System Performance Check Data (850MHz Head)

Date of measurement: 1/11/2010

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

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

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

A. Experimental conditions.

Phantom File	**surf_sam_plan.txt, Adaptative 2 max**
Phantom	**Validation plane**
Device Position	**Body**
Band	**GSM850**
Channels	**Middle**
Signal	**CW**

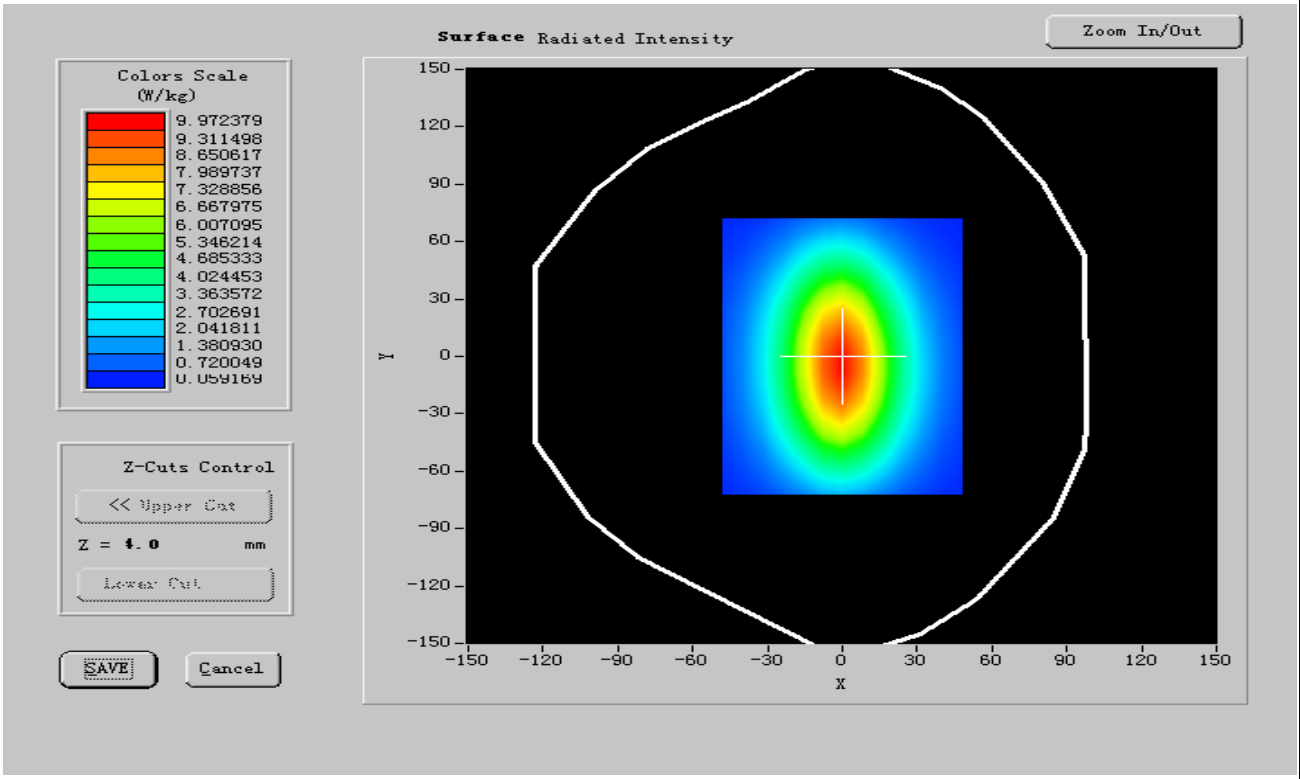
B. Instrumentations.

PC	**HP (Pentium(R) V3.06GHz, SN:375052-AA1)**	**Calibration Due: N/A**
Wireless Communication Test Set	**R&S (CMU200, SN:B23-03291)**	**Calibration Due: 05/25/2011**
Network Analyzer	**Agilent(E5071B, MY42301382)**	**Calibration Due: 03/24/2011**
Voltmeter	**Keithley (2000, SN:1015843)**	**Calibration Due: 05/25/2011**
Signal Generator	**Agilent (E8257C, SN:MY43321570)**	**Calibration Due: 03/24/2011**
Amplifier	**Mini-Circuits (ZHL-42, SN:110405)**	**Calibration Due: 07/29/2011**
Power Meter	**Agilent (E4416A, SN:QB41292714)**	**Calibration Due: 03/24/2011**
Probe	**Antennessa (SN:SN_1109_EP_100)**	**Calibration Due: 05/05/2011**
DIPOLE 835	**Antennessa (DIPI32,SN 48/05)**	**Calibration Due: 02/10/2011**
Phantom	**Antennessa (SN:SN41_05_SAM29)**	**Calibration Due: N/A**
Liquid	**Antennessa**	**Calibration Due: N/A**
Measurement SW	**OPEN SAR V2.1**	**Calibration Due: N/A**

