



FCC SAR TEST REPORT

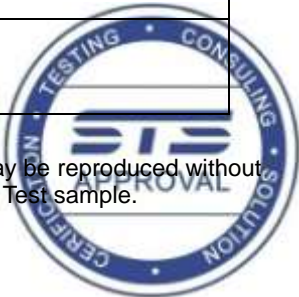
Report No: STS1512123H02

Issued for

Shenzhen XinJiao Du Technology Development CO.,LTD
Room 201, 2/F A Building, jingshun Industry Zone, 6st
Anliang Villiage Henggang Street Longgang District,
Shenzhen China.

Product Name:	GSM DIGITAL MOBILE PHONE
Brand Name:	JEASUNG
Model No.:	X6
Series Model:	N/A
FCC ID:	2AG3UXJDX6
Test Standard:	IEEE 1528:2003
	ANSI/IEEE C95.1-1999
	IEC 62209-2: 2010
Max. SAR (1g):	Head:0.123 W/kg
	Body:1.399 W/kg

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Test Report Certification

Applicant's name : Shenzhen XinJiao Du Technology Development CO.,LTD
Address : Room 201, 2/F A Building, jingshun Industry Zone, 6st Anliang Villiage Henggang Street Longgang District, Shenzhen China.
Manufacture's Name..... : Shenzhen XinJiao Du Technology Development CO.,LTD
Address : Room 201, 2/F A Building, jingshun Industry Zone, 6st Anliang Villiage Henggang Street Longgang District, Shenzhen China.

Product description

Product name : GSM DIGITAL MOBILE PHONE
Trademark : JEASUNG
Model and/or type reference : X6
Serial Model : N/A

Standards..... : IEEE 1528:2003
ANSI/IEEE C95.1-1999
IEC 62209-2: 2010

The device was tested by Shenzhen STS Test Services Co., Ltd. in accordance with the measurement methods and procedures specified in KDB 865664 The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Date of Test..... :

Date (s) of performance of tests..... : 19 Jan. 2016

Date of Issue..... : 21 Jan. 2016

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

Testing Engineer :

Allen Chen

(Allen Chen)

Technical Manager :

John Zou

(John Zou)

Authorized Signatory :

Bovey Yang

(Bovey Yang)





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1. General Information

1.1 EUT Description

Equipment:	GSM DIGITAL MOBILE PHONE
Brand Name:	JEASUNG
Model No.:	X6
Serial Model:	N/A
FCC ID:	2ACDBXJDX6
Model Difference:	N/A
Adapter:	Input: AC100-240V, 0.2A, 50/60Hz Output: DC 5V, 500mA
Battery:	Rated Voltage: 3.7V Charge Limit: 4.2V Capacity: 2500mAh
Rated Power:	UHF: 3.758W
Hardware Version:	A320_MBPCB_V3.0
Software Version:	M60A_A320_CTA_GC0308GC2145_FMBT_V01_2015
Frequency Range:	400-470MHz
Channel Spacing:	12.5KHz
Maximum Transmit Power	35.75 dBm
Max. Reported SAR(1g):	with 50% duty cycle 12.5KHz: Head:0.123 W/kg; Body:1.399 W/kg
Modulation Type:	FM
Test channel:	406.100MHz – 435.325MHz –469.975MHz
Antenna type:	External antenna
Exposure Category:	Occupational/Controlled Exposure



1.2 Test Environment

Ambient conditions in the SAR laboratory:

Items	Required	Actual
Temperature (°C)	18-25	22~23
Humidity (%RH)	30-70	55~65

1.3 Test Facility

Shenzhen STS Test Services Co., Ltd.

Add. : 1/F, Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong, Bao'an District, Shenzhen, Guangdong, China

CNAS Registration No.: L7649

FCC Registration No.: 842334;

IC Registration No.: 12108A-1





2. Test Standards And Limits

No.	Identity	Document Title
1	IEEE 1528:2003	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
2	ANSI/IEEE C95.1-1999	standard for safety levels with respect to human exposure to radio frequency electromagnetic fields, 3 KHz to 300 GHz.
3	IEC62209-2	Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 2: Procedure to determine the Specific Absorption Rate (SAR) in the head and body for 30MHz to 6GHz Handheld and Body-Mounted Devices used in close proximity to the body.
4	KDB 643646 D01 v01r03	SAR Test Reduction Considerations for Occupational PTT Radios
5	FCC KDB 447498 D01 v06	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user. According to 1999/519/EC the limit for General Population/Uncontrolled exposure should be applied for this device, it is 2.0 W/kg as averaged over any 10 gram of tissue.

(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 10 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

