System Performance Check Data (850MHz Head)

Date of measurement: 04/14/2011

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

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

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

A. Experimental conditions.

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

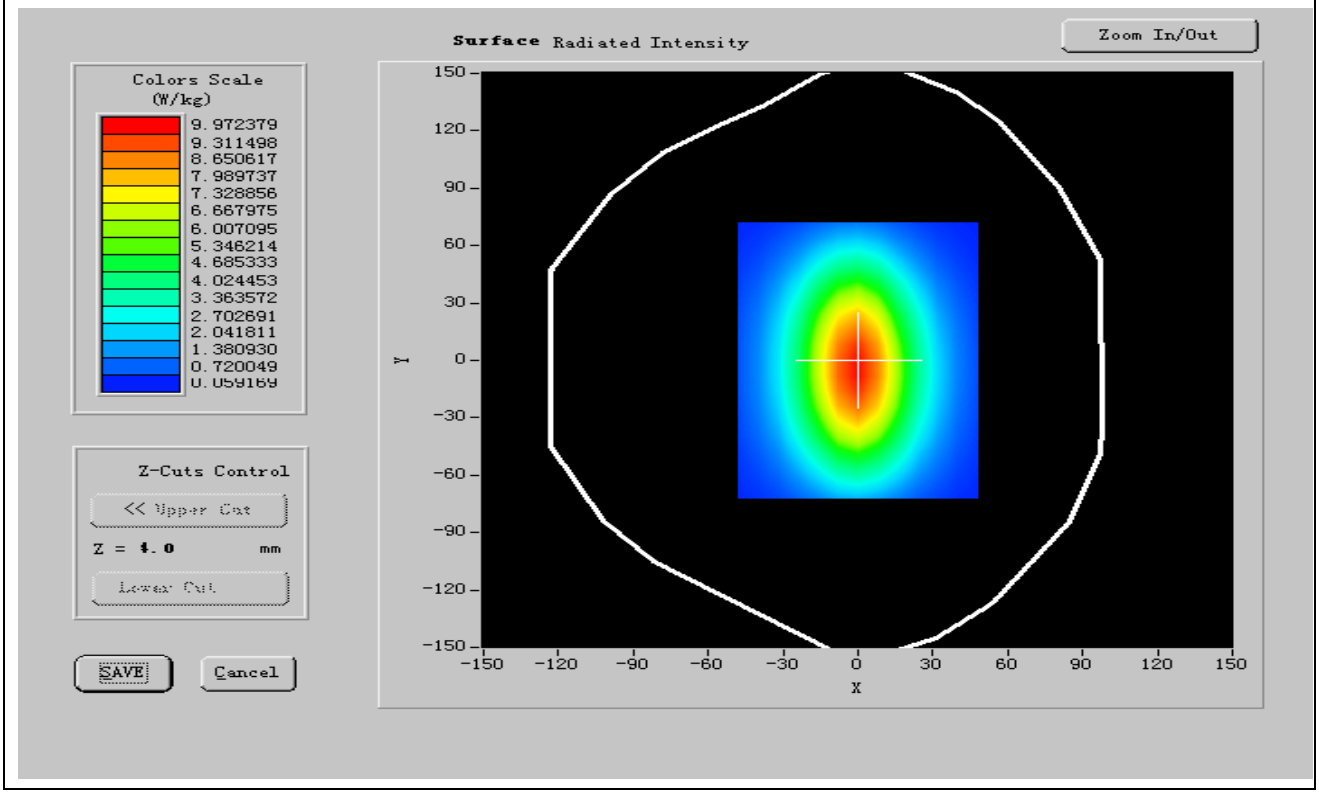
B. Instrumentations.

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: 03/24/2012**
Voltmeter	**Keithley (2000, SN:1015843)**	**Calibration Due: 05/25/2011**
Signal Generator	**Agilent (E8257C, SN:MY43321570)**	**Calibration Due: 03/24/2012**
Amplifier	**Mini-Circuits (ZHL-42, SN:110405)**	**Calibration Due: 07/29/2011**
Power Meter	**Agilent (E4416A, SN:QB41292714)**	**Calibration Due: 03/24/2012**
Probe	**Antennessa (SN:SN_1109_EP_100)**	**Calibration Due: 05/10/2011**
DIPOLE 835	**Antennessa (DIPI32,SN 48/05)**	**Calibration Due: 02/09/2012**
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**

