	SAR Test Plots
	Project name :
	KS100823B02-SF

EUT DESCRIPTION

Product:	Mobile Phone
Model:	Fenix
Trade name:	Xeuss
Tested:	August 24, 2010
Applicant:	**Mastercell LLC** 759 Bloomfield Ave 161 West Caldwell, NJ 07006 USA

Air Temperature: 21 °C Liqued Temperature: 20 °C

Crest Factor: CW:___1__ GSM:__8___ GPRS 10: __4___

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

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

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

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

GSM850 HEAD

I. RESULTS

TYPE	BAND	PARAMETERS
Noise	--	--
Validation	--	--
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 12: Left Head with Tilt device position on High Channel in GSM mode

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

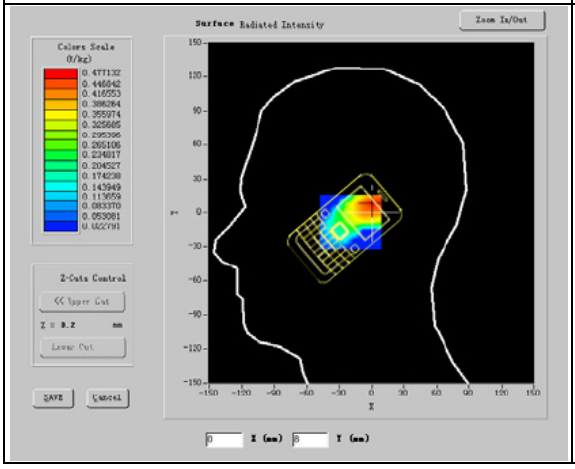
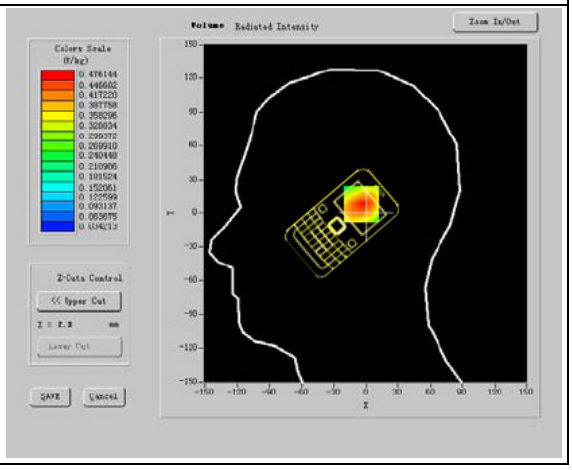
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

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

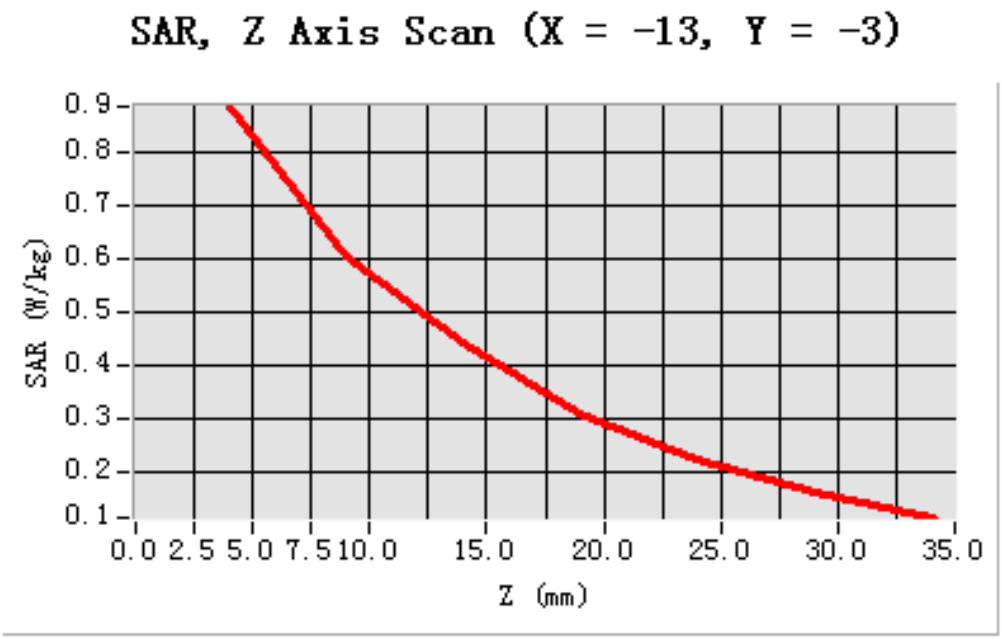
C. SAR Measurement Results

Frequency (MHz)	824.200000
Relative permitivity (real part)	41.466213
Relative permitivity (imaginary part)	19.561100
Conductivity (S/m)	0.899736
Variation (%)	-1.490000

SURFACE SAR	**VOLUME SAR**
	

SAR 10g (W/Kg)	0.530465
SAR 1g (W/Kg)	0.8203325

Z Axis Scan


SAR, Z Axis Scan (X = -13, Y = -3)
SAR (W/kg)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

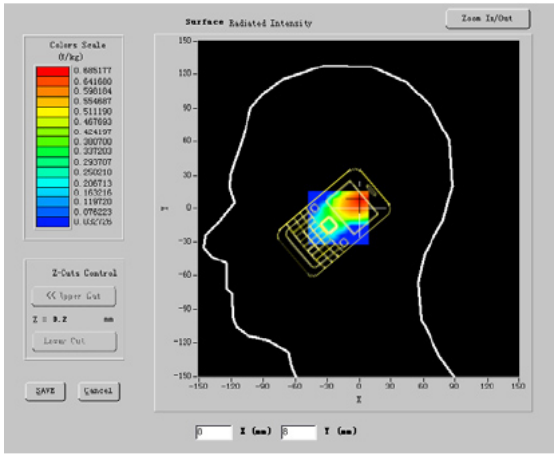
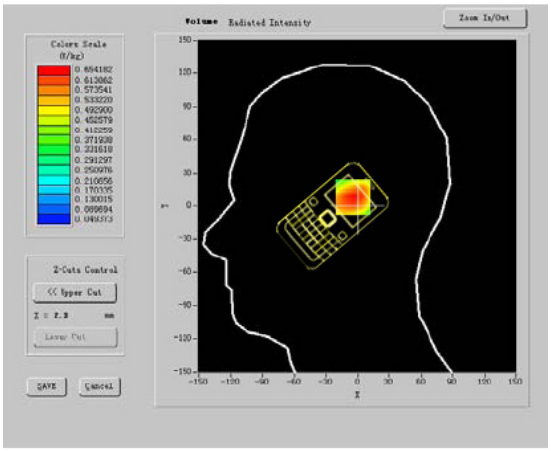
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

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

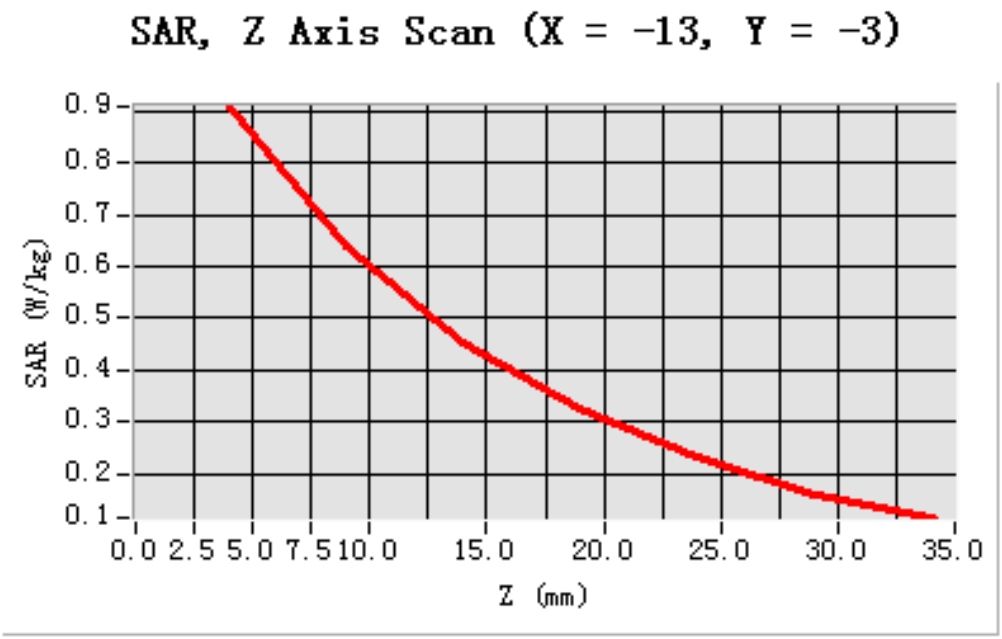
Frequency (MHz)	836.600000
Relative permitivity (real part)	41.465722
Relative permitivity (imaginary part)	19.598777
Conductivity (S/m)	0.906220
Variation (%)	-0.110000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.561347
SAR 1g (W/Kg)	0.846632

Z Axis Scan


SAR, Z Axis Scan (X = -13, Y = -3)
SAR (W/kg)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

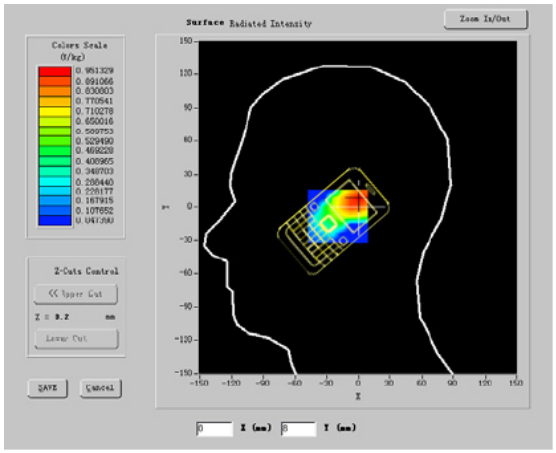
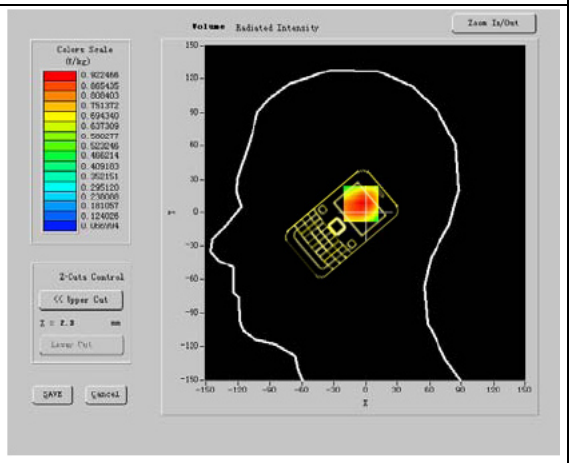
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	High
Signal	GSM

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

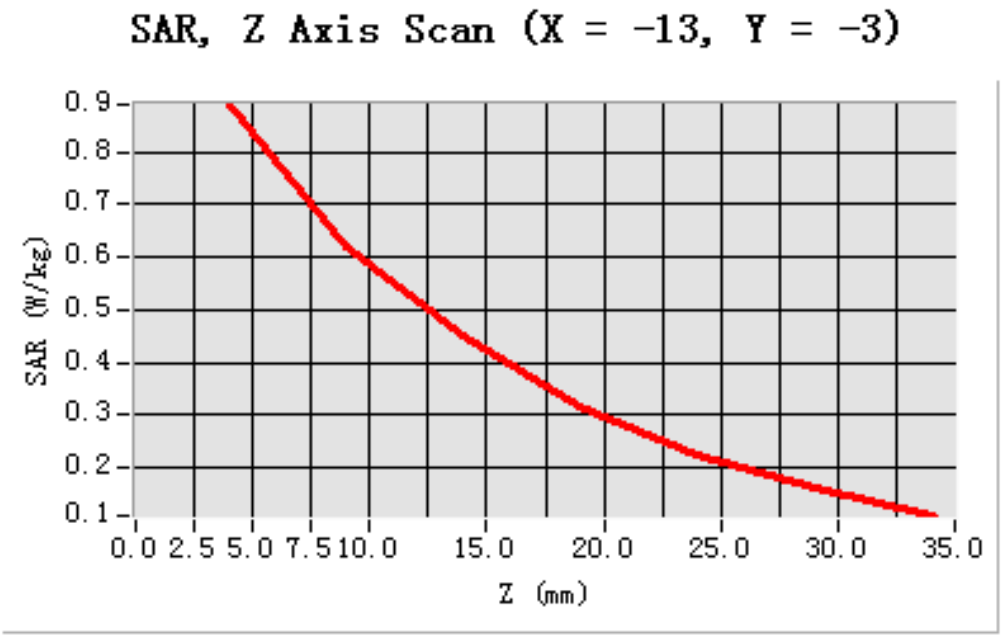
Frequency (MHz)	848.800000
Relative permitivity (real part)	41.462000
Relative permitivity (imaginary part)	19.592400
Conductivity (S/m)	0.906545
Variation (%)	-0.100000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.631965
SAR 1g (W/Kg)	0.879916

Z Axis Scan


SAR, Z Axis Scan (X = -13, Y = -3)
SAR (W/kg)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 4

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

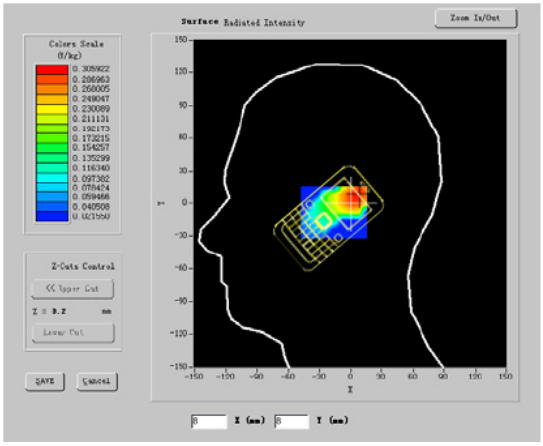
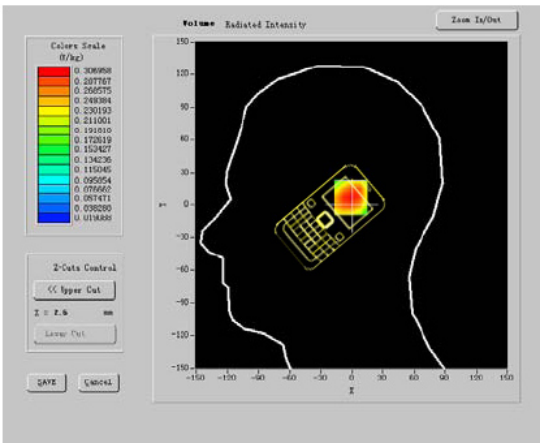
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	GSM

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

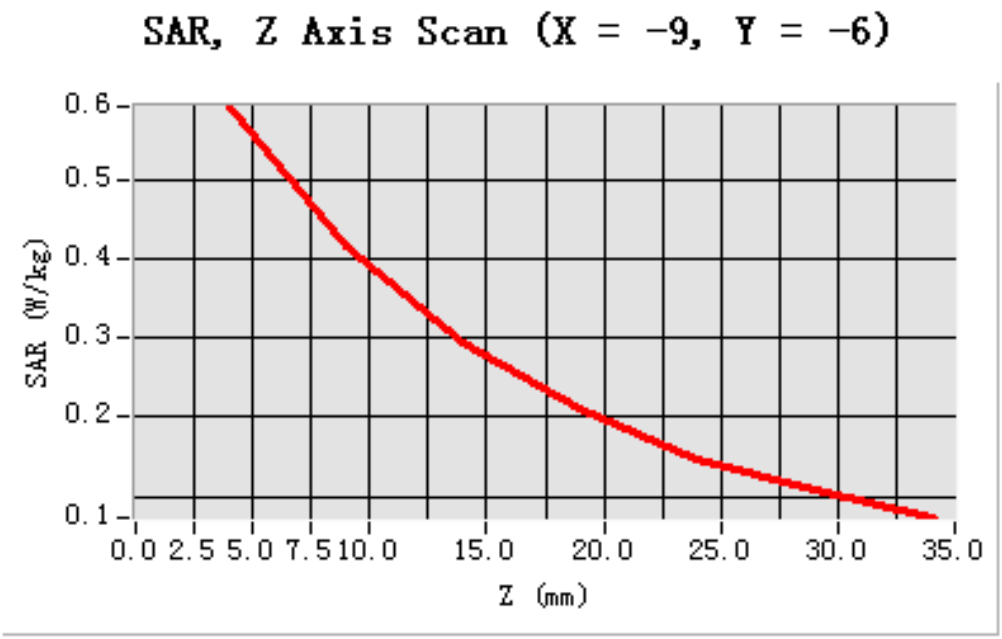
Frequency (MHz)	824.200000
Relative permitivity (real part)	41.465128
Relative permitivity (imaginary part)	19.610000
Conductivity (S/m)	0.899776
Variation (%)	-1.200000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.360036
SAR 1g (W/Kg)	0.512398

Z Axis Scan


SAR, Z Axis Scan (X = -9, Y = -6)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 5

