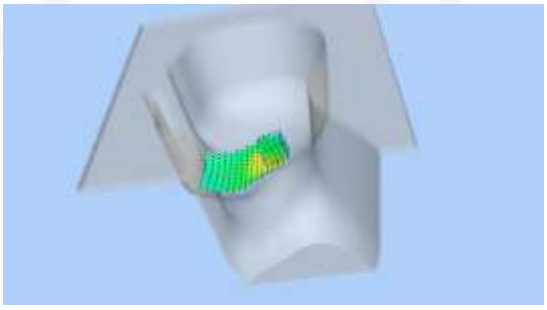
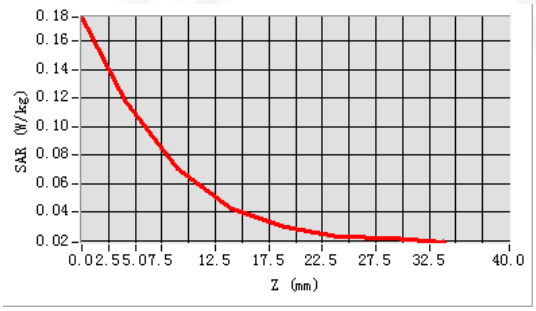
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 37: DUT: PDA; EUT Model: AS01

Test Date	2025-01-10
ConvF	1.80
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	Right Cheek
Device Position	Cheek
Band	2.4 WLAN ANT_B
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2462
Relative permittivity (real part)	39.65
Conductivity (S/m)	1.87

Maximum location: X=9.00, Y=-16.00
SAR Peak: 0.18 W/kg

SAR 10g (W/Kg)	0.064275
SAR 1g (W/Kg)	0.112034

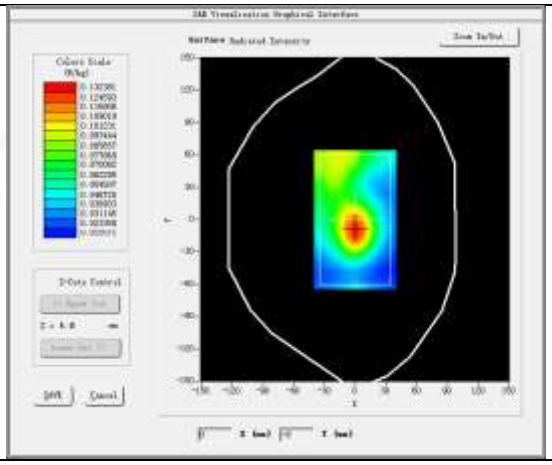
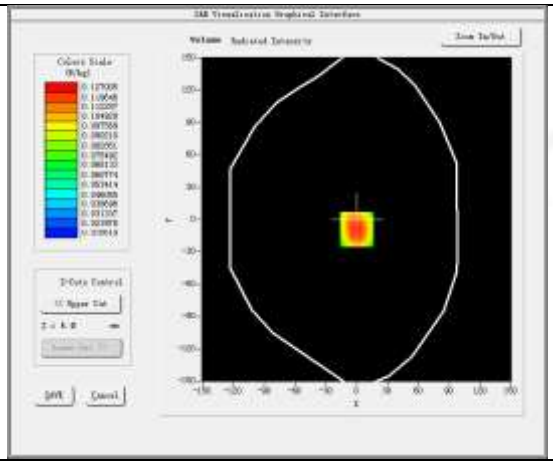
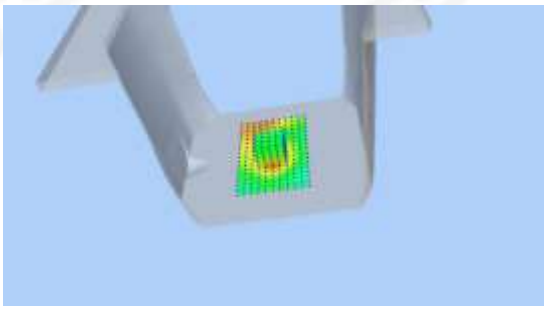
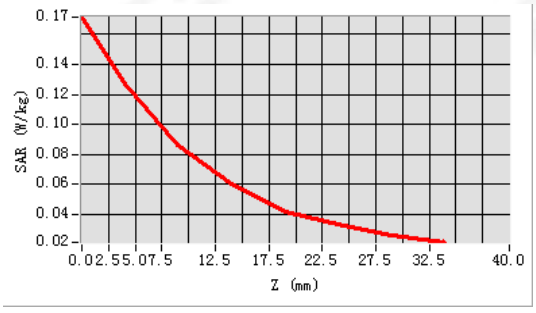
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 38: DUT: PDA; EUT Model: AS01

