

FCC SAR

TEST REPORT

of

GSM Mobile Phone

Model Name:

209

Trade Name:

Avvio

Report No .:

SZ10060151S01

FCC ID.:

WVBAVVIO209

prepared for

Brightstar Corp

9725 NW 117th Ave, #300 - Doral - FL - 33178

pidrepared by

Shenzhen Electronic Product Quality Testing Center

Morlab Laboratory

3/F, Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen, 518055 P. R. China Tel: +86 755 86130398

Fax: +86 755 86130218















NOTE: This test report can be duplicated completely for the legal use with the approval of the applicant, it shall not be reproduced except in full, without the written approval of Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. Any objections should be raised to us within thirty workdays since the date of issue.



Contents

1. GENERAL INFORMATION3
1.1. Notes
1.2. Organization item
1.3. Conclusion
2. TESTING LABORATORY4
2.1. Identification of the Responsible Testing Laboratory4
2.2. Identification of the Responsible Testing Location
2.3. Accreditation Certificate
2.4. List of Test Equipments4
3. TECHNICAL INFORMATION4
3.1. Identification of Applicant5
3.2. Identification of Manufacturer5
3.3. Equipment Under Test (EUT)
3.3.1. Photographs of the EUT6
3.3.2. Identification of all used EUTs6
4. TEST RESULTS6
4.1. Applied Reference Documents 6
4.2. Test Environment/Conditions
4.3. Operational Conditions During Test
4.3.1. Informations On The Testing
4.3.2. The Measurement System
4.3.3. Uncertainty Assessment 12
4.4. MEASUREMENT PROCEDURES
4.4.1. Procedures Used To Establish Test Signal
4.5. Items used in the Test Results List
4.6. Test Results List
ANNEX A ACCREDITATION CERTIFICATE17
ANNEX B PHOTOGRAPHS OF THE EUT19
ANNEX C GRAPH TEST RESULTS22



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 .:

SZ10060151S01

Date of Issue:

Aug 3, 2010

Date of Tests:

Aug 3, 2010 - Aug 3, 2010

Responsible for Accreditation:

Shu Luan

Project Manager:

Li Lei

Deputy Project Manager:

Chen Chao

1.3. Conclusion

Shenzhen Electronic Product Quality Testing Center Morlab Laboratory has verified that all tests as listed in the section 4.5 of this report haven been performed succ essfully with the tested equipment.

Chen Chao

Tested by

(Responsible for the Test Report)

Li Lei

Reviewed by

Certificatio(Verification of the Test Report)

Shu Luan

AL SERVIC

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 0)

2.4. List of Test Equipments

No.	Instrument	Туре	Cal. Date	Cal. Due
1	PC Dell (Pentium IV 2.4GHz,			
	10	SN:X10-23533)		
2	Network	Rohde&Schwarz (CMU200,	2009-09-26	1,000
	Emulator	SN:105894)	2009-09-20	1 year
3	Voltmeter	Keithley (2000, SN:1000572)	2009-9-24	1 year
4	Cymthatizar	Rohde&Schwarz (SML_03,	2009-9-24	1,,,,,,,,,,,
4	Synthetizer	SN:101868)	2009-9-24	1 year
5	Amplifier	Nucl udes (ALB216, SN:10800)	2009-9-24	1 year
6	Power Meter	Rohde&Schwarz (NRVD, SN:101066)	2009-9-24	1 year
7	Probe	Antennessa (SN:SN_3708_EP80)	2009-9-24	1 year
8	Phantom	Antennessa (SN:SN_36_08_SAM62)	2009-9-24	1 year
9	Liquid	Antennessa (Last Calibration:21 08 08)	2009-08-21	1 year



3. Technical Information

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

3.1. Identification of Applicant

Company Name: Brightstar Corp

Address: 9725 NW 117th Ave, #300 – Doral – FL – 33178

3.2. Identification of Manufacturer

Company Name: Longcheer Technology (Shanghai) Co.,Ltd

Address: Building 1,No.401,Caobao Rd,Xuhui District,Shanghai,P.R.China

3.3. Equipment Under Test (EUT)

Brand Name: Avvio
Type Name: Avvio
Marking Name: 209

Hardware Version: LK6M101B1-1

Software Version: LK63S02.8.28.1.0T04G0705_M101

Frequency Bands: GSM 850MHz (channel 128:824.20MHz, channel 190:836.59MHz,

channel 251:848.29MHz)

PCS 1900MHz (channel 512:1850.19MHz, channel 661:1880.00MHz,

channel 810:1909.80MHz)

Modulation Mode: GMSK
Antenna type: Build inside

Development Stage: Identical prototype

Battery Model: BL-4C

Battery specification: 650mAh 3.7V Development Stage Identical prototype

Multislot Class GPRS: Multislot Class 10: EDGE:(n.a)

GPRS Operation Mode Class B



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#	LK6M101B1-1	LK63S02.8.28.1.0T04G0705_M 101

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 f		
	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° C

High Temperature (HT) = 55° C

Extreme Voltage of the EUT: Normal Voltage (NV) = 3.70V

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

Test frequency: GSM 850MHz

PCS 1900MHz

Operation mode: Call established

Power Level: GSM 850 MHz Maximum output power(level 5)

PCS 1900 MHz Maximum output power(level 0)

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 128, 190 and 251 respectively in the case of GSM 850 MHz, or to 512, 661 and 810 respectively in the case of PCS 1900 MHz, The EUT, 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

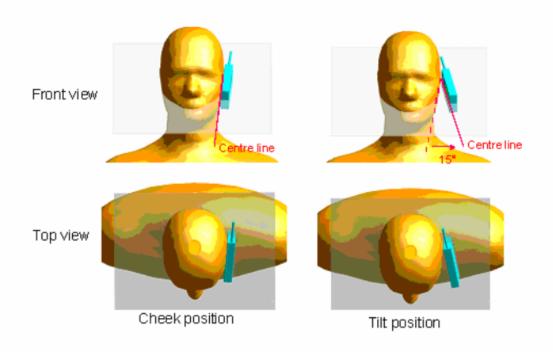
I.1. Normative reference

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
 Axial Isotropy: <0.25 dB
 Spherical Isotropy: <0.50 dB

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.

a	b	c	d	e=f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	7.0	N	1	1	1	7.00	7.00	
Axial Isotropy	E.2.2	2.5	R	√3	(1-Cp) ^{1/2}	(1-Cp) ^{1/2}	1.02	1.02	
Hemispherical Isotropy	E.2.2	4.0	R	V3	V _{Cp}	VCp	1.63	1.63	
Boundary effect	E.2.3	1.0	R	V3	1	1	0.58	0.58	00
Linearity	E.2.4	5.0	R	V3	1	1	2.89	2.89	
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	
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	00
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	√3	1	1	0.03	0.03	00
Liquid conductivity - deviation from target value	E.3.2	0.57	R	√3	0.64	0.43	0.21	0.14	00



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	\[\(\sigma \)	0.6	0.49	1.27	1.04	
from target value				¥3					00
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	SN 36/08 DIPF 101

Results:

Frequency	835MHz	1900MHz
Target value (1g)	10.8 W/Kg(body)	39.7 W/Kg
250 m.W.:	2.627 W/Kg (head)	9.903 W/Kg (head)
250 mW input power	2.711 W/Kg (body)	9.835 W/Kg (body)
Test value (1g)	10.508 W/Kg (head)	39.612 W/Kg (head)
	10.844 W/Kg (body)	39.34 W/Kg (body)

Note:Please refer to check the system performance data, the first 132-143 page. 250 mW input power



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 $54\% \sim 60\%$ and $23.0~^{\circ}\text{C} \sim 23.8~^{\circ}\text{C}$ 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 3)	835 MHZ	41. 675999	0. 894409				
Target value	1900 MHZ	40	1.40				
Validation value (Aug 3)	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 3)	835 MHz	55. 709999	1. 009033					
Target value	1900 MHz	53. 3	1.52					



Validation value	1900 MHz	52. 548876	1. 573978
(Aug 3)			

4.3.6. Simulant liquids

Simulant liquids that are used for testing at frequencies of GSM 850MHz and GSM 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	1900	MHz
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	1.38	1.45

4.4. Items used in the Test Results List

Terms in the column "Verdict" for the test results list of the section 4.5:

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				
Dool	Decl. "Declaration": Morlab has received documents from the applicant an				
Deci.	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				



4.5. Test Results List

Summary of Measurement Results (GSM 850MHz Band)

SAR Values (GSM 850MHz 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		
	Measurement Result (W/kg			
Test Case	1 g Average	Power level		
	(W/kg)	(dBm)		
Left head, Touch cheek, Channel Low	0.751	30.99		
Left head, Touch cheek, Channel Middle	0.899	30.92		
Left head, Touch cheek, Channel High	0.967	31.00		
Left head, Tilt 15 Degree, Channel Low	0.322	30.99		
Left head, Tilt 15 Degree, Channel Middle	0.421	30.92		
Left head, Tilt 15 Degree, Channel High	0.448	31.00		
Right head, Touch cheek, Channel Low	0.840	30.99		
Right head, Touch cheek, Channel Middle	0.988	30.92		
Right head, Touch cheek, Channel High	0.994	31.00		
Right head, Tilt 15 Degree, Channel Low	0.414	30.99		
Right head, Tilt 15 Degree, Channel Middle	0.502	30.92		
Right head, Tilt 15 Degree, Channel High	0.541	31.00		

Summary of Measurement Results (GSM 1900MHz Band)

SAR Values (GSM 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			
	Measurement Result (W/kg)			
Test Case	1 g Average	Power level		
	(W/kg)	(dBm)		
Left head, Touch cheek, Channel Low	0.611	28.34		
Left head, Touch cheek, Channel Middle	0.589	28.29		
Left head, Touch cheek, Channel High	0.521	28.08		
Left head, Tilt 15 Degree, Channel Low	0.298	28.34		
Left head, Tilt 15 Degree, Channel Middle	0.274	28.29		
Left head, Tilt 15 Degree, Channel High	0.241	28.08		
Right head, Touch cheek, Channel Low	0.653	28.34		



Right head, Touch cheek, Channel Middle	0.638	28.29
Right head, Touch cheek, Channel High	0.598	28.08
Right head, Tilt 15 Degree, Channel Low	0.221	28.34
Right head, Tilt 15 Degree, Channel Middle	0.206	28.29
Right head, Tilt 15 Degree, Channel High	0.196	28.08

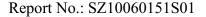
SAR Values (GSM 850MHz Band), Measured against the body.

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	0.535	30.99		
Side, Middle frequency	0.627	30.92		
Side, High frequency	0.669	31.00		
Side, High frequency (back)	0.633	31.00		
Side, High frequency (with GPRS)	1.175	30.38		
Side, High frequency (with earphone)	0.670	31.00		

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

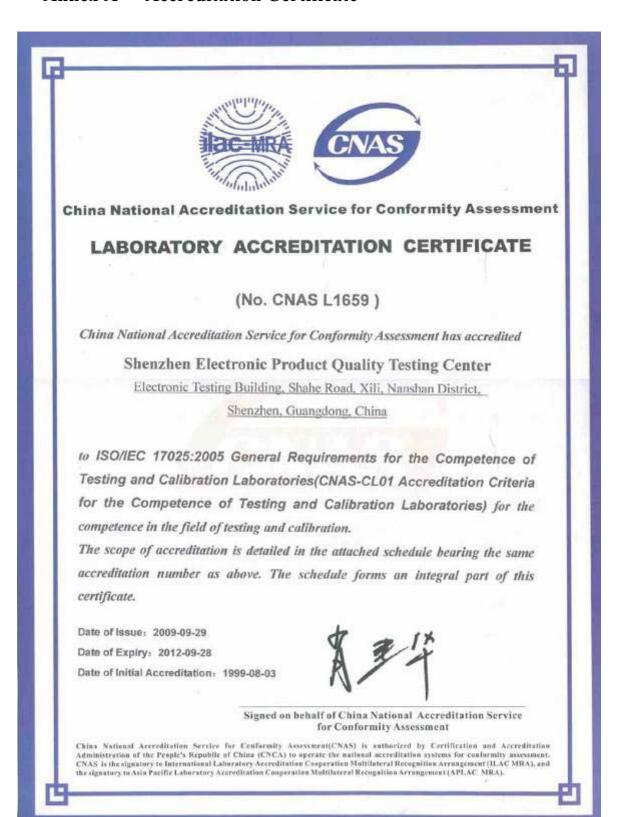
Temperature: 23.0~23.8°C, humidity: 54~60%.				
Limit of CAD (Wiles)	1 g A	1 g Average		
Limit of SAR (W/kg)		1.6		
	Measuremen	Measurement Result (W/kg)		
Test Case	1 g Average	Power level		
	(W/kg)	(dBm)		
Side, Low frequency	0.323	28.34		
Side, Middle frequency	0.316	28.29		
Side, High frequency	0.268	28.08		
Side, Low frequency (back)	0.217	28.34		
Side, Low frequency (with GPRS)	0.704	29.50		
Side, Low frequency (with earphone)	0.317	28.34		

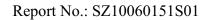
Note: The depth of the body tissue was 15.1cm. The distance between the back of the device and the bottom of the flat phantom is 1.5cm(taking into account of the IEEE 1528 and the place of the antenna)





