SAR Test Plots
Project name :
KS100512B01

#### **EUT DESCRIPTION**

Product name: Mobile Phone

Model No.: K520, K520+, Mini K520, K520i, S218

Trade name: Baoxing

Tested date: May 13, 2010

Applicant: ShenZhen Jin Fei Sheng Technology Co., Ltd.

Room 5103, 51F, Seg Plaza, Shennan Mid-road, Futian District, Shenzhen, China.

Air Temperature: <u>21</u> °C Liqued Temperature: <u>20</u> °C

Crest Factor: CW:\_\_1\_ GSM:\_\_8\_\_ GPRS 12: \_\_2\_\_

**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

Probe: Antennessa (SN:SN\_1109\_EP\_100)

Compliance Certification Services (Kunshan) Inc.
No.10, Weiye Rd., Innovation Park, Eco & Tec. Development Part,
Kunshan City, Jiangsu Province, PRC.

TEL: 86-512-57355888 FAX: 86-512-57370818 http://www.ccsrf.com

# EUT Slide on GSM850

#### I. RESULTS

TYPE	BAND	<u>PARAMETERS</u>
<u>Noise</u>	1	
<u>Validation</u>		
Phone	GSM850	Measurement 1: Right Head with Cheek device position on Low Channel in GSM mode  Measurement 2: Right Head with Cheek device position on Middle Channel in GSM mode  Measurement 3: Right Head with Cheek device position on High Channel in GSM mode  Measurement 4: Right Head with Tilt device position on Low Channel in GSM mode  Measurement 5: Right Head with Tilt device position on Middle Channel in GSM mode  Measurement 6: Right Head with Tilt device position on High Channel in GSM mode  Measurement 7: Left Head with Cheek device position on Low Channel in GSM mode  Measurement 8: Left Head with Cheek device position on Middle Channel in GSM mode  Measurement 9: Left Head with Cheek device position on High Channel in GSM mode  Measurement 10: Left Head with Tilt device position on Low Channel in GSM mode  Measurement 11: Left Head with Tilt device position on Middle Channel in GSM mode  Measurement 11: Left Head with Tilt device position on Middle Channel in GSM mode  Measurement 12: Left Head with Tilt device position on Middle Channel in GSM mode

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

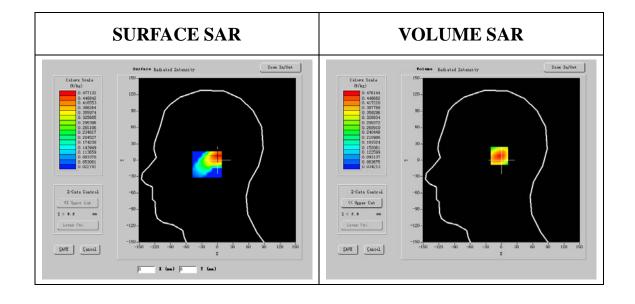
#### A. Experimental conditions.

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)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

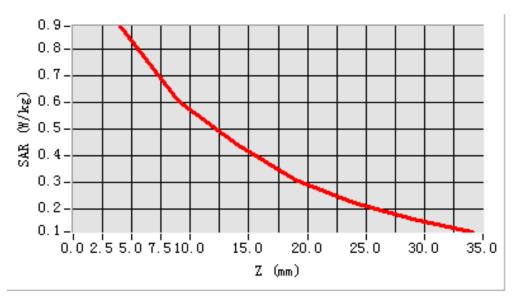


#### **Maximum location: X=-13.00, Y=-3.00**

SAR 1g (W/Kg)	0.866169
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#### Z Axis Scan

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

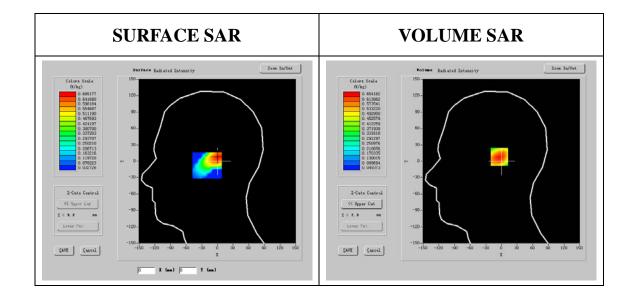
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	836.590001
Relative permitivity (real part)	41.410230
Relative permitivity (imaginary	19.504201
part) Conductivity (S/m)	0.905234
Variation (%)	-0.100000



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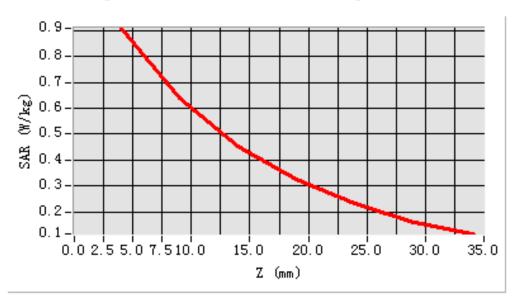
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#### **Maximum location: X=-13.00, Y=-3.00**

SAR 1g (W/Kg)	0.848915
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#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

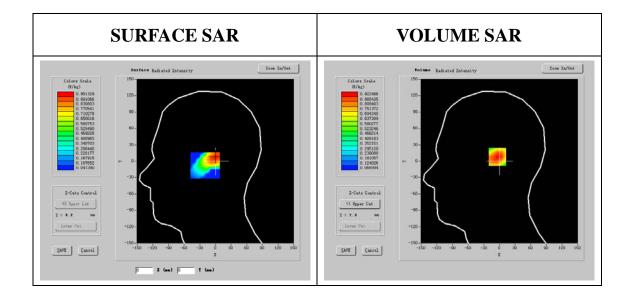
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	848.799999
Relative permitivity (real part)	41.202610
Relative permitivity (imaginary	19.586120
part) Conductivity (S/m)	0.904346
Variation (%)	-0.100000

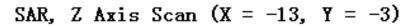


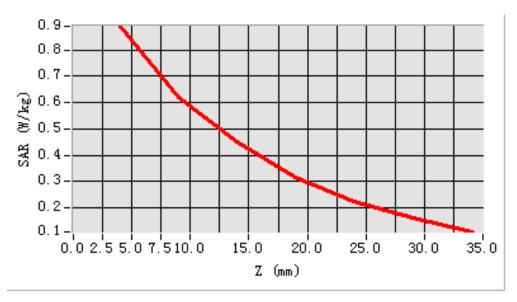
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# **Maximum location: X=-13.00, Y=-3.00**

SAR 1g (W/Kg) 0.83	1094
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#### Z Axis Scan





# **MEASUREMENT 4**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

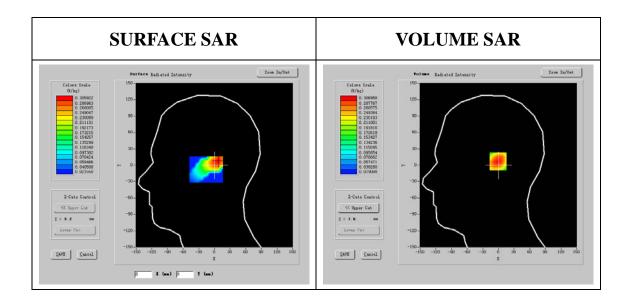
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	824.202012
Relative permitivity (real part)	41.425919
Relative permitivity (imaginary	19.524721
part)	
Conductivity (S/m)	0.814922
Variation (%)	-1.000000
Variation (%)	-1.000000



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#### Maximum location: X=-9.00, Y=-6.00

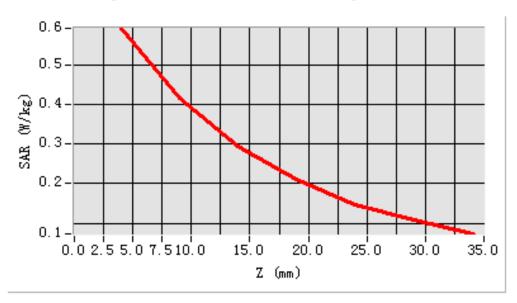
SAR 1g (W/Kg)	0.646488
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#### Z Axis Scan

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



# **MEASUREMENT 5**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

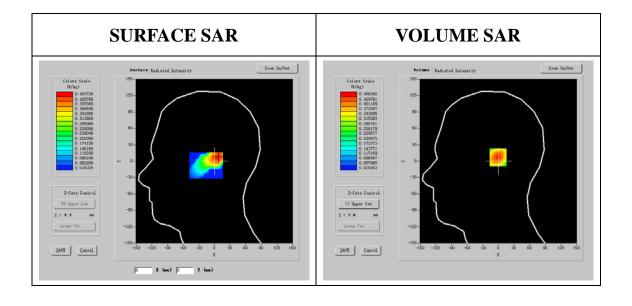
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	836.600210
Relative permitivity (real part)	41.412369
Relative permitivity (imaginary part)	19.530121
Conductivity (S/m)	0.903127
Variation (%)	-0.800000

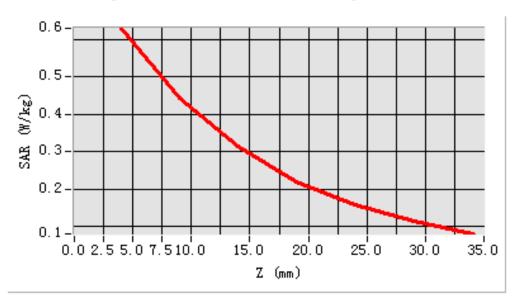


#### Maximum location: X=-9.00, Y=-6.00

SAR 1g (W/Kg)	0.655264
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#### Z Axis Scan

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



# **MEASUREMENT 6**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

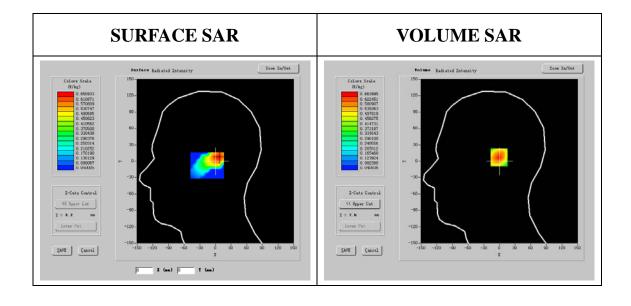
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	848.799000
Relative permitivity (real part)	41.222141
Relative permitivity (imaginary	19.533510
part)	
Conductivity (S/m)	0.902146
Variation (%)	-0.120000



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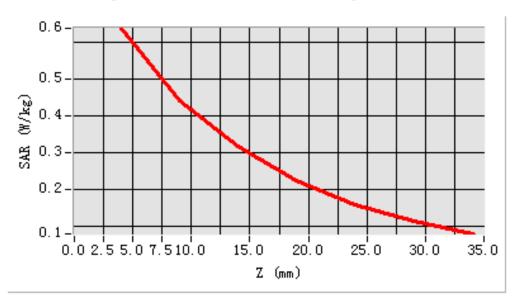
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# Maximum location: X=-9.00, Y=-6.00

SAR 1g (W/Kg) 0.668713
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#### Z Axis Scan

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



# **MEASUREMENT 7**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

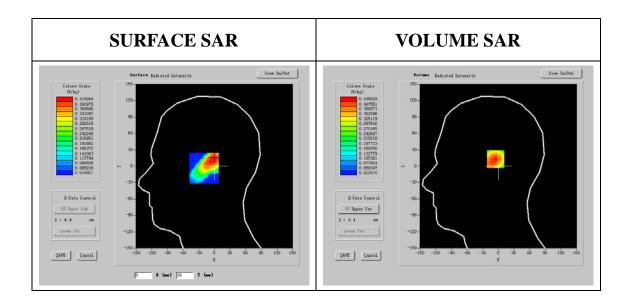
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Cheek
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

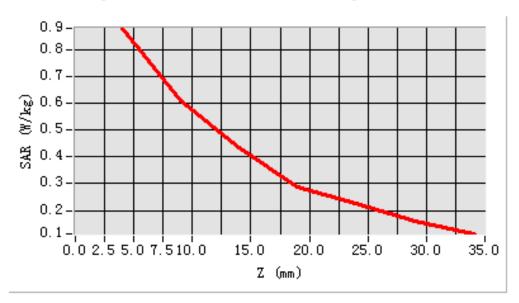
Frequency (MHz)	824.203202
Relative permitivity (real part)	41.420329
Relative permitivity (imaginary part)	19.543256
Conductivity (S/m)	0.834142
Variation (%)	-0.200000



#### **Maximum location: X=-25.00, Y=-11.00**

SAR 1g (W/Kg)	0.858203
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#### SAR, Z Axis Scan (X = -25, Y = -11)



#### **MEASUREMENT 8**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

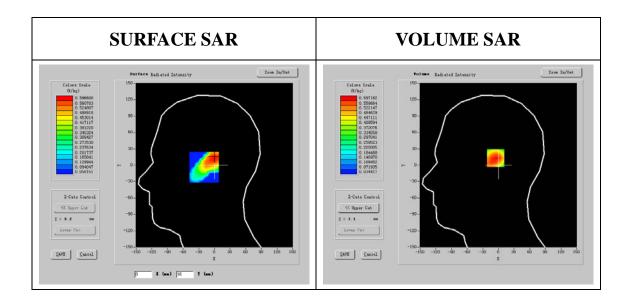
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

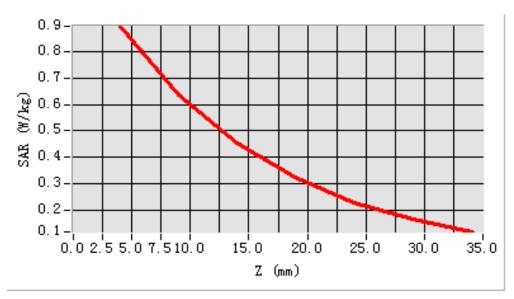
Frequency (MHz)	836.600010
Relative permitivity (real part)	41.485119
Relative permitivity (imaginary part)	19.540231
Conductivity (S/m)	0.912041
Variation (%)	-0.200000



#### **Maximum location: X=-25.00, Y=-11.00**

SAR 1g (W/Kg)	0.812306
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# SAR, Z Axis Scan (X = -25, Y = -11)



#### **MEASUREMENT 9**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

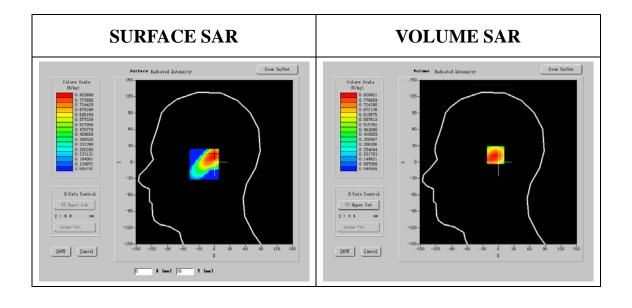
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	High
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

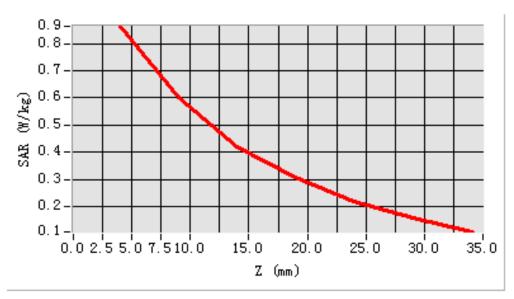
Frequency (MHz)	848.592416
Relative permitivity (real part)	41.223021
Relative permitivity (imaginary	19.532100
part)	
Conductivity (S/m)	0.910220
Variation (%)	-0.300000



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#### **Maximum location: X=-25.00, Y=-11.00**

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



# **MEASUREMENT 10**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

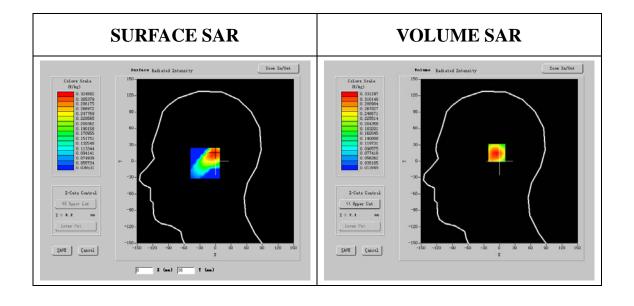
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

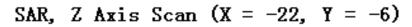
# **C. SAR Measurement Results**

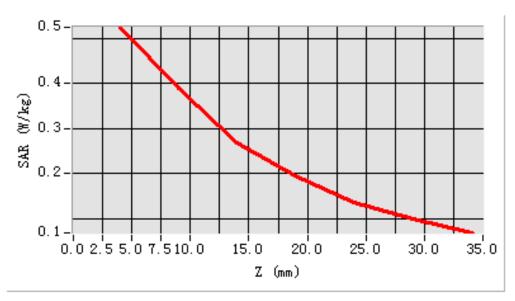
Frequency (MHz)	824.203202
Relative permitivity (real part)	41.412501
Relative permitivity (imaginary part)	19.502103
Conductivity (S/m)	0.910212
Variation (%)	-0.200000



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#### **Maximum location: X=-22.00, Y=-6.00**





# **MEASUREMENT 11**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

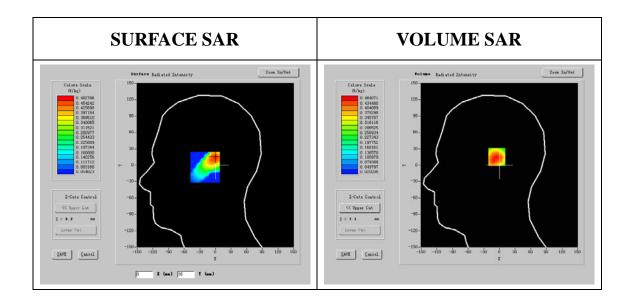
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

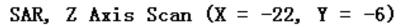
# **C. SAR Measurement Results**

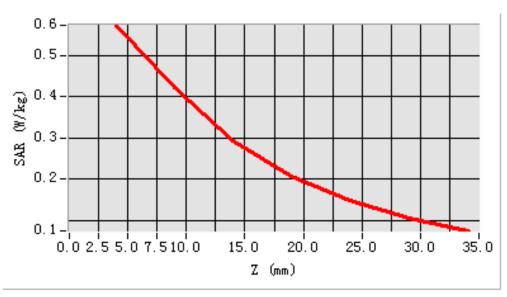
Frequency (MHz)	836.602124
Relative permitivity (real part)	41.456030
Relative permitivity (imaginary	19.540005
part) Conductivity (S/m)	0.902302
Variation (%)	-0.120000



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#### **Maximum location: X=-22.00, Y=-6.00**





# **MEASUREMENT 12**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

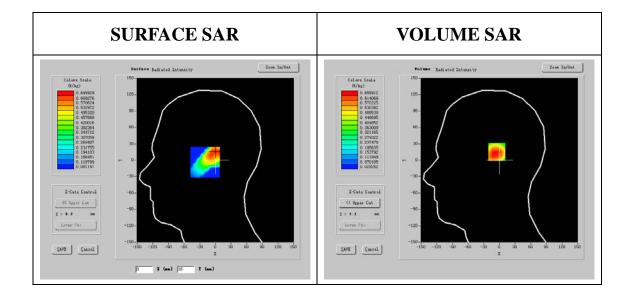
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	High
Signal	GSM

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

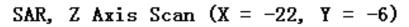
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

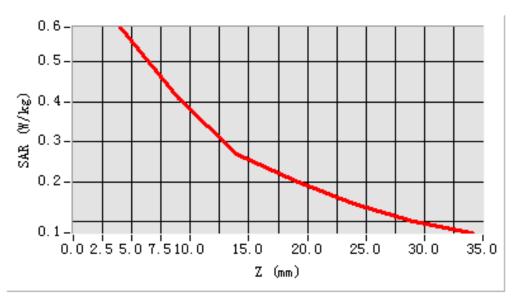
# **C. SAR Measurement Results**

Frequency (MHz)	848.790120
Relative permitivity (real part)	41.431036
Relative permitivity (imaginary	19.524710
part) Conductivity (S/m)	0.910306
Variation (%)	-1.200000



#### **Maximum location: X=-22.00, Y=-6.00**





# Face up with earphone

#### **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Low
Signal	GSM

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

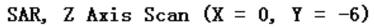
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

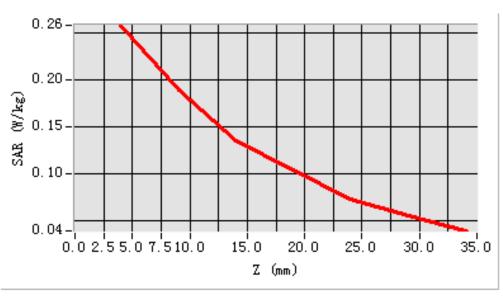
# **C. SAR Measurement Results**

Frequency (MHz)	824.200002
Relative permitivity (real part)	55.530120
Relative permitivity (imaginary part)	21.241030
Conductivity (S/m)	0.935209
Variation (%)	-1.100000



#### Maximum location: X=0.00, Y=-6.00





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

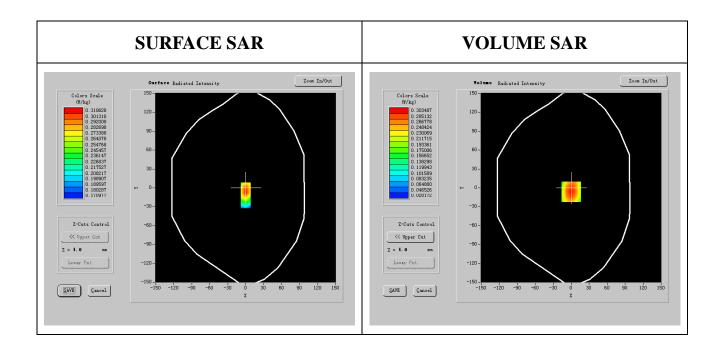
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	836.600204
Relative permitivity (real part)	55.512310
Relative permitivity (imaginary part)	21.833210
Conductivity (S/m)	0.923925
Variation (%)	-1.100000



#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.308000
---------------	----------

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	High
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	848.862406
Relative permitivity (real part)	55.524000
Relative permitivity (imaginary part)	21.702101
Conductivity (S/m)	0.963200
Variation (%)	-1.310000



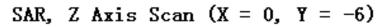
### Maximum location: X=0.00, Y=-6.00

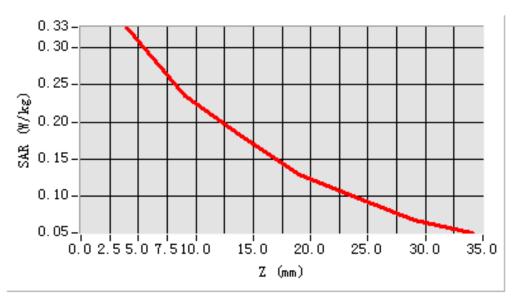
SAR 1g (W/Kg)	0.311339
---------------	----------

Project name: KS100512B01

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### Z Axis Scan





# Face down with earphone

### **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Low
Signal	GSM

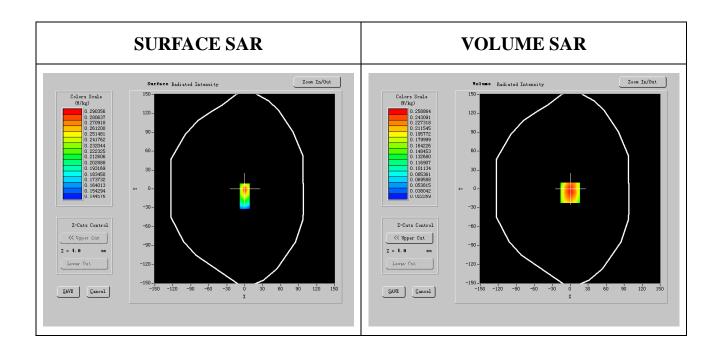
### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

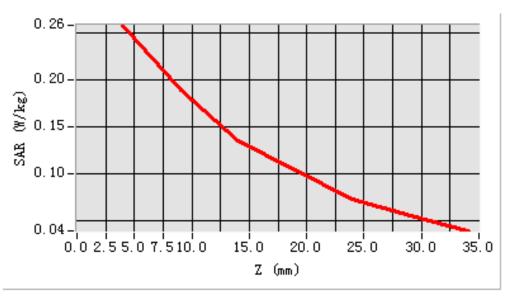
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.875730
Relative permitivity (imaginary part)	21.121350
Conductivity (S/m)	0.989319
Variation (%)	-1.000000



### Maximum location: X=0.00, Y=-6.00

### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.901209
Relative permitivity (imaginary part)	21.236149
Conductivity (S/m)	0.989152
Variation (%)	-0.120000



### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.221341
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Project name: KS100512B01

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### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	High
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

848.599976
55.896242
21.215131
0.989258
-0.200000

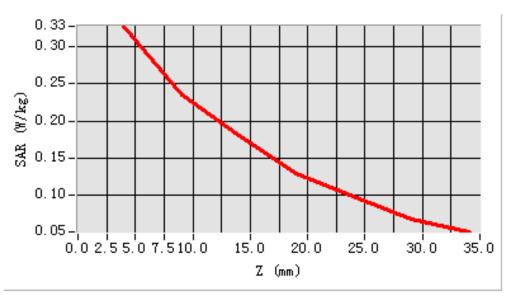


### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.330282
---------------	----------

