



## I. 850MHz Band RESULTS

| <u>TYPE</u>  | <u>PARAMETERS</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Phone</u> | <u>Measurement 1:</u> Right Head with Cheek device position on Low Channel in GSM850 mode<br><u>Measurement 2:</u> Right Head with Cheek device position on Middle Channel in GSM850 mode<br><u>Measurement 3:</u> Right Head with Cheek device position on High Channel in GSM850 mode<br><u>Measurement 4:</u> Right Head with Tilt device position on Low Channel in GSM850 mode<br><u>Measurement 5:</u> Right Head with Tilt device position on Middle Channel in GSM850 mode<br><u>Measurement 6:</u> Right Head with Tilt device position on High Channel in GSM850 mode<br><u>Measurement 7:</u> Left Head with Cheek device position on Low Channel in GSM850 mode<br><u>Measurement 8:</u> Left Head with Cheek device position on Middle Channel in GSM850 mode<br><u>Measurement 9:</u> Left Head with Cheek device position on High Channel in GSM850 mode<br><u>Measurement 10:</u> Left Head with Tilt device position on Low Channel in GSM850 mode<br><u>Measurement 11:</u> Left Head with Tilt device position on Middle Channel in GSM850 mode<br><u>Measurement 12:</u> Left Head with Tilt device position on High Channel in GSM850 mode<br><u>Measurement 13:</u> FrontSide toward phantom 15mm, Low Channel in GSM850 mode<br><u>Measurement 14:</u> FrontSide toward phantom 15mm, Middle Channel in GSM850 mode<br><u>Measurement 15:</u> FrontSide toward phantom 15mm, High Channel in GSM850 mode<br><u>Measurement 16:</u> BackSide toward phantom 15mm, Low Channel in GSM850 mode<br><u>Measurement 17:</u> BackSide toward phantom 15mm, Middle Channel in GSM850 mode<br><u>Measurement 18:</u> BackSide toward phantom 15mm, High Channel in GSM850 mode<br><u>Measurement 19:</u> FrontSide toward phantom 15mm, Low Channel in GPRS850 mode<br><u>Measurement 20:</u> FrontSide toward phantom 15mm, Middle Channel in GPRS850 mode<br><u>Measurement 21:</u> FrontSide toward phantom 15mm, High Channel in GPRS850 mode<br><u>Measurement 22:</u> BackSide toward phantom 15mm, Low Channel in GPRS850 mode<br><u>Measurement 23:</u> BackSide toward phantom 15mm, Middle Channel in GPRS850 mode<br><u>Measurement 24:</u> BackSide toward phantom 15mm, High Channel in GPRS850 mode<br><u>Measurement 25:</u> FrontSide toward phantom 15mm, Low Channel in EDGE850 mode<br><u>Measurement 26:</u> FrontSide toward phantom 15mm, Middle Channel in EDGE850 mode<br><u>Measurement 27:</u> FrontSide toward phantom 15mm, High Channel in EDGE850 mode<br><u>Measurement 28:</u> BackSide toward phantom 15mm, Low Channel in EDGE850 mode<br><u>Measurement 29:</u> BackSide toward phantom 15mm, Middle Channel in EDGE850 mode<br><u>Measurement 30:</u> BackSide toward phantom 15mm, High Channel in EDGE850 mode |



## MEASUREMENT 1

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Right head                 |
| <b>Device Position</b> | Cheek                      |
| <b>Band</b>            | GSM850                     |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | GSM                        |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

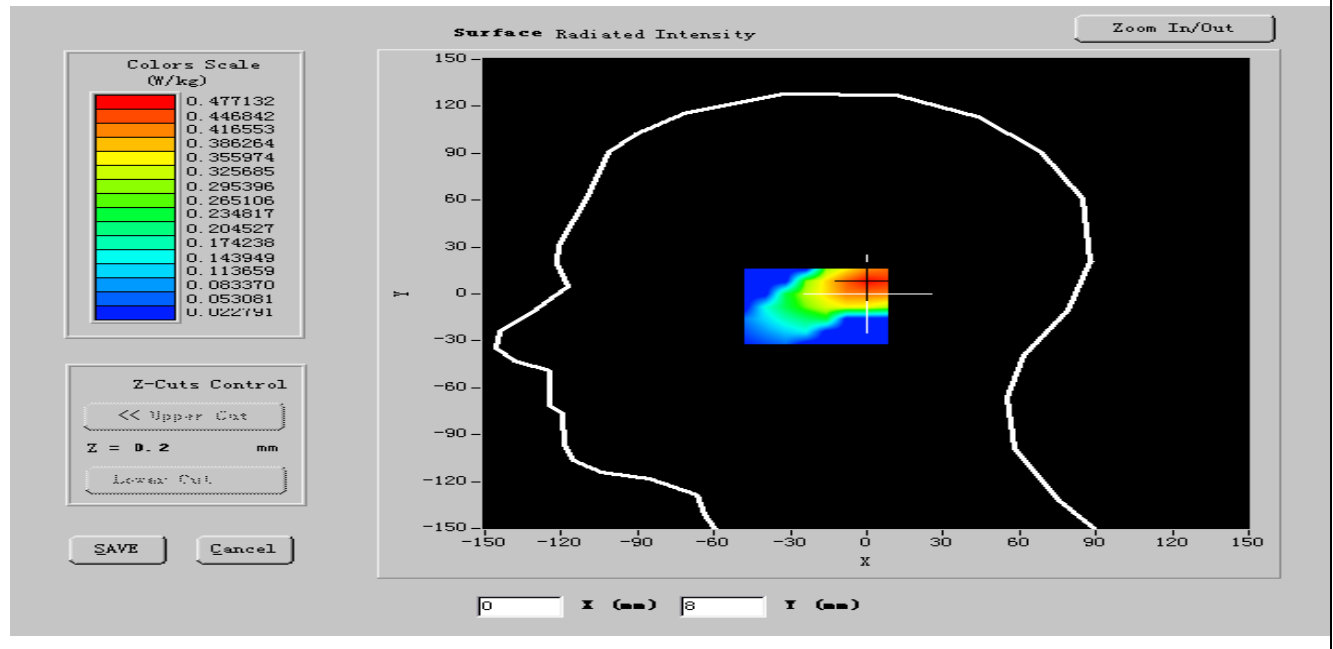
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>824.200012</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.466999</b>           |
| <b>Relative permittivity (imaginary part)</b> | <b>19.511101</b>           |
| <b>Conductivity (S/m)</b>                     | <b>0.923392</b>            |
| <b>Variation (%)</b>                          | <b>-1.490000</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> |



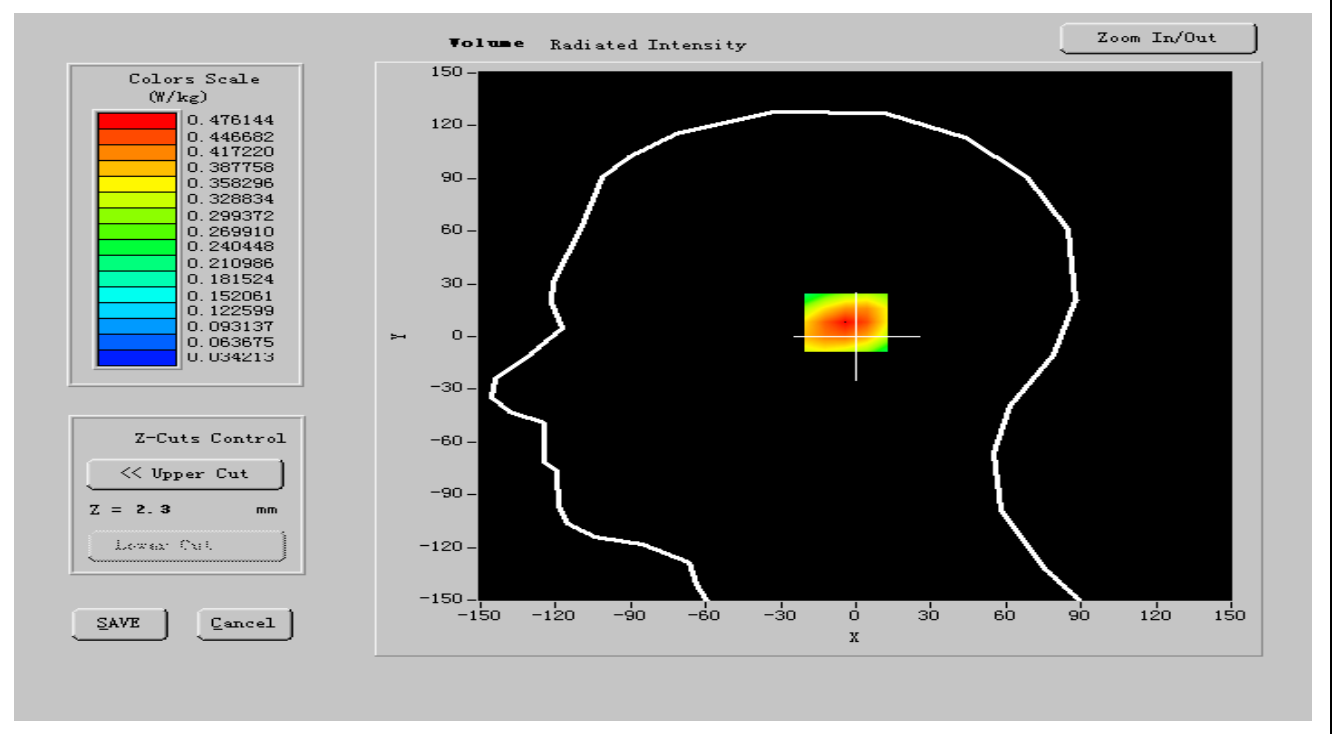
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



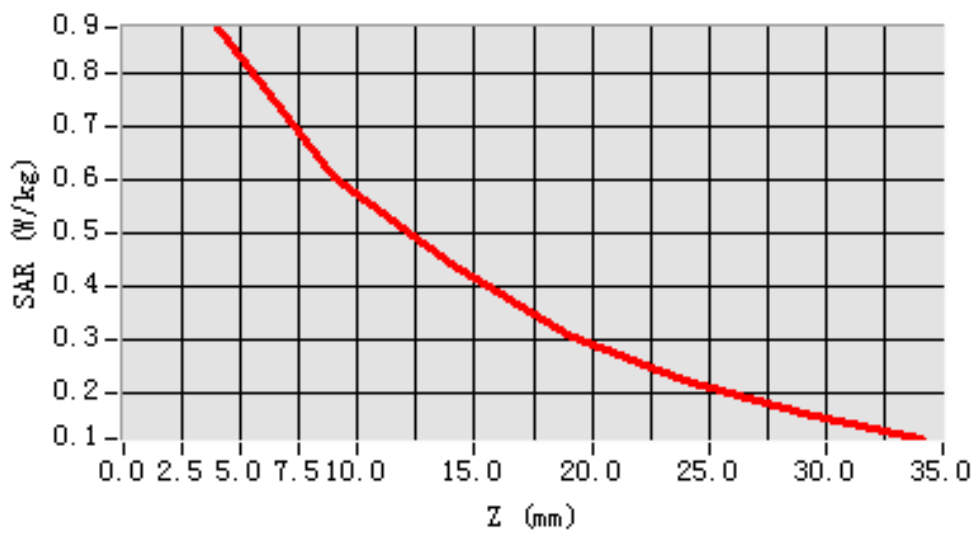


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 2

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Right 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

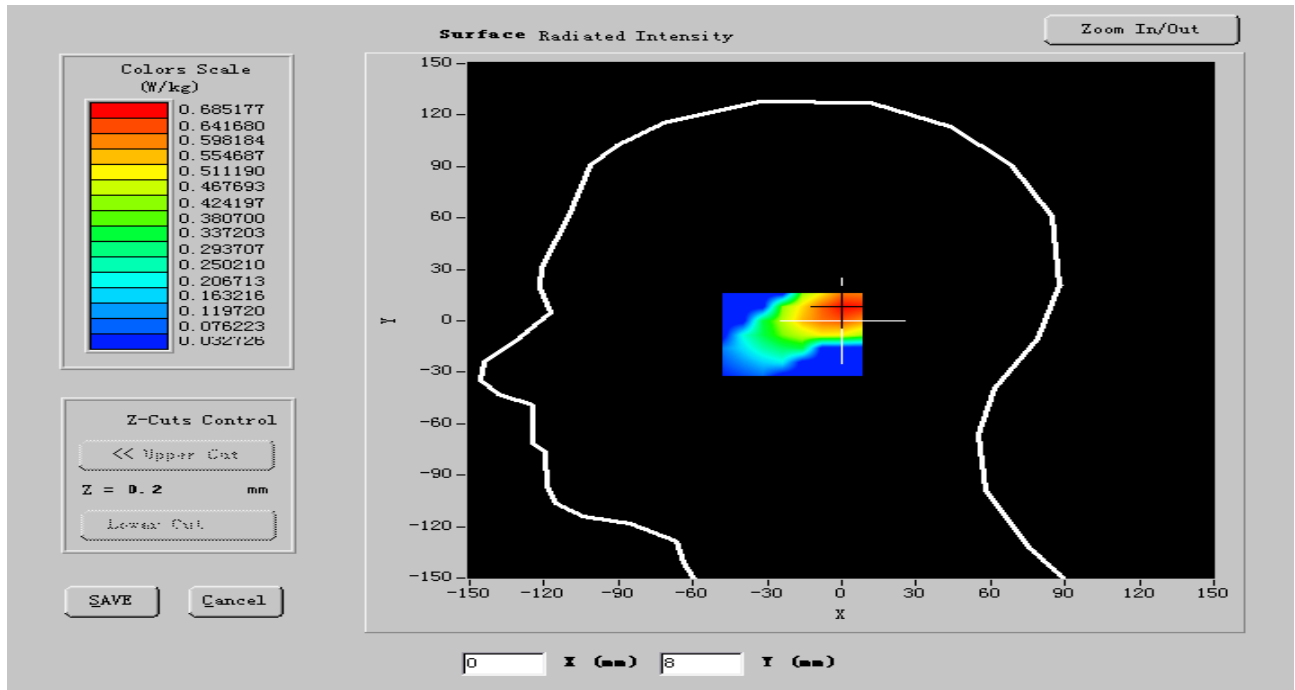
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>836.600024</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.466999</b>           |
| <b>Relative permittivity (imaginary part)</b> | <b>19.511101</b>           |
| <b>Conductivity (S/m)</b>                     | <b>0.916616</b>            |
| <b>Variation (%)</b>                          | <b>-0.110000</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> |



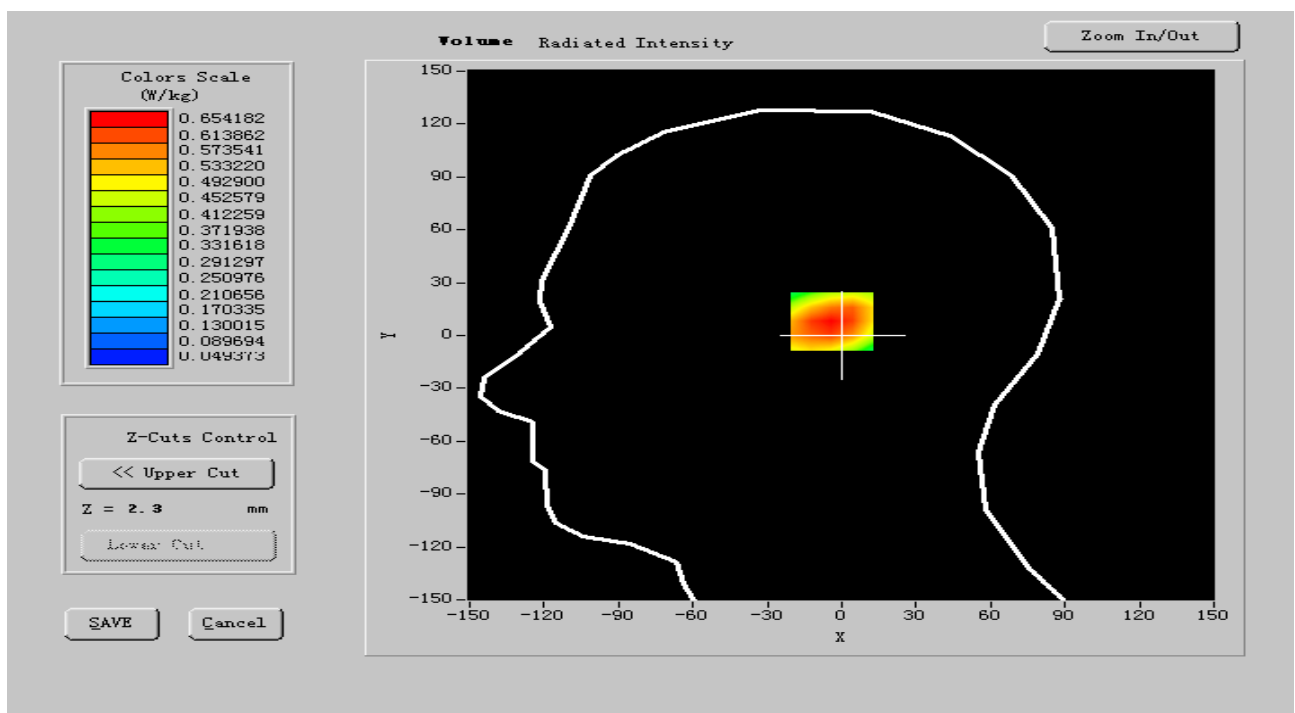
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



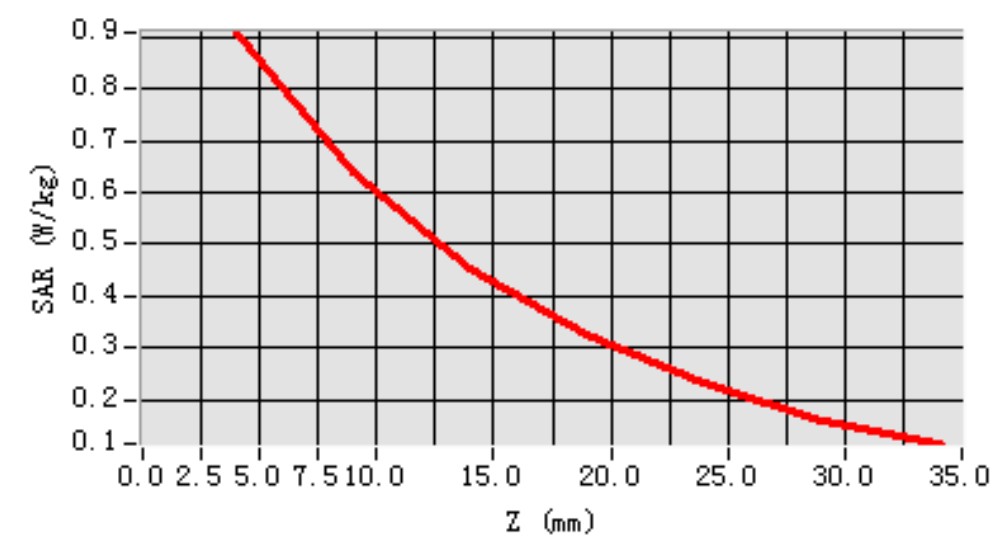


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 3

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Right 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

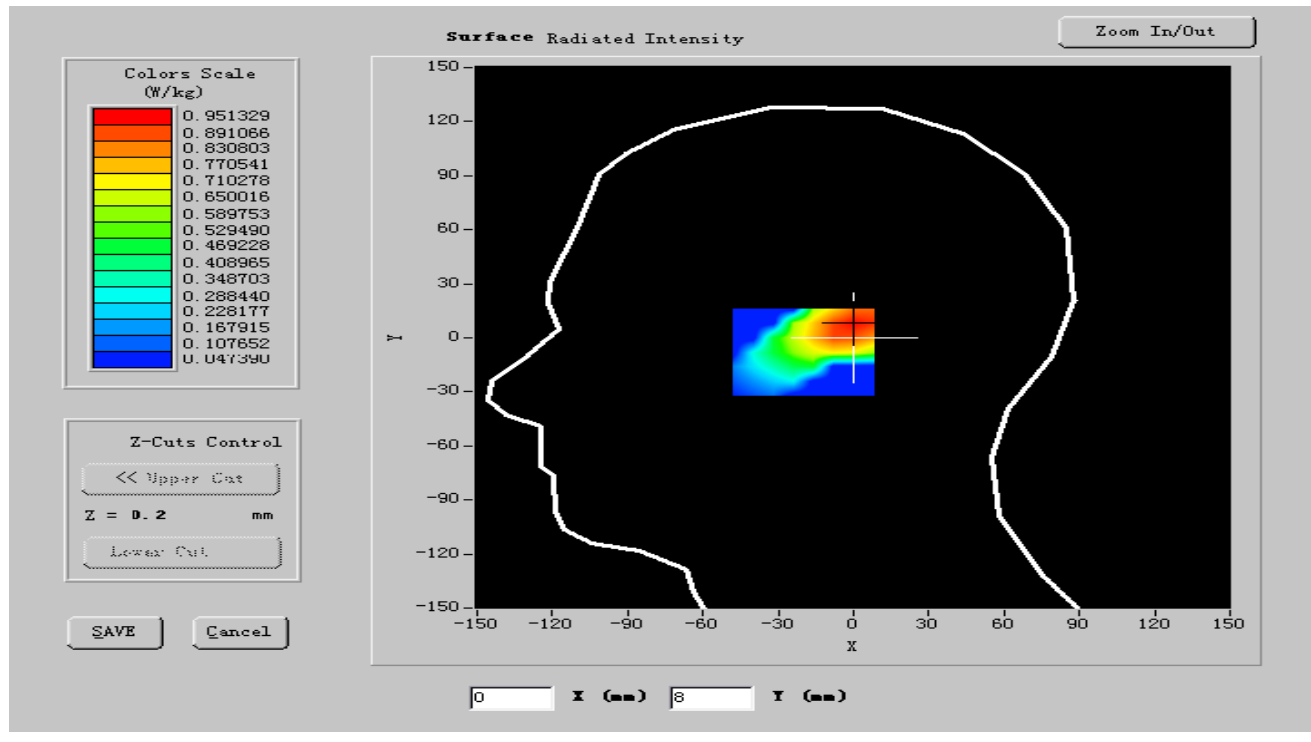
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>848.599976</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.262001</b>           |
| <b>Relative permittivity (imaginary part)</b> | <b>19.598200</b>           |
| <b>Conductivity (S/m)</b>                     | <b>0.923946</b>            |
| <b>Variation (%)</b>                          | <b>-0.110000</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> |



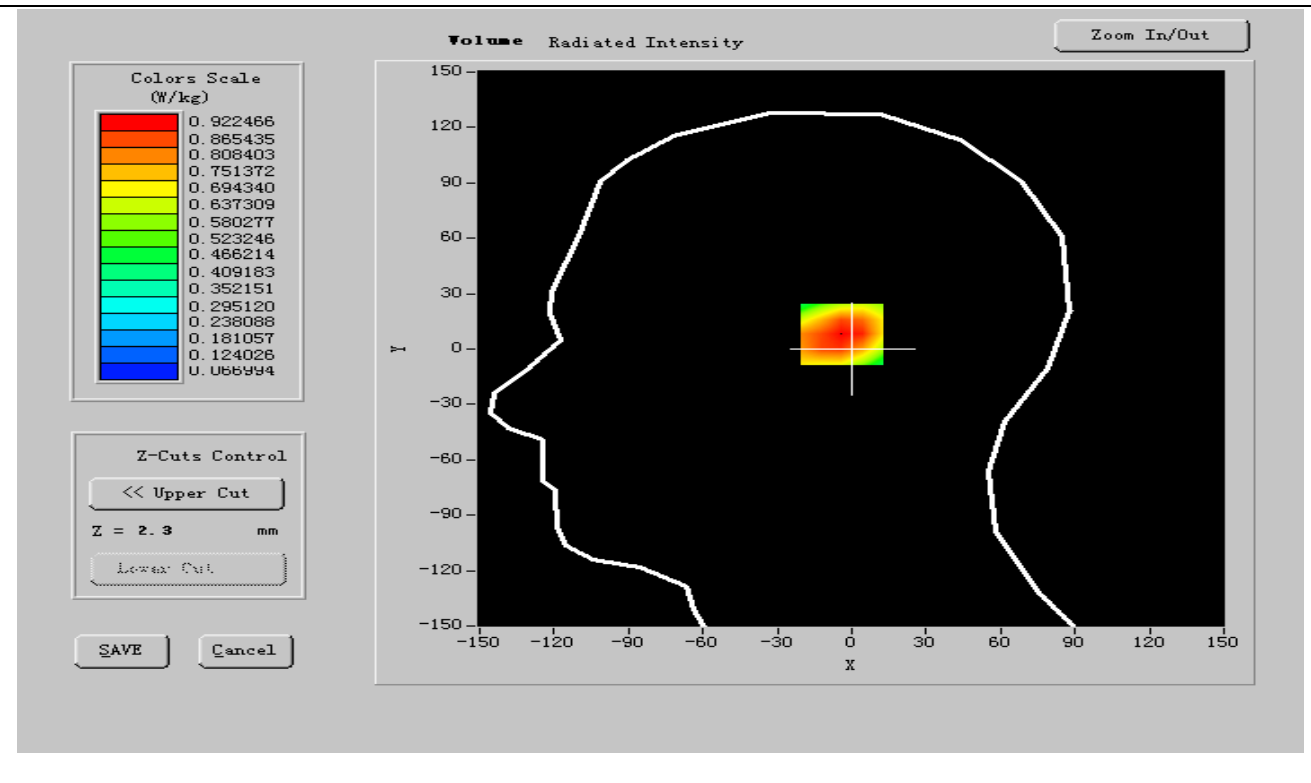
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



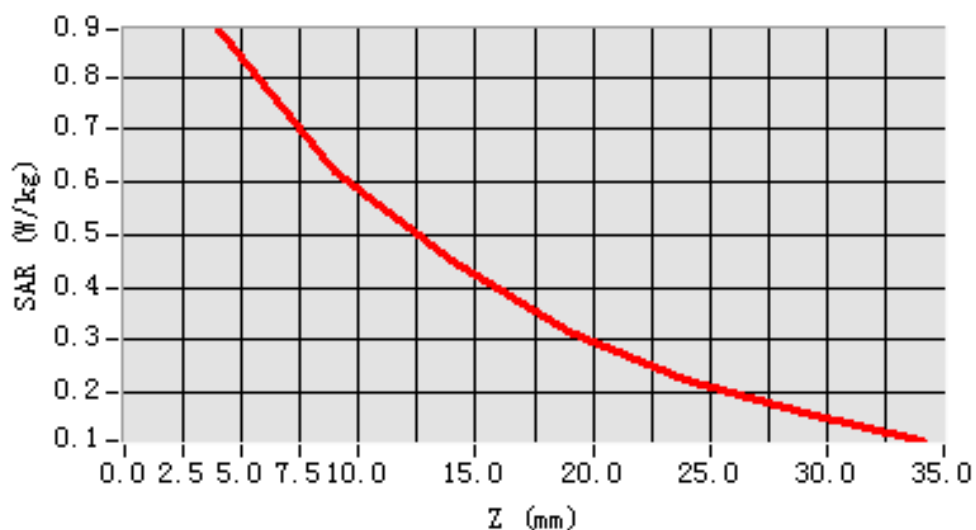


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.555620 |
| SAR 1g (W/Kg)  | 0.844465 |

**Z Axis Scan**

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





## MEASUREMENT 4

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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>                                  | HP (Pentium(R) V3.06GHz,<br>SN:375052-AA1) | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>Test Set</b> | R&S (CMU200, SN:B23-03291)                 | <b>Calibration Due: 05/25/2011</b> |
| <b>Network Analyzer</b>                    | Agilent(E5071B, MY42301382)                | <b>Calibration Due: 03/24/2011</b> |
| <b>Voltmeter</b>                           | Keithley (2000, SN:1015843)                | <b>Calibration Due: 05/25/2011</b> |
| <b>Signal Generator</b>                    | Agilent (E8257C, SN:MY43321570)            | <b>Calibration Due: 03/24/2011</b> |
| <b>Amplifier</b>                           | Mini-Circuits (ZHL-42, SN:110405)          | <b>Calibration Due: 07/29/2011</b> |
| <b>Power Meter</b>                         | Agilent (E4416A, SN:QB41292714)            | <b>Calibration Due: 03/24/2011</b> |
| <b>Probe</b>                               | Antennessa (SN:SN_1109_EP_100)             | <b>Calibration Due: 05/04/2011</b> |
| <b>DIPOLE 835</b>                          | Antennessa (DIPI32, SN 48/05)              | <b>Calibration Due: 02/09/2012</b> |
| <b>Phantom</b>                             | Antennessa (SN:SN41_05_SAM29)              | <b>Calibrated: N/A</b>             |
| <b>Liquid</b>                              | Antennessa                                 | <b>Calibrated: N/A</b>             |
| <b>Measurement SW</b>                      | OPEN SAR V2.1                              | <b>Calibrated: N/A</b>             |

### C. SAR Measurement Results

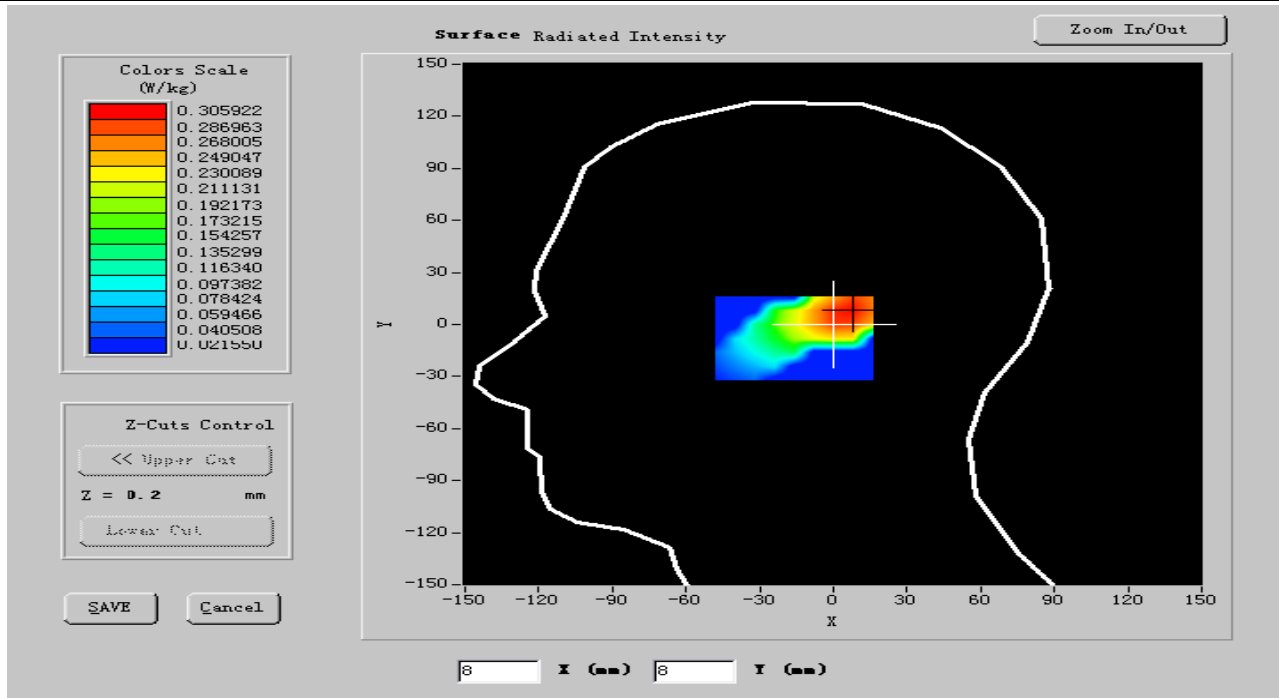
|                                               |                     |
|-----------------------------------------------|---------------------|
| <b>Frequency (MHz)</b>                        | 824.200012          |
| <b>Relative permittivity (real part)</b>      | 41.466999           |
| <b>Relative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



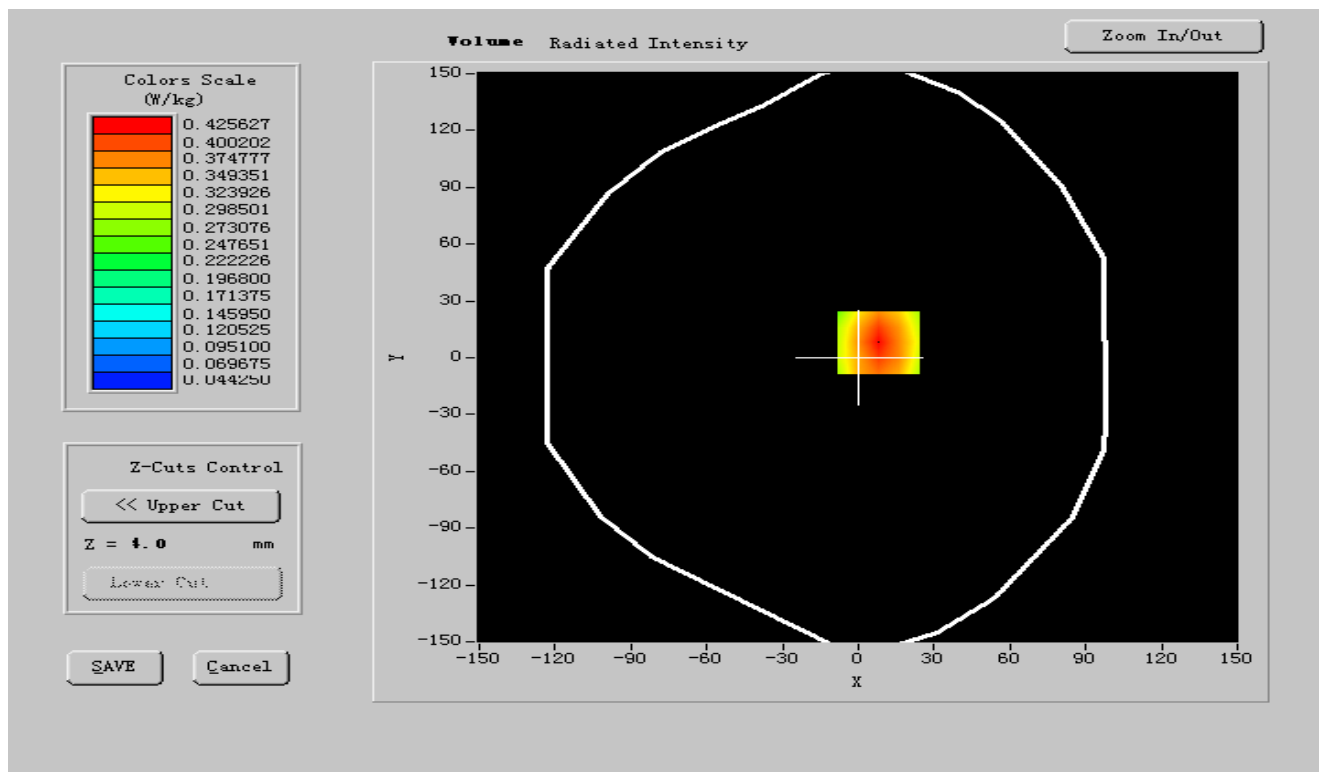
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



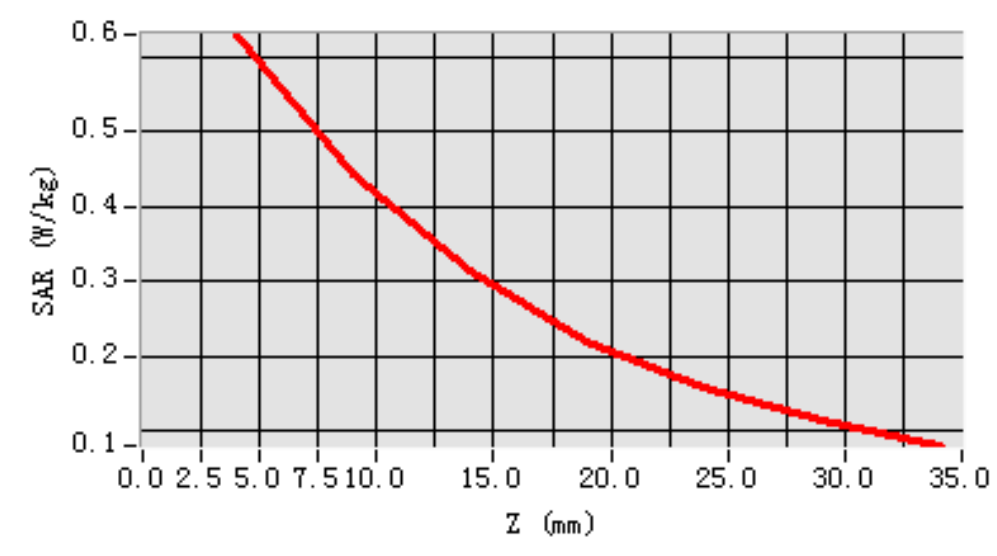


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 5

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

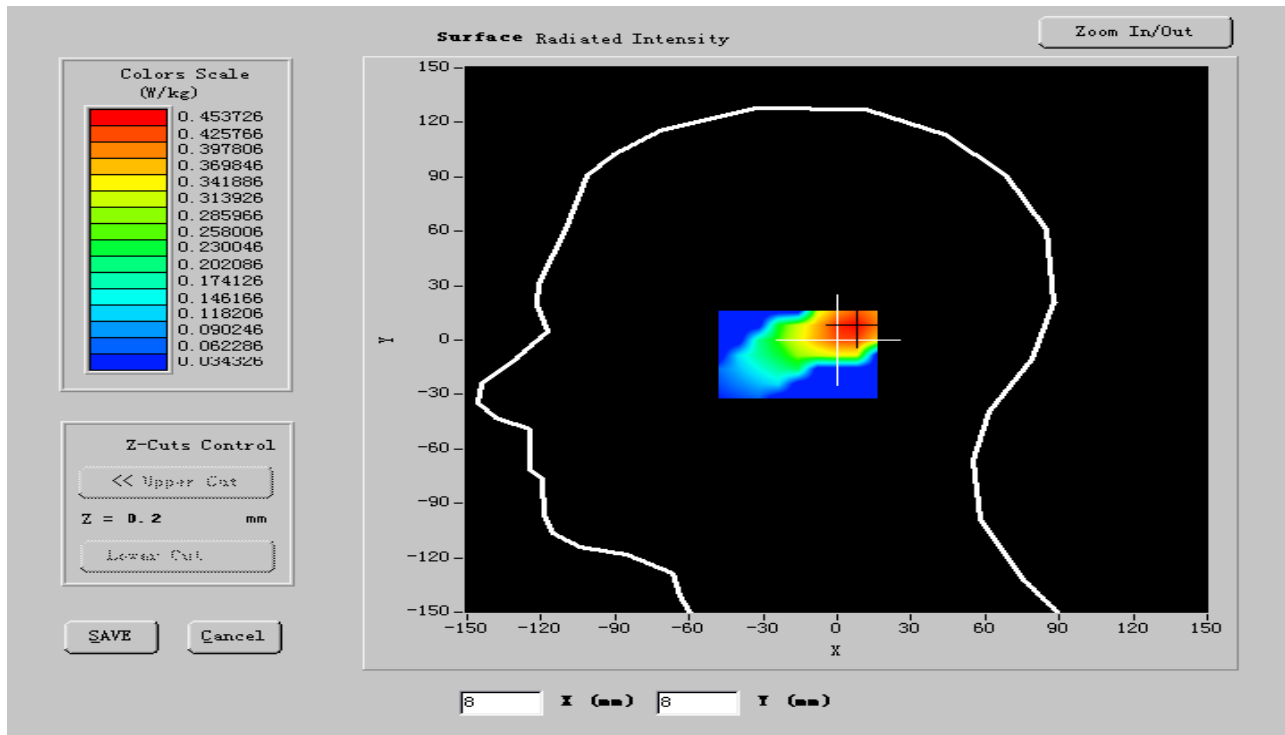
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>836.600024</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.466999</b>           |
| <b>Relative permittivity (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> |



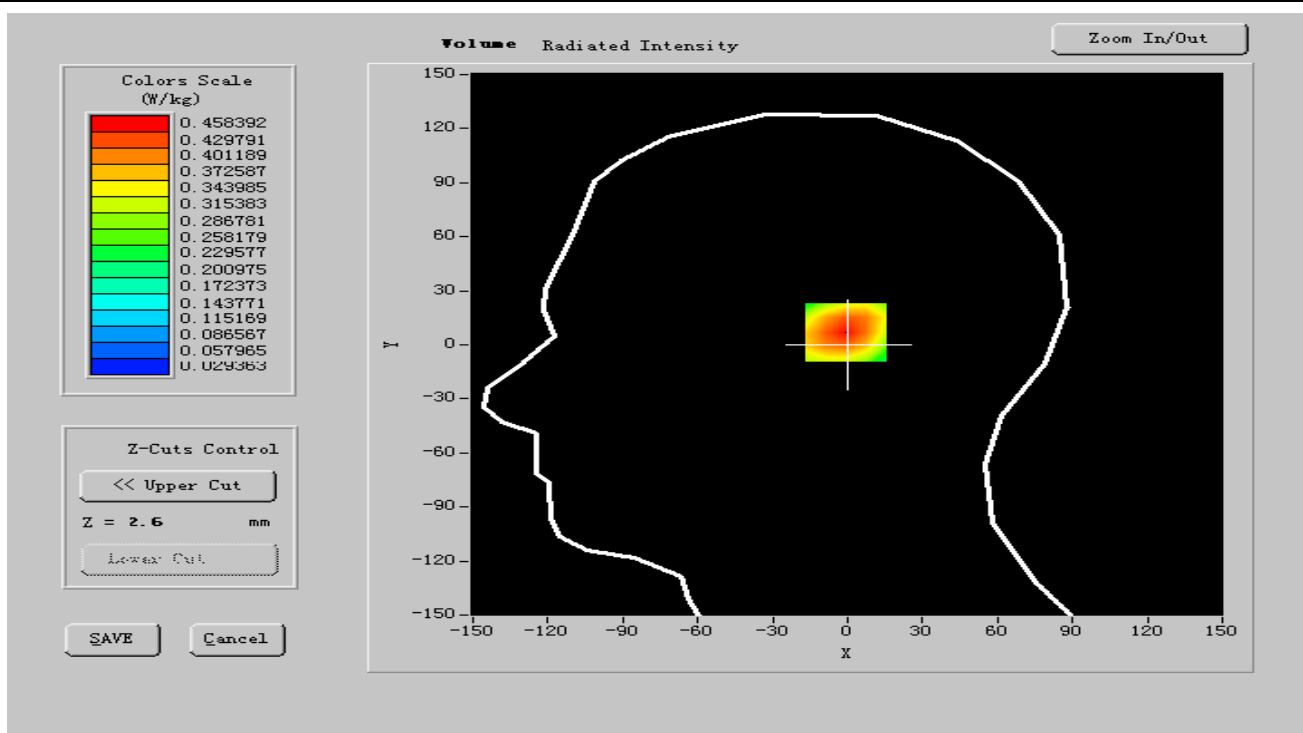
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



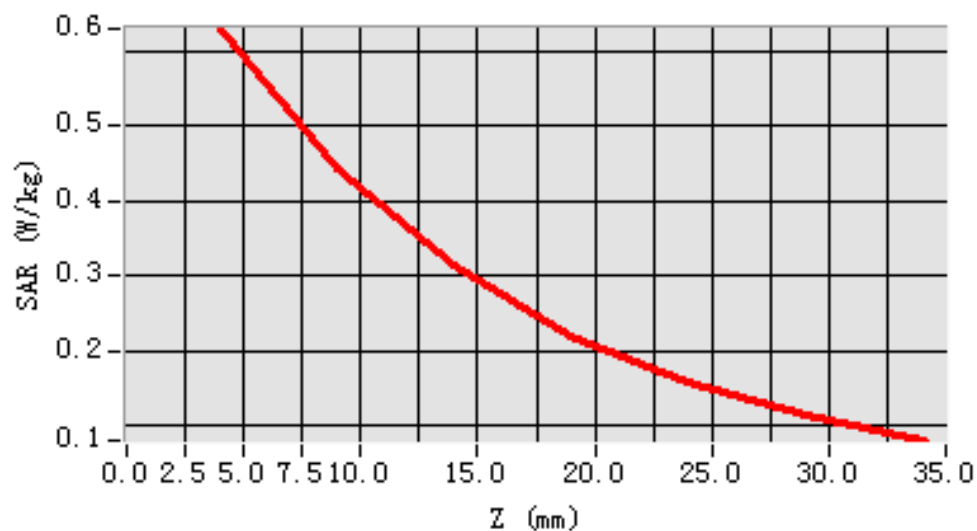


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.412358 |
| SAR 1g (W/Kg)  | 0.592981 |

**Z Axis Scan**

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





## MEASUREMENT 6

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

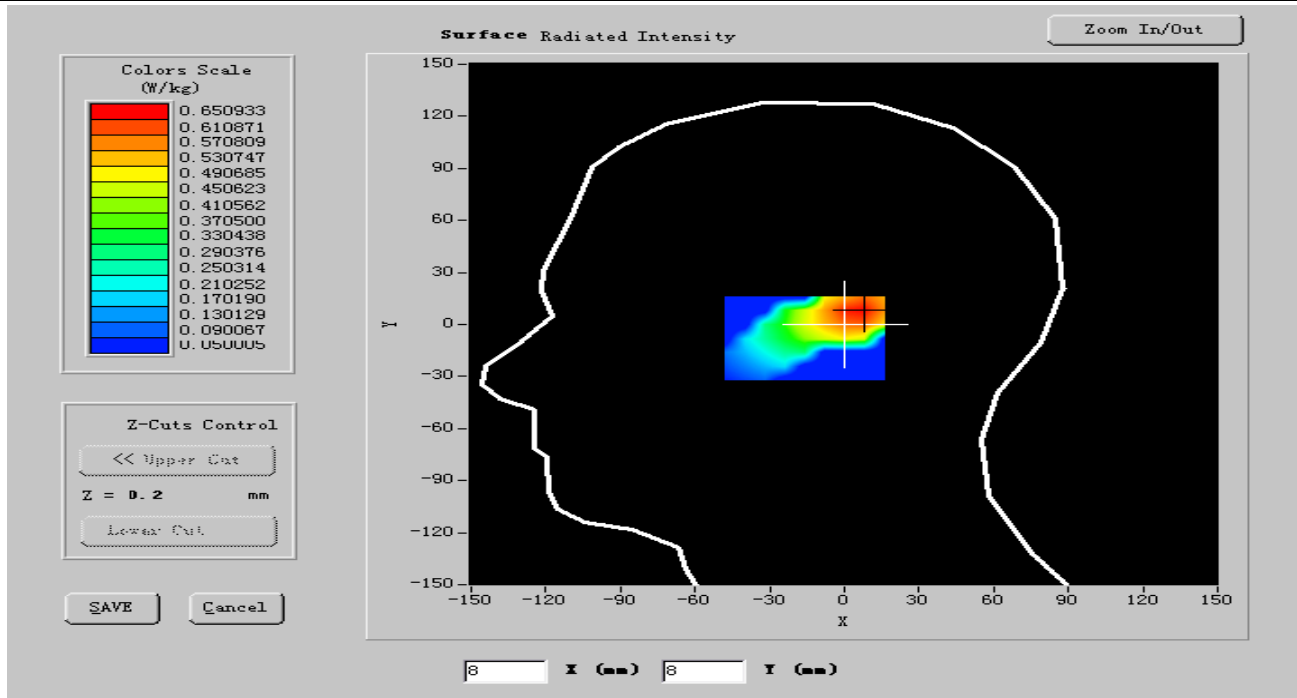
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>848.599976</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.262001</b>           |
| <b>Relative permittivity (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> |



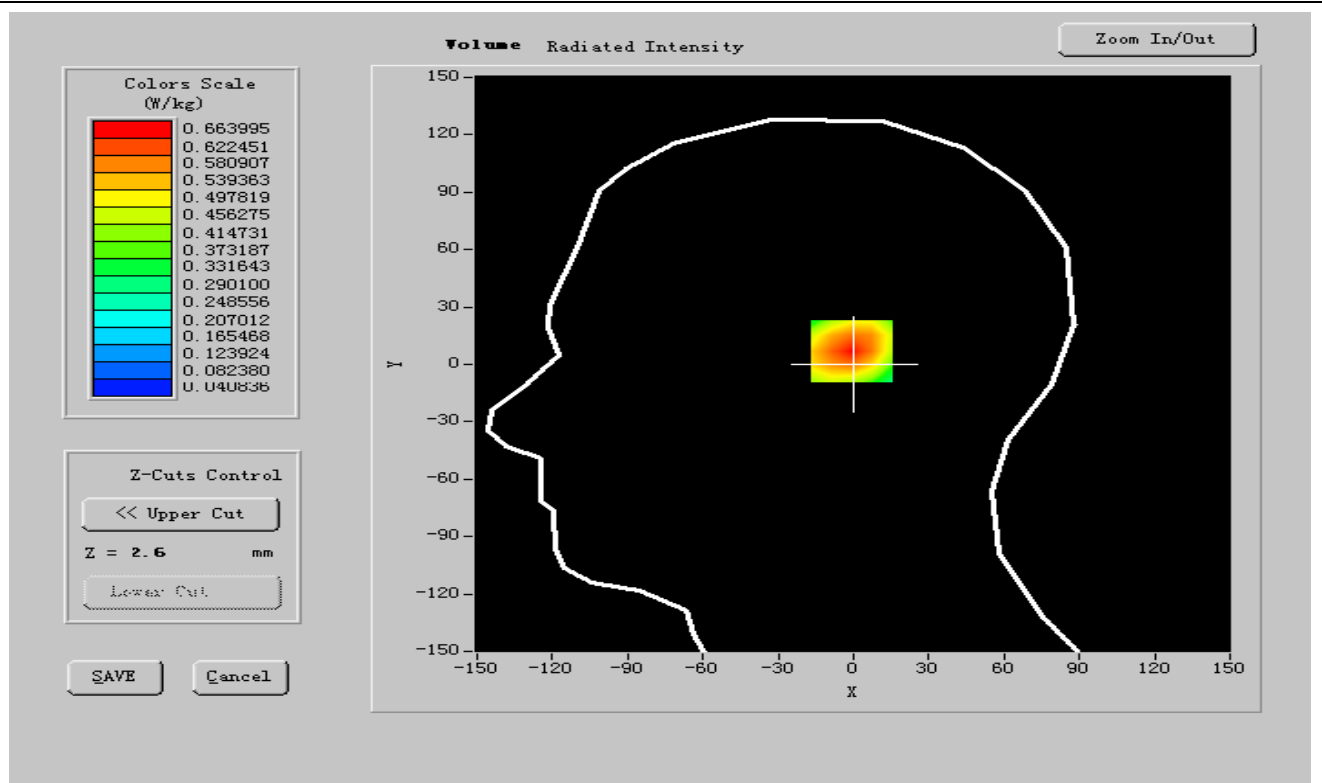
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



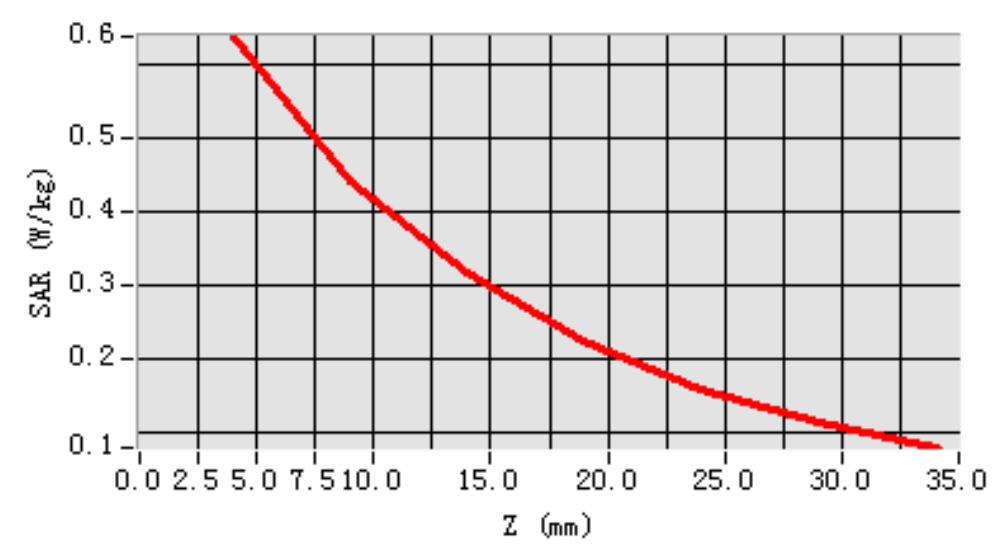


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.416354 |
| SAR 1g (W/Kg)  | 0.599428 |

**Z Axis Scan**

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





## MEASUREMENT 7

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Left head                  |
| <b>Device Position</b> | Cheek                      |
| <b>Band</b>            | GSM850                     |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | GSM                        |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

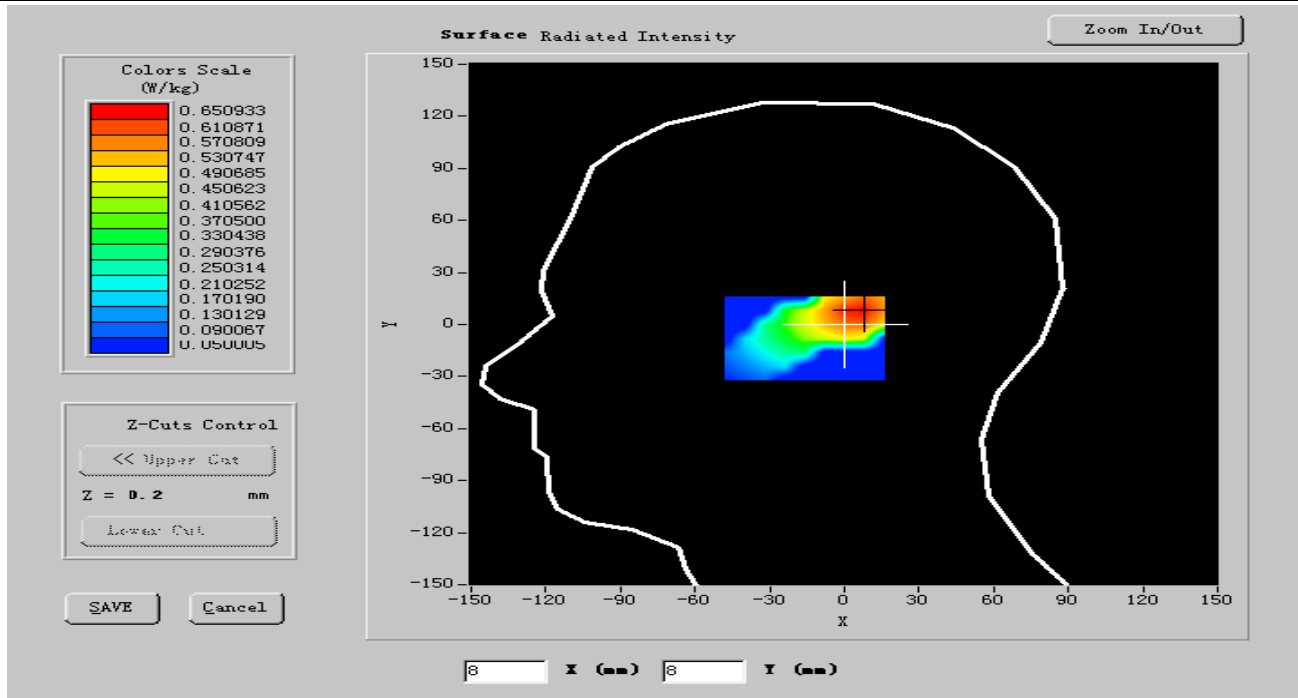
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>824.200012</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.466999</b>           |
| <b>Relative permittivity (imaginary part)</b> | <b>19.511101</b>           |
| <b>Conductivity (S/m)</b>                     | <b>0.923372</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> |



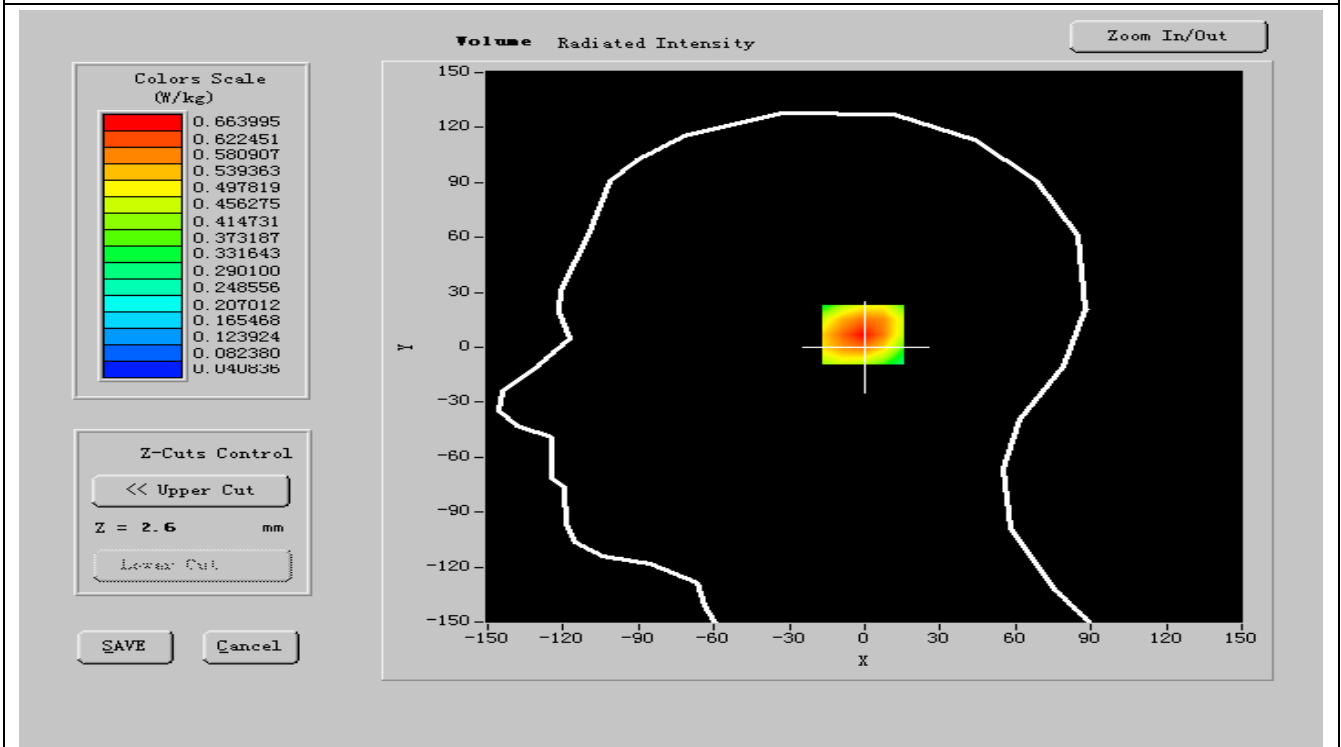
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



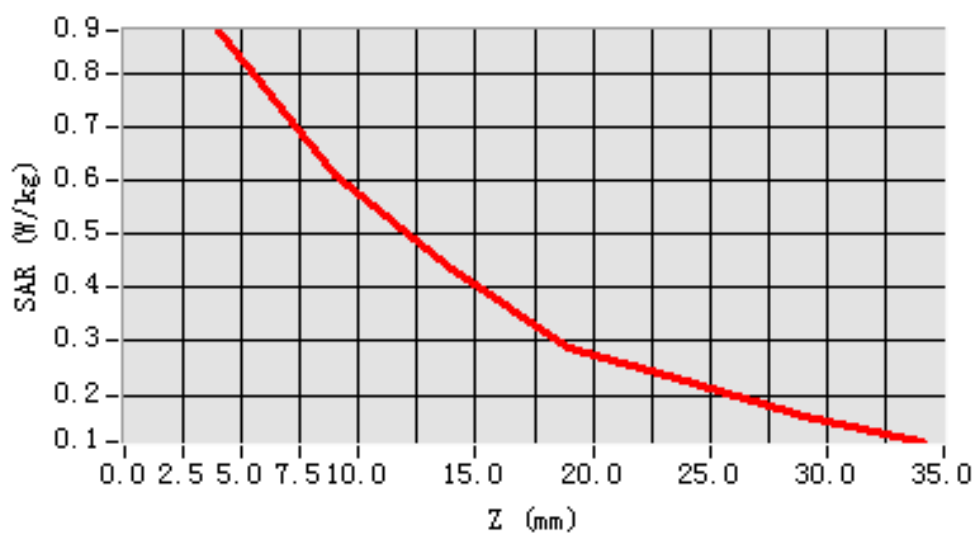


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 8

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

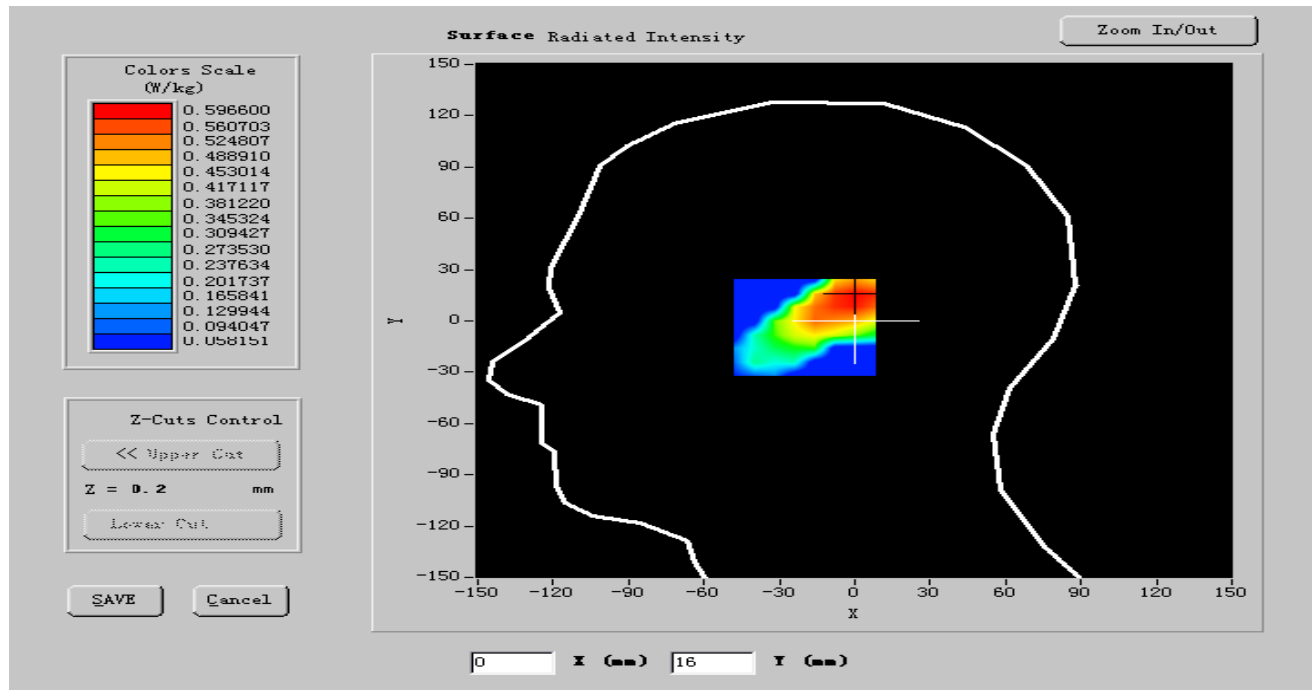
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>836.600024</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.466999</b>           |
| <b>Relative permittivity (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> |



