FCC SAR TEST REPORT

Report No.: STS2207076H01

Issued for

Freecell

Efal 35, petah Tikvah, Israel

Product Name:	Electronic bracelet
Brand Name:	Freecell
Model Name:	Bracelet
Series Model:	N/A
FCC ID:	2A8J9-ADS1M1
Test Standard:	ANSI/IEEE Std. C95.1
	FCC 47 CFR Part 2 (2.1093)
	IEEE 1528: 2013
Max. Report SAR:	Wrist: 0.217 W/kg

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
TEL: +86-755 3688 6288 FAX: +86-755 3688 6277 E-mail:sts@stsapp.com

Test Report Certification

Applicant's name ..... : Freecell

Address ..... : Efal 35, petah Tikvah, Israel

Manufacture's Name..... : Freecell

Address ..... : Efal 35, petah Tikvah, Israel

Product description

Product name ..... : Electronic bracelet

Brand name ..... : Freecell

Model name..... : Bracelet

Series Model..... : N/A

Standards ..... : ANSI/IEEE Std. C95.1-1992
FCC 47 CFR Part 2 (2.1093)
IEEE 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 .....: 12 Aug. 2022~ 18 Aug. 2022

Date of Issue.....: 19 Aug. 2022

Test Result.....: **Pass**

Testing Engineer **:** Shi fan. long

((Shifan. Long)

Technical Manager **:** Sean She

(Sean she)

Authorized Signatory **:** Bovey Yang

(Bovey Yang)

Table of Contents

Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	19 Aug. 2022	STS2207076H01	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	Electronic bracelet		
Brand Name	Freecell		
Model Name	Bracelet		
Series Model	N/A		
Model Difference	N/A		
Battery	Rated Voltage: 3.6 Charge Limit Voltage: 4.2 Capacity: 4400mAh		
Device Category	Portable		
Product stage	Production unit		
Exposure Environment	General Population / Uncontrolled		
Hardware Version	1.0		
Software Version	1.0		
Frequency Range	GSM 850: 824 MHz ~ 849 MHz PCS1900: 1850 MHz ~ 1910 MHz CAT-M FDD Band 2: 1850MHz ~ 1910 MHz CAT-M FDD Band 4: 1710 MHz ~ 1755 MHz CAT-M FDD Band 12: 699MHz ~ 716 MHz CAT-M FDD Band 13: 775 MHz ~ 785 MHz CAT-M FDD Band 26: 814 MHz ~ 824 MHz NB-IOT FDD Band 2: 1850MHz ~ 1910 MHz NB-IOT FDD Band 12: 699MHz ~ 716 MHz NB-IOT FDD Band 13: 775 MHz ~ 785 MHz NB-IOT FDD Band 26: 814 MHz ~ 824 MHz		
Max. Reported SAR	Band	Mode	Wrist-10g (W/kg)
	PCT	GSM850	0.133
	PCT	GSM1900	0.159
	PCT	NB-IOT FDD Band 2	0.049
	PCT	NB-IOT FDD Band 12	0.096
	PCT	NB-IOT FDD Band 13	0.099
	PCT	NB-IOT FDD Band 26	0.071
	PCT	CAT-M FDD Band 2	0.050
	PCT	CAT-M FDD Band 4	0.107
	PCT	CAT-M FDD Band 12	0.217
	PCT	CAT-M FDD Band 13	0.178
	PCT	CAT-M FDD Band 26	0.133
Limit(W/kg)			4 W/Kg
FCC Equipment Class	PCS Licensed Transmitter worn on body (PCT)		
Operating Mode	GSM: GPRS/EGPRS Class 12 LTE: QPSK,16QAM		
Antenna Specification	GSM/LTE: Ceramic Antenna		
SIM Card	Support single card		
Note: 1、The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power			

1.2 Test Environment

Ambient conditions in the SAR laboratory:

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

1.3 Test Factory

SHENZHEN STS TEST SERVICES CO.,LTD.

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 D01v01r04	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
7	FCC KDB 941225 D05 v02r05	SAR for LTE Devices
8	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
9	FCC KDB 248227 D01 Wi-Fi SAR v02r02	SAR Considerations for 802.11 Devices

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

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

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

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

Note: Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram 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(1g)
PARTIAL WRIST LIMIT
4.0 W/kg(10g)

3. SAR Measurement System

3.1 Definition Of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

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

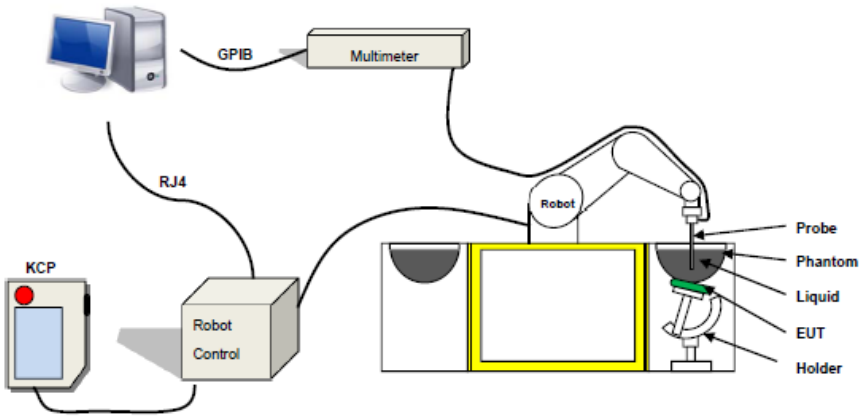
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

3.2 SAR System

MVG SAR System Diagram:



COMOSAR is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The COMOSAR system consists of the following items:
- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.

The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR 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 07/21 EPGO352 with following specifications is used

- Probe Length: 330 mm
- Length of Individual Dipoles: 2mm
- 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

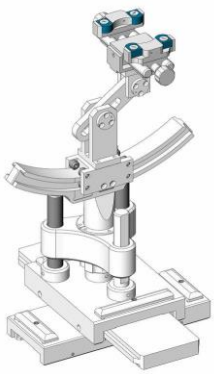
3.2.2 Phantom

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.

Figure-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

4.1 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
835	41.5	55.2	0.90	0.97
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
1900	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

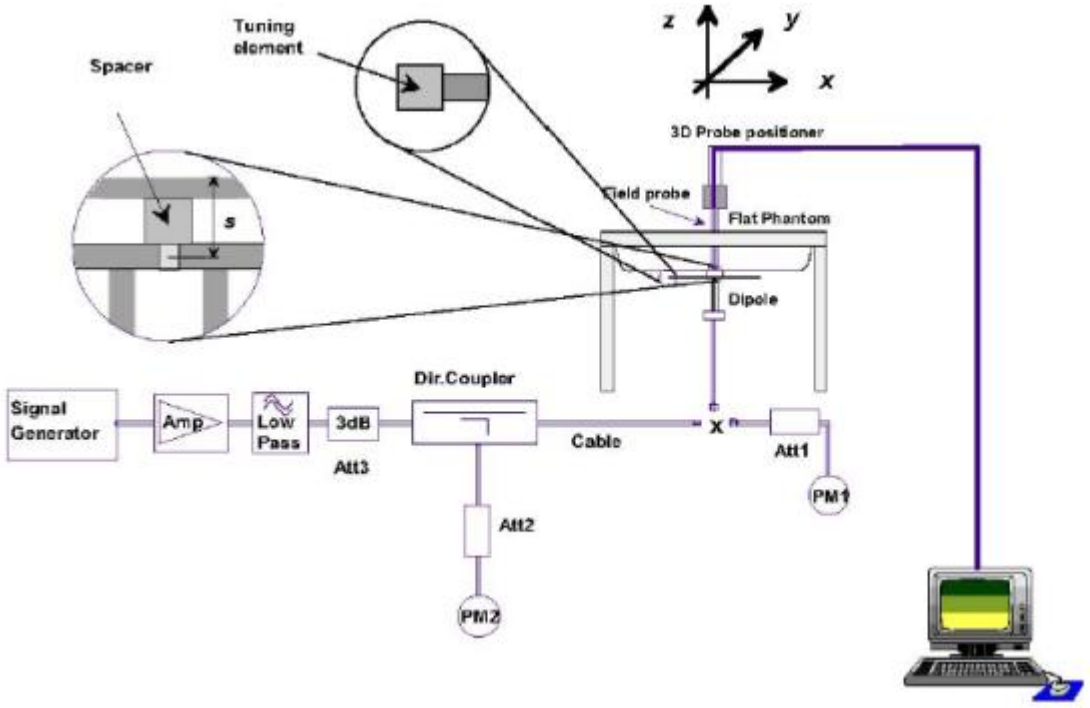
Date	Ambient		Simulating Liquid		Parameters	Target	Measured	Deviation %	Limited %
	Temp. [°C]	Humidity %	Frequency (MHz)	Temp. [°C]					
2022-08-12	22.0	50	704	21.7	Permittivity	42.12	42.51	0.93	±5
					Conductivity	0.88	0.89	1.14	±5
2022-08-12	22.2	52	707.5	21.9	Permittivity	42.13	42.50	0.88	±5
					Conductivity	0.89	0.86	-3.37	±5
2022-08-12	22.2	53	711	21.9	Permittivity	42.11	43.39	3.04	±5
					Conductivity	0.89	0.85	-4.49	±5
2022-08-12	22.3	42	750	22.0	Permittivity	41.90	42.30	0.95	±5
					Conductivity	0.89	0.91	2.25	±5
2022-08-12	22.5	51	782	22.2	Permittivity	41.73	42.32	1.41	±5
					Conductivity	0.89	0.90	1.12	±5
2022-08-15	23.3	46	831.5	23.0	Permittivity	41.52	41.79	0.65	±5
					Conductivity	0.90	0.91	1.11	±5
2022-08-15	23.2	50	835	23.0	Permittivity	41.50	42.04	1.30	±5
					Conductivity	0.90	0.91	1.11	±5
2022-08-15	23.4	53	836.6	23.2	Permittivity	41.47	41.62	0.36	±5
					Conductivity	0.90	0.92	2.22	±5
2022-08-16	22.9	46	1745	22.6	Permittivity	40.08	40.62	1.35	±5
					Conductivity	1.37	1.41	2.92	±5
2022-08-16	23.2	47	1800	22.9	Permittivity	40.00	40.73	1.82	±5
					Conductivity	1.40	1.42	1.43	±5
2022-08-17	22.3	54	1850.2	22.0	Permittivity	40.00	40.59	1.48	±5
					Conductivity	1.40	1.41	0.71	±5
2022-08-17	22.5	53	1880	22.2	Permittivity	40.00	41.00	2.50	±5
					Conductivity	1.40	1.35	-3.57	±5
2022-08-17	22.1	51	1900	21.9	Permittivity	40.00	40.45	1.13	±5
					Conductivity	1.40	1.37	-2.14	±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)	(%)	(%)
2022-08-12	750	100	0.853	8.53	8.49	0.47	10
2022-08-15	835	100	0.964	9.64	9.56	0.84	10
2022-08-16	1800	100	3.873	38.73	38.40	0.86	10
2022-08-17	1900	100	3.997	39.97	39.70	0.68	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:

-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 D01v01r01 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.

