SAR TEST REPORT

Issued to

TELEEPOCH Limited

For

D5

Model Name	:	D5
Trade Name	:	UMX
Brand Name	:	UMX
FCC ID	:	U46-D5
Standard	:	FCC Oet65 Supplement C Jun.2001 47CFR 2.1093 ANSI C95.1-1999 IEEE 1528-2003
MAX SAR	:	Body: 1.028W/kg
Test date	:	2011-5-26
Issue date	:	2011-5-30

by

Shenzhen MORLAB Communication Technology Co., Ltd.

Tested by	Samuel.peng	*Approved by*	Zeng Dexin	*Review by*	Li Lei
	Samuel Peng		Q.Zeng Dexin		Li Lei
Date	2011.05.30	*Date*	2011.05.30	*Date*	2011.05.30

DIRECTORY

Change History		
Issue	Date	Reason for change
1.0	May 30, 2011	First edition

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)	2010-9-26	1year
3	Voltmeter	Keithley (2000, SN:1000572)	2010-9-24	1year
4	Synthetizer	Rohde&Schwarz (SML_03, SN:101868)	2010-9-24	1year
5	Amplifier	Nucl udes (ALB216, SN:10800)	2010-9-24	1year
6	Power Meter	Rohde&Schwarz (NRVD, SN:101066)	2010-9-24	1year
7	Probe	Satimo (SN:SN_3708_EP80)	2010-9-24	1year
8	Phantom	Satimo (SN:SN_36_08_SAM62)	2010-9-24	1year
9	Liquid	Satimo (Last Calibration:21 08 08)	2010-8-21	1year
10	Dipole 835MHz	Satimo (SN 36/08 DIPC 99)	2010-9-23	1year
11	Dipole 1900MHz	Satimo (SN 36/08 DIPF 102)	2010-9-23	1year

2. Technical Information

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

2.1. Identification of Applicant

Company Name:	TELEEPOCH Limited
Address:	5A, B1 Building, Digital Tech Zone, High-Tech Park(South),Nanshan District,Shenzhen,Guangdong Province,China

2.2. Identification of Manufacturer

Company Name:	TELEEPOCH Limited
Address:	5A, B1 Building, Digital Tech Zone, High-Tech Park(South),Nanshan District,Shenzhen,Guangdong Province,China

2.3. Equipment Under Test (EUT)

Brand Name:	UMX
Type Name:	UMX
Marking Name:	D5
Hardware Version:	V1.1
Software Version:	D5_TE_CN_V09
Frequency Bands:	CDMA 800 / CDMA 1900 Wifi:802.11B/G
Modulation Mode:	CDMA: CDMA; Wifi: DSSS/OFDM
Antenna type:	Fixed Internal Antenna
Development Stage:	Identical prototype
Battery Model:	MXE-650
Battery specification:	1500mAh 3.7V

2.3.1. Photographs of the EUT

Please see for photographs of the EUT.

2.3.2. Identification of all used EUTs

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#	V1.1	D5_TE_CN_V09

2.4. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	**47 CFR§2.1O93**	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:	CDMA 800
	CDMA 1900
Operation mode:	Call established
Power Level:	CDMA 800 Maximum output power(all up bit)
	CDMA 1900 Maximum output power(all up bit)

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 1013, 384 and 777 respectively in the case of CDMA 800, or to 25, 600 and 1175 respectively in the case of CDMA 1900. The EUT is commanded to operate at maximum transmitting power.
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

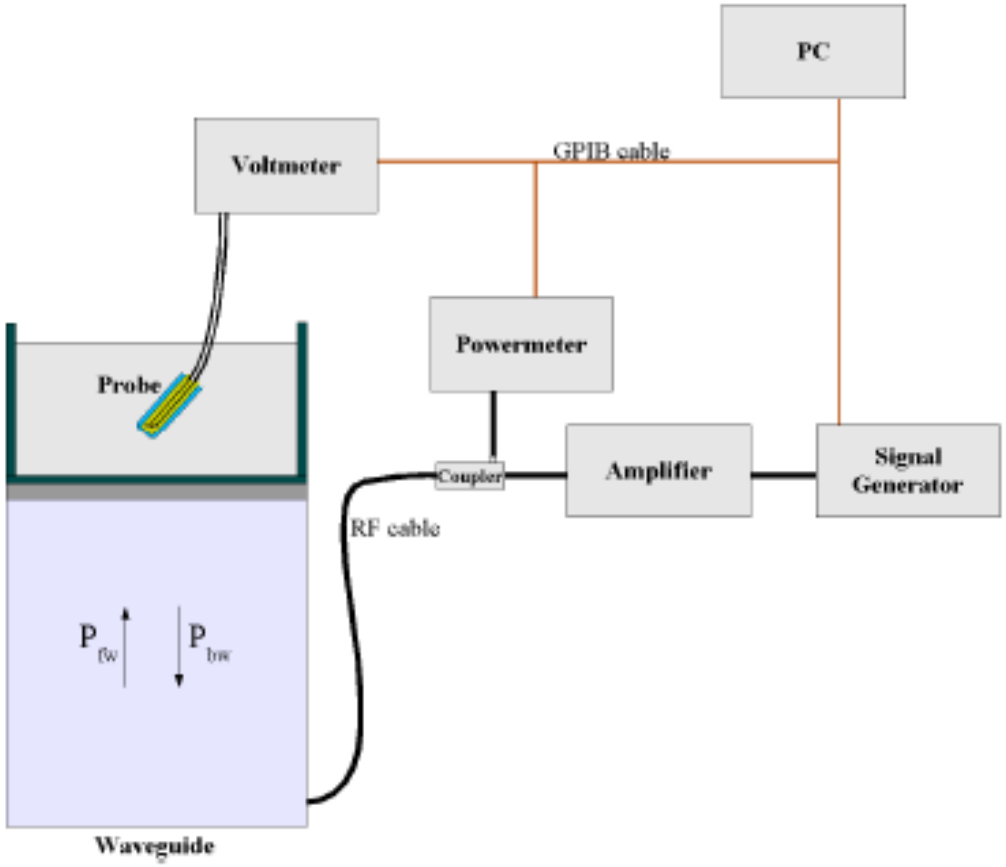
For the measurements the Specific Dosimetric E-Field Probe SN 37/08 EP80 with following specifications is used

- 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.



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

Where :
Pfw = Forward Power
Pbw = Backward Power
a and b = Waveguide dimensions
ı = Skin depth
Keithley configuration:

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

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

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

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

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

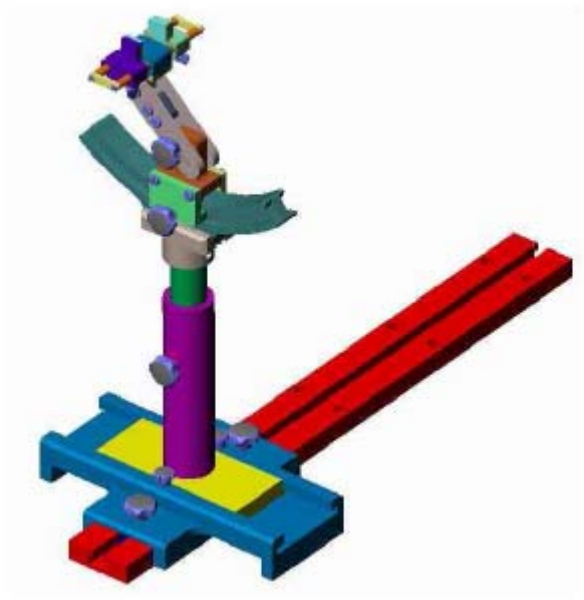
where DCP is the diode compression point in mV.

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 GSM 850MHz PCS 1900MHz, 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 head and body tissue simulating liquid for frequency band 835 MHz ,1900 MHz and 2450MHz.

Ingredients (% by weight)	Frequency Band 835MHz	Frequency Band 1900MHz	Frequency Band 2450MHz
Tissue Type	Body	Body	Body
Water	52.4	40.4	40.4
Salt(NaCl)	1.4	0.5	0.5
Sugar	45.0	58.0	58.0
HEC	1.0	1.0	1.0
Bactericide	0.1	0.1	0.1
Triton	0.0	0.0	0.0
DGBE	0.0	0.0	0.0
Acticide SPX	0.0	0.0	0.0
Dielectric Constant	56.1	54.0	54.0
Conductivity (S/m)	0.95	1.45	1.45

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.

For body-worn measurements, the device was tested against flat phantom representing the user body. Under measurement phone was put on in the phone holder.

Table 2: 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 (May 26)	835 MHz	55.709999	1.009033
Target value	1900 MHz	53.3	1.52
Validation value (May 26)	1900 MHz	52.548876	1.573978
Target value	2450 MHz	53.3	1.52
Validation value (May 26)	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 from target value	E.3.2	4.57	R	√3	0.64	0.43	1.69	1.13	
Liquid conductivity -	E.3.3	5.00	N	1	0.64	0.43	3.20	2.15	M

measurement uncertainty									
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	$\sqrt{3}$			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 (10 g)	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	$\sqrt{3}$			1.02	1.02	
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$			1.63	1.63	
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	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	$\sqrt{3}$	1	1	1.73	1.73	
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	
RF ambient Conditions	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	
Extrapolation, interpolation and integration Algoritms for Max. SAR Evaluation	E.5.2	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	
Dipole									
Dipole axis to liquid Distance	8,E.4.2	1.00	N	$\sqrt{3}$	1	1	0.58	0.58	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 frequency at 835 MHz, 1900 MHz and 2450MHz. 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	835MHz:SN 36/08 DIPC 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 %.

Frequency	835MHz	1900MHz	2450MHz
Target value（1g）	9.5 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

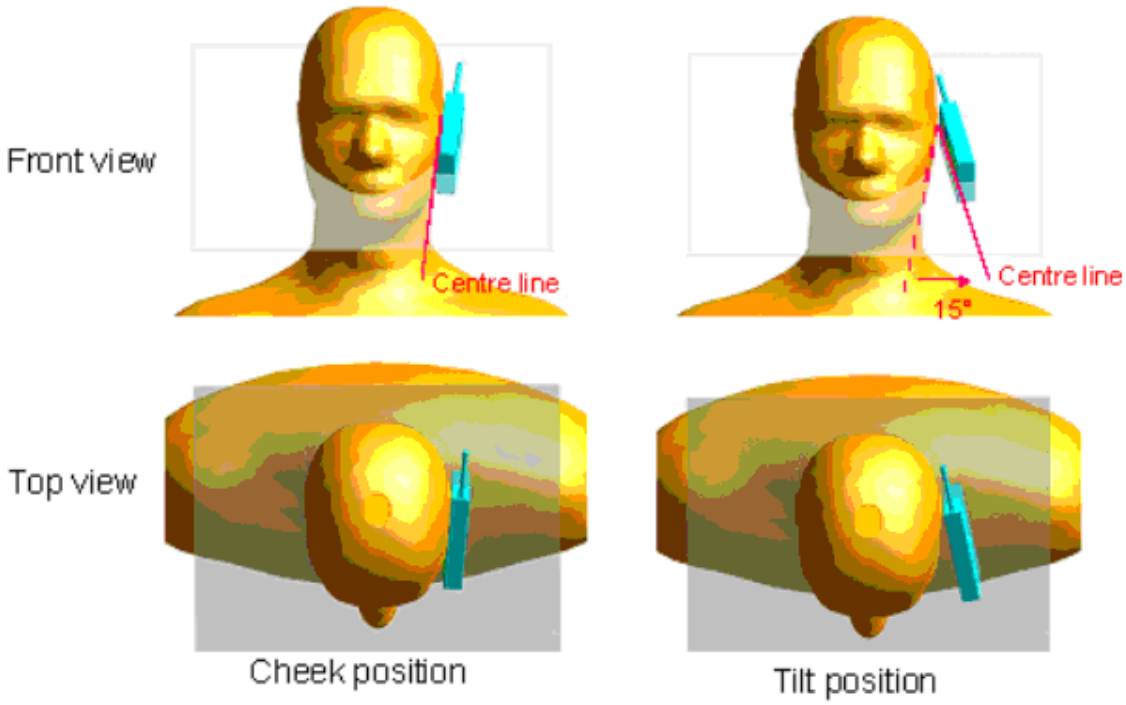
Note: System checks the specific test data please see page85-90.

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.

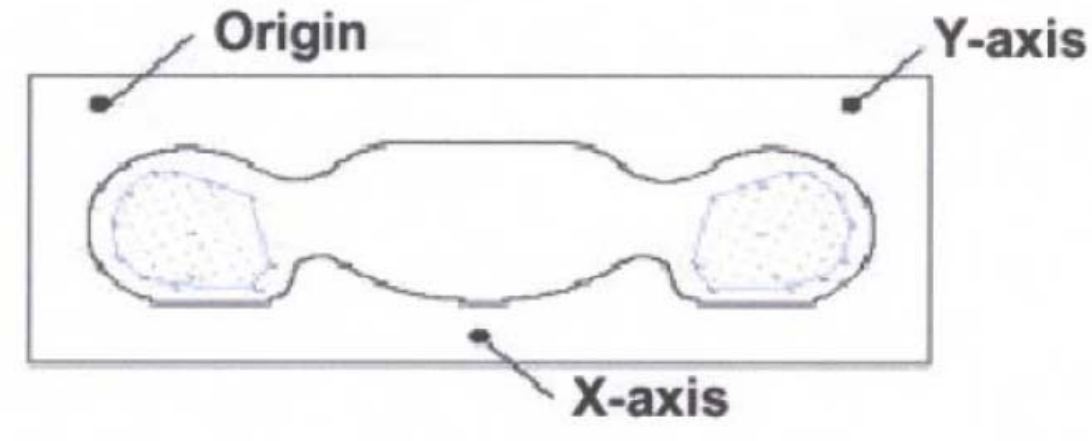
Remark: Please refer to Appendix B for the test setup photos.

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. 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 CDMA

These procedures were followed according to FCC "SAR Measurement Procedures for 3G Devices", October 2007 (Revised).

9.3. Output Power Verification

See 3GPP2 C.S0011/TIA-98-E as recommended by "SAR Measurement Procedures for 3G Devices", October 2007 (Revised).
Maximum output power is verified on the High, Middle and Low channels according to procedures in section 3.1.2.3.4 of 3GPP2 C.S0033-0/TIA-866 for Rev. 0 and section 4.3.4 of 3GPP2 C.S0033-A for Rev. A. For Rev. A, maximum output power for both Subtype 0/1 and Subtype 2 Physical Layer configurations should be measured. The device operating configurations under TAP/ETAP should be documented in the test report; including power control, code channel and RF channel output power levels. The measurement results should be tabulated in the SAR report with any measurement difficulties and equipment limitations clearly identified.

9.4. SAR Measurement

SAR is measured using FTAP/RTAP and FETAP/RETAP respectively for Rev. 0 and Rev. A devices. The AT is tested with a Reverse Data Channel rate of 153.6 kbps in Subtype 0/1 Physical Layer configurations; and a Reverse Data Channel payload size of 4096 bits and Termination Target of 16 slots in Subtype 2 Physical Layer configurations. Both FTAP and FETAP are configured with a Forward Traffic Channel data rate corresponding to the 2-slot version of 307.2 kbps with the ACK Channel transmitting in all slots. AT power control should be in “All Bits Up” conditions for TAP/ETAP.

Body SAR is measured using Subtype 0/1 Physical Layer configurations for Rev. 0. SAR for Subtype 2 Physical layer configurations is not required for Rev. A when the maximum average output of each RF channels is less than that measured in Subtype 0/1 Physical layer configurations. Otherwise, SAR is measured on the maximum output channel for Rev. A using the exposure configuration that results in the highest SAR for that RF channels in Rev. 0.17 Head SAR is required for Ev-Do devices that support operations next to the ear; for example, with VOIP, using Subtype 2 Physical Layer configurations according to the required handsetconfigurations.

4.4.2.3 1x RTT Support

For Ev-Do devices that also support 1x RTT voice and/or data operations, SAR is not required for 1x

RTT when the maximum average output of each channel is less than ¼ dB higher than that measured in Subtype 0/1 Physical Layer configurations for Rev. 0. Otherwise, the 'Body SAR Measurements' procedures in the 'CDMA 2000 1x Handsets' section should be applied.

4.4.2.4 Output Power Verification 1x RTT

Maximum output power is verified on the High, Middle, and Low channels according to procedures in Section 4.4.5.2 of 3 GPP2 C.S0011/TIA-98-E. Results for at least steps 3,4 and 10 of the power measurement procedures should be tabulated in the SAR report. Steps 3 and 4 should be measured using SO55 with power control bits in "All Up" condition. TDSO/SO32 may be used instead of SO55 for step 4.Step 10 should be measured using TDSO/SO32 with power control bits in the "Bits Hold"

1xRTT Power Measurements

Channel	Radio Configuration aud conducted Power (dBm)			
	RC1	RC1	RC3	RC3
1013	27.63	26.54	26.48	26.52
384	27.55	27.35	27.45	27.02
777	28.23	27.13	27.18	27.20
25	26.02	25.95	25.93	25.94
600	27.30	27.21	27.15	27.20
1175	27.27	27.20	27.12	27.21
SO	SO2	SO55	SO2	SO55

EvDo Rev A Power Measurements

1x EvDo Rev.A Type 0 [dBm] – FTAP rate = 2 Slot Version 307.2kbps						
	RTAP Rate	9.6kbps	19.2 kbps	38.2 kbps	76.8 kbps	153.6 kbps
Band	Channel					
Cellular	1013	27.52	27.34	27.38	27.12	27.23
	384	27.32	27.25	27.19	27.24	27.28
	777	27.92	27.74	27.80	27.76	27.82
PCS	25	26.41	26.20	26.18	26.20	26.15
	600	26.66	26.41	26.48	26.39	26.46
	1175	26.44	26.32	26.41	26.34	23.36

Note: 1. Because CDMA voice mode peak output power is large than EVDO, we select CDMA voice mode for SAR testing.

2. SAR test Power Control was set in 'All Bits Up" for all measurements.

9.5. WIFI and BT measurement power.

Wifi peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)	
			802.11B (DSSS)	802.11G (OFDM)
WiFi	1	2412	13.80	7.89
	6	2437	13.00	8.12
	11	2462	12.07	8.09

10.Wireless Hot Spot SAR Evaluation Procedures

This Portable Devices with Wireless Router function. And the SAR evaluation procedures accord with KDB 941225 D06 Hot Spot SAR v01.

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

11.Test Results List

Summary of Measurement Results (CDMA 800 Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg)		
			Device Test channel, Frequency		
			Channel 1013	Channel 384	Channel 777
			824.7MHz	836.52MHz	848.31MHz
Body	Top side	Extended	0.594	0.554	0.543
	Back side	Extended	0.925	0.845	0.860
	Edge A	Extended	0.543	0.557	0.547
	Edge B	Extended	/	/	0.301
	Edge C	Extended	/	/	/
	Edge D	Extended	/	/	0.255

Summary of Measurement Results (CDMA 1900 Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg)		
			Device Test channel, Frequency		
			Channel 25	Channel 600	Channel 1175
			1851.30MHz	1880.0MHz	1908.8MHz
Body	Top side	Extended	0.816	1.028	0.935
	Back side	Extended	0.504	0.406	0.475
	Edge A	Extended	0.572	0.567	0.457
	Edge B	Extended	/	/	0.189
	Edge C	Extended	/	/	/
	Edge D	Extended	/	/	0.183

Summary of Measurement Results (802.11B Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg)		
			Device Test channel, Frequency		
			Channel 1	Channel 6	Channel 11
			2412.0MHz	2436.0MHz	2462.0MHz
Body	Top side	Extended	0.200	/	/
	Back side	Extended	0.189	/	/
	Edge A	Extended	0.059	/	/
	Edge B	Extended	/	/	/
	Edge C	Extended	0.031	/	/
	Edge D	Extended	0.113	/	/

Note: 1. Acorrd with KDB 941225 D06, the CDMA antenna located on edge A, and the distance between edge A and edge C is large than 2.5cm, the SAR testing of edge C is not required during perform CDMA standalone SAR evaluation. And the WIFI antenna loacted on edge D, when perform WIFI standalone SAR evlition, the SAR testing of edge B is not reqiured.

2.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.

3. Edge configurations :

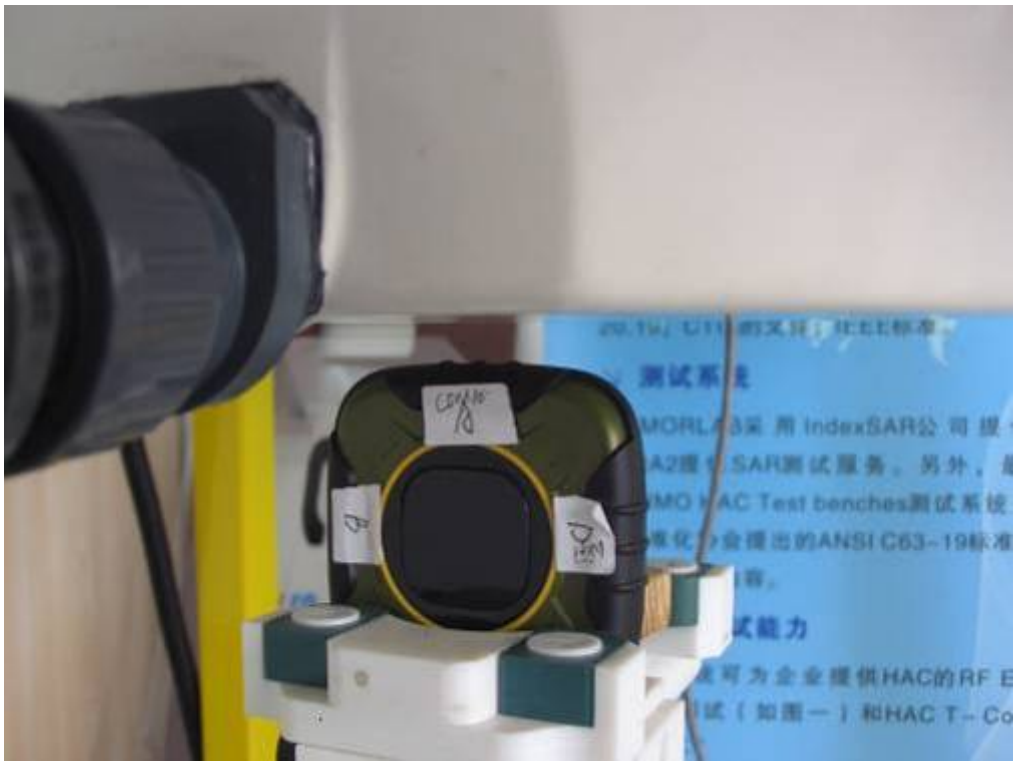
12.Multiple Transmitters Evaluation

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

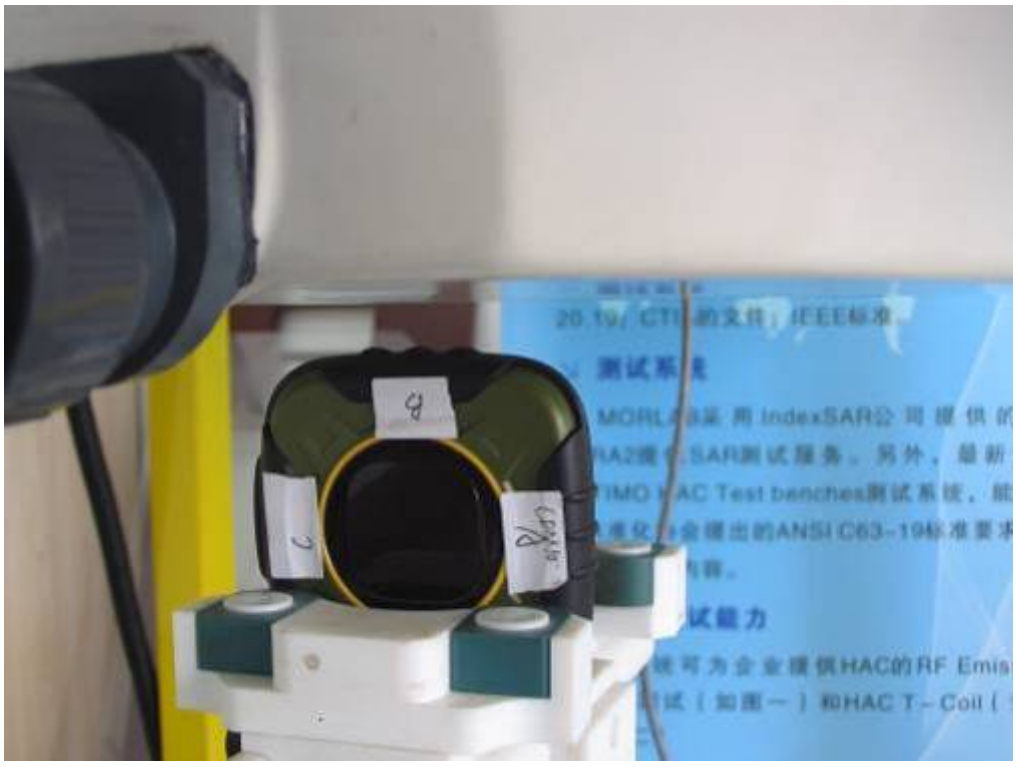
1. The Wifi mode Max. 1-g SAR vauel is 0.200W/Kg, and the CDMA Max. 1-g SAR vauel is 1.028W/Kg, the sum of 1-g SAR vauel is 1.228W/Kg less than 1.6W/Kg, according with KDB 648474 D01, when the sum of the 1-g SAR is <1.6 W/kg for all simultaneous transmitting antennas , and the Simultaneous Transmission SAR is not required.