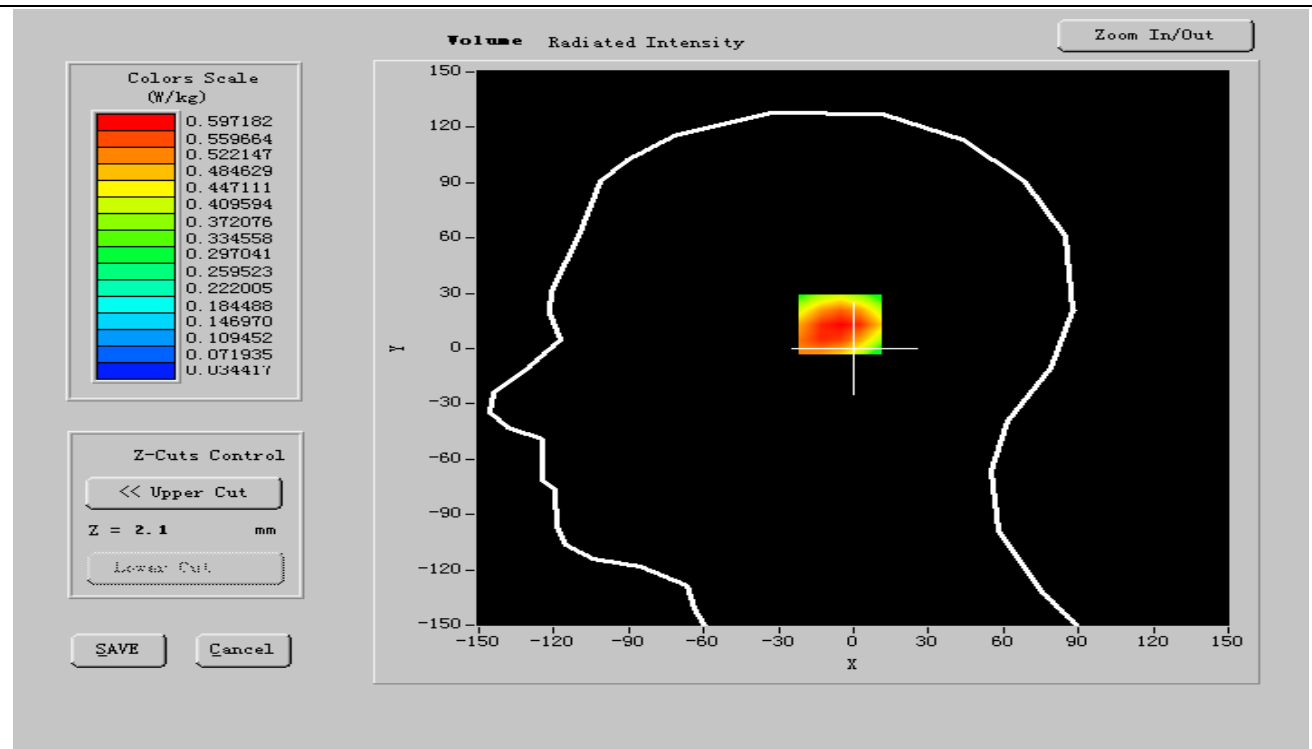
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



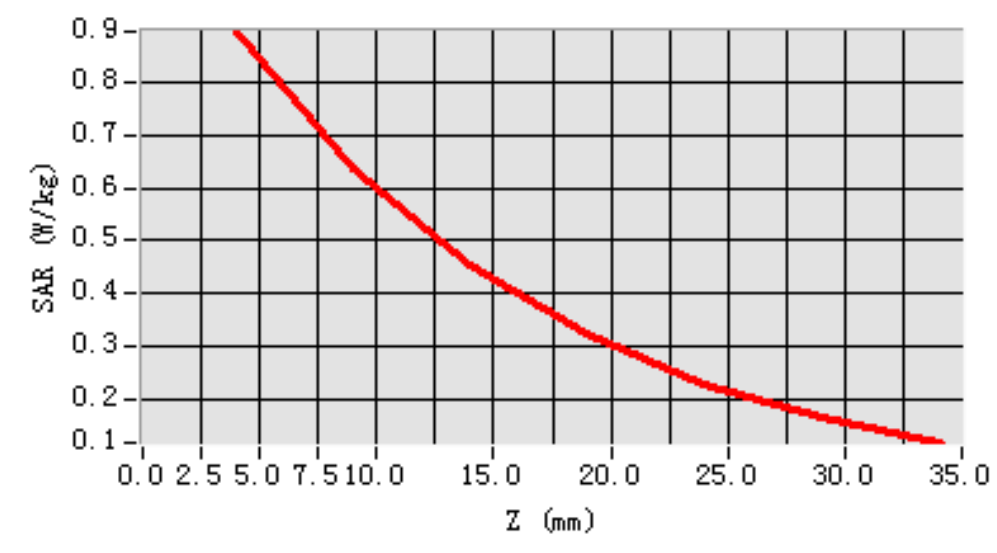


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.559310 |
| SAR 1g (W/Kg)  | 0.850731 |

**Z Axis Scan**

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





## MEASUREMENT 9

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

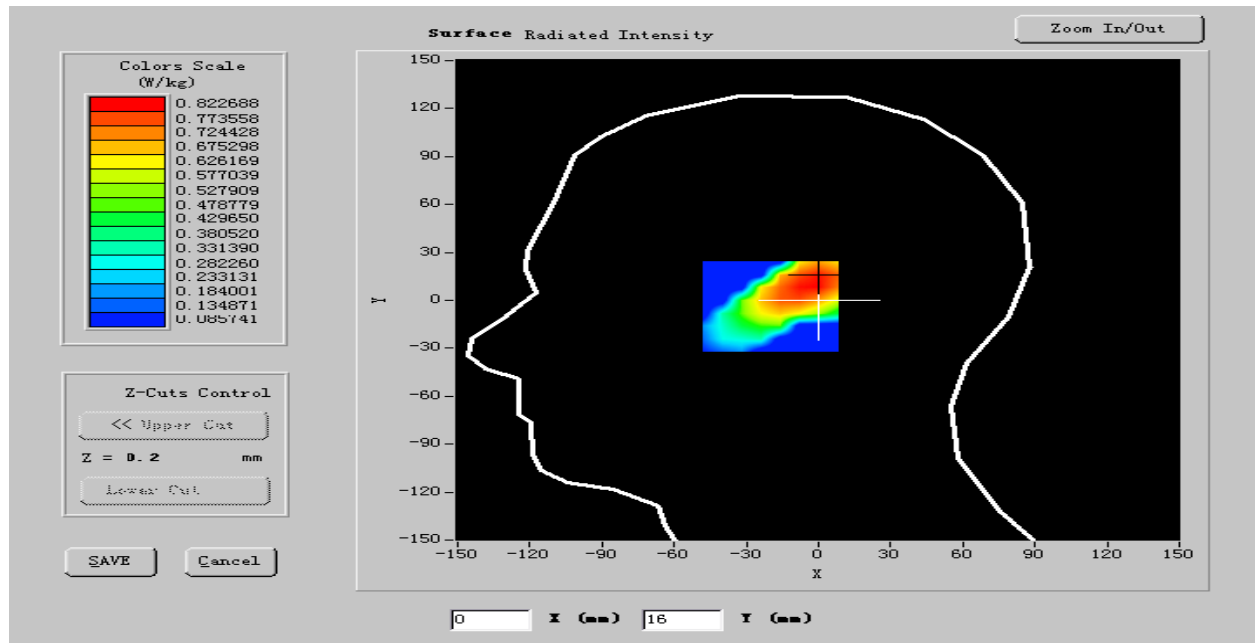
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>848.599976</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.278801</b>           |
| <b>Relative permittivity (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> |



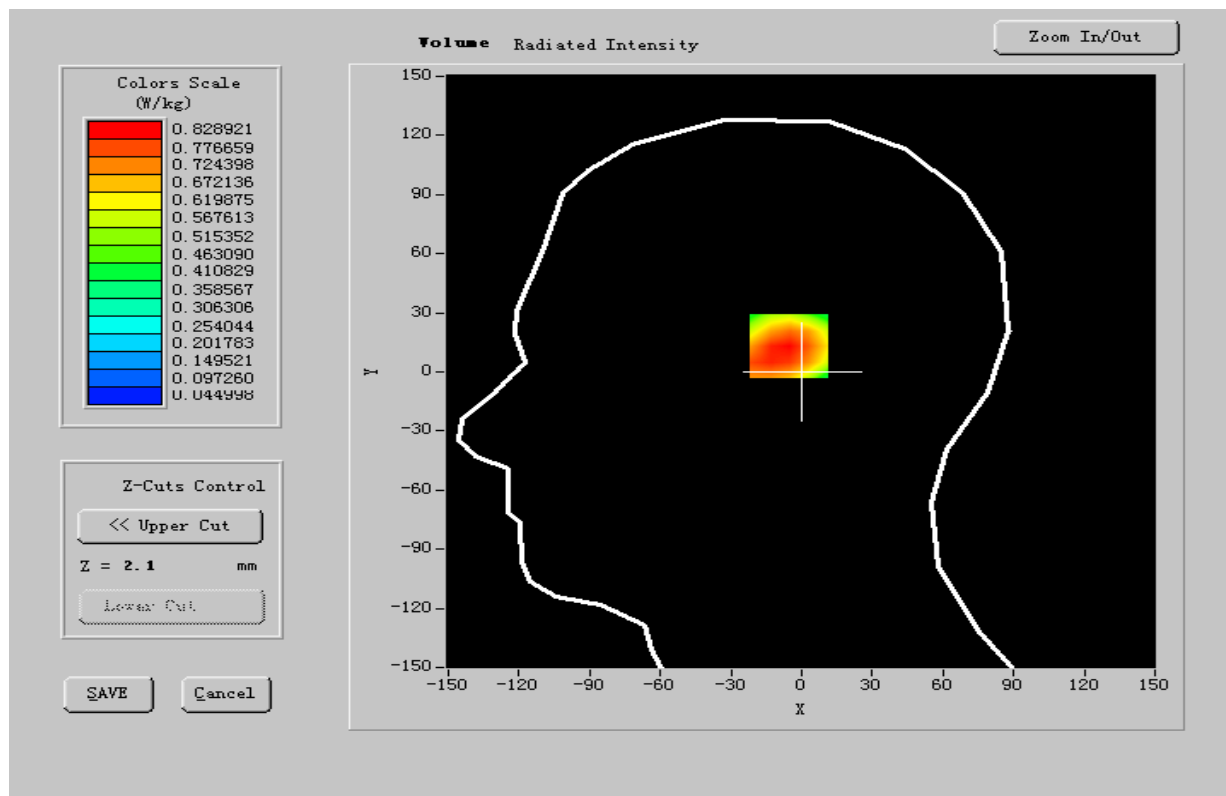
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



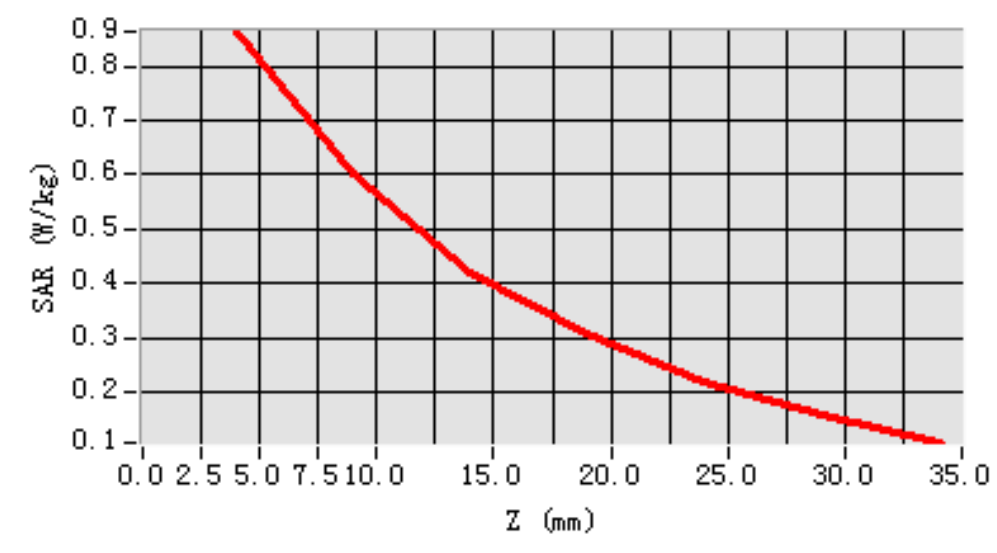


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.538640 |
| SAR 1g (W/Kg)  | 0.812950 |

**Z Axis Scan**

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



**MEASUREMENT 10****Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm****A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Left 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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**

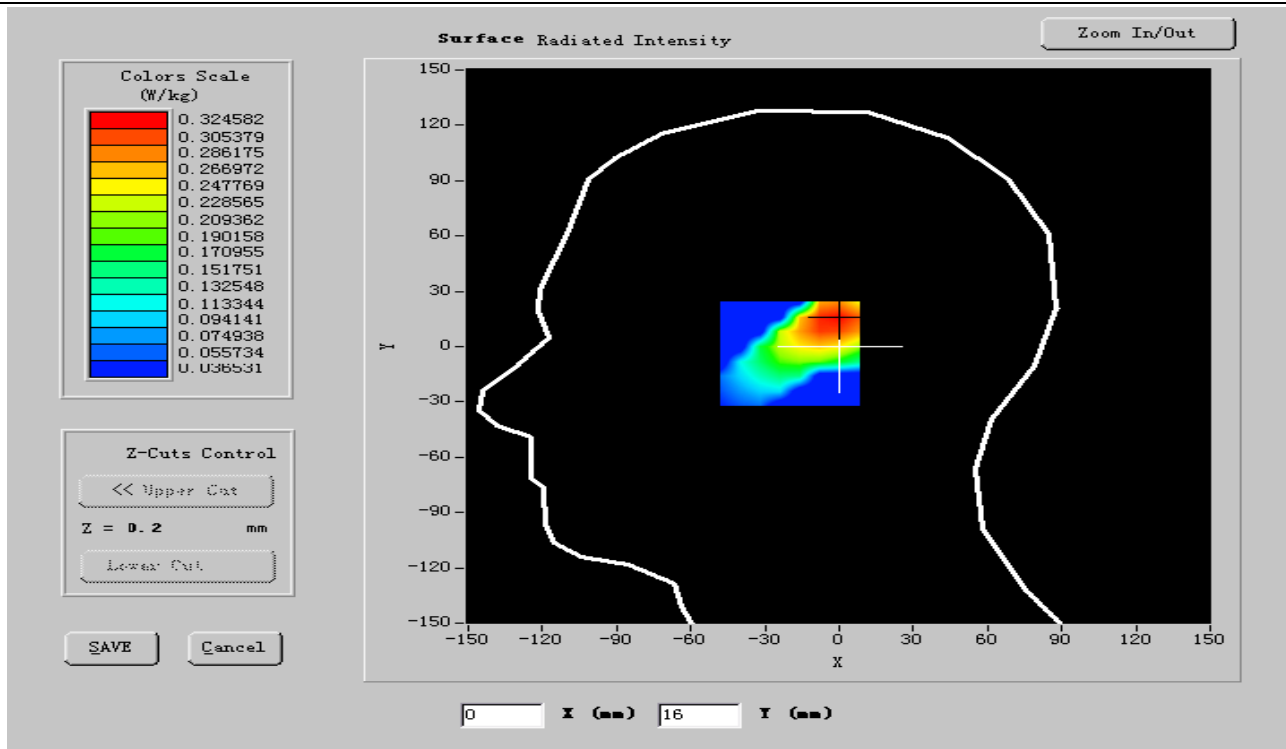
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>824.200012</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.466365</b>           |
| <b>Relative permittivity (imaginary part)</b> | <b>19.511101</b>           |
| <b>Conductivity (S/m)</b>                     | <b>0.923253</b>            |
| <b>Variation (%)</b>                          | <b>-0.170000</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> |



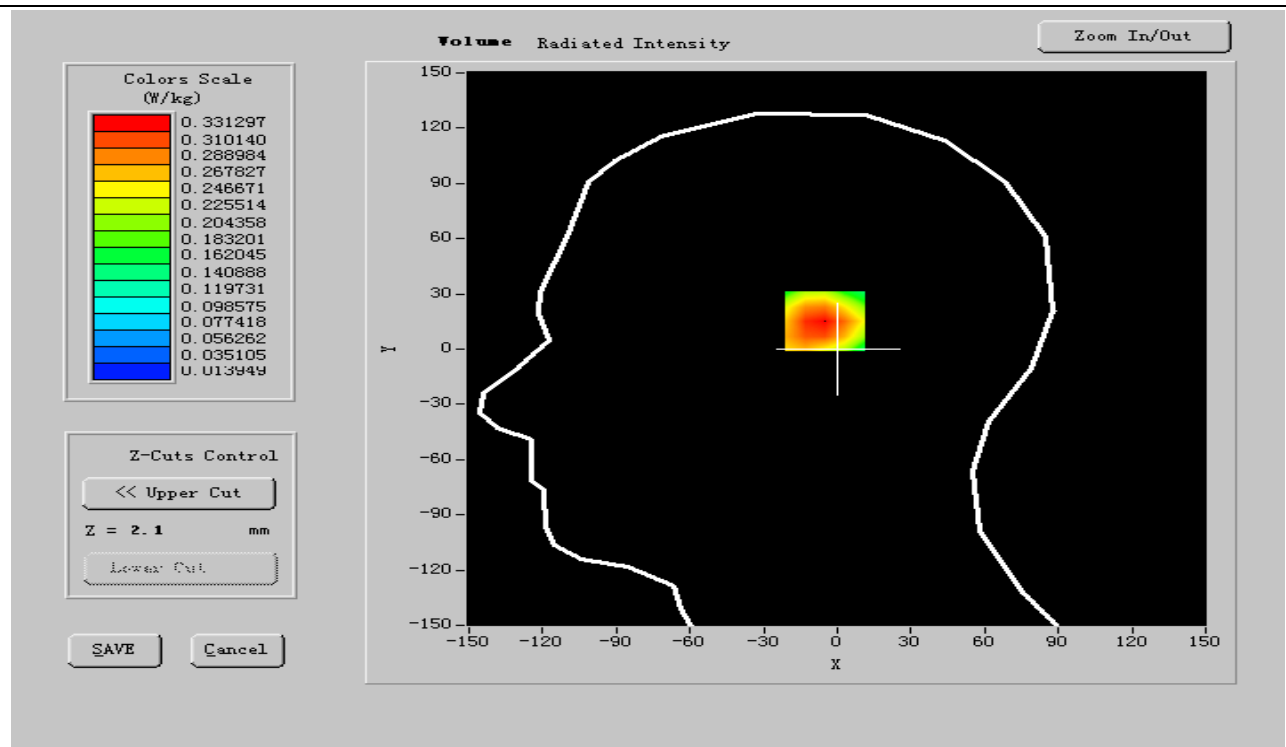
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



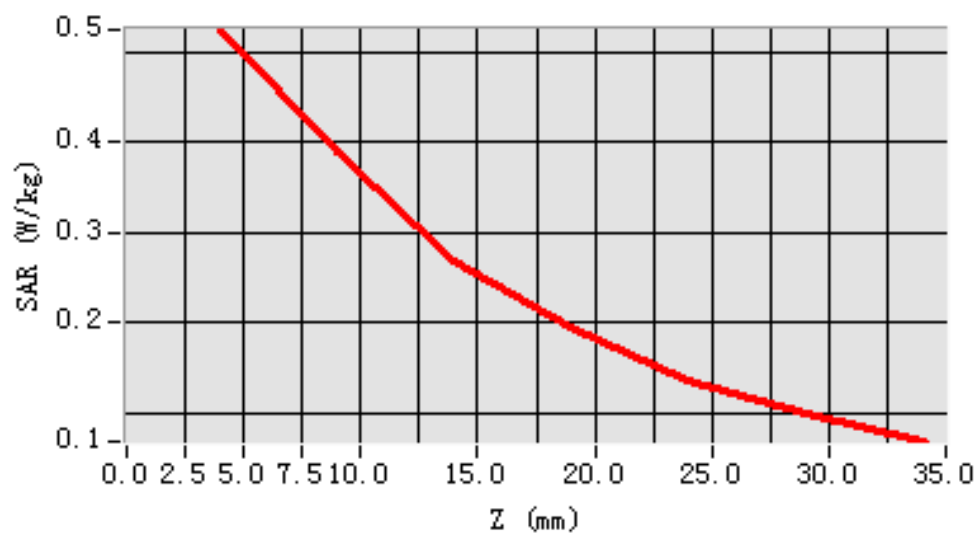


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.333695 |
| SAR 1g (W/Kg)  | 0.491852 |

**Z Axis Scan**

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





## MEASUREMENT 11

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Left 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>             |

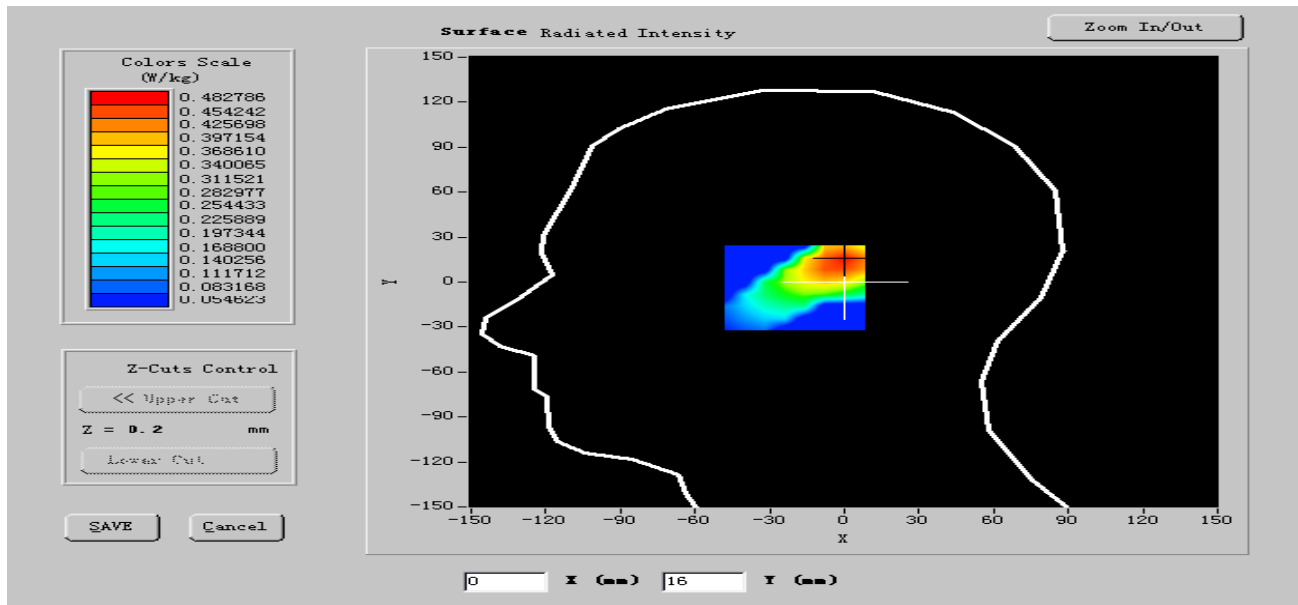
### C. SAR Measurement Results

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

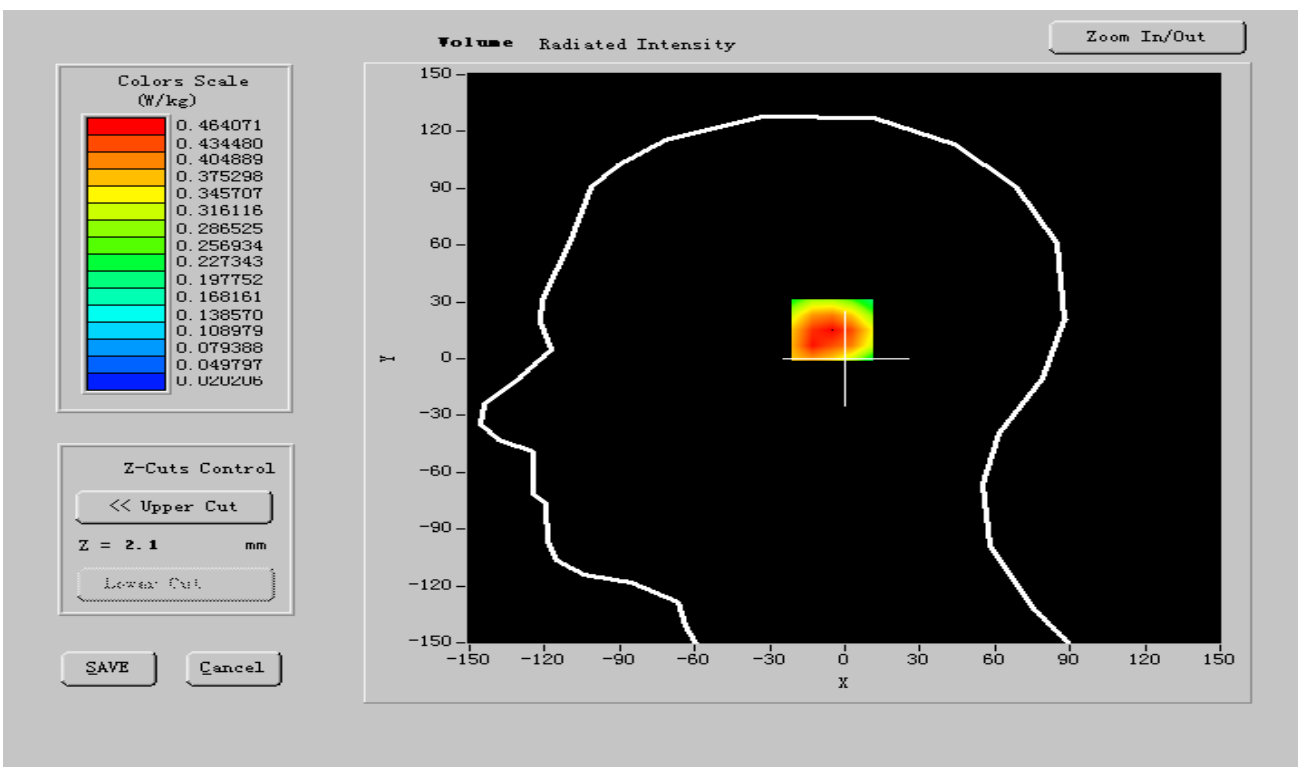


|                     |                     |
|---------------------|---------------------|
| Liquid Temperature: | 20 °C               |
| ConvF:              | 20.66, 20.51, 28.36 |
| Crest factor:       | 1:8                 |

### SURFACE SAR



### VOLUME SAR



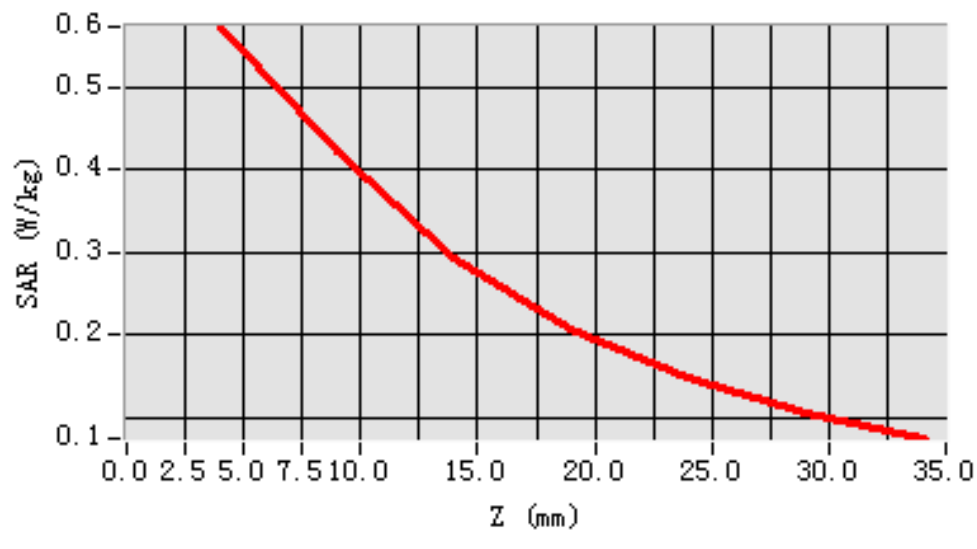


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.368301 |
| SAR 1g (W/Kg)  | 0.553397 |

**Z Axis Scan**

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





## MEASUREMENT 12

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

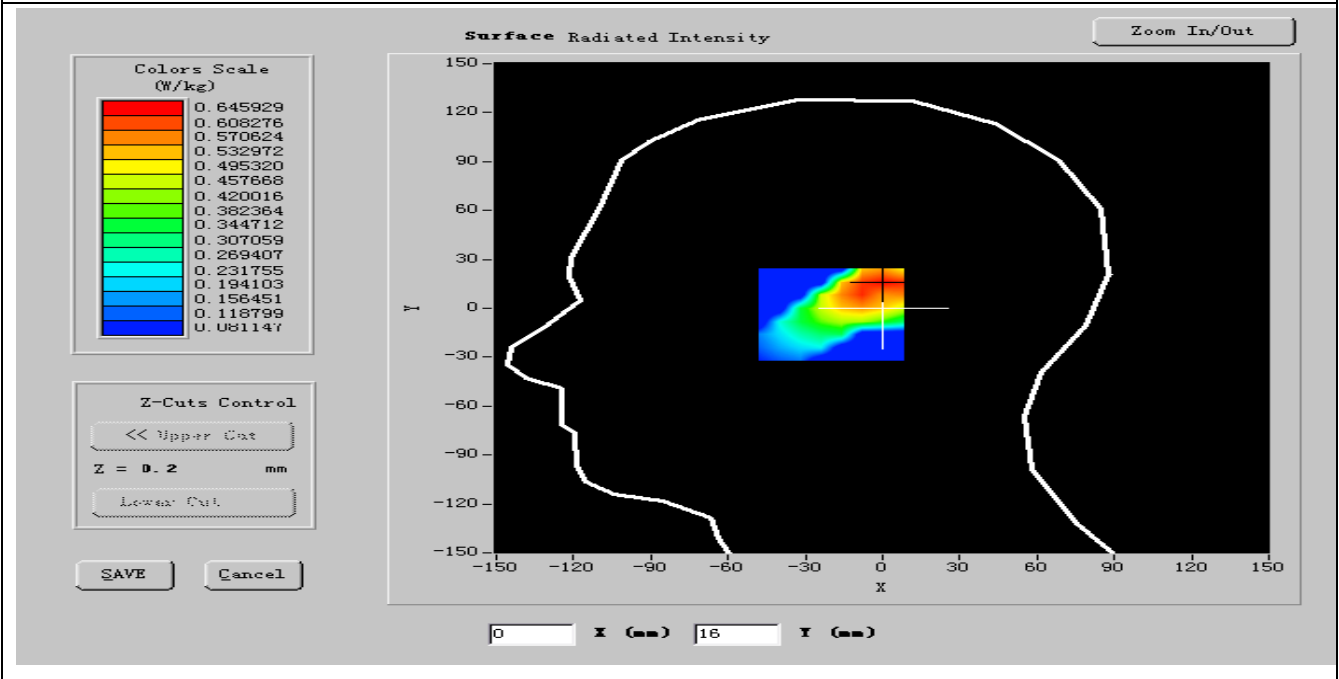
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>848.599976</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.262023</b>           |
| <b>Relative permittivity (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> |



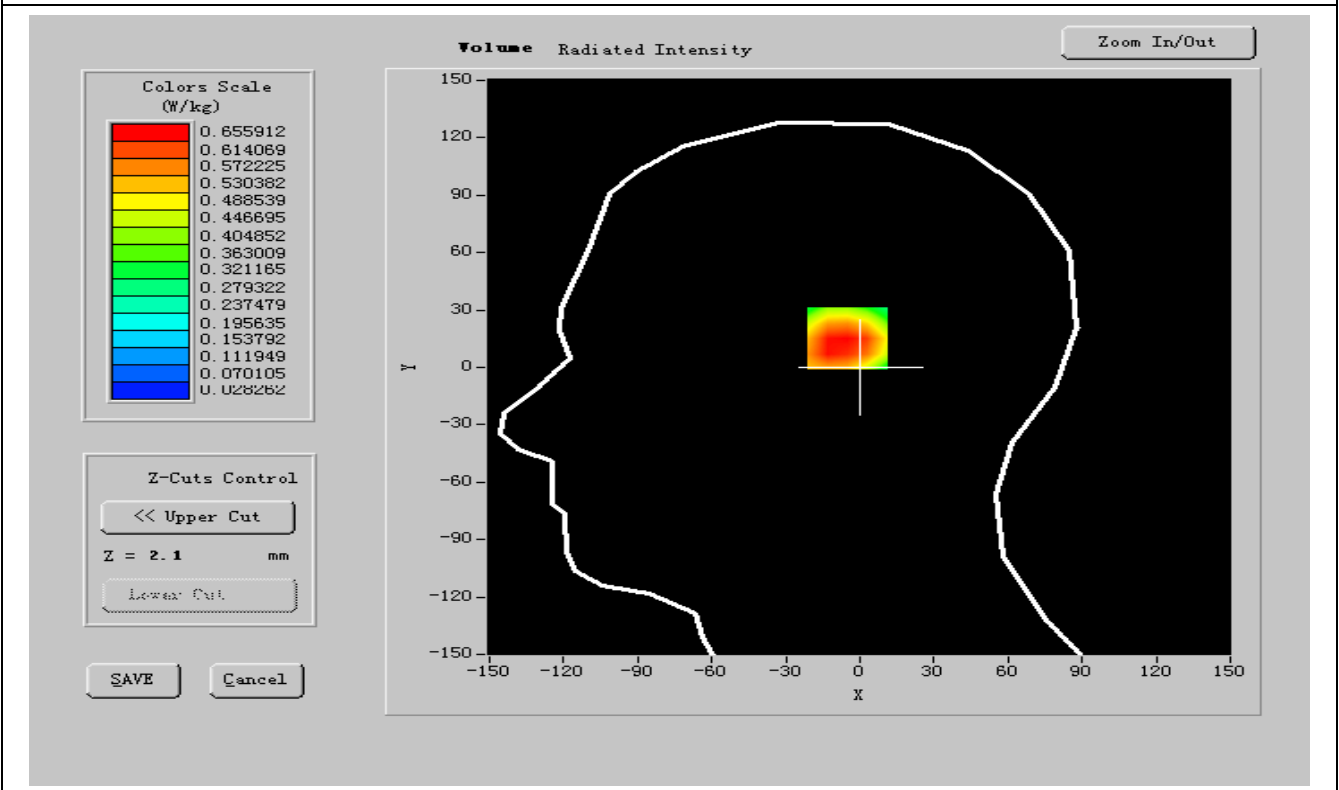
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



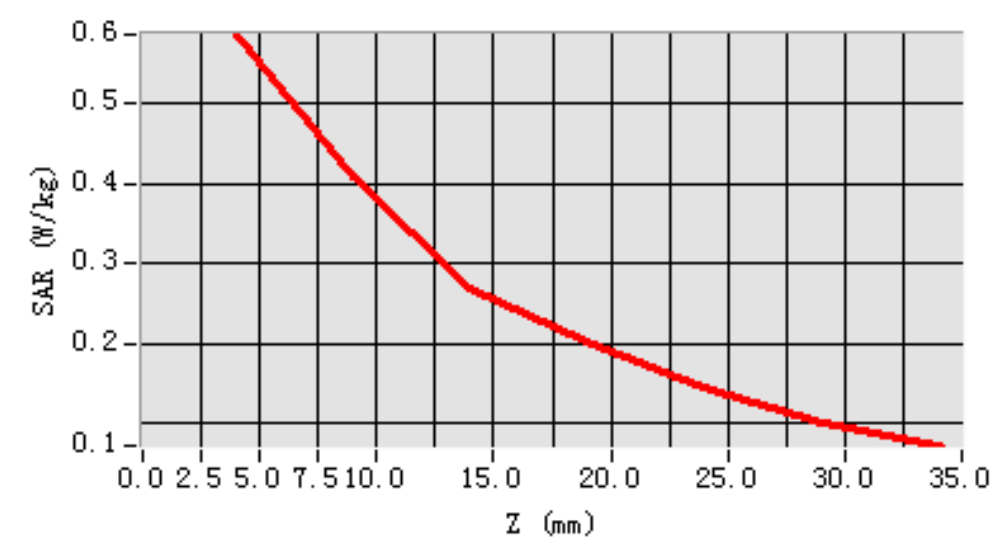


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.359632 |
| SAR 1g (W/Kg)  | 0.551006 |

**Z Axis Scan**

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



**MEASUREMENT 13****Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm****A. Experimental conditions.**

|                        |                              |
|------------------------|------------------------------|
| <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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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**

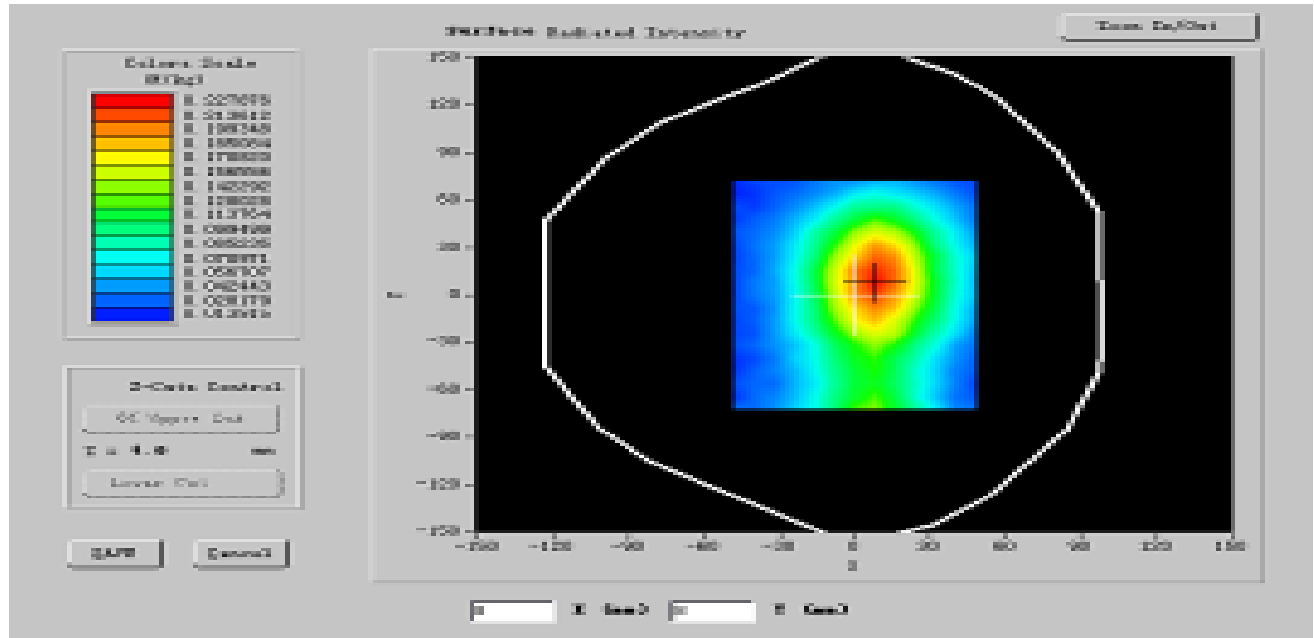
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>824.200012</b>          |
| <b>Relative permittivity (real part)</b>      | <b>56.514000</b>           |
| <b>Relative permittivity (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> |



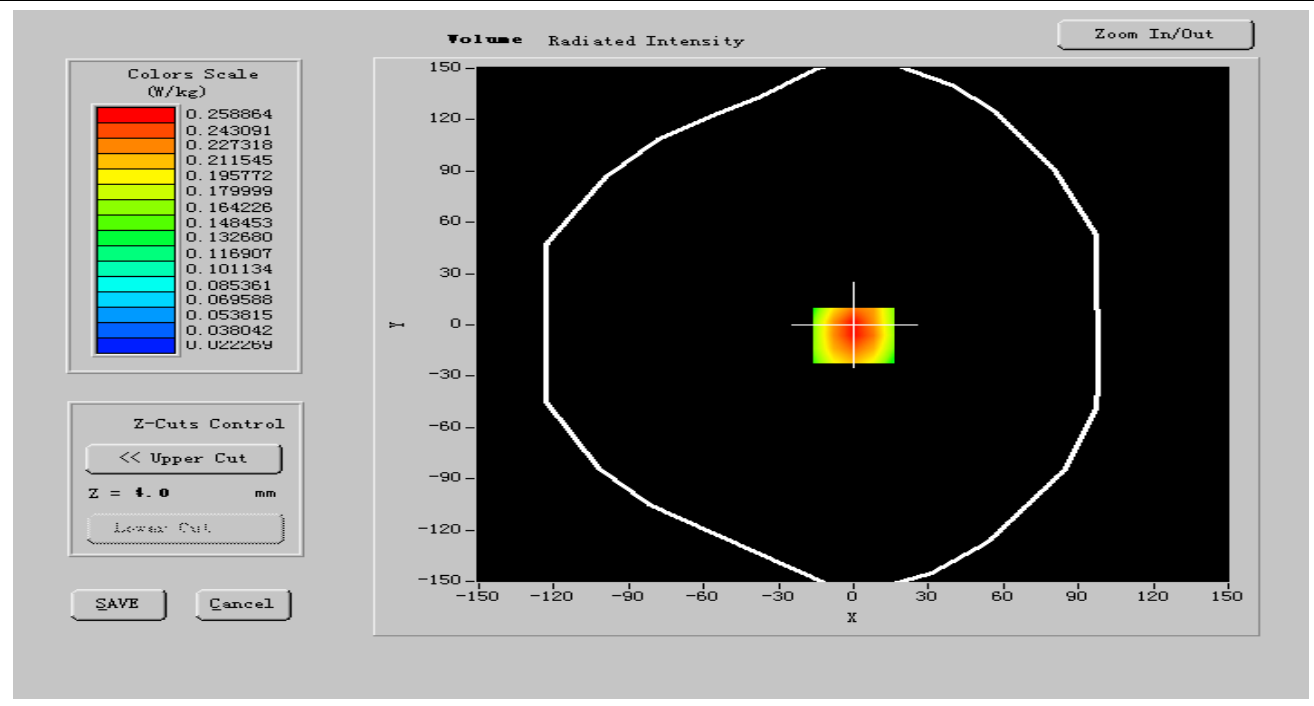
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



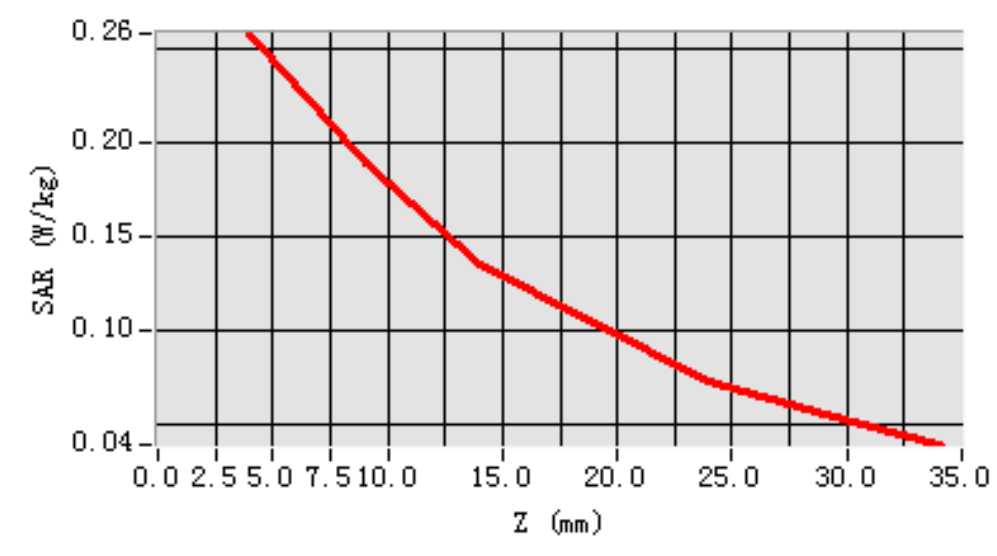


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 14

Date of measurement: 02/20/2011

Area Scan: 7 x 7 x 1

dx=15mm

dy=15mm

Zoom Scan: 5 x 5 x 7

dx=5mm

dy=5mm

dz=5mm

Z Axis Scan: 1 x 1 x 21

dx=20mm

dy=20mm

dz=5mm

### A. Experimental conditions.

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

### B. Instrumentations.

|                                    |                                            |                             |
|------------------------------------|--------------------------------------------|-----------------------------|
| PC                                 | HP (Pentium(R) V3.06GHz,<br>SN:375052-AA1) | Calibrated: N/A             |
| Wireless Communication<br>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: 02/09/2012 |
| 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

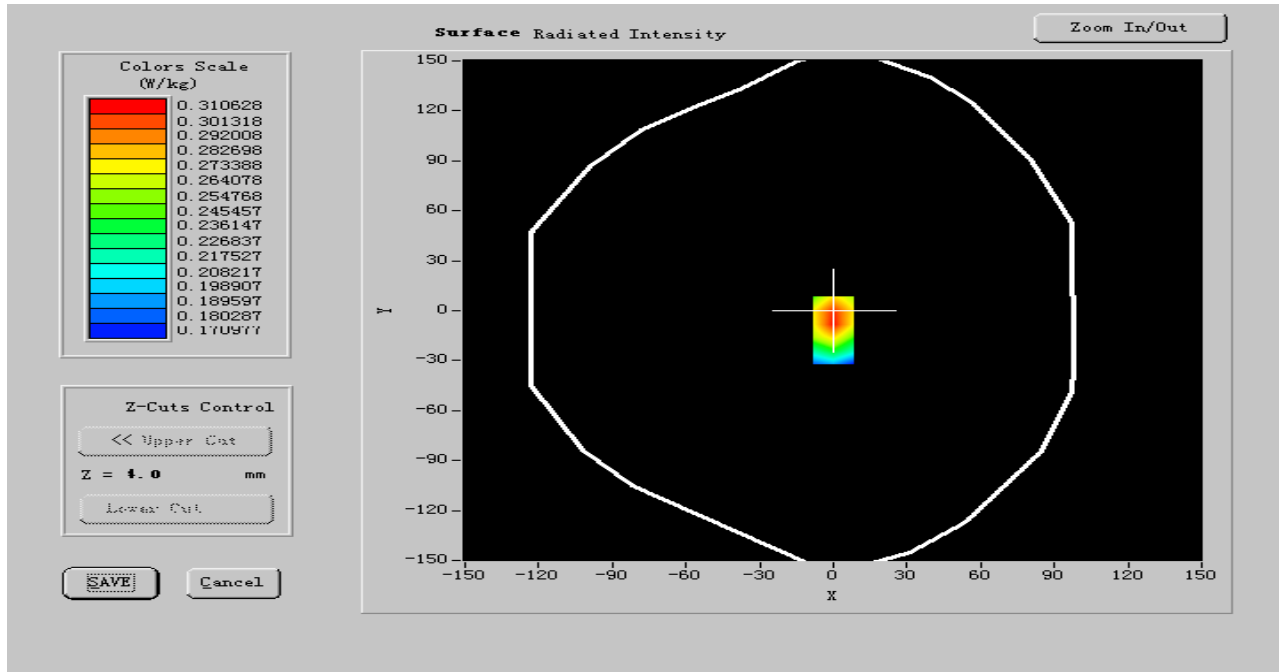
|                                        |                     |
|----------------------------------------|---------------------|
| Frequency (MHz)                        | 836.600024          |
| Relative permittivity (real part)      | 56.501935           |
| Relative permittivity (imaginary part)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



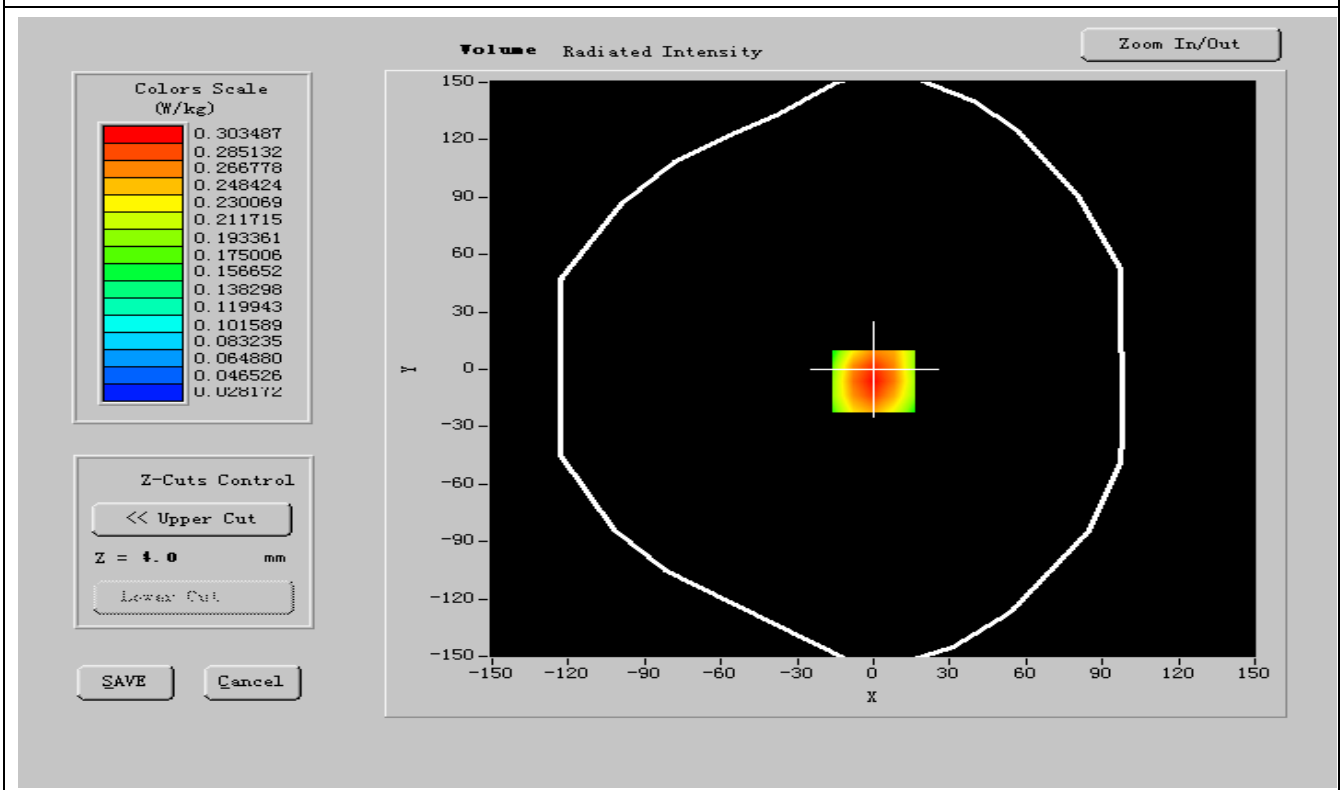
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



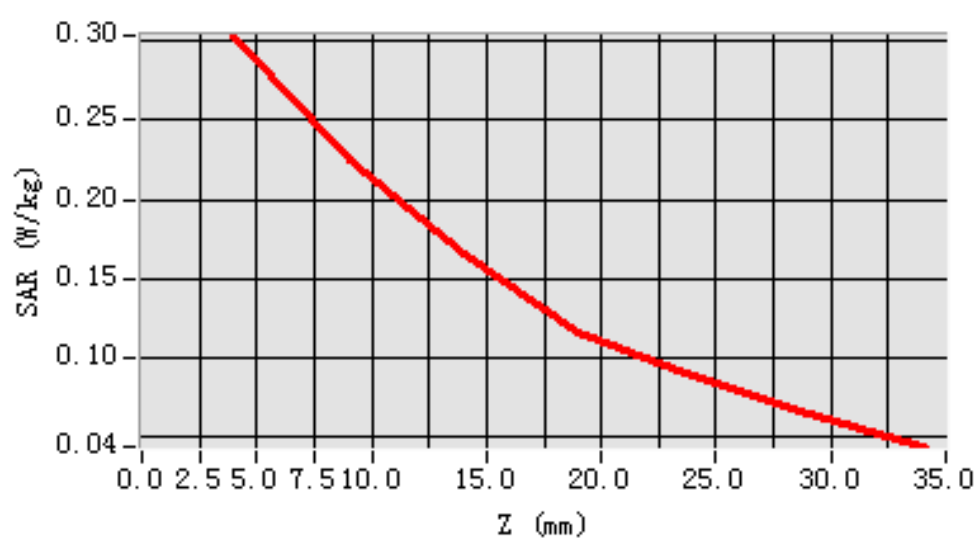


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 15

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>56.508121</b>  |
| <b>Relative permittivity (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>      |



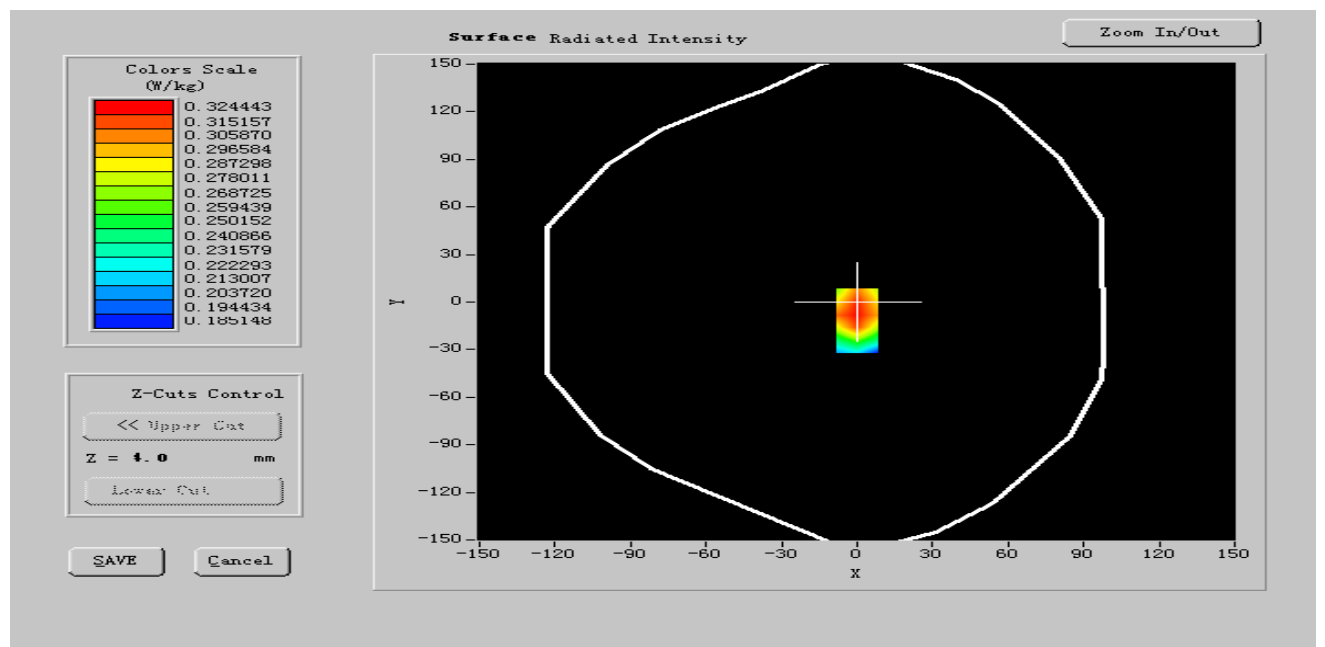
ConvF:

20.00, 19.88, 27.77

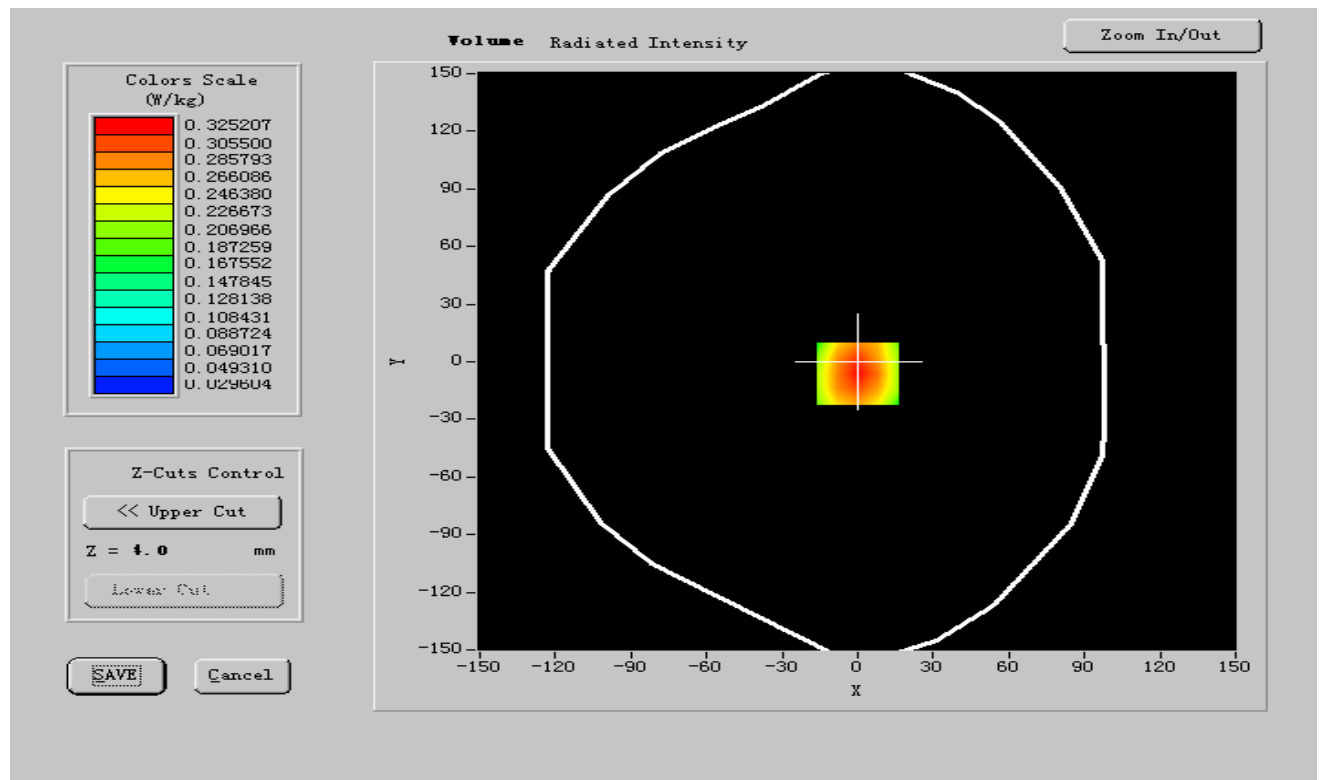
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



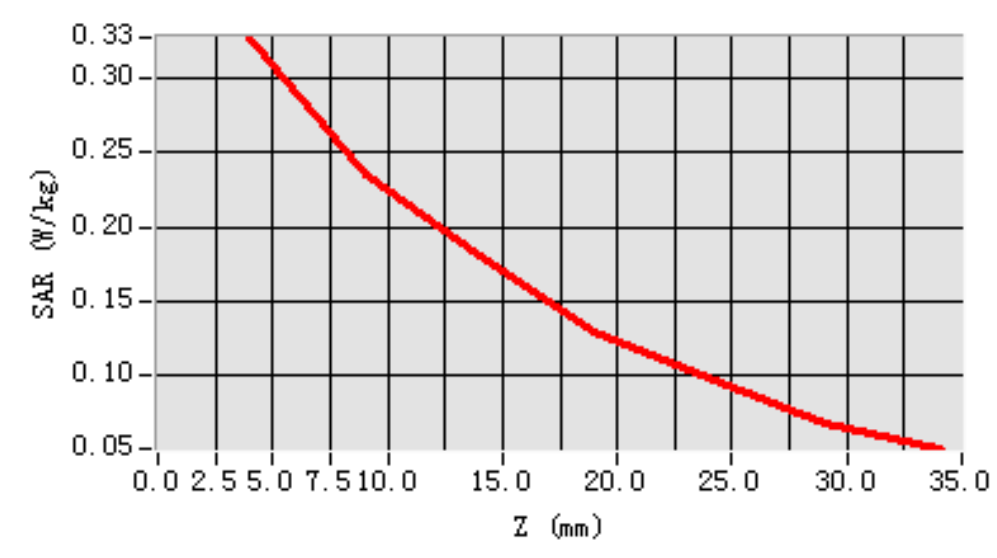


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 16

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>             |

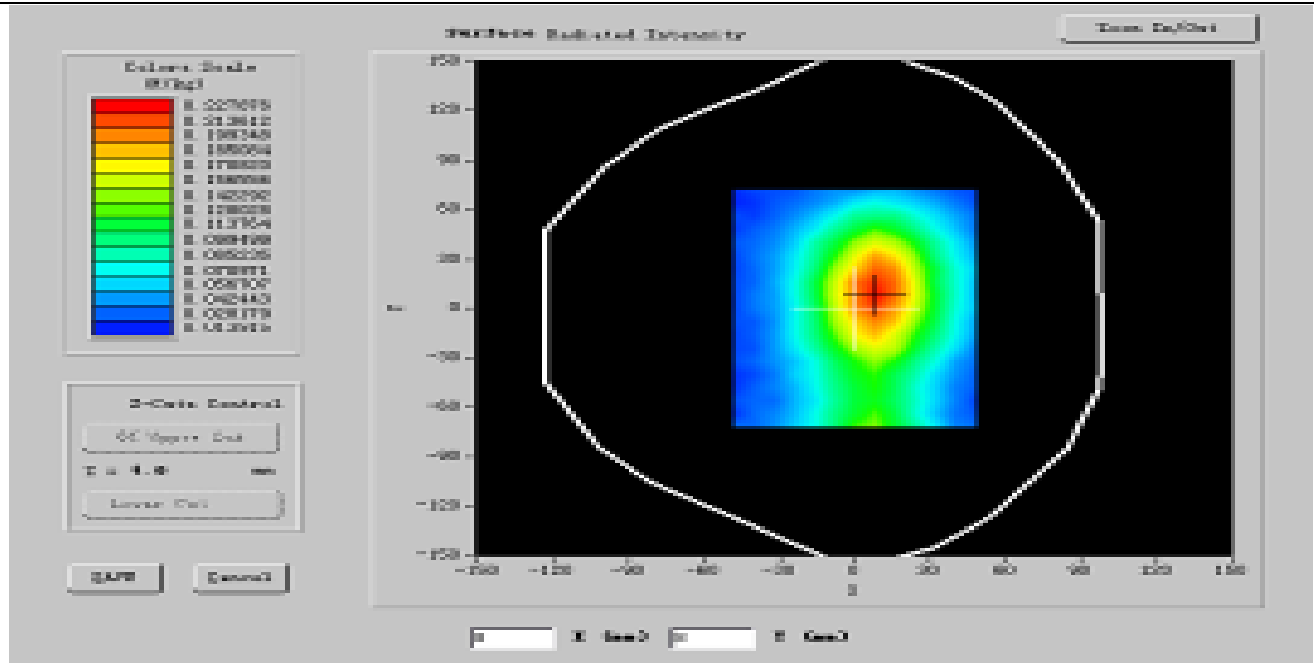
### C. SAR Measurement Results

|                                               |                   |
|-----------------------------------------------|-------------------|
| <b>Frequency (MHz)</b>                        | <b>824.200012</b> |
| <b>Relative permittivity (real part)</b>      | <b>56.514000</b>  |
| <b>Relative permittivity (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>      |

