Report No.: SZ11060109S02

SAR TEST REPORT

Issued to

S.F. EXPRESS GROUP CO., LTD.

For

Handheld Terminal

Model Name	:	HHT4GR
Trade Name	:	HHT4GR
Brand Name	:	SF
FCC ID	:	ZZQHHT4GR
Standard	:	FCC Oet65 Supplement C Jun.2001
	:	47CFR 2.1093
		ANSI C95.1-1999
		IEEE 1528-2003
MAX SAR	:	Body: 0.436W/kg
Test date	:	Aug. 23, 2011
Issue date	:	Oct. 13, 2011

by

Shenzhen MORLAB Communication Technology Co., Ltd.

Tested by	Samuel Peng	*Approved by*	Zeng Dexin	*Review by*	Li Lei
Date	2011.10.13	*Date*	2011.10.13	*Date*	2011.10.13

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DIRECTORY

Change History		
Issue	Date	Reason for change
1.0	Aug. 26, 2011	First edition
1.1	Oct. 13, 2011	Add HSDPA SAR test configuration.

1. Testing Laboratory

1.1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	3/F, Electronic Testing Building, Shahe Road, Nanshan District, Shenzhen, 518055 P. R. China
Responsible Test Lab Manager:	Mr. Shu Luan
Telephone:	+86 755 86130268
Facsimile:	+86 755 86130218

1.2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	3/F, Electronic Testing Building, Shahe Road, Nanshan District, Shenzhen, 518055 P. R. China

1.3. Accreditation Certificate

Accredited Testing Laboratory:	No. CNAS L3572

1.4. 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	Rohde&Schwarz (CMU200, SN:105894)	2011-9-26	1year
3	Voltmeter	Keithley (2000, SN:1000572)	2011-9-24	1year
4	Synthetizer	Rohde&Schwarz (SML_03, SN:101868)	2011-9-24	1year
5	Amplifier	Nucl udes (ALB216, SN:10800)	2011-9-24	1year
6	Power Meter	Rohde&Schwarz (NRVD, SN:101066)	2011-9-24	1year
7	Probe	Satimo (SN:SN_3708_EP80)	2011-9-24	1year
8	Phantom	Satimo (SN:SN_36_08_SAM62)	2011-9-24	1year
9	Liquid	Satimo (Last Calibration: 2011-10-13)	N/A	N.A
10	Dipole 835MHz	Satimo (SN 36/08 DIPC 99)	2011-9-24	1year
11	Dipole 1900MHz	Satimo (SN 36/08 DIPF 102)	2011-9-24	1year
11	Dipole 2450MHz	Satimo (SN 36/08 DIPF 103)	2011-9-24	1year

2. Technical Information

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

2.1. Identification of Applicant

Company Name:	S.F. EXPRESS GROUP CO., LTD
Address:	9-11/F、14-20F, Wanji Business Building， Fuhua Avenue, Futian District , Shenzhen, P.R. China

2.2. Identification of Manufacturer

Company Name:	QI NENG WAN WEI（Beijing）Co.,Ltd.
Address:	No.2203, Unit 4, Building 7, No.9 Shuanghuayuan nanli, Chaoyang Dist Beijing.

2.3. Equipment Under Test (EUT)

Brand Name:	SF
Type Name:	HHT4GR
Model Name:	HHT4GR
Hardware Version:	HHT4GR-MB-P2
Software Version:	4GR_V1.0.6_110622MP
Frequency Bands:	WCMDA 850MHz WCMDA 1900MHz WIFI 2412MHz-2472MHz
Modulation Mode:	WCDMA : QPSK; HSDPA : QPSK / 16QAM; WIFI 802.11B: DSSS WIFI 802.11G: OFDM
Multislot Class	GPRS: N/A EDGE: N/A
Antenna type:	Fixed Internal Antenna
Development Stage:	Identical prototype
Battery Model:	SF-HHT4GR
Battery specification:	3000mAh 3.7V

2.3.1. Photographs of the EUT

Please see for photographs of the EUT.

2.3.2. 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#	HHT4GR-MB-P2	4GR_V1.0.6_110622MP

2.4. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	**47 CFR § 2. 1093**	Radiofrequency Radiation Exposure Evaluation: Portable Devices
2	**FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01)**	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
3	**ANSI C95.1-1999**	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300 GHz
4	**IEEE 1528-2003**	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techuiques.

2.5. Device Category and SAR Limits

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.

2.6. Test Environment/Conditions

Normal Temperature (NT):	20 ... 25 °C
Relative Humidity:	30 ... 75 %
Air Pressure:	980 ... 1020 hPa
Test frequency:	WCDMA 850MHz
	WCDMA 1900MHz
	WIFI: 2412MHz-2472MHz
Operation mode:	Call established
Power Level:	WCDMA Maximum output power
	WIFI Maximum output power

During SAR test, EUT is in Traffic Mode (Channel Allocated) at Normal Voltage Condition. A communication link is set up with a System Simulator (SS) by air link, and a call is established.
The Absolute Radio Frequency Channel Number (ARFCN) is allocated to 4132, 4182 and 4233 respectively in the case of WCDMA 850 and allocated at 9262, 9400， 9538 of WCDMA 1900. The EUT is commanded to operate at maximum transmitting power.
When perform WIFI SAR testing, the EUT was commanded to maximum output power transmitting.
The EUT shall use its internal transmitter. The antenna(s), battery and accessories shall be those specified by the manufacturer. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. If a wireless link is used, the antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the handset.
The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the handset by at least 35 dB.

3. Specific Absorption Rate (SAR)

3.1. 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 higher than the limits for general population/uncontrolled.

3.2. 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:

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

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

$$SAR = C\frac{\delta T}{\delta t}$$

, where C is the specific head capacity, δ T is the temperature rise and δ t the exposure duration, or related to the electrical field in the tissue by

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

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

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

4. SAR Measurement Setup

4.1. 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
- Head simulating tissue

The following figure shows the system.

The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 10g mass.

4.2. Probe

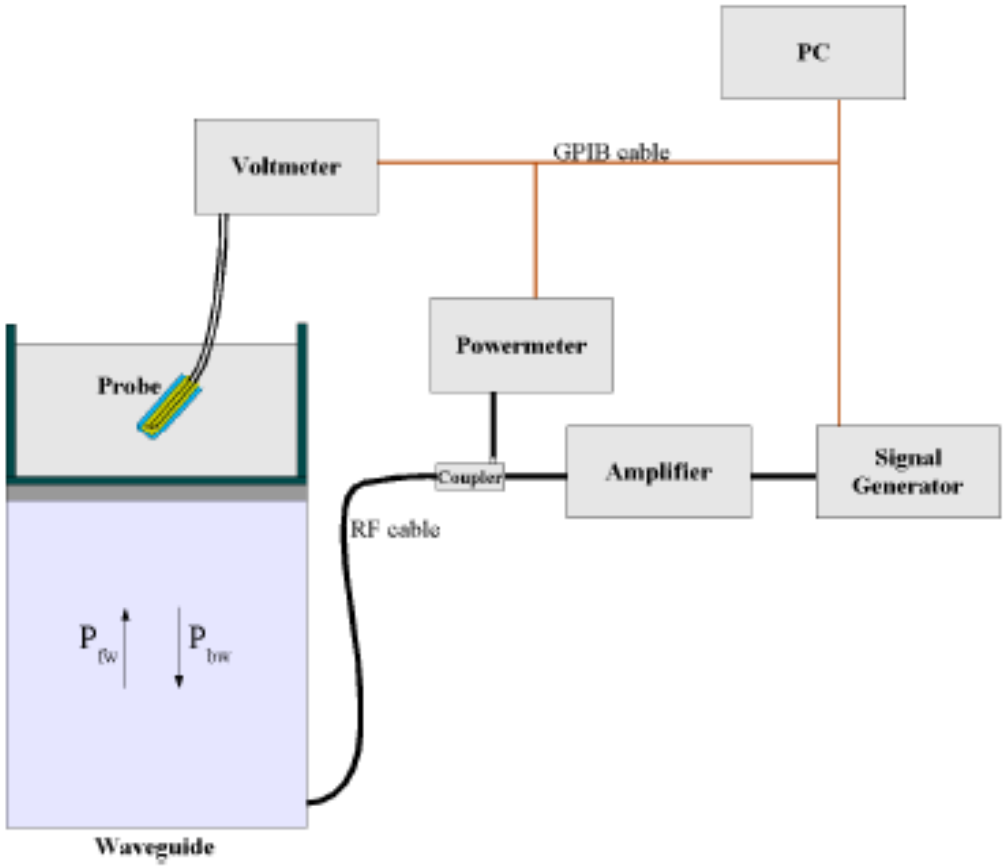
For the measurements the Specific Dosimetric E-Field Probe SN 37/08 EP80 with following specifications is used

- 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 head & body simulating liquid.

Angle between probe axis (evaluation axis) and suface normal line:1ess 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 annexe 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) (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)) (N=1,2,3)

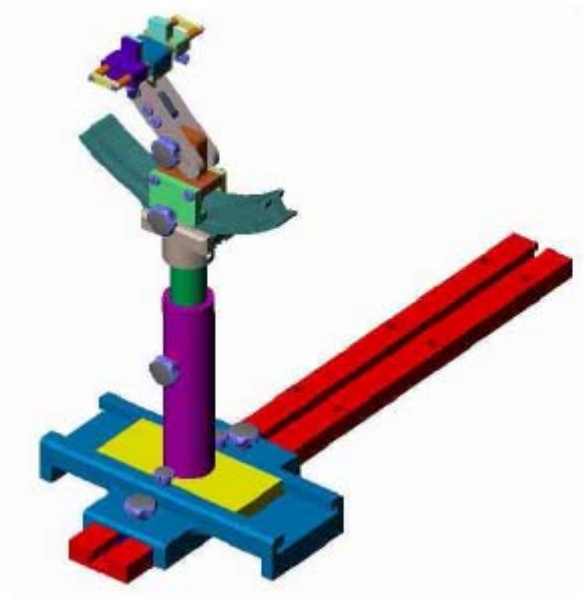
where DCP is the diode compression point in mV.

4.3. 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.

4.4. 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 lower than 1°.



Device holder

System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

5. Tissue Simulating Liquids

Simulant liquids that are used for testing at frequencies of 850MHz, 1900MHz and 2450MHz, which are made mainly of sugar, salt and water solutions may be left in the phantoms. Approximately 20litres are needed for an upright head compared to about 25 litres for a horizontal bath phantom. The liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is (head SAR)or from the flat phantom to the liquid top surface (body SAR) is 15cm.

Following is the recipes for one liter of body tissue simulating liquid for frequency band 850MHz, 1900 MHz and 2450 MHz.

Ingredients (% by weight)	Frequency Band	Frequency Band	Frequency Band
	850MHz	1900MHz	2450MHz
Tissue Type	Body	Body	Body
Water	52.4	40.4	73.2
Salt(NaCl)	1.4	0.5	0.04
Sugar	45.0	58.0	0.0
HEC	1.0	1.0	0.0
Bactericide	0.1	0.1	0.0
Triton	0.0	0.0	0.0
DGBE	0.0	0.0	26.7
Acticide SPX	0.0	0.0	0.0
Dielectric Constant	56.1	54.0	52.5
Conductivity (S/m)	0.95	1.45	1.78

Recipes for Tissue Simulating Liquid

The dielectric parameters of the 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 Body Tissue Simulating Liquid

Temperature: 23.0~23.8°C, humidity: 54~60%.			
/	**Frequency**	**Permittivity ε**	**Conductivity σ (S/m)**
Target value	835 MHz	55.2	0.97
Validation value (Oct. 13)	835 MHz	55.709999	1.009033
Target value	1900 MHz	53.3	1.52
Validation value (Oct. 13)	1900 MHz	52.548876	1.573978
Target value	2450 MHz	53.3	1.52
Validation value (Oct. 13)	2450 MHz	52.548876	1.573978

6. Uncertainty Assessment

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

6.1. UNCERTAINTY EVALUATION FOR HANDSET 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	7.0	N	1	1	1	7.00	7.00	
Axial Isotropy	E.2.2	2.5	R	√3			1.02	1.02	
Hemispherical Isotropy	E.2.2	4.0	R	√3			1.63	1.63	
Boundary effect	E.2.3	1.0	R	√3	1	1	0.58	0.58	
Linearity	E.2.4	5.0	R	√3	1	1	2.89	2.89	
System detection limits	E.2.5	1.0	R	√3	1	1	0.58	0.58	
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	
Reponse Time	E.2.7	3.0	R	√3	1	1	1.73	1.73	
Integration Time	E.2.8	2.0	R	√3	1	1	1.15	1.15	
RF ambient Conditions	E.6.1	3.0	R	√3	1	1	1.73	1.73	
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	√3	1	1	1.15	1.15	
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	√3	1	1	0.03	0.03	
Extrapolation, interpolation and integration Algoritms for Max. SAR Evaluation	E.5.2	5.0	R	√3	1	1	2.89	2.89	
Test sample Related									
Test sample positioning	E.4.2.1	0.03	N	1	1	1	0.03	0.03	N-1
Device Holder Uncertainty	E.4.1.1	5.00	N	1	1	1	5.00	5.00	
Output power Power Drift - SAR drift measurement	6.6.2	4.04	R	√3	1	1	2.33	2.33	
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	√3	1	1	0.03	0.03	
Liquid conductivity - deviation	E.3.2	4.57	R	√3	0.64	0.43	1.69	1.13	

from target value									
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	√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				11.23	10.70	
Expanded Uncertainty (95% Confidence interval)			k				21.91	20.86	

6.2. 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 (+-%)	V i
Measurement System									
Probe calibration	E.2.1	7.0	N	1	1	1	7.00	7.00	
Axial Isotropy	E.2.2	2.5	R	√3			1.02	1.02	
Hemispherical Isotropy	E.2.2	4.0	R	√3			1.63	1.63	
Boundary effect	E.2.3	1.0	R	√3	1	1	0.58	0.58	
Linearity	E.2.4	5.0	R	√3	1	1	2.89	2.89	
System detection limits	E.2.5	1.0	R	√3	1	1	0.58	0.58	
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	
Reponse Time	E.2.7	3.0	R	√3	1	1	1.73	1.73	
Integration Time	E.2.8	2.0	R	√3	1	1	1.15	1.15	
RF ambient Conditions	E.6.1	3.0	R	√3	1	1	1.73	1.73	
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	√3	1	1	1.15	1.15	
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	√3	1	1	0.03	0.03	
Extrapolation, interpolation and integration Algoritms for Max. SAR Evaluation	E.5.2	5.0	R	√3	1	1	2.89	2.89	
Dipole									
Dipole axis to liquid Distance	8,E.4.2	1.00	N	√3	1	1	0.58	0.58	N -1

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	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				10.08	9.47	
Expanded Uncertainty (95% Confidence interval)			k				19.65	18.47	

7. SAR Measurement Evaluation

7.1. 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 at frequency 835 MHz and 1900 MHz. 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.

Equipments :

name	Type and specification
Signal generator	E4433B
Directional coupler	450MHz-3GHz
Amplifier	3W 502(10-2500MHz)
Reference dipole	850MHz:SN 36/08 DIPF 99 1900MHz:SN 36/08 DIPF 102 2450MHz:SN 36/08 DIPF 103

7.2. Validation Results

Comparing to the original SAR value provided by SPEAG, the validation data should be within its specification of 10 %.

Cal. On Aug.23, 2011

Frequency	835MHz	1900MHz	2450MHz
Target value（1g）	9.2 W/Kg	39.7 W/Kg	52.4 W/Kg
250 mW input power	2.478 W/Kg	9.556 W/Kg	12.899 W/Kg
Test value（1g）	9.912 W/Kg	38.224 W/Kg	51.596 W/Kg

Cal. On Aug.23, 2011

Frequency	835MHz	1900MHz
Target value（1g）	9.2 W/Kg	39.7 W/Kg
250 mW input power	2.383 W/Kg	9.066 W/Kg
Test value（1g）	9.532 W/Kg	36.264 W/Kg

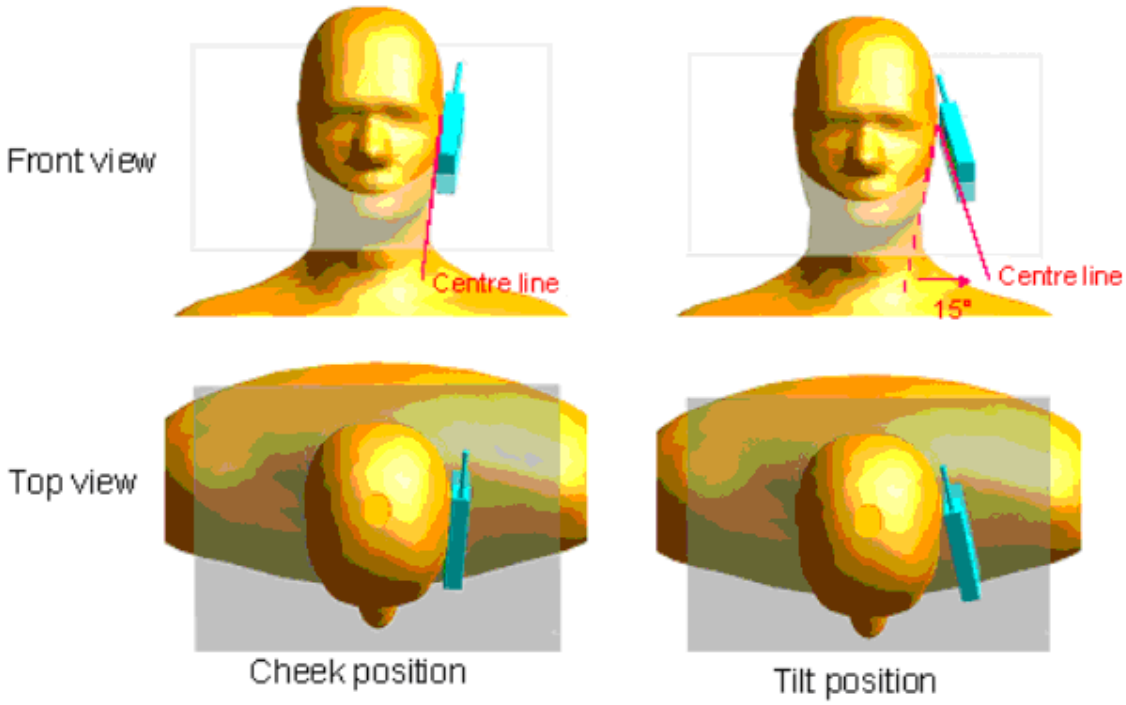
Note: System checks the specific test data please see page 79-88.

8. Operational Conditions During Test

8.1. Informations on the testing

The mobile phone antenna and battery are those specified by the manufacturer. The battery is fully charged before each measurement. The output power and frequency are controlled using a base station simulator. The mobile phone is set to transmit at its highest output peak power level.

The mobile phone is test in the “cheek” and “tilted” positions on the left and right sides of the phantom. The mobile phone is placed with the vertical centre line of the body of the mobile phone and the horizontal line crossing the centre of the earpiece in a plane parallel to the sagittal plane of the phantom.



Description of the “cheek” position:
The mobile phone is well placed in the reference plane and the earpiece is in contact with the ear. Then the mobile phone is moved until any point on the front side get in contact with the cheek of the phantom or until contact with the ear is lost.

Description of the “tilted” position:
The mobile phone is well placed in the “cheek” position as described above. Then the mobile phone is moved outward away from the month by an angle of 15 degrees or until contact with the ear lost.

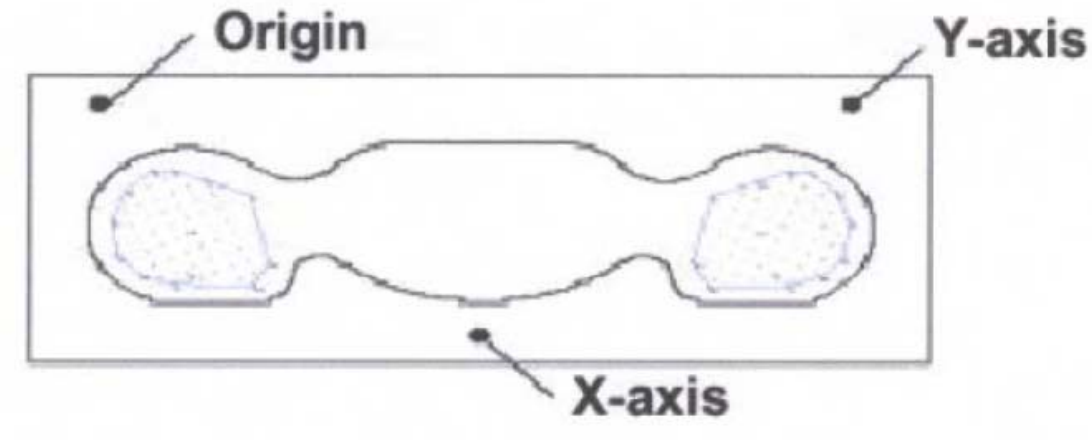
Remark: Please refer to Appendix B for the test setup photos.

8.2. 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.

The depth of the body tissue was 15.1cm. The distance between the back of the device and the bottom of the flat phantom is 1.5cm(taking into account of the IEEE 1528 and the place of the antenna)

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.



SAR Measurement Points in Area Scan

8.3. Measurement procedure

The following steps are used for each test position

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

8.4. 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.

9. 3G MEASUREMENT PROCEDURES

9.1. Procedures Used To Establish Test Signal

The handset was placed into a simulated call using a base station simulator in a shielded chamber. Such test signals offer a consistent means for testing SAR and are recommended for evaluating SAR. SAR measurements were taken with a fully charged battery. In order to verify that the device was tested and maintained at full power, this was configured with the base station simulator. The SAR measurement software calculates a reference point at the start and end of the test to check for power drifts. If conducted power deviations of more then 5% occurred, the tests were repeated.

9.2. SAR Measurement Conditions for WCDMA

These procedures were followed according to FCC KDB 941225, October, 2007.

9.3. WCDMA Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC(transmit power control) set to all "1s". Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes) should be tabulated in the test report. All configurations that are not supported by the EUT or cannot be measured due to technical or equipment limitations should be clearly identified.

ltem	band	WCDMA 850			WCDMA 1900		
	ARFCN	4132	4175	4233	9262	9400	9538
	subtest						
5.2(WCDMA)	non	24.39	25.52	24.56	24.40	24.16	25.31
5.2A(HSDPA)	1	24.37	25.32	24.38	24.21	24.14	25.22
	2	24.23	25.25	24.26	24.33	24.07	25.18
	3	24.19	25.11	24.22	24.10	24.04	25.10
	4	24.14	25.13	24.13	24.11	24.00	25.08

9.4. WIFI Measurement Peak Power.

WIFI peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)	
			802.11B (DSSS)	802.11G (OFDM)
WiFi	1	2412	11.74	1.82
	6	2437	11.81	1.86
	11	2462	11.76	1.57

10. Test Results List

Summary of Measurement Results (WCDMA 850 Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g value		
			Device Test channel		
			Channel 4132	Channel 4182	Channel 4233
WCDMA	Back upward	Internal	0.375	0.435	0.419
	Face Upward	Internal	0.142	0.371	0.216
HSDPA	Back upward	Internal	0.307	0.406	0.318
	Face Upward	Internal	0.195	0.214	0.247

Summary of Measurement Results (WCDMA 1900 Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g value		
			Device Test channel		
			Channel 9262	Channel 9400	Channel 9538
WCDMA	Back upward	Internal	0.436	0.273	0.293
	Face Upward	Internal	0.112	0.113	0.156
HSDPA	Back upward	Internal	0.239	0.248	0.269
	Face Upward	Internal	0.175	0.183	0.135

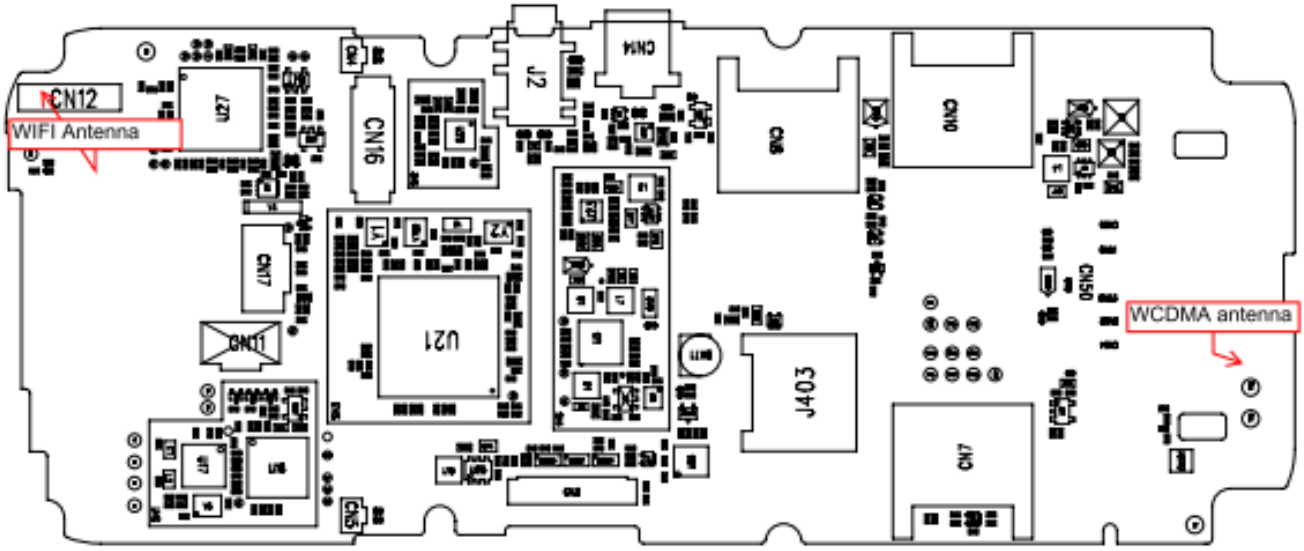
Summary of Measurement Results (WIFI 802.11B)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g value		
			Device Test channel		
			Channel 1	Channel 6	Channel 11
802.11B	Back upward	Internal	/	0.133	/
	Face Upward	Internal	/	0.044	/

Note: Refer 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.

