



## I. 850MHz Band RESULTS

<u>TYPE</u>	<u>PARAMETERS</u>
<b>Phone</b>	<p><u>Measurement 1:</u> Right Head with Cheek device position on Low Channel in GSM850 mode</p> <p><u>Measurement 2:</u> Right Head with Cheek device position on Middle Channel in GSM850 mode</p> <p><u>Measurement 3:</u> Right Head with Cheek device position on High Channel in GSM850 mode</p> <p><u>Measurement 4:</u> Right Head with Tilt device position on Low Channel in GSM850 mode</p> <p><u>Measurement 5:</u> Right Head with Tilt device position on Middle Channel in GSM850 mode</p> <p><u>Measurement 6:</u> Right Head with Tilt device position on High Channel in GSM850 mode</p> <p><u>Measurement 7:</u> Left Head with Cheek device position on Low Channel in GSM850 mode</p> <p><u>Measurement 8:</u> Left Head with Cheek device position on Middle Channel in GSM850 mode</p> <p><u>Measurement 9:</u> Left Head with Cheek device position on High Channel in GSM850 mode</p> <p><u>Measurement 10:</u> Left Head with Tilt device position on Low Channel in GSM850 mode</p> <p><u>Measurement 11:</u> Left Head with Tilt device position on Middle Channel in GSM850 mode</p> <p><u>Measurement 12:</u> Left Head with Tilt device position on High Channel in GSM850 mode</p> <p><u>Measurement 13:</u> FrontSide toward phantom 15mm, Low Channel in GSM850 mode(Bottom)</p> <p><u>Measurement 14:</u> FrontSide toward phantom 15mm, Middle Channel in GSM850 mode(Bottom)</p> <p><u>Measurement 15:</u> FrontSide toward phantom 15mm, High Channel in GSM850 mode(Bottom)</p> <p><u>Measurement 16:</u> FrontSide toward phantom 15mm, Low Channel in GSM850 mode(Top)</p> <p><u>Measurement 17:</u> FrontSide toward phantom 15mm, Middle Channel in GSM850 mode(Top)</p> <p><u>Measurement 18:</u> FrontSide toward phantom 15mm, High Channel in GSM850 mode(Top)</p>



Measurement 19: FrontSide toward phantom 15mm, Low Channel in GPRS850 mode(Bottom)

Measurement 20: FrontSide toward phantom 15mm, Middle Channel in GPRS850 mode(Bottom)

Measurement 21: FrontSide toward phantom 15mm, High Channel in GPRS850 mode(Bottom)

Measurement 22: FrontSide toward phantom 15mm, Low Channel in GPRS850 mode(Top)

Measurement 23: FrontSide toward phantom 15mm, Middle Channel in GPRS850 mode(Top)

Measurement 24: FrontSide toward phantom 15mm, High Channel in GPRS850 mode(Top)



## MEASUREMENT 1

Date of measurement: 24/9/2010

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	GSM850
Channels	Low
Signal	GSM

### B. Instrumentations.

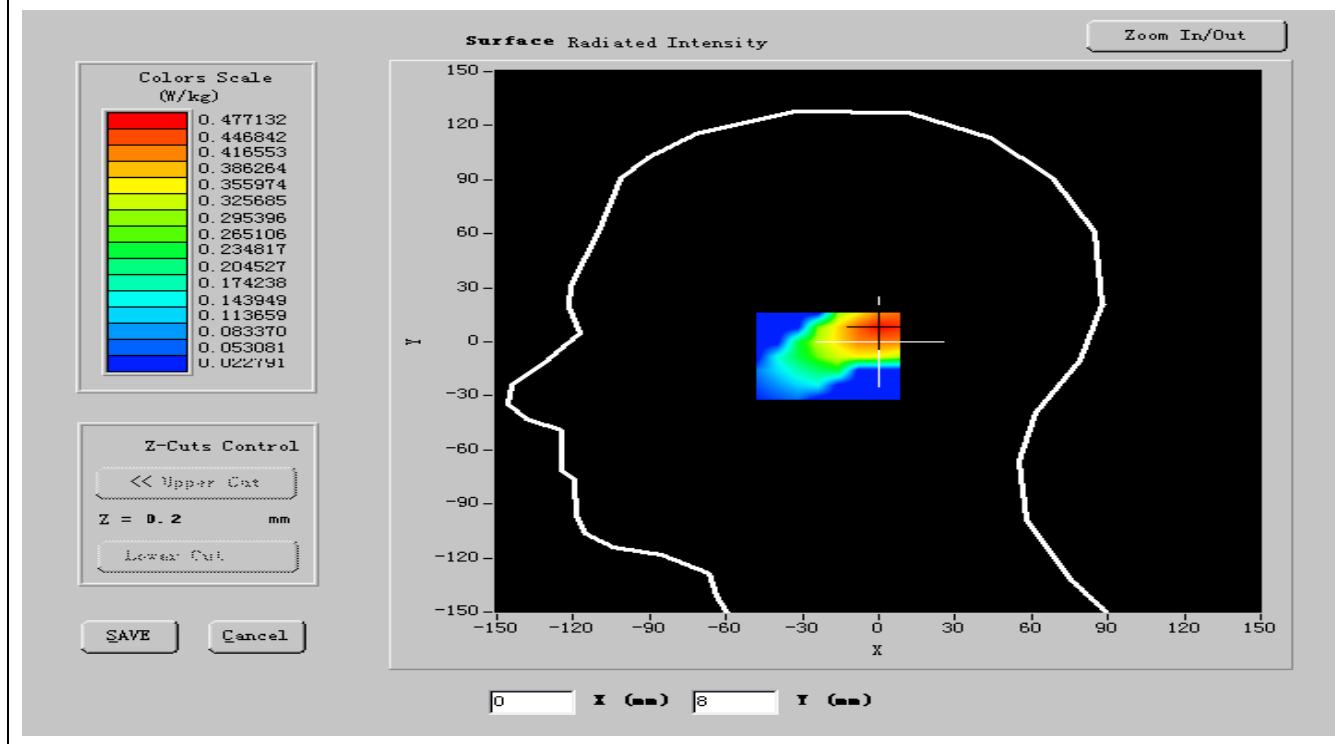
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

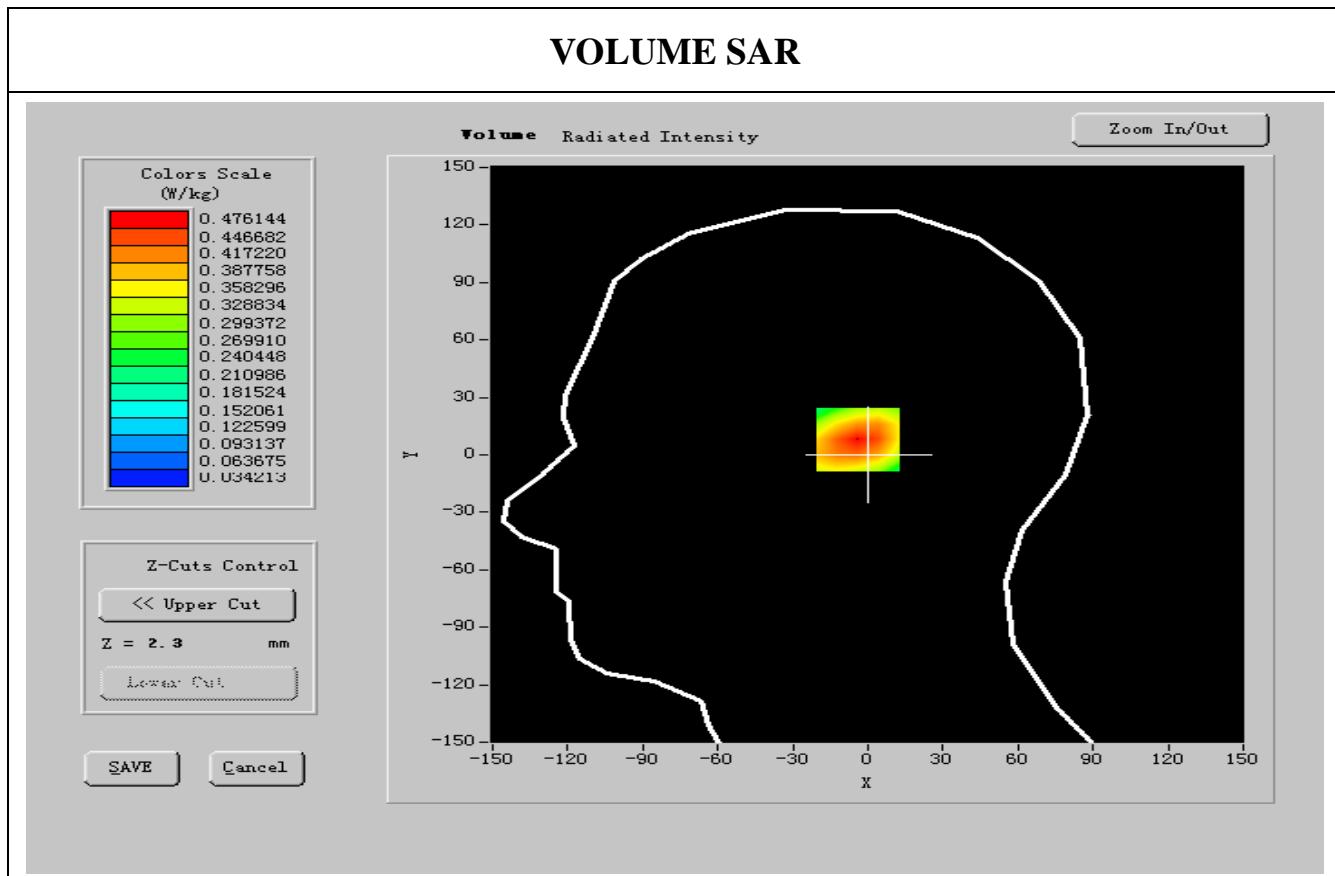
Frequency (MHz)	824.200012
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.923392
Variation (%)	-1.490000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36
Crest factor:	1:8



## SURFACE SAR



## VOLUME SAR





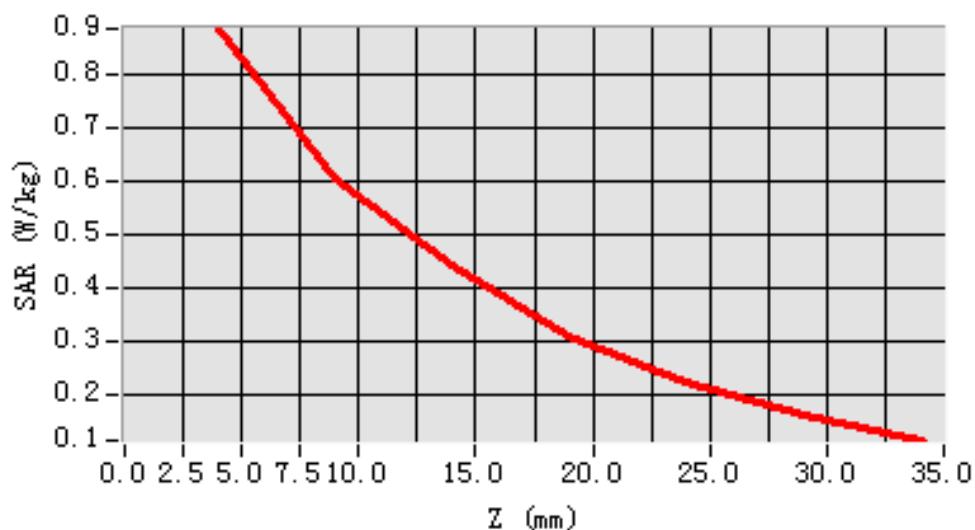
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.544232
SAR 1g (W/Kg)	0.841195

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	<b>0.8491</b>	<b>0.5876</b>	<b>0.4532</b>	<b>0.2756</b>	<b>0.1985</b>	<b>0.1465</b>

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





## MEASUREMENT 2

Date of measurement: 24/9/2010

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	GSM850
Channels	Middle
Signal	GSM

### B. Instrumentations.

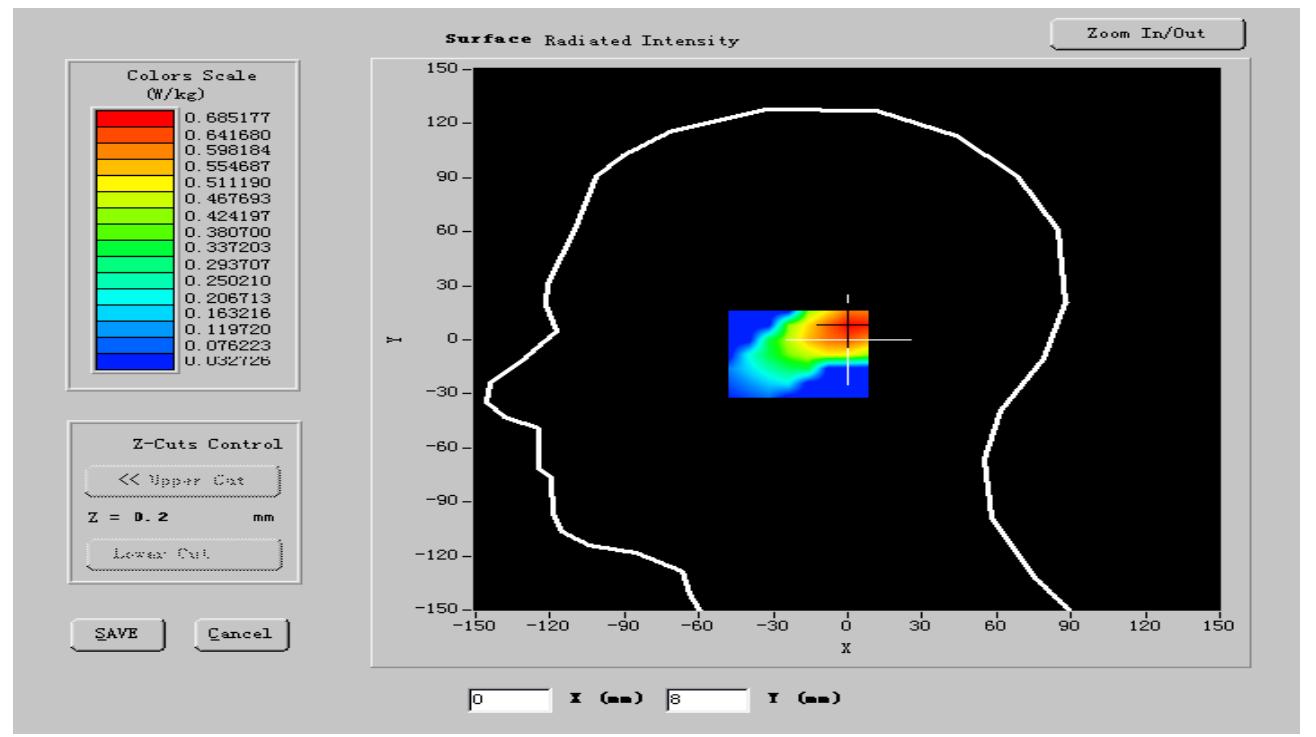
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

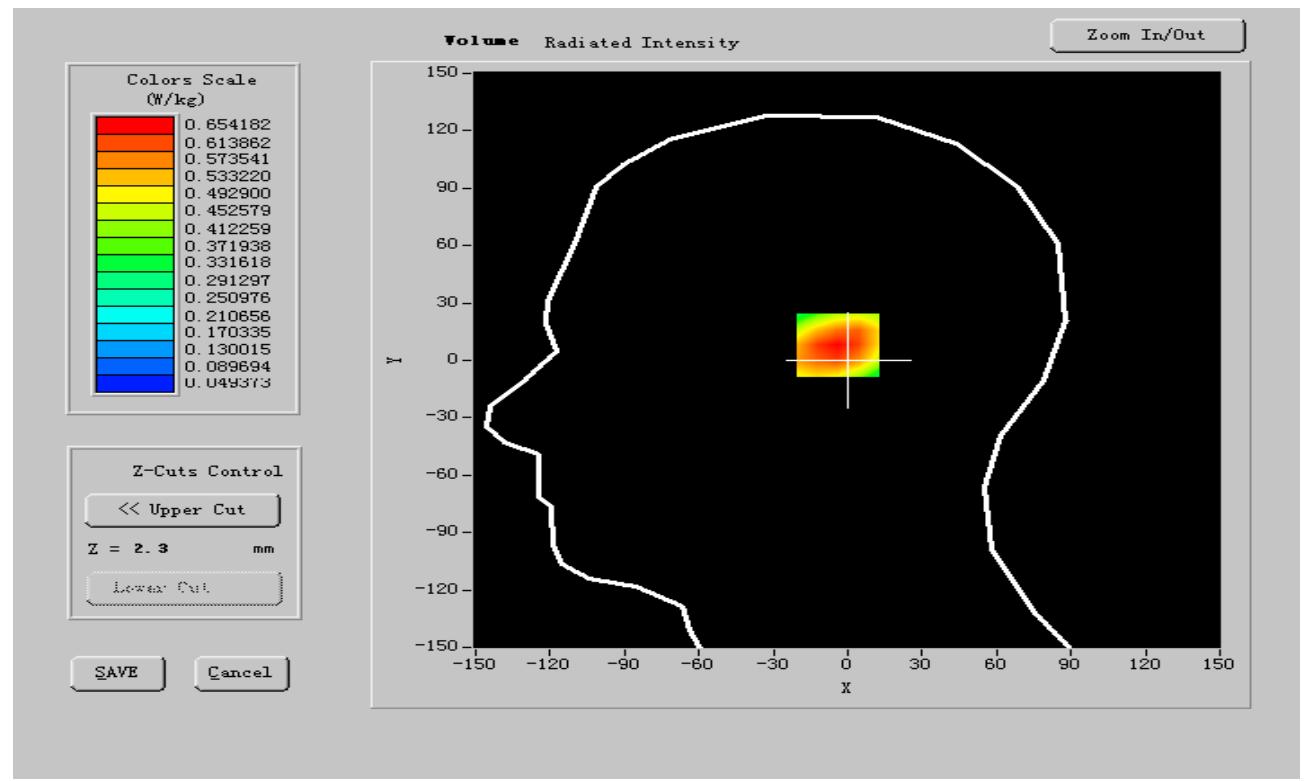
Frequency (MHz)	836.400024
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.916616
Variation (%)	-0.110000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36
Crest factor:	1:8



## SURFACE SAR



## VOLUME SAR





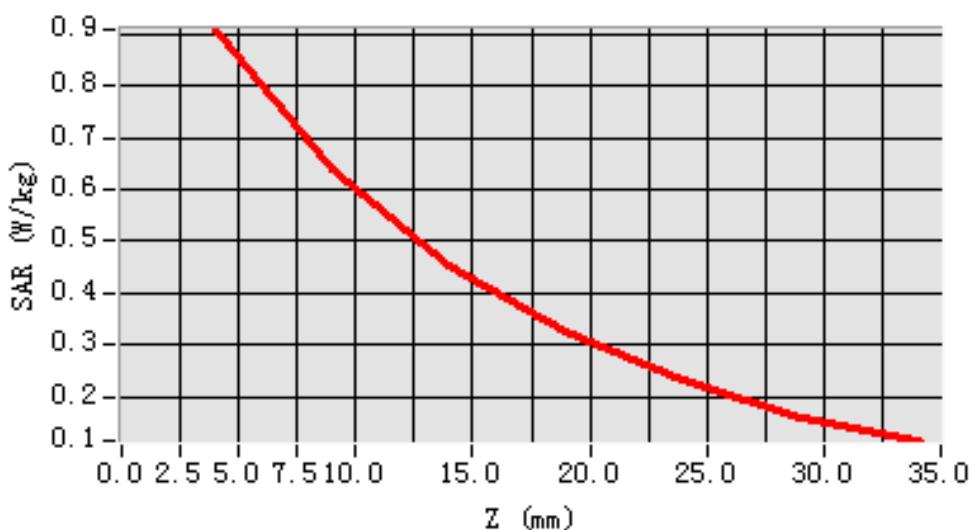
**Maximum location: X=-13.00, Y=-3.00**

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

### **Z Axis Scan**

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/kg)</b>	<b>0.0000</b>	<b>0.8683</b>	<b>0.5987</b>	<b>0.4463</b>	<b>0.4073</b>	<b>0.2345</b>	<b>0.1673</b>

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





## MEASUREMENT 3

Date of measurement: 24/9/2010

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	GSM850
Channels	High
Signal	GSM

### B. Instrumentations.

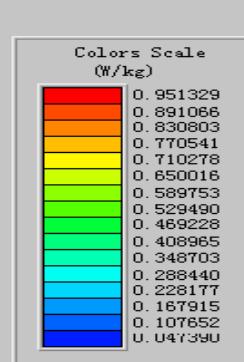
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

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
Crest factor:	1:8



## SURFACE SAR



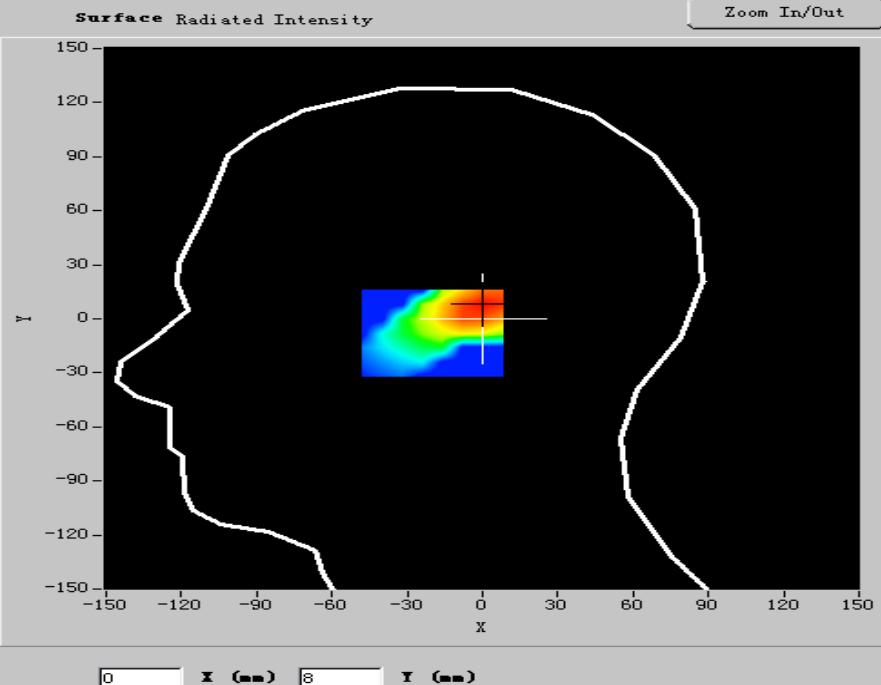
Z-Cuts Control

<< Upper Cut

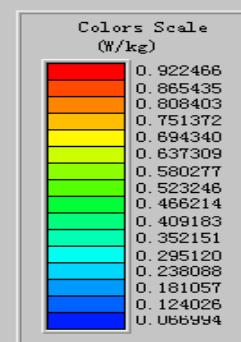
Z = 0.2 mm

Lower Cut

SAVE Cancel



## VOLUME SAR



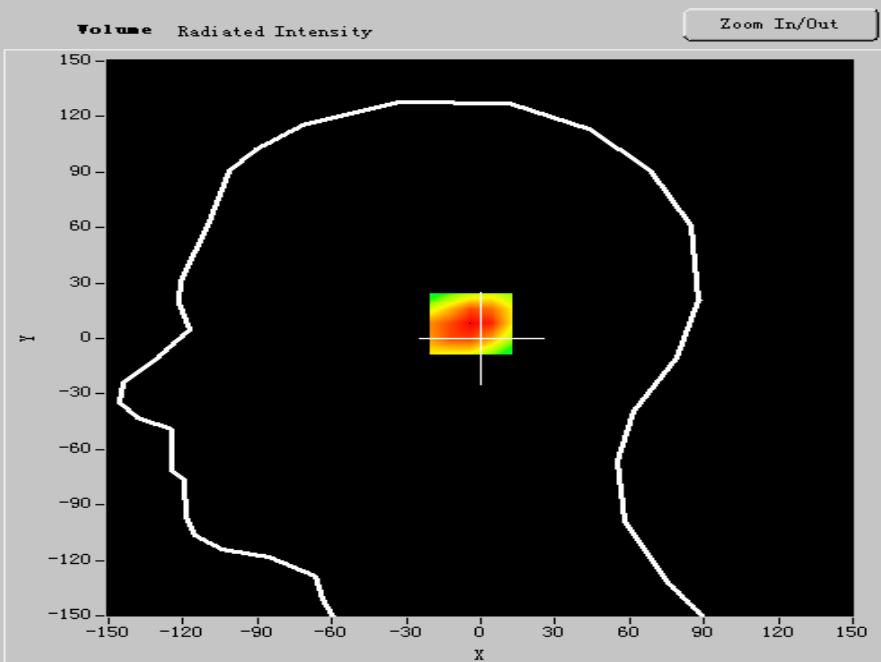
Z-Cuts Control

<< Upper Cut

Z = 2.3 mm

Lower Cut

SAVE Cancel





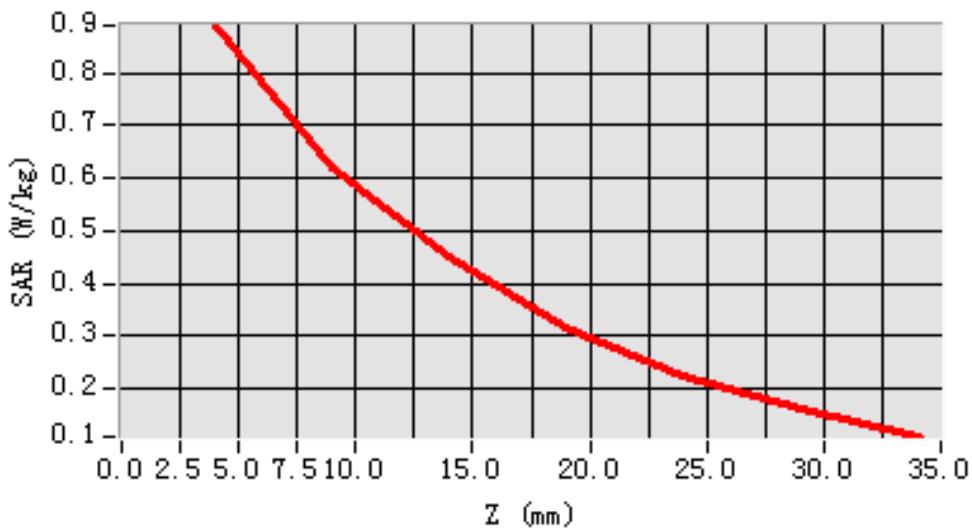
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.555620
SAR 1g (W/Kg)	0.864465

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.84446	0.58763	0.4127	0.2947	0.1987	0.1324

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





## **MEASUREMENT 4**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

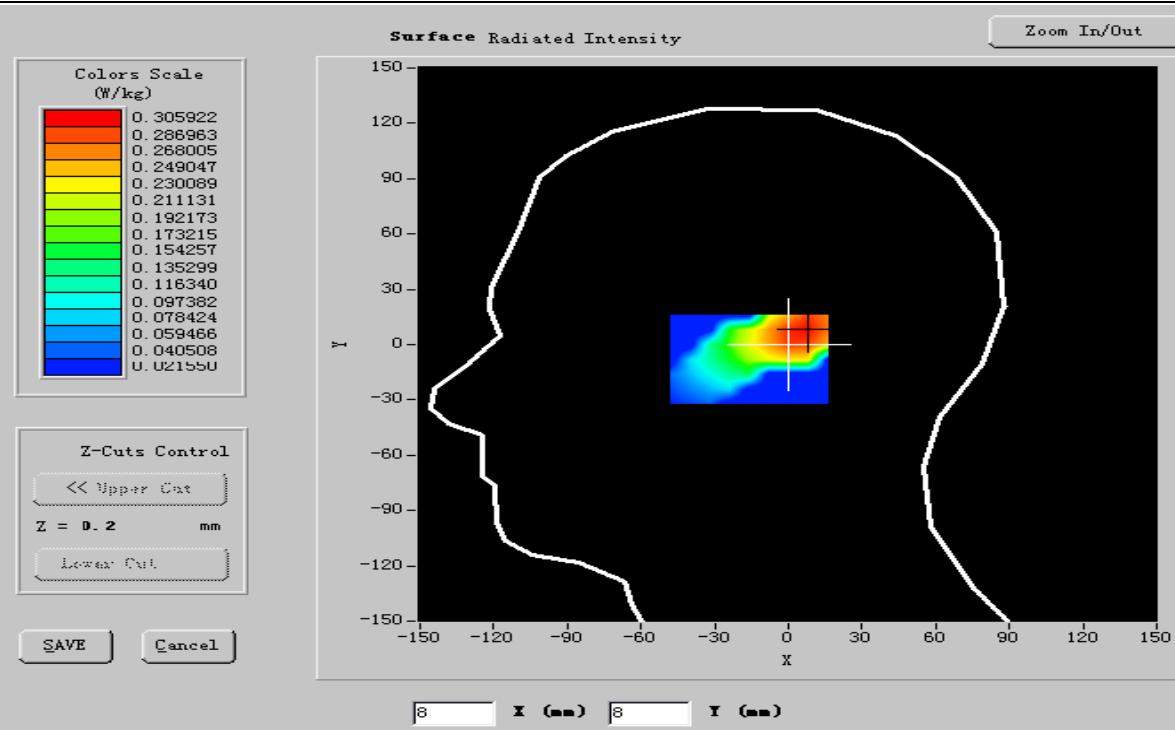
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

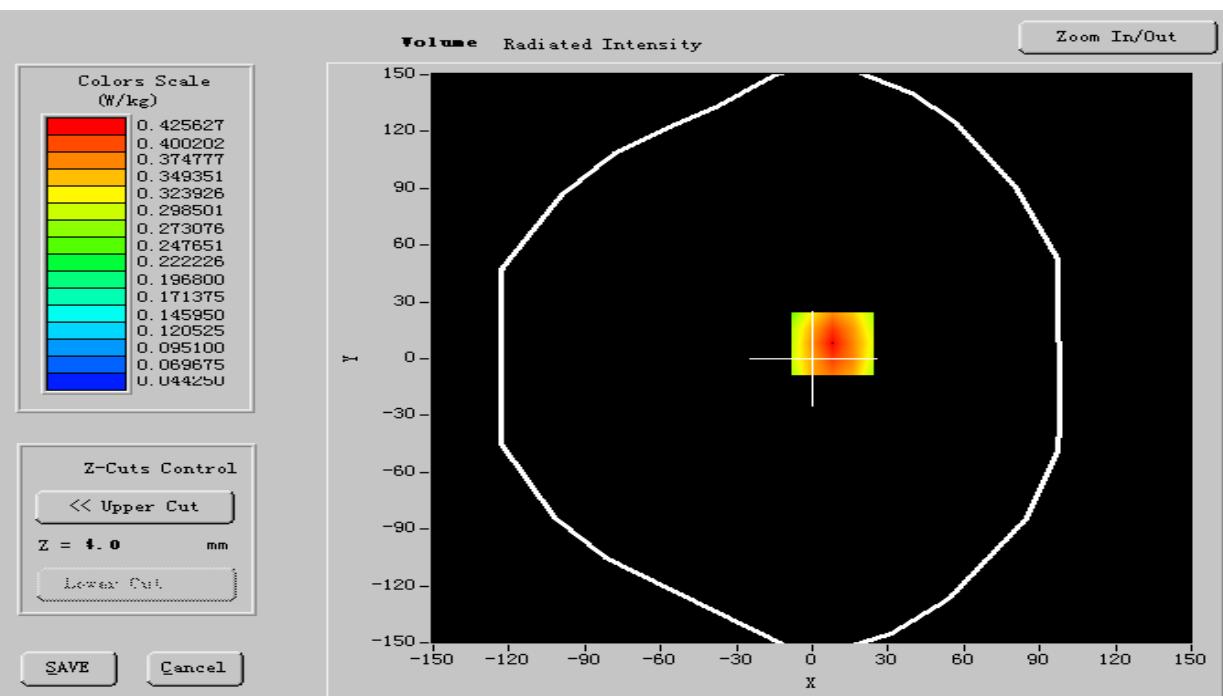
<b>Frequency (MHz)</b>	<b>824.200012</b>
<b>Relative permitivity (real part)</b>	<b>41.466999</b>
<b>Relative permitivity (imaginary part)</b>	<b>19.511101</b>
<b>Conductivity (S/m)</b>	<b>0.913392</b>
<b>Variation (%)</b>	<b>-3.070000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.66, 20.51, 28.36</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





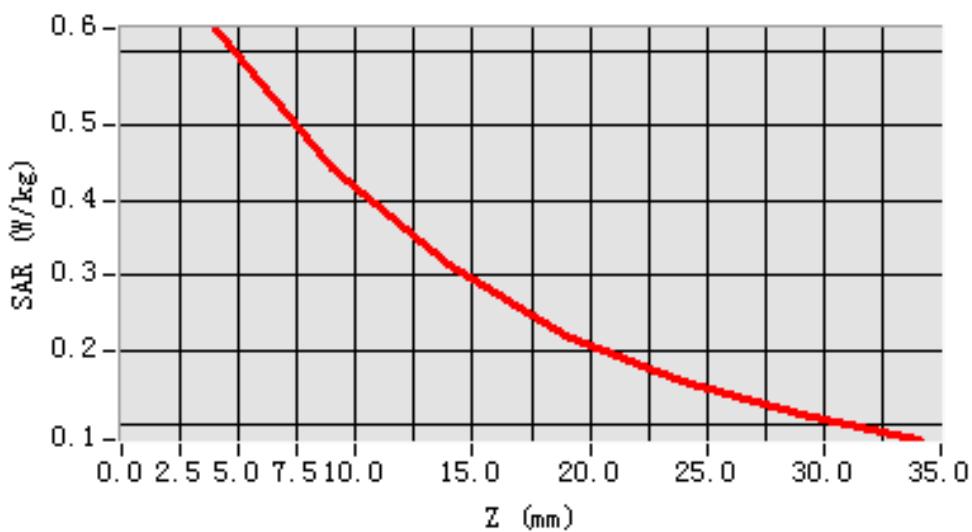
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.365920
SAR 1g (W/Kg)	0.572698

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.5756	0.4854	0.3354	0.2154	0.1911	0.0111

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





## **MEASUREMENT 5**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

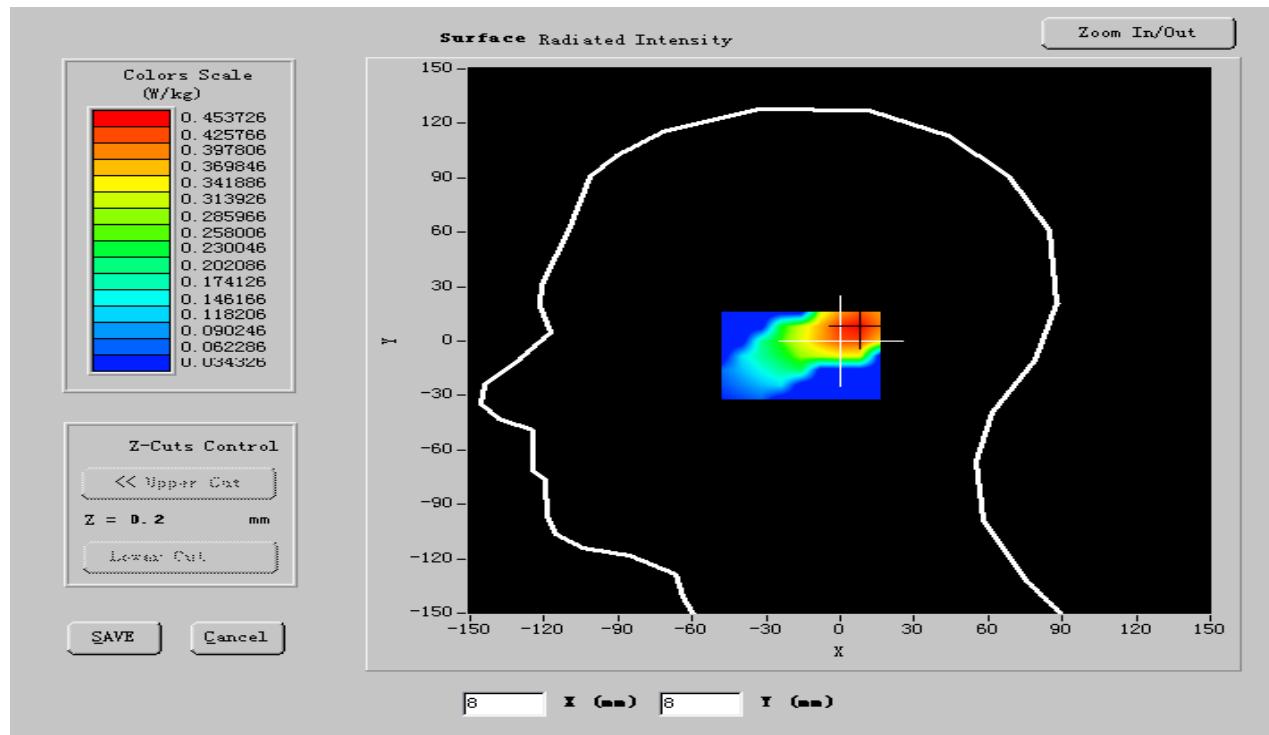
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

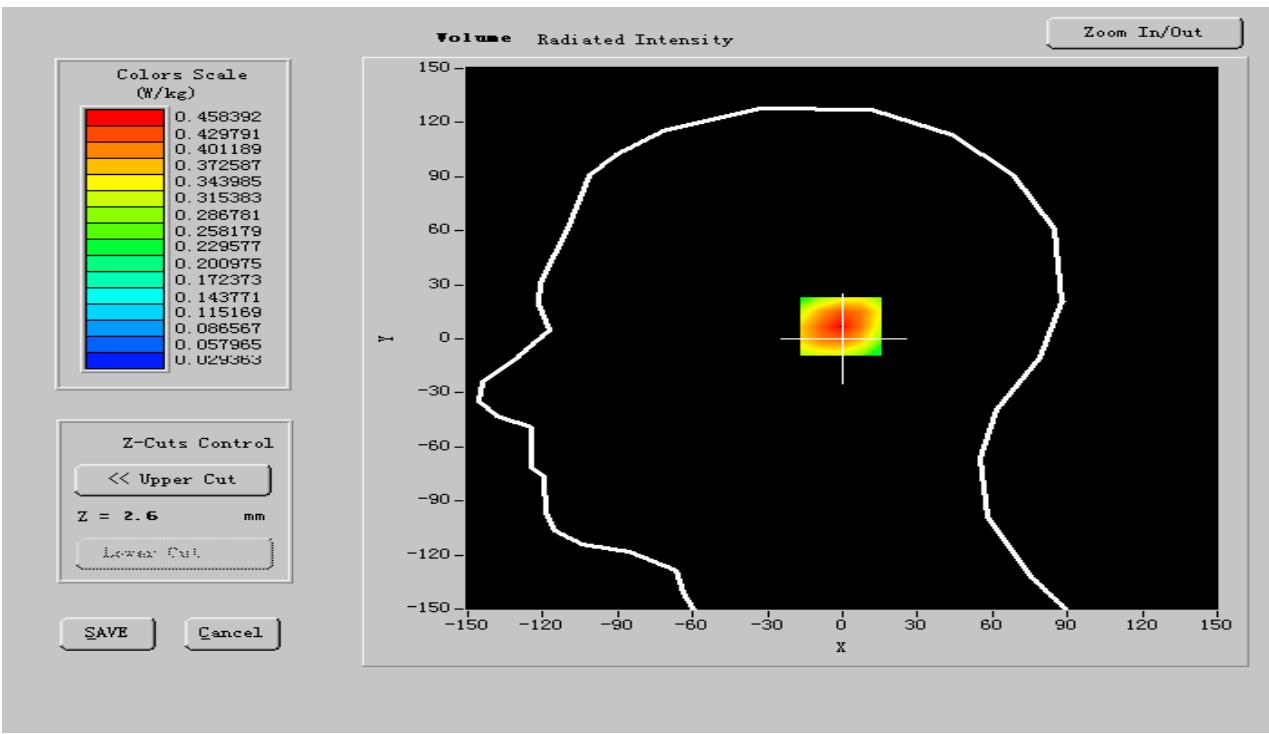
<b>Frequency (MHz)</b>	<b>836.400024</b>
<b>Relative permitivity (real part)</b>	<b>41.466999</b>
<b>Relative permitivity (imaginary part)</b>	<b>19.511101</b>
<b>Conductivity (S/m)</b>	<b>0.913636</b>
<b>Variation (%)</b>	<b>-0.880000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.66, 20.51, 28.36</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





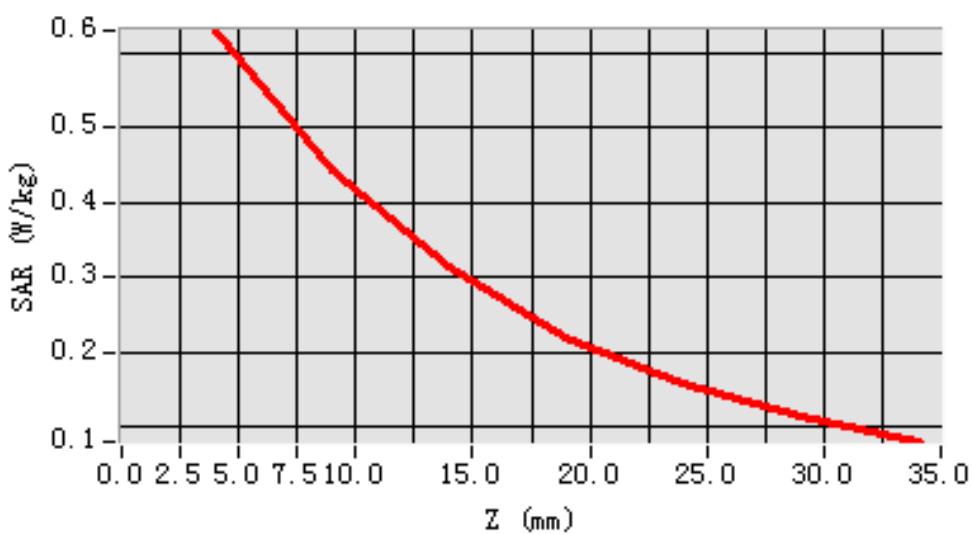
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.412358
SAR 1g (W/Kg)	0.582981

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.5929	0.4354	0.3354	0.2154	0.1611	0.0123

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





## **MEASUREMENT 6**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

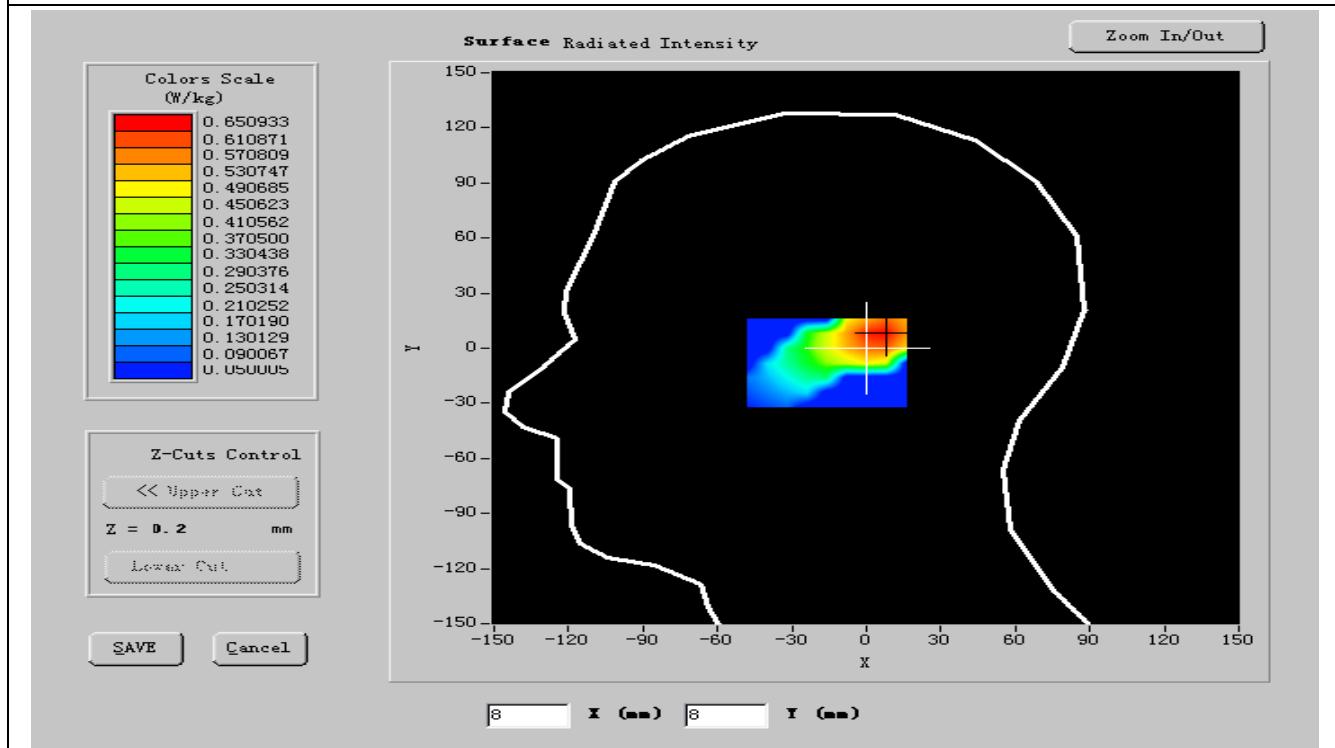
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

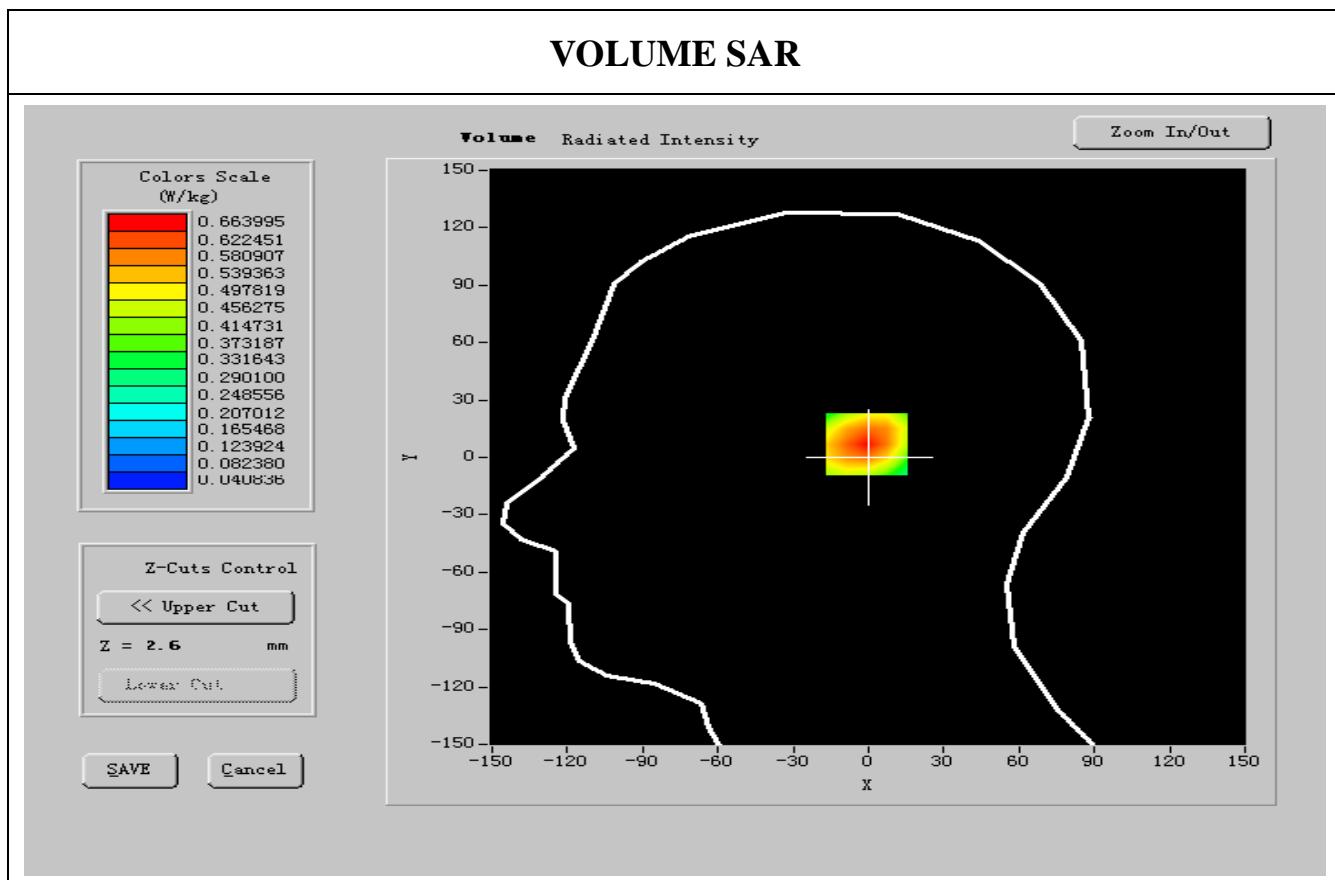
<b>Frequency (MHz)</b>	<b>848.599976</b>
<b>Relative permitivity (real part)</b>	<b>41.262001</b>
<b>Relative permitivity (imaginary part)</b>	<b>19.598200</b>
<b>Conductivity (S/m)</b>	<b>0.923946</b>
<b>Variation (%)</b>	<b>-3.070000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.66, 20.51, 28.36</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





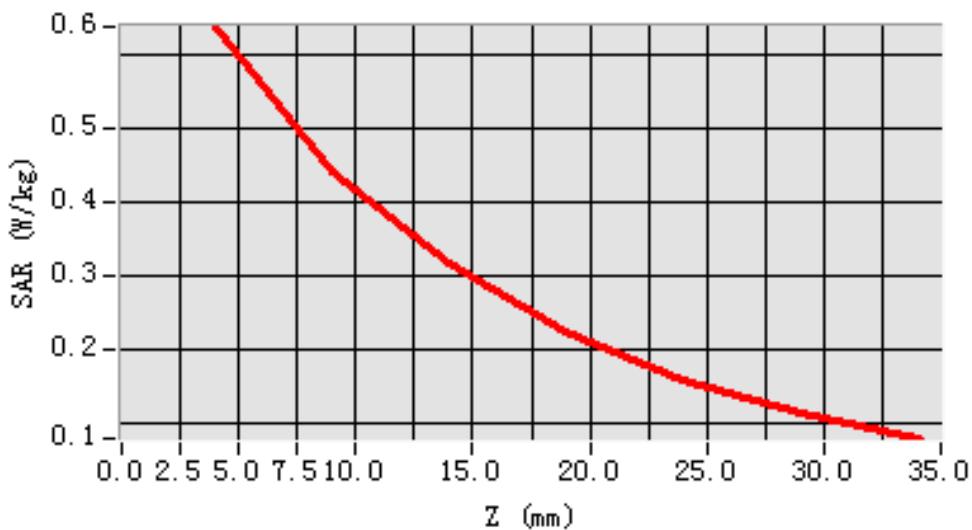
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.416354
SAR 1g (W/Kg)	0.609428

### **Z Axis Scan**

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.5994	0.4354	0.3354	0.2154	0.1611	0.1234

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





## MEASUREMENT 7

Date of measurement: 24/9/2010

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	GSM850
Channels	Low
Signal	GSM

### B. Instrumentations.

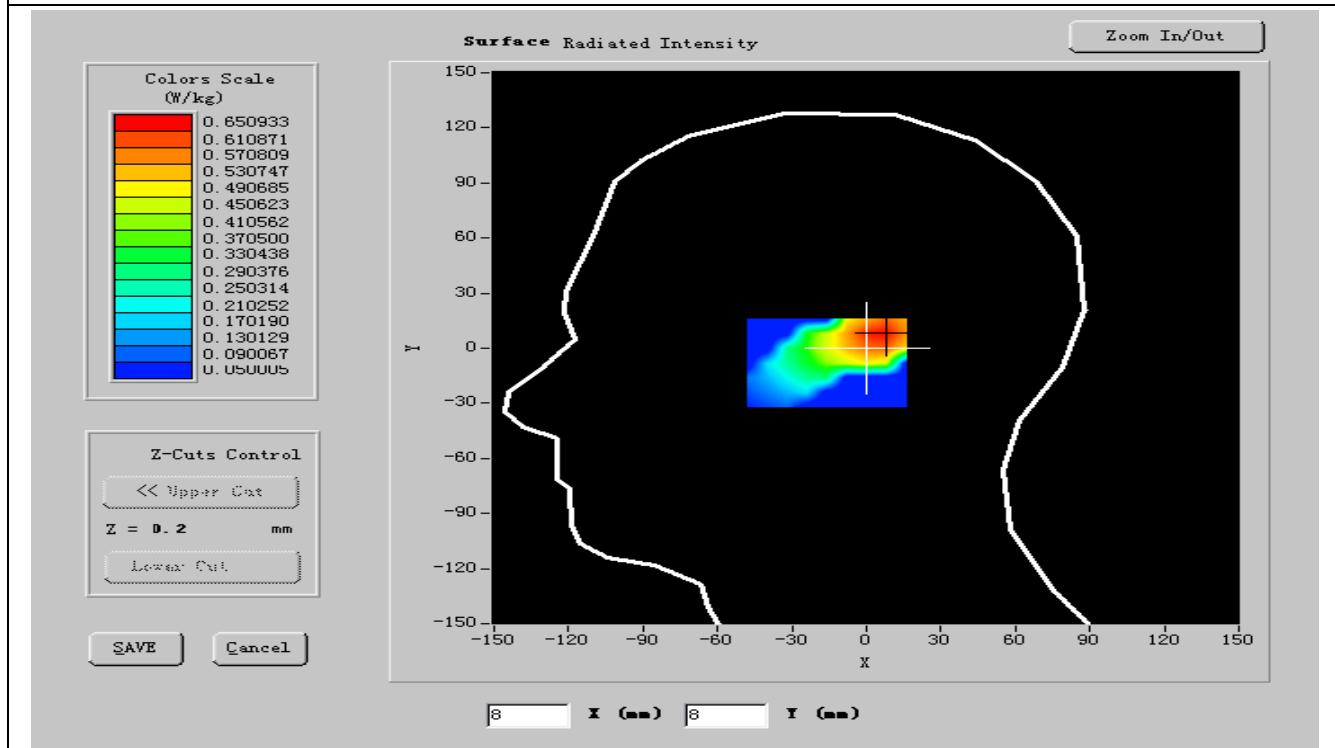
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator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

