Report No: KS100816B01

#### I. 850MHz Band RESULTS



## **MEASUREMENT 1**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

#### A. Experimental conditions.

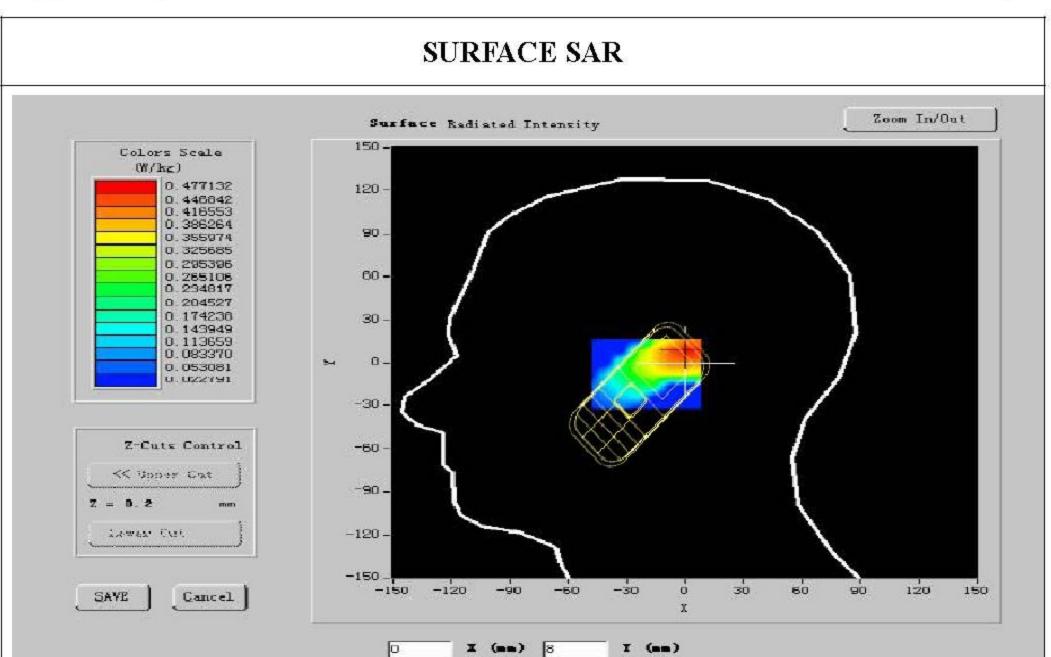
Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Right head		
<b>Device Position</b>	Cheek		
Band	GSM850		
Channels	Low		
Signal	GSM		

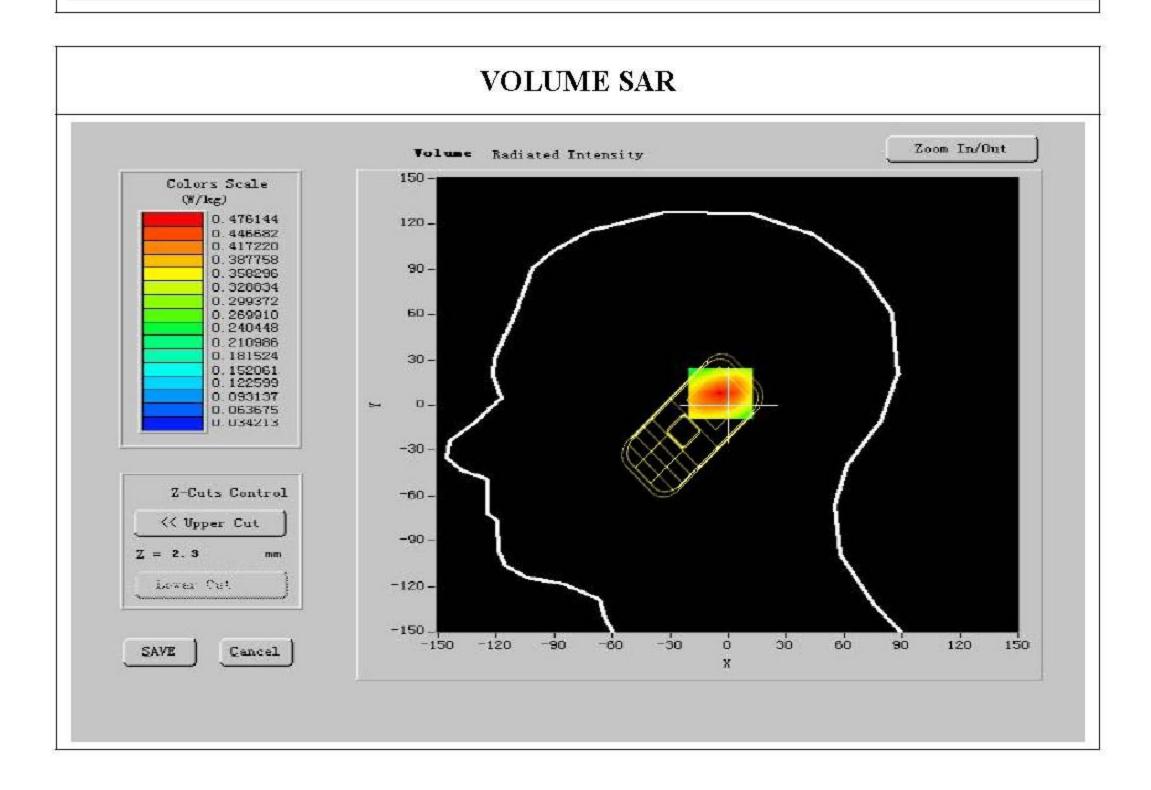
#### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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







Report No: KS100816B01

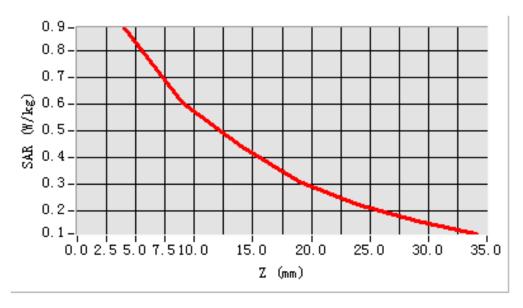
**Maximum location: X=-13.00, Y=-3.00** 

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.8491	0.5876	0.4532	0.2756	0.1985	0.1465
(W/kg)	0.0000	V.0491	U.30/U	U.4532	0.4/50	0.1905	V.1405

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





### **MEASUREMENT 2**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

#### A. Experimental conditions.

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

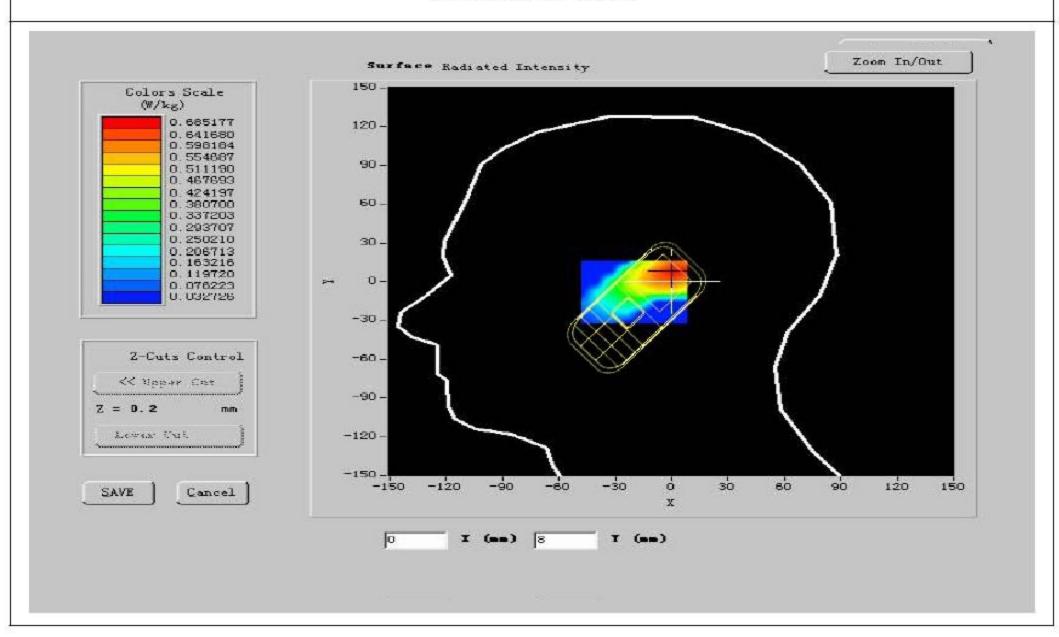
#### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

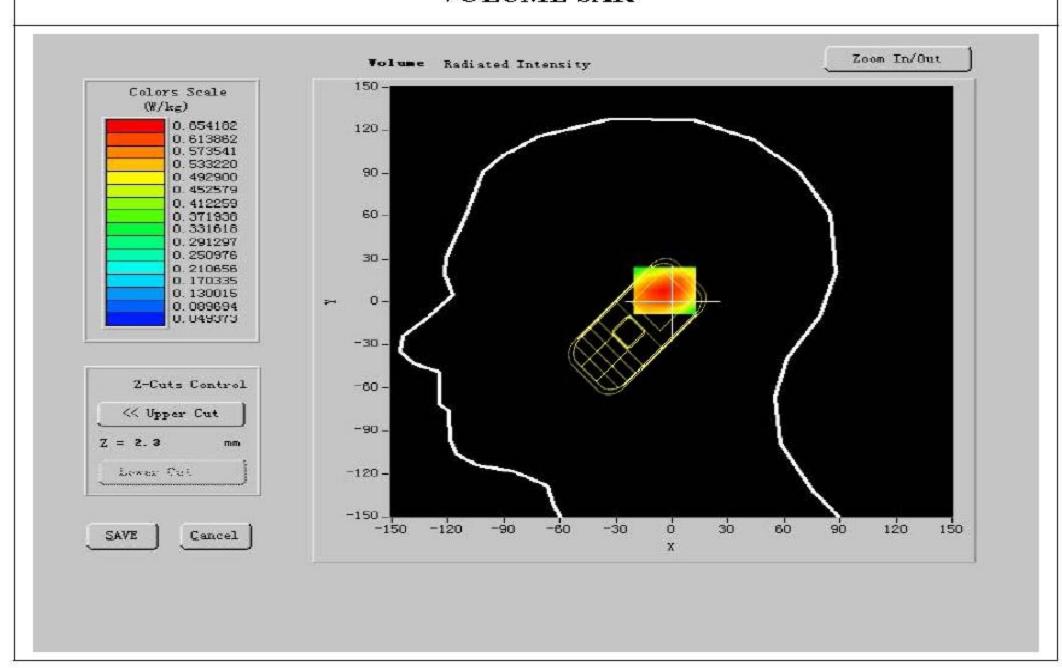
Frequency (MHz)	836.400024
Relative permitivity (real part)	41.466999
Relative permitivity (imaginary part)	19.511101
Conductivity (S/m)	0.916616
Variation (%)	-0.110000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36
Crest factor:	1:8

