



# SAR TEST REPORT

*Issued to*

Teleepoch Limited

*For*

**Mobile phone**

Model Name : Wi920;WI920E/MAX  
 Trade Name : PUBLIC/UMX  
 Brand Name : PUBLIC/UMX  
 FCC ID : U46-MAX  
 IC ID : 9412A-MAX  
 Standard : FCC Oet65 Supplement C Jun.2001  
               47CFR 2.1093  
               ANSI C95.1-1999  
               Health Canada's Safety Code 6  
               RSS-102 issue 4-2010  
               IEEE 1528-2003  
 MAX SAR : Head: 0.908W/kg  
               Body:1.151W/kg  
 Test date : 2011-09-07  
 Issue date : 2011-09-16

Shenzhen MORLAB Communication Technology Co., Ltd.

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 Date 2011.9.16



CTIA Authorized Test Lab  
 LAB CODE 200801223-00

IEEE 1725      OTA

OFTA  
 電訊管理局



GCF  
 Official Member of  
 Global Certification Forum

Bluetooth  
 BQTF

FCC  
 Reg. No.  
 741109

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Change History		
Issue	Date	Reason for change
1.0	Sep. 16, 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 1800MHz	Satimo (SN 36/08 DIPF 101)	2010-9-23	1year
12	Dipole 1900MHz	Satimo (SN 36/08 DIPF 102)	2010-9-23	1year
13	Dipole 2450MHz	Satimo (SN 36/08 DIPF 103)	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: PUBLIC/UMX  
Type Name: PUBLIC/UMX  
Marking Name: Wi920;WI920E/MAX  
Hardware Version: WI920\_V1.2  
Software Version: N/A  
Frequency Bands: CDMA 800MHz /CDMA 1700MHz/ CDMA 1900MHz  
WIFI: 2412MHz-2462MHz  
BT: 2402MHz-2480MHz  
Modulation Mode: CDMA : CDMA  
WIFI 802.11B : DSSS  
WIFI 802.11G: OFDM  
BT: GFSK  
Antenna type: Fixed Internal Antenna  
Development Stage: Identical prototype  
Battery Model: N/A  
Battery specification: 1450mAh 3.7V

#### 2.3.1. Photographs of the EUT

Please see for photographs of the EUT.

#### 2.3.2. Identification of all used EUT

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

EUT Identity	Hardware Version	Software Version
1#	WI920_V1.2	N/A

## 2.4. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	<b>47 CFR § 2. 1093</b>	Radiofrequency Radiation Exposure Evaluation: Portable Devices
2	<b>FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01)</b>	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
3	<b>ANSI C95.1-1999</b>	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300 GHz
4	<b>Health Canada's Safety Code 6</b>	Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz - Safety Code 6 (2009)
5	<b>RSS-102, Issue 4-2010</b>	Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands)
6	<b>IEEE 1528-2003</b>	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 800MHz
	CDMA 1700MHz
	CDMA 1900MHz
	WIFI:2450MHz
Operation mode:	Call established
Power Level:	CDMA Maximum output power
	WIFI Maximum output power

During SAR test, EUT is in Traffic Mode (Channel Allocated) at Normal Voltage Condition. A communication link is set up with a System Simulator (SS) by air link, and a call is established.

The Absolute Radio Frequency Channel Number (ARFCN) is 1013, 384 and 777 respectively in the case of CDMA 800MHz or is allocated to 40, 440 and 840 respectively in the case of CDMA 1700MHz, or is allocated to 25, 600 and 1175 respectively in the case of CDMA 1900MHz, 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.

For SAR testing, EUT is in CDMA link mode, its crest factor is 1.

### 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.  $\rho$  ). The equation description is as below:

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

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be either related to the temperature elevation in tissue by

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

, where  $C$  is the specific heat capacity,  $\delta T$  is the temperature rise and  $\delta t$  the exposure duration, or related to the electrical field in the tissue by

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

, where  $\sigma$  is the conductivity of the tissue,  $\rho$  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

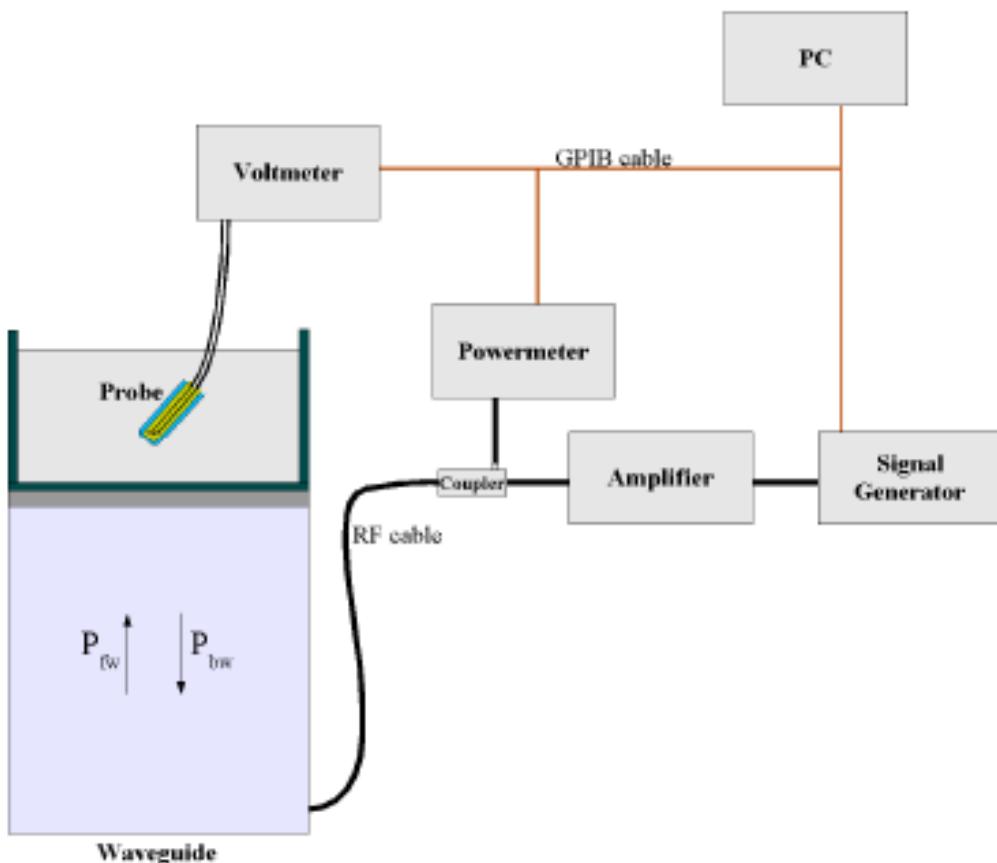
For the measurements the Specific Dosimetric E-Field Probe SN 37/08 EP80 with following specifications is used

- 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: 835 to 2500MHz for head & body simulating liquid.

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

Probe calibration is realized, in compliance with CENELEC EN 62209 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 622091 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
- $\delta$  = 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:

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

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

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

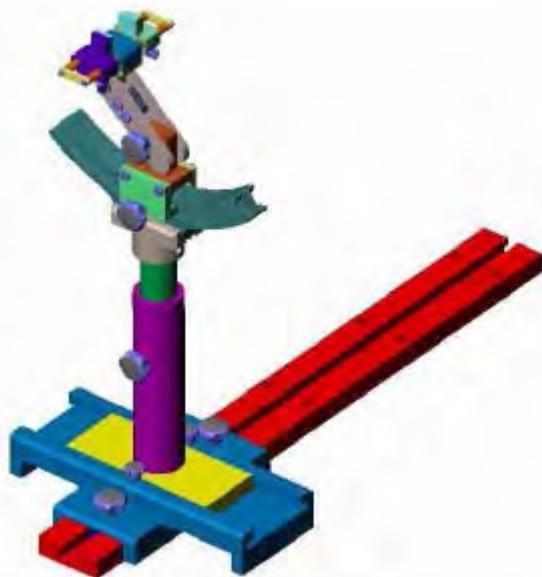
where  $DCP$  is the diode compression point in mV.

### 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		Frequency Band		Frequency Band
	835MHz		1800-1900MHz		2450MHz
Tissue Type	Head	Body	Head	Body	Body
Water	41.45	52.4	54.9	40.4	40.4
Salt(NaCl)	1.49	1.4	0.18	0.5	0.5
Sugar	46.78	45.0	0.0	58.0	58.0
HEC	0.52	1.0	0.0	1.0	1.0
Bactericide	0.05	0.1	0.0	0.1	0.1
Triton	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	44.92	0.0	0.0
Acticide SPX	0.0	0.0	0.0	0.0	0.0
Dielectric Constant	42.54	56.1	39.9	54.0	54.0
Conductivity (S/m)	0.91	0.95	1.42	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 1: Dielectric Performance of Head Tissue Simulating Liquid**

Temperature: 23.0~23.8°C, humidity: 54~60%.			
/	Frequency	Permittivity $\epsilon$	Conductivity $\sigma$ (S/m)
<b>Target value</b>	835 MHZ	41.5	0.90
<b>Validation value (Sep. 7)</b>	835 MHZ	41.675999	0.894409
<b>Target value</b>	1800 MHZ	40	1.40
<b>Validation value (Sep. 7)</b>	1800 MHZ	38.509998	1.416111
<b>Target value</b>	1900 MHZ	40	1.40
<b>Validation value (Sep. 7)</b>	1900 MHZ	38.509998	1.436111

**Table 2: Dielectric Performance of Body Tissue Simulating Liquid**

<b>Temperature: 23.0~23.8°C, humidity: 54~60%.</b>			
/	<b>Frequency</b>	<b>Permittivity <math>\epsilon</math></b>	<b>Conductivity <math>\sigma</math> (S/m)</b>
<b>Target value</b>	835 MHz	55.2	0.97
<b>Validation value (Sep. 7)</b>	835 MHz	55.709999	1.009033
<b>Target value</b>	1800 MHZ	54.0	1.45
<b>Validation value (Sep. 7)</b>	1800 MHZ	52.949998	1.436111
<b>Target value</b>	1900 MHz	53.3	1.52
<b>Validation value (Sep. 7)</b>	1900 MHz	52.548876	1.573978
<b>Target value</b>	2450 MHz	53.3	1.52
<b>Validation value (Sep. 7)</b>	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
<b>Measurement System</b>									
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	
<b>Test sample Related</b>									
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	$\sqrt{3}$	1	1	2.33	2.33	
<b>Phantom and Tissue Parameters</b>									
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 -	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
<b>Measurement System</b>									
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	
<b>Dipole</b>									
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	
<b>Phantom and Tissue Parameters</b>									
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	$\sqrt{3}$	0.6 4	0.43	1.69	1.13	
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	1	0.6 4	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, 1800MHz, 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 1800MHz:SN 36/08 DIPF 101 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	1800MHz	1900MHz	2450MHz
Target value (1g)	9.5 W/Kg	38.1 W/Kg	39.7 W/Kg	52.4 W/Kg
250 mW power	2.478 W/Kg	8.854 W/Kg	9.556 W/Kg	12.899 W/Kg
Test value (1g)	9.912 W/Kg	35.416 W/Kg	38.224 W/Kg	51.596 W/Kg

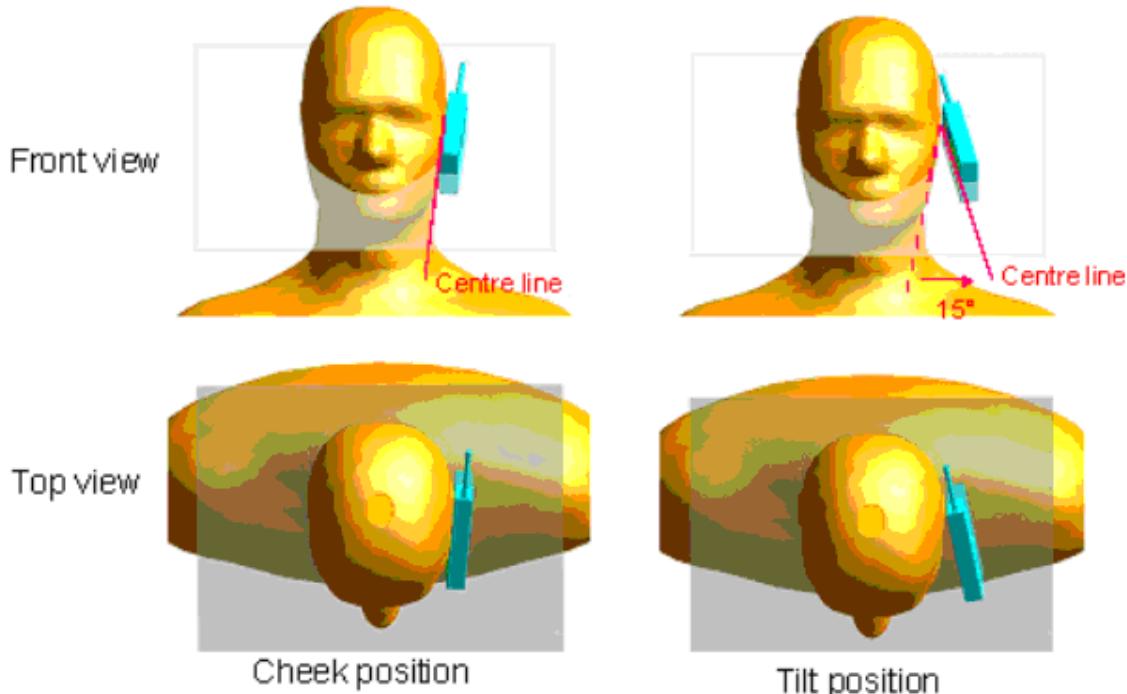
**Note:** System checks the specific test data please see page 190-197.

## 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 mouth by an angle of 15 degrees or until contact with the ear lost.

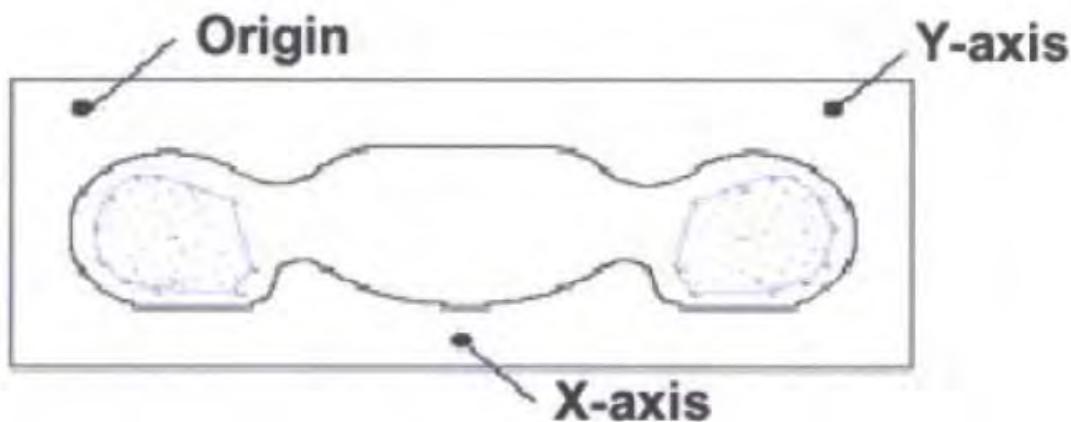
Remark: Please refer to Appendix B for the test setup photos.

### 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 5mm(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 to 16 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 used to determine these 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 than 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 handset configurations.

#### 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

## 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 than 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 handset configurations.

#### 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

## 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	10.72	1.12
	6	2437	11.07	1.27
	11	2462	11.40	1.36

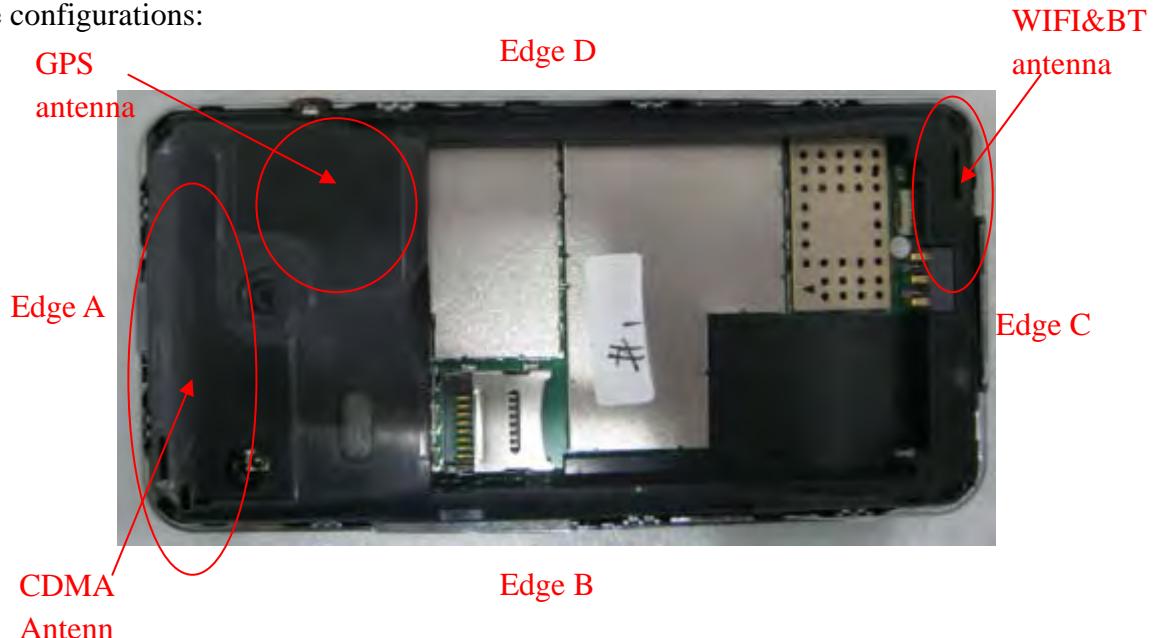
Bluetooth peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)		
			GFSK	$\Pi/4$ -DQPSK	8-DPSK
BT	0	2402	8.126	7.754	7.681
	38	2441	6.758	6.223	6.320
	79	2480	6.225	5.662	5.751

## 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.
2. Edge configurations:



## 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), 1g Peak		
			Device Test channel		
			Channel 1013	Channel 384	Channel 777
Left Side Of Head	Cheek/Touch	Internal	0.287	0.152	0.158
	Ear/Tilt	Internal	0.288	0.149	0.154
Right Side Of Head	Cheek/Touch	Internal	0.302	0.157	0.169
	Ear/Tilt	Internal	0.361	0.174	0.192
Body (10mm separation)	Back Side	Internal	1.151	0.483	0.383
	Face Side	Internal	0.660	0.332	0.374
	Edge A	Internal	/	0.225	/
	Edge B	Internal	/	0.705	/
	Edge C	Internal	/	/	/
	Edge D	Internal	/	0.606	/

Summary of Measurement Results (CDMA 1700 Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g Peak		
			Device Test channel		
			Channel 40	Channel 440	Channel 875
Left Side Of Head	Cheek/Touch	Internal	0.535	0.549	0.825
	Ear/Tilt	Internal	0.397	0.281	0.522
Right Side Of Head	Cheek/Touch	Internal	0.716	0.792	0.656
	Ear/Tilt	Internal	0.894	0.903	0.764
Body (10mm separation)	Back Side	Internal	0.780	1.008	0.927
	Face Side	Internal	0.320	0.364	0.324
	Edge A	Internal	/	0.318	/
	Edge B	Internal	/	0.286	/
	Edge C	Internal	/	/	/
	Edge D	Internal	/	0.396	/

## 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), 1g Peak			
			Device Test channel			
			Ch. 25	Ch. 600	Ch. 1175	Ch. 1275
Left Side Of Head	Cheek/Touch	Internal	0.634	0.589	0.811	0.577
	Ear/Tilt	Internal	0.750	0.703	0.908	0.672
Right Side Of Head	Cheek/Touch	Internal	0.396	0.363	0.471	0.407
	Ear/Tilt	Internal	0.643	0.598	0.764	0.561
Body (10mm separation)	Back Side	Internal	0.671	0.595	0.738	0.638
	Face Side	Internal	0.238	0.216	0.285	0.186
	Edge A	Internal	0.218	/	/	0.496
	Edge B	Internal	0.270	/	/	0.423
	Edge C	Internal	/	/	/	/
	Edge D	Internal	0.289	/	/	0.371

## Summary of Measurement Results (WLAN 802.11B Band)

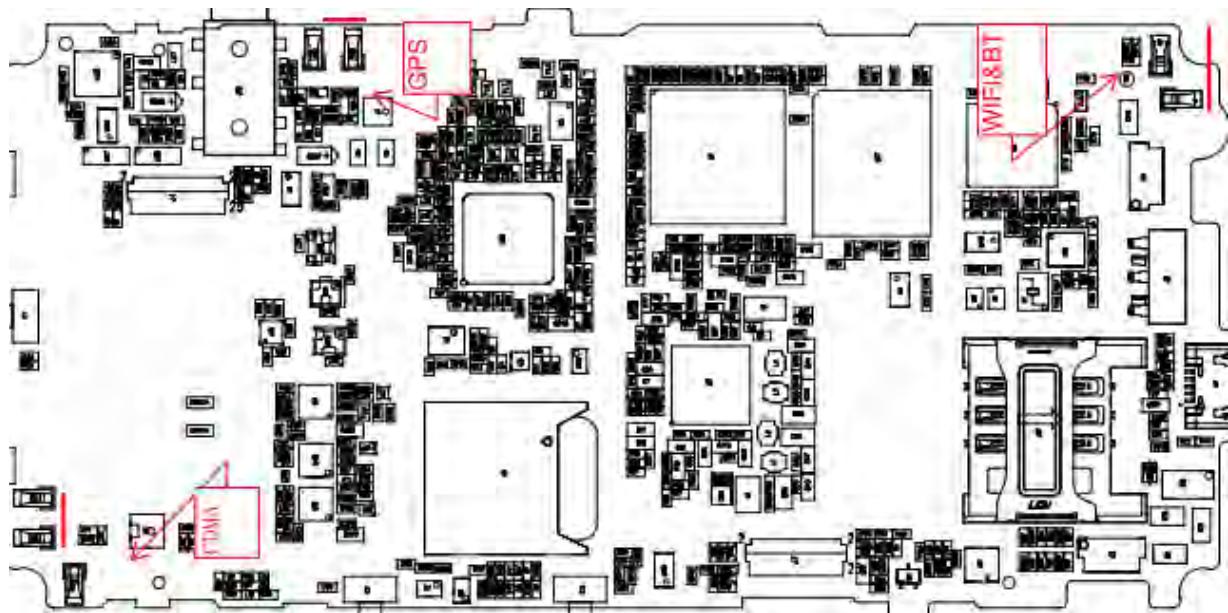
Temperature: 21.0~23.8°C, humidity: 54~60%.						
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g Peak			
			Device Test channel			
			Channel 1	Channel 6	Channel 11	
Body (10mm separation)	Back upward	Internal	/	/	/	0.115
	Face Upward	Internal	/	/	/	0.071
	Edge A	Internal	/	/	/	/
	Edge B	Internal	/	/	/	0.032
	Edge C	Internal	/	/	/	0.082
	Edge D	Internal	/	/	/	0.023

**Note:** 1. 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  $\leq$  100 MHz, testing for the other channels is not required.

2. CDMA antenna located at edge A, the distance between CDMA antenna and edge C is large than 2.5cm. according with KDB941225 D06, the SAR measurement of Edge D is not required
3. WIFI antenna located at edge C. the distance between wifi antenna and edge A is large than 2.5cm. according with KDB941225 D06, the SAR measurement of Edge A is not required.

## 12. Multiple Transmitters Evaluation

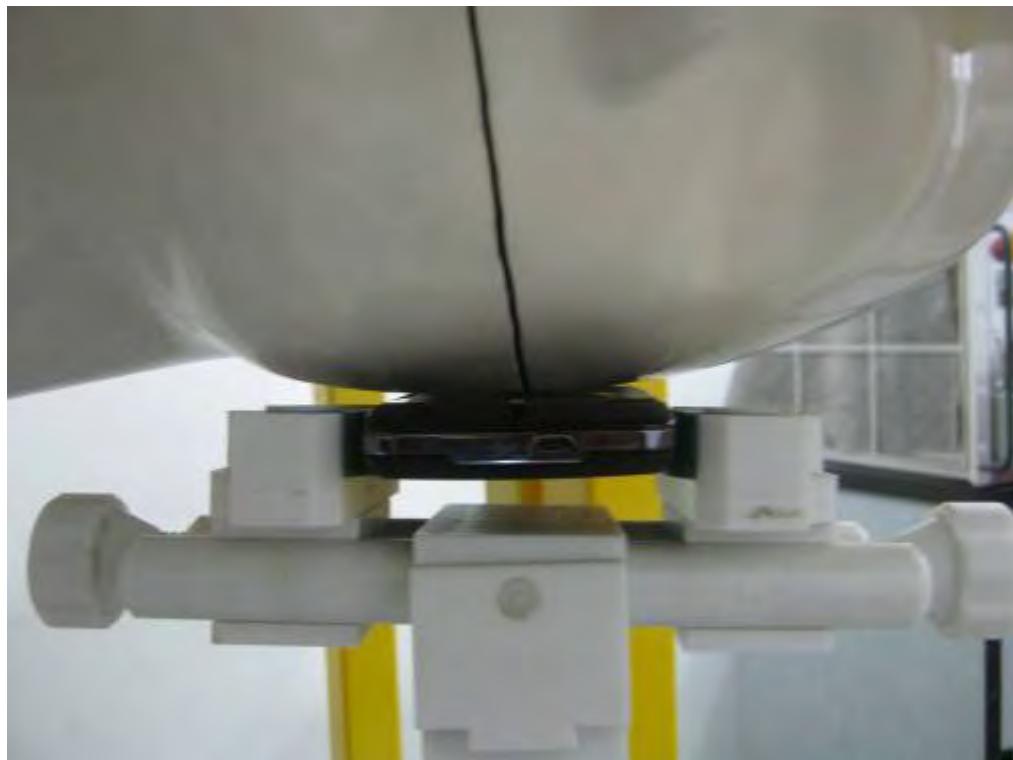
There are three transmitters built in EUT, CDMA, BT and WiFi, as follows:



1. The WiFi mode Max. 1-g SAR value is 0.115W/Kg, and the CDMA Max. 1-g SAR value is 1.151W/Kg, the sum of 1-g SAR value is 1.266W/Kg less than 1.6W/Kg, according with KDB 648474 D01, when the sum of the 1-g SAR is <1.6 W/kg for all simultaneous transmitting antennas, and the Simultaneous Transmission SAR is not required.

## Annex A Photographs of the EUT

1 EUT Left Head Touch Cheek Position



2 EUT Left Head Tilt15 Position



3 EUT Right Head Touch Cheek Position



4 EUT Right Head Tilt15 Position



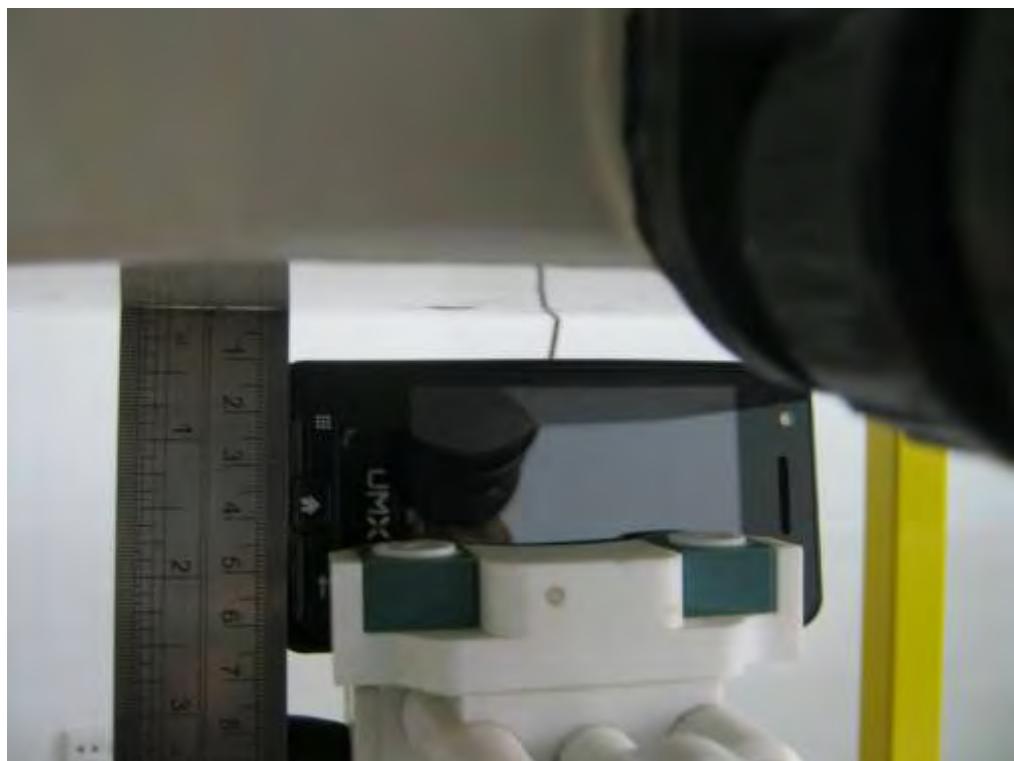
5 Side Position With Headphone 10mm distance.



6 Edge A, 10mm distance.



7. Edge B, 10mm distance



8. Edge C, 10mm distance



8. Edge D, 10mm distance



Liquid Level Photo



## Annex C Graph Test Results

BAND	PARAMETERS
<u>CDMA</u> <u>800</u>	<p><u>Measurement 1:</u> Right Head with Cheek device position on Low Channel in CDMA mode</p> <p><u>Measurement 2:</u> Right Head with Cheek device position on Middle Channel in CDMA mode</p> <p><u>Measurement 3:</u> Right Head with Cheek device position on High Channel in CDMA mode</p> <p><u>Measurement 4:</u> Right Head with Tilt device position on Low Channel in CDMA mode</p> <p><u>Measurement 5:</u> Right Head with Tilt device position on Middle Channel in CDMA mode</p> <p><u>Measurement 6:</u> Right Head with Tilt device position on High Channel in CDMA mode</p> <p><u>Measurement 7:</u> Left Head with Cheek device position on Low Channel in CDMA mode</p> <p><u>Measurement 8:</u> Left Head with Cheek device position on Middle Channel in CDMA mode</p> <p><u>Measurement 9:</u> Left Head with Cheek device position on High Channel in CDMA mode</p> <p><u>Measurement 10:</u> Left Head with Tilt device position on Low Channel in CDMA mode</p> <p><u>Measurement 11:</u> Left Head with Tilt device position on Middle Channel in CDMA mode</p> <p><u>Measurement 12:</u> Left Head with Tilt device position on High Channel in CDMA mode</p> <p><u>Measurement 13:</u> Validation Plane with Body device position on Low Channel in CDMA mode</p> <p><u>Measurement 14:</u> Validation Plane with Body device position on Low Channel in CDMA mode</p> <p><u>Measurement 15:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 16:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 17:</u> Validation Plane with Body device position on High Channel in CDMA mode</p> <p><u>Measurement 18:</u> Validation Plane with Body device position on High Channel in CDMA mode</p> <p><u>Measurement 19:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 20:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 21:</u> Validation Plane with Body device position on</p>



**CDMA  
1900**

Measurement 43: Right Head with Cheek device position on Low Channel in CDMA mode

Measurement 44: Right Head with Cheek device position on Middle Channel in CDMA mode

Measurement 45: Right Head with Cheek device position on High Channel in CDMA mode

Measurement 46: Right Head with Tilt device position on Low Channel in CDMA mode

Measurement 47: Right Head with Tilt device position on Middle Channel in CDMA mode

Measurement 48: Right Head with Tilt device position on High Channel in CDMA mode

Measurement 49: Left Head with Cheek device position on Low Channel in CDMA mode

Measurement 50: Left Head with Cheek device position on Middle Channel in CDMA mode

Measurement 51: Left Head with Cheek device position on High Channel in CDMA mode

Measurement 52: Left Head with Tilt device position on Low Channel in CDMA mode

Measurement 53: Left Head with Tilt device position on Middle Channel in CDMA mode

Measurement 54: Left Head with Tilt device position on High Channel in CDMA mode

Measurement 55: Validation Plane with Body device position on Low Channel in CDMA mode

Measurement 56: Validation Plane with Body device position on Low Channel in CDMA mode

Measurement 57: Validation Plane with Body device position on Middle Channel in CDMA mode

Measurement 58: Validation Plane with Body device position on Middle Channel in CDMA mode

Measurement 59: Validation Plane with Body device position on High Channel in CDMA mode

Measurement 60: Validation Plane with Body device position on High Channel in CDMA mode

Measurement 61: Validation Plane with Body device position on Middle Channel in CDMA mode

Measurement 62: Validation Plane with Body device position on Middle Channel in CDMA mode

Measurement 63: Validation Plane with Body device position on Middle Channel in CDMA mode

Measurement 64: Right Head with Cheek device position on Low Channel in CDMA mode

<b><u>CDMA</u></b> <b><u>1900</u></b> <b><u>G-block</u></b>	<p><u>Measurement 65:</u> Right Head with Tilt device position in CDMA mode</p> <p><u>Measurement 66:</u> Left Head with Cheek device position in CDMA mode</p> <p><u>Measurement 67:</u> Left Head with Tilt device position in CDMA mode</p> <p><u>Measurement 68:</u> Validation Plane with Body device position in CDMA mode</p> <p><u>Measurement 69:</u> Validation Plane with Body device position in CDMA mode</p> <p><u>Measurement 70:</u> Validation Plane with Body device position in CDMA mode</p> <p><u>Measurement 71:</u> Validation Plane with Body device position in CDMA mode</p> <p><u>Measurement 72:</u> Validation Plane with Body device position in CDMA mode</p>
<b><u>WIFI</u></b> <b><u>2450</u></b>	<p><u>Measurement 73:</u> Validation Plane with Body device position on Low Channel in DSSS mode</p> <p><u>Measurement 74:</u> Validation Plane with Body device position on Low Channel in DSSS mode</p> <p><u>Measurement 75:</u> Validation Plane with Body device position on Low Channel in DSSS mode</p> <p><u>Measurement 76:</u> Validation Plane with Body device position on Low Channel in DSSS mode</p> <p><u>Measurement 77:</u> Validation Plane with Body device position on Low Channel in DSSS mode</p>

# 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: 7/9/2011

Measurement duration: 7 minutes 28 seconds

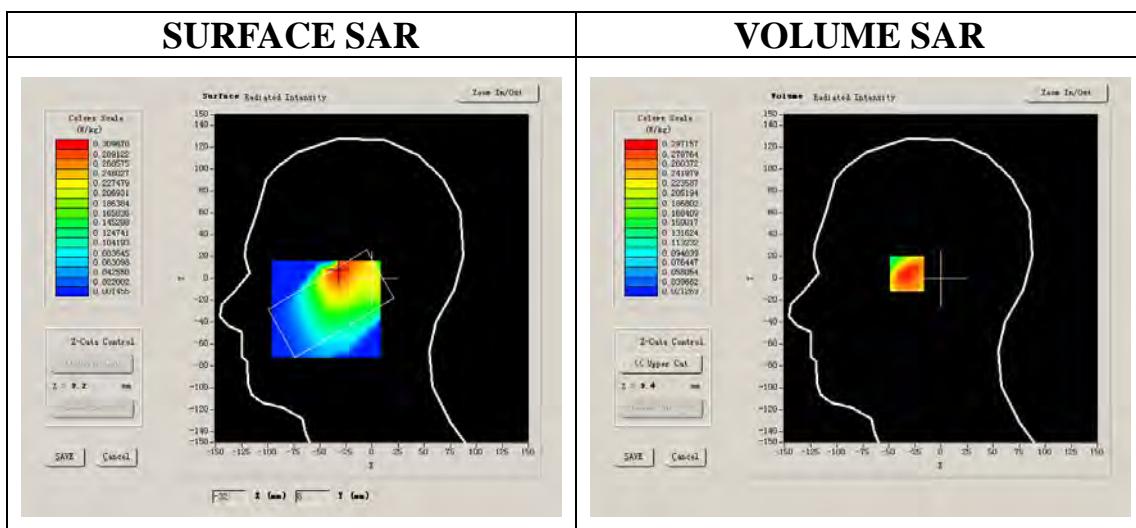
## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA850
<b>Channels</b>	Low
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Lower Band SAR (Channel 1013):

<b>Frequency (MHz)</b>	824.700012
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.867138
<b>Power Drift (%)</b>	-2.130000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



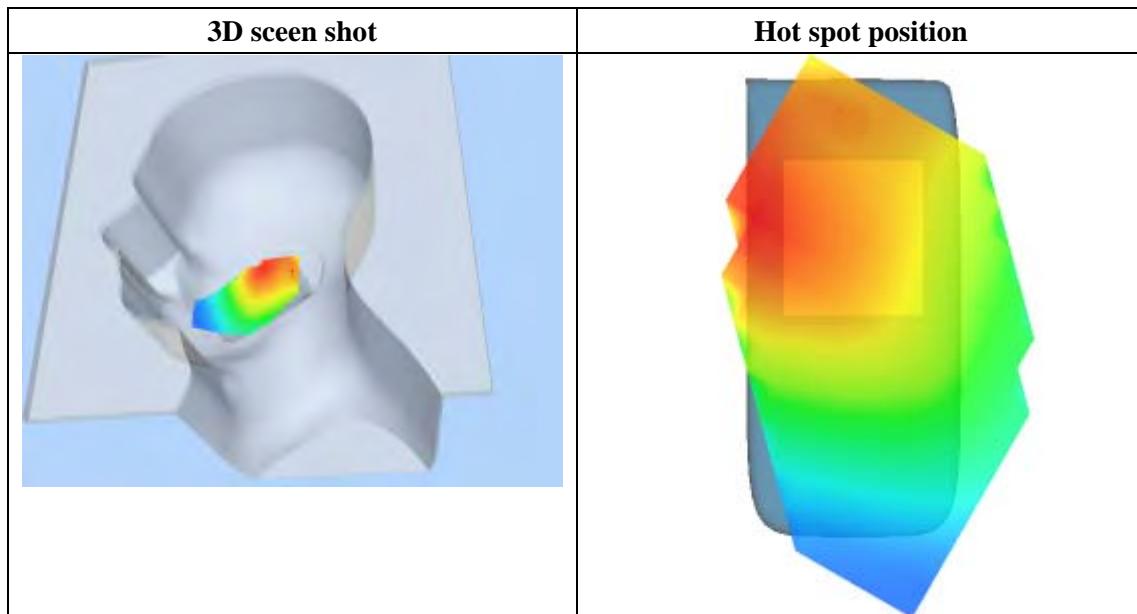
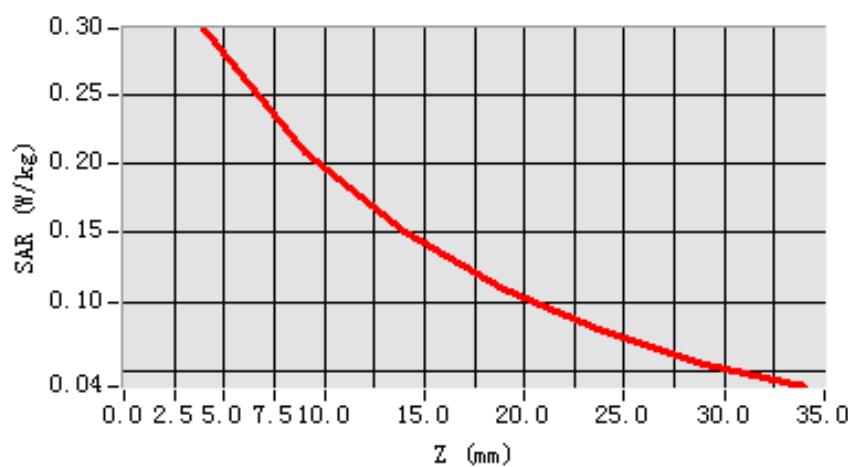
**Maximum location: X=-32.00, Y=7.00**

<b>SAR 10g (W/Kg)</b>	0.194188
<b>SAR 1g (W/Kg)</b>	0.286632

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2972	0.2072	0.1512	0.1085	0.0780	0.0555

**SAR, Z Axis Scan (X = -32, Y = 7)**



## 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: 7/9/2011

Measurement duration: 7 minutes 32 seconds

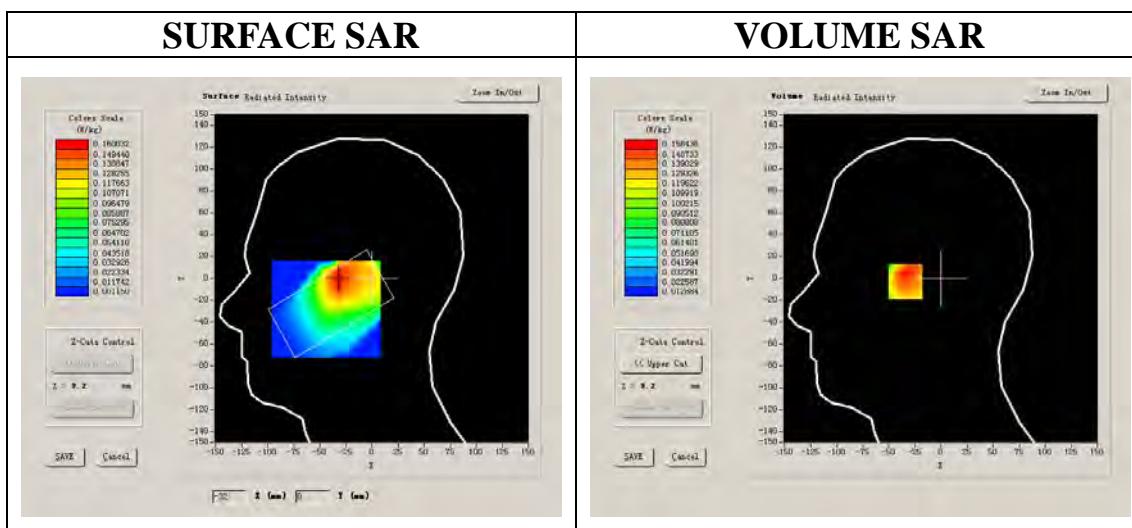
### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.879566
<b>Power Drift (%)</b>	-3.660000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



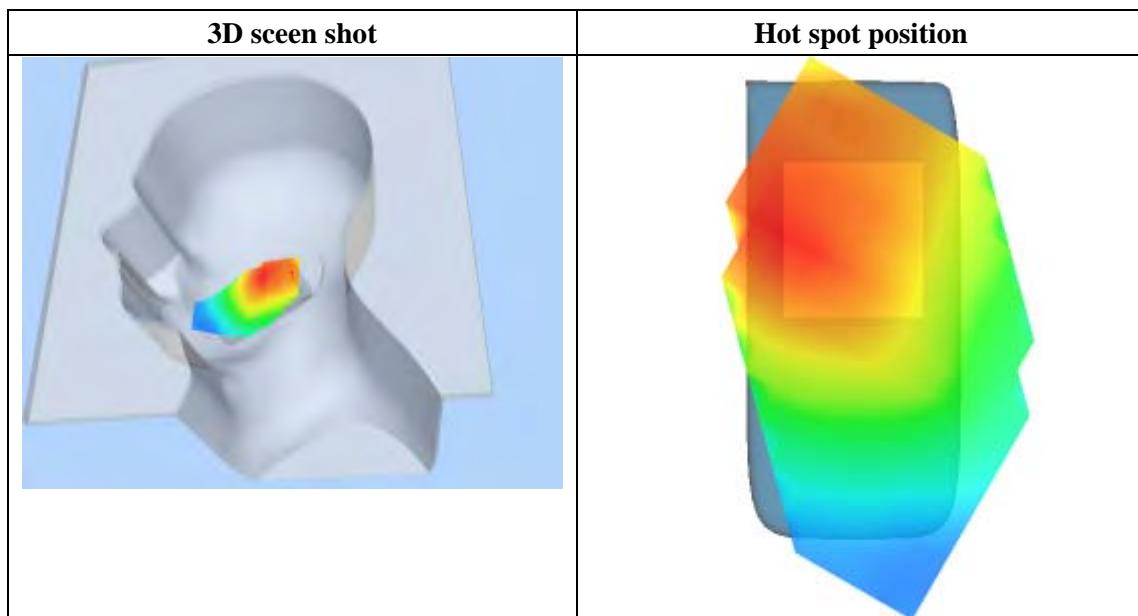
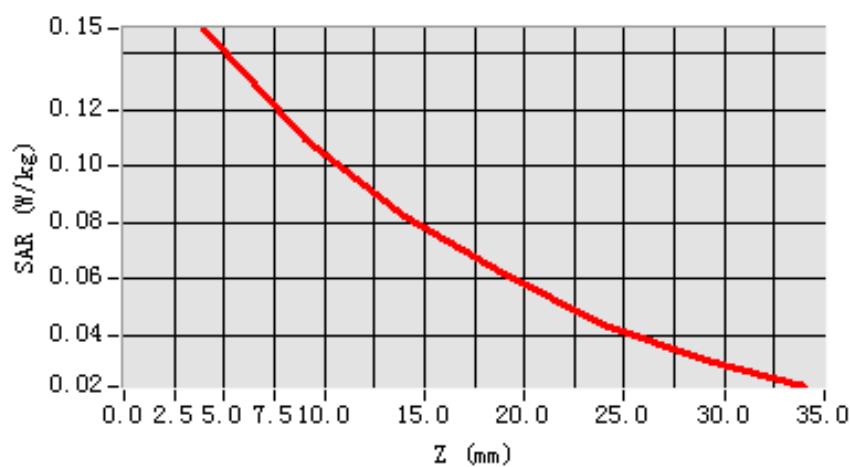
Maximum location: X=-32.00, Y=-1.00

SAR 10g (W/Kg)	0.103992
SAR 1g (W/Kg)	0.151812

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1487	0.1098	0.0820	0.0617	0.0434	0.0311

SAR, Z Axis Scan (X = -32, Y = -1)



# 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: 7/9/2011

Measurement duration: 7 minutes 30 seconds

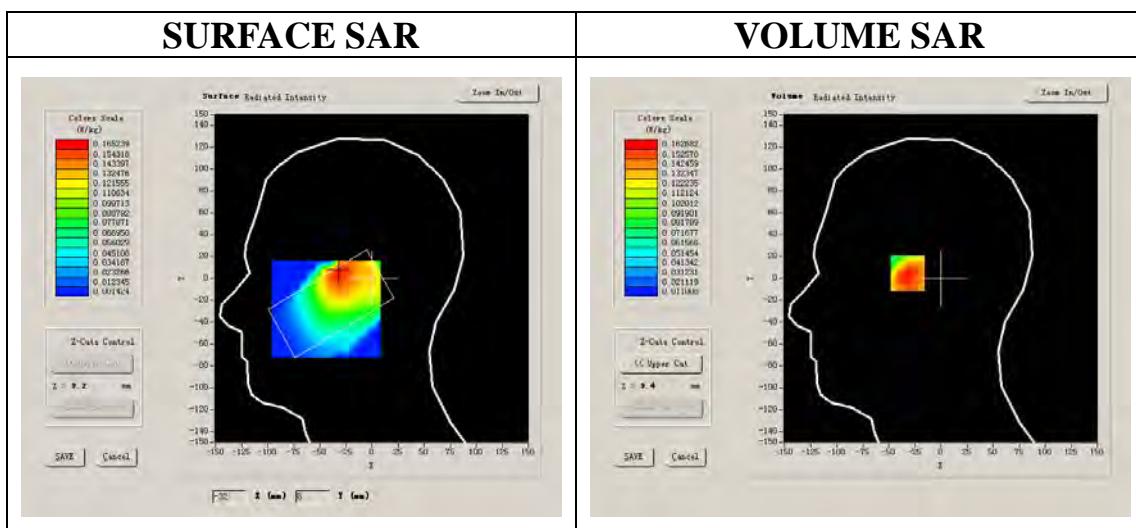
## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA850
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 777):

<b>Frequency (MHz)</b>	848.309998
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.891963
<b>Power Drift (%)</b>	0.090000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



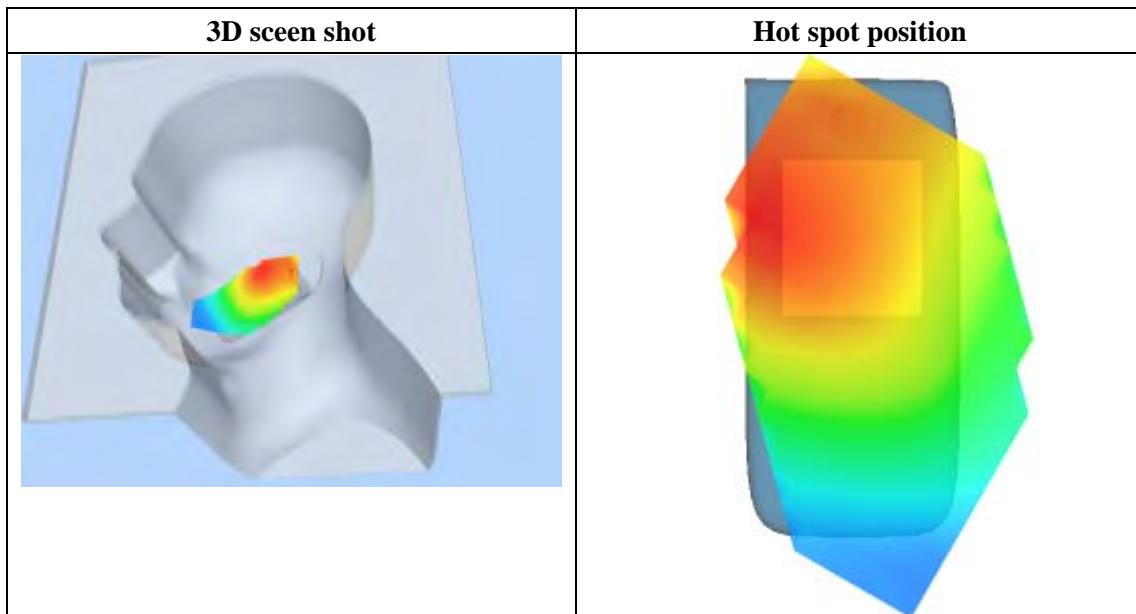
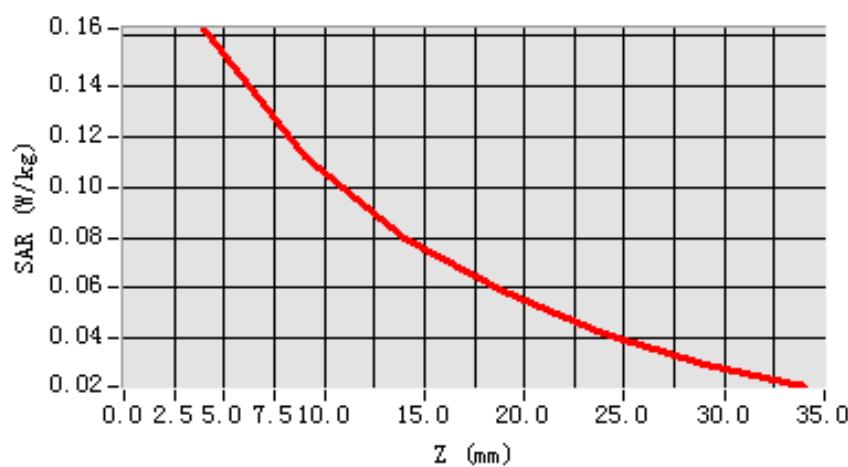
**Maximum location: X=-31.00, Y=7.00**

<b>SAR 10g (W/Kg)</b>	0.107421
<b>SAR 1g (W/Kg)</b>	0.157912

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.1627	0.1120	0.0798	0.0583	0.0424	0.0294

**SAR, Z Axis Scan (X = -31, Y = 7)**



## 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: 7/9/2011

Measurement duration: 7 minutes 22 seconds

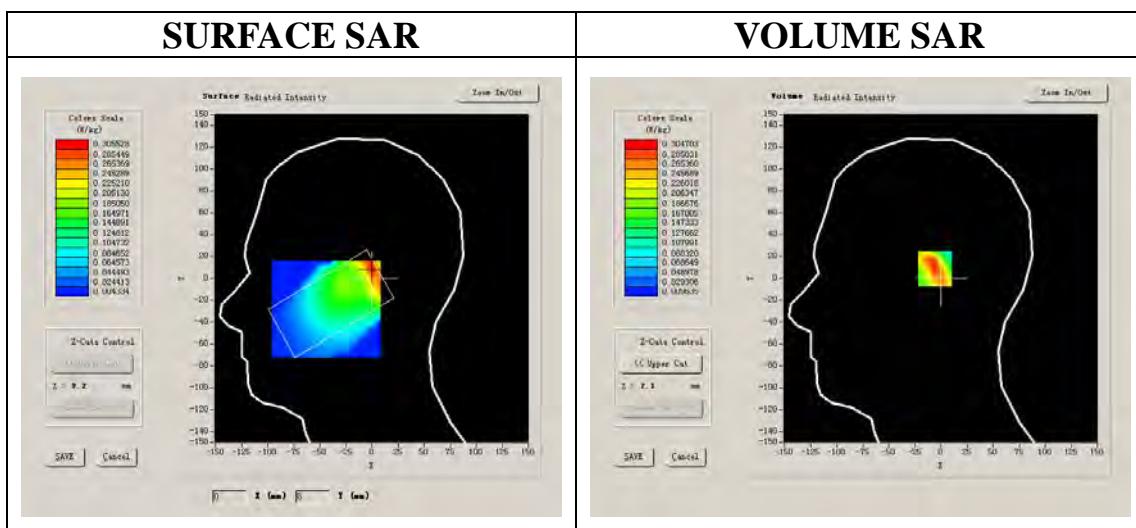
### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA850
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Lower Band SAR (Channel 1013):

<b>Frequency (MHz)</b>	824.700012
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.867138
<b>Power Drift (%)</b>	-0.730000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



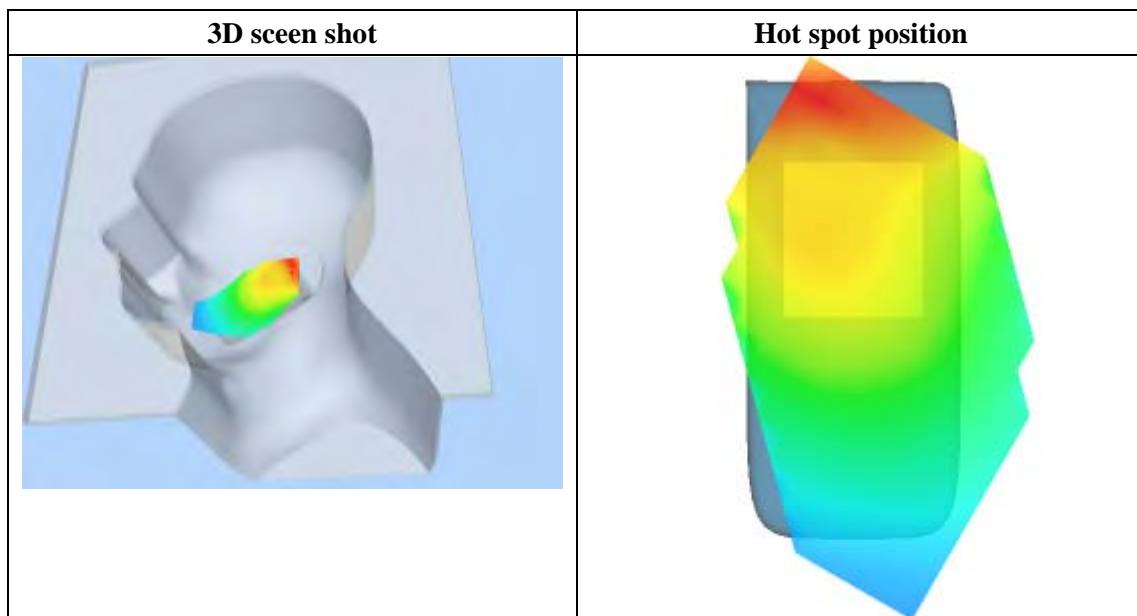
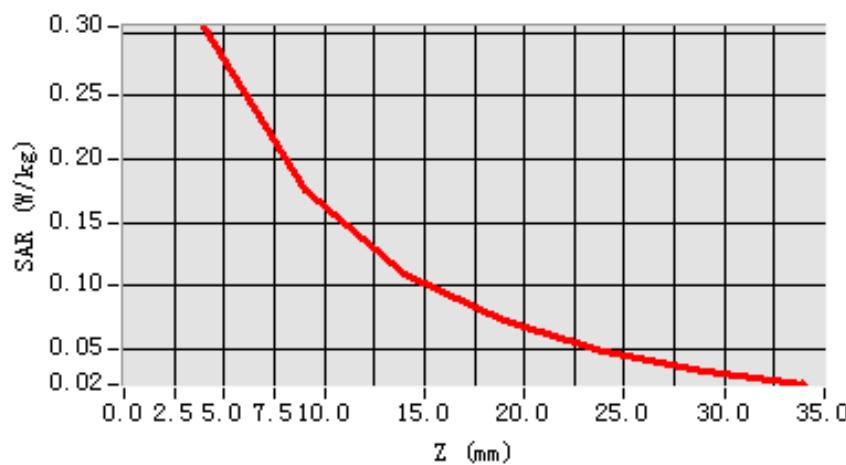
Maximum location: X=0.00, Y=9.00

SAR 10g (W/Kg)	0.166729
SAR 1g (W/Kg)	0.287598

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3047	0.1755	0.1096	0.0721	0.0487	0.0328

SAR, Z Axis Scan (X = 0, Y = 9)



# 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: 7/9/2011

Measurement duration: 7 minutes 27 seconds

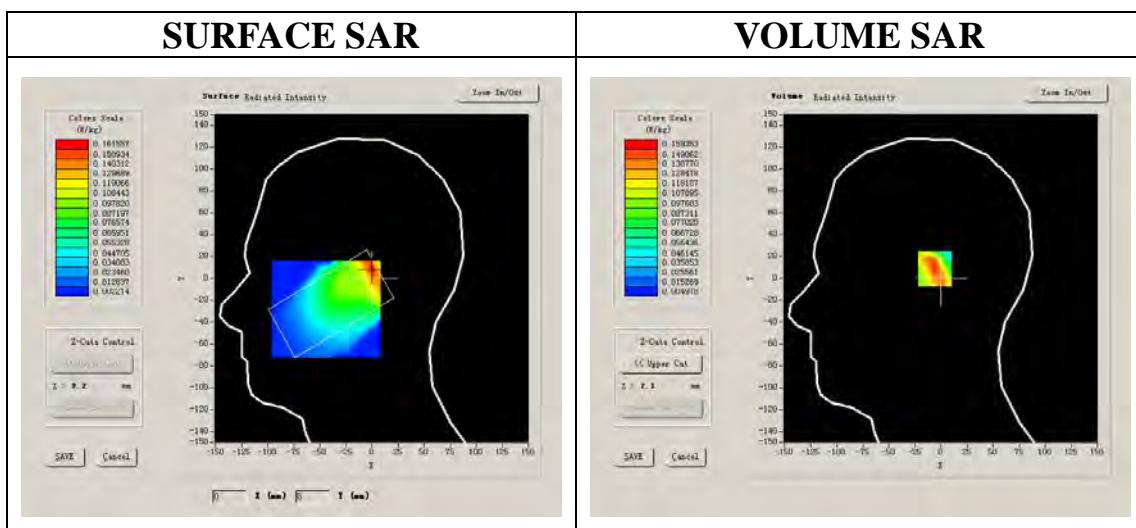
## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.879566
<b>Power Drift (%)</b>	-1.840000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



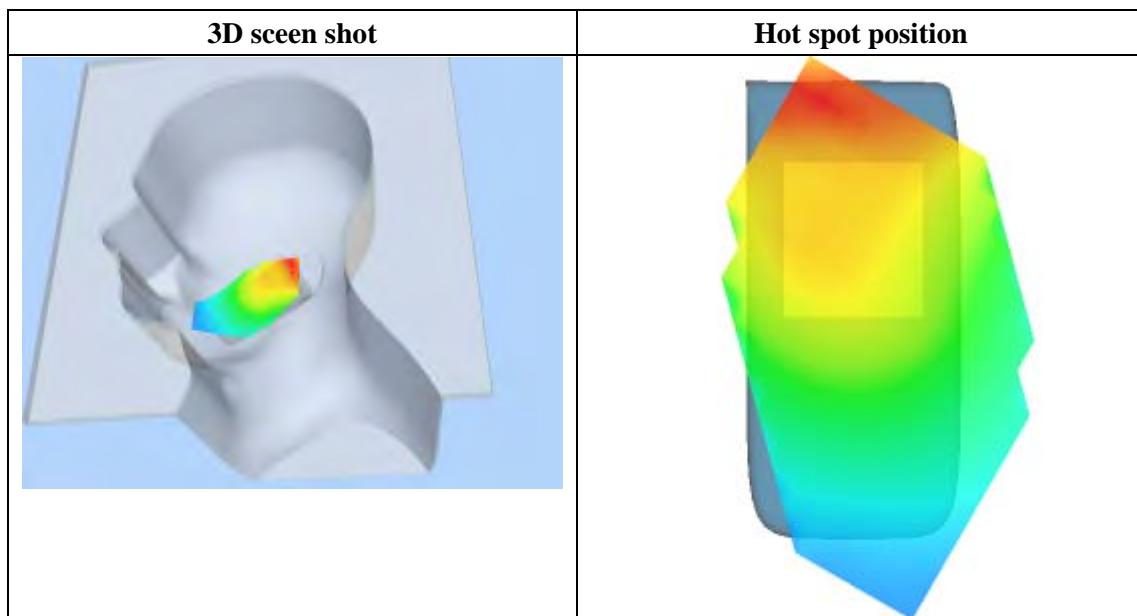
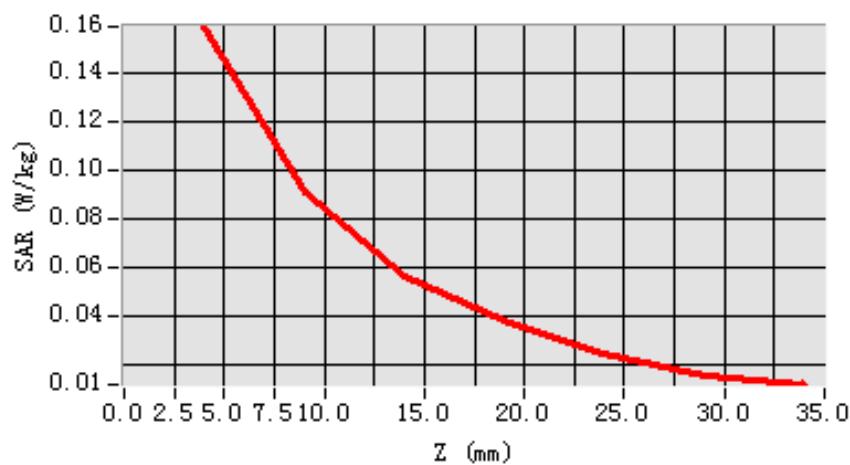
Maximum location: X=0.00, Y=9.00

SAR 10g (W/Kg)	0.087107
SAR 1g (W/Kg)	0.149038

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1594	0.0911	0.0564	0.0379	0.0248	0.0159

SAR, Z Axis Scan (X = 0, Y = 9)



# 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: 7/9/2011

Measurement duration: 8 minutes 34 seconds

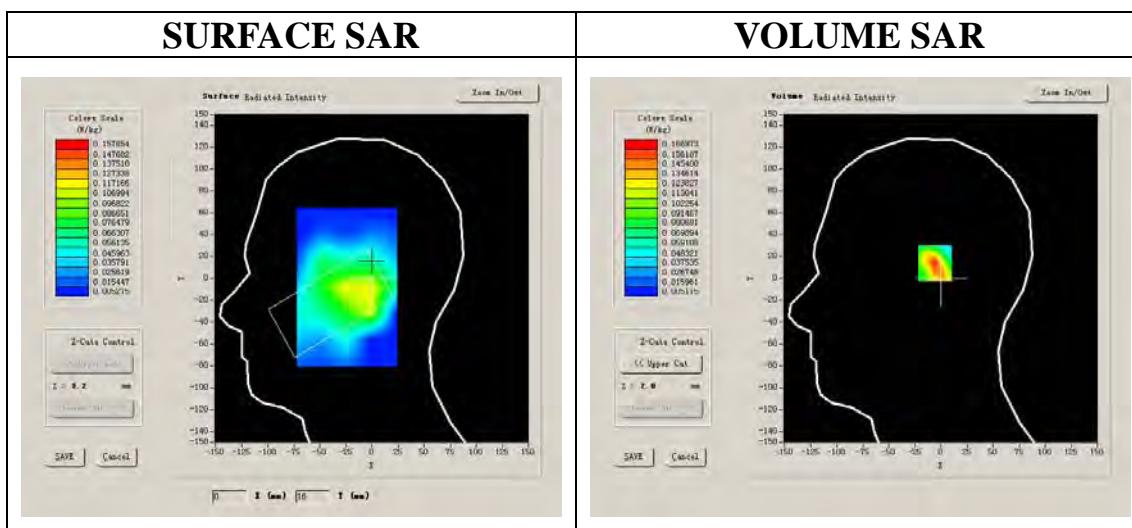
## A. Experimental conditions.