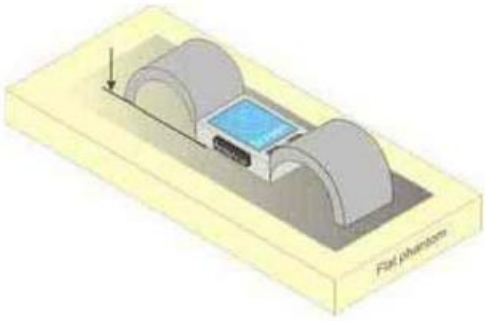
7. EUT Test Position

This EUT was tested in Rear Face.

Limb-worn Position Conditions

Transmitters that are built-in within a wrist watch or similar wrist-worn devices typically operate in speaker mode for voice communication, with the device worn on the wrist and positioned next to the mouth. Next to the mouth exposure requires 1-g SAR and the wrist-worn condition requires 10-g extremity SAR

(1) Next to the mouth use is evaluated with the front of the device positioned at 10 mm from a flat phantom filled with head tissue-equivalent medium



Test position for limb-worn devices

8. 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.

Uncertainty Component	Tol. (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System								
Probe calibration	5.86	N	1	1	1	5.86	5.86	∞
Axial Isotropy	0.16	R	√3	√0.5	√0.5	0.07	0.07	∞
Hemispherical Isotropy	1.06	R	√3	√0.5	√0.5	0.43	0.43	∞
Boundary effect	1	R	√3	1	1	0.58	0.58	∞
Linearity	1.27	R	√3	1	1	0.73	0.73	∞
System detection limits	1.23	R	√3	1	1	0.71	0.71	∞
Modulation response	3.6	R	√3	1	1	3.60	3.60	∞
Readout Electronics	0.28	N	1	1	1	0.28	0.28	∞
Response Time	0.19	R	√3	1	1	0.11	0.11	∞
Integration Time	1.47	R	√3	1	1	0.85	0.85	∞
RF ambient conditions-Noise	3.5	R	√3	1	1	2.02	2.02	∞
RF ambient conditions-reflections	3.2	R	√3	1	1	1.85	1.85	∞
Probe positioner mechanical tolerance	1.4	R	√3	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	1.4	R	√3	1	1	0.81	0.81	∞
Post-processing	2.3	R	√3	1	1	1.33	1.33	∞
Test sample Related								
Test sample positioning	3.1	N	1	1	1	3.10	3.10	∞
Device holder uncertainty	3.8	N	1	1	1	3.80	3.80	∞
SAR drift measurement	4.8	R	√3	1	1	2.77	2.77	∞
SAR scaling	2	R	√3	1	1	1.15	1.15	∞
Phantom and tissue parameters								
Phantom uncertainty (shape and thickness uncertainty)	4	R	√3	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	2	N	1	1	0.84	2.00	1.68	∞
Liquid conductivity (temperature uncertainty)	2.5	R	√3	0.78	0.71	1.95	1.78	∞
Liquid conductivity (measured)	4	N	1	0.78	0.71	0.92	1.04	M
Liquid permittivity (temperature uncertainty)	2.5	R	√3	0.23	0.26	1.95	1.78	∞
Liquid permittivity (measured)	5	N	1	0.23	0.26	1.15	1.30	M
Combined Standard Uncertainty		RSS				10.60	10.51	
Expanded Uncertainty (95% Confidence interval)		K=2				21.21	21.03	

9. Conducted Power Measurement

9.1 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
GPRS (GMSK,1-Slot)	32.19	32.25	32.31	29.49	29.33	29.28
GPRS (GMSK, 2-Slot)	31.72	31.75	31.82	29.02	28.84	28.85
GPRS (GMSK, 3-Slot)	31.27	31.29	31.34	28.54	28.41	28.43
GPRS (GMSK, 4-Slot)	30.83	30.89	30.87	28.07	27.98	27.95
EGPRS(8PSK, 1-Slot)	26.31	26.37	26.31	25.09	25.03	24.96
EGPRS(8PSK, 2-Slot)	25.53	25.65	25.52	24.37	24.26	24.16
EGPRS(8PSK, 3-Slot)	24.80	24.86	24.75	23.58	23.50	23.39
EGPRS(8PSK, 4-Slot)	24.07	24.15	24.02	22.84	22.71	22.62
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
GPRS (GMSK,1-Slot)	23.16	23.22	23.28	20.46	20.30	20.25
GPRS (GMSK, 2-Slot)	25.70	25.73	25.80	23.00	22.82	22.83
GPRS (GMSK, 3-Slot)	27.01	27.03	27.08	24.28	24.15	24.17
GPRS (GMSK, 4-Slot)	27.82	27.88	27.86	25.06	24.97	24.94
EGPRS(8PSK, 1-Slot)	17.28	17.34	17.28	16.06	16.00	15.93
EGPRS(8PSK, 2-Slot)	19.51	19.63	19.50	18.35	18.24	18.14
EGPRS(8PSK, 3-Slot)	20.54	20.60	20.49	19.32	19.24	19.13
EGPRS(8PSK, 4-Slot)	21.06	21.14	21.01	19.83	19.70	19.61
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						

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.

Radiated Power (EIRP) for CAT-M Band 2						
BW (MHz)	RB Size	RB offset	Modulation	Lowest	Middle	Highest
1.4	1	0	QPSK	22.78	23.05	22.65
	6	0		22.59	22.93	22.53
	1	0	16-QAM	22.47	22.79	22.46
	5	0		22.34	22.69	22.37
3	1	0	QPSK	22.69	22.91	22.55
	6	0		22.65	22.83	22.49
	1	0	16-QAM	22.59	22.71	22.34
	5	0		22.42	22.65	22.21
5	1	0	QPSK	22.92	23.12	23.04
	6	0		22.88	23.11	22.99
	1	0	16-QAM	22.68	23.03	22.85
	5	0		22.6	22.95	22.72
10	1	0	QPSK	23.04	22.56	22.3
	6	0		23.03	22.48	22.13
	1	0	16-QAM	23.03	22.33	22.05
	5	0		22.86	22.13	21.95
15	1	0	QPSK	22.71	22.58	22.59
	6	0		22.69	22.49	22.43
	1	0	16-QAM	22.64	22.38	22.43
	5	0		22.61	22.24	22.26
20	1	0	QPSK	22.79	22.7	23.15
	6	0		22.6	22.68	22.96
	1	0	16-QAM	22.52	22.66	22.93
	5	0		22.32	22.53	22.9

Radiated Power (EIRP) for CAT-M Band 4						
BW (MHz)	RB Size	RB offset	Modulation	Lowest	Middle	Highest
1.4	1	0	QPSK	22.48	22.34	22.19
	6	0		22.45	22.20	22.12
	1	0	16-QAM	22.43	22.17	22.01
	5	0		22.29	22.02	21.88
3	1	0	QPSK	22.68	22.56	22.31
	6	0		22.59	22.45	22.22
	1	0	16-QAM	22.45	22.30	22.08
	5	0		22.27	22.23	21.92
5	1	0	QPSK	22.95	23.06	23.19
	6	0		22.78	23.06	23.12
	1	0	16-QAM	22.61	23.04	23.00
	5	0		22.52	23.01	22.89
10	1	0	QPSK	22.76	22.93	22.99
	6	0		22.74	22.75	22.85
	1	0	16-QAM	22.62	22.61	22.84
	5	0		22.62	22.41	22.67
15	1	0	QPSK	22.83	22.94	22.82
	6	0		22.76	22.80	22.68
	1	0	16-QAM	22.56	22.75	22.62
	5	0		22.55	22.70	22.51
20	1	0	QPSK	22.59	23.20	22.75
	6	0		22.53	23.06	22.64
	1	0	16-QAM	22.35	23.00	22.54
	5	0		22.30	22.93	22.50

Radiated Power (EIRP) for CAT-M Band 12						
BW (MHz)	RB Size	RB offset	Modulation	Lowest	Middle	Highest
1.4	1	0	QPSK	22.02	22.43	22.55
	6	0		21.91	22.36	22.45
	1	0	16-QAM	21.77	22.36	22.42
	5	0		21.72	22.32	22.31
3	1	0	QPSK	22.11	22.62	22.35
	6	0		21.94	22.49	22.23
	1	0	16-QAM	21.82	22.43	22.22
	5	0		21.73	22.27	22.11
5	1	0	QPSK	22.59	22.86	22.91
	6	0		22.44	22.73	22.87
	1	0	16-QAM	22.44	22.59	22.75
	5	0		22.27	22.49	22.66
10	1	0	QPSK	22.49	22.85	23.01
	6	0		22.37	22.72	22.92
	1	0	16-QAM	22.20	22.59	22.91
	5	0		22.20	22.59	22.83

Radiated Power (EIRP) for CAT-M Band 13						
BW (MHz)	RB Size	RB offset	Modulation	Lowest	Middle	Highest
5	1	0	QPSK	22.81	22.77	22.79
	6	0		22.80	22.77	22.78
	1	0	16-QAM	22.79	22.71	22.71
	5	0		22.60	22.65	22.56
10	1	0	QPSK	/	22.83	/
	6	0		/	22.82	/
	1	0	16-QAM	/	22.64	/
	5	0		/	22.46	/

LTE Band 26_Part 22S

Radiated Power (EIRP) for CAT-M Band 26 Part22						
BW (MHz)	RB Size	RB offset	Modulation	Lowest	Middle	Highest
1.4	1	0	QPSK	23.01	23.35	23.34
	6	0		22.95	23.25	23.30
	1	0	16-QAM	22.84	23.17	23.29
	5	0		22.77	23.14	23.29
3	1	0	QPSK	23.33	23.55	22.98
	6	0		23.16	23.37	22.86
	1	0	16-QAM	23.16	23.31	22.73
	5	0		23.10	23.17	22.61
5	1	0	QPSK	23.54	23.44	23.58
	6	0		23.49	23.41	23.51
	1	0	16-QAM	23.34	23.40	23.34
	5	0		23.32	23.34	23.23
10	1	0	QPSK	23.23	23.02	23.07
	6	0		23.21	22.86	22.87
	1	0	16-QAM	23.02	22.77	22.71
	5	0		22.91	22.60	22.52
15	1	0	QPSK	23.05	23.40	23.69
	6	0		22.95	23.28	23.54
	1	0	16-QAM	22.83	23.14	23.51
	5	0		22.77	22.98	23.33

LTE Band 26_Part 90S

Radiated Power (EIRP) for CAT-M Band 26 Part90						
BW (MHz)	RB Size	RB offset	Modulation	Lowest	Middle	Highest
1.4	1	0	QPSK	23.19	23.40	23.33
	6	0		23.11	23.20	23.31
	1	0	16-QAM	23.09	23.15	23.30
	5	0		22.95	23.05	23.14
3	1	0	QPSK	22.88	23.40	23.43
	6	0		22.72	23.25	23.25
	1	0	16-QAM	22.59	23.05	23.21
	5	0		22.45	22.95	23.05
5	1	0	QPSK	23.29	23.55	23.45
	6	0		23.22	23.48	23.36
	1	0	16-QAM	23.18	23.37	23.30
	5	0		23.12	23.34	23.14
10	1	0	QPSK	/	23.60	/
	6	0		/	23.50	/
	1	0	16-QAM	/	23.31	/
	5	0		/	23.27	/

