FCC SAR TEST REPORT

Report No:STS1506078F1

Issued for

KENXINDA TECHNOLOGY CO., LIMITED

UNIT B 13/F PRAT COMMERCIAL BUILDING 17-19 PRAT AVENUE TSIMSHATSUI KL HONGKONG

Product Name:	3G Mobile phone
Brand Name:	KENXINDA
Model No.:	E7 Dual Sim
Series Model:	N/A
FCC ID:	2AE56E7
Test Standard:	ANSI/IEEE Std. C95.1
	FCC 47 CFR Part 2 (2.1093)
	IEEE 1528: 2003
Max. SAR (1g):	Head:0.620 W/kg
	Body:0.934 W/kg

Shenzhen STS Test Services Co., Ltd.
1/F, Building B, Zhuoke Science Park, Chongqing Road, Fuyong, Baoan District, Shenzhen, China
TEL: +86-755 3688 6288 FAX: +86-755 3688 6277 E-mail:sts@stsapp.com

Test Report Certification

Applicant's name	:	KENXINDA TECHNOLOGY CO., LIMITED
Address	:	UNIT B 13/F PRAT COMMERCIAL BUILDING 17-19 PRAT AVENUE TSIMSHATSUI KL HONGKONG
Manufacture's Name.....	:	SHENZHEN KENXINDA TECHNOLOGY CO., LTD. (BAO'AN BRANCH)
Address	:	1-6 Floor, No.105 Work Shop & 1-5 Floor, No.104 Work Shop, Xinweihuaning Road, Dalang Community, Dalang Street, Baoán District, Shenzhen, P.R.C
Product description		
Product name	:	3G Mobile phone
Trademark	:	KENXINDA
Model and/or type reference	:	E7 Dual Sim
Serial Model：		N/A
IMIE1:		865617020599481
IMIE2:		865617020629486
Standards	:	ANSI/IEEE Std. C95.1-1992 FCC 47 CFR Part 2 (2.1093) IEEE 1528: 2003

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	:	June 25,2015 to June 30,2015
Date of Issue.....	:	July 07,2015
Test Result.....	:	**Pass**

Testing Engineer **:** Allen Chen

(Allen Chen)

Technical Manager **:**

(John Zou)

Authorized Signatory **:** Bovey Yang

(Bovey Yang)

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1. General Information

1.1 EUT Description

Equipment	3G Mobile phone		
Brand Name	KENXINDA		
Model No.	E7 Dual Sim		
Serial Model	N/A		
Model Difference	N/A		
Adapter	Input: AC100-240V, 50/60 Hz Output: DC 5V, 1000mA		
Battery	Rated Voltage: 3.7V Charge Limit: 4.2V Capacity: 2200mAh		
Hardware Version	W810_MB_V2.0		
Software Version	w810_0202-user4.43KOT49H.14B_eng.sp6.20150629.104151		
Frequency Range	GSM 850: 824 ~ 849MHz PCS1900: 1850 ~ 1910 MHz WCDMA II: 1850~1910 MHz WCDMA V: 824~849 MHz WLAN 802.11 b/g/n(HT20):2412-2462 MHz WLAN 802.11 n(HT40):2422-2452 MHz Bluetooth：2402~2480MHz		
Transmit Power(MAX):	**SIM 1 Card** GSM 850: 31.65dBm GSM 1900: 28.29dBm WCDMA II: 22.34dBm WCDMA V: 22.41dBm	**SIM 2 Card** GSM 850: 31.53dBm GSM 1900: 28.17dBm	802.11b: 11.69dBm 802.11g: 10.29dBm 802.11n(HT20/HT40): 10.13dBm/8.26dBm Bluetooth: 4.39dBm
Max. Reported SAR(1g):	Head: GSM 850: 0.318 W/kg GSM 1900: 0.207 W/kg WCDMA II: 0.620 W/kg WCDMA V: 0.489 W/kg 802.11b: 0.142W/kg	Body: GSM 850: 0.616W/kg GSM 1900: 0.778 W/kg WCDMA II: 0.883 W/kg WCDMA V: 0.934W/kg 802.11b: 0.211W/kg	Simultaneous Transmission : GSM 850: 0.707W/kg GSM 1900: 0.869 W/kg WCDMA II: 0.974 W/kg WCDMA V: 1.025W/kg
Operating Mode:	GSM: GSM Voice/GPRS Class 12; WCDMA: RMC/HSDPA/HSUPA Release 6; WLAN: 802.11 b/g/n; Bluetooth: V3.0(GFSK+π /4DQPSK+8DPSK)		
Antenna Specification:	GSM/WCDMA: PIFA Antenna BT/WIFI: PIFA 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		

Product	Type	
	☒ Production unit	☐ Identical Prototype

1.2 Test Environment

Ambient conditions in the SAR laboratory:

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

1.3 Test Facility

Shenzhen STS Test Services Co., Ltd.
Add. : 1/F, Building 2, Zhuoke Science Park, Chongqing Road, Fuyong, Baoan District, Shenzhen, China
FCC Registration No.: 842334;IC Registration No.: 12108A-1

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. 1528-2003	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 D01 v05r02	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 865664 D01 v01r03	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 941225 D06 v02	SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
7	FCC KDB 941225 D01 v03	SAR Measurement Procedures for 3G Devices
8	FCC KDB 248227 D01 v02r01	SAR Measurement Procedures for 802.11 a/b/g Transmitters
9	FCC KDB 648474 D04 v01r02	Handset SAR

SAR assessments have been made in line with the requirements of IEEE-1528:2003, FCC Supplement C, and comply with ANSI/IEEE C95.1-1992 “Uncontrolled Environments” limits. These limits apply to a location which is deemed as “Uncontrolled Environment” which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

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

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

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

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

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

Population/Uncontrolled Environments:
are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

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

NOTE
GENERAL POPULATION/UNCONTROLLED EXPOSURE
PARTIAL BODY LIMIT
1.6 W/kg

3. SAR Measurement System

3.1 Definition of Specific Absorption Rate (SAR)

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

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

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

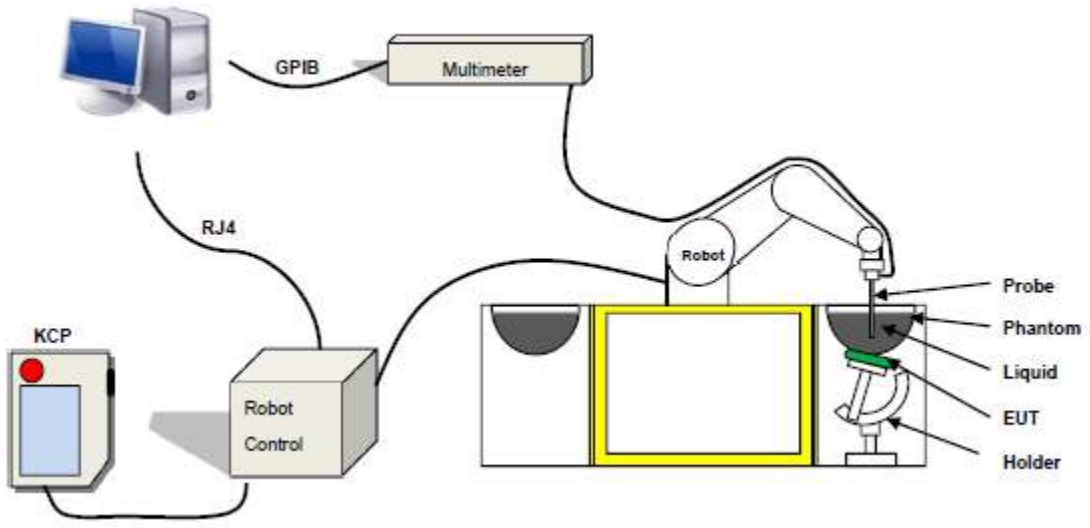
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

3.2 SAR System

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

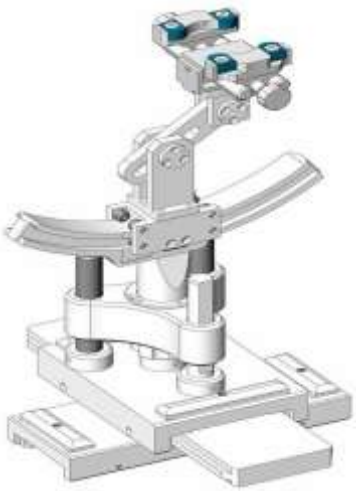
For the measurements the SAM twin phantom defined by the IEEE-1528:2003 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

The SAM twin 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.

SN 32/14 SAM115

3.2.3 Device Holder

The COMOSAR device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR). Thus the device needs no repositioning when changing the angles.
The COMOSAR device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity
εr =3 and loss tangent δ = 0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



4. Tissue Simulating Liquids

4.1 Simulating Liquids Parameter Check

The head tissue dielectric parameters recommended by the IEEE 1528-2003 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 IEEE 1528-2003 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 IEEE 1528-2003.

Frequency (MHz)	Water %	Suger %	Cellulose %	Salt %	Preventol %	Dgbe %	Conductivity σ	Permitivity: ε
Head								
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
1900	54.9	0	0	0.18	0	44.92	1.4	40.0
2450	46.7	0	0	0	0	53.3	1.80	0
Body								
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
1900	40.5	58.0	0	0.5	0.5	0	1.52	53.3
2450	73.2	0	0	0.04	0	26.7	1.95	52.7

LIQUID MEASUREMENT RESULTS

Date: June 25,2015 **Ambient condition:** Temperature 21.6°C **Relative humidity:** 59.0%

Head Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
824.2 MHz	21.2	Permitivity:	41.5	42.85	3.25	± 5
		Conductivity:	0.90	0.86	-4.44	± 5
826 .4MHz		Permitivity:	41.5	42.16	1.59	± 5
		Conductivity:	0.90	0.87	-3.33	± 5
835.0 MHz		Permitivity:	41.5	42.01	1.23	± 5
		Conductivity:	0.90	0.90	0.00	± 5
836.6 MHz		Permitivity:	41.5	41.91	0.99	± 5
		Conductivity:	0.90	0.90	0.00	± 5
846.6 MHz		Permitivity:	41.5	41.73	0.55	± 5
		Conductivity:	0.90	0.92	2.22	± 5
848.8 MHz		Permitivity:	41.5	41.00	-1.20	± 5
		Conductivity:	0.90	0.93	3.33	± 5

Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
824.2 MHz	21.3	Permitivity:	55.20	56.10	1.63	± 5
		Conductivity:	0.97	0.94	-3.09	± 5
826 .4MHz		Permitivity:	55.20	55.99	1.43	± 5
		Conductivity:	0.97	0.95	-2.06	± 5
835.0 MHz		Permitivity:	55.20	55.43	0.42	± 5
		Conductivity:	0.97	0.96	-1.03	± 5
836.6 MHz		Permitivity:	55.20	55.08	-0.22	± 5
		Conductivity:	0.97	0.97	0.00	± 5
846.6 MHz		Permitivity:	55.20	54.57	-1.14	± 5
		Conductivity:	0.97	0.97	0.00	± 5
848.8 MHz		Permitivity:	55.20	54.15	-1.90	± 5
		Conductivity:	0.97	0.99	2.06	± 5

Date: June 29,2015 **Ambient condition:** Temperature 21.8°C **Relative humidity:** 51.3%

Head Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
1850.2 MHz	21.7	Permitivity:	40.00	41.26	3.15	± 5
		Conductivity:	1.40	1.36	-2.86	± 5
1852.4 MHz		Permitivity:	40.00	41.00	2.50	± 5
		Conductivity:	1.40	1.37	-2.14	± 5
1880.0 MHz		Permitivity:	40.00	40.83	2.08	± 5
		Conductivity:	1.40	1.39	-0.71	± 5
1900.0 MHz		Permitivity:	40.00	40.72	1.80	± 5
		Conductivity:	1.40	1.40	0.00	± 5
1907.6 MHz		Permitivity:	40.00	40.21	0.53	± 5
		Conductivity:	1.40	1.42	1.43	± 5
1909.8 MHz		Permitivity:	40.00	39.64	-0.90	± 5
		Conductivity:	1.40	1.45	3.57	± 5

Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
1850.2 MHz	19.9	Permitivity:	53.30	54.61	2.46	± 5
		Conductivity:	1.52	1.48	-2.63	± 5
1852.4 MHz		Permitivity:	53.30	54.09	1.48	± 5
		Conductivity:	1.52	1.50	-1.32	± 5
1880.0 MHz		Permitivity:	53.30	53.75	0.84	± 5
		Conductivity:	1.52	1.52	0.00	± 5
1900.0 MHz		Permitivity:	53.30	53.29	-0.02	± 5
		Conductivity:	1.52	1.53	0.66	± 5
1907.6 MHz		Permitivity:	53.30	53.14	-0.30	± 5
		Conductivity:	1.52	1.54	1.32	± 5
1909.8 MHz		Permitivity:	53.30	53.00	-0.56	± 5
		Conductivity:	1.52	1.56	2.63	± 5

Date: June 30,2015 **Ambient condition: Temperature** 21.7°C **Relative humidity:** 50.9%

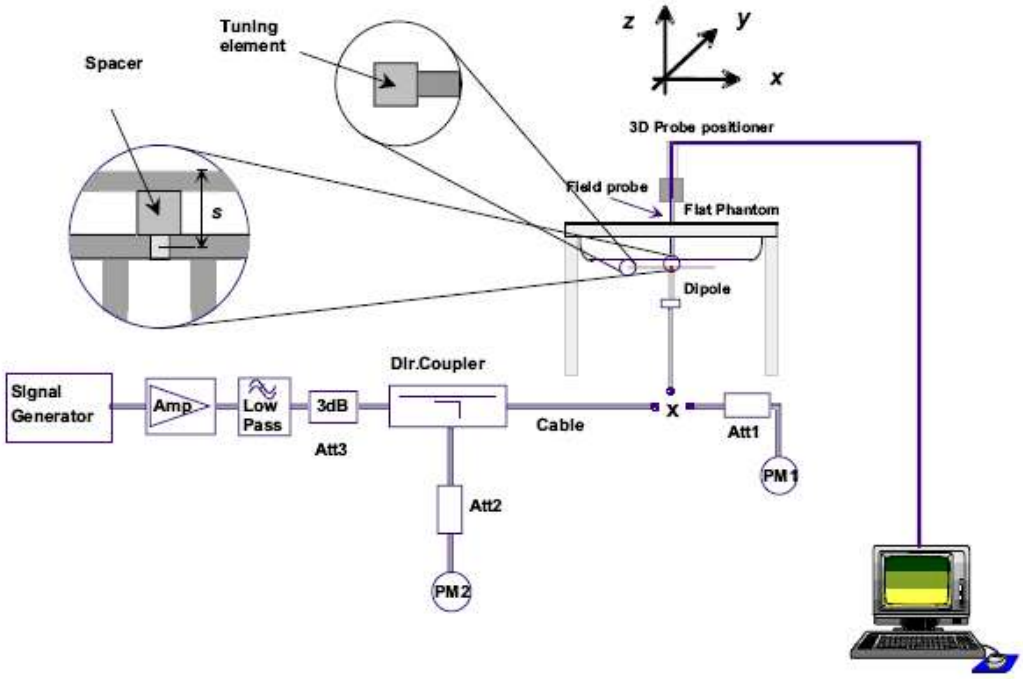
Head Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
2412 MHz	21.4	Permitivity:	39.2	40.28	2.755	± 5
		Conductivity:	1.80	1.75	-2.778	± 5
2437 MHz		Permitivity:	39.2	40.00	2.041	± 5
		Conductivity:	1.80	1.77	-1.667	± 5
2450 MHz		Permitivity:	39.2	39.67	1.199	± 5
		Conductivity:	1.80	1.78	-1.111	± 5
2462 MHz		Permitivity:	39.2	39.23	0.077	± 5
		Conductivity:	1.80	1.81	0.556	± 5

Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
2412 MHz	21.7	Permitivity:	52.7	52.89	0.361	± 5
		Conductivity:	1.95	1.88	-3.590	± 5
2437 MHz		Permitivity:	52.7	52.61	-0.171	± 5
		Conductivity:	1.95	1.90	-2.564	± 5
2450 MHz		Permitivity:	52.7	52.11	-1.120	± 5
		Conductivity:	1.95	1.94	-0.513	± 5
2462 MHz		Permitivity:	52.7	51.78	-1.746	± 5
		Conductivity:	1.95	1.96	0.513	± 5

5. SAR System Check

5.1 SAR System Check Procedures

Each SATIMO system is equipped with one or more system check kits. These units, together with the predefined measurement procedures within the SATIMO software, enable the user to conduct the system performance check and system check. 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 check setup is shown as below.



5.2 System Check Result

Comparing to the original SAR value provided by SATIMO, the system check data should be within its specification of 10 %.

Ambient condition: Temperature 21.6°C **Relative humidity:** 59.0%

Freq.(MHz)	Power(mw)	Tested Value (W/Kg)	Normalized SAR (W/kg)	Target(W/Kg)	Limited[%]	Date
835 Head	63.1	0.618	9.888	9.63	8.667-10.593	2015-06-25
835 Body	63.1	0.631	10.096	9.93	8.937-10.923	2015-06-25

Ambient condition: Temperature 21.8°C **Relative humidity:** 51.3%

Freq.(MHz)	Power(mw)	Tested Value (W/Kg)	Normalized SAR (W/kg)	Target(W/Kg)	Limited[%]	Date
1900 Head	63.1	2.516	40.256	39.84	35.856-43.824	2015-06-29
1900 Body	63.1	2.447	39.152	43.33	38.997-47.663	2015-06-29

Note: The tolerance limit of System validation ±10%.

Ambient condition: Temperature 21.7°C **Relative humidity:** 50.9%

Freq.(MHz)	Power (mW)	Tested Value (W/Kg)	Normalized SAR (W/kg)	Target (W/Kg)	Limited[%]	Date
2450 Head	63.1	3.310	52.960	54.70	49.230-60.170	June 30,2015
2450 Body	63.1	3.248	51.968	55.65	50.085-61. 215	June 30,2015

6. SAR Evaluation Procedures

The EUT is set to transmit at the required power in line with product specification, at each frequency relating to the LOW, MID, and HIGH channel settings.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the SAM twin phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR location (interpolated resolution set at $1mm^2$) which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at $1mm^3$).

When multiple peak SAR location were found during the same configuration or test mode, Zoom scan shall performed on each peak SAR location, only the peak point with maximum SAR value will be reported for the configuration or test mode.

Area Scan& Zoom Scan

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a $10mm^2$ step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments. In this report, Area Scan: dx=8mm dy=8mm

When an Area Scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE 1528-2003 and relevant KDB files, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan).

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. A density of 1000 kg/m^3 is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications utilize a physical step of 8mmx8mmx5mm providing a volume of 30mm in the X & Y axis, and 30mm in the Z axis.

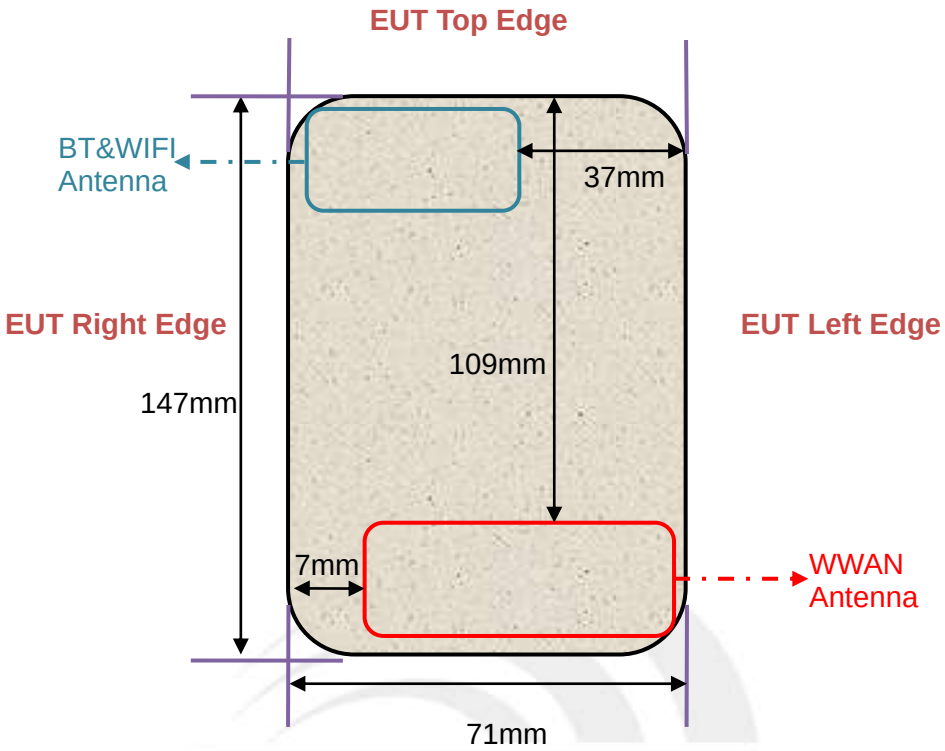
			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7. EUT Antenna Location Sketch

It is a 3G Mobile phone, support GSM mode and WCDMA mode.



(The back view)

7.1 SAR TEST EXCLUSION CONSIDER TABLE

For WWAN mode:

Test Configurations	Antenna to edges/surface	SAR required
Back	<25mm	Yes
Front	<25mm	Yes
Edge 1 (Top)	109mm	No
Edge 2 (Right)	2mm	Yes
Edge 3 (Bottom)	2mm	Yes
Edge 4 (Left)	7mm	Yes

For WLAN mode:

Test Configurations	Antenna to edges/surface	SAR required
Back	<25mm	Yes
Front	<25mm	Yes
Edge 1 (Top)	2mm	Yes
Edge 2 (Right)	2mm	Yes
Edge 3 (Bottom)	134mm	No
Edge 4 (Left)	37mm	No

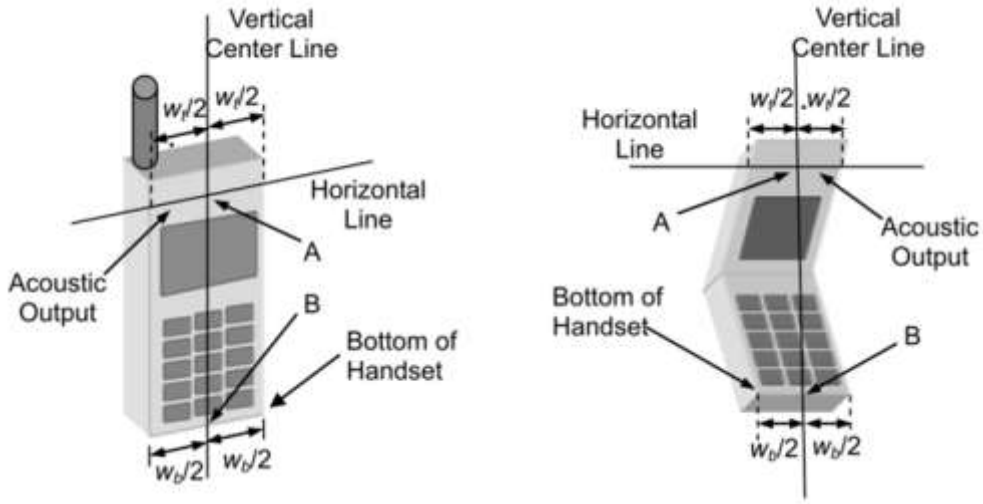
Note: SAR is not required for the distance between the antenna and the edge is <25mm as per KDB 941225D06 Hotspot SAR

8. EUT Test Position

This EUT was tested in Right Cheek, Right Titled, Left Cheek, Left Titled, Front Face, Rear Face and 4 edges.

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 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

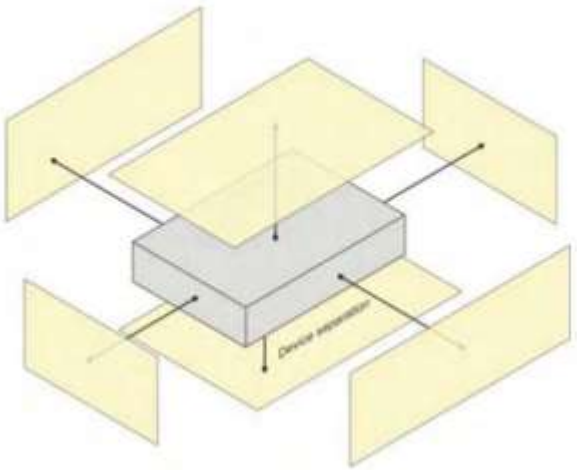
(1) To position the EUT parallel to the phantom surface.

(2) To adjust the EUT parallel to the flat phantom.

(3) To adjust the distance between the EUT surface and the flat phantom to 10mm.