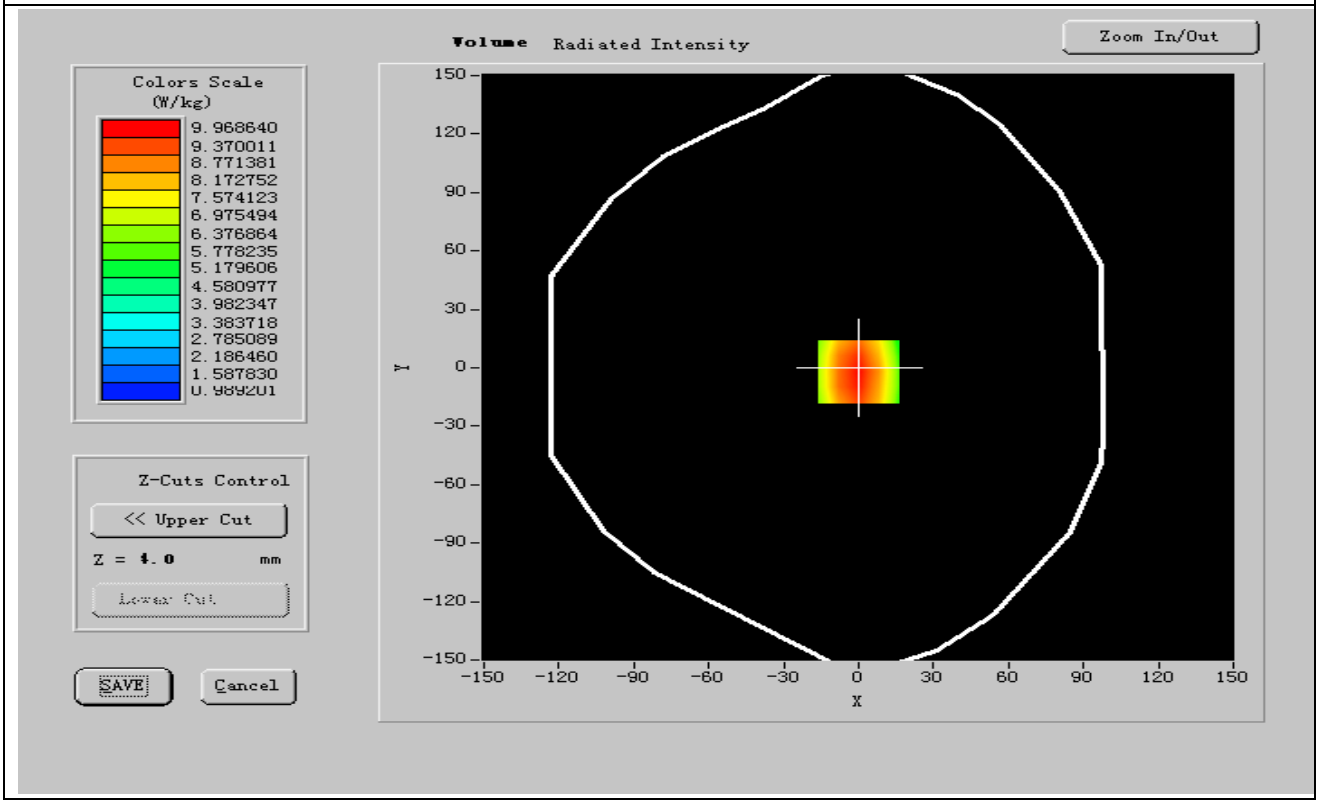
C. SAR Measurement Results

Frequency (MHz)	**835.000024**
Relative permitivity (real part)	**41.471999**
Relative permitivity (imaginary part)	**20.020350**
Conductivity (S/m)	**0.926279**
Variation (%)	**-0.470000**
Ambient Temperature:	**21 °C**
Liquid Temperature:	**20 °C**
ConvF:	**20.66, 20.51, 28.36**
Crest factor：	**1:1**

SURFACE SAR



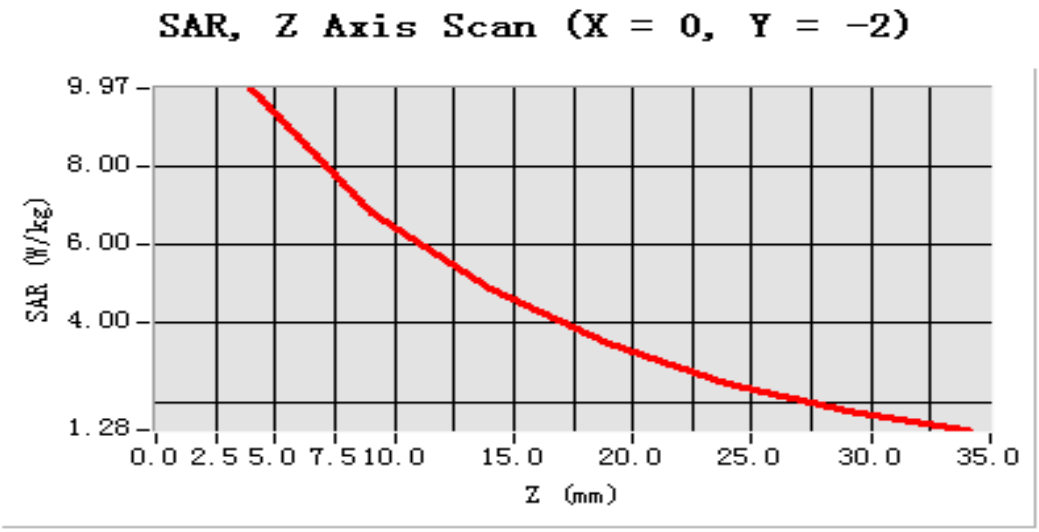
VOLUME SAR



Maximum location: X=0.00, Y=-5.00

SAR 10g (W/Kg)	**6.384533**
SAR 1g (W/Kg)	**9.537344**

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -2)
9.97
8.00
6.00
4.00
1.28
SAR (W/kg)
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

System Performance Check Data (850MHz Body)

