### I. 850MHz Band RESULTS

TYPE	<u>PARAMETERS</u>
Phone	Measurement 1: Right Head with Cheek device position on Low Channel in GSM850 mode  Measurement 2: Right Head with Cheek device position on Middle Channel in GSM850 mode  Measurement 3: Right Head with Cheek device position on High Channel in GSM850 mode  Measurement 4: Right Head with Tilt device position on Low Channel in GSM850 mode  Measurement 5: Right Head with Tilt device position on Middle Channel in GSM850 mode  Measurement 6: Right Head with Tilt device position on High Channel in GSM850 mode  Measurement 7: Left Head with Cheek device position on Low Channel in GSM850 mode  Measurement 8: Left Head with Cheek device position on Middle Channel in GSM850 mode  Measurement 9: Left Head with Cheek device position on High Channel in GSM850 mode  Measurement 10: Left Head with Tilt device position on Low Channel in GSM850 mode  Measurement 11: Left Head with Tilt device position on Middle Channel in GSM850 mode  Measurement 12: Left Head with Tilt device position on High Channel in GSM850 mode  Measurement 13: FrontSide toward phantom 15mm, Low Channel in GSM850 mode  Measurement 14: FrontSide toward phantom 15mm, Middle Channel in GSM850 mode  Measurement 15: ForntSide toward phantom 15mm, High Channel in GSM850 mode  Measurement 16: BackSide toward phantom 15mm, Low Channel in GSM850 mode  Measurement 17: BackSide toward phantom 15mm, High Channel in GSM850 mode  Measurement 17: BackSide toward phantom 15mm, Middle Channel in GSM850 mode



**MEASUREMENT 1** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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

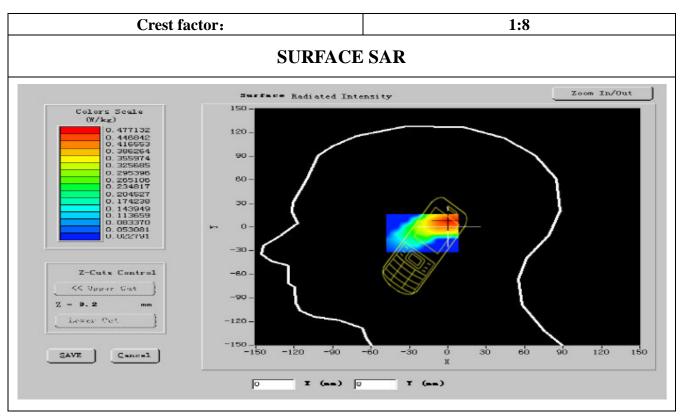
### A. Experimental conditions.

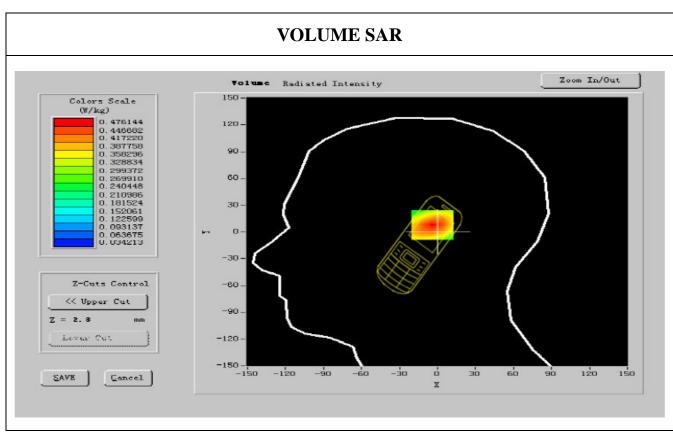
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	824.200012
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.923392
Variation (%)	-1.490000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36



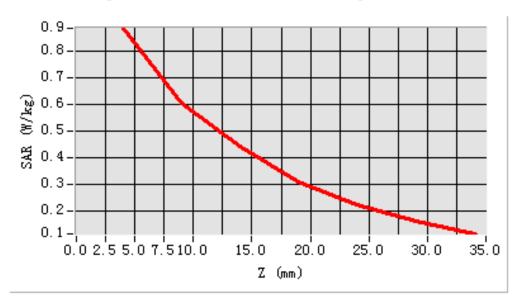


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.544232
SAR 1g (W/Kg)	0.849195

SAR, Z Axis Scan (X = -13, Y = -3)





**MEASUREMENT 2** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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

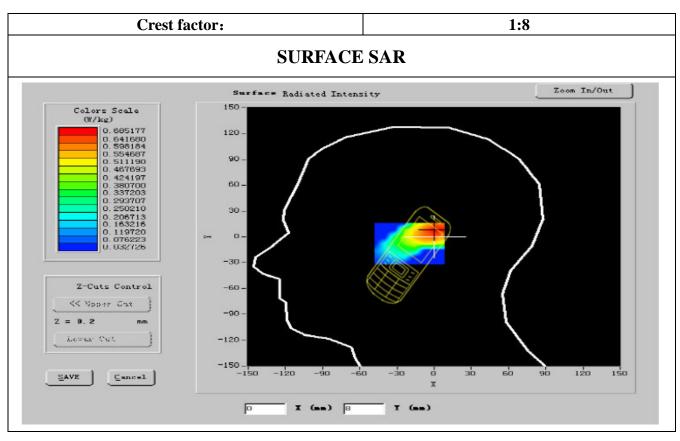
### A. Experimental conditions.

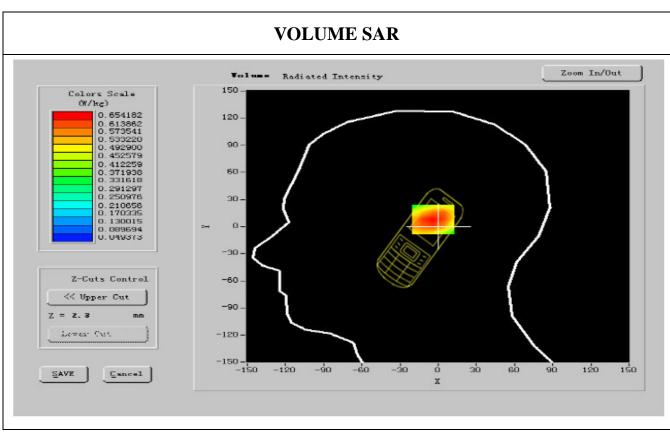
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	836.600024
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.916616
Variation (%)	-0.110000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36



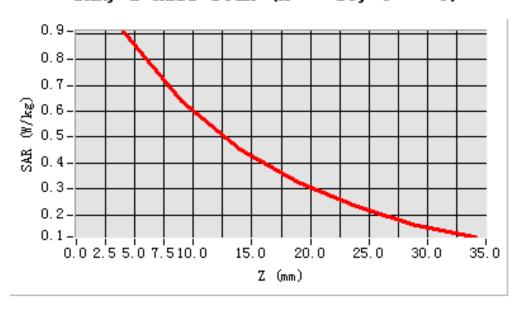


Maximum location: X=-13.00, Y=-3.00

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.562540
SAR 1g (W/Kg)	0.868381

SAR, Z Axis Scan (X = -13, Y = -3)





**MEASUREMENT 3** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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.