11.Multiple Transmitters Evaluation

The are two transmitters build in EUT, WCDMA and WiFi, As follwing :



1. The Wifi mode Max. 1-g SAR vauel is 0.133W/Kg, and the CDMA Max. 1-g SAR vauel is 0.436W/Kg, the sum of 1-g SAR vauel is 0.549W/Kg less than 1.6W/Kg, according with KDB 648474 D01, when the sum of the 1-g SAR is <1.6 W/kg for all simultaneous transmitting antennas , and the Simultaneous Transmission SAR is not required.

Annex A Photographs of the EUT

1 EUT Keyboard Upward

2 EUT Back Upward

Liquid Level Photo

Annex C Graph Test Results

BAND	PARAMETERS
WCDMA 850	Measurement 1: Validation Plane with Body device position on Low Channel in WCDMA mode Measurement 2Validation Plane with Body device position on Low Channel in WCDMA mode Measurement 3: Validation Plane with Body device position on Middle Channel in WCDMA mode Measurement 4: Validation Plane with Body device position on Middle Channel in WCDMA mode Measurement 5: Validation Plane with Body device position on High Channel in WCDMA mode_ Measurement 6: Validation Plane with Body device position on High Channel in WCDMA mode
HSDPA 850	Measurement 7: Validation Plane with Body device position on Low Channel in HSDPA mode Measurement 8Validation Plane with Body device position on Low Channel in HSDPA mode Measurement 9: Validation Plane with Body device position on Middle Channel in HSDPA mode Measurement 10: Validation Plane with Body device position on Middle Channel in HSDPA mode Measurement 11: Validation Plane with Body device position on High Channel in HSDPA mode_ Measurement 12: Validation Plane with Body device position on High Channel in HSDPA mode
WCDMA 1900	Measurement 13: Validation Plane with Body device position on Low Channel in WCDMA mode Measurement 14Validation Plane with Body device position on Low Channel in WCDMA mode Measurement 15: Validation Plane with Body device position on Middle Channel in WCDMA mode Measurement 16: Validation Plane with Body device position on Middle Channel in WCDMA mode Measurement 17: Validation Plane with Body device position on High Channel in WCDMA mode_ Measurement 18: Validation Plane with Body device position on High Channel in WCDMA mode
HSDPA 1900	Measurement 19: Validation Plane with Body device position on Low Channel in HSDPA mode Measurement 20Validation Plane with Body device position on Low Channel in HSDPA mode

	Measurement 21: Validation Plane with Body device position on Middle Channel in HSDPA mode Measurement 22: Validation Plane with Body device position on Middle Channel in HSDPA mode Measurement 23: Validation Plane with Body device position on High Channel in HSDPA mode\ Measurement 24: Validation Plane with Body device position on High Channel in HSDPA mode
WIFI 802.11B	Measurement 25: Validation Plane with Body device position on Middle Channel in DSSS mode Measurement 26: Validation Plane with Body device position on Middle Channel in DSSS mode

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: 23/8/2011
Measurement duration: 9 minutes 14 seconds

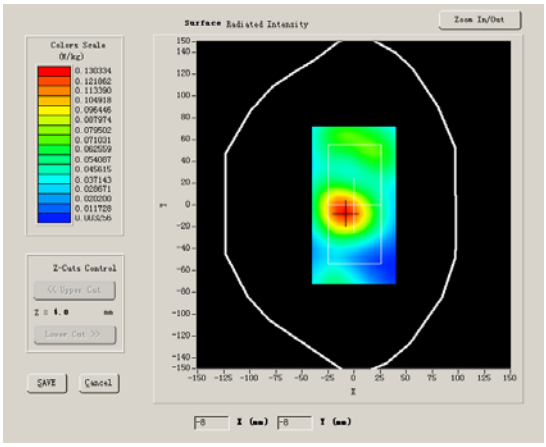
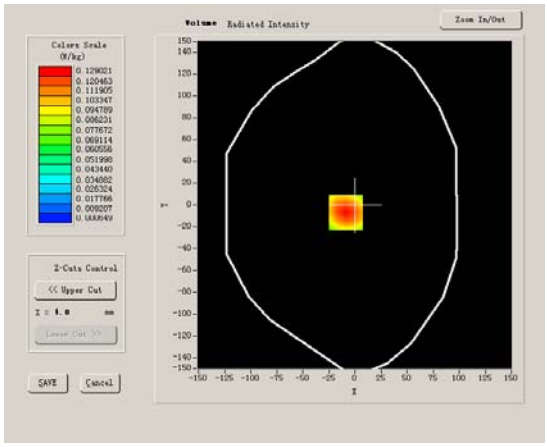
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 4132):

Frequency (MHz)	826.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	-3.820000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

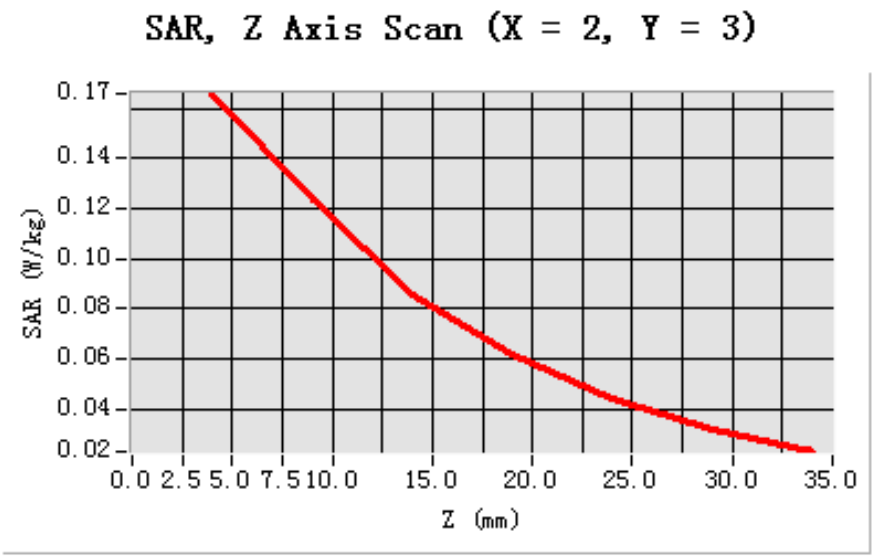
SURFACE SAR	VOLUME SAR
	

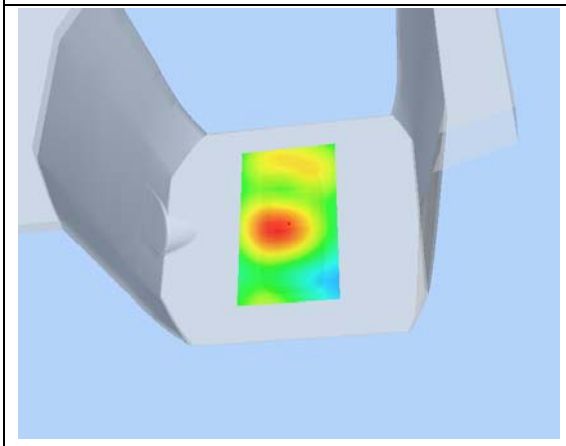
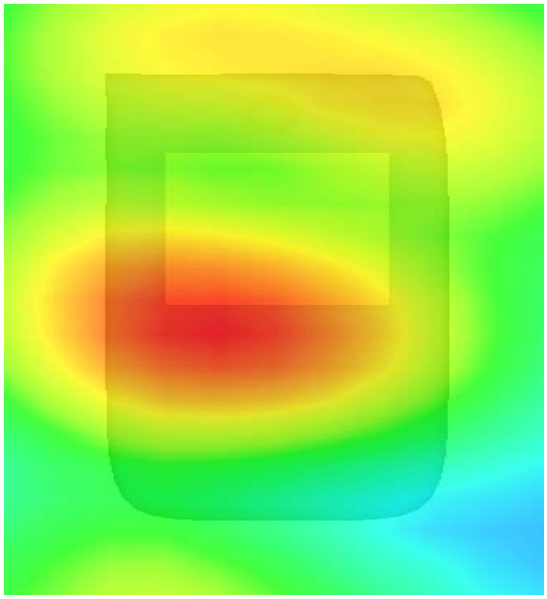
Maximum location: X=-9.00, Y=-7.00

SAR 10g (W/Kg)	0.076874
SAR 1g (W/Kg)	0.142423

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1655	0.0842	0.0446	0.0017	0.0011	0.0016



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 8 seconds

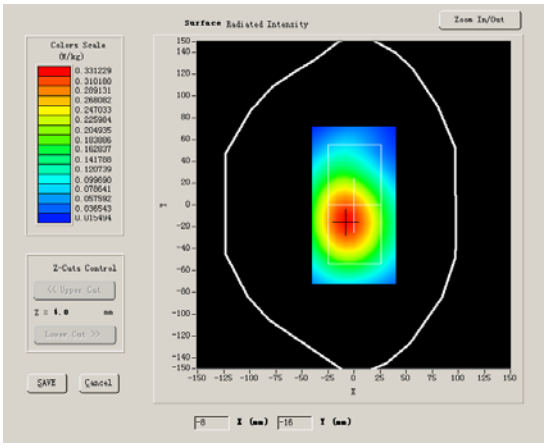
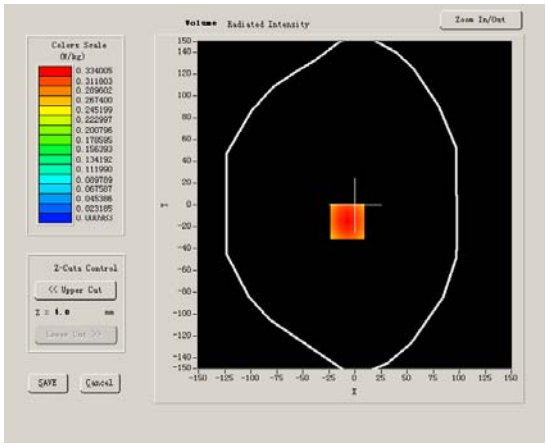
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 4132):

Frequency (MHz)	826.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	-1.369995
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

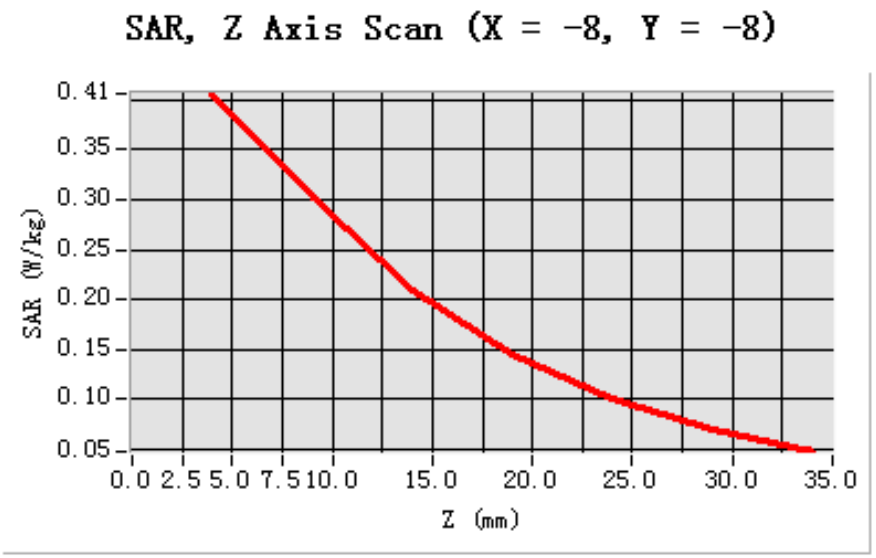
SURFACE SAR	VOLUME SAR
	

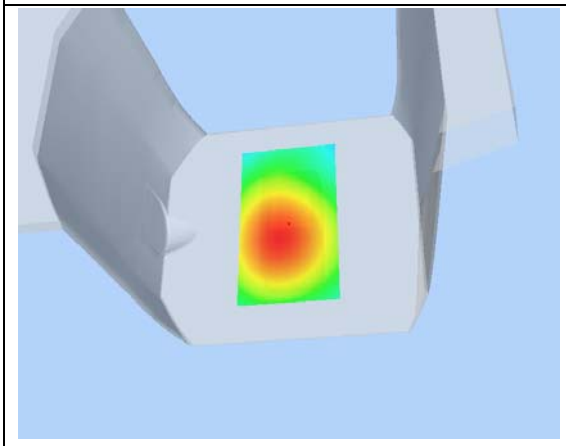
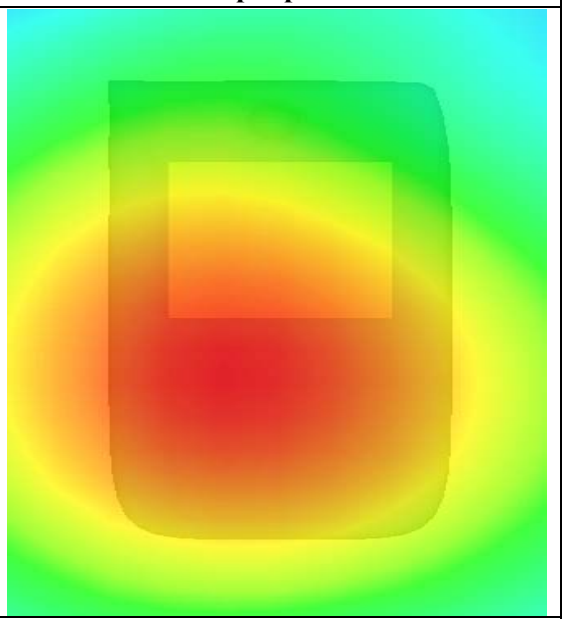
Maximum location: X=-7.00, Y=-15.00

SAR 10g (W/Kg)	0.265767
SAR 1g (W/Kg)	0.375243

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4027	0.2955	0.2199	0.1628	0.0015	0.0872



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 6 seconds

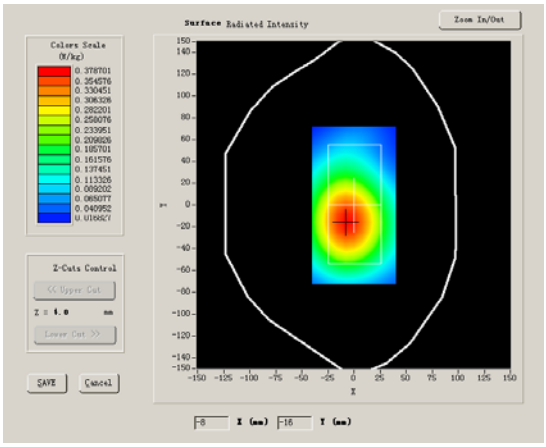
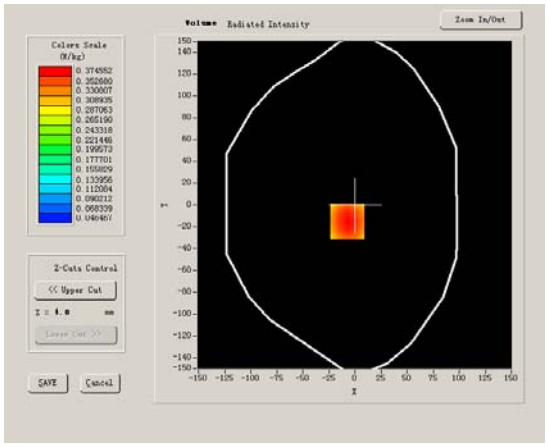
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	-0.560000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

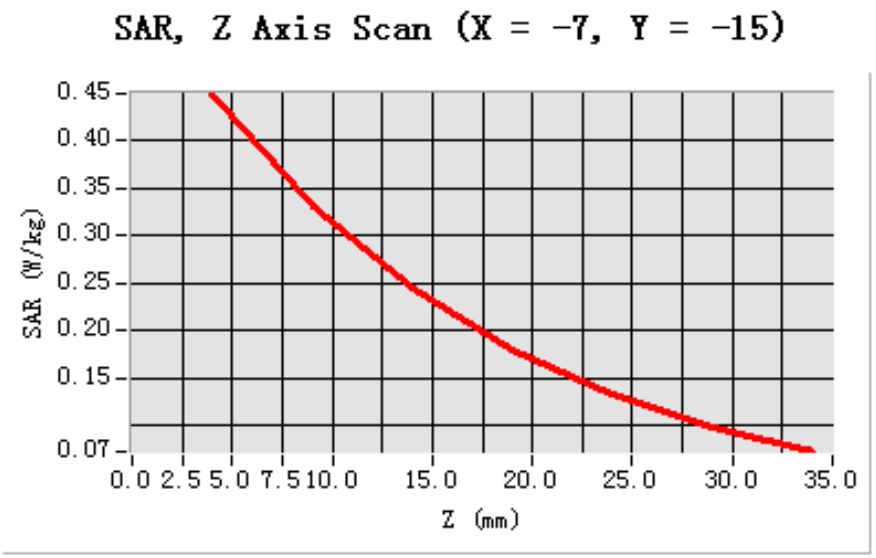
SURFACE SAR	VOLUME SAR
	

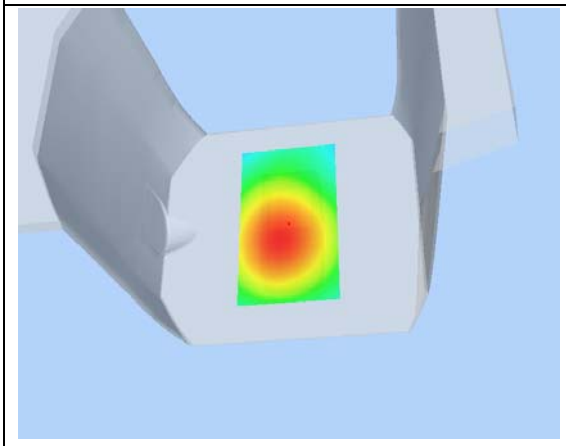
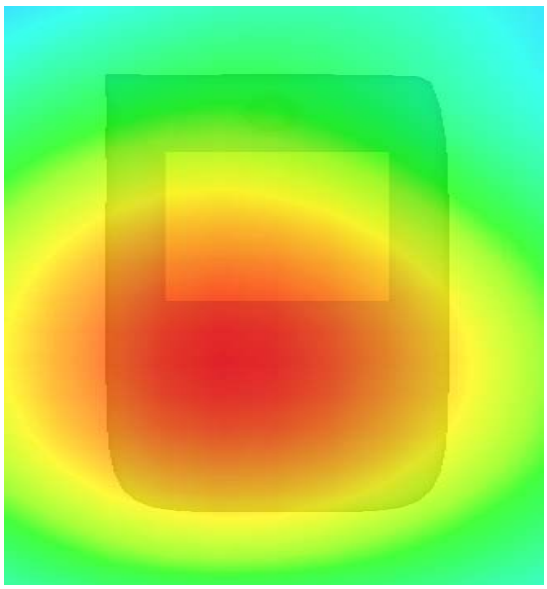
Maximum location: X=-7.00, Y=-15.00

SAR 10g (W/Kg)	0.311682
SAR 1g (W/Kg)	0.435497

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4495	0.3316	0.2438	0.1807	0.1329	0.0982



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 5 seconds

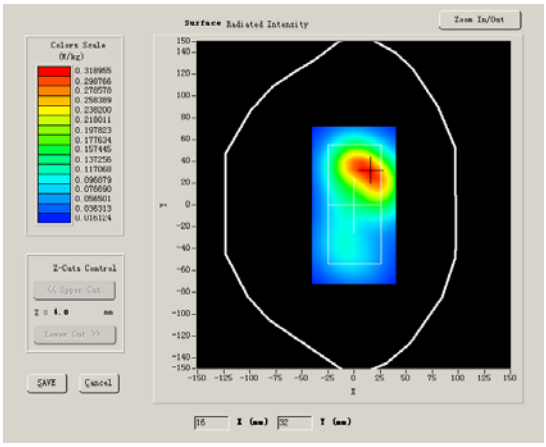
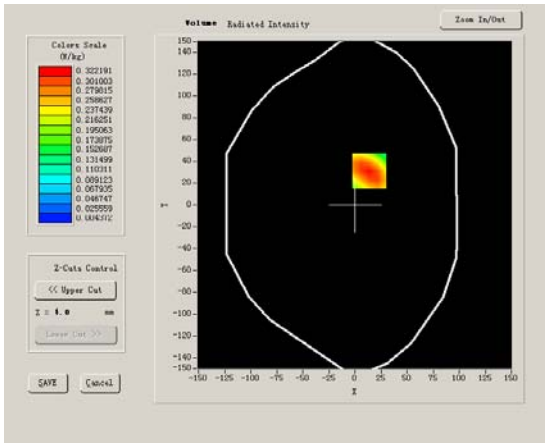
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	0.280000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

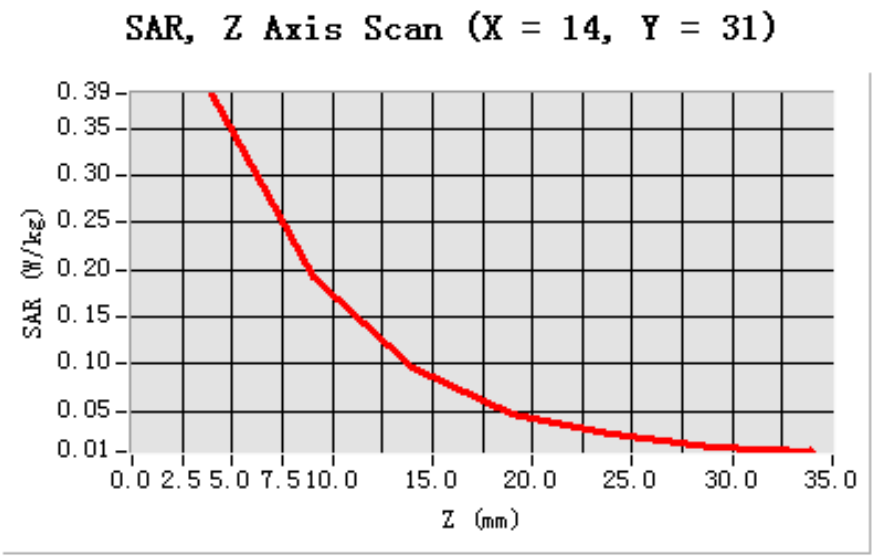
SURFACE SAR	VOLUME SAR
	

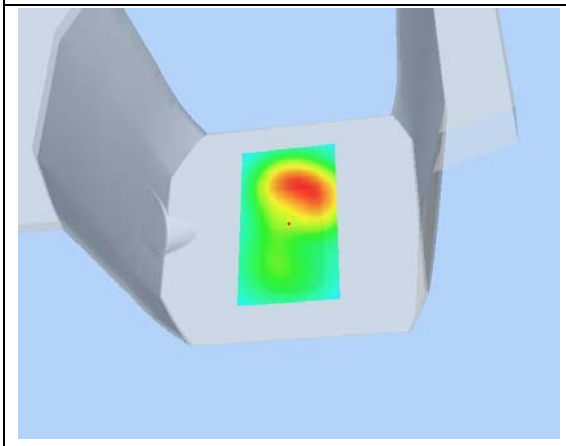
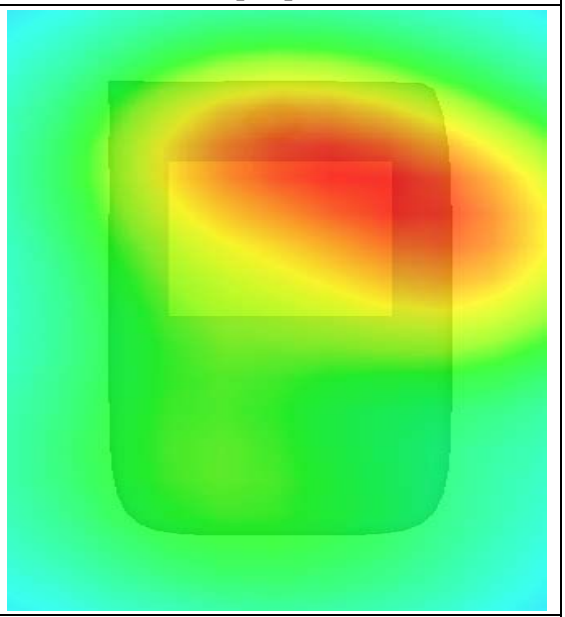
Maximum location: X=14.00, Y=31.00