Annex B EUT Setup Photos

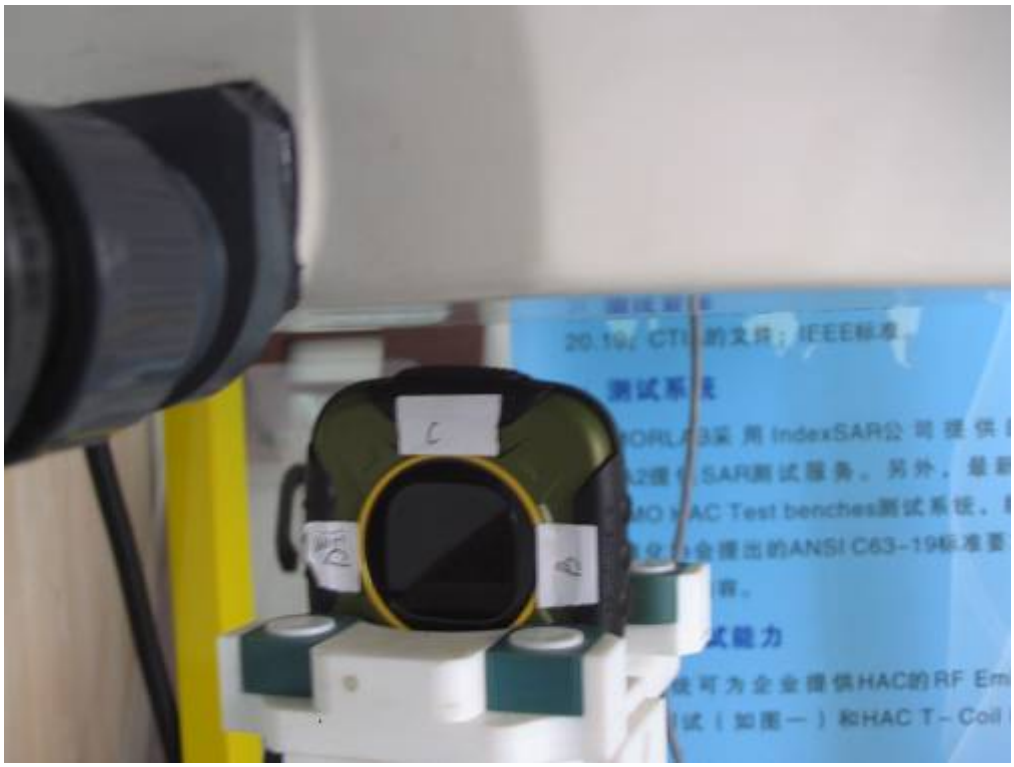
1 Body Edge A 10mm distance



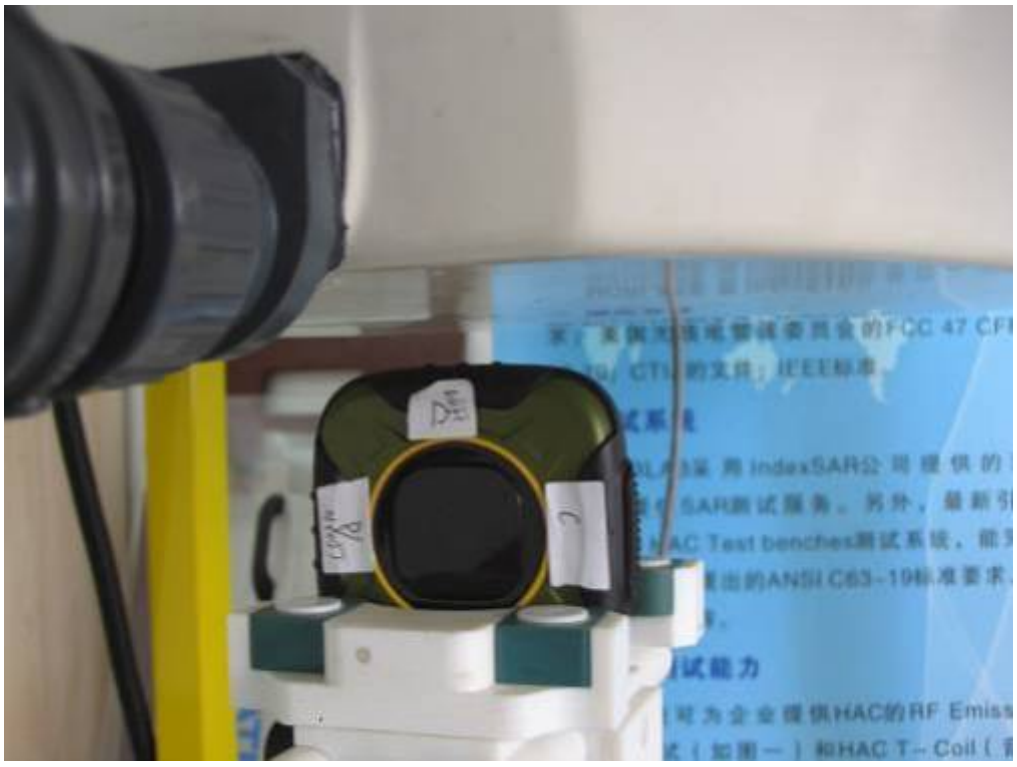
2 Body Edge B 10mm distance



3 Body Edge C 10mm distance



4 Body Edge D 10mm distance



5 Body side 10mm distance

Liquid Level Photo

Annex C Graph Test Results

BAND	PARAMETERS
CDMA 800	Measurement 1: Validation Plane with Body device position on Low Channel in CDMA mode (Top side) Measurement 2: Validation Plane with Body device position on Middle Channel in CDMA mode (Top side) Measurement 3: Validation Plane with Body device position on High Channel in CDMA mode (Top side) Measurement 4: Validation Plane with Body device position on Low Channel in CDMA mode (back side) Measurement 5: Validation Plane with Body device position on Middle Channel in CDMA mode (back side) Measurement 6: Validation Plane with Body device position on High Channel in CDMA mode (back side) Measurement 7: Validation Plane with Body device position on low Channel in CDMA mode (Edge A) Measurement 8: Validation Plane with Body device position on middle Channel in CDMA mode (Edge A) Measurement 9: Validation Plane with Body device position on high Channel in CDMA mode (Edge A) Measurement 10: Validation Plane with Body device position on Middle Channel in CDMA mode (Edge B) Measurement 11: Validation Plane with Body device position on Middle Channel in CDMA mode (Edge D)
CDMA 1900	Measurement 12: Validation Plane with Body device position on Low Channel in CDMA mode (Top side) Measurement 13: Validation Plane with Body device position on Middle Channel in CDMA mode (Top side) Measurement 14: Validation Plane with Body device position on High Channel in CDMA mode (Top side) Measurement 15: Validation Plane with Body device position on Low Channel in CDMA mode (back side) Measurement 16: Validation Plane with Body device position on Middle Channel in CDMA mode (back side) Measurement 17: Validation Plane with Body device position on High Channel in CDMA mode (back side) Measurement 18: Validation Plane with Body device position on low Channel in CDMA mode (Edge A) Measurement 19: Validation Plane with Body device position on middle Channel in CDMA mode (Edge A) Measurement 20: Validation Plane with Body device position on high Channel in CDMA mode (Edge A) Measurement 21: Validation Plane with Body device

	position on Middle Channel in CDMA mode (Edge B) Measurement 22: Validation Plane with Body device position on Middle Channel in CDMA mode (Edge D)
WIFI	Measurement 23: Validation Plane with Body device position on Low Channel in CDMA mode (Top side) Measurement 24: Validation Plane with Body device position on Low Channel in CDMA mode (back side) Measurement 25: Validation Plane with Body device position on Low Channel in CDMA mode (Edge D) Measurement 26: Validation Plane with Body device position on Low Channel in CDMA mode (Edge A) Measurement 27: Validation Plane with Body device position on Low Channel in CDMA mode (Edge C)

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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

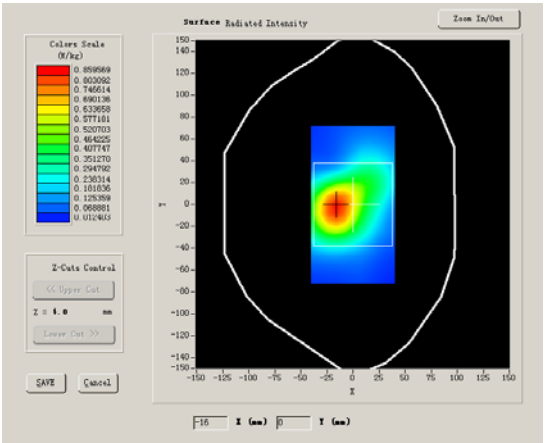
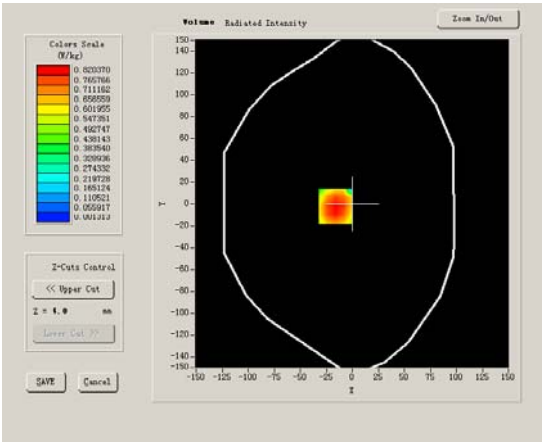
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	0.975187
Variation (%)	1.110000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

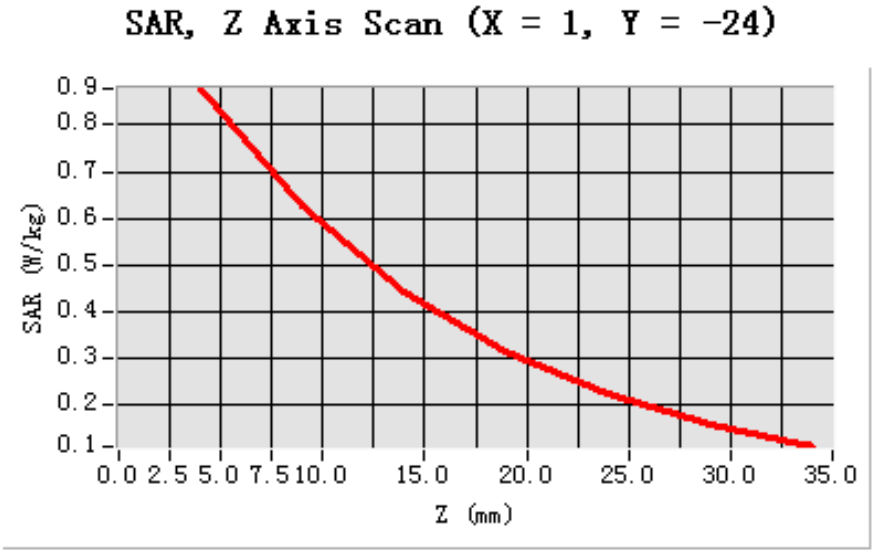
SURFACE SAR	VOLUME SAR
	

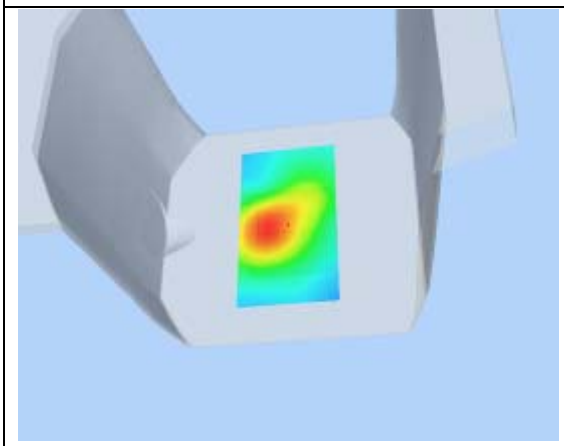
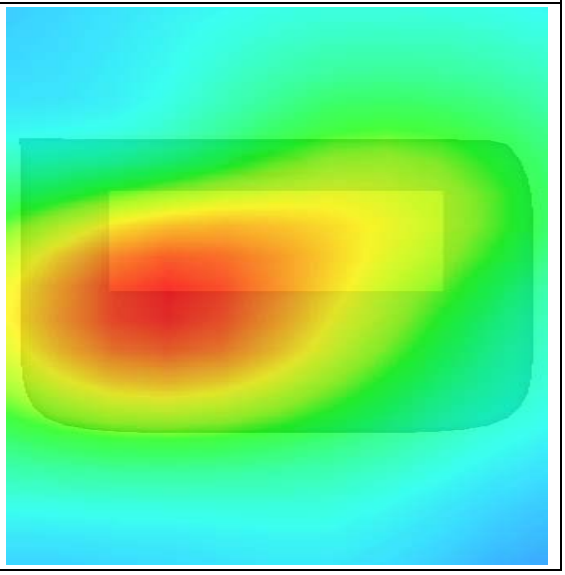
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.547514
SAR 1g (W/Kg)	0.924752

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8735	0.494	0.3056	0.0047	0.1042	0.0036



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

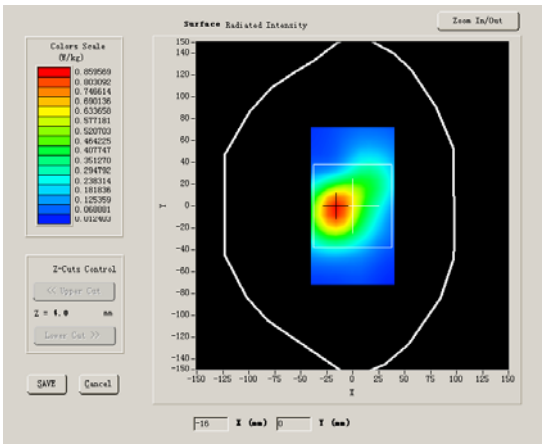
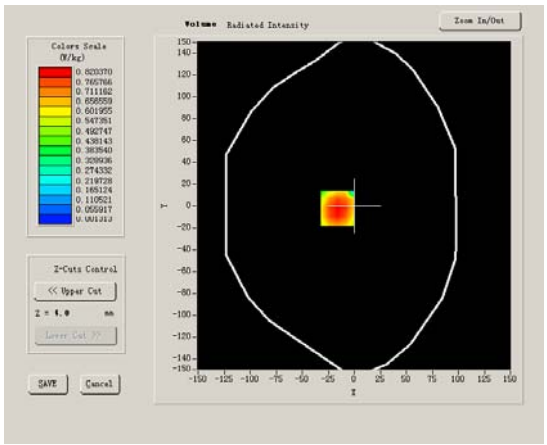
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 384):

Frequency (MHz)	836.520020
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250
Conductivity (S/m)	0.879566
Variation (%)	-0.960000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

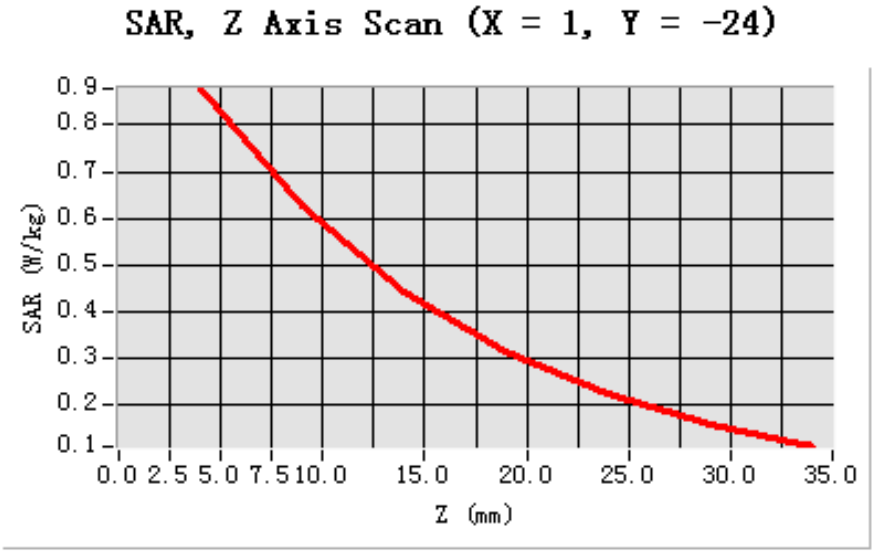
SURFACE SAR	VOLUME SAR
	

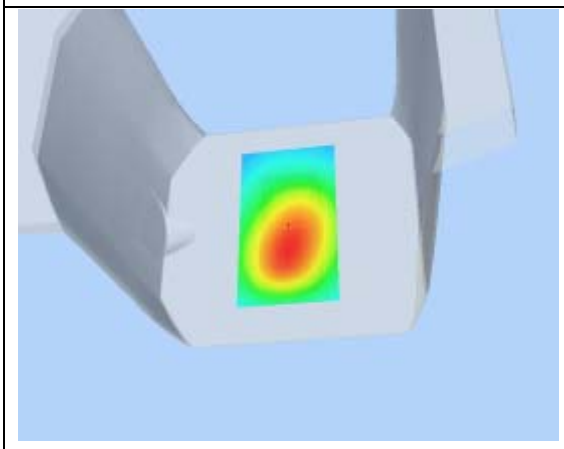
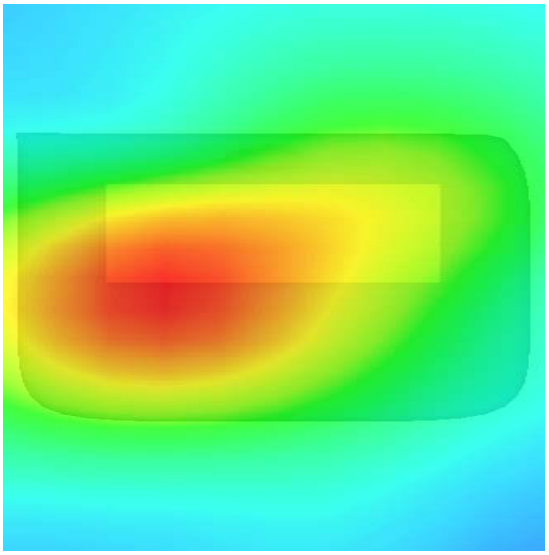
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.524175
SAR 1g (W/Kg)	0.845241

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8777	0.6264	0.4407	0.3150	0.2237	0.1569



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

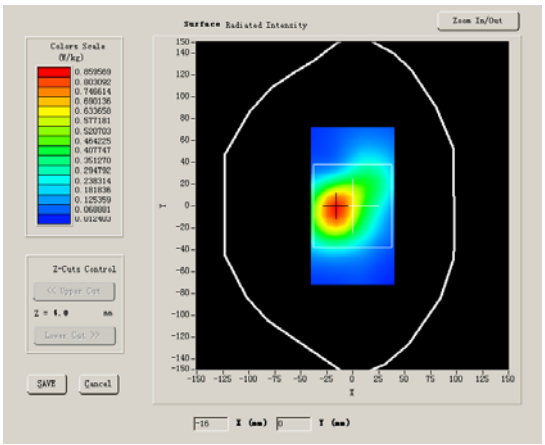
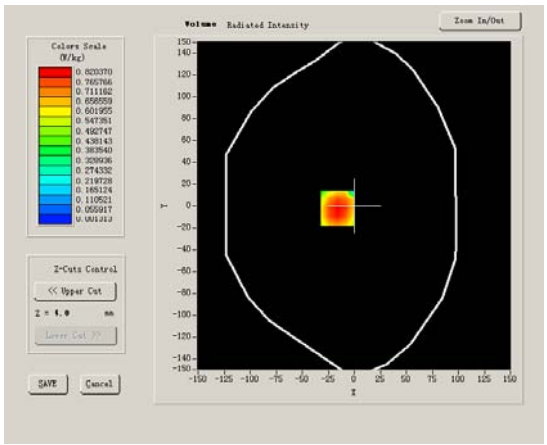
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	High
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	1.003105
Variation (%)	0.730000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

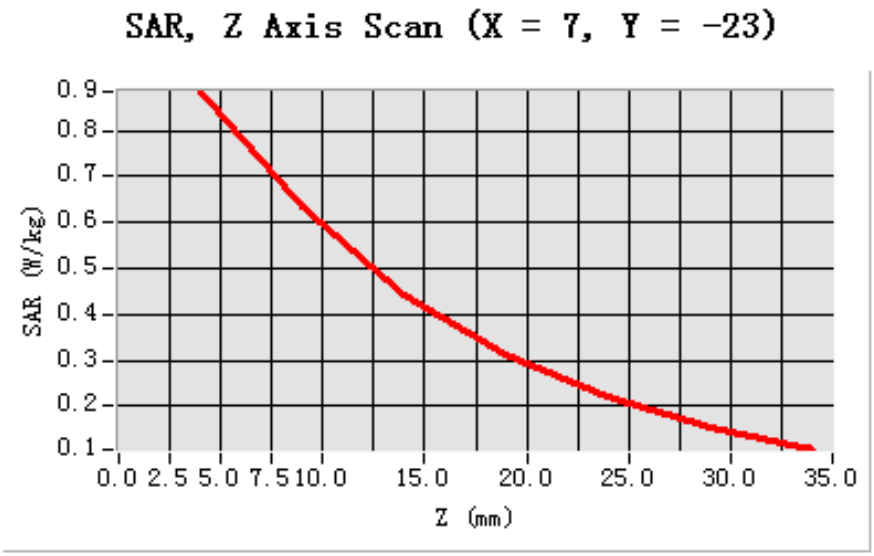
SURFACE SAR	VOLUME SAR
	

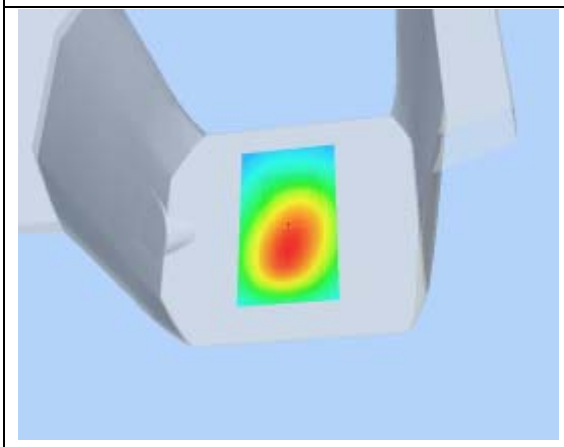
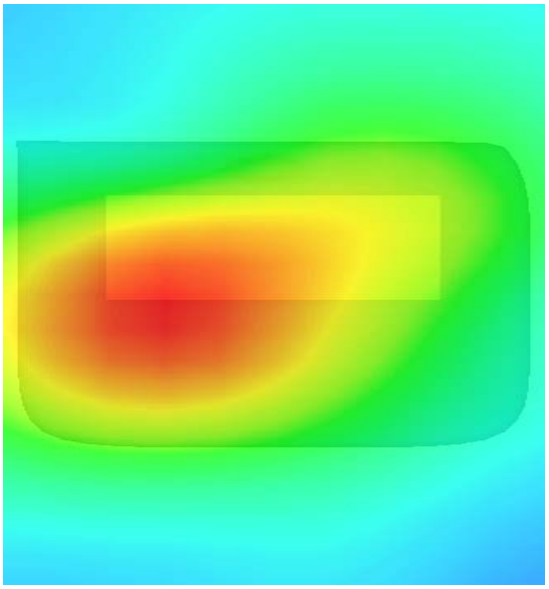
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.594383
SAR 1g (W/Kg)	0.860678

