REPORT No. : SZ17040173S01

FCC SAR TEST REPORT

APPLICANT	:	Shenzhen Jingwah Information Technology Co., Ltd.
PRODUCT NAME	:	Tablet PC
MODEL NAME	:	M7057,3GR, 3G-16, S813G, 3G-32, G10, Xtab 832
TRADE NAME	:	N/A
BRAND NAME	:	N/A
FCC ID	:	RBD-M7057
STANDARD(S)	:	47CFR 2.1093 IEEE 1528-2013;
ISSUE DATE	:	2017-04-17

SHENZHEN MORLAB COMMUNICATIONS TECHNOLOGY Co., Ltd.

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DIRECTORY

Change History		
Issue	Date	Reason for change
1.0	2017-04-17	First edition

TEST REPORT DECLARATION

Applicant	Shenzhen Jingwah Information Technology Co., Ltd.		
Applicant Address	4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China		
Manufacturer	Shenzhen Jingwah Information Technology Co., Ltd.		
Manufacturer Address	4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China		
Product Name	Tablet PC		
Model Name	M7057,3GR, 3G-16, S813G, 3G-32, G10, Xtab 832		
Brand Name	N/A		
HW Version	K706		
SW Version	K706.M.V10.8.JH-V0.4.1646		
Test Standards	47 CFR 2.1093; IEEE 1528-2013;		
Test Date	2017-04-14		
The Highest Reported 1g-SAR(W/kg)	Head	0.165W/kg	Limit(W/kg): 1.6W/kg
	Body-worn	0.786W/kg	
	Hotspot	1.185W/kg	
	Simultaneous	1.349W/kg	

Reviewed by : Liu Jun

Liu Jun

Approved by : Peng Huarui

Peng Huarui

1.TECHNICAL INFORMATION

Note: the Following data is based on the information by the applicant.

1.1 Identification of Applicant

Company Name:	Shenzhen Jingwah Information Technology Co., Ltd.
Address:	4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China

1.2 Identification of Manufacturer

Company Name:	Shenzhen Jingwah Information Technology Co., Ltd.
Address:	4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China

1.3 Equipment Under Test (EUT)

Model Name:	M7057,3GR, 3G-16, S813G, 3G-32, G10, Xtab 832
Trade Name:	N/A
Brand Name:	N/A
Hardware Version:	K706
Software Version:	K706.M.V10.8.JH-V0.4.1646
Frequency Bands:	GSM 850: 824-849 MHz; GSM 1900: 1850-1910 MHz; WCDMA Band II : 1850-1910MHz; WCDMA Band V: 824-849 MHz; 802.11 b/g/n: 2412-2462 MHz; Bluetooth 2.1+EDR; 2402-2480 MHz; BLE 4.0; 2402-2480 MHz;
Uplink Modulations:	GSM/GPRS: GMSK; EDGE: 8PSK; WCDMA: QPSK; HSPA/HSPA+: QPSK/16QAM; WIFI 802.11b: DSSS; WIFI 802.11g/n: OFDM; Bluetooth 2.1+EDR: GFSK/π/4-DQPSK/8-DPSK; Bluetooth4.0: GFSK
Antenna type:	Fixed Internal Antenna
Hotspot function:	Support

1.3.1 Photographs of the EUT

Please refer to the External Photos for the Photos of the EUT

1.3.2 Identification of all used EUT

The EUT identity consists of numerical and letter characters, the letter character indicates the test sample, and the Following two numerical characters indicate the software version of the test sample.

EUT Identity	Hardware Version	Software Version
1#	K706	K706.M.V10.8.JH-V0.4.1646

1.4 Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	**47 CFR§2.1093**	Radiofrequency Radiation Exposure Evaluation: Portable Devices
2	**IEEE 1528-2013**	IEEE Recommended Practice forDetermining the Peak Spatial-AverageSpecific Absorption Rate (SAR) in theHuman Head from WirelessCommunications Devices: Measurement Techniques
3	**KDB 447498 D01v06**	General RF Exposure Guidance
4	**KDB 248227 D01v02r02**	SAR Measurement Procedures for 802.11 Transmitters
5	**KDB 941225 D01v03r01**	SAR Measurement Procedures for 3G Devices
6	**KDB 941225 D06v02r01**	Hotspot Mode SAR
7	**KDB 941225 D05v02r05**	SAR for LTE Devices
8	**KDB 941225 D07v01r02**	UMPC Mini tablet
9	**KDB 865664 D01v01r04**	SAR Measurement 100 MHz to 6 GHz
10	**KDB 865664 D02v01r02**	SAR Reporting

2. Device Category and SAR Limits

Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

Note: This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user. Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

2. SPECIFIC ABSORPTION RATE (SAR)

2.1 Introduction

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 Middle than the limits for general population/uncontrolled.

2.2 SAR Definition

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

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

SAR is expressed in units of Watts per kilogram (W/kg)
SAR measurement can be either related to the temperature elevation in tissue by,

$$\mathbf{SAR} = \mathbf{C}\left(\frac{\boldsymbol{\delta}\mathbf{T}}{\boldsymbol{\delta}\mathbf{t}}\right)$$

Where C is the specific body capacity, δT is the temperature rise and δt the exposure duration, or related to the electrical field in the tissue by

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

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

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

3. SAR MEASUREMENT SETUP

3.1 The Measurement System

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
- Body 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 body 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 Probe

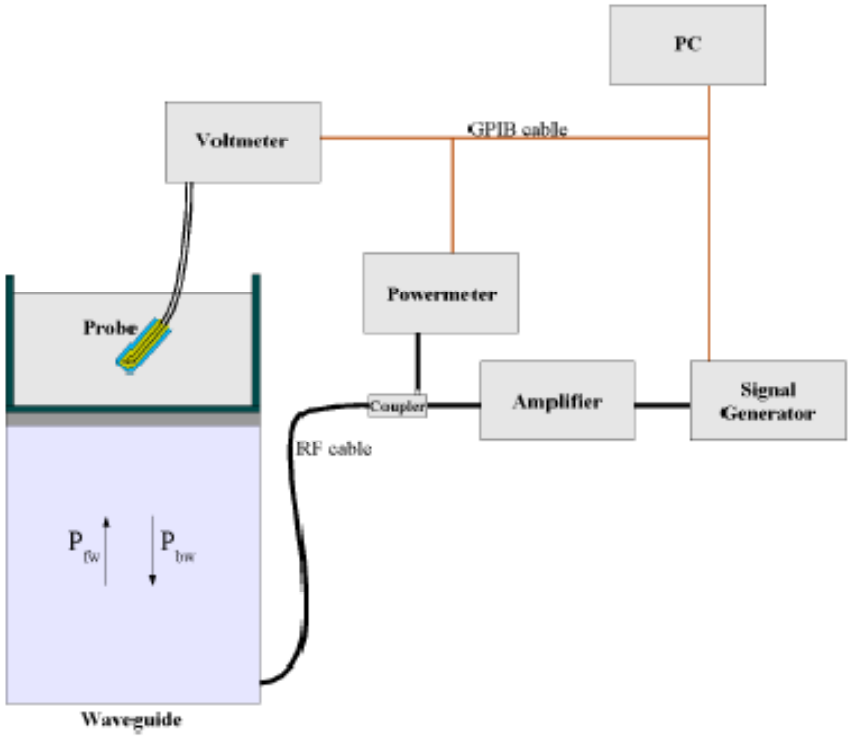
For the measurements the Specific Dosimetric E-Field Probe SN 37/08 EP80 with Following specifications is used

- Dynamic range: 0.01-100 W/kg
- Tip Diameter: 6.5 mm

- Distance between probe tip and sensor center: 2.5mm
- 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: 835to 2500MHz for body & body simulating liquid.

Angle between probe axis (evaluation axis) and surface normal line: less than 30°

Probe calibration is realized, in compliance with CENELEC EN 62209 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 622091 annex technique using reference guide at the five frequencies.



$$SAR = \frac{4\left(P_{fw} - P_{bw}\right)}{ab\delta} \cos^2\left(\pi \frac{y}{a}\right) e^{-(2z/\delta)}$$

Where :

Pfw = Forward Power

Pbw = Backward Power

a and b = Waveguide dimensions

ı = Skin depth

Keithley configuration:

Rate = Medium; Filter =ON; RDGS=10; FILTER TYPE =MOVING AVERAGE; RANGE AUTO
After each calibration, a SAR measurement is performed on a validation dipole and compared with a NPL calibrated probe, to verify it.

The calibration factors, CF(N), for the 3 sensors corresponding to dipole 1, dipole 2 and dipole 3 are:

$$CF(N)=SAR(N)/Vlin(N) \qquad (N=1,2,3)$$

The linearised output voltage Vlin(N) is obtained from the displayed output voltage V(N) using

$$Vlin(N)=V(N)*(1+V(N)/DCP(N)) \qquad (N=1,2,3)$$

Where DCP is the diode compression point in mV.

3.3 Probe Calibration Process

3.3.1 Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. SATIMO Probe calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm^2) using an with CALISAR, Antenna proprietary calibration system.

3.3.2 Free Space Assessment Procedure

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm^2.

3.3.3 Temperature Assessment Procedure

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulating body tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

Where:

δt = exposure time (30 seconds),

$$\mathbf{SAR} = \mathbf{C}\left(\frac{\delta \mathbf{T}}{\delta \mathbf{t}}\right)$$

C = heat capacity of tissue (brain or muscle),

δT = temperature increase due to RF exposure.

SAR is proportional to ΔT/Δt, the initial rate of tissue heating, before thermal diffusion takes place. The electric field in the simulated tissue can be used to estimate SAR by equating the thermally derived SAR to that with the E- field component.

Where:

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

σ = simulated tissue conductivity,

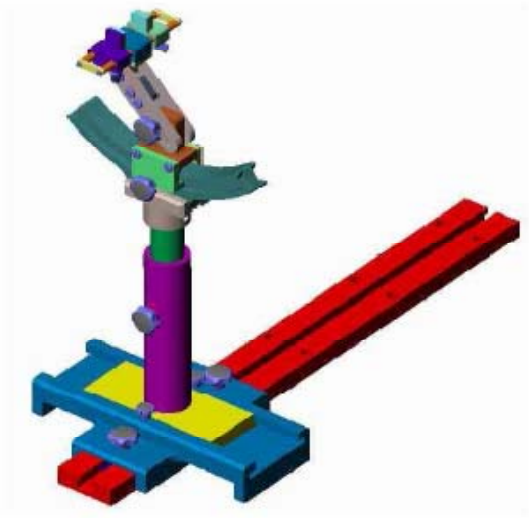
ρ = Tissue density (1.25 g/cm³ for brain tissue)

3.4 Phantom

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

3.5 Device Holder

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is Middle than 1°.



Device holder

System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

4. TISSUE SIMULATING LIQUIDS

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For body SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5% are listed in below table.

The following table gives the recipes for tissue simulating liquids

Frequency Band (MHz)	835		1900	
Tissue Type	Head	Body	Head	Body
Ingredients(% by weight)				
DeionisedWater	50.36	50.20	54.90	40.40
Salt(NaCl)	1.25	0.90	0.18	0.50
Sugar	0.00	48.50	0.00	58.00
Tween 20	48.39	0.00	0.00	0.00
HEC	0.00	0.20	0.00	1.00
Bactericide	0.00	0.20	0.00	0.10
Triton X-100	0.00	0.00	0.00	0.00
DGBE	0.00	0.00	44.92	0.00
Diethylenglycol monohexylether	0.00	0.00	0.00	0.00
Target dielectric parameters				
Dielectric Constant	41.50	56.10	39.90	53.30
Conductivity (S/m)	0.90	0.95	1.42	1.52

Note: Please refer to the validation results for dielectric parameters of each frequency band.

The dielectric properties of the tissue simulating liquids were verified prior to the SAR evaluation using an Agilent 85033E Dielectric Probe Kit and an Agilent Network Analyzer.

Table 1: Dielectric Performance of Tissue Simulating Liquid

Temperature: 22.0~23.8°C, humidity: 54~60%.						
Date	**Freq.(MHz)**	**Liquid Parameters**	**Meas.**	**Target**	**Delta(%)**	**Limit±(%)**
2017/04/14	Head 850	Relative Permittivity(εr):	41.39	41.5	-0.003	5
		Conductivity(σ):	0.86	0.90	-0.044	5
2017/04/14	Body 850	Relative Permittivity(εr):	54.6	55.2	-0.011	5
		Conductivity(σ):	0.96	0.97	-0.010	5
2017/04/14	Head 1900	Relative Permittivity(εr):	39.11	40.0	-0.022	5
		Conductivity(σ):	1.38	1.40	-0.014	5
2017/04/14	Body 1900	Relative Permittivity(εr):	52.48	53.3	-0.015	5
		Conductivity(σ):	1.44	1.52	-0.053	5

5. UNCERTAINTY ASSESSMENT

The Following table includes the uncertainty table of the IEEE 1528. The values are determined by Antennessa.

5.1 UNCERTAINTY EVALUATION FOR EUT SAR TEST

a	b	c	d	e= f(d,k)	f	g	h= c*f/e	i= c*g/ e	k
Uncertainty Component	Sec.	Tol (+- %)	Prob . Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+- %)	Vi
Measurement System									
Probe calibration	E.2.1	4.76	N	1	1	1	4.76	4.7	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	0.7	0.7	1.01	1.0	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	0.7	0.7	1.62	1.6	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.5	∞
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.8	∞
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	1	1	0.58	0.5	∞
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.0	∞
Reponse Time	E.2.7	3.0	R	$\sqrt{3}$	1	1	1.73	1.7	∞
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.1	∞
RF ambient Conditions	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.7	∞
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.1 5	∞
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.0 3	∞
Extrapolation, interpolation and integration Algoritms for Max. SAR Evaluation	E.5.2	5.0	R	$\sqrt{3}$	1	1	2.89	2.8 9	∞
Test sample Related									
Test sample positioning	E.4.2. 1	0.03	N	1	1	1	0.03	0.0 3	N- 1
Device Holder Uncertainty	E.4.1.	5.00	N	1	1	1	5.00	5.0	N-

	1							0	1
Output power Power drift - SAR drift measurement	6.6.2	4.04	R	$\sqrt{3}$	1	1	2.33	2.33	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Liquid conductivity - deviation from target value	E.3.2	4.57	R	$\sqrt{3}$	0.64	0.43	1.69	1.13	∞
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	1	0.64	0.43	3.20	2.15	M
Liquid permittivity - deviation from target value	E.3.2	3.69	R	$\sqrt{3}$	0.6	0.49	1.28	1.04	∞
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N	1	0.6	0.49	6.00	4.90	M
Combined Standard Uncertainty			RSS				11.55	10.67	
Expanded Uncertainty (95% Confidence interval)			K=2				23.11	21.33	

5.2 UNCERTAINTY FOR SYSTEM PERFORMANCE CHECK

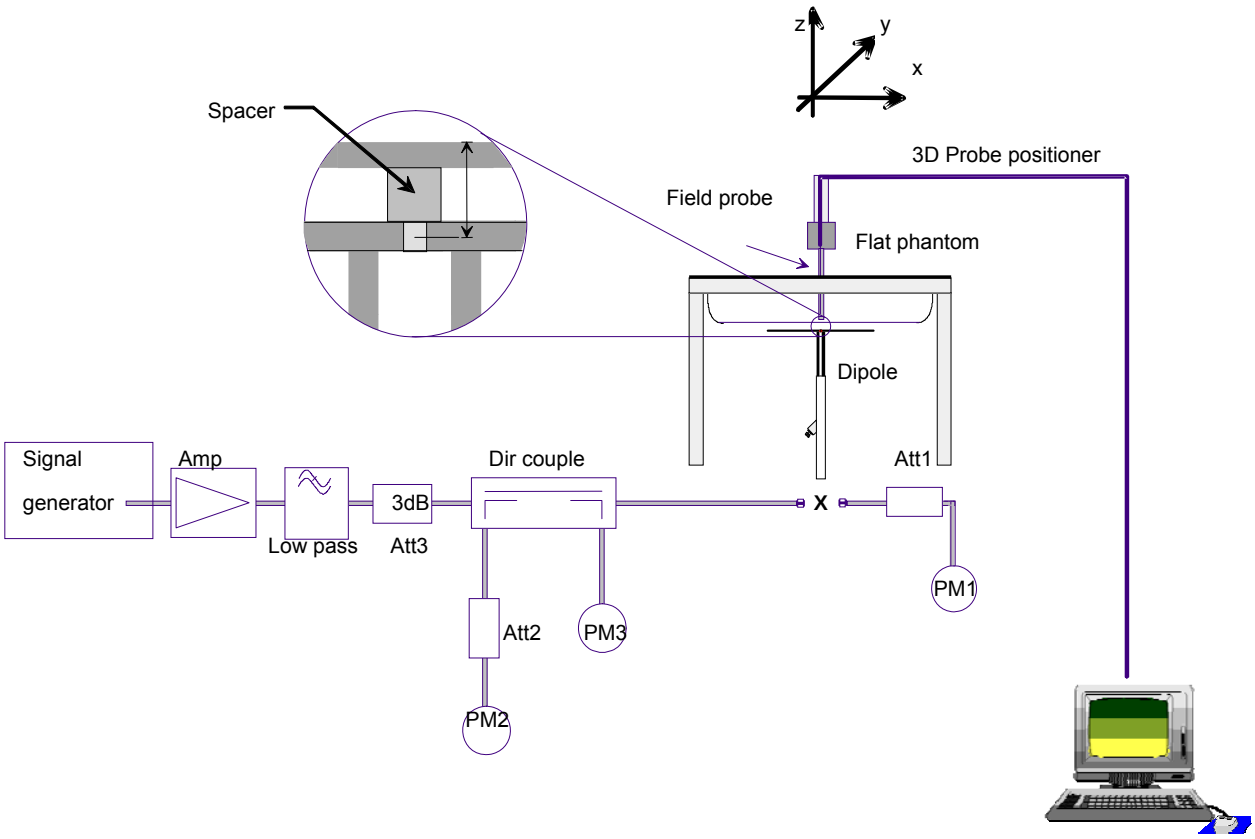
a	b	c	d	e= f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+-%)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	4.76	N	1	1	1	4.76	4.7	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	0.7	0.7	1.01	1.0	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	0.7	0.7	1.62	1.6	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.5	∞
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.8	∞
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	1	1	0.58	0.5	∞
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.0	∞

Reponse Time	E.2.7	3.0	R	$\sqrt{3}$	1	1	1.73	1.7	∞
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.1	∞
RF ambient Conditions	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.7	∞
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Extrapolation, interpolation and integration Algoritms for Max. SAR Evaluation	E.5.2	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Dipole									
Dipole axis to liquid Distance	8,E.4.2	1.00	N	$\sqrt{3}$	1	1	0.58	0.58	∞
Input power and SAR drift measurement	8,6.6.2	4.04	R	$\sqrt{3}$	1	1	2.33	2.33	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Liquid conductivity - deviation from target value	E.3.2	4.57	R	$\sqrt{3}$	0.64	0.43	1.69	1.13	∞
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	$\sqrt{3}$	0.64	0.43	1.85	1.24	M
Liquid permittivity - deviation from target value	E.3.2	3.69	R	$\sqrt{3}$	0.6	0.49	1.28	1.04	∞
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N	$\sqrt{3}$	0.6	0.49	3.46	2.83	M
Combined Standard Uncertainty			RSS				8.83	8.37	
Expanded Uncertainty (95% Confidence interval)			K=2				17.66	16.73	

6. SAR MEASUREMENT EVALUATION

6.1 System Setup

In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave which comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The system check verifies that the system operates within its specifications. It is performed daily or before every SAR measurement. The system check uses normal SAR measurements in the flat section of the phantom with a matched dipole at a specified distance. The system verification setup is shown as below



The validation dipole is placed beneath the flat phantom with the specific spacer in place. The distance spacer is touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The power meter PM1 measures the forward power at the location of the system check dipole connector. The signal generator is adjusted for the desired forward power (250 mW is used for 700 MHz to 3 GHz,100 mW is used for 3.5 GHz to

6 GHz) at the dipole connector and the power meter PM2 is read at that level. After connecting the cable to the dipole, the signal generator is readjusted for the same reading at power meter PM2.

6.2 Validation Results

After system check testing, the SAR result will be normalized to 1W forward input power and compared with the reference SAR value derived from validation dipole certificate report. The deviation of system check should be within 10 %.

Frequency	835MHz(H)	835MHz(B)	1900MHz(H)	1900MHz(B)
Target value 1W (1g)	9.68W/Kg	10.04 W/Kg	39.36 W/Kg	42.36W/Kg
Test value 1g (100 mW input power)	0.952W/Kg (2017.04.14)	0.991 W/Kg (2017.04.14)	3.955 W/Kg (2017.04.14)	4.188 W/Kg (2017.04.14)
Normalized to 1W value(1g)	9.52 W/Kg	9.91 W/Kg	39.55 W/Kg	41.88 W/Kg

Note: System checks the specific test data please the Annex C.

7. OPERATIONAL CONDITIONS DURING TEST

7.1 Body-worn Configurations

The body-worn configurations shall be tested with the supplied accessories (belt-clips, holsters, etc.) attached to the device in normal use configuration.

For body-worn and other configurations a flat phantom shall be used which is comprised of material with electrical properties similar to the corresponding tissues.

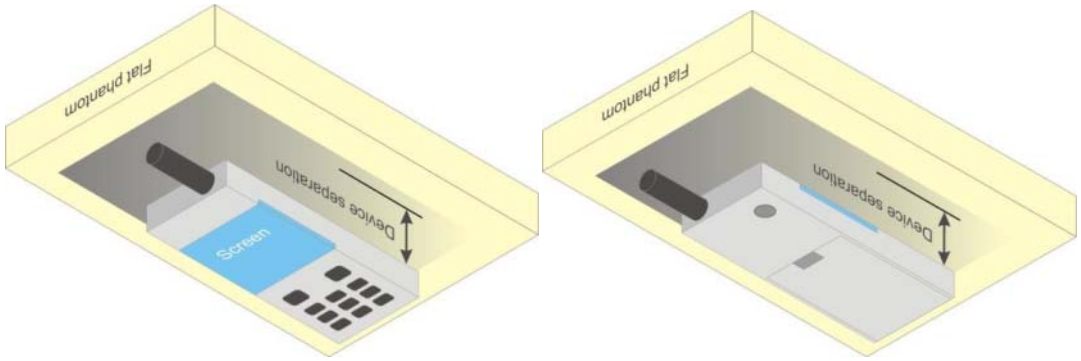


Illustration for Body Worn Position

7.2 Measurement procedure

The Following steps are used for each test position

1. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface.
2. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
3. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
4. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.3 Description of interpolation/extrapolation scheme

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimize measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1mm step.

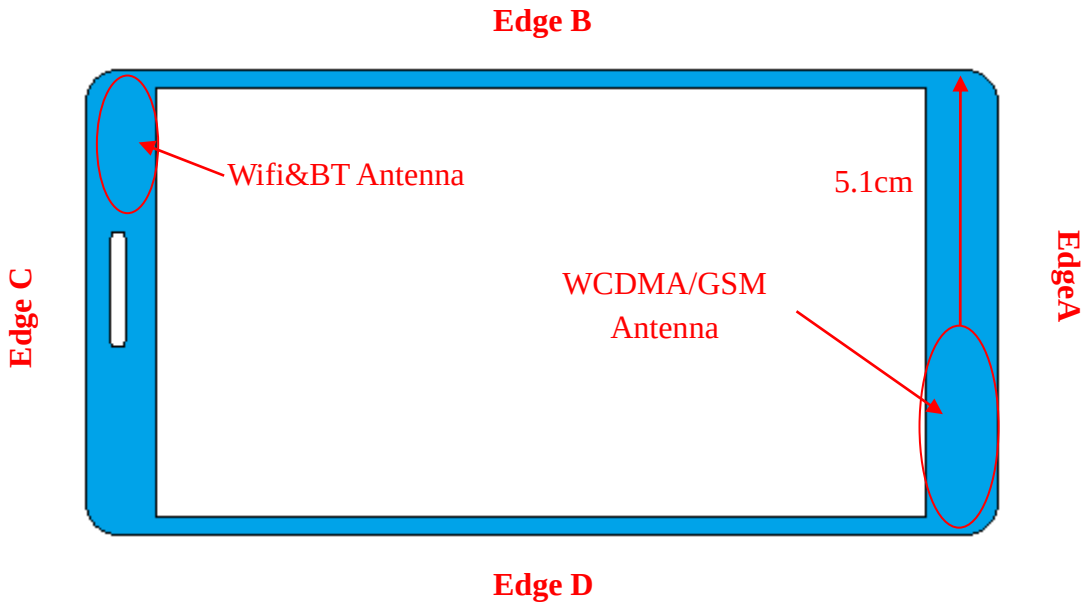
The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10 grams and 1 gram requires a very fine resolution in the three dimensional scanned data array.

8. ANTENNA LOCATION AND TEST POSITION

The SAR evaluation procedures for Portable Devices with Wireless Router function is according to KDB 941225 D06 HotSpot SAR v02r01.

SAR must be tested for all surfaces and edges (side) with a transmitting antenna with in 2.5 cm from that surface or edge, at a test separation distance of 10 mm, in the wireless mode that support wireless routing.

According to KDB 447498 D01, the bottom face (back of the device) is required to be tested touching the flat phantom. Per KDB 447498, SAR testing applies for the tablet edges with antenna located within 5cm of each tablet edge closet to the user.



Assessment	Hotspot side for SAR					
					Test distance: 10mm	
Antennas	Back	Front	Edge A	Edge B	Edge C	Edge D
WCDMA/GSM	Yes	Yes	Yes	No	No	Yes

9. MEASUREMENT OF CONDUCTED OUTPUT POWER

1. GSM Conducted peak output power

Band	Channel	Frequency (MHz)	Output Power (dBm)
GSM 850	128	824.6	32.56
	190	836.6	32.49
	251	848.4	32.52
PCS 1900	512	1850.2	29.38
	661	1880.0	29.32
	810	1909.8	29.35

2. GPRS Mode

Band	Channel	Frequency (MHz)	Output Power(dBm)			
			Slot 1	Slot 2	Slot 3	Slot 4
GSM 850	128	824.6	32.41	31.70	30.23	29.16
	190	836.6	32.38	31.68	30.27	29.25
	251	848.4	32.39	31.62	30.25	29.20
PCS 1900	512	1850.2	29.21	28.25	27.13	25.28
	661	1880.0	29.20	28.30	27.11	25.23
	810	1909.8	29.17	28.22	27.06	25.25

GPRS Mode Time-based Average Power

Band	Channel	Frequency (MHz)	Output Power(dBm)			
			Slot 1	Slot 2	Slot 3	Slot 4
GSM 850	128	824.2	23.38	25.68	25.97	26.15
	190	836.6	23.35	25.66	26.01	26.24
	251	848.8	23.36	25.60	25.99	26.19
PCS 1900	512	1850.2	20.18	22.23	22.87	22.27
	661	1880.0	20.17	22.28	22.85	22.22
	810	1909.8	20.14	22.20	22.80	22.24

3. EGPRS Mode

Band	Channel	Frequency (MHz)	Output Power(dBm)			
			Slot 1	Slot 2	Slot 3	Slot 4
GSM 850	128	824.6	27.63	27.11	25.68	24.18
	190	836.6	27.57	27.08	25.72	24.12
	251	848.4	27.53	27.15	25.73	24.10
PCS 1900	512	1850.2	25.30	24.07	23.31	22.61
	661	1880.0	25.22	24.02	23.27	22.57
	810	1909.8	25.27	24.05	23.26	22.55

EGPRS Mode Time-based Average Power

Band	Channel	Frequency (MHz)	Output Power(dBm)			
			Slot 1	Slot 2	Slot 3	Slot 4
GSM 850	128	824.2	18.60	21.09	21.42	21.17
	190	836.6	18.54	21.06	21.46	21.11
	251	848.8	18.50	21.13	21.47	21.09
PCS 1900	512	1850.2	16.27	18.05	19.05	19.60
	661	1880.0	16.19	18.00	19.01	19.56
	810	1909.8	16.24	18.03	19.00	19.54

Timeslot consignations:

No. Of Slots	Slot 1	Slot 2	Slot 3	Slot 4
Slot Consignation	1Up4Down	2Up3Down	3Up2Down	4Up1Down
Duty Cycle	1:8	1:4	1:2.67	1:2
Correct Factor	-9.03dB	-6.02dB	-4.26dB	-3.01dB

4. Wifi Average output power

Band	Channel	Frequency (MHz)	Output Power(dBm)		
			802.11b (DSSS)	802.11g (OFDM)	802.11n20 (OFDM)
Wifi	1	2412	7.63	5.41	5.93
	6	2442	7.83	5.59	6.19
	11	2472	8.70	6.41	6.06

Band	Channel	Frequency (MHz)	Output Power(dBm)
			802.11n40 (OFDM)
Wifi	3	2422	5.52
	6	2442	5.21
	9	2462	5.78

5. Bluetooth Average output power

Band	Channel	Frequency (MHz)	Output Power(dBm)		
			GFSK	π/4-DQPSK	8-DPSK
BT2.1+EDR	0	2402	-11.44	-12.53	-12.64
	39	2441	-12.12	-12.77	-12.89
	78	2480	-12.57	-13.49	-13.66

Band	Channel	Frequency (MHz)	Output Power(dBm)
			GFSK
BT 4.0	0	2402	-12.47
	19	2440	-12.46
	39	2480	-13.42

6. WCDMA Average output power

Item	band	WCDMA 850			WCDMA1900		
	ARFCN	4132	4183	4233	9262	9400	9538
	subtest	dBm			dBm		
5.2(WCDMA)	non	23.68	23.71	23.75	23.80	23.85	23.83
HSDPA	1	23.52	23.61	23.63	23.71	23.76	23.72
	2	23.32	23.35	23.49	23.56	23.62	23.55
	3	23.28	23.32	23.35	23.40	23.46	23.39
	4	23.40	23.47	23.46	23.48	23.55	23.52
HSUPA	1	23.37	23.40	23.43	23.57	23.66	23.60
	2	23.29	23.35	23.36	23.35	23.41	23.33
	3	23.18	23.22	23.26	23.52	23.60	23.58
	4	23.14	23.18	23.16	23.45	23.52	23.51
	5	23.26	23.25	23.29	23.37	23.44	23.39

10. TEST RESULTS LIST

Summary of Measurement Results (GSM 850MHz Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.							
Phantom Configurations		Device Test Positions	Device Test channel	SAR(W/Kg), 1g Peak	Scaling Factor	Scaled SAR (W/Kg), 1g	Plot No.
Right Side Of Head		Cheek/Touch	190	0.148	1.002	0.148	
		Ear/Tilt		0.042		0.042	
Left Side Of Head		Cheek/Touch		0.165		**0.165**	
		Ear/Tilt		0.055		0.055	
Body-worn Dist.10mm	GSM	Back upward		0.773		0.775	
		Front upward		0.425		0.426	
	GPRS	Back upward	128	1.011	1.084	1.096	
			190	1.082	1.062	**1.149**	
			251	1.025	1.074	1.101	
		Front upward	190	0.738	1.062	0.784	
Hotspot Mode Dist.10mm		Back upward		1.082		1.149	
		Front upward		0.738		0.784	
		Edge A		0.653		0.693	
		Edge D		0.272		0.289	

Summary of Measurement Results (GSM 1900MHz Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.							
Phantom Configurations		Device Test Positions	Device Test channel	SAR(W/Kg), 1g Peak	Scaling Factor	Scaled SAR (W/Kg), 1g	Plot No.
Right Side Of Head		Cheek/Touch	810	0.149	1.042	0.155	
		Ear/Tilt		0.039		0.041	
Left Side Of Head		Cheek/Touch		0.155		0.162	
		Ear/Tilt		0.042		0.044	
Body-worn Dist.10mm	GSM	Back upward		0.590		0.615	
		Front upward		0.266		0.277	
	GPRS	Back upward	512	1.150	1.030	**1.185**	
			661	0.925	1.035	0.957	
			810	0.911	1.047	0.954	
		Front upward	810	0.722	1.047	0.756	
Hotspot Mode Dist.10mm		Back upward	512	1.150	1.030	1.185	
		Front upward	810	0.722	1.047	0.756	
		Edge A	810	0.193	1.047	0.202	
		Edge D	810	0.566	1.047	0.593	

Note:

1. GPRS/EDGE test Scenario(Based on the Max. Time-based Average Power)

Band	Slots	Power level	Duty Cycle
GPRS850	4	5	1:2
GPRS1900	4	0	3:8

2. SAR is not required for EDGE mode because its output power is less than that of GPRS mode.

Summary of Measurement Results (WCDMA 850MHz Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.						
Phantom Configurations	Device Test Positions	Device Test channel	SAR(W/Kg), 1g Peak	Scaling Factor	Scaled SAR (W/Kg), 1g	Plot No.
Right Side Of Head	Cheek/Touch	4175	0.088	1.069	0.094	
	Ear/Tilt		0.029		0.031	
Left Side Of Head	Cheek/Touch		0.097		0.104	
	Ear/Tilt		0.033		0.035	
Body-worn Dist.10mm	Back upward		0.735		**0.786**	
	Front upward		0.320		0.342	
Hotspot Mode Dist.10mm	Back upward		0.735		0.786	
	Front upward		0.320		0.342	
	Edge A		0.116		0.124	
	Edge D		0.337		0.360	

Summary of Measurement Results (WCDMA 1900MHz Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.						
Phantom Configurations	Device Test Positions	Device Test channel	SAR(W/Kg), 1g Peak	Scaling Factor	Scaled SAR (W/Kg), 1g	Plot No.
Right Side Of Head	Cheek/Touch	9400	0.112	1.035	0.116	
	Ear/Tilt		0.041		0.042	
Left Side Of Head	Cheek/Touch		0.132		0.137	
	Ear/Tilt		0.044		0.046	
Body-worn Dist.10mm	Back upward		0.682		0.706	
	Front upward		0.408		0.422	
Hotspot Mode Dist.10mm	Back upward		0.682		0.706	
	Front upward		0.408		0.422	
	Edge A		0.418		0.433	
	Edge D		0.214		0.221	

Note:

1. When the 1-g SAR for the mid-band channel or the channel with the highest output power satisfy the following conditions, testing of the other channels in the band is not required. (Per KDB 447498 D01 General RF Exposure Guidance v06)

≤ 0.8 W/kg and transmission band ≤ 100 MHz
≤ 0.6 W/kg and, 100 MHz < transmission bandwidth ≤ 200 MHz
≤ 0.4 W/kg and transmission band > 200 MHz

2. The WCDMA mode is test with 12.2kbps RMC and TPC set to all "1", if maximum SAR for 12.2kbps RMC is ≤ 75% of the SAR limit (i.e. 1.2W/Kg 1g) and maximum average output of each RF channel with HSDPA/HSUPA active is less than 1/4 dB Middle than that measured without HSDPA/HSUPA using 12.2kbps RMC, according to KDB 941225D01v03, SAR is not required for this handset with HSPA capabilities.