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

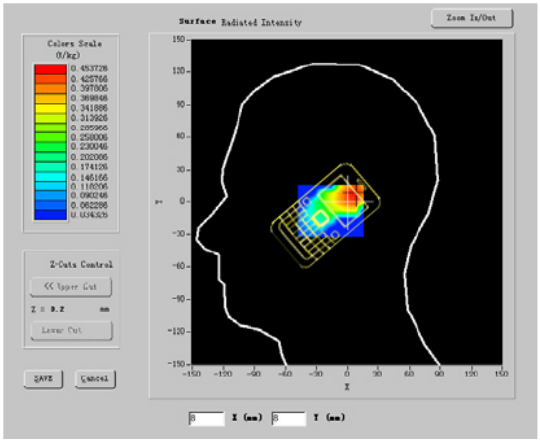
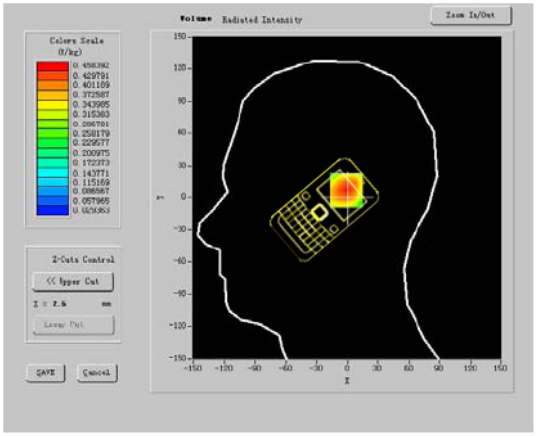
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

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

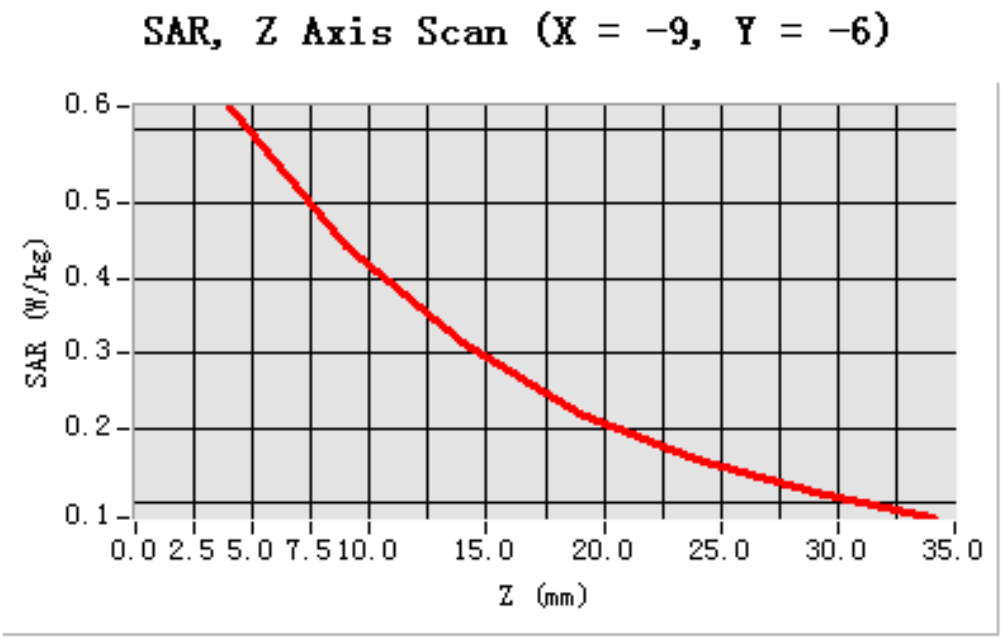
Frequency (MHz)	836.600000
Relative permitivity (real part)	41.466635
Relative permitivity (imaginary part)	19.599675
Conductivity (S/m)	0.906778
Variation (%)	-0.880000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.399236
SAR 1g (W/Kg)	0.615132

Z Axis Scan


SAR, Z Axis Scan (X = -9, Y = -6)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 6

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

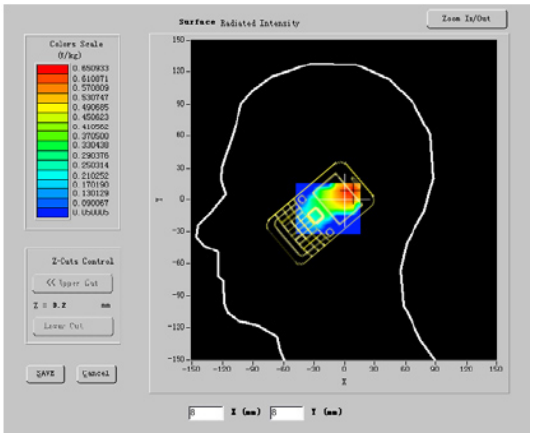
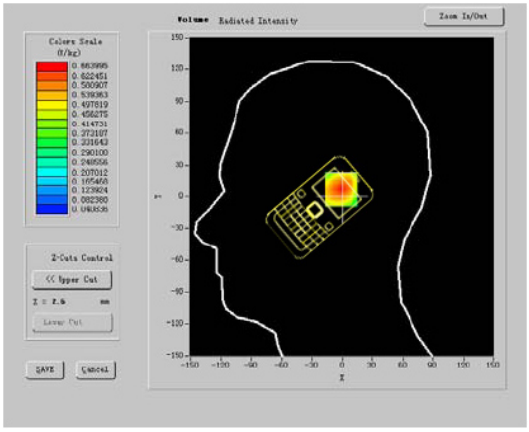
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	High
Signal	GSM

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

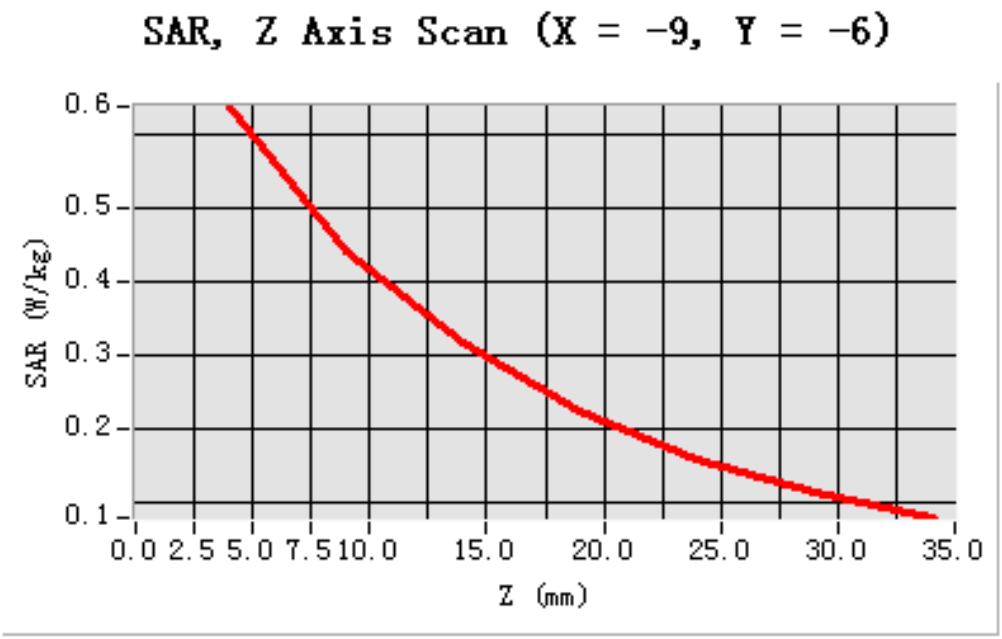
Frequency (MHz)	848.800000
Relative permitivity (real part)	41.466279
Relative permitivity (imaginary part)	19.592305
Conductivity (S/m)	0.907888
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.439524
SAR 1g (W/Kg)	0.651187

Z Axis Scan


SAR, Z Axis Scan (X = -9, Y = -6)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

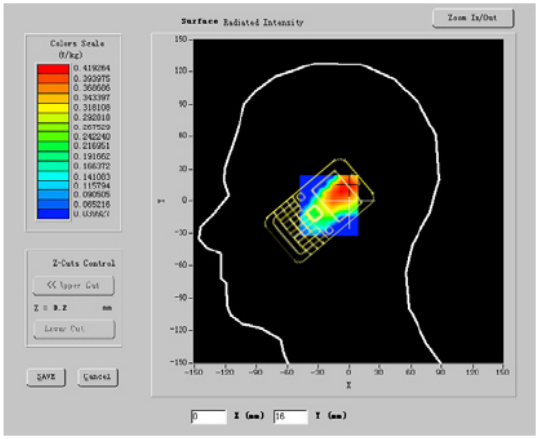
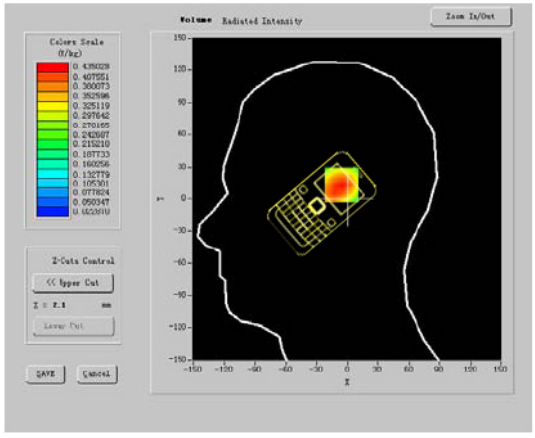
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

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

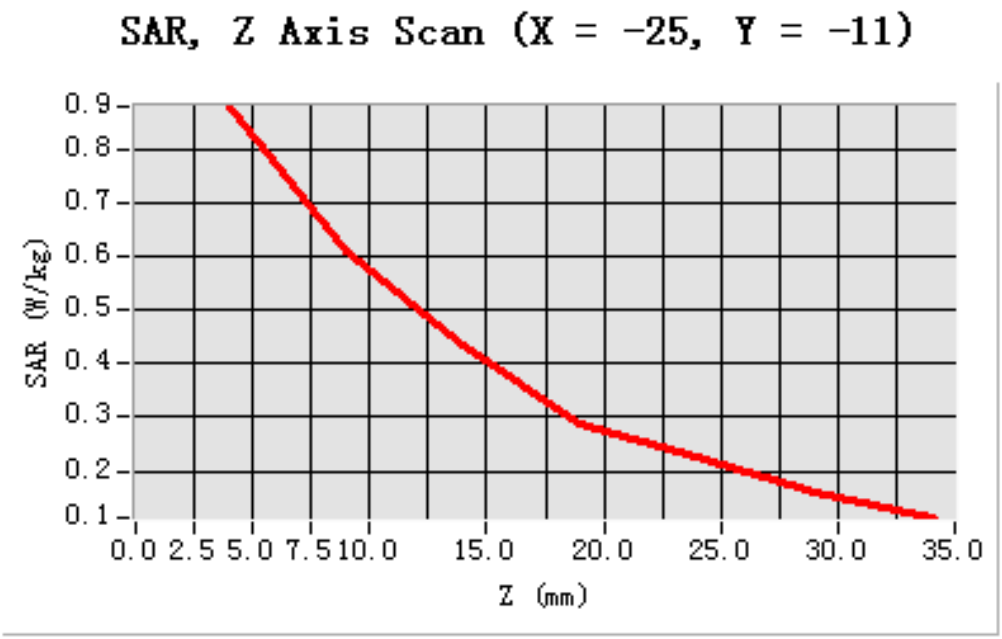
Frequency (MHz)	824.200000
Relative permitivity (real part)	41.467003
Relative permitivity (imaginary part)	19.600344
Conductivity (S/m)	0.905436
Variation (%)	-0.240000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.547130
SAR 1g (W/Kg)	0.831954

Z Axis Scan


SAR, Z Axis Scan (X = -25, Y = -11)
SAR (W/kg)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 8

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

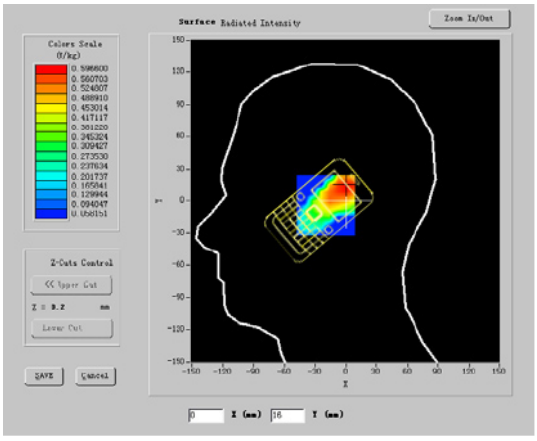
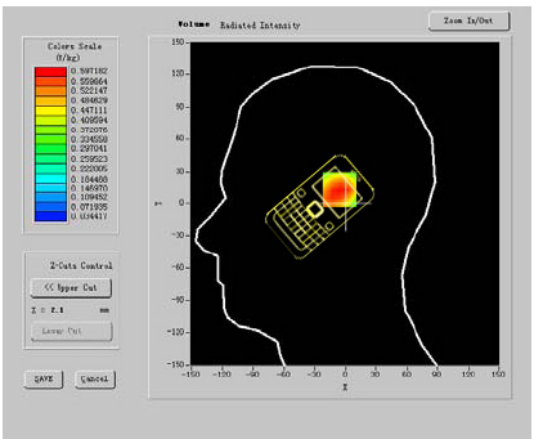
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

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

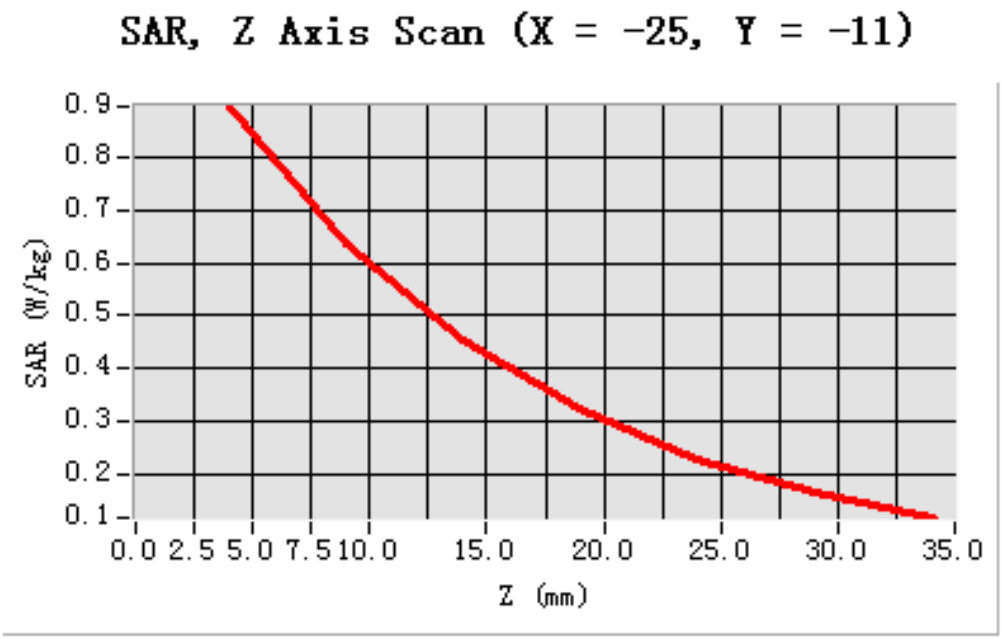
Frequency (MHz)	836.600000
Relative permitivity (real part)	41.471003
Relative permitivity (imaginary part)	19.597265
Conductivity (S/m)	0.906815
Variation (%)	-0.240000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.591364
SAR 1g (W/Kg)	0.855491

Z Axis Scan


SAR, Z Axis Scan (X = -25, Y = -11)
SAR (W/kg)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 9

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

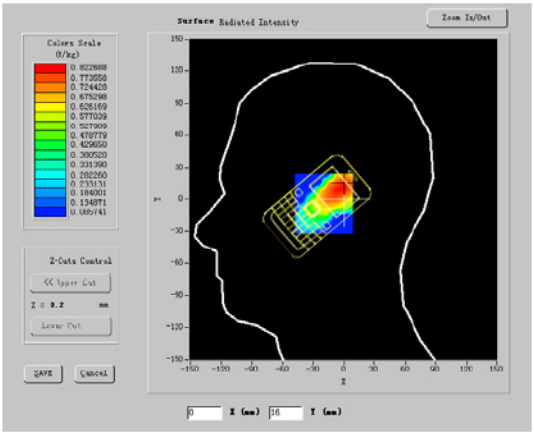
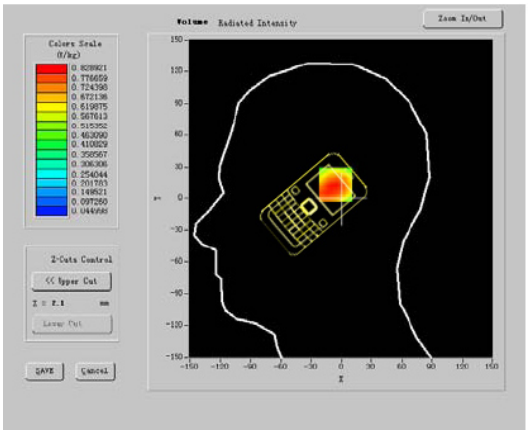
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	High
Signal	GSM