Date of measurement: 1/11/2010

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

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

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

A. Experimental conditions.

Phantom File	**surf_sam_plan.txt, Adaptative 2 max**
Phantom	**Validation plane**
Device Position	**Body**
Band	**GSM850**
Channels	**Middle**
Signal	**CW**

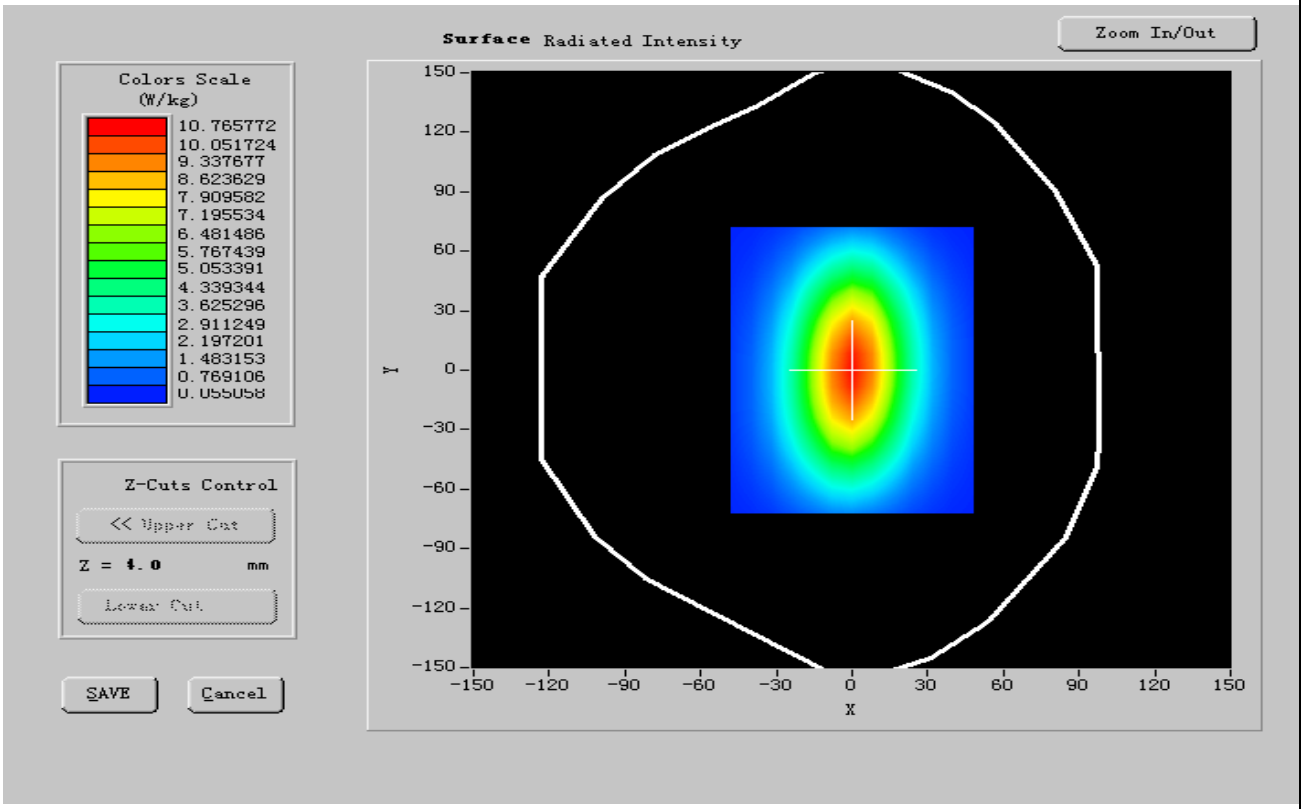
B. Instrumentations.

PC	**HP (Pentium(R) V3.06GHz, SN:375052-AA1)**	**Calibration Due: N/A**
Wireless Communication Test Set	**R&S (CMU200, SN:B23-03291)**	**Calibration Due: 05/25/2011**
Network Analyzer	**Agilent(E5071B, MY42301382)**	**Calibration Due: 03/24/2011**
Voltmeter	**Keithley (2000, SN:1015843)**	**Calibration Due: 05/25/2011**
Signal Generator	**Agilent (E8257C, SN:MY43321570)**	**Calibration Due: 03/24/2011**
Amplifier	**Mini-Circuits (ZHL-42, SN:110405)**	**Calibration Due: 07/29/2011**
Power Meter	**Agilent (E4416A, SN:QB41292714)**	**Calibration Due: 03/24/2011**
Probe	**Antennessa (SN:SN_1109_EP_100)**	**Calibration Due: 05/05/2011**
DIPOLE 835	**Antennessa (DIPI32,SN 48/05)**	**Calibration Due: 02/10/2011**
Phantom	**Antennessa (SN:SN41_05_SAM29)**	**Calibration Due: N/A**
Liquid	**Antennessa**	**Calibration Due: N/A**
Measurement SW	**OPEN SAR V2.1**	**Calibration Due: N/A**