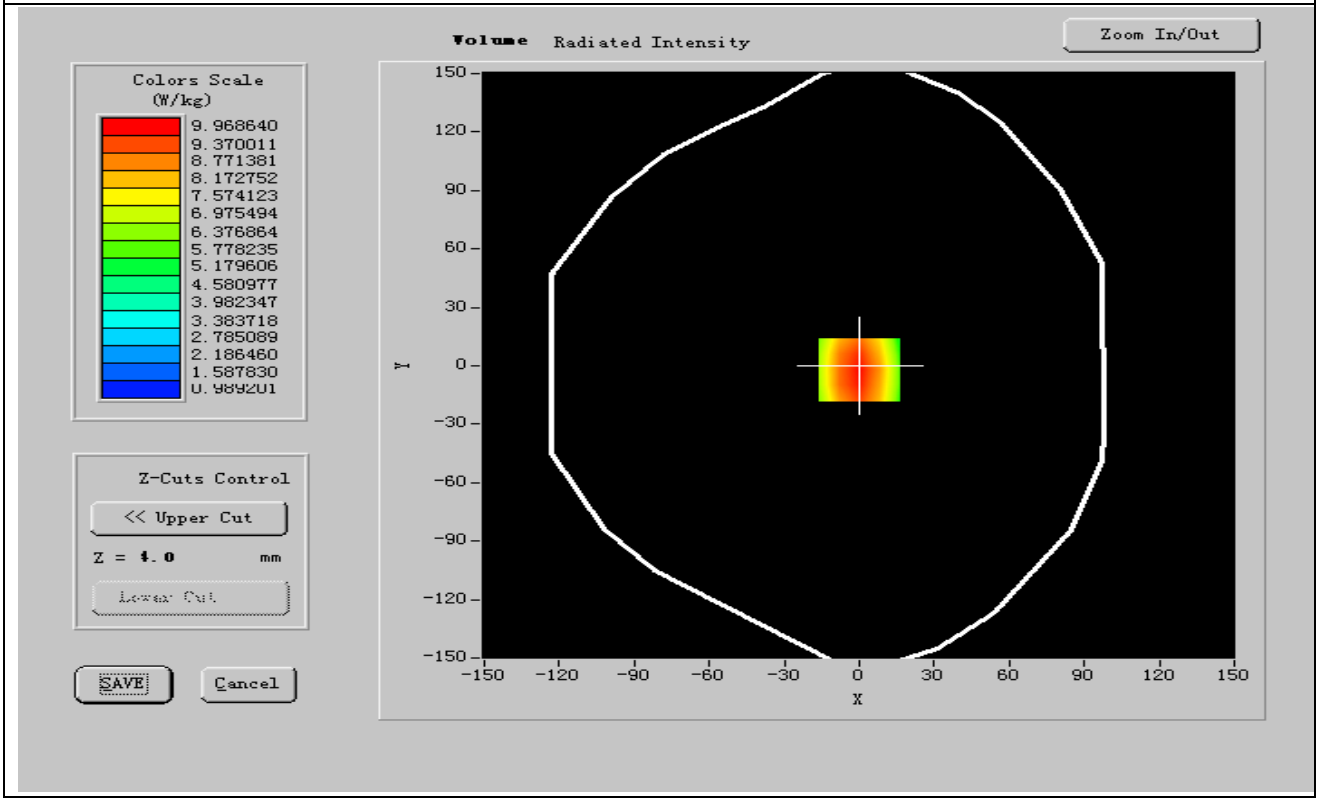
C. SAR Measurement Results

Frequency (MHz)	**835.000024**
Relative permitivity (real part)	**41.207999**
Relative permitivity (imaginary part)	**20.020350**
Conductivity (S/m)	**0.870279**
Variation (%)	**-0.470000**
Ambient Temperature:	**21 °C**
Liquid Temperature:	**20 °C**
ConvF:	**20.66, 20.51, 28.36**
Crest factor：	**1:1**

SURFACE SAR

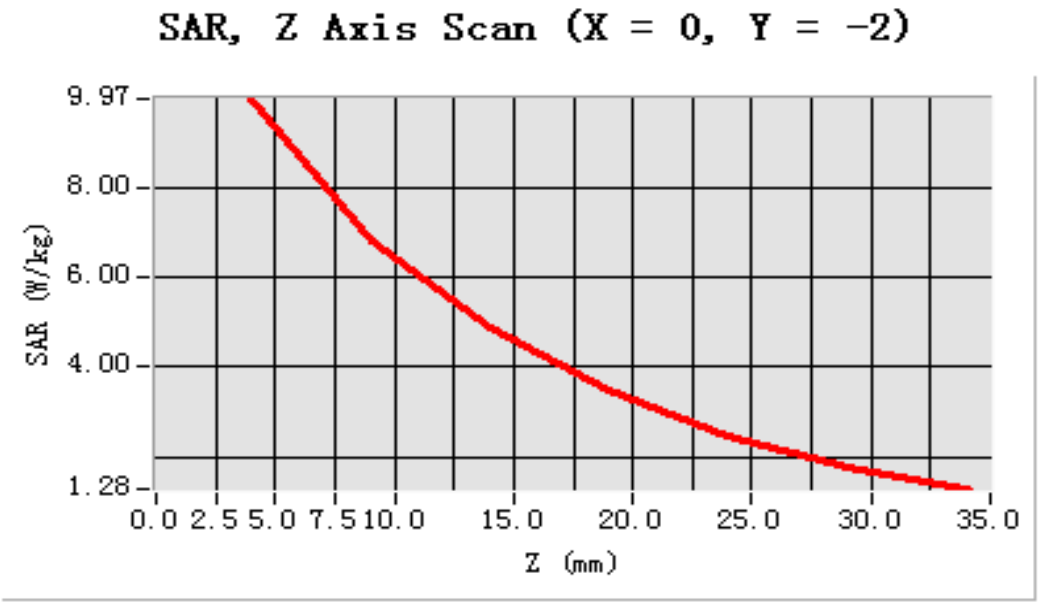


VOLUME SAR



Maximum location: X=0.00, Y=-5.00

SAR 10g (W/Kg)	**6.306124**
SAR 1g (W/Kg)	**9.451452**



System Performance Check Data (850MHz Body)