<b>Phantom File</b>	zinf5.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA850
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 777):

<b>Frequency (MHz)</b>	848.309998
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.891963
<b>Power Drift (%)</b>	1.350000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



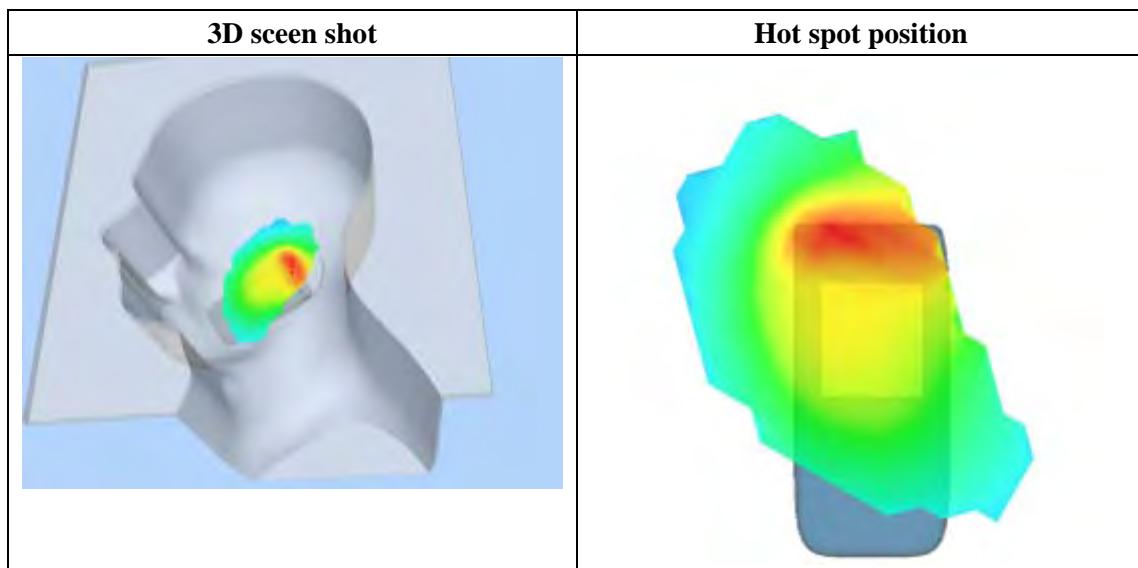
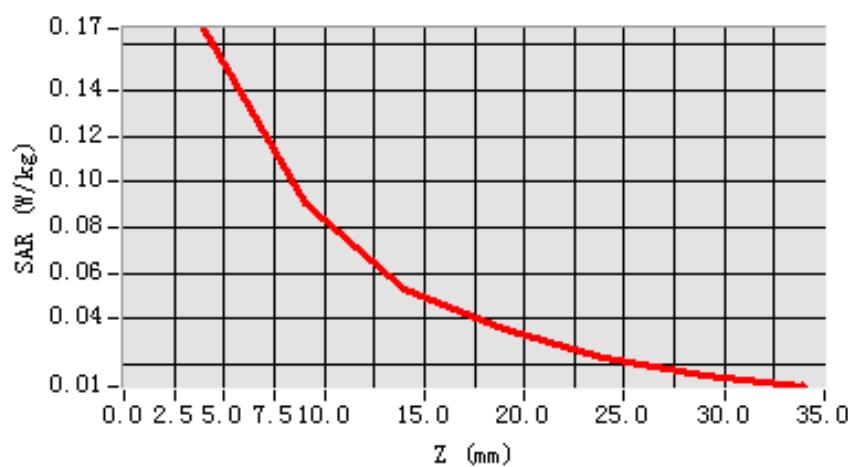
**Maximum location: X=-1.00, Y=14.00**

<b>SAR 10g (W/Kg)</b>	0.087012
<b>SAR 1g (W/Kg)</b>	0.153957

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.1670	0.0906	0.0534	0.0353	0.0232	0.0154

**SAR, Z Axis Scan (X = -1, Y = 14)**



# MEASUREMENT 7

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 24 seconds

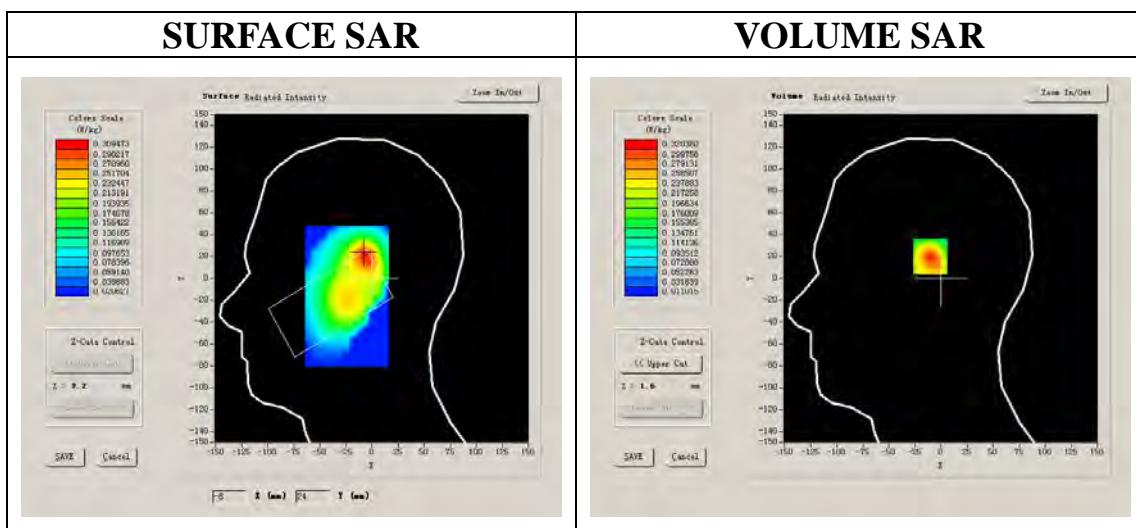
## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA850
<b>Channels</b>	Low
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Lower Band SAR (Channel 1013):

<b>Frequency (MHz)</b>	824.700012
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.867138
<b>Power Drift (%)</b>	1.090000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



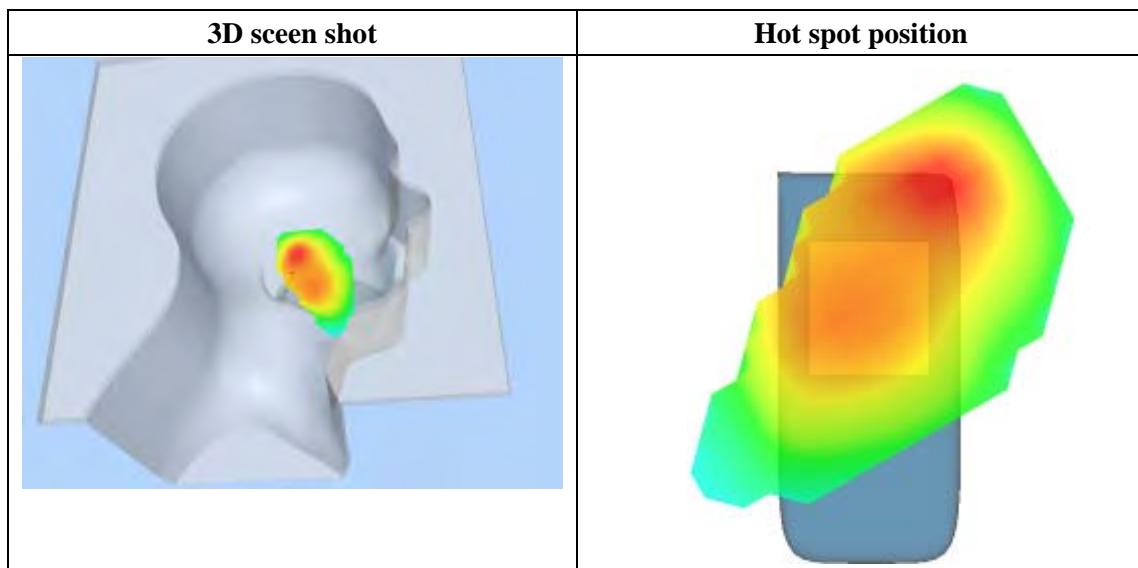
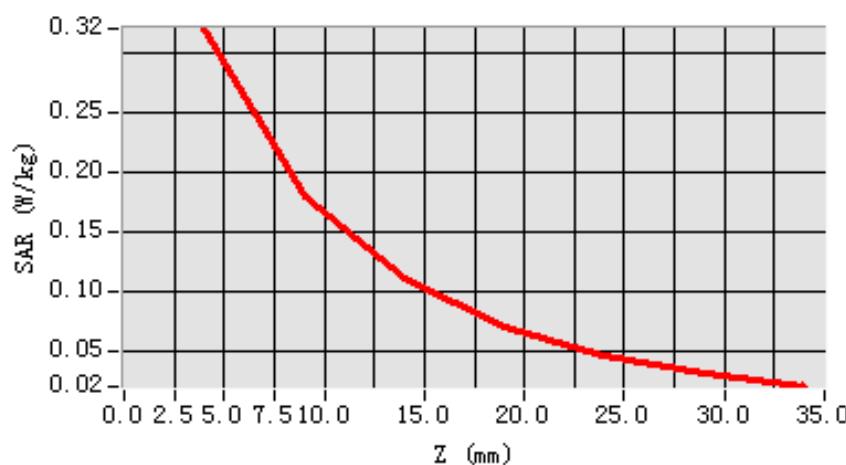
**Maximum location: X=-7.00, Y=22.00**

<b>SAR 10g (W/Kg)</b>	0.176618
<b>SAR 1g (W/Kg)</b>	0.301725

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3204	0.1804	0.1106	0.0709	0.0472	0.0315

**SAR, Z Axis Scan (X = -7, Y = 22)**



# 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: 7/9/2011

Measurement duration: 7 minutes 15 seconds

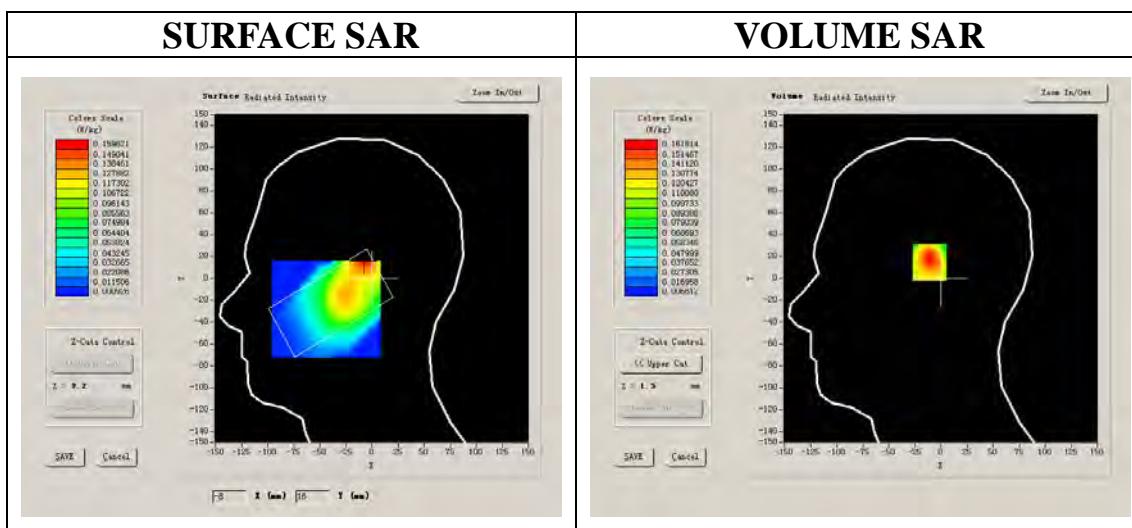
## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.879566
<b>Power Drift (%)</b>	-1.600000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



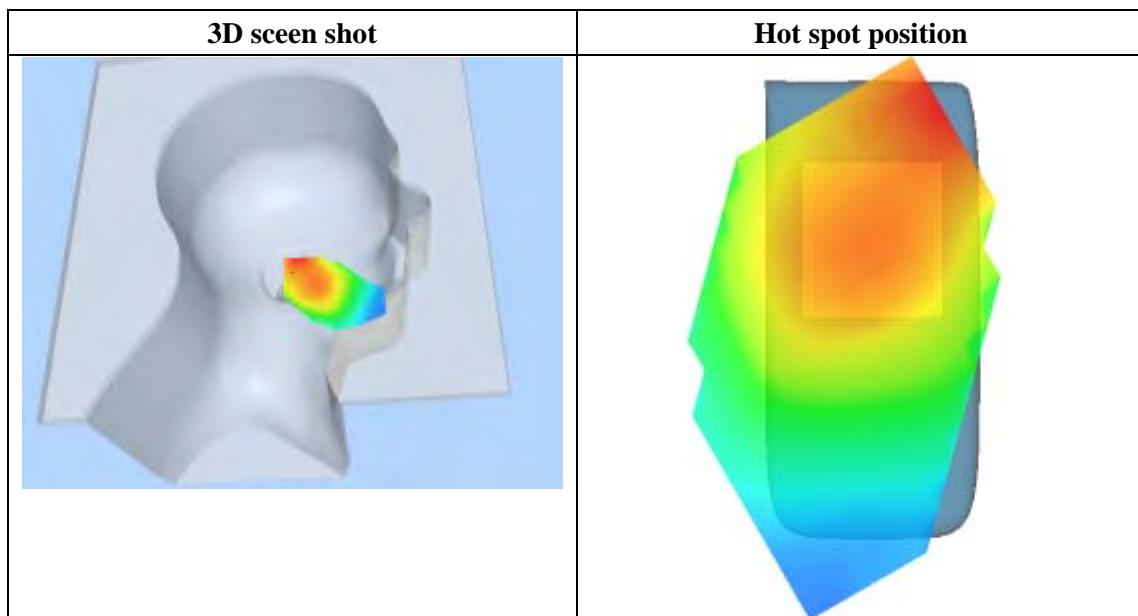
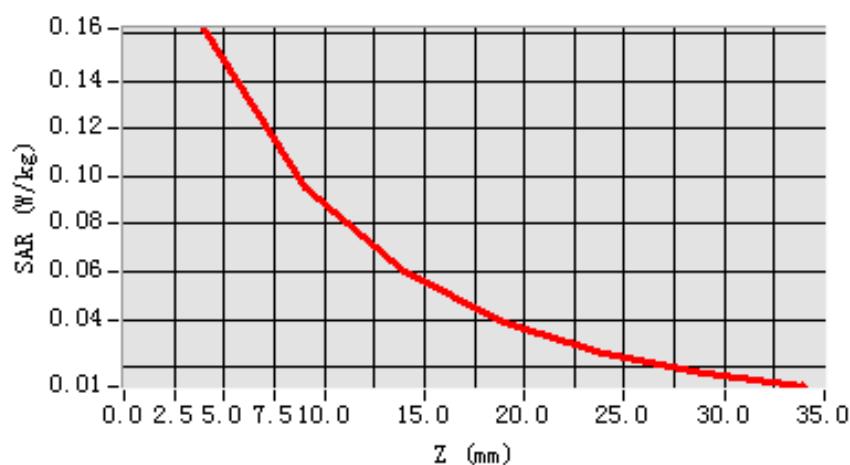
**Maximum location: X=-7.00, Y=16.00**

<b>SAR 10g (W/Kg)</b>	0.092581
<b>SAR 1g (W/Kg)</b>	0.157379

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.1618	0.0953	0.0596	0.0385	0.0253	0.0169

**SAR, Z Axis Scan (X = -7, Y = 16)**



# 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: 7/9/2011

Measurement duration: 7 minutes 24 seconds

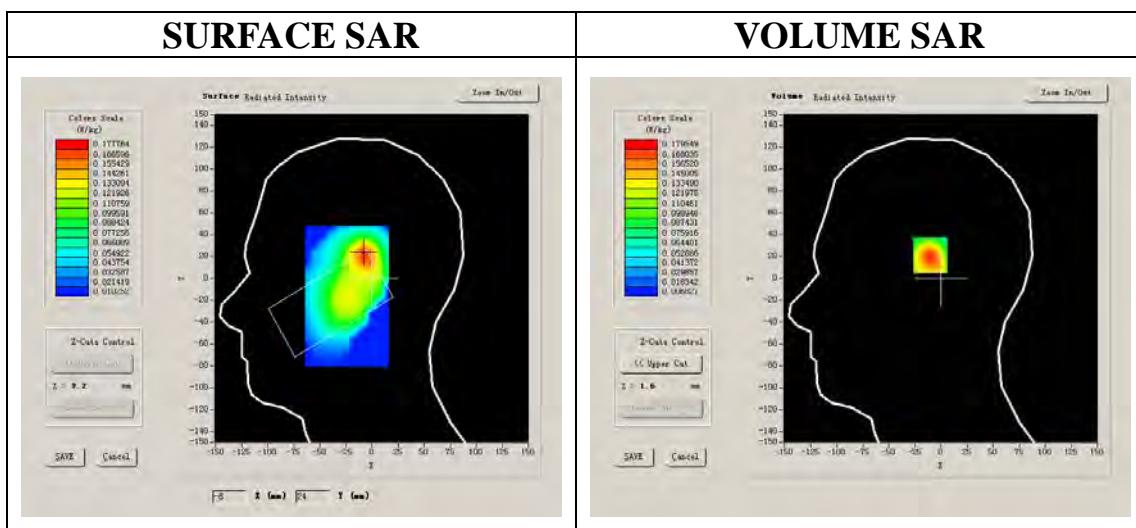
## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA850
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 777):

<b>Frequency (MHz)</b>	848.309998
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.891963
<b>Power Drift (%)</b>	-1.130000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



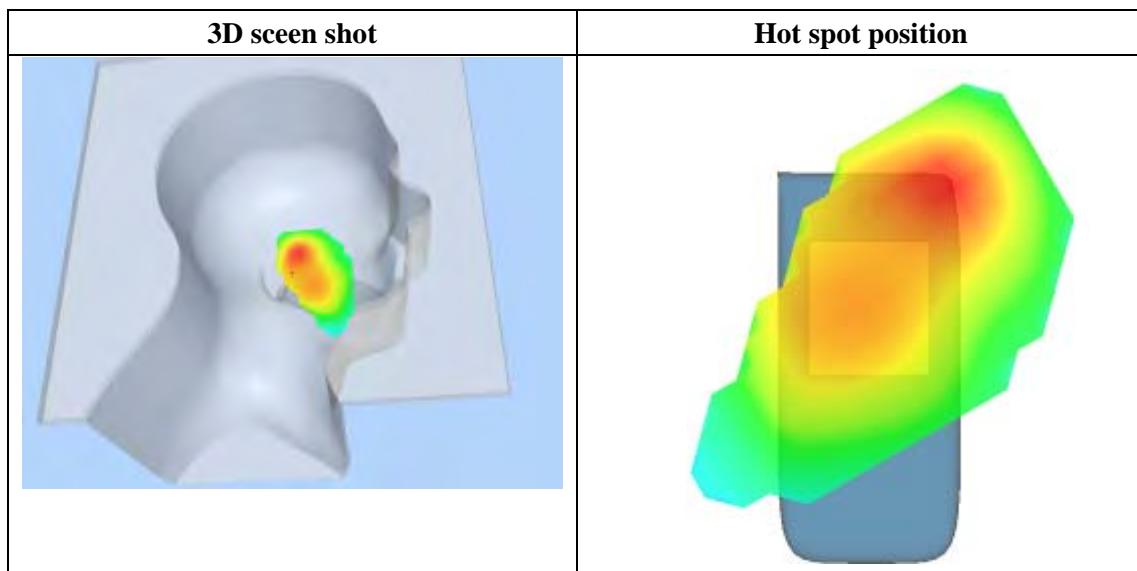
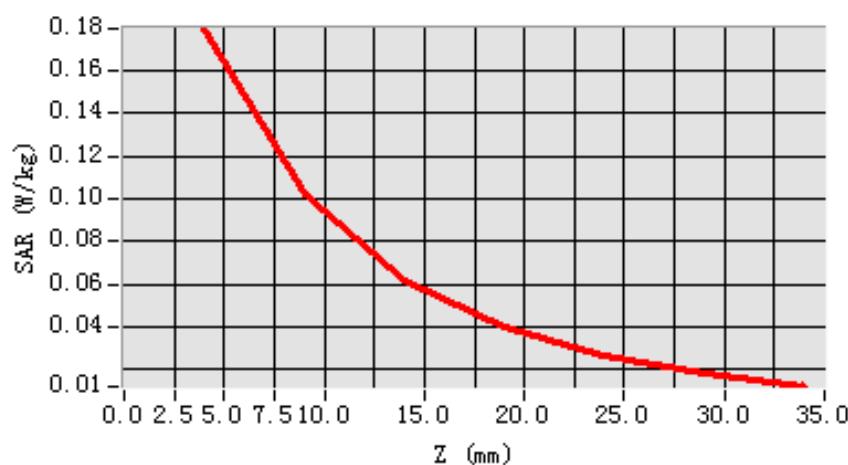
**Maximum location: X=-7.00, Y=23.00**

<b>SAR 10g (W/Kg)</b>	0.098969
<b>SAR 1g (W/Kg)</b>	0.169441

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.1795	0.1021	0.0617	0.0398	0.0260	0.0178

**SAR, Z Axis Scan (X = -7, Y = 23)**



# 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: 7/9/2011

Measurement duration: 7 minutes 25 seconds

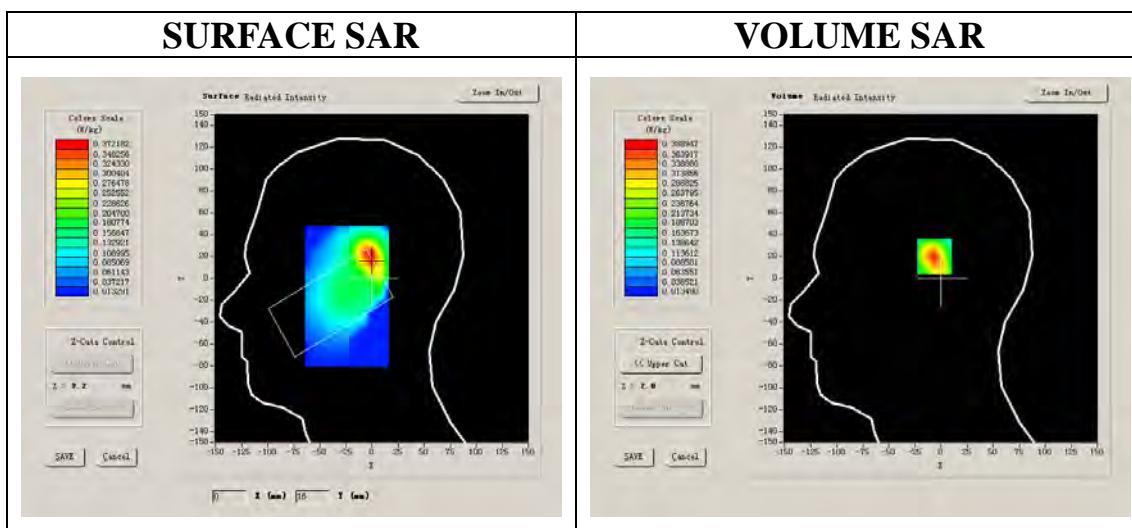
## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA850
<b>Channels</b>	Low
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Lower Band SAR (Channel 1013):

<b>Frequency (MHz)</b>	824.700012
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.867138
<b>Power Drift (%)</b>	-0.040000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



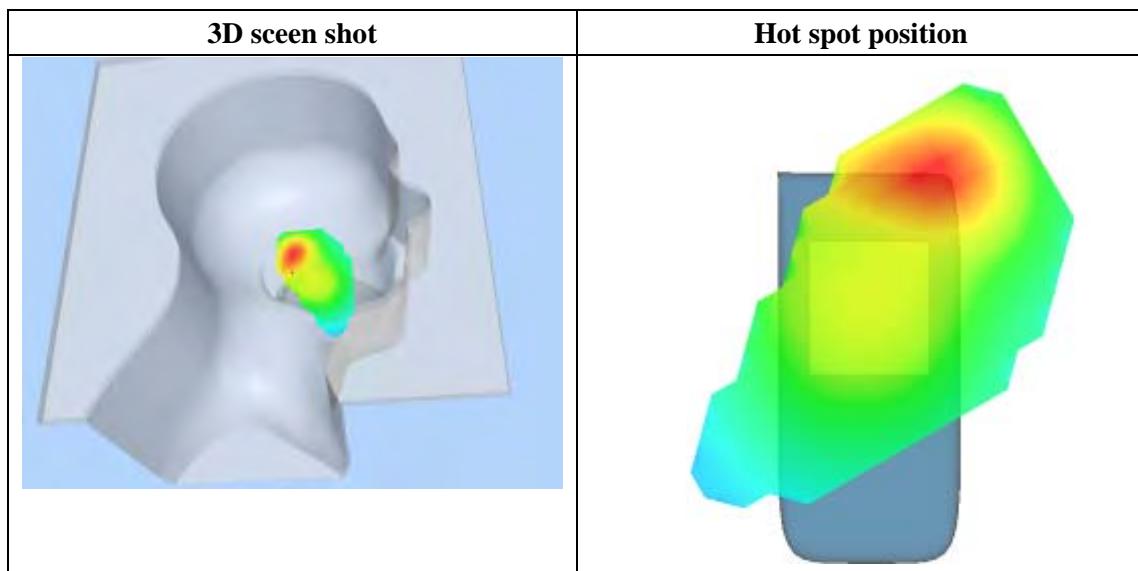
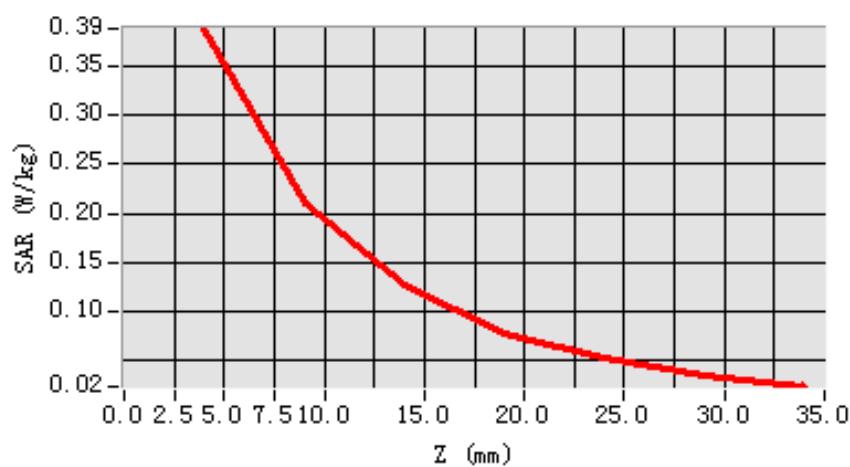
**Maximum location: X=-2.00, Y=22.00**

<b>SAR 10g (W/Kg)</b>	0.199684
<b>SAR 1g (W/Kg)</b>	0.360860

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3889	0.2107	0.1261	0.0779	0.0520	0.0344

**SAR, Z Axis Scan (X = -2, Y = 22)**



# 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: 7/9/2011

Measurement duration: 7 minutes 24 seconds

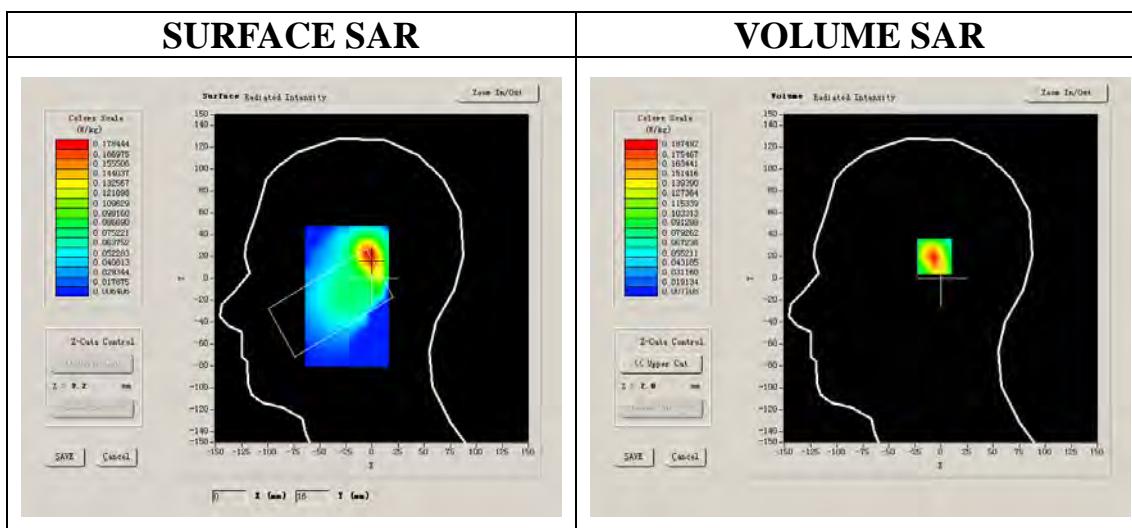
## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.879566
<b>Power Drift (%)</b>	0.460000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



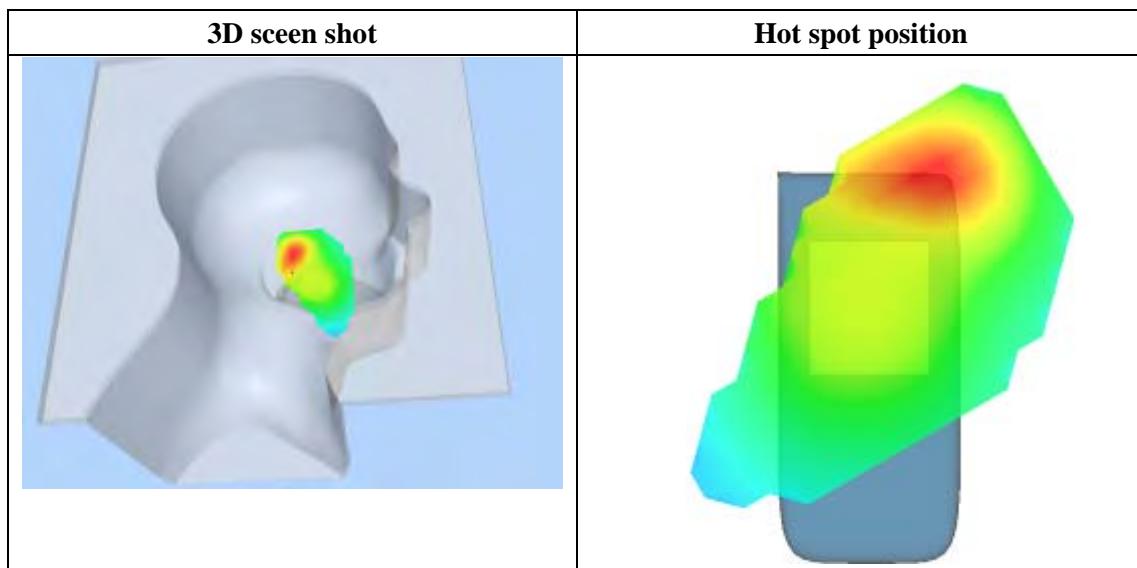
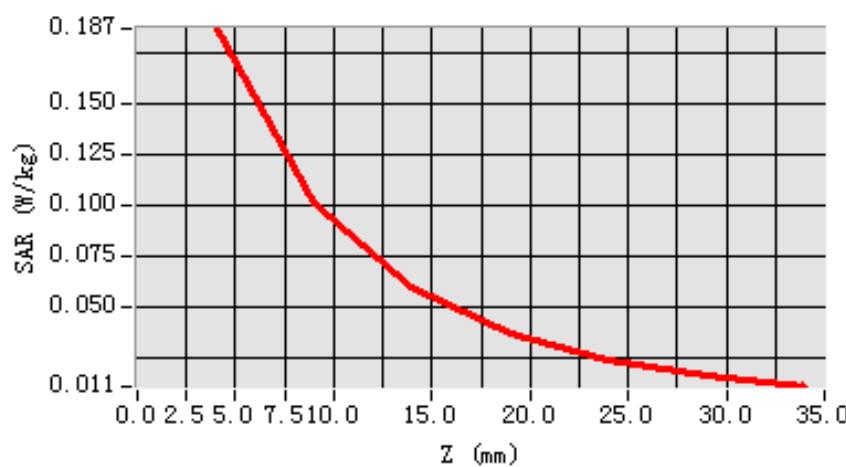
**Maximum location: X=-2.00, Y=22.00**

<b>SAR 10g (W/Kg)</b>	0.095722
<b>SAR 1g (W/Kg)</b>	0.174425

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.1875	0.1011	0.0594	0.0371	0.0241	0.0159

**SAR, Z Axis Scan (X = -2, Y = 22)**



## MEASUREMENT 12

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 24 seconds

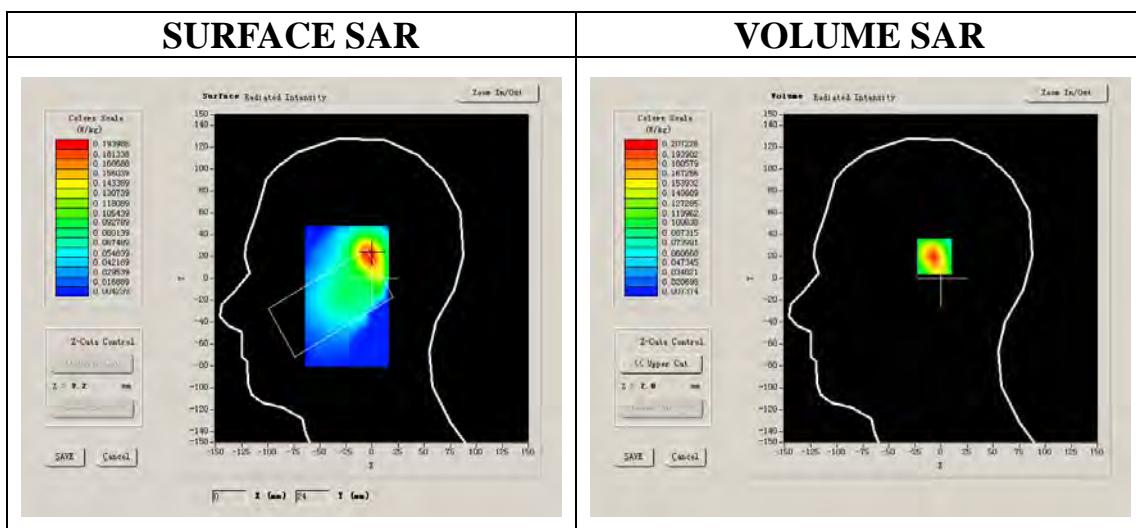
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA850
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Higher Band SAR (Channel 777):

<b>Frequency (MHz)</b>	848.309998
<b>Relative permittivity (real part)</b>	41.790001
<b>Relative permittivity</b>	18.926250
<b>Conductivity (S/m)</b>	0.891963
<b>Power Drift (%)</b>	0.540000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



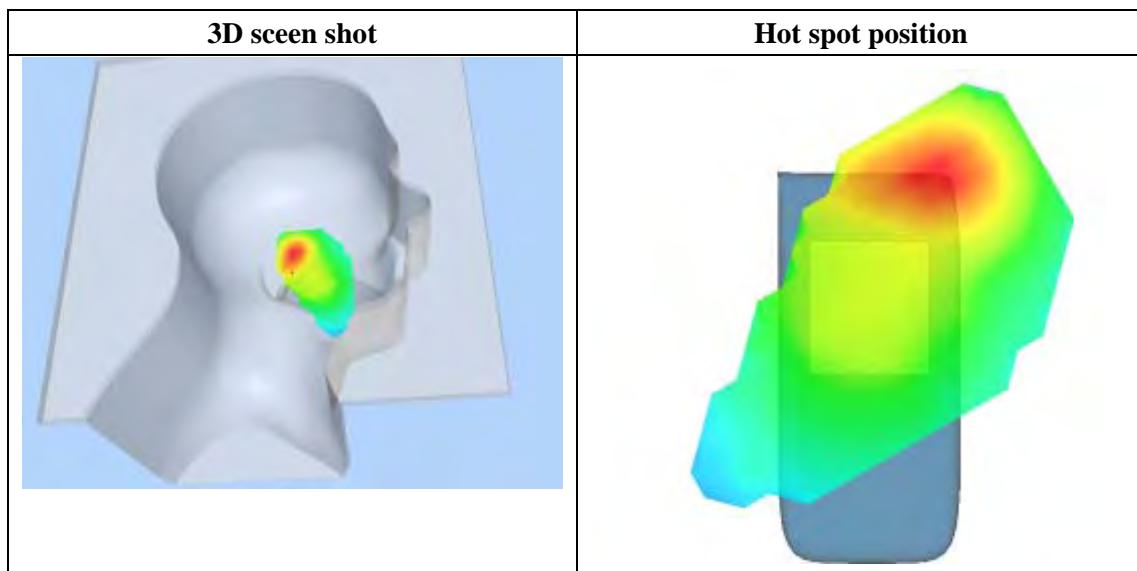
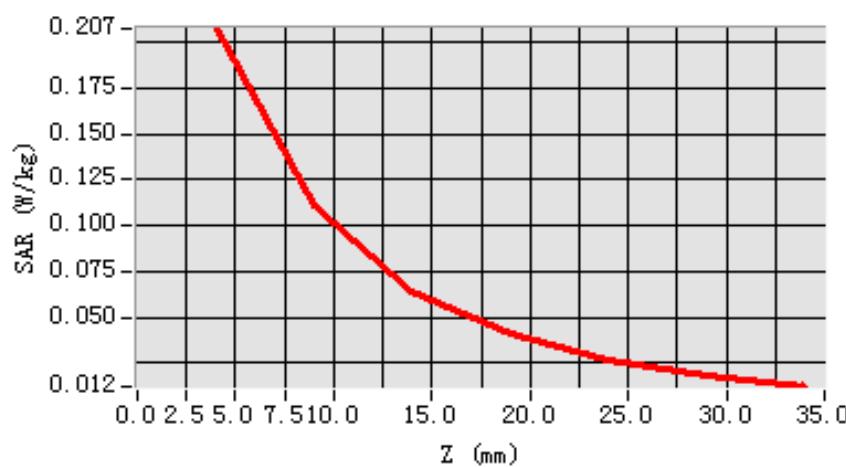
**Maximum location: X=-2.00, Y=22.00**

<b>SAR 10g (W/Kg)</b>	0.105513
<b>SAR 1g (W/Kg)</b>	0.192462

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2072	0.1112	0.0644	0.0413	0.0270	0.0178

**SAR, Z Axis Scan (X = -2, Y = 22)**



## MEASUREMENT 13

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 8 seconds

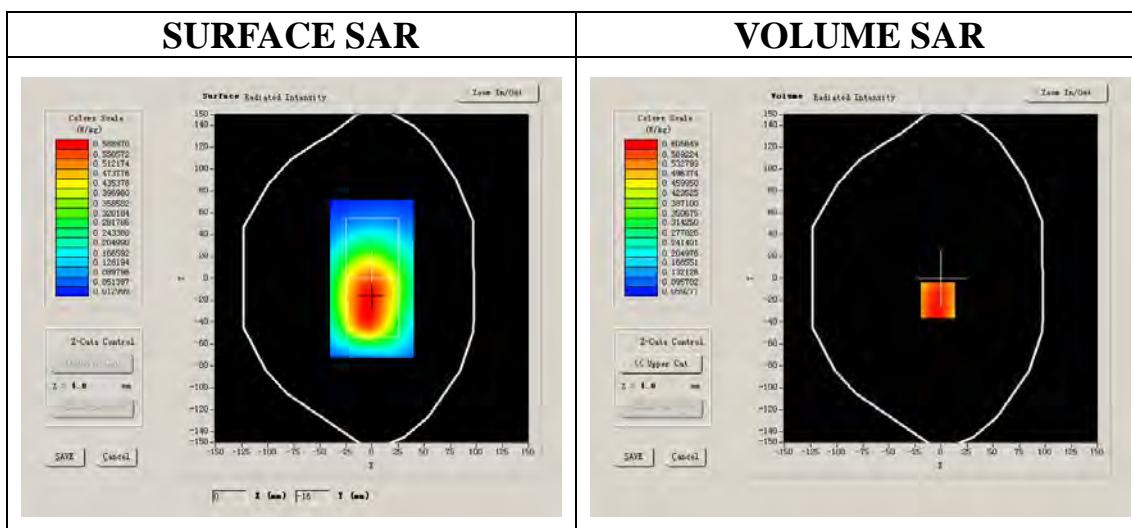
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA850
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Lower Band SAR (Channel 1013):

<b>Frequency (MHz)</b>	824.700012
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	0.975187
<b>Power drift (%)</b>	-0.870000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



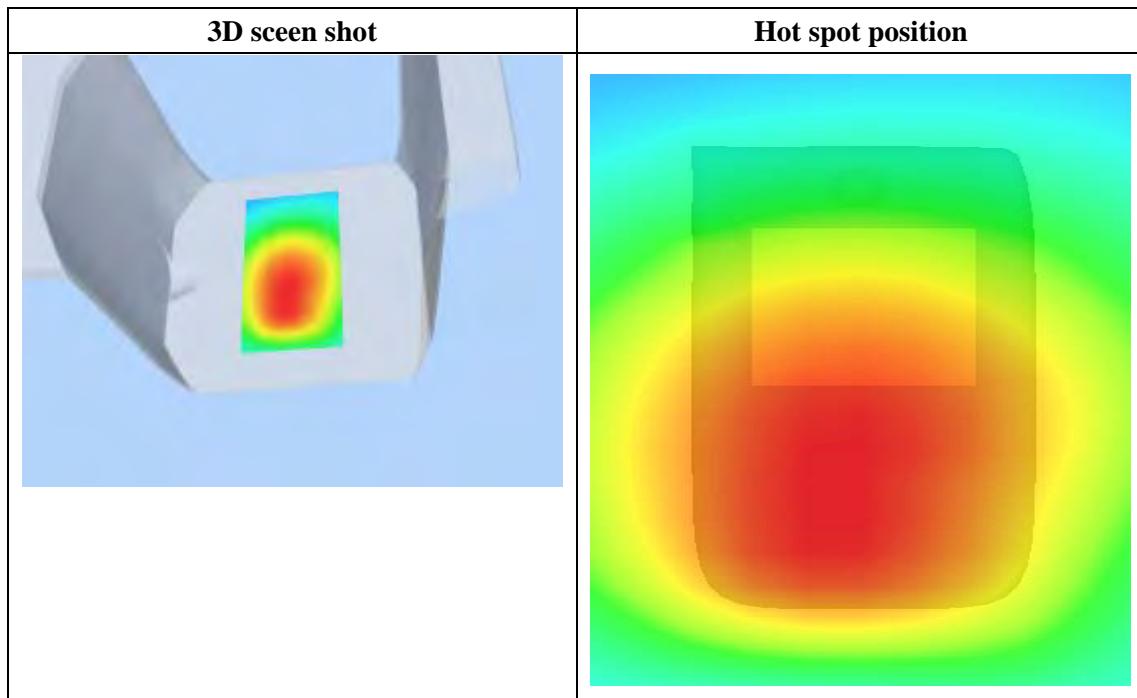
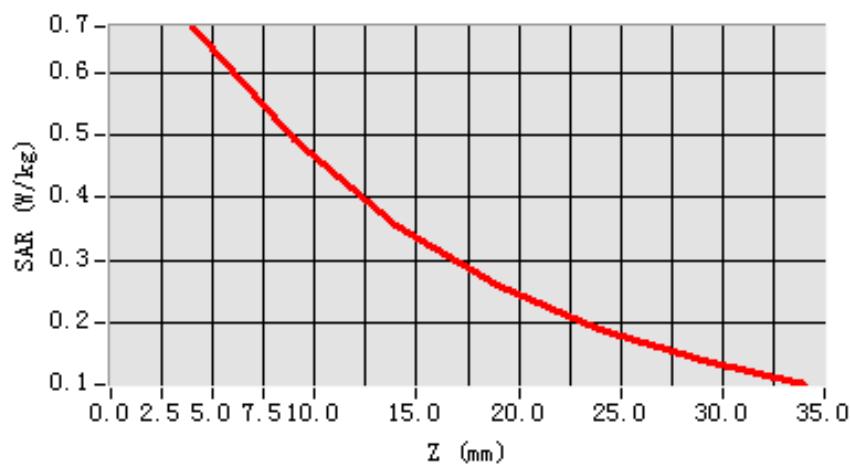
**Maximum location: X=-3.00, Y=-20.00**

<b>SAR 10g (W/Kg)</b>	0.467085
<b>SAR 1g (W/Kg)</b>	0.660292

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6739	0.4938	0.3534	0.2584	0.1897	0.1378

**SAR, Z Axis Scan (X = -3, Y = -20)**



## MEASUREMENT 14

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 16 seconds

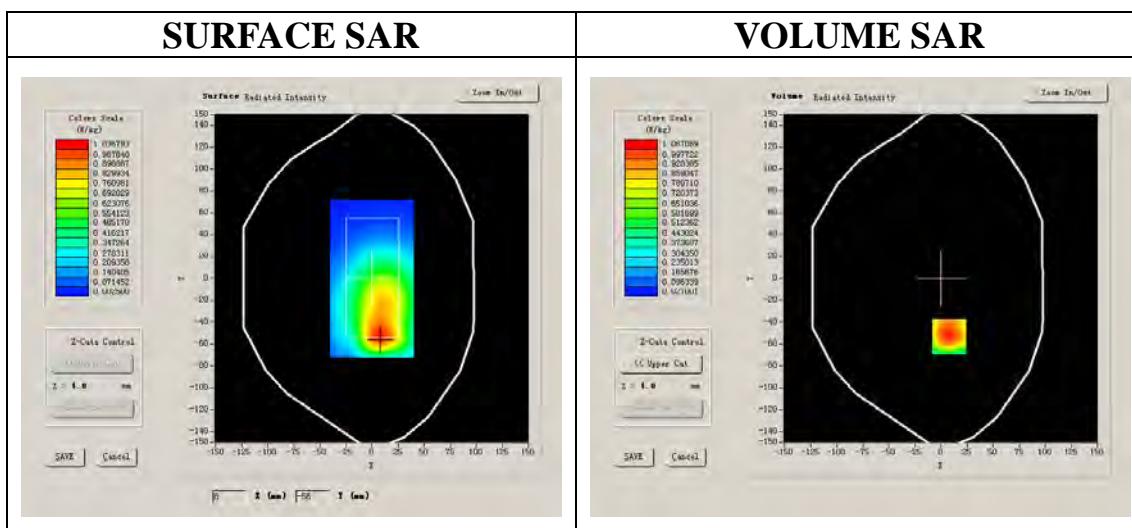
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA850
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Lower Band SAR (Channel 1013):

<b>Frequency (MHz)</b>	824.700012
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	0.975187
<b>Power drift (%)</b>	-0.030000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



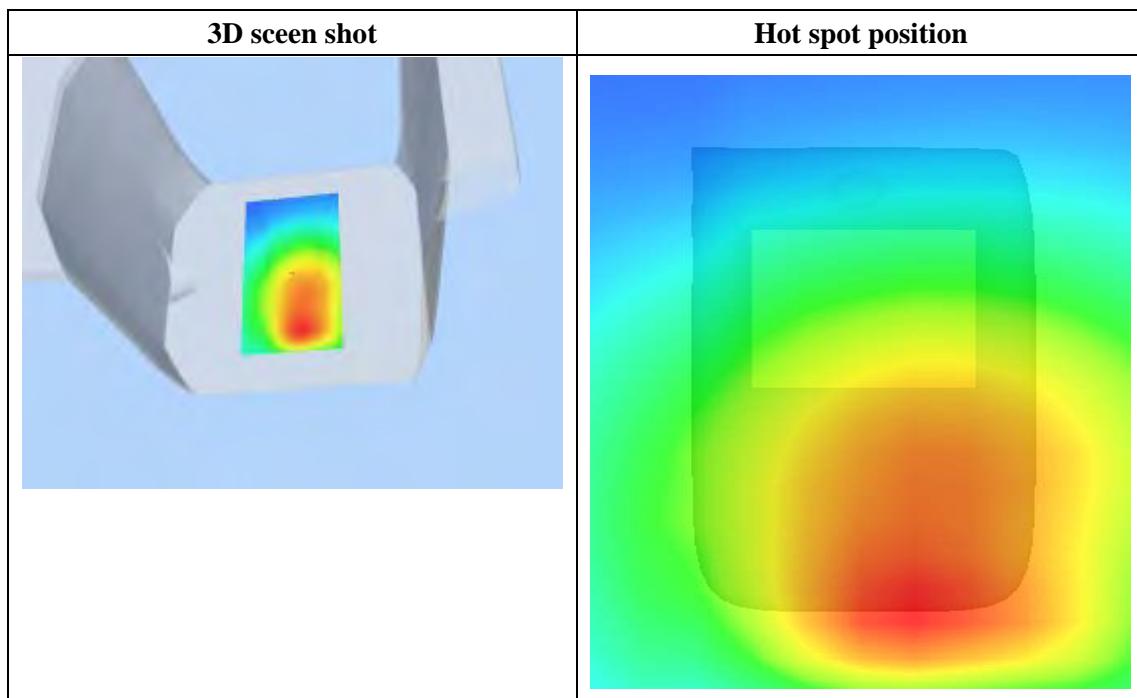
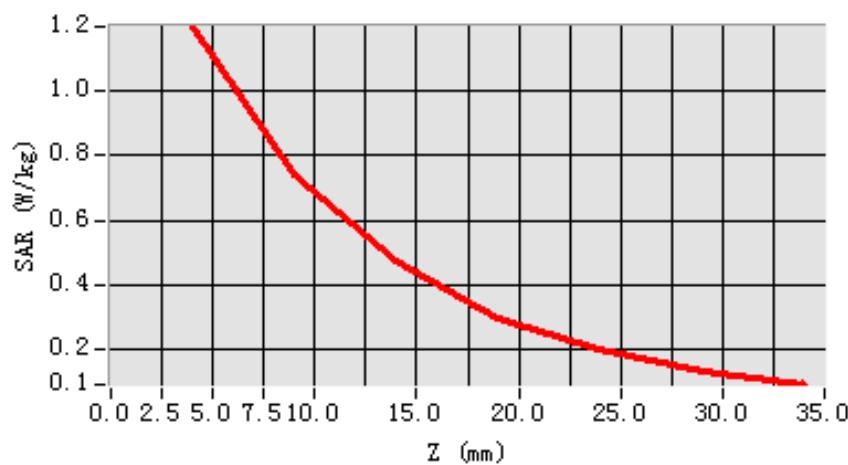
**Maximum location: X=8.00, Y=-53.00**

<b>SAR 10g (W/Kg)</b>	0.718364
<b>SAR 1g (W/Kg)</b>	1.151197

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	1.2000	0.7444	0.4738	0.2988	0.1983	0.1343

**SAR, Z Axis Scan (X = 8, Y = -53)**



## 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: 7/9/2011

Measurement duration: 9 minutes 12 seconds

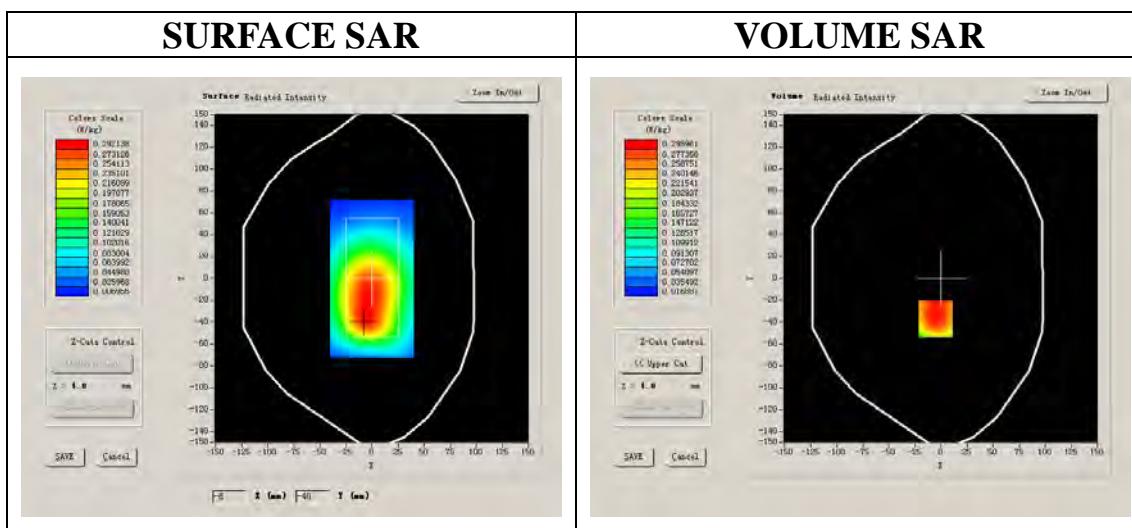
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	0.989164
<b>Power drift (%)</b>	-0.080000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



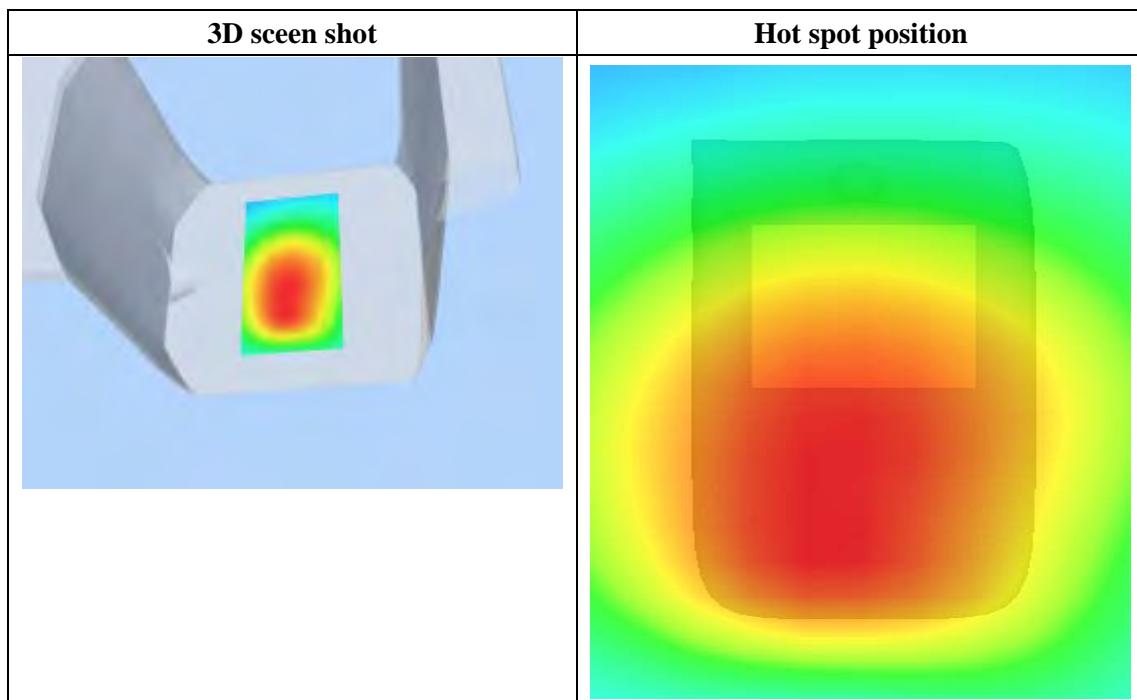
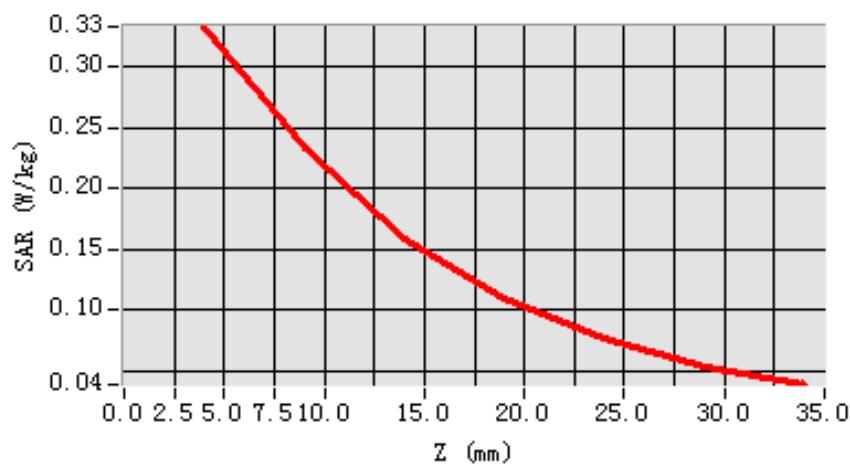
**Maximum location: X=-5.00, Y=-37.00**

<b>SAR 10g (W/Kg)</b>	0.219996
<b>SAR 1g (W/Kg)</b>	0.322145

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3328	0.2326	0.1592	0.1103	0.0781	0.0546

**SAR, Z Axis Scan (X = -5, Y = -37)**



## MEASUREMENT 16

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 11 seconds

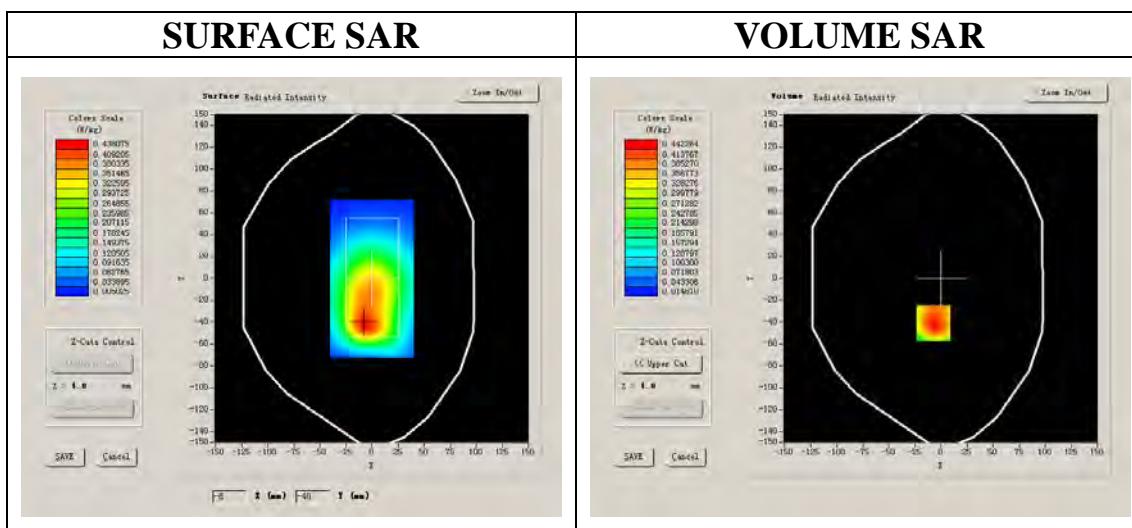
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	0.989164
<b>Power drift (%)</b>	-1.350000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



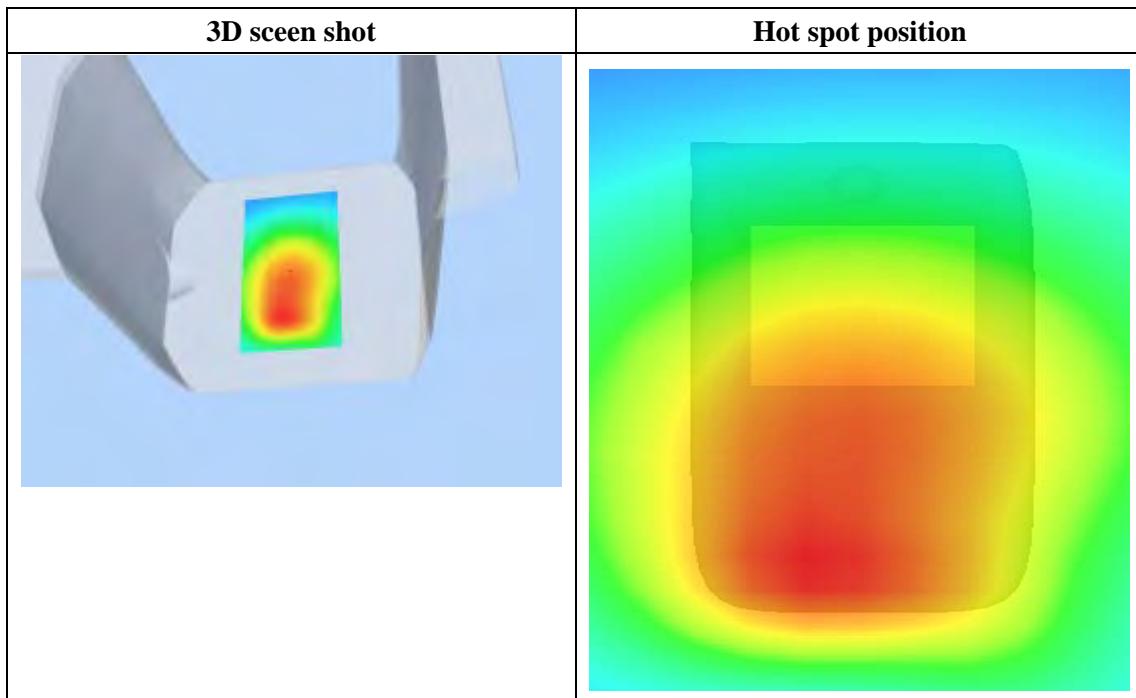
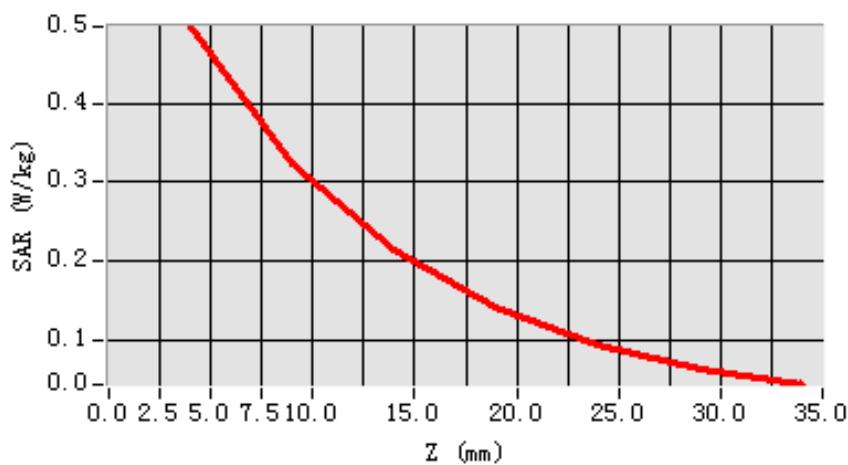
**Maximum location: X=-7.00, Y=-41.00**

<b>SAR 10g (W/Kg)</b>	0.308533
<b>SAR 1g (W/Kg)</b>	0.483495

**Z Axis Scan**

(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4974	0.3227	0.2136	0.1422	0.0943	0.0636

**SAR, Z Axis Scan (X = -7, Y = -41)**



## MEASUREMENT 17

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 12 seconds

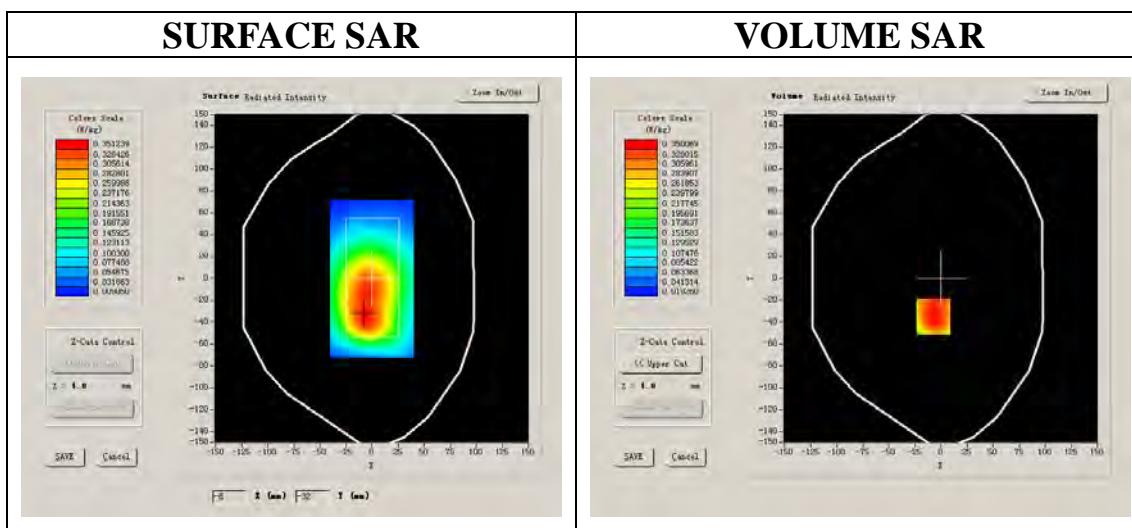
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA850
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Higher Band SAR (Channel 777):