### C. SAR Measurement Results

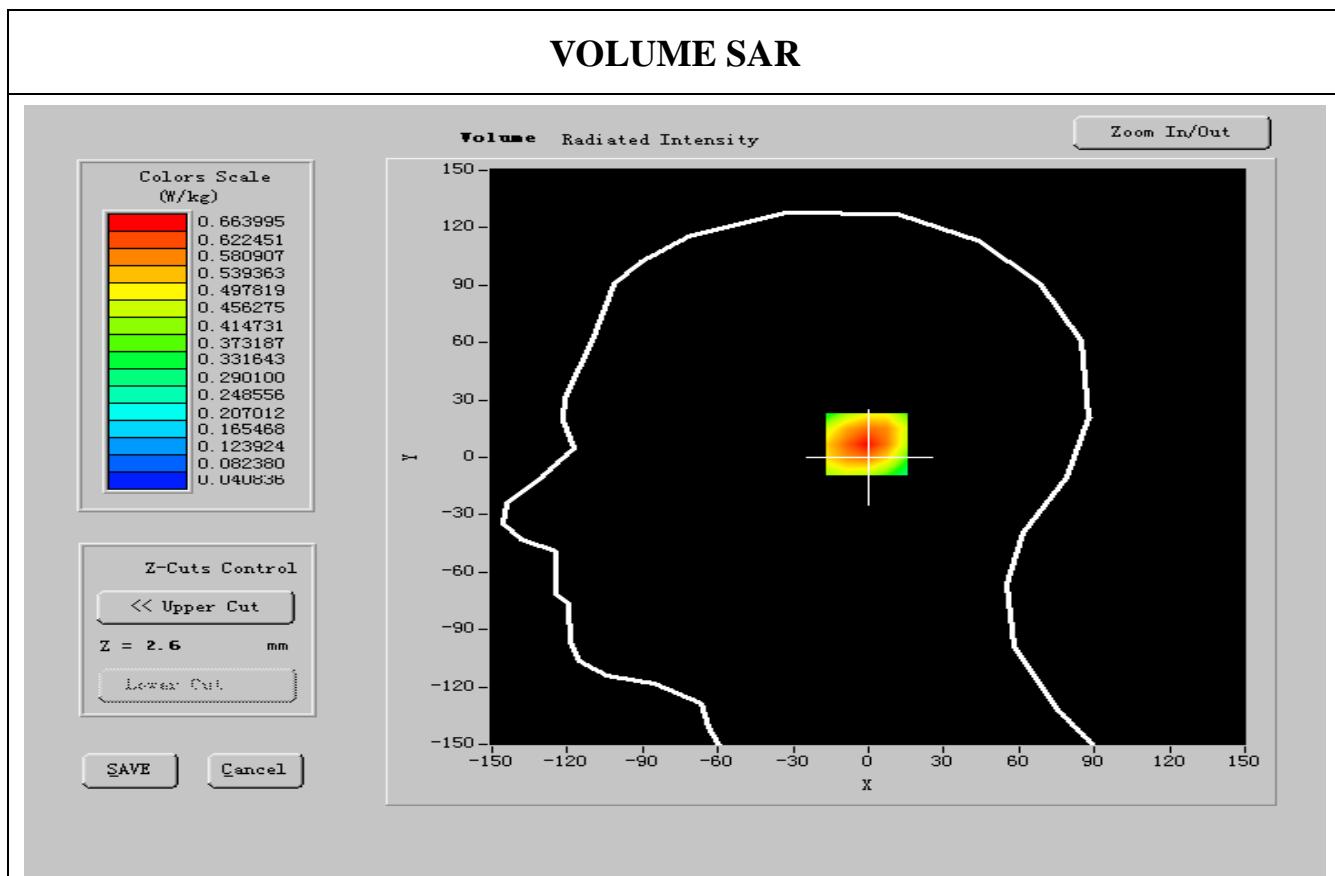
Frequency (MHz)	824.200012
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.923372
Variation (%)	-1.240000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36
Crest factor:	1:8



## SURFACE SAR



## VOLUME SAR





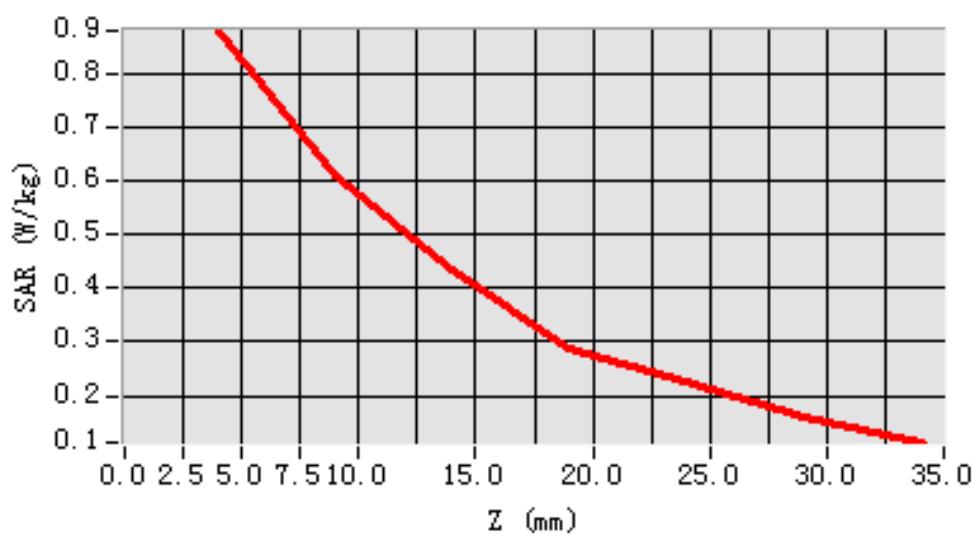
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.536541
SAR 1g (W/Kg)	0.832028

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.8390	0.5354	0.4154	0.2854	0.2111	0.1352

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





## **MEASUREMENT 8**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

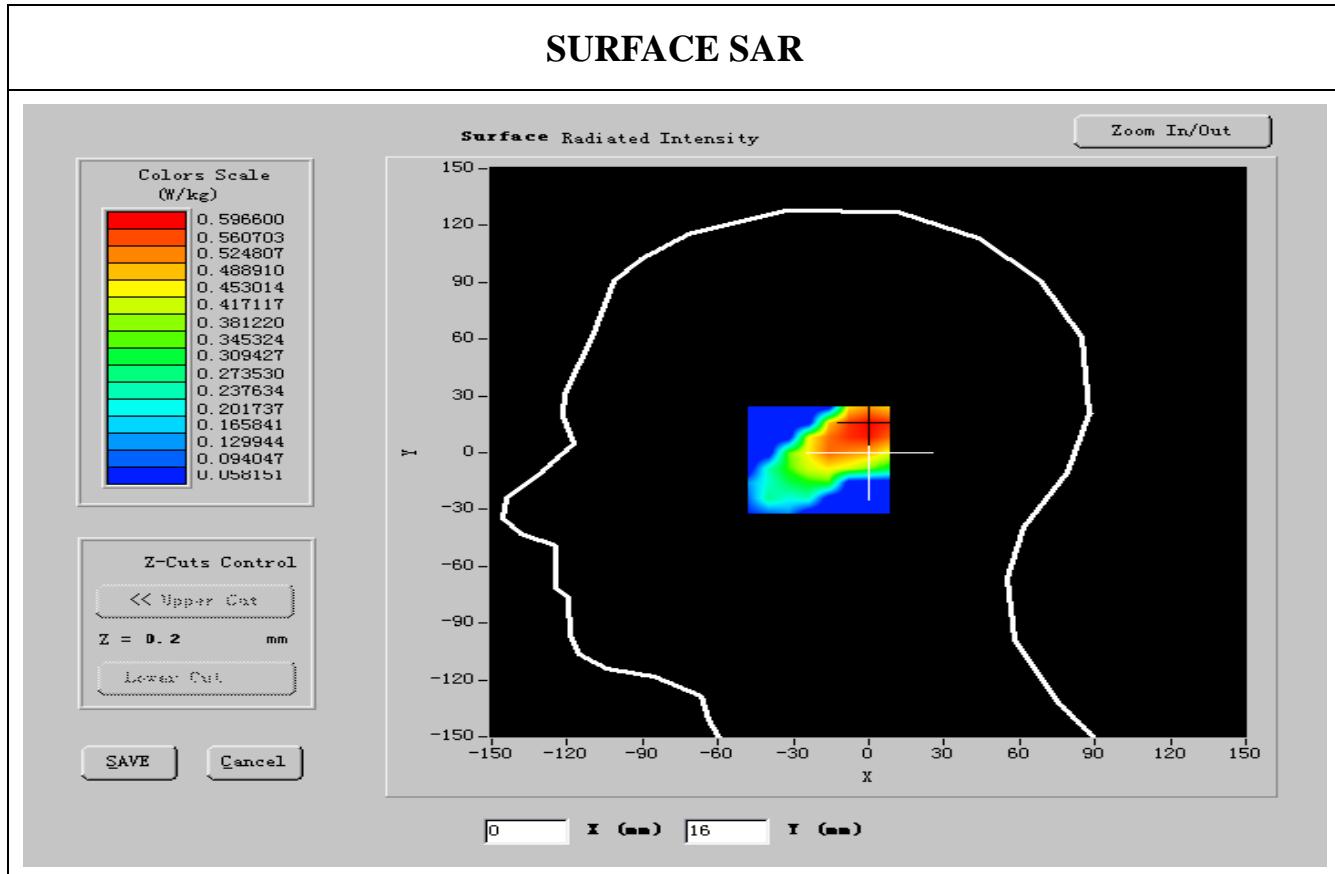
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

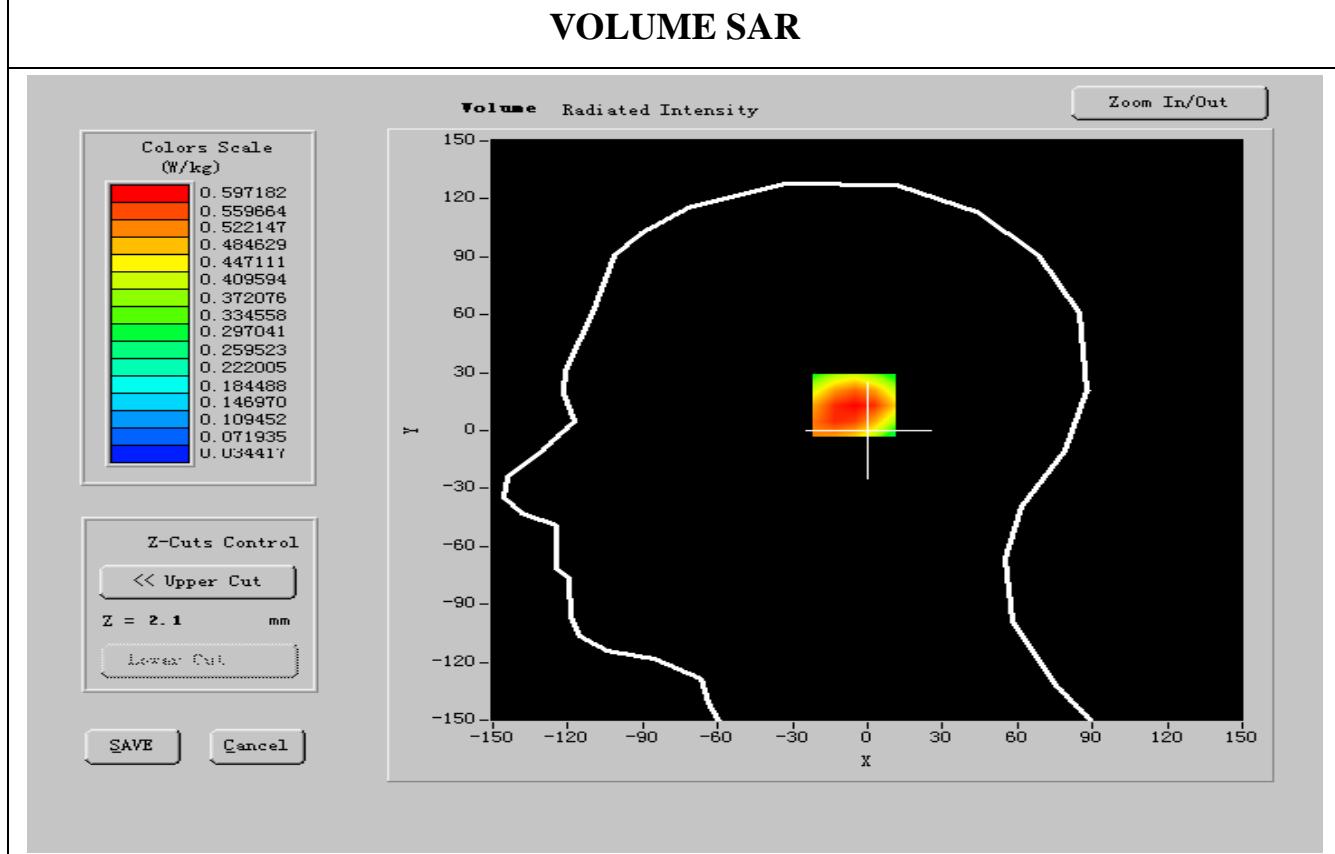
<b>Frequency (MHz)</b>	<b>836.400024</b>
<b>Relative permitivity (real part)</b>	<b>41.466999</b>
<b>Relative permitivity (imaginary part)</b>	<b>19.511101</b>
<b>Conductivity (S/m)</b>	<b>0.9163242</b>
<b>Variation (%)</b>	<b>-1.240000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.66, 20.51, 28.36</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





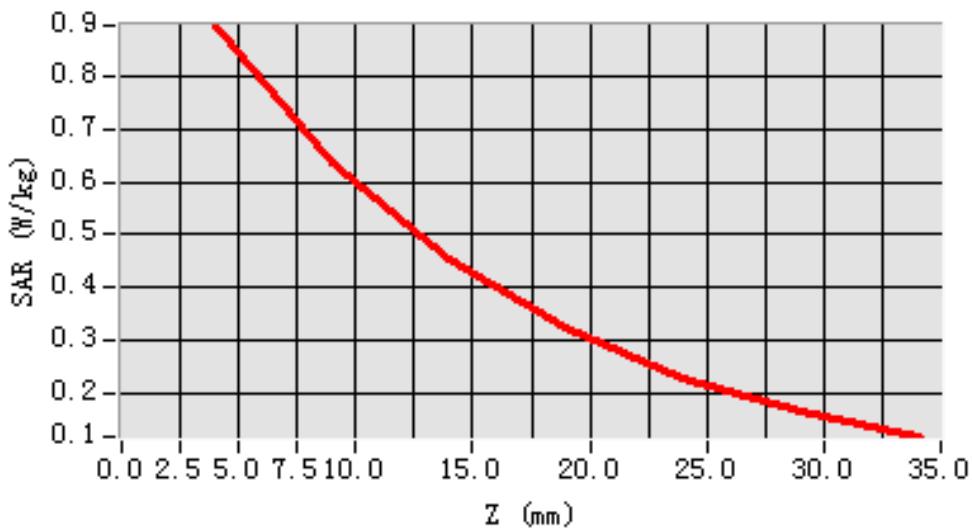
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.559310
SAR 1g (W/Kg)	0.858731

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.8507	0.5334	0.4132	0.2832	0.2132	0.1353

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





## **MEASUREMENT 9**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

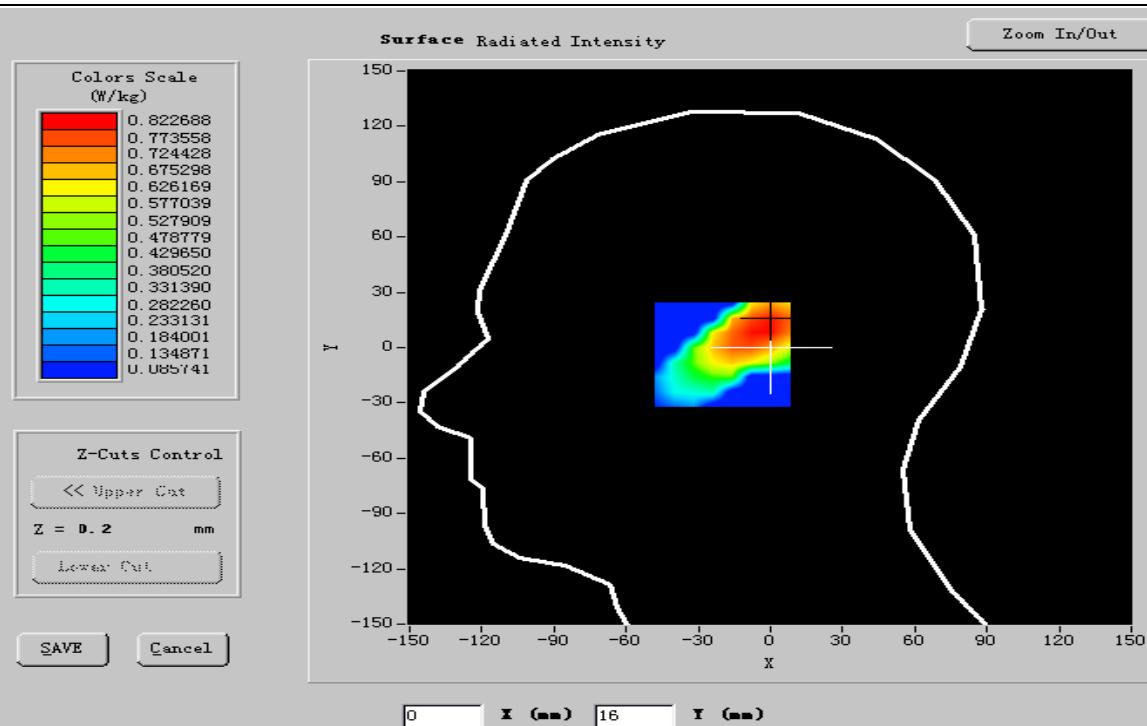
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

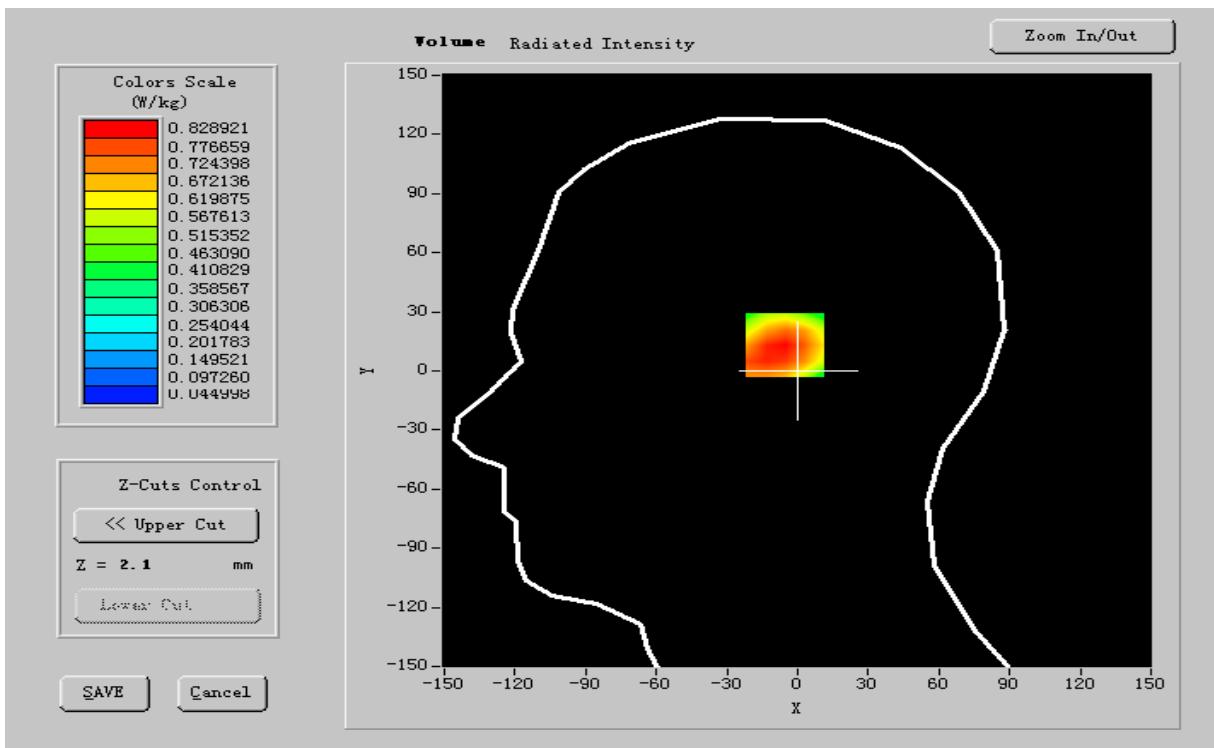
<b>Frequency (MHz)</b>	<b>848.599976</b>
<b>Relative permitivity (real part)</b>	<b>41.278801</b>
<b>Relative permitivity (imaginary part)</b>	<b>19.598200</b>
<b>Conductivity (S/m)</b>	<b>0.923946</b>
<b>Variation (%)</b>	<b>-1.200000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.66, 20.51, 28.36</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





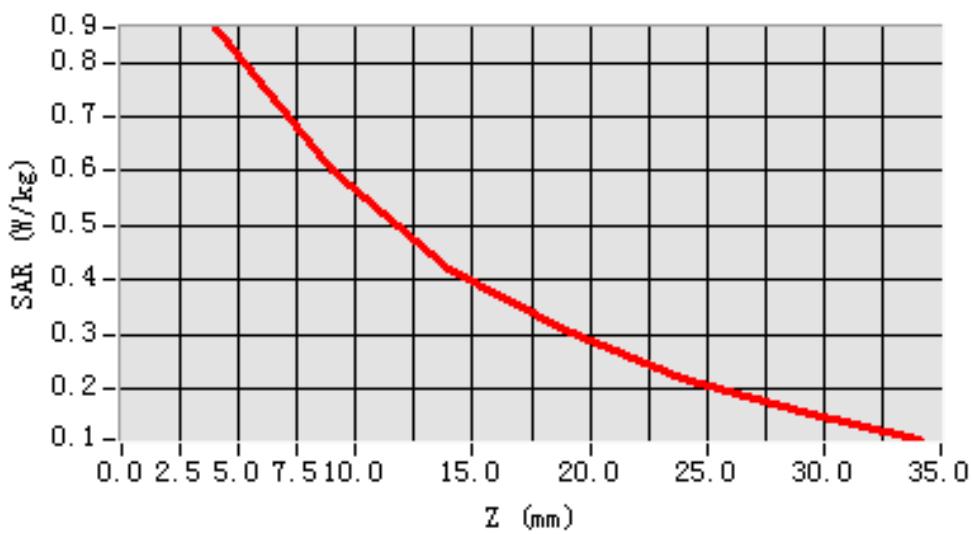
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.538640
SAR 1g (W/Kg)	0.817950

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.8129	0.5323	0.4545	0.2834	0.2132	0.1323

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





## MEASUREMENT 10

Date of measurement: 24/9/2010

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	GSM850
Channels	Low
Signal	GSM

### B. Instrumentations.

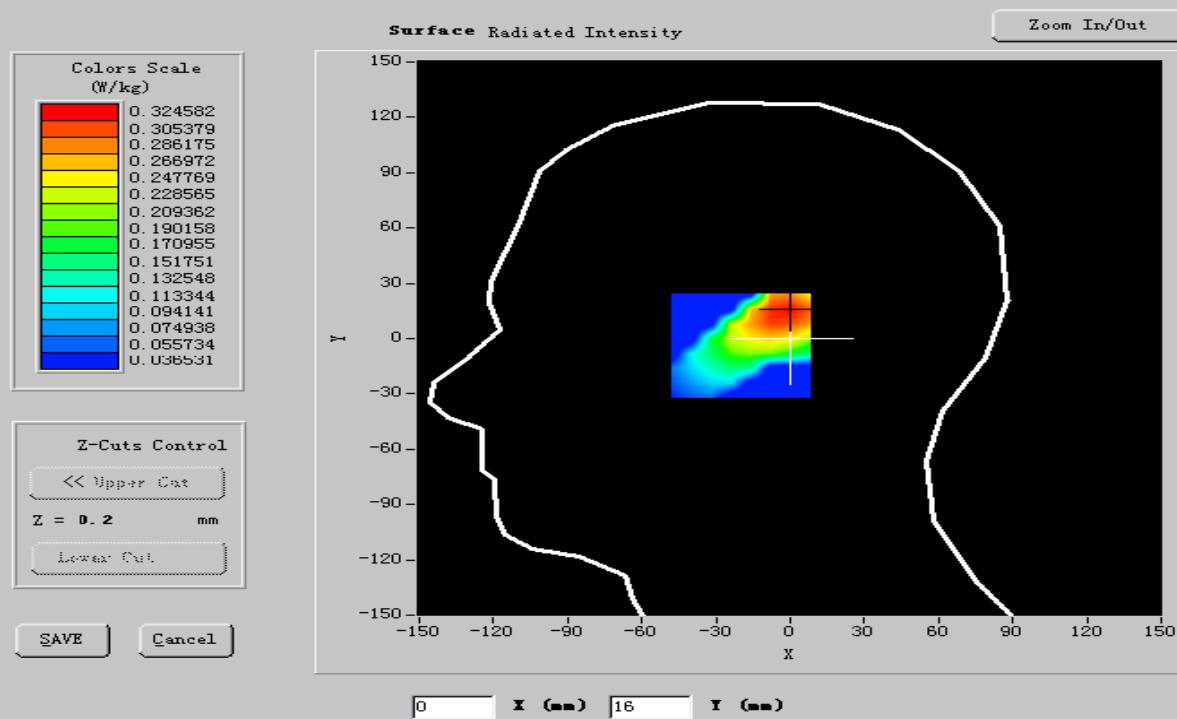
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

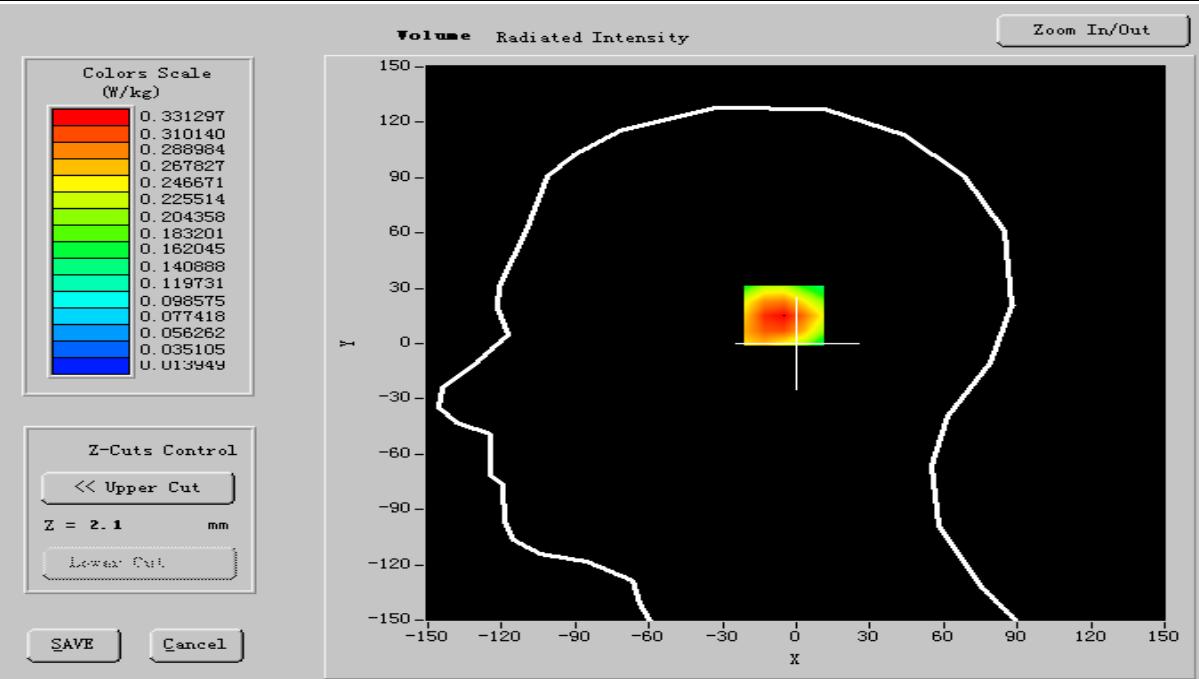
Frequency (MHz)	824.200012
Relative permitivity (real part)	41.466365
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.923253
Variation (%)	-0.170000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36
Crest factor:	1:8



## SURFACE SAR



## VOLUME SAR





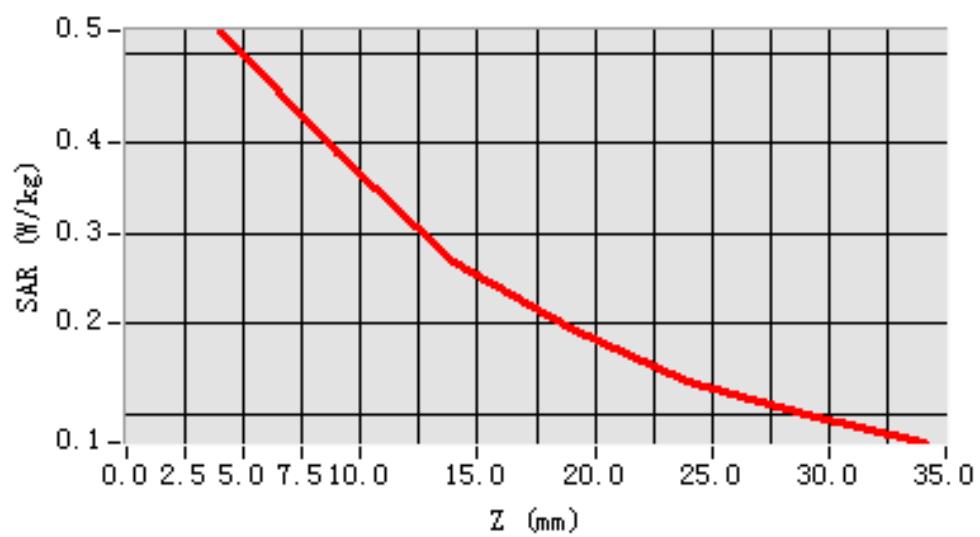
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.333695
SAR 1g (W/Kg)	0.451852

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4918	0.5332	0.2564	0.1821	0.1443	0.1454

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





## MEASUREMENT 11

Date of measurement: 24/9/2010

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	GSM850
Channels	Middle
Signal	GSM

### B. Instrumentations.

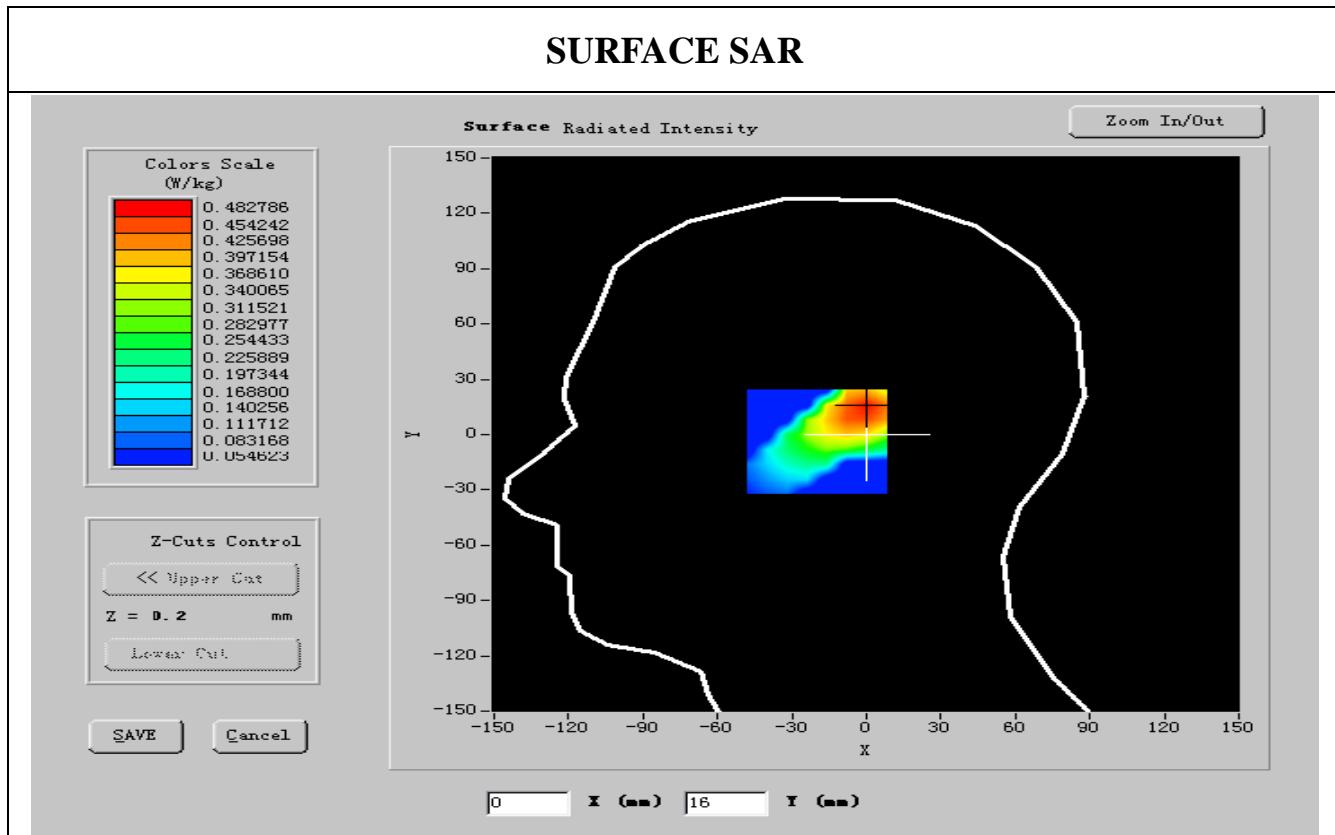
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

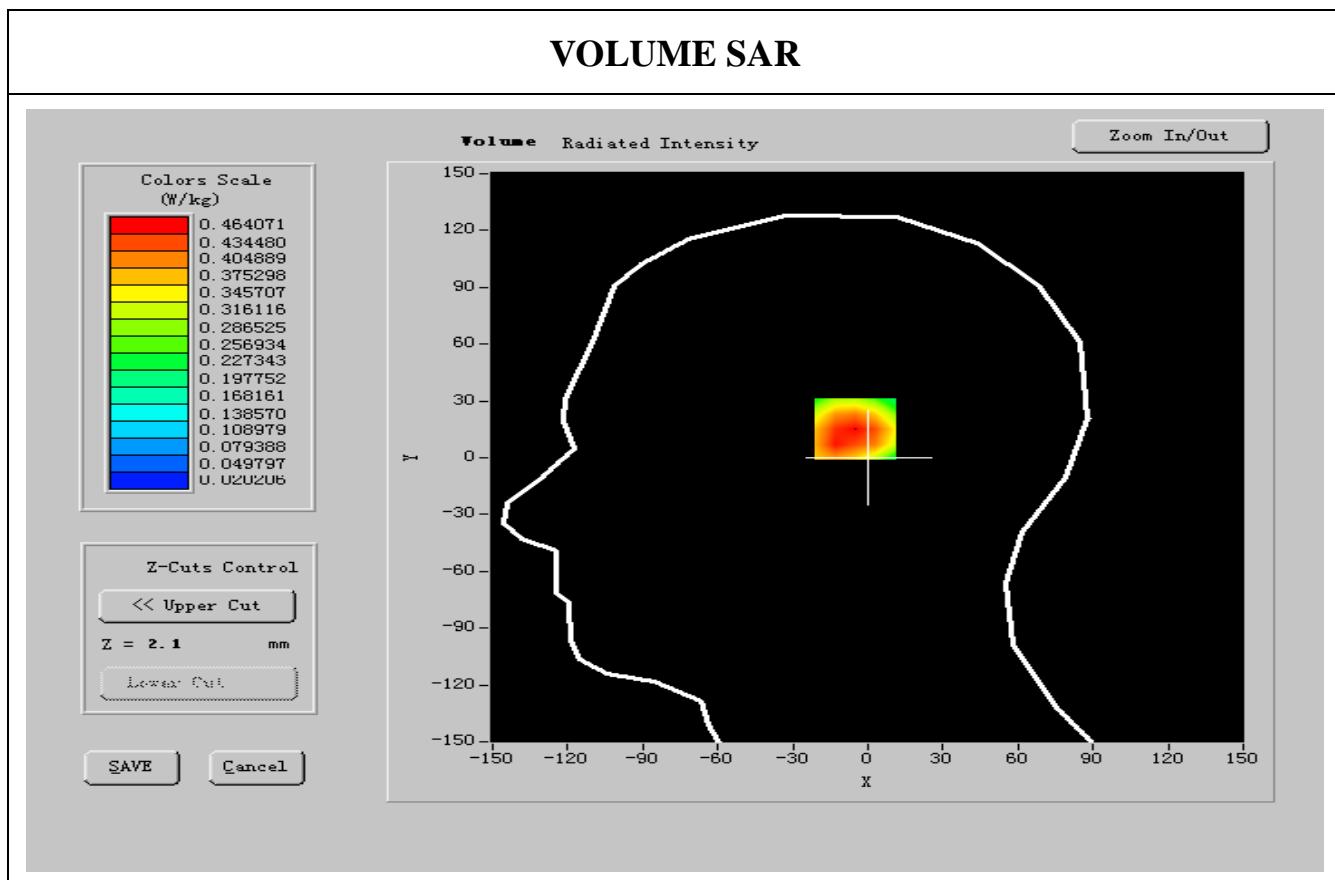
Frequency (MHz)	836.400024
Relative permitivity (real part)	41.467953
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.916214
Variation (%)	-1.170000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36
Crest factor:	1:8



## SURFACE SAR



## VOLUME SAR





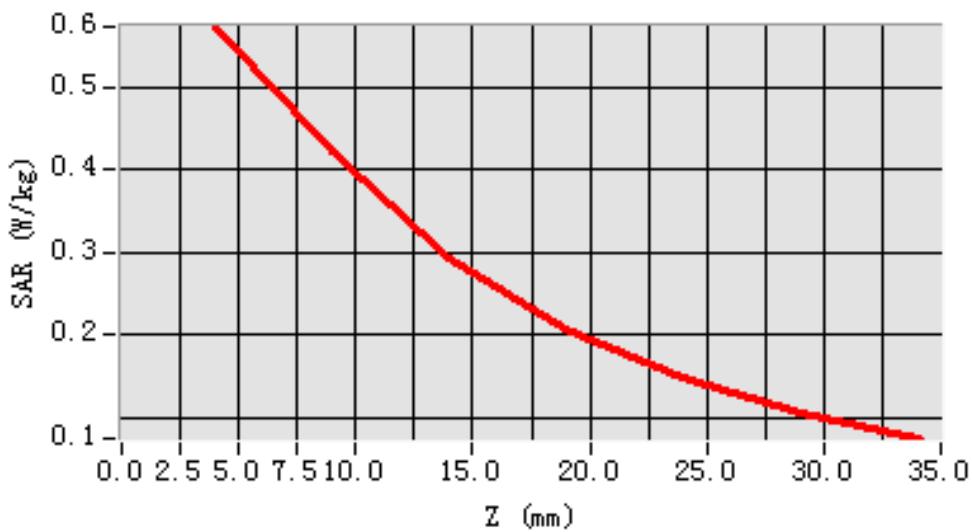
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.368301
SAR 1g (W/Kg)	0.563397

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.5533	0.4132	0.2964	0.2021	0.1643	0.1154

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





## **MEASUREMENT 12**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

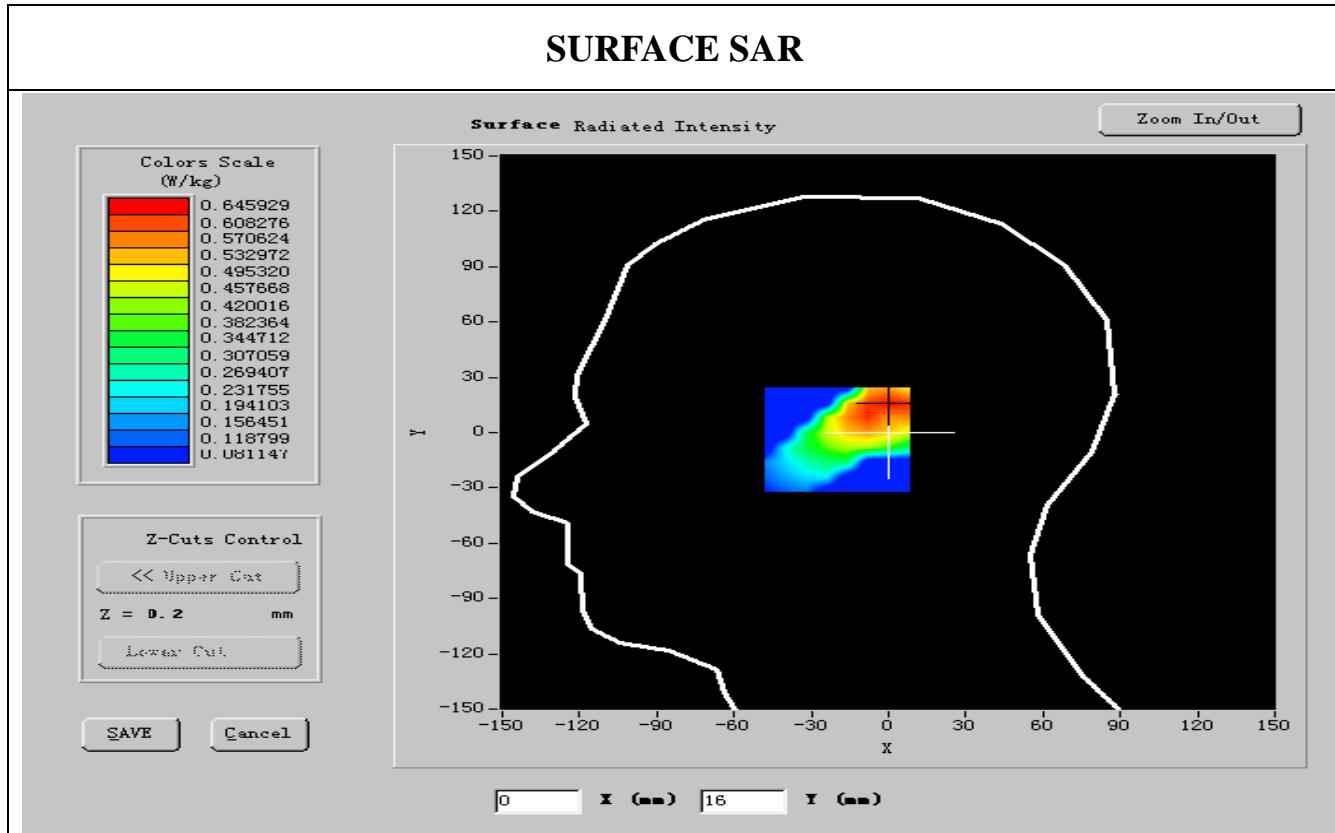
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

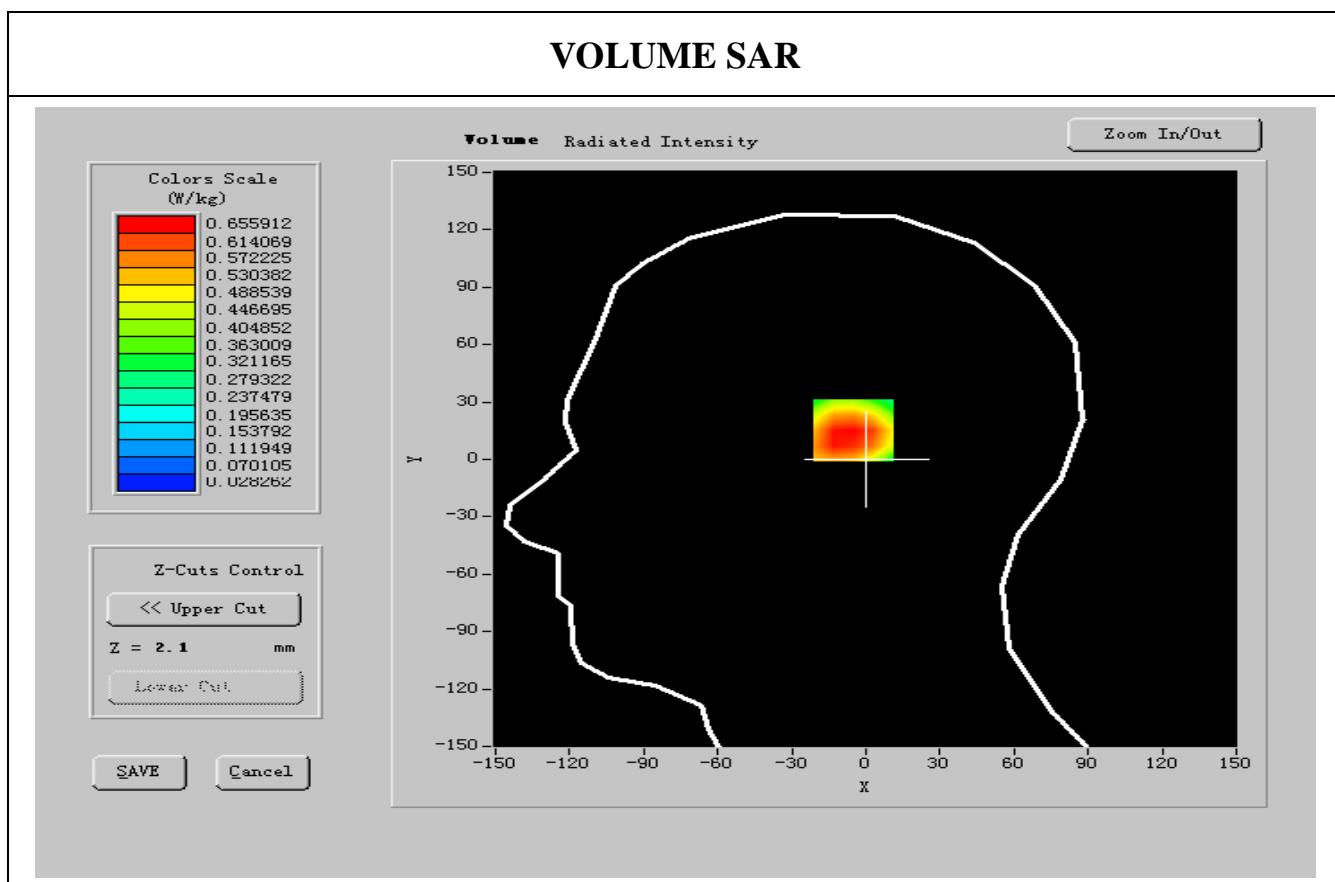
<b>Frequency (MHz)</b>	<b>848.599976</b>
<b>Relative permitivity (real part)</b>	<b>41.262023</b>
<b>Relative permitivity (imaginary part)</b>	<b>19.598200</b>
<b>Conductivity (S/m)</b>	<b>0.923946</b>
<b>Variation (%)</b>	<b>-1.000000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.66, 20.51, 28.36</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





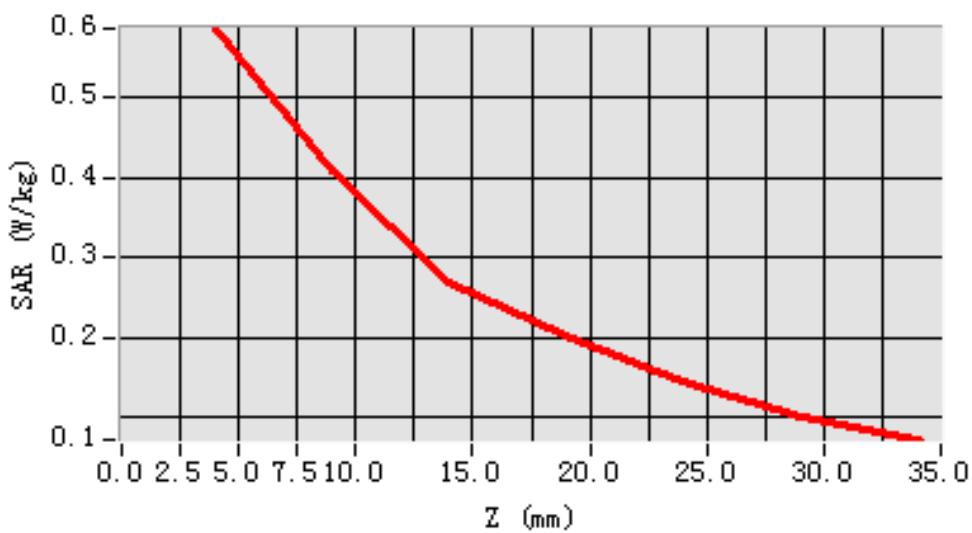
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.359632
SAR 1g (W/Kg)	0.571006

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.5510	0.4142	0.2664	0.2020	0.1543	0.1054

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





## **MEASUREMENT 13**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

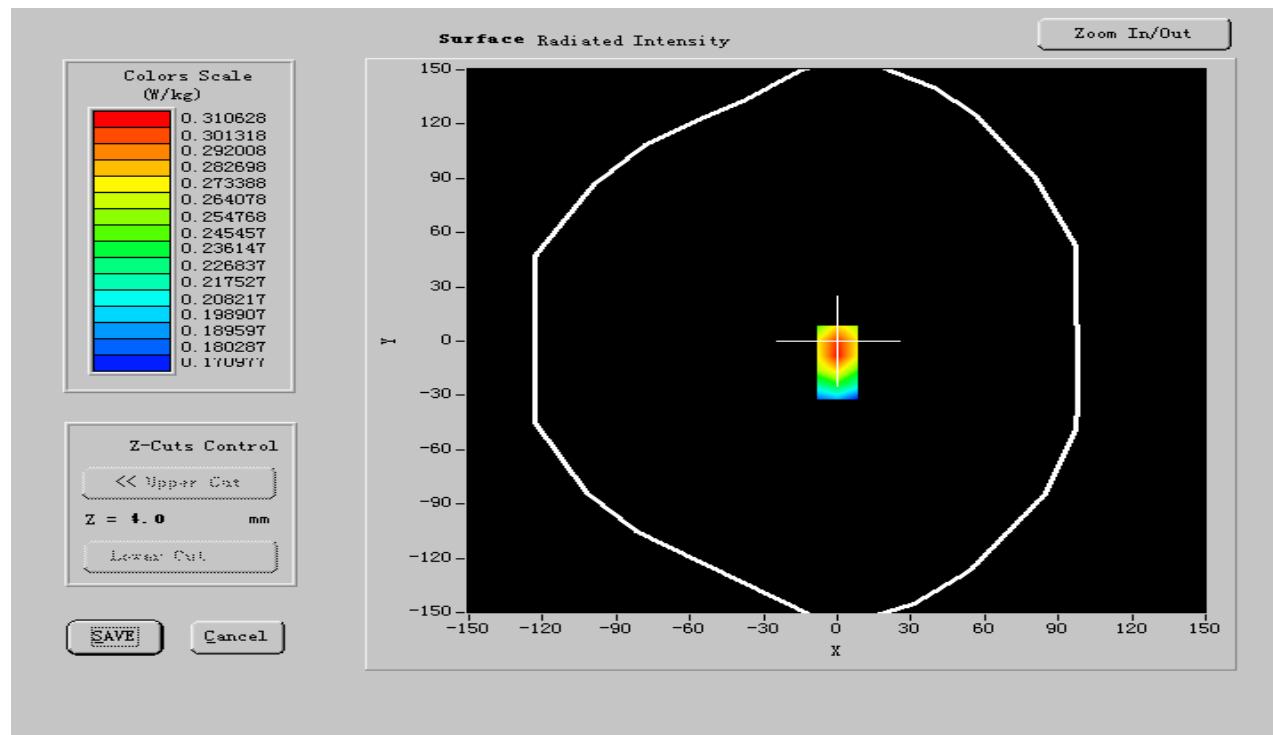
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

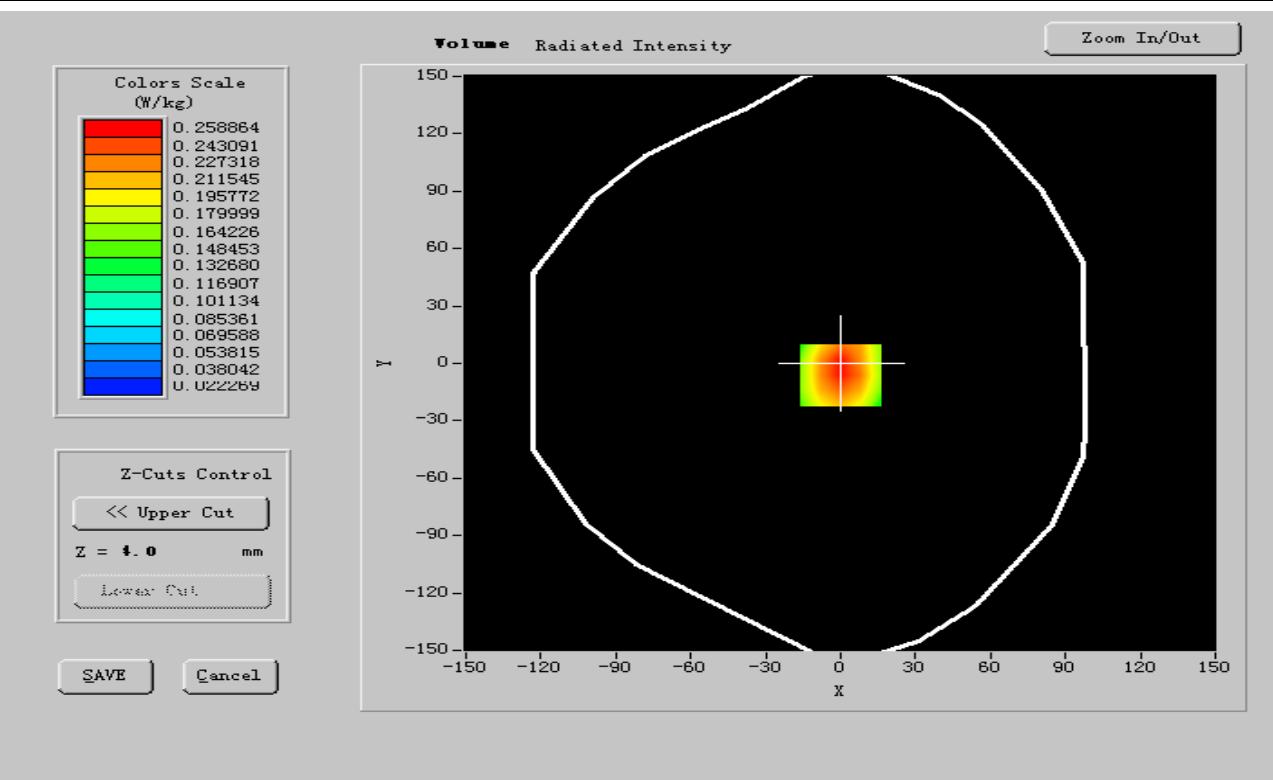
<b>Frequency (MHz)</b>	<b>824.200012</b>
<b>Relative permitivity (real part)</b>	<b>56.514000</b>
<b>Relative permitivity (imaginary part)</b>	<b>21.654150</b>
<b>Conductivity (S/m)</b>	<b>0.984519</b>
<b>Variation (%)</b>	<b>-2.120000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.00, 19.88, 27.77</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