Test Date	2025-01-10
ConvF	1.80
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	Back Side
Band	2.4 WLAN ANT_B
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2462
Relative permittivity (real part)	39.65
Conductivity (S/m)	1.87

Maximum location: X=0.00, Y=-9.00
SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.078438
SAR 1g (W/Kg)	0.105267

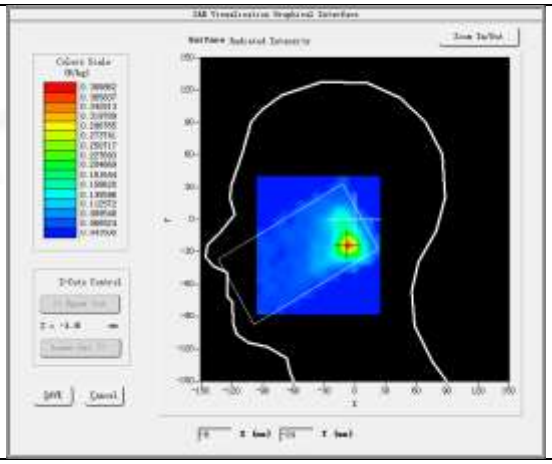
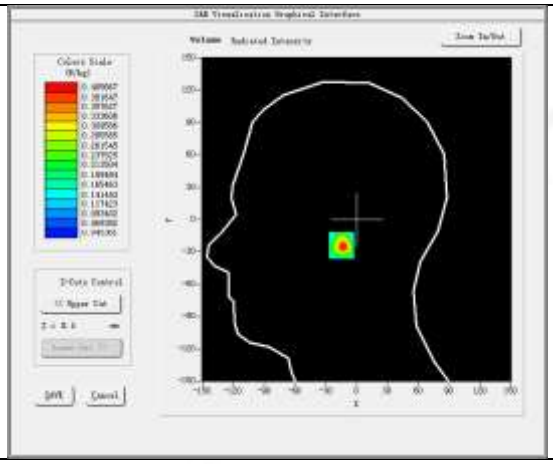
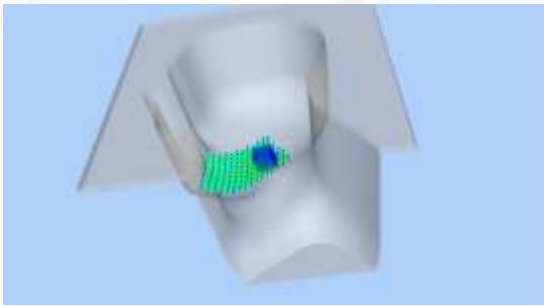
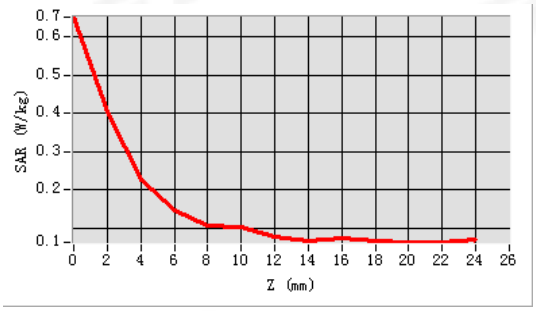
SURFACE SAR	VOLUME SAR
	