<b>Frequency (MHz)</b>	848.309998
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	1.003105
<b>Power drift (%)</b>	-1.480000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



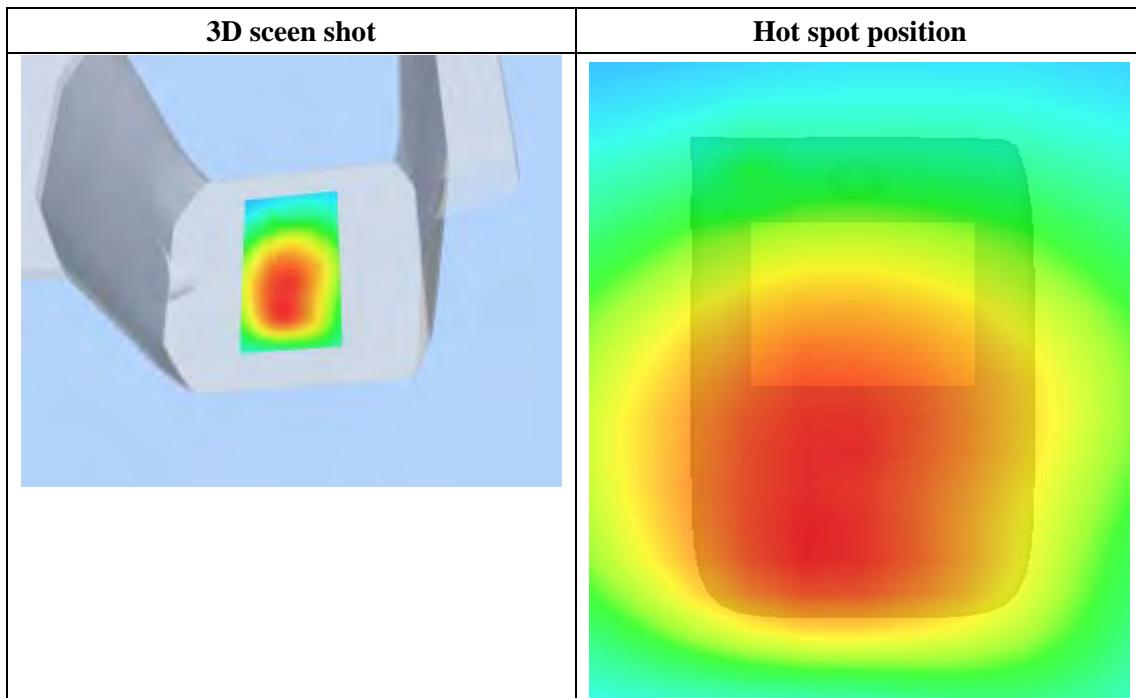
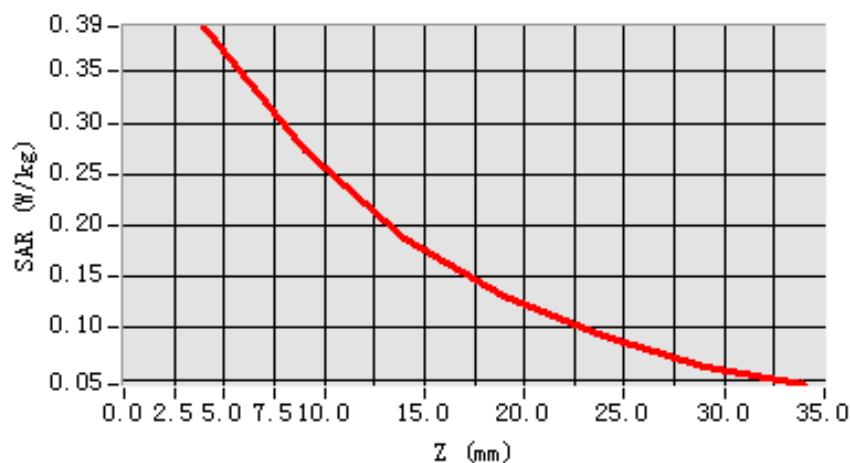
**Maximum location: X=-7.00, Y=-35.00**

<b>SAR 10g (W/Kg)</b>	0.260353
<b>SAR 1g (W/Kg)</b>	0.383301

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3937	0.2724	0.1862	0.1303	0.0917	0.0632

**SAR, Z Axis Scan (X = -7, Y = -35)**



## 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: 7/9/2011

Measurement duration: 9 minutes 16 seconds

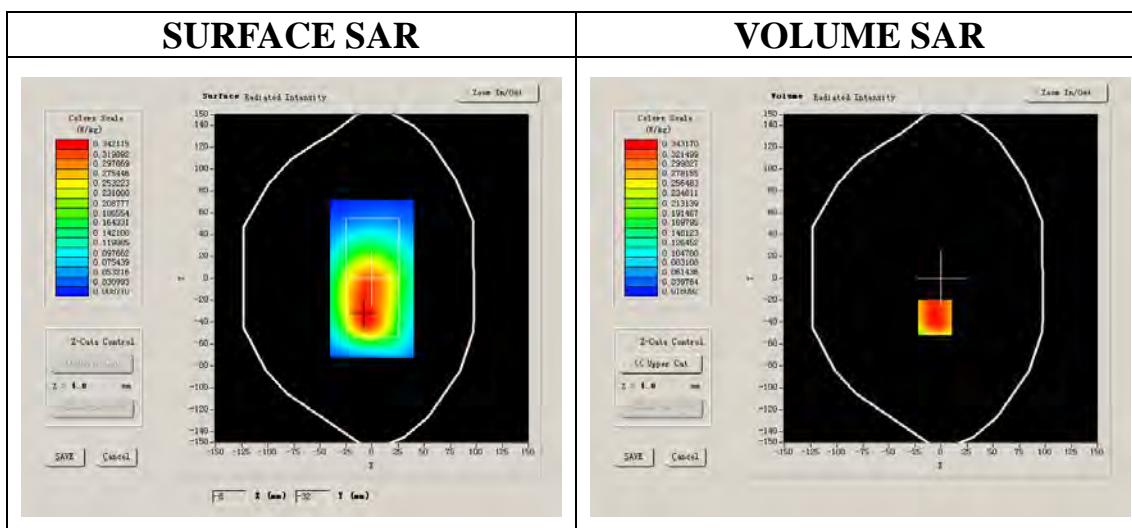
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA850
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Higher Band SAR (Channel 777):

<b>Frequency (MHz)</b>	848.309998
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	1.003105
<b>Power drift (%)</b>	-0.170000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.5C
<b>ConvF:</b>	28.479,25.214,27.196
<b>Crest factor:</b>	1:1



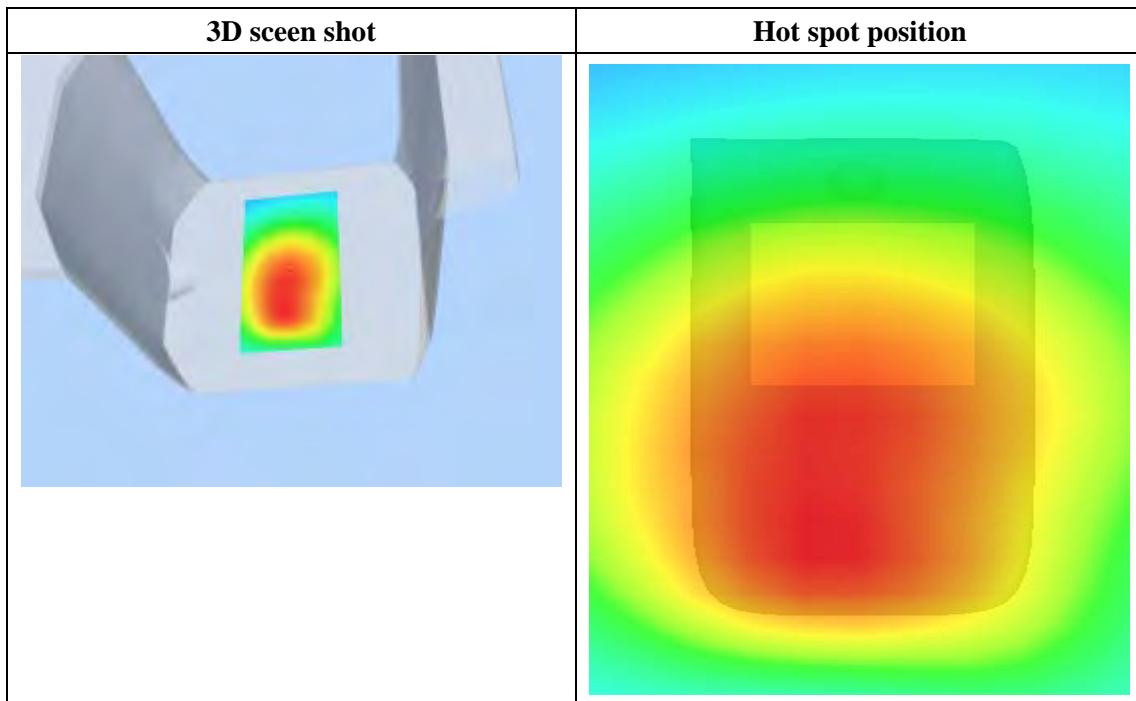
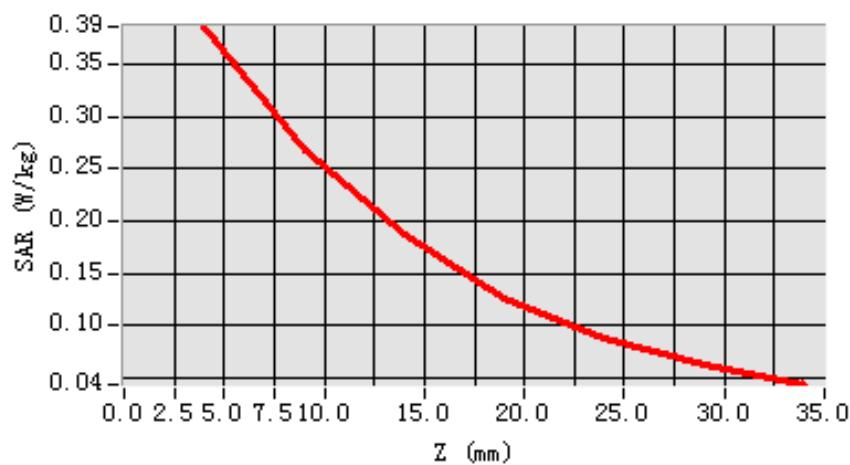
**Maximum location: X=-6.00, Y=-36.00**

<b>SAR 10g (W/Kg)</b>	0.253771
<b>SAR 1g (W/Kg)</b>	0.373509

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3859	0.2683	0.1863	0.1266	0.0883	0.0620

**SAR, Z Axis Scan (X = -6, Y = -36)**



## MEASUREMENT 19

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 17 seconds

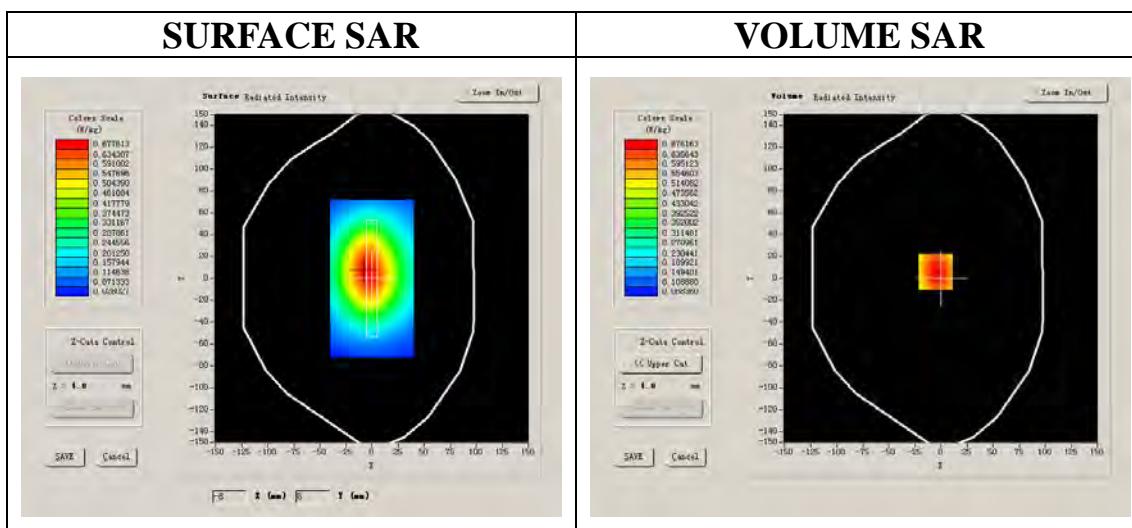
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body (Edge B)
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	0.989164
<b>Power Drift (%)</b>	-1.410000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



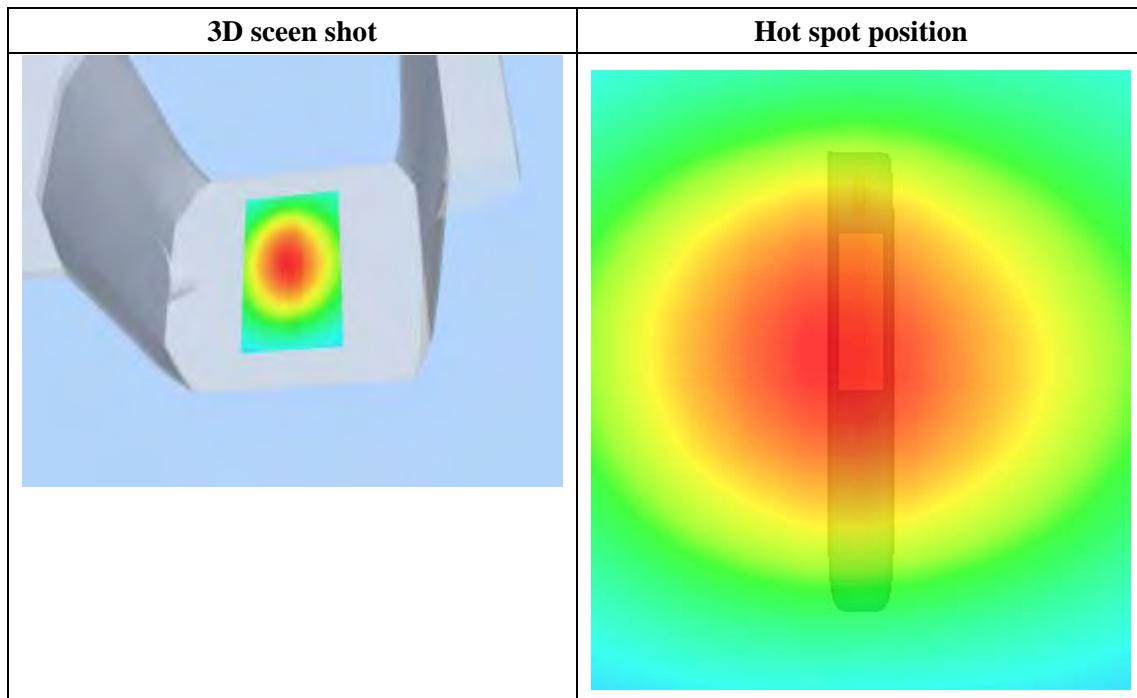
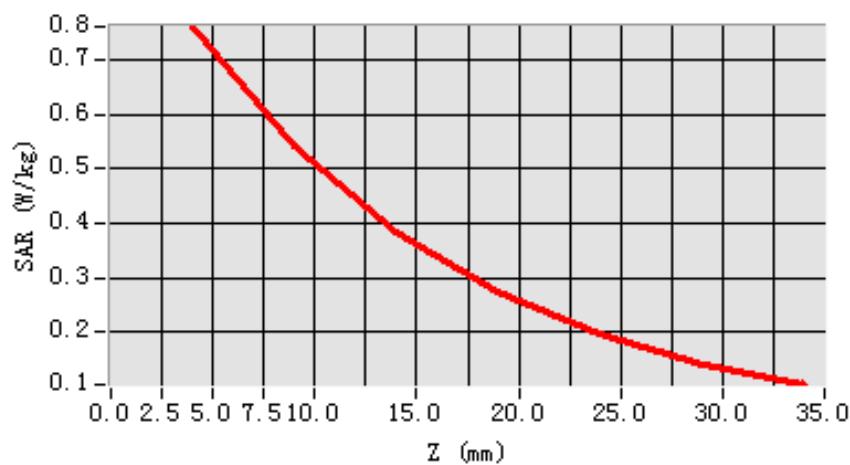
**Maximum location: X=-5.00, Y=6.00**

<b>SAR 10g (W/Kg)</b>	0.507229
<b>SAR 1g (W/Kg)</b>	0.705493

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.7604	0.5399	0.3850	0.2741	0.1967	0.1423

**SAR, Z Axis Scan (X = -5, Y = 6)**



## MEASUREMENT 20

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 11 seconds

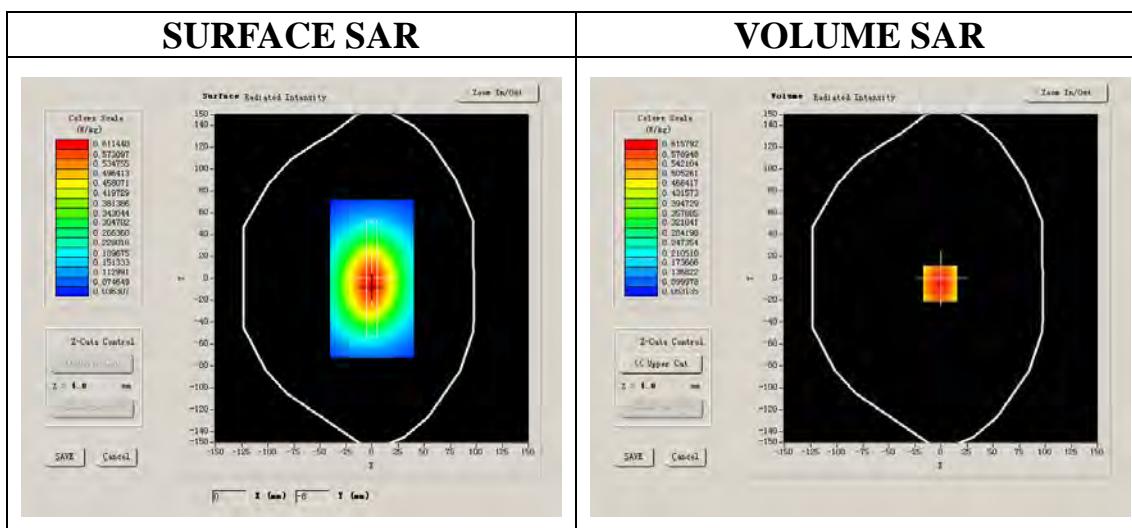
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body (Edge D)
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	0.989164
<b>Power Drift (%)</b>	-0.970000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



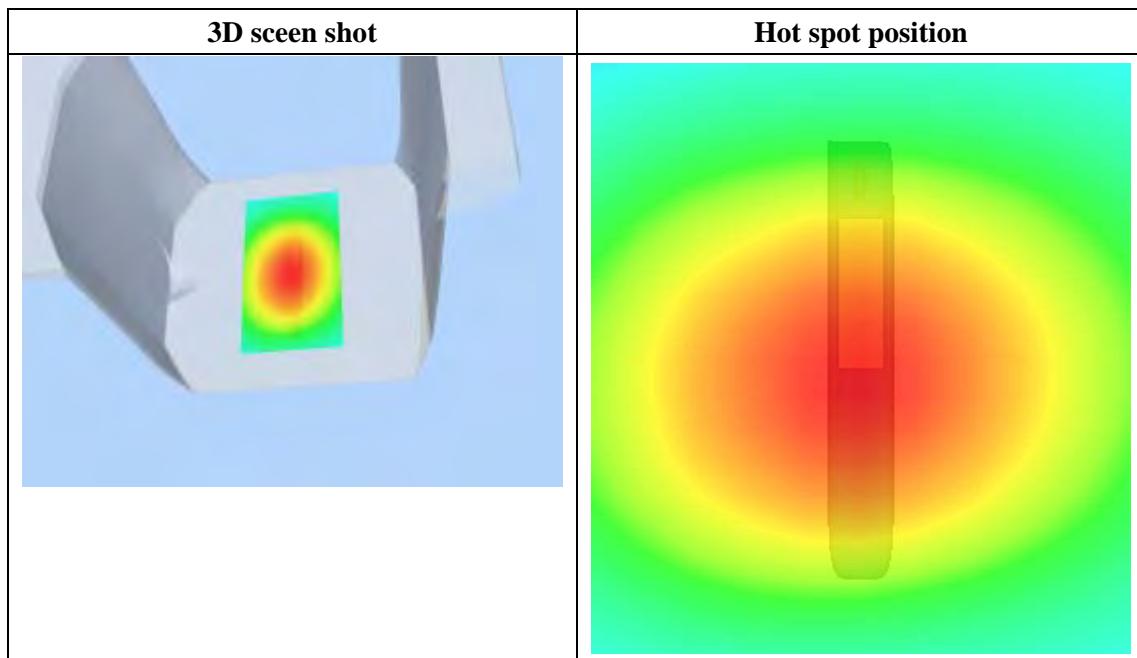
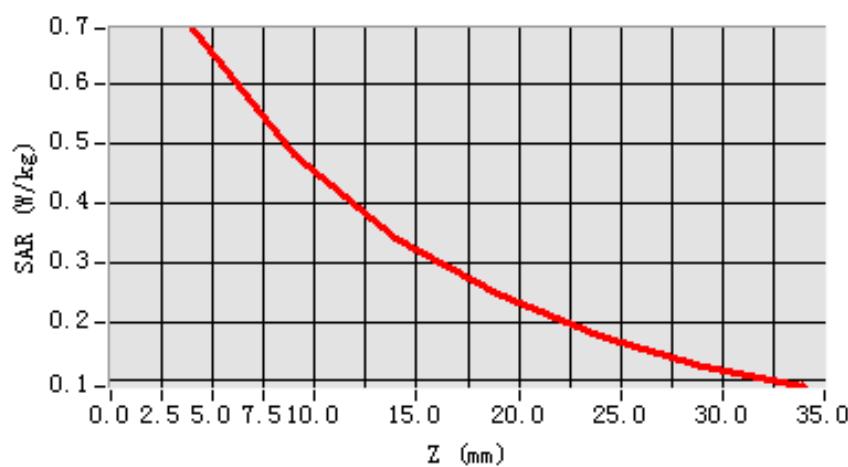
**Maximum location: X=-1.00, Y=-5.00**

<b>SAR 10g (W/Kg)</b>	0.456210
<b>SAR 1g (W/Kg)</b>	0.606412

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6925	0.4802	0.3391	0.2451	0.1749	0.1255

**SAR, Z Axis Scan (X = -1, Y = -5)**



# 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: 7/9/2011

Measurement duration: 9 minutes 19 seconds

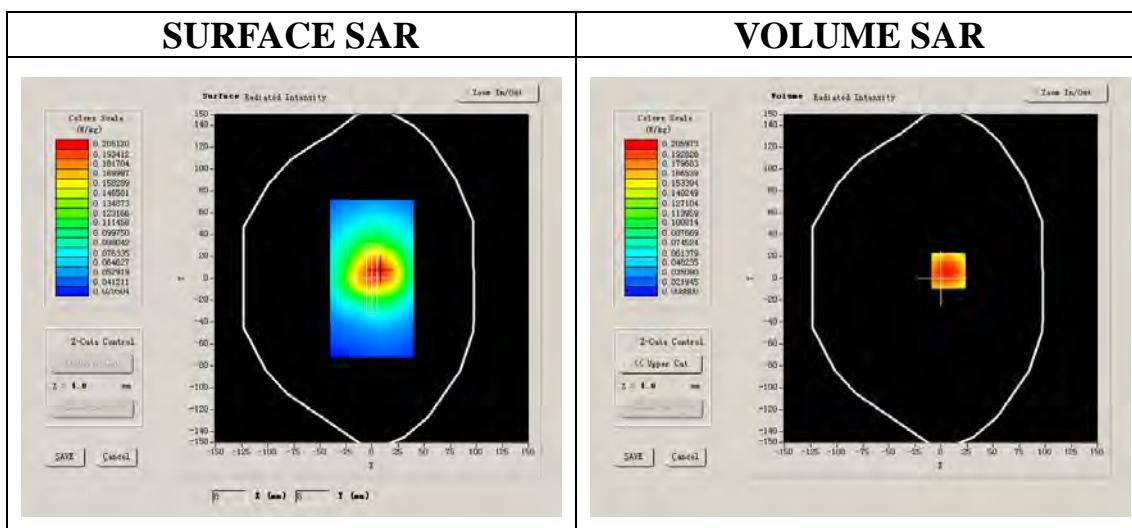
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body (Edge A)
<b>Band</b>	CDMA850
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Middle Band SAR (Channel 384):

<b>Frequency (MHz)</b>	836.520020
<b>Relative permittivity (real part)</b>	54.116001
<b>Relative permittivity</b>	21.284550
<b>Conductivity (S/m)</b>	0.989164
<b>Power Drift (%)</b>	-1.360000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



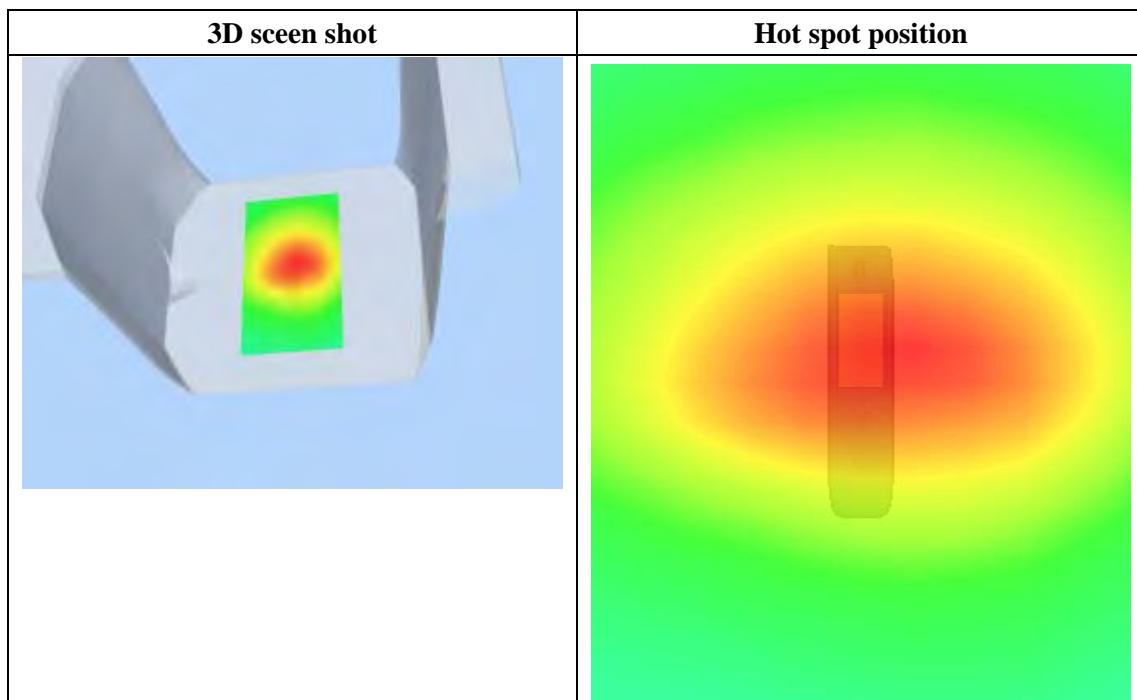
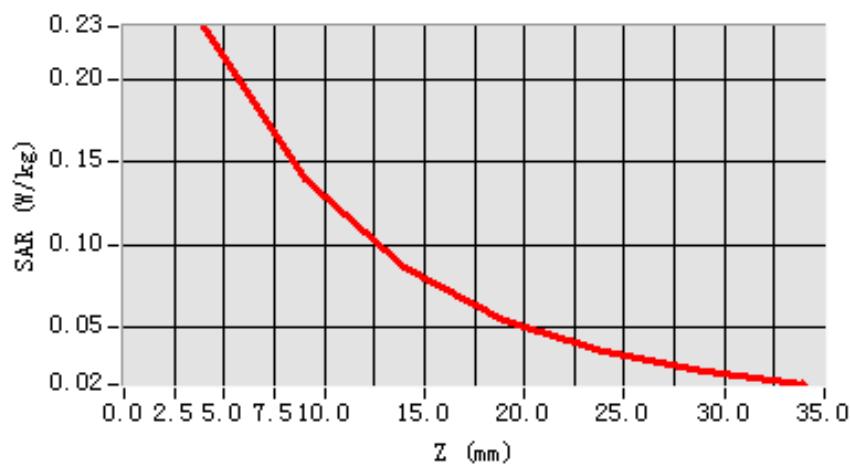
**Maximum location: X=7.00, Y=7.00**

<b>SAR 10g (W/Kg)</b>	0.139478
<b>SAR 1g (W/Kg)</b>	0.224720

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2316	0.1396	0.0857	0.0543	0.0346	0.0230

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



## 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: 7/9/2011

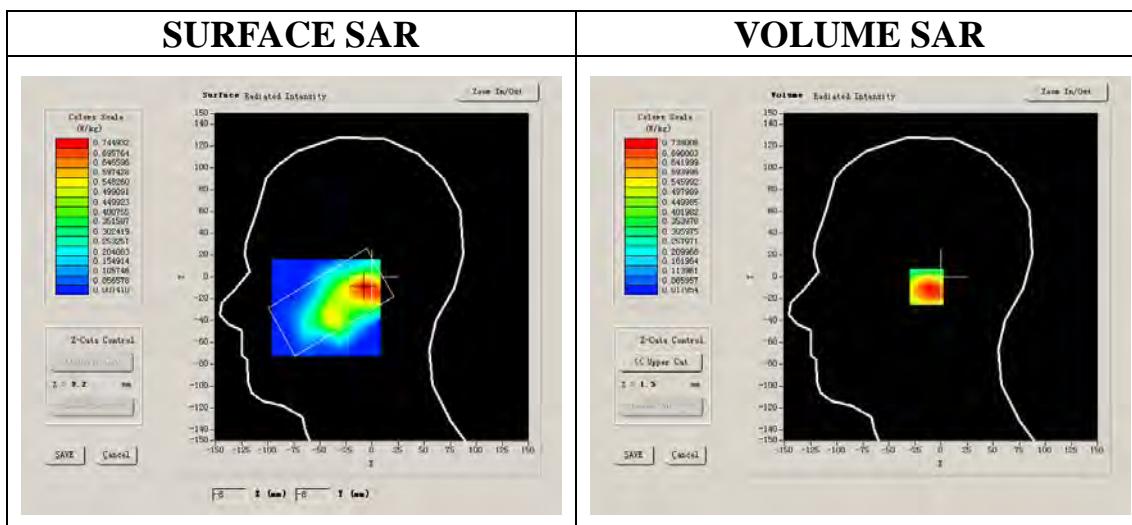
Measurement duration: 7 minutes 29 seconds

### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA 1700
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1711.250000
<b>Relative permittivity (real part)</b>	38.650002
<b>Relative permittivity</b>	13.750000
<b>Conductivity (S/m)</b>	1.306250
<b>Power drift (%)</b>	-3.550000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



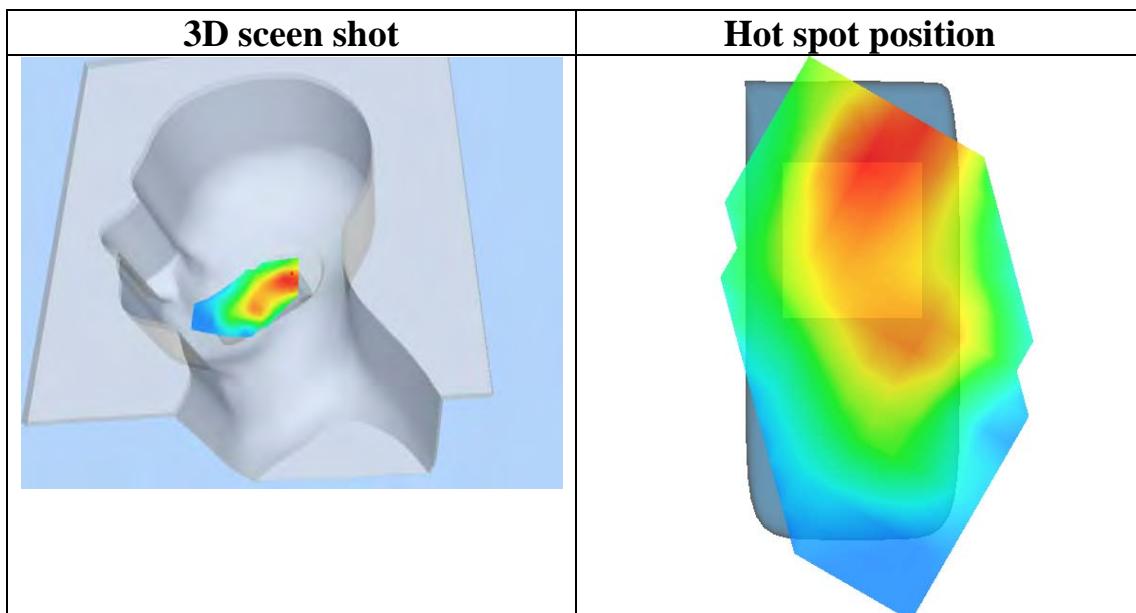
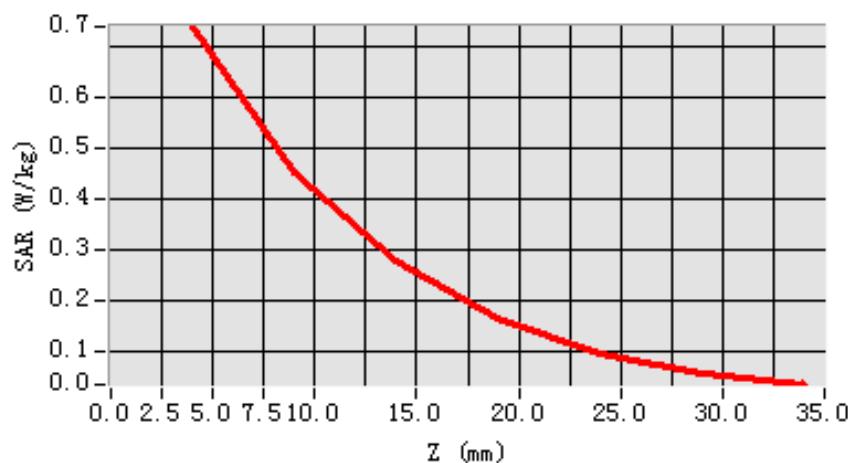
**Maximum location: X=-7.00, Y=-9.00**

<b>SAR 10g (W/Kg)</b>	0.419289
<b>SAR 1g (W/Kg)</b>	0.716451

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.7380	0.4508	0.2770	0.1644	0.0962	0.0586

**SAR, Z Axis Scan (X = -7, Y = -9)**



# 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: 7/9/2011

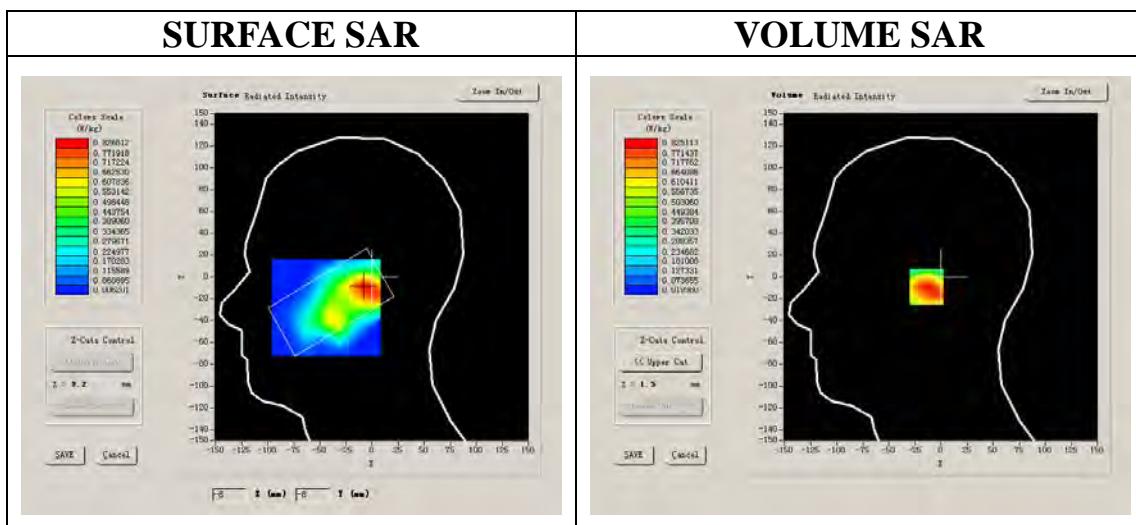
Measurement duration: 7 minutes 27 seconds

## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	0.080000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



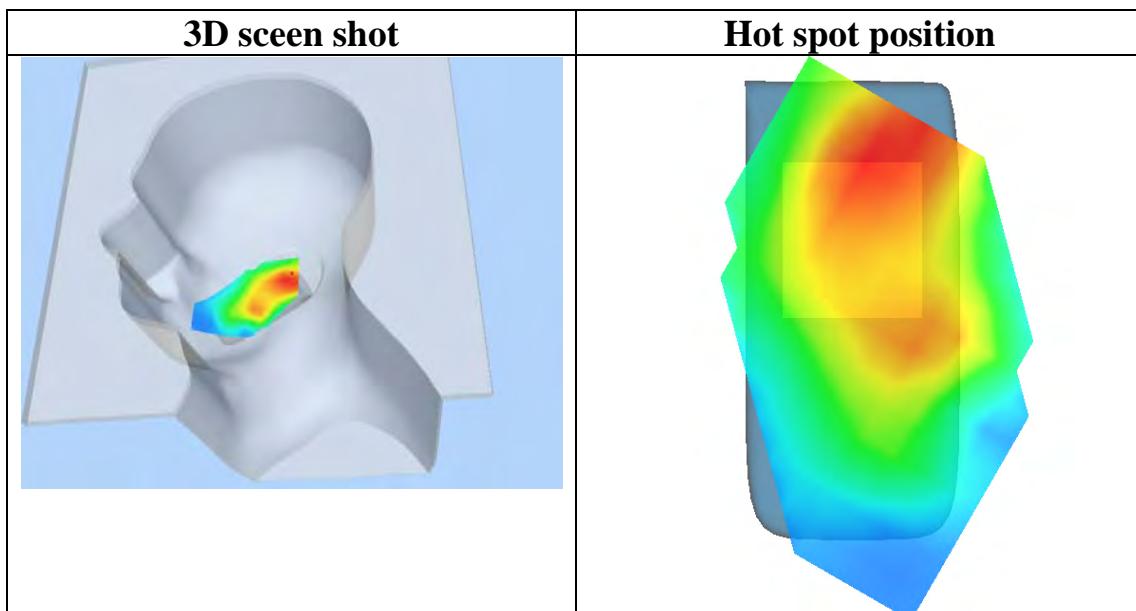
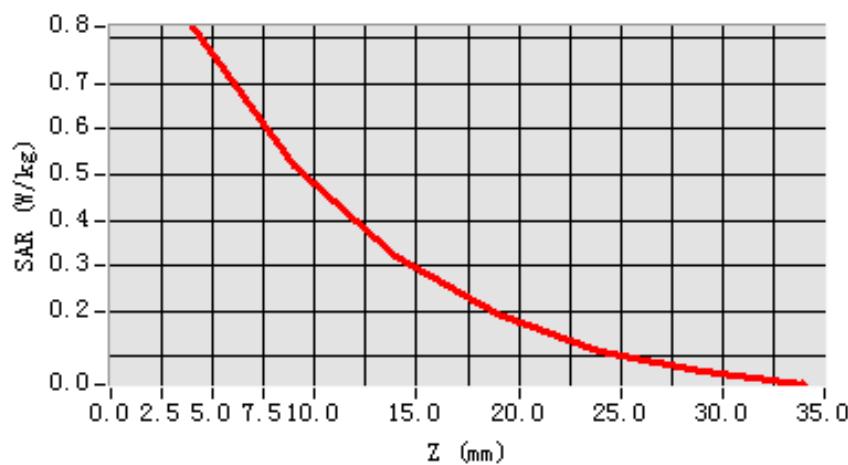
**Maximum location: X=-7.00, Y=-9.00**

<b>SAR 10g (W/Kg)</b>	0.468934
<b>SAR 1g (W/Kg)</b>	0.792119

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.8251	0.5192	0.3206	0.1925	0.1139	0.0684

**SAR, Z Axis Scan (X = -7, Y = -9)**



## 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: 7/9/2011

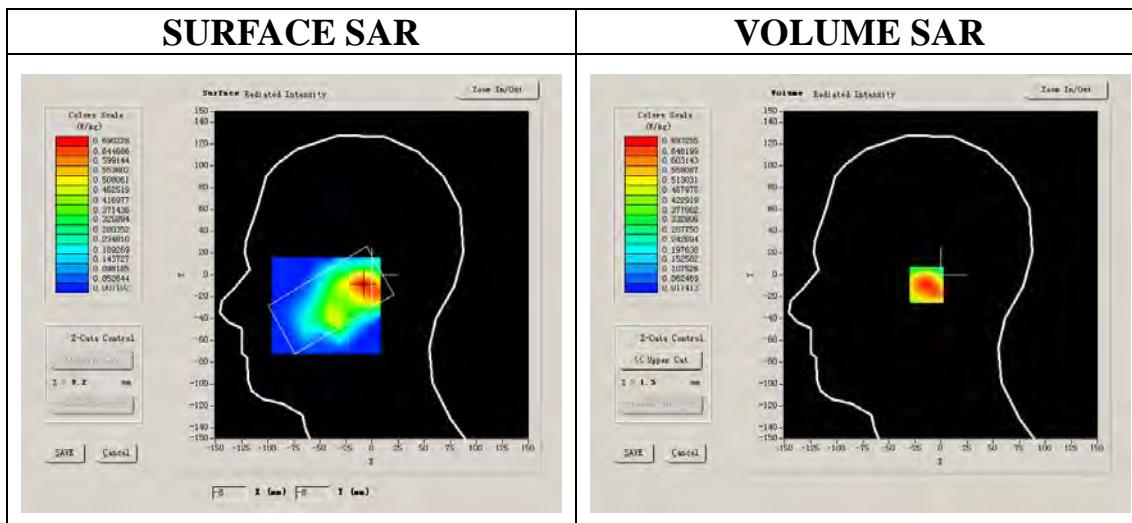
Measurement duration: 7 minutes 27 seconds

### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA 1700
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1753.700000
<b>Relative permittivity (real part)</b>	38.270000
<b>Relative permittivity</b>	13.900000
<b>Conductivity (S/m)</b>	1.355250
<b>Power drift (%)</b>	0.210000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



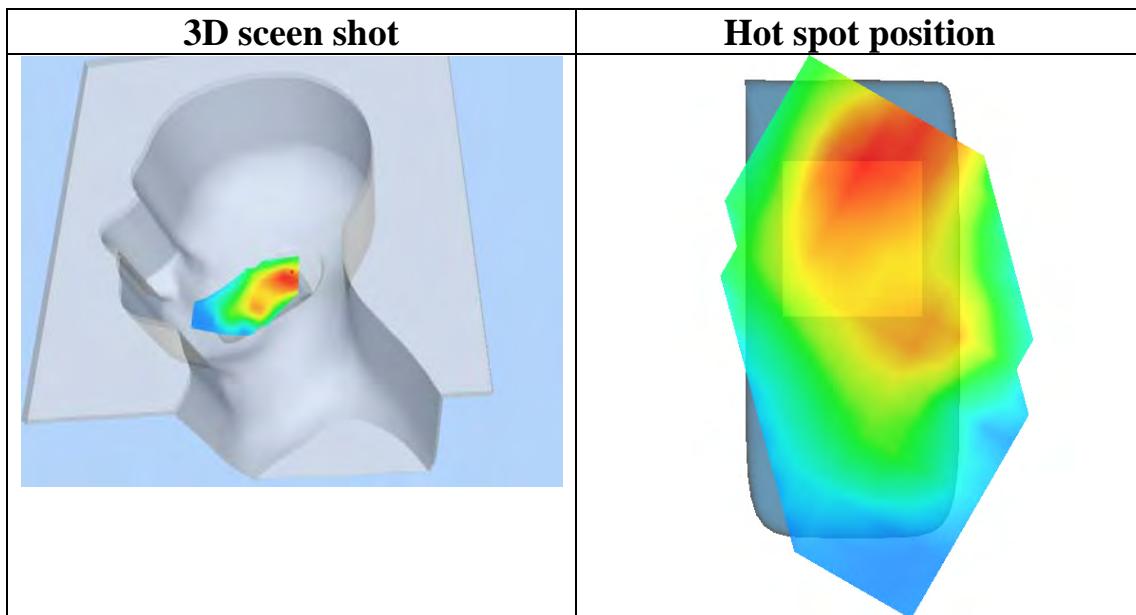
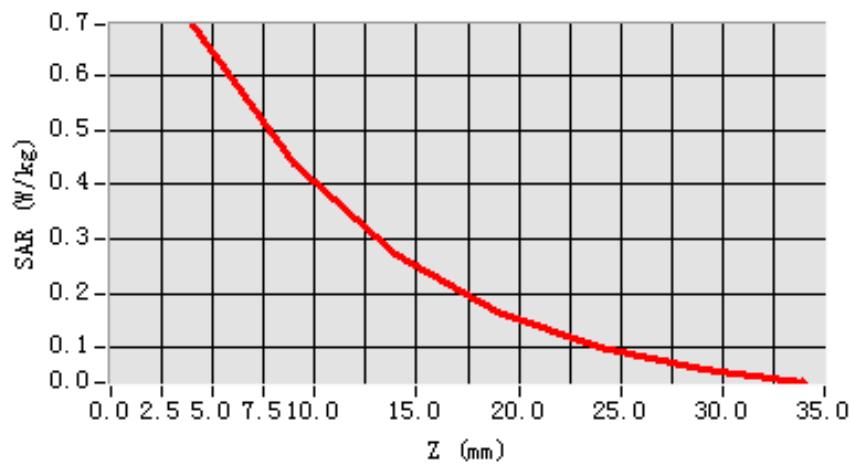
**Maximum location: X=-7.00, Y=-9.00**

<b>SAR 10g (W/Kg)</b>	0.387185
<b>SAR 1g (W/Kg)</b>	0.655701

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6933	0.4379	0.2717	0.1652	0.0997	0.0585

**SAR, Z Axis Scan (X = -7, Y = -9)**



## 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: 7/9/2011

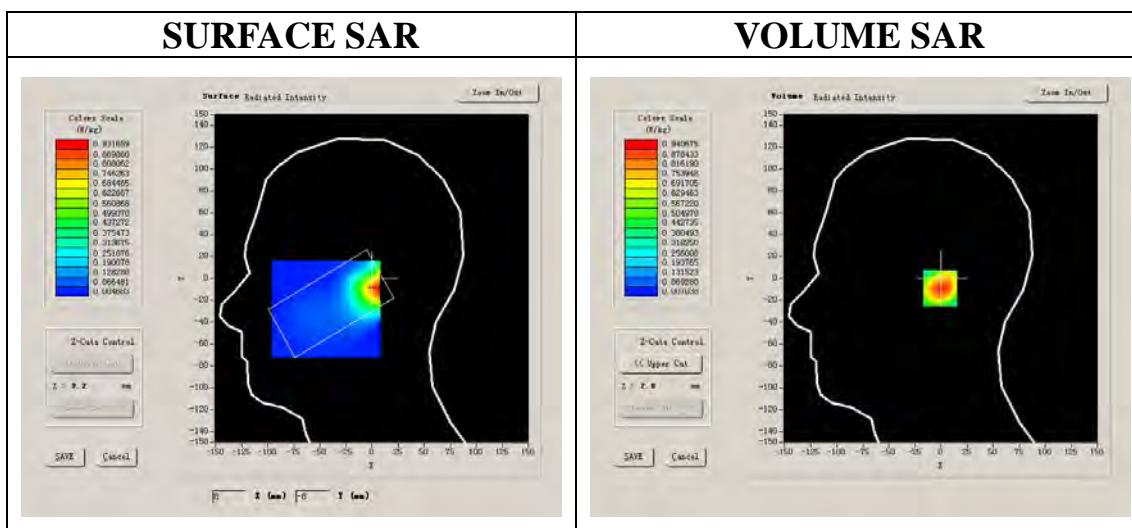
Measurement duration: 7 minutes 27 seconds

### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA 1700
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1711.250000
<b>Relative permittivity (real part)</b>	38.650002
<b>Relative permittivity</b>	13.750000
<b>Conductivity (S/m)</b>	1.306250
<b>Power drift (%)</b>	-0.730000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



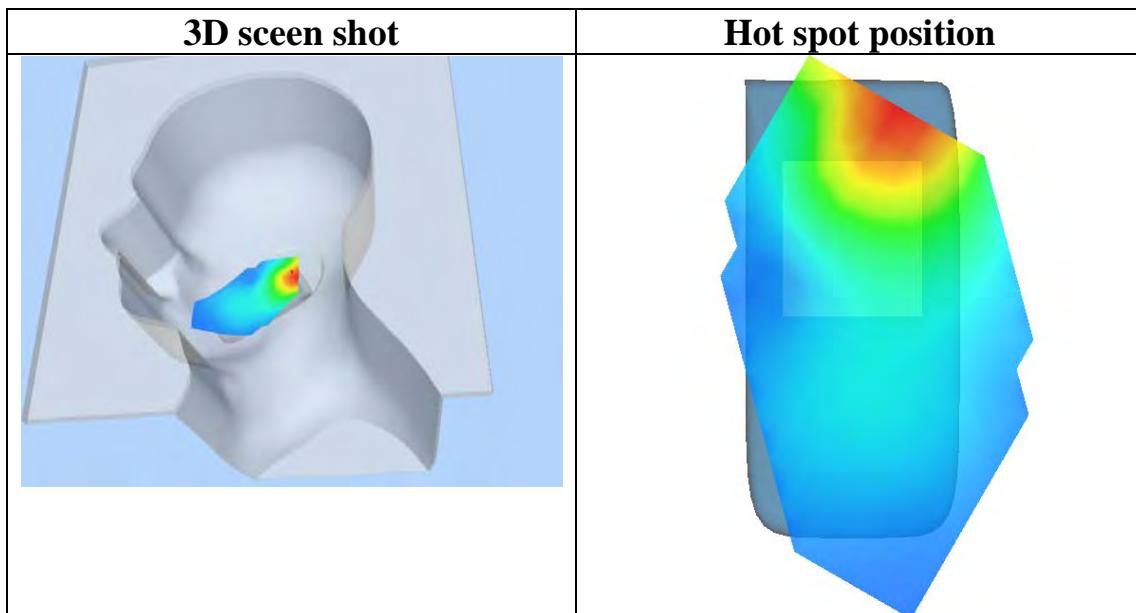
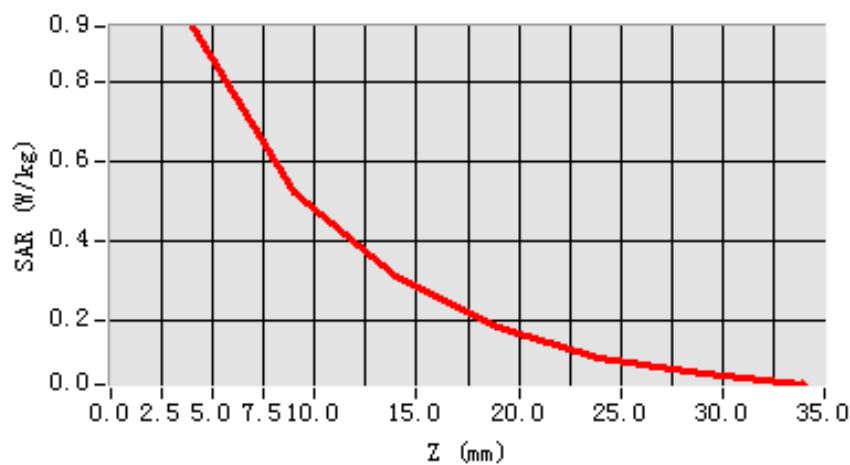
**Maximum location: X=8.00, Y=-9.00**

<b>SAR 10g (W/Kg)</b>	0.495032
<b>SAR 1g (W/Kg)</b>	0.894730

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.9407	0.5255	0.3110	0.1842	0.1064	0.0639

**SAR, Z Axis Scan (X = 8, Y = -9)**



## 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: 7/9/2011

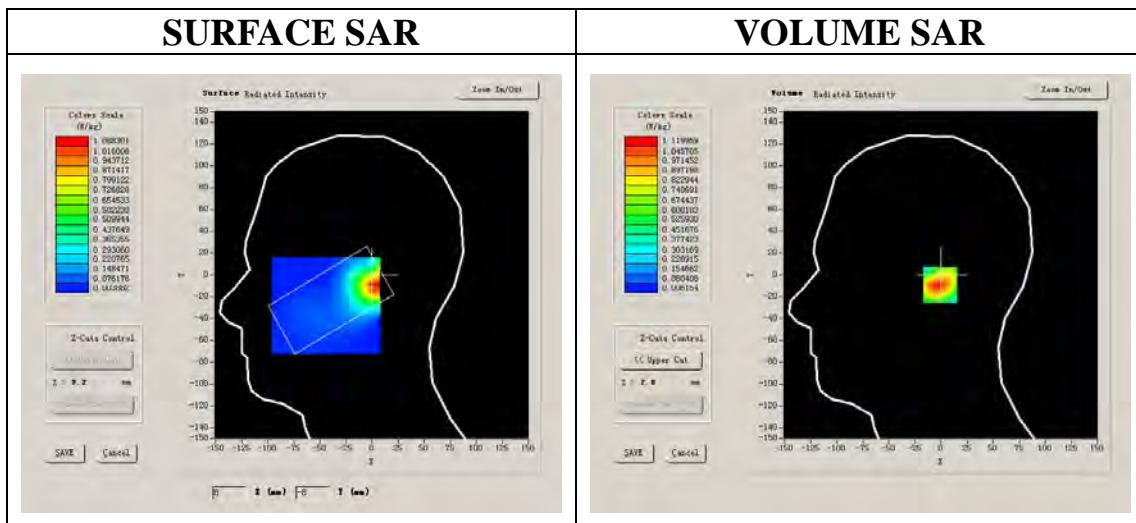
Measurement duration: 7 minutes 24 seconds

### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	-4.590000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



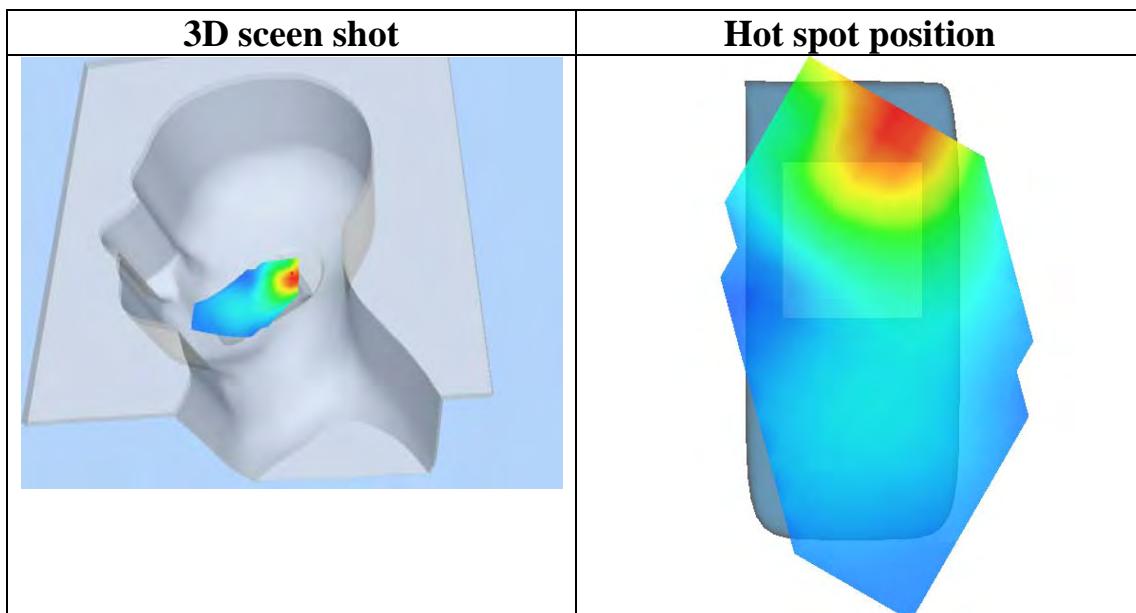
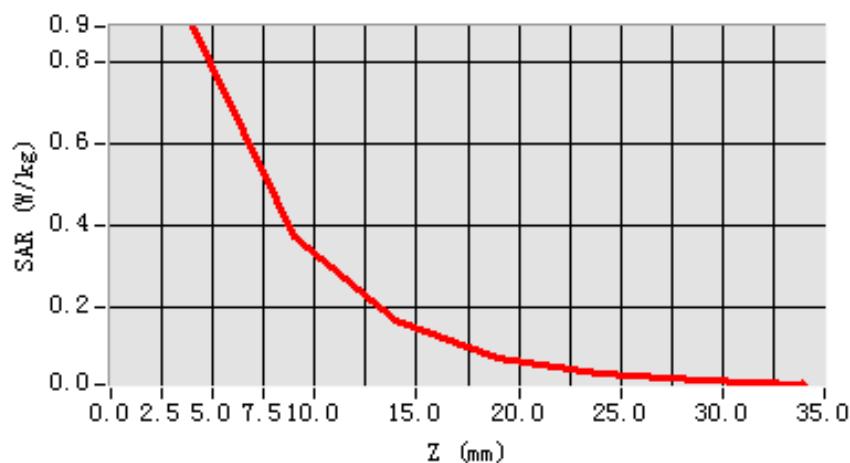
**Maximum location: X=-7.00, Y=25.00**

<b>SAR 10g (W/Kg)</b>	0.562463
<b>SAR 1g (W/Kg)</b>	0.9032375

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.90400	0.5648	0.3370	0.1960	0.1156	0.0669

**SAR, Z Axis Scan (X = -7, Y = 25)**



## 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: 7/9/2011

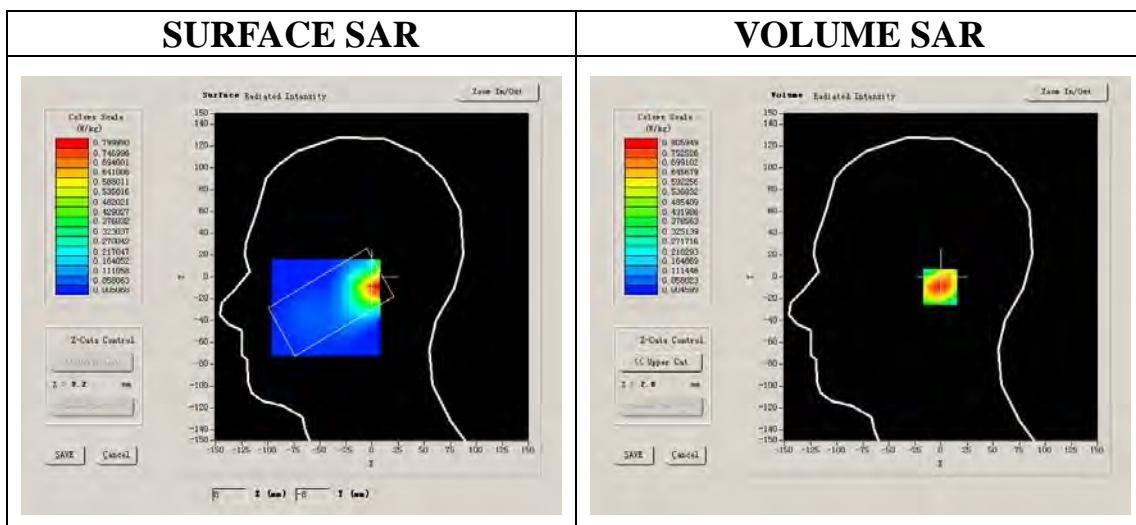
Measurement duration: 7 minutes 29 seconds

### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA 1700
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1753.700000
<b>Relative permittivity (real part)</b>	38.270000
<b>Relative permittivity</b>	13.900000
<b>Conductivity (S/m)</b>	1.355250
<b>Power drift (%)</b>	0.280000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



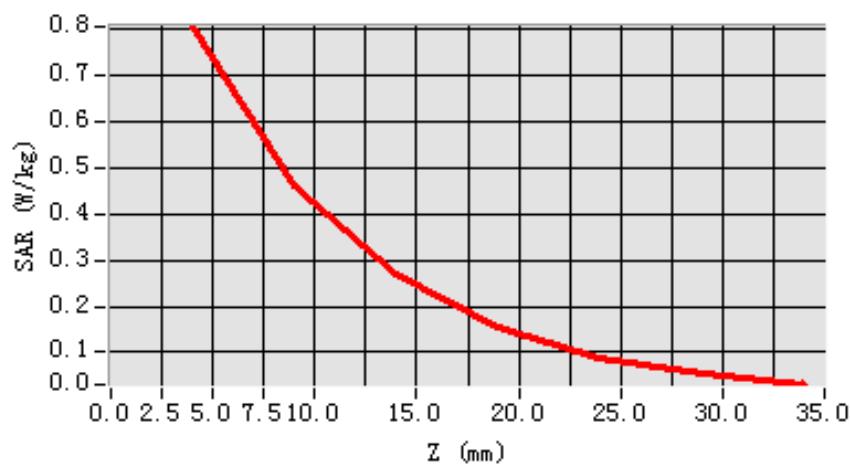
**Maximum location: X=8.00, Y=-9.00**

<b>SAR 10g (W/Kg)</b>	0.424375
<b>SAR 1g (W/Kg)</b>	0.764794

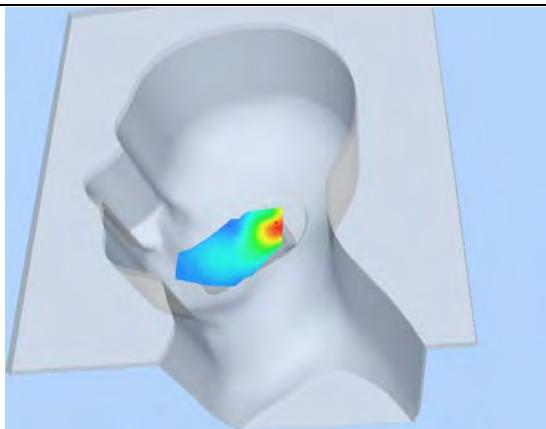
**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.8059	0.4594	0.2675	0.1573	0.0903	0.0534

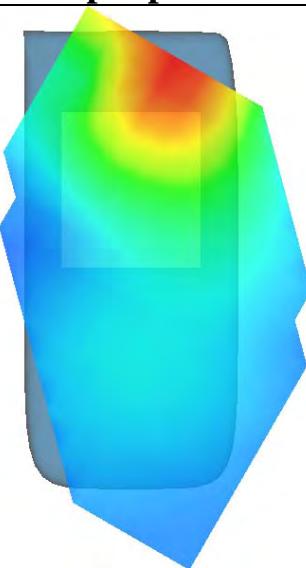
**SAR, Z Axis Scan (X = 8, Y = -9)**



**3D screen shot**



**Hot spot position**



# MEASUREMENT 28

Type: Phone measurement (Complete)