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8851	0.6338	0.4441	0.3112	0.2186	0.1538



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

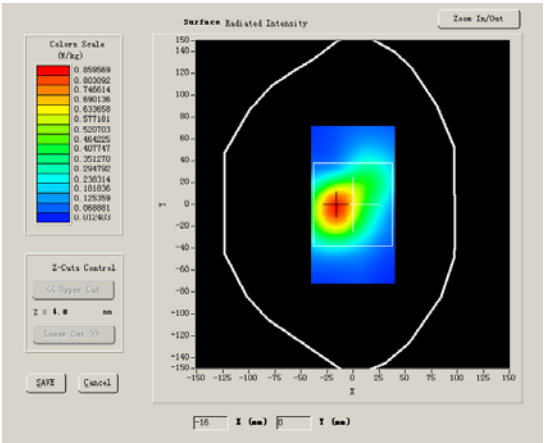
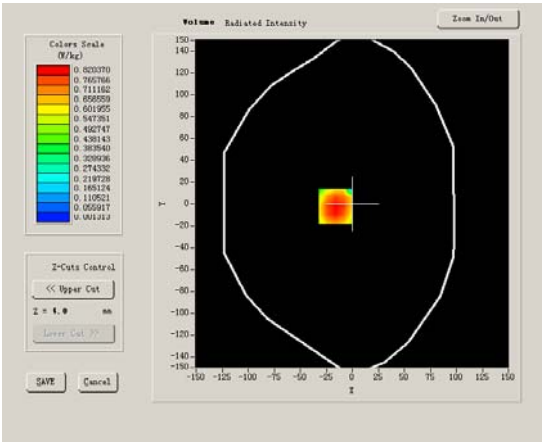
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	0.975187
Variation (%)	1.110000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

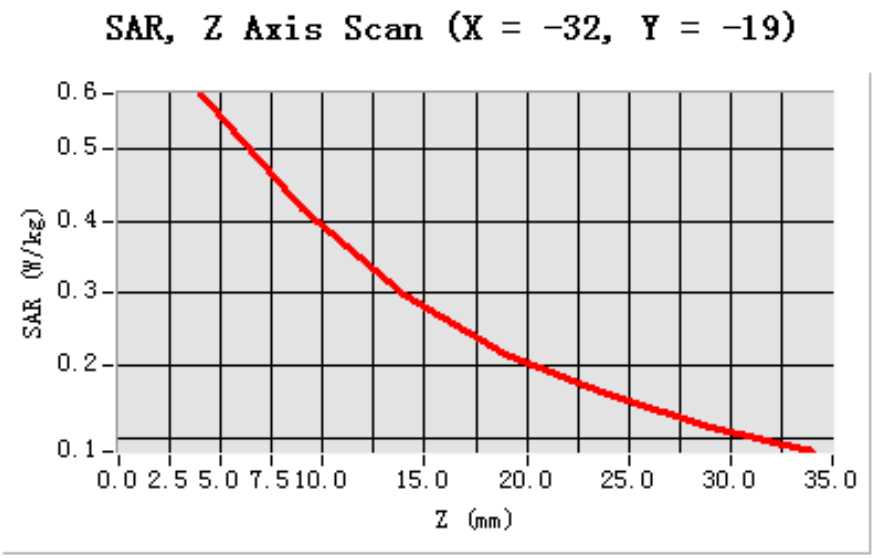
SURFACE SAR	VOLUME SAR
	

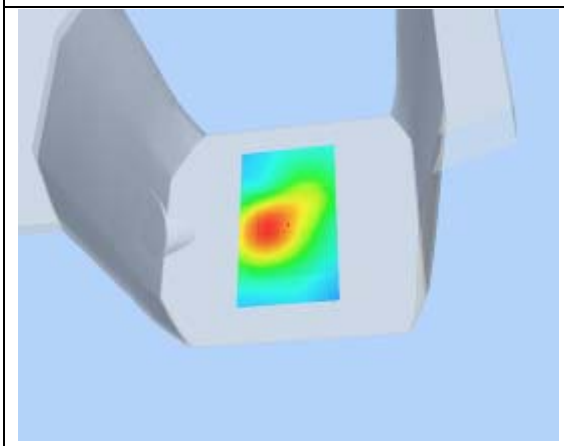
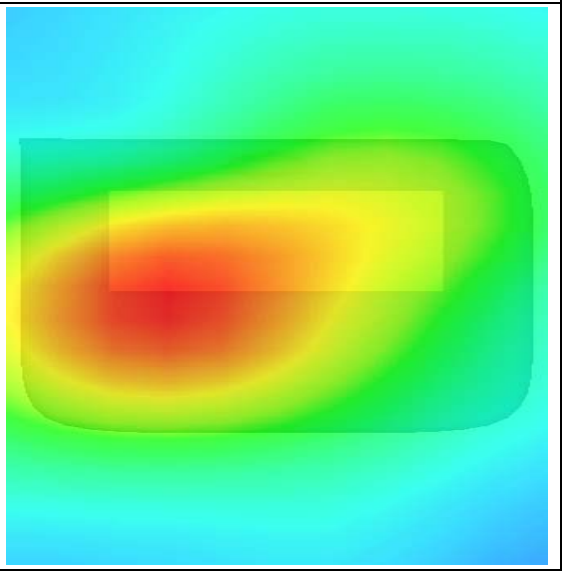
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.426403
SAR 1g (W/Kg)	0.594348

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5758	0.4178	0.2981	0.2171	0.1609	0.1163



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

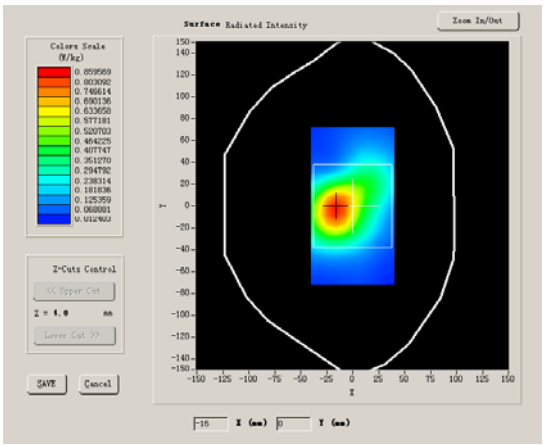
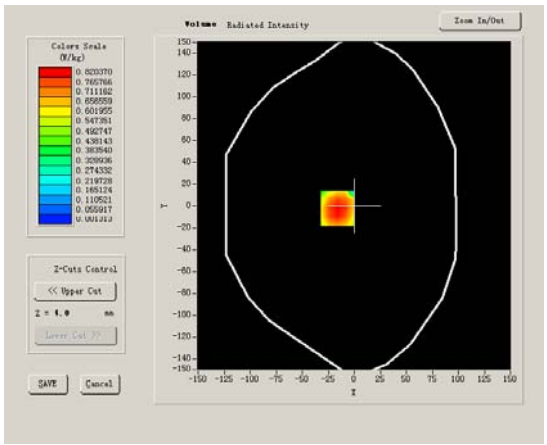
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 384):

Frequency (MHz)	836.520020
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250
Conductivity (S/m)	0.879566
Variation (%)	-0.960000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

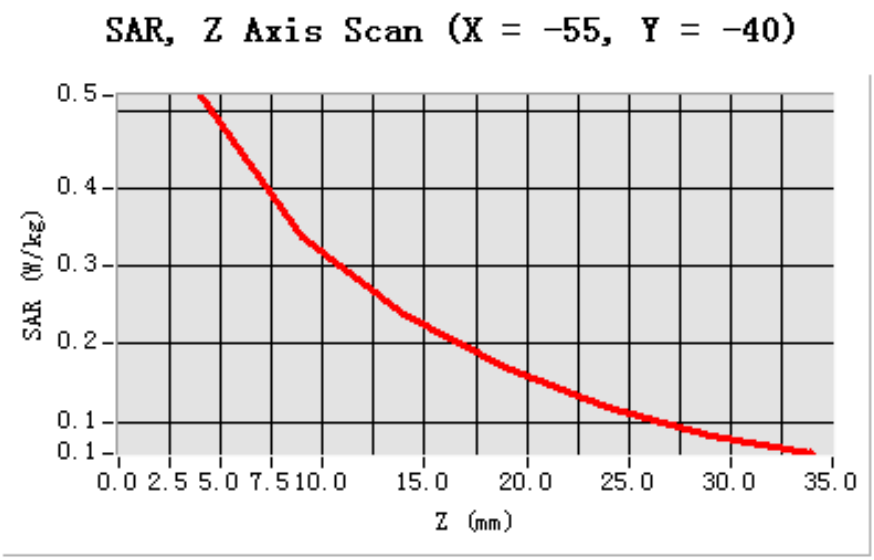
SURFACE SAR	VOLUME SAR
	

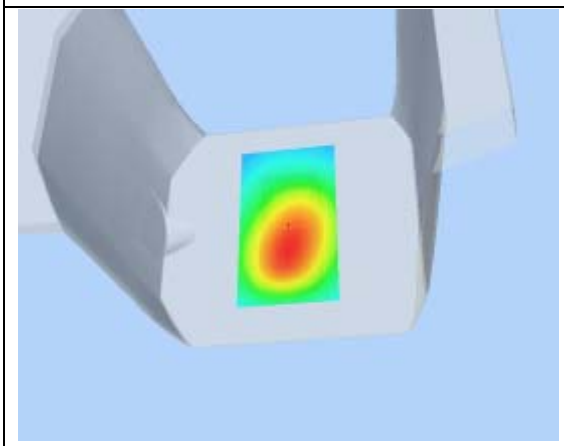
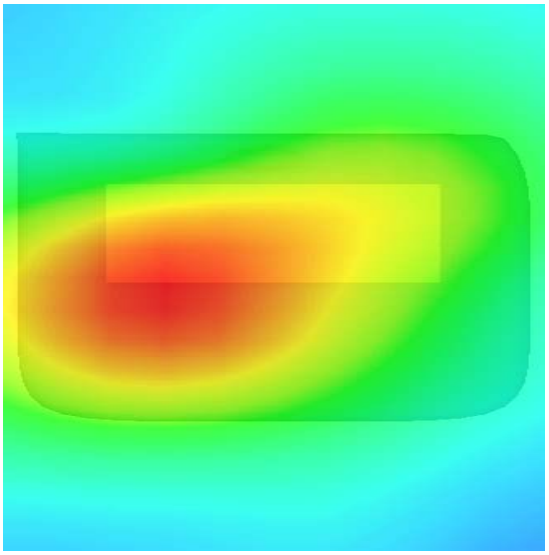
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.380810
SAR 1g (W/Kg)	0.554291

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5212	0.3388	0.2387	0.1697	0.1199	0.0815



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

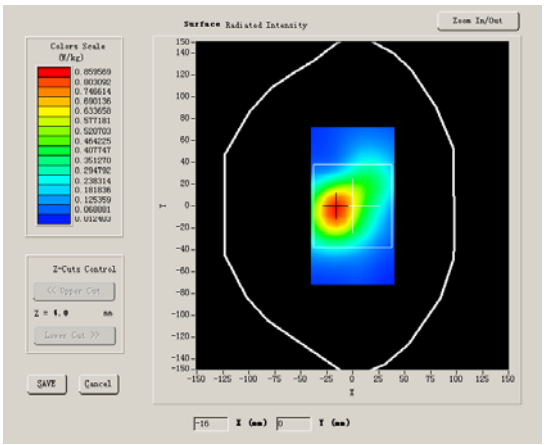
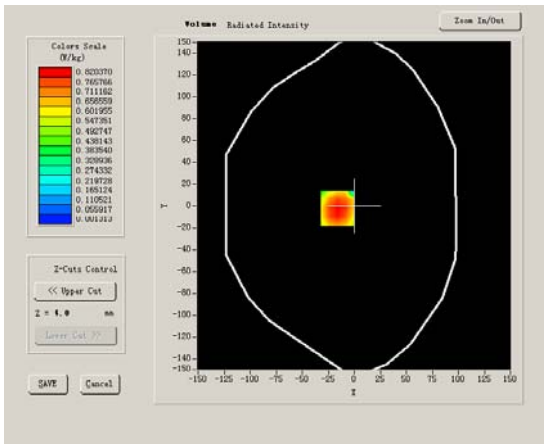
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	High
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	1.003105
Variation (%)	0.730000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

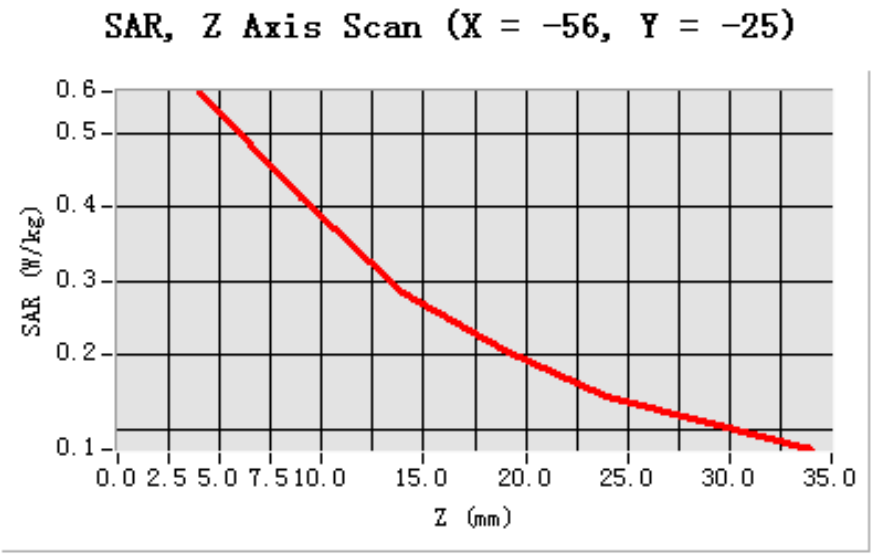
SURFACE SAR	VOLUME SAR
	

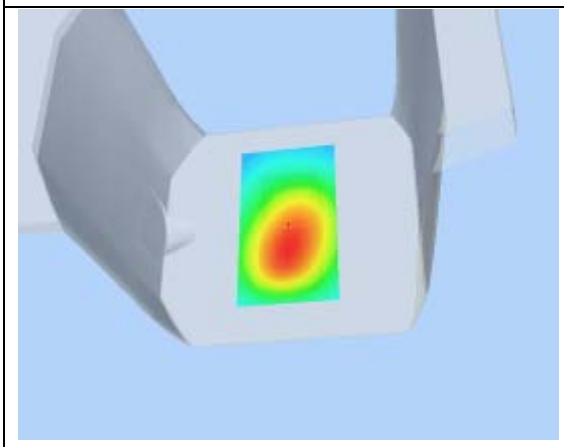
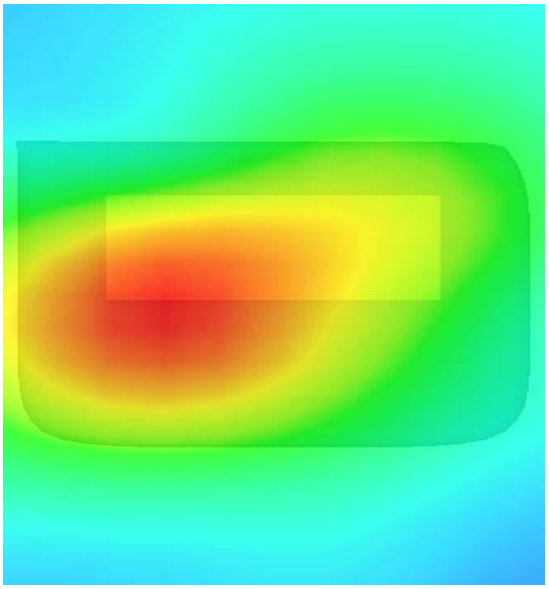
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.372861
SAR 1g (W/Kg)	0.542577

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5566	0.4143	0.2839	0.2067	0.1450	0.1080



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

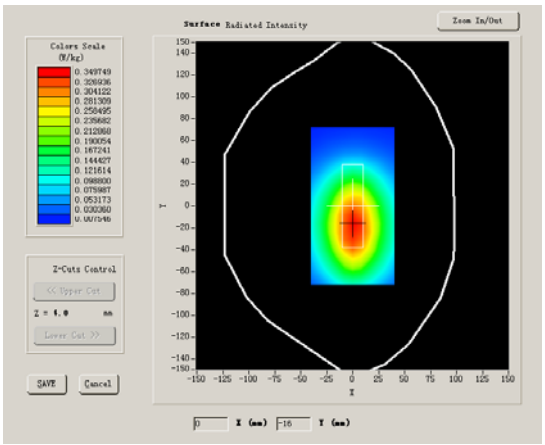
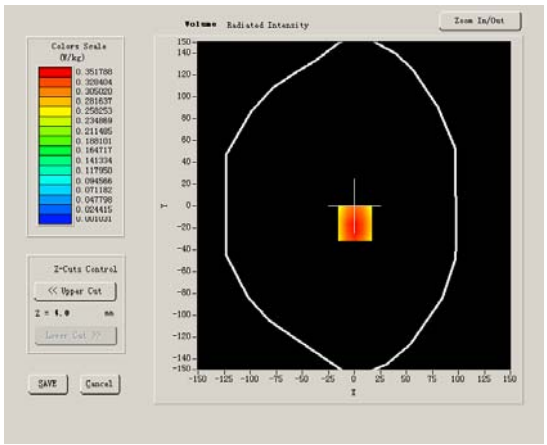
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	Low
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	0.975187
Variation (%)	1.110000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

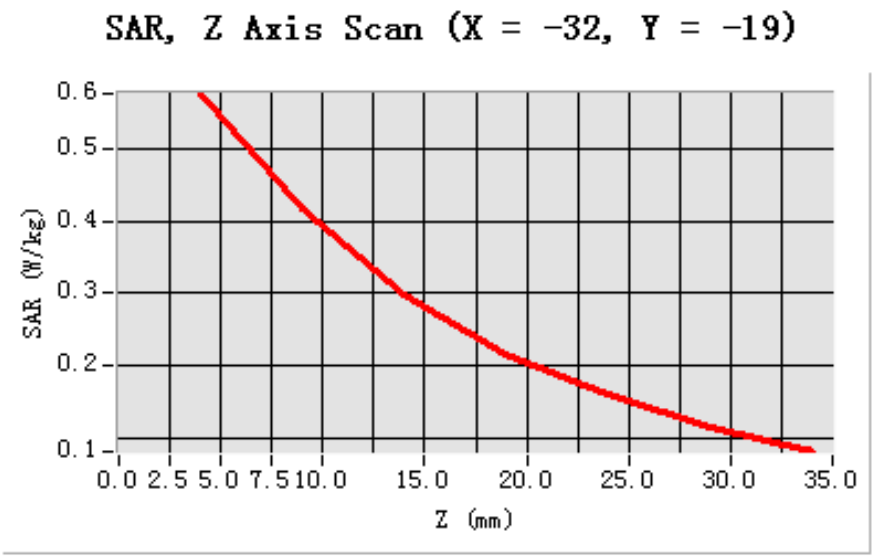
SURFACE SAR	VOLUME SAR
	

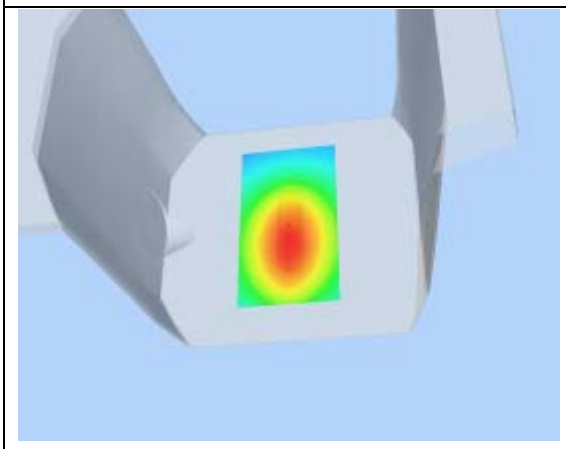
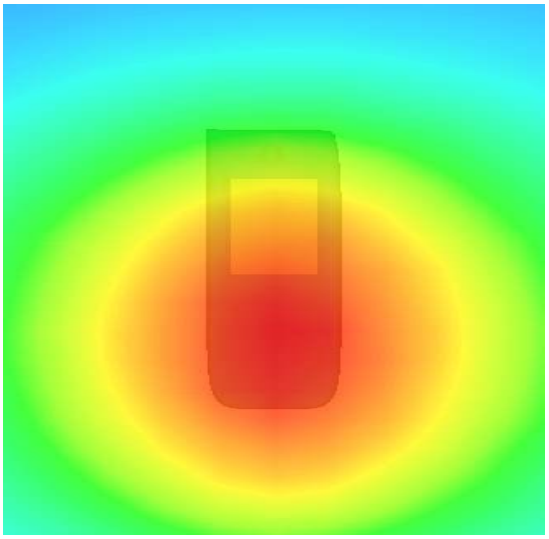
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.374124
SAR 1g (W/Kg)	0.557247

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5542	0.4104	0.29361	0.2014	0.1791	0.1103



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

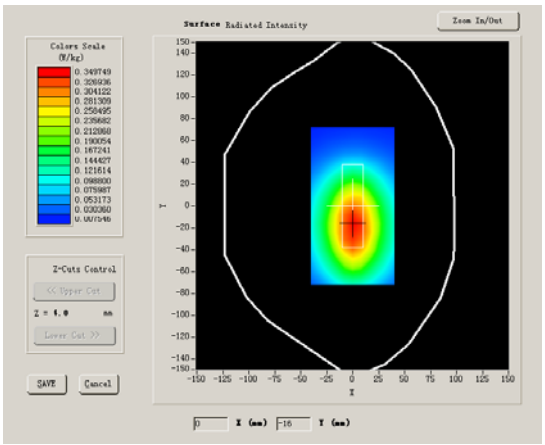
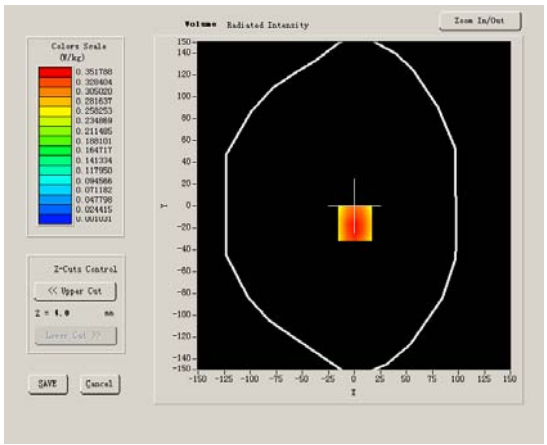
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 384):

Frequency (MHz)	836.520020
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250
Conductivity (S/m)	0.879566
Variation (%)	-0.960000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