NB-IoT Band 2 Maximum Average Power [dBm]					
Mode	**UL Channel**	**Modulation**	**Subcarrier Space (KHz)**	**RB Configure**	**Conduction AVG Power(dBm)**
Band 2 Standalone	Lowest	BPSK	3.75	1#0	20.31
				1#47	20.09
			15	1#0	19.88
				1#11	19.66
		QPSK	3.75	1#0	19.40
				1#47	19.19
			15	1#0	18.89
				1#11	20.08
				12#0	19.88
	Middle	BPSK	3.75	1#0	**23.74**
				1#47	23.48
			15	1#0	23.20
				1#11	22.98
		QPSK	3.75	1#0	22.74
				1#47	22.47
			15	1#0	22.26
				1#11	23.53
				12#0	23.26
	Highest	BPSK	3.75	1#0	20.08
				1#47	19.81
			15	1#0	19.51
				1#11	19.24
		QPSK	3.75	1#0	18.98
				1#47	18.74
			15	1#0	18.48
				1#11	19.88
				12#0	19.66

NB-IoT Band 12 Maximum Average Power [dBm]					
Mode	**UL Channel**	**Modulation**	**Subcarrier Space (KHz)**	**RB Configure**	**Conduction AVG Power(dBm)**
Band 12 Standalone	Lowest	BPSK	3.75	1#0	19.80
				1#47	19.58
			15	1#0	19.37
				1#11	19.11
		QPSK	3.75	1#0	18.82
				1#47	18.62
			15	1#0	18.38
				1#11	19.58
				12#0	19.34
	Middle	BPSK	3.75	1#0	**23.48**
				1#47	23.25
			15	1#0	23.05
				1#11	22.81
		QPSK	3.75	1#0	22.52
				1#47	22.31
			15	1#0	22.05
				1#11	23.18
				12#0	22.97
	Highest	BPSK	3.75	1#0	19.63
				1#47	19.37
			15	1#0	19.13
				1#11	18.90
		QPSK	3.75	1#0	18.63
				1#47	18.35
			15	1#0	18.08
				1#11	19.38
				12#0	19.14

NB-IoT Band 13 Maximum Average Power [dBm]					
Mode	**UL Channel**	**Modulation**	**Subcarrier Space (KHz)**	**RB Configure**	**Conduction AVG Power(dBm)**
Band 13 Standalone	Lowest	BPSK	3.75	1#0	19.79
				1#47	19.51
			15	1#0	19.30
				1#11	19.10
		QPSK	3.75	1#0	18.81
				1#47	18.60
			15	1#0	18.37
				1#11	19.50
				12#0	19.24
	Middle	BPSK	3.75	1#0	**23.47**
				1#47	23.20
			15	1#0	22.97
				1#11	22.70
		QPSK	3.75	1#0	22.44
				1#47	22.17
			15	1#0	21.89
				1#11	23.25
				12#0	23.02
	Highest	BPSK	3.75	1#0	19.71
				1#47	19.45
			15	1#0	19.17
				1#11	18.87
		QPSK	3.75	1#0	18.60
				1#47	18.32
			15	1#0	18.11
				1#11	19.42
				12#0	19.15

NB-IoT Band 26 Part22 Maximum Average Power [dBm]					
Mode	**UL Channel**	**Modulation**	**Subcarrier Space (KHz)**	**RB Configure**	**Conduction AVG Power(dBm)**
Band 26 Standalone	Lowest	BPSK	3.75	1#0	17.03
				1#47	16.76
			15	1#0	16.47
				1#11	16.20
		QPSK	3.75	1#0	15.93
				1#47	15.65
			15	1#0	15.45
				1#11	16.79
				12#0	16.51
	Middle	BPSK	3.75	1#0	**23.04**
				1#47	22.74
			15	1#0	22.45
				1#11	22.24
		QPSK	3.75	1#0	22.00
				1#47	21.77
			15	1#0	21.55
				1#11	22.76
				12#0	22.52
	Highest	BPSK	3.75	1#0	19.46
				1#47	19.21
			15	1#0	19.00
				1#11	18.75
		QPSK	3.75	1#0	18.46
				1#47	18.19
			15	1#0	17.99
				1#11	19.17
				12#0	18.95

NB-IoT Band 26 Part90 Maximum Average Power [dBm]					
Mode	**UL Channel**	**Modulation**	**Subcarrier Space (KHz)**	**RB Configure**	**Conduction AVG Power(dBm)**
Band 5 Standalone	Lowest	BP SK	3.75	1#0	19.90
				1#47	19.64
			15	1#0	19.40
				1#11	19.15
		QPSK	3.75	1#0	18.94
				1#47	18.72
			15	1#0	18.44
				1#11	19.68
				12#0	19.44
	Middle	BPSK	3.75	1#0	**23.17**
				1#47	22.92
			15	1#0	22.72
				1#11	22.48
		QPSK	3.75	1#0	22.28
				1#47	22.07
			15	1#0	21.81
				1#11	22.92
				12#0	22.69
	Highest	BPSK	3.75	1#0	16.92
				1#47	16.64
			15	1#0	16.41
				1#11	16.21
		QPSK	3.75	1#0	15.94
				1#47	15.67
			15	1#0	15.39
				1#11	16.72
				12#0	16.46

10. EUT And Test Setup Photo

10.1 EUT Photo

Front side

Back side

Top Edge

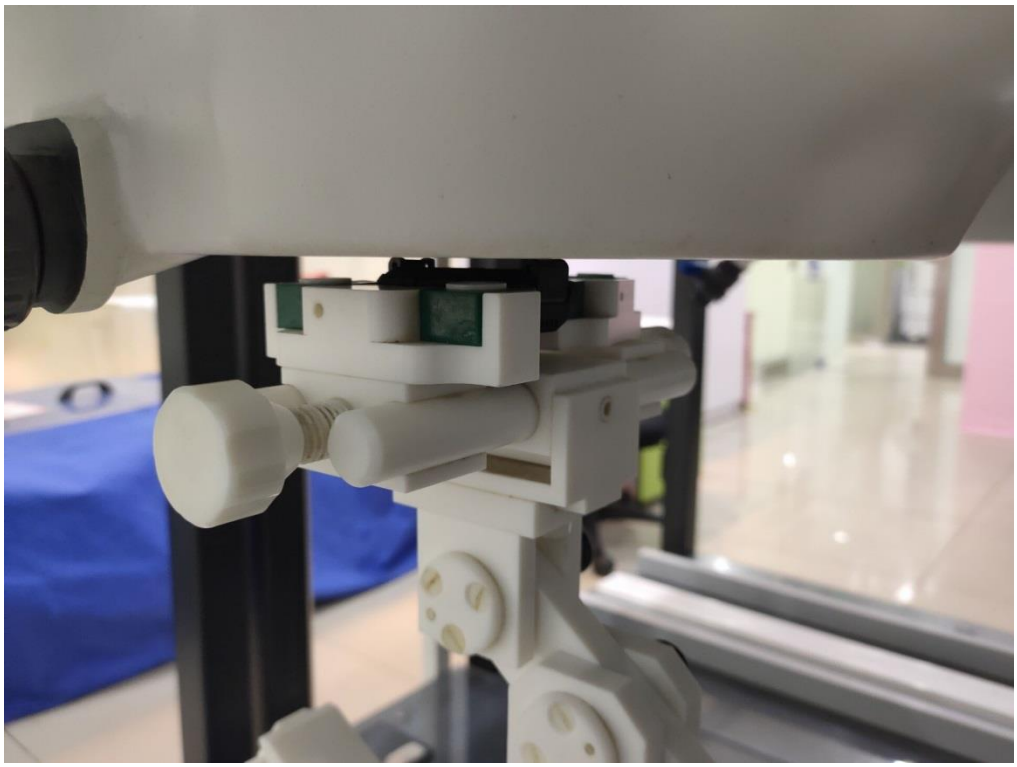
Bottom Edge

Left Edge

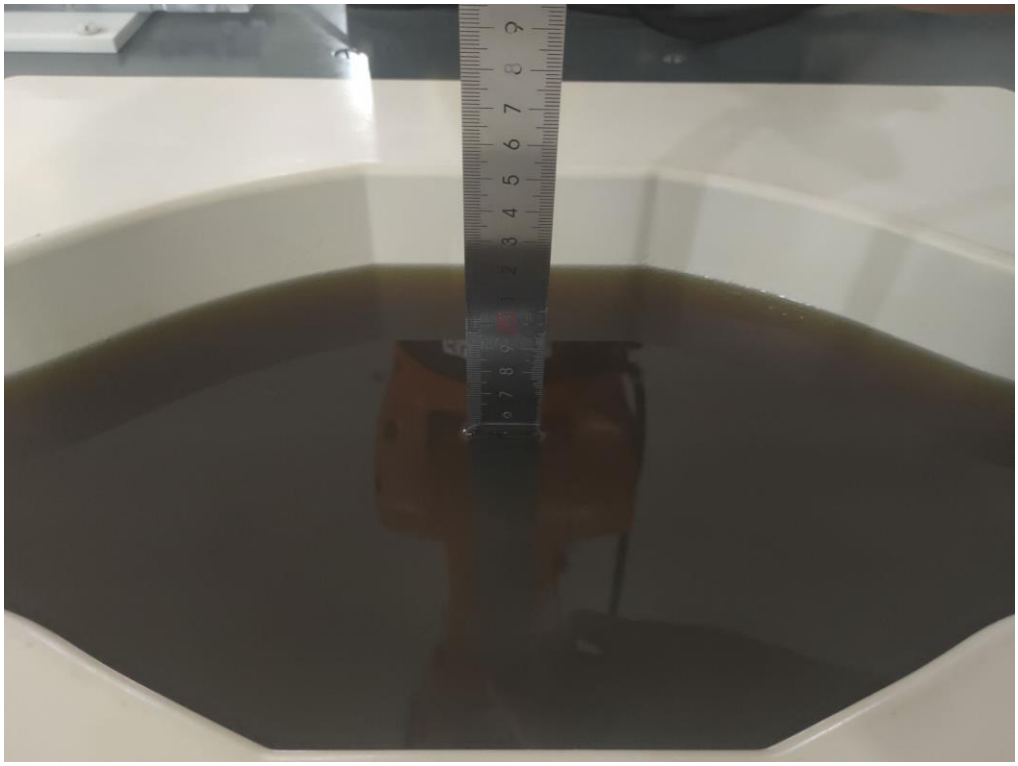
Right Edge

10.2 Setup Photo

Wrist(separation distance is 0mm)



Liquid depth (15 cm)



11. SAR Result Summary

11.1 Wrist SAR

Band	Model	Test Position	Freq.	SAR (10g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
GSM850	GPRS Data-4 Slot	Wrist	836.6	0.130	0.79	31.00	30.89	**0.133**	**1**
GSM1900	GPRS Data-4 Slot	Wrist	1850.2	0.144	2.80	28.50	28.07	**0.159**	**2**