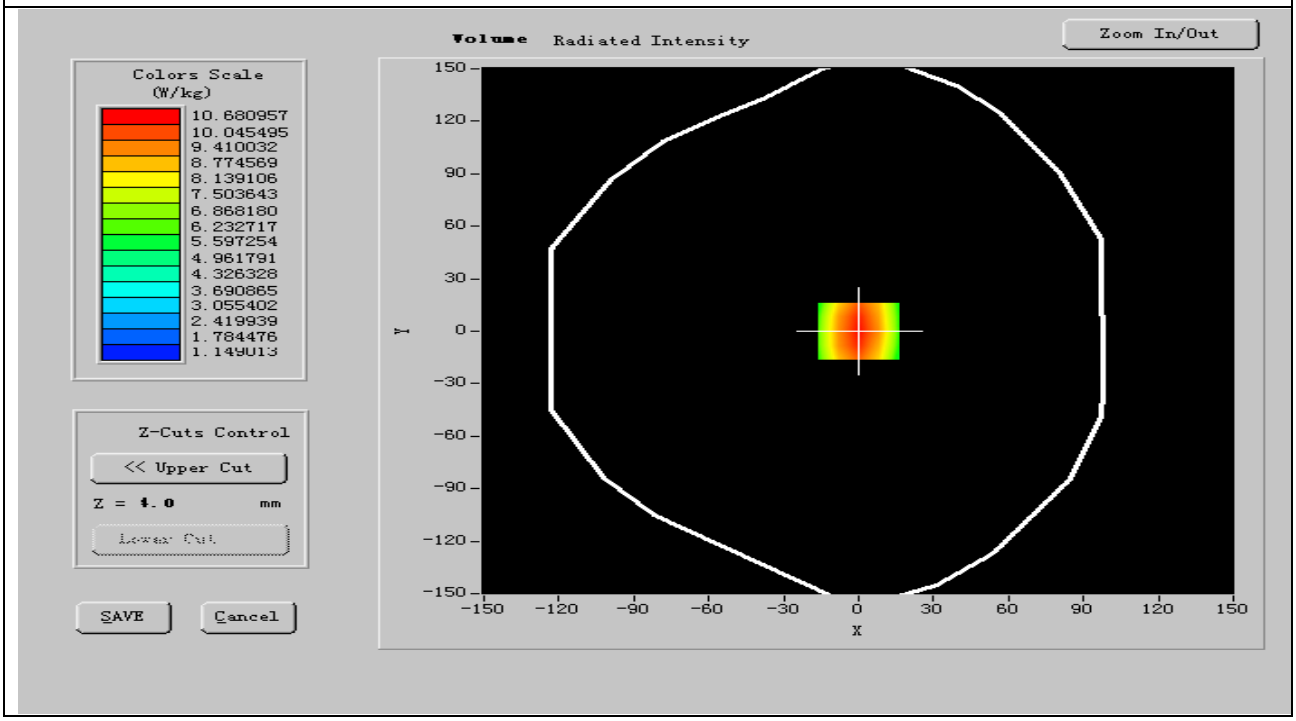
C. SAR Measurement Results

Frequency (MHz)	**835.000024**
Relative permitivity (real part)	**56.512999**
Relative permitivity (imaginary part)	**21.866249**
Conductivity (S/m)	**0.981052**
Variation (%)	**-0.740000**
Ambient Temperature:	**21 °C**
Liquid Temperature:	**20 °C**
ConvF:	**20.00, 19.88, 27.77**
Crest factor：	**1:1**

SURFACE SAR



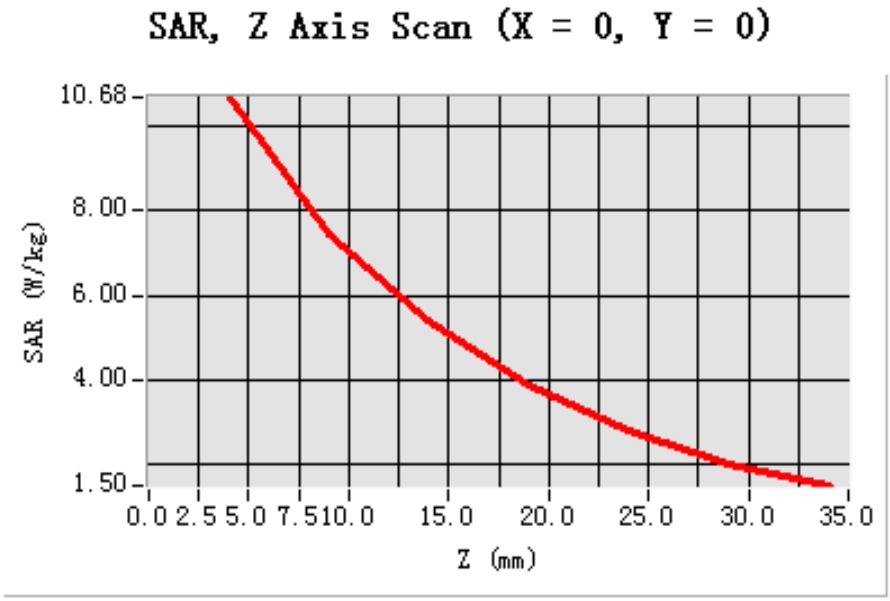
VOLUME SAR



Maximum location: X=0.00, Y=-5.00

SAR 10g (W/Kg)	**6.854345**
SAR 1g (W/Kg)	**10.171448**

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = 0)
10.68
8.00
6.00
4.00
1.50
SAR (W/kg)
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

System Performance Check Data (1900MHz Head)

Date of measurement: 1/11/2010

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

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

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

A. Experimental conditions.

Phantom File	**surf_sam_plan.txt, Adaptative 2 max**
Phantom	**Validation plane**
Device Position	**Body**
Band	**GSM1900**
Channels	**Middle**
Signal	**CW**