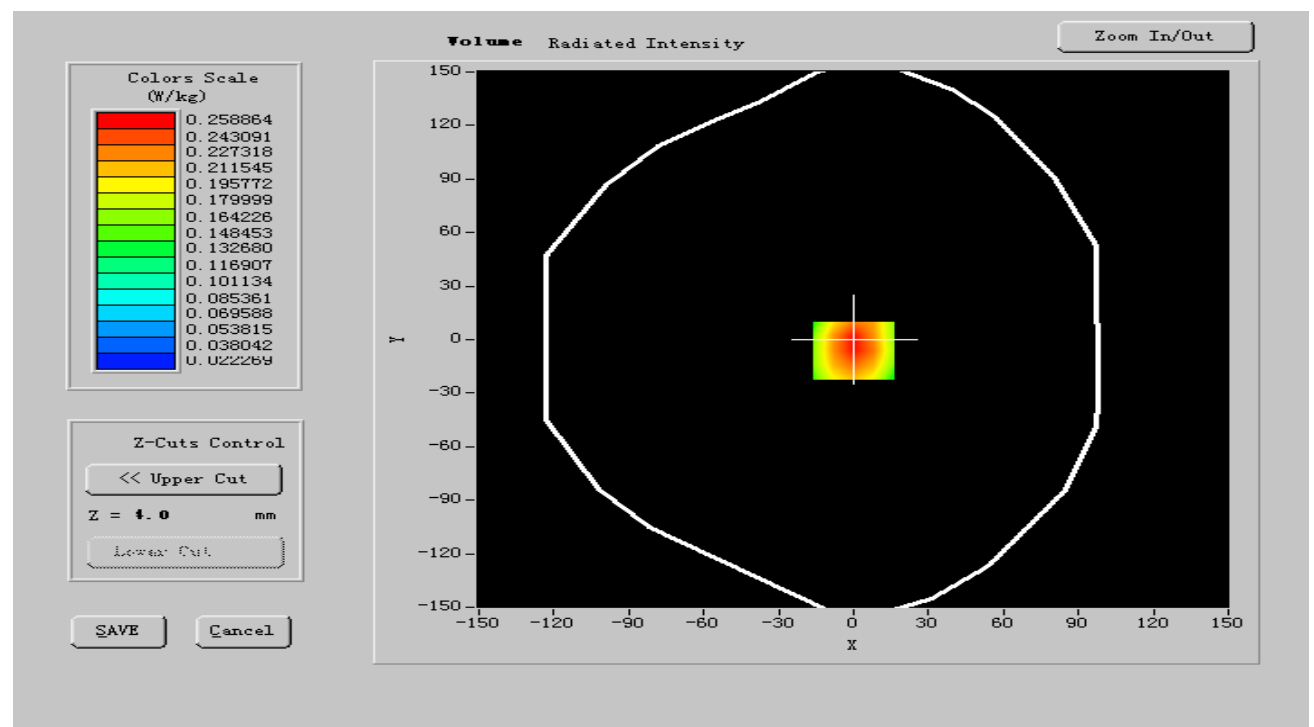


|               |                     |
|---------------|---------------------|
| ConvF:        | 20.00, 19.88, 27.77 |
| Crest factor: | 1:8                 |

### SURFACE SAR



### VOLUME SAR



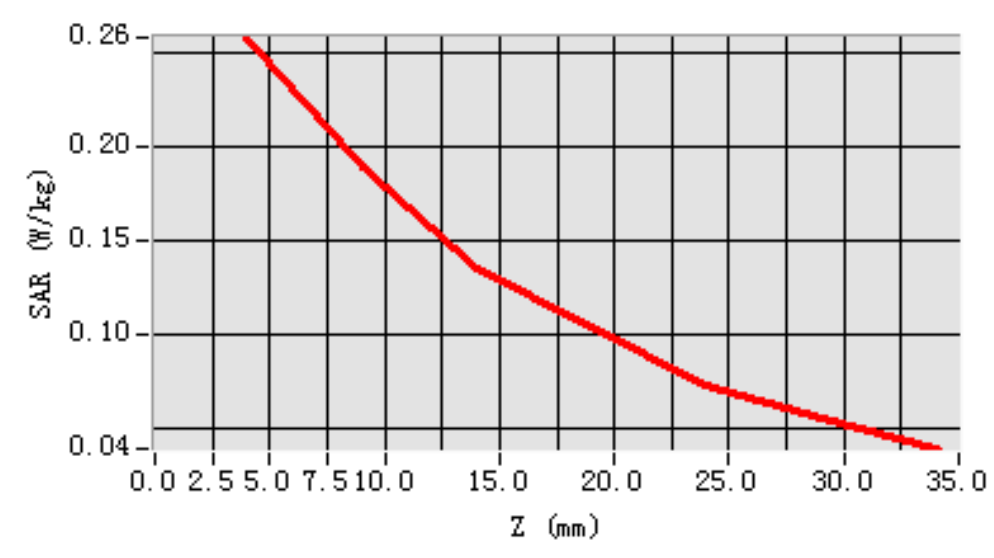


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 17

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>836.600024</b> |
| <b>Relative permittivity (real part)</b>      | <b>56.501935</b>  |
| <b>Relative permittivity (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>      |



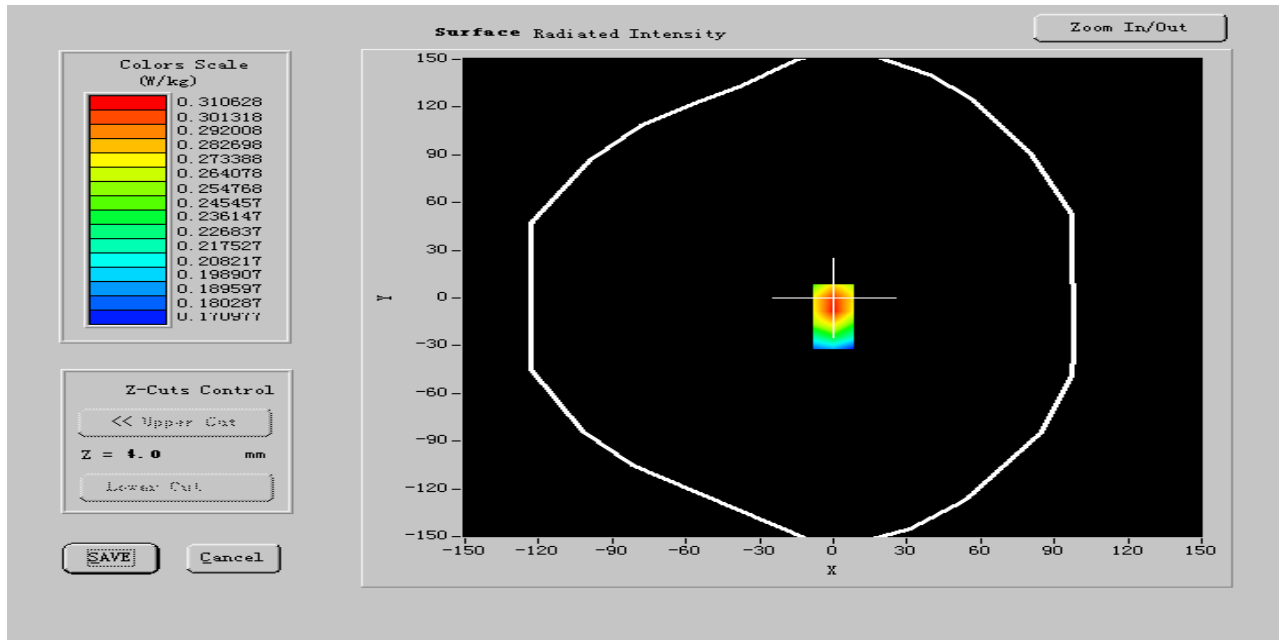
ConvF:

20.00, 19.88, 27.77

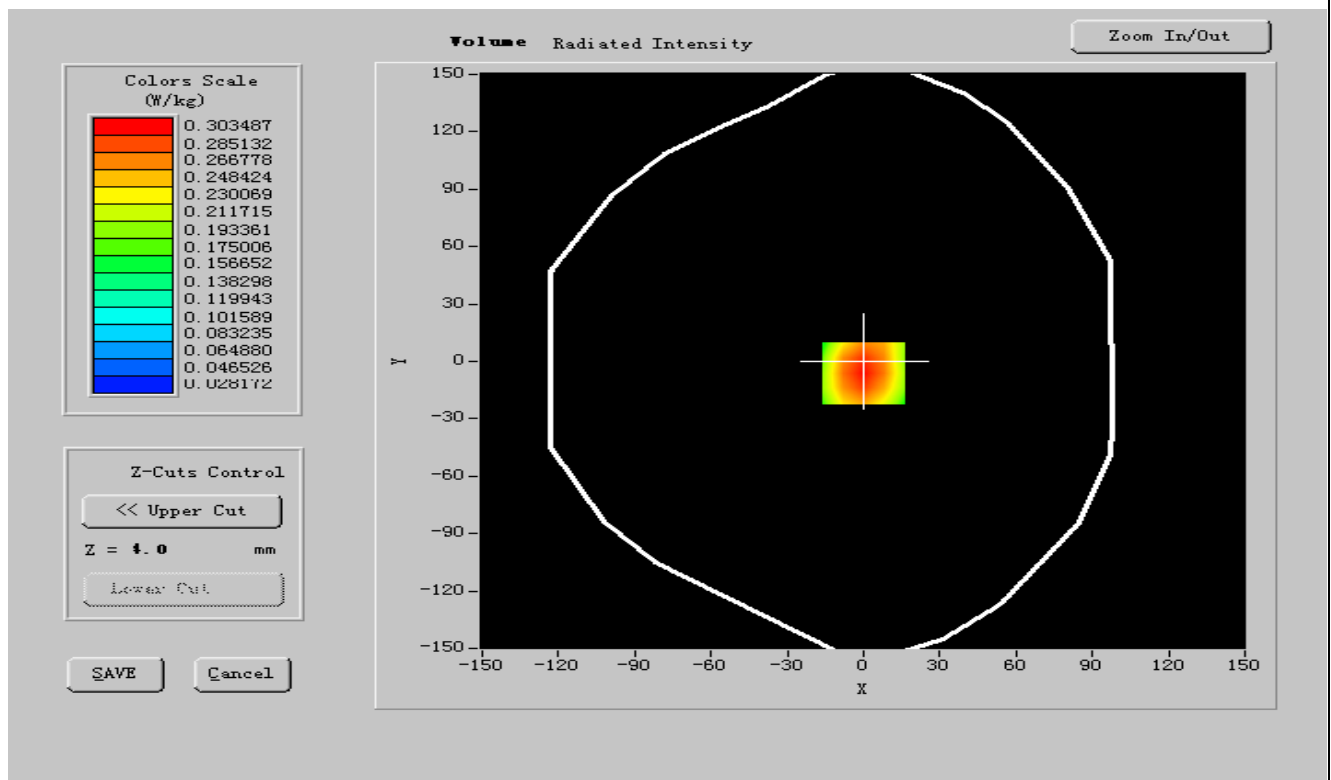
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



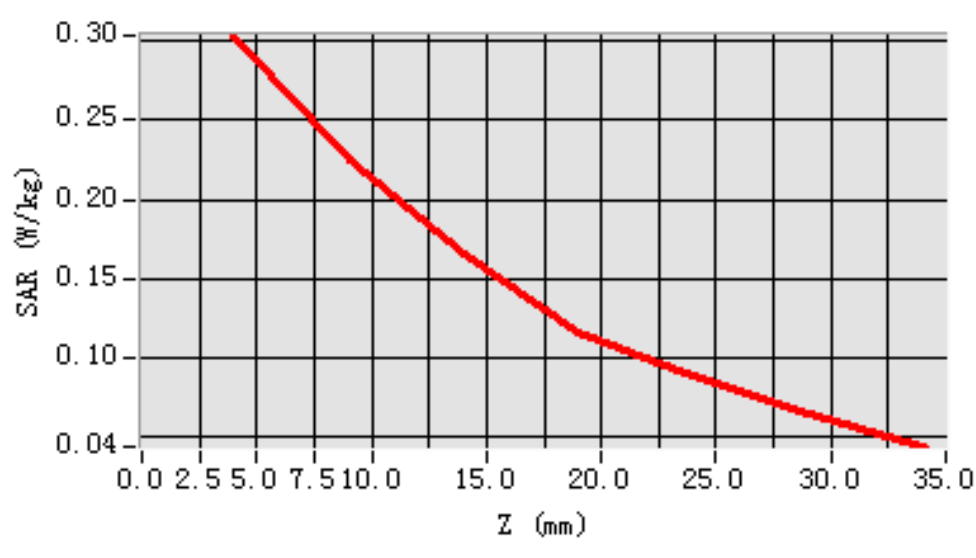


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 18

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>56.508121</b>  |
| <b>Relative permittivity (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>      |



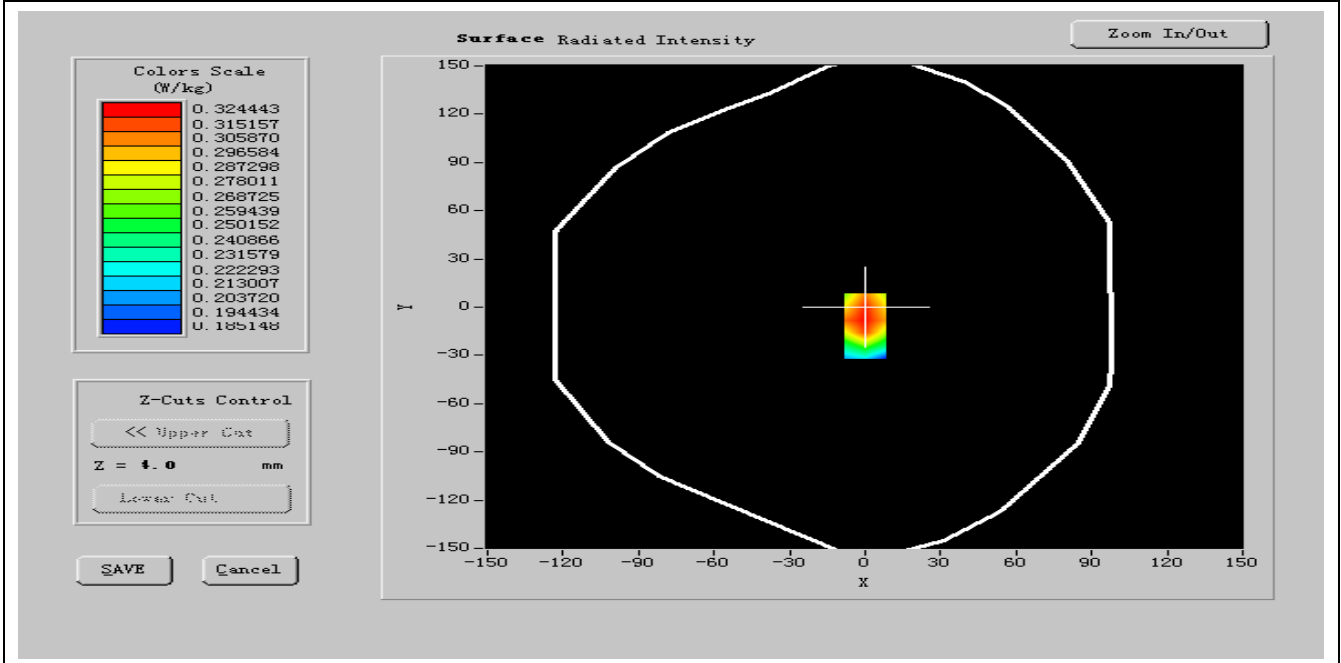
ConvF:

20.00, 19.88, 27.77

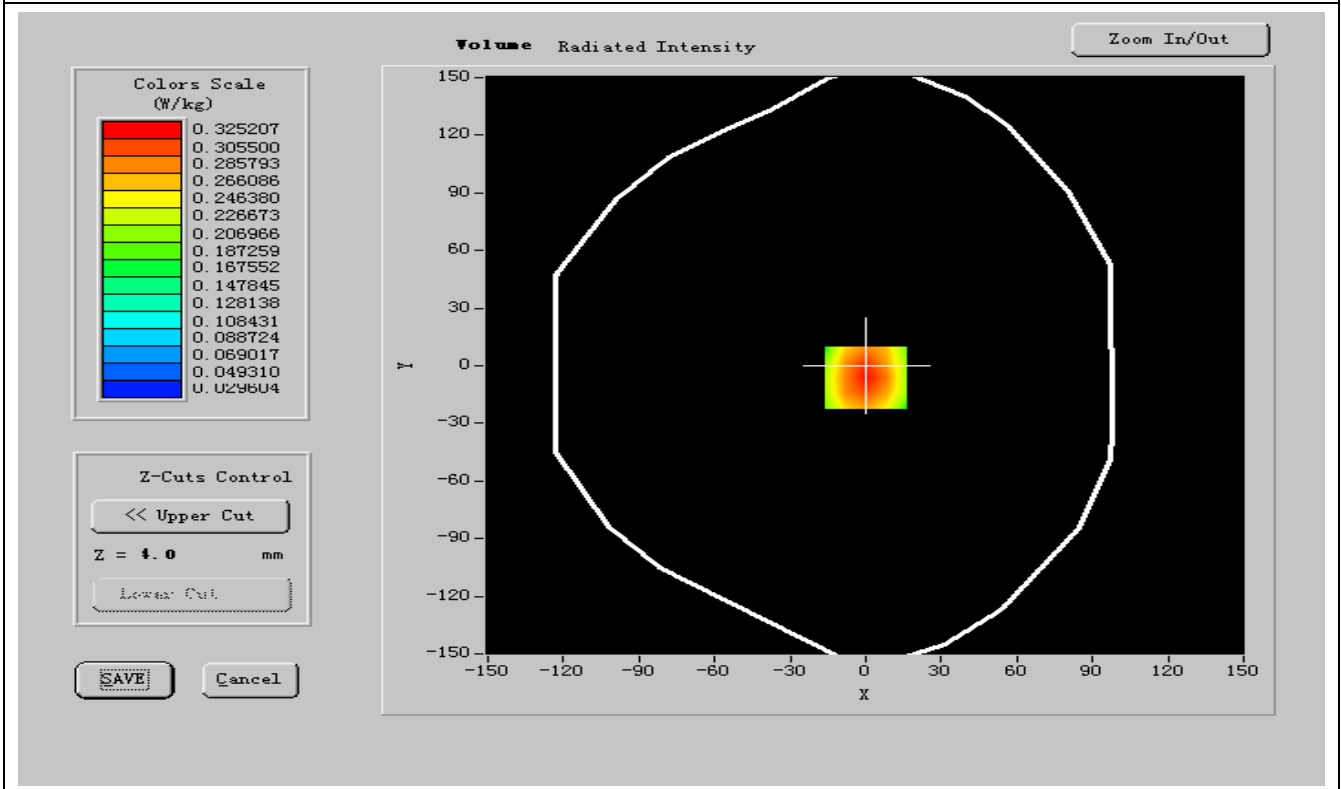
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



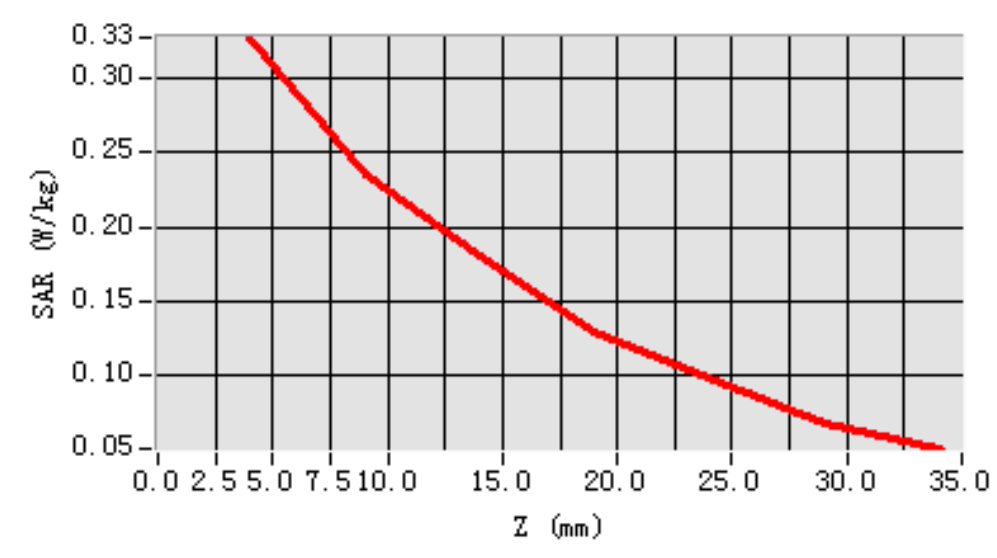


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 19

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>56.584000</b>  |
| <b>Relative permittivity (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>      |



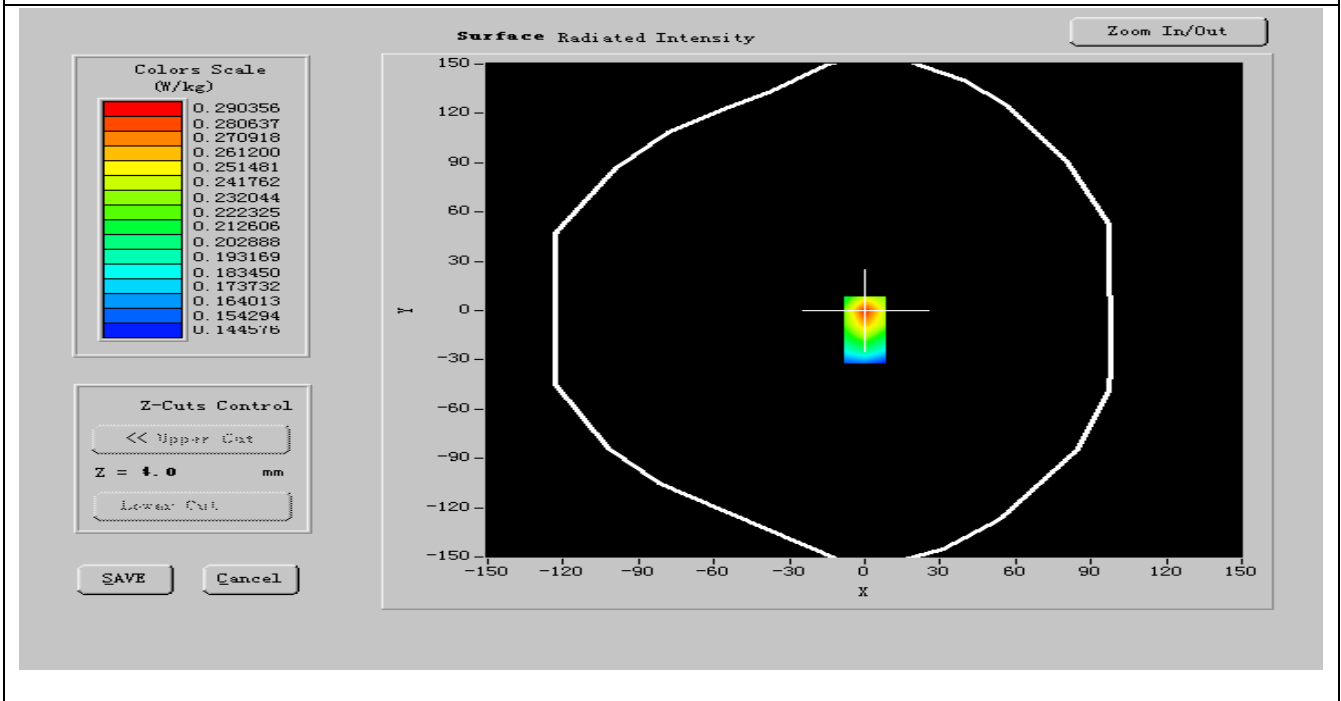
ConvF:

20.00, 19.88, 27.77

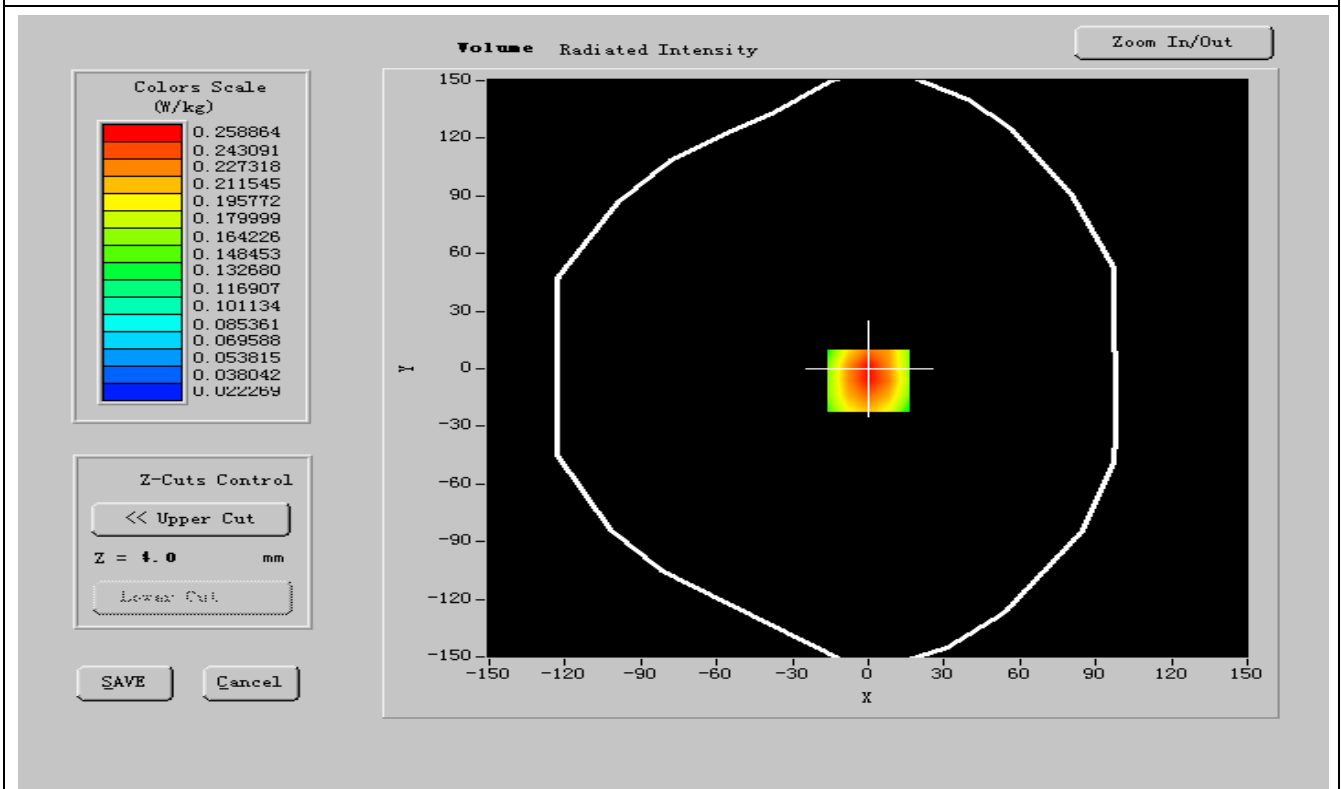
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



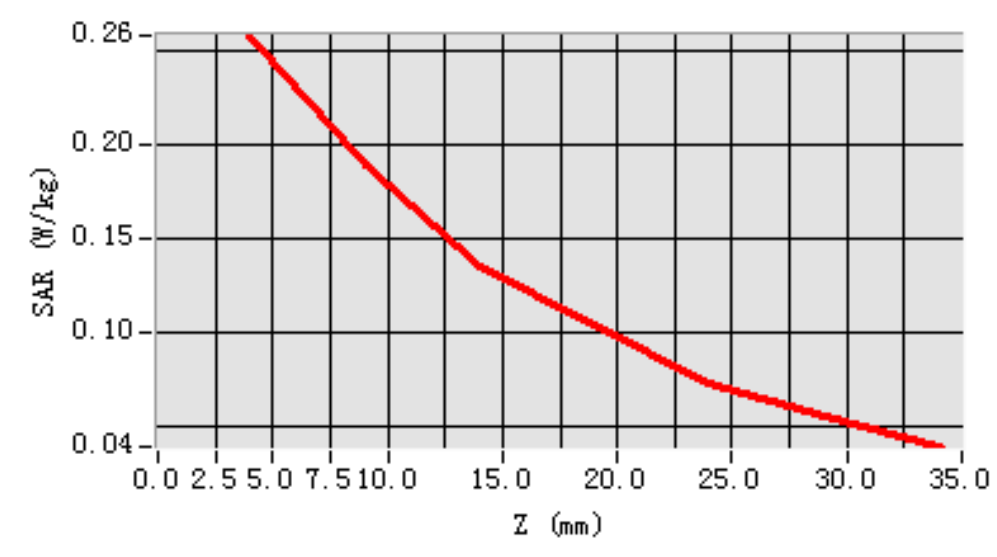


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 20

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>             |

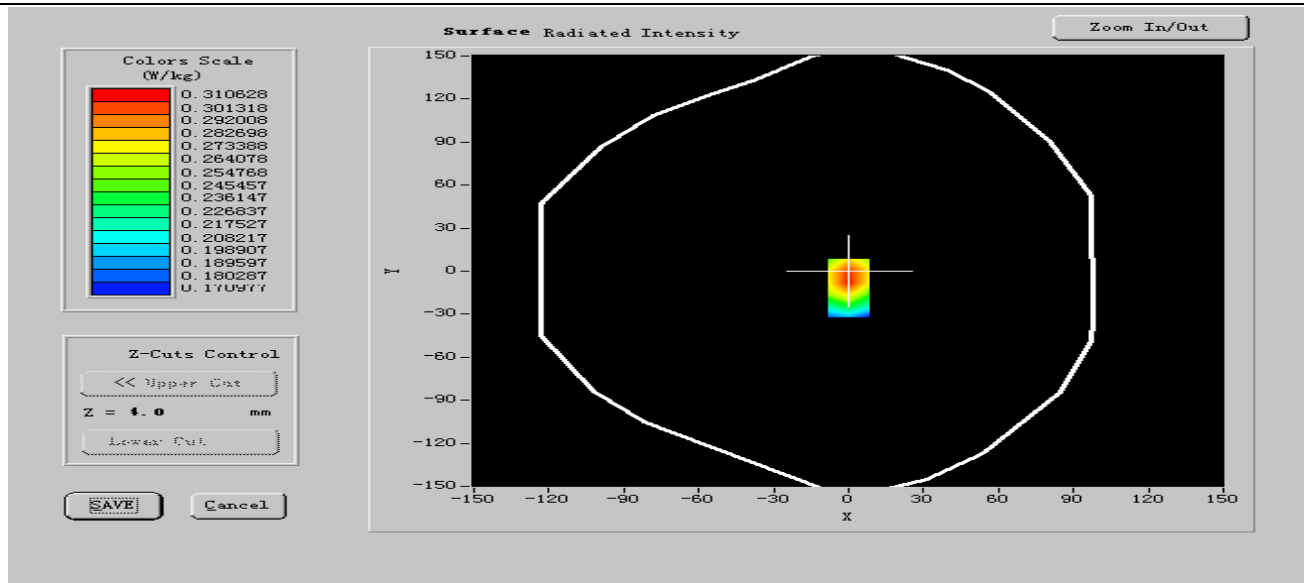
### C. SAR Measurement Results

|                                               |                   |
|-----------------------------------------------|-------------------|
| <b>Frequency (MHz)</b>                        | <b>836.600024</b> |
| <b>Relative permittivity (real part)</b>      | <b>55.501999</b>  |
| <b>Relative permittivity (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>      |

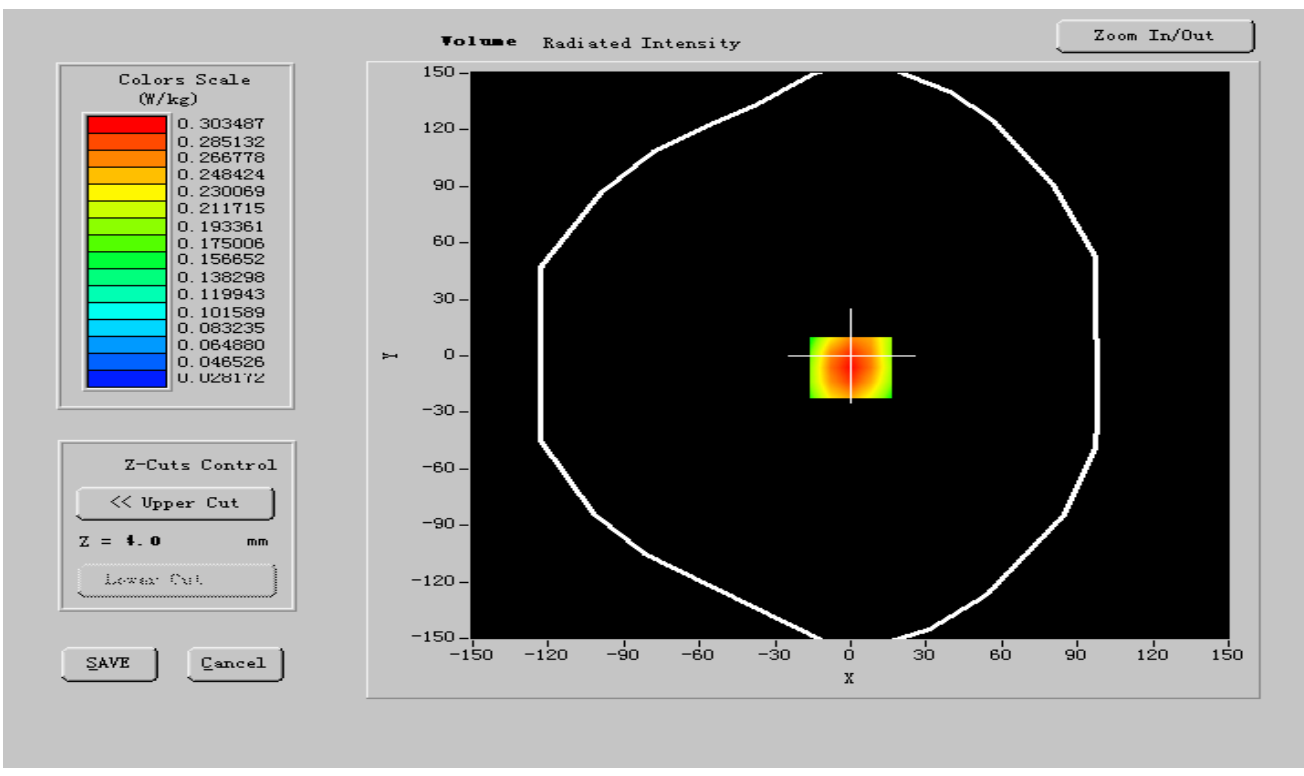


|                     |                     |
|---------------------|---------------------|
| Liquid Temperature: | 20 °C               |
| ConvF:              | 20.00, 19.88, 27.77 |
| Crest factor:       | 1:2                 |

### SURFACE SAR



### VOLUME SAR



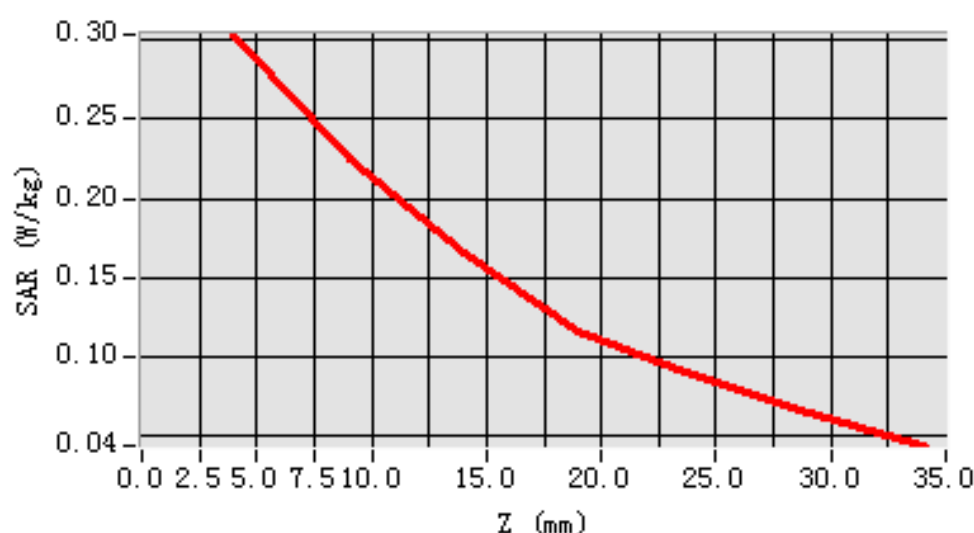


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 21

Date of measurement: 02/20/2011

Area Scan: 7 x 7 x 1

dx=15mm

dy=15mm

Zoom Scan: 5 x 5 x 7

dx=5mm

dy=5mm

dz=5mm

Z Axis Scan: 1 x 1 x 21

dx=20mm

dy=20mm

dz=5mm

### A. Experimental conditions.

|                 |                            |
|-----------------|----------------------------|
| Phantom File    | zinf15.txt, Adaptive 2 max |
| Phantom         | Body                       |
| Device Position | FrontSide toward phantom   |
| Band            | GPRS850                    |
| Channels        | High                       |
| Signal          | GPRS                       |

### B. Instrumentations.

|                                    |                                            |                             |
|------------------------------------|--------------------------------------------|-----------------------------|
| PC                                 | HP (Pentium(R) V3.06GHz,<br>SN:375052-AA1) | Calibrated: N/A             |
| Wireless Communication<br>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: 02/09/2012 |
| 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

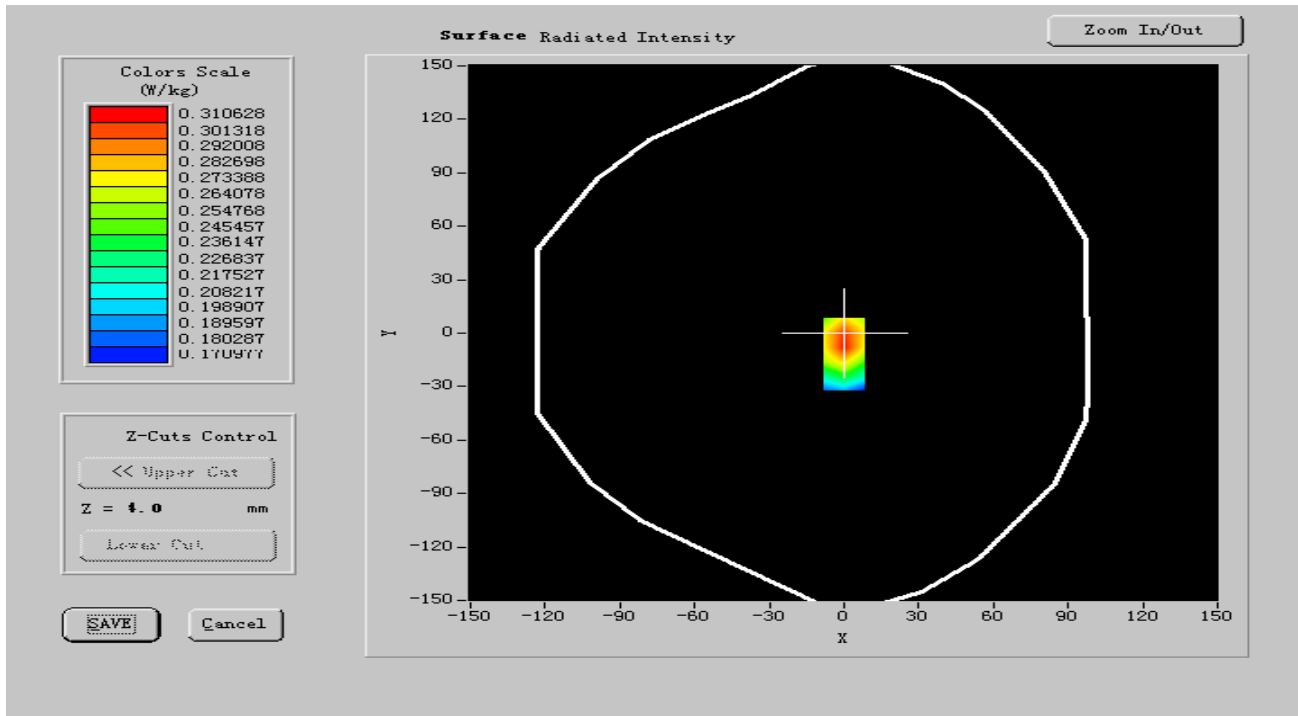
|                                        |                     |
|----------------------------------------|---------------------|
| Frequency (MHz)                        | 848.599976          |
| Relative permittivity (real part)      | 55.576000           |
| Relative permittivity (imaginary part) | 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 |



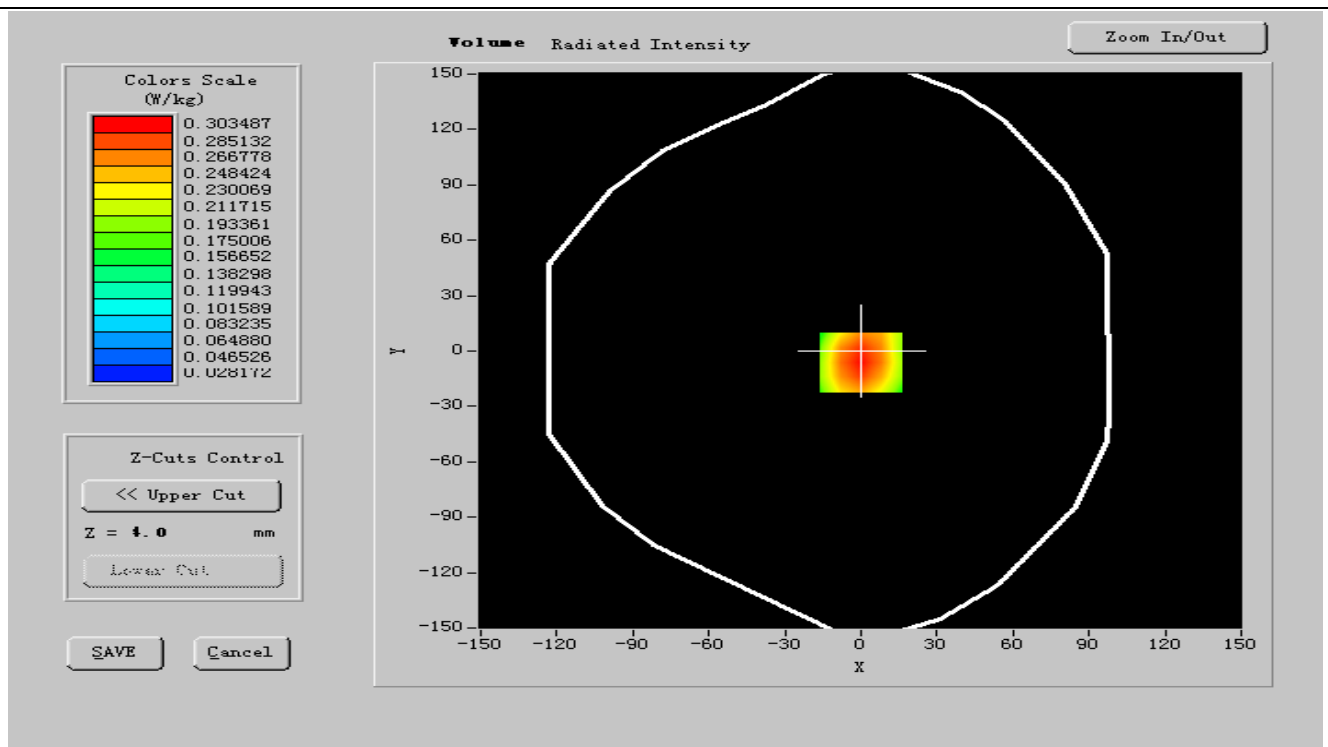
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



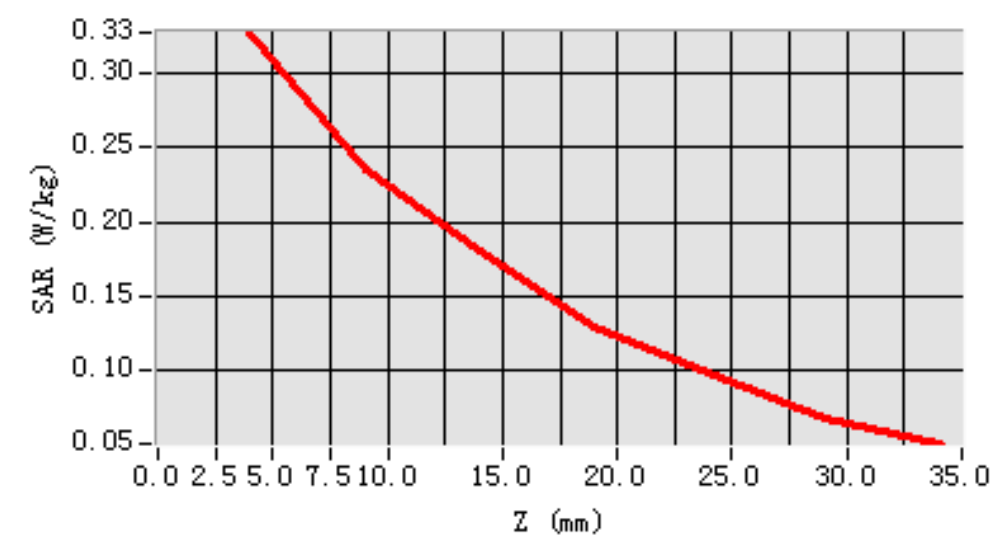


**Maximum location: X=-13.00, Y=-3.00**

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

**Z Axis Scan**

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





## MEASUREMENT 22

Date of measurement: 02/20/2011

Area Scan: 7 x 7 x 1

dx=15mm

dy=15mm

Zoom Scan: 5 x 5 x 7

dx=5mm

dy=5mm

dz=5mm

Z Axis Scan: 1 x 1 x 21

dx=20mm

dy=20mm

dz=5mm

### A. Experimental conditions.

|                 |                            |
|-----------------|----------------------------|
| Phantom File    | zinf15.txt, Adaptive 2 max |
| Phantom         | Body                       |
| Device Position | BackSide toward phantom    |
| Band            | GPRS850                    |
| Channels        | Low                        |
| Signal          | GPRS                       |

### B. Instrumentations.

|                                    |                                            |                             |
|------------------------------------|--------------------------------------------|-----------------------------|
| PC                                 | HP (Pentium(R) V3.06GHz,<br>SN:375052-AA1) | Calibrated: N/A             |
| Wireless Communication<br>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: 02/09/2012 |
| 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

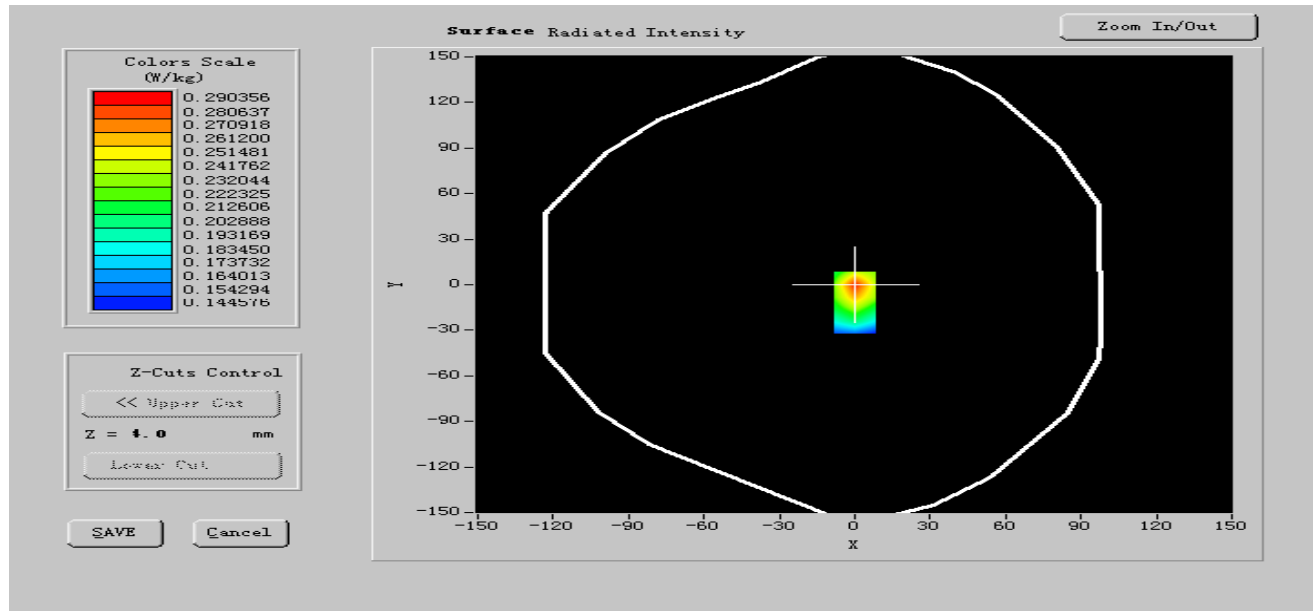
|                                        |                     |
|----------------------------------------|---------------------|
| Frequency (MHz)                        | 824.200012          |
| Relative permittivity (real part)      | 56.585000           |
| Relative permittivity (imaginary part) | 21.654170           |
| Conductivity (S/m)                     | 0.970587            |
| Variation (%)                          | -1.100000           |
| Ambient Temperature:                   | 21 °C               |
| Liquid Temperature:                    | 20 °C               |
| ConvF:                                 | 20.00, 19.88, 27.77 |



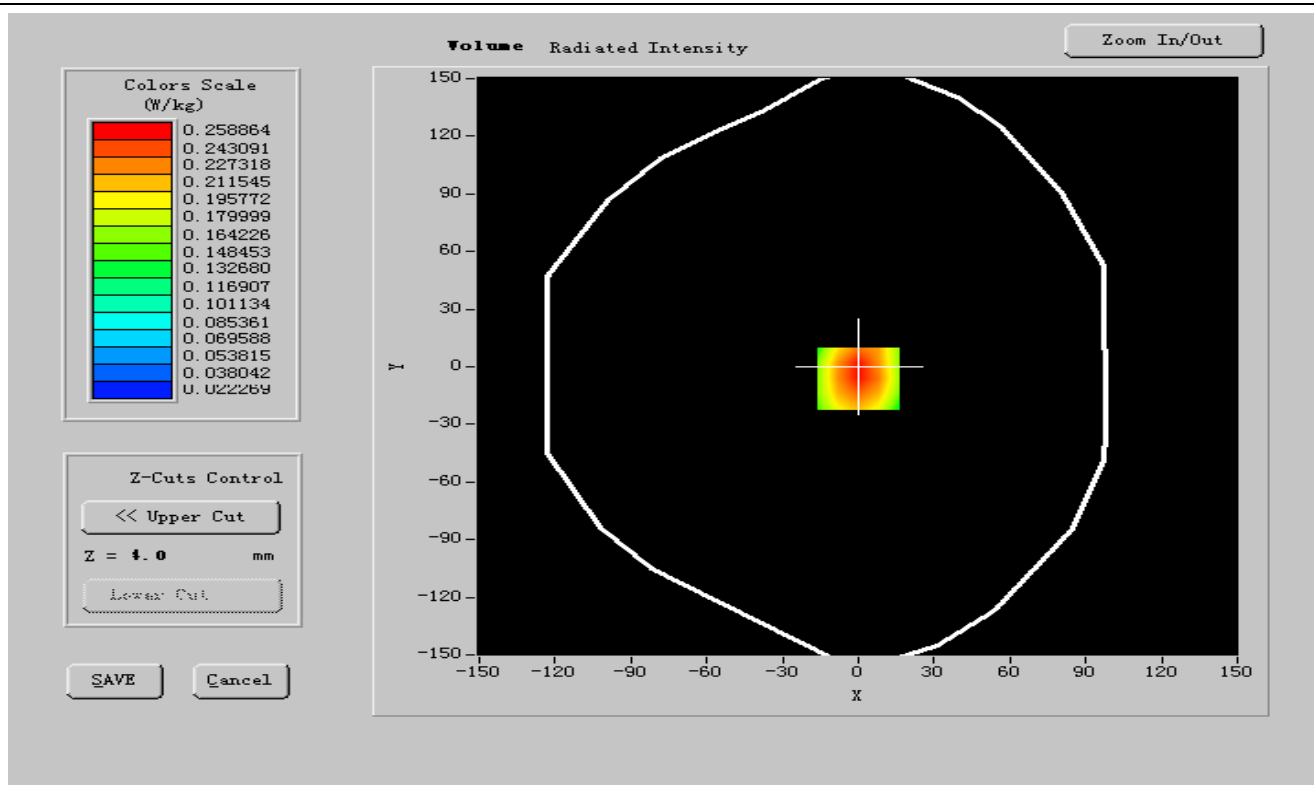
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



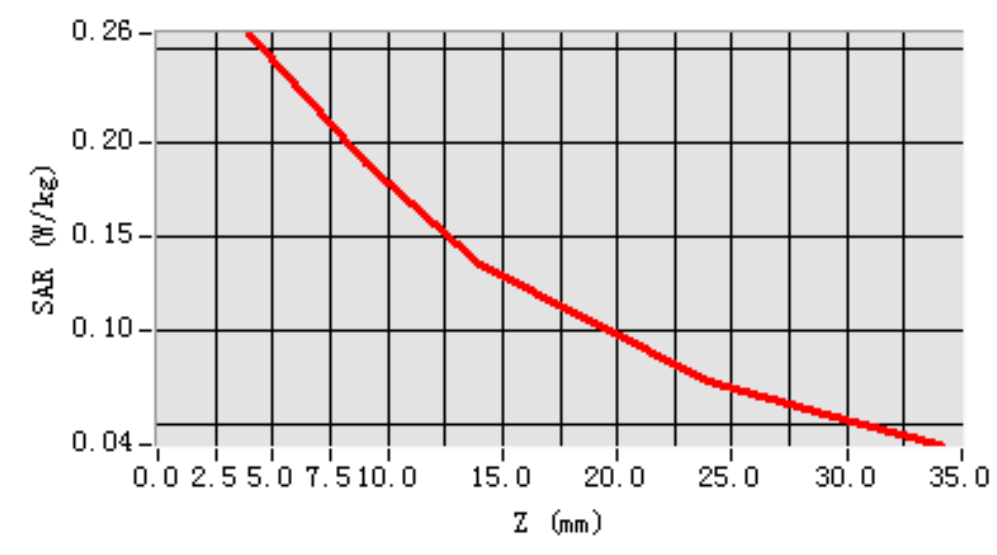


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.162658 |
| SAR 1g (W/Kg)  | 0.247122 |

**Z Axis Scan**

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





## MEASUREMENT 23

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>836.600024</b> |
| <b>Relative permittivity (real part)</b>      | <b>55.502419</b>  |
| <b>Relative permittivity (imaginary part)</b> | <b>21.863712</b>  |
| <b>Conductivity (S/m)</b>                     | <b>0.985102</b>   |
| <b>Variation (%)</b>                          | <b>-1.200000</b>  |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>      |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>      |



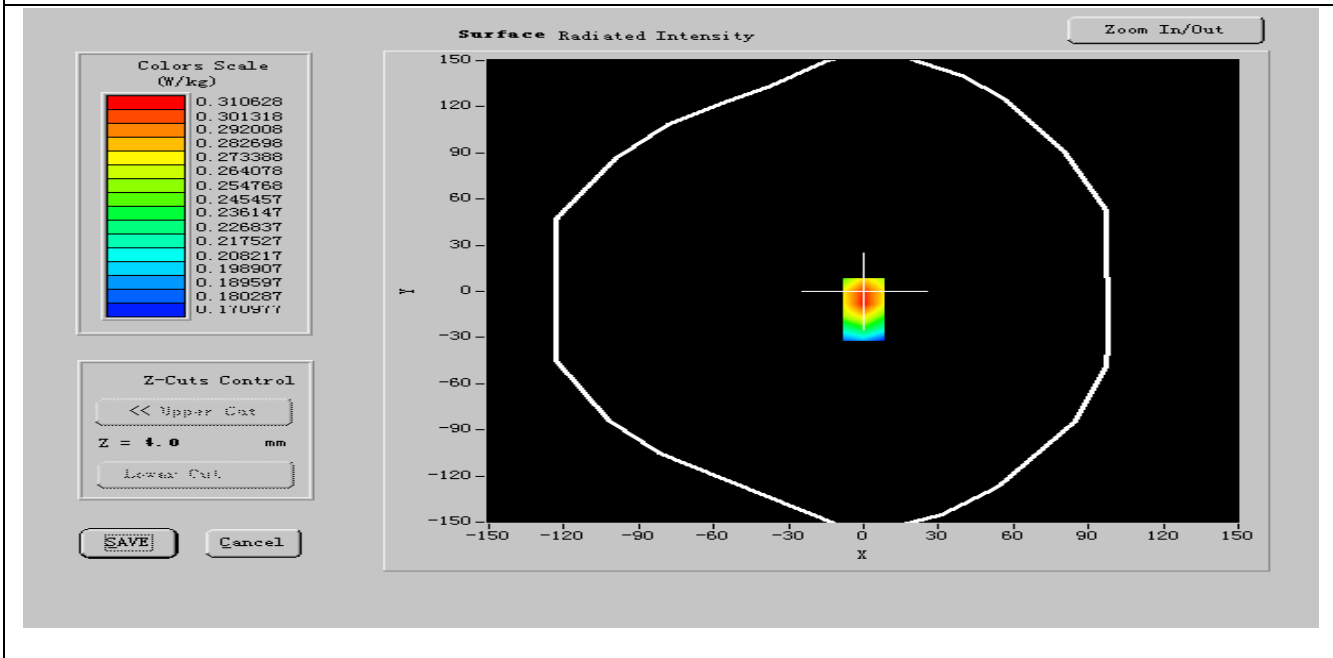
ConvF:

20.00, 19.88, 27.77

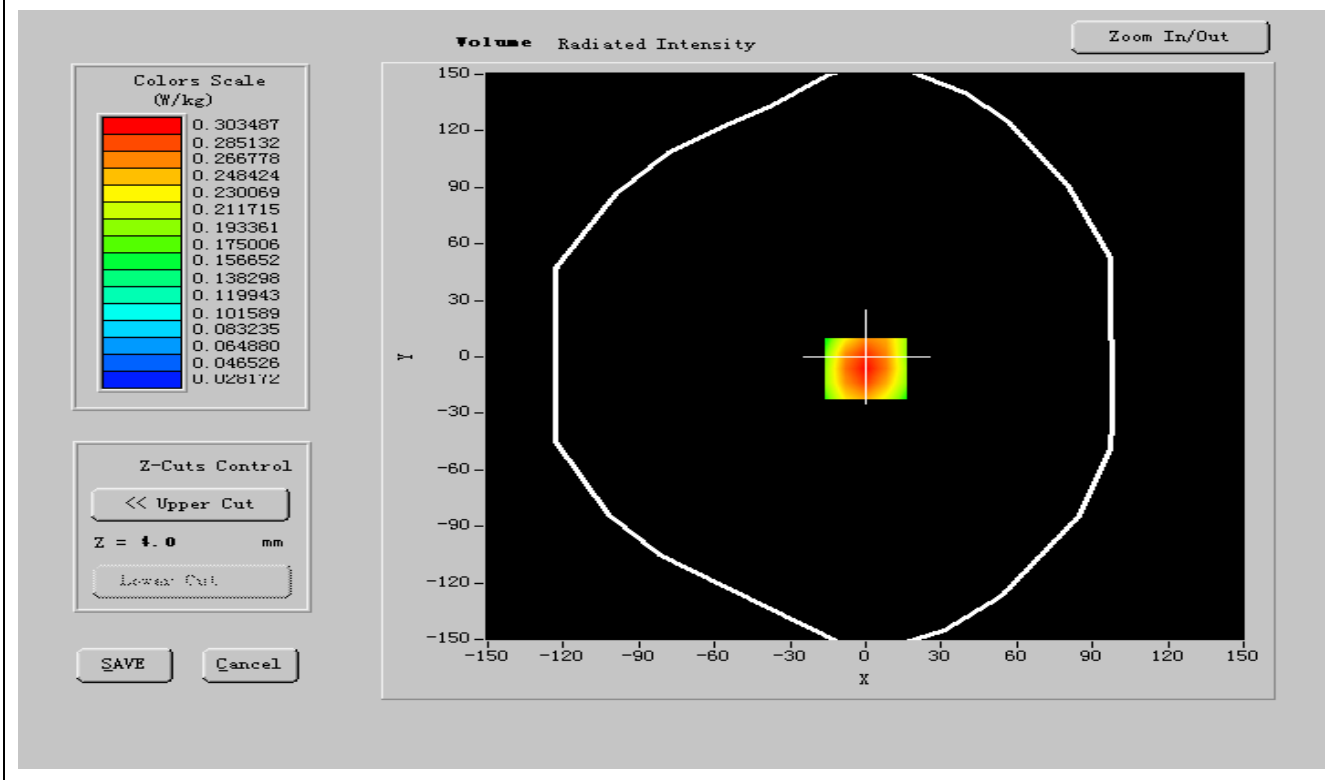
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



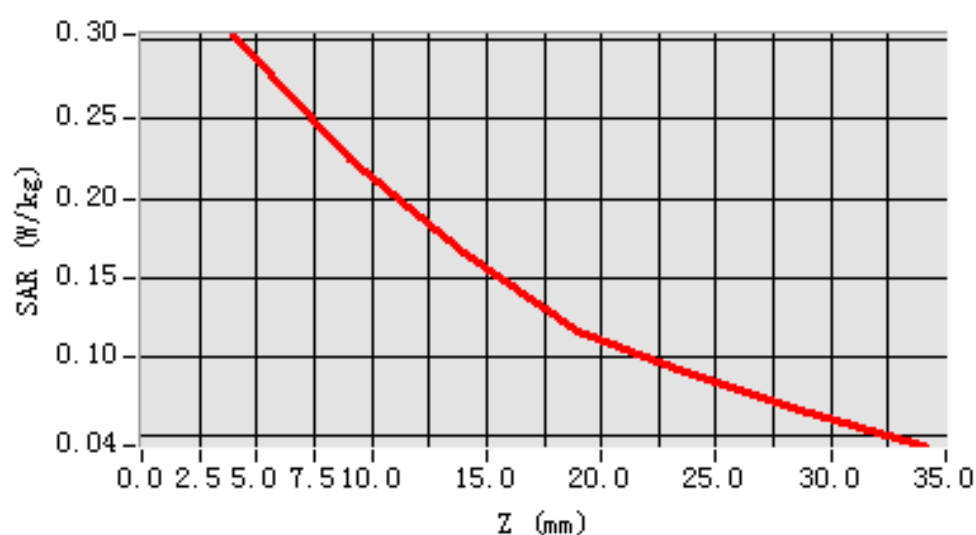


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.212035 |
| SAR 1g (W/Kg)  | 0.265124 |

**Z Axis Scan**

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





## MEASUREMENT 24

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>55.574700</b>  |
| <b>Relative permittivity (imaginary part)</b> | <b>21.725721</b>  |
| <b>Conductivity (S/m)</b>                     | <b>0.981218</b>   |
| <b>Variation (%)</b>                          | <b>-0.200000</b>  |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>      |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>      |



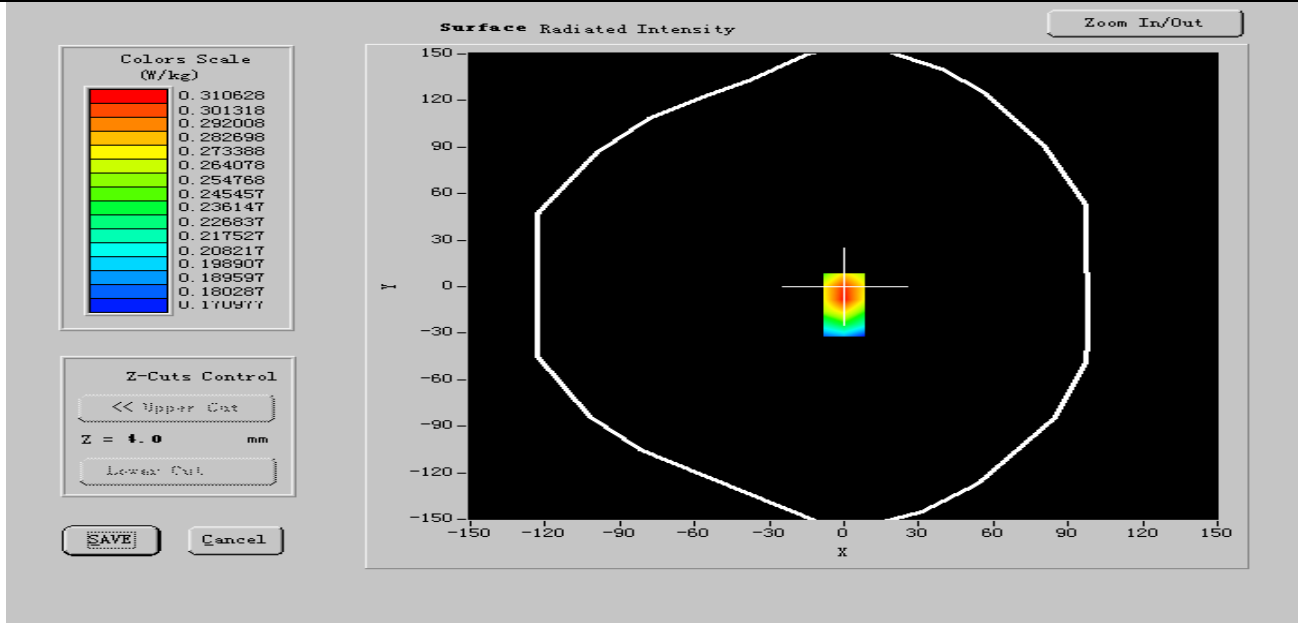
ConvF:

20.00, 19.88, 27.77

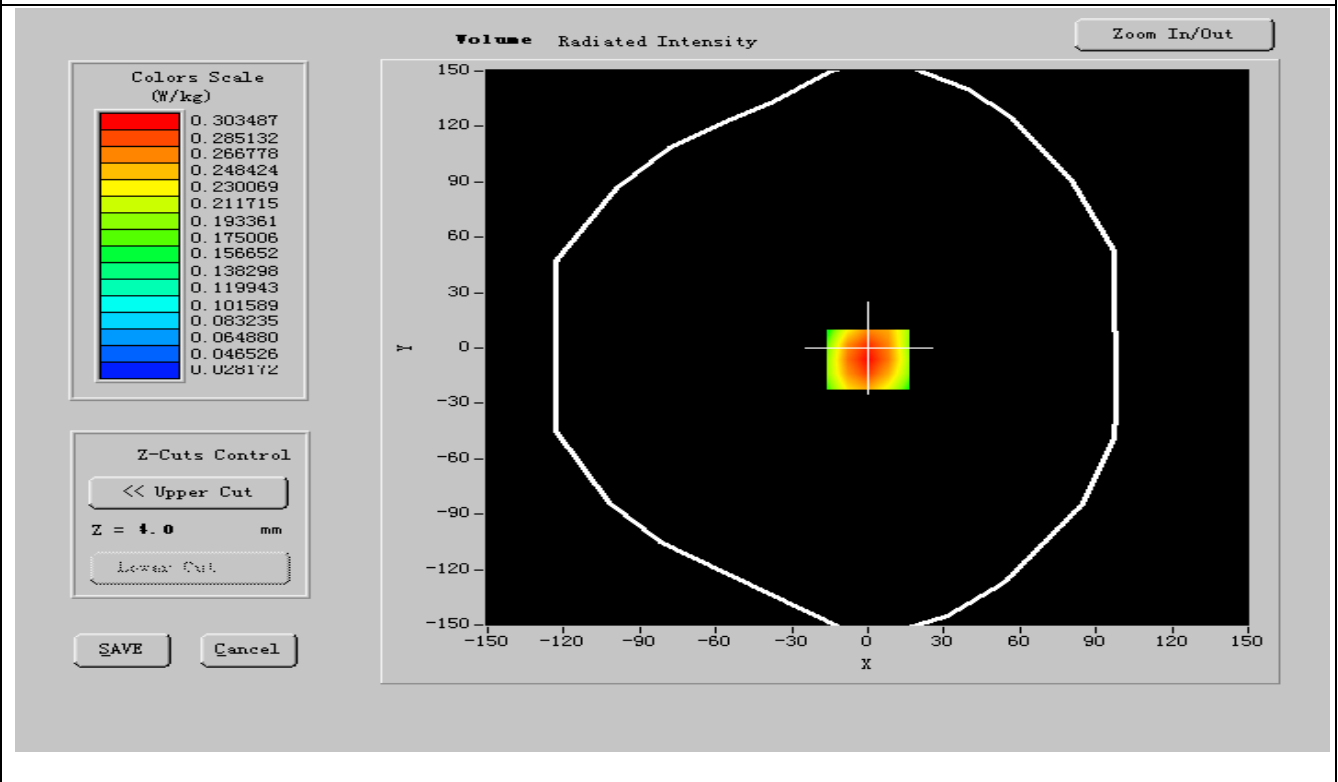
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



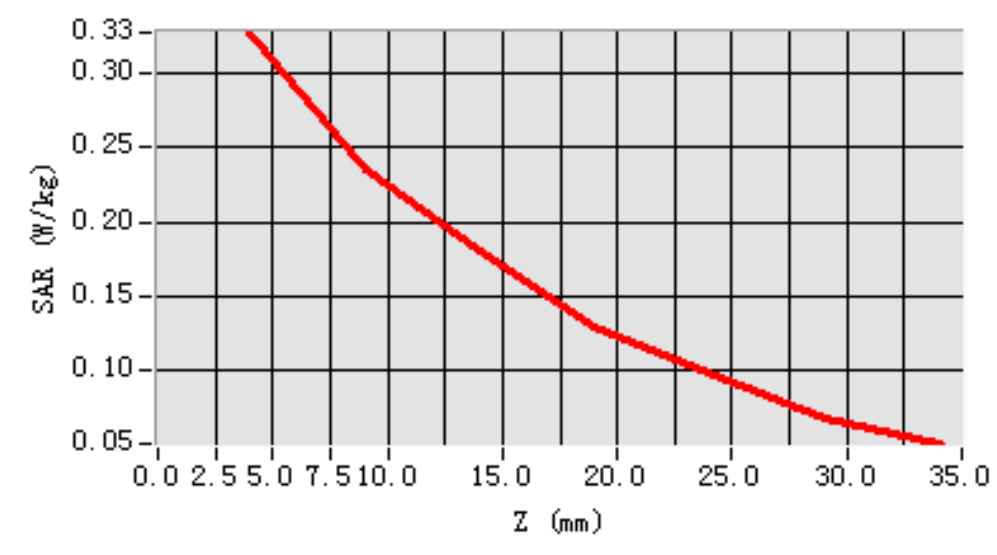


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.210146 |
| SAR 1g (W/Kg)  | 0.298258 |

**Z Axis Scan**

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





## MEASUREMENT 25

Date of measurement: 02/20/2011

Area Scan: 7 x 7 x 1

dx=15mm

dy=15mm

Zoom Scan: 5 x 5 x 7

dx=5mm

dy=5mm

dz=5mm

Z Axis Scan: 1 x 1 x 21

dx=20mm

dy=20mm

dz=5mm

### A. Experimental conditions.

|                 |                            |
|-----------------|----------------------------|
| Phantom File    | zinf15.txt, Adaptive 2 max |
| Phantom         | Body                       |
| Device Position | FrontSide toward phantom   |
| Band            | EDGE850                    |
| Channels        | Low                        |
| Signal          | EDGE                       |

### B. Instrumentations.

|                                    |                                            |                             |
|------------------------------------|--------------------------------------------|-----------------------------|
| PC                                 | HP (Pentium(R) V3.06GHz,<br>SN:375052-AA1) | Calibrated: N/A             |
| Wireless Communication<br>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: 02/09/2012 |
| 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

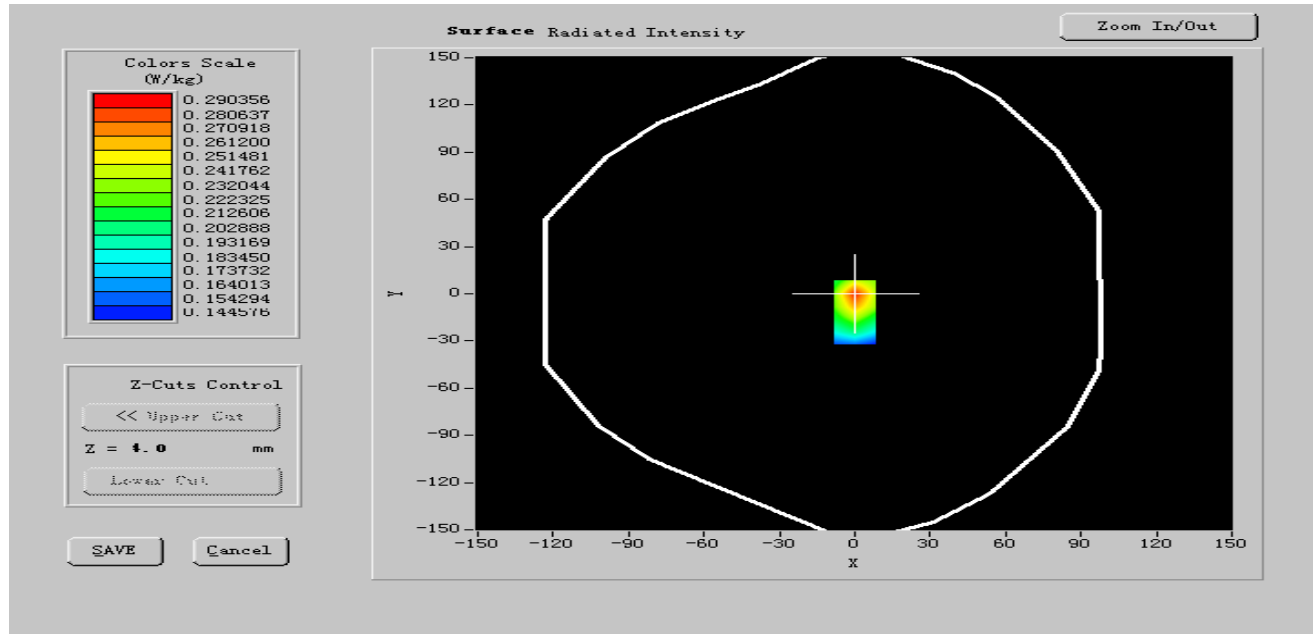
|                                        |                     |
|----------------------------------------|---------------------|
| Frequency (MHz)                        | 824.200012          |
| Relative permittivity (real part)      | 56.574000           |
| Relative permittivity (imaginary part) | 21.654150           |
| Conductivity (S/m)                     | 0.970219            |
| Variation (%)                          | -1.110000           |
| Ambient Temperature:                   | 21 °C               |
| Liquid Temperature:                    | 20 °C               |
| ConvF:                                 | 20.00, 19.88, 27.77 |



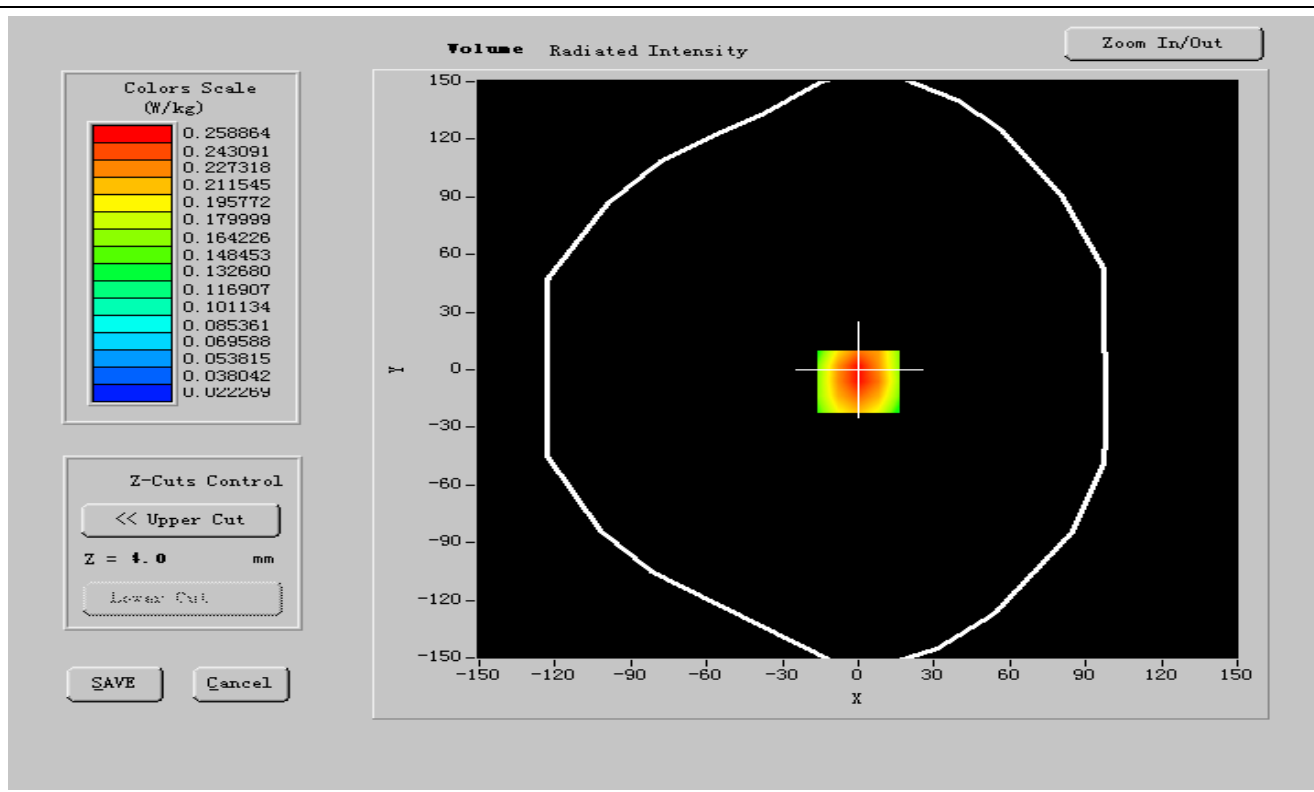
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



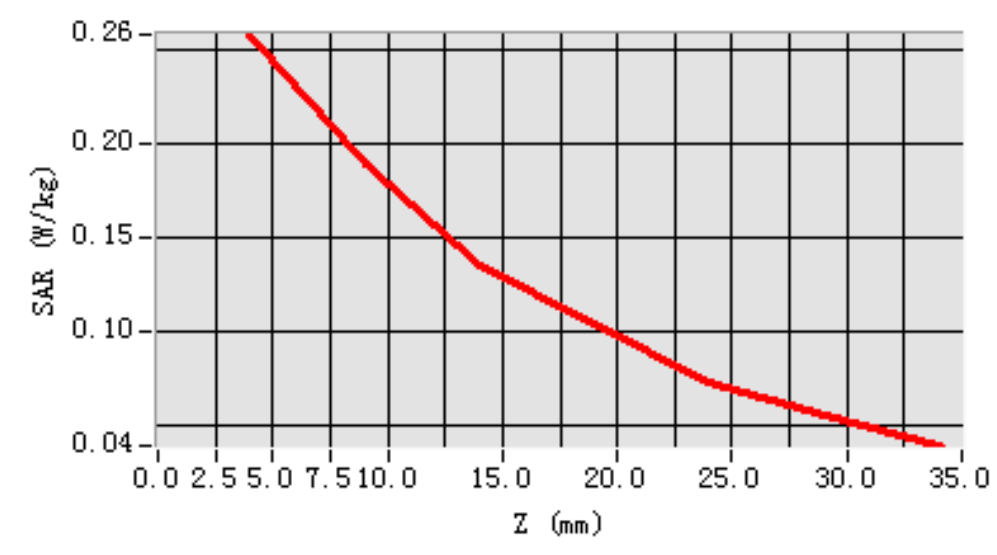


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.152358 |
| SAR 1g (W/Kg)  | 0.262141 |

**Z Axis Scan**

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





## MEASUREMENT 26

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | FrontSide toward phantom   |
| <b>Band</b>            | EDGE850                    |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | EDGE                       |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>836.600024</b> |
| <b>Relative permittivity (real part)</b>      | <b>55.501999</b>  |
| <b>Relative permittivity (imaginary part)</b> | <b>21.86949</b>   |
| <b>Conductivity (S/m)</b>                     | <b>1.006142</b>   |
| <b>Variation (%)</b>                          | <b>-0.210000</b>  |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>      |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>      |



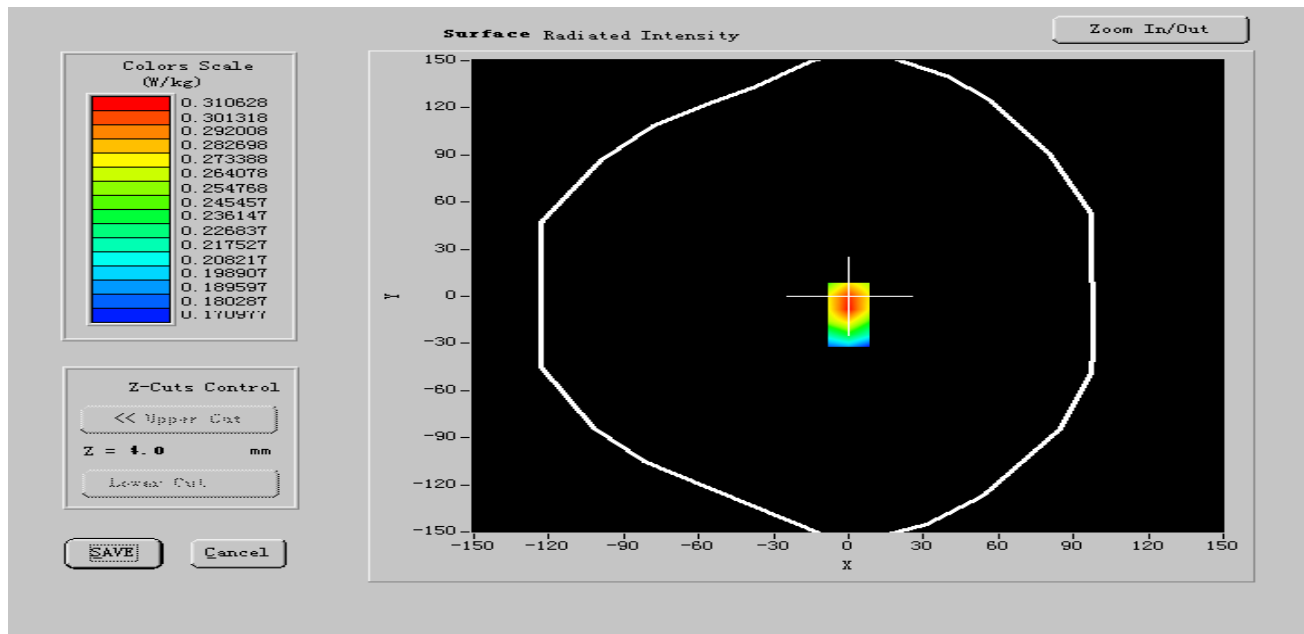
ConvF:

20.00, 19.88, 27.77

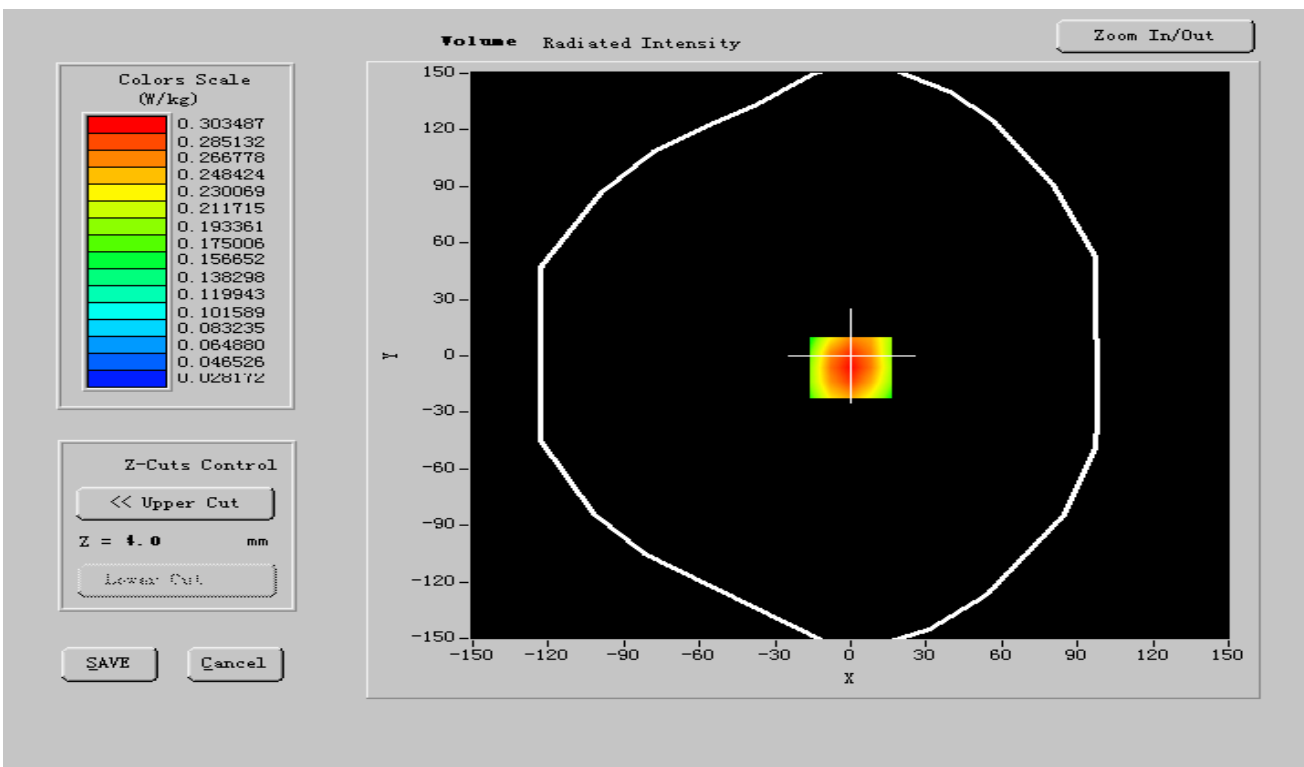
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



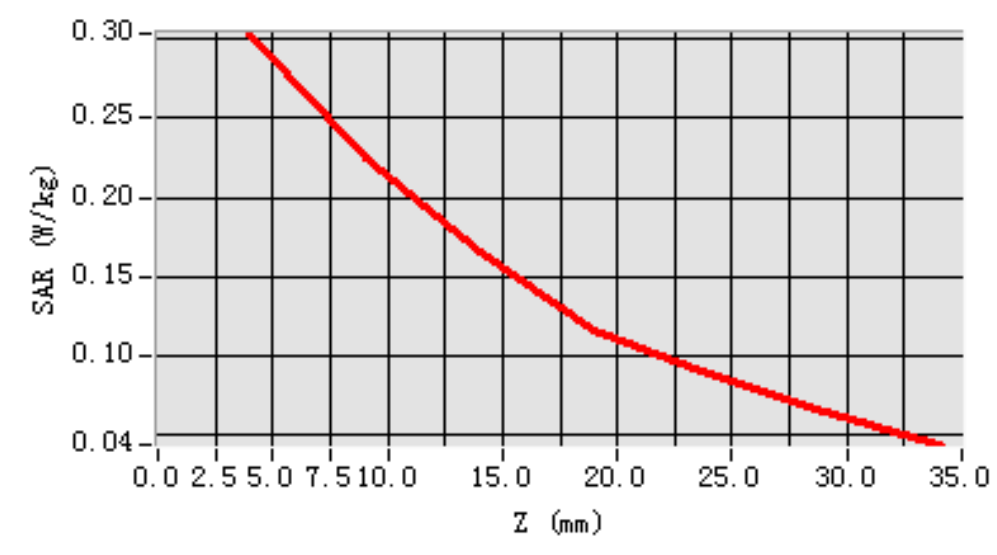


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.212395 |
| SAR 1g (W/Kg)  | 0.281213 |

**Z Axis Scan**

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



**MEASUREMENT 27****Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm****A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | FrontSide toward phantom   |
| <b>Band</b>            | EDGE850                    |
| <b>Channels</b>        | High                       |
| <b>Signal</b>          | EDGE                       |

**B. Instrumentations.**

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>55.576000</b>  |
| <b>Relative permittivity (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>      |



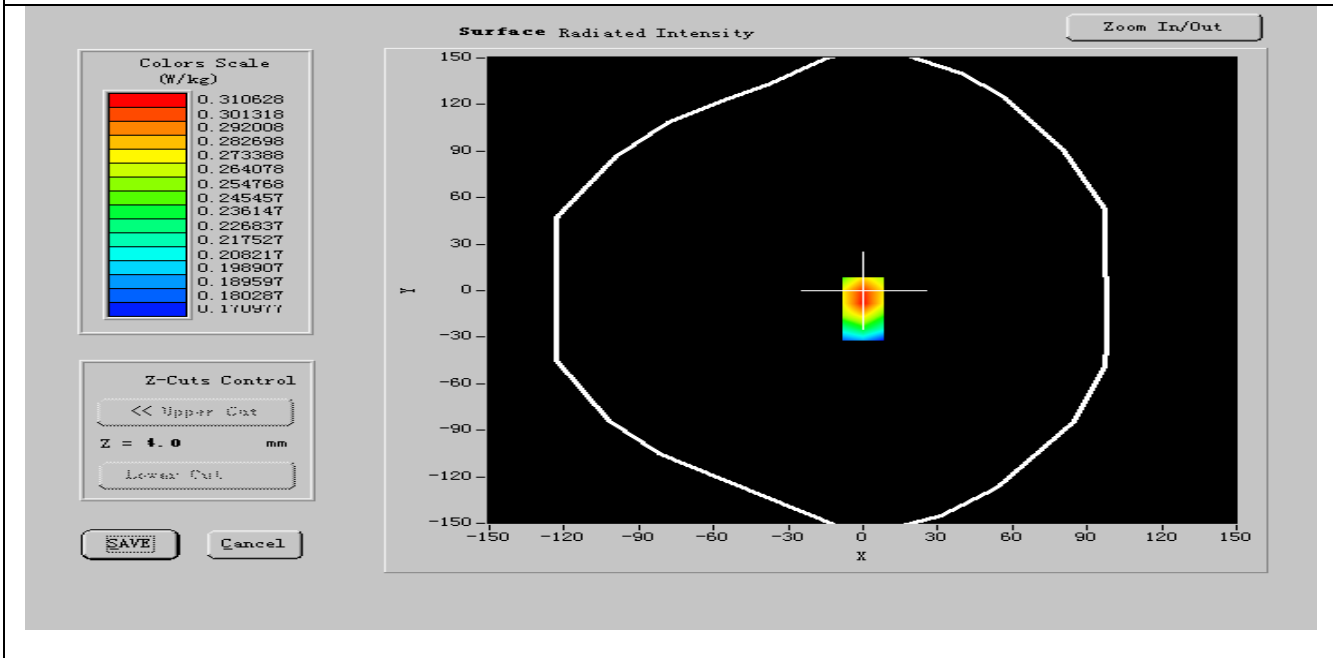
ConvF:

20.00, 19.88, 27.77

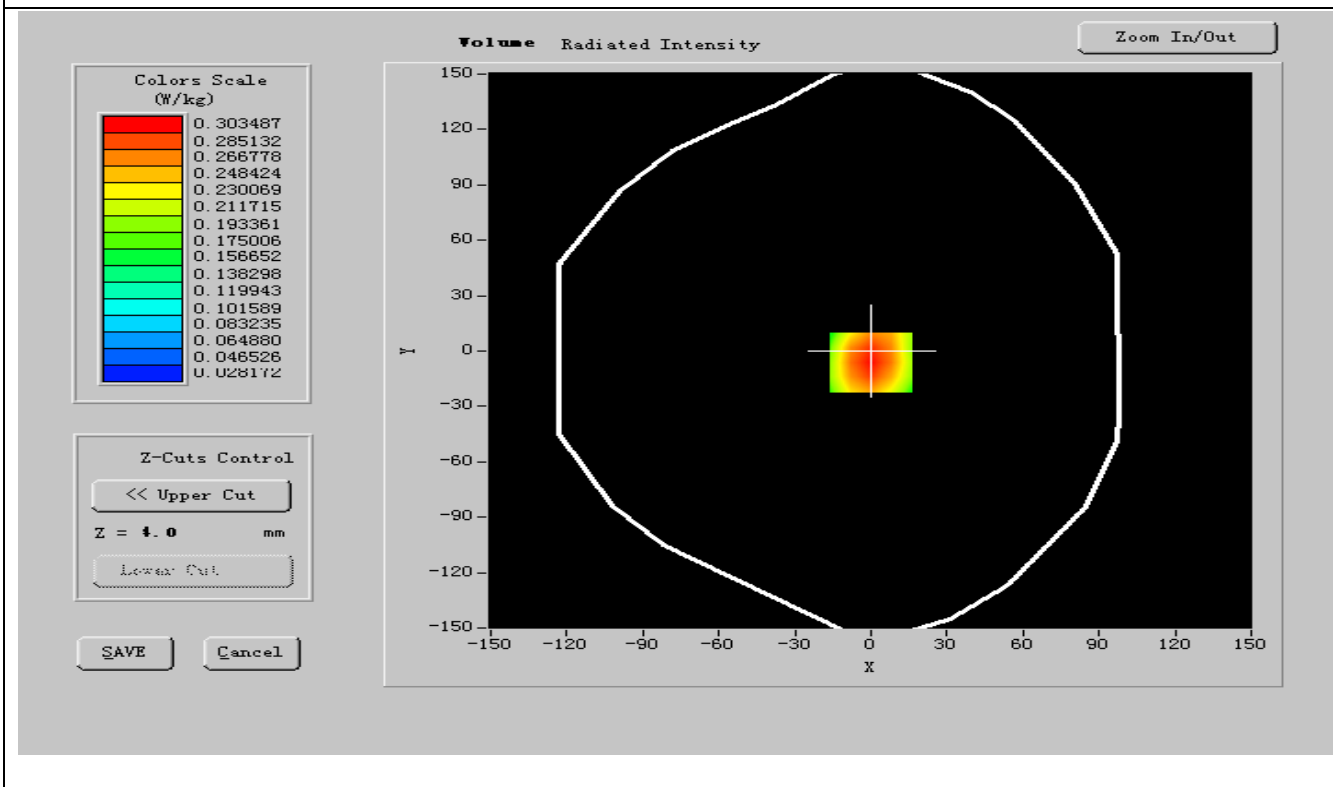
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



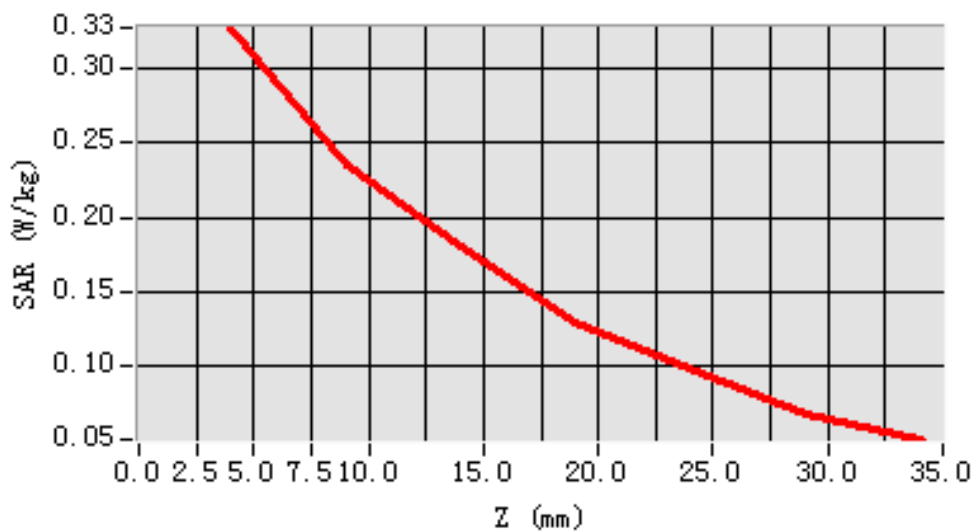


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.192258 |
| SAR 1g (W/Kg)  | 0.312258 |

**Z Axis Scan**

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





## MEASUREMENT 28

Date of measurement: 02/20/2011

Area Scan: 7 x 7 x 1

dx=15mm

dy=15mm

Zoom Scan: 5 x 5 x 7

dx=5mm

dy=5mm

dz=5mm

Z Axis Scan: 1 x 1 x 21

dx=20mm

dy=20mm

dz=5mm

### A. Experimental conditions.

|                 |                            |
|-----------------|----------------------------|
| Phantom File    | zinf15.txt, Adaptive 2 max |
| Phantom         | Body                       |
| Device Position | BackSide toward phantom    |
| Band            | EDGE850                    |
| Channels        | Low                        |
| Signal          | EDGE                       |

### B. Instrumentations.

|                                    |                                            |                             |
|------------------------------------|--------------------------------------------|-----------------------------|
| PC                                 | HP (Pentium(R) V3.06GHz,<br>SN:375052-AA1) | Calibrated: N/A             |
| Wireless Communication<br>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: 02/09/2012 |
| 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

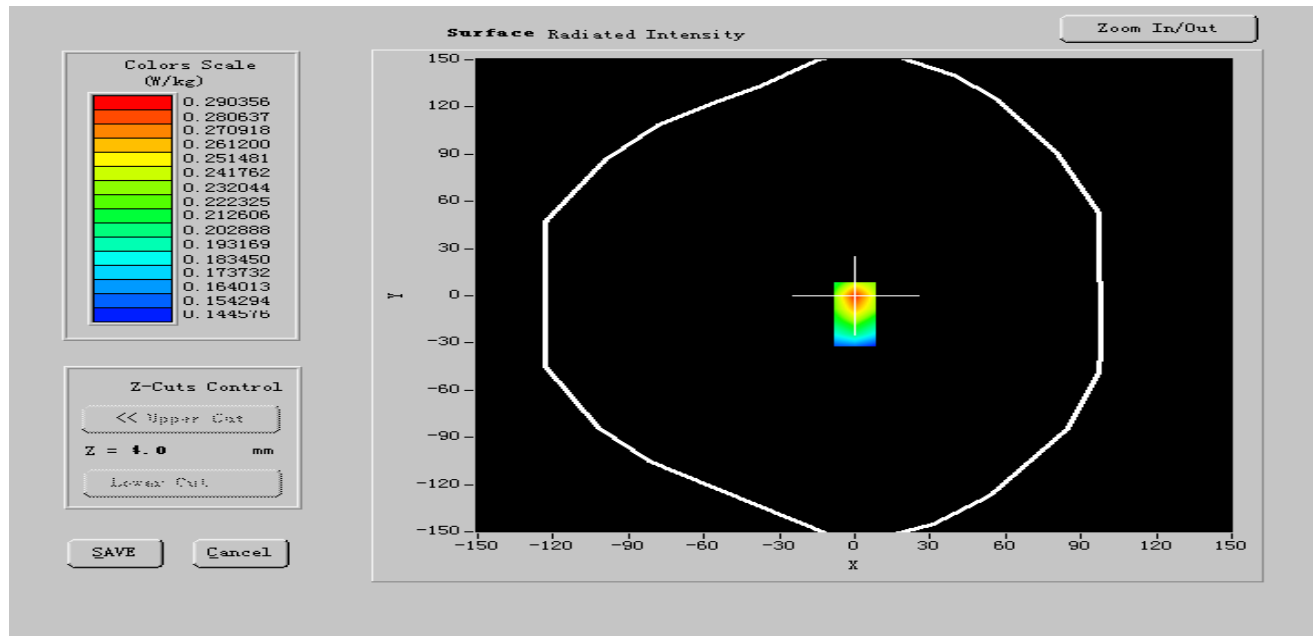
|                                        |                     |
|----------------------------------------|---------------------|
| Frequency (MHz)                        | 824.200012          |
| Relative permittivity (real part)      | 56.565820           |
| Relative permittivity (imaginary part) | 21.653148           |
| Conductivity (S/m)                     | 0.975719            |
| Variation (%)                          | -1.100000           |
| Ambient Temperature:                   | 21 °C               |
| Liquid Temperature:                    | 20 °C               |
| ConvF:                                 | 20.00, 19.88, 27.77 |



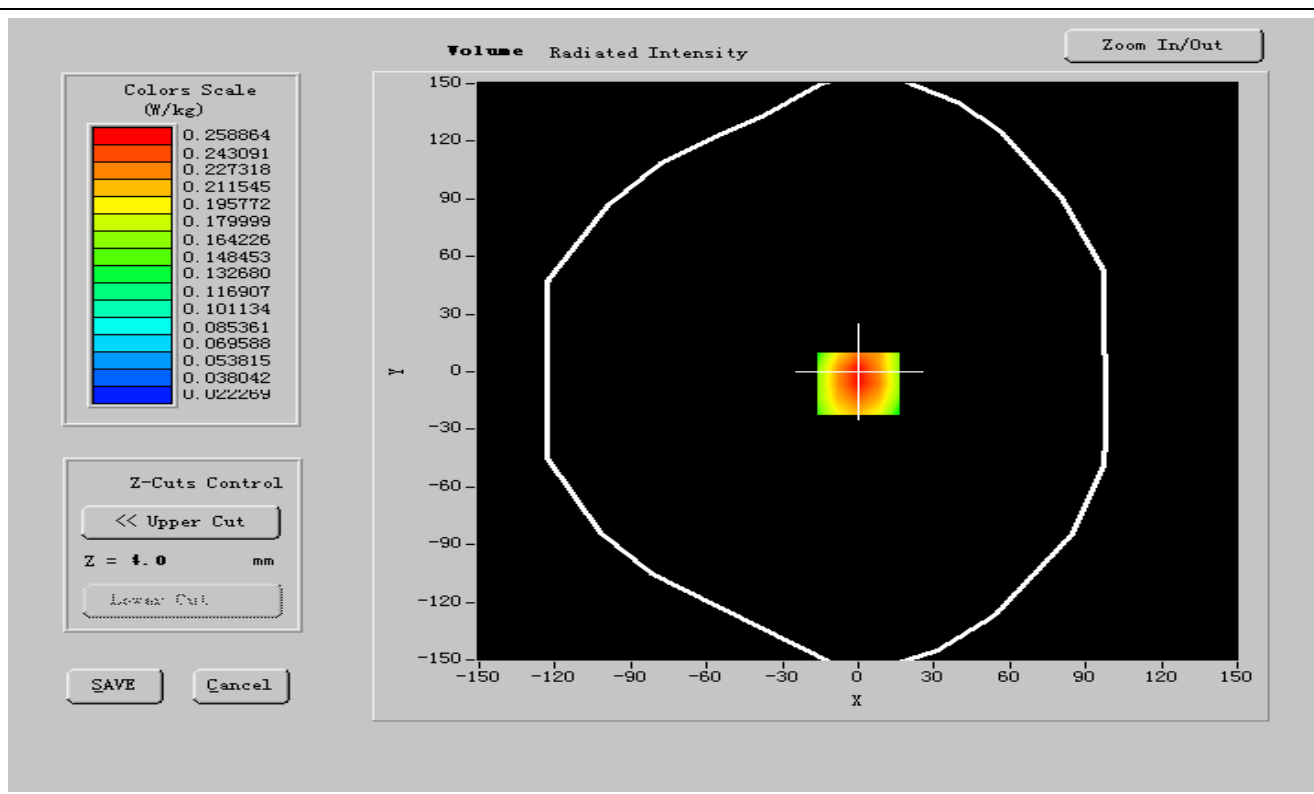
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



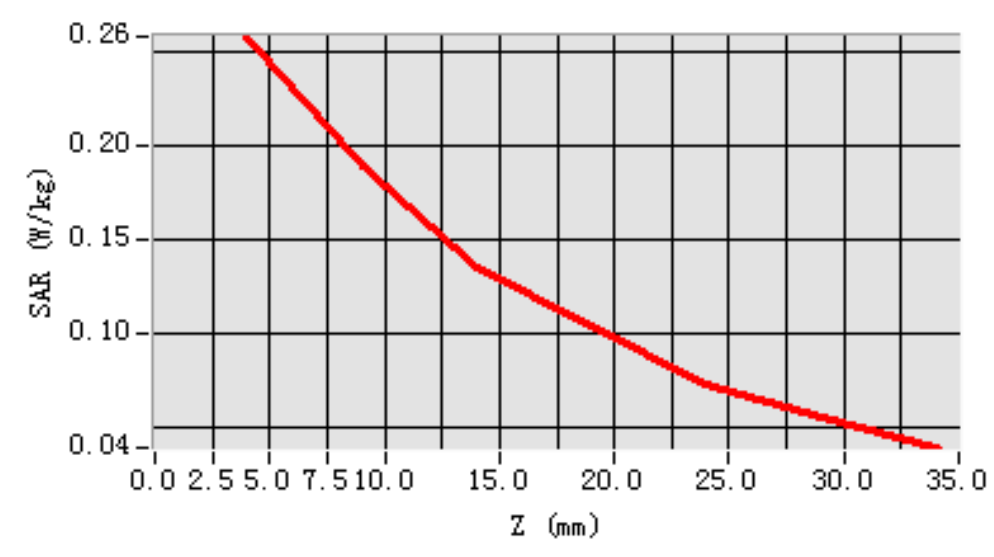


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.156581 |
| SAR 1g (W/Kg)  | 0.235870 |

**Z Axis Scan**

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





## MEASUREMENT 29

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide toward phantom    |
| <b>Band</b>            | EDGE850                    |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | EDGE                       |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>836.600024</b> |
| <b>Relative permittivity (real part)</b>      | <b>55.501999</b>  |
| <b>Relative permittivity (imaginary part)</b> | <b>21.858743</b>  |
| <b>Conductivity (S/m)</b>                     | <b>1.122012</b>   |
| <b>Variation (%)</b>                          | <b>-0.200000</b>  |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>      |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>      |



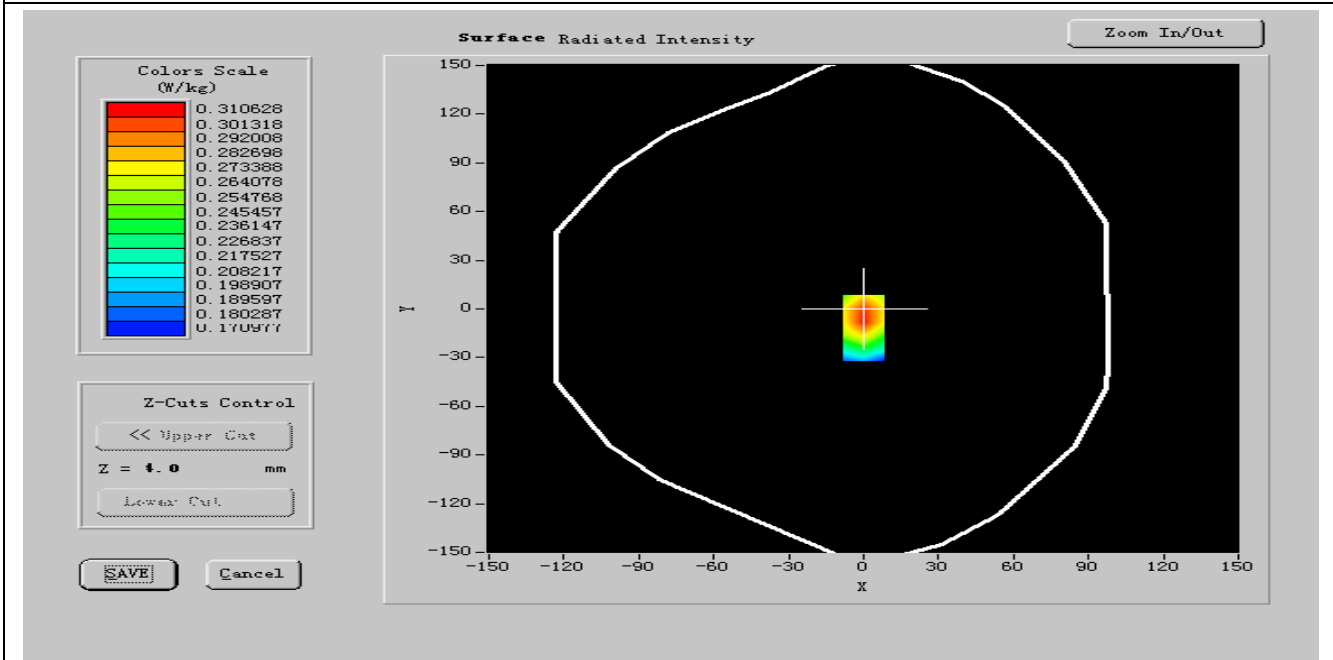
ConvF:

20.00, 19.88, 27.77

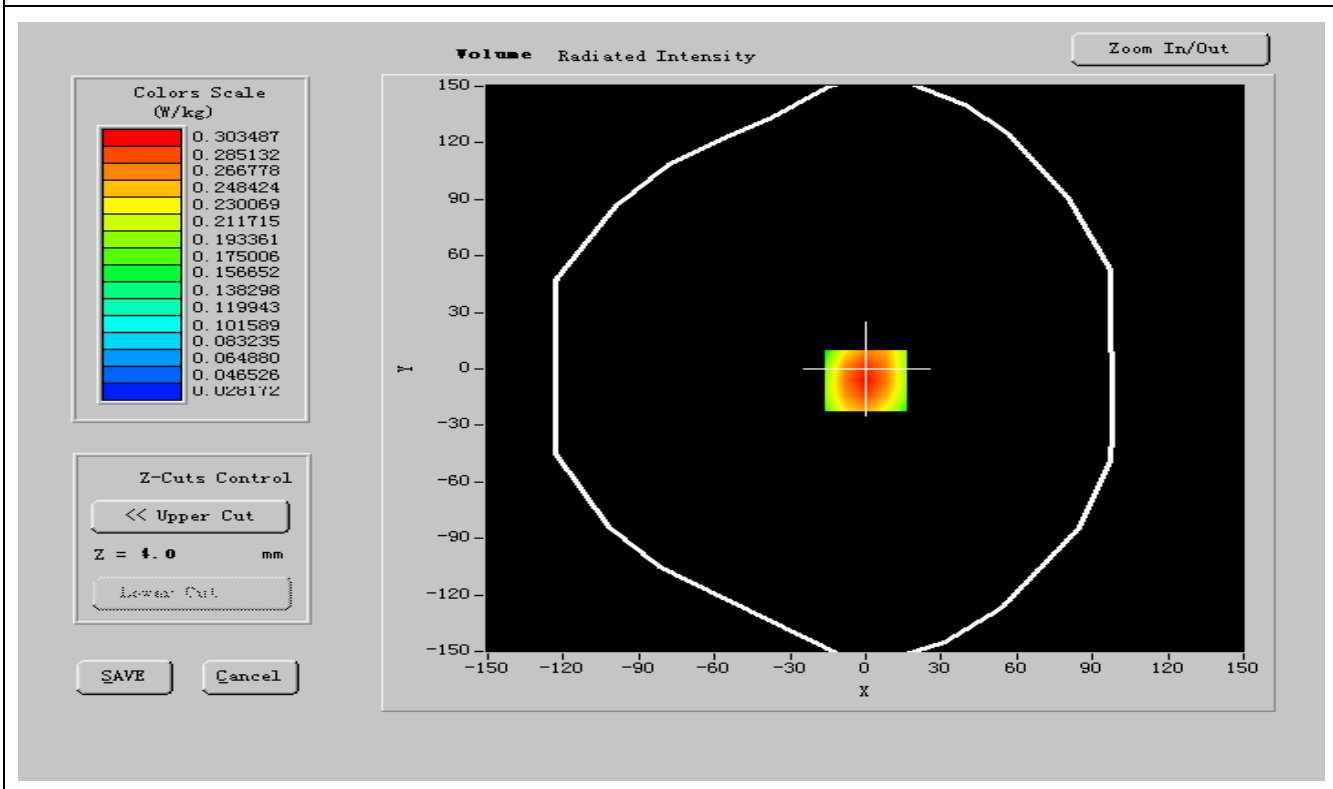
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



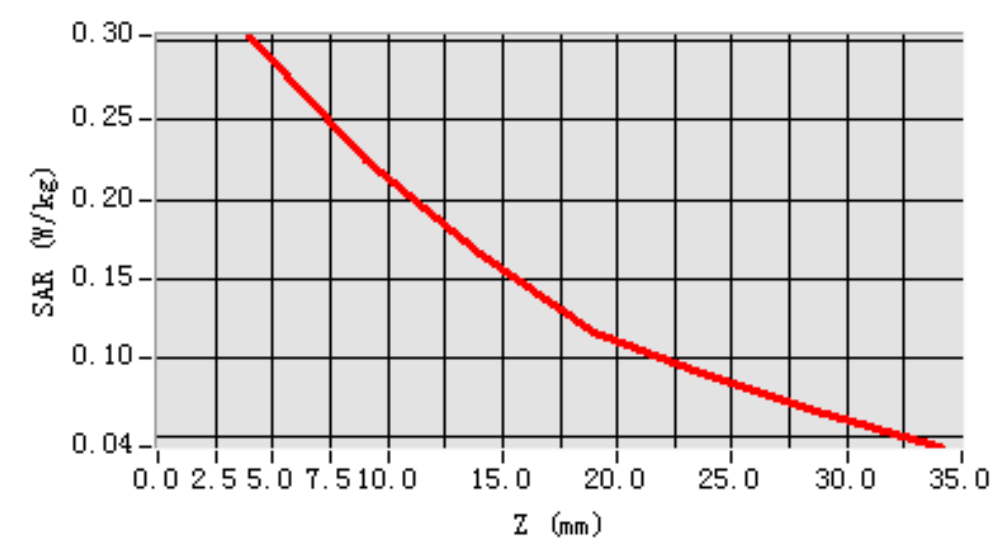


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.224101 |
| SAR 1g (W/Kg)  | 0.265814 |

**Z Axis Scan**

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





## MEASUREMENT 30

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide toward phantom    |
| <b>Band</b>            | EDGE850                    |
| <b>Channels</b>        | High                       |
| <b>Signal</b>          | EDGE                       |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>55.578700</b>  |
| <b>Relative permittivity (imaginary part)</b> | <b>21.726811</b>  |
| <b>Conductivity (S/m)</b>                     | <b>0.973988</b>   |
| <b>Variation (%)</b>                          | <b>-0.220000</b>  |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>      |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>      |



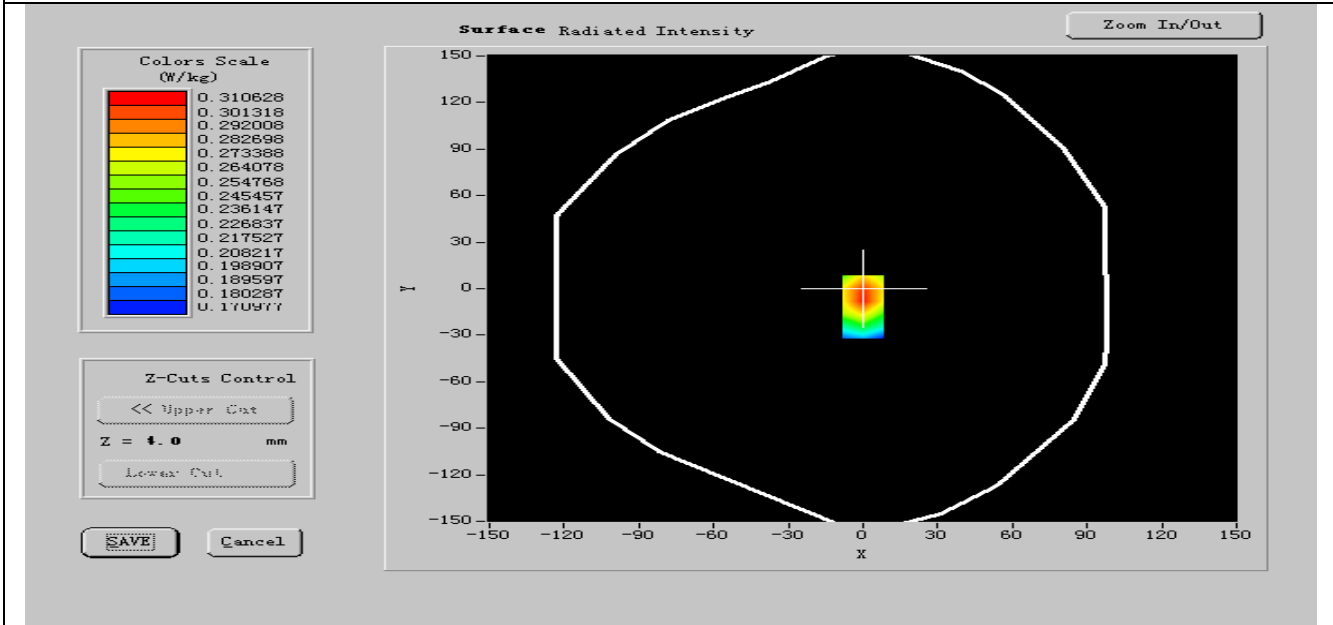
ConvF:

20.00, 19.88, 27.77

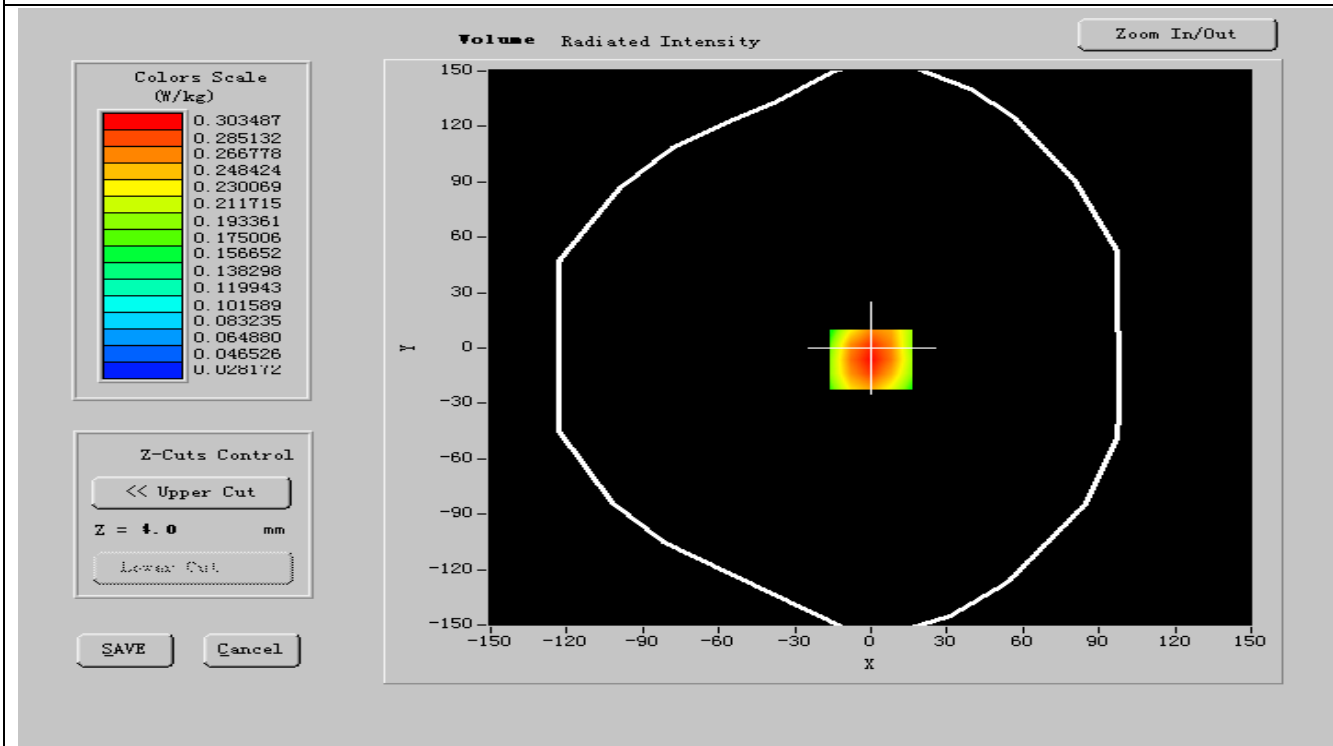
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



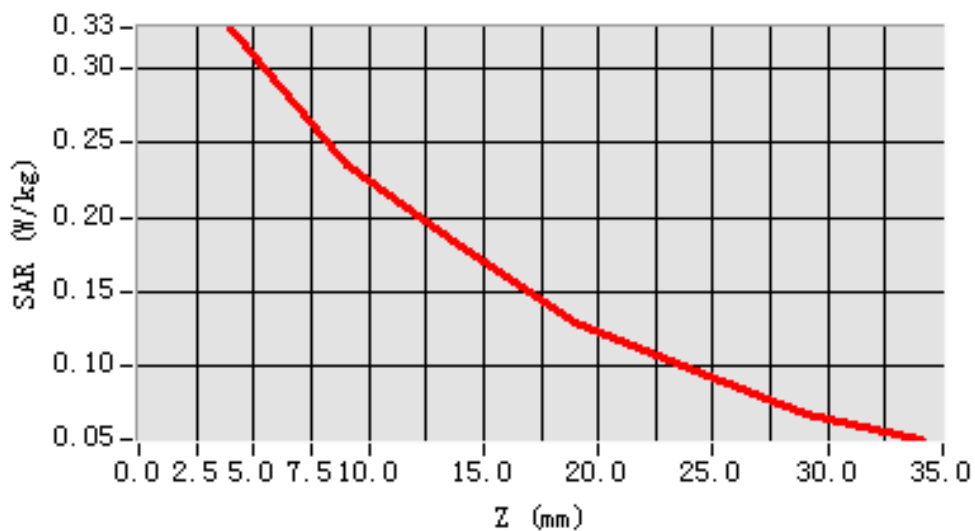


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.193518 |
| SAR 1g (W/Kg)  | 0.278968 |

**Z Axis Scan**

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





## II. 1900MHz Band RESULTS

| <u>TYPE</u>  | <u>PARAMETERS</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Phone</u> | <u>Measurement 1:</u> Right Head with Cheek device position on Low Channel in GSM1900 mode<br><u>Measurement 2:</u> Right Head with Cheek device position on Middle Channel in GSM1900 mode<br><u>Measurement 3:</u> Right Head with Cheek device position on High Channel in GSM1900 mode<br><u>Measurement 4:</u> Right Head with Tilt device position on Low Channel in GSM1900 mode<br><u>Measurement 5:</u> Right Head with Tilt device position on Middle Channel in GSM1900 mode<br><u>Measurement 6:</u> Right Head with Tilt device position on High Channel in GSM1900 mode<br><u>Measurement 7:</u> Left Head with Cheek device position on Low Channel in GSM1900 mode<br><u>Measurement 8:</u> Left Head with Cheek device position on Middle Channel in GSM1900 mode<br><u>Measurement 9:</u> Left Head with Cheek device position on High Channel in GSM1900 mode<br><u>Measurement 10:</u> Left Head with Tilt device position on Low Channel in GSM1900 mode<br><u>Measurement 11:</u> Left Head with Tilt device position on Middle Channel in GSM1900 mode<br><u>Measurement 12:</u> Left Head with Tilt device position on High Channel in GSM1900 mode<br><u>Measurement 13:</u> FrontSide toward phantom 15mm, Low Channel in GSM1900 mode<br><u>Measurement 14:</u> FrontSide toward phantom 15mm, Middle Channel in GSM1900 mode<br><u>Measurement 15:</u> FrontSide toward phantom 15mm, High Channel in GSM1900 mode<br><u>Measurement 16:</u> BackSide toward phantom 15mm, Low Channel in GSM1900 mode<br><u>Measurement 17:</u> BackSide toward phantom 15mm, Middle Channel in GSM1900 mode<br><u>Measurement 18:</u> BackSide toward phantom 15mm, High Channel in GSM1900 mode<br><u>Measurement 19:</u> FrontSide toward phantom 15mm, Low Channel in GPRS1900 mode<br><u>Measurement 20:</u> FrontSide toward phantom 15mm, Middle |



|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Channel in GPRS1900 mode<br><u>Measurement 21:</u> FrontSide toward phantom 15mm, High<br>Channel in GPRS1900 mode<br><u>Measurement 22:</u> BackSide toward phantom 15mm, Low<br>Channel in GPRS1900 mode<br><u>Measurement 23:</u> BackSide toward phantom 15mm, Middle<br>Channel in GPRS1900 mode<br><u>Measurement 24:</u> BackSide toward phantom 15mm, High<br>Channel in GPRS1900 mode<br><u>Measurement 25:</u> FrontSide toward phantom 15mm, Low<br>Channel in EDGE1900 mode<br><u>Measurement 26:</u> FrontSide toward phantom 15mm, Middle<br>Channel in EDGE1900 mode<br><u>Measurement 27:</u> FrontSide toward phantom 15mm, High<br>Channel in EDGE1900 mode<br><u>Measurement 28:</u> BackSide toward phantom 15mm, Low<br>Channel in EDGE1900 mode<br><u>Measurement 29:</u> BackSide toward phantom 15mm, Middle<br>Channel in EDGE1900 mode<br><u>Measurement 30:</u> BackSide toward phantom 15mm, High<br>Channel in EDGE1900 mode |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## MEASUREMENT 1

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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

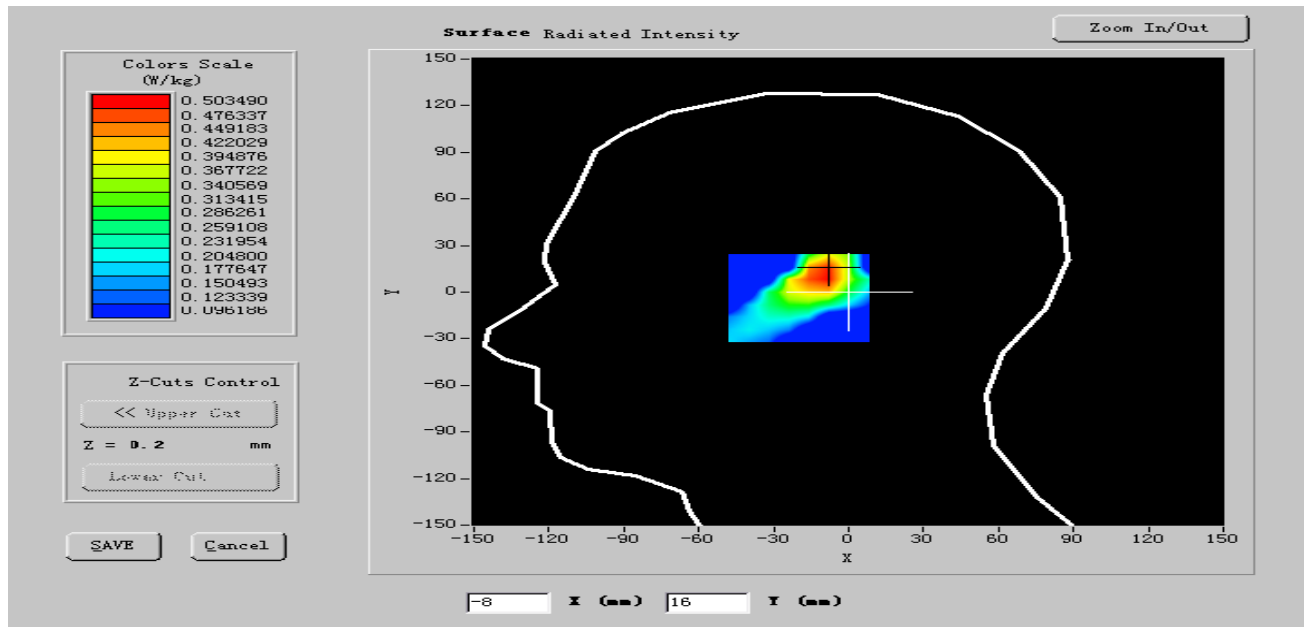
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>1850.400024</b>         |
| <b>Relative permittivity (real part)</b>      | <b>40.213000</b>           |
| <b>Relative permittivity (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>41.91, 43.15, 56.44</b> |



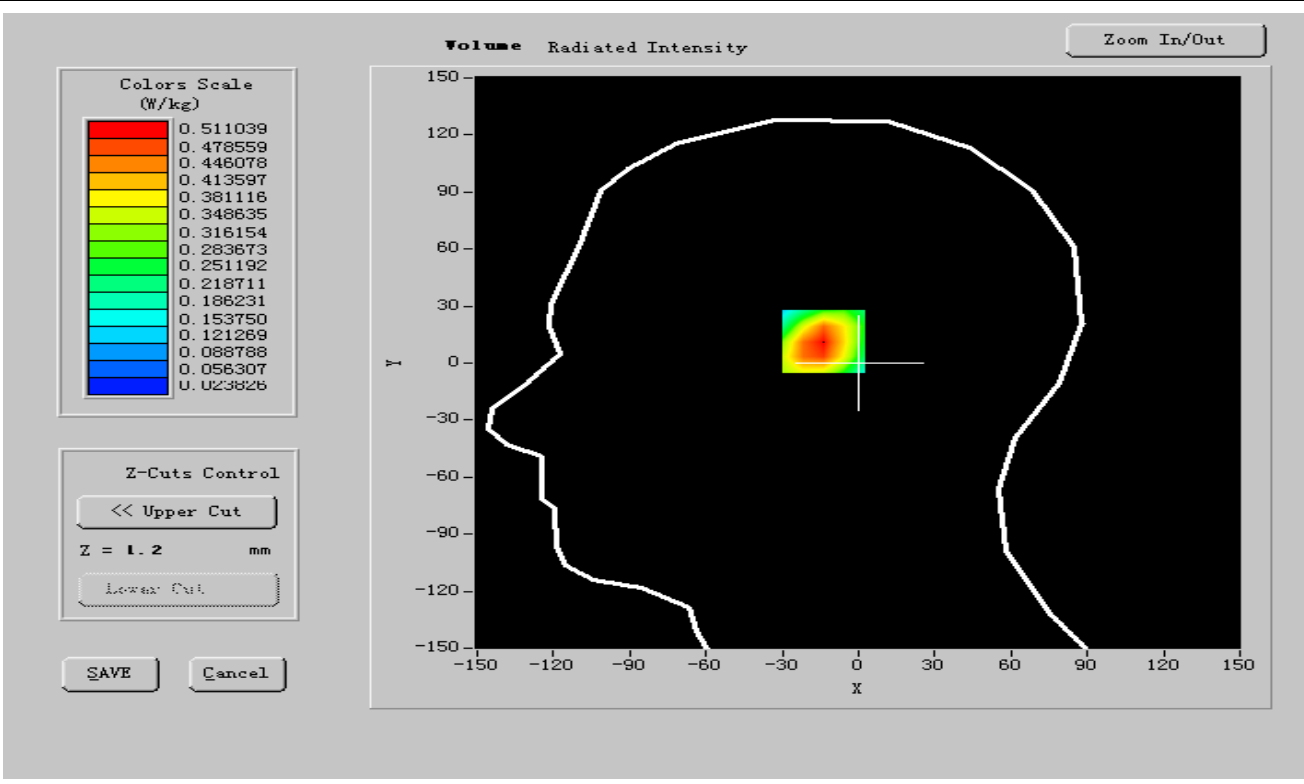
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



