

### FCC SAR

# **TEST REPORT**

of

#### M560

Model Name:

LYNX (Revol Wireless)/

EXPRESSION(Mobi PCS)/V1 (Open Mobile)

Trade Name:

Revol Wireless, Mobi PCS, Open Mobile

Report No.:

SZ10070023S01

FCC ID:

U46-M560

prepared for

### **Teleepoch Limited**

2/F,R2-A North Gate, Shenzhen High-Tech Industrial Nanshan District, Shenzhen, Guang Dong, China

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#### General Information

#### 1.1. Notes

The test results of this test report relate exclusively to the information specified in section 3.3. Shenzhen Electronic Product Quality Testing Center Morlab Laboratory does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the identification. The test report may only be reproduced or published in full. Reproduction or publications of extracts from the test report requires the prior written approval of Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. The test report shall be invalid without all the signatures of testing the Project Manager, the Deputy Project Manager and the Test Lab Manager. Any objections must be raised to Morlab within 30 days since the date when the report is received. It will not be taken into consideration beyond this limit.

## 1.2. Organization item

Report No.:

SZ10070023S01

Date of Issue:

Aug 26, 2010

Date of Tests:

Aug 17, 2010 - Aug 17, 2010

Responsible for Accreditation:

Zeng Dexin

Project Manager:

Li Lei

Deputy Project Manager:

Samuel Peng

#### 1.3. Conclusion

Shenzhen Electronic Product Quality Testing Center Morlab Laboratory has verified that all tests as listed in the section 4.6 of this report haven been performed successfully with the tested equipment.

Tested by

(Responsible for the Test Report)

Reviewed by

Certification (Verification of the Test Report)

Zeng Dexin

OKOBAL SERVICE

Approved by

(Responsible Test Lab Manager)



## 2. Testing Laboratory

## 2.1. Identification of the Responsible Testing Laboratory

Company Name: Shenzhen Electronic Product Quality Testing Center

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

## 2.2. Identification of the Responsible Testing Location

Name: Shenzhen Electronic Product Quality Testing Center Morlab

Laboratory

Address: 3/F, Electronic Testing Building, Shahe Road, Nanshan

District, Shenzhen, 518055 P. R. China

#### 2.3. Accreditation Certificate

Accredited Testing Laboratory: No. CNAS L1659 (see Annex A)

## 2.4. List of Test Equipments

No.	Instrument	Туре	Cal. Date	Cal. Due
1	PC	Dell (Pentium IV 2.4GHz,		
1	rc	SN:X10-23533)		
2	Network	Rohde&Schwarz (CMU200,	2009-9-26	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
2	Emulator	SN:105894)	2009-9-20	1 year
3	Voltmeter	Keithley (2000, SN:1000572)	2009-9-24	1year
4	Crystlastinas	Rohde&Schwarz (SML_03,	2009-9-24	1,,,,,,,,,,
4 Synth	Synthetizer	SN:101868)	2009-9-24	1 year
5	Amplifier	Nucl udes (ALB216, SN:10800)	2009-9-24	1year
6	Power Meter	Rohde&Schwarz (NRVD, SN:101066)	2009-9-24	1year
7	Probe	Antennessa (SN:SN_3708_EP80)	2009-9-24	1year
8	Phantom	Antennessa (SN:SN_36_08_SAM62)	2009-9-24	1year
9	Liquid	Antennessa (Last Calibration:21 08 08)	2010-8-21	1year



### 3. Technical Information

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

## 3.1. Identification of Applicant

Company Name: Teleepoch Limited

Address: 2/F,R2-A North Gate, Shenzhen High-Tech Industrial Nanshan

District, Shenzhen, Guang Dong, China

### 3.2. Identification of Manufacturer

Company Name: Teleepoch Limited

Address: 5A, B1 Building, South Section, Hi-Tech Industrial Park Nanshan

District, 518057, Shenzhen Guangdong Province, China

### 3.3. Equipment Under Test (EUT)

Brand Name: Revol Wireless, Mobi PCS, Open Mobile Type Name: Revol Wireless, Mobi PCS, Open Mobile

Marking Name: LYNX (Revol Wireless)/ EXPRESSION(Mobi PCS)/

V1 (Open Mobile)

Hardware Version: M560\_V1.2 Software Version: M560\_V0.6

Frequency Bands: CDMA 800MHz (channel 1013:824.70MHz,

channel 384:836.50MHz, Channel 848.30MHz) CDMA 1900MHz (channel 25:1851.2MHz,

channel 600:1880.00MHz, Channel 1175:1908.8MHz)

Modulation Mode: CDMA

Antenna type: Build inside Accessories: Charger; Battery

Battery Model: 054050

Battery specification: 1000mAh 3.7V



### 3.3.1. Photographs of the EUT

Please see for photographs of the EUT.

#### 3.3.2. Identification of all used EUTs

The EUT Identity consists of numerical and letter characters (see the table below), the first five numerical characters indicates the Type of the EUT defined by Morlab, the next letter character indicates the test sample, and the following two numerical characters indicates the software version of the test sample.

EUT Identity	Hardware Version	Software Version
1#	M560_V1.2	M560_V0.6

#### 4. Test Results

# 4.1. Applied Reference Documents

Leading reference documents for testing:

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



### 4.2. Test Environment/Conditions

Normal Temperature (NT): 20 ... 25 °C Relative Humidity: 30 ... 75 %

Air Pressure: 980 ... 1020 hPa
Details of Power Supply: 220V/50Hz AC

Extreme Temperature: Low Temperature (LT) =  $-10^{\circ}$ C

High Temperature (HT) =  $55^{\circ}$ C

Extreme Voltage of the EUT: Normal Voltage (NV) = 3.80V

Low Voltage (LV) = 3.60VHigh Voltage (HV) = 4.20V

Test frequency: CDMA 800MHz

CDMA 1900MHz

Operation mode: Call established

Power Level: Maximum output power

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

The Absolute Radio Frequency Channel Number (ARFCN) is allocated to 1013, 384 and 777 respectively in the case of CDMA 800MHz 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.





## 4.3. Operational Conditions During Test

## 4.3.1. Informations On The Testing

#### I. INFORMATIONS ON THE TESTING

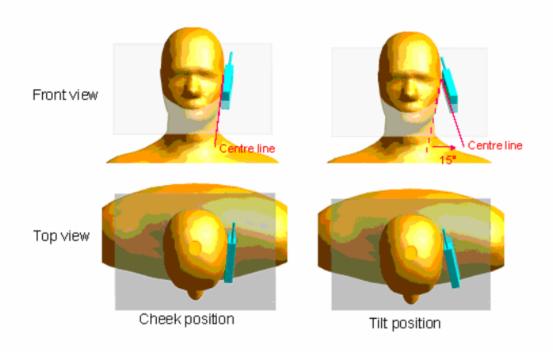
#### I.1. Normative reference

IEEE 1528: Recommended Practice for determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques. Institute of Electrical and Electronics Engineers, INC., 2003.

#### I.3. Positions and test conditions of the mobile phone under test

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 place 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



## 4.3.2. 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.



COMOSAR bench

The mobile phone 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 10 g mass.

#### II.1. 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 2 mm +/- 0,2 mm. It enables the dosimetric evaluation of left and right hand 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.

#### II.2. Probe

For the measurements the Specific Dosimetric E-Field Probe SSE5 with following specifications is used.

• Dynamic range: 0.01-100 W/kg

• Tip Diameter: 5 mm



• Distance between probe tip and sensor center: 2.5 mm

 Distance between sensor center and the inner phantom surface: 4 mm (repeatability better than +/- 1mm).

Probe linearity: <0.25 dB</li>
Axial Isotropy: <0.25 dB</li>
Spherical Isotropy: <0.50 dB</li>

· Calibration range: 835 to 2500 MHz for head & body simulating liquid

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

#### II.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 16 mm \* 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.

#### $\Pi.4$ 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 minimise measurements errors, but the highest local SAR will occur at the surface of the phantom.

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



# 4.3.3. Uncertainty Assessment

The following table includes the uncertainty table of the IEEE 1528.

The values are determined by Antennessa.

	1	1		•	1	ı	1	1	
a	b	С	d	e=f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	7.0	N	1	1	1	7.00	7.00	00
Axial Isotropy	E.2.2	2.5	R	V3	(1-Cp) <sup>1/2</sup>	(1-Cp) <sup>1/2</sup>	1.02	1.02	00
Hemispherical Isotropy	E.2.2	4.0	R	V3	√Cp	√Co	1.63	1.63	
Boundary effect	E.2.3	1.0	R	√3	1	1	0.58	0.58	00
Linearity	E.2.4	5.0	R	V3	1	1	2.89	2.89	00
System detection limits	E.2.5	1.0	R	V3	1	1	0.58	0.58	00
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	00
Reponse Time	E.2.7	3.0	R	√3	1	1	1.73	1.73	00
Integration Time	E.2.8	2.0	R	V3	1	1	1.15	1.15	00
RF ambient Conditions	E.6.1	3.0	R	V3	1	1	1.73	1.73	00
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	√3	1	1	1.15	1.15	00
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	√3	1	1	0.03	0.03	00
Extrapolation, interpolation and integration Algoritms for Max. SAR Evaluation	E.5.2	5.0	R	√3	1	1	2.89	2.89	00
Test sample Related									
Test sample positioning	E.4.2.1	0.03	N	1	1	1	0.03	0.03	N-1
Device Holder Uncertainty	E.4.1.1	5.00	N	1	1	1	5.00	5.00	
Output power Variation - SAR drift measurement	6.6.2	4.76	R	√3	1	1	2.75	2.75	8
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	√3	1	1	0.03	0.03	~
Liquid conductivity - deviation from target value	E.3.2	0.57	R	√3	0.64	0.43	0.21	0.14	~



Liquid conductivity -	E.3.3	5.00	N	1	0.64	0.43	3.20	2.15	M
measurement uncertainty									
Liquid permittivity - deviation	E.3.2	3.66	R	\[ \scale_{\scale}	0.6	0.49	1.27	1.04	8
from target value				¥3					
Liquid permittivity -	E.3.3	10.00	N	1	0.6	0.49	6.00	4.90	M
measurement uncertainty									
Combined Standard Uncertainty			RSS				11.28	10.78	
Expanded Uncertainty			k				21.99	21.03	
(95% Confidence interval)									

# 4.3.4. Equipments and results of validation testing

## Equipments:

name	Type and specification
Signal generator	E4433B
Directional coupler	450MHz-3GHz
Amplifier	3W 502(10-2500MHz)
Reference dipole	835MHz:SN 36/08 DIPC99
	1800MHz:SN 36/08 DIPF101

## Results:

Frequency	835MHz	1900MHz
Target value (1g)	10.8 W/Kg(body)	39.7 W/Kg
250 mW input power	2.734 W/Kg (head)	9.857 W/Kg (head)
	2.752 W/Kg (body)	9.895 W/Kg (body)
Test value (1g)	10.936 W/Kg (head)	39.428 W/Kg (head)
	10.080 W/Kg (body)	39.580 W/Kg (body)

Note: please refer to check the system performance data, the first 72-77 page



#### 4.3.5. Dielectric Performance

The measured 1-gram averaged SAR values of the device against the head and the body are provided in Tables 1 and 2 respectively. The humidity and ambient temperature of test facility were 54% ~60% and 23.0 °C ~23.8°C respectively. The SAM head phantom (SN 0381 SH) were full of the head tissue simulating liquid. The depth of the body tissue was 15.1cm. The distance between the back of the device and the bottom of the flat phantom is 1.5cm (taking into account of the IEEE 1528 and the place of the antenna). A base station simulator was used to control the device during the SAR measurement. The phone was supplied with full-charged battery for each measurement.

For head measurement, the device was tested at the lowest, middle and highest frequencies in the transmit band.

**Table 1: Dielectric Performance of Head Tissue Simulating Liquid** 

Temperature: 23.0~23.8°C, humidity: 54~60%.							
/	Frequency	Permittivity ε	Conductivity σ (S/m)				
Target value	835 MHZ	41.5	0.90				
Validation value (Aug. 6)	835 MHZ	41. 675999	0. 894409				
Target value	1900 MHZ	40	1.40				
Validation value (Aug. 6)	1900 MHZ	38. 509998	1. 436111				

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

Table 2: Dielectric Performance of Body Tissue Simulating Liquid

Temperature: 23.0~23.8°C, humidity: 54~60%.								
/	Frequency	Permittivity ε	Conductivity σ (S/m)					
Target value	835 MHz	55. 0	0.95					
Validation value (Aug. 6)	835 MHz	55. 709999	1. 009033					
Target value	1900 MHz	53. 3	1. 52					



Validation value	1900 MHz	52. 548876	1. 573978
(Aug. 6)			

# 4.3.6. Simulant liquids

Simulant liquids that are used for testing at frequencies of CDMA 800MHz or CDMA 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 20litres for a horizontal bath phantom.

Ingredients	Frequency Band		Frequen	cy Band
(% by weight)	835]	MHz	1900MHz	
Tissue Type	Head	Body	Head	Body
Water	41.45	52.4	55.36	40.4
Salt(NaCl)	1.45	1.4	0.35	0.5
Sugar	56.0	45.0	30.45	58.0
HEC	1.0	1.0	0.0	1.0
Bactericide	0.1	0.1	0.0	0.1
Triton	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	13.84	0.0
Acticide SPX	0.0	0.0	0.0	0.0
Dielectric Constant	42.45	56.1	41.00	54.0
Conductivity (S/m)	0.91	0.95	0.38	1.45



#### 4.4. MEASUREMENT PROCEDURES

### 4.4.1. Procedures Used To Establish Test Signal

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

#### 4.4.2 SAR Measurement Conditions for CDMA2000 1x

These procedures were followed according to FCC "SAR Measurement Procedures for 3G Devices", June 2006.

## 4.4.2.1 Output Power Verification

See 3GPP2 C.S0011/TIA-98-E as recommended by "SAR Measurement Procedures for 3G Devices", June 2006.

Maximum output power is verified on the High, Middle and Low channels according to procedures defined in section 4.4.5.2 of 3GPP2 C.S0011/TIA-98-E. SO55 tests were measured with power control bits in "All Up" condition.

- 1. If the mobile station supports Reverse TCH RC 1 and Forward TCH RC 1, set up a call using Fundamental Channel Test Mode 1 (RC=1/1) with 9600 bps data rate only.
- 2. Under RC1, C.S0011 Table 4.4.5.2-1 (Table.A) parameters were applied.
- 3. If the MS supports the RC 3 Reverse FCH, RC3 Reverse SCH0 and demodulation of RC 3, 4, or 5, set up a call using Supplemental Channel Test Mode 3 (RC 3/3) with 9600 bps Fundamental Channel and 9600 bps SCH0 data rate Channel and 9600 bps SCH0 data rate.
- 4. Under RC3, C.S0011 Table 4.4.5.2-2(Table.B) was applied.
- 5. FCHs were configured at full rate for maximum SAR with "All Up" power control bits. Table.A Table.B

Parameters for Max. Power for RC1		
Parameter	Units	Value
Loc	4Bm/1.23 MHz	-104
Pilot E <sub>c</sub>	dB	-7
Traffic E <sub>c</sub>	dB	-7.4

Parameters for Max. Power for		
Parameter	Units	
l <sub>or</sub>	dBm/1.23 MHz	
Pilot E <sub>c</sub>	dB	
$\frac{\text{Traffic } E_c}{I_{or}}$	dB	

Table, A

Table, B

#### 4.4.2.2 Head SAR Measurement

SAR for head exposure configurations is measured in RC3 with the DUT configured to transmit at

Value -86



fullrate using Loopback Service Option SO55. SAR for RC1 is not required when the maximum average output of each channel is less than ¼ dB higher than that measured in RC3. Otherwise, SAR is measured on the maximum output channel in RC1 using the exposure configuration that results in the highest SAR for that channel in RC3.