Band	Mod.	Subcarrier Space (KHz)	RB Configure	Test Position	Freq.	Result 10g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
NB-IoT Band 2	BPSK	3.75	1#0	Wrist	1880	0.046	0.28	24.00	23.74	**0.049**	**3**
			1#47	Wrist	1880	0.042	0.27	24.00	23.48	0.047	/
NB-IoT Band 12	BPSK	3.75	1#0	Wrist	707.5	0.096	2.05	24.00	23.48	**0.108**	**4**
			1#47	Wrist	707.5	0.083	-1.58	24.00	23.25	0.099	/
NB-IoT Band 13	BPSK	3.75	1#0	Wrist	782	0.098	-1.89	24.00	23.47	**0.111**	**5**
			1#47	Wrist	782	0.079	0.83	24.00	23.2	0.095	**/**
NB-IoT Band 26	BPSK	3.75	1#0	Wrist	831.5	0.066	-3.04	24.00	23.17	**0.080**	**6**
			1#47	Wrist	831.5	0.053	1.49	24.00	22.92	0.068	/

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Result 10g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
CAT-M Band 2	20M	QPSK	1	0	Wrist	1900	0.046	3.38	23.5	23.15	**0.050**	**7**
			6	0	Wrist	1900	0.040	3.91	23.5	22.96	0.045	/
CAT-M Band 4	20M	QPSK	1	0	Wrist	1745	0.100	2.31	23.5	23.2	**0.107**	**8**
			6	0	Wrist	1745	0.092	2.09	23.5	23.06	0.102	/
CAT-M Band 12	10M	QPSK	1	0	Wrist	704	0.153	1.41	23.5	22.49	0.193	/
			1	0	Wrist	707.5	0.162	0.21	23.5	22.85	0.188	**/**
			1	0	Wrist	711	0.194	0.39	23.5	23.01	**0.217**	**9**
			6	0	Wrist	711	0.152	-1.36	23.5	22.92	0.174	/
CAT-M Band 13	10M	QPSK	1	0	Wrist	782	0.171	-1.32	23	22.83	**0.178**	**10**
			6	0	Wrist	782	0.135	2.76	23	22.82	0.141	/
CAT-M Band 26	15M	QPSK	1	0	Wrist	831.5	0.124	1.60	24	23.69	**0.133**	**11**
			6	0	Wrist	831.5	0.112	1.71	24	23.54	0.125	/

Note:

1. The test separation of all above table is 0mm.
2. Per KDB865664 D01, Repeated measurement is not required when the original highest measured SAR is <2.00 W/kg
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 ≤ 1.2 W/kg. (The highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power was **0.055** W/Kg for Body)

12. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
750MHz Dipole	MVG	SID750	SN 30/14 DIP0G750-331	2020.07.14	2023.07.13
835MHz Dipole	MVG	SID835	SN 30/14 DIP0G835-332	2020.07.14	2023.07.13
1800MHz Dipole	MVG	SID1800	SN 30/14 DIP1G800-329	2020.07.14	2023.07.13
1900MHz Dipole	MVG	SID1900	SN 30/14 DIP1G900-333	2020.07.14	2023.07.13
E-Field Probe	MVG	SSE2	SN 07/21 EPGO352	2022.02.28	2023.03.01
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2021.11.23	2022.11.22
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
Directional coupler	Narda	4226-20	3305	N/A	N/A
Network Analyzer	Agilent	8753ES	US38432810	2021.09.29	2022.09.28
Multi Meter	Keithley	Multi Meter 2000	4050073	2021.10.08	2022.10.07
Signal Generator	Agilent	N5182A	MY50140530	2021.09.30	2022.09.29
Wireless Communication Test Set	Agilent	8960-E5515C	MY48360751	2021.09.30	2022.09.29
Wireless Communication Test Set	R&S	CMW500	117239	2021.09.30	2022.09.29
Power Amplifier	DESAY	ZHL-42W	9638	2021.10.09	2022.10.08
Power Meter	R&S	NRP	100510	2021.09.29	2022.09.28
Power Sensor	R&S	NRP-Z11	101919	2021.09.29	2022.09.28
Temperature hygrometer	SuWei	SW-108	N/A	2021.10.09	2022.10.08
Thermograph	Elitech	RC-4	S/N EF7176501537	2021.10.09	2022.10.08
Network Analyzer	Agilent	8753ES	US38432810	2021.09.29	2022.09.28
Multi Meter	Keithley	Multi Meter 2000	4050073	2021.10.08	2022.10.07

Note:
Per KDB 865664 D01, Dipole SAR Validation Verification, STS LAB has adopted 3 years calibration intervals. On annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:
1. There is no physical damage on the dipole
2. System validation with specific dipole is within 10% of calibrated value
Return-loss in within 20% of calibrated measurement

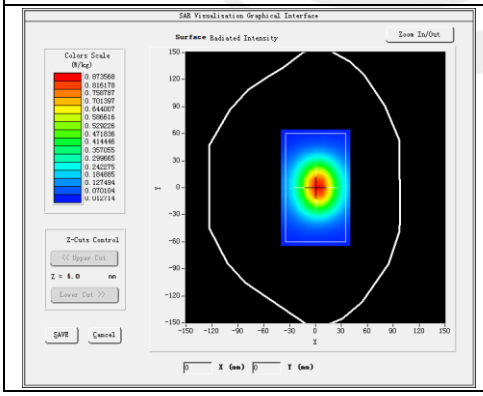
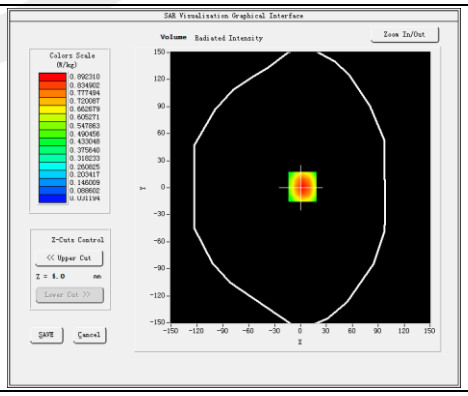
Appendix A. System Validation Plots

System Performance Check Data (750MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2022-08-12

Experimental conditions

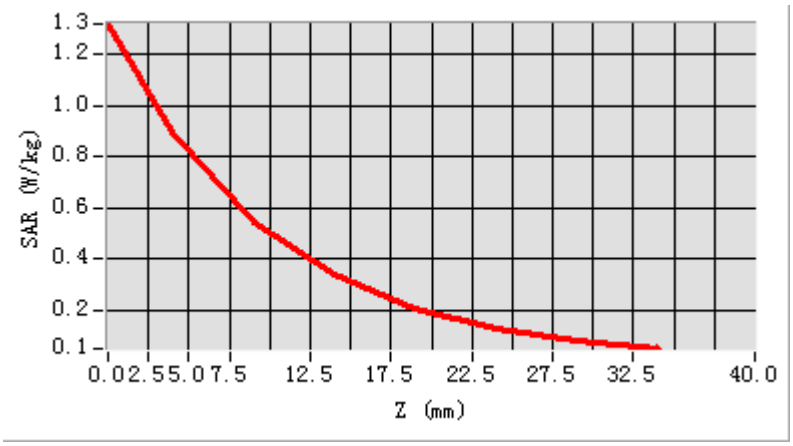
Phantom	Validation plane
Device Position	-
Band	750MHz
Channels	-
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity	42.30
Conductivity (S/m)	0.91
Probe	SN 07/21 EPGO352
ConvF	1.43
Crest factor	1:1

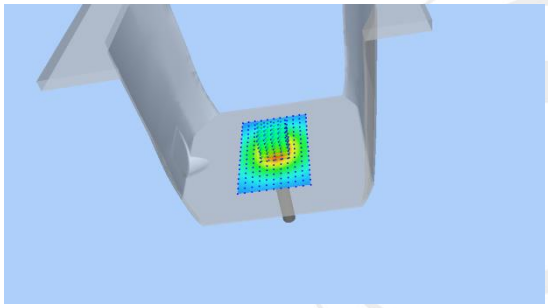
SURFACE SAR	VOLUME SAR
	

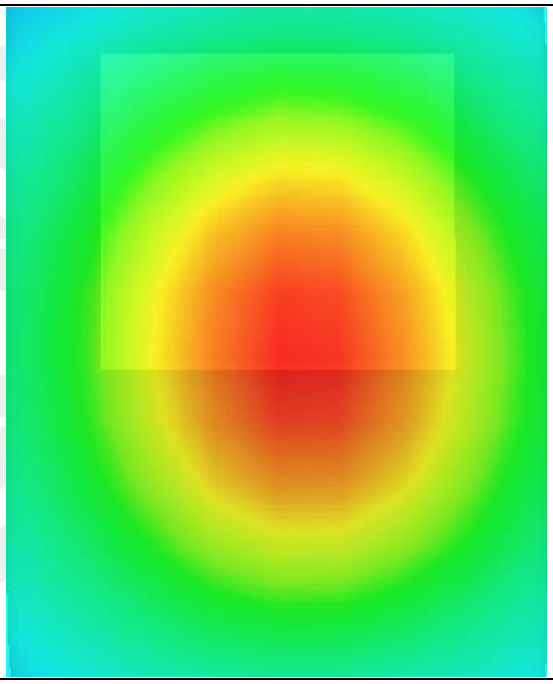
Maximum location: X=2.00, Y=1.00

SAR 10g (W/Kg)	0.531382
SAR 1g (W/Kg)	0.853277

Z Axis Scan


SAR (W/kg)
1.3
1.2
1.0
0.8
0.6
0.4
0.2
0.1
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)



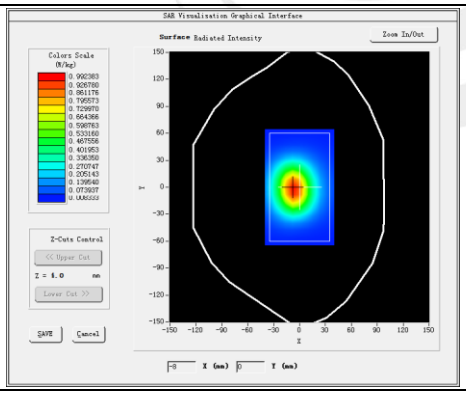
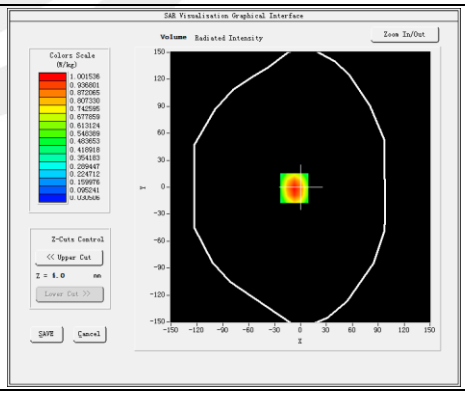


System Performance Check Data (835MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2022-08-15