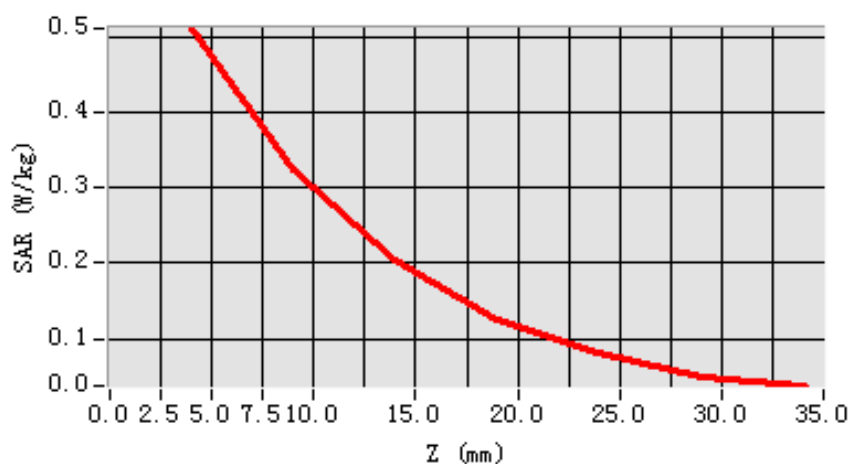


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.278521 |
| SAR 1g (W/Kg)  | 0.473368 |

**Z Axis Scan**

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





## MEASUREMENT 2

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.198001</b>   |
| <b>Relative permittivity (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>       |



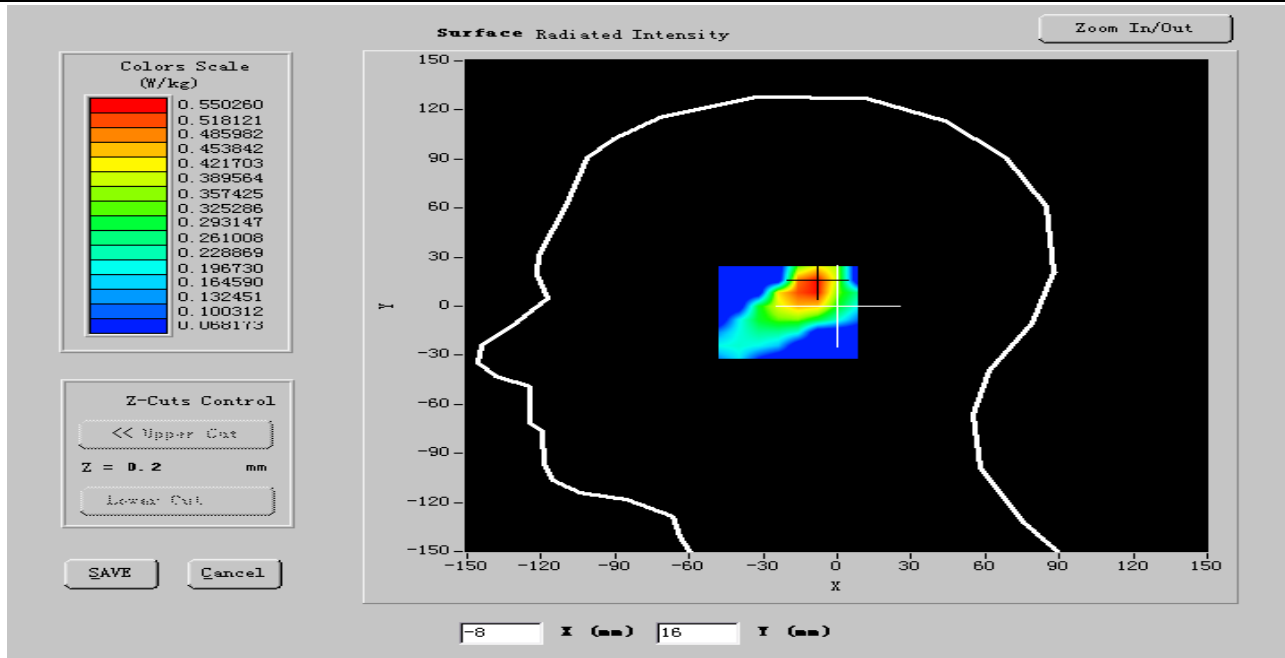
ConvF:

41.91, 43.15, 56.44

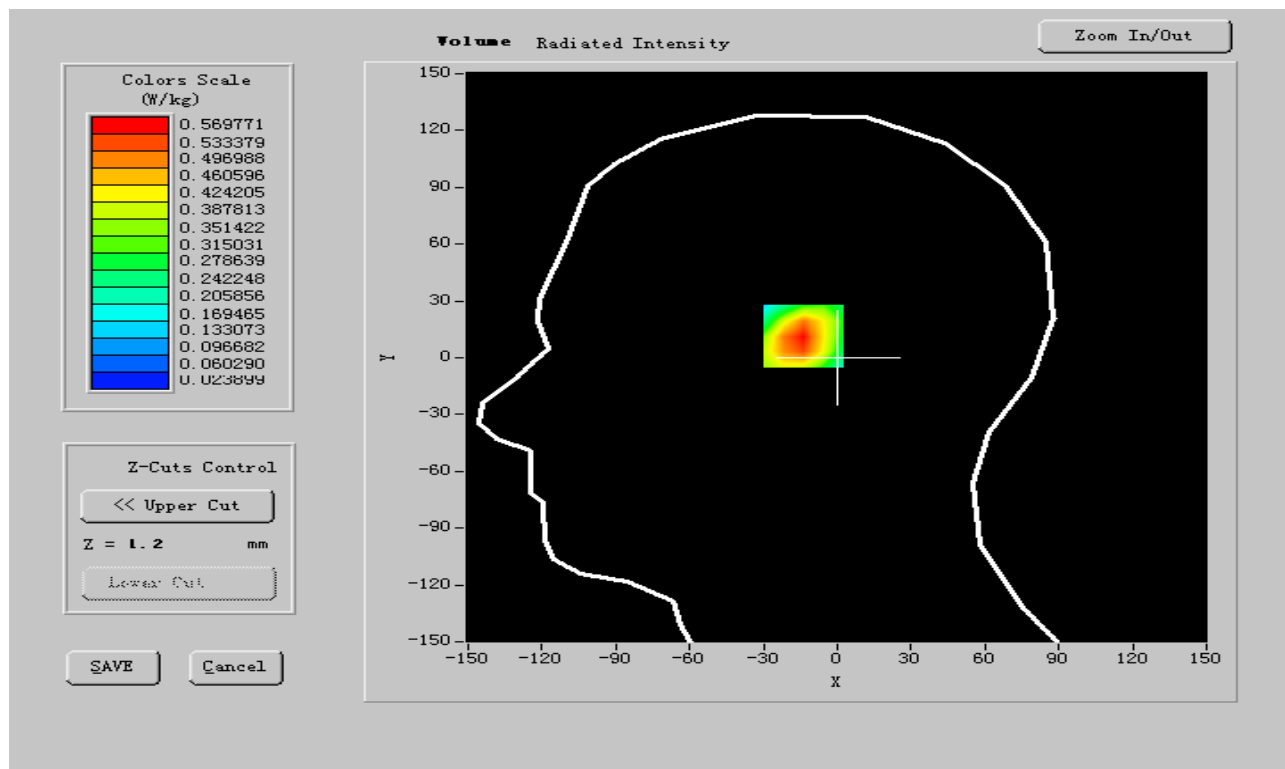
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



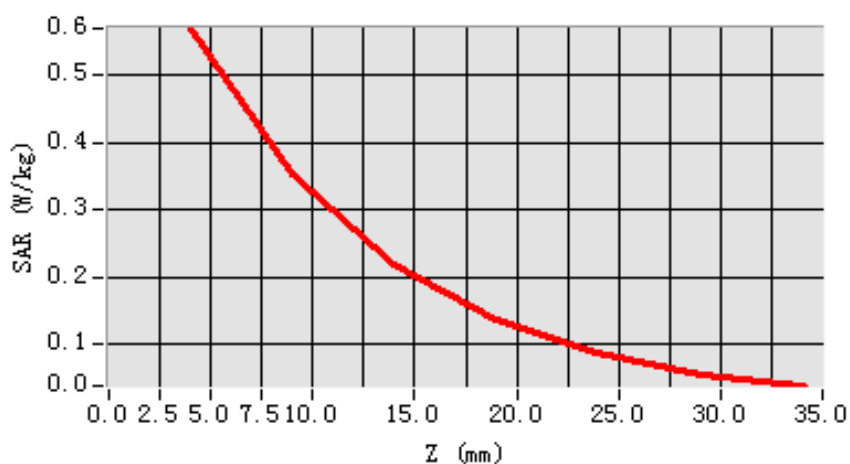


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.309541 |
| SAR 1g (W/Kg)  | 0.515497 |

**Z Axis Scan**

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





## MEASUREMENT 3

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>             |

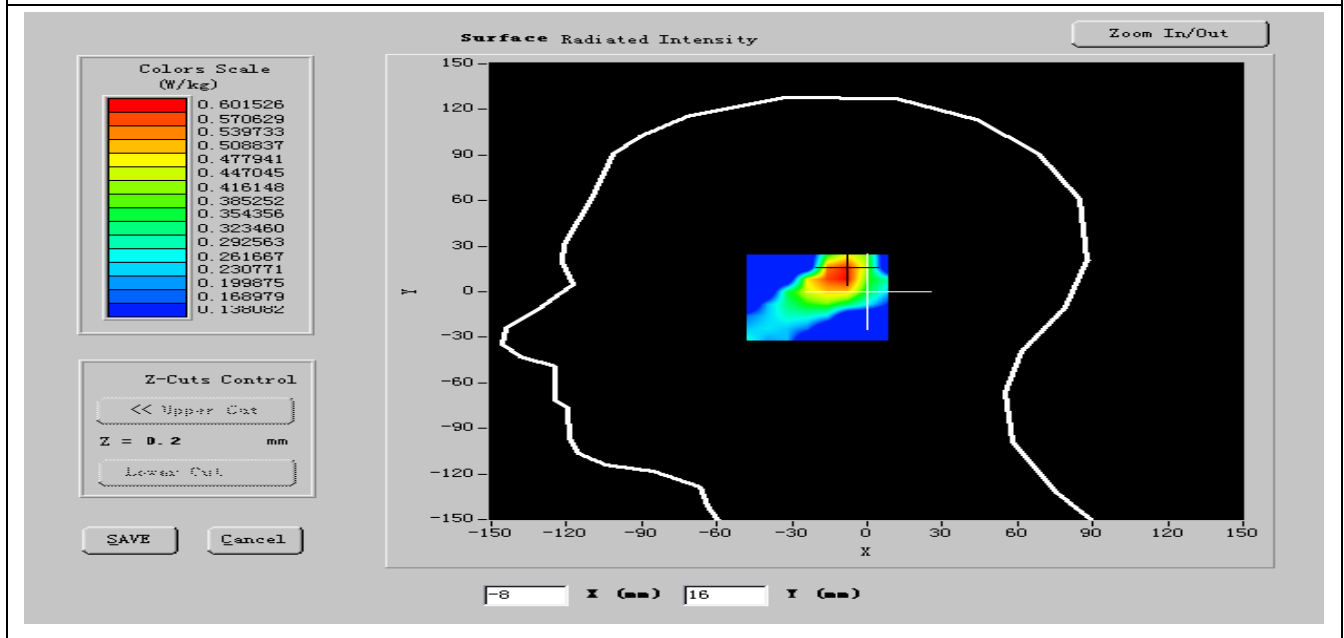
### C. SAR Measurement Results

|                                               |                    |
|-----------------------------------------------|--------------------|
| <b>Frequency (MHz)</b>                        | <b>1909.599976</b> |
| <b>Relative permittivity (real part)</b>      | <b>40.205999</b>   |
| <b>Relative permittivity (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>       |

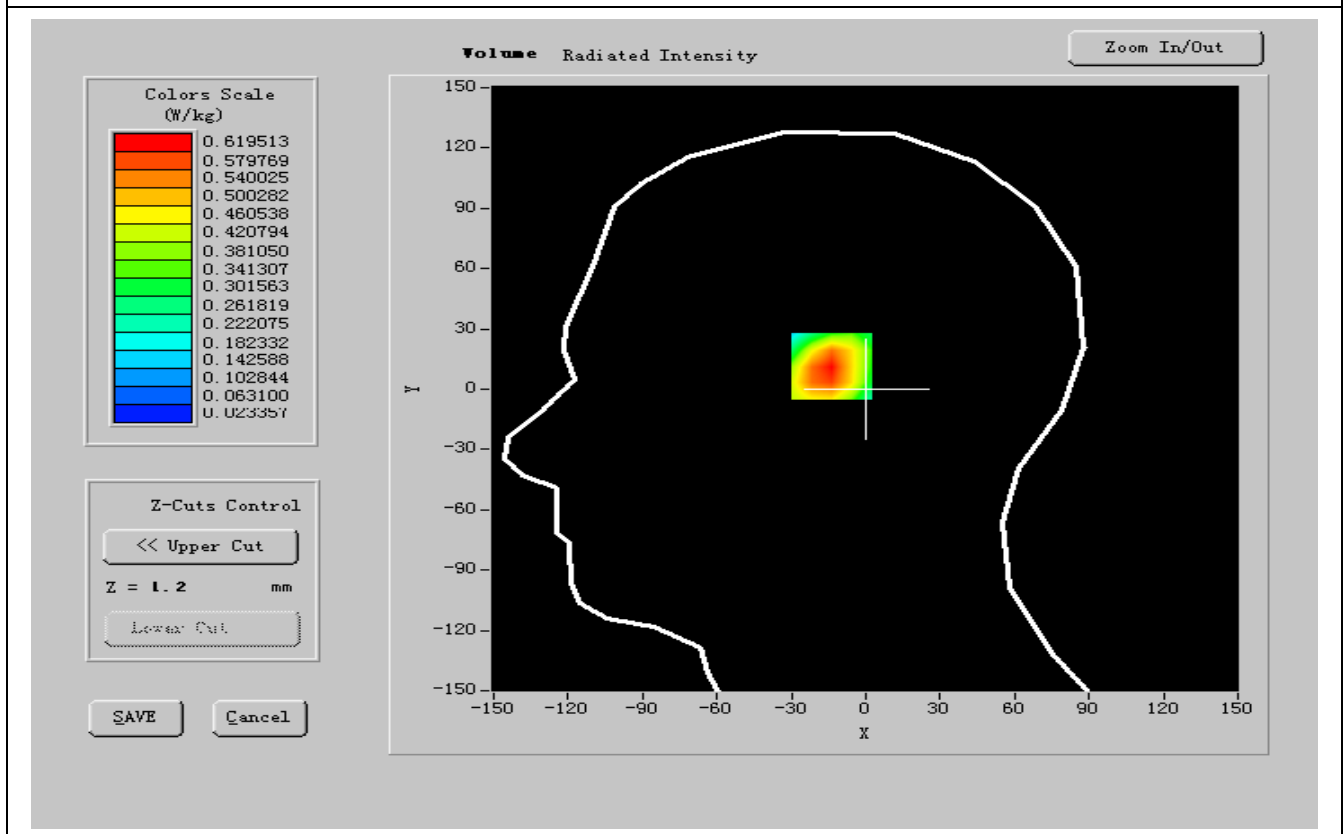


|               |                     |
|---------------|---------------------|
| ConvF:        | 41.91, 43.15, 56.44 |
| Crest factor: | 1:8                 |

## SURFACE SAR



## VOLUME SAR



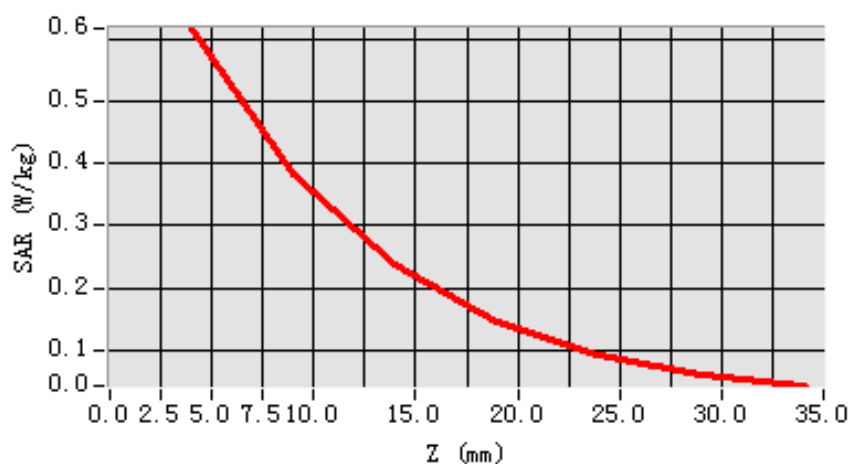


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.348952 |
| SAR 1g (W/Kg)  | 0.573654 |

**Z Axis Scan**

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





## MEASUREMENT 4

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.213000</b>   |
| <b>Relative permittivity (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>       |



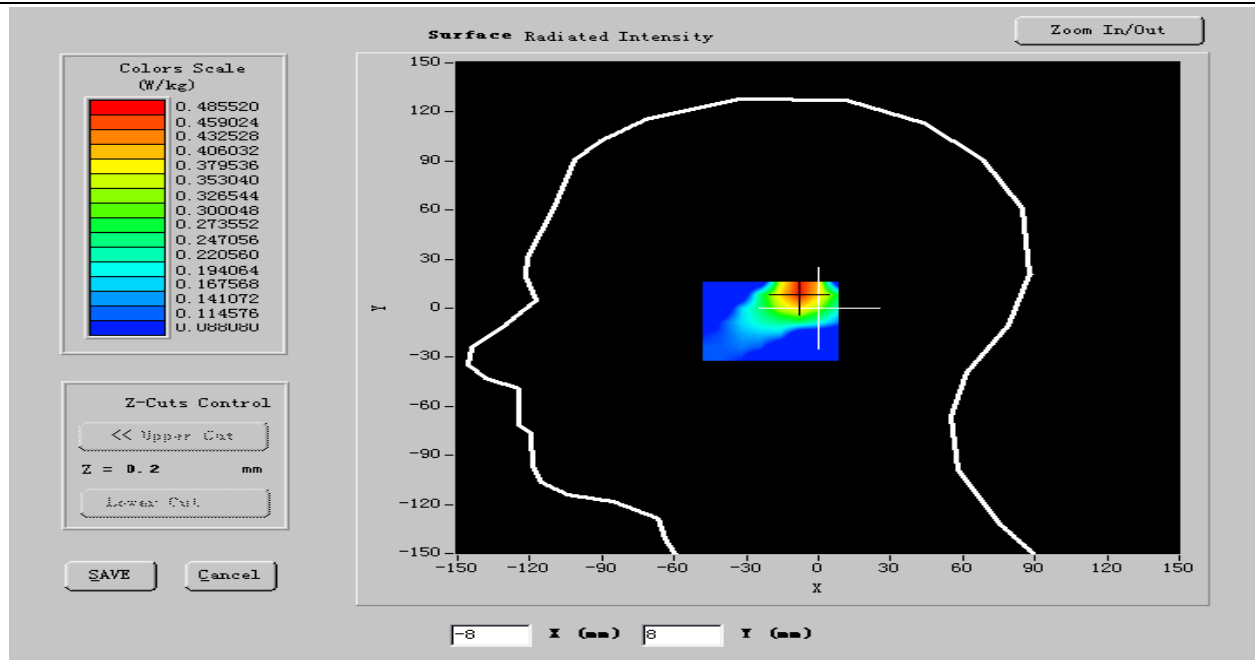
ConvF:

41.91, 43.15, 56.44

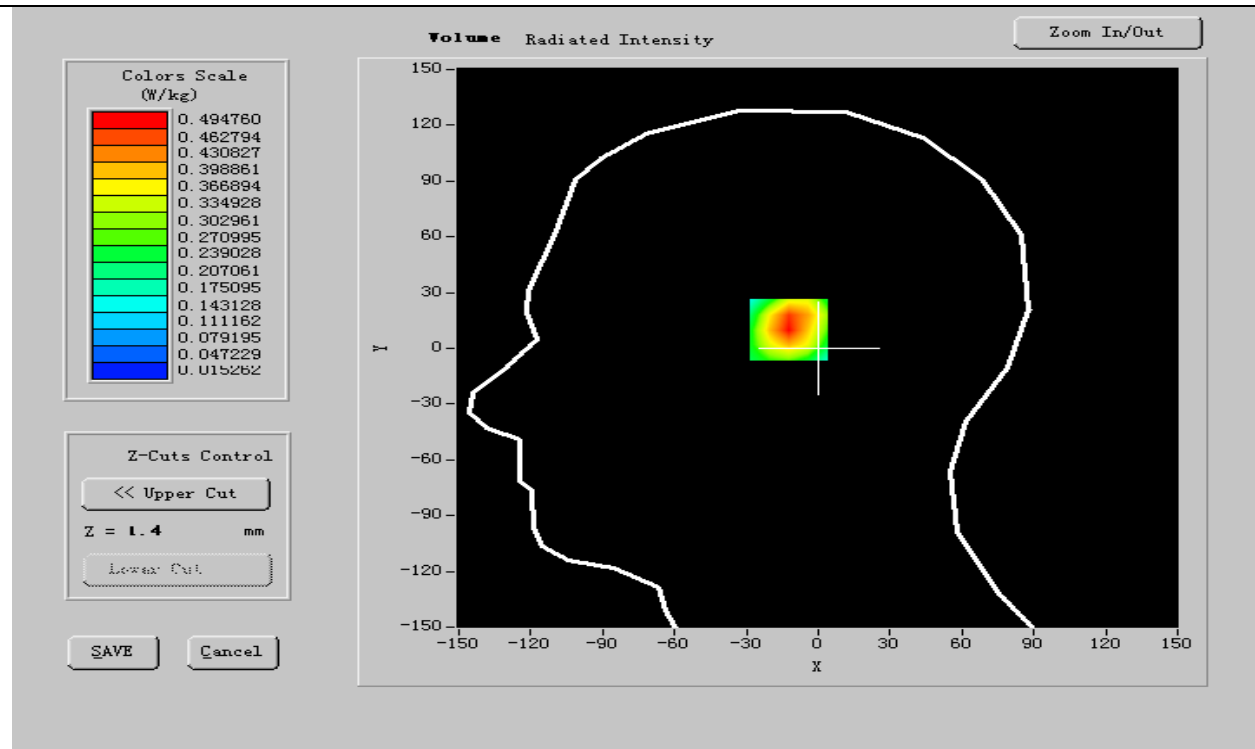
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



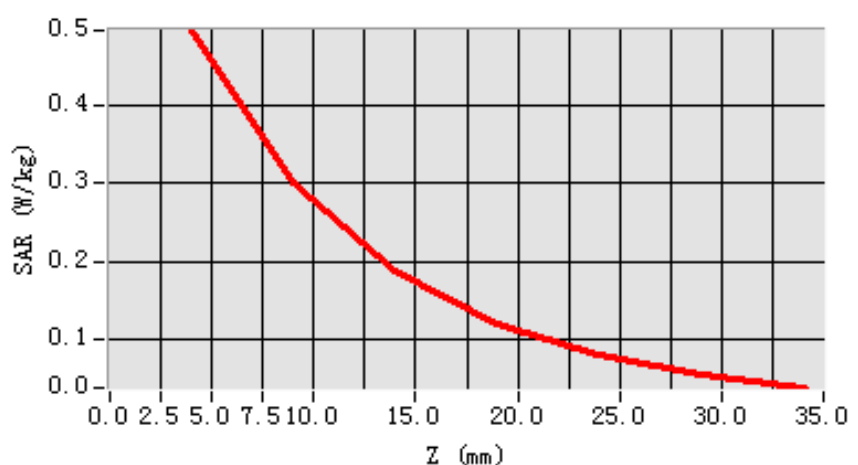


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.259871 |
| SAR 1g (W/Kg)  | 0.456381 |

**Z Axis Scan**

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





## MEASUREMENT 5

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Right 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.193001</b>   |
| <b>Relative permittivity (imaginary part)</b> | <b>13.813800</b>   |
| <b>Conductivity (S/m)</b>                     | <b>1.422173</b>    |
| <b>Variation (%)</b>                          | <b>-0.420000</b>   |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>       |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>       |



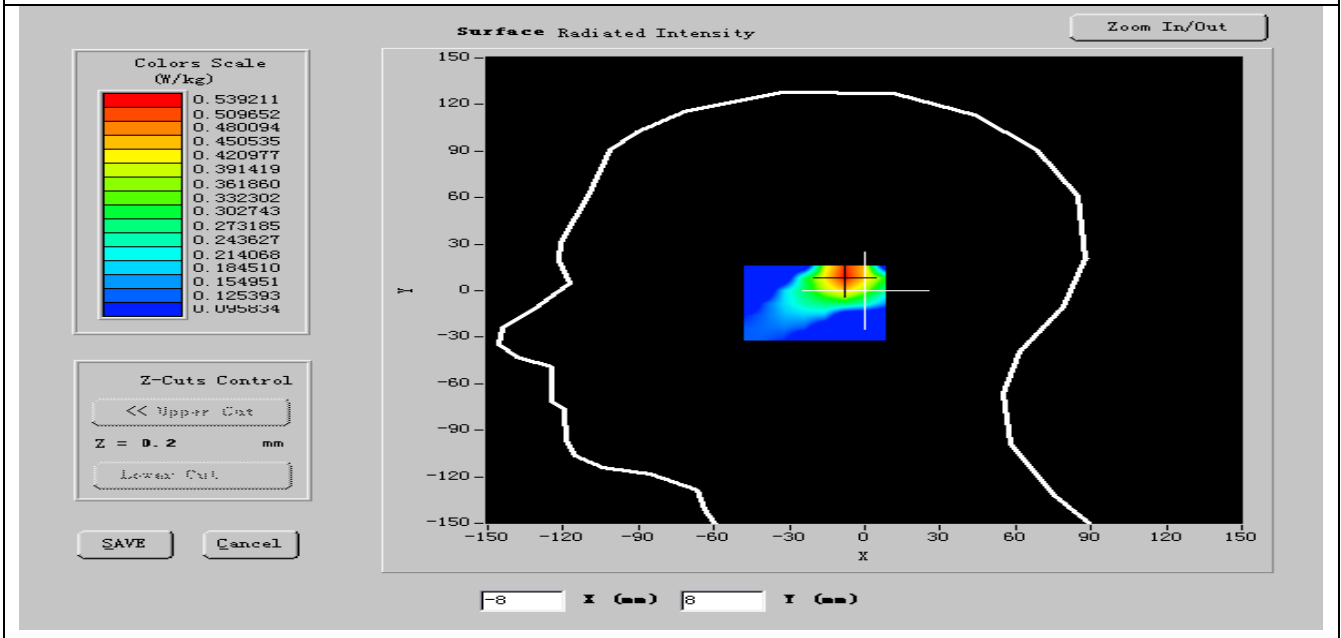
ConvF:

41.91, 43.15, 56.44

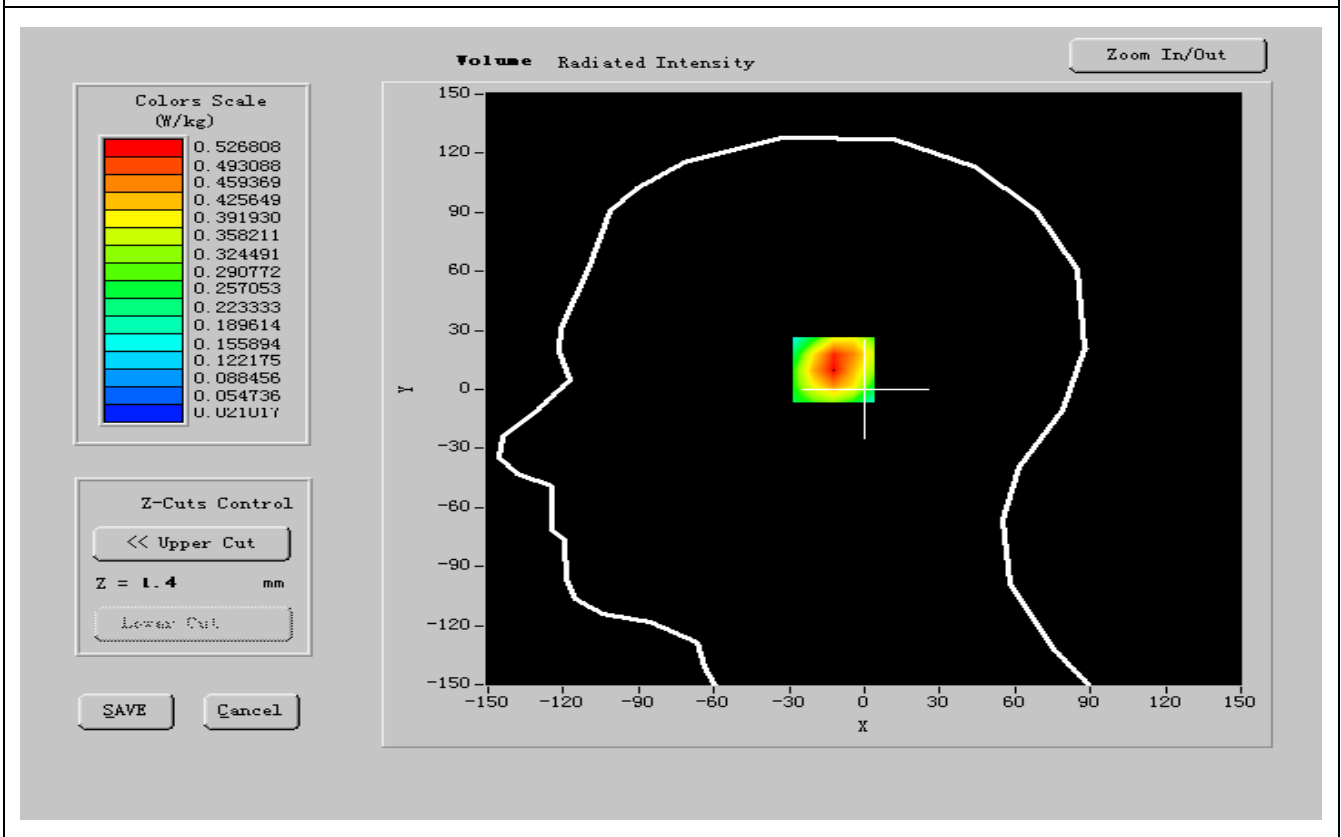
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



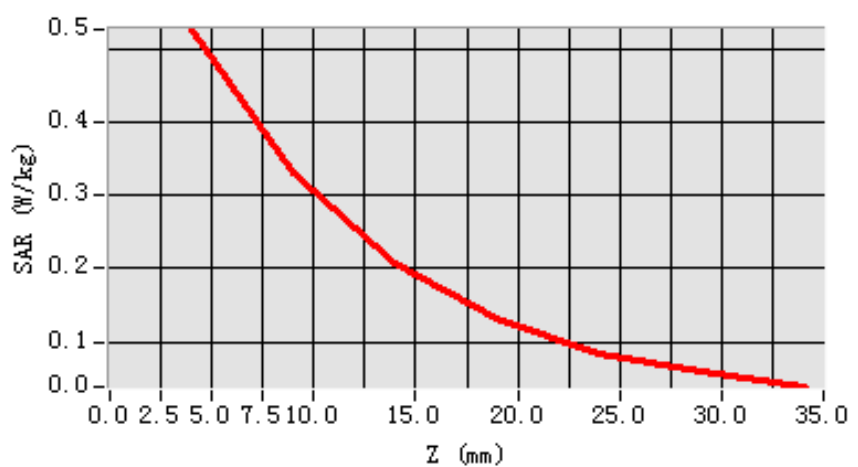


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.289652 |
| SAR 1g (W/Kg)  | 0.481892 |

**Z Axis Scan**

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





## MEASUREMENT 6

**Date of measurement: 02/20/2011**

**Area Scan: 7 x 7 x 1**

**dx=15mm**

**dy=15mm**

**Zoom Scan: 5 x 5 x 7**

**dx=5mm**

**dy=5mm**

**dz=5mm**

**Z Axis Scan: 1 x 1 x 21**

**dx=20mm**

**dy=20mm**

**dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.205999</b>   |
| <b>Relative permittivity (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>       |



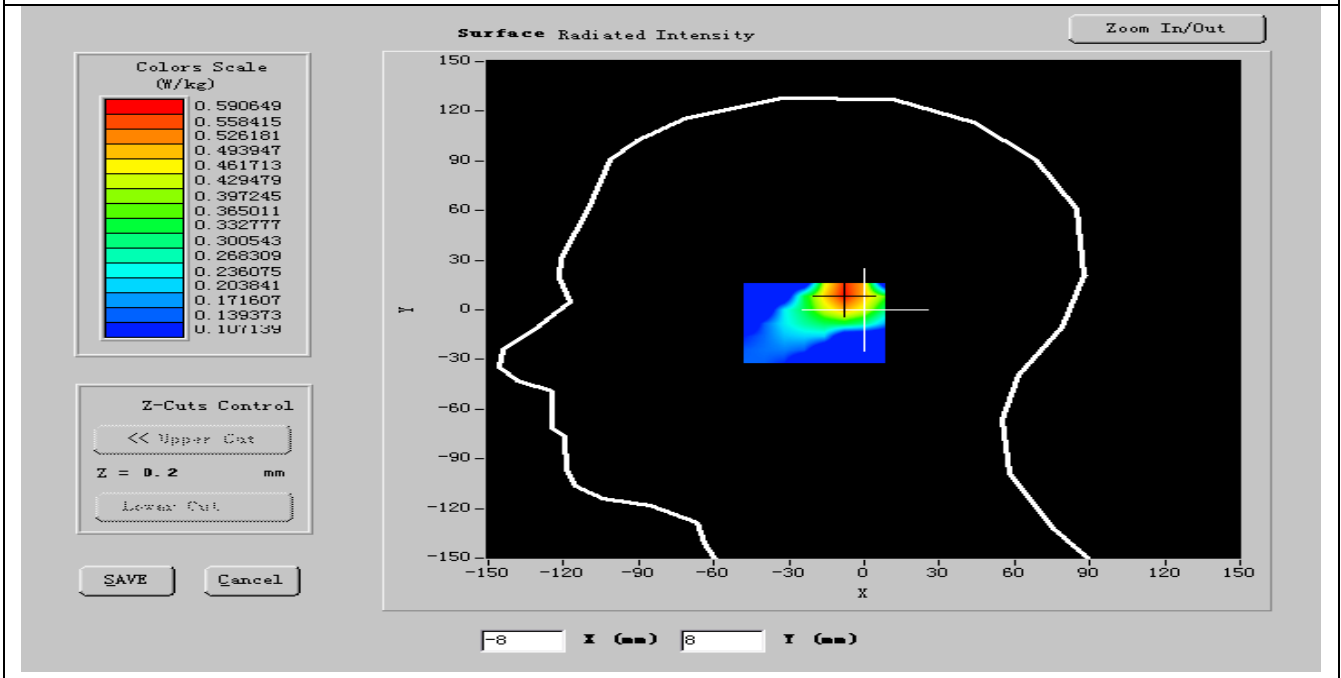
ConvF:

41.91, 43.15, 56.44

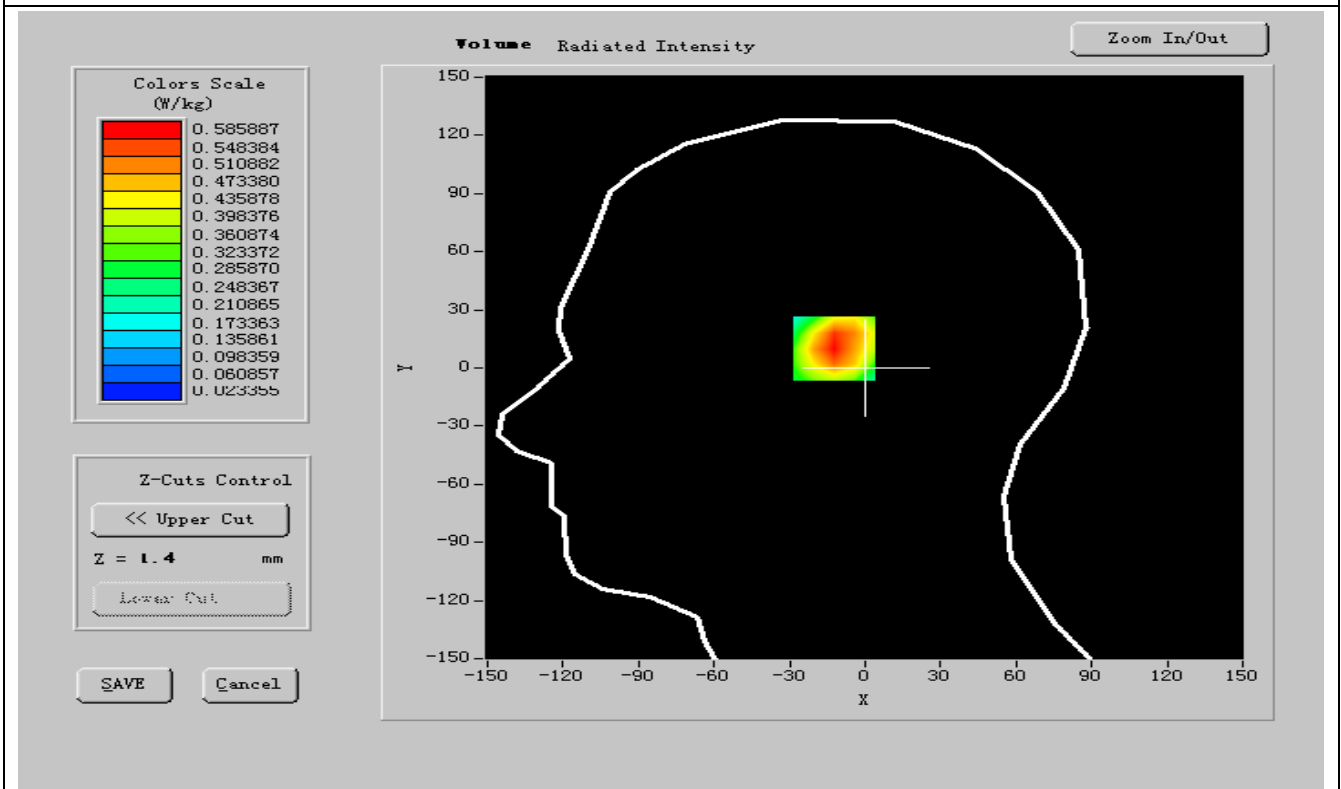
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



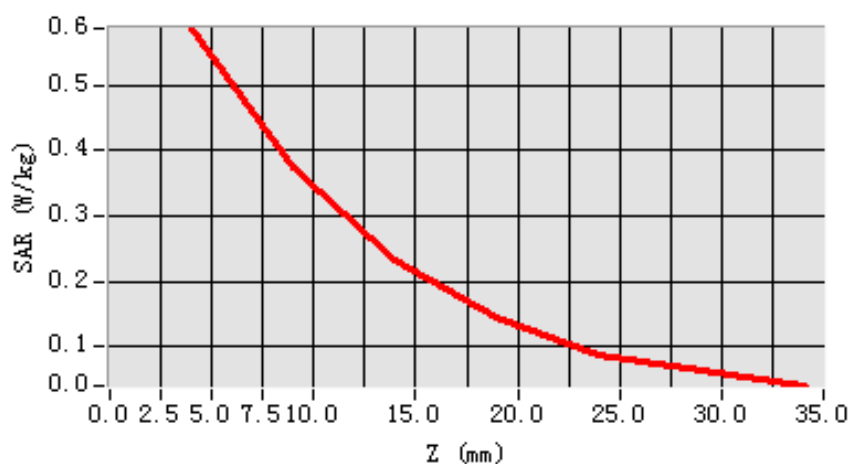


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.316982 |
| SAR 1g (W/Kg)  | 0.535985 |

**Z Axis Scan**

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





## MEASUREMENT 7

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.313000</b>   |
| <b>Relative permittivity (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>       |



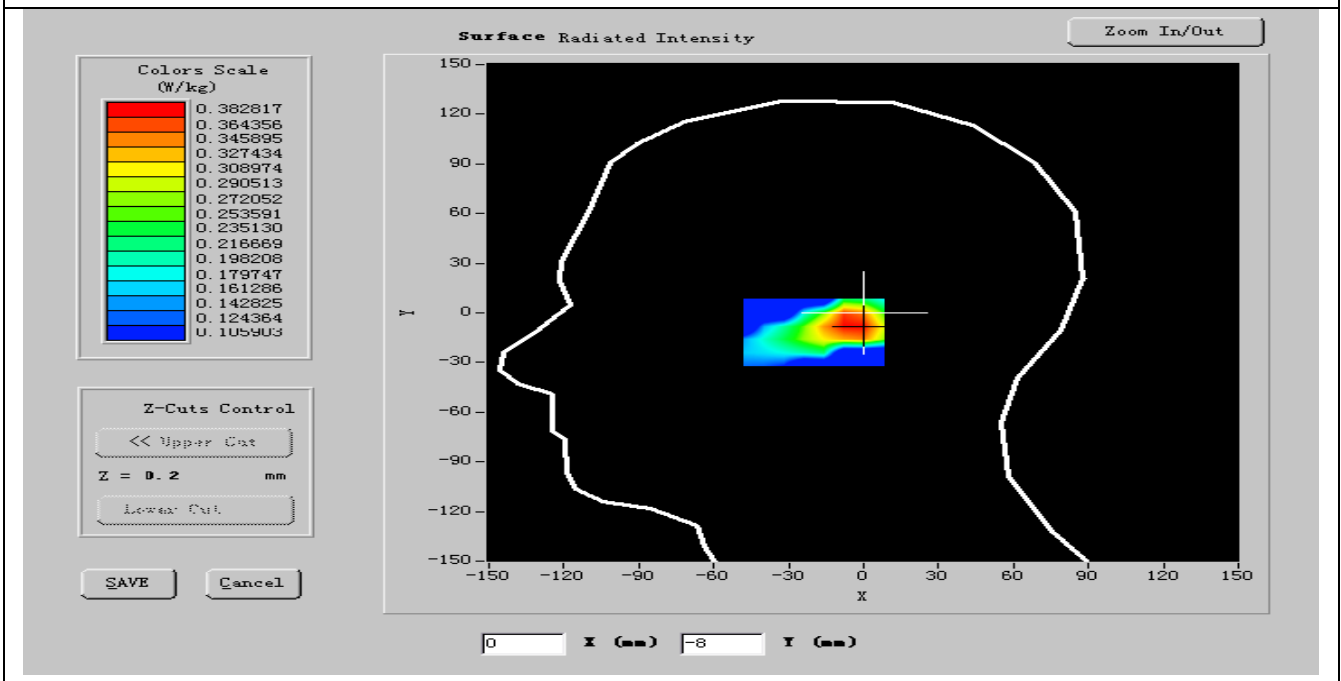
ConvF:

41.91, 43.15, 56.44

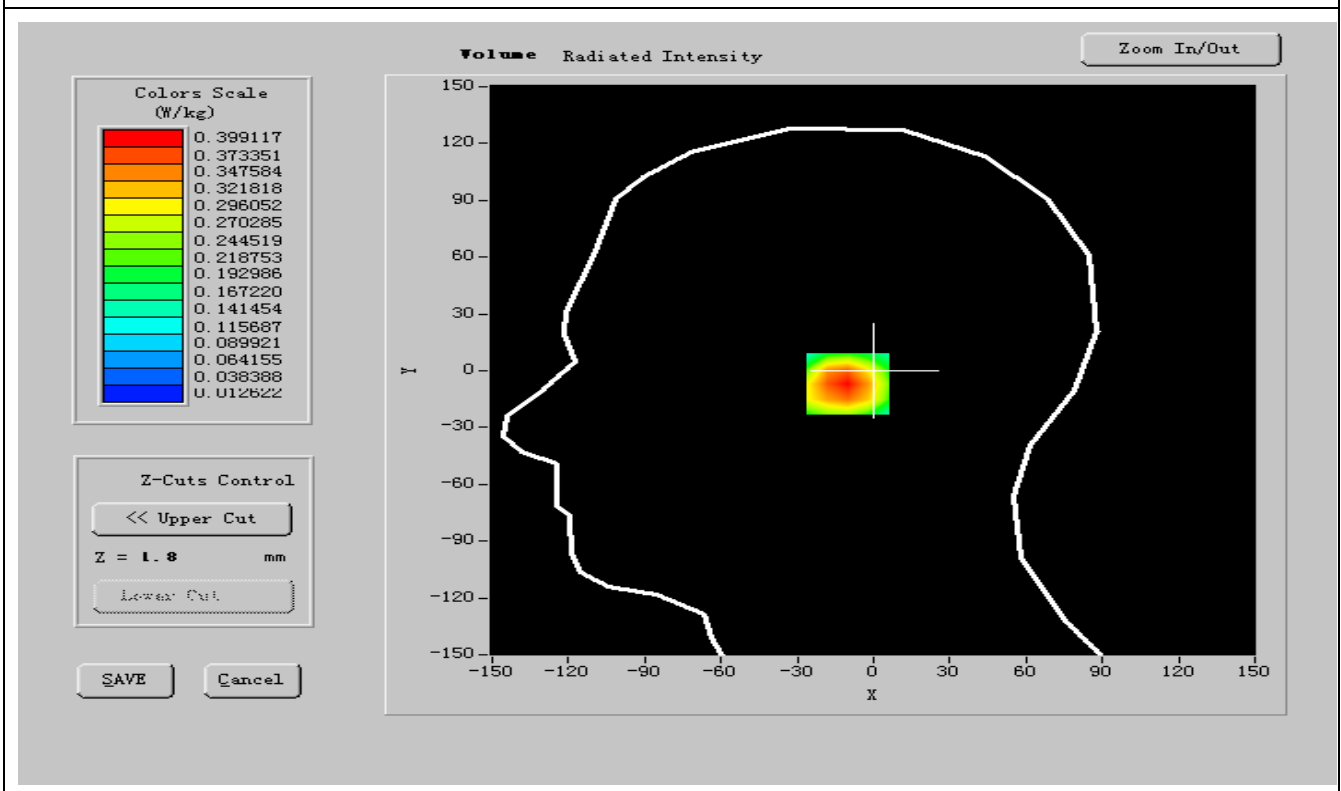
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



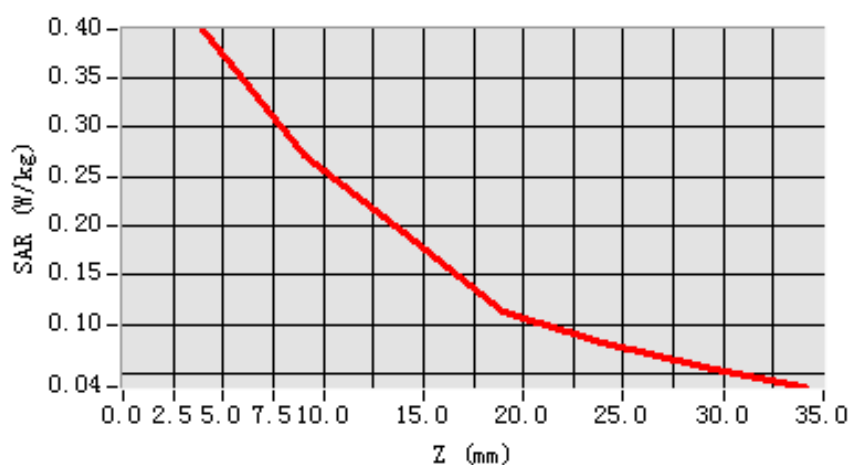


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.229650 |
| SAR 1g (W/Kg)  | 0.361058 |

**Z Axis Scan**

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





## MEASUREMENT 8

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.193001</b>   |
| <b>Relative permittivity (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>       |



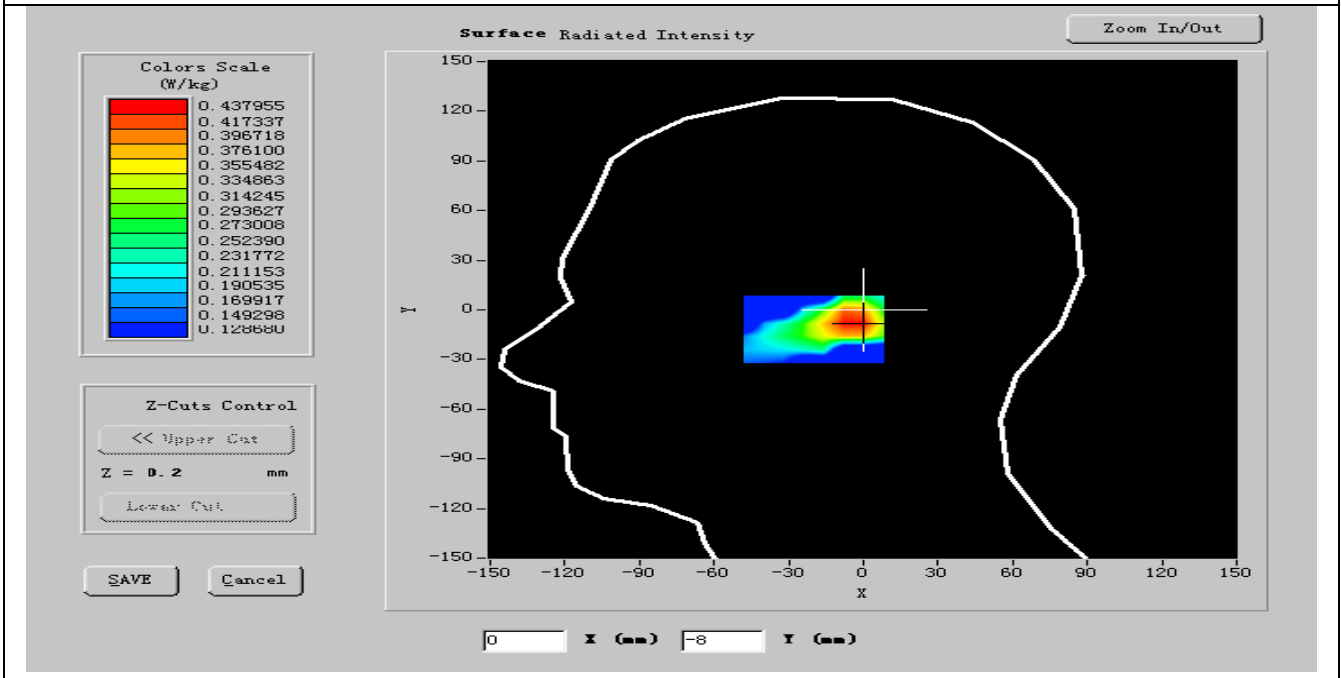
ConvF:

41.91, 43.15, 56.44

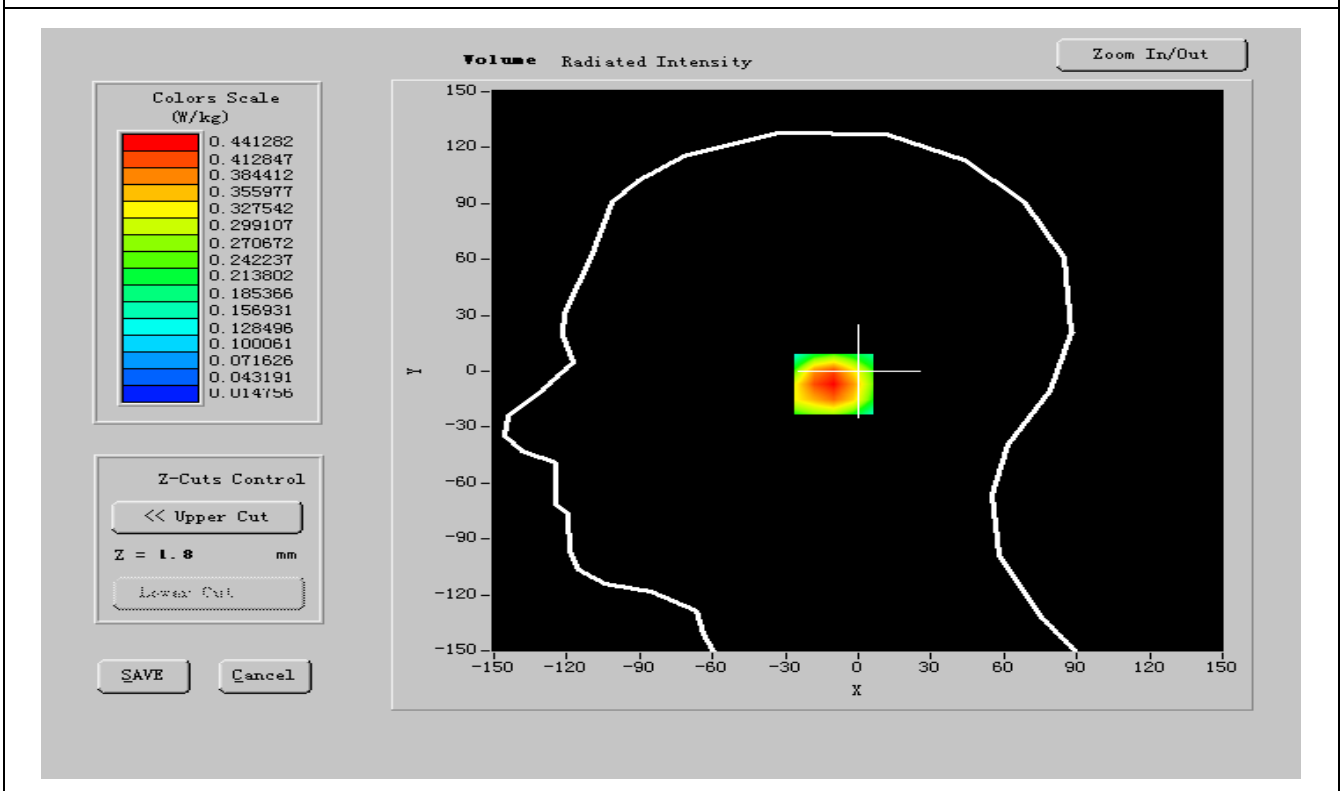
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



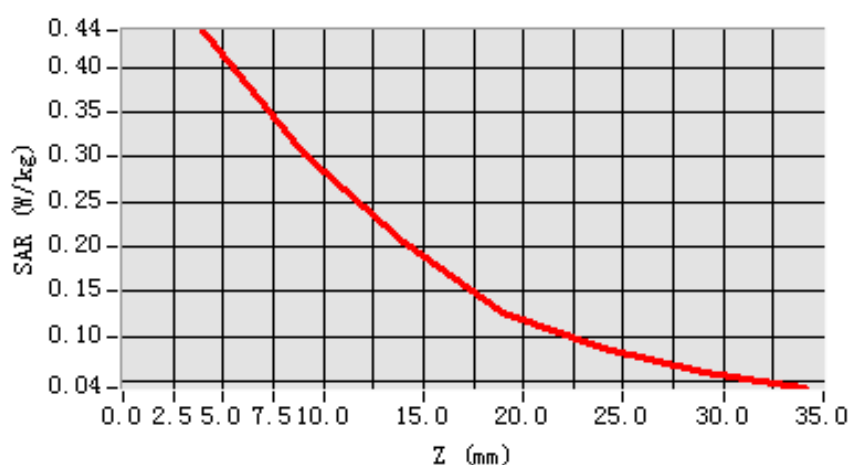


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.262184 |
| SAR 1g (W/Kg)  | 0.423335 |

**Z Axis Scan**

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





## MEASUREMENT 9

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.285999</b>   |
| <b>Relative permittivity (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>       |



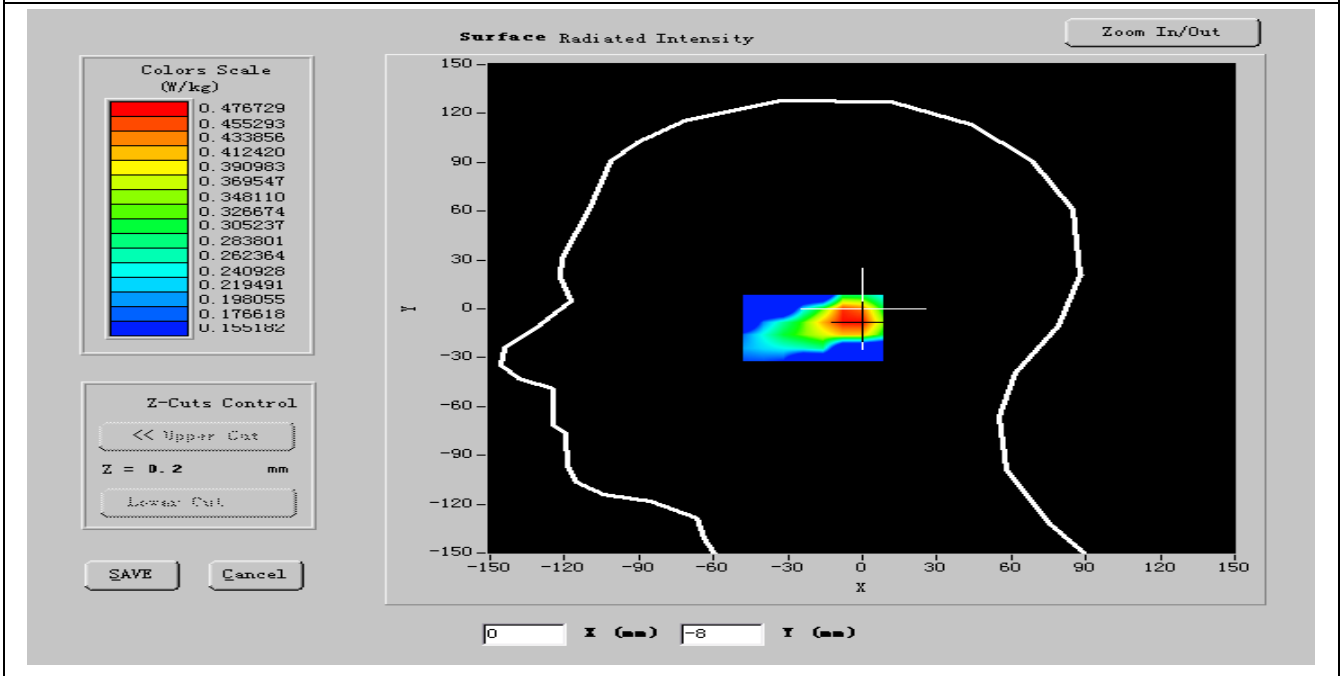
ConvF:

41.91, 43.15, 56.44

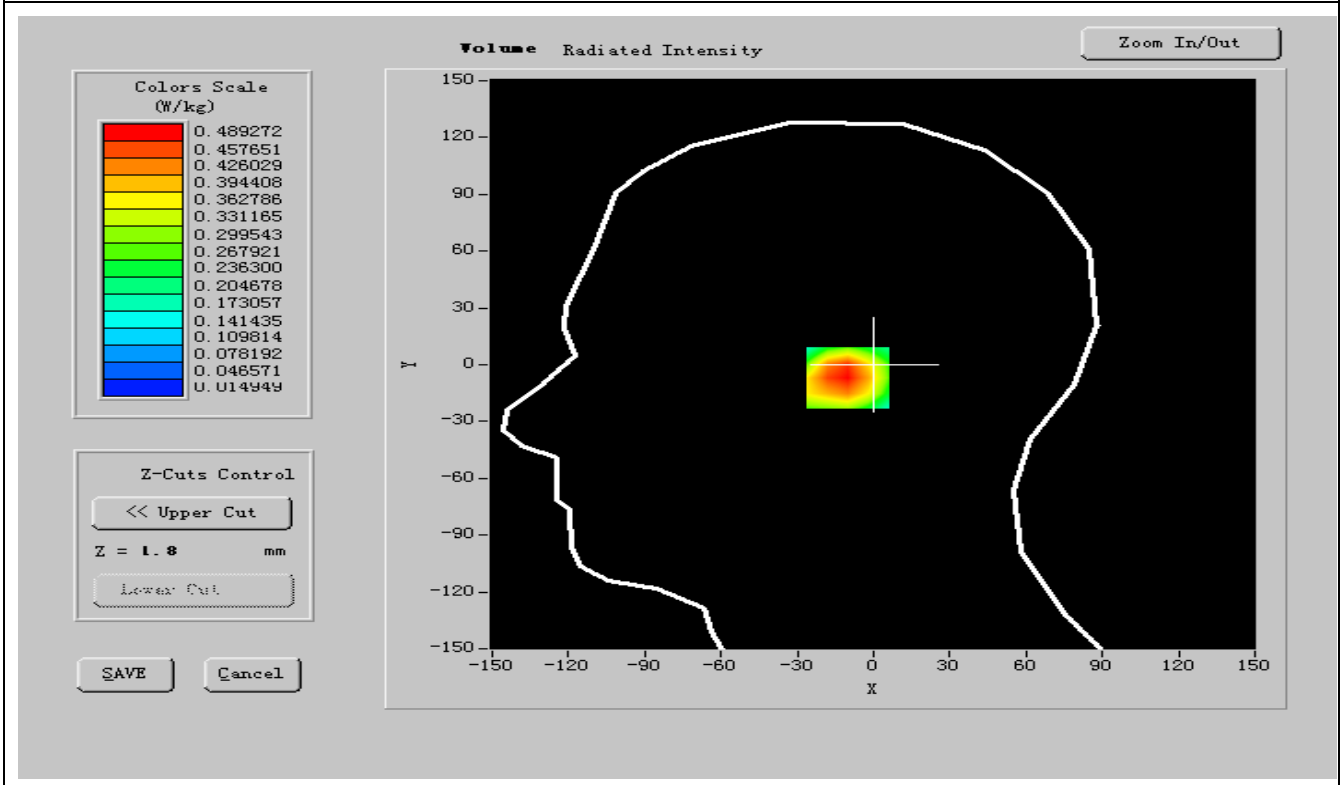
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



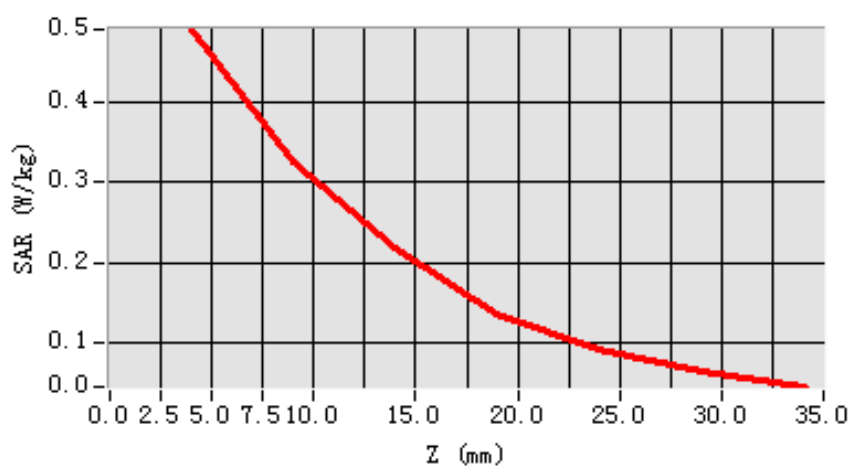


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.291874 |
| SAR 1g (W/Kg)  | 0.449005 |

**Z Axis Scan**

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





## MEASUREMENT 10

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.313134</b>   |
| <b>Relative permittivity (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>       |