### Z Axis Scan

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



# Face up without earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	824.200012
Relative permitivity (real part)	55.875730
Relative permitivity (imaginary part)	21.121350
Conductivity (S/m)	0.989319
Variation (%)	-1.000000
variation (70)	1.00000

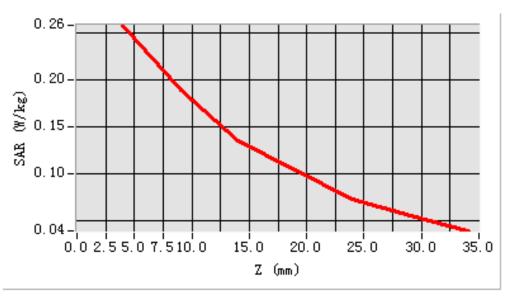


### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.288064
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### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.901209
Relative permitivity (imaginary part)	21.236149
Conductivity (S/m)	0.989152
Variation (%)	-0.120000



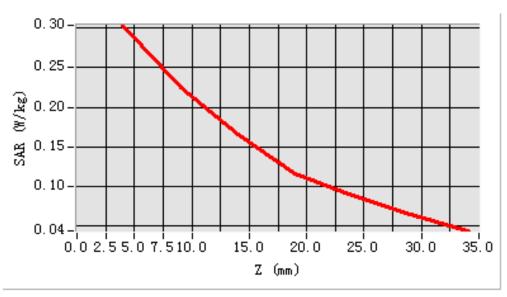
### Maximum location: X=0.00, Y=-6.00

Project name: KS100512B01

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### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	High
Signal	GSM

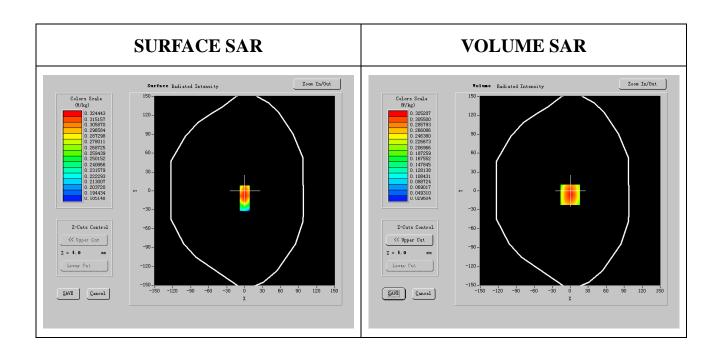
### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	848.599976
Relative permitivity (real part)	55.896242
Relative permitivity (imaginary part)	21.215131
Conductivity (S/m)	0.989258
Variation (%)	-0.200000

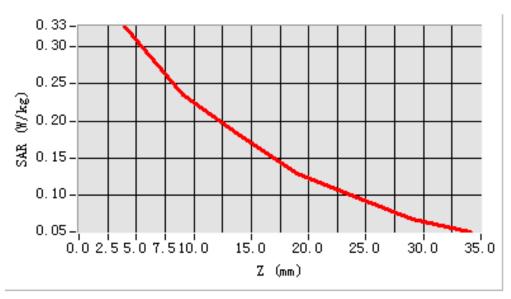


### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.333282
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### Z Axis Scan

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



# Face down without earphone

### **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	824.200012
Relative permitivity (real part)	55.892130
Relative permitivity (imaginary part)	21.223660
Conductivity (S/m)	0.990119
Variation (%)	-1.200000



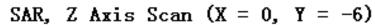
## Maximum location: X=0.00, Y=-6.00

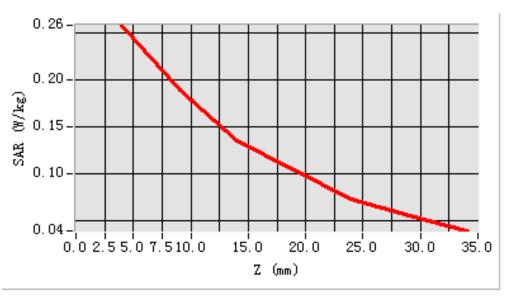
SAR 1g (W/Kg) 0.279235	
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Project name: KS100512B01

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#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

## A. Experimental conditions.

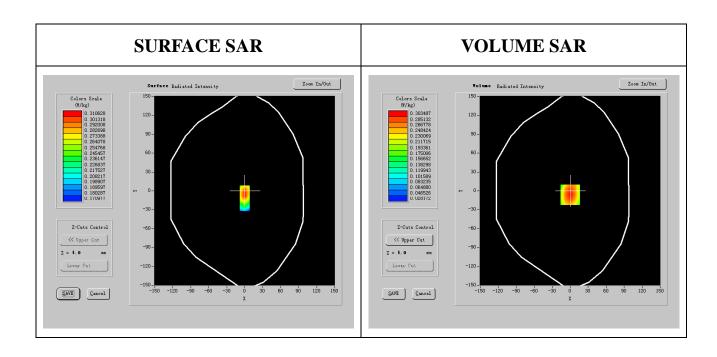
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

## **C. SAR Measurement Results**

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.896233
Relative permitivity (imaginary part)	21.236179
Conductivity (S/m)	0.979356
	0.575330
Variation (%)	-0.200000

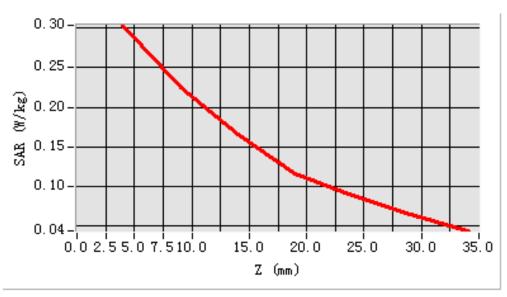


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.228134
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#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

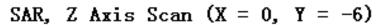
Frequency (MHz)	848.599976
Relative permitivity (real part)	55.932142
Relative permitivity (imaginary part)	21.236431
Conductivity (S/m)	0.959648
Variation (%)	-1.000000

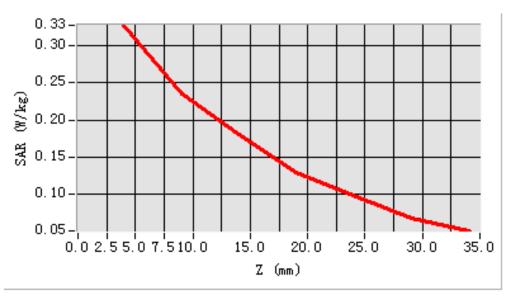


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.336173

#### Z Axis Scan





### **GSM 1900**

#### I. RESULTS

TYPE	BAND	<u>PARAMETERS</u>
<u>Noise</u>		
<u>Validation</u>		
<u>Phone</u>	GSM1900	Measurement 1: Right Head with Cheek device position on Low Channel in GSM mode  Measurement 2: Right Head with Cheek device position on Middle Channel in GSM mode  Measurement 3: Right Head with Cheek device position on High Channel in GSM mode  Measurement 4: Right Head with Tilt device position on Low Channel in GSM mode  Measurement 5: Right Head with Tilt device position on Middle Channel in GSM mode  Measurement 6: Right Head with Tilt device position on High Channel in GSM mode  Measurement 7: Left Head with Cheek device position on Low Channel in GSM mode  Measurement 8: Left Head with Cheek device position on Middle Channel in GSM mode  Measurement 9: Left Head with Cheek device position on High Channel in GSM mode  Measurement 10: Left Head with Tilt device position on Low Channel in GSM mode  Measurement 11: Left Head with Tilt device position on Middle Channel in GSM mode  Measurement 12: Left Head with Tilt device position on Middle Channel in GSM mode  Measurement 12: Left Head with Tilt device position on High Channel in GSM mode

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

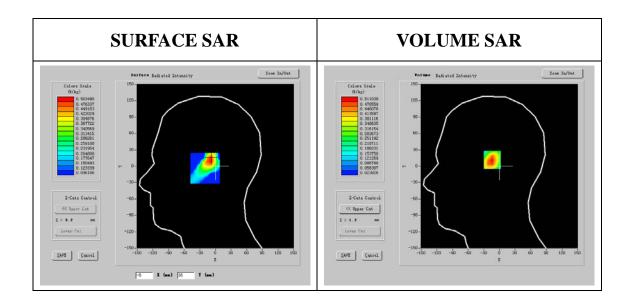
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

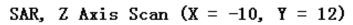
Frequency (MHz)	1850.200024
Relative permitivity (real part)	40.310200
Relative permitivity (imaginary part)	13.535200
Conductivity (S/m)	1.432218
Variation (%)	-1.200000

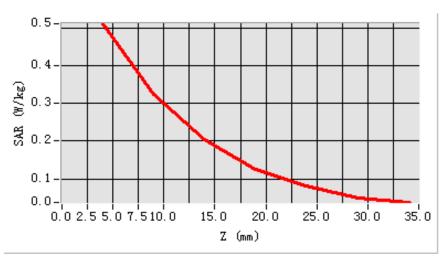


## **Maximum location: X=-10.00, Y=12.00**

SAR 1g (W/Kg)	0.488131
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#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

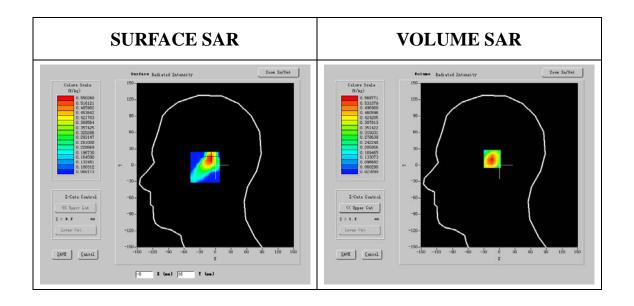
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.112031
Relative permitivity (imaginary part)	13.829140
Conductivity (S/m)	1.420105
Variation (%)	-0.100000

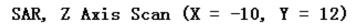


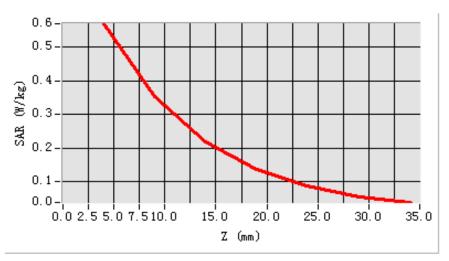
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## **Maximum location: X=-10.00, Y=12.00**

SAR 1g (W/Kg)	0.546198
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## Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

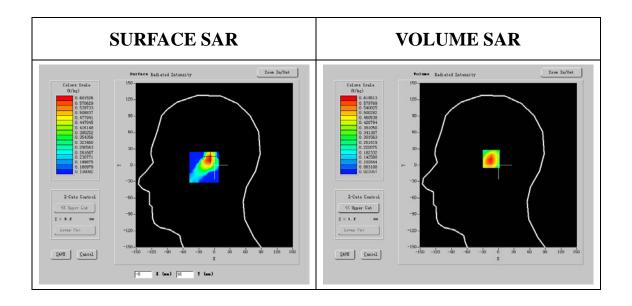
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

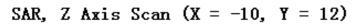
Frequency (MHz)	1910.000216
Relative permitivity (real part)	40.212009
Relative permitivity (imaginary part)	13.621200
Conductivity (S/m)	1.421345
Variation (%)	-0.300000

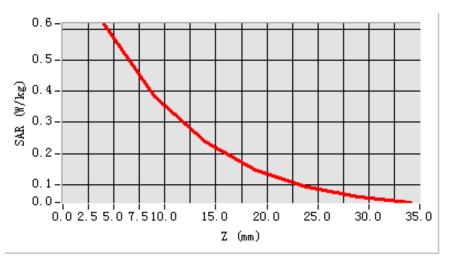


## **Maximum location: X=-10.00, Y=12.00**

SAR 1g (W/Kg)	0.570913
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#### Z Axis Scan





# **MEASUREMENT 4**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

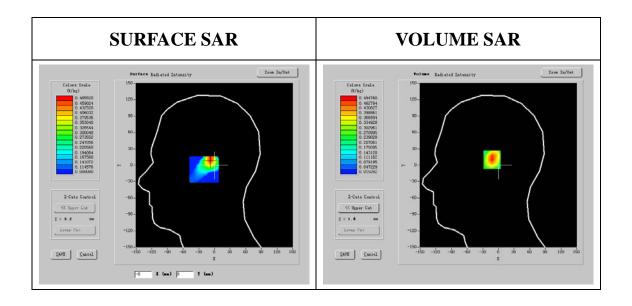
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1850.200020
Relative permitivity (real part)	40.310230
Relative permitivity (imaginary part)	13.524100
Conductivity (S/m)	1.402108
Variation (%)	-1.400000

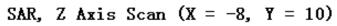


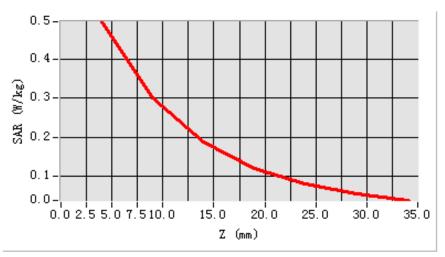
Project name: KS100512B01

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### Maximum location: X=-8.00, Y=10.00

#### Z Axis Scan





# **MEASUREMENT 5**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

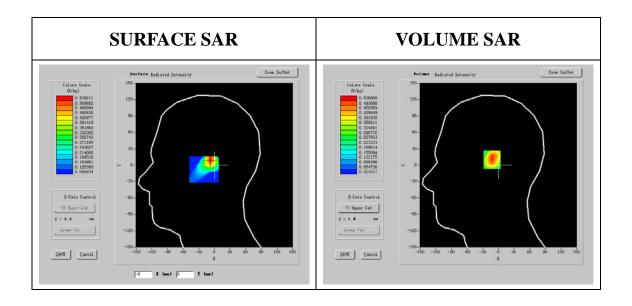
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

1880.000000
40.213201
13.802000
1.432010
-0.450000

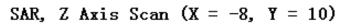


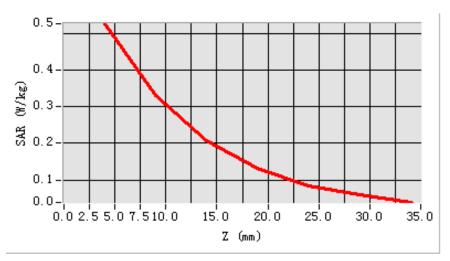
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# Maximum location: X=-8.00, Y=10.00

SAR 1g (W/Kg)	0.490955
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### Z Axis Scan





# **MEASUREMENT 6**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

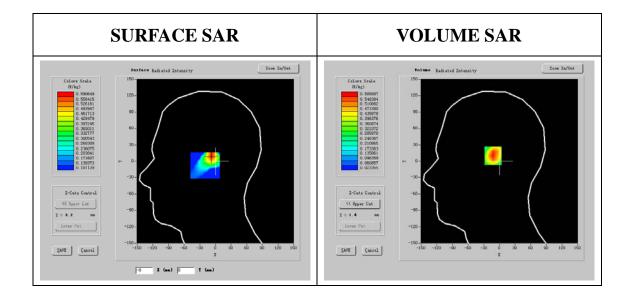
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	High
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

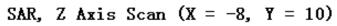
Frequency (MHz)	1910.000216
Relative permitivity (real part)	40.302159
Relative permitivity (imaginary	13.220300
part) Conductivity (S/m)	1.415220
Variation (%)	-1.000000

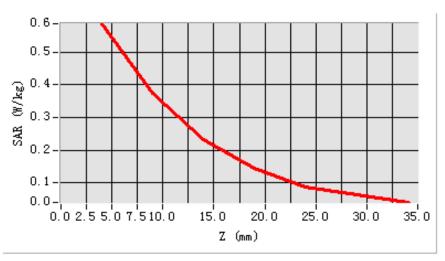


# Maximum location: X=-8.00, Y=10.00

SAR 1g (W/Kg)	0.562155
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#### Z Axis Scan





# **MEASUREMENT 7**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

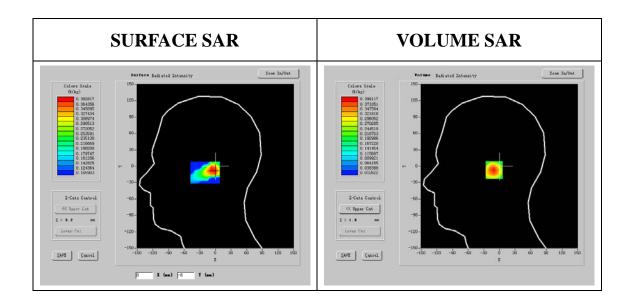
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

1850.200001
40.323100
13.530200
1.421230
0.700000

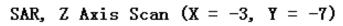


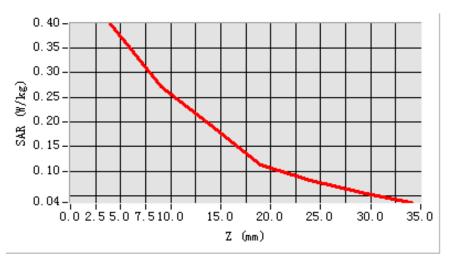
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# Maximum location: X=-3.00, Y=-7.00

SAR 1g (W/Kg)	0.363116
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#### Z Axis Scan





# **MEASUREMENT 8**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

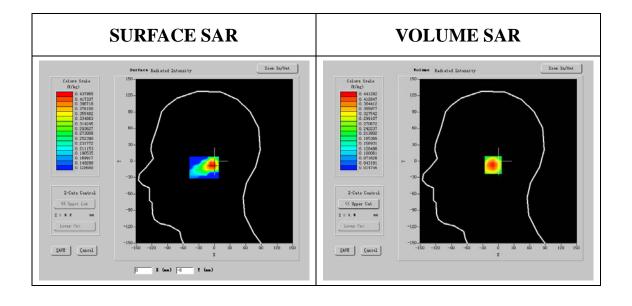
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

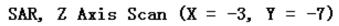
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.142032
Relative permitivity (imaginary	13.832000
part) Conductivity (S/m)	1.412102
Variation (%)	1.500000

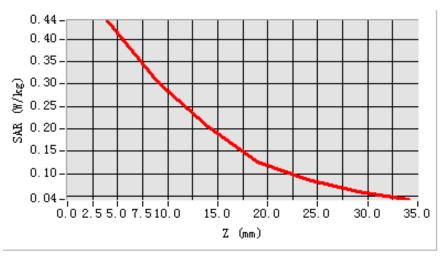


# Maximum location: X=-3.00, Y=-7.00

SAR 1g (W/Kg)	0.559309
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#### Z Axis Scan





# **MEASUREMENT 9**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

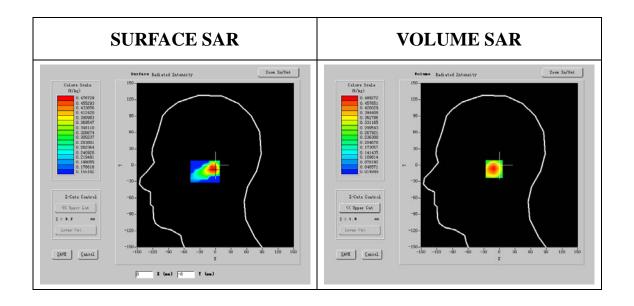
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	High
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1910.000276
Relative permitivity (real part)	40.103250
Relative permitivity (imaginary part)	13.602300
Conductivity (S/m)	1.411236
Variation (%)	0.450000

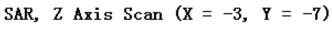


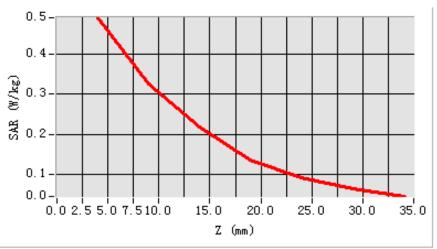
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# Maximum location: X=-3.00, Y=-7.00

SAR 1g (W/Kg)	0.442303
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#### Z Axis Scan





# **MEASUREMENT 10**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

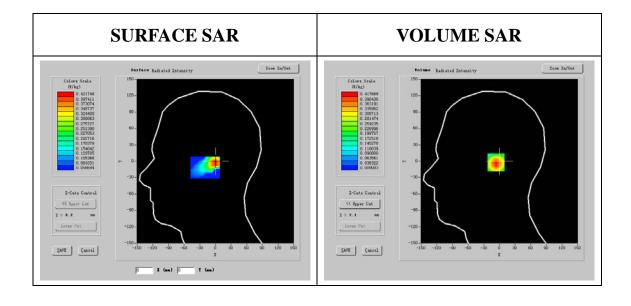
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

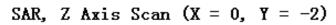
Frequency (MHz)	1850.200004
Relative permitivity (real part)	40.312300
Relative permitivity (imaginary part)	13.512300
Conductivity (S/m)	1.403510
Variation (%)	-0.230000

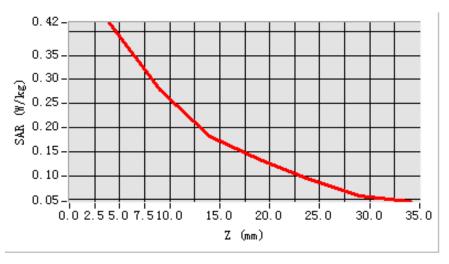


# Maximum location: X=0.00, Y=-2.00

SAR 1g (W/Kg)	0.364447
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#### Z Axis Scan





# **MEASUREMENT 11**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

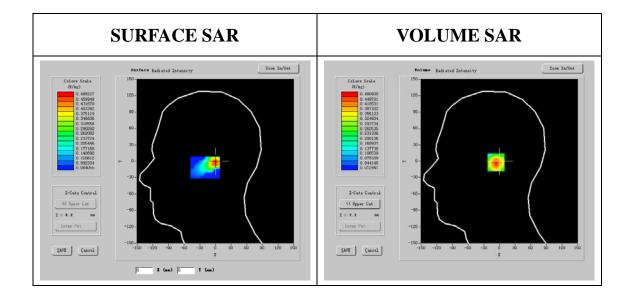
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

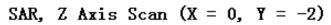
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.310201
Relative permitivity (imaginary	13.321300
part) Conductivity (S/m)	1.410010
Variation (%)	-1.200000

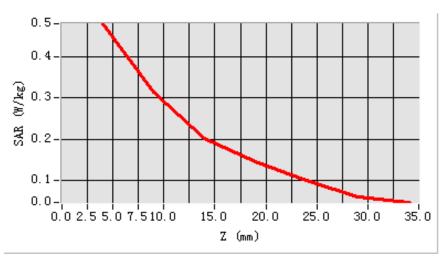


# Maximum location: X=0.00, Y=-2.00

SAR 1g (W/Kg)	0.448825
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### Z Axis Scan





# **MEASUREMENT 12**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

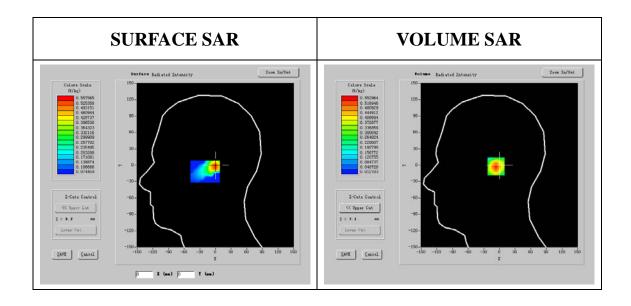
### A. Experimental conditions.