Report No: KS100816B01





## **VOLUME SAR**





Report No: KS100816B01

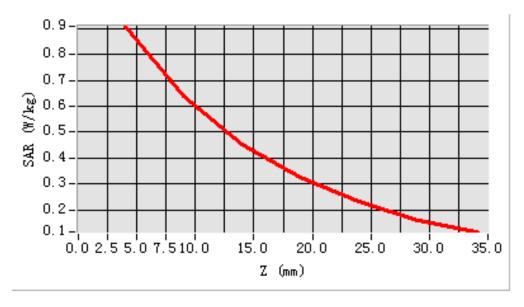
1114AIIII4III 10C4H0II: 21— 15:00; 1— 5:00	Maximum	location:	X = -13	.00,	Y=-	3.00
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SAR 10g (W/Kg)	0.562540
SAR 1g (W/Kg)	0.868381

#### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.0603	0.5097	0.4463	0.4073	0.2245	0.1672
(W/kg)	0.0000	0.8683	0.5987	0.4463	0.4073	0.2345	0.1673

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





### **MEASUREMENT 3**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

#### A. Experimental conditions.

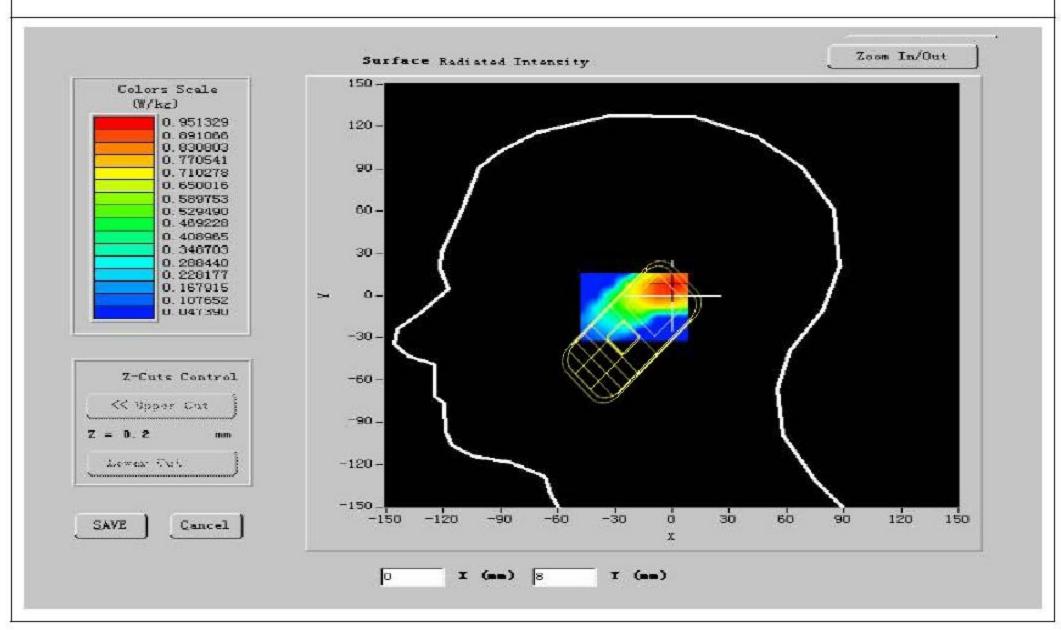
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Right head	
<b>Device Position</b>	Cheek	
Band	GSM850	
Channels	High	
Signal	GSM	

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

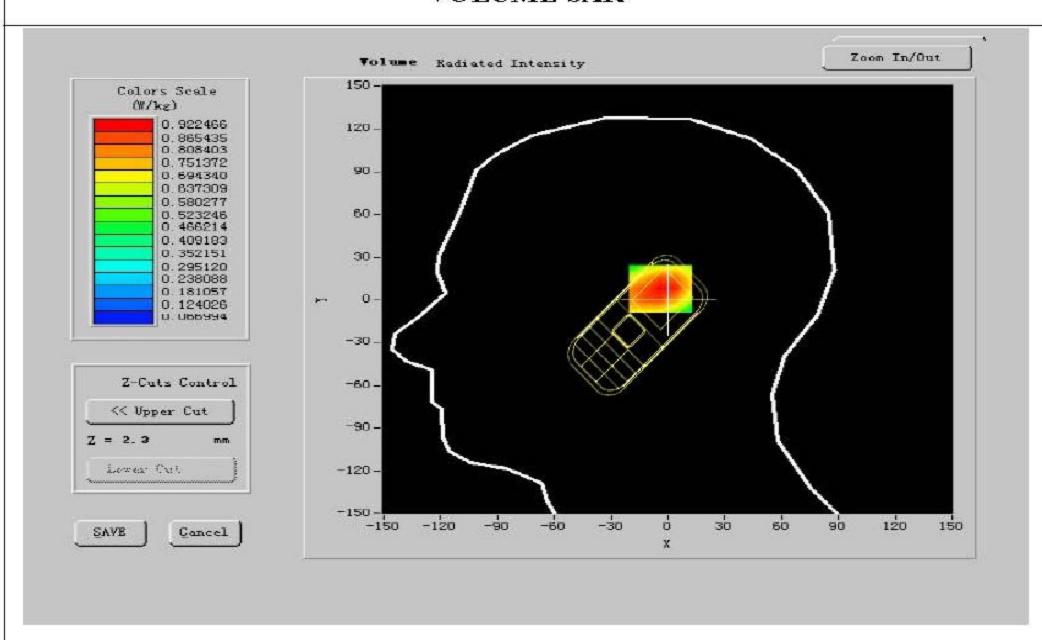
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

Frequency (MHz)	848.599976
Relative permitivity (real part)	41.262001
Relative permitivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	-0.110000
Ambient Temperature:	21 °C
Liquid Temperature:	20 °C
ConvF:	20.66, 20.51, 28.36
Crest factor:	1:8









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

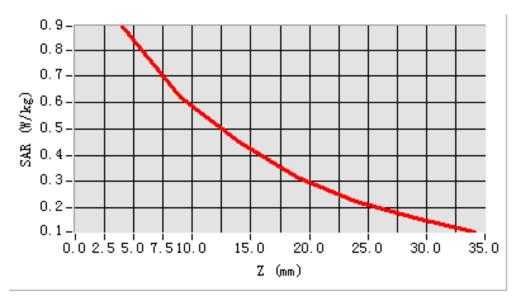
Report No: KS100816B01

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.84446	0.58763	0.4127	0.2947	0.1987	0.1324
(W/kg)	<b>0.0000</b>	V.04440	0.50/05	U.4127	0.2947	0.1987	0.1324

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





### **MEASUREMENT 4**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

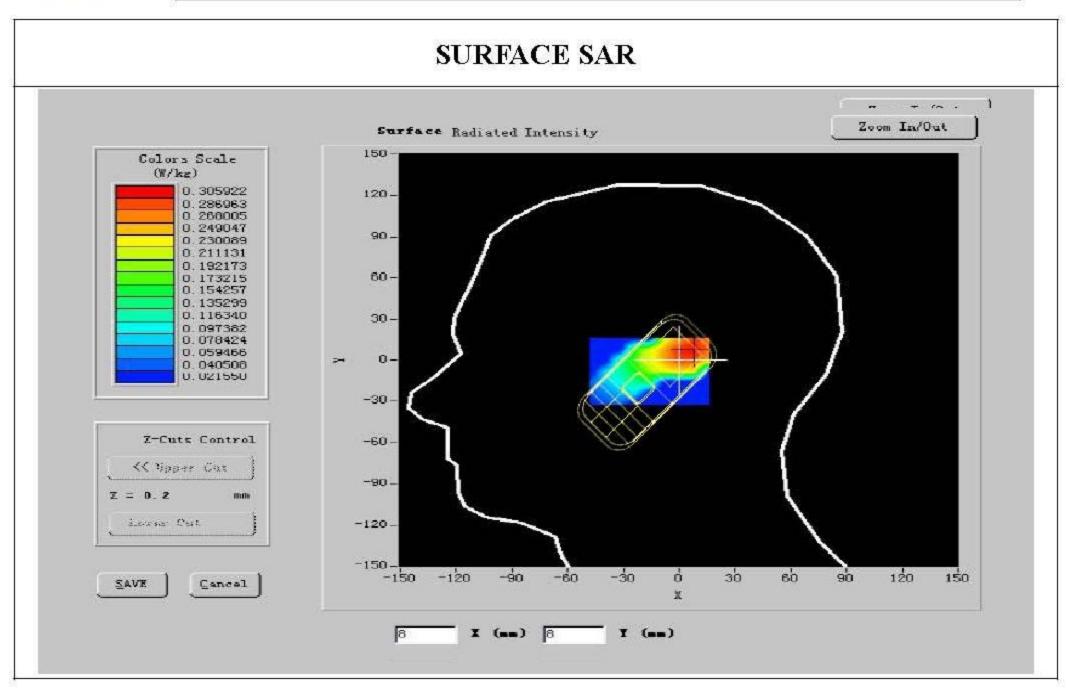
#### A. Experimental conditions.

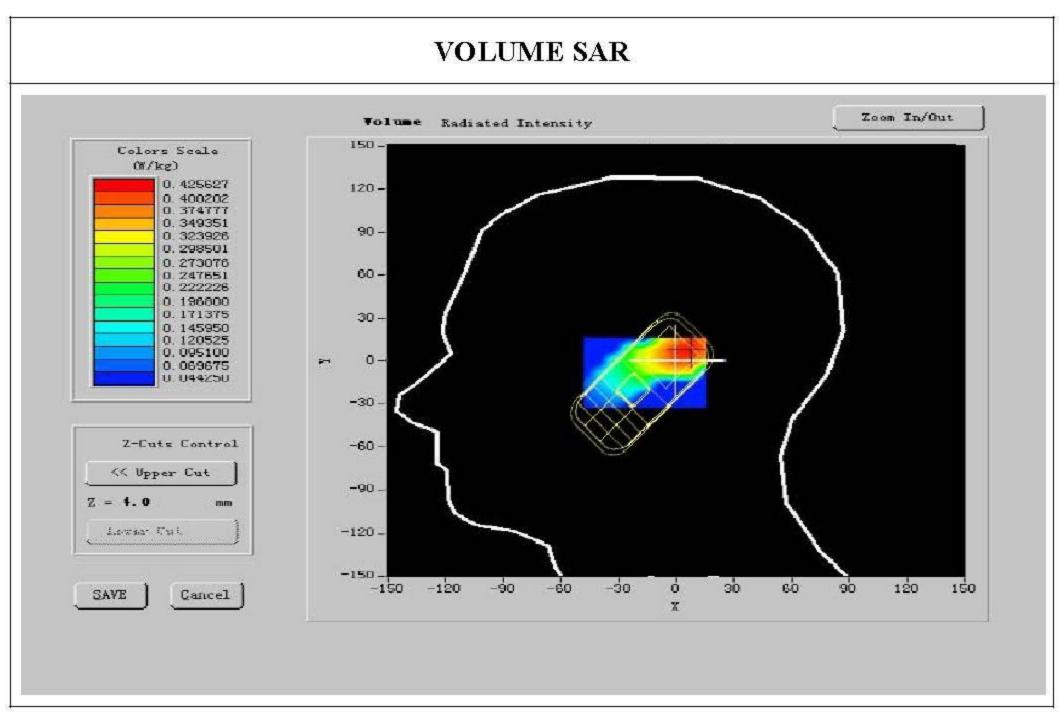
Phantom File zinf15.txt, Adaptative 2 m		
Phantom	Right head	
<b>Device Position</b>	Tilt	
Band	GSM850	
Channels	Low	
Signal	GSM	