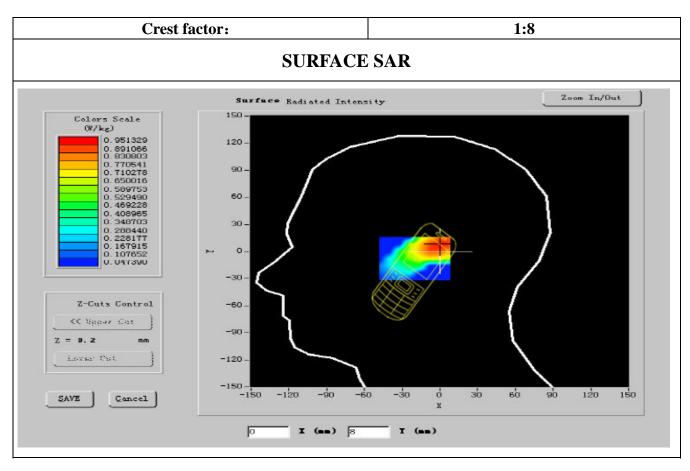
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	High
Signal	GSM

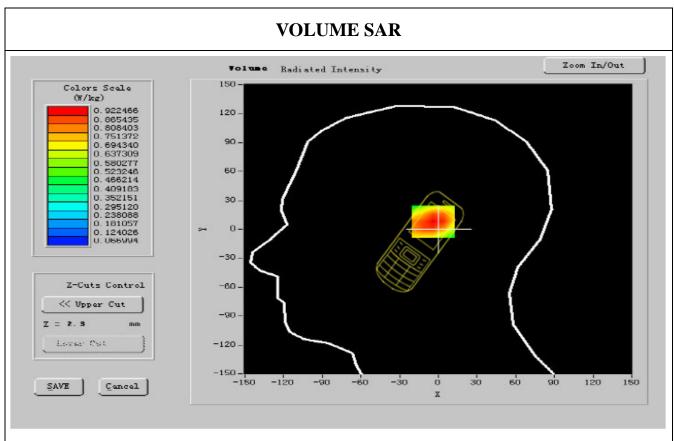
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	848.599976
Relative permitivity (real part)	41.262001
Relative permitivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	-0.110000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36





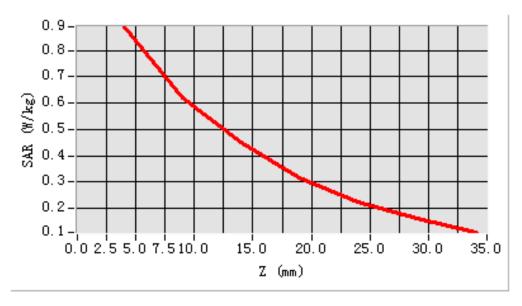


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.555620
SAR 1g (W/Kg)	0.834465

SAR, Z Axis Scan (X = -13, Y = -3)





## **MEASUREMENT 4**

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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

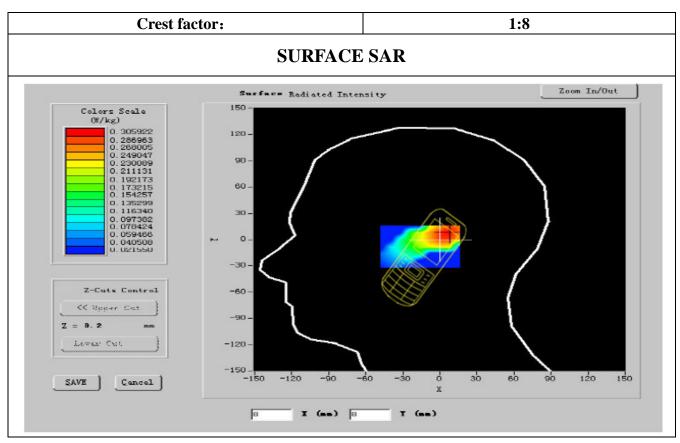
### A. Experimental conditions.

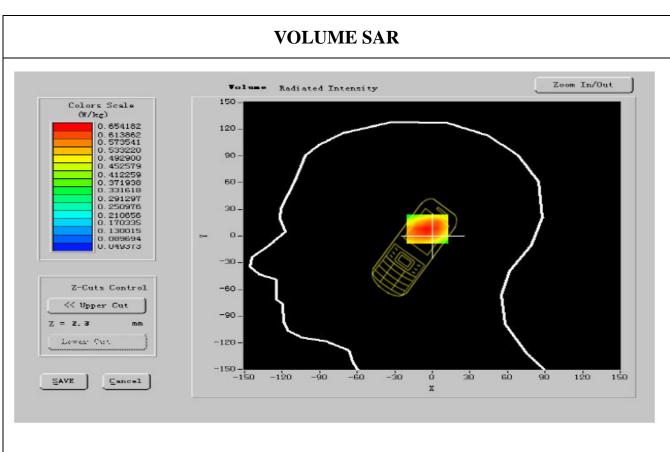
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	824.200012
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.913392
Variation (%)	-3.070000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36



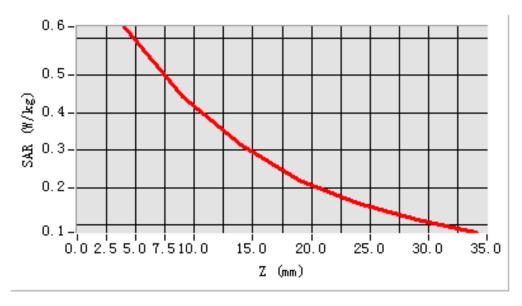


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.365920
SAR 1g (W/Kg)	0.575698

SAR, Z Axis Scan (X = -9, Y = -6)





**MEASUREMENT 5** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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.