### 4.4.2.3 Body SAR Measurement

SAR for body exposure configurations is measured in RC3 with the DUT configured to transmit at full rate on FCH with all other code channels disabled using TDSO / SO32. SAR for multiple code channels (FCH + SCHn) is not required when the maximum average output of each RF channel is less than ¼ dB higher than that measured with FCH only. Otherwise, SAR is measured on the maximum output channel (FCH + SCHn) with FCH at full rate and SCH0 enabled at 9600 bps using the exposure configuration that results in the highest SAR for that channel with FCH only. When multiple code channels are enabled, the DUT output may shift by more than 0.5 dB and lead to higher SAR drifts and SCH dropouts. Body SAR in RC1 is not required when the maximum average output of each channel is less than ¼dB higher than that measured in RC3. Otherwise, SAR is measured on the maximum output channel in RC1; with Loopback Service Option SO55, at full rate, using the body exposure configuration that results in the highest SAR for that channel in RC3.

**1xRTT Power Measurements** 

Channel	Radio Configuration aud conducted Power (dBm)			
Chamiei	RC1	RC1	RC3	RC3
1013	23.21	23.34	23.26	23.24
384	23.53	23.65	23.35	23.40
777	23.18	23.45	23.34	23.33
25	24.11	24.16	23.98	23.99
600	23.00	23.01	22.96	22.93
1175	22.75	22.81	22.74	22.65
SO	SO2	SO55	SO2	SO55



## 4.5. Items used in the Test Results List

Terms in the column "Verdict" for the test results list of the section 4.6:

Terms in the column vertice for the test results list of the section 1.0.		
Verdict	Description	
PASS	EUT passed this test case	
FAIL	EUT failed this test case	
INC.	EUT did not pass and did not fail this test case, therefore the verdict is inconclusive	
Decl.	Decl. "Declaration": Morlab has received documents from the applicant and/or manufacturer which show conformity to the applied standards for this test case.	
N/A	Test case not applicable for the EUT, see the column "Note" for detailed	



## 4.6. Test Results List

Summary of Measurement Results (CDMA 800MHz Band) SAR Values (CDMA 800MHz Band), Measured against the head.

Temperature: 23.0~23.8°C, humidity: 54~60%.			
Limit of SAD (W//kg)	1 g Average		
Limit of SAR (W/kg)	1.6		
	Measurement Result (W/kg)		
Test Case	1 g Average	Power level	
	(W/kg)	(dBm)	
Left head, Touch cheek, channel Low	0.700	27.57	
Left head, Touch cheek, channel Middle	0.777	27.34	
Left head, Touch cheek, channel High	1.160	27.48	
Left head, Tilt 15 Degree, channel Low	0.547	27.57	
Left head, Tilt 15 Degree, Channel Middle	0.567	27.34	
Left head, Tilt 15 Degree, Channel High	0.828	27.48	
Right head, Touch cheek, channel Low	0.673	27.57	
Right head, Touch cheek, Channel Middle	0.686	27.34	
Right head, Touch cheek, Channel High	0.957	27.48	
Right head, Tilt 15 Degree, channel Low	0.461	27.57	
Right head, Tilt 15 Degree, Channel Middle	0.479	27.34	
Right head, Tilt 15 Degree, Channel High	0.662	27.48	

Summary of Measurement Results (CDMA 1900MHz Band) SAR Values (CDMA 1900MHz Band), Measured against the head.

Temperature: 23.0~23.8°C, humidity: 54~60%.			
Limit of SAR (W/kg)	1 g Average		
Limit of SAR (W/kg)	1.6		
	Measuremen	leasurement Result (W/kg)	
Test Case	1 g Average	Power level	
	(W/kg)	(dBm)	
Left head, Touch cheek, channel Low	1.271	27.79	
Left head, Touch cheek, channel Middle	0.776	27.51	
Left head, Touch cheek, channel High	1.113	27.34	
Left head, Tilt 15 Degree, channel Low	1.195	27.79	
Left head, Tilt 15 Degree, Channel Middle	0.755	27.51	
Left head, Tilt 15 Degree, Channel High	0.983	27.34	
Right head, Touch cheek, channel Low	1.266	27.79	



Right head, Touch cheek, Channel Middle	0.956	27.51
Right head, Touch cheek, Channel High	1.211	27.34
Right head, Tilt 15 Degree, channel Low	1.136	27.79
Right head, Tilt 15 Degree, Channel Middle	0.752	27.51
Right head, Tilt 15 Degree, Channel High	1.156	27.34

### SAR Values (CDMA 800MHz Band), Measured against the body.

Temperature: 23.0~23.8°C, humidity: 54~60%.		
Limit of SAR (W/kg)	1 g Average	
Limit of SAR (W/kg)	1.6	
	Measurement Result (W/	
Test Case	1 g Average	Power level
	(W/kg)	(dBm)
Side, Low frequency	1.151	27.57
Side, Middle frequency	1.053	27.34
Side, High frequency	0.996	27.48
Side, Low frequency (back)	0.465	27.57
Side, Low frequency (with earphone)	1.096	27.57

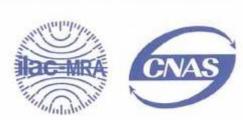
### SAR Values (CDMA 1900MHz Band), Measured against the body.

Temperature: 23.0~23.8°C, humidity: 54~60%.			
Limit of SAR (W/kg)	1 g Average		
Limit of SAR (W/kg)	1.6		
	Measurement Result (W/kg)		
Test Case	1 g Average	Power level	
	(W/kg)	(dBm)	
Side, Low frequency	0.913	27.79	
Side, Middle frequency	0.633	27.51	
Side, High frequency	0.833	27.34	
Side, Low frequency (back)	0.571	27.79	
Side, Low frequency (with earphone)	0.912	27.79	

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







China National Accreditation Service for Conformity Assessment

#### LABORATORY ACCREDITATION CERTIFICATE

(No. CNAS L1659)

China National Accreditation Service for Conformity Assessment has accredited

Shenzhen Electronic Product Quality Testing Center

Electronic Testing Building, Shahe Road, Xili, Nanshan District,

Shenzhen, Guangdong, China

to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing and calibration.

The scope of accreditation is detailed in the attached schedule bearing the same accreditation number as above. The schedule forms an integral part of this certificate.

Date of Issue: 2009-09-29

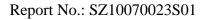
Date of Expiry: 2012-09-28

Date of Initial Accreditation: 1999-08-03



Signed on behalf of China National Accreditation Service for Conformity Assessment

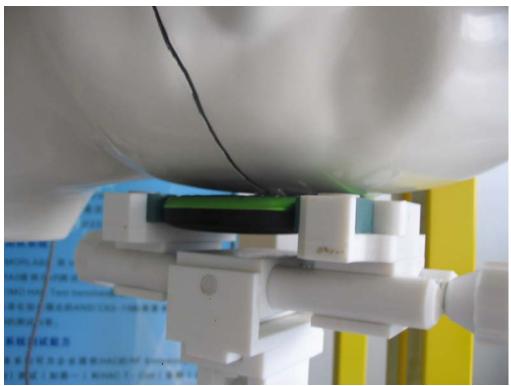
China National Accreditation Service for Conformity Assessment(CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation systems for conformity assessment. CNAS is the signatory to International Laboratory Accreditation Cooperation Multilateral Recognition Arrangement (ILAC MRA), and the signatory to Axia Pacific Laboratory Accreditation Cooperation Multilateral Recognition Arrangement (APLAC MRA).





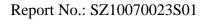
# Annex B Photographs of the EUT

1 EUT Left Head Touch Cheek Position



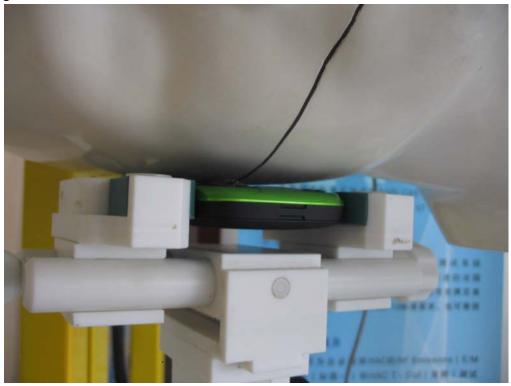
2 EUT Left Head Tilt15 Position





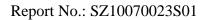


3 EUT Right Head Touch Cheek Position



4 EUT Right Head Tilt15 Position







# 5 Side Position



# 3 with earphone





# **Annex C Graph Test Results**

	BAND	<u>PARAMETERS</u>
TYPE	BAND  CDMA80  0	Measurement 1: Right Head with Cheek device position on Low Channel in CDMA mode  Measurement 2: Right Head with Cheek device position on Middle Channel in CDMA mode  Measurement 3: Right Head with Cheek device position on High Channel in CDMA mode  Measurement 4: Right Head with Tilt device position on Low Channel in CDMA mode  Measurement 5: Right Head with Tilt device position on Middle Channel in CDMA mode  Measurement 6: Right Head with Tilt device position on High Channel in CDMA mode  Measurement 7: Left Head with Cheek device position on Low Channel in CDMA mode  Measurement 8: Left Head with Cheek device position on Middle Channel in CDMA mode  Measurement 9: Left Head with Cheek device position on High Channel in CDMA mode  Measurement 10: Left Head with Tilt device position on Low Channel in CDMA mode  Measurement 11: Left Head with Tilt device position on Low Channel in CDMA mode  Measurement 11: Left Head with Tilt device position on Middle Channel in CDMA mode  Measurement 11: Left Head with Tilt device position on Middle Channel in CDMA mode  Measurement 12: Left Head with Tilt device position on High Channel in CDMA mode  Measurement 13: Validation Plane with Body device
		Measurement 12: Left Head with Tilt device position on High Channel in CDMA mode  Measurement 13: Validation Plane with Body device position on Low Channel in CDMA mode  Measurement 14: Validation Plane with Body device position on Middle Channel in CDMA mode  Measurement 15: Validation Plane with Body device position on High Channel in CDMA mode
		Measurement 16: Validation Plane with Body device position on High Channel in CDMA mode (back)  Measurement 17: Validation Plane with Body device position on High Channel in CDMA mode (with earphone)  Measurement 18: Right Head with Cheek device position on Low Channel in CDMA mode



**CDMA** 

<u>1900</u>

Report No.: SZ10070023S01

	Measurement 19: Right Head with Cheek device position
	on Middle Channel in CDMA mode
	Measurement 20: Right Head with Cheek device position
	on High Channel in CDMA mode
	Measurement 21: Right Head with Tilt device position on
	Low Channel in CDMA mode
	Measurement 22: Right Head with Tilt device position on
	Middle Channel in CDMA mode
	Measurement 23: Right Head with Tilt device position on
	High Channel in CDMA mode
	Measurement 24: Left Head with Cheek device position
ı	on Low Channel in CDMA mode
	Measurement 25: Left Head with Cheek device position
	on Middle Channel in CDMA mode
	Measurement 26: Left Head with Cheek device position
	on High Channel in CDMA mode
	Measurement 27: Left Head with Tilt device position on
	Low Channel in CDMA mode
	Measurement 28: Left Head with Tilt device position on
	Middle Channel in CDMA mode
	Measurement 29: Left Head with Tilt device position on
	High Channel in CDMA mode
	Measurement 30: Validation Plane with Body device
	position on Low Channel in CDMA mode
	Measurement 31: Validation Plane with Body device
	position on Middle Channel in CDMA mode
	Measurement 32: Validation Plane with Body device
	position on High Channel in CDMA mode
	Measurement 33: Validation Plane with Body device
	position on Middle Channel in CDMA mode (back)
	Measurement 34: Validation Plane with Body device
	position on Middle Channel in CDMA mode
	(with earphone)



# **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: 17/8/2010

Measurement duration: 7 minutes 43 seconds

# A. Experimental conditions.

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

# **B. SAR Measurement Results**

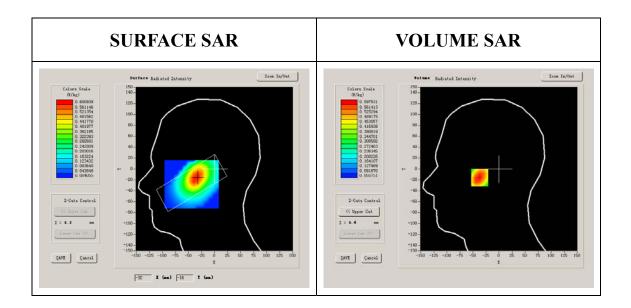
Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.867138
Variation (%)	-0.070000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.5°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



**Maximum location: X=-34.00, Y=-16.00** 

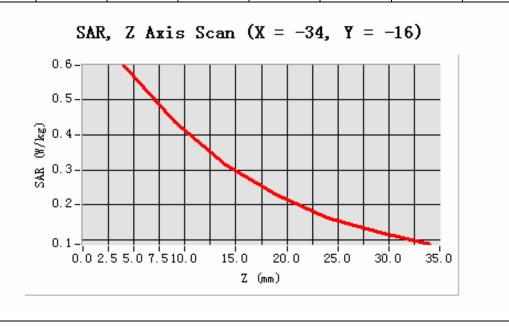
SAR 10g (W/Kg)	0.390029
SAR 1g (W/Kg)	0.673151

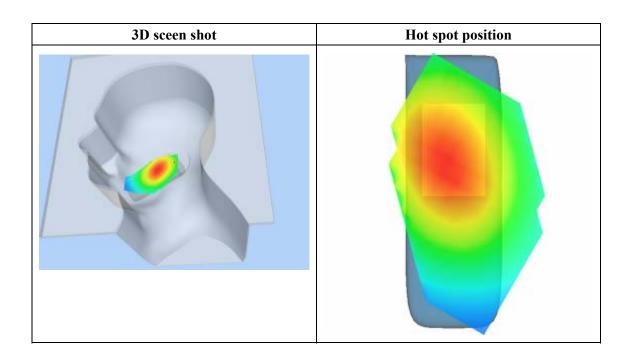




## Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5975	0.4368	0.3153	0.2283	0.1652	0.1215
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 48 seconds

# A. Experimental conditions.

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

# **B. SAR Measurement Results**

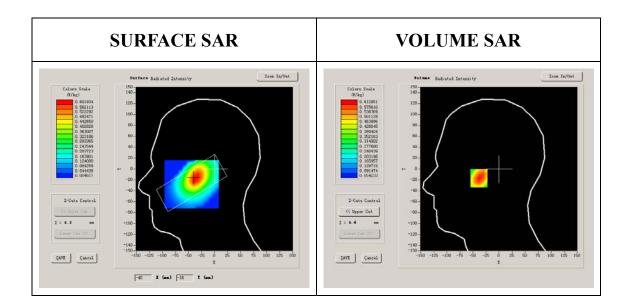
Middle Band SAR (Channel 384):