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





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

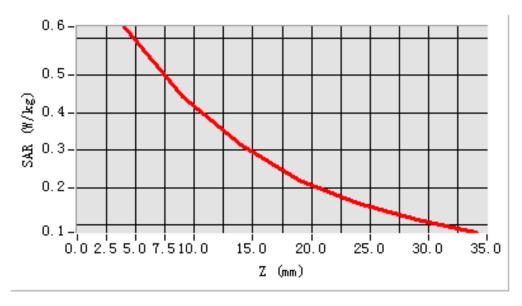
Report No: KS100816B01

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5756	0.4854	0.3354	0.2154	0.1911	0.0111
(W/kg)	<b>0.0000</b>	0.5750	V.4054	0.3354	0.2154	0.1911	0.0111

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





### **MEASUREMENT 5**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

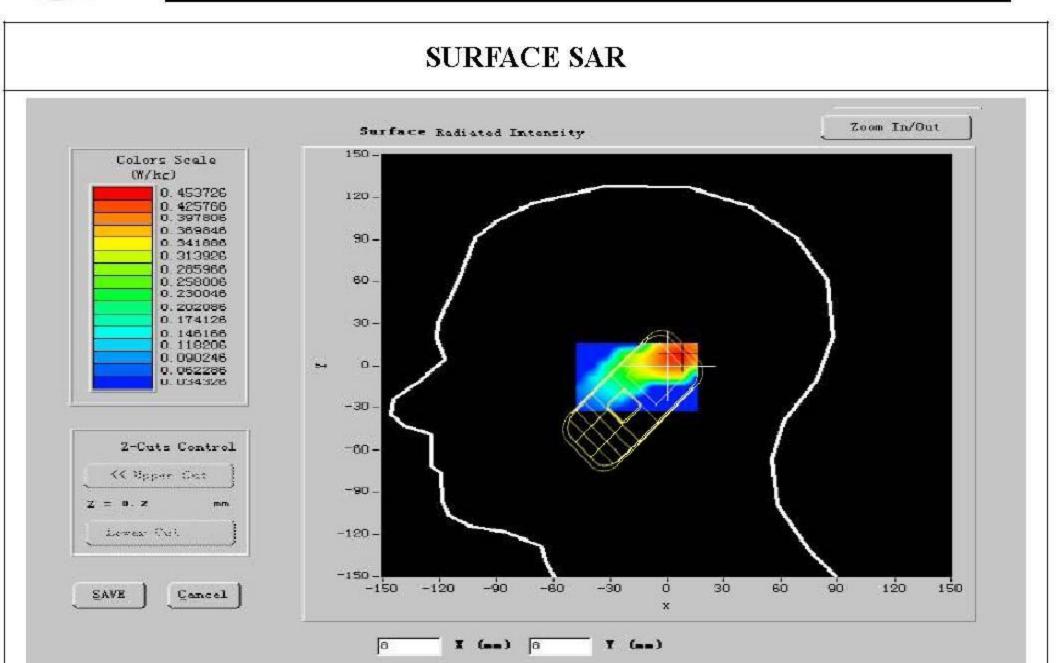
#### A. Experimental conditions.

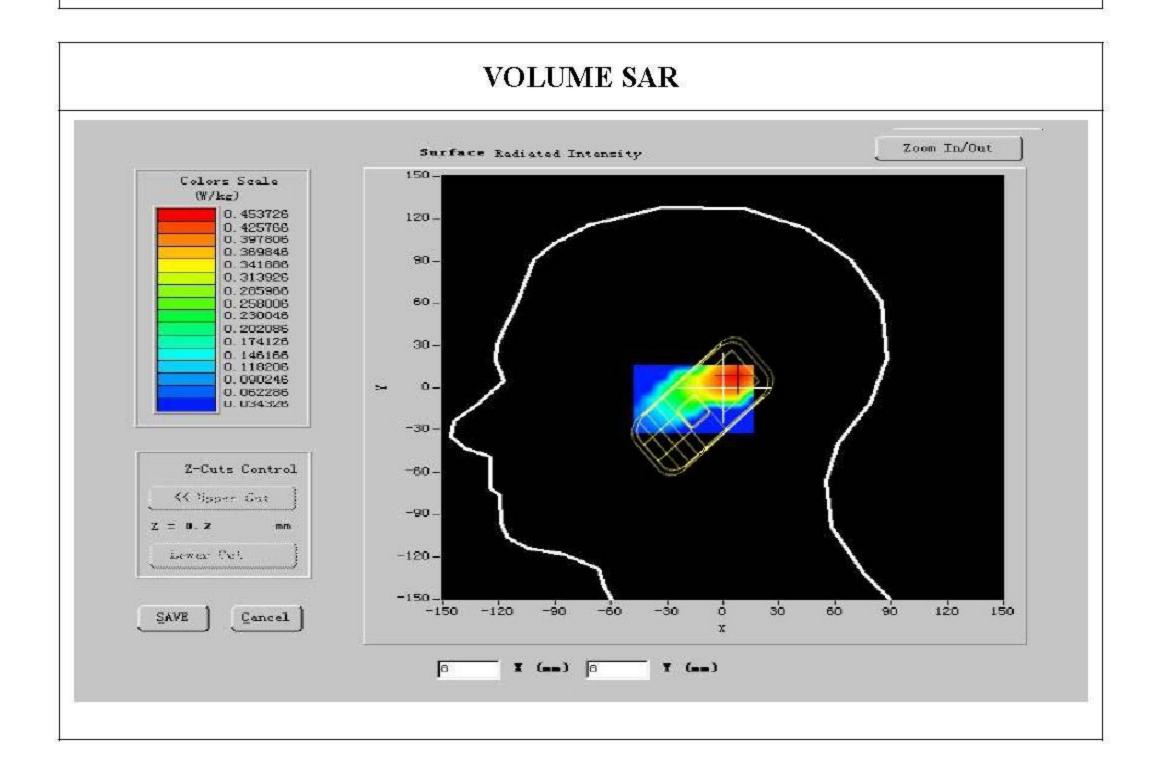
Phantom File zinf15.txt, Adaptative 2 max		
Phantom	Right head	
<b>Device Position</b>	Tilt	
Band	GSM850	
Channels	Middle	
Signal	GSM	

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





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

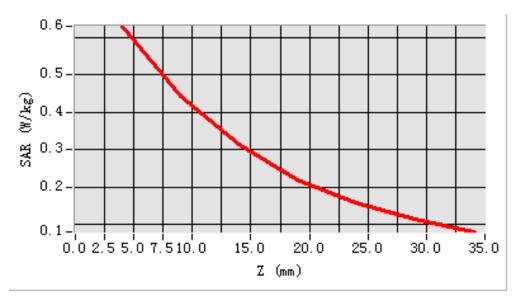
Report No: KS100816B01

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5020	0.4254	0.2254	0.2154	0.1711	0.0122
(W/kg)	0.0000	0.5929	0.4354	0.3354	0.2154	0.1611	0.0123

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





### **MEASUREMENT 6**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

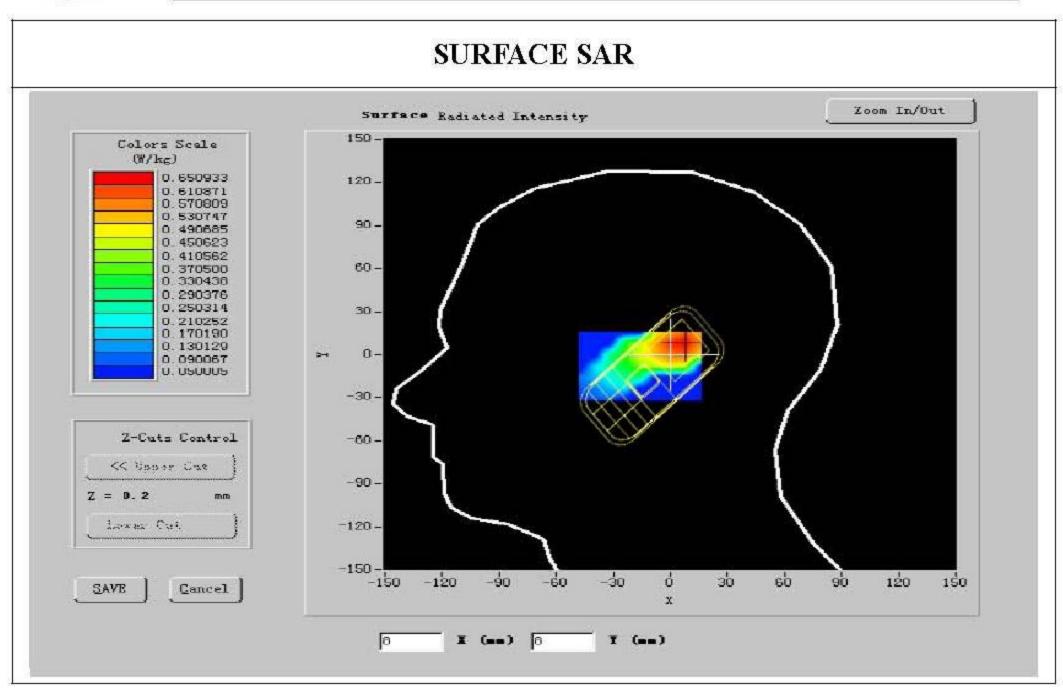
#### A. Experimental conditions.