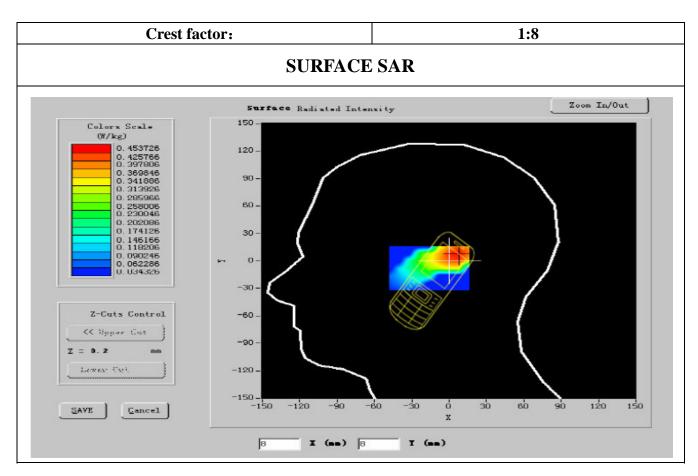
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Right head	
Device Position	Tilt	
Band	GSM850	
Channels	Middle	
Signal	GSM	

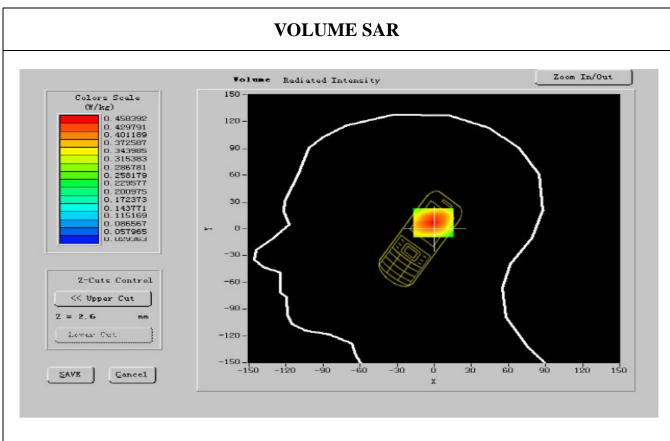
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	836.600024
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.913636
Variation (%)	-0.880000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36





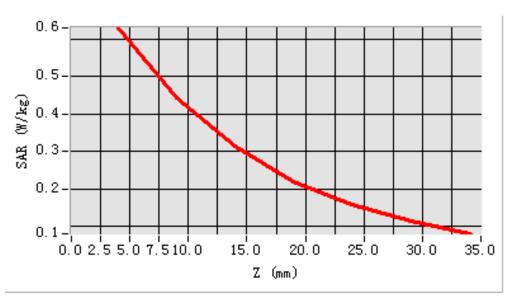


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.412358
SAR 1g (W/Kg)	0.587451

SAR, Z Axis Scan (X = -9, Y = -6)





**MEASUREMENT 6** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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

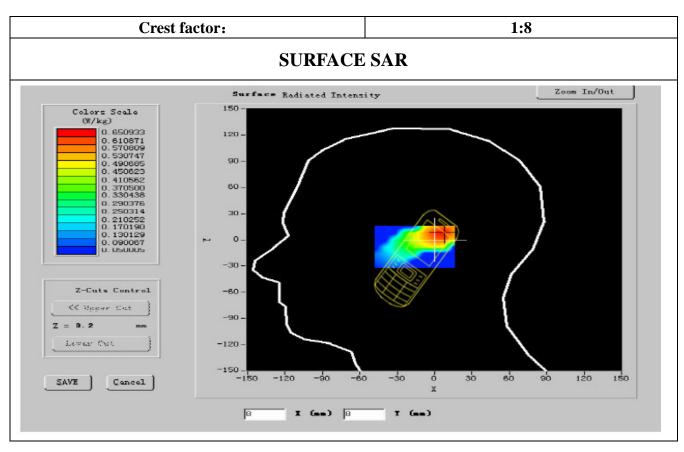
### A. Experimental conditions.

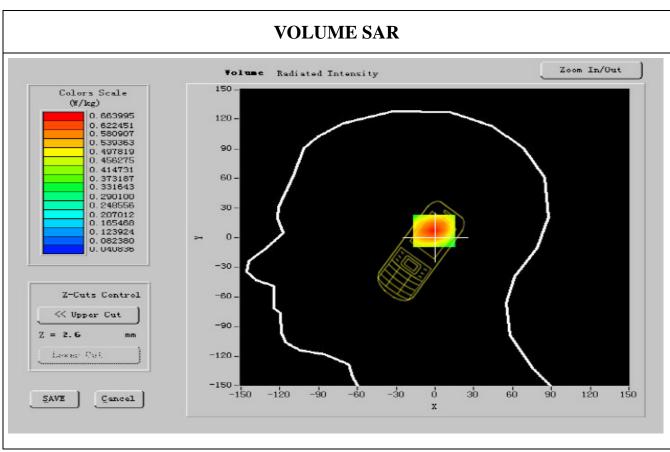
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Right head	
Device Position	Tilt	
Band	GSM850	
Channels	High	
Signal	GSM	

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	848.599976
Relative permitivity (real part)	41.262001
Relative permitivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	-3.070000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36



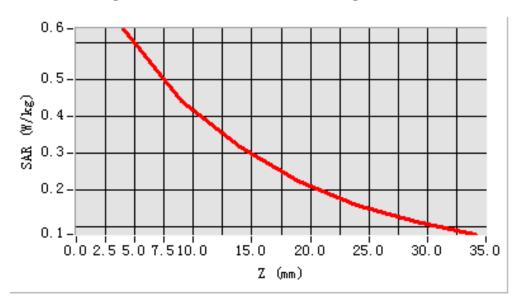


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.416354
SAR 1g (W/Kg)	0.594571

SAR, Z Axis Scan (X = -9, Y = -6)





Report No: KS110407B01-SF

## **MEASUREMENT 7**

Date of measurement: 04/14/2011

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

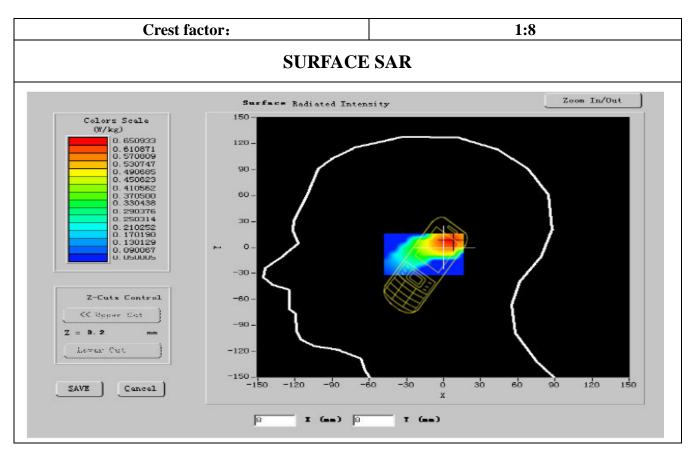
### A. Experimental conditions.