Frequency (MHz)	836.520020
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.879566	
Variation (%)	-0.600000	
Ambient Temperature:	22.8°C	
Liquid Temperature:	22.5°C	
ConvF:	28.479,25.214,27.196	
Crest factor:	1:1	



**Maximum location: X=-37.00, Y=-17.00** 

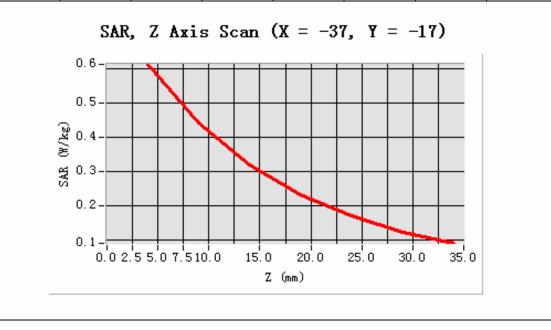
SAR 10g (W/Kg)	0.397925
SAR 1g (W/Kg)	0.686033

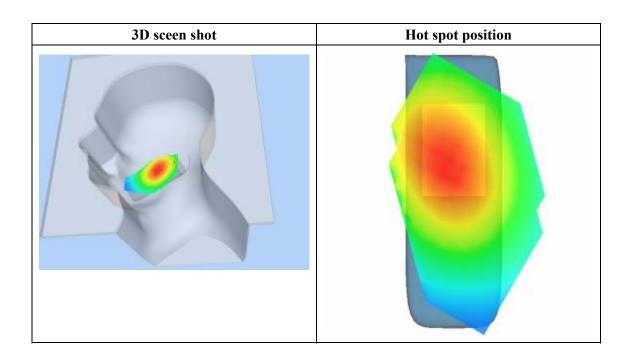




## Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6129	0.4414	0.3201	0.2320	0.1692	0.1231
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 47 seconds

# A. Experimental conditions.

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

# **B. SAR Measurement Results**

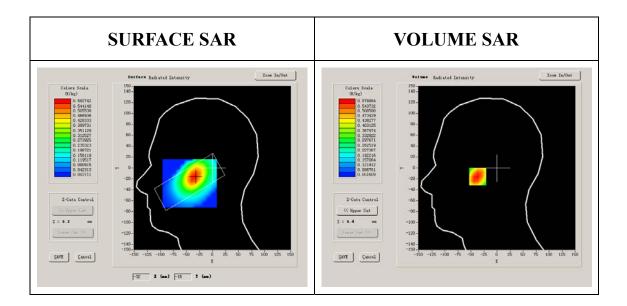
Higher Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.891963
Variation (%)	-1.790000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.5°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



**Maximum location: X=-34.00, Y=-16.00** 

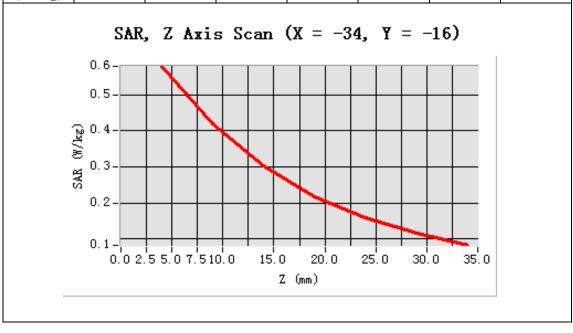
SAR 10g (W/Kg)	0.473868
SAR 1g (W/Kg)	0.957476

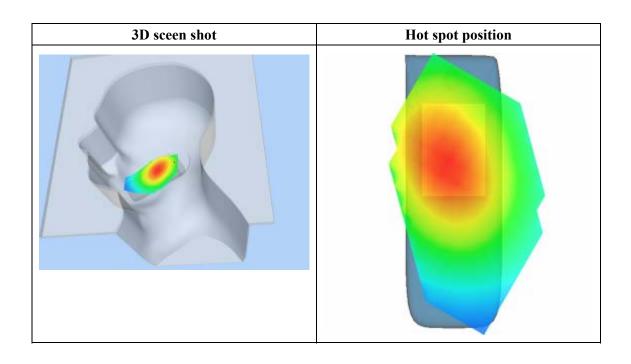




## Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5789	0.4188	0.3049	0.2187	0.1587	0.1161
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 31 seconds

# A. Experimental conditions.

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

# **B. SAR Measurement Results**

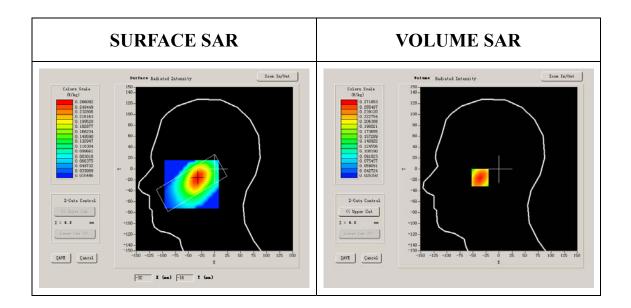
Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.867138	
Variation (%)	-0.070000	
Ambient Temperature:	22.8°C	
Liquid Temperature:	22.5°C	
ConvF:	28.479,25.214,27.196	
Crest factor:	1:1	



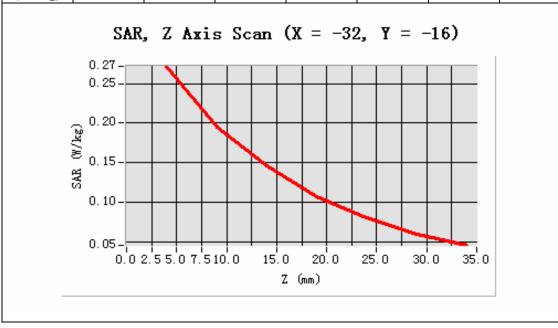
**Maximum location: X=-32.00, Y=-16.00** 

SAR 10g (W/Kg)	0.281585
SAR 1g (W/Kg)	0.460784





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2719	0.1955	0.1462	0.1073	0.0803	0.0600
(W/Kg)							







## **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: 17/8/2010

Measurement duration: 7 minutes 34 seconds

## A. Experimental conditions.

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

#### **B. SAR Measurement Results**

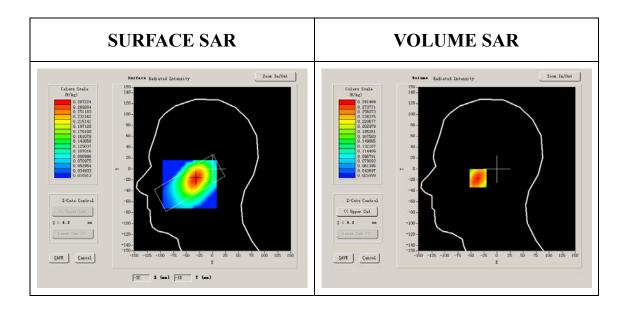
Middle Band SAR (Channel 384):

Frequency (MHz)	836.520020
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.879566
Variation (%)	-0.800000
Ambient Temperature:	22.8°C
Liquid Temperature:	22.5°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



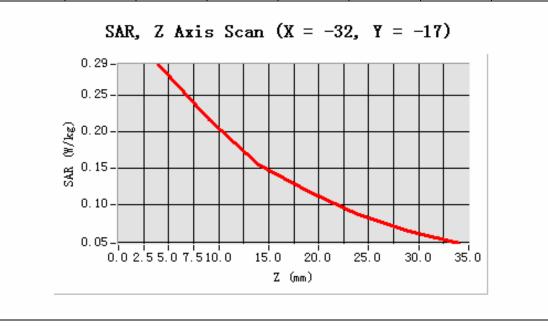
**Maximum location: X=-32.00, Y=-17.00** 

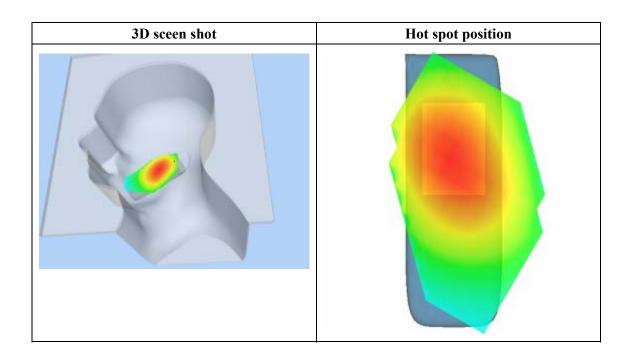
SAR 10g (W/Kg)	0.295103
SAR 1g (W/Kg)	0.478907





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2915	0.2166	0.1550	0.1187	0.0873	0.0646
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 29 seconds

## A. Experimental conditions.

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

# **B. SAR Measurement Results**

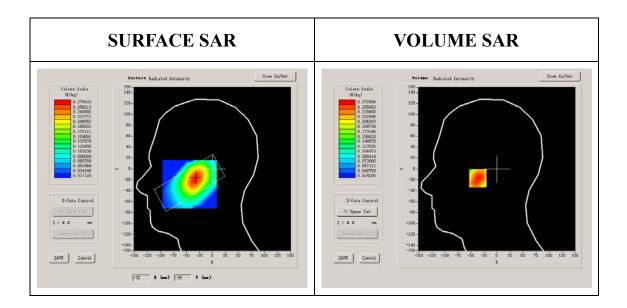
Higher Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.891963	
Variation (%)	-0.650000	
Ambient Temperature:	22.8°C	
Liquid Temperature:	22.5°C	
ConvF:	28.479,25.214,27.196	
Crest factor:	1:1	



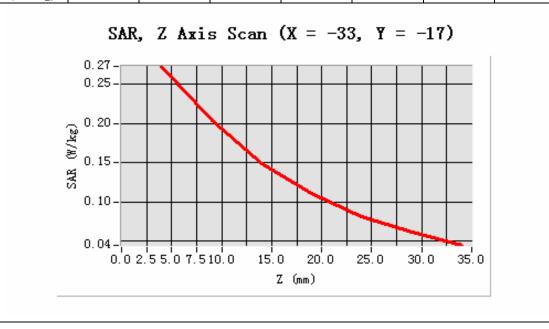
**Maximum location: X=-33.00, Y=-17.00** 

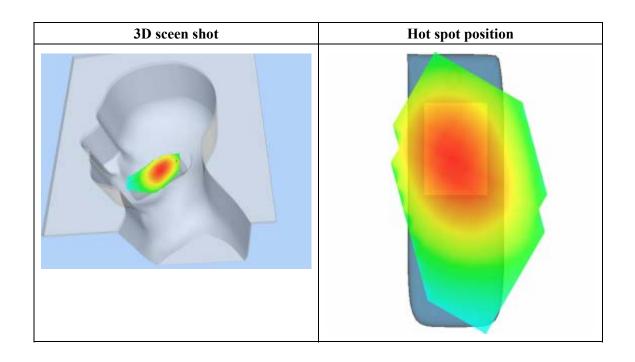
SAR 10g (W/Kg)	0.384247
SAR 1g (W/Kg)	0.661794





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2725	0.2030	0.1488	0.1104	0.0811	0.0612
(W/Kg)							







# **MEASUREMENT 7**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 7 minutes 24 seconds

## A. Experimental conditions.

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

#### **B. SAR Measurement Results**

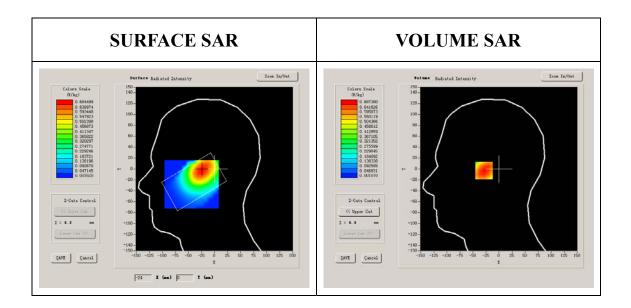
Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.867138		
Variation (%)	-2.010010		
Ambient Temperature:	22.6°C		
Liquid Temperature:	22.3°C		
ConvF:	28.479,25.214,27.196		
Crest factor:	1:1		



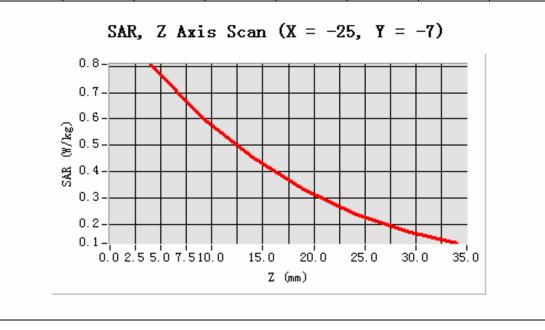
**Maximum location: X=-25.00, Y=-2.00** 

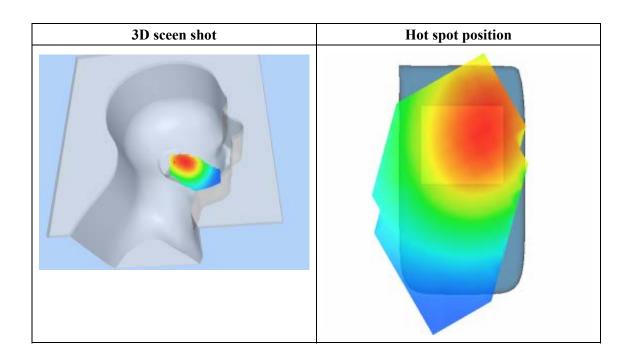
SAR 10g (W/Kg)	0.483983
SAR 1g (W/Kg)	0.700249





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6874	0.5232	0.3898	0.2911	0.2117	0.0015
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 33 seconds

## A. Experimental conditions.

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

#### **B. SAR Measurement Results**

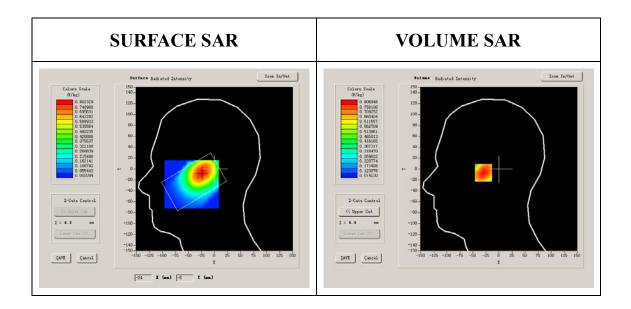
Middle Band SAR (Channel 384):

Frequency (MHz)	836.520020		
Relative permittivity (real part)	41.790001		
Relative permittivity	18.926250		





Conductivity (S/m)	0.879566		
Variation (%)	0.030000		
Ambient Temperature:	22.6°C		
Liquid Temperature:	22.3°C		
ConvF:	28.479,25.214,27.196		
Crest factor:	1:1		