1. BT & WiFi SAR test is conducted according to section 12 stand-alone SAR evaluation of this report.
2. During 802.11 testing, engineering testing software installed on the EUT can provide continuous transmitting RF signal. The RF signal utilized in SAR measurement has almost 100% duty cycle, and its crest factor is 1.
3. IEEE Std 1528-2013 require the middle channel to be tested first. This generally applies to wireless devices that are designed to operate in technologies with tight tolerances for maximum output power variations across channels in the band. When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel must be used.

4. Per KDB 447498, when the SAR procedures require multiple channels to be tested and the 1-g SAR for the highest output channel is less than 0.8 W/kg and peak SAR is less than 1.6W/kg, where the transmission band corresponding to all channels is ≤ 100 MHz, testing for the other channels is not required.

5. The WCDMA mode is test with 12.2kbps RMC and TPC set to all “1”, if maximum SAR for 12.2kbps RMC is ≤ 75% of the SAR limit (i.e. 1.2W/Kg 1g) and maximum average output of each RF channel with HSDPA/HSUPA active is less than 1/4 dB higher than that measured without HSDPA/HSUPA using 12.2kbps RMC, according to KDB 941225D01v03, SAR is not required for this handset with HSPA capabilities. This module supports 3GPP release R7 HSPA+ using QPSK only without 16QAM in the uplink. So PBA is not required for HSPA+.

6. Scaling Factor calculation

Band	Tune-up power tolerance(dBm)	SAR test channel Power (dBm)	Scaling Factor
GSM 850	PCL = 5, PWR =32+-0.5	32.49	1.002
GPRS 850	PCL = 5, PWR =26+-0.5(4 slots)	26.15	1.084
		26.24	1.062
		26.19	1.074
GSM 1900	PCL = 0, PWR =29+-0.5	29.32	1.042
GPRS1900	PCL = 0, PWR =22.5+-0.5(4 slots)	22.87	1.030
		22.85	1.035
		22.80	1.047
WCDMA 850	Max output power =23(+1/-2)	23.71	1.069
WCDMA 1900	Max output power =23(+1/-2)	23.85	1.035

11. REPEATED SAR MEASUREMENT

In accordance with published RF Exposure KDB procedure 865664 D01 SAR measurement 100 MHz to 6 GHz. These additional measurements are repeated after the completion of all measurements requiring the same body or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Band	Test Position	Test Channel	Meas.SAR(W/kg)		Largest to Smallest SAR Ratio
			Original	Repeated	
GSM 850	Back upward	128	1.011	1.021	1.010
		190	1.082	1.093	1.010
		251	1.025	1.033	1.008
GSM 1900	Back upward	512	1.150	1.088	1.057
		661	0.925	0.911	1.015
		810	0.911	0.908	1.003

12. MULTIPLE TRANSMITTERS EVALUATION

Stand-alone SAR

Test distance: 5mm			
Band	**Highest power(mW) per tune up**	**1-g SAR test threshold**	**Test required?**
WIFI(2.4G)	7.94	[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [√f(GHz)] ≤ 3.0 for 1-g SAR	No
BT	0.08		No

Test distance: 10mm			
Band	**Highest power(mW) per tune up**	**1-g SAR test threshold**	**Test required?**
WIFI(2.4G)	7.94	[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [√f(GHz)] ≤ 3.0 for 1-g SAR	No
BT	0.08		No

The SAR test for BT and WiFi are not required.

The BT stand-alone SAR is not required, the standalone SAR must be estimated according to followingto 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.
(Max power=7.94 mW for WiFi; *min. test separation distance*= 5mm for Head; *f*=2.4GHz)
WiFi estimated Head SAR =0.329W/Kg (1g)
WiFi estimated Body SAR =0.164W/Kg (1g
(Max power=0.08 mW for BT; *min. test separation distance*= 10mm for Body; *f*=2.4GHz)
BT estimated Head SAR =0.003W/Kg (1g)
BT estimated Body SAR =0.002W/Kg (1g)

Simultaneous SAR

	Simultaneous transmission conditions				
	WWAN		WLAN		Sum of WWAN& WLAN
#	GSM	UMTS	802.11b/g/n	BT	
1	×		×		×
2	×			×	×
3		×	×		×
4		×		×	×

Note:

1. When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the Wi-Fi transmitter and another WWAN transmitter. Both transmitter often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The "Portable Hotspot" feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

2. The hotspot SAR result may overlap with the body-worn accessory SAR requirements, per KDB 941225 D06, the more conservative configurations can be considered, thus excluding some unnecessary body-worn accessory SAR tests.

3. GSM supports voice and data transmission, though not simultaneously. WCDMA supports voice and data transmission simultaneously.

4. Simultaneous Transmission SAR evaluation is not required for BT and WiFi, because the software mechanism have been incorporated to guarantee that the WLAN and Bluetooth transmitters would not simultaneously operate.

5. Per KDB 447498D01v06, Simultaneous Transmission SAR Evaluation procedures is as followed:

   Step 1: If sum of 1 g SAR < 1.6 W/kg, Simultaneous SAR measurement is not required.

   Step 2: If sum of 1 g SAR > 1.6 W/kg, ratio of SAR to peak separation distance for pair of transmitters calculated.

   Step 3: If the ratio of SAR to peak separation distance is ≤ 0.04, Simultaneous SAR measurement is not required.

   Step 4: If the ratio of SAR to peak separation distance is > 0.04, Simultaneous SAR

measurement is required and simultaneous transmission SAR value is calculated.
(The ratio is determined by: (SAR1 + SAR2) ^ 1.5/Ri ≤ 0.04,
Ri is the separation distance between the peak SAR locations for the antenna pair in mm)

6. Applicable Multiple Scenario Evaluation

Test Position	Main Ant. SARMax (W/Kg)	Bluetooth SAR(W/Kg)	WiFi SARMax(W/Kg)	∑1-g SARMax(W/Kg)	
				BT&Main Ant	WiFi&Main Ant
Head SAR	0.165	0.003	0.329	0.168	0.494
Body SAR	1.185	0.002	0.164	1.187	1.349

Simultaneous Transmission SAR evaluation is not required for WiFi and WCDMA&GSM, because the sum of 1g SARMax is **1.349**W/Kg < 1.6W/Kg for Wifi and WCDMA&GSM.
Simultaneous Transmission SAR evaluation is not required for BT and WCDMA&GSM, because the sum of 1g SARMax is **1.187** W/Kg < 1.6W/Kg for BT and WCDMA&GSM.
(According to KDB 447498D01v06, the sum of the Highest *reported* SAR of each antenna does not exceed thelimit, simultaneous transmission SAR evaluation is not required.)

13ANNEX A PLOTS OF SAR TEST RESULTS

14ANNEX B GENERAL INFORMATION

15 ANNEX C SYSTEM CHECK DATA

16 ANNEX D SETUP PHOTOS

ANNEX A PLOTS OF SAR TEST RESULTS

MEASUREMENT 1

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 58 seconds

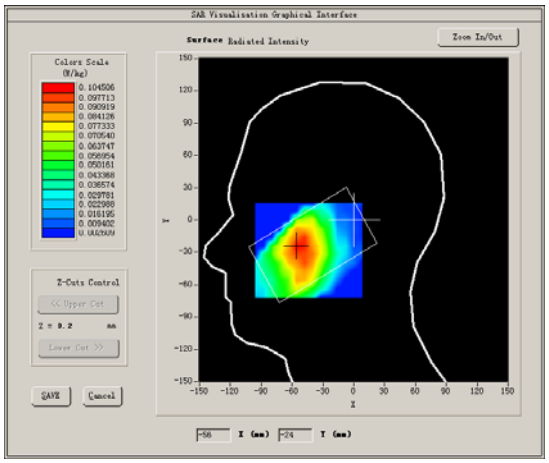
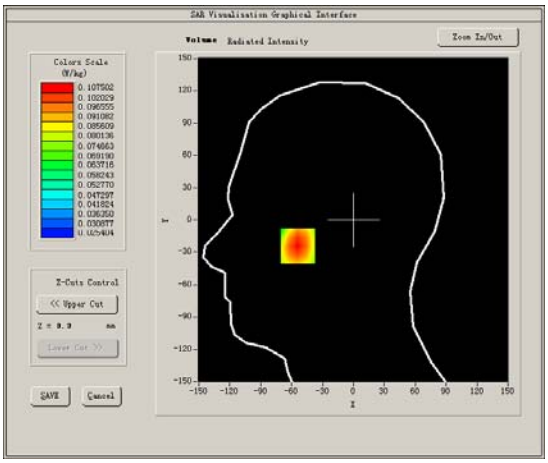
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

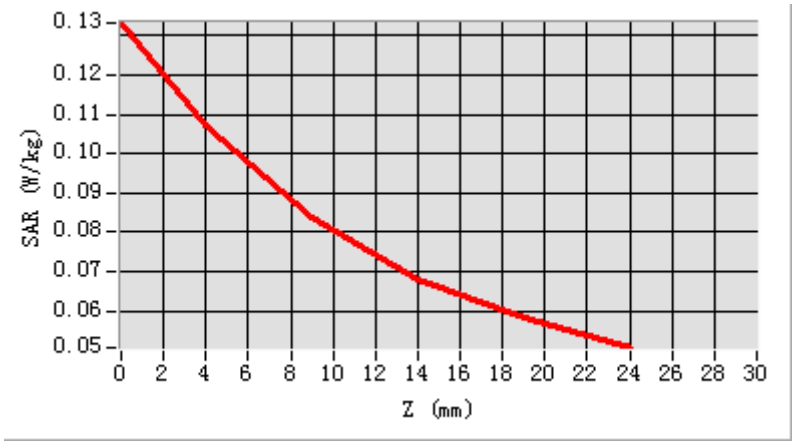
Frequency (MHz)	836.400000
Relative permittivity (real part)	41.522291
Conductivity (S/m)	0.911718
Power drift (%)	3.970000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:8

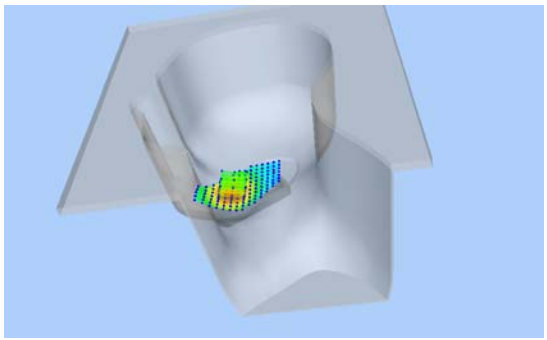
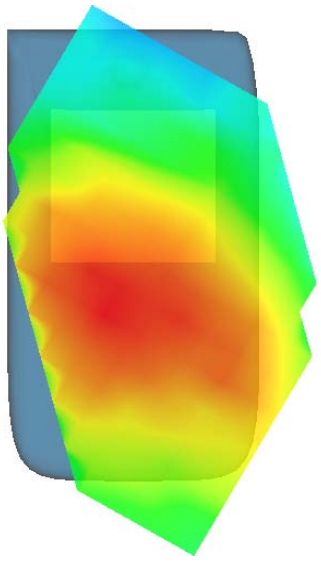
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-54.00, Y=-24.00
SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.113611
SAR 1g (W/Kg)	0.147621

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1332	0.1075	0.0839	0.0682	0.0581



3D screen shot	Hot spot position
	

MEASUREMENT 2

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 32 seconds

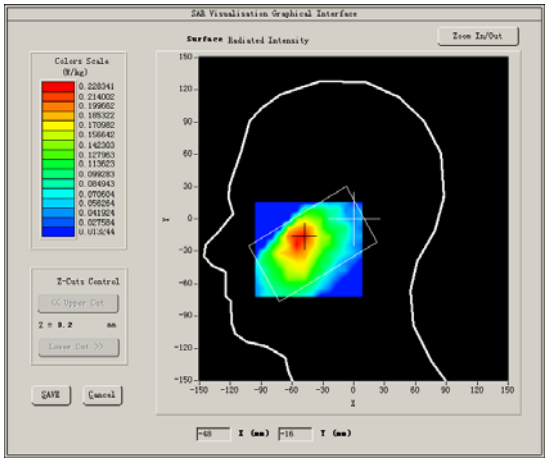
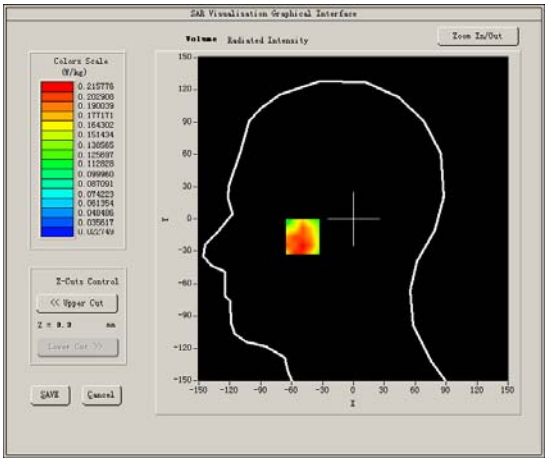
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.400000
Relative permittivity (real part)	41.522291
Conductivity (S/m)	0.911718
Power drift (%)	-2.300000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:8

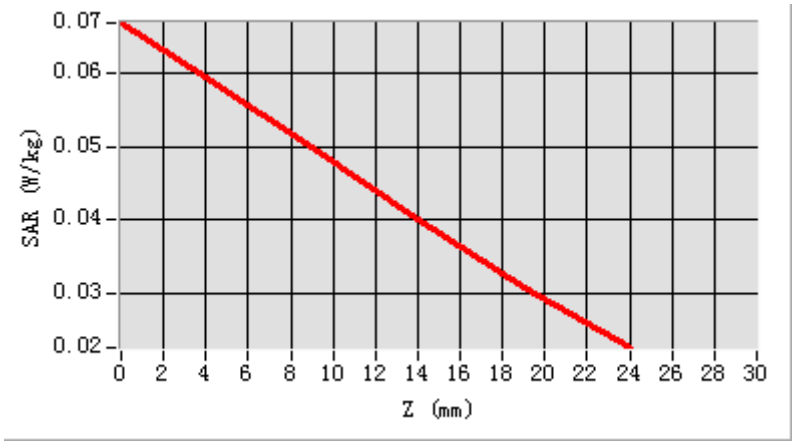
SURFACE SAR	VOLUME SAR
	

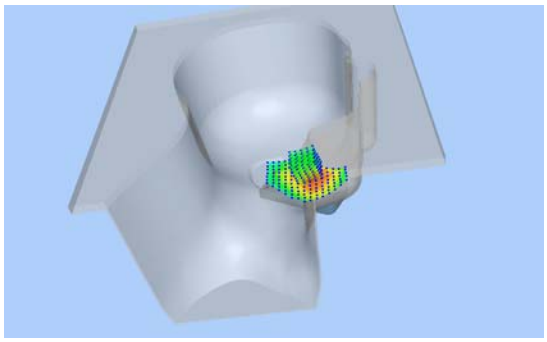
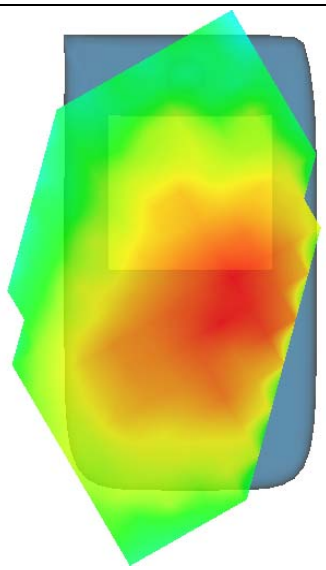
Maximum location: X=-32.00, Y=-8.00

SAR Peak: 0.07 W/kg

SAR 10g (W/Kg)	0.035136
SAR 1g (W/Kg)	0.042045

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**
SAR (W/Kg)	**0.0669**	**0.0594**	**0.0498**	**0.0402**	**0.0310**



3D screen shot	**Hot spot position**
	

MEASUREMENT 3

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

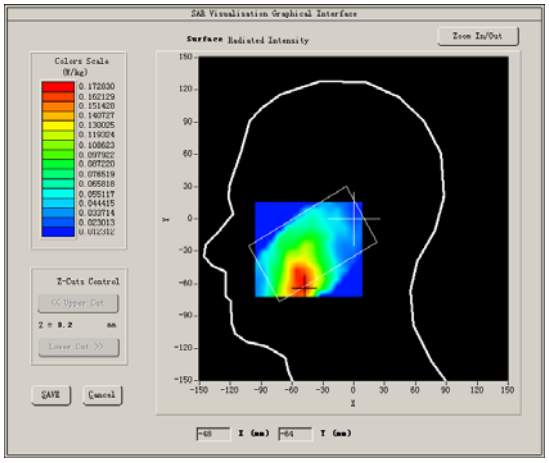
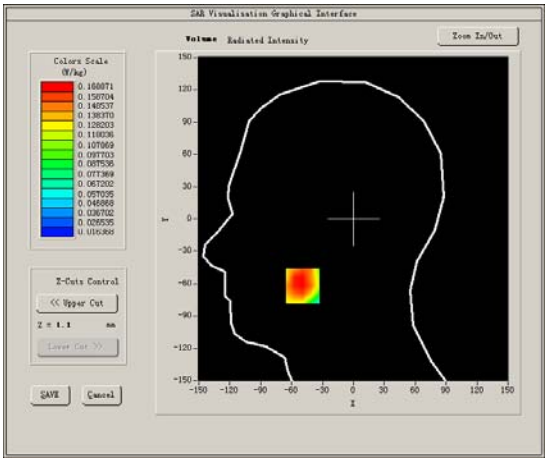
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.400000
Relative permittivity (real part)	41.522291
Conductivity (S/m)	0.911718
Power drift (%)	1.140000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:8

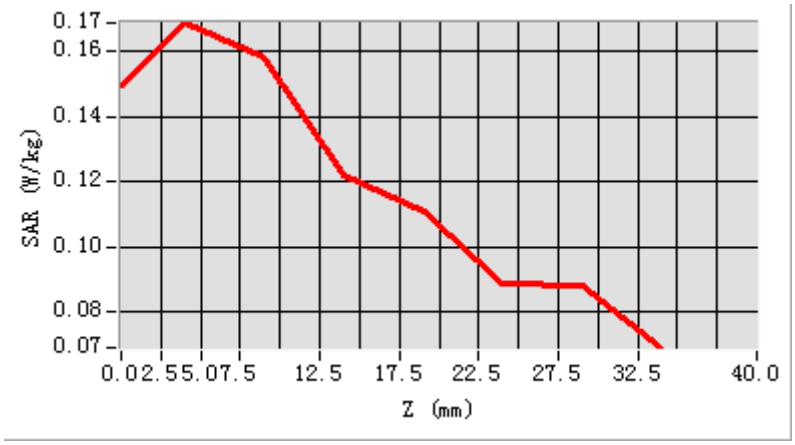
SURFACE SAR	VOLUME SAR
	

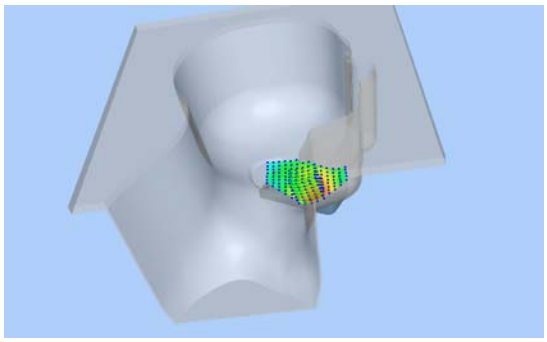
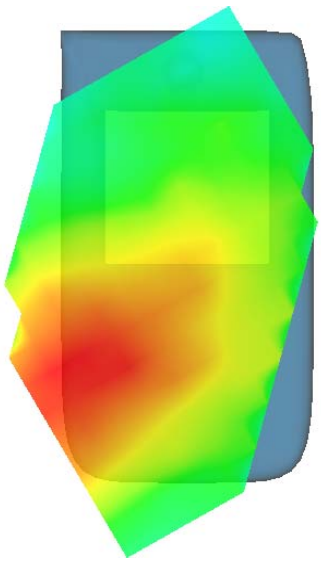
Maximum location: X=-55.00, Y=-41.00

SAR Peak: 0.19 W/kg

SAR 10g (W/Kg)	0.133629
SAR 1g (W/Kg)	0.164814

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.1499**	**0.1689**	**0.1582**	**0.1219**	**0.1109**	**0.0885**	**0.0879**



3D screen shot	**Hot spot position**
	

MEASUREMENT 4

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 13 seconds

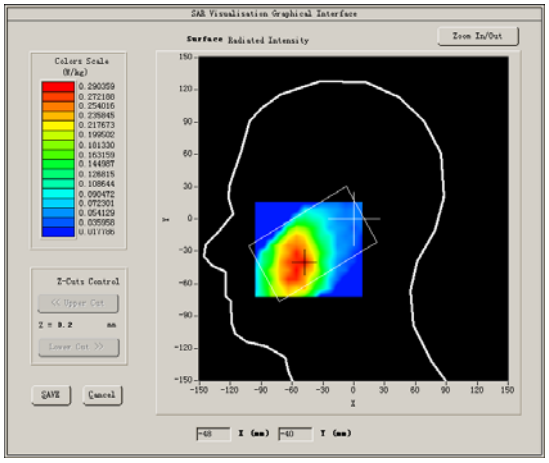
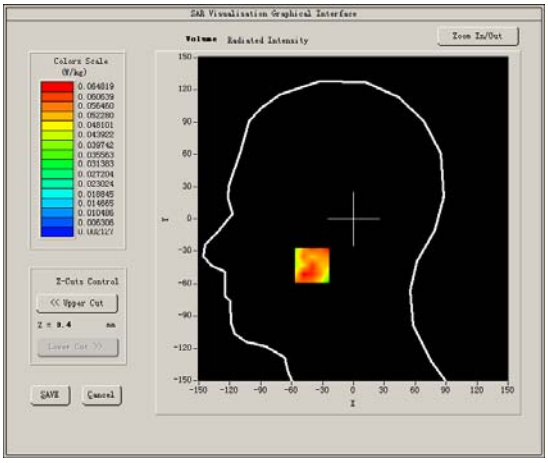
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

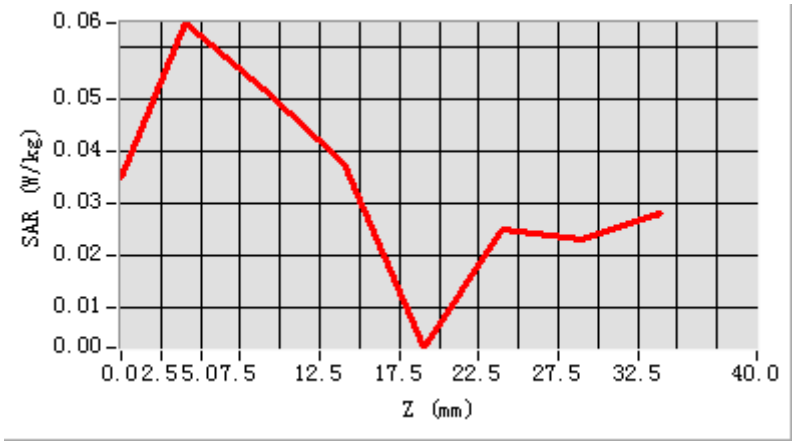
Frequency (MHz)	836.400000
Relative permittivity (real part)	41.522291
Conductivity (S/m)	0.911718
Power drift (%)	1.650000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:8

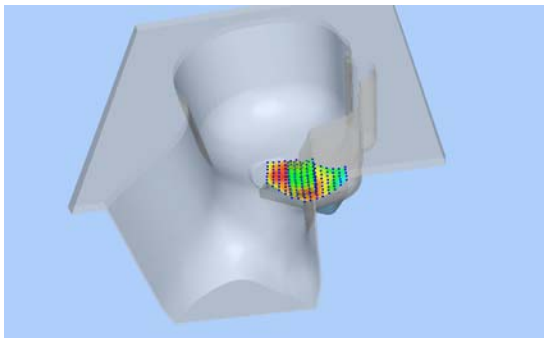
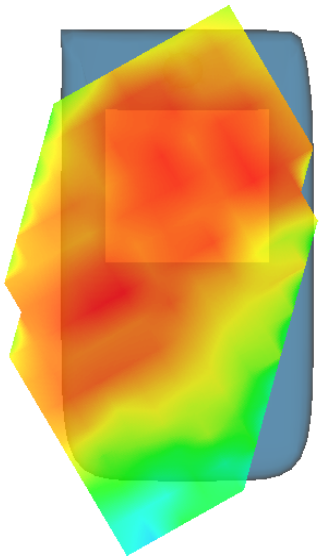
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-49.00, Y=-40.00
SAR Peak: 0.08W/kg

SAR 10g (W/Kg)	0.040283
SAR 1g (W/Kg)	0.055192

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0351**	**0.0648**	**0.0519**	**0.0378**	**0.0021**	**0.0248**	**0.0230**



3D screen shot	**Hot spot position**
	

MEASUREMENT 5

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 34 seconds

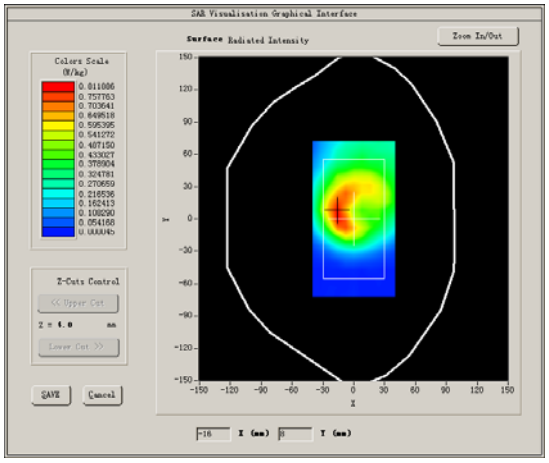
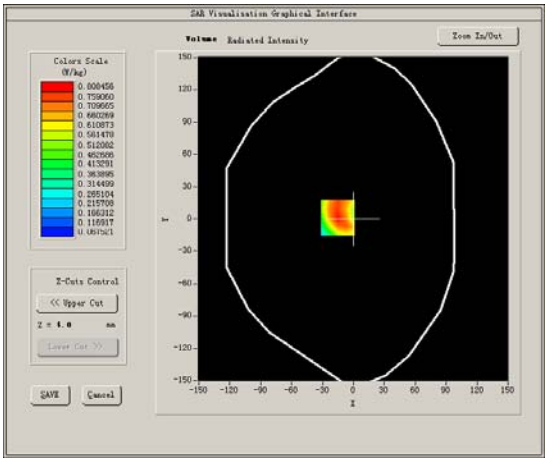
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

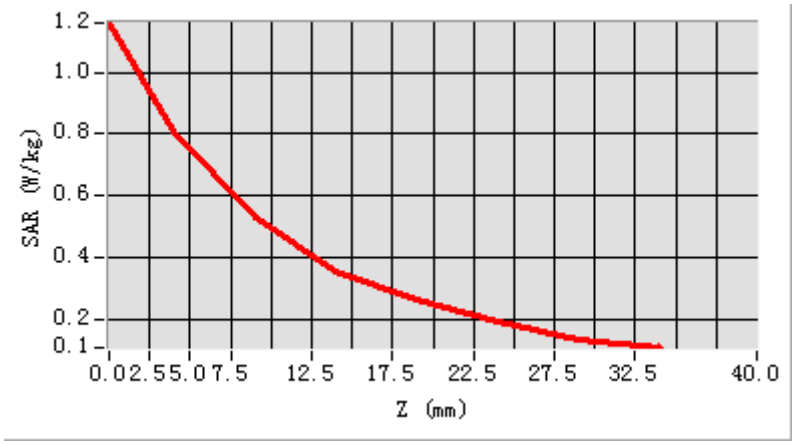
Frequency (MHz)	836.400000
Relative permittivity (real part)	55.222291
Conductivity (S/m)	0.991718
Power drift (%)	-1.350000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:8

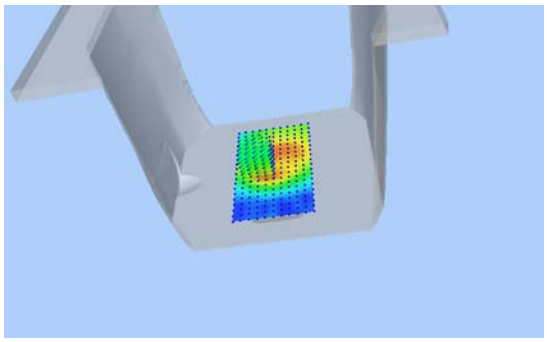
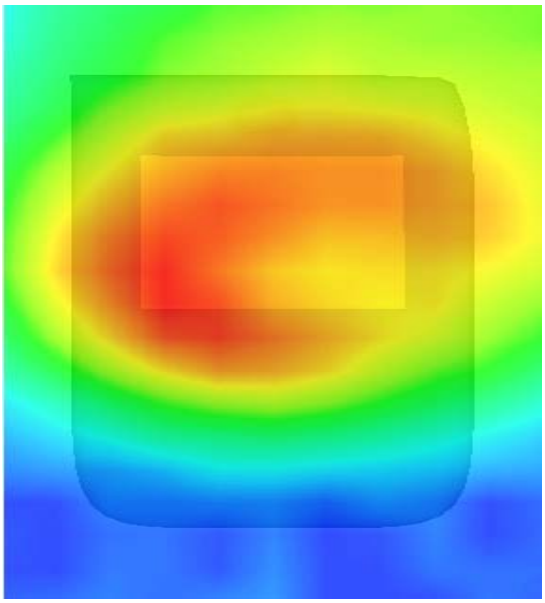
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-15.00, Y=1.00
SAR Peak: 1.16 W/kg

SAR 10g (W/Kg)	0.488788
SAR 1g (W/Kg)	0.772899

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.1611	0.8085	0.5323	0.3553	0.2619	0.1926	0.1358



3D screen shot	Hot spot position
	

MEASUREMENT 6

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 32 seconds

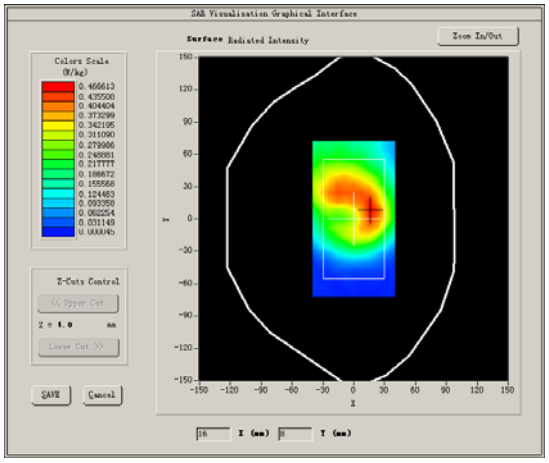
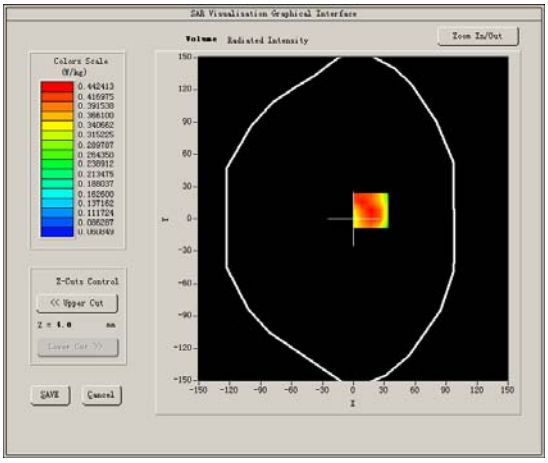
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

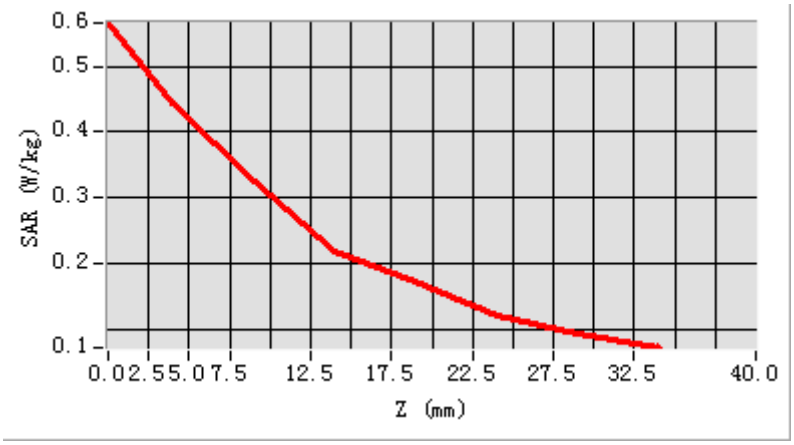
Frequency (MHz)	836.400000
Relative permittivity (real part)	55.222291
Conductivity (S/m)	0.991718
Power drift (%)	-0.830000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