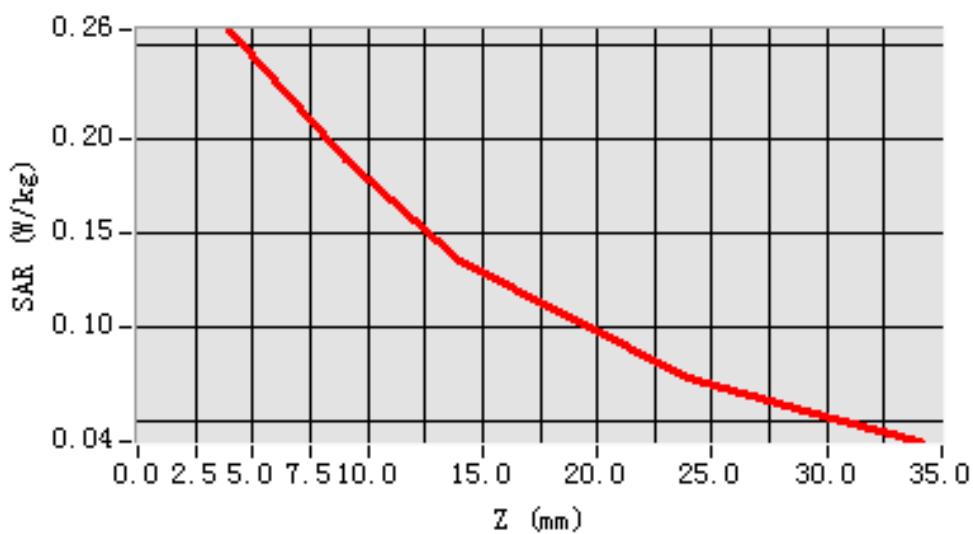
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.166891
SAR 1g (W/Kg)	0.251297

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.2512	0.1242	0.1464	0.1020	0.0631	0.0454

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





## **MEASUREMENT 14**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

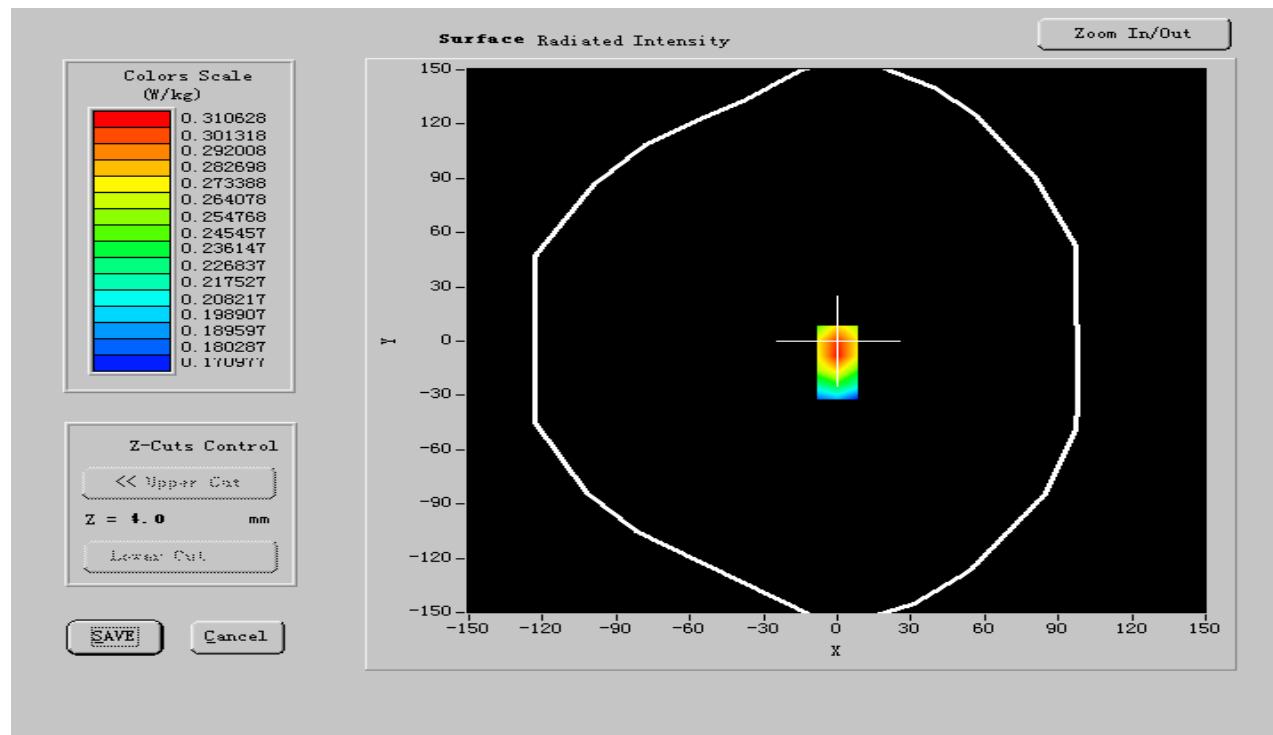
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

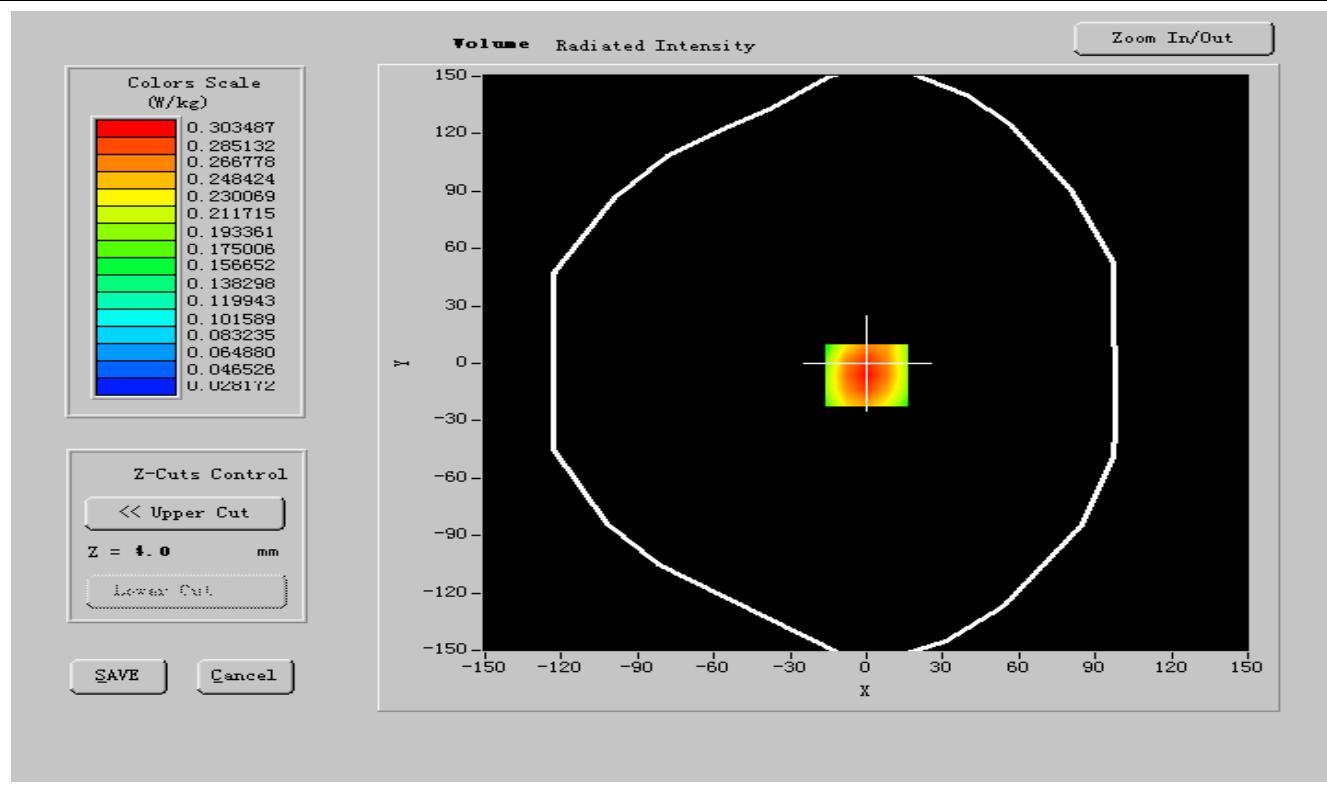
<b>Frequency (MHz)</b>	<b>836.400024</b>
<b>Relative permitivity (real part)</b>	<b>56.501935</b>
<b>Relative permitivity (imaginary part)</b>	<b>21.866249</b>
<b>Conductivity (S/m)</b>	<b>0.986052</b>
<b>Variation (%)</b>	<b>-2.120000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.00, 19.88, 27.77</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





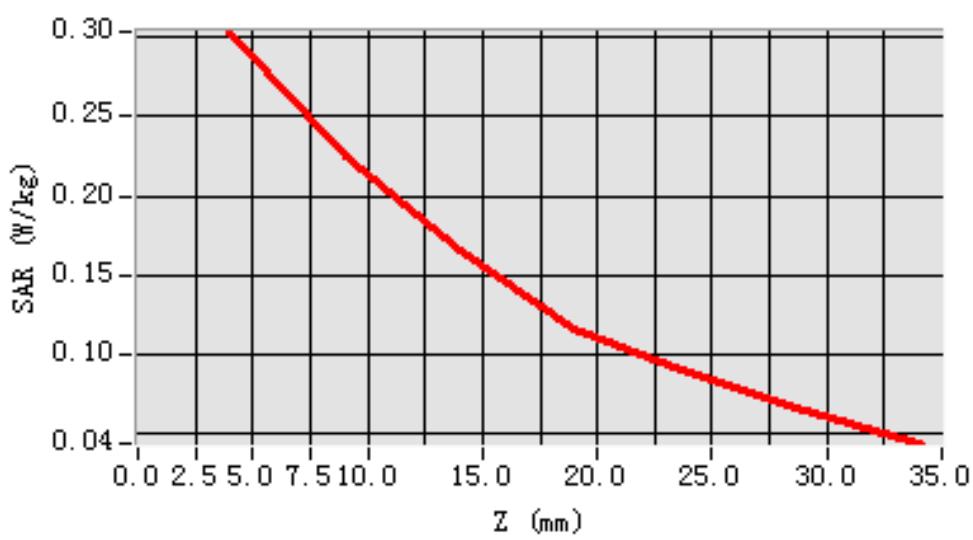
**Maximum location: X=-13.00, Y=-3.00**

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

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.2890	0.2342	0.1664	0.1120	0.0887	0.0422

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





## **MEASUREMENT 15**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

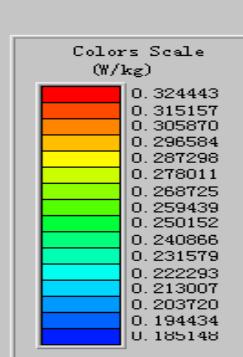
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

<b>Frequency (MHz)</b>	<b>848.599976</b>
<b>Relative permitivity (real part)</b>	<b>56.508121</b>
<b>Relative permitivity (imaginary part)</b>	<b>21.726601</b>
<b>Conductivity (S/m)</b>	<b>0.983288</b>
<b>Variation (%)</b>	<b>-1.120000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.00, 19.88, 27.77</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR

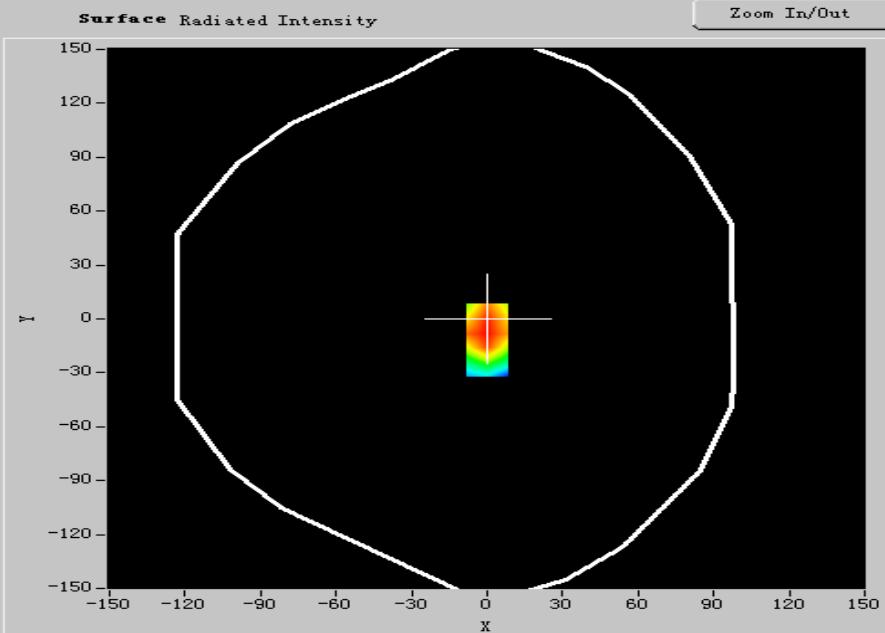


Z-Cuts Control

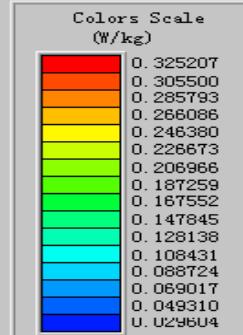
<< Upper Cut

Z = 4.0 mm

Lower Cut



## VOLUME SAR

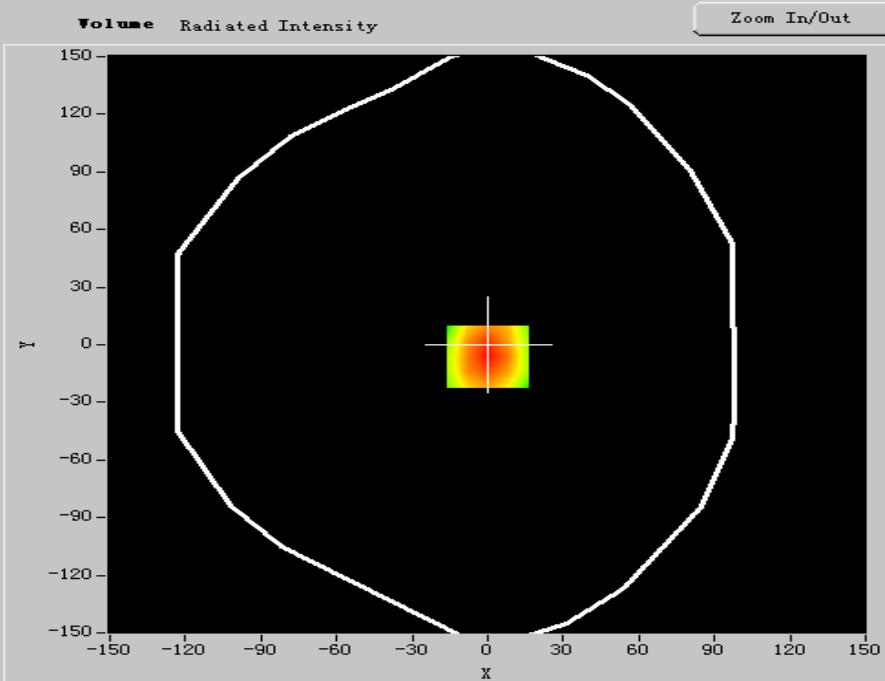


Z-Cuts Control

<< Upper Cut

Z = 4.0 mm

Lower Cut





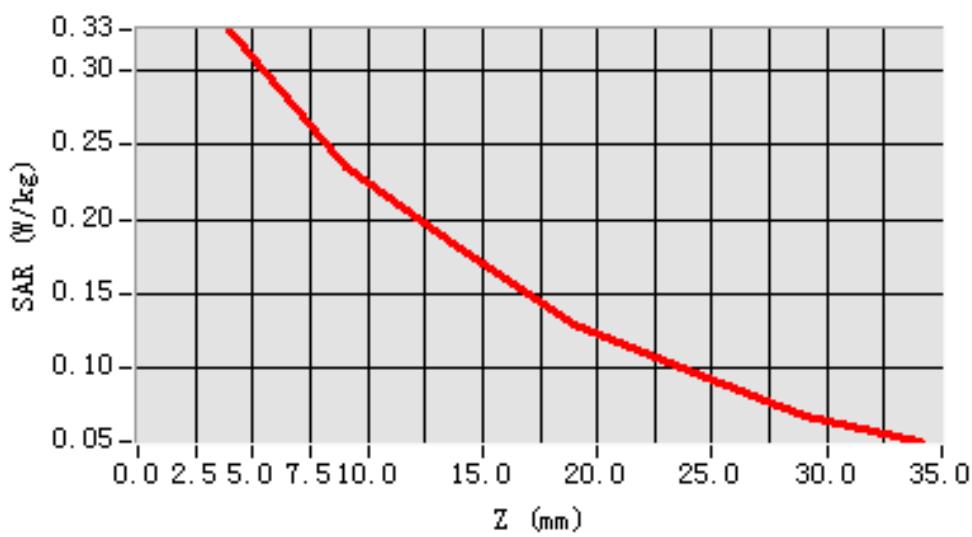
**Maximum location: X=-13.00, Y=-3.00**

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

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.3063	0.2322	0.1674	0.1420	0.1800	0.0573

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





## MEASUREMENT 16

Date of measurement: 24/9/2010

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
Device Position	FrontSide toward phantom
Band	GSM850
Channels	Low
Signal	GSM

### B. Instrumentations.

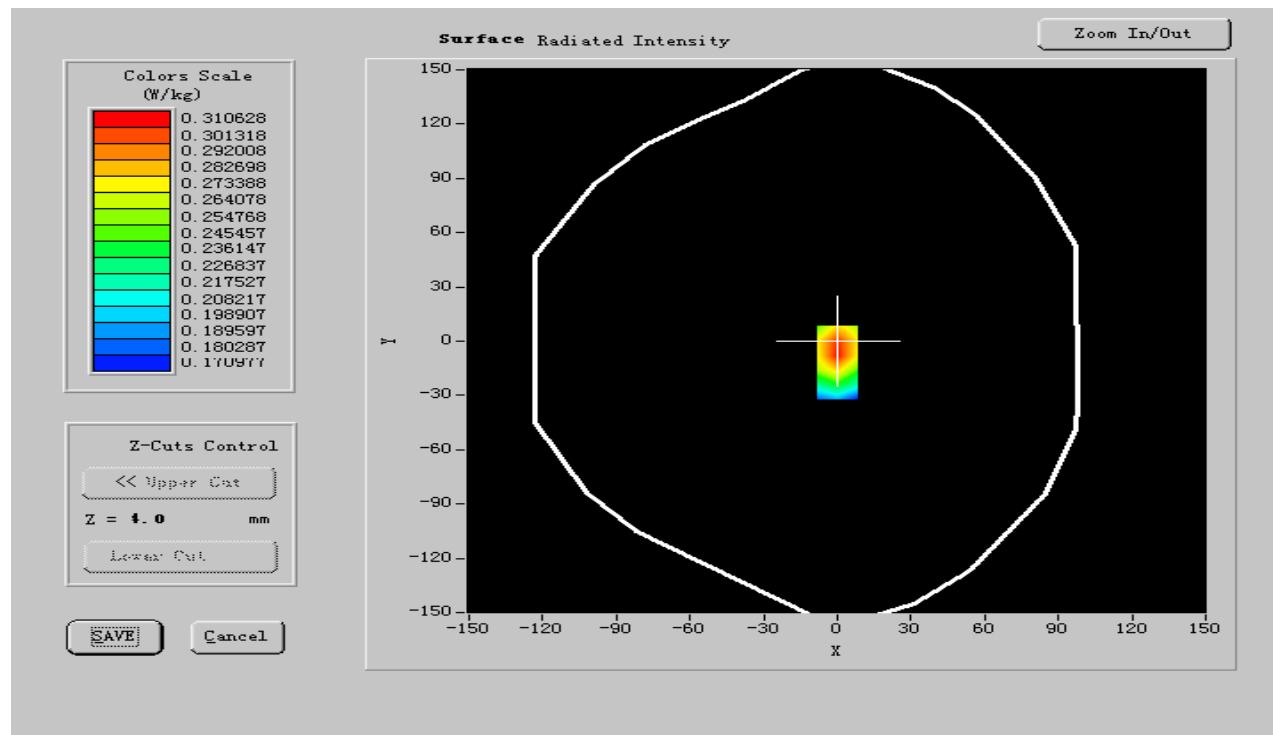
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

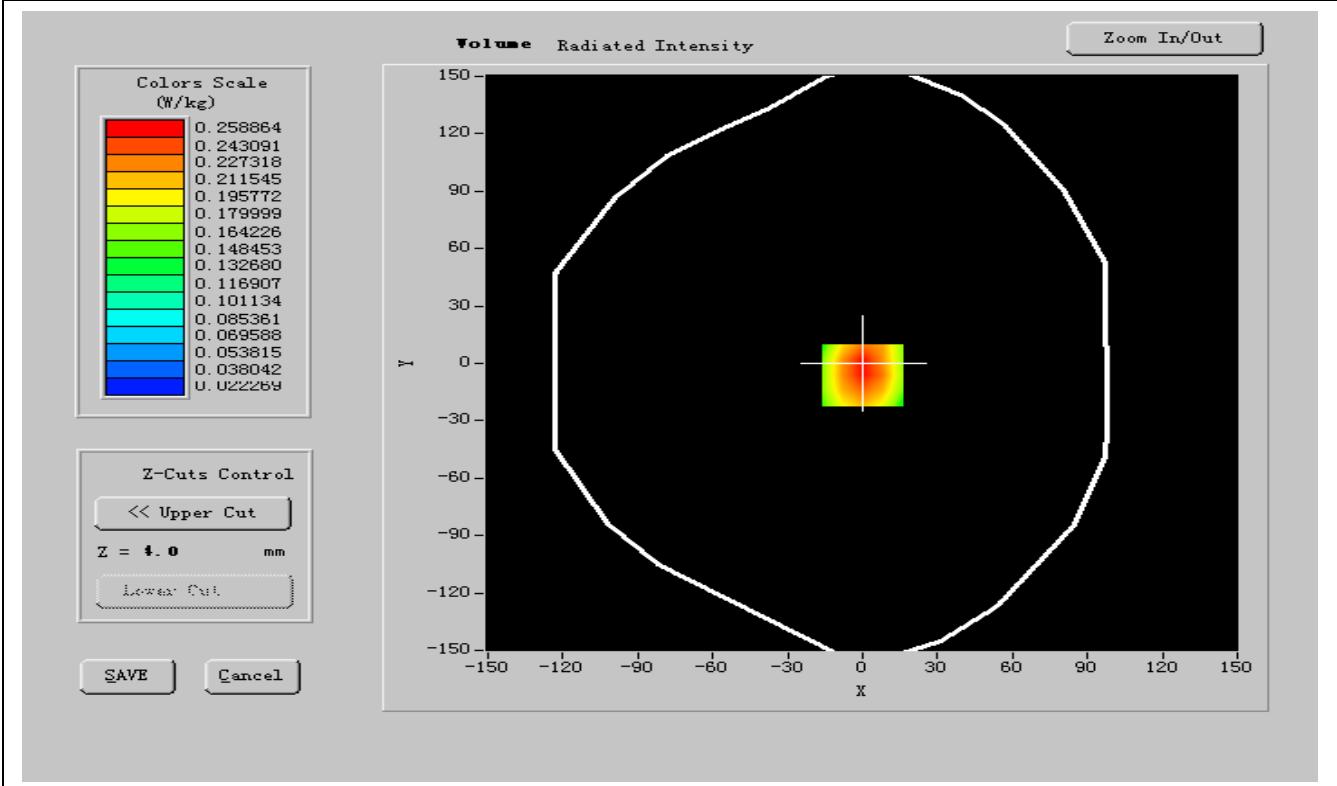
Frequency (MHz)	824.200012
Relative permitivity (real part)	56.514000
Relative permitivity (imaginary part)	21.654150
Conductivity (S/m)	0.984519
Variation (%)	-2.120000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.00, 19.88, 27.77
Crest factor:	1:8



## SURFACE SAR



## VOLUME SAR





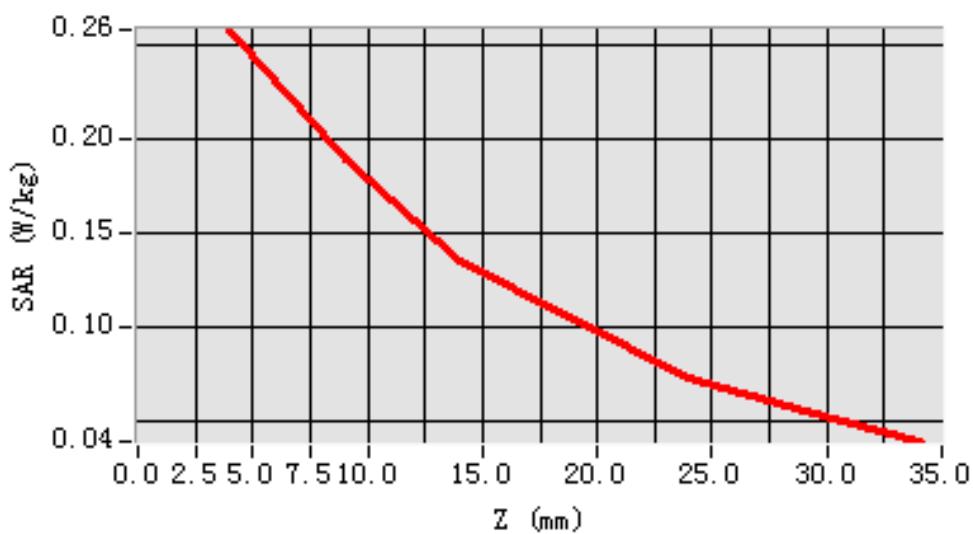
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.1543426
SAR 1g (W/Kg)	0.217234

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.2512	0.1242	0.1464	0.1020	0.0631	0.0454

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





## **MEASUREMENT 17**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

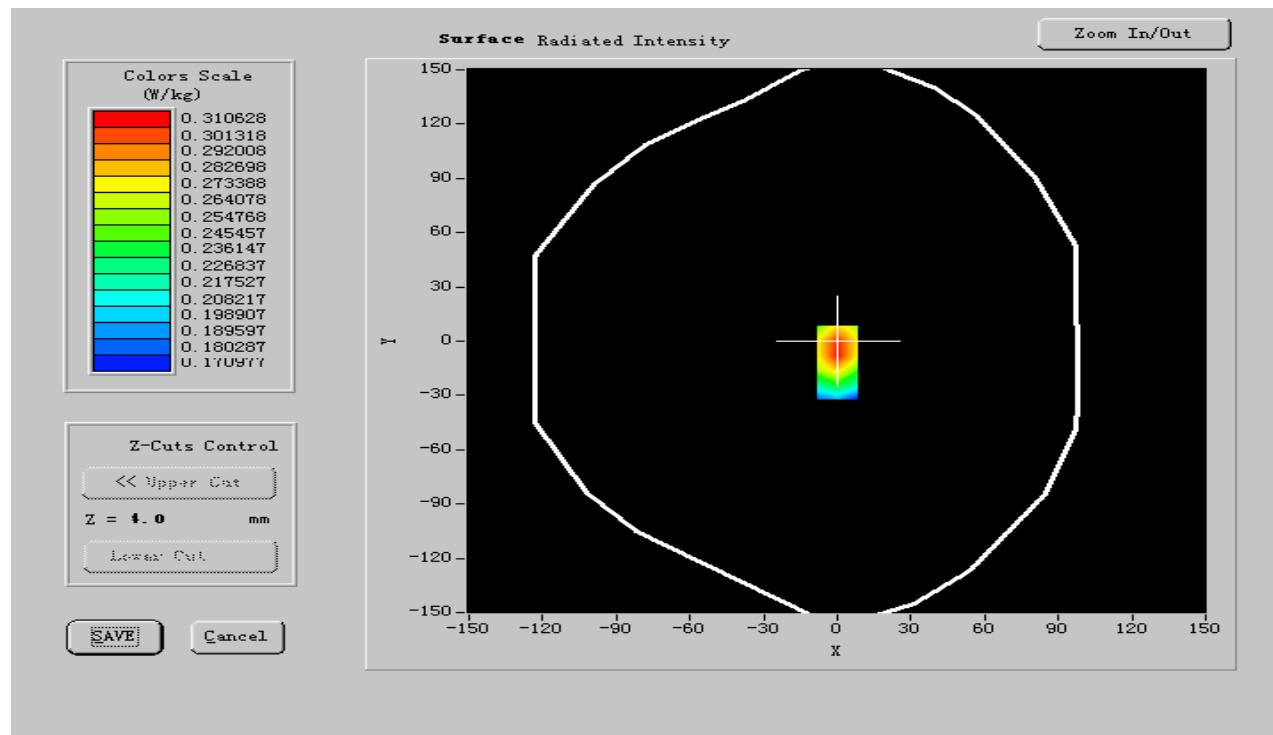
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

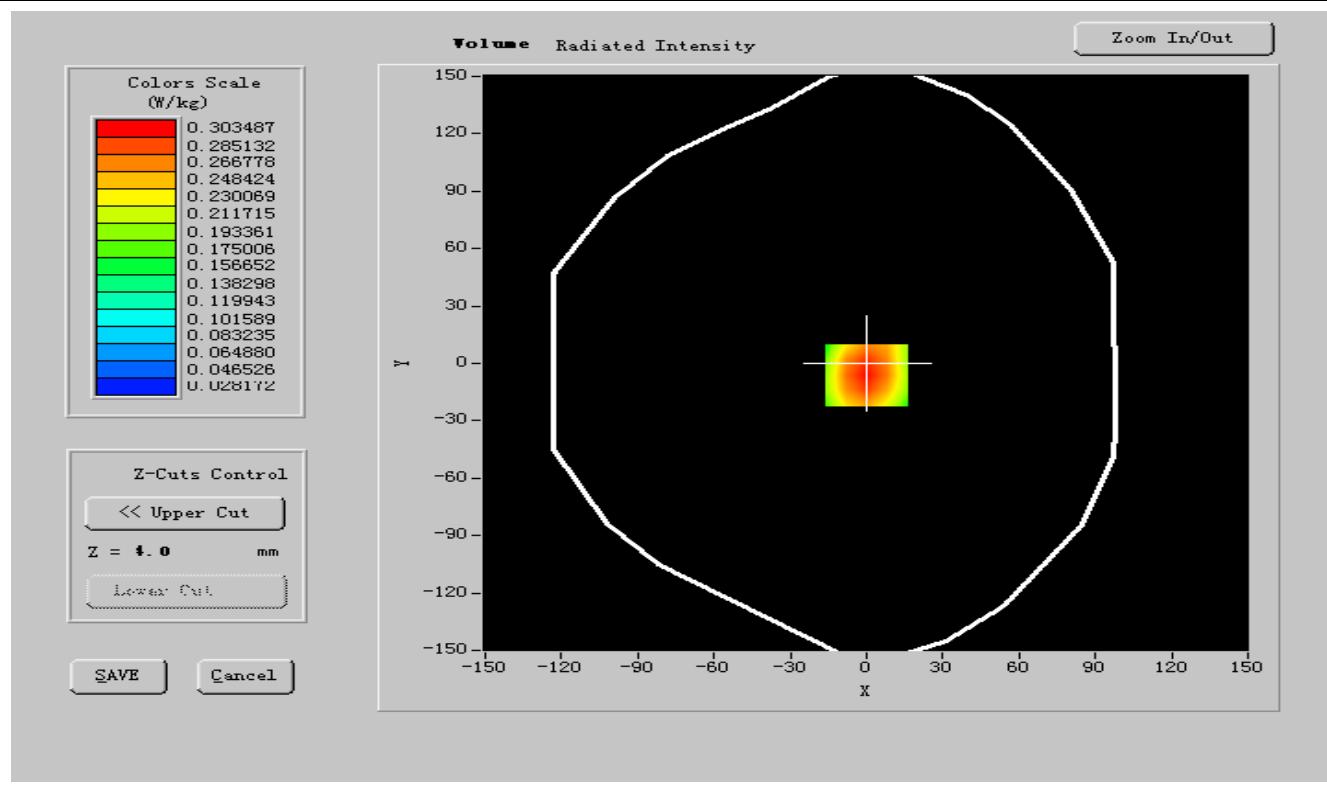
<b>Frequency (MHz)</b>	<b>836.400024</b>
<b>Relative permitivity (real part)</b>	<b>56.501935</b>
<b>Relative permitivity (imaginary part)</b>	<b>21.866249</b>
<b>Conductivity (S/m)</b>	<b>0.986052</b>
<b>Variation (%)</b>	<b>-2.120000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.00, 19.88, 27.77</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





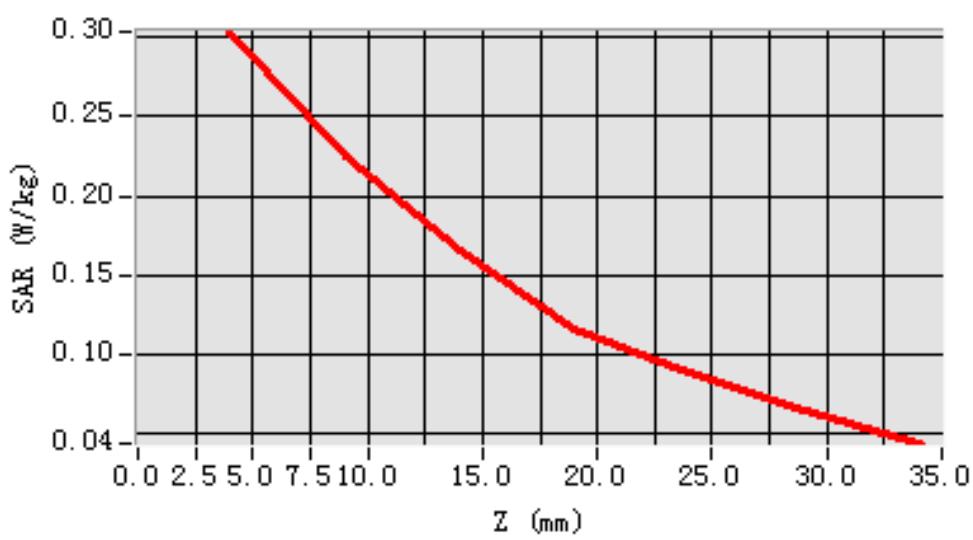
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.254352
SAR 1g (W/Kg)	0.239123

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.2890	0.2342	0.1664	0.1120	0.0887	0.0422

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





## MEASUREMENT 18

**Date of measurement:** 24/9/2010

**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.

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

### B. Instrumentations.

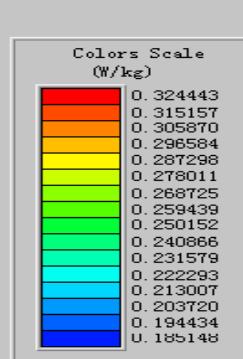
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

### C. SAR Measurement Results

<b>Frequency (MHz)</b>	<b>848.599976</b>
<b>Relative permitivity (real part)</b>	<b>56.508121</b>
<b>Relative permitivity (imaginary part)</b>	<b>21.726601</b>
<b>Conductivity (S/m)</b>	<b>0.983288</b>
<b>Variation (%)</b>	<b>-1.120000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.00, 19.88, 27.77</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR

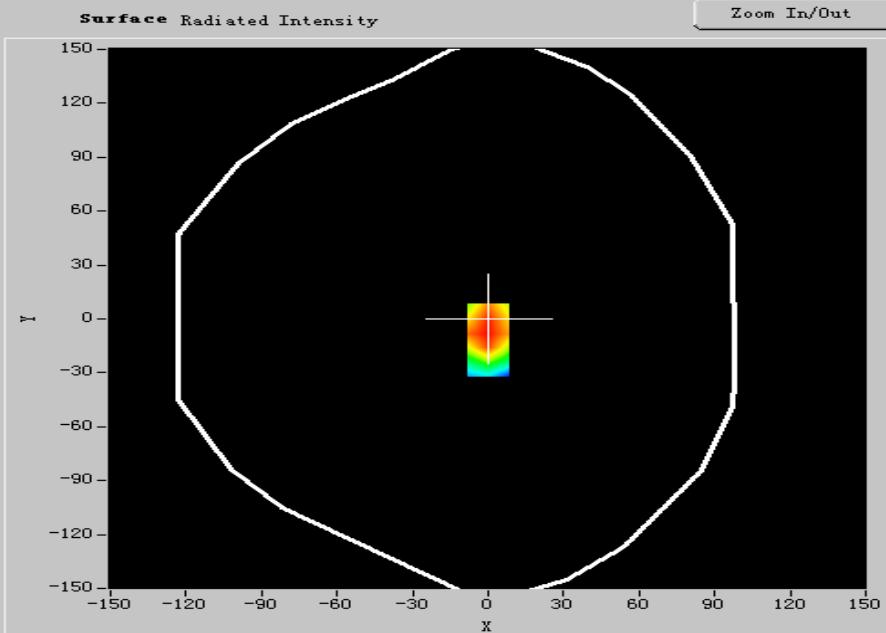


Z-Cuts Control

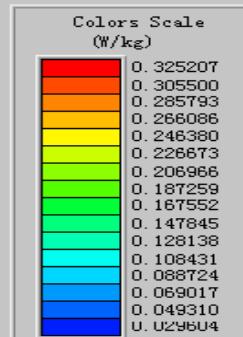
<< Upper Cut

Z = 4.0 mm

Lower Cut



## VOLUME SAR

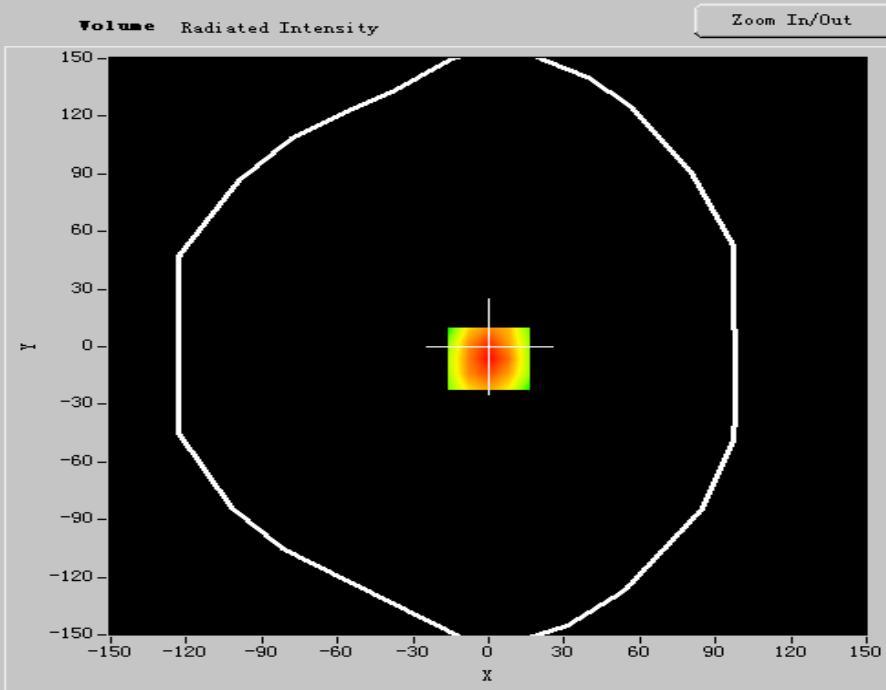


Z-Cuts Control

<< Upper Cut

Z = 4.0 mm

Lower Cut





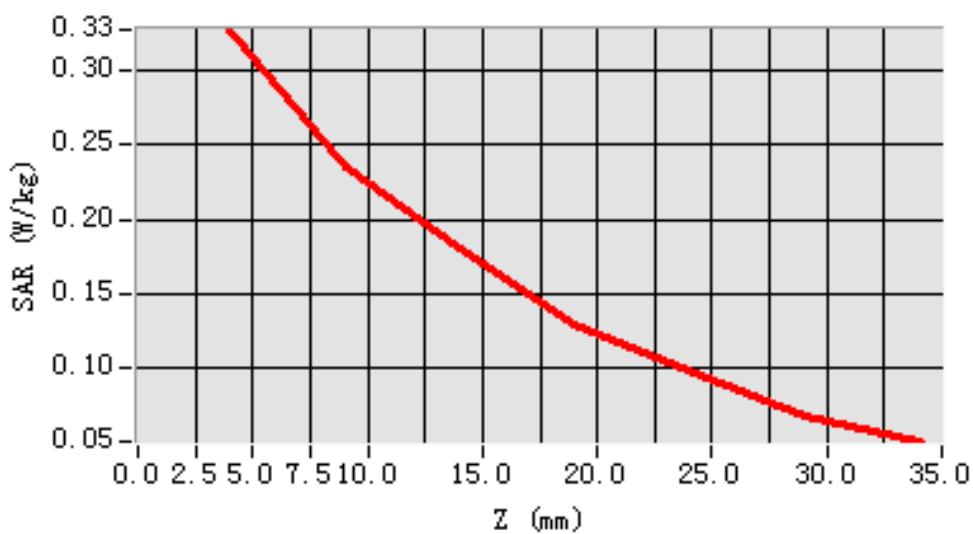
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.221345
SAR 1g (W/Kg)	0.286543

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.3063	0.2322	0.1674	0.1420	0.1800	0.0573

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





## MEASUREMENT 19

Date of measurement: 24/9/2010

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
Device Position	FrontSide toward phantom
Band	GPRS850
Channels	Low
Signal	GPRS

### B. Instrumentations.

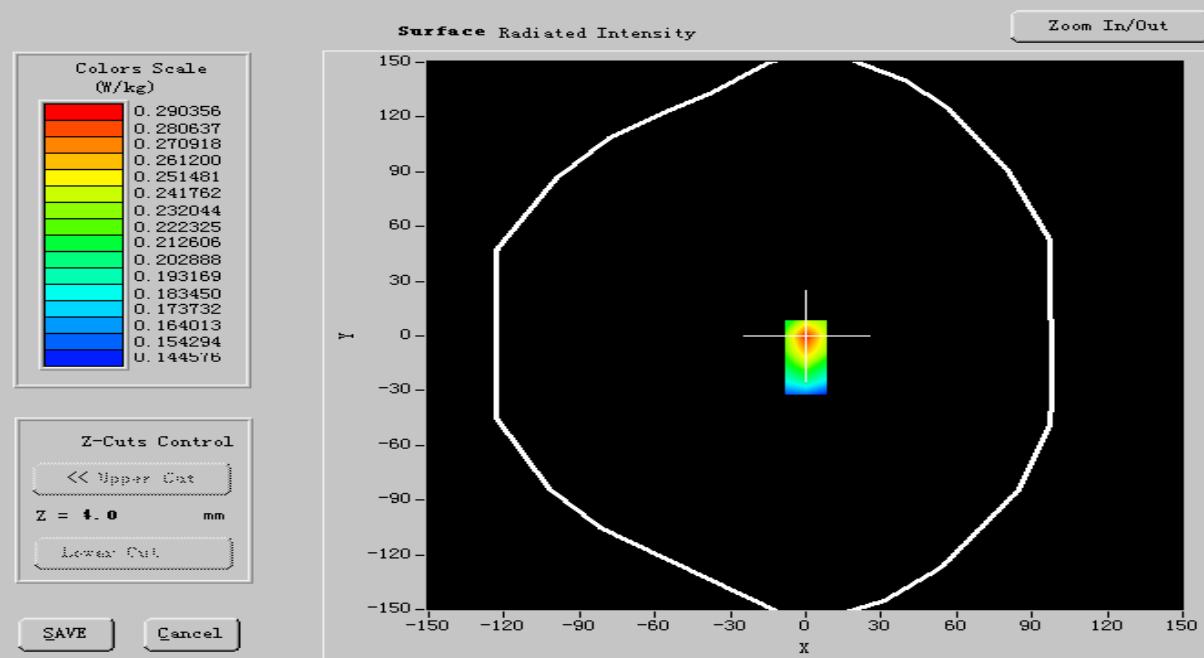
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

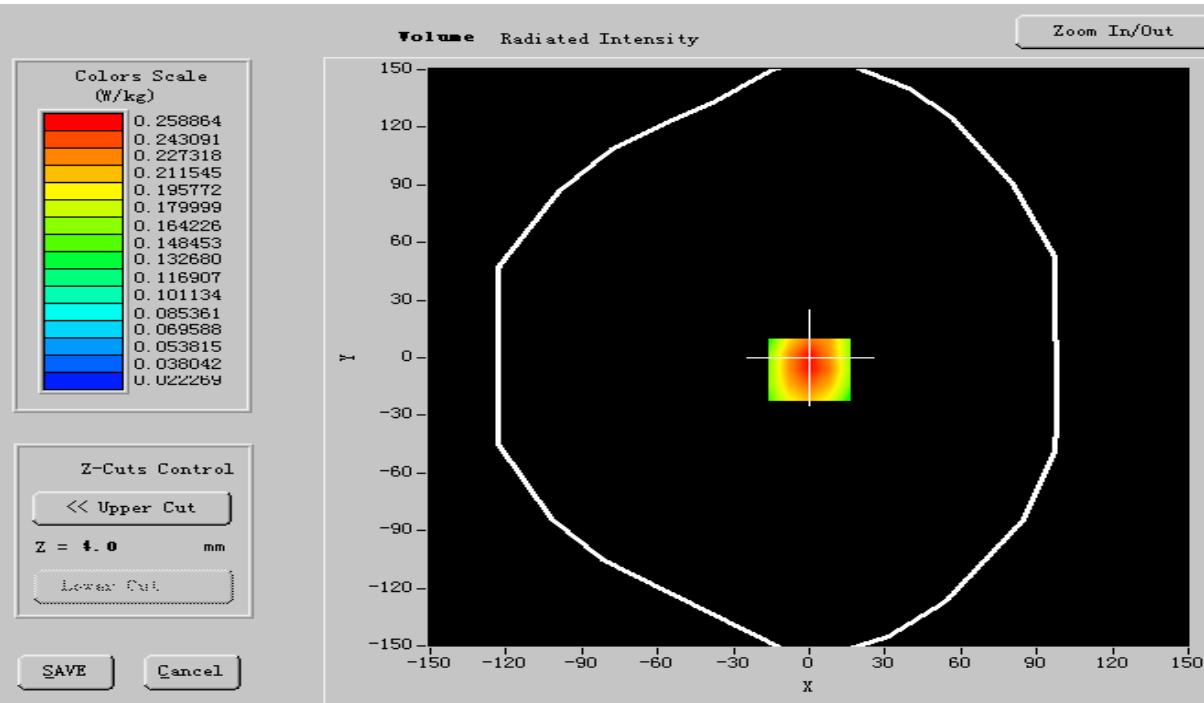
Frequency (MHz)	824.200012
Relative permitivity (real part)	56.584000
Relative permitivity (imaginary part)	21.654150
Conductivity (S/m)	0.971519
Variation (%)	-1.120000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.00, 19.88, 27.77
Crest factor:	1:4



## SURFACE SAR



## VOLUME SAR





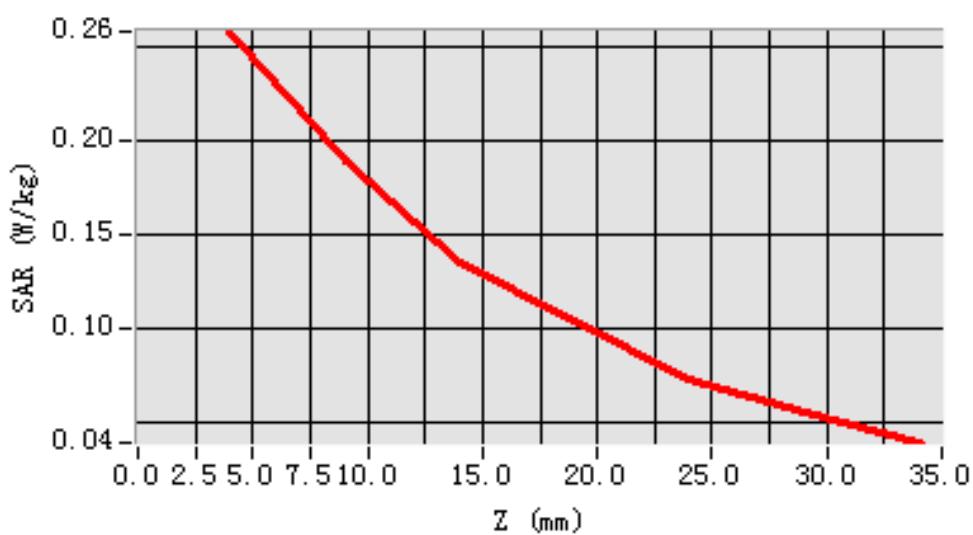
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.161258
SAR 1g (W/Kg)	0.287832

### Z Axis Scan

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

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





## MEASUREMENT 20

Date of measurement: 24/9/2010

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
Device Position	FrontSide toward phantom
Band	GPRS850
Channels	Middle
Signal	GPRS

### B. Instrumentations.

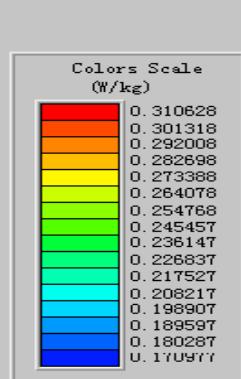
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.501999
Relative permitivity (imaginary part)	21.866249
Conductivity (S/m)	1.006342
Variation (%)	-0.200000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.00, 19.88, 27.77
Crest factor:	1:4



## SURFACE SAR

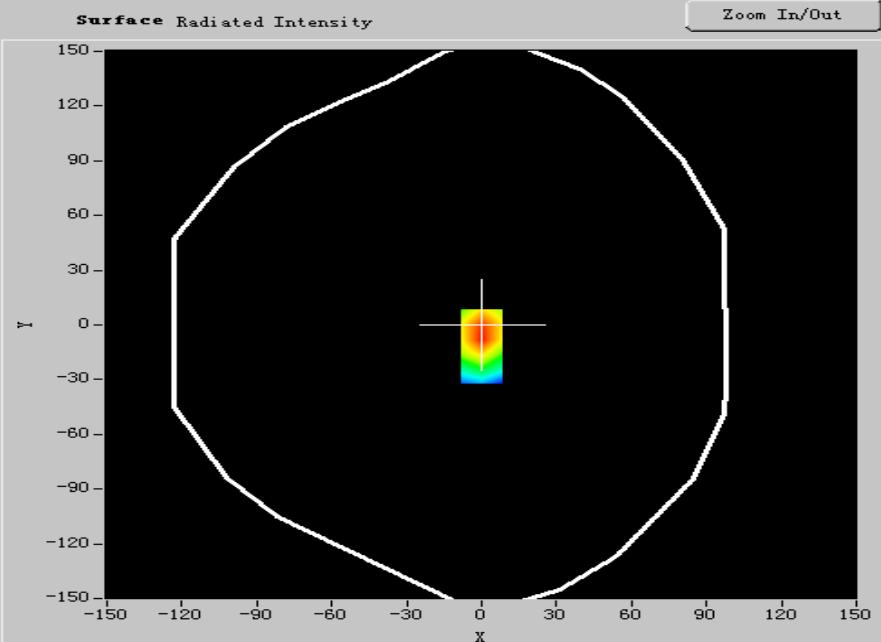


Z-Cuts Control

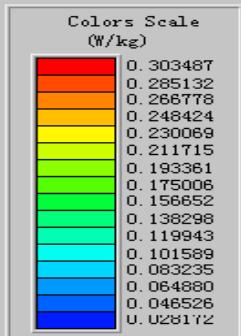
<< Upper Cut

Z = 4.0 mm

Lower Cut



## VOLUME SAR

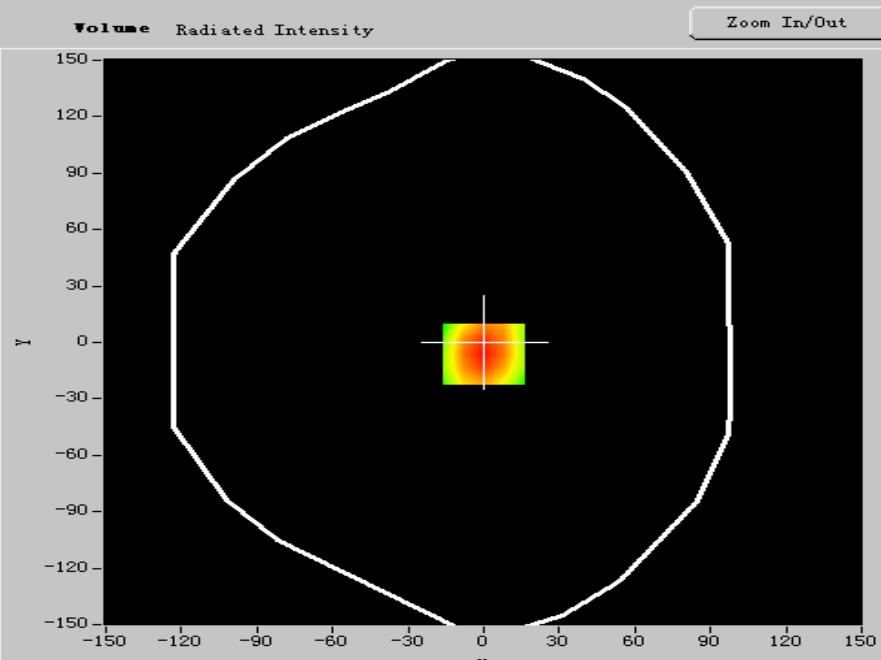


Z-Cuts Control

<< Upper Cut

Z = 4.0 mm

Lower Cut





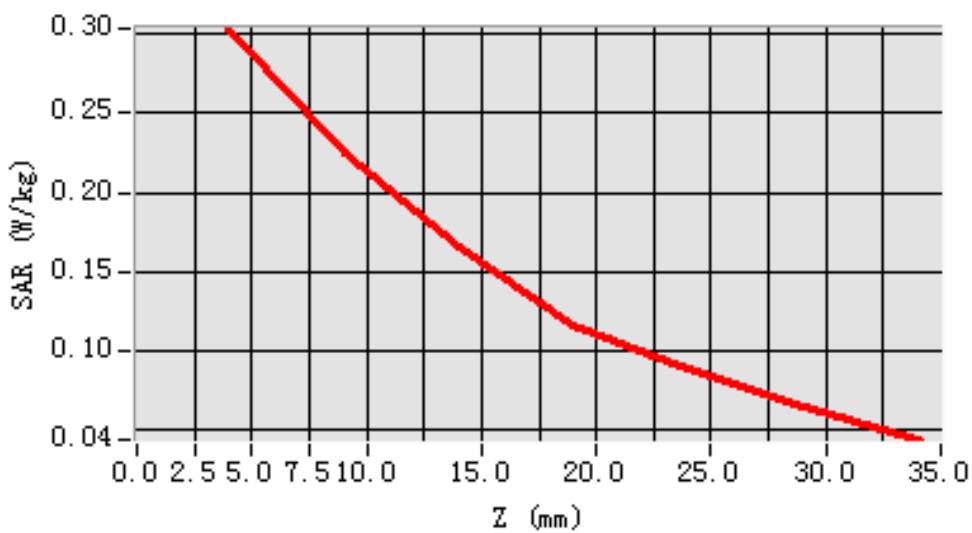
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.233695
SAR 1g (W/Kg)	0.292963

