SAR Test Plots

Project name :

KS100819B11

EUT DESCRIPTION

Product name:	Mobile Phone
Model No.:	HKM650
Trade name:	HKM
Tested date:	August 20, 2010
Applicant:	**Sociedad importadora italiana ltda.**
	Av Nueva Costanera 3848 , depto 24 , Vitacura, Santiago - Chile

Compliance Certification Services (Kunshan) Inc.
No.10, Weiye Rd., Innovation Park, Eco & Tec. Development Part,
Kunshan City, Jiangsu Province, PRC.
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GSM850

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 13: Validation Plane with Body device position on Low Channel in GSMmode Measurement 14: Validation Plane with Body device position on Middle Channel in GSM mode Measurement 15: Validation Plane with Body device position on High Channel in GSM mode

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 08/20/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=824.2MHz; σ=41.49mho/m; εr=0.92; ρ =1000kg/m3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

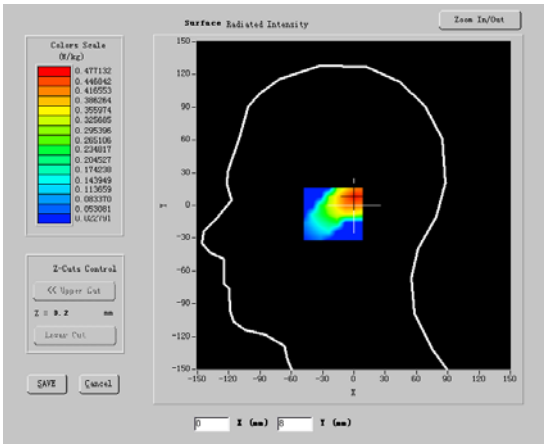
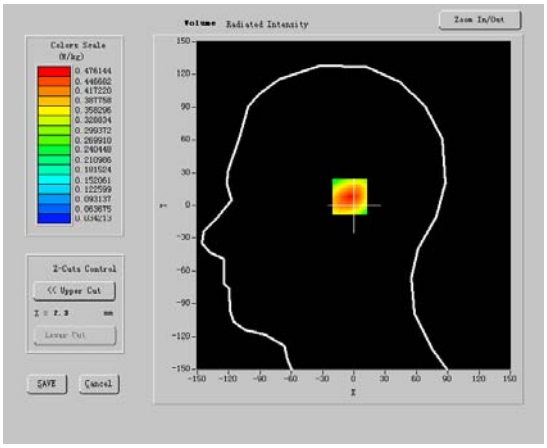
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

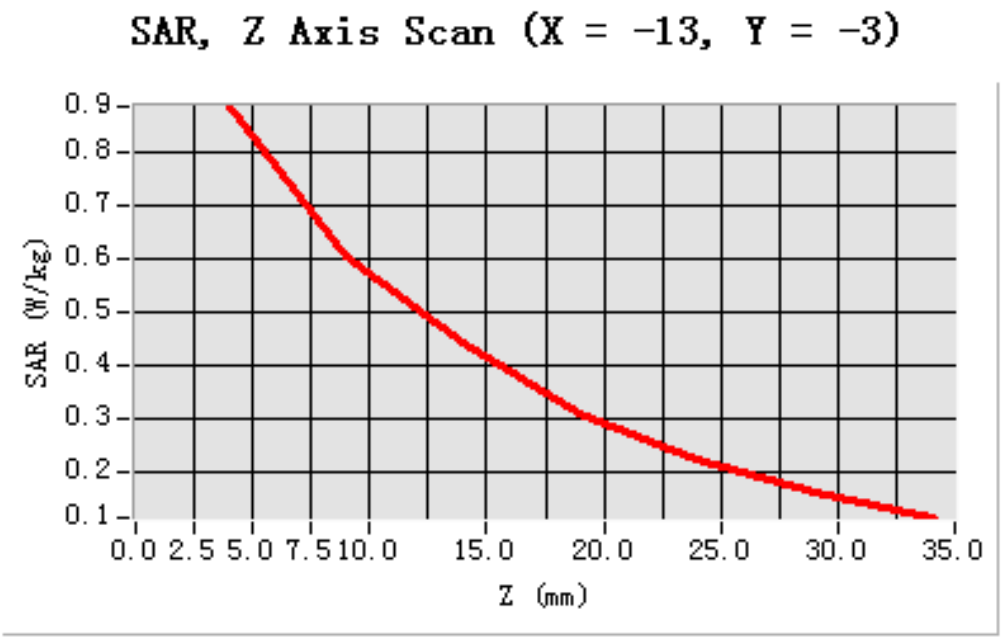
Frequency (MHz)	824.200001
Relative permitivity (real part)	41.487542
Relative permitivity (imaginary part)	19.510000
Conductivity (S/m)	0.922200
Variation (%)	-1.450000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.104353
SAR 1g (W/Kg)	0.223541

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: 08/20/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=836.6MHz; σ=41.45mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

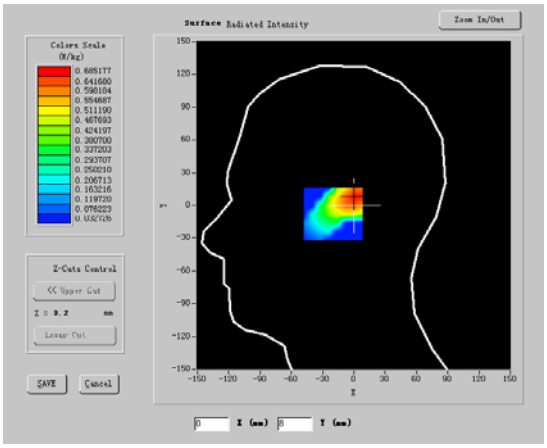
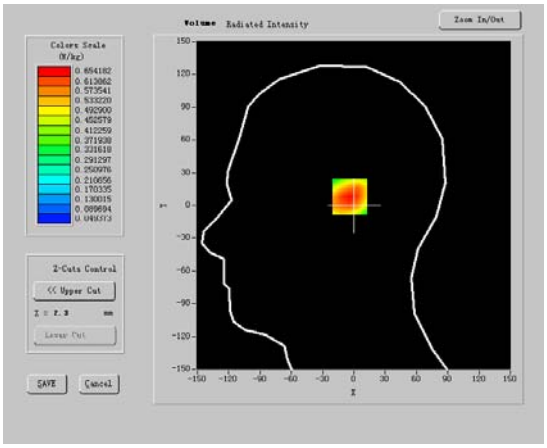
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

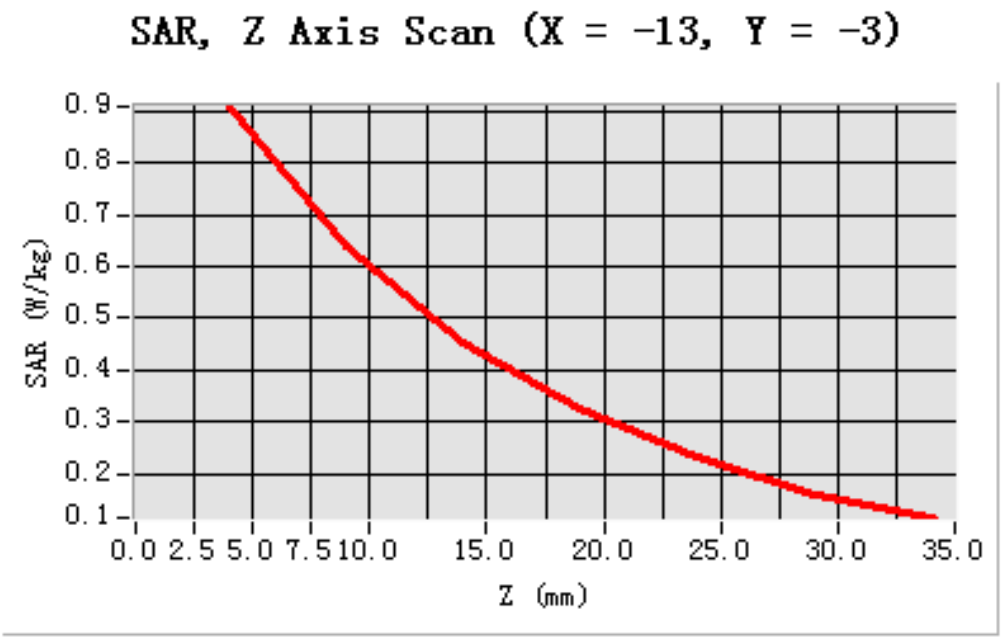
Frequency (MHz)	836.590001
Relative permitivity (real part)	41.450210
Relative permitivity (imaginary part)	19.523201
Conductivity (S/m)	0.916234
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.112377
SAR 1g (W/Kg)	0.242513

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: 08/20/2010

Measurement duration: 19 minutes 56 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=848.8MHz; σ=41.39mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

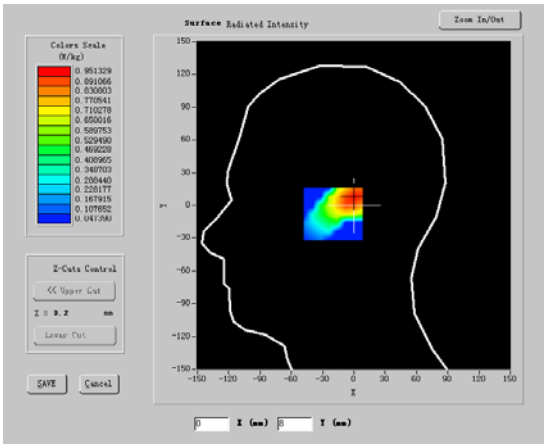
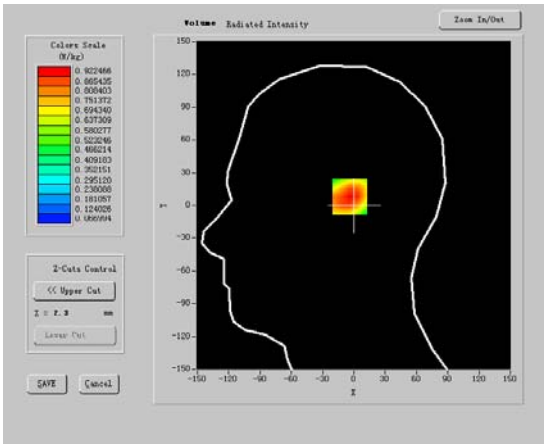
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

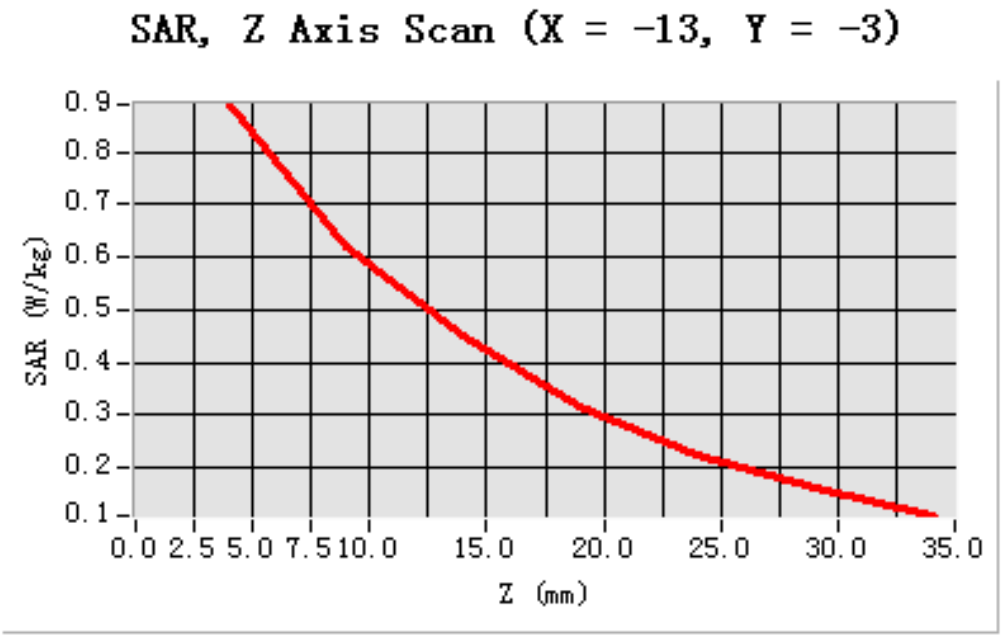
Frequency (MHz)	848.799999
Relative permitivity (real part)	41.392410
Relative permitivity (imaginary part)	19.603210
Conductivity (S/m)	0.922146
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.108977
SAR 1g (W/Kg)	0.232514

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: 08/20/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=824.2MHz; σ=41.45mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

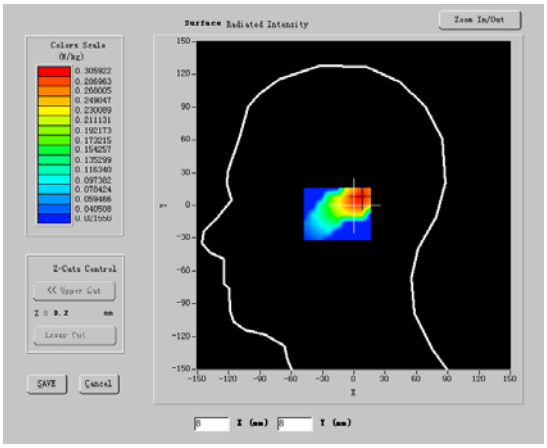
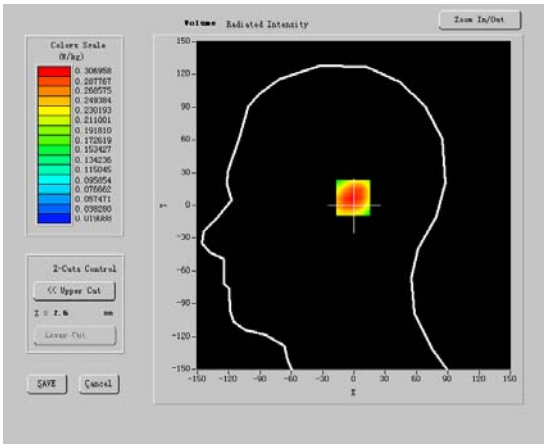
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

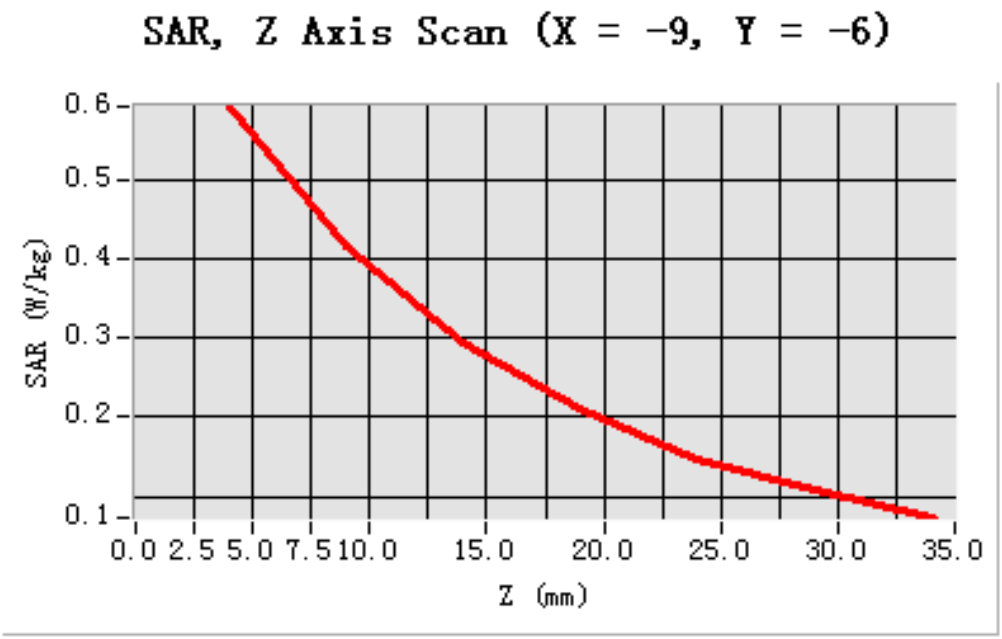
Frequency (MHz)	824.202012
Relative permitivity (real part)	41.452019
Relative permitivity (imaginary part)	19.572401
Conductivity (S/m)	0.915242
Variation (%)	-1.300000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.077643
SAR 1g (W/Kg)	0.121458