SAR 10g (W/Kg)	0.201177
SAR 1g (W/Kg)	0.371007

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3867	0.1928	0.0961	0.0483	0.0257	0.0133



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 9 seconds

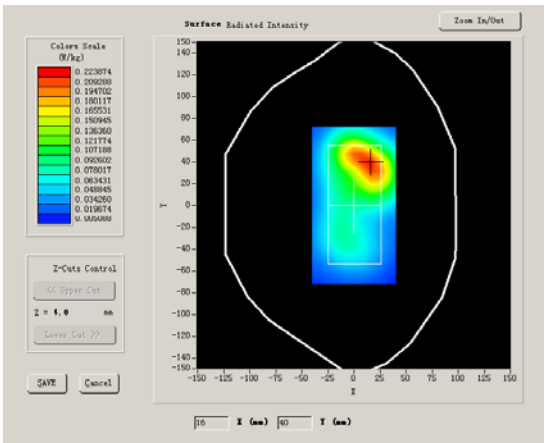
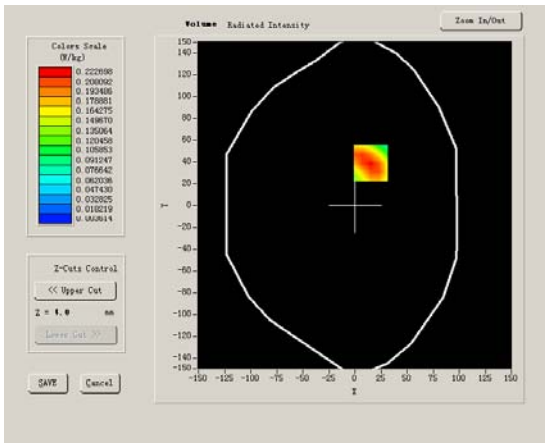
A. Experimental conditions

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850
Channels	High
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4233):

Frequency (MHz)	836.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	0.280000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

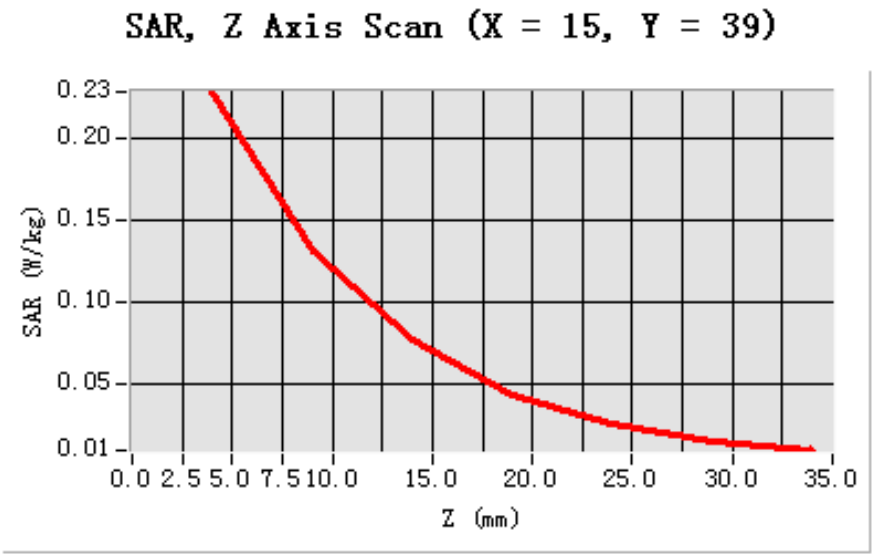
SURFACE SAR	VOLUME SAR
	

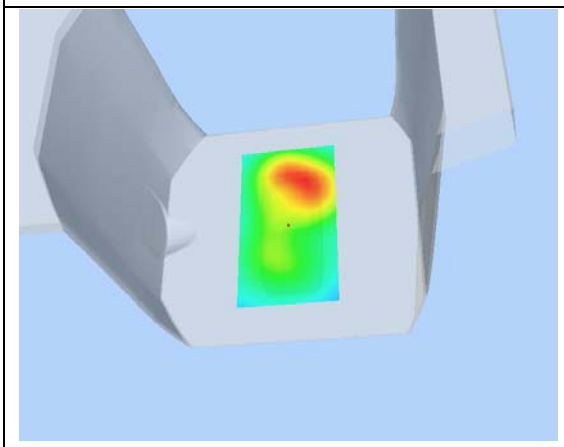
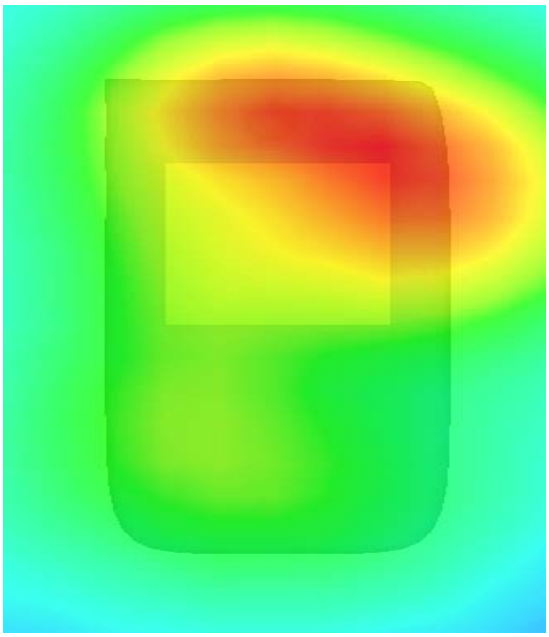
Maximum location: X=15.00, Y=39.00

SAR 10g (W/Kg)	0.126936
SAR 1g (W/Kg)	0.216561

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2279	0.1310	0.0773	0.0440	0.0265	0.0159



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 8 seconds

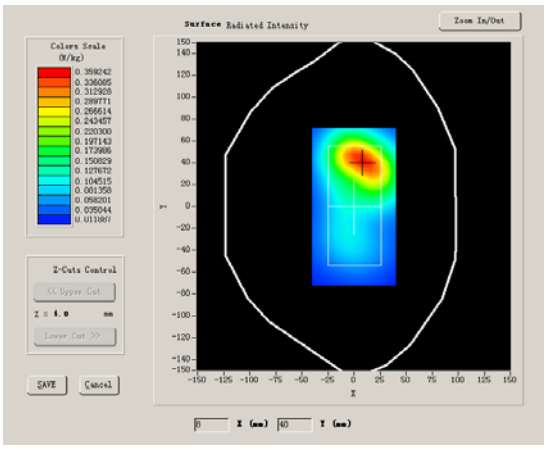
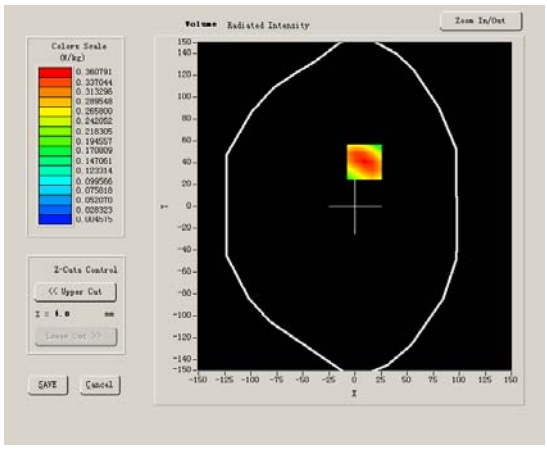
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850
Channels	High
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 4233):

Frequency (MHz)	836.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	-0.030000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

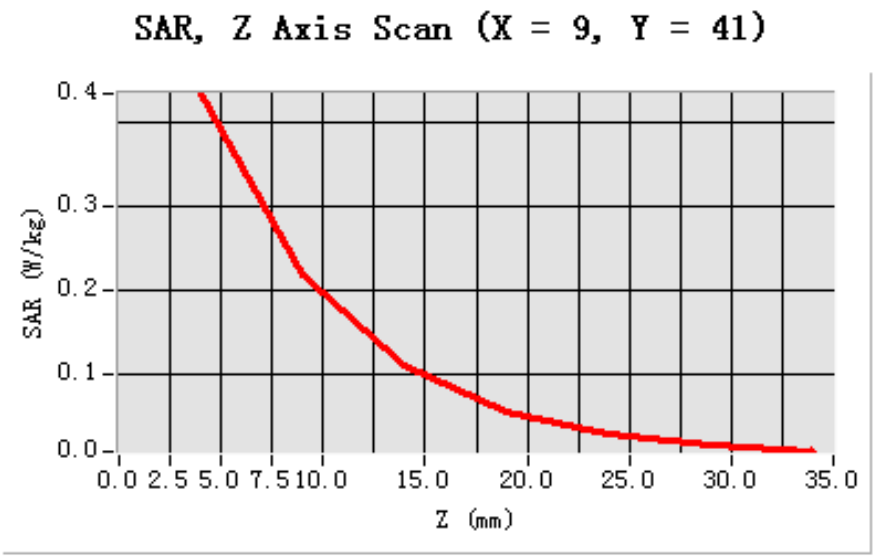
SURFACE SAR	VOLUME SAR
	

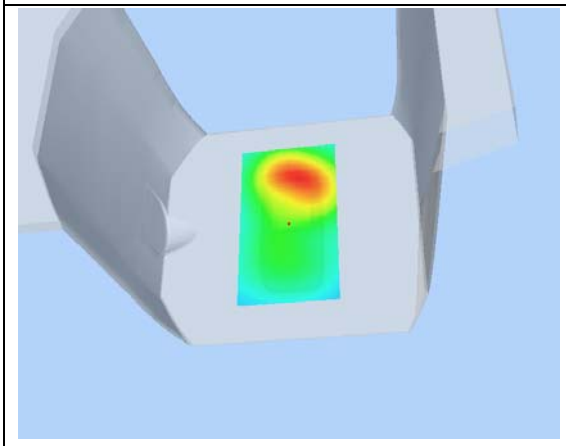
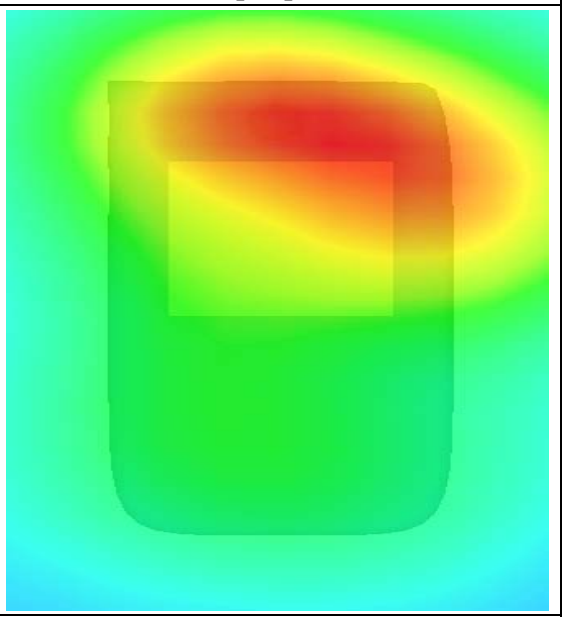
Maximum location: X=9.00, Y=41.00

SAR 10g (W/Kg)	0.226261
SAR 1g (W/Kg)	0.419220

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4350	0.2181	0.1097	0.0554	0.0283	0.0147



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 7 seconds

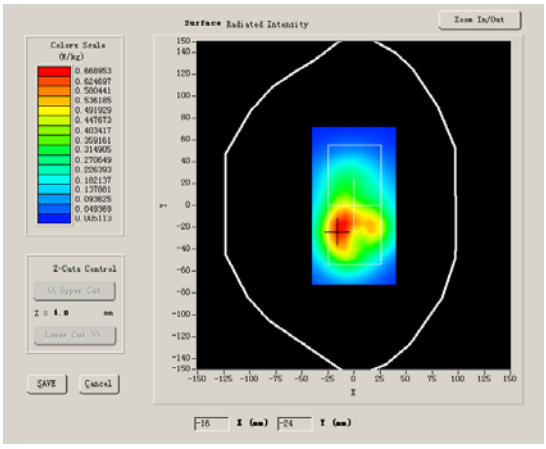
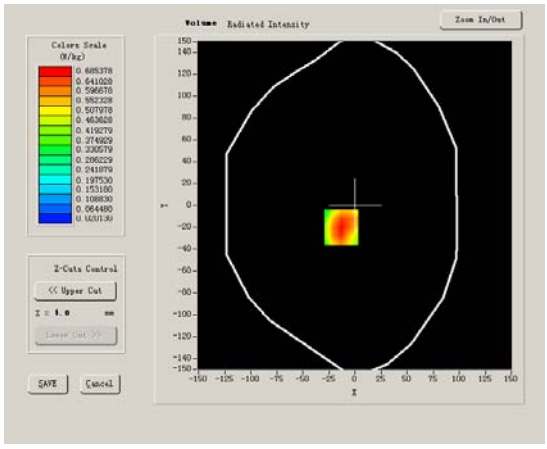
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850 HSPDA
Channels	Low
Signal	WCDMA

B. SAR Measurement Results

Lower Band SAR (Channel 41322):

Frequency (MHz)	826.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	-1.369995
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

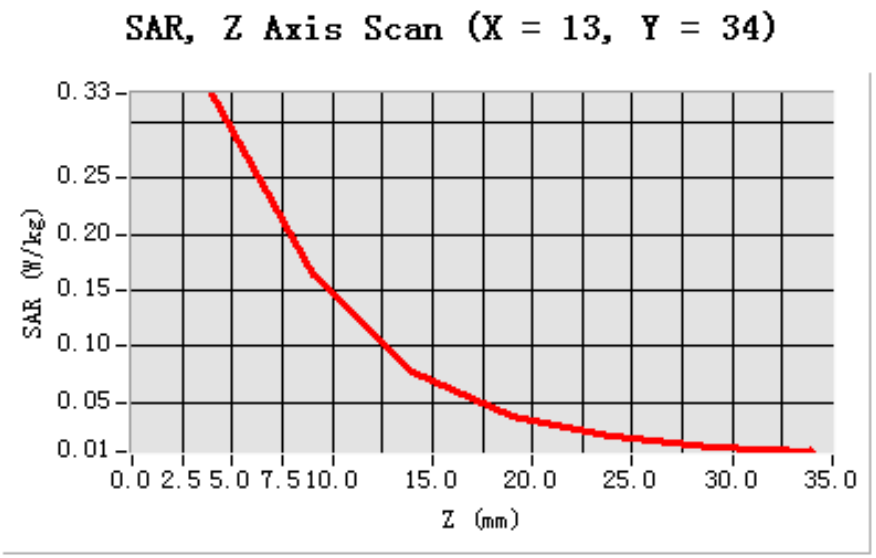
SURFACE SAR	VOLUME SAR
	

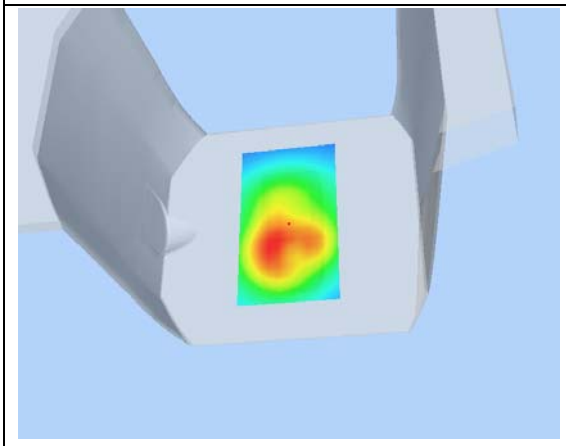
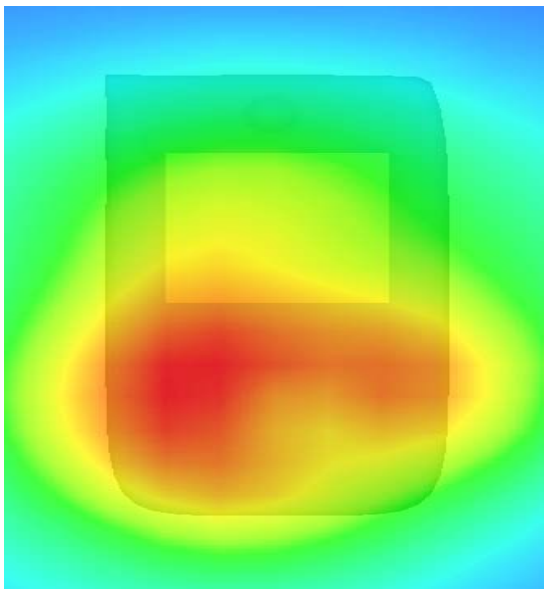
Maximum location: X=-13.00, Y=-20.00

SAR 10g (W/Kg)	0.159416
SAR 1g (W/Kg)	0.307382

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3254	0.1638	0.0771	0.0382	0.0195	0.0110



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 7 seconds

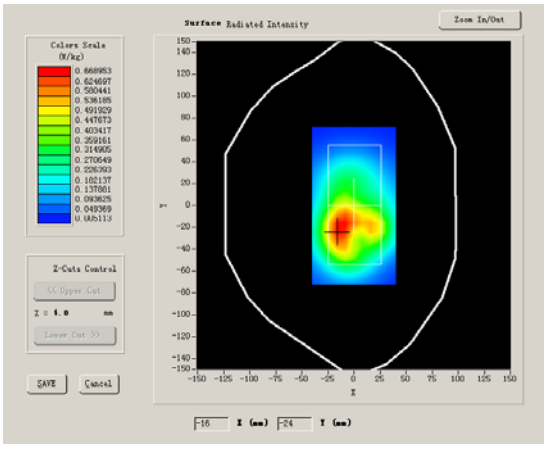
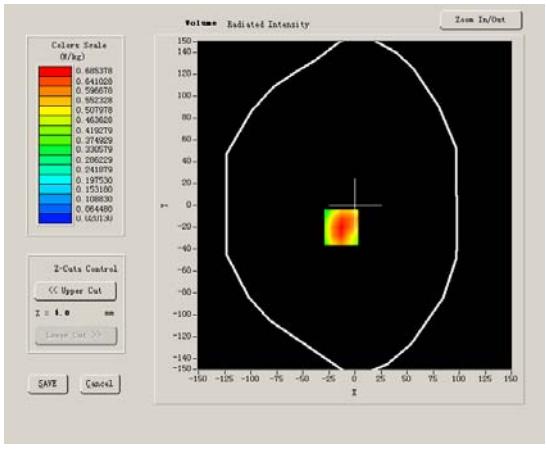
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850 HSPDA
Channels	Low
Signal	WCDMA

B. SAR Measurement Results

Lower Band SAR (Channel 4132):

Frequency (MHz)	826.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	2.35700
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

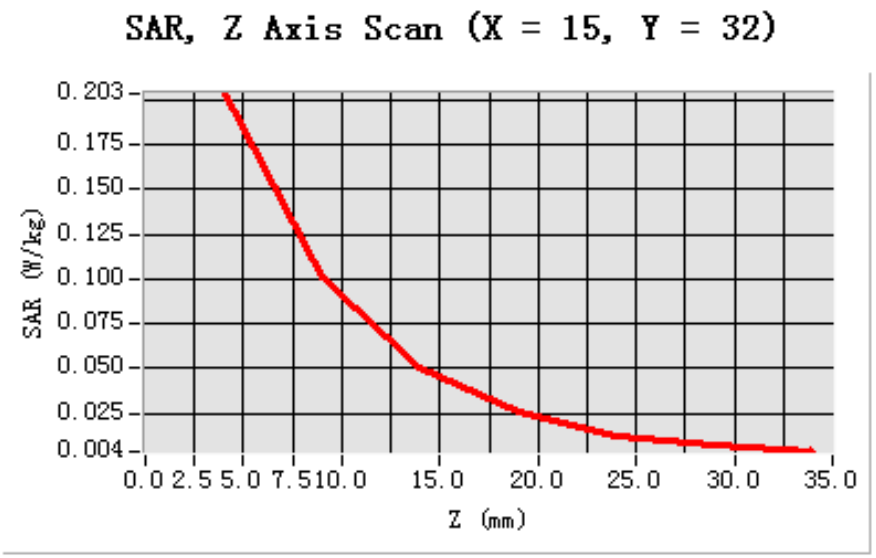
SURFACE SAR	VOLUME SAR
	

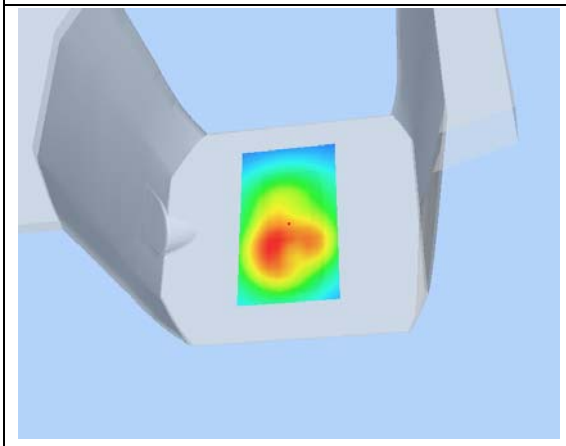
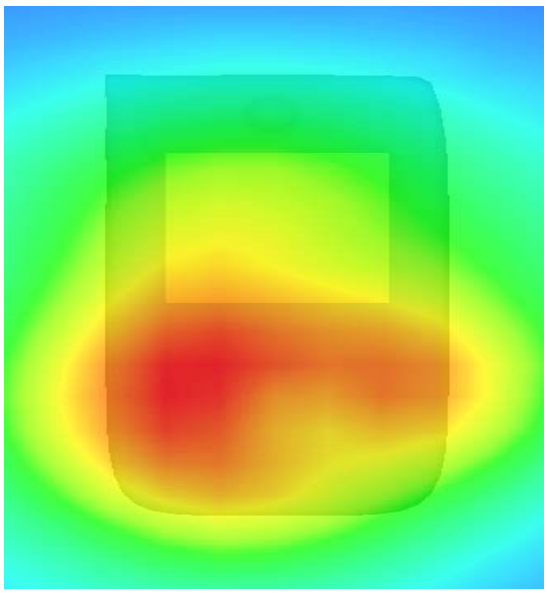
Maximum location: X=-13.00, Y=-20.00

SAR 10g (W/Kg)	0.102833
SAR 1g (W/Kg)	0.195073

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2034	0.1015	0.0511	0.0258	0.0127	0.0068



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 7 seconds

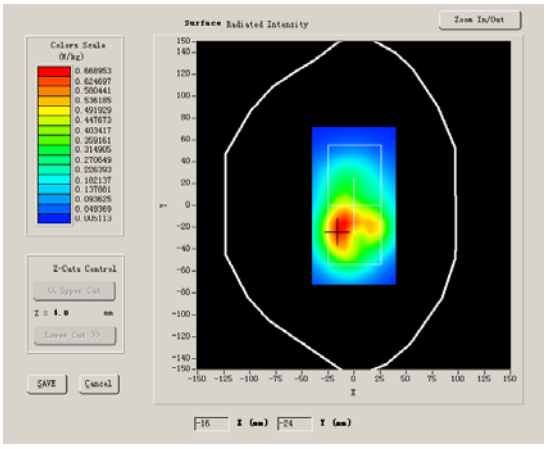
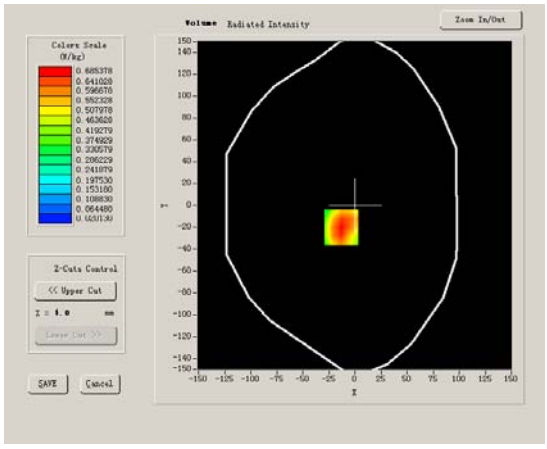
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850 HSPDA
Channels	Middle
Signal	WCDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	1.450000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