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 from 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: 2003.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									
1	Probe calibration	5.8	N	1	1	1	5.8	5.8	∞
2	Axial isotropy	3.5	R	√3	$(1\text{-cp})^{1/2}$	$(1\text{-cp})^{1/2}$	1.43	1.43	∞
3	Hemispherical isotropy	5.9	R	√3	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
4	Boundary effect	1.0	R	√3	1	1	0.58	0.58	∞
5	Linearity	4.7	R	√3	1	1	2.71	2.71	∞
6	System Detection limits	1.0	R	√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	√3	1	1	0	0	∞
9	Integration time	1.4	R	√3	1	1	0.81	0.81	∞
10	Ambient noise	3.0	R	√3	1	1	1.73	1.73	∞
11	Ambient reflections	3.0	R	√3	1	1	1.73	1.73	∞
12	Probe positioner mech. restrictions	1.4	R	√3	1	1	0.81	0.81	∞
13	Probe positioning with respect to phantom shell	1.4	R	√3	1	1	0.81	0.81	∞
14	Max.SAR evaluation	1.0	R	√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	√3	1	1	2.89	2.89	∞
Phantom and set-up									
18	Phantom uncertainty	4.0	R	√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%	

9.2 System cheek Uncertainty

NO	Source	Tol(%)	Prob. Dist.	Div. k	ci (1g)	ci (10g)	1gUi	10gUi	Veff
[redacted]									
1	Probe calibration	5.8	N	1	1	1	5.8	5.8	∞
2	Axial isotropy	3.5	R	√3	$(1\text{-cp})^{1/2}$	$(1\text{-cp})^{1/2}$	1.43	1.43	∞
3	Hemispherical isotropy	5.9	R	√3	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
4	Boundary effect	1.0	R	√3	1	1	0.58	0.58	∞
5	Linearity	4.7	R	√3	1	1	2.71	2.71	∞
6	System Detection limits	1.0	R	√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	√3	1	1	0	0	∞
10	Integration time	1.4	R	√3	1	1	0.81	0.81	∞
11	Ambient noise	3.0	R	√3	1	1	1.73	1.73	∞
12	Ambient reflections	3.0	R	√3	1	1	1.73	1.73	∞
13	Probe positioner mech. restrictions	1.4	R	√3	1	1	0.81	0.81	∞
14	Probe positioning with respect to phantom shell	1.4	R	√3	1	1	0.81	0.81	∞
15	Max.SAR evaluation	1.0	R	√3	1	1	0.6	0.6	∞
Dipole									

16	Deviation of experimental source from numerical source	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	$\sqrt{3}$	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 permittivity and conductivity)	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					21.29%	21.10%	

10. Conducted Power Measurement

Test Result:

GSM 850:

Mode	Frequency (MHz)	Peak Powe(dBm)r	AVG Power(dBm)	Duty cycle Factor(dBm)	Frame Power(dBm)
Maximum Power <1>					
GSM850	824.2	**32.59**	**31.65**	-9	22.65
	836.6	32.53	31.61	-9	22.61
	848.8	32.48	31.56	-9	22.56
GPRS850 (1 Slot)	824.2	31.71	31.23	-9	22.23
	836.6	31.68	31.21	-9	22.21
	848.8	31.64	31.17	-9	22.17
GPRS850 (2 Slot)	824.2	30.74	30.24	-6	24.24
	836.6	30.72	30.21	-6	24.21
	848.8	30.68	30.17	-6	24.17
GPRS850 (3 Slot)	824.2	28.75	28.29	-4.26	24.03
	836.6	28.73	28.26	-4.26	24.00
	848.8	28.66	28.15	-4.26	23.89
GPRS850 (4 Slot)	824.2	27.79	27.33	-3	24.33
	836.6	27.74	27.28	-3	24.28
	848.8	27.69	27.24	-3	24.24
Maximum Power <2>					
GSM850	824.2	**32.42**	**31.53**	-9	22.53
	836.6	32.37	31.48	-9	22.48
	848.8	32.34	31.43	-9	22.43
GPRS850 (1 Slot)	824.2	31.61	31.09	-9	22.09
	836.6	31.56	31.06	-9	22.06
	848.8	31.52	31.03	-9	22.03
GPRS850 (2 Slot)	824.2	30.73	30.29	-6	24.29
	836.6	30.65	30.24	-6	24.24
	848.8	30.61	30.19	-6	24.19
GPRS850 (3 Slot)	824.2	28.77	28.41	-4.26	24.15
	836.6	28.74	28.38	-4.26	24.12
	848.8	28.71	28.35	-4.26	24.09
GPRS850 (4 Slot)	824.2	27.86	27.39	-3	24.39
	836.6	27.82	27.35	-3	24.35
	848.8	27.79	27.32	-3	24.32

PCS 1900:

Mode	Frequency (MHz)	Peak Power(dBm)	AVG Power(dBm)	Duty cycle Factor(dBm)	Frame Power(dBm)
Maximum Power <1>					
GSM1900	1850.2	**28.73**	**28.29**	-9	19.29
	1880	28.68	28.25	-9	19.25
	1909.8	28.64	28.21	-9	19.21
GPRS1900 (1 Slot)	1850.2	28.61	28.15	-9	19.15
	1880	28.59	28.13	-9	19.13
	1909.8	28.56	28.09	-9	19.09
GPRS1900 (2 Slot)	1850.2	27.82	27.37	-6	21.37
	1880	27.77	27.33	-6	21.33
	1909.8	27.74	27.29	-6	21.29
GPRS1900 (3 Slot)	1850.2	25.68	25.25	-4.26	20.99
	1880	25.64	25.23	-4.26	20.97
	1909.8	25.62	25.21	-4.26	20.95
GPRS1900 (4 Slot)	1850.2	24.88	24.48	-3	21.48
	1880	24.84	24.41	-3	21.41
	1909.8	24.79	24.37	-3	21.37
Maximum Power <2>					
GSM1900	1850.2	**28.62**	**28.17**	-9	19.17
	1880	28.59	28.14	-9	19.14
	1909.8	28.53	28.11	-9	19.11
GPRS1900 (1 Slot)	1850.2	28.41	27.86	-9	18.86
	1880	28.38	27.83	-9	18.83
	1909.8	28.37	27.78	-9	18.78
GPRS1900 (2 Slot)	1850.2	27.63	27.21	-6	21.21
	1880	27.61	27.15	-6	21.15
	1909.8	27.55	27.12	-6	21.12
GPRS1900 (3 Slot)	1850.2	25.64	25.26	-4.26	21.00
	1880	25.61	25.19	-4.26	20.93
	1909.8	25.58	25.15	-4.26	20.89
GPRS1900 (4 Slot)	1850.2	24.84	24.39	-3	21.39
	1880	24.79	24.32	-3	21.32
	1909.8	24.74	24.31	-3	21.31

Note 1:
The Frame Power (Source-based time-averaged Power) is scaled the maximum burst average power based on time slots. The calculated methods are show as following:
Frame Power = Max burst power (1 Up Slot) – 9 dB
Frame Power = Max burst power (2 Up Slot) – 6 dB
Frame Power = Max burst power (3 Up Slot) – 4.26 dB
Frame Power = Max burst power (4 Up Slot) – 3 dB

UMTS BAND

HSDPA Setup Configuration:

·The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.

·The RF path losses were compensated into the measurements.

·A call was established between EUT and Based Station with following setting:

(1) Set Gain Factors(βc and βd) parameters set according to each

(2) Set RMC 12.2Kbps+HSDPA mode.

(3) Set Cell Power=-86dBm

(4) Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)

(5) Select HSDPA Uplink Parameters

(6) Set Delta ACK, Delta NACK and Delta CQI=8

(7) Set Ack - Nack Repetition Factor to 3

(8) Set CQI Feedback Cycle (k) to 4ms

(9) Set CQI Repetition Factor to 2

(10) Power Ctrl Mode=All Up bits

·The transmitted maximum output power was recorded.

Table C.10.2.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	βc (Note5)	βd	βd (SF)	βc/βd	βHS (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(Note 4)	15/15(Note 4)	64	12/15(Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: ΔACK, ΔNACK and ΔCQI = 30/15 with β_{hs} = 30/15 * β_c .
Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, ΔACK and ΔNACK = 30/15 with β_{hs} = 30/15 * β_c , and ΔCQI = 24/15 with β_{hs} = 24/15 * β_c .
Note 3: CM = 1 for βc/βd =12/15, hs/ c=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
Note 4: For subtest 2 the c/ d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to c = 11/15 and d = 15/15.

HSUPA Setup Configuration:

· The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.

· The RF path losses were compensated into the measurements.

· A call was established between EUT and Base Station with following setting * :

(1) Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK

(2) Set the Gain Factors (βc and βd) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121

(3) Set Cell Power = -86 dBm

(4) Set Channel Type = 12.2k + HSPA

(5) Set UE Target Power

(6) Power Ctrl Mode= Alternating bits

(7) Set and observe the E-TFCI

(8) Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI

· The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	βc	βd	βd (SF)	βc/βd	βHS (Note1)	βec	βed (Note 4) (Note 5)	βed (SF)	βed (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	βed1: 47/15 βed2: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, ΔACK, ΔNACK and ΔCQI = 30/15 with β_{hs} = 30/15 * β_c . For sub-test 5, ΔACK, ΔNACK and ΔCQI = 5/15 with β_{hs} = 5/15 * β_c .

Note 2: CM = 1 for βc/βd =12/15, hs/ 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.

Note 3: For subtest 1 the c/ d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to c = 10/15 and d = 15/15.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: βed cannot be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

UMTS BAND V

Mode	Frequency(MHz)	Peak Power(dBm)	AVG Power(dBm)
WCDMA 850 AMR	826.4	**22.88**	**22.41**
	836.6	22.84	22.37
	846.6	22.82	22.32
WCDMA 850 RMC	826.4	22.79	22.26
	836.6	22.80	22.30
	846.6	22.75	22.27
HSDPA Subtest 1	826.4	22.67	21.89
	836.6	22.68	21.84
	846.6	22.61	21.81
HSDPA Subtest 2	826.4	21.72	21.34
	836.6	21.68	21.31
	846.6	21.64	21.26
HSDPA Subtest 3	826.4	20.75	20.23
	836.6	20.68	20.21
	846.6	20.66	20.16
HSDPA Subtest 4	826.4	20.54	19.86
	836.6	20.51	19.85
	846.6	20.49	19.74
HSUPA Subtest 1	826.4	22.46	22.11
	836.6	22.42	22.09
	846.6	22.38	22.06
HSUPA Subtest 2	826.4	21.61	21.21
	836.6	21.64	21.20
	846.6	21.59	21.16
HSUPA Subtest 3	826.4	20.75	20.37
	836.6	20.73	20.35
	846.6	20.67	20.31
HSUPA Subtest 4	826.4	20.48	19.87
	836.6	20.46	19.82
	846.6	20.42	19.77
HSUPA Subtest 5	826.4	19.76	19.29
	836.6	19.75	19.26
	846.6	19.72	19.24

UMTS BAND II

Mode	Frequency(MHz)	Peak Power	AVG Power
WCDMA 1900 RMC	1852.4	**22.85**	**22.34**
	1880	22.81	22.32
	1907.6	22.78	22.29
WCDMA 1900 AMR	1852.4	22.65	22.34
	1880	22.69	22.21
	1907.6	22.62	22.28
HSDPA Subtest 1	1852.4	22.59	22.25
	1880	22.52	22.09
	1907.6	22.51	22.06
HSDPA Subtest 2	1852.4	21.37	20.76
	1880	21.32	20.71
	1907.6	21.28	20.68
HSDPA Subtest 3	1852.4	20.79	20.33
	1880	20.77	20.31
	1907.6	20.75	20.26
HSDPA Subtest 4	1852.4	20.64	20.15
	1880	20.61	20.12
	1907.6	20.59	20.08
HSUPA Subtest 1	1852.4	22.74	22.36
	1880	22.72	22.32
	1907.6	22.68	22.24
HSUPA Subtest 2	1852.4	21.56	21.12
	1880	21.53	21.09
	1907.6	21.51	21.05
HSUPA Subtest 3	1852.4	20.78	20.37
	1880	20.74	20.32
	1907.6	20.71	20.29
HSUPA Subtest 4	1852.4	20.42	19.89
	1880	20.38	19.77
	1907.6	20.36	19.75
HSUPA Subtest 5	1852.4	19.74	19.32
	1880	19.72	19.29
	1907.6	19.67	19.25

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

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

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

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

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

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

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

WIFI

Mode	Channel Number	Frequency (MHz)	Peak Power(dBm)
802.11b	1	2412	**11.69**
	6	2437	11.54
	11	2462	11.41
802.11g	1	2412	10.29
	6	2437	10.25
	11	2462	10.18
802.11n(HT-20)	1	2412	10.13
	6	2437	10.09
	11	2462	10.06
802.11n(HT-40)	3	2422	8.26
	6	2437	8.15
	9	2452	8.12

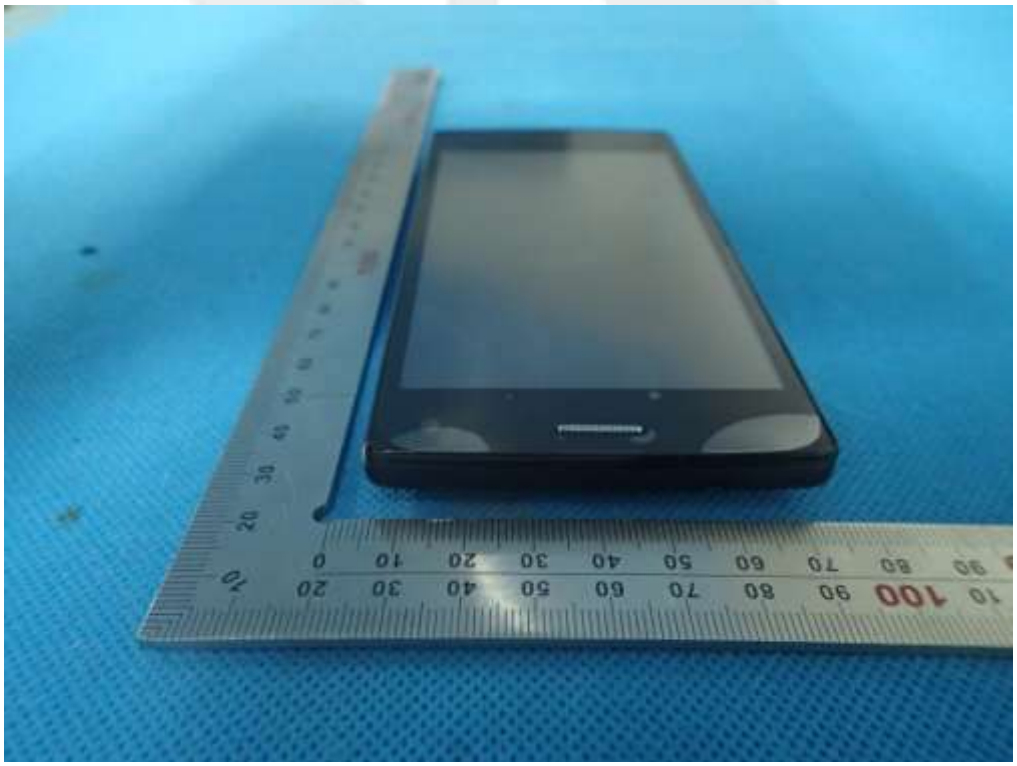
Bluetooth 3.0

Mode	Channel Number	Frequency (MHz)	Peak Power(dBm)
GFSK(1M)	0	2402	4.10
	39	2441	**4.39**
	78	2480	4.24
π/4-DQPSK(2Mbps)	0	2402	3.61
	39	2441	3.90
	78	2480	3.84
8-DPSK(3Mbps)	0	2402	3.64
	39	2441	3.92
	78	2480	3.72