3D	**Z AZxis Scan**
	

Plot 39: DUT: PDA; EUT Model: AS01

Test Date	2025-01-12
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	Right Cheek
Device Position	Cheek
Band	5.2G WLAN ANT_B
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5250
Relative permittivity (real part)	36.80
Conductivity (S/m)	4.72

Maximum location: X=-7.00, Y=-24.00
SAR Peak: 1.00 W/kg

SAR 10g (W/Kg)	0.164404
SAR 1g (W/Kg)	0.391181

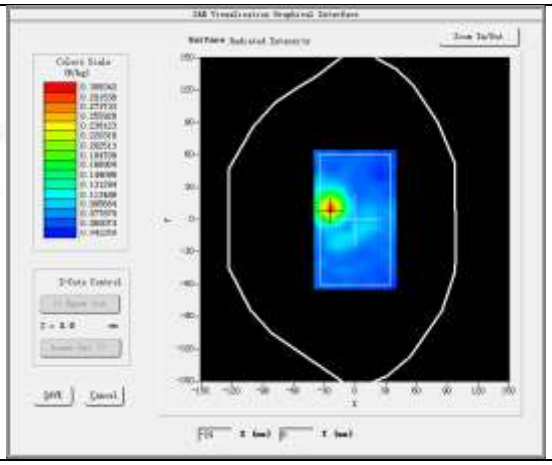
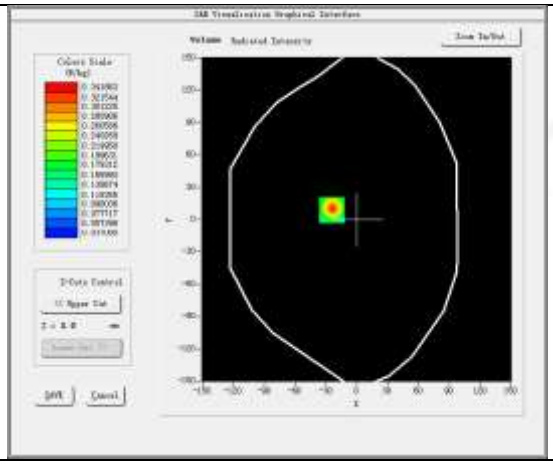
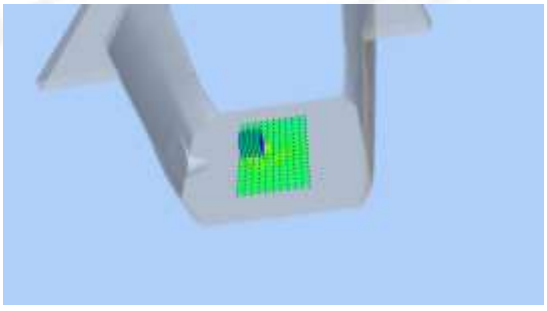
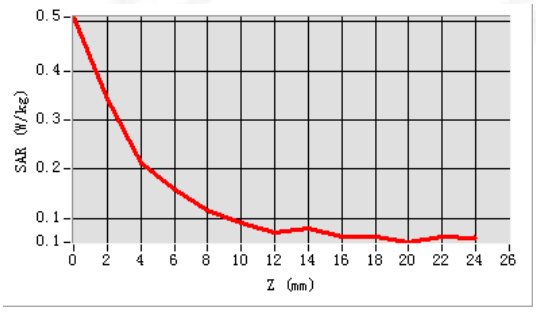
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 40: DUT: PDA; EUT Model: AS01

Test Date	2025-01-12
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	Back Side
Band	5.2G WLAN ANT_B
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5250
Relative permittivity (real part)	36.80
Conductivity (S/m)	4.72