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

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

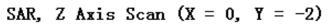
Frequency (MHz)	1910.002076
Relative permitivity (real part)	40.220203
Relative permitivity (imaginary part)	13.618100
Conductivity (S/m)	1.422415
Variation (%)	-1.100000

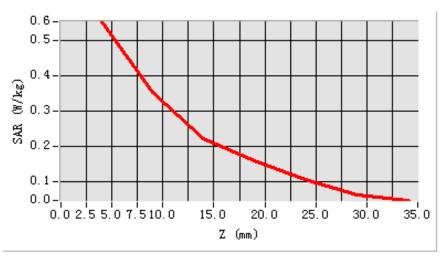


## Maximum location: X=0.00, Y=-2.00

SAR 1g (W/Kg)	0.453610
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#### Z Axis Scan





# Face up with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

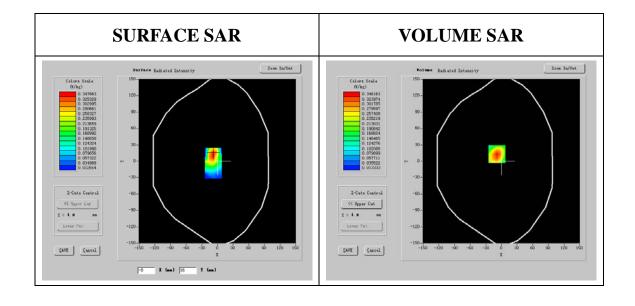
# A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN 11-09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	1850.200004
Relative permitivity (real part)	53.310300
Relative permitivity (imaginary part)	13.526900
Conductivity (S/m)	1.510201
Variation (%)	-0.100000



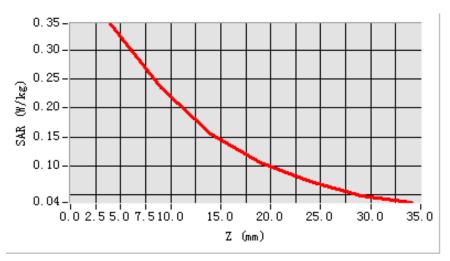
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## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.352114
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#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

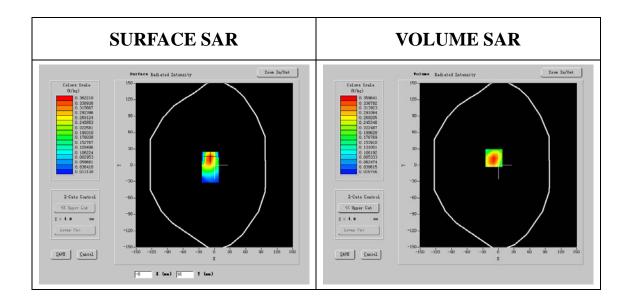
## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN 11-09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

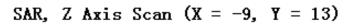
Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.941421
Relative permitivity (imaginary part)	13.792500
Conductivity (S/m)	1.511420
Variation (%)	-0.500000

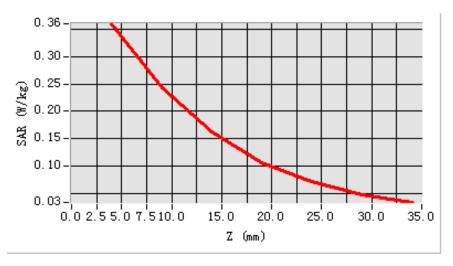


## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.319058
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#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

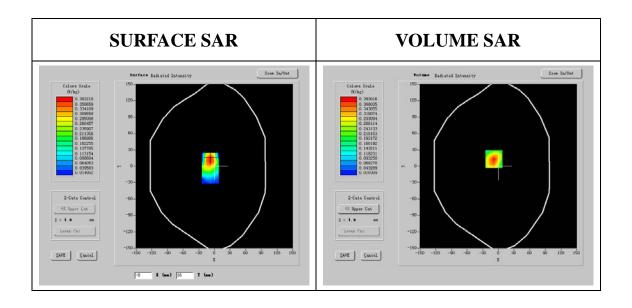
## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN 11-09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	1909.590210
Relative permitivity (real part)	52.281410
Relative permitivity (imaginary	13.626320
part)	
Conductivity (S/m)	1.502125
Variation (%)	-0.540000



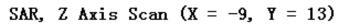
Project name: KS100512B01

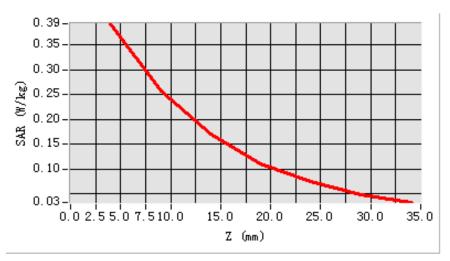
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## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.373272
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#### Z Axis Scan





# Face down with earphone

## **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

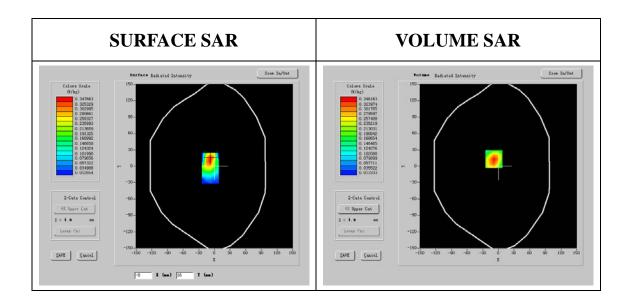
#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN11/09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	1850.400024
Relative permitivity (real part)	52.313000
Relative permitivity (imaginary part)	13.584900
Conductivity (S/m)	1.416522
Variation (%)	-0.200000



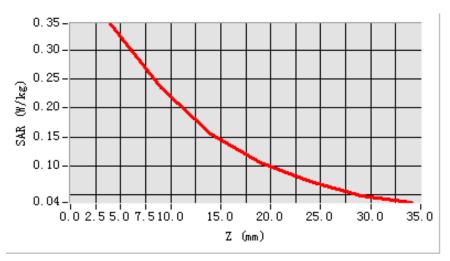
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## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.389142
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

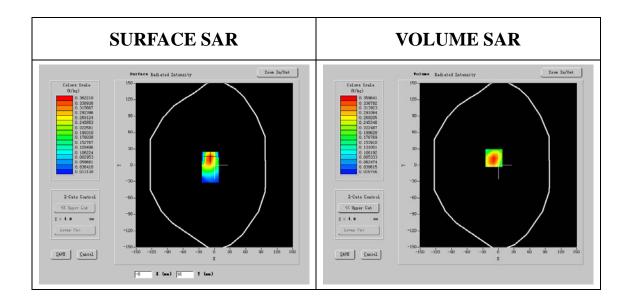
## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN11/09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.893001
Relative permitivity (imaginary	13.813800
part)	
Conductivity (S/m)	1.512775
Variation (%)	-1.000000

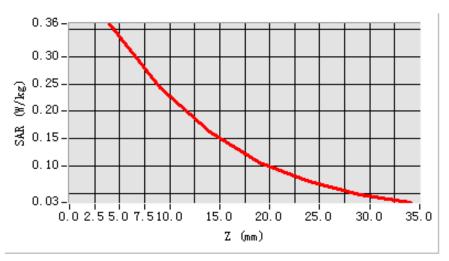


## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.325149
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

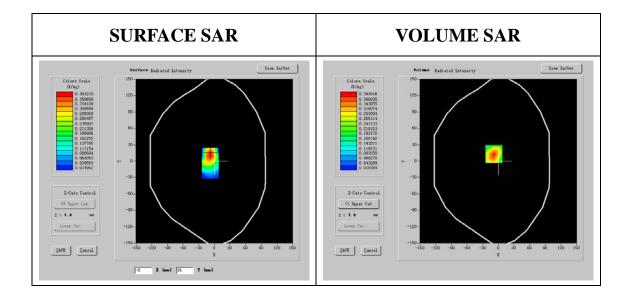
## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN11/09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	1909.599976
Relative permitivity (real part)	52.885999
Relative permitivity (imaginary	13.669900
part) Conductivity (S/m)	1.510225
Variation (%)	-0.600000



Project name: KS100512B01

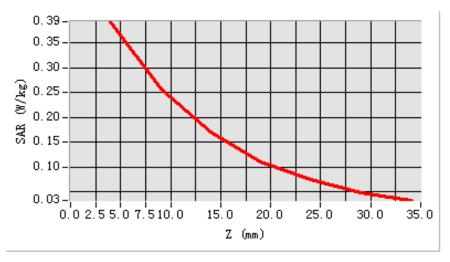
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## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.38924s6
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#### Z Axis Scan





# Face up without earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

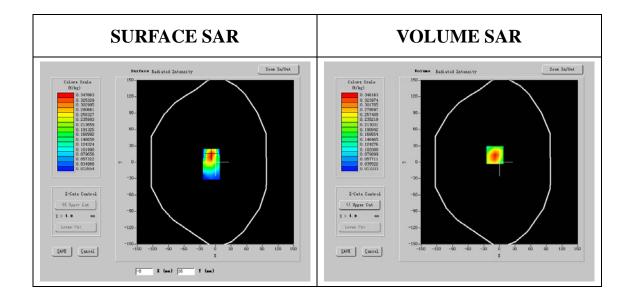
#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Frequency (MHz)	1850.400024
Relative permitivity (real part)	54.202574
Relative permitivity (imaginary	13.803214
part) Conductivity (S/m)	1.596228
Variation (%)	-0.100000
Variation (%)	-0.100000



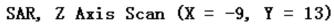
Project name: KS100512B01

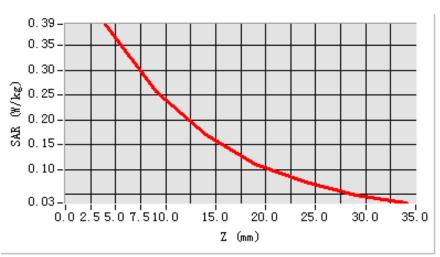
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### Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.380148
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#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

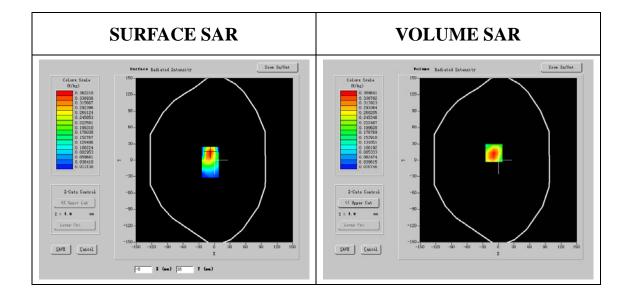
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1880.000000
Relative permitivity (real part)	54.021431
Relative permitivity (imaginary part)	13.752100
Conductivity (S/m)	1.582075
Variation (%)	-0.100000



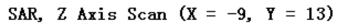
Project name: KS100512B01

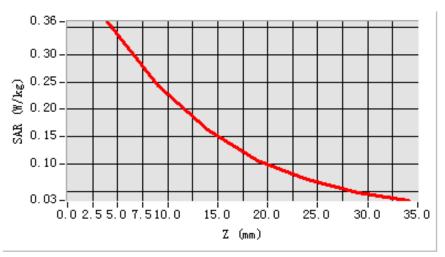
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### Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.326460
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#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

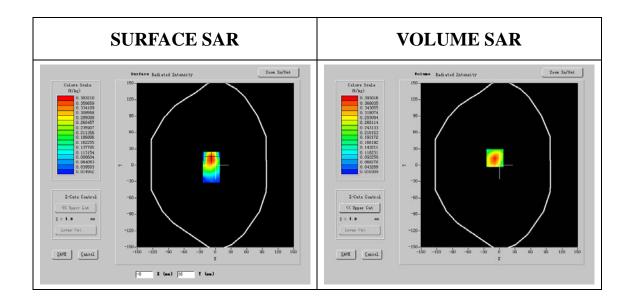
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1909.599976
Relative permitivity (real part)	54.121302
Relative permitivity (imaginary part)	13.790000
Conductivity (S/m)	1.589635
Variation (%)	-0.600000



### Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.387321
---------------	----------

#### Z Axis Scan





# Face down without earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

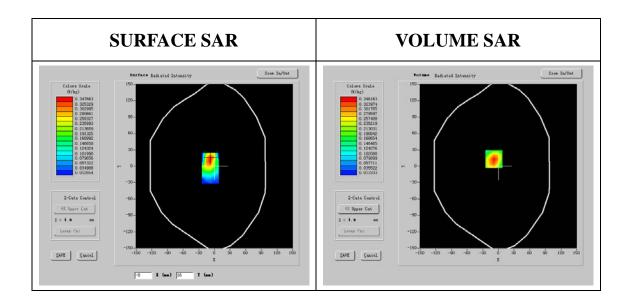
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1850.400024
Relative permitivity (real part)	54.201021
Relative permitivity (imaginary part)	13.782520
Conductivity (S/m)	1.565248
Variation (%)	-0.100000

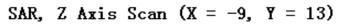


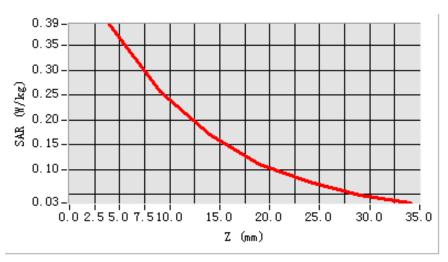
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# Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.392138
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

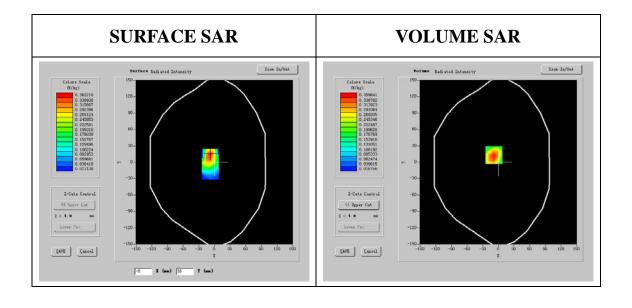
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1880.000000
Relative permitivity (real part)	53.874001
Relative permitivity (imaginary part)	13.801100
Conductivity (S/m)	1.586375
Variation (%)	-0.100000



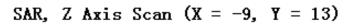
Project name: KS100512B01

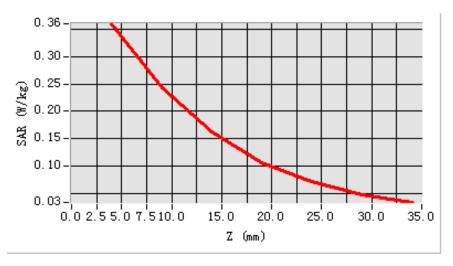
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# Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.329360
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#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

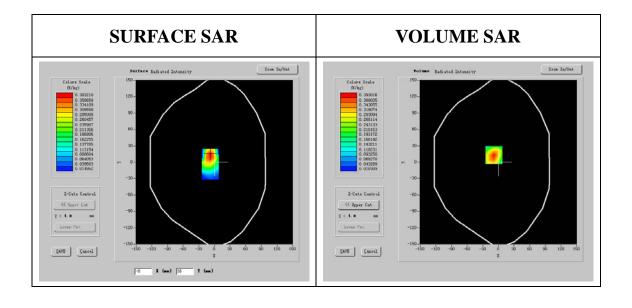
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1909.599976
Relative permitivity (real part)	52.925419
Relative permitivity (imaginary	13.692500
part)	
Conductivity (S/m)	1.591025
Variation (%)	-0.600000



### Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.396011
---------------	----------

### **GPRS 850**

#### I. RESULTS

<b>TYPE</b>	BAND	<u>PARAMETERS</u>
Noise		
<b>Validation</b>		
<u>Phone</u>	GPRS850	Measurement 1: Validation Plane with Body device position on Low Channel in GPRS mode  Measurement 2: Validation Plane with Body device position on Middle Channel in GPRS mode  Measurement 3: Validation Plane with Body device position on High Channel in GPRS mode

# Face up with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

# A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

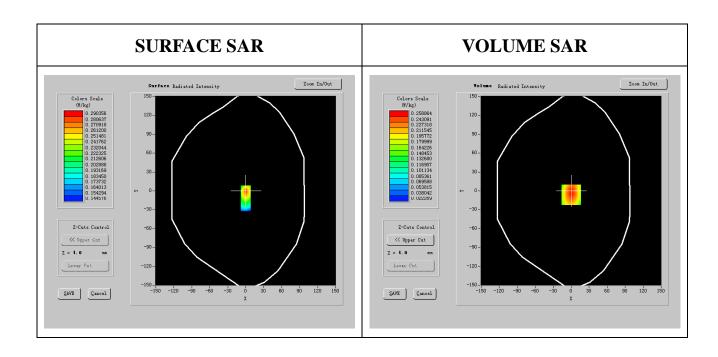
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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# **C. SAR Measurement Results**

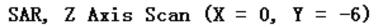
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.546230
Relative permitivity (imaginary part)	21.653000
Conductivity (S/m)	0.959410
Variation (%)	-0.100000

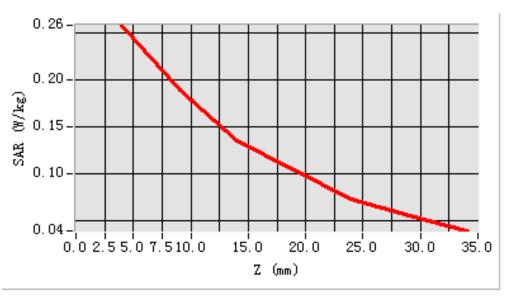


# Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.290911
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

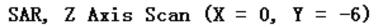
# **C. SAR Measurement Results**

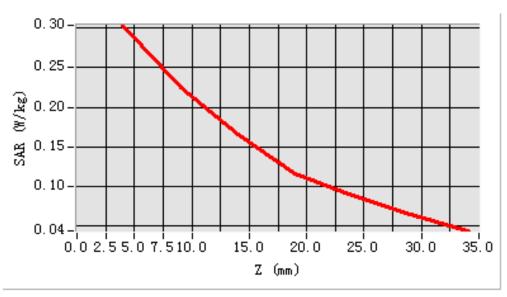
Frequency (MHz)	836.600004
Relative permitivity (real part)	55.512029
Relative permitivity (imaginary part)	21.810209
Conductivity (S/m)	0.920212
Variation (%)	-0.120000



# Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg) 0.363226	
------------------------	--





## **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	High
Signal	GPRS

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

## **C. SAR Measurement Results**

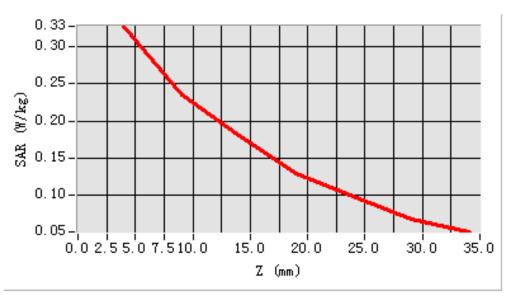
Frequency (MHz)	848.799001
Relative permitivity (real part)	55.532010
Relative permitivity (imaginary part)	21.720101
Conductivity (S/m)	0.969012
Variation (%)	-0.200000



#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.350077
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SAR, Z Axis Scan (X = 0, Y = -6)



# Face down with earphone

## **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

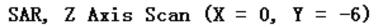
Project name: KS100512B01

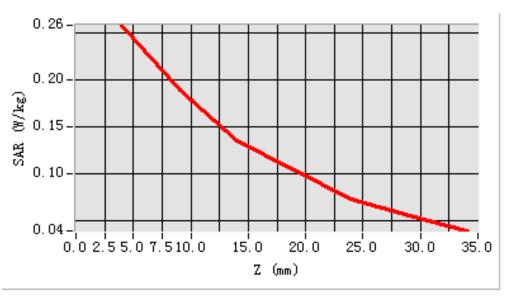
## **C. SAR Measurement Results**

Frequency (MHz)	824.200012
Relative permitivity (real part)	55.910100
Relative permitivity (imaginary part)	21.987050
Conductivity (S/m)	0.987519
Variation (%)	0.100000



#### Maximum location: X=0.00, Y=-6.00





## **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

# **B.** Instrumentations.

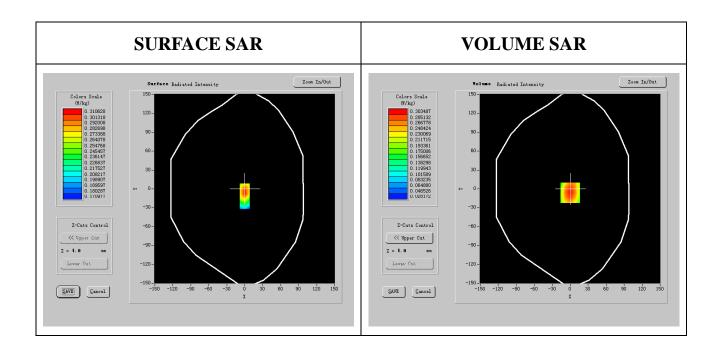
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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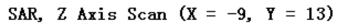
#### **C. SAR Measurement Results**

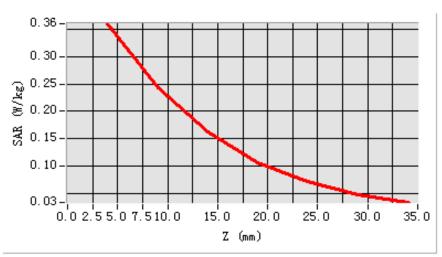
Frequency (MHz)	836.400024
Relative permitivity (real part)	55.903400
Relative permitivity (imaginary part)	21.958079
Conductivity (S/m)	0.978922
Variation (%)	-0.100000



#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.360325
---------------	----------





## **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	High
Signal	GPRS

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

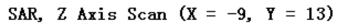
## **C. SAR Measurement Results**

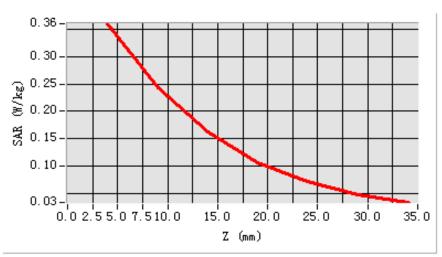
Frequency (MHz)	848.599976
Relative permitivity (real part)	55.890110
Relative permitivity (imaginary part)	21.957211
Conductivity (S/m)	0.989718
Variation (%)	-0.100000



#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.363217
---------------	----------





# Face up without earphone

## **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

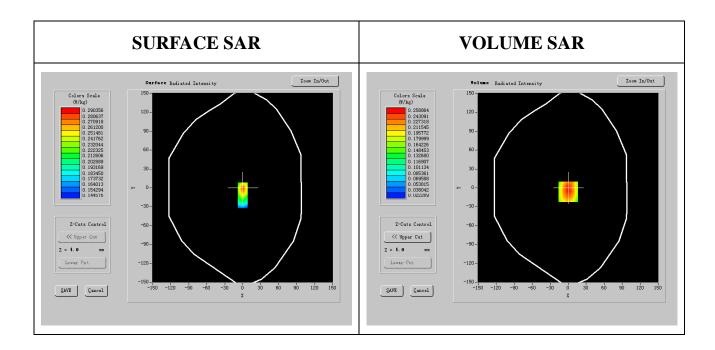
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN11/09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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# **C. SAR Measurement Results**

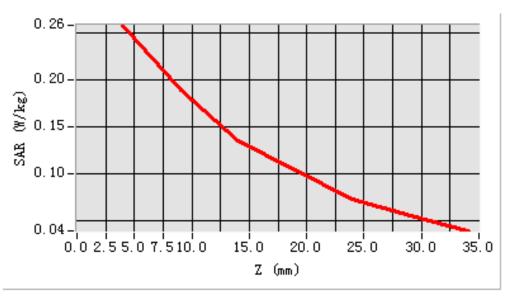
Frequency (MHz)	824.200012
Relative permitivity (real part)	56.584000
Relative permitivity (imaginary part)	21.654150
Conductivity (S/m)	0.971519
Variation (%)	-1.120000
Conductivity (S/m)	0.971519



Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.289212
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## **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

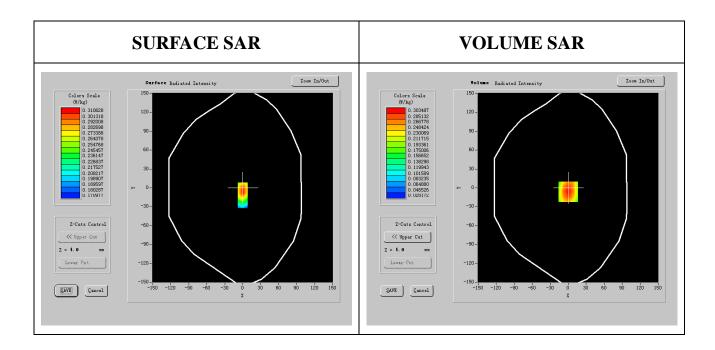
# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN11/09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

836.400024
55.501999
21.866249
1.006342
-0.200000

Project name: KS100512B01

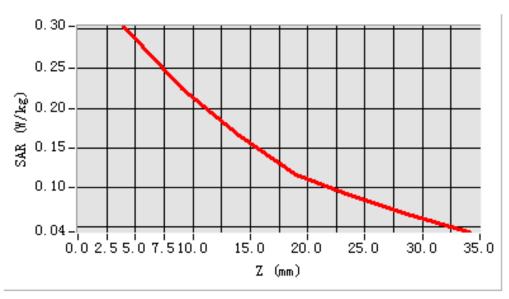


Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.356123
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Project name: KS100512B01

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



## **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	High
Signal	GPRS

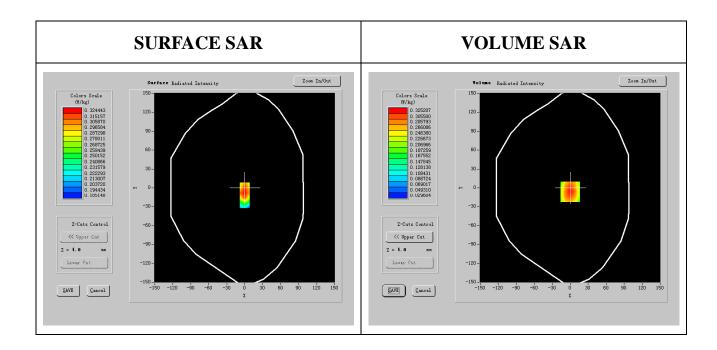
#### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN11/09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	848.599976
Relative permitivity (real part)	55.576000
Relative permitivity (imaginary part)	21.726601
Conductivity (S/m)	0.974288
Variation (%)	-0.220000