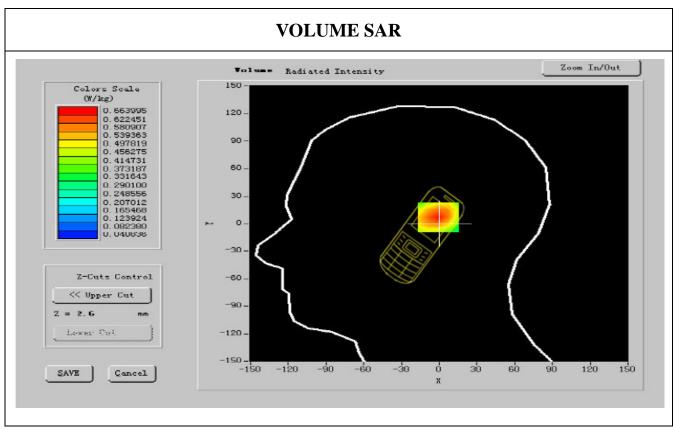
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
Device Position	Cheek	
Band	GSM850	
Channels	Low	
Signal	GSM	

#### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	824.200012
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.923372
Variation (%)	-1.240000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36



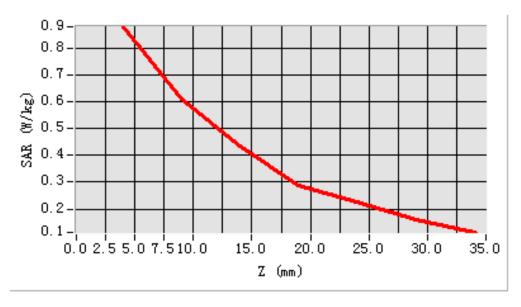


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.536541
SAR 1g (W/Kg)	0.839028

SAR, Z Axis Scan (X = -25, Y = -11)





**MEASUREMENT 8** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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

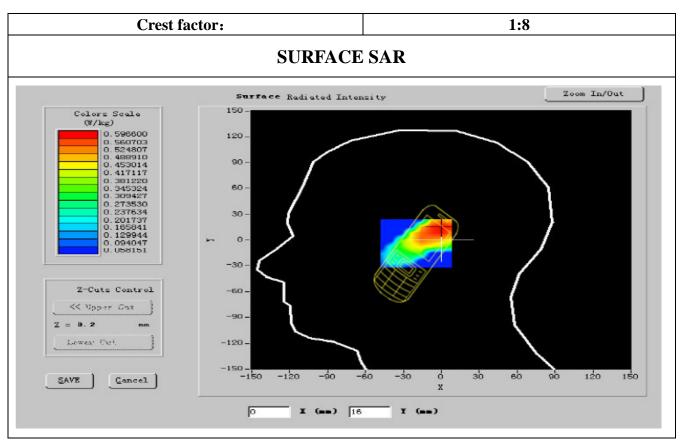
### A. Experimental conditions.

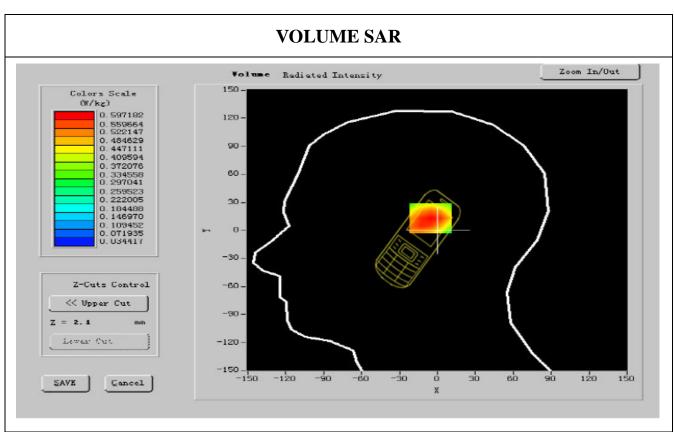
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
Device Position	Cheek	
Band	GSM850	
Channels	Middle	
Signal	GSM	

#### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	836.600024
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.9163242
Variation (%)	-1.240000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36



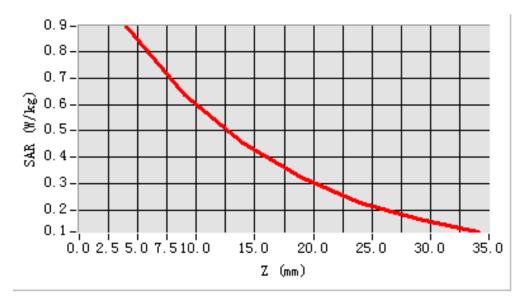


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.559310
SAR 1g (W/Kg)	0.845112

SAR, Z Axis Scan (X = -25, Y = -11)





**MEASUREMENT 9** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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

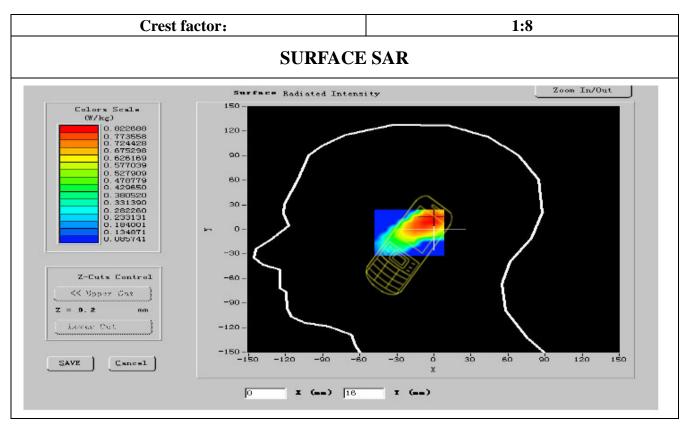
### A. Experimental conditions.

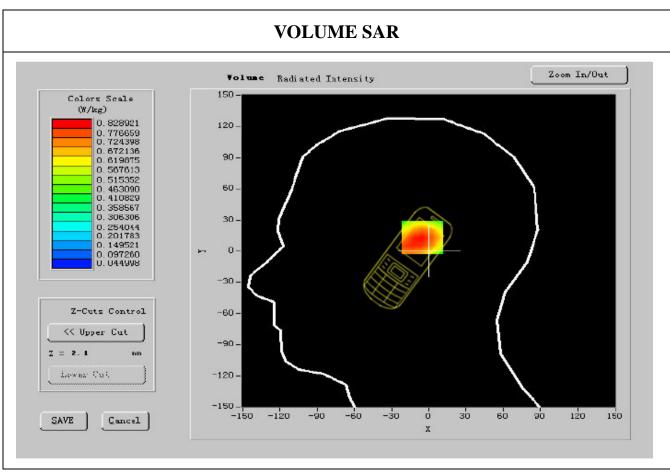
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
Device Position	Cheek	
Band	GSM850	
Channels	High	
Signal	GSM	

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	848.599976
Relative permitivity (real part)	41.278801
Relative permitivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	-1.200000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36





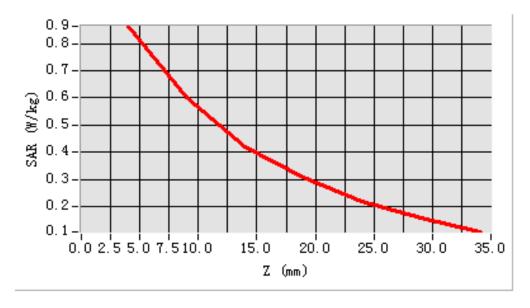
Report No: KS110407B01-SF

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

SAR 10g (W/Kg)	0.538640
SAR 1g (W/Kg)	0.807452

#### **Z** Axis Scan

## SAR, Z Axis Scan (X = -25, Y = -11)





Report No: KS110407B01-SF

## **MEASUREMENT 10**

Date of measurement: 04/14/2011

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.