Maximum location: X=-24.00, Y=9.00
SAR Peak: 0.53 W/kg

SAR 10g (W/Kg)	0.115834
SAR 1g (W/Kg)	0.207730

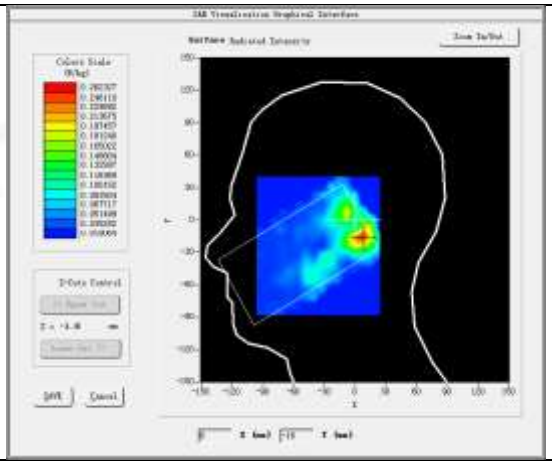
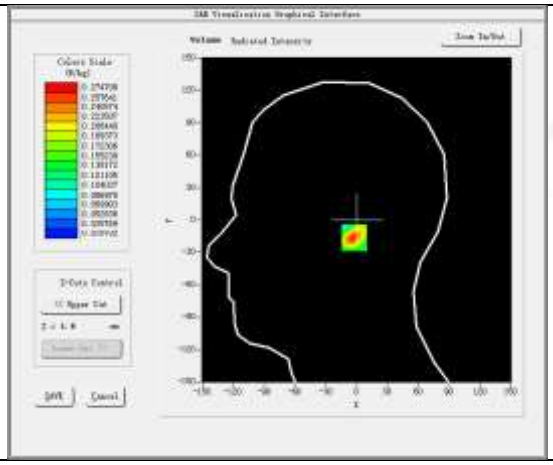
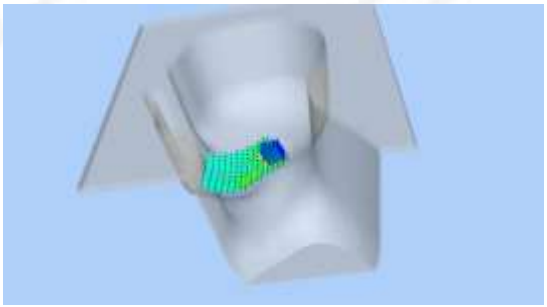
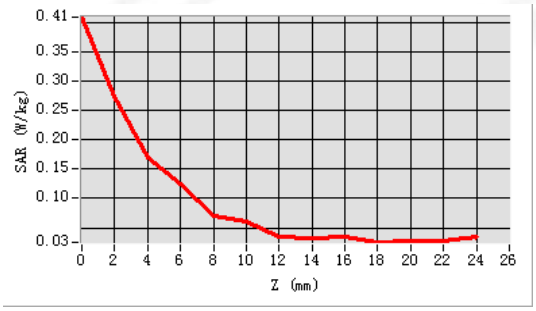
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 41: DUT: PDA; EUT Model: AS01

Test Date	2025-01-12
ConvF	1.31
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	Right Cheek
Device Position	Cheek
Band	5.3G WLAN ANT_B
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5310
Relative permittivity (real part)	35.90
Conductivity (S/m)	4.73