Date of measurement: 04/14/2011
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

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

B. Instrumentations.

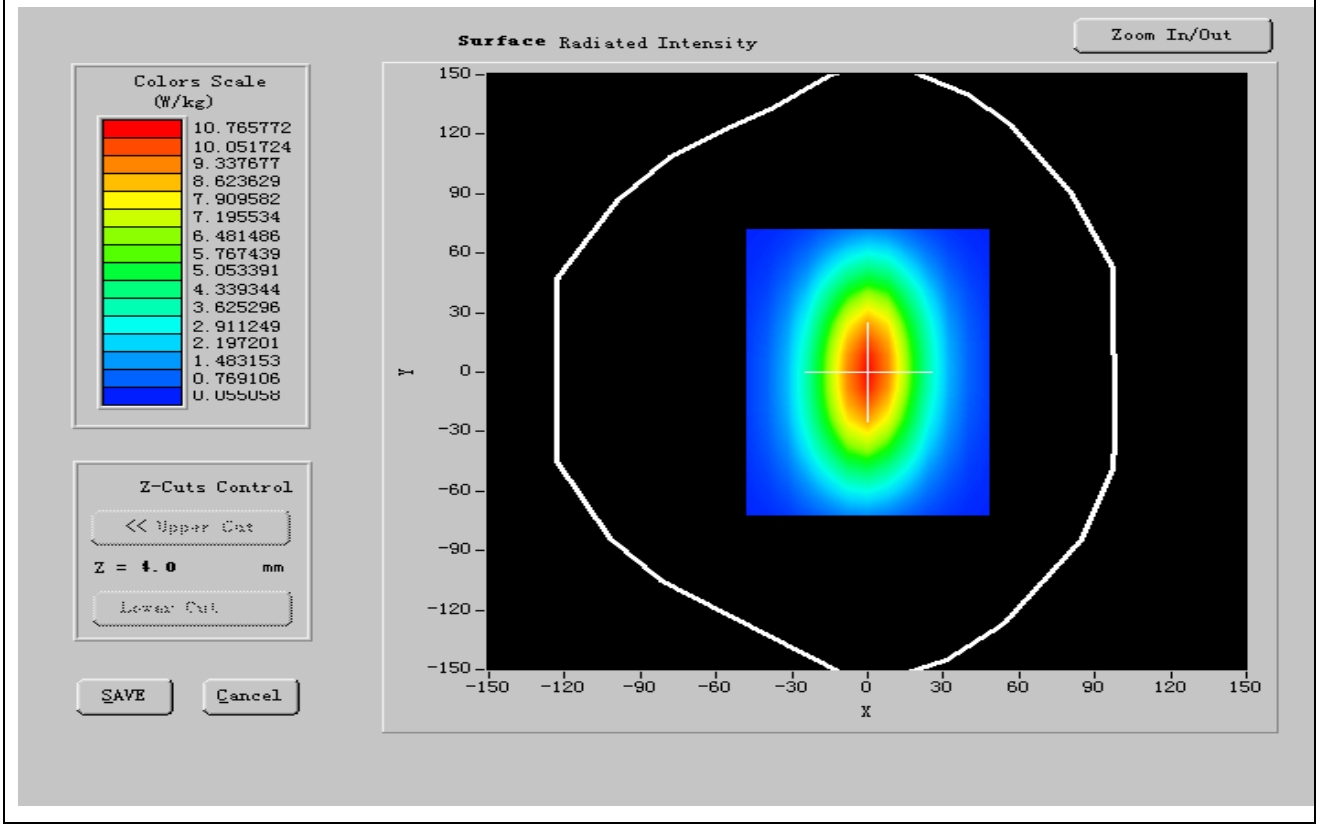
PC	**HP (Pentium(R) V3.06GHz, SN:375052-AA1)**	**Calibration Due: N/A**
Wireless Communication Test Set	**R&S (CMU200, SN:B23-03291)**	**Calibration Due: 05/25/2011**
Network Analyzer	**Agilent(E5071B, MY42301382)**	**Calibration Due: 03/24/2012**
Voltmeter	**Keithley (2000, SN:1015843)**	**Calibration Due: 05/25/2011**
Signal Generator	**Agilent (E8257C, SN:MY43321570)**	**Calibration Due: 03/24/2012**
Amplifier	**Mini-Circuits (ZHL-42, SN:110405)**	**Calibration Due: 07/29/2011**
Power Meter	**Agilent (E4416A, SN:QB41292714)**	**Calibration Due: 03/24/2012**
Probe	**Antennessa (SN:SN_1109_EP_100)**	**Calibration Due: 05/10/2011**
DIPOLE 835	**Antennessa (DIPI32,SN 48/05)**	**Calibration Due: 02/09/2012**
Phantom	**Antennessa**	**Calibration Due: N/A**

	(SN:SN41_05_SAM29)	
Liquid	Antennessa	Calibration Due: N/A
Measurement SW	OPEN SAR V2.1	Calibration Due: N/A