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

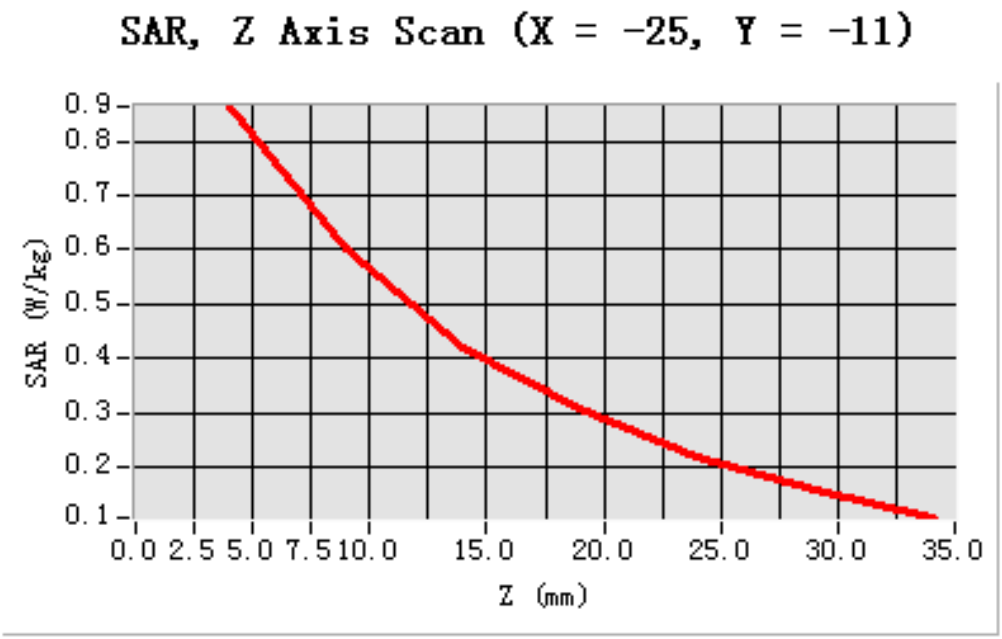
Frequency (MHz)	848.800000
Relative permitivity (real part)	41.462000
Relative permitivity (imaginary part)	19.591689
Conductivity (S/m)	0.907225
Variation (%)	-1.200000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.612371
SAR 1g (W/Kg)	0.871122

Z Axis Scan


SAR, Z Axis Scan (X = -25, Y = -11)
SAR (W/kg)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 10

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

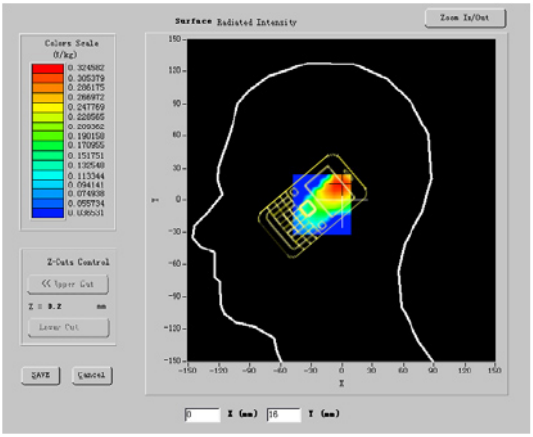
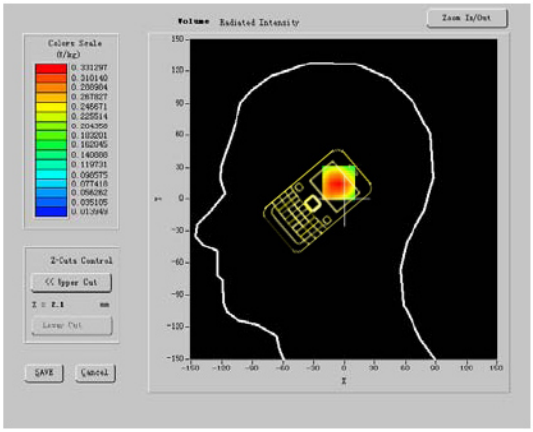
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	GSM

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

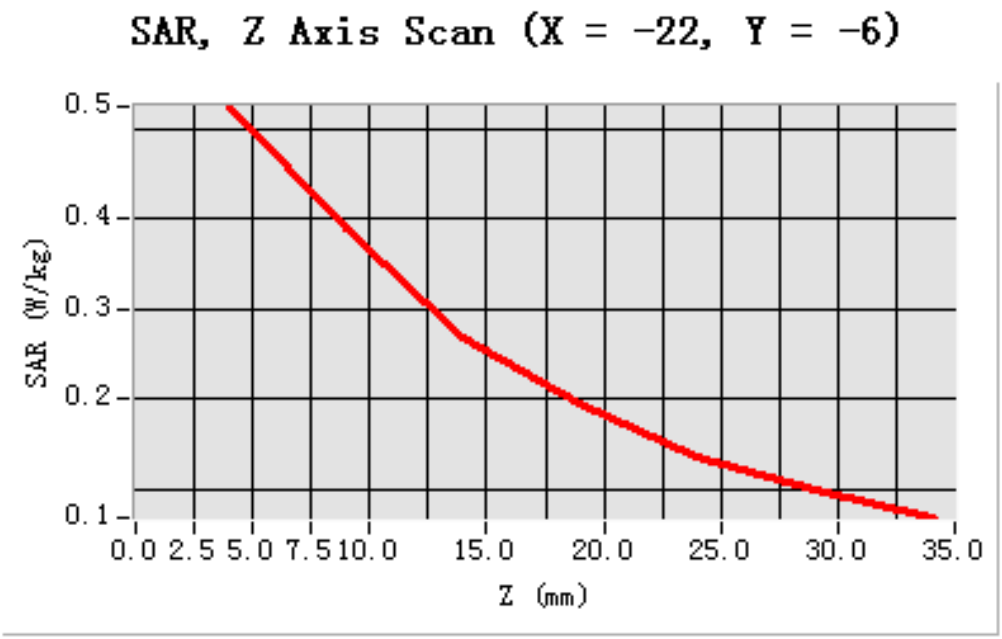
Frequency (MHz)	824.200000
Relative permitivity (real part)	41.467331
Relative permitivity (imaginary part)	19.611000
Conductivity (S/m)	0.908136
Variation (%)	-0.100000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.340691
SAR 1g (W/Kg)	0.535468

Z Axis Scan


SAR, Z Axis Scan (X = -22, Y = -6)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 11

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

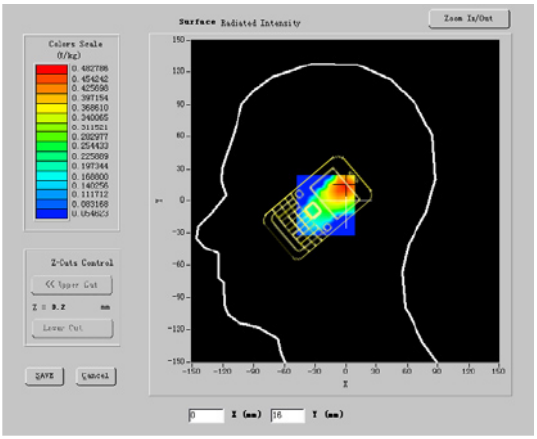
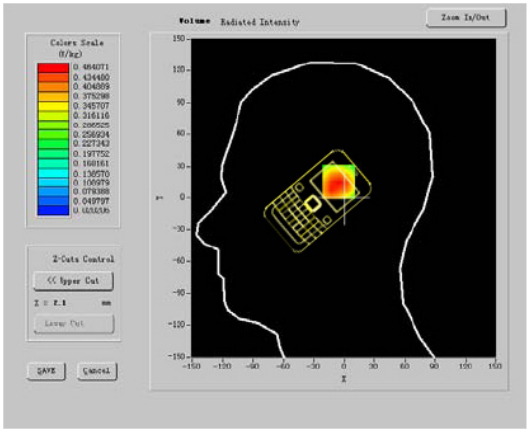
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

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

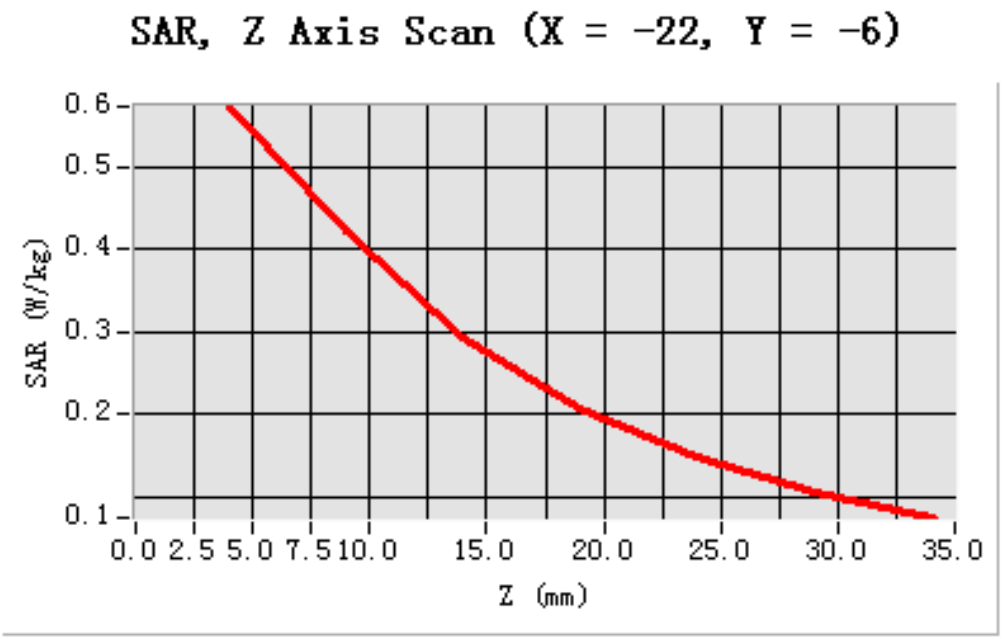
Frequency (MHz)	836.600000
Relative permitivity (real part)	41.465713
Relative permitivity (imaginary part)	19.610035
Conductivity (S/m)	0.907348
Variation (%)	-0.170000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.384321
SAR 1g (W/Kg)	0.587131

Z Axis Scan


SAR, Z Axis Scan (X = -22, Y = -6)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 12

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

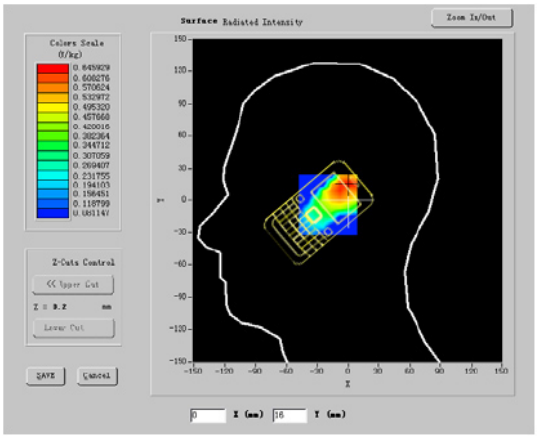
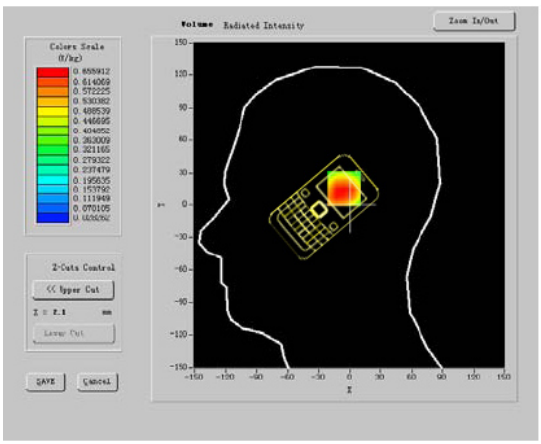
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	High
Signal	GSM

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

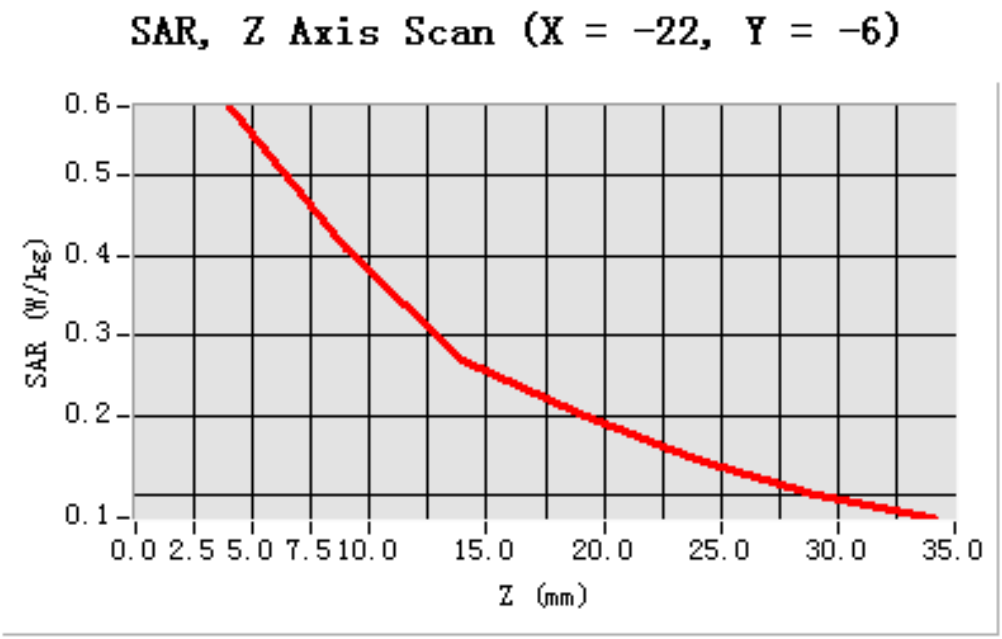
Frequency (MHz)	848.800000
Relative permitivity (real part)	41.465781
Relative permitivity (imaginary part)	19.589722
Conductivity (S/m)	0.906899
Variation (%)	-1.000000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.387654
SAR 1g (W/Kg)	0.607115

Z Axis Scan


SAR, Z Axis Scan (X = -22, Y = -6)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

GSM850 BODY

TYPE	BAND	PARAMETERS
Noise	--	--
Validation	--	--
Phone	**GSM850**	Measurement 1: Validation Plane with Body device position on Low Channel in GSMmode Measurement 2: Validation Plane with Body device position on Middle Channel in GSM mode Measurement 3: Validation Plane with Body device position on High Channel in GSM mode

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

A. Experimental conditions.

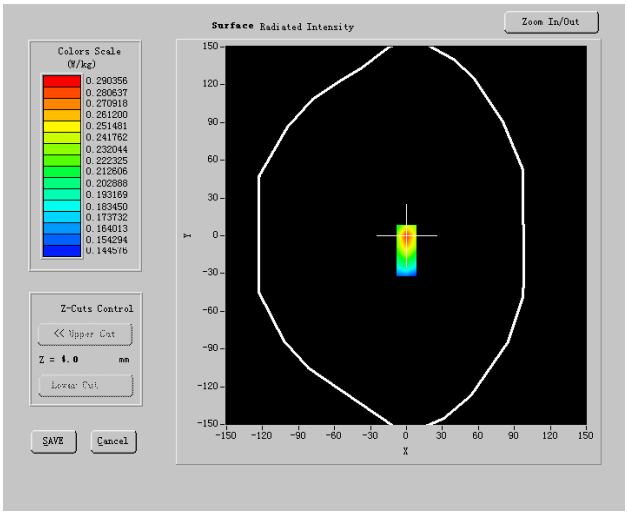
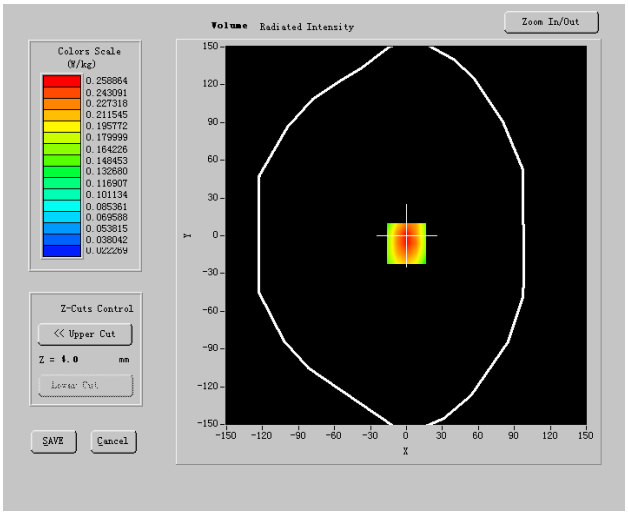
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GSM

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

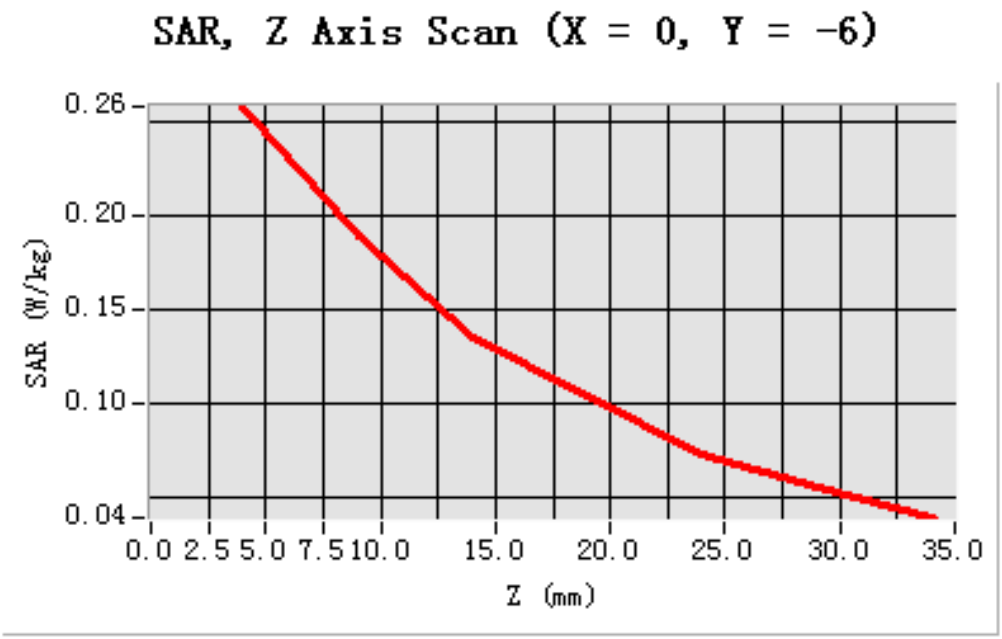
Frequency (MHz)	824.200012
Relative permitivity (real part)	55.411029
Relative permitivity (imaginary part)	21.114526
Conductivity (S/m)	0.963258
Variation (%)	-1.120000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.173849
SAR 1g (W/Kg)	0.266632