Maximum location: X=6.00, Y=-16.00
SAR Peak: 0.60 W/kg

SAR 10g (W/Kg)	0.110763
SAR 1g (W/Kg)	0.207037

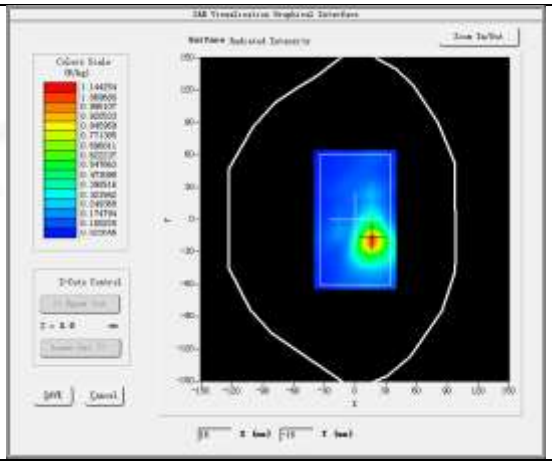
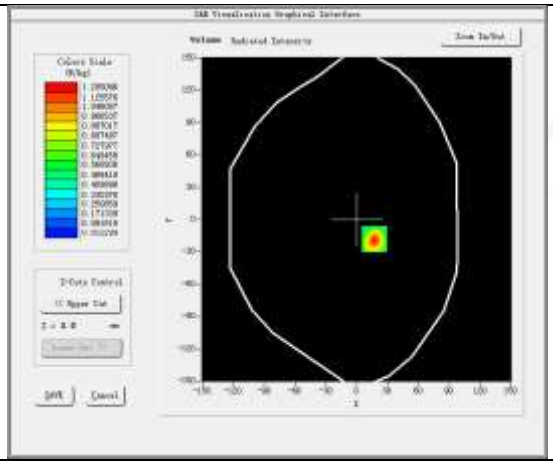
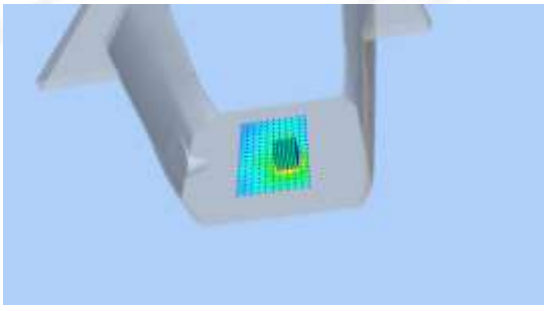
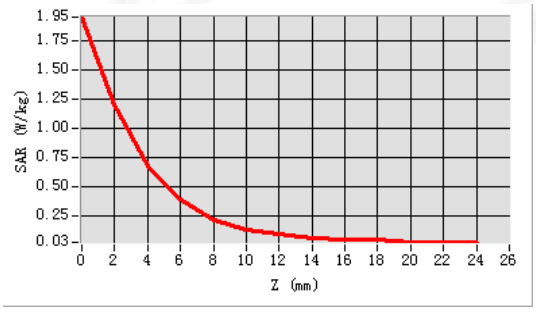
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 42: DUT: PDA; EUT Model: AS01

Test Date	2025-01-12
ConvF	1.31
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	Back Side
Band	5.3G WLAN ANT_B
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5310
Relative permittivity (real part)	35.90
Conductivity (S/m)	4.73

Maximum location: X=8.00, Y=-17.00
SAR Peak: 0.45 W/kg

SAR 10g (W/Kg)	0.097168
SAR 1g (W/Kg)	0.205142

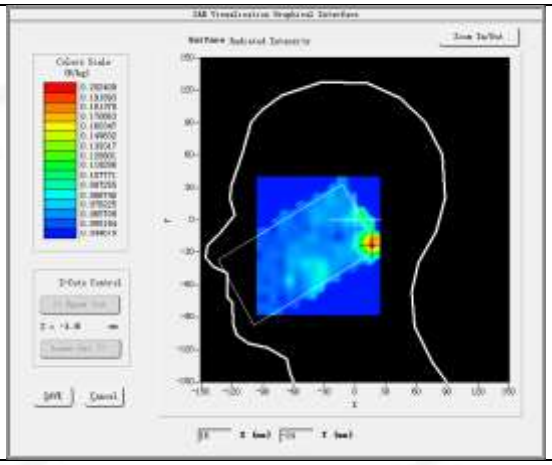
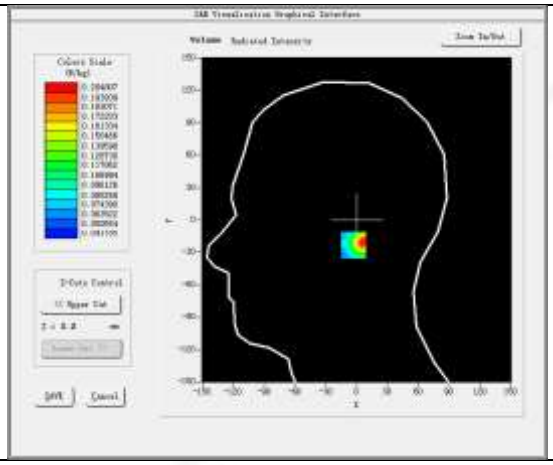
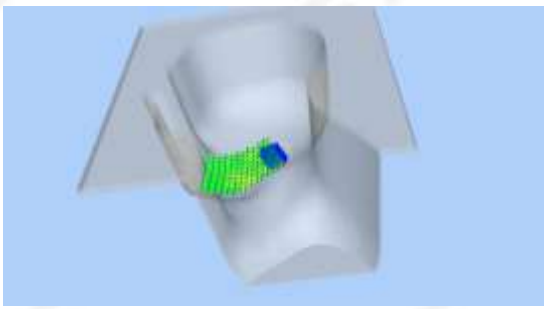
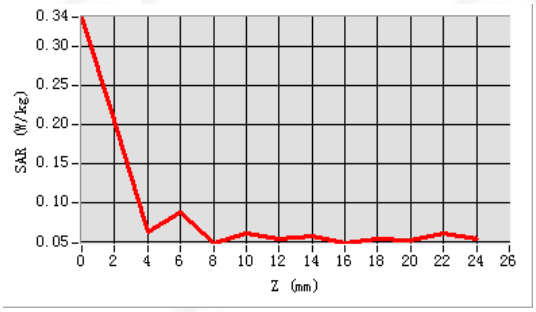
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 43: DUT: PDA; EUT Model: AS01