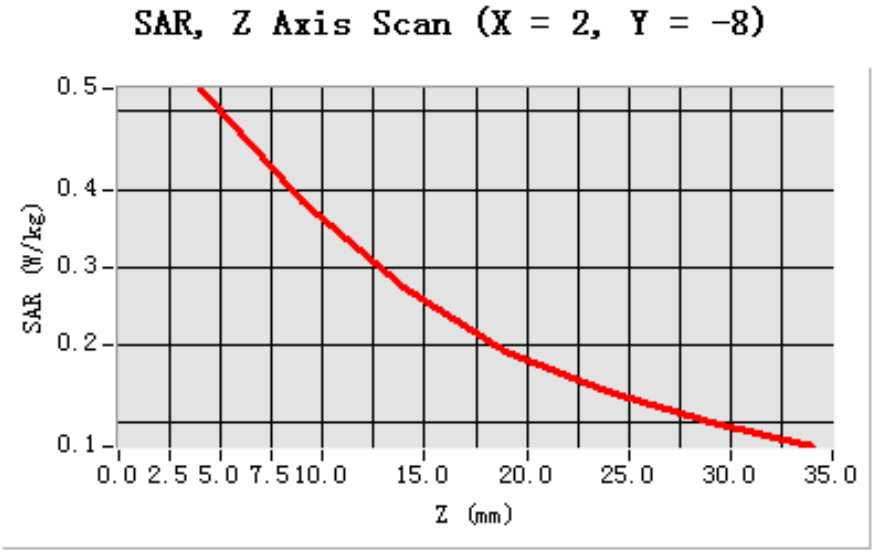
SURFACE SAR	VOLUME SAR
	

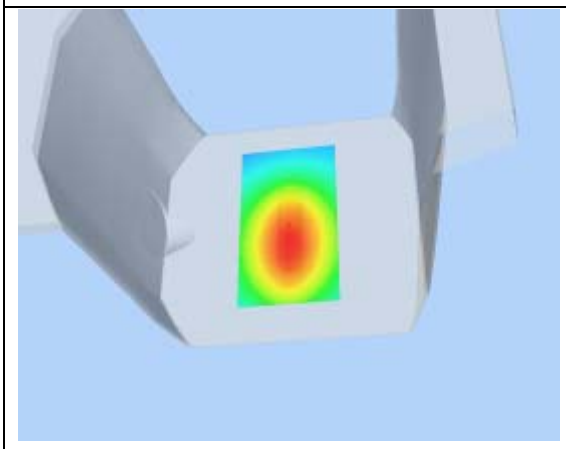
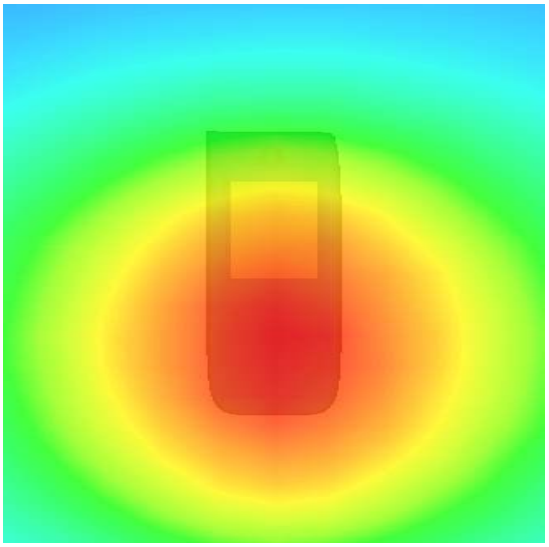
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.356554
SAR 1g (W/Kg)	0.547005

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5299	0.3831	0.2724	0.1904	0.1393	0.1002



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

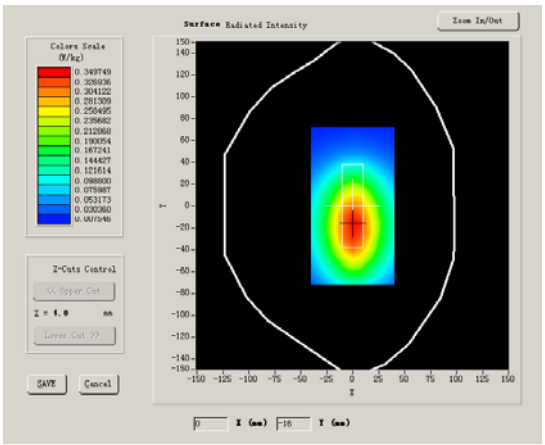
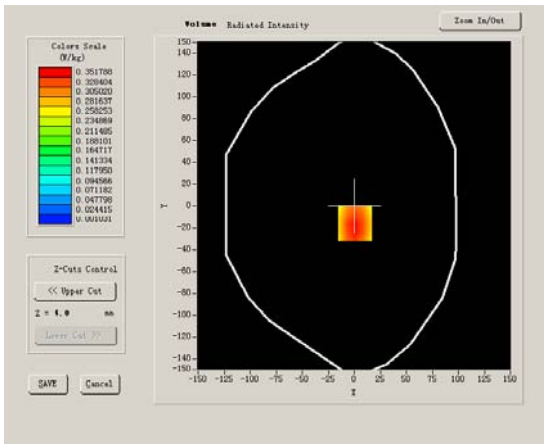
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	High
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	1.003105
Variation (%)	0.730000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

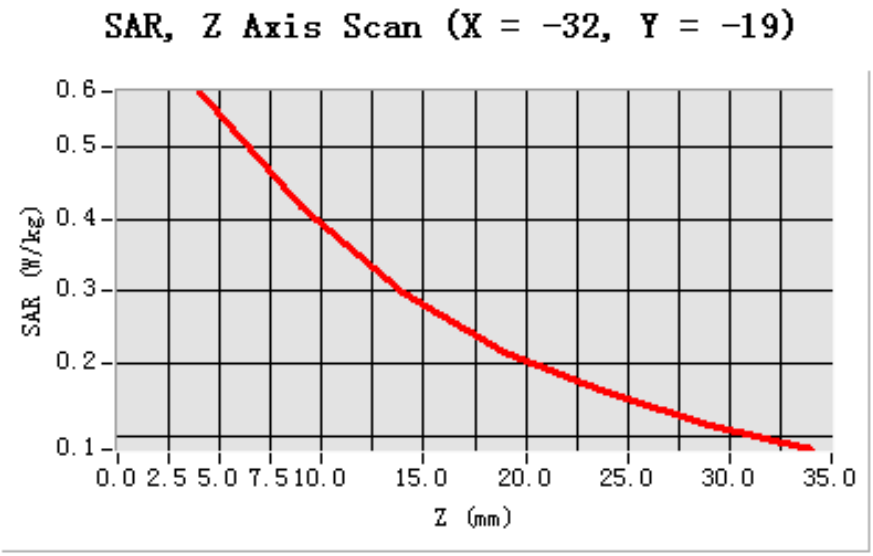
SURFACE SAR	VOLUME SAR
	

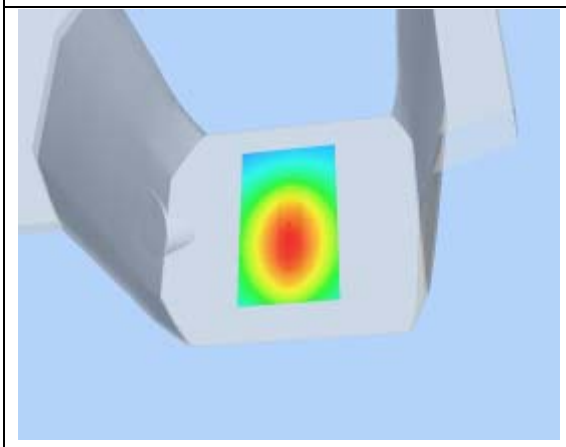
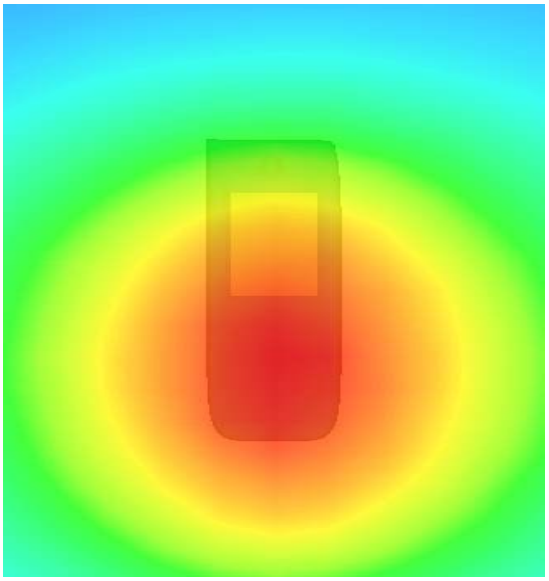
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.347122
SAR 1g (W/Kg)	0.594751

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5946	0.4178	0.2981	0.2171	0.1609	0.1163



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

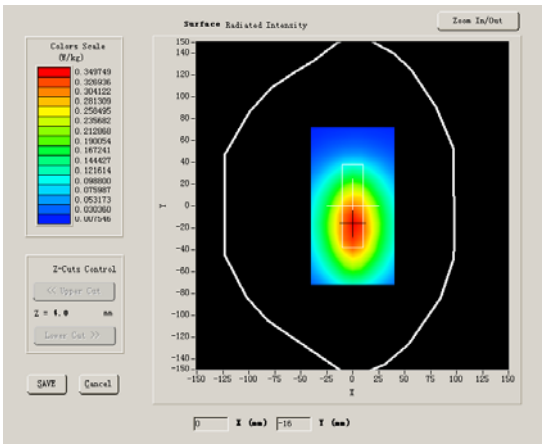
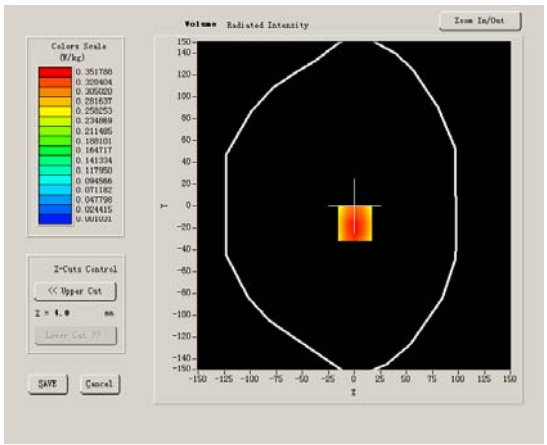
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	High
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	1.003105
Variation (%)	1.110000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

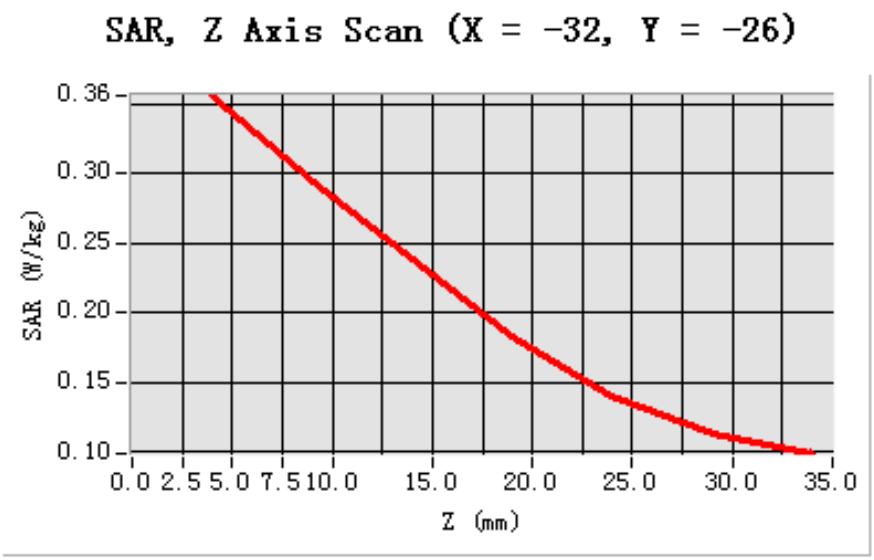
SURFACE SAR	VOLUME SAR
	

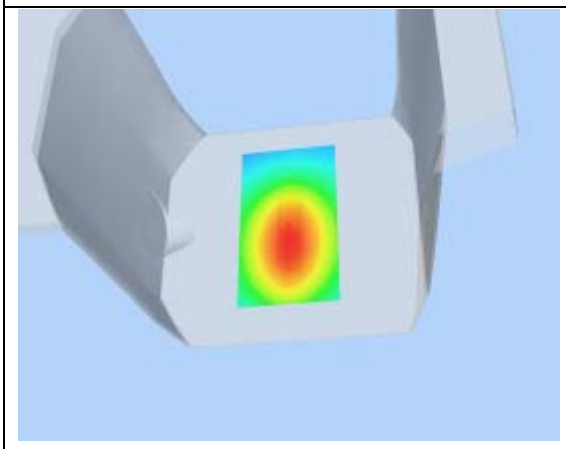
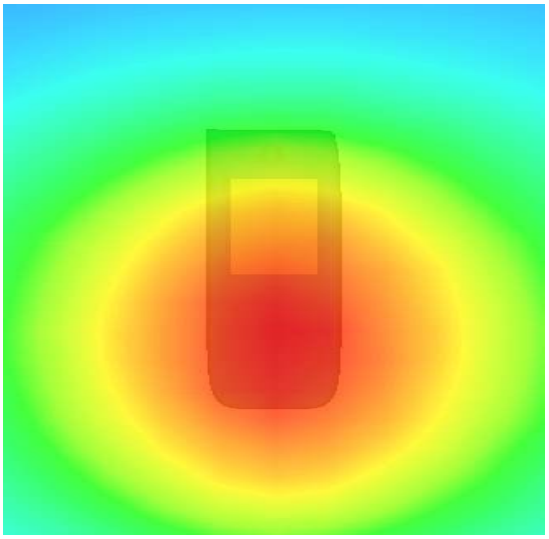
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.1984571
SAR 1g (W/Kg)	0.3014074

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5542	0.4104	0.29361	0.2014	0.1791	0.1103



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

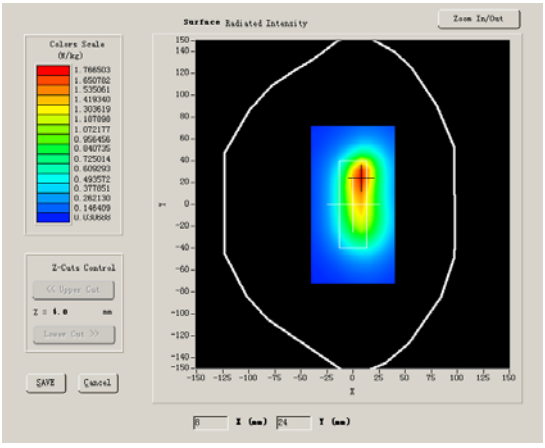
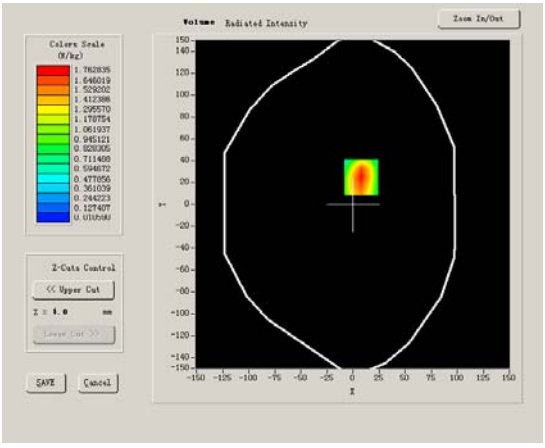
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	CDMA 800
Channels	High
Signal	CDMA

B. SAR Measurement Results

Lower Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	1.003105
Variation (%)	-0.960000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.7C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

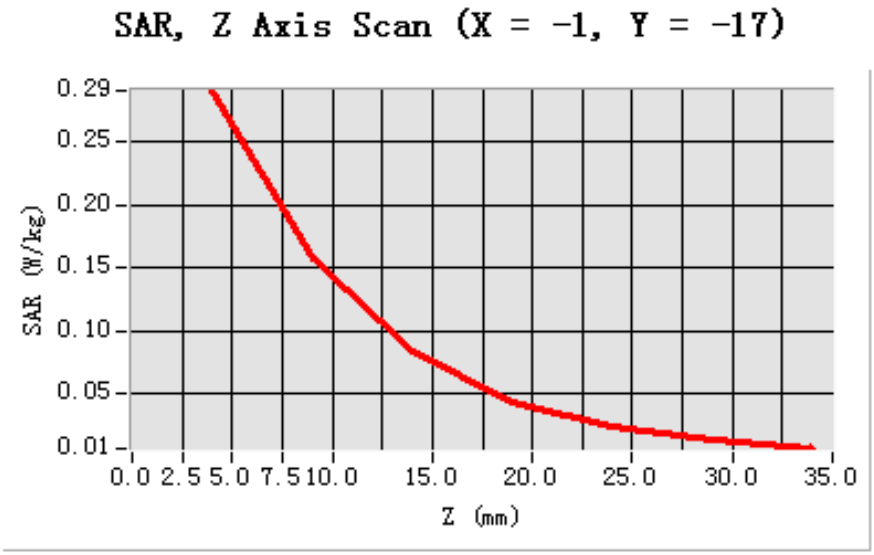
SURFACE SAR	VOLUME SAR
	

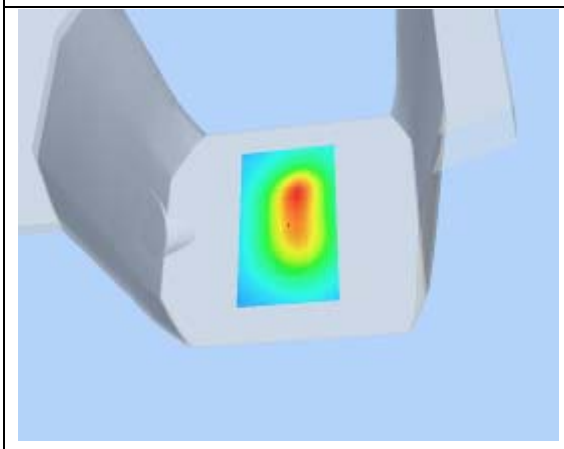
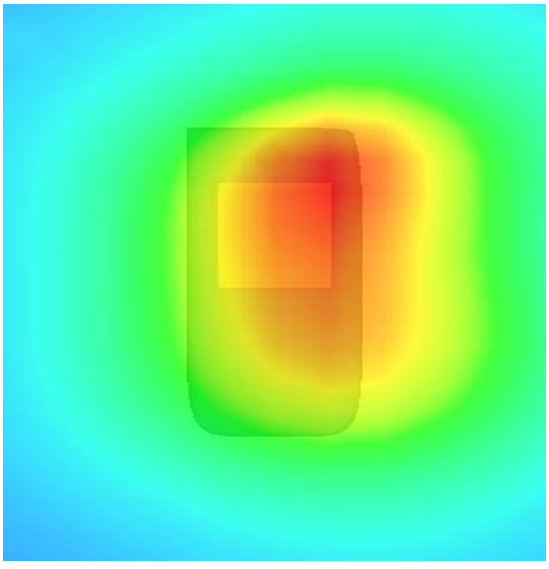
Maximum location: X=1.00, Y=-24.00

SAR 10g (W/Kg)	0.142752
SAR 1g (W/Kg)	0.244314

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	0.1443	0.0785	0.0408	0.0244	0.0139



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

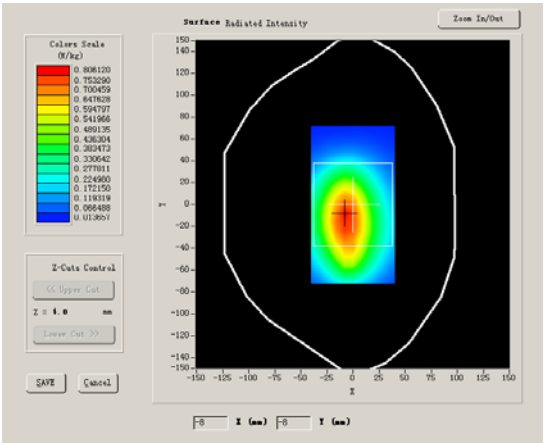
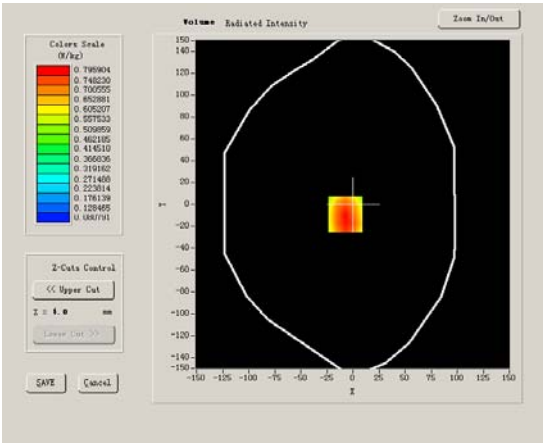
A. Experimental conditions.

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

B. SAR Measurement Results

Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.523949
Variation (%)	-1.820000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

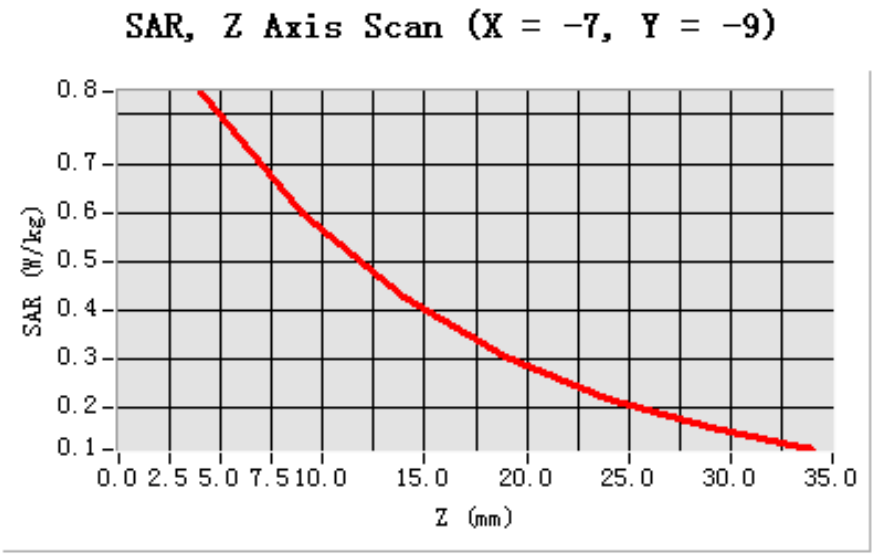
SURFACE SAR	VOLUME SAR
	

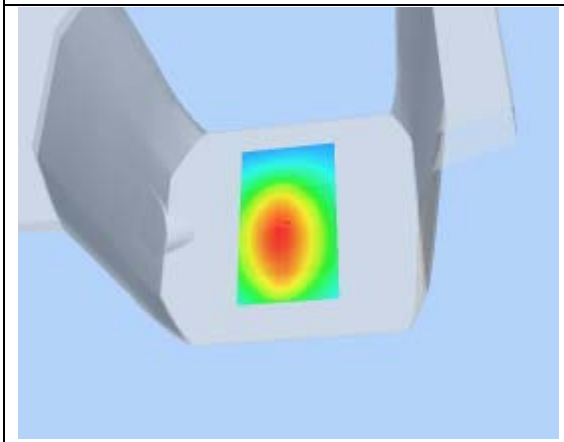
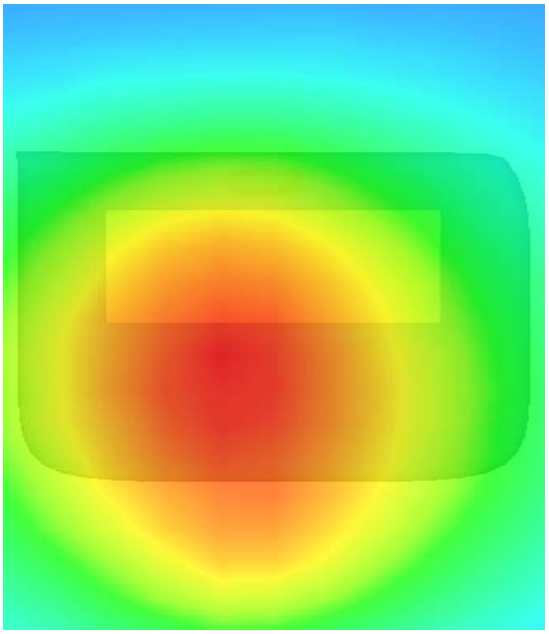
Maximum location: X=-7.00, Y=-9.00

SAR 10g (W/Kg)	0.559717
SAR 1g (W/Kg)	0.816098

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8475	0.5987	0.4259	0.3064	0.2203	0.1609



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: 26/5/2011
Measurement duration: 9 minutes 15 seconds

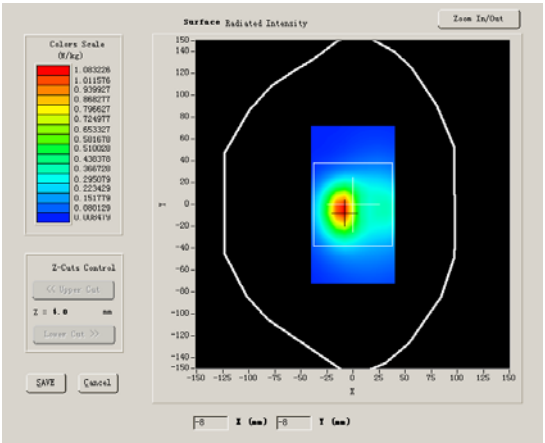
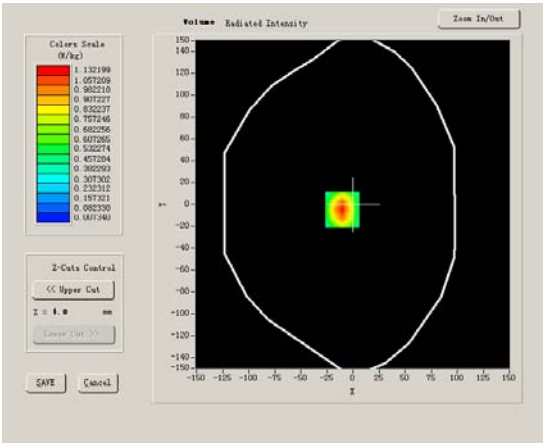
A. Experimental conditions.