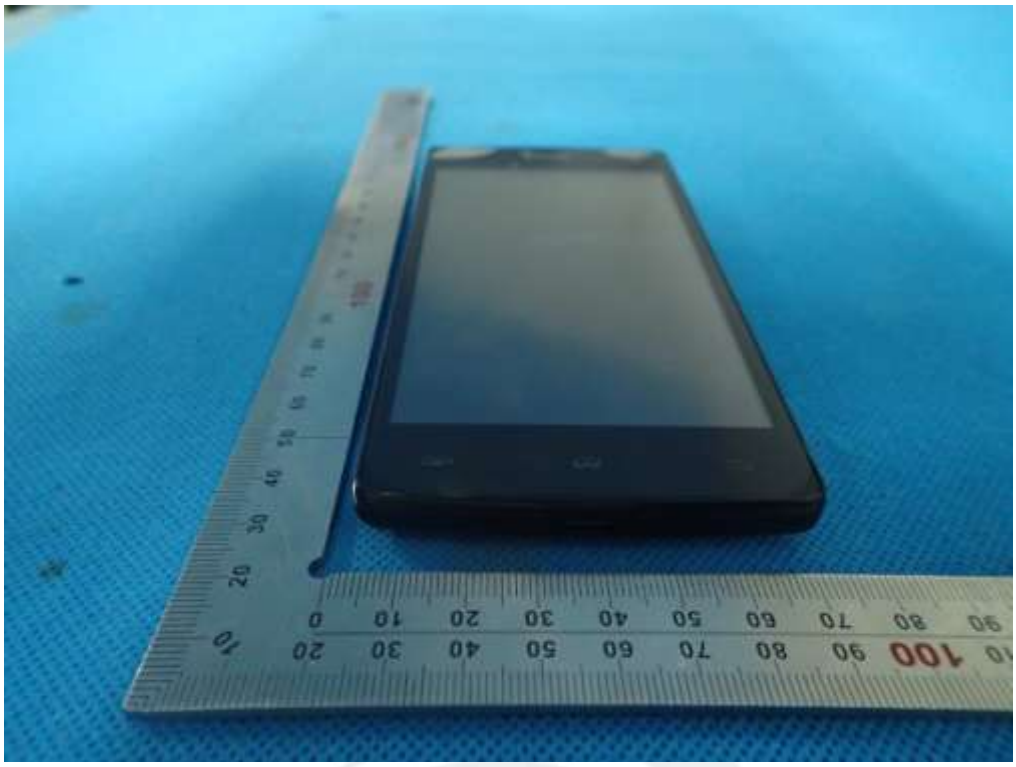
11. EUT And Test Setup Photo

11.1EUT Photo

All View of EUT



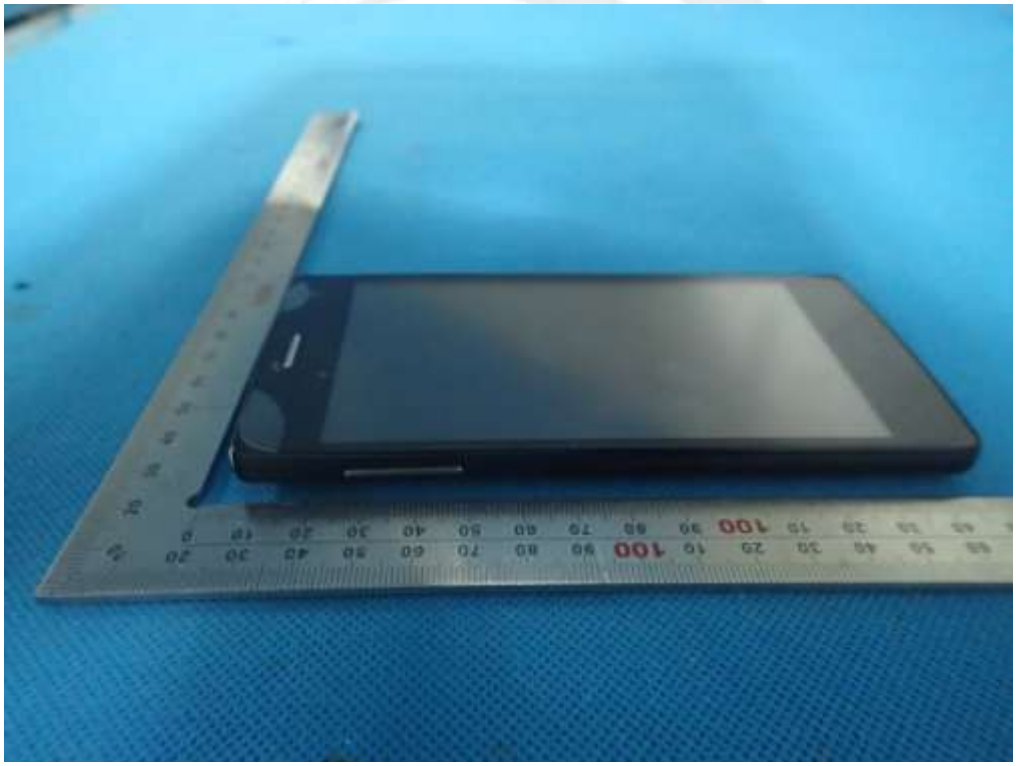
Top side



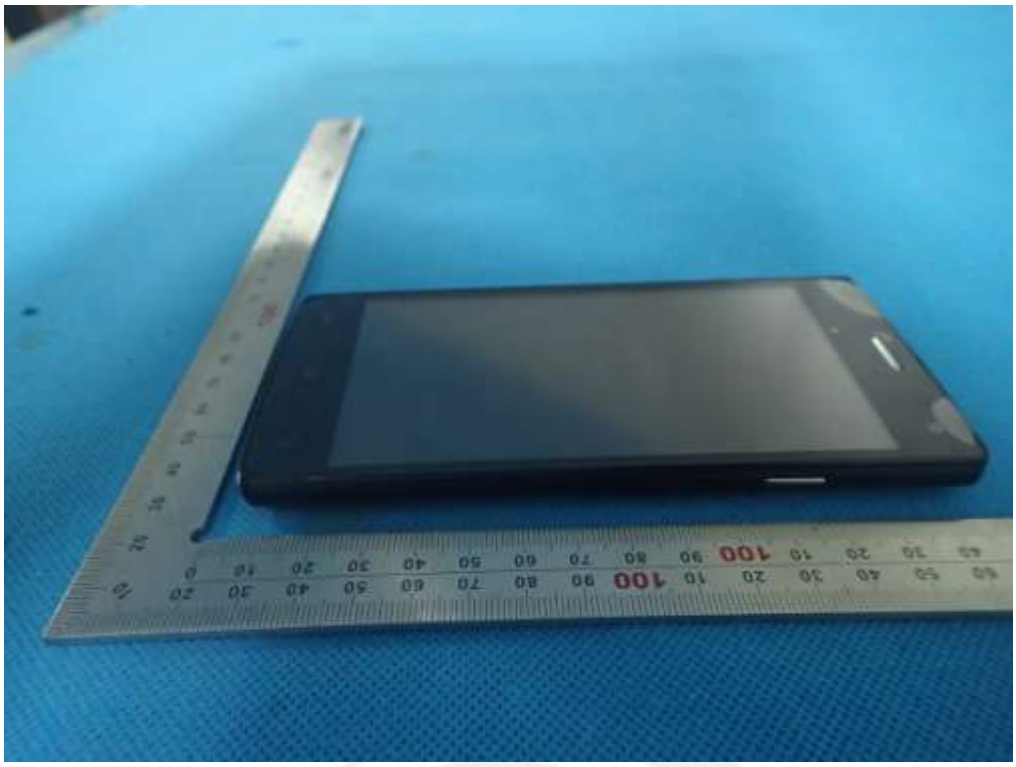
Bottom side

Front side

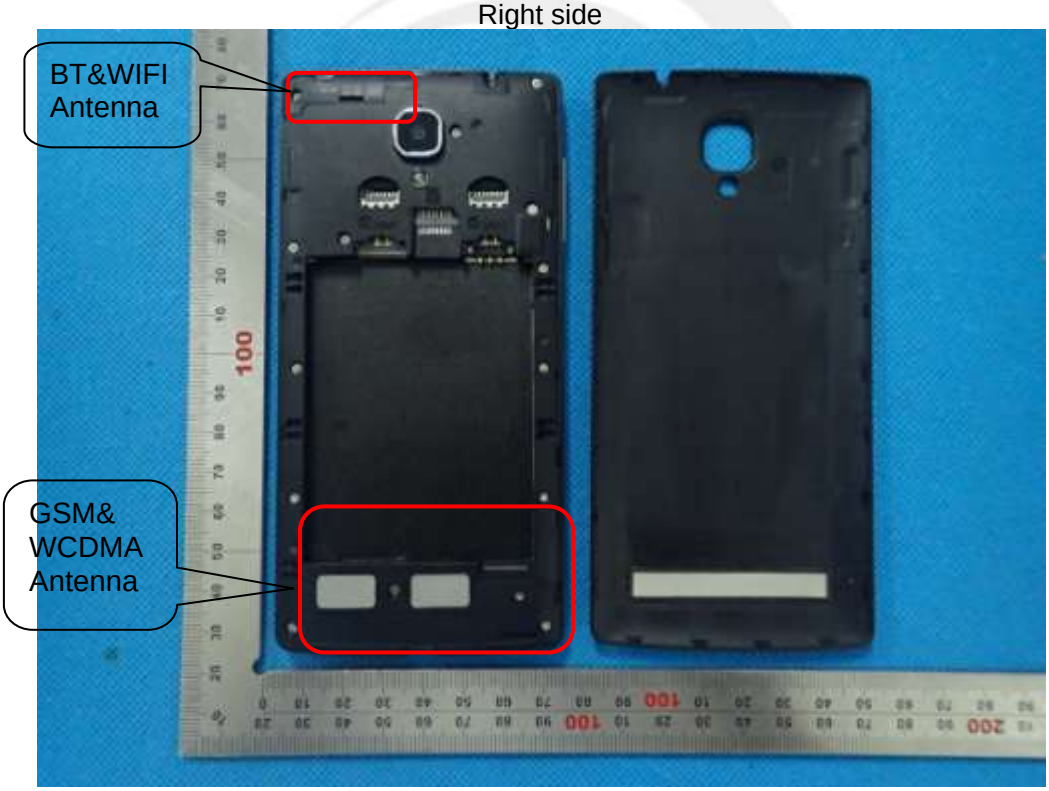
Back side



Left side

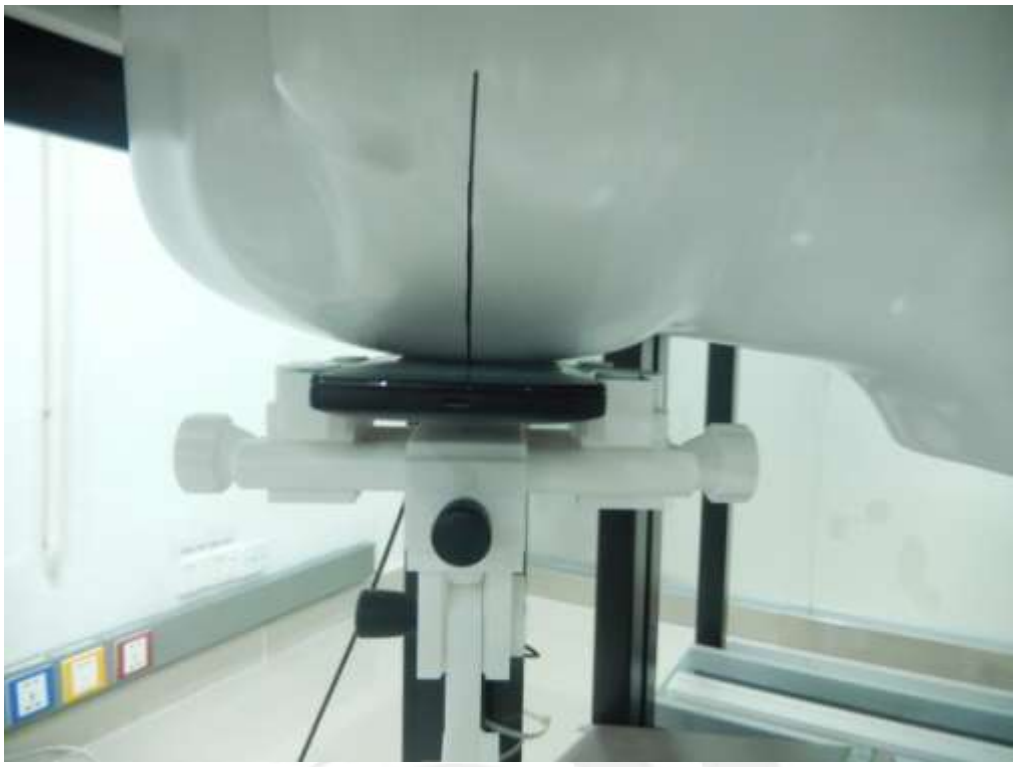


Right side

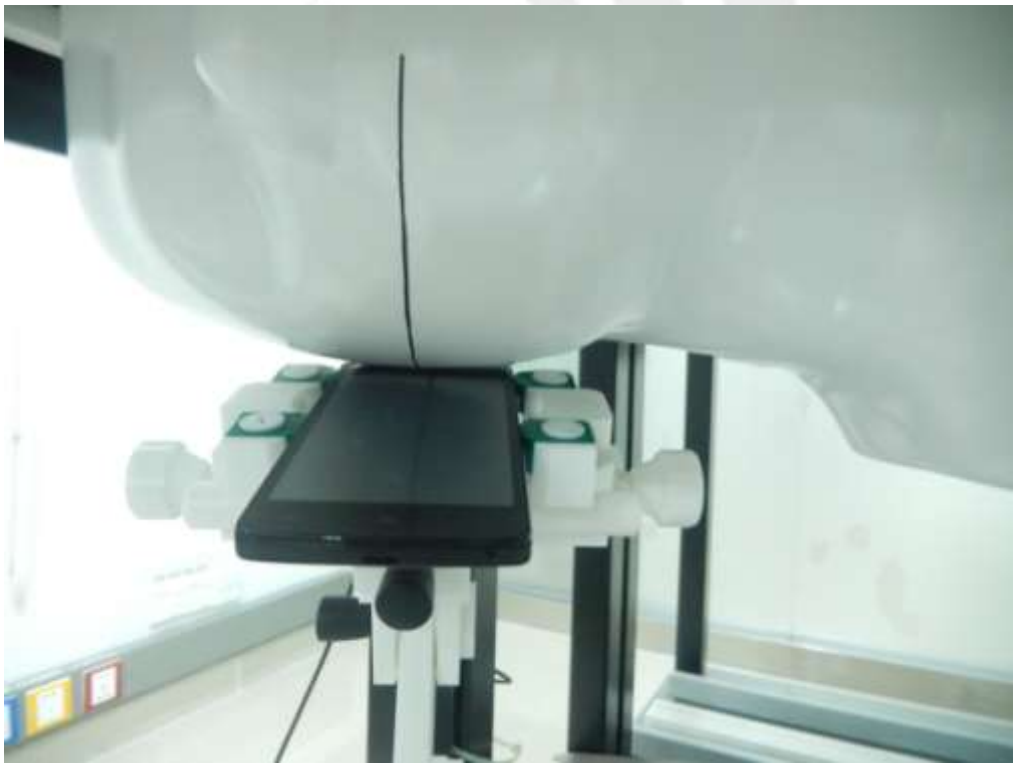


Open View of EUT-1

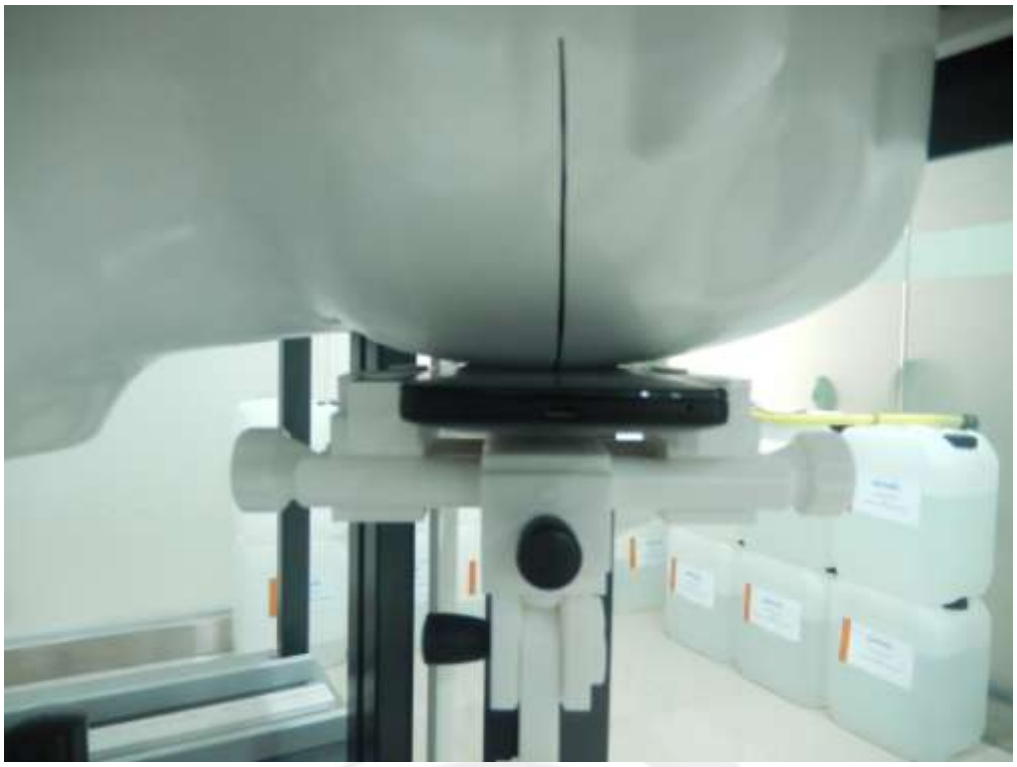
11.2Setup Photo



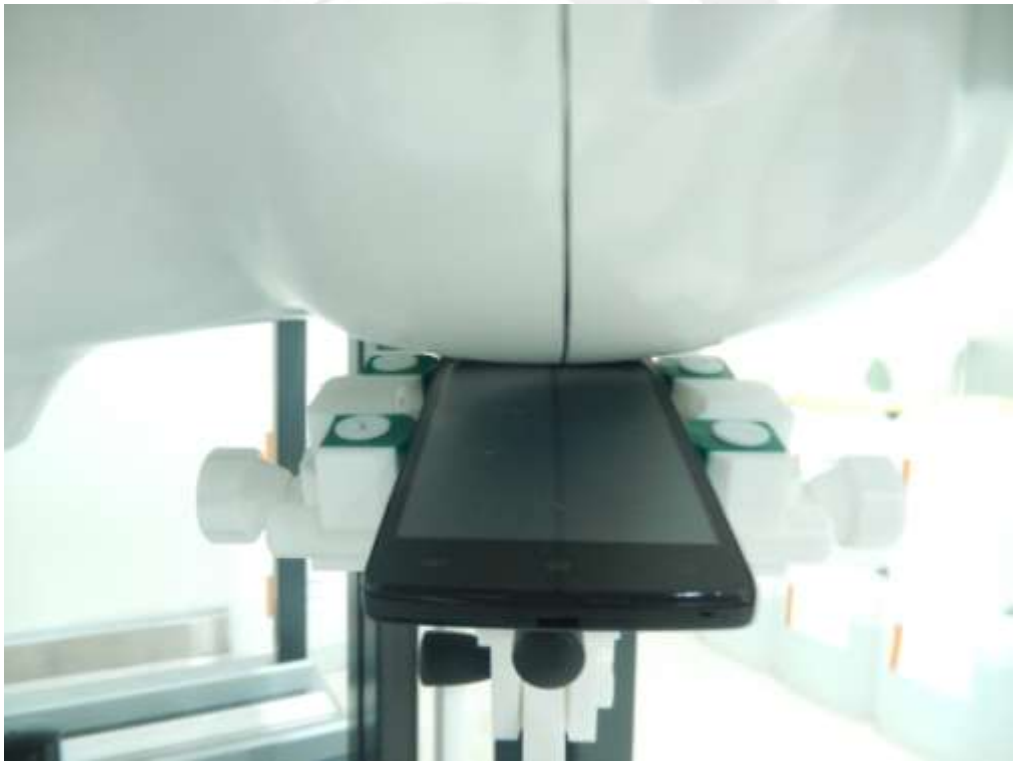
Right Touch



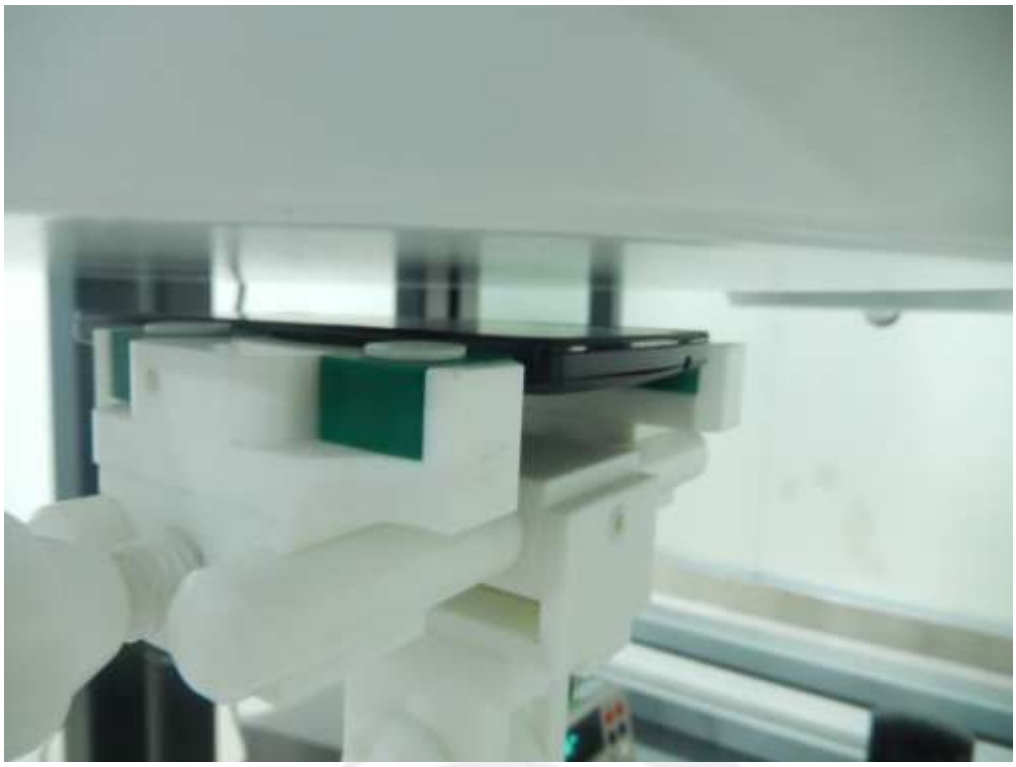
RIGHT TILT 150



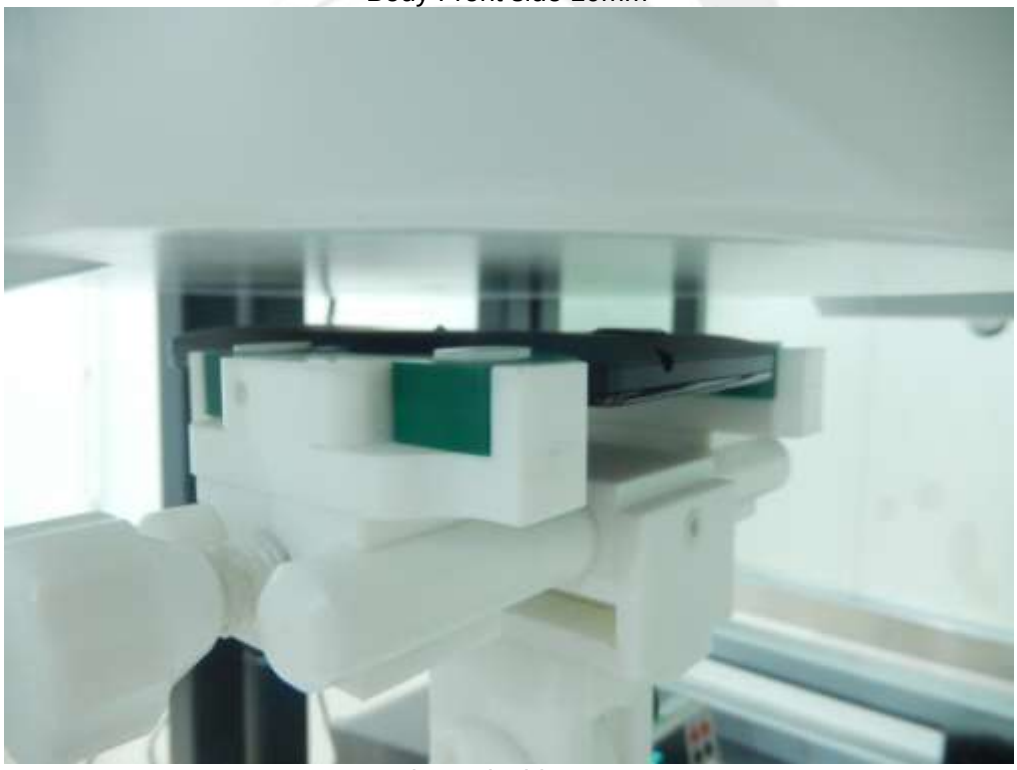
Left Touch



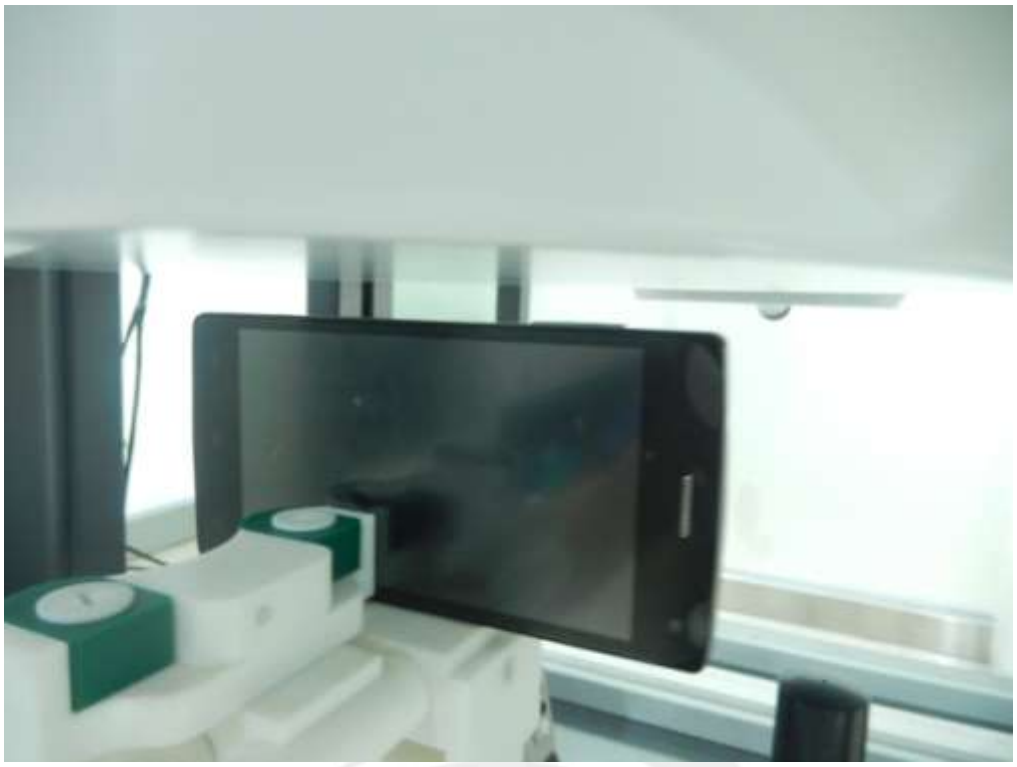
LEFT TILT 150



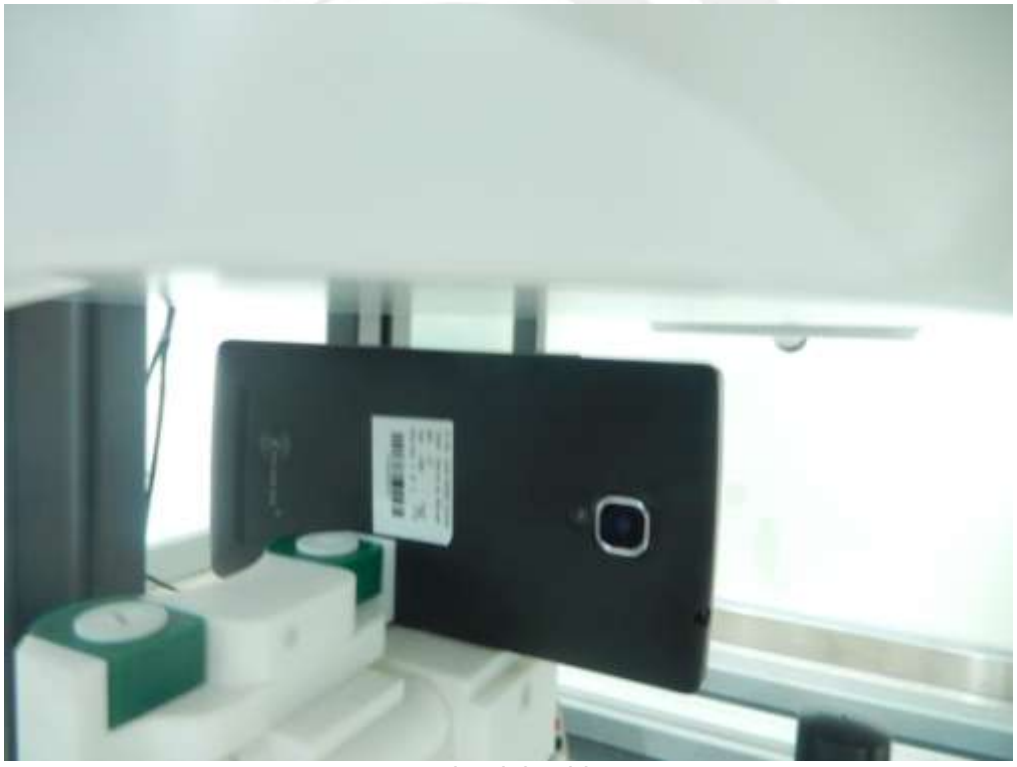
Body Front side 10mm



Body Back side 10mm

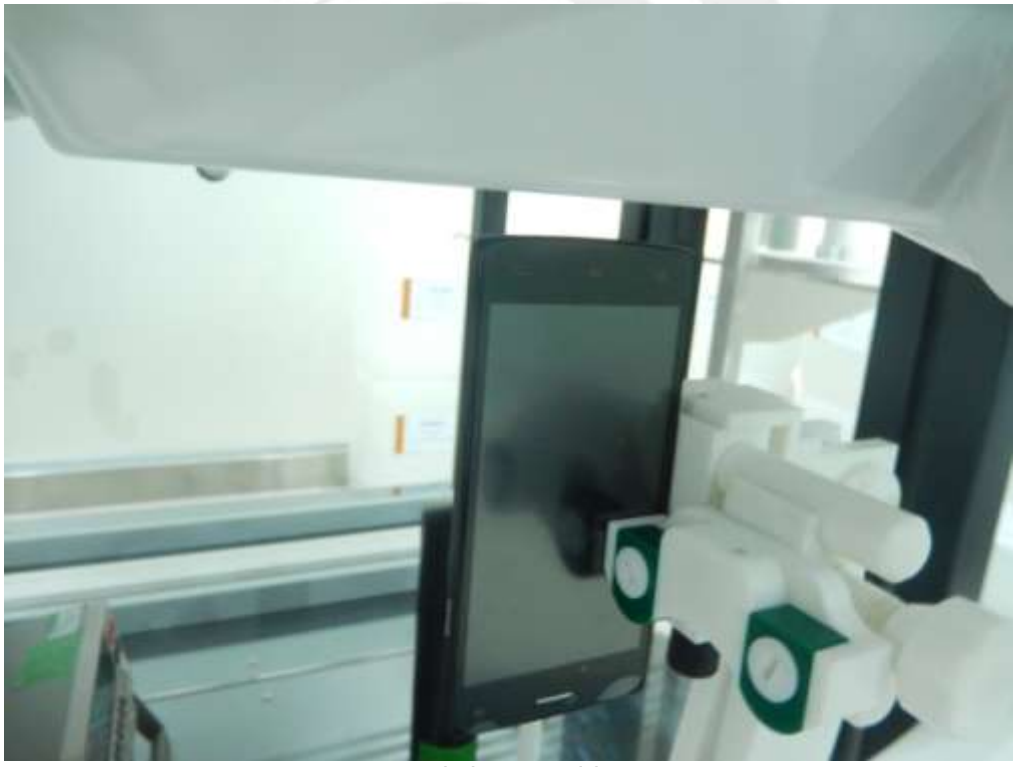


Body left side



Body Right side

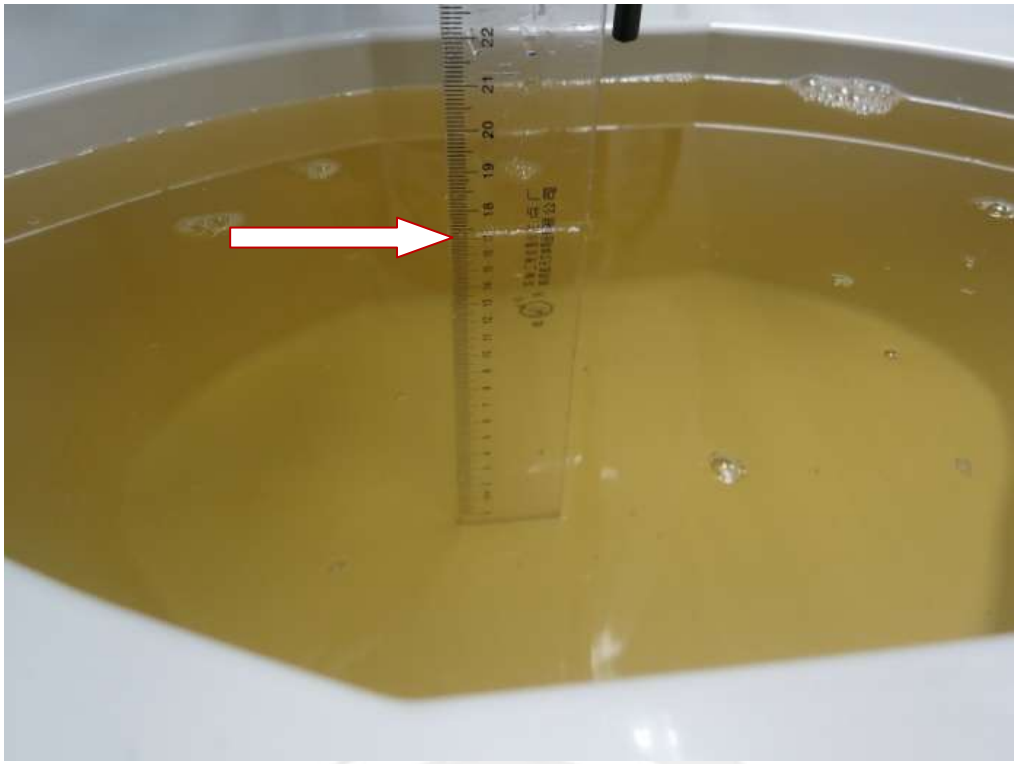
Body top side



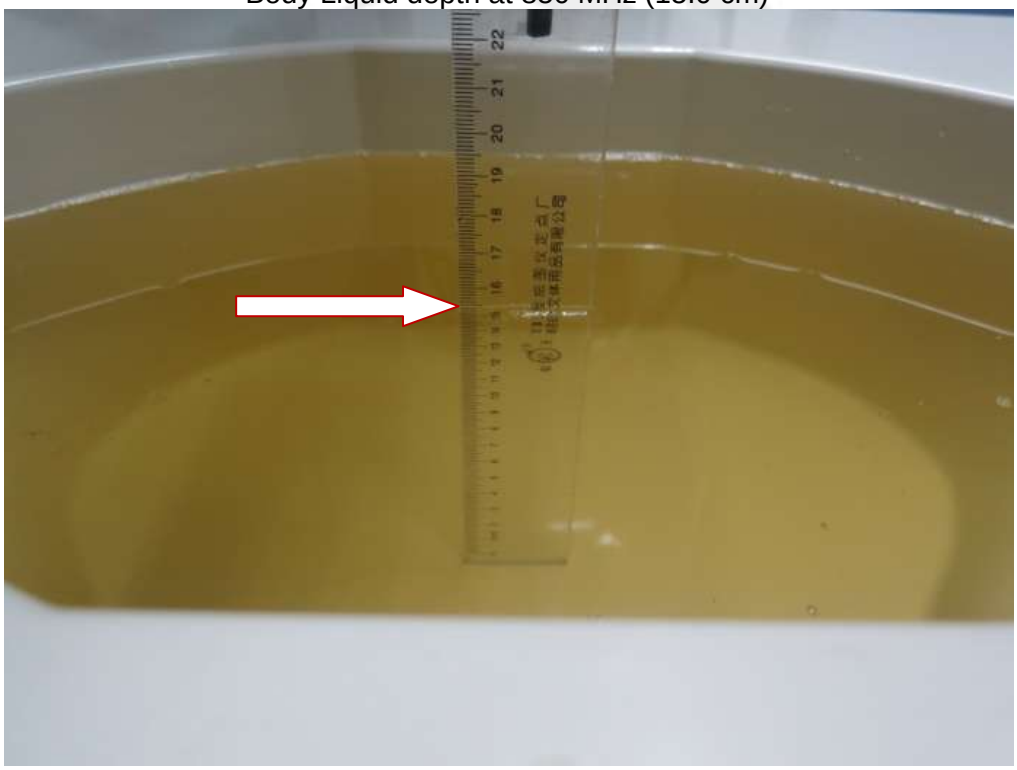
Body bottom side

Head Liquid depth at 850 MHz (15.0cm)

Head Liquid depth at 1900 MHz (15.0cm)



Body Liquid depth at 850 MHz (15.0 cm)



Body Liquid depth at 1900 MHz (15.0 cm)

Head Liquid depth at 2450 MHz (15.0cm)

Body Liquid depth at 2450MHz (15.0 cm)

12. SAR Result Summary

12.1 Head SAR

Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
GSM 850	Voice	Left Cheek	CH 190	0.253	0.51	32.00	31.61	0.277	1
		Left Tilt	CH 190	0.241	0.16	32.00	31.61	0.264	2
		Right Cheek	CH 190	**0.291**	-0.42	32.00	31.61	**0.318**	3
		Right Tilt	CH 190	0.206	0.32	32.00	31.61	0.225	4
	GPRS Data-4 Slot（hotspot）	Left Cheek	CH 190	0.134	0.26	28.00	27.28	0.158	5
		Left Tilt	CH 190	0.105	-0.09	28.00	27.28	0.124	6
		Right Cheek	CH 190	**0.153**	0.56	28.00	27.28	0.181	7
		Right Tilt	CH 190	0.125	-0.12	28.00	27.28	0.148	8
GSM1900	Voice	Left Cheek	CH 661	**0.174**	0.18	29.00	28.25	**0.207**	9
		Left Tilt	CH 661	0.034	0.23	29.00	28.25	0.040	10
		Right Cheek	CH 661	0.154	-0.44	29.00	28.25	0.183	11
		Right Tilt	CH 661	0.035	0.06	29.00	28.25	0.042	12
	GPRS Data-4 Slot（hotspot）	Left Cheek	CH 661	**0.085**	0.02	25.00	24.41	**0.097**	13
		Left Tilt	CH 661	0.018	0.17	25.00	24.41	0.021	14
		Right Cheek	CH 661	0.079	-0.11	25.00	24.41	0.090	15
		Right Tilt	CH 661	0.023	0.03	25.00	24.41	0.026	16
WCDMA II	RMC	Left Cheek	CH9400	**0.530**	0.09	23.00	22.32	**0.620**	17
		Left Tilt	CH9400	0.075	0.24	23.00	22.32	0.088	18
		Right Cheek	CH9400	0.446	-0.28	23.00	22.32	0.522	19
		Right Tilt	CH9400	0.076	0.51	23.00	22.32	0.089	20
WCDMA V	RMC	Left Cheek	CH4183	**0.423**	-0.56	23.00	22.37	**0.489**	21
		Left Tilt	CH4183	0.254	-0.28	23.00	22.37	0.294	22
		Right Cheek	CH4183	0.379	0.33	23.00	22.37	0.438	23
		Right Tilt	CH4183	0.287	0.38	23.00	22.37	0.332	24

12.2 Body SAR And Hotspot

Summary of Measurement Results (SIM 1 Card)

Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
GSM 850	Voice (body-worn)	Front side	CH 190	0.334	-0.02	32	31.61	0.365	25
		Back side	CH 190	**0.563**	0.41	32	31.61	**0.616**	26
	GPRS Data-4 Slot (hotspot)	Front side	CH 190	0.183	-0.06	28	27.28	0.216	27
		Back side	CH 190	**0.263**	0.12	28	27.28	0.310	28
		Left side	CH 190	0.143	-0.19	28	27.28	0.169	29
		Right side	CH 190	0.016	0.58	28	27.28	0.019	30
		Top side	CH 190	0.006	0.64	28	27.28	0.007	31
		Bottom side	CH 190	0.113	0.23	28	27.28	0.133	32
GSM1900	Voice (body-worn)	Front side	CH 661	0.116	-0.07	29	28.25	0.138	33
		Back side	CH 661	**0.655**	-0.05	29	28.25	**0.778**	34
	GPRS Data-4 Slot (hotspot)	Front side	CH 661	0.057	0.11	25	24.41	0.065	35
		Back side	CH 661	**0.315**	0.16	25	24.41	**0.361**	36
		Left side	CH 661	0.114	0.26	25	24.41	0.131	37
		Right side	CH 661	0.307	0.07	25	24.41	0.352	38
		Top side	CH 661	0.025	0.23	25	24.41	0.029	39
		Bottom side	CH 661	0.276	0.26	25	24.41	0.316	40
WCDMA II	RMC (body-worn and hotspot)	Front side	CH9400	0.368	0.39	23	22.32	0.430	41
		Back side	CH9262	0.722	0.44	23	22.34	0.840	42
		Back side	CH9400	0.722	0.46	23	22.32	0.844	43
		Back side	CH9538	**0.750**	-0.07	23	22.29	**0.883**	44
		Left side	CH9400	0.070	0.52	23	22.32	0.082	45
		Right side	CH9400	0.117	-0.66	23	22.32	0.137	46
		Top side	CH9400	0.028	0.18	23	22.32	0.033	47
		Bottom side	CH9400	0.398	0.22	23	22.32	0.465	48
WCDMA V	RMC (body-worn and hotspot)	Front side	CH4183	0.475	0.18	23	22.37	0.549	49
		Back side	CH 4132	0.786	0.49	23	22.41	0.900	50
		Back side	CH 4183	0.717	-0.57	23	22.37	0.829	51
		Back side	CH 4233	**0.799**	0.16	23	22.32	**0.934**	52
		Left side	CH4183	0.497	0.24	23	22.37	0.575	53
		Right side	CH4183	0.026	0.03	23	22.37	0.030	54
		Top side	CH4183	0.005	-0.18	23	22.37	0.006	55

		Bottom side	CH4183	0.505	-0.08	23	22.37	0.584	56

Summary of Measurement Results (SIM 2 Card)

Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
GSM 850	Voice	Right Cheek	CH 190	0.275	-0.06	32	31.48	0.310	57
GSM1900	Voice	Left Cheek	CH 661	0.166	0.24	29	28.14	0.202	58
GSM 850	Voice（body-worn）	Back side	CH 190	0.544	0.41	32	31.48	0.613	59
GSM1900	Voice（body-worn）	Back side	CH 661	0.635	-0.05	29	28.14	0.774	60

Note:
When the 1-g Reported SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
Two card slot can't work at the same time.
The test separation of all above table is 10mm.