Test Date	2025-01-13
ConvF	1.24
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	Right Cheek
Device Position	Cheek
Band	5.6G WLAN ANT_B
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5510
Relative permittivity (real part)	36.49
Conductivity (S/m)	4.91

Maximum location: X=8.00, Y=-23.00
SAR Peak: 0.45 W/kg

SAR 10g (W/Kg)	0.098470
SAR 1g (W/Kg)	0.174111

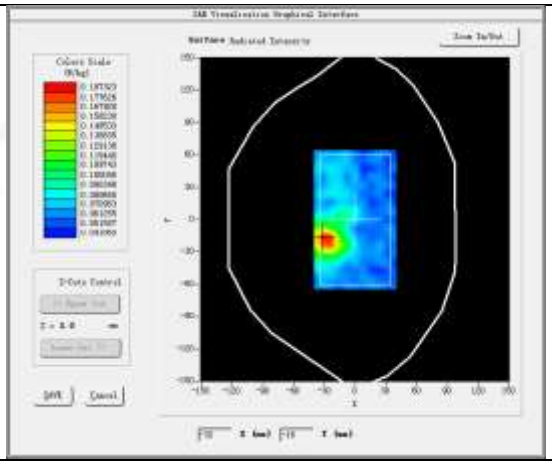
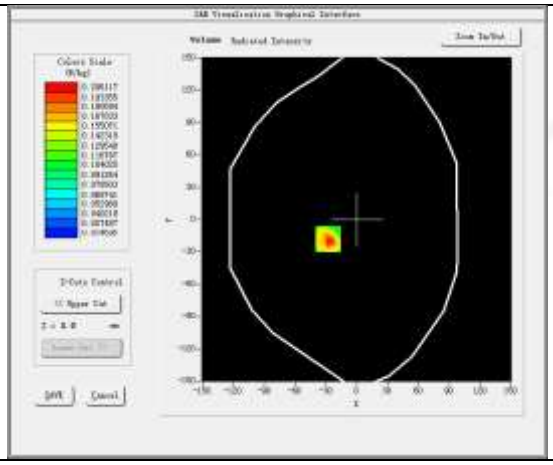
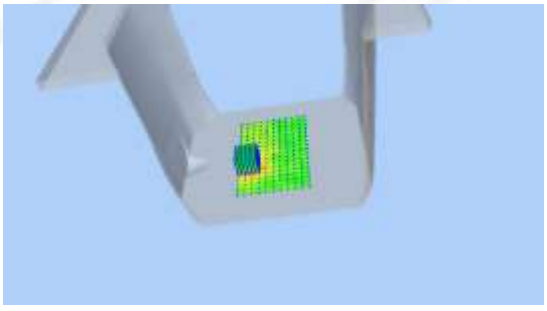
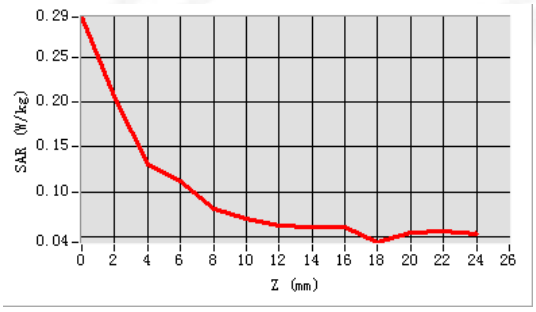
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 44: DUT: PDA; EUT Model: AS01