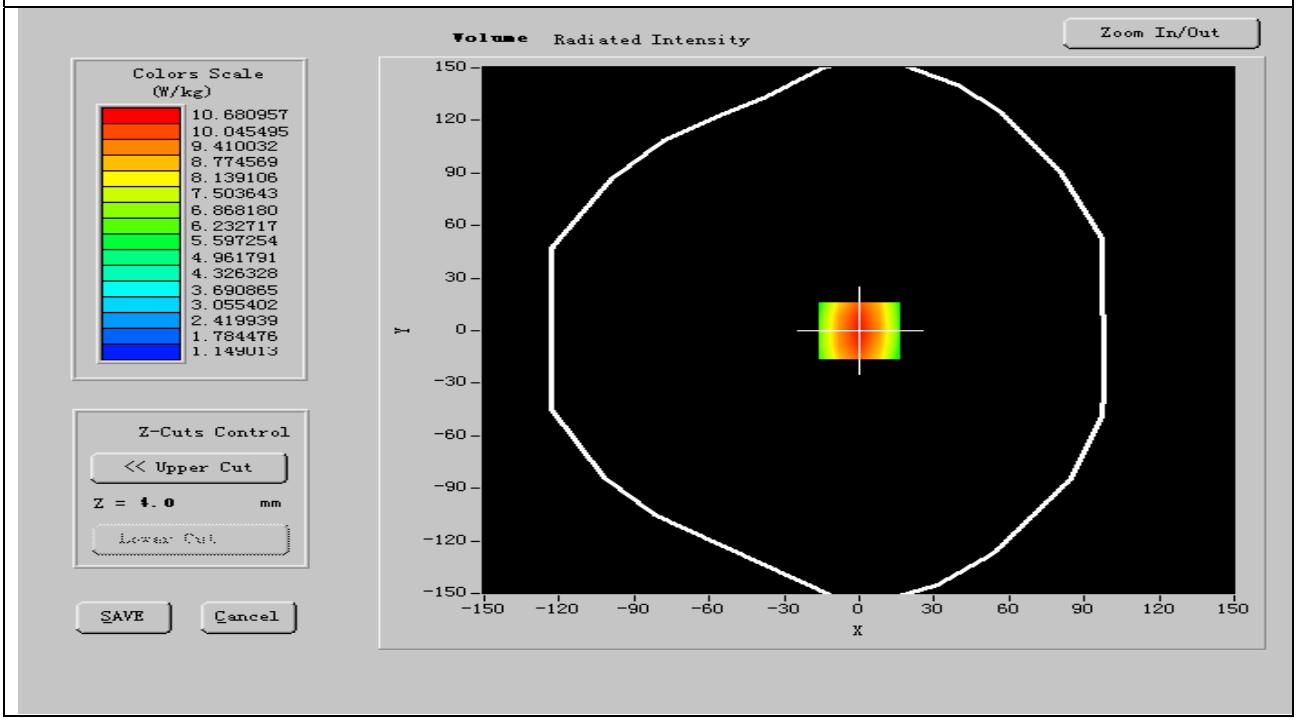
C. SAR Measurement Results

Frequency (MHz)	835.000024
Relative permitivity (real part)	53.361999
Relative permitivity (imaginary part)	21.866249
Conductivity (S/m)	0.976052
Variation (%)	-0.740000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.00, 19.88, 27.77
Crest factor：	1:1

SURFACE SAR



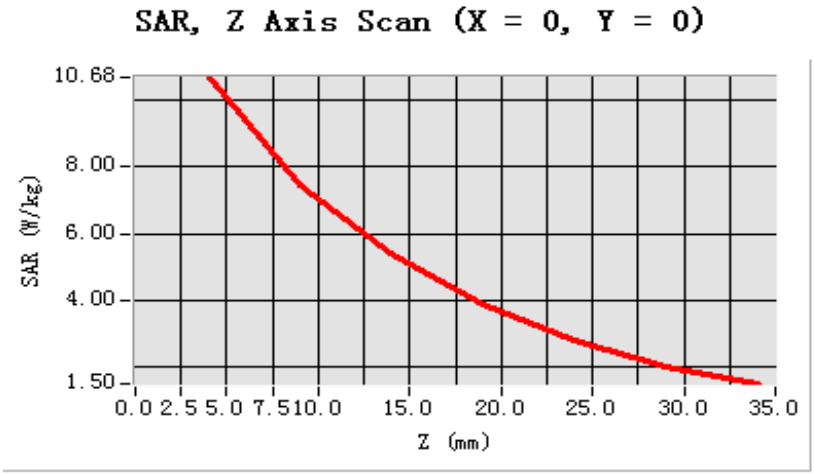
VOLUME SAR



Maximum location: X=0.00, Y=-5.00

SAR 10g (W/Kg)	**6.740243**
SAR 1g (W/Kg)	**9.857240**

Z Axis Scan



System Performance Check Data (1900MHz Head)

Date of measurement: 04/14/2011
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