Annex A Accreditation Certificate

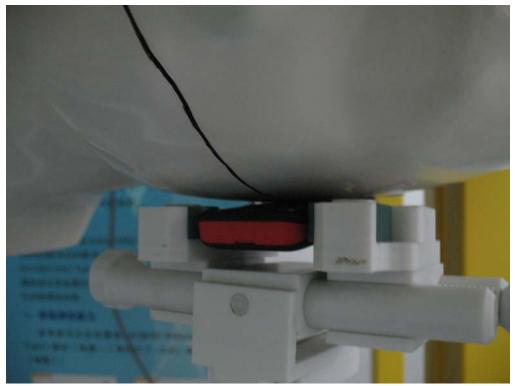






Annex B Photographs of the EUT

1 EUT Left Head Touch Cheek Position



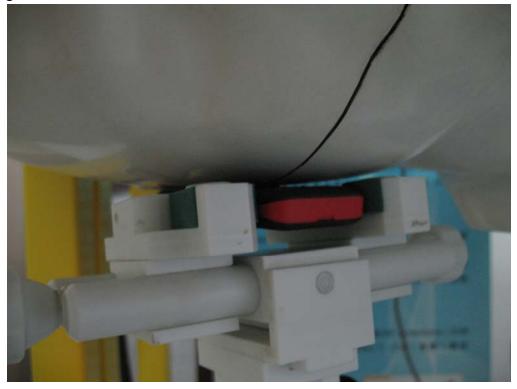
2 EUT Left Head Tilt15 Position





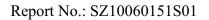


3 EUT Right Head Touch Cheek Position



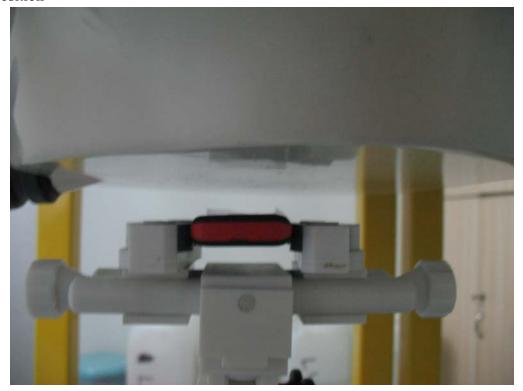
4 EUT Right Head Tilt15 Position







5 Side Position



6 With Headphone







Annex C Graph Test Results

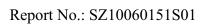
	BAND	<u>PARAMETERS</u>
		Measurement 1: Right Head with Cheek device position
		on Low Channel in GSM mode
		Measurement 2: Right Head with Cheek device position
		on Middle Channel in GSM mode
		Measurement 3: Right Head with Cheek device position
		on High Channel in GSM mode
		Measurement 4: Right Head with Tilt device position on
		Low Channel in GSM mode
		Measurement 5: Right Head with Tilt device position on
		Middle Channel in GSM mode
		Measurement 6: Right Head with Tilt device position on
		High Channel in GSM mode
		Measurement 7: Left Head with Cheek device position
		on Low Channel in GSM mode
		Measurement 8: Left Head with Cheek device position
		on Middle Channel in GSM mode
TVDE		Measurement 9: Left Head with Cheek device position
TYPE	~~~~	on High Channel in GSM mode
	<u>GSM850</u>	Measurement 10: Left Head with Tilt device position on
		Low Channel in GSM mode
		Measurement 11: Left Head with Tilt device position on
		Middle Channel in GSM mode
		Measurement 12: Left Head with Tilt device position on
		High Channel in GSM mode
		Measurement 13: Validation Plane with Body device
		position on Low Channel in GSM mode
		Measurement 14: Validation Plane with Body device
		position on Middle Channel in GSM mode
		Measurement 15: Validation Plane with Body device
		position on High Channel in GSM mode Massurament 16: Validation Plana with Pody dayion
		Measurement 16: Validation Plane with Body device
		position on Middle Channel in GSM mode (back) Maggyramont 17: Validation Plana with Rody dayion
		Measurement 17: Validation Plane with Body device
		position on Middle Channel in GSM mode (with GPRS)
		Measurement 18: Validation Plane with Body device
		position on Middle Channel in GSM mode (with earphone)



Measurement 19: Right Head with Cheek device position on Low Channel in GSM mode Measurement 20: Right Head with Cheek device position on Middle Channel in GSM mode Measurement 21: Right Head with Cheek device position on High Channel in GSM mode Measurement 22: Right Head with Tilt device position on Low Channel in GSM mode Measurement 23: Right Head with Tilt device position on Middle Channel in GSM mode Measurement 24: Right Head with Tilt device position on High Channel in GSM mode Measurement 25: Left Head with Cheek device position on Low Channel in GSM mode Measurement 26: Left Head with Cheek device position on Middle Channel in GSM mode Measurement 27: Left Head with Cheek device position on High Channel in GSM mode Measurement 28: Left Head with Tilt device position on Low Channel in GSM mode Measurement 29: Left Head with Tilt device position on Middle Channel in GSM mode Measurement 30: Left Head with Tilt device position on High Channel in GSM mode Measurement 31: Validation Plane with Body device position on Low Channel in GSM mode Measurement 32: Validation Plane with Body device position on Middle Channel in GSM mode Measurement 33: Validation Plane with Body device position on High Channel in GSM mode Measurement 34: Validation Plane with Body device position on Low Channel in GSM mode (back) Measurement 35: Validation Plane with Body device position on Low Channel in GSM mode (with GPRS) Measurement 36: Validation Plane with Body device position on Low e Channel in GSM mode (with earphone)

GSM

1900





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: 3/8/2010

Measurement duration: 7 minutes 42 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

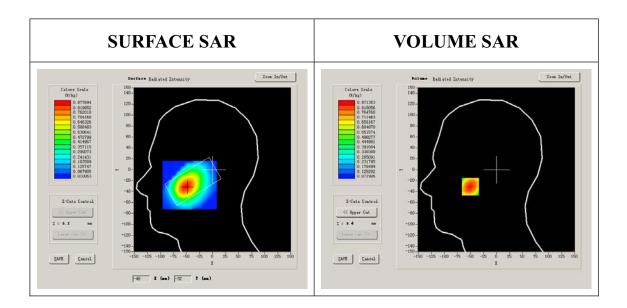
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012	
Relative permittivity (real part)	41.790001	
Relative permittivity	18.926250	





Conductivity (S/m)	0.866612		
Variation (%) -1.420000			
Ambient Temperature:	22.6°C		
Liquid Temperature:	22.3°C		
ConvF:	28.479,25.214,27.196		
Crest factor:	1:8		



Maximum location: X=-50.00, Y=-31.00

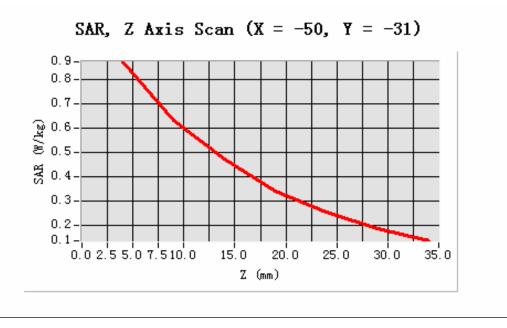
SAR 10g (W/Kg)	0.580577	
SAR 1g (W/Kg)	0.840574	

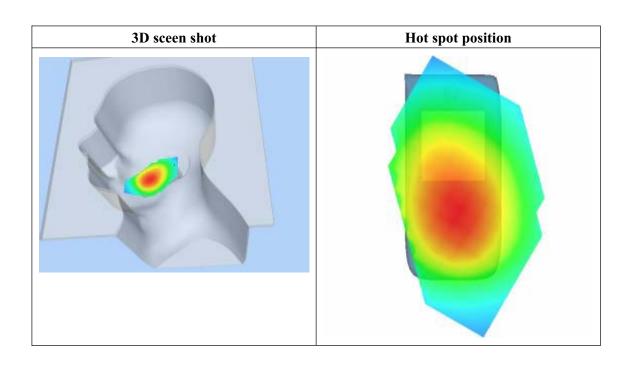


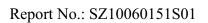


Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.8714	0.6291	0.4714	0.3407	0.2552	0.1852
(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: 3/8/2010

Measurement duration: 7 minutes 45 seconds

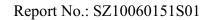
A. Experimental conditions.

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

B. SAR Measurement Results

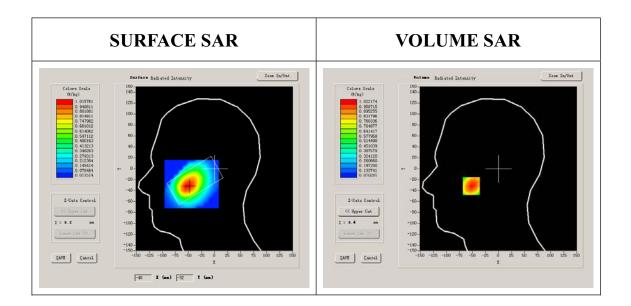
Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	40.669998
Relative permittivity	19.120001





Conductivity (S/m)	0.888655
Variation (%)	0.200000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



Maximum location: X=-52.00, Y=-32.00

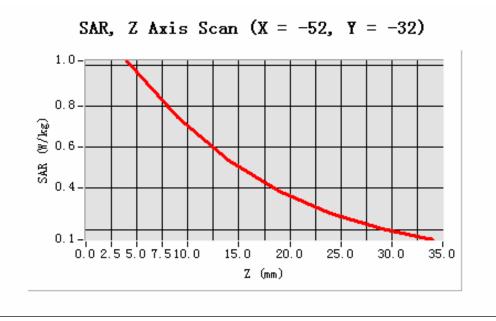
SAR 10g (W/Kg)	0.676645
SAR 1g (W/Kg)	0.988957

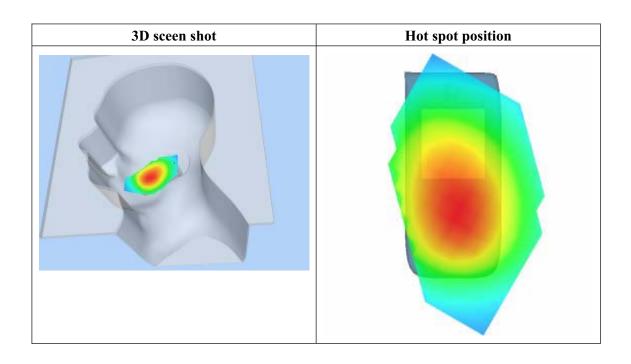


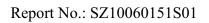


Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.0222	0.7449	0.5376	0.3874	0.2807	0.2059
(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: 3/8/2010

Measurement duration: 7 minutes 49 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

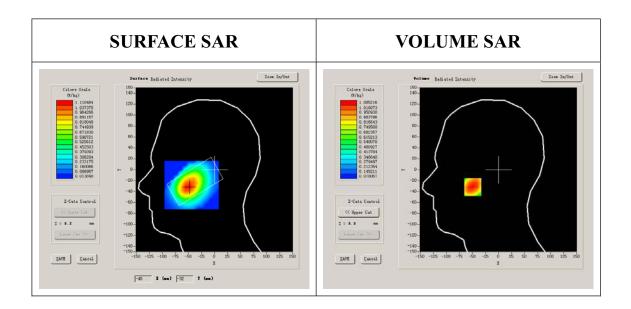
Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	41.675999
Relative permittivity	18.967199





Conductivity (S/m)	0.894409
Variation (%)	-1.110000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



Maximum location: X=-49.00, Y=-32.00

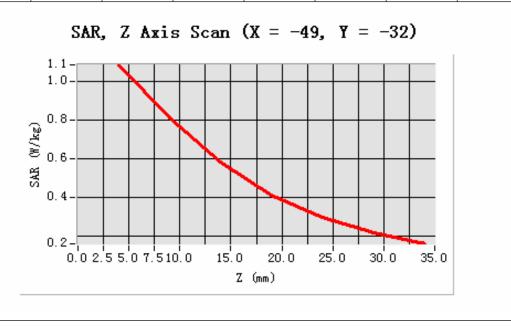
SAR 10g (W/Kg)	0.698846
SAR 1g (W/Kg)	0.994144

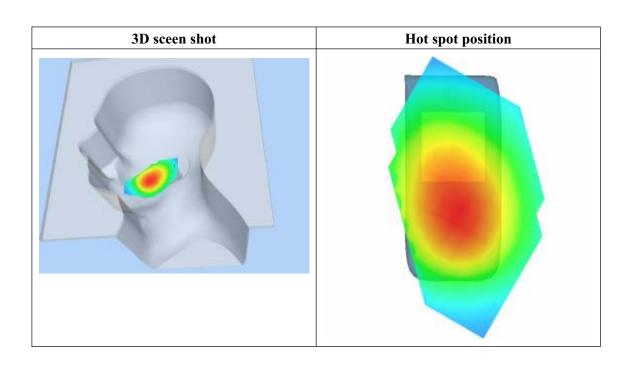




Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.0852	0.8112	0.5798	0.4094	0.2946	0.2141
(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: 3/8/2010

Measurement duration: 7 minutes 40 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

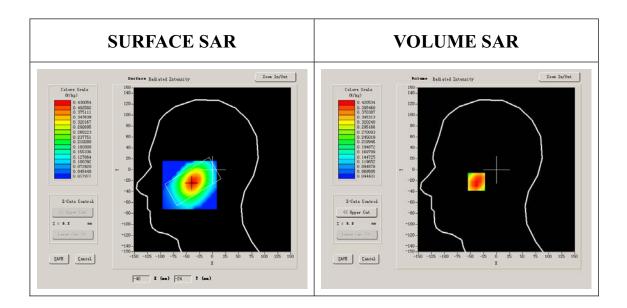
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250



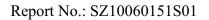


Conductivity (S/m)	0.866612		
Variation (%)	-0.340000		
Ambient Temperature:	22.6°C		
Liquid Temperature:	22.3°C		
ConvF:	28.479,25.214,27.196		
Crest factor:	1:8		



Maximum location: X=-38.00, Y=-22.00

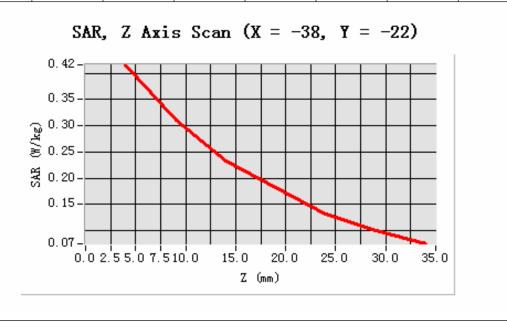
SAR 10g (W/Kg)	0.299675
SAR 1g (W/Kg)	0.414653

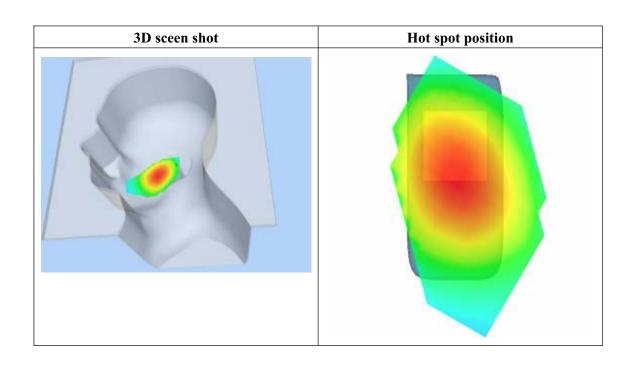


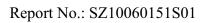


Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4160	0.3105	0.2337	0.1820	0.1314	0.0997
(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: 3/8/2010

Measurement duration: 7 minutes 37 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

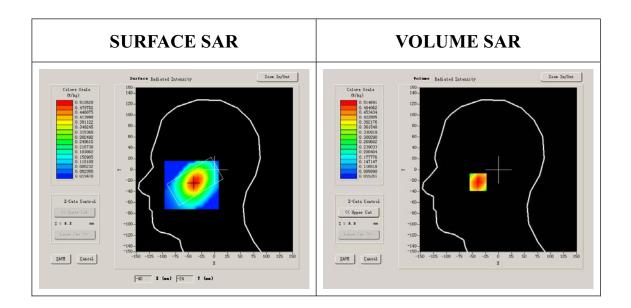
Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	40.669998
Relative permittivity	19.120001