### Z Axis Scan

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

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





## **MEASUREMENT 21**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

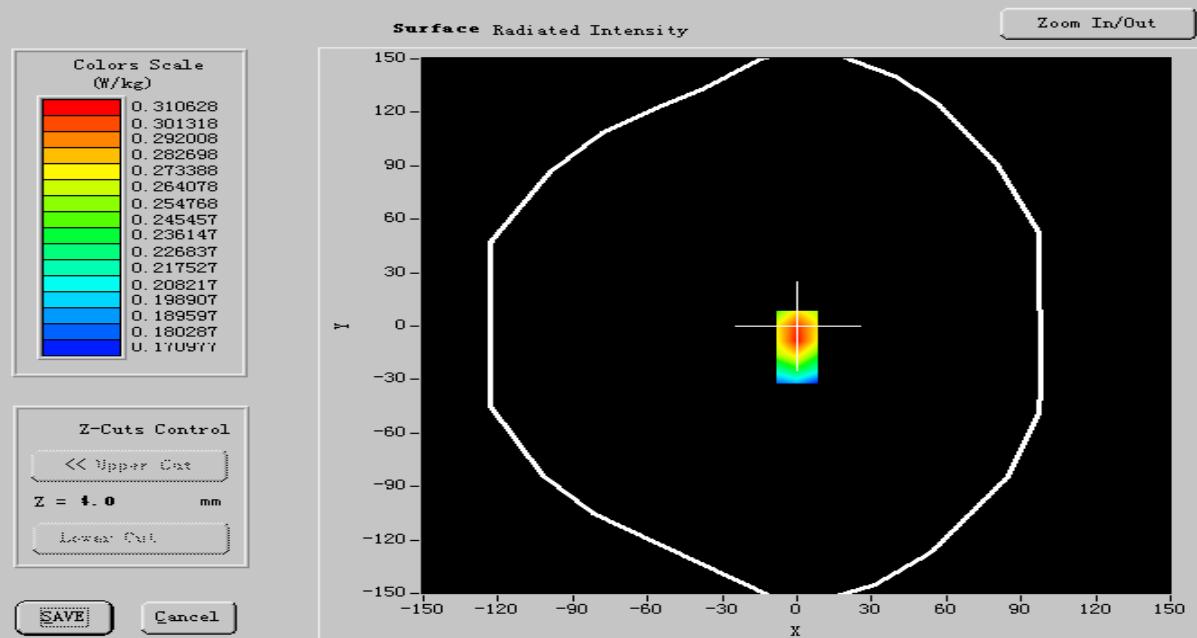
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

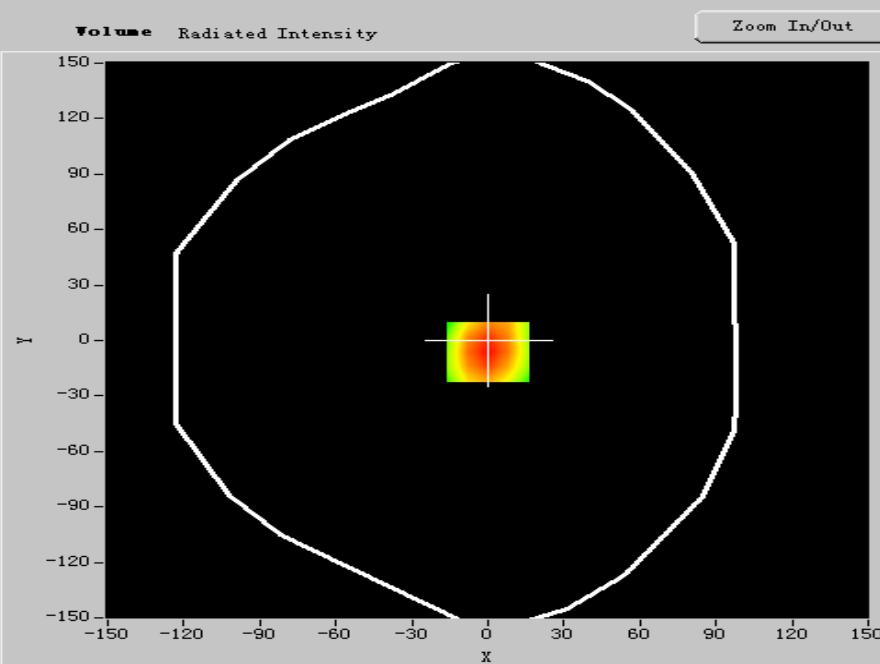
<b>Frequency (MHz)</b>	<b>848.599976</b>
<b>Relative permitivity (real part)</b>	<b>55.576000</b>
<b>Relative permitivity (imaginary part)</b>	<b>21.726601</b>
<b>Conductivity (S/m)</b>	<b>0.974288</b>
<b>Variation (%)</b>	<b>-0.220000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.00, 19.88, 27.77</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



## VOLUME SAR





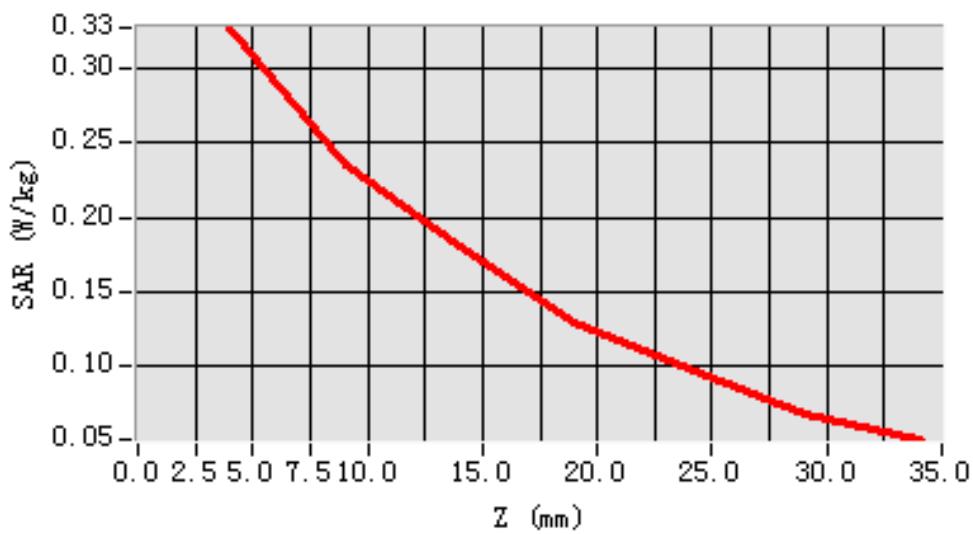
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.211258
SAR 1g (W/Kg)	0.323258

### Z Axis Scan

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

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





## **MEASUREMENT 22**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

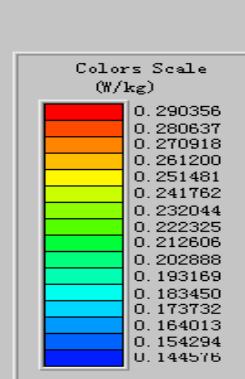
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

<b>Frequency (MHz)</b>	<b>824.200012</b>
<b>Relative permitivity (real part)</b>	<b>56.584000</b>
<b>Relative permitivity (imaginary part)</b>	<b>21.654150</b>
<b>Conductivity (S/m)</b>	<b>0.971519</b>
<b>Variation (%)</b>	<b>-1.120000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.00, 19.88, 27.77</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



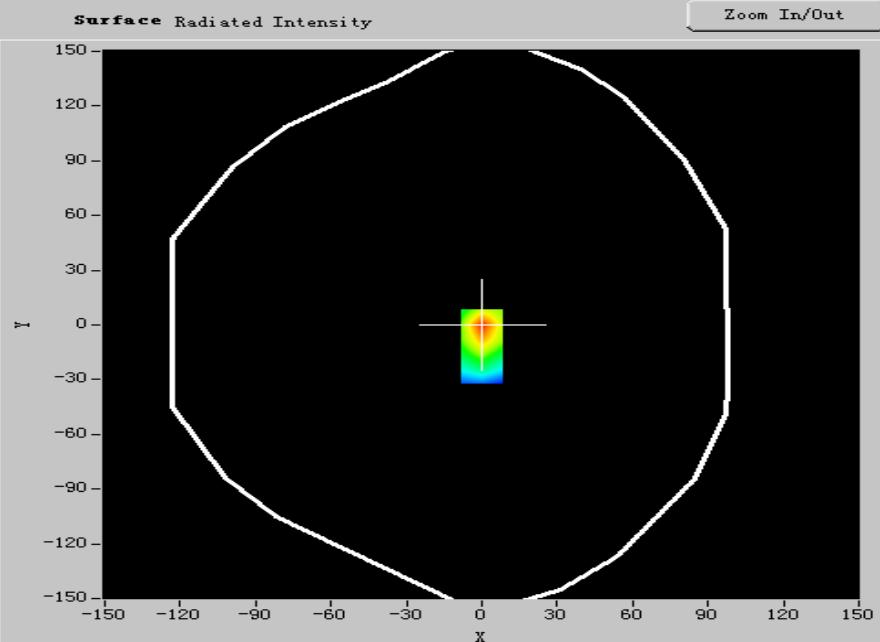
Z-Cuts Control

<< Upper Cut

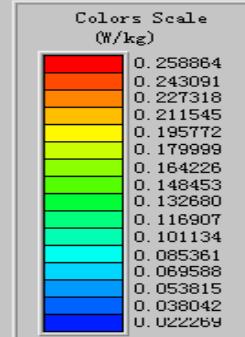
Z = 4.0 mm

Lower Cut

SAVE Cancel



## VOLUME SAR



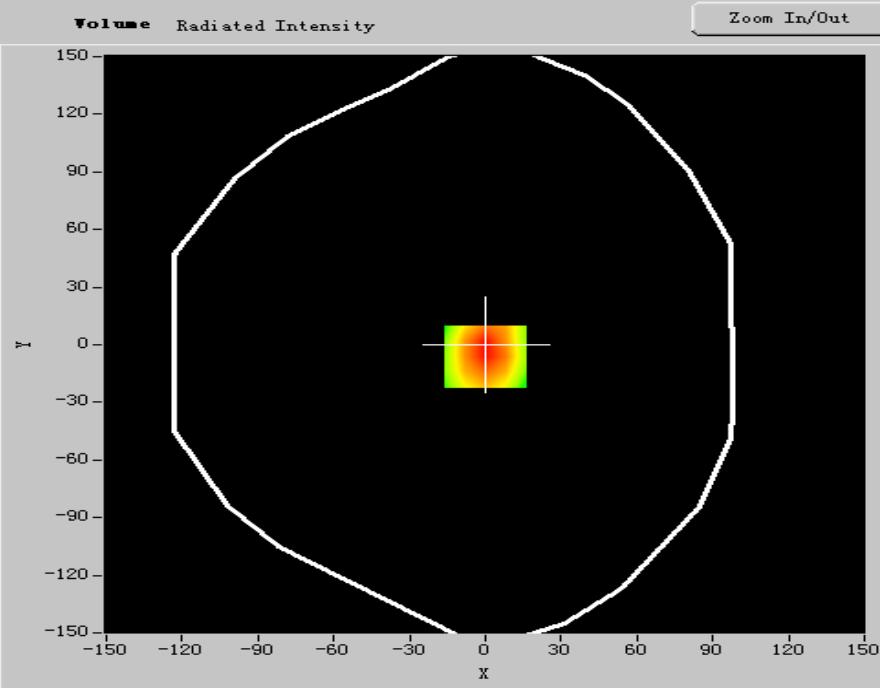
Z-Cuts Control

<< Upper Cut

Z = 4.0 mm

Lower Cut

SAVE Cancel





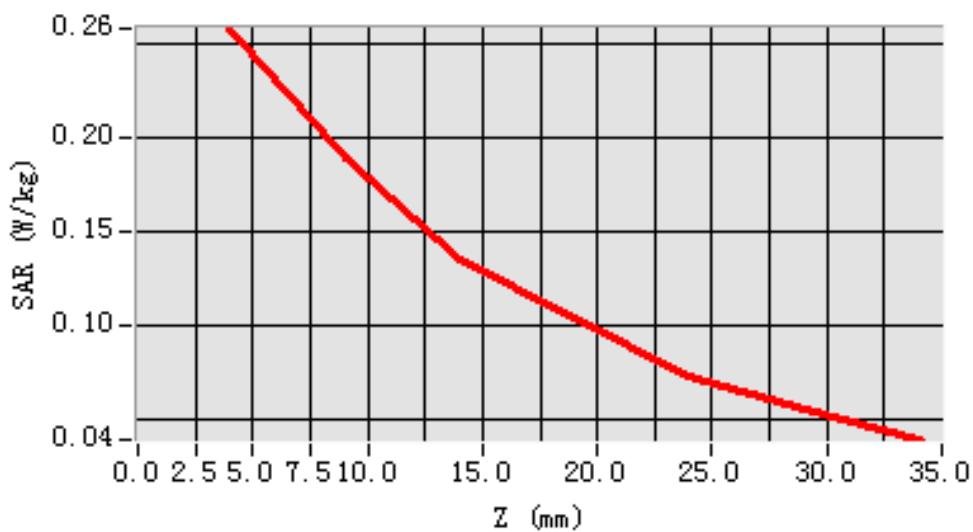
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.161258
SAR 1g (W/Kg)	0.257832

### Z Axis Scan

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

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





## **MEASUREMENT 23**

**Date of measurement: 24/9/2010**

**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.**

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

### **B. Instrumentations.**

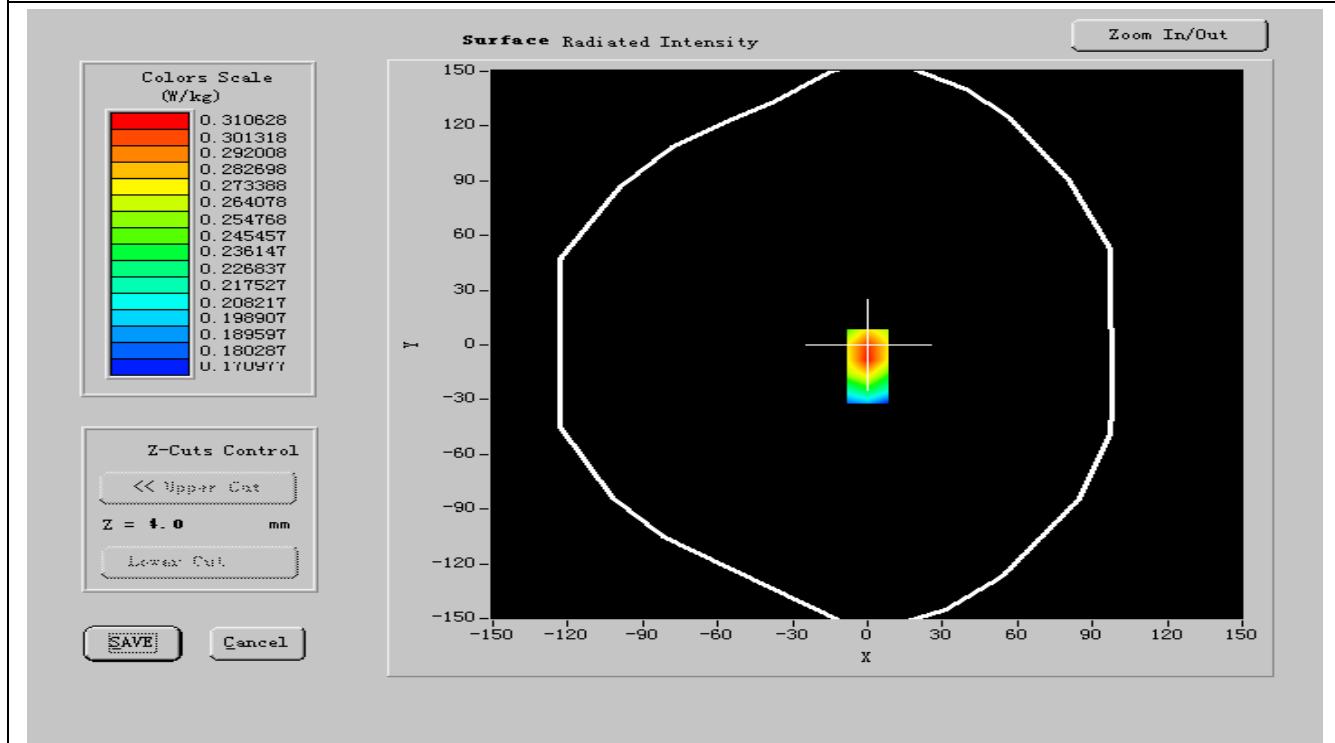
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 835</b>	<b>Antennessa (DIP132,SN 48/05)</b>	<b>Calibration Due: 02/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

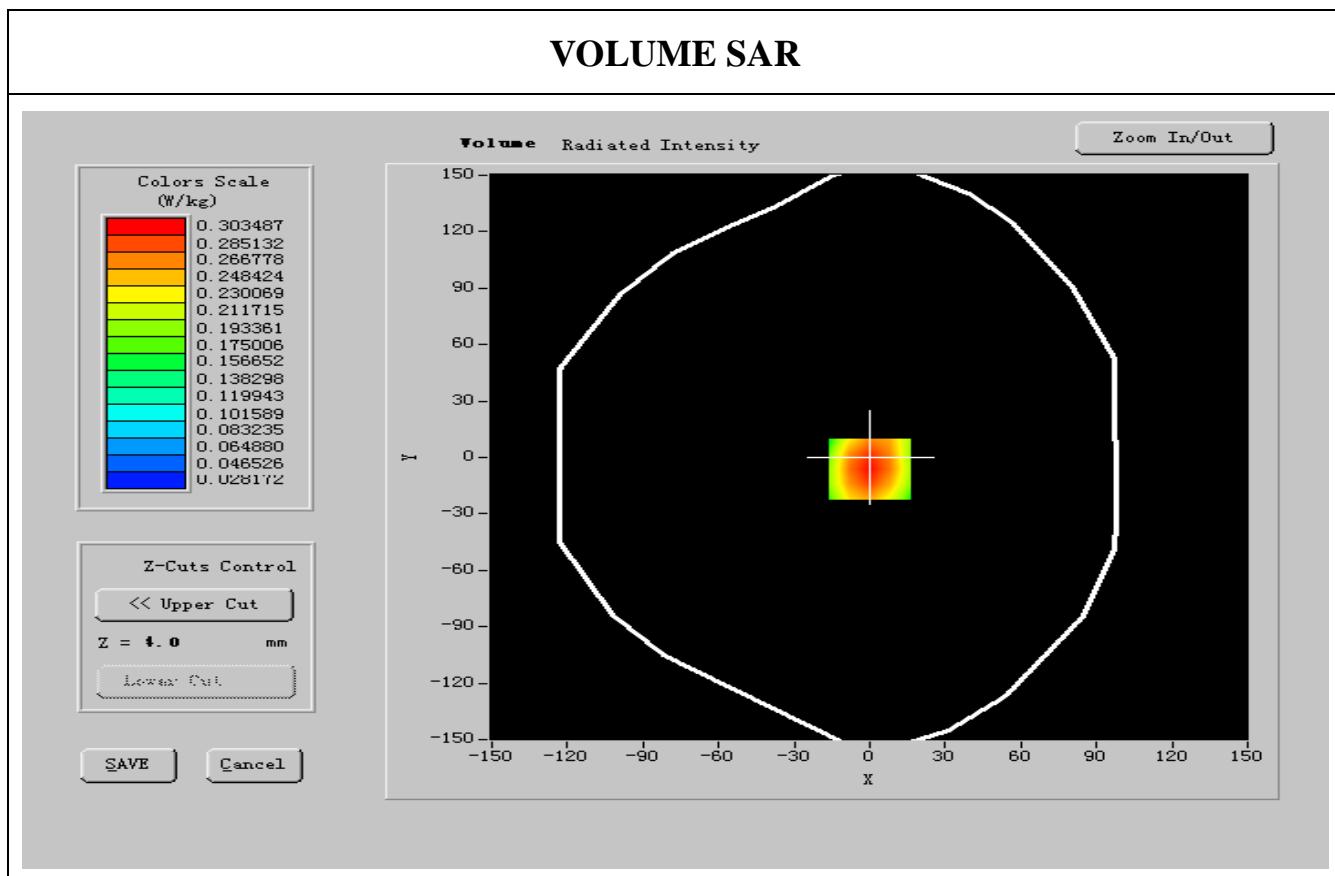
<b>Frequency (MHz)</b>	<b>836.400024</b>
<b>Relative permitivity (real part)</b>	<b>55.501999</b>
<b>Relative permitivity (imaginary part)</b>	<b>21.866249</b>
<b>Conductivity (S/m)</b>	<b>1.006342</b>
<b>Variation (%)</b>	<b>-0.200000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>20.00, 19.88, 27.77</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



## VOLUME SAR





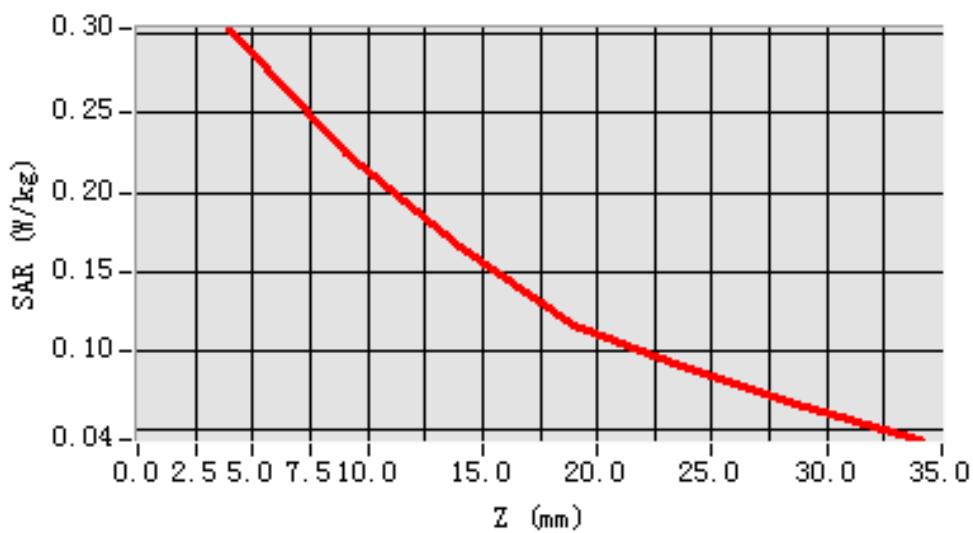
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.275467
SAR 1g (W/Kg)	0.252967

### Z Axis Scan

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

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





## MEASUREMENT 24

Date of measurement: 24/9/2010

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
Device Position	FrontSide toward phantom
Band	GPRS850
Channels	High
Signal	GPRS

### B. Instrumentations.

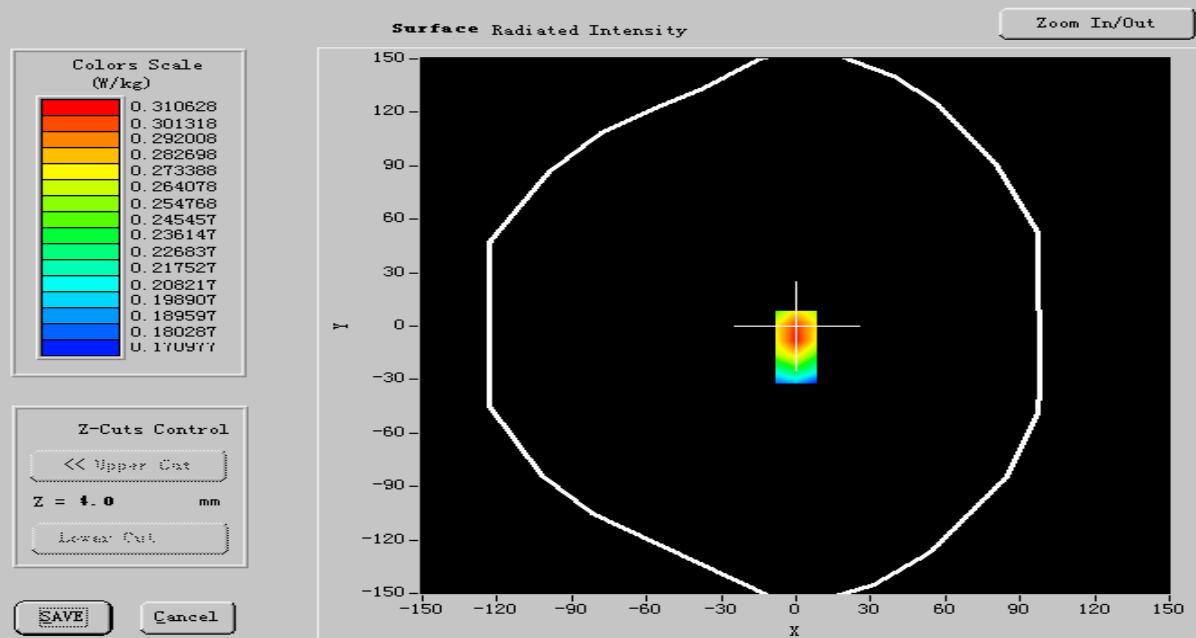
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
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 (DIP132,SN 48/05)	Calibration Due: 02/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

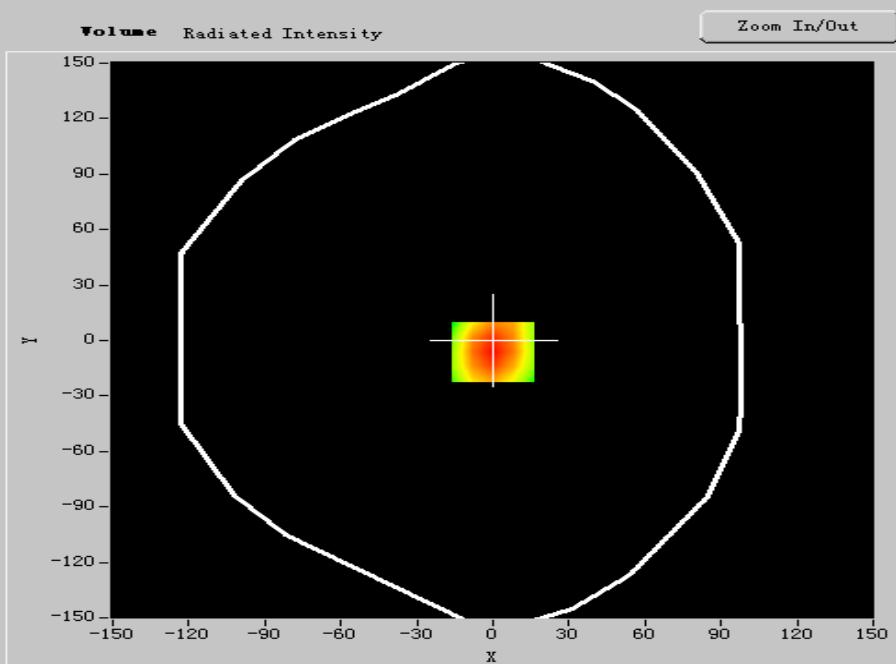
Frequency (MHz)	848.599976
Relative permitivity (real part)	55.576000
Relative permitivity (imaginary part)	21.726601
Conductivity (S/m)	0.974288
Variation (%)	-0.220000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.00, 19.88, 27.77
Crest factor:	1:4



## SURFACE SAR



## VOLUME SAR





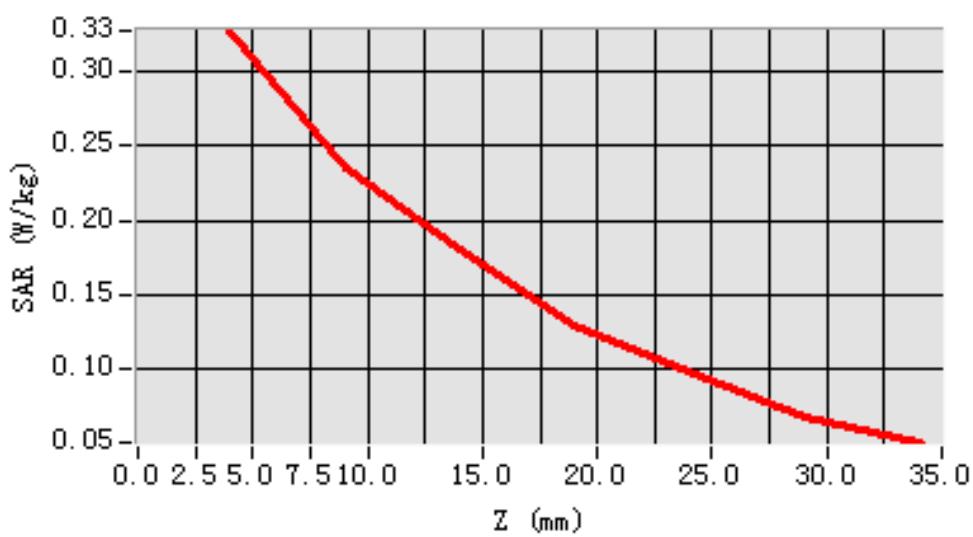
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.211258
SAR 1g (W/Kg)	0.301256

### Z Axis Scan

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

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





## II. 1900MHz Band RESULTS

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



Measurement 20: FrontSide toward phantom 15mm, Middle Channel in GPRS1900 mode(Bottom)

Measurement 21: FrontSide toward phantom 15mm, High Channel in GPRS1900 mode(Bottom)

Measurement 22: FrontSide toward phantom 15mm, Low Channel in GPRS1900 mode Top)

Measurement 23: FrontSide toward phantom 15mm, Middle Channel in GPRS1900 mode(Top)

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



## **MEASUREMENT 1**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

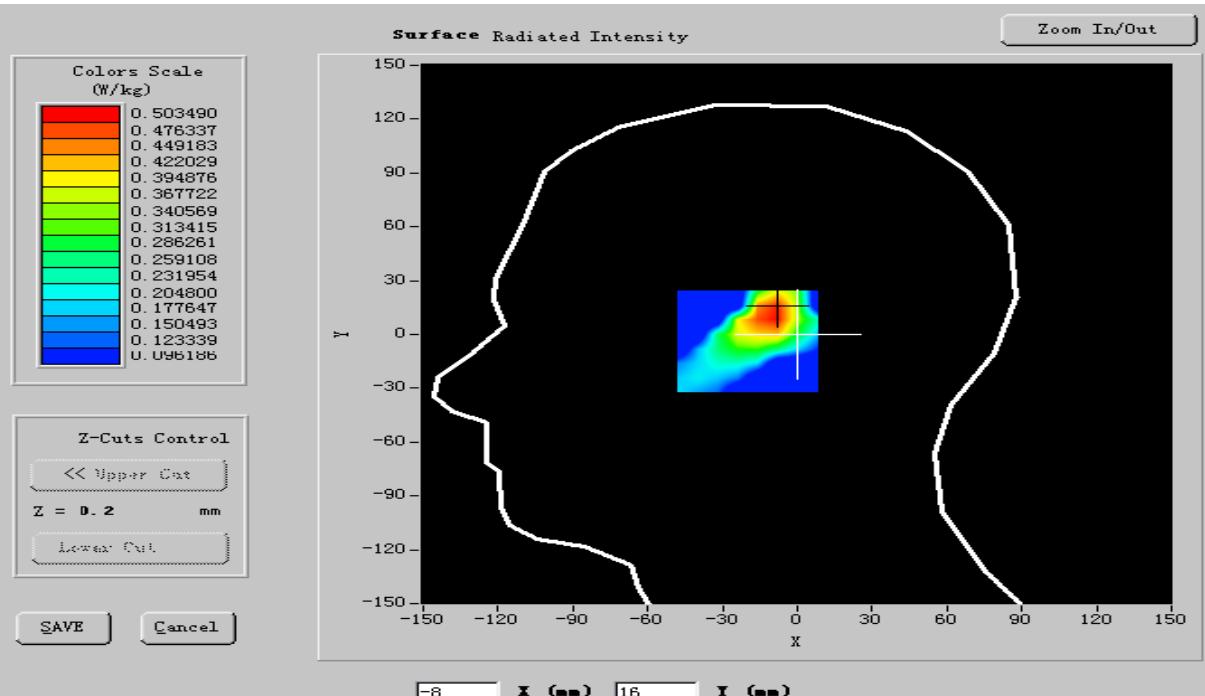
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

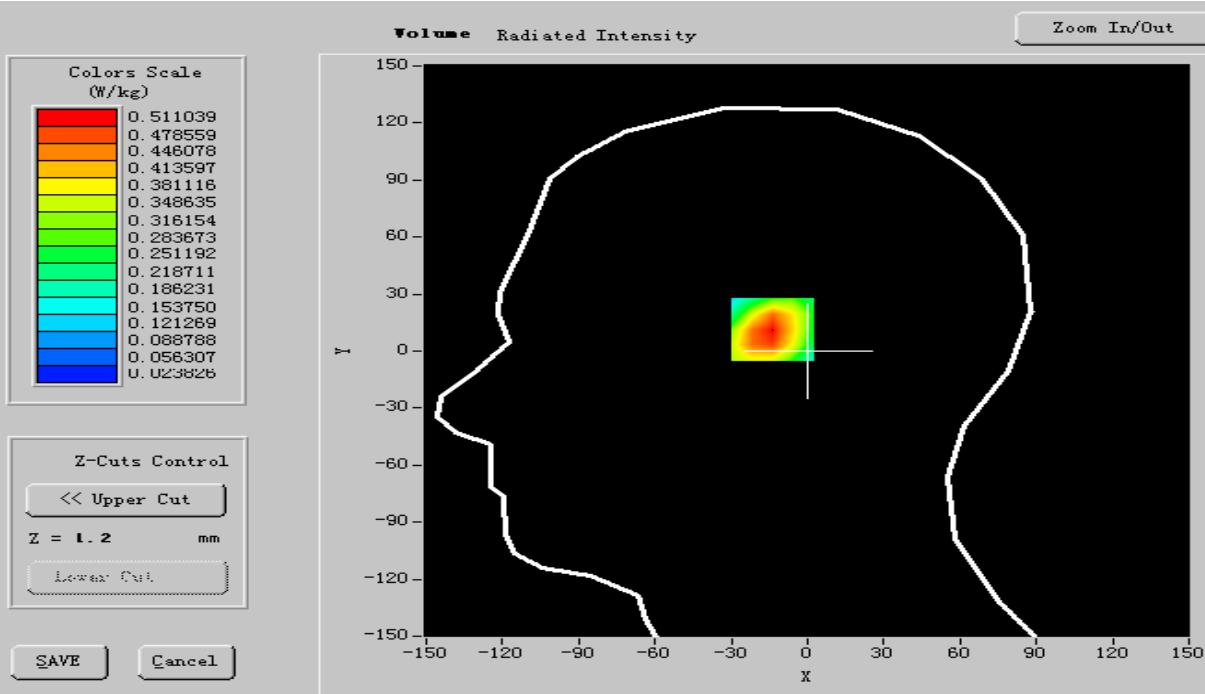
<b>Frequency (MHz)</b>	<b>1850.400024</b>
<b>Relative permitivity (real part)</b>	<b>40.213000</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.584900</b>
<b>Conductivity (S/m)</b>	<b>1.410528</b>
<b>Variation (%)</b>	<b>-1.220000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





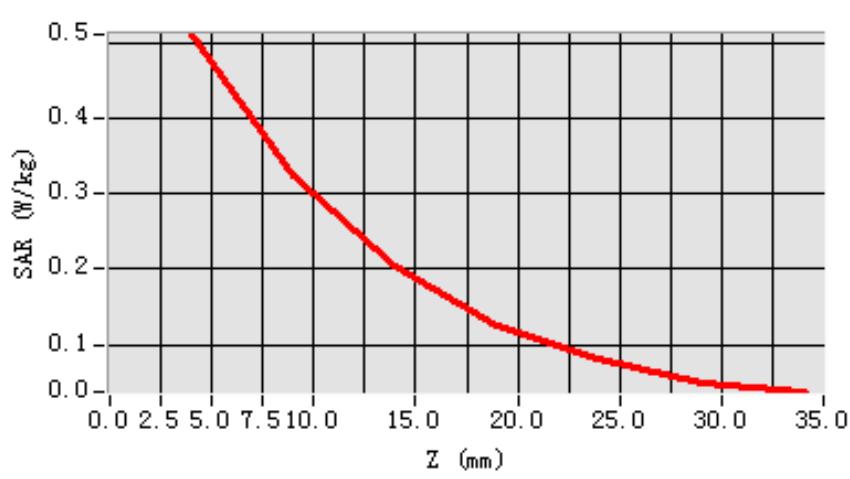
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.278521
SAR 1g (W/Kg)	0.463368

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4733	0.3122	0.1894	0.1224	0.0687	0.0081

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





## MEASUREMENT 2

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

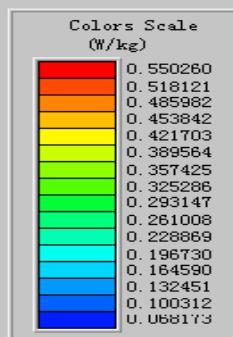
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

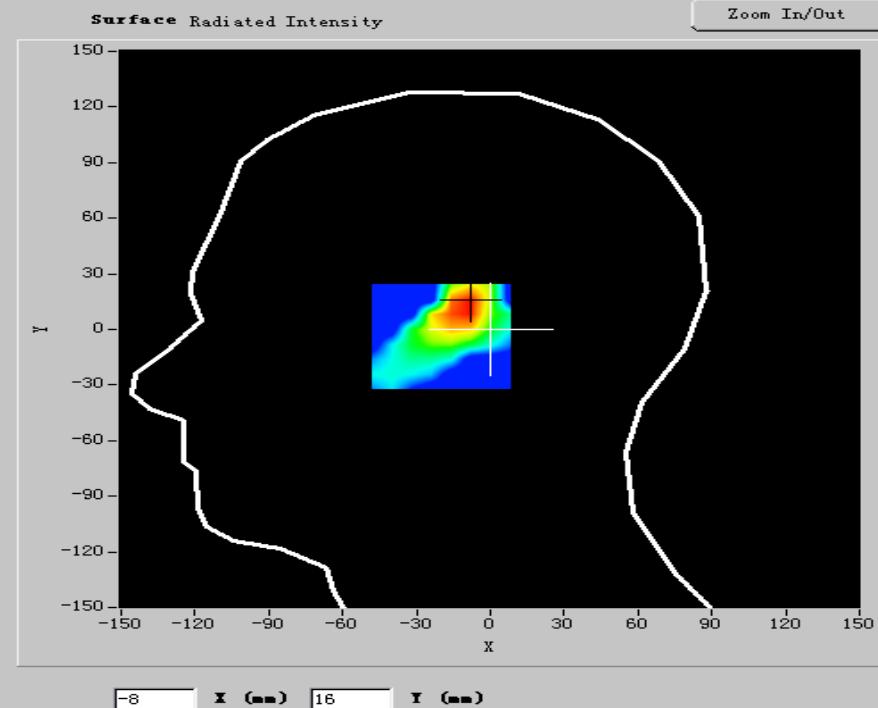
<b>Frequency (MHz)</b>	<b>1880.000000</b>
<b>Relative permitivity (real part)</b>	<b>40.198001</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.813800</b>
<b>Conductivity (S/m)</b>	<b>1.422775</b>
<b>Variation (%)</b>	<b>-0.210000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



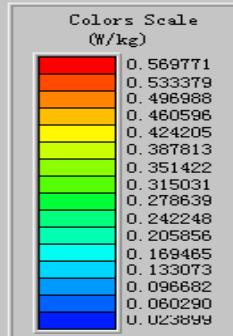
## SURFACE SAR



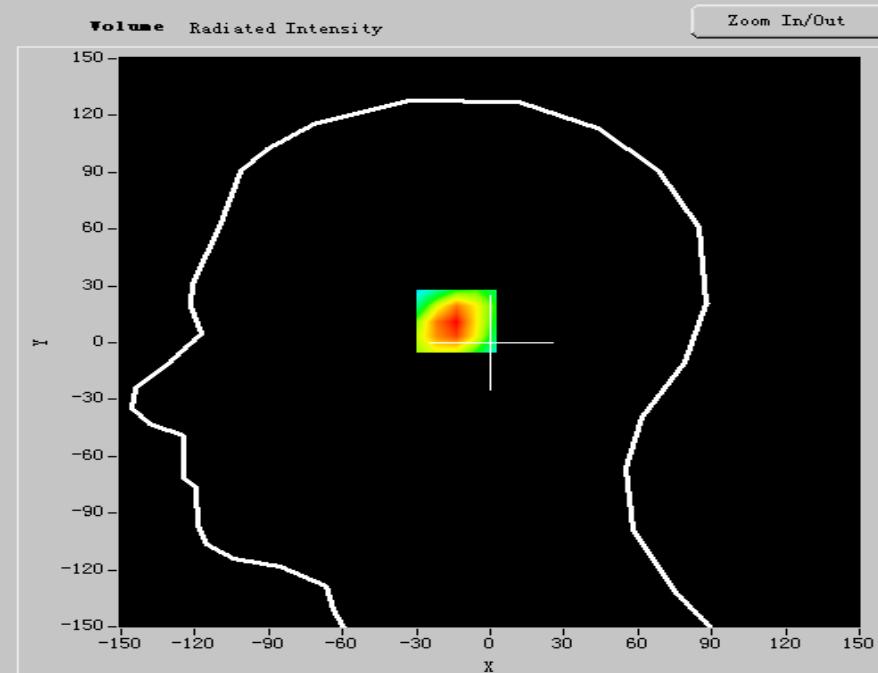
Z-Cuts Control  
Upper Cut  
**Z = 0.2 mm**  
Lower Cut



## VOLUME SAR



Z-Cuts Control  
Upper Cut  
**Z = 1.2 mm**  
Lower Cut





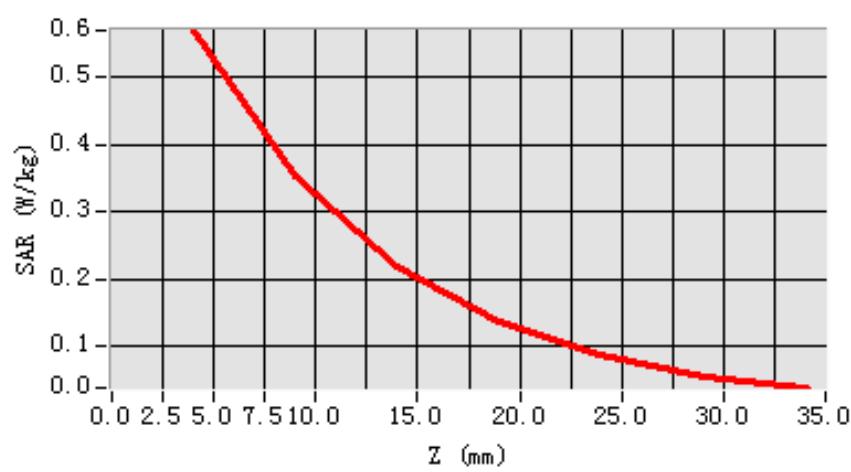
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.309541
SAR 1g (W/Kg)	0.505497

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.5154	0.3322	0.2294	0.1424	0.0789	0.0031

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





## **MEASUREMENT 3**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

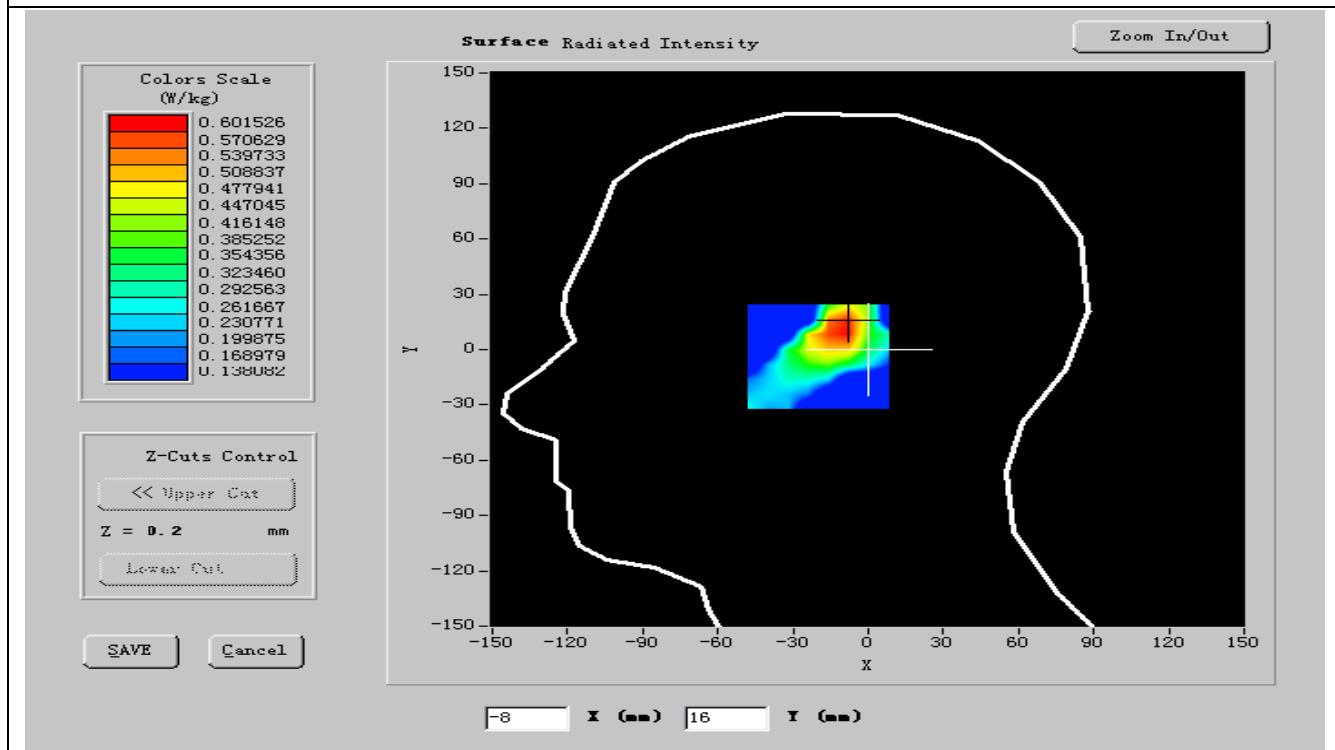
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

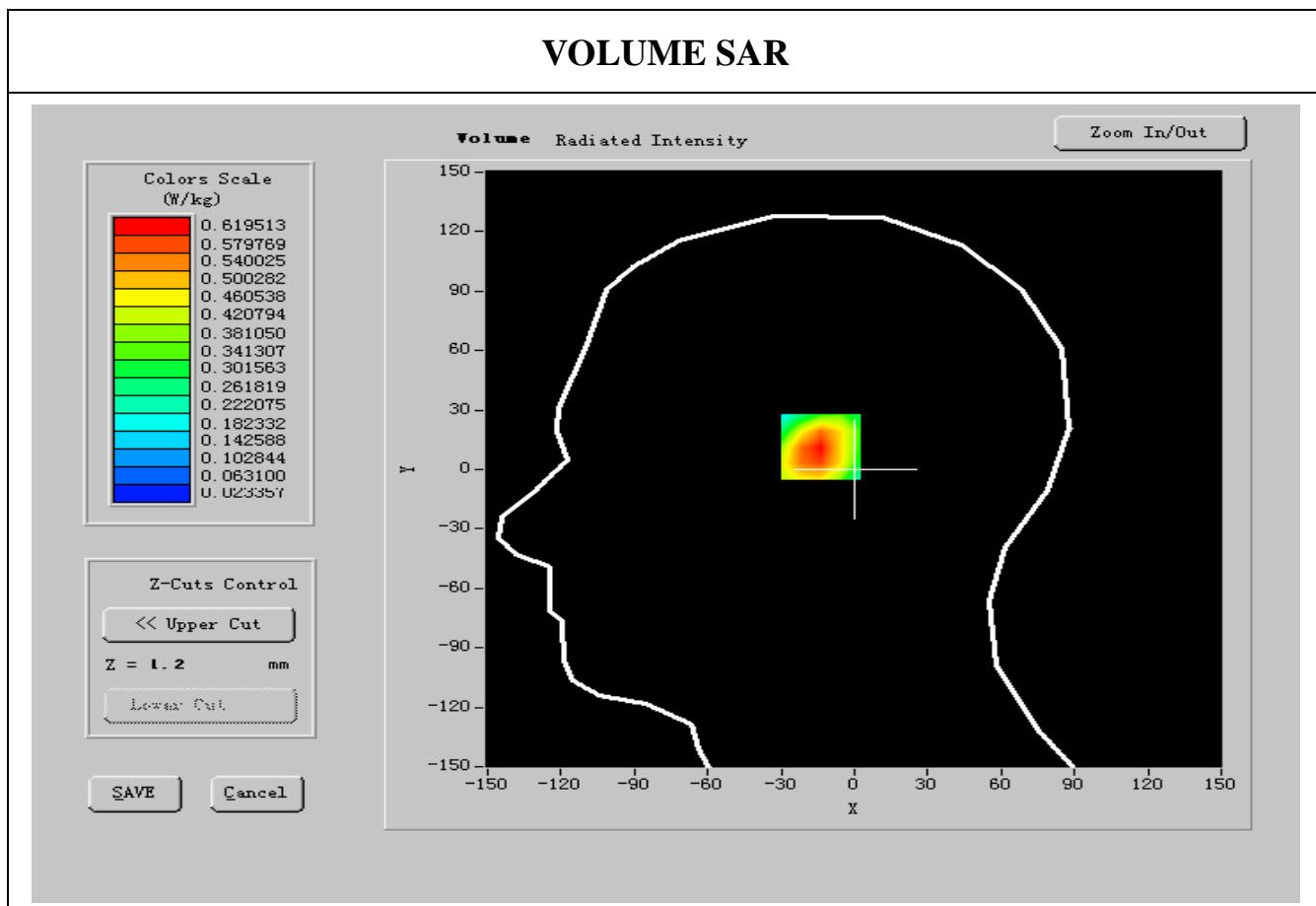
<b>Frequency (MHz)</b>	<b>1909.599976</b>
<b>Relative permitivity (real part)</b>	<b>40.205999</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.669900</b>
<b>Conductivity (S/m)</b>	<b>1.420413</b>
<b>Variation (%)</b>	<b>-0.030000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





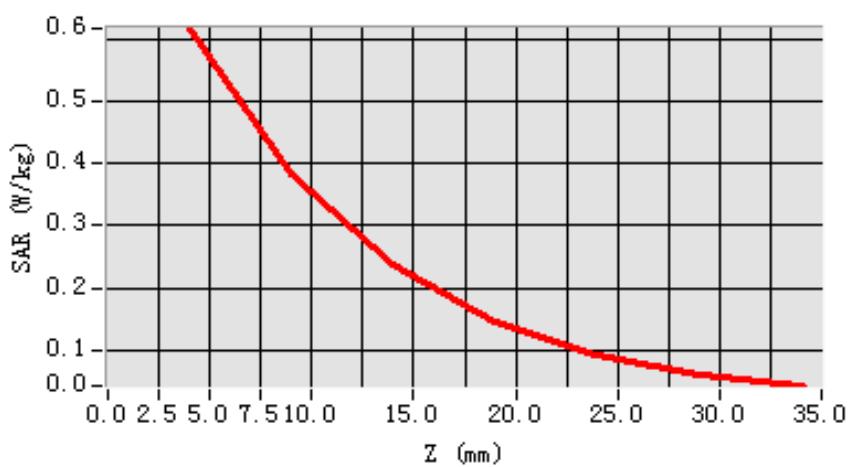
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.348952
SAR 1g (W/Kg)	0.578654

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.5736	0.3422	0.2264	0.1724	0.0889	0.0021

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





## MEASUREMENT 4

**Date of measurement: 15/11/2010**

**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.

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

### B. Instrumentations.

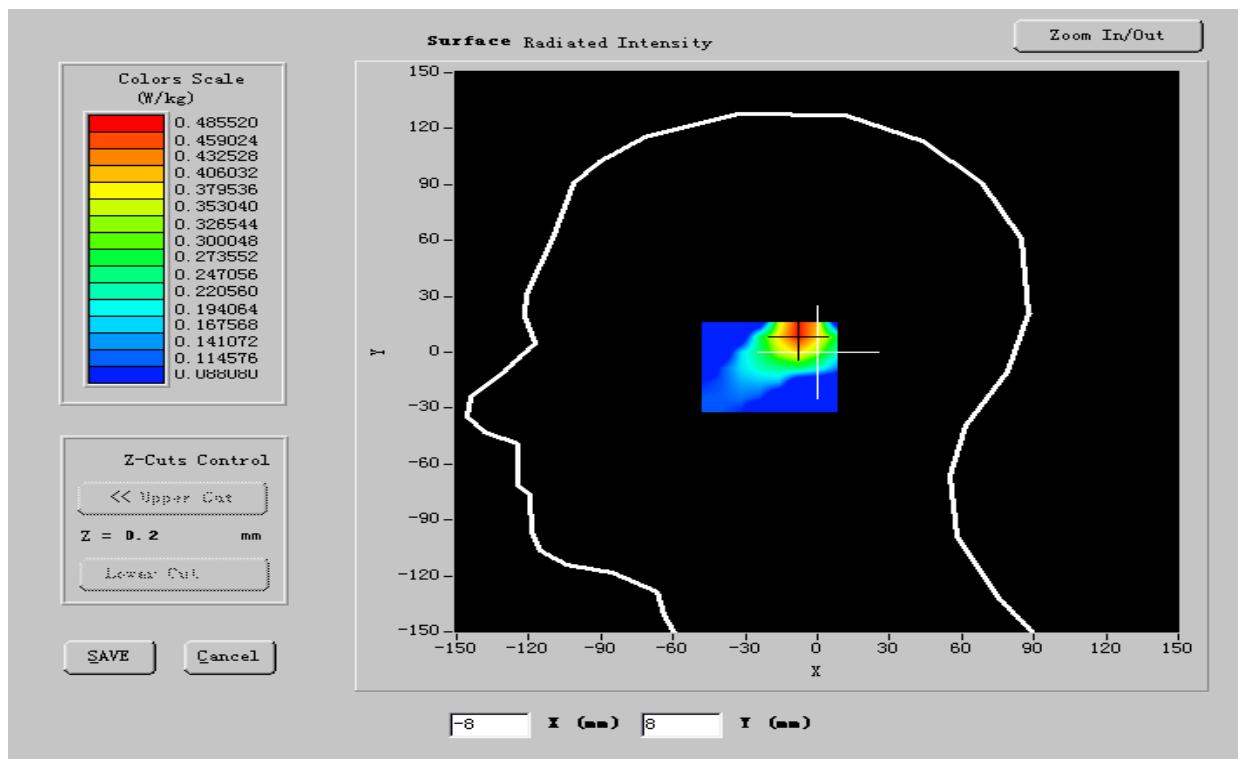
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

### C. SAR Measurement Results

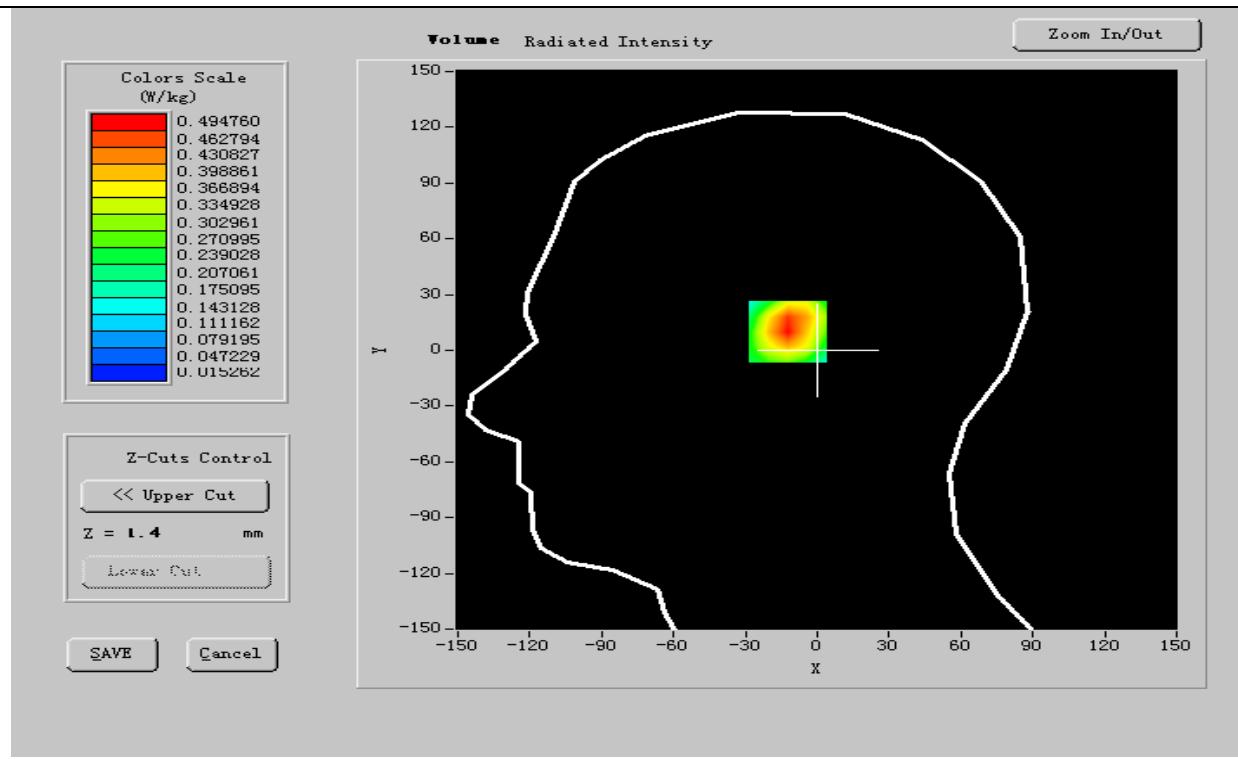
<b>Frequency (MHz)</b>	<b>1850.400024</b>
<b>Relative permitivity (real part)</b>	<b>40.213000</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.584900</b>
<b>Conductivity (S/m)</b>	<b>1.426657</b>
<b>Variation (%)</b>	<b>-1.400000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





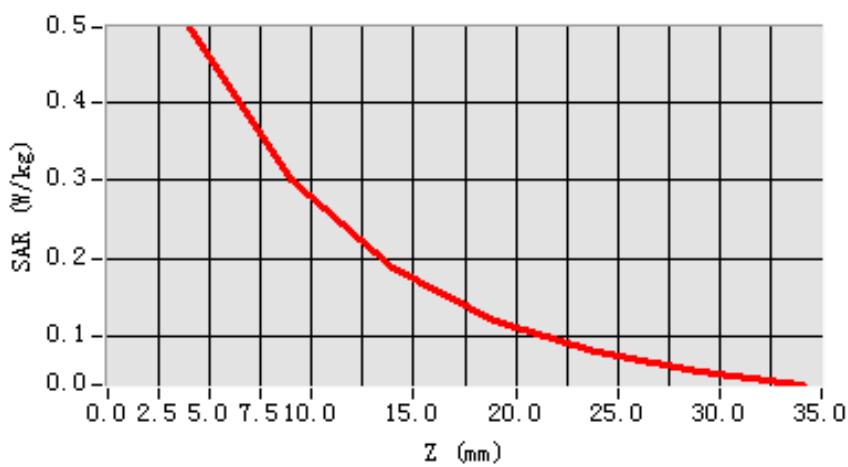
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.259871
SAR 1g (W/Kg)	0.446381

### Z Axis Scan

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

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





## MEASUREMENT 5

Date of measurement: 15/11/2010

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.