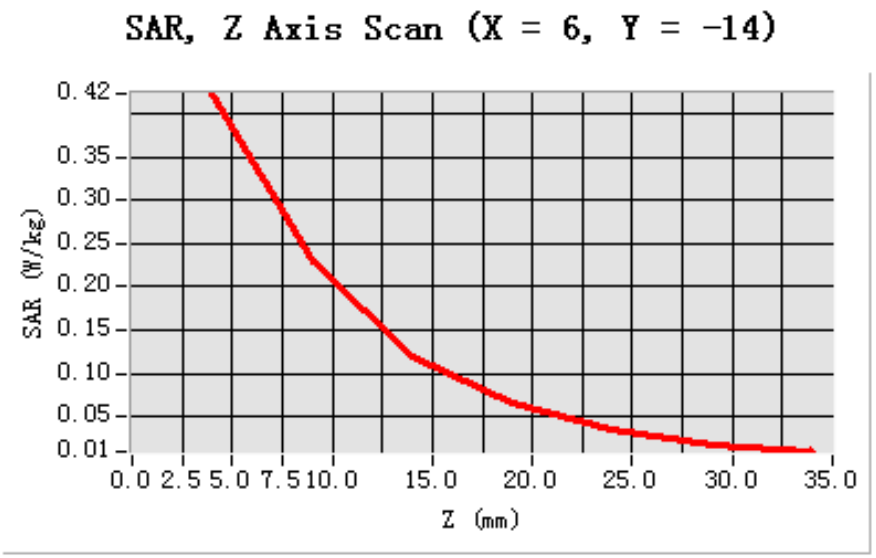
SURFACE SAR	VOLUME SAR
	

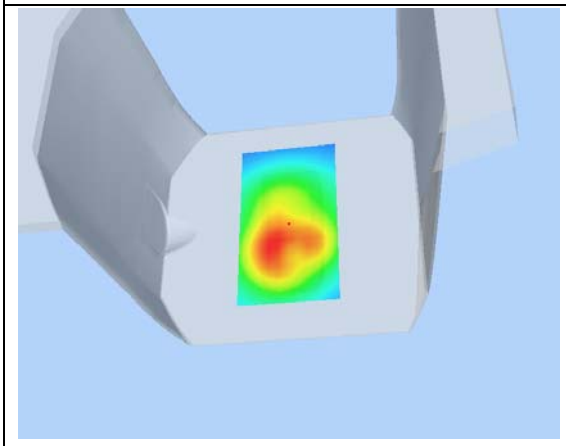
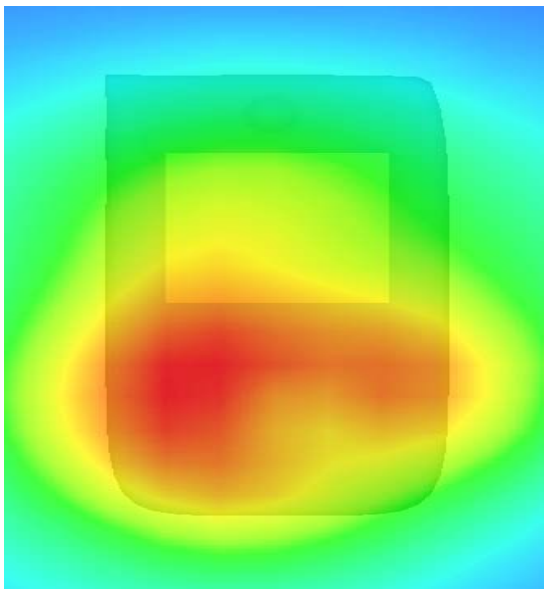
Maximum location: X=-13.00, Y=-20.00

SAR 10g (W/Kg)	0.227697
SAR 1g (W/Kg)	0.406561

Z Axis Scan

(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4236	0.2283	0.1200	0.0648	0.0337	0.0173



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 7 seconds

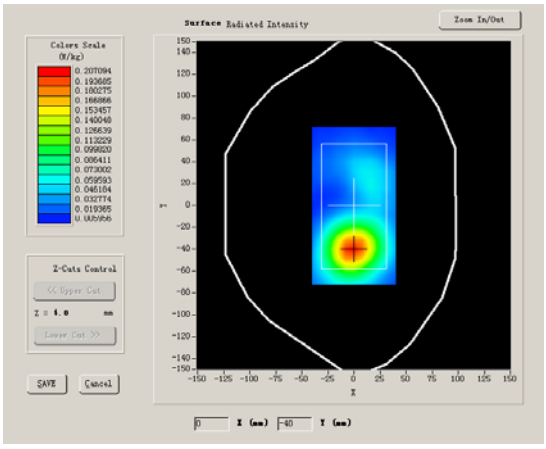
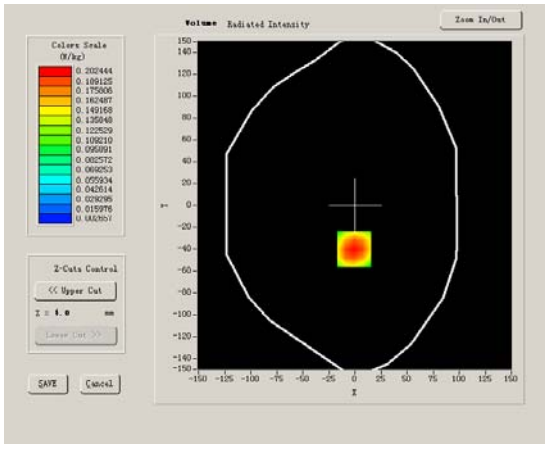
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850 HSPDA
Channels	Middle
Signal	WCDMA

B. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	0.860000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

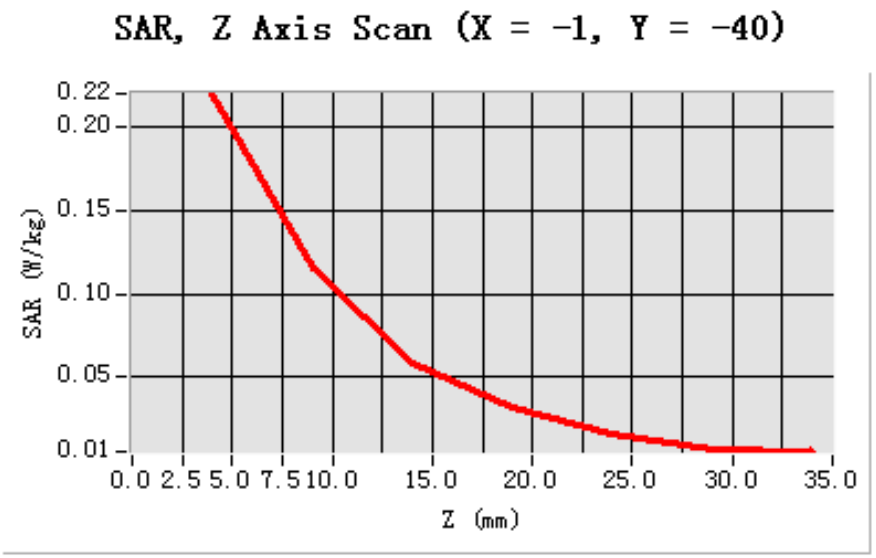
SURFACE SAR	VOLUME SAR
	

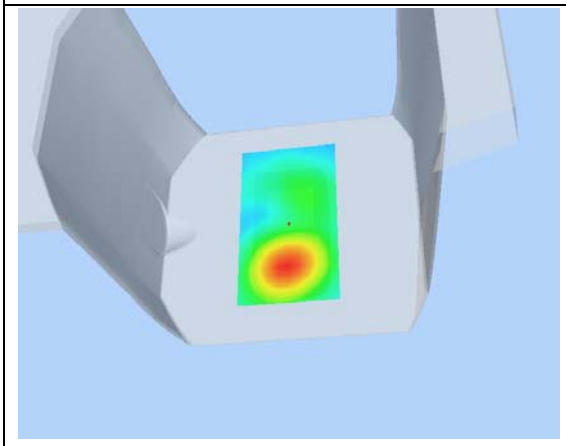
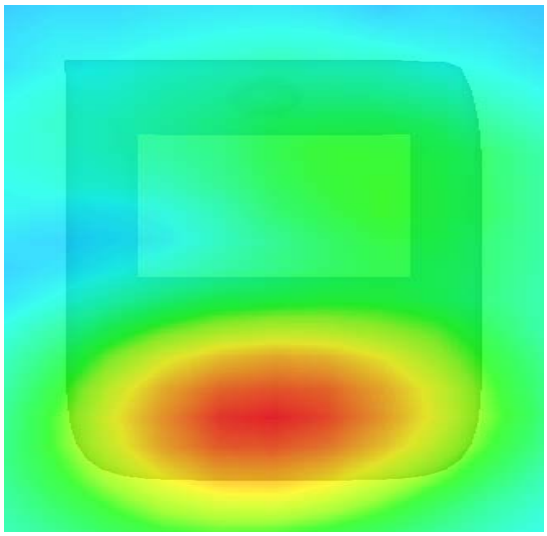
Maximum location: X=-13.00, Y=-20.00

SAR 10g (W/Kg)	0.115406
SAR 1g (W/Kg)	0.213575

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2204	0.1153	0.0583	0.0317	0.0163	0.0073



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 8 seconds

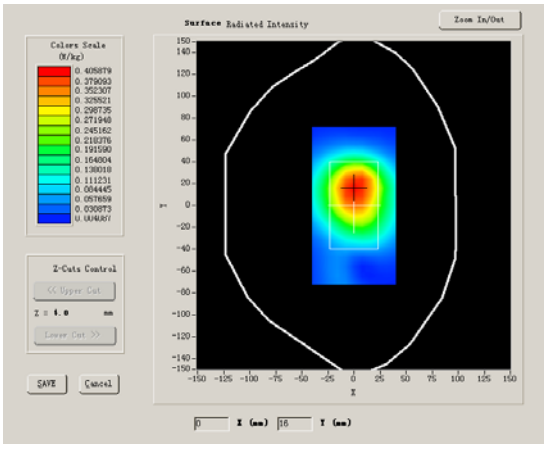
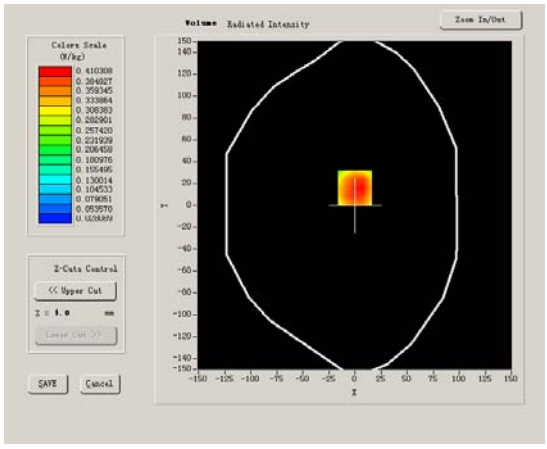
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850 HSPDA
Channels	High
Signal	WCDMA

B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	836.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Power drift (%)	-2.140000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

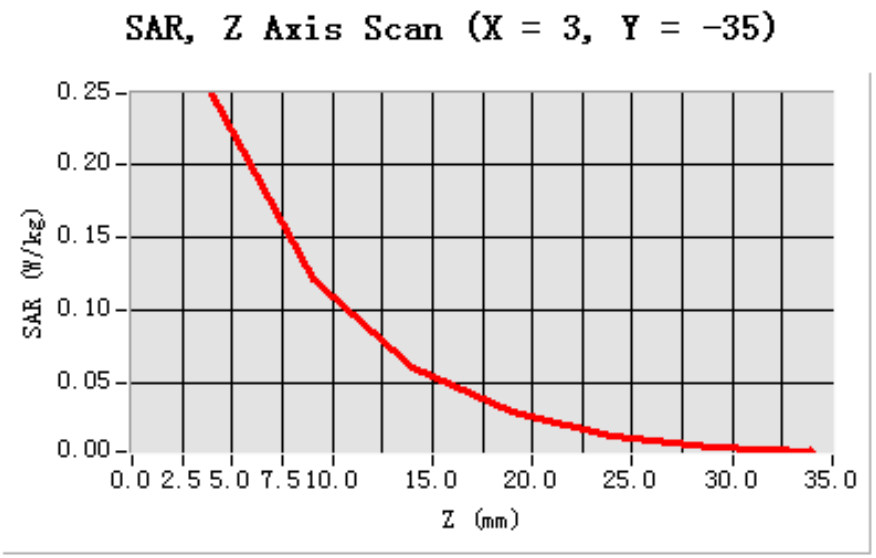
SURFACE SAR	VOLUME SAR
	

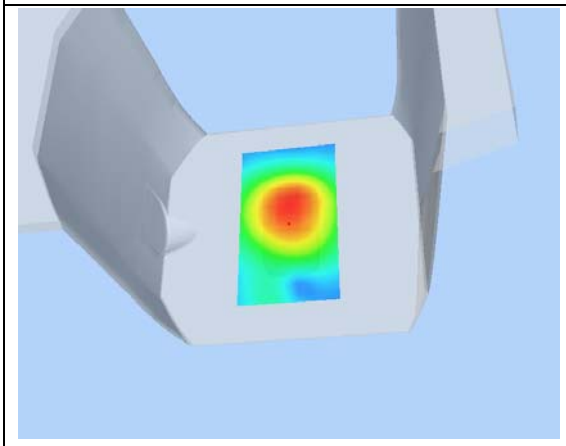
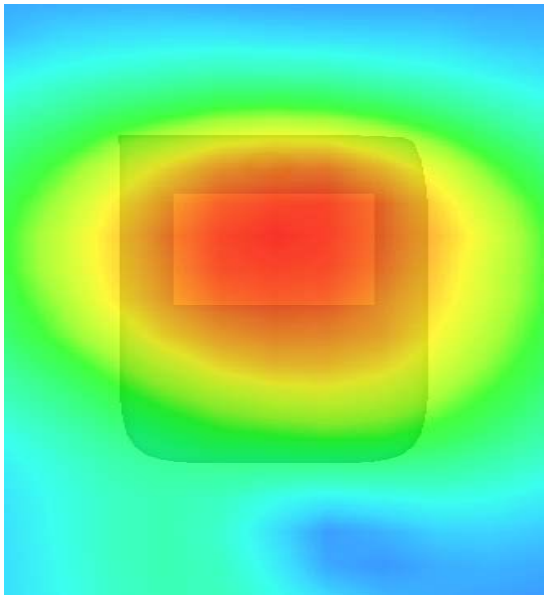
Maximum location: X=3.00, Y=-35.00

SAR 10g (W/Kg)	0.140245
SAR 1g (W/Kg)	0.246543

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2477	0.1211	0.0605	0.0310	0.0141	0.0058



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 9 seconds

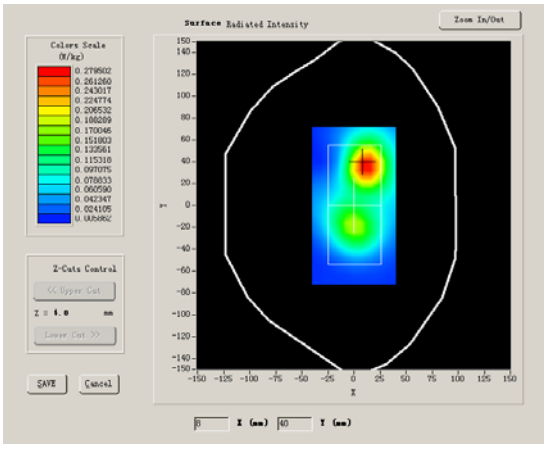
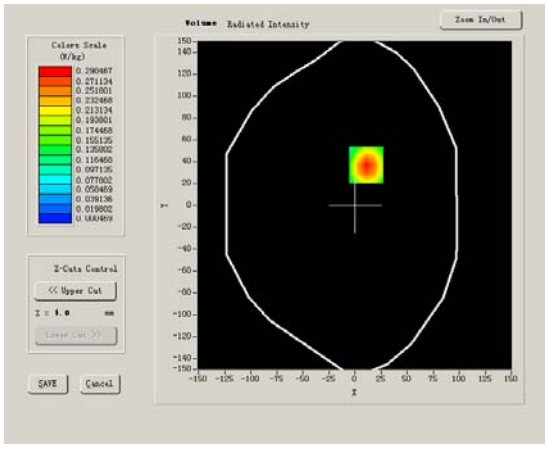
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 850 HSPDA
Channels	High
Signal	WCDMA

B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	836.000000
Relative permittivity (real part)	55.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.928580
Variation (%)	2.140000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

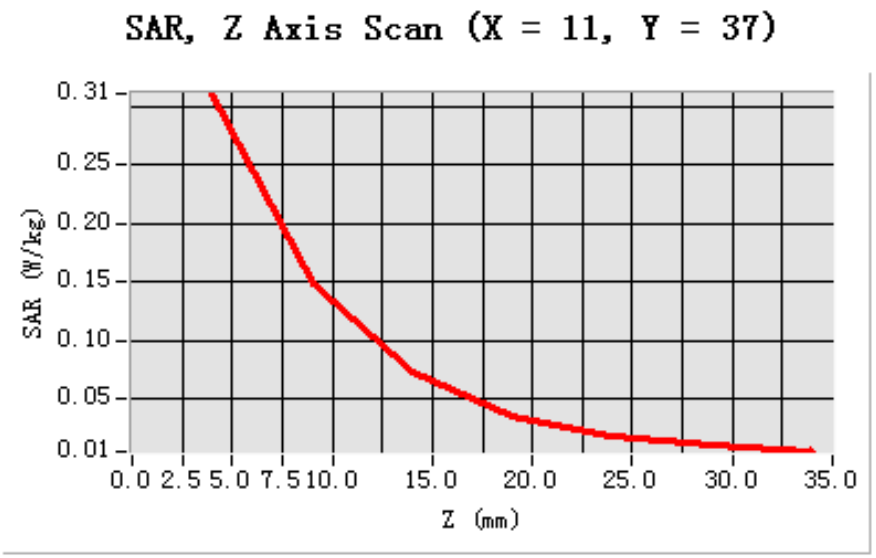
SURFACE SAR	VOLUME SAR
	

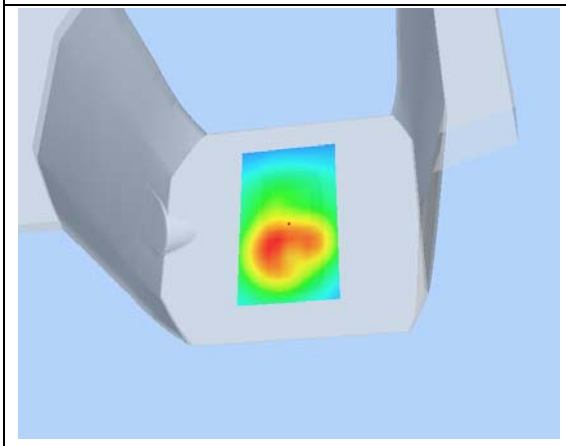
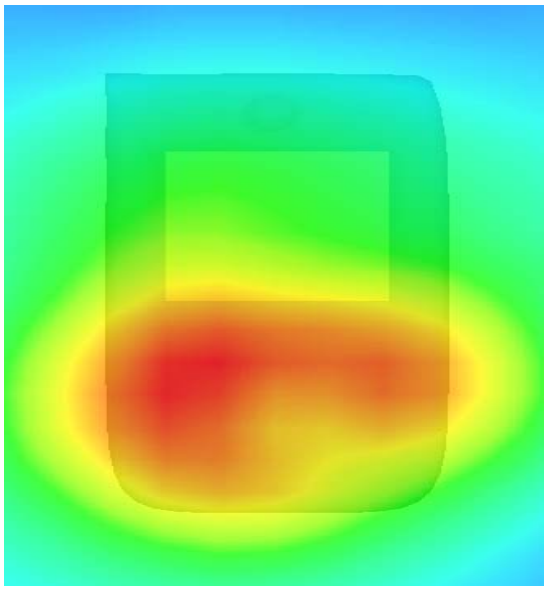
Maximum location: X=11.00, Y=37.00

SAR 10g (W/Kg)	0.1528992
SAR 1g (W/Kg)	0.3185712

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3106	0.1482	0.0738	0.0362	0.0191	0.0111



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 8 seconds

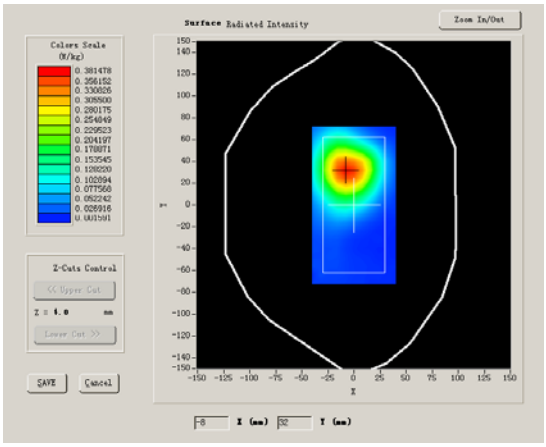
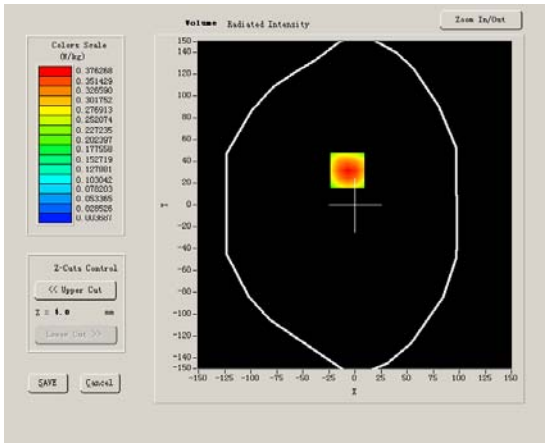
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.433572
Power drift (%)	-0.730000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

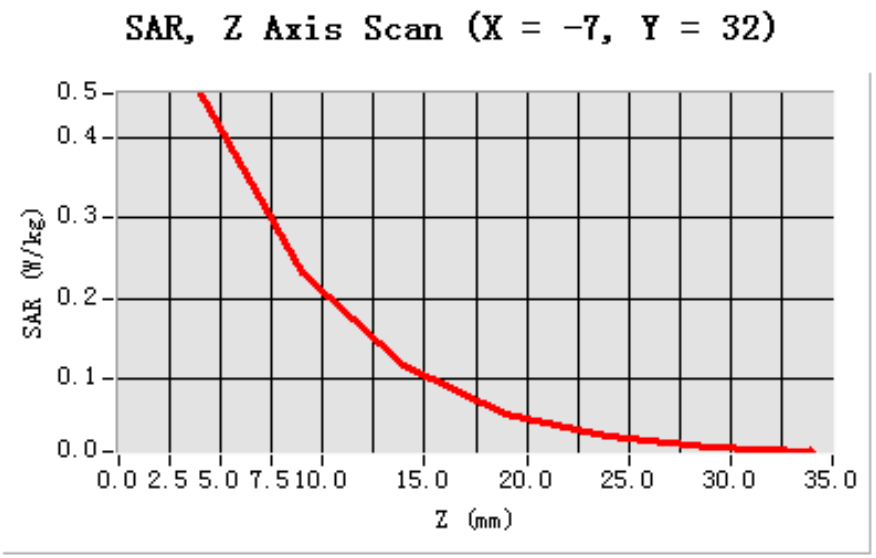
SURFACE SAR	VOLUME SAR
	

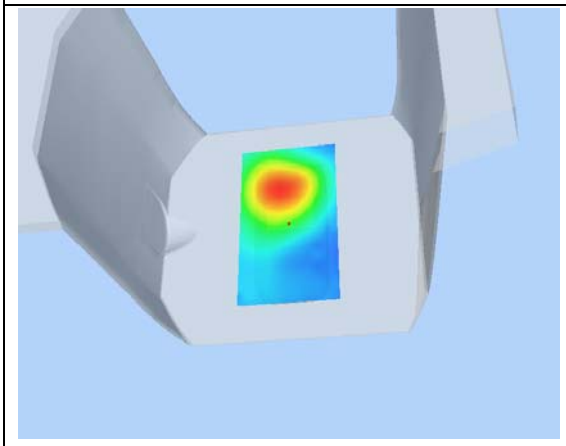
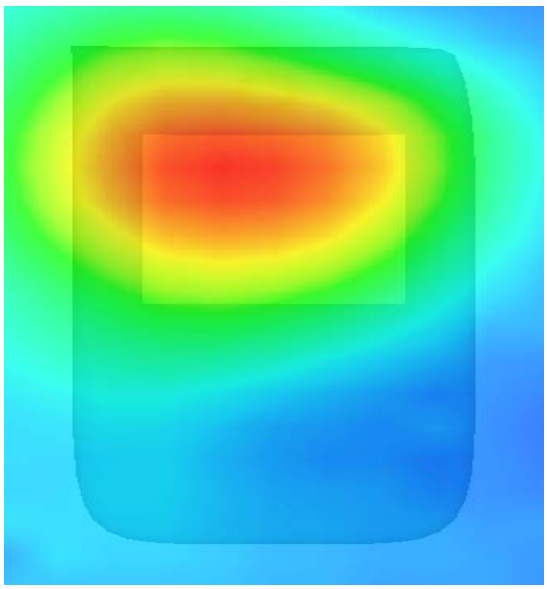
Maximum location: X=-7.00, Y=32.00