Experimental conditions

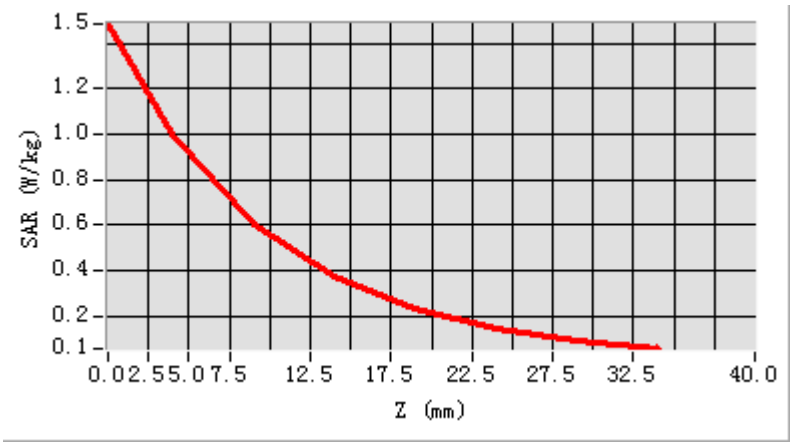
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity	42.04
Conductivity (S/m)	0.91
Probe	SN 07/21 EPGO352
ConvF:	1.48
Crest factor:	1:1

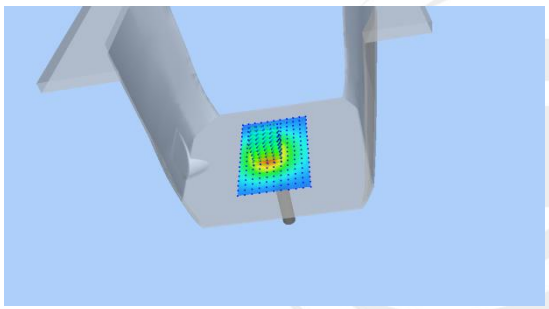
SURFACE SAR	VOLUME SAR
	

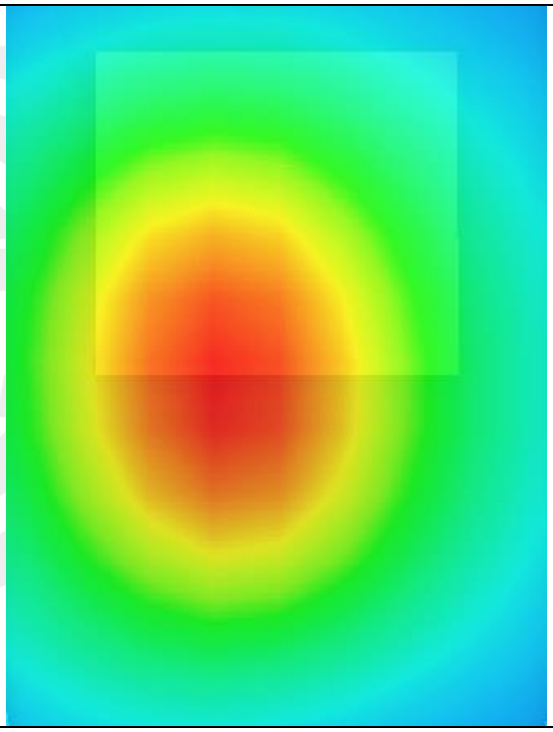
Maximum location: X=-7.00, Y=-1.00

SAR 10g (W/Kg)	0.582395
SAR 1g (W/Kg)	0.963827

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)



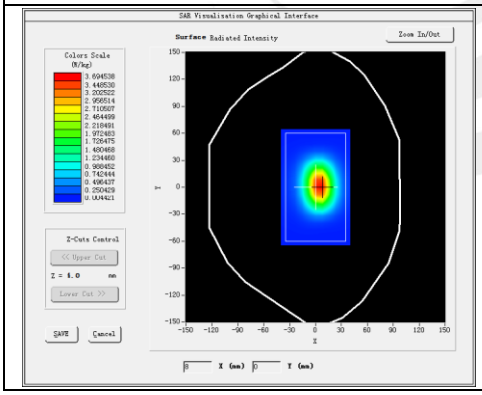
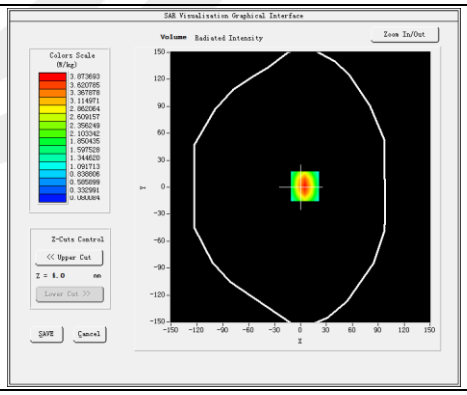


System Performance Check Data (1800MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2022-08-16

Experimental conditions.

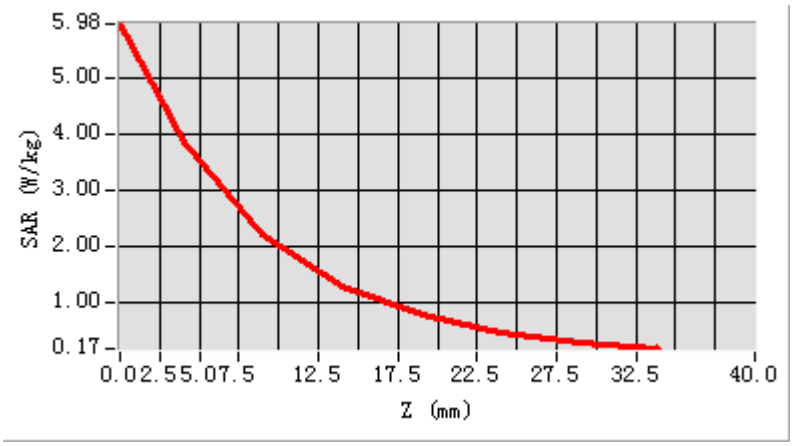
Phantom	Validation plane
Device Position	-
Band	1800MHz
Channels	-
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity	40.73
Conductivity (S/m)	1.42
Probe	SN 07/21 EPGO352
ConvF	1.60
Crest factor:	1:1

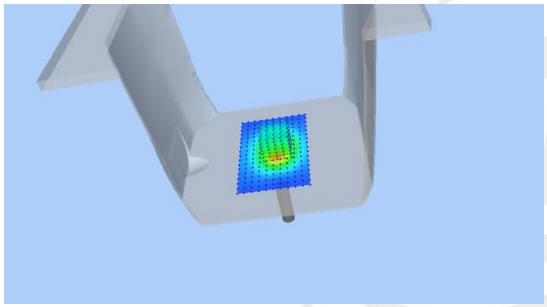
SURFACE SAR	VOLUME SAR
	

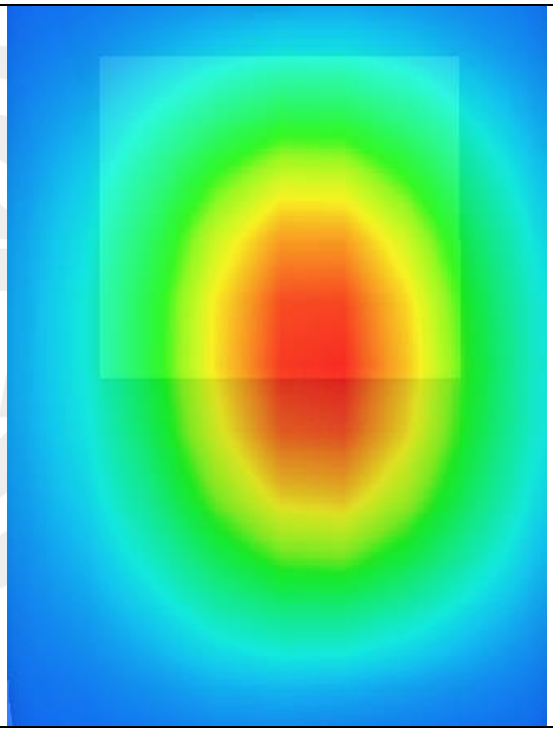
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	1.988562
SAR 1g (W/Kg)	3.873376

Z Axis Scan


5.98
5.00
4.00
3.00
2.00
1.00
0.17
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)



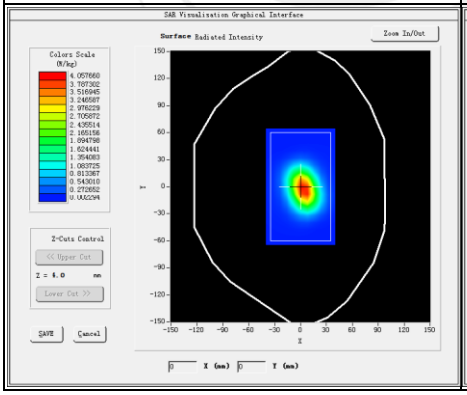
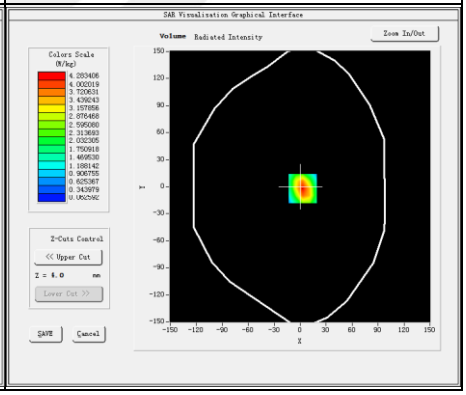


System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2022-08-17

Experimental conditions.

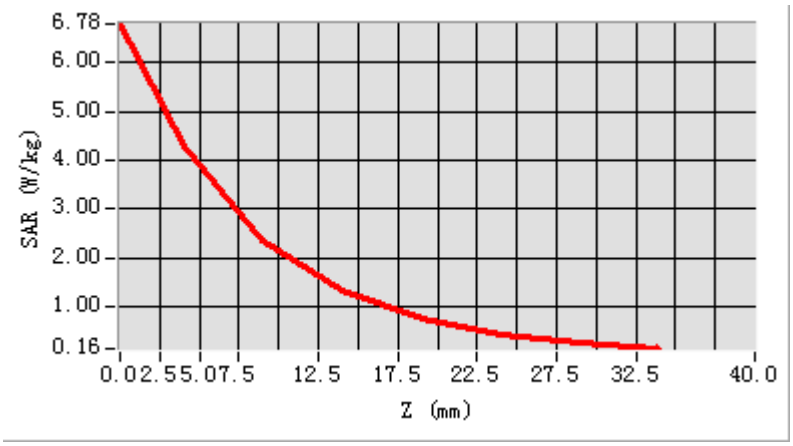
Phantom	Validation plane
Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900MHz
Relative permittivity	40.45
Conductivity (S/m)	1.37
Probe	SN 07/21 EPGO352
ConvF:	1.84
Crest factor:	1:1