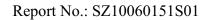


Conductivity (S/m)	0.888655
Variation (%)	0.940000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



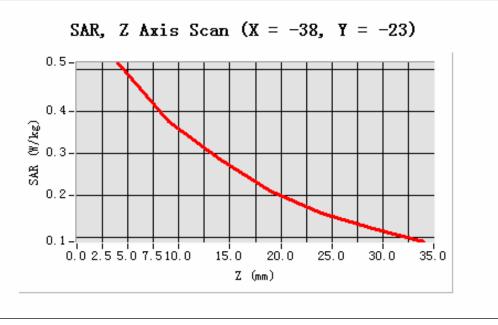
Maximum location: X=-38.00, Y=-23.00

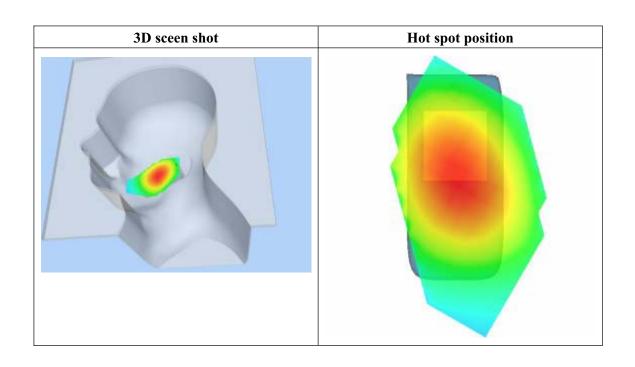
SAR 10g (W/Kg)	0.352355
SAR 1g (W/Kg)	0.502132

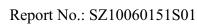




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5147	0.3757	0.2870	0.2104	0.1576	0.1206
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

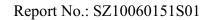
Measurement duration: 7 minutes 38 seconds

A. Experimental conditions.

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

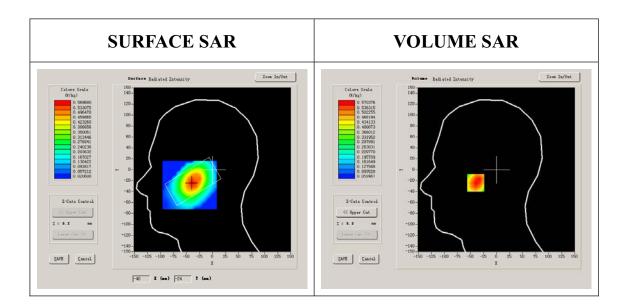
B. SAR Measurement Results

Frequency (MHz)	848.799988
Relative permittivity (real part)	41.675999
Relative permittivity	18.967199





Conductivity (S/m)	0.894409
Variation (%)	-0.100000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



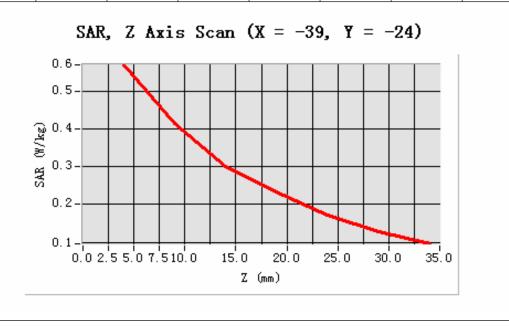
Maximum location: X=-39.00, Y=-24.00

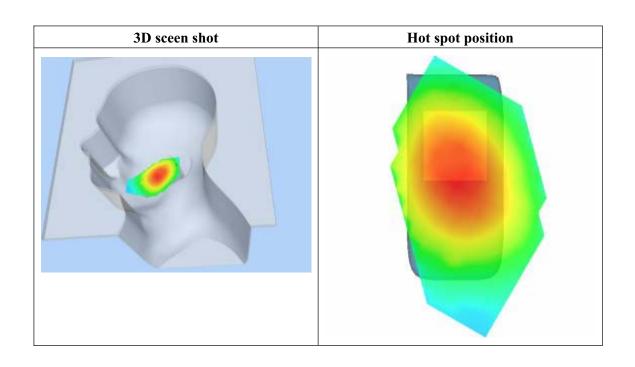
SAR 10g (W/Kg)	0.399976
SAR 1g (W/Kg)	0.541665

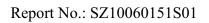




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5694	0.4131	0.3006	0.2333	0.1713	0.1277
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 57 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

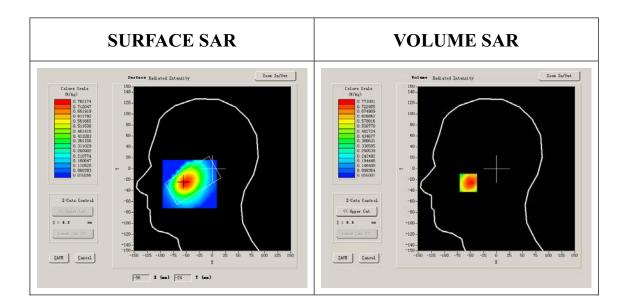
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250



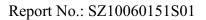


Conductivity (S/m)	0.866612
Variation (%)	-1.800000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



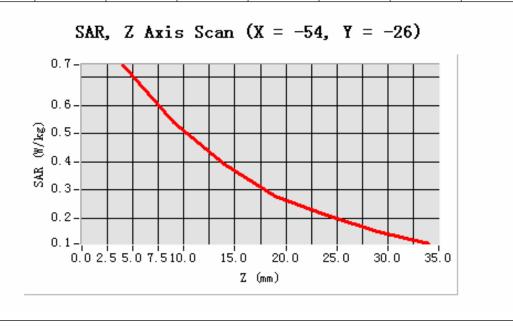
Maximum location: X=-54.00, Y=-26.00

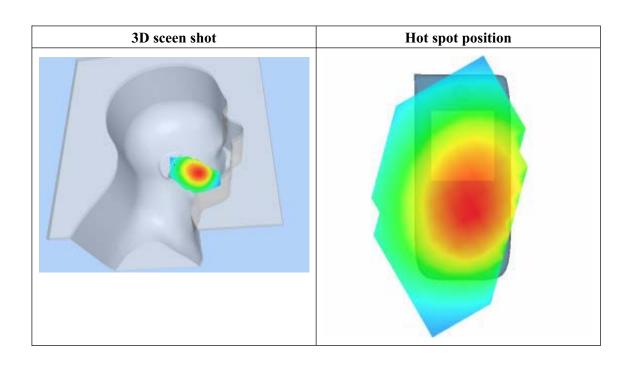
SAR 10g (W/Kg)	0.512553
SAR 1g (W/Kg)	0.751655

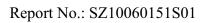




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.7433	0.5407	0.3902	0.2774	0.2119	0.1528
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 44 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

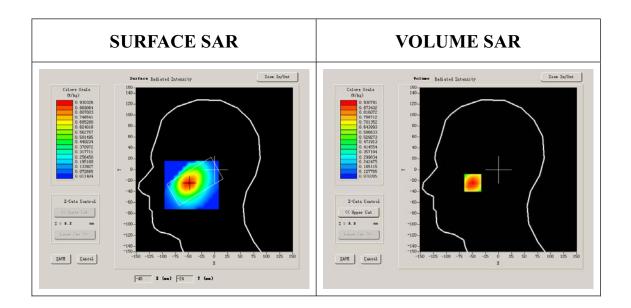
Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976	
Relative permittivity (real part)	40.669998	
Relative permittivity	19.120001	





Conductivity (S/m)	0.888655		
Variation (%)	-1.290000		
Ambient Temperature:	22.6°C		
Liquid Temperature:	22.3°C		
ConvF:	28.479,25.214,27.196		
Crest factor:	1:8		



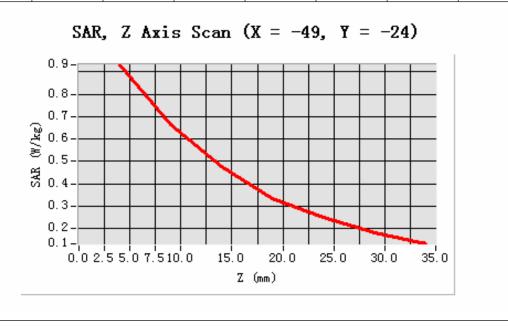
Maximum location: X=-49.00, Y=-24.00

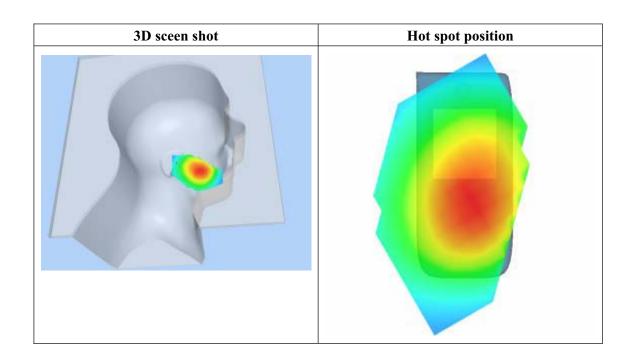
SAR 10g (W/Kg)	0.617745
SAR 1g (W/Kg)	0.899567

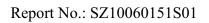




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.9308	0.6622	0.4748	0.3362	0.2503	0.1829
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

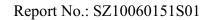
Measurement duration: 7 minutes 45 seconds

A. Experimental conditions.

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

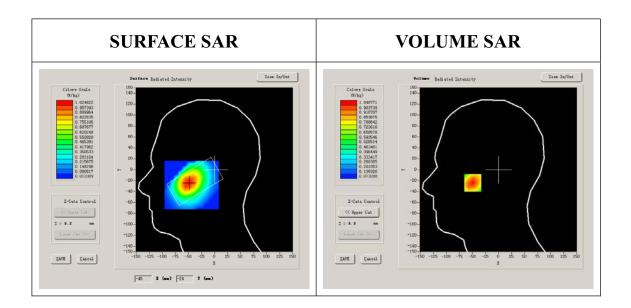
B. SAR Measurement Results

Frequency (MHz)	848.799988	
Relative permittivity (real part)	41.675999	
Relative permittivity	18.967199	



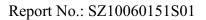


Conductivity (S/m)	0.894409		
Variation (%)	0.040000		
Ambient Temperature:	22.6°C		
Liquid Temperature:	22.3°C		
ConvF:	28.479,25.214,27.196		
Crest factor:	1:8		



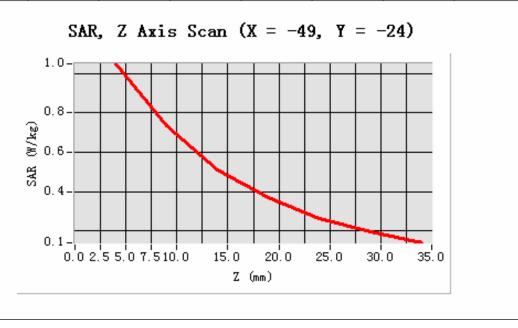
Maximum location: X=-49.00, Y=-24.00

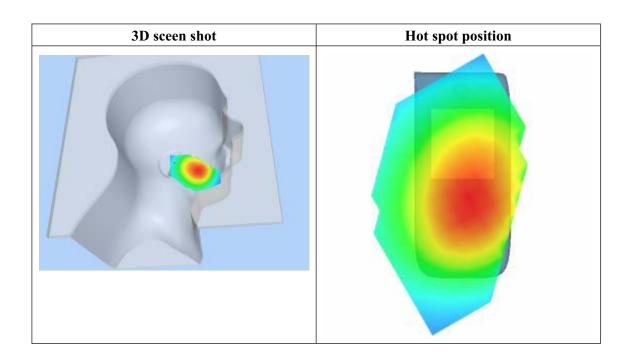
SAR 10g (W/Kg)	0.652444
SAR 1g (W/Kg)	0.967664

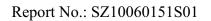




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.0488	0.7326	0.5101	0.3706	0.2632	0.1977
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 40 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

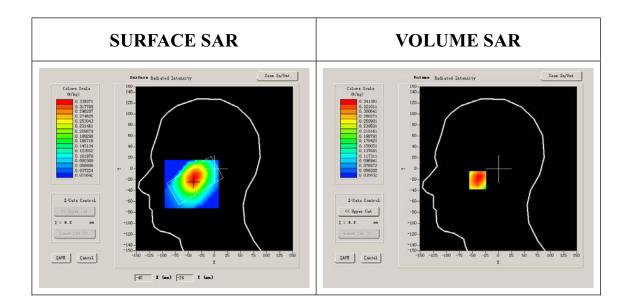
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250



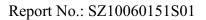


Conductivity (S/m)	0.866612	
Variation (%)	-0.460000	
Ambient Temperature:	22.6°C	
Liquid Temperature:	22.3°C	
ConvF:	28.479,25.214,27.196	
Crest factor:	1:8	



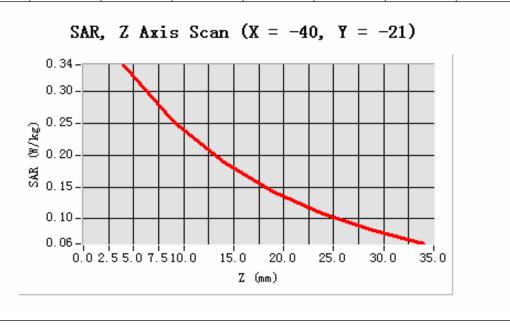
Maximum location: X=-40.00, Y=-21.00

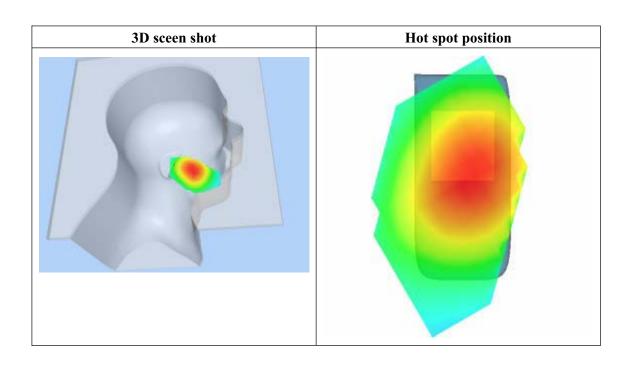
SAR 10g (W/Kg)	0.229658
SAR 1g (W/Kg)	0.322133

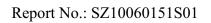




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.3414	0.2516	0.1892	0.1424	0.1071	0.0819
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 32 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