Occupational/Controlled Environments

PARTIAL BODY LIMIT

8.0 W/kg

3. SAR Measurement System

3.1 Definition Of Specific Absorption Rate (SAR)

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

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

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

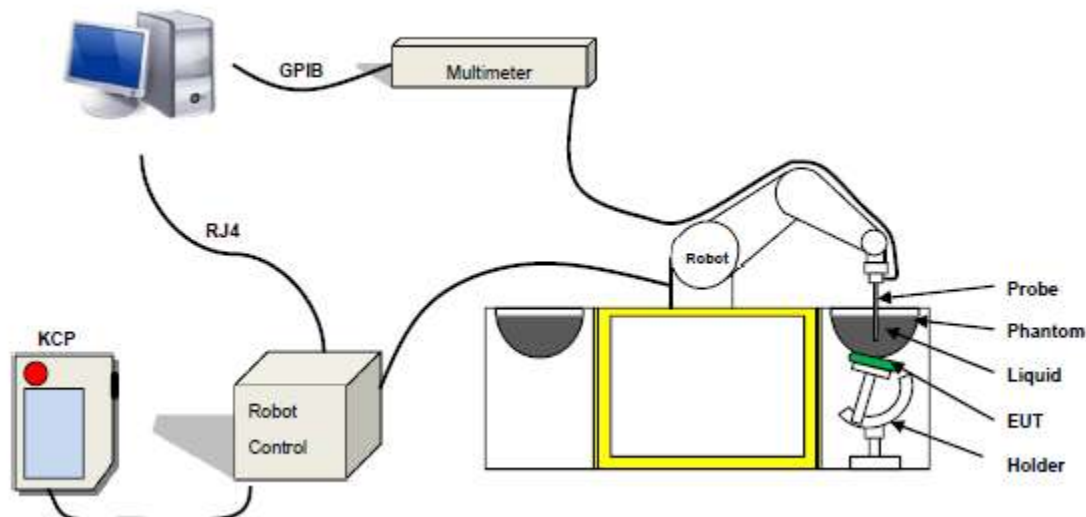
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

3.2 SAR System

SATIMO 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 17/14 EP221 with following specifications is used

- Dynamic range: 0.01-100 W/kg
 - Tip Diameter :5 mm
 - Distance between probe tip and sensor center: 2.7mm
 - Distance between sensor center and the inner phantom surface: 4 mm (repeatability better than +/- 1mm)
 - Probe linearity: < 0.25 dB
 - Axial Isotropy: < 0.25 dB
 - Spherical Isotropy: < 0.25 dB
 - Calibration range: 450MHz to 2600MHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°



Figure 1 – Satimo 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.

Flat phantom



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.

The following table gives the recipes for tissue liquid.

Frequency (MHz)	Water %	Suger %	Cellulose %	Salt %	Preventol %	Dgbe %	Conductivity σ	Permittivity: ϵ
Head								
450	38.56	56.32	0.98	3.95	0.19	0.0	0.85	43.42
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800,1900,2000	55.	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
Body								
450	41.45	56.32	0.52	1.49	0.05	0.0	0.83	58.0
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800,1900,2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0	0	31.4	1.95	52.7

LIQUID MEASUREMENT RESULTS

Date: 19 Jan. 2016 **Ambient condition:** Temperature 23.4°C **Relative humidity:** 43%

Head Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
450.000MHz System performance check(450)	22.30	Permittivity:	43.42	43.26	-0.37	± 5
		Conductivity:	0.85	0.88	3.53	± 5

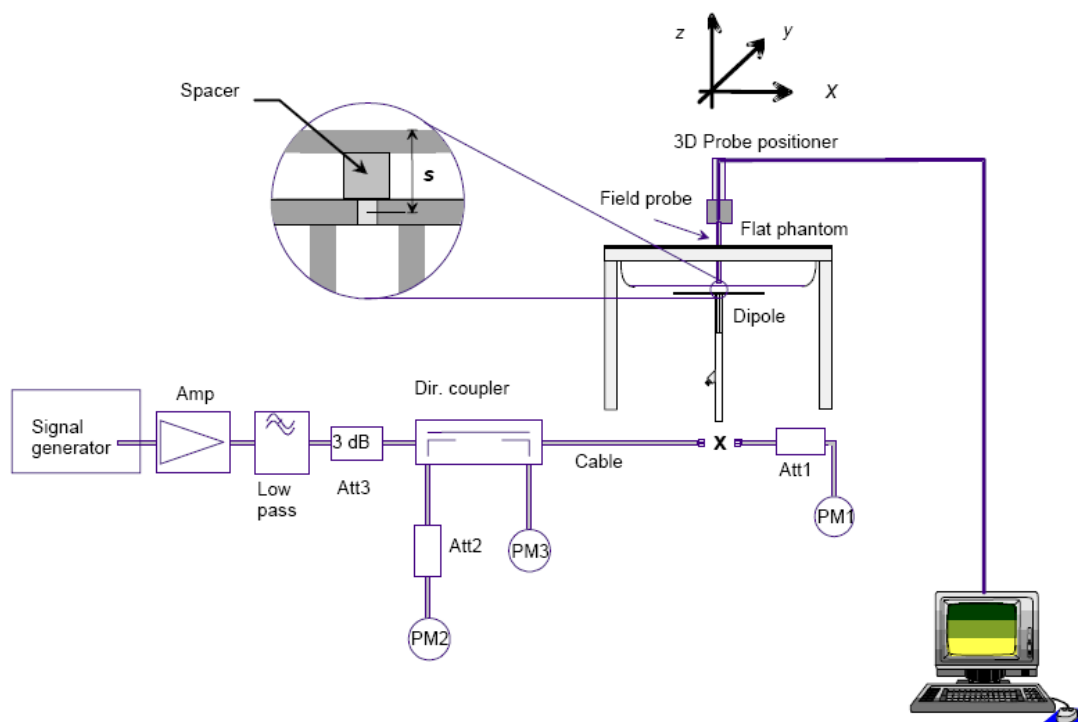
Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
450.000MHz System performance check(450)	22.30	Permittivity:	58.0	57.81	-0.33	± 5
		Conductivity:	0.83	0.85	2.41	± 5

5. SAR System Validation

5.1 Validation System

Each SATIMO system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the SATIMO 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 SATIMO, the validation data should be within its specification of 10 %.

Ambient condition: Temperature 23.5°C

Relative humidity: 45%

Freq.(MHz)	Power(mW)	Tested Value (W/Kg)	Normalized SAR (W/kg)	Target(W/Kg)	Tolerance(%)	Date
450 Head	250	0.439	4.39	4.58	-4.33	2016-01-19
450 Body	250	0.462	4.62	4.58	0.87	2016-01-19

Note: The tolerance limit of System validation $\pm 10\%$.