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

B. Instrumentations.

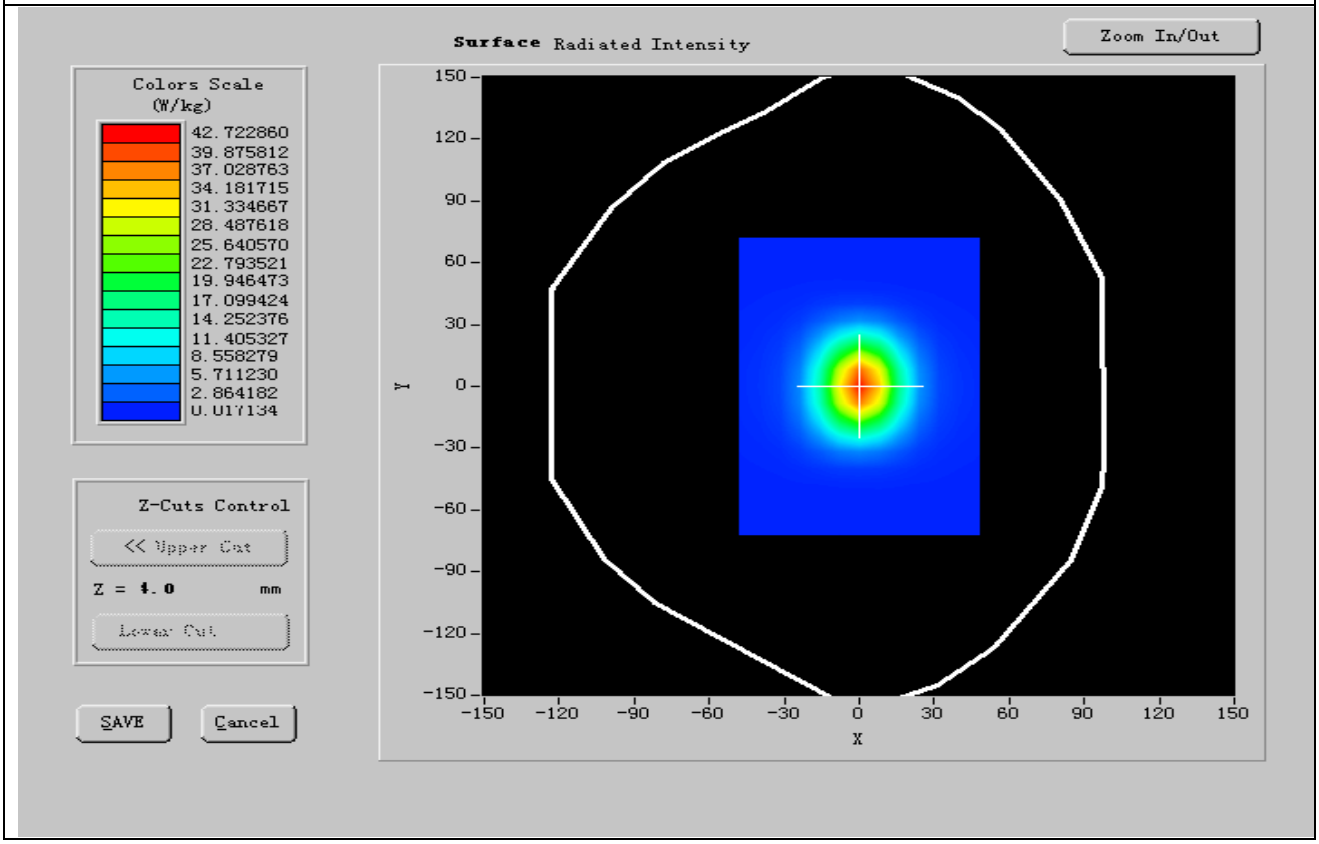
PC	**HP (Pentium(R) V3.06GHz, SN:375052-AA1)**	**Calibration Due: N/A**
Wireless Communication Test Set	**R&S (CMU200, SN:B23-03291)**	**Calibration Due: 05/25/2011**
Network Analyzer	**Agilent(E5071B, MY42301382)**	**Calibration Due: 03/24/2012**
Voltmeter	**Keithley (2000, SN:1015843)**	**Calibration Due: 05/25/2011**
Signal Generator	**Agilent (E8257C, SN:MY43321570)**	**Calibration Due: 03/24/2012**
Amplifier	**Mini-Circuits (ZHL-42, SN:110405)**	**Calibration Due: 07/29/2011**
Power Meter	**Agilent (E4416A, SN:QB41292714)**	**Calibration Due: 03/24/2012**
Probe	**Antennessa (SN:SN_1109_EP_100)**	**Calibration Due: 05/10/2011**
DIPOLE 1900	**Antennessa (DIPI36, SN 48/05**	**Calibration Due: 02/09/2012**
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