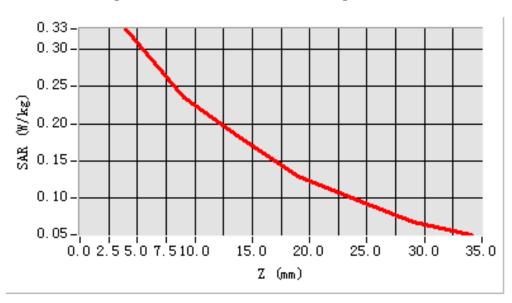


Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.358118
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Project name: KS100512B01

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



# Face down without earphone

#### **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

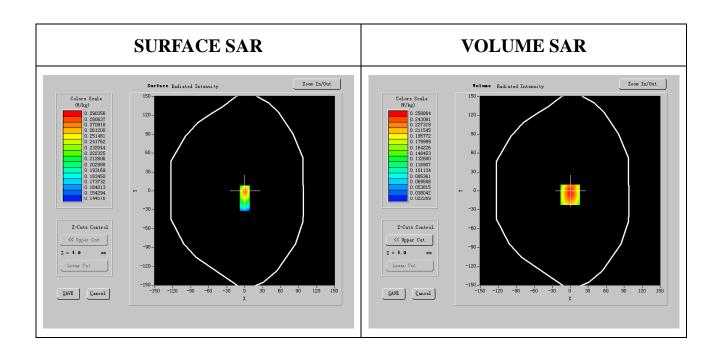
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

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

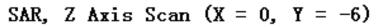
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.878200
Relative permitivity (imaginary part)	21.148470
Conductivity (S/m)	0.995129
Variation (%)	0.120000

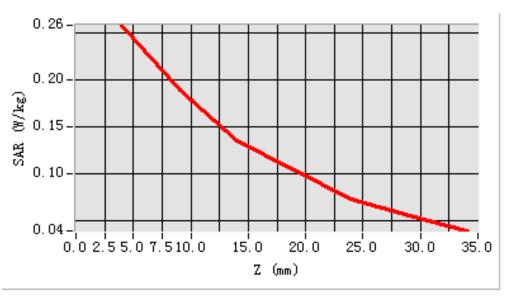


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.290212
---------------	----------

#### Z Axis Scan





## **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

# **B.** Instrumentations.

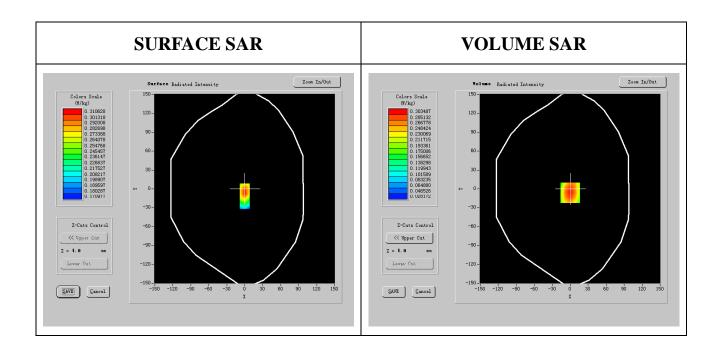
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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## **C. SAR Measurement Results**

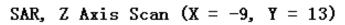
Frequency (MHz)	836.400024
Relative permitivity (real part)	55.954400
Relative permitivity (imaginary part)	21.154379
Conductivity (S/m)	0.997352
Variation (%)	-0.200000

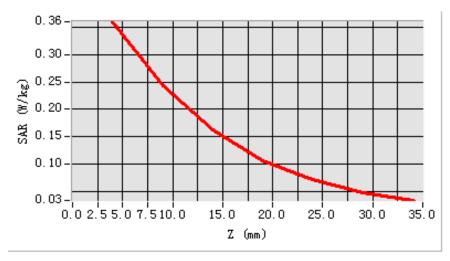


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.356514
---------------	----------

#### Z Axis Scan





## **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

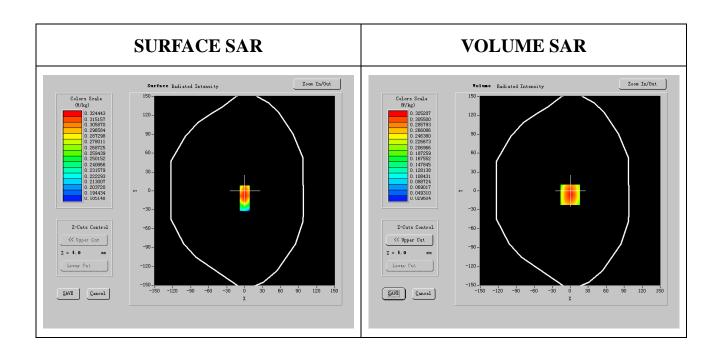
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	High
Signal	GPRS

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

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

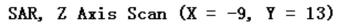
Frequency (MHz)	848.599976
Relative permitivity (real part)	55.896320
Relative permitivity (imaginary part)	21.201301
Conductivity (S/m)	0.994118
Variation (%)	-0.200000

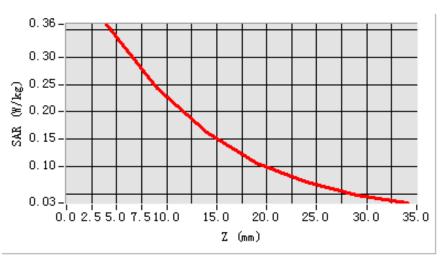


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.360212
---------------	----------

#### Z Axis Scan





#### **GPRS 1900**

#### I. RESULTS

<b>TYPE</b>	BAND	<u>PARAMETERS</u>
Noise		
<b>Validation</b>		
<u>Phone</u>	GPRS1900	Measurement 1: Validation Plane with Body device position on Low Channel in GPRS mode  Measurement 2: Validation Plane with Body device position on Middle Channel in GPRS mode  Measurement 3: Validation Plane with Body device position on High Channel in GPRS mode

# Face up with earphone

## **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

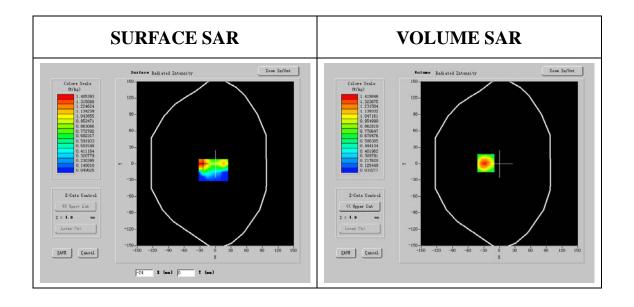
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

## **C. SAR Measurement Results**

Frequency (MHz)	1850.199021
Relative permitivity (real part)	52.312000
Relative permitivity (imaginary part)	14.412322
Conductivity (S/m)	1.511021
Variation (%)	-0.500000

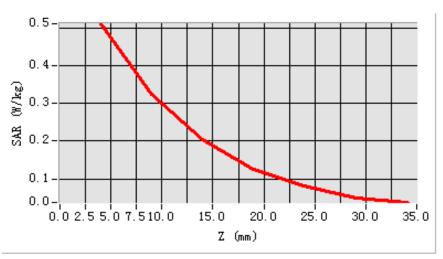


## **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.486131
---------------	----------

#### Z Axis Scan

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



## **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

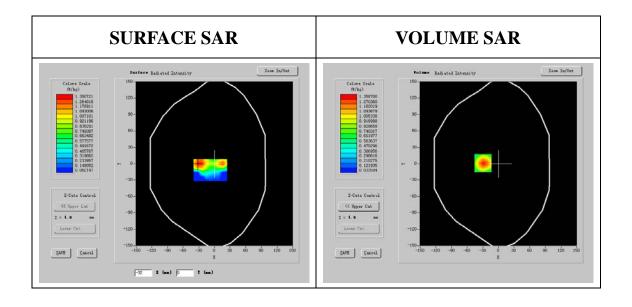
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Middle
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

## **C. SAR Measurement Results**

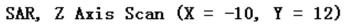
Frequency (MHz)	1880.000004
Relative permitivity (real part)	52.402103
Relative permitivity (imaginary part)	14.235206
Conductivity (S/m)	1.501203
Variation (%)	-1.000000

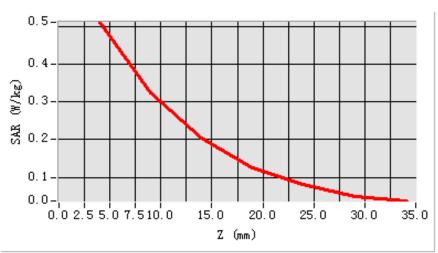


#### **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.394056
---------------	----------

#### Z Axis Scan





## **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

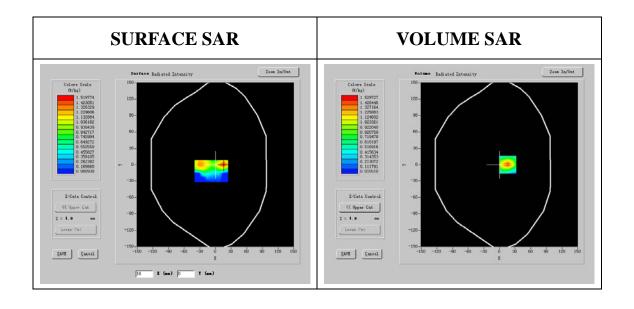
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	High
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

## **C. SAR Measurement Results**

1910.029036
52.810010
14.301200
1.502102
-0.130000



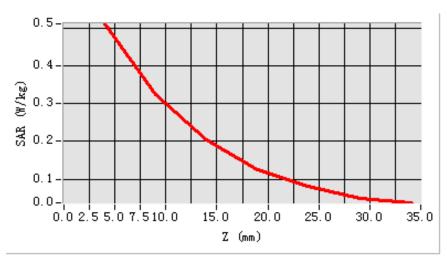
## Maximum location: X=2.00, Y=9.00

Project name: KS100512B01

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#### Z Axis Scan

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



# Face down with earphone

#### **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

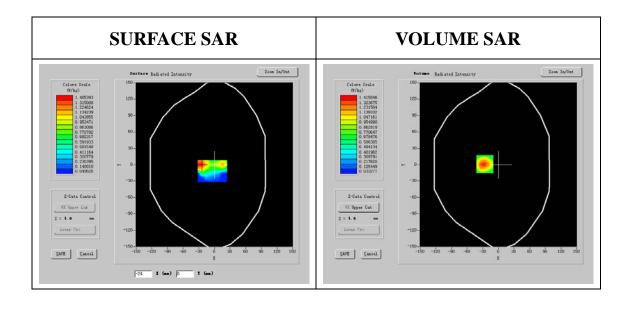
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

## **C. SAR Measurement Results**

Frequency (MHz)	1710.199951
Relative permitivity (real part)	53.351470
Relative permitivity (imaginary	14.025293
part) Conductivity (S/m)	1.575938
Variation (%)	-0.200000

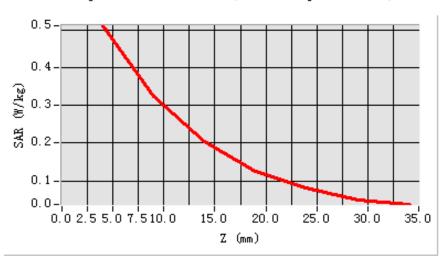


#### **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.439211
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

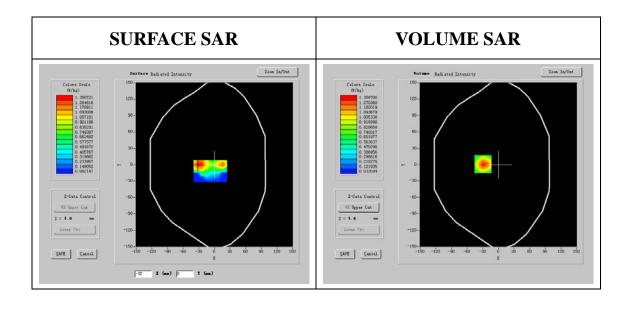
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Middle
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

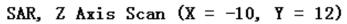
Frequency (MHz)	1747.400004
Relative permitivity (real part)	52.954008
Relative permitivity (imaginary	14.032160
part) Conductivity (S/m)	1.587486
Variation (%)	-1.100000

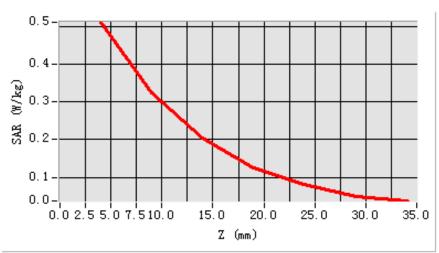


#### **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.358241
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#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

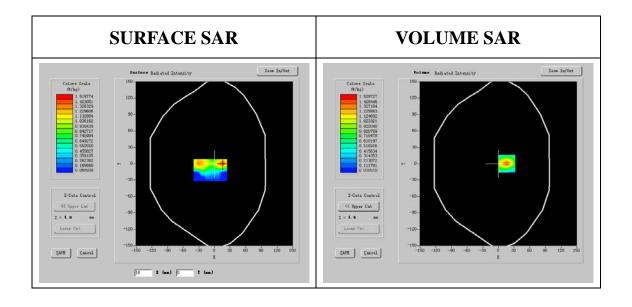
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	High
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1784.599036
Relative permitivity (real part)	52.987442
Relative permitivity (imaginary part)	13.874330
Conductivity (S/m)	1.589565
Variation (%)	-0.130000



# Maximum location: X=2.00, Y=9.00

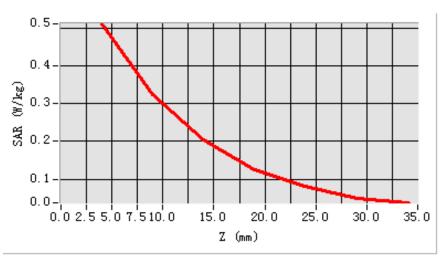
SAR 1g (W/Kg)	0.440233
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Project name: KS100512B01

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#### Z Axis Scan

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



# Face up without earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

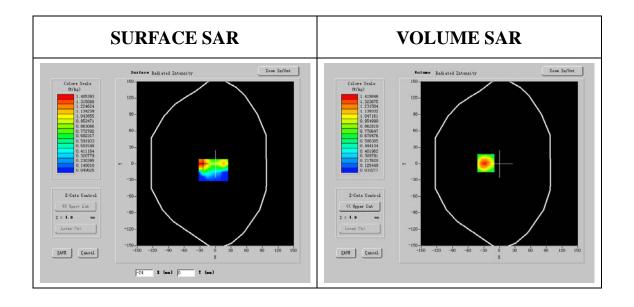
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN11/09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1710.199951
Relative permitivity (real part)	52.347400
Relative permitivity (imaginary part)	14.450693
Conductivity (S/m)	1.533698
Variation (%)	-1.000000



#### **Maximum location: X=-31.00, Y=-16.00**

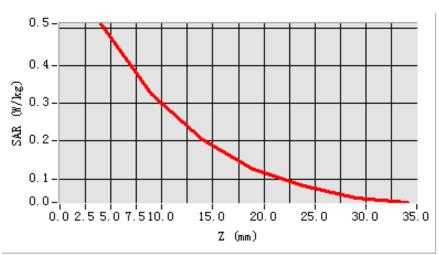
SAR 1g (W/Kg)	0.436212
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Project name: KS100512B01

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#### Z Axis Scan

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

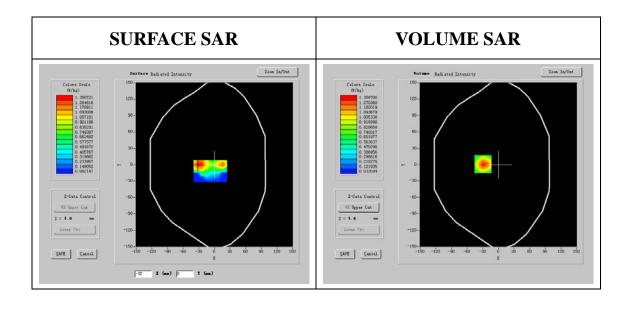
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Middle
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN11/09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

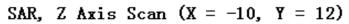
Frequency (MHz)	1747.400004
Relative permitivity (real part)	51.417028
Relative permitivity (imaginary	14.293556
part) Conductivity (S/m)	1.514286
Variation (%)	-1.100000

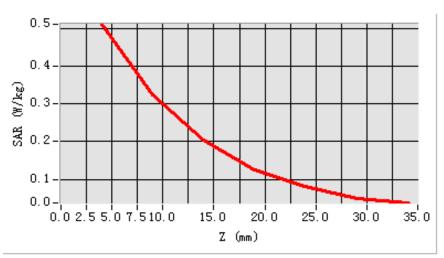


#### **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.356128
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

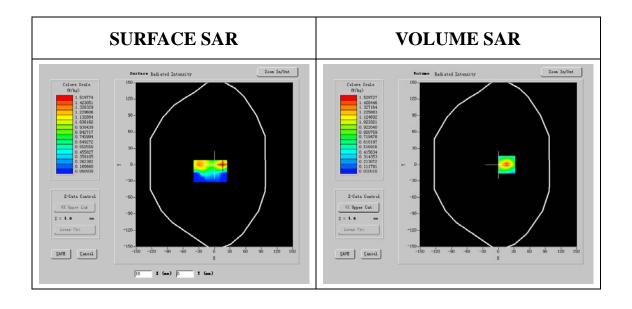
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	High
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN11/09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	1784.599036
Relative permitivity (real part)	51.813332
Relative permitivity (imaginary part)	14.319230
Conductivity (S/m)	1.513224
Variation (%)	-0.130000

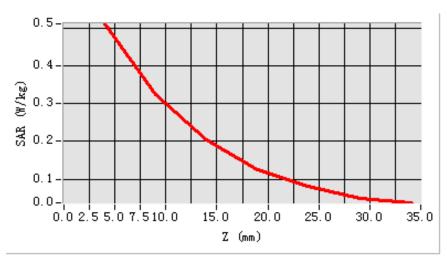


# Maximum location: X=2.00, Y=9.00

SAR 1g (W/Kg)	0.436121
---------------	----------

#### Z Axis Scan

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



# Face down without earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

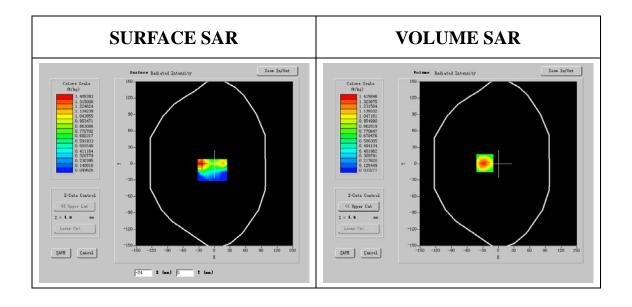
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_11/09_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

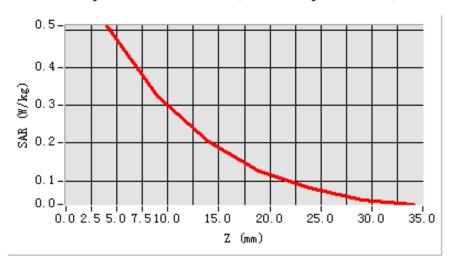
1710.199951
54.147400
13.892153
1.588198
-0.220000



# **Maximum location: X=-31.00, Y=-16.00**

#### Z Axis Scan

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

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

# **B.** Instrumentations.

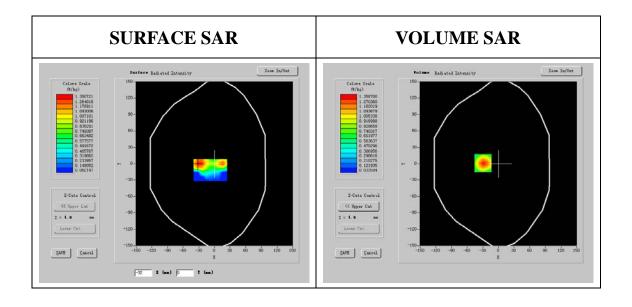
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

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# **C. SAR Measurement Results**

1747.400004
54.221428
14.001456
1.589086
-1.200000

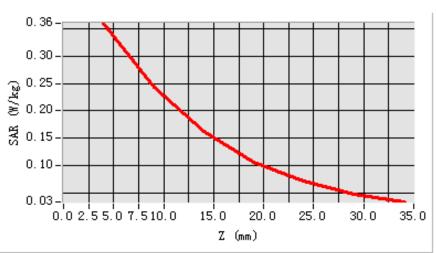


#### **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.359361
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

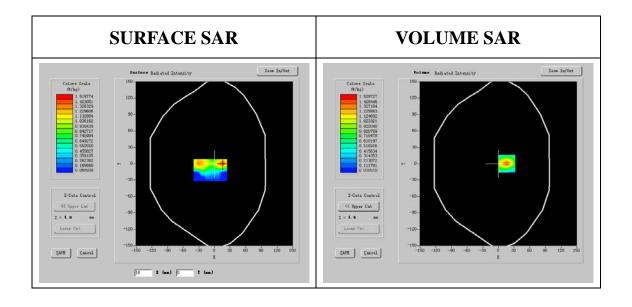
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	High
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

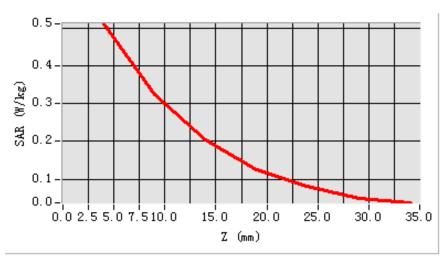
Frequency (MHz)	1784.599036
Relative permitivity (real part)	53.802142
Relative permitivity (imaginary part)	13.821430
Conductivity (S/m)	1.585465
Variation (%)	-0.100000



# Maximum location: X=2.00, Y=9.00

#### Z Axis Scan

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



# EUT Slide off GSM850

#### I. RESULTS

TYPE	BAND	<u>PARAMETERS</u>
<u>Noise</u>		
<u>Validation</u>		
Phone	GSM850	Measurement 1: Right Head with Cheek device position on Low Channel in GSM mode  Measurement 2: Right Head with Cheek device position on Middle Channel in GSM mode  Measurement 3: Right Head with Cheek device position on High Channel in GSM mode  Measurement 4: Right Head with Tilt device position on Low Channel in GSM mode  Measurement 5: Right Head with Tilt device position on Middle Channel in GSM mode  Measurement 6: Right Head with Tilt device position on High Channel in GSM mode  Measurement 7: Left Head with Cheek device position on Low Channel in GSM mode  Measurement 8: Left Head with Cheek device position on Middle Channel in GSM mode  Measurement 9: Left Head with Cheek device position on High Channel in GSM mode  Measurement 10: Left Head with Tilt device position on Low Channel in GSM mode  Measurement 11: Left Head with Tilt device position on Middle Channel in GSM mode  Measurement 11: Left Head with Tilt device position on Middle Channel in GSM mode

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

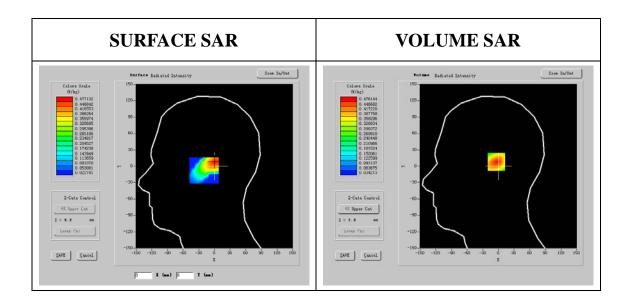
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	824.200001
D-1-4'	41, 4002.45
Relative permitivity (real part)	41.489245
Relative permitivity (imaginary	19.510000
part)	
Conductivity (S/m)	0.853690
Variation (%)	-1.000000

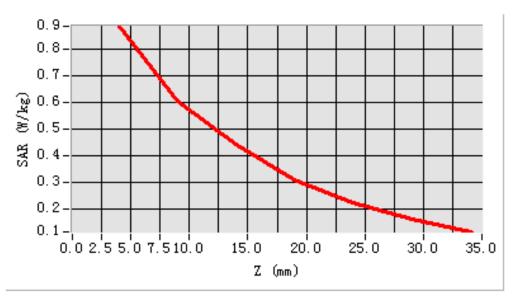


#### **Maximum location: X=-13.00, Y=-3.00**

SAR 1g (W/Kg)	0.863224
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

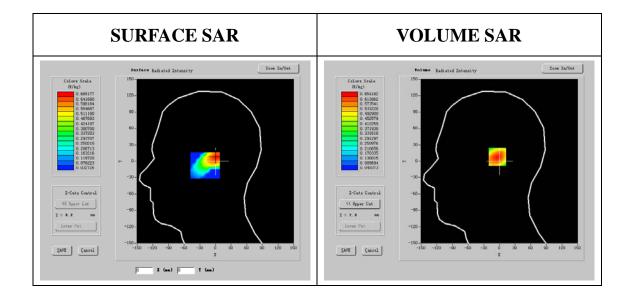
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	836.590001
Relative permitivity (real part)	41.412030
Relative permitivity (imaginary part)	19.510201
Conductivity (S/m)	0.907024
Variation (%)	-0.100000

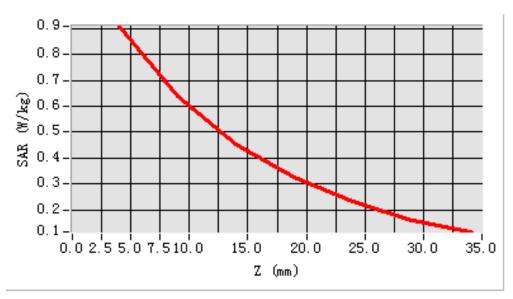


#### **Maximum location: X=-13.00, Y=-3.00**

SAR 1g (W/Kg)	0.836217
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

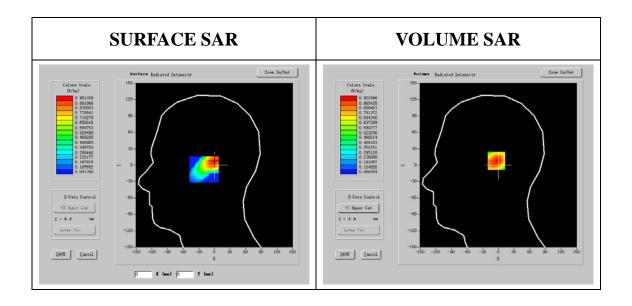
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

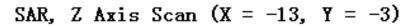
# **C. SAR Measurement Results**

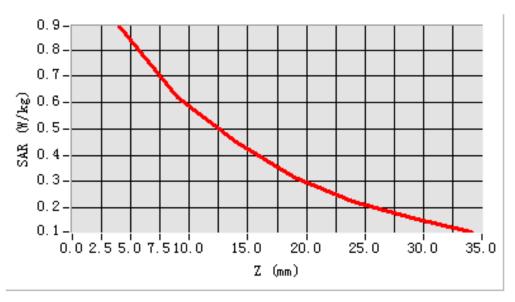
Frequency (MHz)	848.799999
Relative permitivity (real part)	41.212030
Relative permitivity (imaginary part)	19.587020
Conductivity (S/m)	0.903216
Variation (%)	-0.100000



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

#### Z Axis Scan





# **MEASUREMENT 4**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

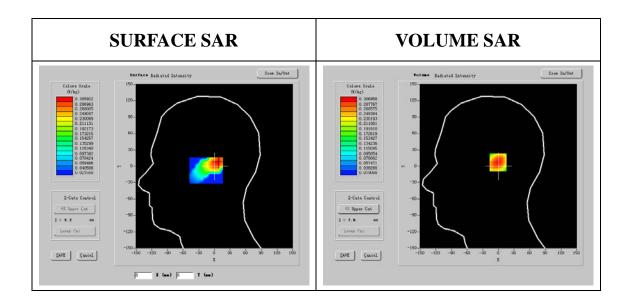
#### A. Experimental conditions.