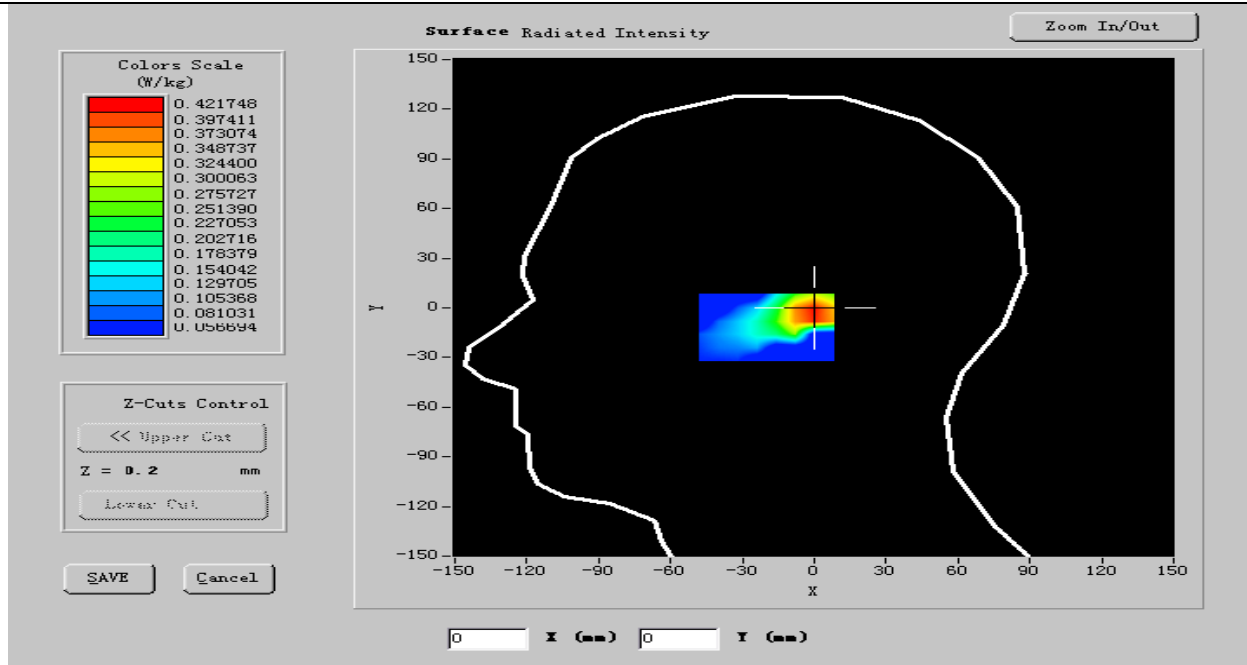
ConvF:

41.91, 43.15, 56.44

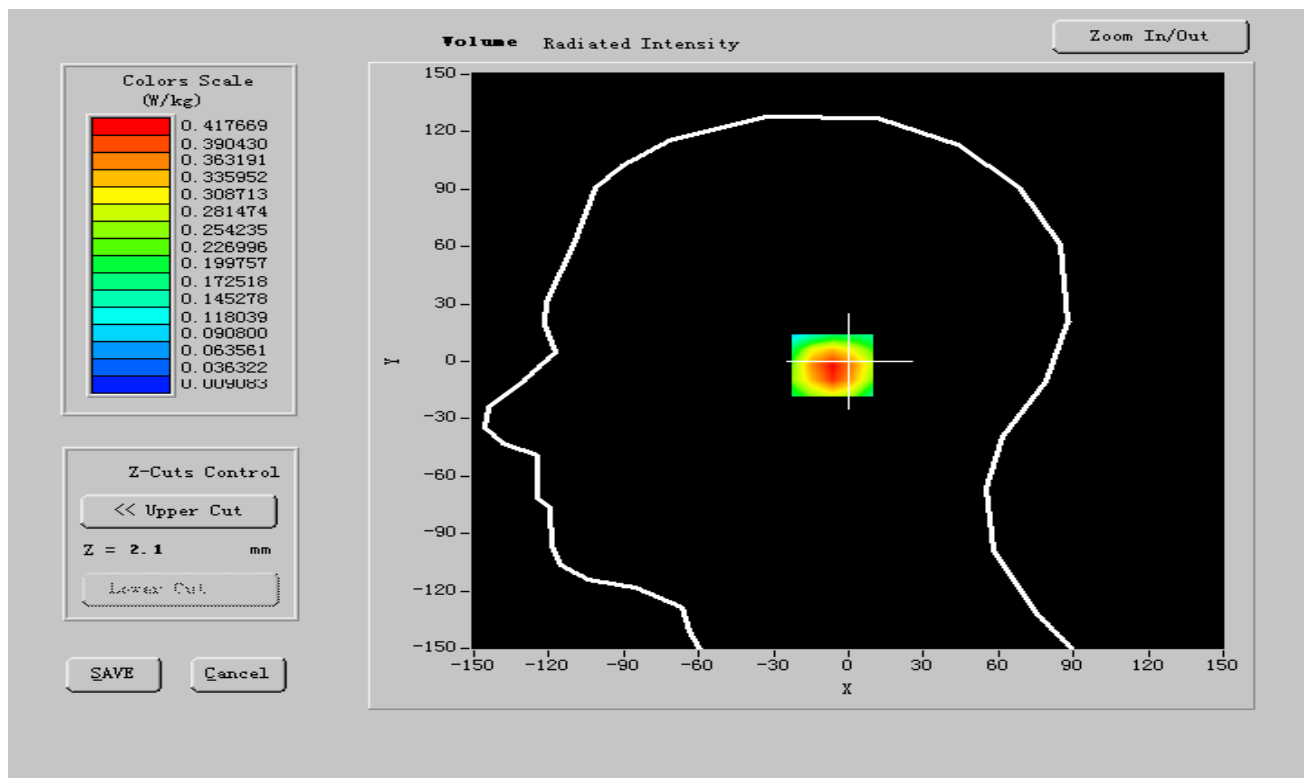
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



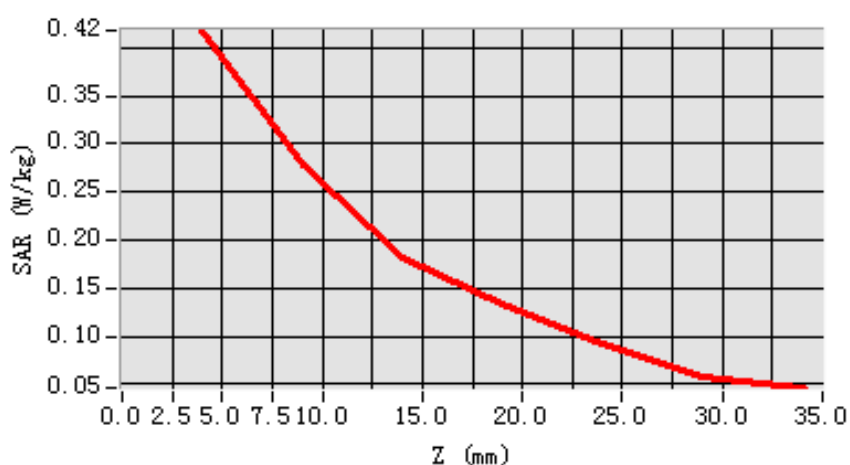


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.256978 |
| SAR 1g (W/Kg)  | 0.403289 |

**Z Axis Scan**

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





## MEASUREMENT 11

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.193001</b>   |
| <b>Relative permittivity (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>       |



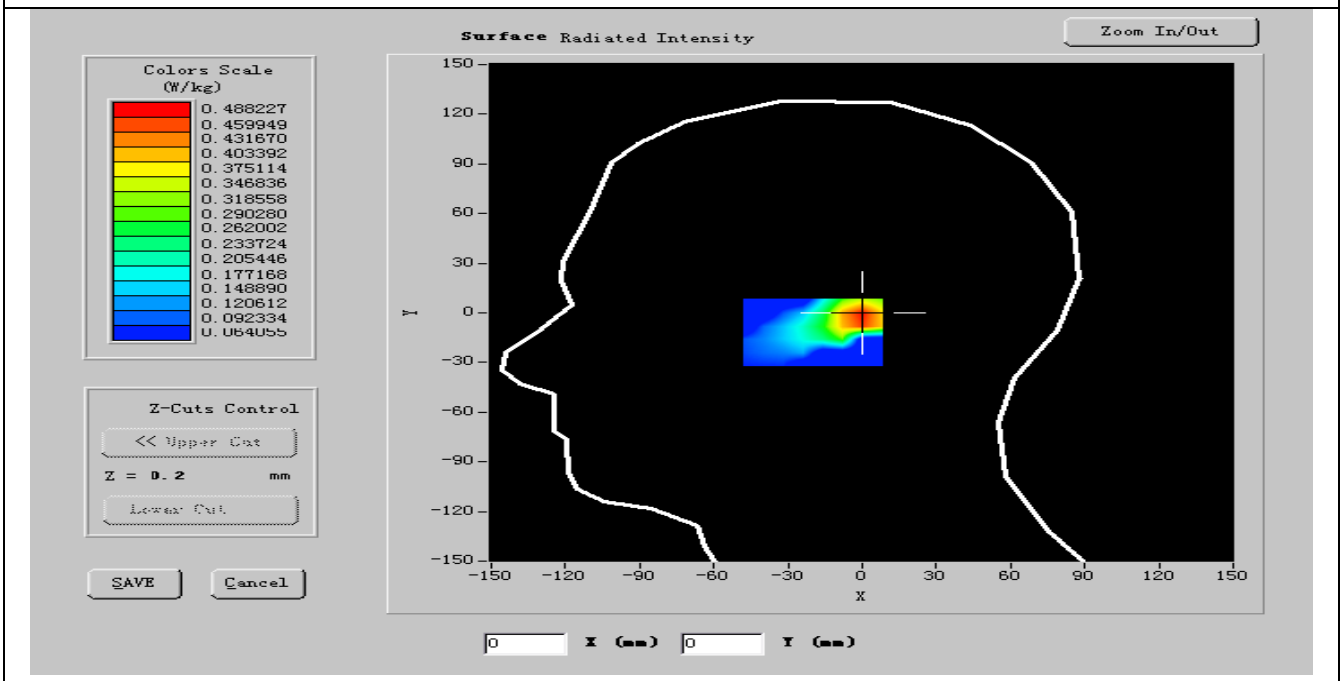
ConvF:

41.91, 43.15, 56.44

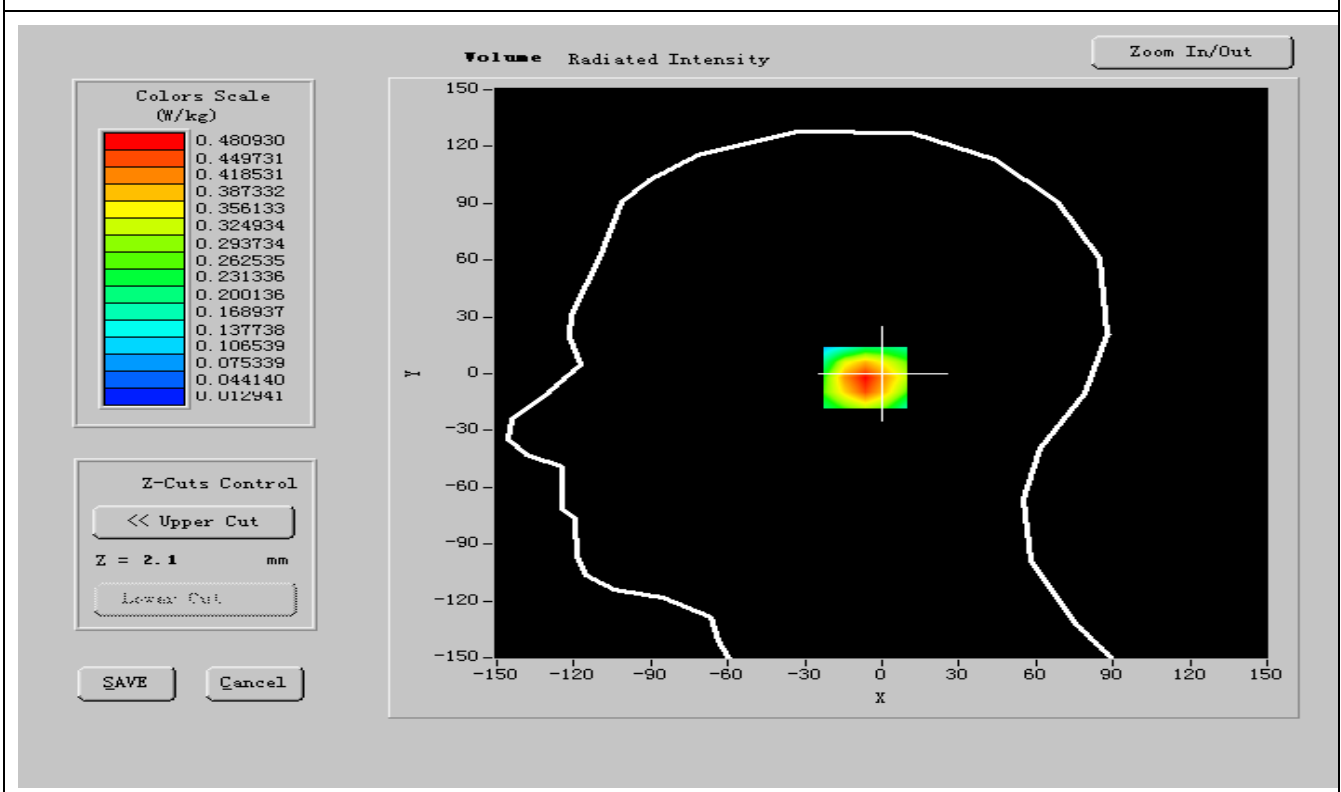
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR

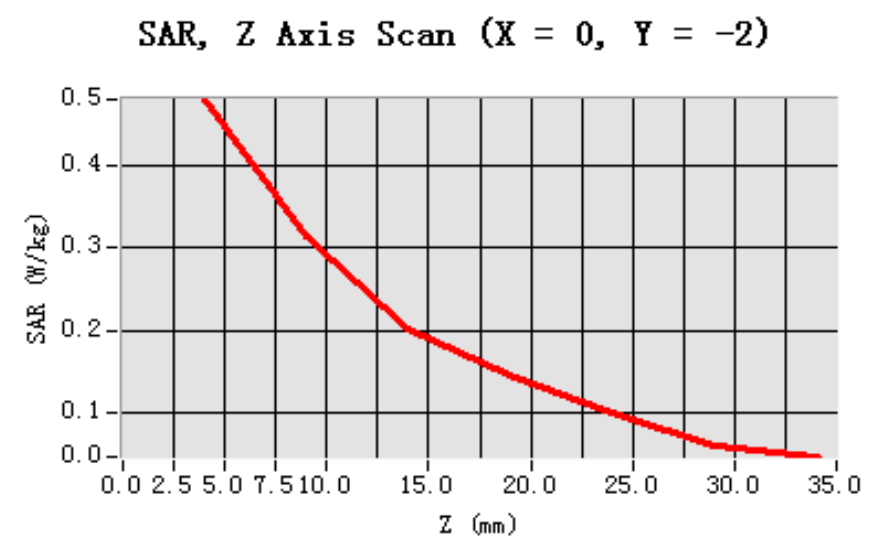




**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.256123 |
| SAR 1g (W/Kg)  | 0.446892 |

**Z Axis Scan**





## MEASUREMENT 12

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### **A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>40.285999</b>   |
| <b>Relative permittivity (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>       |



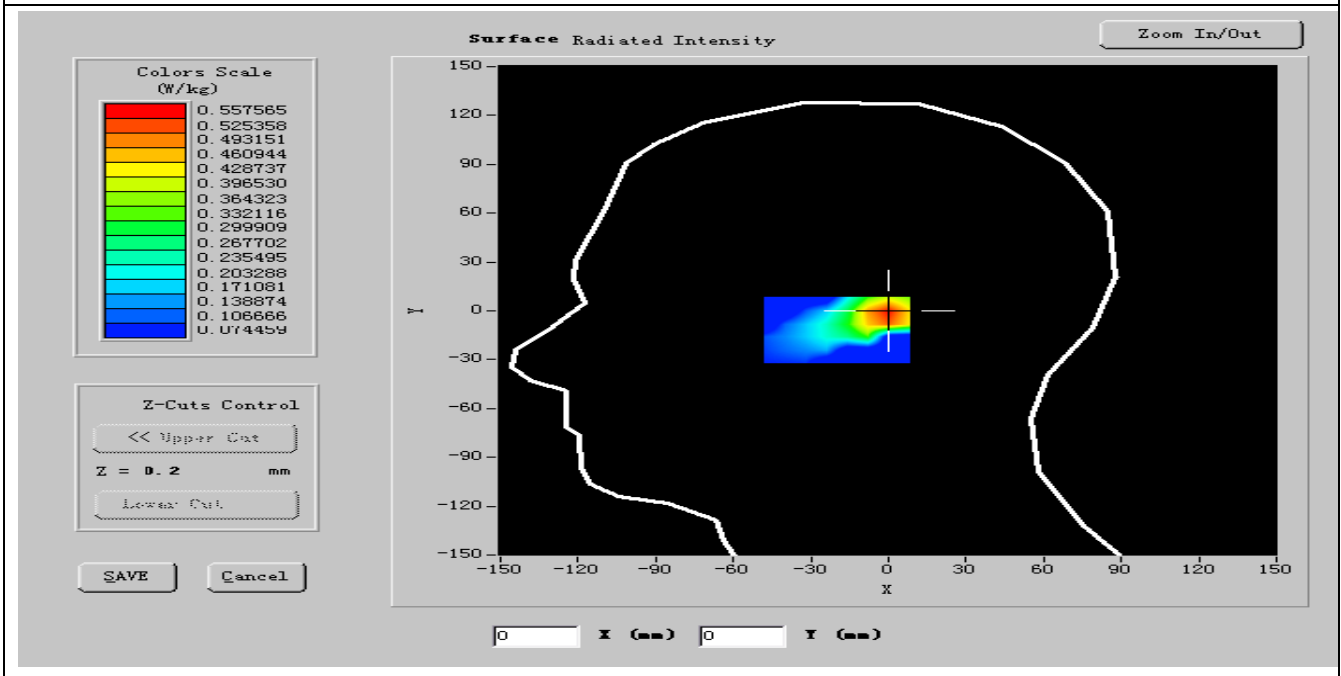
ConvF:

41.91, 43.15, 56.44

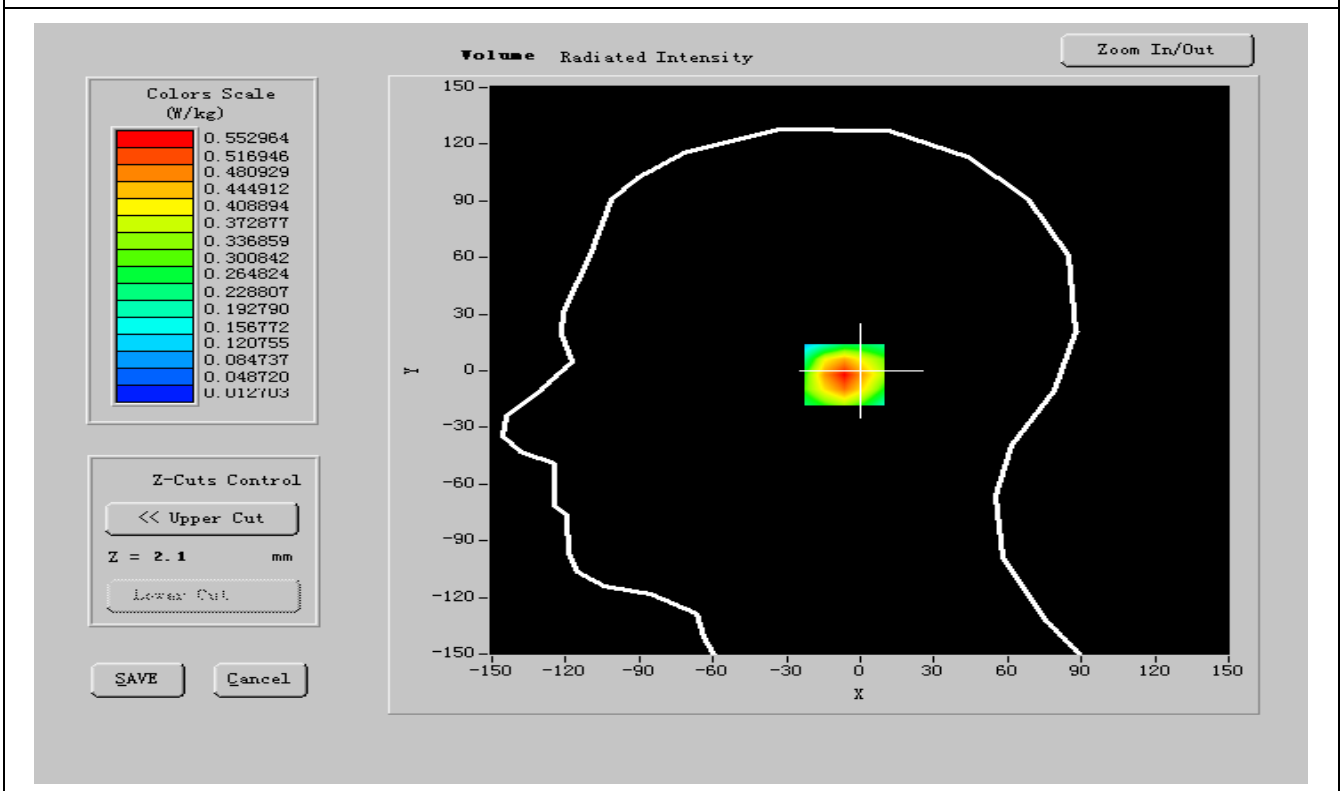
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



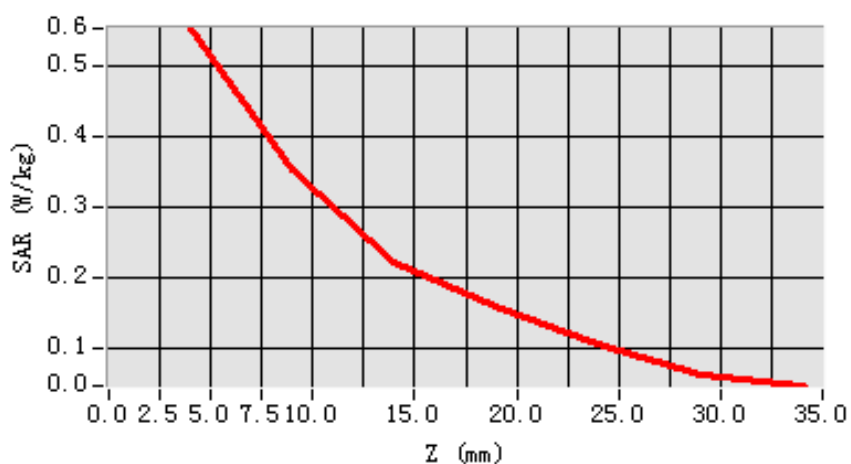


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.365651 |
| SAR 1g (W/Kg)  | 0.487752 |

**Z Axis Scan**

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





## MEASUREMENT 13

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>52.313000</b>   |
| <b>Relative permittivity (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>       |



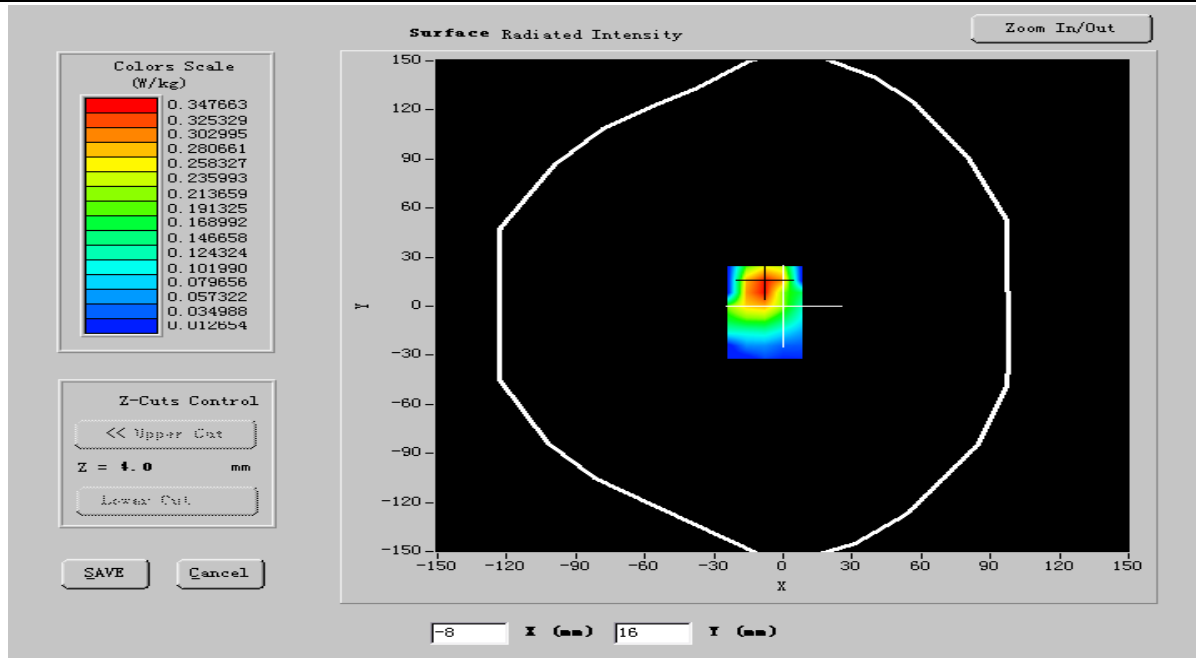
ConvF:

41.01, 42.41, 55.65

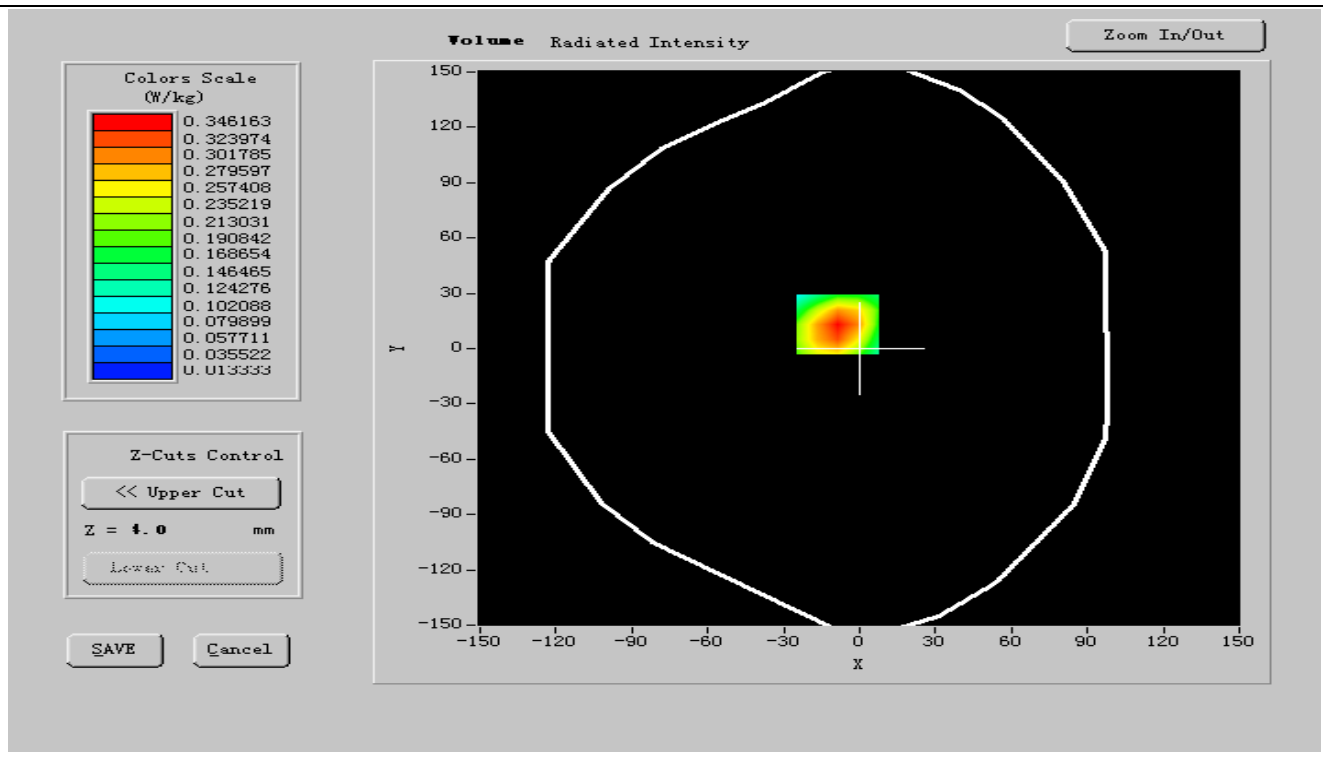
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



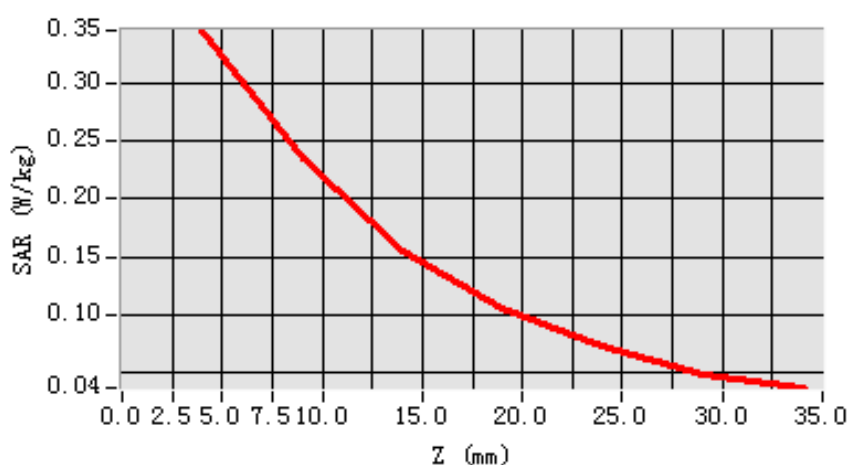


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.200652 |
| SAR 1g (W/Kg)  | 0.313356 |

**Z Axis Scan**

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





## MEASUREMENT 14

**Date of measurement:** 02/20/2011

**Area Scan:** 7 x 7 x 1

**dx=15mm**

**dy=15mm**

**Zoom Scan:** 5 x 5 x 7

**dx=5mm**

**dy=5mm**

**dz=5mm**

**Z Axis Scan:** 1 x 1 x 21

**dx=20mm**

**dy=20mm**

**dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>52.893001</b>   |
| <b>Relative permittivity (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>       |



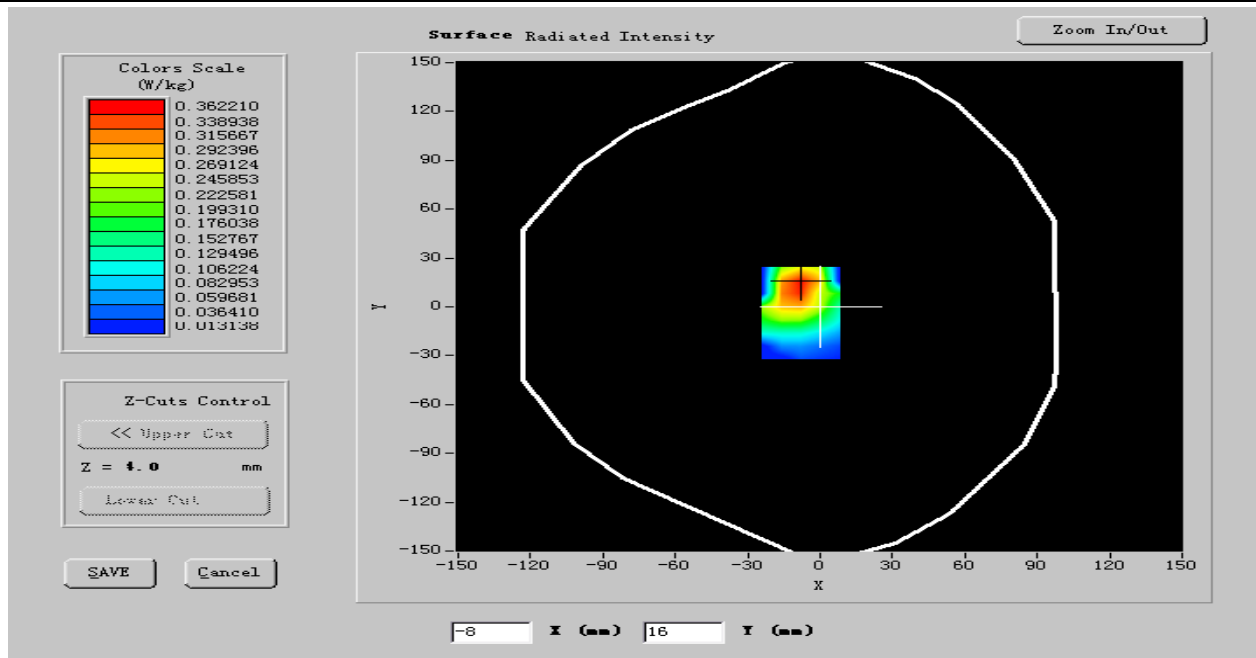
ConvF:

41.01, 42.41, 55.65

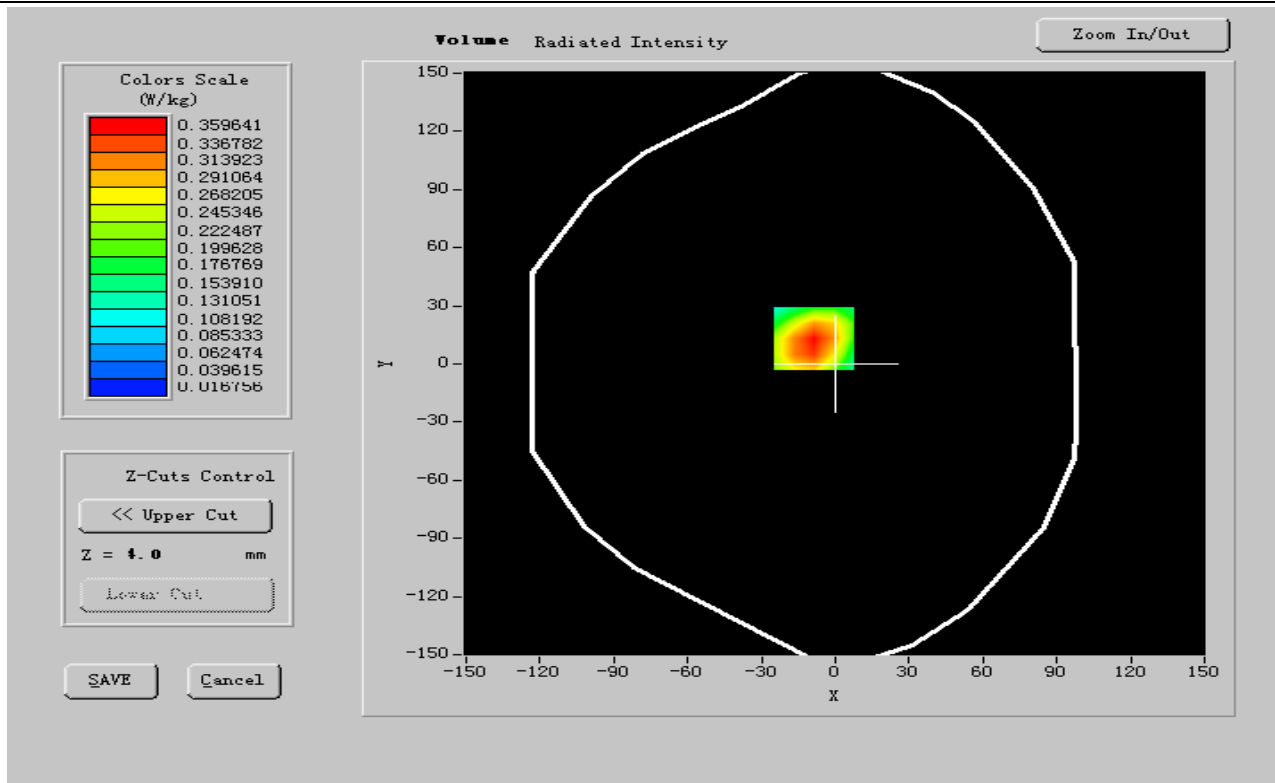
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



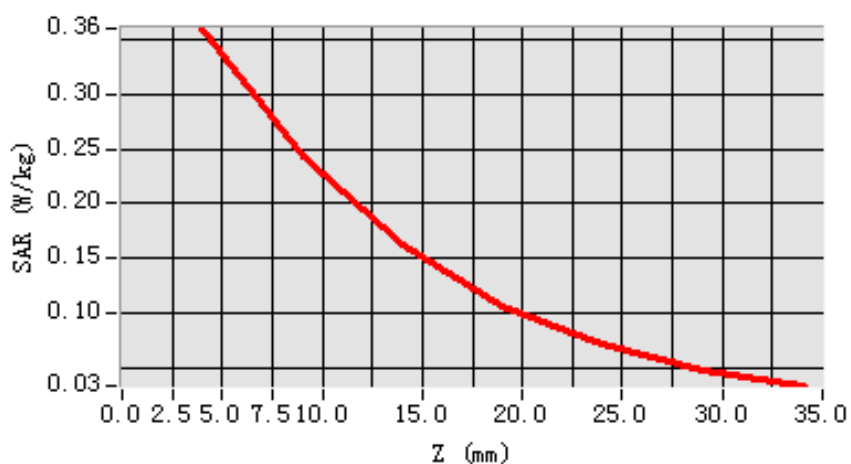


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.203691 |
| SAR 1g (W/Kg)  | 0.315239 |

**Z Axis Scan**

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





## MEASUREMENT 15

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>52.885999</b>   |
| <b>Relative permittivity (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>       |



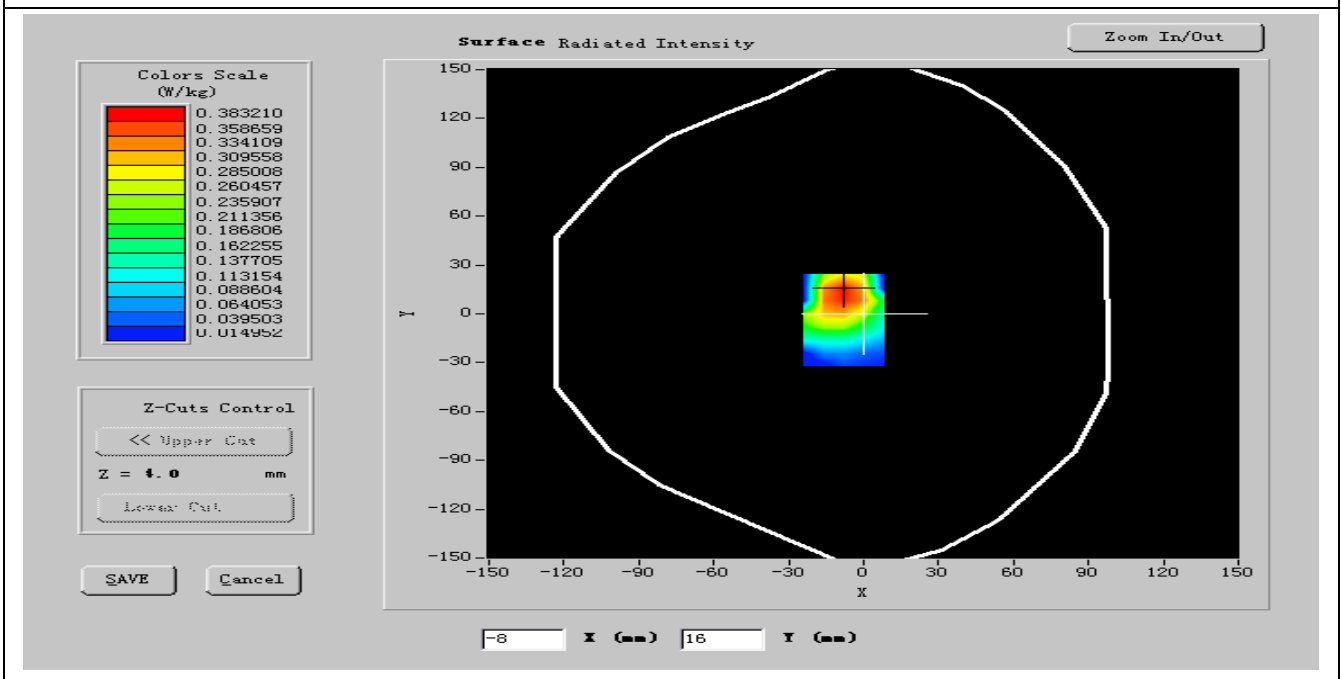
ConvF:

41.01, 42.41, 55.65

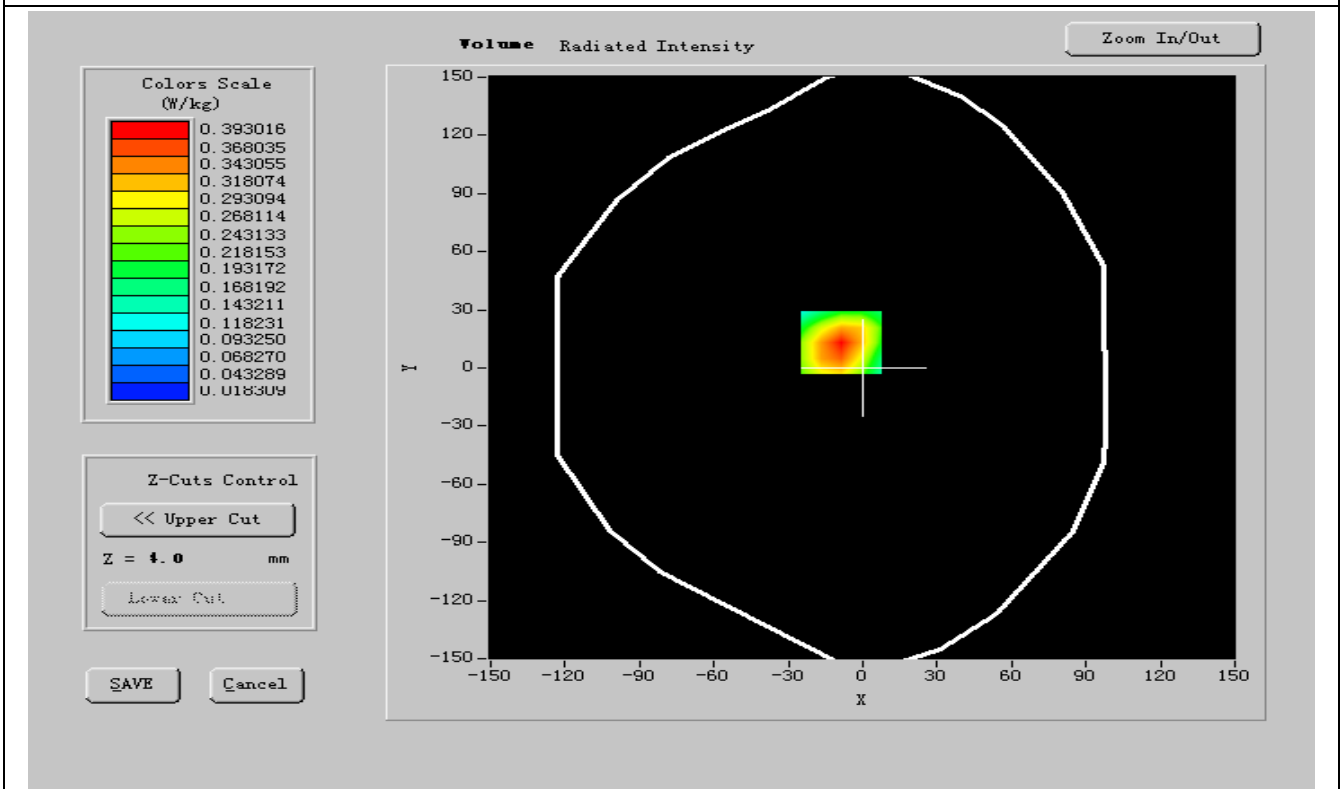
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



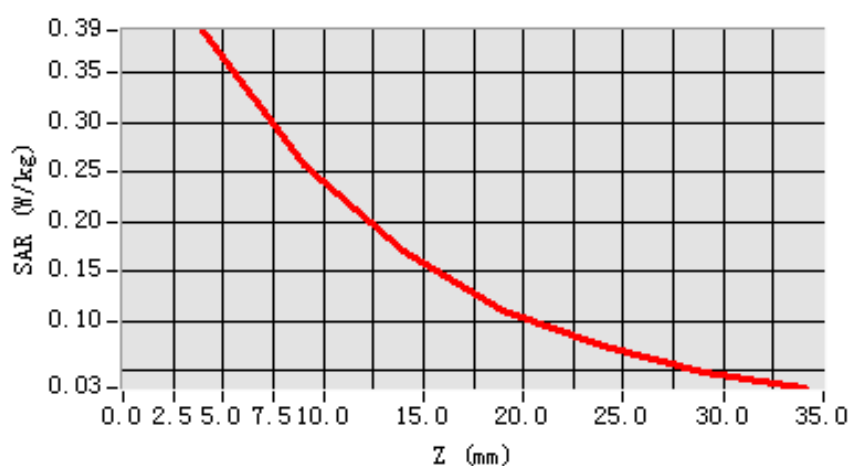


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.245223 |
| SAR 1g (W/Kg)  | 0.357196 |

**Z Axis Scan**

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





## MEASUREMENT 16

Date of measurement: 02/20/2011

Area Scan: 7 x 7 x 1

dx=15mm

dy=15mm

Zoom Scan: 5 x 5 x 7

dx=5mm

dy=5mm

dz=5mm

Z Axis Scan: 1 x 1 x 21

dx=20mm

dy=20mm

dz=5mm

### A. Experimental conditions.

|                 |                              |
|-----------------|------------------------------|
| Phantom File    | zinf15.txt, Adaptative 2 max |
| Phantom         | Body                         |
| Device Position | BackSide toward phantom      |
| Band            | GSM1900                      |
| Channels        | Low                          |
| Signal          | GSM                          |

### B. Instrumentations.

|                                    |                                            |                             |
|------------------------------------|--------------------------------------------|-----------------------------|
| PC                                 | HP (Pentium(R) V3.06GHz,<br>SN:375052-AA1) | Calibrated: N/A             |
| Wireless Communication<br>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 (DIPI36, SN 48/05)              | Calibration Due: 02/09/2012 |
| Phantom                            | Antennessa (SN:SN41_05_SAM29)              | Calibrated: N/A             |
| Liquid                             | Antennessa                                 | Calibrated: N/A             |
| Measurement SW                     | OPEN SAR V2.1                              | Calibrated: N/A             |

### C. SAR Measurement Results

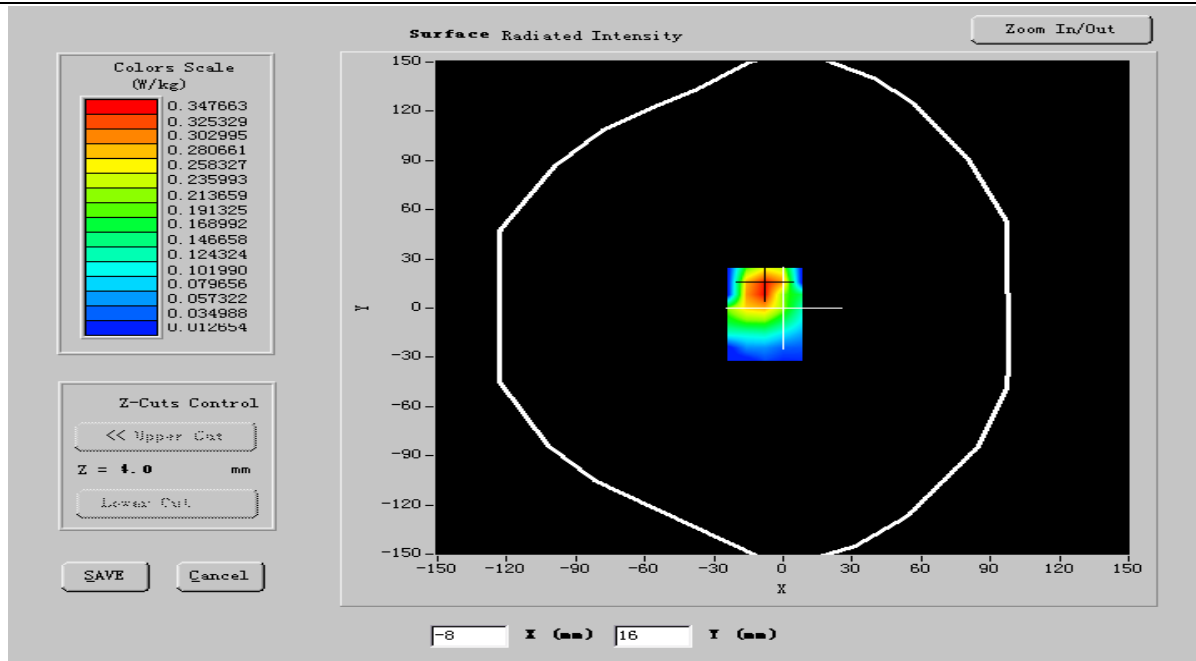
|                                        |                     |
|----------------------------------------|---------------------|
| Frequency (MHz)                        | 1850.400024         |
| Relative permittivity (real part)      | 52.321420           |
| Relative permittivity (imaginary part) | 13.568140           |
| Conductivity (S/m)                     | 1.402642            |
| Variation (%)                          | -0.120000           |
| Ambient Temperature:                   | 21 °C               |
| Liquid Temperature:                    | 20 °C               |
| ConvF:                                 | 41.01, 42.41, 55.65 |



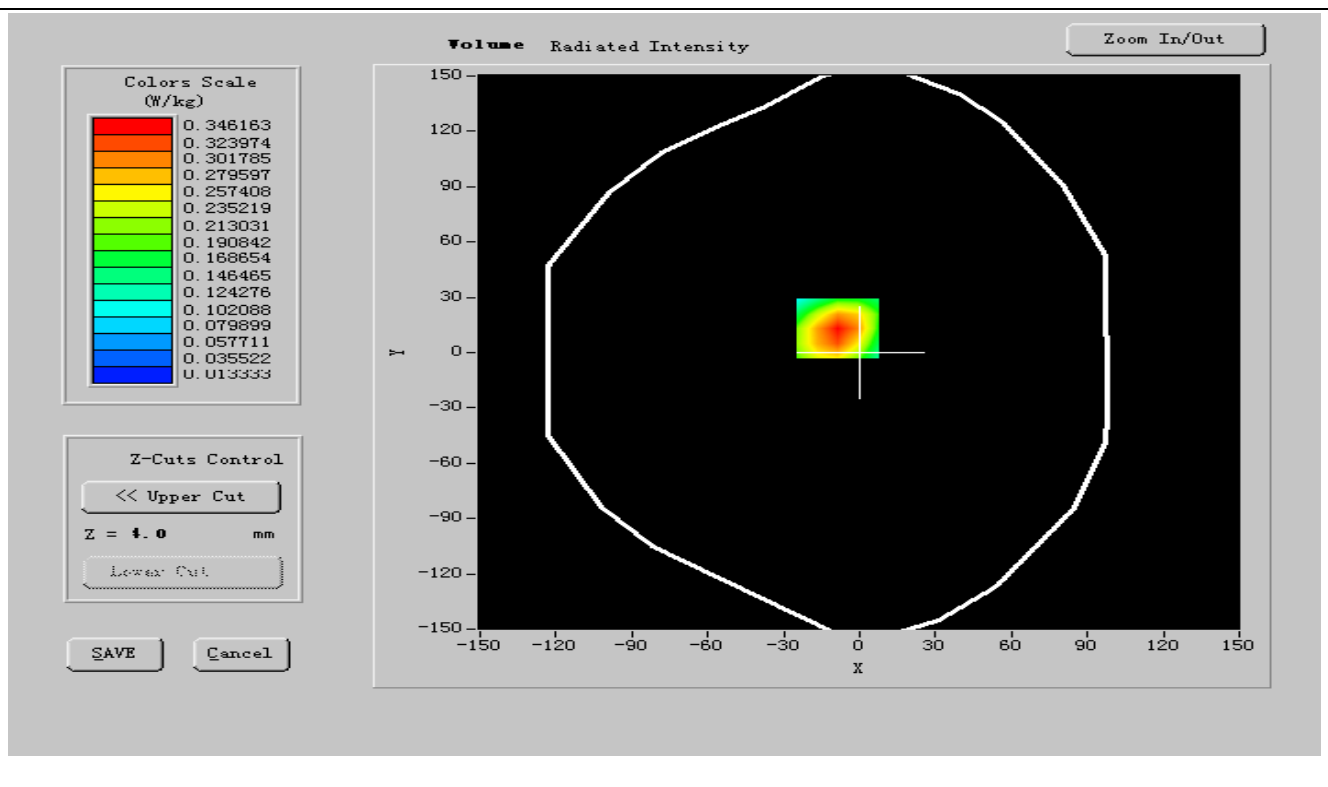
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



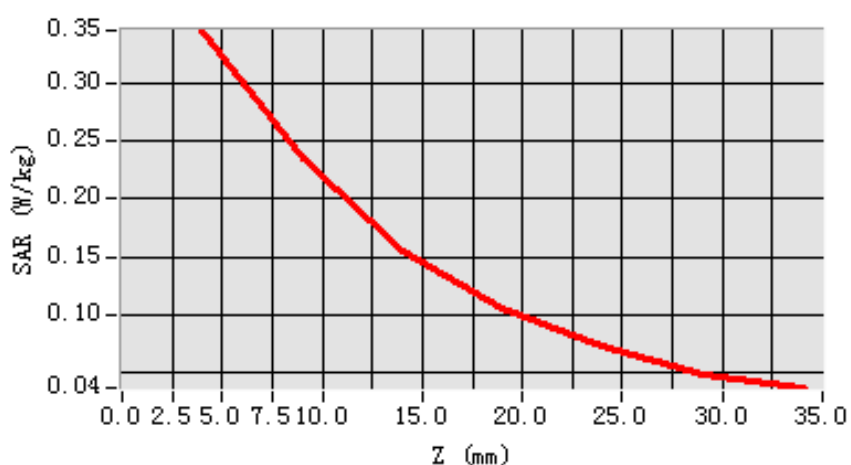


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.202552 |
| SAR 1g (W/Kg)  | 0.275963 |

**Z Axis Scan**

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





## MEASUREMENT 17

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>52.875621</b>   |
| <b>Relative permittivity (imaginary part)</b> | <b>13.814200</b>   |
| <b>Conductivity (S/m)</b>                     | <b>1.513241</b>    |
| <b>Variation (%)</b>                          | <b>-0.720000</b>   |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>       |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>       |



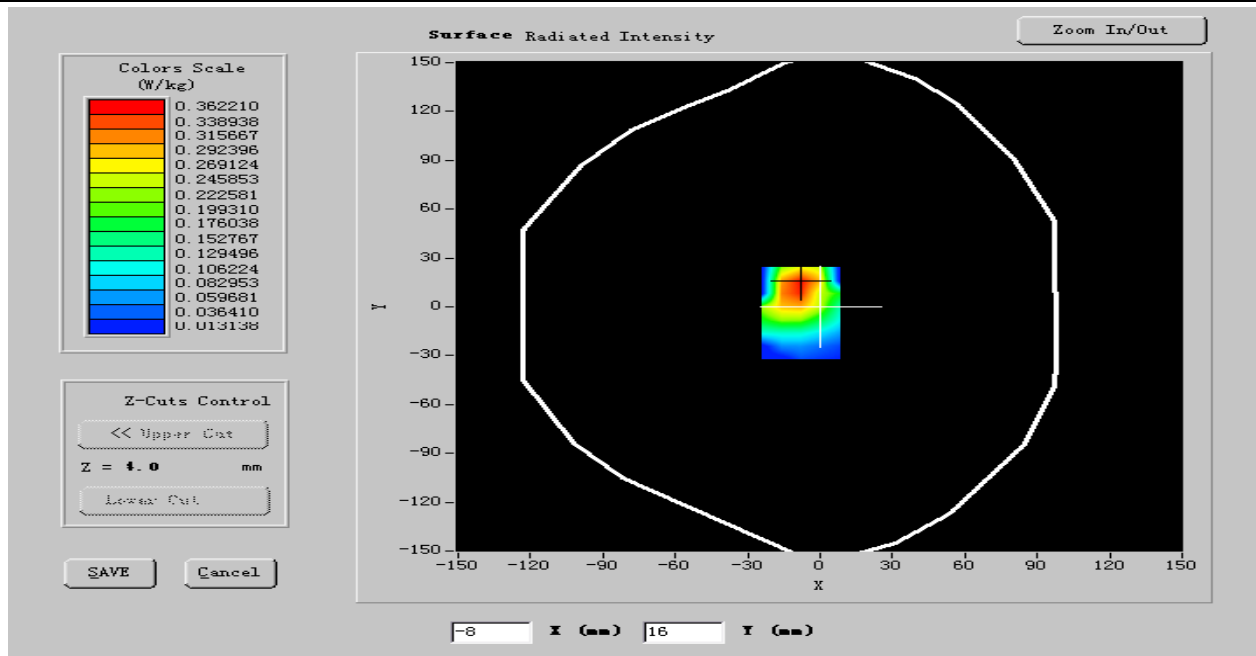
ConvF:

41.01, 42.41, 55.65

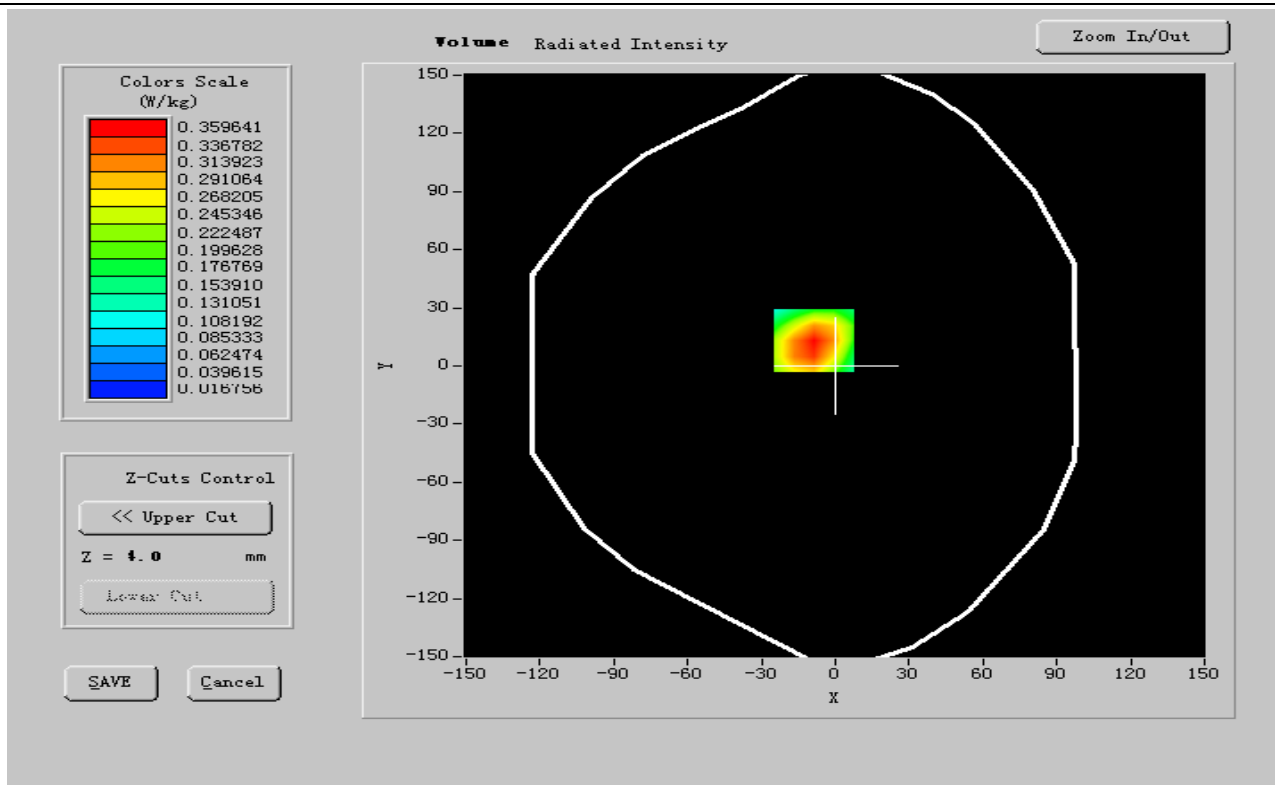
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



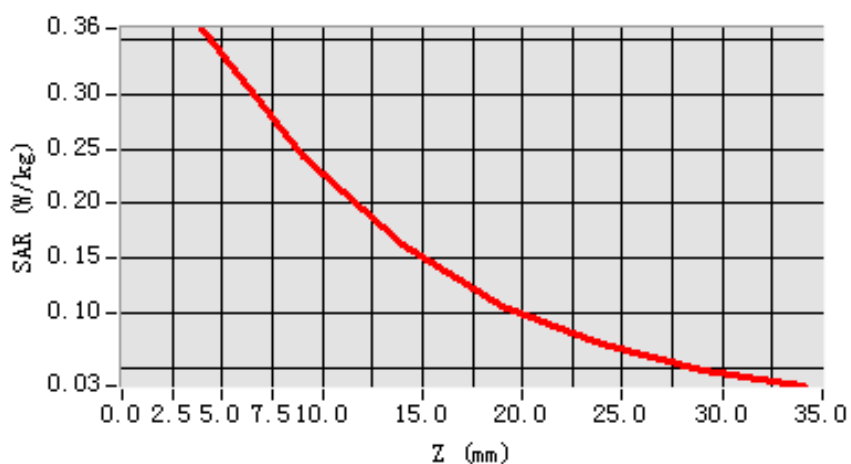


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.212051 |
| SAR 1g (W/Kg)  | 0.296349 |

**Z Axis Scan**

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





## MEASUREMENT 18

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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 permittivity (real part)</b>      | <b>52.884854</b>   |
| <b>Relative permittivity (imaginary part)</b> | <b>13.658620</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>       |



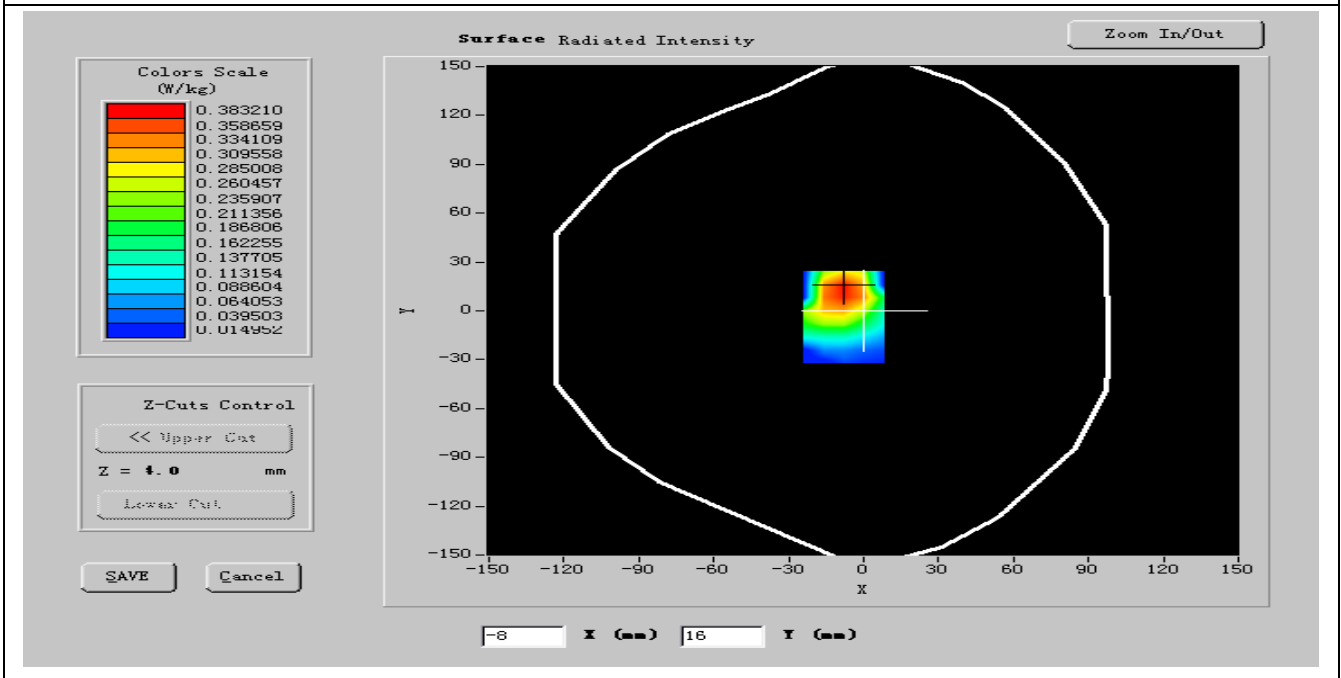
ConvF:

41.01, 42.41, 55.65

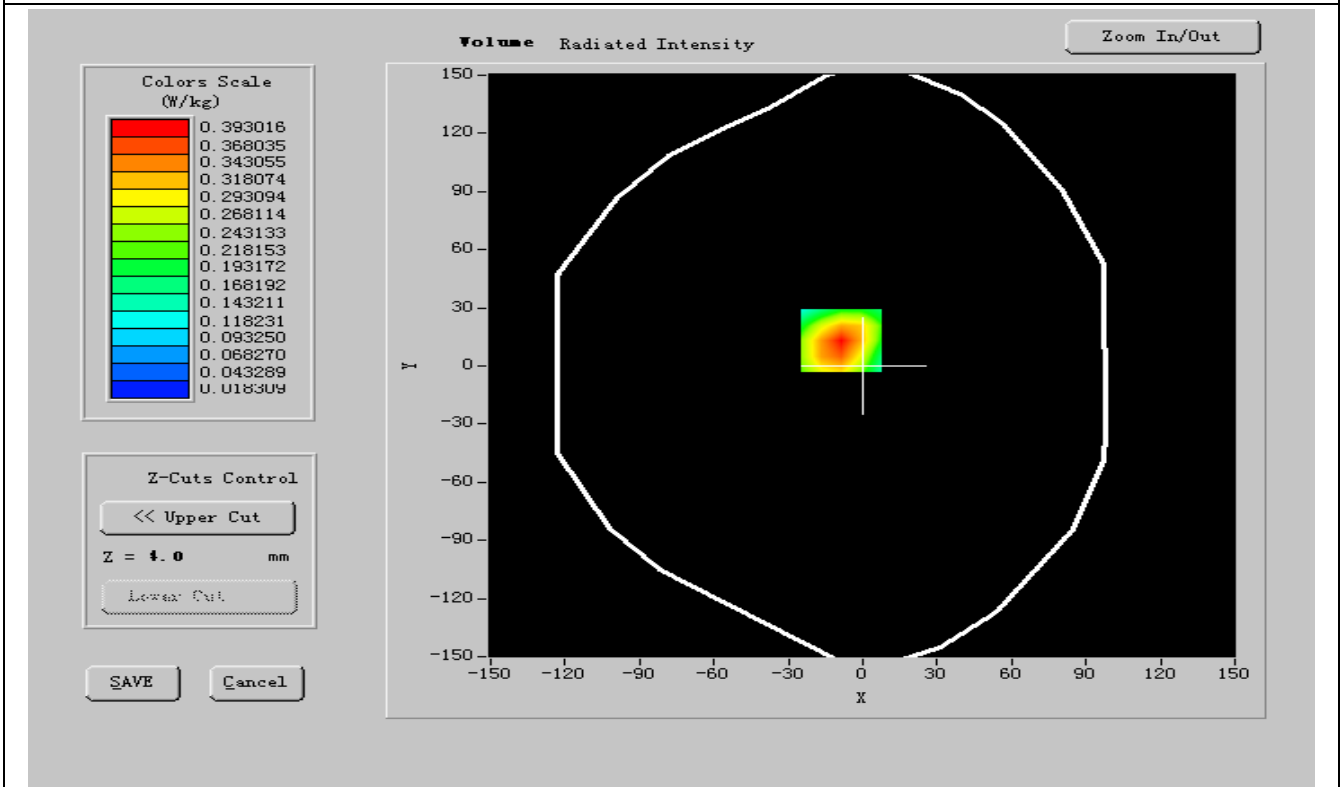
Crest factor:

1:8

## SURFACE SAR



## VOLUME SAR



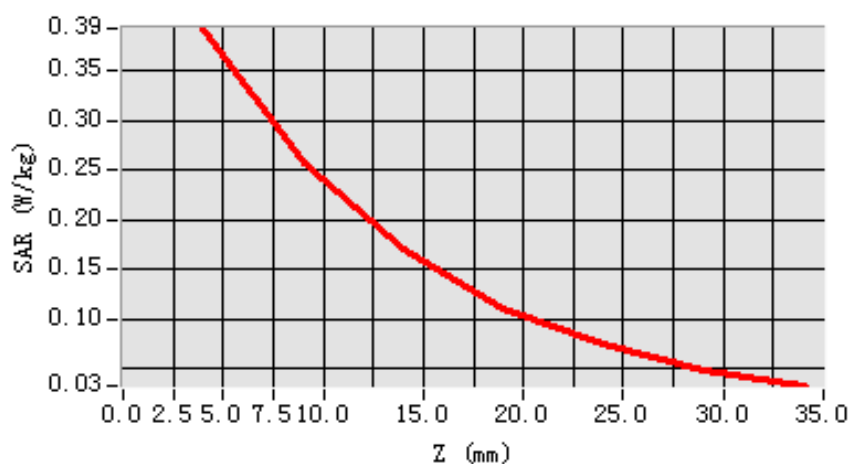


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.242136 |
| SAR 1g (W/Kg)  | 0.327830 |

**Z Axis Scan**

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





## MEASUREMENT 19

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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

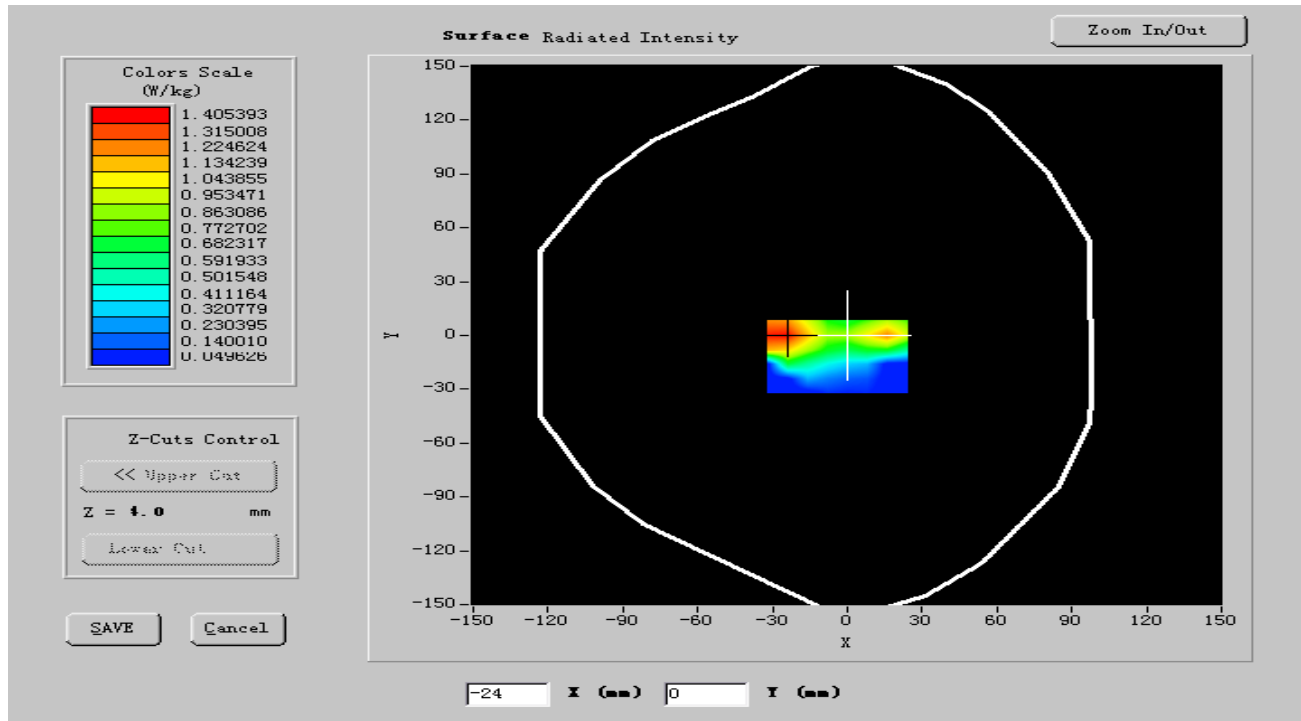
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>1710.199951</b>         |
| <b>Relative permittivity (real part)</b>      | <b>52.347400</b>           |
| <b>Relative permittivity (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>41.01, 42.41, 55.65</b> |



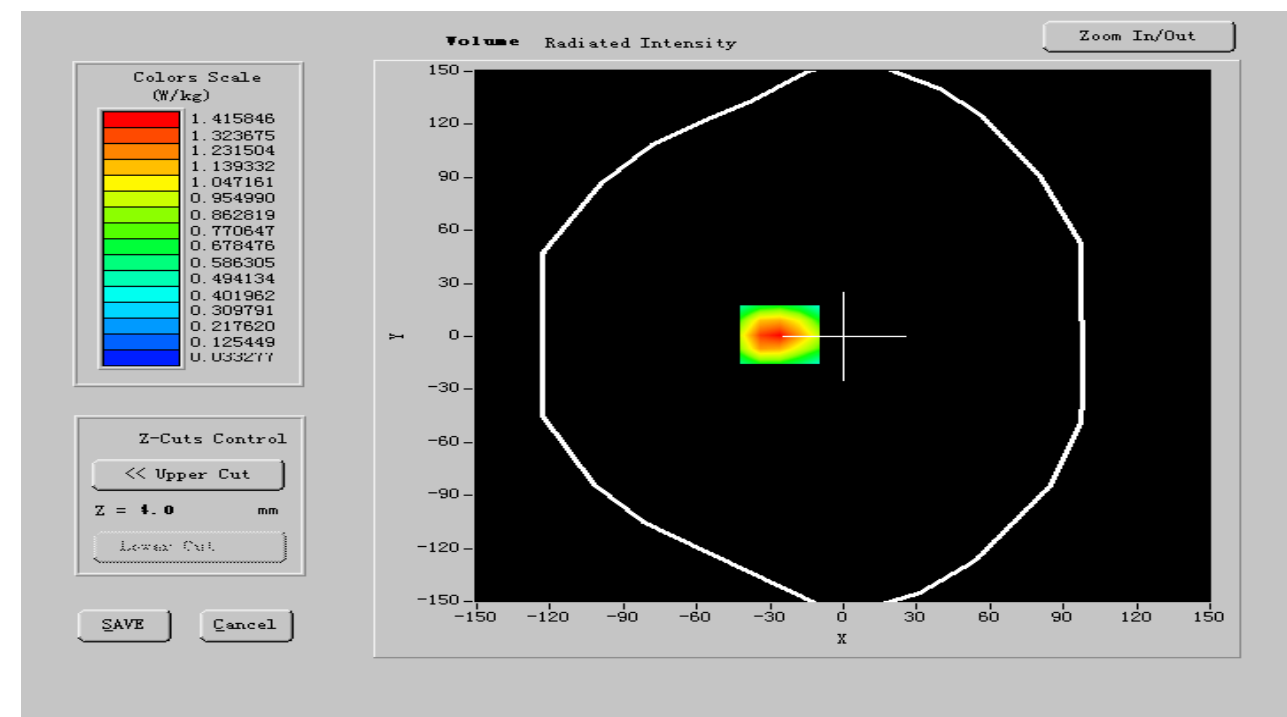
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



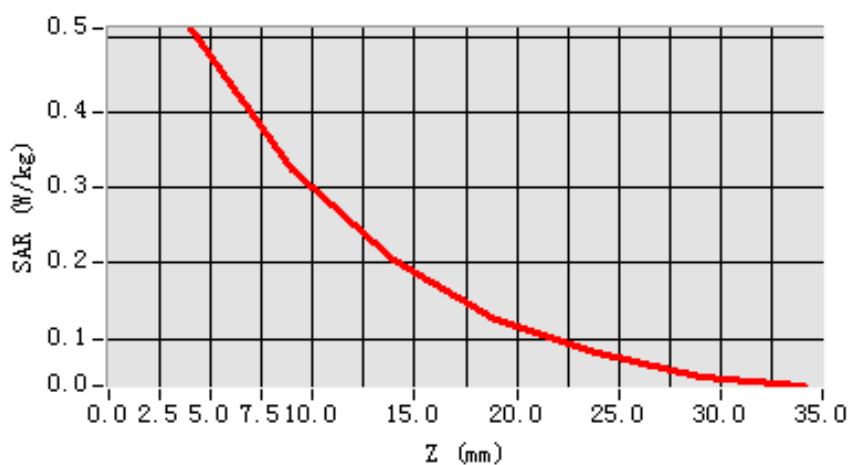


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.219562 |
| SAR 1g (W/Kg)  | 0.418852 |

**Z Axis Scan**

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





## MEASUREMENT 20

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>1747.400004</b> |
| <b>Relative permittivity (real part)</b>      | <b>51.417028</b>   |
| <b>Relative permittivity (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>       |



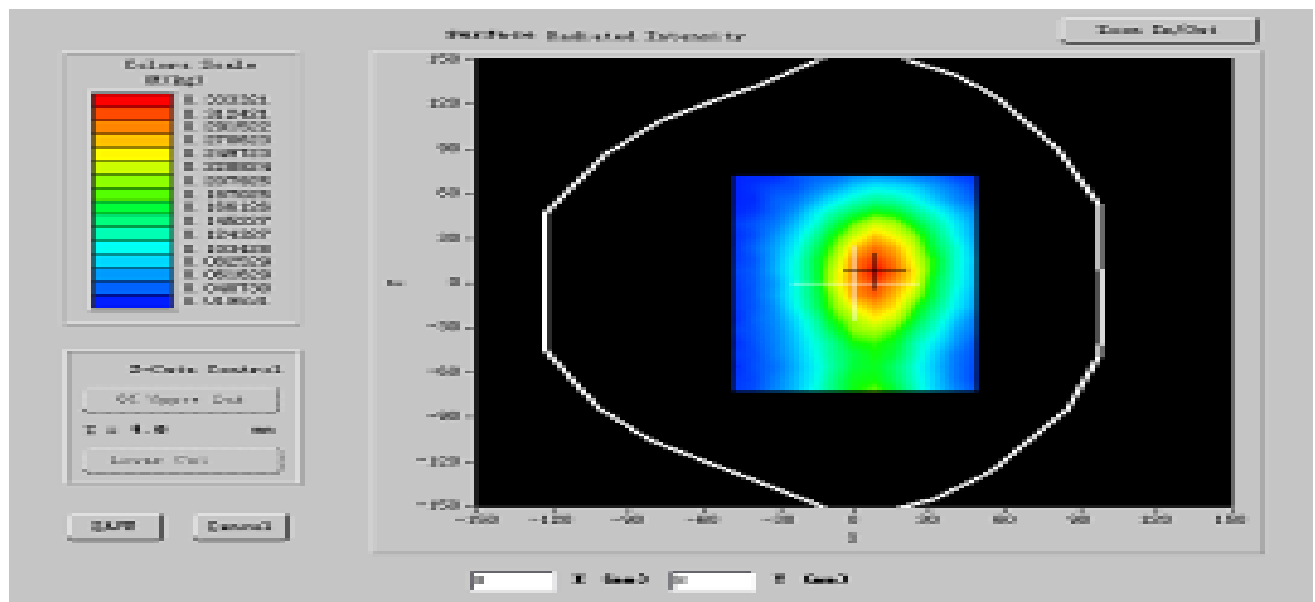
ConvF:

41.01, 42.41, 55.65

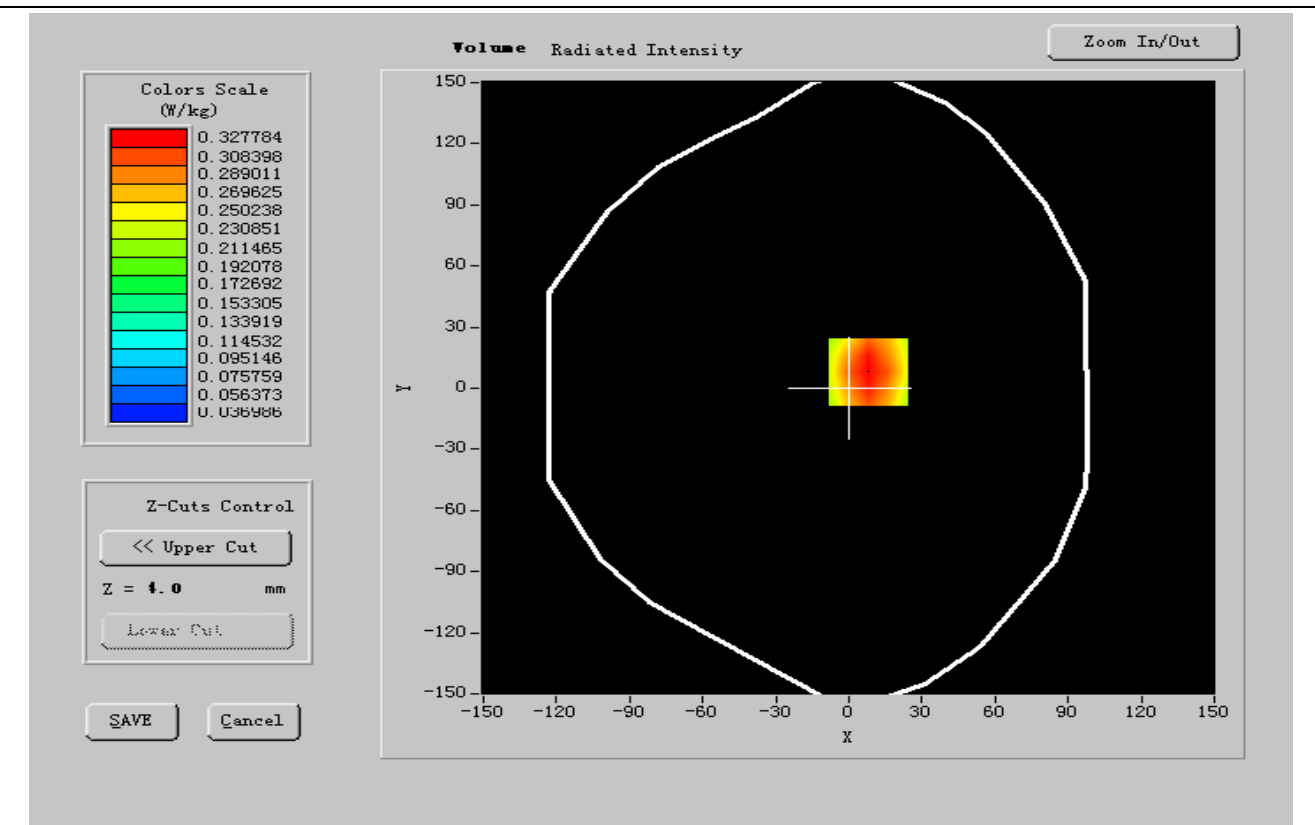
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



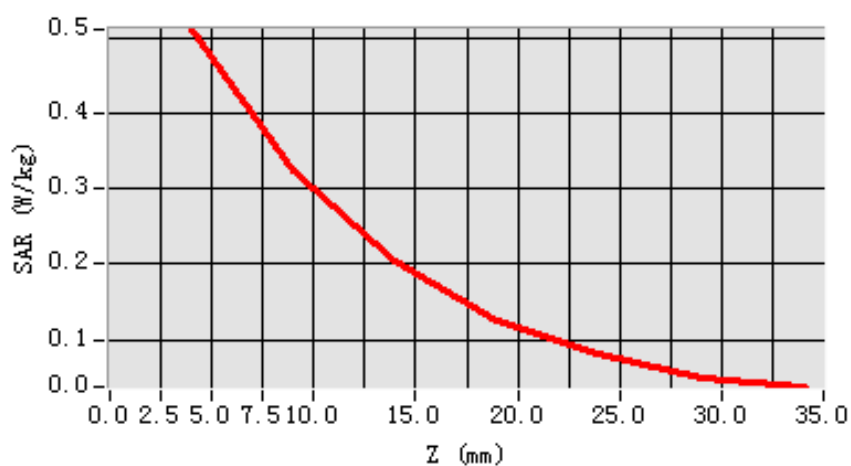


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.215362 |
| SAR 1g (W/Kg)  | 0.424258 |

**Z Axis Scan**

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





## MEASUREMENT 21

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### **A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>1784.599036</b> |
| <b>Relative permittivity (real part)</b>      | <b>51.813332</b>   |
| <b>Relative permittivity (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>       |



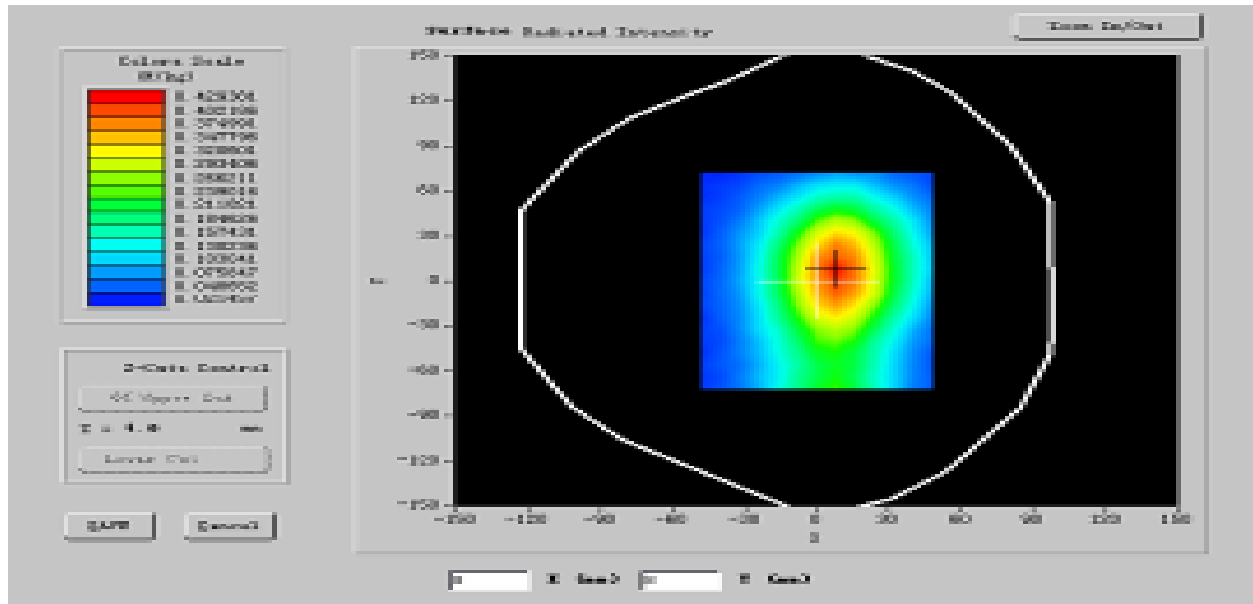
ConvF:

41.01, 42.41, 55.65

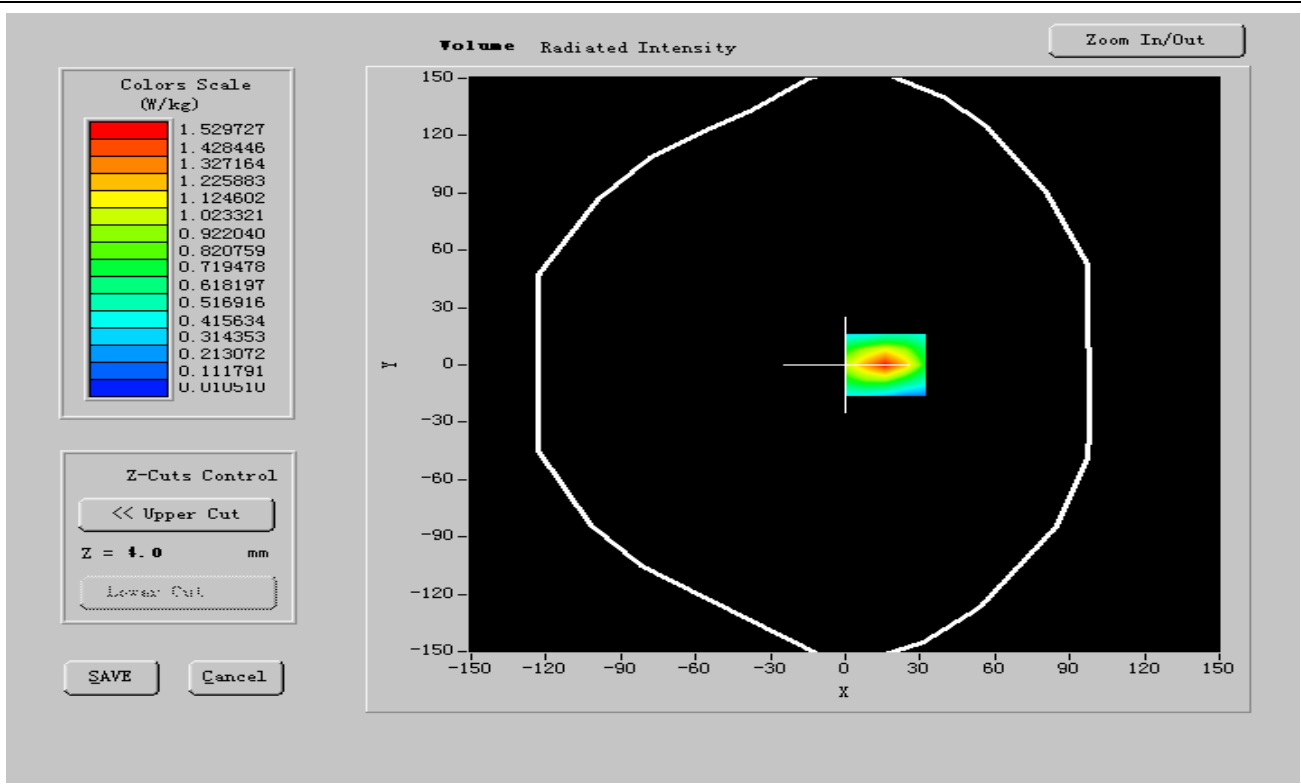
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



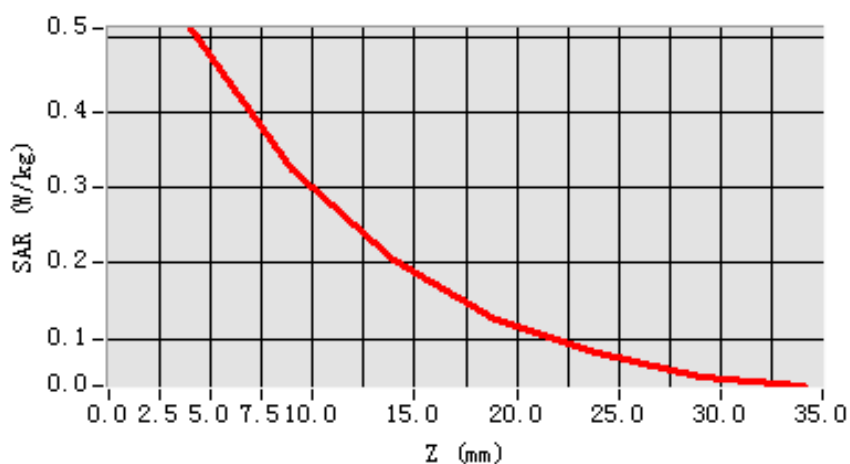


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.265841 |
| SAR 1g (W/Kg)  | 0.446721 |

**Z Axis Scan**

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



**MEASUREMENT 22****Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm****A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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**

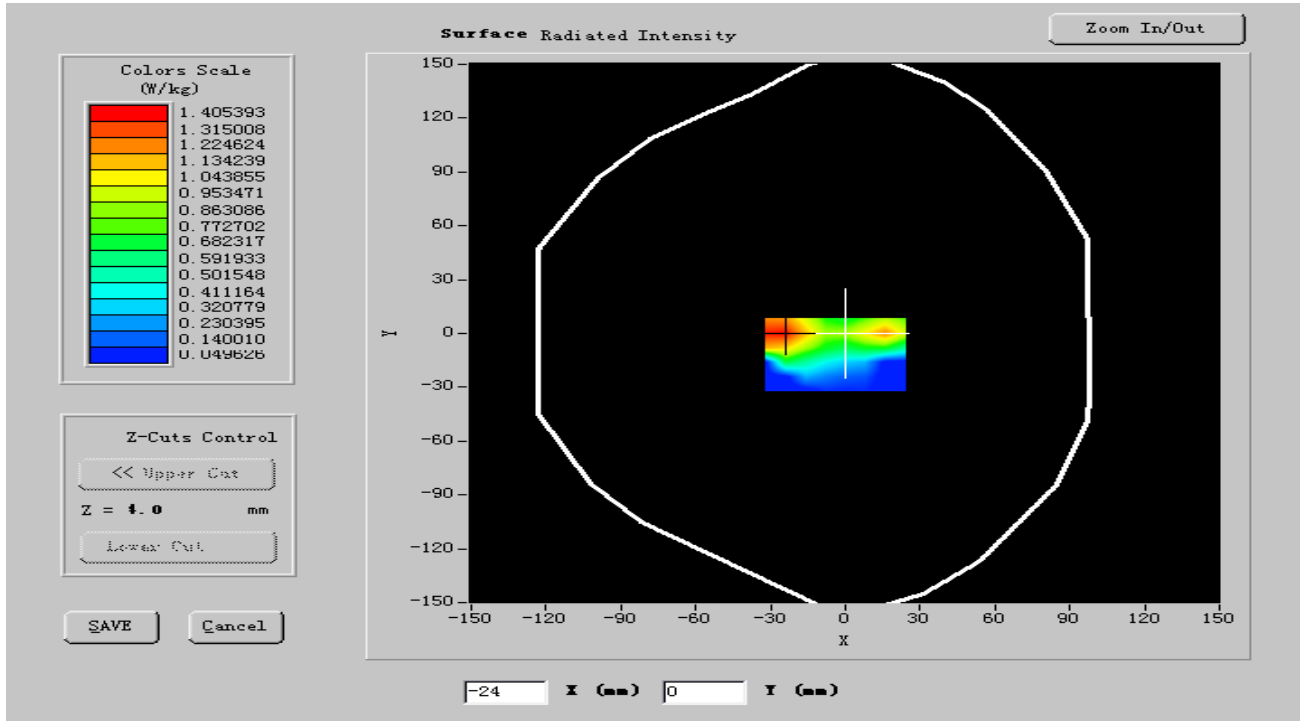
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>1710.199951</b>         |
| <b>Relative permittivity (real part)</b>      | <b>52.362100</b>           |
| <b>Relative permittivity (imaginary part)</b> | <b>14.448303</b>           |
| <b>Conductivity (S/m)</b>                     | <b>1.520398</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>41.01, 42.41, 55.65</b> |



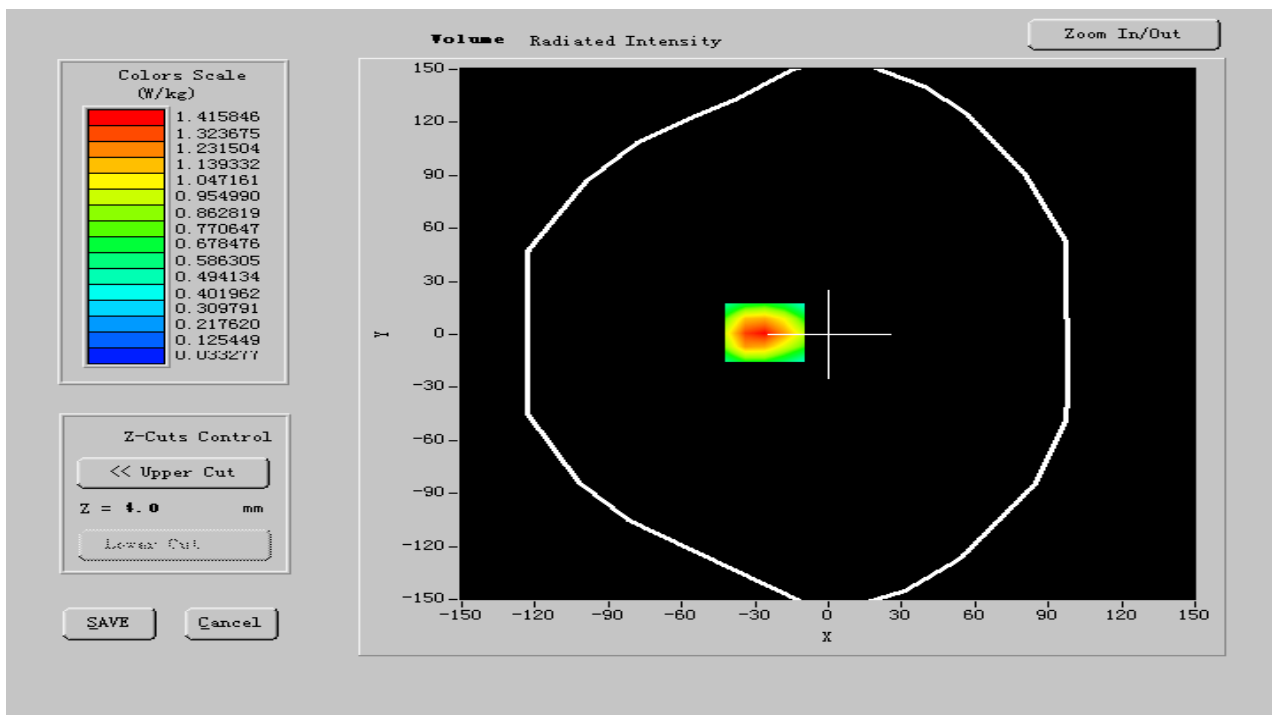
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



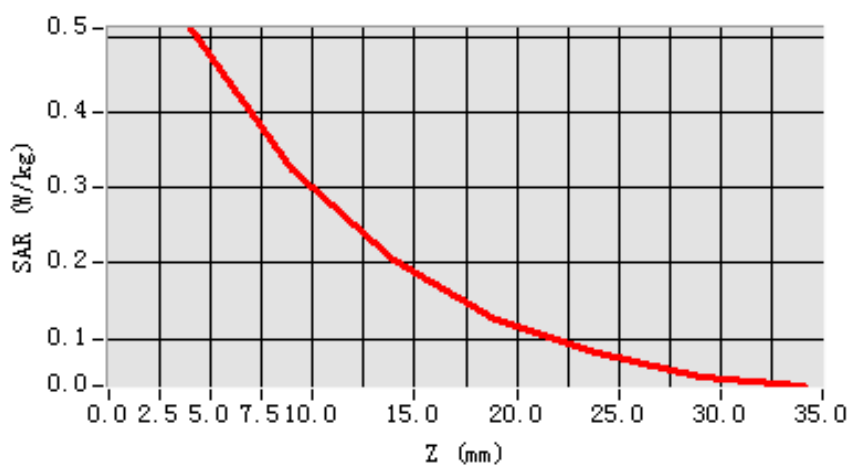


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.203682 |
| SAR 1g (W/Kg)  | 0.442510 |

**Z Axis Scan**

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





## MEASUREMENT 23

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>1747.400004</b> |
| <b>Relative permittivity (real part)</b>      | <b>51.414928</b>   |
| <b>Relative permittivity (imaginary part)</b> | <b>14.293740</b>   |
| <b>Conductivity (S/m)</b>                     | <b>1.513216</b>    |
| <b>Variation (%)</b>                          | <b>-1.000000</b>   |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>       |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>       |



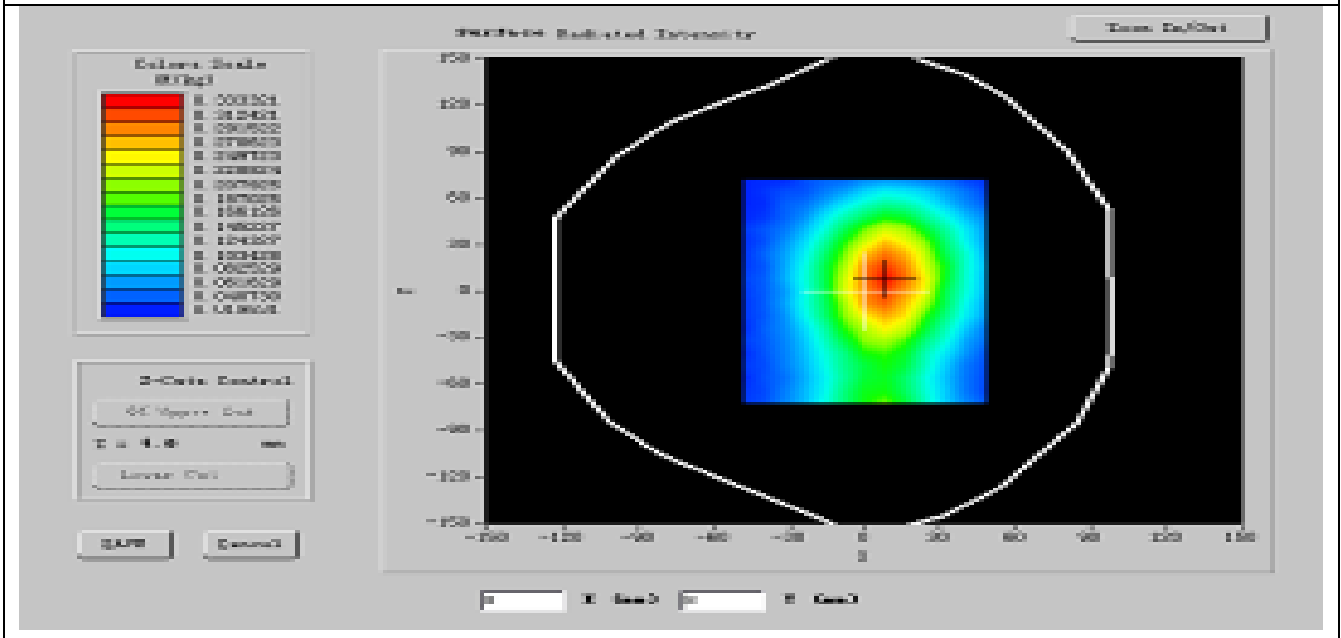
ConvF:

41.01, 42.41, 55.65

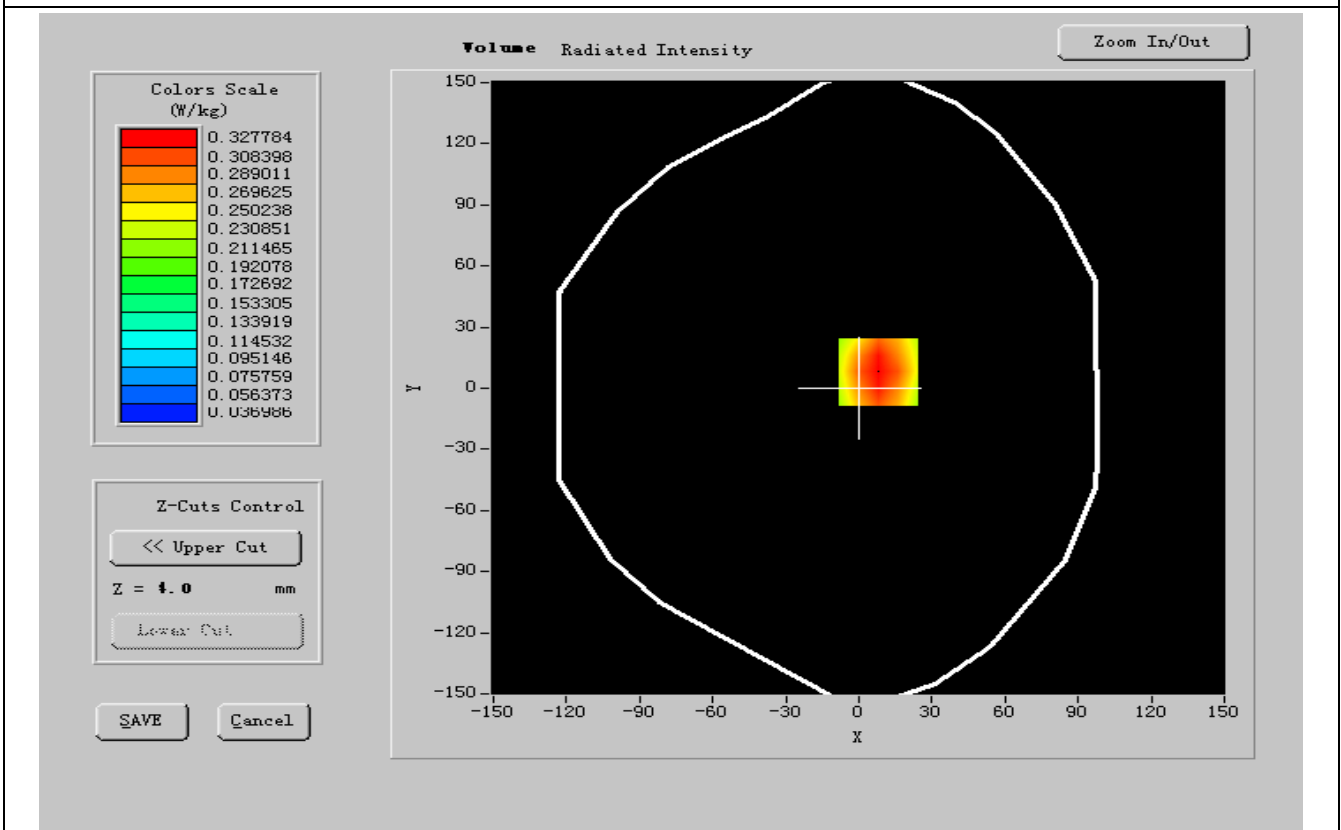
Crest factor:

1:2

### SURFACE SAR



### VOLUME SAR



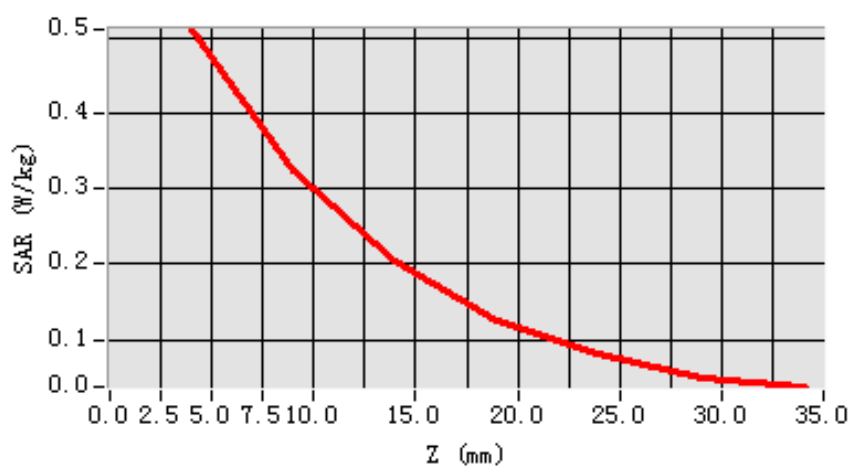


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.215462 |
| SAR 1g (W/Kg)  | 0.395658 |

**Z Axis Scan**

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



**MEASUREMENT 24****Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm****A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide 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,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>1784.599036</b> |
| <b>Relative permittivity (real part)</b>      | <b>51.811452</b>   |
| <b>Relative permittivity (imaginary part)</b> | <b>14.323150</b>   |
| <b>Conductivity (S/m)</b>                     | <b>1.514304</b>    |
| <b>Variation (%)</b>                          | <b>-0.120000</b>   |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>       |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>       |



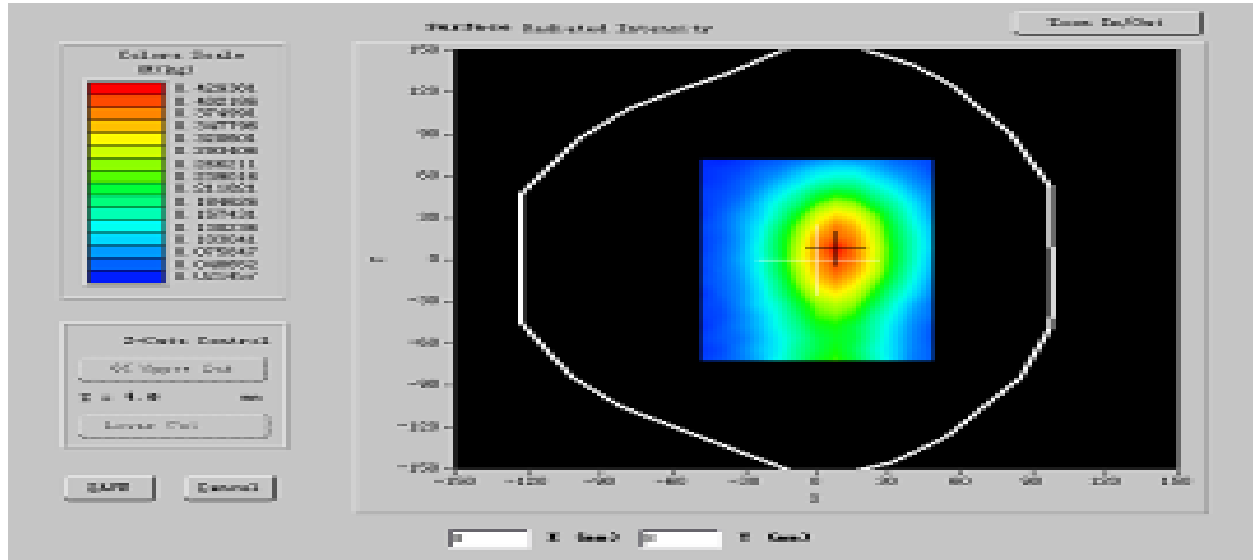
ConvF:

41.01, 42.41, 55.65

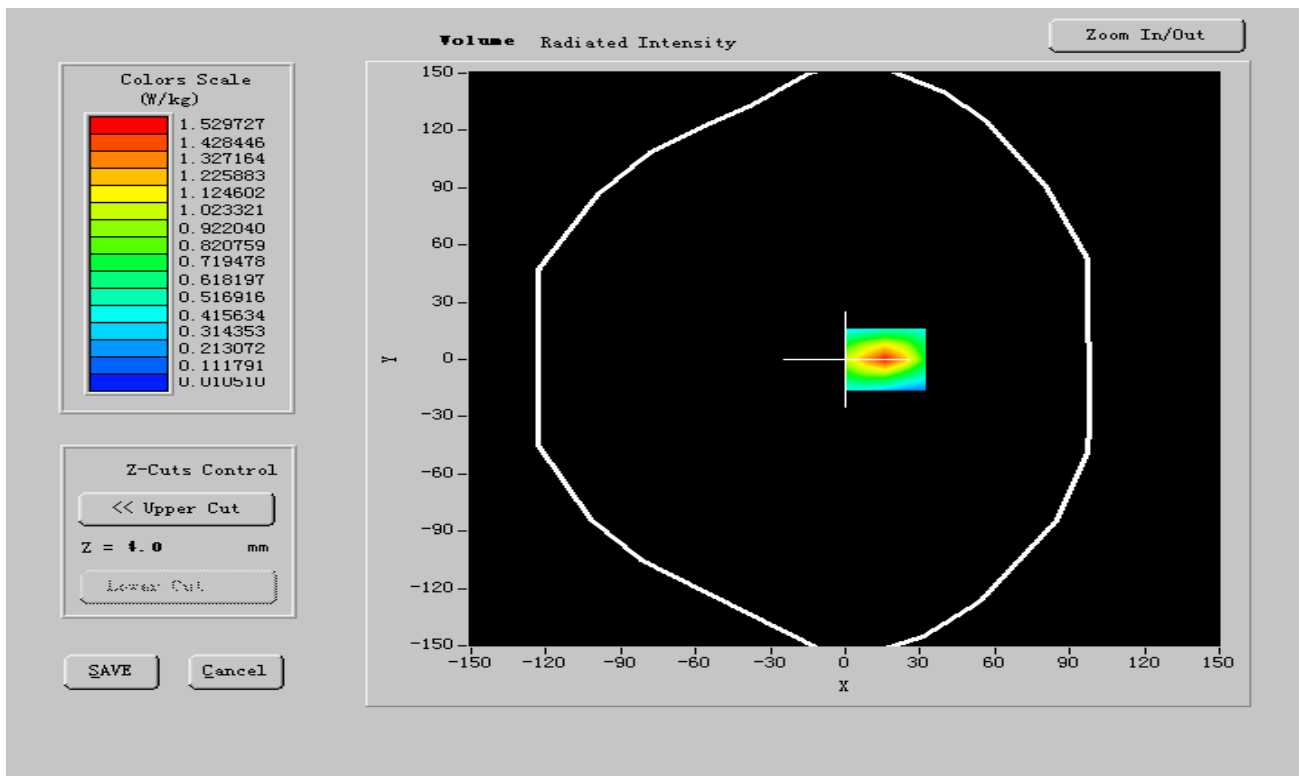
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



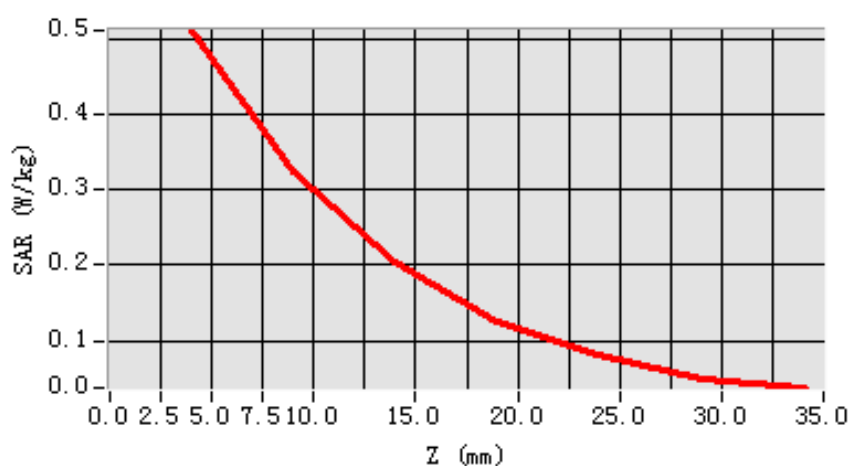


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.246921 |
| SAR 1g (W/Kg)  | 0.406312 |

**Z Axis Scan**

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



**MEASUREMENT 25****Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm****A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | FrontSide toward phantom   |
| <b>Band</b>            | EDGE1900                   |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | EDGE                       |

**B. Instrumentations.**

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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**

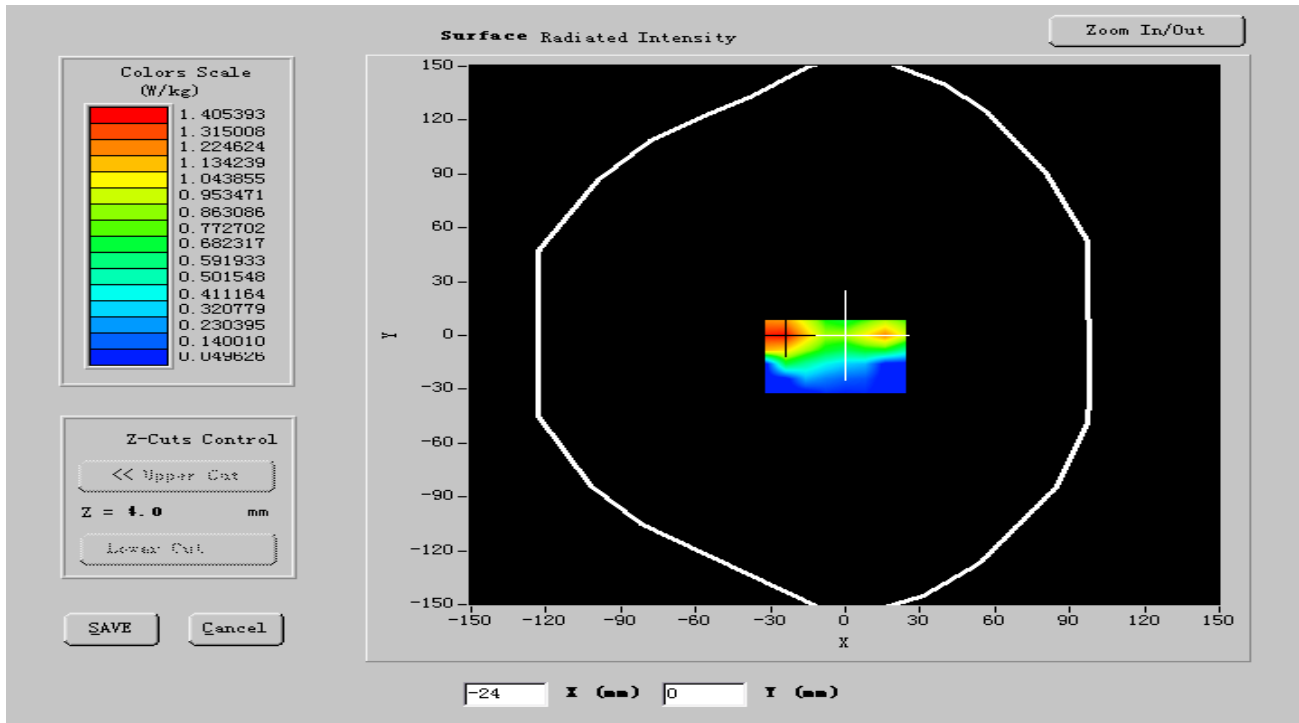
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>1710.199951</b>         |
| <b>Relative permittivity (real part)</b>      | <b>52.347400</b>           |
| <b>Relative permittivity (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>41.01, 42.41, 55.65</b> |



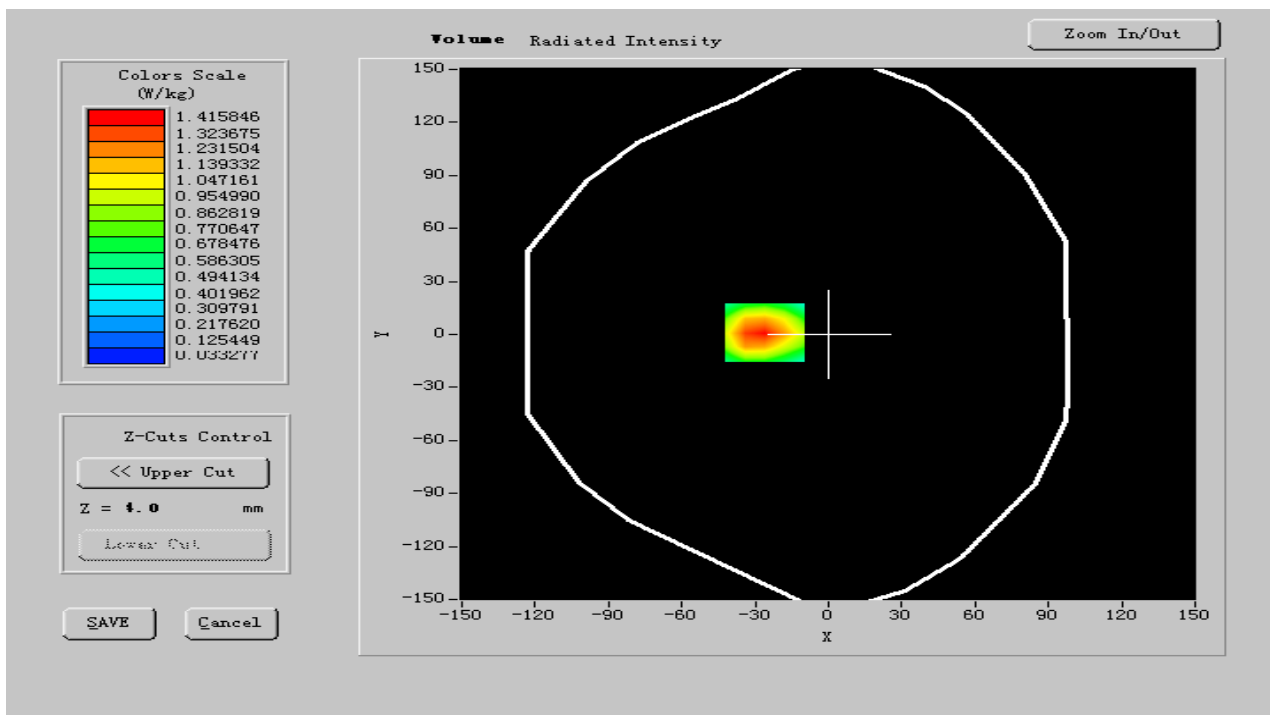
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



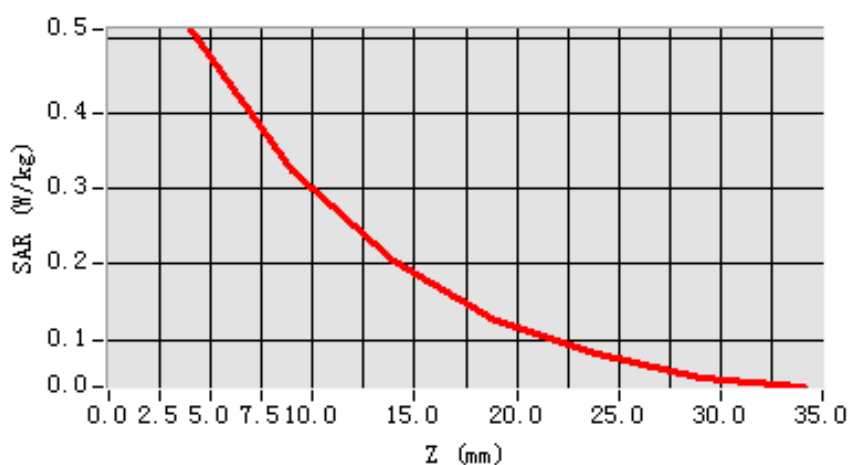


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.192140 |
| SAR 1g (W/Kg)  | 0.452101 |

**Z Axis Scan**

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





## MEASUREMENT 26

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | FrontSide toward phantom   |
| <b>Band</b>            | EDGE 1900                  |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | EDGE                       |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>1747.400004</b> |
| <b>Relative permittivity (real part)</b>      | <b>51.417028</b>   |
| <b>Relative permittivity (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>       |



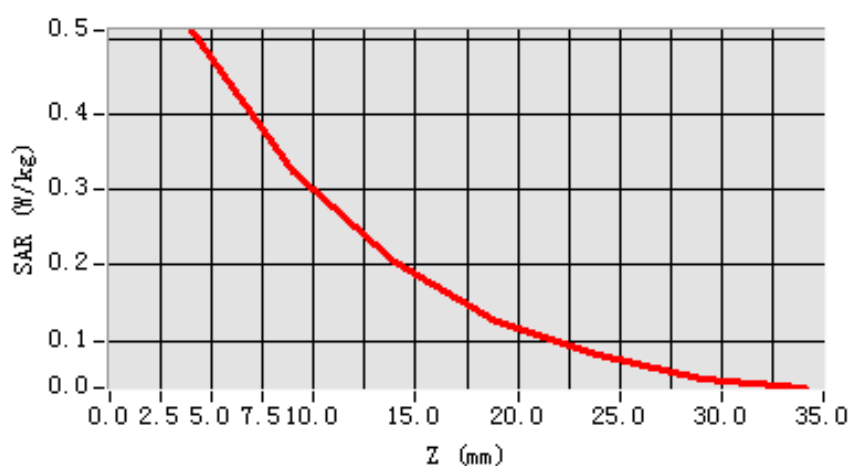


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.210212 |
| SAR 1g (W/Kg)  | 0.403521 |

**Z Axis Scan**

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



**MEASUREMENT 27****Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm****A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | FrontSide toward phantom   |
| <b>Band</b>            | EDGE 1900                  |
| <b>Channels</b>        | High                       |
| <b>Signal</b>          | EDGE                       |

**B. Instrumentations.**

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>1784.599036</b> |
| <b>Relative permittivity (real part)</b>      | <b>51.813332</b>   |
| <b>Relative permittivity (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>       |



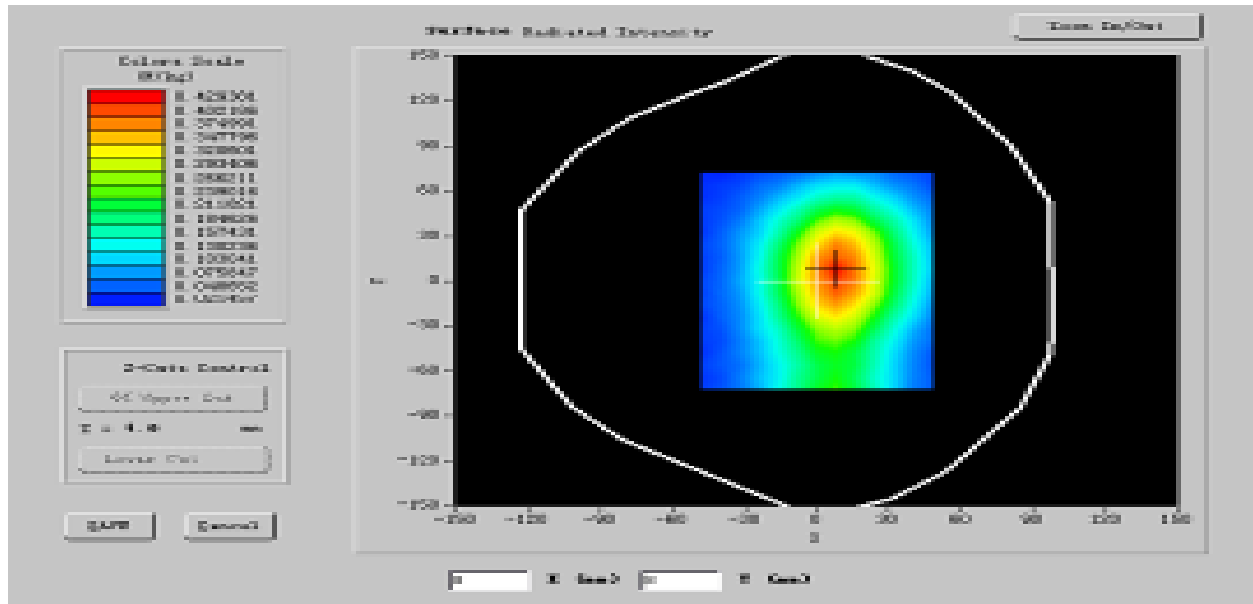
ConvF:

41.01, 42.41, 55.65

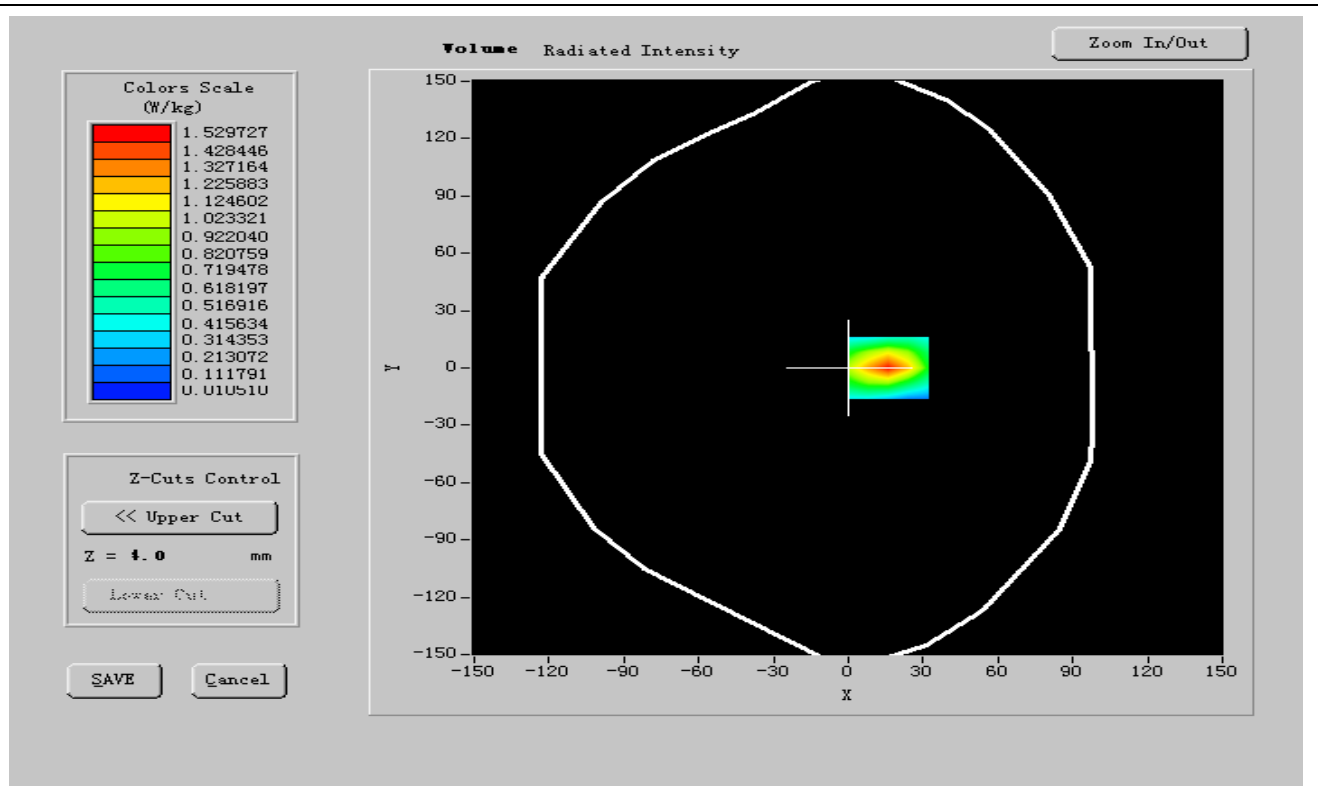
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