6. SAR Evaluation Procedures

The procedure for assessing the average SAR value consists of the following steps:

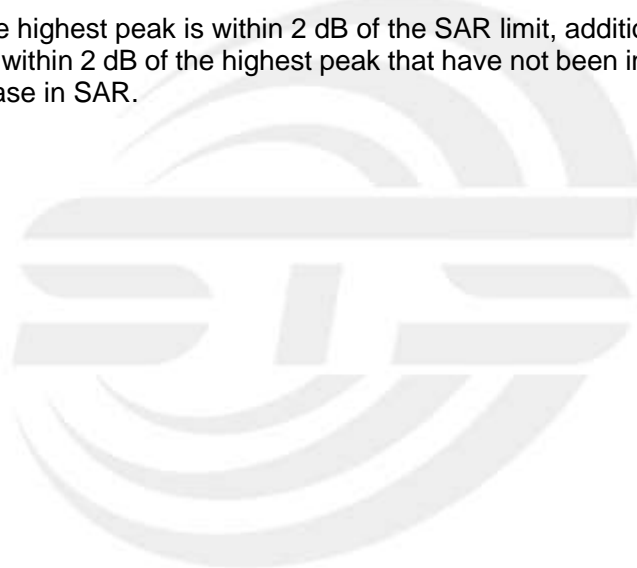
The following steps are used for each test position

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

➤ 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. Uncertainty

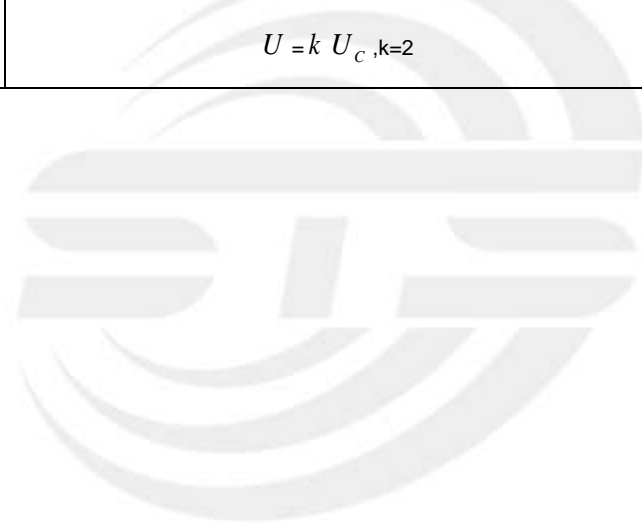
7.1 Measurement Uncertainty

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 $k=2$.

NO	Source	Tol(%)	Prob. Dist.	Div. k	ci (1g)	ci (10g)	1gUi	10gUi	Veff
Measurement System									
1	Probe calibration	5.8	N	1	1	1	5.8	5.8	∞
2	Axial isotropy	3.5	R	$\sqrt{3}$	$(1-c_p)^{1/2}$	$(1-c_p)^{1/2}$	1.43	1.43	∞
3	Hemispherical isotropy	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
4	Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
5	Linearity	4.7	R	$\sqrt{3}$	1	1	2.71	2.71	∞
6	System Detection limits	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
7	Readout electronics	0.5	N	1	1	1	0.50	0.50	∞
8	Response time	0	R	$\sqrt{3}$	1	1	0	0	∞
9	Integration time	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
10	Ambient noise	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
11	Ambient reflections	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
12	Probe positioner mech. restrictions	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
13	Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
14	Max.SAR evaluation	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related									
15	Device positioning	2.6	N	1	1	1	2.6	2.6	11
16	Device holder	3	N	1	1	1	3.0	3.0	7



17	Drift of output power	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Phantom and set-up									
18	Phantom uncertainty	4.0	R	$\sqrt{3}$	1	1	2.31	2.31	∞
19	Liquid conductivity (target)	2.5	N	1	0.78	0.71	1.95	1.78	5
20	Liquid conductivity (meas)	4	N	1	0.23	0.26	0.92	1.04	5
21	Liquid Permittivity (target)	2.5	N	1	0.78	0.71	1.95	1.78	∞
22	Liquid Permittivity (meas)	5.0	N	1	0.23	0.26	1.15	1.30	∞
Combined standard			RSS	$U_c = \sqrt{\sum_{i=1}^n C_i^2 U_i^2}$			10.63%	10.54%	
Expanded uncertainty (P=95%)		$U = k U_c, k=2$					21.26%	21.08%	





7.2 System validation Uncertainty

NO	Source	Tol(%)	Prob. Dist.	Div. k	ci (1g)	ci (10g)	1gUi	10gUi	Veff
Magnet System									
1	Probe calibration	5.8	N	1	1	1	5.8	5.8	∞
2	Axial isotropy	3.5	R	$\sqrt{3}$	$(1-cp)^{1/2}$	$(1-cp)^{1/2}$	1.43	1.43	∞
3	Hemispherical isotropy	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
4	Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
5	Linearity	4.7	R	$\sqrt{3}$	1	1	2.71	2.71	∞
6	System Detection limits	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
7	Modulation response	0	N	1	1	1	0	0	∞
8	Readout electronics	0.5	N	1	1	1	0.50	0.50	∞
9	Response time	0	R	$\sqrt{3}$	1	1	0	0	∞
10	Integration time	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
11	Ambient noise	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
12	Ambient reflections	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
13	Probe positioner mech. restrictions	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
14	Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
15	Max.SAR evaluation	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Dipole									
16	Deviation of experimental source from	4	N	1	1	1	4.00	4.00	∞
17	Input power and SAR drit measurement	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞