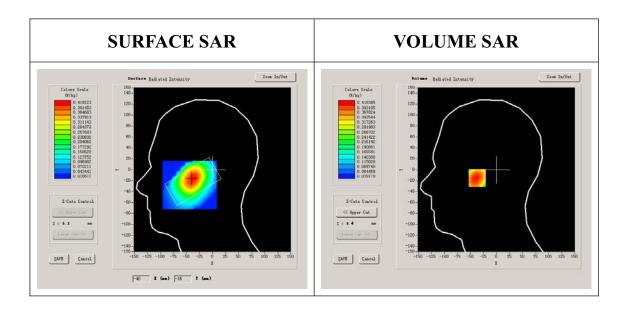
Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	40.669998
Relative permittivity	19.120001





Conductivity (S/m)	0.888655
Variation (%)	0.940000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



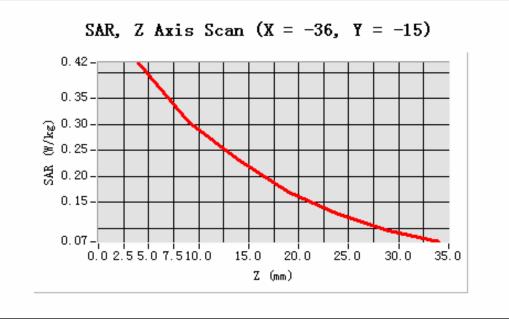
Maximum location: X=-36.00, Y=-15.00

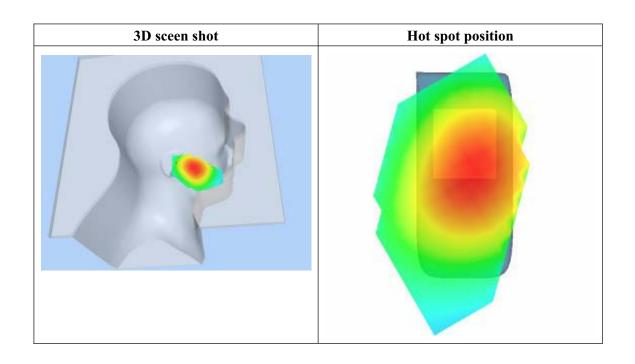
SAR 10g (W/Kg)	0.299677
SAR 1g (W/Kg)	0.421664

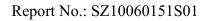




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4184	0.3035	0.2305	0.1688	0.1275	0.0957
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 30 seconds

A. Experimental conditions.

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

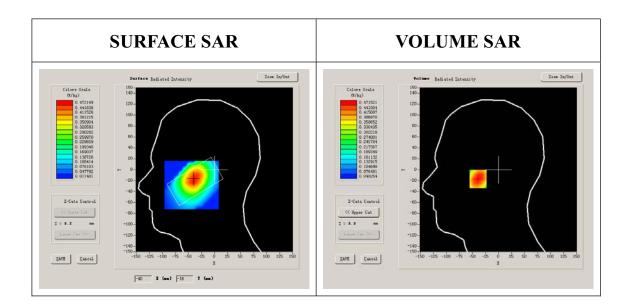
B. SAR Measurement Results

Frequency (MHz)	848.799988
Relative permittivity (real part)	41.675999
Relative permittivity	18.967199



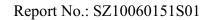


Conductivity (S/m)	0.894409
Variation (%)	1.270000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



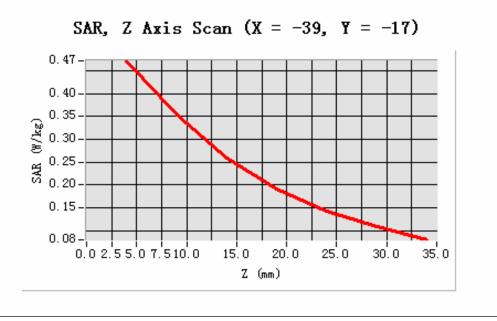
Maximum location: X=-39.00, Y=-17.00

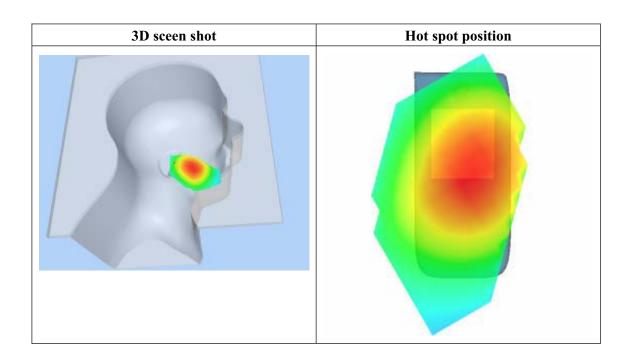
SAR 10g (W/Kg)	0.327775
SAR 1g (W/Kg)	0.448347





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4715	0.3526	0.2584	0.1910	0.1430	0.1079
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 9 seconds

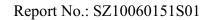
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

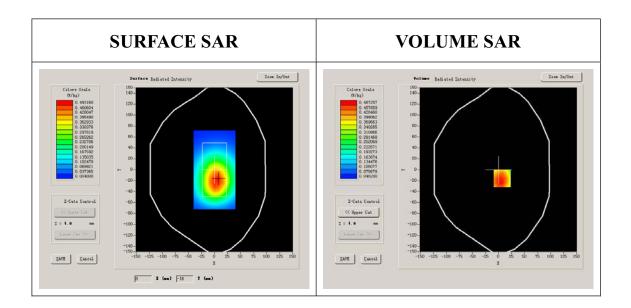
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550





Conductivity (S/m)	0.974596
Variation (%)	-0.700000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



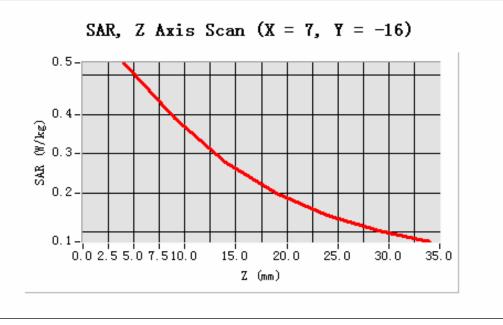
Maximum location: X=7.00, Y=-16.00

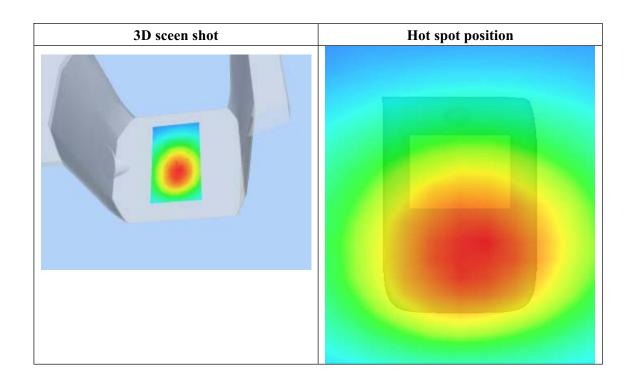
SAR 10g (W/Kg)	0.376665
SAR 1g (W/Kg)	0.525159

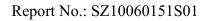




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5324	0.3926	0.2781	0.1995	0.1420	0.1035
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

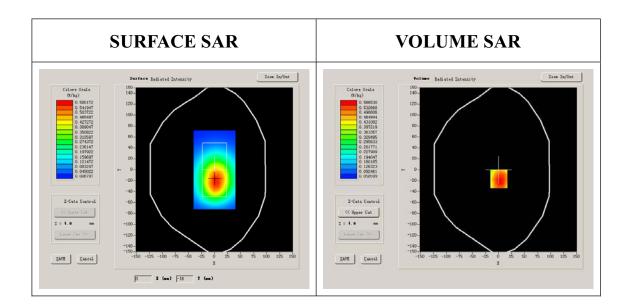
Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976		
Relative permittivity (real part)	55.709999		
Relative permittivity	21.709999		





Conductivity (S/m)	1.009033			
Variation (%)	-1.870000			
Ambient Temperature:	22.6°C			
Liquid Temperature:	22.3°C			
ConvF:	28.479,25.214,27.196			
Crest factor:	1:8			



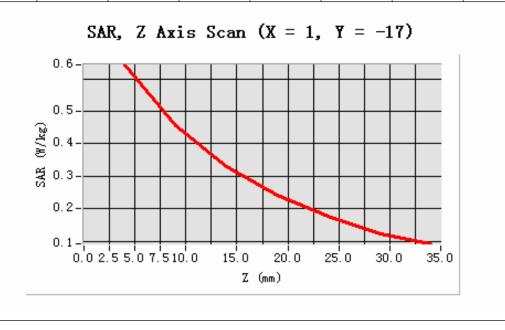
Maximum location: X=1.00, Y=-17.00

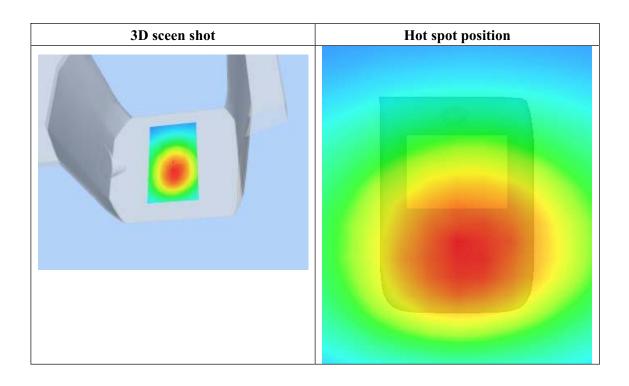
SAR 10g (W/Kg)	0.422141
SAR 1g (W/Kg)	0.627976





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6433	0.4575	0.3309	0.2412	0.1767	0.1219
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

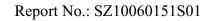
Measurement duration: 9 minutes 9 seconds

A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	High
Signal	GSM

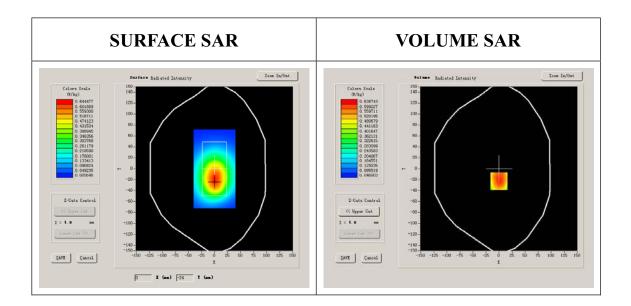
B. SAR Measurement Results

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850





Conductivity (S/m)	1.005962	
Variation (%)	0.110000	
Ambient Temperature:	22.6°C	
Liquid Temperature:	22.3°C	
ConvF:	28.479,25.214,27.196	
Crest factor:	1:8	



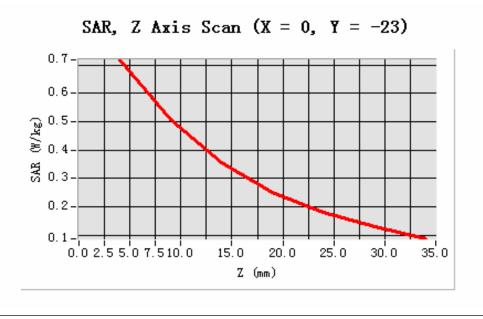
Maximum location: X=0.00, Y=-23.00

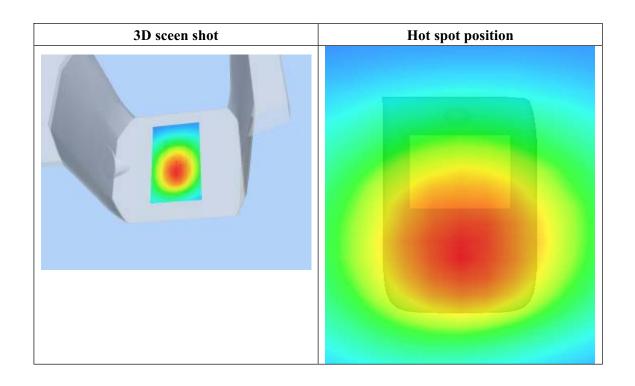
SAR 10g (W/Kg)	0.455353
SAR 1g (W/Kg)	0.669577





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.7184	0.5067	0.3578	0.2507	0.1794	0.1295
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

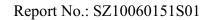
Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	High
Signal	GSM

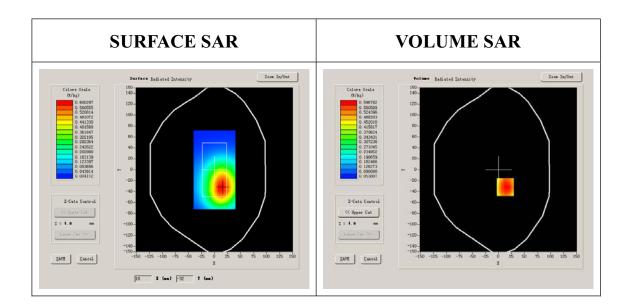
B. SAR Measurement Results

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850



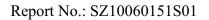


Conductivity (S/m)	1.005962	
Variation (%)	0.530000	
Ambient Temperature:	22.6°C	
Liquid Temperature:	22.3°C	
ConvF:	28.479,25.214,27.196	
Crest factor:	1:8	



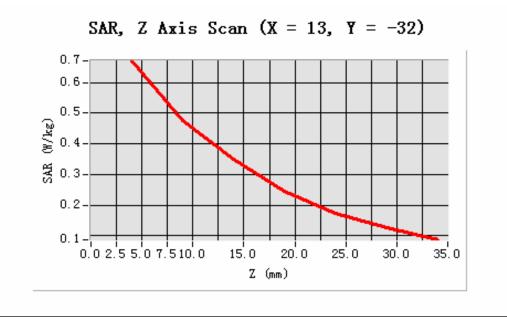
Maximum location: X=13.00, Y=-32.00

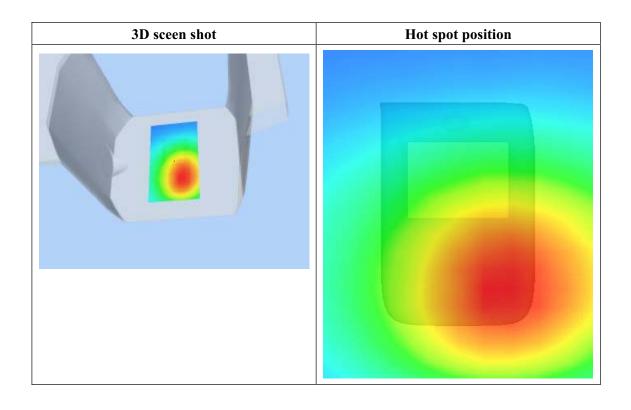
SAR 10g (W/Kg)	0.4214645
SAR 1g (W/Kg)	0.633156

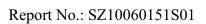




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6712	0.4762	0.3512	0.2446	0.1743	0.1256
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 15/7/2010