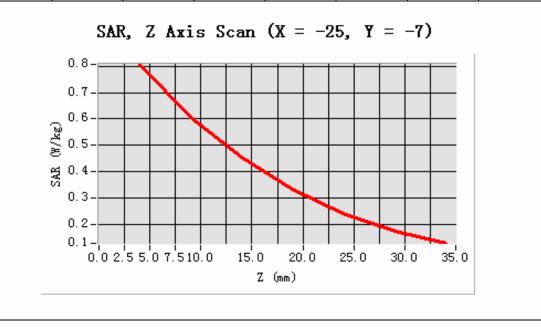
**Maximum location: X=-25.00, Y=-7.00** 

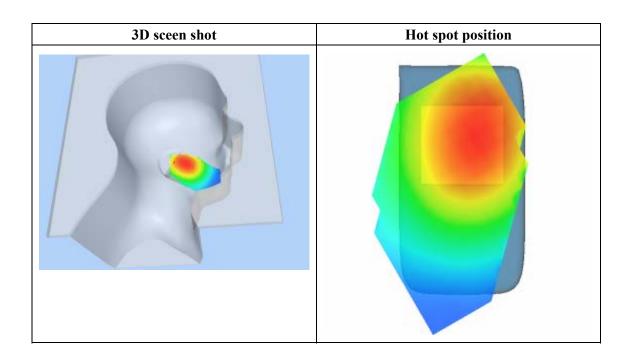
SAR 10g (W/Kg)	0.549507
SAR 1g (W/Kg)	0.776973





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.8069	0.6068	0.4529	0.3328	0.2426	0.1757
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 32 seconds

## A. Experimental conditions.

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

#### **B. SAR Measurement Results**

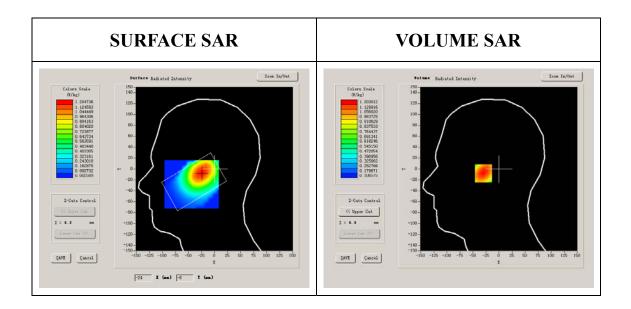
Higher Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.891963
Variation (%)	-0.070000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



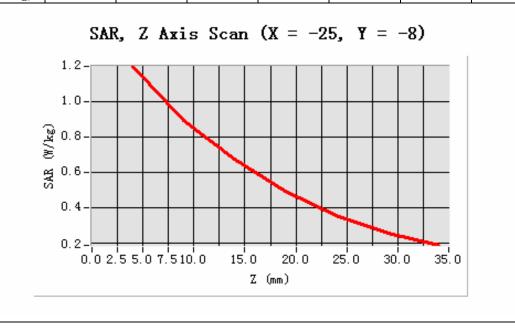
**Maximum location: X=-25.00, Y=-8.00** 

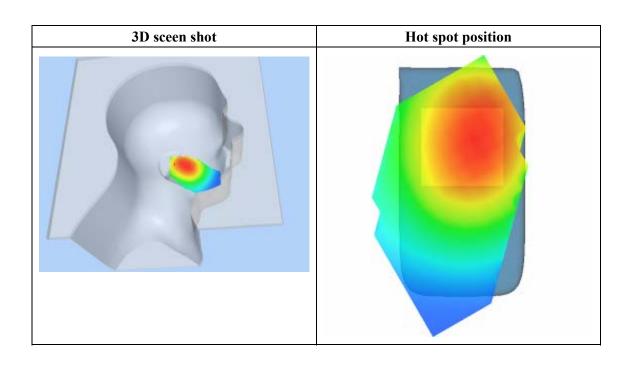
SAR 10g (W/Kg)	0.821401
SAR 1g (W/Kg)	1.160395





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.2030	0.8970	0.6761	0.4954	0.3579	0.2589
(W/Kg)							







## **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: 17/8/2010

Measurement duration: 7 minutes 28 seconds

## A. Experimental conditions.

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

#### **B. SAR Measurement Results**

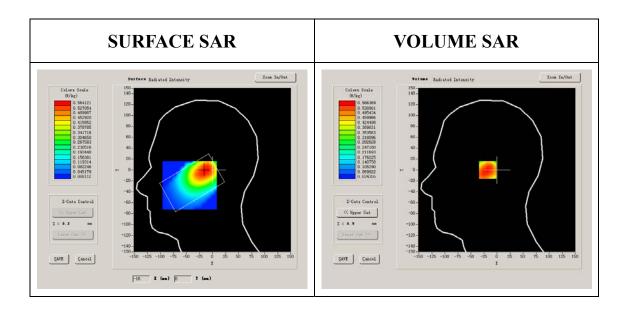
Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250



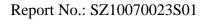


Conductivity (S/m)	0.867138
Variation (%)	0.090000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



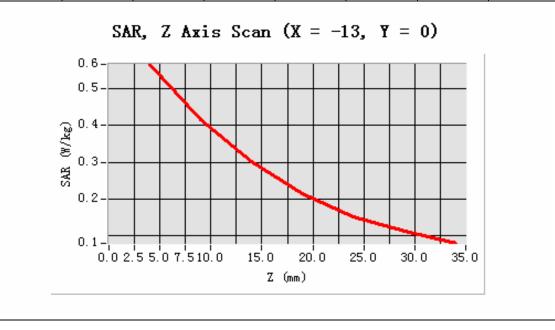
**Maximum location: X=-13.00, Y=0.00** 

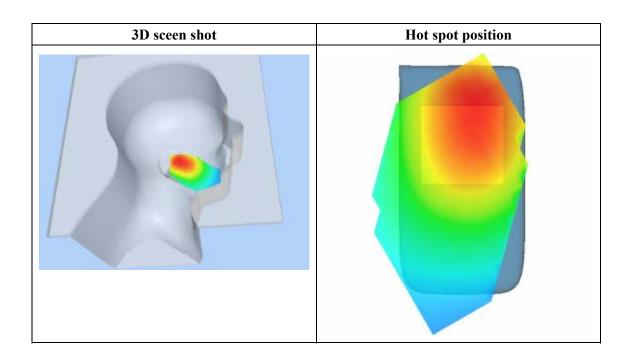
SAR 10g (W/Kg)	0.382060
SAR 1g (W/Kg)	0.547004





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5664	0.4172	0.3012	0.2151	0.1528	0.1116
(W/Kg)							







## **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: 17/8/2010

Measurement duration: 7 minutes 23 seconds

## A. Experimental conditions.

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

#### **B. SAR Measurement Results**

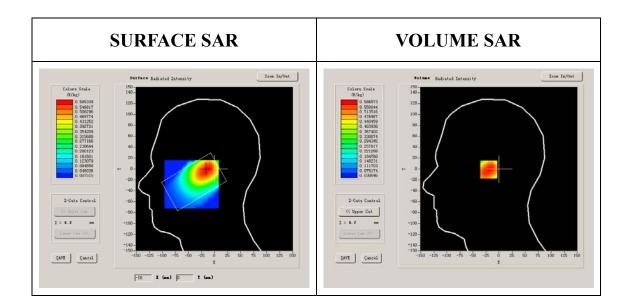
Middle Band SAR (Channel 384):

Frequency (MHz)	836.520020
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.879566
Variation (%)	0.050000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



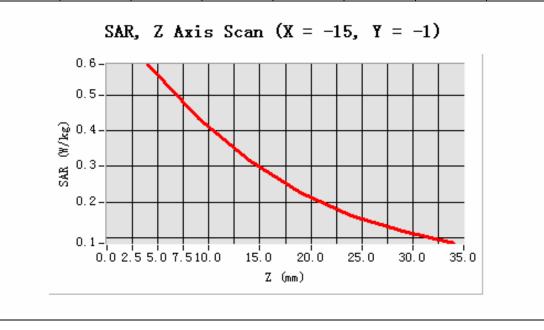
**Maximum location: X=-15.00, Y=-1.00** 

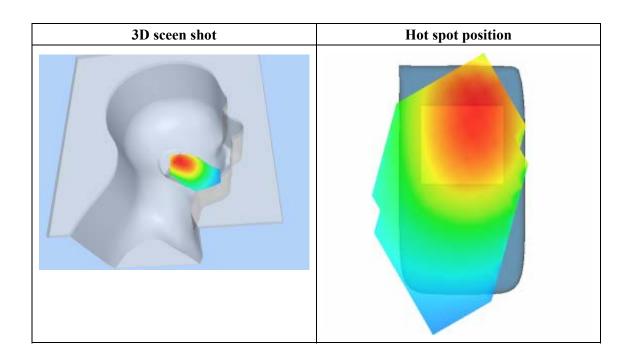
SAR 10g (W/Kg)	0.396301	
SAR 1g (W/Kg)	0.567389	





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5866	0.4356	0.3166	0.2270	0.1627	0.1164
(W/Kg)							







# **MEASUREMENT 12**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 7 minutes 30 seconds

## A. Experimental conditions.

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

# **B. SAR Measurement Results**

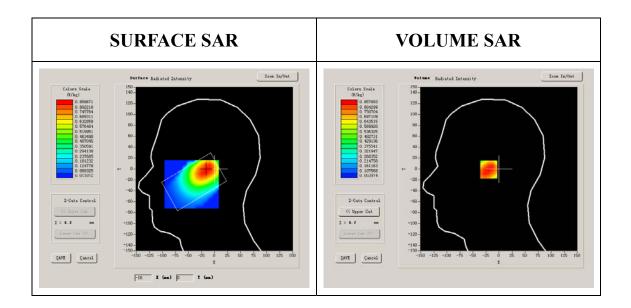
Higher Band SAR (Channel 777):

Frequency (MHz)	848.309998
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250





Conductivity (S/m)	0.891963		
Variation (%)	-0.140000		
Ambient Temperature:	22.6°C		
Liquid Temperature:	22.3°C		
ConvF:	28.479,25.214,27.196		
Crest factor:	1:1		



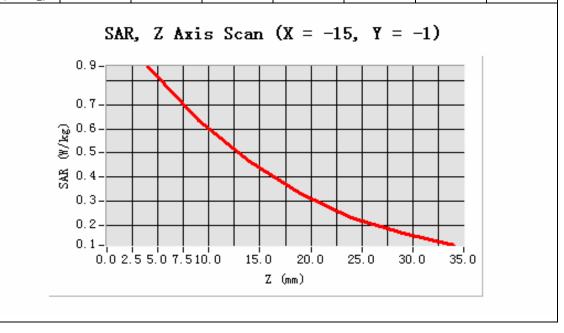
**Maximum location: X=-15.00, Y=-1.00** 

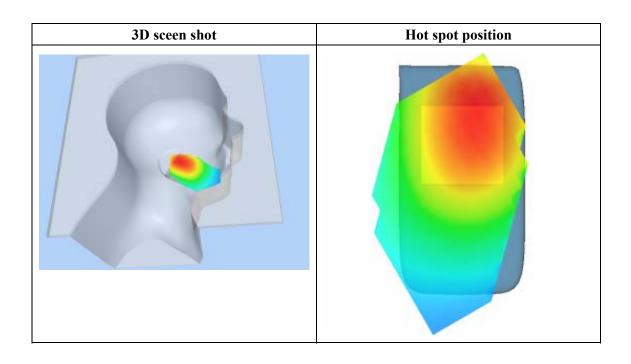
SAR 10g (W/Kg)	0.578734	
SAR 1g (W/Kg)	0.828221	





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.8579	0.6361	0.4636	0.3311	0.2331	0.1671
(W/Kg)							







# **MEASUREMENT 13**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 9 minutes 9 seconds

## A. Experimental conditions.

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

#### **B. SAR Measurement Results**

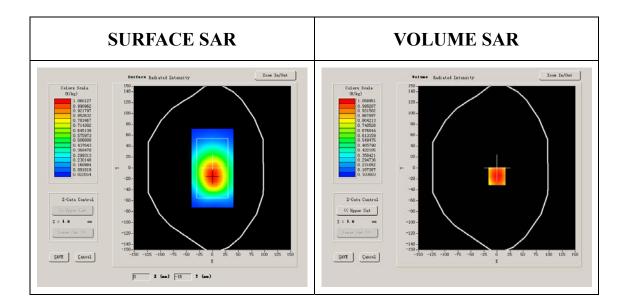
Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012		
Relative permittivity (real part)	54.116001		
Relative permittivity	21.284550		





Conductivity (S/m)	0.975187		
Variation (%)	0.110000		
Ambient Temperature:	22.6°C		
Liquid Temperature:	22.3°C		
ConvF:	28.479,25.214,27.196		
Crest factor:	1:1		



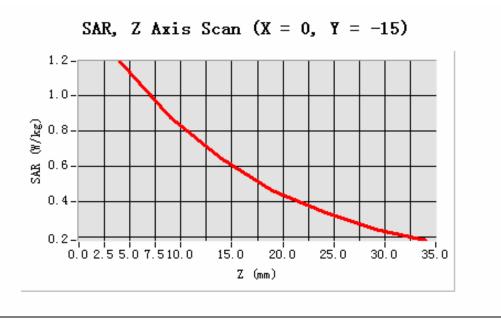
Maximum location: X=0.00, Y=-15.00

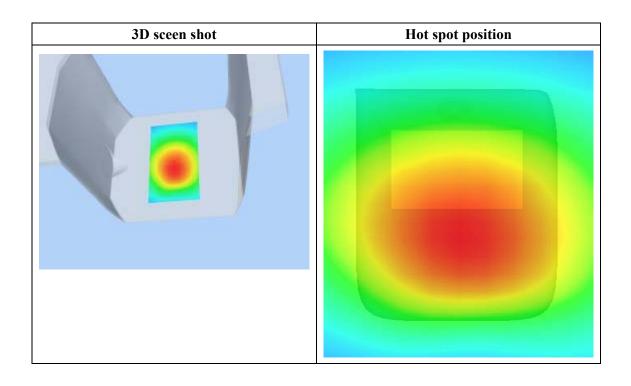
SAR 10g (W/Kg)	0.811457
SAR 1g (W/Kg)	1.150749

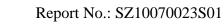




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.1909	0.8715	0.6399	0.4620	0.3404	0.2455
(W/Kg)							









## **MEASUREMENT 14**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 9 minutes 11 seconds

## A. Experimental conditions.

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

### **B. SAR Measurement Results**

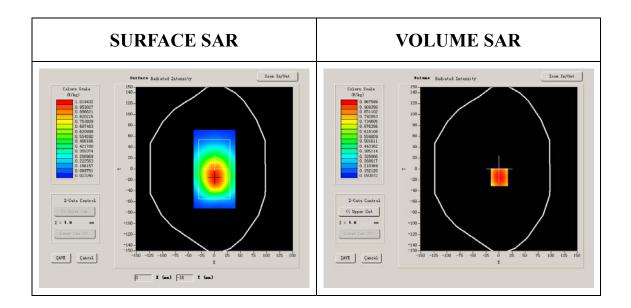
Middle Band SAR (Channel 384):

Frequency (MHz)	836.520020	
Relative permittivity (real part)	54.116001	
Relative permittivity	21.284550	





Conductivity (S/m)	0.989164
Variation (%)	-2.240000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