18	Dipole Axis to liquid Distance	2	R	√3	1	1			∞
Phantom and set-up									
19	Phantom uncertainty	4.0	R	√3	1	1	2.31	2.31	∞
20	Uncertainty in SAR correction for deviation(in	2.0	N	1	1	0.84	2	1.68	∞
21	Liquid conductivity (target)	2	N	1	1	0.84	2.00	1.68	∞
22	Liquid conductivity (temperature uncertainty)	2.5	N	1	0.78	0.71	1.95	1.78	5
23	Liquid conductivity (meas)	4	N	1	0.23	0.26	0.92	1.04	5
24	Liquid Permittivity (target)	2.5	N	1	0.78	0.71	1.95	1.78	∞
25	Liquid Permittivity (temperature uncertainty)	2.5	N	1	0.78	0.71	1.95	1.78	5
26	Liquid Permittivity (meas)	5.0	N	1	0.23	0.26	1.15	1.30	∞
Combined standard			RSS	$U_c = \sqrt{\sum_{i=1}^n C_i^2 U_i^2}$			10.15%	10.05%	
Expanded uncertainty (P=95%)		$U = k U_c ,k=2$					20.29%	20.10%	



8. Conducted Power Measurement

Mode	Frequency (MHz)	Channel Spacing	Turn-up Power	Means.Output power(dBm)
UHF(3.758W)	406.100	12.5KHz	35±1	35.29
	435.325			35.75
	469.975			34.30