SAR 10g (W/Kg)	0.237382
SAR 1g (W/Kg)	0.436466

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4536	0.2335	0.1178	0.0584	0.0303	0.0163



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 8 seconds

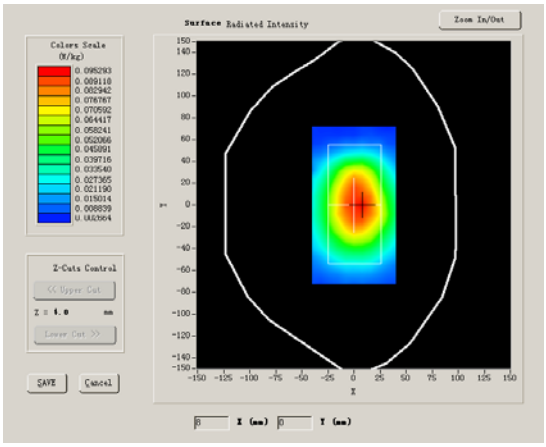
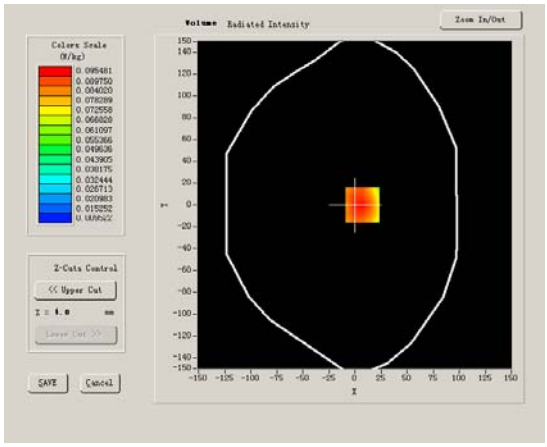
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.433572
Power drift (%)	-1.180000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

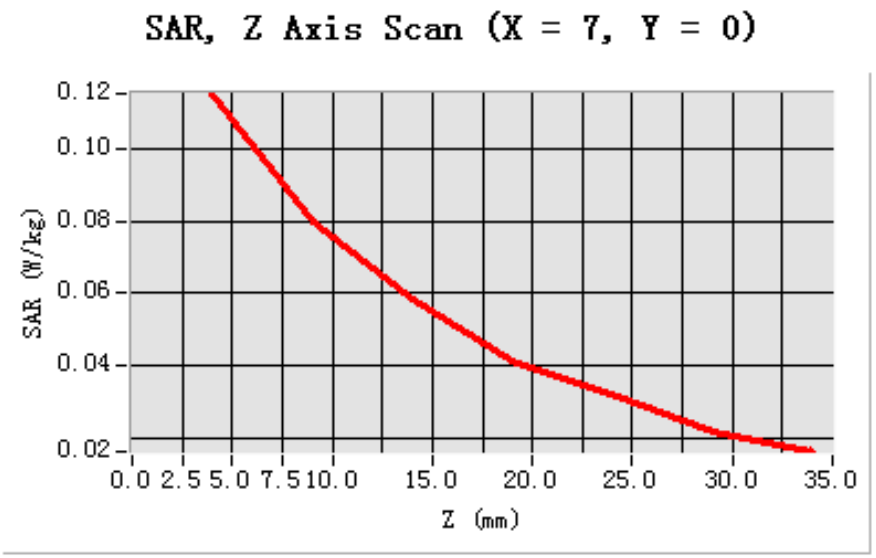
SURFACE SAR	VOLUME SAR
	

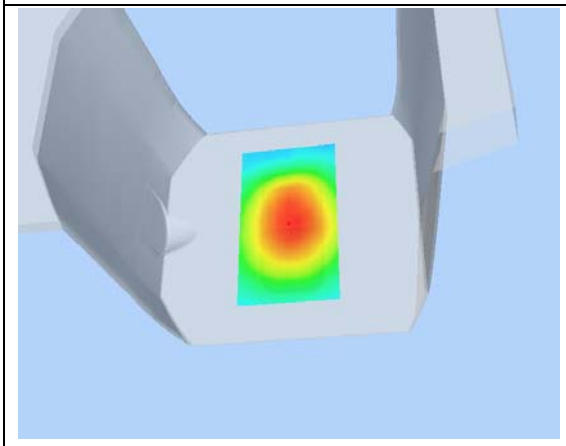
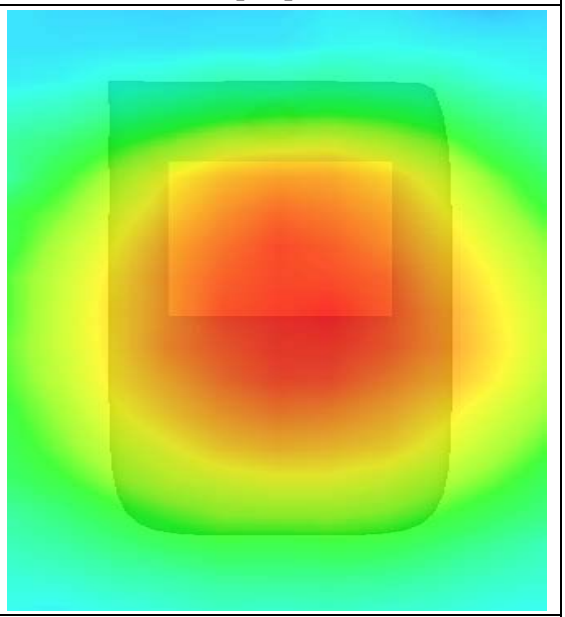
Maximum location: X=7.00, Y=0.00

SAR 10g (W/Kg)	0.076915
SAR 1g (W/Kg)	0.111508

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1151	0.0799	0.0586	0.0413	0.0321	0.0218



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 8 seconds

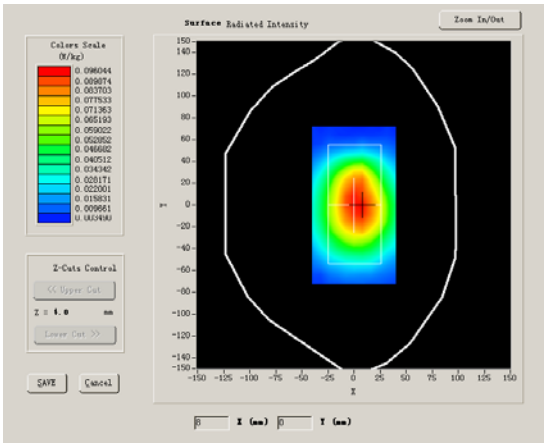
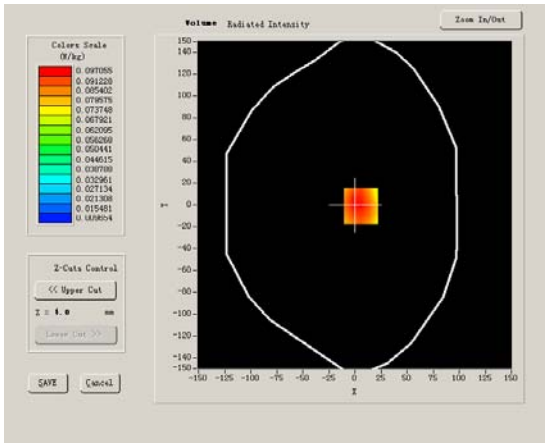
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.458270
Power drift (%)	-1.220000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

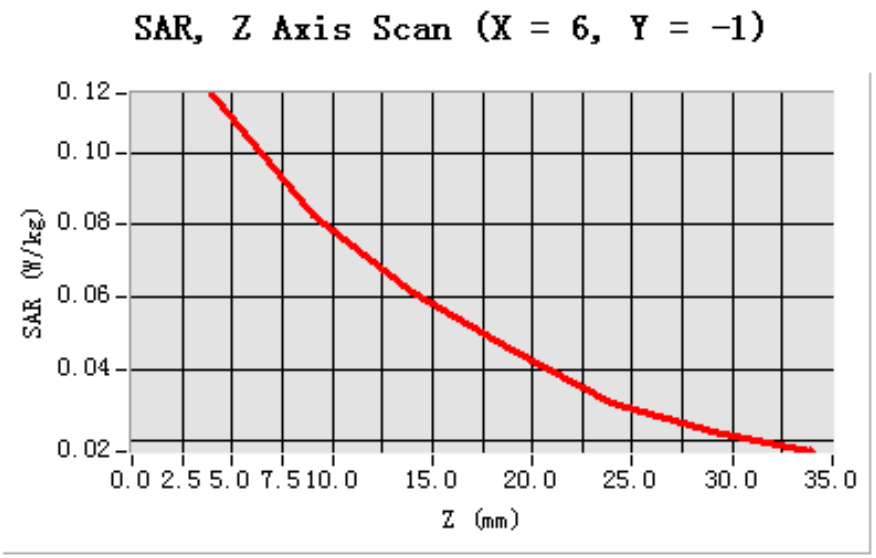
SURFACE SAR	VOLUME SAR
	

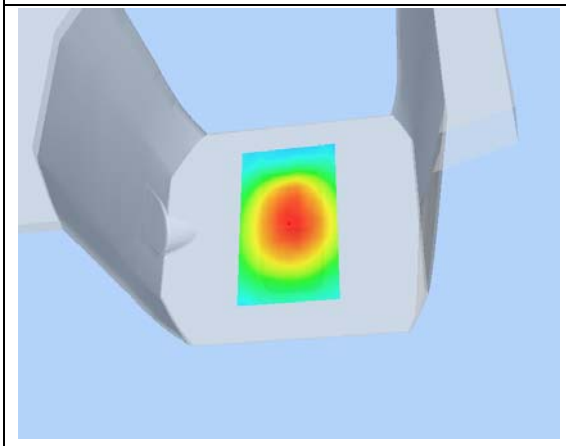
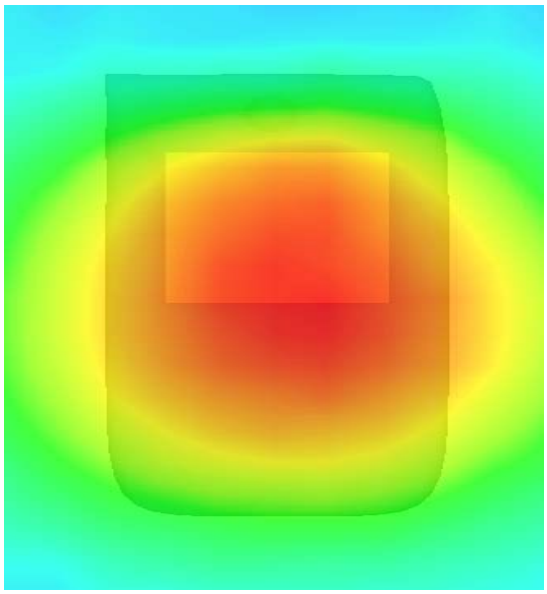
Maximum location: X=6.00, Y=-1.00

SAR 10g (W/Kg)	0.078992
SAR 1g (W/Kg)	0.113316

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1165	0.0829	0.0615	0.0453	0.0302	0.0228



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 1 seconds

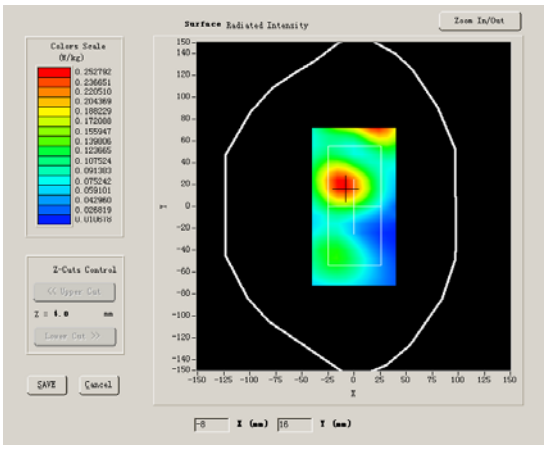
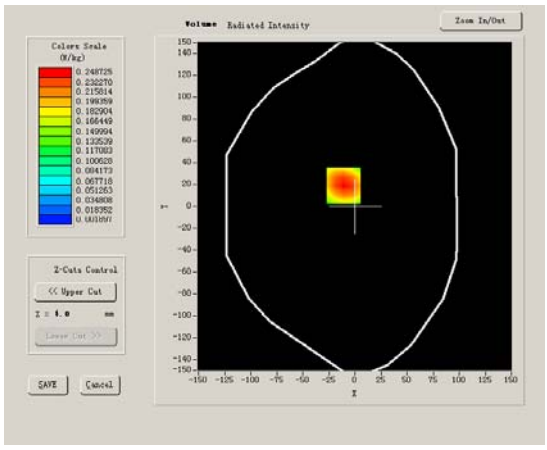
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.458270
Power drift (%)	-3.359985
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

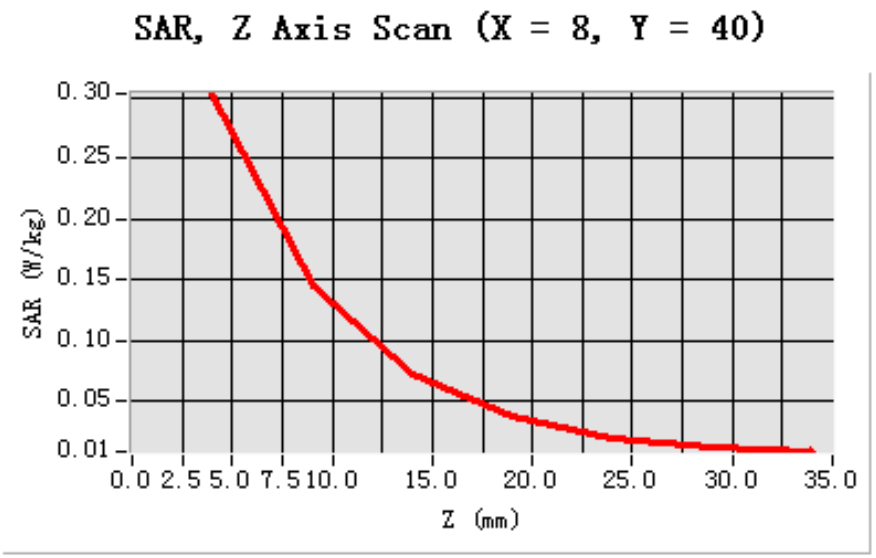
SURFACE SAR	VOLUME SAR
	

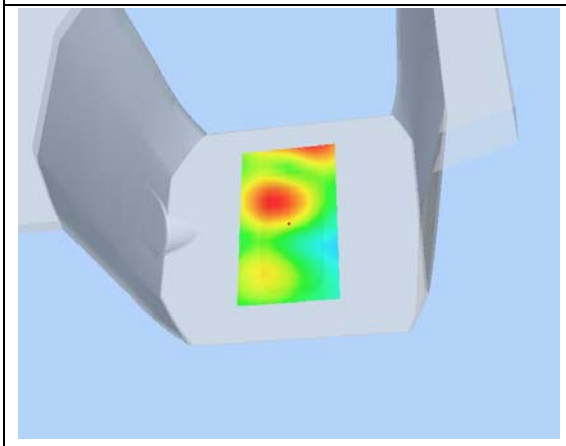
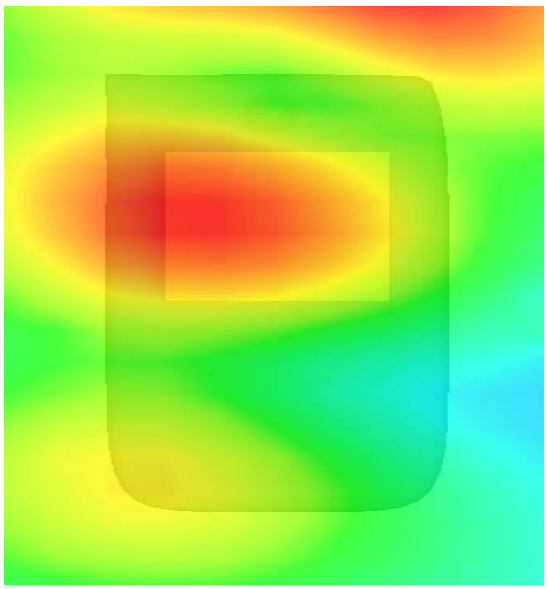
Maximum location: X=8.00, Y=40.00

SAR 10g (W/Kg)	0.148721
SAR 1g (W/Kg)	0.273196

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2985	0.1596	0.0876	0.0038	0.0039	0.0045



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 8 seconds

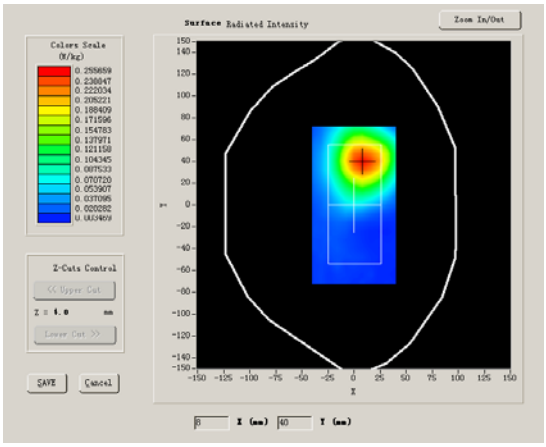
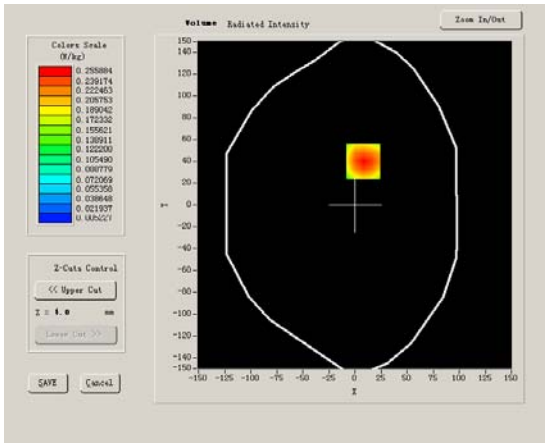
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900
Channels	High
Signal	CDMA

B. SAR Measurement Results

Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.482085
Power drift (%)	-0.970000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

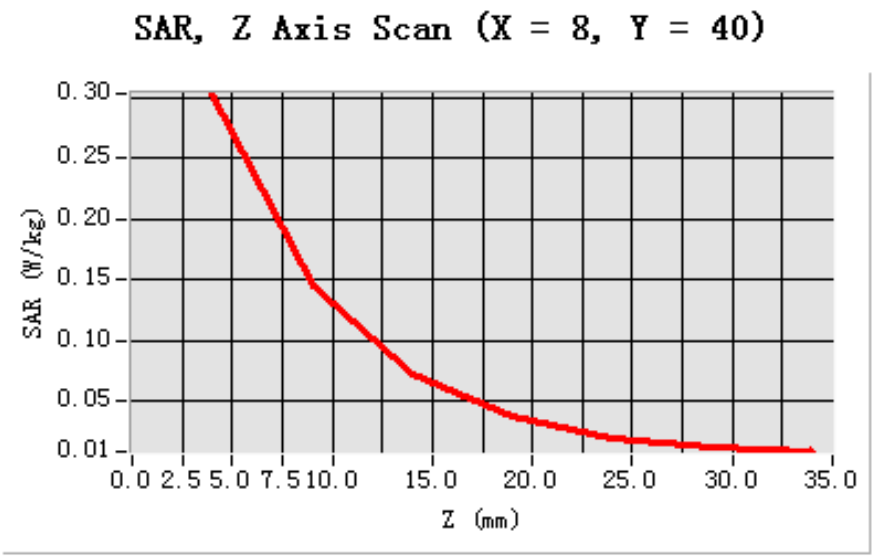
SURFACE SAR	VOLUME SAR
	

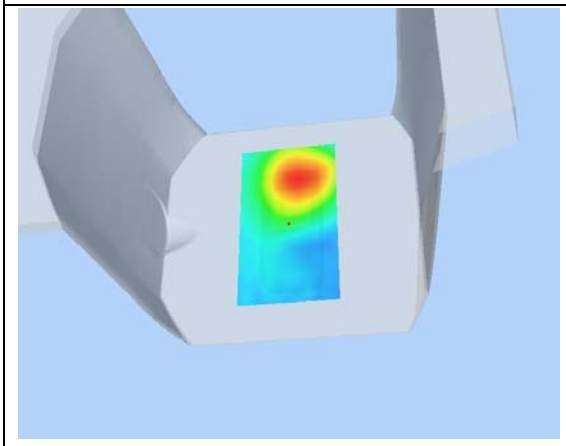
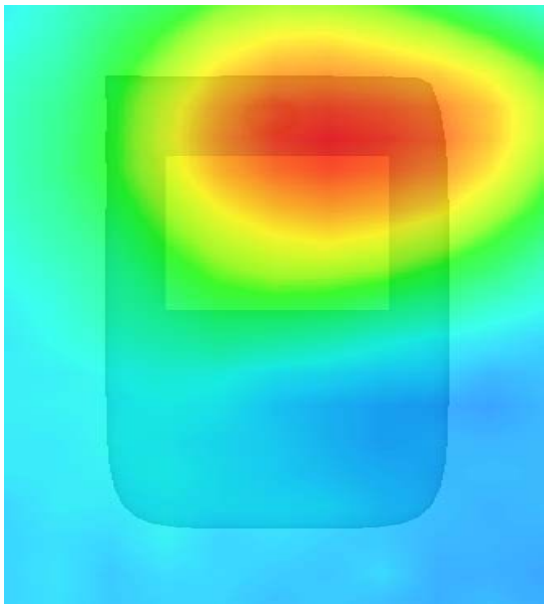
Maximum location: X=8.00, Y=40.00

SAR 10g (W/Kg)	0.158147
SAR 1g (W/Kg)	0.293160

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3036	0.1462	0.0732	0.0380	0.0205	0.0118



3D sceen 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: 23/8/2011
Measurement duration: 9 minutes 7 seconds

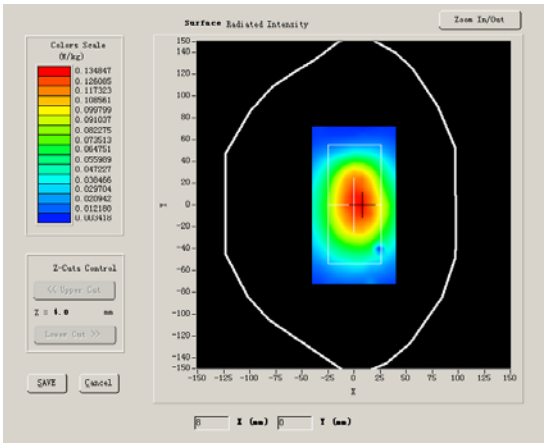
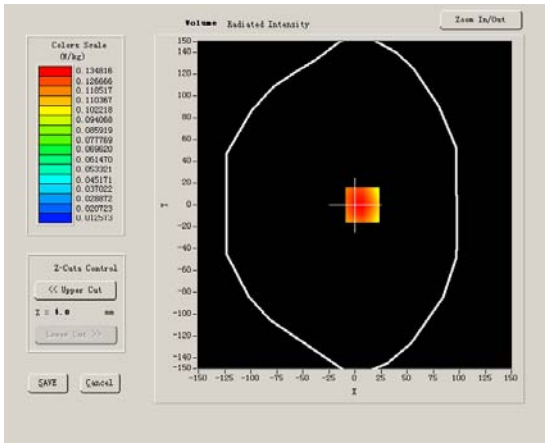
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900
Channels	High
Signal	CDMA

B. SAR Measurement Results

Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.482085
Power drift (%)	-1.430000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