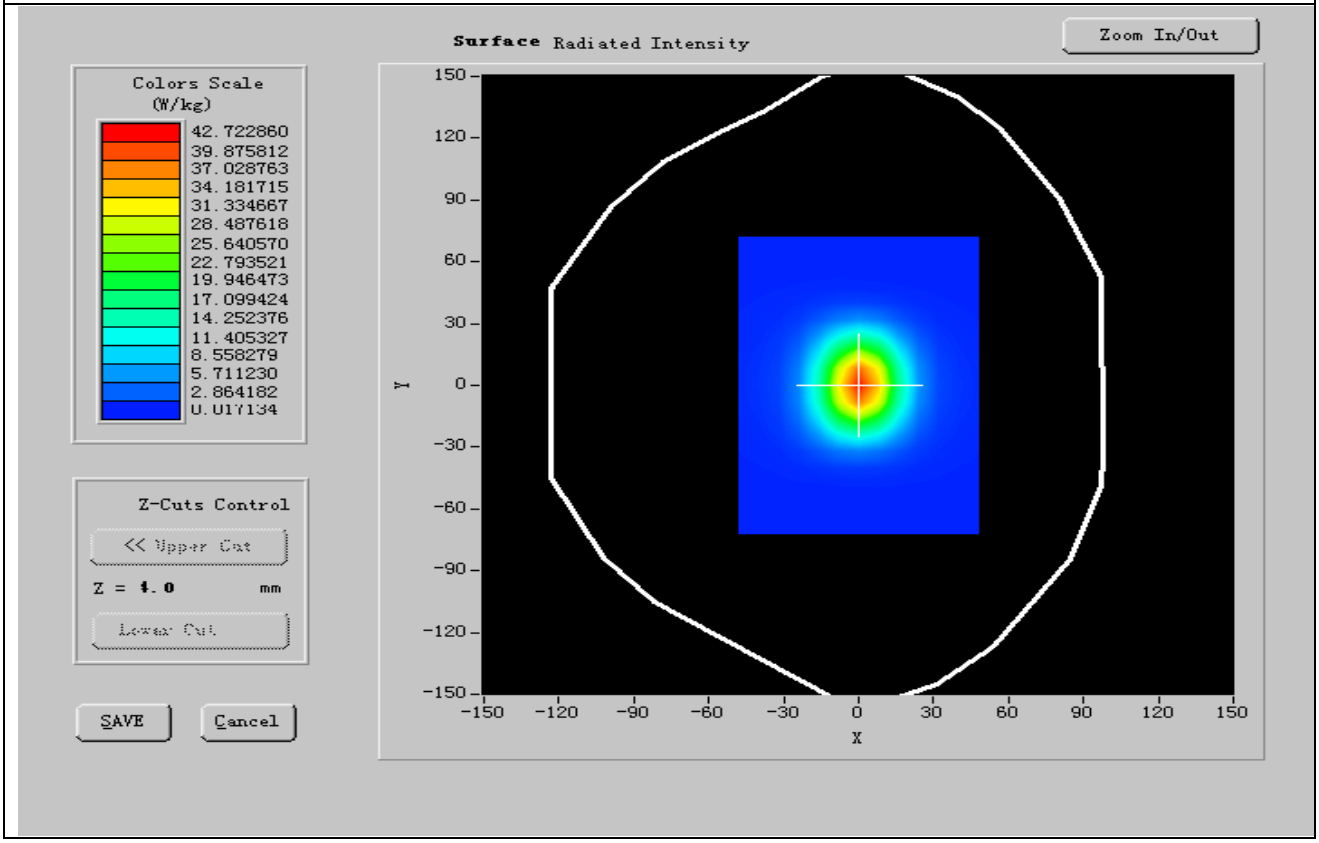
B. Instrumentations.

PC	**HP (Pentium(R) V3.06GHz, SN:375052-AA1)**	**Calibration Due: N/A**
Wireless Communication Test Set	**R&S (CMU200, SN:B23-03291)**	**Calibration Due: 05/25/2011**
Network Analyzer	**Agilent(E5071B, MY42301382)**	**Calibration Due: 03/24/2011**
Voltmeter	**Keithley (2000, SN:1015843)**	**Calibration Due: 05/25/2011**
Signal Generator	**Agilent (E8257C, SN:MY43321570)**	**Calibration Due: 03/24/2011**
Amplifier	**Mini-Circuits (ZHL-42, SN:110405)**	**Calibration Due: 07/29/2011**
Power Meter	**Agilent (E4416A, SN:QB41292714)**	**Calibration Due: 03/24/2011**
Probe	**Antennessa (SN:SN_1109_EP_100)**	**Calibration Due: 05/05/2011**
DIPOLE 1900	**Antennessa (DIPI36, SN 48/05**	**Calibration Due: 02/10/2011**
Phantom	**Antennessa (SN:SN41_05_SAM29)**	**Calibration Due: N/A**
Liquid	**Antennessa**	**Calibration Due: N/A**
Measurement SW	**OPEN SAR V2.1**	**Calibration Due: N/A**