Summary of Measurement Results (Repeated SAR)

Band	Mode	Test Position	Channel	Once SAR (1g) (W/kg)	Twice SAR (1g) (W/kg)	Third SAR (1g) (W/kg)	Limit W/kg	Meas. No.
WCDMA V	RMC（body-worn and hotspot）	Back side	CH 4233	0.726	-	-	1.6	61
WCDMA II	RMC（body-worn and hotspot）	Back side	CH9262	0.755	-	-	1.6	62

Summary of Measurement Results (WIFI SAR)

Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
802.11b	DTS	Left Cheek	CH 6	**0.128**	-0.07	12.00	11.54	**0.142**	64
		Left Tilt	CH 6	0.080	0.16	12.00	11.54	0.089	65
		Right Cheek	CH 6	0.063	0.20	12.00	11.54	0.070	66
		Right Tilt	CH 6	0.052	-0.19	12.00	11.54	0.058	67
		Front side	CH 6	0.059	0.03	12.00	11.54	0.066	69
		Back side	CH 6	0.082	0.04	12.00	11.54	0.091	68
		Left side	CH 6	0.017	0.21	12.00	11.54	0.019	73
		Right side	CH 6	**0.190**	0.43	12.00	11.54	**0.211**	71
		Top side	CH 6	0.166	-0.80	12.00	11.54	0.185	70
		Bottom side	CH 6	0.016	0.37	12.00	11.54	0.018	72

Simultaneous Multi-band Transmission Evaluation:
Application Simultaneous Transmission information:

NO	Simultaneous state	Portable Handset		
		Head	Body-worn	Hotspot
1	GSM(voice)+WLAN 2.4GHz (data)	Yes	Yes	-
2	WCDMA(voice)+WLAN 2.4GHz (data)	Yes	Yes	-
3	GSM(voice)+Bluetooth(data)	-	Yes	-
4	WCDMA(voice)+Bluetooth(data)	-	Yes	-
5	GSM (Data) + Bluetooth(data)	-	Yes	
6	GSM (Data) + WLAN 2.4GHz (data)	Yes	Yes	Yes
7	WCDMA (Data) + Bluetooth(data)	--	Yes	
8	WCDMA (Data) + WLAN 2.4GHz (data)	Yes	Yes	Yes

NOTE:

1. WLAN and BT share the same antenna, and cannot transmit simultaneously.
2. Simultaneous with every transmitter must be the same test position.
3. KDB 447498 D01, BT SAR is excluded as below table.
4. KDB 447498 D01, for handsets the test separation distance is determined by the smallest distance between the outer surface of the device and the user; which is 0mm for head SAR and 10mm for body-worn SAR.
5. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
6. According to KDB447497 D01 4.3.2, simultaneous transmission SAR test exclusion is as follow:
   (1) 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.
   (2) Any transmitters and antennas should be considered when calculating simultaneous mode.
   (3) For mobile phone and PC, it's the sum of all transmitters and antennas at the same mode with same position in each applicable exposure condition
   (4) When the standalone SAR test exclusion of section 4.3.1 is applied to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to the following to determine simultaneous transmission SAR test exclusion:

   (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.
7. When the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The simultaneous transmitting antennas in each operating mode and exposure condition combination must be considered one pair at a time to determine the SAR to peak location separation ratio to qualify for test exclusion. The ratio is determined by (SAR1 + SAR2)1.5/Ri, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

Estimated SAR		Maximum Peak Power		Antenna to user(mm)	Frequency(GHz)	Stand alone SAR(1g) [W/kg]
		dBm	mW			
BT	Head	5	3.162	5	2.441	0.132
	Body			10	2.441	0.066

Maximum test results (WWAN) with BT SAR:
BT: Head (0 cm gap): 0.114 W/kg and Body (1.0cm gap): 0.057W/kg

Sum of the SAR for GSM 850 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/Kg)
		GSM 850 Band	WI-Fi DTS Band	Bluetooth	
Head (voice)	Left Touch	0.277	0.142		0.419
	Left Tilt	0.264	0.089		0.353
	Right Touch	0.318	0.070		0.388
	Right Tilt	0.225	0.058		0.283
Body-worn	Front	0.365	0.066		0.431
	Rear	0.616	0.091		**0.707**
Body-worn	Rear	0.365		0.066	0.431
	Front	0.616		0.066	0.682
Head (VoIP)	Left Touch	0.158	0.142		0.300
	Left Tilt	0.124	0.089		0.213
	Right Touch	0.181	0.070		0.251
	Right Tilt	0.148	0.058		0.206
Hotspot	Front	0.216	0.066		0.282
	Rear	0.310	0.091		0.401
	Left side	0.169	0.019		0.188
	Right side	0.019	0.211		0.23
	Top side	0.007	0.185		0.192
	Bottom side	0.133	0.018		0.151
Hotspot	Front	0.216		0.066	0.282
	Rear	0.310		0.066	0.376
	Left side	0.169		0.066	0.235
	Right side	0.019		0.066	0.085
	Top side	0.007		0.066	0.073
	Bottom side	0.133		0.066	0.199

Sum of the SAR for GSM 1900 &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/Kg)
		GSM 1900 Band	WI-Fi DTS Band	Bluetooth	
Head (voice)	Left Touch	0.207	0.142		0.349
	Left Tilt	0.040	0.089		0.129
	Right Touch	0.183	0.070		0.253
	Right Tilt	0.042	0.058		0.100
Body-worn	Front	0.138	0.066		0.204
	Rear	0.778	0.091		**0.869**
Body-worn	Rear	0.138		0.066	0.204
	Front	0.778		0.066	0.844
Head (VoIP)	Left Touch	0.097	0.142		0.239
	Left Tilt	0.021	0.089		0.110
	Right Touch	0.090	0.070		0.160
	Right Tilt	0.026	0.058		0.084
Hotspot	Front	0.065	0.066		0.131
	Rear	0.361	0.091		0.452
	Left side	0.131	0.019		0.150
	Right side	0.352	0.211		0.563
	Top side	0.029	0.185		0.214
	Bottom side	0.316	0.018		0.334
Hotspot	Front	0.065		0.066	0.131
	Rear	0.361		0.066	0.427
	Left side	0.131		0.066	0.197
	Right side	0.352		0.066	0.418
	Top side	0.029		0.066	0.095
	Bottom side	0.316		0.066	0.382

Sum of the SAR for WCDMA Band II &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/Kg)
		WCDMA Band II	Wi-Fi DTS Band	Bluetooth	
Head	Left Touch	0.620	0.142		0.762
	Left Tilt	0.088	0.089		0.177
	Right Touch	0.522	0.070		0.592
	Right Tilt	0.089	0.058		0.147
Body-worn	Front	0.430	0.066		0.496
	Rear	0.883	0.091		**0.974**
	Left side	0.082	0.019		0.101
	Right side	0.137	0.211		0.348
	Top side	0.033	0.185		0.218
	Bottom side	0.465	0.018		0.483
	Front	0.430		0.066	0.496
	Rear	0.883		0.066	0.949
	Left side	0.082		0.066	0.148
	Right side	0.137		0.066	0.203
	Top side	0.033		0.066	0.099
	Bottom side	0.465		0.066	0.531

Sum of the SAR for WCDMA Band V &Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ1-g SAR (W/Kg)
		WCDMA Band V	Wi-Fi DTS Band	Bluetooth	
Head	Left Touch	0.489	0.142		0.631
	Left Tilt	0.294	0.089		0.383
	Right Touch	0.438	0.070		0.508
	Right Tilt	0.332	0.058		0.390
Body-worn	Front	0.549	0.066		0.615
	Rear	0.934	0.091		**1.025**
	Left side	0.575	0.019		0.594
	Right side	0.030	0.211		0.241
	Top side	0.006	0.185		0.191
	Bottom side	0.584	0.018		0.602
	Front	0.549		0.066	0.615
	Rear	0.934		0.066	1.000
	Left side	0.575		0.066	0.641
	Right side	0.030		0.066	0.096
	Top side	0.006		0.066	0.072
	Bottom side	0.584		0.066	0.650

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

NO.	Instrument	Manufacturer	Model	S/N	Cal. Date	Cal. Due Date
1	835MHz Dipole	SATIMO	SID835	SN 30/14 DIP0G835-332	2014.09.01	2015.08.31
2	1900MHz Dipole	SATIMO	SID1900	SN 30/14 DIP1G900-333	2014.09.01	2015.08.31
3	2450MHz Dipole	SATIMO	SID2450	SN 30/14 DIP2G450-335	2014.09.01	2015.08.31
4	E-Field Probe	SATIMO	SSE5	SN 17/14 EP221	2014.09.01	2015.08.31
5	Antenna	SATIMO	ANTA3	SN 07/13 ZNTA52	2014.09.01	2015.08.31
6	Waveguide	SATIMO	SWG5500	SN 13/14 WGA32	2014.09.01	2015.08.31
7	Phantom	SATIMO	SAM	SN_4511_SAM90	2014.09.01	-
8	SAR TEST BENCH	SATIMO	Tablet POSITIONNING SYSTEM	SN 32/14 MSH97	2014.09.01	2015.08.31
9	SAR TEST BENCH	SATIMO	LAPTOP POSITIONNING SYSTEM	SN 32/14 LSH29	2014.09.01	2015.08.31
10	Dielectric Probe Kit	SATIMO	SCLMP	SN 32/14 OCPG52	2014.09.01	2015.08.31
11	Multi Meter	Keithley	Multi Meter 2000	4050073	2014.11.20	2015.11.19
12	Signal Generator	R&S	SMF100A	104260	2014.10.27	2015.10.26
13	Power Meter	R&S	NRP	100510	2014.10.25	2015.10.24
14	Power Sensor	R&S	NRP-Z11	101919	2014.10.25	2015.10.24
15	Network Analyzer	R&S	5071C	EMY46103472	2014.12.12	2015.12.11
16	Power Amplifier	SATIMO	ZHL-42W	9638	2014.11.20	2015.11.19

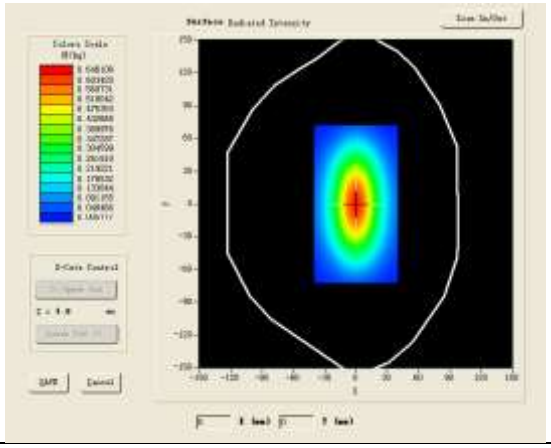
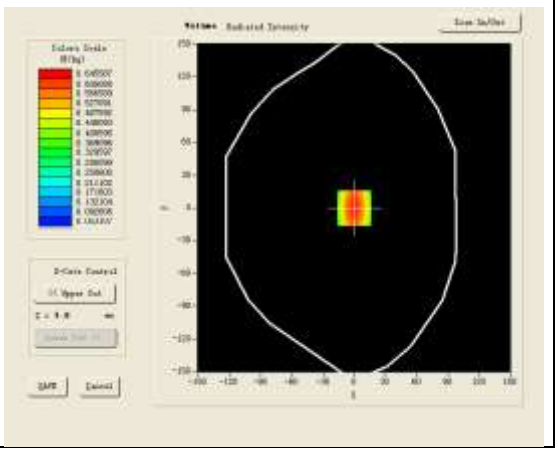
Appendix A. System Check Plots

System Performance Check Data (835MHz Head)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2015.06.25
Measurement duration: 13 minutes 27 seconds

Experimental conditions

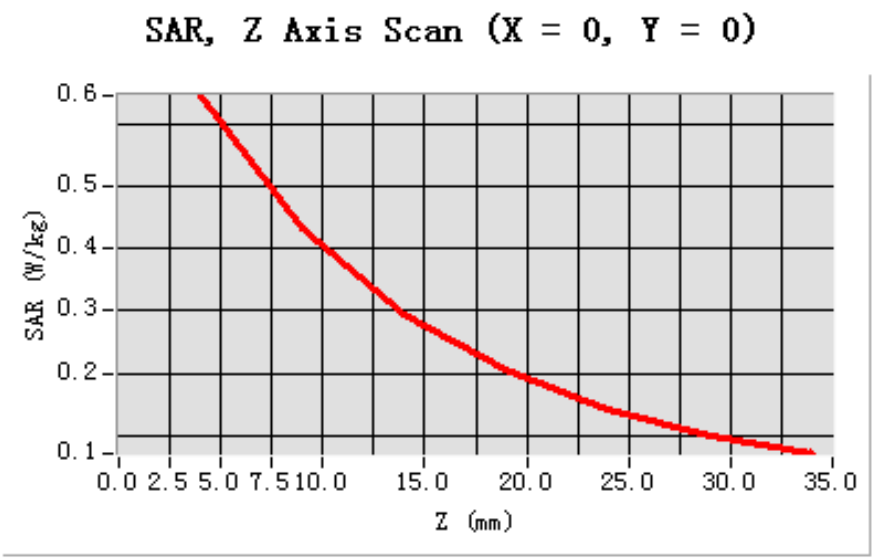
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity (real part)	42.01
Relative permittivity	18.72
Conductivity (S/m)	0.90
Power drift (%)	0.31
Ambient Temperature:	21.6°C
Liquid Temperature:	21.2°C
ConvF:	4.83
Crest factor:	1:1

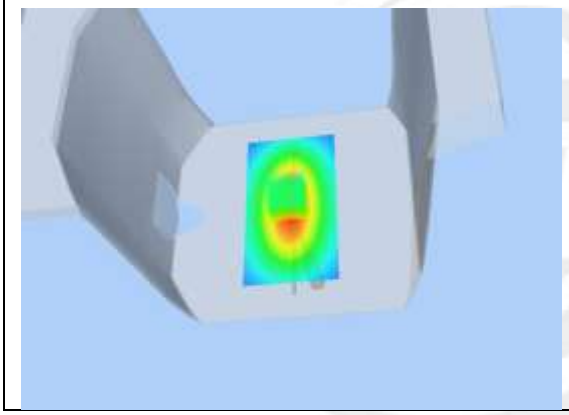
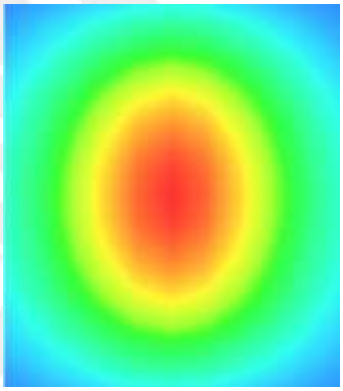
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	0.398264
SAR 1g (W/Kg)	0.617715

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6470	0.4322	0.2961	0.2058	0.1439	0.1013



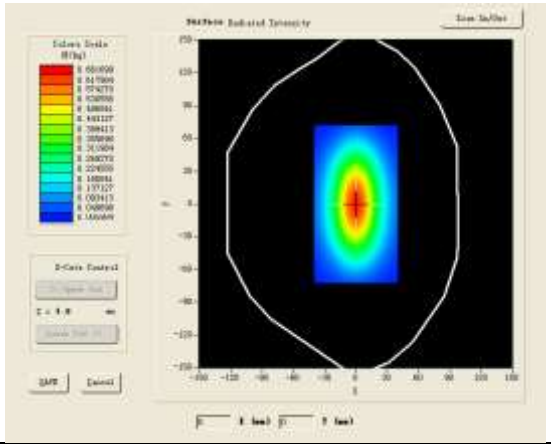
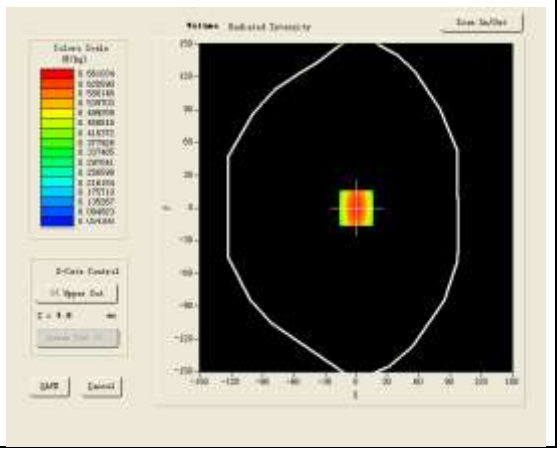
3D screen shot	Hot spot position
	

System Performance Check Data (835MHz Body)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2015.06.25
Measurement duration: 14 minutes 13 seconds

Experimental conditions.

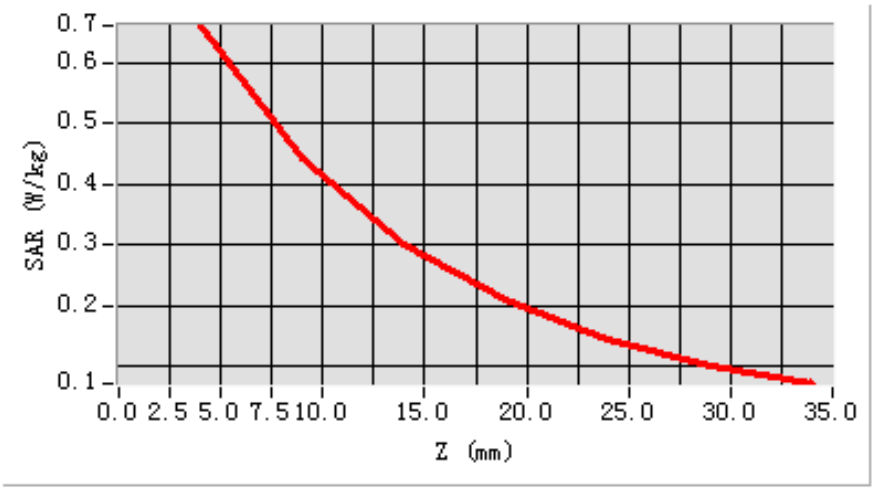
Probe	SN 17/14 EP221
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity (real part)	55.43
Relative permittivity	20.672109
Conductivity (S/m)	0.96
Power drift (%)	0.06
Ambient Temperature:	21.6℃
Liquid Temperature:	21.3℃
ConvF:	5.02
Crest factor:	1:1

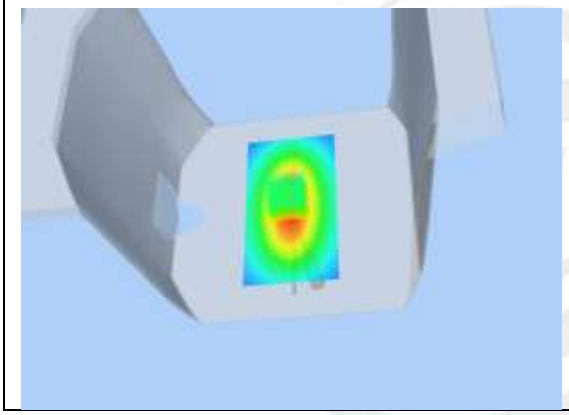
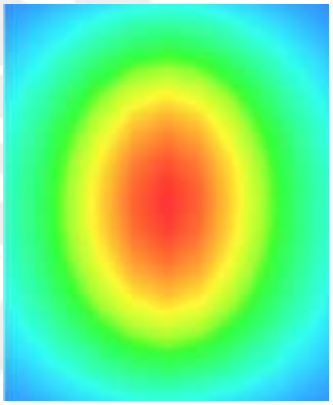
SURFACE SAR	VOLUME SAR
	

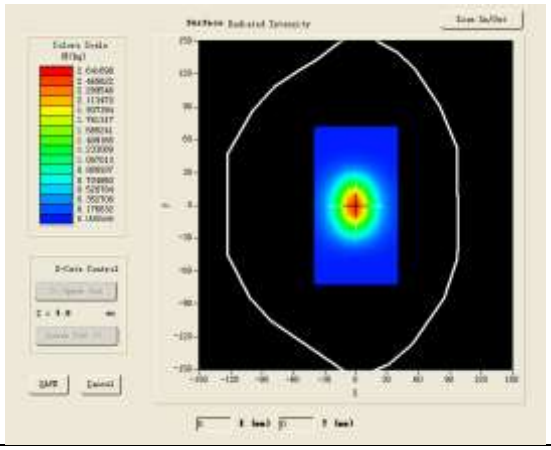
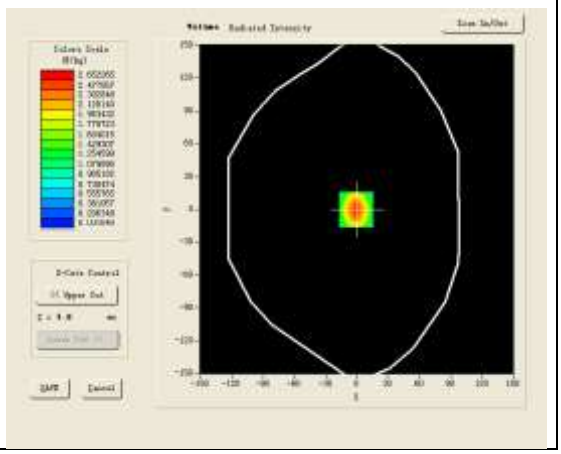
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	0.405117
SAR 1g (W/Kg)	0.631253

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6604	0.4413	0.3019	0.2083	0.1457	0.1020



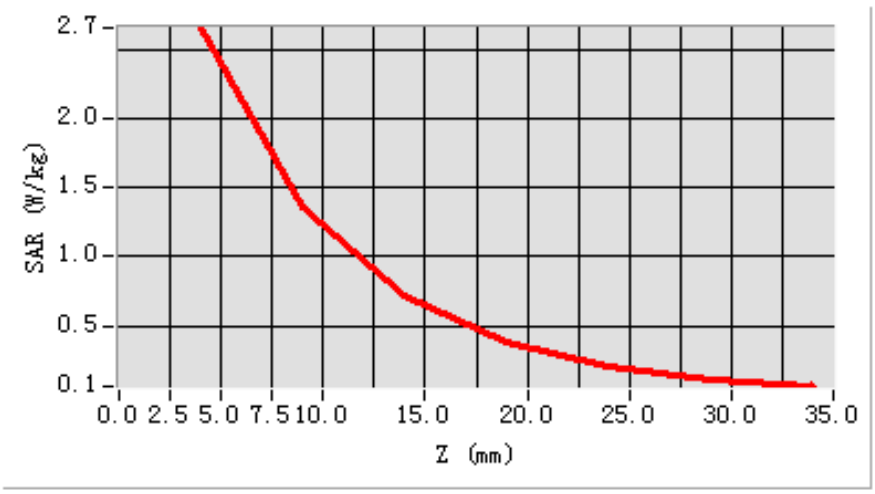
3D screen shot	Hot spot position
	

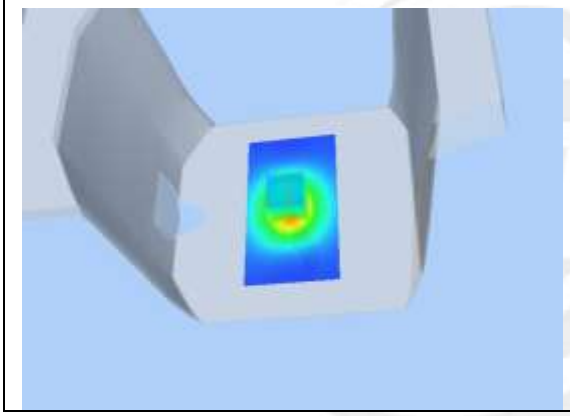
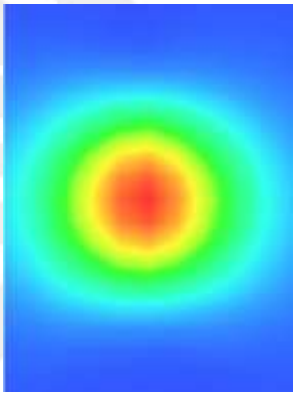
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-1.00, Y=0.00

SAR 10g (W/Kg)	1.275214
SAR 1g (W/Kg)	2.516345

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.6518	1.3517	0.7131	0.3793	0.2051	0.1108



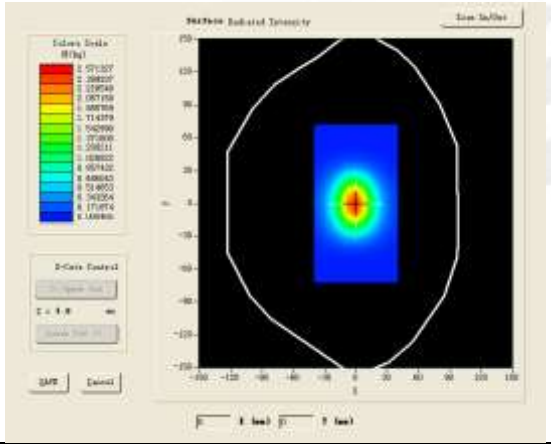
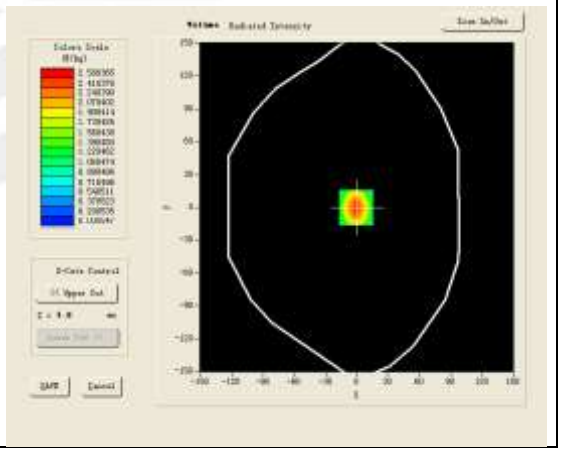
3D screen shot	Hot spot position
	

System Performance Check Data (1900MHz Body)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2015.6.29
Measurement duration: 14 minutes 37 seconds

Experimental conditions.