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

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

Date of measurement: 16/9/2011

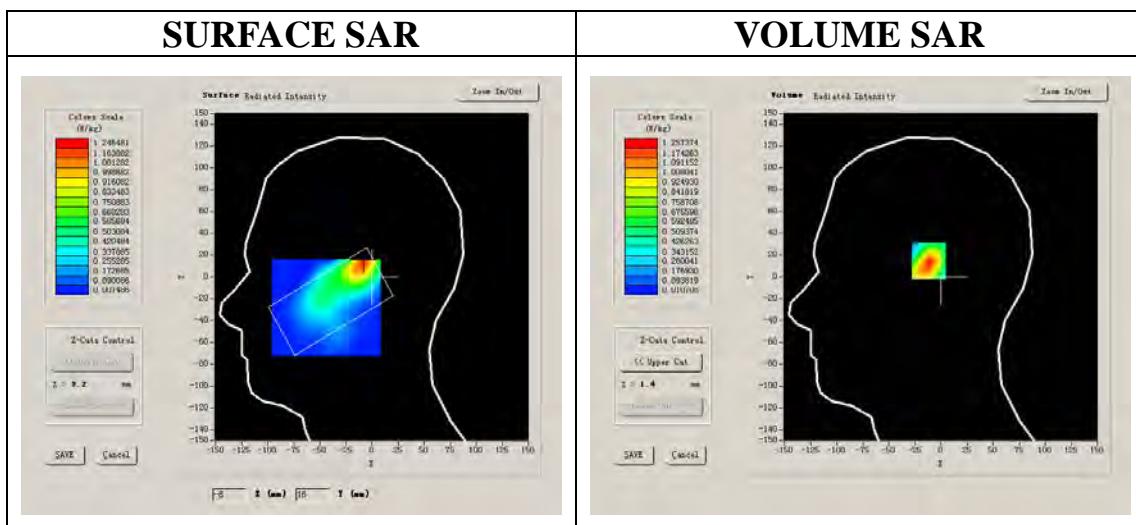
Measurement duration: 7 minutes 27 seconds

## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA 1700
<b>Channels</b>	Low
<b>Signal</b>	CDMA

## B. SAR Measurement Results

<b>Frequency (MHz)</b>	1711.250000
<b>Relative permittivity (real part)</b>	38.650002
<b>Relative permittivity</b>	13.750000
<b>Conductivity (S/m)</b>	1.306250
<b>Power drift (%)</b>	-1.120000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



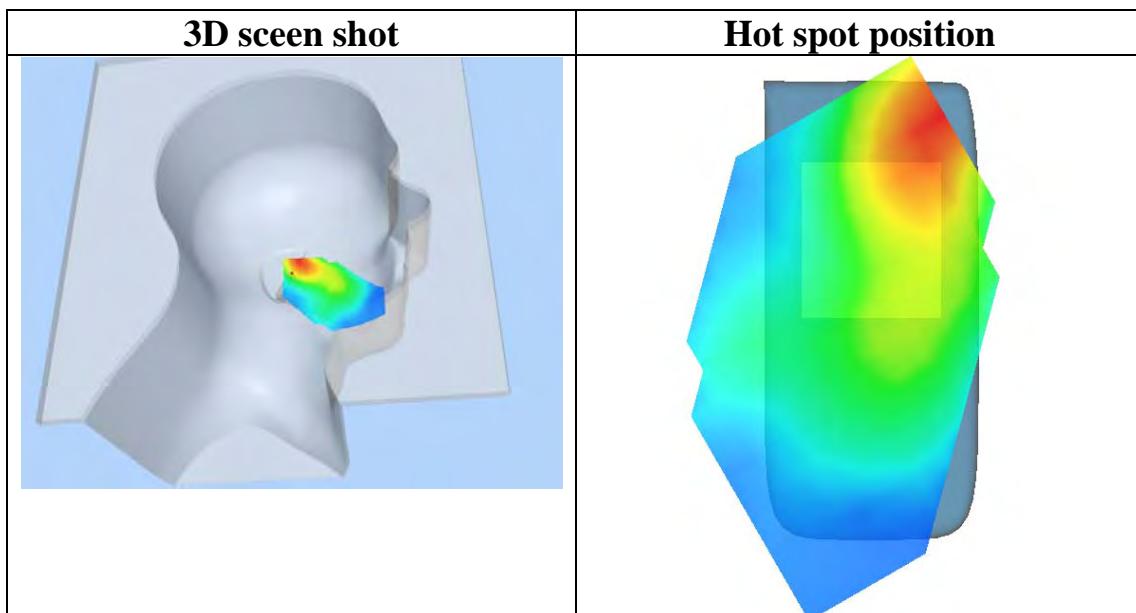
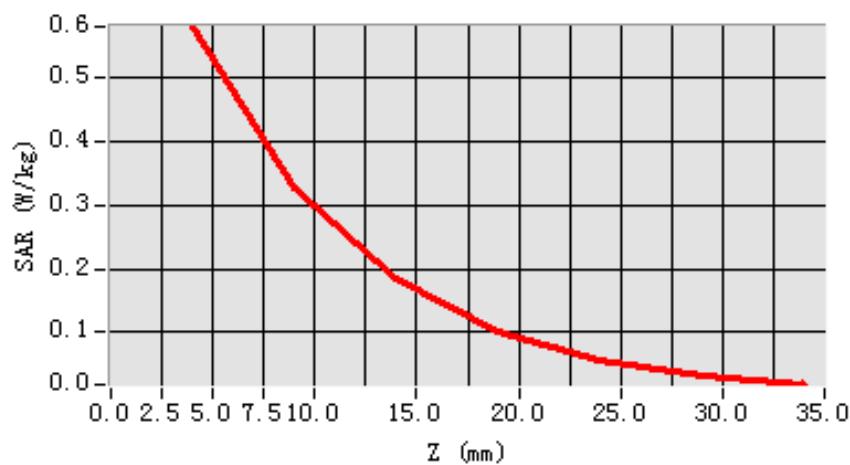
**Maximum location: X=-14.00, Y=6.00**

<b>SAR 10g (W/Kg)</b>	0.275783
<b>SAR 1g (W/Kg)</b>	0.535171

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	1.2574	0.6315	0.3361	0.1848	0.1005	0.0543

**SAR, Z Axis Scan (X = -14, Y = 6)**



## MEASUREMENT 29

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 13/9/2011

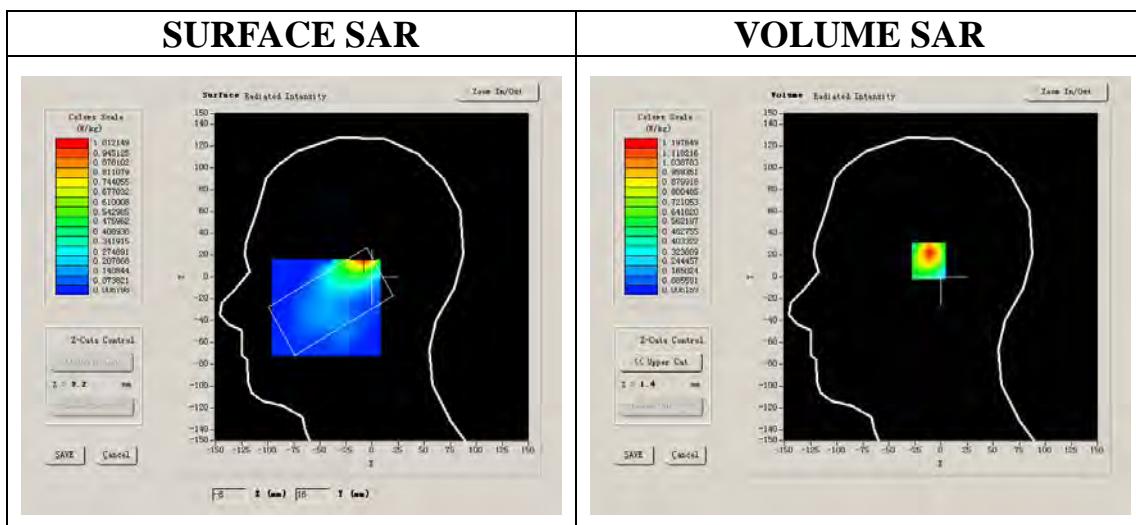
Measurement duration: 7 minutes 26 seconds

### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	3.600000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



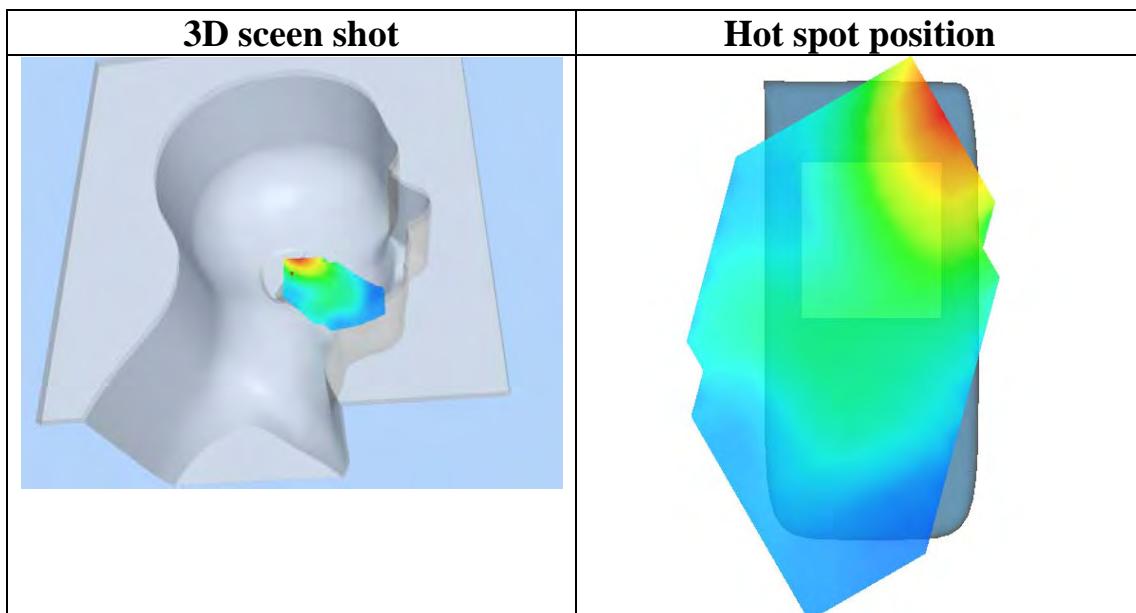
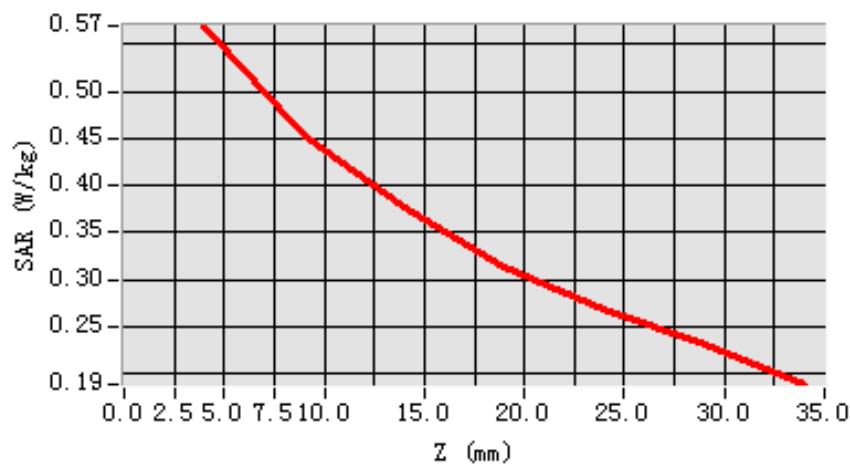
**Maximum location: X=-33.00, Y=-16.00**

<b>SAR 10g (W/Kg)</b>	0.417431
<b>SAR 1g (W/Kg)</b>	0.549414

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	1.0158	0.4752	0.2307	0.1117	0.0561	0.0270

**SAR, Z Axis Scan (X = -33, Y = -16)**



# MEASUREMENT 30

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

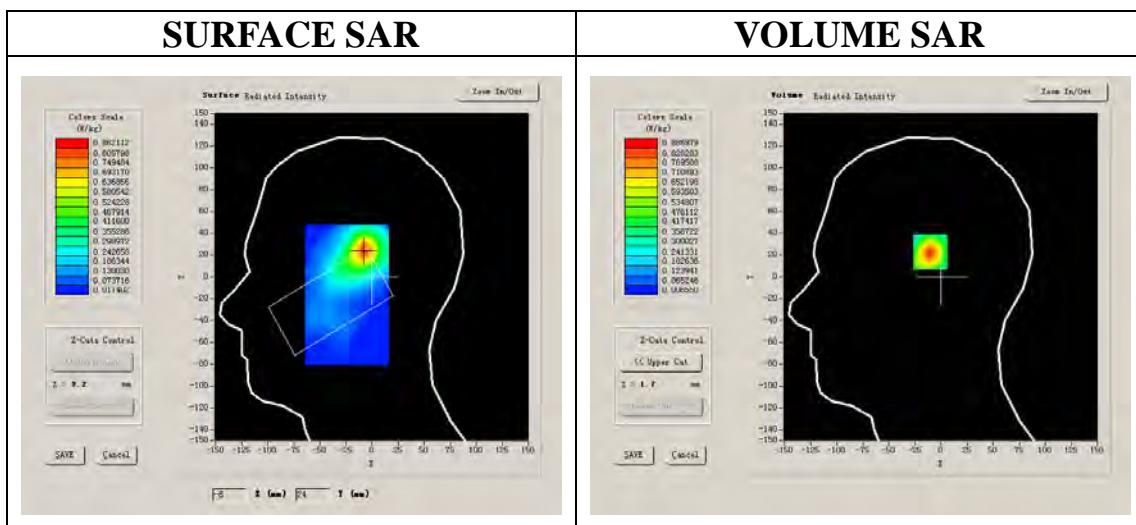
Measurement duration: 7 minutes 26 seconds

## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	CDMA 1700
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

<b>Frequency (MHz)</b>	1753.700000
<b>Relative permittivity (real part)</b>	38.270000
<b>Relative permittivity</b>	13.900000
<b>Conductivity (S/m)</b>	1.355250
<b>Power drift (%)</b>	2.130000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



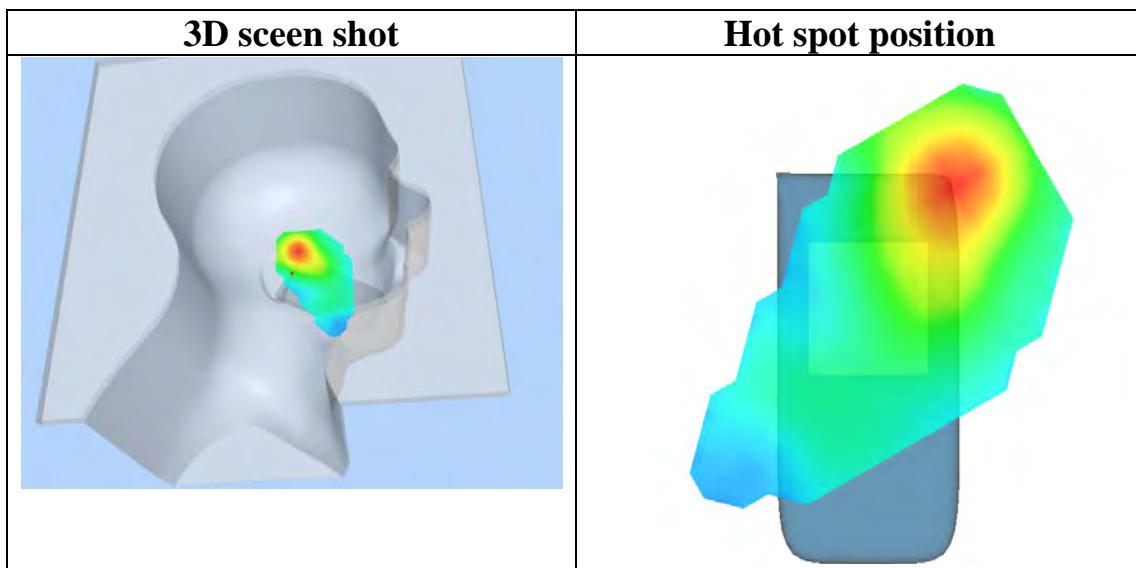
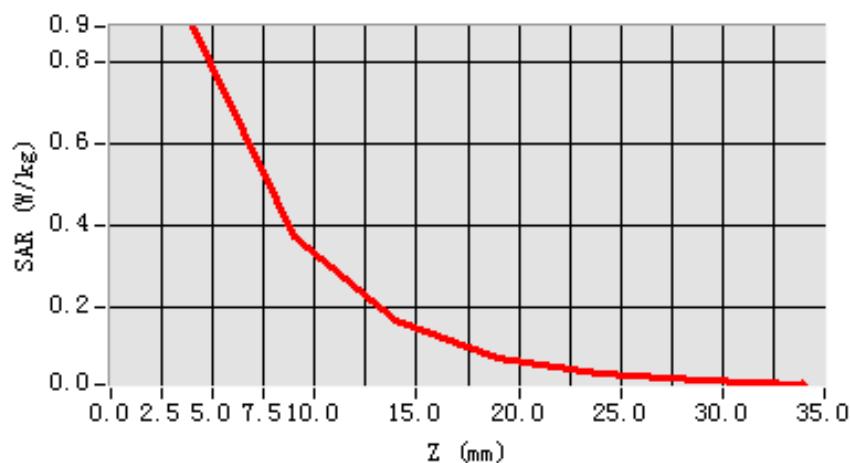
**Maximum location: X=-7.00, Y=25.00**

<b>SAR 10g (W/Kg)</b>	0.387393
<b>SAR 1g (W/Kg)</b>	0.825546

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.8870	0.3712	0.1673	0.0778	0.0372	0.0222

**SAR, Z Axis Scan (X = -7, Y = 25)**



# MEASUREMENT 31

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

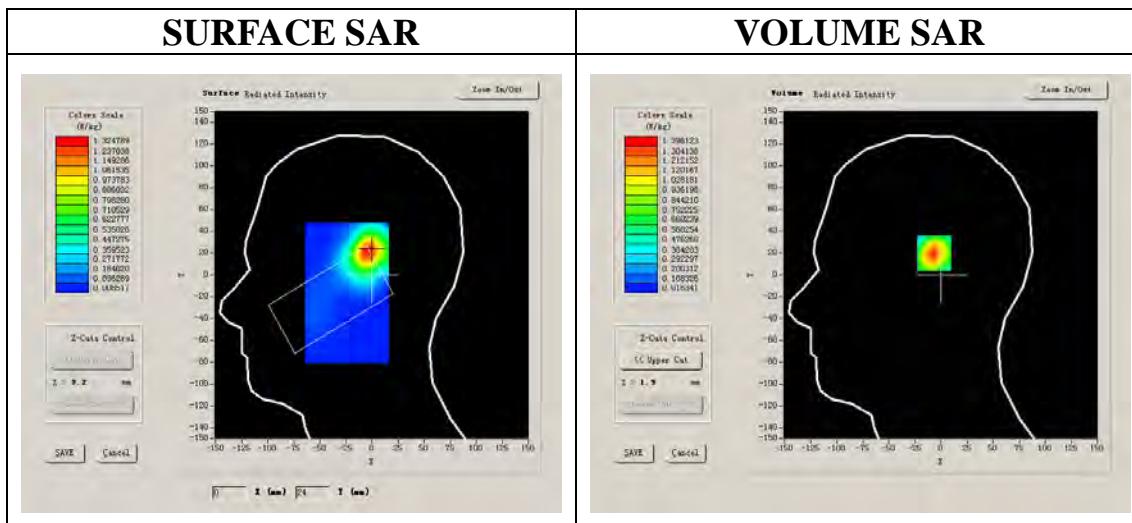
Measurement duration: 7 minutes 25 seconds

## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA 1700
<b>Channels</b>	Low
<b>Signal</b>	CDMA

## B. SAR Measurement Results

<b>Frequency (MHz)</b>	1711.250000
<b>Relative permittivity (real part)</b>	38.650002
<b>Relative permittivity</b>	13.750000
<b>Conductivity (S/m)</b>	1.306250
<b>Power drift (%)</b>	-2.580000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



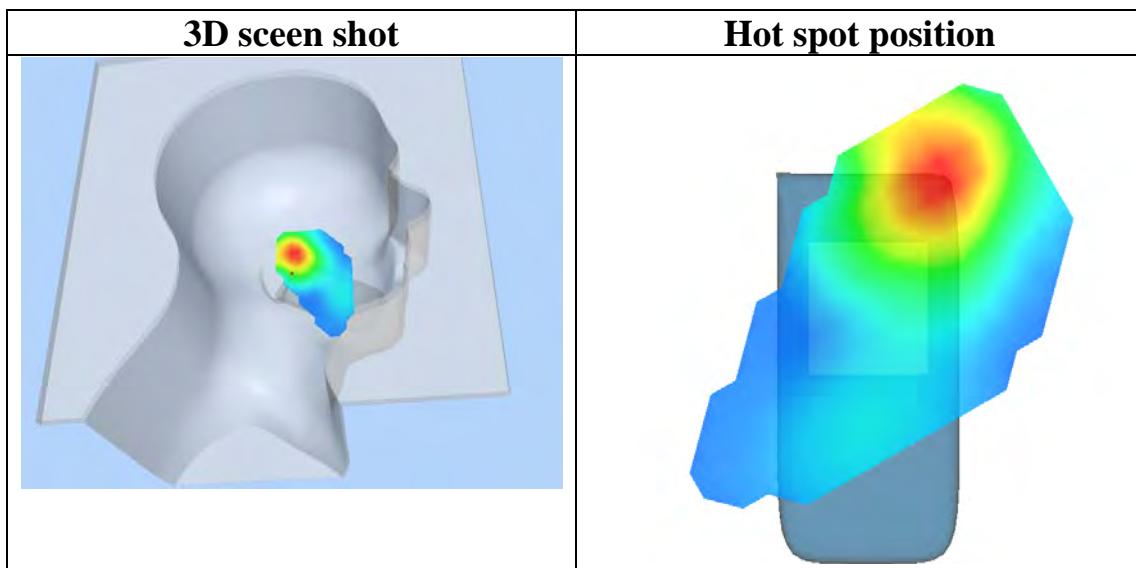
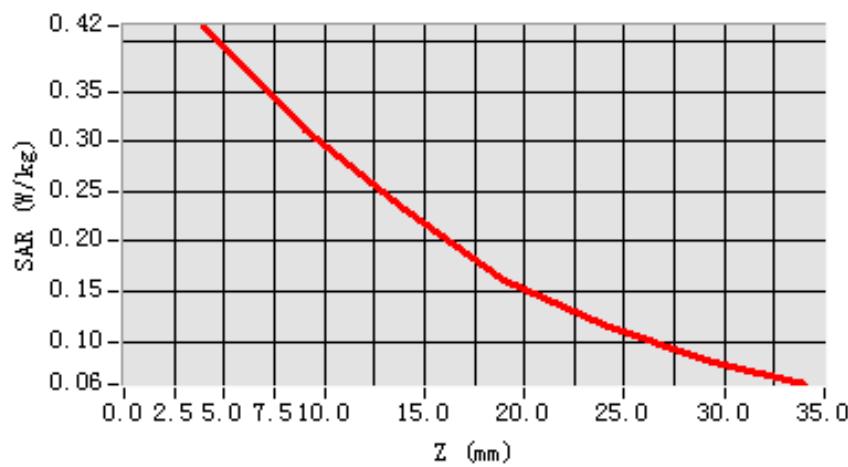
**Maximum location: X=-32.00, Y=-13.00**

<b>SAR 10g (W/Kg)</b>	0.275649
<b>SAR 1g (W/Kg)</b>	0.397115

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.8870	0.3712	0.1673	0.0778	0.0372	0.0222

**SAR, Z Axis Scan (X = -32, Y = -13)**



# MEASUREMENT 32

Type: Phone measurement (Complete)

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

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

Date of measurement: 16/9/2011

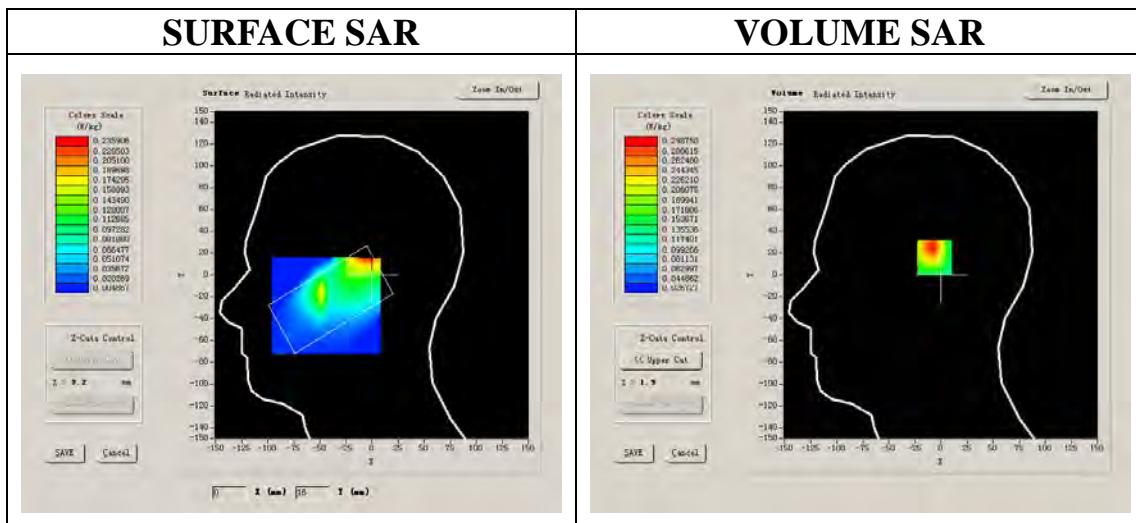
Measurement duration: 7 minutes 34 seconds

## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA 1700
<b>Channels</b>	Low
<b>Signal</b>	CDMA

## B. SAR Measurement Results

<b>Frequency (MHz)</b>	1711.250000
<b>Relative permittivity (real part)</b>	38.650002
<b>Relative permittivity</b>	13.750000
<b>Conductivity (S/m)</b>	1.306250
<b>Power drift (%)</b>	6.010000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



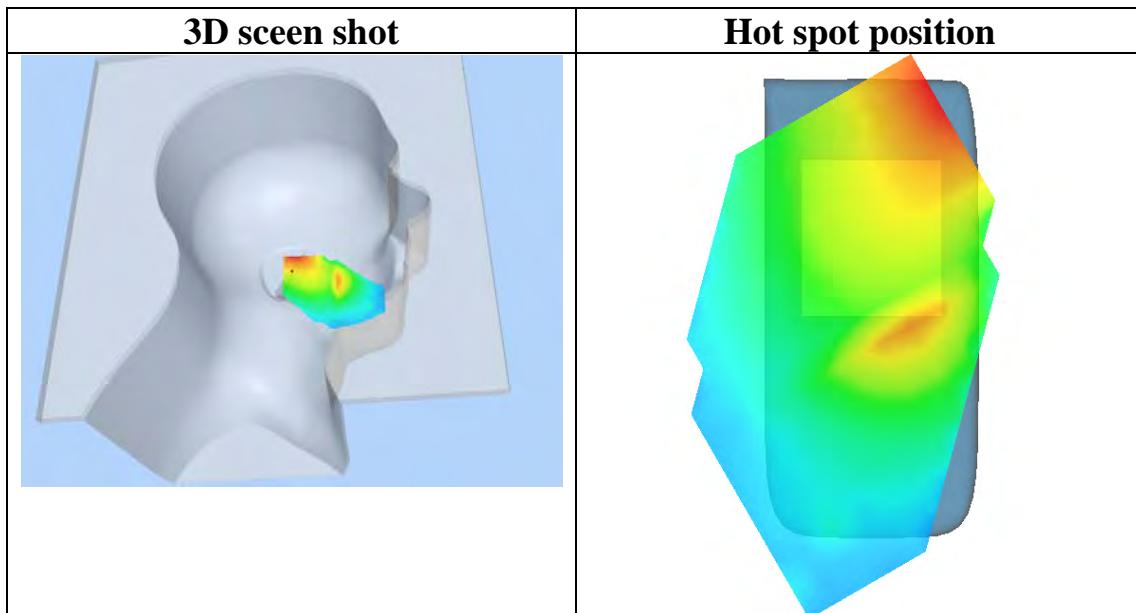
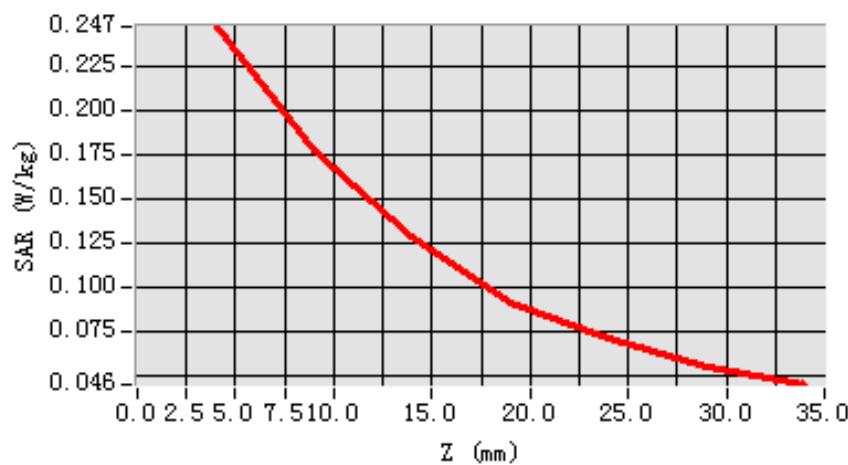
**Maximum location: X=-2.00, Y=16.00**

<b>SAR 10g (W/Kg)</b>	0.175084
<b>SAR 1g (W/Kg)</b>	0.281352

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2475	0.1776	0.1289	0.0911	0.0718	0.0559

**SAR, Z Axis Scan (X = -2, Y = 16)**



# MEASUREMENT 33

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

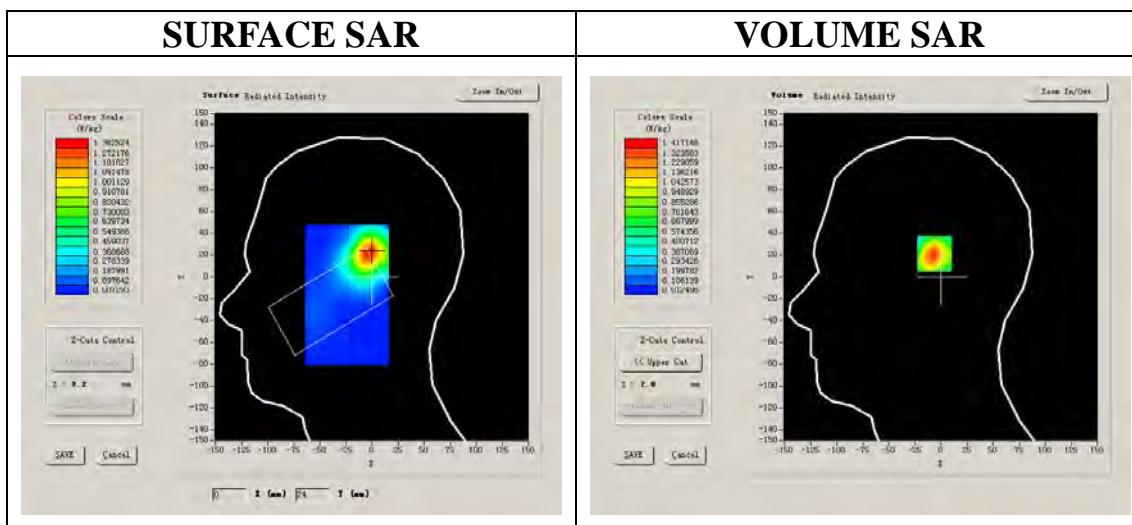
Measurement duration: 7 minutes 30 seconds

## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	0.260000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



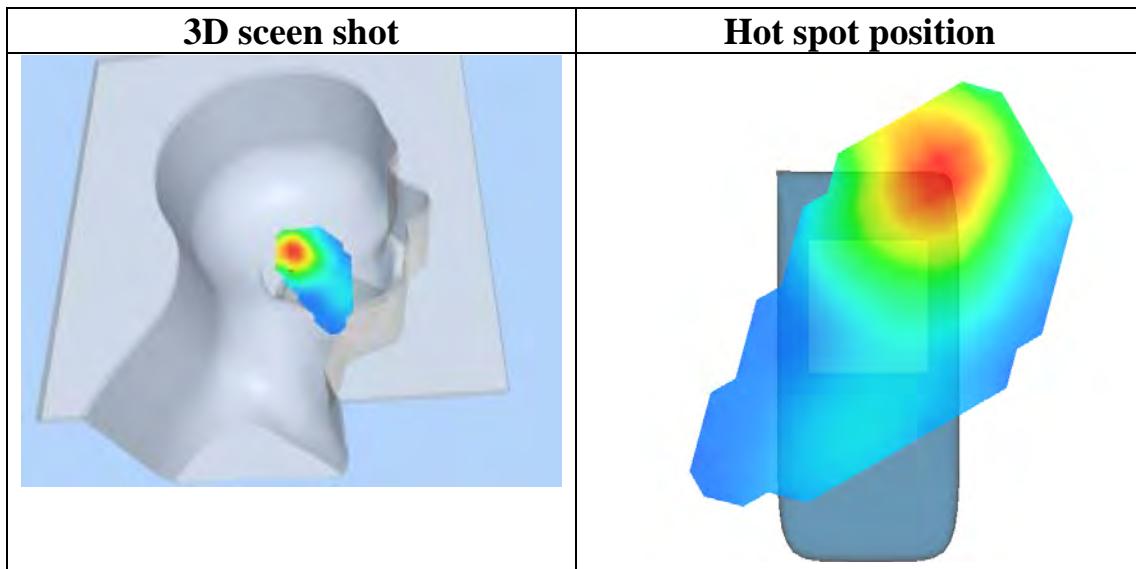
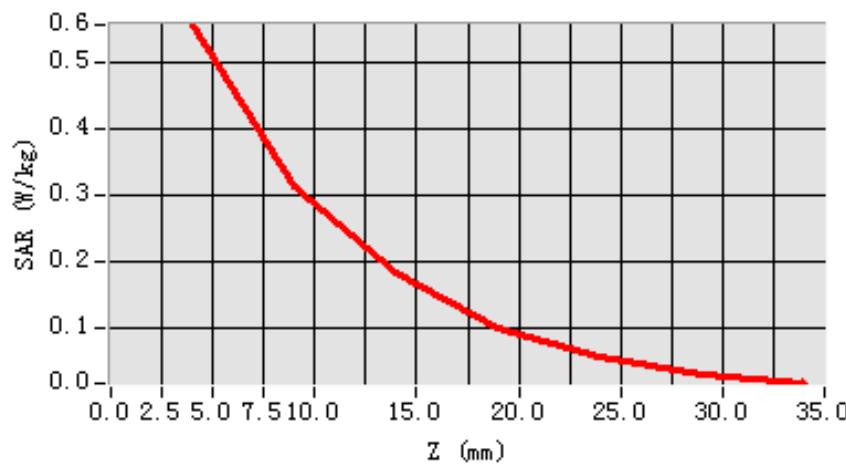
**Maximum location: X=-8.00, Y=-9.00**

<b>SAR 10g (W/Kg)</b>	0.281561
<b>SAR 1g (W/Kg)</b>	0.522506

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.5551	0.3135	0.1818	0.0978	0.0545	0.0283

**SAR, Z Axis Scan (X = -8, Y = -9)**



## MEASUREMENT 34

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

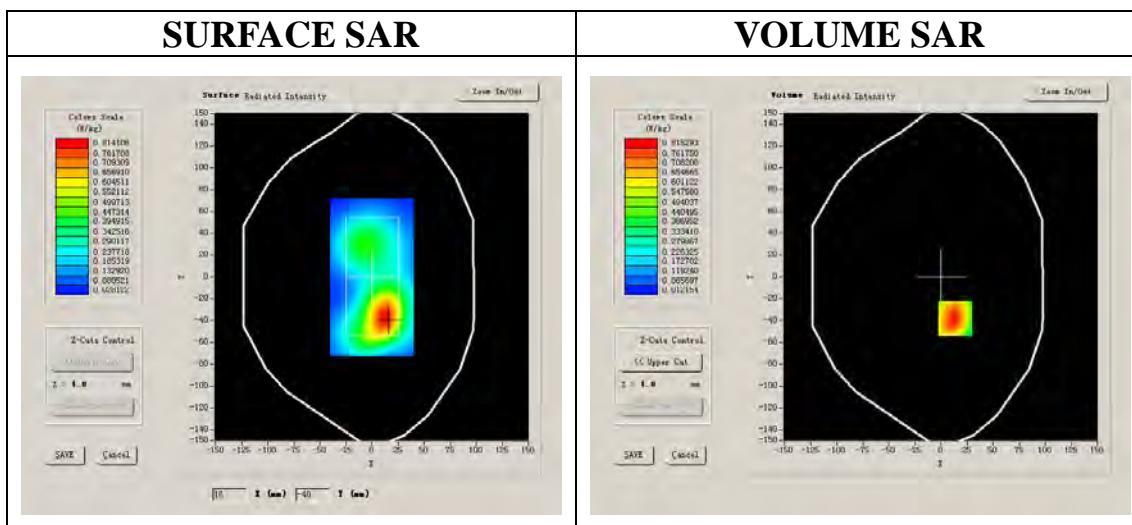
Measurement duration: 9 minutes 8 seconds

### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1711.250000
<b>Relative permittivity (real part)</b>	38.650002
<b>Relative permittivity</b>	13.750000
<b>Conductivity (S/m)</b>	1.306250
<b>Power drift (%)</b>	-1.320000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



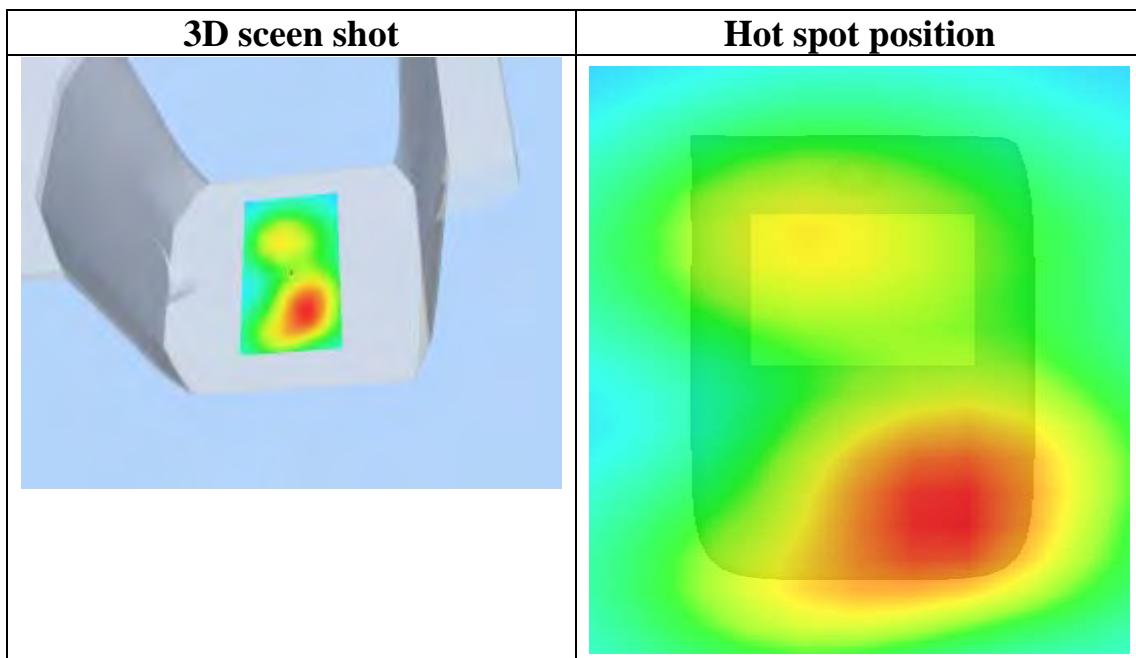
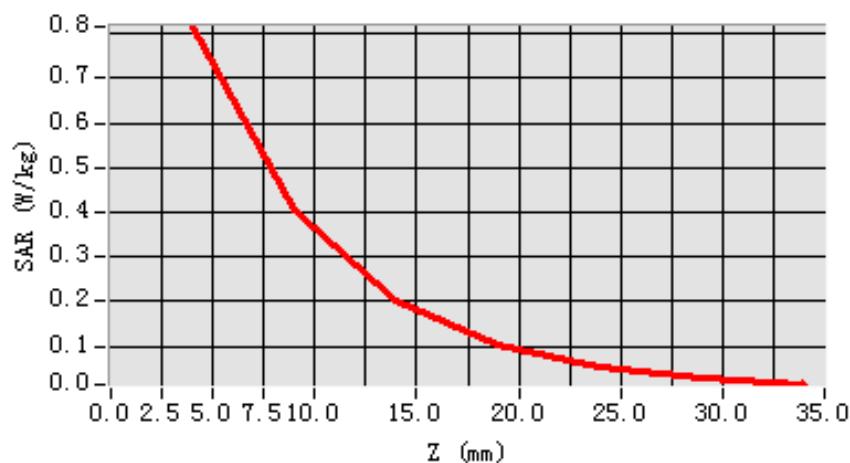
**Maximum location: X=14.00, Y=-38.00**

<b>SAR 10g (W/Kg)</b>	0.416571
<b>SAR 1g (W/Kg)</b>	0.780189

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.8153	0.4042	0.2040	0.1022	0.0540	0.0287

**SAR, Z Axis Scan (X = 14, Y = -38)**



## MEASUREMENT 35

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

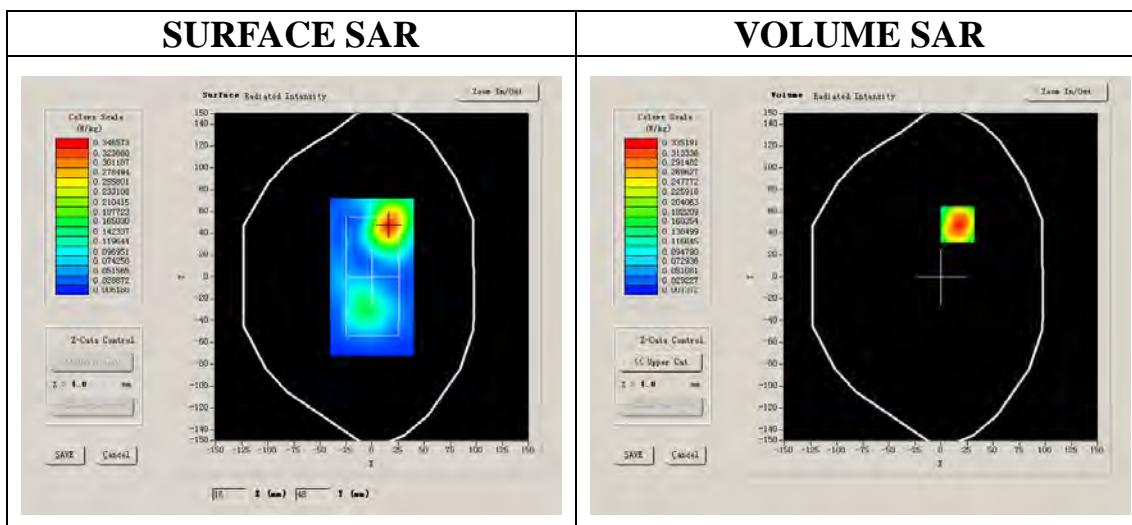
Measurement duration: 9 minutes 10 seconds

### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1711.250000
<b>Relative permittivity (real part)</b>	38.650002
<b>Relative permittivity</b>	13.750000
<b>Conductivity (S/m)</b>	1.306250
<b>Power drift (%)</b>	-8.520000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



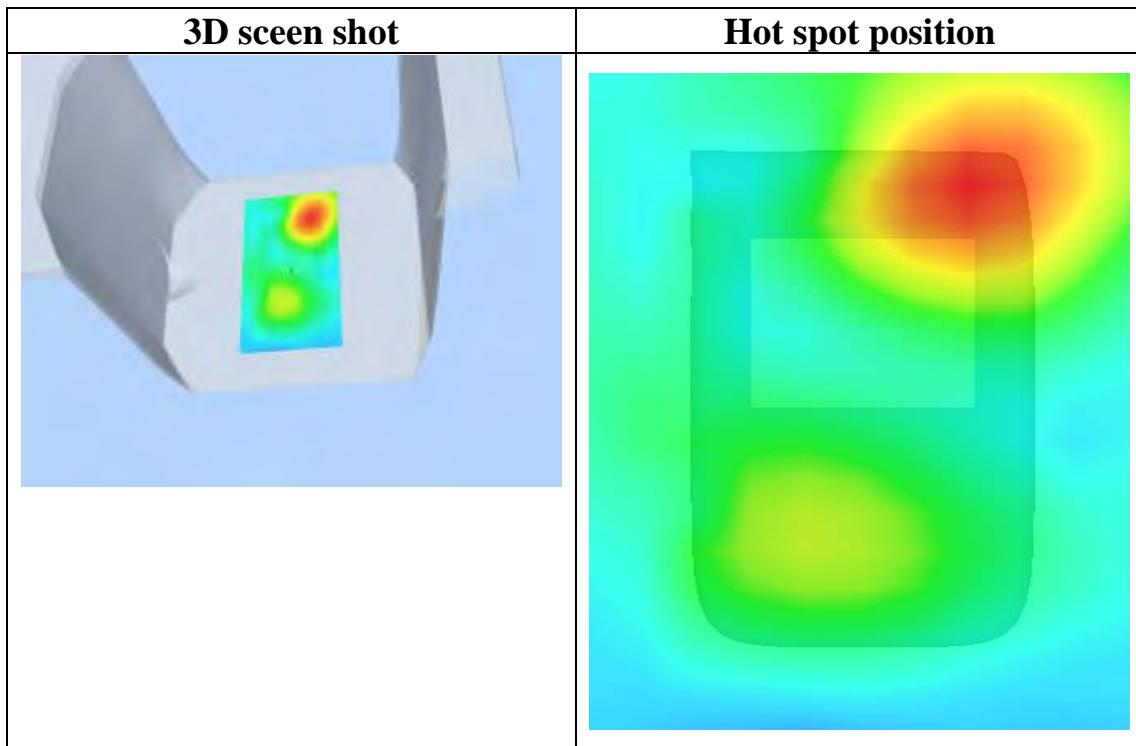
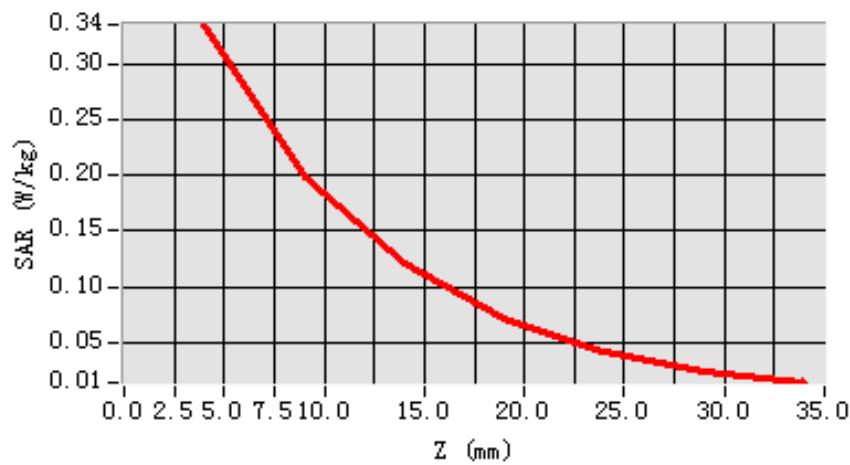
**Maximum location: X=16.00, Y=48.00**

<b>SAR 10g (W/Kg)</b>	0.183794
<b>SAR 1g (W/Kg)</b>	0.319825

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3352	0.1993	0.1207	0.0712	0.0425	0.0236

**SAR, Z Axis Scan (X = 16, Y = 48)**



## MEASUREMENT 36

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

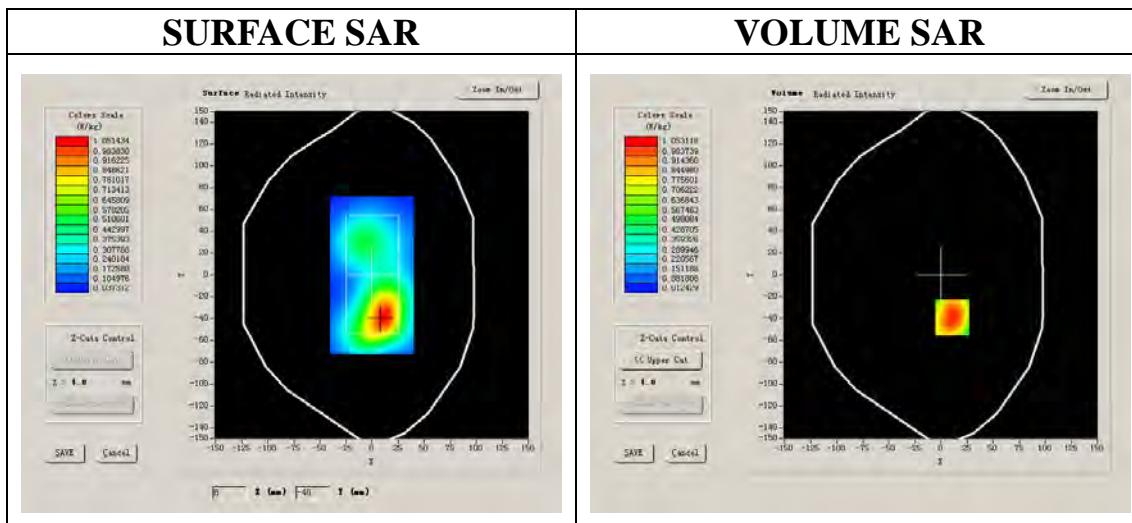
Measurement duration: 9 minutes 7 seconds

### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	-0.150000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



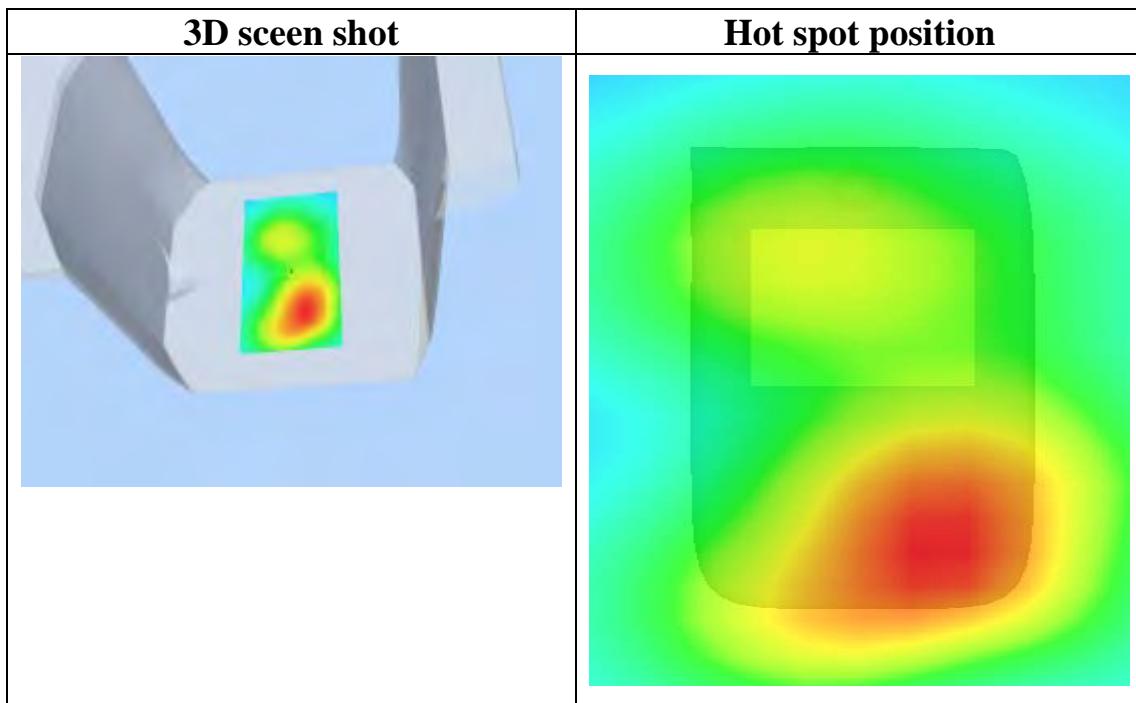
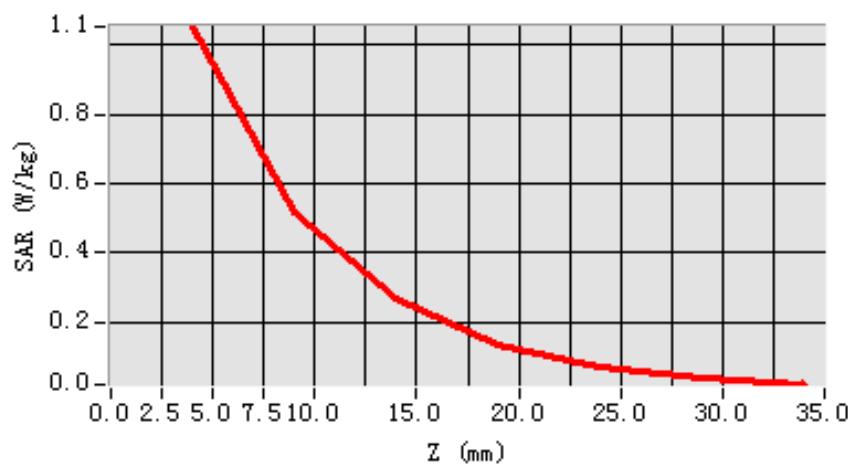
**Maximum location: X=11.00, Y=-39.00**

<b>SAR 10g (W/Kg)</b>	0.542552
<b>SAR 1g (W/Kg)</b>	1.008165

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	1.0531	0.5183	0.2673	0.1362	0.0722	0.0385

**SAR, Z Axis Scan (X = 11, Y = -39)**



## MEASUREMENT 37

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

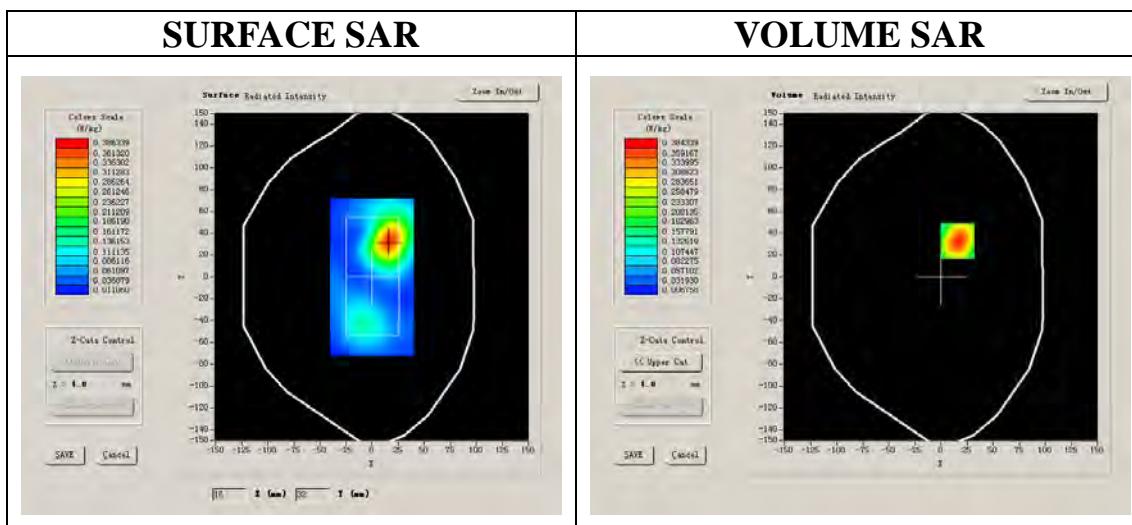
Measurement duration: 9 minutes 9 seconds

### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	-0.490000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



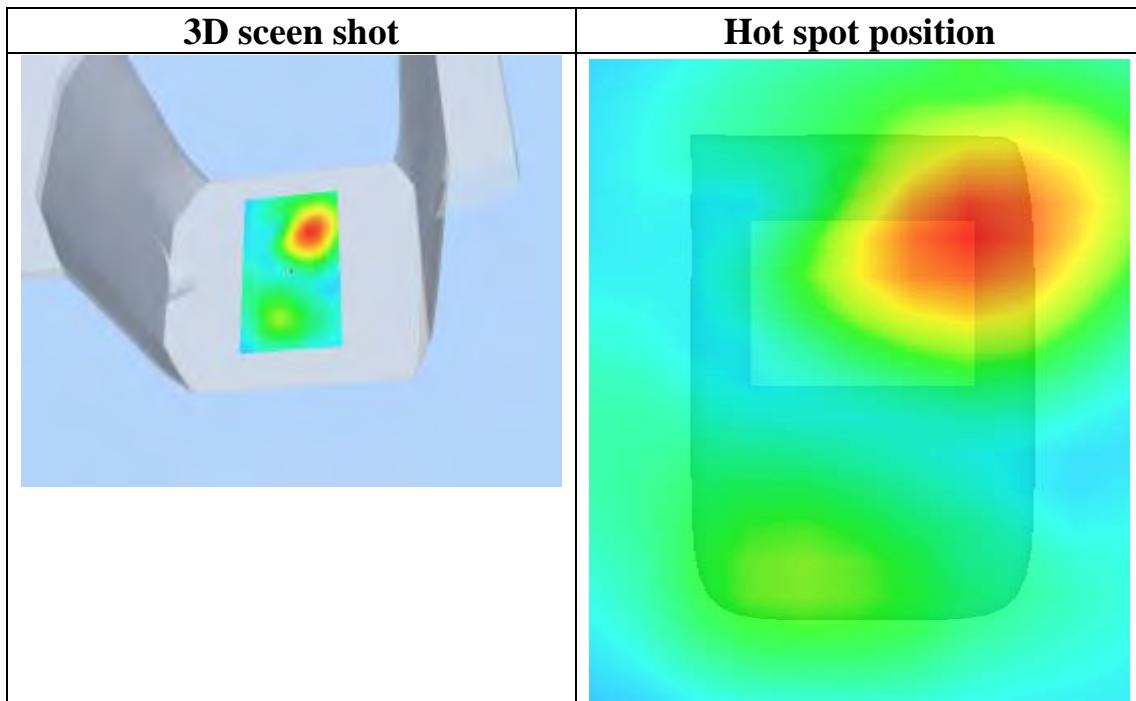
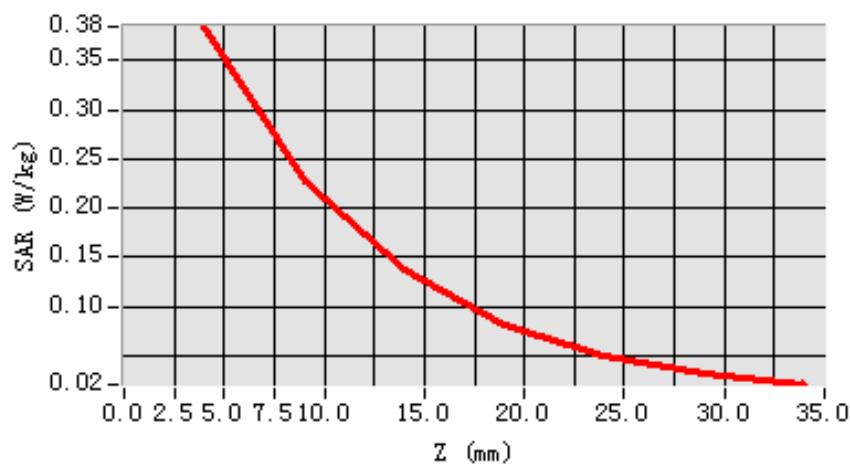
**Maximum location: X=16.00, Y=33.00**

<b>SAR 10g (W/Kg)</b>	0.208022
<b>SAR 1g (W/Kg)</b>	0.364370

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3843	0.2271	0.1360	0.0818	0.0501	0.0306

**SAR, Z Axis Scan (X = 16, Y = 33)**



## MEASUREMENT 38

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

of measurement: 7/9/2011

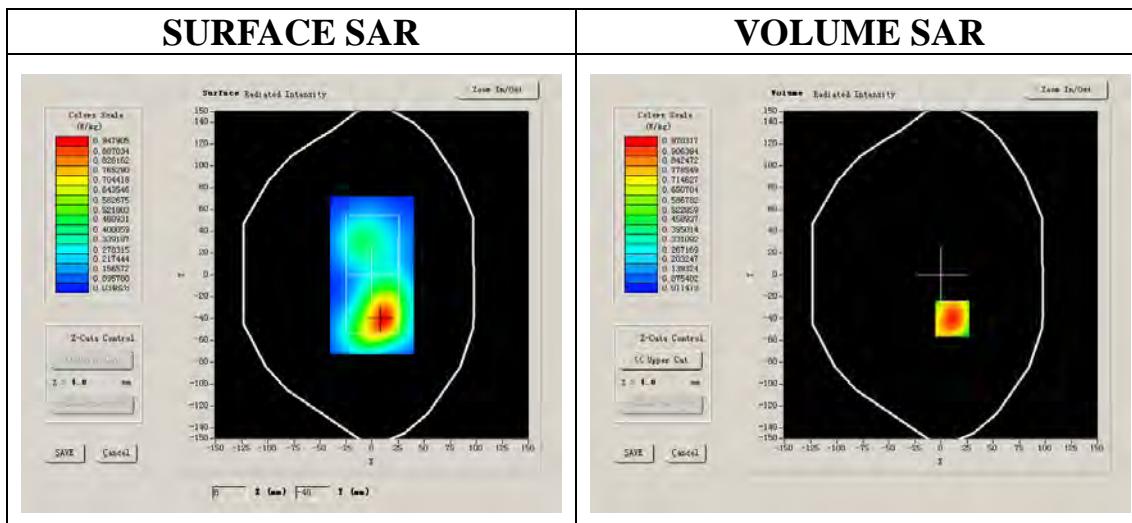
Measurement duration: 9 minutes 7 seconds

### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1753.700000
<b>Relative permittivity (real part)</b>	38.270000
<b>Relative permittivity</b>	13.900000
<b>Conductivity (S/m)</b>	1.355250
<b>Power drift (%)</b>	1.880000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



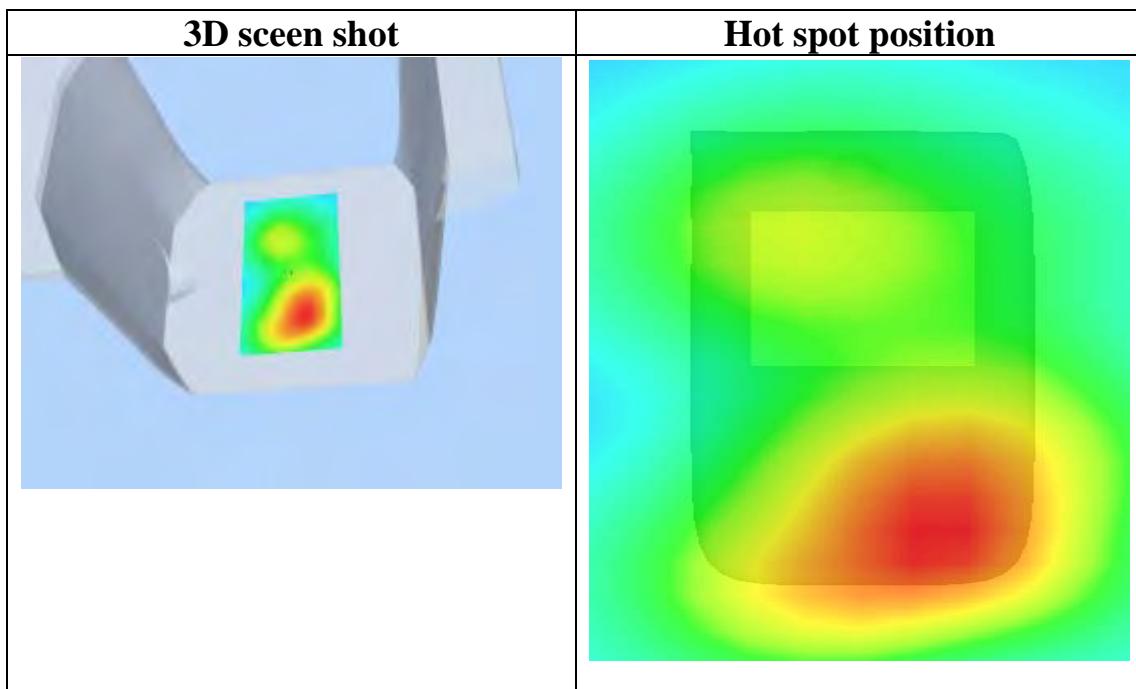
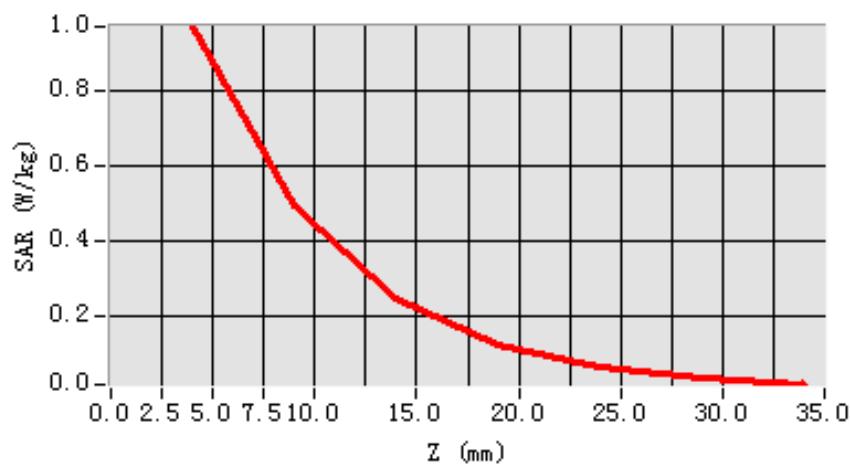
**Maximum location: X=11.00, Y=-40.00**