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

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**



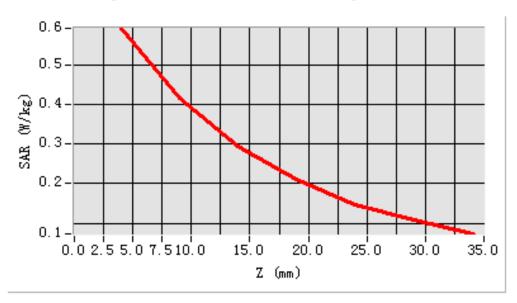
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# Maximum location: X=-9.00, Y=-6.00

SAR 1g (W/Kg)	0.636211
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#### Z Axis Scan

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



# **MEASUREMENT 5**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

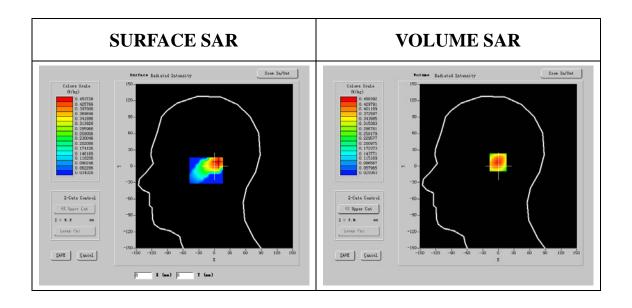
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	836.600210
Relative permitivity (real part)	41.421339
Relative permitivity (imaginary part)	19.530121
Conductivity (S/m)	0.903127
Variation (%)	-0.800000



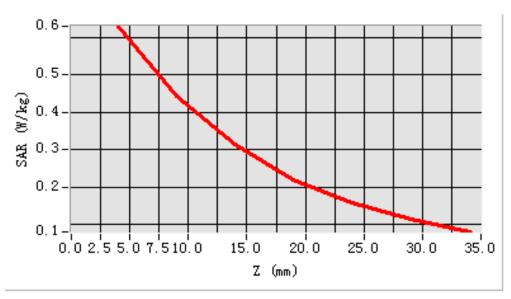
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# Maximum location: X=-9.00, Y=-6.00

SAR 1g (W/Kg)	0.648238
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 6**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

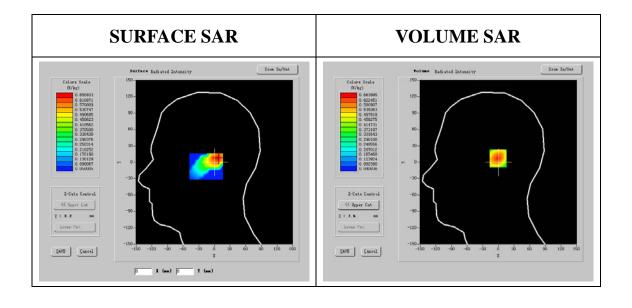
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	848.799000
Relative permitivity (real part)	41.220341
Relative permitivity (imaginary	19.534020
part) Conductivity (S/m)	0.902146
Variation (%)	-0.120000

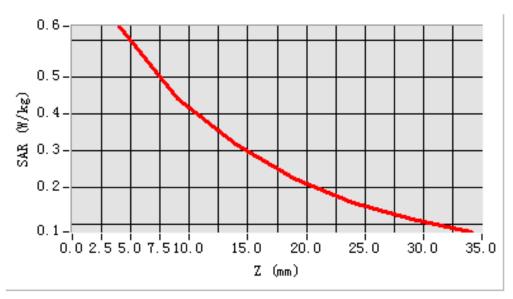


#### Maximum location: X=-9.00, Y=-6.00

SAR 1g (W/Kg)	0.658212
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#### Z Axis Scan

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



# **MEASUREMENT 7**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

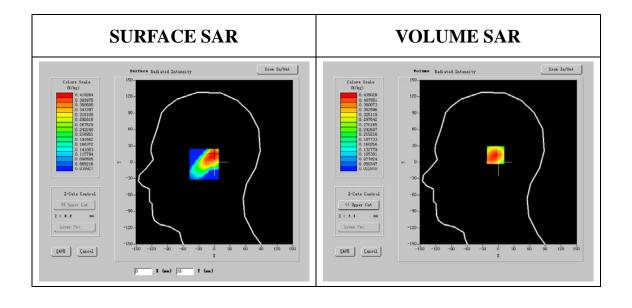
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Cheek
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

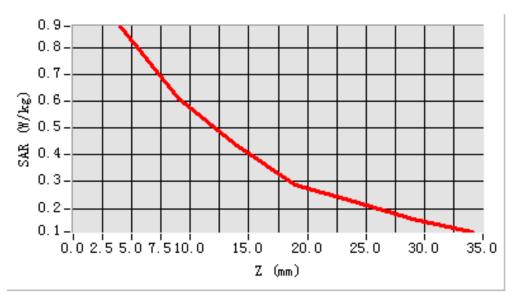
Frequency (MHz)	824.203202
Relative permitivity (real part)	41.4220139
Relative permitivity (imaginary	19.544006
part) Conductivity (S/m)	0.834032
Variation (%)	-0.400000



## **Maximum location: X=-25.00, Y=-11.00**

#### Z Axis Scan

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



## **MEASUREMENT 8**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

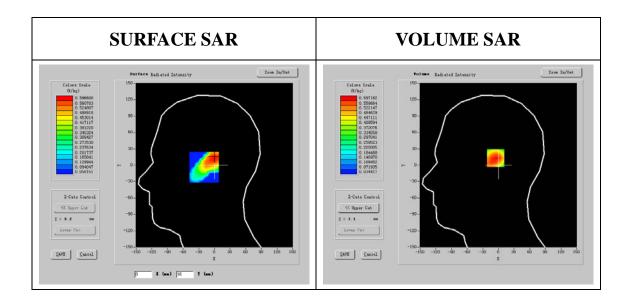
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	836.600010
Relative permitivity (real part)	41.484129
Relative permitivity (imaginary	19.540231
part) Conductivity (S/m)	0.912041
Variation (%)	-0.200000
. 322 - 332 - 337	3.2333

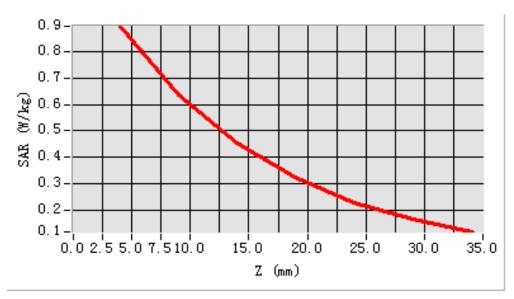


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## **Maximum location: X=-25.00, Y=-11.00**

#### Z Axis Scan

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



## **MEASUREMENT 9**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

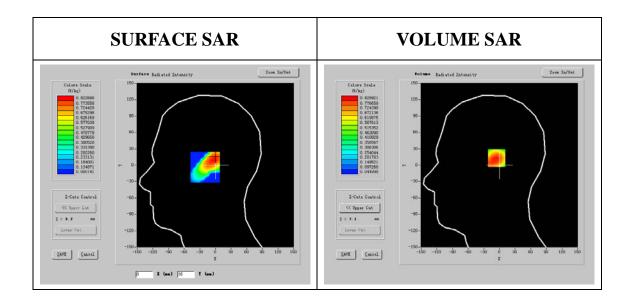
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Cheek
Band	GSM850
Channels	High
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	848.592416
Relative permitivity (real part)	41.234121
Relative permitivity (imaginary	19.531230
part) Conductivity (S/m)	0.912020
Variation (%)	-0.320000



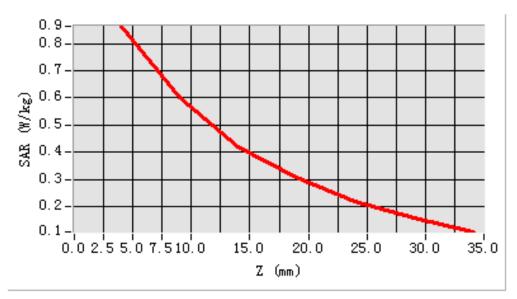
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# **Maximum location: X=-25.00, Y=-11.00**

SAR 1g (W/Kg)	0.818233

#### Z Axis Scan

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



# **MEASUREMENT 10**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

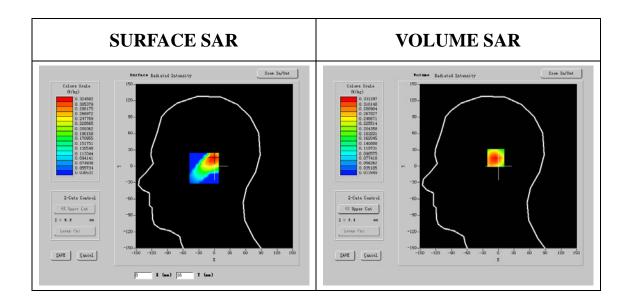
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	824.203202
Relative permitivity (real part)	41.402301
Relative permitivity (imaginary part)	19.510233
Conductivity (S/m)	0.911232
Variation (%)	-0.110000



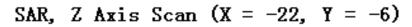
#### **Maximum location: X=-22.00, Y=-6.00**

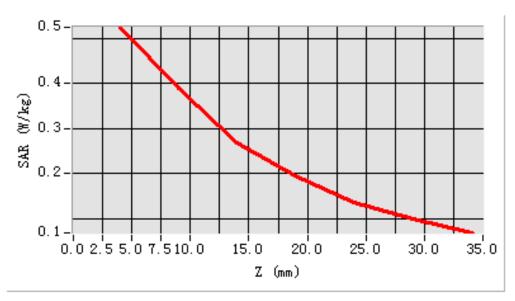
SAR 1g (W/Kg)	0.450232
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Project name: KS100512B01

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#### Z Axis Scan





# **MEASUREMENT 11**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

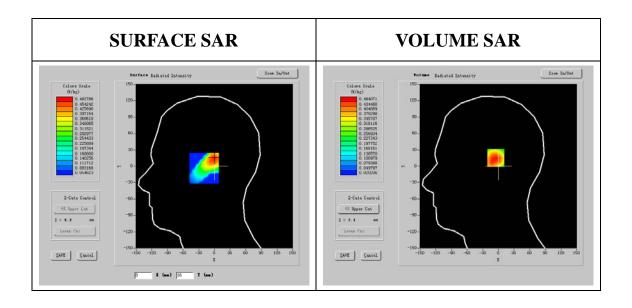
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

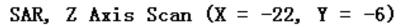
Frequency (MHz)	836.602124
Relative permitivity (real part)	41.456030
Relative permitivity (imaginary	19.540005
part)	
Conductivity (S/m)	0.902302
Variation (%)	-0.120000

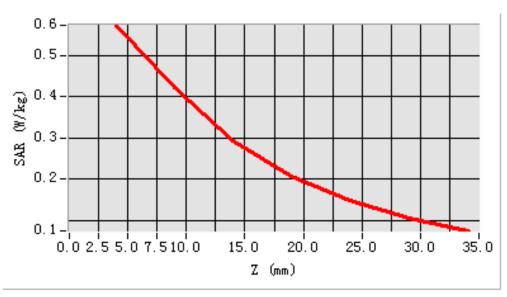


#### **Maximum location: X=-22.00, Y=-6.00**

SAR 1g (W/Kg)	0.500321
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#### Z Axis Scan





# **MEASUREMENT 12**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

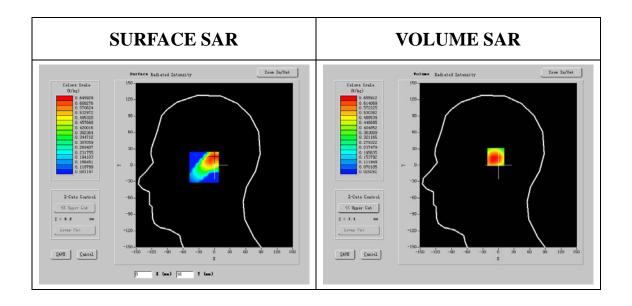
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	848.790120
Relative permitivity (real part)	41.432136
Relative permitivity (imaginary part)	19.530140
Conductivity (S/m)	0.910306
Variation (%)	-1.200000

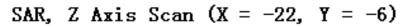


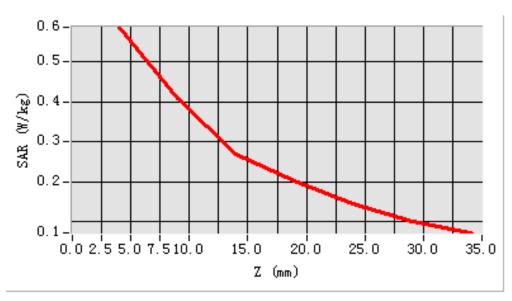
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# **Maximum location: X=-22.00, Y=-6.00**

SAR 1g (W/Kg) 0.533218
------------------------

#### Z Axis Scan





# Face up with earphone

## **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	824.200002
Relative permitivity (real part)	55.530120
Relative permitivity (imaginary part)	21.241030
Conductivity (S/m)	0.935209
Variation (%)	-1.100000

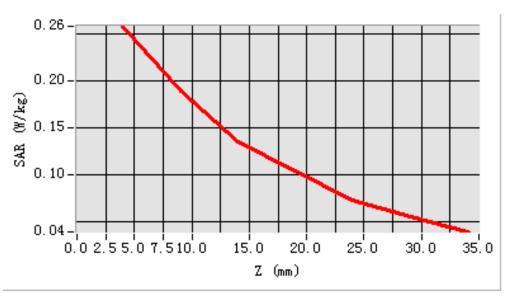


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.302611
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

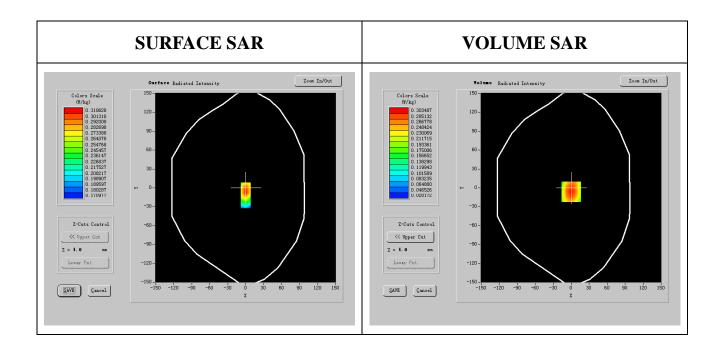
## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

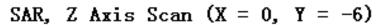
Frequency (MHz)	836.600204
Relative permitivity (real part)	55.523010
Relative permitivity (imaginary part)	21.833210
Conductivity (S/m)	0.923925
Variation (%)	-1.100000

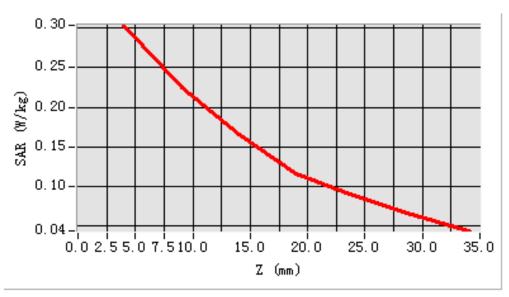


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.259289
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

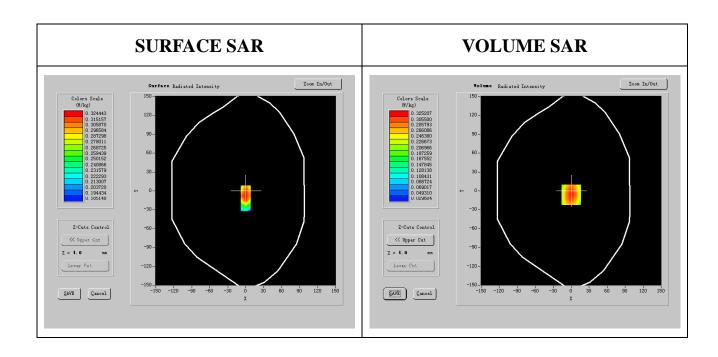
## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	High
Signal	GSM

## **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	848.862406
Relative permitivity (real part)	55.522300
Relative permitivity (imaginary part)	21.712301
Conductivity (S/m)	0.963200
Variation (%)	-1.310000

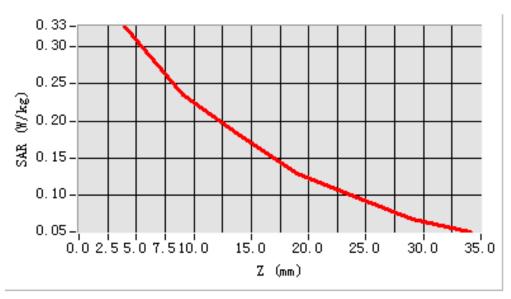


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.355239
---------------	----------

#### Z Axis Scan

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



# Face down with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

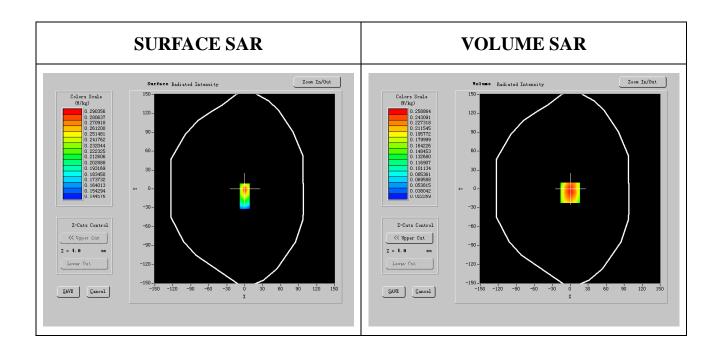
### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

824.200012
55.584000
21.654150
0.951519
-1.120000

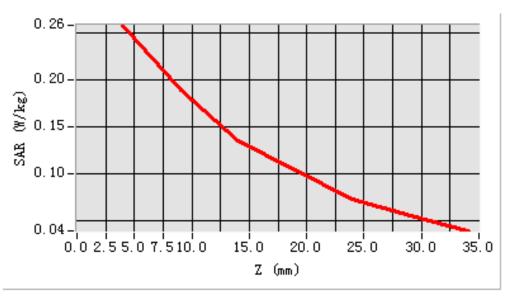


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.256148
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### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

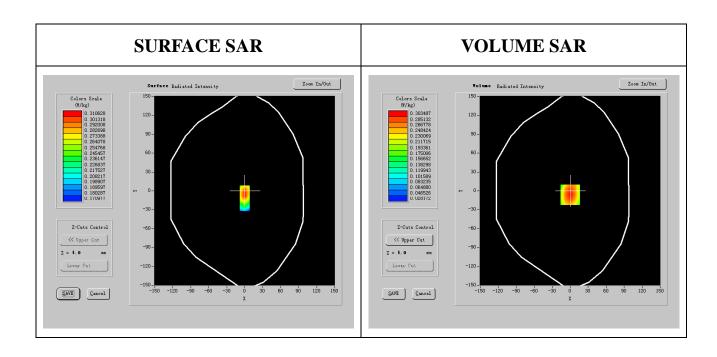
## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.501999
Relative permitivity (imaginary part)	21.866249
Conductivity (S/m)	0.966052
Variation (%)	-0.120000

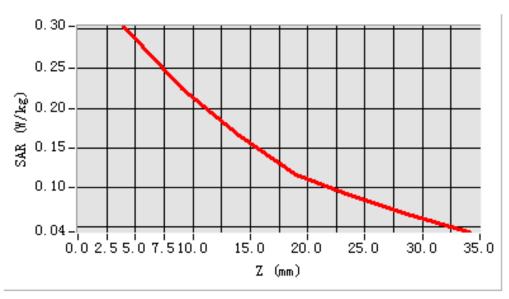


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.267161
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

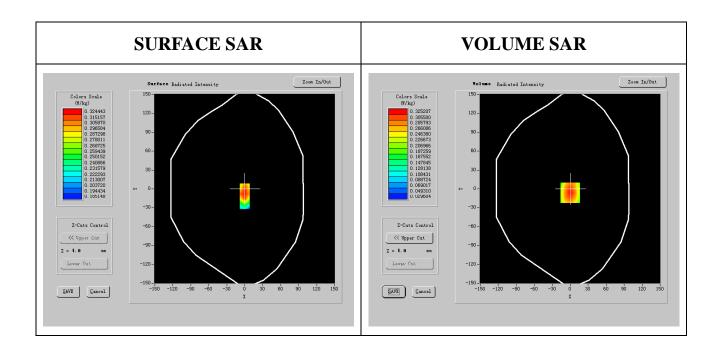
## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	High
Signal	GSM

## **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	848.599976
Relative permitivity (real part)	55.576000
Relative permitivity (imaginary part)	21.726601
Conductivity (S/m)	0.964288
Variation (%)	-1.120000

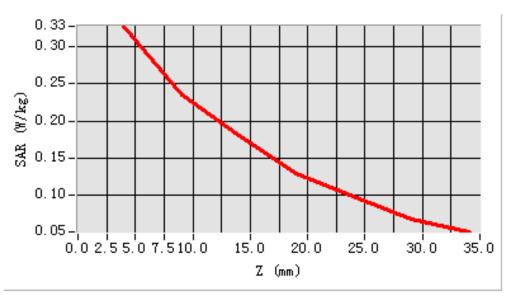


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.311212
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#### Z Axis Scan

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



# Face up without earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

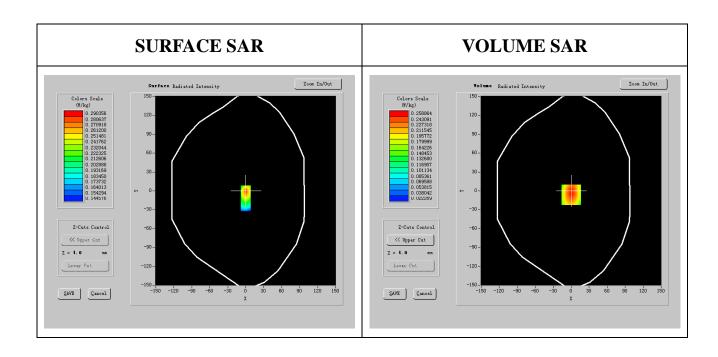
### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