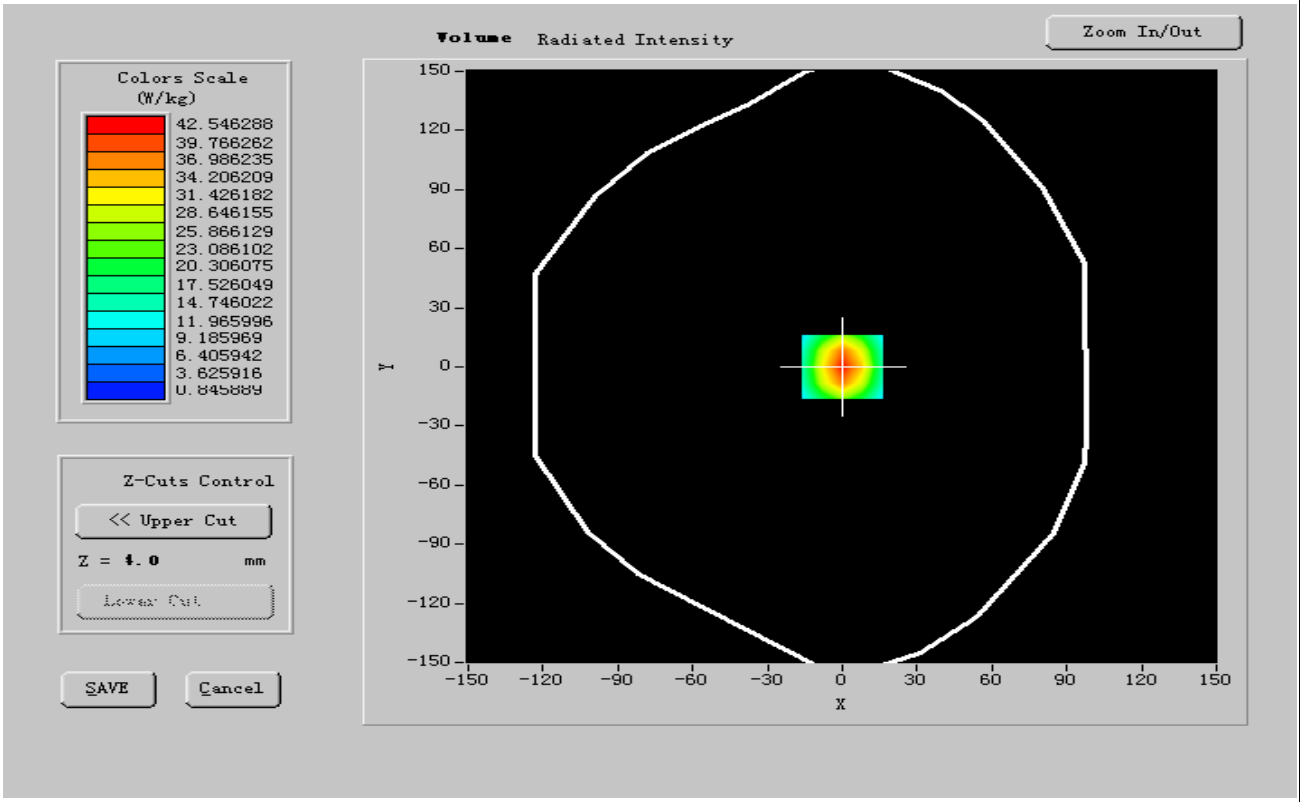
C. SAR Measurement Results

Frequency (MHz)	**1950.000000**
Relative permitivity (real part)	**40.251299**
Relative permitivity (imaginary part)	**13.506150**
Conductivity (S/m)	**1.421202**
Variation (%)	**-0.460000**
Ambient Temperature	**21 °C**
Liquid Temperature	**20 °C**
ConvF	**41.91, 43.15, 56.44**
Crest factor	**1:1**

SURFACE SAR



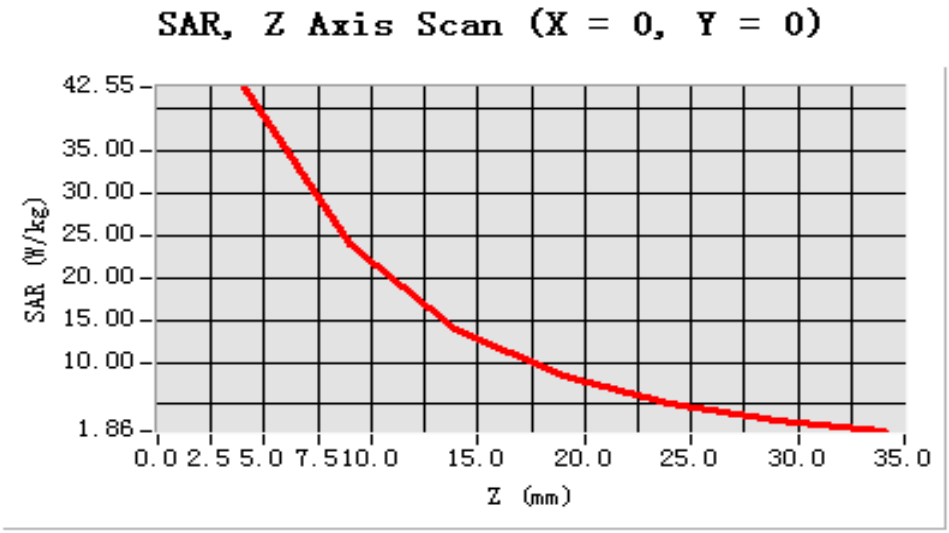
VOLUME SAR



Maximum location: X=0.00, Y=-5.00

SAR 10g (W/Kg)	**21.122345**
SAR 1g (W/Kg)	**39.372104**

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = 0)
42.55
35.00
30.00
25.00
20.00
15.00
10.00
1.86
SAR (W/kg)
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

System Performance Check Data (1900MHz Body)

Date of measurement: 1/11/2010

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

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

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

A. Experimental conditions.

Phantom File	**surf_sam_plan.txt, Adaptative 2 max**
Phantom	**Validation plane**
Device Position	**Body**
Band	**GSM1900**
Channels	**Middle**
Signal	**CW**