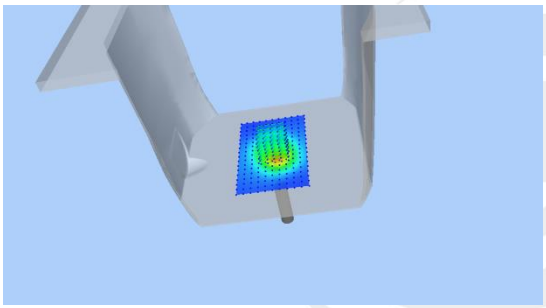
SURFACE SAR	VOLUME SAR
	

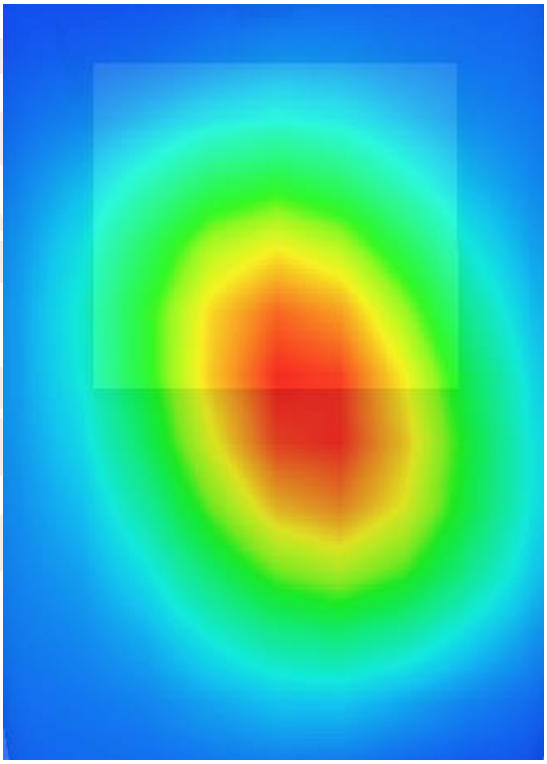
Maximum location: X=3.00, Y=-2.00

SAR 10g (W/Kg)	2.032850
SAR 1g (W/Kg)	3.996555

Z Axis Scan


6.78
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)





Appendix B. SAR Test Plots

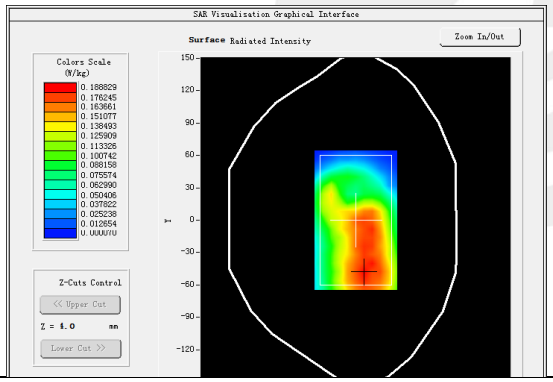
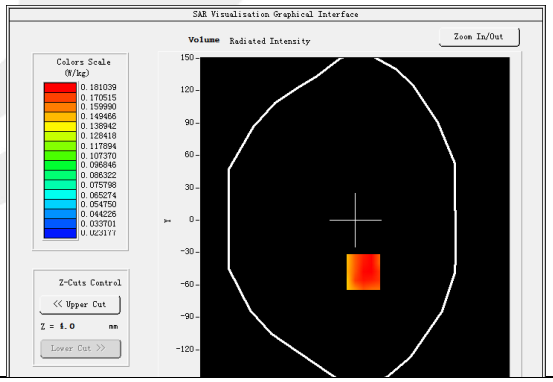
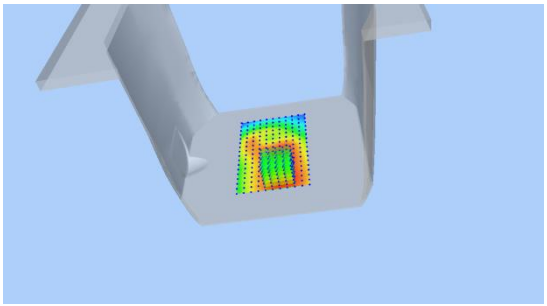
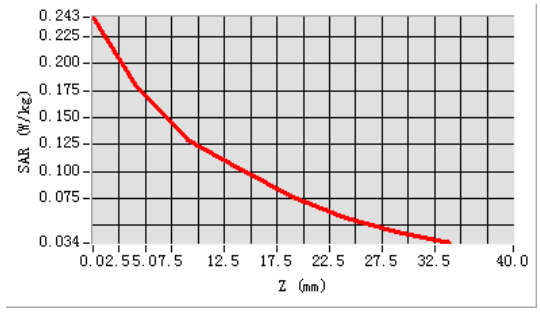
Plot 1: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-12
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	GPRS 850
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	848.8
Relative permittivity (real part)	41.16
Conductivity (S/m)	0.91

Maximum location: X=8.00, Y=-48.00

SAR Peak: 0.23 W/kg

SAR 10g (W/Kg)	0.130015
SAR 1g (W/Kg)	0.176675

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

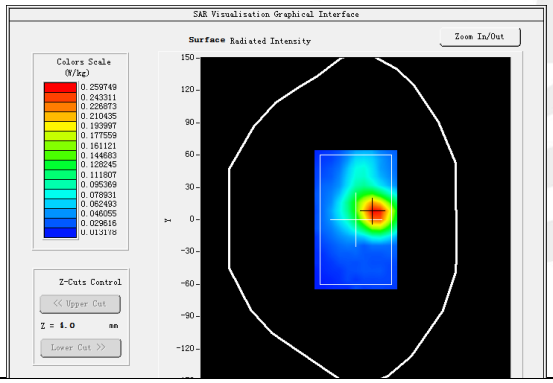
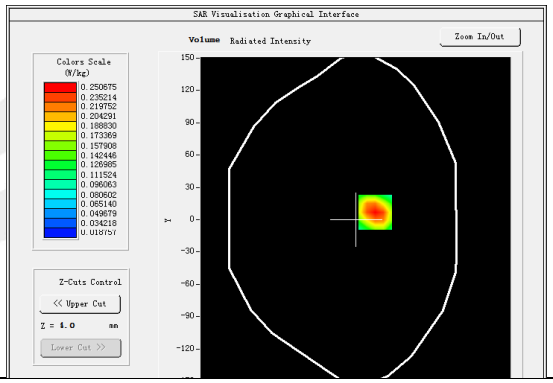
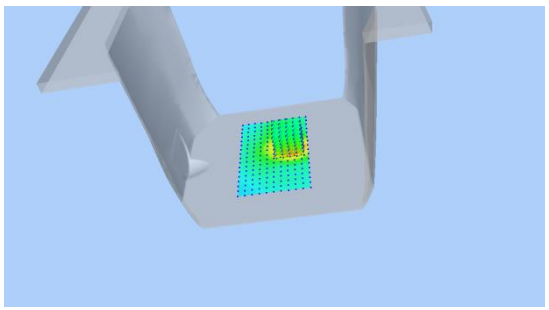
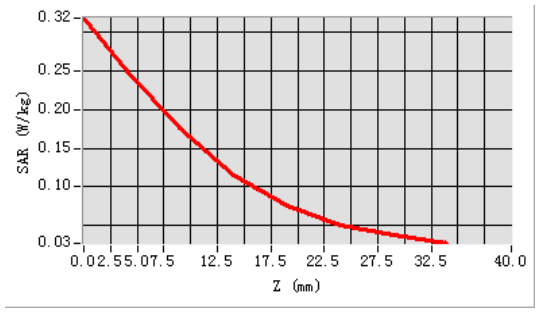
Plot 2: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-17
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	GPRS 1900
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1850.2
Relative permittivity (real part)	40.59
Conductivity (S/m)	1.41

Maximum location: X=19.00, Y=7.00

SAR Peak: 0.35 W/kg

SAR 10g (W/Kg)	0.143711
SAR 1g (W/Kg)	0.235894

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

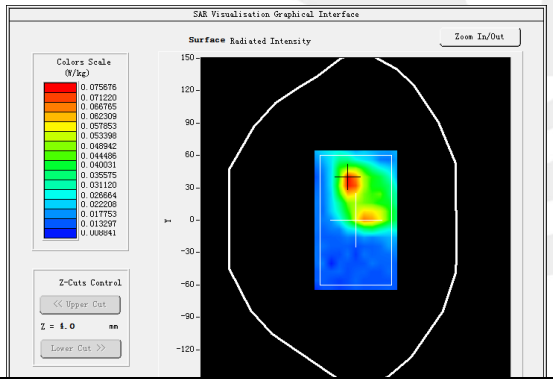
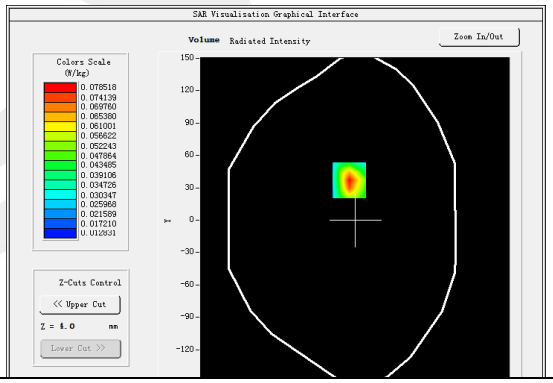
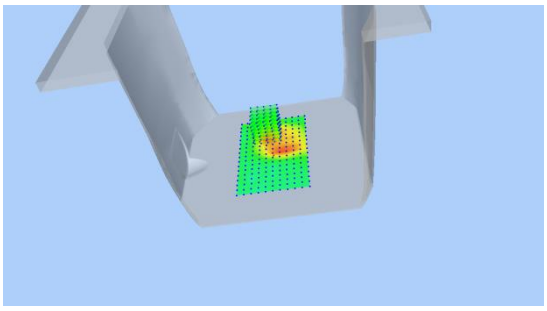
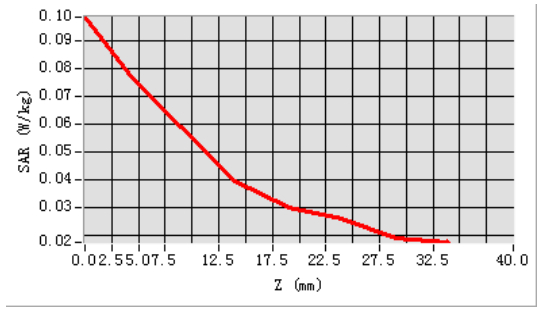
Plot 3: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-17
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE-NB1 Band 2
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.00
Conductivity (S/m)	1.35