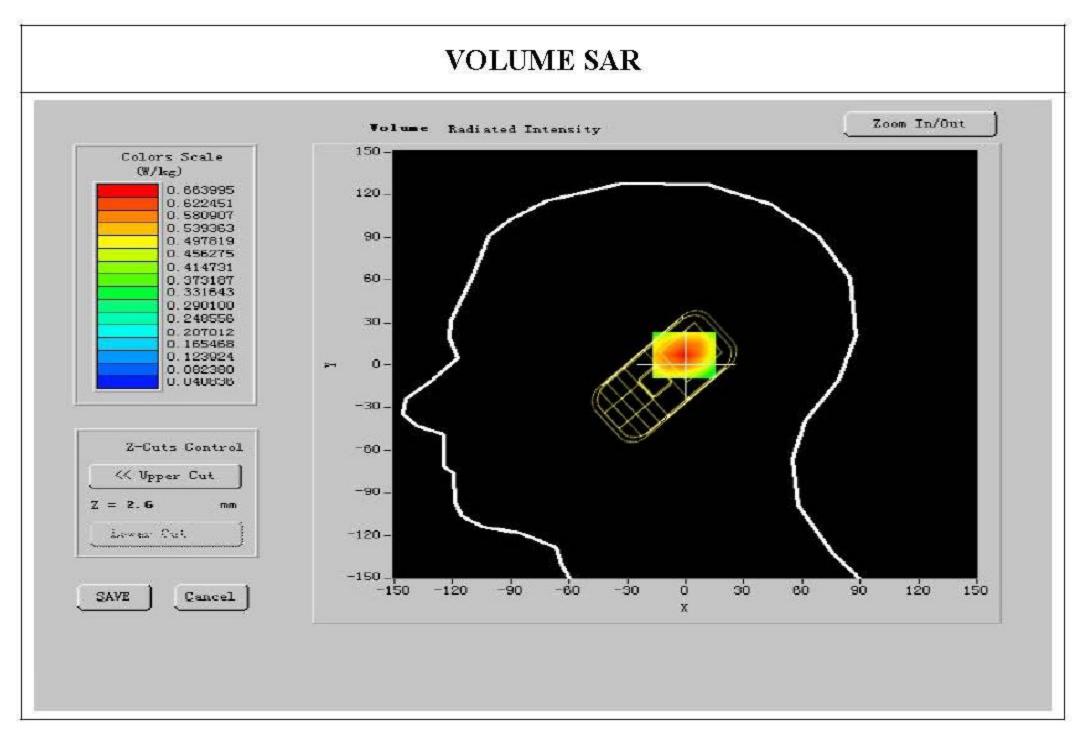
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





Report No: KS100816B01

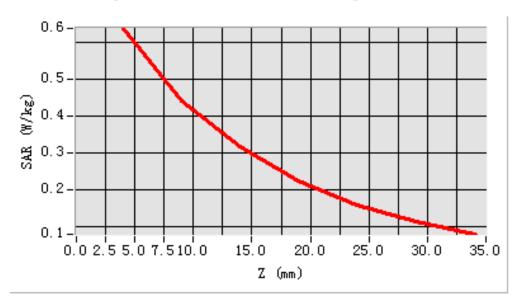
#### **Maximum location: X=-13.00, Y=-3.00**

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5994	0.4354	0.3354	0.2154	0.1611	0.1234
(W/kg)	0.0000	0.3994	V.4354	V.3354	0.2154	0.1011	0.1234

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





### **MEASUREMENT 7**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

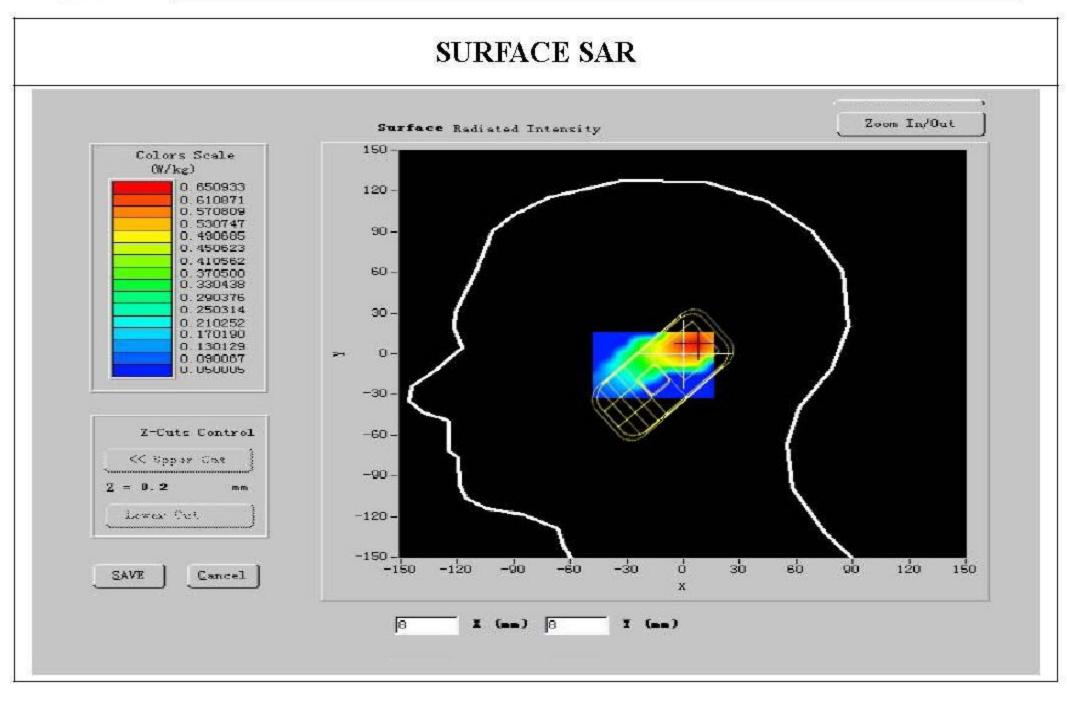
## A. Experimental conditions.

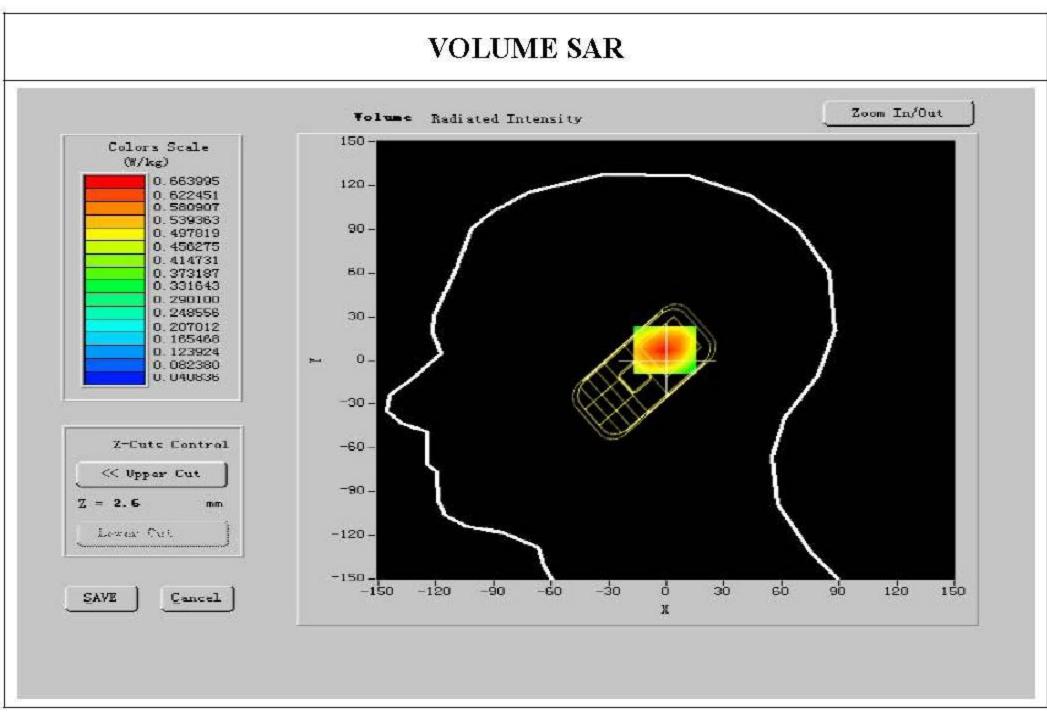
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
<b>Device Position</b>	Cheek	
Band	GSM850	
Channels	Low	
Signal	GSM	

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





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

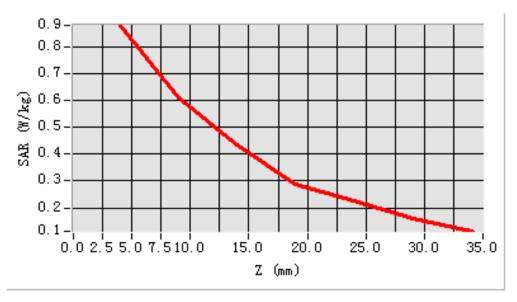
Report No: KS100816B01

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.8390	0.5354	0.4154	0.2854	0.2111	0.1352
(W/kg)	0.0000	0.0370	V.3334	V.4134	V.2034	<b>V.2111</b>	U.1332

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





### **MEASUREMENT 8**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

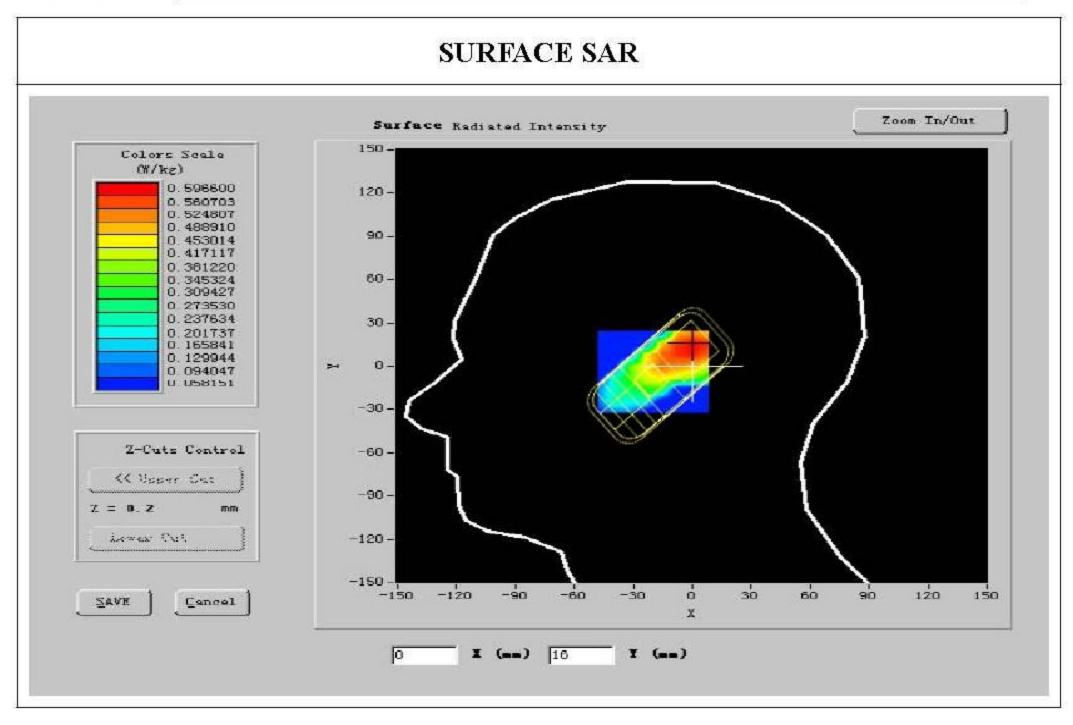
#### A. Experimental conditions.