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

B. SAR Measurement Results

Middle Band SAR (Channel 600):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.547616
Variation (%)	-0.320000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

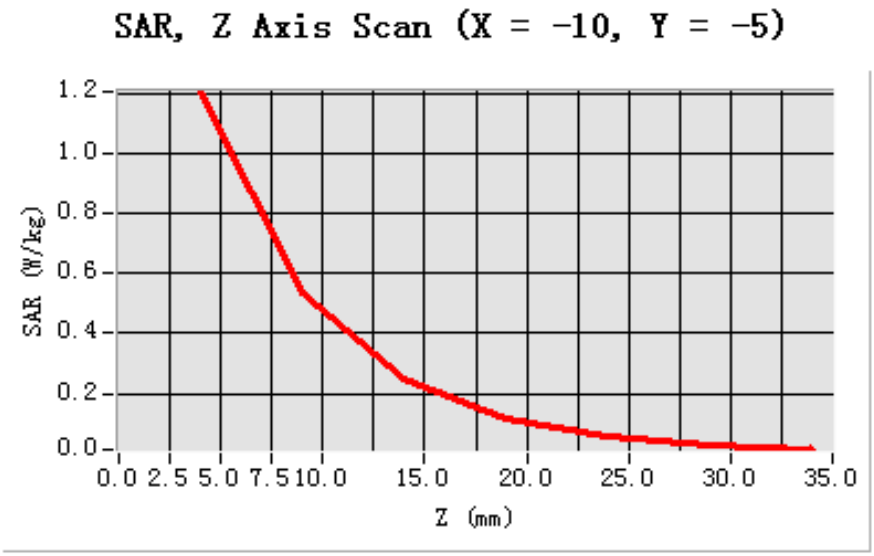
SURFACE SAR	VOLUME SAR
	

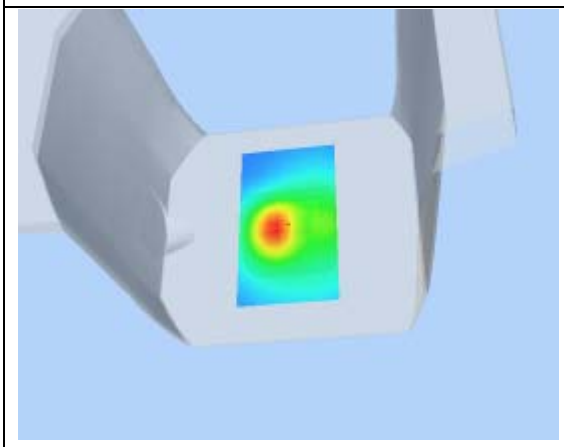
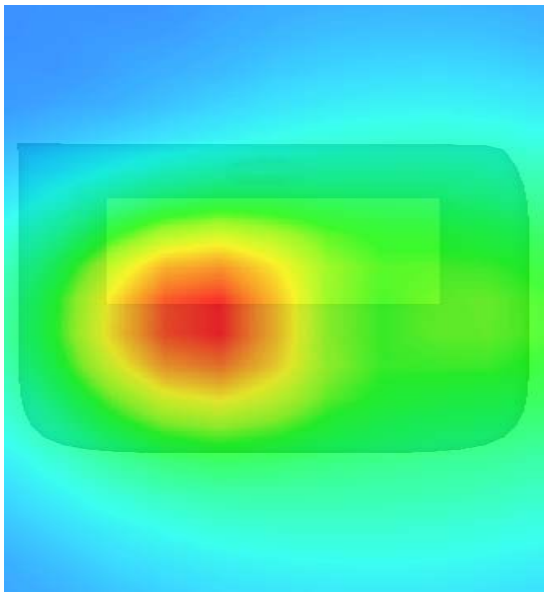
Maximum location: X=-10.00, Y=-5.00

SAR 10g (W/Kg)	0.545285
SAR 1g (W/Kg)	1.027885

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.2056	0.5380	0.2475	0.1154	0.0552	0.0269



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: 26/5/2011
Measurement duration: 9 minutes 15 seconds

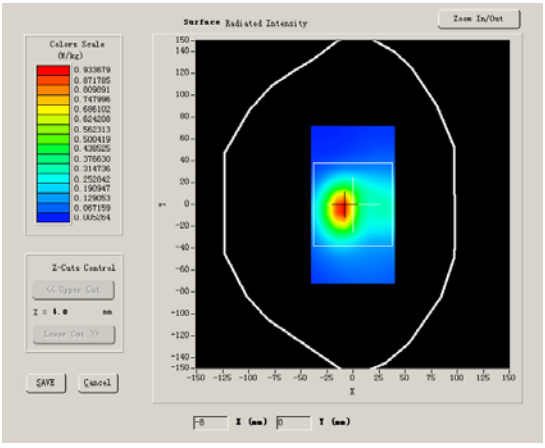
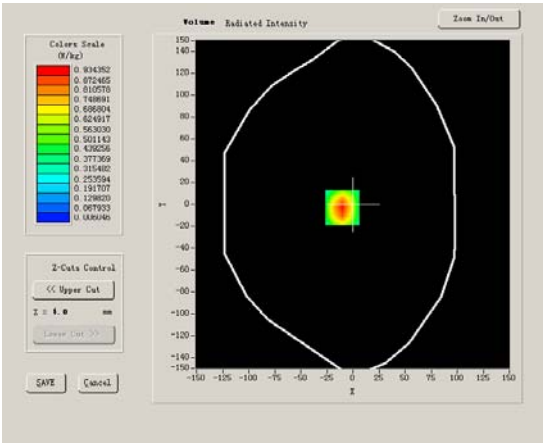
A. Experimental conditions.

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

B. SAR Measurement Results

Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.571283
Variation (%)	-3.670000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

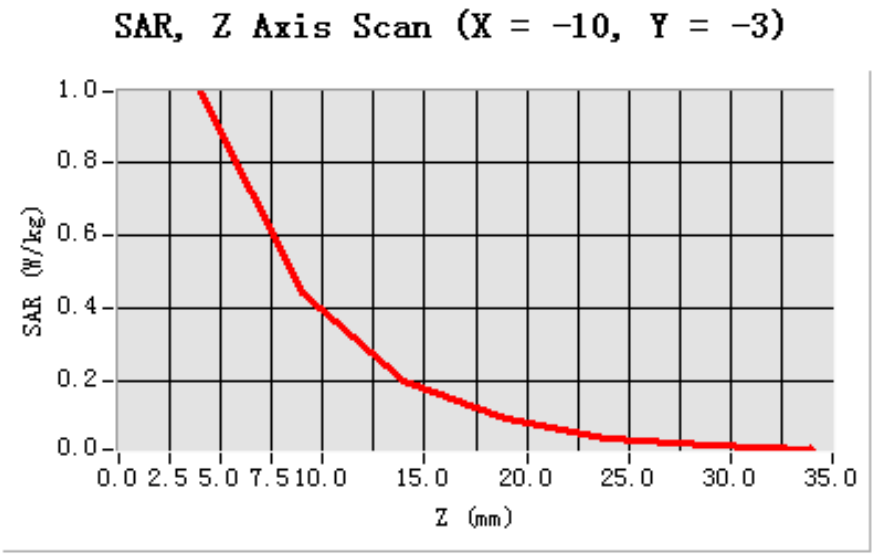
SURFACE SAR	VOLUME SAR
	

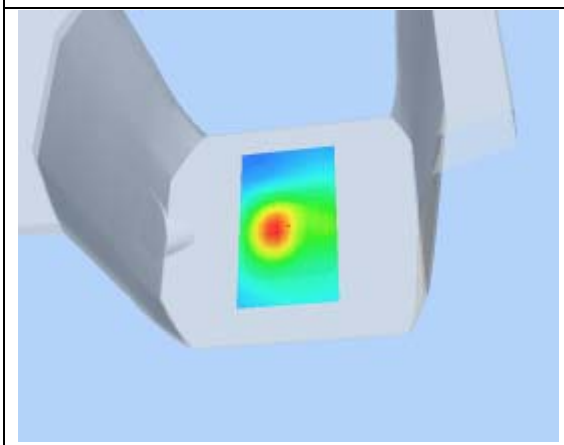
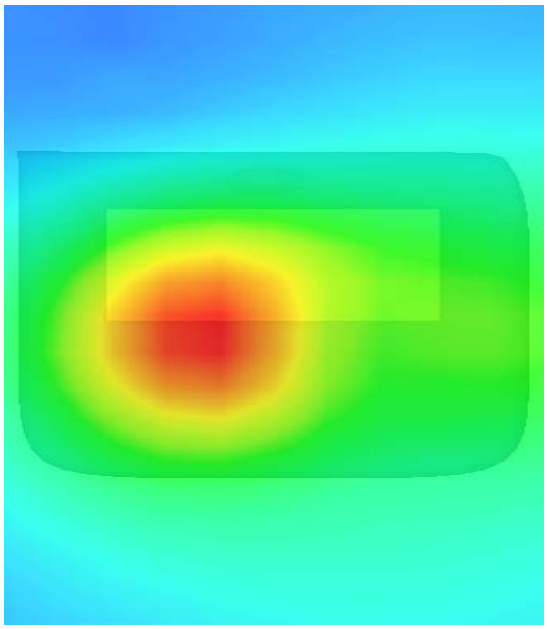
Maximum location: X=-10.00, Y=-3.00

SAR 10g (W/Kg)	0.454913
SAR 1g (W/Kg)	0.935825

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9949	0.4442	0.2023	0.0939	0.0439	0.0220



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: 26/5/2011
Measurement duration: 9 minutes 16 seconds

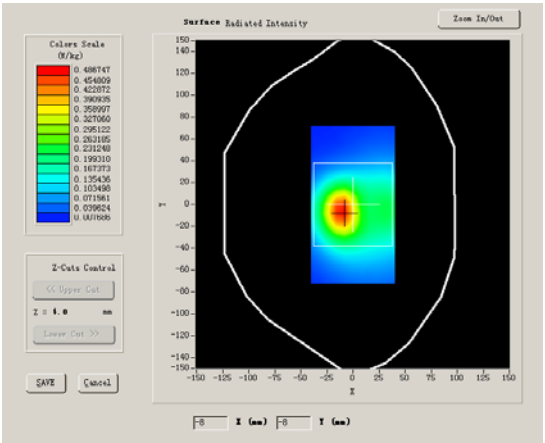
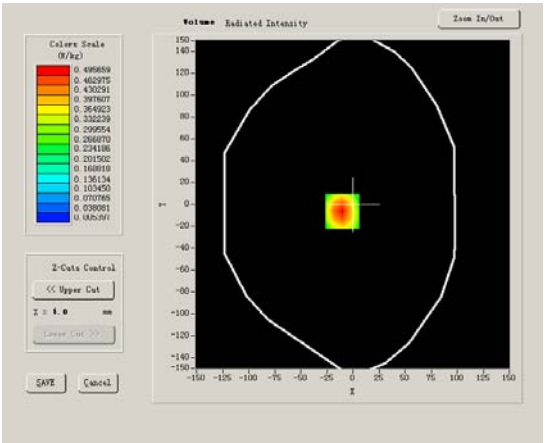
A. Experimental conditions.

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

B. SAR Measurement Results

Middle Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.523949
Variation (%)	-0.640000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

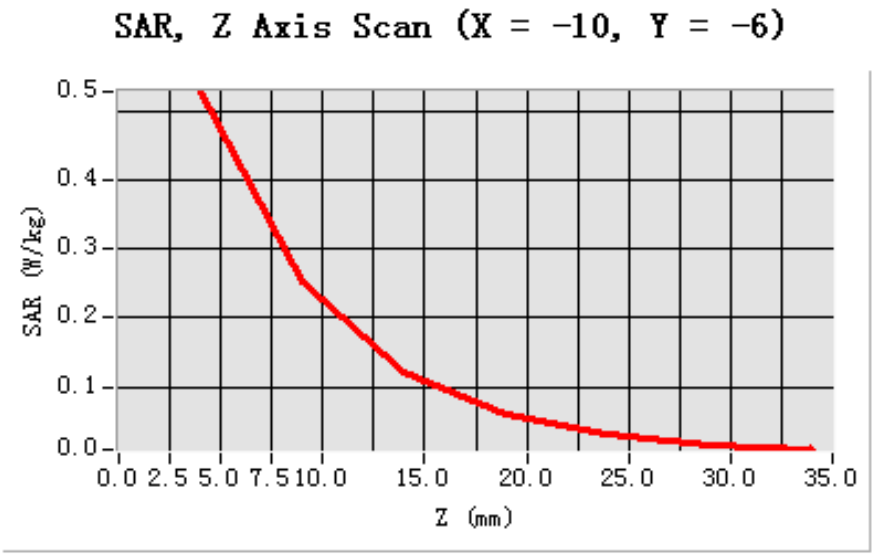
SURFACE SAR	VOLUME SAR
	

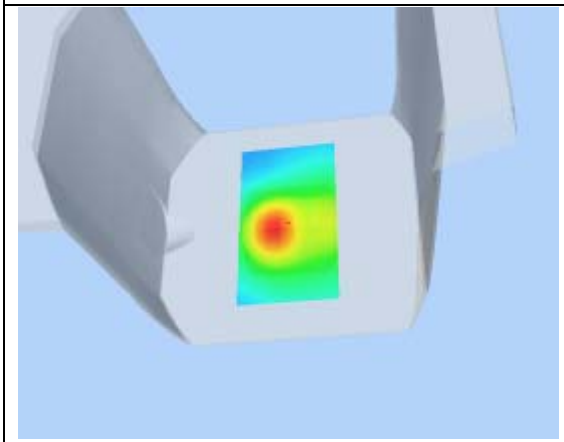
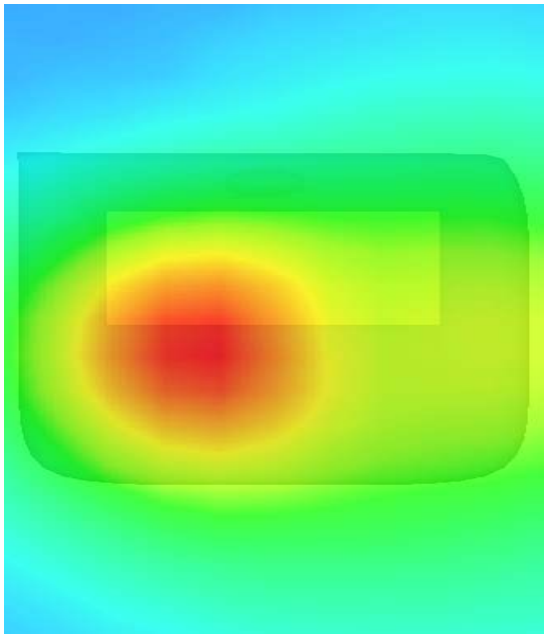
Maximum location: X=-10.00, Y=-6.00

SAR 10g (W/Kg)	0.260383
SAR 1g (W/Kg)	0.504188

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5278	0.2508	0.1219	0.0611	0.0303	0.0147



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: 26/5/2011
Measurement duration: 9 minutes 10 seconds

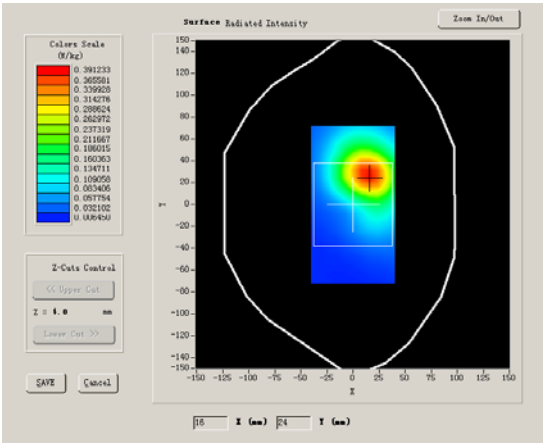
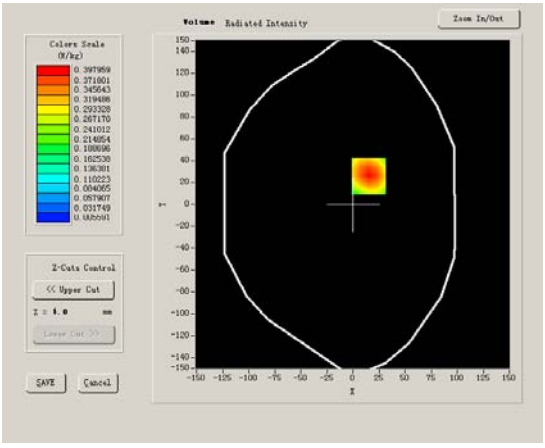
A. Experimental conditions.

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

B. SAR Measurement Results

Middle Band SAR (Channel 600):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.547616
Variation (%)	0.030000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

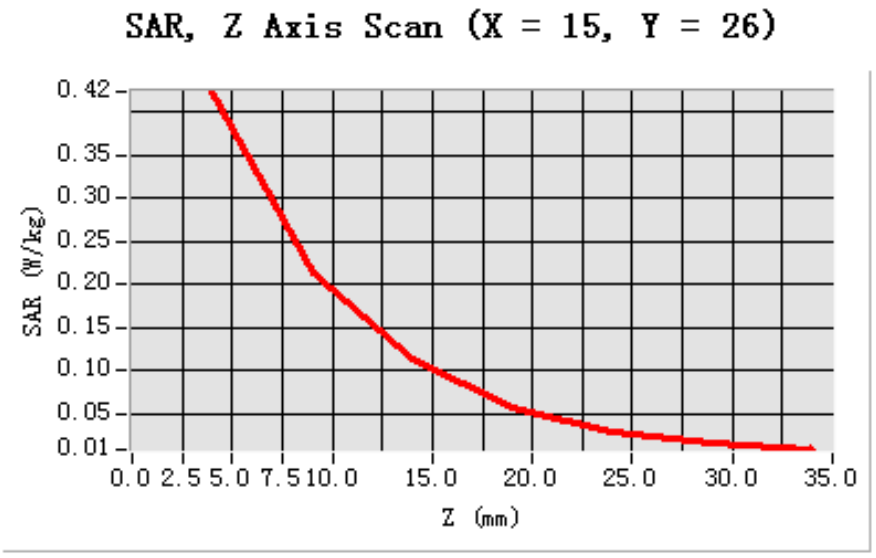
SURFACE SAR	VOLUME SAR
	

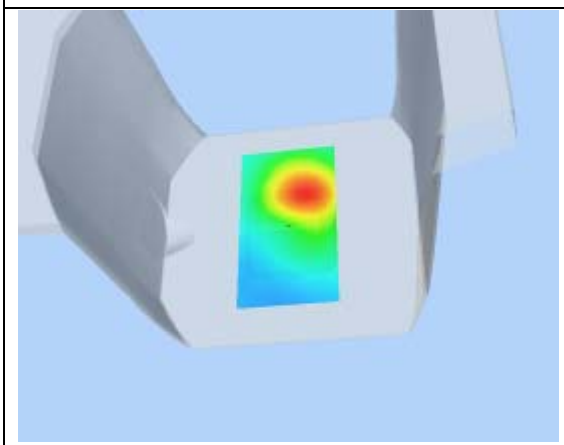
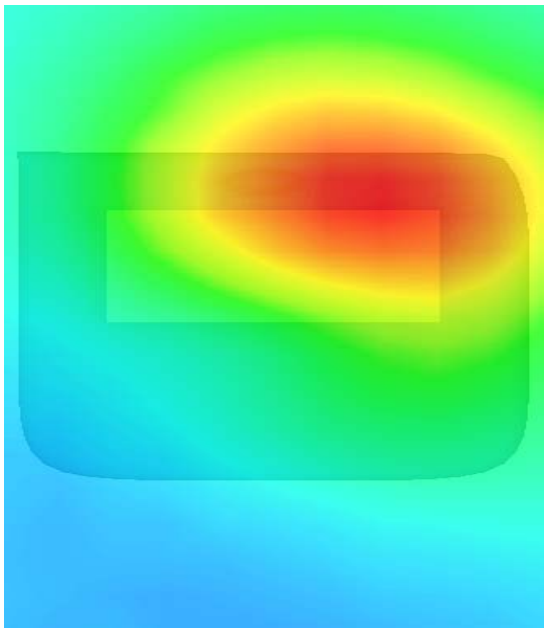
Maximum location: X=15.00, Y=26.00

SAR 10g (W/Kg)	0.221417
SAR 1g (W/Kg)	0.406588

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4238	0.2138	0.1128	0.0586	0.0302	0.0163



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: 26/5/2011
Measurement duration: 9 minutes 13 seconds

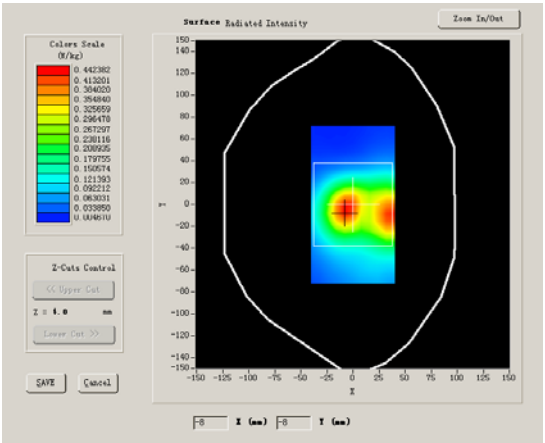
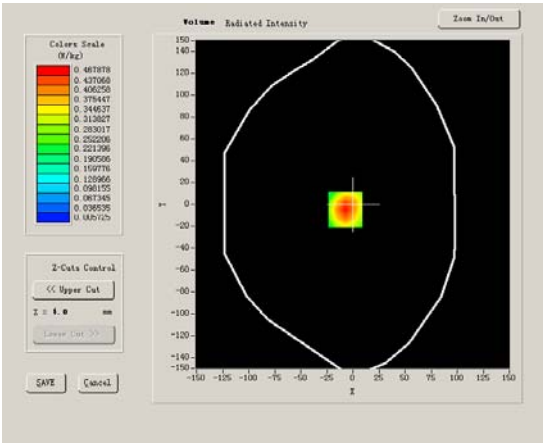
A. Experimental conditions.

