

Report No: KS110120B05-SF

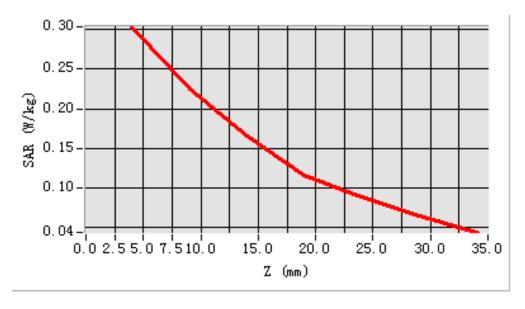
### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.541247
SAR 1g (W/Kg)	0.314136

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0 2070	0.1722	0 1474	0.1022	0.0007	0.0511
(W/kg)	0.0000	0.2878	0.1722	0.1474	0.1023	0.0887	0.0511

### SAR, Z Axis Scan (X = 0, Y = -6)





**MEASUREMENT 24** 

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Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

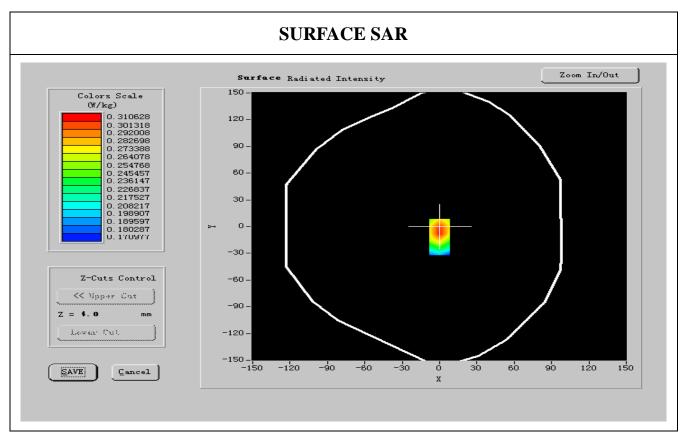
### A. Experimental conditions.

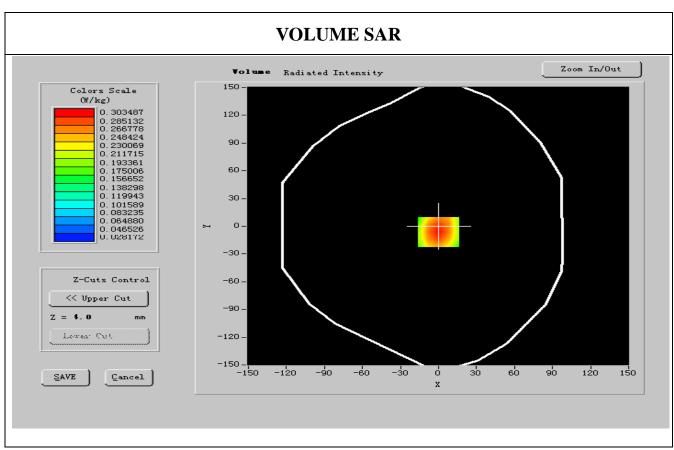
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Body	
<b>Device Position</b>	FrontSide toward phantom	
Band	GPRS850	
Channels	High	
Signal	GPRS	

## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibration Due: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPC32,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

Frequency (MHz)	848.800000
Relative permitivity (real part)	55.576000
Relative permitivity (imaginary part)	21.726601
Conductivity (S/m)	0.974288
Variation (%)	-0.220000
Ambient Temperature:	21.2 °C
Liquid Temperature:	20.4°C
ConvF:	20.00, 19.88, 27.77
Crest factor:	1:2





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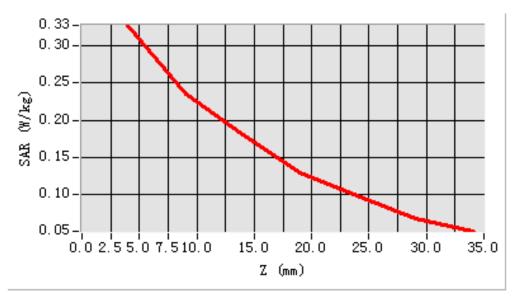
### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.465216
SAR 1g (W/Kg)	0.305416

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2222	0.1722	0.1404	0.1222	0.0797	0.0651
(W/kg)	0.0000	0.3232	0.1722	0.1494	0.1323	0.0787	0.0651

## SAR, Z Axis Scan (X = 0, Y = -6)



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### II. 1900MHz Band RESULTS