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: 08/20/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=836.6MHz; σ=41.46mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

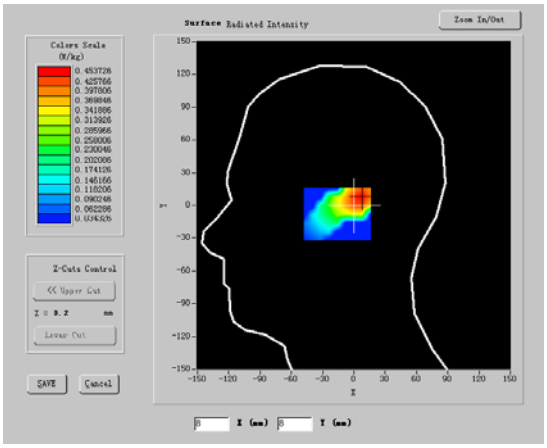
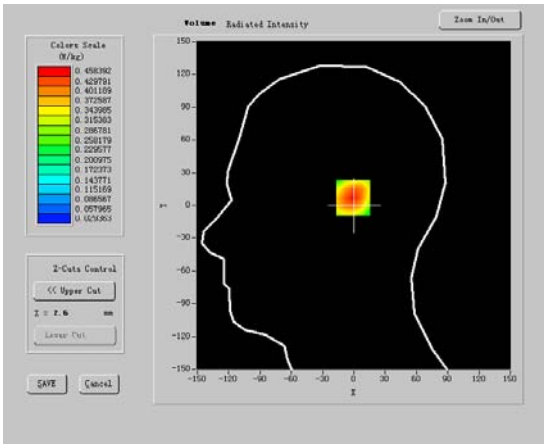
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

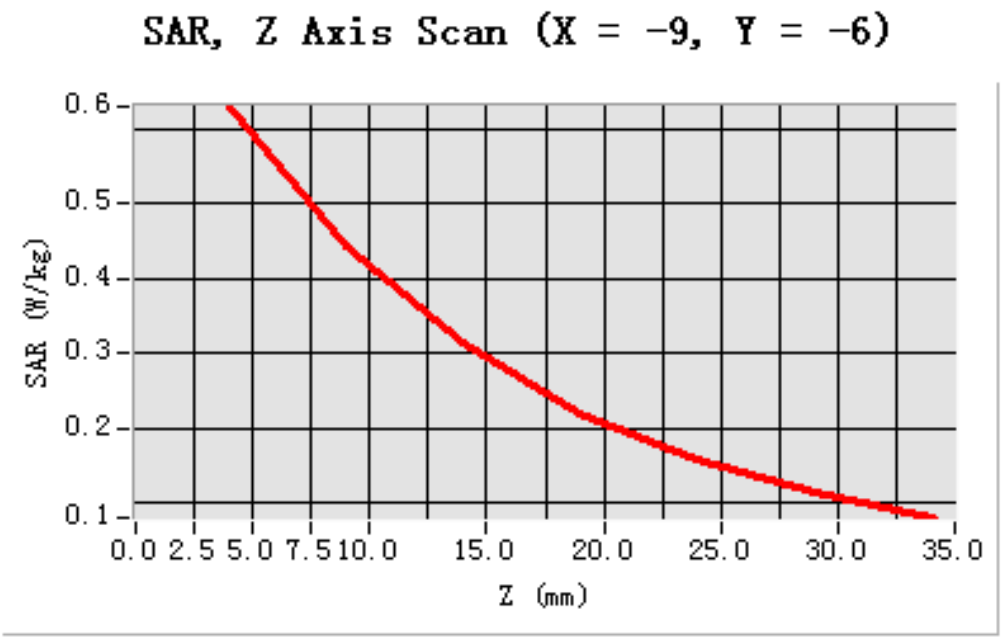
Frequency (MHz)	836.600210
Relative permitivity (real part)	41.447109
Relative permitivity (imaginary part)	19.674001
Conductivity (S/m)	0.925120
Variation (%)	-0.800000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.088971
SAR 1g (W/Kg)	0.151244

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: 08/20/2010

Measurement duration: 19 minutes 47 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=848.8MHz; σ=41.42mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

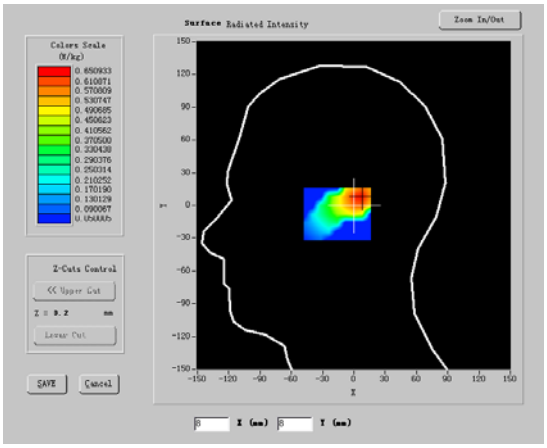
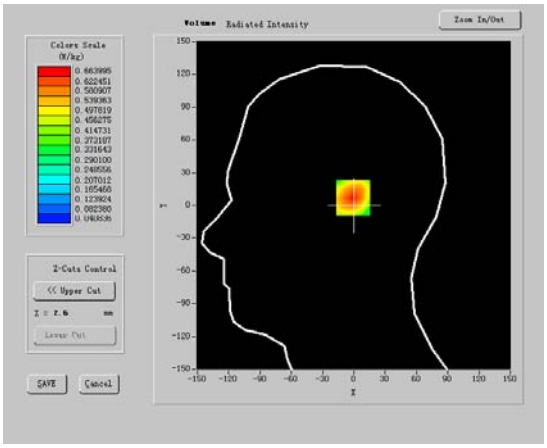
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

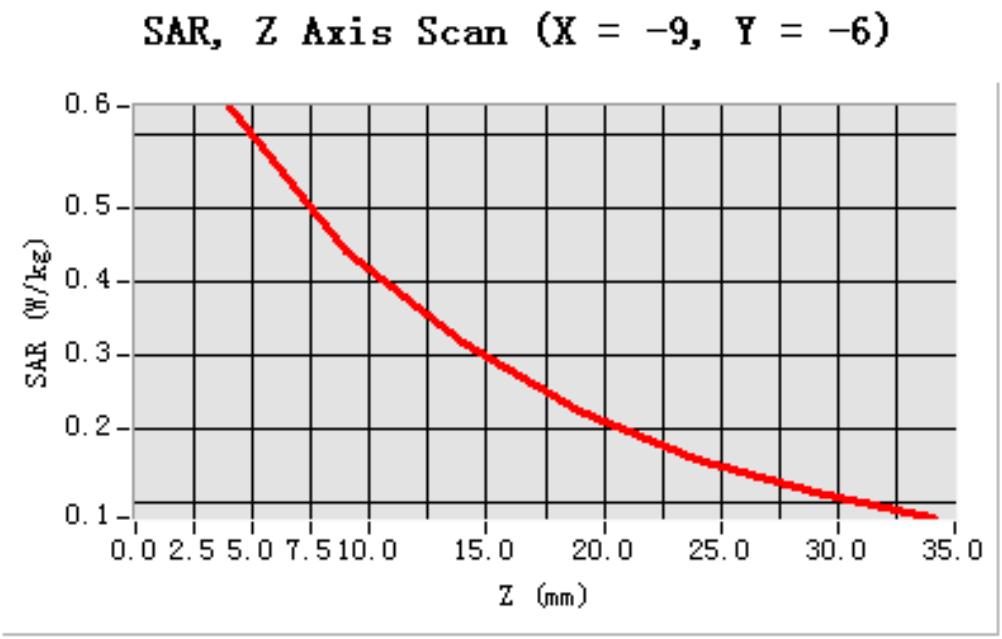
Frequency (MHz)	848.799000
Relative permitivity (real part)	41.421001
Relative permitivity (imaginary part)	19.586200
Conductivity (S/m)	0.923346
Variation (%)	-0.400000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.081444
SAR 1g (W/Kg)	0.162598

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: 08/20/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=824.2MHz; σ=41.46mho/m; εr=0.89; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

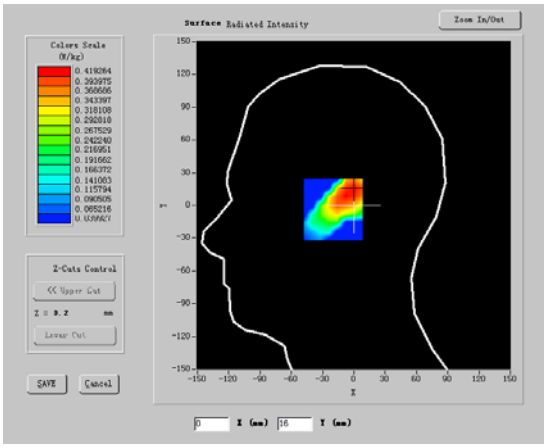
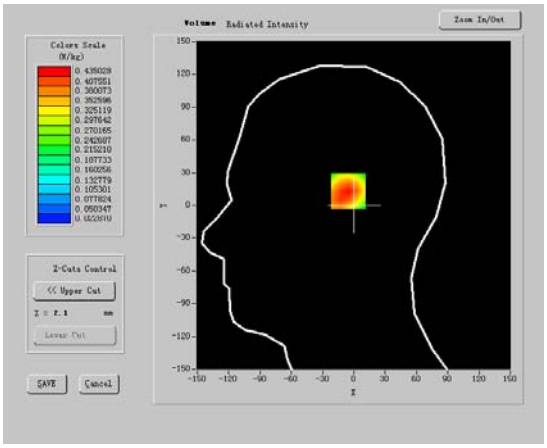
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

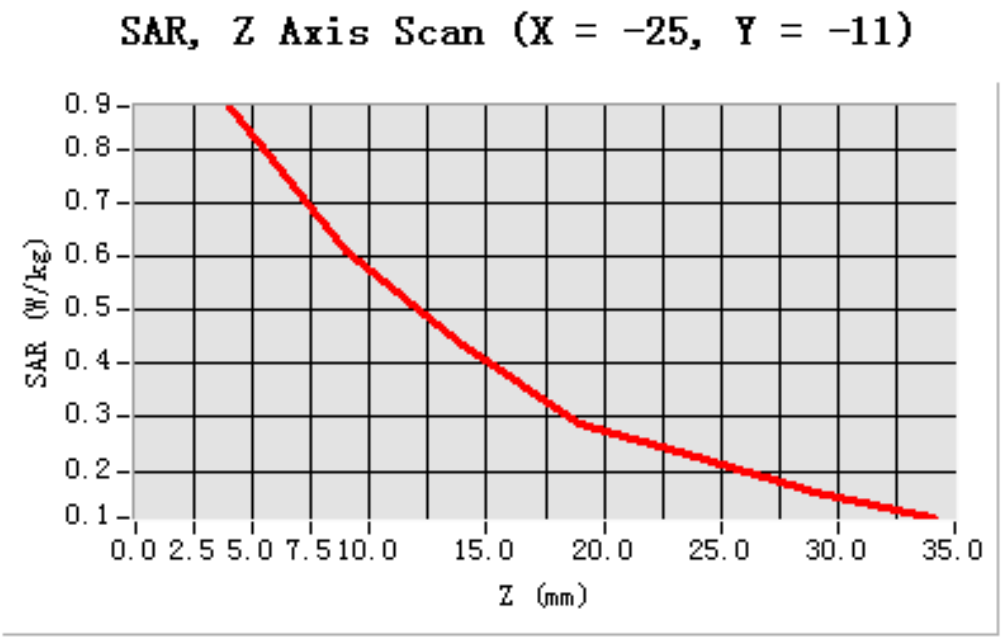
Frequency (MHz)	824.203202
Relative permitivity (real part)	41.462099
Relative permitivity (imaginary part)	19.565206
Conductivity (S/m)	0.892142
Variation (%)	-0.250000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.114952
SAR 1g (W/Kg)	0.292144

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: 08/20/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=836.6MHz; σ=41.47mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

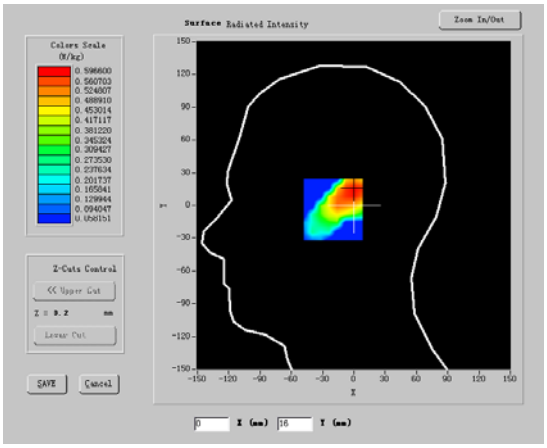
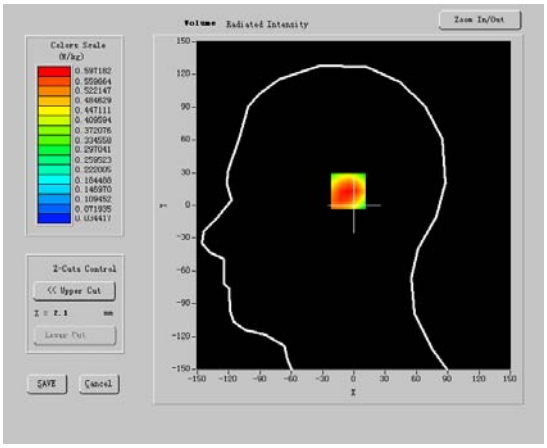
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