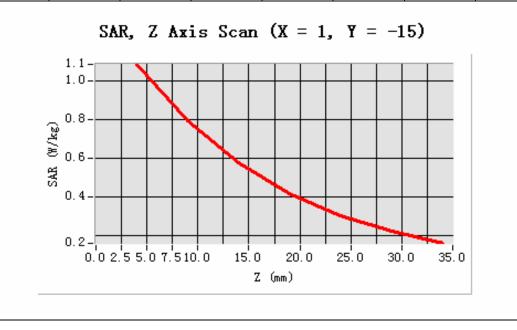
Maximum location: X=1.00, Y=-15.00

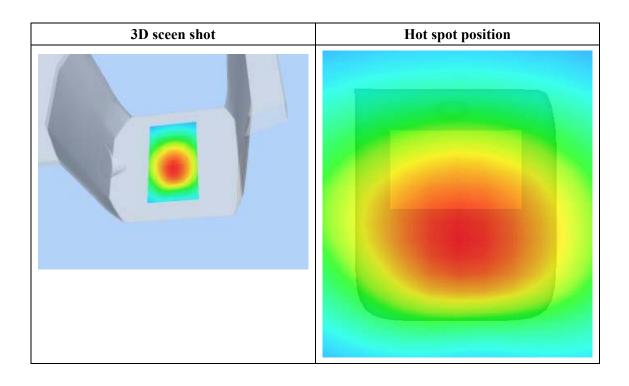
SAR 10g (W/Kg)	0.740630	
SAR 1g (W/Kg)	1.053023	

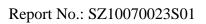




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.0882	0.7972	0.5757	0.4161	0.3023	0.2191
(W/Kg)							









# **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: 17/8/2010

Measurement duration: 9 minutes 11 seconds

## A. Experimental conditions.

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

### **B. SAR Measurement Results**

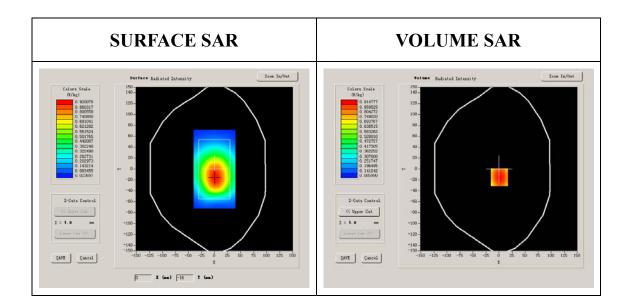
Higher Band SAR (Channel 777):

Frequency (MHz)	848.309998	
Relative permittivity (real part)	54.116001	
Relative permittivity	21.284550	





Conductivity (S/m)	1.003105	
Variation (%)	-0.490000	
Ambient Temperature:	22.6°C	
Liquid Temperature:	22.3°C	
ConvF:	28.479,25.214,27.196	
Crest factor:	1:1	



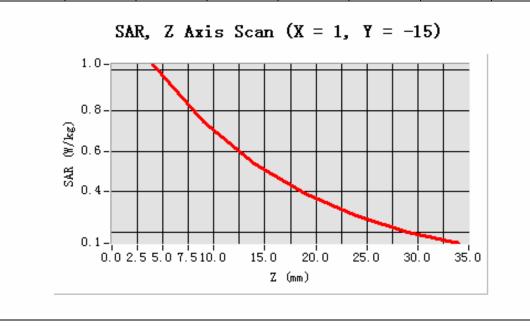
Maximum location: X=1.00, Y=-15.00

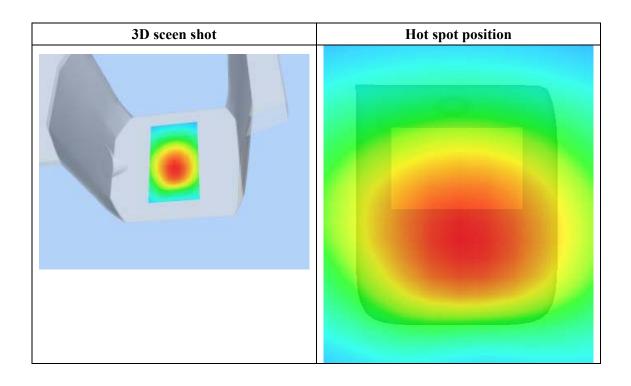
SAR 10g (W/Kg)	0.695325	
SAR 1g (W/Kg)	0.996114	





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.0288	0.7438	0.5362	0.3878	0.2785	0.1980
(W/Kg)							







# **MEASUREMENT 16**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 9 minutes 11 seconds

## A. Experimental conditions.

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

### **B. SAR Measurement Results**

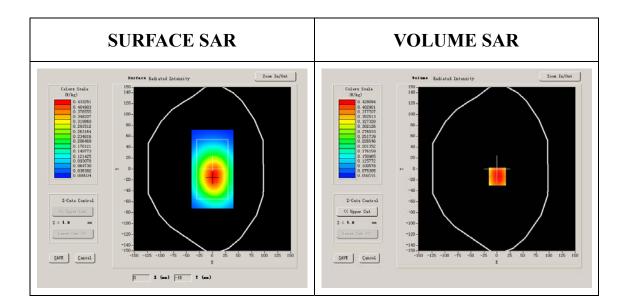
Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550





Conductivity (S/m)	0.975187
Variation (%)	-1.190000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



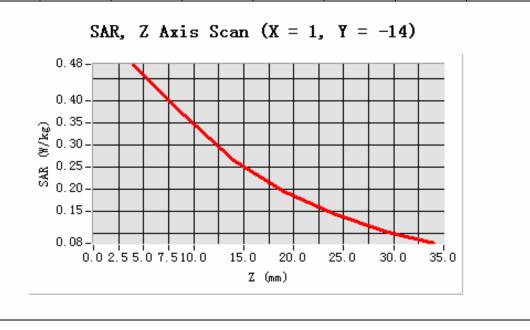
Maximum location: X=1.00, Y=-14.00

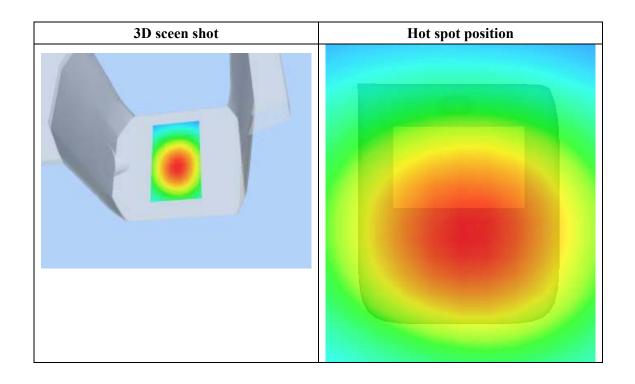
SAR 10g (W/Kg)	0.333094
SAR 1g (W/Kg)	0.465492





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4814	0.3662	0.2655	0.1957	0.1450	0.1053
(W/Kg)							







# **MEASUREMENT 17**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 9 minutes 11 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

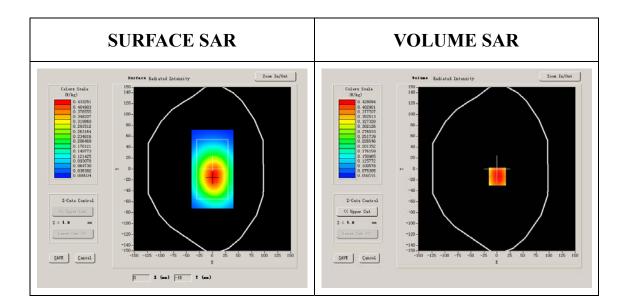
Lower Band SAR (Channel 1013):

Frequency (MHz)	824.700012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550





Conductivity (S/m)	0.975187
Variation (%)	-1.190000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



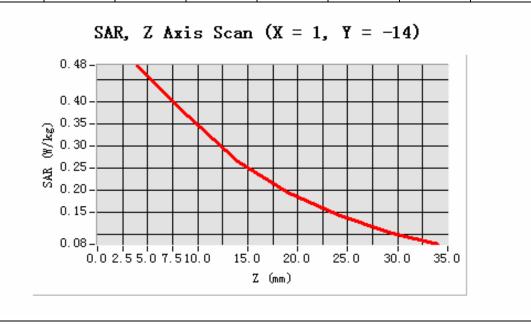
Maximum location: X=1.00, Y=-14.00

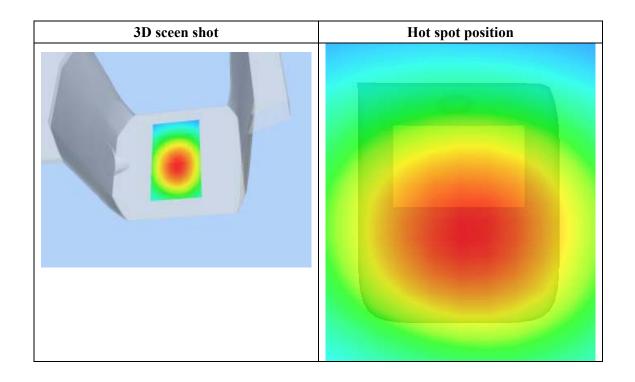
SAR 10g (W/Kg)	0.553352
SAR 1g (W/Kg)	1.095773





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4814	0.3662	0.2655	0.1957	0.1450	0.1053
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 25 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

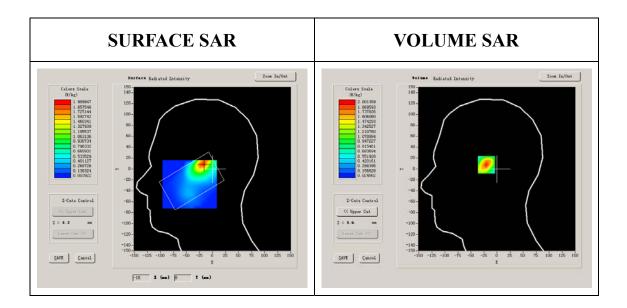
Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650





Conductivity (S/m)	1.431186	
Variation (%)	-2.360000	
Ambient Temperature:	23.5°C	
Liquid Temperature:	22.8°C	
ConvF:	40.625,34.773,38.535	
Crest factor:	1:1	



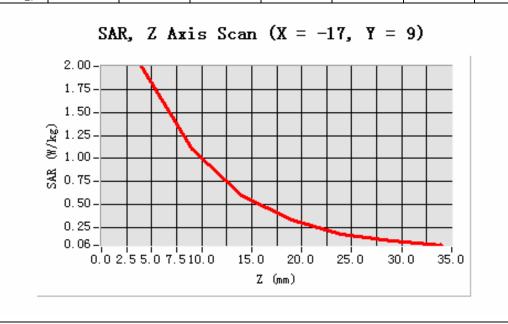
Maximum location: X=-17.00, Y=9.00

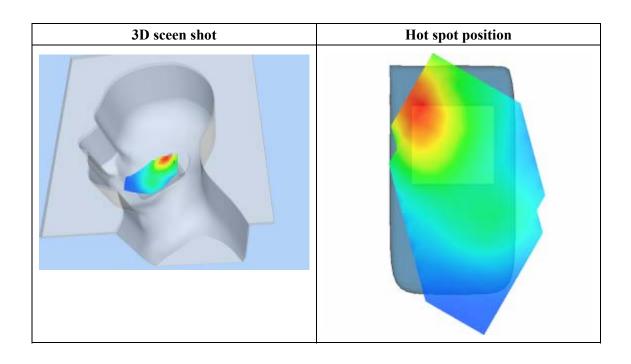
SAR 10g (W/Kg)	0.787521
SAR 1g (W/Kg)	1.266238





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	2.0014	1.1023	0.5948	0.3335	0.1785	0.1059
(W/Kg)							







# **MEASUREMENT 19**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 7 minutes 26 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

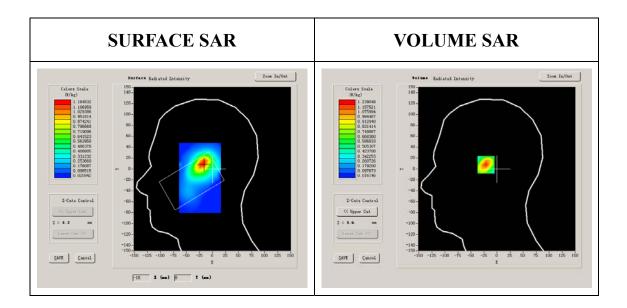
Middle Band SAR (Channel 600):

Frequency (MHz)	1880.000000		
Relative permittivity (real part)	38.209000		
Relative permittivity	13.915650		





Conductivity (S/m)	1.453412		
Variation (%)	-0.440000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:1		



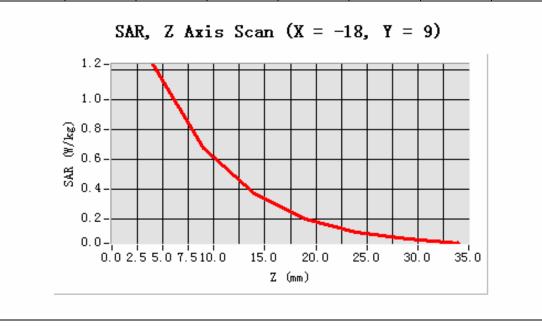
**Maximum location: X=-18.00, Y=9.00** 

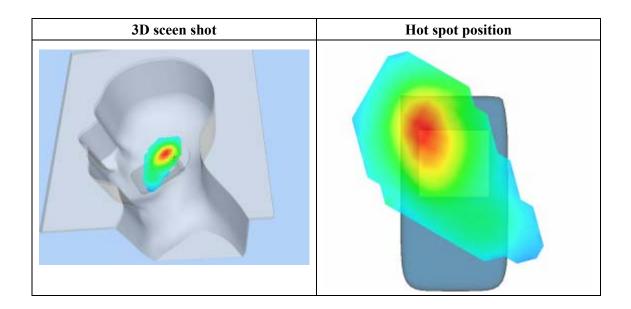
SAR 10g (W/Kg)	0.504934
SAR 1g (W/Kg)	0.955692





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.2390	0.6729	0.3672	0.1992	0.1108	0.0618
(W/Kg)							







# **MEASUREMENT 20**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 7 minutes 26 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

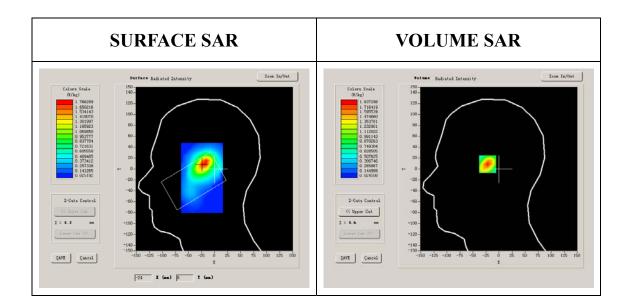
Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650





Conductivity (S/m)	1.475639		
Variation (%)	-0.830000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:1		