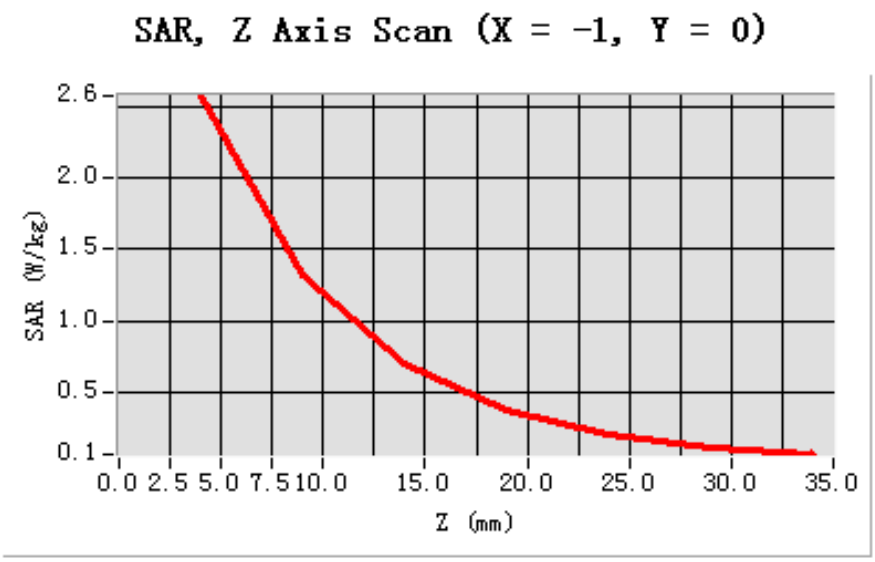
Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900
Relative permittivity (real part)	53.29
Relative permittivity	14.47
Conductivity (S/m)	1.53
Power drift (%)	0.16
Ambient Temperature:	21.8℃
Liquid Temperature:	19.9C
Probe	SN 17/14 EP221
ConvF:	4.85
Crest factor:	1:1

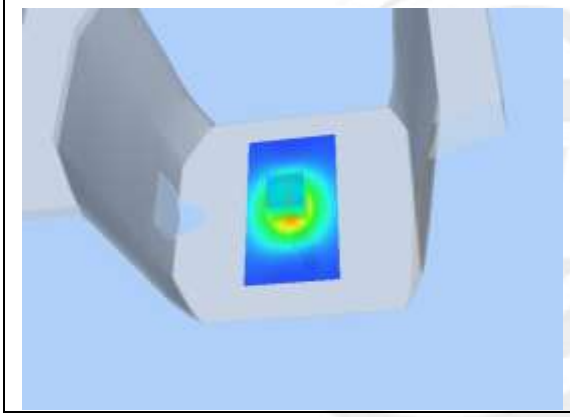
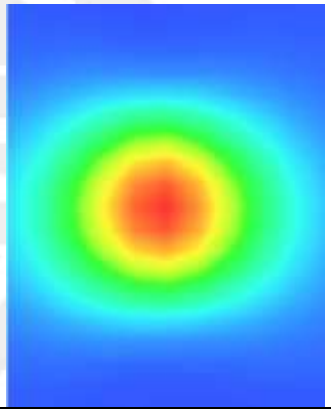
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-1.00, Y=0.00

SAR 10g (W/Kg)	1.245233
SAR 1g (W/Kg)	2.447118

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.5791	1.3159	0.6923	0.3701	0.1982	0.1076



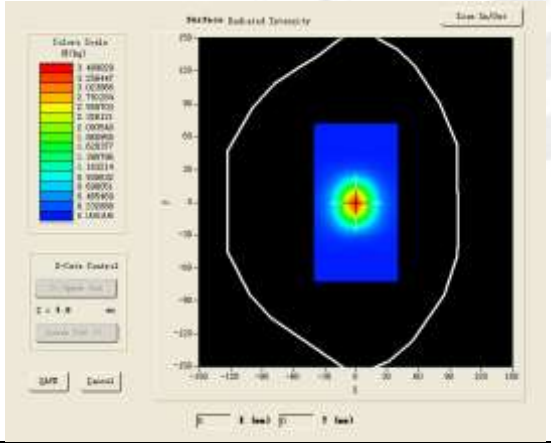
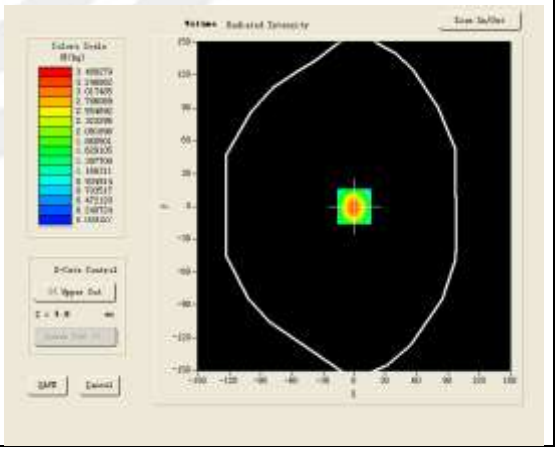
3D screen shot	Hot spot position
	

System Performance Check Data (2450MHz Head)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm
Date of measurement: June 30,2015
Measurement duration: 17 minutes 42 seconds

Experimental conditions.

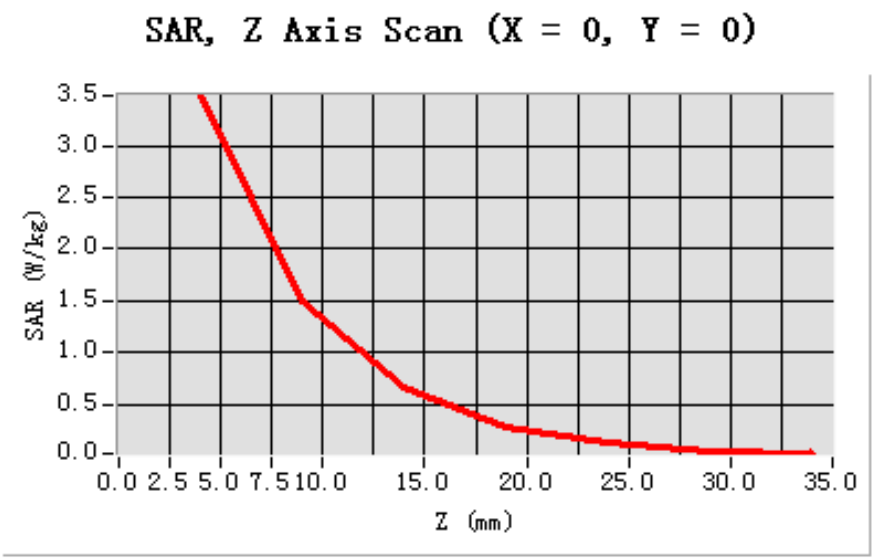
Device Position	-
Band	2450MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity (real part)	39.67
Relative permittivity	14.59
Conductivity (S/m)	1.78
Power drift (%)	0.31
Ambient Temperature:	21.7
Liquid Temperature:	21.4
Probe	SN 17/14 EP221
ConvF:	4.11
Crest factor:	1:1

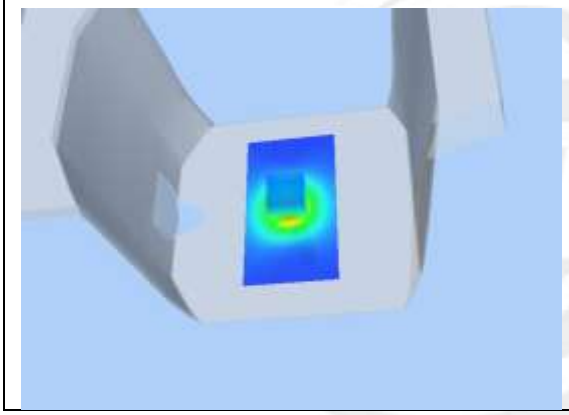
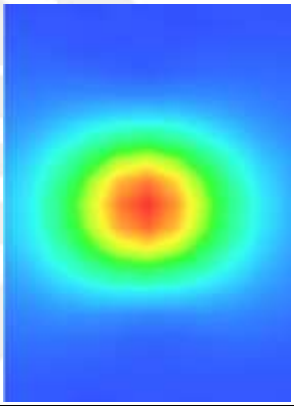
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.475346
SAR 1g (W/Kg)	3.309780

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	3.4793	1.4916	0.6570	0.2894	0.1300	0.0560



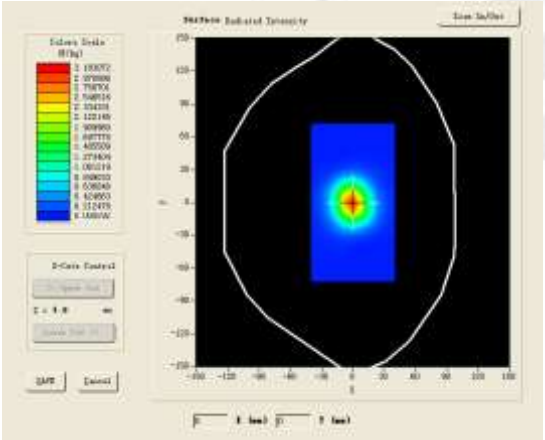
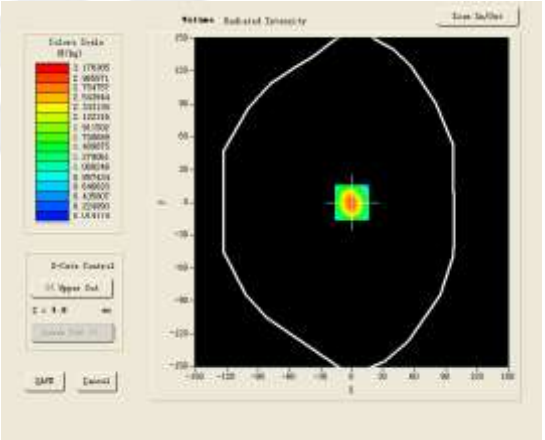
3D screen shot	Hot spot position
	

System Performance Check Data (2450MHz Body)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm
Date of measurement: June 30,2015
Measurement duration: 17 minutes 36 seconds

Experimental conditions.

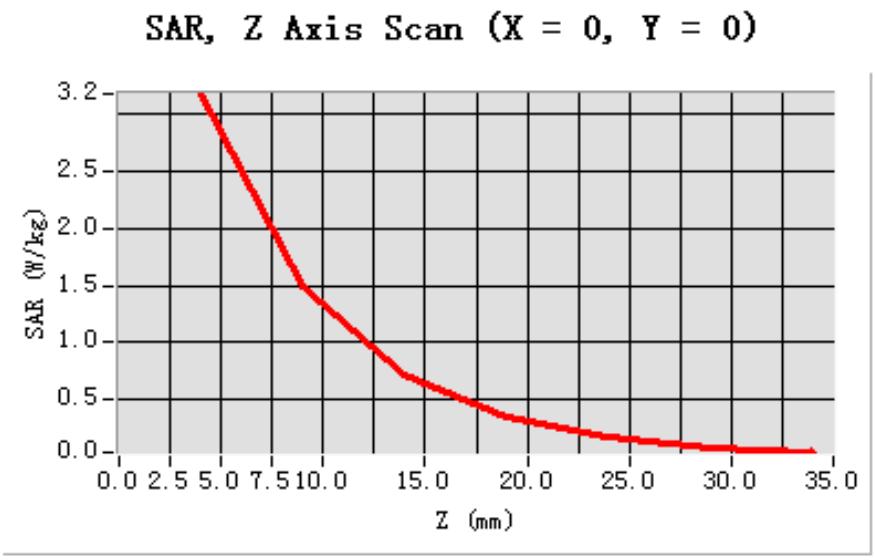
Device Position	-
Band	2450MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity (real part)	52.11
Relative permittivity	14.58
Conductivity (S/m)	1.94
Power drift (%)	0.37
Ambient Temperature:	21.7
Liquid Temperature:	21.7
Probe	SN 17/14 EP221
ConvF:	4.25
Crest factor:	1:1

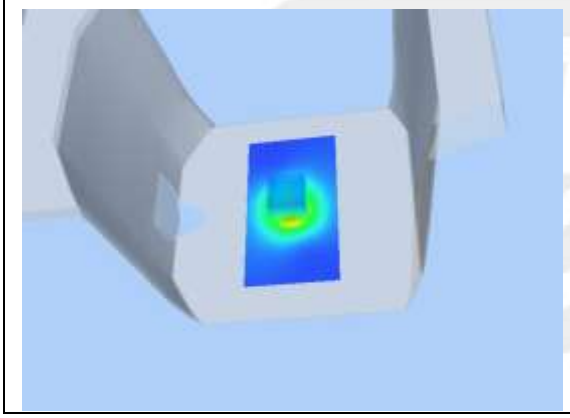
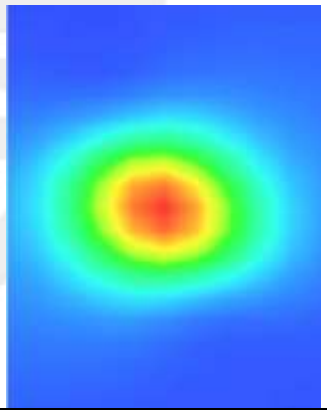
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.491037
SAR 1g (W/Kg)	3.247542

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	3.1753	1.4920	0.7181	0.3459	0.1671	0.0820

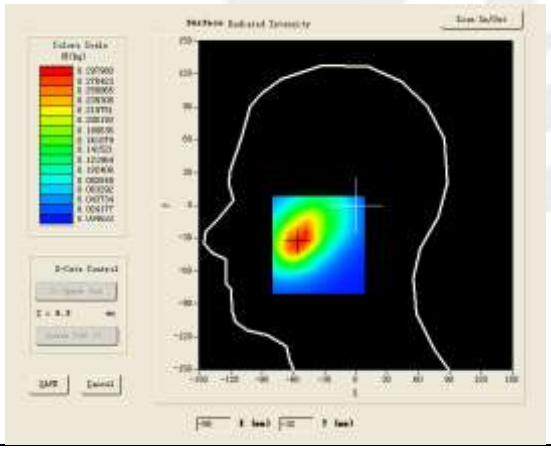
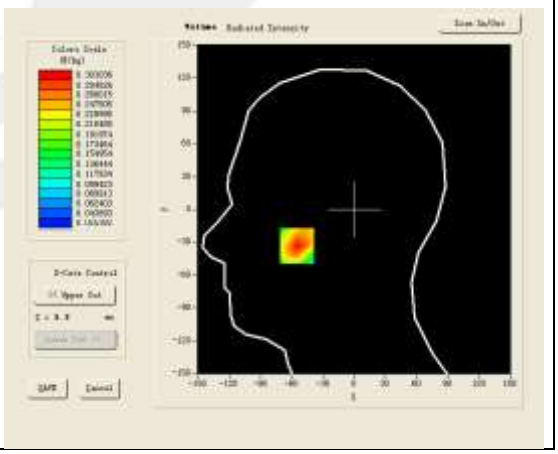


3D screen shot	Hot spot position
	

Appendix B. SAR Test Plots

Plot 3: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

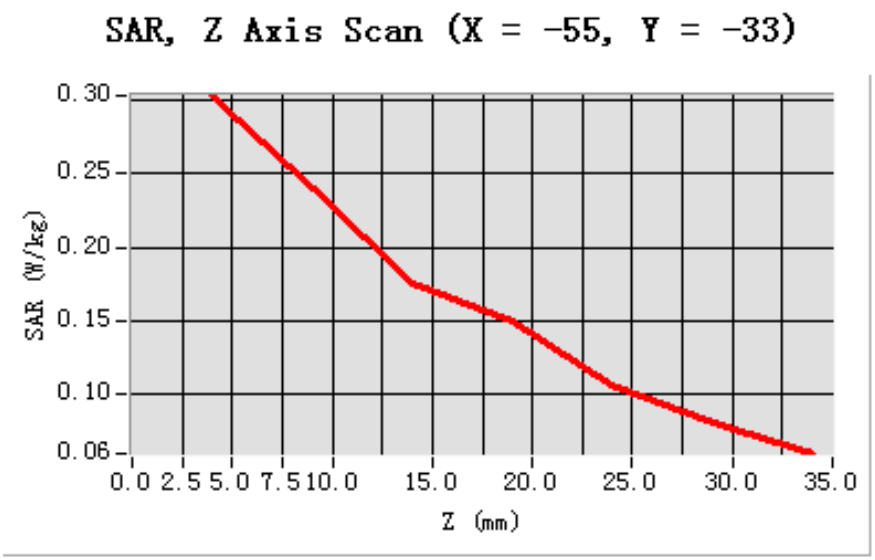
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.2
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.91
Conductivity (S/m)	0.90
Variation (%)	-0.42

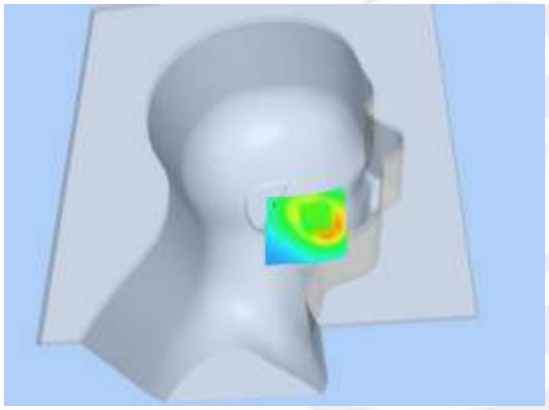
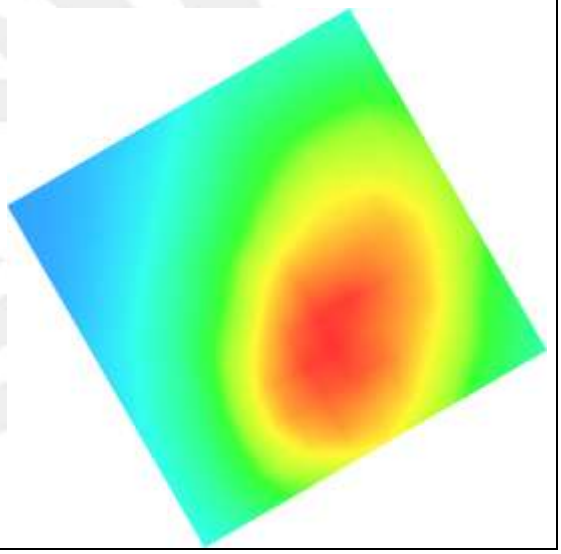
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-55.00, Y=-33.00

SAR 10g (W/Kg)	0.202165
SAR 1g (W/Kg)	0.291094

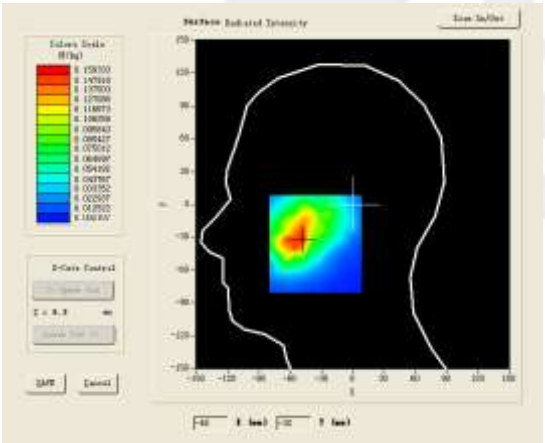
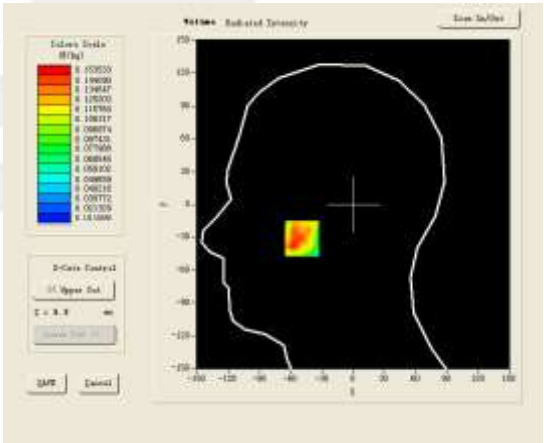
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3027	0.2389	0.1765	0.1487	0.1058	0.0803



3D screen shot	Hot spot position
	

Plot 7: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

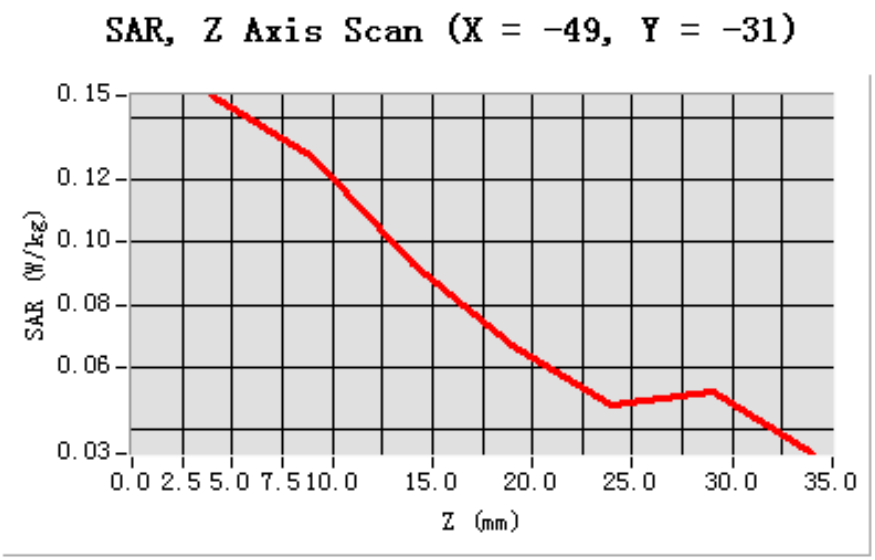
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.2
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 2.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.91
Conductivity (S/m)	0.90
Variation (%)	0.12

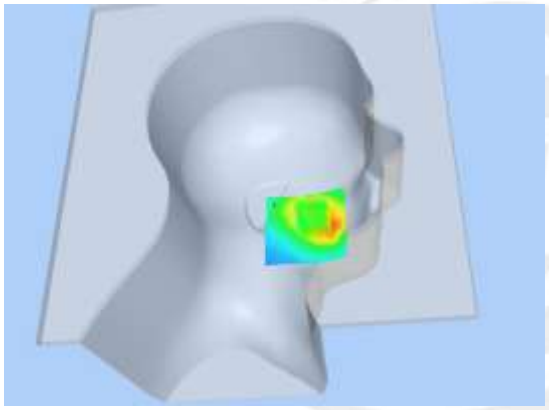
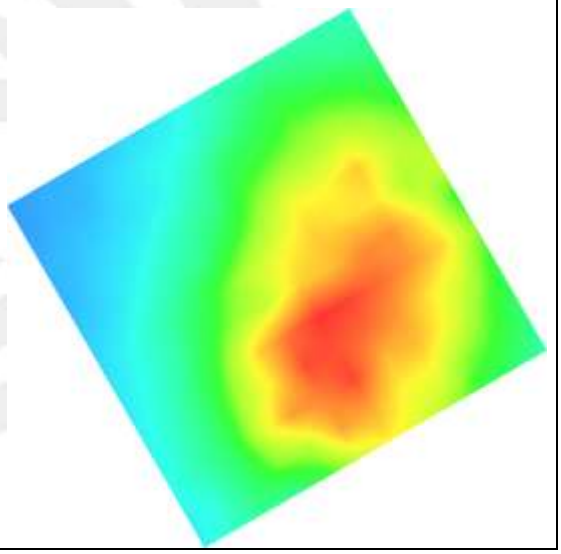
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-49.00, Y=-31.00

SAR 10g (W/Kg)	0.095127
SAR 1g (W/Kg)	0.153216

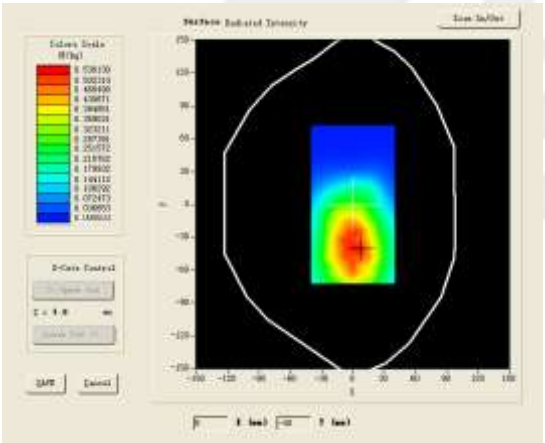
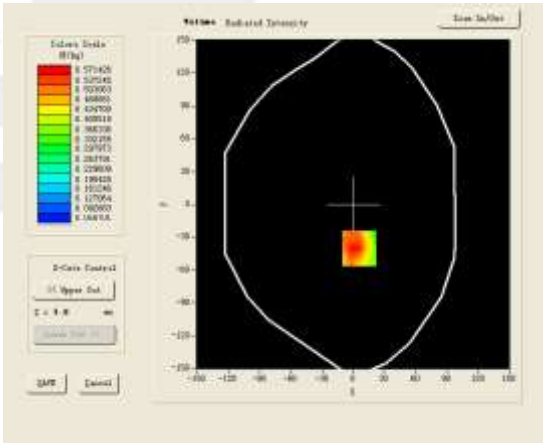
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1457	0.1273	0.0928	0.0679	0.0476	0.0526



3D screen shot	Hot spot position
	

Plot 26: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

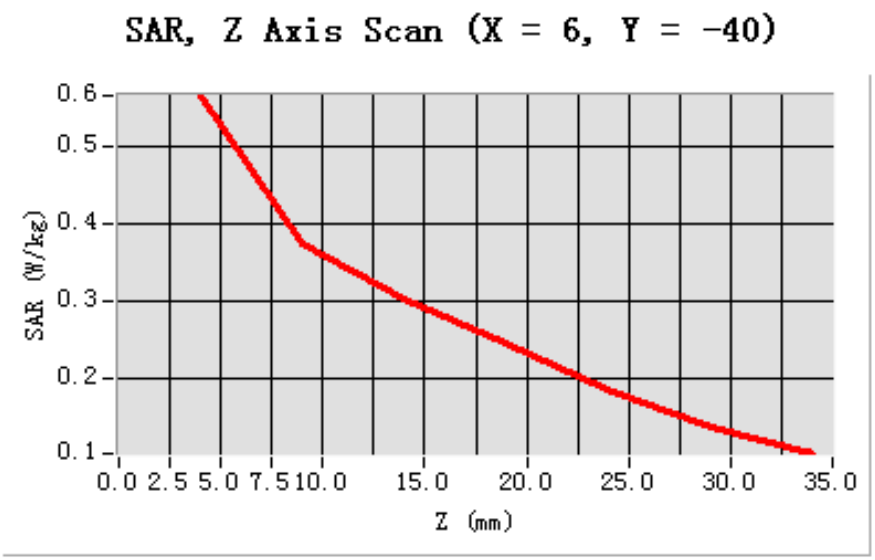
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.3
Probe	SN 17/14 EP221
ConvF	5.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Behind
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.08
Conductivity (S/m)	0.97
Variation (%)	0.41

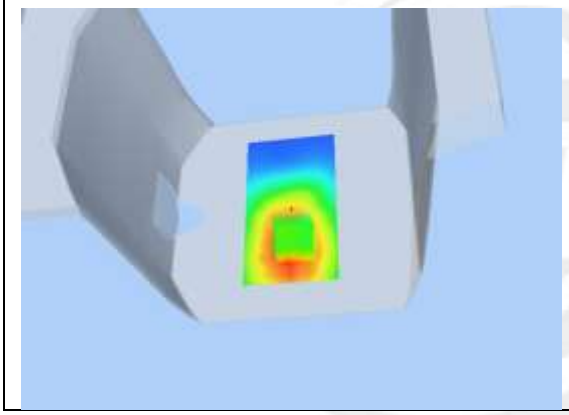
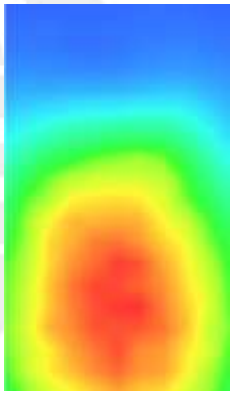
SURFACE SAR	VOLUME SAR
	

Maximum location: X=6.00, Y=-40.00

SAR 10g (W/Kg)	0.382152
SAR 1g (W/Kg)	0.563126

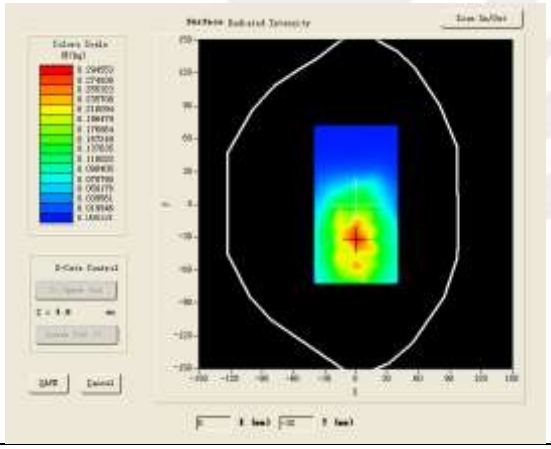
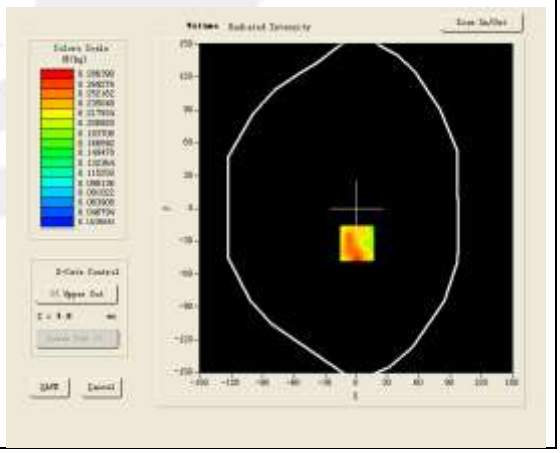
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5652	0.3751	0.3023	0.2457	0.1867	0.1358