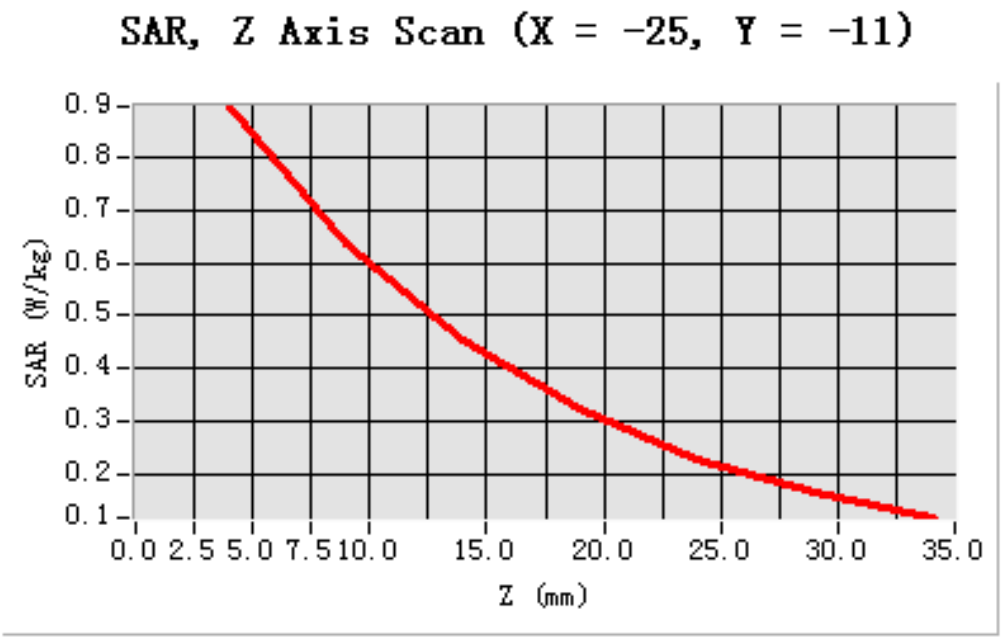
Frequency (MHz)	836.600010
Relative permitivity (real part)	41.470019
Relative permitivity (imaginary part)	19.576201
Conductivity (S/m)	0.919241
Variation (%)	-0.230000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.125110
SAR 1g (W/Kg)	0.302548

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: 08/20/2010

Measurement duration: 20 minutes 2 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=848.8MHz; σ=41.41mho/m; εr=0.93; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

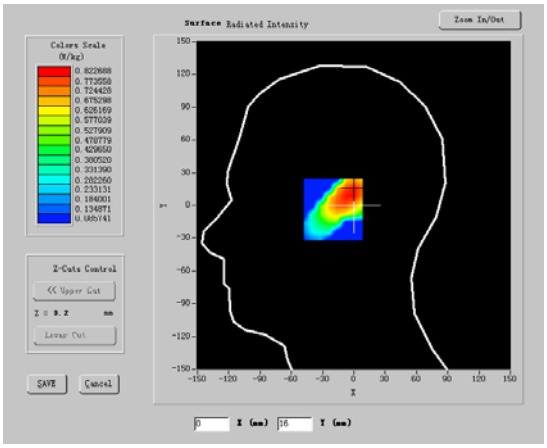
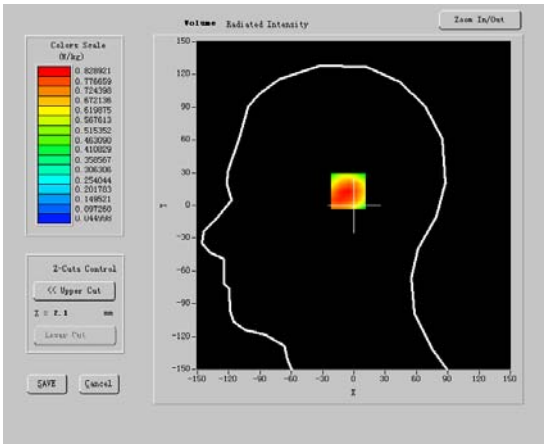
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

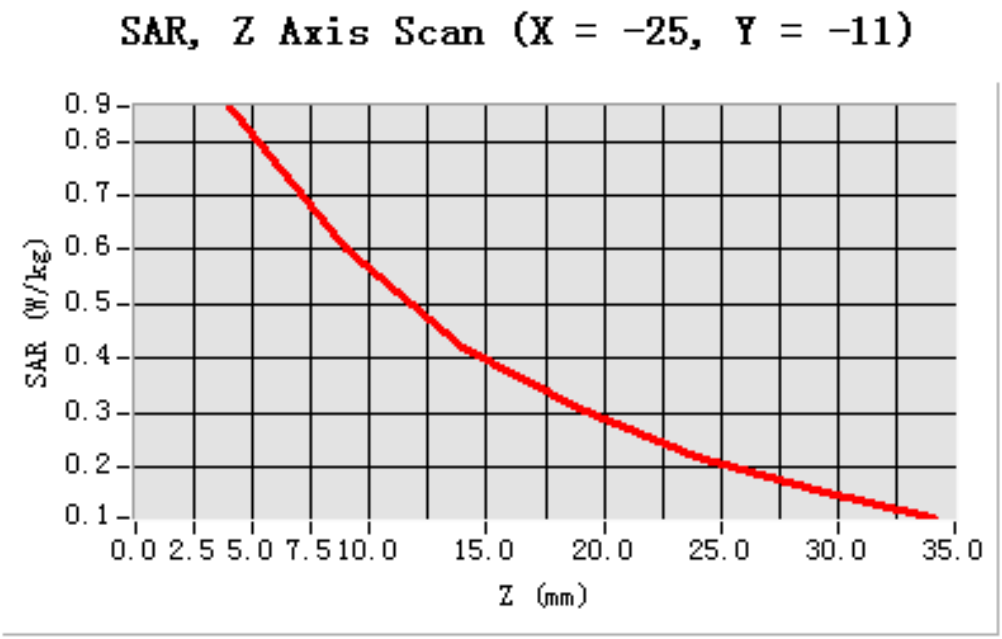
Frequency (MHz)	848.592416
Relative permitivity (real part)	41.414521
Relative permitivity (imaginary part)	19.575200
Conductivity (S/m)	0.930120
Variation (%)	-1.300000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.109334
SAR 1g (W/Kg)	0.271247

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: 08/20/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=824.2MHz; σ=41.45mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

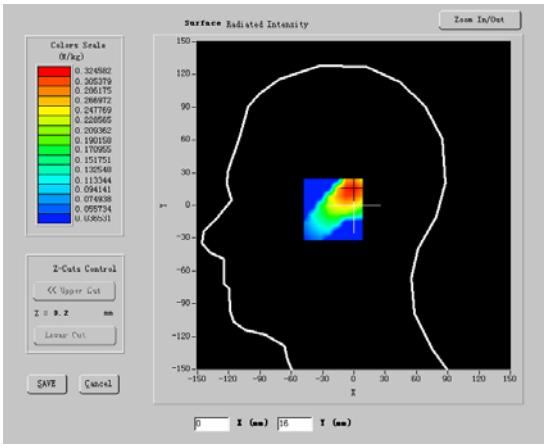
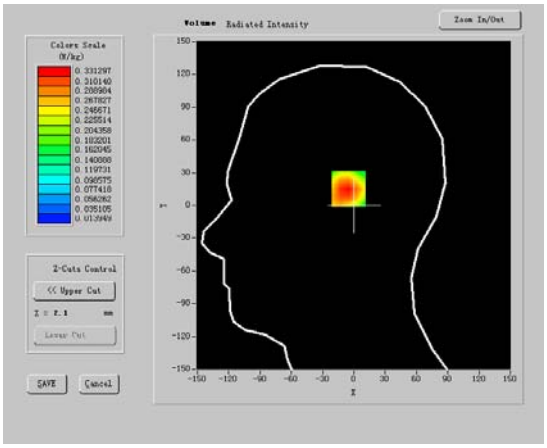
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

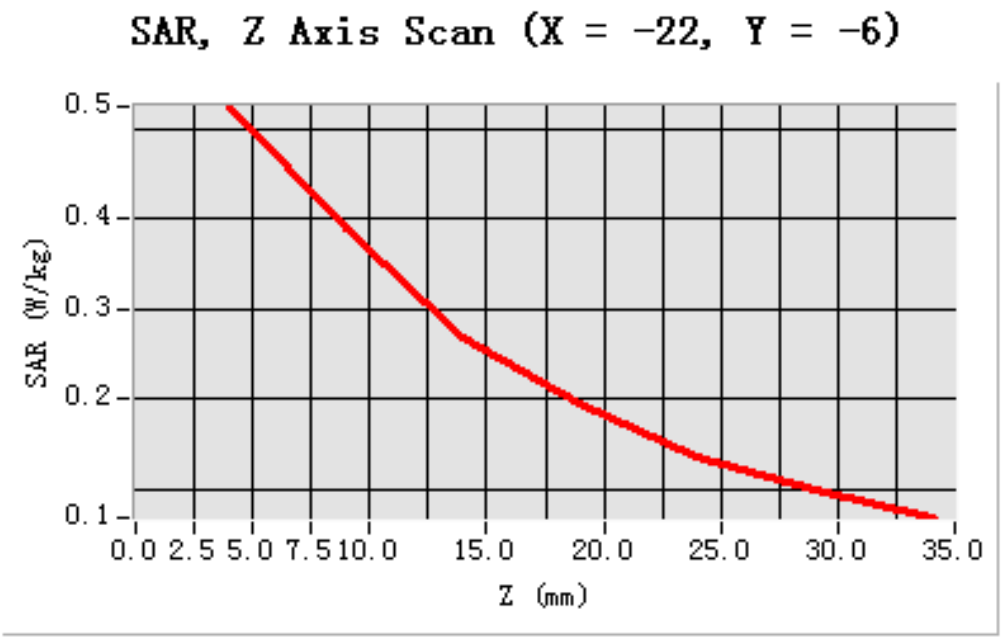
Frequency (MHz)	824.203202
Relative permitivity (real part)	41.452501
Relative permitivity (imaginary part)	19.582103
Conductivity (S/m)	0.920212
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.110358
SAR 1g (W/Kg)	0.172514

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: 08/20/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=836.6MHz; σ=41.46mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

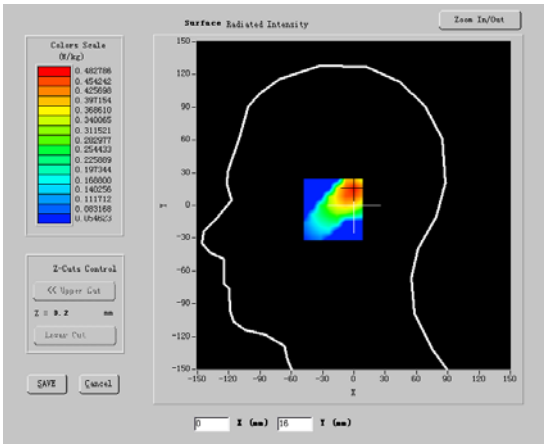
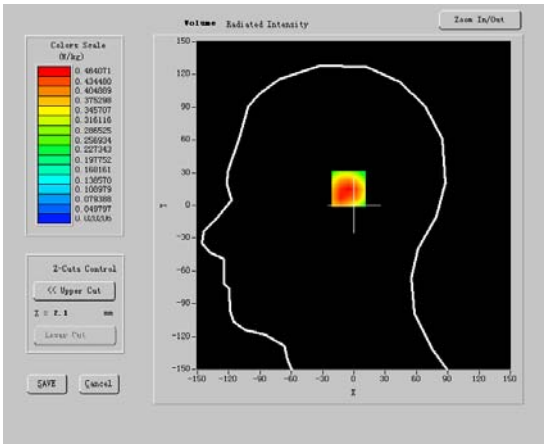
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

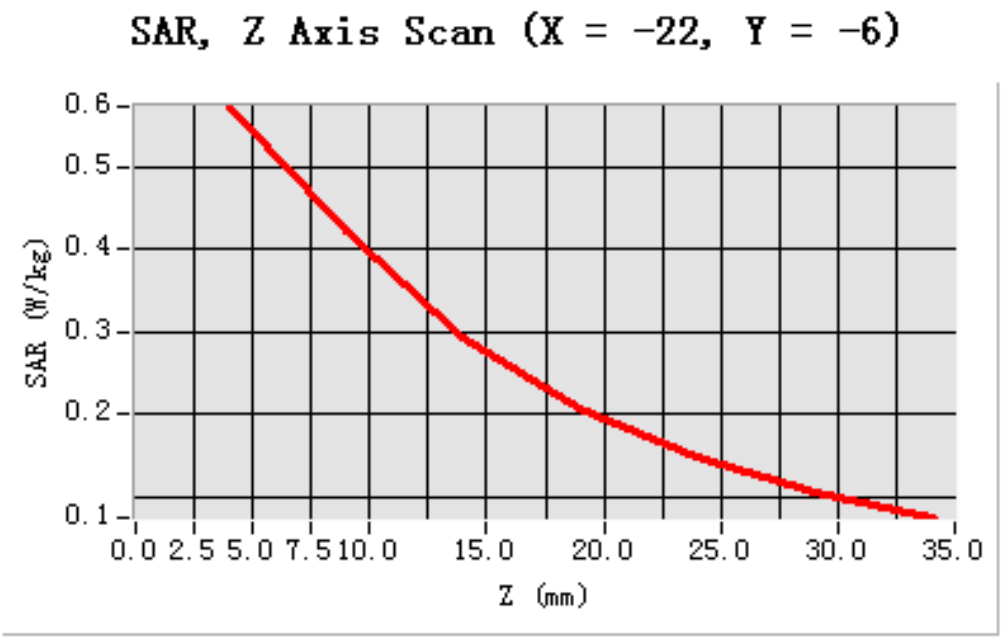
Frequency (MHz)	836.602124
Relative permitivity (real part)	41.460120
Relative permitivity (imaginary part)	19.582105
Conductivity (S/m)	0.920102
Variation (%)	-0.010000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.121877
SAR 1g (W/Kg)	0.180365

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: 08/20/2010

Measurement duration: 19 minutes 49 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=848.8MHz; σ=41.46mho/m; εr=0.92; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

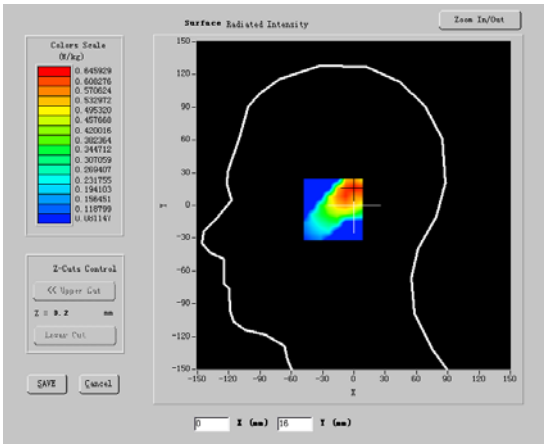
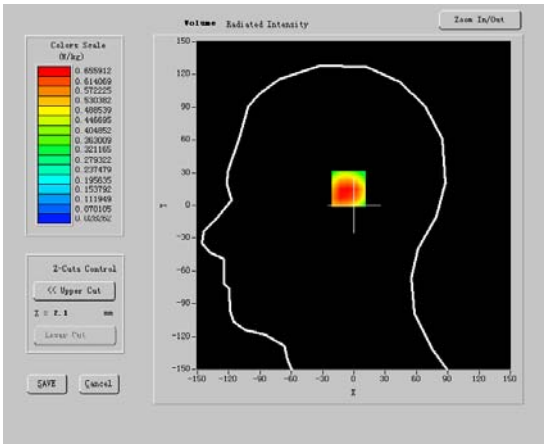
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