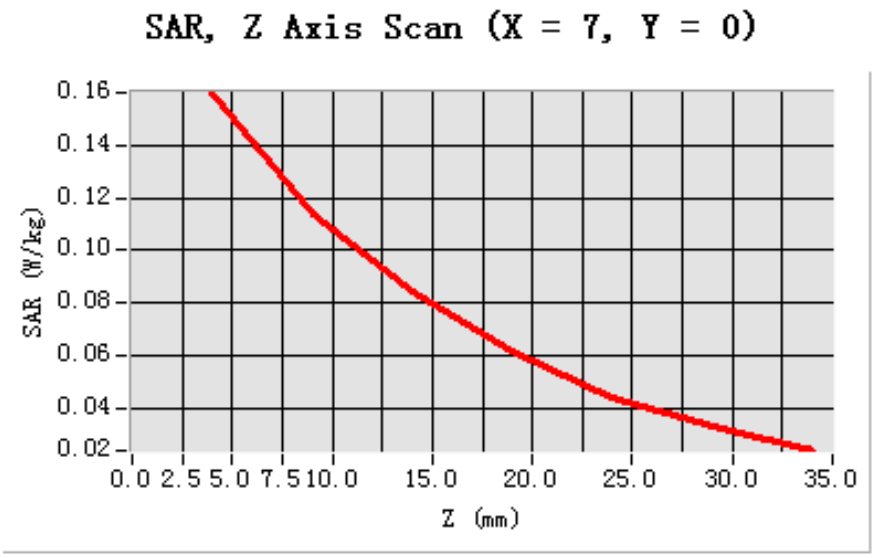
SURFACE SAR	VOLUME SAR
	

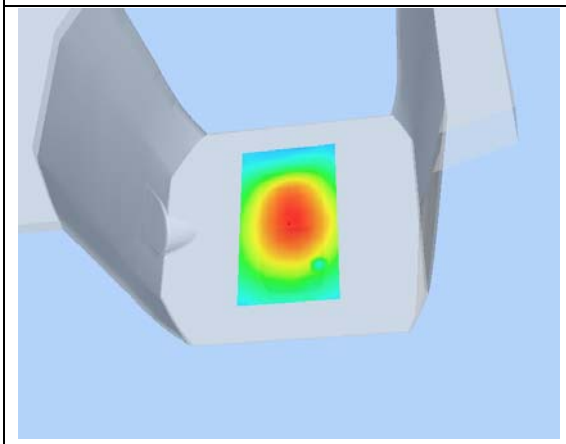
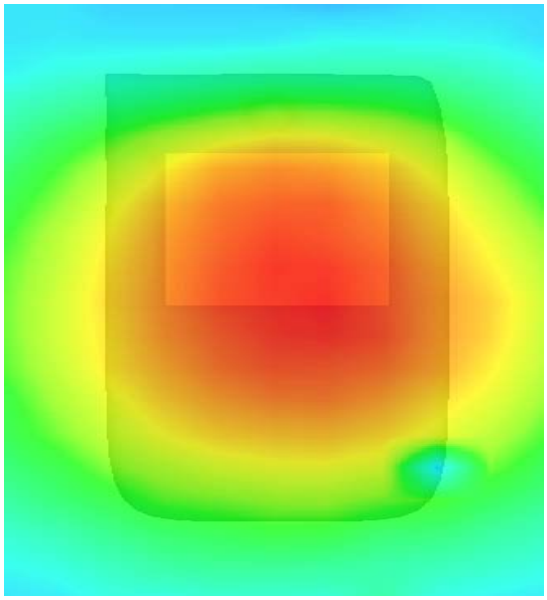
Maximum location: X=7.00, Y=0.00

SAR 10g (W/Kg)	0.108874
SAR 1g (W/Kg)	0.156423

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1600	0.1140	0.0847	0.0615	0.0440	0.0326



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 6 seconds

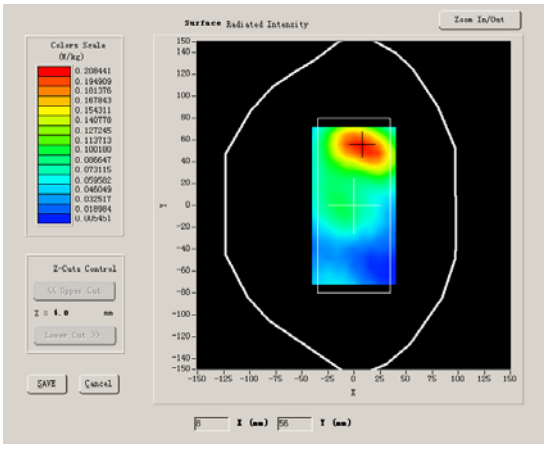
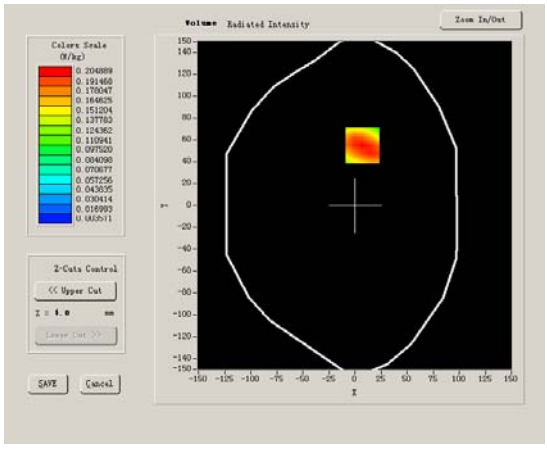
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900 HSDPA
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.433572
Power drift (%)	-2.450000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

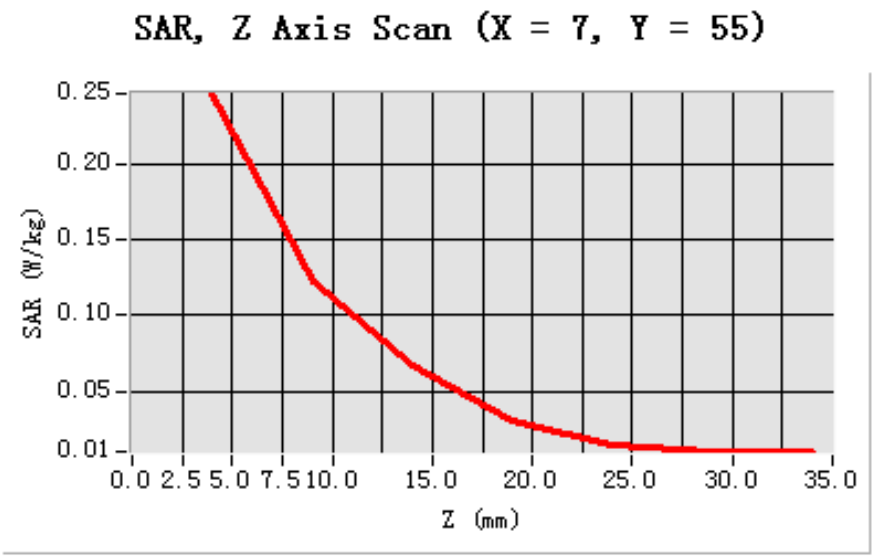
SURFACE SAR	VOLUME SAR
	

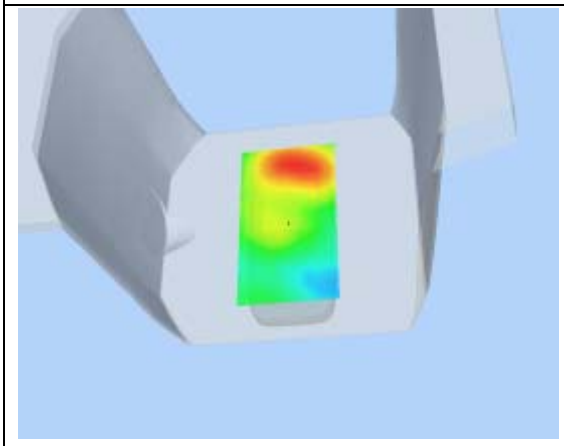
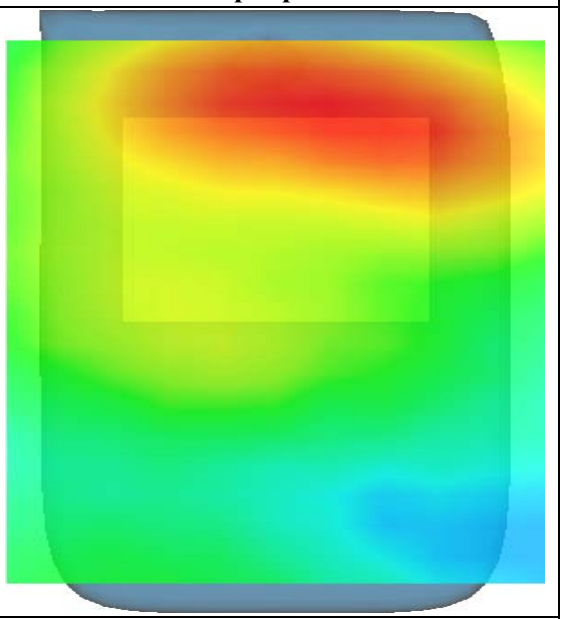
Maximum location: X=7.00, Y=55.00

SAR 10g (W/Kg)	0.131452
SAR 1g (W/Kg)	0.239124

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2470	0.1223	0.0669	0.0309	0.0149	0.0100



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 6 seconds

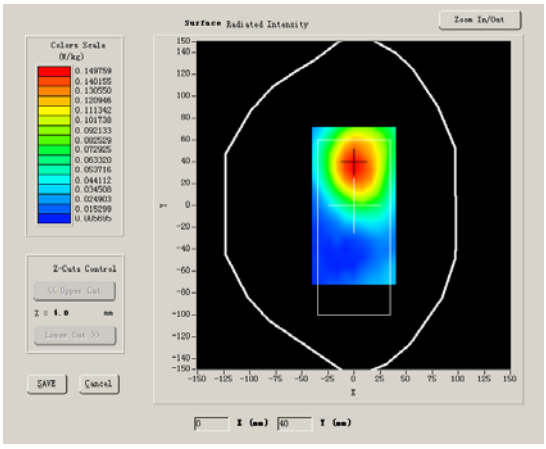
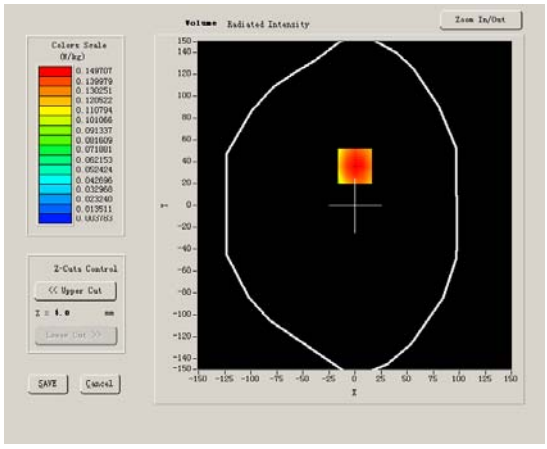
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900 HSDPA
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 9612):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.433572
Power drift (%)	-2.300000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

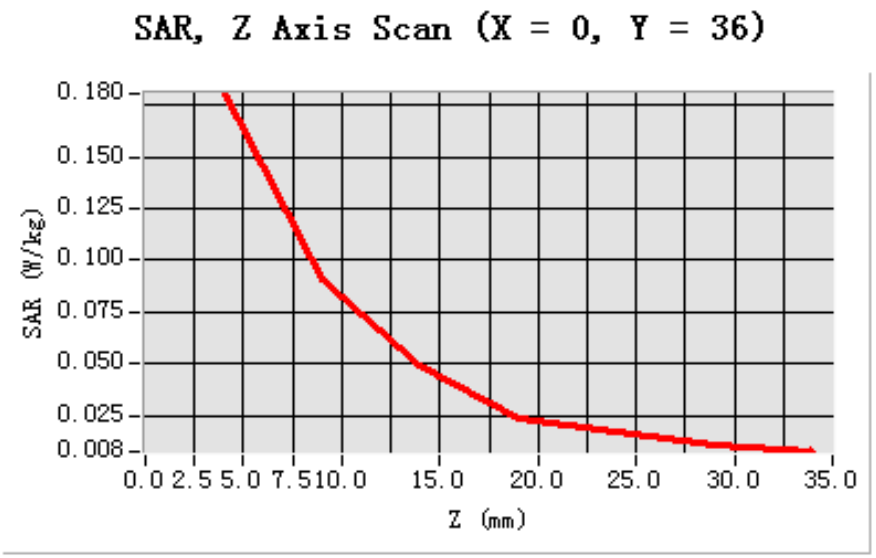
SURFACE SAR	VOLUME SAR
	

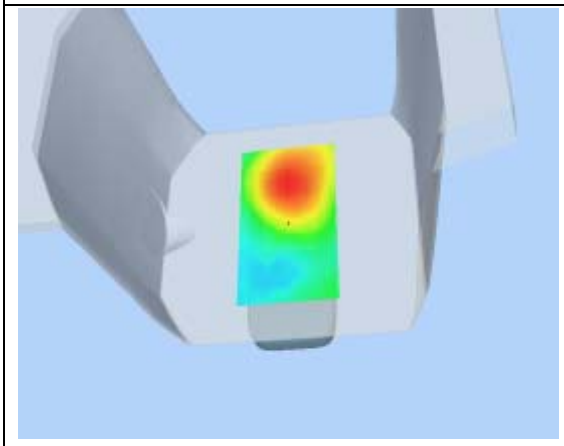
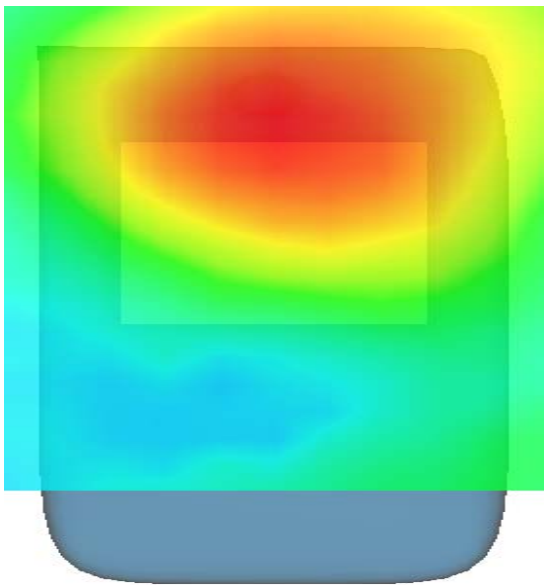
Maximum location: X=0.00, Y=36.00

SAR 10g (W/Kg)	0.098519
SAR 1g (W/Kg)	0.174946

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1805	0.0908	0.0497	0.0233	0.0177	0.0107



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 5 seconds

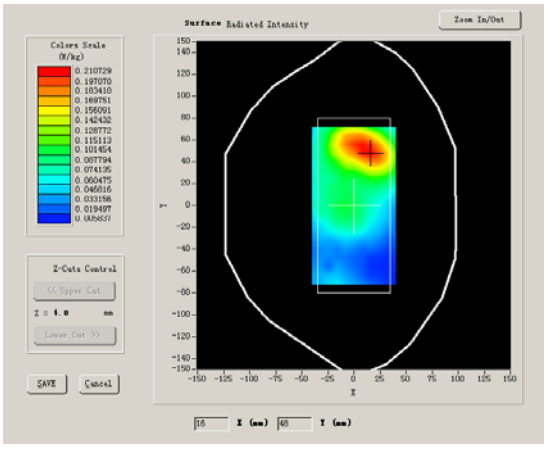
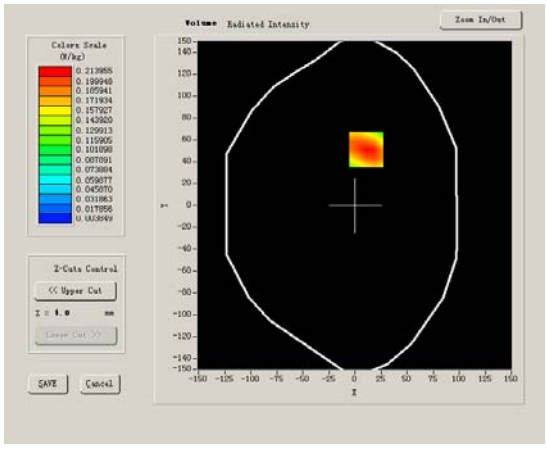
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900 HSDPA
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.458270
Power drift (%)	-2.45700
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

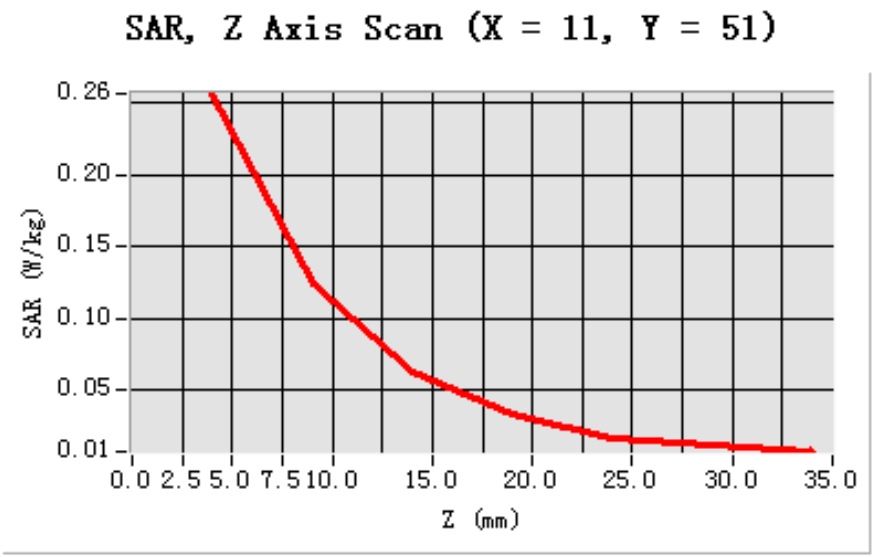
SURFACE SAR	VOLUME SAR
	

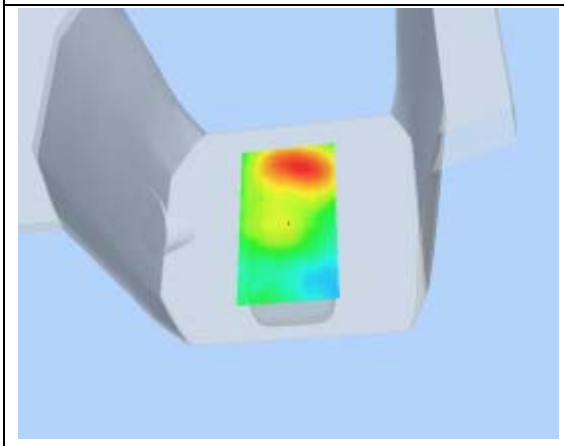
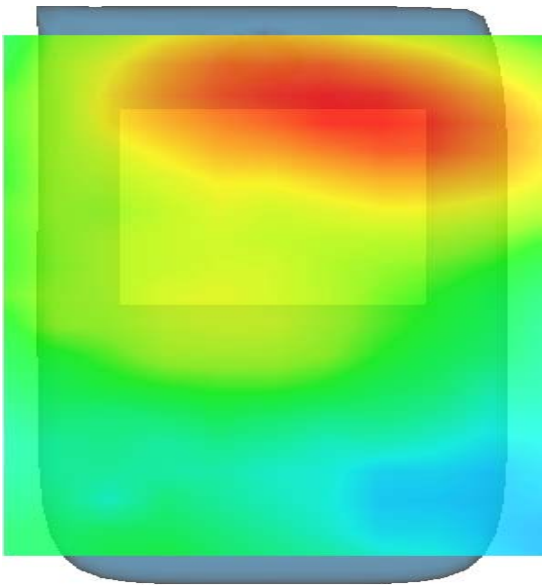
Maximum location: X=11.00, Y=51.00

SAR 10g (W/Kg)	0.133398
SAR 1g (W/Kg)	0.248013

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2568	0.1237	0.0630	0.0322	0.0153	0.0115



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 9 seconds

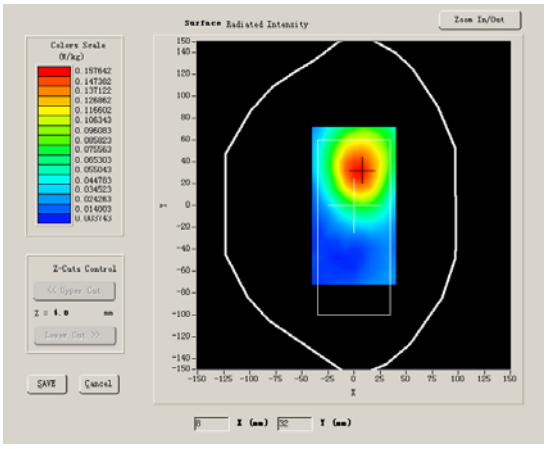
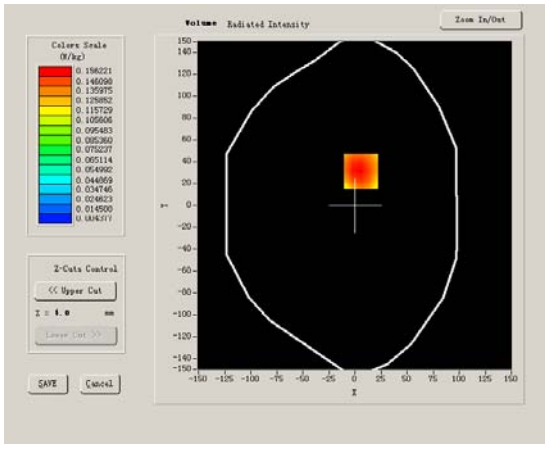
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900 HSDPA
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.458270
Power drift (%)	-3.359985
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

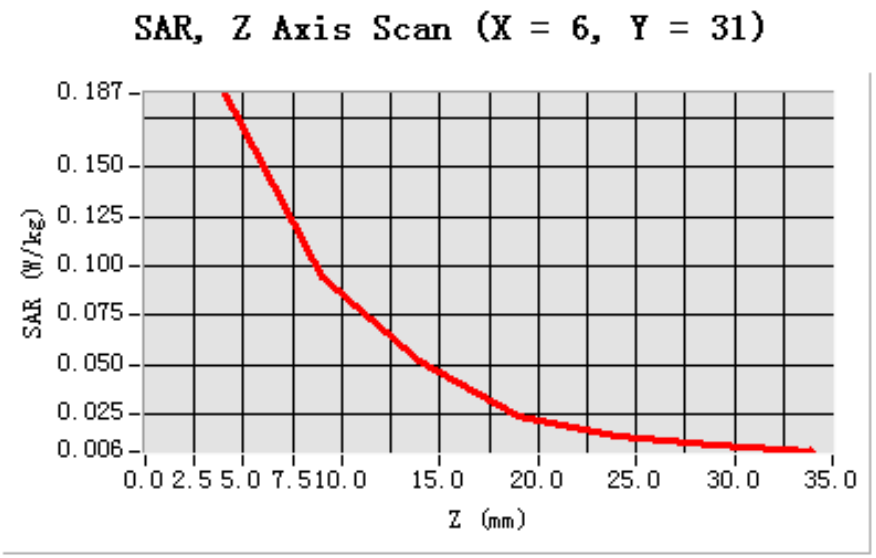
SURFACE SAR	VOLUME SAR
	

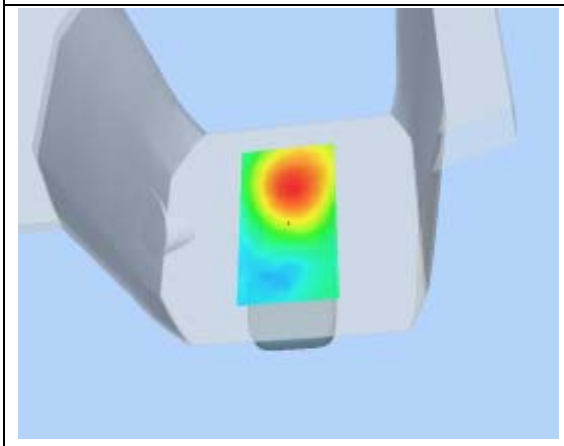
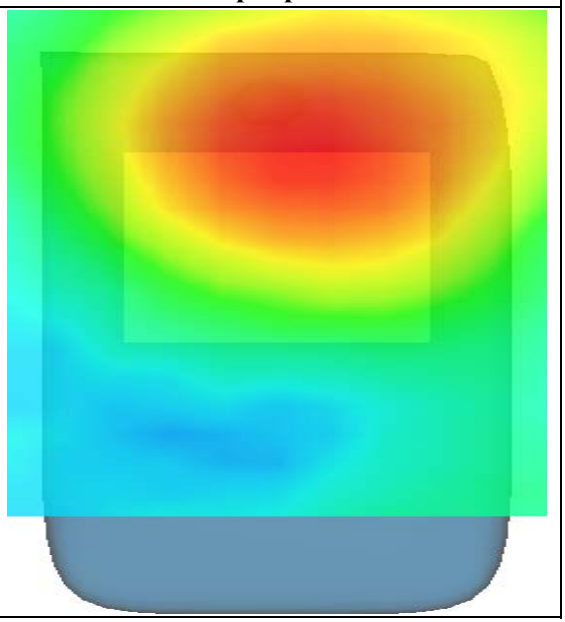
Maximum location: X=6.00, Y=31.00