<b>TYPE</b>	<u>PARAMETERS</u>
	Measurement 1:
	Right Head with Cheek device position on Low Channel in GSM1900 mode
	Measurement 2:
	Right Head with Cheek device position on Middle Channel in GSM1900 mode
	Measurement 3:
	Right Head with Cheek device position on High Channel in GSM1900 mode
	Measurement 4:
	Right Head with Tilt device position on Low Channel in GSM1900 mode
	Measurement 5:
	Right Head with Tilt device position on Middle Channel in GSM1900 mode
	Measurement 6:  Dight Head with Tilt davige position on High Channel in GSM1000 mode
	Right Head with Tilt device position on High Channel in GSM1900 mode Measurement 7:
	Left Head with Cheek device position on Low Channel in GSM1900 mode
	Measurement 8:
	Left Head with Cheek device position on Middle Channel in GSM1900 mode
	Measurement 9:
	Left Head with Cheek device position on High Channel in GSM1900 mode
Dhone	Measurement 10:
<b>Phone</b>	Left Head with Tilt device position on Low Channel in GSM1900 mode
	Measurement 11:
	Left Head with Tilt device position on Middle Channel in GSM1900 mode
	Measurement 12:
	Left Head with Tilt device position on High Channel in GSM1900 mode
	Measurement 13:
	BackSide toward phantom 15mm, Low Channel in GSM1900 mode
	Measurement 14:
	BackSide toward phantom 15mm, Middle Channel in GSM1900 mode
	Measurement 15:  BackSide toward phantom 15mm, High Channel in GSM1900 mode
	Measurement 16:
	BackSide toward phantom 15mm, Low Channel in GPRS1900 mode
	Measurement 17:
	BackSide toward phantom 15mm, Middle Channel in GPRS1900 mode
	Measurement 18:
	BackSide toward phantom 15mm, High Channel in GPRS1900 mode
	Measurement 19:
	FrontSide toward phantom 15mm, Low Channel in GSM1900 mode



Measurement 20: FrontSide toward phantom 15mm, Middle Channel in GSM1900 mode

Measurement 21: FrontSide toward phantom 15mm, High Channel in GSM1900 mode

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<u>Measurement 22:</u> FrontSide toward phantom 15mm, Low Channel in GPRS1900 mode

<u>Measurement 23:</u> FrontSide toward phantom 15mm, Middle Channel in GPRS1900 mode

Measurement 24: FrontSide toward phantom 15mm, High Channel in GPRS1900 mode

### **MEASUREMENT 1**

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

### A. Experimental conditions.

Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibration Due: N/A
	SN:375052-AA1)	



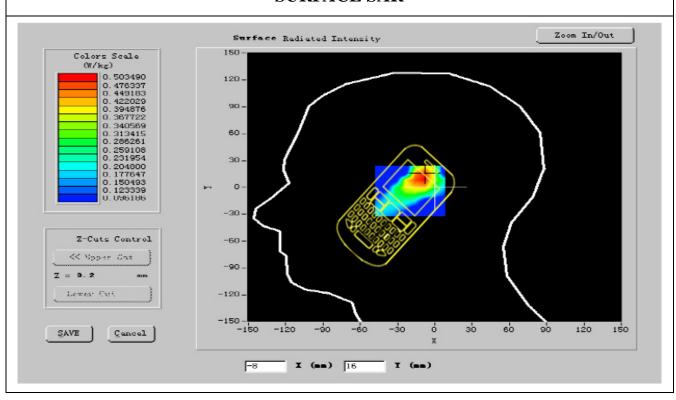
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

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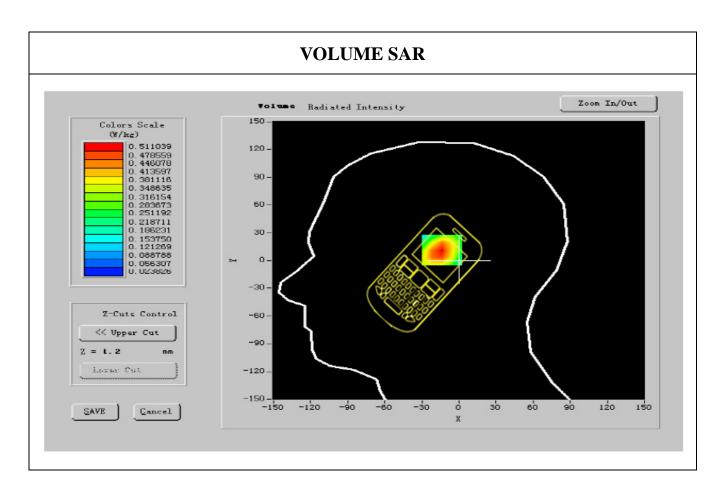
### **C. SAR Measurement Results**

Frequency (MHz)	1850.200000
Relative permitivity (real part)	40.213000
Relative permitivity (imaginary part)	13.584900
Conductivity (S/m)	1.410528
Variation (%)	-1.220000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4 °C
ConvF:	41.05, 42.35, 55.45
Crest factor:	1:8

#### **SURFACE SAR**



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### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.630107
SAR 1g (W/Kg)	0.411473

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4733	0.3122	0.1894	0.1224	0.0687	0.0081
(W/kg)	0.0000	0.4733	0.3122	U.1094	<b>U.1224</b>	0.0007	0.0001



**MEASUREMENT 2** 

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Date of measurement: 01/24/2011

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

## A. Experimental conditions.

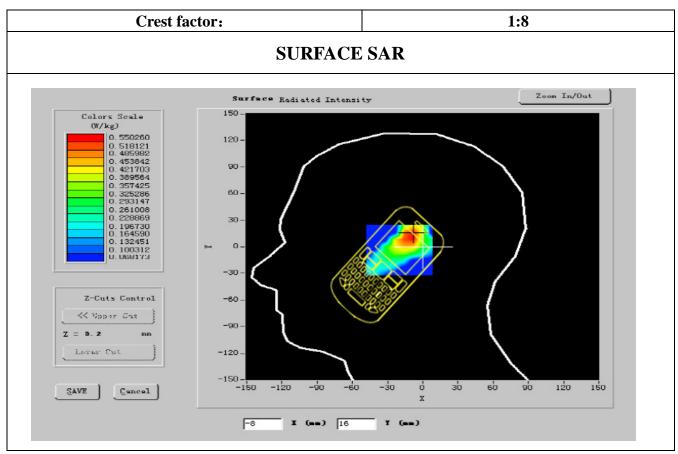
Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Right head		
Device Position	Cheek		
Band	GSM1900		
Channels	Middle		
Signal	GSM		