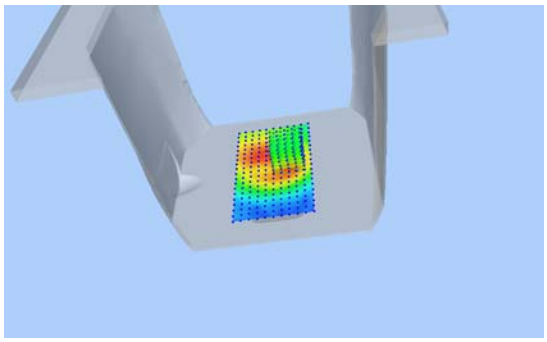
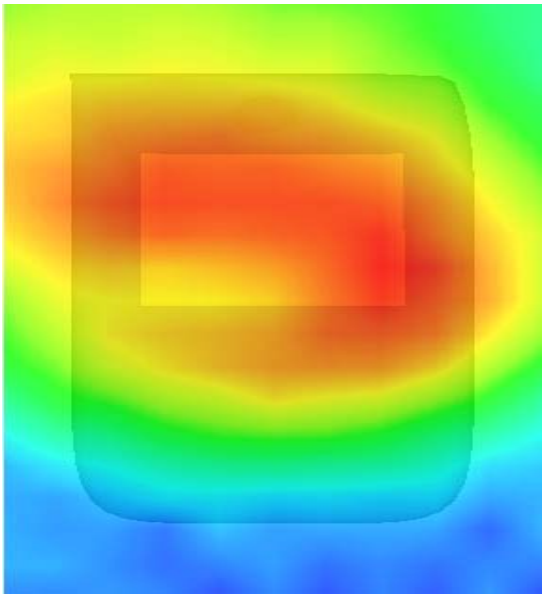
SURFACE SAR	VOLUME SAR
	

Maximum location: X=17.00, Y=8.00
SAR Peak: 0.61 W/kg

SAR 10g (W/Kg)	0.289934
SAR 1g (W/Kg)	0.425228

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.5655**	**0.4424**	**0.3265**	**0.2185**	**0.1725**	**0.1223**	**0.0947**



3D screen shot	**Hot spot position**
	

MEASUREMENT 7

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

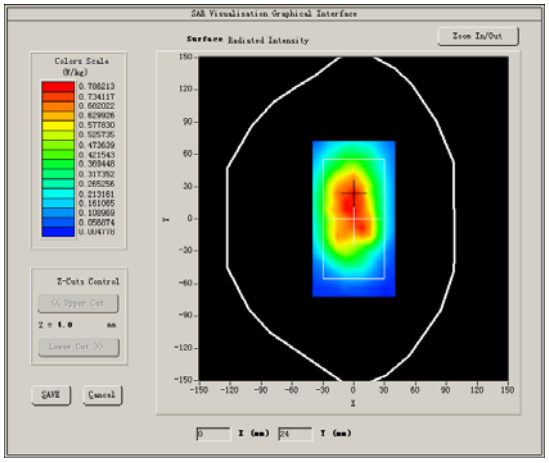
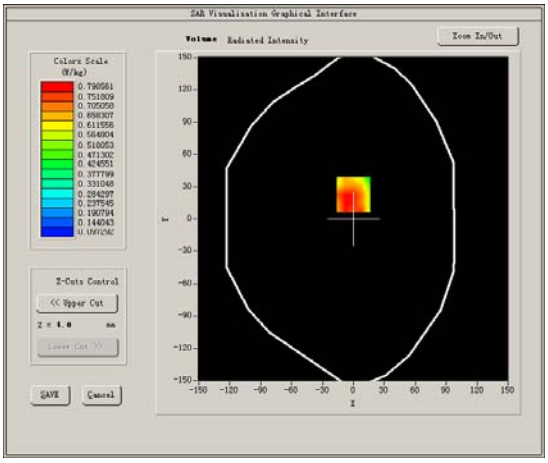
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM850
Channels	Low
Signal	GPRS

B. SAR Measurement Results

Low Band SAR (Channel 128):

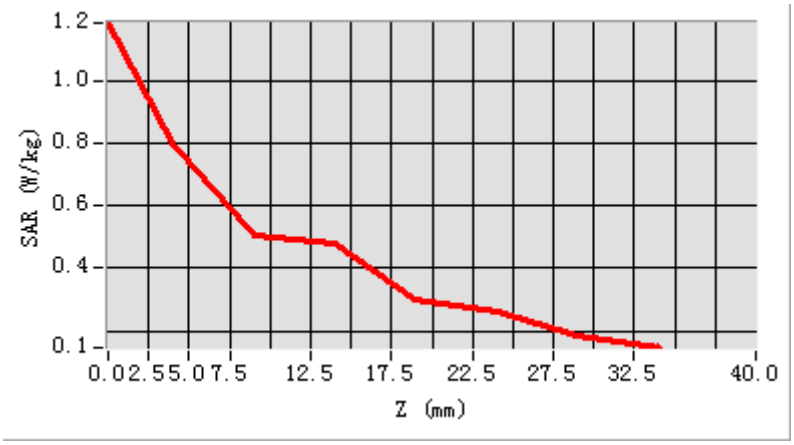
Frequency (MHz)	824.200000
Relative permittivity (real part)	55.222291
Conductivity (S/m)	0.991718
Power drift (%)	-1.620000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

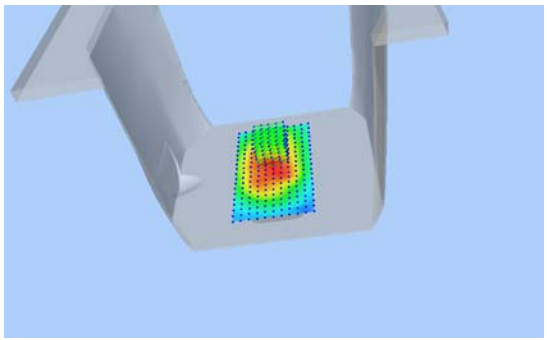
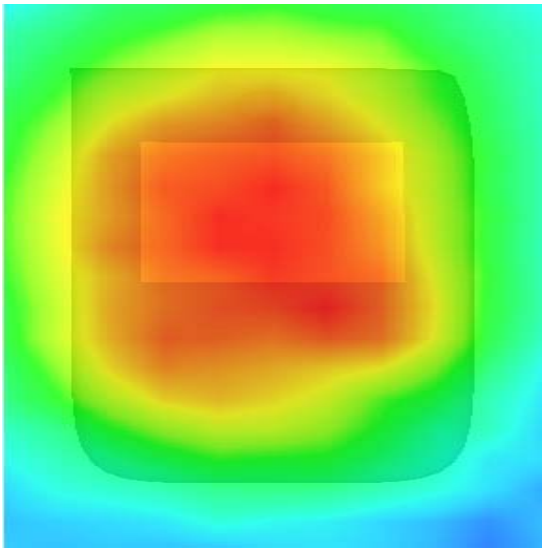
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=23.00
SAR Peak: 1.10 W/kg

SAR 10g (W/Kg)	0.801364
SAR 1g (W/Kg)	1.011239

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.1830	0.7986	0.5065	0.4775	0.3025	0.2593	0.1845



3D screen shot	Hot spot position
	

MEASUREMENT 8

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

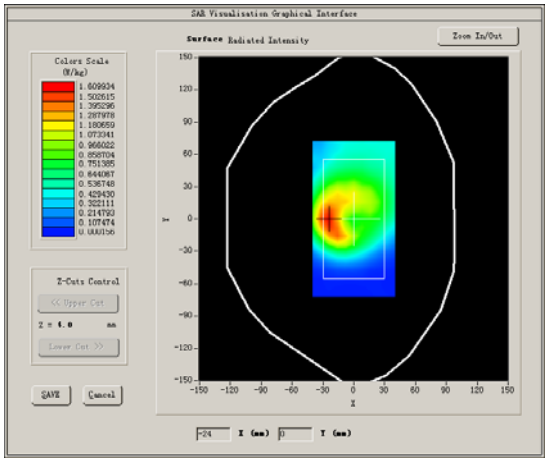
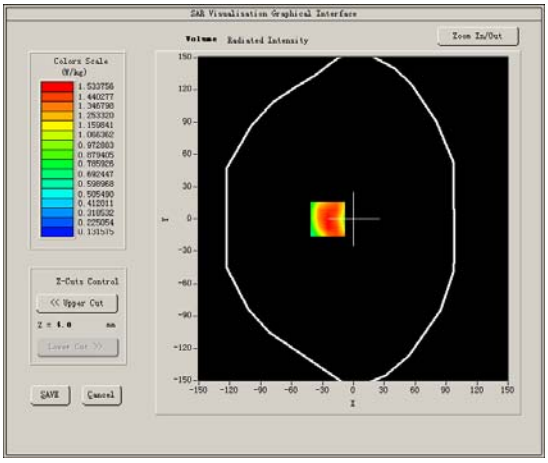
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.400000
Relative permittivity (real part)	55.222291
Conductivity (S/m)	0.991718
Power drift (%)	-1.620000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

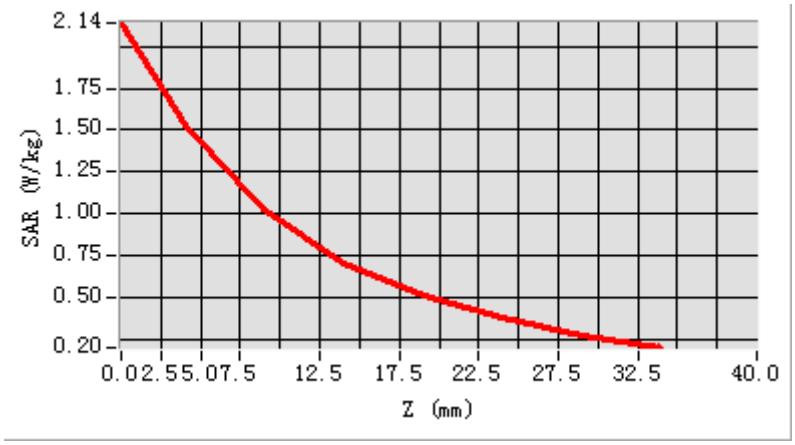
SURFACE SAR	VOLUME SAR
	

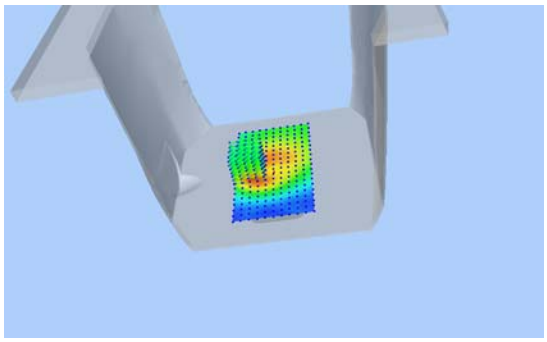
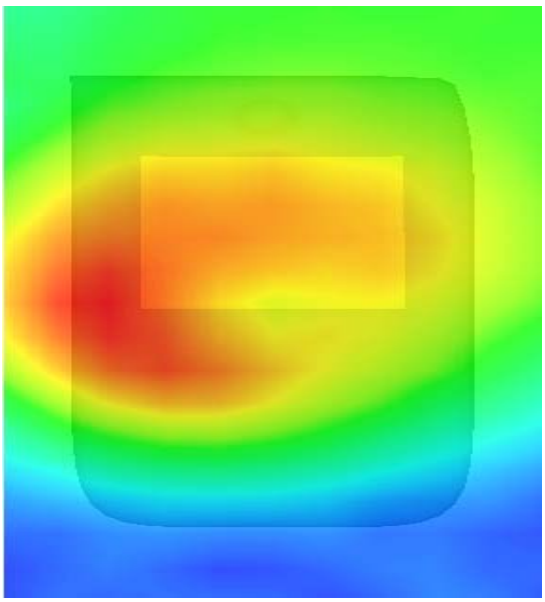
Maximum location: X=-5.00, Y=9.00

SAR Peak: 0.84 W/kg

SAR 10g (W/Kg)	0.757051
SAR 1g (W/Kg)	1.082497

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**2.1400**	**1.5338**	**1.0282**	**0.6965**	**0.5069**	**0.3759**	**0.2740**



3D screen shot	**Hot spot position**
	

MEASUREMENT 9

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

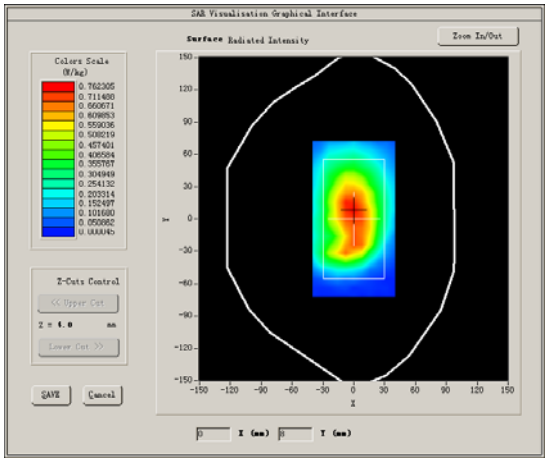
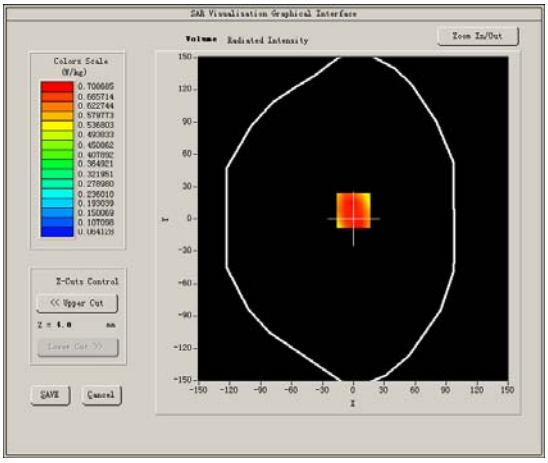
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM850
Channels	High
Signal	GPRS

B. SAR Measurement Results

High Band SAR (Channel 251):

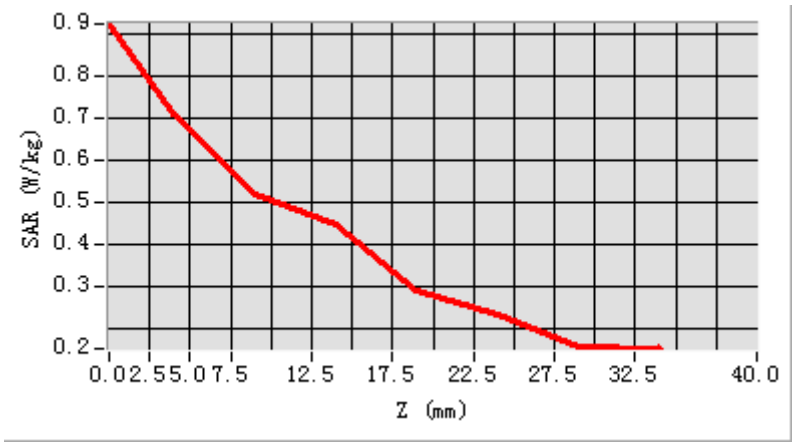
Frequency (MHz)	848.800000
Relative permittivity (real part)	55.222291
Conductivity (S/m)	0.991718
Power drift (%)	-1.620000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

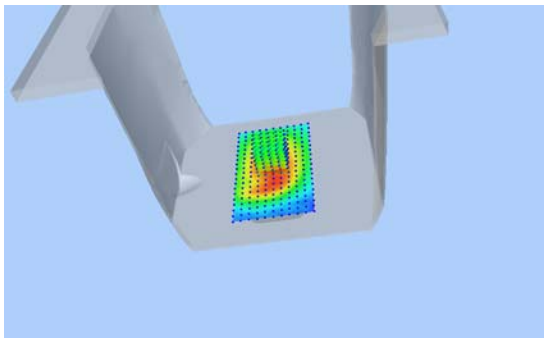
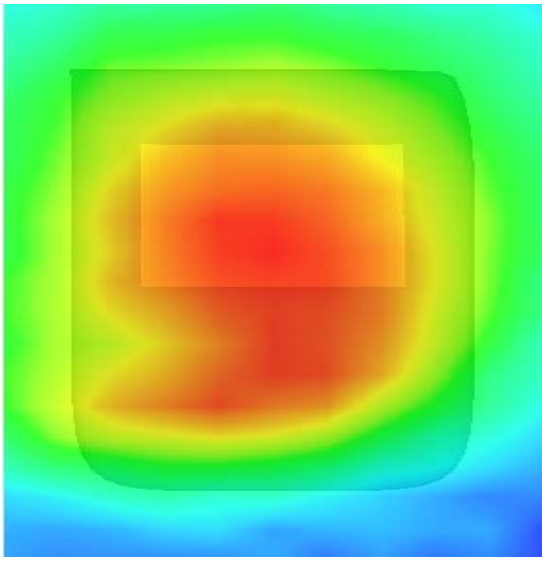
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=8.00
SAR Peak: 0.93 W/kg

SAR 10g (W/Kg)	0.713621
SAR 1g (W/Kg)	1.025291

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.9254**	**0.7087**	**0.5176**	**0.4481**	**0.2927**	**0.2320**	**0.1551**



3D screen shot	**Hot spot position**
	

MEASUREMENT 10

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

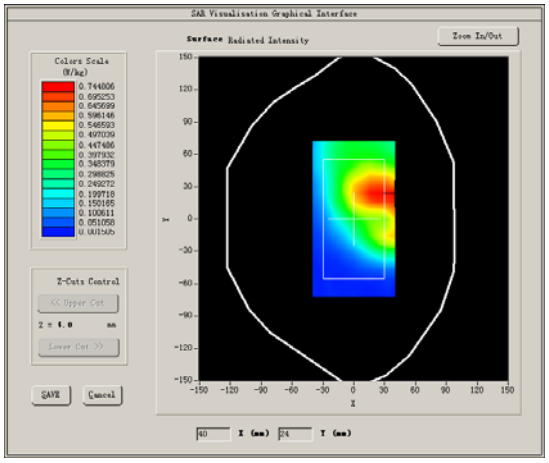
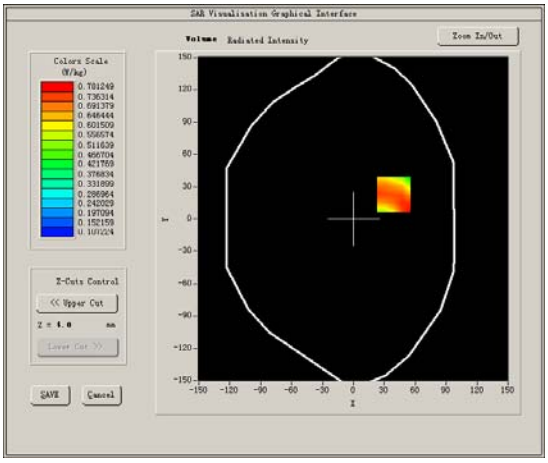
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

Middle Band SAR (Channel 190):

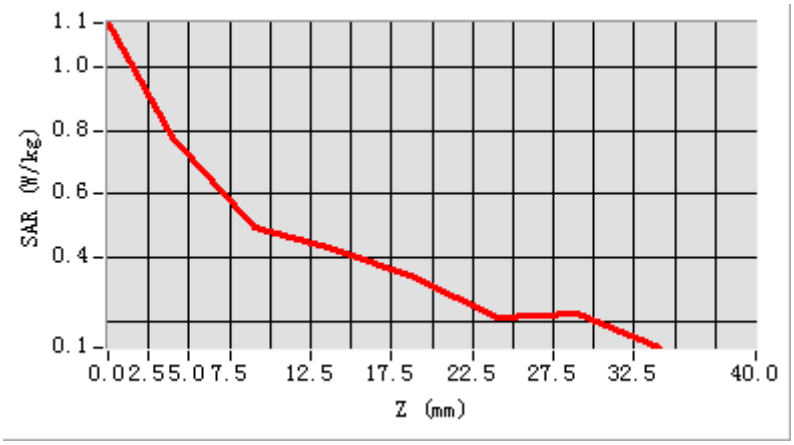
Frequency (MHz)	836.400000
Relative permittivity (real part)	55.222291
Conductivity (S/m)	0.991718
Power drift (%)	-1.620000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

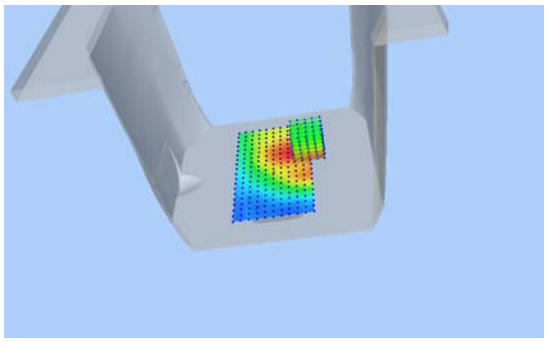
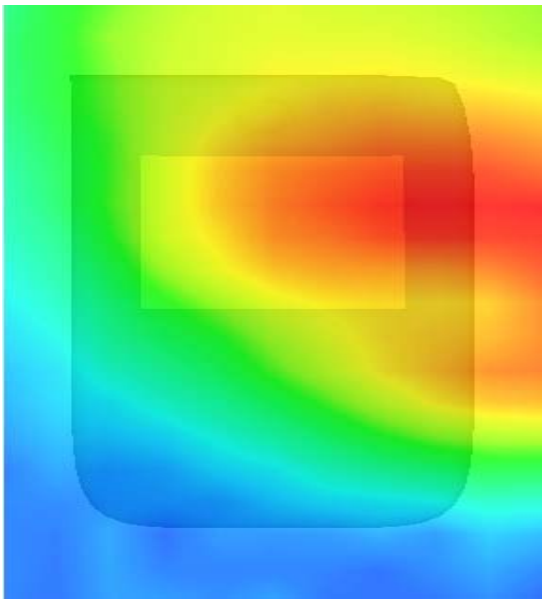
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=-6.00
SAR Peak: 3.25 W/kg

SAR 10g (W/Kg)	0.526419
SAR 1g (W/Kg)	0.737528

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.1377	0.7812	0.4933	0.4262	0.3399	0.2089	0.2262



3D screen shot	Hot spot position
	

MEASUREMENT 11

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 34 seconds

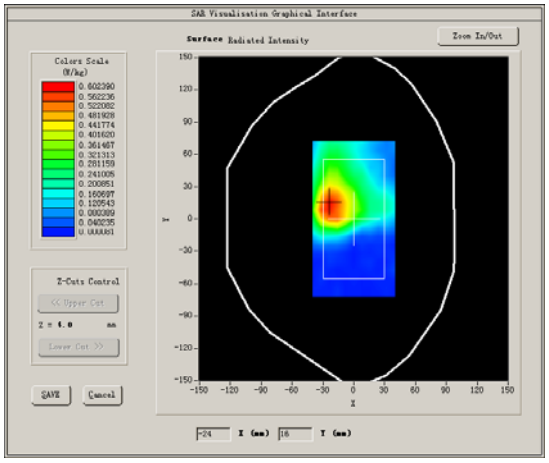
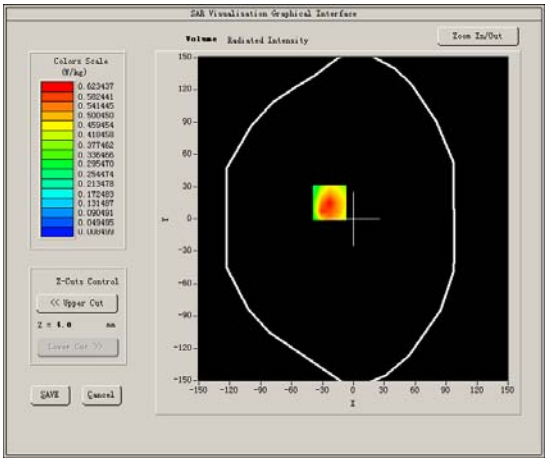
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.400000
Relative permittivity (real part)	55.222291
Conductivity (S/m)	0.991718
Power drift (%)	-1.350000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:8

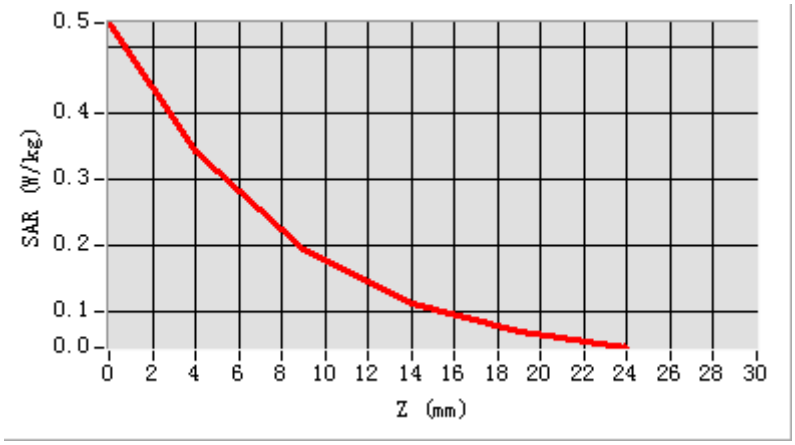
SURFACE SAR	VOLUME SAR
	

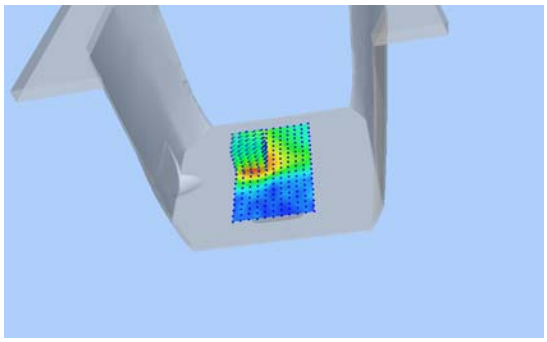
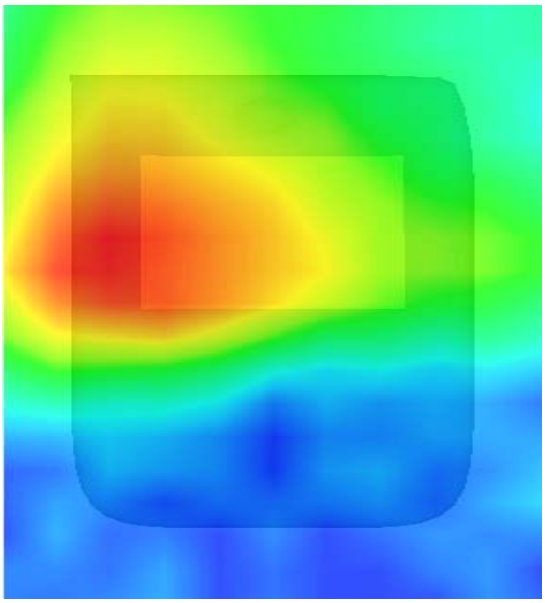
Maximum location: X=-6.00, Y=1.00

SAR Peak: 0.55 W/kg

SAR 10g (W/Kg)	0.267813
SAR 1g (W/Kg)	0.653142

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**
SAR (W/Kg)	**0.5376**	**0.3441**	**0.1940**	**0.1126**	**0.0709**



3D screen shot	Hot spot position
	

MEASUREMENT 12

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 32 seconds

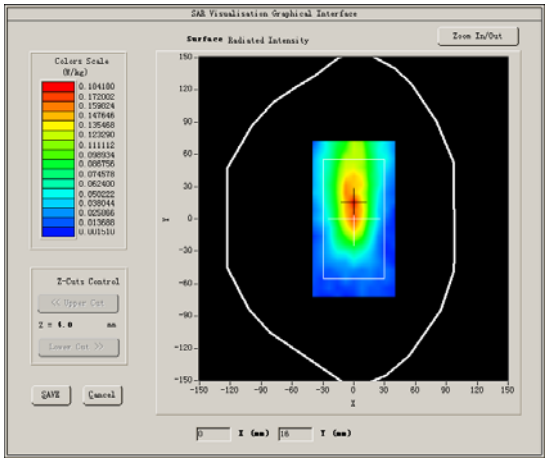
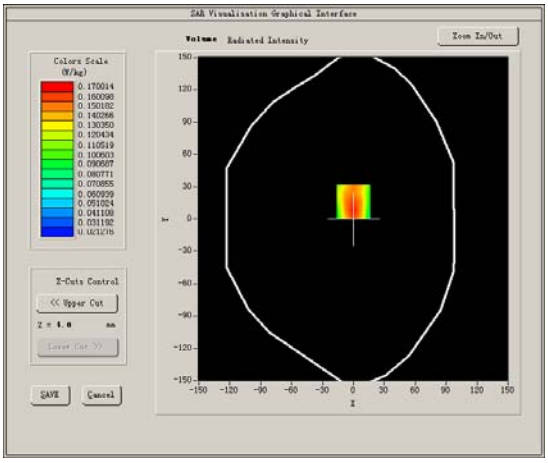
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

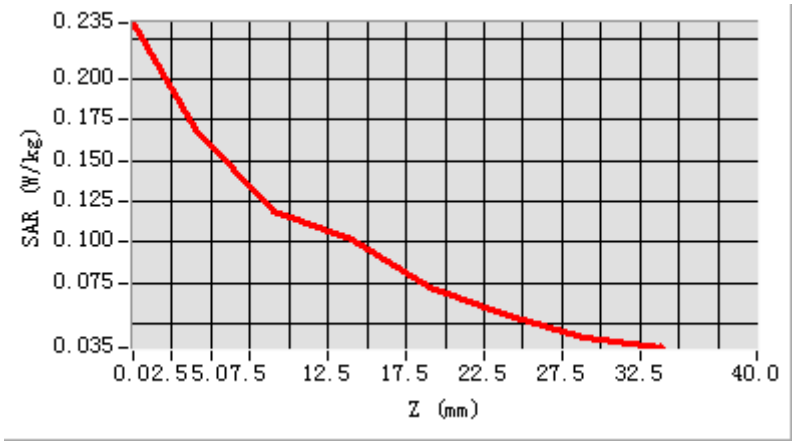
Frequency (MHz)	836.400000
Relative permittivity (real part)	55.222291
Conductivity (S/m)	0.991718
Power drift (%)	-0.830000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

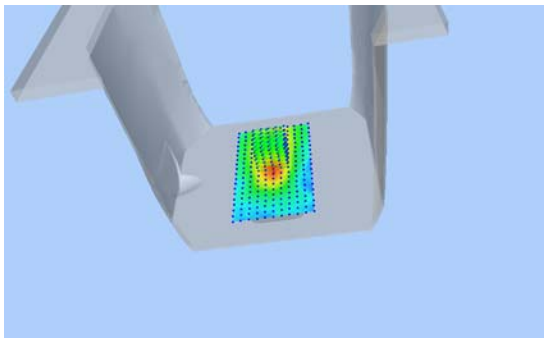
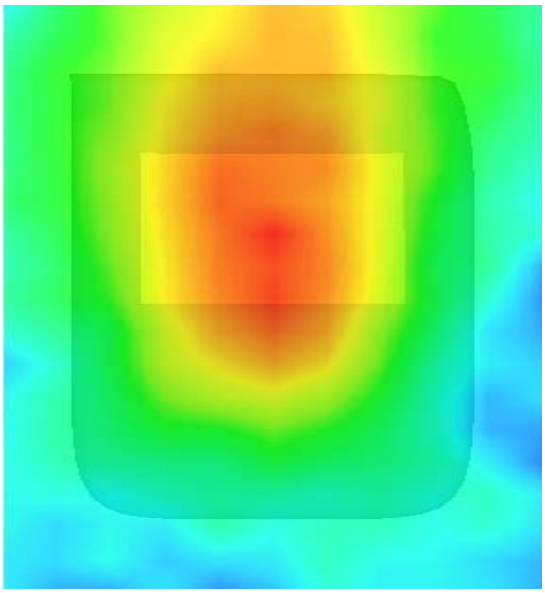
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=8.00
SAR Peak: 0.93 W/kg

SAR 10g (W/Kg)	0.112692
SAR 1g (W/Kg)	0.272679

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2346	0.1700	0.1186	0.1012	0.0719	0.0556	0.0419



3D screen shot	Hot spot position
	

MEASUREMENT 13

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 27 seconds

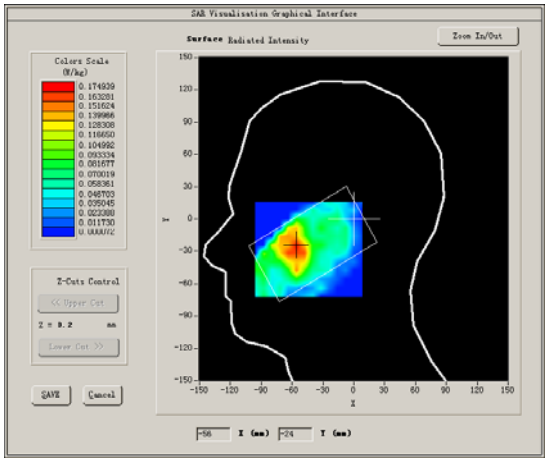
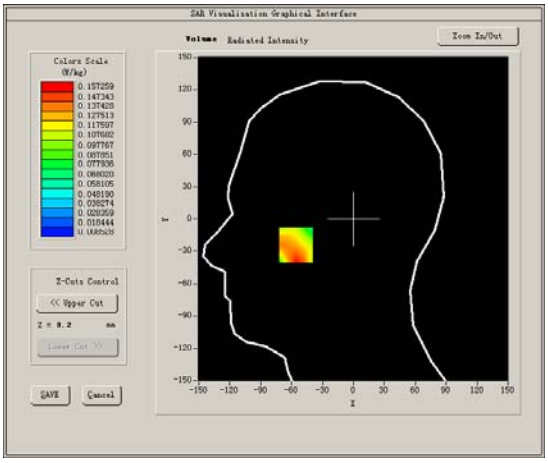
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

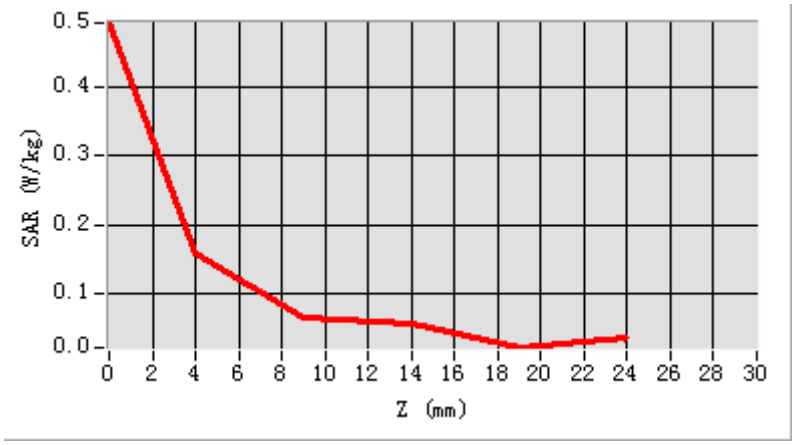
Frequency (MHz)	1747.400024
Relative permittivity (real part)	40.117383
Conductivity (S/m)	1.391079
Power drift (%)	-0.150000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	5.42
Crest factor:	1:8