<b>SAR 10g (W/Kg)</b>	0.500224
<b>SAR 1g (W/Kg)</b>	0.927570

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.9703	0.4934	0.2500	0.1270	0.0668	0.0366

**SAR, Z Axis Scan (X = 11, Y = -40)**



## MEASUREMENT 39

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

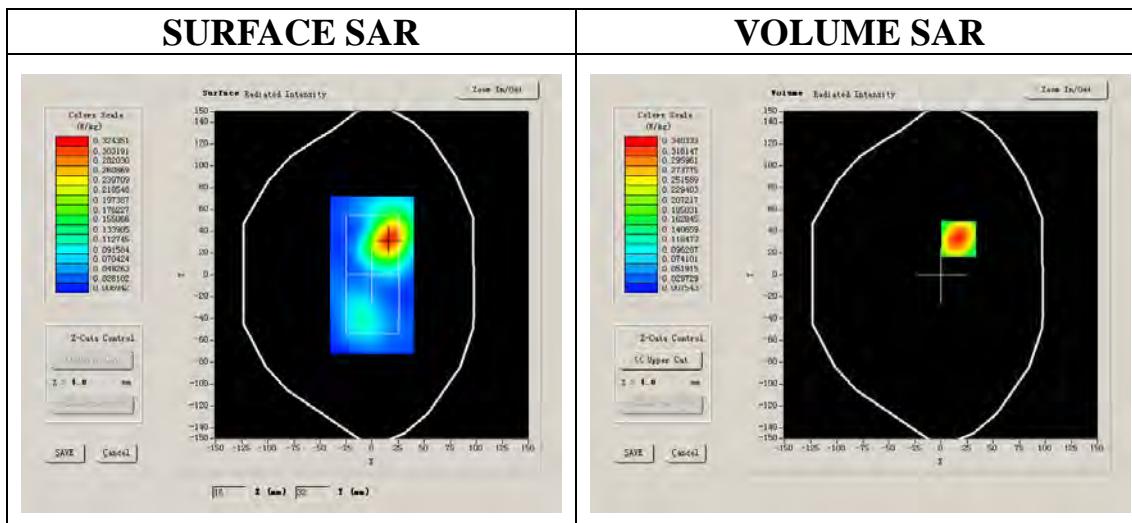
Measurement duration: 9 minutes 13 seconds

### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1753.700000
<b>Relative permittivity (real part)</b>	38.270000
<b>Relative permittivity</b>	13.900000
<b>Conductivity (S/m)</b>	1.355250
<b>Power drift (%)</b>	-0.040000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



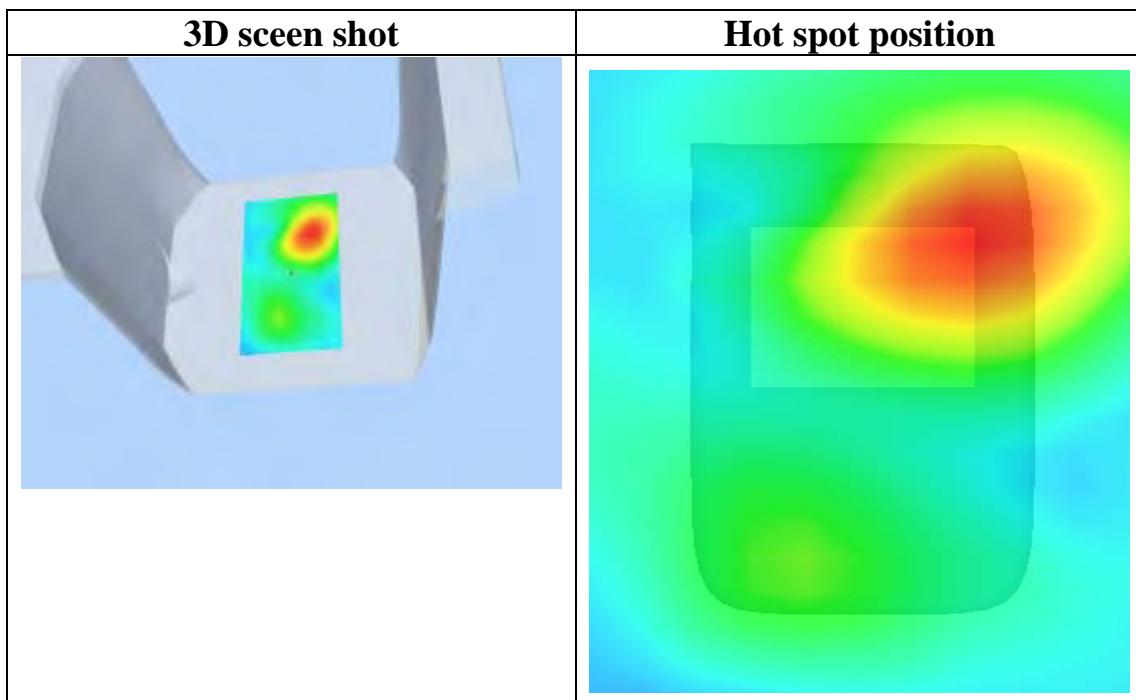
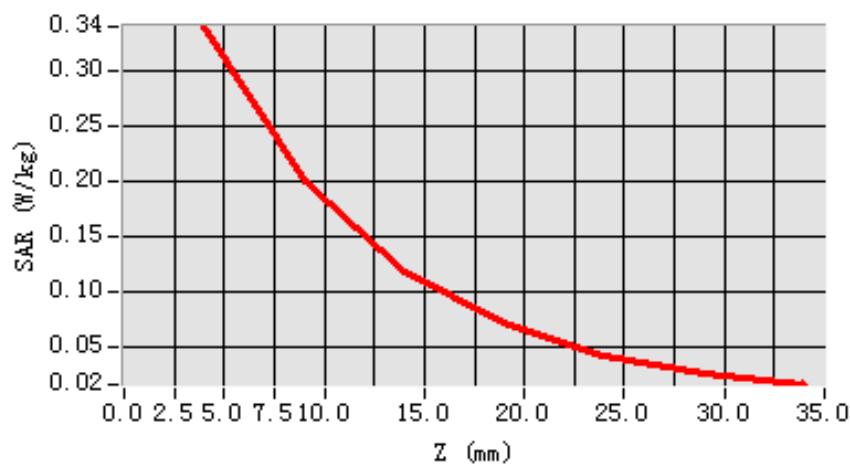
**Maximum location: X=17.00, Y=33.00**

<b>SAR 10g (W/Kg)</b>	0.185477
<b>SAR 1g (W/Kg)</b>	0.324485

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3403	0.2013	0.1185	0.0722	0.0431	0.0273

**SAR, Z Axis Scan (X = 17, Y = 33)**



# MEASUREMENT 40

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

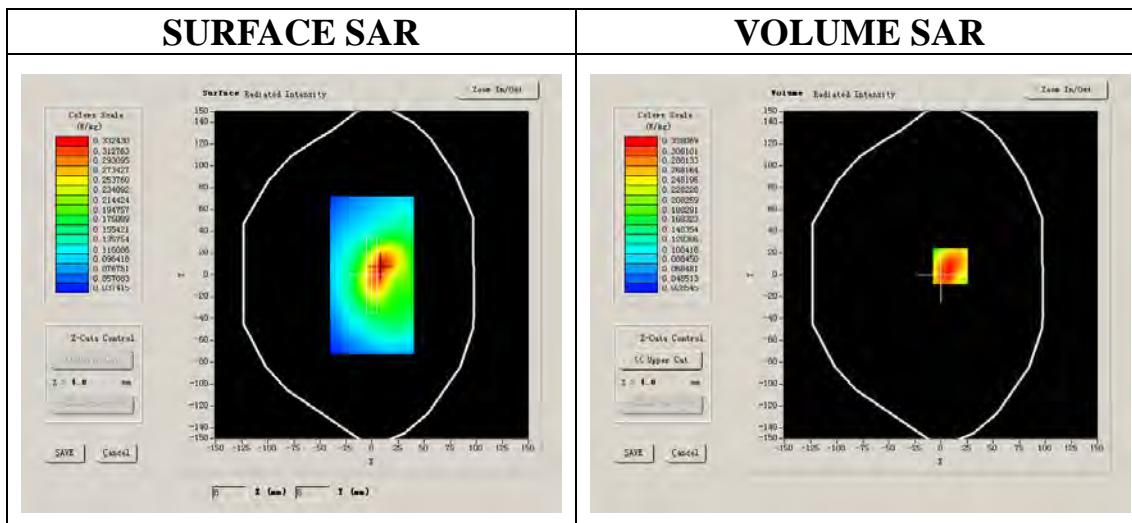
Measurement duration: 9 minutes 5 seconds

## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	-0.490000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



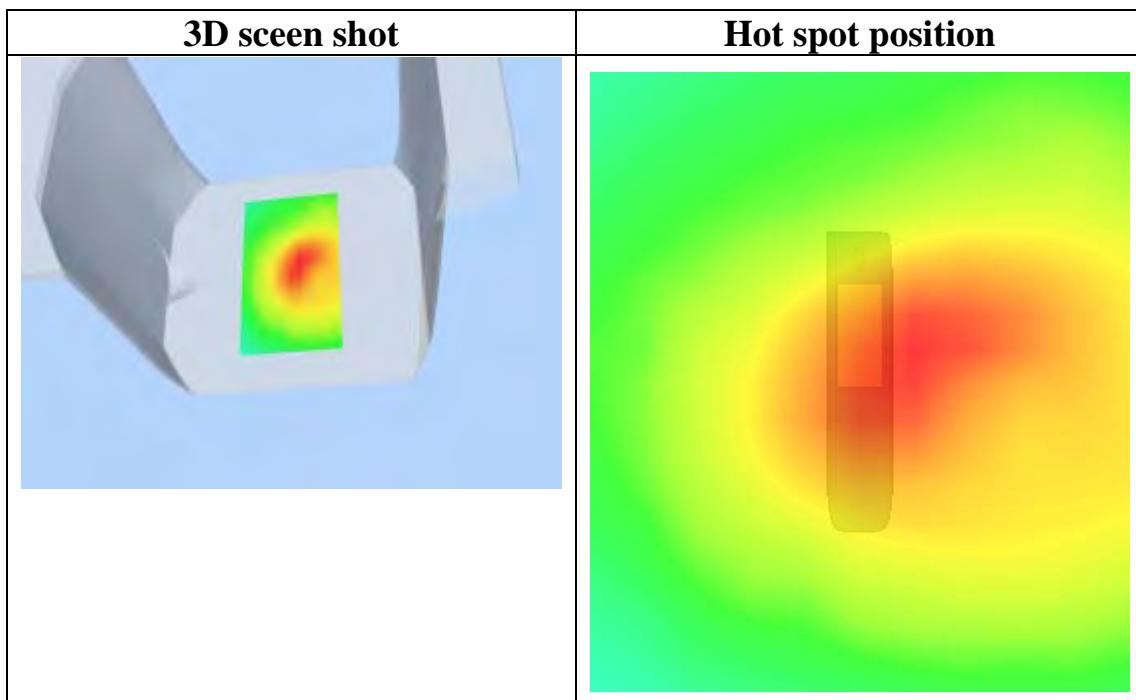
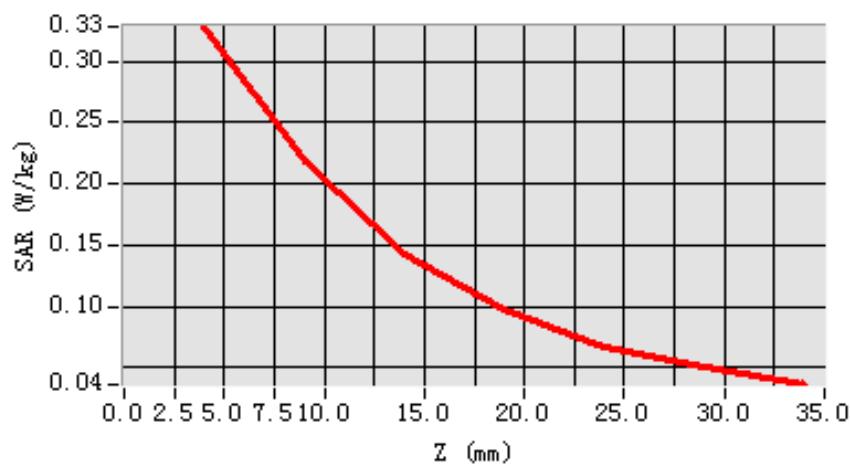
Maximum location: X=9.00, Y=8.00

SAR 10g (W/Kg)	0.209614
SAR 1g (W/Kg)	0.317980

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3281	0.2185	0.1429	0.0973	0.0676	0.0507

**SAR, Z Axis Scan (X = 9, Y = 8)**



# MEASUREMENT 41

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

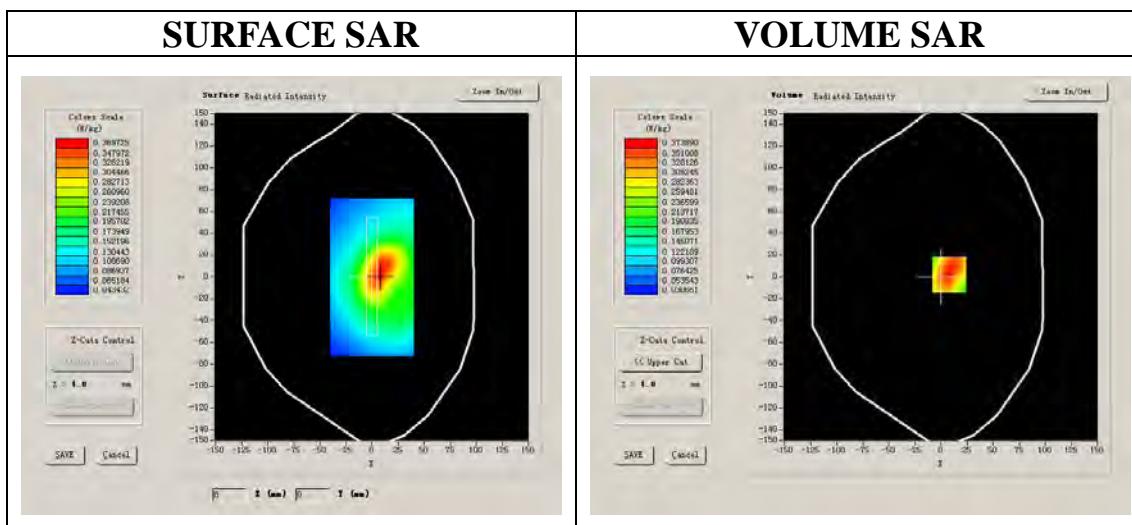
Measurement duration: 9 minutes 6 seconds

## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	-2.760000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



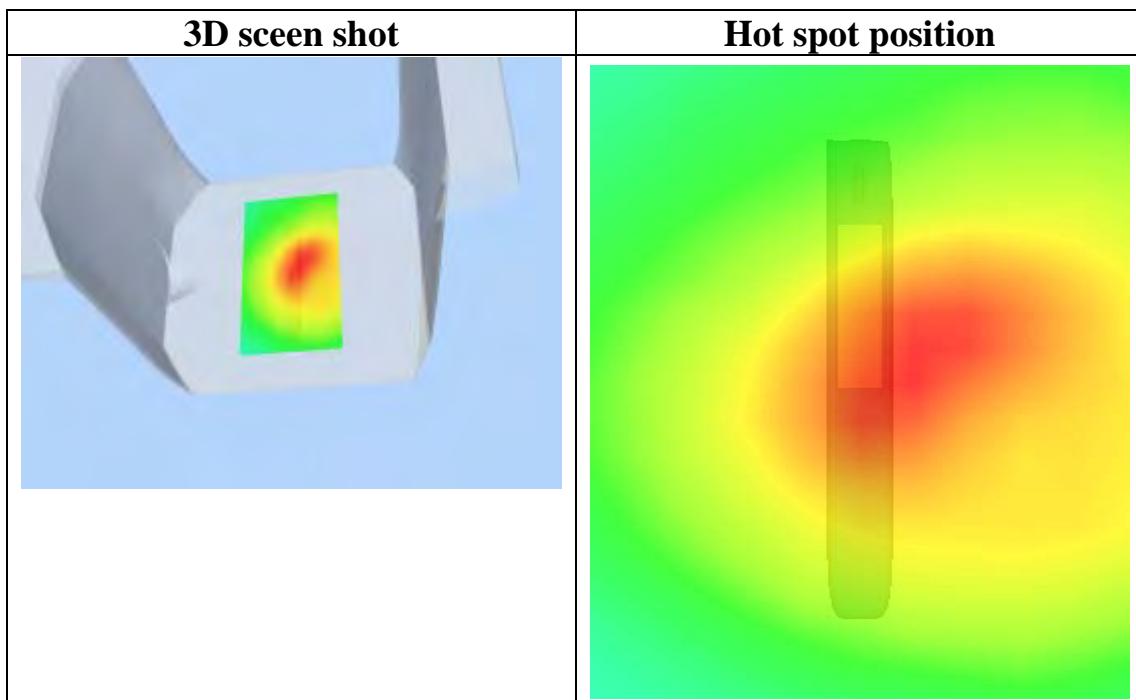
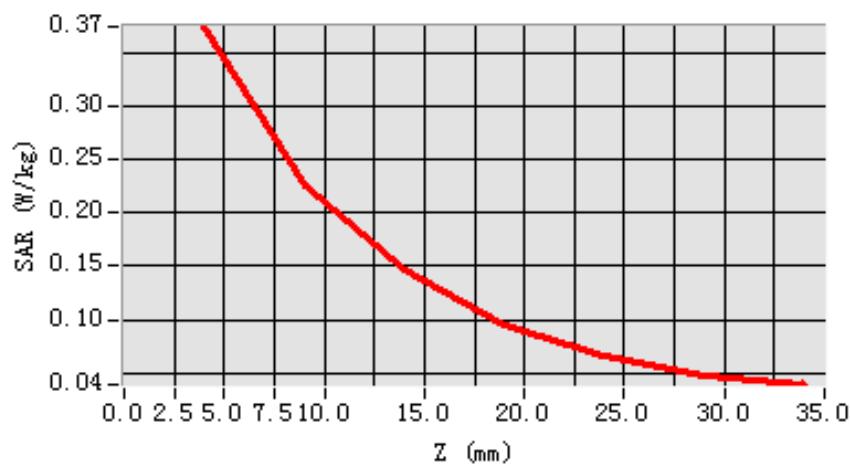
Maximum location: X=8.00, Y=2.00

SAR 10g (W/Kg)	0.229785
SAR 1g (W/Kg)	0.360778

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3739	0.2244	0.1467	0.0956	0.0671	0.0471

SAR, Z Axis Scan (X = 8, Y = 2)



## MEASUREMENT 42

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

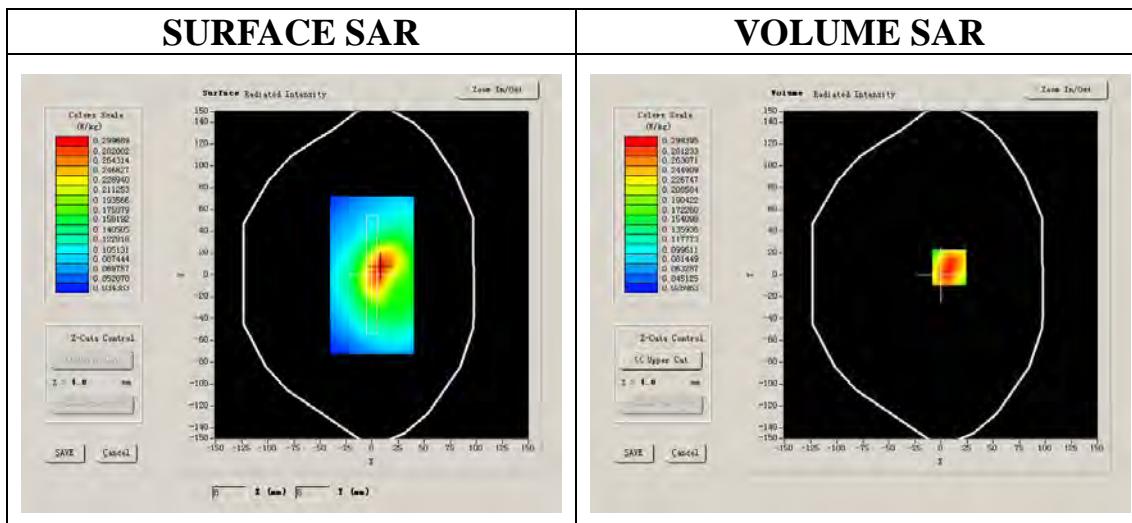
Measurement duration: 9 minutes 9 seconds

### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	CDMA 1700
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

<b>Frequency (MHz)</b>	1732.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	13.610000
<b>Conductivity (S/m)</b>	1.309584
<b>Power drift (%)</b>	3.770000
<b>Ambient Temperature</b>	22.4 °C
<b>Liquid Temperature</b>	21.6 °C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



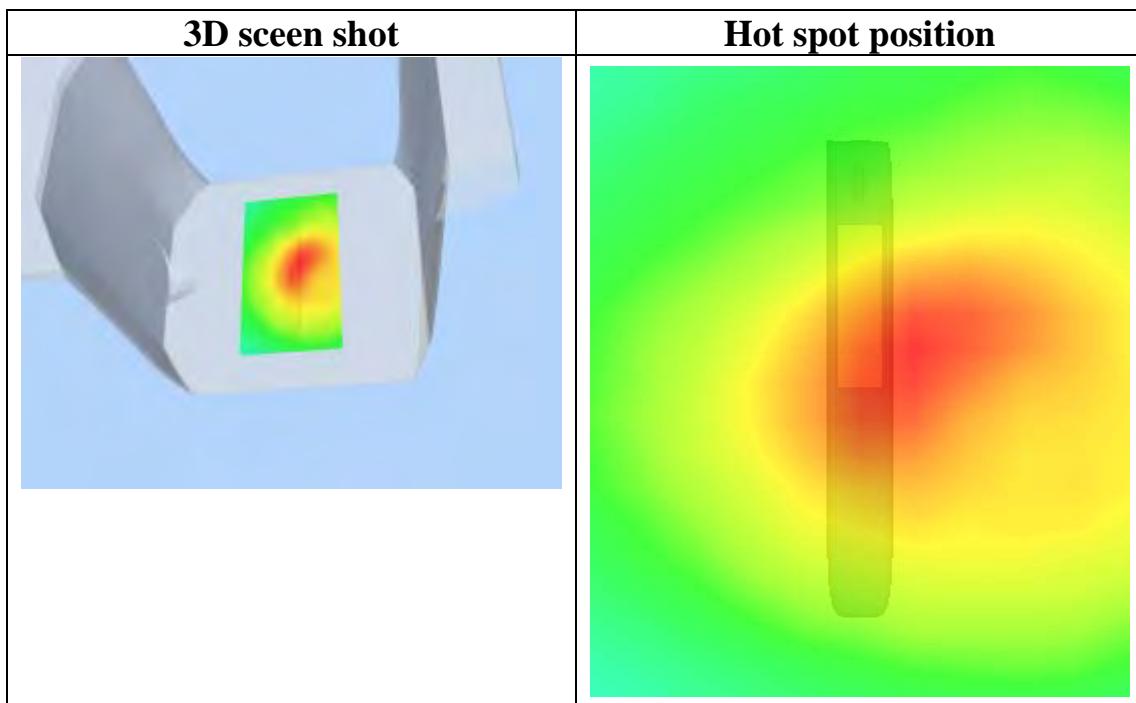
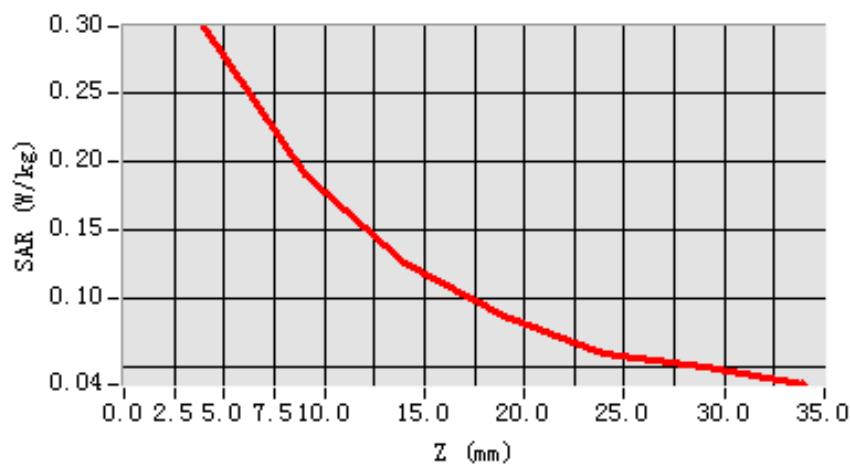
Maximum location: X=8.00, Y=7.00

SAR 10g (W/Kg)	0.185646
SAR 1g (W/Kg)	0.286416

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2994	0.1902	0.1258	0.0876	0.0590	0.0498

SAR, Z Axis Scan (X = 8, Y = 7)



## MEASUREMENT 43

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 27 seconds

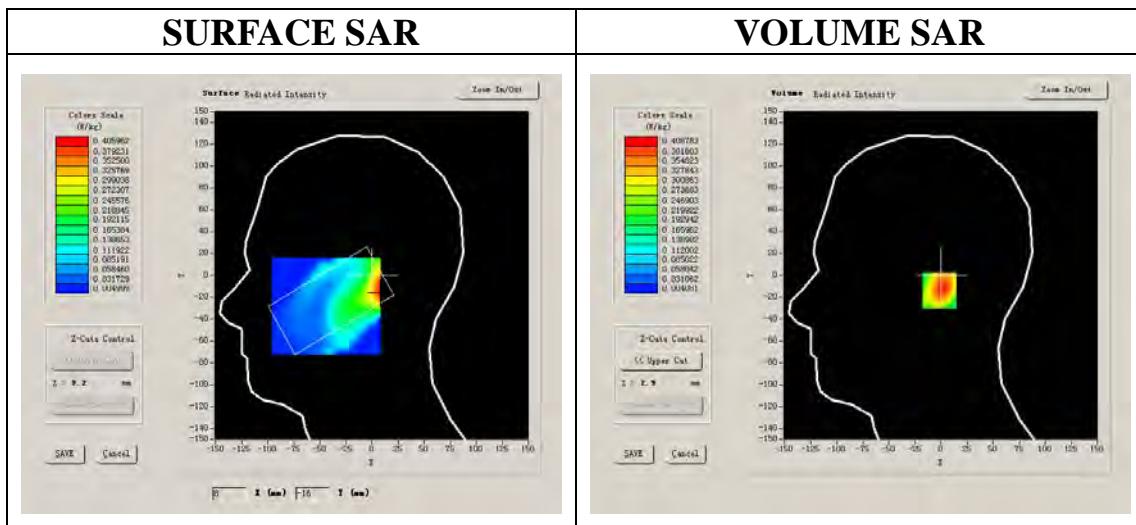
### A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	US_PCS
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.431186
<b>Power drift (%)</b>	0.060000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



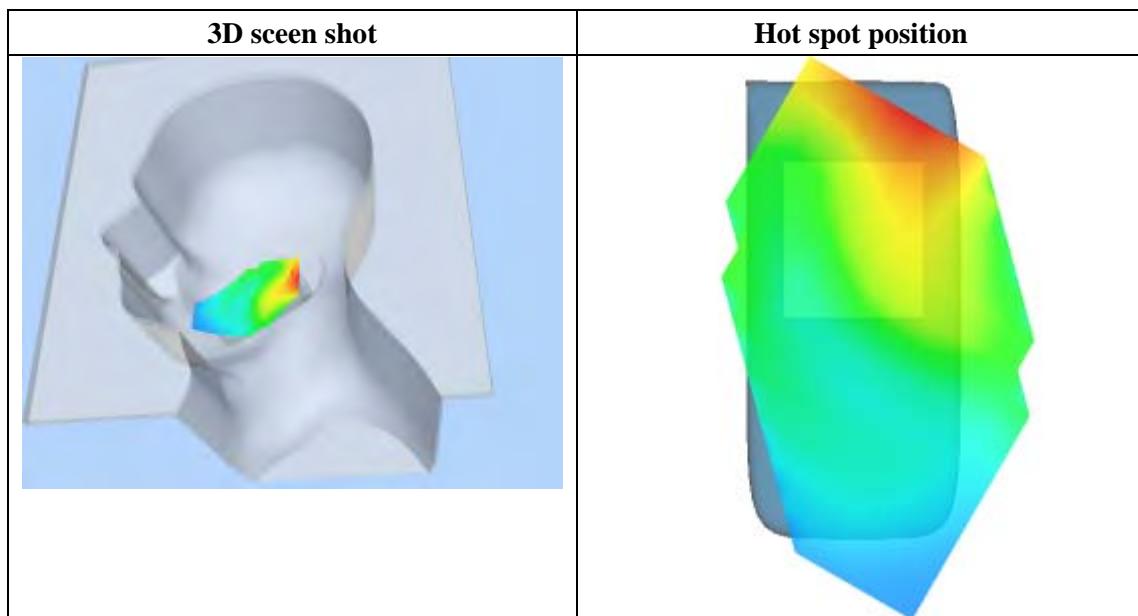
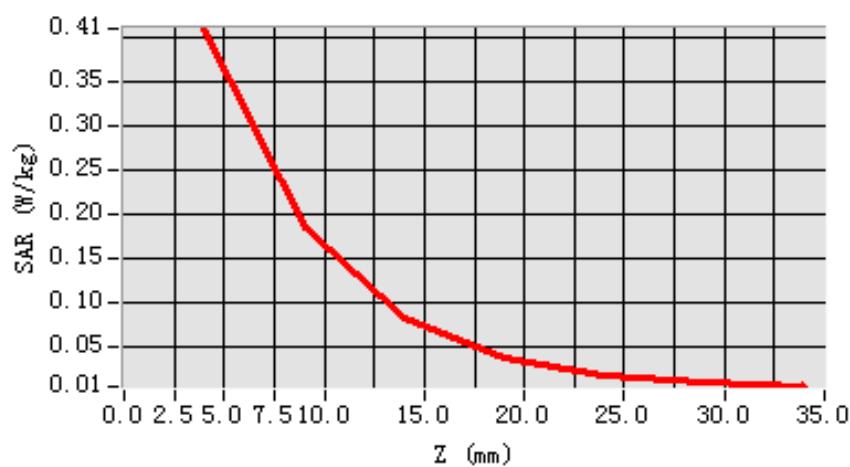
**Maximum location: X=8.00, Y=-14.00**

<b>SAR 10g (W/Kg)</b>	0.198530
<b>SAR 1g (W/Kg)</b>	0.396151

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.4088	0.1841	0.0817	0.0391	0.0180	0.0105

**SAR, Z Axis Scan (X = 8, Y = -14)**



## MEASUREMENT 44

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 28 seconds

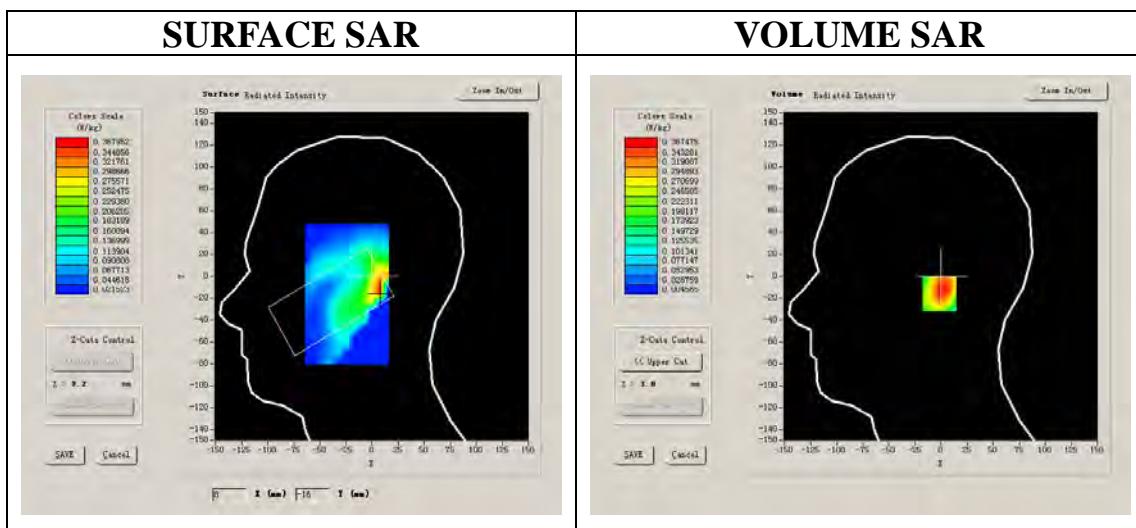
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	US_PCS
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Middle Band SAR (Channel 600):

<b>Frequency (MHz)</b>	1880.000000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.453412
<b>Power drift (%)</b>	-0.040000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



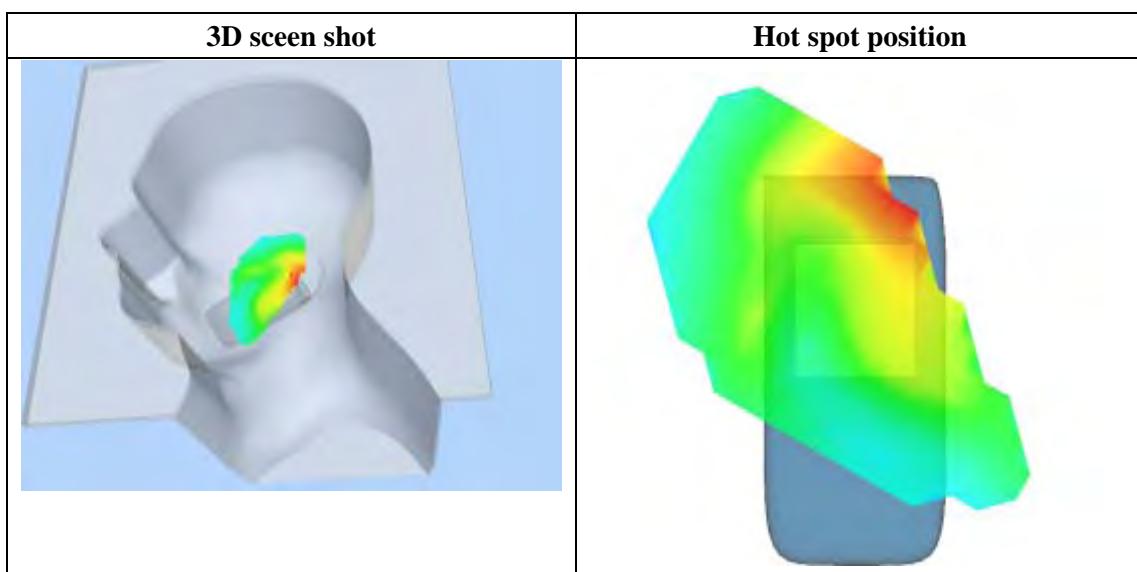
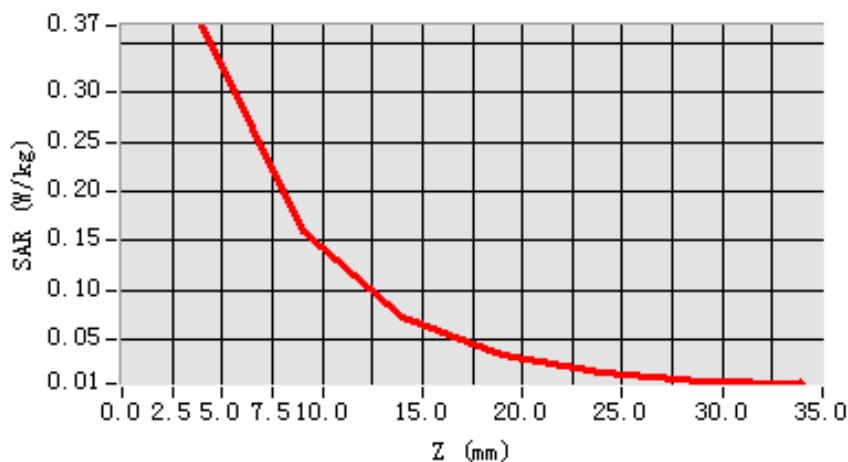
**Maximum location: X=8.00, Y=-16.00**

<b>SAR 10g (W/Kg)</b>	0.180976
<b>SAR 1g (W/Kg)</b>	0.363345

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3675	0.1589	0.0720	0.0342	0.0162	0.0078

**SAR, Z Axis Scan (X = 8, Y = -16)**



## MEASUREMENT 45

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 8 minutes 34 seconds

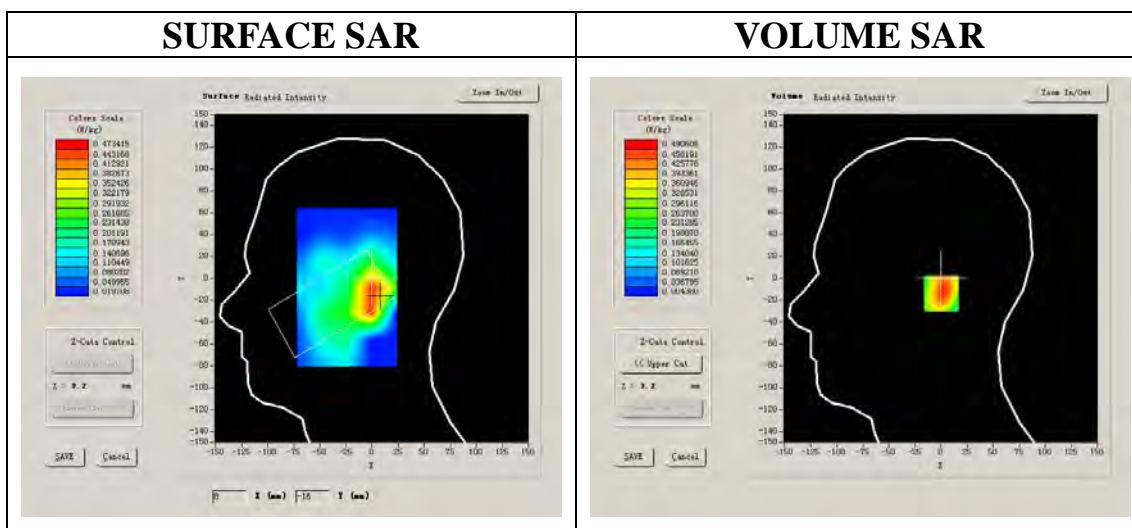
### A. Experimental conditions.

<b>Phantom File</b>	zinf5.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	US_PCS
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Higher Band SAR (Channel 1175):

<b>Frequency (MHz)</b>	1908.750000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.475639
<b>Power drift (%)</b>	0.500000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



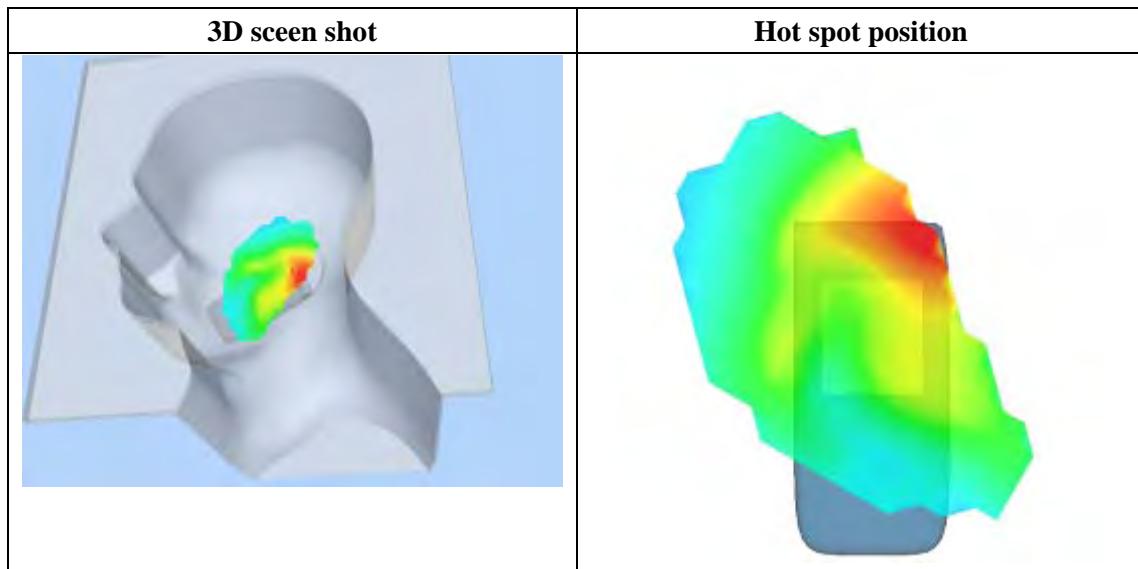
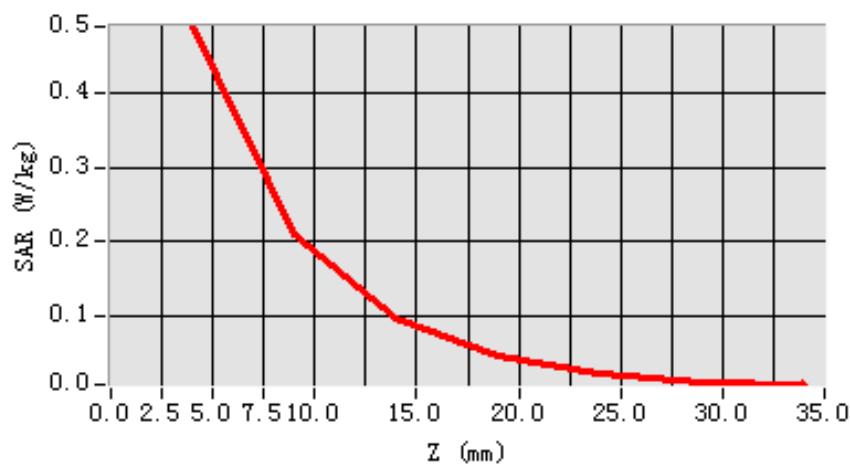
**Maximum location: X=10.00, Y=-14.00**

<b>SAR 10g (W/Kg)</b>	0.236984
<b>SAR 1g (W/Kg)</b>	0.471481

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.4906	0.2091	0.0955	0.0459	0.0213	0.0100

**SAR, Z Axis Scan (X = 10, Y = -14)**



## MEASUREMENT 46

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 30 seconds

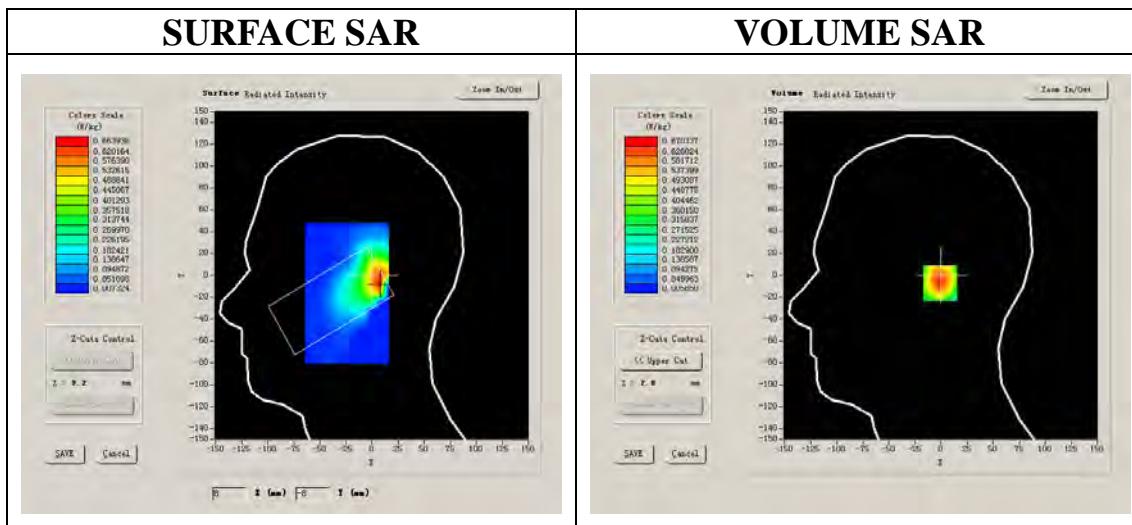
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	US_PCS
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.431186
<b>Power drift (%)</b>	0.350000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721



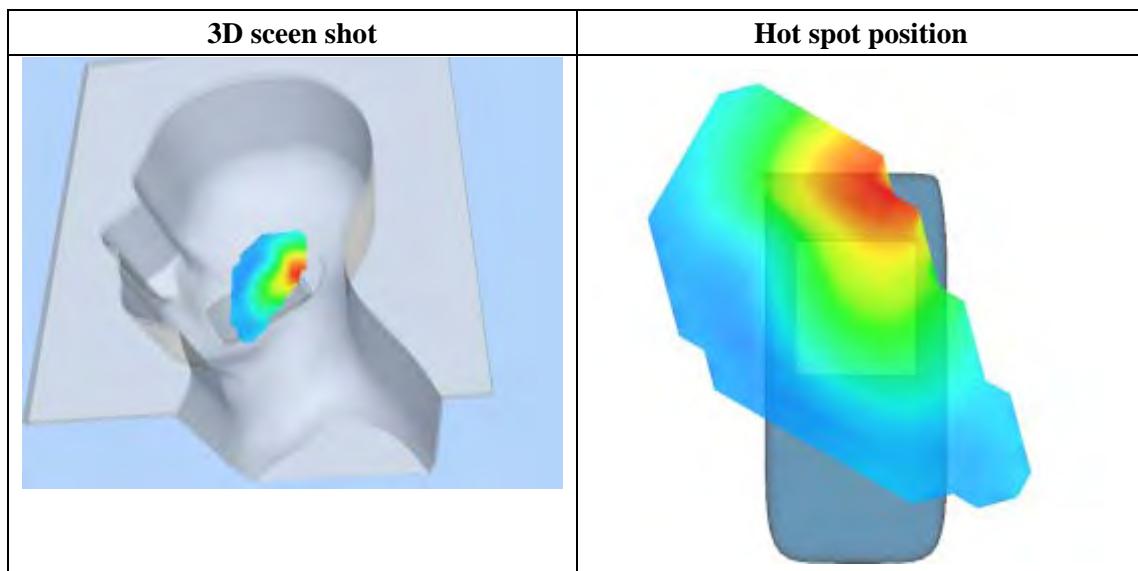
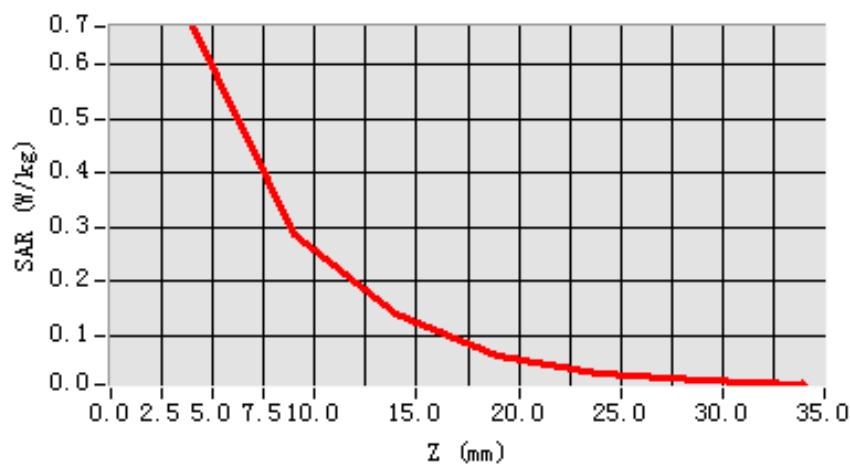
Maximum location: X=8.00, Y=-7.00

SAR 10g (W/Kg)	0.322870
SAR 1g (W/Kg)	0.643106

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6703	0.2884	0.1388	0.0640	0.0320	0.0167

SAR, Z Axis Scan (X = 8, Y = -7)



## MEASUREMENT 47

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 27 seconds

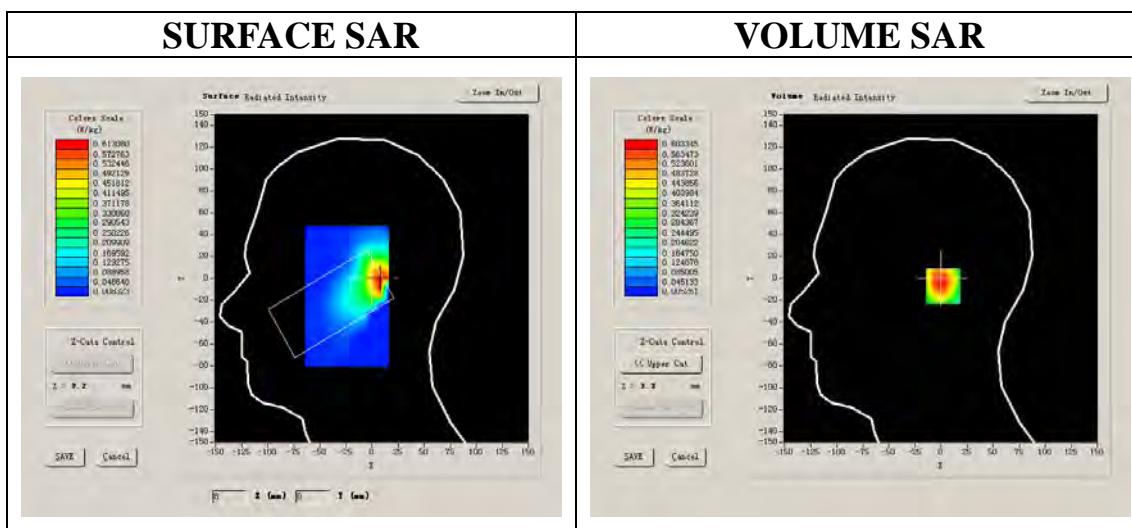
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	US_PCS
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Middle Band SAR (Channel 600):

<b>Frequency (MHz)</b>	1880.000000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.453412
<b>Power drift (%)</b>	0.430000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



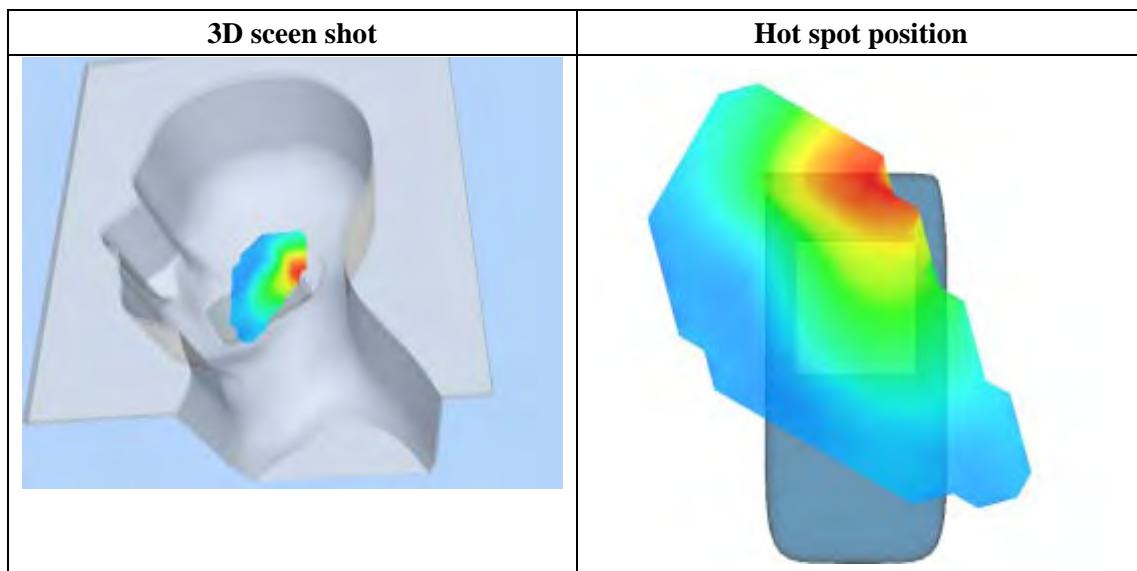
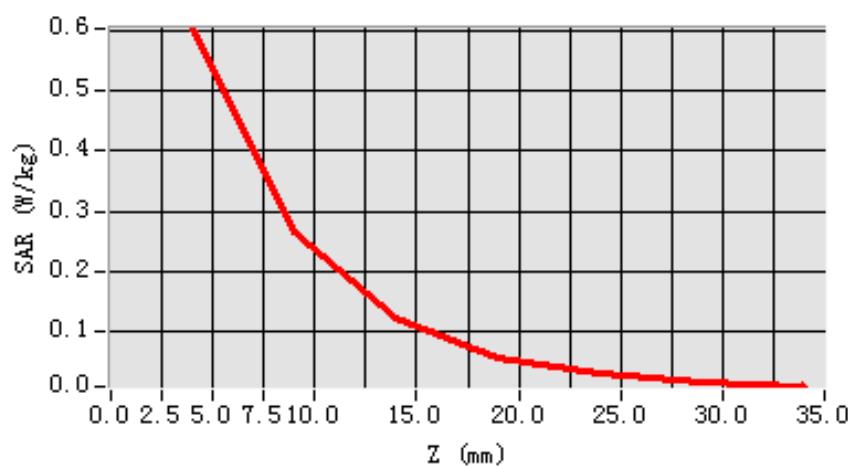
**Maximum location: X=12.00, Y=-7.00**

<b>SAR 10g (W/Kg)</b>	0.300881
<b>SAR 1g (W/Kg)</b>	0.598486

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6033	0.2652	0.1210	0.0578	0.0286	0.0148

**SAR, Z Axis Scan (X = 12, Y = -7)**



## MEASUREMENT 48

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 29 seconds

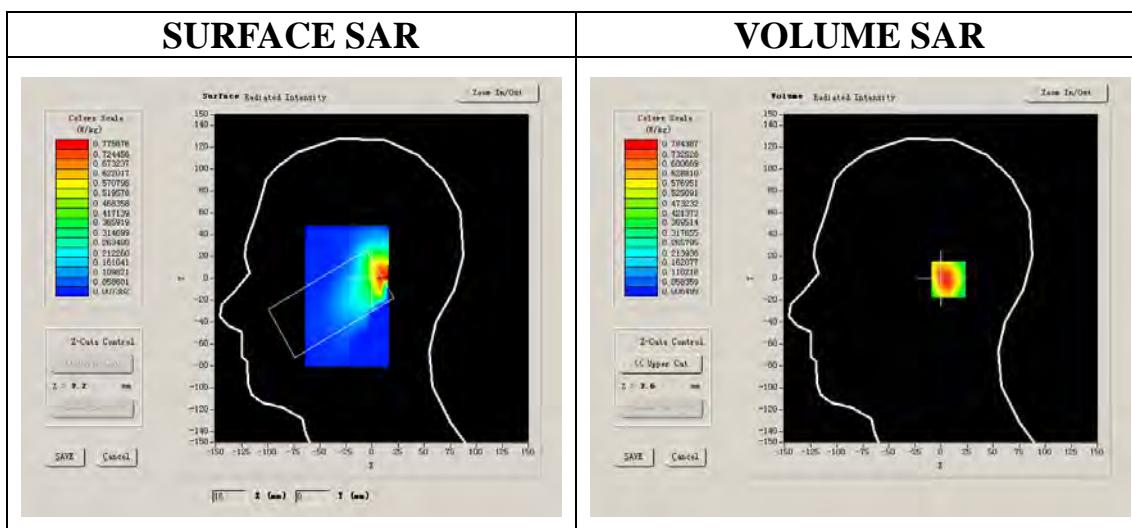
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	US_PCS
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Higher Band SAR (Channel 1175):

<b>Frequency (MHz)</b>	1908.750000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.475639
<b>Power drift (%)</b>	0.870000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



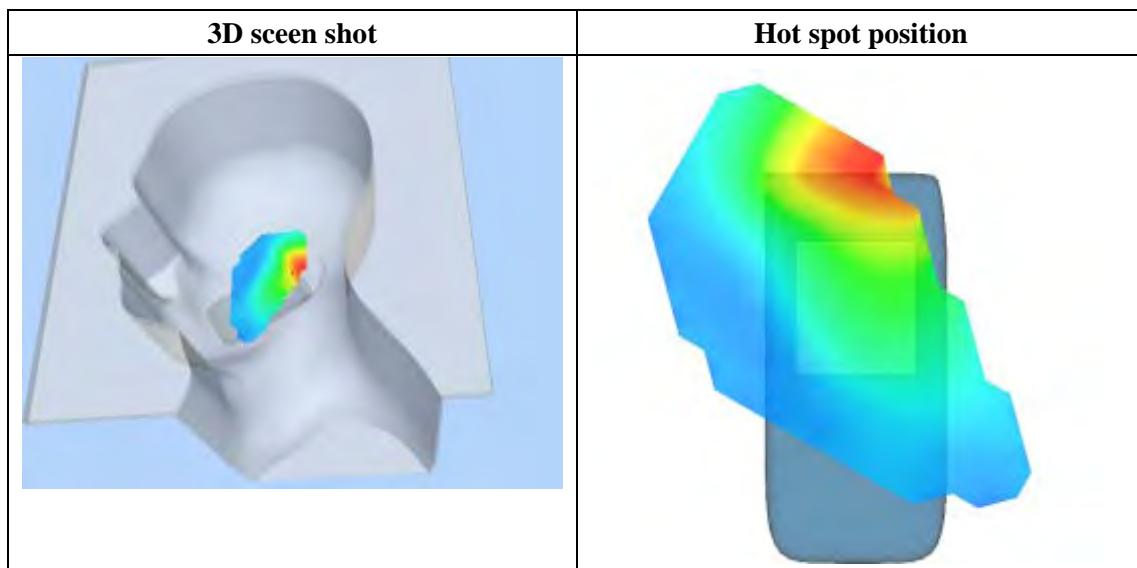
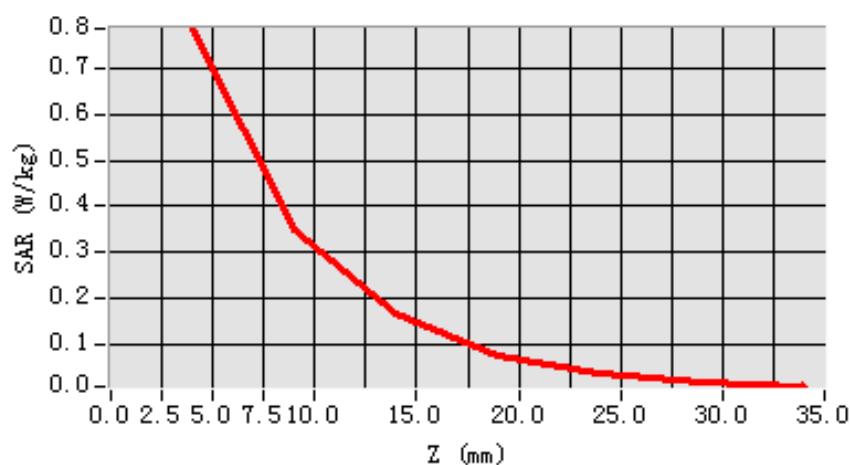
**Maximum location: X=16.00, Y=-1.00**

<b>SAR 10g (W/Kg)</b>	0.384169
<b>SAR 1g (W/Kg)</b>	0.764145

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.7844	0.3515	0.1665	0.0778	0.0370	0.0195

**SAR, Z Axis Scan (X = 16, Y = -1)**



## MEASUREMENT 49

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 28 seconds

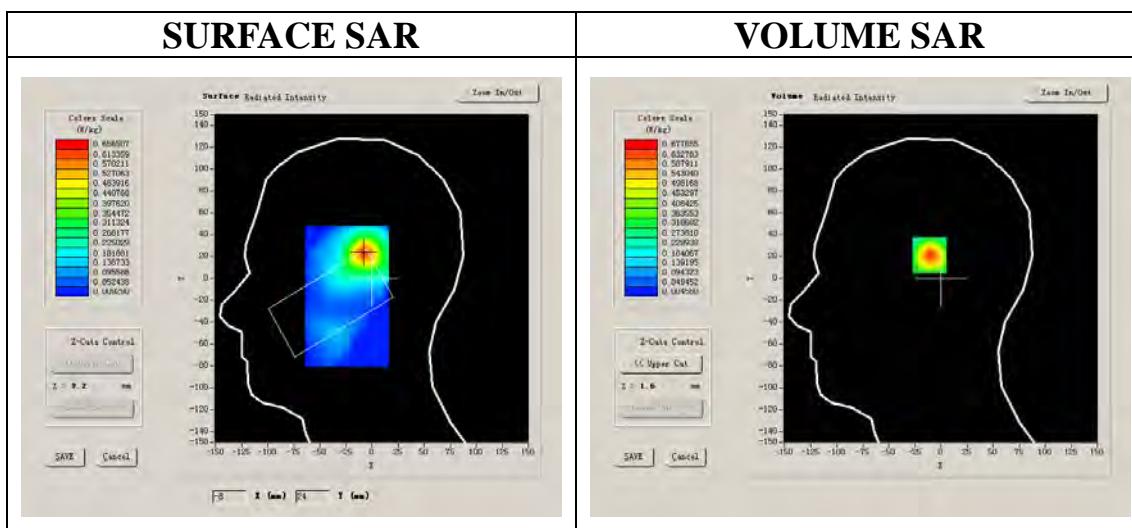
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	US_PCS
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.431186
<b>Power drift (%)</b>	2.220000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



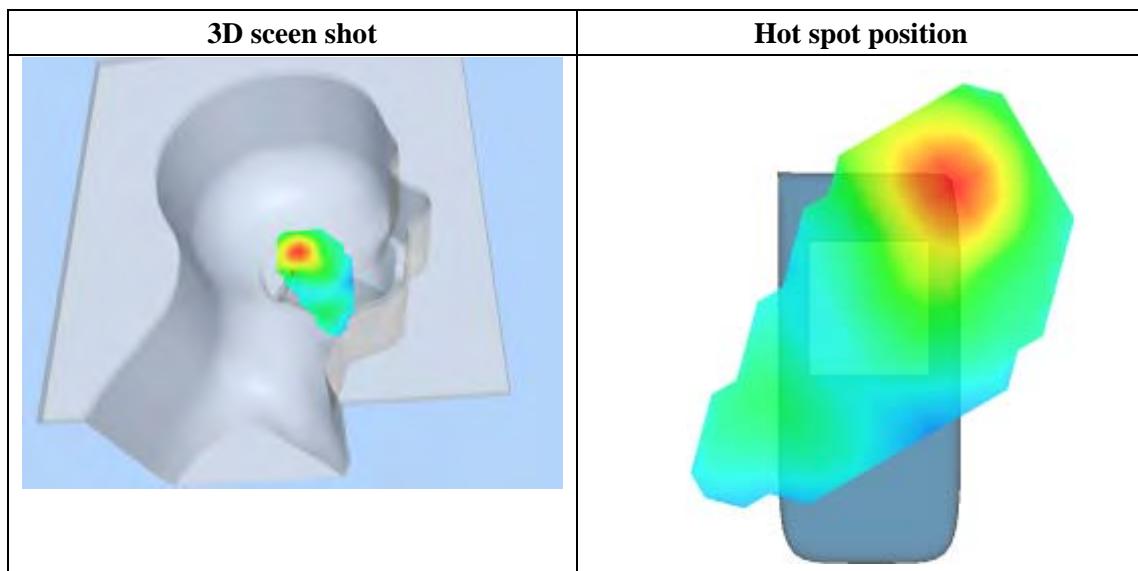
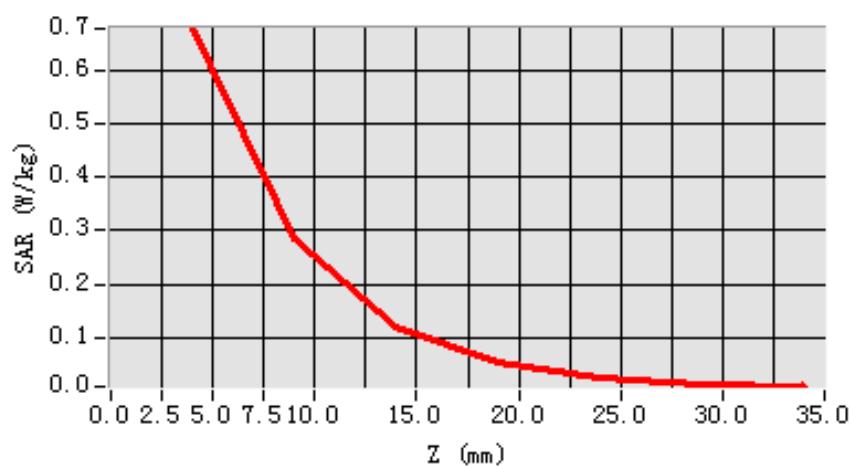
**Maximum location: X=-8.00, Y=24.00**