SAR 10g (W/Kg)	0.103089
SAR 1g (W/Kg)	0.183413

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1875	0.0948	0.0521	0.0244	0.0134	0.0089



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 2 seconds

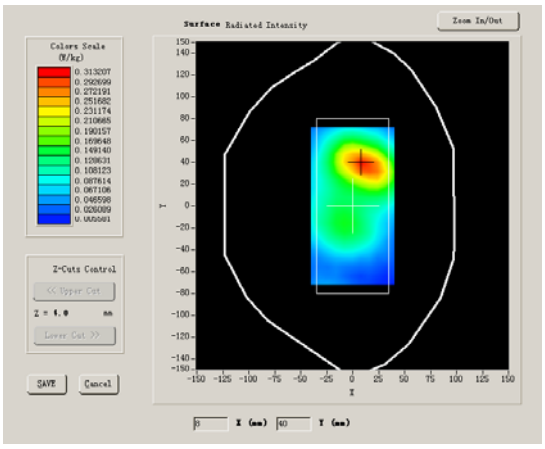
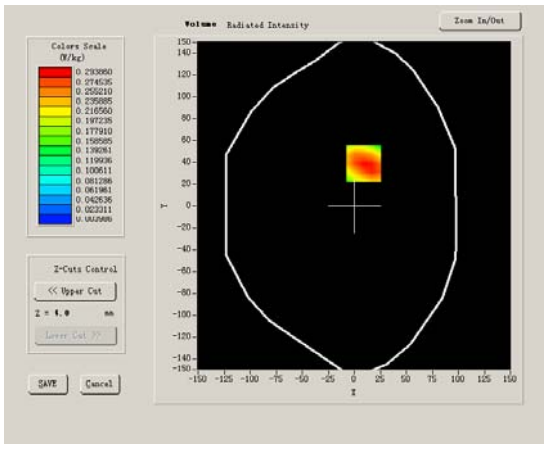
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900 HSDPA
Channels	High
Signal	CDMA

B. SAR Measurement Results

Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.482085
Power drift (%)	-0.850000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

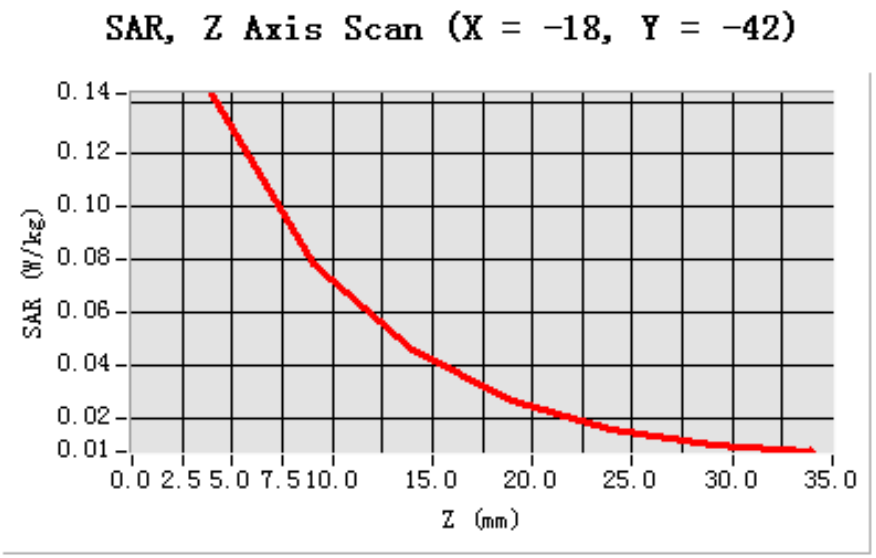
SURFACE SAR	VOLUME SAR
	

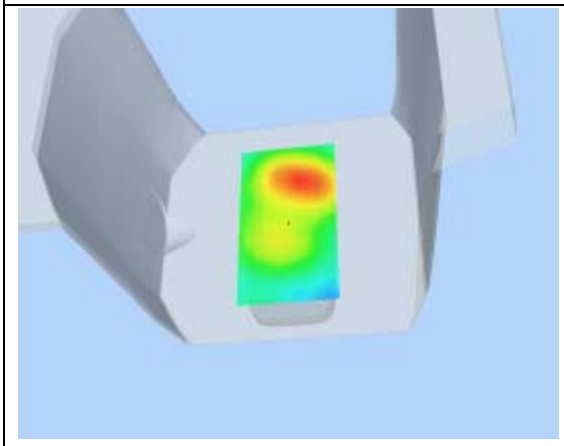
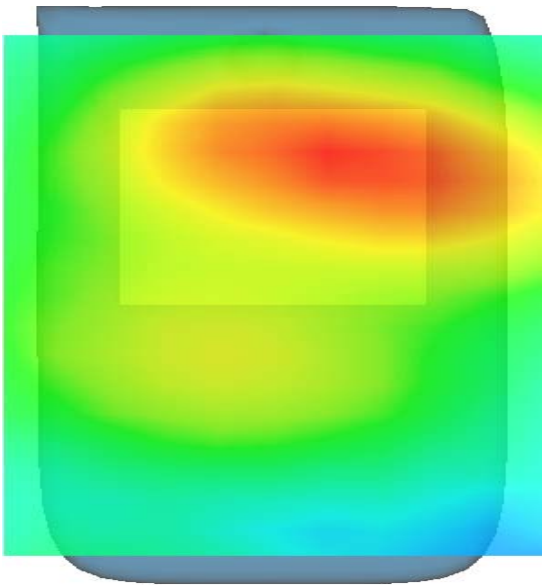
Maximum location: X=-18.00, Y=-42.00

SAR 10g (W/Kg)	0.076987
SAR 1g (W/Kg)	0.135497

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1430	0.0787	0.0454	0.0267	0.0155	0.0098



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 7 seconds

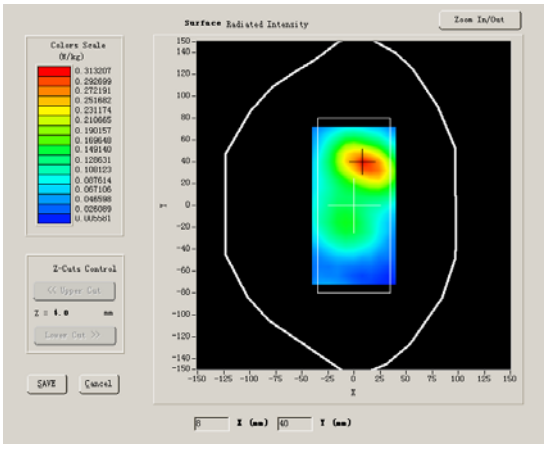
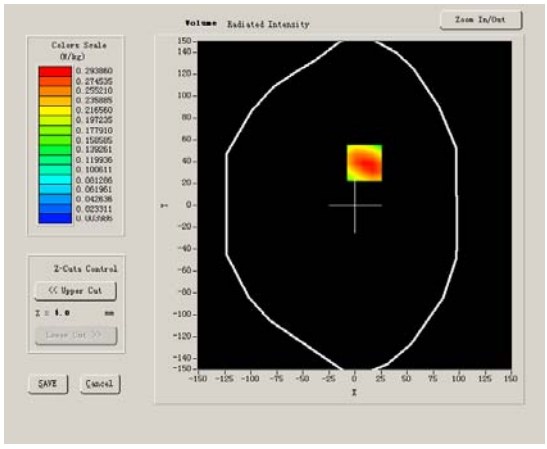
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA 1900 HSDPA
Channels	High
Signal	CDMA

B. SAR Measurement Results

Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.482085
Power drift (%)	-0.970000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

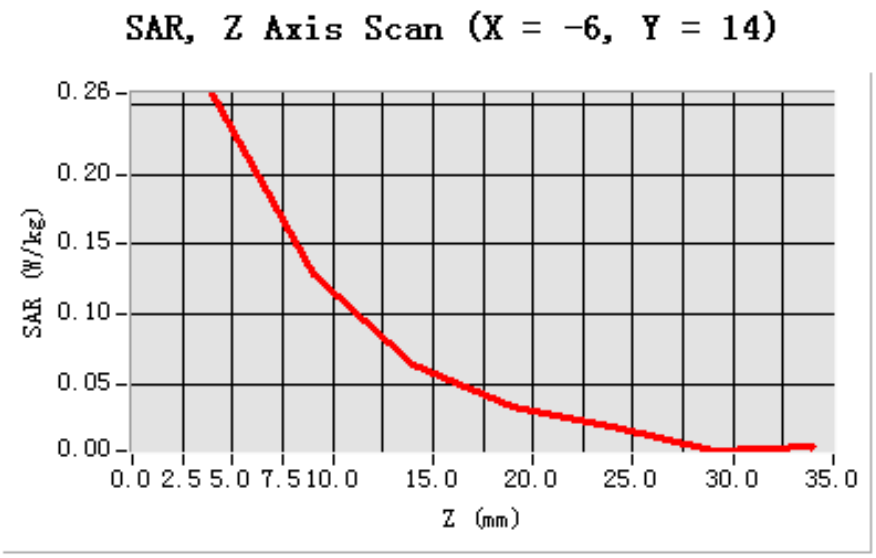
SURFACE SAR	VOLUME SAR
	

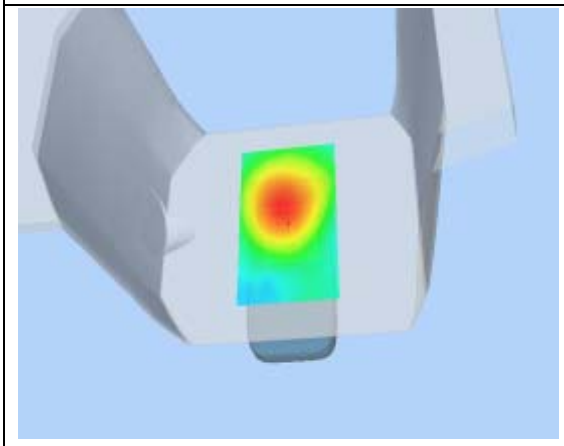
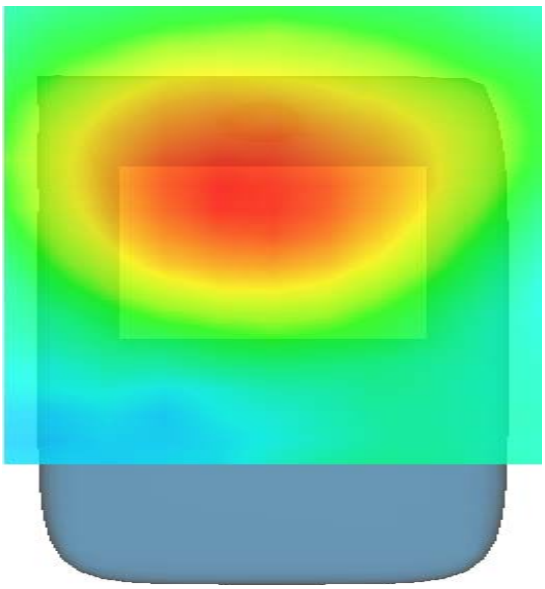
Maximum location: X=-6.00, Y=14.00

SAR 10g (W/Kg)	0.157845
SAR 1g (W/Kg)	0.268754

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2675	0.1411	0.0475	0.0307	0.0202	0.0057



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 7 seconds

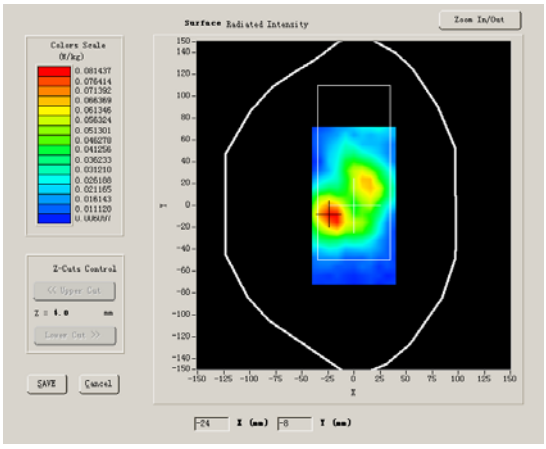
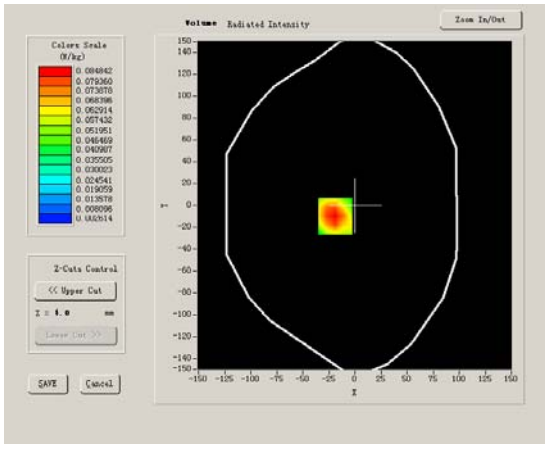
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11B
Channels	Middle
Signal	DSSS

B. SAR Measurement Results

Middle Band SAR (Channel 7):

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52..548876
Relative permittivity	12.991650
Conductivity (S/m)	1.790014
Power Drift (%)	-0.240000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

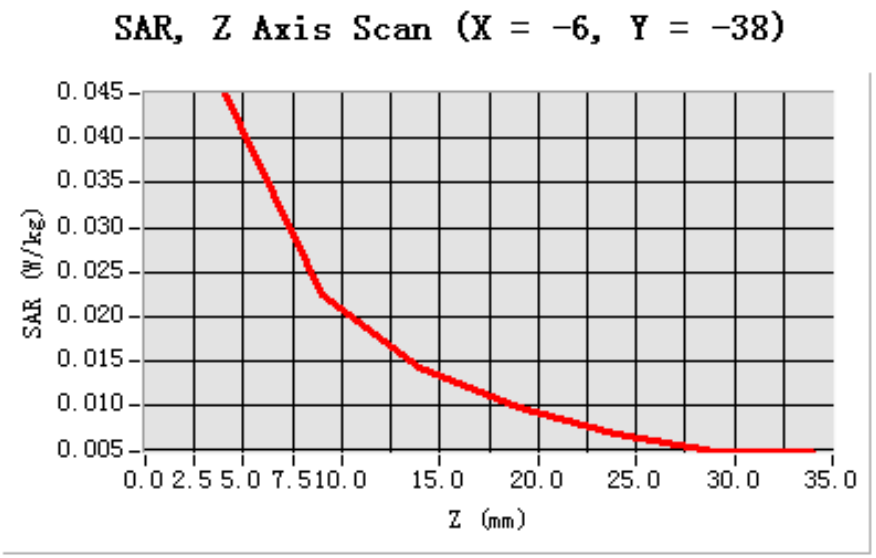
SURFACE SAR	VOLUME SAR
	

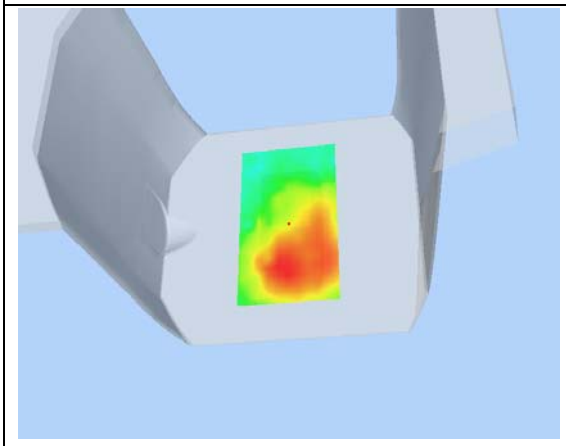
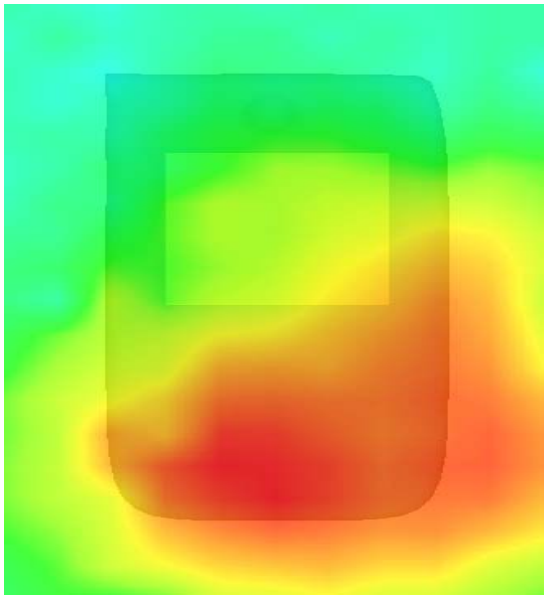
Maximum location: X=-19.00, Y=-10.00

SAR 10g (W/Kg)	0.025368
SAR 1g (W/Kg)	0.044497

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0450	0.0225	0.0142	0.0099	0.0068	0.0048



3D sceen 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: 13/10/2011
Measurement duration: 9 minutes 8 seconds

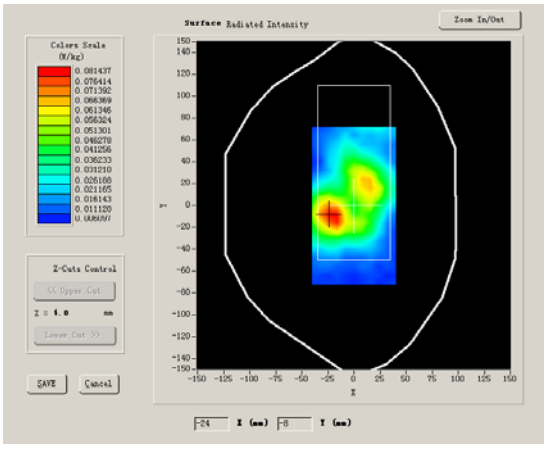
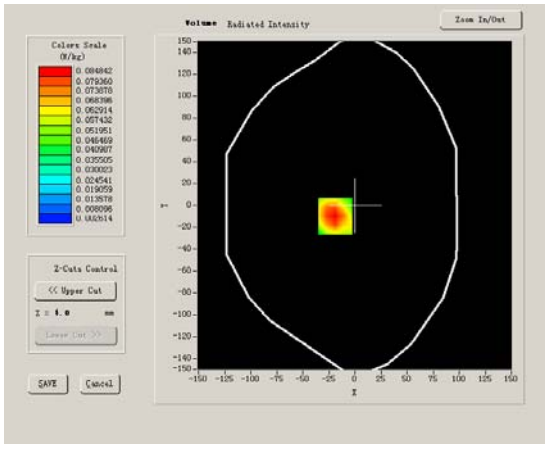
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11B
Channels	Middle
Signal	DSSS

B. SAR Measurement Results

Middle Band SAR (Channel 7):

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52..548876
Relative permittivity	12.991650
Conductivity (S/m)	1.790014
Power Drift (%)	2.450000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

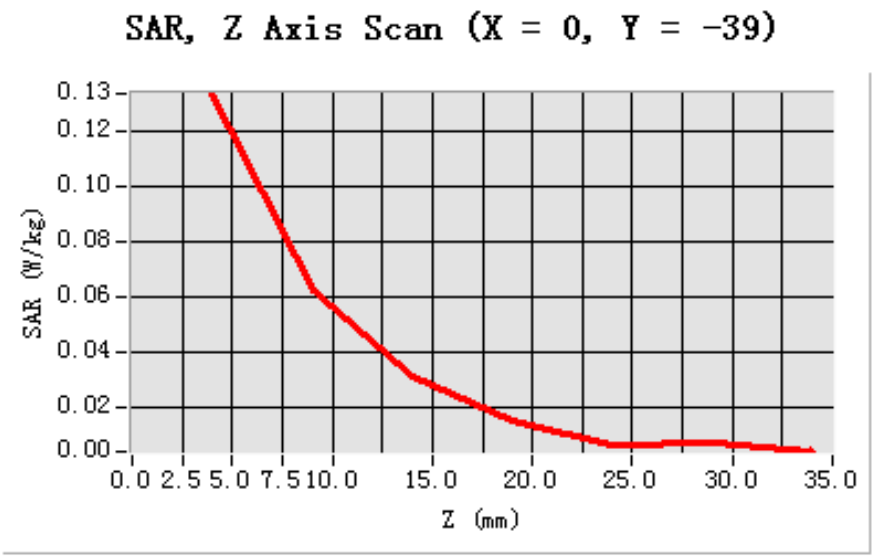
SURFACE SAR	VOLUME SAR
	

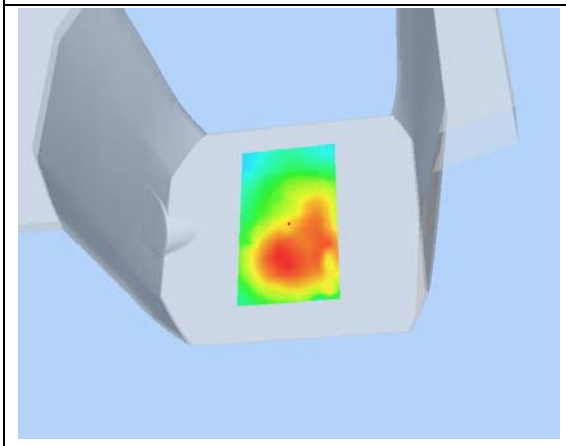
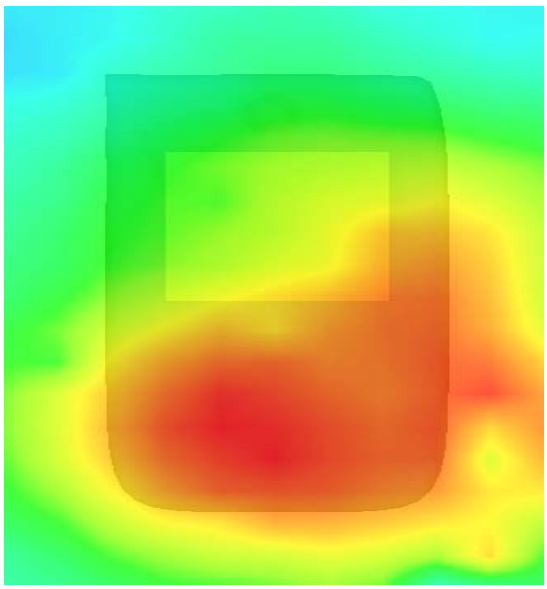
Maximum location: X=-16.00, Y=-17.00

SAR 10g (W/Kg)	0.071720
SAR 1g (W/Kg)	0.133186

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1336	0.0628	0.0312	0.0157	0.0067	0.0077



3D sceen shot	Hot spot position
	

System Performance Check Data(835MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 23/8/2011
Measurement duration: 13 minutes 27 seconds

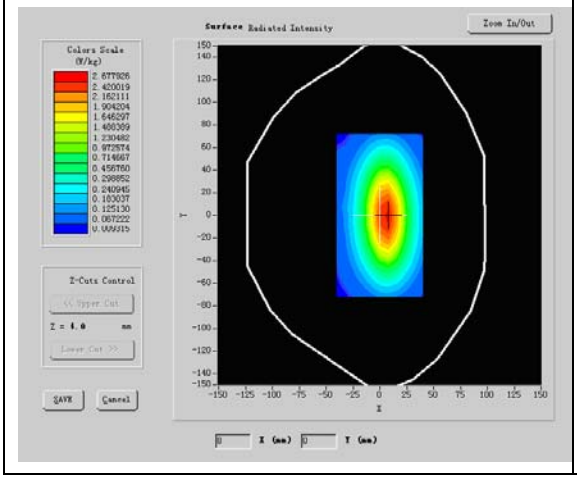
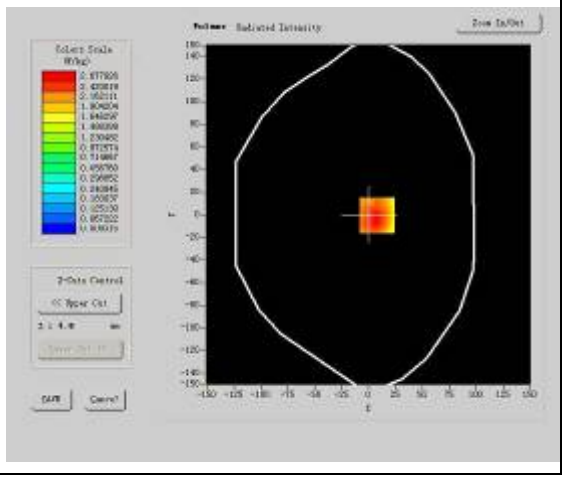
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	
Band	835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	835.000000
Relative permittivity (real part)	40.490002
Relative permittivity	15.070000
Conductivity (S/m)	0.983918
Power Drift (%)	-0.050000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.5°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