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

B. SAR Measurement Results

Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.571283
Variation (%)	0.580000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

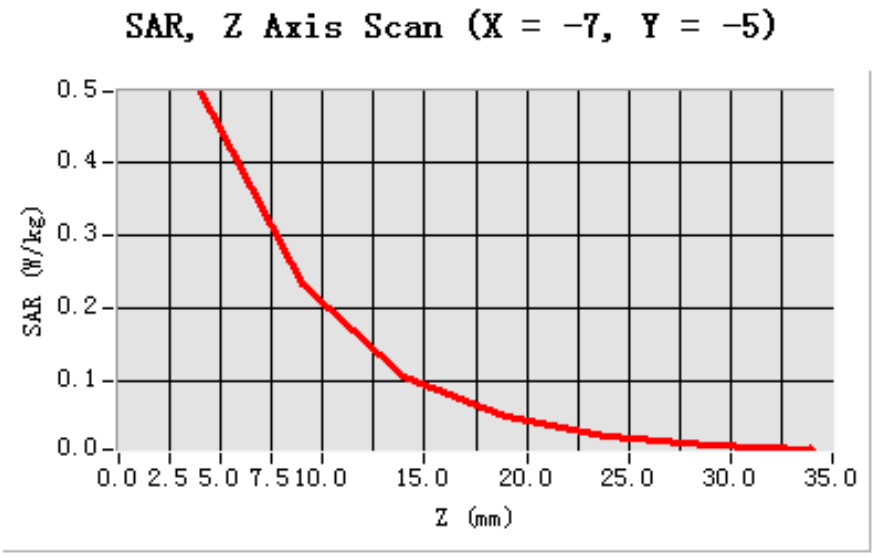
SURFACE SAR	VOLUME SAR
	

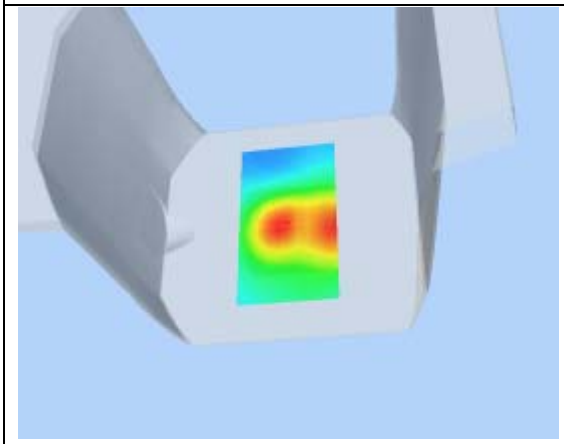
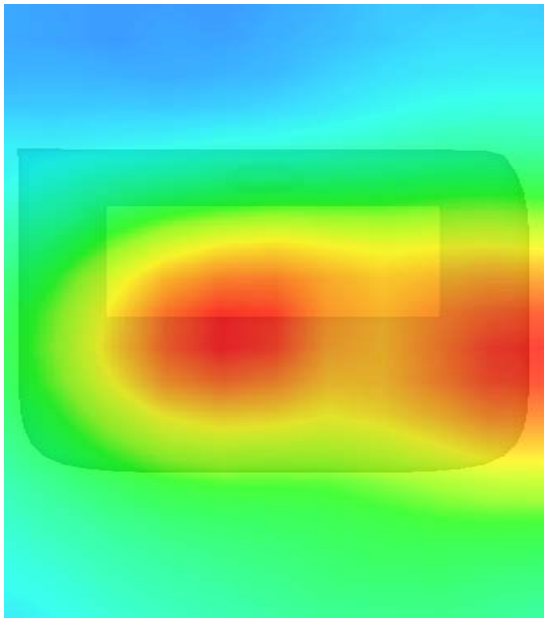
Maximum location: X=-7.00, Y=-5.00

SAR 10g (W/Kg)	0.243572
SAR 1g (W/Kg)	0.474824

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4982	0.2357	0.1079	0.0540	0.0258	0.0144



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: 26/5/2011
Measurement duration: 9 minutes 6 seconds

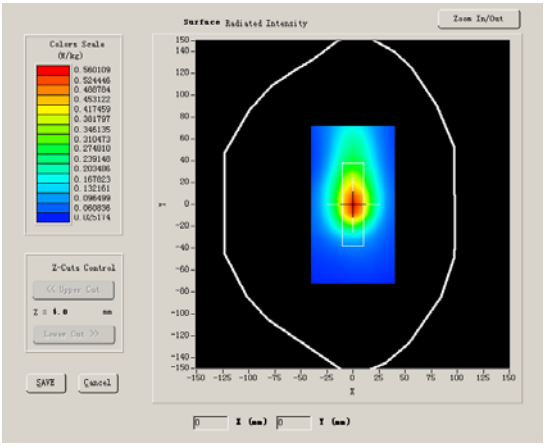
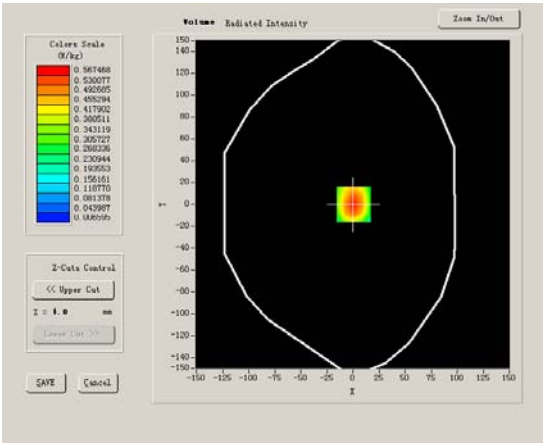
A. Experimental conditions.

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

B. SAR Measurement Results

Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.523949
Variation (%)	-0.670000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

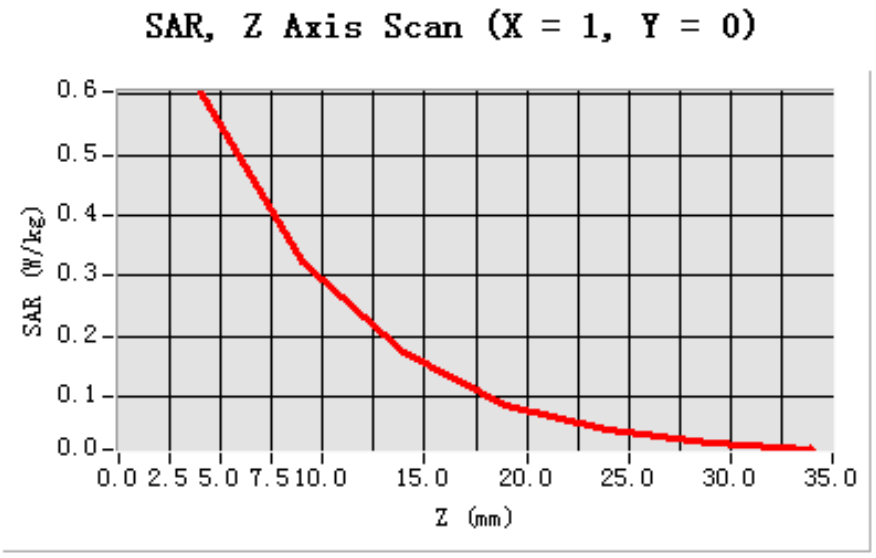
SURFACE SAR	VOLUME SAR
	

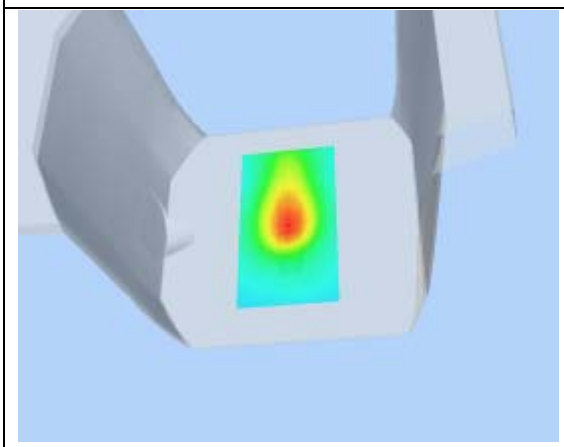
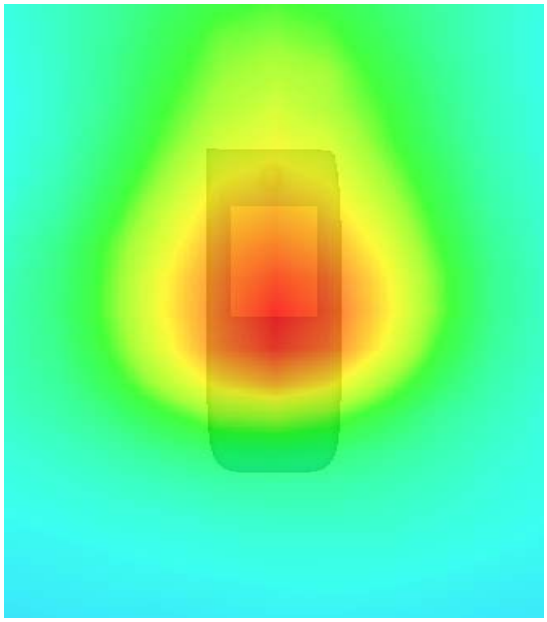
Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	0.311683
SAR 1g (W/Kg)	0.572586

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6042	0.3230	0.1719	0.0856	0.0463	0.0238



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: 26/5/2011
Measurement duration: 9 minutes 7 seconds

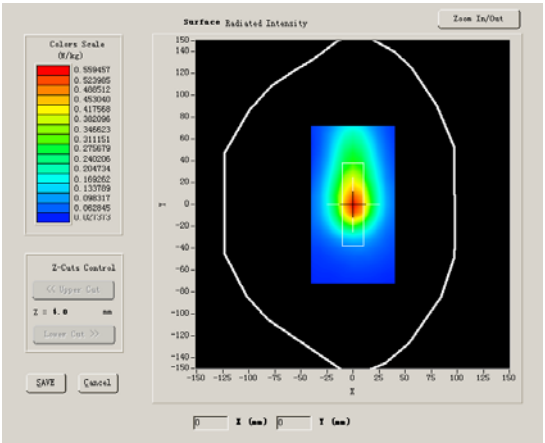
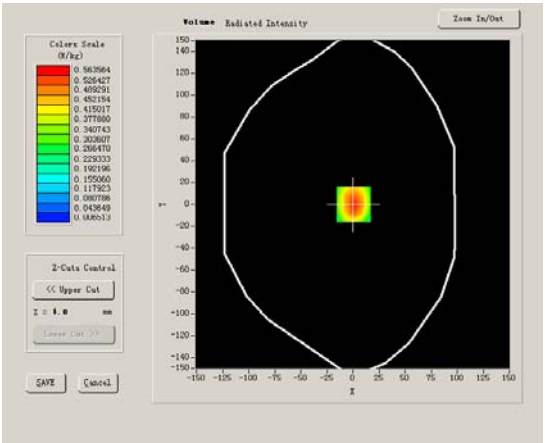
A. Experimental conditions.

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

B. SAR Measurement Results

Middle Band SAR (Channel 600):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.547616
Variation (%)	0.010000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

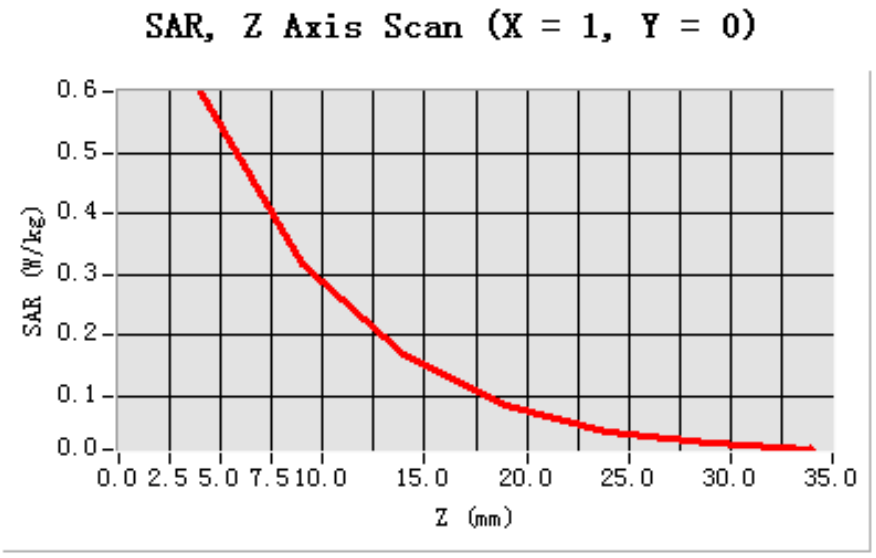
SURFACE SAR	VOLUME SAR
	

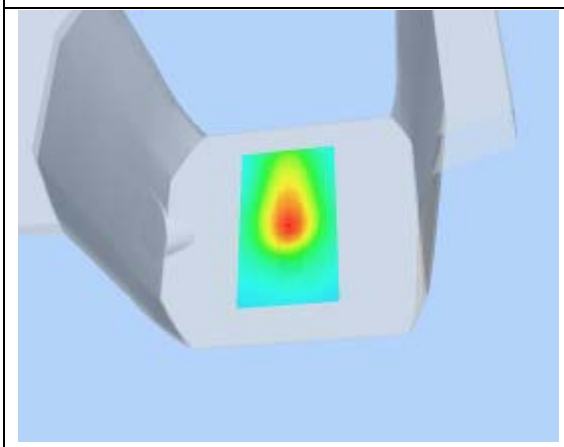
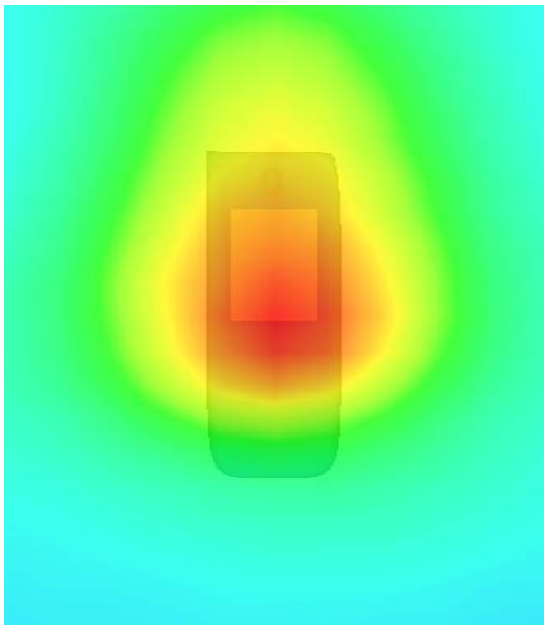
Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	0.304729
SAR 1g (W/Kg)	0.566767

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6001	0.3158	0.1675	0.0839	0.0419	0.0217



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: 26/5/2011
Measurement duration: 9 minutes 9 seconds

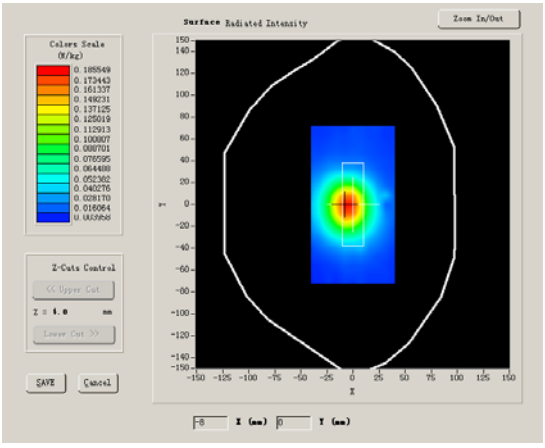
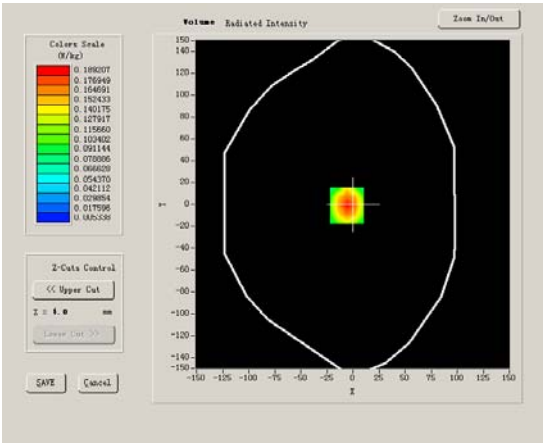
A. Experimental conditions.

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

B. SAR Measurement Results

Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.571283
Variation (%)	-0.900000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

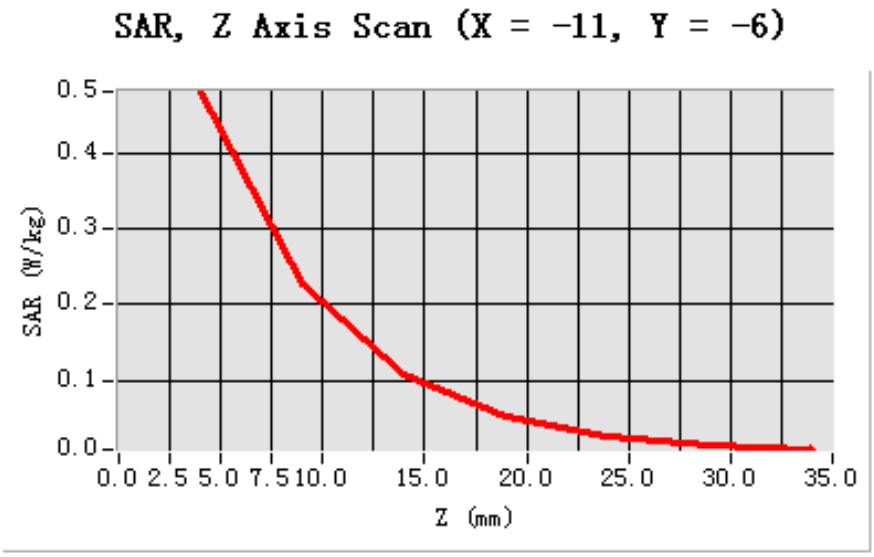
SURFACE SAR	VOLUME SAR
	

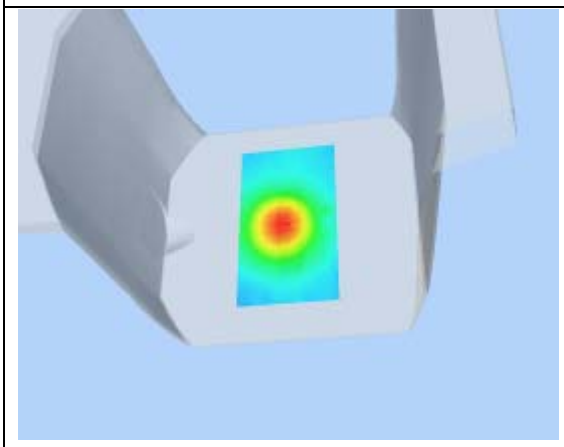
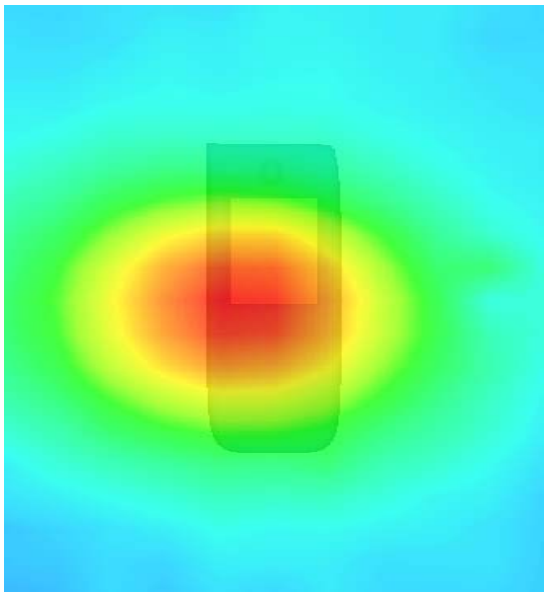
Maximum location: X=-11.00, Y=-6.00

SAR 10g (W/Kg)	0.235596
SAR 1g (W/Kg)	0.457340

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4808	0.2274	0.1089	0.0526	0.0264	0.0146



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: 26/5/2011
Measurement duration: 9 minutes 9 seconds

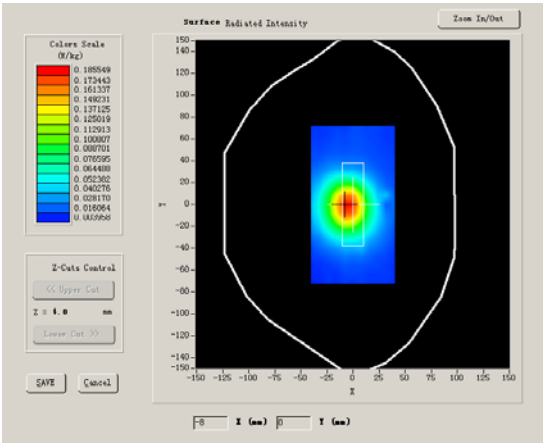
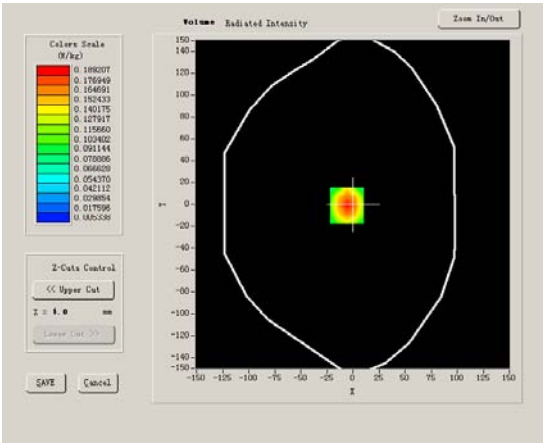
A. Experimental conditions.

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

B. SAR Measurement Results

Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.571283
Variation (%)	-0.900000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

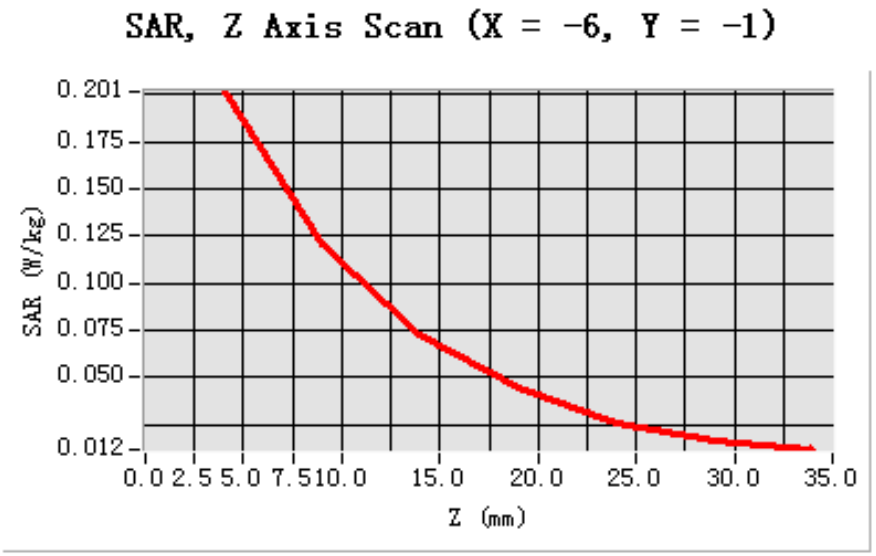
SURFACE SAR	VOLUME SAR
	

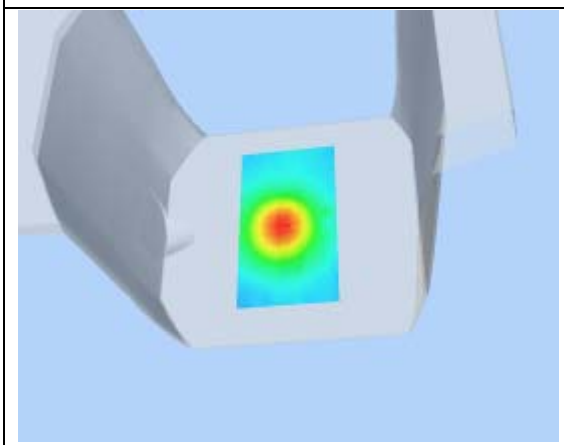
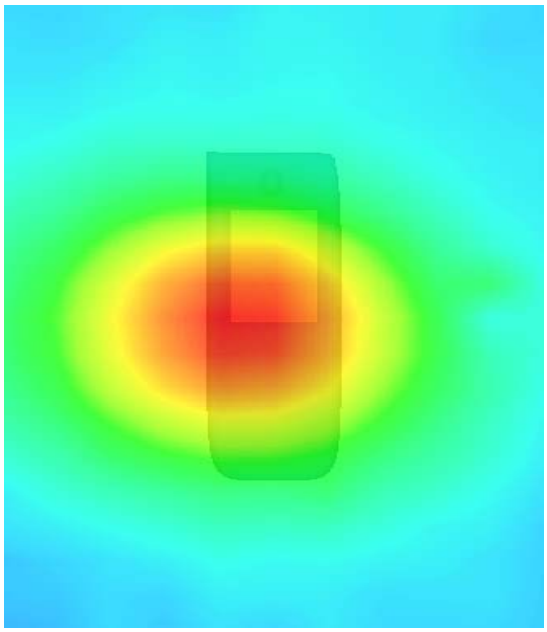
Maximum location: X=-6.00, Y=-1.00

SAR 10g (W/Kg)	0.109098
SAR 1g (W/Kg)	0.189342

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2015	0.1203	0.0722	0.0445	0.0254	0.0169



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: 26/5/2011
Measurement duration: 9 minutes 10 seconds

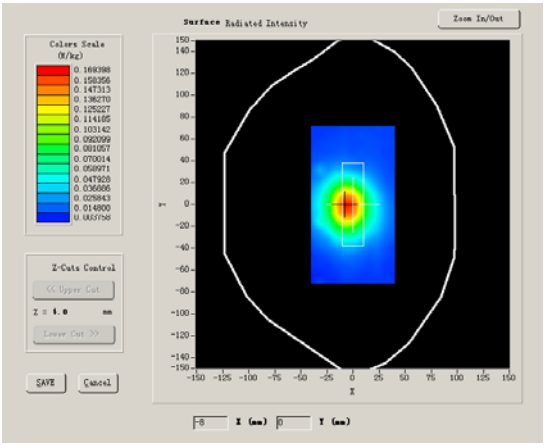
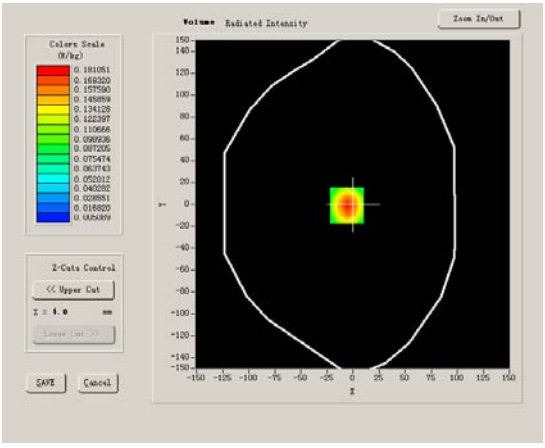
A. Experimental conditions.