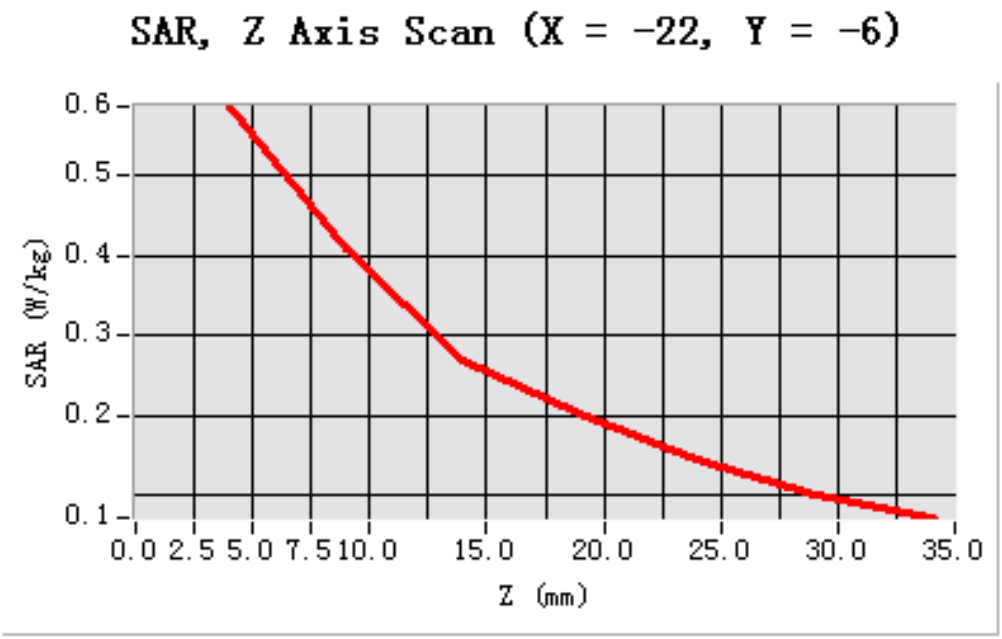
Frequency (MHz)	848.790120
Relative permitivity (real part)	41.462001
Relative permitivity (imaginary part)	19.584100
Conductivity (S/m)	0.923206
Variation (%)	-1.100000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.102491
SAR 1g (W/Kg)	0.171428

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 13

Type: Phone measurement (Complete)

Date of measurement: 08/20/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=824.2MHz; σ=56.52mho/m; εr=0.97; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

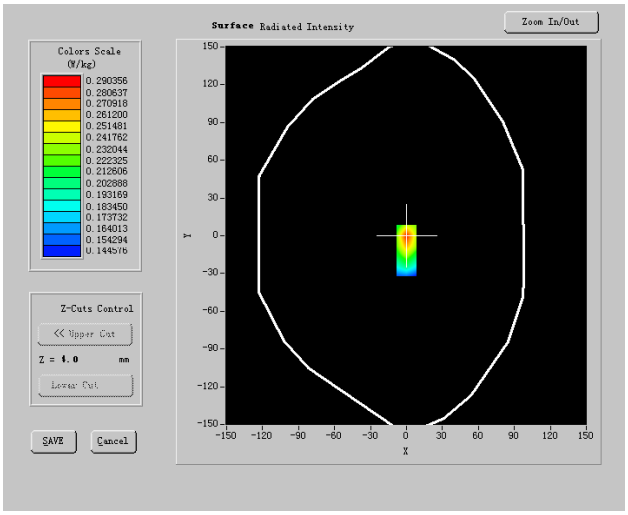
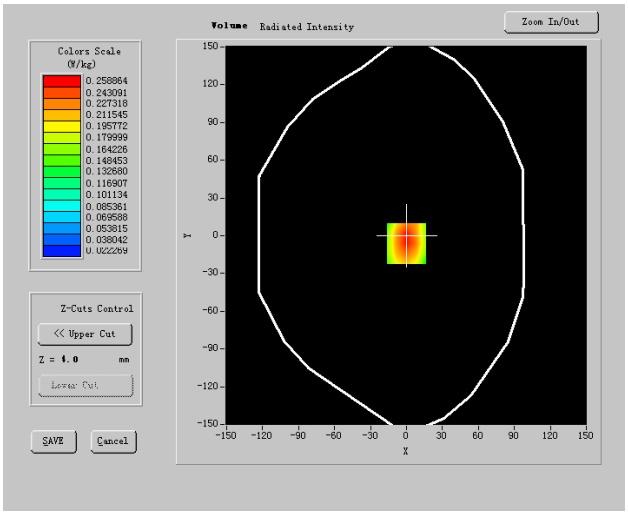
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

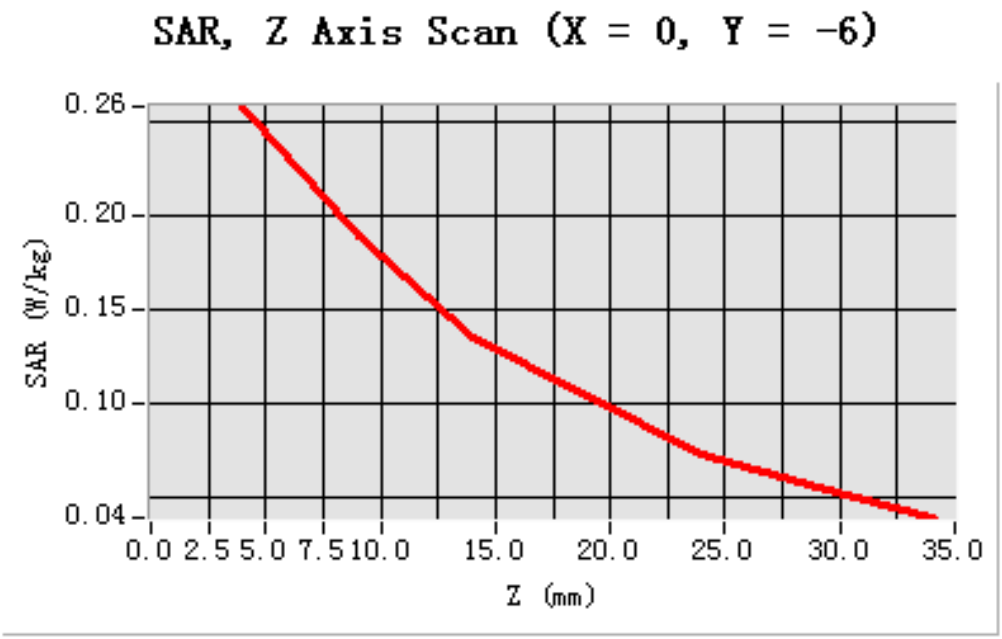
Frequency (MHz)	824.200002
Relative permitivity (real part)	56.524000
Relative permitivity (imaginary part)	21.251150
Conductivity (S/m)	0.972509
Variation (%)	-1.100000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.085537
SAR 1g (W/Kg)	0.191474

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 14

Type: Phone measurement (Complete)

Date of measurement: 08/20/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=836.6MHz; σ=56.50mho/m; εr=0.97; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

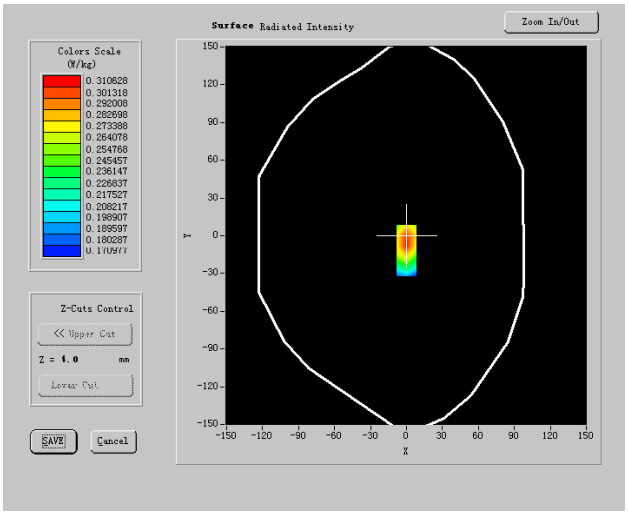
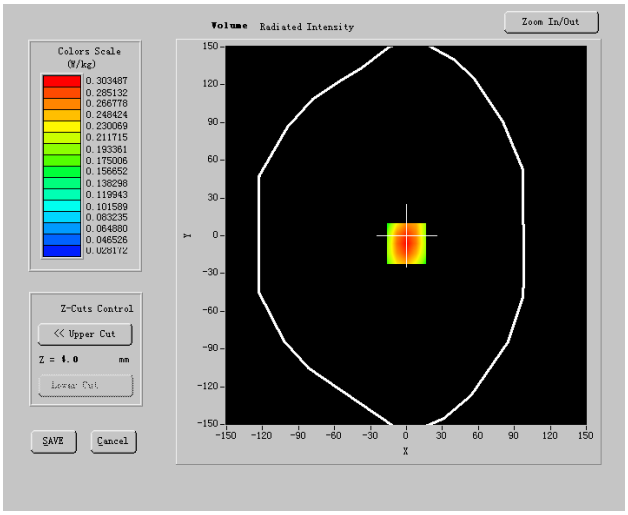
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

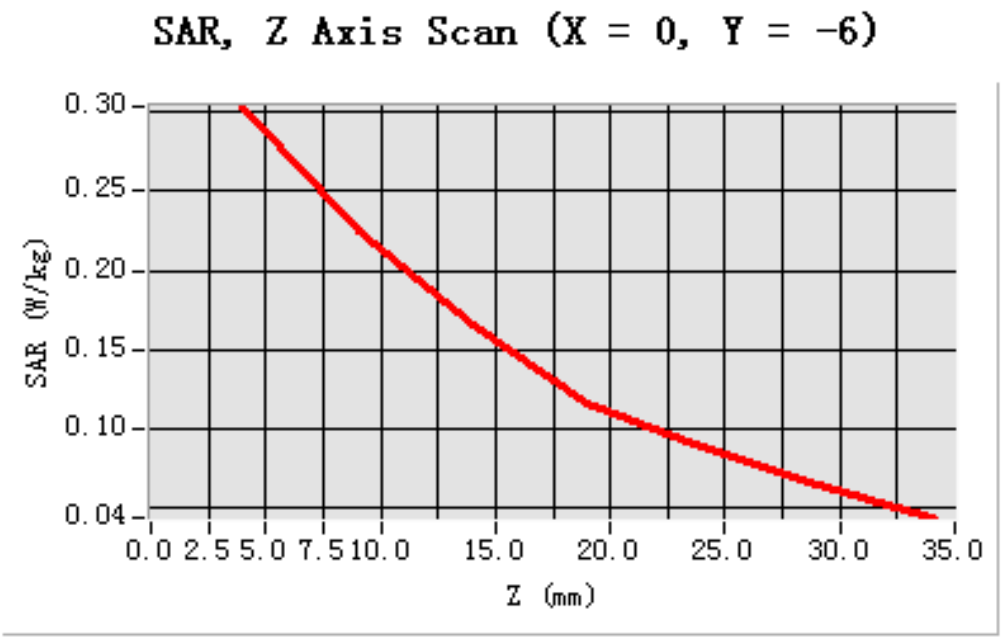
Frequency (MHz)	836.600204
Relative permitivity (real part)	56.500210
Relative permitivity (imaginary part)	21.842010
Conductivity (S/m)	0.974152
Variation (%)	-1.000000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.103389
SAR 1g (W/Kg)	0.152415

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 15

Type: Phone measurement (Complete)

Date of measurement: 08/20/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=848.8MHz; σ=56.52mho/m; εr=0.97; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

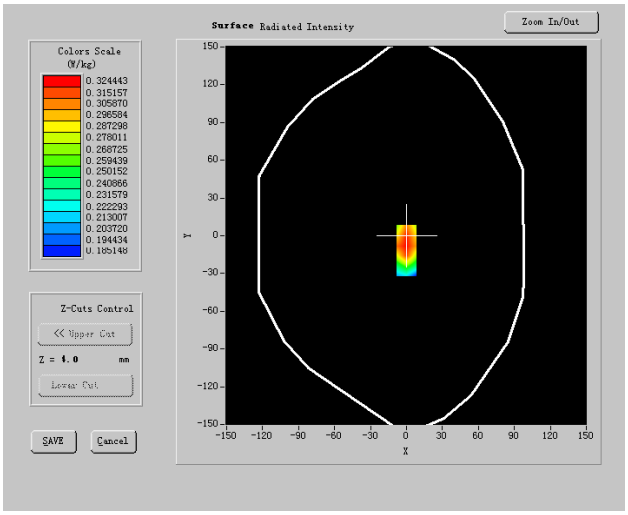
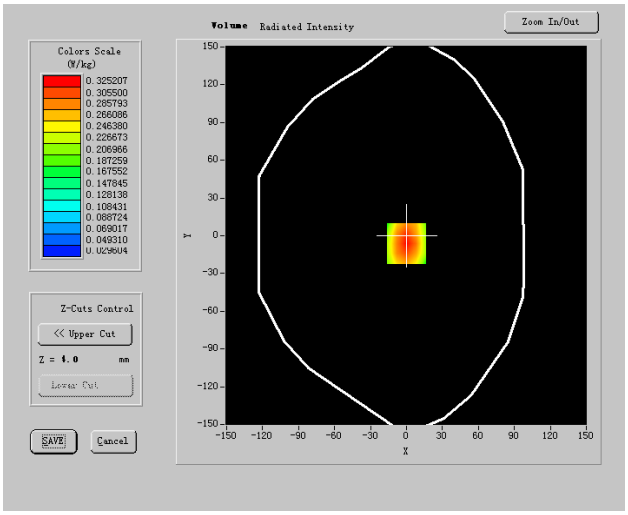
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

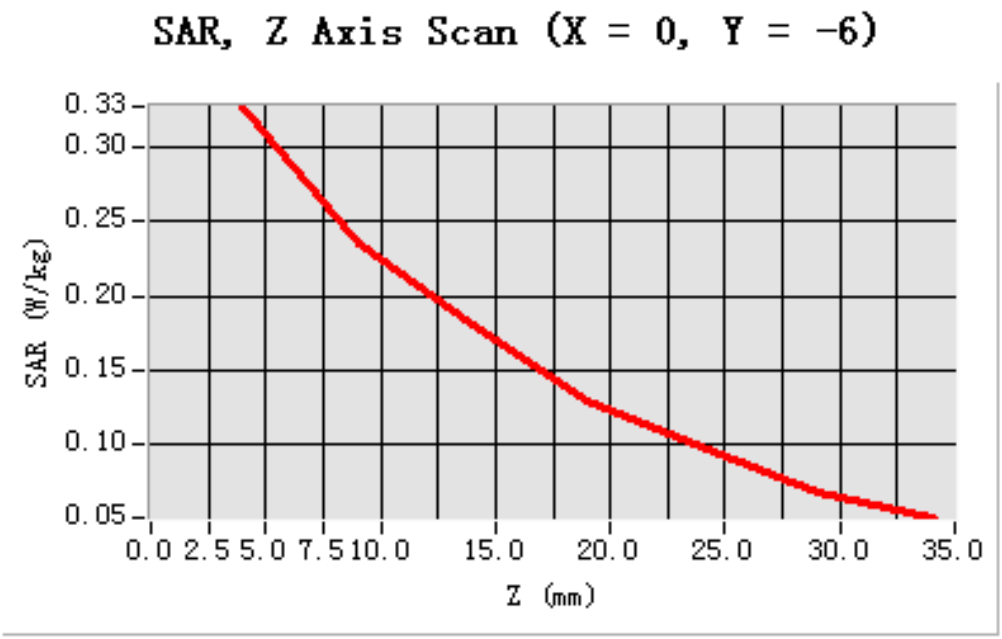
Frequency (MHz)	848.862406
Relative permitivity (real part)	56.524000
Relative permitivity (imaginary part)	21.792101
Conductivity (S/m)	0.973200
Variation (%)	-1.000000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.093471
SAR 1g (W/Kg)	0.164739