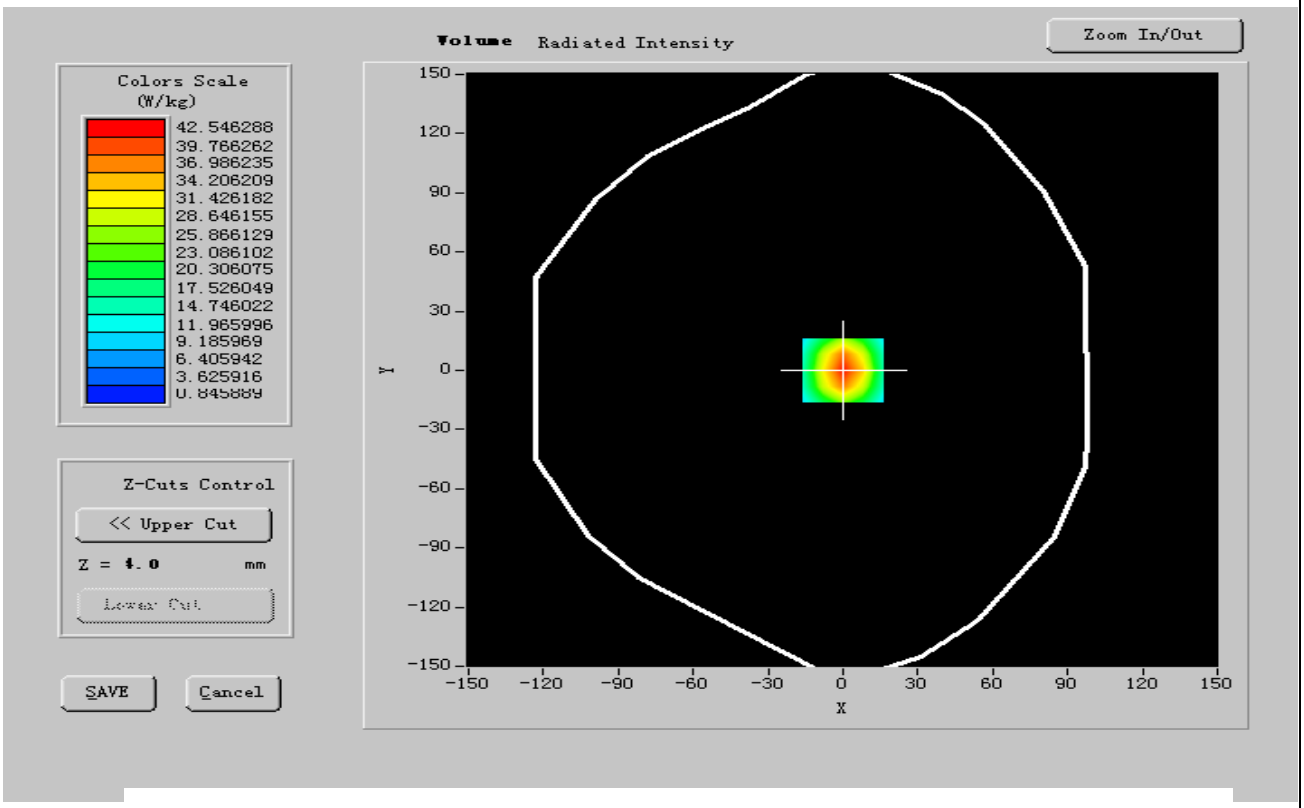
C. SAR Measurement Results

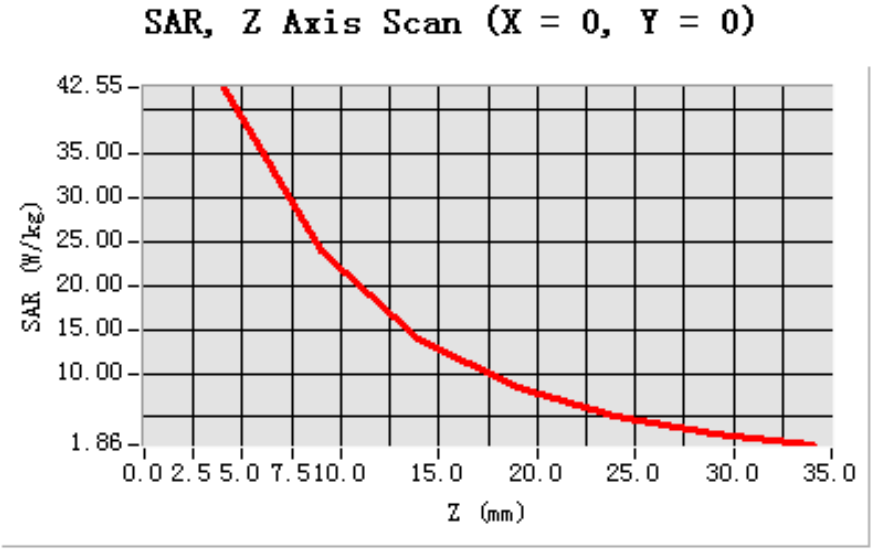
Frequency (MHz)	1950.000000
Relative permitivity (real part)	40.256999
Relative permitivity (imaginary part)	13.506150
Conductivity (S/m)	1.420642
Variation (%)	-0.460000
Ambient Temperature	21 °C
Liquid Temperature	20 °C
ConvF	41.91, 43.15, 56.44
Crest factor	1:1

SURFACE SAR



VOLUME SAR


Volume Radiated Intensity
Zoom In/Out
Colors Scale (W/kg)
42.546288
39.766262
36.986235
34.206209
31.426182
28.646155
25.866129
23.086102
20.306075
17.526049
14.746022
11.965996
9.185969
6.405942
3.625916
0.845889
Z-Cuts Control
<< Upper Cut
Z = 4.0 mm
Lower Cut
SAVE
Cancel
150
120
90
60
30
0
-30
-60
-90
-120
-150
Y
X