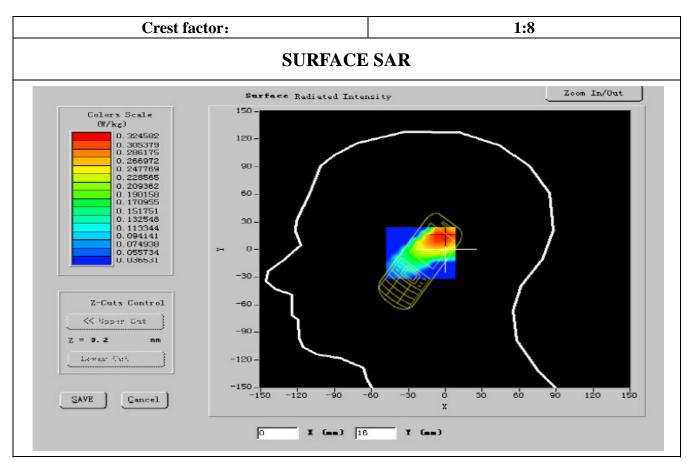
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom Left head		
Device Position	Tilt	
Band	GSM850	
Channels	Low	
Signal	GSM	

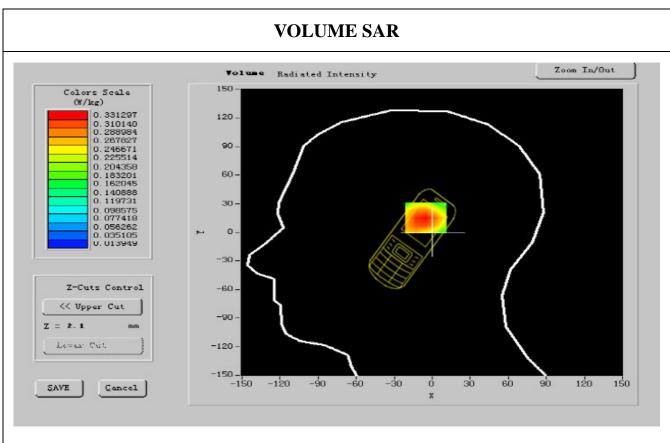
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	824.200012
Relative permitivity (real part)	41.466365
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.923253
Variation (%)	-0.170000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36







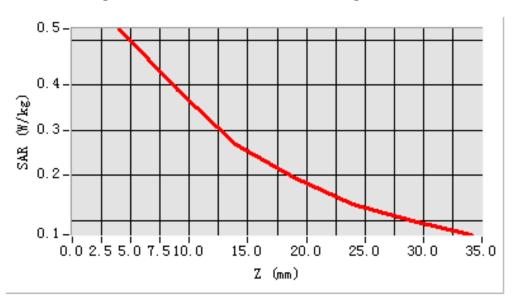


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.333695
SAR 1g (W/Kg)	0.484813

SAR, Z Axis Scan (X = -22, Y = -6)





Report No: KS110407B01-SF

## **MEASUREMENT 11**

Date of measurement: 04/14/2011

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	GSM850	
Channels	Middle	
Signal	GSM	

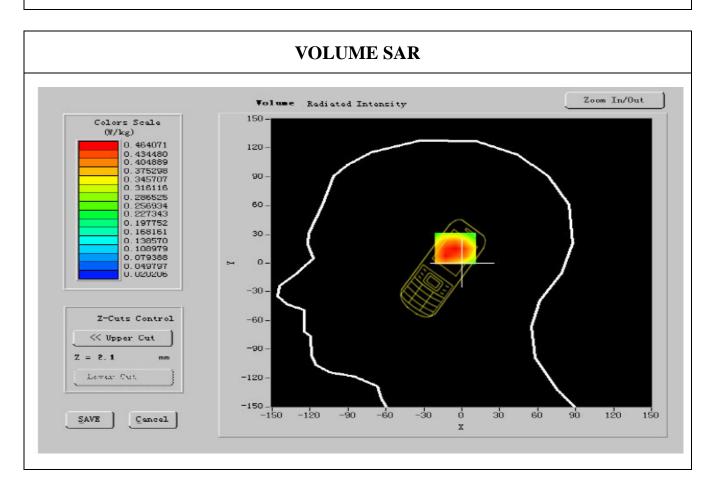
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	836.600024
Relative permitivity (real part)	41.467953
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.916214
Variation (%)	-1.170000
Ambient Temperature:	21 °C



Liquid T	emperature:	20 °C	
ConvF:	20.66, 20.51, 28.36		
Crest	factor:	1:8	
	SURFACE	ESAR	
	Surface Redicted Inter	Zoom In/Out	
Celera Scale (W/kg)  0. 482788 0. 455698 0. 425698 0. 327154 0. 388810 0. 340085 0. 311521 0. 282977 0. 254433 0. 225889 0. 197344 0. 188800 0. 140256 0. 111712 0. 083168 0. U54823  Z-Cuta Control	90 - 60 - 30 - - - - - - - - - - - - - -		
Z = 0.2 mm Liberac Cut	-90 - -120 - -150 -120 -90 -	elo -slo d slo elo slo 150	



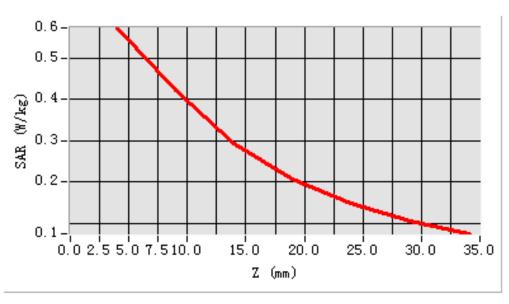
Report No: KS110407B01-SF

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

SAR 10g (W/Kg)	0.368301
SAR 1g (W/Kg)	0.547123

### Z Axis Scan

### SAR, Z Axis Scan (X = -22, Y = -6)





**MEASUREMENT 12** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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

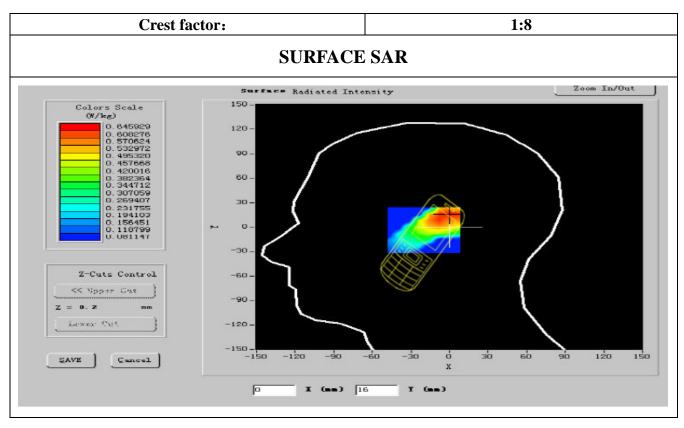
### A. Experimental conditions.