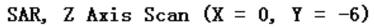
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.575230
Relative permitivity (imaginary part)	21.671350
Conductivity (S/m)	0.952319
Variation (%)	-1.000000

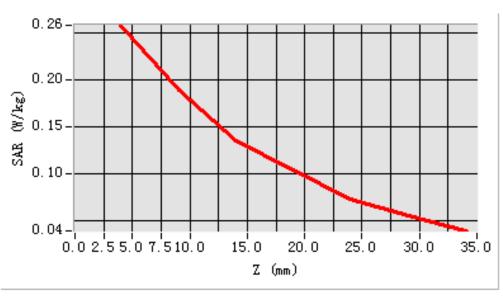


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.253018
---------------	----------

### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_1109_EP_100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.5125209
Relative permitivity (imaginary part)	21.859639
Conductivity (S/m)	0.961252
Variation (%)	-0.100000

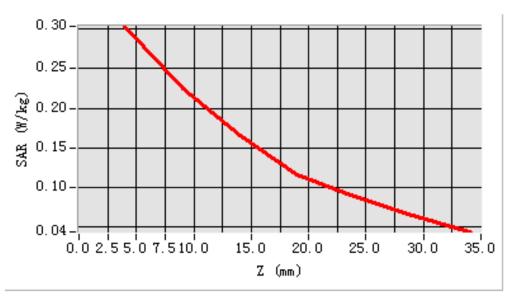


## Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.265141
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	High
Signal	GSM

## **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Frequency (MHz)	848.599976
Relative permitivity (real part)	55.565222
Relative permitivity (imaginary part)	21.735131
Conductivity (S/m)	0.960258
Variation (%)	-1.000000

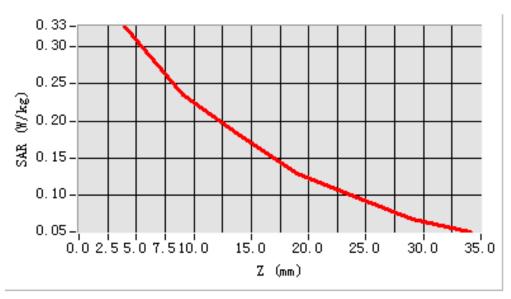


### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.310252
---------------	----------

#### Z Axis Scan

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



# Face down without earphone

### **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

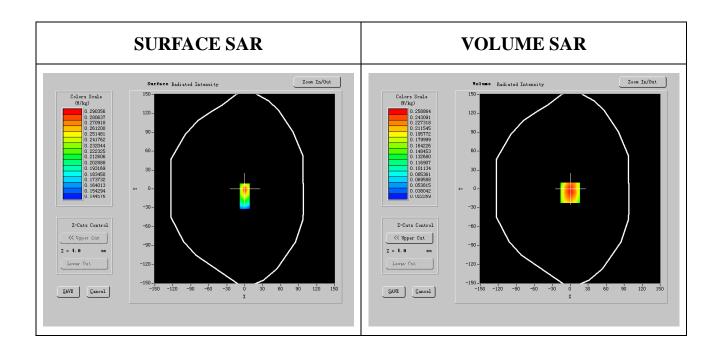
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

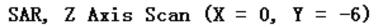
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.592130
Relative permitivity (imaginary part)	21.659250
Conductivity (S/m)	0.952919
Variation (%)	-1.100000

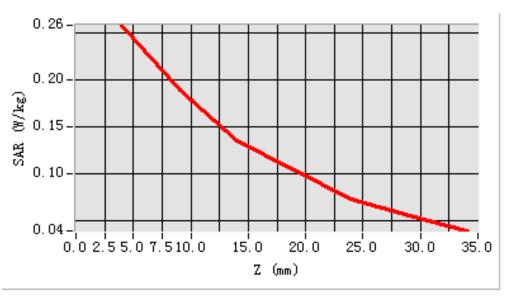


### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.258214
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	Middle
Signal	GSM

# **B.** Instrumentations.

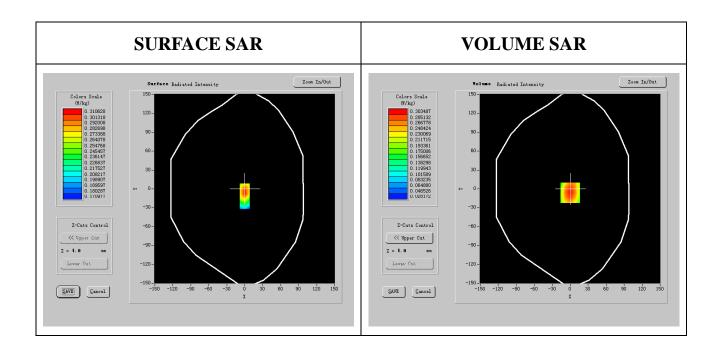
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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

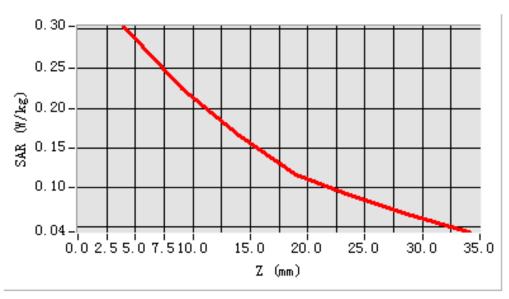
Frequency (MHz)	836.400024
Relative permitivity (real part)	55.510239
Relative permitivity (imaginary part)	21.865179
Conductivity (S/m)	0.960256
Variation (%)	-0.900000



### Maximum location: X=0.00, Y=-6.00

#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

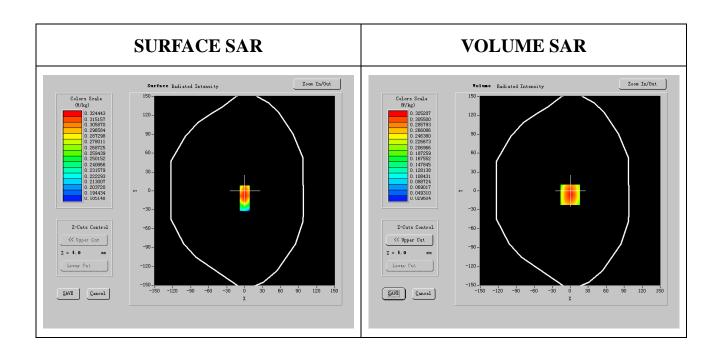
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM850
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	848.599976
Relative permitivity (real part)	55.567142
Relative permitivity (imaginary part)	21.721431
Conductivity (S/m)	0.961248
Variation (%)	-1.000000

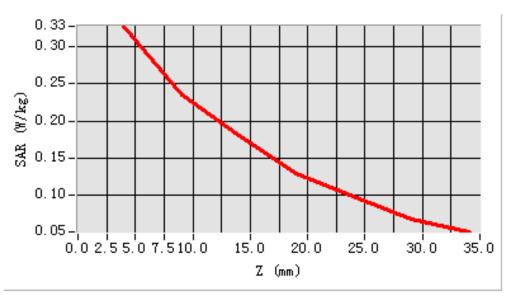


### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.312143
---------------	----------

#### Z Axis Scan

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



#### **GSM 1900**

#### I. RESULTS

TYPE	BAND	<u>PARAMETERS</u>
<u>Noise</u>		
<u>Validation</u>		
<u>Phone</u>	GSM1900	Measurement 1: Right Head with Cheek device position on Low Channel in GSM mode  Measurement 2: Right Head with Cheek device position on Middle Channel in GSM mode  Measurement 3: Right Head with Cheek device position on High Channel in GSM mode  Measurement 4: Right Head with Tilt device position on Low Channel in GSM mode  Measurement 5: Right Head with Tilt device position on Middle Channel in GSM mode  Measurement 6: Right Head with Tilt device position on High Channel in GSM mode  Measurement 7: Left Head with Cheek device position on Low Channel in GSM mode  Measurement 8: Left Head with Cheek device position on Middle Channel in GSM mode  Measurement 9: Left Head with Cheek device position on High Channel in GSM mode  Measurement 10: Left Head with Tilt device position on Low Channel in GSM mode  Measurement 11: Left Head with Tilt device position on Middle Channel in GSM mode  Measurement 12: Left Head with Tilt device position on Middle Channel in GSM mode  Measurement 12: Left Head with Tilt device position on High Channel in GSM mode

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

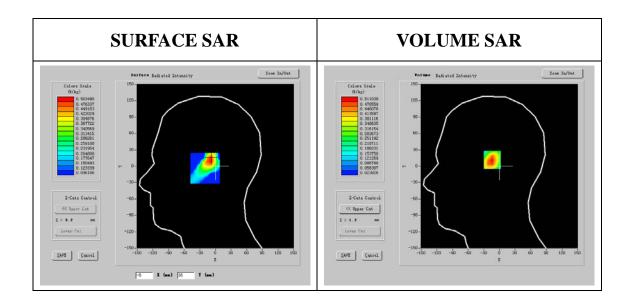
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN 11-09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

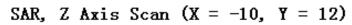
Frequency (MHz)	1850.200024
Relative permitivity (real part)	40.310200
Relative permitivity (imaginary	13.535200
part)	
Conductivity (S/m)	1.432218
Variation (%)	-1.200000

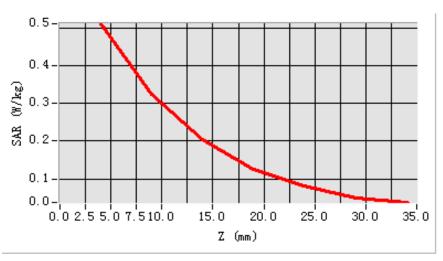


### **Maximum location: X=-10.00, Y=12.00**

SAR 1g (W/Kg)	0.483216
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

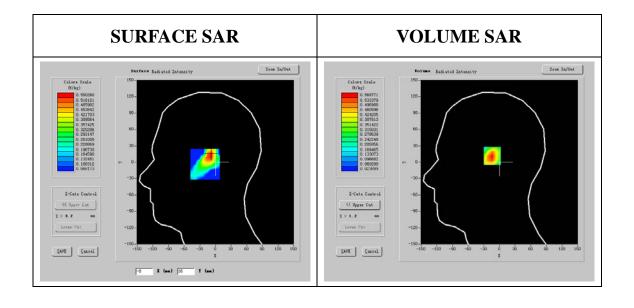
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN 11-09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.112031
Relative permitivity (imaginary	13.829140
part) Conductivity (S/m)	1.420105
Variation (9/)	-0.100000
Variation (%)	-0.100000

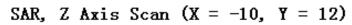


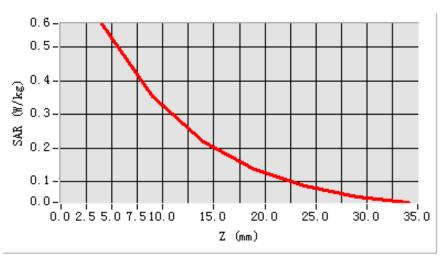
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### **Maximum location: X=-10.00, Y=12.00**

SAR 1g (W/Kg)	0.532012
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

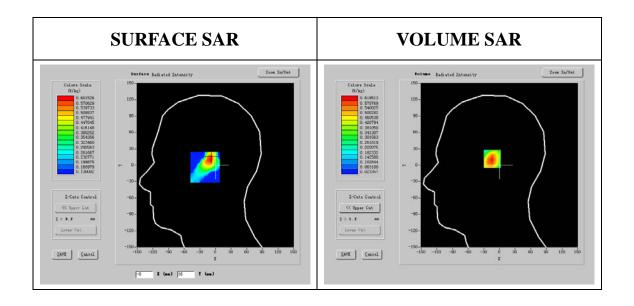
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN 11-09 EP100)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa

# **C. SAR Measurement Results**

Frequency (MHz)	1910.000216
Relative permitivity (real part)	40.212009
Relative permitivity (imaginary	13.621200
part) Conductivity (S/m)	1.421345
Variation (%)	-0.300000



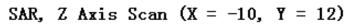
Project name: KS100512B01

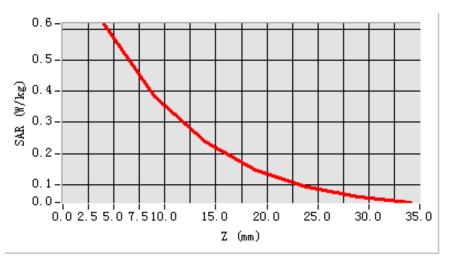
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### **Maximum location: X=-10.00, Y=12.00**

SAR 1g (W/Kg)	0.572312
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 4**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

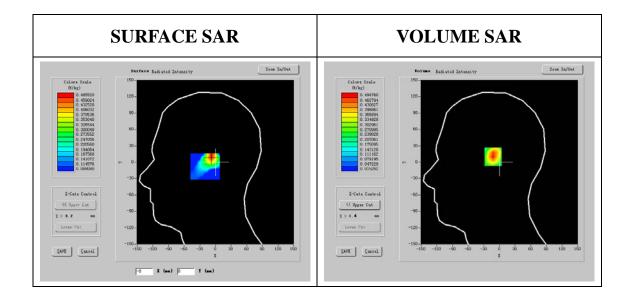
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

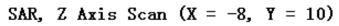
Frequency (MHz)	1850.200020
Relative permitivity (real part)	40.310230
Relative permitivity (imaginary part)	13.524100
Conductivity (S/m)	1.402108
Variation (%)	-1.400000

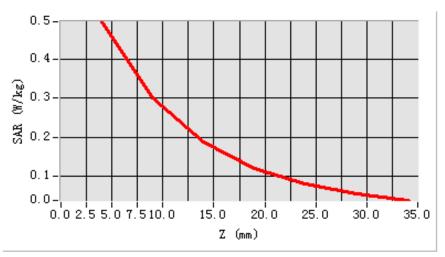


## Maximum location: X=-8.00, Y=10.00

SAR 1g (W/Kg)	0.443211
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 5**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

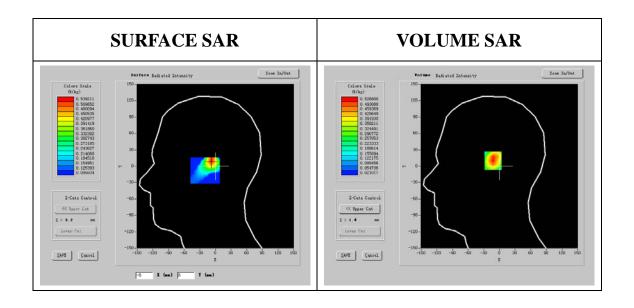
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

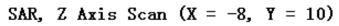
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.213201
Relative permitivity (imaginary	13.802000
part)	
Conductivity (S/m)	1.432010
Variation (%)	-0.450000

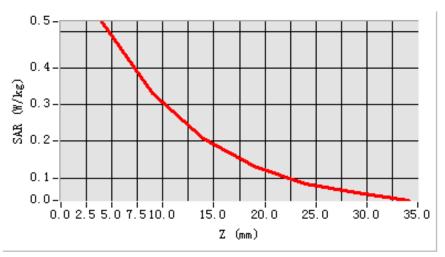


## Maximum location: X=-8.00, Y=10.00

SAR 1g (W/Kg)	0.486242
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 6**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

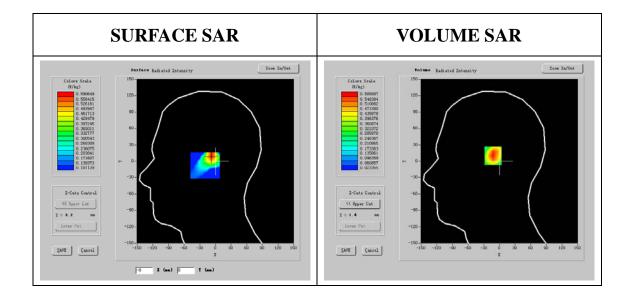
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

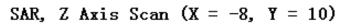
Frequency (MHz)	1910.000216
Relative permitivity (real part)	40.302159
Relative permitivity (imaginary	13.220300
part) Conductivity (S/m)	1.415220
Variation (%)	-1.000000
Variation (%)	-1.000000

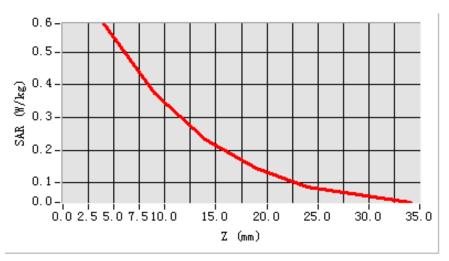


## Maximum location: X=-8.00, Y=10.00

SAR 1g (W/Kg)	0.551234
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 7**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

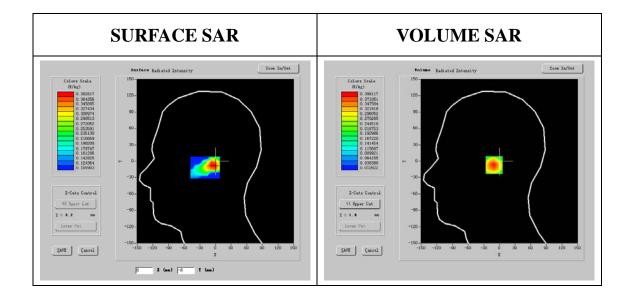
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

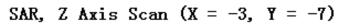
Frequency (MHz)	1850.200001
Relative permitivity (real part)	40.323100
Relative permitivity (imaginary part)	13.530200
Conductivity (S/m)	1.421230
Variation (%)	0.700000

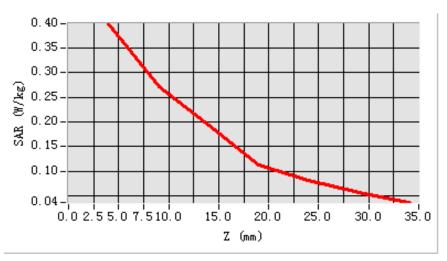


## Maximum location: X=-3.00, Y=-7.00

SAR 1g (W/Kg)	0.355218
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 8**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

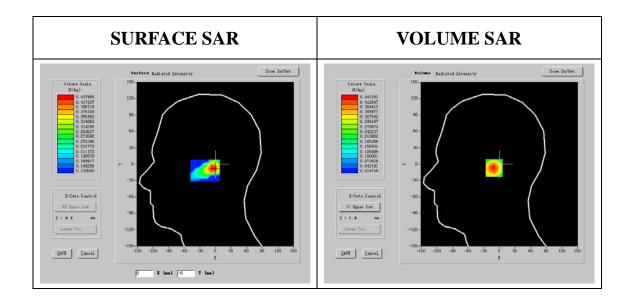
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

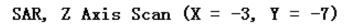
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.142032
Relative permitivity (imaginary part)	13.832000
Conductivity (S/m)	1.412102
Variation (%)	1.500000

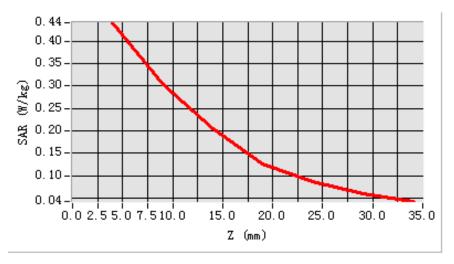


## Maximum location: X=-3.00, Y=-7.00

SAR 1g (W/Kg)	0.553247
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 9**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

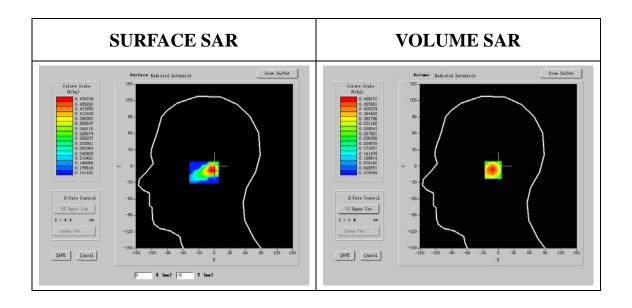
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Cheek
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1910.000276
Relative permitivity (real part)	40.103250
Relative permitivity (imaginary part)	13.602300
Conductivity (S/m)	1.411236
Variation (%)	0.450000



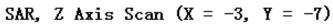
Project name: KS100512B01

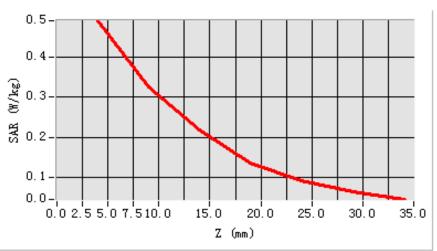
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## Maximum location: X=-3.00, Y=-7.00

SAR 1g (W/Kg)	0.448751
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 10**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

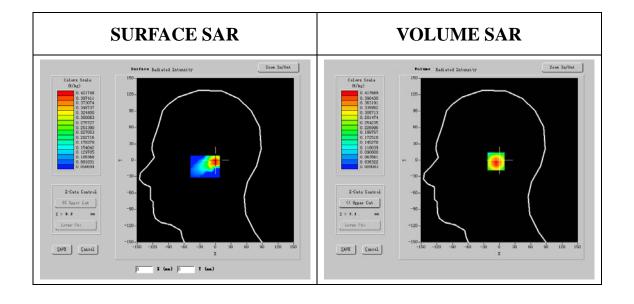
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

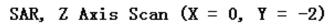
Frequency (MHz)	1850.200004
Relative permitivity (real part)	40.312300
Relative permitivity (imaginary part)	13.512300
Conductivity (S/m)	1.403510
Variation (%)	-0.230000

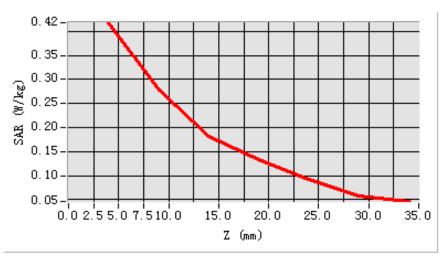


## Maximum location: X=0.00, Y=-2.00

SAR 1g (W/Kg)	0.360146
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#### Z Axis Scan





# **MEASUREMENT 11**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

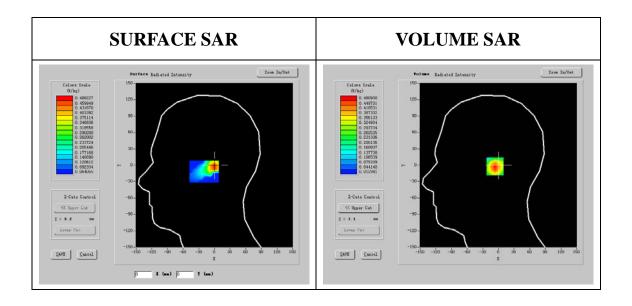
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

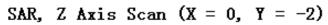
# **C. SAR Measurement Results**

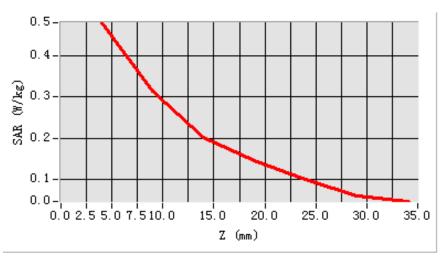
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.310201
Relative permitivity (imaginary	13.321300
part)	
Conductivity (S/m)	1.410010
Variation (%)	-1.200000



## Maximum location: X=0.00, Y=-2.00

SAR 1g (W/Kg)	0.439429
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# **MEASUREMENT 12**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

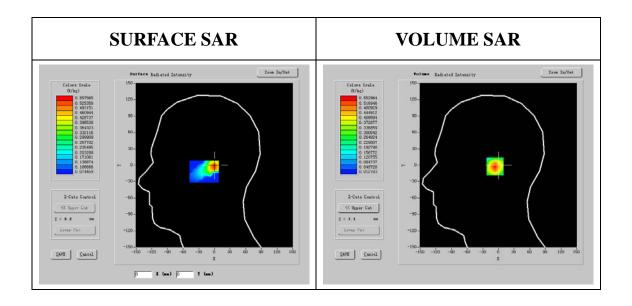
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
<b>Device Position</b>	Tilt
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

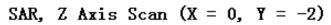
Frequency (MHz)	1910.002076
Relative permitivity (real part)	40.220203
Relative permitivity (imaginary part)	13.618100
Conductivity (S/m)	1.422415
Variation (%)	-1.100000

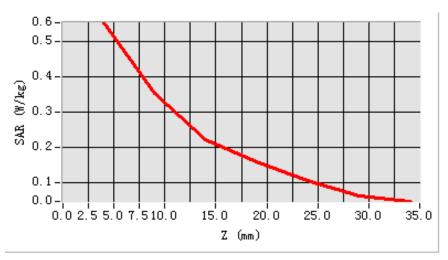


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## Maximum location: X=0.00, Y=-2.00

SAR 1g (W/Kg)	0.452169
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# Face up with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