9. EUT And Test Setup Photo

9.1 EUT Photo

Front side



Back side



Top side



Bottom side



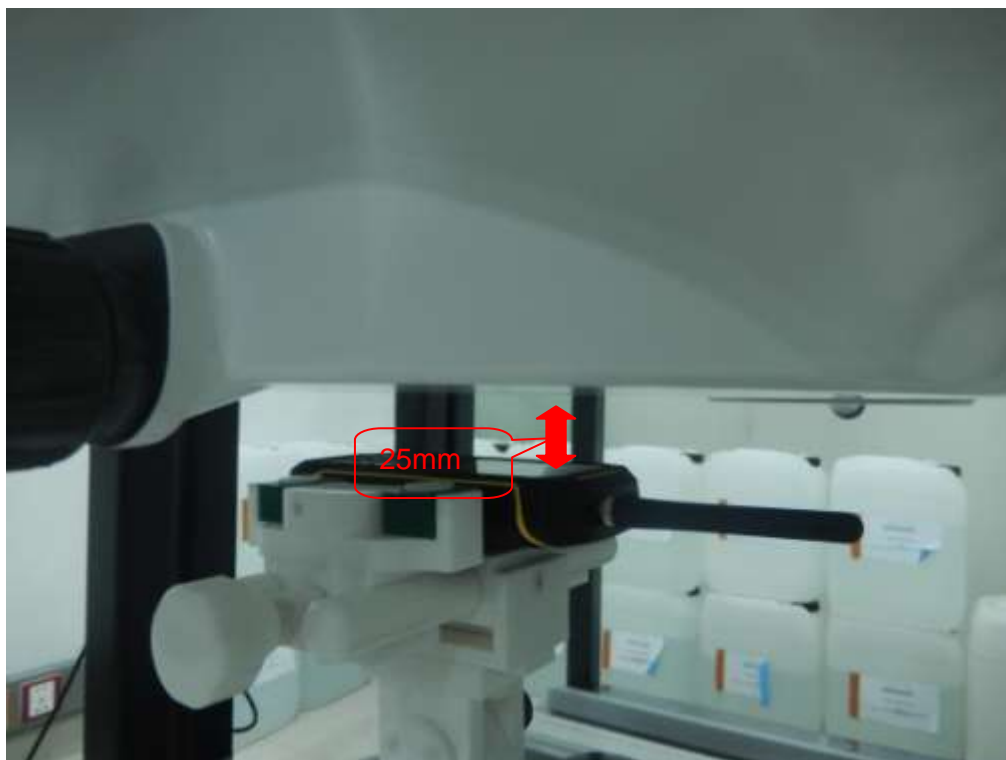
Left side



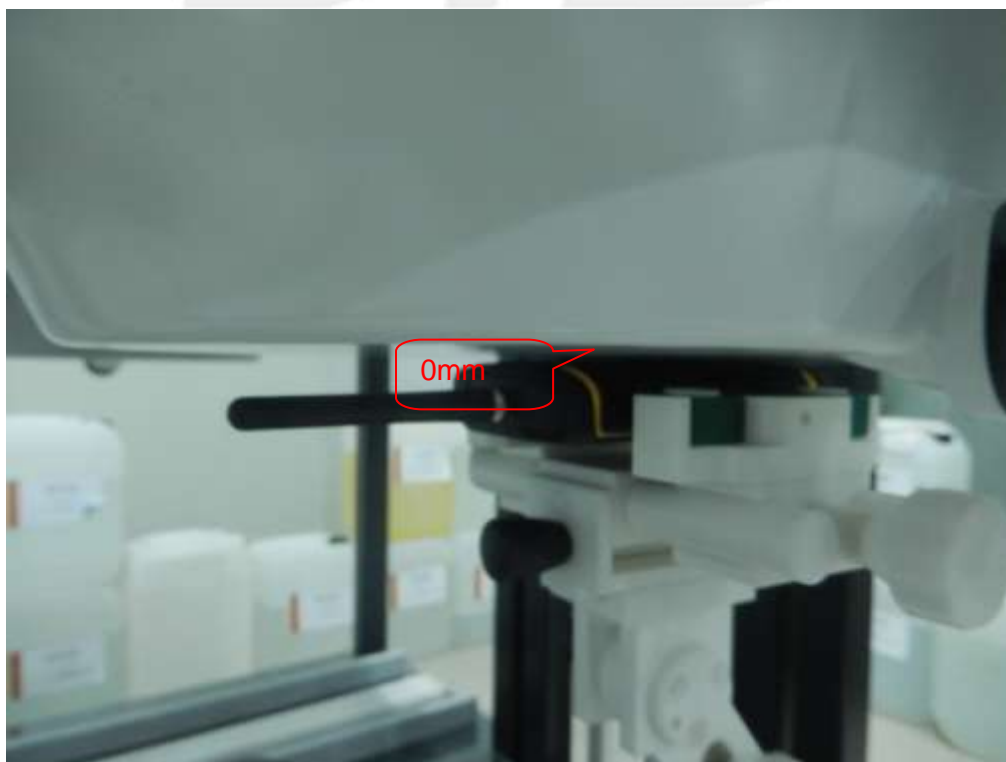
Right side



Face-up



Body



Liquid depth (15 cm)





10. SAR Result Summary

Summary of Measurement Results (Channel Spacing: 12.5 KHz-)

Phantom Configurations	Frequency	Channel	Antenna Positions	Power Drift(%)	SAR 1g with 100% duty cycle (W/Kg)	SAR 1g with 50% duty cycle (W/Kg)	Max. Turn-up Power (dBm)	Meas. Output Power (dBm)	Scaled SAR (W/Kg)	Meas. No.
Face up (2.5 cm Separation)	435.3MHz	Middle	External	0.80	0.232	0.116	36	35.75	0.123	1
Body touch (direct)	435.3MHz	Middle	External	-2.62	2.642	1.321	36	35.75	1.399	2

Note: when the 1-g SAR of middle channel is ≤ 3.5 W/Kg, testing for other channel is optional. Refer to KDB 643646.





11. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
450 MHz Dipole	SATIMO	SID450-330	SN 30/14 DIP0G450-330	2014.09.01	2017.08.31
E-Field Probe	SATIMO	SSE5	SN 17/14 EP221	2015.09.01	2016.08.31
Antenna	SATIMO	ANTA3	SN 07/13 ZNTA52	2014.09.01	2017.08.31
Waveguide	SATIMO	SWG5500	SN 13/14 WGA32	2014.09.01	2017.08.31
Phantom1	SATIMO	SAM	SN 32/14 SAM115	N/A	N/A
Phantom2	SATIMO	SAM	SN 32/14 SAM116	N/A	N/A
SAR TEST BENCH	SATIMO	GSM and WCDMA mobile phone POSITIONNIN G SYSTEM	SN 32/14 MSH97	N/A	N/A
SAR TEST BENCH	SATIMO	LAPTOP POSITIONNIN G SYSTEM	SN 32/14 LSH29	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 32/14 OCPG52	2015.09.01	2016.08.31
Multi Meter	Keithley	Multi Meter 2000	4050073	2015.11.20	2016.11.19
Signal Generator	Agilent	N5182A	MY50140530	2015.11.18	2016.11.17
Power Meter	R&S	NRP	100510	2015.10.25	2016.10.24
Power Sensor	R&S	NRP-Z11	101919	2015.10.24	2016.10.23
Power Sensor	Anritsu	MA2411B	1027253	2015.10.10	2016.10.09
Power Sensor	R&S	NRP-Z21	103971	2015.12.12	2016.12.11
Network Analyzer	Agilent	5071C	EMY46103472	2015.12.12	2016.12.11
Attenuator 1	PE	PE7005-10	N/A	2015.10.25	2016.10.24
Attenuator 2	PE	PE7005-3	N/A	2015.10.24	2016.10.23
Attenuator 3	Woken	WK0602-XX	N/A	2015.12.12	2016.12.11
Dual Directional Coupler	Agilent	778D	50422	2015.11.18	2016.11.17

Appendix A. System Validation Plots

System Performance Check Data (450MHz Head)

Type: Phone measurement (Complete)

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

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

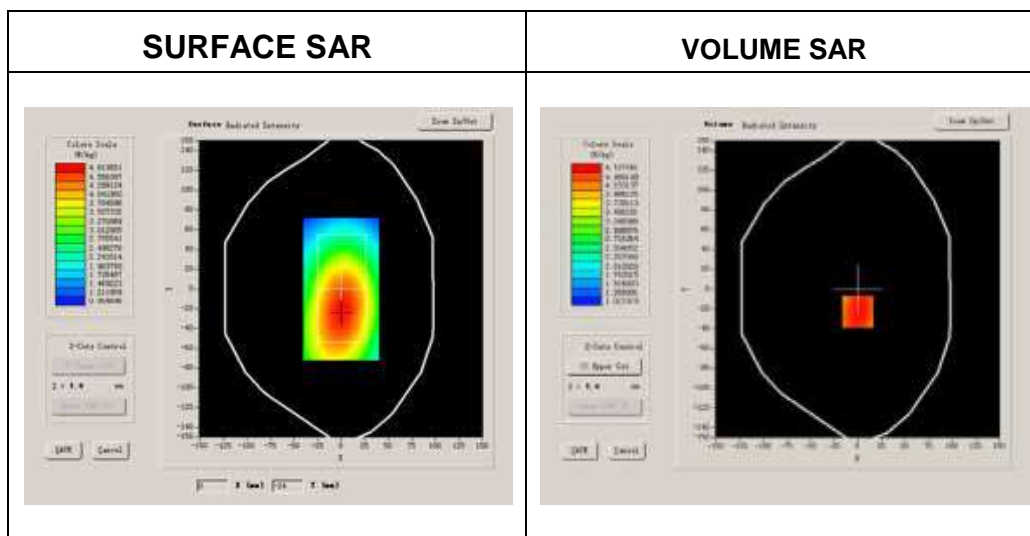
Input Power=20dBm

Date of measurement: 2016-01-19

Measurement duration: 14 minutes 46 seconds

Experimental conditions

Phantom	Validation plane
Device Position	-
Band	450MHz
Channels	-
Signal	CW
Frequency (MHz)	450MHz
Relative permittivity (real part)	43.183725
Conductivity (S/m)	0.874296
Power drift (%)	0.170000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.3°C
Probe	SN 17/14 EP221
ConvF:	4.84
Crest factor:	1:1