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: 04/14/2011

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

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

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

A. Experimental conditions.

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

B. Instrumentations.

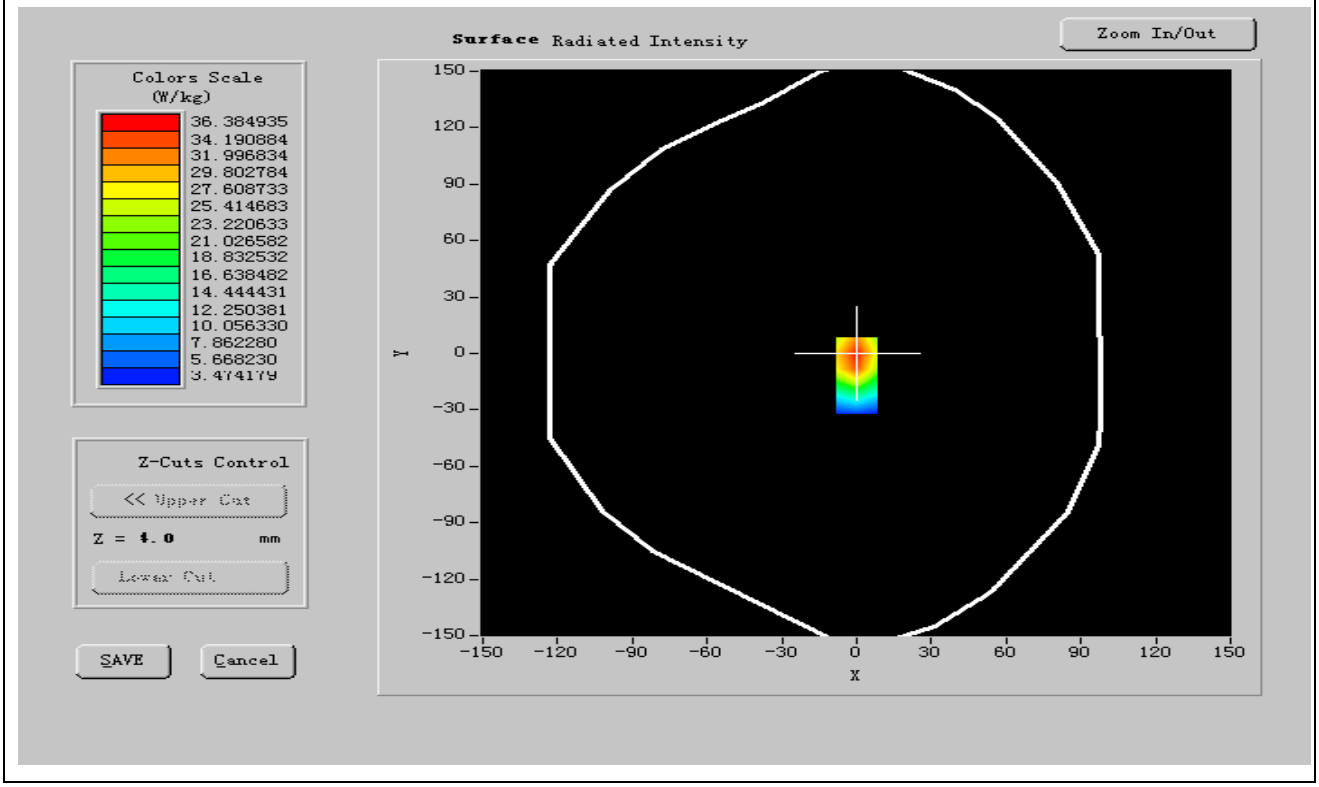
PC	**HP (Pentium(R) V3.06GHz, SN:375052-AA1)**	**Calibration Due: N/A**
Wireless Communication Test Set	**R&S (CMU200, SN:B23-03291)**	**Calibration Due: 05/25/2011**
Network Analyzer	**Agilent(E5071B, MY42301382)**	**Calibration Due: 03/24/2012**
Voltmeter	**Keithley (2000, SN:1015843)**	**Calibration Due: 05/25/2011**
Signal Generator	**Agilent (E8257C, SN:MY43321570)**	**Calibration Due: 03/24/2012**
Amplifier	**Mini-Circuits (ZHL-42, SN:110405)**	**Calibration Due: 07/29/2011**
Power Meter	**Agilent (E4416A, SN:QB41292714)**	**Calibration Due: 03/24/2012**
Probe	**Antennessa (SN:SN_1109_EP_100)**	**Calibration Due: 05/10/2011**

DIPOLE 1900	Antennessa (DIPI36, SN 48/05	Calibration Due: 02/09/2012
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