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 13: Validation Plane with Body device position on Low Channel in GSM mode Measurement 14: Validation Plane with Body device position on Middle Channel in GSM mode Measurement 15: Validation Plane with Body device position on High Channel in GSM mode

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 08/20/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1850.2MHz; σ=40.30mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

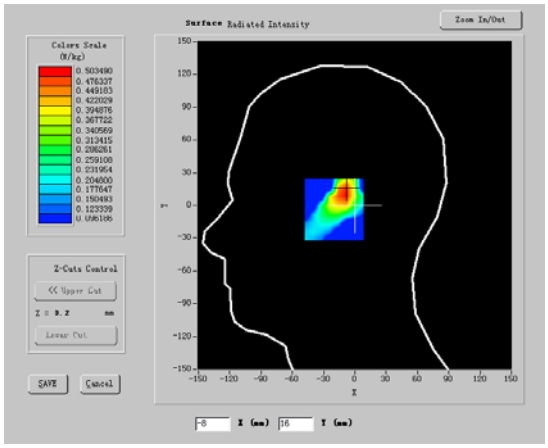
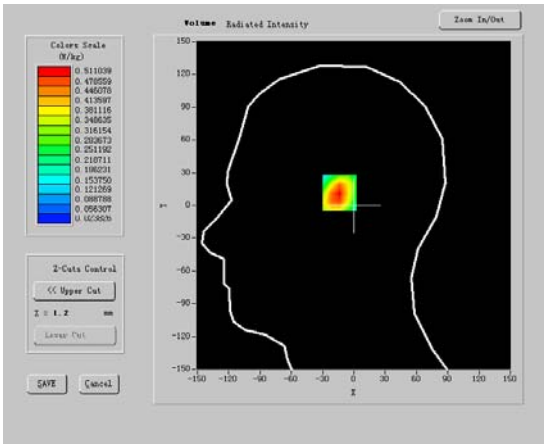
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

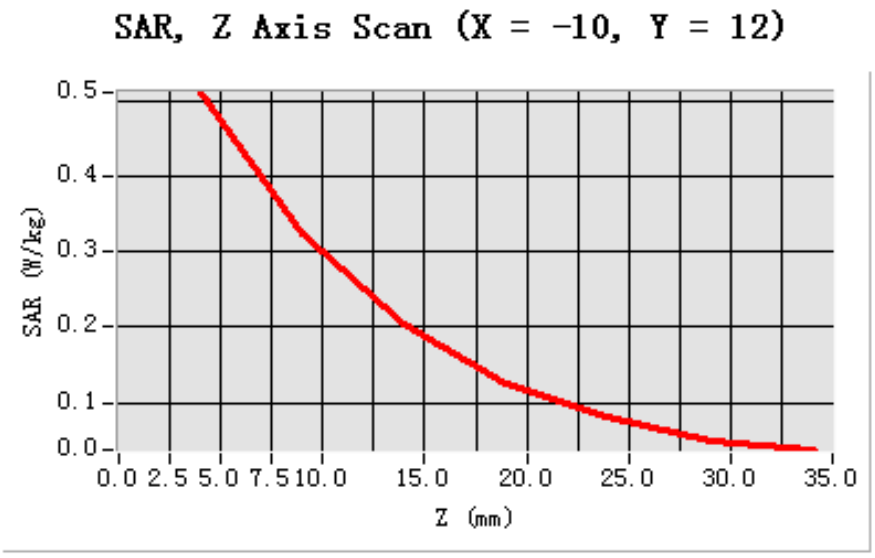
Frequency (MHz)	1850.200024
Relative permitivity (real part)	40.301000
Relative permitivity (imaginary part)	13.546000
Conductivity (S/m)	1.442058
Variation (%)	-1.200000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-10.00, Y=12.00

SAR 10g (W/Kg)	0.311647
SAR 1g (W/Kg)	0.642147

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: 08/20/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1880.0MHz; σ=40.21mho/m; εr=1.42; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

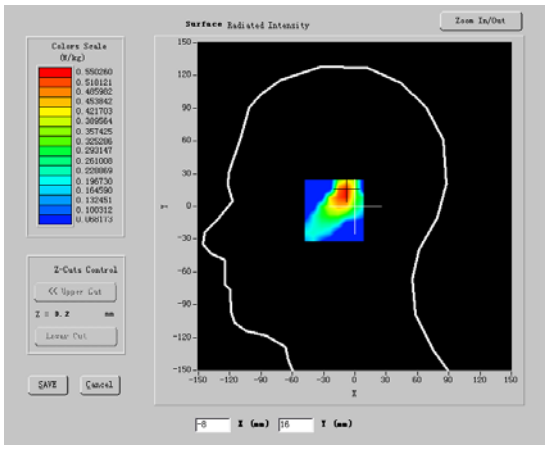
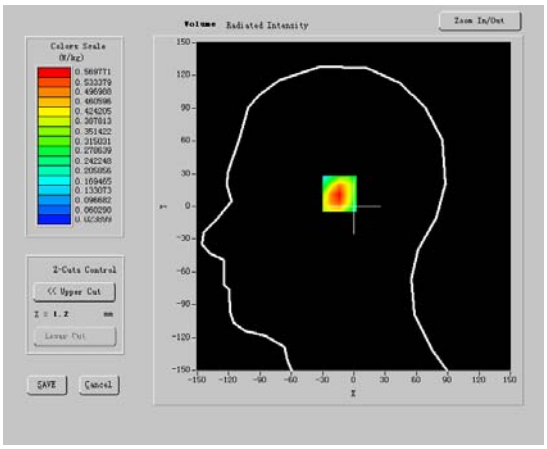
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

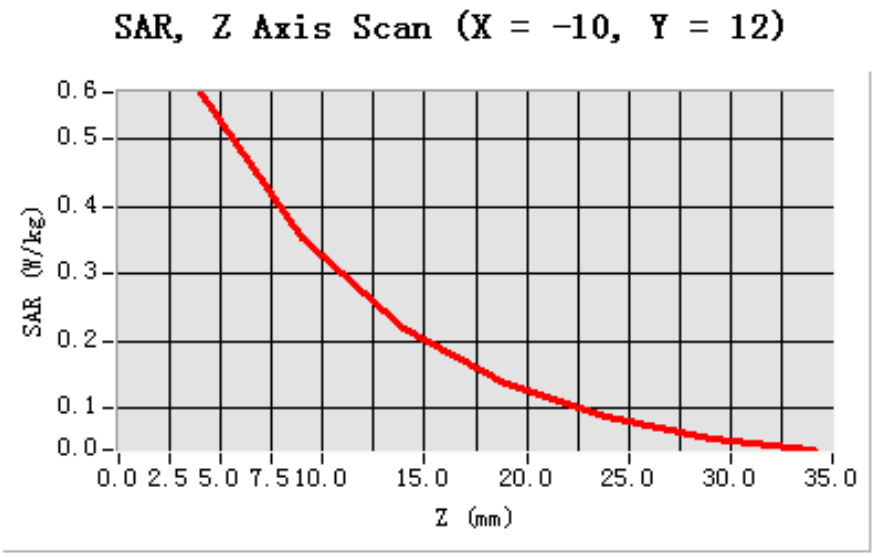
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.212201
Relative permitivity (imaginary part)	13.845200
Conductivity (S/m)	1.423205
Variation (%)	-0.300000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-10.00, Y=12.00

SAR 10g (W/Kg)	0.328957
SAR 1g (W/Kg)	0.671149

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: 08/20/2010

Measurement duration: 15 minutes 3 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1910.0MHz; σ=40.21mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

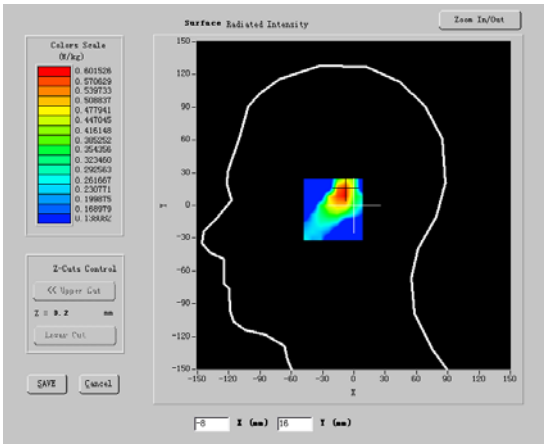
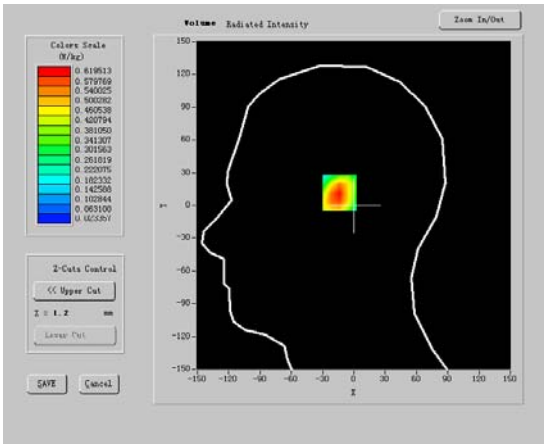
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

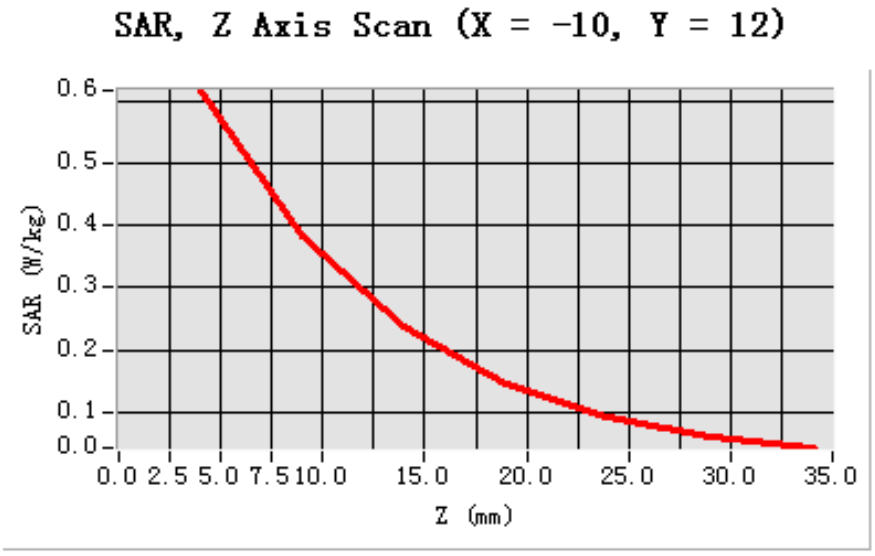
Frequency (MHz)	1910.000216
Relative permitivity (real part)	40.212109
Relative permitivity (imaginary part)	13.646200
Conductivity (S/m)	1.441045
Variation (%)	-0.300000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-10.00, Y=12.00

SAR 10g (W/Kg)	0.320448
SAR 1g (W/Kg)	0.652479

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: 08/20/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1850.2MHz; σ=40.22mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

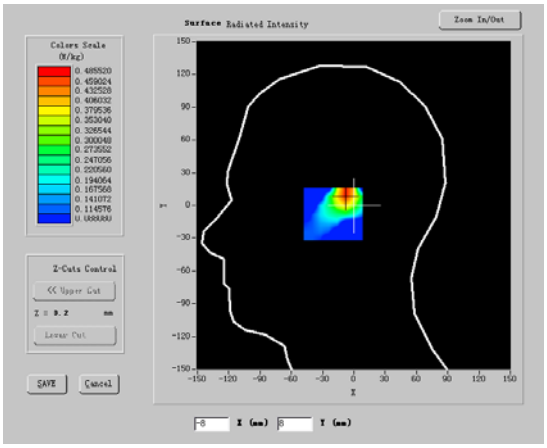
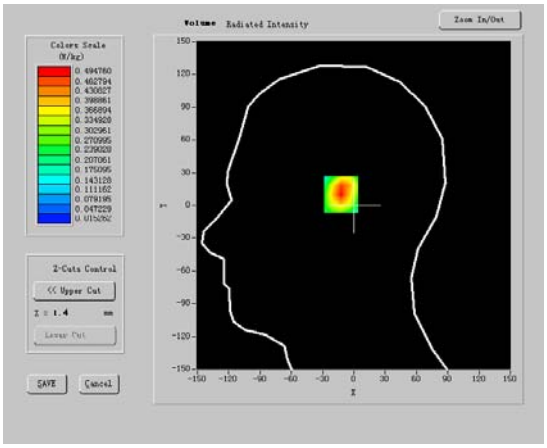
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

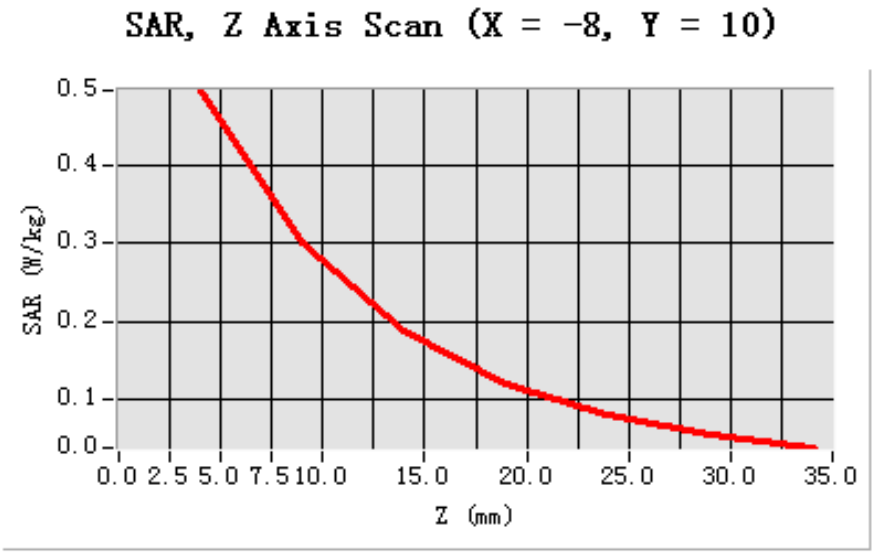
Frequency (MHz)	1850.200020
Relative permitivity (real part)	40.222030
Relative permitivity (imaginary part)	13.594100
Conductivity (S/m)	1.442108
Variation (%)	-1.400000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-8.00, Y=10.00

SAR 10g (W/Kg)	0.116894
SAR 1g (W/Kg)	0.251743

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: 08/20/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1880.0MHz; σ=40.21mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

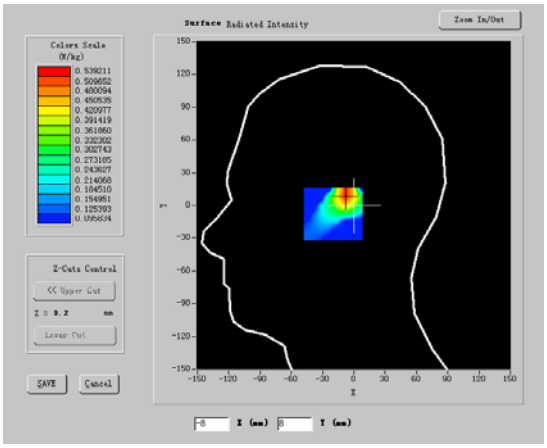
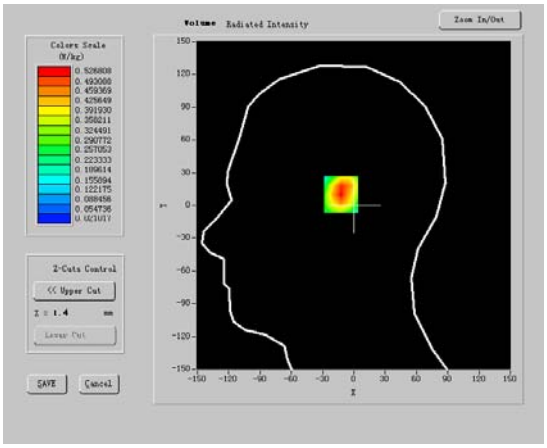
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