<b>SAR 10g (W/Kg)</b>	0.296744
<b>SAR 1g (W/Kg)</b>	0.633808

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6777	0.2845	0.1192	0.0531	0.0234	0.0129

**SAR, Z Axis Scan (X = -8, Y = 24)**



## MEASUREMENT 50

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 21 seconds

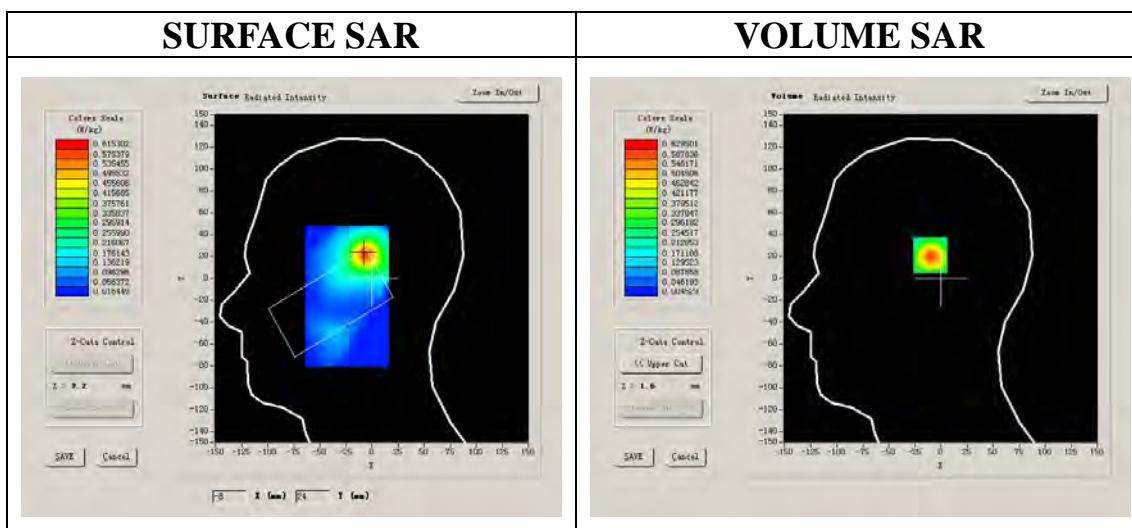
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	US_PCS
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Middle Band SAR (Channel 600):

<b>Frequency (MHz)</b>	1880.000000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.453412
<b>Power drift (%)</b>	-1.600000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



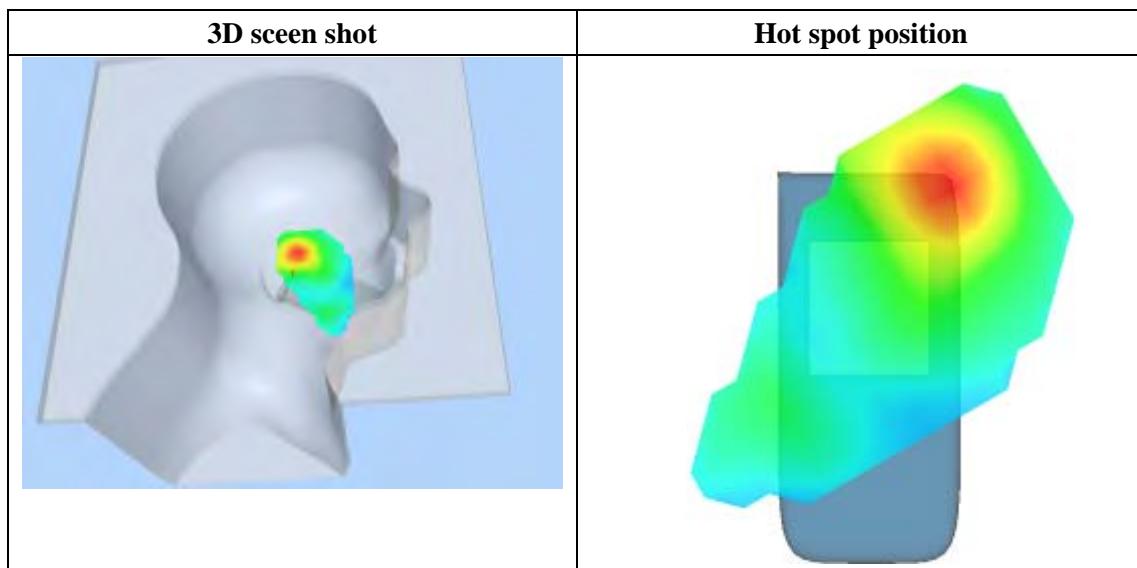
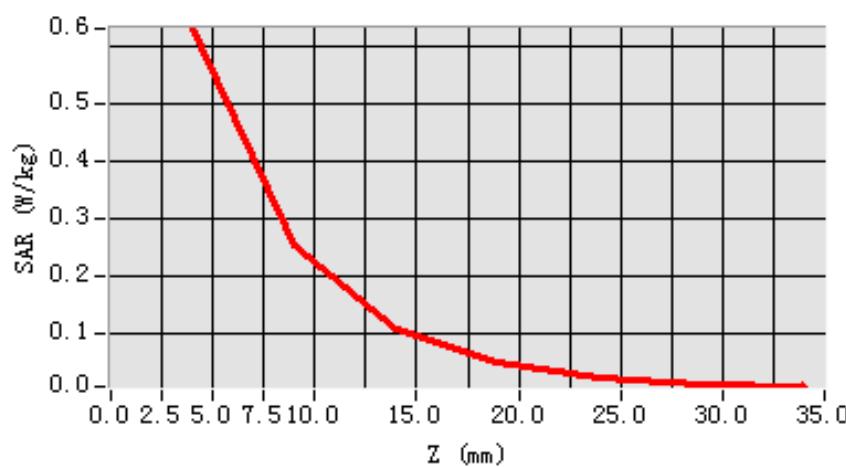
**Maximum location: X=-7.00, Y=23.00**

<b>SAR 10g (W/Kg)</b>	0.271574
<b>SAR 1g (W/Kg)</b>	0.588628

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6295	0.2535	0.1079	0.0485	0.0223	0.0117

**SAR, Z Axis Scan (X = -7, Y = 23)**



# MEASUREMENT 51

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 22 seconds

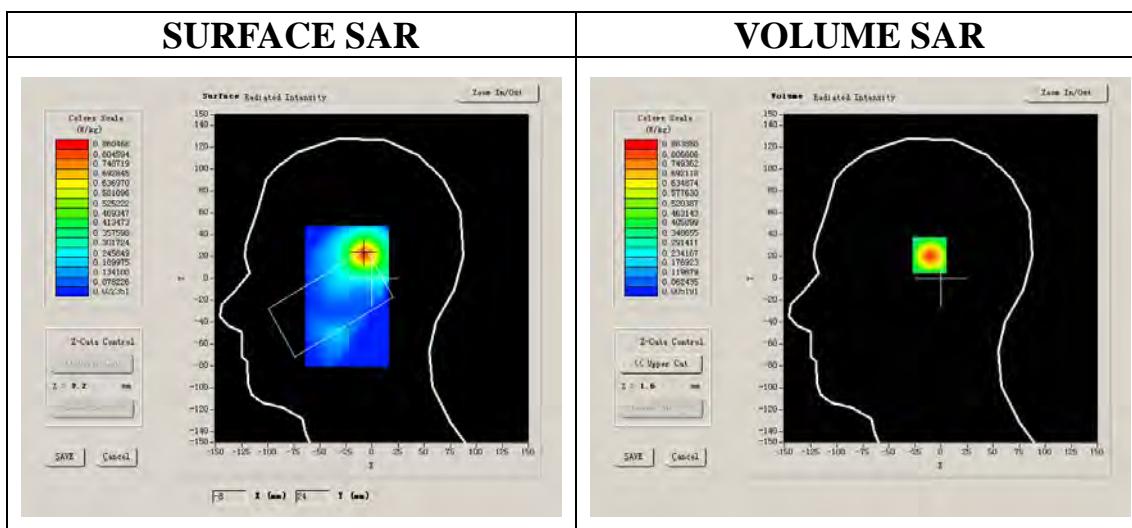
## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	US_PCS
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1175):

<b>Frequency (MHz)</b>	1908.750000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.475639
<b>Power drift (%)</b>	1.730000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



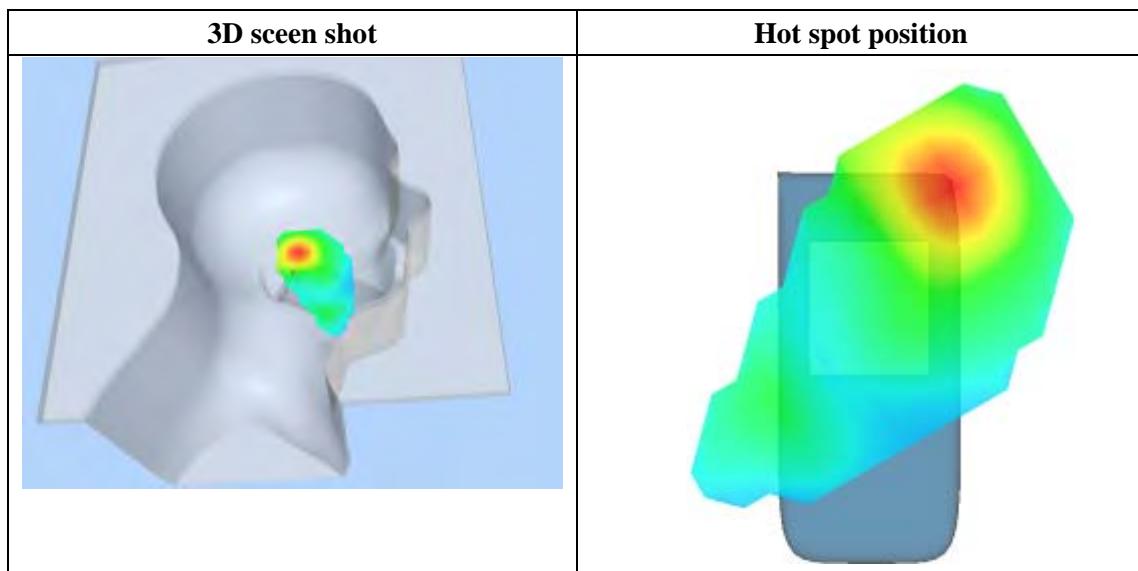
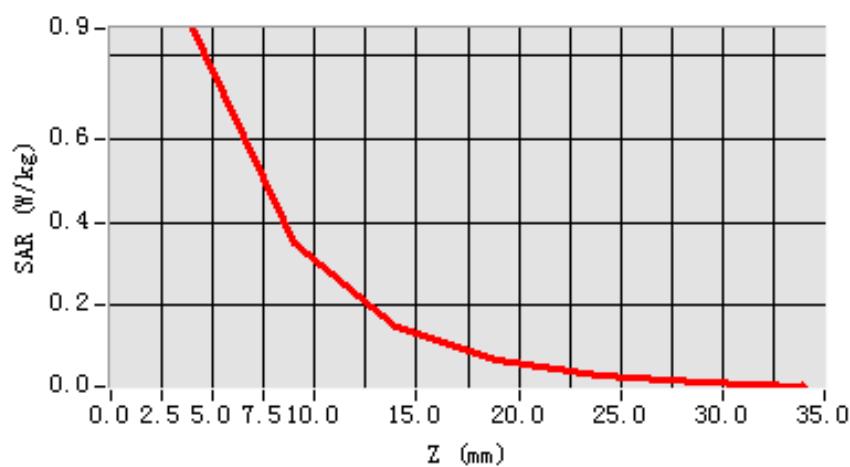
**Maximum location: X=-8.00, Y=23.00**

<b>SAR 10g (W/Kg)</b>	0.376721
<b>SAR 1g (W/Kg)</b>	0.810732

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.8639	0.3487	0.1518	0.0687	0.0307	0.0154

**SAR, Z Axis Scan (X = -8, Y = 23)**



## MEASUREMENT 52

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 27 seconds

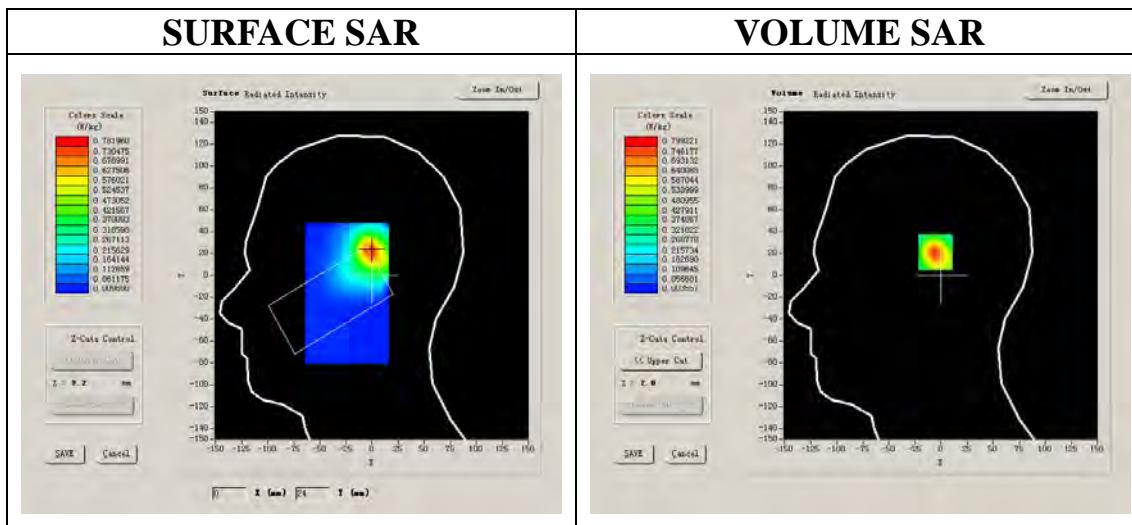
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	US_PCS
<b>Channels</b>	Low
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.431186
<b>Power drift (%)</b>	1.260000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



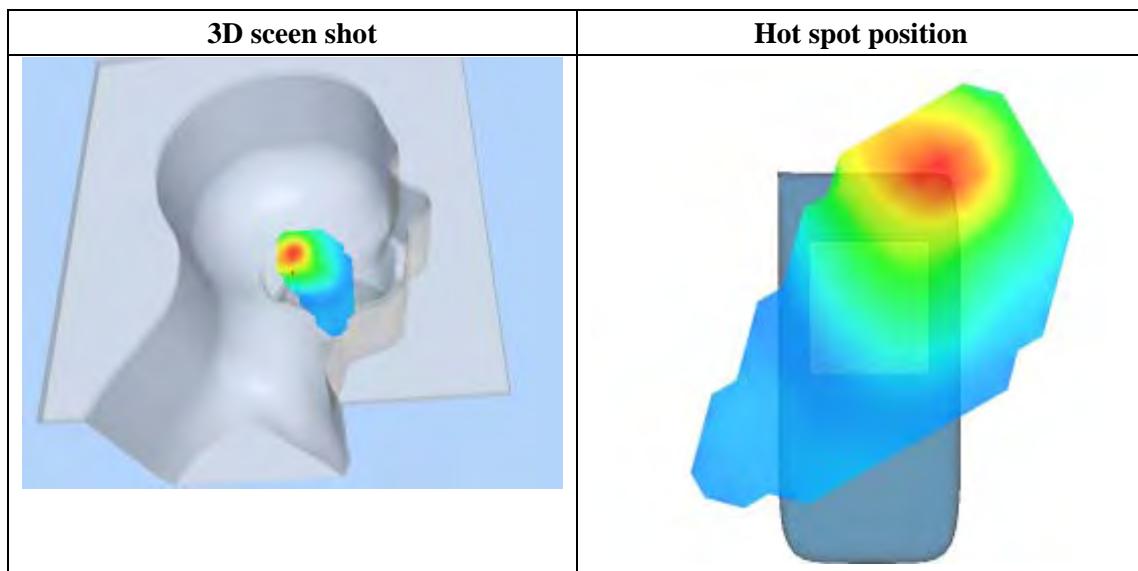
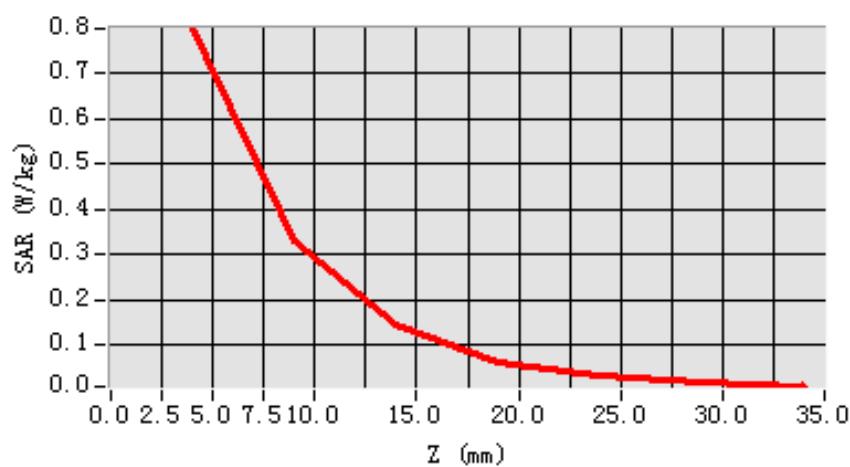
**Maximum location: X=-1.00, Y=23.00**

<b>SAR 10g (W/Kg)</b>	0.352574
<b>SAR 1g (W/Kg)</b>	0.749713

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.7992	0.3299	0.1433	0.0632	0.0297	0.0159

**SAR, Z Axis Scan (X = -1, Y = 23)**



# MEASUREMENT 53

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 36 seconds

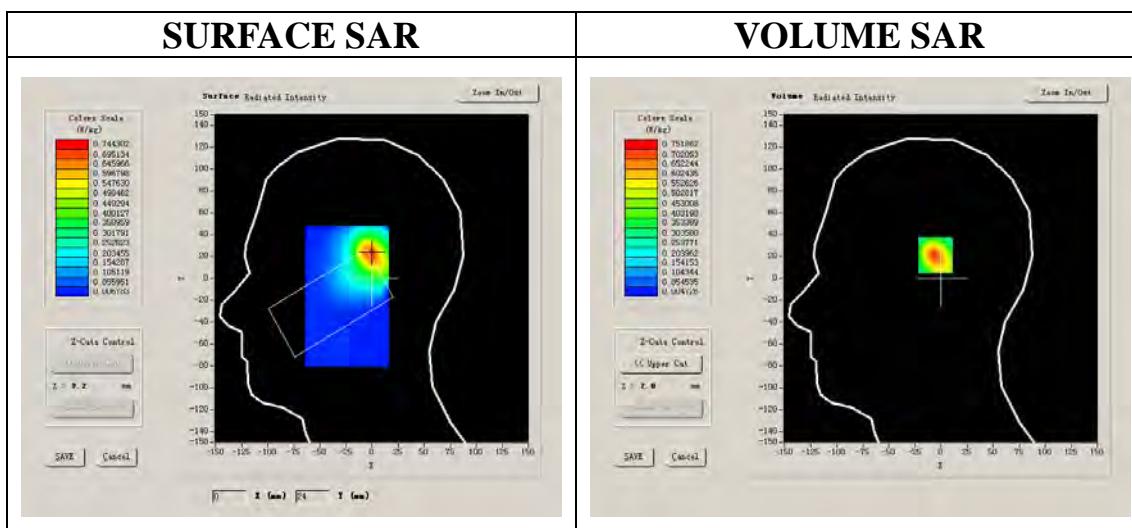
## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	US_PCS
<b>Channels</b>	Middle
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Middle Band SAR (Channel 600):

<b>Frequency (MHz)</b>	1880.000000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.453412
<b>Power drift (%)</b>	-1.130000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



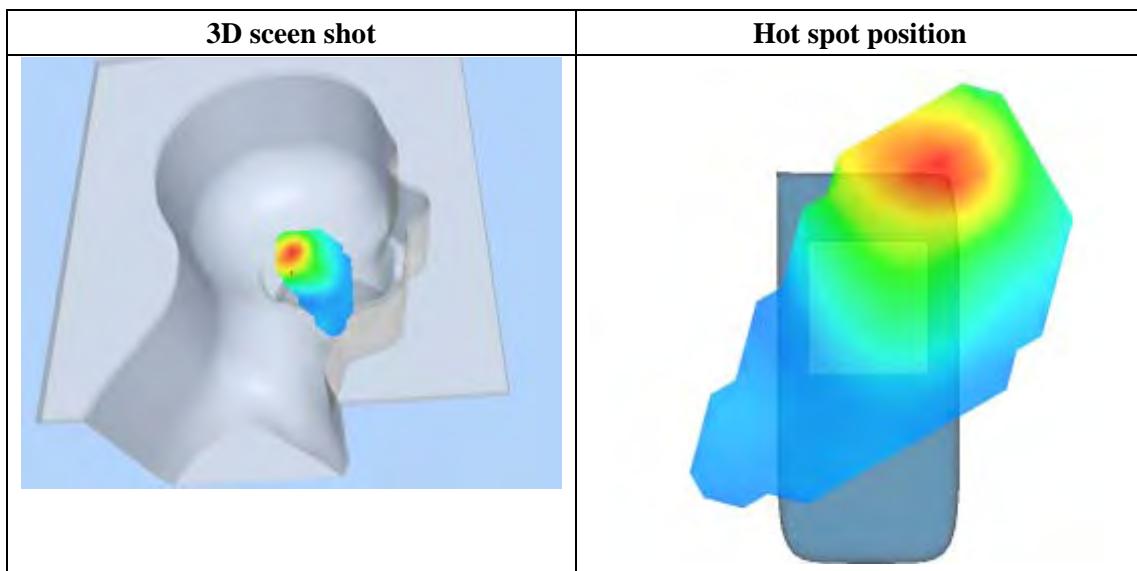
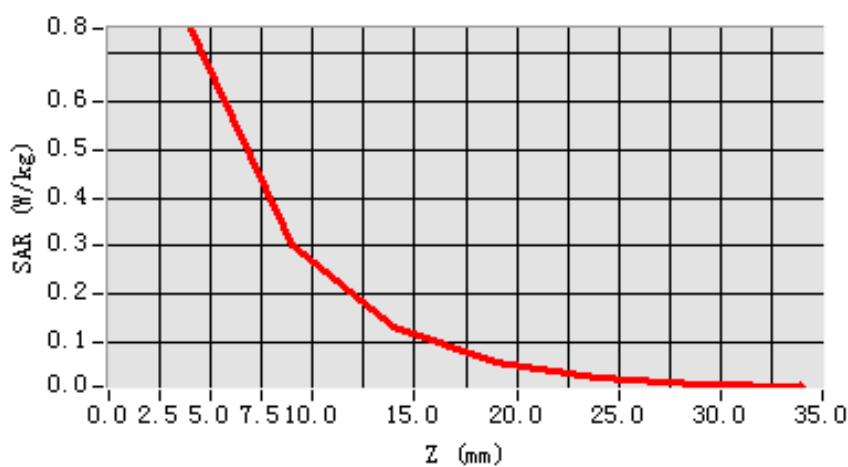
**Maximum location: X=-1.00, Y=23.00**

<b>SAR 10g (W/Kg)</b>	0.332006
<b>SAR 1g (W/Kg)</b>	0.703677

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.7519	0.3033	0.1312	0.0579	0.0259	0.0126

**SAR, Z Axis Scan (X = -1, Y = 23)**



## MEASUREMENT 54

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 29 seconds

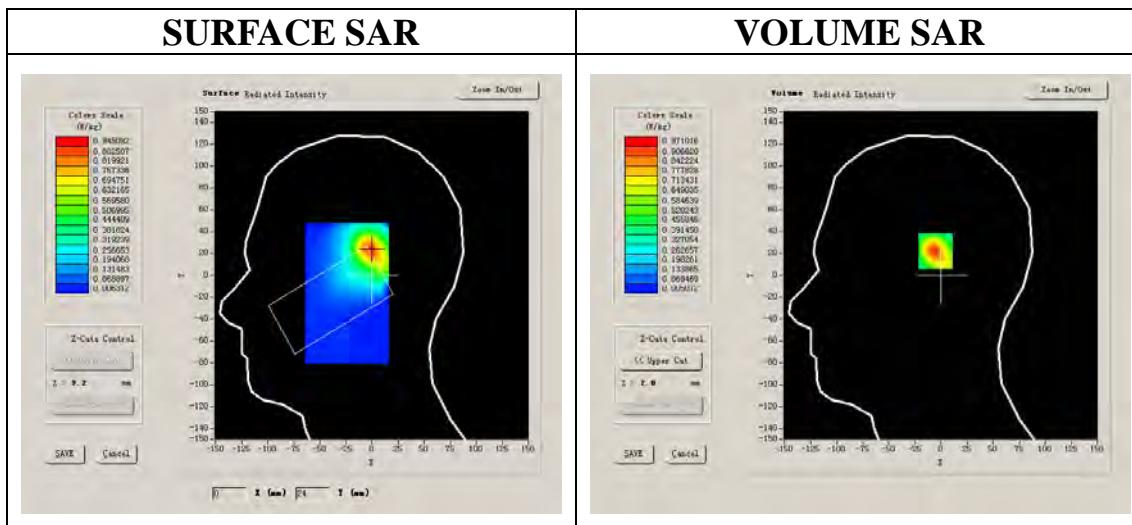
### A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	US_PCS
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Higher Band SAR (Channel 1175):

<b>Frequency (MHz)</b>	1908.750000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.475639
<b>Power drift (%)</b>	1.150000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



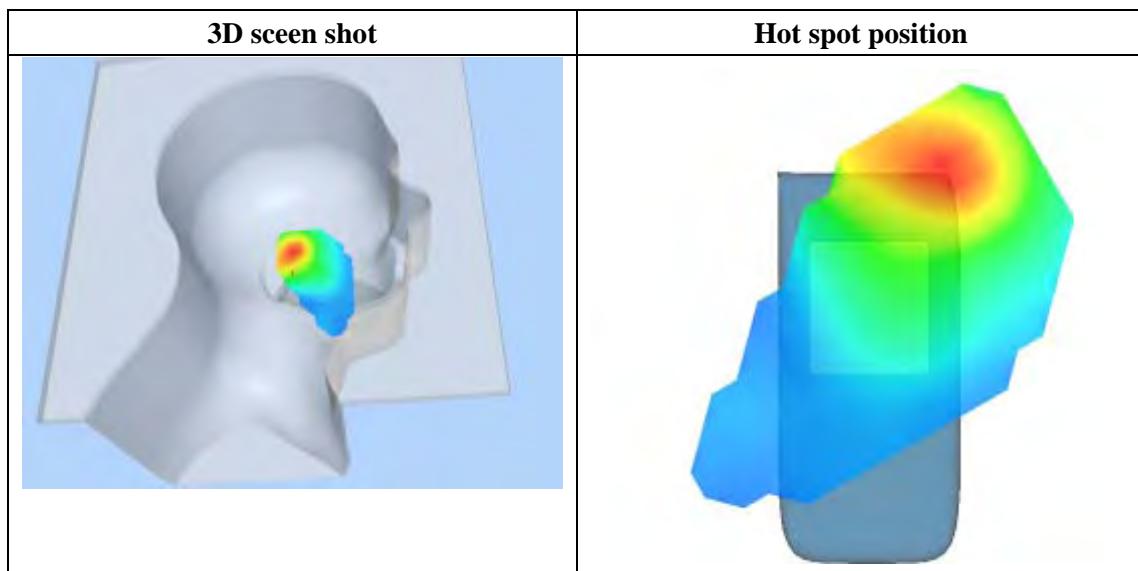
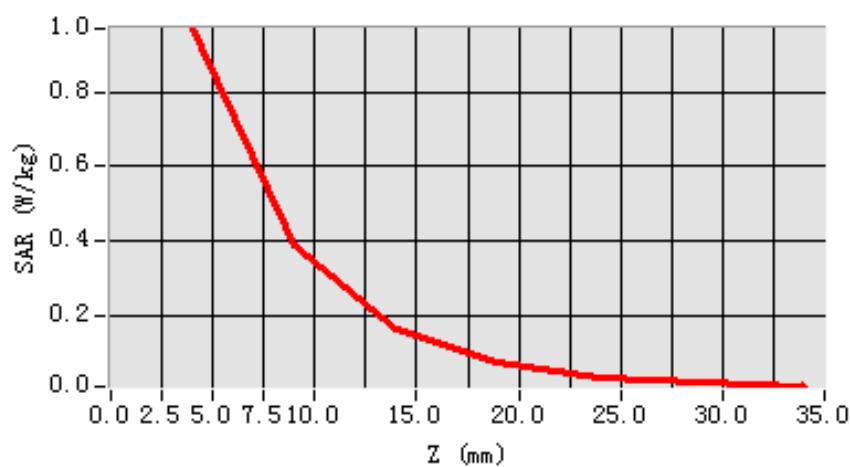
**Maximum location: X=-1.00, Y=24.00**

<b>SAR 10g (W/Kg)</b>	0.425652
<b>SAR 1g (W/Kg)</b>	0.908228

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.9710	0.3896	0.1649	0.0725	0.0334	0.0173

**SAR, Z Axis Scan (X = -1, Y = 24)**



# MEASUREMENT 55

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 12 seconds

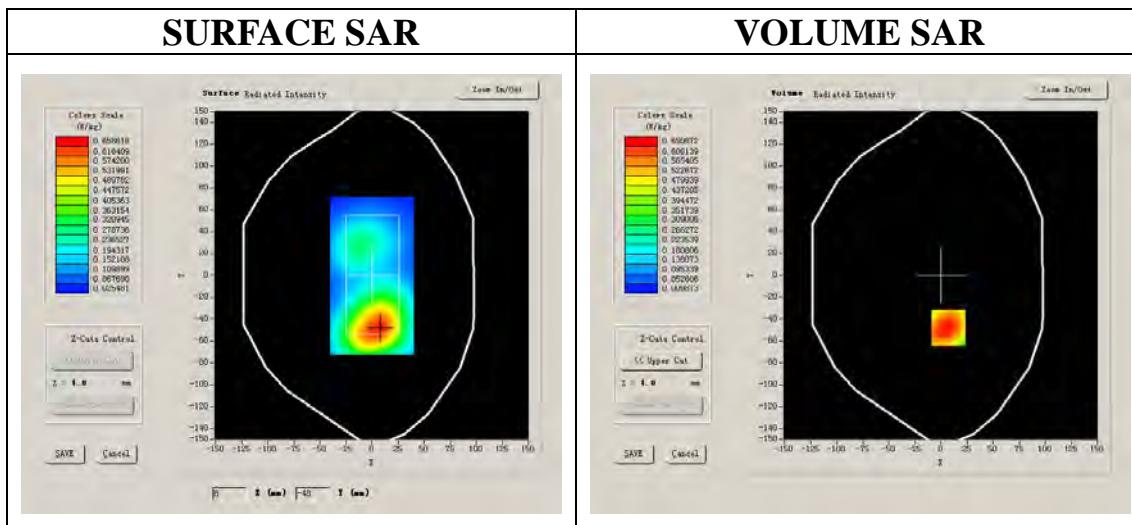
## A. Experimental conditions.

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

## B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.523949
<b>Power drift (%)</b>	0.330000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



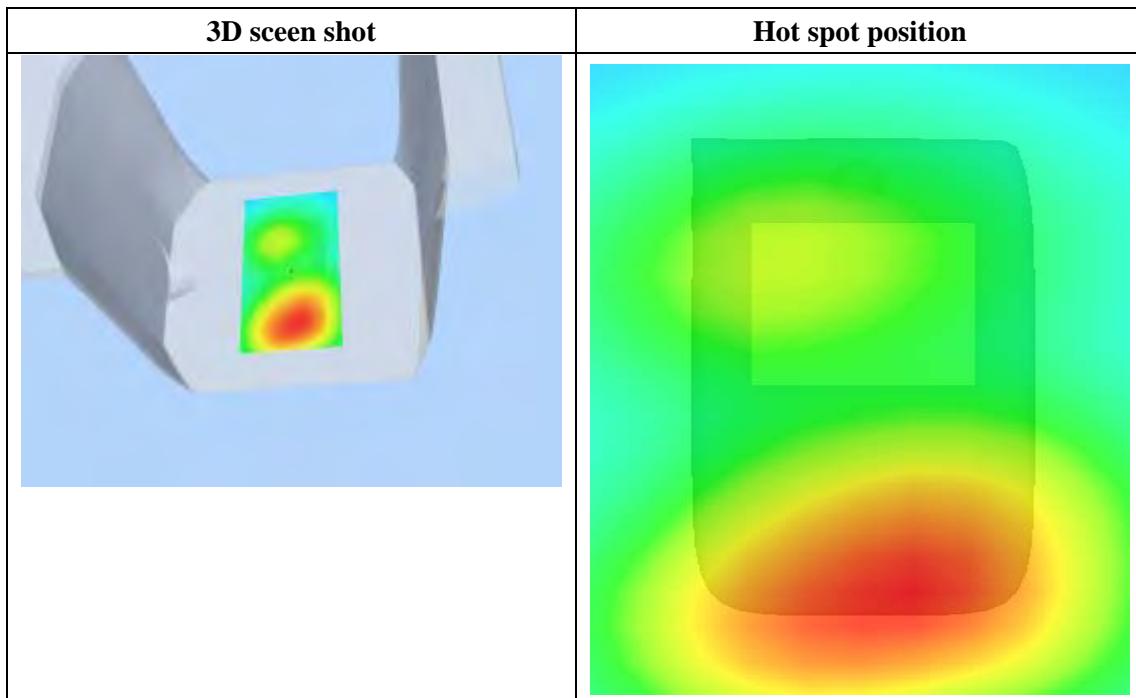
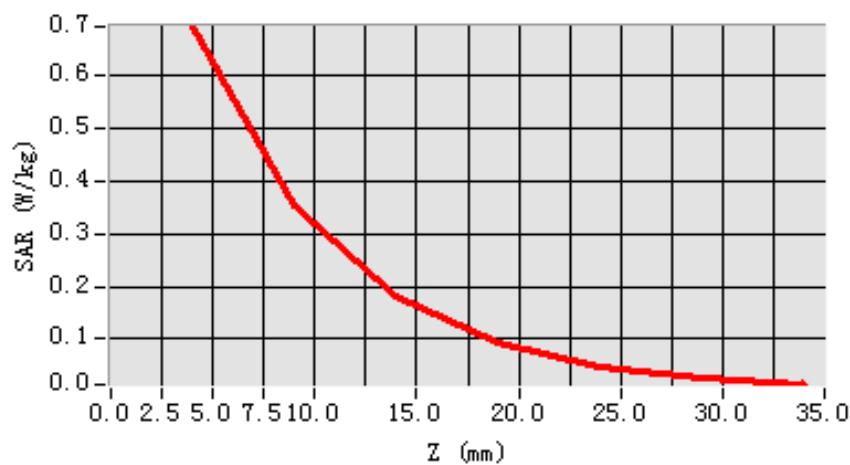
**Maximum location: X=7.00, Y=-48.00**

<b>SAR 10g (W/Kg)</b>	0.369739
<b>SAR 1g (W/Kg)</b>	0.671117

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6931	0.3539	0.1813	0.0922	0.0490	0.0265

**SAR, Z Axis Scan (X = 7, Y = -48)**



# MEASUREMENT 56

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 10 seconds

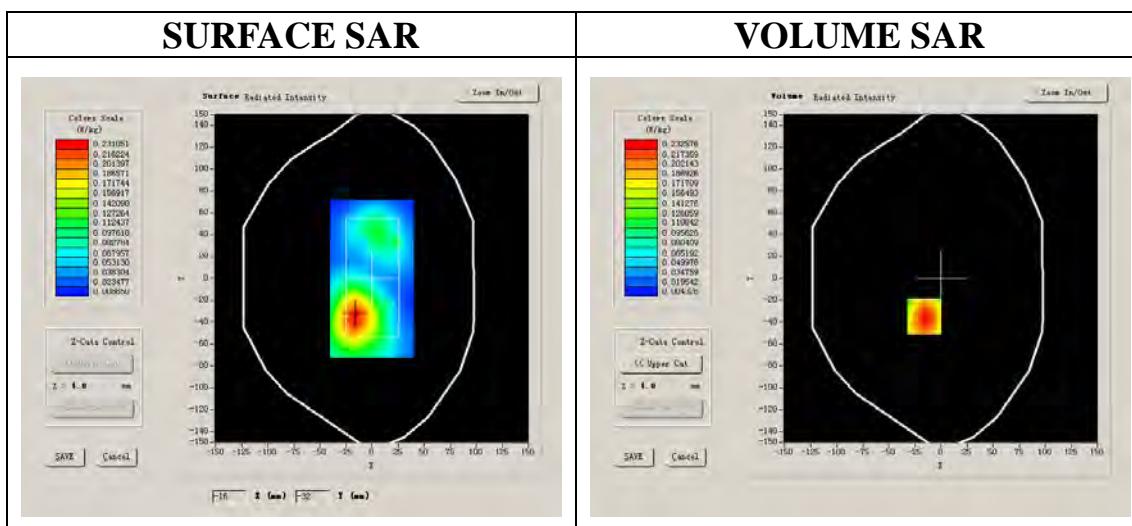
## A. Experimental conditions.

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

## B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.523949
<b>Power drift (%)</b>	-0.300000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



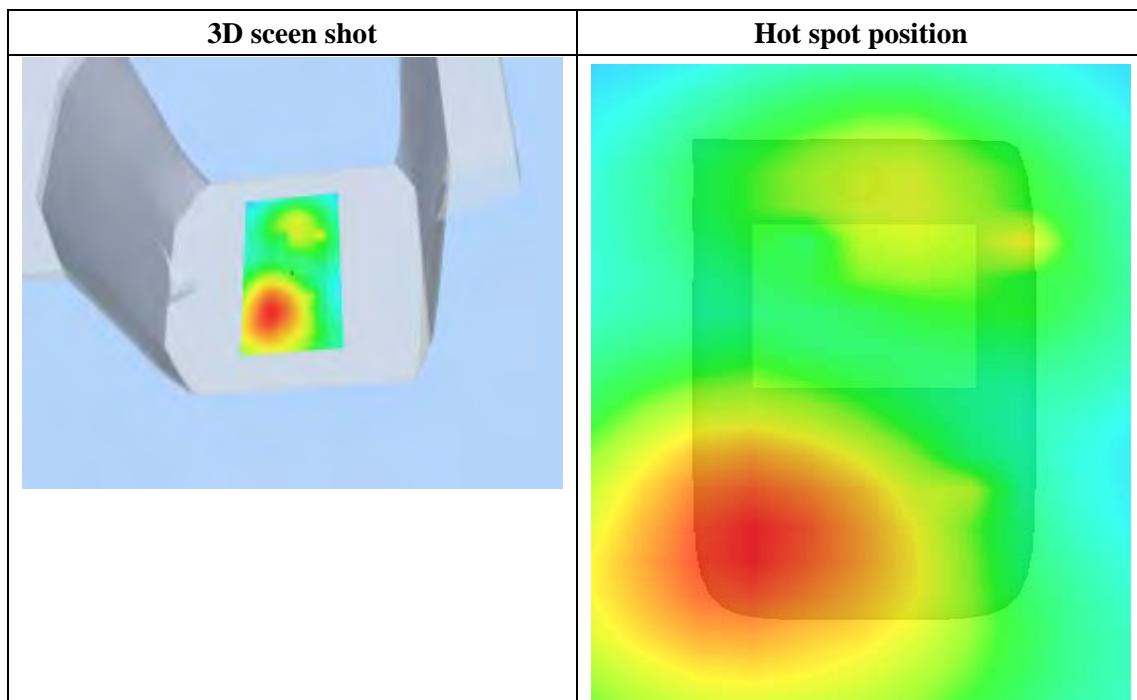
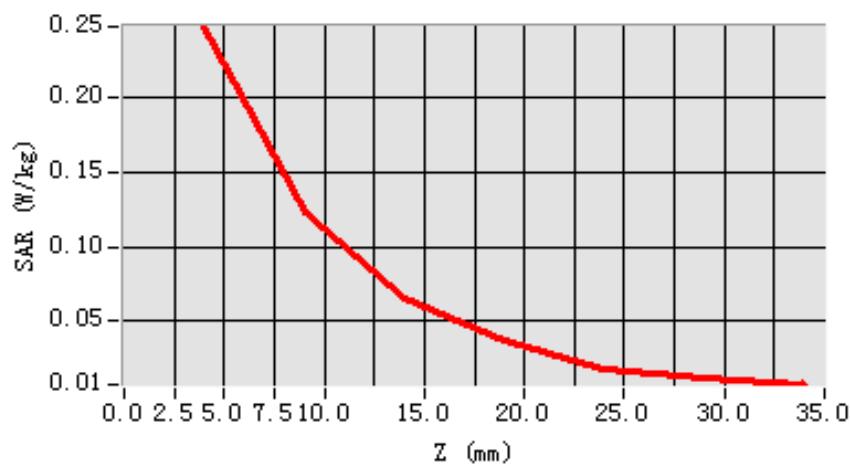
**Maximum location: X=-16.00, Y=-35.00**

<b>SAR 10g (W/Kg)</b>	0.130080
<b>SAR 1g (W/Kg)</b>	0.238362

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2477	0.1238	0.0647	0.0373	0.0181	0.0117

**SAR, Z Axis Scan (X = -16, Y = -35)**



## MEASUREMENT 57

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 10 seconds

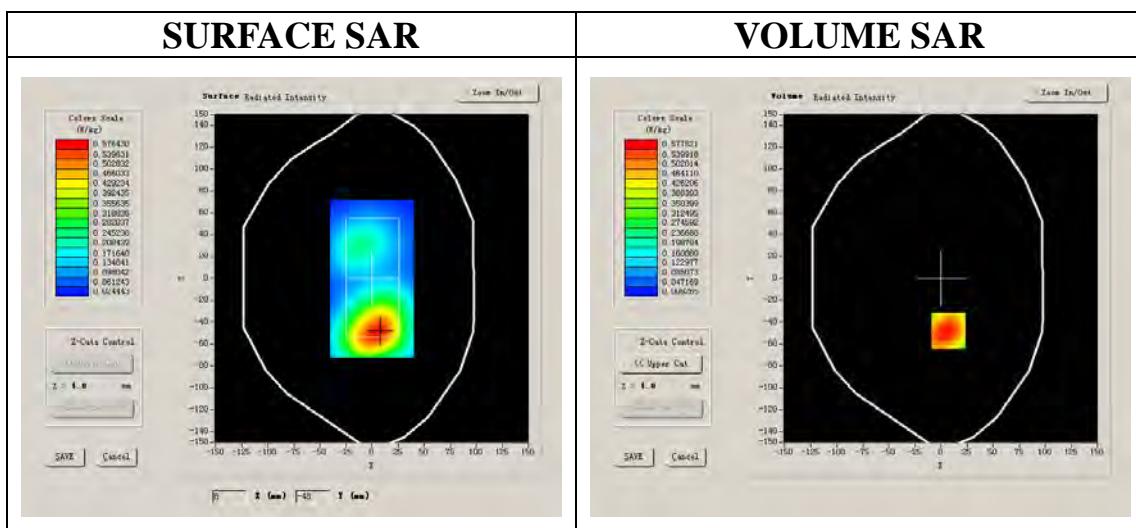
### A. Experimental conditions.

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

### B. SAR Measurement Results

Middle Band SAR (Channel 600):

<b>Frequency (MHz)</b>	1880.000000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.547616
<b>Power drift (%)</b>	-0.070000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



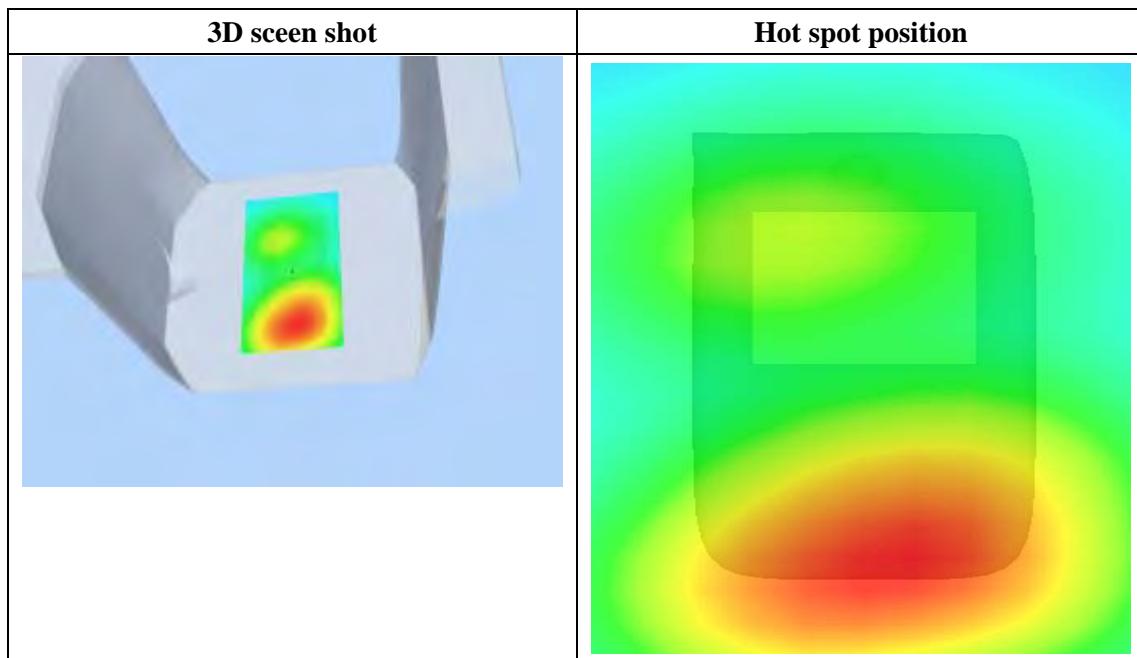
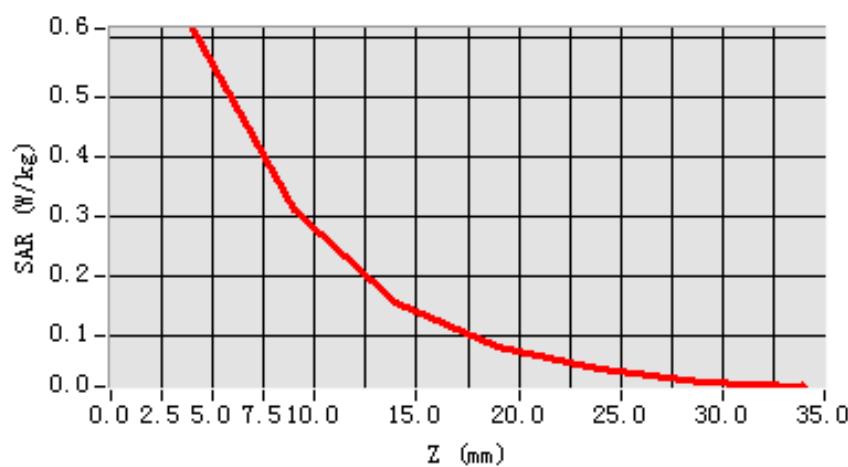
**Maximum location: X=7.00, Y=-48.00**

<b>SAR 10g (W/Kg)</b>	0.327101
<b>SAR 1g (W/Kg)</b>	0.595740

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6153	0.3114	0.1556	0.0795	0.0419	0.0231

**SAR, Z Axis Scan (X = 7, Y = -48)**



## MEASUREMENT 58

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 11 seconds

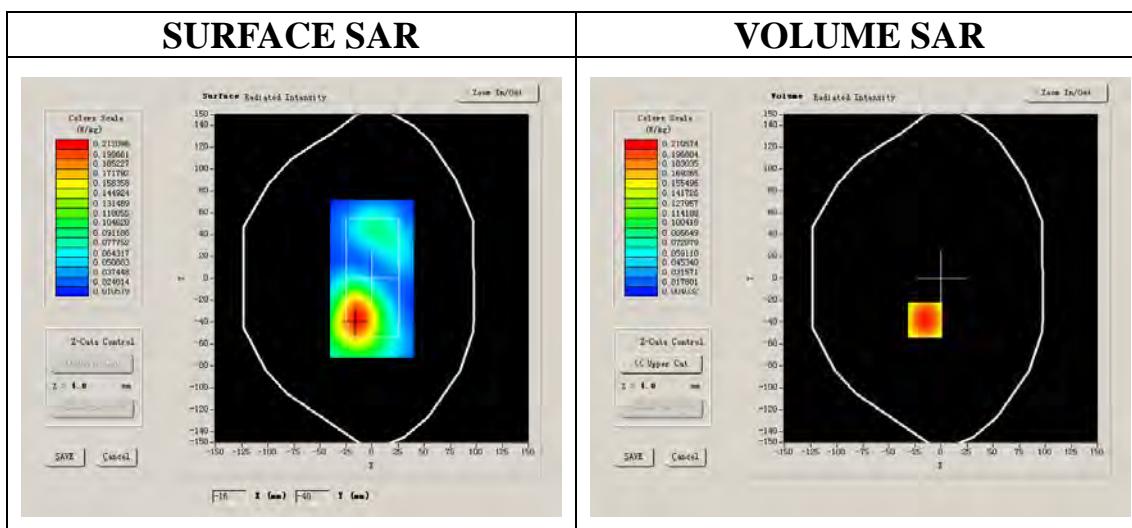
### A. Experimental conditions.

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

### B. SAR Measurement Results

Middle Band SAR (Channel 600):

<b>Frequency (MHz)</b>	1880.000000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.547616
<b>Power drift (%)</b>	-1.240000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



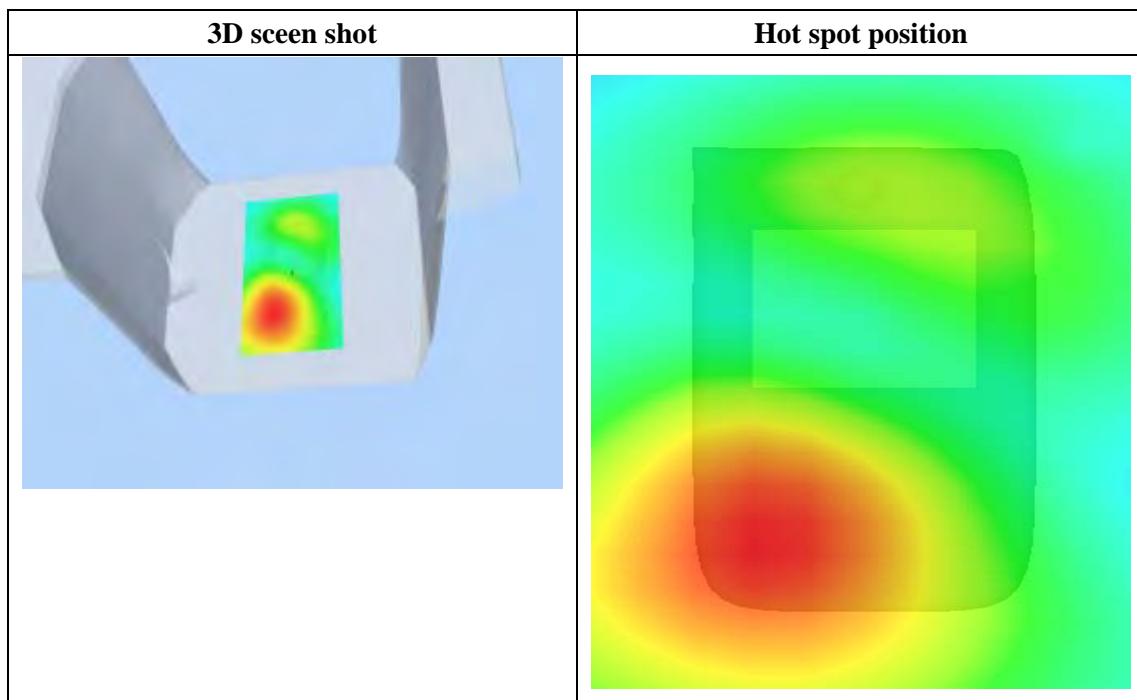
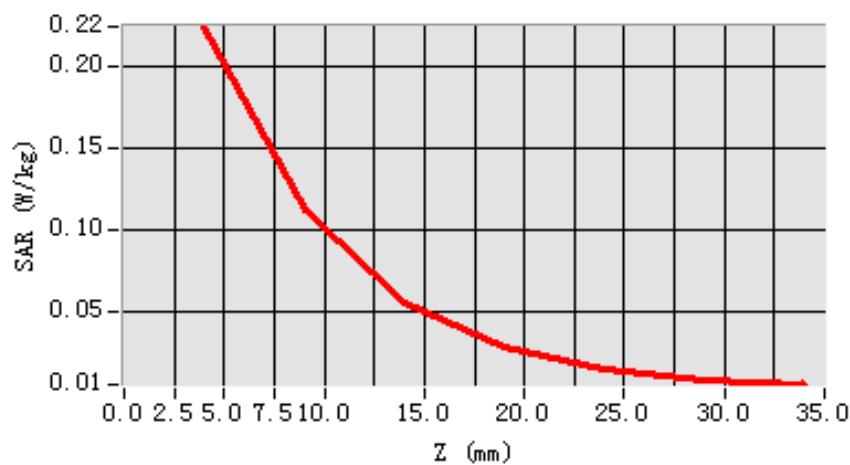
**Maximum location: X=-15.00, Y=-38.00**

<b>SAR 10g (W/Kg)</b>	0.119605
<b>SAR 1g (W/Kg)</b>	0.216038

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2242	0.1131	0.0562	0.0289	0.0161	0.0094

**SAR, Z Axis Scan (X = -15, Y = -38)**



## MEASUREMENT 59

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 15 seconds

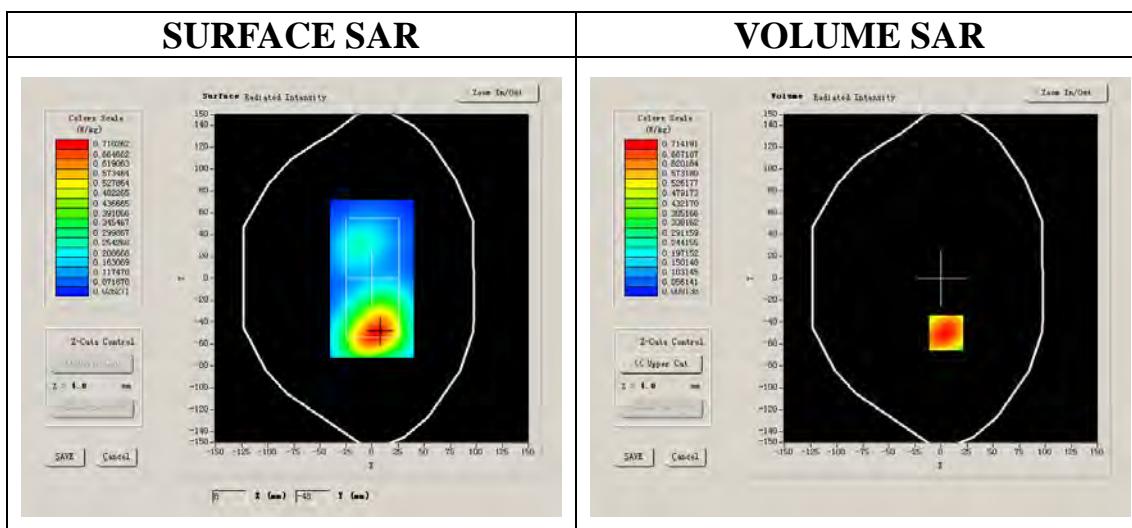
### A. Experimental conditions.

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

### B. SAR Measurement Results

Higher Band SAR (Channel 1175):

<b>Frequency (MHz)</b>	1908.750000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.571283
<b>Power drift (%)</b>	-0.110000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1

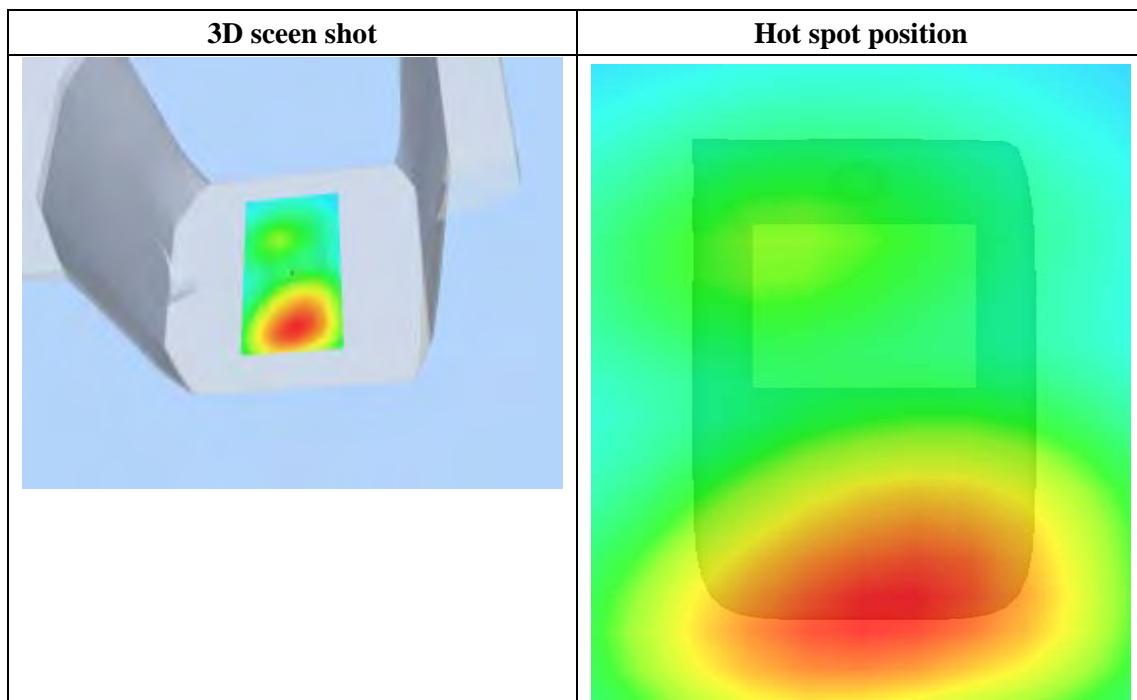
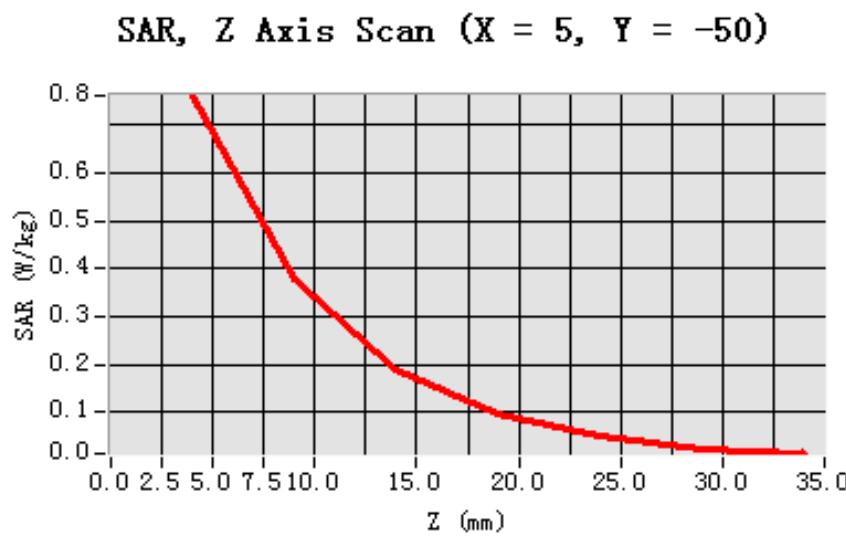


**Maximum location: X=5.00, Y=-50.00**

<b>SAR 10g (W/Kg)</b>	0.402655
<b>SAR 1g (W/Kg)</b>	0.738487

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.7605	0.3799	0.1913	0.0971	0.0500	0.0231



# MEASUREMENT 60

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 11 seconds

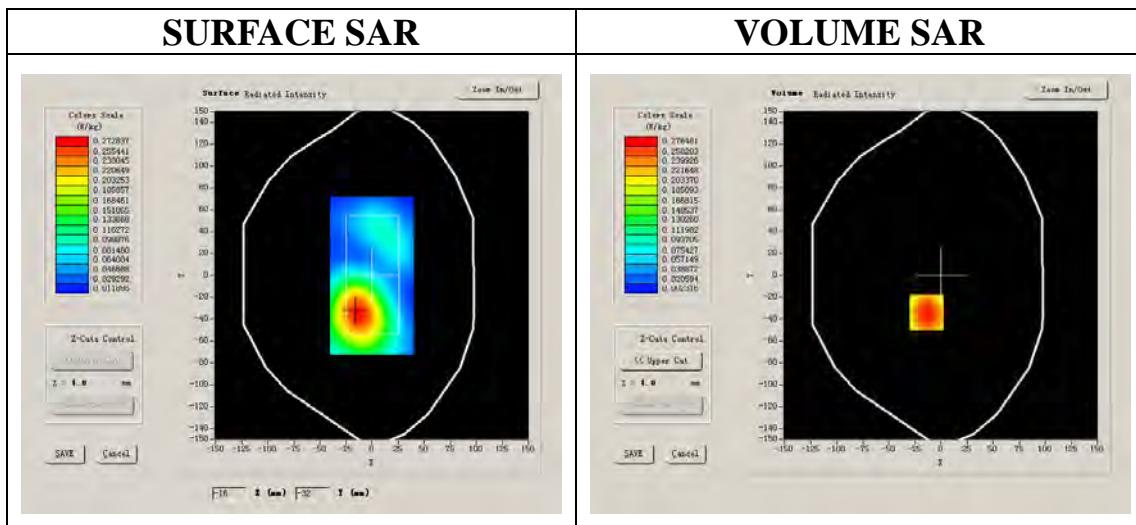
## A. Experimental conditions.