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -6)
SAR (W/kg)
0.26
0.20
0.15
0.10
0.04
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

A. Experimental conditions.

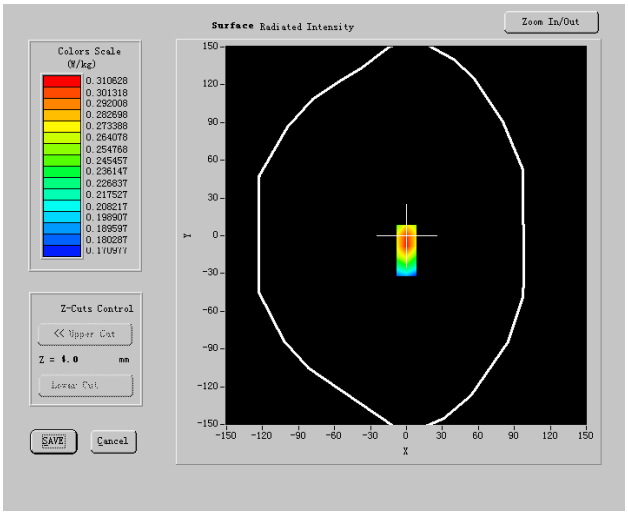
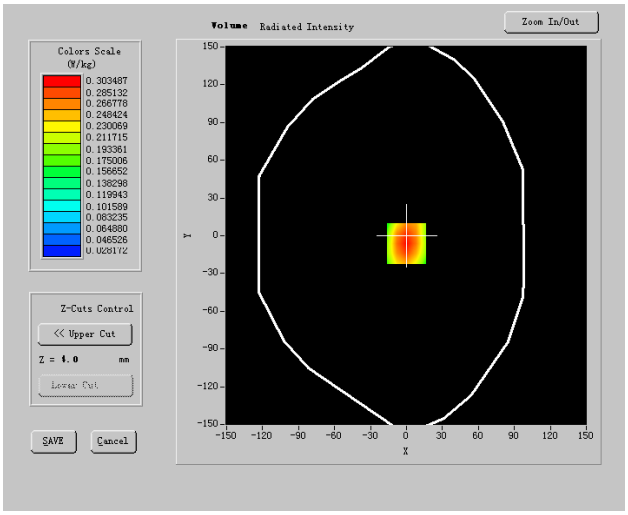
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GSM

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

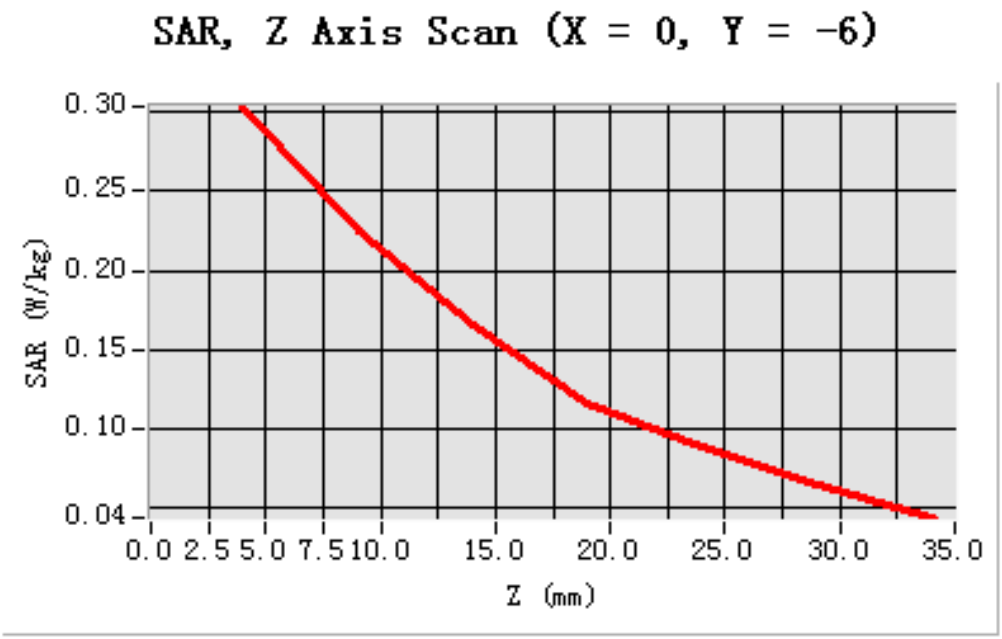
Frequency (MHz)	836.600000
Relative permitivity (real part)	55.500011
Relative permitivity (imaginary part)	21.992678
Conductivity (S/m)	0.963126
Variation (%)	-0.120000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.209131
SAR 1g (W/Kg)	0.306147

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -6)
SAR (W/kg)
0.30
0.25
0.20
0.15
0.10
0.04
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

A. Experimental conditions.

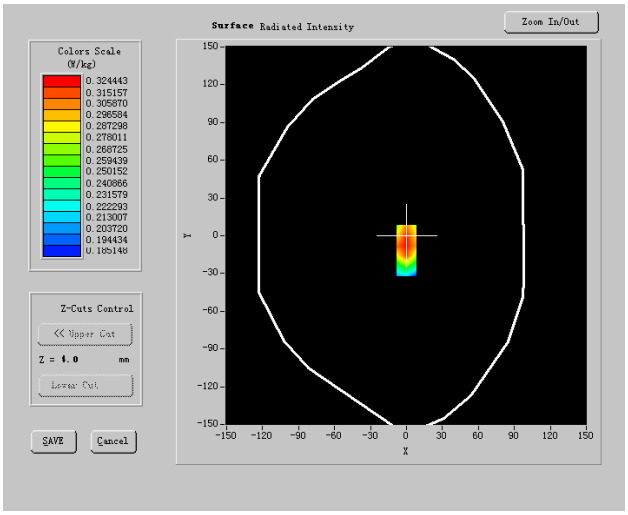
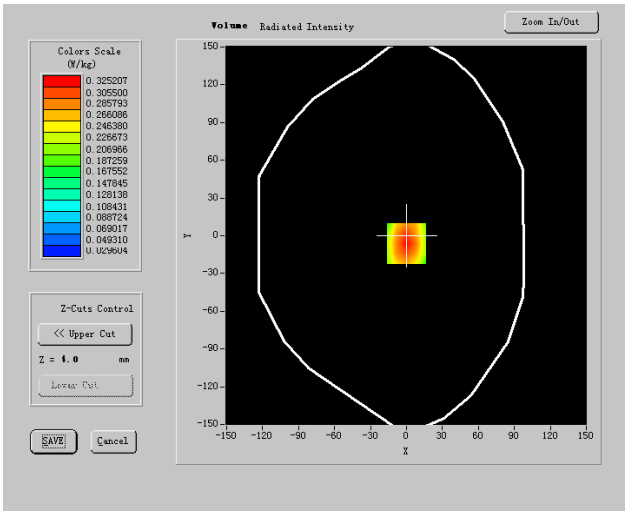
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	High
Signal	GSM

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

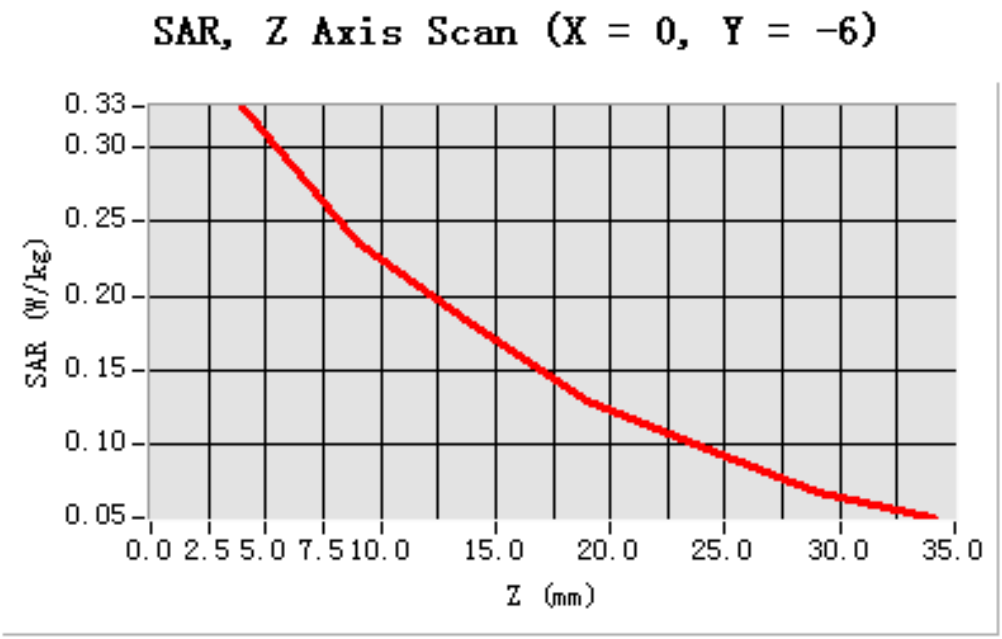
Frequency (MHz)	848.800000
Relative permitivity (real part)	55.376000
Relative permitivity (imaginary part)	21.126113
Conductivity (S/m)	0.964015
Variation (%)	-1.120000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.230089
SAR 1g (W/Kg)	0.346311

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -6)
SAR (W/kg)
0.33
0.30
0.25
0.20
0.15
0.10
0.05
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

GSM 1900

I. RESULTS

TYPE	BAND	PARAMETERS
Noise	--	--
Validation	--	--
Phone	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 High Channel in GSM mode

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

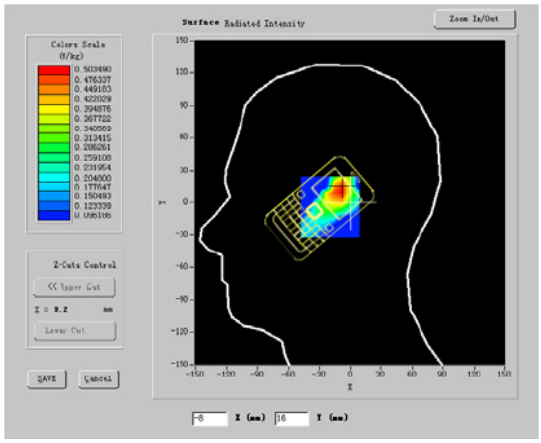
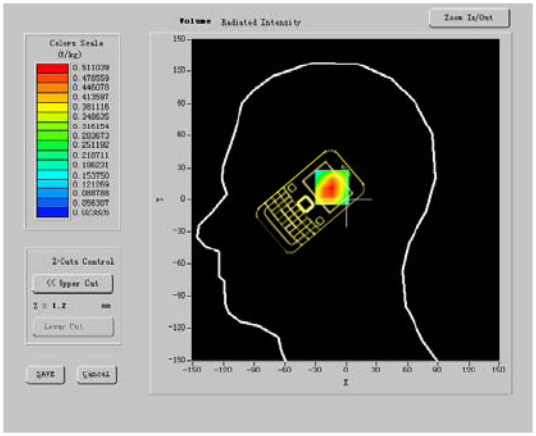
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

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

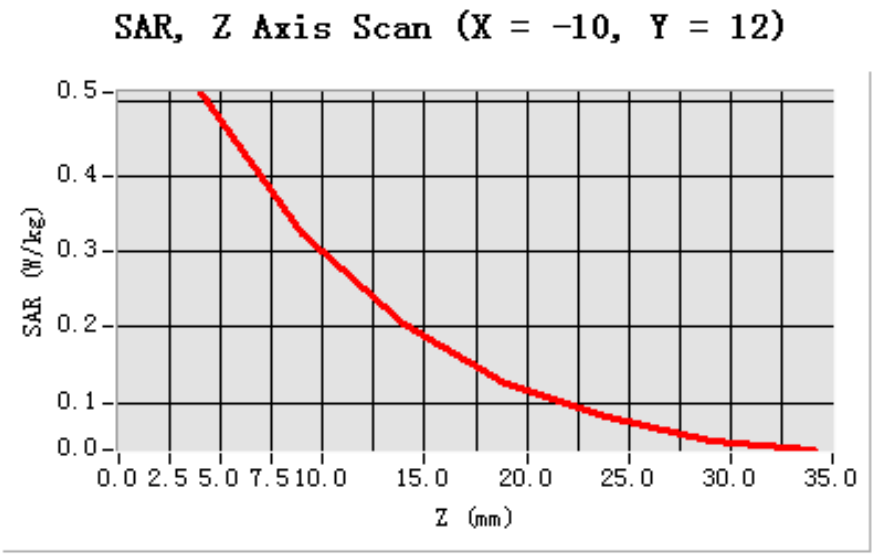
Frequency (MHz)	1850.200000
Relative permitivity (real part)	40.386000
Relative permitivity (imaginary part)	13.689900
Conductivity (S/m)	1.413005
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-10.00, Y=12.00

SAR 10g (W/Kg)	0.281223
SAR 1g (W/Kg)	0.394657

Z Axis Scan


SAR, Z Axis Scan (X = -10, Y = 12)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

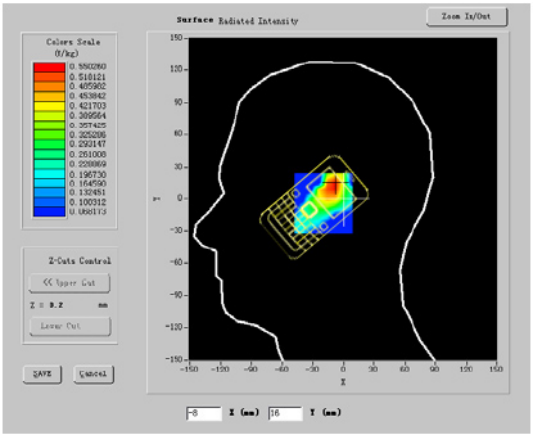
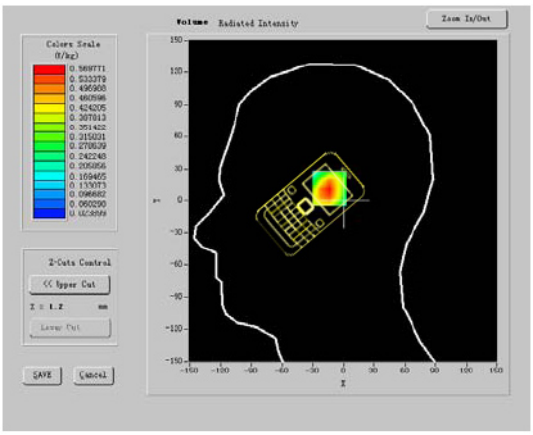
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

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

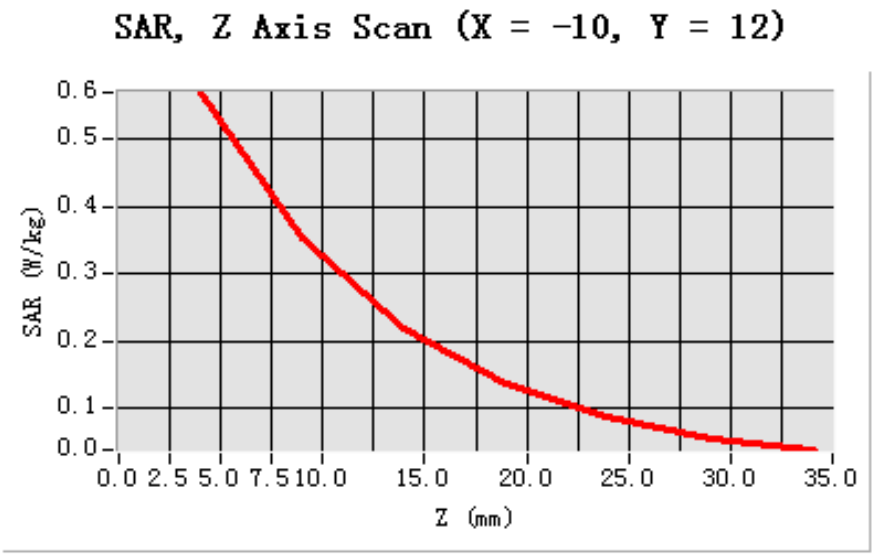
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.198364
Relative permitivity (imaginary part)	13.800135
Conductivity (S/m)	1.412625
Variation (%)	-0.210000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-10.00, Y=12.00

SAR 10g (W/Kg)	0.320442
SAR 1g (W/Kg)	0.436189

Z Axis Scan


SAR, Z Axis Scan (X = -10, Y = 12)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