Test Date	2025-01-13
ConvF	1.24
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	Back Side
Band	5.6G WLAN ANT_B
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5510
Relative permittivity (real part)	36.49
Conductivity (S/m)	4.91

Maximum location: X=-28.00, Y=-18.00
SAR Peak: 0.33 W/kg

SAR 10g (W/Kg)	0.086415
SAR 1g (W/Kg)	0.117954

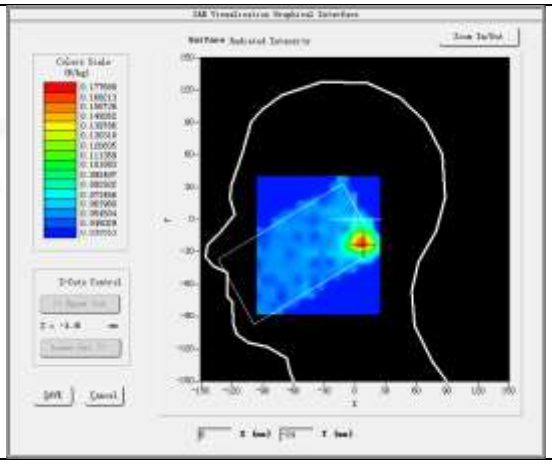
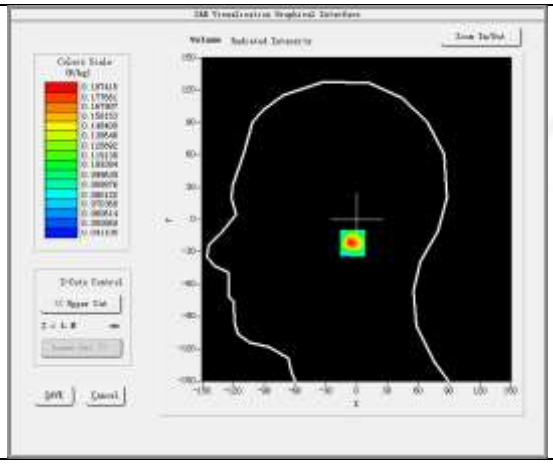
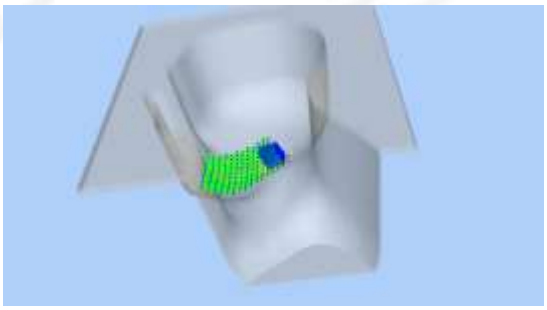
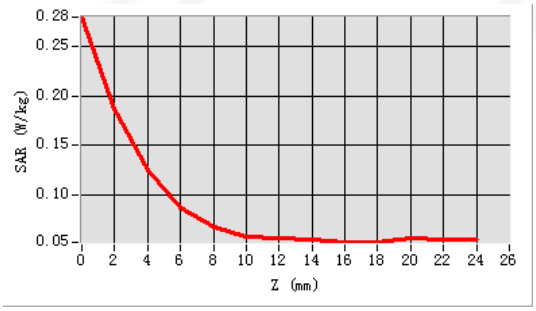
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 45: DUT: PDA; EUT Model: AS01