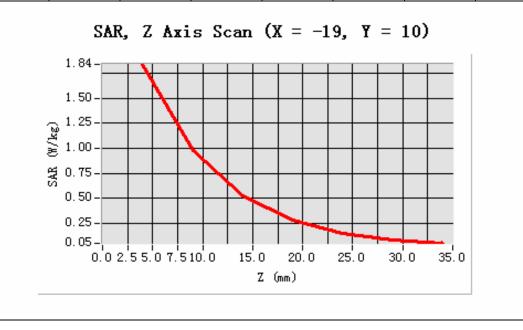
**Maximum location: X=-19.00, Y=10.00** 

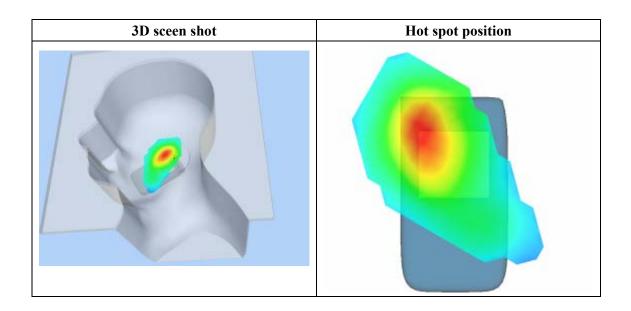
SAR 10g (W/Kg)	0.694672
SAR 1g (W/Kg)	1.210925





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.8373	0.9728	0.5217	0.2773	0.1497	0.0829
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 26 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

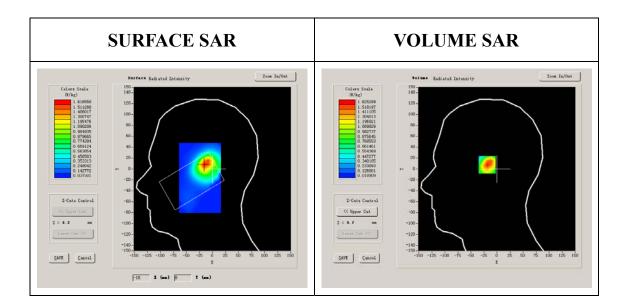
Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650





Conductivity (S/m)	1.431186
Variation (%)	0.680000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



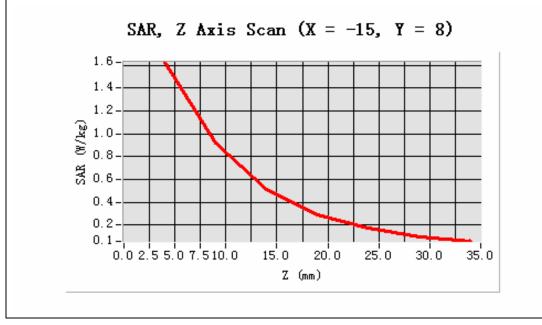
**Maximum location: X=-15.00, Y=8.00** 

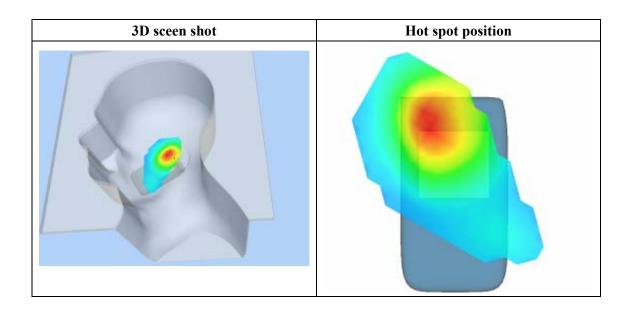
SAR 10g (W/Kg)	0.623898
SAR 1g (W/Kg)	1.135556





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.6253	0.9219	0.5163	0.2960	0.1751	0.0992
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 25 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

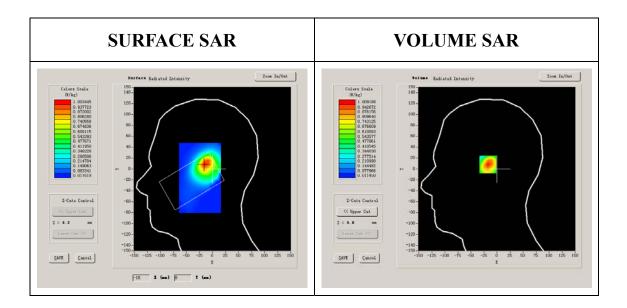
Middle Band SAR (Channel 600):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650





Conductivity (S/m)	1.453412
Variation (%)	-0.020000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



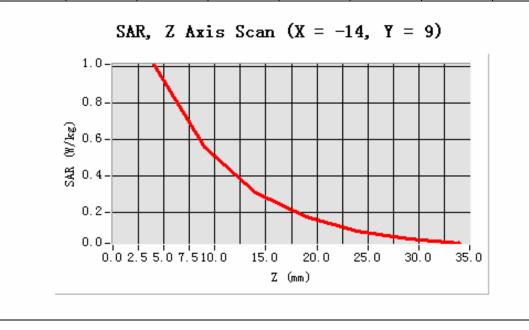
Maximum location: X=-14.00, Y=9.00

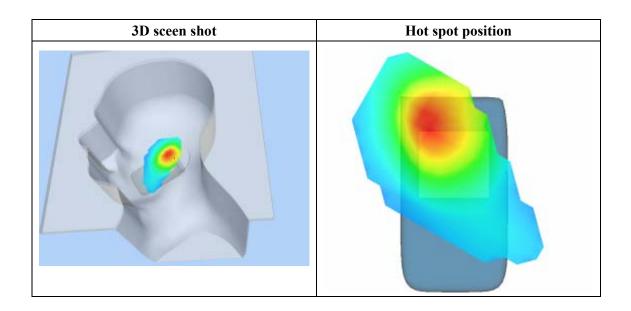
SAR 10g (W/Kg)	0.418083
SAR 1g (W/Kg)	0.752132





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.0092	0.5596	0.3127	0.1763	0.0990	0.0582
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 26 seconds

# A. Experimental conditions.

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

#### **B. SAR Measurement Results**

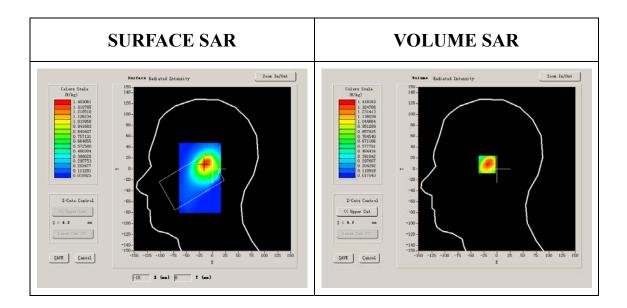
Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650





Conductivity (S/m)	1.475639
Variation (%)	-0.180000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



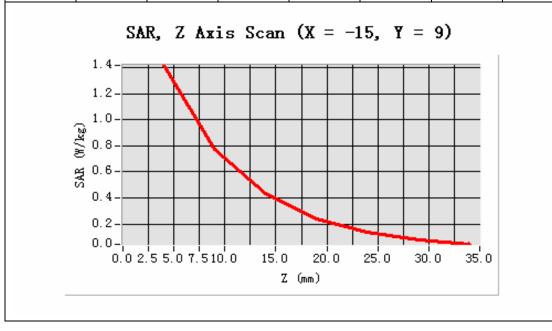
**Maximum location: X=-15.00, Y=9.00** 

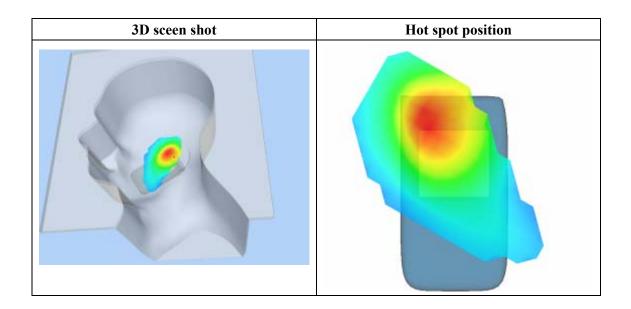
SAR 10g (W/Kg)	0.633340
SAR 1g (W/Kg)	1.155513





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.4182	0.7769	0.4301	0.2391	0.1329	0.0757
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 25 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

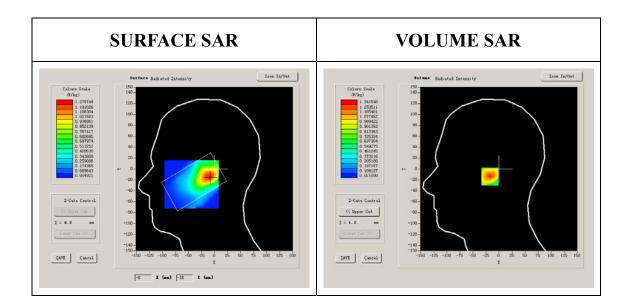
Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000		
Relative permittivity (real part)	38.209000		
Relative permittivity	13.915650		



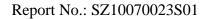


Conductivity (S/m)	1.431186
Variation (%)	-1.850000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



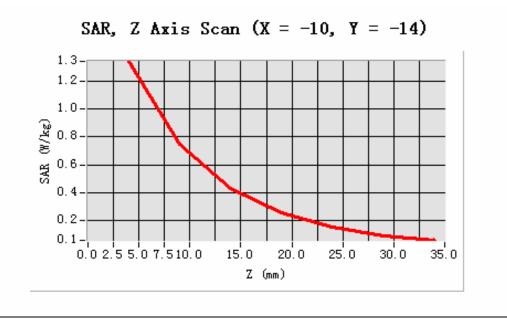
**Maximum location: X=-10.00, Y=-14.00** 

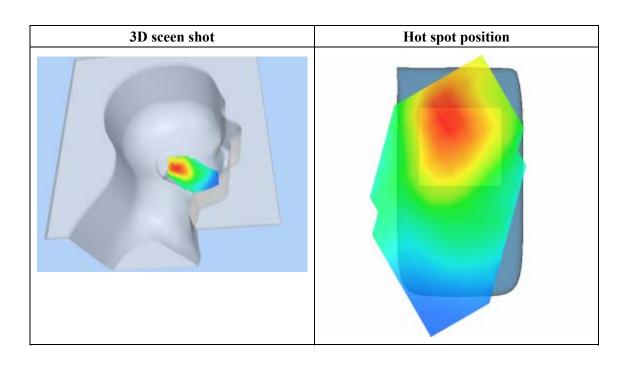
SAR 10g (W/Kg)	0.711478
SAR 1g (W/Kg)	1.270717





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.3415	0.7510	0.4318	0.2555	0.1511	0.0927
(W/Kg)							







# **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: 17/8/2010

Measurement duration: 7 minutes 24 seconds

# A. Experimental conditions.

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

#### **B. SAR Measurement Results**

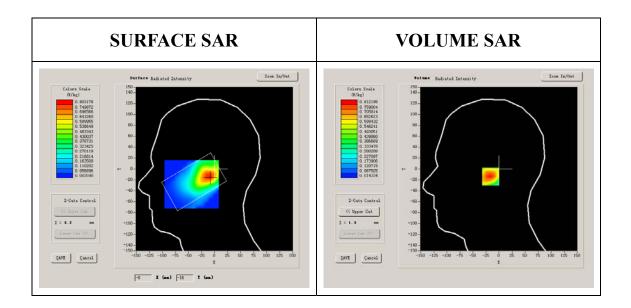
Middle Band SAR (Channel 600):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650





Conductivity (S/m)	1.453412
Variation (%)	-0.820000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



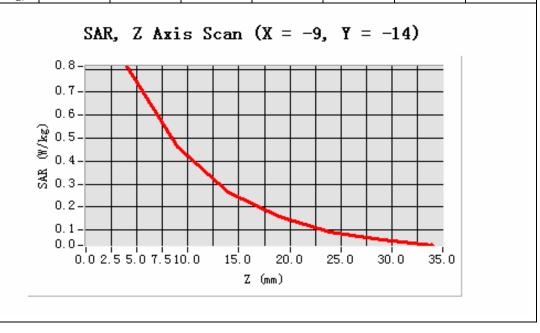
**Maximum location: X=-9.00, Y=-14.00** 

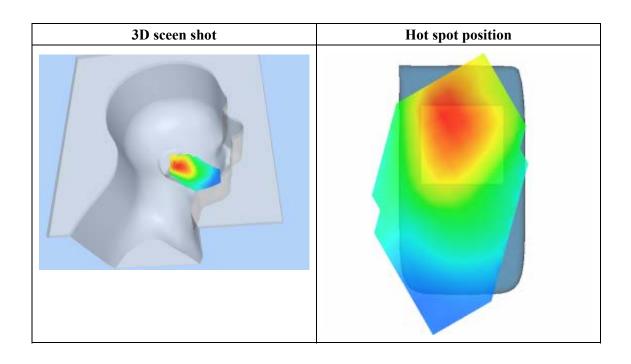
SAR 10g (W/Kg)	0.446779
SAR 1g (W/Kg)	0.775760





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.8122	0.4620	0.2664	0.1568	0.0920	0.0568
(W/Kg)							









# **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: 17/8/2010

Measurement duration: 7 minutes 25 seconds

# A. Experimental conditions.

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

#### **B. SAR Measurement Results**

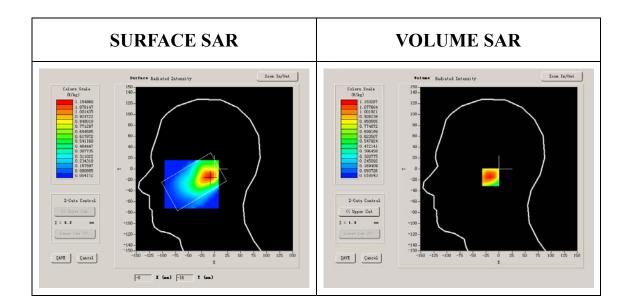
Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650





Conductivity (S/m)	1.475639		
Variation (%)	-1.109985		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:1		



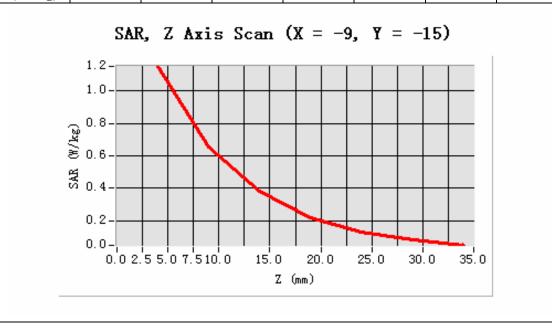
**Maximum location: X=-9.00, Y=-15.00** 

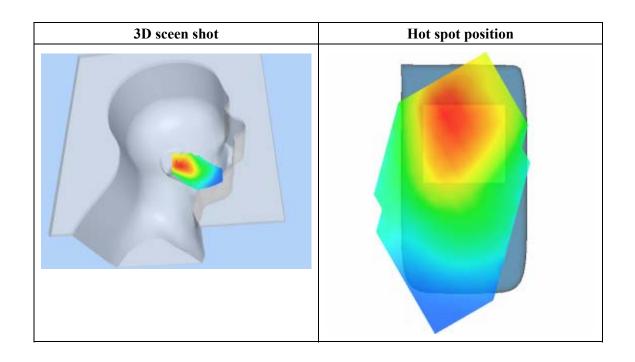
SAR 10g (W/Kg)	0.643670
SAR 1g (W/Kg)	1.113392

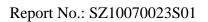




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.1533	0.6560	0.3807	0.2179	0.1281	0.0779
(W/Kg)							









# **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: 17/8/2010

Measurement duration: 7 minutes 24 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