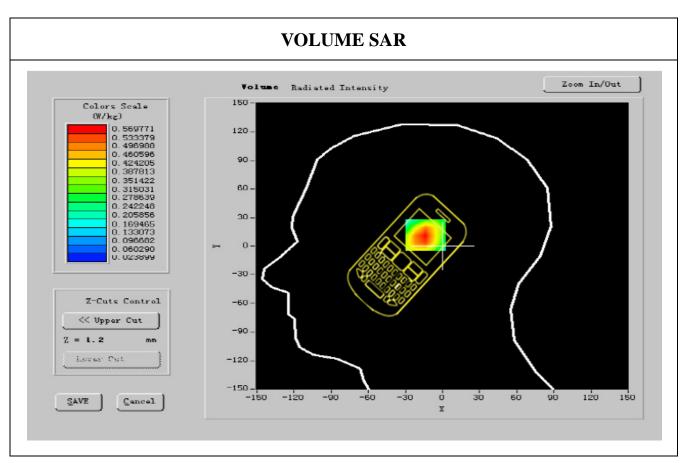
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibration Due: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.198001
Relative permitivity (imaginary part)	13.813800
Conductivity (S/m)	1.422775
Variation (%)	-0.210000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4 °C
ConvF:	41.05, 42.35, 55.45







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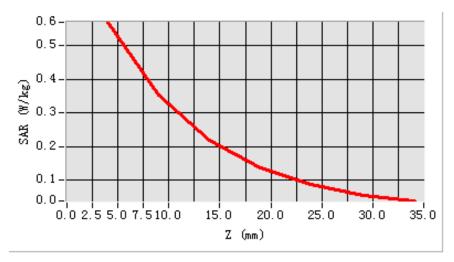
### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.710147
SAR 1g (W/Kg)	0.499854

#### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5154	0.3322	0.2294	0.1424	0.0789	0.0031
(W/kg)	0.0000	V.3134	0.3344	0.2294	<b>0.1424</b>	0.0789	0.0031

### SAR, Z Axis Scan (X = -10, Y = 12)





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## **MEASUREMENT 3**

Date of measurement: 01/24/2011

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

### A. Experimental conditions.

Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Right head		
Device Position	Cheek		
Band	GSM1900		
Channels	High		
Signal	GSM		

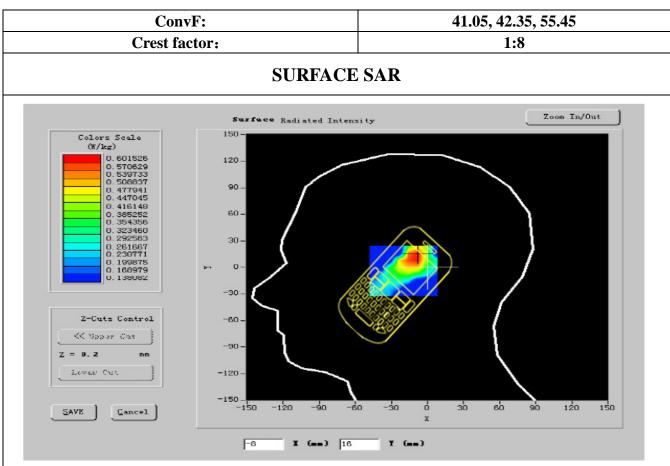
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibration Due: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

Frequency (MHz)	1909.800000
Relative permitivity (real part)	40.205999
Relative permitivity (imaginary part)	13.669900
Conductivity (S/m)	1.420413
Variation (%)	-0.030000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4 °C

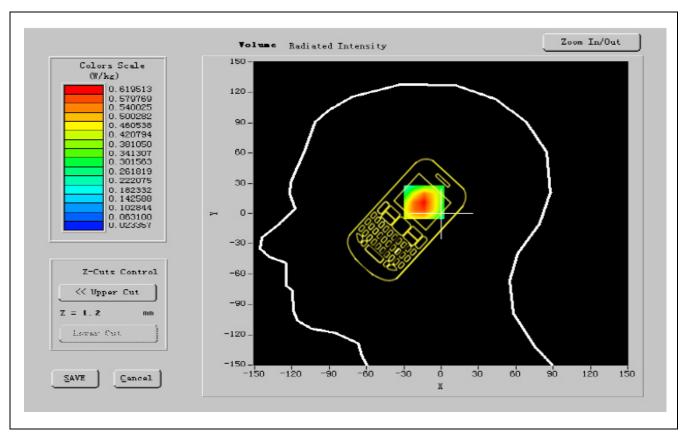


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#### **VOLUME SAR**

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#### Maximum location: X=-13.00, Y=-3.00

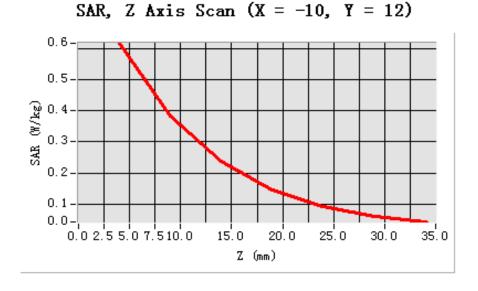
SAR 10g (W/Kg)	0.865124
SAR 1g (W/Kg)	0.535101

### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5736	0.3422	0.2264	0.1724	0.0889	0.0021
(W/kg)	0.0000	0.3730	U.3422	V.2204	U.1/24	0.0009	V.VV21



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### **MEASUREMENT 4**

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

## A. Experimental conditions.

Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Right head	
Device Position	Tilt	
Band	GSM1900	
Channels	Low	
Signal	GSM	

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibration Due: N/A
	SN:375052-AA1)	
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011



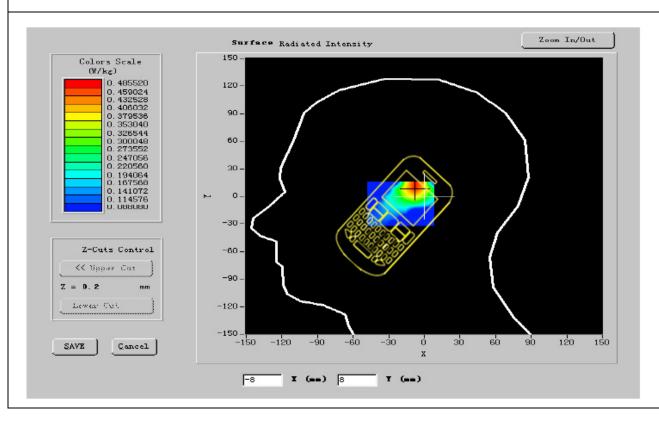
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

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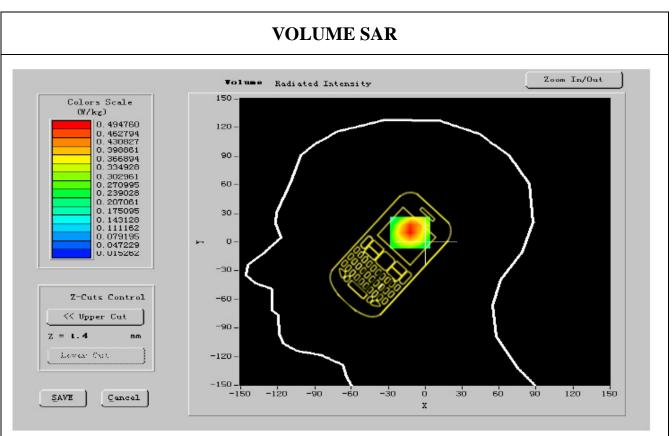
### **C. SAR Measurement Results**

Frequency (MHz)	1850.200000
Relative permitivity (real part)	40.213000
Relative permitivity (imaginary part)	13.584900
Conductivity (S/m)	1.426657
Variation (%)	-1.400000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4 °C
ConvF:	41.05, 42.35, 55.45
Crest factor:	1:8

#### **SURFACE SAR**



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#### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.732140	
SAR 1g (W/Kg)	0.412445	

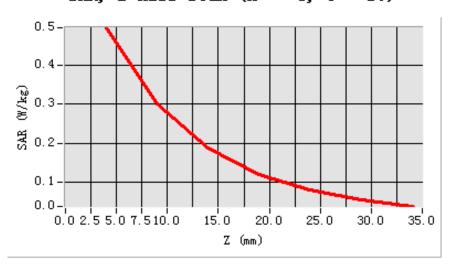
### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4563	0.2022	0.1044	0.1124	0.0797	0.0011
(W/kg)	0.0000	0.4563	0.2922	0.1864	0.1124	0.0787	0.0011



SAR, Z Axis Scan (X = -8, Y = 10)

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## **MEASUREMENT 5**

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

### A. Experimental conditions.

Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Right head		
Device Position	Tilt		
Band	GSM1900		
Channels	Middle		
Signal	GSM		

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibration Due: N/A
	SN:375052-AA1)	
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011



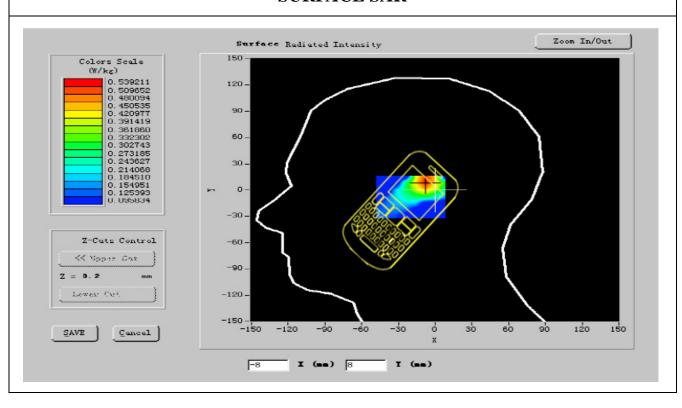
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
<b>Measurement SW</b>	OPEN SAR V2.1	Calibration Due: N/A

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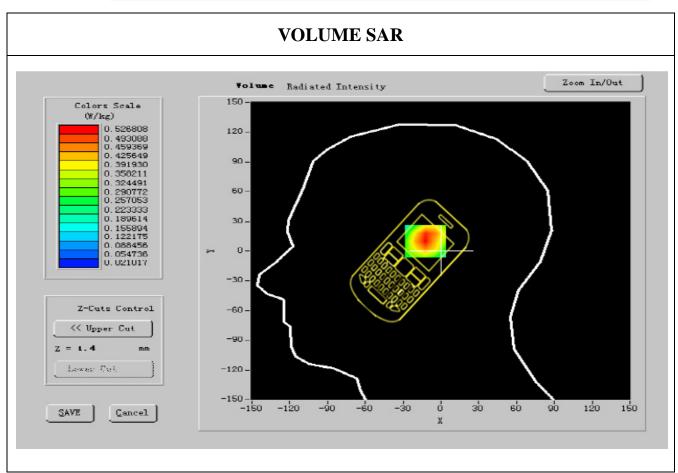
## **C. SAR Measurement Results**