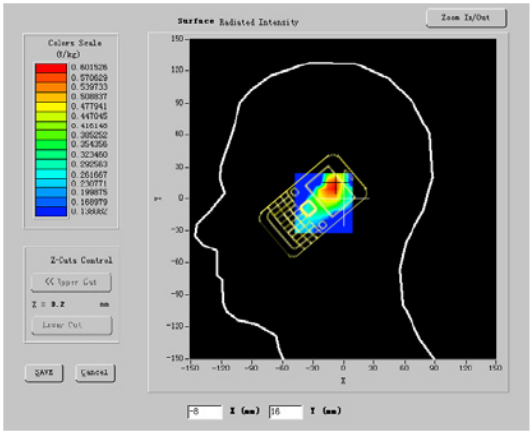
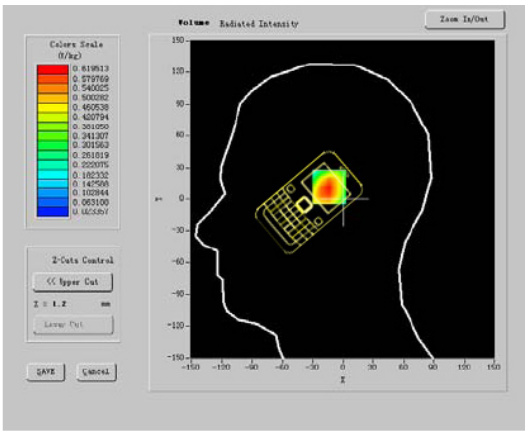
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	High
Signal	GSM

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

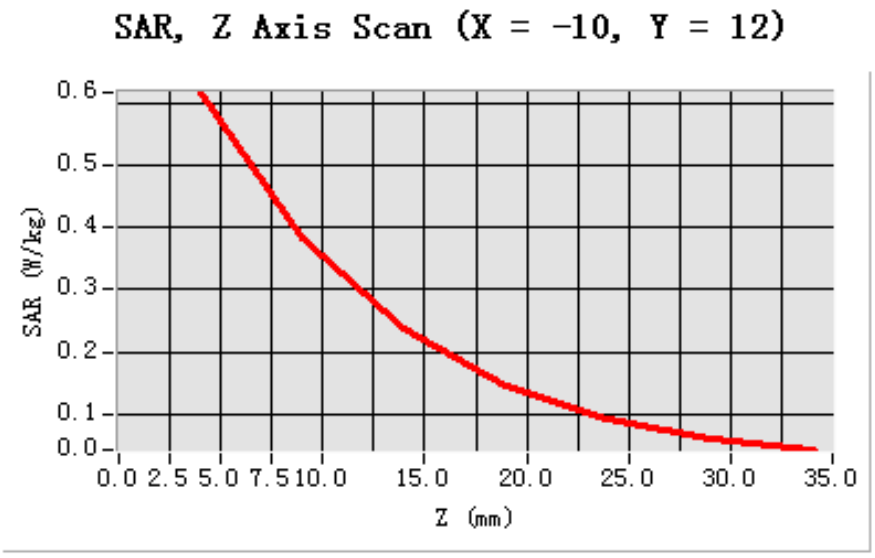
Frequency (MHz)	1910.000000
Relative permitivity (real part)	40.241056
Relative permitivity (imaginary part)	13.698325
Conductivity (S/m)	1.413245
Variation (%)	-0.300000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-10.00, Y=12.00

SAR 10g (W/Kg)	0.350974
SAR 1g (W/Kg)	0.481310

Z Axis Scan


SAR, Z Axis Scan (X = -10, Y = 12)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 4

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

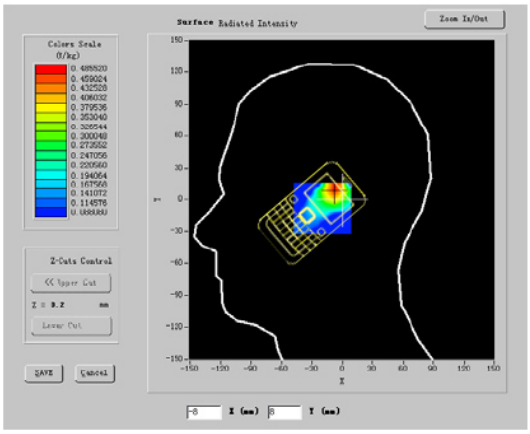
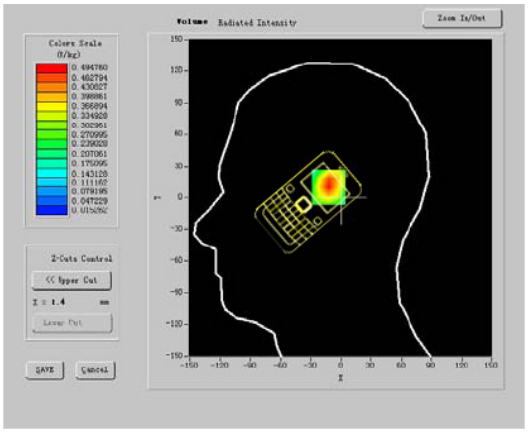
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

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

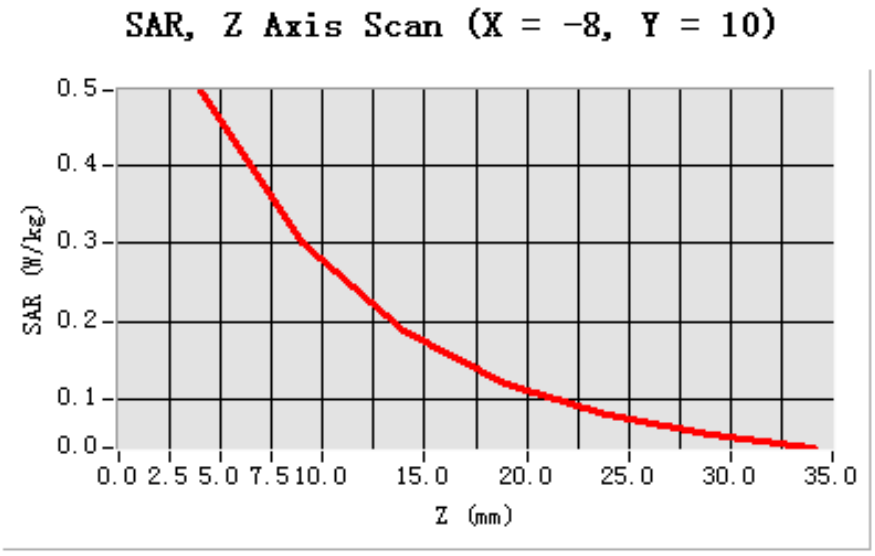
Frequency (MHz)	1850.200000
Relative permitivity (real part)	40.234167
Relative permitivity (imaginary part)	13.688952
Conductivity (S/m)	1.414432
Variation (%)	-1.100000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-8.00, Y=10.00

SAR 10g (W/Kg)	0.291169
SAR 1g (W/Kg)	0.426478

Z Axis Scan


SAR, Z Axis Scan (X = -8, Y = 10)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 5

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

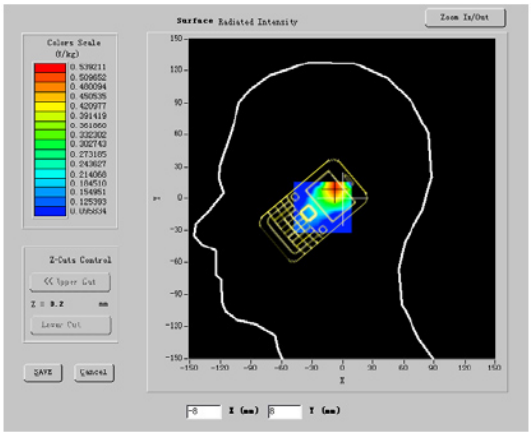
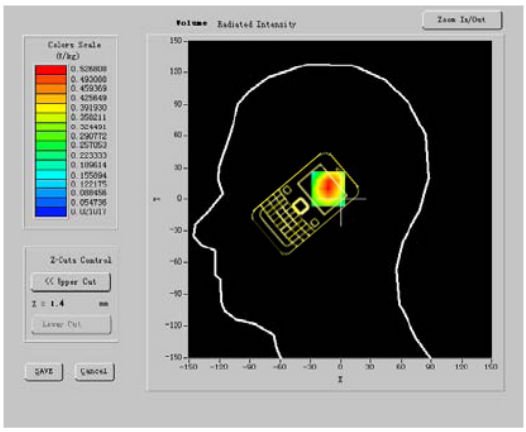
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

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

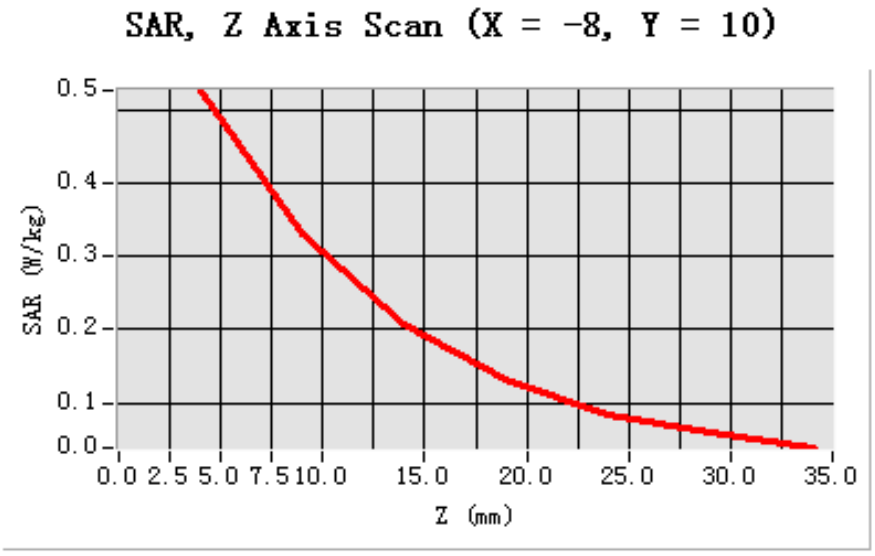
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.213001
Relative permitivity (imaginary part)	13.751246
Conductivity (S/m)	1.412067
Variation (%)	-0.400000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-8.00, Y=10.00

SAR 10g (W/Kg)	0.300000
SAR 1g (W/Kg)	0.481147

Z Axis Scan


SAR, Z Axis Scan (X = -8, Y = 10)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 6

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

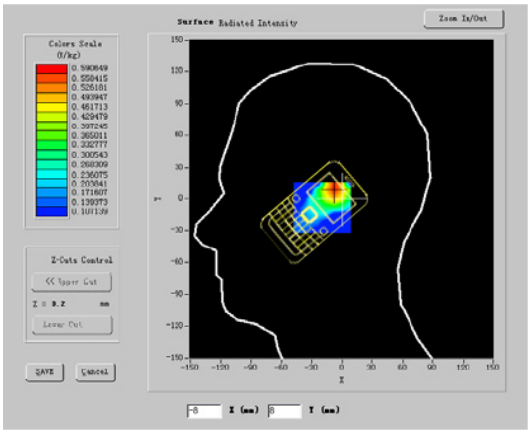
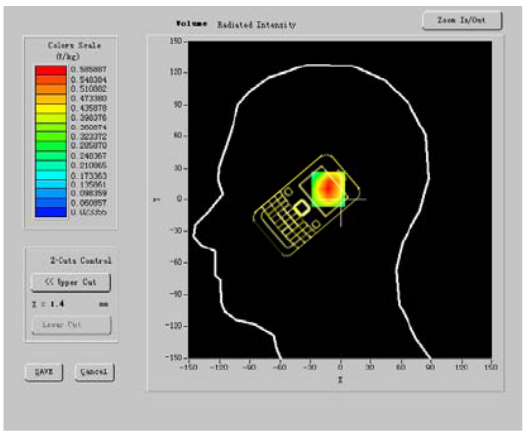
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	High
Signal	GSM

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

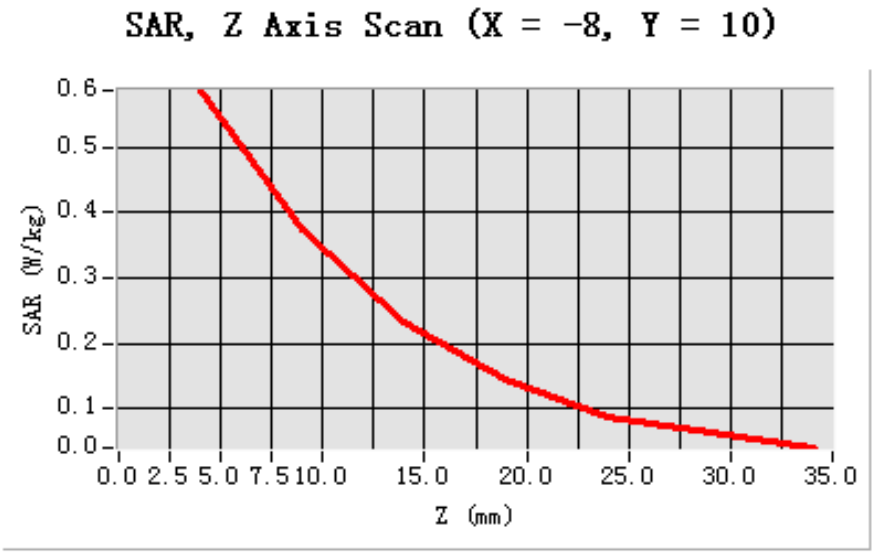
Frequency (MHz)	1910.800000
Relative permitivity (real part)	40.241025
Relative permitivity (imaginary part)	13.669915
Conductivity (S/m)	1.411877
Variation (%)	-1.500000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-8.00, Y=10.00

SAR 10g (W/Kg)	0.343395
SAR 1g (W/Kg)	0.489114

Z Axis Scan


SAR, Z Axis Scan (X = -8, Y = 10)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

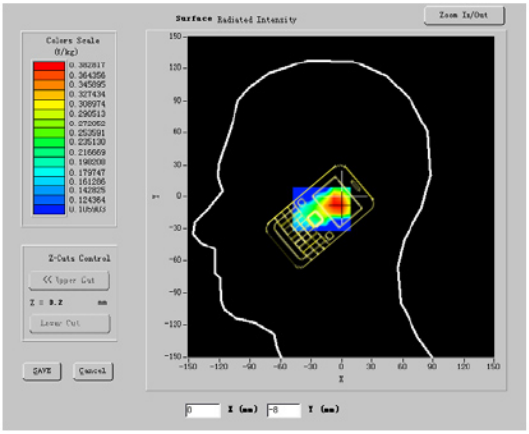
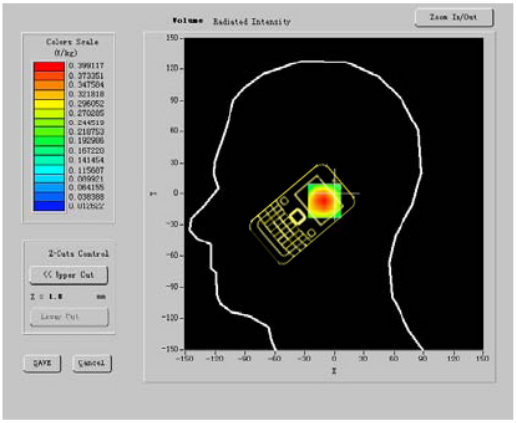
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

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

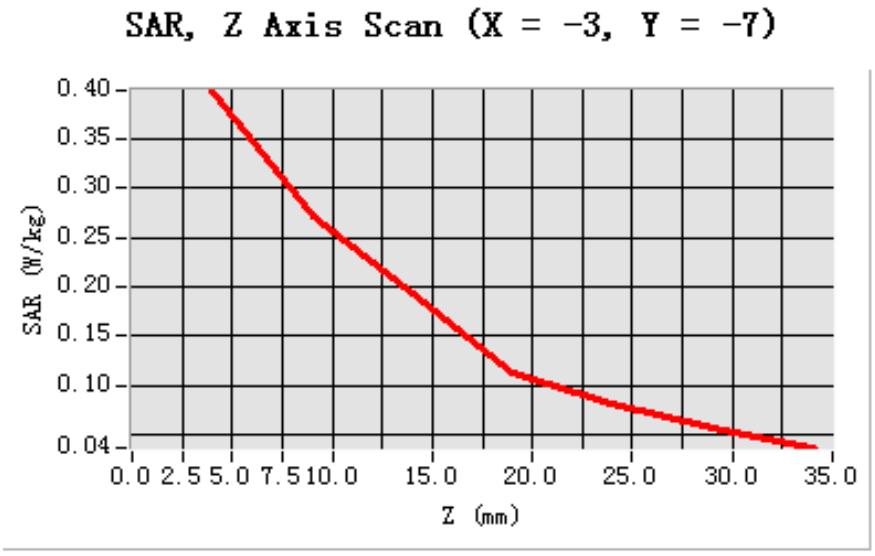
Frequency (MHz)	1850.200000
Relative permitivity (real part)	40.310000
Relative permitivity (imaginary part)	13.684900
Conductivity (S/m)	1.416528
Variation (%)	0.400000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.259174
SAR 1g (W/Kg)	0.320885

Z Axis Scan


SAR, Z Axis Scan (X = -3, Y = -7)
SAR (W/kg)
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.04
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 8