# A. Experimental conditions.

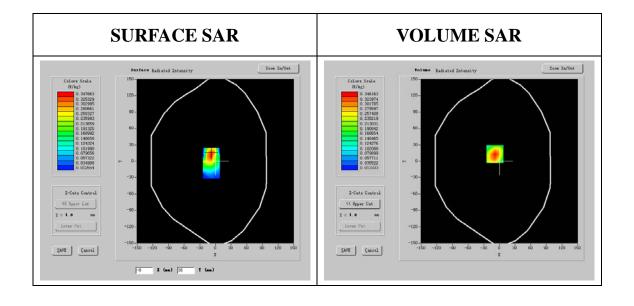
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

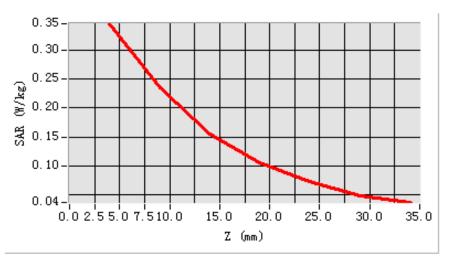
Frequency (MHz)	1850.200004
Relative permitivity (real part)	53.310300
Relative permitivity (imaginary	13.526900
part) Conductivity (S/m)	1.510201
Variation (%)	-0.100000



## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.353689
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# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

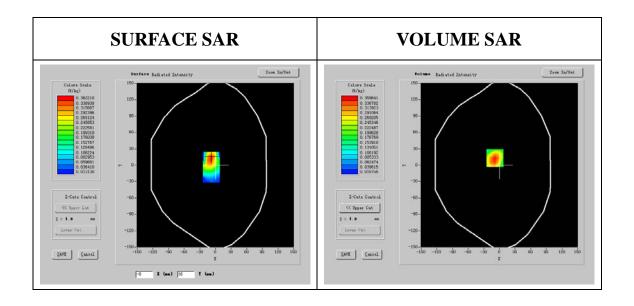
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

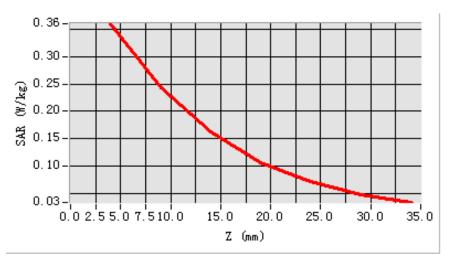
Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.941421
Relative permitivity (imaginary	13.792500
part) Conductivity (S/m)	1.511420
Variation (%)	-0.500000



## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.310258
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# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

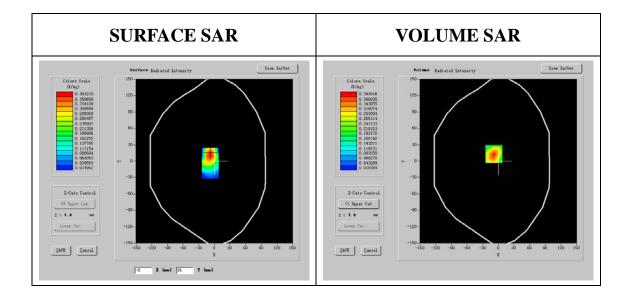
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

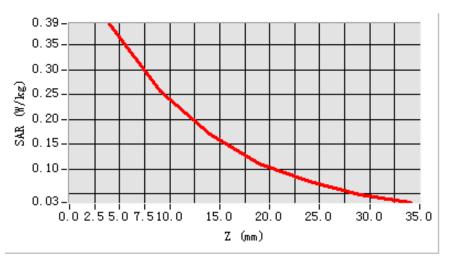
Frequency (MHz)	1909.590210
Relative permitivity (real part)	52.281410
Relative permitivity (imaginary part)	13.626320
Conductivity (S/m)	1.502125
Variation (%)	-0.540000



## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.368472
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# Face down with earphone

## **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

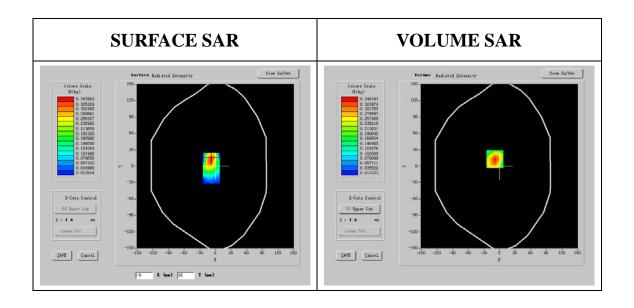
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Low
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1850.400024
Relative permitivity (real part)	53.313000
Relative permitivity (imaginary part)	13.584900
Conductivity (S/m)	1.506528
Variation (%)	-0.130000

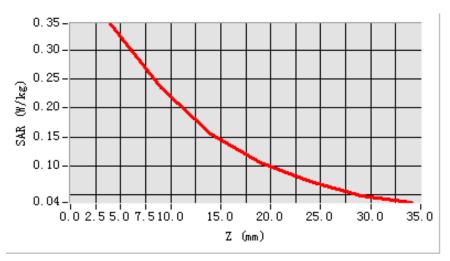


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## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.322318
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# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

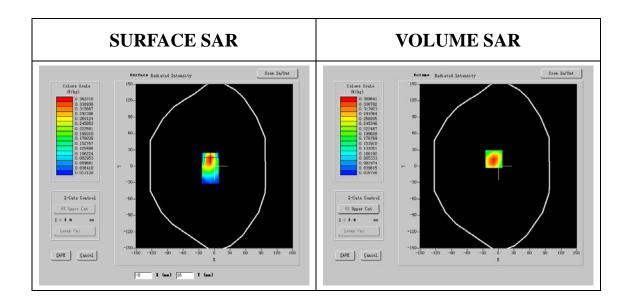
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.993001
Relative permitivity (imaginary	13.813800
part)	
Conductivity (S/m)	1.512775
Variation (%)	-0.700000

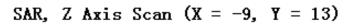


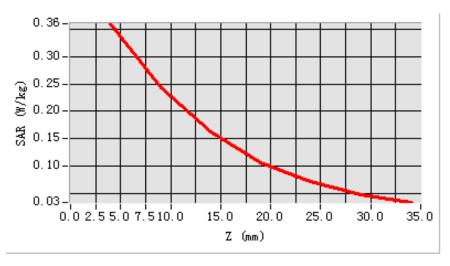
Project name: KS100512B01

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## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.329280
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# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

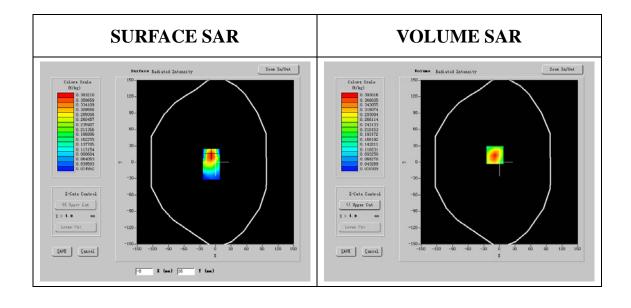
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	High
Signal	GSM

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

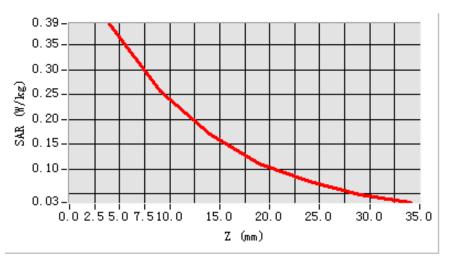
Frequency (MHz)	1909.599976
Relative permitivity (real part)	52.285999
Relative permitivity (imaginary part)	13.669900
Conductivity (S/m)	1.510225
Variation (%)	-0.600000



## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.348231
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# Face up without earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

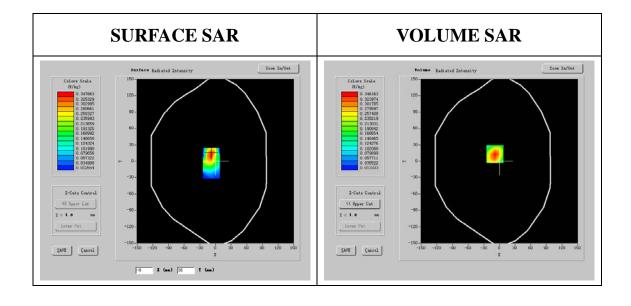
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Low
Signal	GSM

## **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1850.400024
Relative permitivity (real part)	53.310210
Relative permitivity (imaginary	13.585320
part)	
Conductivity (S/m)	1.501028
Variation (%)	-0.100000

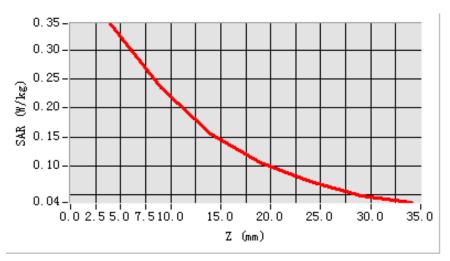


## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.321018
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#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

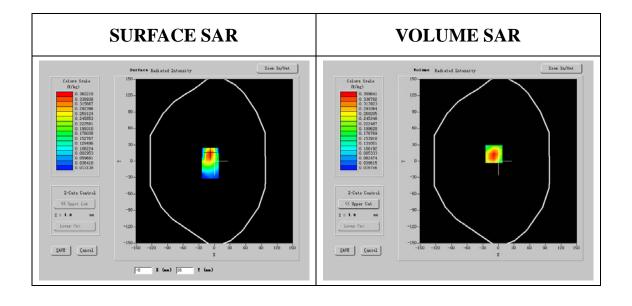
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Middle
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.847101
Relative permitivity (imaginary part)	13.752100
Conductivity (S/m)	1.510275
Variation (%)	-0.100000



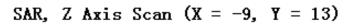
Project name: KS100512B01

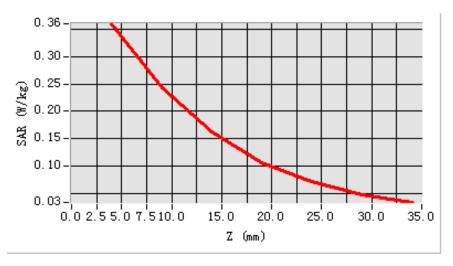
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## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.330120
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#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

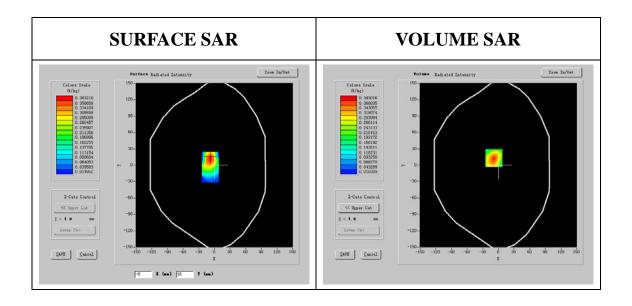
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	High
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1909.599976
Relative permitivity (real part)	52.313029
Relative permitivity (imaginary	13.6510000
part)	
Conductivity (S/m)	1.502125
Variation (%)	-0.600000



Project name: KS100512B01

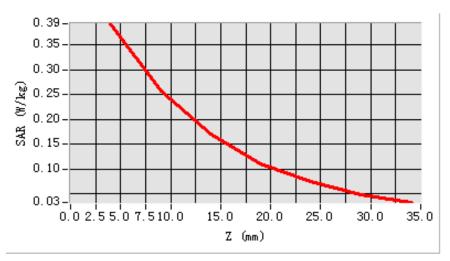
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## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.345231
---------------	----------

#### Z Axis Scan





# Face down without earphone

## **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

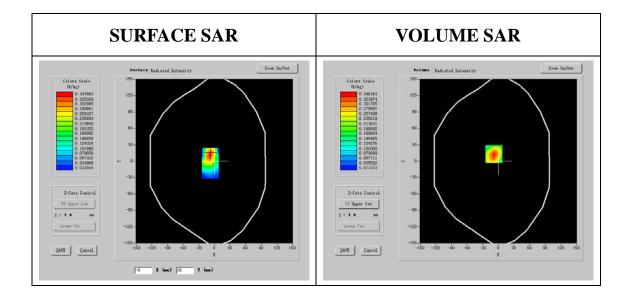
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Low
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1850.400024
Relative permitivity (real part)	53.310210
Relative permitivity (imaginary	13.587020
part) Conductivity (S/m)	1.501248
Variation (%)	-0.100000

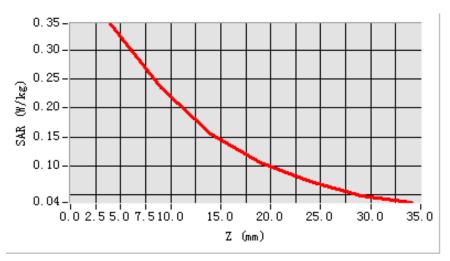


## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.323148
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

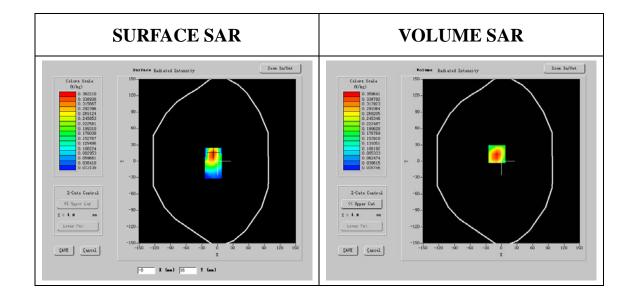
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	Middle
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

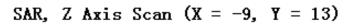
Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.874001
Relative permitivity (imaginary	13.752100
part)	
Conductivity (S/m)	1.502175
Variation (%)	-0.100000

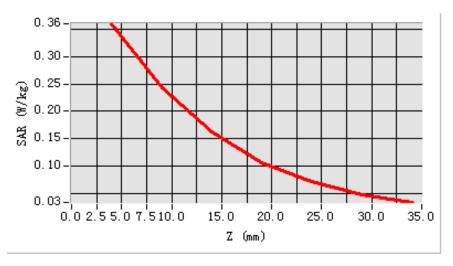


## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.331210
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

### A. Experimental conditions.

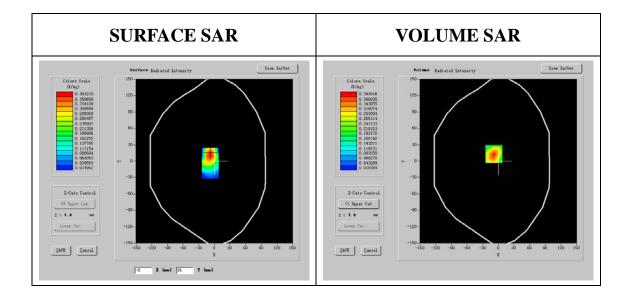
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GSM1900
Channels	High
Signal	GSM

### **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN 11-09 EP100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

1909.599976
52.302579
13.614000
1.508325
-0.600000

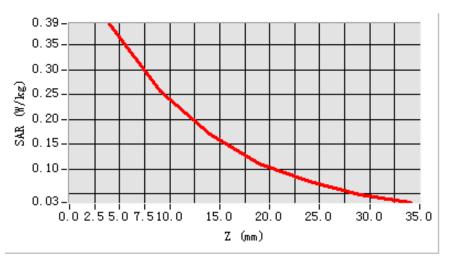


## Maximum location: X=-9.00, Y=13.00

SAR 1g (W/Kg)	0.352011
---------------	----------

#### Z Axis Scan





### **GPRS 850**

### I. RESULTS

TYPE	BAND	<u>PARAMETERS</u>
Noise		
<b>Validation</b>		
<u>Phone</u>	GPRS850	Measurement 1: Validation Plane with Body device position on Low Channel in GPRS mode  Measurement 2: Validation Plane with Body device position on Middle Channel in GPRS mode  Measurement 3: Validation Plane with Body device position on High Channel in GPRS mode

# Face up with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

## A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

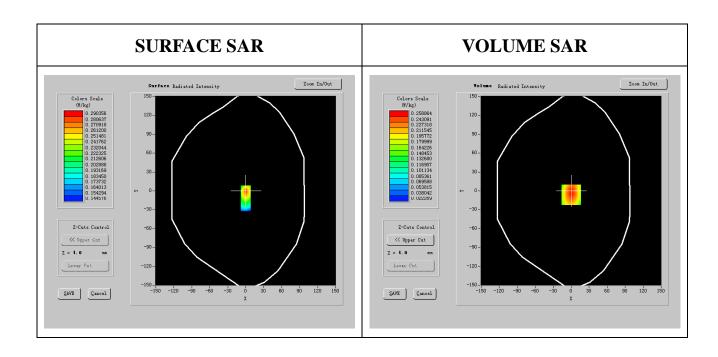
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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## **C. SAR Measurement Results**

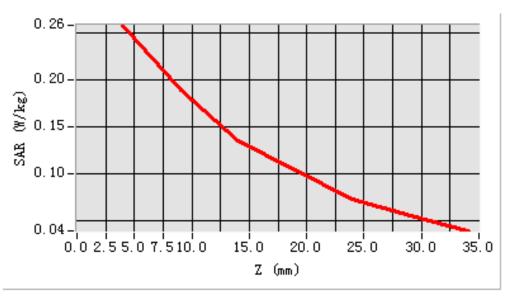
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.541230
Relative permitivity (imaginary part)	21.653210
Conductivity (S/m)	0.956320
Variation (%)	-0.200000



## Maximum location: X=0.00, Y=-6.00

### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

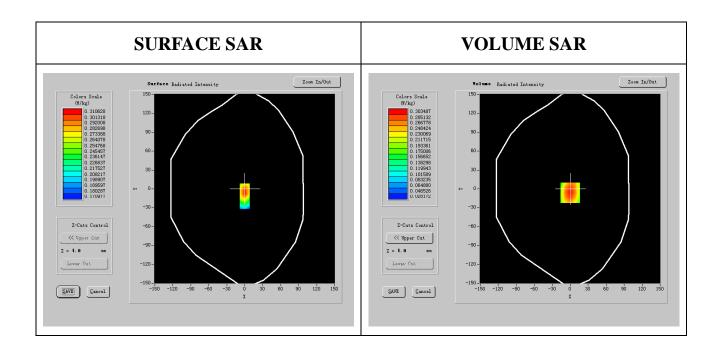
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	836.600004
Relative permitivity (real part)	55.512029
Relative permitivity (imaginary part)	21.810209
Conductivity (S/m)	0.920212
Variation (%)	-0.120000

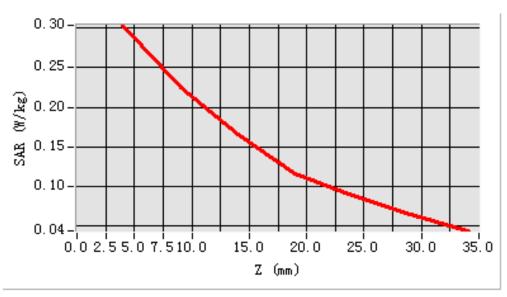


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.356213
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	High
Signal	GPRS

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

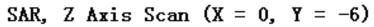
8.799001
5.533220
1.721053
0.967452
0.200000

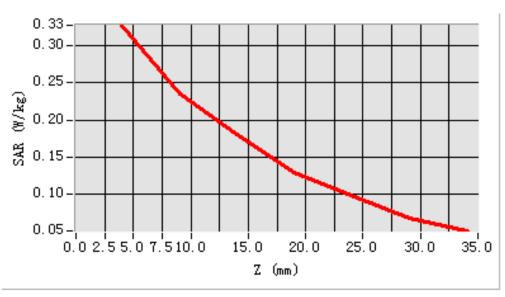


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.348472
---------------	----------

#### Z Axis Scan





# Face down with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

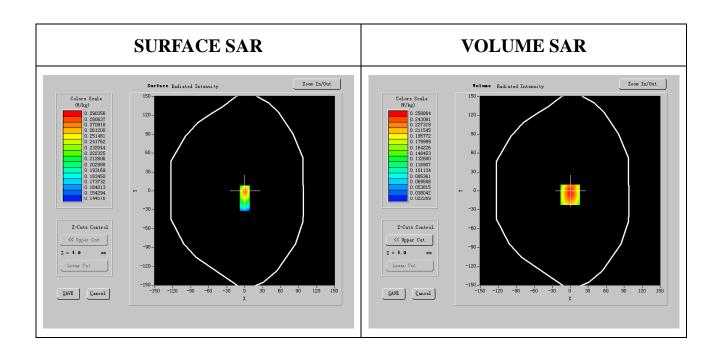
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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# **C. SAR Measurement Results**

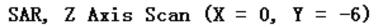
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.582100
Relative permitivity (imaginary part)	21.650050
Conductivity (S/m)	0.958319
Variation (%)	0.100000
Variation (%)	0.100000

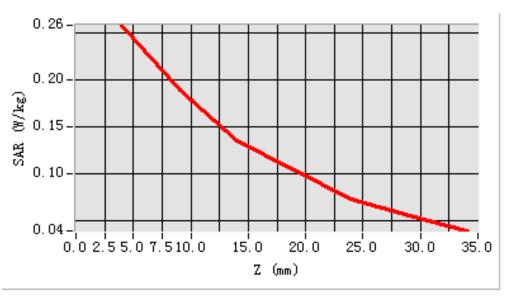


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.280368
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

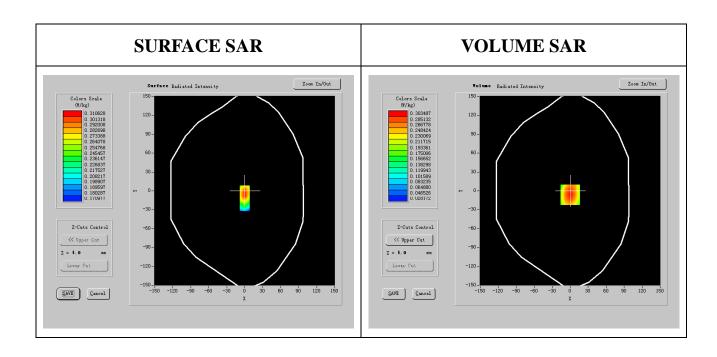
# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.502400
Relative permitivity (imaginary part)	21.857179
Conductivity (S/m)	0.958632
Variation (%)	-0.100000

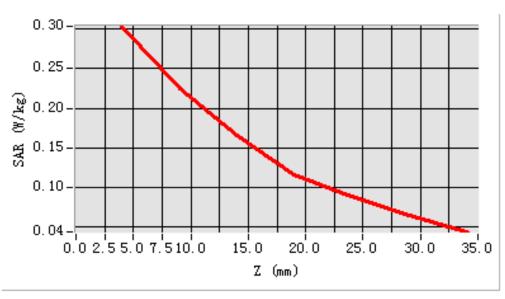


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.304125
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	High
Signal	GPRS

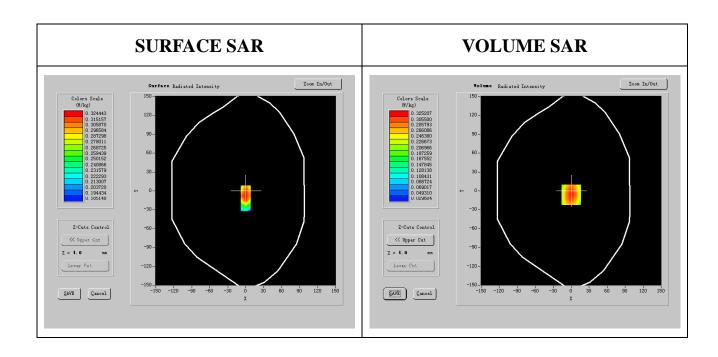
#### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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

Frequency (MHz)	848.599976
Relative permitivity (real part)	55.590110
Relative permitivity (imaginary part)	21.726601
Conductivity (S/m)	0.964718
Variation (%)	-0.200000

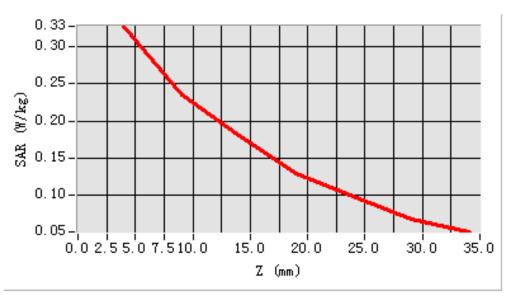


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.329327
---------------	----------

#### Z Axis Scan

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



# Face down up earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

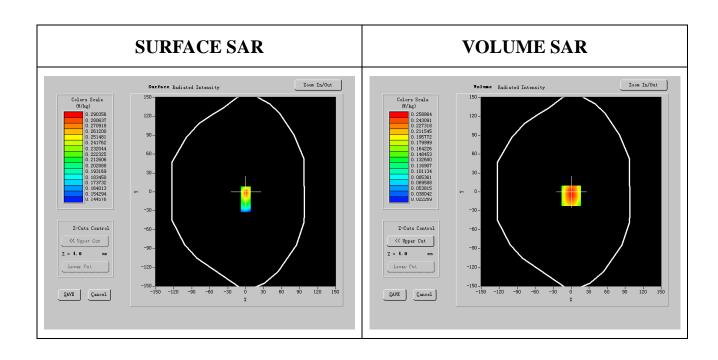
PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