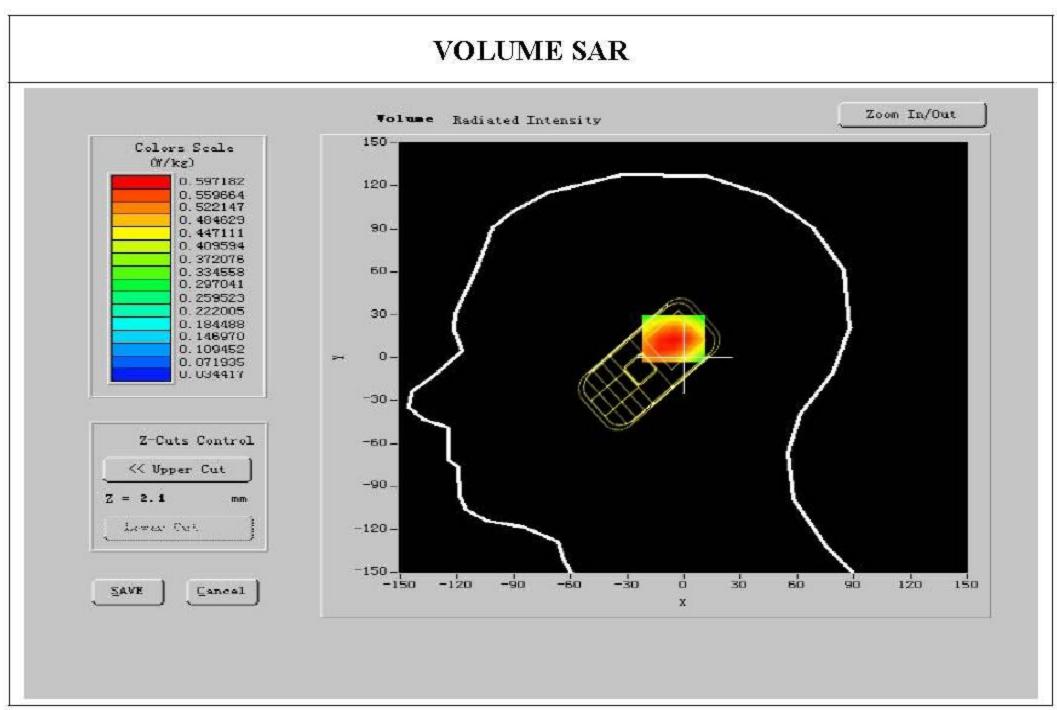
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
<b>Device Position</b>	Cheek	
Band	GSM850	
Channels	Middle	
Signal	GSM	

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





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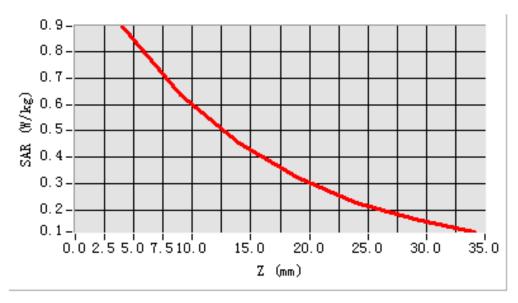
#### Maximum location: X=-13.00, Y=-3.00

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.8507	0.5334	0.4132	0.2832	0.2132	0.1353
(W/kg)	0.0000	0.0507	0.5554	0.4132	0.2032	0.2132	0.1353

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





## **MEASUREMENT 9**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

#### A. Experimental conditions.

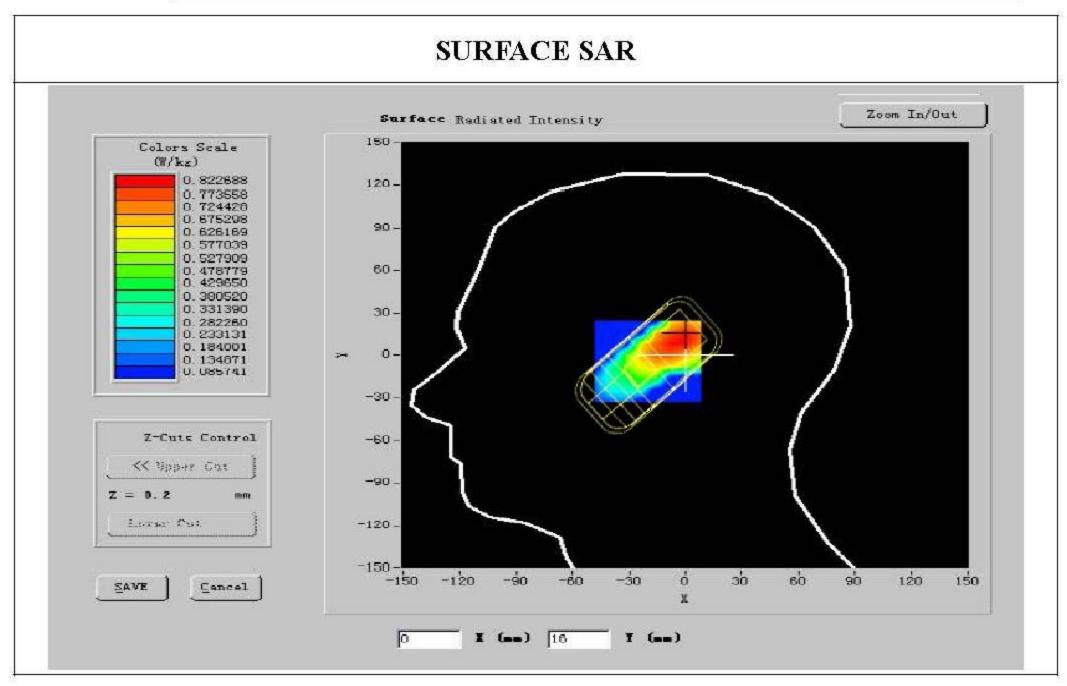
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
<b>Device Position</b>	Cheek	
Band	GSM850	
Channels	High	
Signal	GSM	

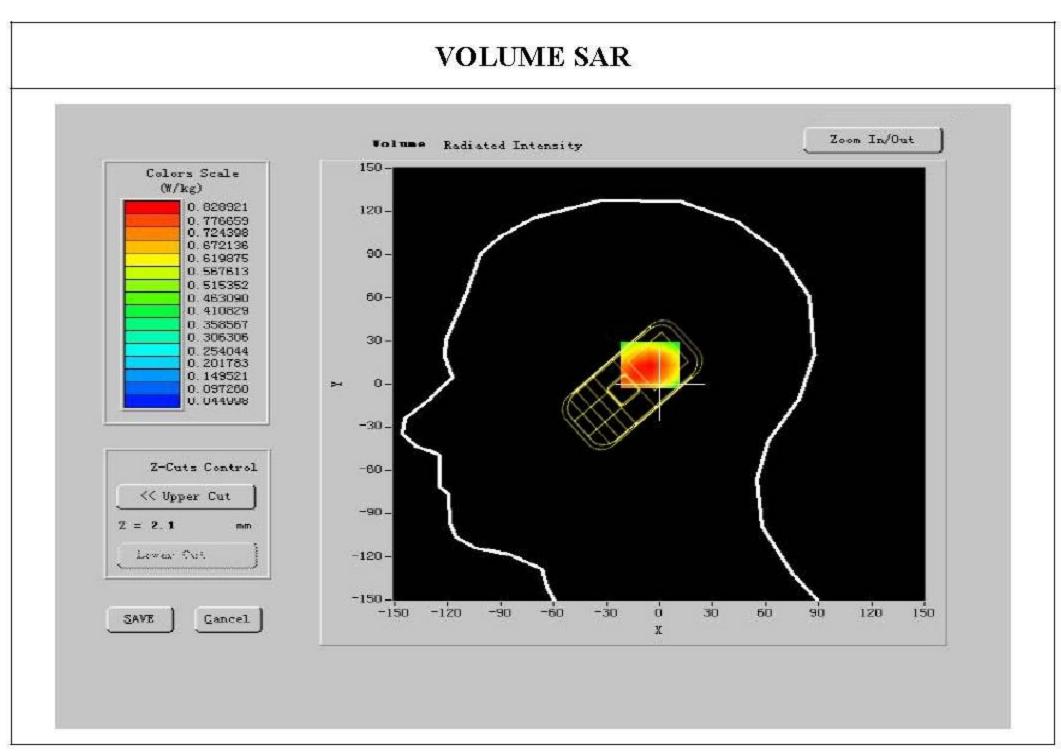
#### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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







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

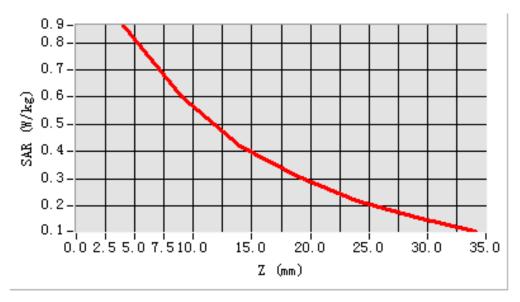
Report No: KS100816B01

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.0120	0.5222	0.4545	0.2024	0.2122	0.1222
(W/kg)	0.0000	0.8129	0.5323	0.4545	0.2834	0.2132	0.1323

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





### **MEASUREMENT 10**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

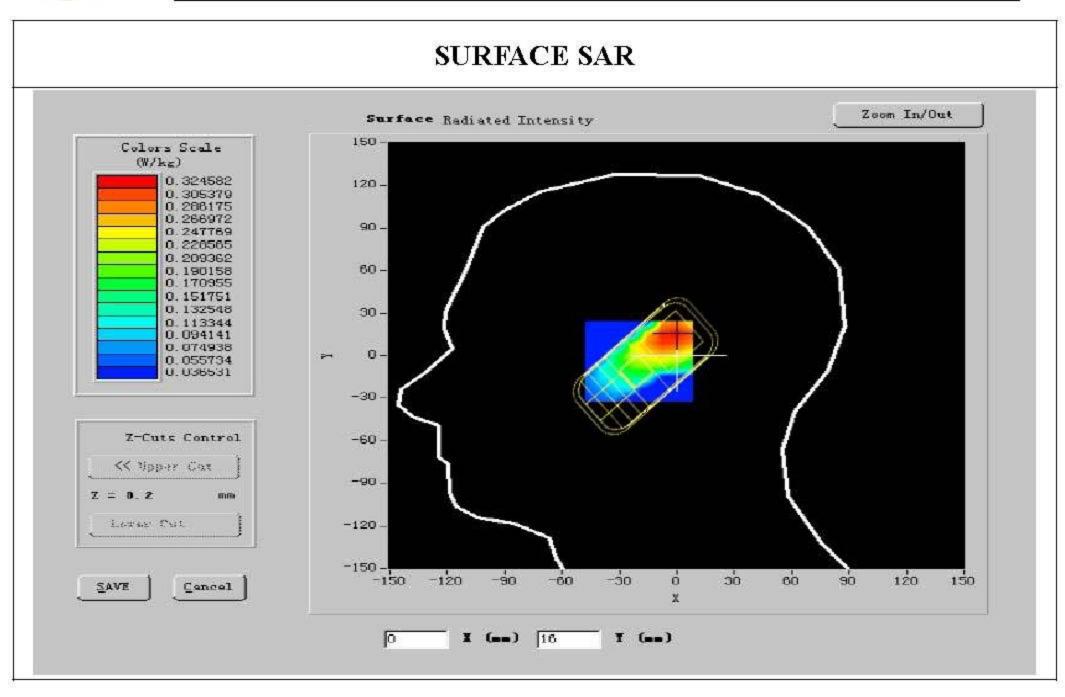
## A. Experimental conditions.