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

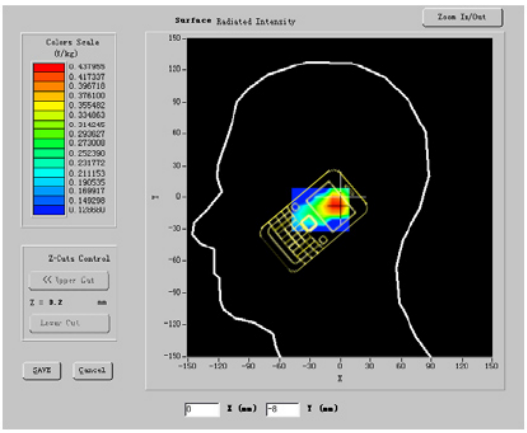
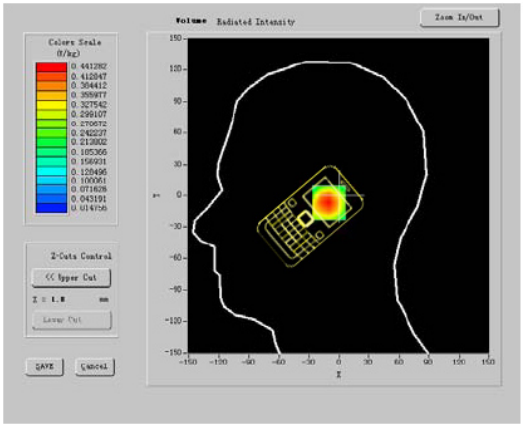
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

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

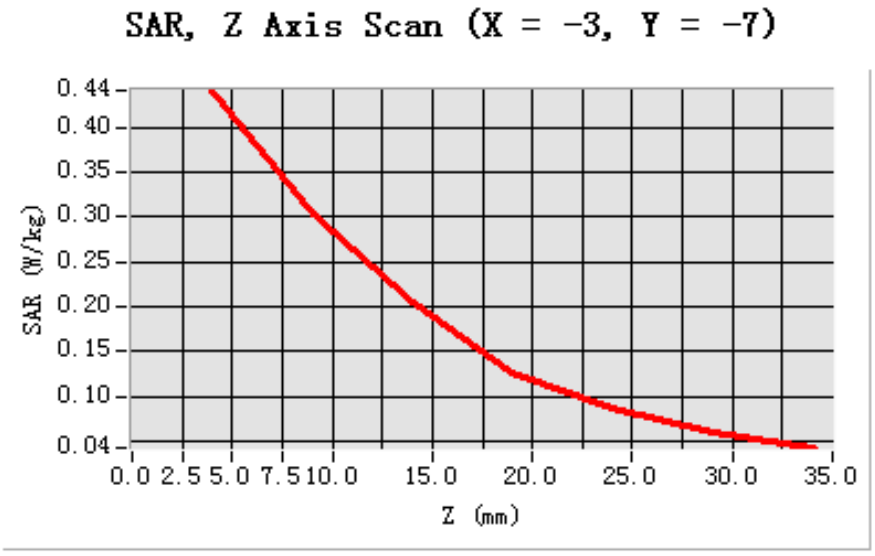
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.193452
Relative permitivity (imaginary part)	13.738200
Conductivity (S/m)	1.412572
Variation (%)	1.800000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.284479
SAR 1g (W/Kg)	0.394873

Z Axis Scan


SAR, Z Axis Scan (X = -3, Y = -7)
SAR (W/kg)
0.44
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.04
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 9

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

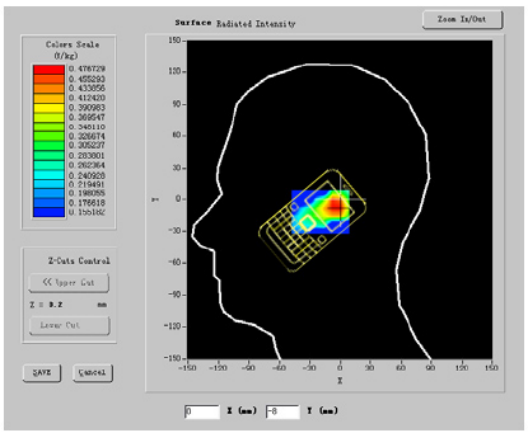
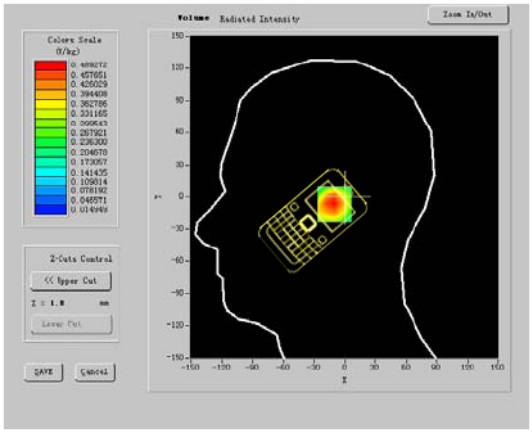
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	High
Signal	GSM

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

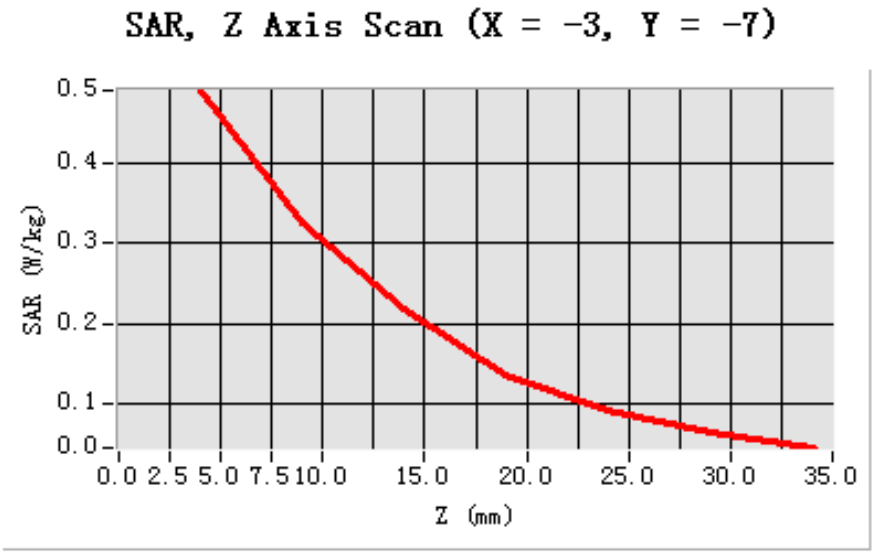
Frequency (MHz)	1910.000000
Relative permitivity (real part)	40.241367
Relative permitivity (imaginary part)	13.763400
Conductivity (S/m)	1.410870
Variation (%)	0.400000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.305513
SAR 1g (W/Kg)	0.476615

Z Axis Scan


SAR, Z Axis Scan (X = -3, Y = -7)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 10

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

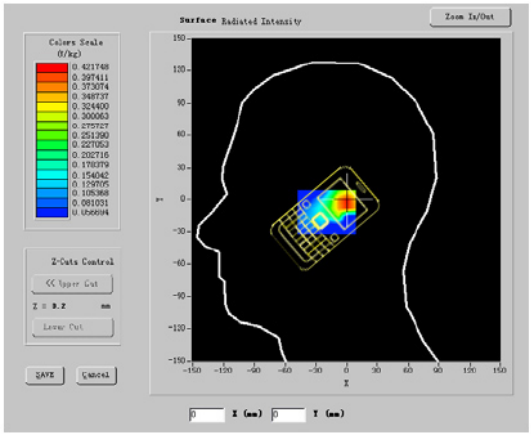
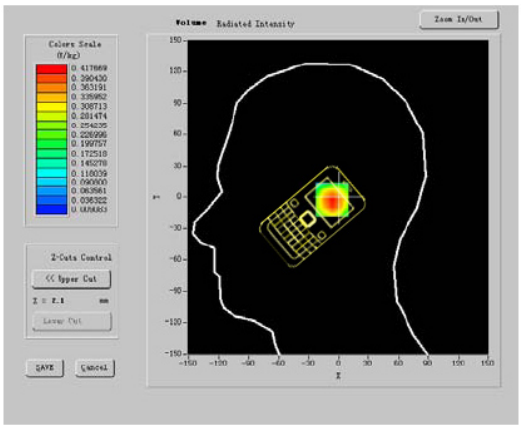
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

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

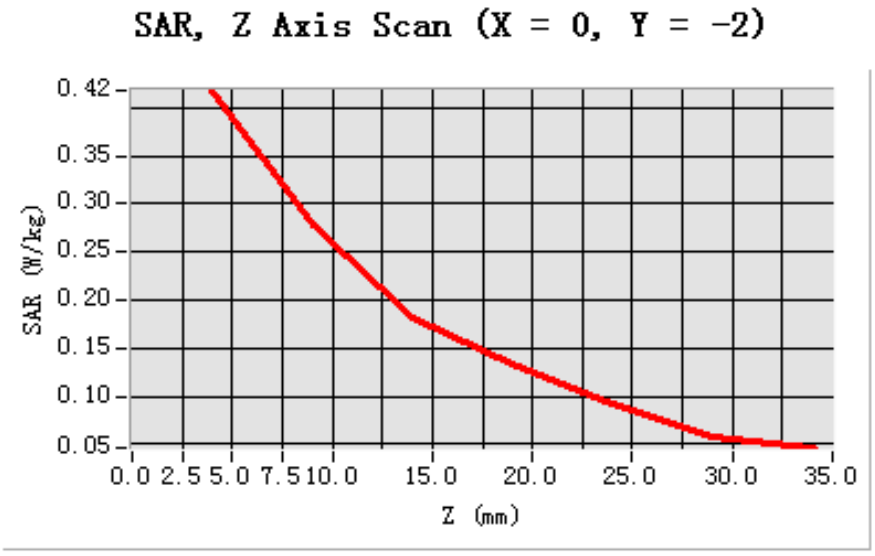
Frequency (MHz)	1850.200000
Relative permitivity (real part)	40.245000
Relative permitivity (imaginary part)	13.687900
Conductivity (S/m)	1.413007
Variation (%)	-0.700000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-2.00

SAR 10g (W/Kg)	0.247718
SAR 1g (W/Kg)	0.351128

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -2)
SAR (W/kg)
0.42
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 11

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

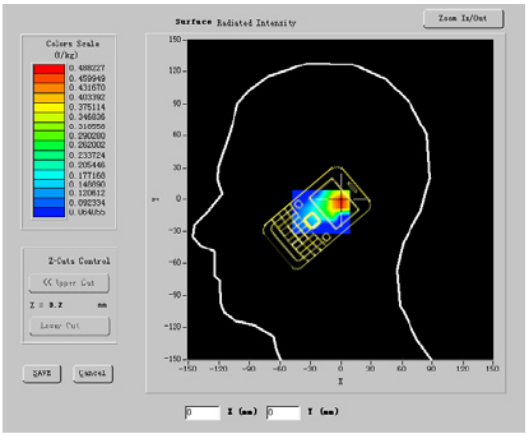
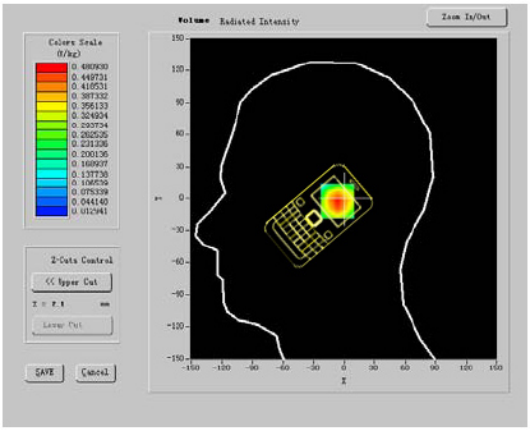
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

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

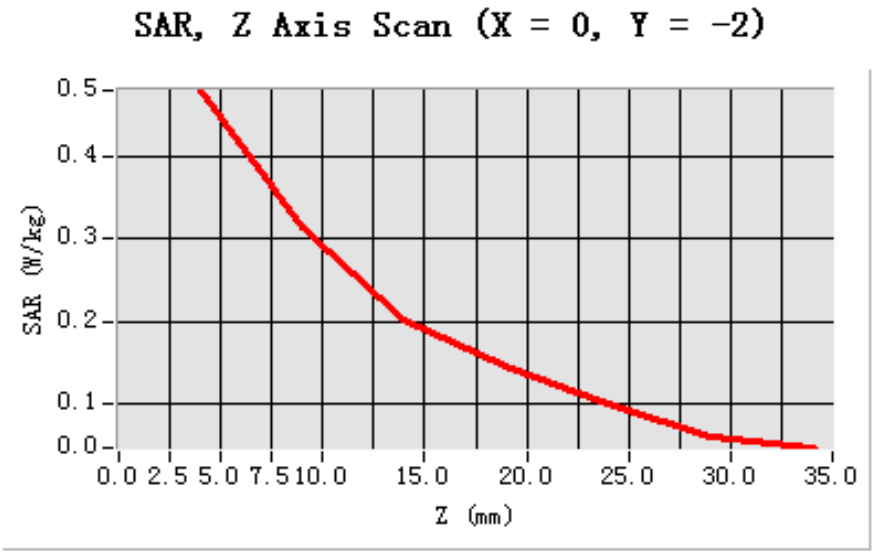
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.213000
Relative permitivity (imaginary part)	13.753200
Conductivity (S/m)	1.411392
Variation (%)	-1.000000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=-2.00

SAR 10g (W/Kg)	0.2877312
SAR 1g (W/Kg)	0.400339

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -2)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 12

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

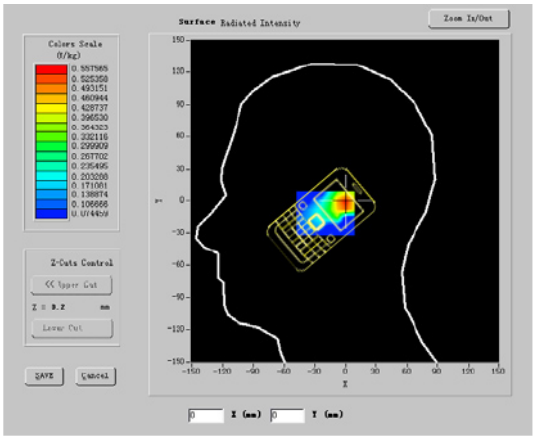
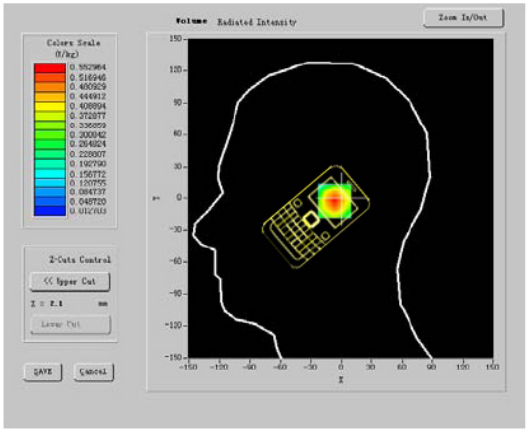
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	High
Signal	GSM

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

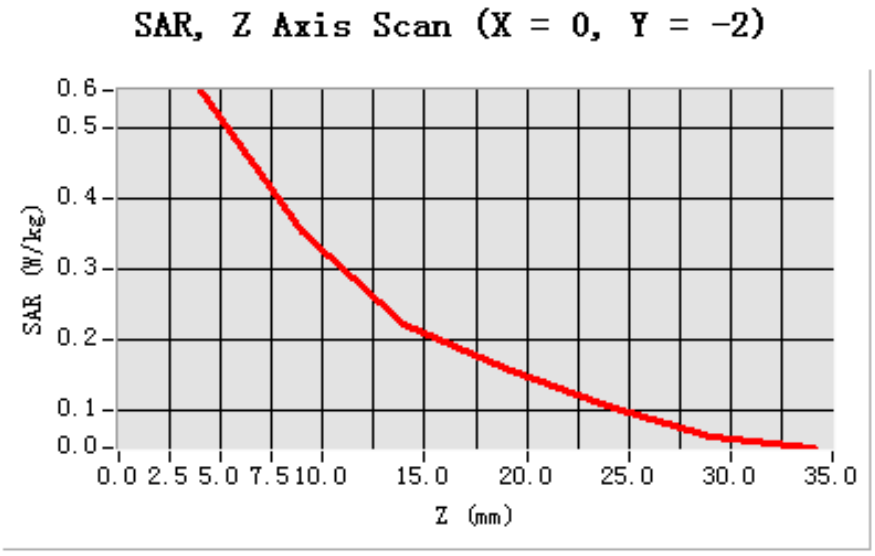
Frequency (MHz)	1910.000000
Relative permitivity (real part)	40.240528
Relative permitivity (imaginary part)	13.732195
Conductivity (S/m)	1.418444
Variation (%)	-1.300000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-2.00

SAR 10g (W/Kg)	0.325102
SAR 1g (W/Kg)	0.500322

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -2)
SAR (W/kg)
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

GSM1900 BODY

TYPE	BAND	PARAMETERS
Noise	--	--
Validation	--	--
Phone	GSM1900	Measurement 1: Validation Plane with Body device position on Low Channel in GSM mode Measurement 2: Validation Plane with Body device position on Middle Channel in GSM mode Measurement 3: Validation Plane with Body device position on High Channel in GSM mode

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

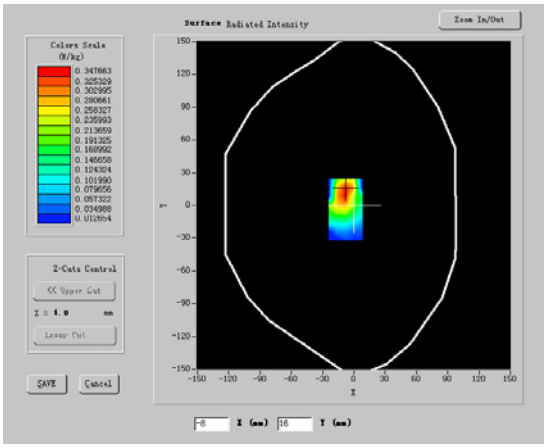
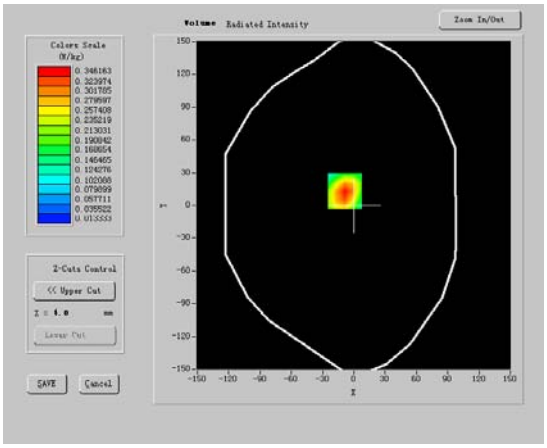
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GSM