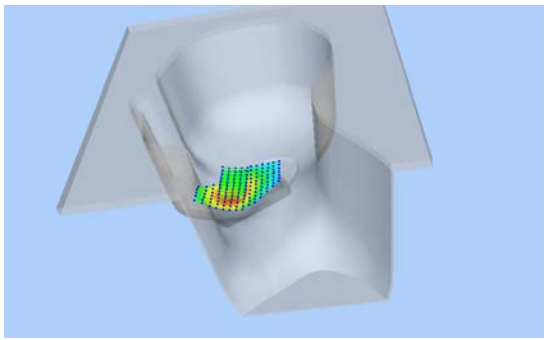
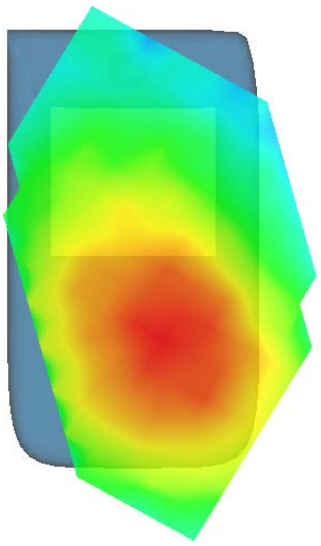
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-55.00, Y=-8.00
SAR Peak: 0.12 W/kg

SAR 10g (W/Kg)	0.097513
SAR 1g (W/Kg)	0.149354

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**
SAR (W/Kg)	**0.4921**	**0.1573**	**0.0647**	**0.0573**	**0.0213**



3D screen shot	**Hot spot position**
	

MEASUREMENT 14

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 53 seconds

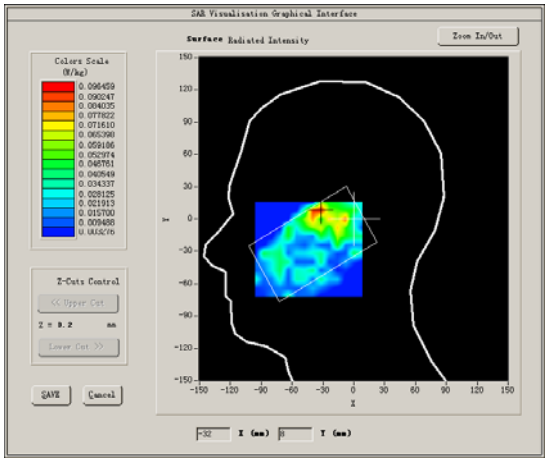
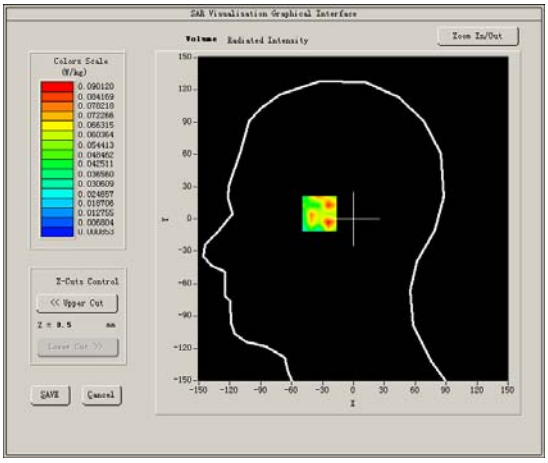
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

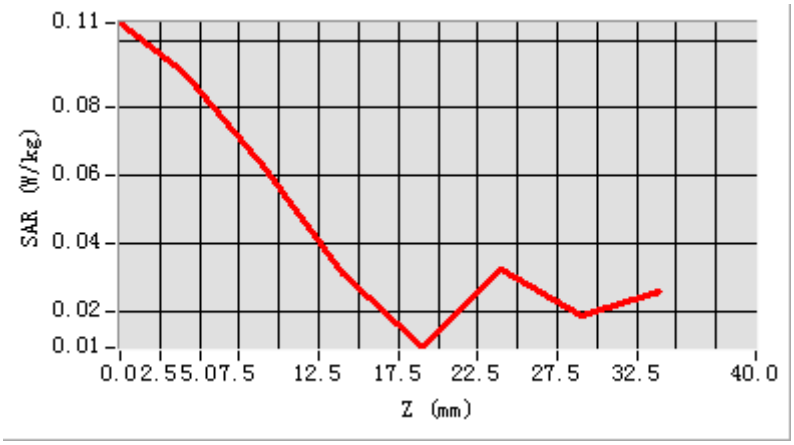
Frequency (MHz)	1747.400024
Relative permittivity (real part)	40.117383
Conductivity (S/m)	1.391079
Power drift (%)	-3.070000
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	5.42
Crest factor:	1:8

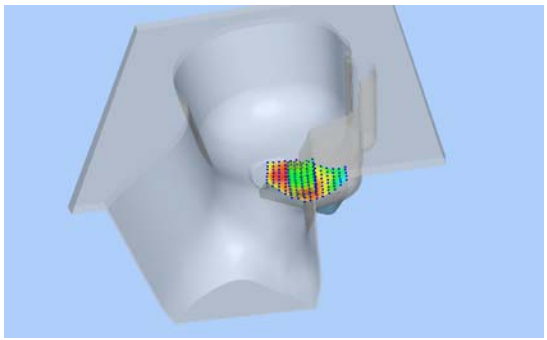
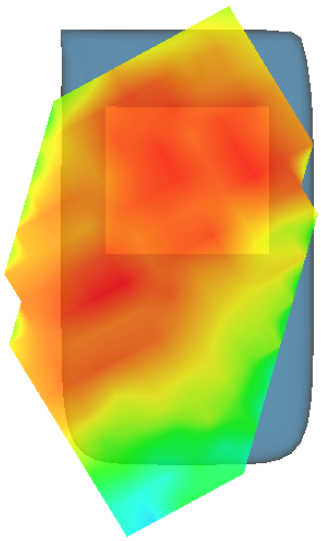
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-6.00, Y=10.00
SAR Peak: 0.10 W/kg

SAR 10g (W/Kg)	0.010318
SAR 1g (W/Kg)	0.038541

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.1051	0.0901	0.0630	0.0314	0.0092	0.0325	0.0185



3D screen shot	Hot spot position
	

MEASUREMENT 15

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 27 seconds

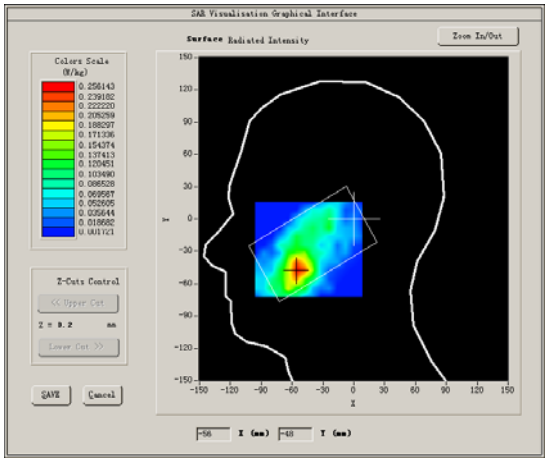
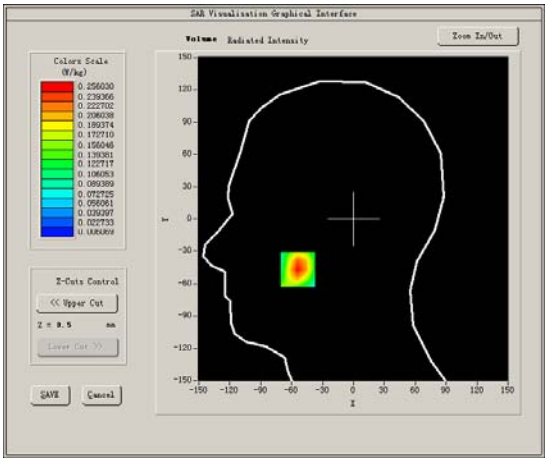
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

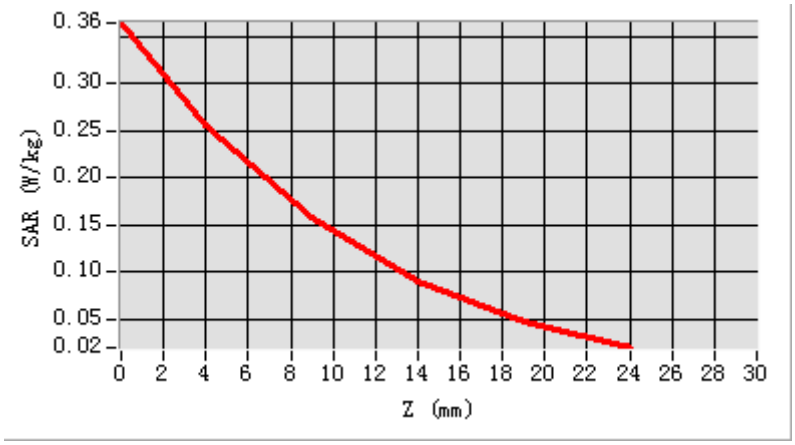
Frequency (MHz)	1747.400024
Relative permittivity (real part)	40.117383
Conductivity (S/m)	1.391079
Power drift (%)	-0.890000
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	5.42
Crest factor:	1:8

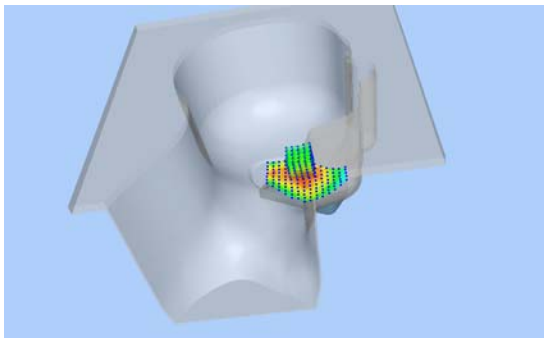
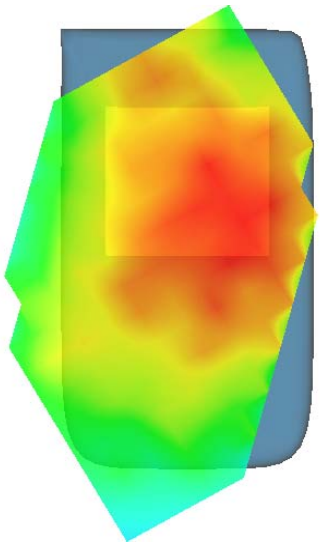
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-50.00, Y=-55.00
SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.085646
SAR 1g (W/Kg)	0.155461

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.3648	0.2560	0.1572	0.0903	0.0468



3D screen shot	Hot spot position
	

MEASUREMENT 16

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 11 seconds

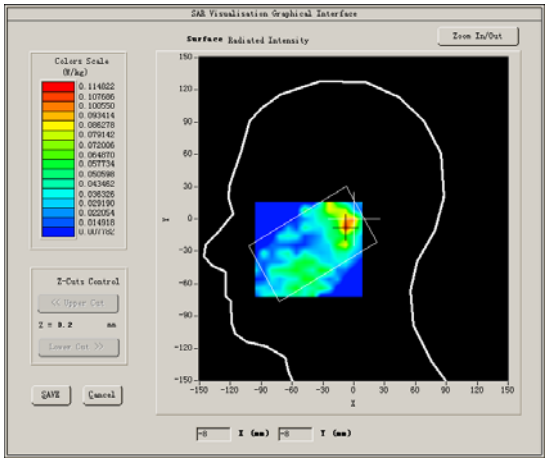
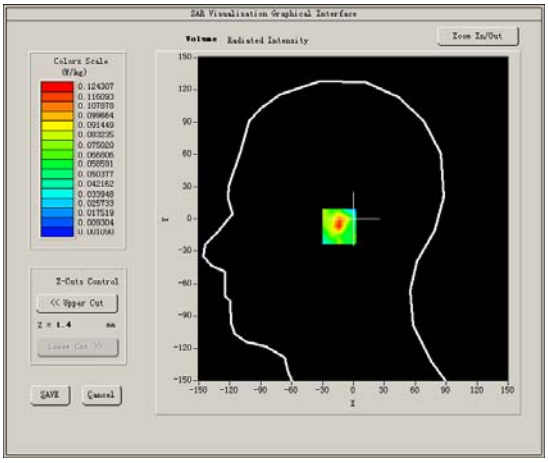
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

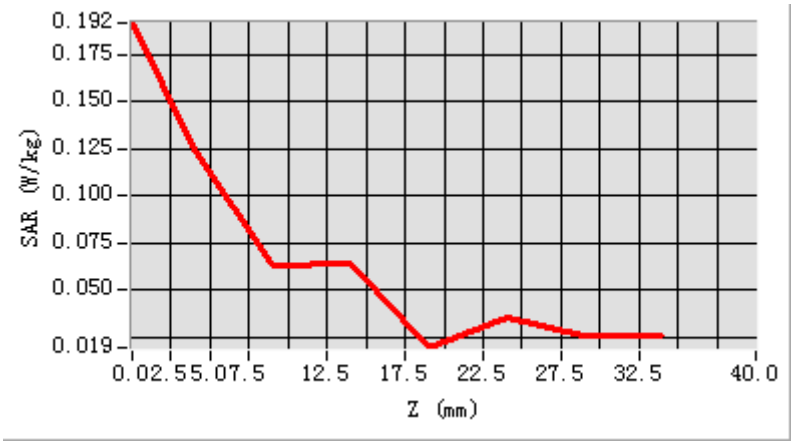
Frequency (MHz)	1747.400024
Relative permittivity (real part)	40.117383
Conductivity (S/m)	1.391079
Power drift (%)	-2.200000
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	5.42
Crest factor:	1:8

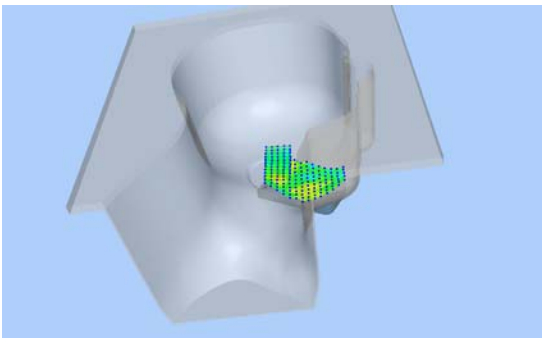
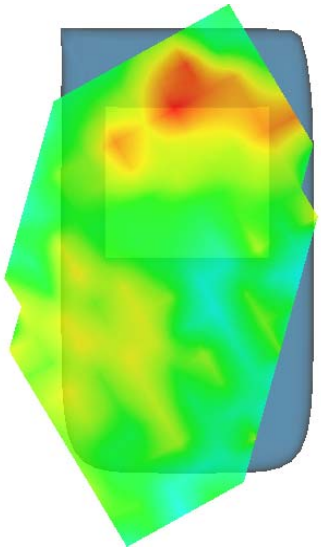
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-47.00, Y=-56.00
SAR Peak: 0.10 W/kg

SAR 10g (W/Kg)	0.019875
SAR 1g (W/Kg)	0.042139

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.1917	0.1243	0.0629	0.0636	0.0193	0.0354	0.0255



3D screen shot	Hot spot position
	

MEASUREMENT 17

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 29 seconds

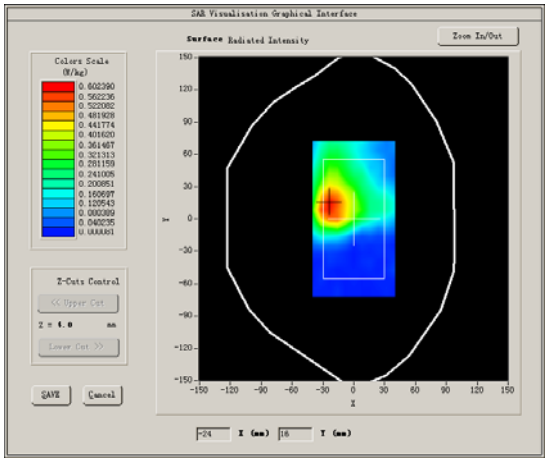
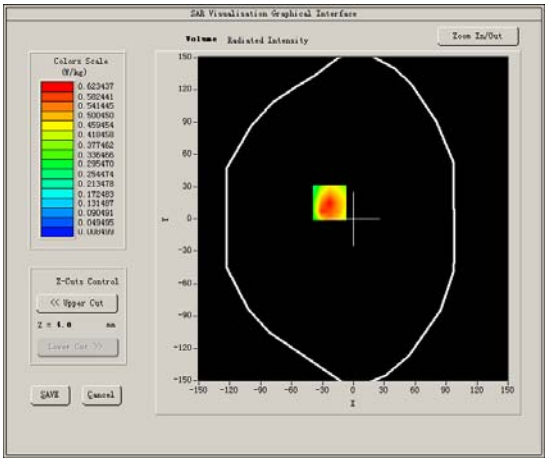
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

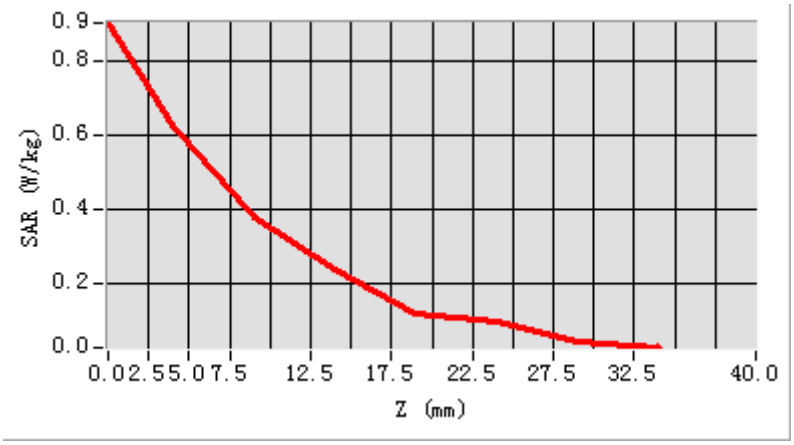
Frequency (MHz)	1747.400024
Relative permittivity (real part)	53.317383
Conductivity (S/m)	1.511079
Power drift (%)	2.420000
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	5.42
Crest factor:	1:8

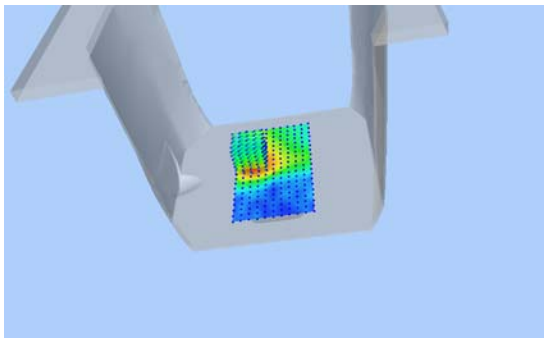
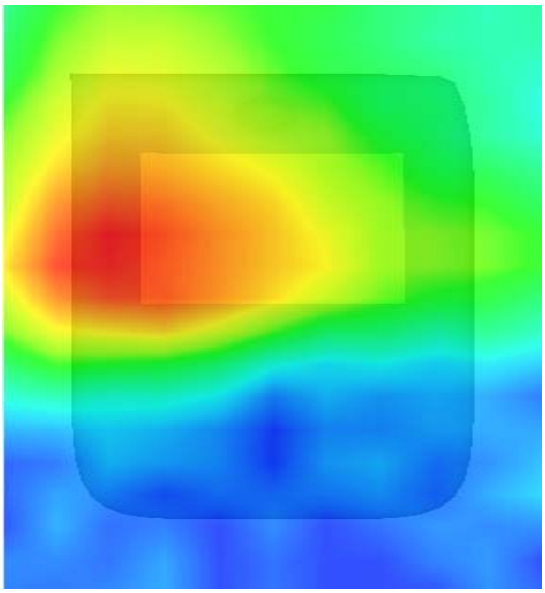
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=10.00
SAR Peak: 0.35 W/kg

SAR 10g (W/Kg)	0.333015
SAR 1g (W/Kg)	0.589776

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.9010	0.6234	0.3751	0.2364	0.1150	0.0944	0.0432



3D screen shot	Hot spot position
	

MEASUREMENT 18

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

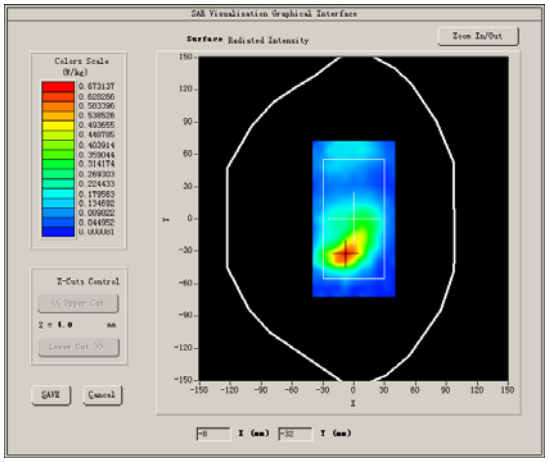
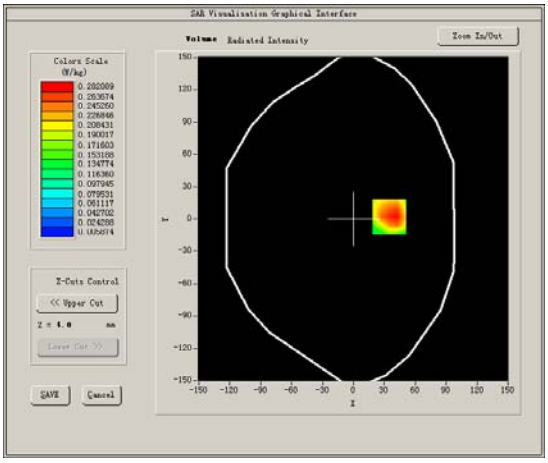
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

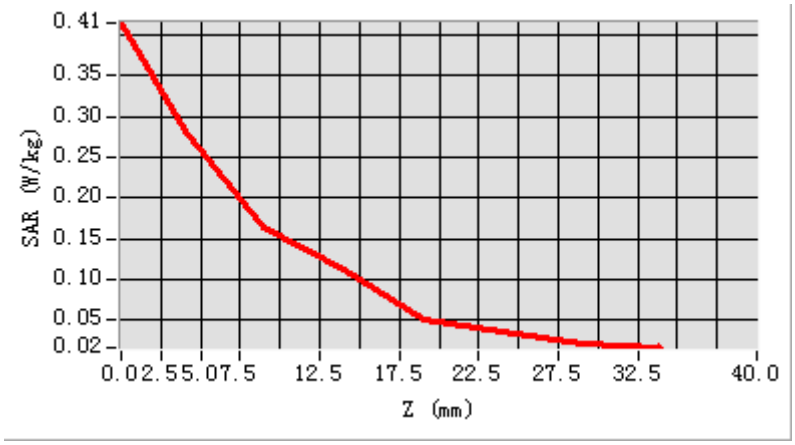
Frequency (MHz)	1747.400024
Relative permittivity (real part)	53.317383
Conductivity (S/m)	1.511079
Power drift (%)	-2.460000
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	5.42
Crest factor:	1:8

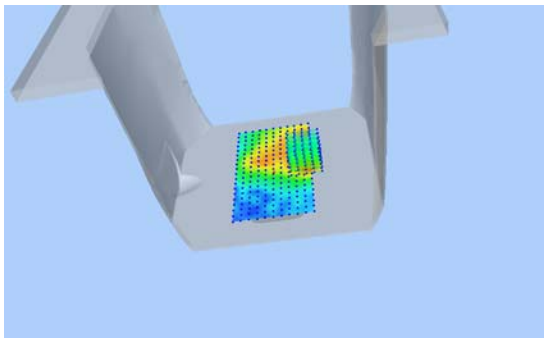
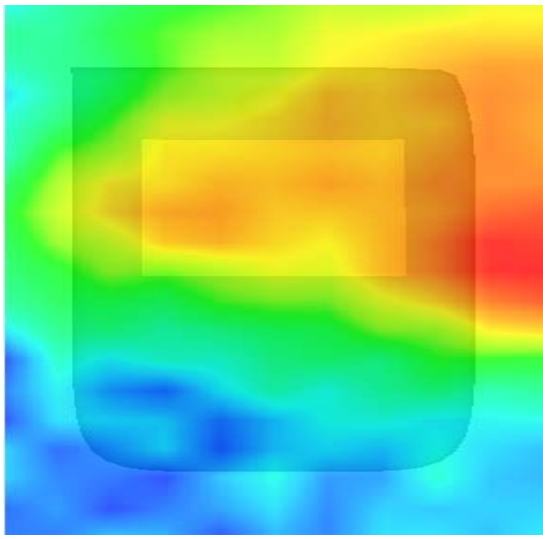
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-6.00, Y=9.00
SAR Peak: 0.63 W/kg

SAR 10g (W/Kg)	0.157409
SAR 1g (W/Kg)	0.266487

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.4148	0.2821	0.1631	0.1113	0.0516	0.0370	0.0227



3D screen shot	Hot spot position
	

MEASUREMENT 19

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

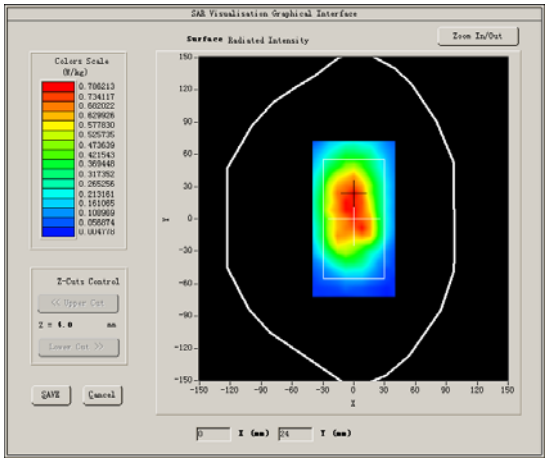
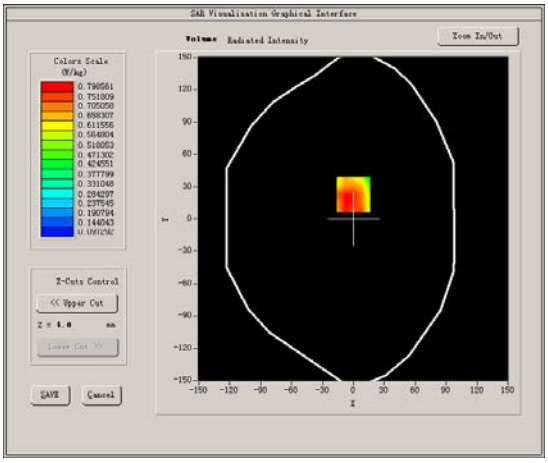
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GPRS

B. SAR Measurement Results

Low Band SAR (Channel 512):

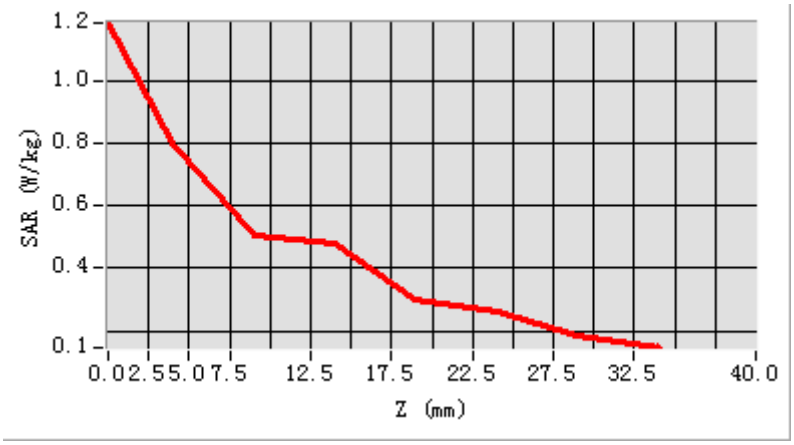
Frequency (MHz)	1850.200000
Relative permittivity (real part)	53.317383
Conductivity (S/m)	1.511079
Power drift (%)	-1.620000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

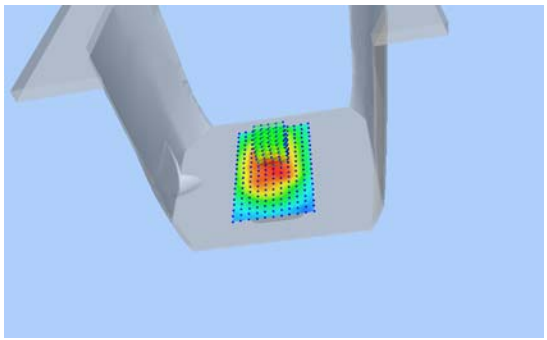
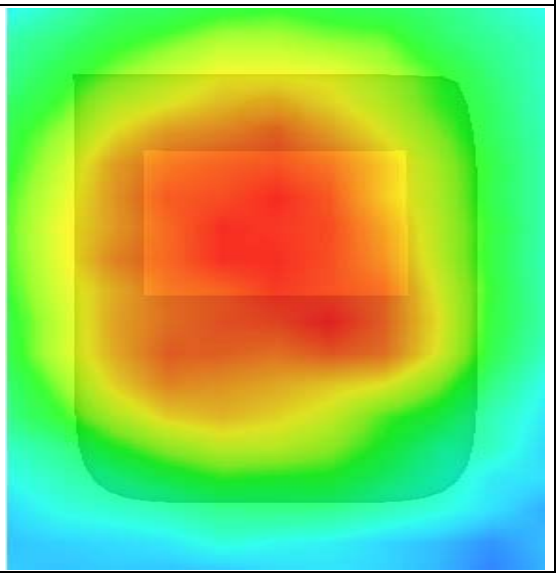
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=23.00
SAR Peak: 1.10 W/kg

SAR 10g (W/Kg)	0.651392
SAR 1g (W/Kg)	1.150361

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.1830	0.7986	0.5065	0.4775	0.3025	0.2593	0.1845



3D screen shot	Hot spot position
	

MEASUREMENT 20

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

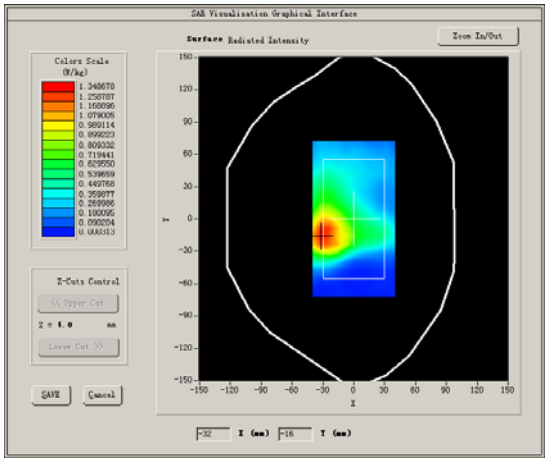
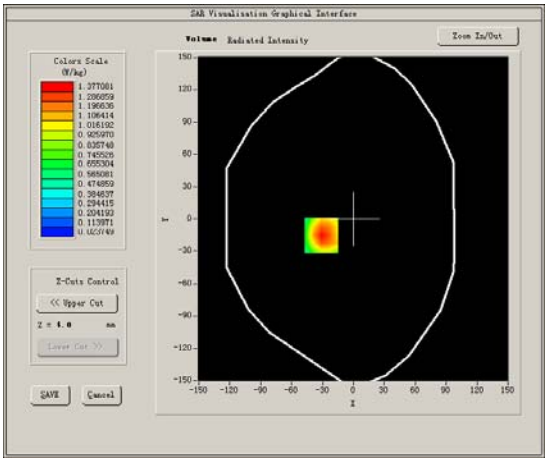
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

Middle Band SAR (Channel 661):

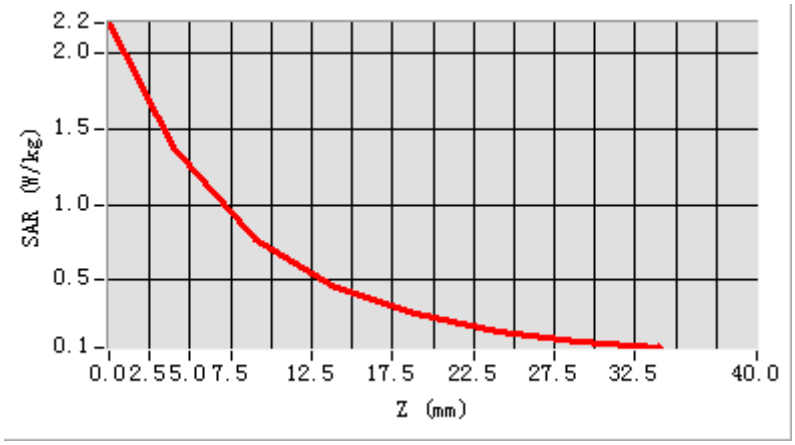
Frequency (MHz)	1880.00000
Relative permittivity (real part)	53.317383
Conductivity (S/m)	1.511079
Power drift (%)	-1.620000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

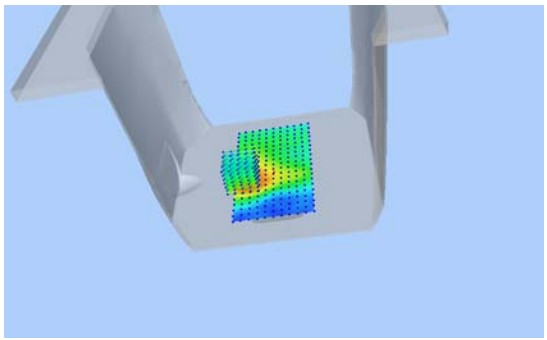
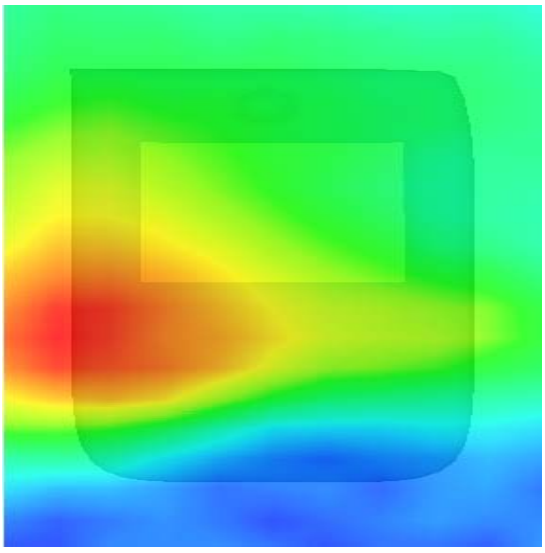
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-31.00, Y=-15.00
SAR Peak: 2.20 W/kg