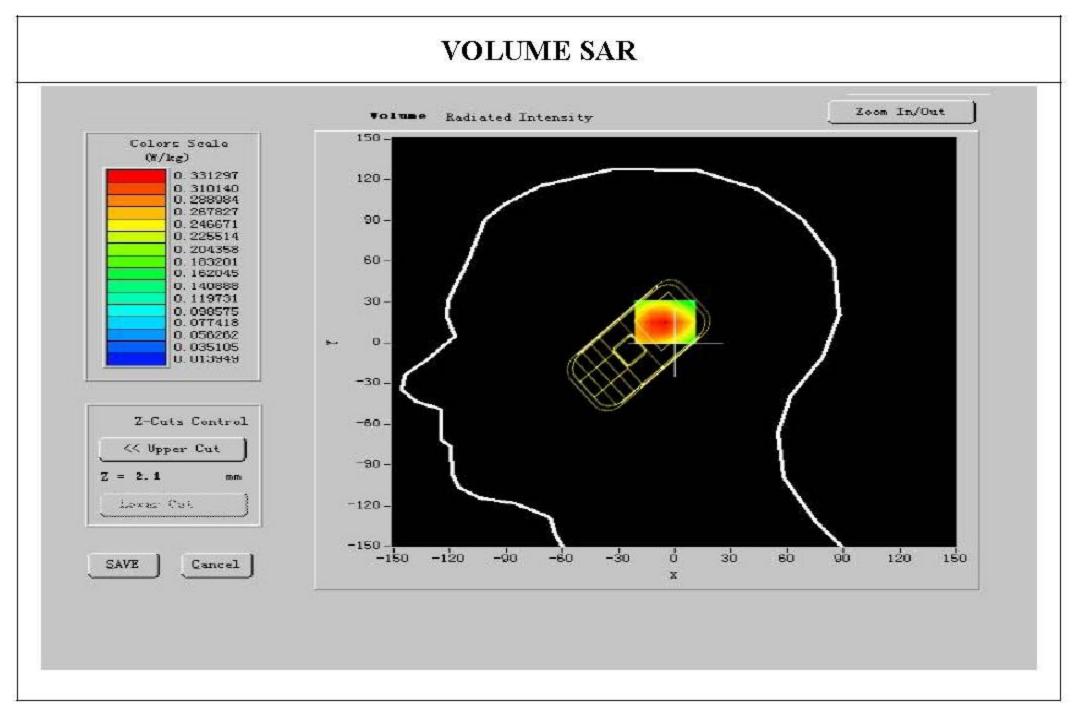
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Left head	
<b>Device Position</b>	Tilt	
Band	GSM850	
Channels	Low	
Signal	GSM	

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





Report No: KS100816B01

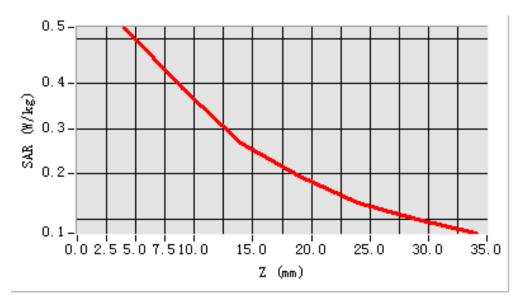
#### **Maximum location: X=-13.00, Y=-3.00**

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.4918	0.5332	0.2564	0.1821	0.1443	0.1454
(W/kg)	0.0000	V.4710	0.3332	V.23U4	V.1021	V.1443	V.1434

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





## **MEASUREMENT 11**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

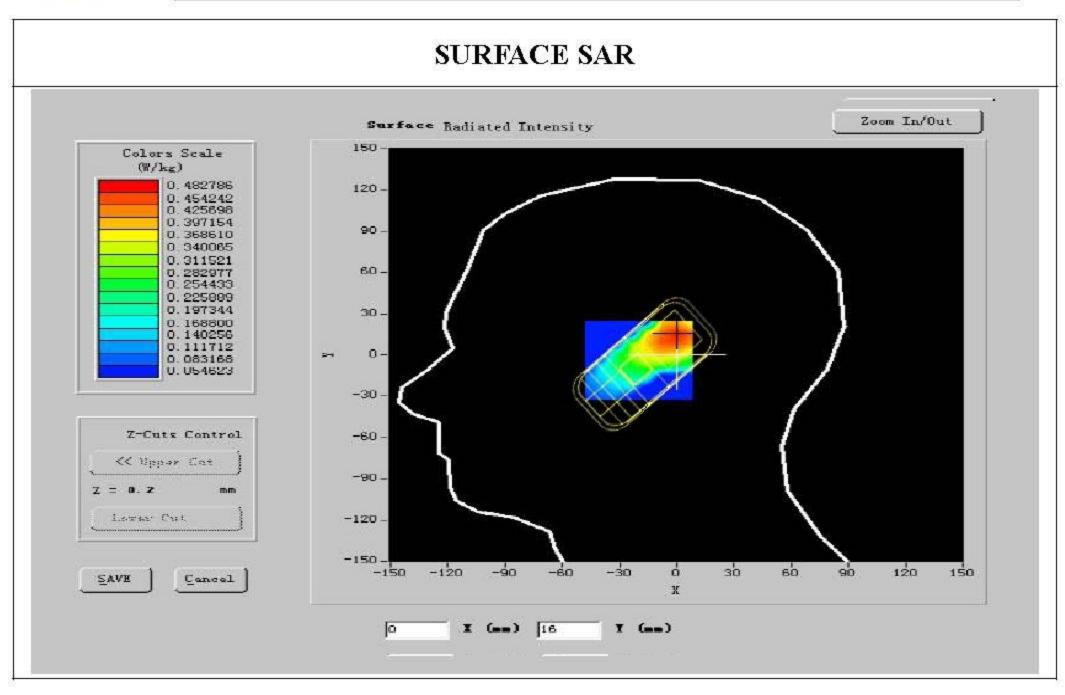
#### A. Experimental conditions.

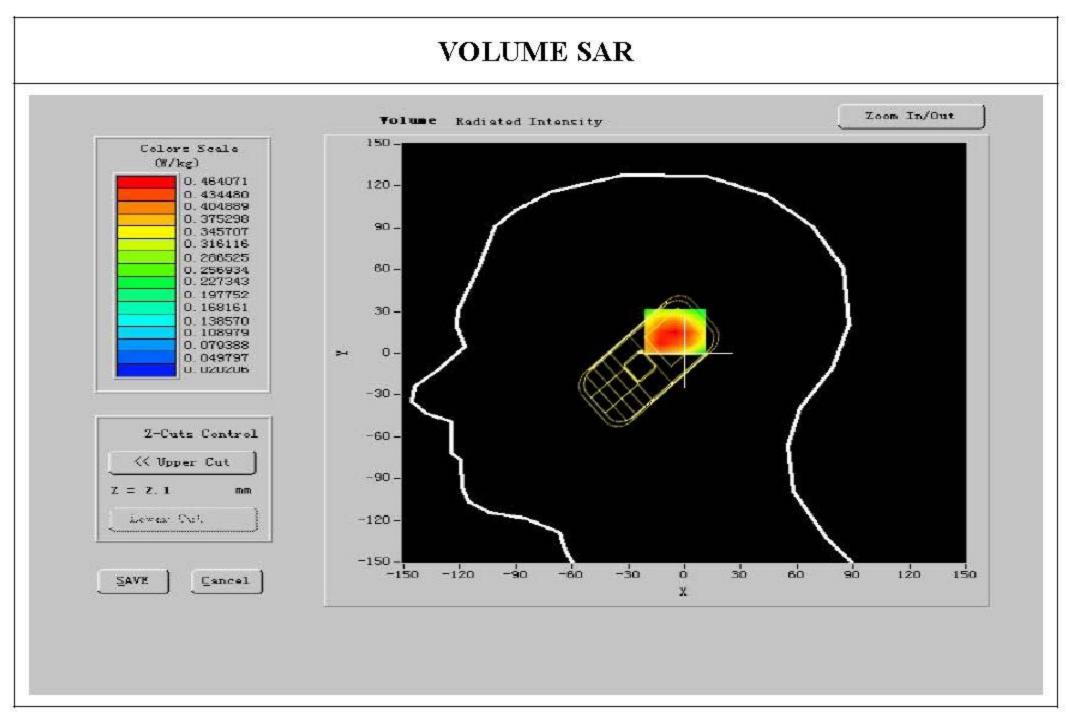
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





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

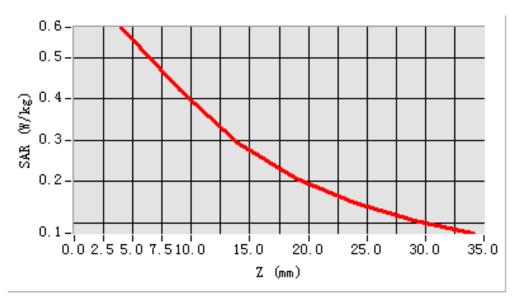
Report No: KS100816B01

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5533	0.4132	0.2964	0.2021	0.1643	0.1154
(W/kg)	0.0000	0.3333	0.4132	0.2704	0.2021	0.1043	V.1154

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





### **MEASUREMENT 12**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

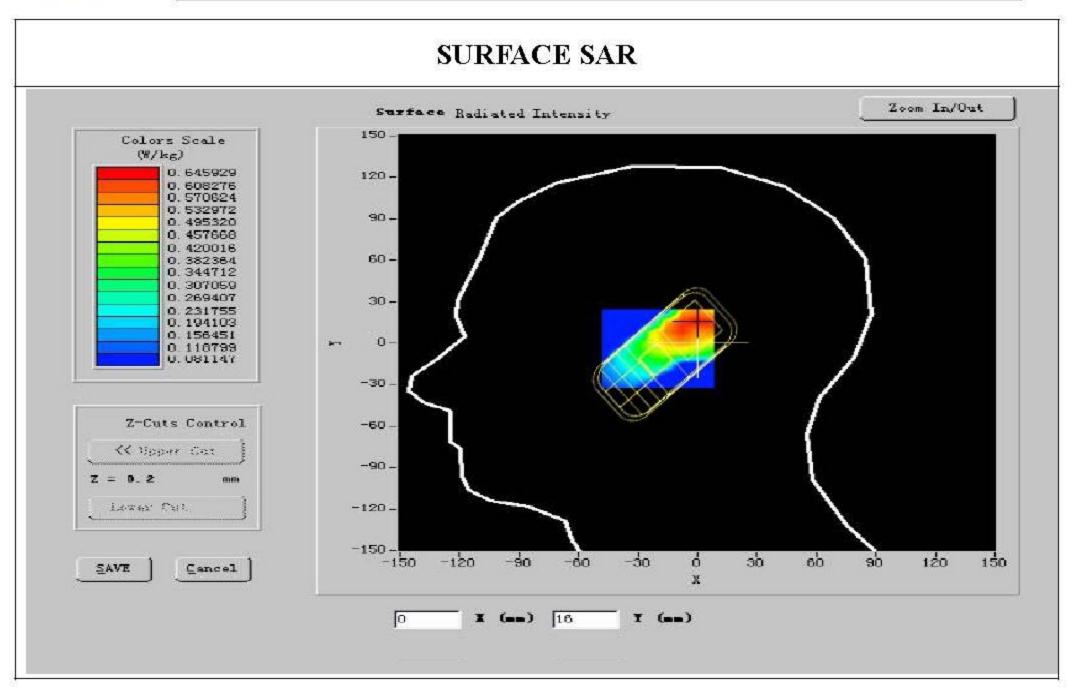
#### A. Experimental conditions.