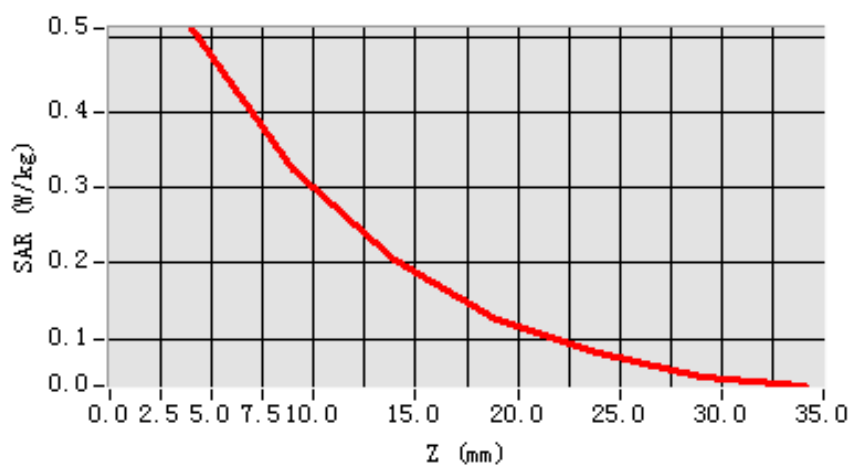


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.261441 |
| SAR 1g (W/Kg)  | 0.405411 |

**Z Axis Scan**

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



**MEASUREMENT 28****Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm****A. Experimental conditions.**

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide toward phantom    |
| <b>Band</b>            | EDGE1900                   |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | EDGE                       |

**B. Instrumentations.**

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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**

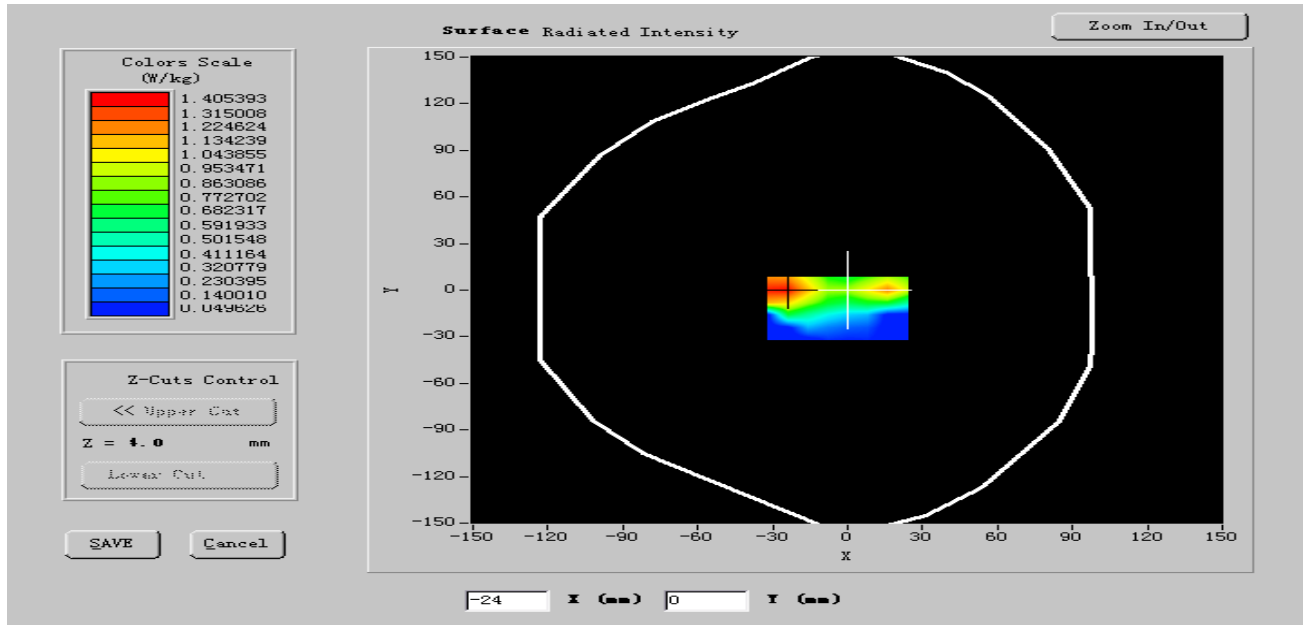
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>1710.199951</b>         |
| <b>Relative permittivity (real part)</b>      | <b>52.347300</b>           |
| <b>Relative permittivity (imaginary part)</b> | <b>14.451641</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>41.01, 42.41, 55.65</b> |



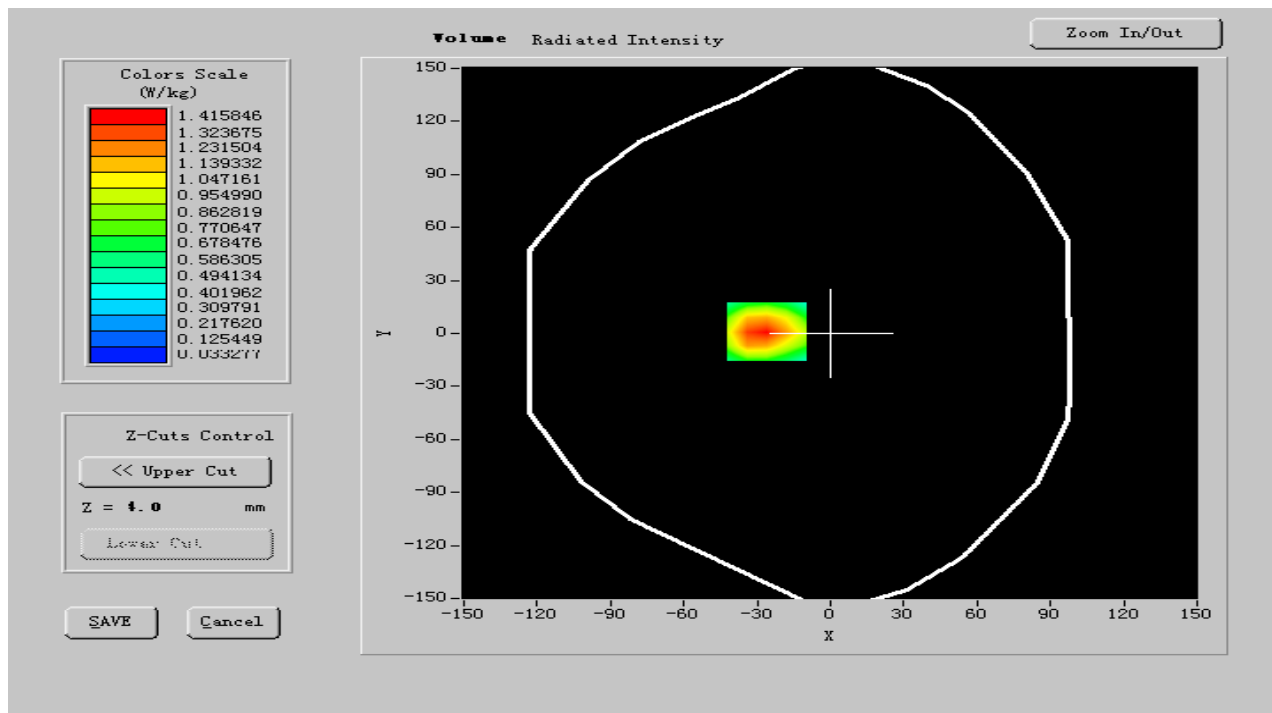
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



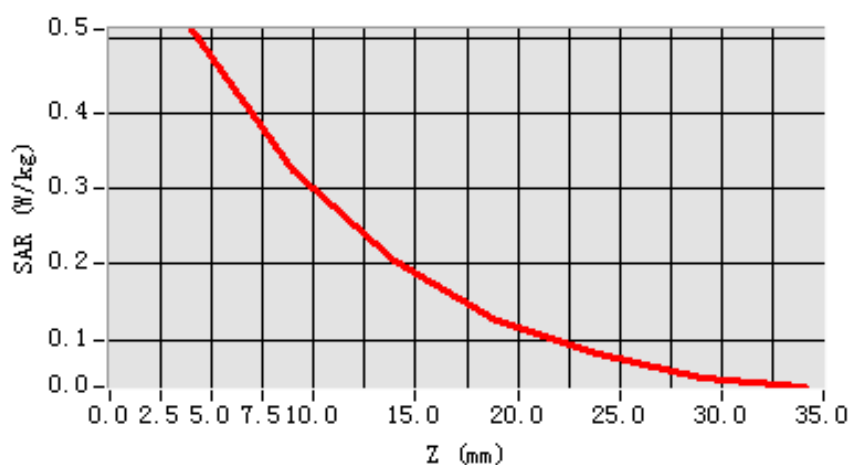


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.212662 |
| SAR 1g (W/Kg)  | 0.415521 |

**Z Axis Scan**

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





## MEASUREMENT 29

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide toward phantom    |
| <b>Band</b>            | EDGE 1900                  |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | EDGE                       |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>1747.400004</b> |
| <b>Relative permittivity (real part)</b>      | <b>51.418410</b>   |
| <b>Relative permittivity (imaginary part)</b> | <b>14.293614</b>   |
| <b>Conductivity (S/m)</b>                     | <b>1.514284</b>    |
| <b>Variation (%)</b>                          | <b>-1.010000</b>   |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>       |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>       |



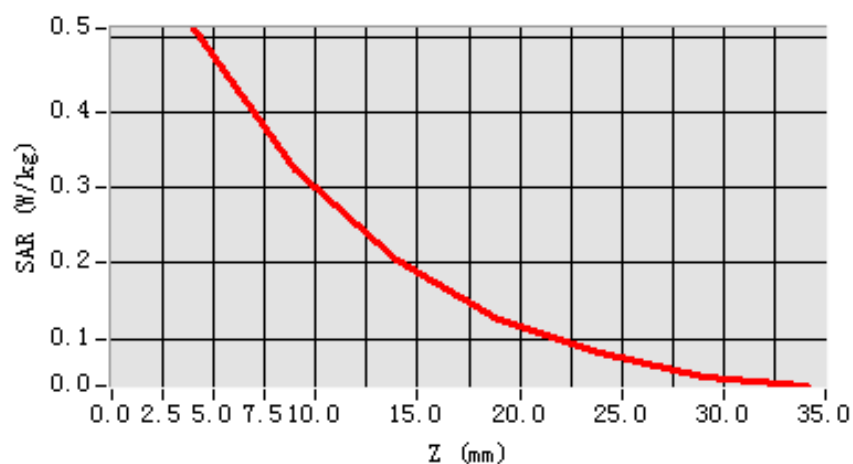


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.212300 |
| SAR 1g (W/Kg)  | 0.378911 |

**Z Axis Scan**

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





## MEASUREMENT 30

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Body                       |
| <b>Device Position</b> | BackSide toward phantom    |
| <b>Band</b>            | EDGE 1900                  |
| <b>Channels</b>        | High                       |
| <b>Signal</b>          | EDGE                       |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI36, SN 48/05)</b>               | <b>Calibration Due: 02/09/2012</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>1784.599036</b> |
| <b>Relative permittivity (real part)</b>      | <b>51.815412</b>   |
| <b>Relative permittivity (imaginary part)</b> | <b>14.318561</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>       |



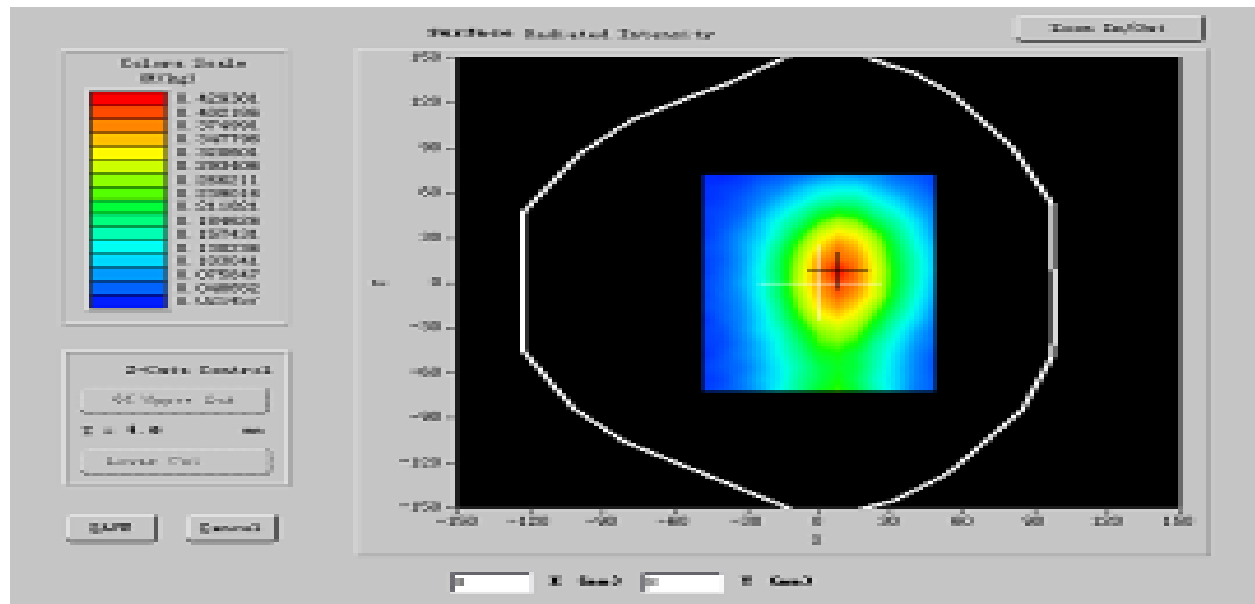
ConvF:

41.01, 42.41, 55.65

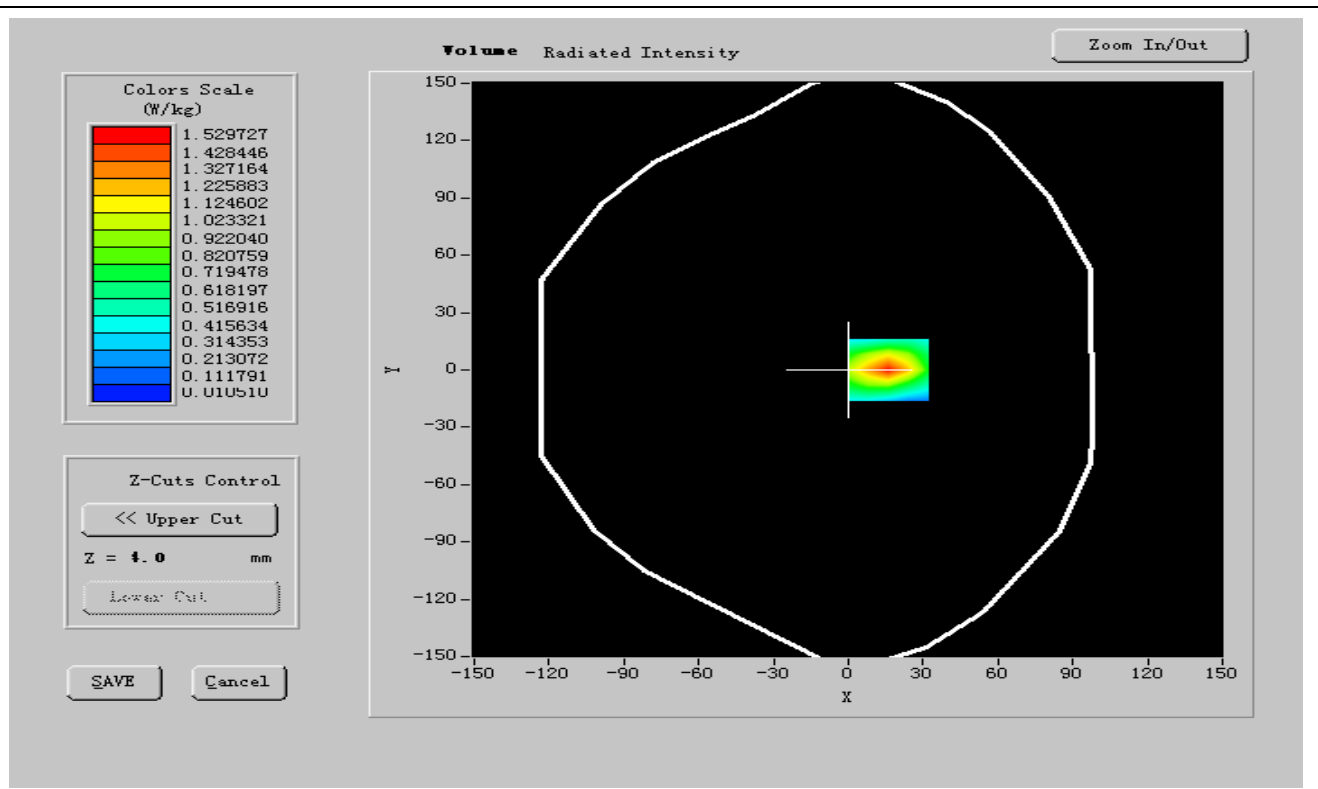
Crest factor:

1:2

## SURFACE SAR



## VOLUME SAR



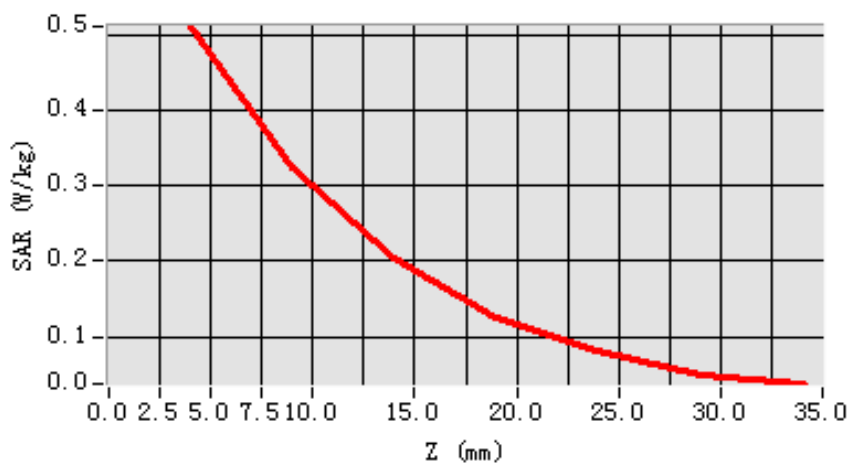


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.267412 |
| SAR 1g (W/Kg)  | 0.395411 |

**Z Axis Scan**

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



**III. WCDMA BAND V RESULTS**

| <b><u>TYPE</u></b>  | <b><u>PARAMETERS</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Phone</u></b> | <u>Measurement 1:</u> Right Head with Cheek device position on Low Channel in WCDMA band V mode<br><u>Measurement 2:</u> Right Head with Cheek device position on Middle Channel in WCDMA band V mode<br><u>Measurement 3:</u> Right Head with Cheek device position on High Channel in WCDMA band V mode<br><u>Measurement 4:</u> Right Head with Tilt device position on Low Channel in WCDMA band V mode<br><u>Measurement 5:</u> Right Head with Tilt device position on Middle Channel in WCDMA band V mode<br><u>Measurement 6:</u> Right Head with Tilt device position on High Channel in WCDMA band V mode<br><u>Measurement 7:</u> Left Head with Cheek device position on Low Channel in WCDMA band V mode<br><u>Measurement 8:</u> Left Head with Cheek device position on Middle Channel in WCDMA band V mode<br><u>Measurement 9:</u> Left Head with Cheek device position on High Channel in WCDMA band V mode<br><u>Measurement 10:</u> Left Head with Tilt device position on Low Channel in WCDMA band V mode<br><u>Measurement 11:</u> Left Head with Tilt device position on Middle Channel in WCDMA band V mode<br><u>Measurement 12:</u> Left Head with Tilt device position on High Channel in WCDMA band V mode<br><u>Measurement 13:</u> FrontSide toward phantom 15mm on Low Channel in WCDMA band V mode<br><u>Measurement 14:</u> FrontSide toward phantom 15mm on Middle Channel in WCDMA band V mode<br><u>Measurement 15:</u> FrontSide toward phantom 15mm on High Channel in WCDMA band V mode<br><u>Measurement 16:</u> BackSide toward phantom 15mm on Low Channel in WCDMA band V mode<br><u>Measurement 17:</u> BackSide toward phantom 15mm on Middle Channel in WCDMA band V mode<br><u>Measurement 18:</u> BackSide toward phantom 15mm on High Channel in WCDMA band V mode<br><u>Measurement 19:</u> FrontSide toward phantom 15mm on Low Channel in HSDPA band V mode<br><u>Measurement 20:</u> FrontSide toward phantom 15mm on Middle |



|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Channel in HSDPA band V mode</p> <p><u>Measurement 21:</u> FrontSide toward phantom 15mm on High</p> <p>Channel in HSDPA band V mode</p> <p><u>Measurement 22:</u> BackSide toward phantom 15mm on Low</p> <p>Channel in HSDPA band V mode</p> <p><u>Measurement 23:</u> BackSide toward phantom 15mm on Middle</p> <p>Channel in HSDPA band V mode</p> <p><u>Measurement 24:</u> BackSide toward phantom 15mm on High</p> <p>Channel in HSDPA band V mode</p> |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## MEASUREMENT 1

Date of measurement: 02/20/2011

Area Scan: 7 x 7 x 1

dx=15mm

dy=15mm

Zoom Scan: 5 x 5 x 7

dx=5mm

dy=5mm

dz=5mm

Z Axis Scan: 1 x 1 x 21

dx=20mm

dy=20mm

dz=5mm

### A. Experimental conditions.

|                 |                            |
|-----------------|----------------------------|
| Phantom File    | zinf15.txt, Adaptive 2 max |
| Phantom         | Right head                 |
| Device Position | Cheek                      |
| Band            | WCDMA band V               |
| Channels        | Low                        |
| Signal          | WCDMA                      |

### B. Instrumentations.

|                                    |                                            |                             |
|------------------------------------|--------------------------------------------|-----------------------------|
| PC                                 | HP (Pentium(R) V3.06GHz,<br>SN:375052-AA1) | Calibrated: N/A             |
| Wireless Communication<br>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: 02/09/2012 |
| 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

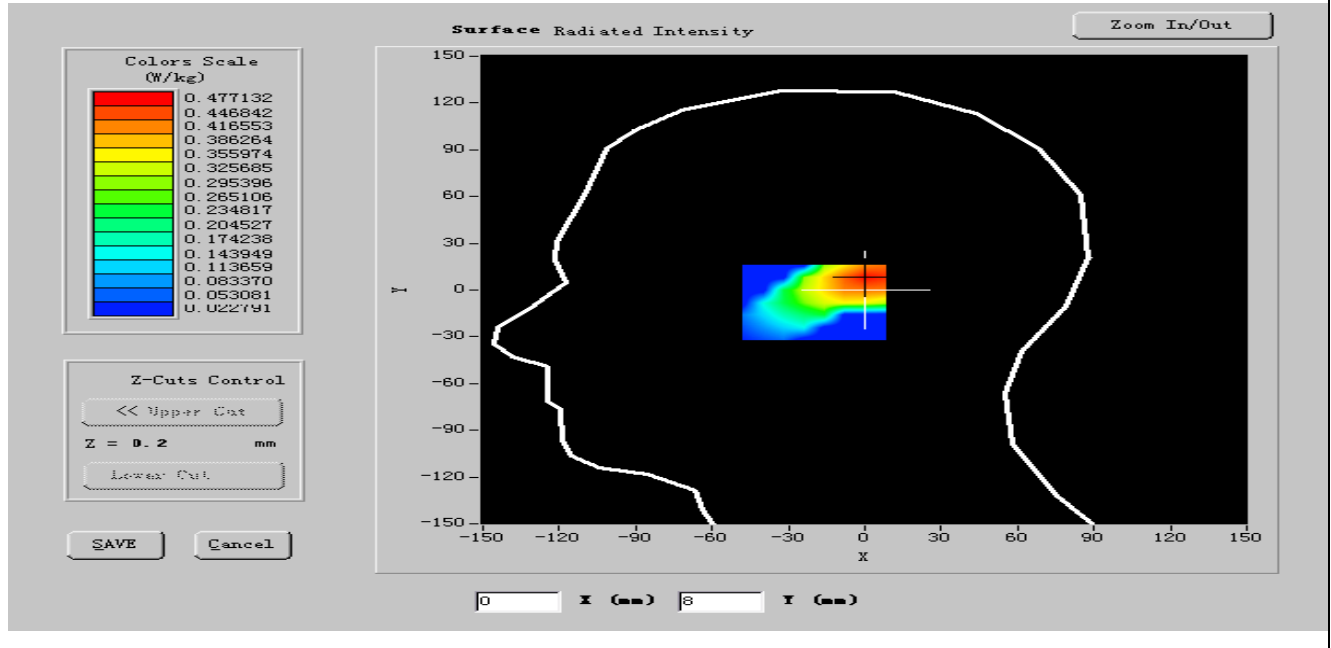
|                                        |                     |
|----------------------------------------|---------------------|
| Frequency (MHz)                        | 826.200001          |
| Relative permittivity (real part)      | 41.491777           |
| Relative permittivity (imaginary part) | 19.510000           |
| Conductivity (S/m)                     | 0.923144            |
| Variation (%)                          | -1.450000           |
| Ambient Temperature:                   | 21 °C               |
| Liquid Temperature:                    | 20 °C               |
| ConvF:                                 | 20.66, 20.51, 28.36 |



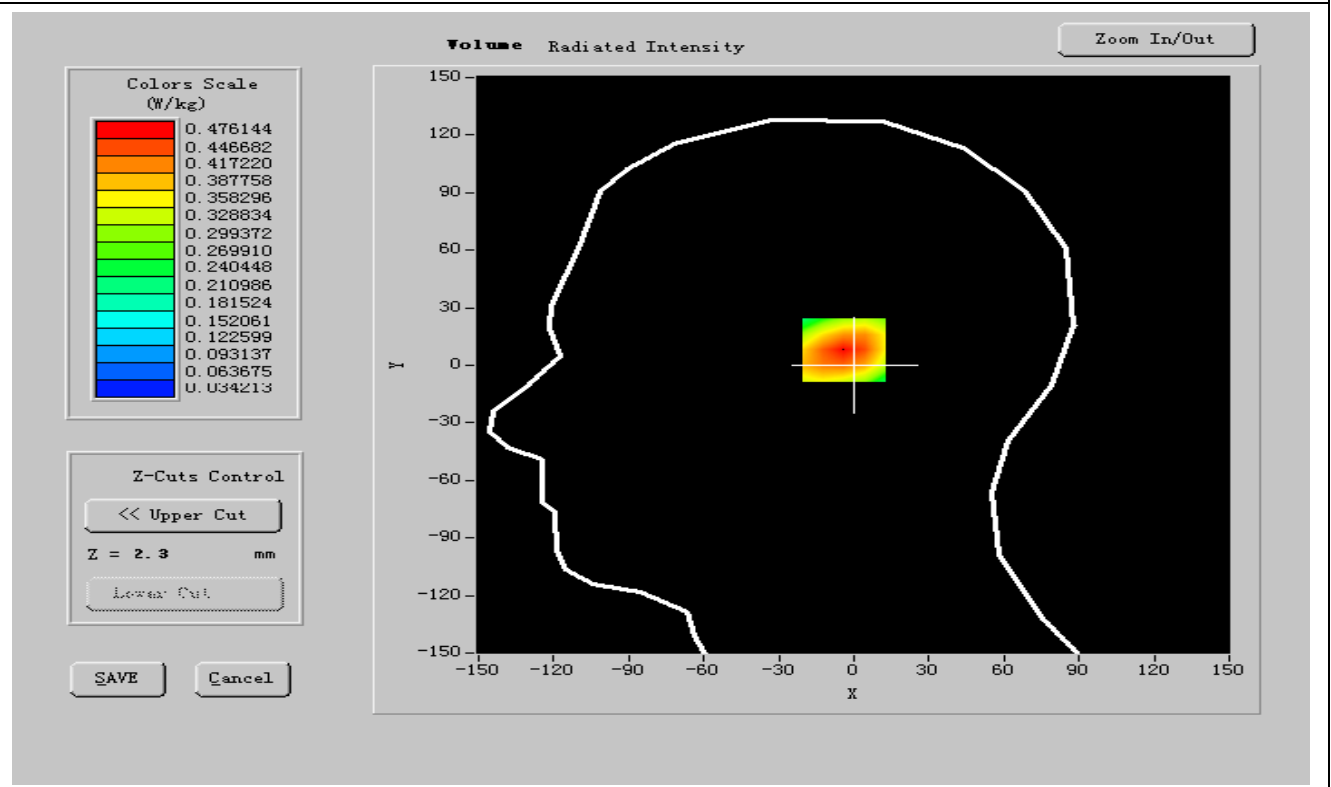
Crest factor:

1:1

## SURFACE SAR



## VOLUME SAR



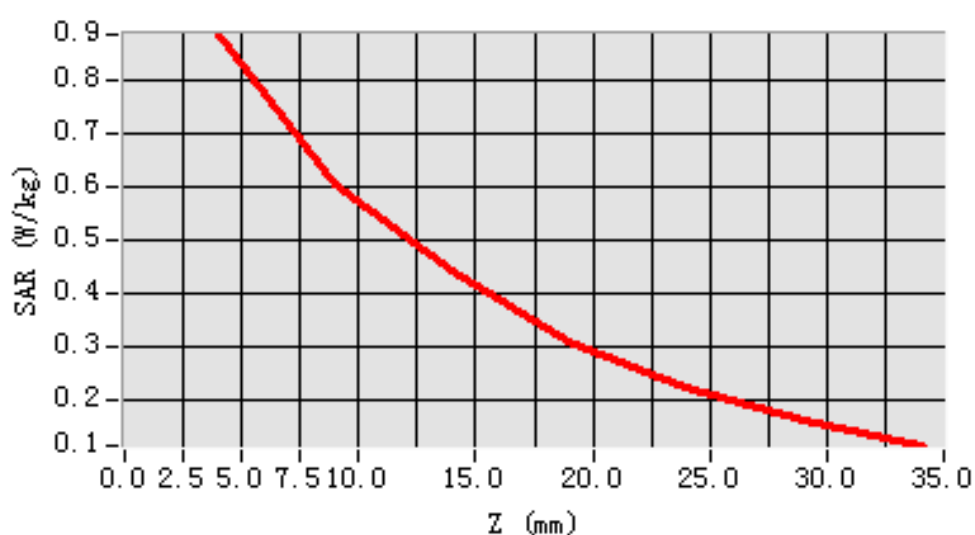


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.110129 |
| SAR 1g (W/Kg)  | 0.243204 |

**Z Axis Scan**

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





## MEASUREMENT 2

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Right head                 |
| <b>Device Position</b> | Cheek                      |
| <b>Band</b>            | WCDMA band V               |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | WCDMA                      |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>836.590001</b> |
| <b>Relative permittivity (real part)</b>      | <b>41.444610</b>  |
| <b>Relative permittivity (imaginary part)</b> | <b>19.522697</b>  |
| <b>Conductivity (S/m)</b>                     | <b>0.916555</b>   |
| <b>Variation (%)</b>                          | <b>-0.200000</b>  |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>      |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>      |



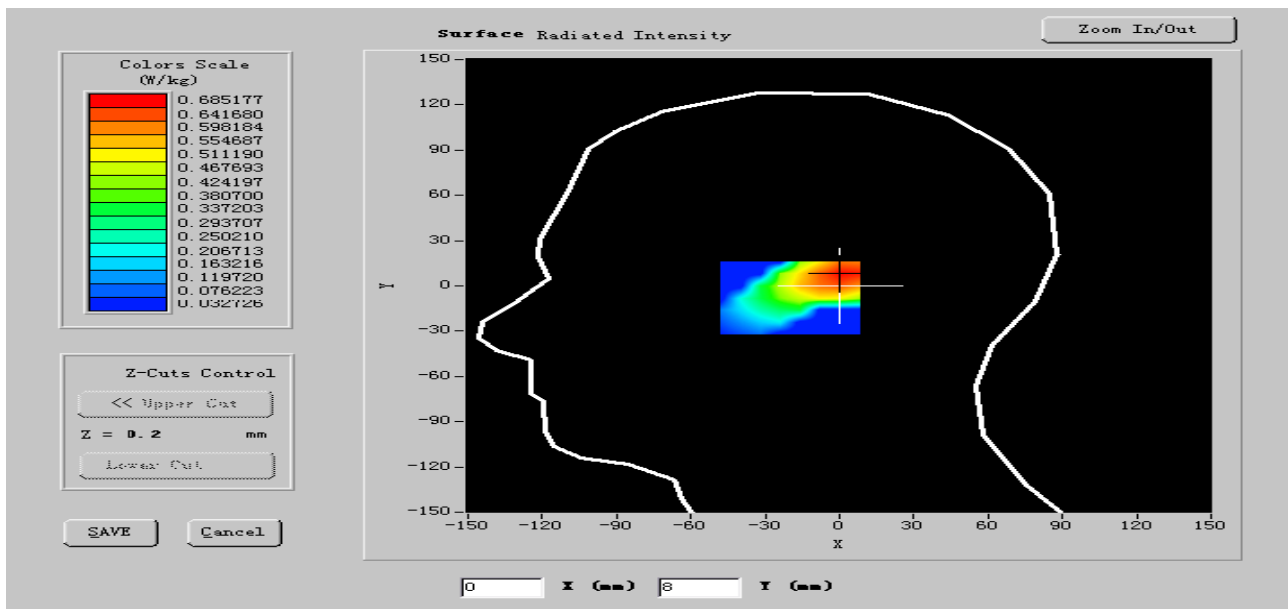
ConvF:

20.66, 20.51, 28.36

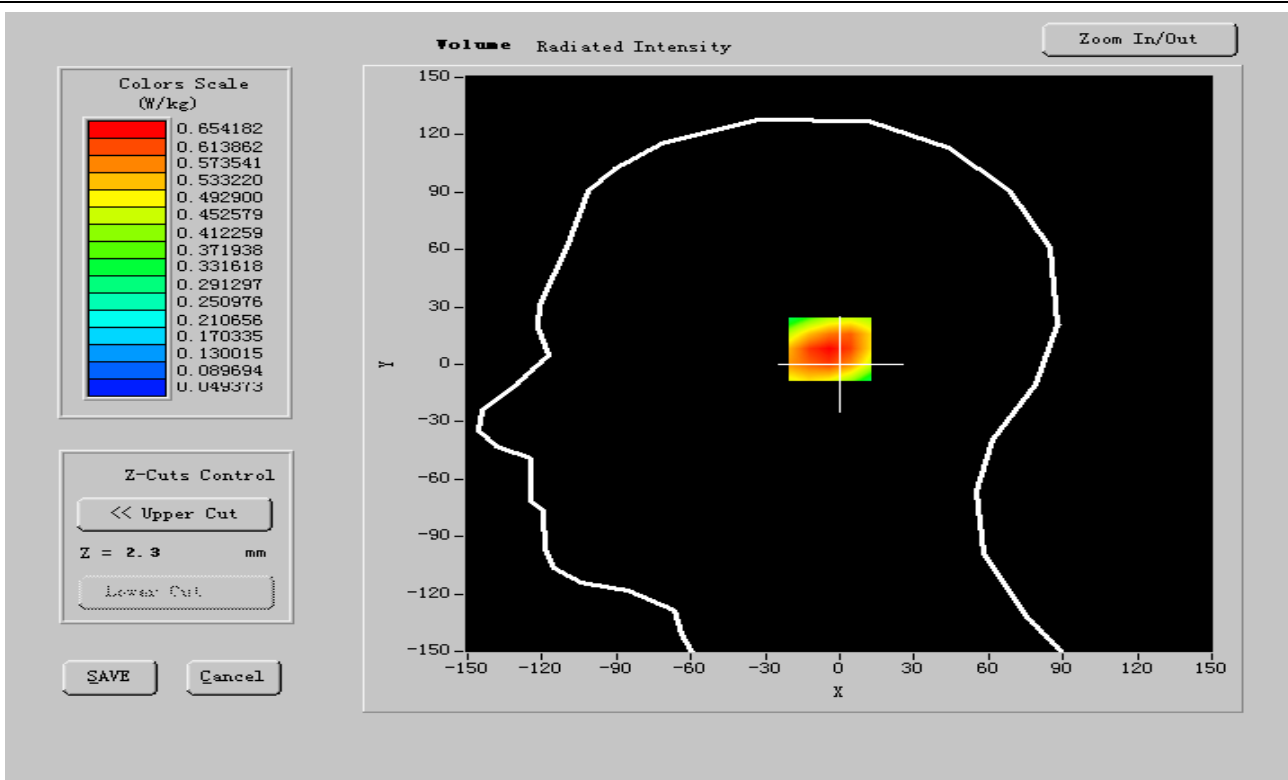
Crest factor:

1:1

## SURFACE SAR



## VOLUME SAR



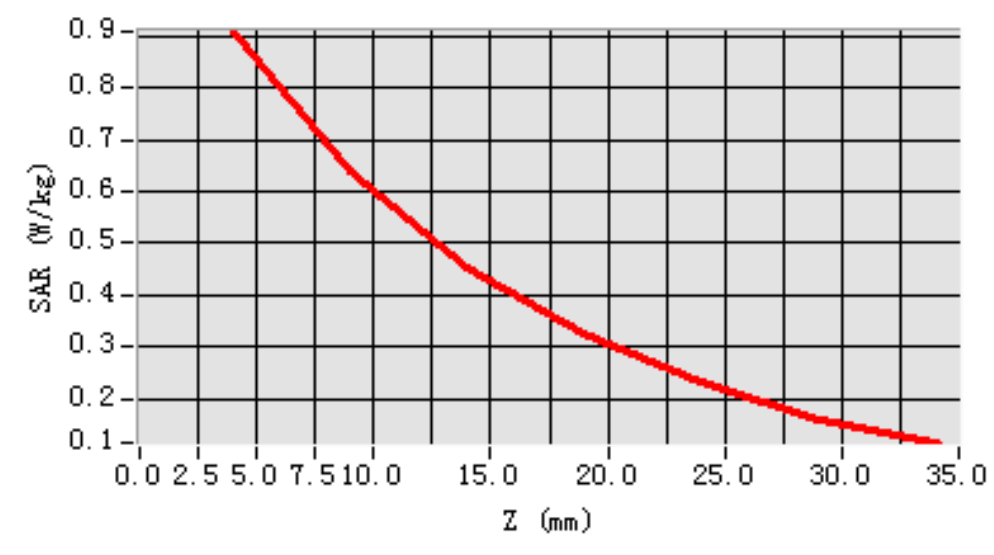


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.161427 |
| SAR 1g (W/Kg)  | 0.284104 |

**Z Axis Scan**

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





## MEASUREMENT 3

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Right head                 |
| <b>Device Position</b> | Cheek                      |
| <b>Band</b>            | WCDMA band V               |
| <b>Channels</b>        | High                       |
| <b>Signal</b>          | WCDMA                      |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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

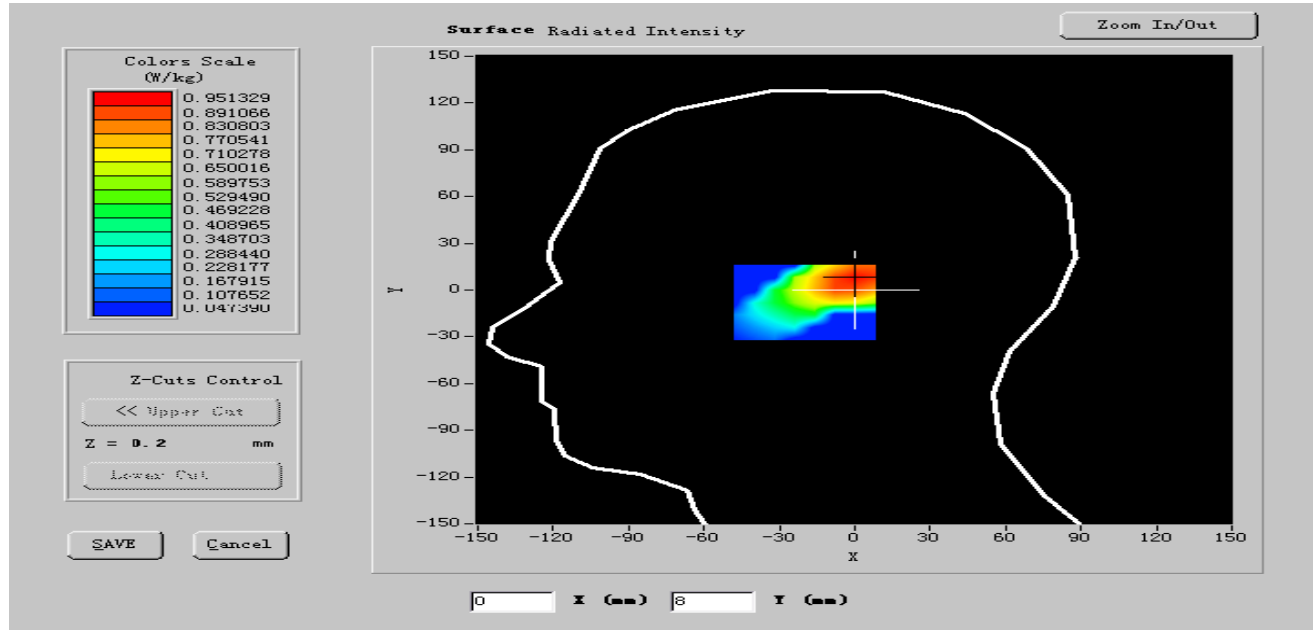
|                                               |                            |
|-----------------------------------------------|----------------------------|
| <b>Frequency (MHz)</b>                        | <b>846.799999</b>          |
| <b>Relative permittivity (real part)</b>      | <b>41.400523</b>           |
| <b>Relative permittivity (imaginary part)</b> | <b>19.611047</b>           |
| <b>Conductivity (S/m)</b>                     | <b>0.922155</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>20.66, 20.51, 28.36</b> |



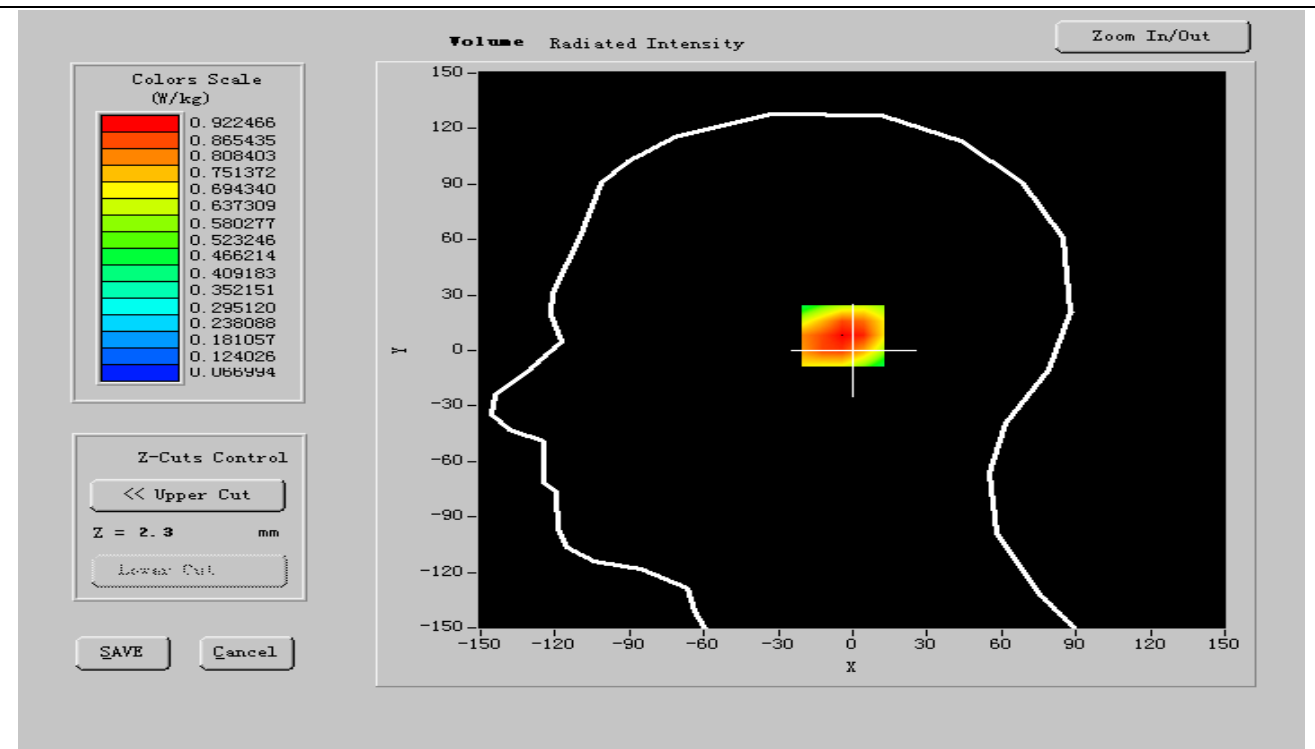
Crest factor:

1:1

## SURFACE SAR



## VOLUME SAR



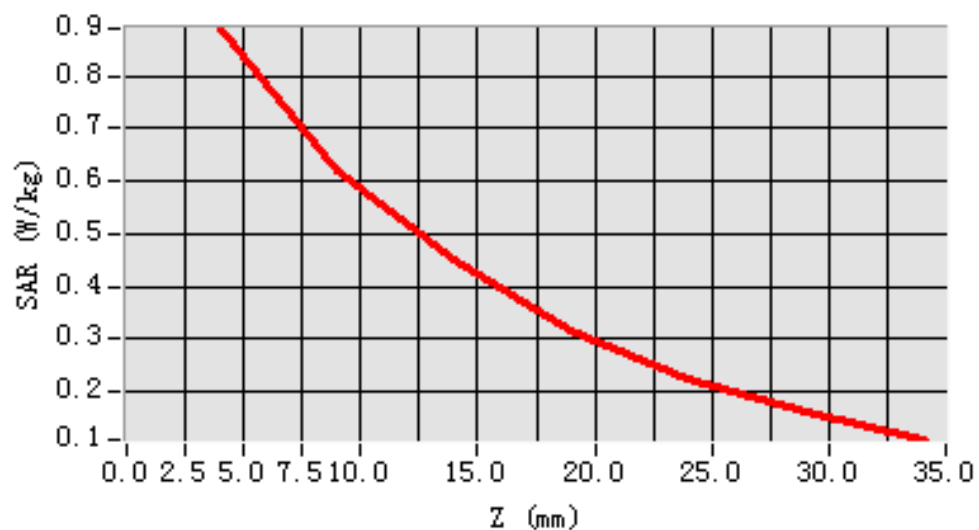


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.103215 |
| SAR 1g (W/Kg)  | 0.262142 |

**Z Axis Scan**

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





## MEASUREMENT 4

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Right head                 |
| <b>Device Position</b> | Tilt                       |
| <b>Band</b>            | WCDMA band V               |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | WCDMA                      |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>826.202012</b> |
| <b>Relative permittivity (real part)</b>      | <b>41.443276</b>  |
| <b>Relative permittivity (imaginary part)</b> | <b>19.581064</b>  |
| <b>Conductivity (S/m)</b>                     | <b>0.914617</b>   |
| <b>Variation (%)</b>                          | <b>-1.300000</b>  |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>      |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>      |



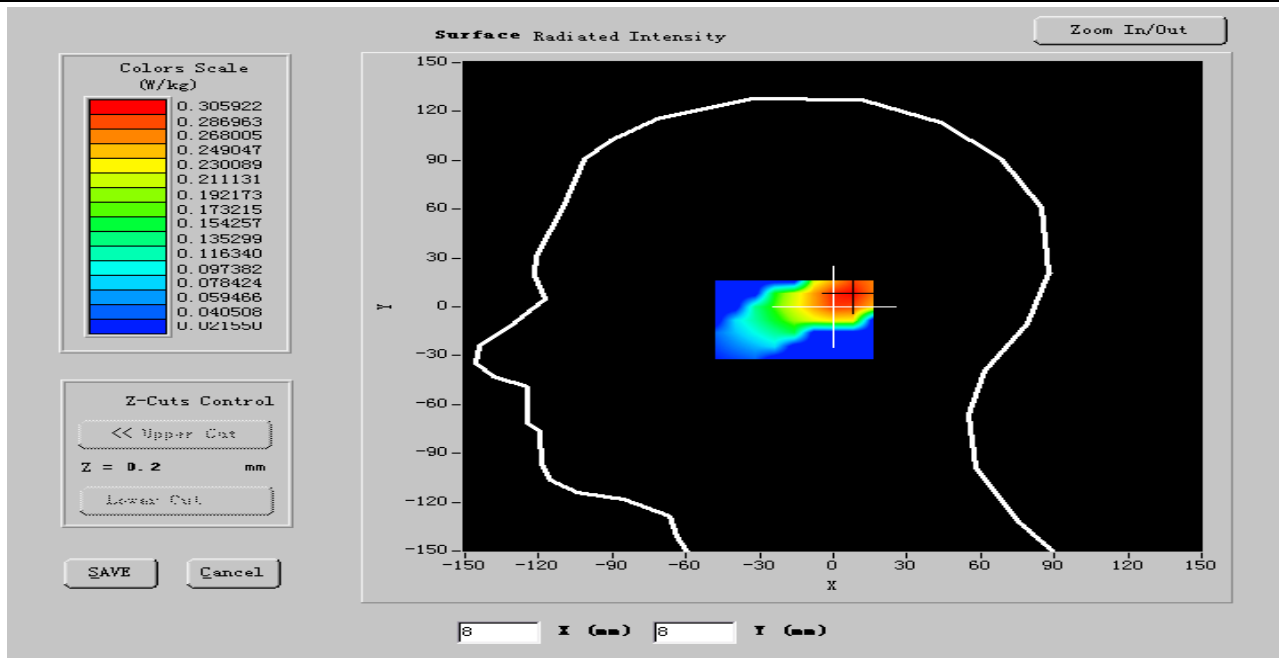
ConvF:

20.66, 20.51, 28.36

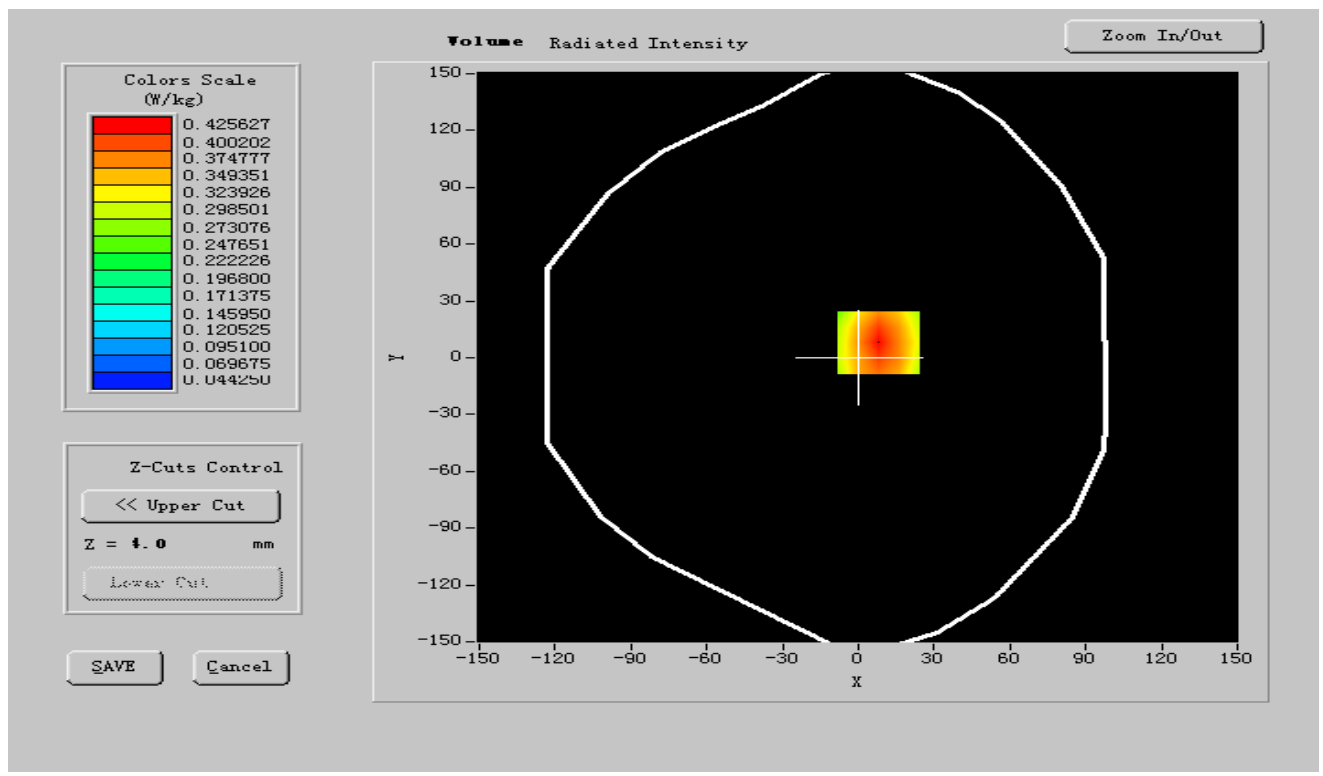
Crest factor:

1:1

## SURFACE SAR



## VOLUME SAR



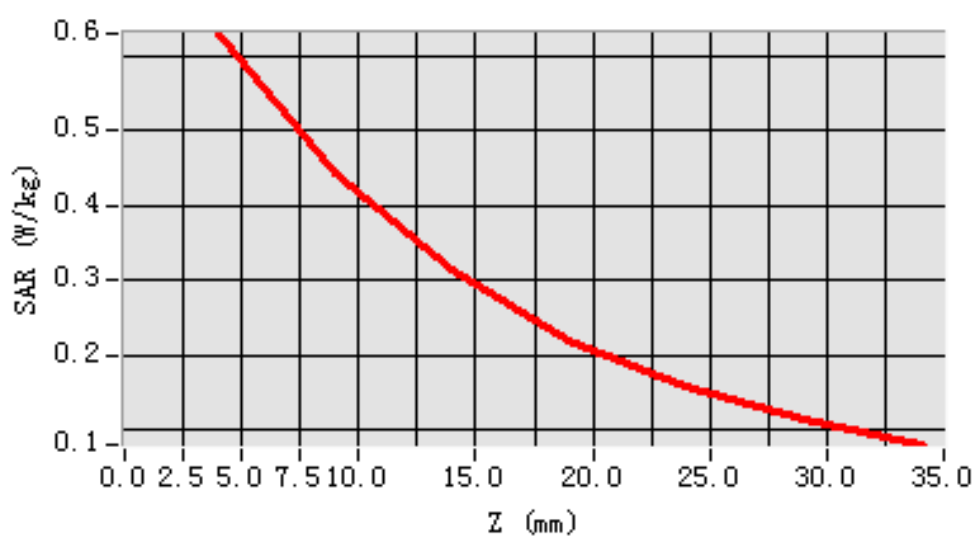


**Maximum location: X=-13.00, Y=-3.00**

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.083021 |
| SAR 1g (W/Kg)  | 0.140325 |

**Z Axis Scan**

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





## MEASUREMENT 5

**Date of measurement: 02/20/2011****Area Scan: 7 x 7 x 1****dx=15mm****dy=15mm****Zoom Scan: 5 x 5 x 7****dx=5mm****dy=5mm****dz=5mm****Z Axis Scan: 1 x 1 x 21****dx=20mm****dy=20mm****dz=5mm**

### A. Experimental conditions.

|                        |                            |
|------------------------|----------------------------|
| <b>Phantom File</b>    | zinf15.txt, Adaptive 2 max |
| <b>Phantom</b>         | Right head                 |
| <b>Device Position</b> | Tilt                       |
| <b>Band</b>            | WCDMA band V               |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | WCDMA                      |

### B. Instrumentations.

|                                            |                                                    |                                    |
|--------------------------------------------|----------------------------------------------------|------------------------------------|
| <b>PC</b>                                  | <b>HP (Pentium(R) V3.06GHz,<br/>SN:375052-AA1)</b> | <b>Calibrated: N/A</b>             |
| <b>Wireless Communication<br/>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 (DIPI32,SN 48/05)</b>                | <b>Calibration Due: 02/09/2012</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>             |

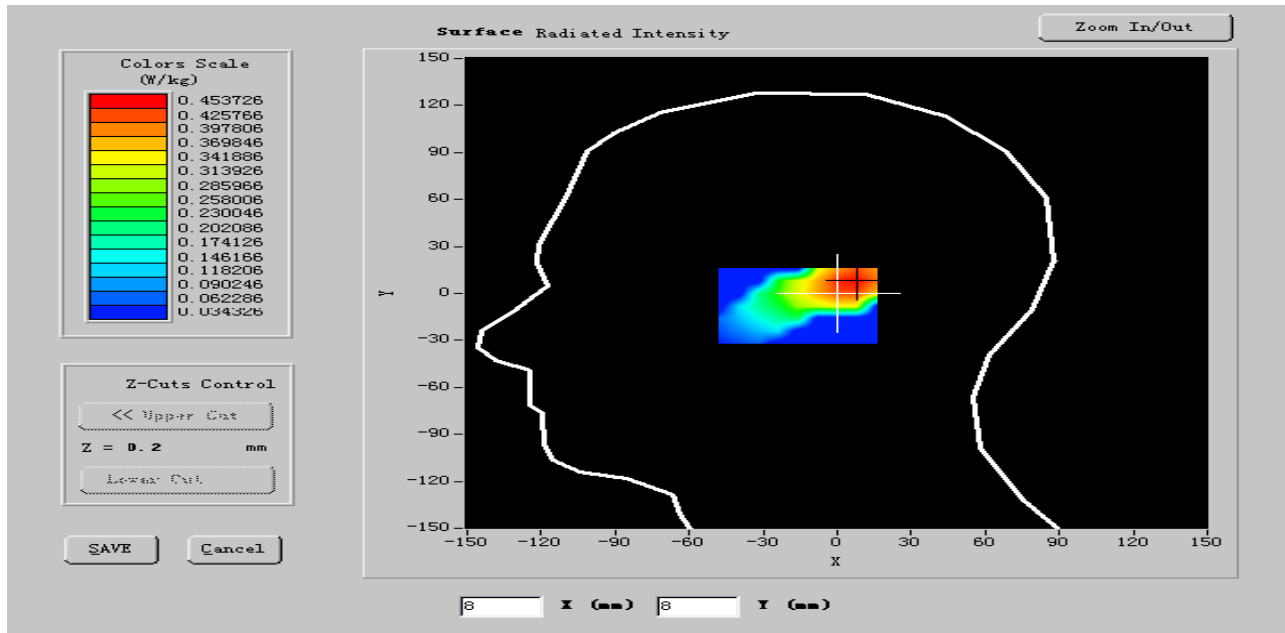
### C. SAR Measurement Results

|                                               |                   |
|-----------------------------------------------|-------------------|
| <b>Frequency (MHz)</b>                        | <b>836.600210</b> |
| <b>Relative permittivity (real part)</b>      | <b>41.470244</b>  |
| <b>Relative permittivity (imaginary part)</b> | <b>19.571880</b>  |
| <b>Conductivity (S/m)</b>                     | <b>0.921224</b>   |
| <b>Variation (%)</b>                          | <b>-0.890000</b>  |
| <b>Ambient Temperature:</b>                   | <b>21 °C</b>      |
| <b>Liquid Temperature:</b>                    | <b>20 °C</b>      |

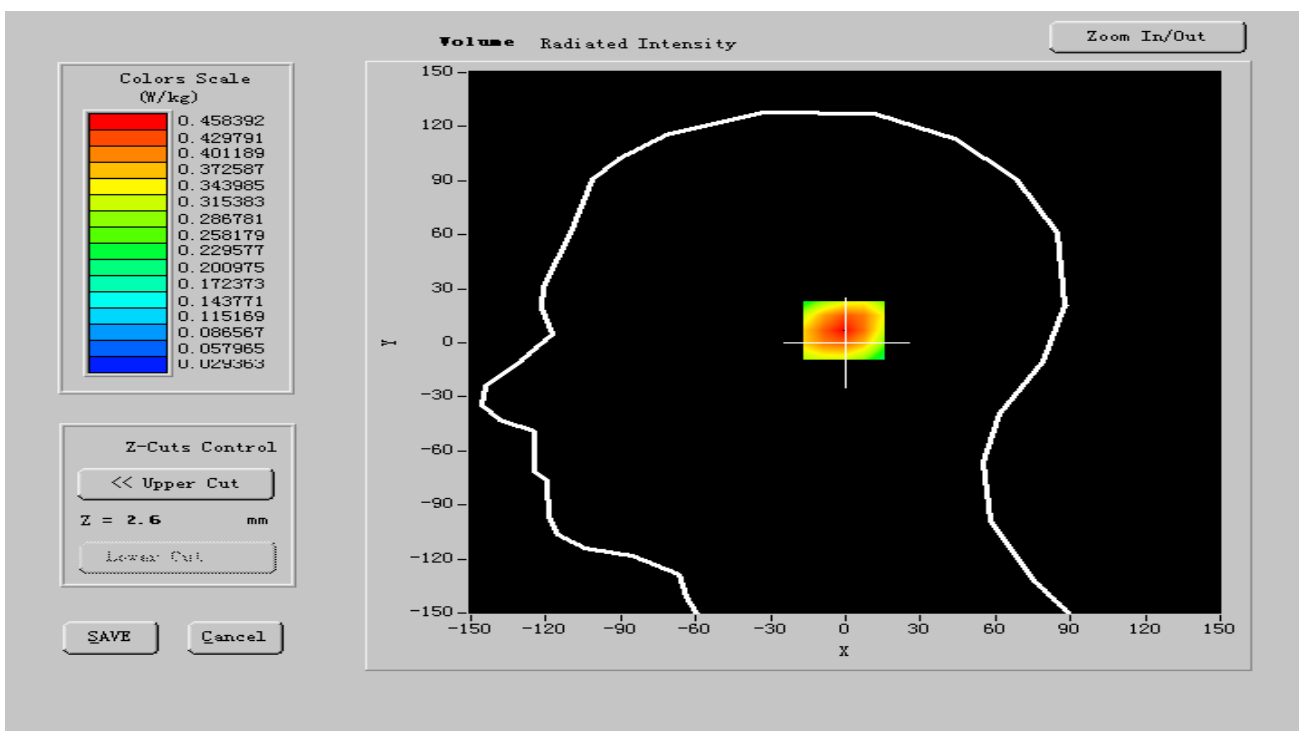


|               |                     |
|---------------|---------------------|
| ConvF:        | 20.66, 20.51, 28.36 |
| Crest factor: | 1:1                 |

## SURFACE SAR



## VOLUME SAR





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

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.120244 |
| SAR 1g (W/Kg)  | 0.167174 |

**Z Axis Scan**

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