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

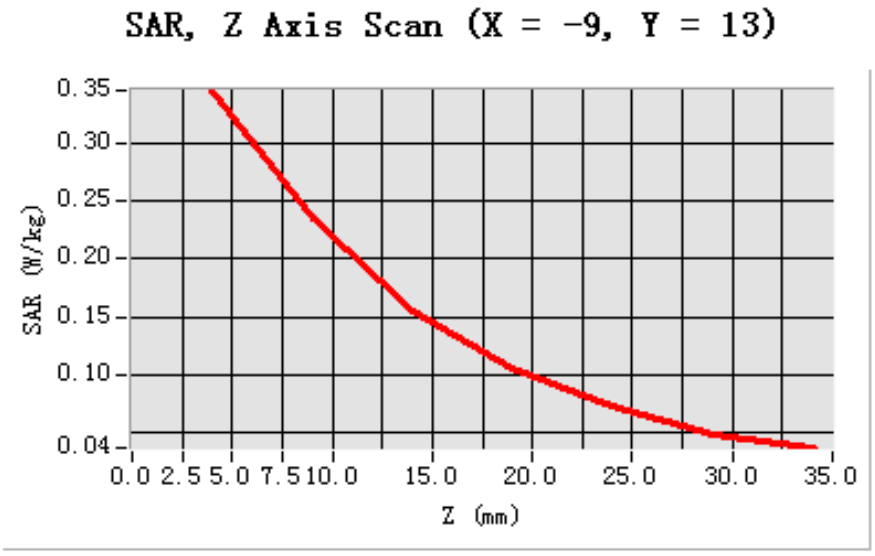
Frequency (MHz)	1850.200000
Relative permitivity (real part)	53.013260
Relative permitivity (imaginary part)	13.812470
Conductivity (S/m)	1.514677
Variation (%)	-0.130000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-9.00, Y=13.00

SAR 10g (W/Kg)	0.234179
SAR 1g (W/Kg)	0.334489

Z Axis Scan


SAR, Z Axis Scan (X = -9, Y = 13)
SAR (W/kg)
0.35
0.30
0.25
0.20
0.15
0.10
0.04
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

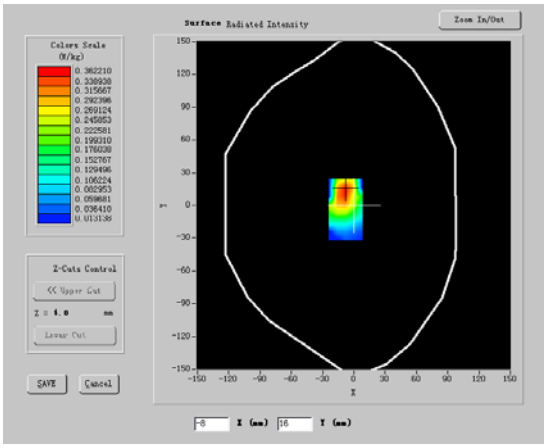
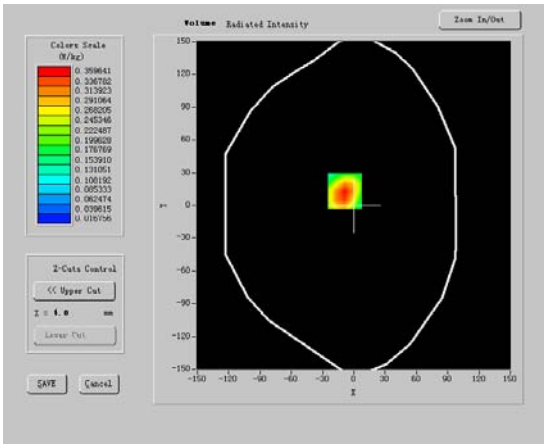
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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

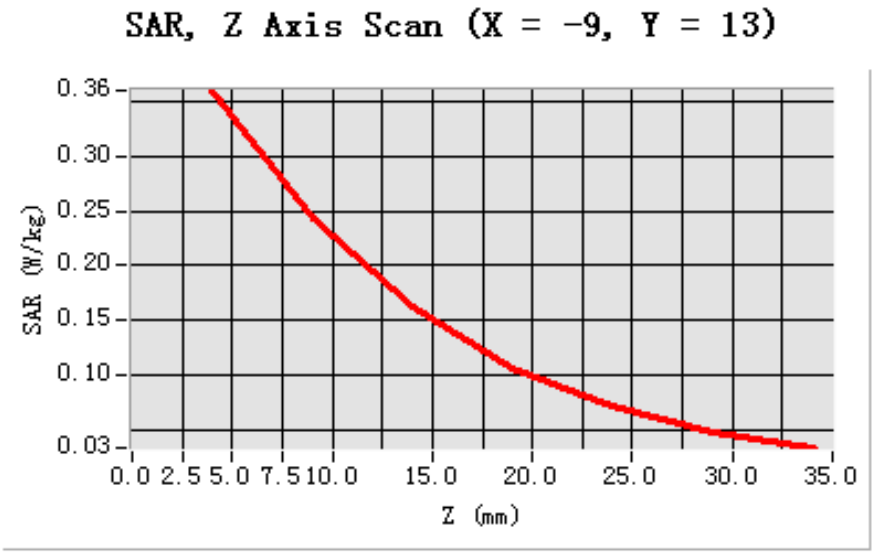
Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.993001
Relative permitivity (imaginary part)	13.813800
Conductivity (S/m)	1.513006
Variation (%)	-0.700000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-9.00, Y=13.00

SAR 10g (W/Kg)	0.236187
SAR 1g (W/Kg)	0.345566

Z Axis Scan


SAR, Z Axis Scan (X = -9, Y = 13)
SAR (W/kg)
0.36
0.30
0.25
0.20
0.15
0.10
0.03
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

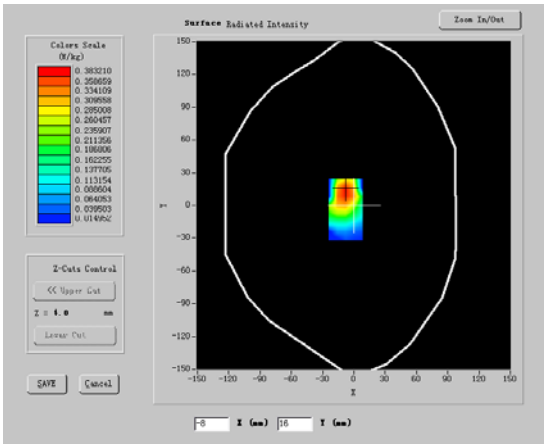
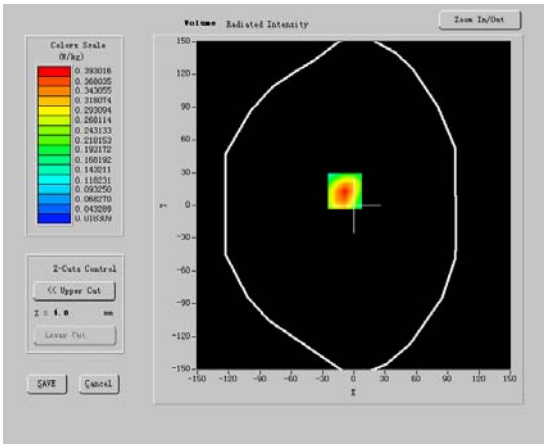
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	GSM

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

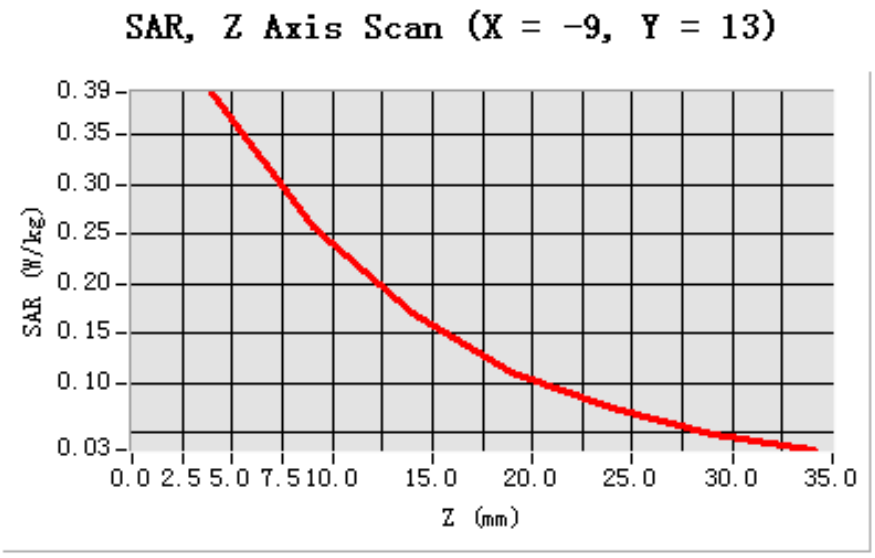
Frequency (MHz)	1910.000000
Relative permitivity (real part)	52.899733
Relative permitivity (imaginary part)	13.769970
Conductivity (S/m)	1.514325
Variation (%)	-0.600000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-9.00, Y=13.00

SAR 10g (W/Kg)	0.261174
SAR 1g (W/Kg)	0.396161

Z Axis Scan


SAR, Z Axis Scan (X = -9, Y = 13)
SAR (W/kg)
0.39
0.35
0.30
0.25
0.20
0.15
0.10
0.03
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

GPRS 850

I. RESULTS

TYPE	BAND	PARAMETERS
Noise	--	--
Validation	--	--
Phone	**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

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

A. Experimental conditions.

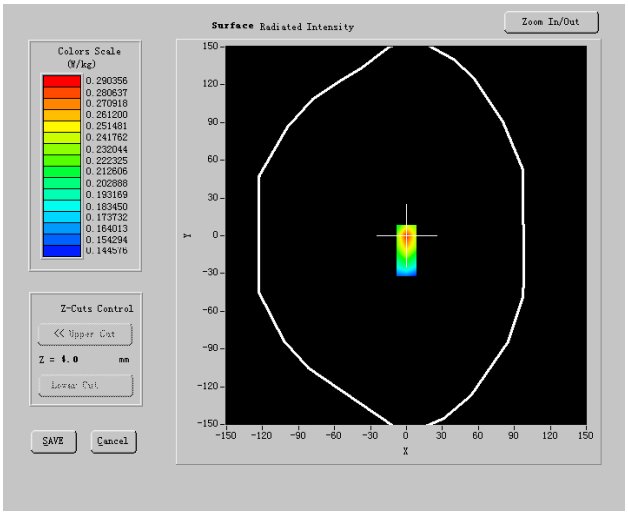
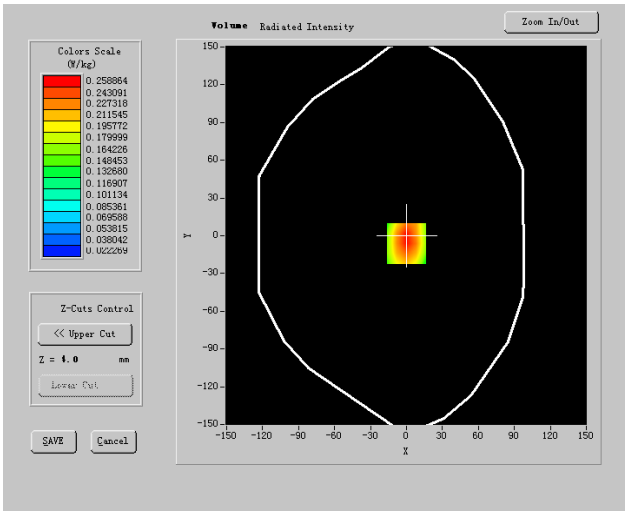
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	Low
Signal	GPRS

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

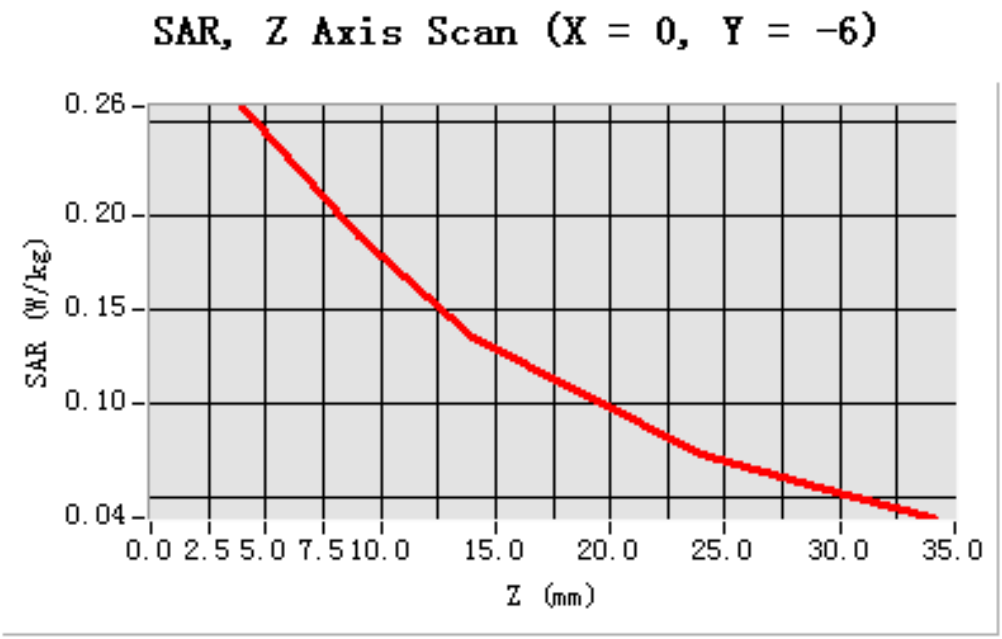
Frequency (MHz)	824.200000
Relative permitivity (real part)	55.399765
Relative permitivity (imaginary part)	21.986011
Conductivity (S/m)	0.963278
Variation (%)	-0.120000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.171110
SAR 1g (W/Kg)	0.269420

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -6)
SAR (W/kg)
0.26
0.20
0.15
0.10
0.04
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

A. Experimental conditions.

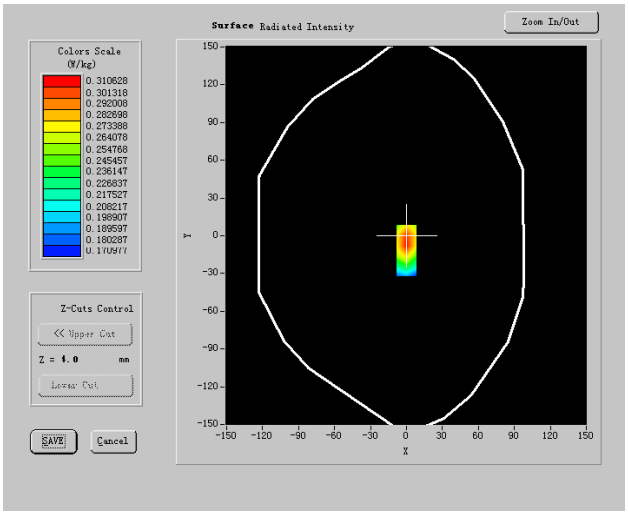
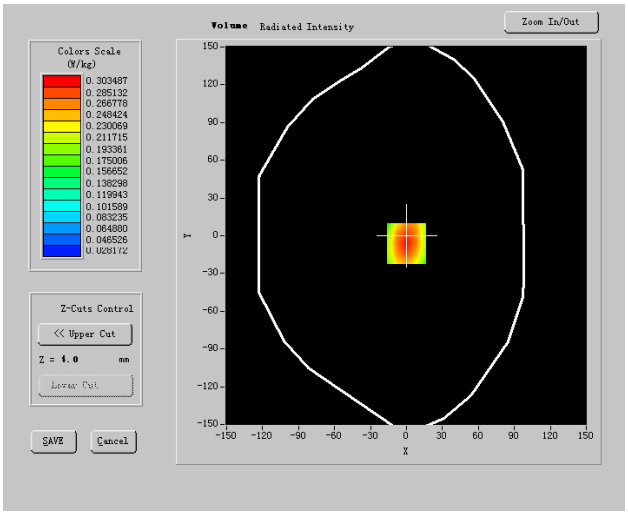
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