Maximum location: X=-6.00, Y=37.00

SAR Peak: 0.10 W/kg

SAR 10g (W/Kg)	0.046445
SAR 1g (W/Kg)	0.072326

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

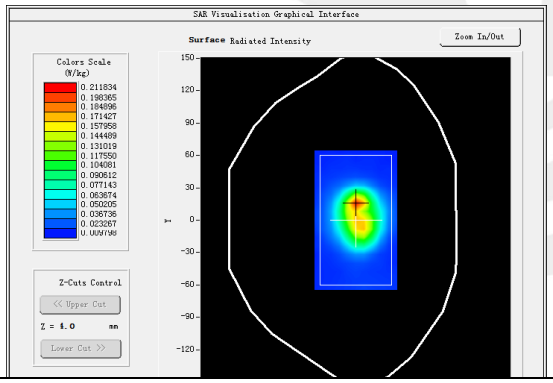
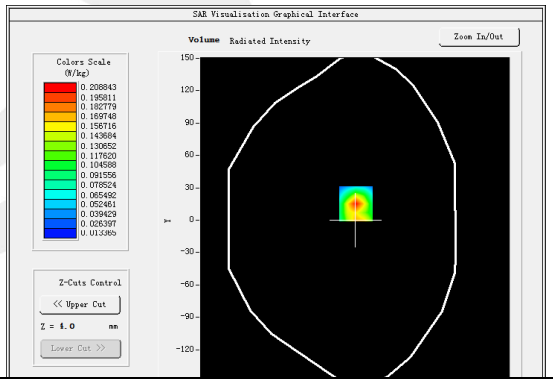
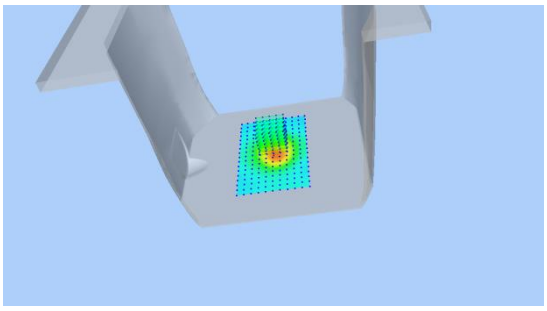
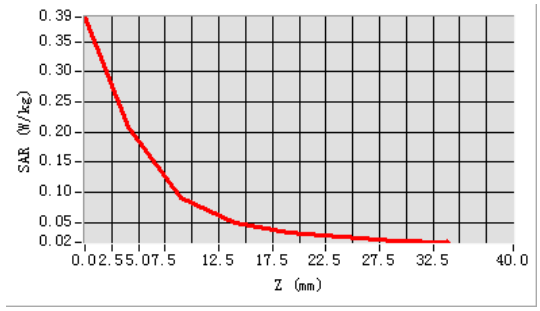
Plot 4: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-12
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE-NB1 Band 12
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	707.5
Relative permittivity (real part)	42.50
Conductivity (S/m)	0.86

Maximum location: X=1.00, Y=15.00

SAR Peak: 0.39 W/kg

SAR 10g (W/Kg)	0.095599
SAR 1g (W/Kg)	0.198080

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

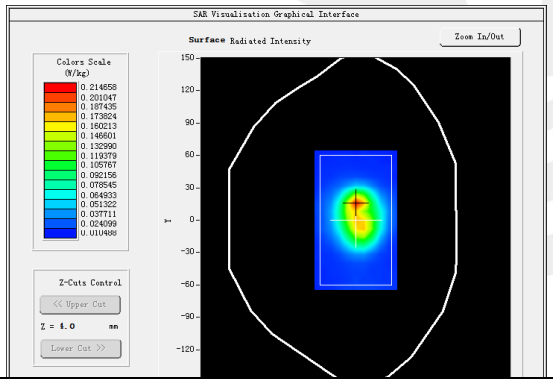
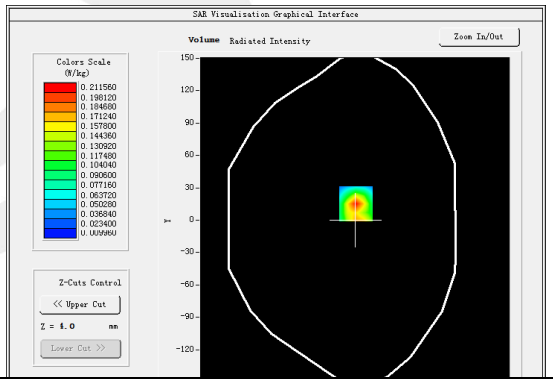
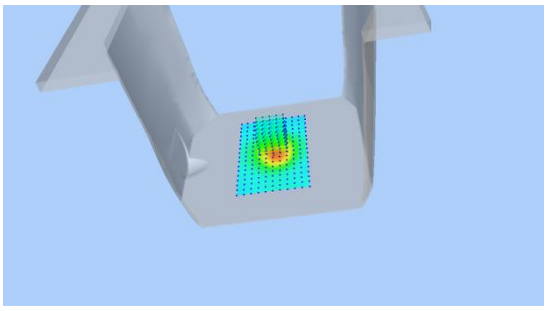
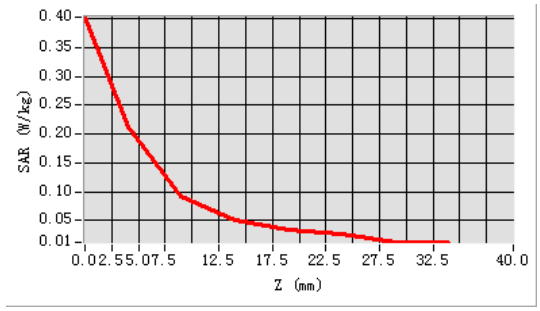
Plot 5: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-12
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE-NB1 Band 13
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	782
Relative permittivity (real part)	42.32
Conductivity (S/m)	0.90

Maximum location: X=1.00, Y=15.00

SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.097974
SAR 1g (W/Kg)	0.203753

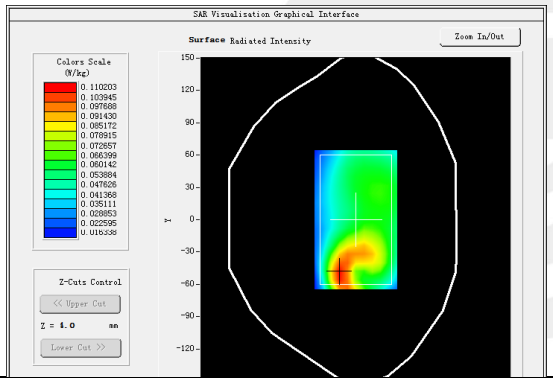
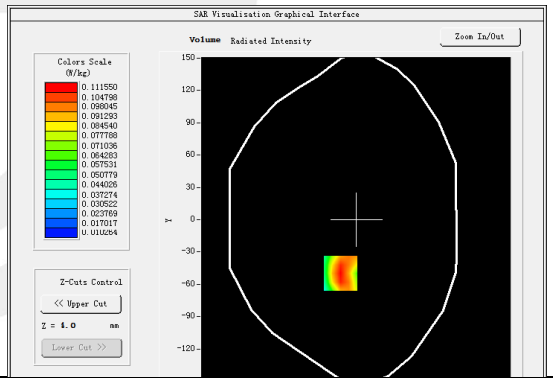
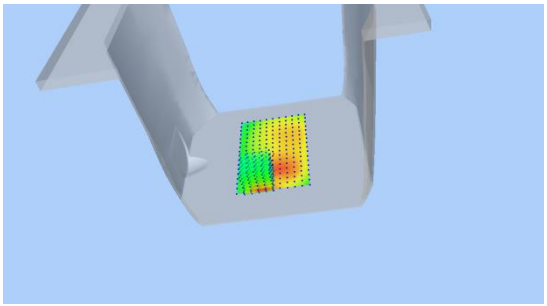
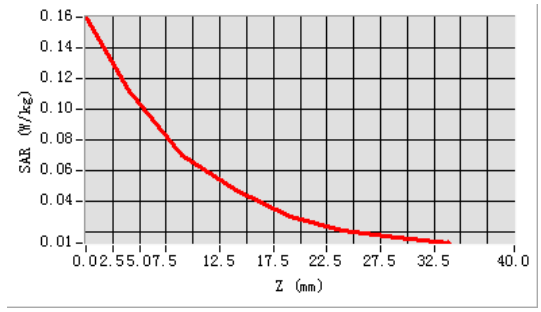
SURFACE SAR	VOLUME SAR
	
3D screen shot	**Z Axis Scan**
	

Plot 6: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-15
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE-NB1 Band 26
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	831.5
Relative permittivity (real part)	41.79
Conductivity (S/m)	0.91

Maximum location: X=-15.00, Y=-50.00
SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.066180
SAR 1g (W/Kg)	0.108703

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

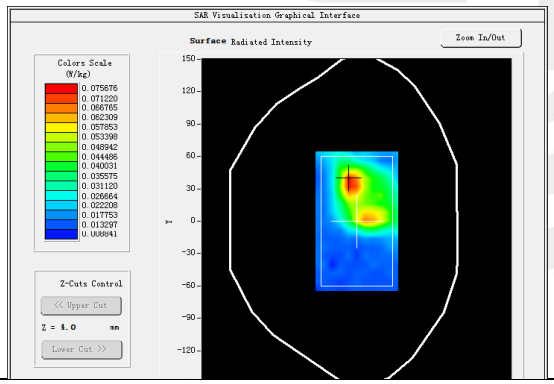
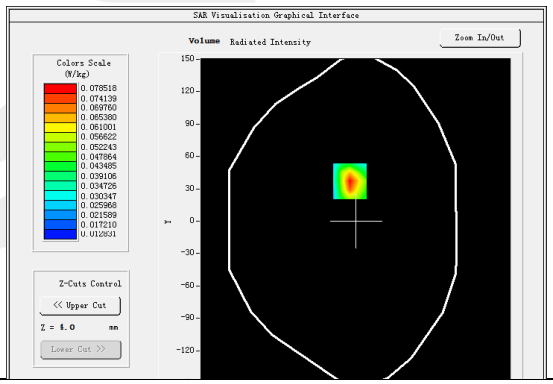
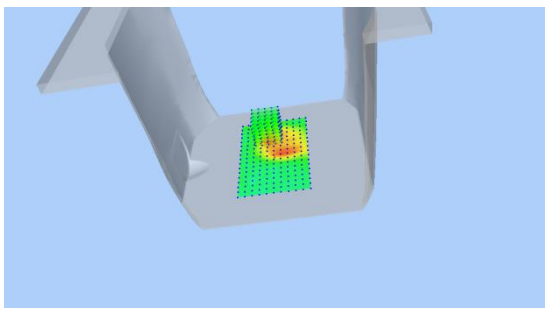
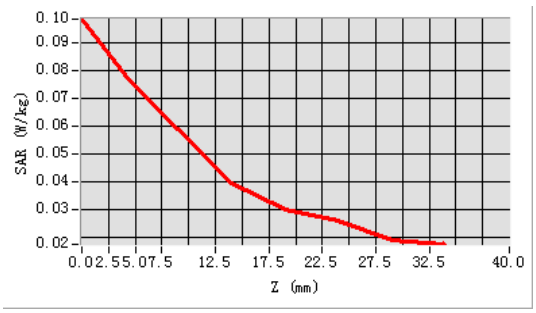
Plot 7: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-17
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 2
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1900
Relative permittivity (real part)	40.45
Conductivity (S/m)	1.37