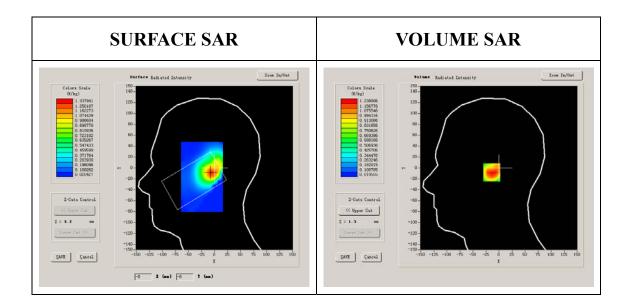
Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650





Conductivity (S/m)	1.431186
Variation (%)	-4.480000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



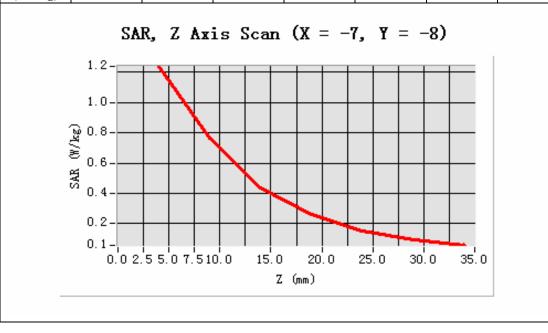
**Maximum location: X=-7.00, Y=-8.00** 

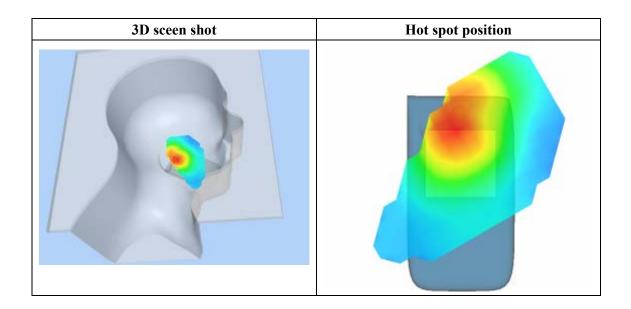
SAR 10g (W/Kg)	0.689484
SAR 1g (W/Kg)	1.195233





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.2380	0.7664	0.4399	0.2609	0.1516	0.0914
(W/Kg)							









# **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: 17/8/2010

Measurement duration: 7 minutes 28 seconds

# A. Experimental conditions.

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

### **B. SAR Measurement Results**

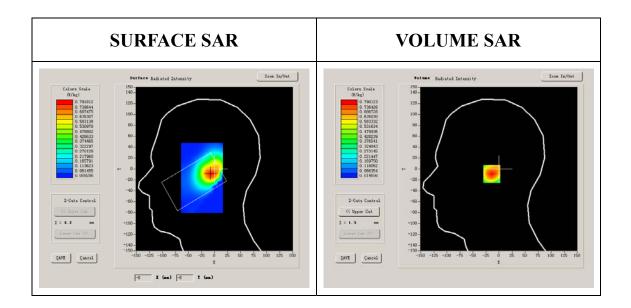
Middle Band SAR (Channel 600):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650



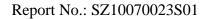


Conductivity (S/m)	1.453419
Variation (%)	-0.760000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



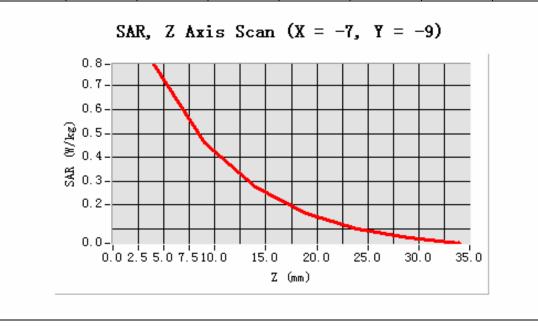
**Maximum location: X=-7.00, Y=-9.00** 

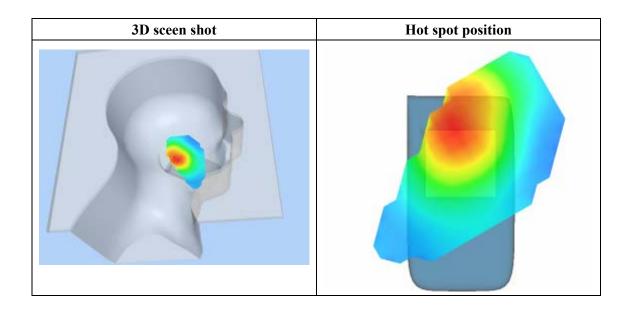
SAR 10g (W/Kg)	0.437996
SAR 1g (W/Kg)	0.754772





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.7901	0.4587	0.2751	0.1647	0.0990	0.0618
(W/Kg)							







Report No.: SZ10070023S01

## **MEASUREMENT 29**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 7 minutes 22 seconds

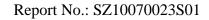
## A. Experimental conditions.

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

## **B. SAR Measurement Results**

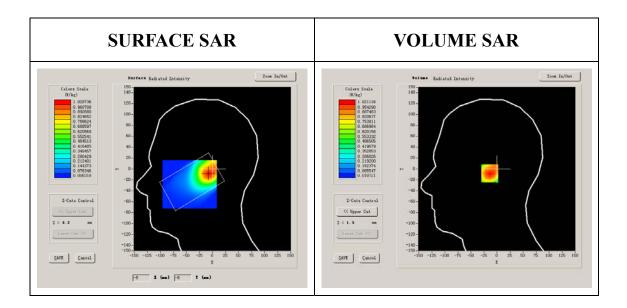
Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000
Relative permittivity (real part)	38.209000
Relative permittivity	13.915650



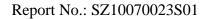


Conductivity (S/m)	1.475639
Variation (%)	-0.080000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



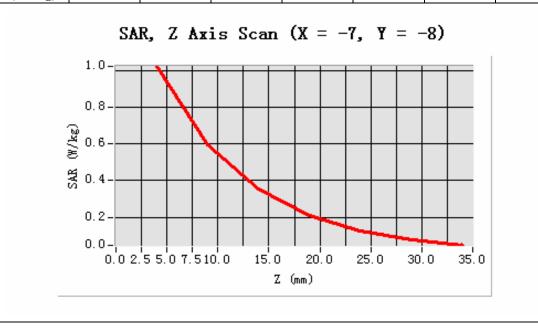
**Maximum location: X=-7.00, Y=-8.00** 

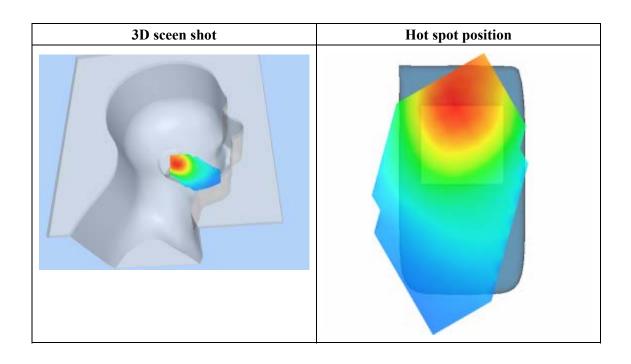
SAR 10g (W/Kg)	0.574338
SAR 1g (W/Kg)	0.983044

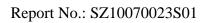




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.0211	0.5948	0.3559	0.2101	0.1266	0.0777
(W/Kg)							









# **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: 17/8/2010

Measurement duration: 9 minutes 7 seconds

## A. Experimental conditions.

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

### **B. SAR Measurement Results**

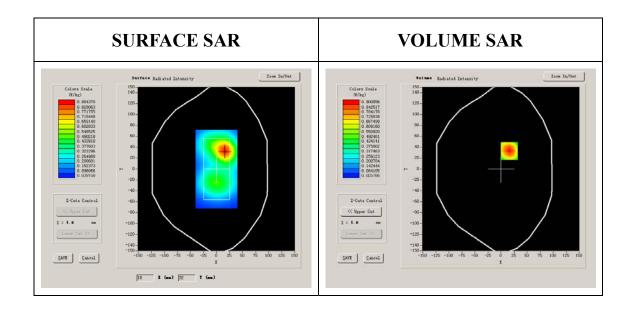
Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600





Conductivity (S/m)	1.523949
Variation (%)	1.210000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



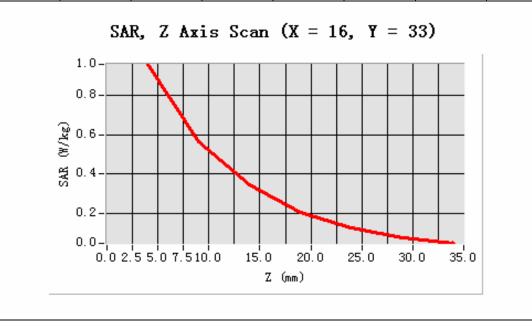
Maximum location: X=16.00, Y=33.00

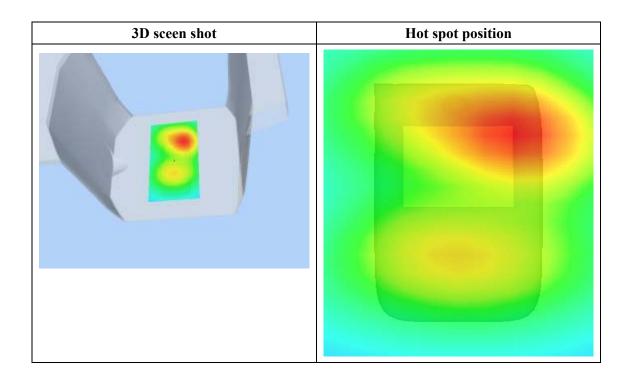
SAR 10g (W/Kg)	0.533648
SAR 1g (W/Kg)	0.912578





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.9592	0.5662	0.3418	0.2053	0.1244	0.0761
(W/Kg)							







## **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: 17/8/2010

Measurement duration: 9 minutes 7 seconds

## A. Experimental conditions.

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

### **B. SAR Measurement Results**

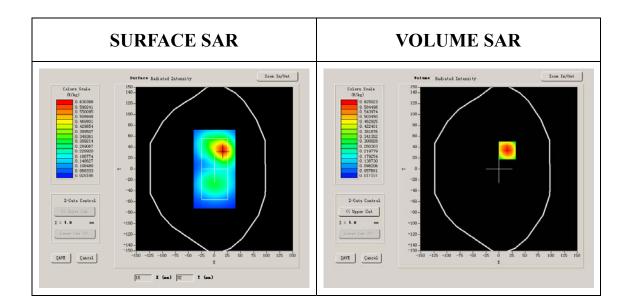
Middle Band SAR (Channel 600):

Frequency (MHz)	1880.000000		
Relative permittivity (real part)	51.903000		
Relative permittivity	14.817600		





Conductivity (S/m)	1.547616		
Variation (%)	-1.570000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:1		



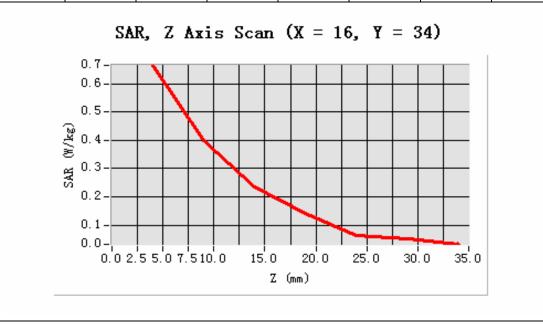
**Maximum location: X=16.00, Y=34.00** 

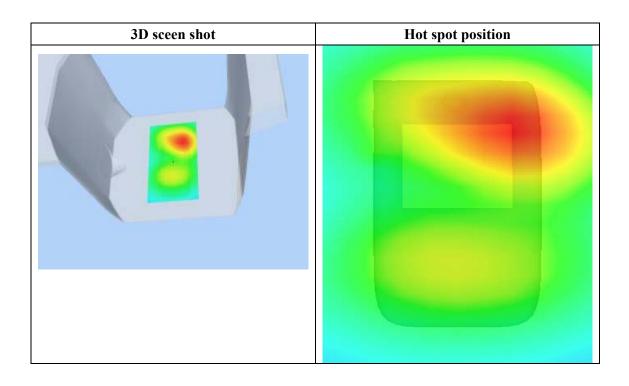
SAR 10g (W/Kg)	0.371792		
SAR 1g (W/Kg)	0.632598		





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6655	0.3992	0.2372	0.1411	0.0647	0.0519
(W/Kg)							









## **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: 17/8/2010

Measurement duration: 9 minutes 9 seconds

## A. Experimental conditions.

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

## **B. SAR Measurement Results**

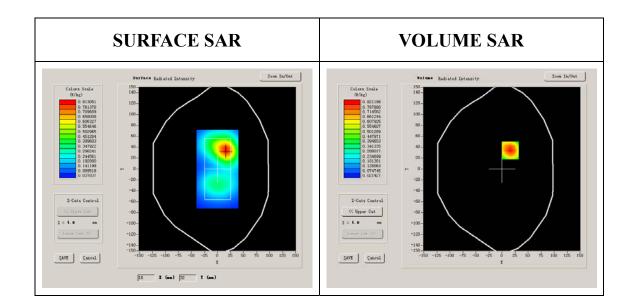
Higher Band SAR (Channel 1175):

Frequency (MHz)	1908.750000		
Relative permittivity (real part)	51.903000		
Relative permittivity	14.817600		





Conductivity (S/m)	1.571283		
Variation (%)	0.560000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:1		



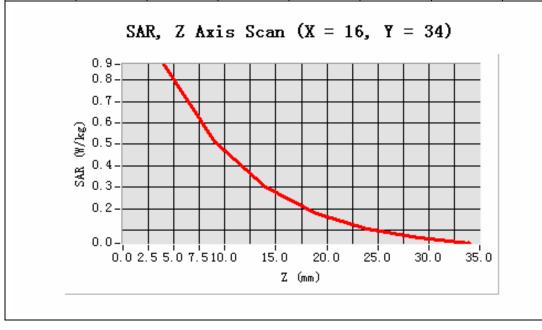
**Maximum location: X=16.00, Y=34.00** 

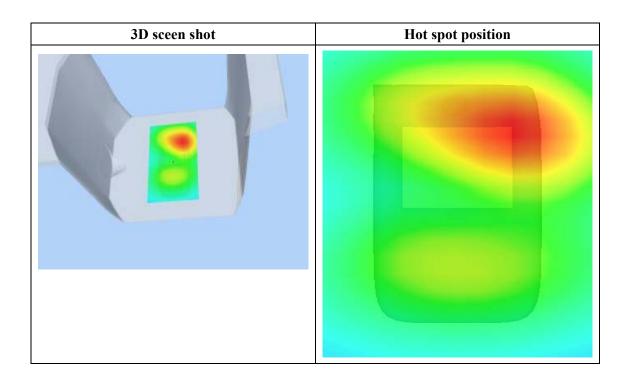
SAR 10g (W/Kg)	0.484948		
SAR 1g (W/Kg)	0.832930		





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.8744	0.5150	0.3028	0.1782	0.1055	0.0643
(W/Kg)							







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## **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: 17/8/2010