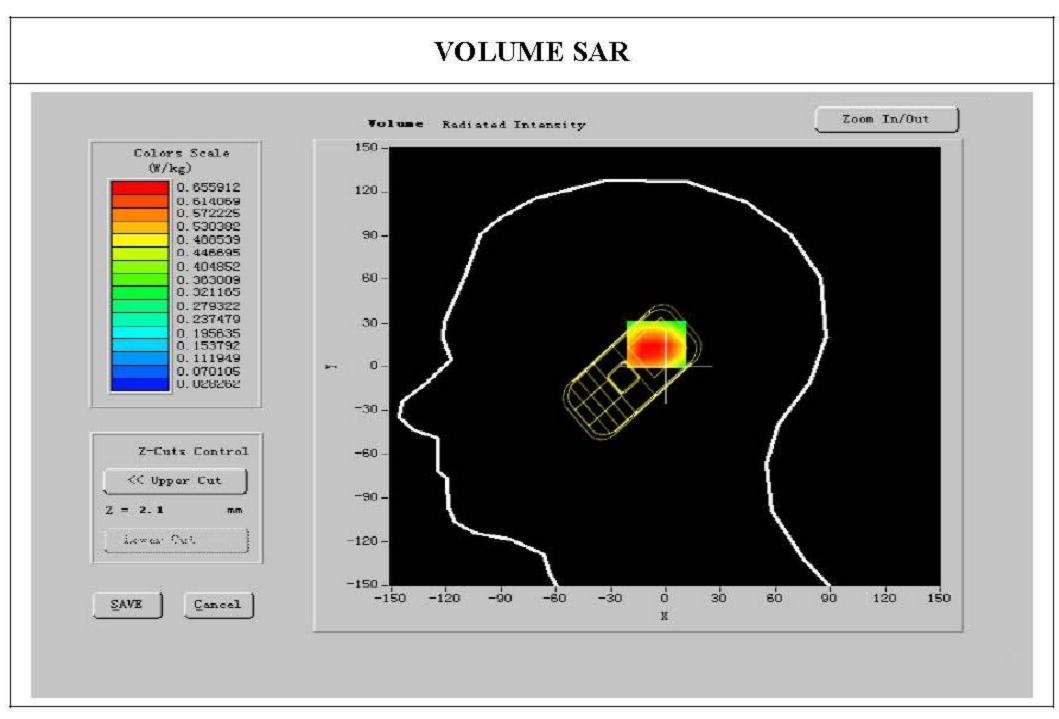
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





Report No: KS100816B01

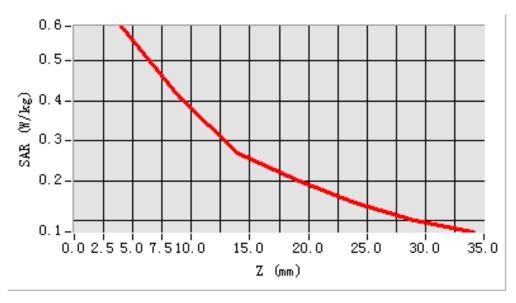
### **Maximum location: X=-13.00, Y=-3.00**

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

#### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.5510	0.4142	0.2664	0.2020	0.1543	0.1054
(W/kg)	0.0000	0.3310	0.4142	V.2004	0.2020	0.1343	0.1034

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





## **MEASUREMENT 13**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

## A. Experimental conditions.

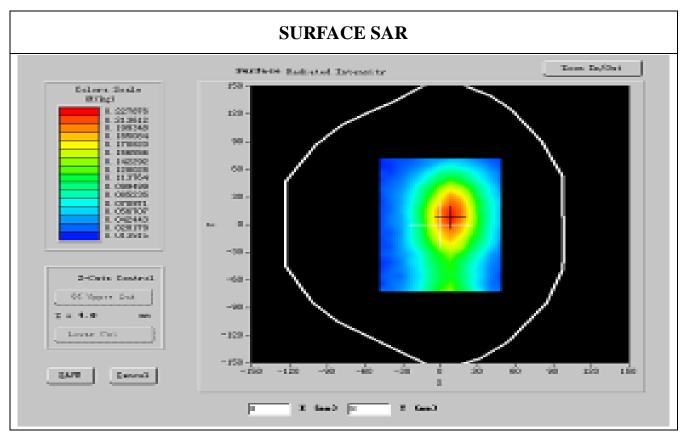
Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Body		
Device Position	FrontSide toward phantom		
Band	GSM850		
Channels	Low		
Signal	nal GSM		

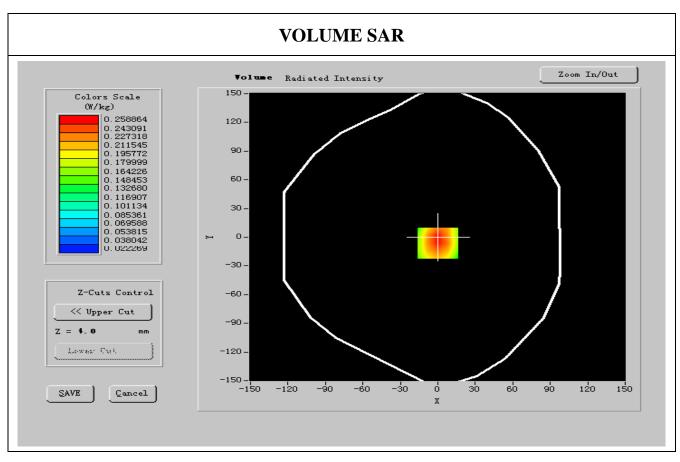
## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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







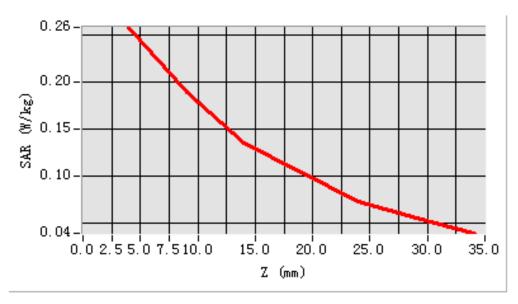
Report No: KS100816B01

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

#### Z Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2512	0.1242	0.1464	0.1020	0.0631	0.0454
(W/kg)	0.0000	U.2512	U.1242	V.1404	0.1020	0.0031	V.U454

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





## **MEASUREMENT 14**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

### A. Experimental conditions.

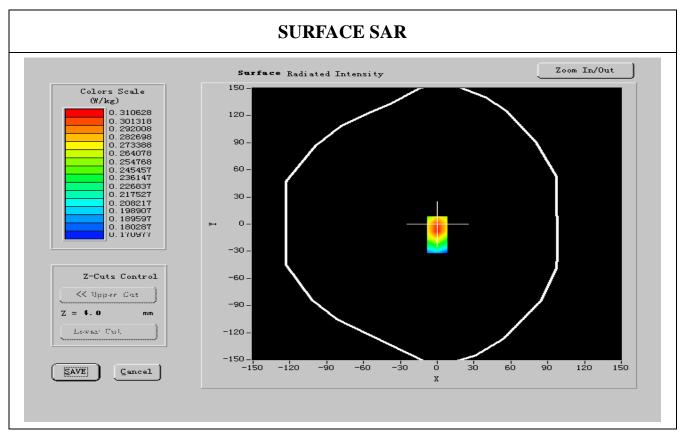
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Body	
<b>Device Position</b>	FrontSide toward phantom	
Band	GSM850	
Channels	Middle	
Signal	GSM	

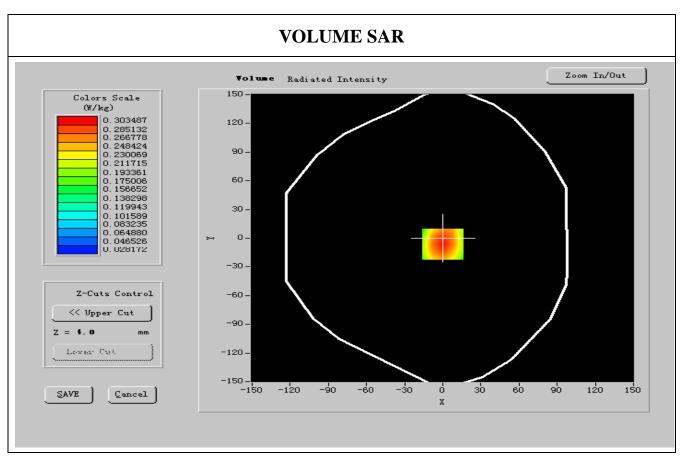
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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







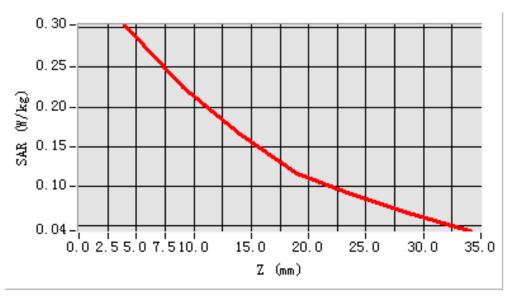
**Maximum location: X=-13.00, Y=-3.00** 

Report No: KS100816B01

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

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2000	0.2242	0.1664	0 1120	0.0007	0.0422
(W/kg)	0.0000	0.2890	0.2342	0.1664	0.1120	0.0887	0.0422

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





## **MEASUREMENT 15**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

### A. Experimental conditions.

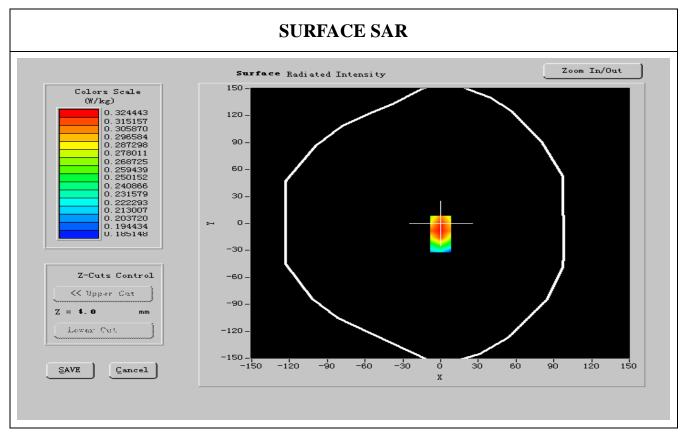
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Body	
<b>Device Position</b>	FrontSide toward phantom	
Band	GSM850	
Channels	High	
Signal	GSM	