SAR 10g (W/Kg)	0.749404
SAR 1g (W/Kg)	0.925475

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	2.2014	1.3771	0.7650	0.4537	0.2863	0.1580	0.0945



3D screen shot	Hot spot position
	

MEASUREMENT 21

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

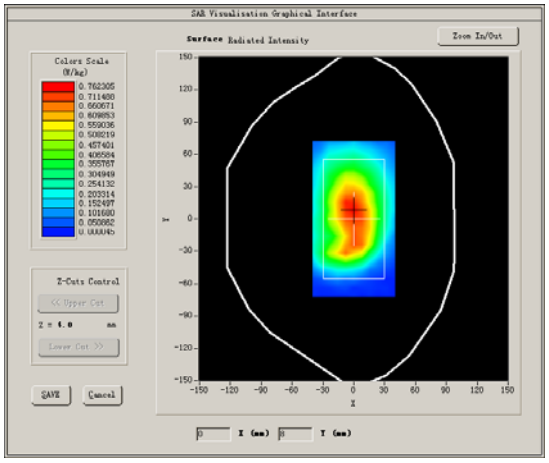
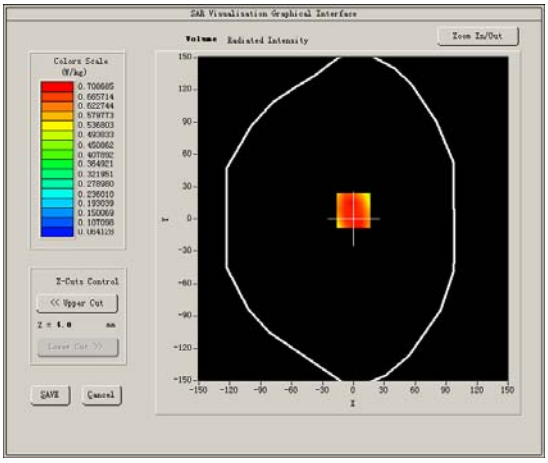
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM1900
Channels	High
Signal	GPRS

B. SAR Measurement Results

High Band SAR (Channel 810):

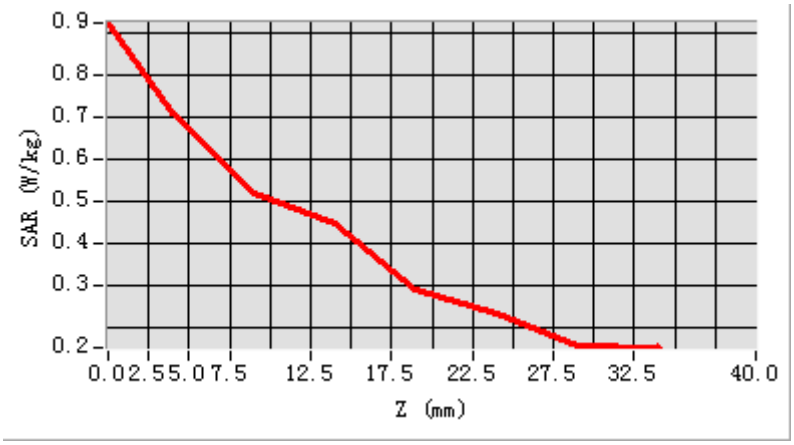
Frequency (MHz)	1909.800000
Relative permittivity (real part)	53.317383
Conductivity (S/m)	1.511079
Power drift (%)	-1.620000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.11
Crest factor:	1:2

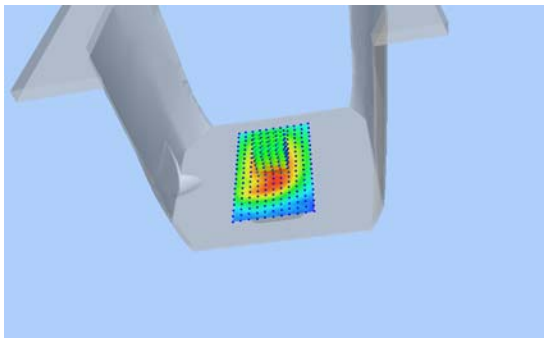
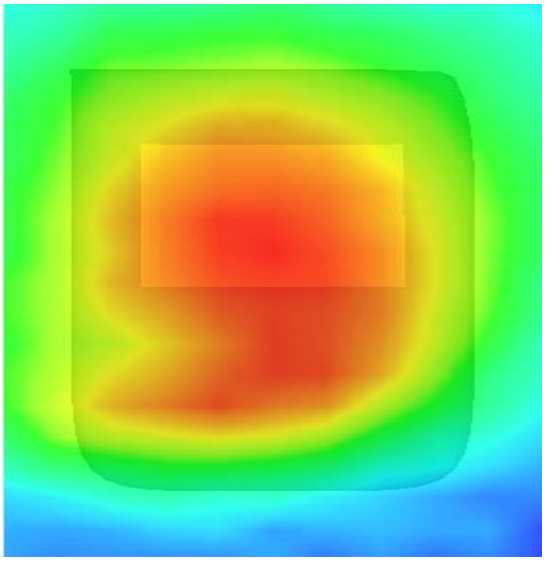
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=8.00
SAR Peak: 0.93 W/kg

SAR 10g (W/Kg)	0.851361
SAR 1g (W/Kg)	0.911203

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.9254	0.7087	0.5176	0.4481	0.2927	0.2320	0.1551



3D screen shot	Hot spot position
	

MEASUREMENT 22

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 36 seconds

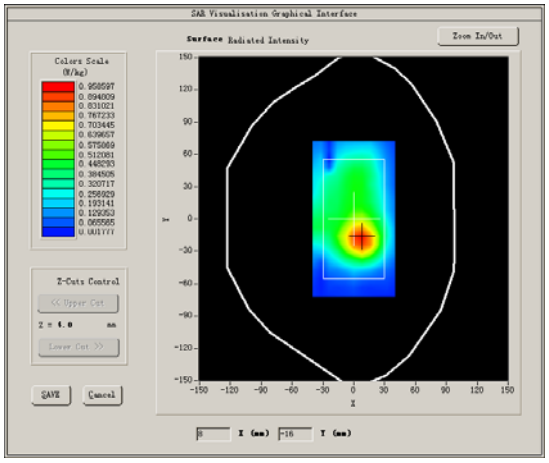
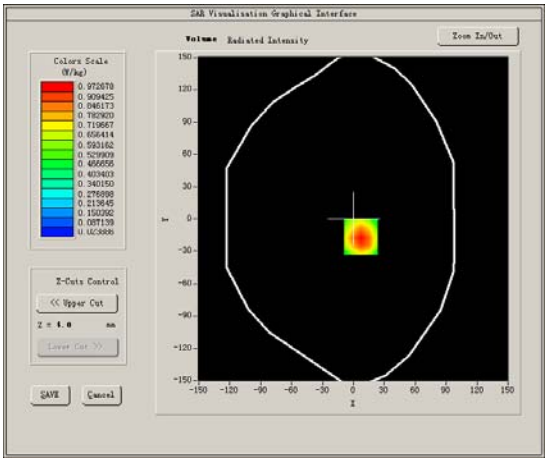
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

Middle Band SAR (Channel 661):

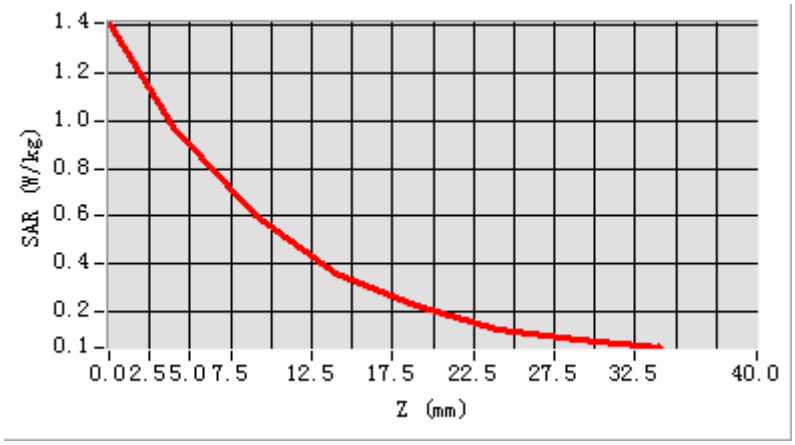
Frequency (MHz)	1747.400024
Relative permittivity (real part)	53.317383
Conductivity (S/m)	1.511079
Power drift (%)	2.130000
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	5.42
Crest factor:	1:2

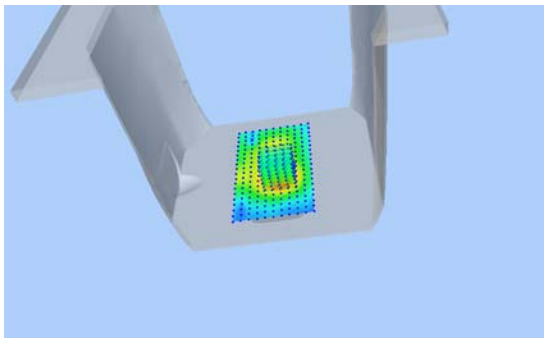
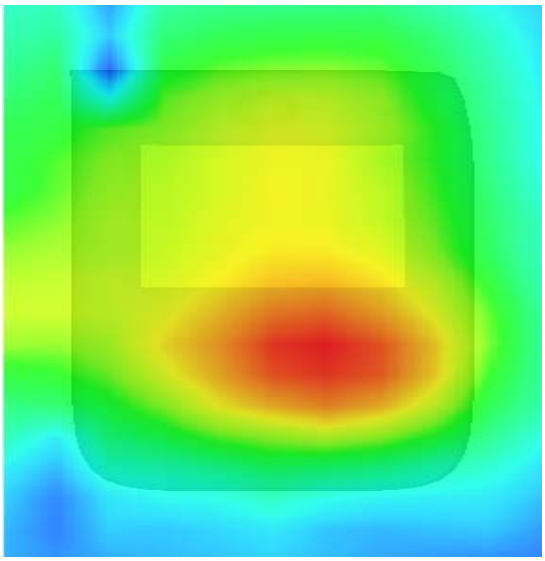
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-1.00, Y=-26.00
SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.514013
SAR 1g (W/Kg)	0.722143

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.4081	0.9727	0.6018	0.3600	0.2264	0.1281	0.0824



3D screen shot	Hot spot position
	

MEASUREMENT 23

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 36 seconds

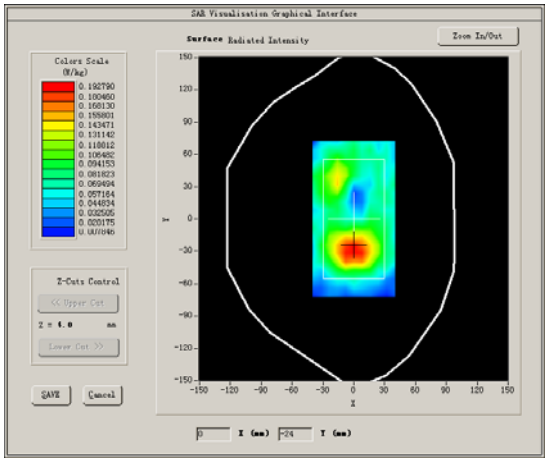
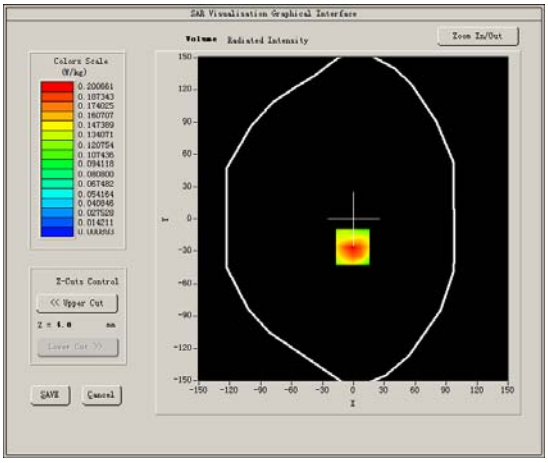
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

Middle Band SAR (Channel 661):

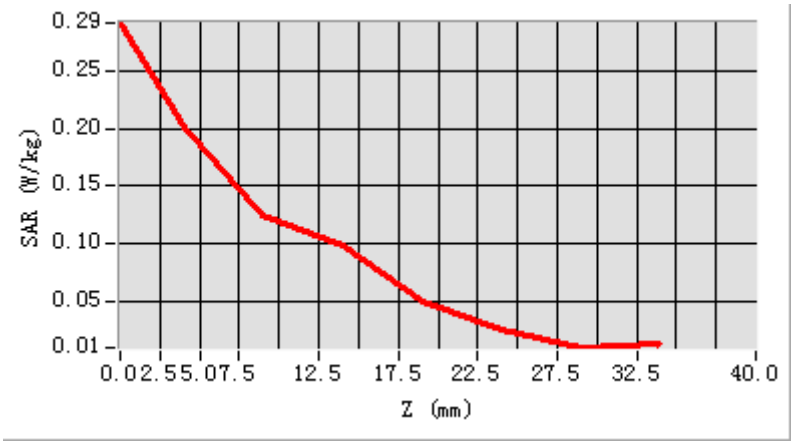
Frequency (MHz)	1747.400024
Relative permittivity (real part)	53.317383
Conductivity (S/m)	1.511079
Power drift (%)	2.130000
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	5.42
Crest factor:	1:2

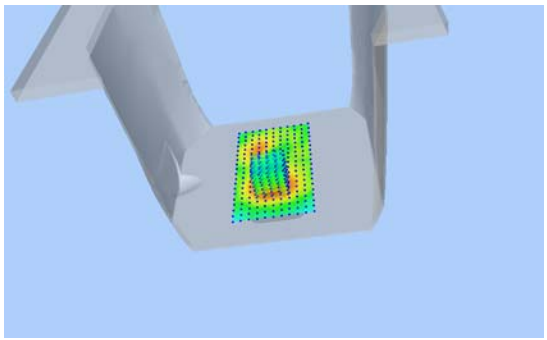
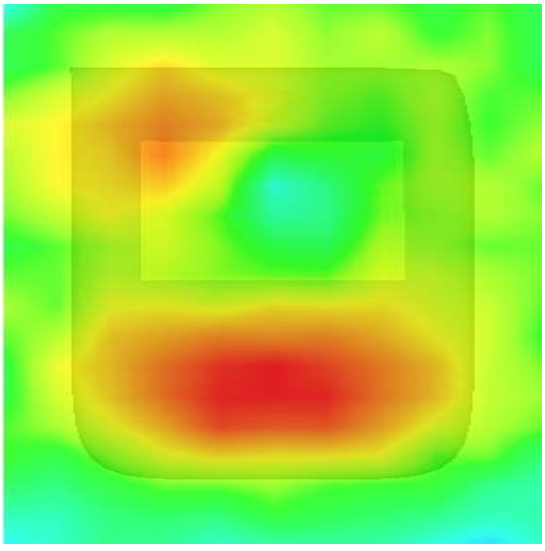
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-1.00, Y=-26.00
SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.114013
SAR 1g (W/Kg)	0.193286

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2906	0.2007	0.1250	0.0986	0.0502	0.0272	0.0111



3D screen shot	Hot spot position
	

MEASUREMENT 24

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 36 seconds

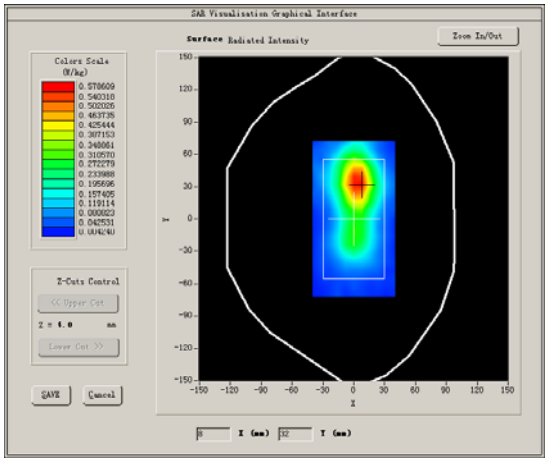
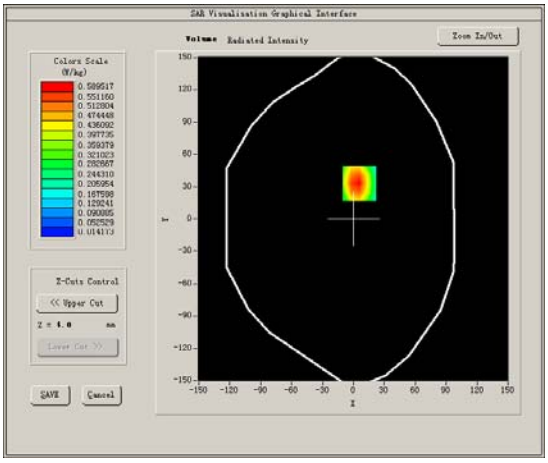
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

Middle Band SAR (Channel 661):

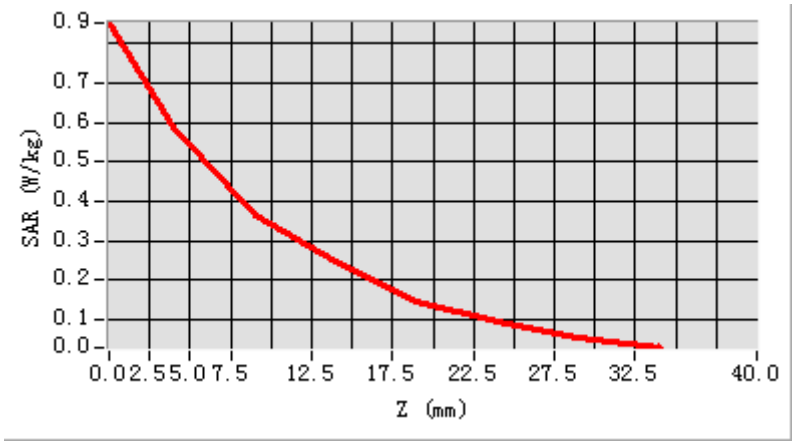
Frequency (MHz)	1747.400024
Relative permittivity (real part)	53.317383
Conductivity (S/m)	1.511079
Power drift (%)	2.130000
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	5.42
Crest factor:	1:2

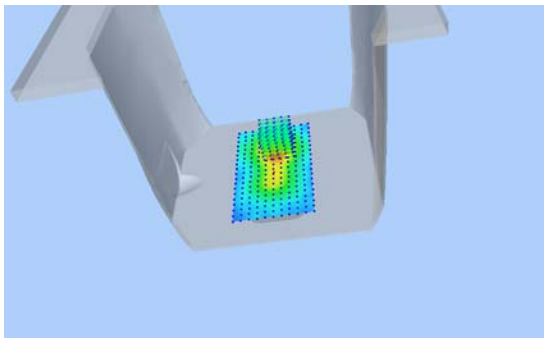
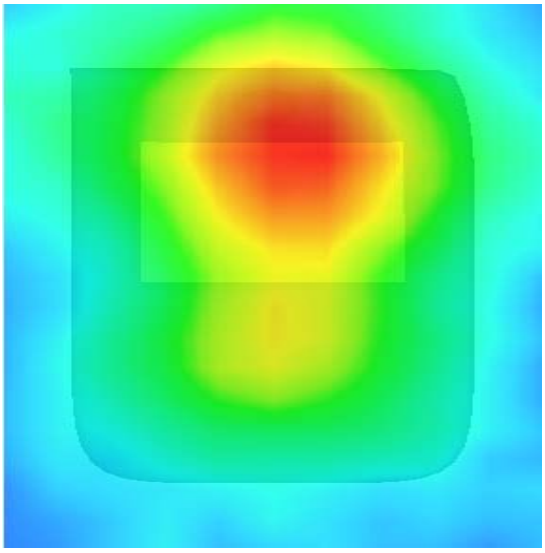
SURFACE SAR	VOLUME SAR
	

Maximum location: X=6.00, Y=33.00
SAR Peak: 0.89 W/kg

SAR 10g (W/Kg)	0.326209
SAR 1g (W/Kg)	0.566283

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.8527	0.5895	0.3648	0.2453	0.1462	0.0939	0.0561



3D screen shot	Hot spot position
	

MEASUREMENT 25

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 28 seconds

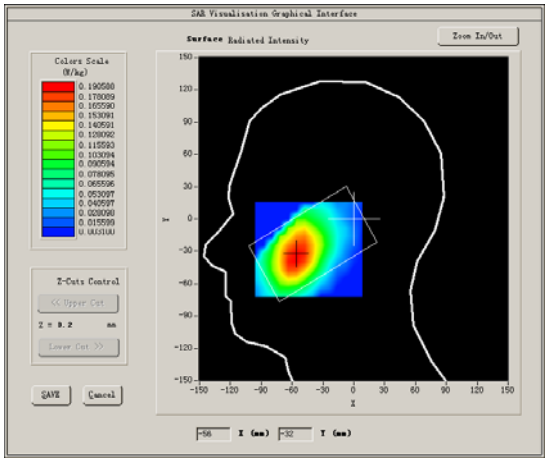
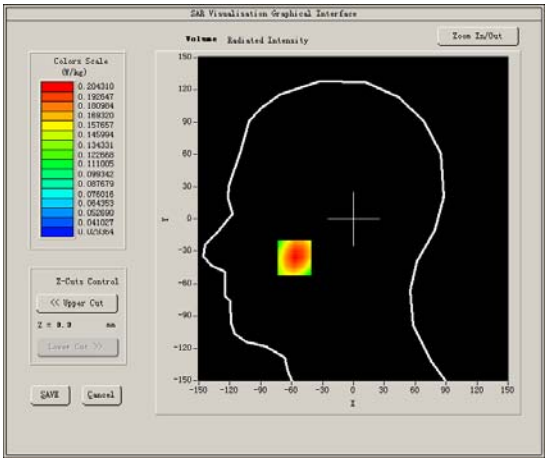
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

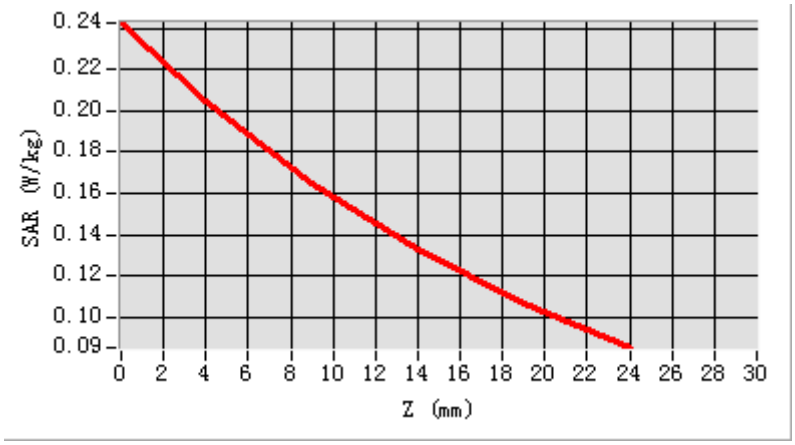
Frequency (MHz)	836.400024
Relative permittivity (real part)	41.596477
Conductivity (S/m)	0.914283
Power drift (%)	1.930000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

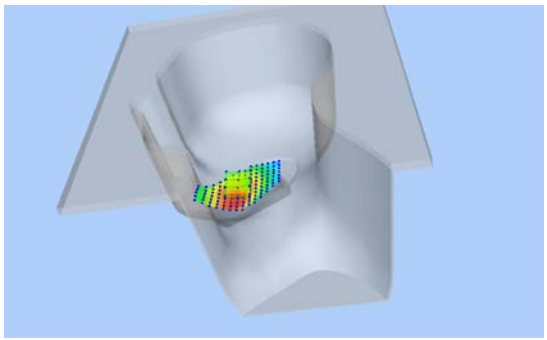
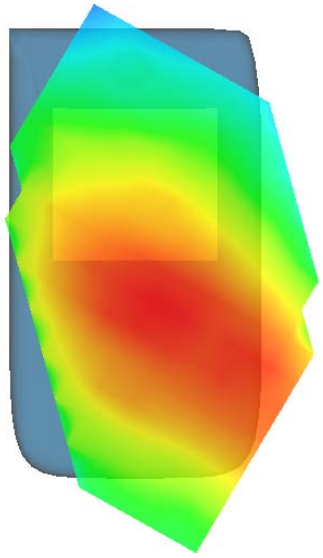
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-57.00, Y=-36.00
SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.075594
SAR 1g (W/Kg)	0.088360

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2425	0.2043	0.1647	0.1328	0.1072



3D screen shot	Hot spot position
	

MEASUREMENT 26

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 7 seconds

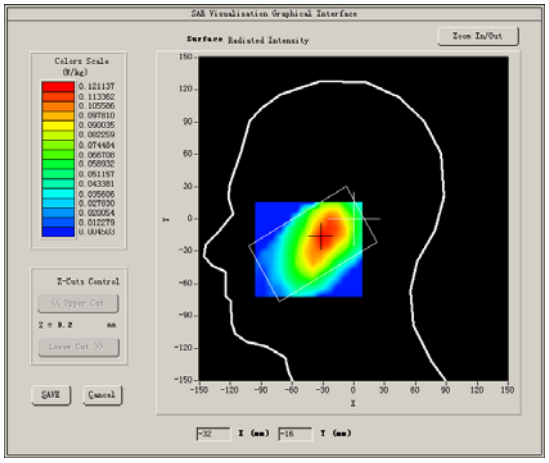
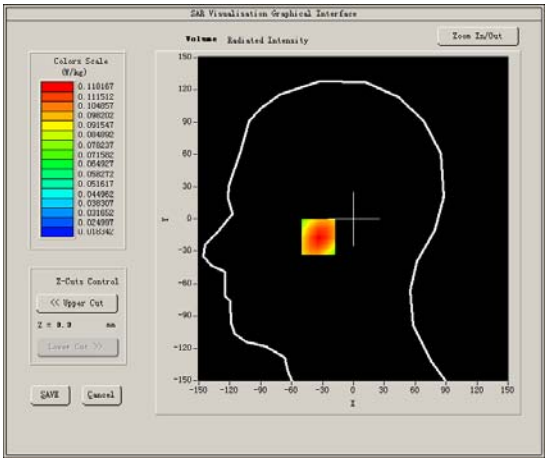
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

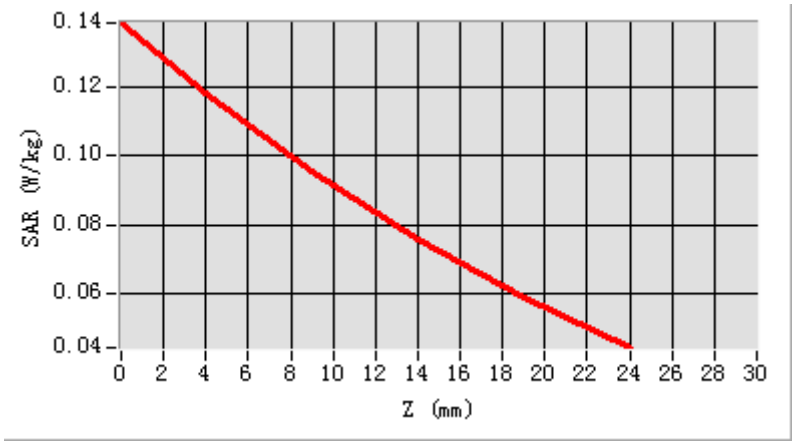
Frequency (MHz)	836.400024
Relative permittivity (real part)	41.596477
Conductivity (S/m)	0.914283
Power drift (%)	2.430000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

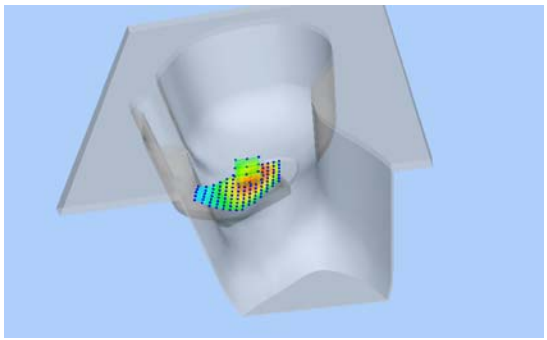
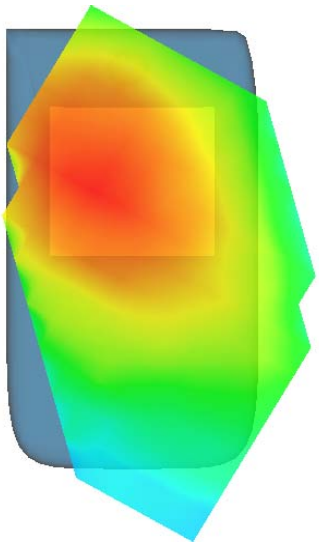
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-31.00, Y=-17.00
SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.012382
SAR 1g (W/Kg)	0.028934

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**
SAR (W/Kg)	**0.1387**	**0.1182**	**0.0954**	**0.0758**	**0.0589**



3D screen shot	**Hot spot position**
	

MEASUREMENT 27

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 16 seconds

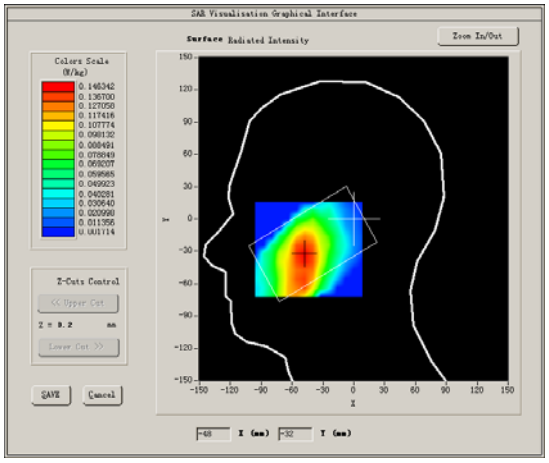
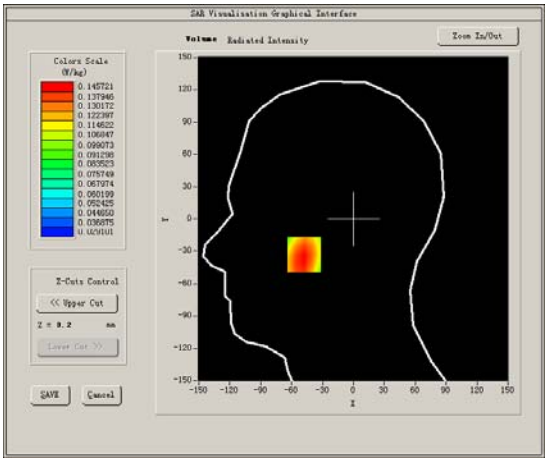
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

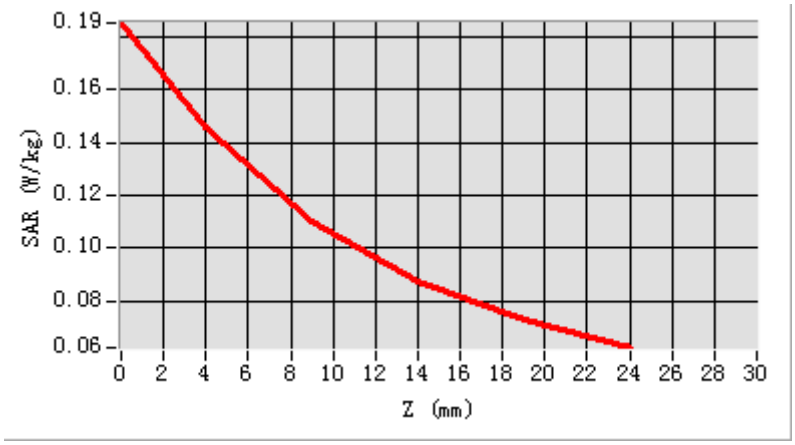
Frequency (MHz)	836.400024
Relative permittivity (real part)	41.596477
Conductivity (S/m)	0.914283
Power drift (%)	3.020000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

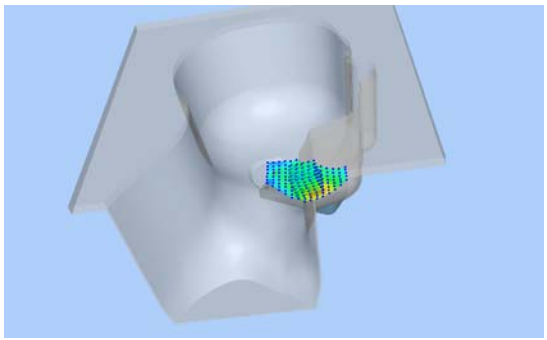
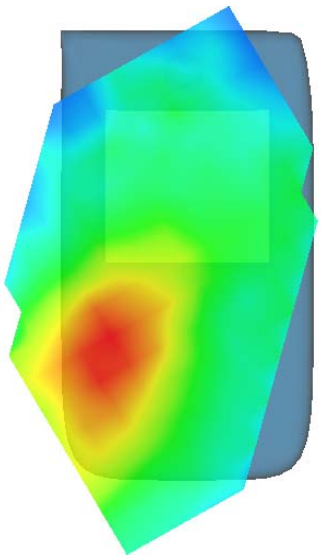
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-48.00, Y=-33.00
SAR Peak: 0.19 W/kg

SAR 10g (W/Kg)	0.065239
SAR 1g (W/Kg)	0.097681

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.1854	0.1457	0.1102	0.0871	0.0727