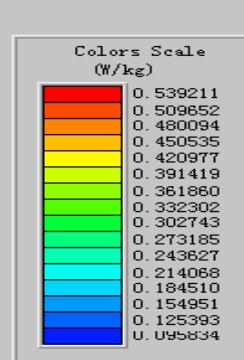
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator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

### C. SAR Measurement Results

Frequency (MHz)	1880.000000
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 °C
ConvF:	41.05, 42.35, 55.45
Crest factor:	1:8



## SURFACE SAR



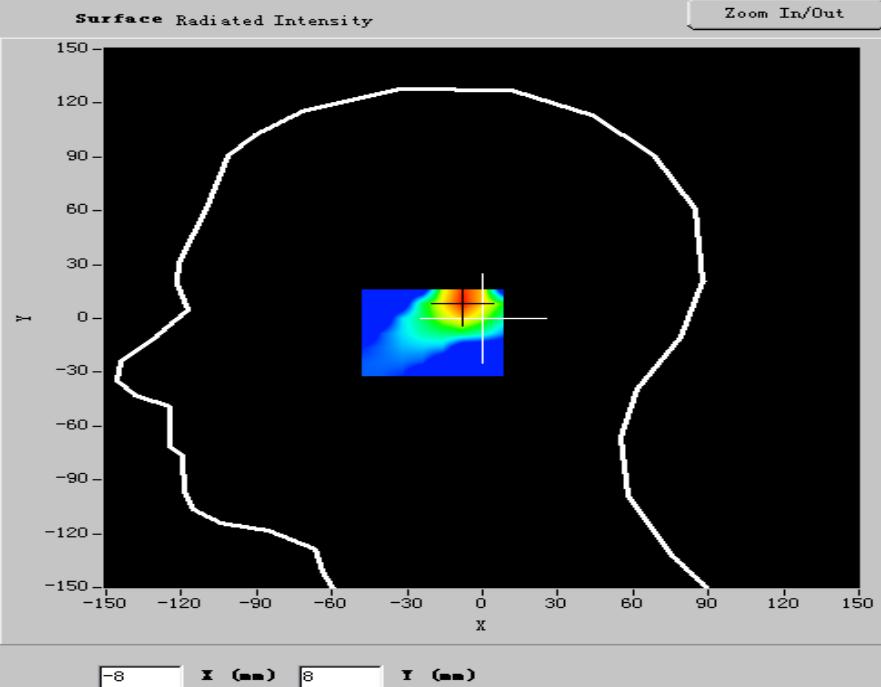
Z-Cuts Control

<< Upper Cut

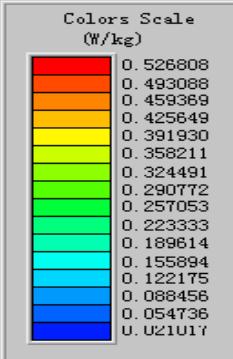
Z = 0.2 mm

Lower Cut

SAVE Cancel



## VOLUME SAR



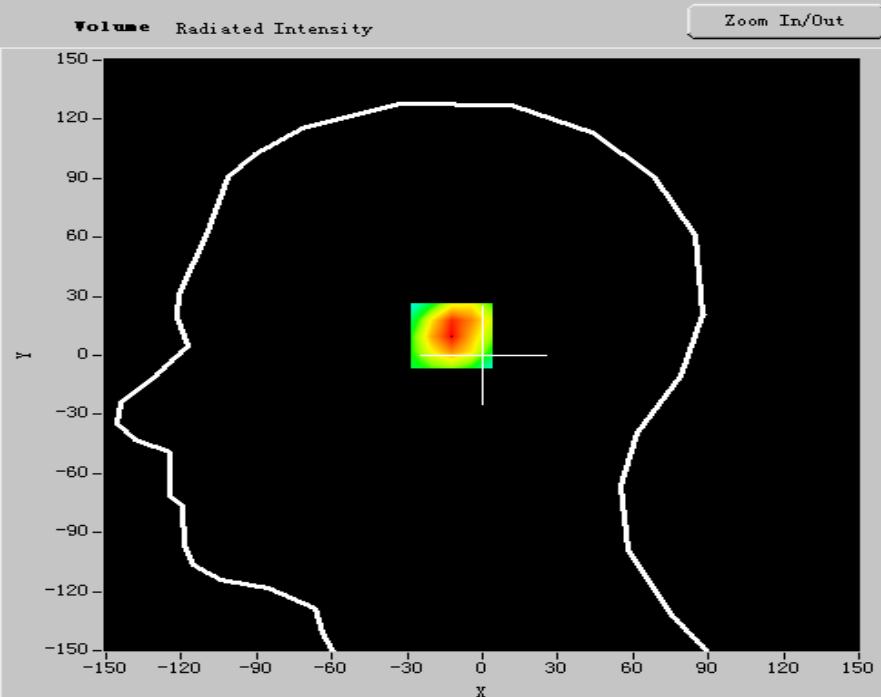
Z-Cuts Control

<< Upper Cut

Z = 1.4 mm

Lower Cut

SAVE Cancel





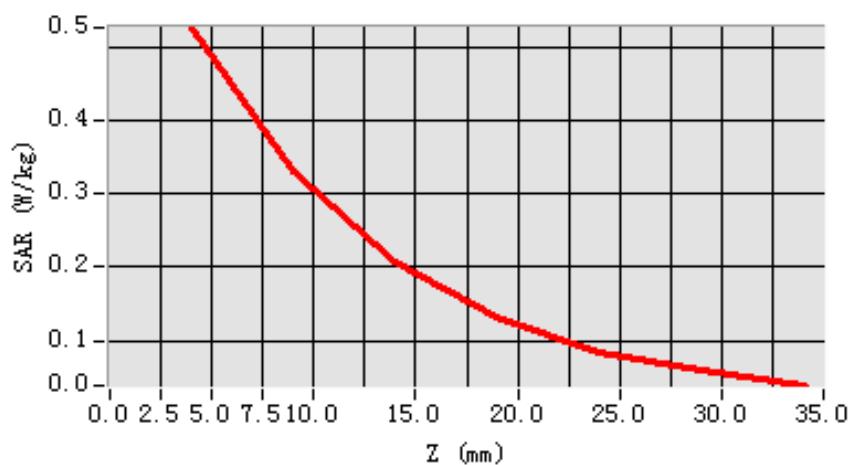
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.289652
SAR 1g (W/Kg)	0.471892

### **Z Axis Scan**

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4818	0.3622	0.2064	0.1324	0.0887	0.0411

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





## **MEASUREMENT 6**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

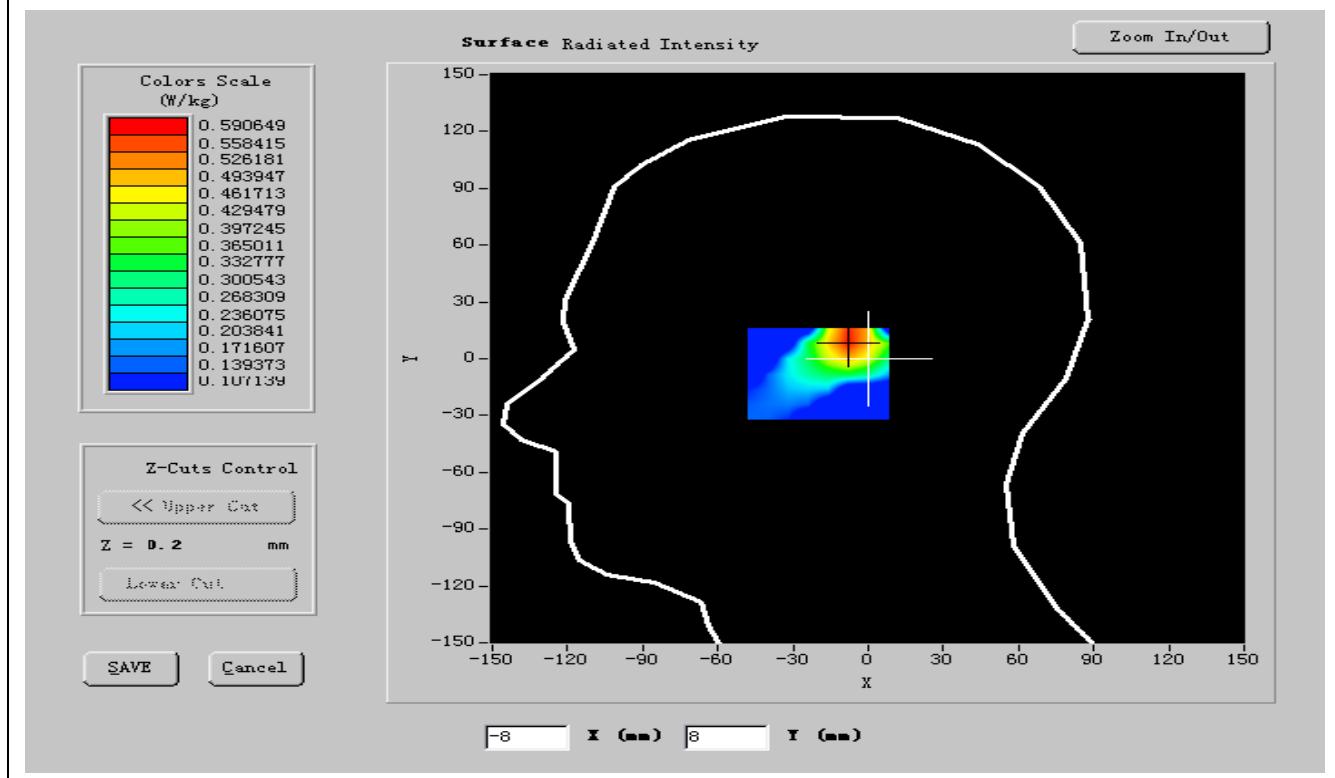
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

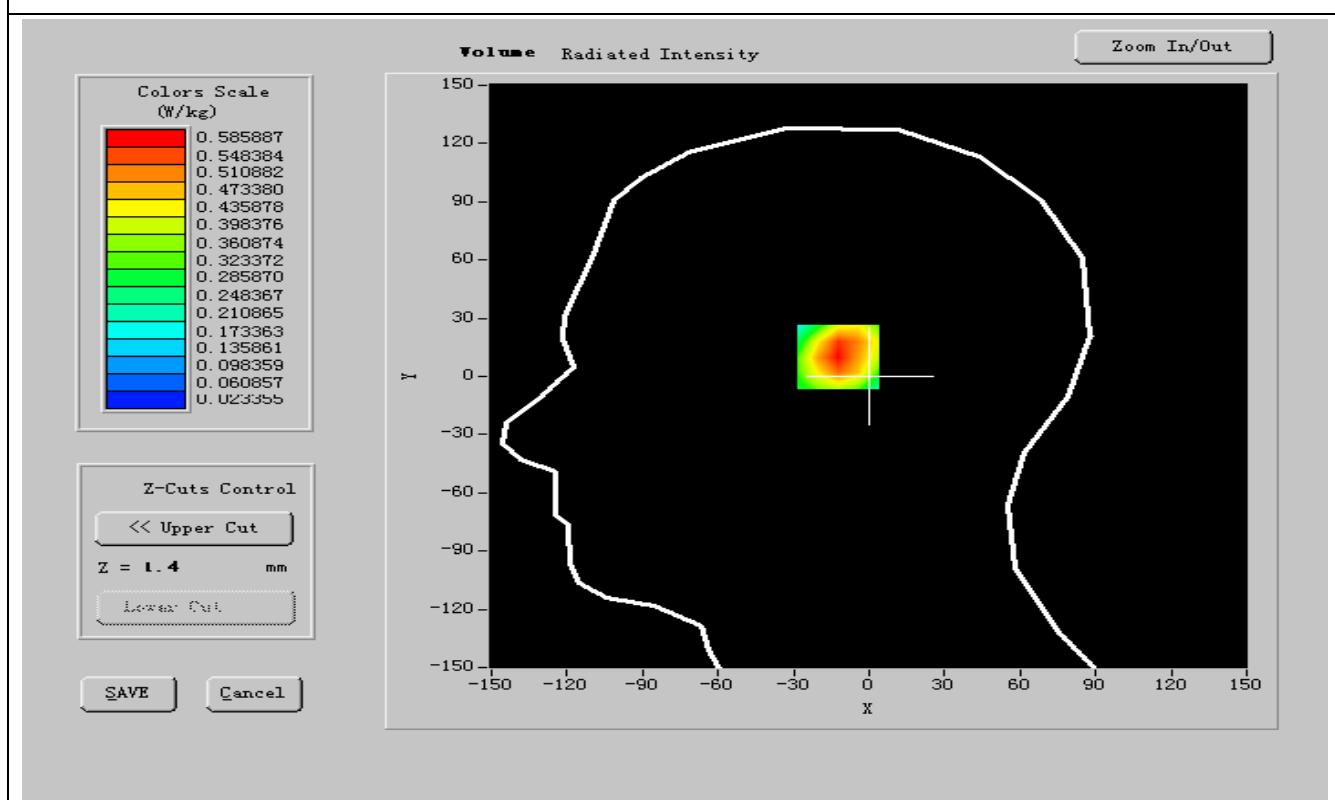
<b>Frequency (MHz)</b>	<b>1909.599976</b>
<b>Relative permitivity (real part)</b>	<b>40.205999</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.669900</b>
<b>Conductivity (S/m)</b>	<b>1.400224</b>
<b>Variation (%)</b>	<b>-1.500000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





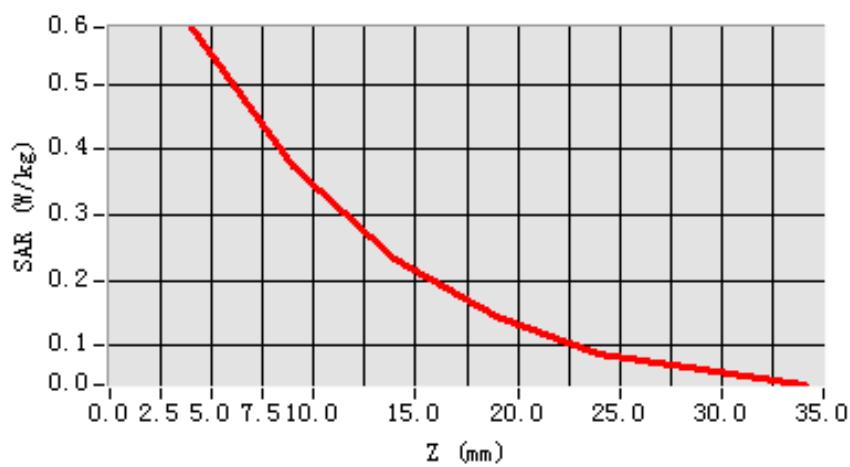
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.316982
SAR 1g (W/Kg)	0.545985

### Z Axis Scan

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

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





## **MEASUREMENT 7**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

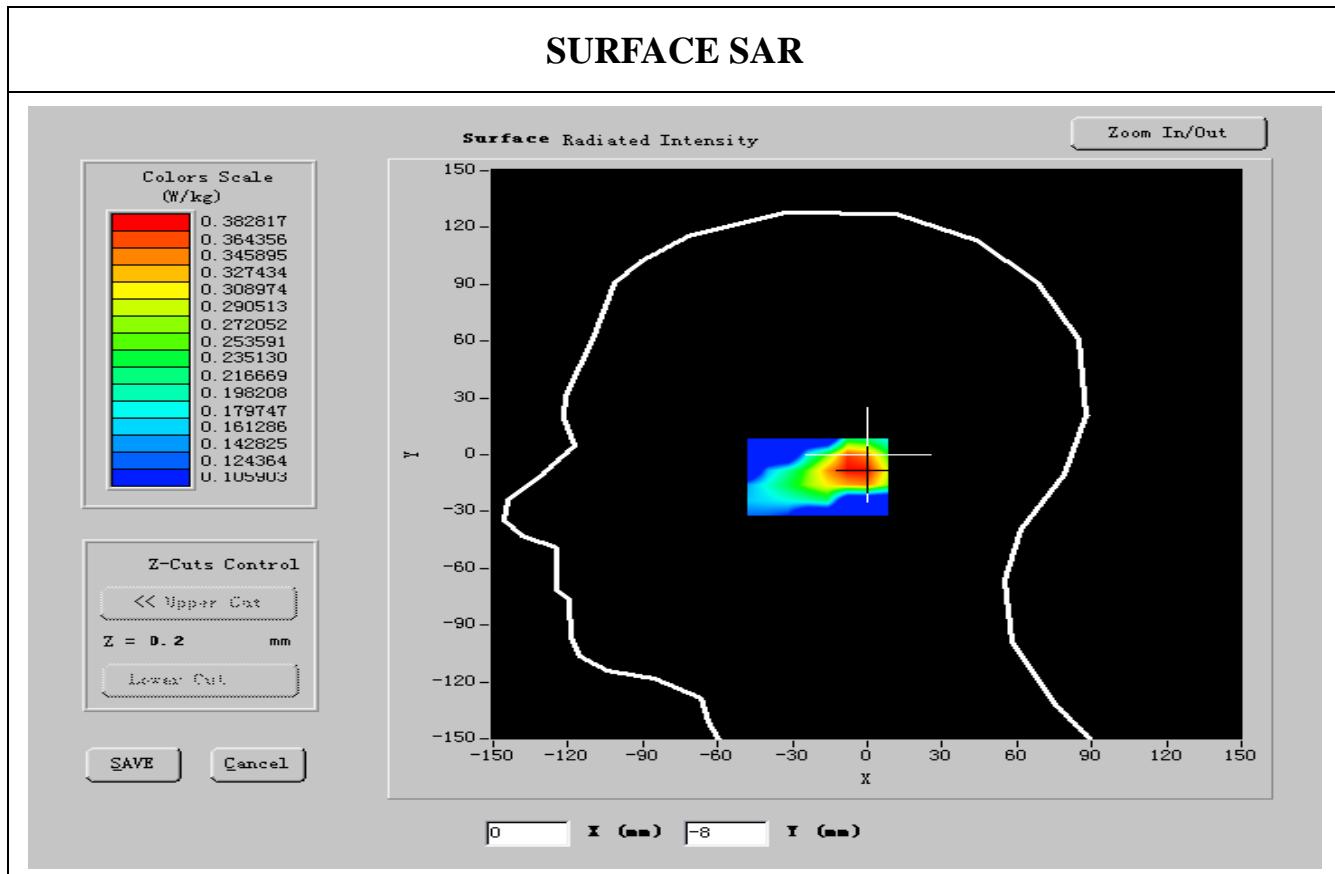
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

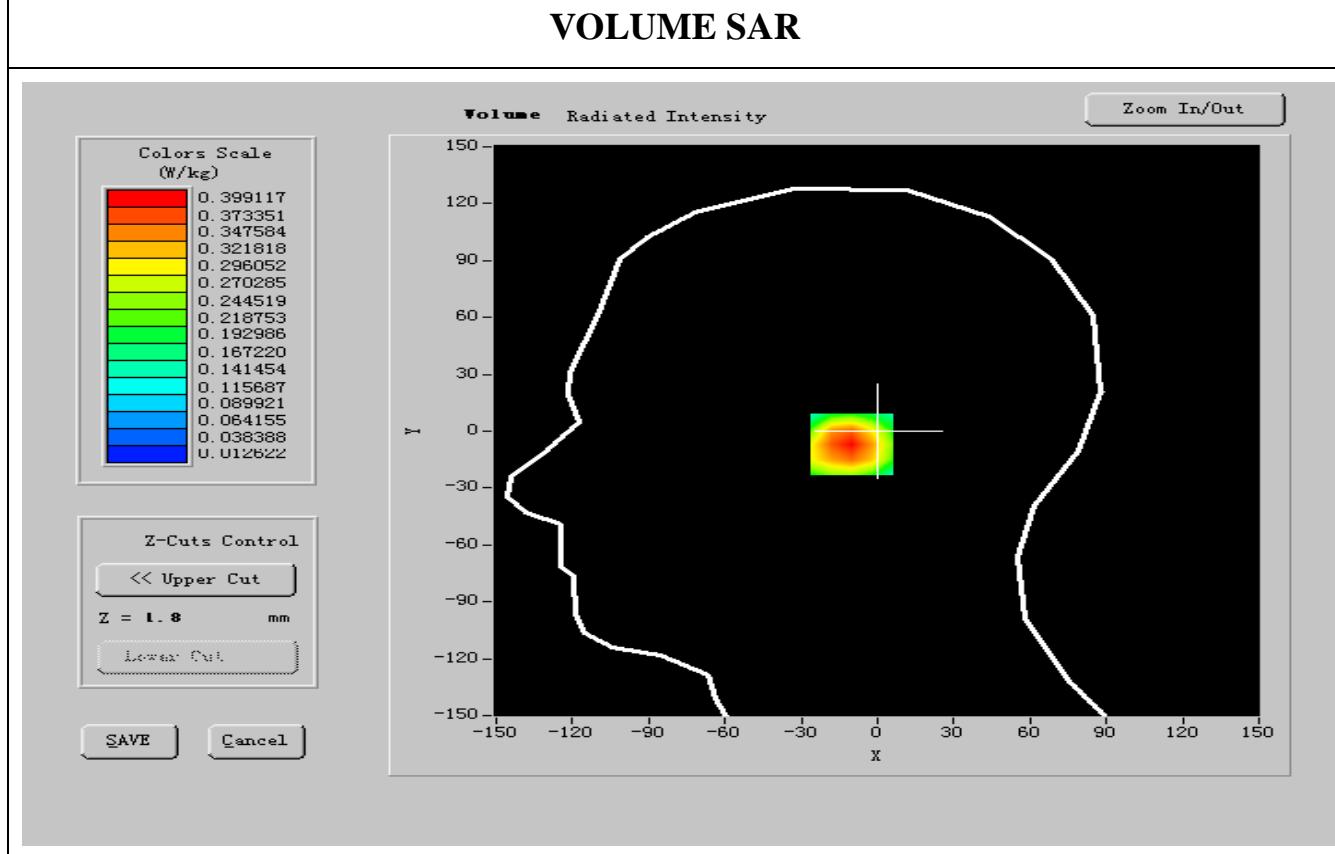
<b>Frequency (MHz)</b>	<b>1850.400024</b>
<b>Relative permitivity (real part)</b>	<b>40.313000</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.584900</b>
<b>Conductivity (S/m)</b>	<b>1.416528</b>
<b>Variation (%)</b>	<b>0.400000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





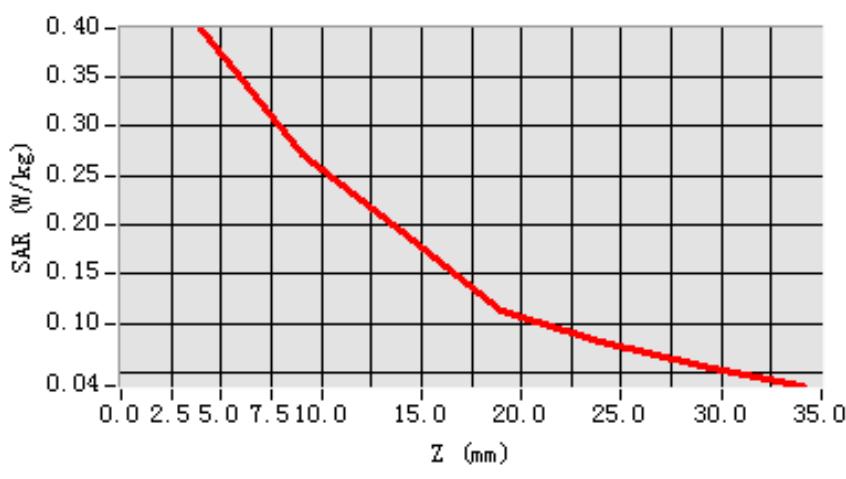
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.229650
SAR 1g (W/Kg)	0.351058

### **Z Axis Scan**

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

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





## **MEASUREMENT 8**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

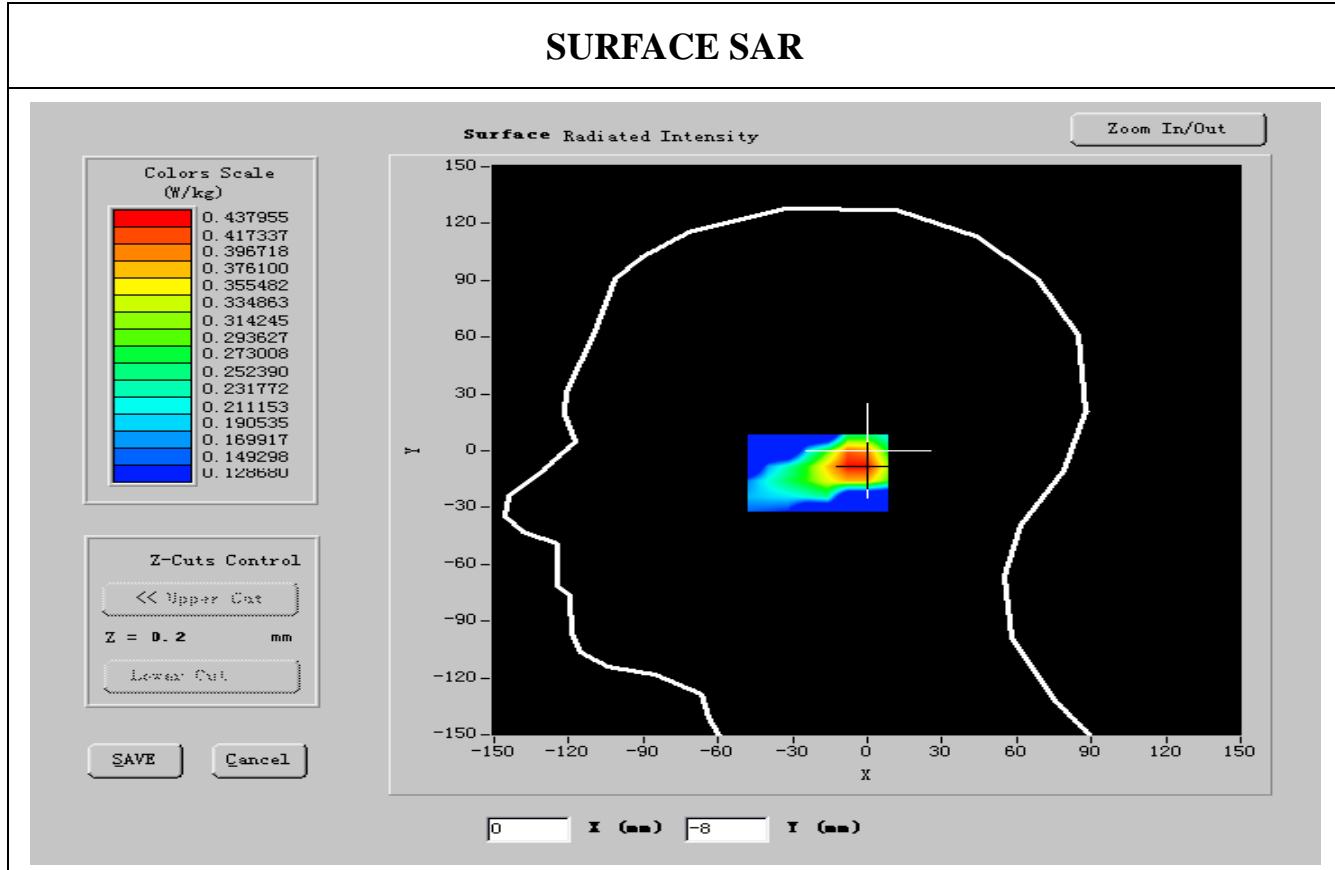
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

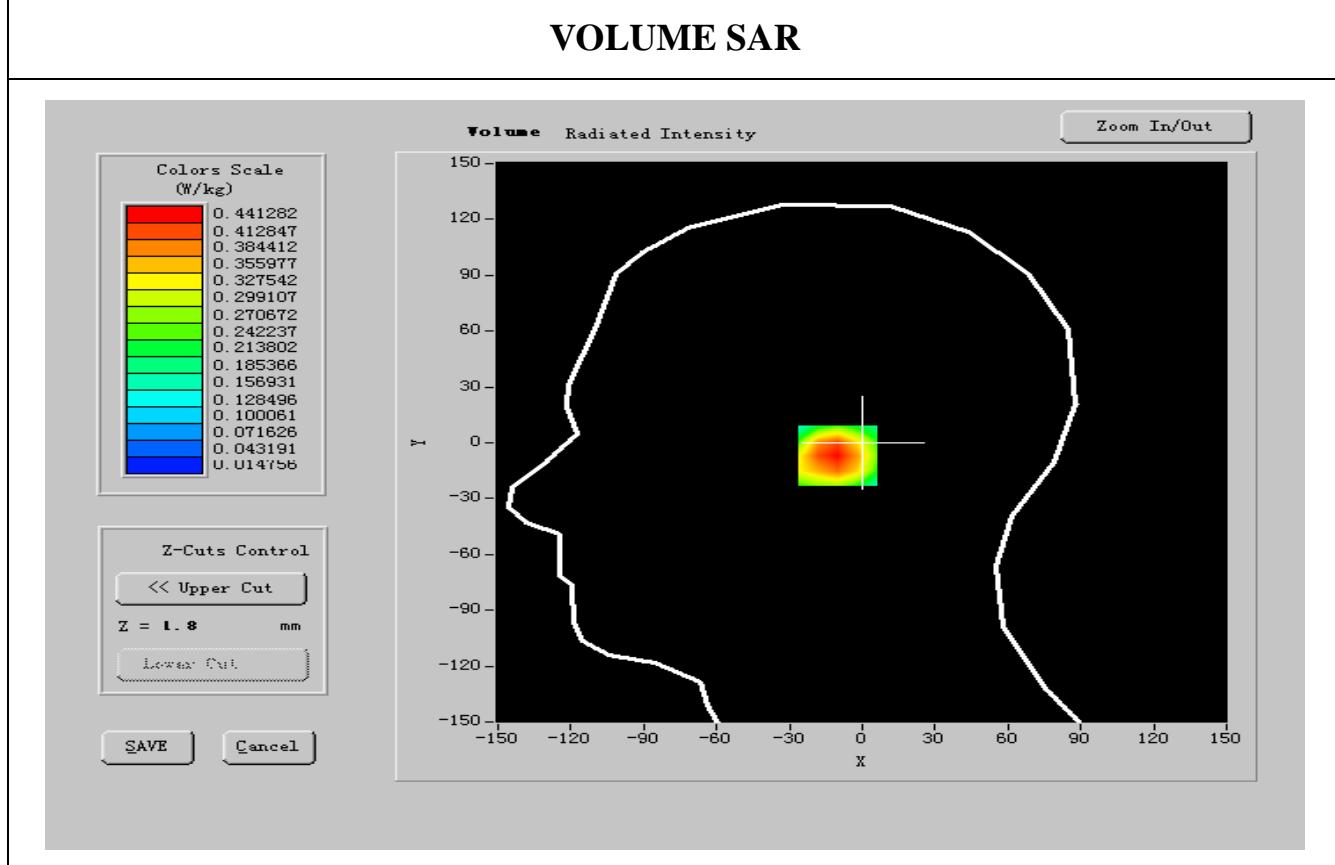
<b>Frequency (MHz)</b>	<b>1880.000000</b>
<b>Relative permitivity (real part)</b>	<b>40.193001</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.813800</b>
<b>Conductivity (S/m)</b>	<b>1.412324</b>
<b>Variation (%)</b>	<b>1.300000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





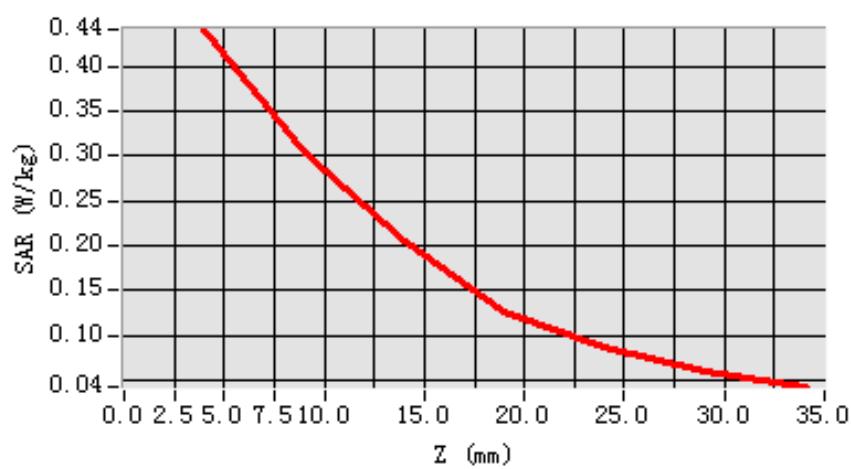
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.262184
SAR 1g (W/Kg)	0.443335

### Z Axis Scan

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

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





## **MEASUREMENT 9**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

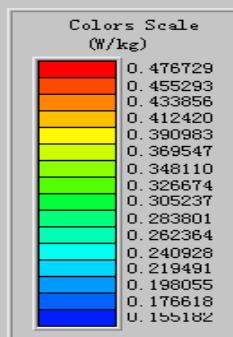
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

<b>Frequency (MHz)</b>	<b>1909.599976</b>
<b>Relative permitivity (real part)</b>	<b>40.285999</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.669900</b>
<b>Conductivity (S/m)</b>	<b>1.410242</b>
<b>Variation (%)</b>	<b>0.400000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR

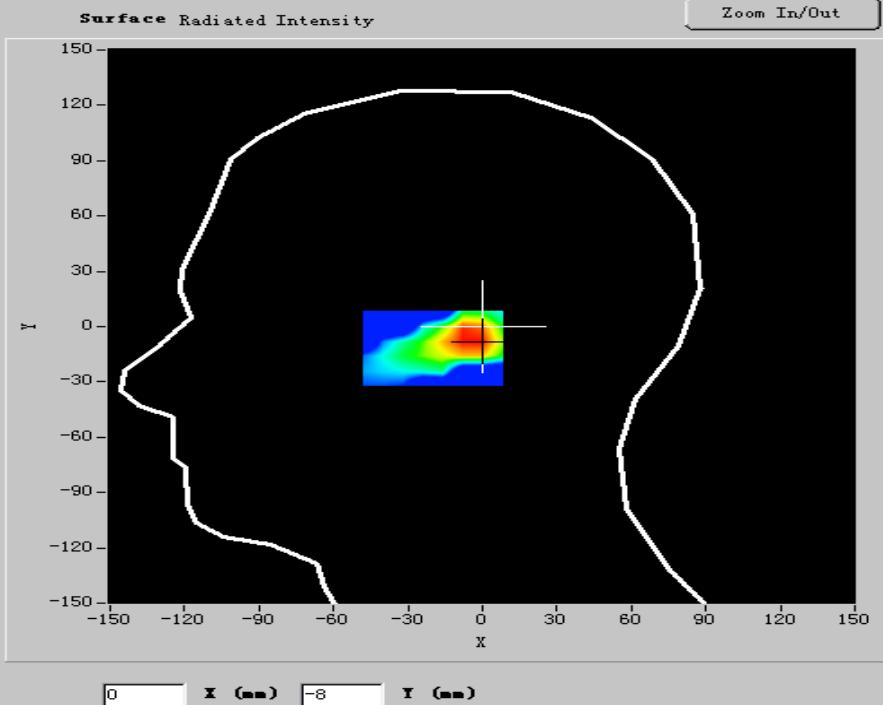


Z-Cuts Control

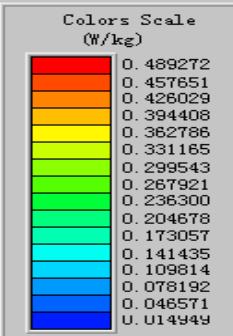
<< Upper Cut

Z = 0.2 mm

Lower Cut



## VOLUME SAR

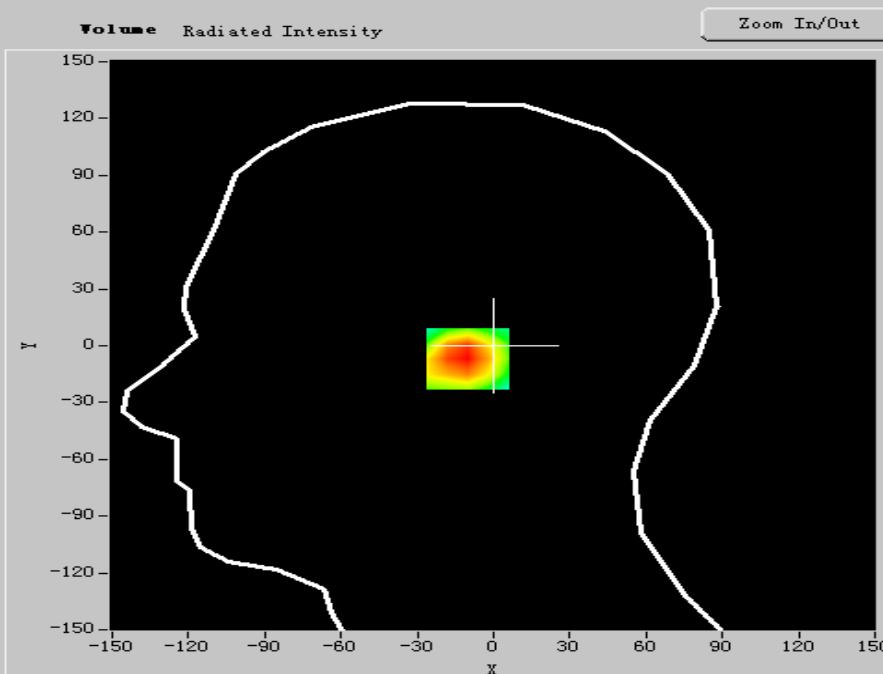


Z-Cuts Control

<< Upper Cut

Z = 1.8 mm

Lower Cut





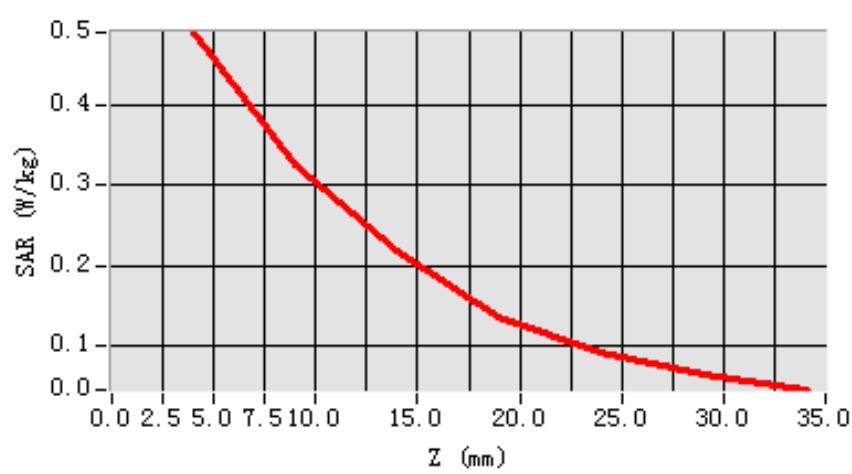
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.291874
SAR 1g (W/Kg)	0.429005

### Z Axis Scan

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

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





## **MEASUREMENT 10**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

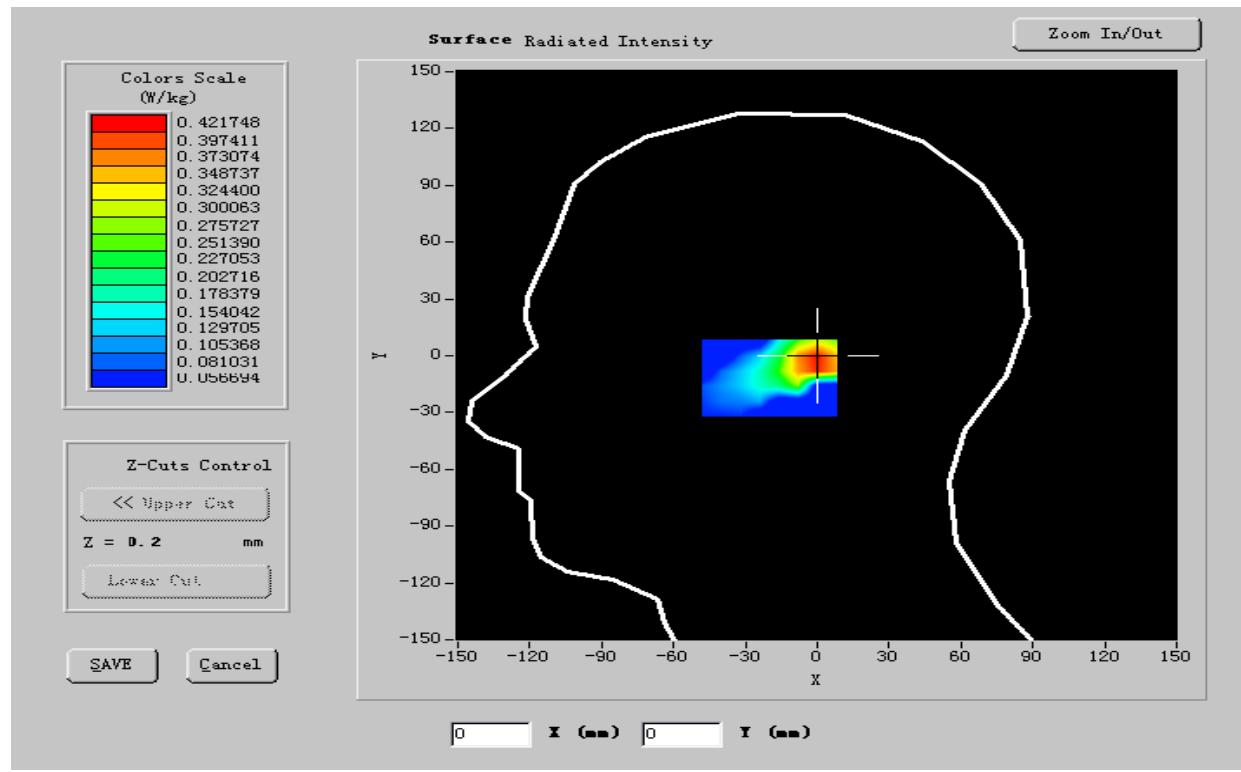
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

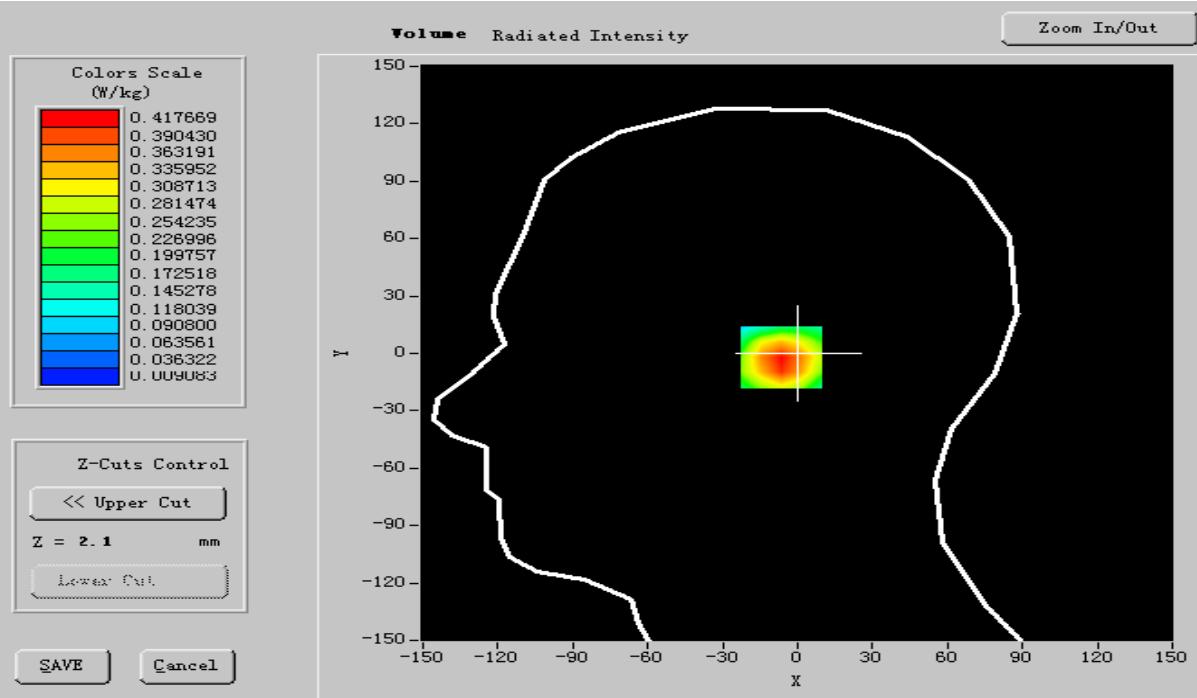
<b>Frequency (MHz)</b>	<b>1850.400024</b>
<b>Relative permitivity (real part)</b>	<b>40.313134</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.584900</b>
<b>Conductivity (S/m)</b>	<b>1.416243</b>
<b>Variation (%)</b>	<b>-0.700000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





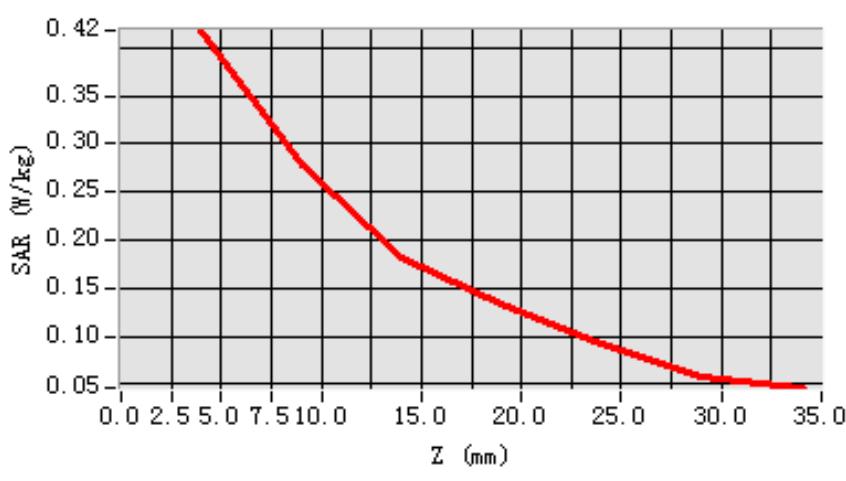
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.256978
SAR 1g (W/Kg)	0.433289

### **Z Axis Scan**

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/kg)</b>	<b>0.0000</b>	<b>0.4032</b>	<b>0.3224</b>	<b>0.2134</b>	<b>0.1864</b>	<b>0.0864</b>	<b>0.0554</b>