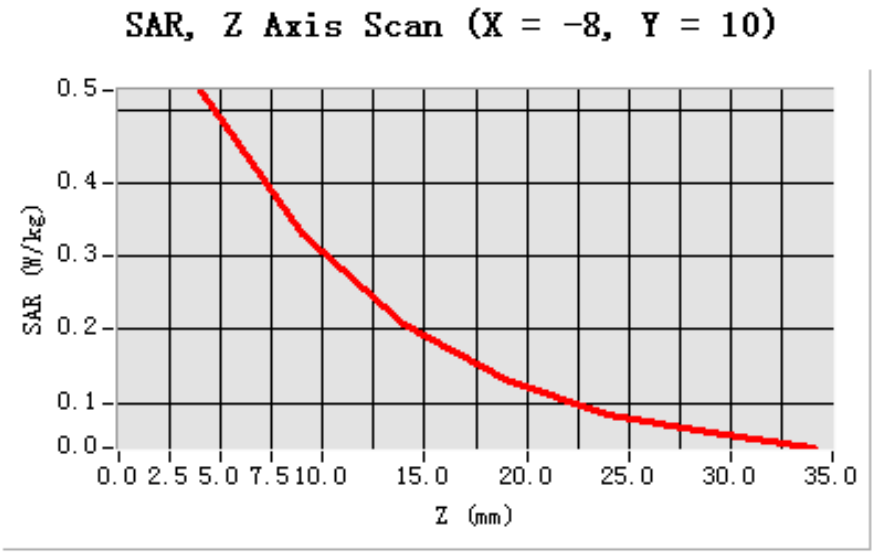
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.211201
Relative permitivity (imaginary part)	13.792000
Conductivity (S/m)	1.442010
Variation (%)	-0.450000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-8.00, Y=10.00

SAR 10g (W/Kg)	0.123067
SAR 1g (W/Kg)	0.272453

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: 08/20/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1910.0MHz; σ=40.21mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

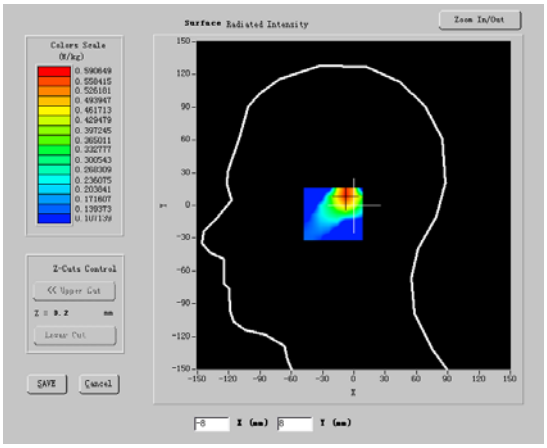
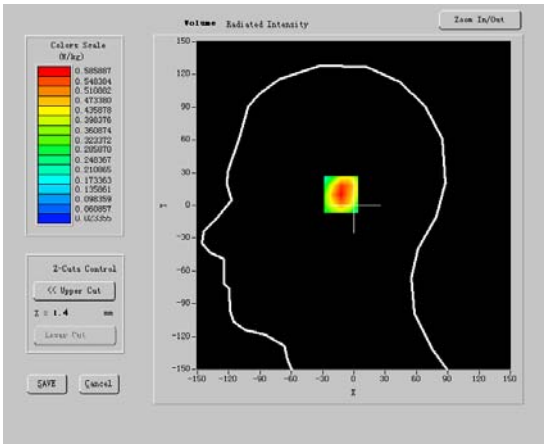
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

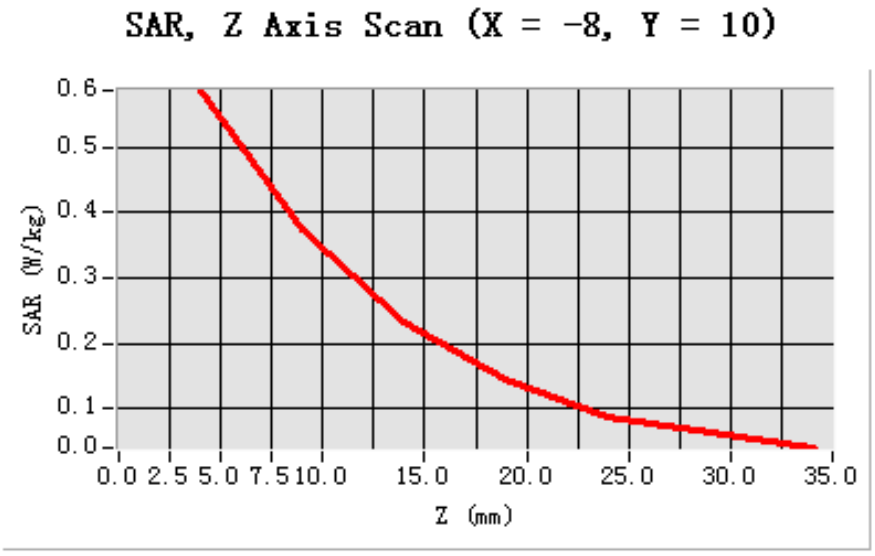
Frequency (MHz)	1910.000216
Relative permitivity (real part)	40.212019
Relative permitivity (imaginary part)	13.220900
Conductivity (S/m)	1.443020
Variation (%)	-1.500000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-8.00, Y=10.00

SAR 10g (W/Kg)	0.108446
SAR 1g (W/Kg)	0.264821

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: 08/20/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1850.2MHz; σ=40.21mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

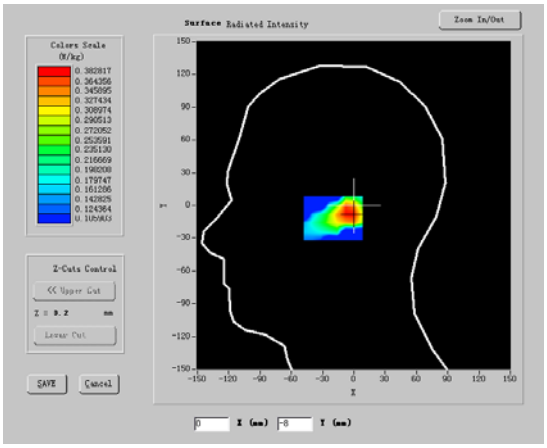
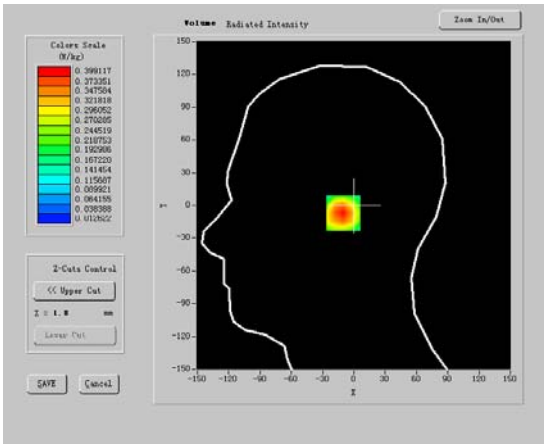
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

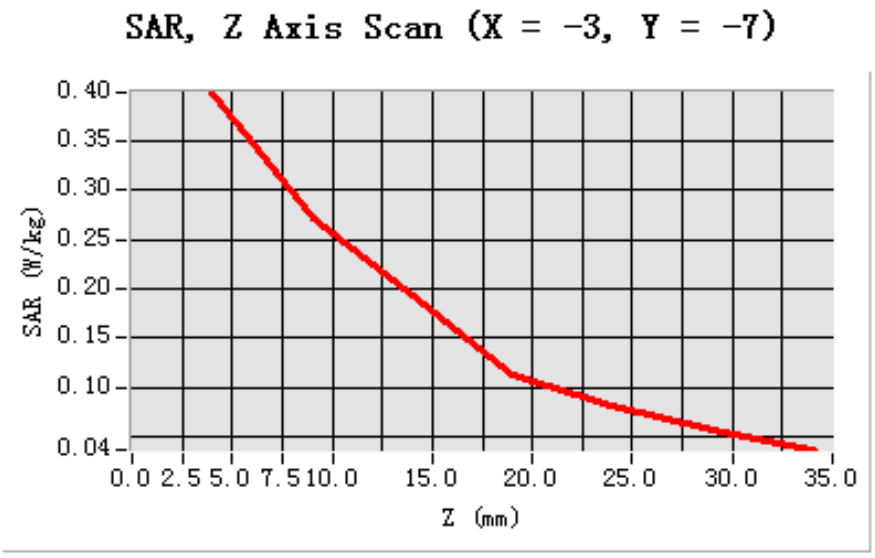
Frequency (MHz)	1850.200001
Relative permitivity (real part)	40.212000
Relative permitivity (imaginary part)	13.582000
Conductivity (S/m)	1.440120
Variation (%)	0.300000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.524162
SAR 1g (W/Kg)	0.842501

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: 08/20/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1880.0MHz; σ=40.22mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

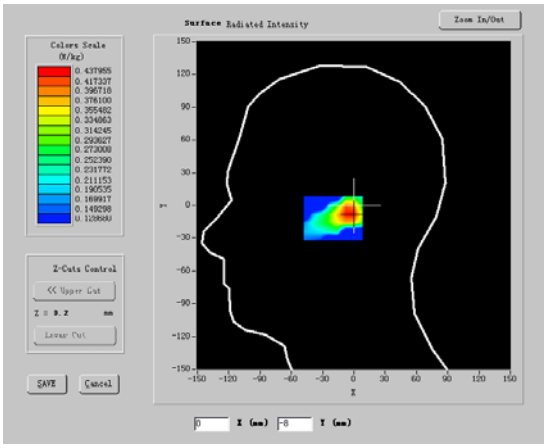
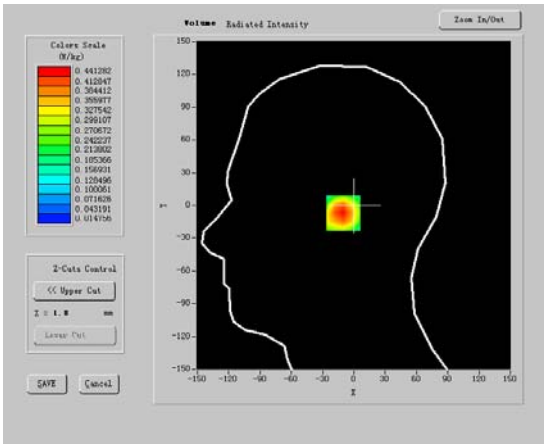
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

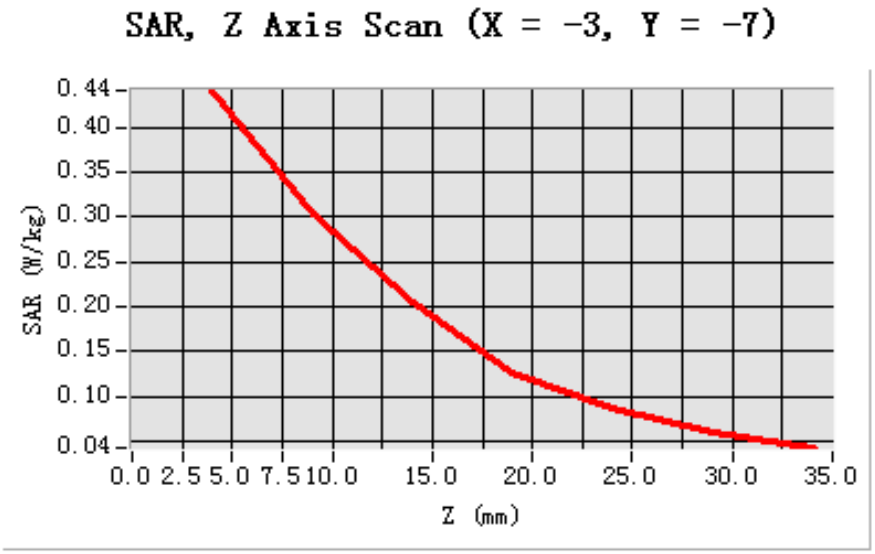
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.225402
Relative permitivity (imaginary part)	13.582000
Conductivity (S/m)	1.440102
Variation (%)	1.400000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.588764
SAR 1g (W/Kg)	0.871420

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: 08/20/2010

Measurement duration: 14 minutes 27 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1910.0MHz; σ=40.22mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

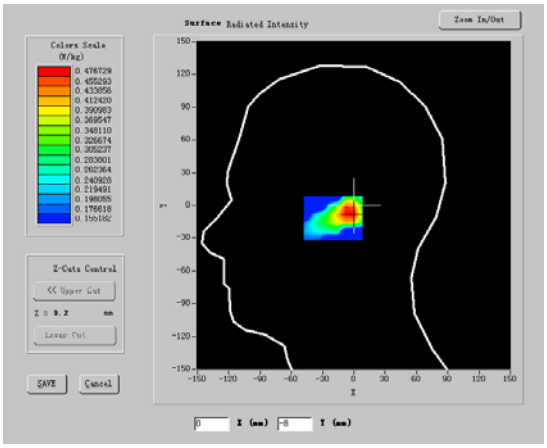
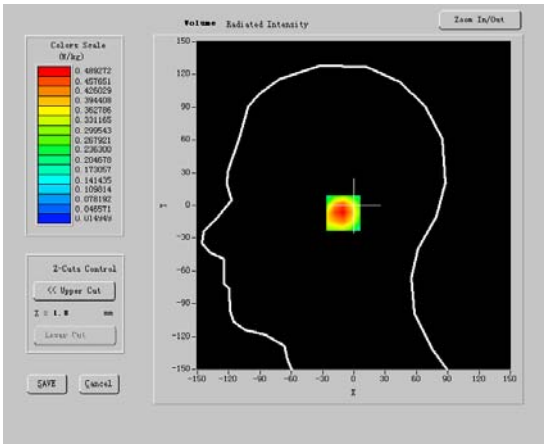
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

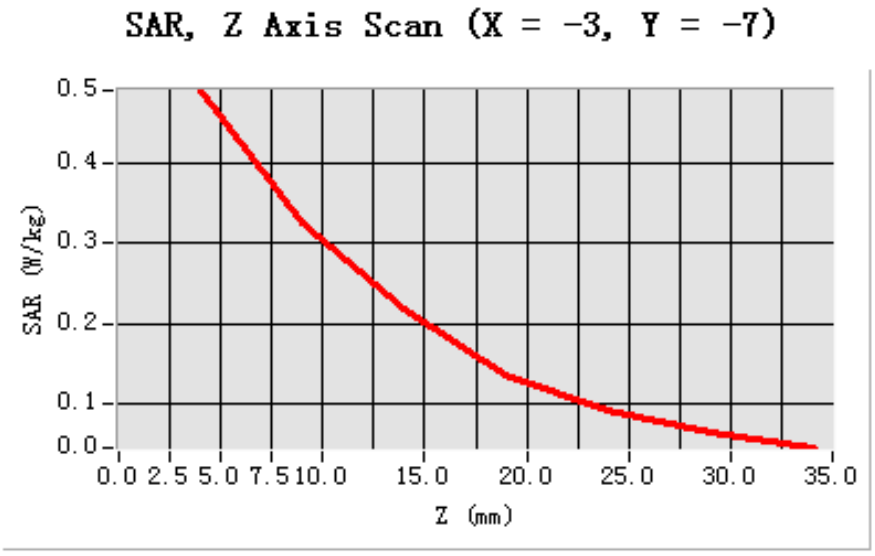
Frequency (MHz)	1910.000276
Relative permitivity (real part)	40.221030
Relative permitivity (imaginary part)	13.601000
Conductivity (S/m)	1.440320
Variation (%)	0.500000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.550437
SAR 1g (W/Kg)	0.812540