3D screen shot	Hot spot position
	

MEASUREMENT 28

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 20 seconds

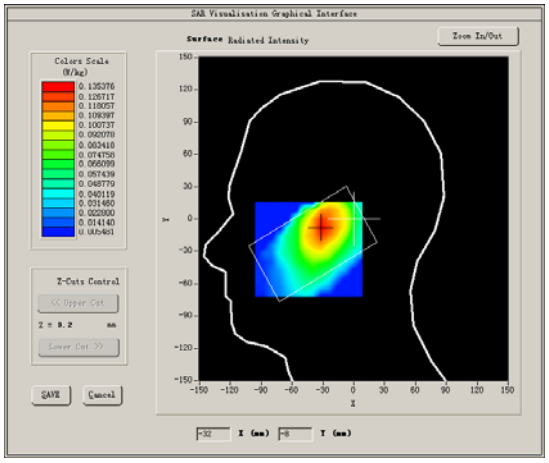
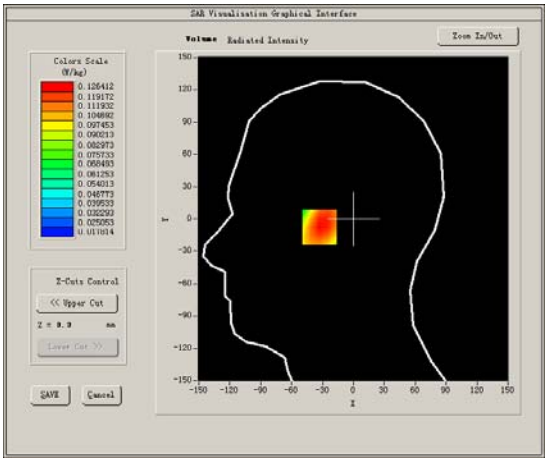
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182

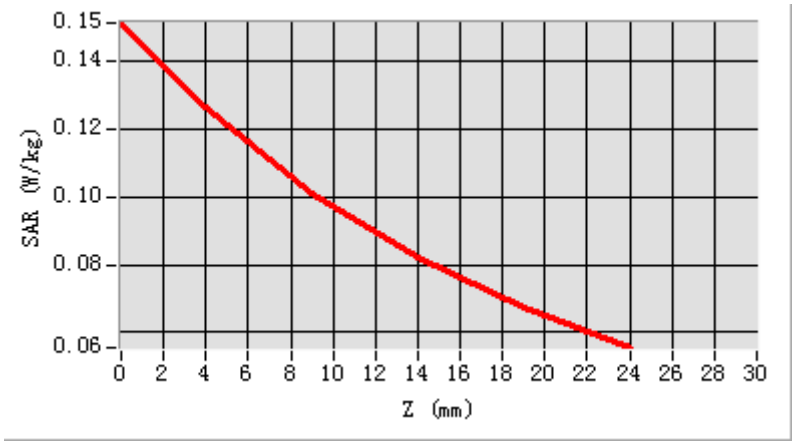
Frequency (MHz)	836.400024
Relative permittivity (real part)	41.596477
Conductivity (S/m)	0.914283
Power drift (%)	-0.840000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

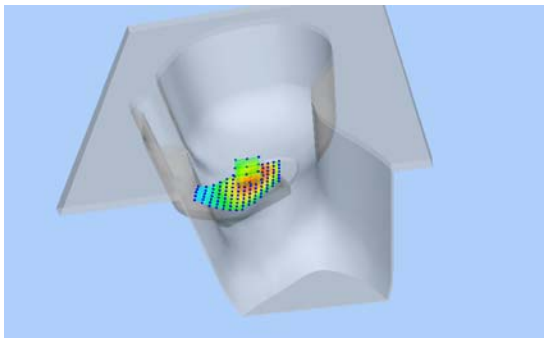
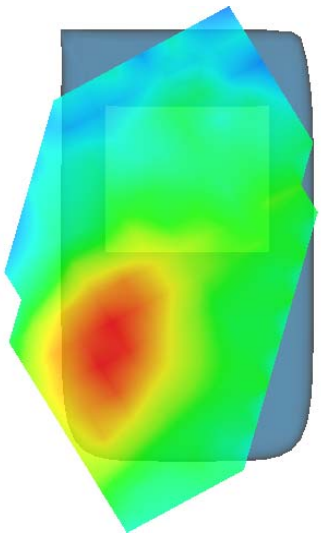
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-31.00, Y=-7.00
SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.022898
SAR 1g (W/Kg)	0.033312

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**
SAR (W/Kg)	**0.1515**	**0.1264**	**0.1013**	**0.0822**	**0.0675**



3D screen shot	**Hot spot position**
	

MEASUREMENT 29

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

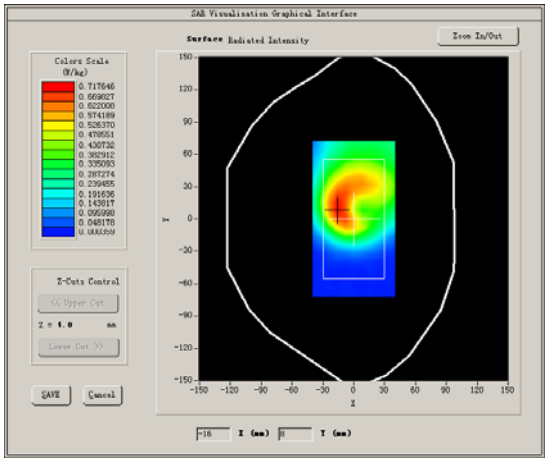
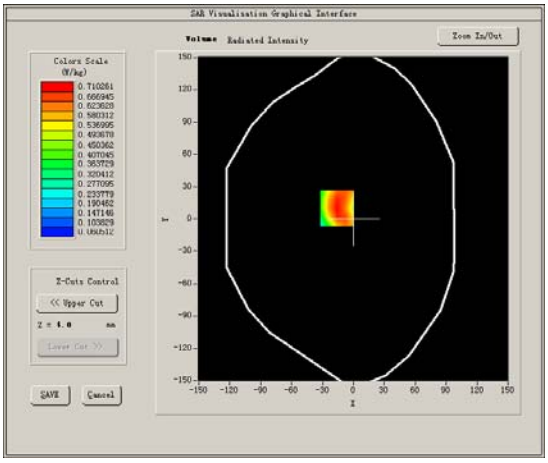
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

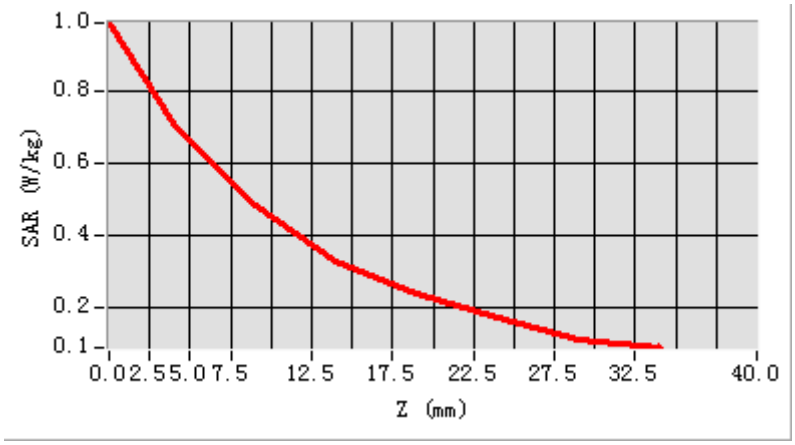
Frequency (MHz)	836.400024
Relative permittivity (real part)	55.296477
Conductivity (S/m)	0.964283
Power drift (%)	2.890000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

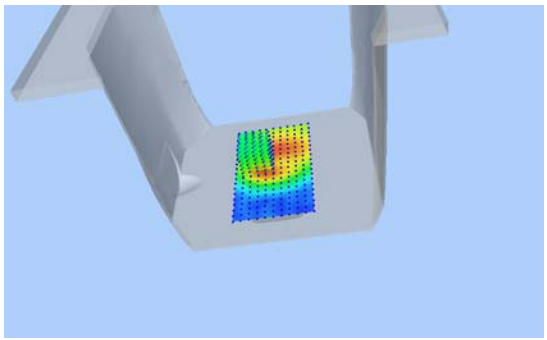
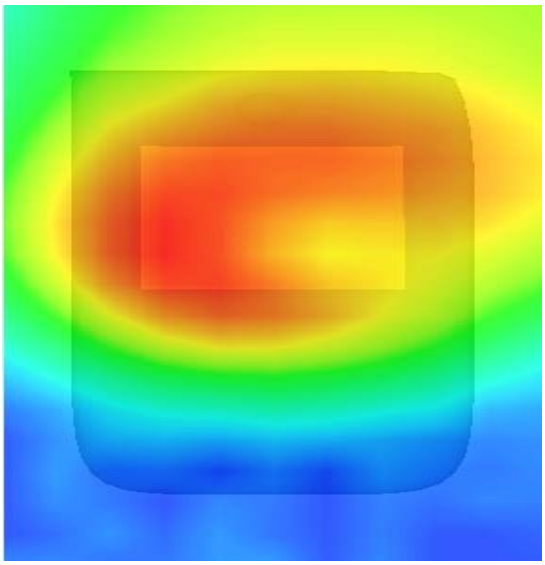
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-16.00, Y=10.00
SAR Peak: 0.98 W/kg

SAR 10g (W/Kg)	0.445381
SAR 1g (W/Kg)	0.735483

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.9854**	**0.7103**	**0.4852**	**0.3304**	**0.2381**	**0.1760**	**0.1164**



3D screen shot	**Hot spot position**
	

MEASUREMENT 30

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 34 seconds

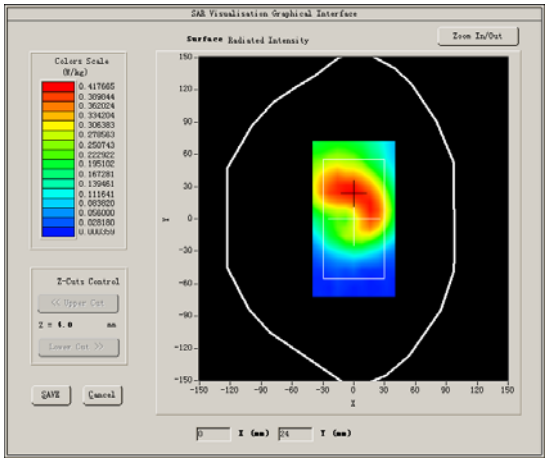
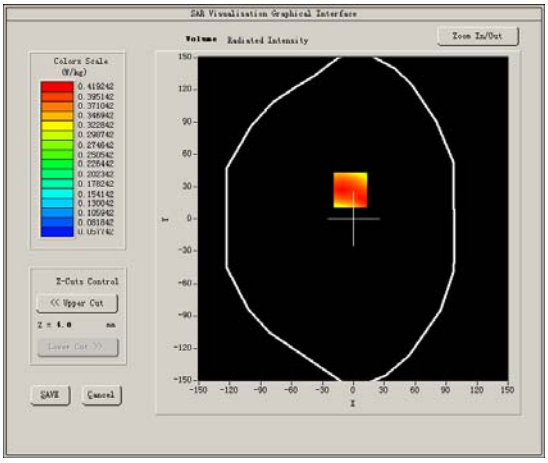
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

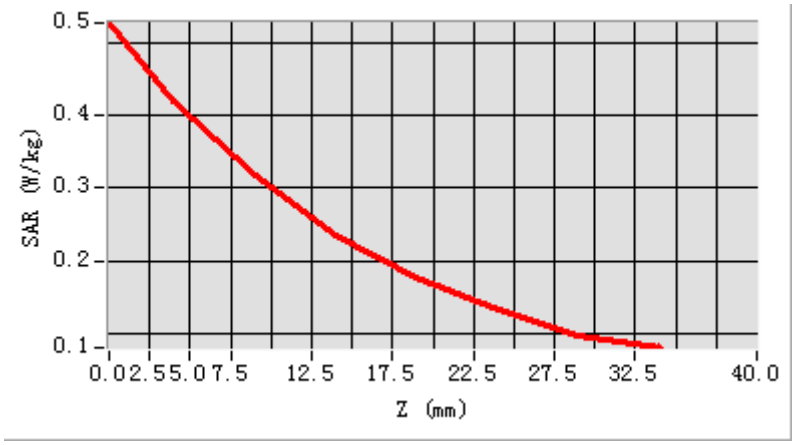
Frequency (MHz)	836.400024
Relative permittivity (real part)	55.296477
Conductivity (S/m)	0.964283
Power drift (%)	-2.350000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

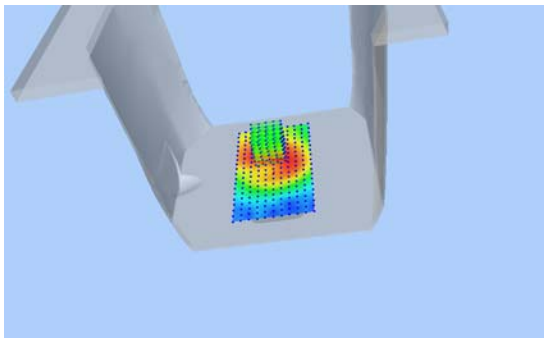
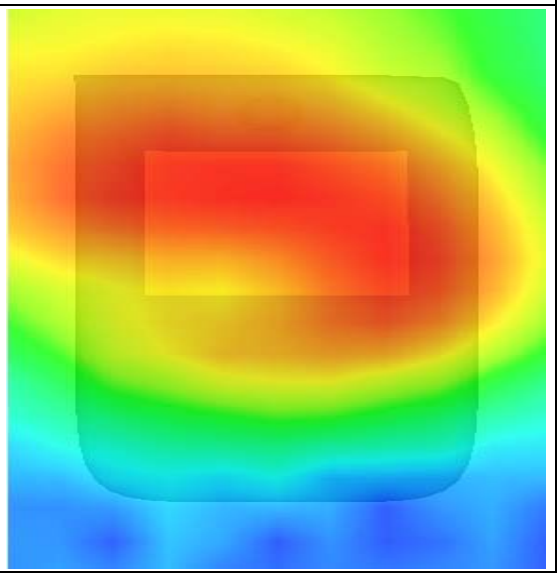
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-3.00, Y=27.00
SAR Peak: 0.54 W/kg

SAR 10g (W/Kg)	0.298041
SAR 1g (W/Kg)	0.319964

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.5264**	**0.4192**	**0.3173**	**0.2351**	**0.1769**	**0.1325**	**0.0972**



3D screen shot	**Hot spot position**
	

MEASUREMENT 31

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 34 seconds

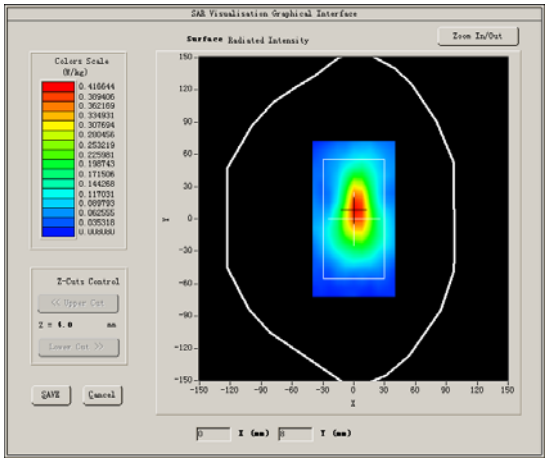
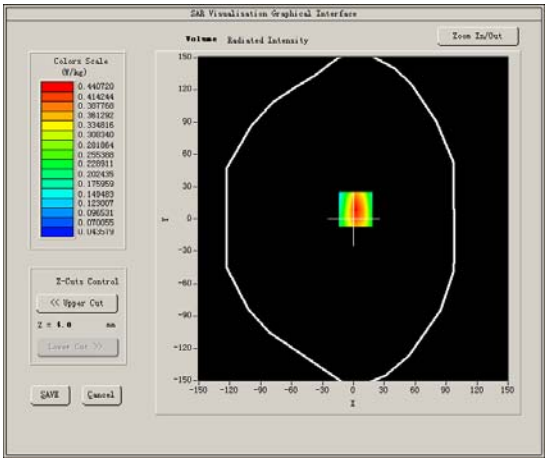
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

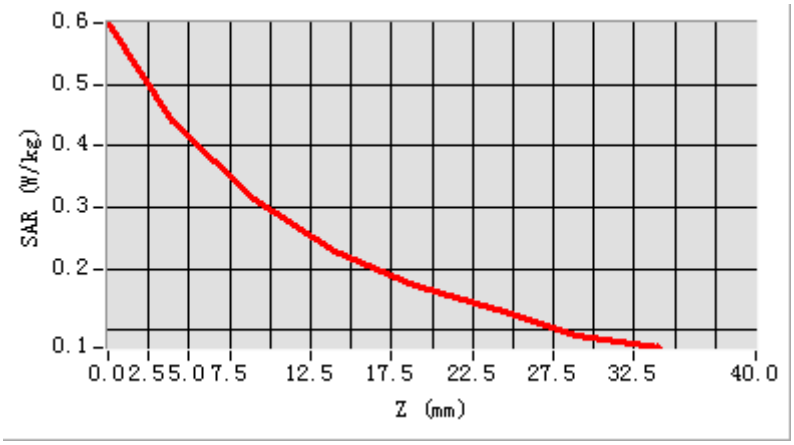
Frequency (MHz)	836.400024
Relative permittivity (real part)	55.296477
Conductivity (S/m)	0.964283
Power drift (%)	-2.350000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

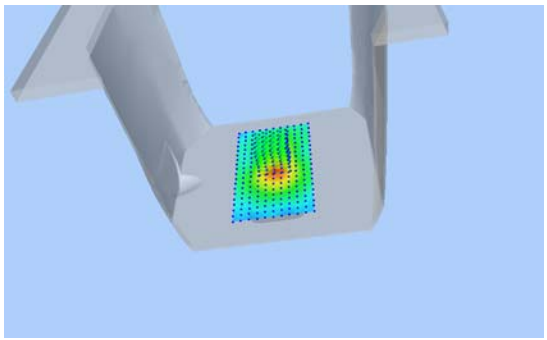
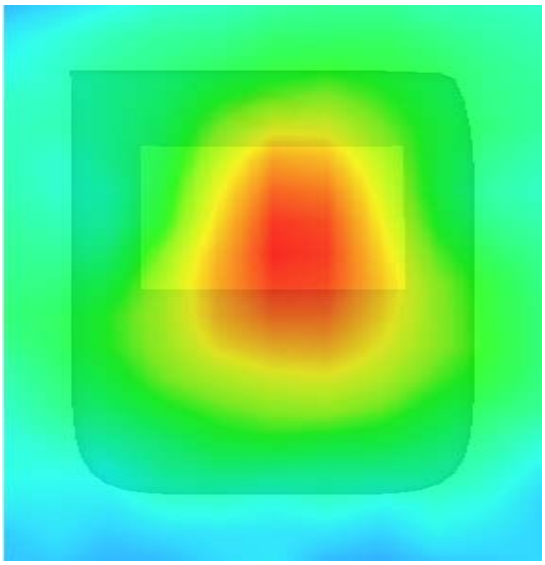
SURFACE SAR	VOLUME SAR
	

Maximum location: X=2.00, Y=9.00
SAR Peak: 0.60 W/kg

SAR 10g (W/Kg)	0.089622
SAR 1g (W/Kg)	0.116006

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.6009**	**0.4407**	**0.3126**	**0.2275**	**0.1714**	**0.1325**	**0.0910**



3D screen shot	**Hot spot position**
	

MEASUREMENT 32

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 34 seconds

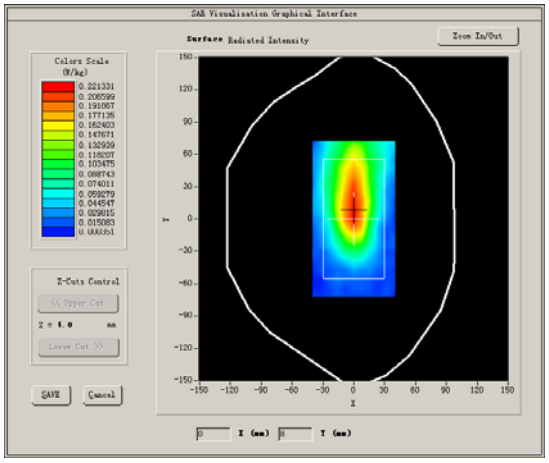
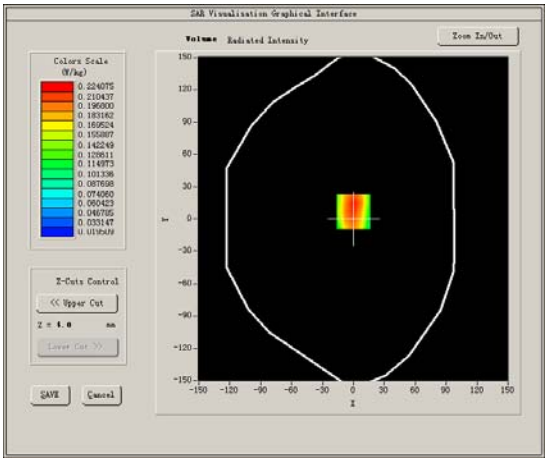
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

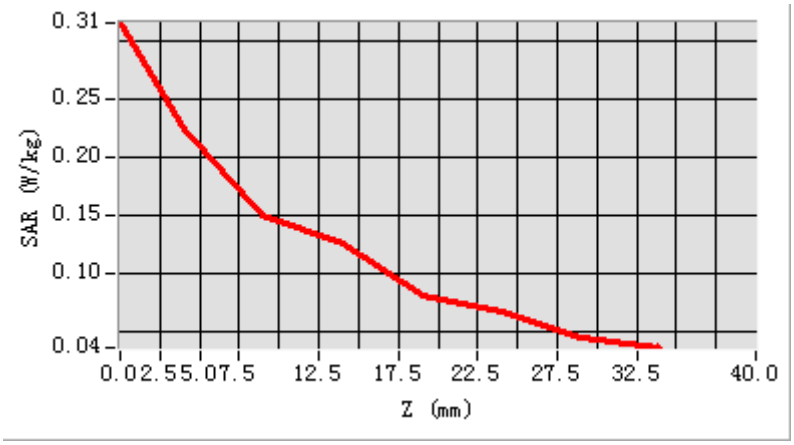
Frequency (MHz)	836.400024
Relative permittivity (real part)	55.296477
Conductivity (S/m)	0.964283
Power drift (%)	-2.350000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

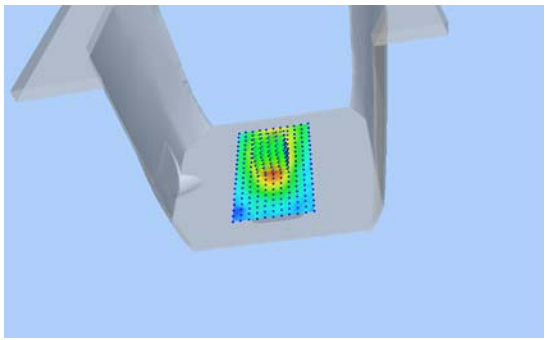
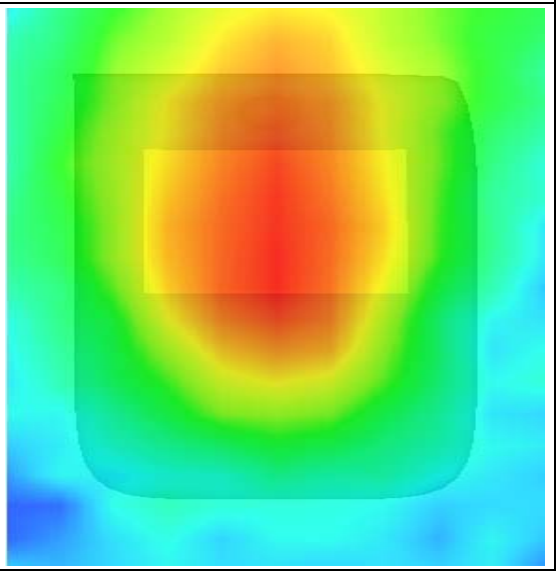
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=7.00
SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.246934
SAR 1g (W/Kg)	0.336712

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.3147	0.2241	0.1501	0.1260	0.0817	0.0686	0.0464



3D screen shot	Hot spot position
	

MEASUREMENT 33

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 28 seconds

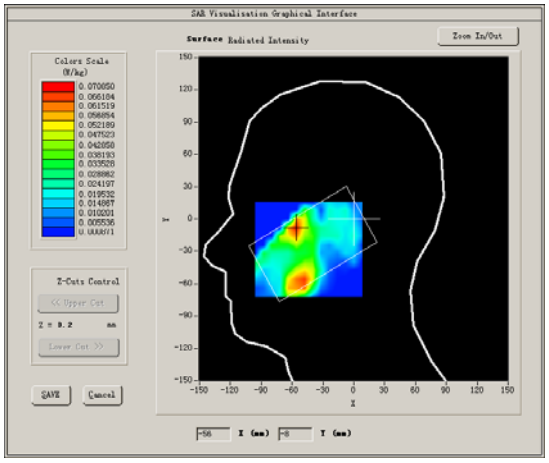
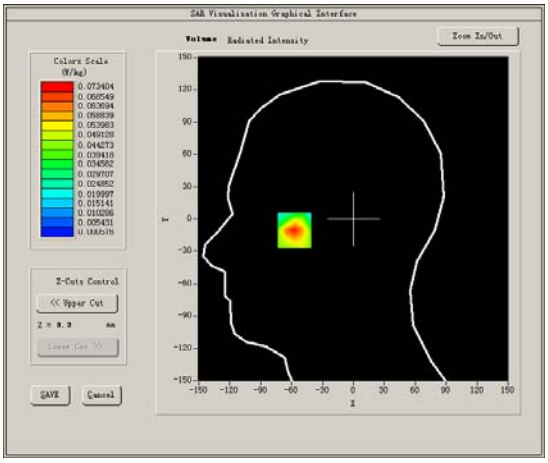
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

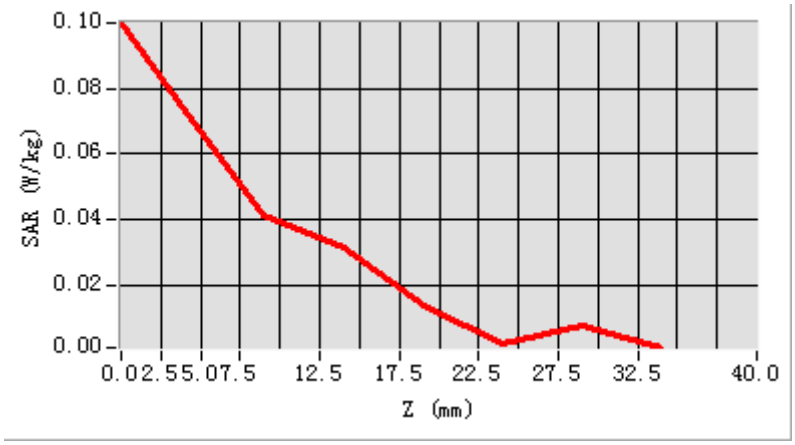
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.196477
Conductivity (S/m)	1.364283
Power drift (%)	1.930000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

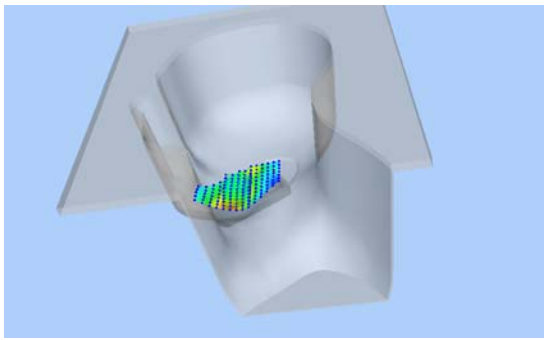
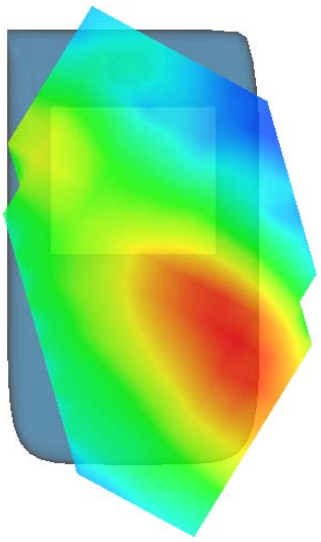
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-57.00, Y=-8.00
SAR Peak: 0.11 W/kg

SAR 10g (W/Kg)	0.046590
SAR 1g (W/Kg)	0.112103

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.1002	0.0734	0.0414	0.0313	0.0135	0.0021	0.0072



3D screen shot	Hot spot position
	

MEASUREMENT 34

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 7 seconds

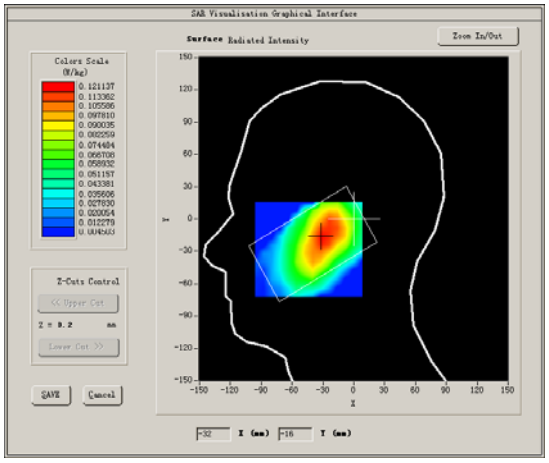
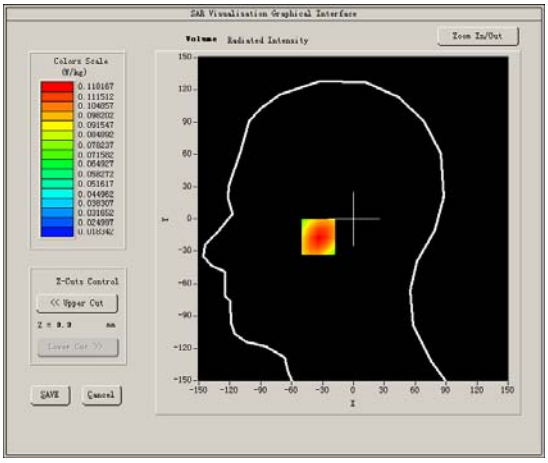
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

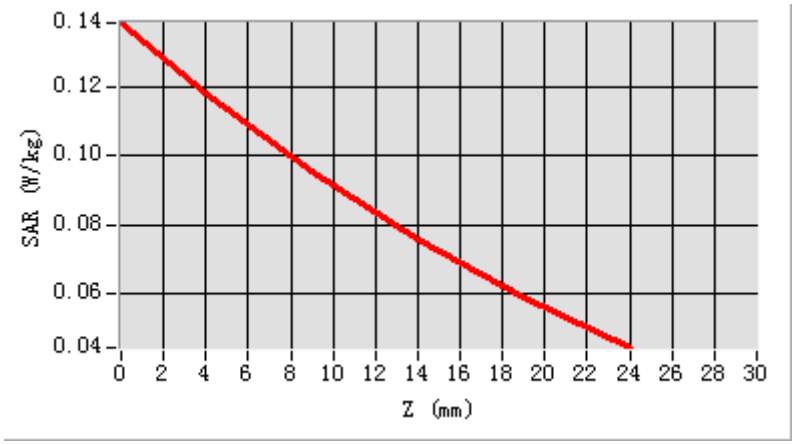
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.196477
Conductivity (S/m)	1.364283
Power drift (%)	2.430000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

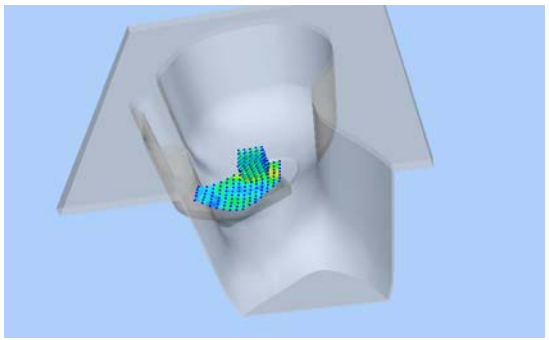
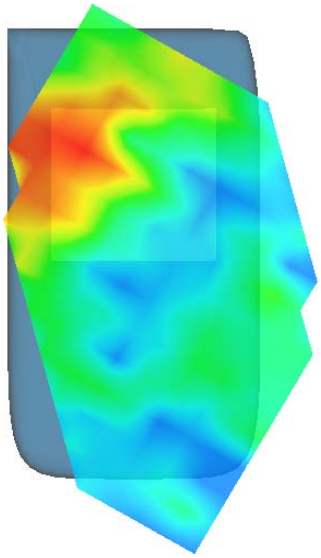
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-31.00, Y=-17.00
SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.014122
SAR 1g (W/Kg)	0.041463

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**
SAR (W/Kg)	**0.1387**	**0.1182**	**0.0954**	**0.0758**	**0.0589**



3D screen shot	**Hot spot position**
	

MEASUREMENT 35

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 16 seconds

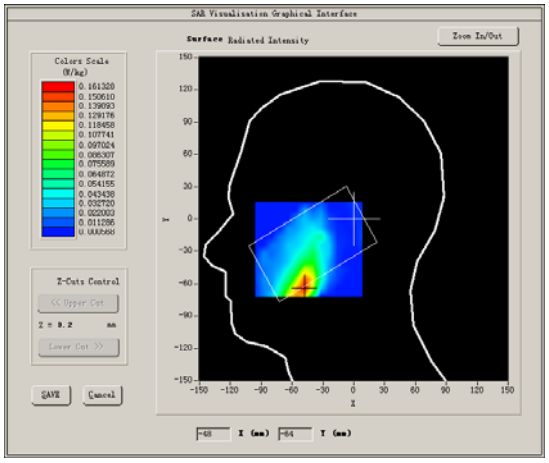
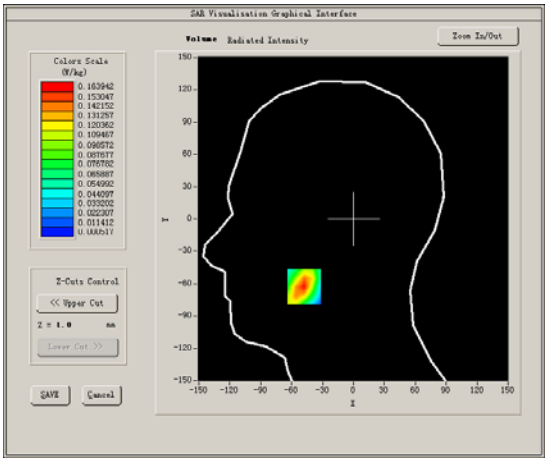
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