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

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

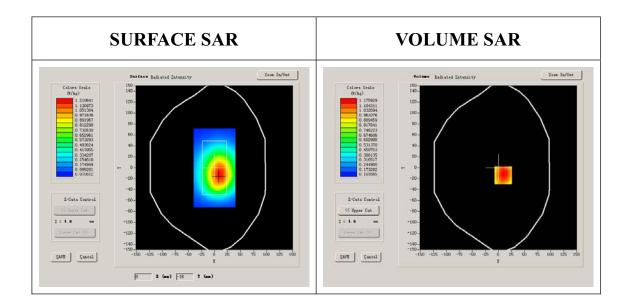
B. SAR Measurement Results

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850



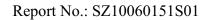


Conductivity (S/m)	1.005962
Variation (%)	-0.290000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:4



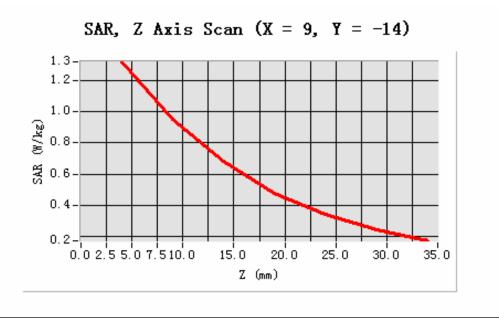
Maximum location: X=9.00, Y=-14.00

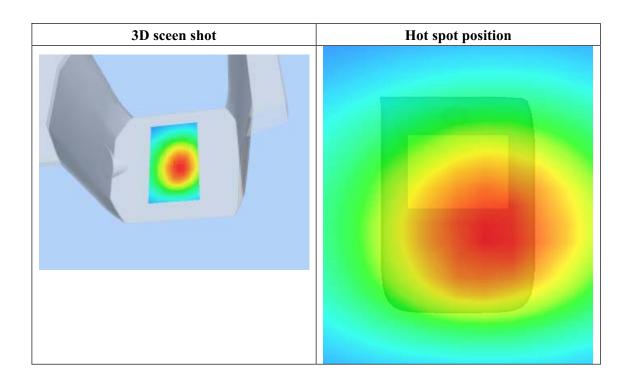
SAR 10g (W/Kg)	0.816645
SAR 1g (W/Kg)	1.175353

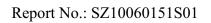




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	1.3226	0.9548	0.6796	0.4744	0.3417	0.2438
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 6 seconds

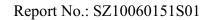
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	High
Signal	GSM

B. SAR Measurement Results

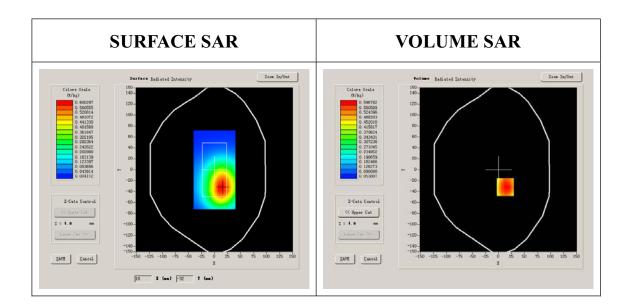
Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850





Conductivity (S/m)	1.005962
Variation (%)	0.530000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



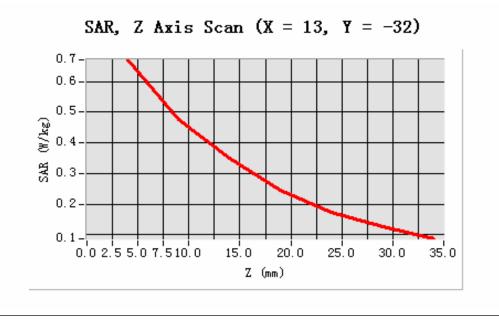
Maximum location: X=13.00, Y=-32.00

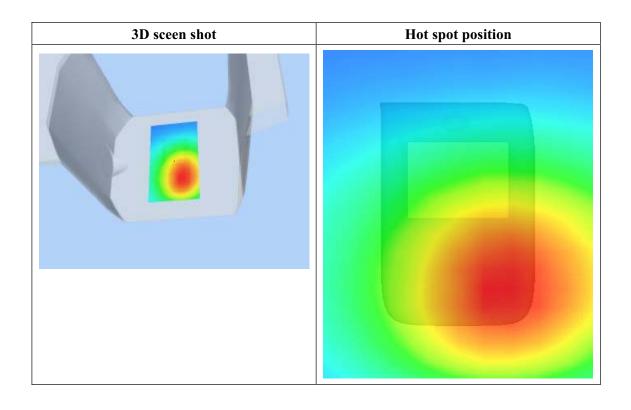
SAR 10g (W/Kg)	0.481216
SAR 1g (W/Kg)	0.670577

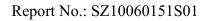




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6712	0.4762	0.3512	0.2446	0.1743	0.1256
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 48 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

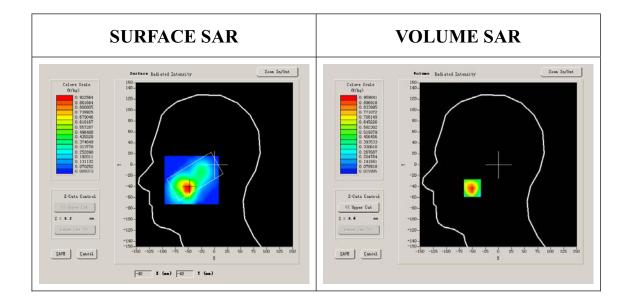
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650





Conductivity (S/m)	1.335397
Variation (%)	-0.810000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



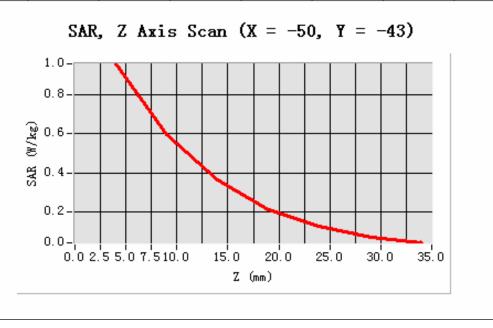
Maximum location: X=-50.00, Y=-43.00

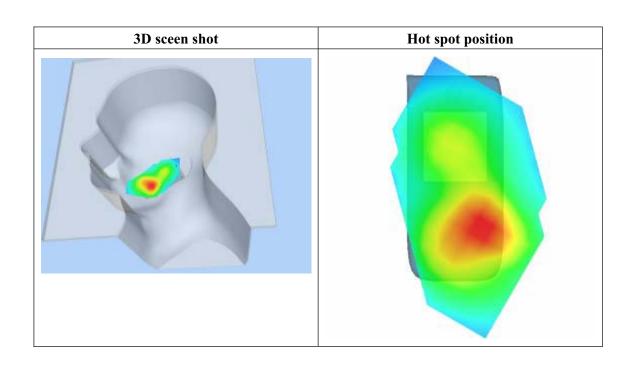
SAR 10g (W/Kg)	0.355424
SAR 1g (W/Kg)	0.653214

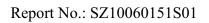




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.9598	0.5948	0.3641	0.2115	0.1239	0.0694
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 51 seconds

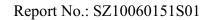
A. Experimental conditions.

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

B. SAR Measurement Results

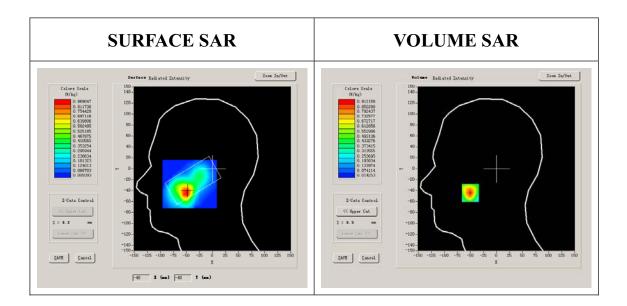
Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000	
Relative permittivity (real part)	38.509998	
Relative permittivity	13.750000	





Conductivity (S/m)	1.436111		
Variation (%)	-1.200000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:8		



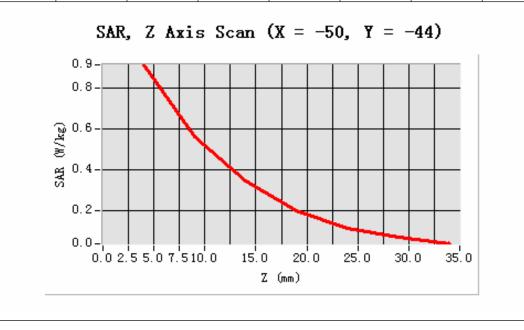
Maximum location: X=-50.00, Y=-44.00

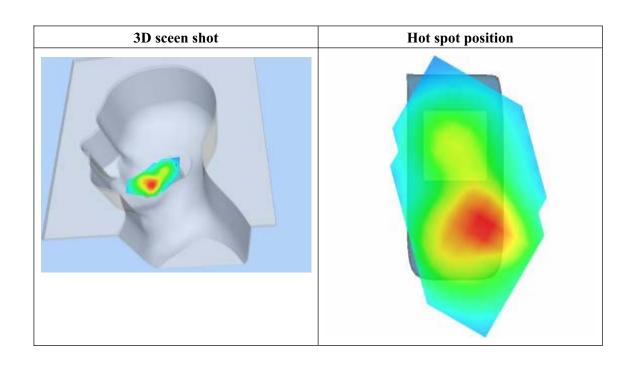
SAR 10g (W/Kg)	0.364554
SAR 1g (W/Kg)	0.638575

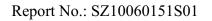




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.9122	0.5613	0.3434	0.2001	0.1144	0.0663
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 56 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

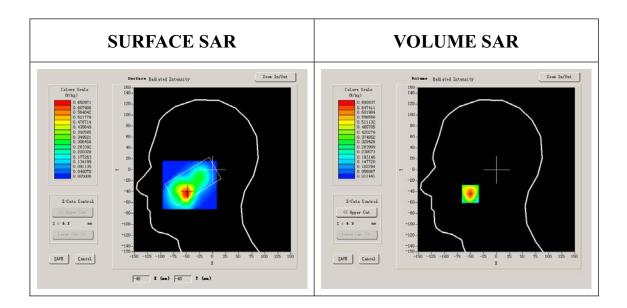
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049	
Relative permittivity (real part)	39.929001	
Relative permittivity	13.156500	





Conductivity (S/m)	1.395905		
Variation (%)	0.920000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:8		



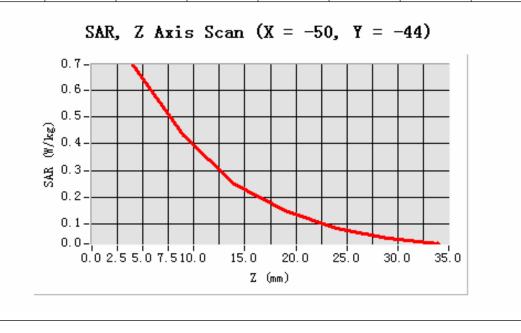
Maximum location: X=-50.00, Y=-44.00

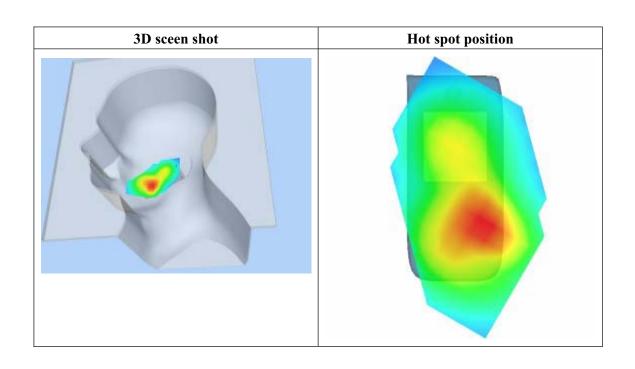
SAR 10g (W/Kg)	0.324414		
SAR 1g (W/Kg)	0.598576		

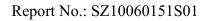




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6928	0.4299	0.2508	0.1501	0.0831	0.0482
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 22 seconds

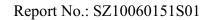
A. Experimental conditions.

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

B. SAR Measurement Results

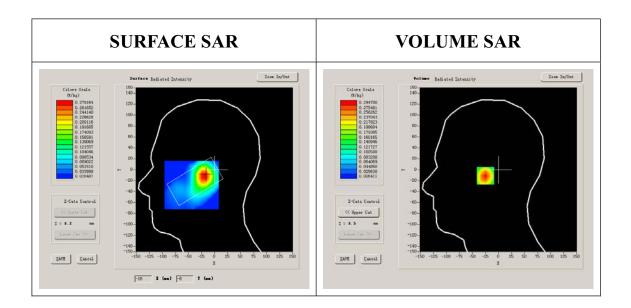
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650





Conductivity (S/m)	1.335397
Variation (%)	-1.570000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



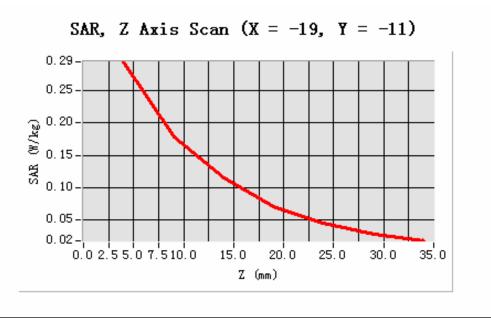
Maximum location: X=-19.00, Y=-11.00

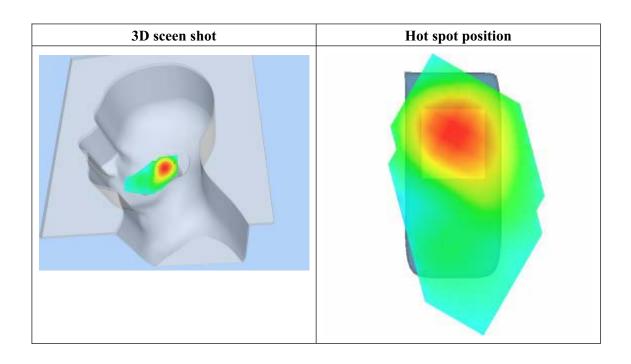
SAR 10g (W/Kg)	0.152552
SAR 1g (W/Kg)	0.221775





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2947	0.1777	0.1150	0.0707	0.0451	0.0272
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 27 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

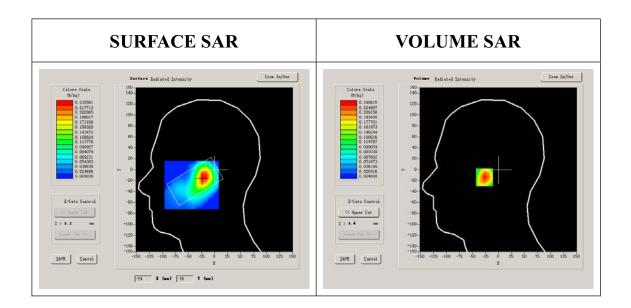
Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.509998
Relative permittivity	13.750000