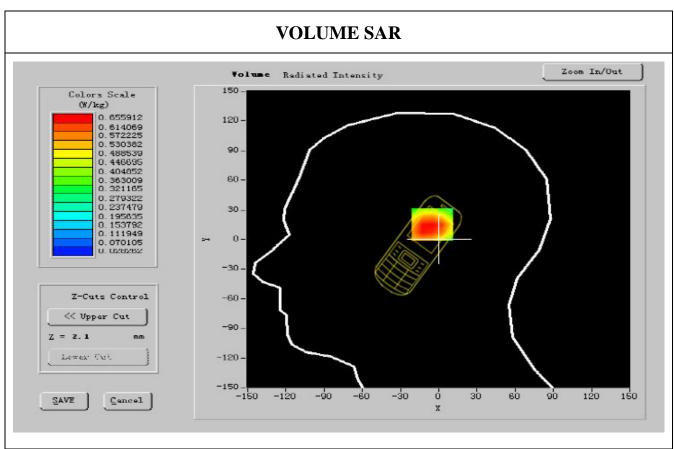
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
Device Position Tilt		
Band	GSM850	
Channels	High	
Signal GSM		

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	848.599976
Relative permitivity (real part)	41.262023
Relative permitivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	-1.000000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36





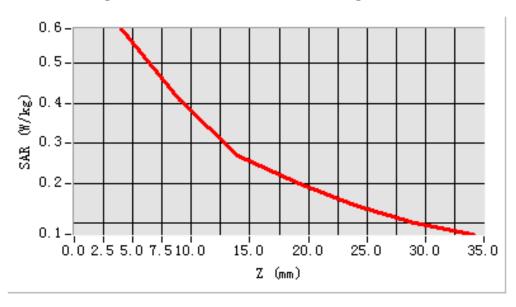
Report No: KS110407B01-SF

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

SAR 10g (W/Kg)	0.359632
SAR 1g (W/Kg)	0.549812

#### **Z** Axis Scan

## SAR, Z Axis Scan (X = -22, Y = -6)





**MEASUREMENT 13** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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

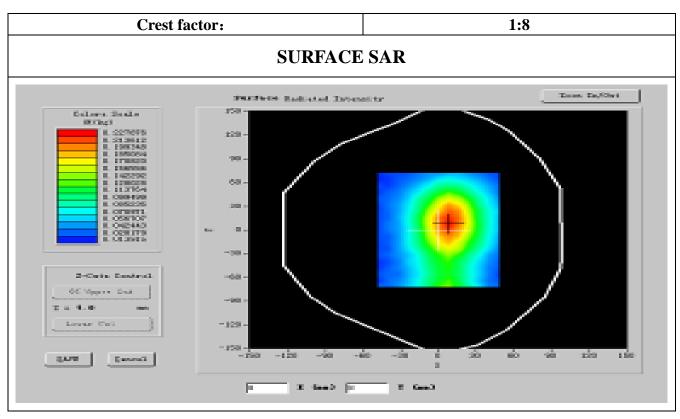
### A. Experimental conditions.

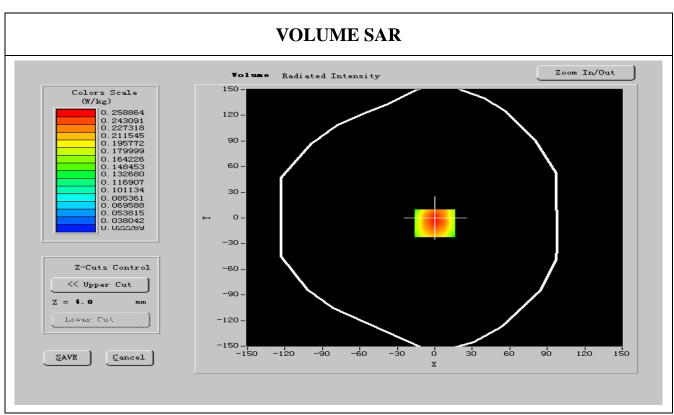
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Body	
Device Position	FrontSide toward phantom	
Band	GSM850	
Channels	Low	
Signal	GSM	

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	824.200012
Relative permitivity (real part)	56.514000
Relative permitivity (imaginary part)	21.654150
Conductivity (S/m)	0.984519
Variation (%)	-2.120000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.00, 19.88, 27.77



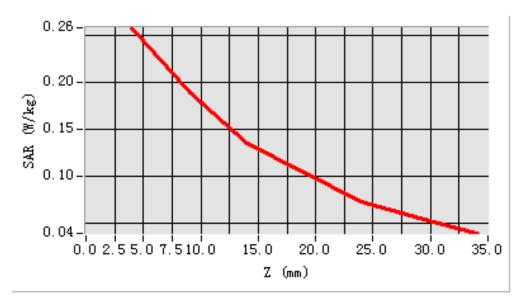


**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.166891
SAR 1g (W/Kg)	0.248712

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





**MEASUREMENT 14** 

Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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.

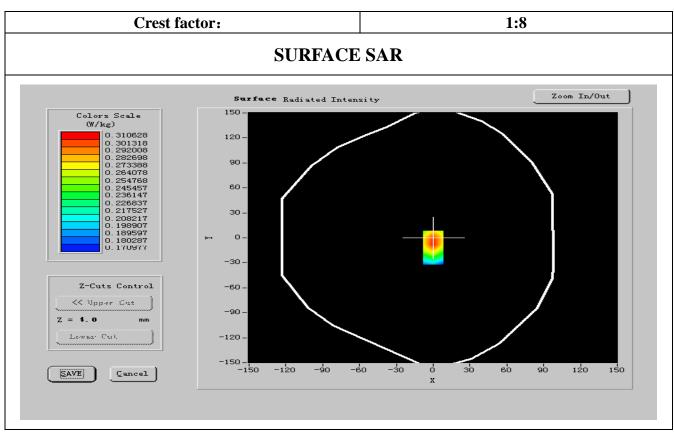
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Body	
Device Position	FrontSide toward phantom	
Band	GSM850	
Channels	Middle	
Signal	GSM	