Maximum location: X=5.00, Y=18.00

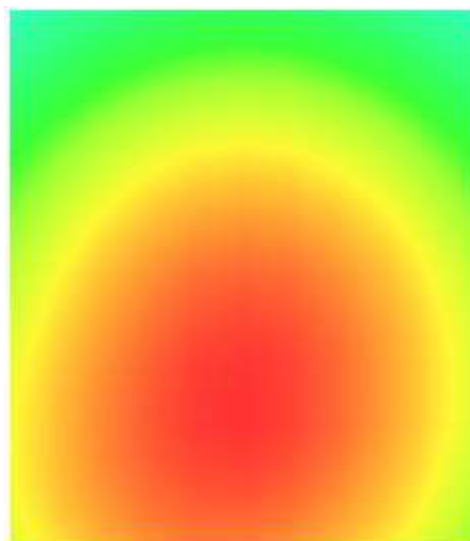
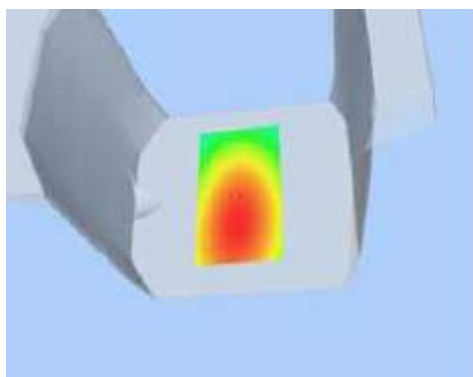
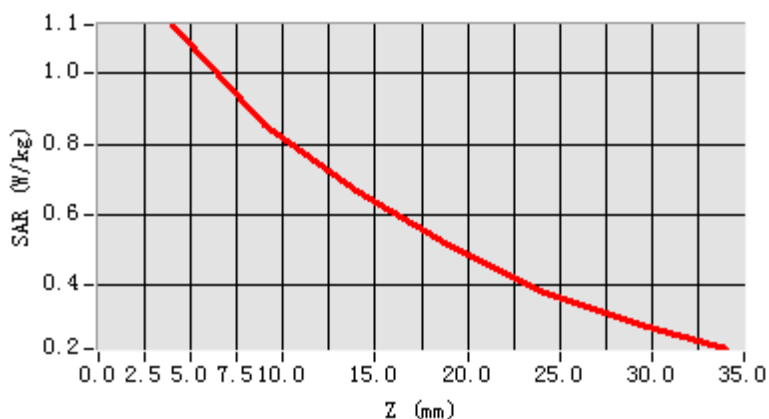
SAR Peak: 1.40 W/kg

SAR 10g (W/Kg)	0.376193
SAR 1g (W/Kg)	0.437619

Z Axis Scan

Z (mm)	0	4	9	14	19	24	29
SAR(W/Kg)	0.0000	1.0545	0.7926	0.49865	0.2764	0.1972	0.1328

SAR, Z Axis Scan (X = 7, Y = 33)



**System Performance Check Data(450 MHz Body)**

Type: Phone measurement (Complete)

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

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

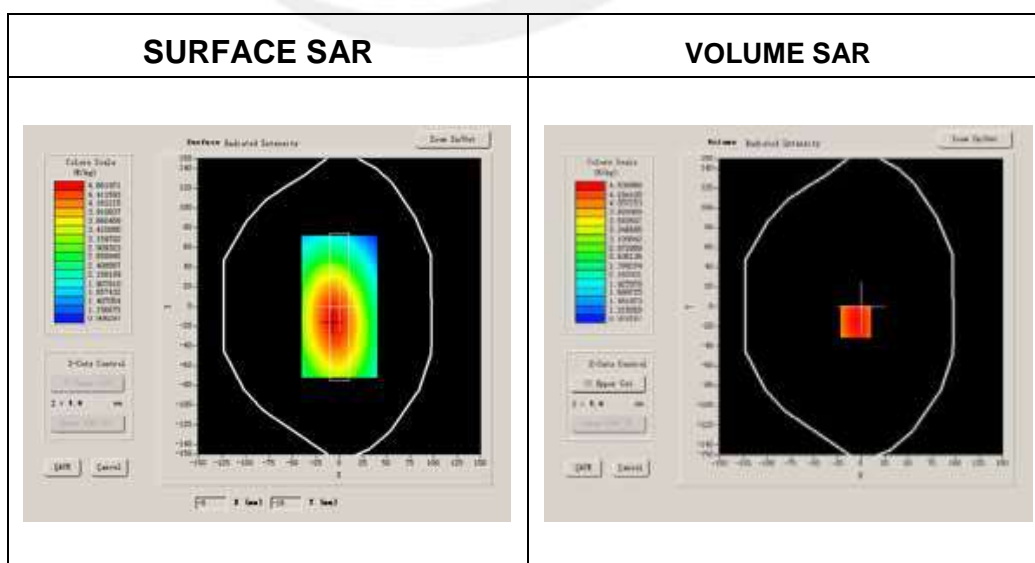
Input Power=20dBm

Date of measurement: 2016-01-19

Measurement duration: 14 minutes 46 seconds

Experimental conditions.