Conductivity (S/m)	1.436111
Variation (%)	-0.250000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



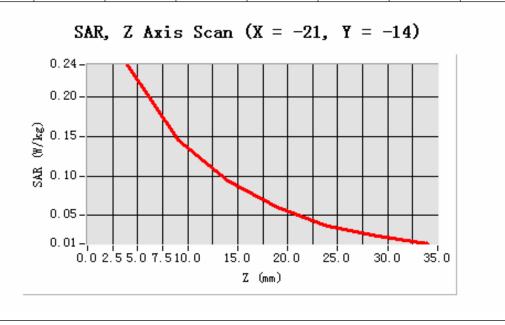
Maximum location: X=-21.00, Y=-14.00

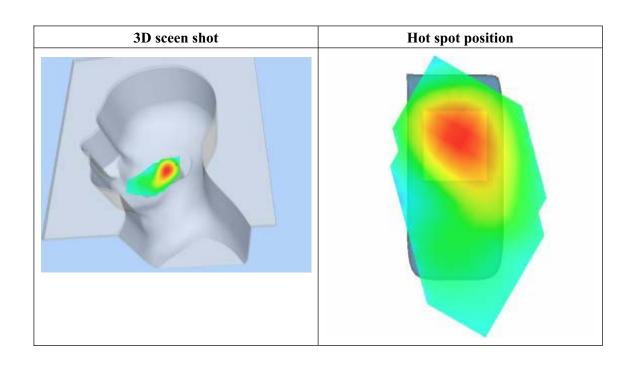
SAR 10g (W/Kg)	0.121441
SAR 1g (W/Kg)	0.206366

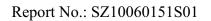




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2406	0.1451	0.0937	0.0598	0.0365	0.0235
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 23 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

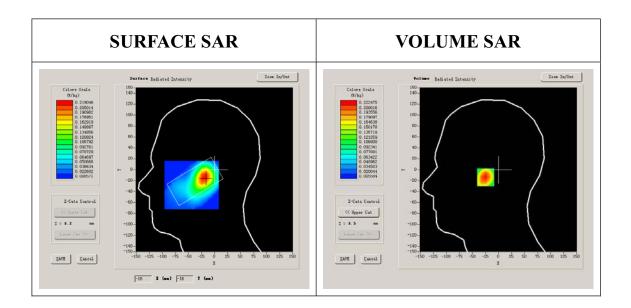
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	39.929001
Relative permittivity	13.156500



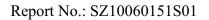


Conductivity (S/m)	1.395905
Variation (%)	-0.220000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



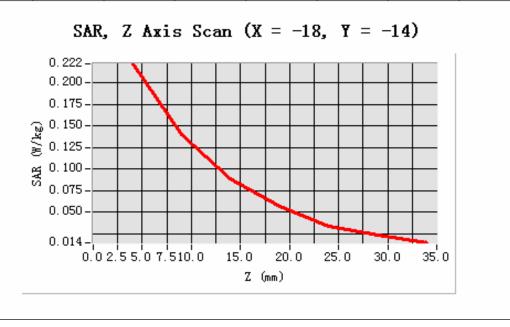
Maximum location: X=-18.00, Y=-14.00

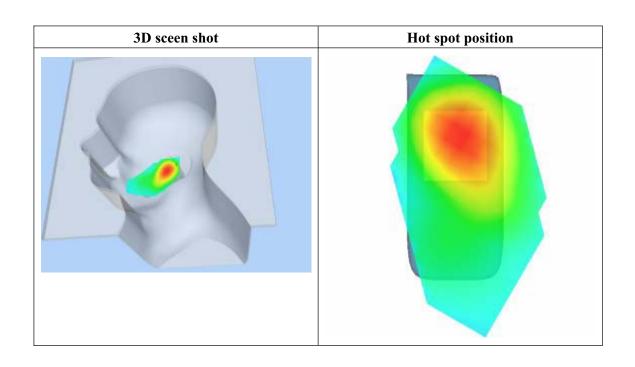
SAR 10g (W/Kg)	0.100686
SAR 1g (W/Kg)	0.196368





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2225	0.1396	0.0883	0.0563	0.0341	0.0230
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 55 seconds

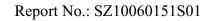
A. Experimental conditions.

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

B. SAR Measurement Results

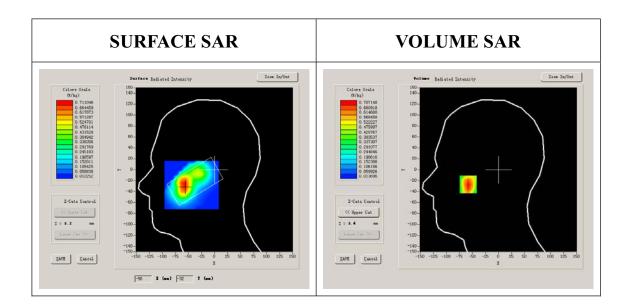
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650



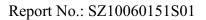


Conductivity (S/m)	1.335397		
Variation (%)	-0.350000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:8		



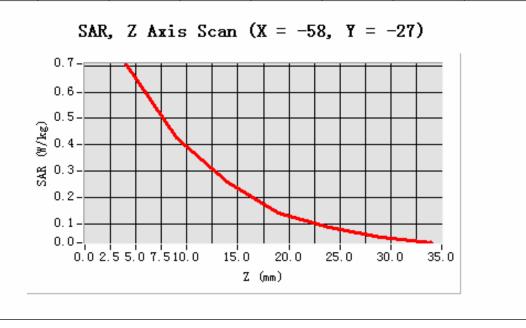
Maximum location: X=-58.00, Y=-27.00

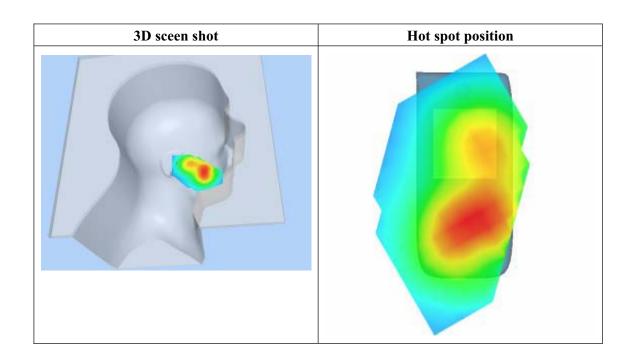
SAR 10g (W/Kg)	0.342222		
SAR 1g (W/Kg)	0.611645		





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.7071	0.4274	0.2566	0.1414	0.0848	0.0469
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 55 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

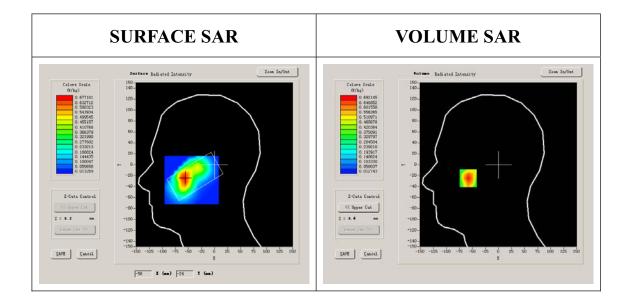
Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.509998
Relative permittivity	13.750000





Conductivity (S/m)	1.436111		
Variation (%)	0.350000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:8		



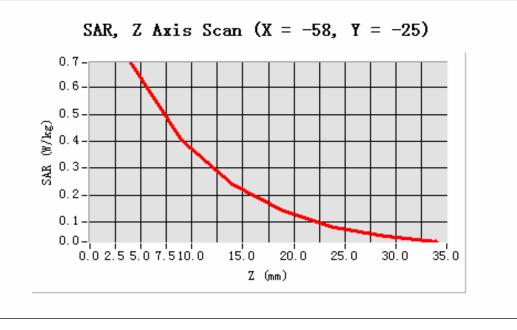
Maximum location: X=-58.00, Y=-25.00

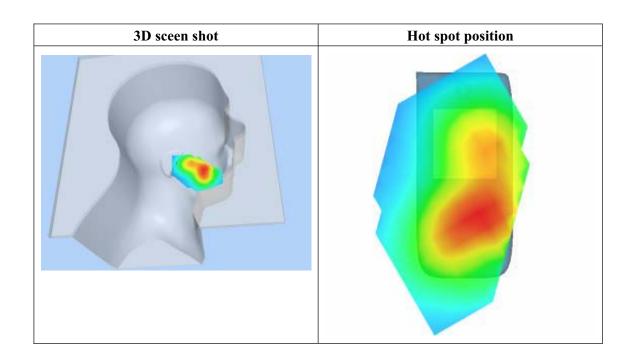
SAR 10g (W/Kg)	0.295775
SAR 1g (W/Kg)	0.589466





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.6921	0.4021	0.2394	0.1409	0.0798	0.0451
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 57 seconds

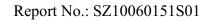
A. Experimental conditions.

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

B. SAR Measurement Results

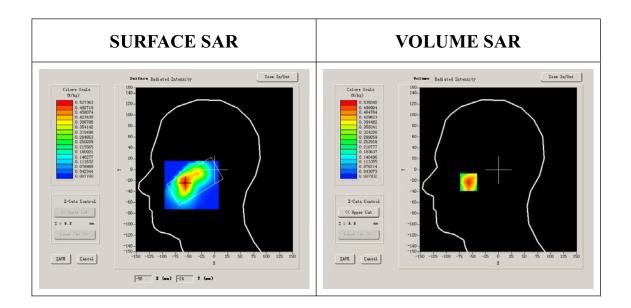
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	39.929001
Relative permittivity	13.156500





Conductivity (S/m)	1.395905	
Variation (%)	-0.340000	
Ambient Temperature:	23.5°C	
Liquid Temperature:	22.8°C	
ConvF:	40.625,34.773,38.535	
Crest factor:	1:8	



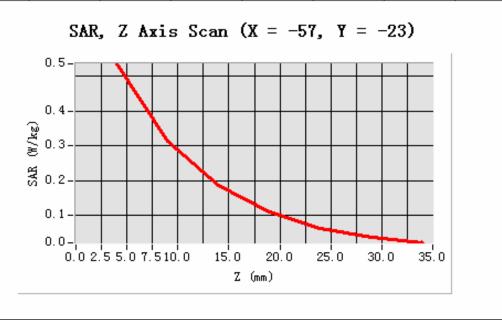
Maximum location: X=-57.00, Y=-23.00

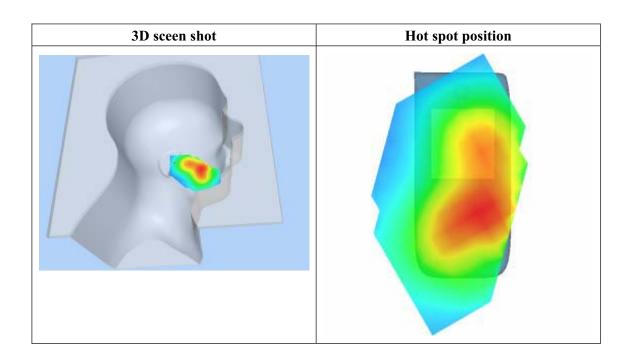
SAR 10g (W/Kg)	0.246645
SAR 1g (W/Kg)	0.521645

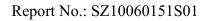




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5350	0.3132	0.1872	0.1095	0.0605	0.0354
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 26 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

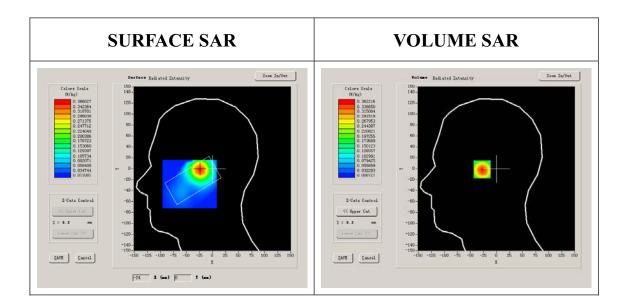
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650





Conductivity (S/m)	1.335397	
Variation (%)	-0.090000	
Ambient Temperature:	23.5°C	
Liquid Temperature:	22.8°C	
ConvF:	40.625,34.773,38.535	
Crest factor:	1:8	



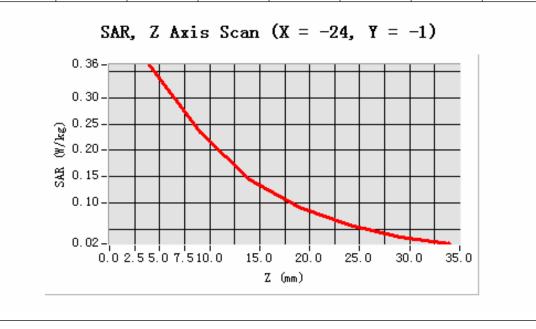
Maximum location: X=-24.00, Y=-1.00

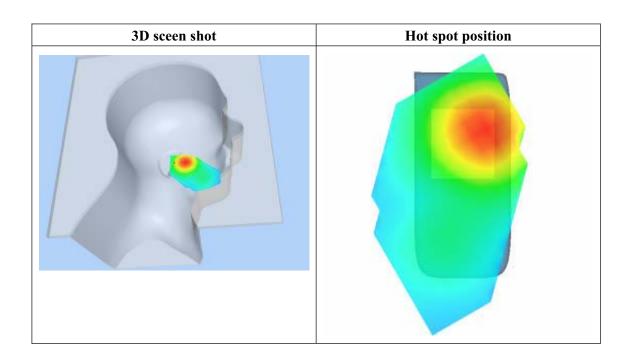
SAR 10g (W/Kg)	0.153477
SAR 1g (W/Kg)	0.298466

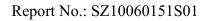




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.3622	0.2342	0.1451	0.0930	0.0582	0.0354
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 27 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

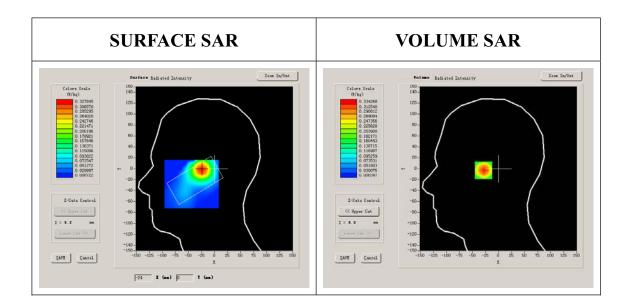
Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.509998
Relative permittivity	13.750000





Conductivity (S/m)	1.436111
Variation (%)	1.230000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



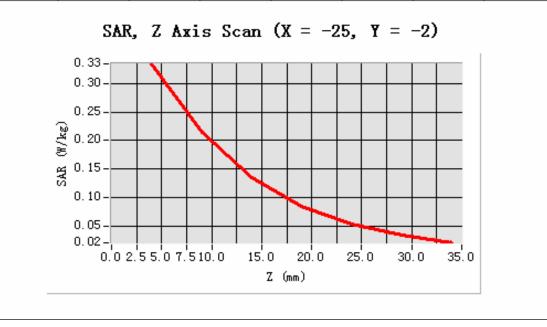
Maximum location: X=-25.00, Y=-2.00

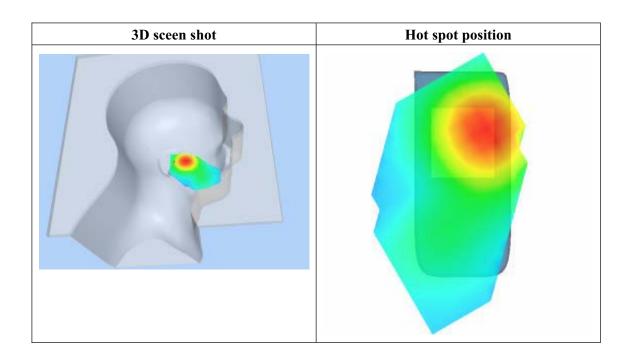
SAR 10g (W/Kg)	0.141447
SAR 1g (W/Kg)	0.274144





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.3343	0.2154	0.1352	0.0859	0.0543	0.0342
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 7 minutes 25 seconds

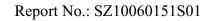
A. Experimental conditions.