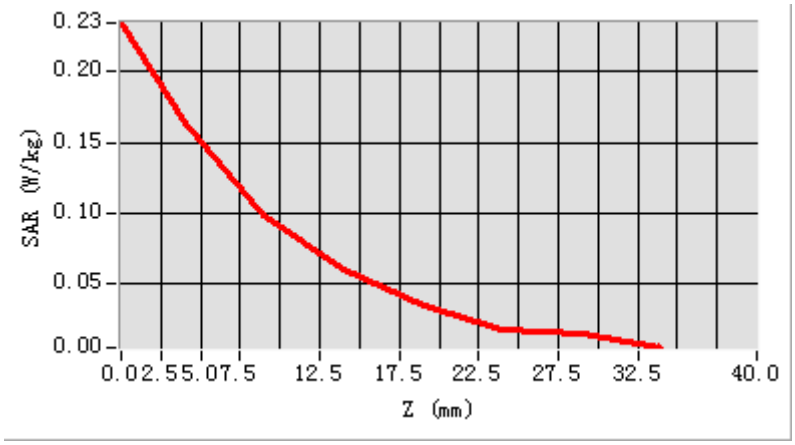
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.196477
Conductivity (S/m)	1.364283
Power drift (%)	3.020000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

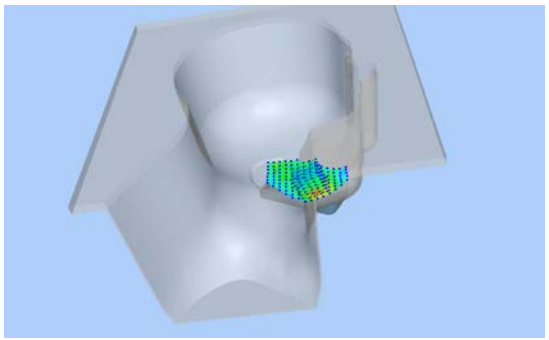
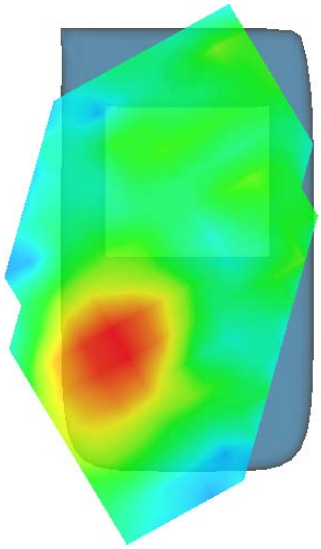
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-48.00, Y=-63.00
SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.091501
SAR 1g (W/Kg)	0.132243

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.2349	0.1639	0.0980	0.0596	0.0335	0.0167	0.0132



3D screen shot	Hot spot position
	

MEASUREMENT 36

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 20 seconds

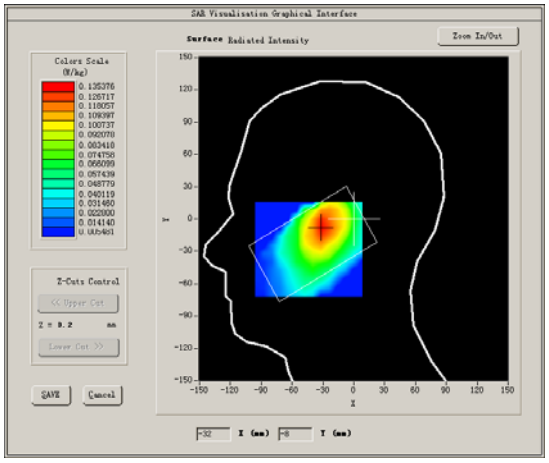
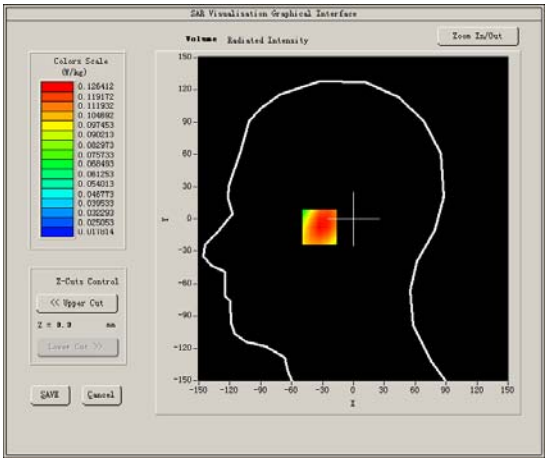
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

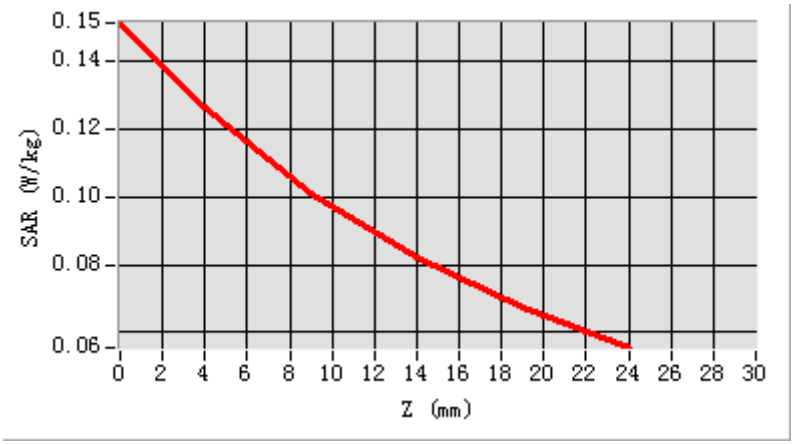
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.196477
Conductivity (S/m)	1.364283
Power drift (%)	-0.840000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

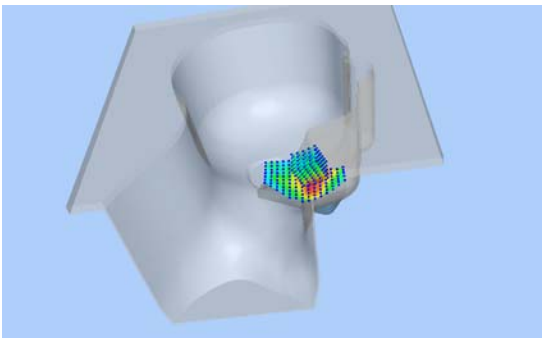
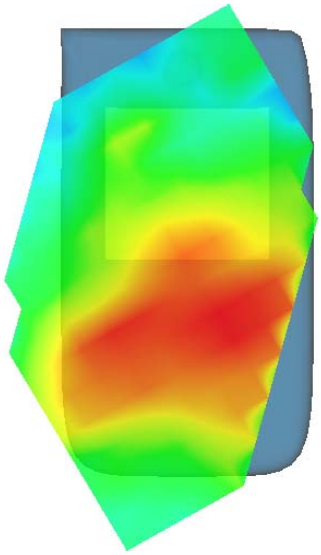
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-31.00, Y=-7.00
SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.012865
SAR 1g (W/Kg)	0.044168

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**
SAR (W/Kg)	**0.1515**	**0.1264**	**0.1013**	**0.0822**	**0.0675**



3D screen shot	**Hot spot position**
	

MEASUREMENT 37

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 31 seconds

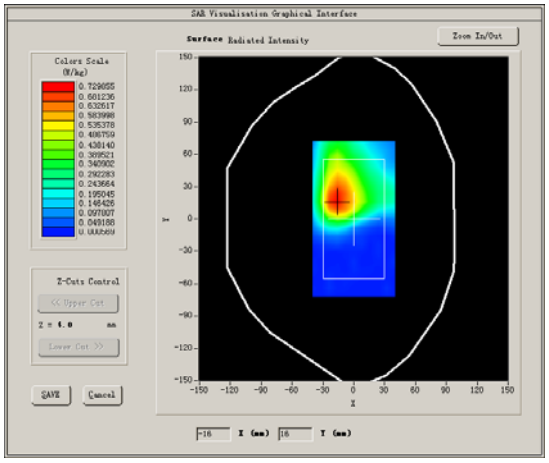
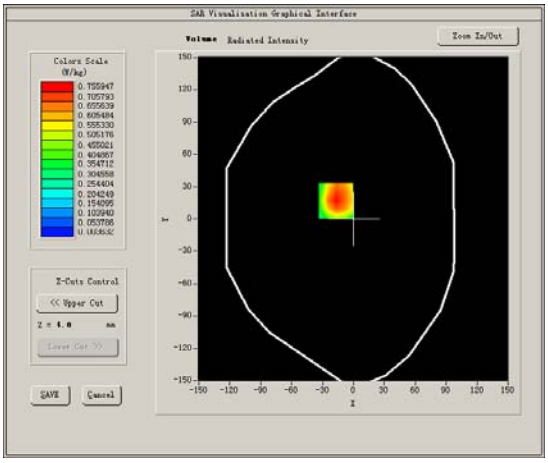
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

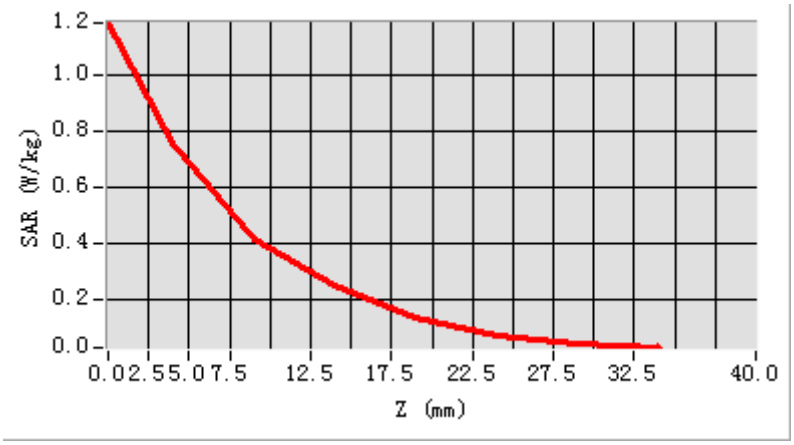
Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.396477
Conductivity (S/m)	1.514283
Power drift (%)	2.890000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

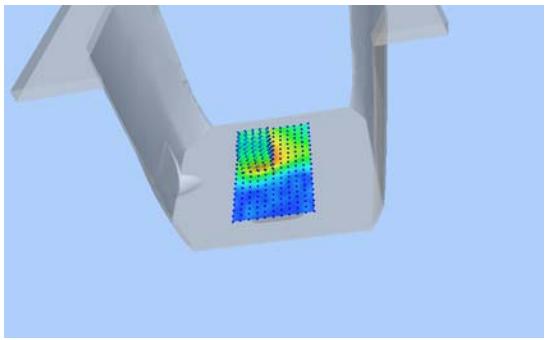
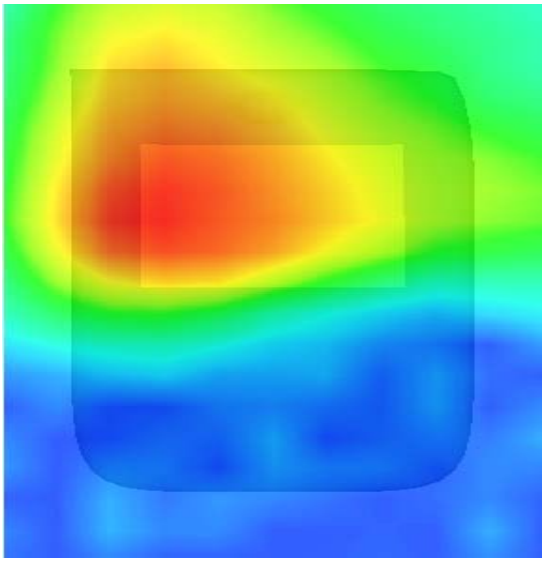
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-17.00, Y=17.00
SAR Peak: 1.22 W/kg

SAR 10g (W/Kg)	0.516437
SAR 1g (W/Kg)	0.682206

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.1894	0.7559	0.4151	0.2504	0.1332	0.0721	0.0398



3D screen shot	Hot spot position
	

MEASUREMENT 38

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 34 seconds

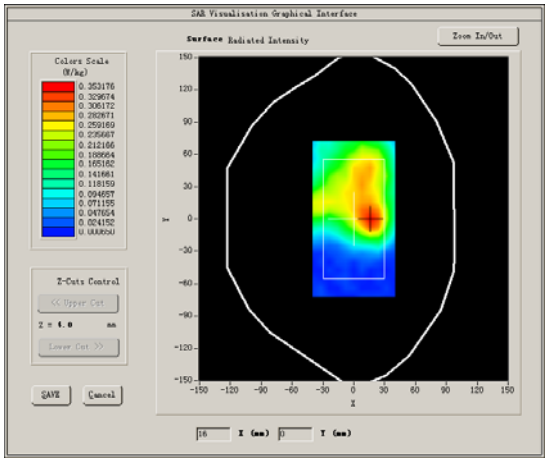
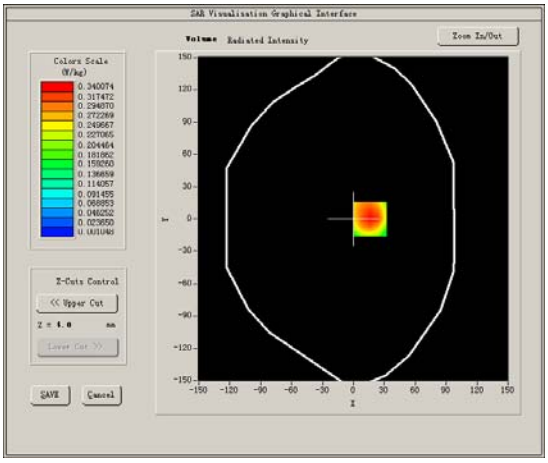
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

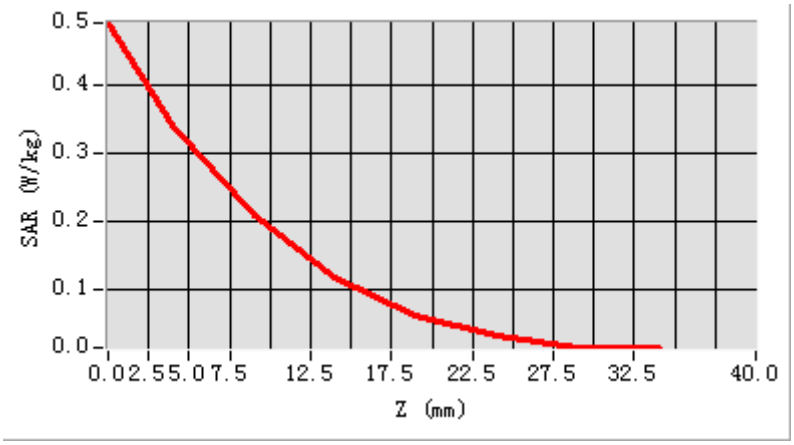
Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.396477
Conductivity (S/m)	1.514283
Power drift (%)	-2.350000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

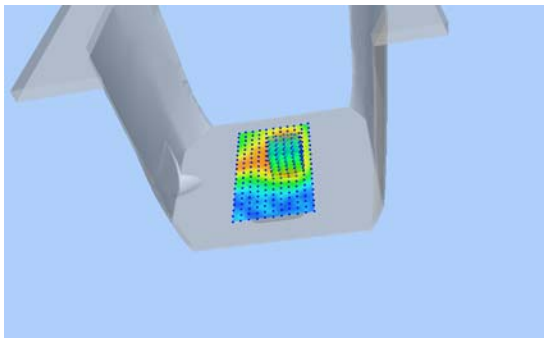
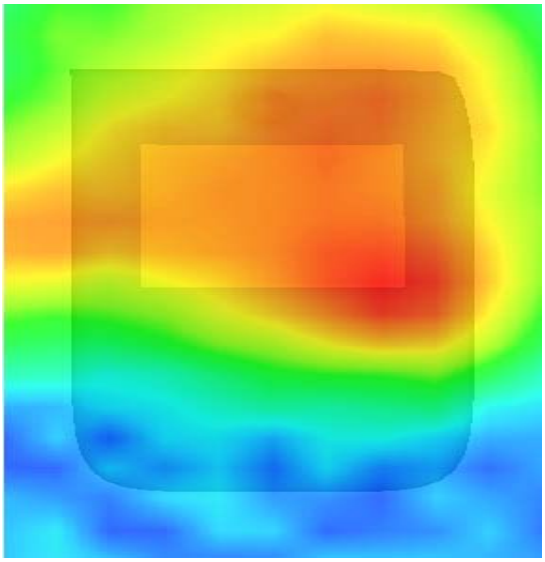
SURFACE SAR	VOLUME SAR
	

Maximum location: X=16.00, Y=0.00
SAR Peak: 0.49 W/kg

SAR 10g (W/Kg)	0.189413
SAR 1g (W/Kg)	0.408448

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.4892	0.3401	0.2082	0.1183	0.0635	0.0357	0.0172



3D screen shot	Hot spot position
	

MEASUREMENT 39

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 34 seconds

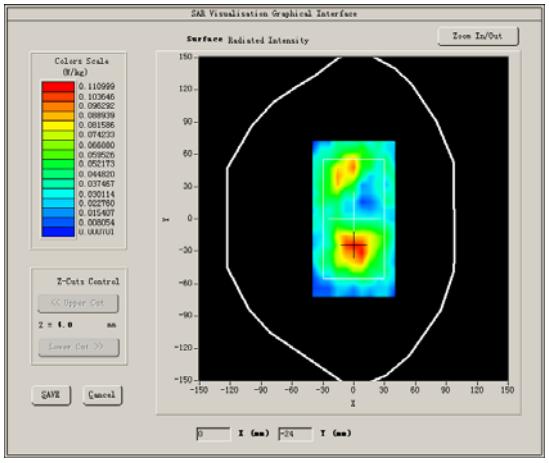
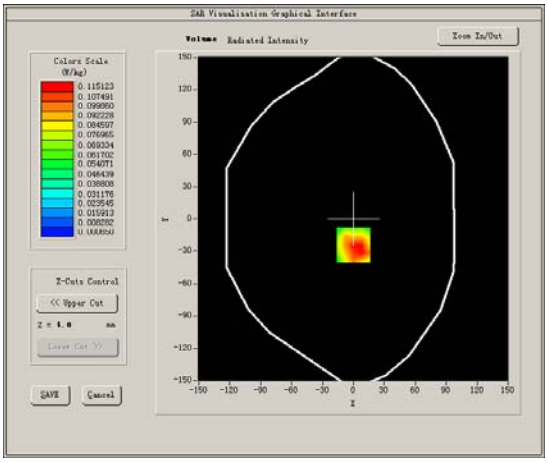
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

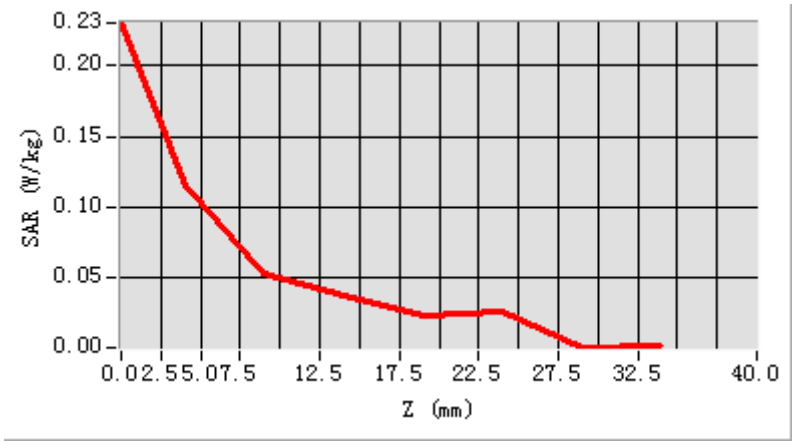
Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.396477
Conductivity (S/m)	1.514283
Power drift (%)	-2.350000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

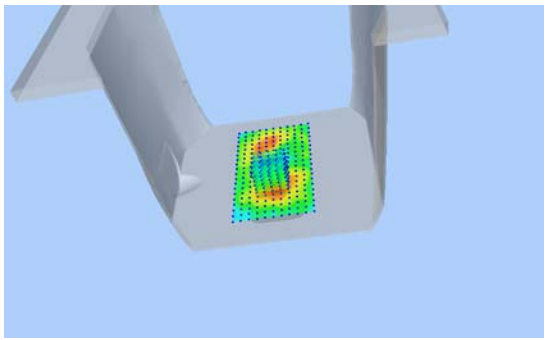
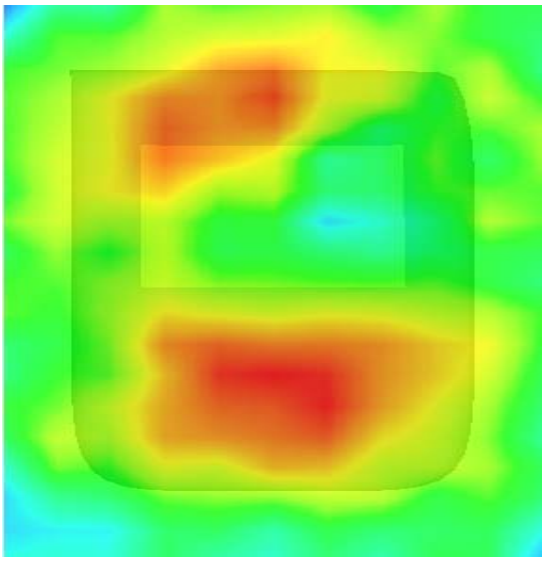
SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=-24.00
SAR Peak: 0.19 W/kg

SAR 10g (W/Kg)	0.365358
SAR 1g (W/Kg)	0.418112

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.2302**	**0.1151**	**0.0527**	**0.0372**	**0.0226**	**0.0268**	**0.0006**



3D screen shot	**Hot spot position**
	

MEASUREMENT40

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.4.14

Measurement duration: 13 minutes 34 seconds

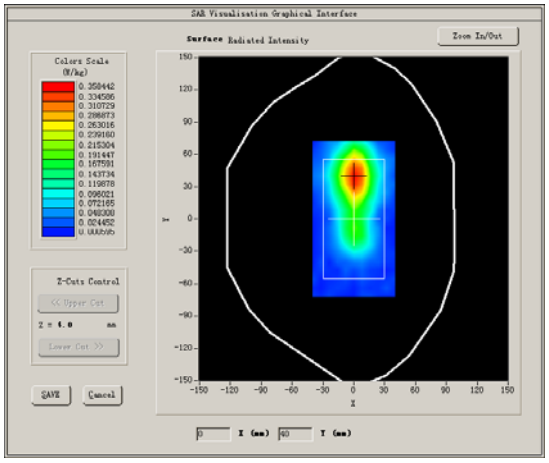
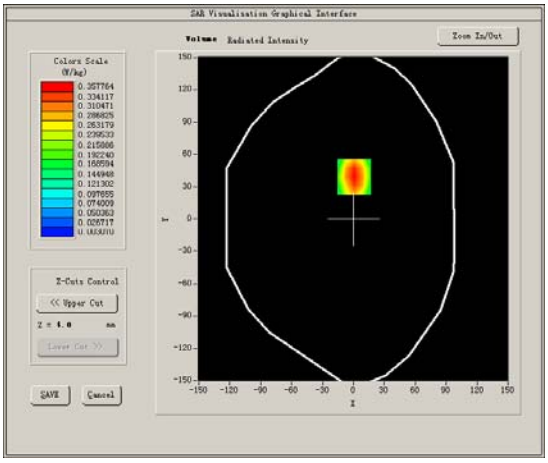
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

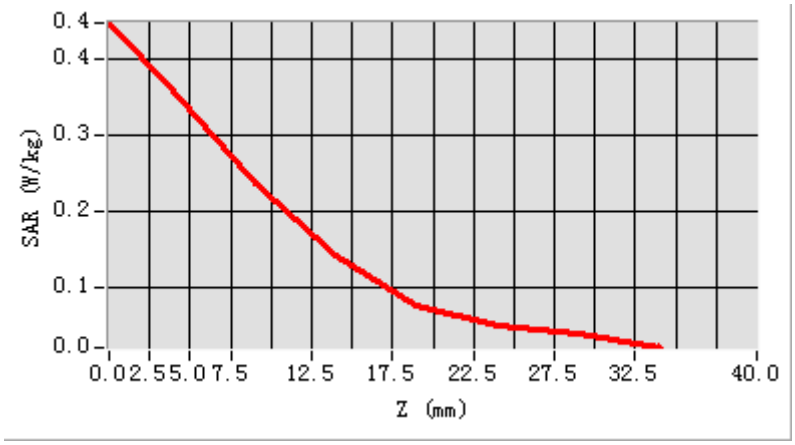
Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.396477
Conductivity (S/m)	1.514283
Power drift (%)	-2.350000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	6.00
Crest factor:	1:1

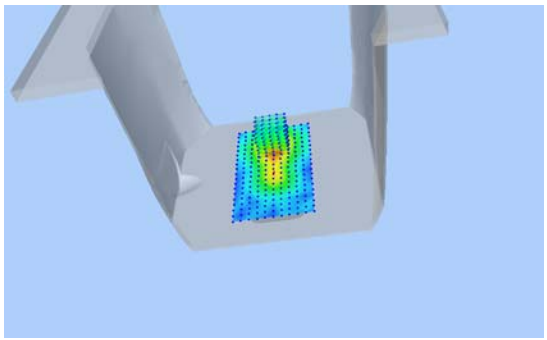
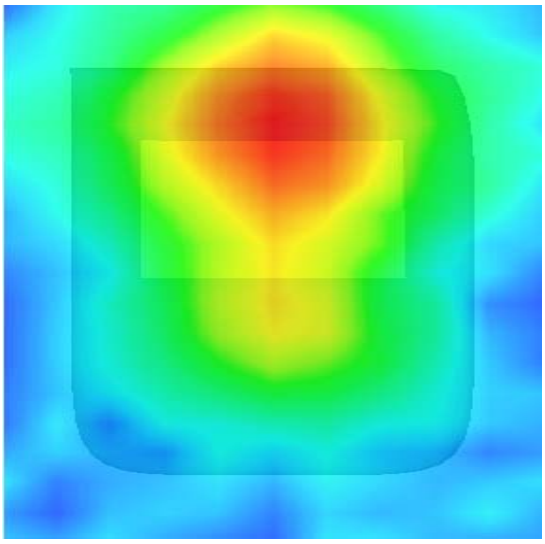
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=39.00
SAR Peak: 0.52 W/kg

SAR 10g (W/Kg)	0.155011
SAR 1g (W/Kg)	0.213501

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.4480**	**0.3578**	**0.2377**	**0.1416**	**0.0755**	**0.0499**	**0.0406**



3D screen shot	**Hot spot position**
	

ANNEX B GENERAL INFORMATION

1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. List of Test Equipments

No.	Instrument	Type	Cal. Date	Cal. Due
1	PC	Dell (Pentium IV 2.4GHz, SN:X10-23533)	(n.a)	(n.a)
2	Network Emulator	Aglient (8960, SN:10752)	2016-6-7	1year
3	Network Analyzer	Agilent(E5071B ,SN:MY42404762)	2016-7-8	1year
4	Voltmeter	Keithley (2000, SN:1000572)	2016-7-8	1year
5	Signal Generator	Rohde&Schwarz (SMP_02)	2016-7-8	1year
6	Power Amplifier	PRANA (Ap32 SV125AZ)	2016-7-8	1year
7	Power Meter	Agilent (E4416A, SN:MY45102093)	2016-7-8	1year
8	Power Sensor	Agilent (N8482A, SN:MY41091706)	2016-7-8	1year
9	Directional coupler	Giga-tronics(SN:1829112)	2016-7-24	1year
10	Probe	Satimo (SN:SN 37/08 EP80)	2016-7-5	1year
11	Dielectric Probe Kit	Agilent (85033E)	2016-7-5	1year
12	Phantom	Satimo (SN:SN_36_08_SAM62)	N/A	N/A
13	Liquid	Satimo(Last Calibration: 2017-04-13)	N/A	N/A
14	Dipole 835MHz	Satimo (SN 20/08 DIPC 99)	2016-7-5	1year
15	Dipole 1900MHz	Satimo (SN 30/13 DIP1G900-261)	2016-7-5	1year

ANNEX C SYSTEM PERFORMANCE CHECK DATA

System Performance Check Data(Head)

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.04.14

Measurement duration: 13 minutes 30 seconds

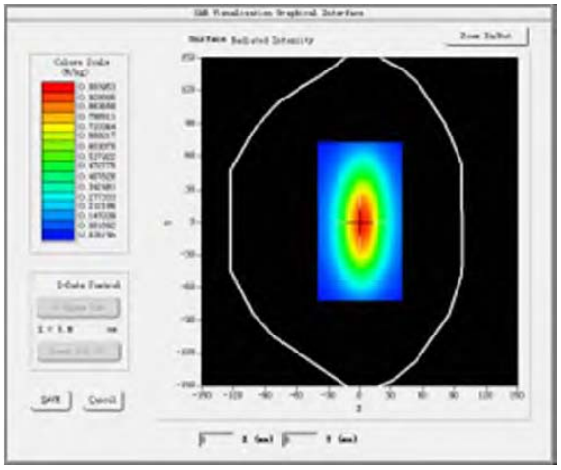
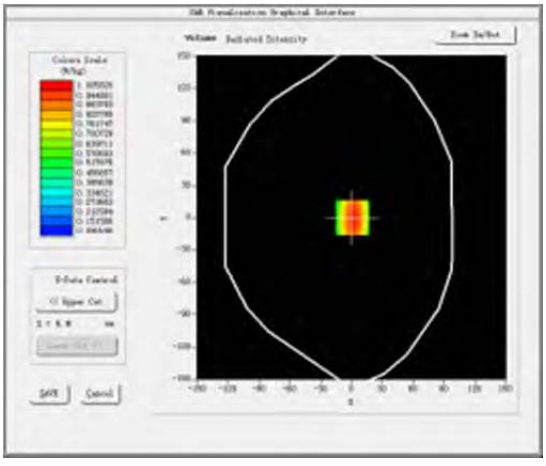
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat Plane
Device Position	
Band	835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	835.000000
Relative permittivity (real part)	41.362849
Conductivity (S/m)	0.913725
Power drift (%)	2.010000
Ambient Temperature:	22.9°C
Liquid Temperature:	22.1°C
ConvF:	5.74
Crest factor:	1:1

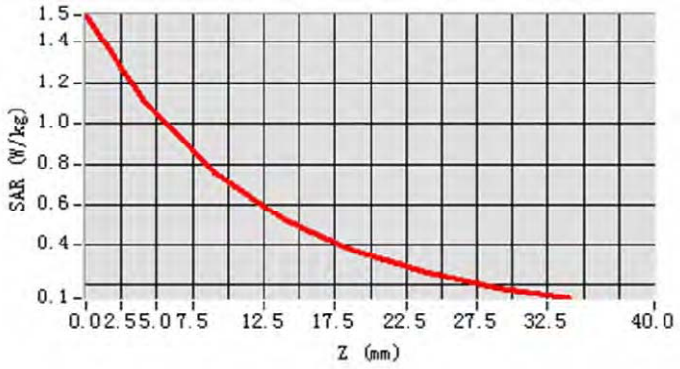
SURFACE SAR	VOLUME SAR
	

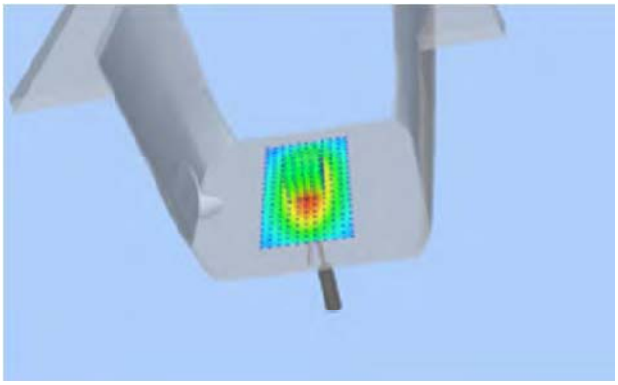
Maximum location: X=1.00, Y=0.00
SAR Peak: 1.50 W/kg

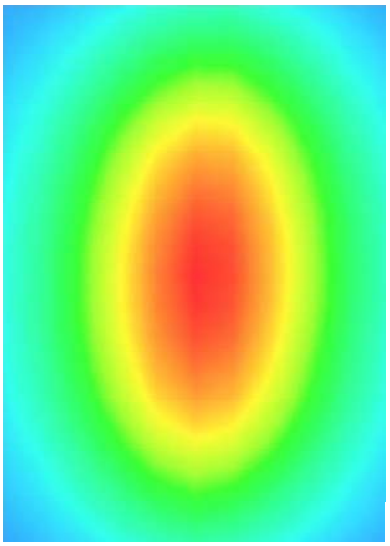
SAR 10g (W/Kg)	0.594323
SAR 1g (W/Kg)	0.952105

Z Axis Scan

Z (mm)	**0**	**4**	**9**	**14**	**19**	**24**	**29**
SAR(W/Kg)	**1.4921**	**1.2304**	**0.7527**	**0.5312**	**0.3902**	**0.2461**	**0.1805**







System Performance Check Data(Body)