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





## **MEASUREMENT 11**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

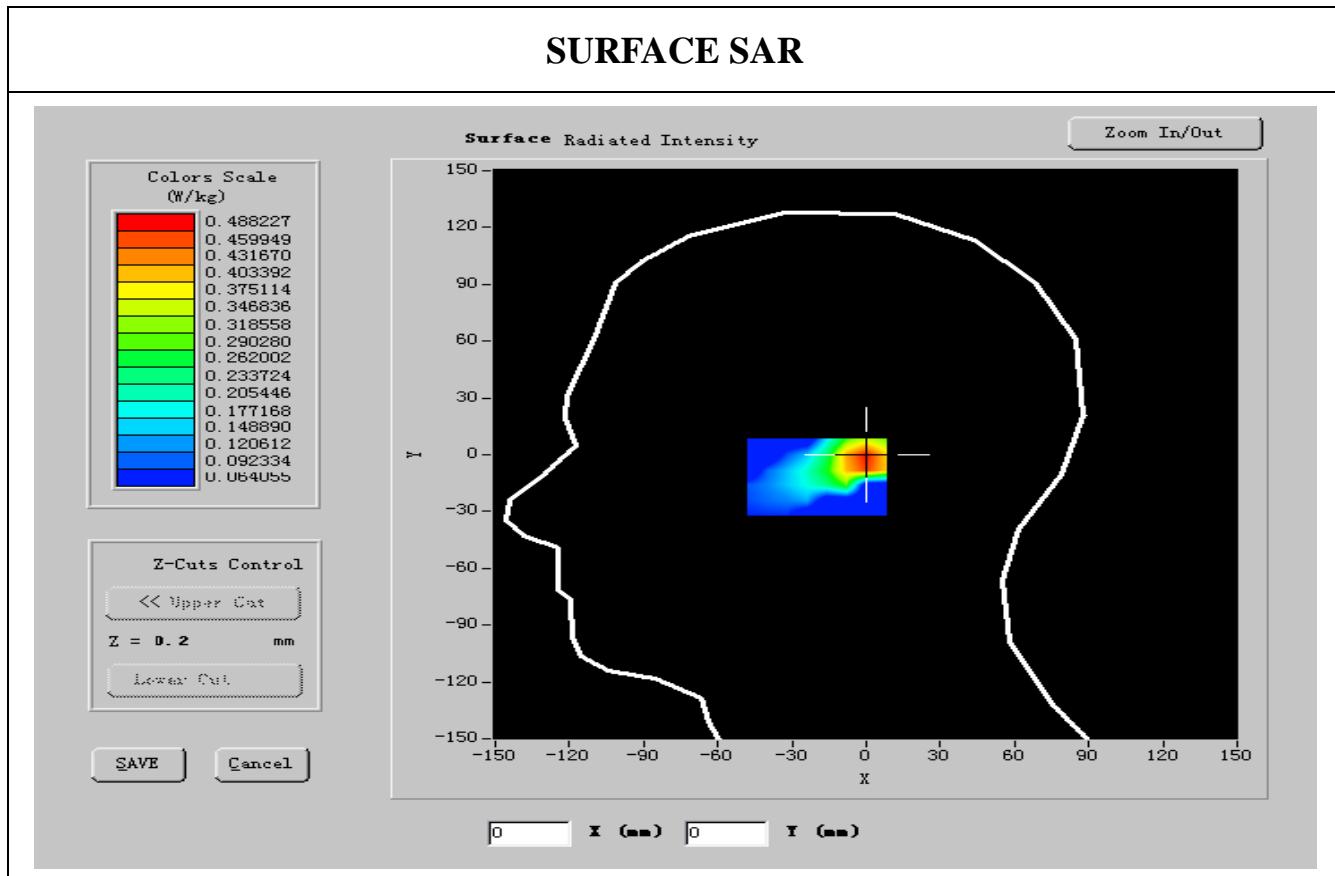
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

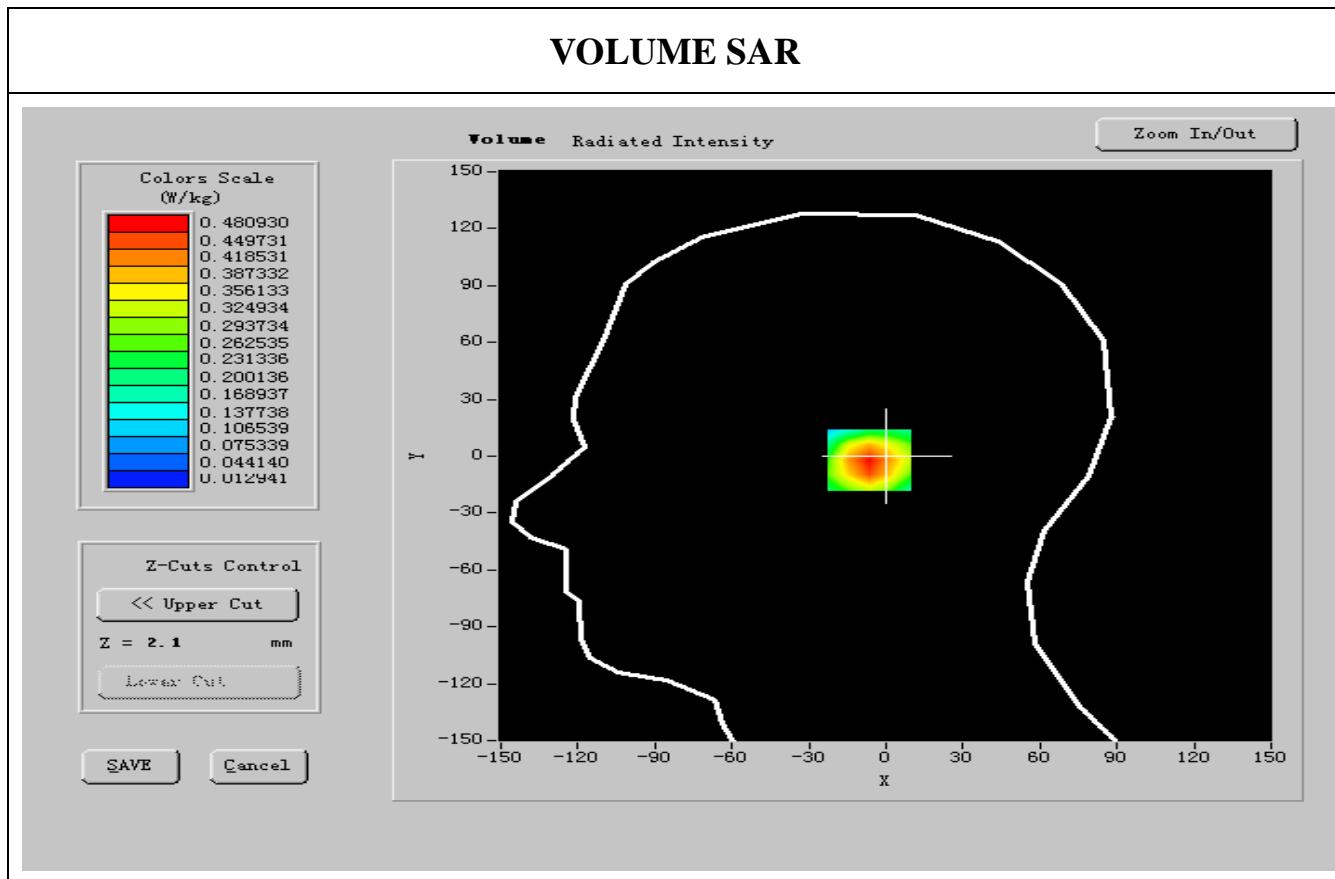
<b>Frequency (MHz)</b>	<b>1880.000000</b>
<b>Relative permitivity (real part)</b>	<b>40.193001</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.813800</b>
<b>Conductivity (S/m)</b>	<b>1.413245</b>
<b>Variation (%)</b>	<b>-1.100000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





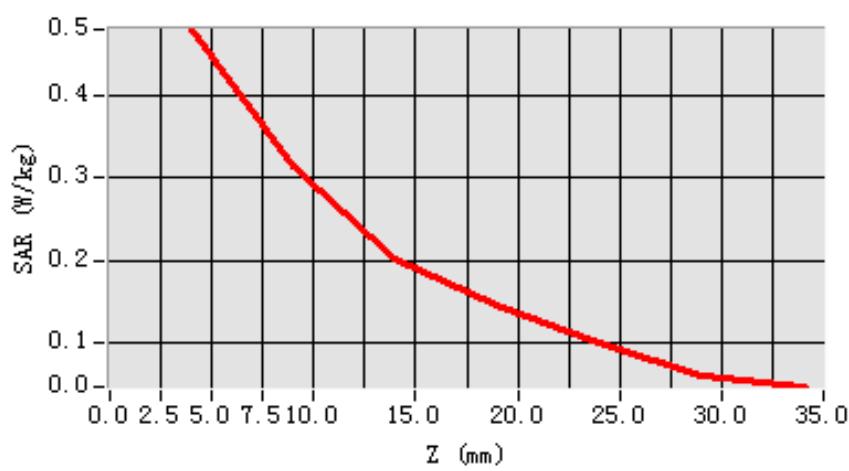
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.256123
SAR 1g (W/Kg)	0.436892

### **Z Axis Scan**

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/kg)</b>	<b>0.0000</b>	<b>0.4468</b>	<b>0.3024</b>	<b>0.1934</b>	<b>0.1564</b>	<b>0.0864</b>	<b>0.0084</b>

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





## **MEASUREMENT 12**

**Date of measurement: 15/11/2010**

**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.**

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

### **B. Instrumentations.**

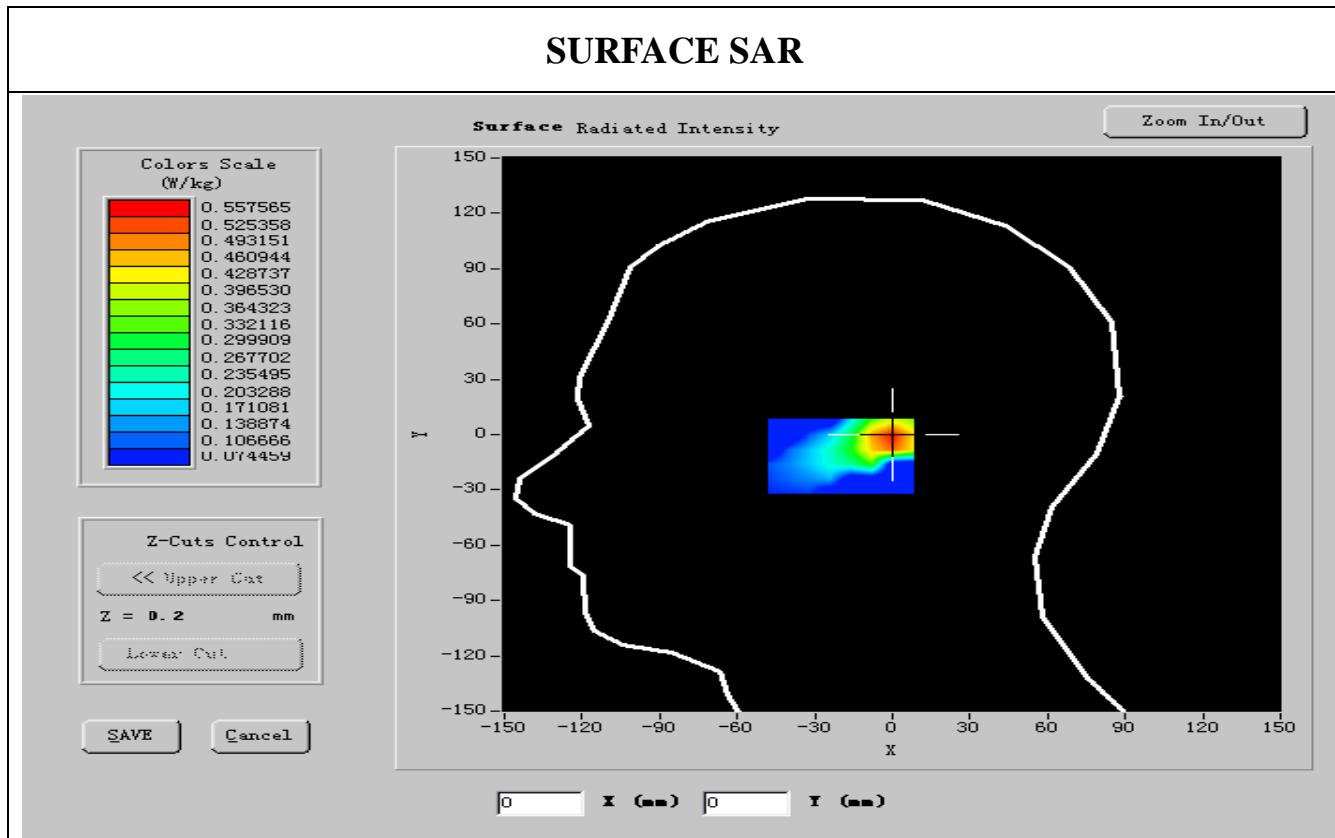
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

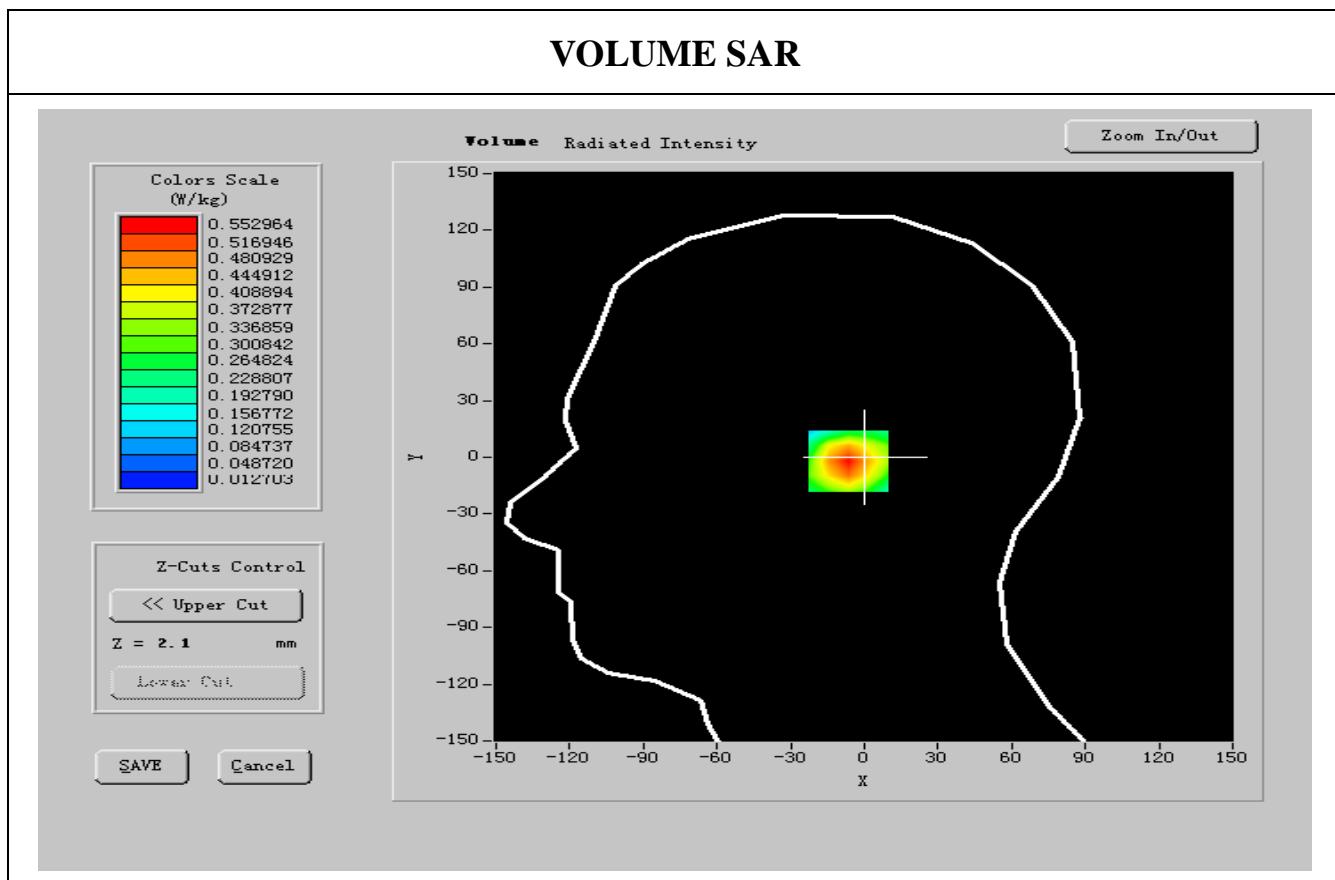
<b>Frequency (MHz)</b>	<b>1909.599976</b>
<b>Relative permitivity (real part)</b>	<b>40.285999</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.669900</b>
<b>Conductivity (S/m)</b>	<b>1.420225</b>
<b>Variation (%)</b>	<b>-1.130000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>41.05, 42.35, 55.45</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





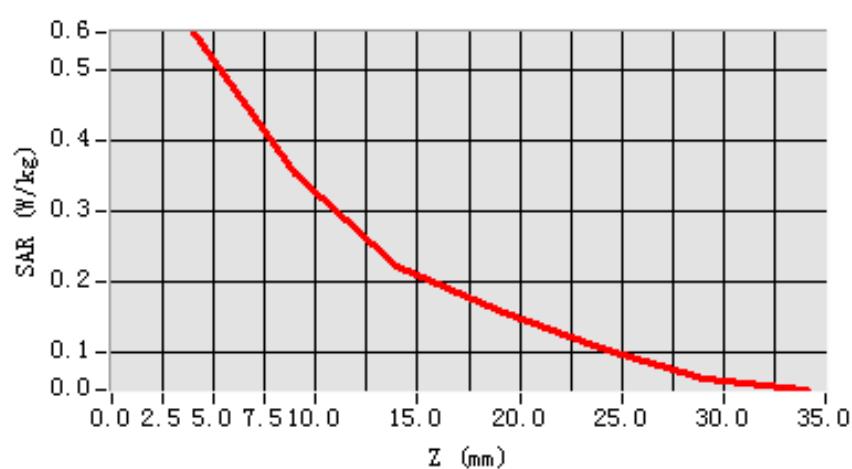
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.365651
SAR 1g (W/Kg)	0.457752

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4877	0.3377	0.1934	0.1464	0.1264	0.0089

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





## **MEASUREMENT 13**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GSM1900
<b>Channels</b>	Low
<b>Signal</b>	GSM

### **B. Instrumentations.**

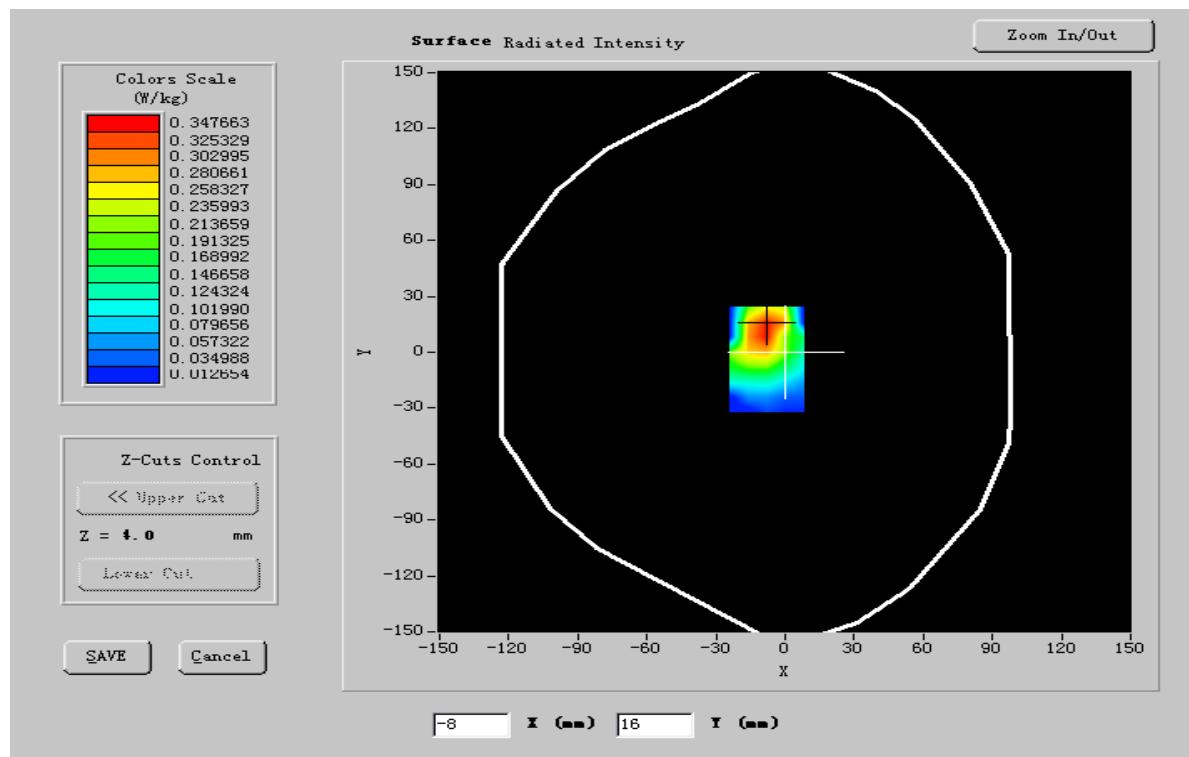
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

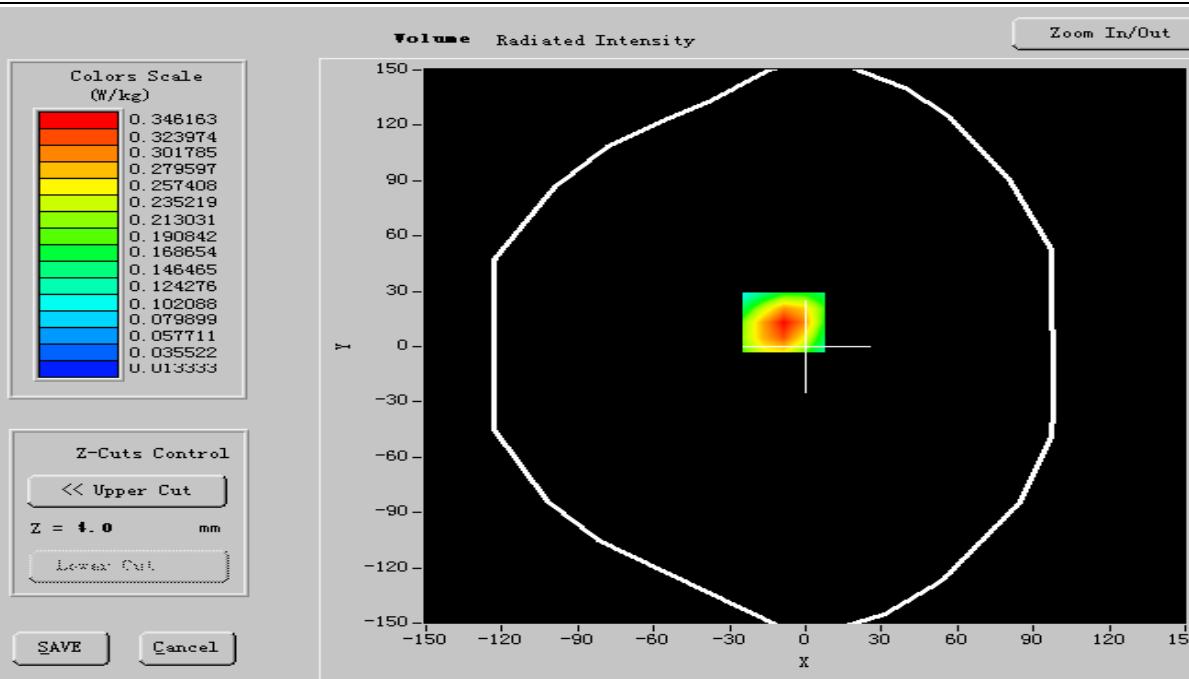
<b>Frequency (MHz)</b>	<b>1850.400024</b>
<b>Relative permitivity (real part)</b>	<b>52.313000</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.584900</b>
<b>Conductivity (S/m)</b>	<b>1.416522</b>
<b>Variation (%)</b>	<b>-0.130000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





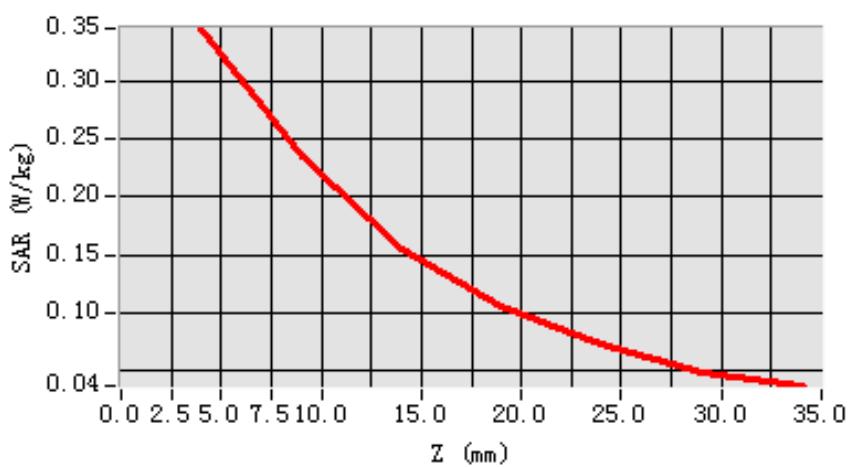
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.200652
SAR 1g (W/Kg)	0.353356

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.3133	0.2873	0.1934	0.1464	0.1264	0.0089

**SAR, Z Axis Scan (X = -9, Y = 13)**





## **MEASUREMENT 14**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GSM1900
<b>Channels</b>	Middle
<b>Signal</b>	GSM

### **B. Instrumentations.**

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

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

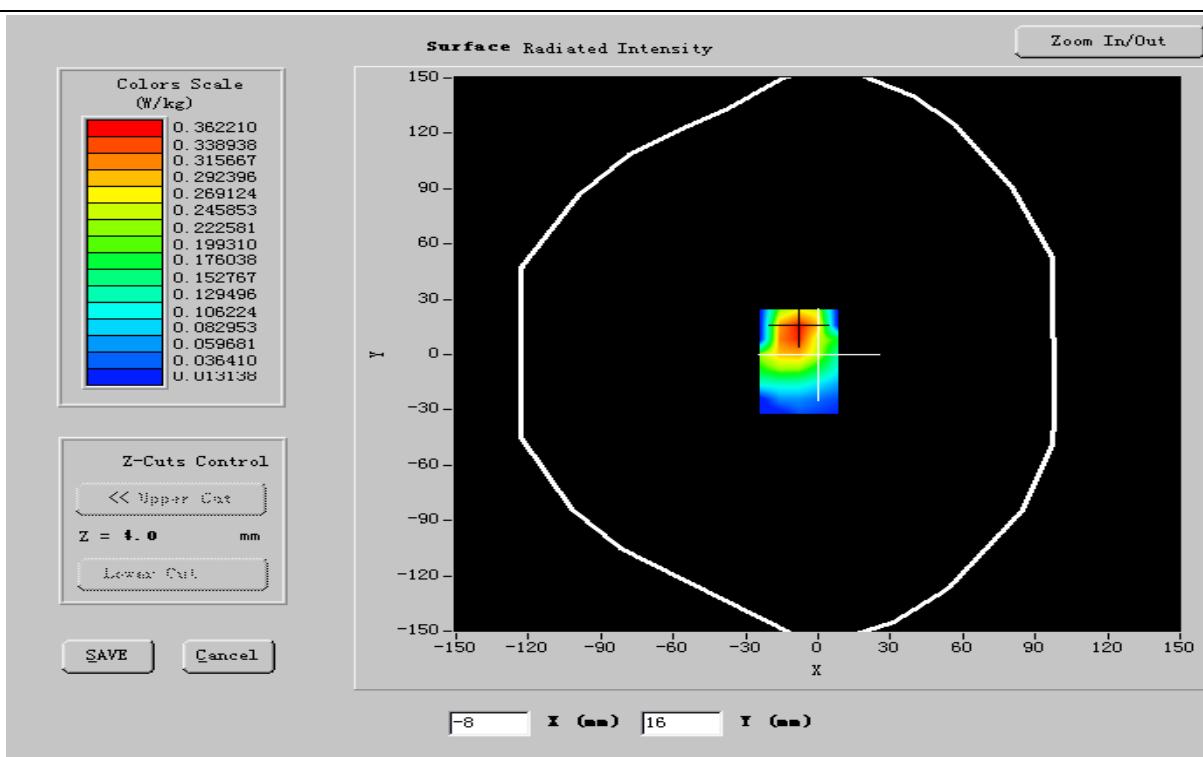
<b>Frequency (MHz)</b>	<b>1880.000000</b>
<b>Relative permitivity (real part)</b>	<b>52.893001</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.813800</b>
<b>Conductivity (S/m)</b>	<b>1.512775</b>
<b>Variation (%)</b>	<b>-0.700000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>



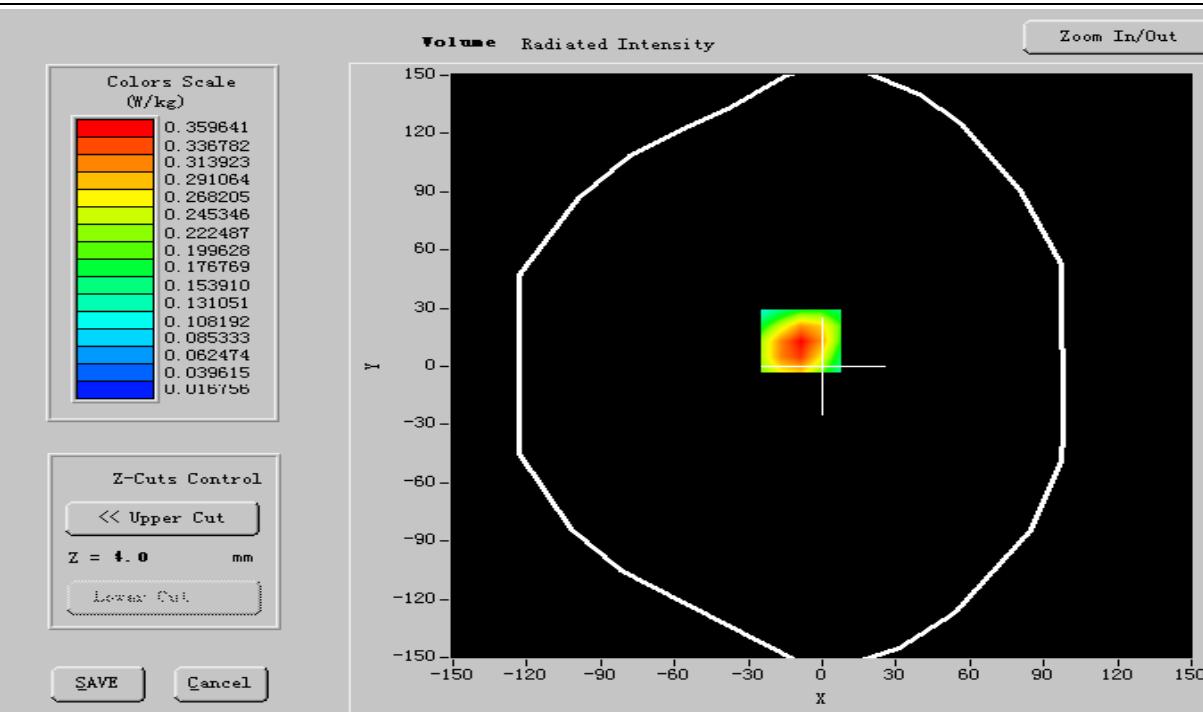
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR





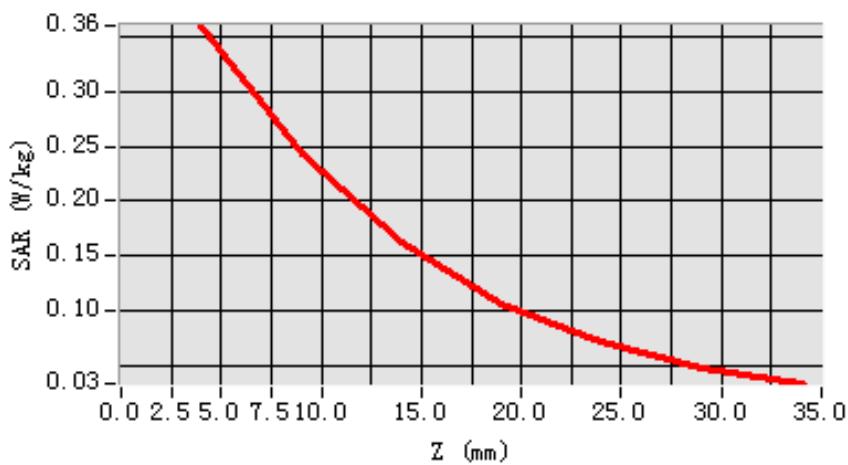
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.203691
SAR 1g (W/Kg)	0.325239

### **Z Axis Scan**

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/kg)</b>	<b>0.0000</b>	<b>0.3152</b>	<b>0.2832</b>	<b>0.1923</b>	<b>0.1423</b>	<b>0.0932</b>	<b>0.0309</b>

**SAR, Z Axis Scan (X = -9, Y = 13)**





## **MEASUREMENT 15**

**Date of measurement: 24/9/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GSM1900
<b>Channels</b>	High
<b>Signal</b>	GSM

### **B. Instrumentations.**

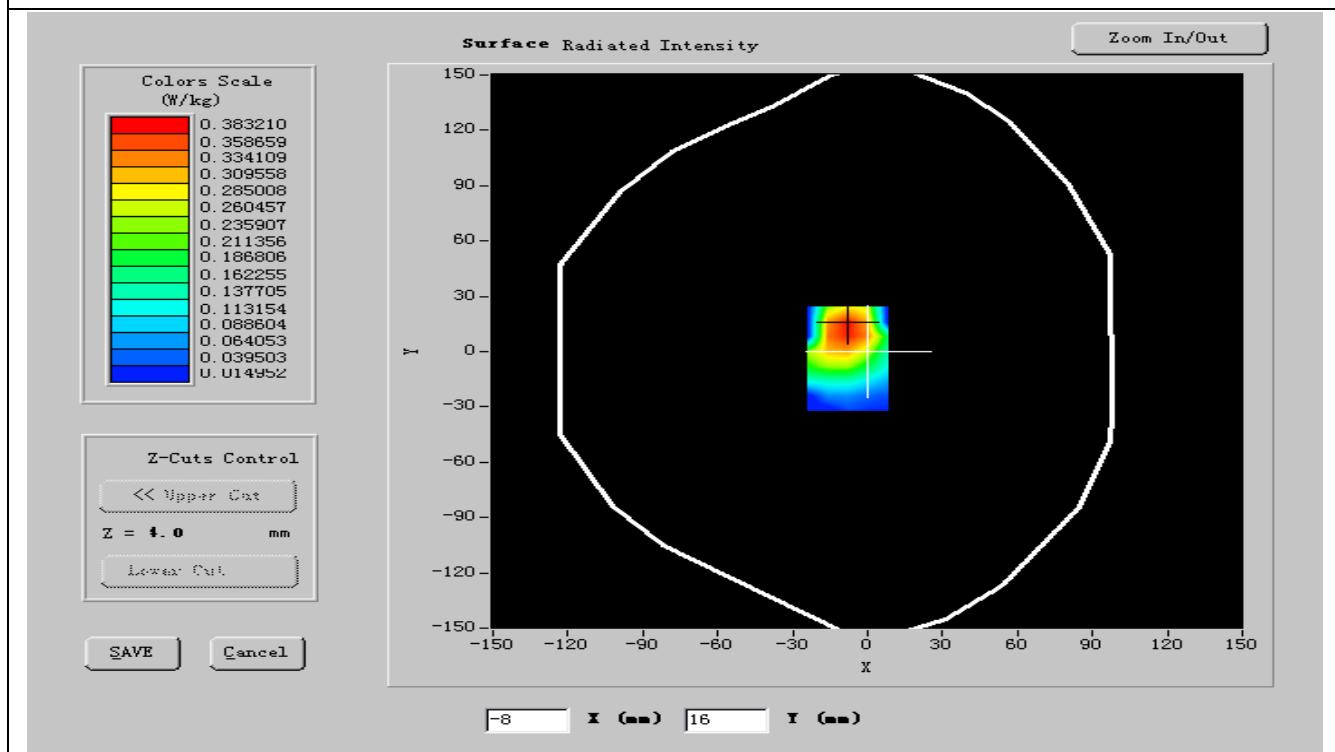
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

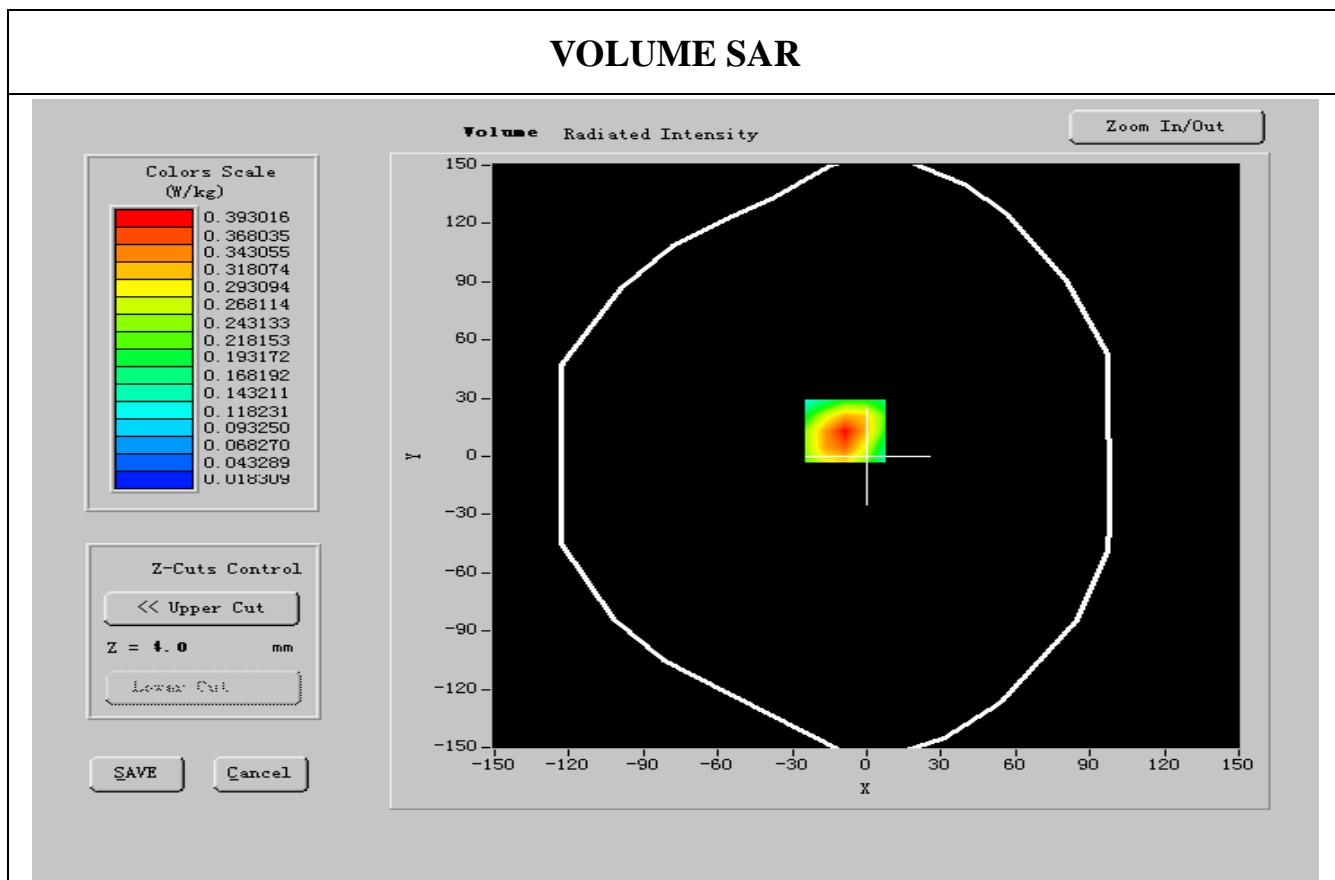
<b>Frequency (MHz)</b>	<b>1909.599976</b>
<b>Relative permitivity (real part)</b>	<b>52.885999</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.669900</b>
<b>Conductivity (S/m)</b>	<b>1.510225</b>
<b>Variation (%)</b>	<b>-0.600000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





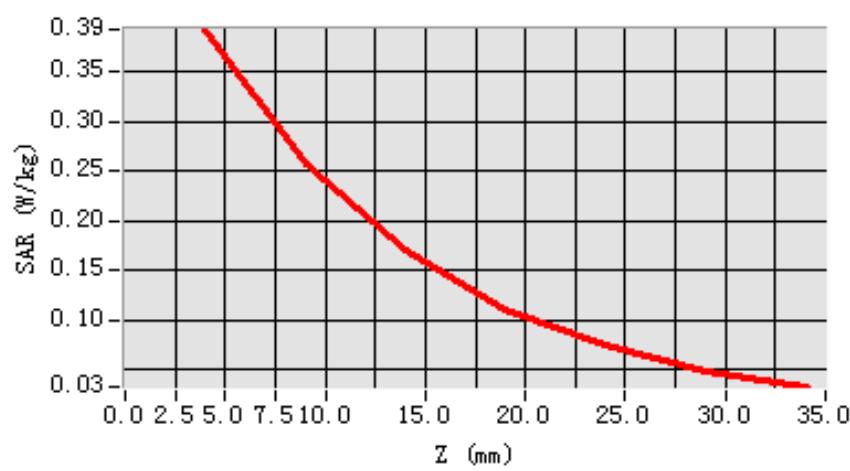
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.245223
SAR 1g (W/Kg)	0.337196

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.3571	0.2832	0.1823	0.1423	0.0923	0.0322

### **SAR, Z Axis Scan (X = -9, Y = 13)**





## **MEASUREMENT 16**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GSM1900
<b>Channels</b>	Low
<b>Signal</b>	GSM

### **B. Instrumentations.**

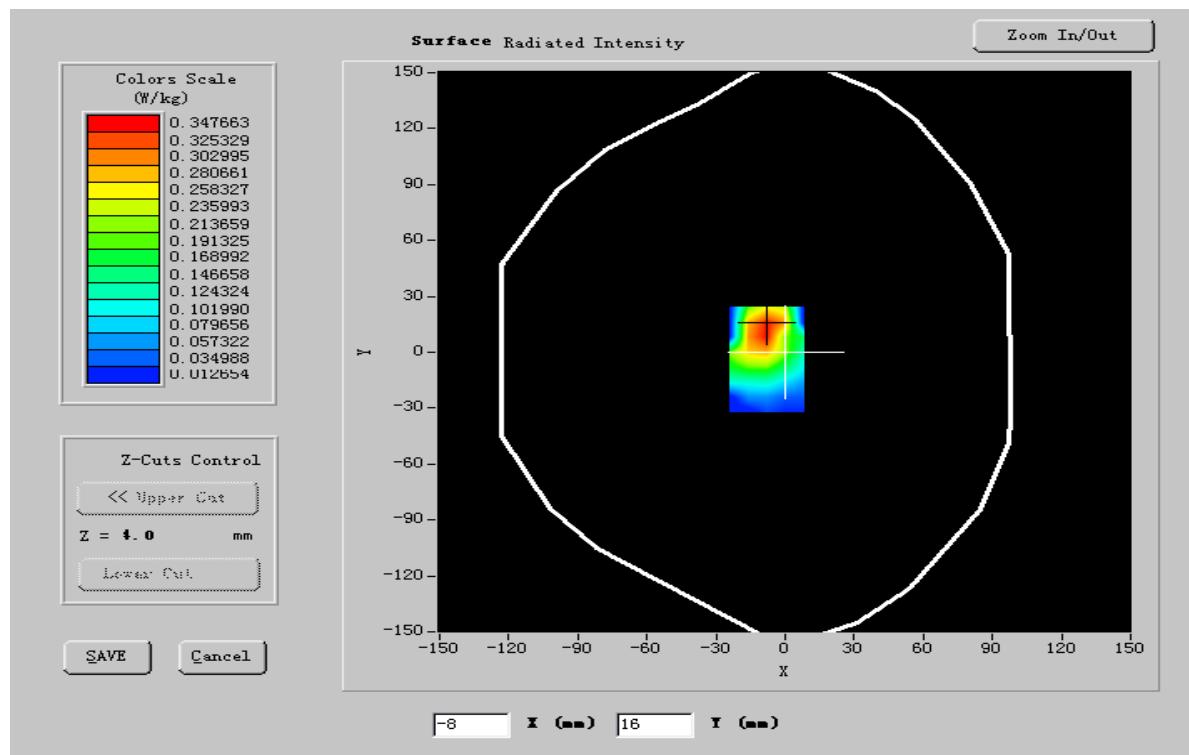
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

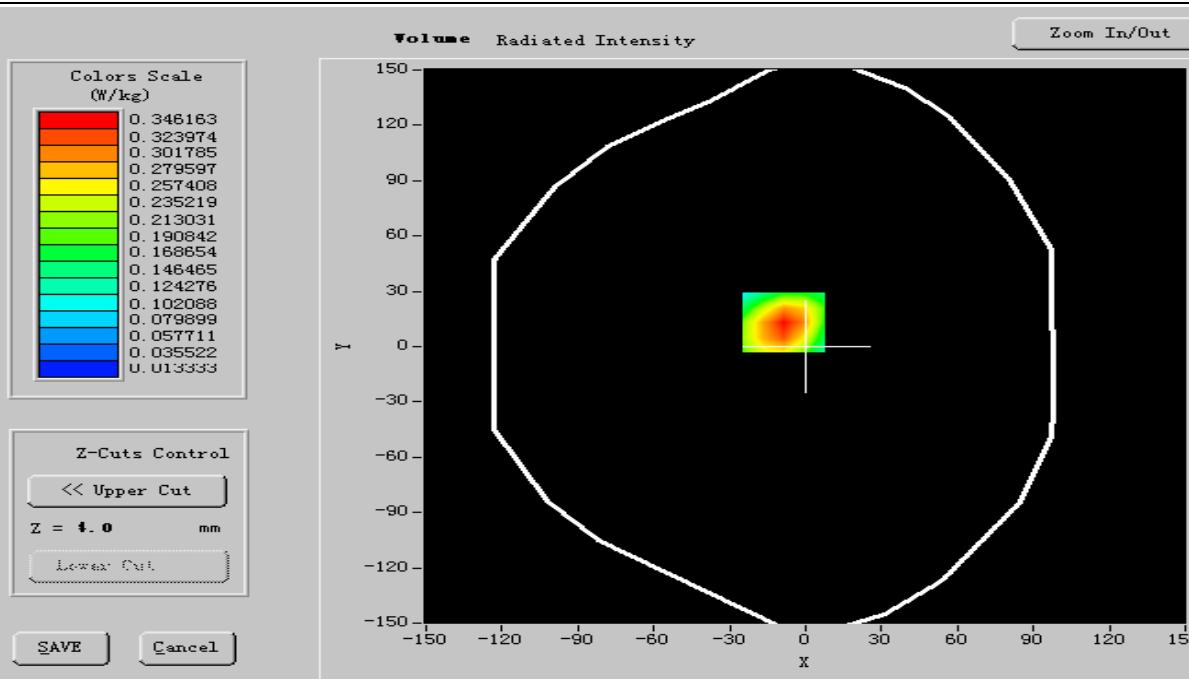
<b>Frequency (MHz)</b>	<b>1850.400024</b>
<b>Relative permitivity (real part)</b>	<b>52.313000</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.584900</b>
<b>Conductivity (S/m)</b>	<b>1.416522</b>
<b>Variation (%)</b>	<b>-0.130000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





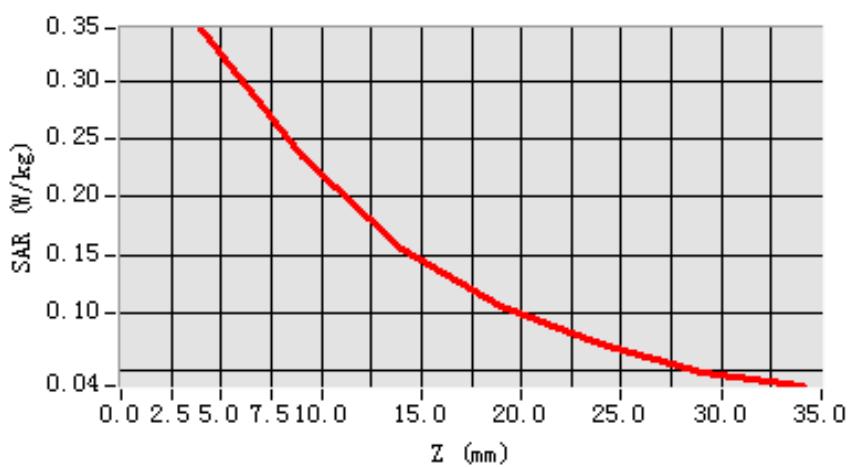
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.200652
SAR 1g (W/Kg)	0.293356

### **Z Axis Scan**

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/kg)</b>	<b>0.0000</b>	<b>0.3133</b>	<b>0.2873</b>	<b>0.1934</b>	<b>0.1464</b>	<b>0.1264</b>	<b>0.0089</b>

### **SAR, Z Axis Scan (X = -9, Y = 13)**





## **MEASUREMENT 17**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GSM1900
<b>Channels</b>	Middle
<b>Signal</b>	GSM

### **B. Instrumentations.**

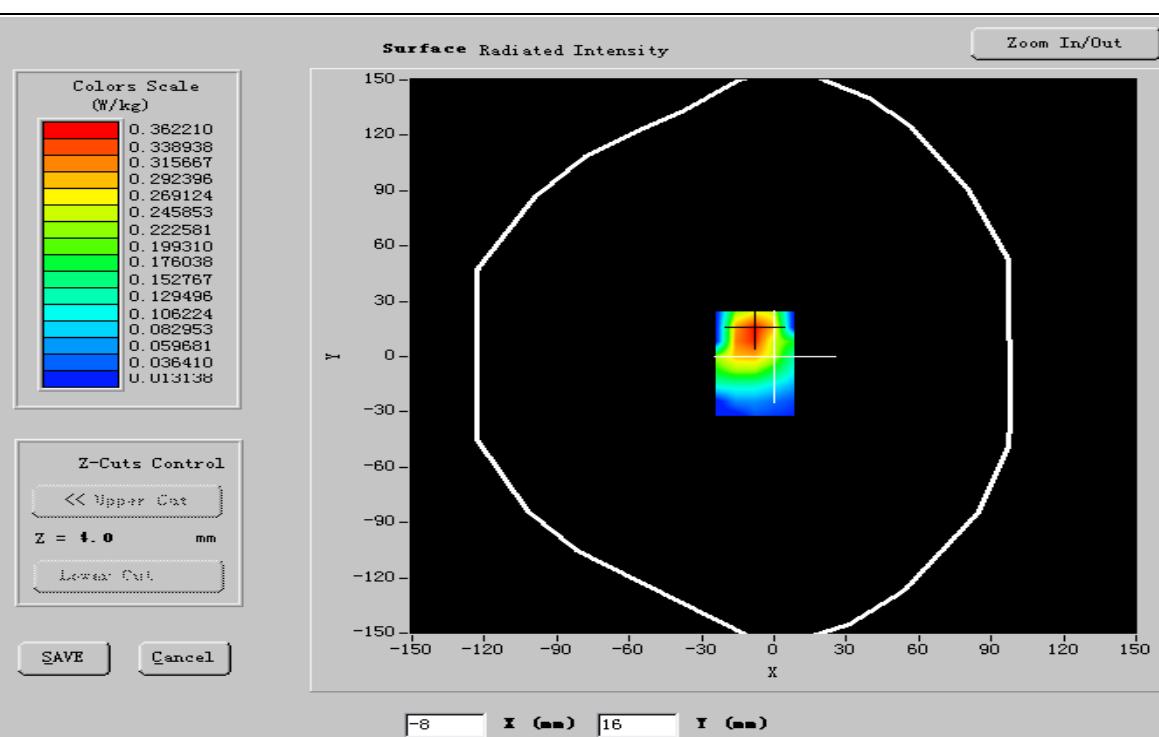
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

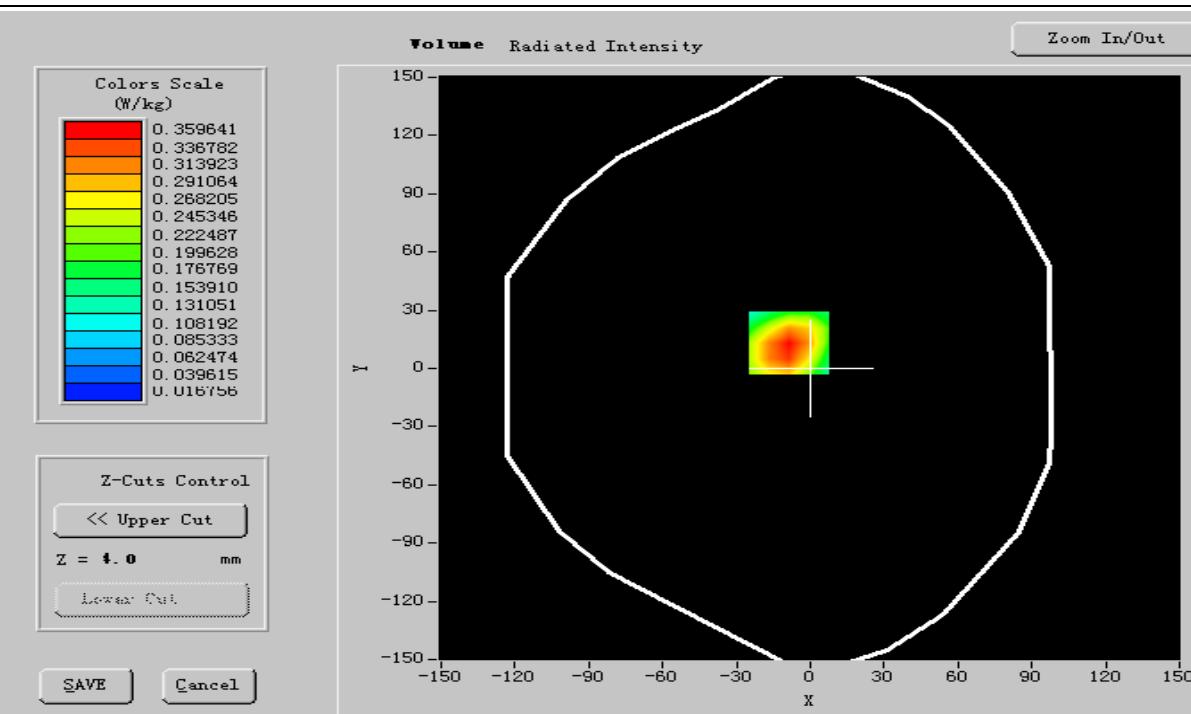
<b>Frequency (MHz)</b>	<b>1880.000000</b>
<b>Relative permitivity (real part)</b>	<b>52.893001</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.813800</b>
<b>Conductivity (S/m)</b>	<b>1.512775</b>
<b>Variation (%)</b>	<b>-0.700000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