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: 08/20/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1850.2MHz; σ=40.40mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

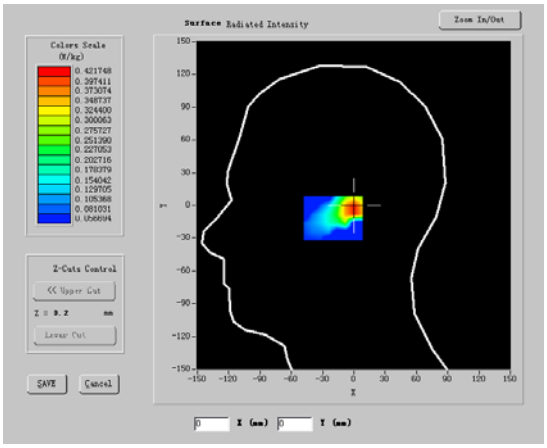
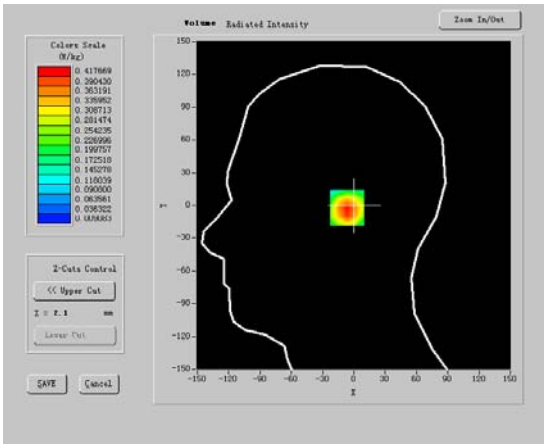
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

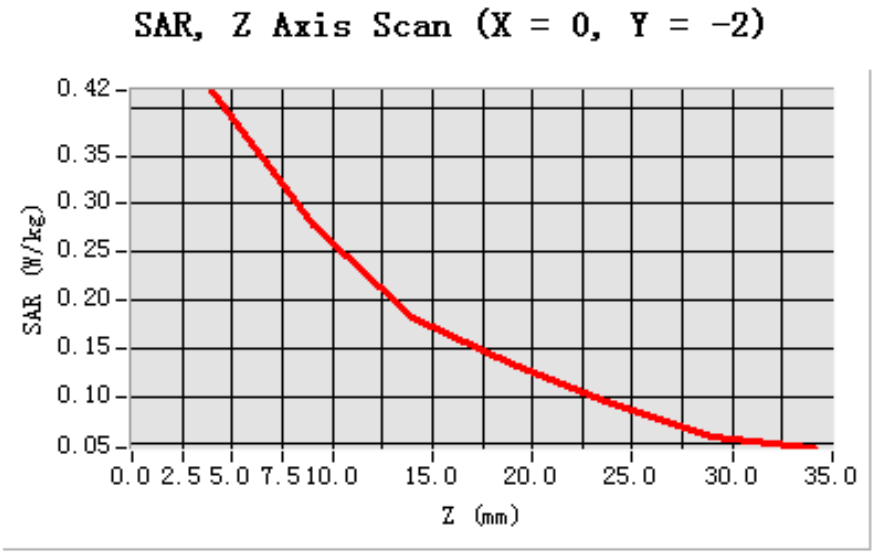
Frequency (MHz)	1850.200004
Relative permitivity (real part)	40.400200
Relative permitivity (imaginary part)	13.582100
Conductivity (S/m)	1.442010
Variation (%)	-0.600000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-2.00

SAR 10g (W/Kg)	0.103671
SAR 1g (W/Kg)	0.323619

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: 08/20/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1880.0MHz; σ=40.21mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

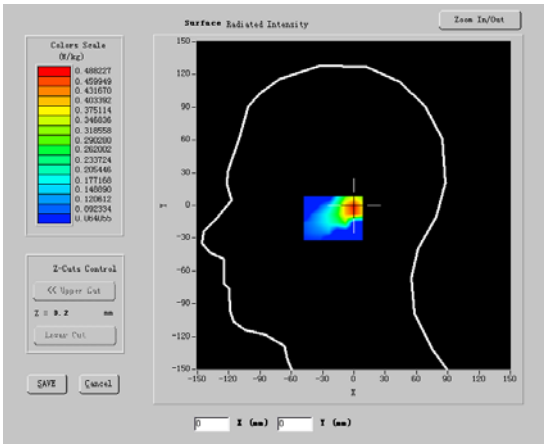
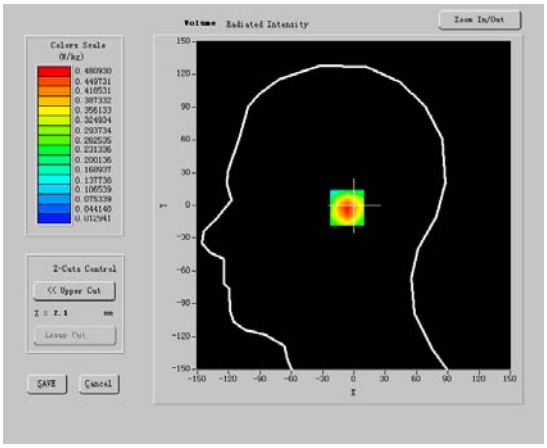
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

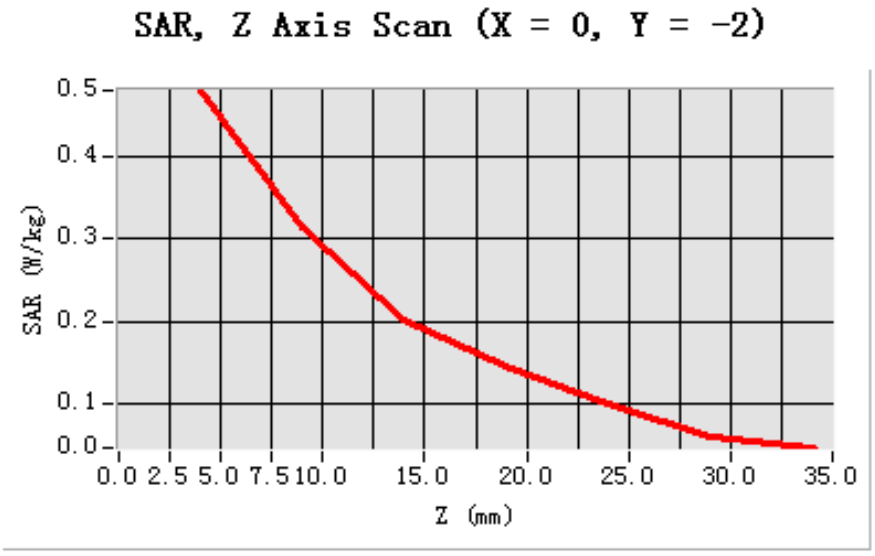
Frequency (MHz)	1880.000000
Relative permitivity (real part)	40.210201
Relative permitivity (imaginary part)	13.590100
Conductivity (S/m)	1.442010
Variation (%)	-1.200000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-2.00

SAR 10g (W/Kg)	0.134805
SAR 1g (W/Kg)	0.321745

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: 08/20/2010

Measurement duration: 14 minutes 19 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1910.0MHz; σ=40.21mho/m; εr=1.44; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

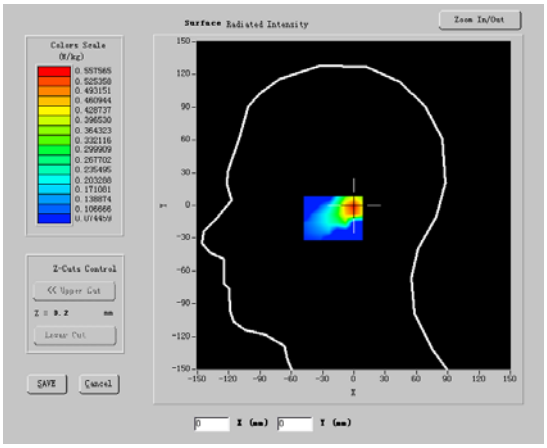
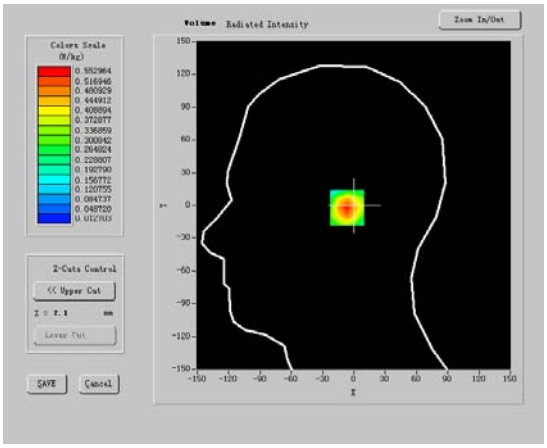
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

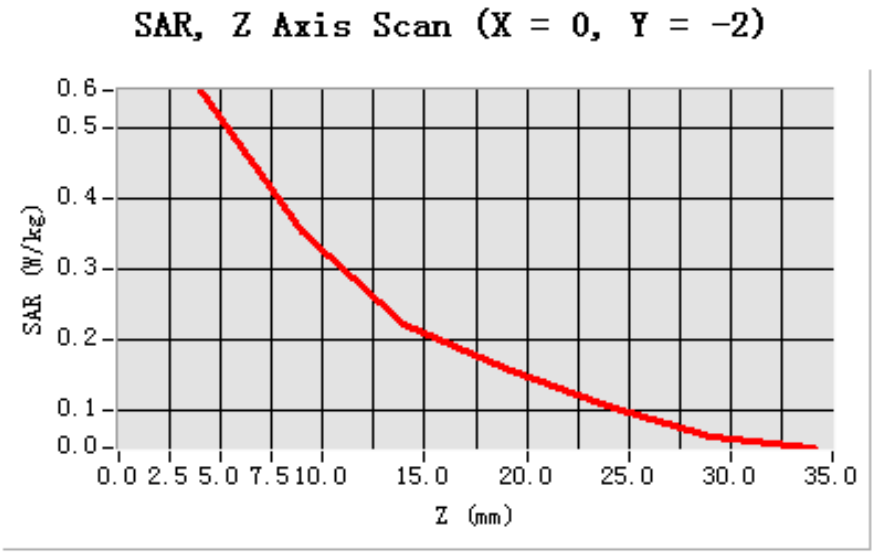
Frequency (MHz)	1910.002076
Relative permitivity (real part)	40.210203
Relative permitivity (imaginary part)	13.610100
Conductivity (S/m)	1.443205
Variation (%)	-1.140000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-2.00

SAR 10g (W/Kg)	0.124356
SAR 1g (W/Kg)	0.333251

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)

MEASUREMENT 13

Type: Phone measurement (Complete)

Date of measurement: 08/20/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1850.2MHz; σ=53.00mho/m; εr=1.50; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

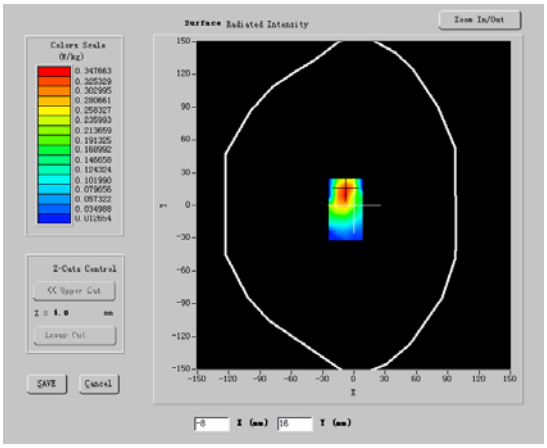
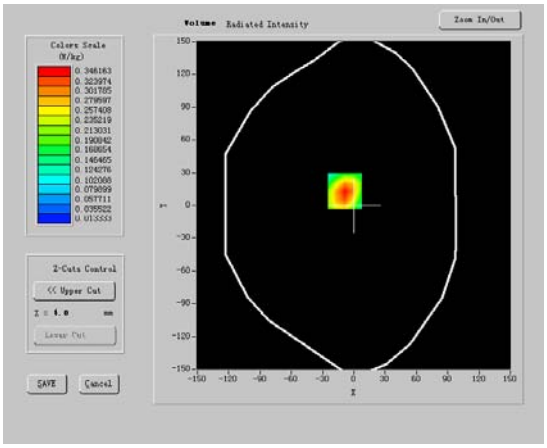
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

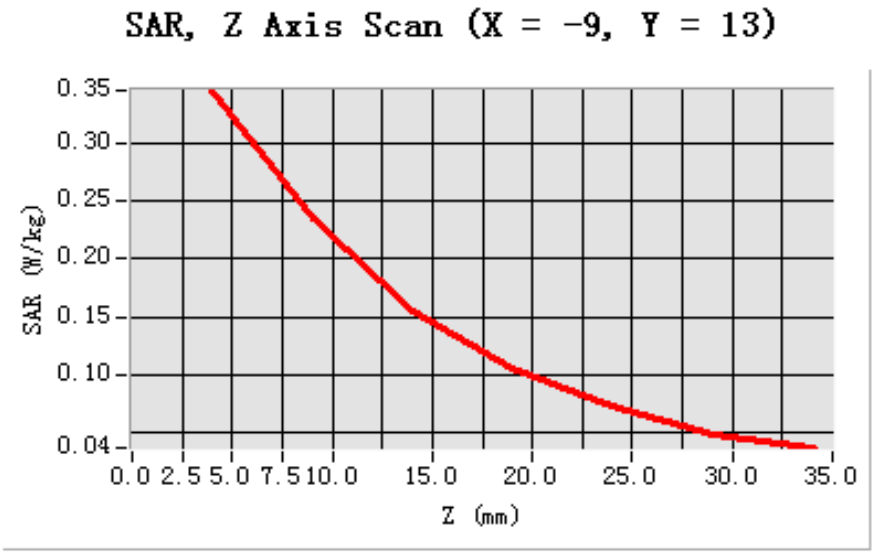
Frequency (MHz)	1850.200004
Relative permitivity (real part)	53.002000
Relative permitivity (imaginary part)	13.572000
Conductivity (S/m)	1.496001
Variation (%)	-0.130000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-9.00, Y=13.00

SAR 10g (W/Kg)	0.095674
SAR 1g (W/Kg)	0.161472

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 14

Type: Phone measurement (Complete)

Date of measurement: 08/20/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1880.0MHz; σ=52.95mho/m; εr=1.50; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