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

## B. SAR Measurement Results

Higher Band SAR (Channel 1175):

<b>Frequency (MHz)</b>	1908.750000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.571283
<b>Power drift (%)</b>	-1.299988
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



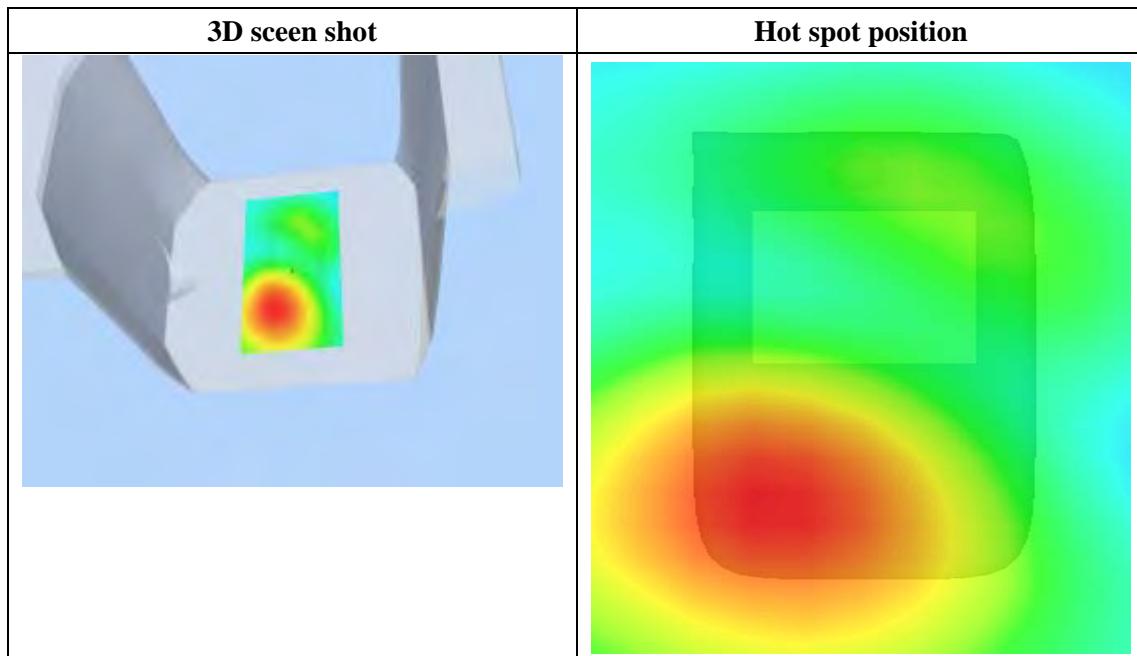
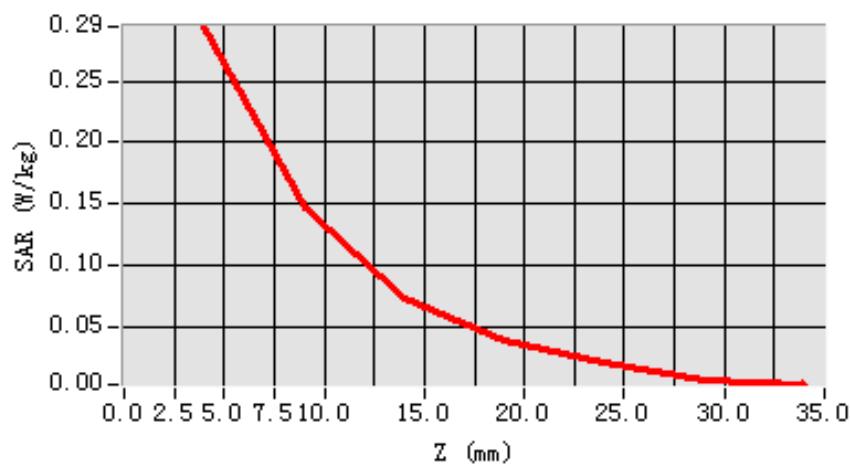
**Maximum location: X=-14.00, Y=-34.00**

<b>SAR 10g (W/Kg)</b>	0.157050
<b>SAR 1g (W/Kg)</b>	0.285781

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2944	0.1472	0.0729	0.0388	0.0201	0.0072

**SAR, Z Axis Scan (X = -14, Y = -34)**



# MEASUREMENT 61

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 17 seconds

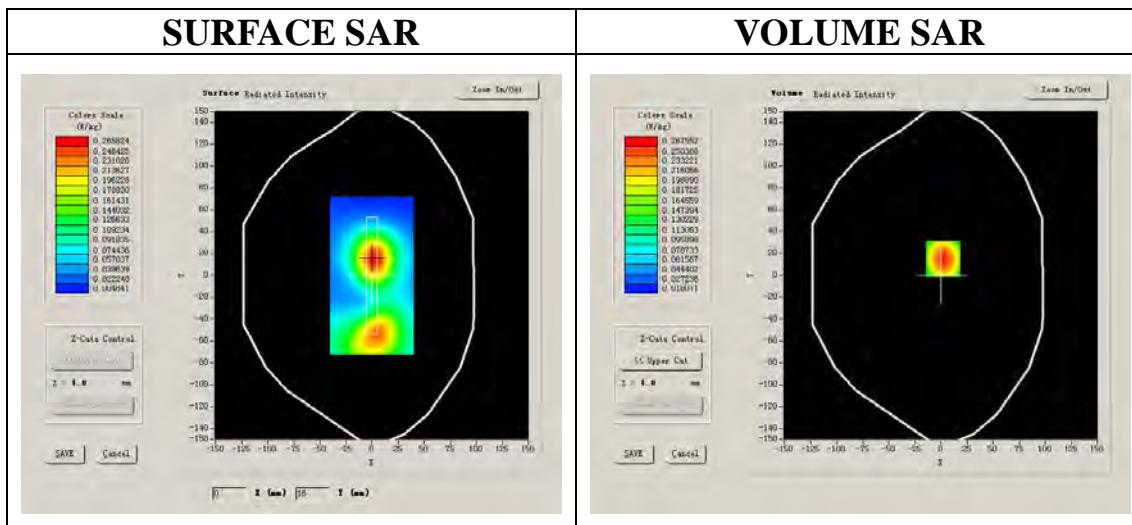
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	US_PCS
<b>Channels</b>	Low (Edge B)
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.547616
<b>Power Drift (%)</b>	0.190000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



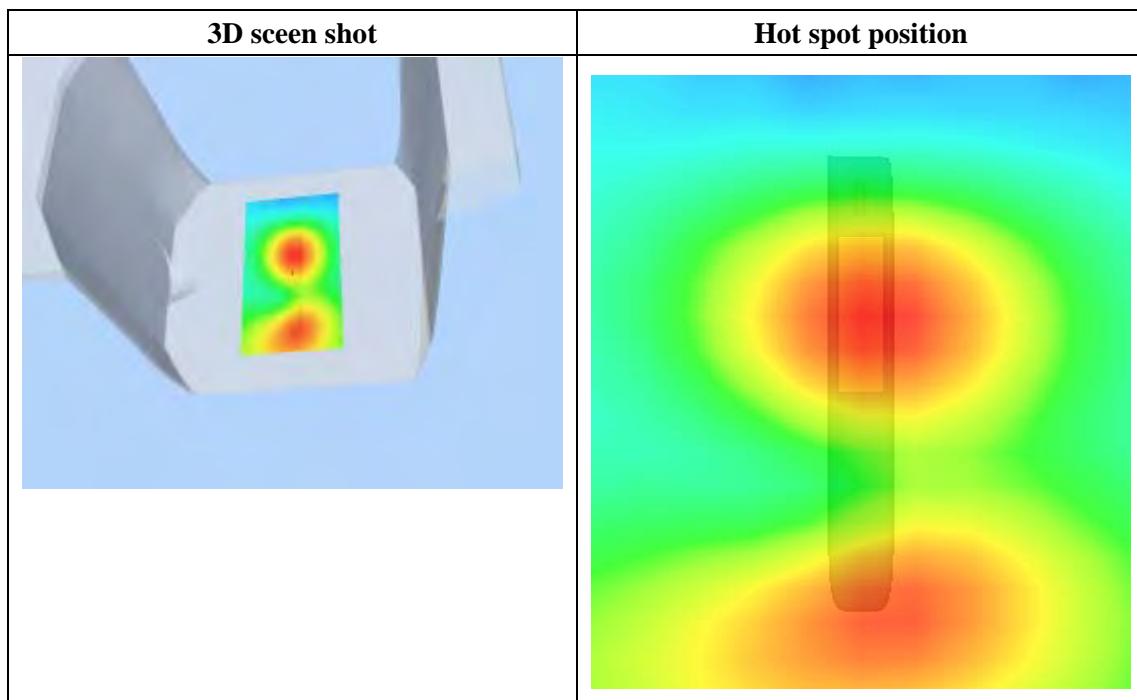
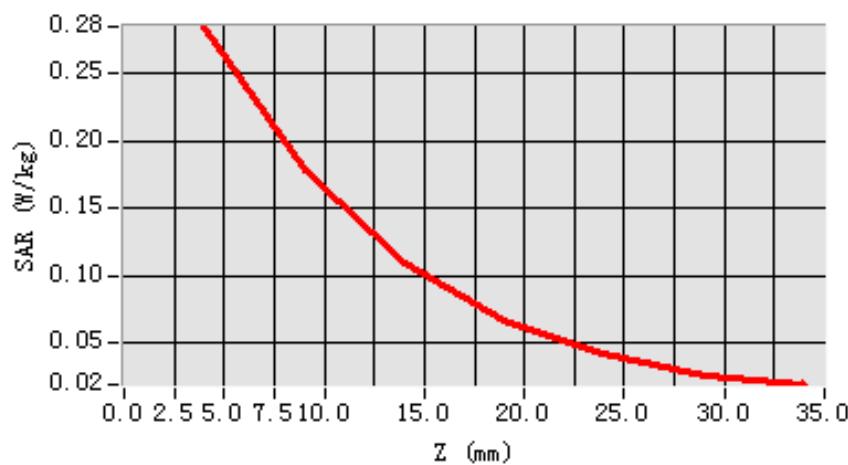
**Maximum location: X=2.00, Y=15.00**

<b>SAR 10g (W/Kg)</b>	0.161124
<b>SAR 1g (W/Kg)</b>	0.269521

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2849	0.1777	0.1103	0.0663	0.0432	0.0268

**SAR, Z Axis Scan (X = 2, Y = 15)**



# MEASUREMENT 62

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 17 seconds

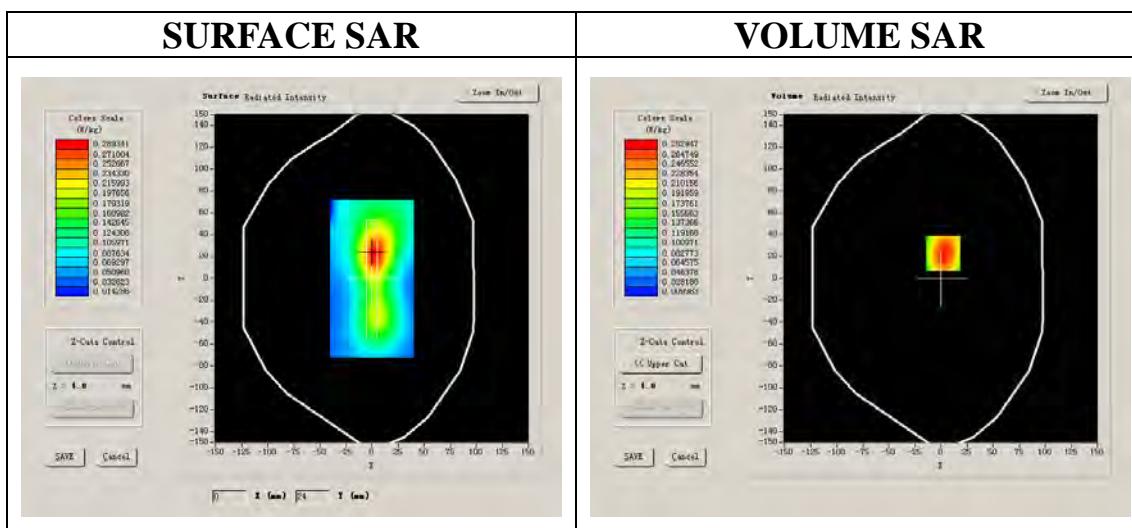
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	US_PCS
<b>Channels</b>	Low (Edge D)
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.547616
<b>Power Drift (%)</b>	-2.430000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



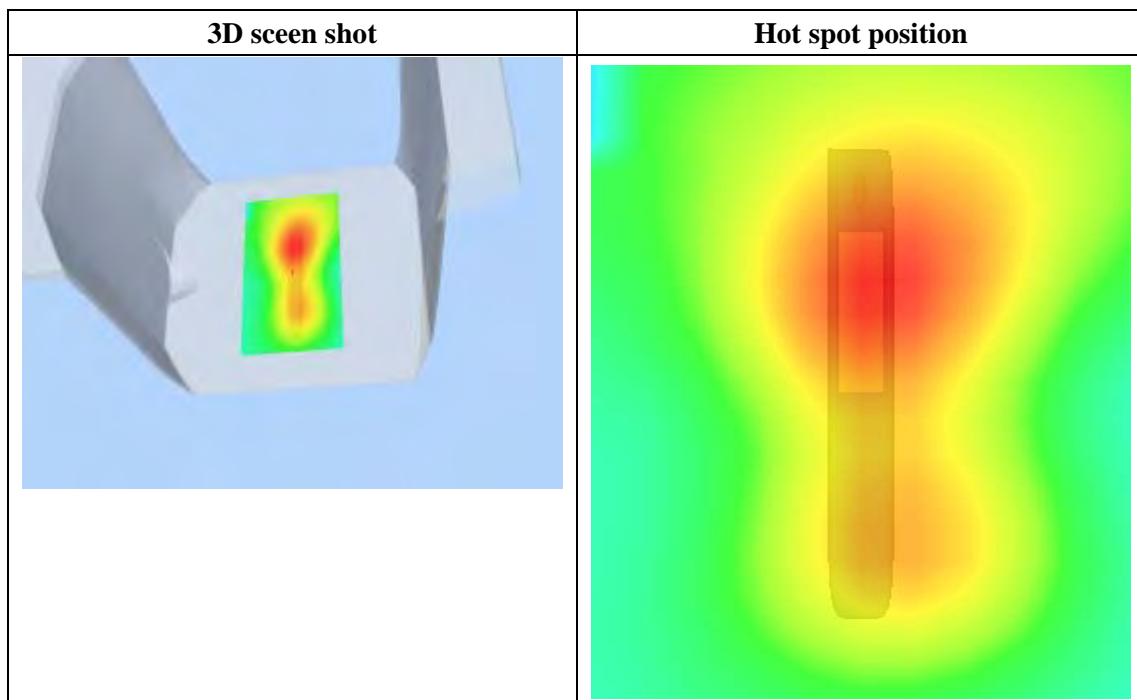
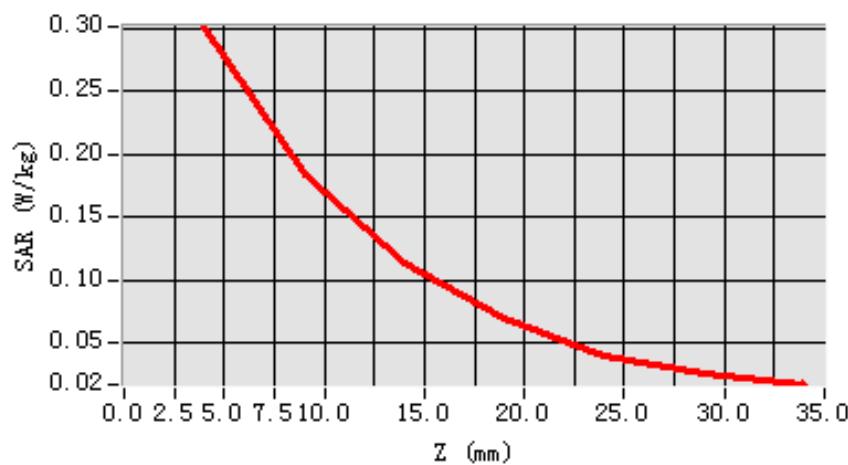
**Maximum location: X=2.00, Y=23.00**

<b>SAR 10g (W/Kg)</b>	0.172801
<b>SAR 1g (W/Kg)</b>	0.288534

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3013	0.1828	0.1137	0.0699	0.0393	0.0256

**SAR, Z Axis Scan (X = 2, Y = 23)**



# MEASUREMENT 63

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 7 seconds

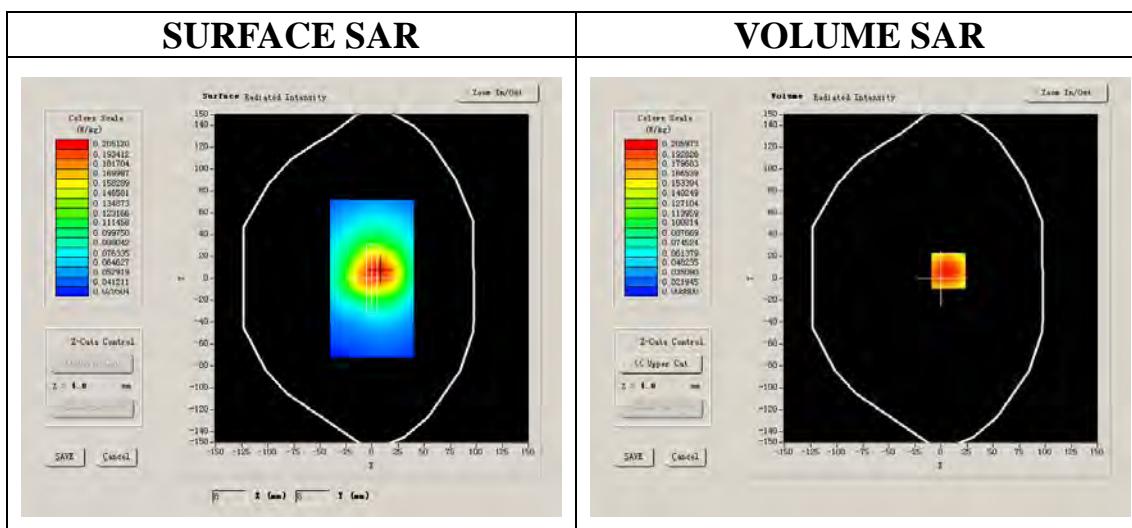
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	US_PCS
<b>Channels</b>	Low (Edge A)
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Lower Band SAR (Channel 25):

<b>Frequency (MHz)</b>	1851.250000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.523949
<b>Power Drift (%)</b>	0.950000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



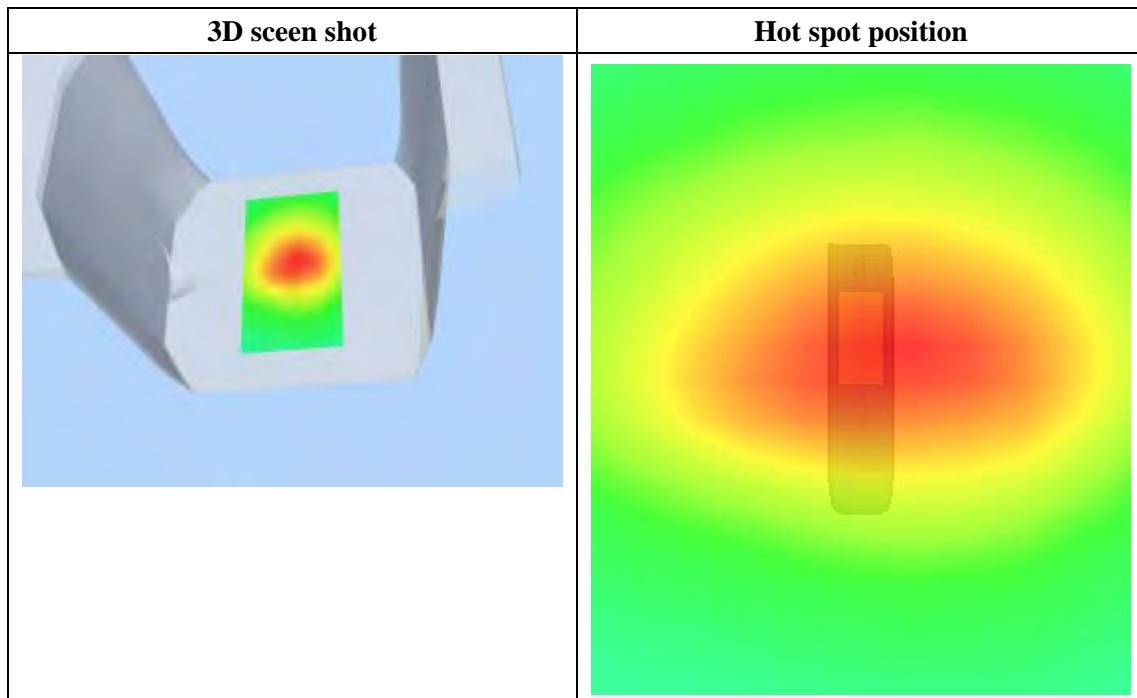
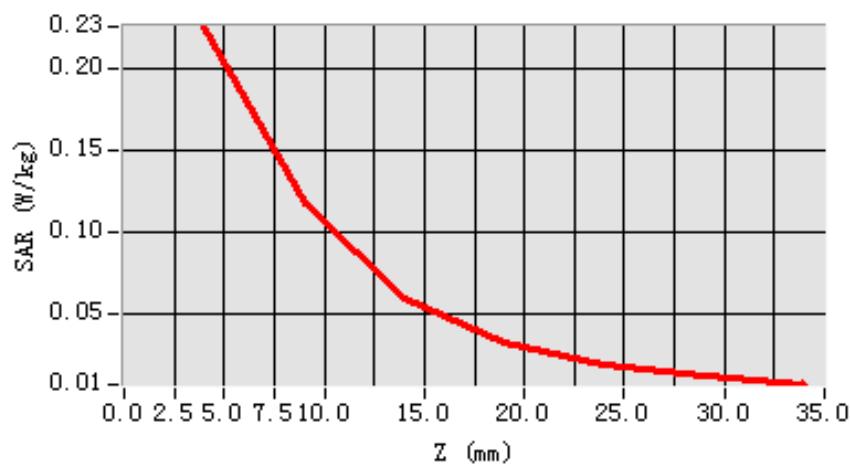
**Maximum location: X=9.00, Y=30.00**

<b>SAR 10g (W/Kg)</b>	0.122531
<b>SAR 1g (W/Kg)</b>	0.217918

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.2261	0.1180	0.0604	0.0330	0.0193	0.0122

**SAR, Z Axis Scan (X = 9, Y = 30)**



# MEASUREMENT 64

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 20 seconds

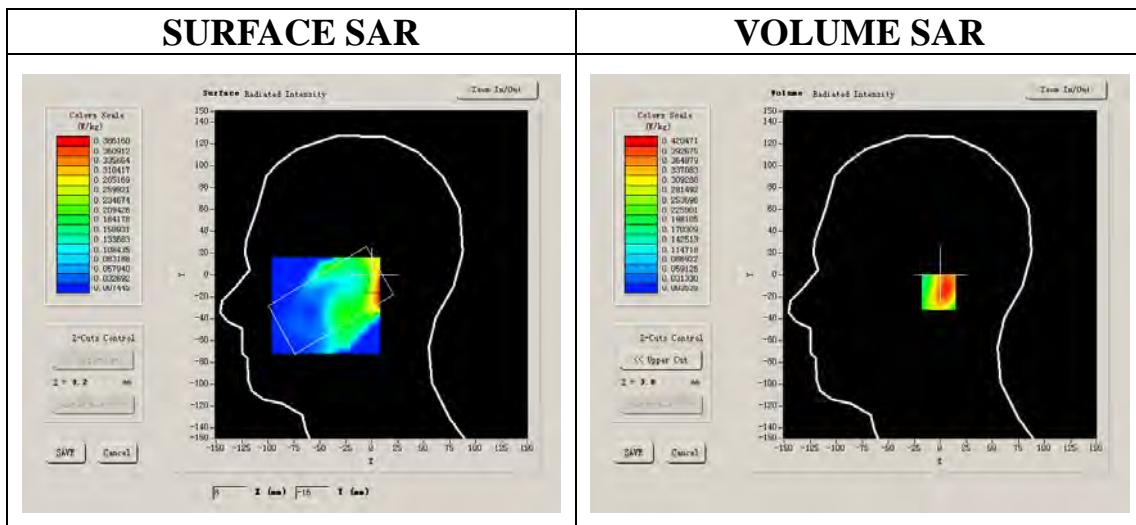
## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Cheek
<b>Band</b>	US_PCS_G-block
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.479504
<b>Power drift (%)</b>	-1.310000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



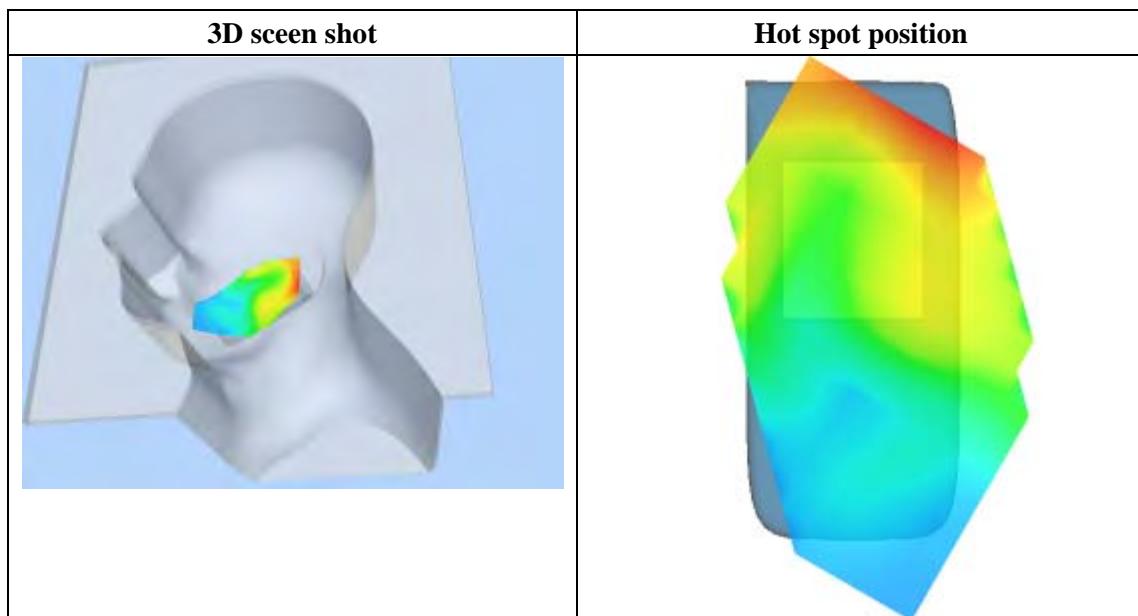
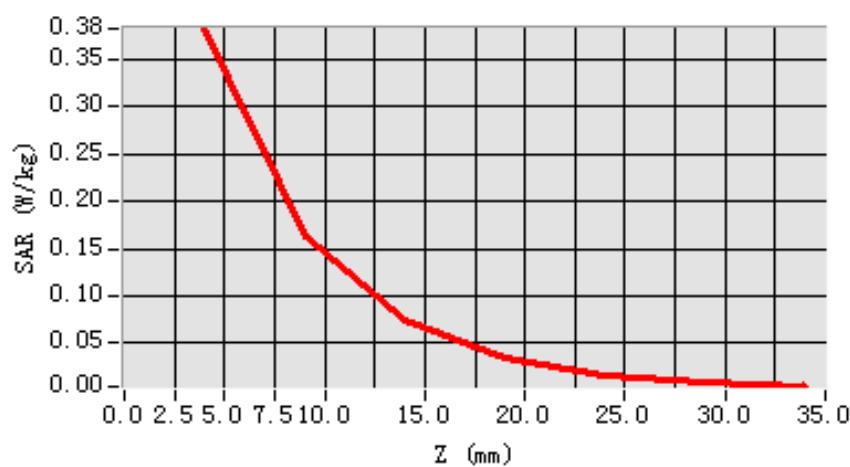
**Maximum location: X=8.00, Y=-16.00**

<b>SAR 10g (W/Kg)</b>	0.204328
<b>SAR 1g (W/Kg)</b>	0.407675

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.3829	0.1630	0.0735	0.0343	0.0159	0.0086

**SAR, Z Axis Scan (X = 8, Y = -16)**



# MEASUREMENT 65

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 25 seconds

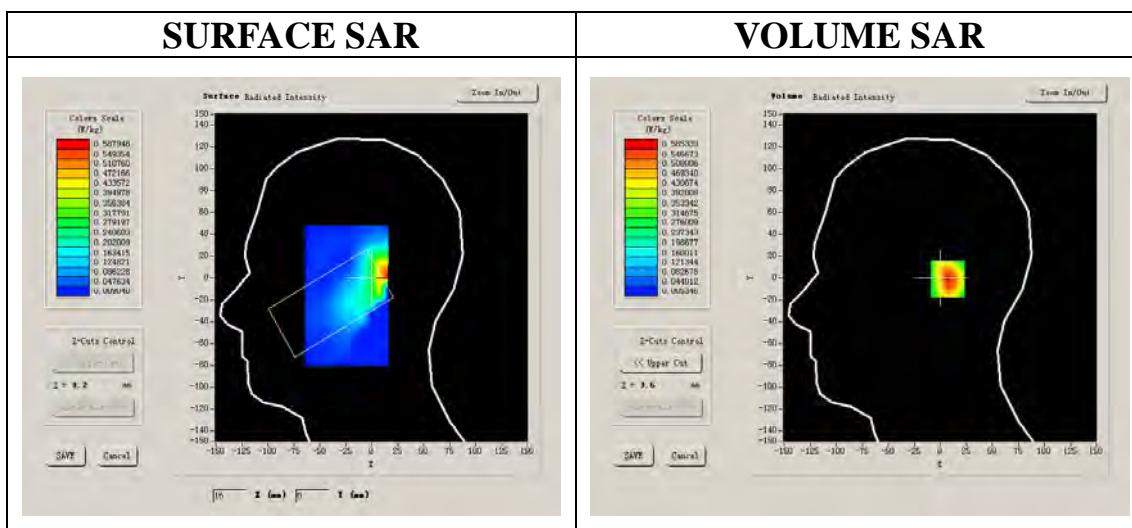
## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Right head
<b>Device Position</b>	Tilt
<b>Band</b>	US_PCS_G-block
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.479504
<b>Power drift (%)</b>	-1.040000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



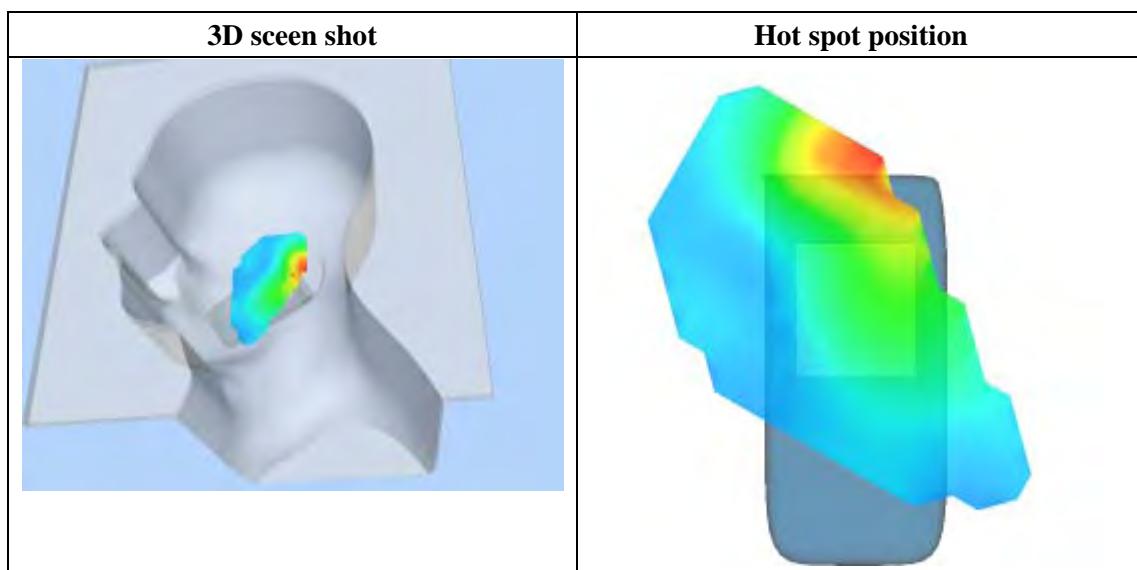
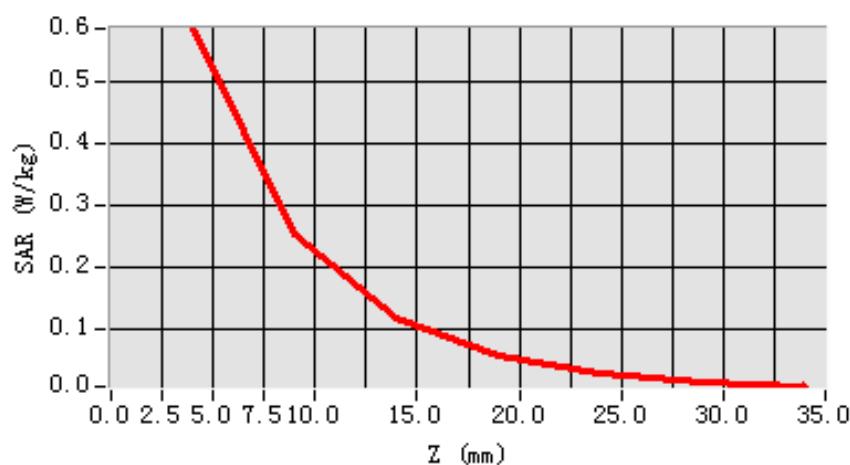
**Maximum location: X=16.00, Y=-1.00**

<b>SAR 10g (W/Kg)</b>	0.282267
<b>SAR 1g (W/Kg)</b>	0.561236

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.5853	0.2535	0.1209	0.0572	0.0300	0.0144

**SAR, Z Axis Scan (X = 16, Y = -1)**



# MEASUREMENT 66

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 23 seconds

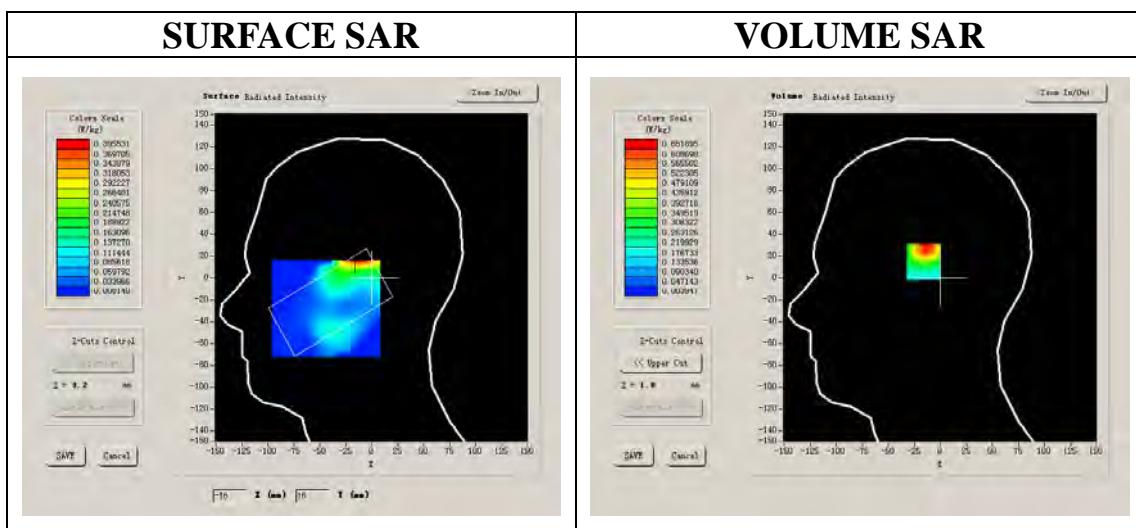
## A. Experimental conditions.

<b>Phantom File</b>	sam_direct_droit2_surf8mm.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Cheek
<b>Band</b>	US_PCS_G-block
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.479504
<b>Power drift (%)</b>	-2.660000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



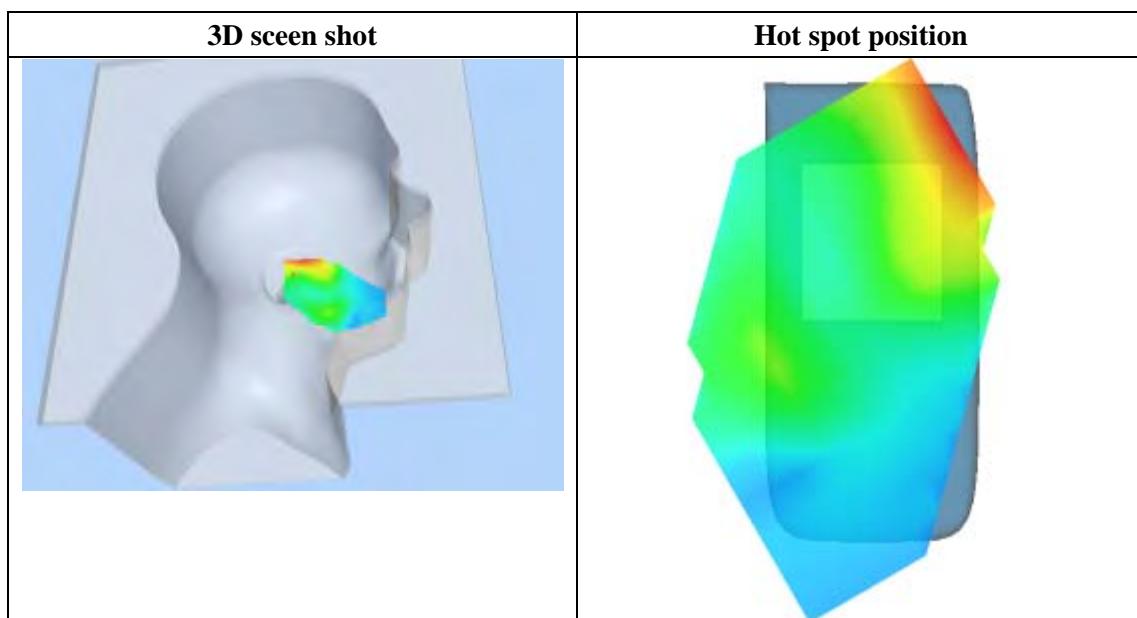
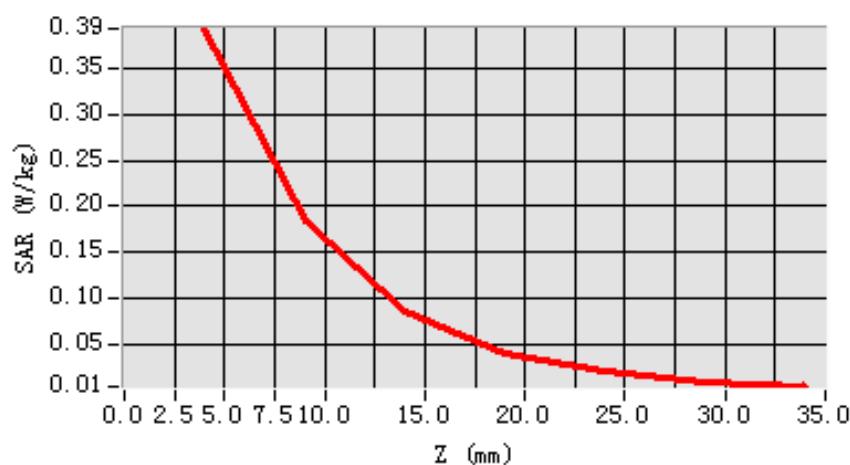
Maximum location: X=-13.00, Y=16.00

SAR 10g (W/Kg)	0.275572
SAR 1g (W/Kg)	0.577221

**Z Axis Scan**

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3925	0.1846	0.0868	0.0412	0.0211	0.0105

SAR, Z Axis Scan (X = -13, Y = 16)



# MEASUREMENT 67

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 7 minutes 19 seconds

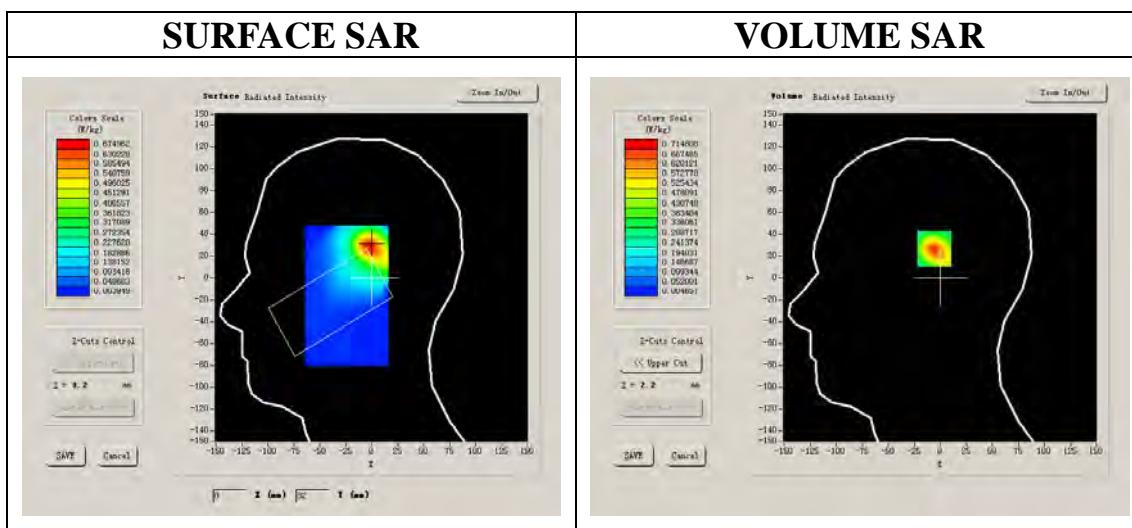
## A. Experimental conditions.

<b>Phantom File</b>	zinf3.txt
<b>Phantom</b>	Left head
<b>Device Position</b>	Tilt
<b>Band</b>	US_PCS_G-block
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	38.209000
<b>Relative permittivity</b>	13.915650
<b>Conductivity (S/m)</b>	1.479504
<b>Power drift (%)</b>	1.060000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721



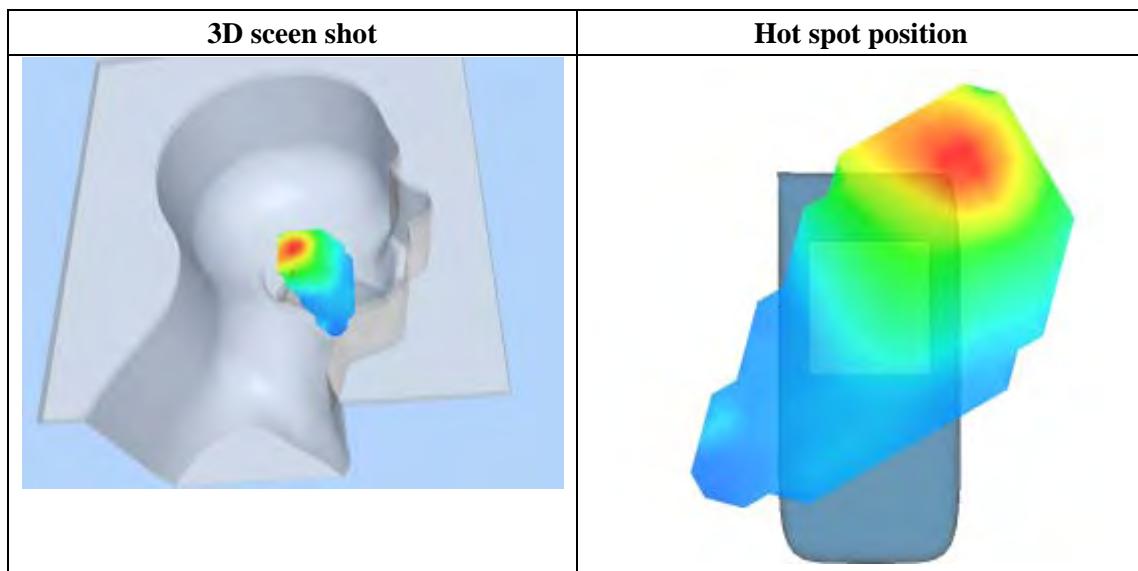
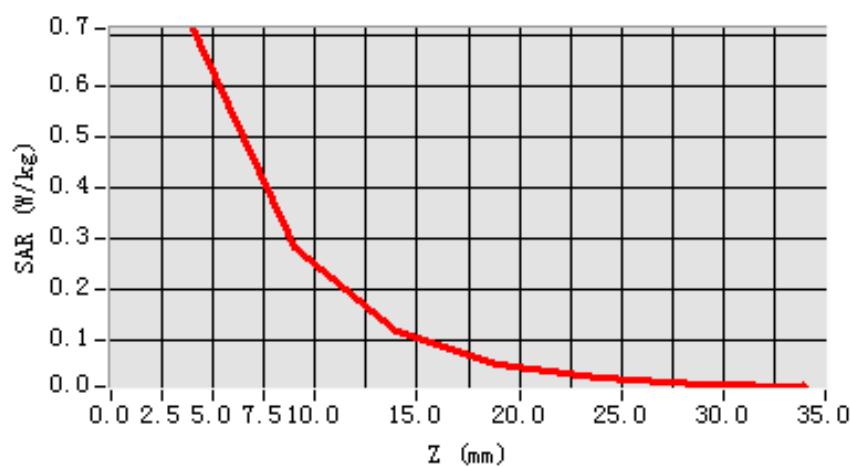
**Maximum location: X=-2.00, Y=30.00**

<b>SAR 10g (W/Kg)</b>	0.316596
<b>SAR 1g (W/Kg)</b>	0.672919

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.7148	0.2842	0.1158	0.0515	0.0226	0.0107

**SAR, Z Axis Scan (X = -2, Y = 30)**



# MEASUREMENT 68

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 8 seconds

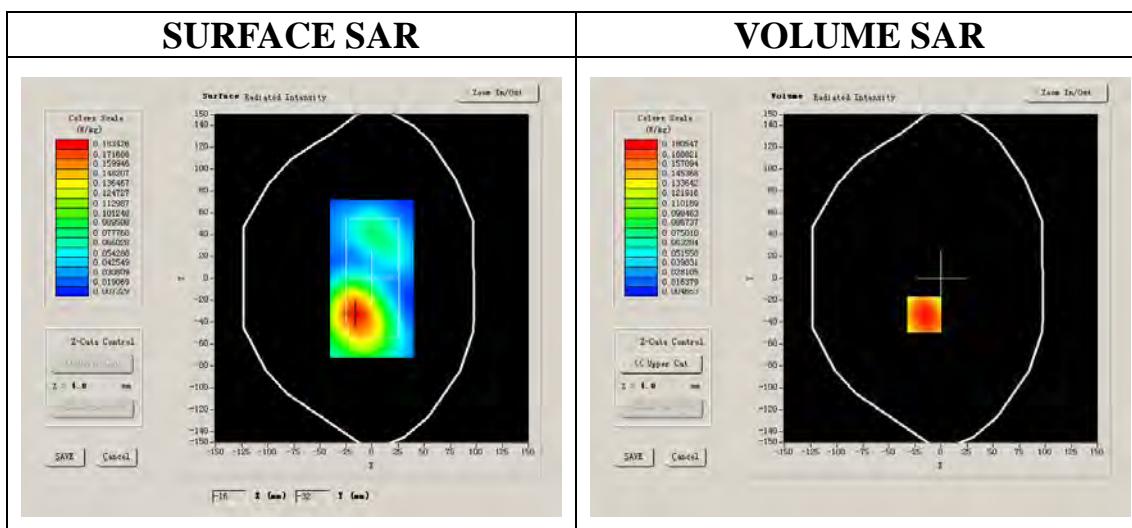
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	US_PCS_G-block
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.575399
<b>Power drift (%)</b>	0.030000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



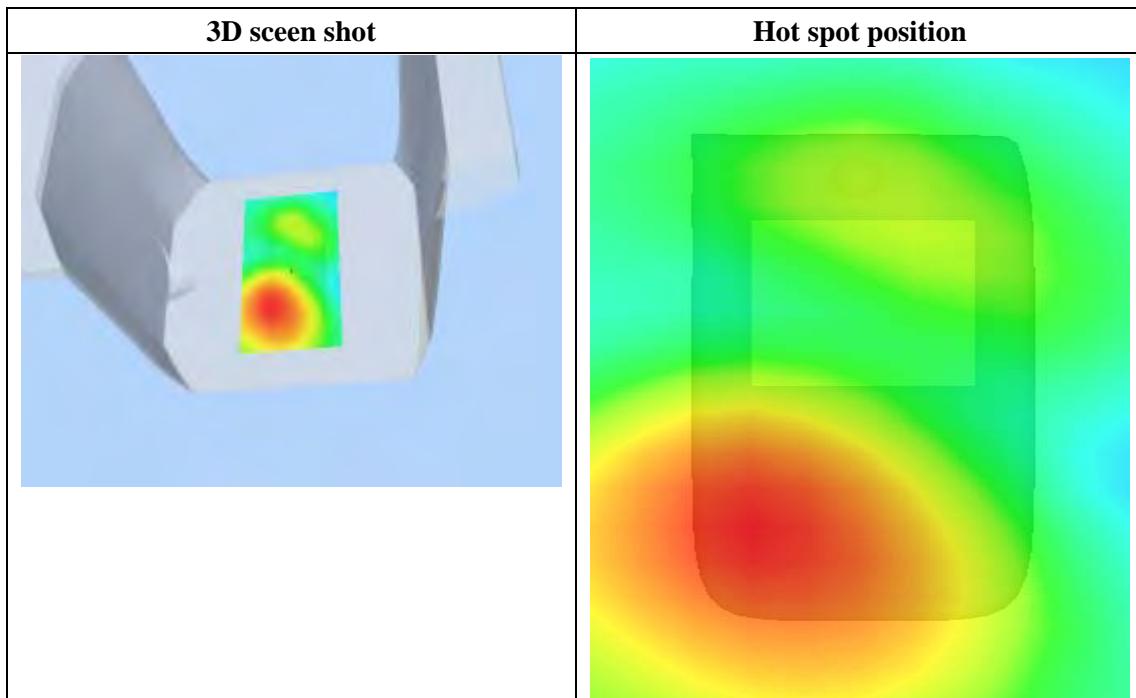
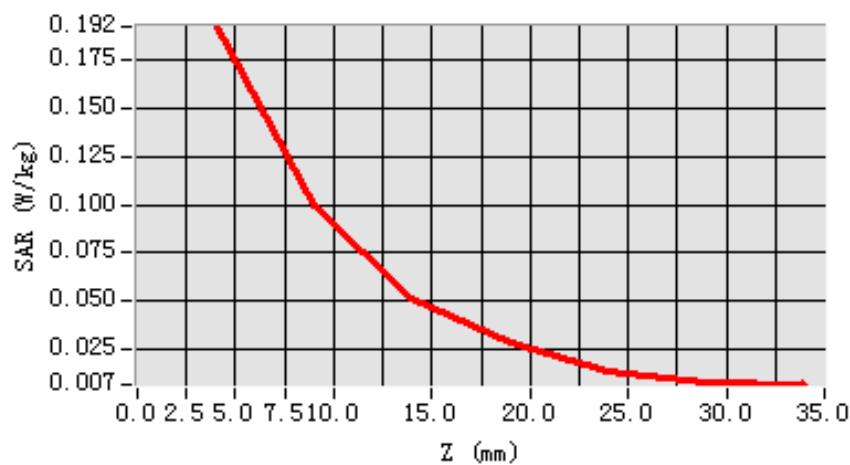
**Maximum location: X=-16.00, Y=-33.00**

<b>SAR 10g (W/Kg)</b>	0.104849
<b>SAR 1g (W/Kg)</b>	0.185677

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.1922	0.0995	0.0515	0.0280	0.0142	0.0082

**SAR, Z Axis Scan (X = -16, Y = -33)**



# MEASUREMENT 69

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 8 seconds

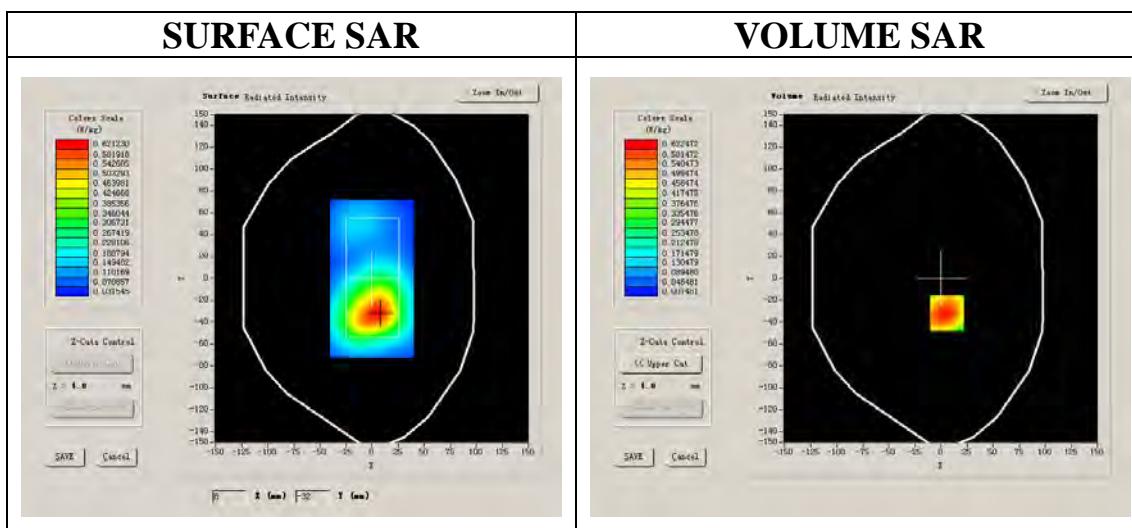
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	US_PCS_G-block
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.575399
<b>Power drift (%)</b>	-0.580000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



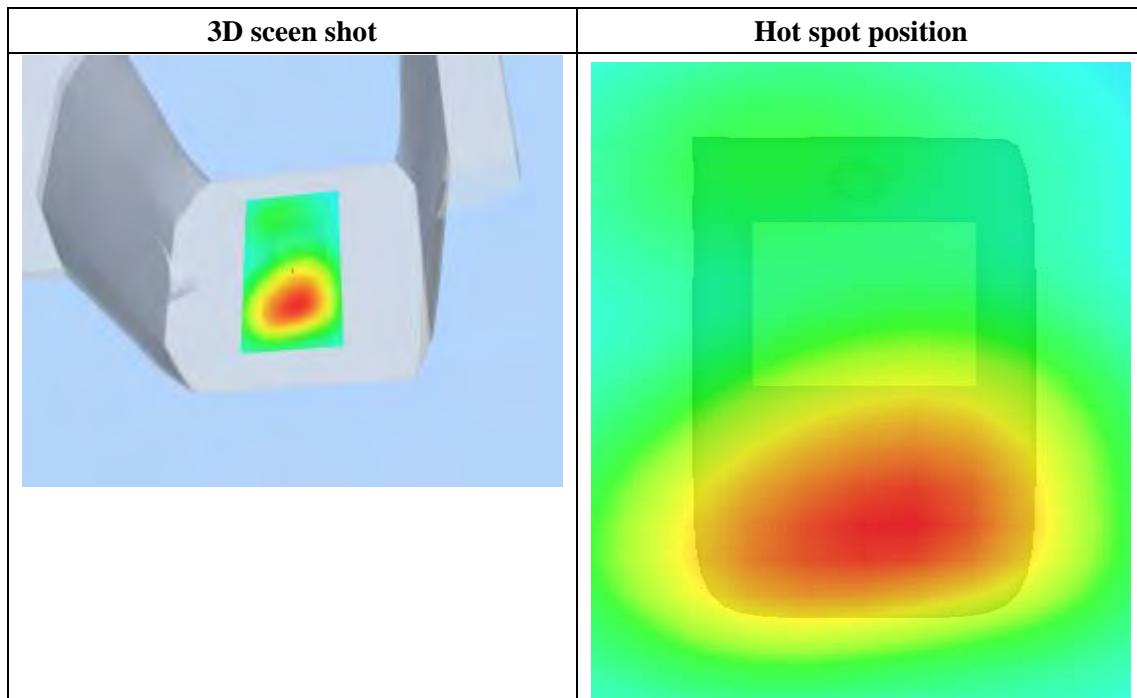
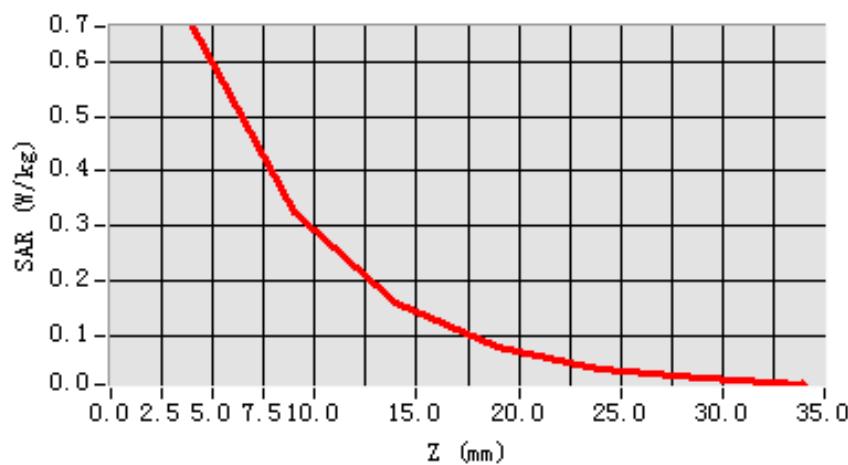
**Maximum location: X=6.00, Y=-32.00**

<b>SAR 10g (W/Kg)</b>	0.344370
<b>SAR 1g (W/Kg)</b>	0.638656

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.6628	0.3241	0.1595	0.0817	0.0416	0.0228

**SAR, Z Axis Scan (X = 6, Y = -32)**



# MEASUREMENT 70

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 9 seconds

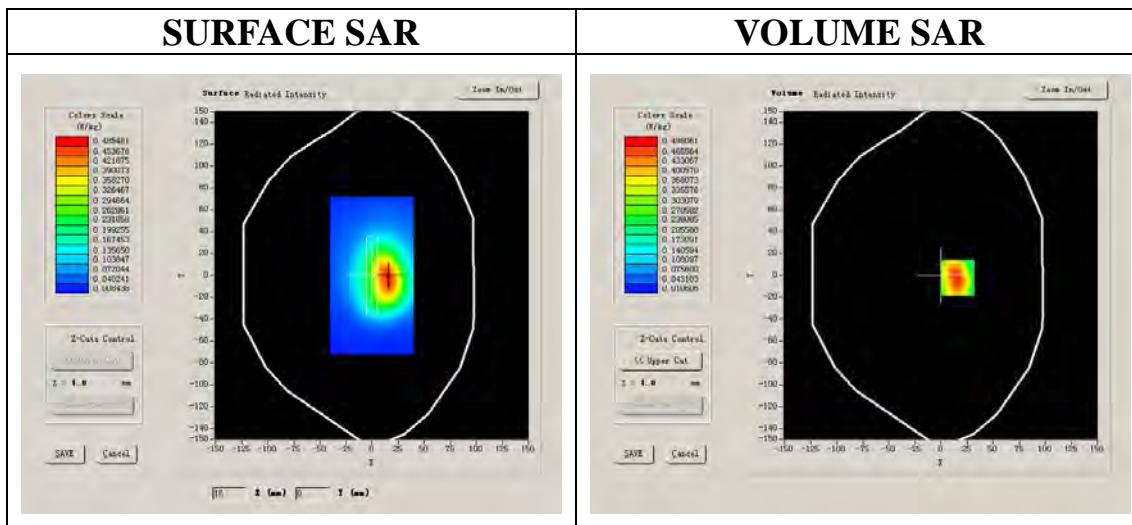
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	US_PCS_G-block(Edge A)
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.575399
<b>Power drift (%)</b>	-3.170000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



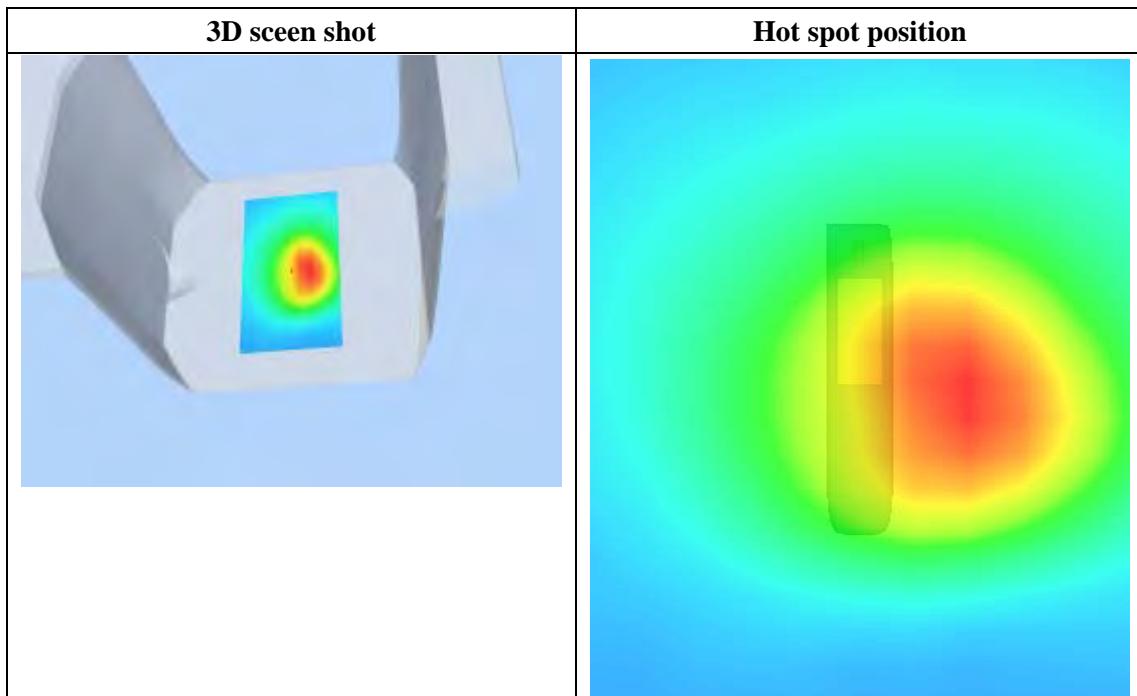
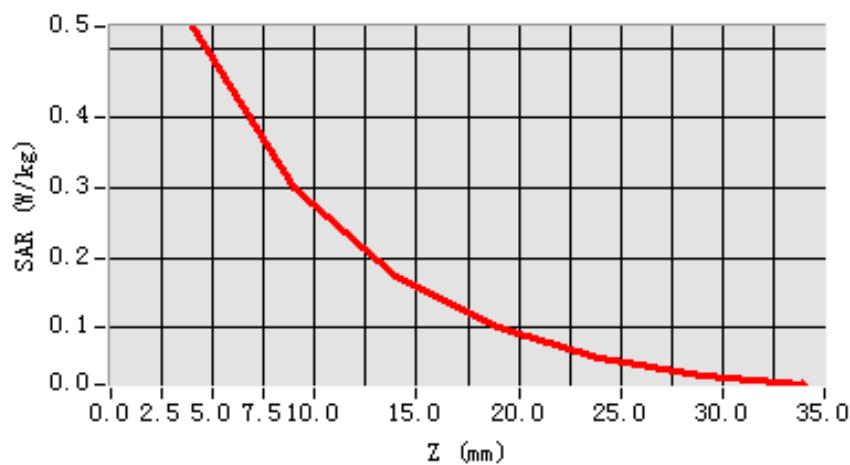
**Maximum location: X=16.00, Y=-2.00**

<b>SAR 10g (W/Kg)</b>	0.277437
<b>SAR 1g (W/Kg)</b>	0.496814

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.5303	0.3006	0.1747	0.1002	0.0572	0.0319

**SAR, Z Axis Scan (X = 16, Y = -2)**



# MEASUREMENT71

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 8 seconds

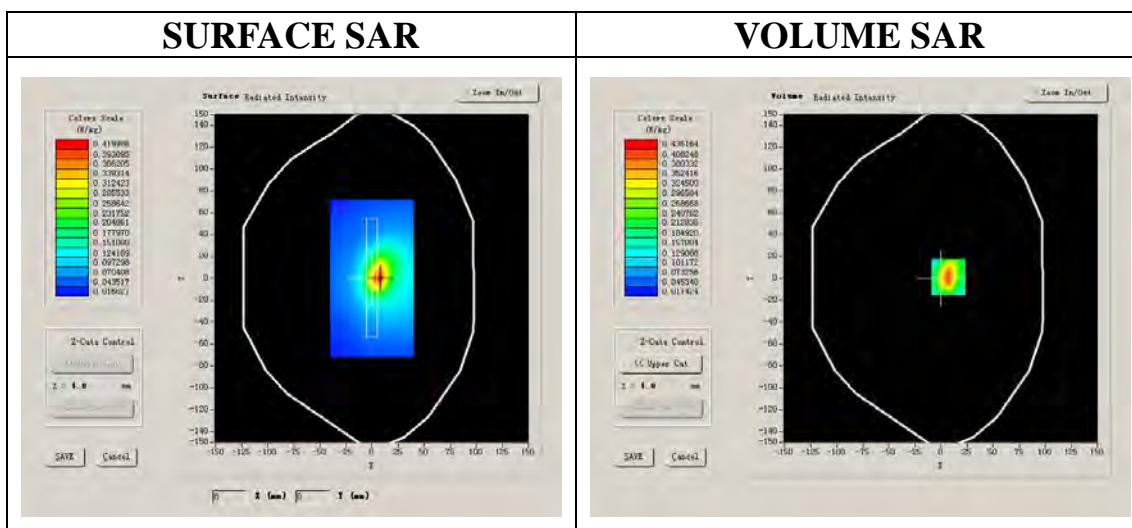
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	US_PCS_G-block(Edge B)
<b>Channels</b>	High
<b>Signal</b>	CDMA

## B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.575399
<b>Power drift (%)</b>	1.150000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