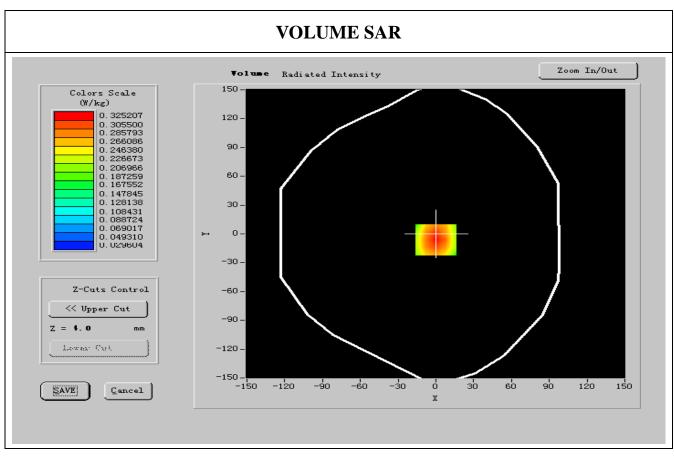
## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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







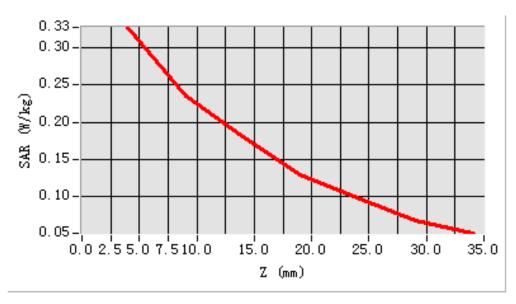
Report No: KS100816B01

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

#### **Z** Axis Scan

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.3063	0.2322	0.1674	0.1420	0.1800	0.0573
(W/kg)	0.0000	0.3003	0.2322	0.1074	0.1420	0.1000	0.0575

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





## **MEASUREMENT 16**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

### A. Experimental conditions.

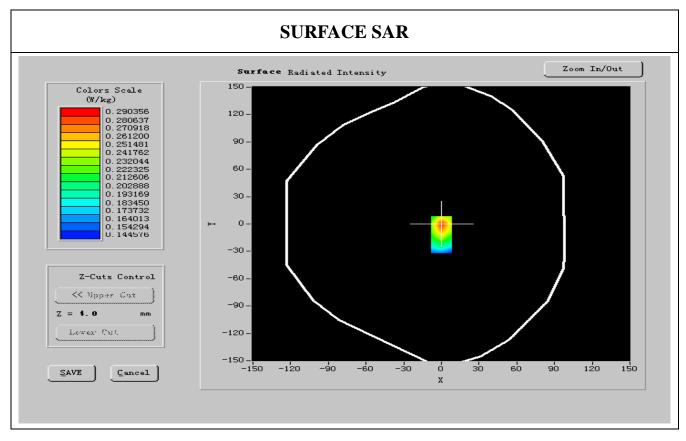
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Body	
<b>Device Position</b>	FrontSide toward phantom	
Band	GPRS850	
Channels	Low	
Signal	GPRS	

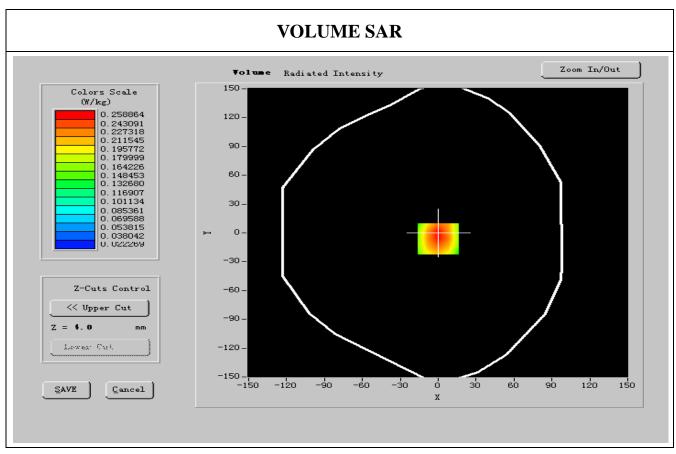
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





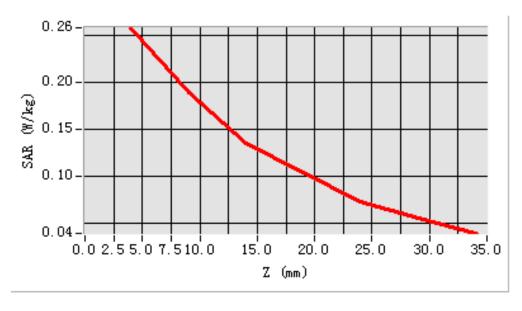


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SAR 10g (W/Kg)	0.161258
SAR 1g (W/Kg)	0.287832

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2070	0.1722	0.1474	0.1022	0.0007	0 0511
(W/kg)	0.0000	0.2878	0.1722	0.1474	0.1023	0.0887	0.0511

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





## **MEASUREMENT 17**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

## A. Experimental conditions.

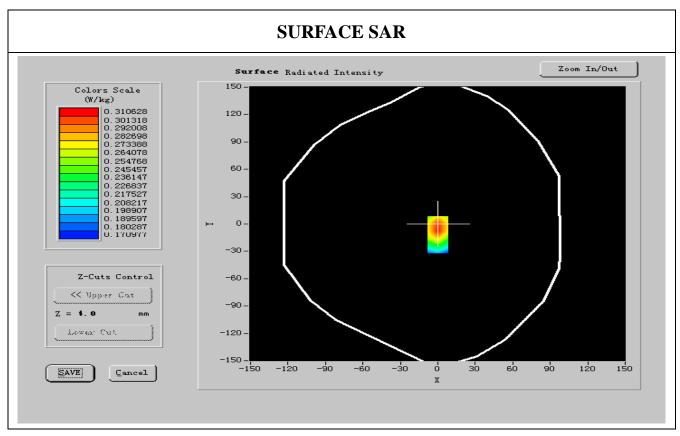
Phantom File	zinf15.txt, Adaptative 2 max	
Phantom	Body	
Device Position	FrontSide toward phantom	
Band	GPRS850	
Channels	Middle	
Signal	GPRS	

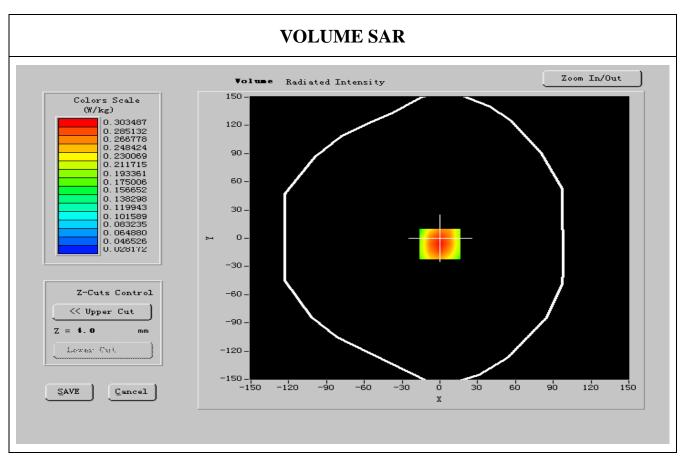
### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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





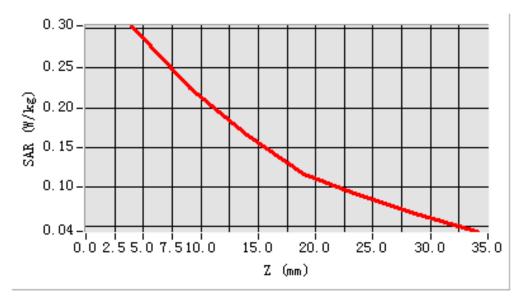


Report No: KS100816B01

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

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2070	0.1722	0 1474	0.1022	0.0007	0.0511
(W/kg)	0.0000	0.2878	0.1722	0.1474	0.1023	0.0887	0.0511

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





## **MEASUREMENT 18**

Report No: KS100816B01

Date of measurement: 30/8/2010

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

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

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

### A. Experimental conditions.

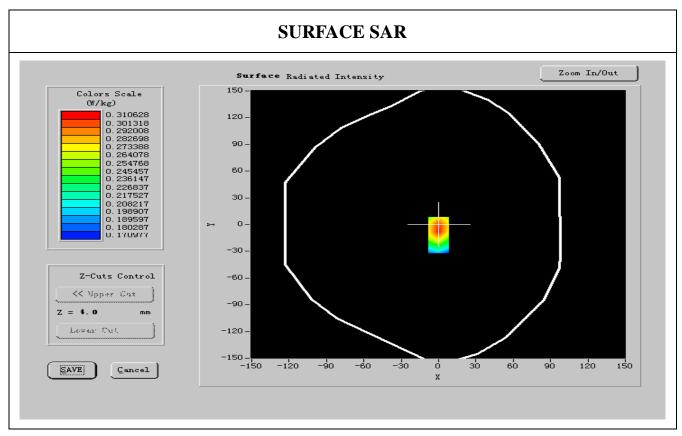
Phantom File	zinf15.txt, Adaptative 2 max		
Phantom	Body		
<b>Device Position</b>	FrontSide toward phantom		
Band	GPRS850		
Channels	High		
Signal	GPRS		

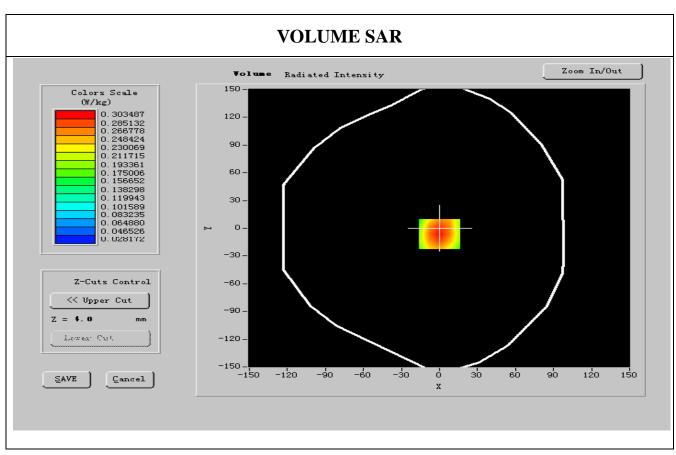
## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Wireless Communication	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Test Set		
Network Analyzer	Agilent(E5071B, MY42301382)	Calibrated: 08/07/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Signal Generator	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 05/05/2011
DIPOLE 835	Antennessa (DIPI32,SN 48/05)	Calibrated: 12/10/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

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







Report No: KS100816B01

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

Z(mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	0.0000	0.2222	0.1722	0.1404	0.1222	0.0707	0.0651
(W/kg)	0.0000 0.3232	0.1722	0.1494	0.1323	0.0787	0.0651	

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