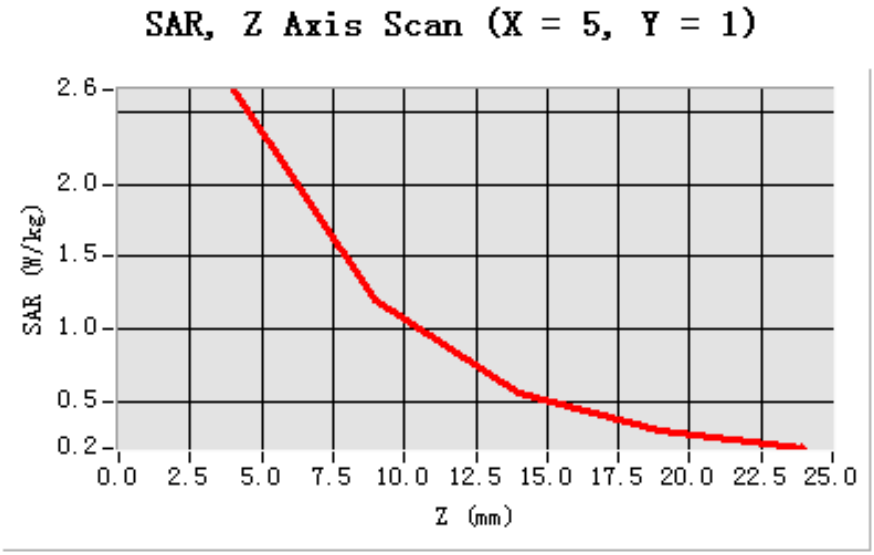
SURFACE SAR	VOLUME SAR
	

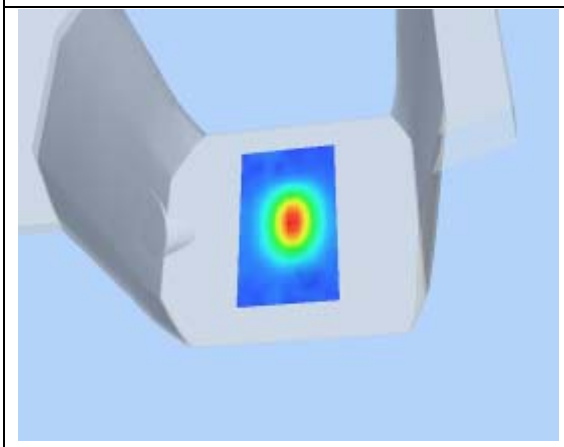
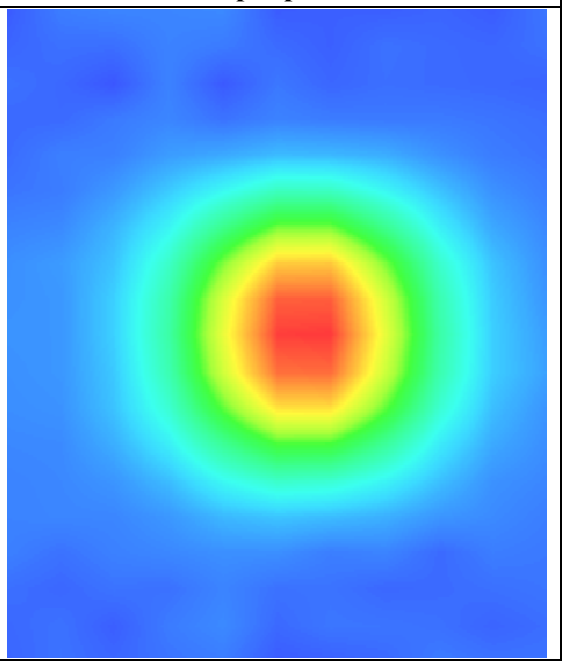
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	1.715223
SAR 1g (W/Kg)	2.477926

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	2.5486	1.2069	0.5583	0.3002



3D sceen shot	Hot spot position
	

System Performance Check Data(1900MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 23/8/2011
Measurement duration: 13 minutes 27 seconds

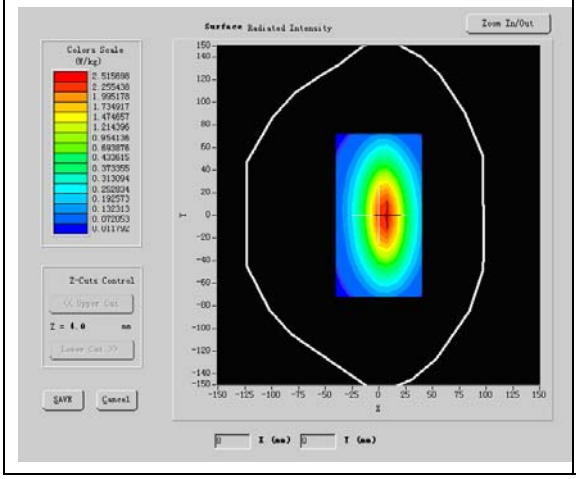
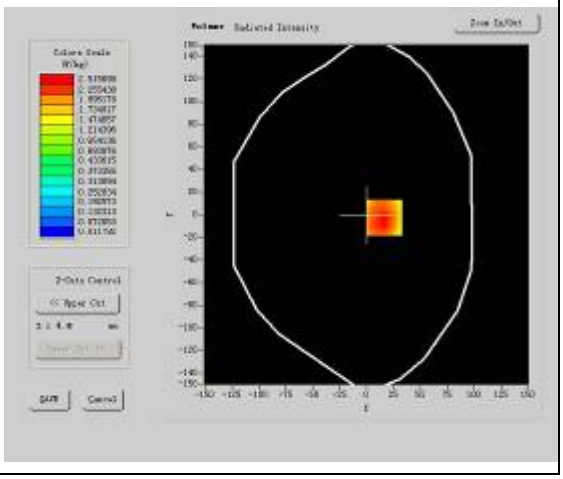
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	
Band	1900MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	1900.000000
Relative permittivity (real part)	38.930000
Relative permittivity	15.070000
Conductivity (S/m)	1.321229
Power Drift (%)	-0.140000
Ambient Temperature:	22.3°C
Liquid Temperature:	22.6°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

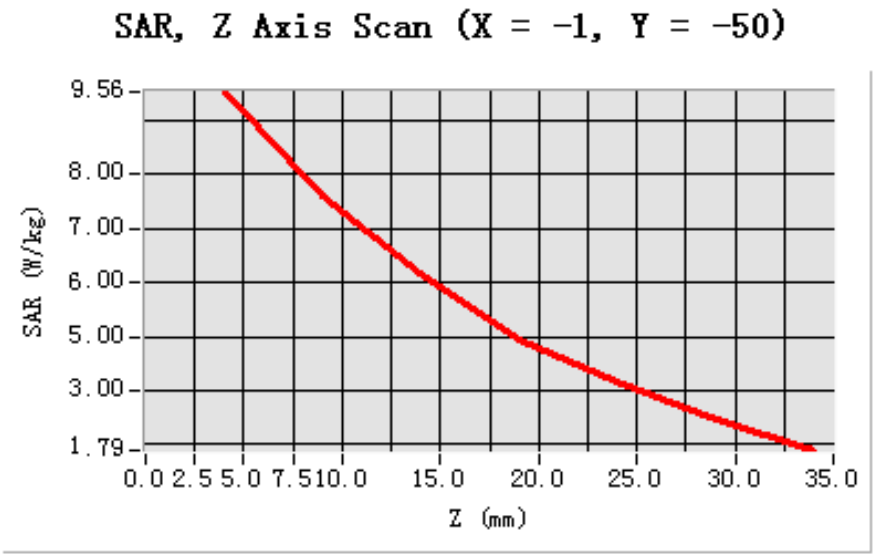
SURFACE SAR	VOLUME SAR
	

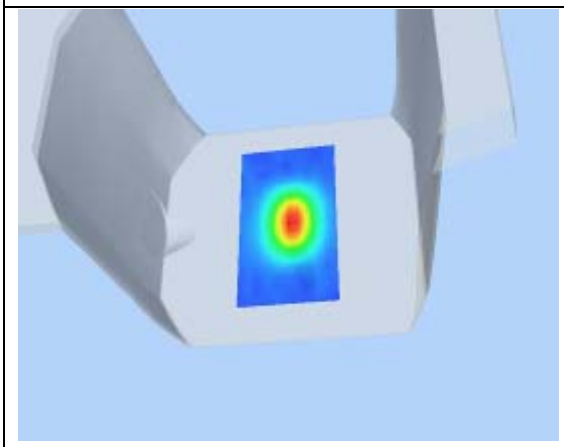
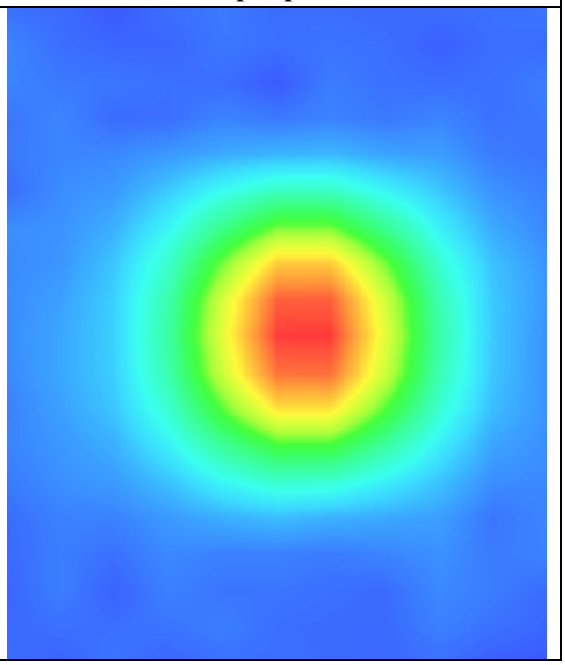
Maximum location: X=-1.00, Y=-50.00

SAR 10g (W/Kg)	4.910003
SAR 1g (W/Kg)	9.555521

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	9.5536	5.3061	2.6041	0.3211



3D sceen shot	Hot spot position
	

System Performance Check Data(835MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 13/10/2011
Measurement duration: 13 minutes 27 seconds

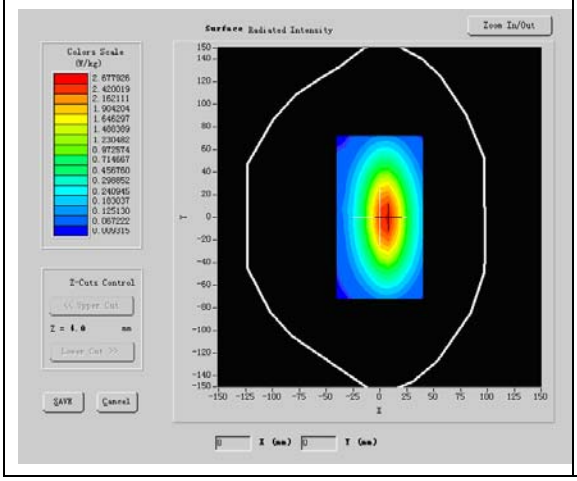
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	
Band	835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	835.000000
Relative permittivity (real part)	40.669998
Relative permittivity	15.070000
Conductivity (S/m)	0.888655
Power Drift (%)	-0.050000
Ambient Temperature:	23.7°C
Liquid Temperature:	23.1°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

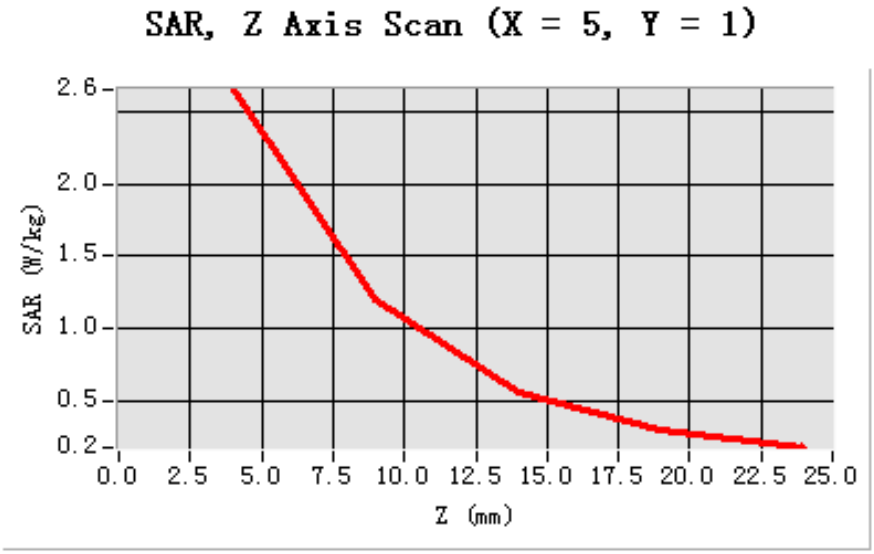
SURFACE SAR	VOLUME SAR
	

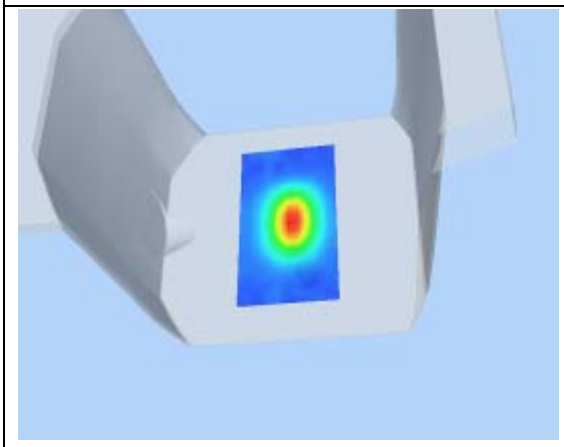
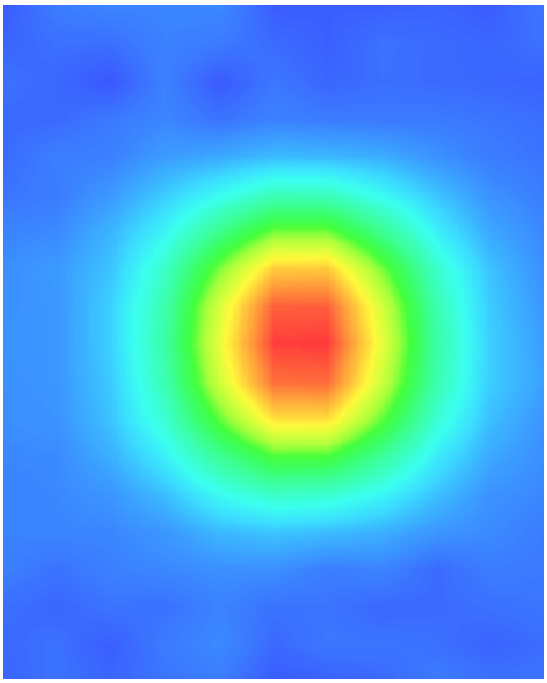
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	1.295674
SAR 1g (W/Kg)	2.383466

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	2.6486	1.2069	0.5583	0.3002



3D sceen shot	Hot spot position
	

System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 13/10/2011
Measurement duration: 13 minutes 27 seconds

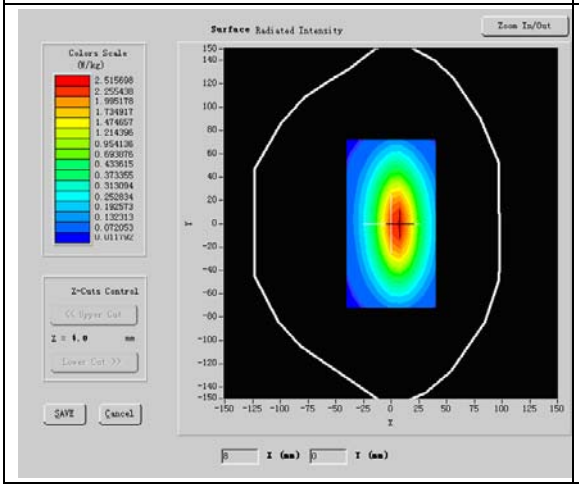
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	
Band	1900MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR:

Frequency (MHz)	1900.000000
Relative permittivity (real part)	38.509998
Relative permittivity	15.070000
Conductivity (S/m)	1.436111
Power Drift (%)	-0.140000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

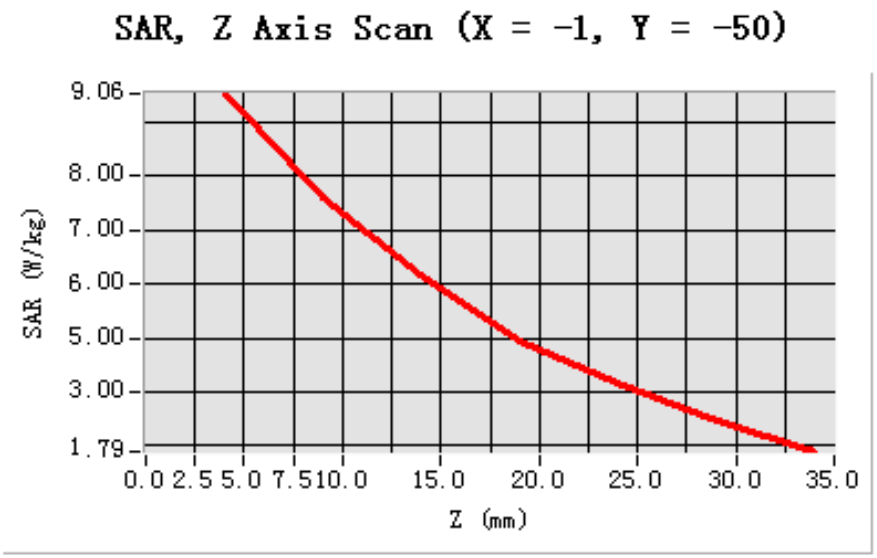
SURFACE SAR	VOLUME SAR
	

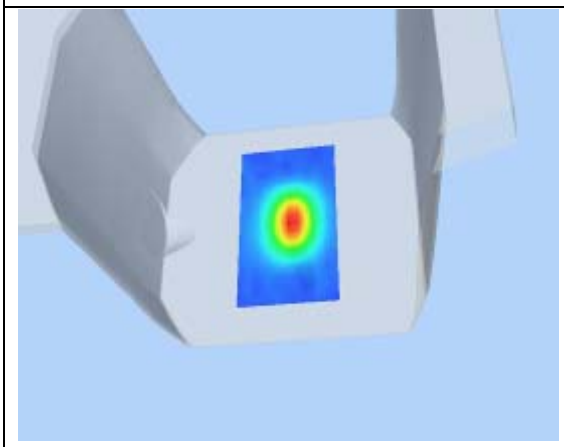
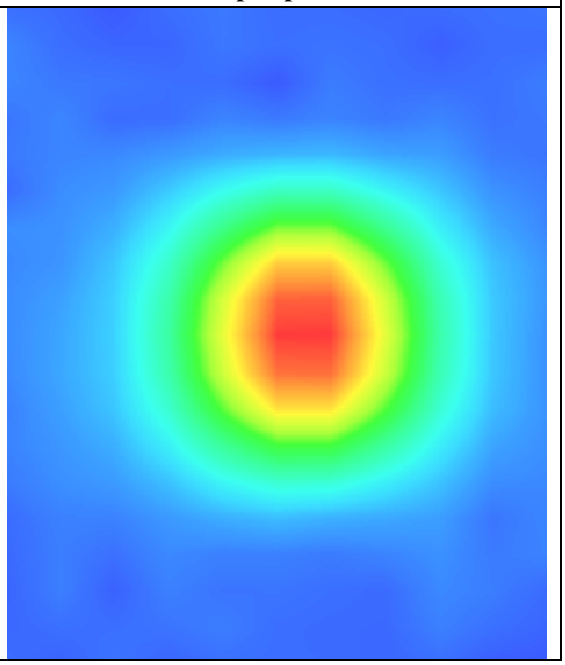
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	5.094776
SAR 1g (W/Kg)	9.066346

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	8.8524	7.3057	5.9027	5.1223



3D sceen shot	Hot spot position
	

System Performance Check Data(2450MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 23/8/2011
Measurement duration: 13 minutes 27 seconds

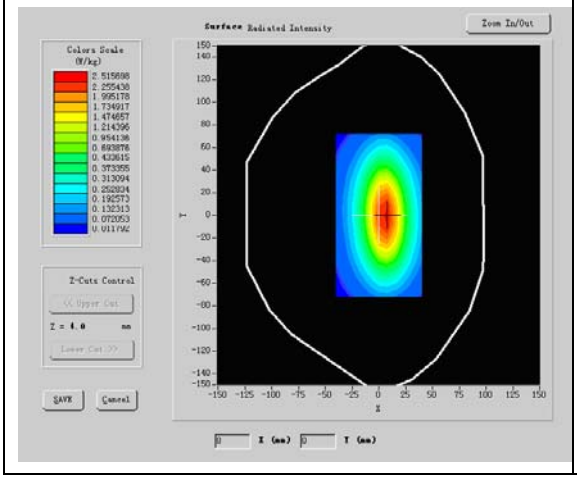
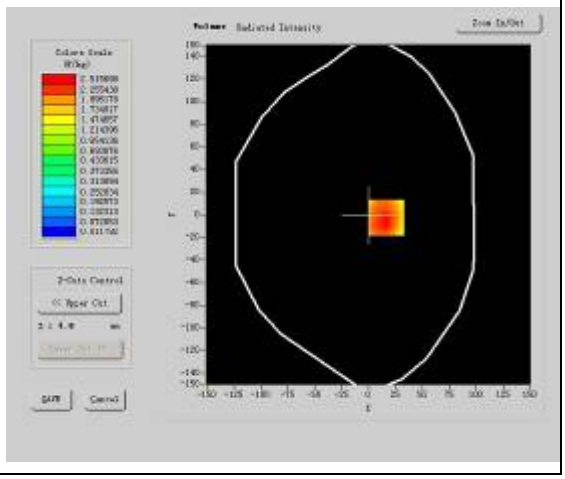
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	
Band	2450MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	2450.000000
Relative permittivity (real part)	52..548876
Relative permittivity	12.991650
Conductivity (S/m)	1.790014
Power Drift (%)	-2.180000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

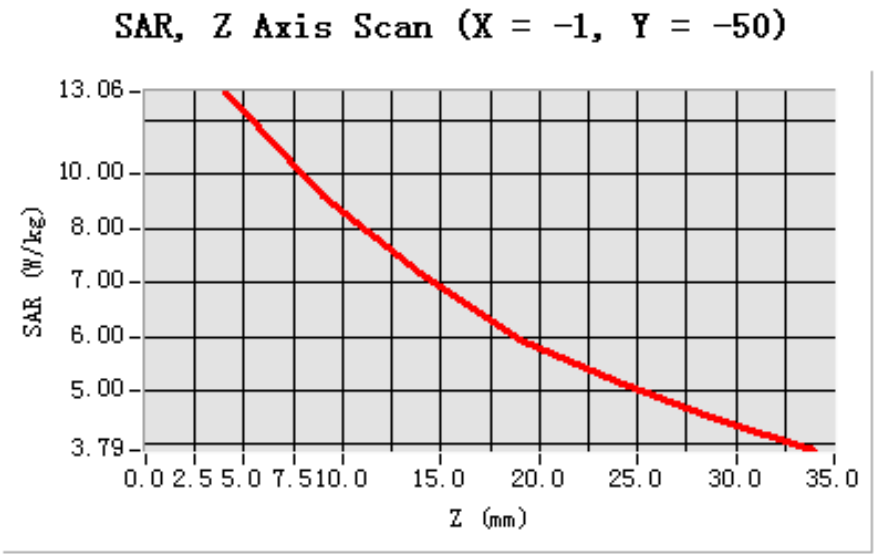
SURFACE SAR	VOLUME SAR
	

Maximum location: X=-1.00, Y=-50.00

SAR 10g (W/Kg)	6.256773
SAR 1g (W/Kg)	12.899365

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	2.8536	1.3061	0.6041	0.3211



3D sceen shot	Hot spot position