Frequency (MHz)	1880.00000
Relative permitivity (real part)	40.193001
Relative permitivity (imaginary part)	13.813800
Conductivity (S/m)	1.422173
Variation (%)	-0.420000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4 °C
ConvF:	41.05, 42.35, 55.45
Crest factor:	1:8

#### **SURFACE SAR**



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### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.541278
SAR 1g (W/Kg)	0.354475

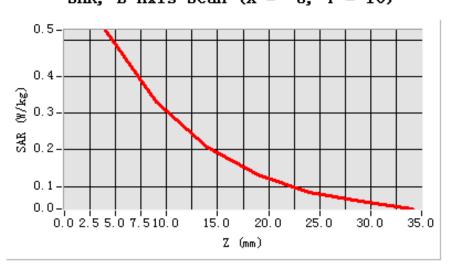
### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4818	0.3622	0.2064	0.1324	0.0887	0.0411
(W/kg)	0.0000	V.4010	0.3022	0.2004	0.1324	<b>0.000</b> 7	V.V411



SAR, Z Axis Scan (X = -8, Y = 10)

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## **MEASUREMENT 6**

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

### A. Experimental conditions.

Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Right head		
Device Position	Tilt		
Band	GSM1900		
Channels	High		
Signal	GSM		

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibration Due: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011



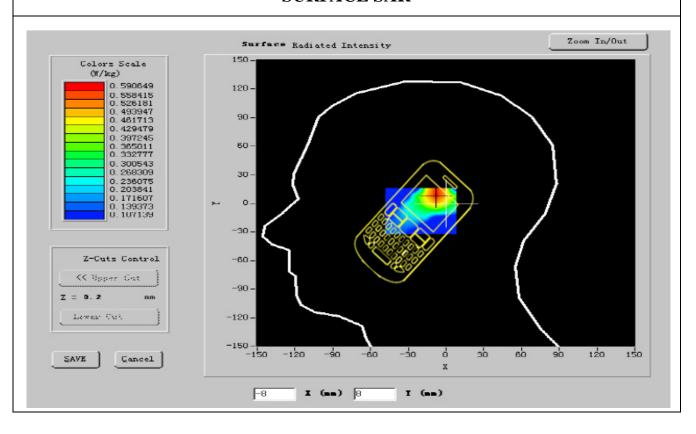
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

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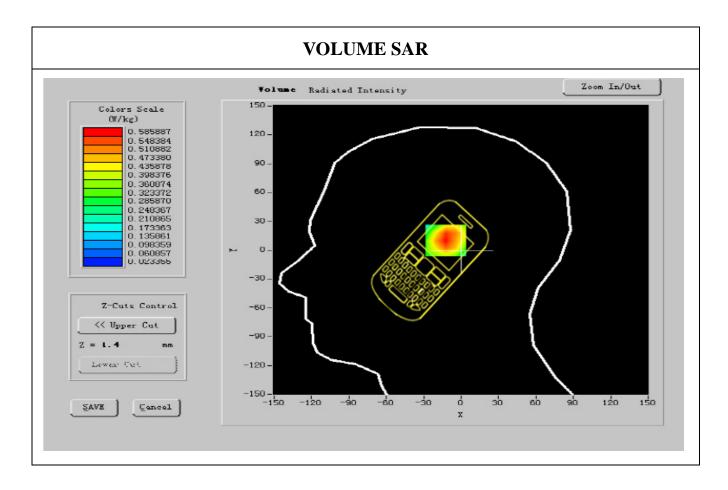
### **C. SAR Measurement Results**

Frequency (MHz)	1909.800000
Relative permitivity (real part)	40.205999
Relative permitivity (imaginary part)	13.669900
Conductivity (S/m)	1.400224
Variation (%)	-1.500000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4 °C
ConvF:	41.05, 42.35, 55.45
Crest factor:	1:8

#### **SURFACE SAR**



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#### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.578421
SAR 1g (W/Kg)	0.334845

#### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5250	0.2622	0.2064	0.1224	0.0974	0.0422
(W/kg)	0.0000	0.5359	0.3622	0.2064	0.1324	0.0864	0.0432

## **MEASUREMENT 7**

Report No: KS110120B05-SF

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

### A. Experimental conditions.

Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Left head		
Device Position	Cheek		
Band	GSM1900		
Channels	Low		
Signal	GSM		

## **B.** Instrumentations.

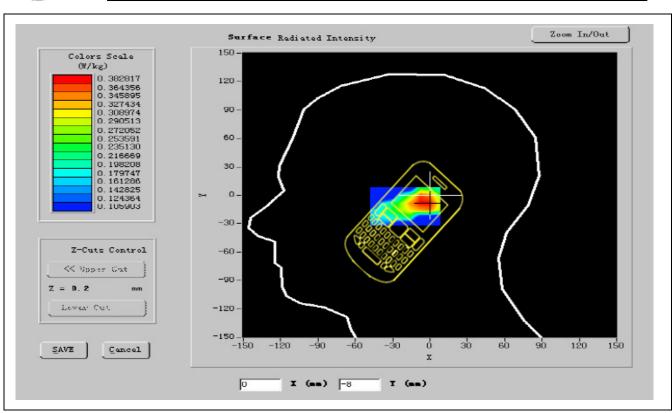
PC	HP (Pentium(R) V3.06GHz,	Calibration Due: N/A
	SN:375052-AA1)	