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

B. SAR Measurement Results

Middle Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600
Conductivity (S/m)	1.571283
Variation (%)	1908.750000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

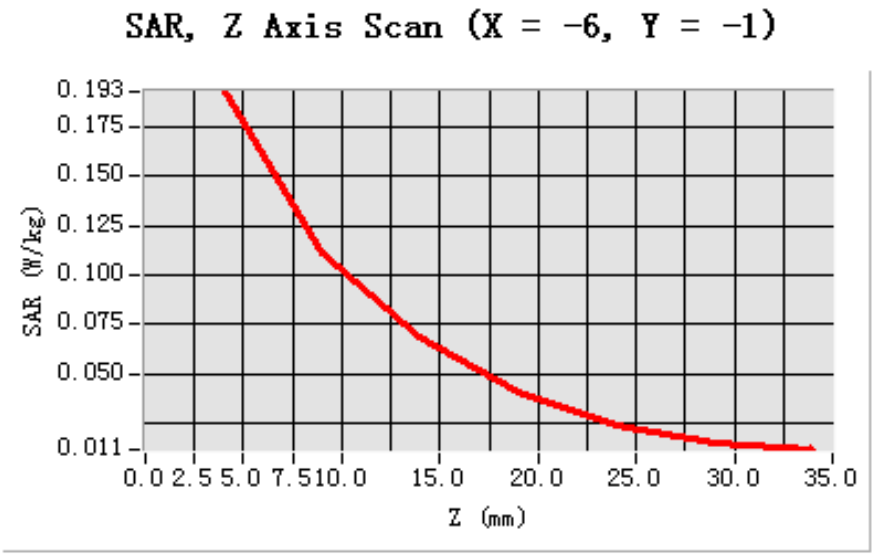
SURFACE SAR	VOLUME SAR
	

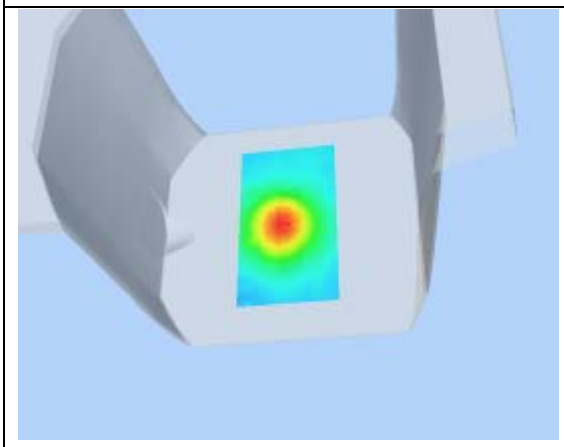
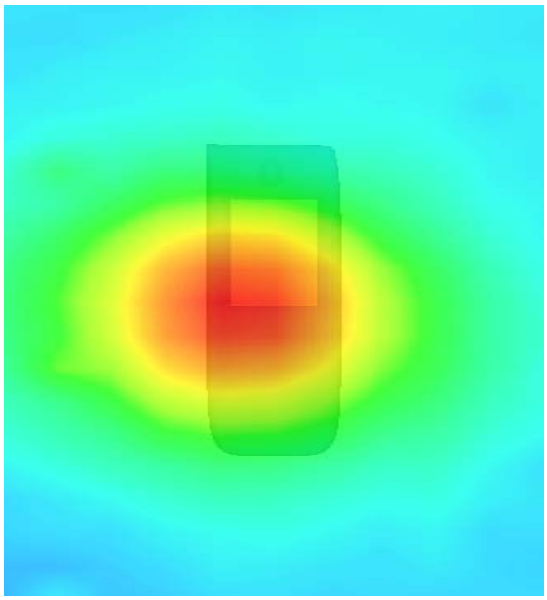
Maximum location: X=-6.00, Y=-1.00

SAR 10g (W/Kg)	0.103603
SAR 1g (W/Kg)	0.182324

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1928	0.1113	0.0681	0.0408	0.0242	0.0153



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: 26/5/2011
Measurement duration: 9 minutes 7 seconds

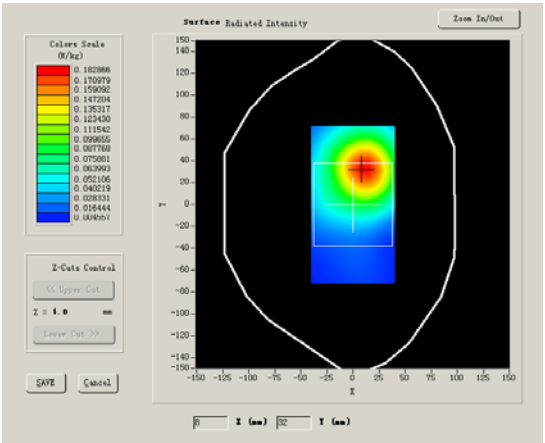
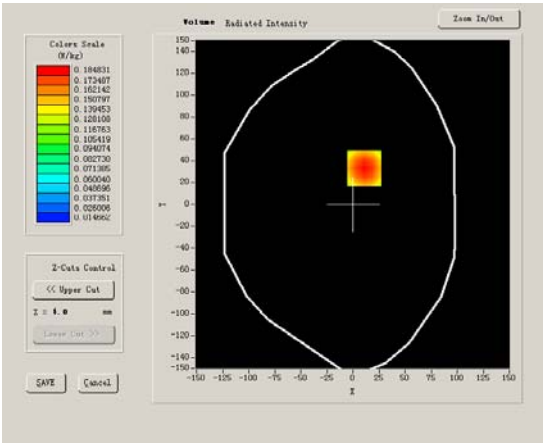
A. Experimental conditions.

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

B. SAR Measurement Results

Lower Band SAR (Channel 1):

Frequency (MHz)	2412.000000
Relative permittivity (real part)	54.341000
Relative permittivity	19.120001
Conductivity (S/m)	1.952641
Power drift (%)	1.860000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

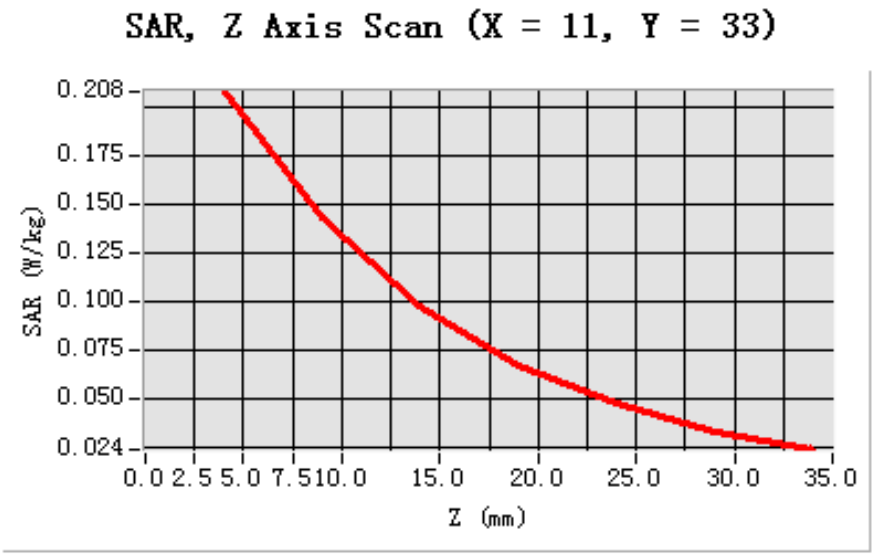
SURFACE SAR	VOLUME SAR
	

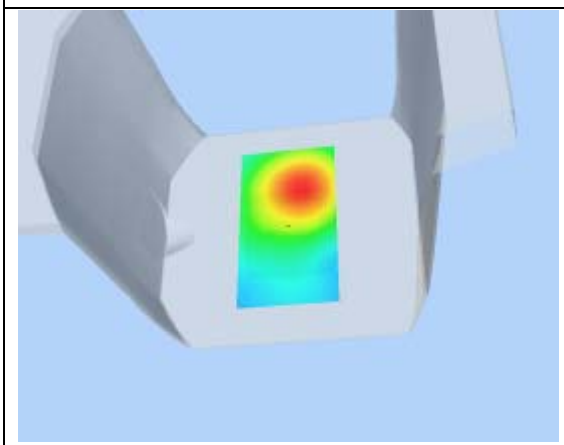
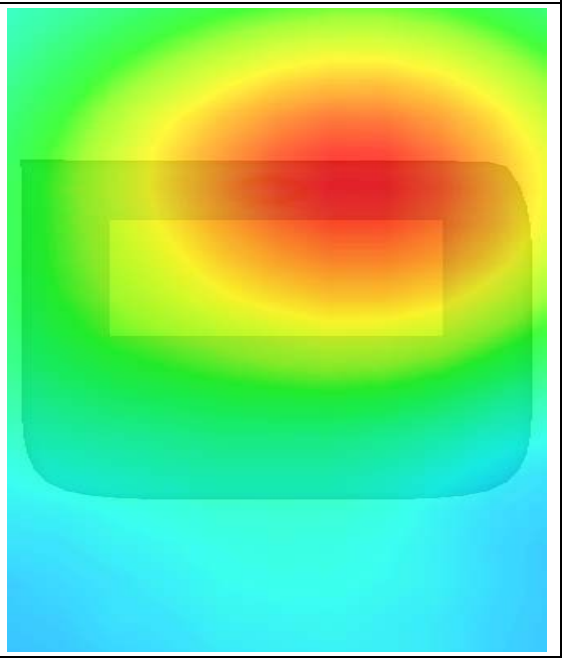
Maximum location: X=11.00, Y=33.00

SAR 10g (W/Kg)	0.132758
SAR 1g (W/Kg)	0.199789

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2079	0.1427	0.0971	0.0672	0.0475	0.0328



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: 26/5/2011
Measurement duration: 9 minutes 5 seconds

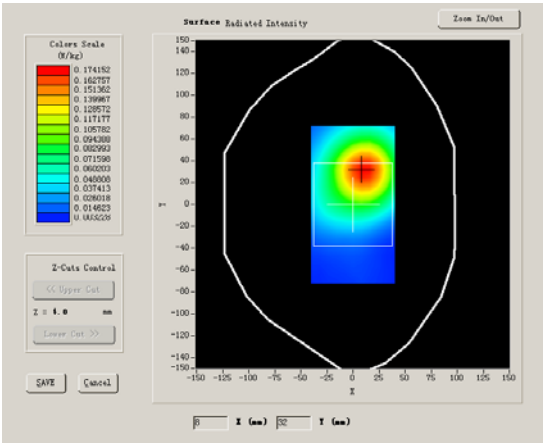
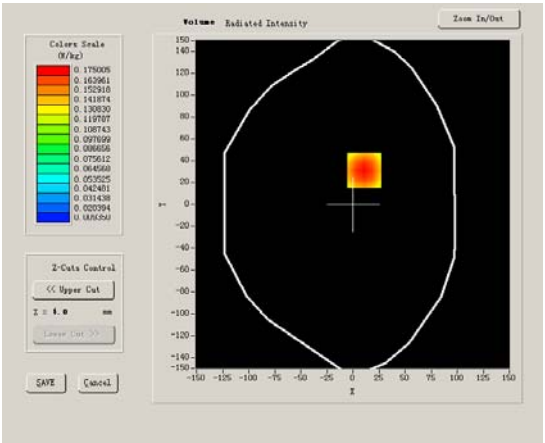
A. Experimental conditions.

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

B. SAR Measurement Results

Lower Band SAR (Channel 1):

Frequency (MHz)	2412.000000
Relative permittivity (real part)	54.341000
Relative permittivity	19.120001
Conductivity (S/m)	1.952641
Power drift (%)	0.120000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

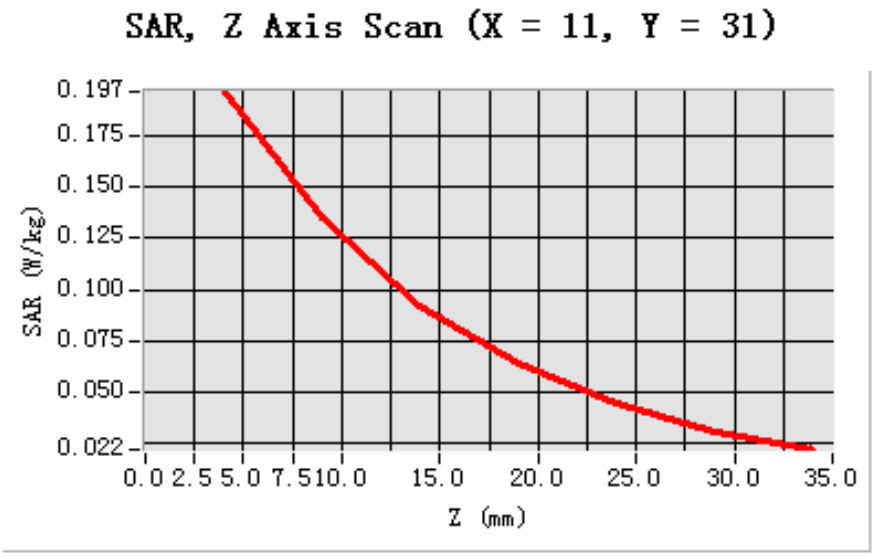
SURFACE SAR	VOLUME SAR
	

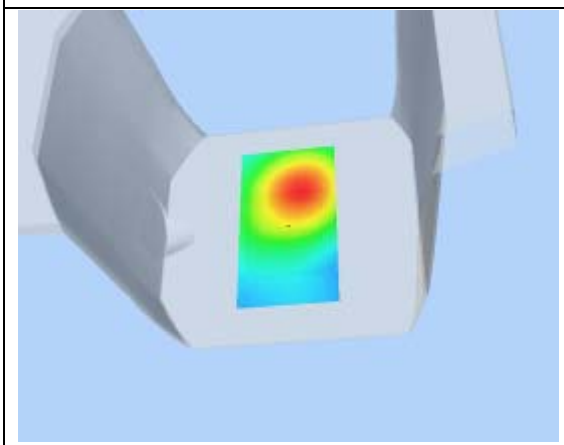
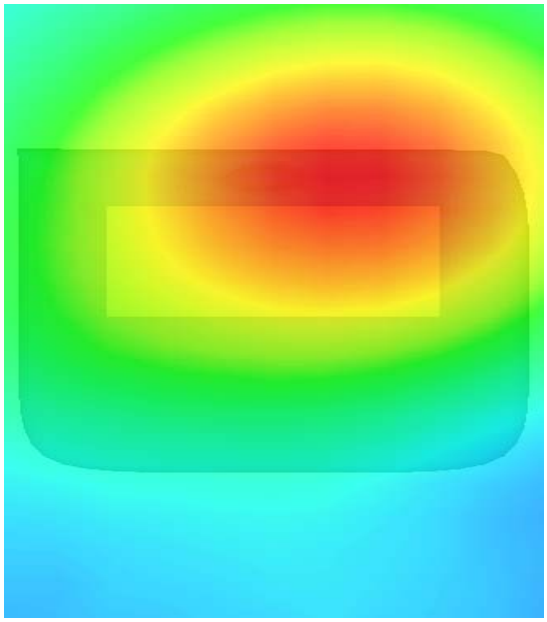
Maximum location: X=11.00, Y=31.00

SAR 10g (W/Kg)	0.125770
SAR 1g (W/Kg)	0.188895

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1968	0.1356	0.0925	0.0638	0.0443	0.0307



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: 26/5/2011
Measurement duration: 9 minutes 11 seconds

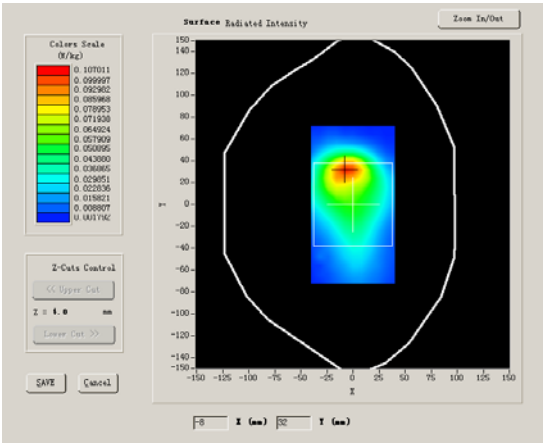
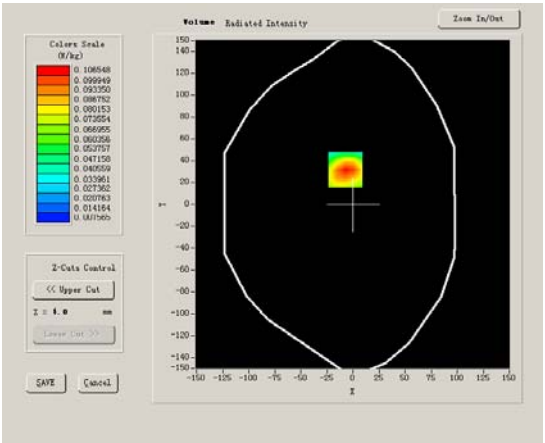
A. Experimental conditions.

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

B. SAR Measurement Results

Lower Band SAR (Channel 1):

Frequency (MHz)	2412.000000
Relative permittivity (real part)	54.341000
Relative permittivity	19.120001
Conductivity (S/m)	1.952641
Power drift (%)	-0.340000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

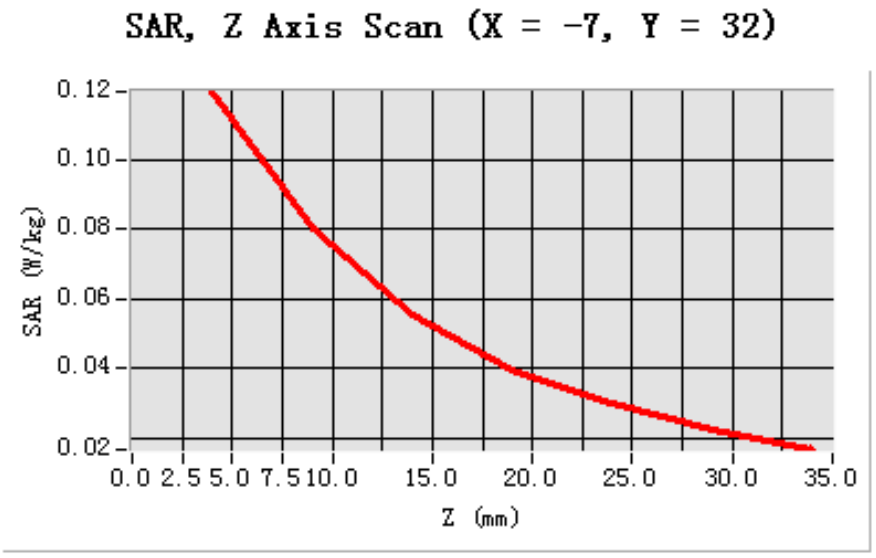
SURFACE SAR	VOLUME SAR
	

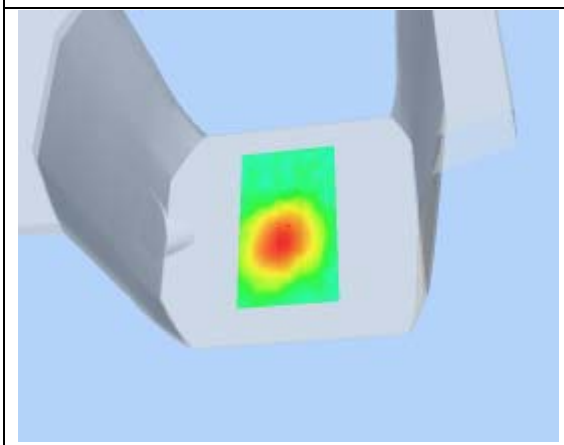
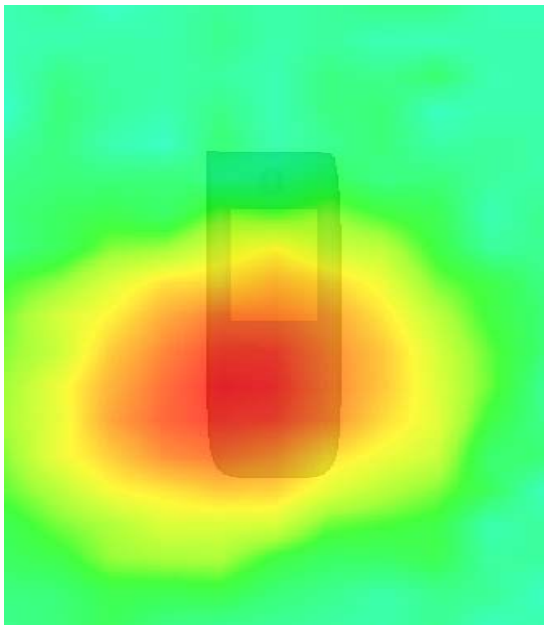
Maximum location: X=-7.00, Y=32.00

SAR 10g (W/Kg)	0.072840
SAR 1g (W/Kg)	0.113891

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1198	0.0801	0.0555	0.0395	0.0296	0.0225



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: 26/5/2011
Measurement duration: 9 minutes 8 seconds

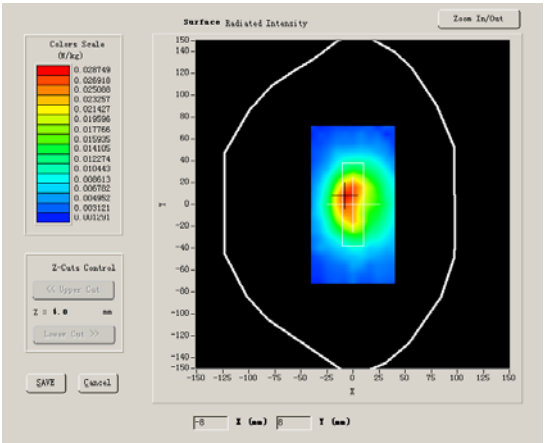
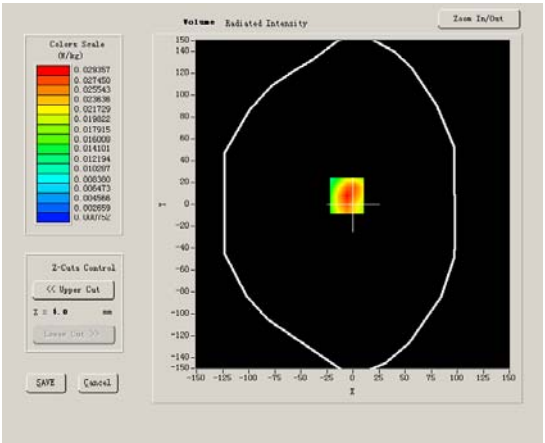
A. Experimental conditions.