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.04.14

Measurement duration: 13 minutes 30 seconds

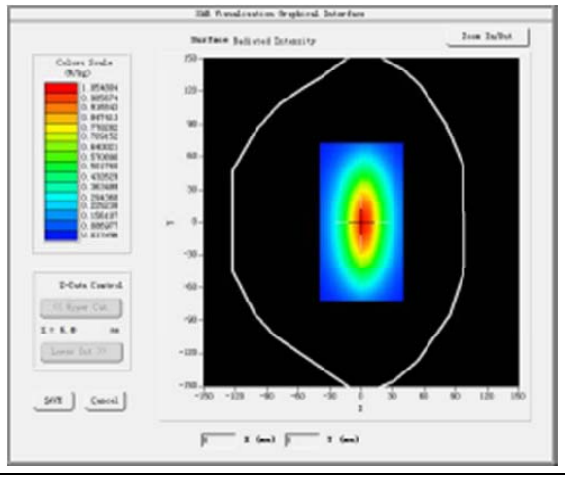
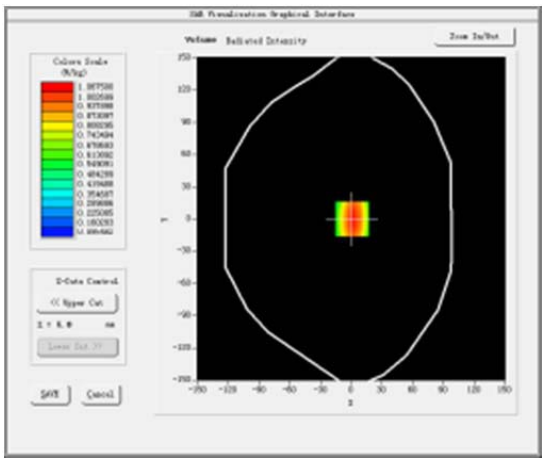
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat Plane
Device Position	
Band	835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	835.000000
Relative permittivity (real part)	55.693058
Conductivity (S/m)	0.970859
Power drift (%)	0.910000
Ambient Temperature:	22.9°C
Liquid Temperature:	22.1°C
ConvF:	6.99
Crest factor:	1:1

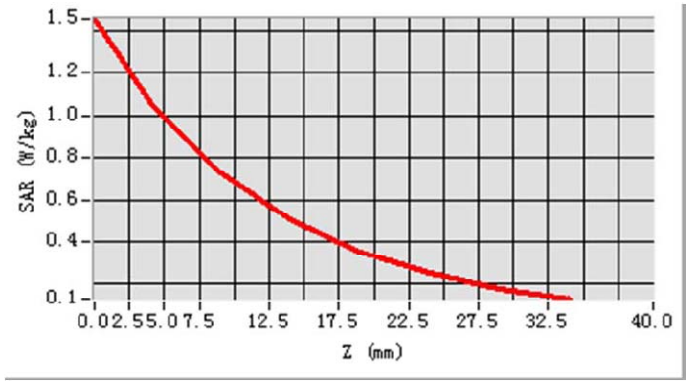
SURFA7CE SAR	VOLUME SAR
	

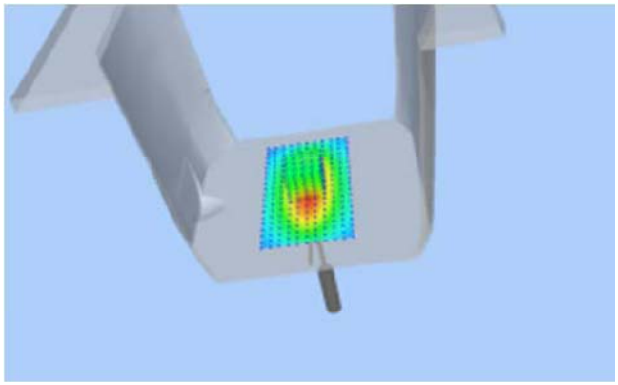
Maximum location: X=7.00, Y=-1.00

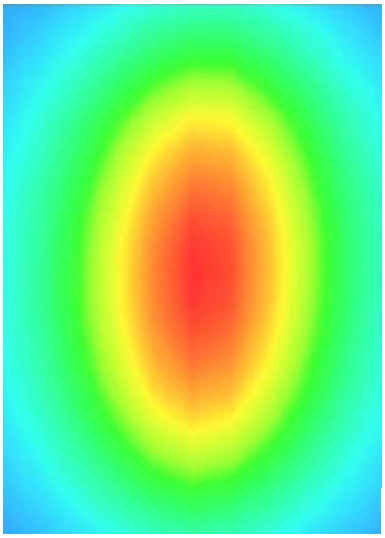
SAR 10g (W/Kg)	0.615621
SAR 1g (W/Kg)	0.991035

Z Axis Scan

Z (mm)	**0**	**4**	**9**	**14**	**19**	**24**	**29**
SAR(W/Kg)	**1.5216**	**1.2714**	**0.7630**	**0.5421**	**0.4112**	**0.2518**	**0.1912**







System Performance Check Data(Head)

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.04.14

Measurement duration: 13 minutes 26 seconds

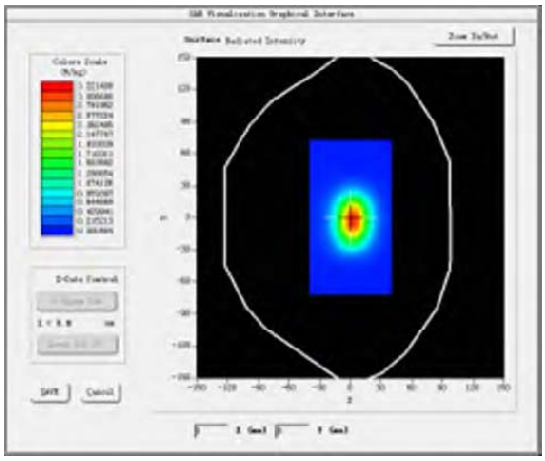
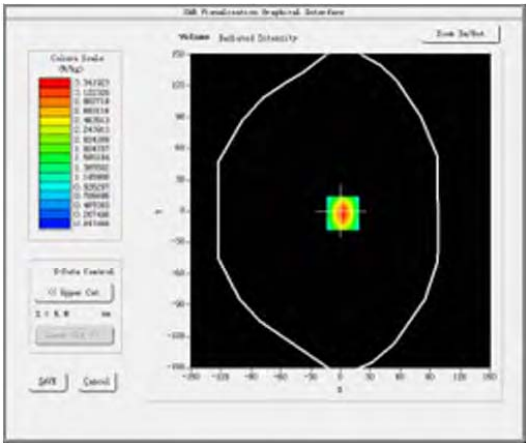
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat Plane
Device Position	
Band	1900MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.984068
Conductivity (S/m)	1.409657
Power drift (%)	1.240000
Ambient Temperature:	22.9°C
Liquid Temperature:	22.1°C
ConvF:	5.32
Crest factor:	1:1

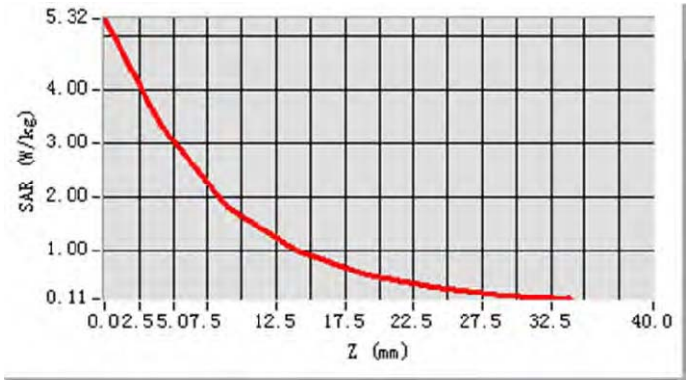
SURFACE SAR	VOLUME SAR
	

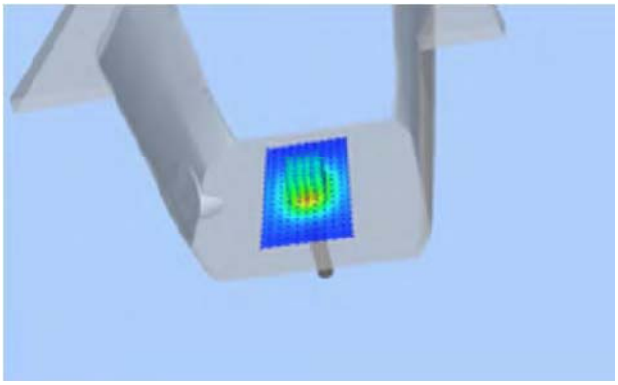
Maximum location: X=2.00, Y=2.00
SAR Peak: 5.27 W/kg

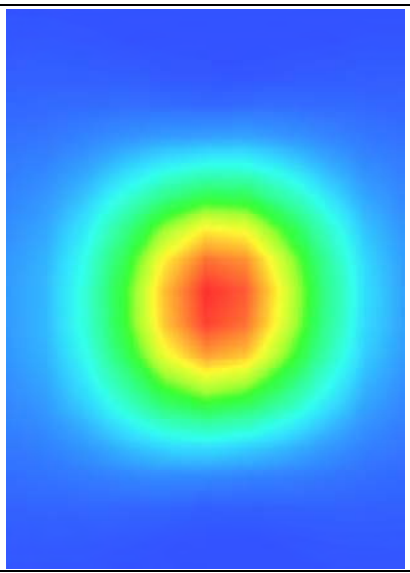
SAR 10g (W/Kg)	2.300541
SAR 1g (W/Kg)	3.955054

Z Axis Scan

Z (mm)	0	4	9	14	19	24	29
SAR(W/Kg)	5.319	3.3391	1.8271	1.0206	0.5860	0.3351	0.1982







System Performance Check Data(Body)

Type: Phone measurement (Complete)

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

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

Date of measurement: 2017.04.14

Measurement duration: 13 minutes 26 seconds

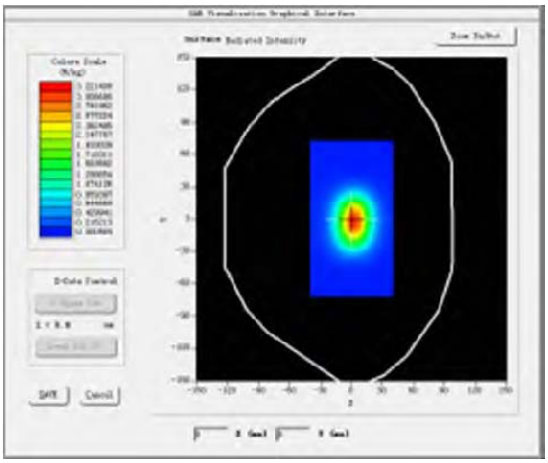
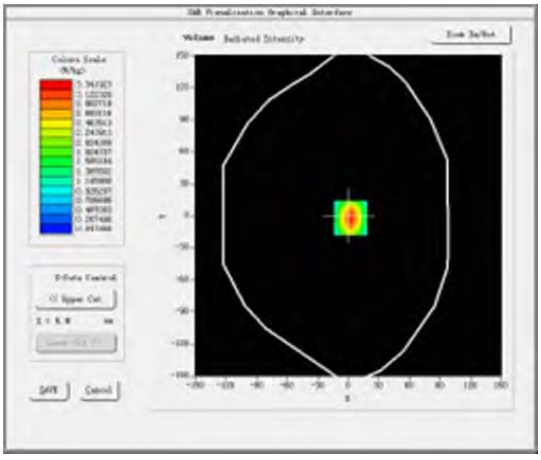
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Flat Plane
Device Position	
Band	1900MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

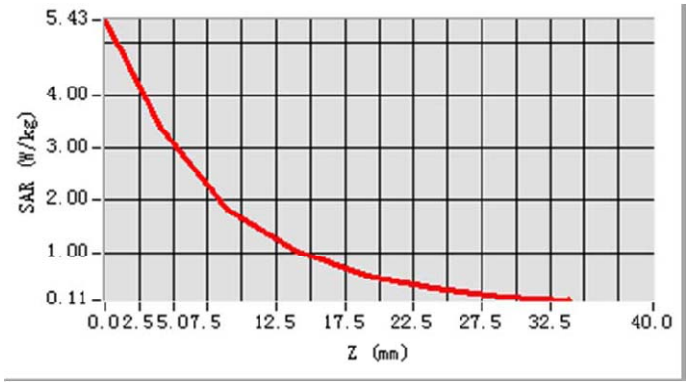
Frequency (MHz)	1900.000000
Relative permittivity (real part)	53.103586
Conductivity (S/m)	1.532437
Power drift (%)	0.280000
Ambient Temperature:	22.9°C
Liquid Temperature:	22.1°C
ConvF:	5.53
Crest factor:	1:1

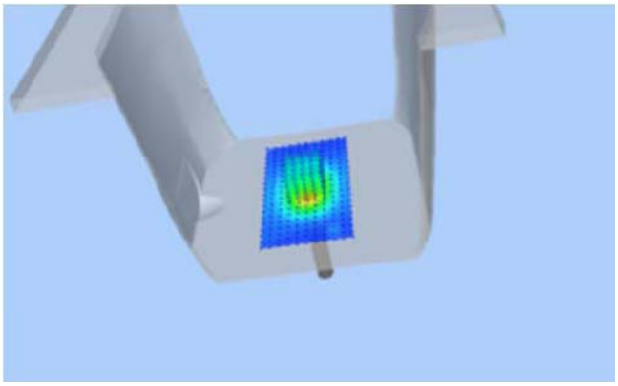
SURFACE SAR	VOLUME SAR
	

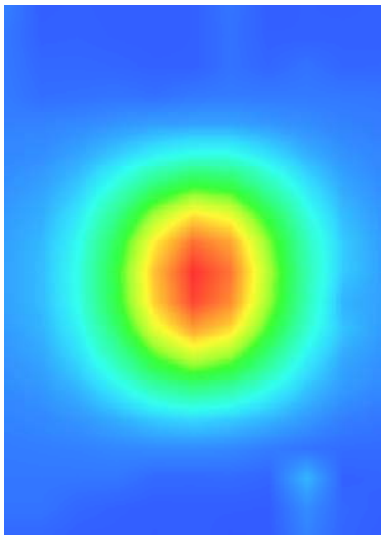
Maximum location: X=2.00, Y=2.00

SAR 10g (W/Kg)	1.972312
SAR 1g (W/Kg)	4.187587

Z Axis Scan

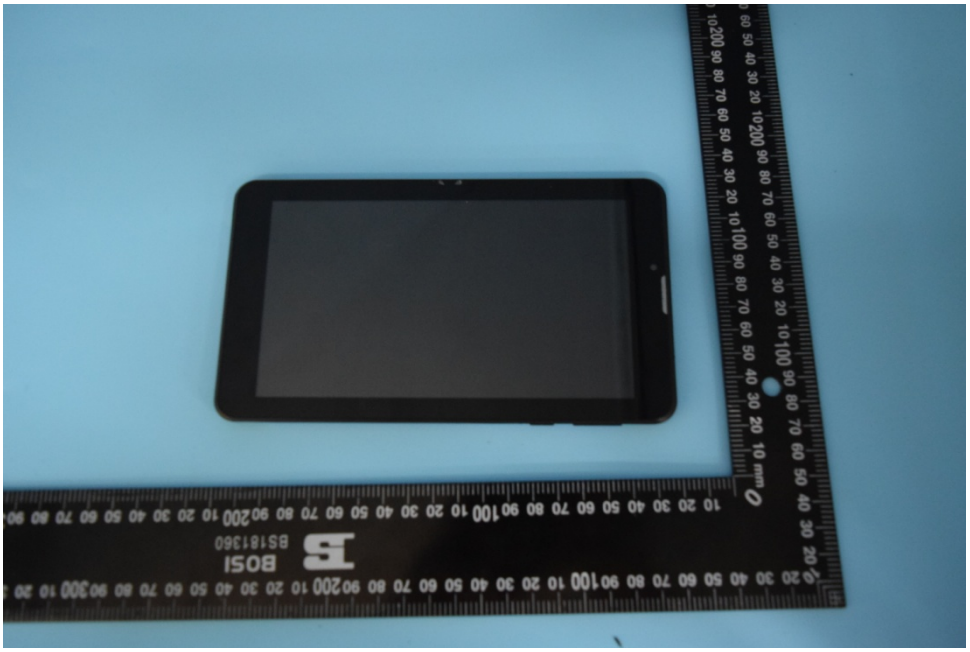


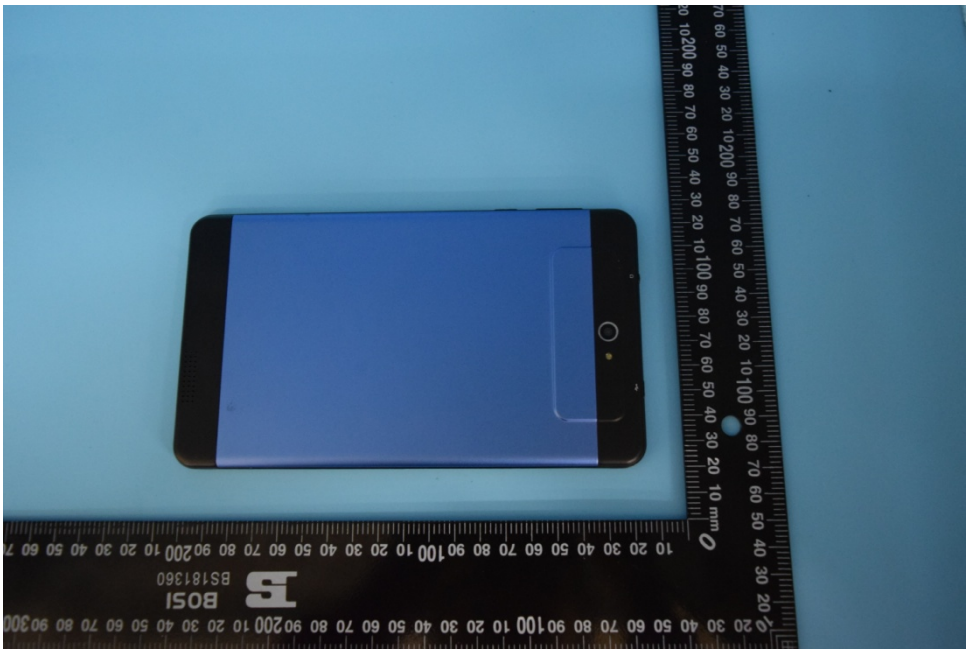




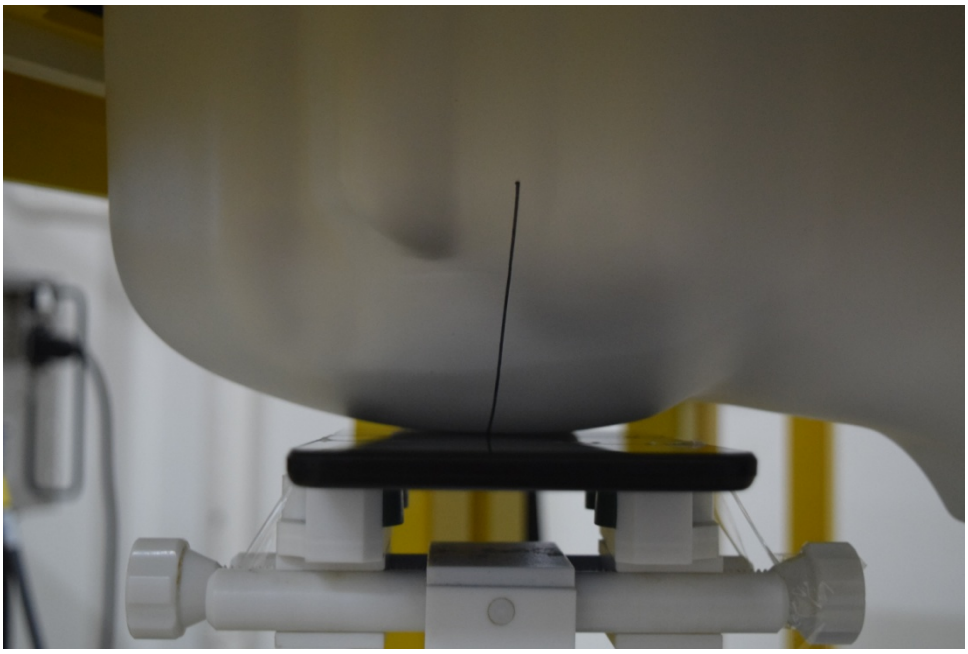
ANNEX D PHOTOS

1. External Photo

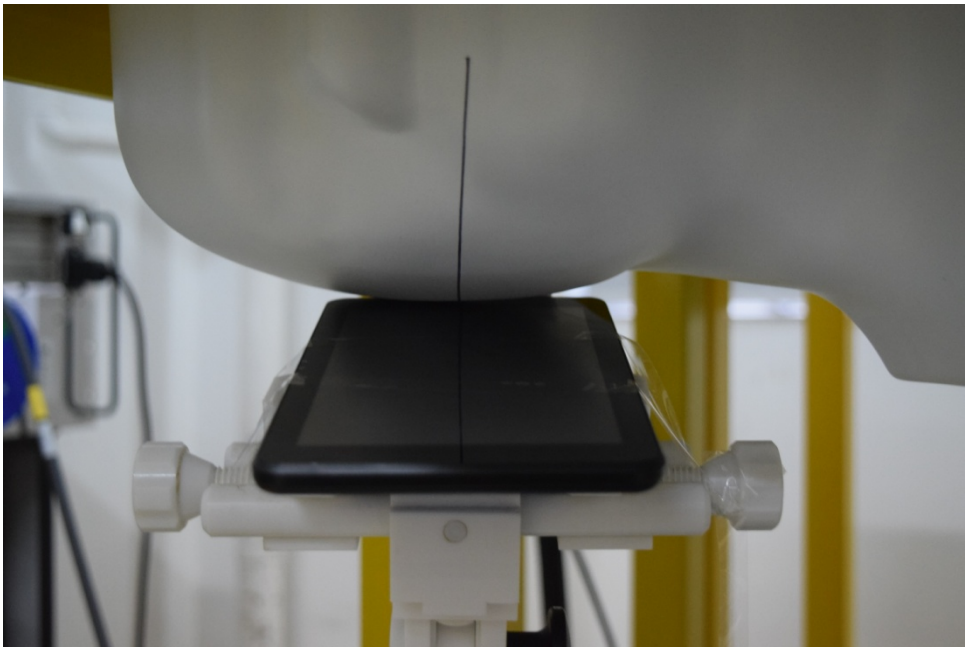




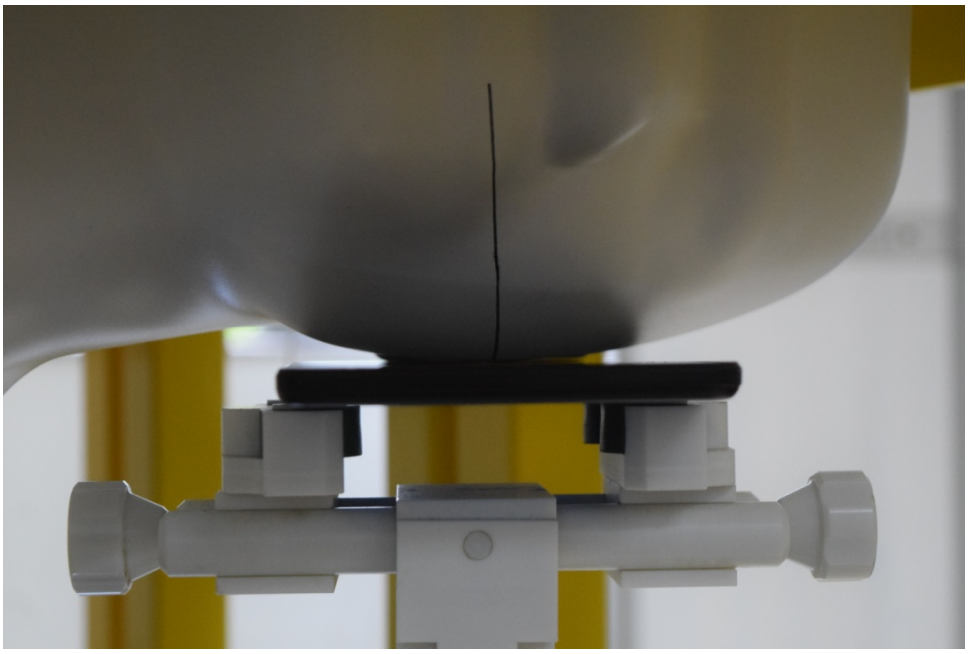
2. EUT Right Head Touch Cheek Position



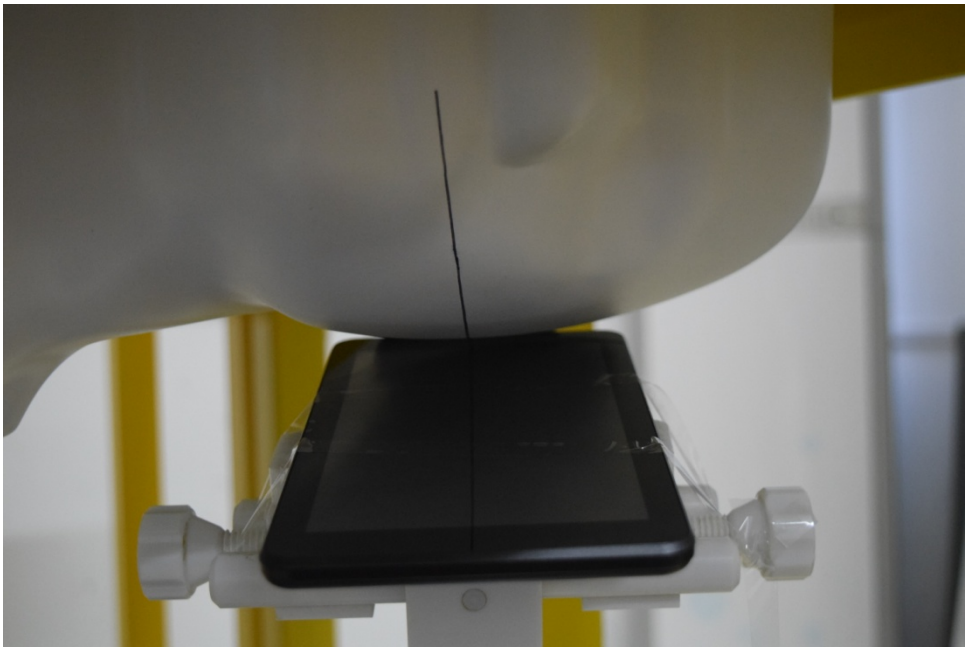
3. EUT Right Head Tilt15 Position



3 EUT Left Head Touch Cheek Position

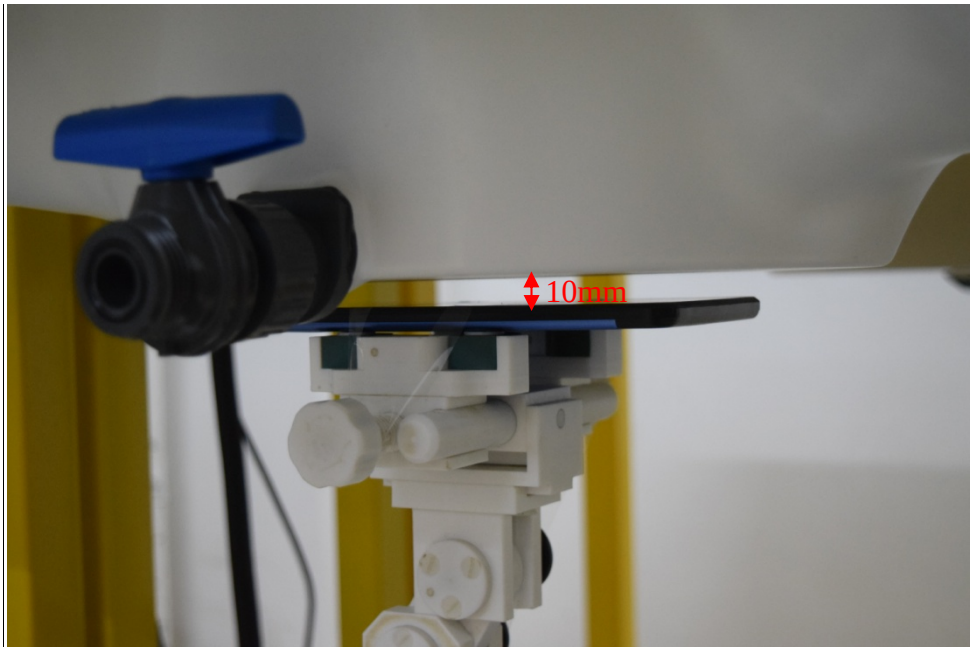


4 EUT Left Head Tilt15 Position

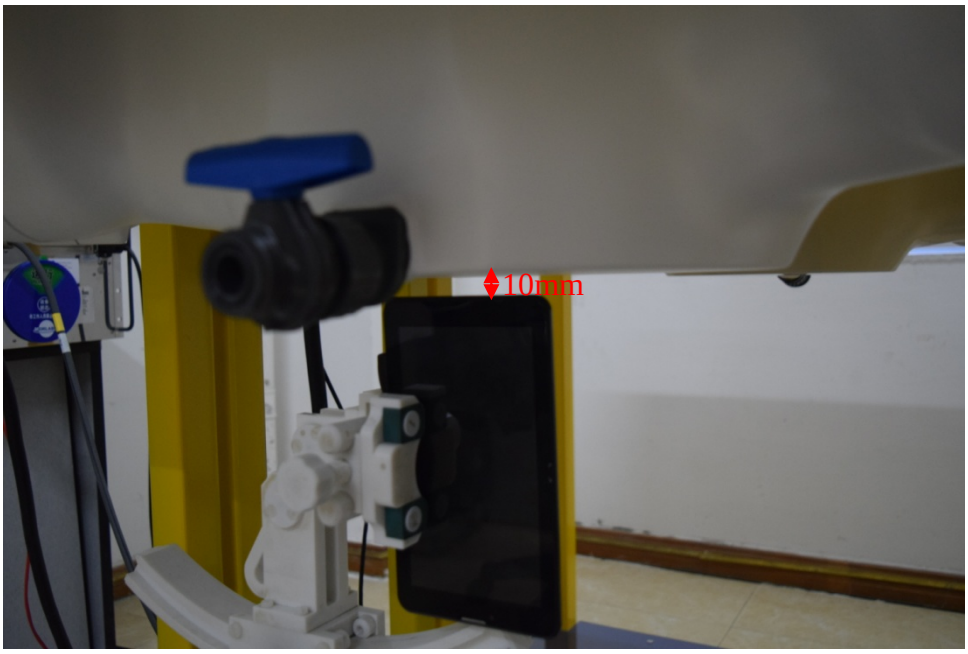


5 Back Side Position

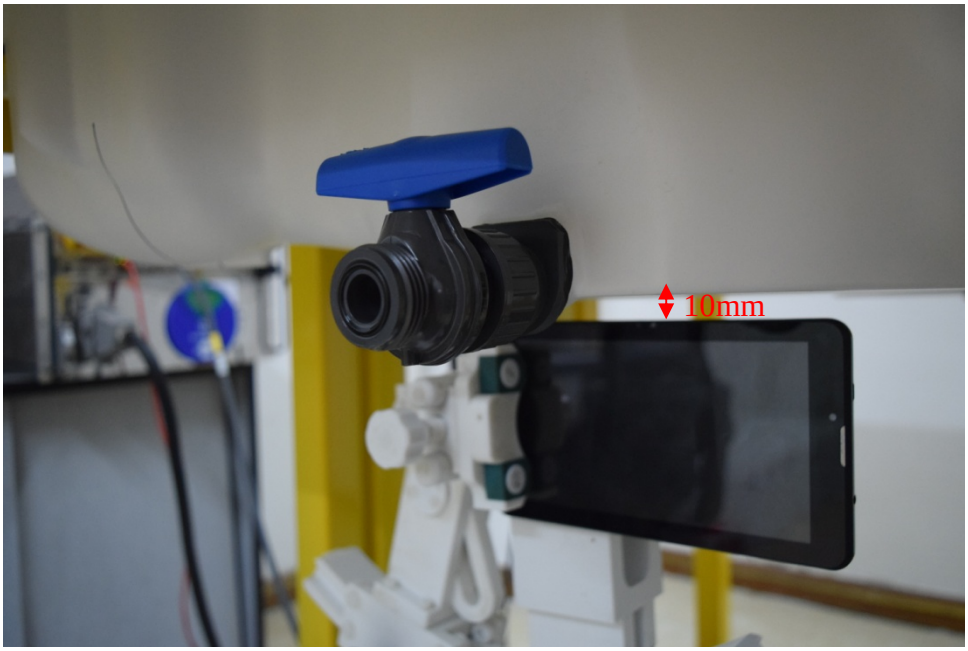
6 Front Side Position



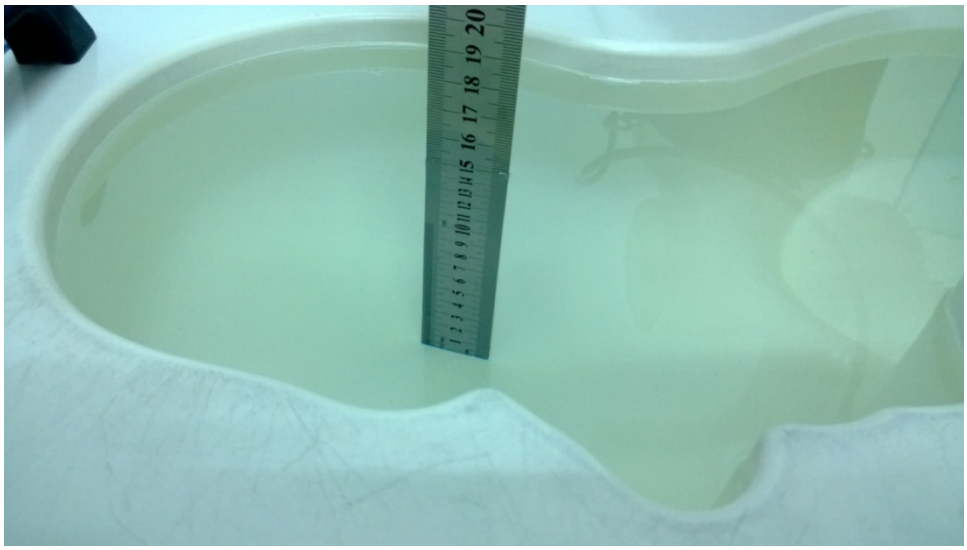
7. Edge A



8. Edge D



Liquid Level Photo Head Liquid



Liquid depth: 15.1cm

Liquid Level Photo Body Liquid

Liquid depth :15.5cm

***** END OF REPORT *****