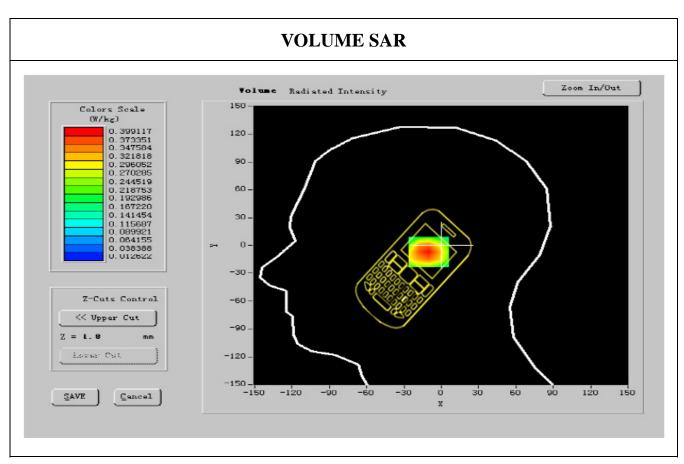


Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

Report No: KS110120B05-SF

Frequency (MHz)	1850.200000
Relative permitivity (real part)	40.313000
Relative permitivity (imaginary part)	13.584900
Conductivity (S/m)	1.416528
Variation (%)	0.400000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4°C
ConvF:	41.05, 42.35, 55.45
Crest factor:	1:8
SURFACE SA	AR





Report No: KS110120B05-SF

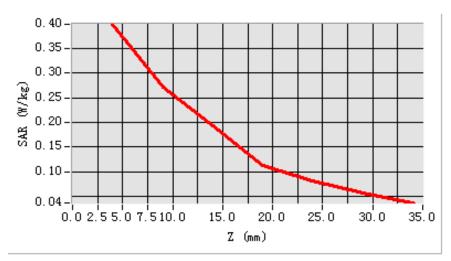
### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.630124
SAR 1g (W/Kg)	0.530201

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2610	0.2622	0.1764	0.1524	0.0764	0.0476
(W/kg)	0.0000	0.3610	0.2622	0.1764	0.1524	0.0764	0.0476

### SAR, Z Axis Scan (X = -3, Y = -7)





**MEASUREMENT 8** 

Report No: KS110120B05-SF

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

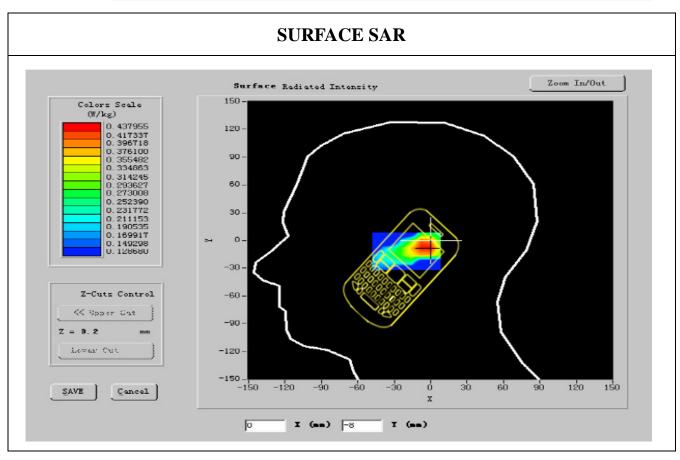
### A. Experimental conditions.

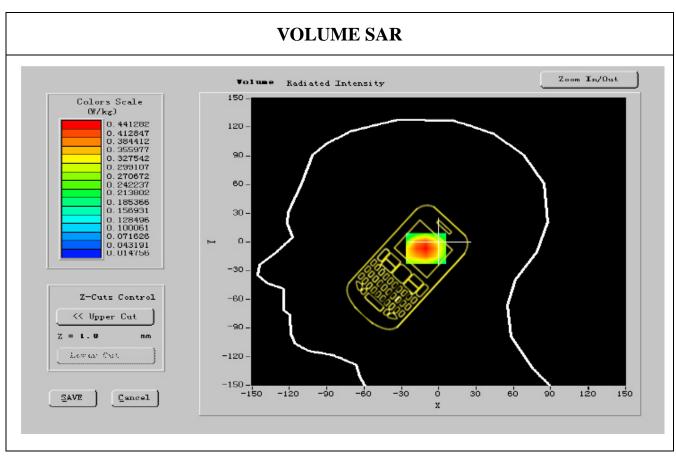
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
<b>Device Position</b>	Cheek	
Band	GSM1900	
Channels	Middle	
Signal	GSM	

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibration Due: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.193001
Relative permitivity (imaginary part)	13.813800
Conductivity (S/m)	1.412324
Variation (%)	1.300000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4 °C
ConvF:	41.05, 42.35, 55.45
Crest factor:	1:8





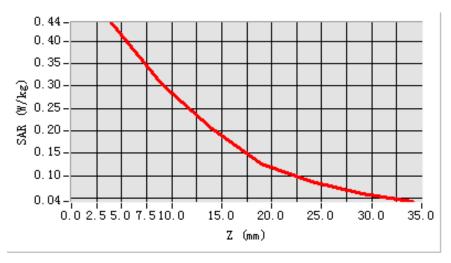
### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.632148
SAR 1g (W/Kg)	0.453129