Measurement duration: 9 minutes 7 seconds

## A. Experimental conditions.

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

### **B. SAR Measurement Results**

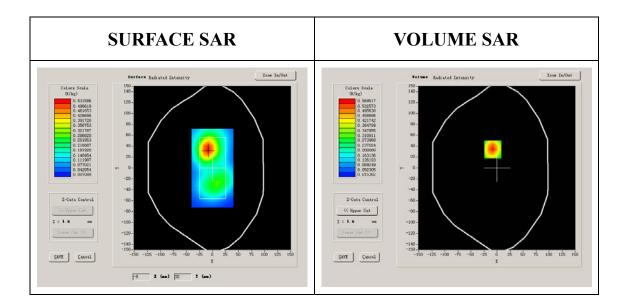
Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600





Conductivity (S/m)	1.523949	
Variation (%)	-0.440000	
Ambient Temperature:	23.5°C	
Liquid Temperature:	22.8°C	
ConvF:	40.625,34.773,38.535	
Crest factor:	1:1	



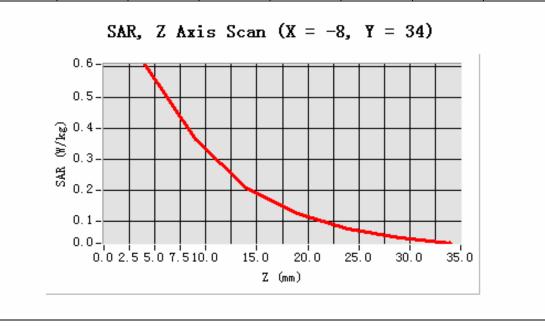
Maximum location: X=-8.00, Y=34.00

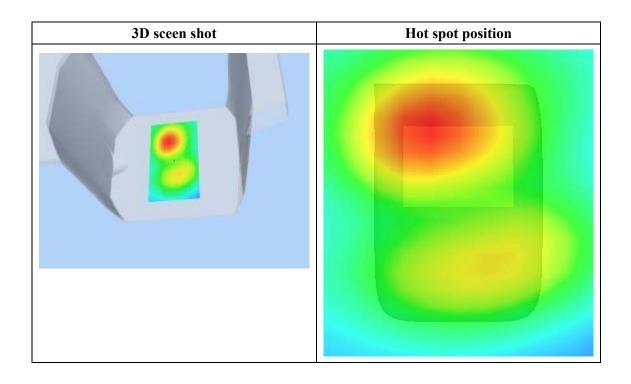
SAR 10g (W/Kg)	0.323731
SAR 1g (W/Kg)	0.570881

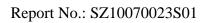




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6064	0.3628	0.2064	0.1249	0.0754	0.0458
(W/Kg)							









## **MEASUREMENT 34**

Type: Phone measurement (Complete)

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

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

Date of measurement: 17/8/2010

Measurement duration: 9 minutes 7 seconds

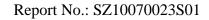
## A. Experimental conditions.

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

### **B. SAR Measurement Results**

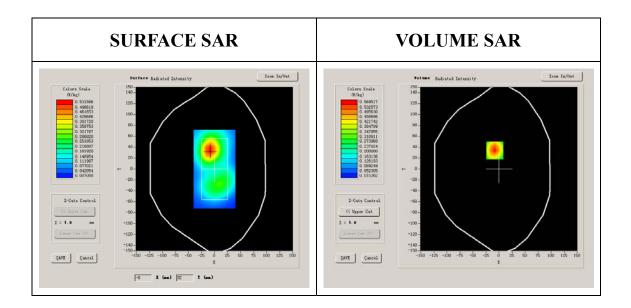
Lower Band SAR (Channel 25):

Frequency (MHz)	1851.250000
Relative permittivity (real part)	51.903000
Relative permittivity	14.817600





Conductivity (S/m)	1.523949
Variation (%)	-0.440000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1



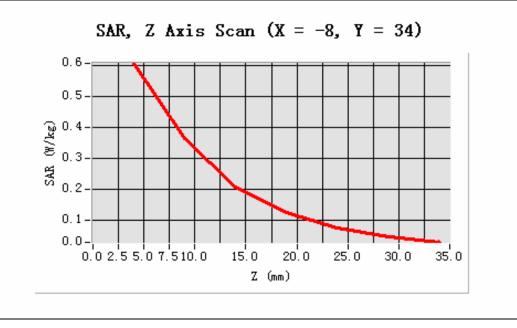
**Maximum location: X=-8.00, Y=34.00** 

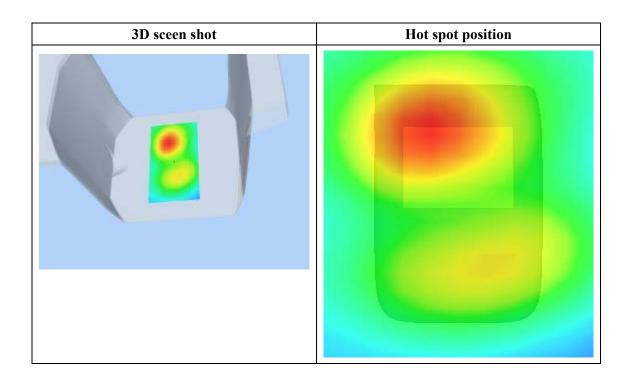
SAR 10g (W/Kg)	0.488362
SAR 1g (W/Kg)	0.911635

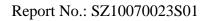




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6064	0.3628	0.2064	0.1249	0.0754	0.0458
(W/Kg)							









# **System Performance Check Data(835MHz Head)**

Type: Phone measurement (Complete)

Date of measurement: 17/8/2010

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

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

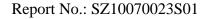
## A. Experimental conditions.

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

## **B. SAR Measurement Results**

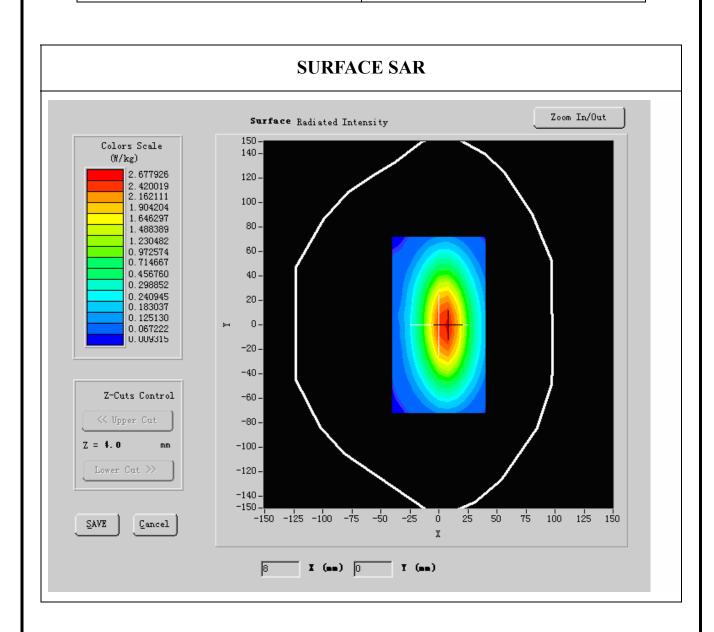
#### Middle Band SAR:

Frequency (MHz)	835.00000
Relative permittivity (real part)	41.675999
Relative permittivity	18.926250
Conductivity (S/m)	0.894409





Variation (%)	-0.050000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

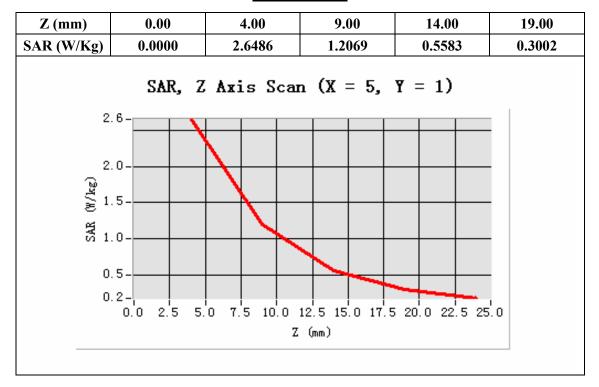


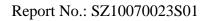
Maximum location: X=5.00, Y=1.00





SAR 10g (W/Kg)	1.896866
SAR 1g (W/Kg)	2.734464







# **System Performance Check Data(835MHz Body)**

Type: Phone measurement (Complete)

Date of measurement: 17/8/2010

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

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

## A. Experimental conditions.

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

## **B. SAR Measurement Results**

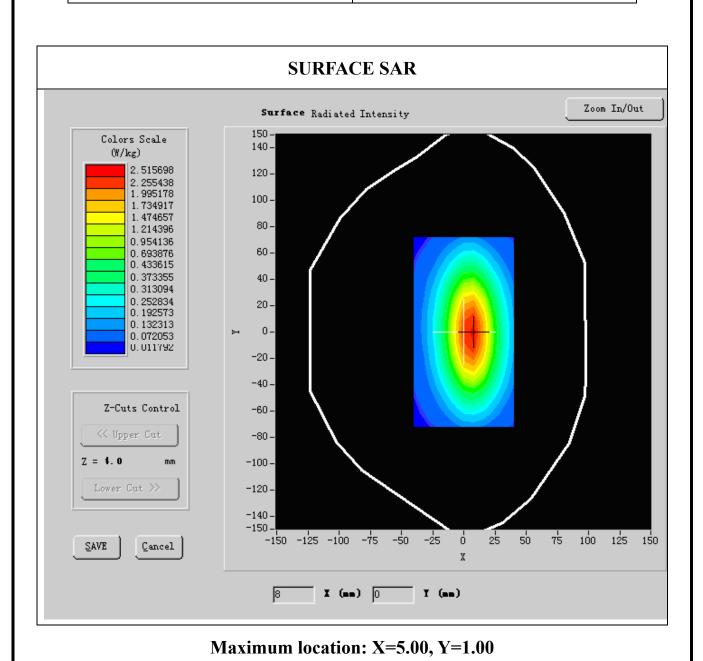
#### Middle Band SAR:

Frequency (MHz)	835.000000
Relative permittivity (real part)	55.709999
Relative permittivity	15.070000
Conductivity (S/m)	1.009033





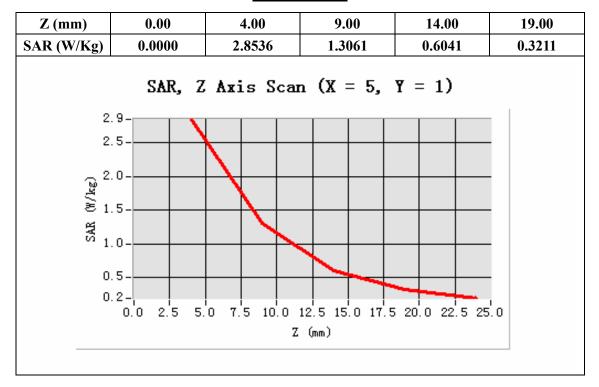
Variation (%)	-0.140000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	28.559,25.681,27.588
Crest factor:	1:1

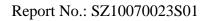






SAR 10g (W/Kg)	1.696888
SAR 1g (W/Kg)	2.752635







# **System Performance Check Data**(1900MHz Head)

Type: Phone measurement (Complete)

Date of measurement: 17/8/2010

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

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

## A. Experimental conditions.

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

## **B. SAR Measurement Results**

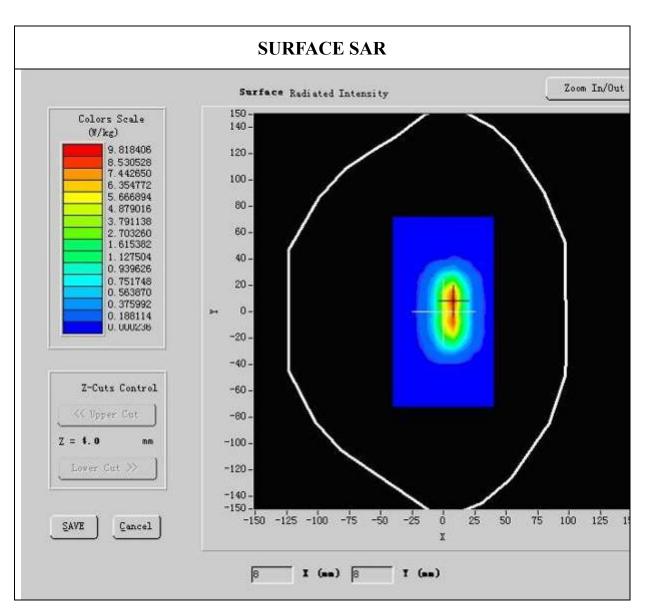
#### **Lower Band SAR:**

Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.481223
Relative permittivity	12.991650
Conductivity (S/m)	1.395758





Variation (%)	0.570000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

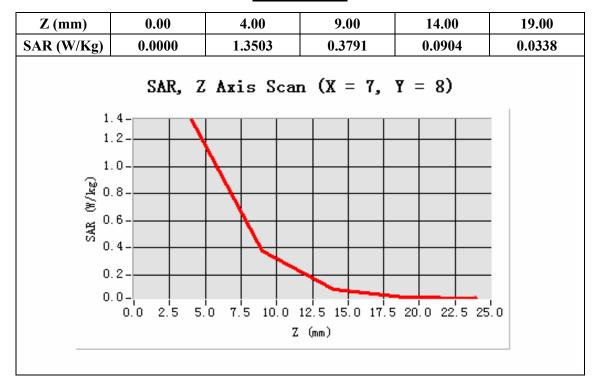


Maximum location: X=7.00, Y=8.00





SAR 10g (W/Kg)	5.957757
SAR 1g (W/Kg)	9.857499







# **System Performance Check Data**(1900MHz Body)

Type: Phone measurement (Complete)

Date of measurement: 17/8/2010

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

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

## A. Experimental conditions.

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

## **B. SAR Measurement Results**

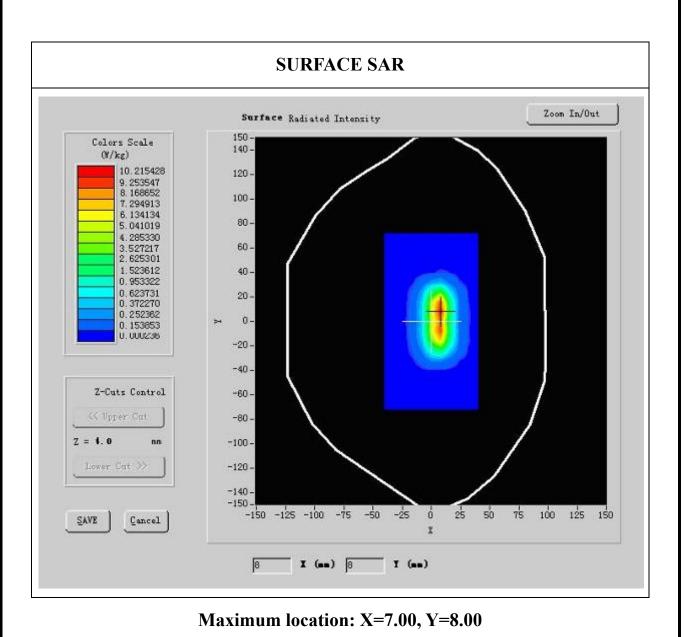
#### **Lower Band SAR:**

Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.548876
Relative permittivity (imaginary	12.991650
part)	





Conductivity (S/m)	1.573978
Variation (%)	0.570000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1







SAR 10g (W/Kg)	5.545777
SAR 1g (W/Kg)	9.895635