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

B. SAR Measurement Results

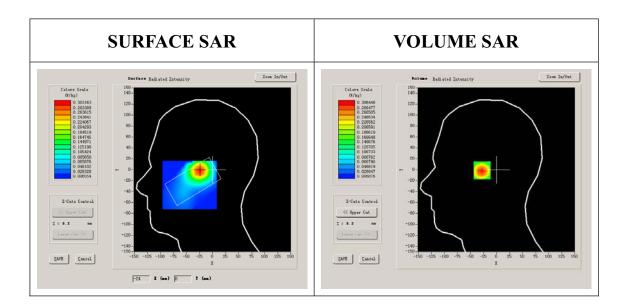
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	39.929001
Relative permittivity	13.156500



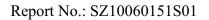


Conductivity (S/m)	1.395905
Variation (%)	1.100000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



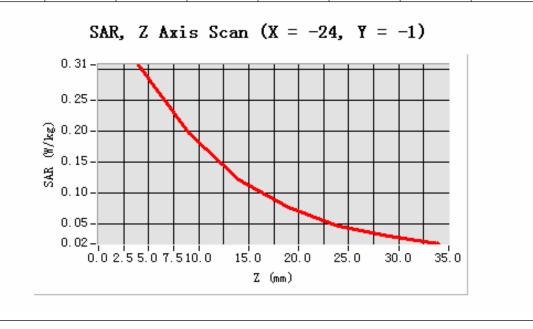
Maximum location: X=-24.00, Y=-1.00

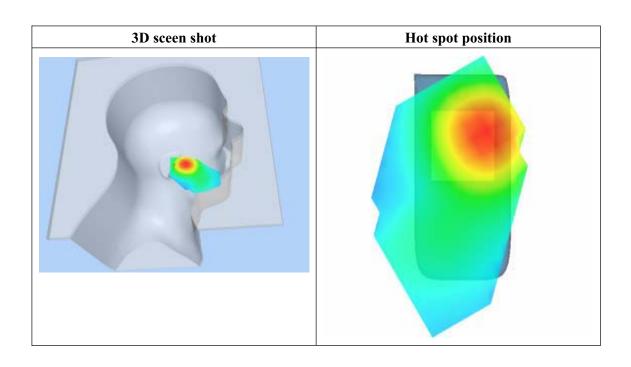
SAR 10g (W/Kg)	0.126645
SAR 1g (W/Kg)	0.241857





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.3064	0.1956	0.1213	0.0760	0.0467	0.0298
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 4 seconds

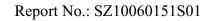
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

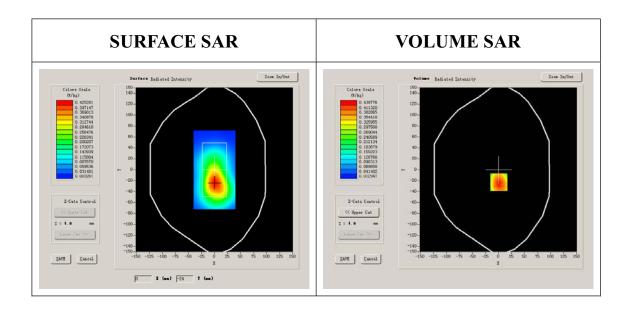
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	51.540001
Relative permittivity	12.000000





Conductivity (S/m)	1.233467
Variation (%)	1.340000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



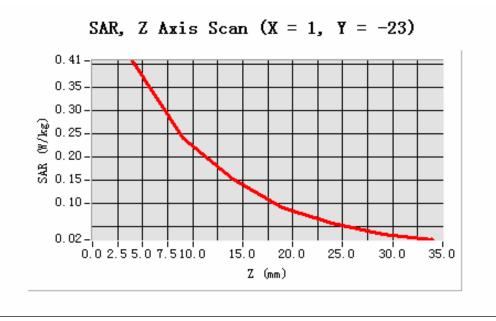
Maximum location: X=1.00, Y=-23.00

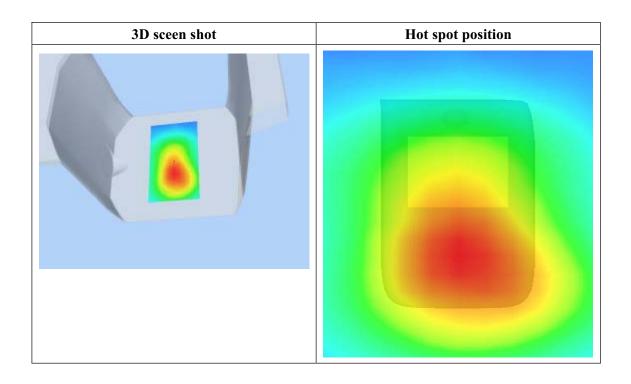
SAR 10g (W/Kg)	0.165886
SAR 1g (W/Kg)	0.323635

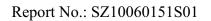




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4062	0.2387	0.1519	0.0899	0.0553	0.0328
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 6 seconds

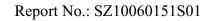
A. Experimental conditions.

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

B. SAR Measurement Results

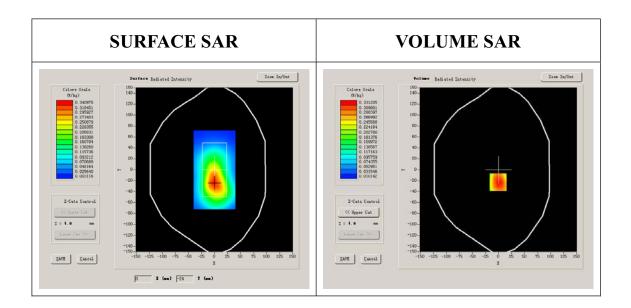
Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000	
Relative permittivity (real part)	51.540001	
Relative permittivity	15.070000	



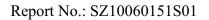


Conductivity (S/m)	1.573978		
Variation (%)	0.110000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:8		



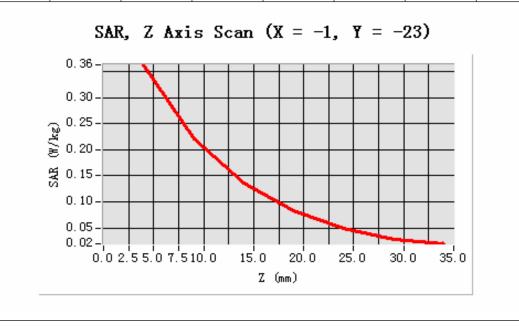
Maximum location: X=-1.00, Y=-23.00

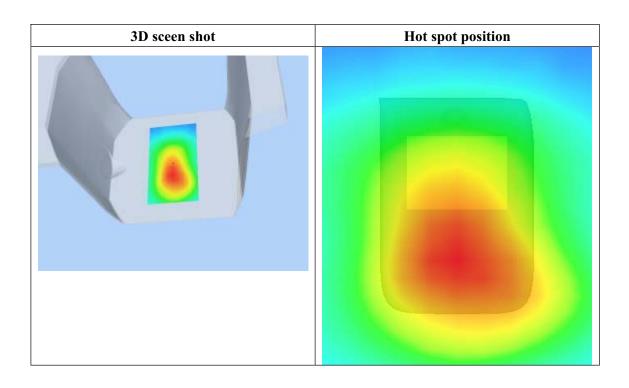
SAR 10g (W/Kg)	0.164577
SAR 1g (W/Kg)	0.316487

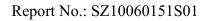




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.3630	0.2219	0.1358	0.0829	0.0484	0.0288
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 5 seconds

A. Experimental conditions.

Phantom File	surf_sam_plan.txt		
Phantom	Validation plane		
Device Position	Body		
Band	GSM1900		
Channels	High		
Signal	GSM		

B. SAR Measurement Results

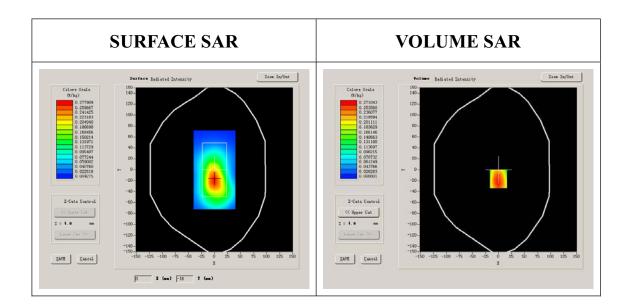
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049	
Relative permittivity (real part)	51.540001	
Relative permittivity	12.000000	





Conductivity (S/m)	1.273000		
Variation (%)	-1.560000		
Ambient Temperature:	23.5°C		
Liquid Temperature:	22.8°C		
ConvF:	40.625,34.773,38.535		
Crest factor:	1:8		



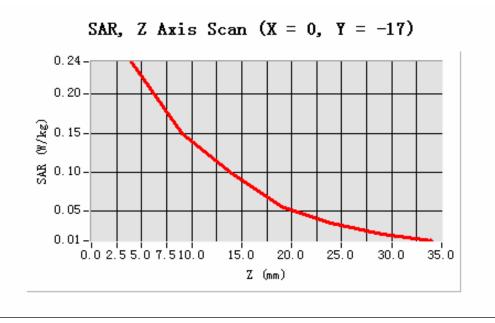
Maximum location: X=0.00, Y=-17.00

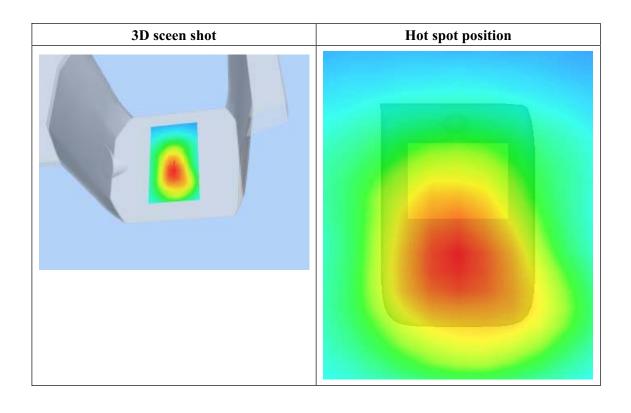
SAR 10g (W/Kg)	0.135255		
SAR 1g (W/Kg)	0.268588		

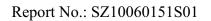




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2411	0.1494	0.0979	0.0563	0.0344	0.0211
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 5 seconds

A. Experimental conditions.

Phantom File	surf_sam_plan.txt		
Phantom	Validation plane		
Device Position	Body		
Band	GSM1900		
Channels	Low		
Signal	GSM		

B. SAR Measurement Results

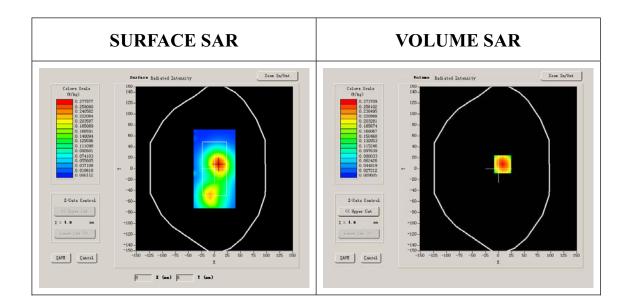
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	51.540001
Relative permittivity	12.000000



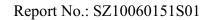


Conductivity (S/m)	1.233467
Variation (%)	-1.510000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



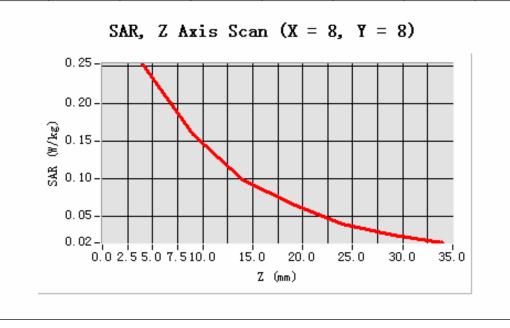
Maximum location: X=8.00, Y=8.00

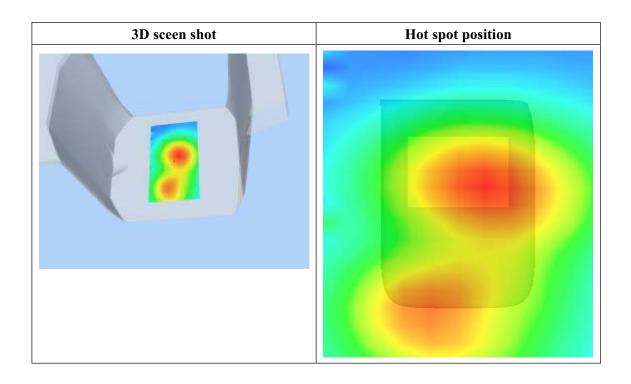
SAR 10g (W/Kg)	0.121476
SAR 1g (W/Kg)	0.217487





Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2528	0.1584	0.0994	0.0661	0.0401	0.0259
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

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

B. SAR Measurement Results

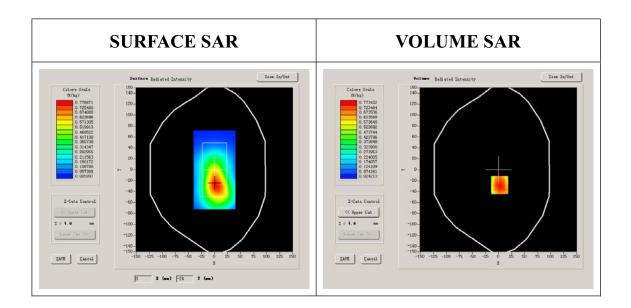
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	51.540001
Relative permittivity	12.000000