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4222	0.2622	0.1764	0.1224	0.0664	0.0444
(W/kg)	0.0000	0.4233	0.2622	0.1764	0.1324	0.0664	0.0444

### SAR, Z Axis Scan (X = -3, Y = -7)





## **MEASUREMENT 9**

Report No: KS110120B05-SF

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

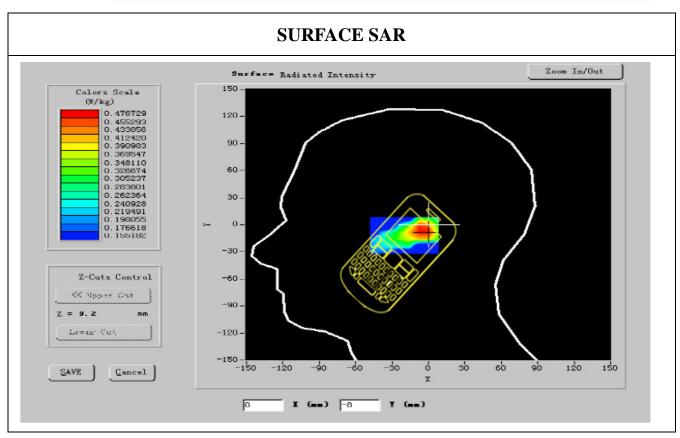
### A. Experimental conditions.

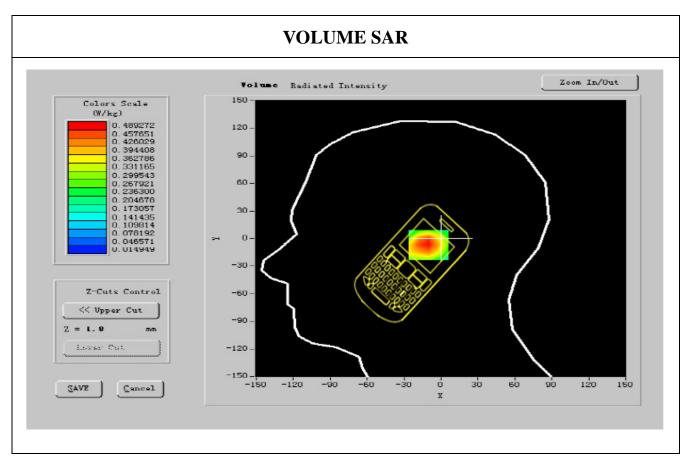
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
Device Position	Cheek	
Band	GSM1900	
Channels	High	
Signal	GSM	

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibration Due: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

Frequency (MHz)	1909.800000
Relative permitivity (real part)	40.285999
Relative permitivity (imaginary part)	13.669900
Conductivity (S/m)	1.410242
Variation (%)	0.400000
Ambient Temperature:	21 °C
Liquid Temperature:	20.4 °C
ConvF:	41.05, 42.35, 55.45
Crest factor:	1:8





Report No: KS110120B05-SF

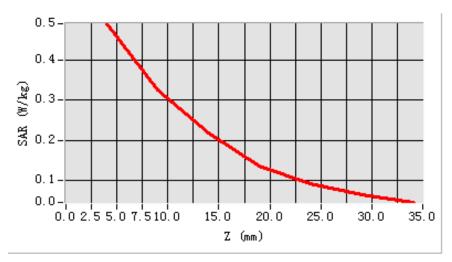
### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.987412
SAR 1g (W/Kg)	0.553874

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4400	0.2222	0.2164	0.1924	0.0064	0.0254
(W/kg)	0.0000	0.4490	0.3222	0.2164	0.1824	0.0864	0.0354

### SAR, Z Axis Scan (X = -3, Y = -7)





## **MEASUREMENT 10**

Report No: KS110120B05-SF

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

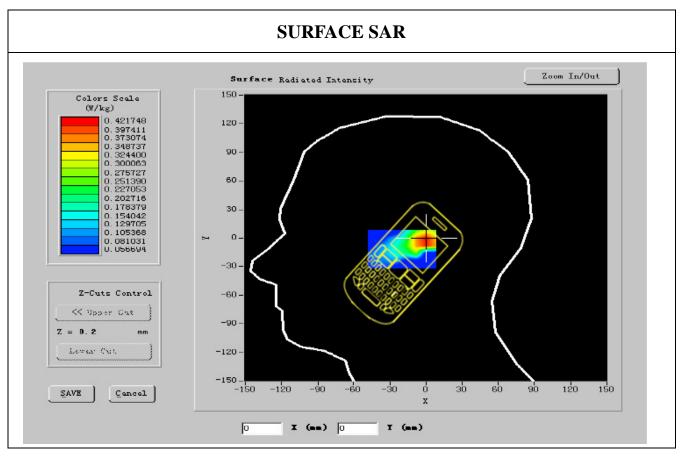
## A. Experimental conditions.