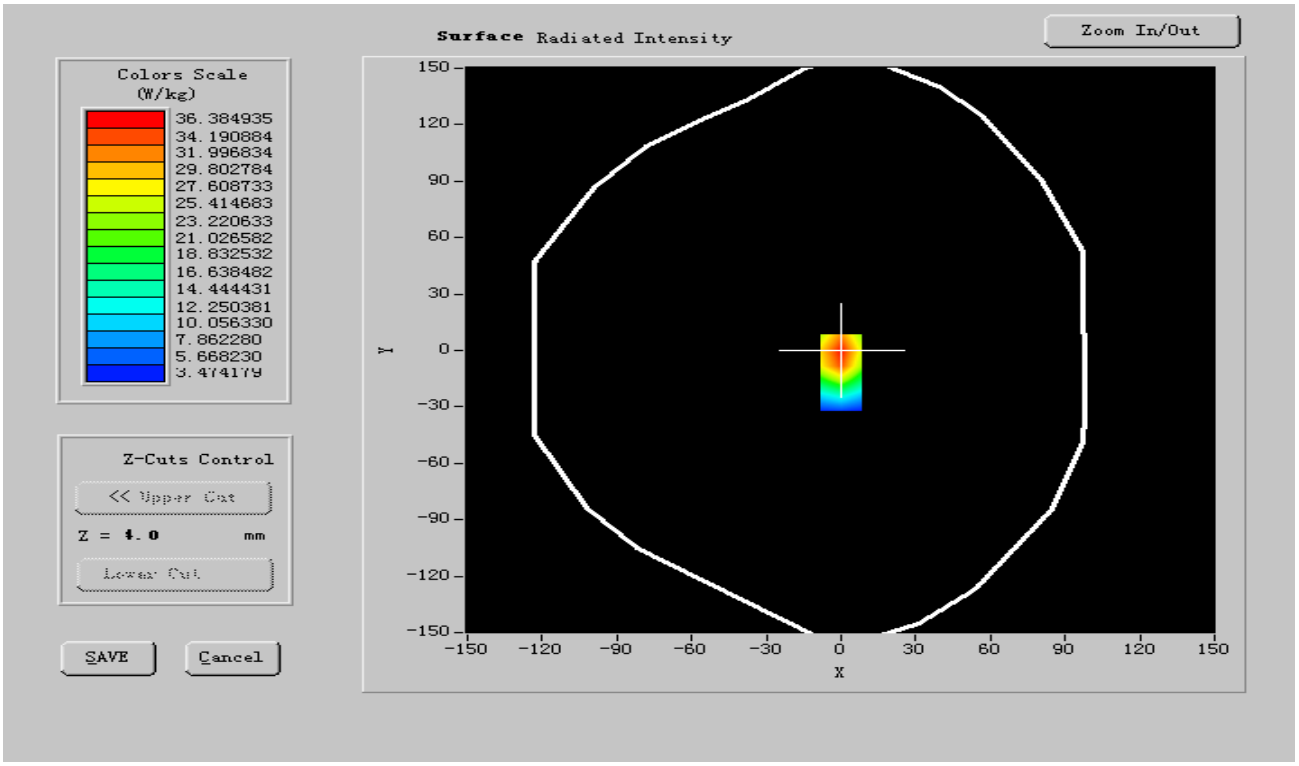
B. Instrumentations.

PC	**HP (Pentium(R) V3.06GHz, SN:375052-AA1)**	**Calibration Due: N/A**
Wireless Communication Test Set	**R&S (CMU200, SN:B23-03291)**	**Calibration Due: 05/25/2011**
Network Analyzer	**Agilent(E5071B, MY42301382)**	**Calibration Due: 03/24/2011**
Voltmeter	**Keithley (2000, SN:1015843)**	**Calibration Due: 05/25/2011**
Signal Generator	**Agilent (E8257C, SN:MY43321570)**	**Calibration Due: 03/24/2011**
Amplifier	**Mini-Circuits (ZHL-42, SN:110405)**	**Calibration Due: 07/29/2011**
Power Meter	**Agilent (E4416A, SN:QB41292714)**	**Calibration Due: 03/24/2011**
Probe	**Antennessa (SN:SN_1109_EP_100)**	**Calibration Due: 05/05/2011**
DIPOLE 1900	**Antennessa (DIPI36, SN 48/05**	**Calibration Due: 02/10/2011**
Phantom	**Antennessa (SN:SN41_05_SAM29)**	**Calibration Due: N/A**
Liquid	**Antennessa**	**Calibration Due: N/A**
Measurement SW	**OPEN SAR V2.1**	**Calibration Due: N/A**