Phantom	Validation plane
Device Position	-
Band	450MHz
Channels	-
Signal	CW
Frequency (MHz)	1900MHz
Relative permittivity (real part)	58.273728
Conductivity (S/m)	0.843621
Power drift (%)	0.120000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.3°C
Probe	SN 17/14 EP221
ConvF:	4.98
Crest factor:	1:1



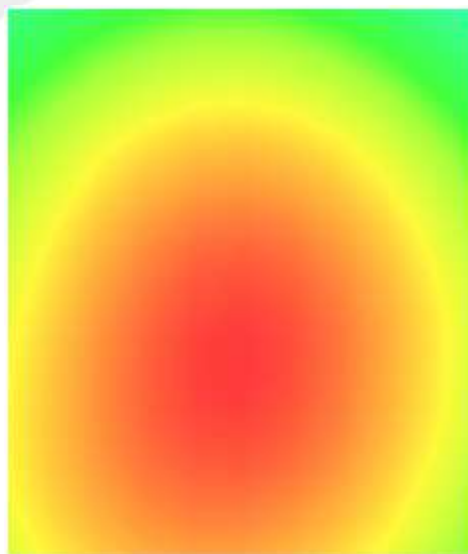
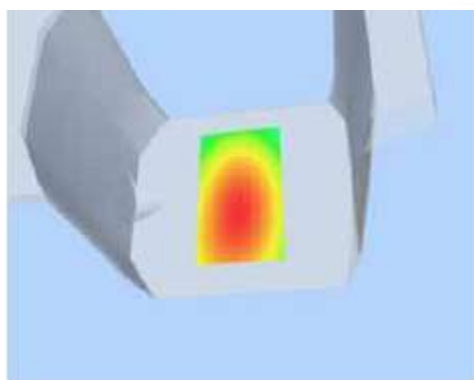
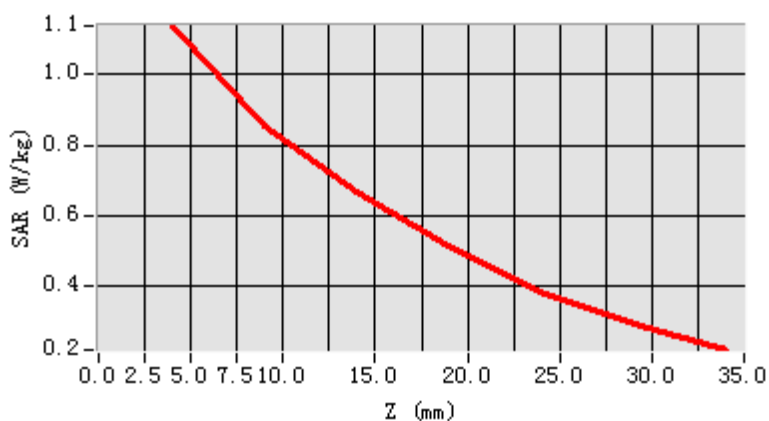
Maximum location: X=7.00, Y=33.00

SAR 10g (W/Kg)	0.306428
SAR 1g (W/Kg)	0.476247

Z Axis Scan

Z (mm)	0	4	9	14	19	24	29
SAR(W/Kg)	0.0000	1.1038	0.9671	0.7264	0.5926	0.3061	0.2140

SAR, Z Axis Scan (X = 7, Y = 33)



Appendix B. SAR Test Plots

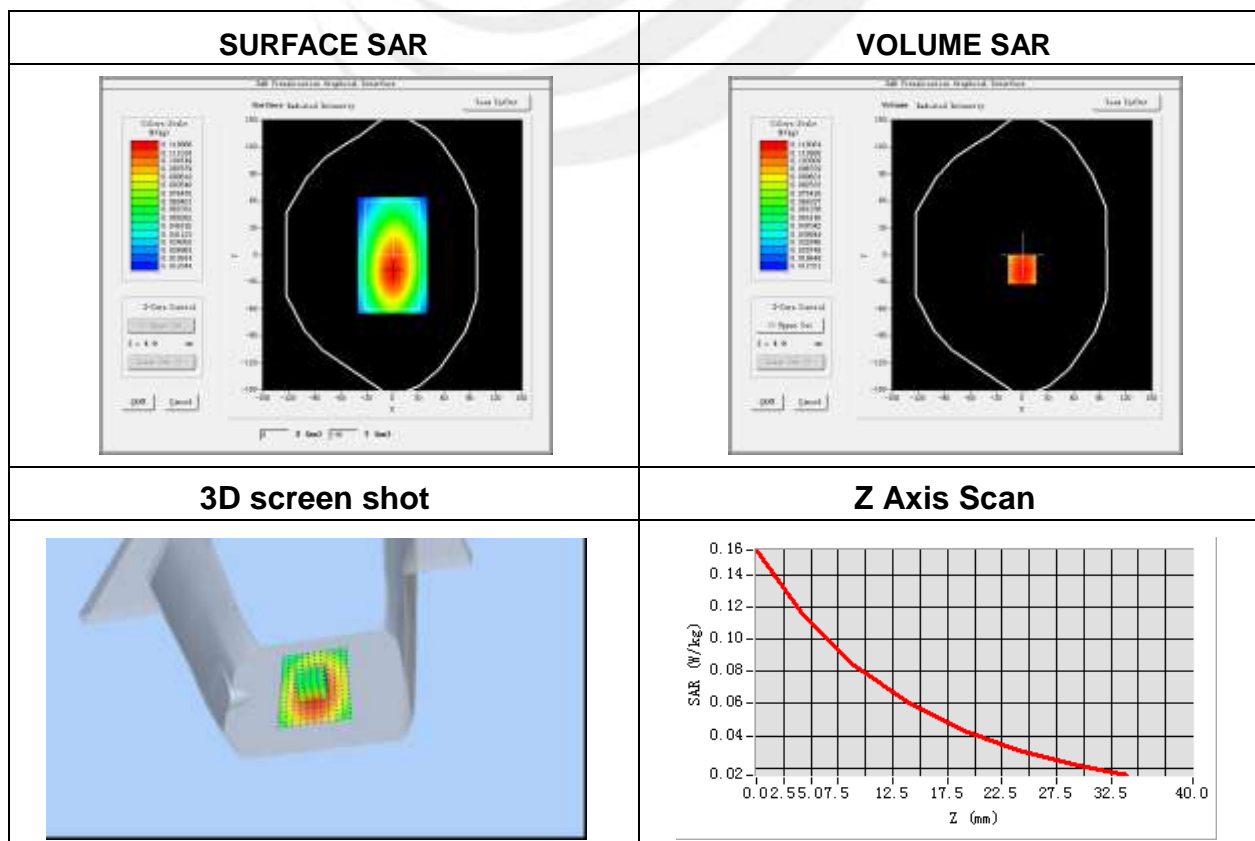
Plot 1: DUT: GSM DIGITAL MOBILE PHONE; EUT Model: X6