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

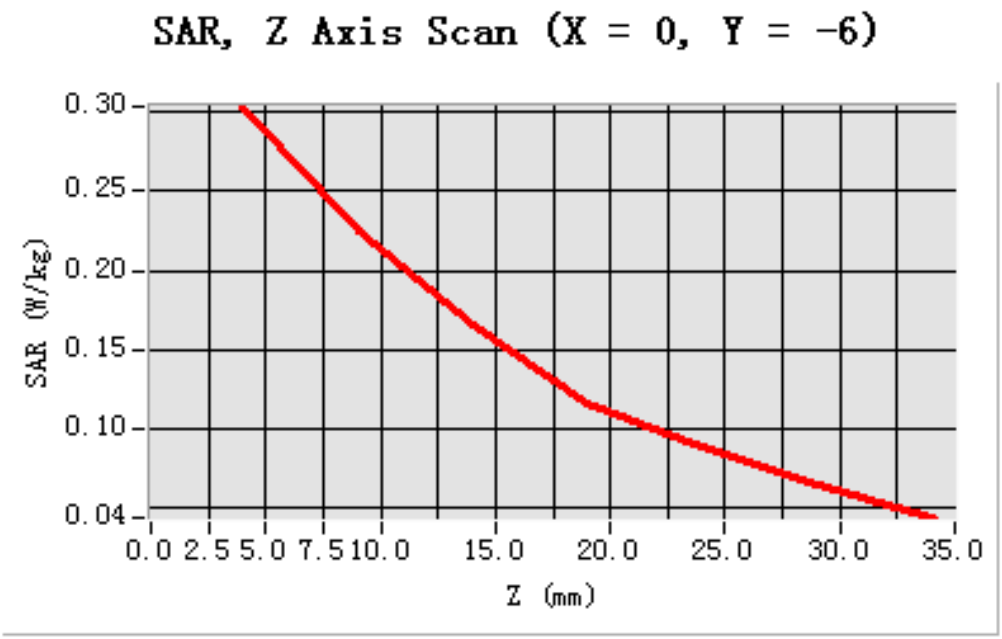
Frequency (MHz)	836.600000
Relative permitivity (real part)	55.501999
Relative permitivity (imaginary part)	21.866249
Conductivity (S/m)	0.966052
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.213395
SAR 1g (W/Kg)	0.294890

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -6)
SAR (W/kg)
0.30
0.25
0.20
0.15
0.10
0.04
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

A. Experimental conditions.

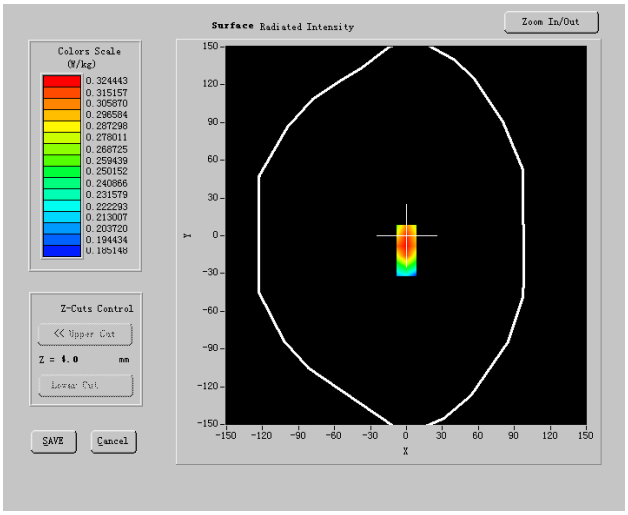
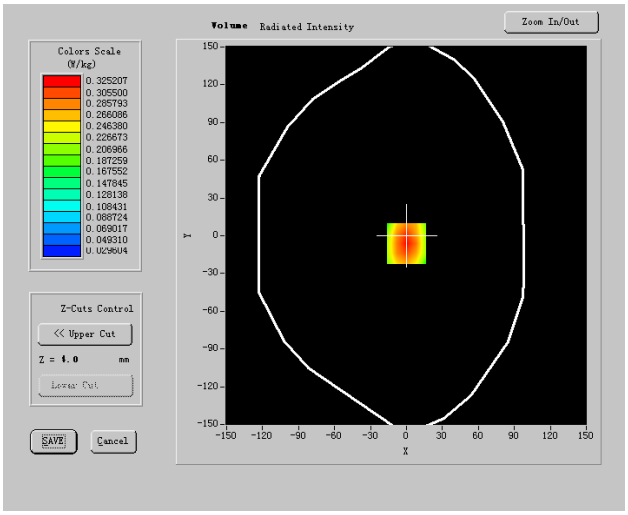
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	High
Signal	GPRS

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

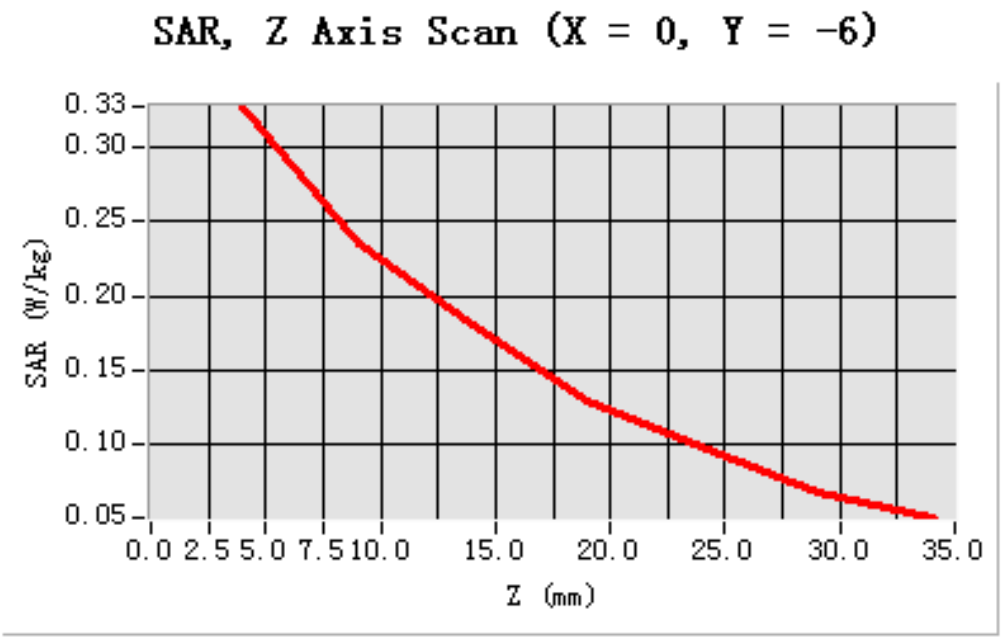
Frequency (MHz)	848.800000
Relative permitivity (real part)	55.403572
Relative permitivity (imaginary part)	21.126601
Conductivity (S/m)	0.965001
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.235541
SAR 1g (W/Kg)	0.329973

Z Axis Scan


SAR, Z Axis Scan (X = 0, Y = -6)
SAR (W/kg)
0.33
0.30
0.25
0.20
0.15
0.10
0.05
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

GPRS 1900

I. RESULTS

TYPE	BAND	PARAMETERS
Noise	--	--
Validation	--	--
Phone	**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

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

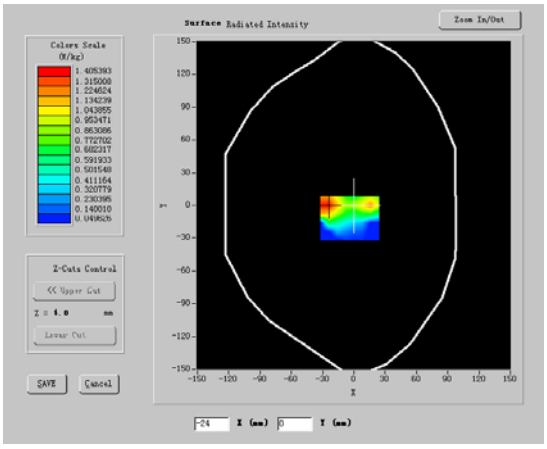
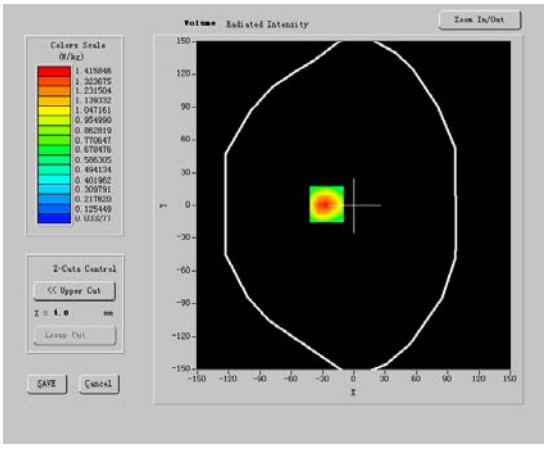
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Channels	Low
Signal	GPRS

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

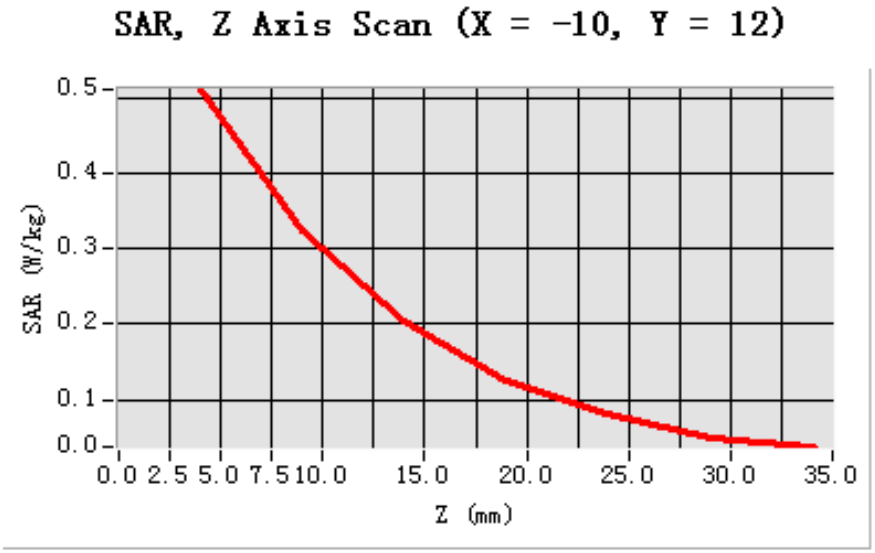
Frequency (MHz)	1850.200000
Relative permitivity (real part)	52.934200
Relative permitivity (imaginary part)	14.012470
Conductivity (S/m)	1.514873
Variation (%)	-0.400000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.231648
SAR 1g (W/Kg)	0.351132

Z Axis Scan


SAR, Z Axis Scan (X = -10, Y = 12)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

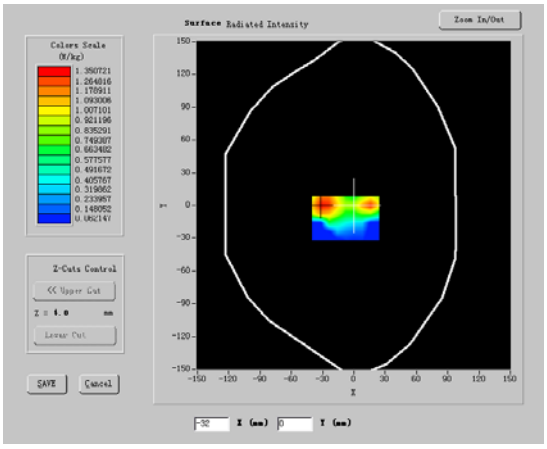
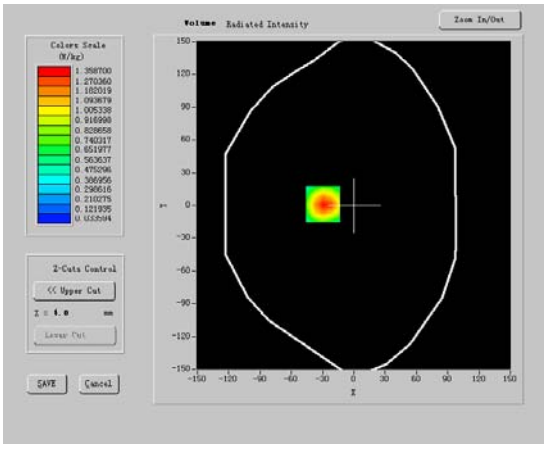
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Channels	Middle
Signal	GPRS

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

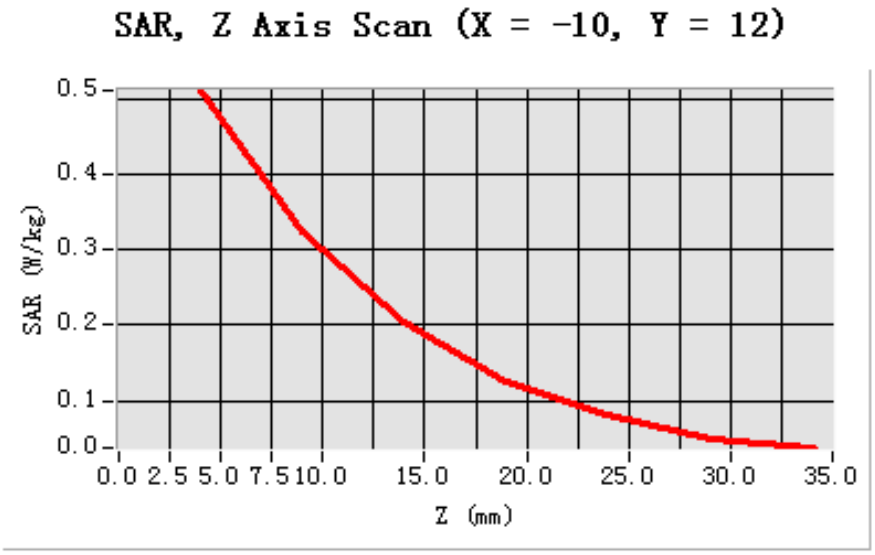
Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.986775
Relative permitivity (imaginary part)	13.810244
Conductivity (S/m)	1.514857
Variation (%)	-1.000000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.267778
SAR 1g (W/Kg)	0.412225

Z Axis Scan


SAR, Z Axis Scan (X = -10, Y = 12)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 08/24/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

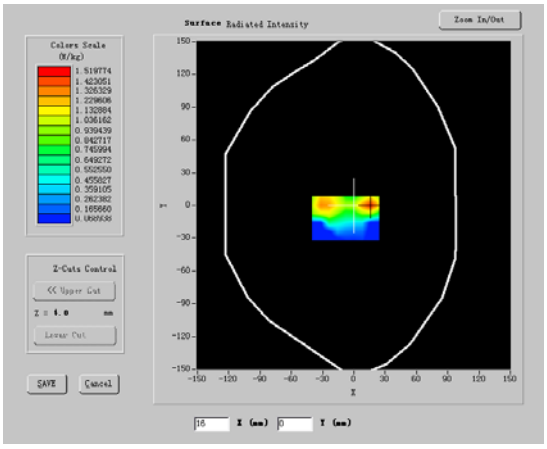
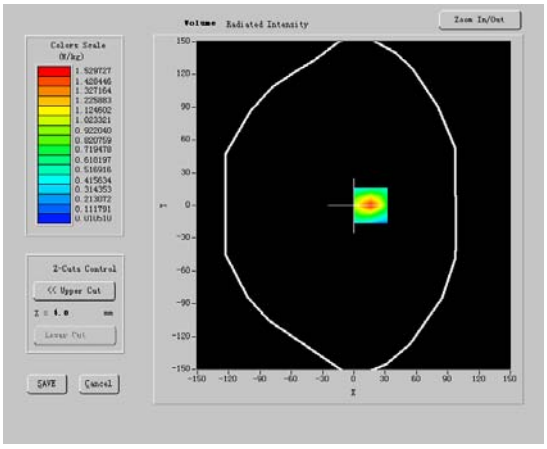
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Channels	High
Signal	GPRS

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

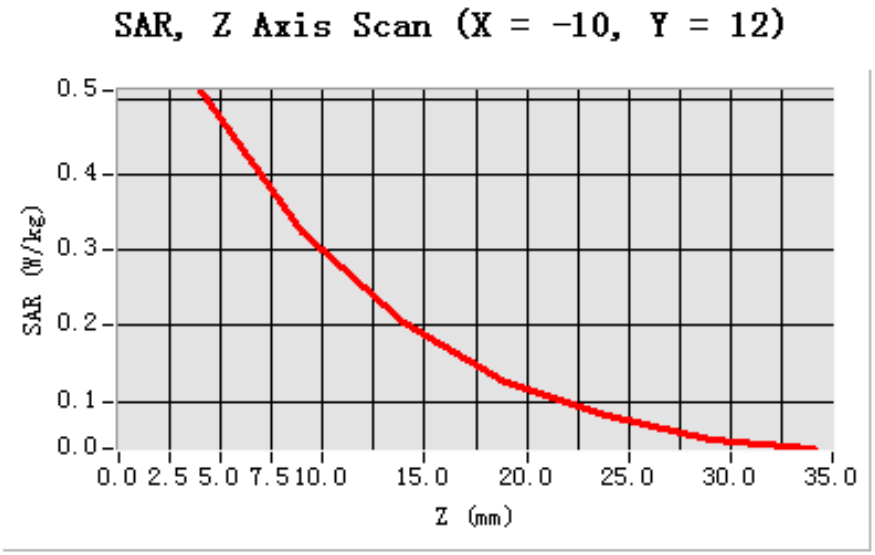
Frequency (MHz)	1910.000000
Relative permitivity (real part)	52.899761
Relative permitivity (imaginary part)	14.819230
Conductivity (S/m)	1.514632
Variation (%)	-0.130000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=2.00, Y=9.00

SAR 10g (W/Kg)	0.295547
SAR 1g (W/Kg)	0.441312

Z Axis Scan


SAR, Z Axis Scan (X = -10, Y = 12)
SAR (W/kg)
0.5
0.4
0.3
0.2
0.1
0.0
0.0 2.5 5.0 7.5 10.0 15.0 20.0 25.0 30.0 35.0
Z (mm)