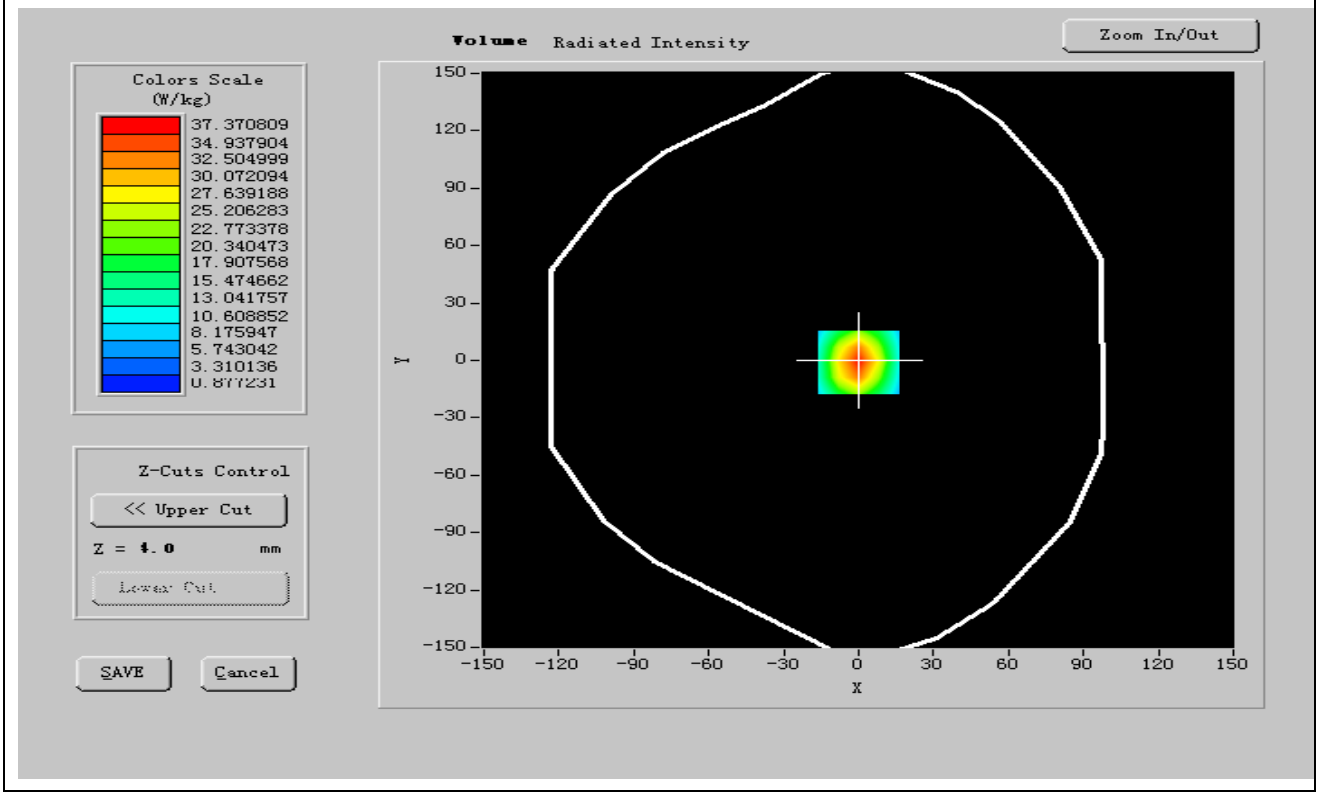
C. SAR Measurement Results

Frequency (MHz)	**1950.000000**
Relative permitivity (real part)	**52.942660**
Relative permitivity (imaginary part)	**13.691050**
Conductivity (S/m)	**1.483460**
Variation (%)	**-0.450000**
Ambient Temperature	**21 °C**
Liquid Temperature	**20 °C**
ConvF	**41.01, 42.41, 55.65**
Crest factor	**1:1**

SURFACE SAR



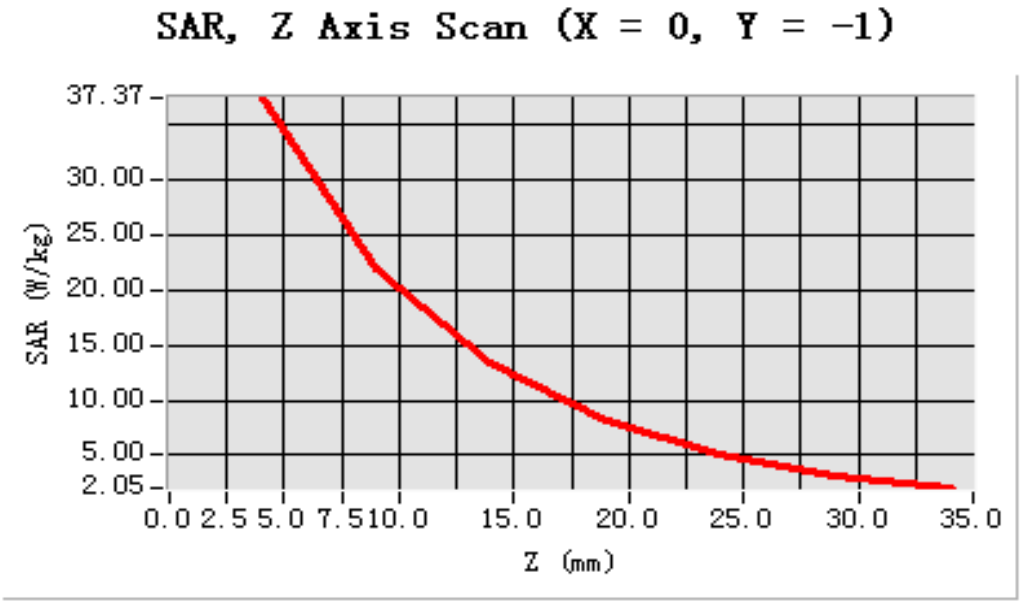
VOLUME SAR



Maximum location: X=0.00, Y=-1.00

SAR 10g (W/Kg)	**20.234145**
SAR 1g (W/Kg)	**38.414545**

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -1)
37.37
30.00
25.00
20.00
15.00
10.00
5.00
2.05
SAR (W/kg)
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)