3D screen shot	Hot spot position
	

Plot 28: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

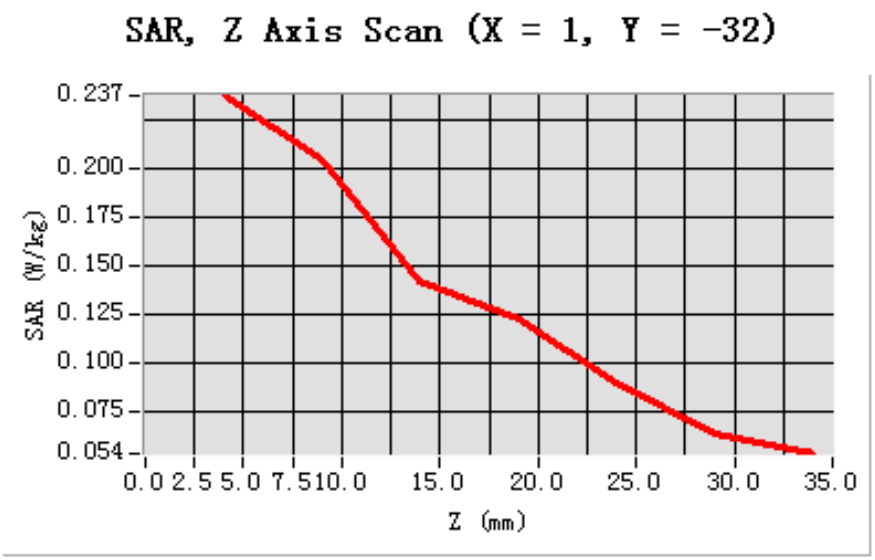
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.3
Probe	SN 17/14 EP221
ConvF	5.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Behind
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 2.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.08
Conductivity (S/m)	0.97
Variation (%)	0.12

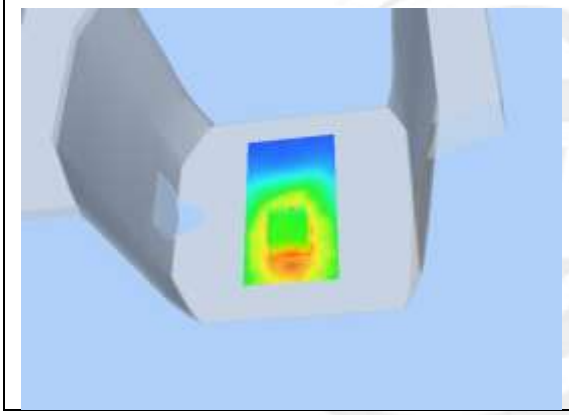
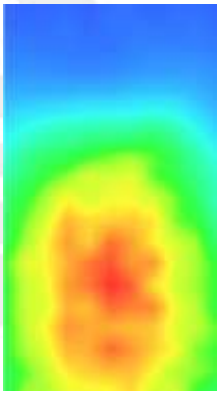
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=-32.00

SAR 10g (W/Kg)	0.182157
SAR 1g (W/Kg)	0.263094

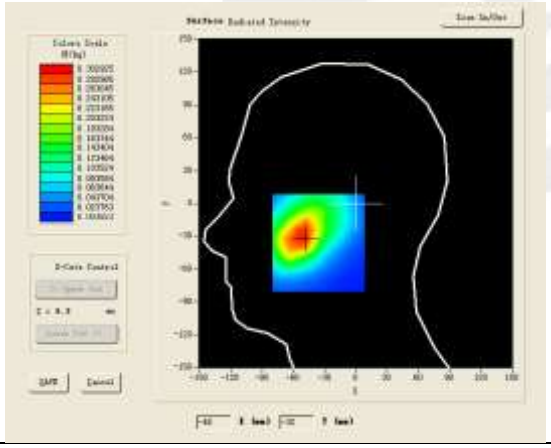
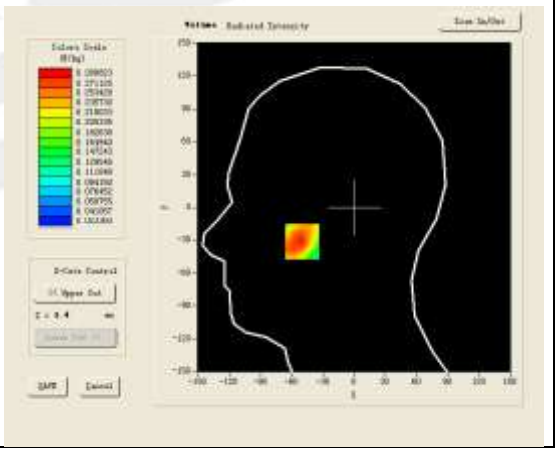
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2367	0.2036	0.1417	0.1236	0.0906	0.0641



3D screen shot	Hot spot position
	

Plot 57: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

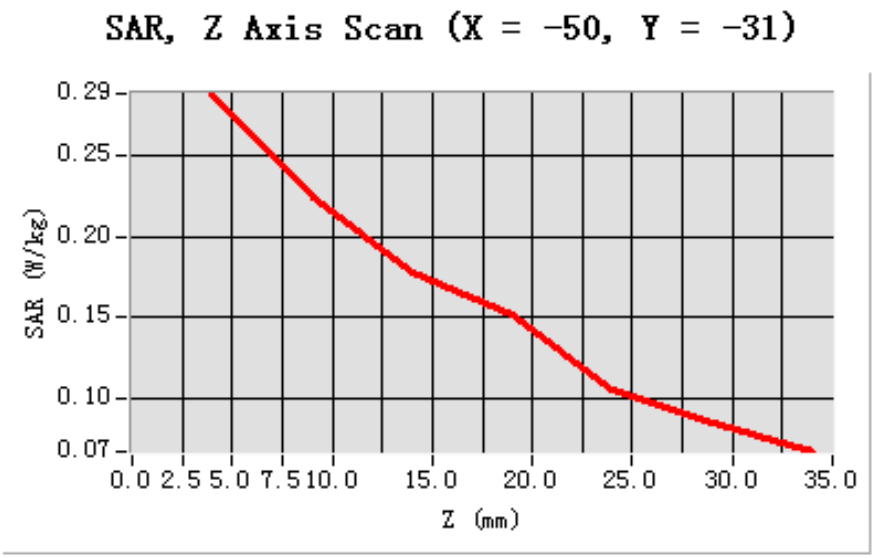
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.2
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.91
Conductivity (S/m)	0.90
Variation (%)	-0.06

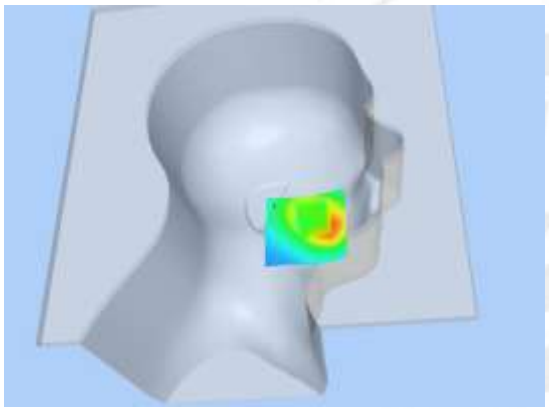
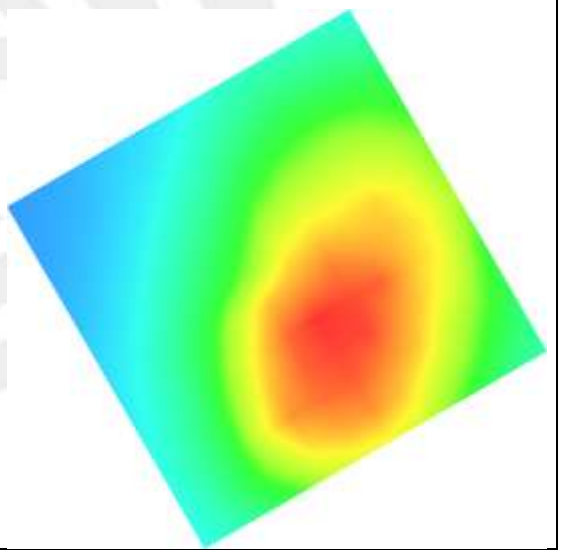
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-50.00, Y=-31.00

SAR 10g (W/Kg)	0.203316
SAR 1g (W/Kg)	0.275319

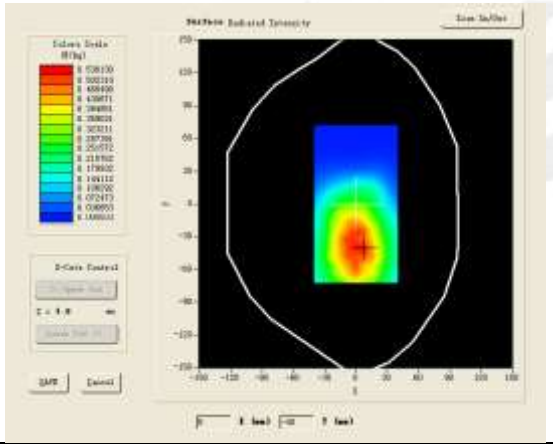
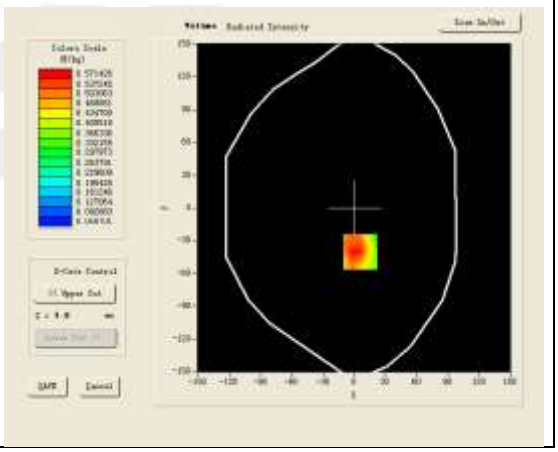
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2879	0.2252	0.1768	0.1521	0.1047	0.0852



3D screen shot	Hot spot position
	

Plot 59: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

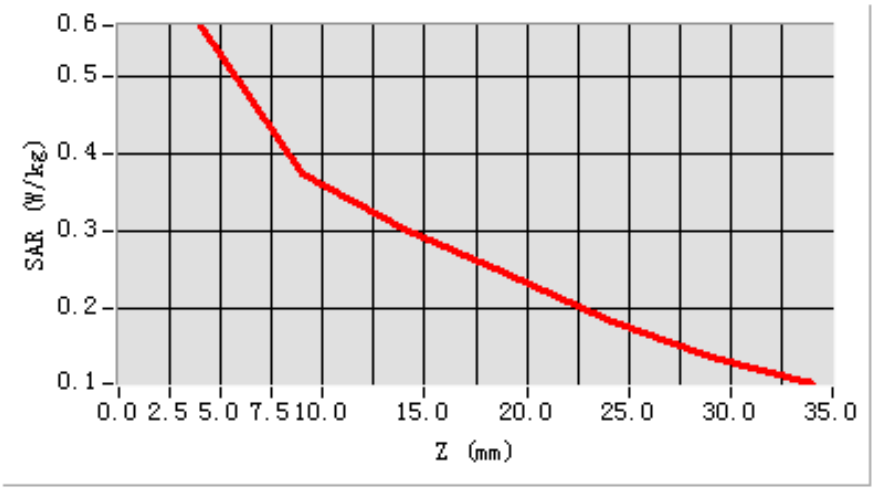
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.3
Probe	SN 17/14 EP221
ConvF	5.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Behind
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.08
Conductivity (S/m)	0.97
Variation (%)	0.41

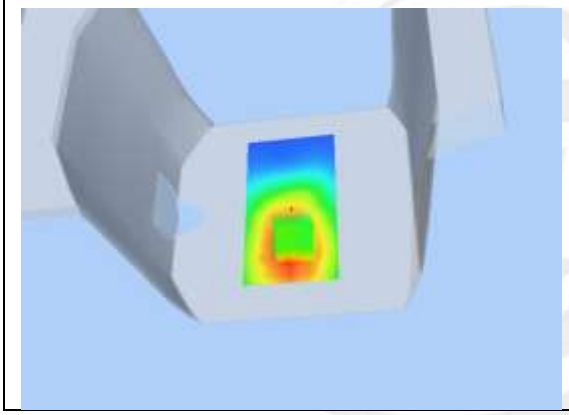
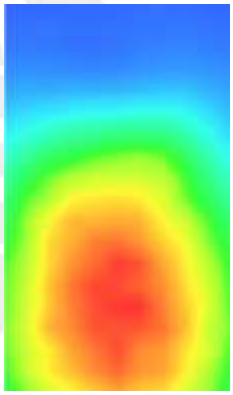
SURFACE SAR	VOLUME SAR
	

Maximum location: X=6.00, Y=-40.00

SAR 10g (W/Kg)	0.371258
SAR 1g (W/Kg)	0.544382

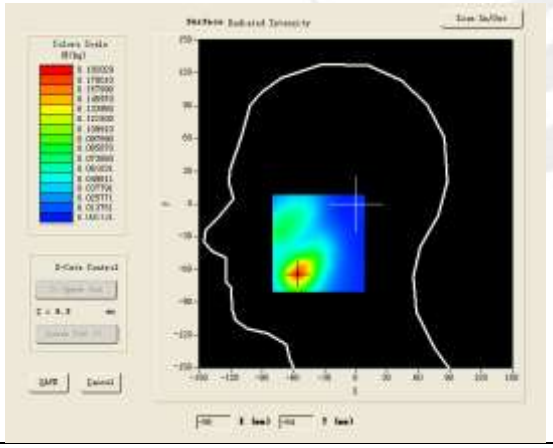
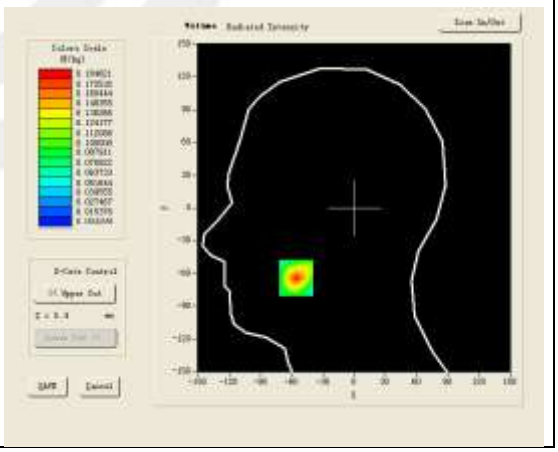
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5610	0.3717	0.2937	0.2412	0.1820	0.1307



3D screen shot	Hot spot position
	

Plot 9: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

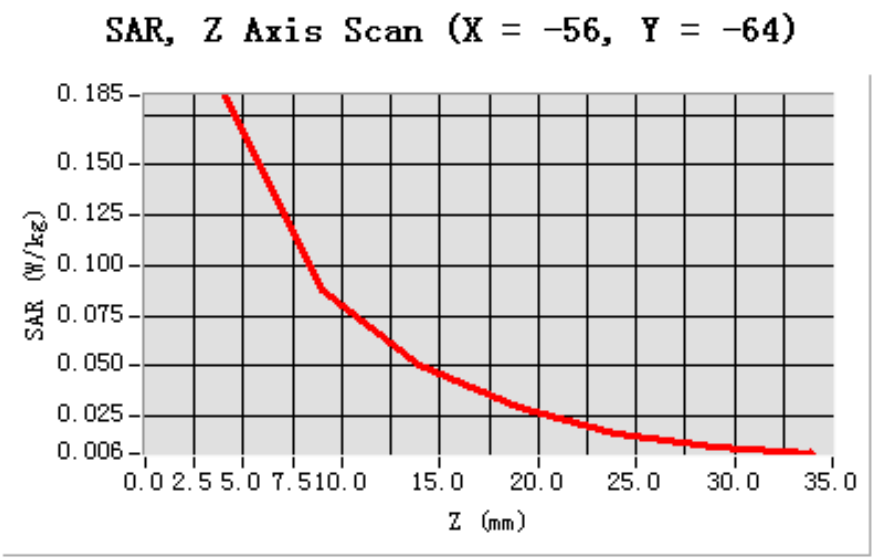
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	21.7
Probe	SN 17/14 EP221
ConvF	4.71
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	1880.0
Relative permittivity (real part)	40.83
Conductivity (S/m)	1.39
Variation (%)	0.18

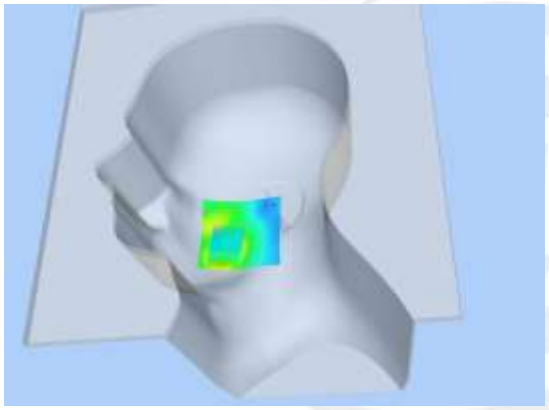
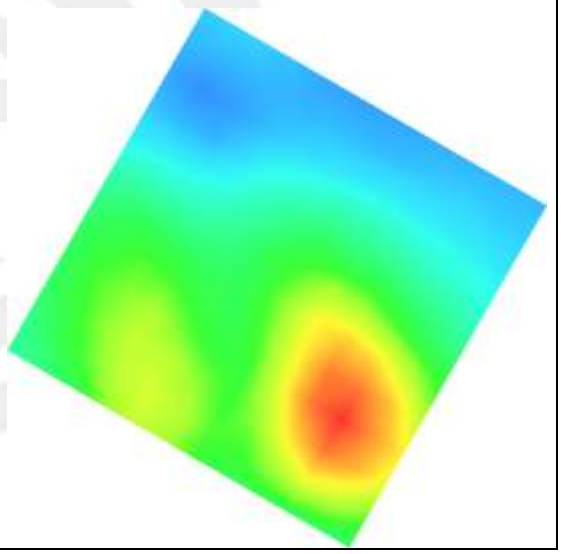
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-56.00, Y=-64.00

SAR 10g (W/Kg)	0.086318
SAR 1g (W/Kg)	0.173627

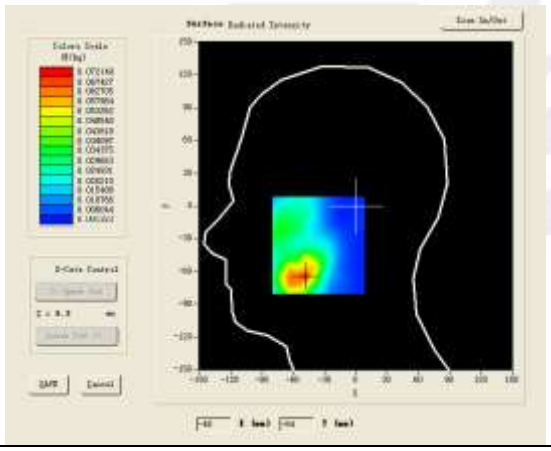
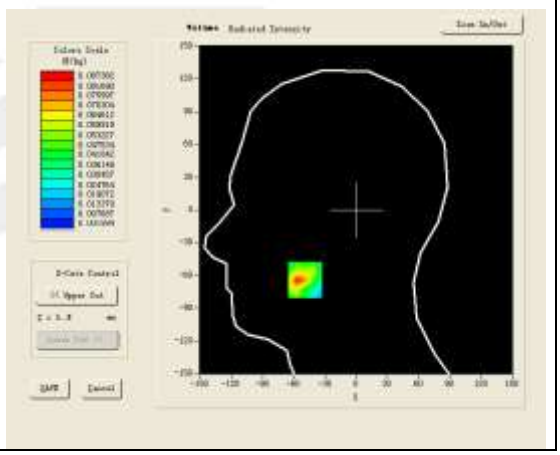
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1851	0.0876	0.0505	0.0279	0.0158	0.0089



3D screen shot	Hot spot position
	

Plot 13: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

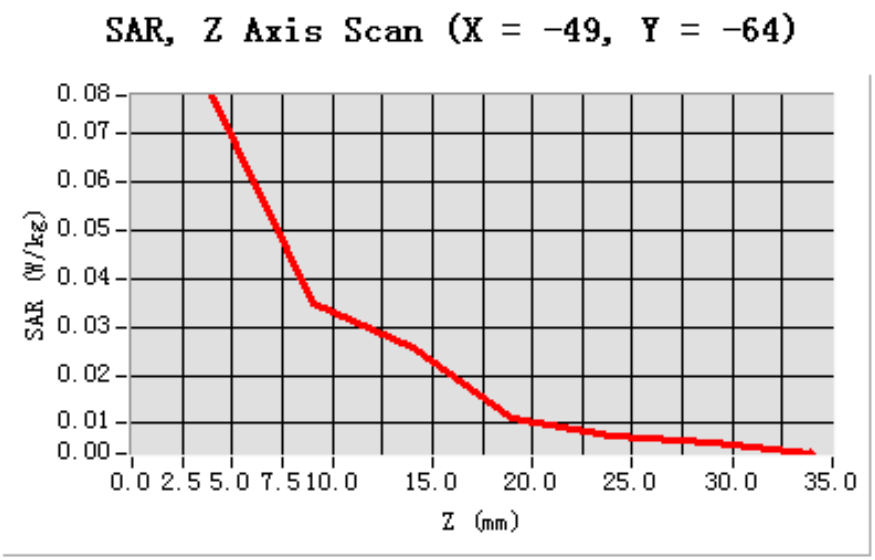
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	21.7
Probe	SN 17/14 EP221
ConvF	4.71
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	GPRS1900
Channels	Middle
Signal	TDMA (Crest factor: 2.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	40.83
Conductivity (S/m)	1.39
Variation (%)	0.18

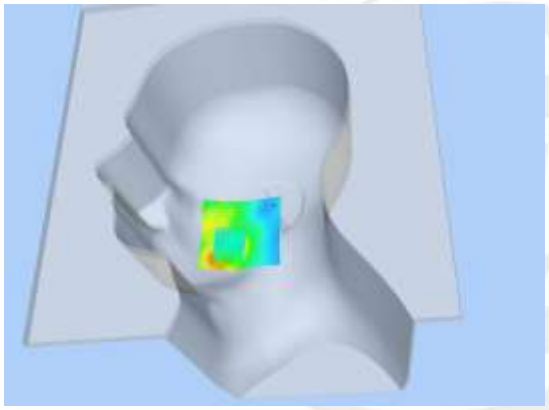
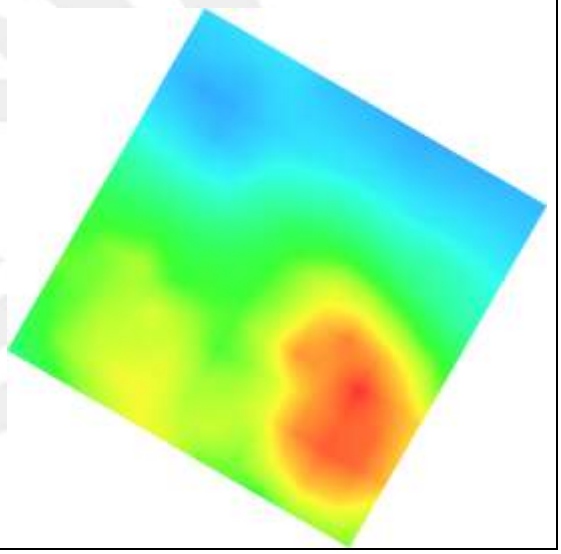
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-49.00, Y=-64.00

SAR 10g (W/Kg)	0.039947
SAR 1g (W/Kg)	0.085428

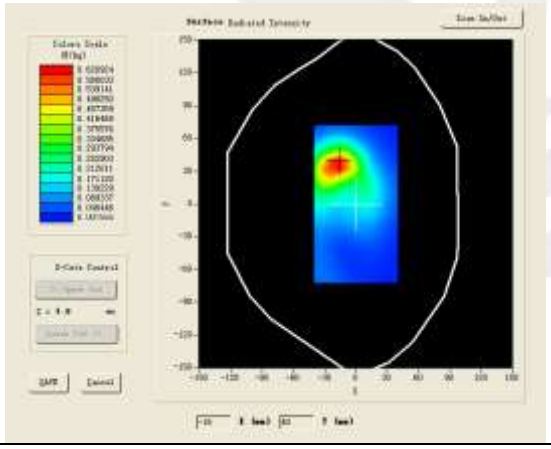
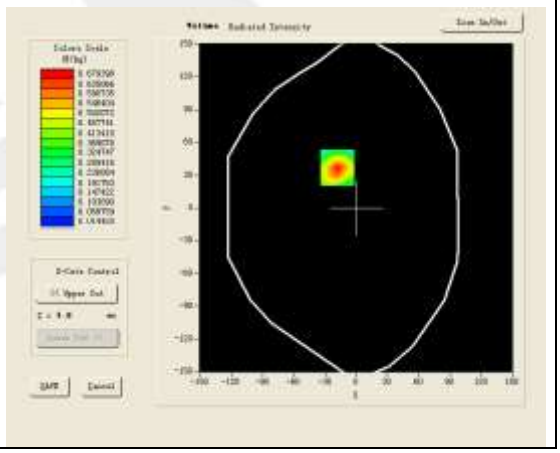
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0786	0.0356	0.0263	0.0115	0.0068	0.0074



3D screen shot	Hot spot position
	

Plot 34: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

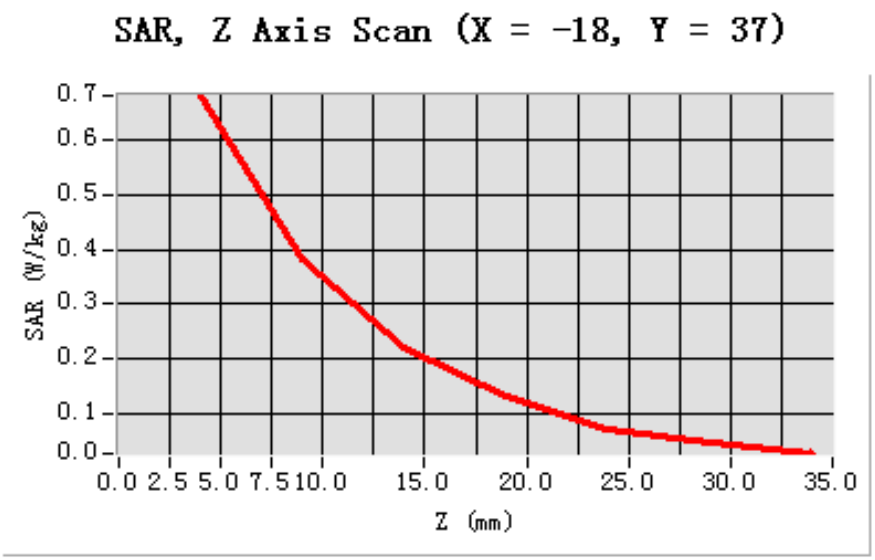
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	19.9
Probe	SN 17/14 EP221
ConvF	4.85
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Behind
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.75
Conductivity (S/m)	1.52
Variation (%)	-0.05