Maximum location: X=-6.00, Y=37.00

SAR Peak: 0.10 W/kg

SAR 10g (W/Kg)	0.046445
SAR 1g (W/Kg)	0.072326

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

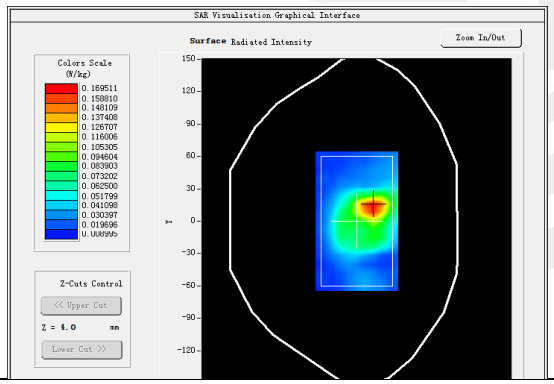
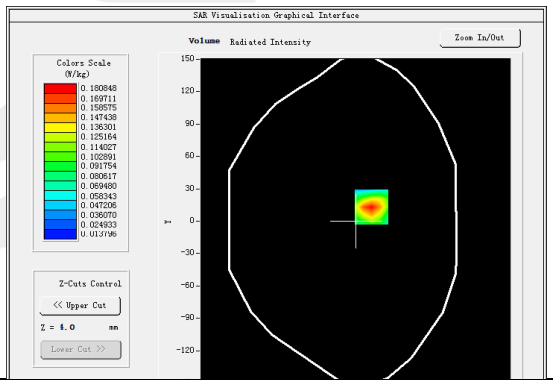
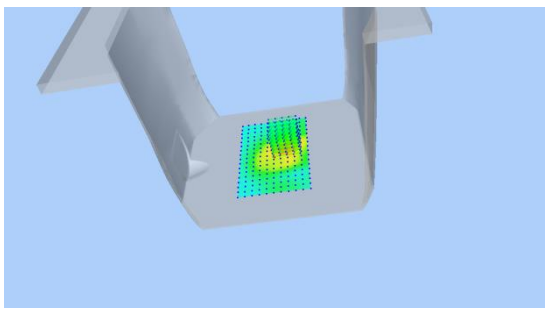
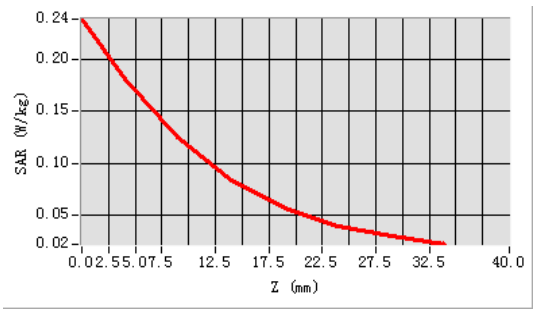
Plot 8: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-16
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 4
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1745
Relative permittivity (real part)	40.62
Conductivity (S/m)	1.41

Maximum location: X=15.00, Y=13.00

SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.100128
SAR 1g (W/Kg)	0.167654

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

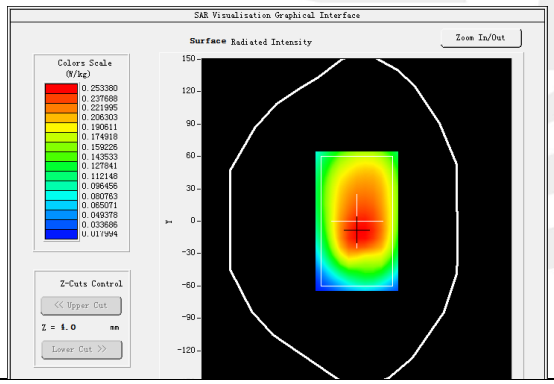
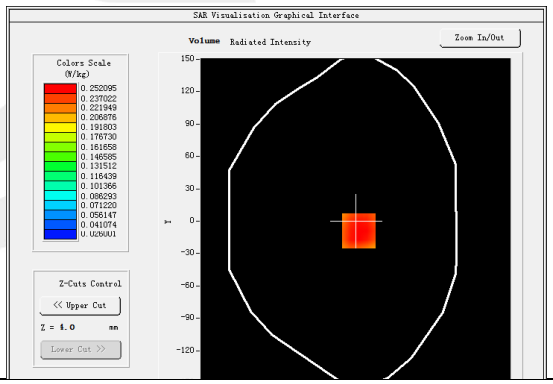
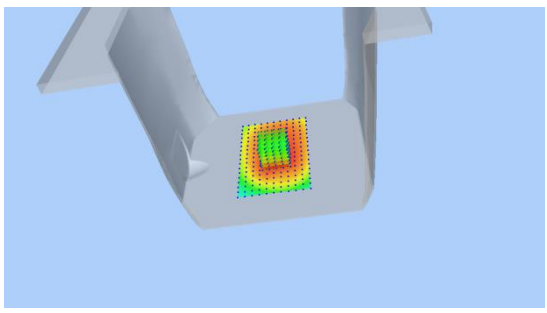
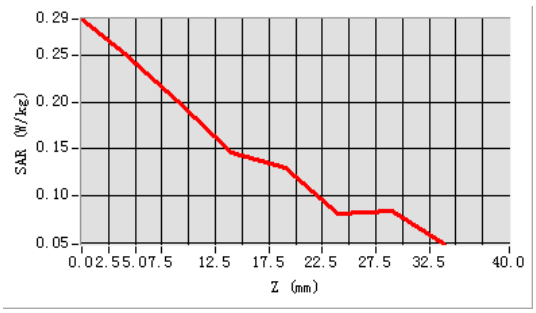
Plot 9: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-12
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 12
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711
Relative permittivity (real part)	43.39
Conductivity (S/m)	0.85

Maximum location: X=3.00, Y=-9.00

SAR Peak: 0.31 W/kg

SAR 10g (W/Kg)	0.193583
SAR 1g (W/Kg)	0.252475

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

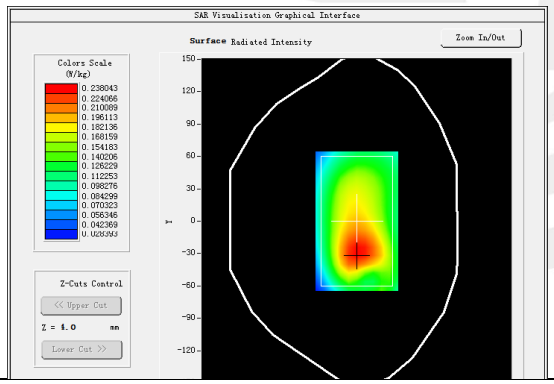
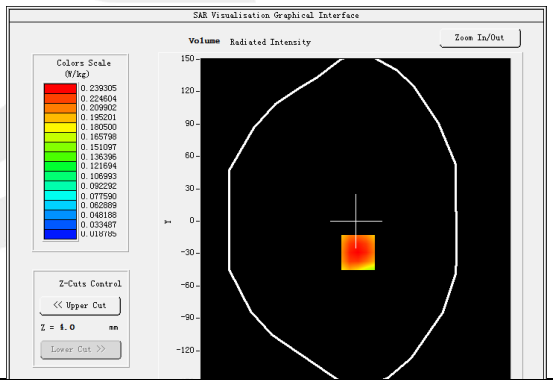
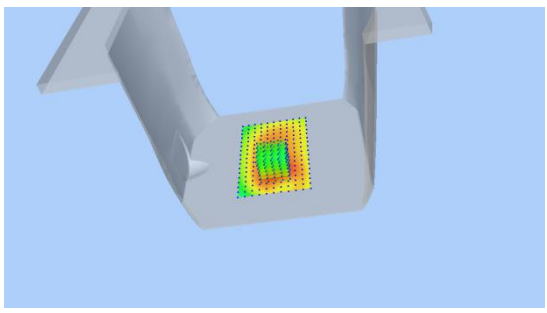
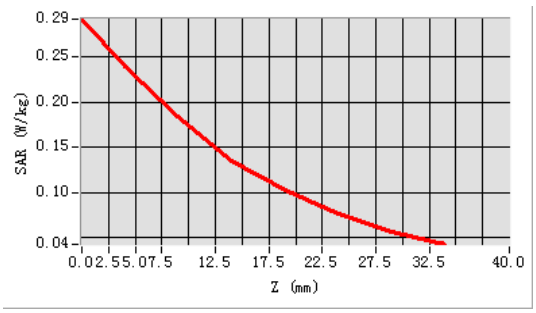
Plot 10: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-12
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 13
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	782
Relative permittivity (real part)	42.32
Conductivity (S/m)	0.90

Maximum location: X=2.00, Y=-29.00

SAR Peak: 0.30 W/kg

SAR 10g (W/Kg)	0.171140
SAR 1g (W/Kg)	0.231909

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

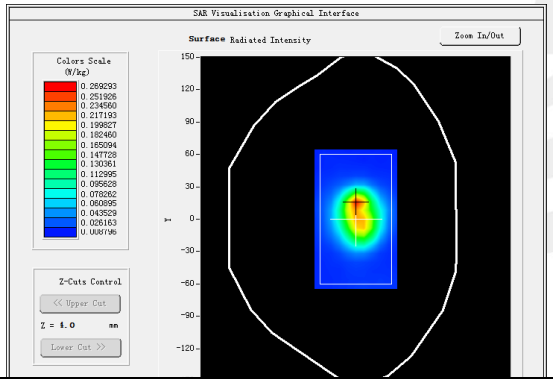
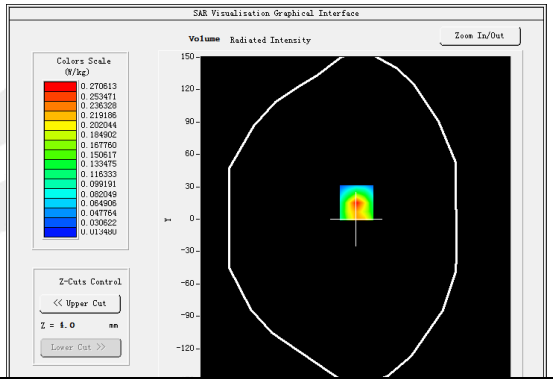
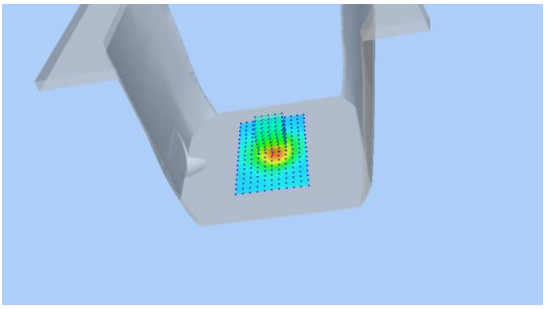
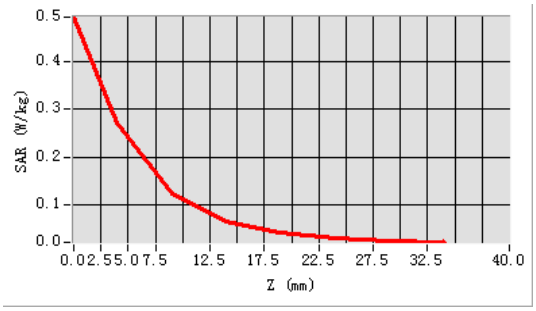
Plot 11: DUT: Electronic bracelet; EUT Model: Bracelet

Test Date	2022-08-15
Probe	SN 07/21 EPGO352
Area Scan	dx=8mm, dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7, dx=8mm, dy=8mm, dz=5mm, Complete/ndx=8mm, dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Wrist
Band	LTE Band 26
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	831.5
Relative permittivity (real part)	41.79
Conductivity (S/m)	0.91

Maximum location: X=1.00, Y=15.00

SAR Peak: 0.48 W/kg

SAR 10g (W/Kg)	0.123749
SAR 1g (W/Kg)	0.250157

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

Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※※END OF THE REPORT※※※※※