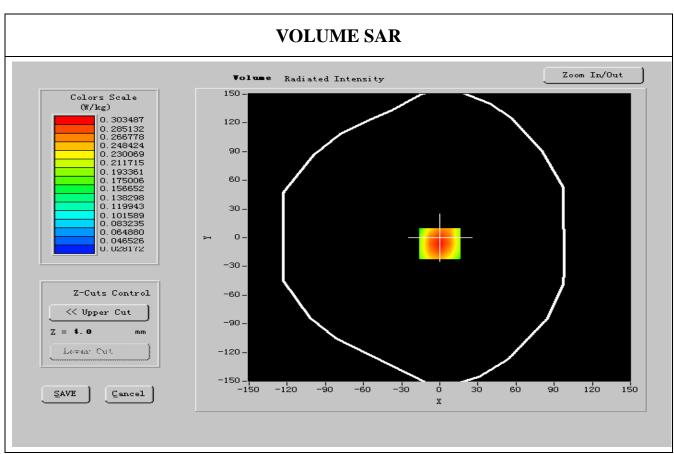
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz,	Calibrated: 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: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	836.600024
Relative permitivity (real part)	56.501935
Relative permitivity (imaginary part)	21.866249
Conductivity (S/m)	0.986052
Variation (%)	-2.120000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.00, 19.88, 27.77





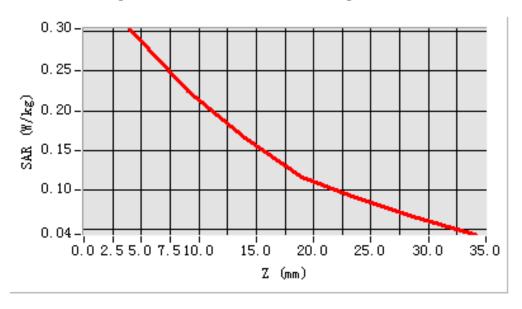




Maximum location: X=-13.00, Y=-3.00

SAR 10g (W/Kg)	0.216520
SAR 1g (W/Kg)	0.289084

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



Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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.

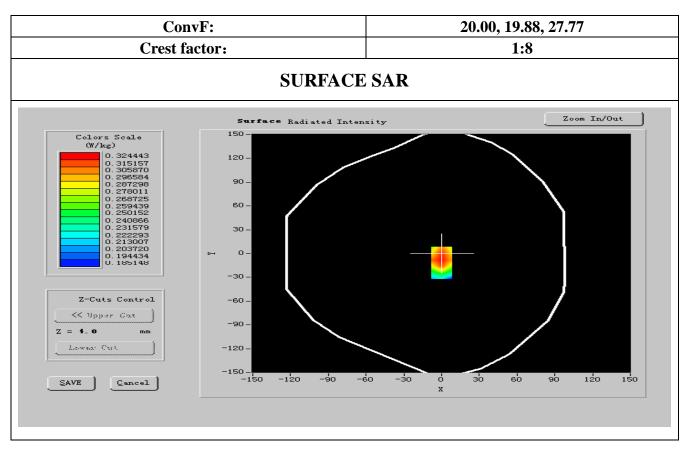
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Body	
Device Position	FrontSide toward phantom	
Band	GSM850	
Channels	High	
Signal	GSM	

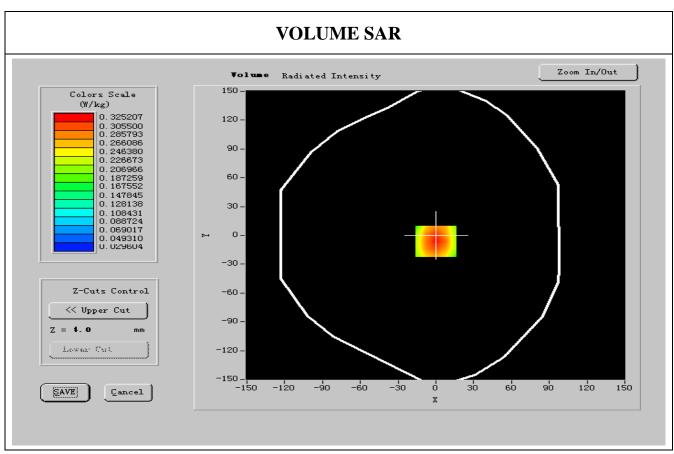
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	848.599976
Relative permitivity (real part)	56.508121
Relative permitivity (imaginary part)	21.726601
Conductivity (S/m)	0.983288
Variation (%)	-1.120000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C







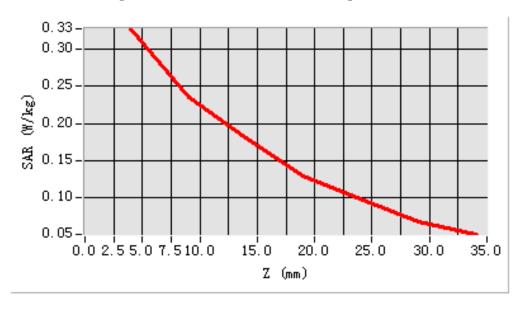


Maximum location: X=-13.00, Y=-3.00

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SAR 10g (W/Kg)	0.214581
SAR 1g (W/Kg)	0.306369

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



Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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.

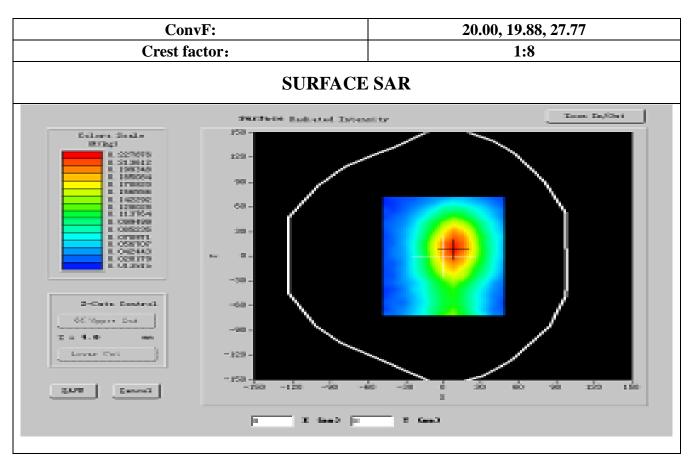
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Body
Device Position	BackSide toward phantom
Band	GSM850
Channels	Low
Signal	GSM

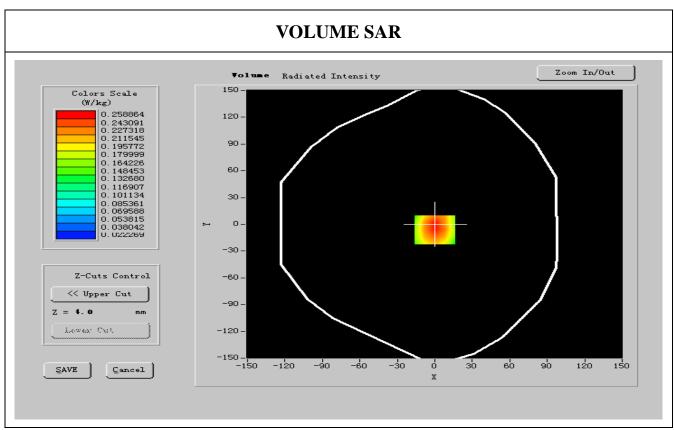
## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	824.200012
Relative permitivity (real part)	56.514000
Relative permitivity (imaginary part)	21.654150
Conductivity (S/m)	0.984519
Variation (%)	-2.120000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C