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

B. SAR Measurement Results

Lower Band SAR (Channel 777):

Frequency (MHz)	2412.000000
Relative permittivity (real part)	54.341000
Relative permittivity	19.120001
Conductivity (S/m)	1.952641
Power drift (%)	-3.540000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

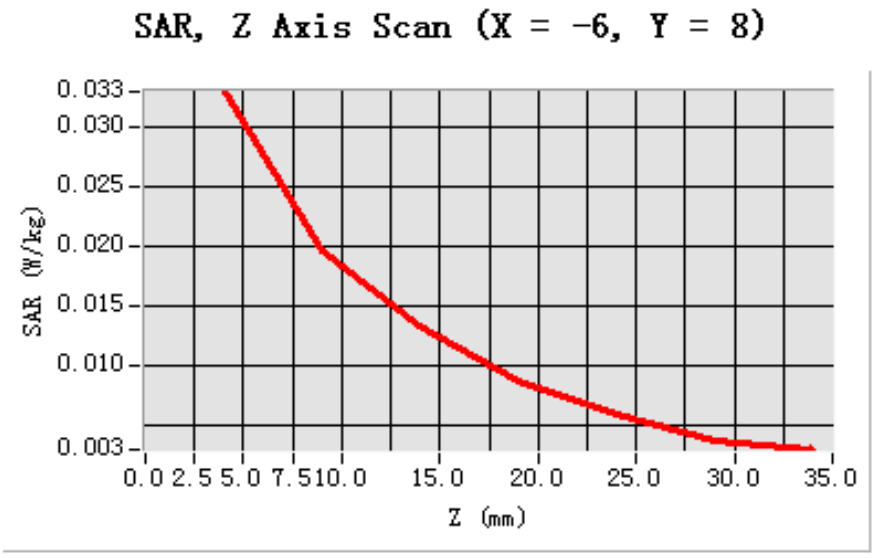
SURFACE SAR	VOLUME SAR
	

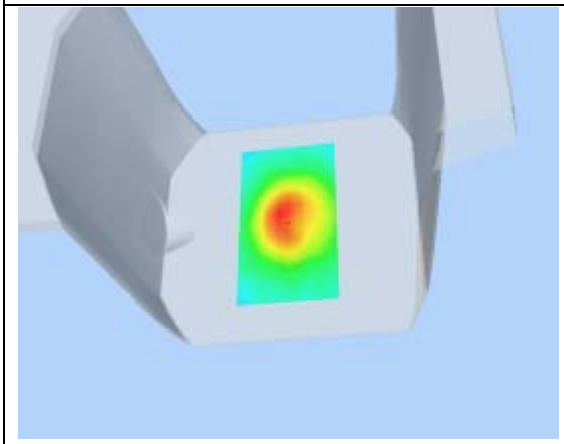
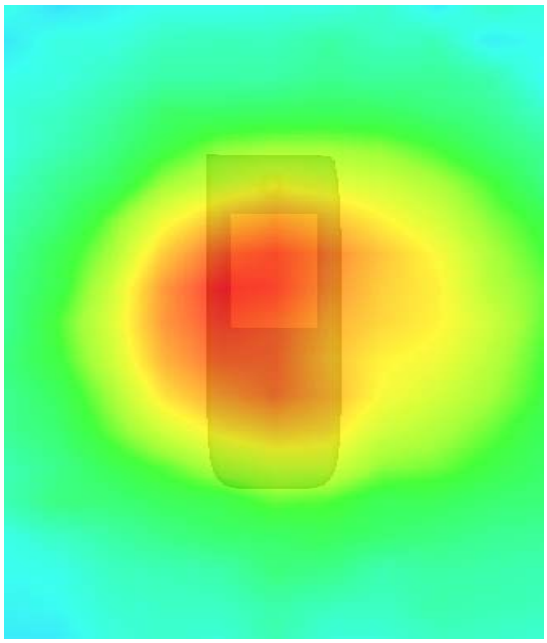
Maximum location: X=-6.00, Y=8.00

SAR 10g (W/Kg)	0.019484
SAR 1g (W/Kg)	0.031499

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0330	0.0197	0.0133	0.0088	0.0059	0.0037



3D sceen shot	Hot spot position
	

MEASUREMENT 27

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 26/5/2011
Measurement duration: 9 minutes 9 seconds

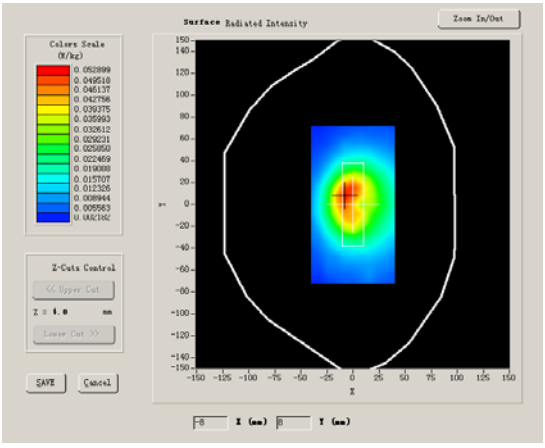
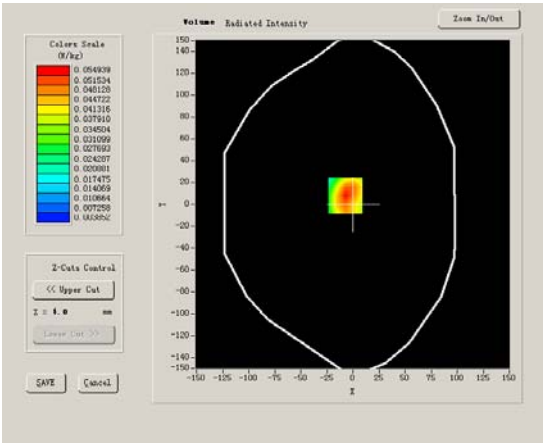
A. Experimental conditions.

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

B. SAR Measurement Results

Lower Band SAR (Channel 1):

Frequency (MHz)	2412.000000
Relative permittivity (real part)	54.341000
Relative permittivity	19.120001
Conductivity (S/m)	1.952641
Power drift (%)	0.850000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

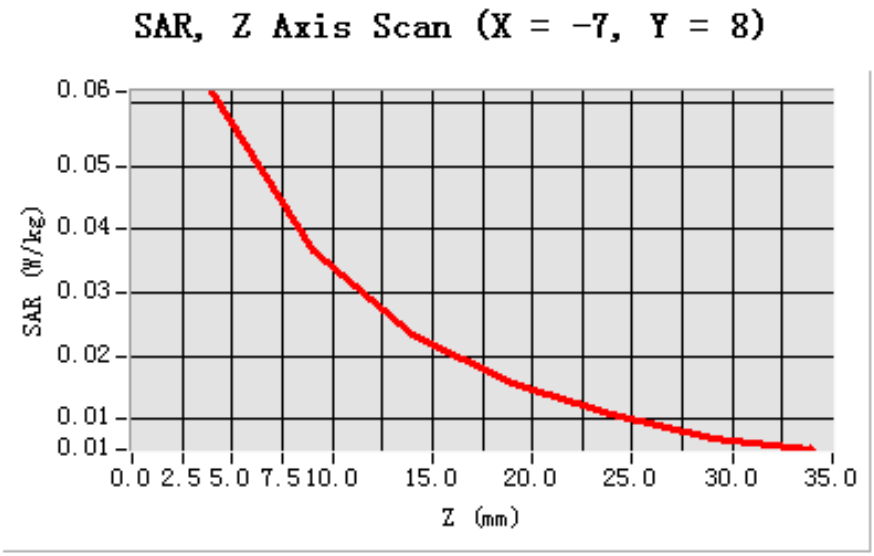
SURFACE SAR	VOLUME SAR
	

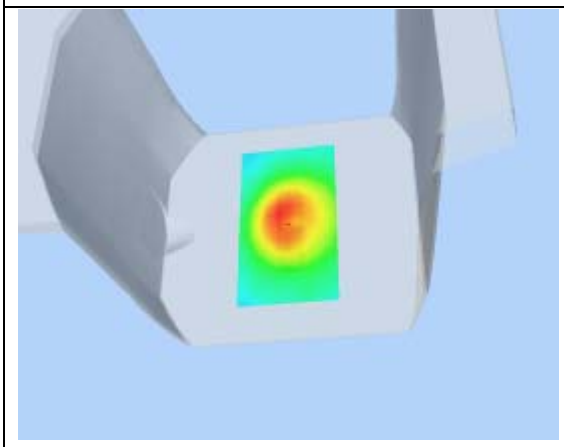
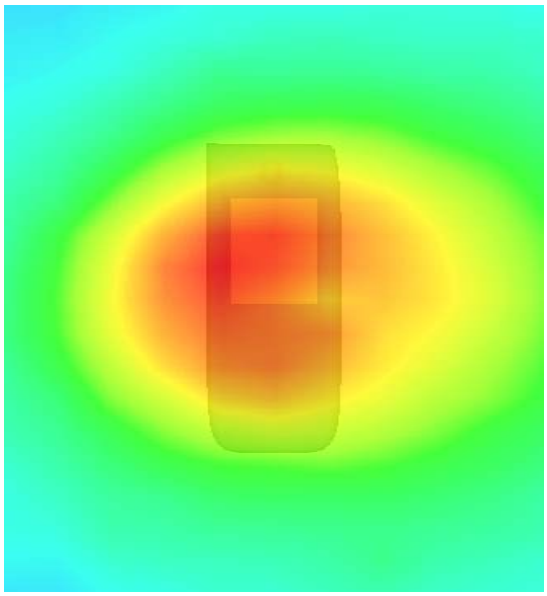
Maximum location: X=-7.00, Y=8.00

SAR 10g (W/Kg)	0.036223
SAR 1g (W/Kg)	0.059061

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0618	0.0366	0.0235	0.0156	0.0107	0.0072



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: 26/5/2011
Measurement duration: 13 minutes 27 seconds

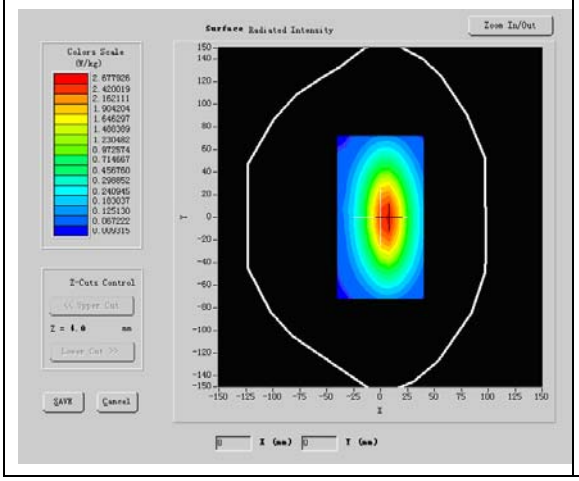
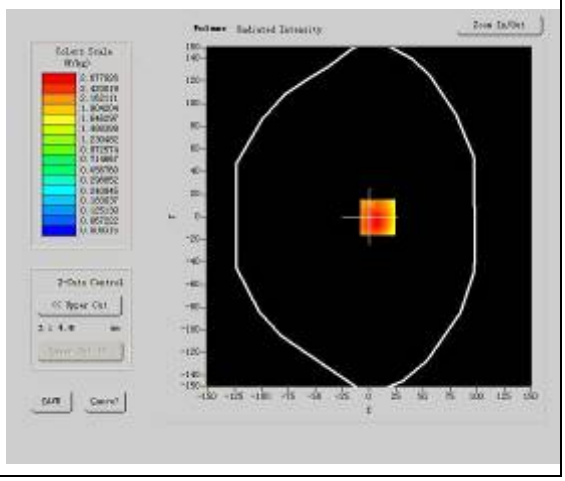
A. Experimental conditions.

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

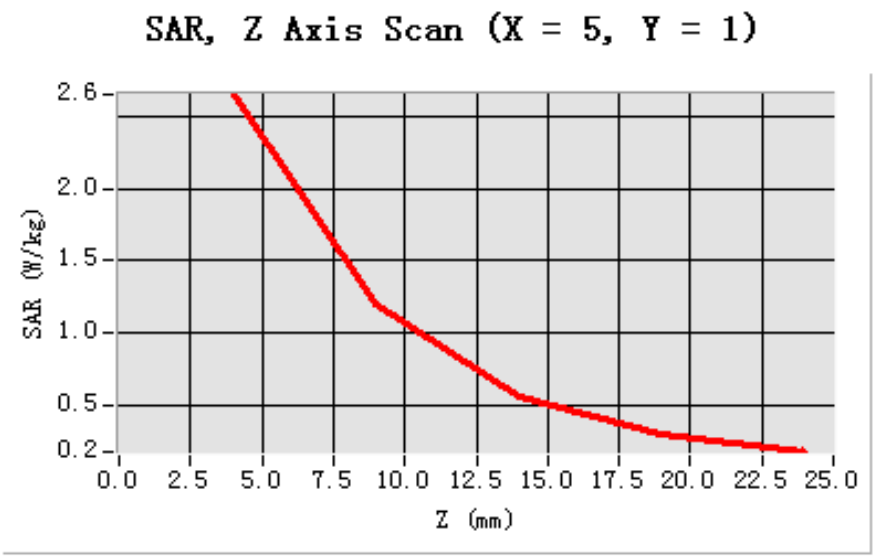
SURFACE SAR	VOLUME SAR
	

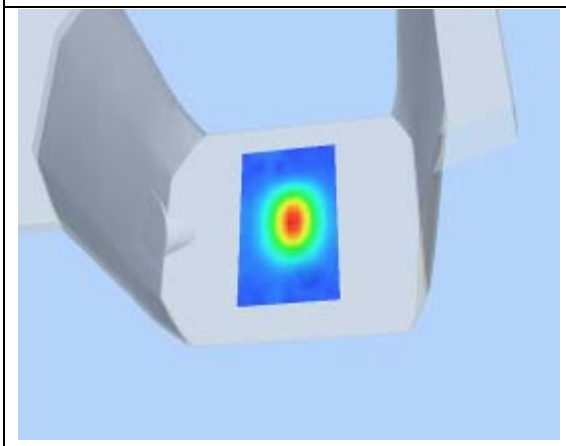
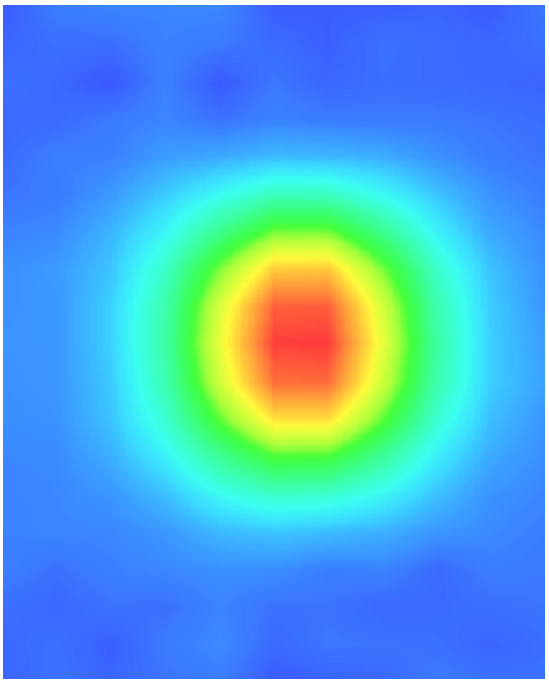
Maximum location: X=5.00, Y=1.00

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: 26/5/2011
Measurement duration: 13 minutes 27 seconds

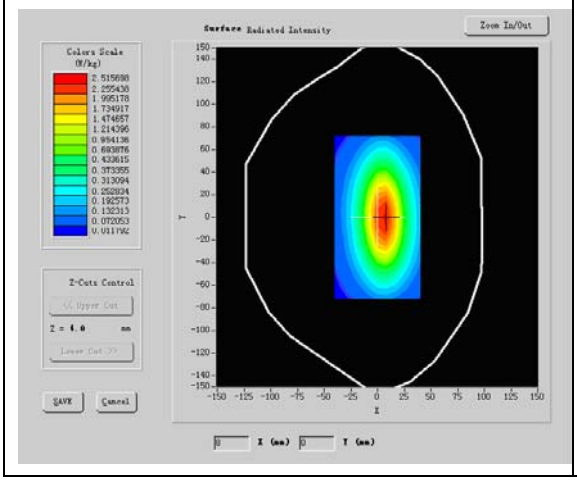
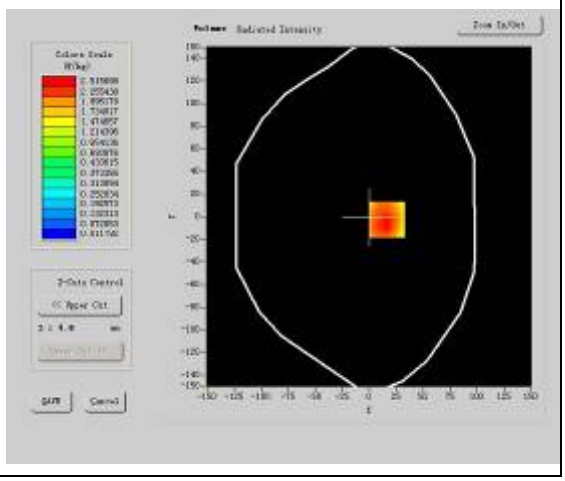
A. Experimental conditions.

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

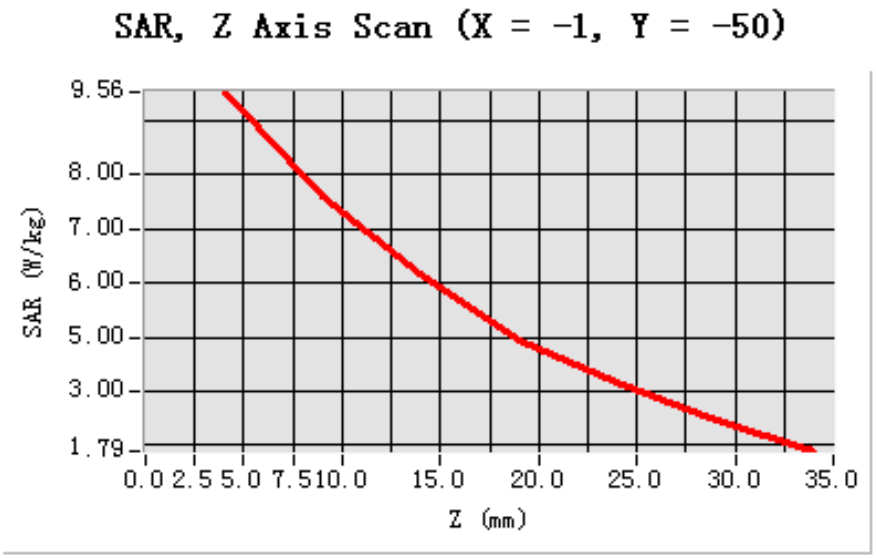
SURFACE SAR	VOLUME SAR
	

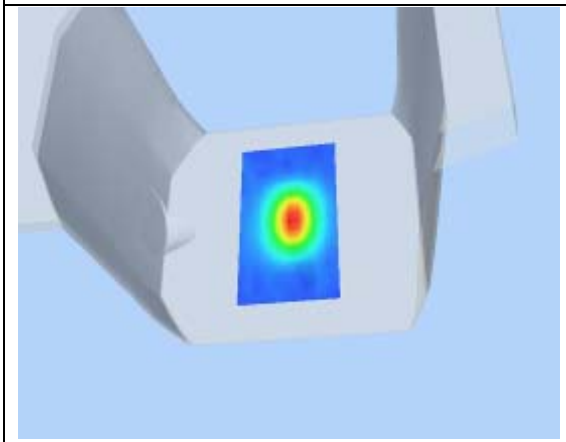
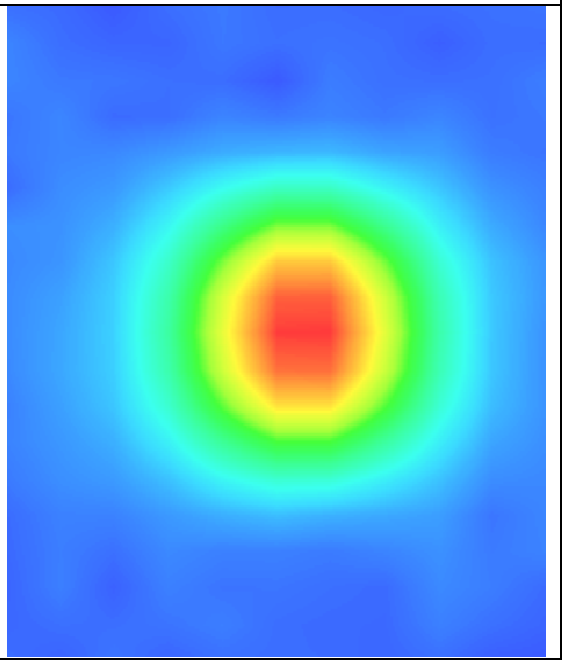
Maximum location: X=-1.00, Y=-50.00

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(2450MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 26/5/2011
Measurement duration: 13 minutes 27 seconds

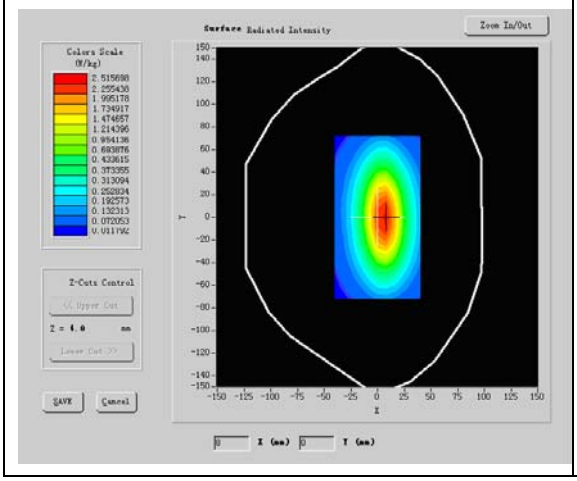
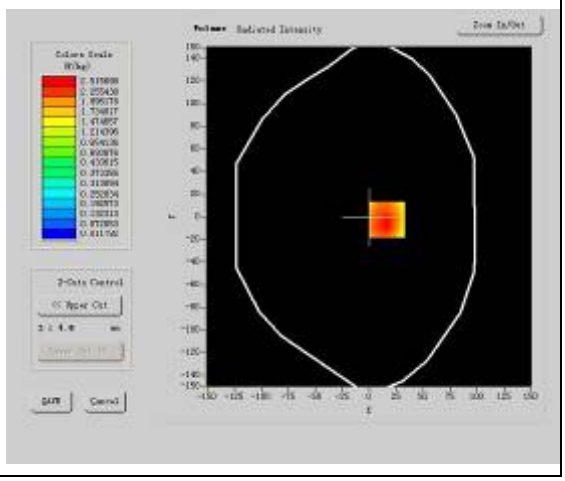
A. Experimental conditions.

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)	1.770014
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

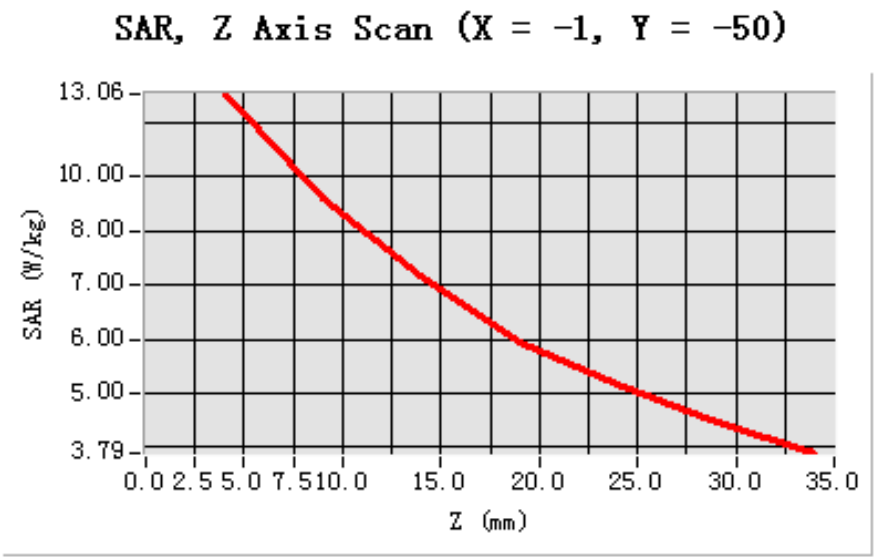
SURFACE SAR	VOLUME SAR
	

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