Test Date	2025-01-13
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	Right Cheek
Device Position	Cheek
Band	5.8G WLAN ANT_B
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5795
Relative permittivity (real part)	36.46
Conductivity (S/m)	5.21

Maximum location: X=6.00, Y=-22.00
SAR Peak: 0.43 W/kg

SAR 10g (W/Kg)	0.095233
SAR 1g (W/Kg)	0.183077

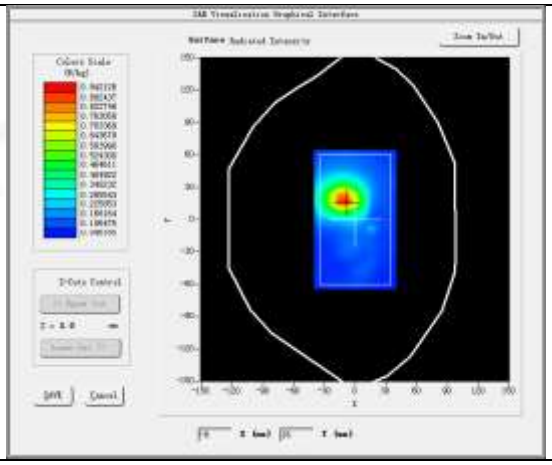
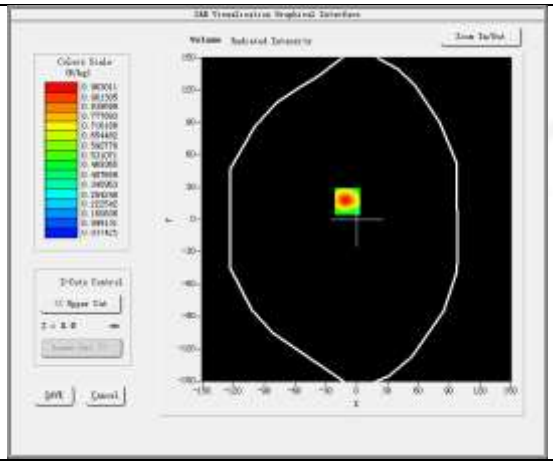
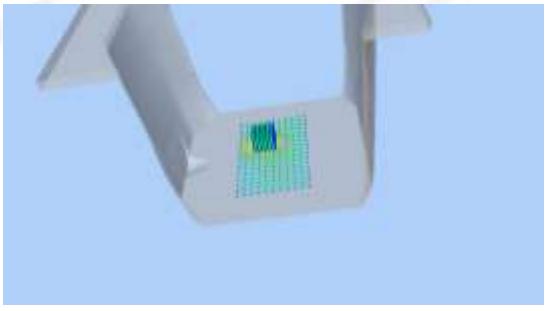
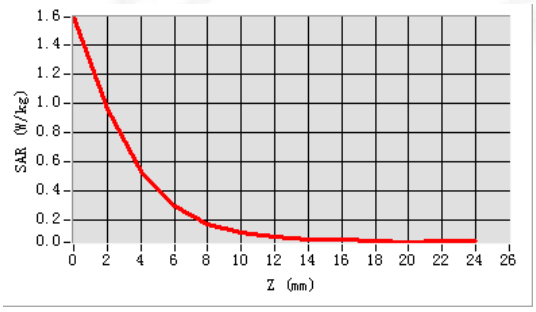
SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Plot 46: DUT: PDA; EUT Model: AS01

Test Date	2025-01-13
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	Back Side
Band	5.8G WLAN ANT_B
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5795
Relative permittivity (real part)	36.46
Conductivity (S/m)	5.21

Maximum location: X=-9.00, Y=17.00
SAR Peak: 1.68 W/kg

SAR 10g (W/Kg)	0.257390
SAR 1g (W/Kg)	0.584257

SURFACE SAR	VOLUME SAR
	
3D	**Z Axis Scan**
	

Appendix C. Probe Calibration and Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※※END OF THE REPORT※※※※※