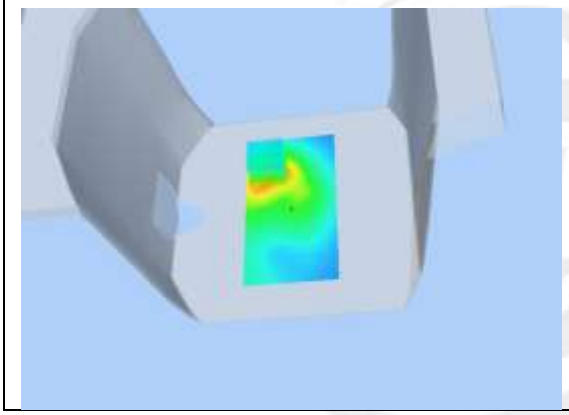
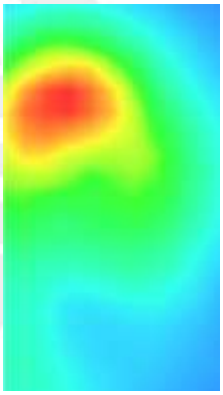
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-18.00, Y=37.00

SAR 10g (W/Kg)	0.354316
SAR 1g (W/Kg)	0.655419

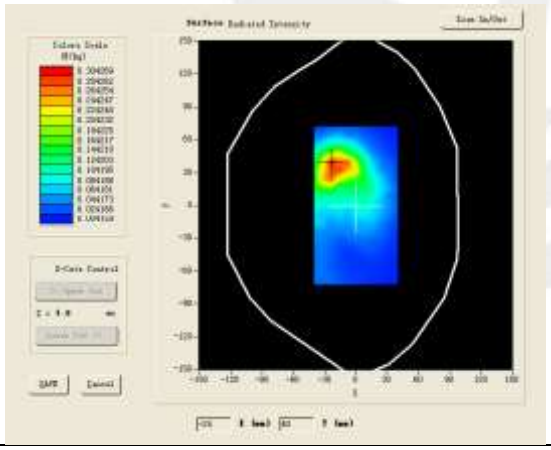
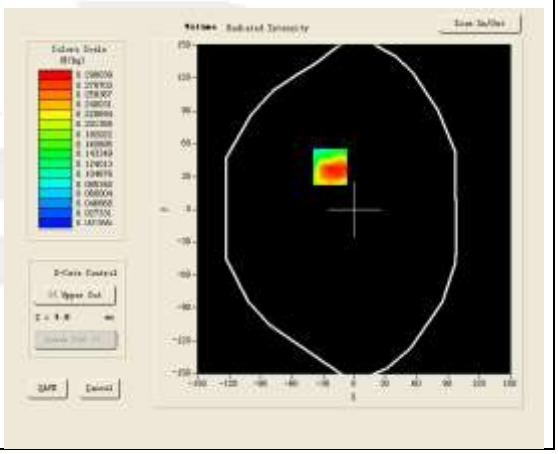
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6796	0.3827	0.2219	0.1332	0.0742	0.0476



3D screen shot	Hot spot position
	

Plot 36: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

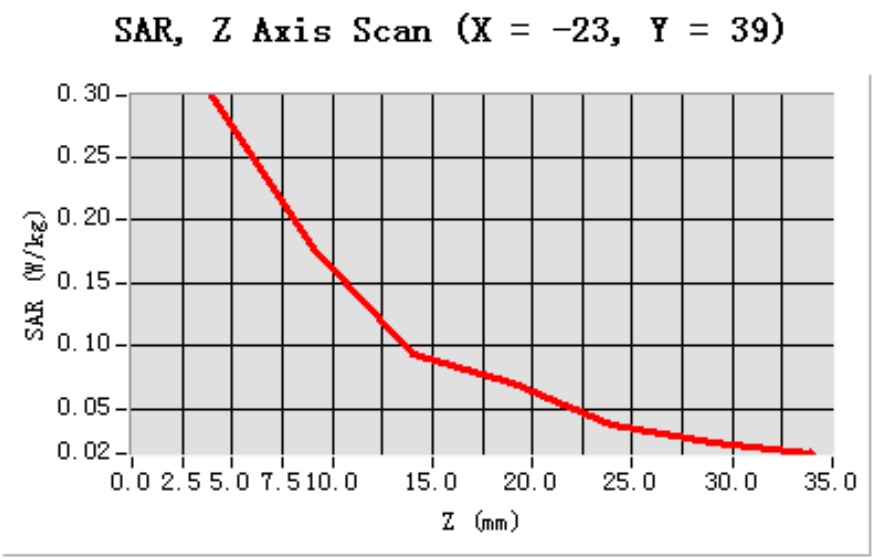
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	19.9
Probe	SN 17/14 EP221
ConvF	4.85
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Behind
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 2.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.75
Conductivity (S/m)	1.52
Variation (%)	0.16

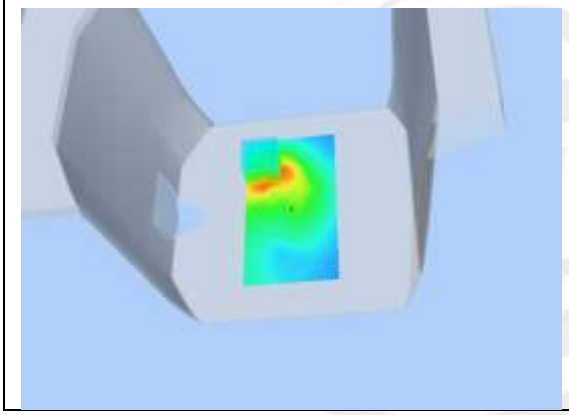
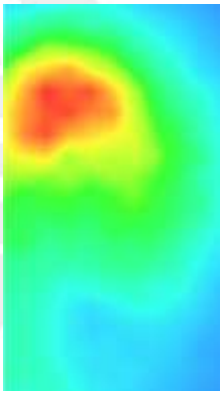
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-23.00, Y=39.00

SAR 10g (W/Kg)	0.164316
SAR 1g (W/Kg)	0.315337

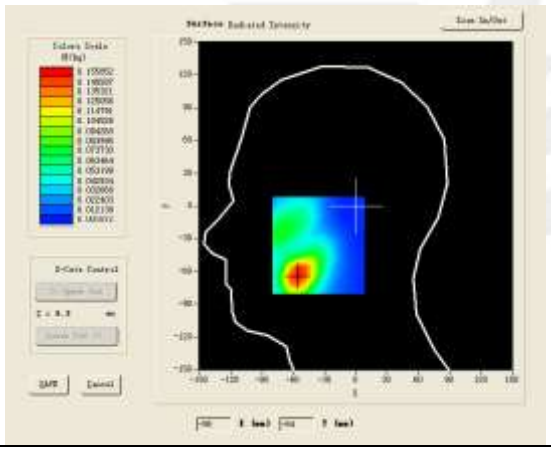
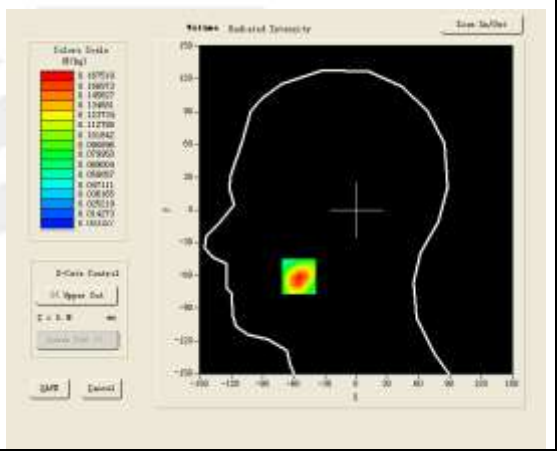
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.297	0.1783	0.0937	0.0724	0.0386	0.0253



3D screen shot	Hot spot position
	

Plot 58: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

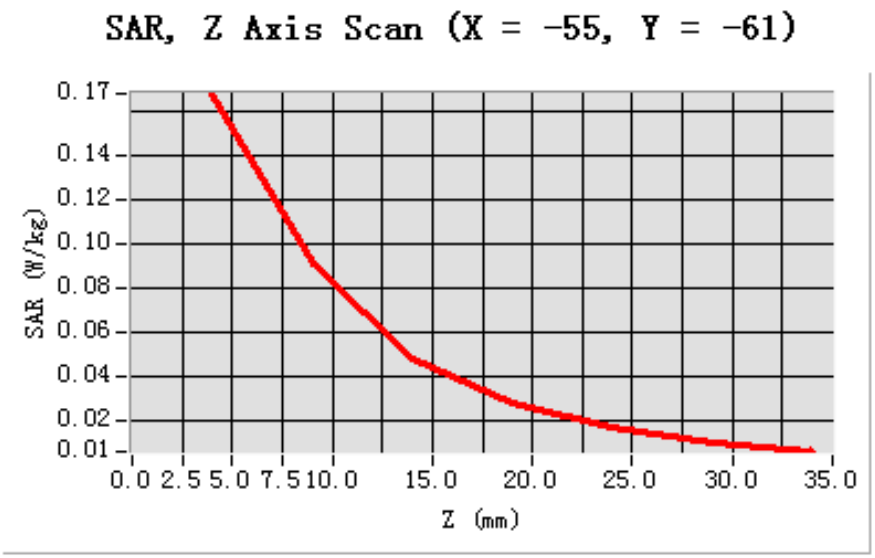
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	21.7
Probe	SN 17/14 EP221
ConvF	4.71
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	1880.0
Relative permittivity (real part)	40.83
Conductivity (S/m)	1.39
Variation (%)	0.24

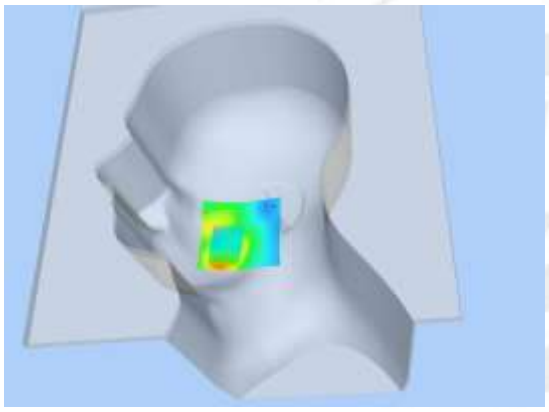
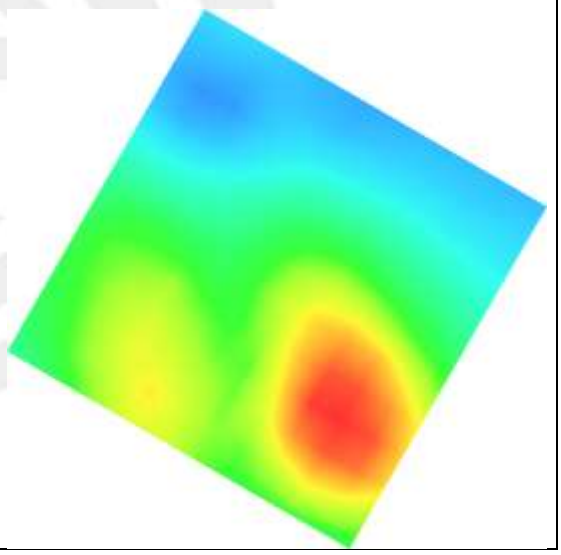
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-55.00, Y=-61.00

SAR 10g (W/Kg)	0.084216
SAR 1g (W/Kg)	0.165721

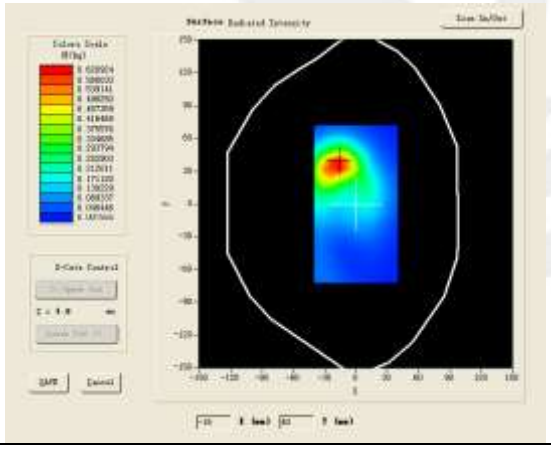
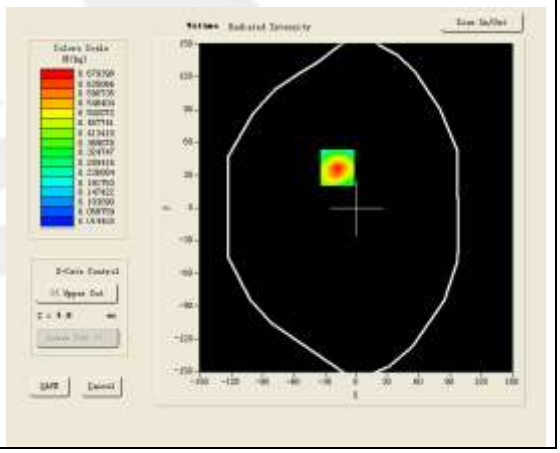
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1679	0.0912	0.0482	0.0281	0.0162	0.0098



3D screen shot	Hot spot position
	

Plot 60: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

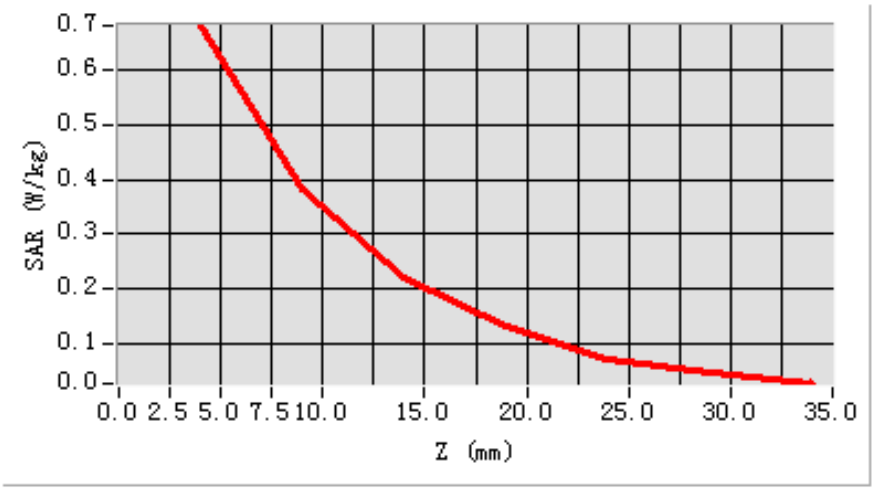
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	19.9
Probe	SN 17/14 EP221
ConvF	4.85
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body Behind
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.75
Conductivity (S/m)	1.52
Variation (%)	-0.05

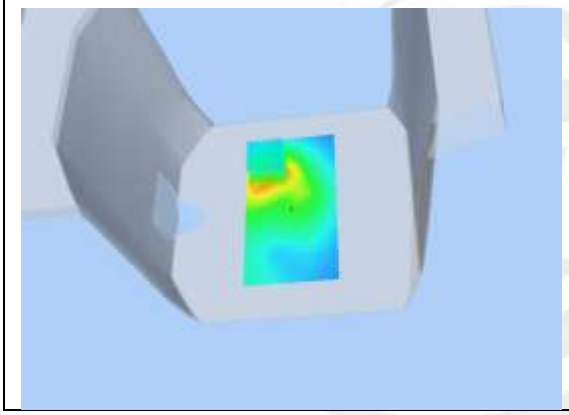
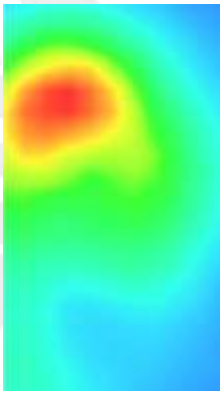
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-18.00, Y=37.00

SAR 10g (W/Kg)	0.344731
SAR 1g (W/Kg)	0.635429

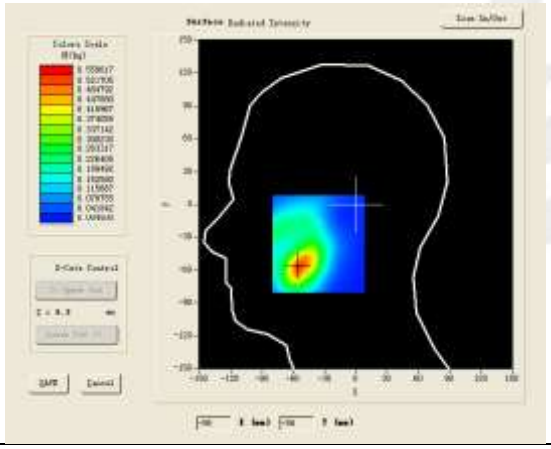
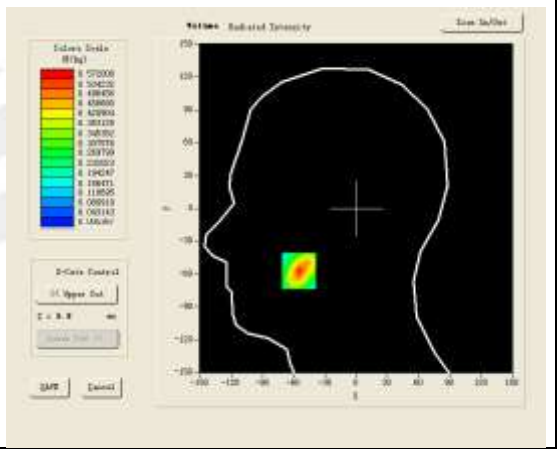
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6750	0.3785	0.2368	0.1289	0.0704	0.0432



3D screen shot	Hot spot position
	

Plot 17: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

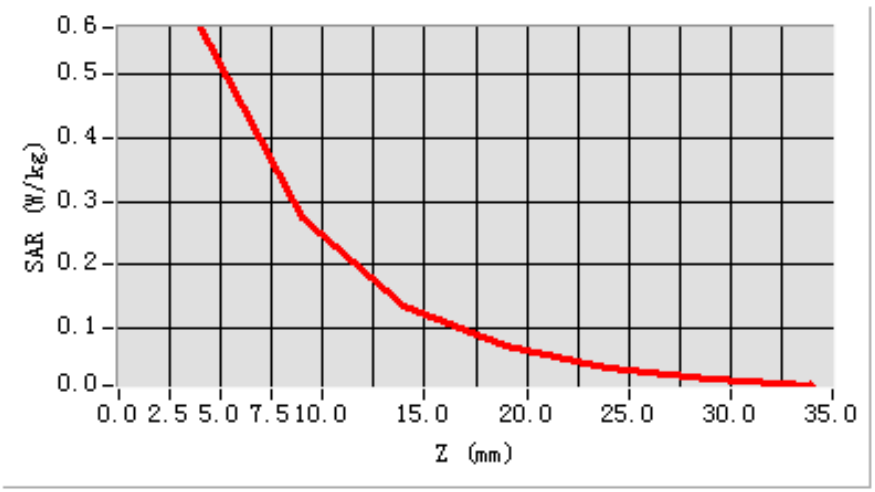
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	21.7
Probe	SN 17/14 EP221
ConvF	4.71
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	WCDMA II
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	40.83
Conductivity (S/m)	1.39
Variation (%)	0.09

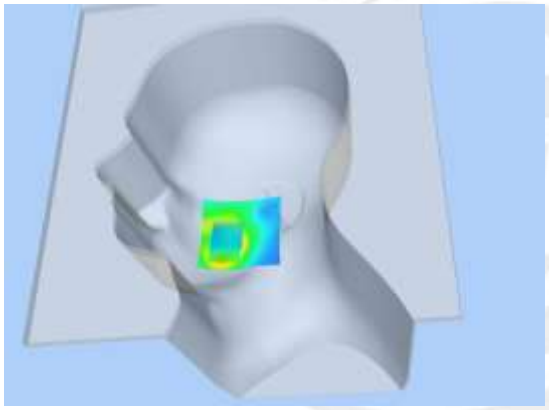
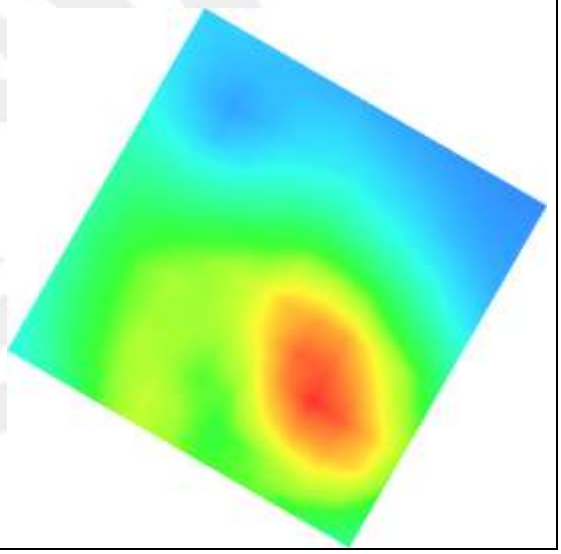
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-55.00, Y=-57.00

SAR 10g (W/Kg)	0.263216
SAR 1g (W/Kg)	0.529562

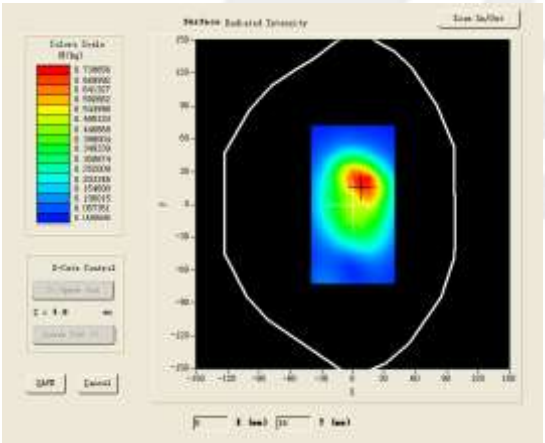
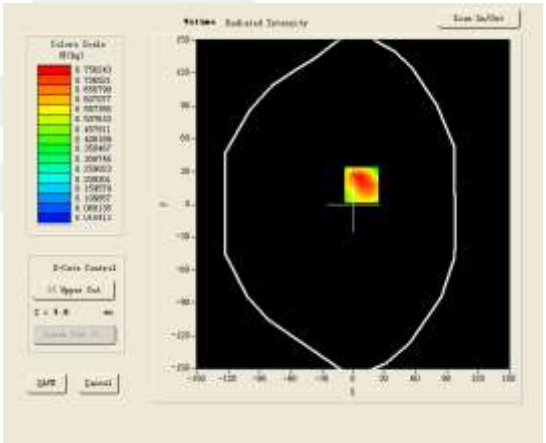
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5725	0.2762	0.1377	0.0752	0.0373	0.0231



3D screen shot	Hot spot position
	

Plot 28: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

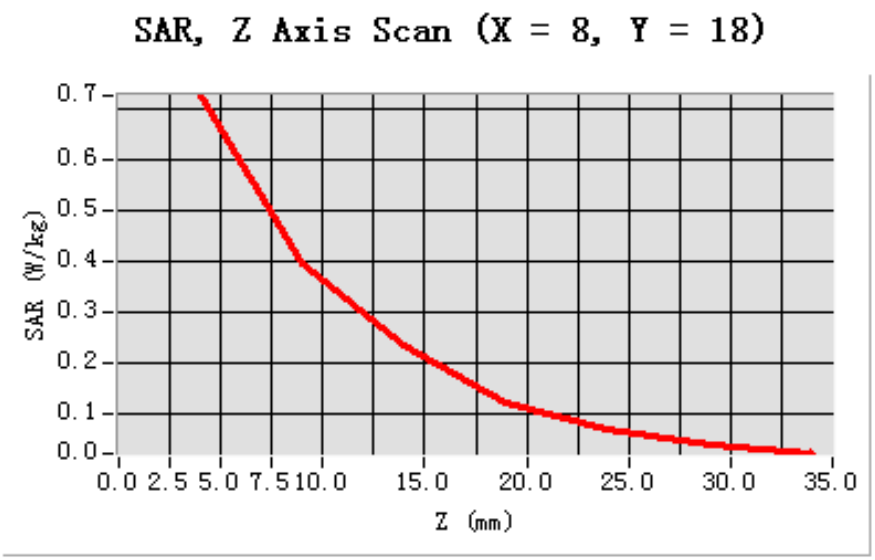
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	19.9
Probe	SN 17/14 EP221
ConvF	4.85
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back side
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	53.14
Conductivity (S/m)	1.54
Variation (%)	-0.07

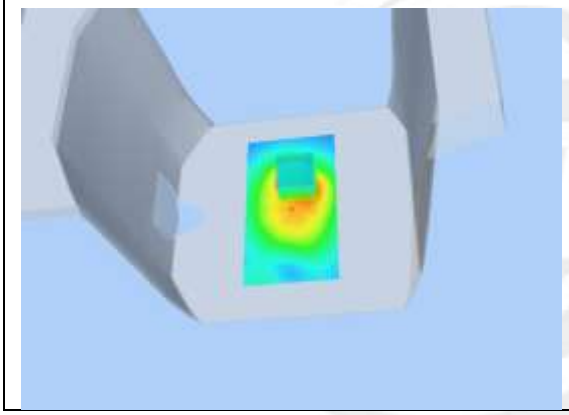
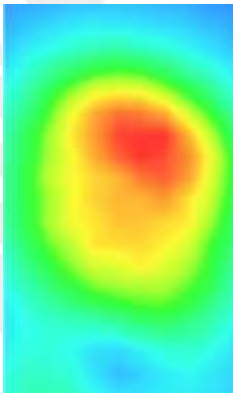
SURFACE SAR	VOLUME SAR
	

Maximum location: X=8.00, Y=18.00

SAR 10g (W/Kg)	0.395716
SAR 1g (W/Kg)	0.749607

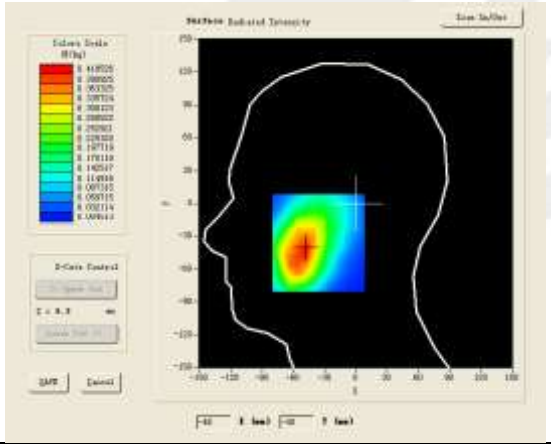
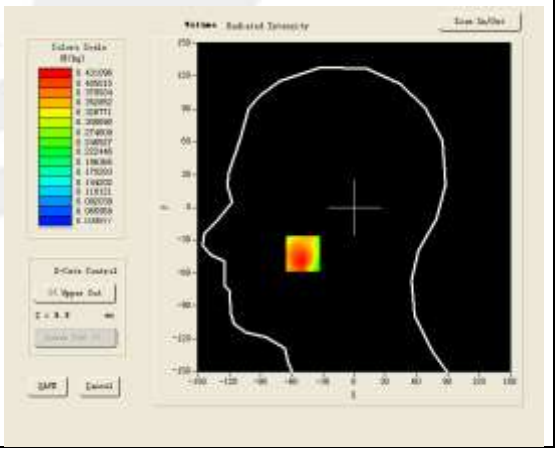
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7277	0.3942	0.2337	0.1196	0.0684	0.0374



3D screen shot	Hot spot position
	

Plot 21: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

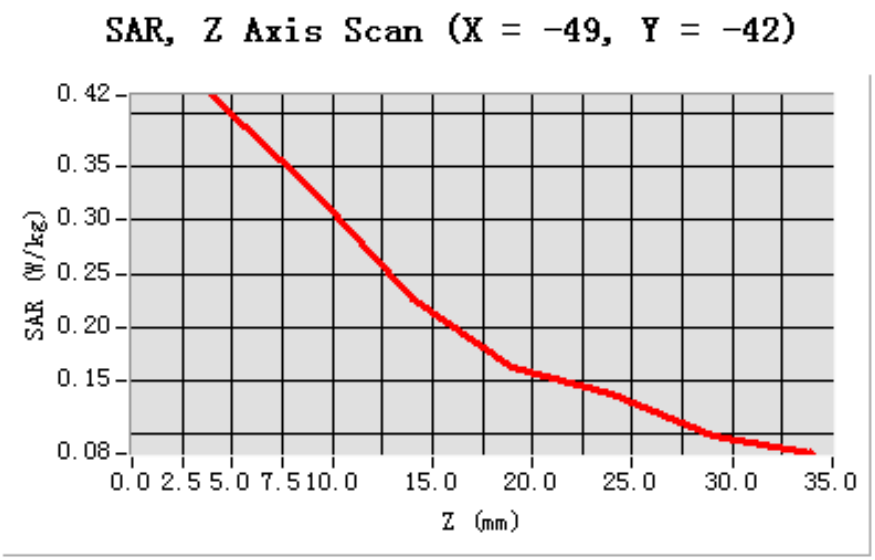
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.2
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.91
Conductivity (S/m)	0.90
Variation (%)	-0.56