Conductivity (S/m)	1.233467	
Variation (%)	-1.160000	
Ambient Temperature:	23.5°C	
Liquid Temperature:	22.8°C	
ConvF:	40.625,34.773,38.535	
Crest factor:	1:4	



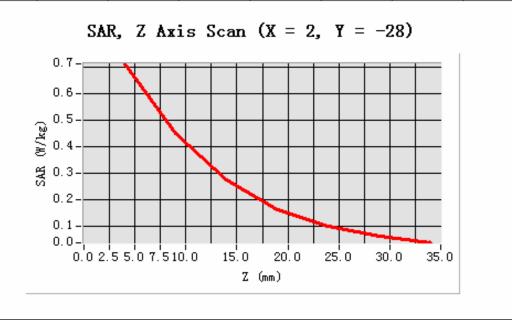
Maximum location: X=2.00, Y=-28.00

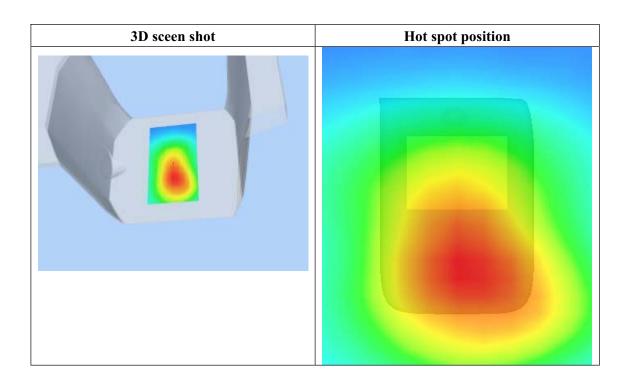
SAR 10g (W/Kg)	0.317764
SAR 1g (W/Kg)	0.704164

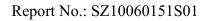




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.7144	0.4506	0.2761	0.1608	0.0977	0.0591
(W/Kg)							









Type: Phone measurement (Complete)

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

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

Date of measurement: 3/8/2010

Measurement duration: 9 minutes 5 seconds

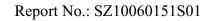
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

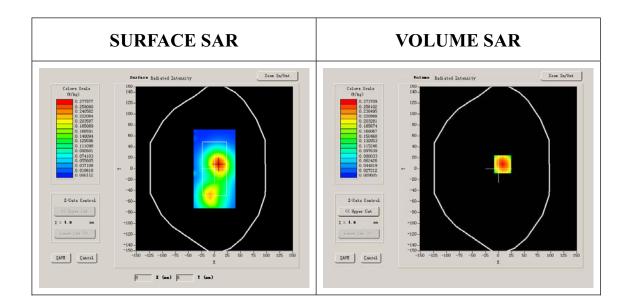
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	51.540001
Relative permittivity	12.000000



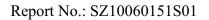


Conductivity (S/m)	1.233467
Variation (%)	-1.510000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8



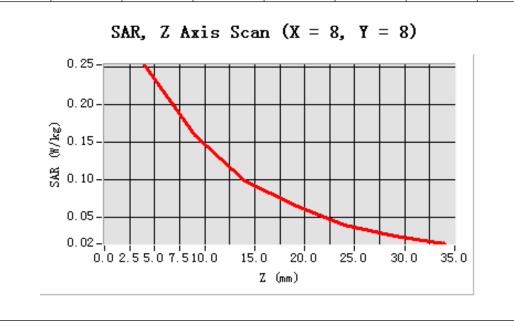
Maximum location: X=8.00, Y=8.00

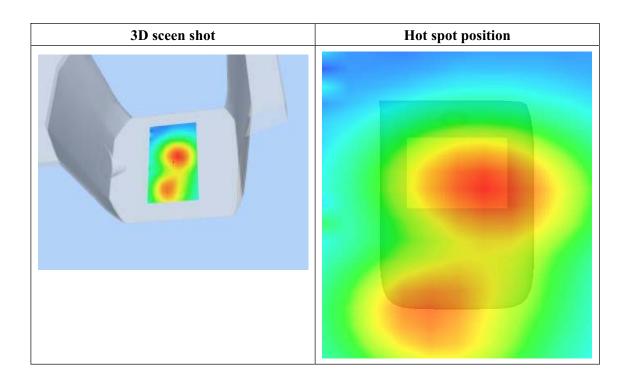
SAR 10g (W/Kg)	0.157564
SAR 1g (W/Kg)	0.317586

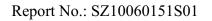




Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2528	0.1584	0.0994	0.0661	0.0401	0.0259
(W/Kg)							









System Performance Check Data(835MHz Head)

Type: Phone measurement (Complete)

Date of measurement: 3/8/2010

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

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

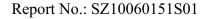
A. Experimental conditions.

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

B. SAR Measurement Results

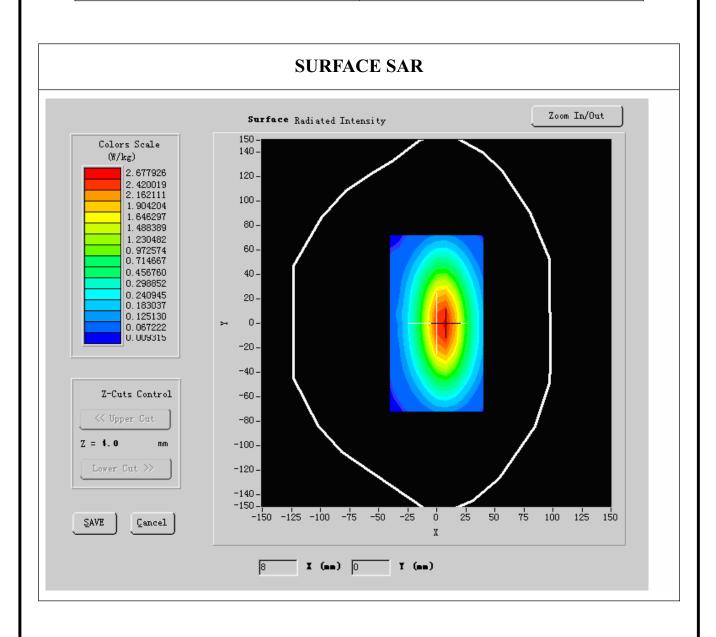
Middle Band SAR:

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	

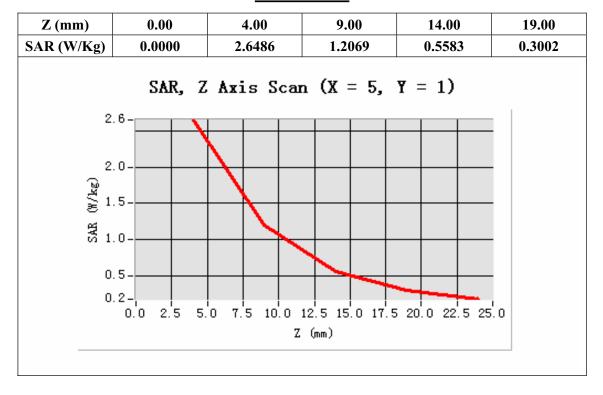


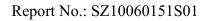
Maximum location: X=5.00, Y=1.00





SAR 10g (W/Kg)	1.875252
SAR 1g (W/Kg)	2.709422







System Performance Check Data(835MHz Body)

Type: Phone measurement (Complete)

Date of measurement: 3/8/2010

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

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

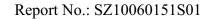
A. Experimental conditions.

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

B. SAR Measurement Results

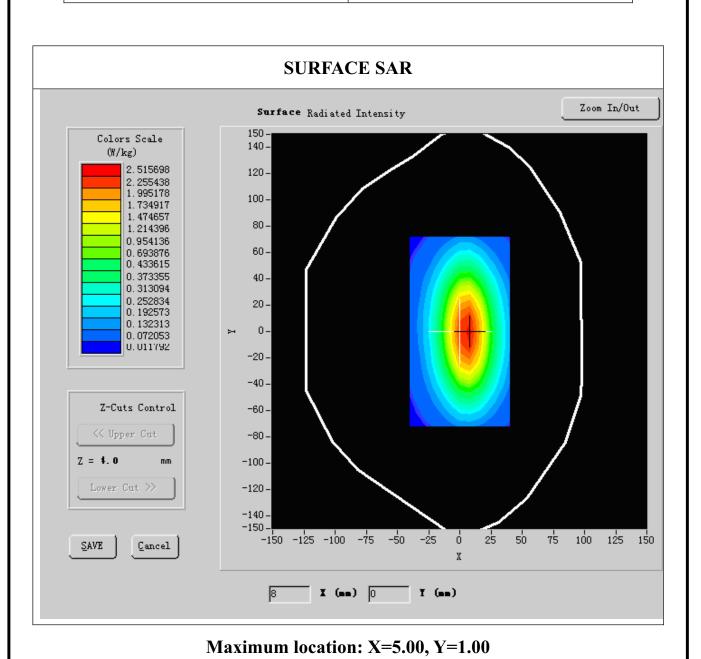
Middle Band SAR:

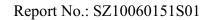
Frequency (MHz)	835.000000
Relative permittivity (real part)	55.709999
Relative permittivity	15.070000
Conductivity (S/m)	1.009033





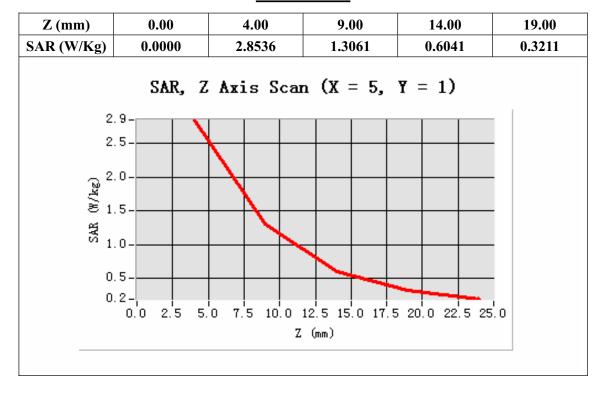
Variation (%)	-0.140000	
Ambient Temperature:	23.5°C	
Liquid Temperature:	22.8°C	
ConvF:	28.559,25.681,27.588	
Crest factor:	1:1	

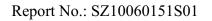






SAR 10g (W/Kg)	1.652852
SAR 1g (W/Kg)	2.701584







System Performance Check Data(1900MHz Head)

Type: Phone measurement (Complete)

Date of measurement: 3/8/2010

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

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

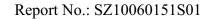
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	
Signal	CW

B. SAR Measurement Results

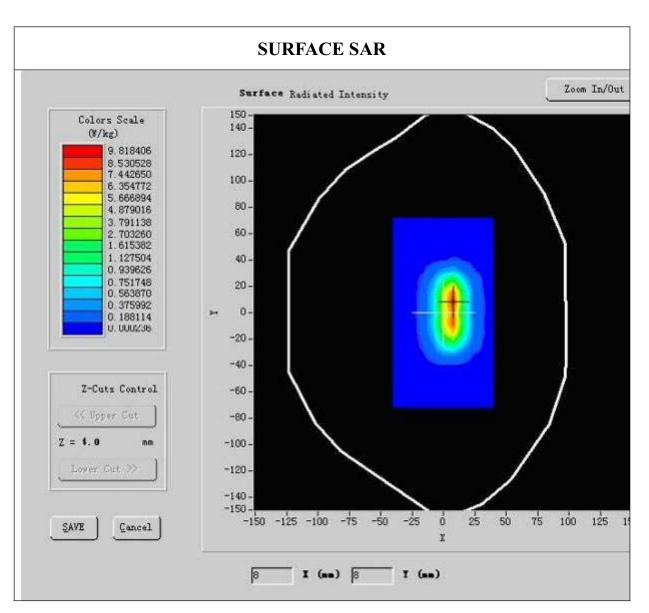
Lower Band SAR:

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

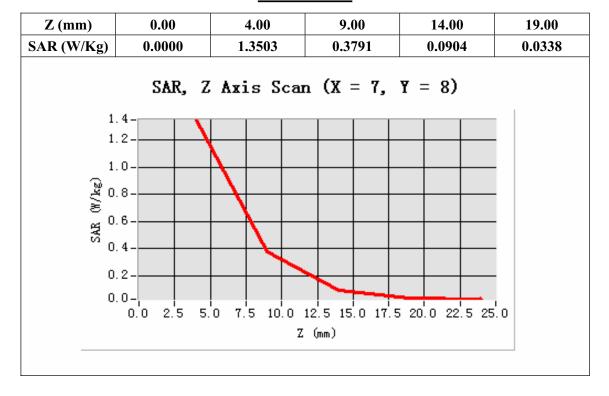


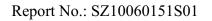
Maximum location: X=7.00, Y=8.00





SAR 10g (W/Kg)	5.873331
SAR 1g (W/Kg)	9.843651







System Performance Check Data(1900MHz Body)

Type: Phone measurement (Complete)

Date of measurement: 3/8/2010

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
Device Position	Body
Band	GSM1900
Channels	
Signal	CW

B. SAR Measurement Results

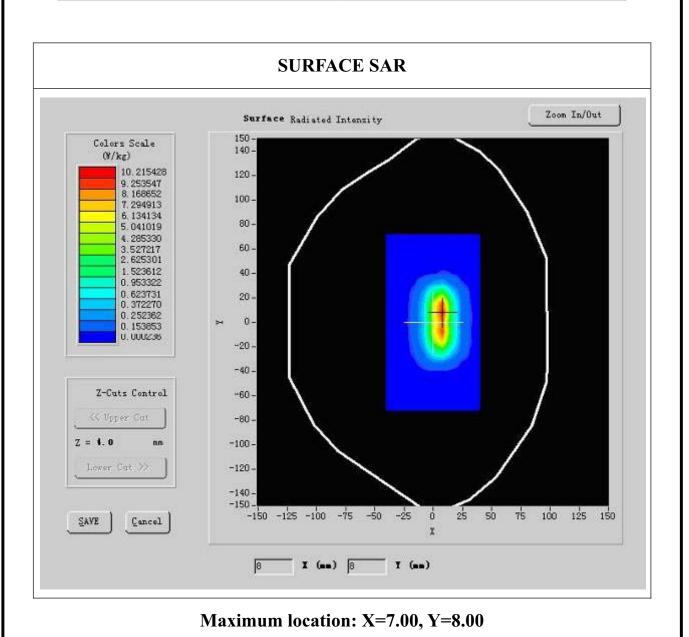
Lower Band SAR:

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)	5.487222
SAR 1g (W/Kg)	10.225723