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

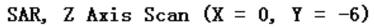
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.584000
Relative permitivity (imaginary part)	21.654150
Conductivity (S/m)	0.961519
Variation (%)	-0.120000

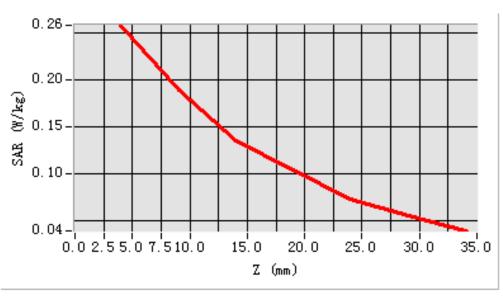


#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.276368
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

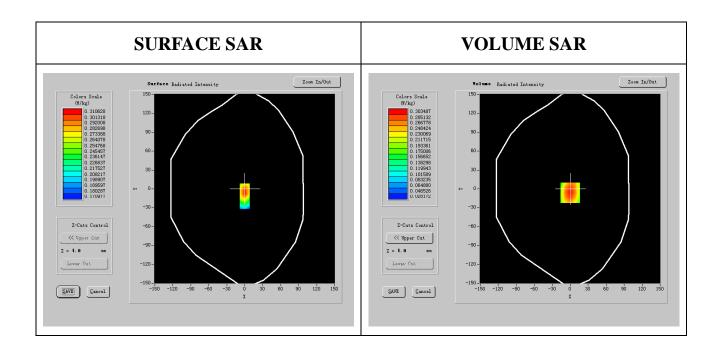
# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.501999
Relative permitivity (imaginary part)	21.866249
Conductivity (S/m)	0.966052
Variation (%)	-0.200000



#### Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.298465
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	High
Signal	GPRS

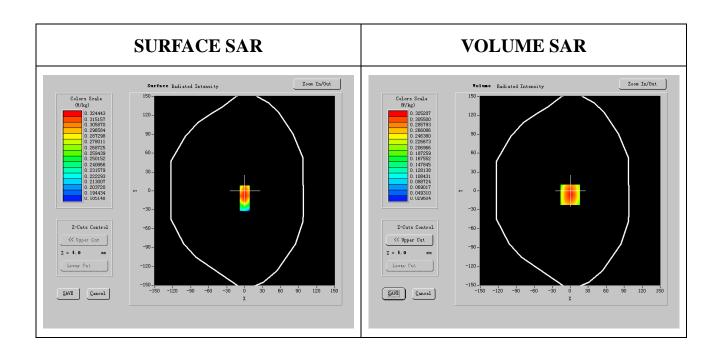
#### **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

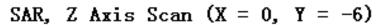
Frequency (MHz)	848.599976
Relative permitivity (real part)	55.576000
Relative permitivity (imaginary part)	21.726601
Conductivity (S/m)	0.969288
Variation (%)	-0.200000

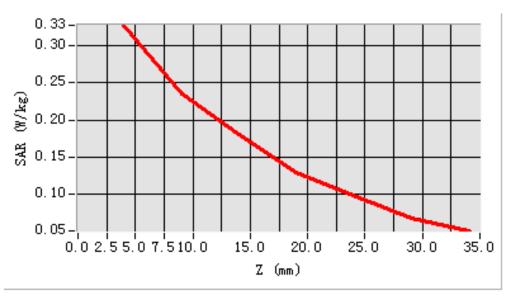


# Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.329687
---------------	----------

#### Z Axis Scan





# Face down without earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

# A. Experimental conditions.

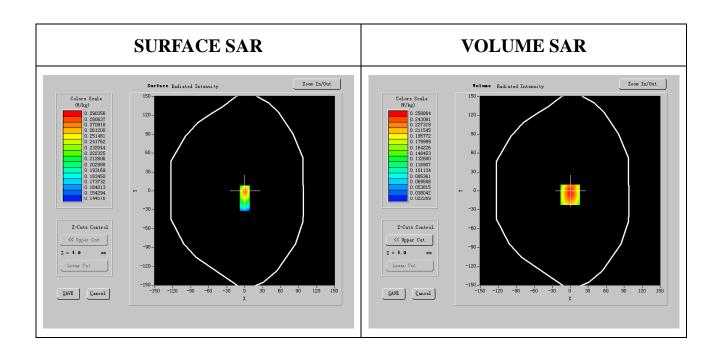
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

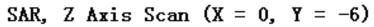
# **C. SAR Measurement Results**

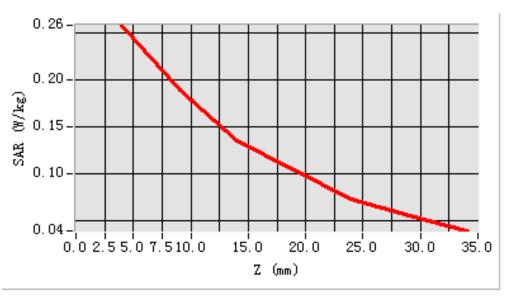
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.578200
Relative permitivity (imaginary part)	21.648550
Conductivity (S/m)	0.959119
Variation (%)	0.120000



# Maximum location: X=0.00, Y=-6.00

#### Z Axis Scan





# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

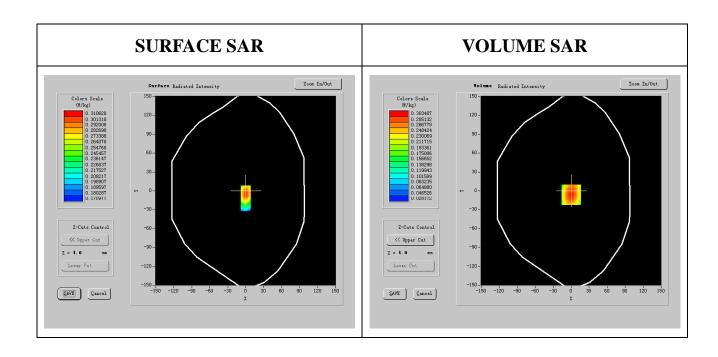
# **B.** Instrumentations.

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	836.400024
Relative permitivity (real part)	55.5021400
Relative permitivity (imaginary part)	21.862479
Conductivity (S/m)	0.960152
Variation (%)	-0.200000

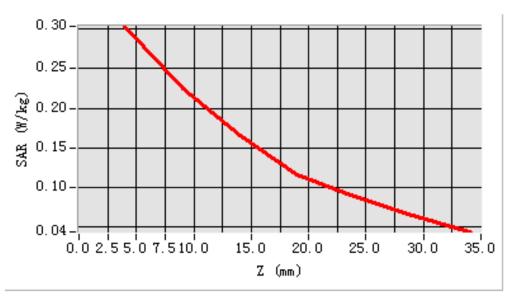


# Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.299665
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

#### A. Experimental conditions.

Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS850
Channels	High
Signal	GPRS

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

PC	HP (Pentium(R) V 3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_1109_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

848.599976
55.578320
21.726601
0.964718
-0.200000

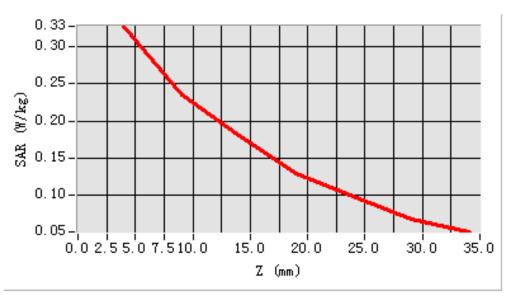


# Maximum location: X=0.00, Y=-6.00

SAR 1g (W/Kg)	0.328127
---------------	----------

#### Z Axis Scan

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



# **GPRS 1900**

#### I. RESULTS

TYPE	BAND	<u>PARAMETERS</u>
Noise		
<b>Validation</b>		
<u>Phone</u>	GPRS1900	Measurement 1: Validation Plane with Body device position on Low Channel in GPRS mode  Measurement 2: Validation Plane with Body device position on Middle Channel in GPRS mode  Measurement 3: Validation Plane with Body device position on High Channel in GPRS mode

# Face up with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

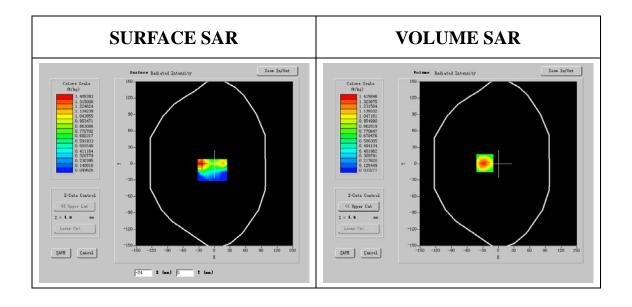
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Low
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

Frequency (MHz)	1850.199021
Relative permitivity (real part)	52.320140
Relative permitivity (imaginary part)	14.403672
Conductivity (S/m)	1.510236
Variation (%)	-0.400000

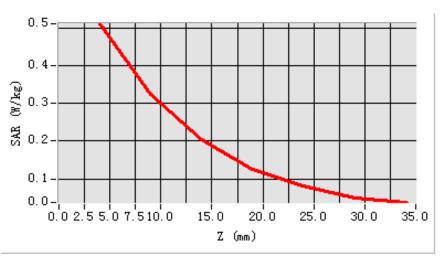


# **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.496121
---------------	----------

#### Z Axis Scan

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

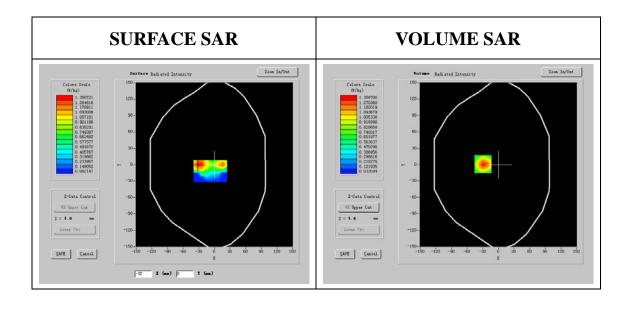
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
<b>Device Position</b>	Body
Band	GPRS1900
Channels	Middle
Signal	GPRS

# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

# **C. SAR Measurement Results**

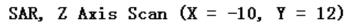
Frequency (MHz)	1880.000004
Relative permitivity (real part)	52.394713
Relative permitivity (imaginary part)	14.227406
Conductivity (S/m)	1.501203
Variation (%)	-1.000000

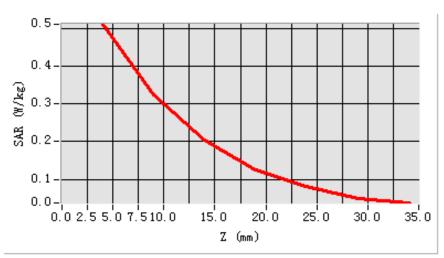


# **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.394818
---------------	----------

#### Z Axis Scan





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

#### A. Experimental conditions.

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

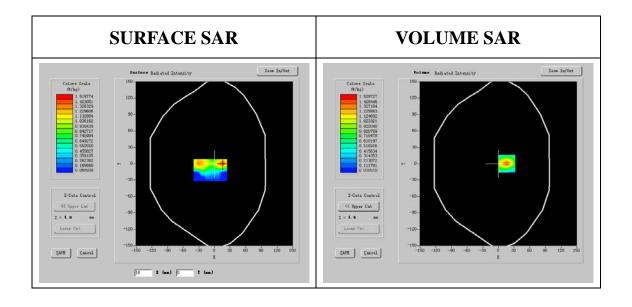
# **B.** Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

# **C. SAR Measurement Results**

Frequency (MHz)	1910.029036
Relative permitivity (real part)	52.8203510
Relative permitivity (imaginary part)	14.361200
Conductivity (S/m)	1.502102
Variation (%)	-0.130000



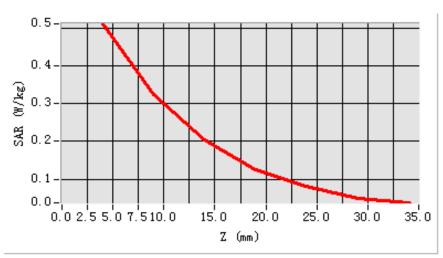
# Maximum location: X=2.00, Y=9.00

SAR 1g (W/Kg)	0.465912
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Project name: KS100512B01

#### Z Axis Scan

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



# Face down with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

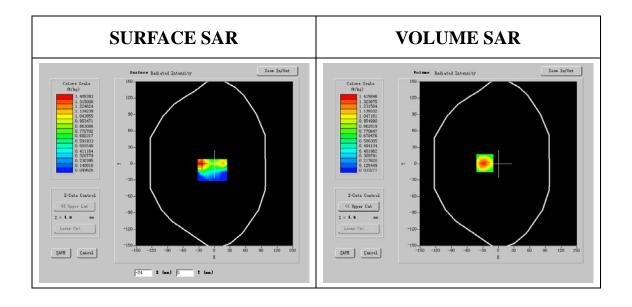
#### A. Experimental conditions.

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

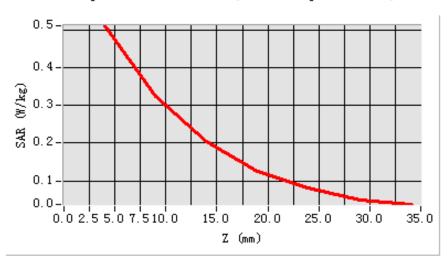
Frequency (MHz)	1710.199951
Relative permitivity (real part)	52.351470
Relative permitivity (imaginary	14.451293
part) Conductivity (S/m)	1.510698
Variation (%)	-0.400000



## **Maximum location: X=-31.00, Y=-16.00**

Project name: KS100512B01

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

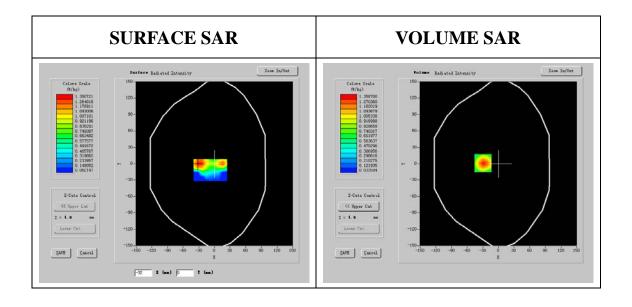
### A. Experimental conditions.

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

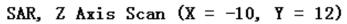
Frequency (MHz)	1747.400004
Relative permitivity (real part)	52.421428
Relative permitivity (imaginary	14.301456
part) Conductivity (S/m)	1.515086
Variation (%)	-1.000000
Variation (%)	-1.00000

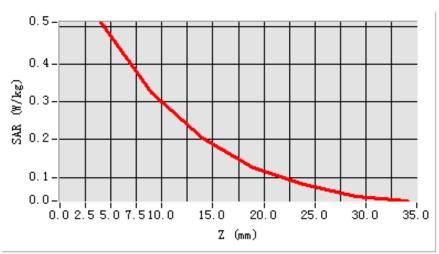


## **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.415201
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Project name: KS100512B01





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

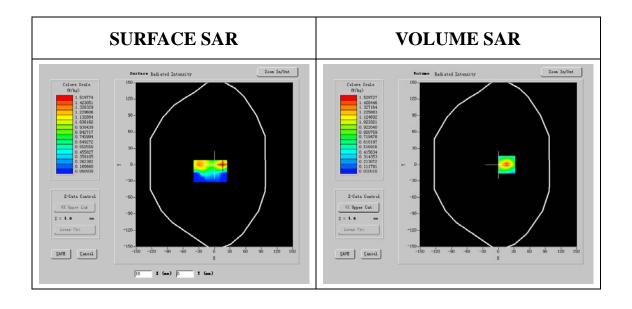
### A. Experimental conditions.

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

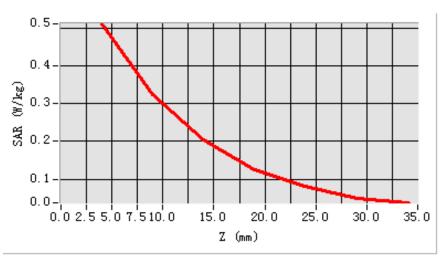
Frequency (MHz)	1784.599036
Relative permitivity (real part)	52.795142
Relative permitivity (imaginary part)	14.319230
Conductivity (S/m)	1.502565
Variation (%)	-0.130000



# Maximum location: X=2.00, Y=9.00

SAR 1g (W/Kg)	0.432144
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## SAR, Z Axis Scan (X = -10, Y = 12)



# Face up with earphone

# **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

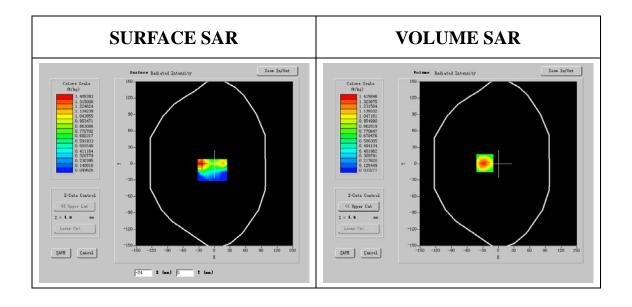
### A. Experimental conditions.

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

Frequency (MHz)	1710.199951
Relative permitivity (real part)	52.347400
Relative permitivity (imaginary	14.450693
part) Conductivity (S/m)	1.510698
Variation (%)	-0.400000



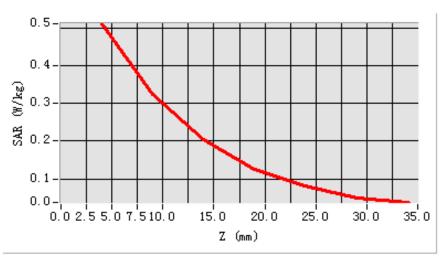
## **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.424231
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Project name: KS100512B01

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



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

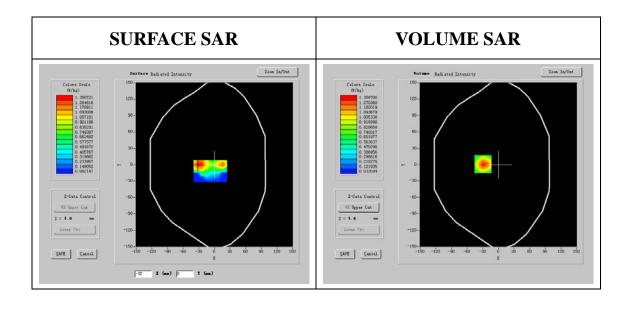
#### A. Experimental conditions.

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

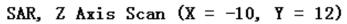
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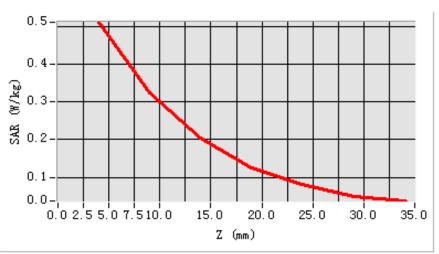


## **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.412211
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Project name: KS100512B01





# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

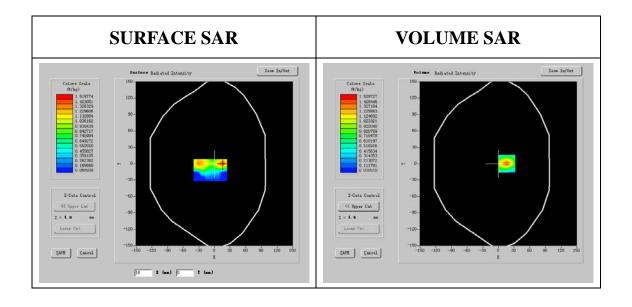
### A. Experimental conditions.

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Project name: KS100512B01

Frequency (MHz)	1784.599036
Relative permitivity (real part)	52.813332
Relative permitivity (imaginary	14.319230
part) Conductivity (S/m)	1.513265
Variation (%)	-0.130000

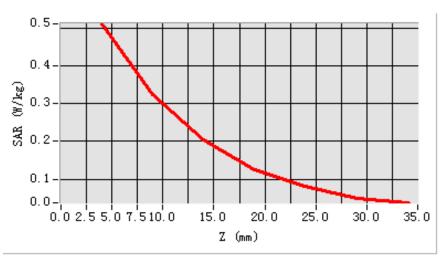


# Maximum location: X=2.00, Y=9.00

Project name: KS100512B01

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



# Face down without earphone

#### **MEASUREMENT 1**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 46 seconds

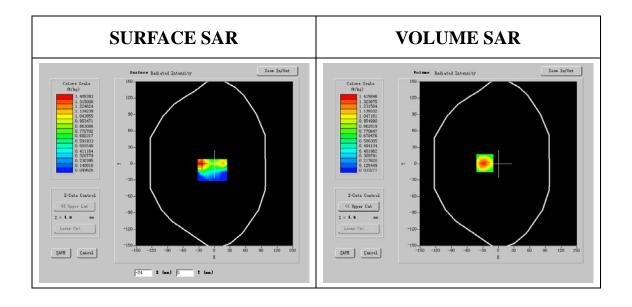
Mobile Phone IMEI number: --

#### A. Experimental conditions.

Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Channels	Low
Signal	GPRS

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

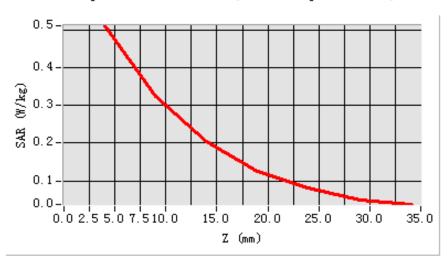
Frequency (MHz)	1710.199951
Relative permitivity (real part)	52.347400
Relative permitivity (imaginary	14.450693
part) Conductivity (S/m)	1.510698
Variation (%)	-0.400000



## **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.421471
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SAR, Z Axis Scan (X = -10, Y = 12)



# **MEASUREMENT 2**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

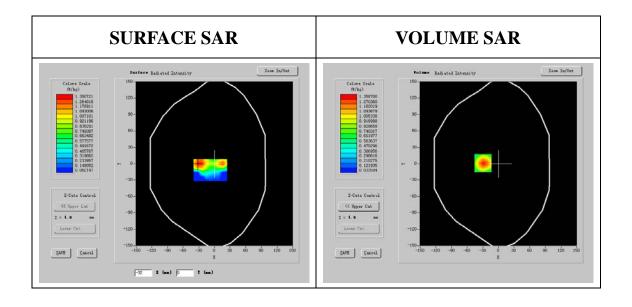
Mobile Phone IMEI number: --

### A. Experimental conditions.

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

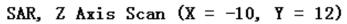
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

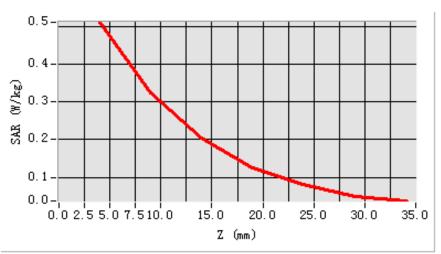
Frequency (MHz)	1747.400004
Dolotino normitivity (voel nort)	52.421.429
Relative permitivity (real part)	52.421428
Relative permitivity (imaginary	14.301456
part)	
Conductivity (S/m)	1.515086
Variation (%)	-1.000000



## **Maximum location: X=-31.00, Y=-16.00**

SAR 1g (W/Kg)	0.410321
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# **MEASUREMENT 3**

Type: Phone measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 21 seconds

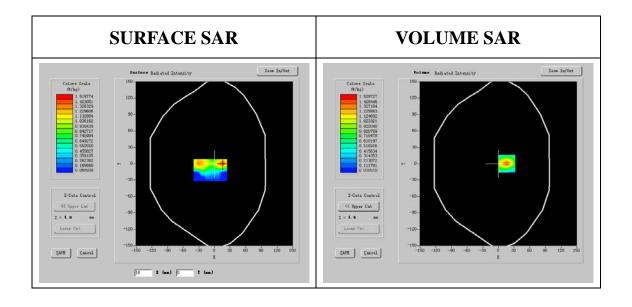
Mobile Phone IMEI number: --

#### A. Experimental conditions.

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

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	
Network Emulator	R&S (CMU200, SN:B23-03291)	
Voltmeter	Keithley (2000, SN:1015843)	
Synthetizer	Agilent (E8257C, SN:MY43321570)	
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	
Power Meter	Agilent (E4416A, SN:QB41292714)	
Probe	Antennessa (SN:SN_11/09_EP_100)	
Phantom	Antennessa (SN:SN41_05_SAM29)	
Liquid	Antennessa	

Frequency (MHz)	1784.599036
Relative permitivity (real part)	52.802142
Relative permitivity (imaginary part)	14.319230
Conductivity (S/m)	1.502565
Variation (%)	-0.130000



# Maximum location: X=2.00, Y=9.00

SAR 1g (W/Kg)	0.426144
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Project name: KS100512B01

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