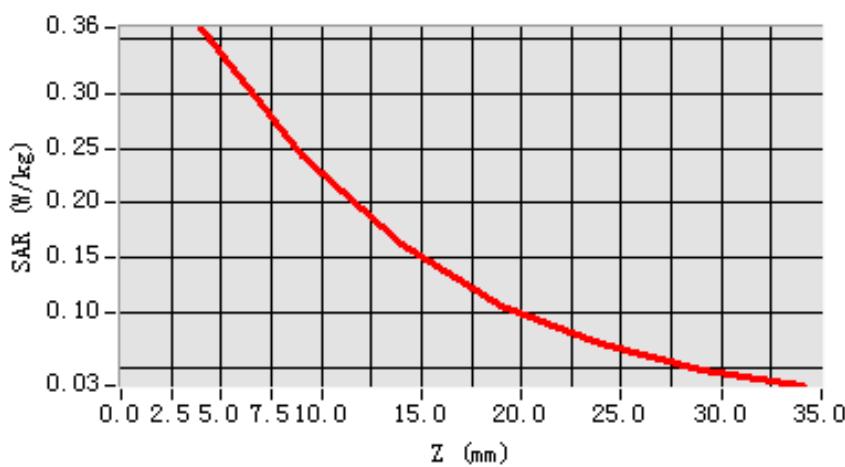
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.246487
SAR 1g (W/Kg)	0.315543

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.3152	0.2832	0.1923	0.1423	0.0932	0.0309

**SAR, Z Axis Scan (X = -9, Y = 13)**





## **MEASUREMENT 18**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GSM1900
<b>Channels</b>	High
<b>Signal</b>	GSM

### **B. Instrumentations.**

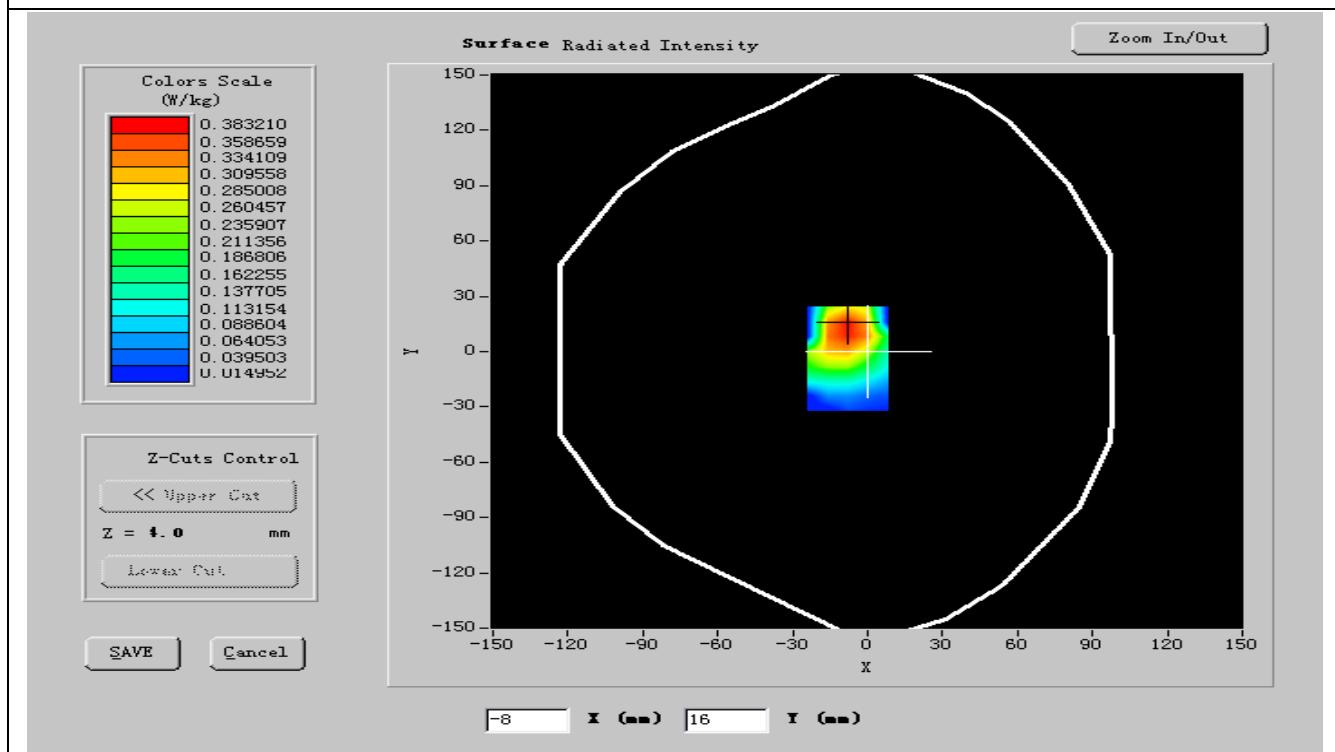
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

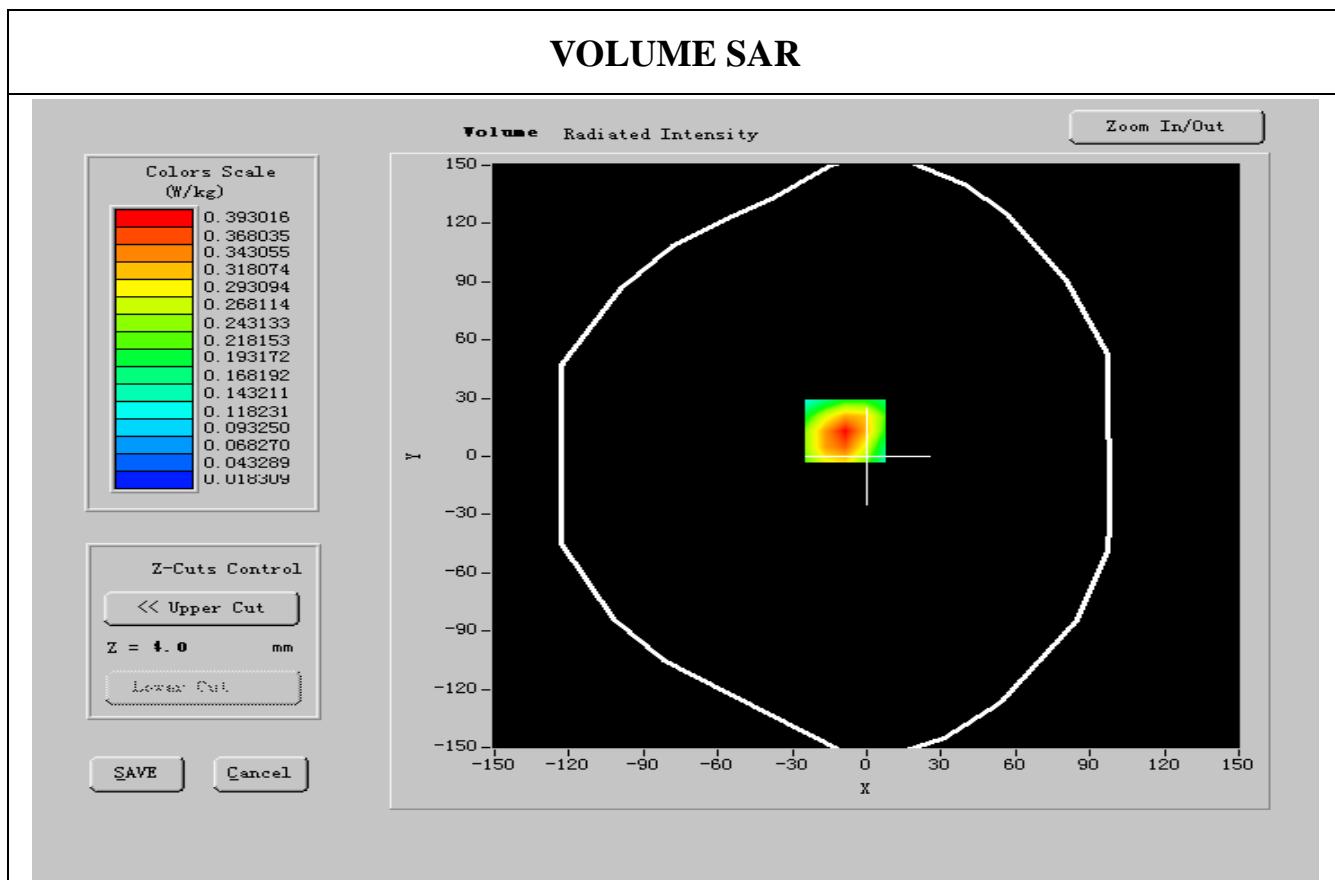
<b>Frequency (MHz)</b>	<b>1909.599976</b>
<b>Relative permitivity (real part)</b>	<b>52.885999</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.669900</b>
<b>Conductivity (S/m)</b>	<b>1.510225</b>
<b>Variation (%)</b>	<b>-0.600000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:8</b>



## SURFACE SAR



## VOLUME SAR





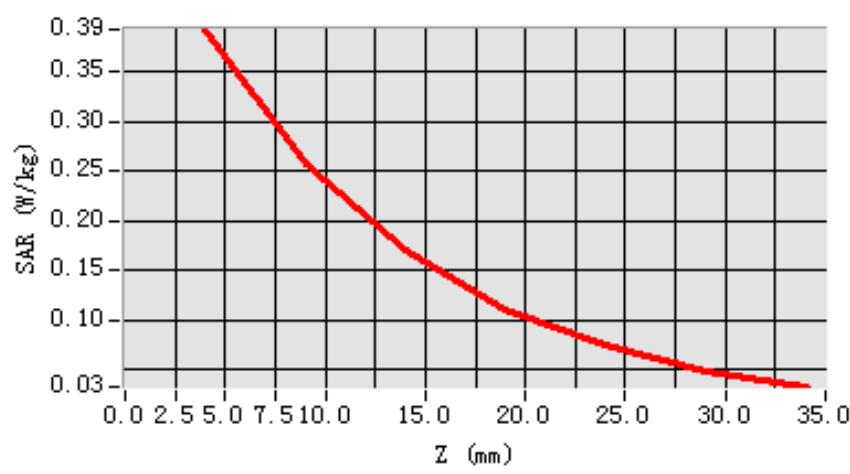
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.234665
SAR 1g (W/Kg)	0.327327

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.3571	0.2832	0.1823	0.1423	0.0923	0.0322

### **SAR, Z Axis Scan (X = -9, Y = 13)**





## **MEASUREMENT 19**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GPRS1900
<b>Channels</b>	Low
<b>Signal</b>	GPRS

### **B. Instrumentations.**

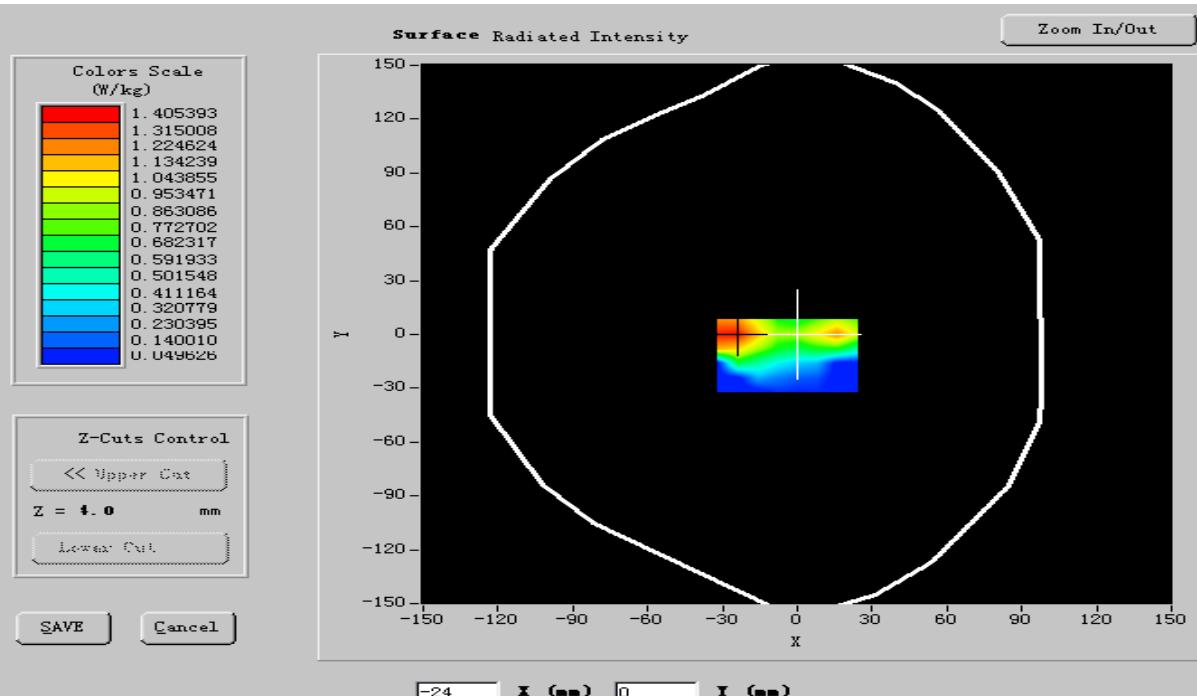
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

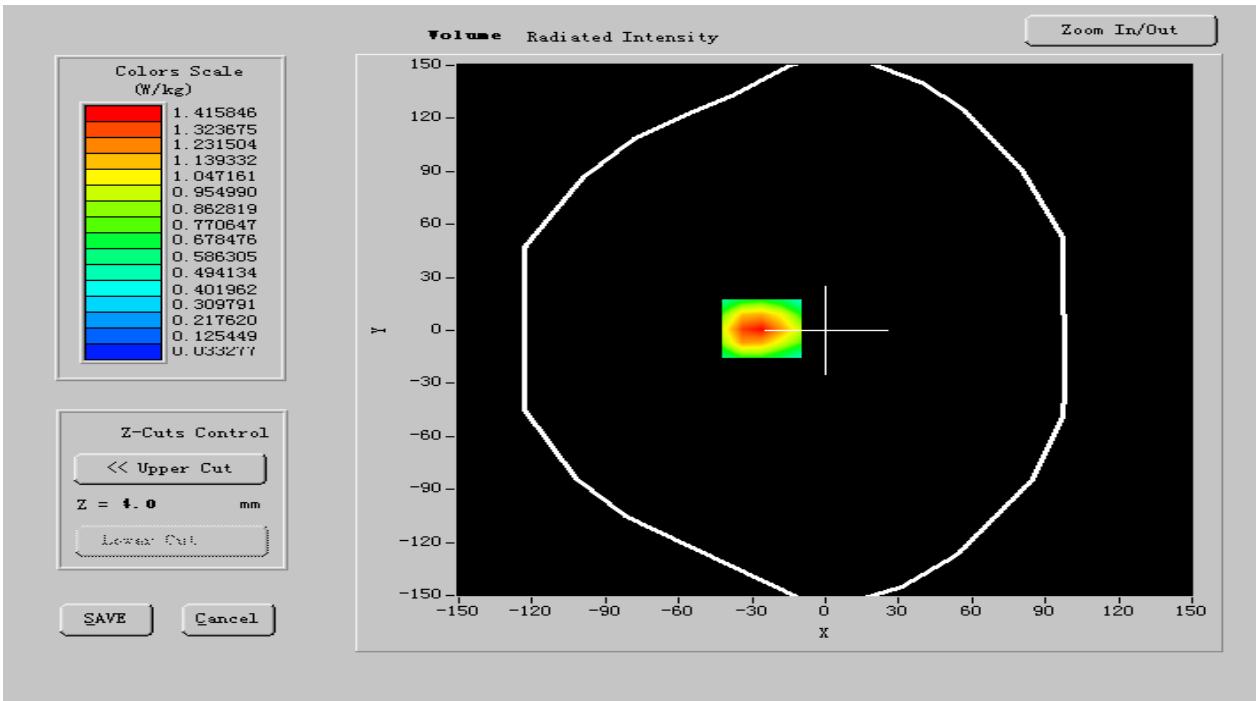
<b>Frequency (MHz)</b>	<b>1850.199951</b>
<b>Relative permitivity (real part)</b>	<b>52.347400</b>
<b>Relative permitivity (imaginary part)</b>	<b>14.450693</b>
<b>Conductivity (S/m)</b>	<b>1.533698</b>
<b>Variation (%)</b>	<b>-0.400000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



## VOLUME SAR





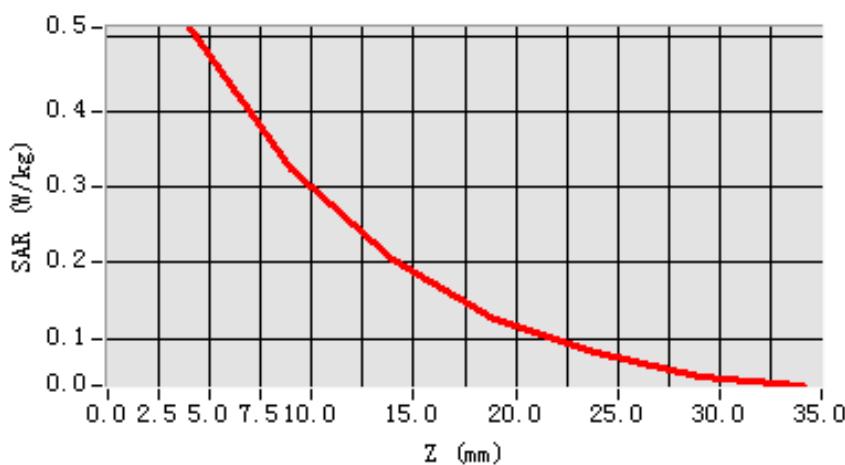
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.219562
SAR 1g (W/Kg)	0.408852

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4188	0.2834	0.1920	0.1523	0.0854	0.0072

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





## **MEASUREMENT 20**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GPRS1900
<b>Channels</b>	Middle
<b>Signal</b>	GPRS

### **B. Instrumentations.**

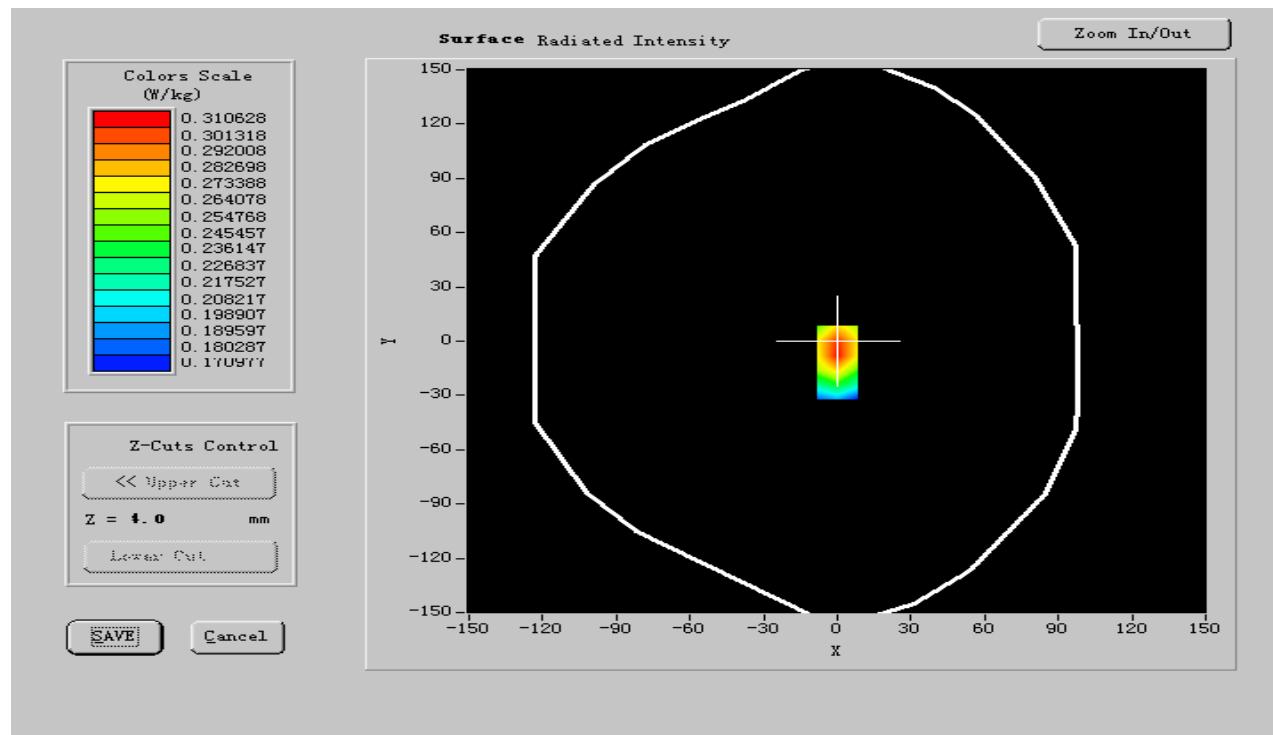
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

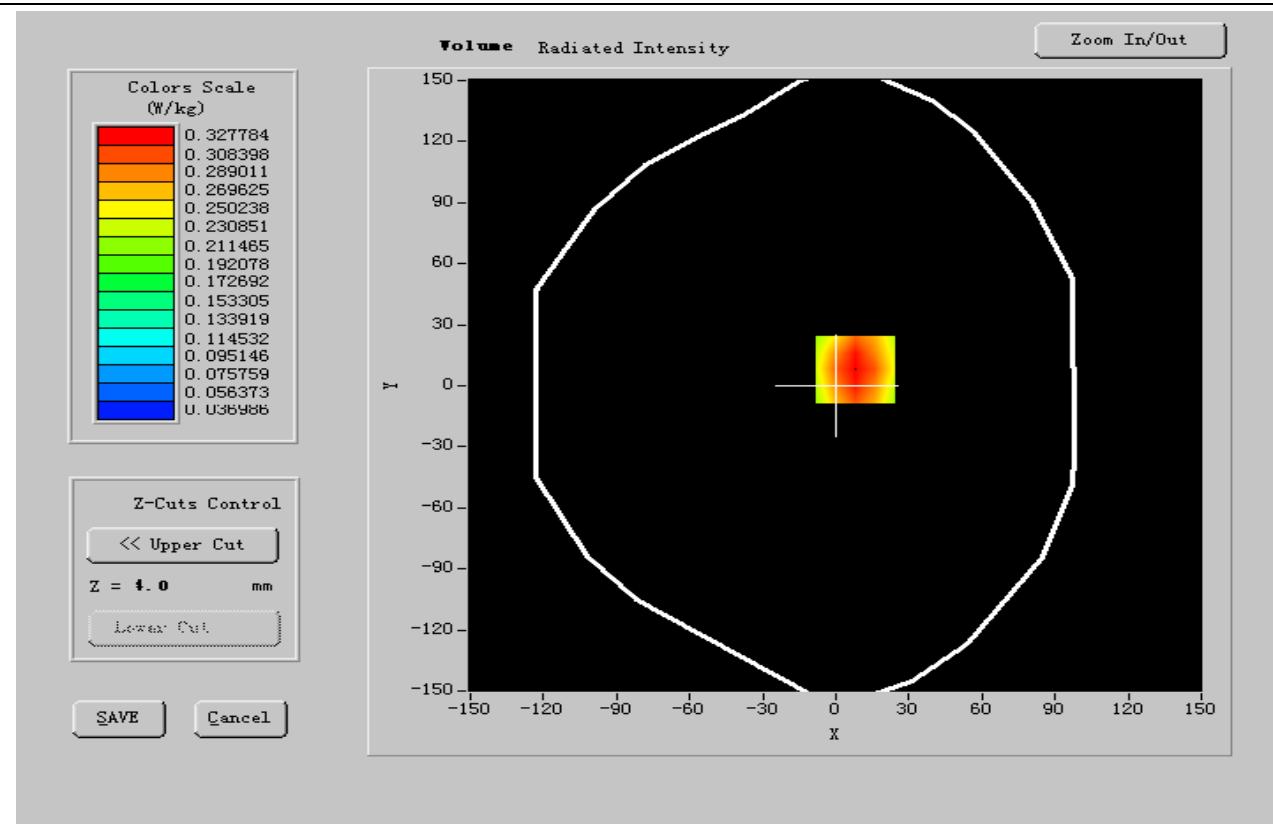
<b>Frequency (MHz)</b>	<b>1880.400004</b>
<b>Relative permitivity (real part)</b>	<b>51.417028</b>
<b>Relative permitivity (imaginary part)</b>	<b>14.293556</b>
<b>Conductivity (S/m)</b>	<b>1.514286</b>
<b>Variation (%)</b>	<b>-1.010000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



## VOLUME SAR





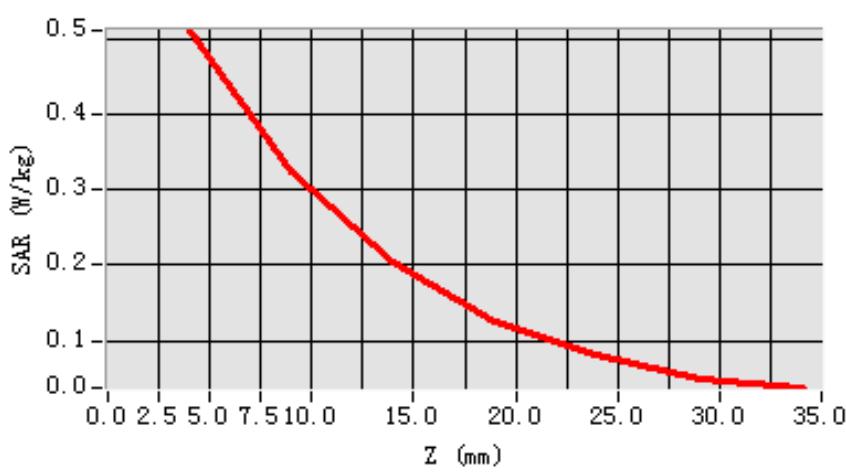
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.215362
SAR 1g (W/Kg)	0.444258

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4242	0.3034	0.1820	0.1323	0.0954	0.0062

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





## **MEASUREMENT 21**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GPRS1900
<b>Channels</b>	High
<b>Signal</b>	GPRS

### **B. Instrumentations.**

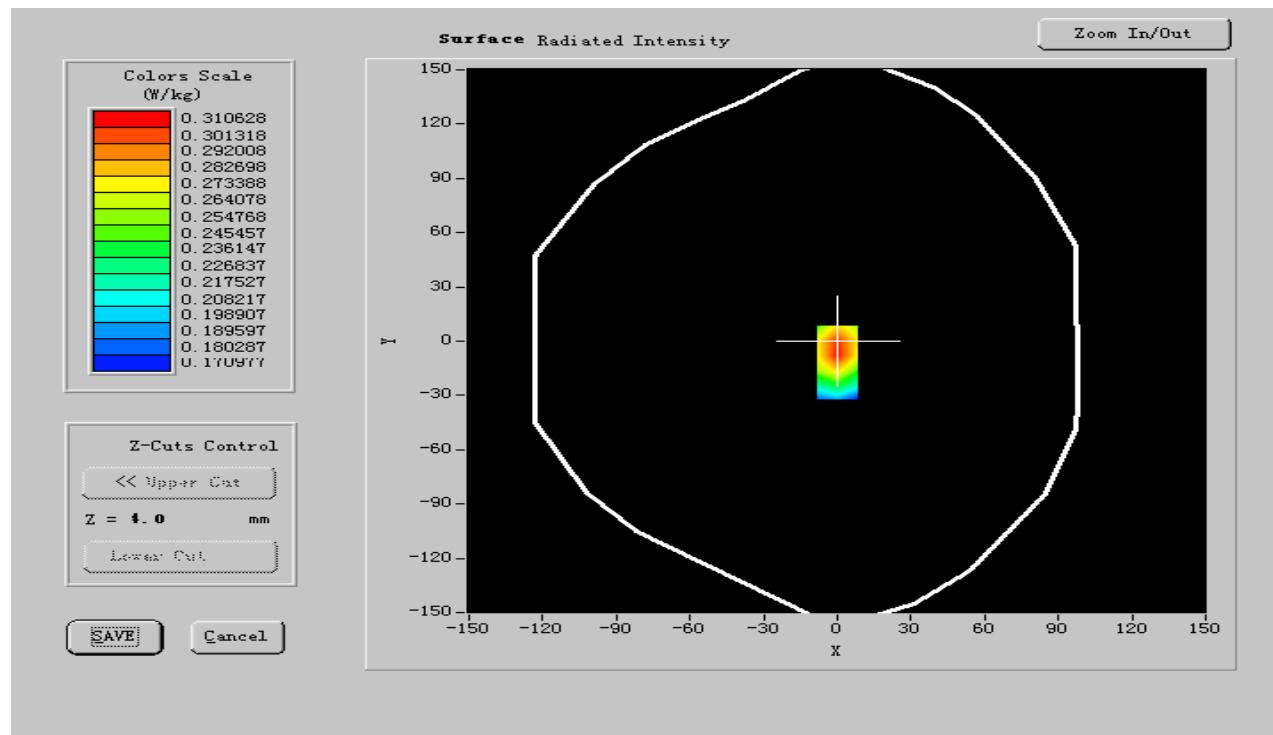
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

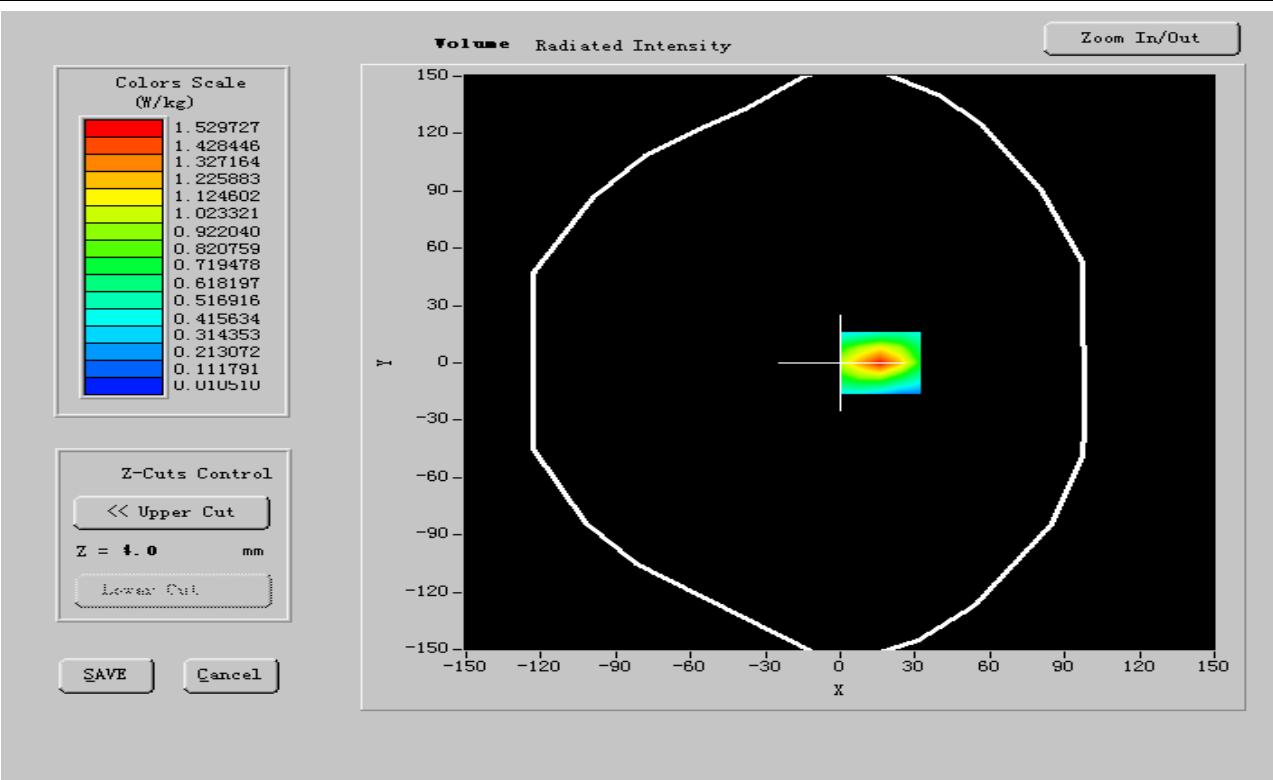
<b>Frequency (MHz)</b>	<b>1908.599036</b>
<b>Relative permitivity (real part)</b>	<b>51.813332</b>
<b>Relative permitivity (imaginary part)</b>	<b>14.319230</b>
<b>Conductivity (S/m)</b>	<b>1.513224</b>
<b>Variation (%)</b>	<b>-0.130000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



## VOLUME SAR





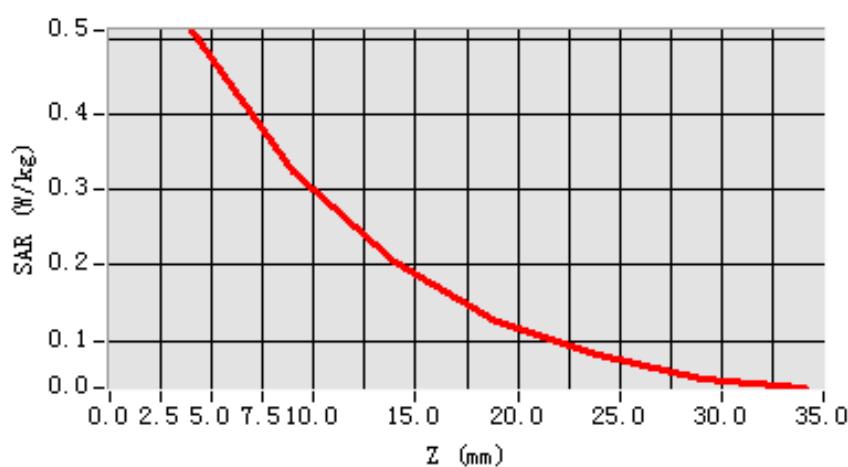
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.265841
SAR 1g (W/Kg)	0.426721

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4467	0.3054	0.1865	0.1234	0.0754	0.0032

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





## **MEASUREMENT 22**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GPRS1900
<b>Channels</b>	Low
<b>Signal</b>	GPRS

### **B. Instrumentations.**

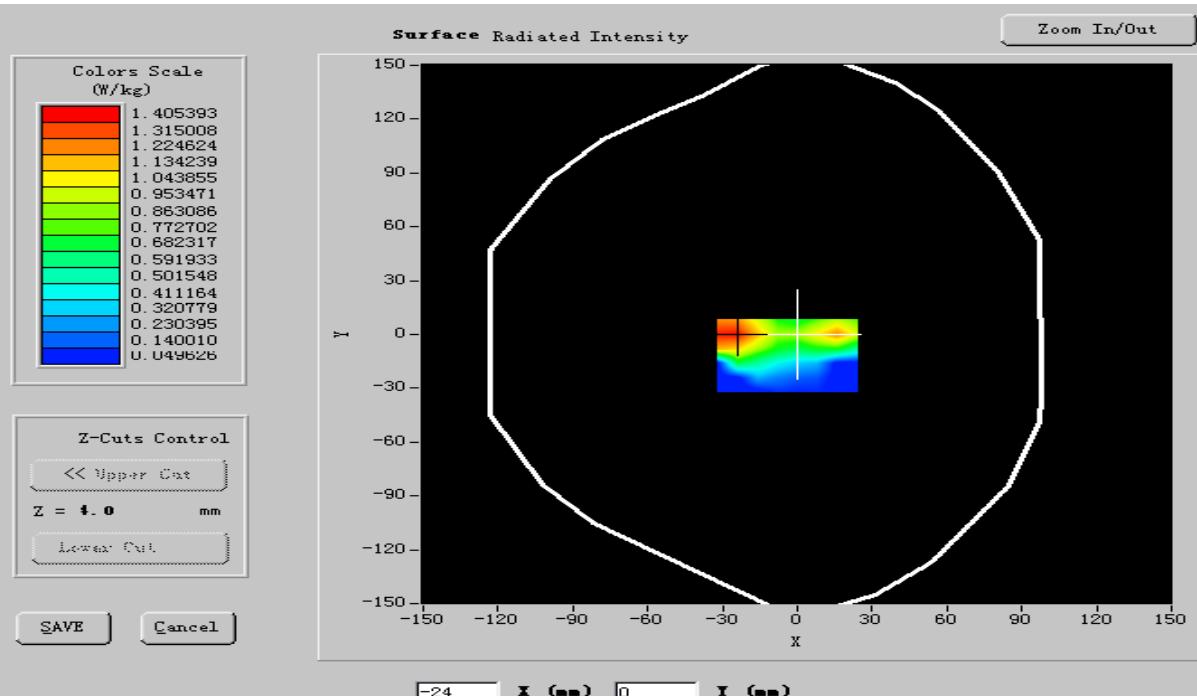
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

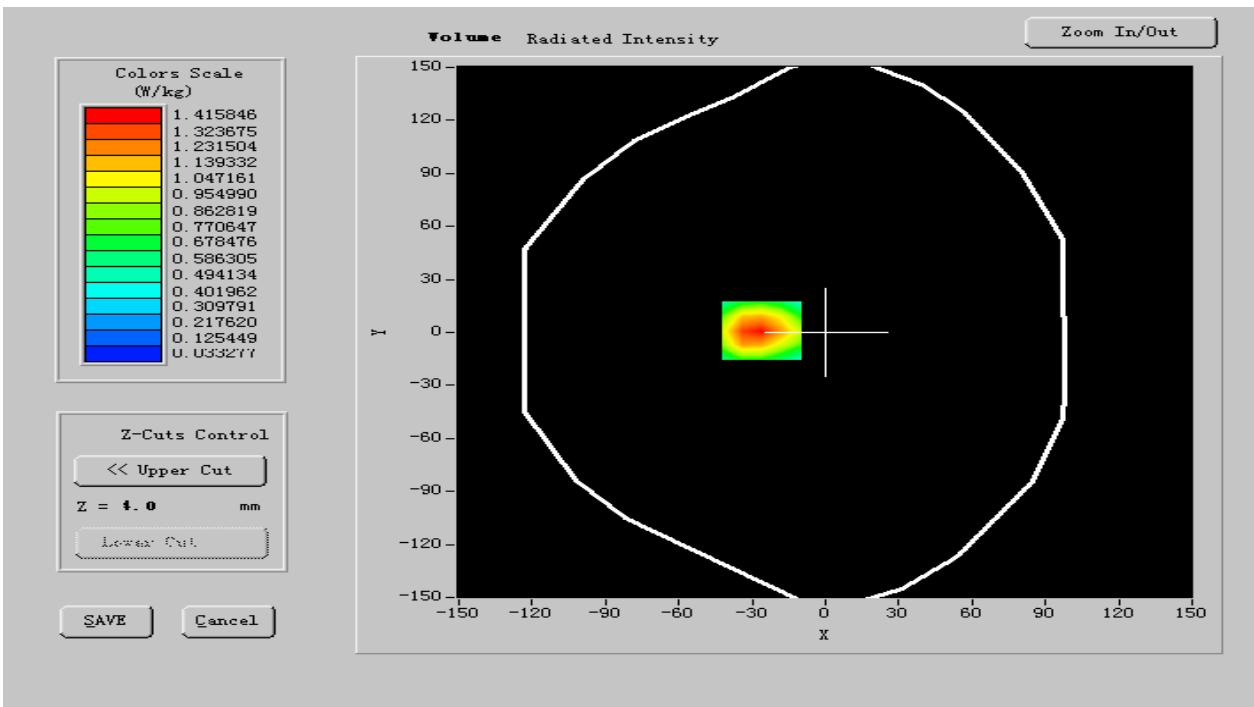
<b>Frequency (MHz)</b>	<b>1850.199951</b>
<b>Relative permitivity (real part)</b>	<b>52.347400</b>
<b>Relative permitivity (imaginary part)</b>	<b>14.450693</b>
<b>Conductivity (S/m)</b>	<b>1.533698</b>
<b>Variation (%)</b>	<b>-0.400000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



## VOLUME SAR





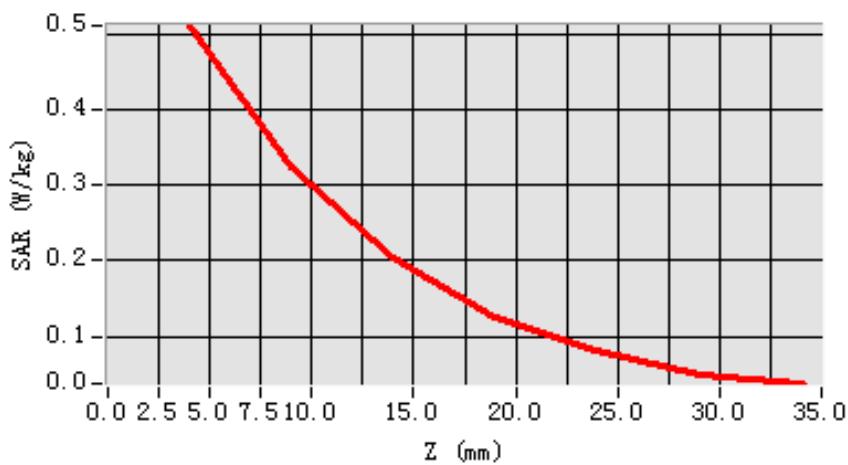
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.256353
SAR 1g (W/Kg)	0.358852

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4188	0.2834	0.1920	0.1523	0.0854	0.0072

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





## **MEASUREMENT 23**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GPRS1900
<b>Channels</b>	Middle
<b>Signal</b>	GPRS

### **B. Instrumentations.**

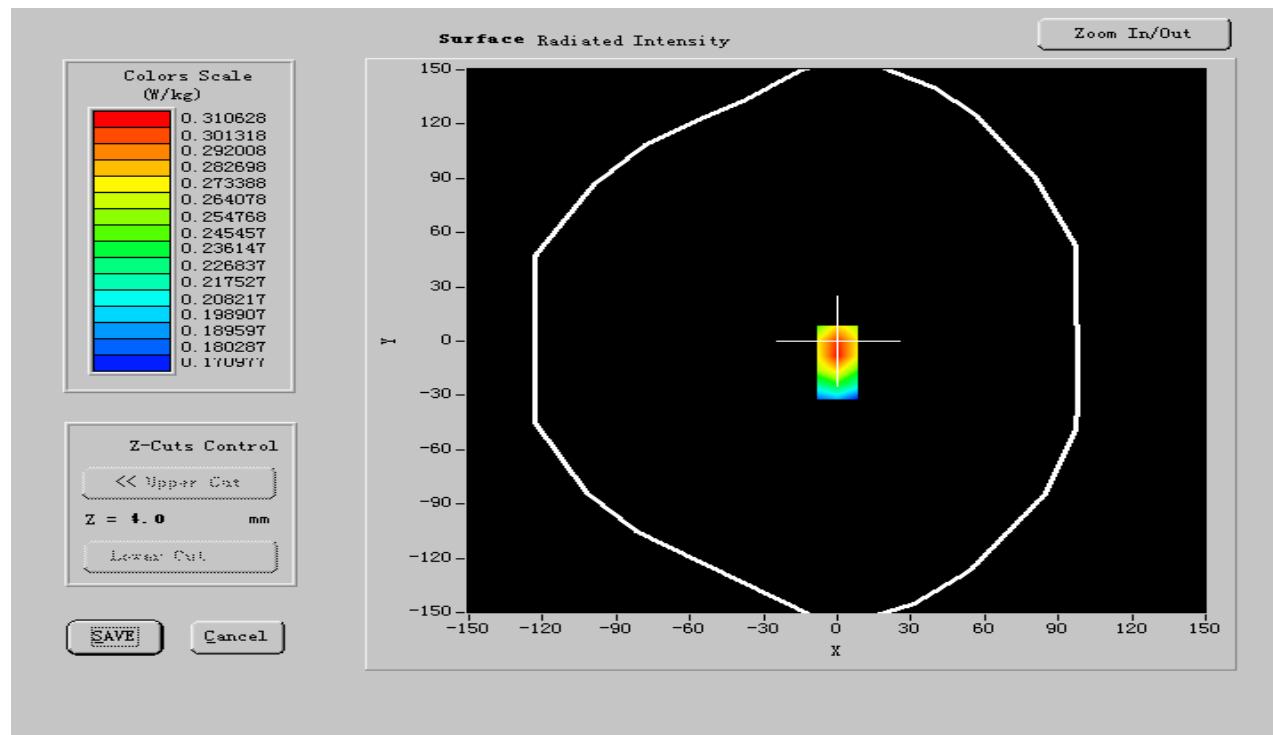
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

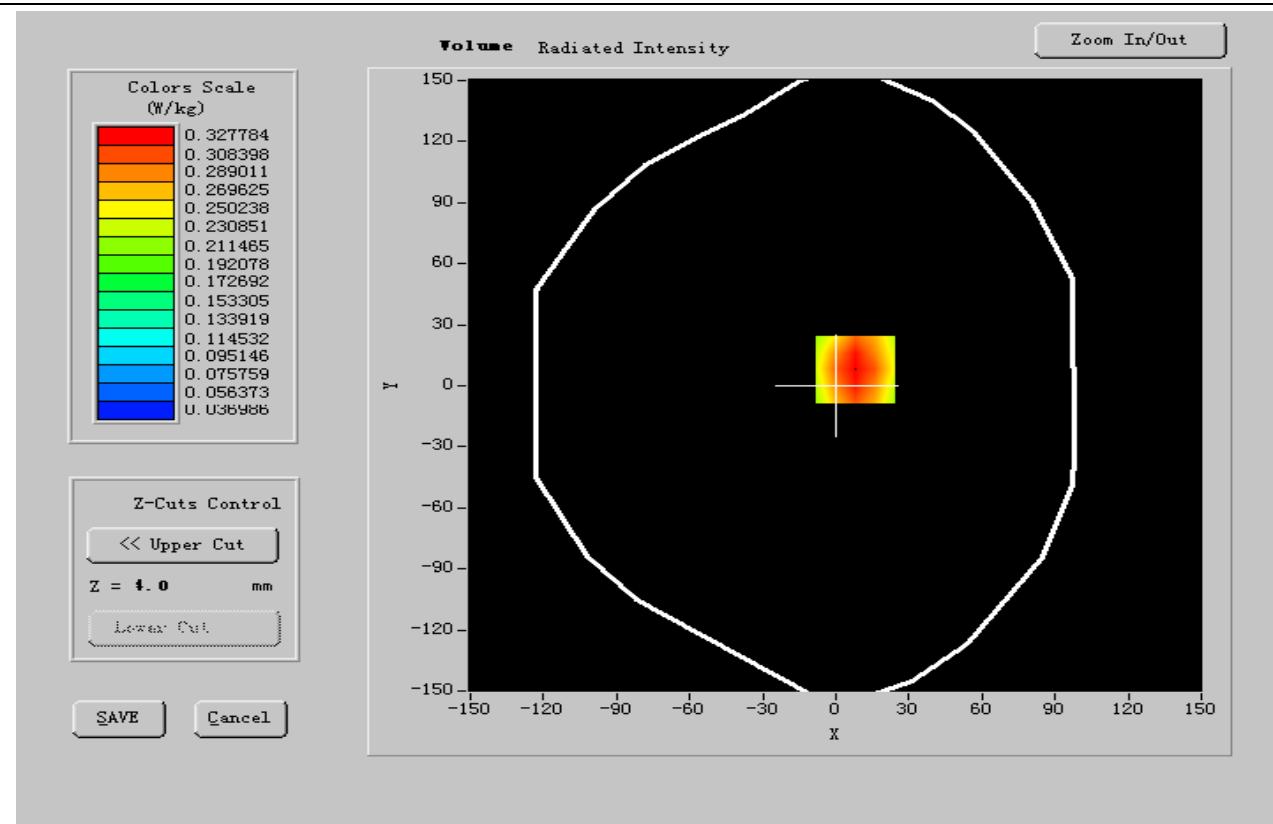
<b>Frequency (MHz)</b>	<b>1880.400004</b>
<b>Relative permitivity (real part)</b>	<b>51.417028</b>
<b>Relative permitivity (imaginary part)</b>	<b>14.293556</b>
<b>Conductivity (S/m)</b>	<b>1.514286</b>
<b>Variation (%)</b>	<b>-1.010000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



## VOLUME SAR





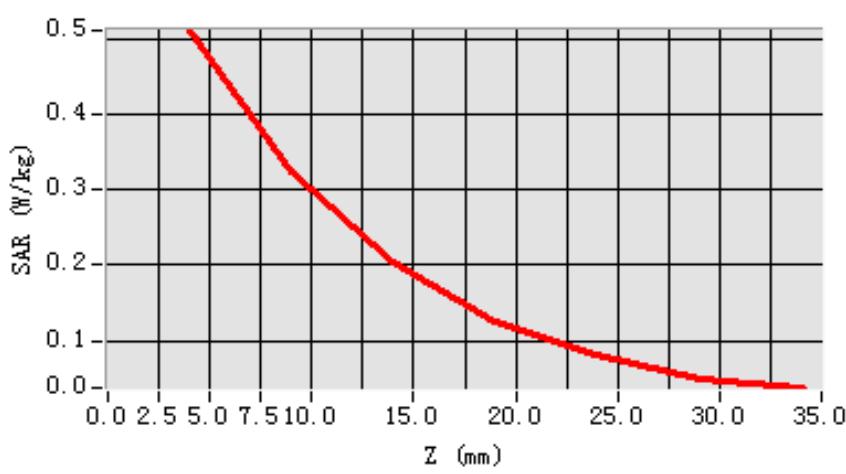
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.215362
SAR 1g (W/Kg)	0.366258

### **Z Axis Scan**

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
<b>SAR (W/kg)</b>	<b>0.0000</b>	<b>0.4242</b>	<b>0.3034</b>	<b>0.1820</b>	<b>0.1323</b>	<b>0.0954</b>	<b>0.0062</b>

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





## **MEASUREMENT 24**

**Date of measurement: 15/11/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	GPRS1900
<b>Channels</b>	High
<b>Signal</b>	GPRS

### **B. Instrumentations.**

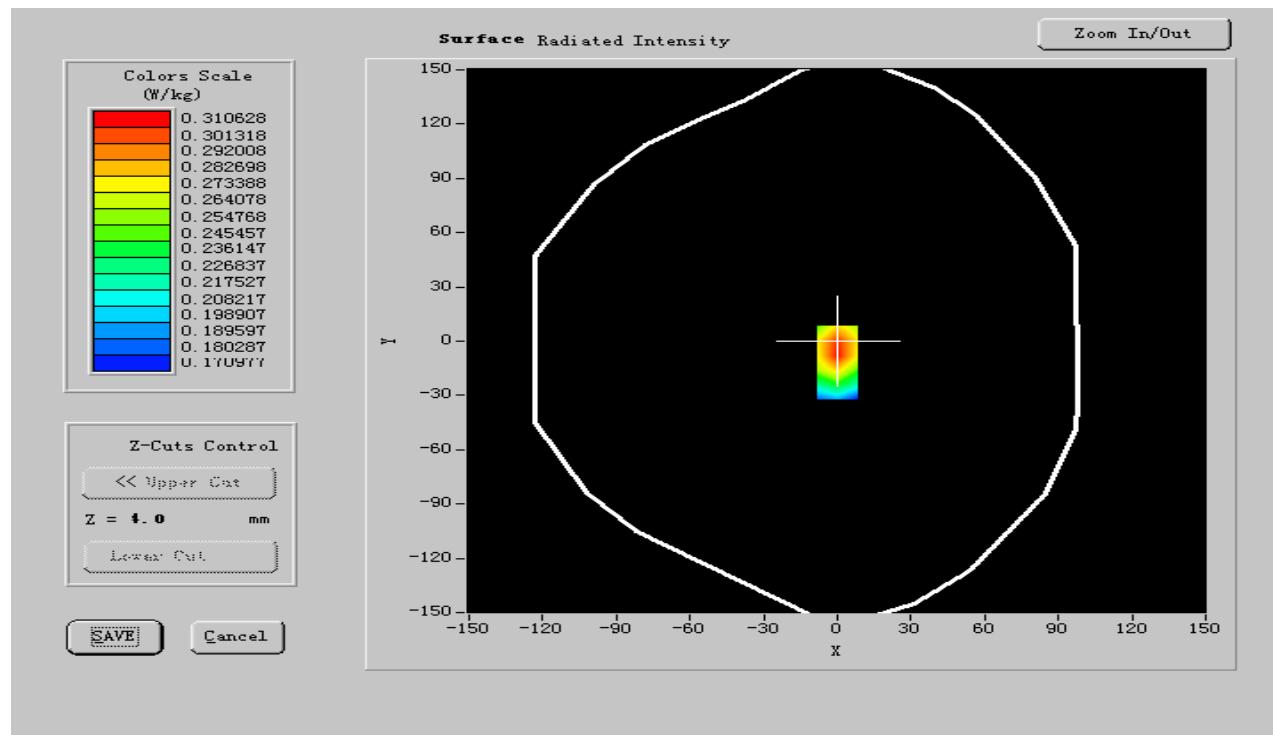
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>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