Test Data	2016-01-19
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.84
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Face Up
Signal	TDMA (Crest factor: 1:1)
Frequency (MHz)	435.3
Relative permittivity (real part)	42.62
Conductivity (S/m)	0.88
Variation (%)	-0.80

Maximum location: X=0.00, Y=-16.00

SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.080443
SAR 1g (W/Kg)	0.115915

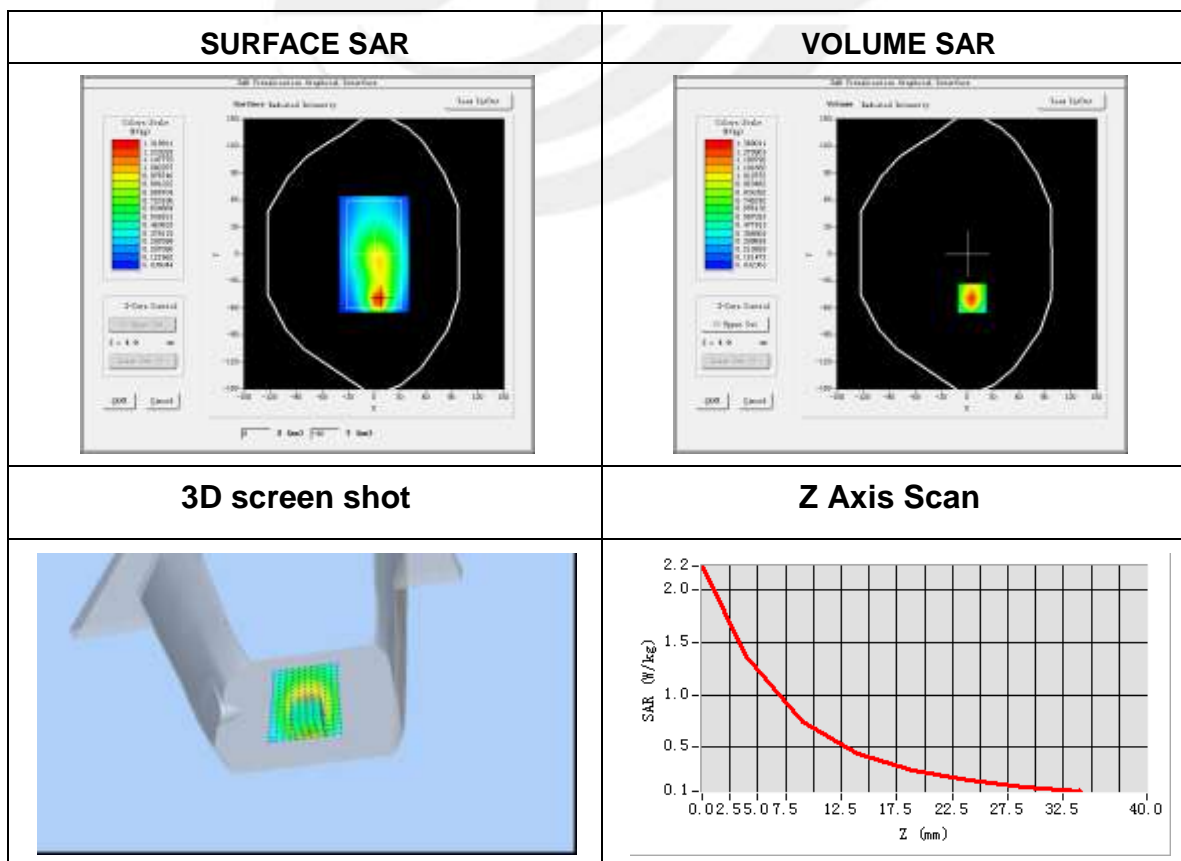


Plot 2: DUT: GSM DIGITAL MOBILE PHONE; EUT Model: X6

Test Data	2016-01-19
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.98
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body
Signal	TDMA (Crest factor: 1:1)
Frequency (MHz)	435.3
Relative permittivity (real part)	42.62
Conductivity (S/m)	0.88
Variation (%)	-2.62

Maximum location: X=6.00, Y=-49.00
SAR Peak: 2.30 W/kg

SAR 10g (W/Kg)	0.693431
SAR 1g (W/Kg)	1.320790





Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※※END OF THE REPORT※※※※※