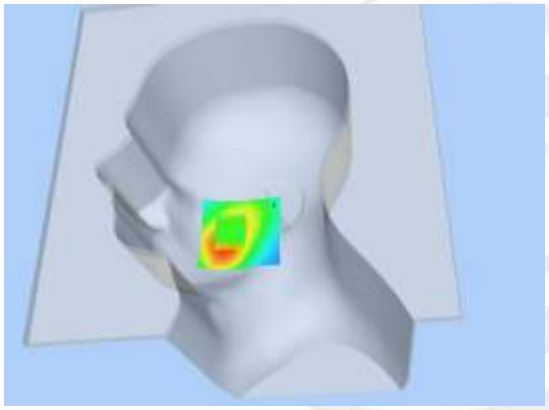
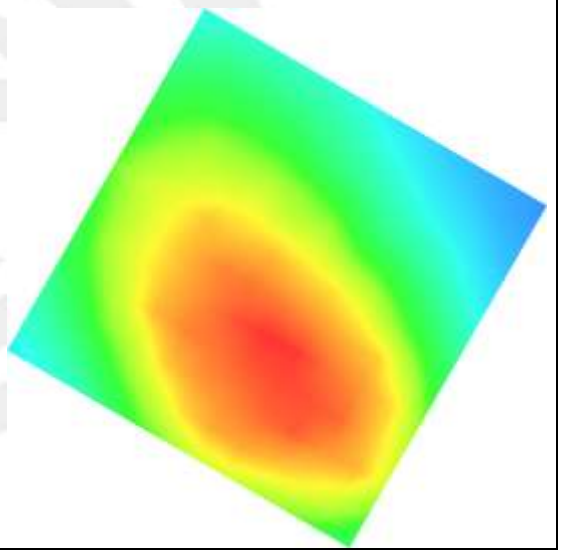
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-49.00, Y=-42.00

SAR 10g (W/Kg)	0.285416
SAR 1g (W/Kg)	0.423148

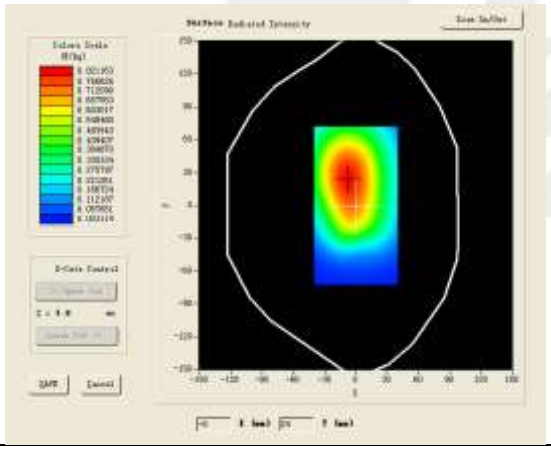
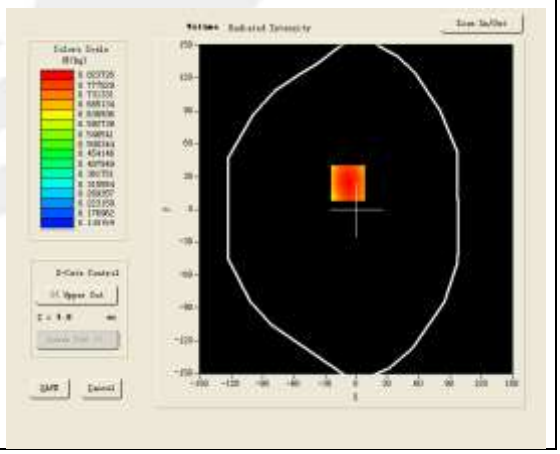
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4161	0.3273	0.2269	0.1642	0.1383	0.0987



3D screen shot	Hot spot position
	

Plot 52: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

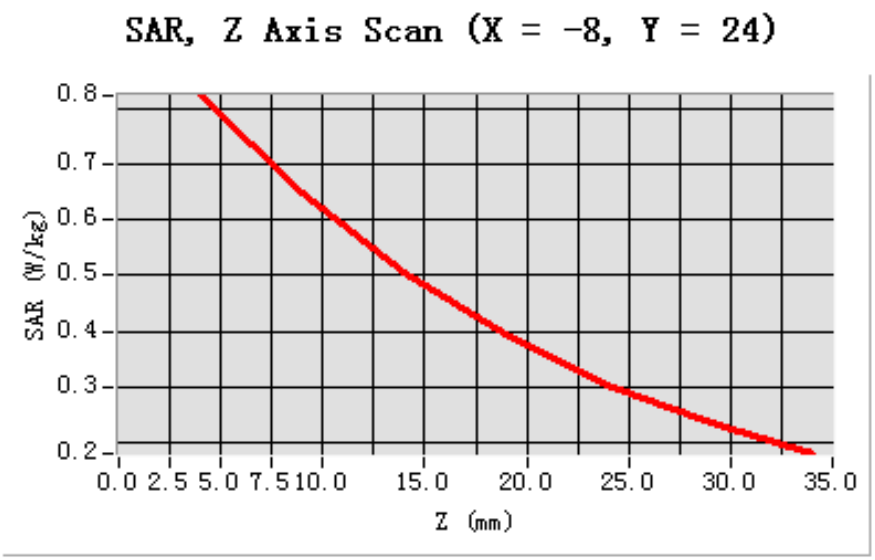
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.3
Probe	SN 17/14 EP221
ConvF	5.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	WCDMA V
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	846.6
Relative permittivity (real part)	54.57
Conductivity (S/m)	0.97
Variation (%)	0.16

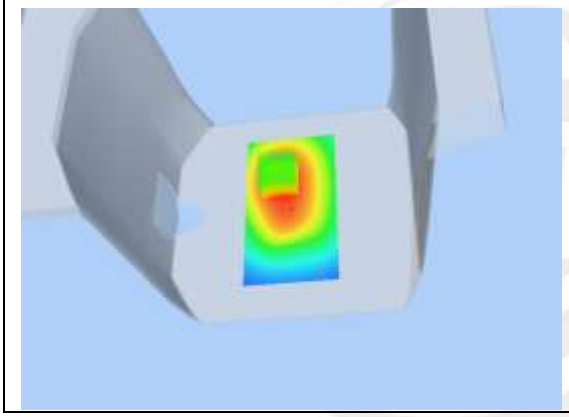
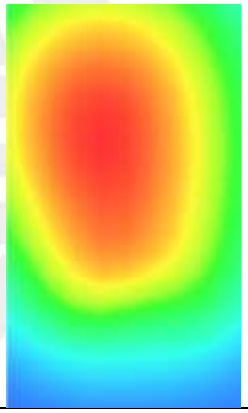
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-8.00, Y=24.00

SAR 10g (W/Kg)	0.597694
SAR 1g (W/Kg)	0.798926

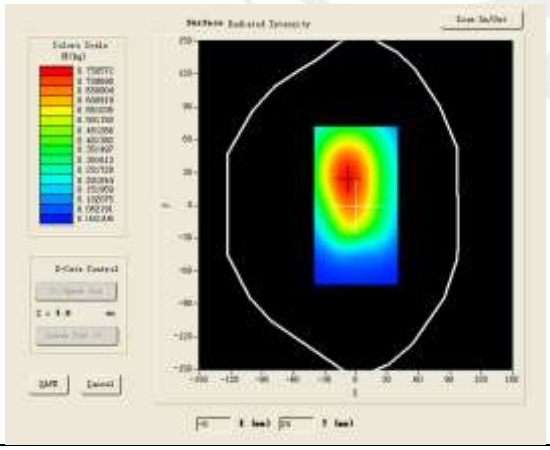
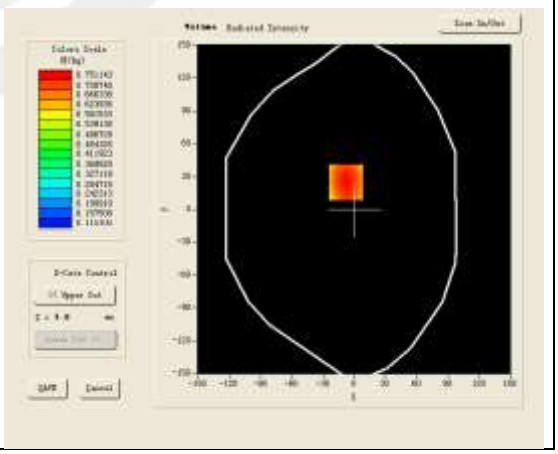
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8245	0.6475	0.5062	0.3942	0.3029	0.2336



3D screen shot	Hot spot position
	

Plot 61: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

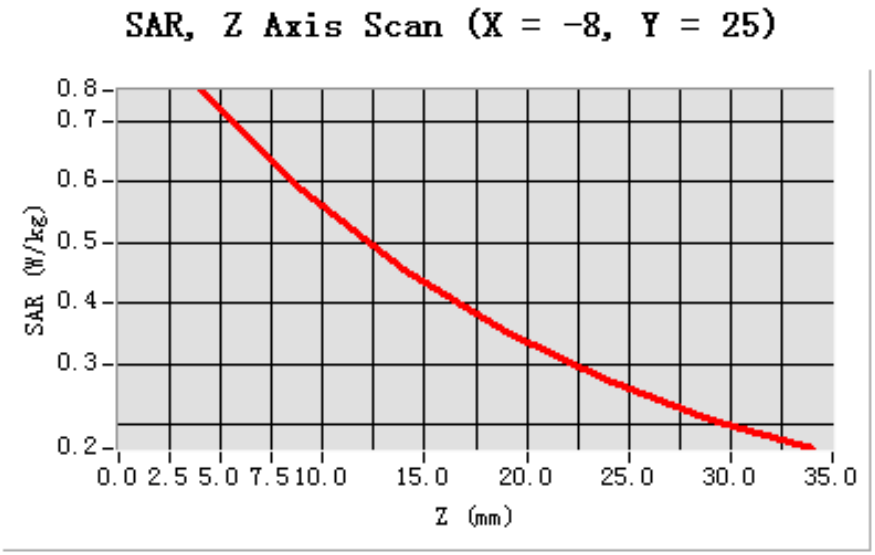
Test Date	2015-06-25
Ambient Temperature(°C)	21.6
Liquid Temperature(°C)	21.3
Probe	SN 17/14 EP221
ConvF	5.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	WCDMA V
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	846.6
Relative permittivity (real part)	54.57
Conductivity (S/m)	0.97
Variation (%)	0.14

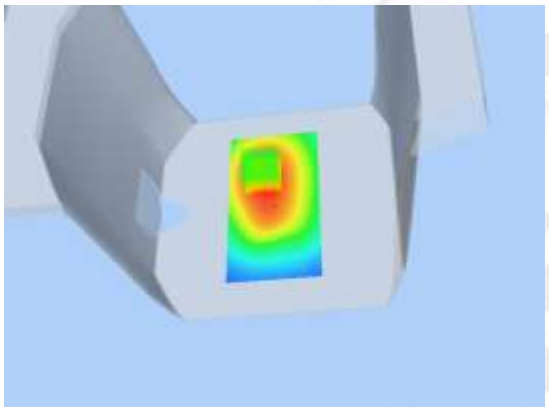
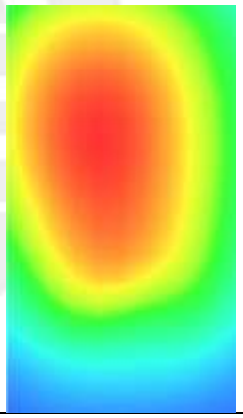
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-8.00, Y=25.00

SAR 10g (W/Kg)	0.544386
SAR 1g (W/Kg)	0.726298

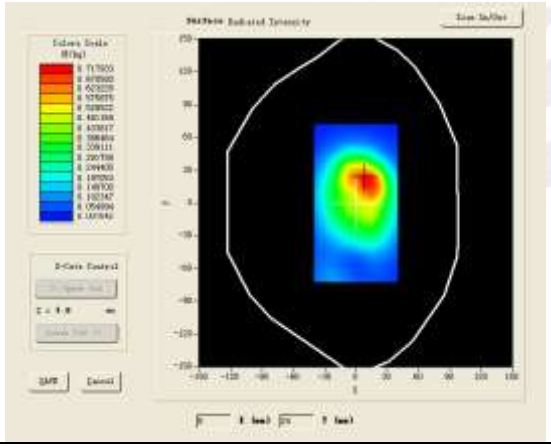
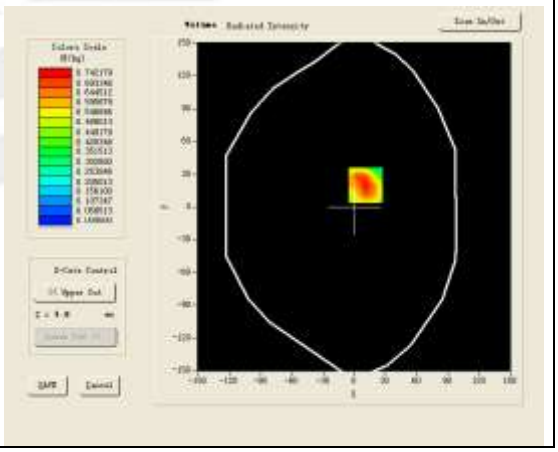
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7509	0.5868	0.4564	0.3542	0.2736	0.2079



3D screen shot	Hot spot position
	

Plot 62: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

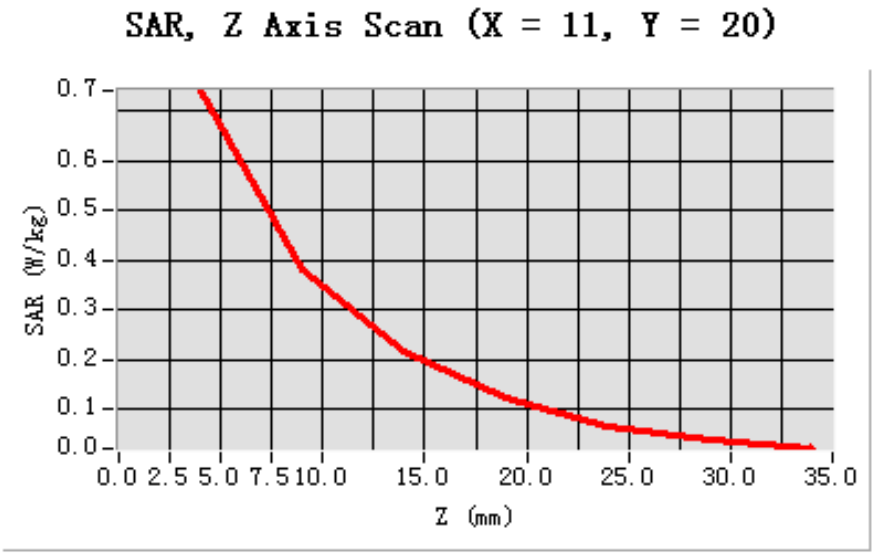
Test Date	2015-06-29
Ambient Temperature(°C)	21.8
Liquid Temperature(°C)	19.9
Probe	SN 17/14 EP221
ConvF	4.85
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back side
Band	WCDMA II
Channels	Low
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1852.4
Relative permittivity (real part)	54.09
Conductivity (S/m)	1.50
Variation (%)	-0.26

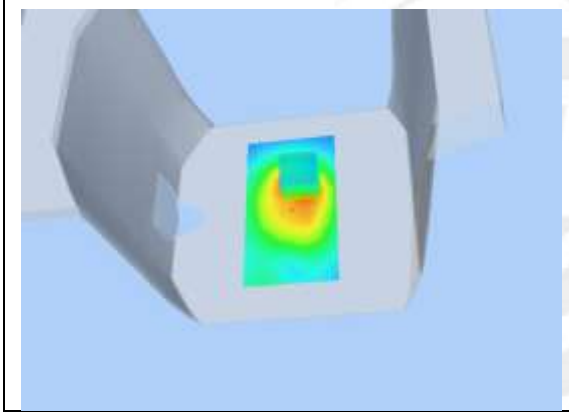
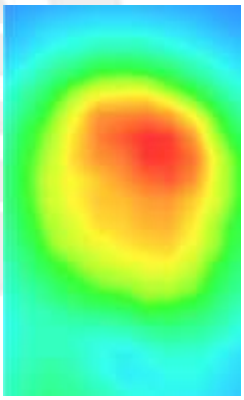
SURFACE SAR	VOLUME SAR
	

Maximum location: X=11.00, Y=20.00

SAR 10g (W/Kg)	0.403178
SAR 1g (W/Kg)	0.755326

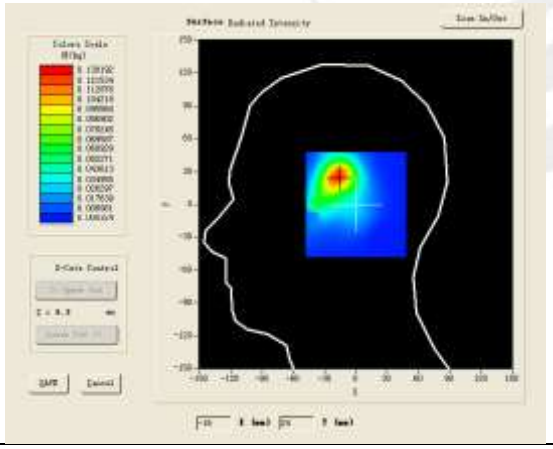
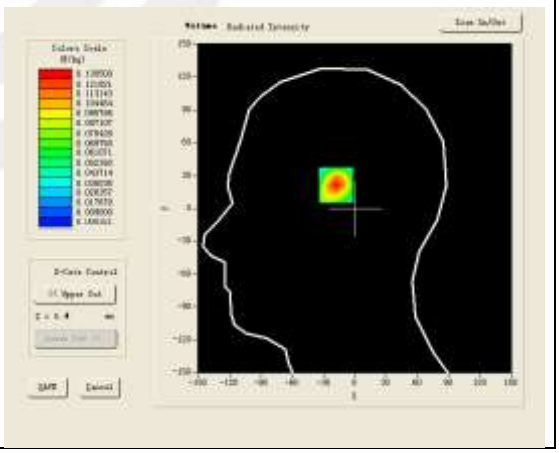
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7431	0.3827	0.2163	0.1252	0.0648	0.0369



3D screen shot	Hot spot position
	

Plot 64: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

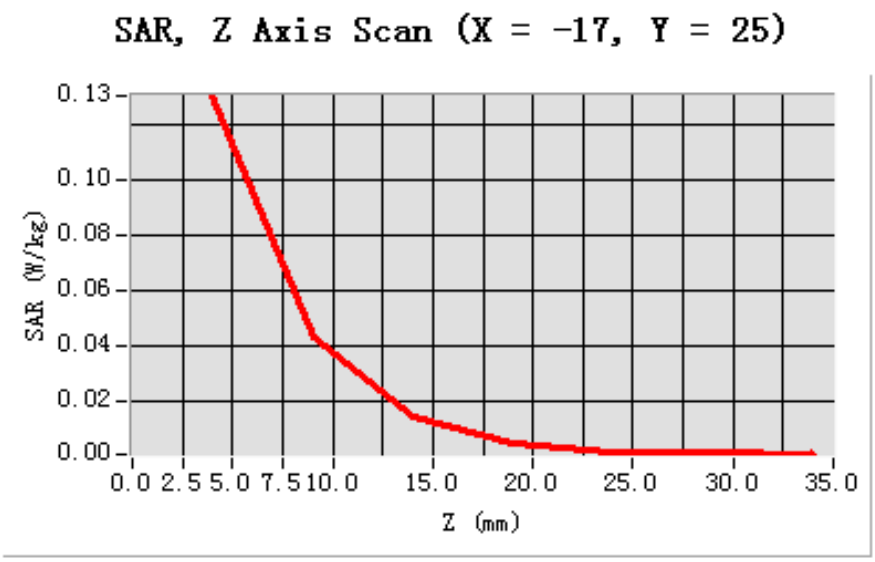
Test Date	2015-06-30
Ambient Temperature(°C)	21.7
Liquid Temperature(°C)	21.4
Probe	SN 17/14 EP221
ConvF	4.16
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm, Complete/ndx=5mm dy=5mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	802.11(b)
Channels	Middle
Signal	802.11(b) (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.77
Variation (%)	-0.07

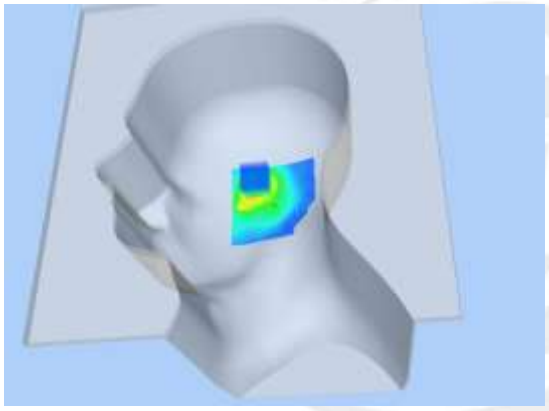
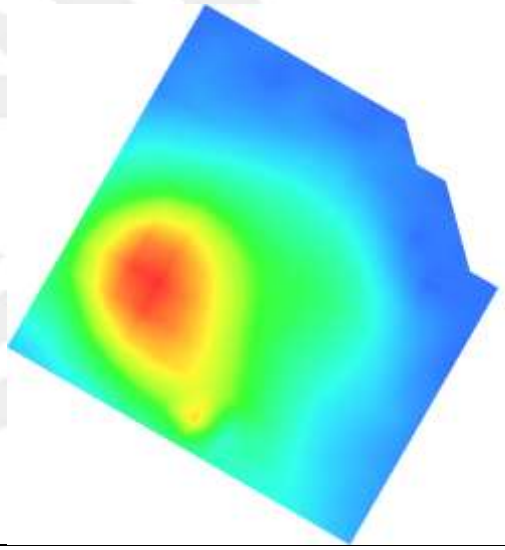
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-17.00, Y=25.00

SAR 10g (W/Kg)	0.052644
SAR 1g (W/Kg)	0.127843

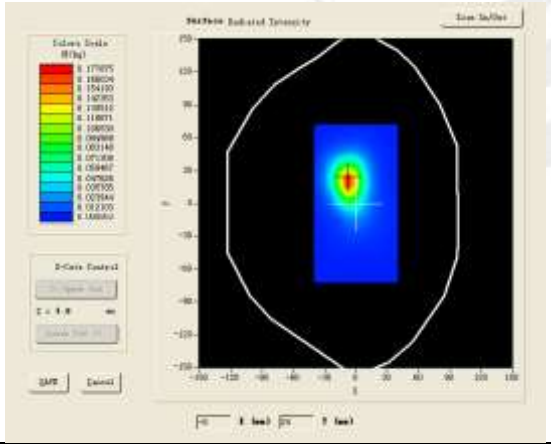
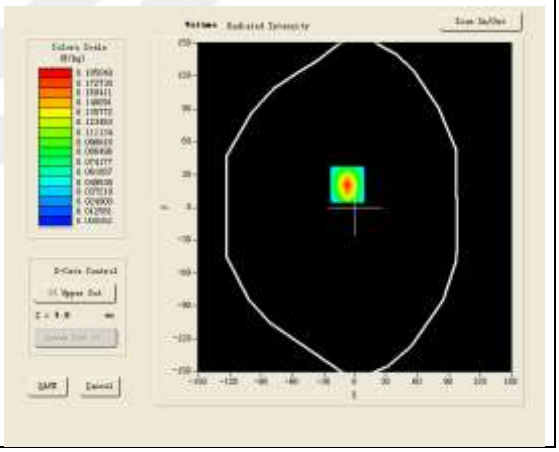
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1305	0.0430	0.0139	0.0043	0.0015	0.0009



3D screen shot	Hot spot position
	

Plot 71: DUT: 3G Mobile phone; EUT Model: E7 Dual Sim

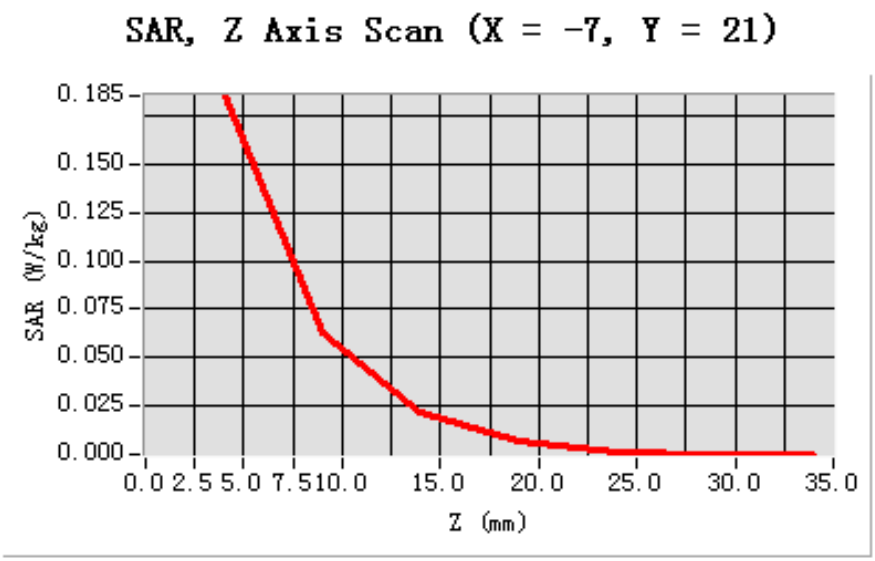
Test Date	2015-06-30
Ambient Temperature(°C)	21.7
Liquid Temperature(°C)	21.7
Probe	SN 17/14 EP221
ConvF	4.07
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm, Complete/ndx=5mm dy=5mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Right side
Band	802.11(b)
Channels	Middle
Signal	802.11(b)(Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	52.61
Conductivity (S/m)	1.90
Variation (%)	0.43

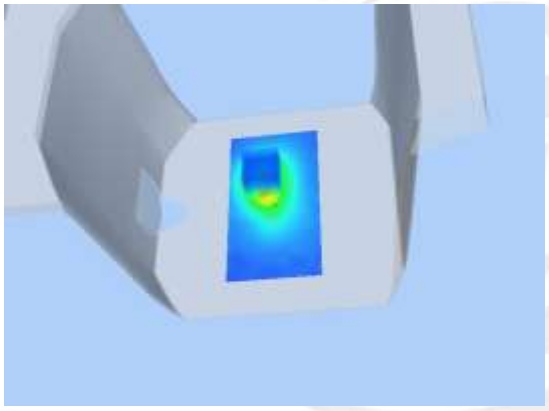
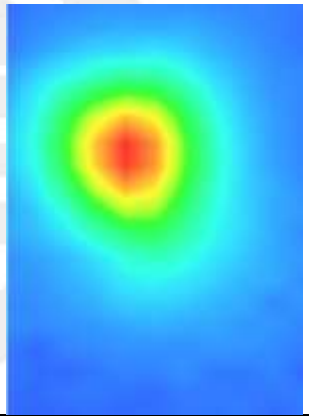
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-7.00, Y=21.00

SAR 10g (W/Kg)	0.074591
SAR 1g (W/Kg)	0.189842

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1850	0.0631	0.0215	0.0074	0.0020	0.0008



3D screen shot	Hot spot position
	

Appendix C. Probe Calibration and Dipole Calibration Report

Refer the appendix Calibration Report.