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

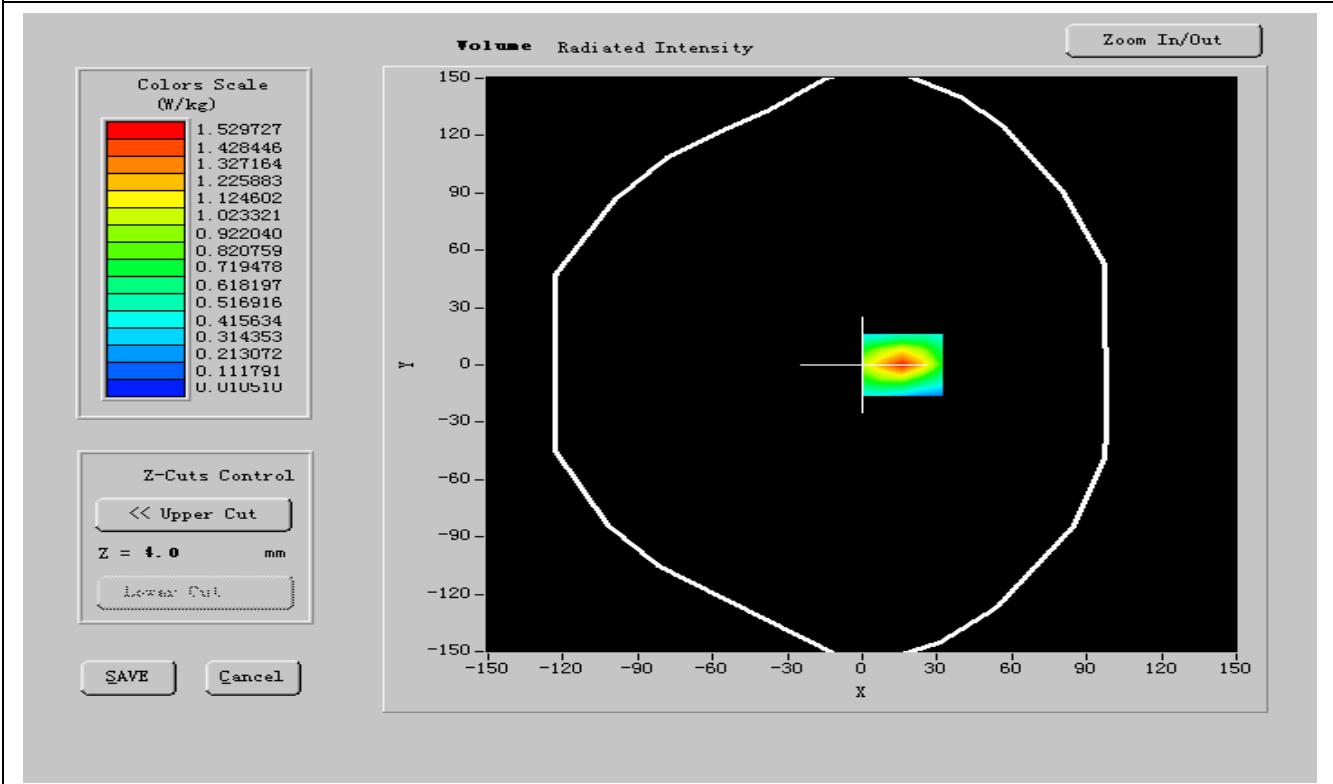
<b>Frequency (MHz)</b>	<b>1908.599036</b>
<b>Relative permitivity (real part)</b>	<b>51.813332</b>
<b>Relative permitivity (imaginary part)</b>	<b>14.319230</b>
<b>Conductivity (S/m)</b>	<b>1.513224</b>
<b>Variation (%)</b>	<b>-0.130000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>40.42, 41.12, 54.75</b>
<b>Crest factor:</b>	<b>1:4</b>



## SURFACE SAR



## VOLUME SAR





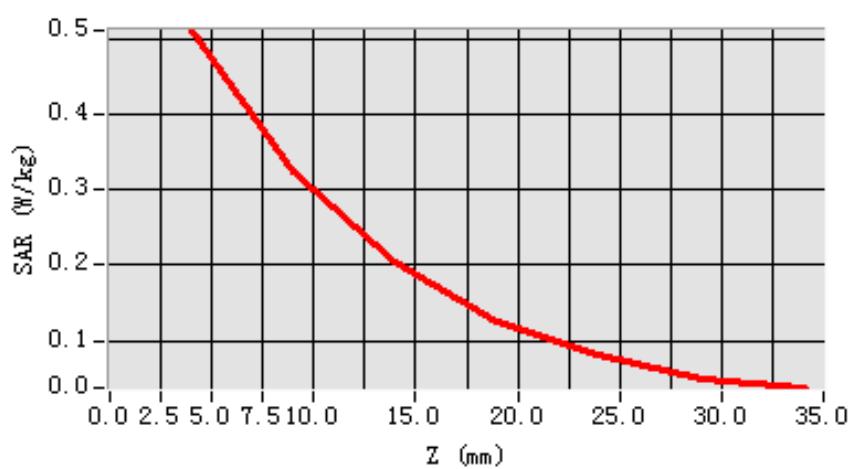
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.234367
SAR 1g (W/Kg)	0.416327

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.4467	0.3054	0.1865	0.1234	0.0754	0.0032

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





## III. 802.11 B RESULTS

<u>TYPE</u>	<u>PARAMETERS</u>
<u>Phone</u>	<p><u>Measurement 1:</u> Validation Plane with Body(Bottom) device position on Low Channel in 802.11b mode</p> <p><u>Measurement 2:</u> Validation Plane with Body(Bottom) device position on Middle Channel in 802.11b mode</p> <p><u>Measurement 3:</u> Validation Plane with Body(Bottom) device position on High Channel in 802.11b mode</p> <p><u>Measurement 4 :</u>Validation Plane with Body (Top)device position on Low Channel in 802.11b mode</p> <p><u>Measurement 5:</u> Validation Plane with Body (Top)device position on Middle Channel in 802.11b mode</p> <p><u>Measurement 6:</u> Validation Plane with Body(Top) device position on High Channel in 802.11b mode</p>



## MEASUREMENT 1

Date of measurement: 24/9/2010

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
Device Position	FrontSide toward phantom
Band	802.11b
Channels	Low
Signal	wireless

### B. Instrumentations.

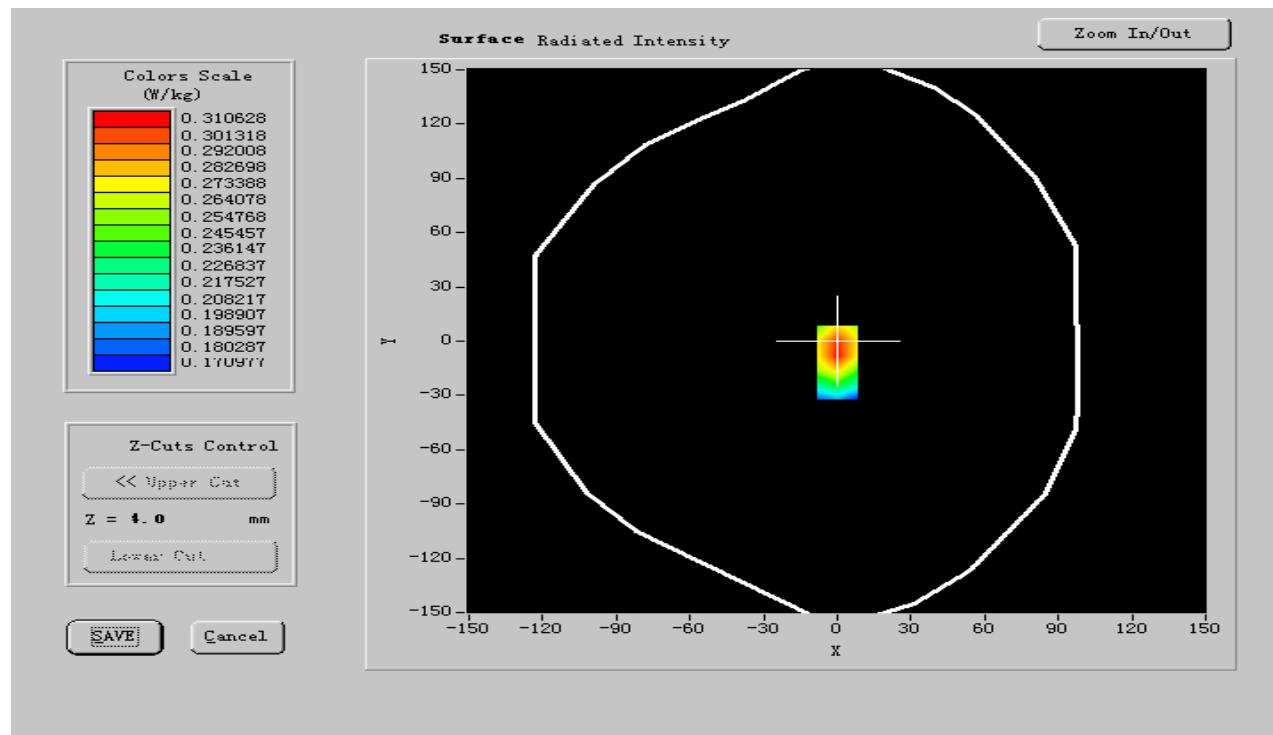
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 2450	Antennessa (DIPJ37,SN 48/05)	Calibration Due: 10/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

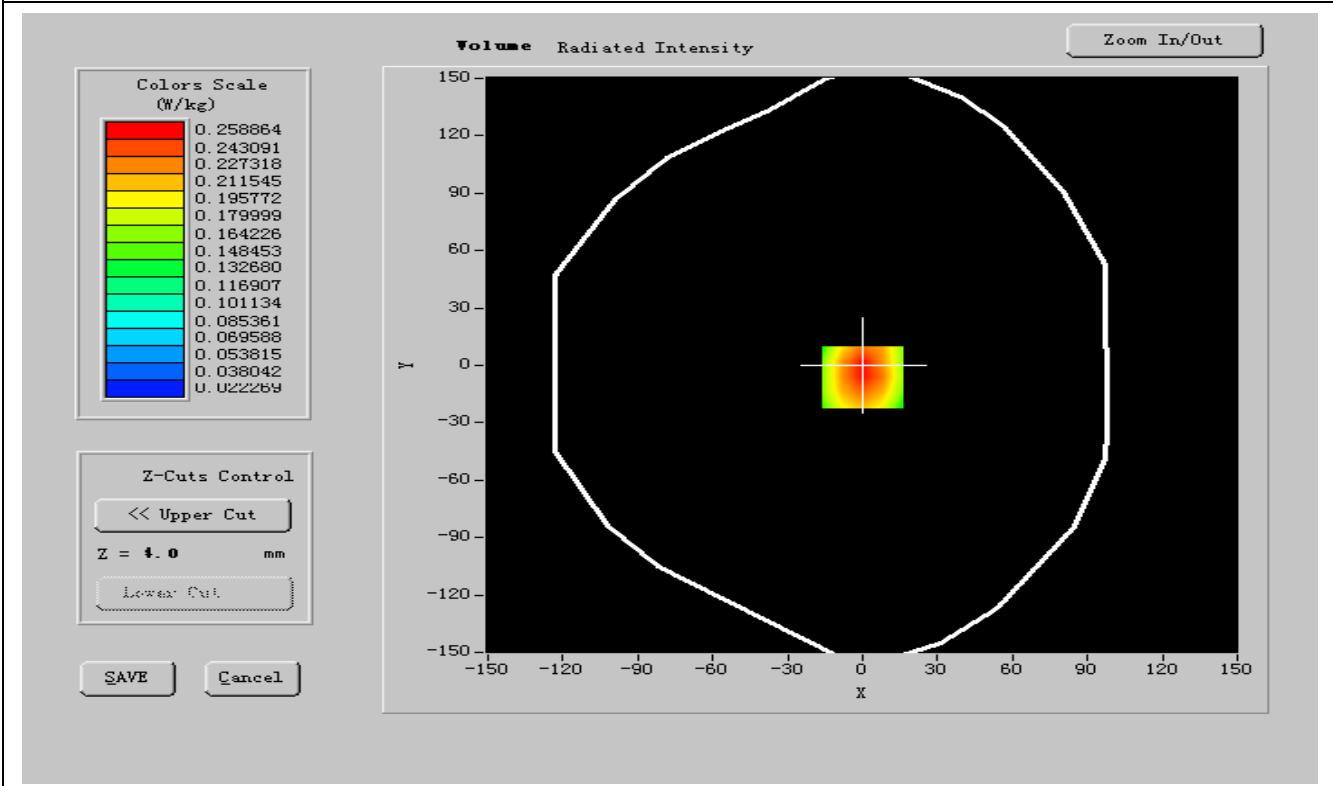
Frequency (MHz)	2412.000000
Relative permitivity (real part)	51.520064
Relative permitivity (imaginary part)	13.370061
Conductivity (S/m)	1.965014
Variation (%)	-0.130000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	50.35,52.98,69.78
Crest factor:	1:1



## SURFACE SAR



## VOLUME SAR





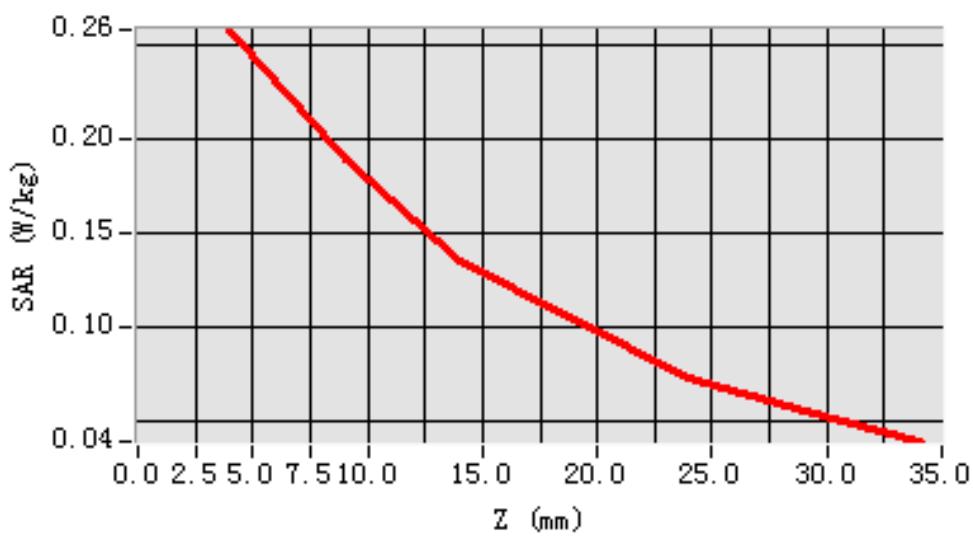
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.054100
SAR 1g (W/Kg)	0.090211

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.2512	0.1242	0.1464	0.1020	0.0631	0.0454

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





## MEASUREMENT 2

Date of measurement: 24/9/2010

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
Device Position	FrontSide toward phantom
Band	802.11b
Channels	Middle
Signal	wireless

### B. Instrumentations.

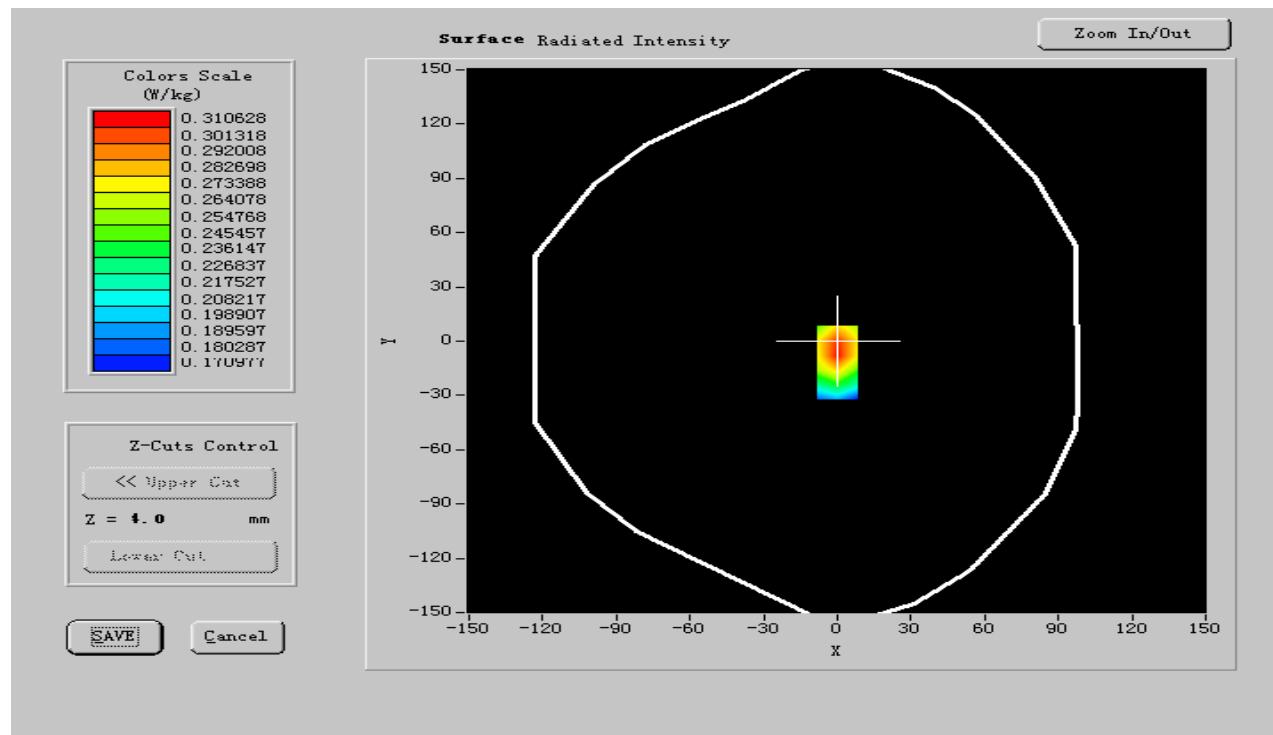
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 2450	Antennessa (DIPJ37,SN 48/05)	Calibration Due: 10/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

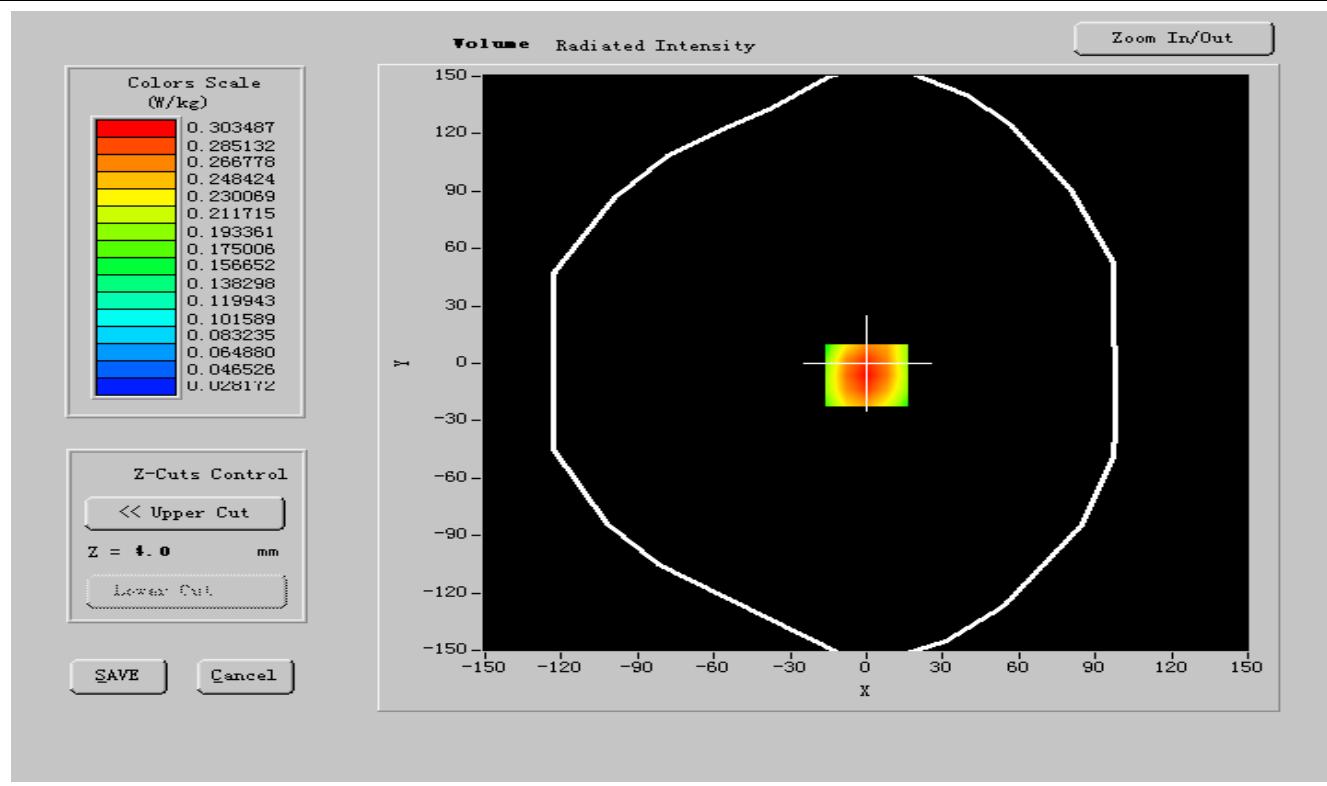
Frequency (MHz)	2437.000000
Relative permitivity (real part)	51.530000
Relative permitivity (imaginary part)	13.400011
Conductivity (S/m)	1.960210
Variation (%)	-0.600000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	50.35,52.98,69.78
Crest factor:	1:1



## SURFACE SAR



## VOLUME SAR





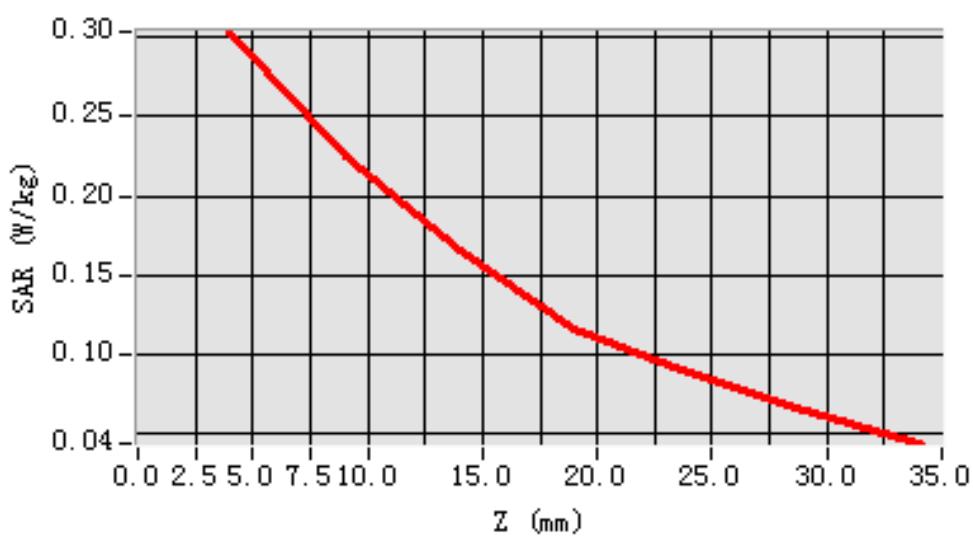
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.061345
SAR 1g (W/Kg)	0.102373

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.2890	0.2342	0.1664	0.1120	0.0887	0.0422

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





## MEASUREMENT 3

Date of measurement: 24/9/2010

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
Device Position	FrontSide toward phantom
Band	802.11b
Channels	High
Signal	wireless

### B. Instrumentations.

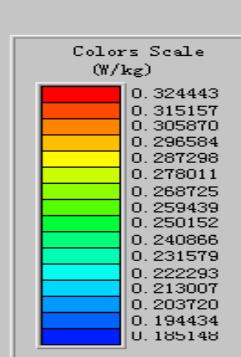
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication Test Set	R&S (CMU200, SN:B23-03291)	Calibration Due: 05/25/2011
Network Analyzer	Agilent(E5071B, MY42301382)	Calibration Due: 03/24/2011
Voltmeter	Keithley (2000, SN:1015843)	Calibration Due: 05/25/2011
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibration Due: 03/24/2011
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibration Due: 07/29/2011
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibration Due: 03/24/2011
Probe	Antennessa (SN:SN_1109_EP_100)	Calibration Due: 05/04/2011
DIPOLE 2450	Antennessa (DIPJ37,SN 48/05)	Calibration Due: 10/09/2011
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

### C. SAR Measurement Results

Frequency (MHz)	2462.000000
Relative permitivity (real part)	51.536640
Relative permitivity (imaginary part)	13.380026
Conductivity (S/m)	1.959641
Variation (%)	-0.400000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	50.35,52.98,69.78
Crest factor:	1:1



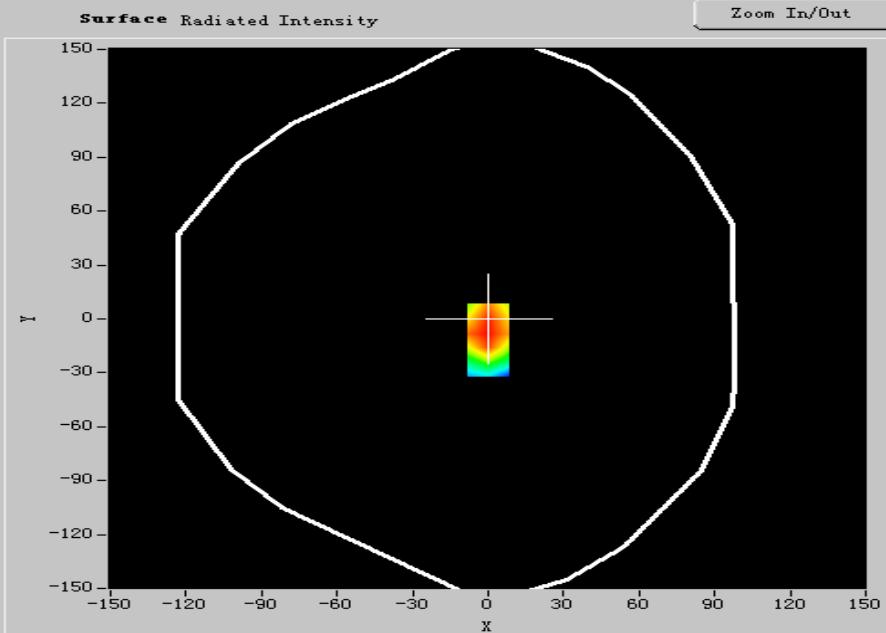
## SURFACE SAR



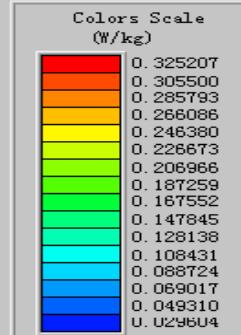
Z-Cuts Control

<<

Z = 4.0 mm



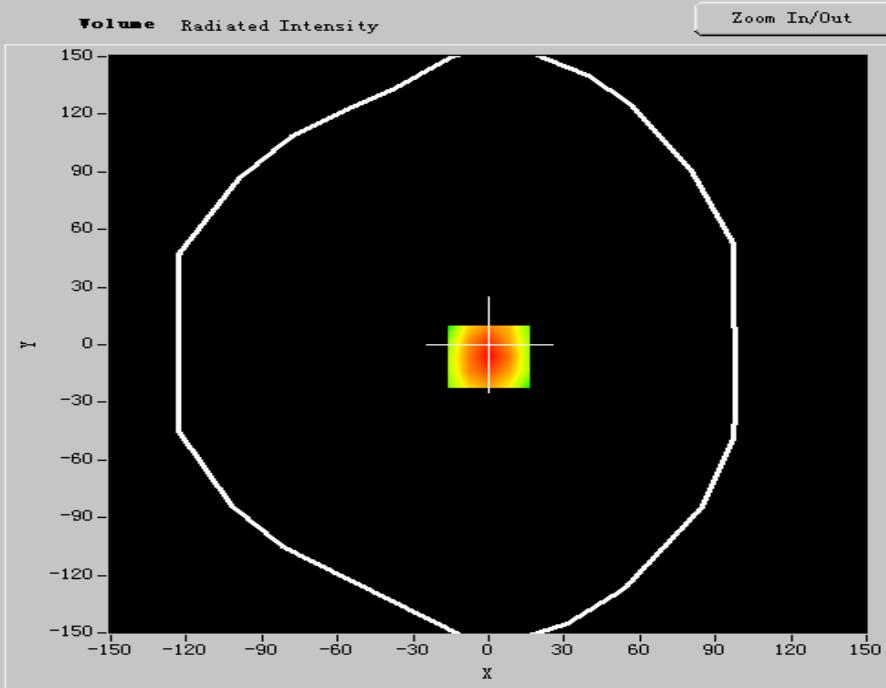
## VOLUME SAR



Z-Cuts Control

<<

Z = 4.0 mm





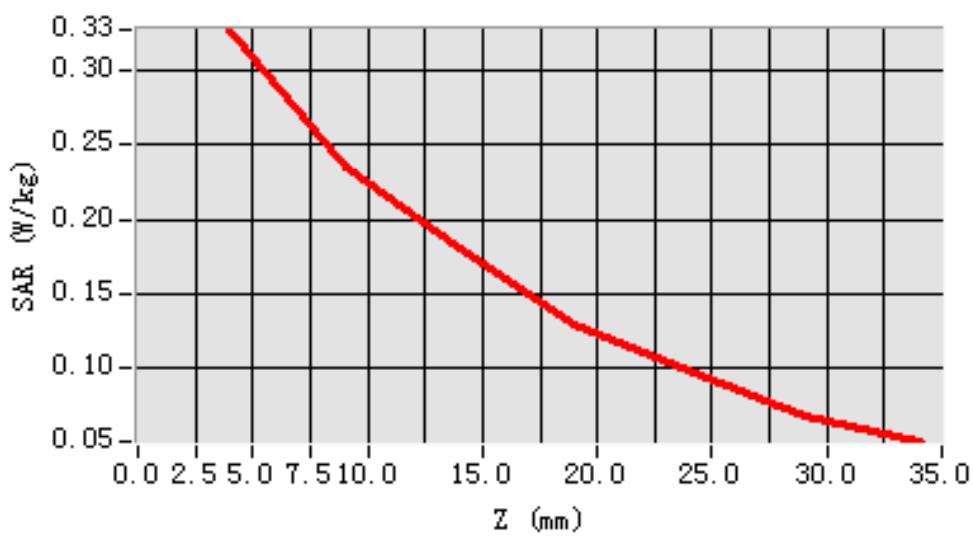
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.073654
SAR 1g (W/Kg)	0.092032

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.3063	0.2322	0.1674	0.1420	0.1800	0.0573

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





## **MEASUREMENT 4**

**Date of measurement: 24/9/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	802.11b
<b>Channels</b>	Low
<b>Signal</b>	wireless

### **B. Instrumentations.**

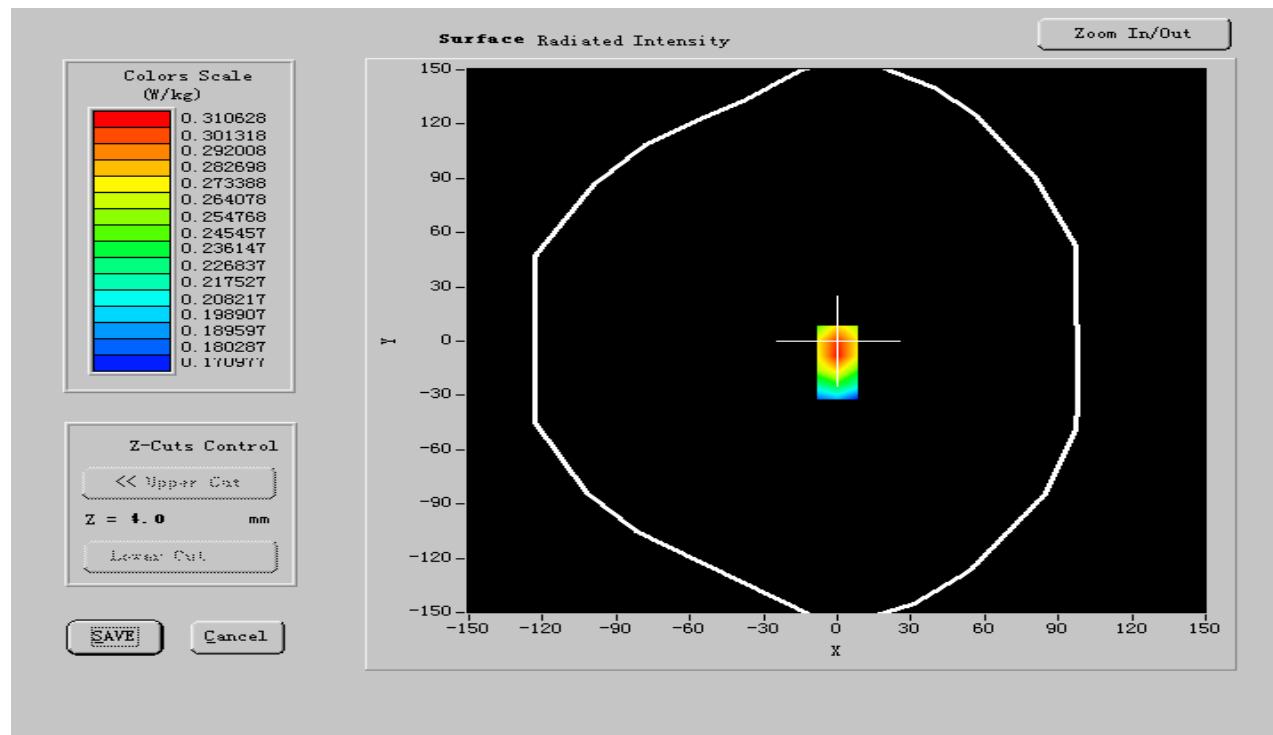
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 2450</b>	<b>Antennessa (DIPJ37,SN 48/05)</b>	<b>Calibration Due: 10/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

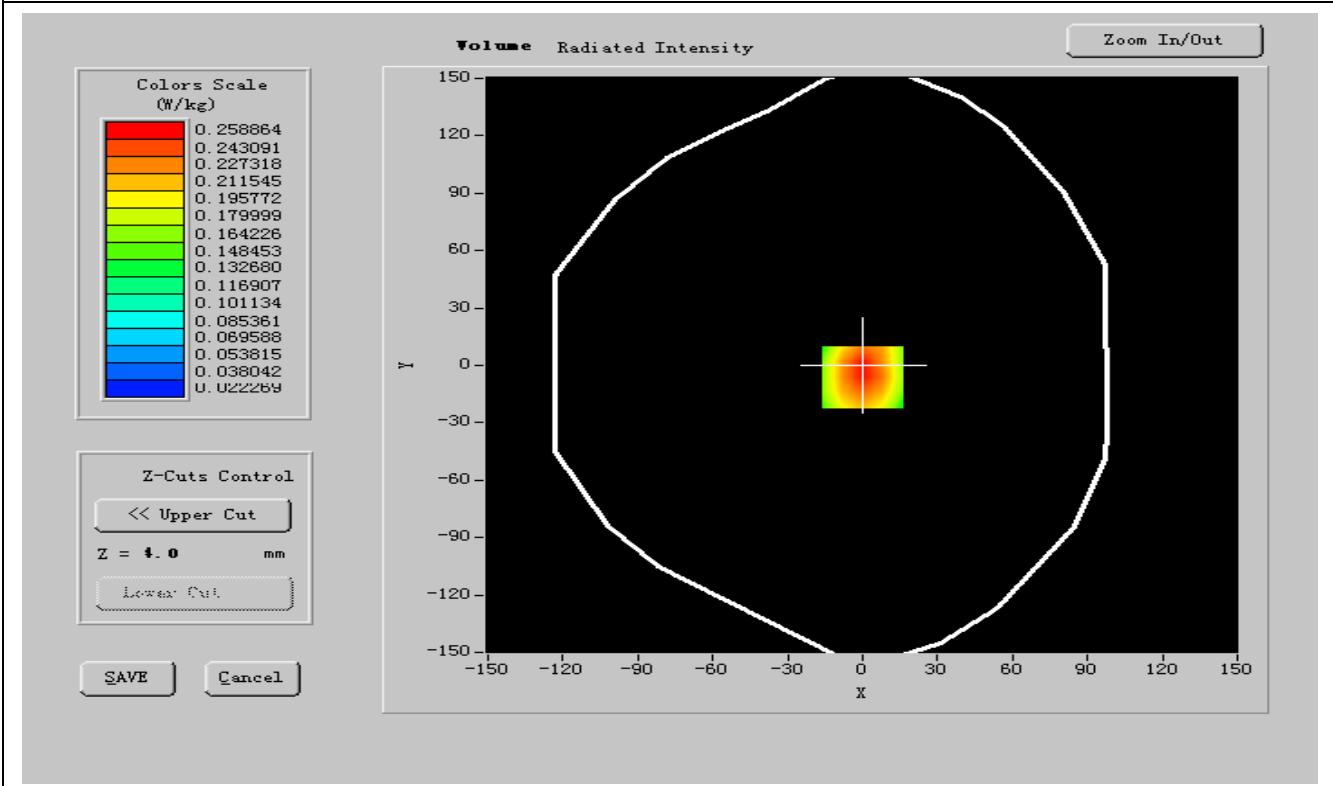
<b>Frequency (MHz)</b>	<b>2412.000000</b>
<b>Relative permitivity (real part)</b>	<b>51.520064</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.370061</b>
<b>Conductivity (S/m)</b>	<b>1.965014</b>
<b>Variation (%)</b>	<b>-0.130000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>50.35,52.98,69.78</b>
<b>Crest factor:</b>	<b>1:1</b>



## SURFACE SAR



## VOLUME SAR





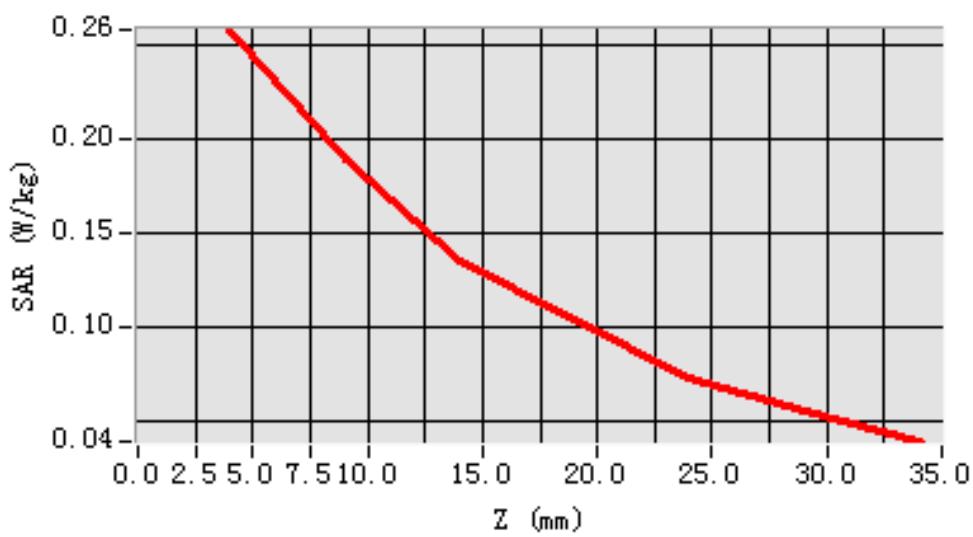
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.054100
SAR 1g (W/Kg)	0.084427

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.2512	0.1242	0.1464	0.1020	0.0631	0.0454

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





## **MEASUREMENT 5**

**Date of measurement: 24/9/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	802.11b
<b>Channels</b>	Middle
<b>Signal</b>	wireless

### **B. Instrumentations.**

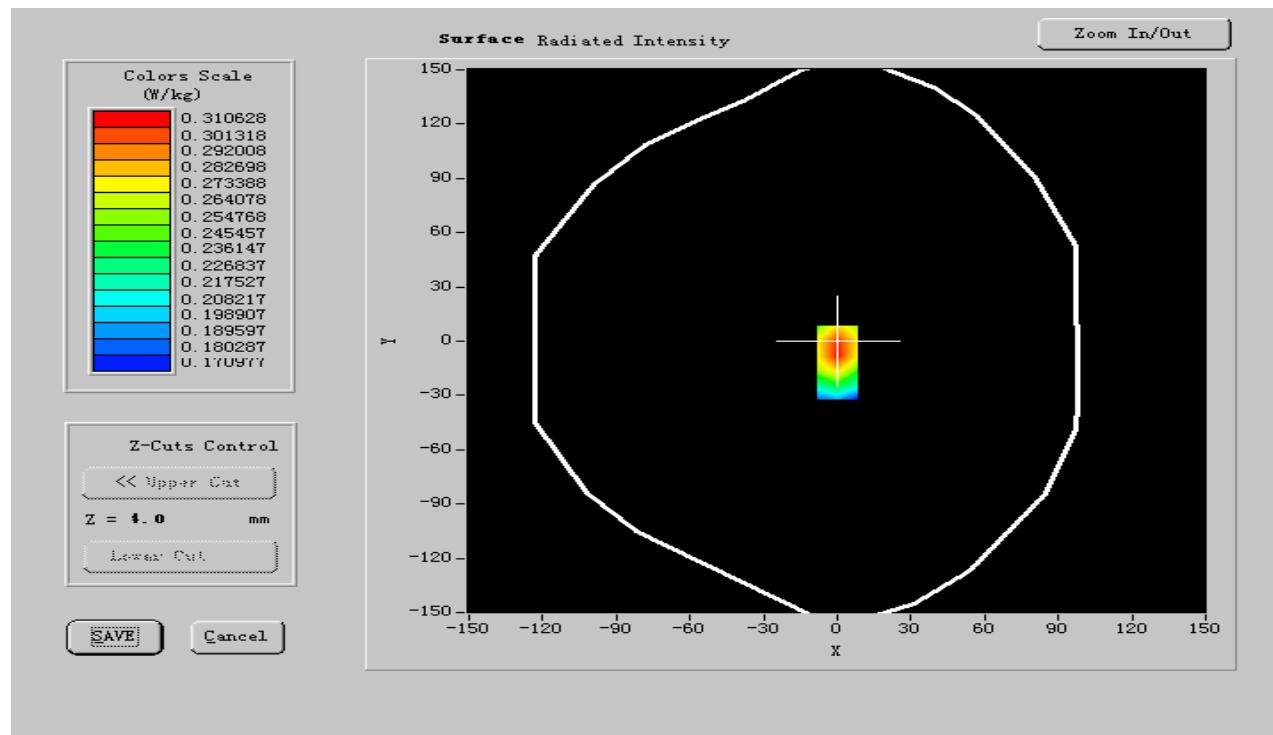
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 2450</b>	<b>Antennessa (DIPJ37,SN 48/05)</b>	<b>Calibration Due: 10/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

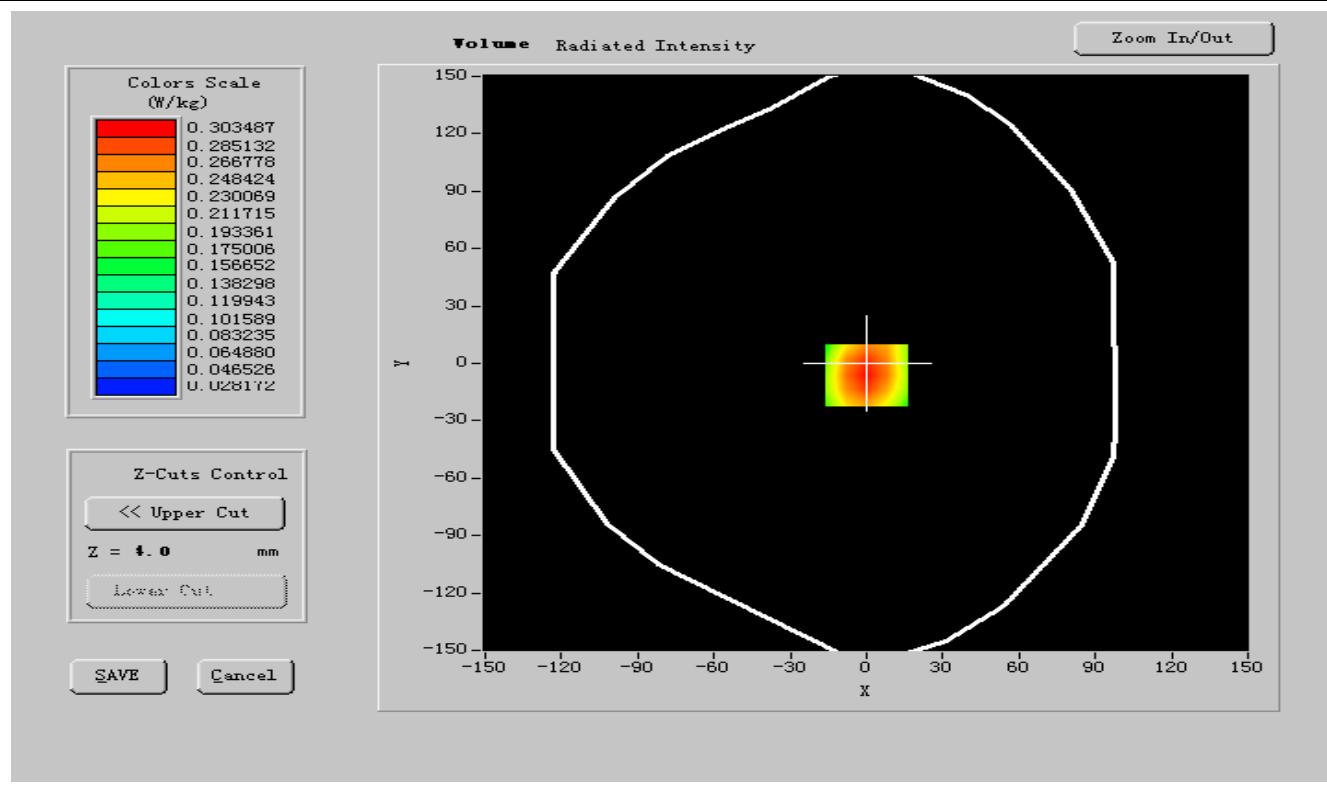
<b>Frequency (MHz)</b>	<b>2437.000000</b>
<b>Relative permitivity (real part)</b>	<b>51.530000</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.400011</b>
<b>Conductivity (S/m)</b>	<b>1.960210</b>
<b>Variation (%)</b>	<b>-0.600000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>50.35,52.98,69.78</b>
<b>Crest factor:</b>	<b>1:1</b>



## SURFACE SAR



## VOLUME SAR





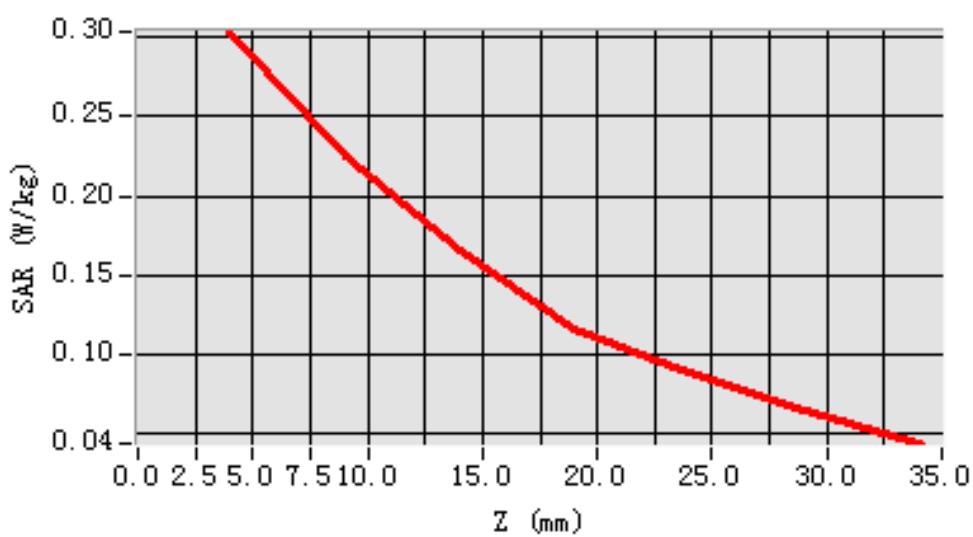
**Maximum location: X=-13.00, Y=-3.00**

SAR 10g (W/Kg)	0.066745
SAR 1g (W/Kg)	0.113426

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.2890	0.2342	0.1664	0.1120	0.0887	0.0422

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





## **MEASUREMENT 6**

**Date of measurement: 24/9/2010**

**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.**

<b>Phantom File</b>	zinf15.txt, Adaptative 2 max
<b>Phantom</b>	Body
<b>Device Position</b>	FrontSide toward phantom
<b>Band</b>	802.11b
<b>Channels</b>	High
<b>Signal</b>	wireless

### **B. Instrumentations.**

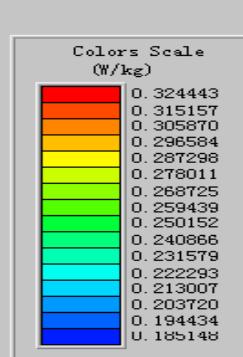
<b>PC</b>	<b>HP (Pentium(R) V3.06GHz, SN:375052-AA1)</b>	<b>Calibrated: N/A</b>
<b>Wireless Communication Test Set</b>	<b>R&amp;S (CMU200, SN:B23-03291)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Network Analyzer</b>	<b>Agilent(E5071B, MY42301382)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Voltmeter</b>	<b>Keithley (2000, SN:1015843)</b>	<b>Calibration Due: 05/25/2011</b>
<b>Signal Generator</b>	<b>Agilent (E8257C, SN:MY43321570)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Amplifier</b>	<b>Mini-Circuits (ZHL-42, SN:110405)</b>	<b>Calibration Due: 07/29/2011</b>
<b>Power Meter</b>	<b>Agilent (E4416A, SN:QB41292714)</b>	<b>Calibration Due: 03/24/2011</b>
<b>Probe</b>	<b>Antennessa (SN:SN_1109_EP_100)</b>	<b>Calibration Due: 05/04/2011</b>
<b>DIPOLE 2450</b>	<b>Antennessa (DIPJ37,SN 48/05)</b>	<b>Calibration Due: 10/09/2011</b>
<b>Phantom</b>	<b>Antennessa (SN:SN41_05_SAM29)</b>	<b>Calibrated: N/A</b>
<b>Liquid</b>	<b>Antennessa</b>	<b>Calibrated: N/A</b>
<b>Measurement SW</b>	<b>OPEN SAR V2.1</b>	<b>Calibrated: N/A</b>

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

<b>Frequency (MHz)</b>	<b>2462.000000</b>
<b>Relative permitivity (real part)</b>	<b>51.536640</b>
<b>Relative permitivity (imaginary part)</b>	<b>13.380026</b>
<b>Conductivity (S/m)</b>	<b>1.959641</b>
<b>Variation (%)</b>	<b>-0.400000</b>
<b>Ambient Temperature:</b>	<b>21 °C</b>
<b>Liquid Temperature:</b>	<b>20 °C</b>
<b>ConvF:</b>	<b>50.35,52.98,69.78</b>
<b>Crest factor:</b>	<b>1:1</b>



## SURFACE SAR

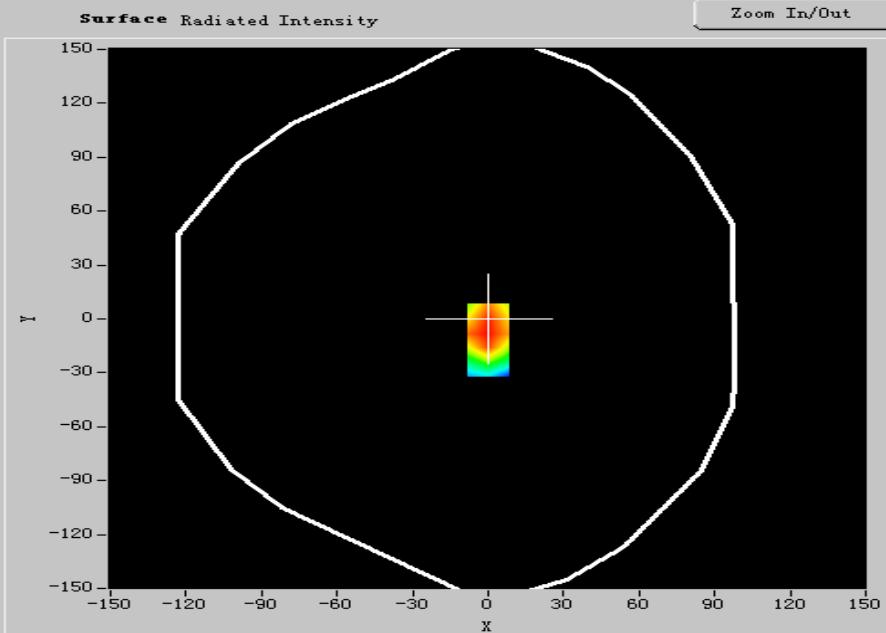


Z-Cuts Control

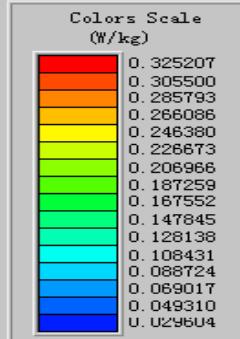
<< Upper Cut

Z = 4.0 mm

Lower Cut



## VOLUME SAR

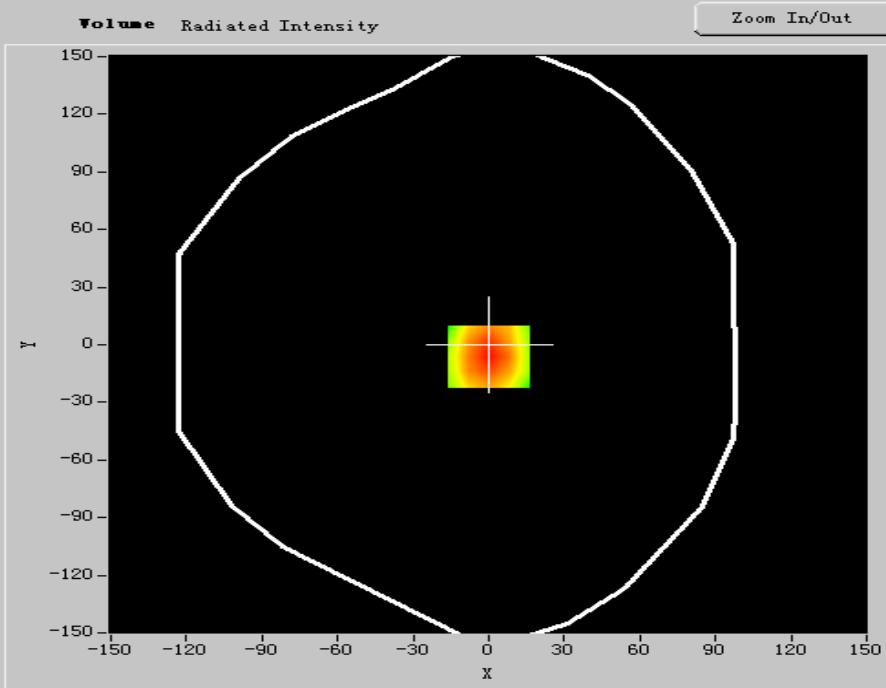


Z-Cuts Control

<< Upper Cut

Z = 4.0 mm

Lower Cut





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

SAR 10g (W/Kg)	0.074565
SAR 1g (W/Kg)	0.098435

### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/kg)	0.0000	0.3063	0.2322	0.1674	0.1420	0.1800	0.0573

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