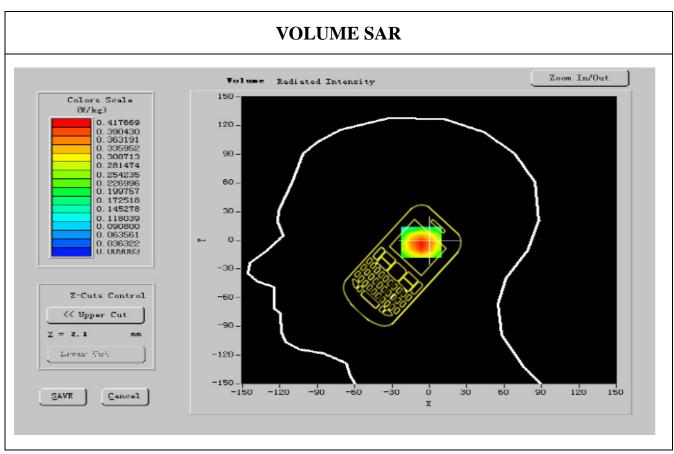
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
Device Position	Tilt	
Band	GSM1900	
Channels	Low	
Signal	GSM	

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibration Due: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

Frequency (MHz)	1850.200000		
Relative permitivity (real part)	40.313134		
Relative permitivity (imaginary part)	13.584900		
Conductivity (S/m)	1.416243		
Variation (%)	-0.700000		
Ambient Temperature:	21 °C		
Liquid Temperature:	20.4 °C		
ConvF:	41.05, 42.35, 55.45		
Crest factor:	1:8		





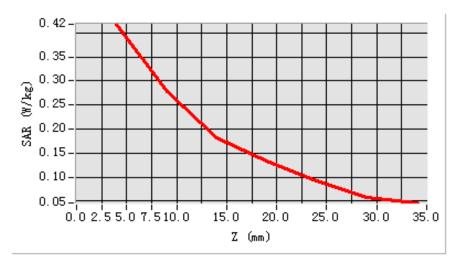
#### Maximum location: X=-13.00, Y=-3.00

SAR 10g (W/Kg)	0.532108
SAR 1g (W/Kg)	0.374824

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000 0.4032	0.2224 0.2124	0.1074	0.0074	0.0554		
(W/kg)		0.4032	0.3224	0.2134	0.1864	0.0864	0.0554

### SAR, Z Axis Scan (X = 0, Y = -2)





## **MEASUREMENT 11**

Report No: KS110120B05-SF

Date of measurement: 01/24/2011

Area Scan: 7 x 7 x 1 dx=15mm dy=15mm

Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm

Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

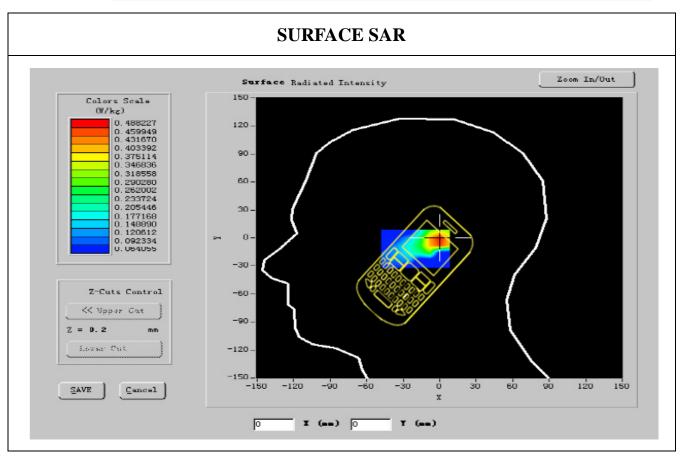
### A. Experimental conditions.

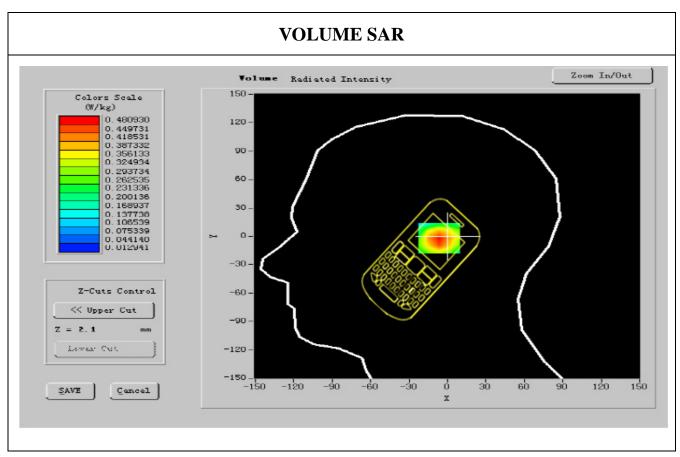
Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Left head		
<b>Device Position</b>	Tilt		
Band	GSM1900		
Channels	Middle		
Signal	GSM		

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibration Due: N/A		
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011		
Test Set				
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011		
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011		
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011		
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011		
<b>Power Meter</b>	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011		
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011		
DIPOLE 1900	Antennessa (DIPG35,SN 48/05)	Calibration Due: 02/09/2011		
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibration Due: N/A		
Liquid	Antennessa	Calibration Due: N/A		
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A		

Frequency (MHz)	1880.000000		
Relative permitivity (real part)	40.193001		
Relative permitivity (imaginary part)	13.813800		
Conductivity (S/m)	1.413245		
Variation (%)	-1.100000		
Ambient Temperature:	21 °C		
Liquid Temperature:	20.4 °C		
ConvF:	41.05, 42.35, 55.45		
Crest factor:	1:8		





### **Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.641784
SAR 1g (W/Kg)	0.321210

#### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4469	0.2024	0.1024	0.1564	0.0064	0.0004
(W/kg)	0.0000 0.4	0.4468	0.3024	0.1934	0.1564	0.0864	0.0084

### SAR, Z Axis Scan (X = 0, Y = -2)