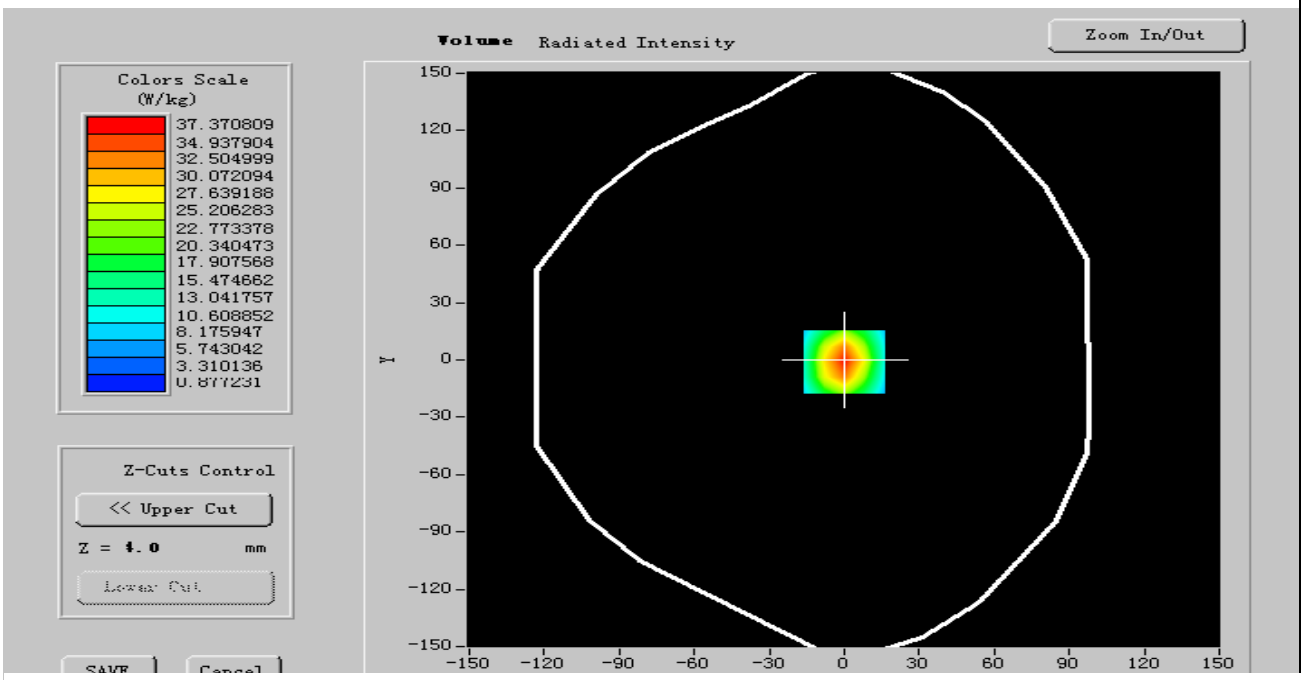
C. SAR Measurement Results

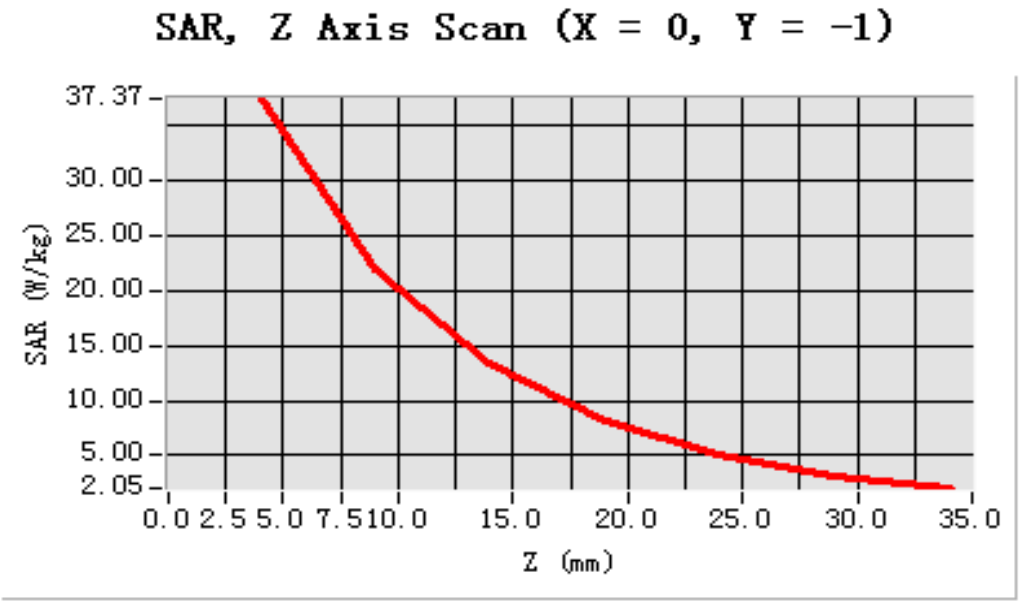
Frequency (MHz)	1950.000000
Relative permitivity (real part)	53.213660
Relative permitivity (imaginary part)	13.691050
Conductivity (S/m)	1.5631460
Variation (%)	-0.450000
Ambient Temperature	21 °C
Liquid Temperature	20 °C
ConvF	41.01, 42.41, 55.65
Crest factor	1:1

SURFACE SAR



VOLUME SAR


Volume Radiated Intensity
Zoom In/Out
Colors Scale
(W/kg)
37.370809
34.937904
32.504999
30.072094
27.639188
25.206283
22.773378
20.340473
17.907568
15.474662
13.041757
10.608852
8.175947
5.743042
3.310136
0.877231
Z-Cuts Control
<< Upper Cut
Z = 4.0 mm
Lower Cut
SAVE
Cancel
150
120
90
60
30
0
-30
-60
-90
-120
-150
Y
-150 -120 -90 -60 -30 0 30 60 90 120 150


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)