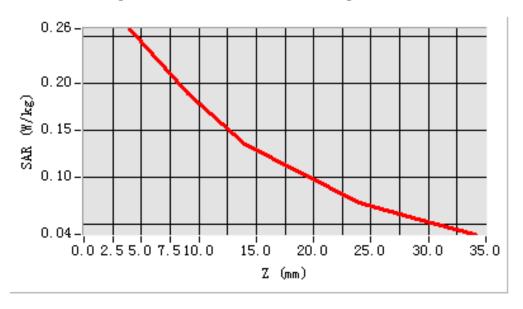
Report No: KS110407B01-SF

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

SAR 10g (W/Kg)	0.165358
SAR 1g (W/Kg)	0.235741

#### Z Axis Scan

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



Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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.

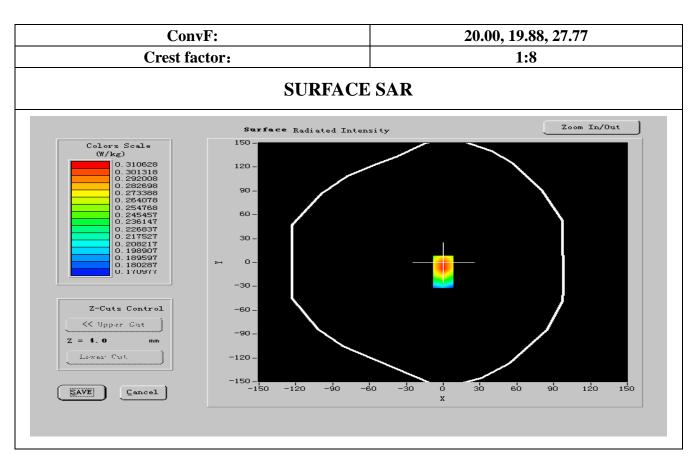
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Body
Device Position	BackSide toward phantom
Band	GSM850
Channels	Middle
Signal	GSM

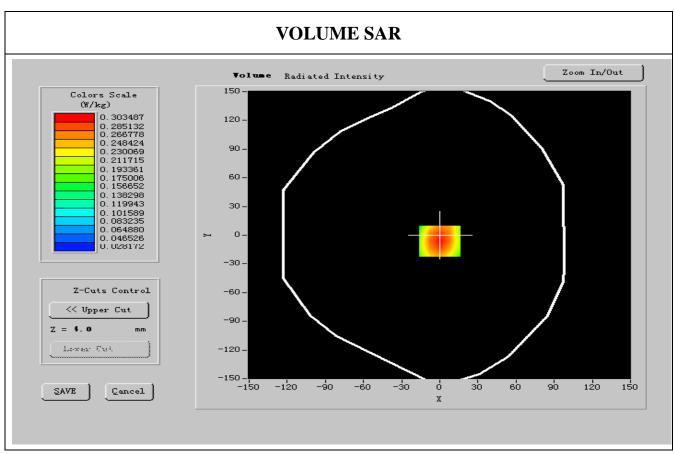
## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	836.600024
Relative permitivity (real part)	56.501935
Relative permitivity (imaginary part)	21.866249
Conductivity (S/m)	0.986052
Variation (%)	-2.120000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C







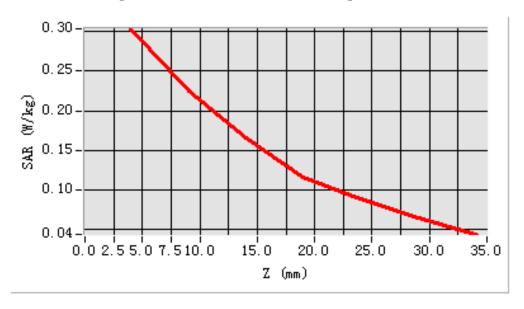


Maximum location: X=-13.00, Y=-3.00

Report No: KS110407B01-SF

SAR 10g (W/Kg)	0.203681
SAR 1g (W/Kg)	0.259353

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



Report No: KS110407B01-SF

Date of measurement: 04/14/2011

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.

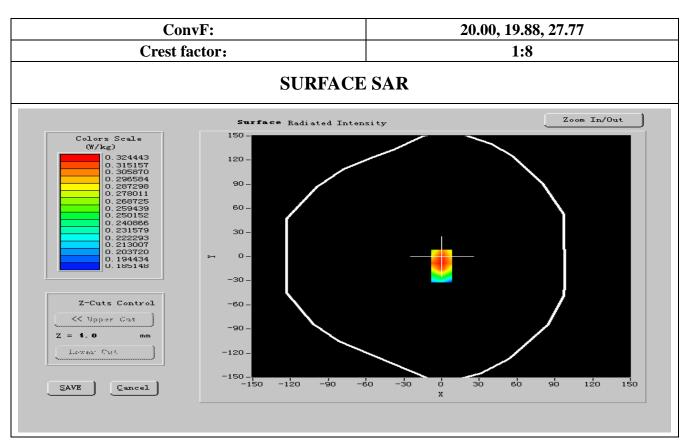
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Body
Device Position	BackSide toward phantom
Band	GSM850
Channels	High
Signal	GSM

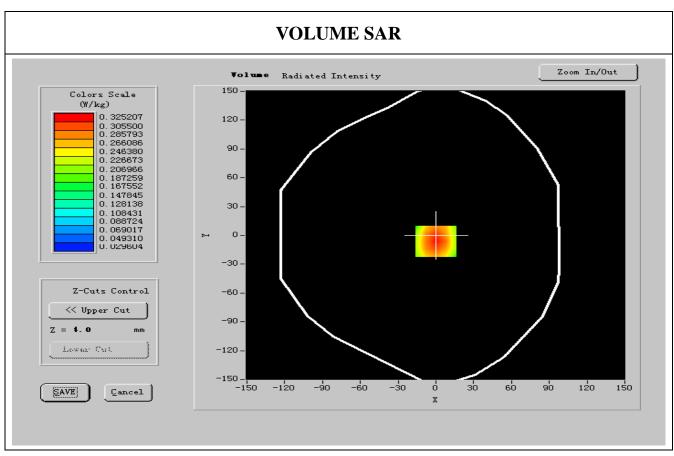
## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2012
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2012
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2012
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibration Due: 02/09/2012
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	848.599976
Relative permitivity (real part)	56.508121
Relative permitivity (imaginary part)	21.726601
Conductivity (S/m)	0.983288
Variation (%)	-1.120000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C









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

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SAR 10g (W/Kg)	0.226851
SAR 1g (W/Kg)	0.278657

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