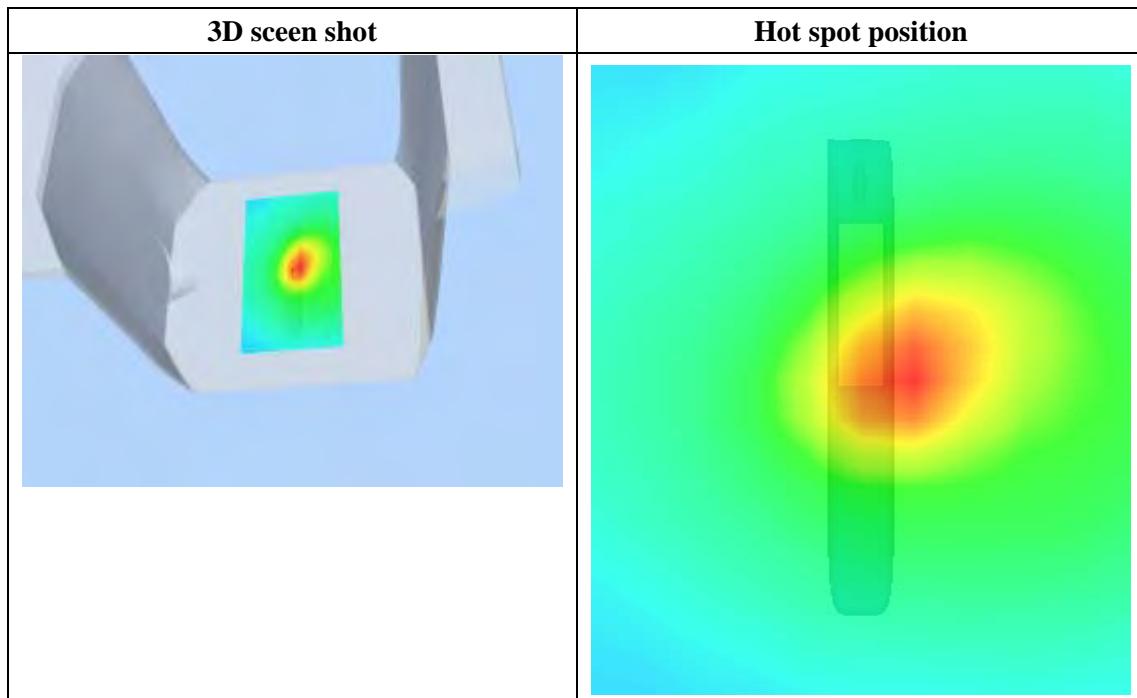
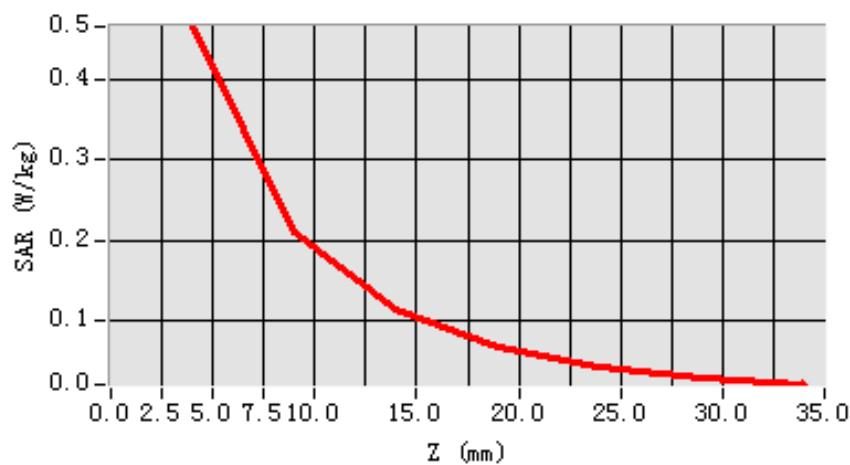
Maximum location: X=7.00, Y=1.00

SAR 10g (W/Kg)	0.212707
SAR 1g (W/Kg)	0.423613

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4644	0.2106	0.1136	0.0675	0.0421	0.0297

SAR, Z Axis Scan (X = 7, Y = 1)



## MEASUREMENT 72

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 9 seconds

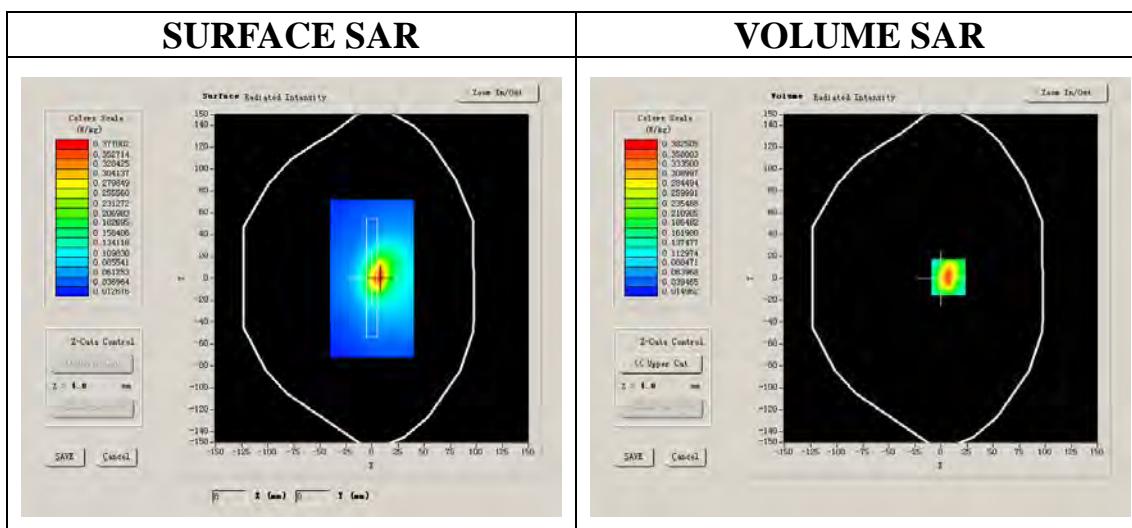
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	US_PCS_G-block(Edge D)
<b>Channels</b>	High
<b>Signal</b>	CDMA

### B. SAR Measurement Results

Higher Band SAR (Channel 1275):

<b>Frequency (MHz)</b>	1913.750000
<b>Relative permittivity (real part)</b>	51.903000
<b>Relative permittivity</b>	14.817600
<b>Conductivity (S/m)</b>	1.575399
<b>Power drift (%)</b>	-0.350000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.7C
<b>ConvF:</b>	40.136,34.843,38.721
<b>Crest factor:</b>	1:1



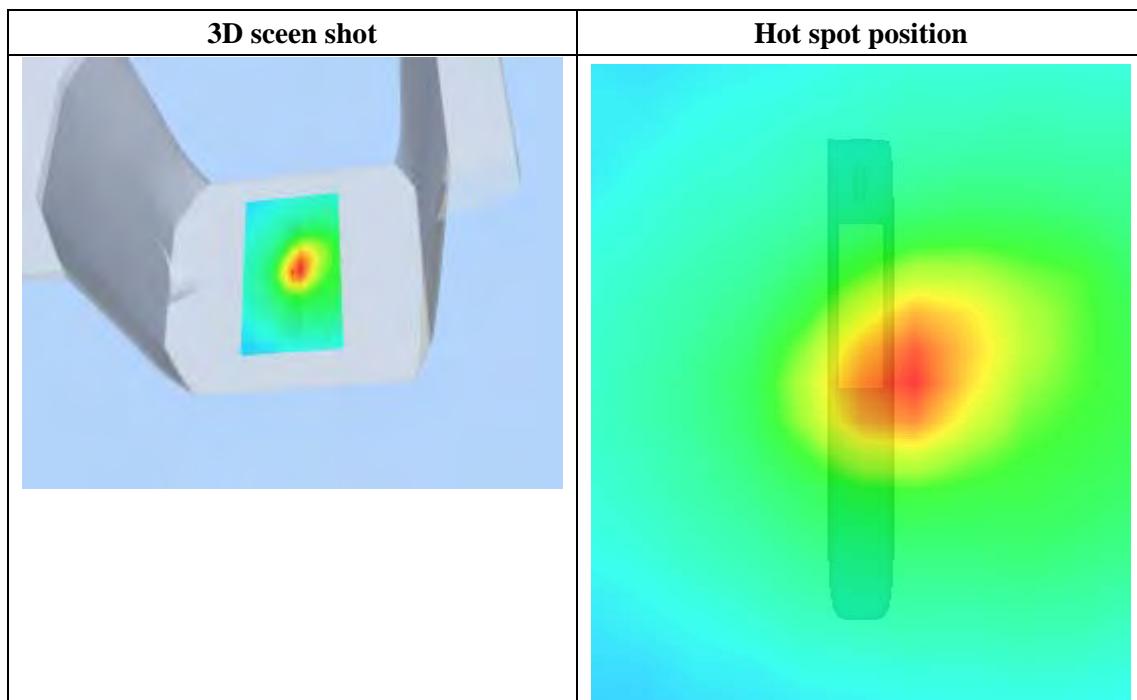
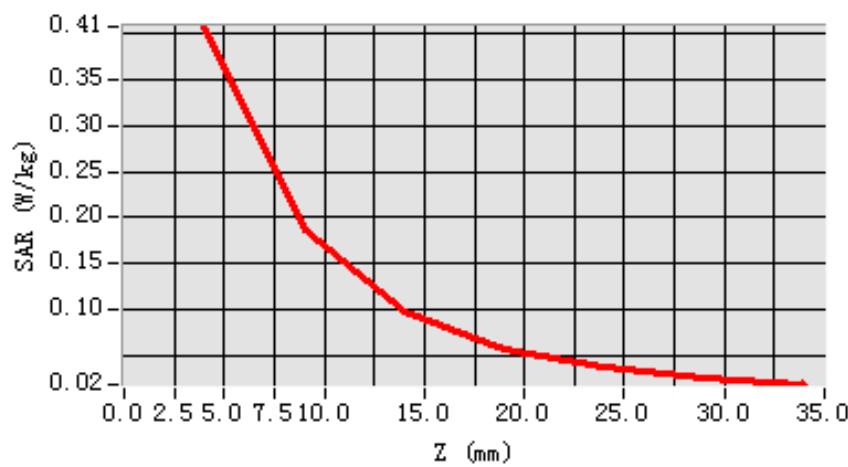
Maximum location: X=7.00, Y=1.00

SAR 10g (W/Kg)	0.187177
SAR 1g (W/Kg)	0.371627

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4073	0.1856	0.0971	0.0568	0.0368	0.0268

SAR, Z Axis Scan (X = 7, Y = 1)



# MEASUREMENT 73

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 8 seconds

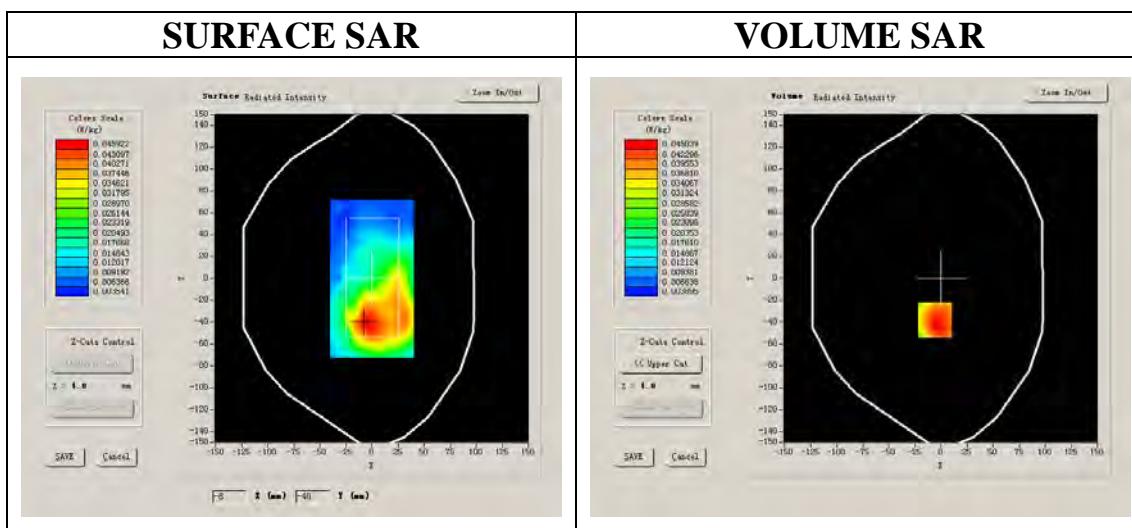
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	802.11B
<b>Channels</b>	High
<b>Signal</b>	DSSS

## B. SAR Measurement Results

High Band SAR (Channel 11):

<b>Frequency (MHz)</b>	2462.000000
<b>Relative permittivity (real part)</b>	54.341000
<b>Relative permittivity</b>	19.120001
<b>Conductivity (S/m)</b>	1.952641
<b>Power drift (%)</b>	0.300000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.8°C
<b>ConvF:</b>	39.772,33.946,37.835
<b>Crest factor:</b>	1:1



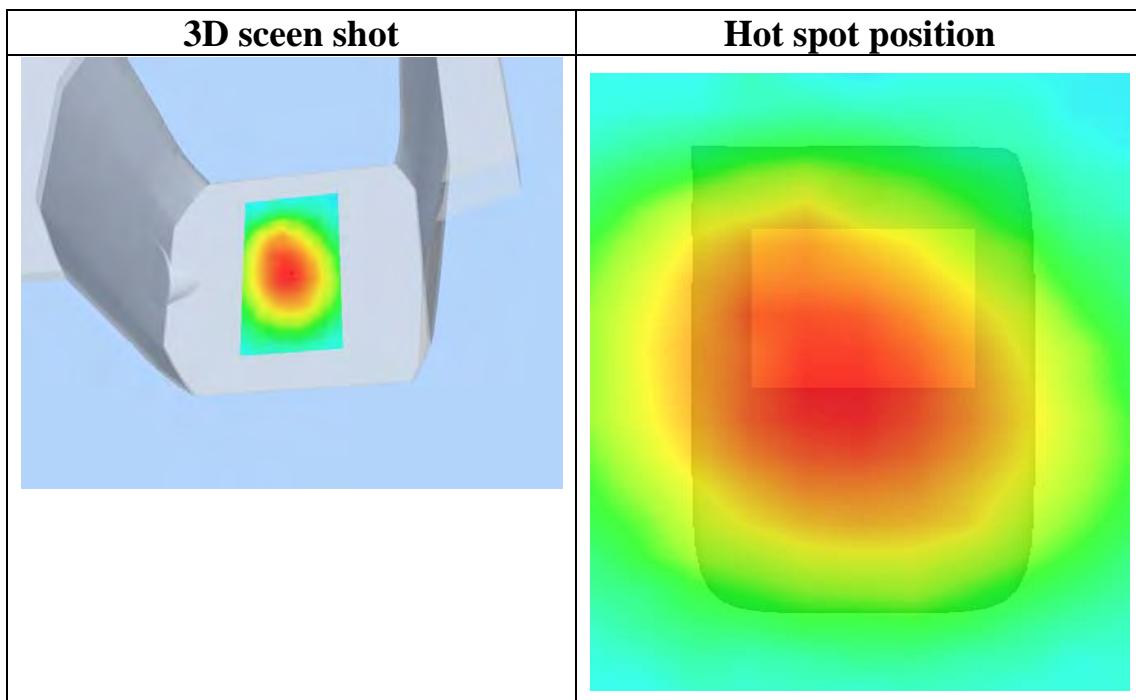
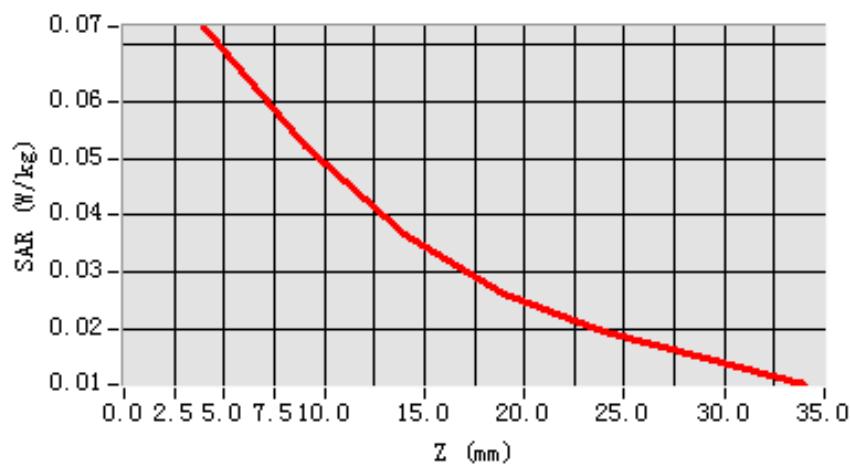
tion: X=-5.00, Y=0.00

<b>SAR 10g (W/Kg)</b>	0.048517
<b>SAR 1g (W/Kg)</b>	0.070753

### Z Axis Scan

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.0732	0.0524	0.0366	0.0263	0.0194	0.0151

### **SAR, Z Axis Scan (X = -5, Y = 0)**



## MEASUREMENT 74

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 8 seconds

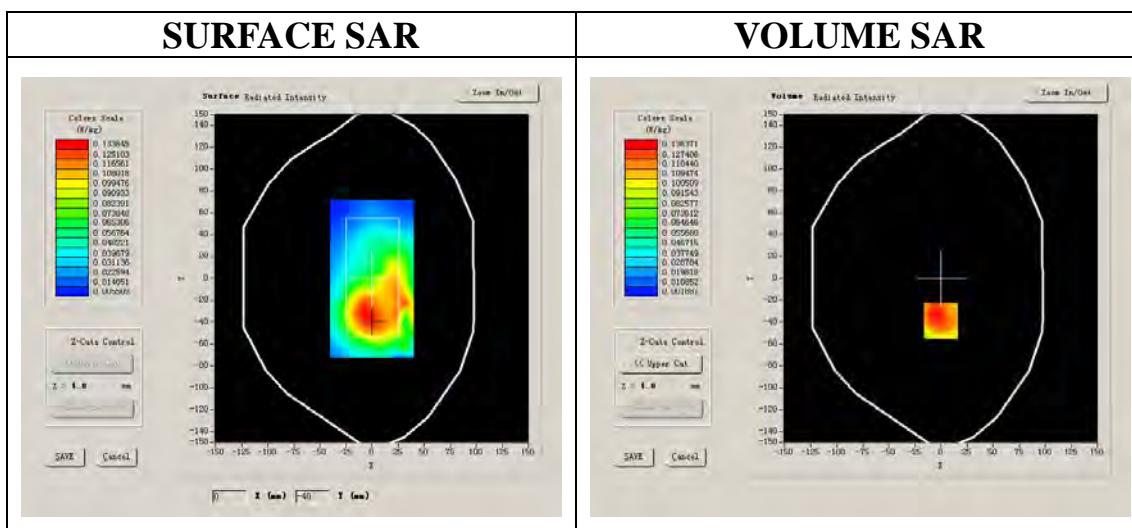
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	802.11B
<b>Channels</b>	High
<b>Signal</b>	DSSS

### B. SAR Measurement Results

High Band SAR (Channel 11):

<b>Frequency (MHz)</b>	246 2.000000
<b>Relative permittivity (real part)</b>	54.341000
<b>Relative permittivity</b>	19.120001
<b>Conductivity (S/m)</b>	1.952641
<b>Power drift (%)</b>	1.860000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.8°C
<b>ConvF:</b>	39.772,33.946,37.835
<b>Crest factor:</b>	1:1



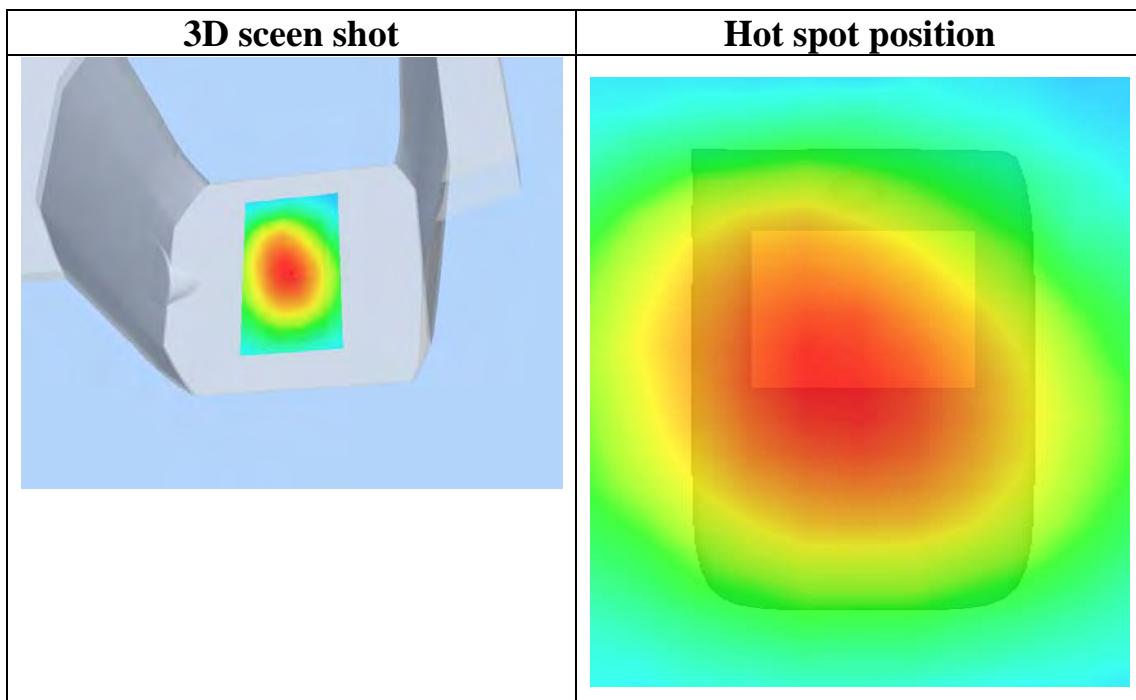
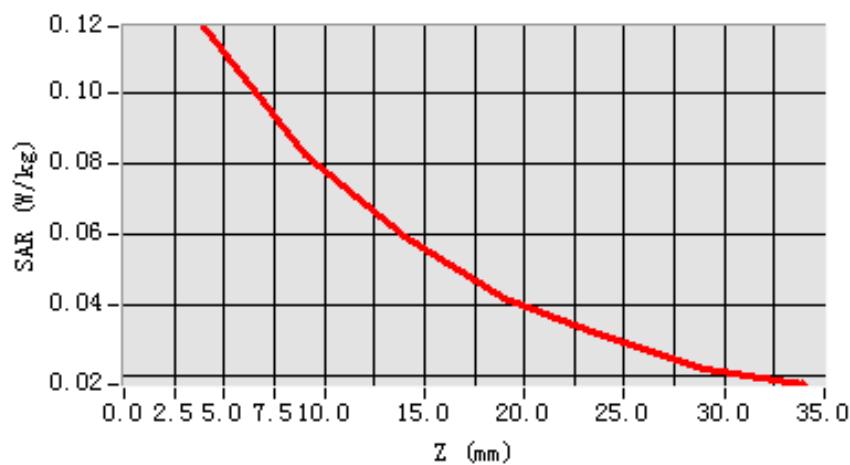
**Maximum location: X=-6.00, Y=-2.00**

<b>SAR 10g (W/Kg)</b>	0.078781
<b>SAR 1g (W/Kg)</b>	0.114768

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.1186	0.0826	0.0598	0.0422	0.0312	0.0222

**SAR, Z Axis Scan (X = -6, Y = 2)**



## MEASUREMENT 75

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 13 seconds

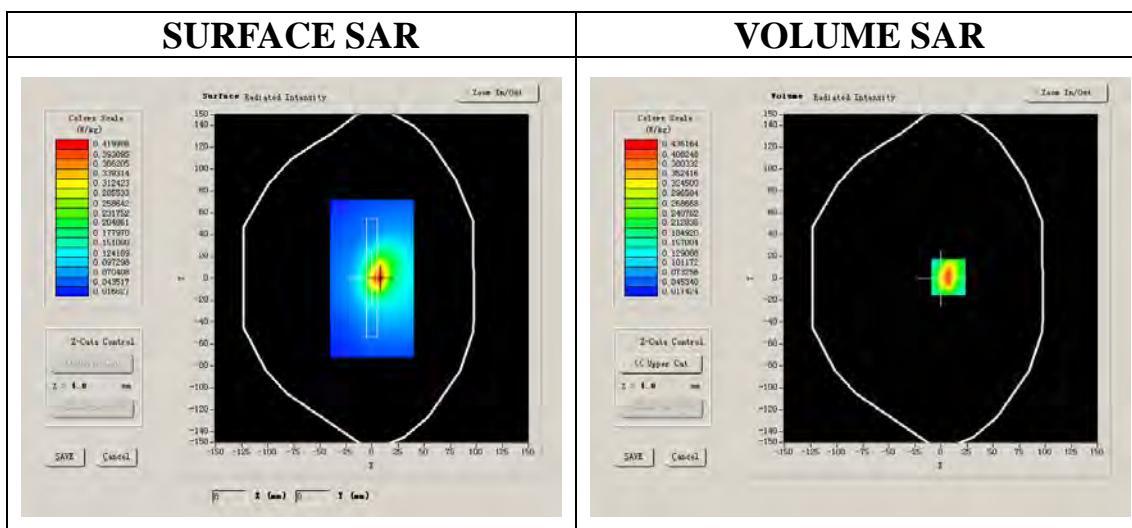
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body Edge B
<b>Band</b>	802.11B
<b>Channels</b>	High
<b>Signal</b>	DSSS

### B. SAR Measurement Results

High Band SAR (Channel 11):

<b>Frequency (MHz)</b>	2462.000000
<b>Relative permittivity (real part)</b>	54.341000
<b>Relative permittivity</b>	19.120001
<b>Conductivity (S/m)</b>	1.952641
<b>Power drift (%)</b>	-2.139999
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.8°C
<b>ConvF:</b>	39.772,33.946,37.835
<b>Crest factor:</b>	1:1



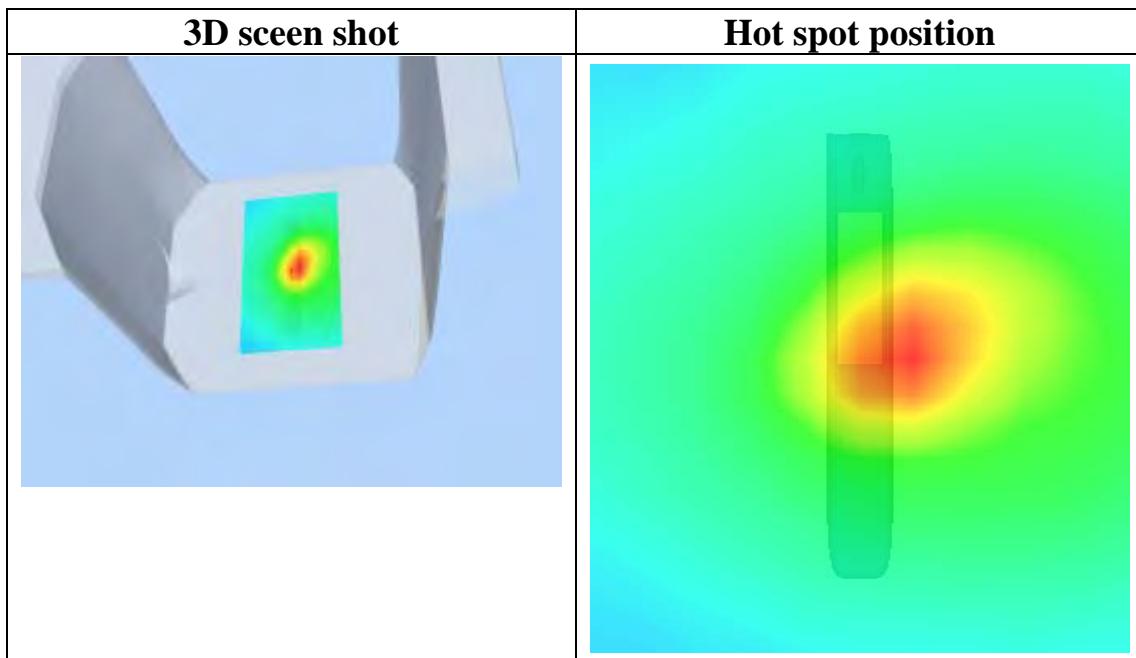
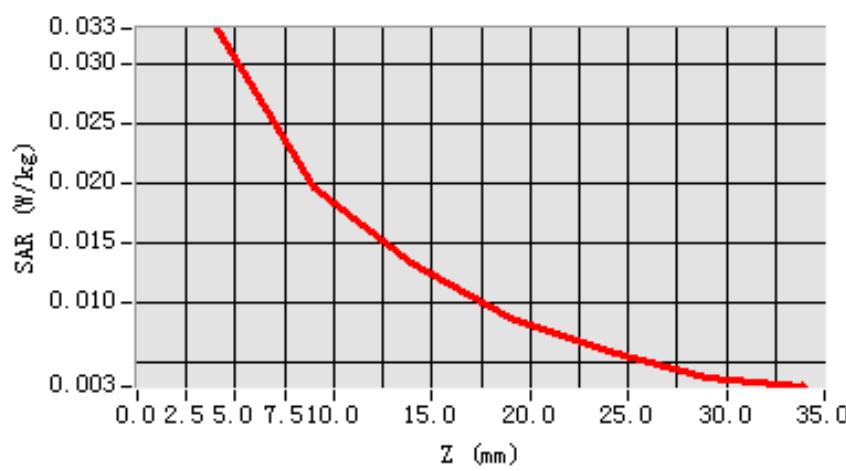
**Maximum location: X=-6.00, Y=8.00**

<b>SAR 10g (W/Kg)</b>	0.010847
<b>SAR 1g (W/Kg)</b>	0.032925

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.0053	0.0030	0.0027	0.0024	0.0046	0.0036

**SAR, Z Axis Scan (X = -6, Y = 8)**



# MEASUREMENT 76

Type: Phone measurement (Complete)

Area scan resolution:  $dx=8\text{mm}, dy=8\text{mm}$

Zoom scan resolution:  $dx=8\text{mm}, dy=8\text{mm}, dz=5\text{mm}$

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 7 seconds

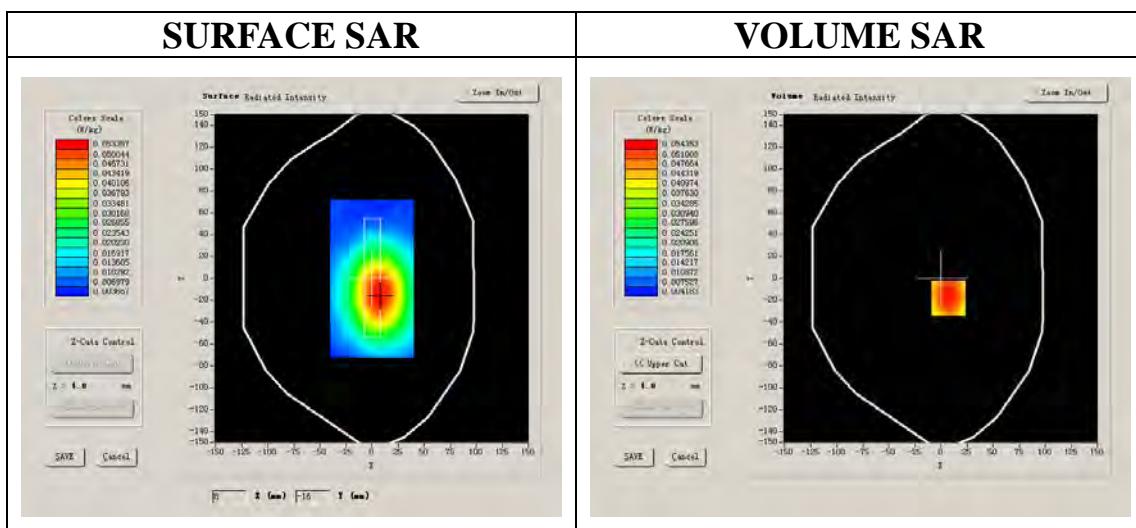
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	802.11B
<b>Channels</b>	High
<b>Signal</b>	DSSS

## B. SAR Measurement Results

High Band SAR (Channel 11):

<b>Frequency (MHz)</b>	2462.000000
<b>Relative permittivity (real part)</b>	54.341000
<b>Relative permittivity</b>	19.120001
<b>Power drift (S/m)</b>	1.952641
<b>Power drift (%)</b>	-3.529999
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.8°C
<b>ConvF:</b>	39.772,33.946,37.835
<b>Crest factor:</b>	1:1



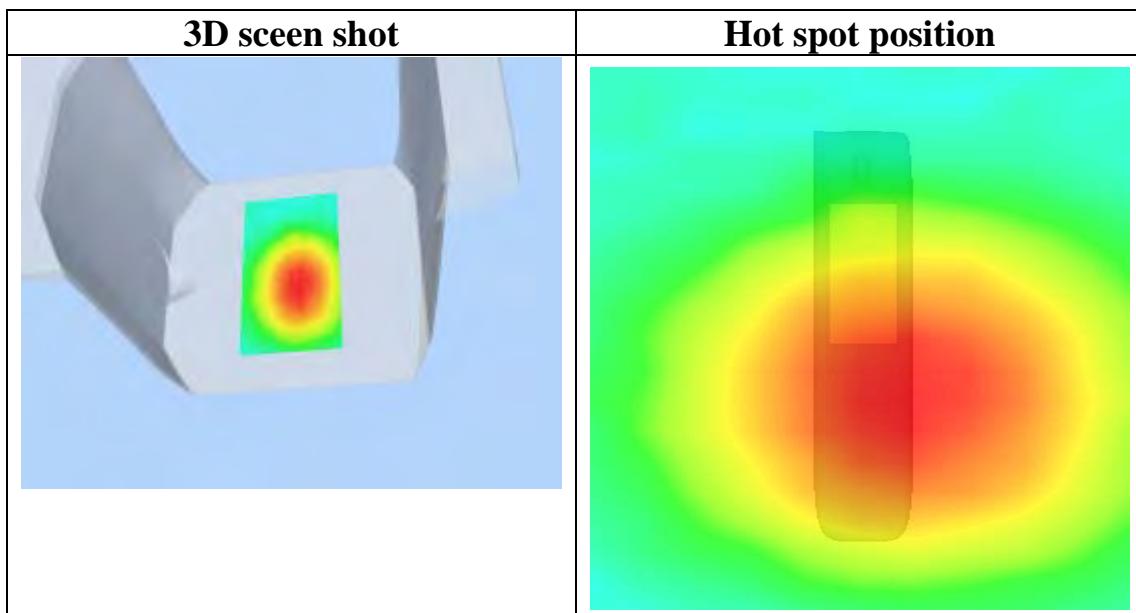
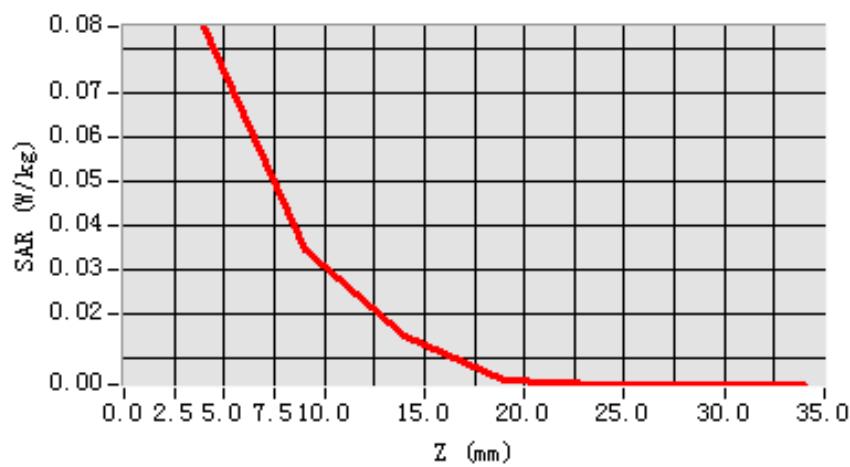
**Maximum location: X=-19.00, Y=-10.00**

<b>SAR 10g (W/Kg)</b>	0.040635
<b>SAR 1g (W/Kg)</b>	0.081988

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.0848	0.0345	0.0146	0.0049	0.0039	0.0039

**SAR, Z Axis Scan (X = -19, Y = -10)**



## MEASUREMENT 77

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 9 minutes 6 seconds

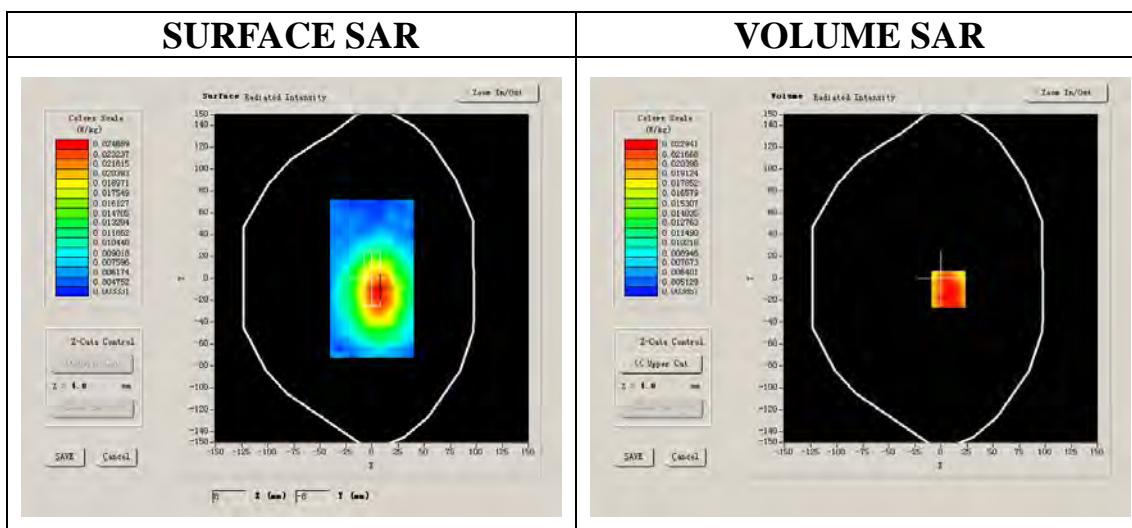
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Body
<b>Band</b>	802.11B Edge D
<b>Channels</b>	Middle
<b>Signal</b>	DSSS

### B. SAR Measurement Results

High Band SAR (Channel 11):

<b>Frequency (MHz)</b>	2462.000000
<b>Relative permittivity (real part)</b>	54.341000
<b>Relative permittivity</b>	19.120001
<b>Conductivity (S/m)</b>	1.952641
<b>Power drift (%)</b>	-1.570000
<b>Ambient Temperature:</b>	22.2°C
<b>Liquid Temperature:</b>	21.8°C
<b>ConvF:</b>	39.772,33.946,37.835
<b>Crest factor:</b>	1:1



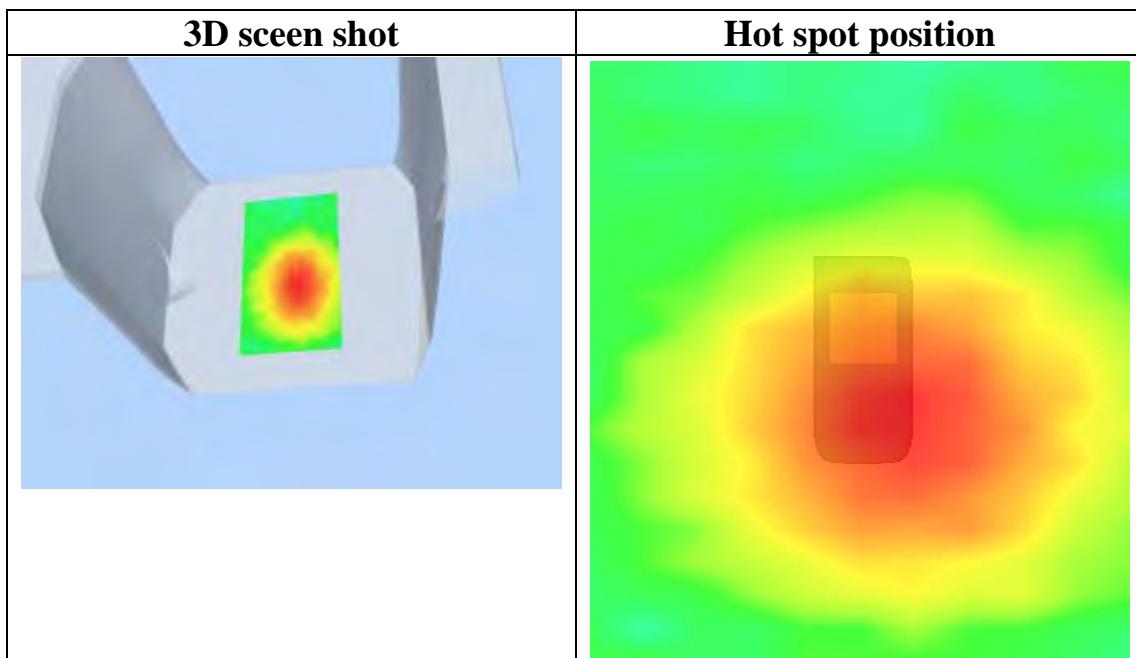
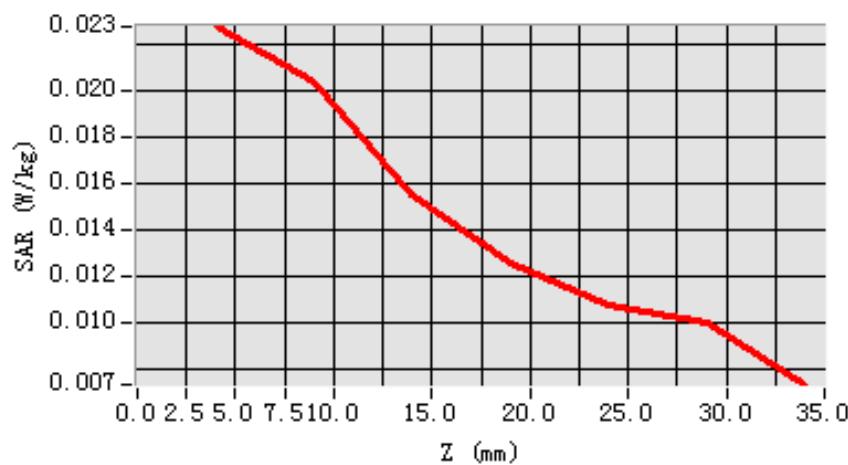
**Maximum location: X=7.00, Y=-10.00**

<b>SAR 10g (W/Kg)</b>	0.017409
<b>SAR 1g (W/Kg)</b>	0.023061

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/Kg)</b>	0.0000	0.0228	0.0204	0.0155	0.0126	0.0108	0.0100

**SAR, Z Axis Scan (X = 7, Y = -10)**



## 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: 7/9/2011

Measurement duration: 13 minutes 27 seconds

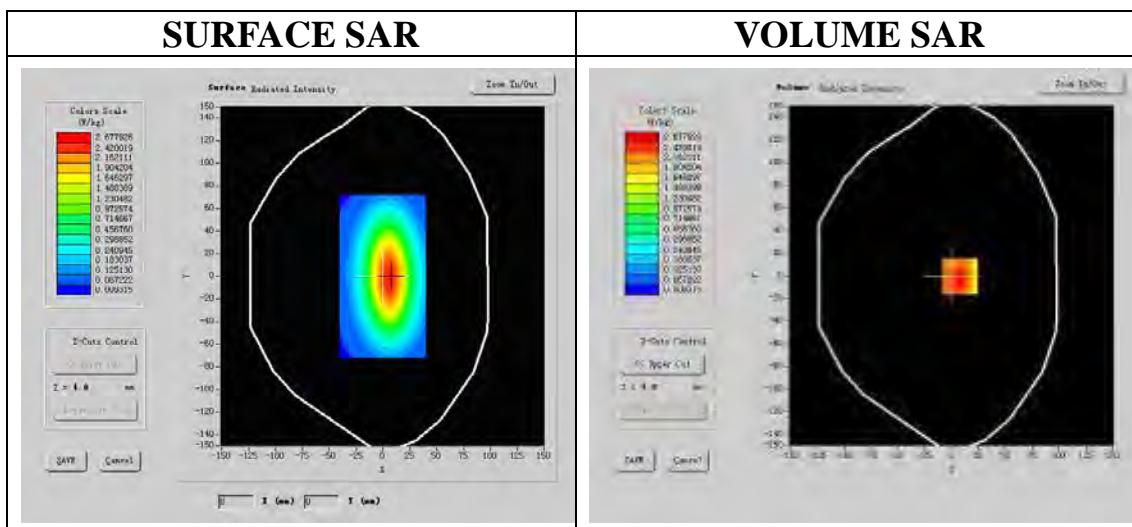
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	
<b>Band</b>	835MHz
<b>Channels</b>	
<b>Signal</b>	CW

### B. SAR Measurement Results

#### Band SAR

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



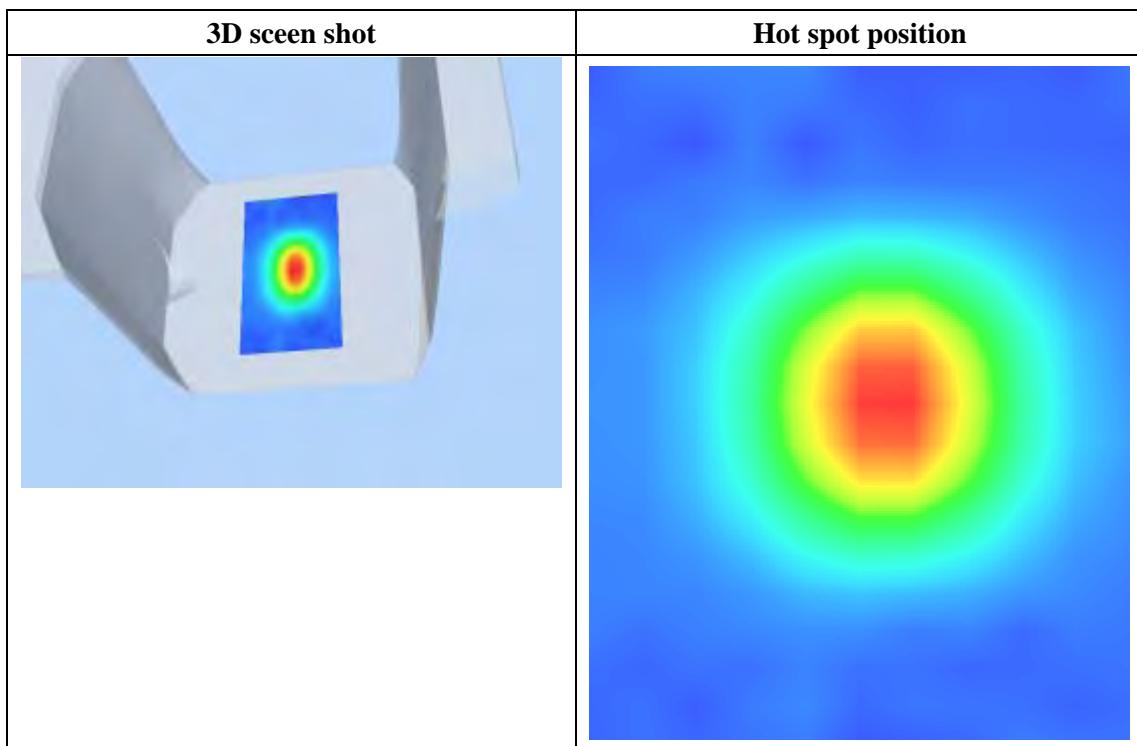
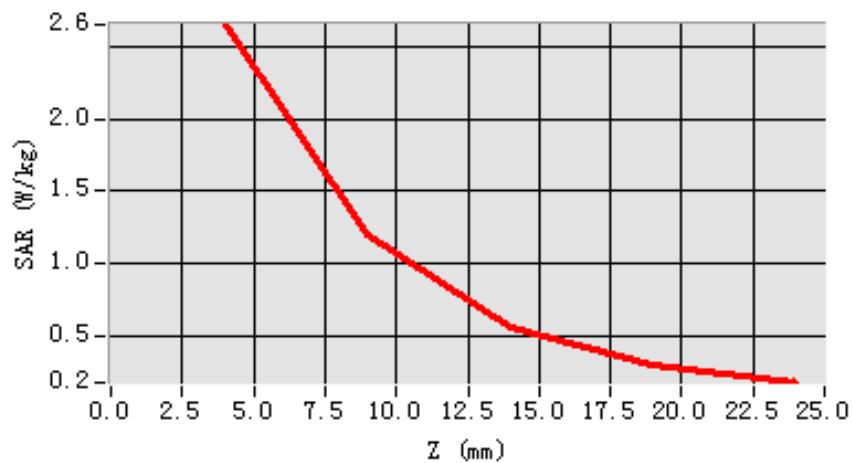
**Maximum location: X=5.00, Y=1.00**

<b>SAR 10g (W/Kg)</b>	1.715223
<b>SAR 1g (W/Kg)</b>	2.477926

**Z Axis Scan**

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

**SAR, Z Axis Scan (X = 5, Y = 1)**



# System Performance Check Data(1800MHz)

Type: Phone measurement (Complete)

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

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

Date of measurement: 7/9/2011

Measurement duration: 13 minutes 27 seconds

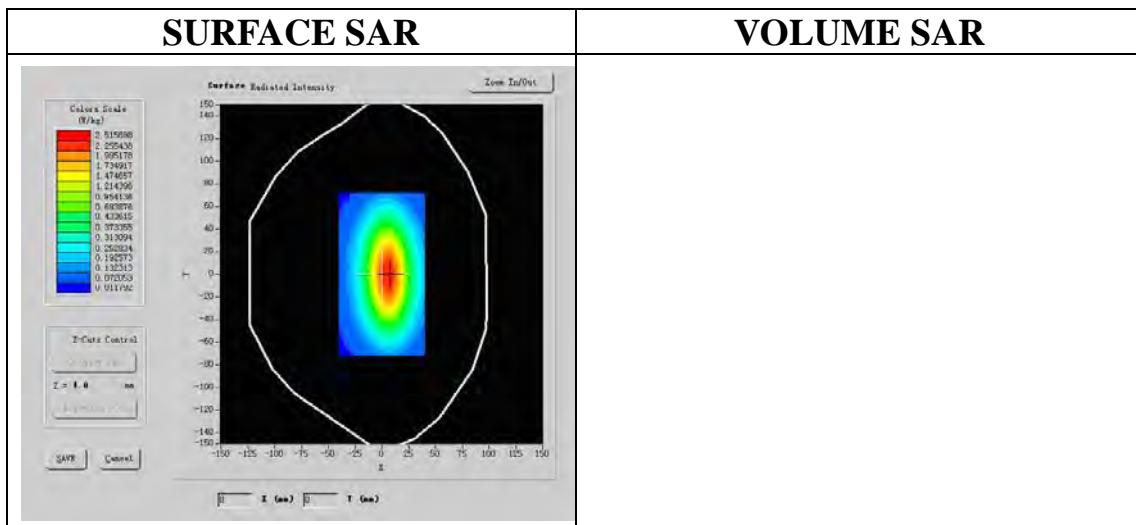
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	
<b>Band</b>	1800MHz
<b>Channels</b>	
<b>Signal</b>	CW

## B. SAR Measurement Results

### Band SAR

<b>Frequency (MHz)</b>	1800.000000
<b>Relative permittivity (real part)</b>	38.930000
<b>Relative permittivity</b>	15.070000
<b>Conductivity (S/m)</b>	1.321229
<b>Power Drift (%)</b>	-0.140000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.8°C
<b>ConvF:</b>	40.977,35.416,39.388
<b>Crest factor:</b>	1:1



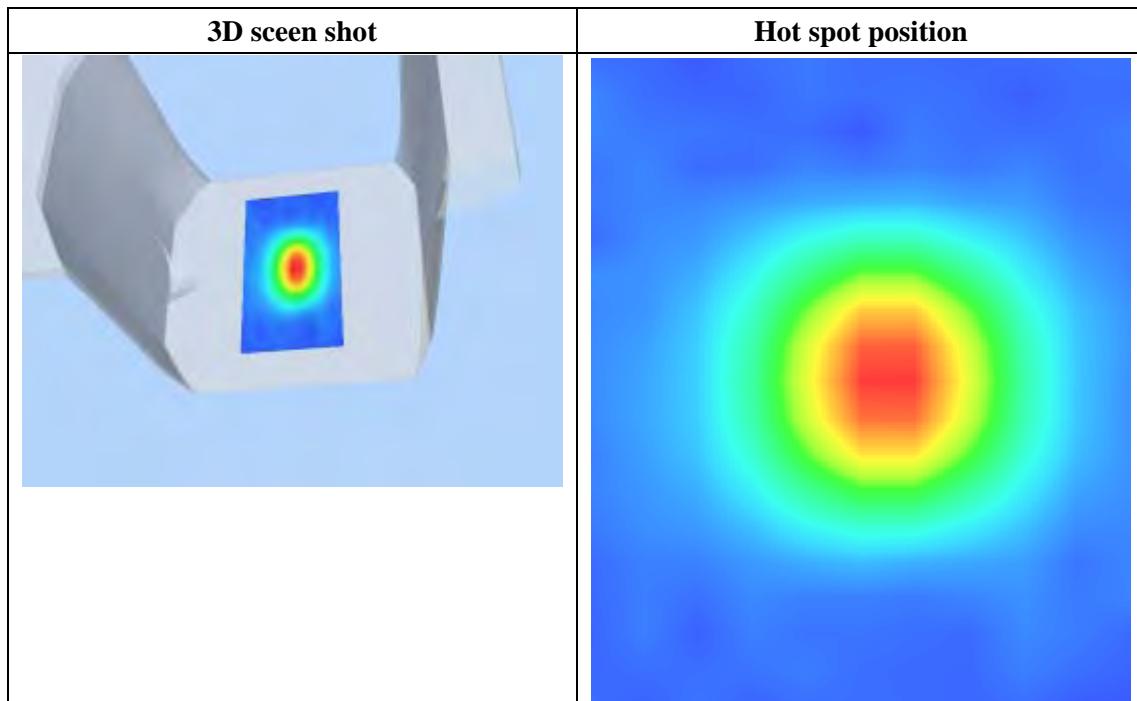
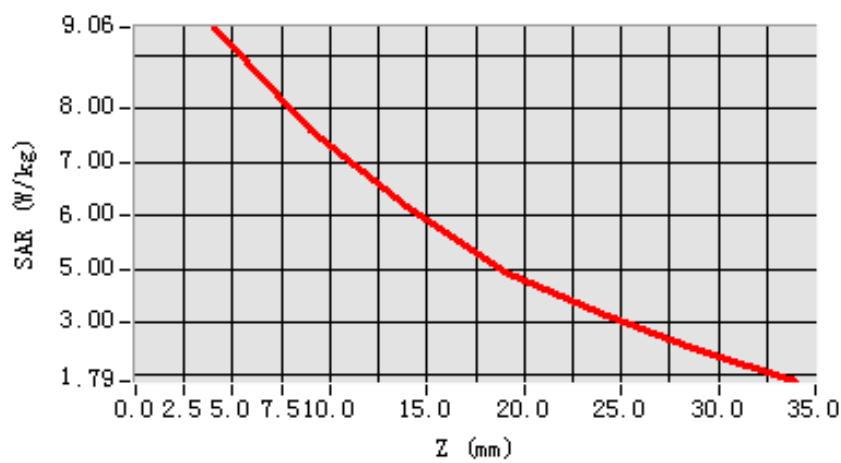
**Maximum location: X=-1.00, Y=-50.00**

<b>SAR 10g (W/Kg)</b>	4.910003
<b>SAR 1g (W/Kg)</b>	8.854121

**Z Axis Scan**

<b>Z (mm)</b>	0.00	4.00	9.00	14.00	19.00
<b>SAR (W/Kg)</b>	0.0000	8.8536	7.3061	5.9041	4.3211

**SAR, Z Axis Scan (X = -1, Y = -50)**



# 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: 7/9/2011

Measurement duration: 13 minutes 27 seconds

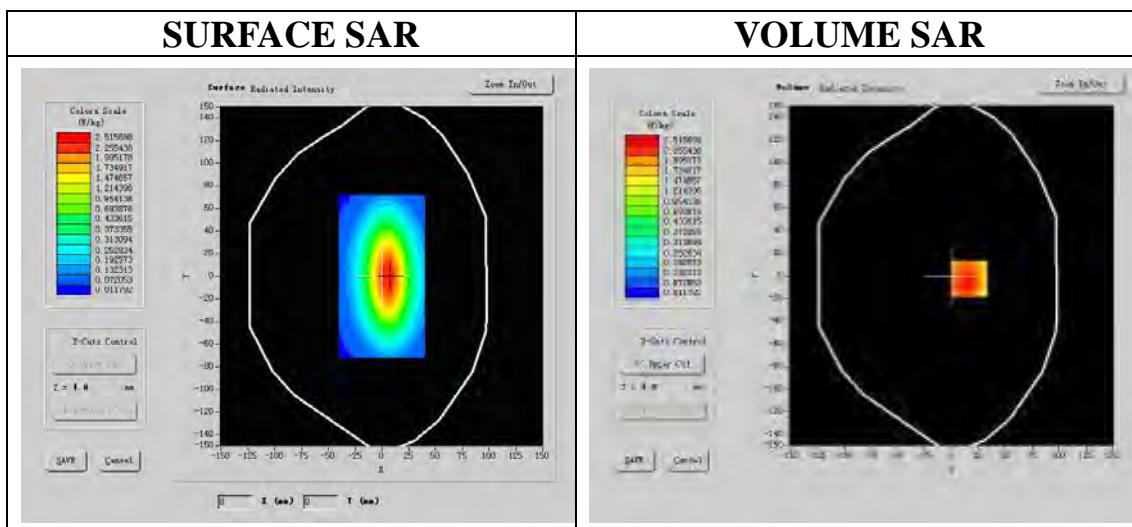
## A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	
<b>Band</b>	1900MHz
<b>Channels</b>	
<b>Signal</b>	CW

## B. SAR Measurement Results

### Band SAR

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



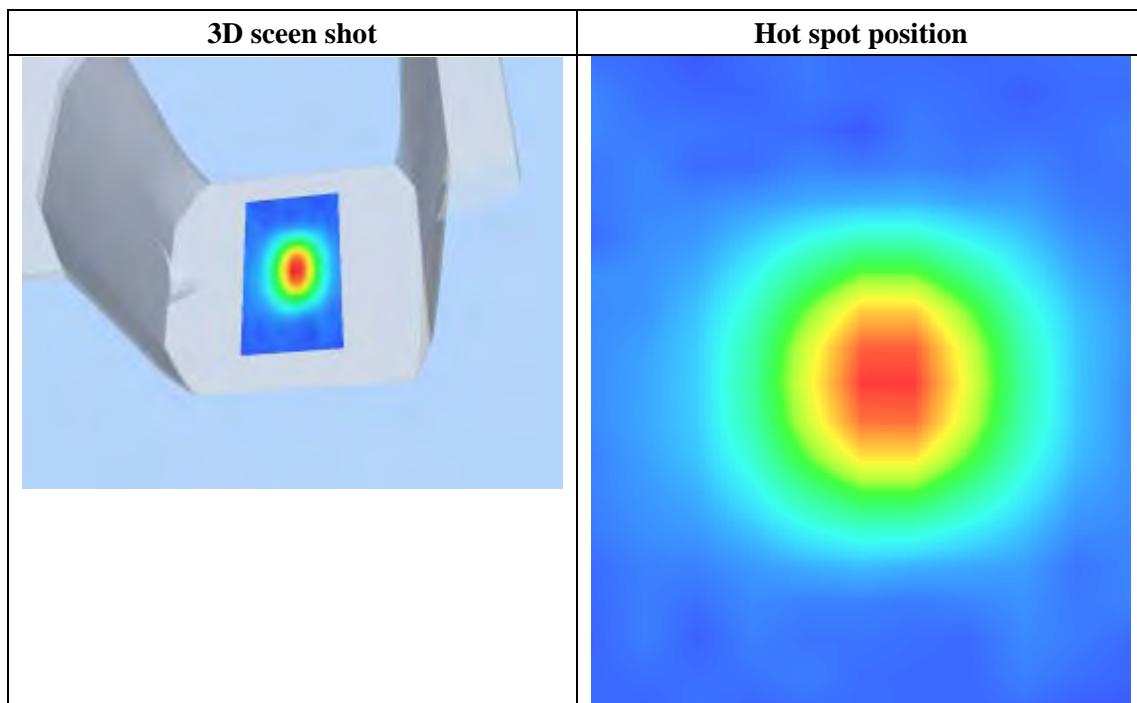
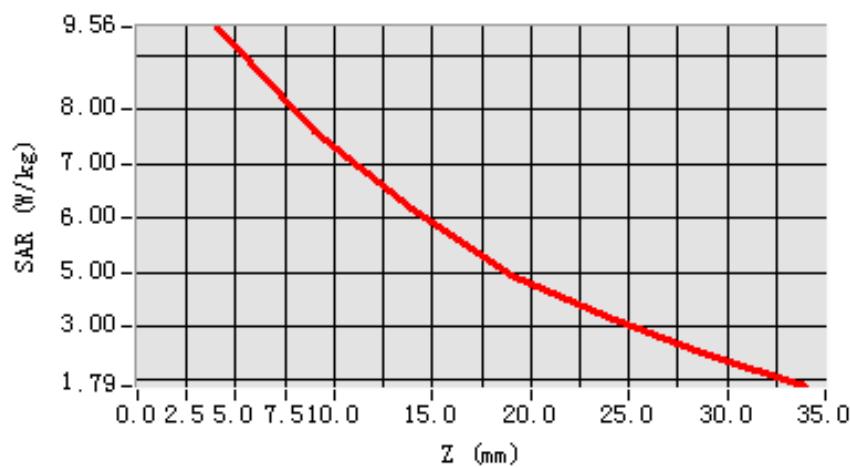
**Maximum location: X=-1.00, Y=-50.00**

<b>SAR 10g (W/Kg)</b>	4.910003
<b>SAR 1g (W/Kg)</b>	9.555521

**Z Axis Scan**

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

**SAR, Z Axis Scan (X = -1, Y = -50)**



## 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: 7/9/2011

Measurement duration: 13 minutes 27 seconds

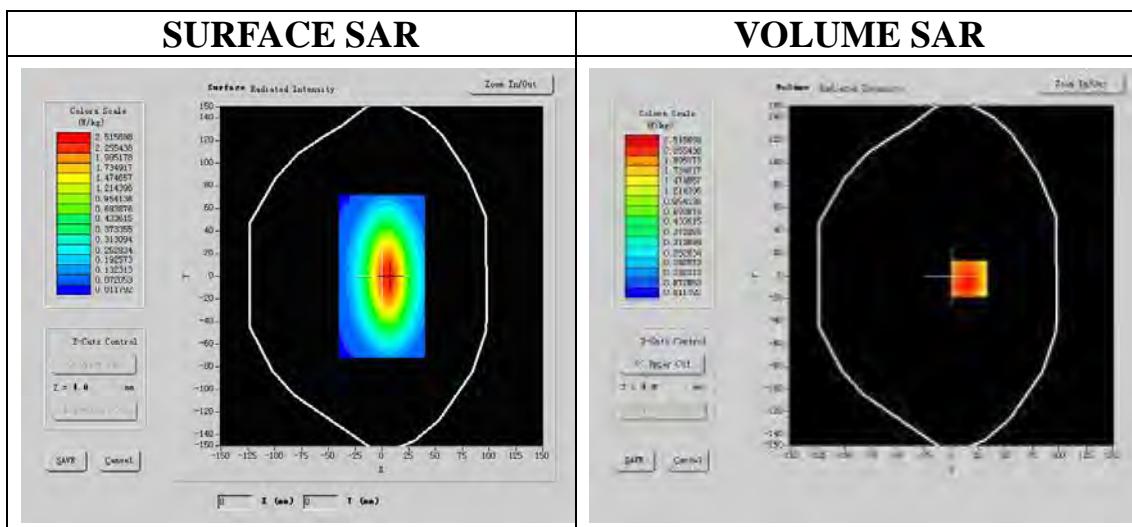
### A. Experimental conditions.

<b>Phantom File</b>	surf_sam_plan.txt
<b>Phantom</b>	Validation plane
<b>Device Position</b>	
<b>Band</b>	2450MHz
<b>Channels</b>	
<b>Signal</b>	CW

### B. SAR Measurement Results

#### Band SAR

<b>Frequency (MHz)</b>	2450.000000
<b>Relative permittivity (real part)</b>	52..548876
<b>Relative permittivity</b>	12.991650
<b>Conductivity (S/m)</b>	1.770014
<b>Power Drift (%)</b>	-2.180000
<b>Ambient Temperature:</b>	22.0°C
<b>Liquid Temperature:</b>	21.8°C
<b>ConvF:</b>	39.772,33.946,37.835
<b>Crest factor:</b>	1:1



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

<b>SAR 10g (W/Kg)</b>	6.256773
<b>SAR 1g (W/Kg)</b>	12.899365

### Z Axis Scan

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

### SAR, Z Axis Scan (X = -1, Y = -50)