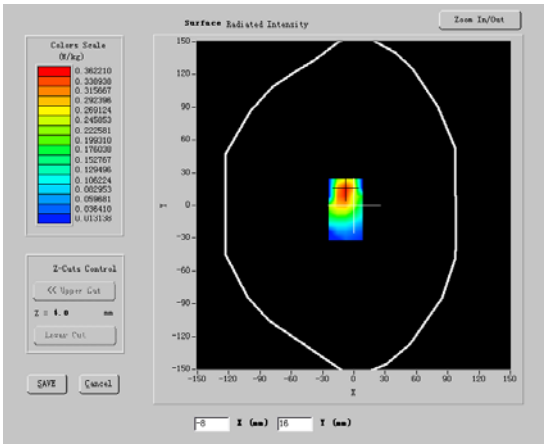
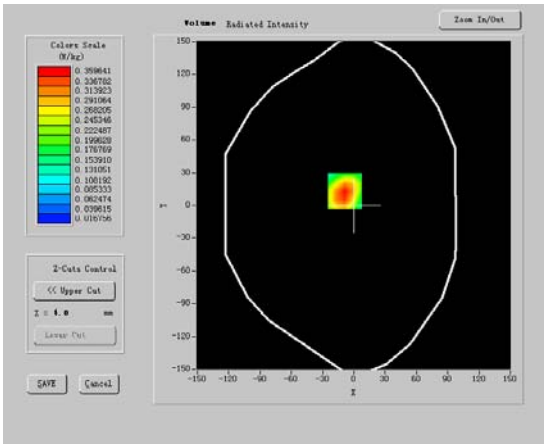
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

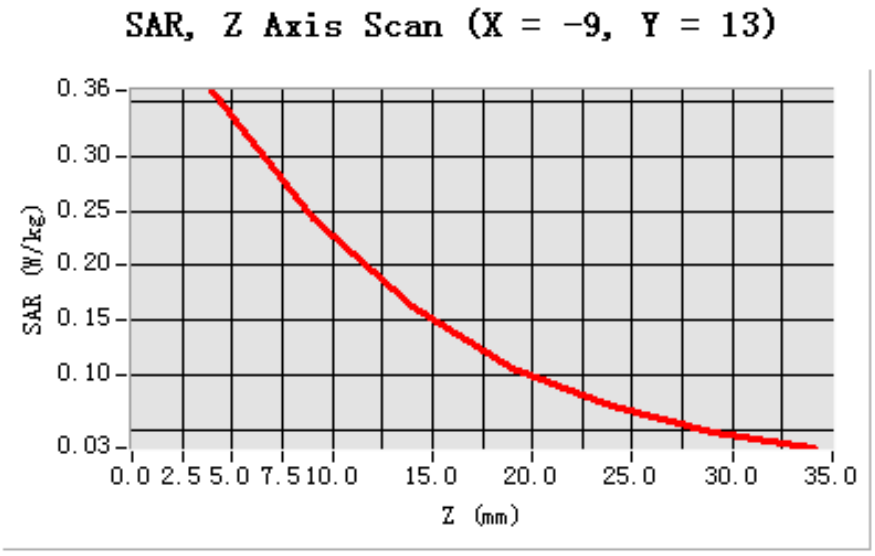
Frequency (MHz)	1880.000000
Relative permitivity (real part)	52.952001
Relative permitivity (imaginary part)	13.62100
Conductivity (S/m)	1.500210
Variation (%)	-0.600000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-9.00, Y=13.00

SAR 10g (W/Kg)	0.103667
SAR 1g (W/Kg)	0.194713

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 15

Type: Phone measurement (Complete)

Date of measurement: 08/20/2010

Measurement duration: 14 minutes 44 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GSM Duty cycle: 1:8
Medium parameters used: f=1910.0MHz; σ=52.98mho/m; εr=1.50; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

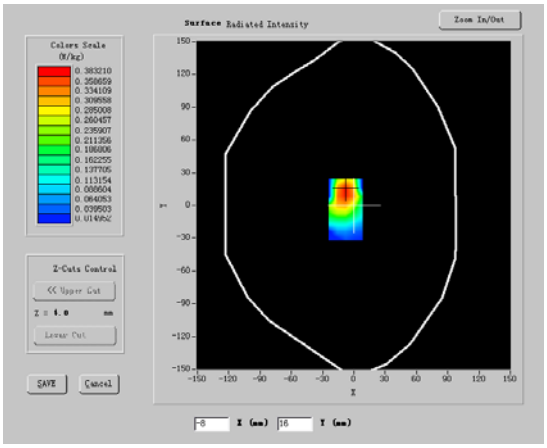
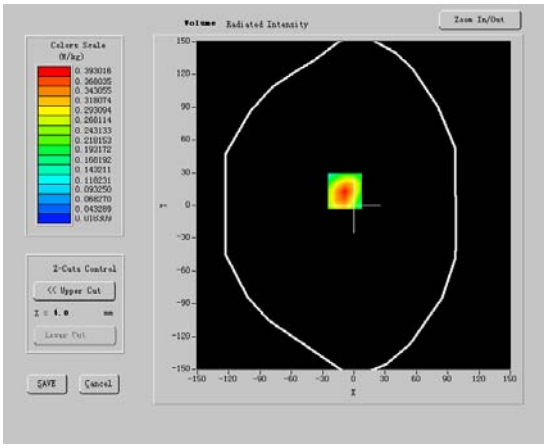
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	GSM

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

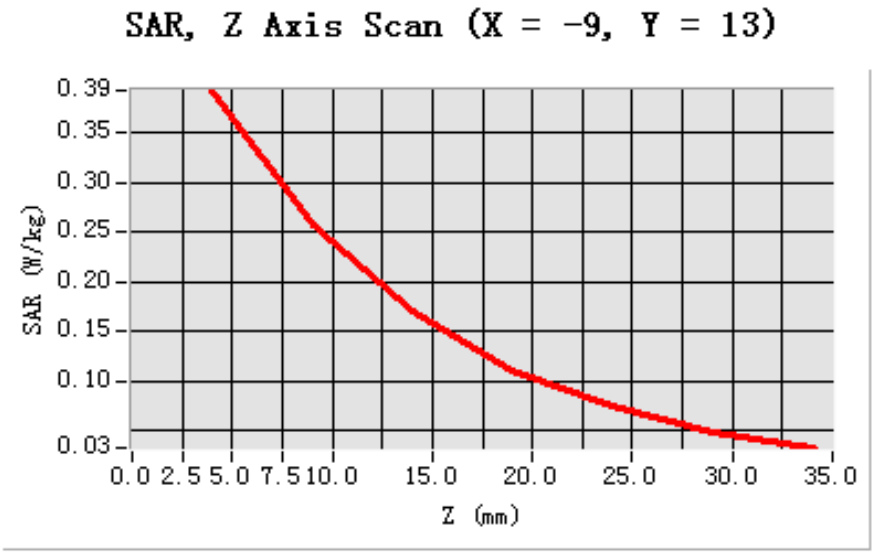
Frequency (MHz)	1909.590210
Relative permitivity (real part)	52.980210
Relative permitivity (imaginary part)	13.606200
Conductivity (S/m)	1.500125
Variation (%)	-0.100000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=-9.00, Y=13.00

SAR 10g (W/Kg)	0.099347
SAR 1g (W/Kg)	0.151738

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 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: 08/20/2010

Measurement duration: 6 minutes 46 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GPRS Duty cycle: 1:2
Medium parameters used: f=1850.2MHz; σ=52.85mho/m; εr=1.50; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

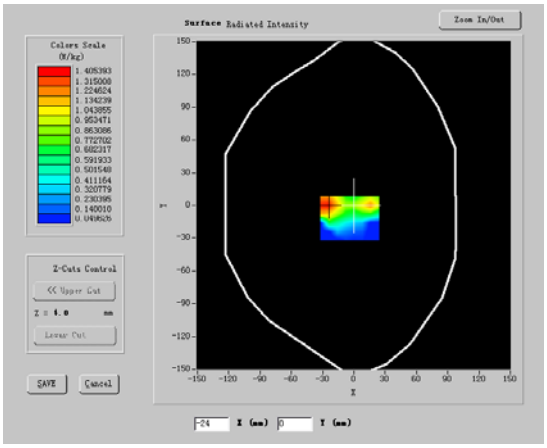
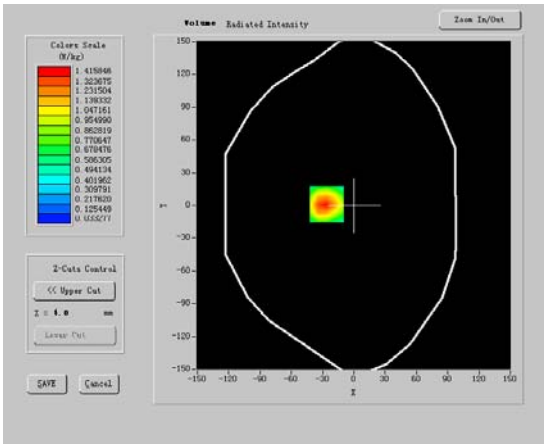
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Channels	Low
Signal	GPRS

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

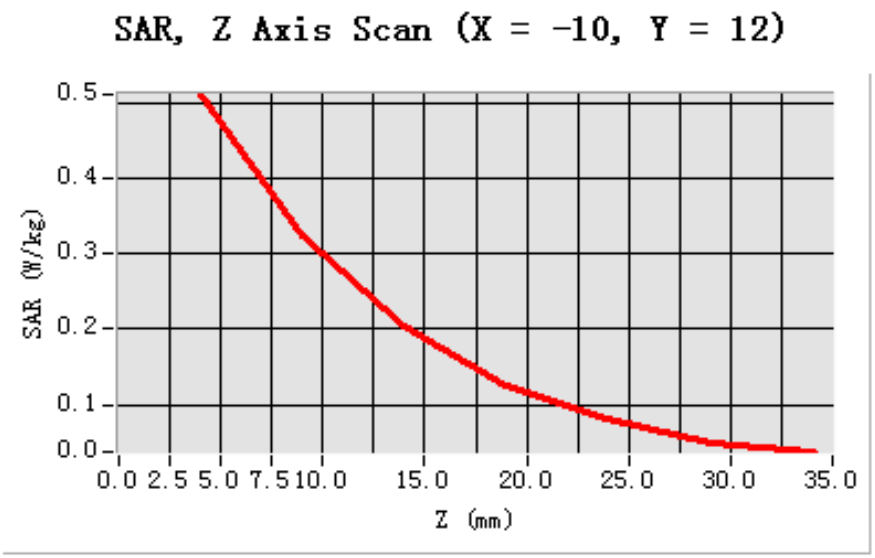
Frequency (MHz)	1850.199021
Relative permitivity (real part)	52.852100
Relative permitivity (imaginary part)	14.441202
Conductivity (S/m)	1.500321
Variation (%)	-0.100000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.611458
SAR 1g (W/Kg)	0.802475

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: 08/20/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GPRS Duty cycle: 1:2
Medium parameters used: f=1880.0MHz; σ=52.90mho/m; εr=1.50; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

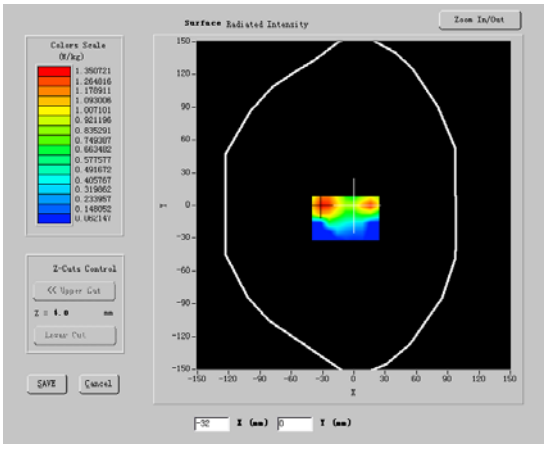
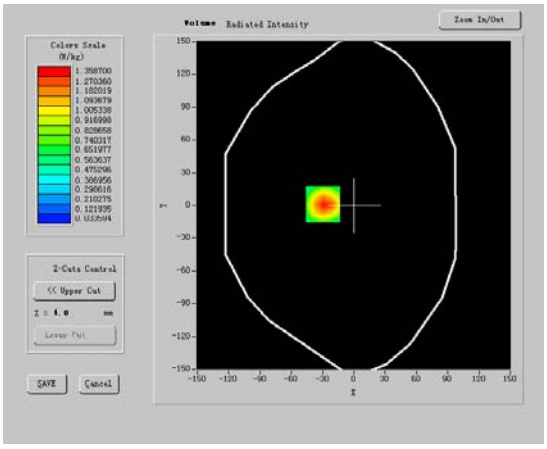
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Channels	Middle
Signal	GPRS

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

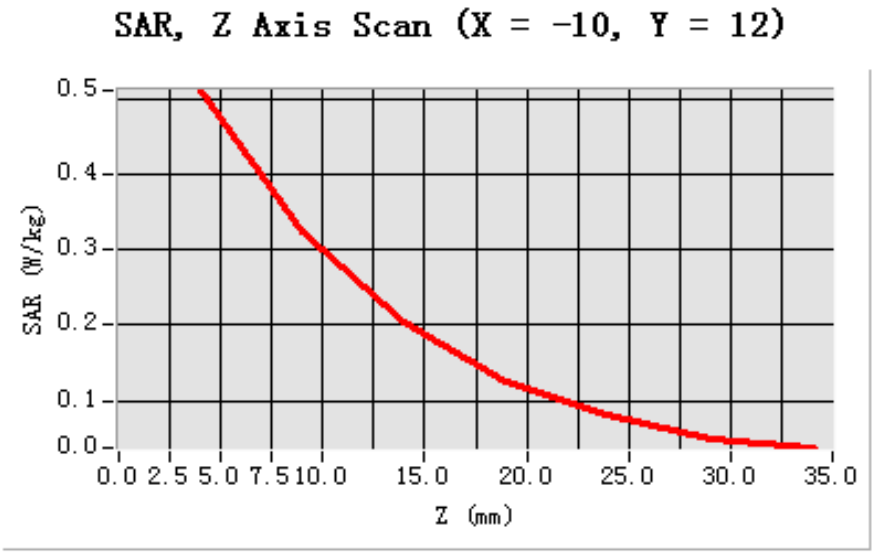
Frequency (MHz)	1880.000004
Relative permitivity (real part)	52.902103
Relative permitivity (imaginary part)	14.255206
Conductivity (S/m)	1.500203
Variation (%)	-2.000000

SURFACE SAR	**VOLUME SAR**
	

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

SAR 10g (W/Kg)	0.633841
SAR 1g (W/Kg)	0.835841

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: 08/20/2010

Measurement duration: 6 minutes 21 seconds

Mobile Phone IMEI number: --

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GPRS Duty cycle: 1:2
Medium parameters used: f=1910.0MHz; σ=52.91mho/m; εr=1.50; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

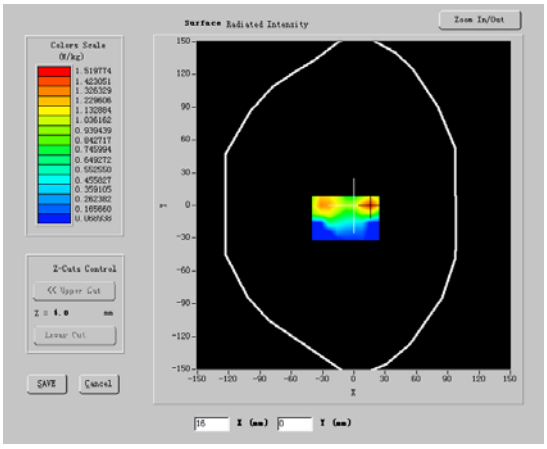
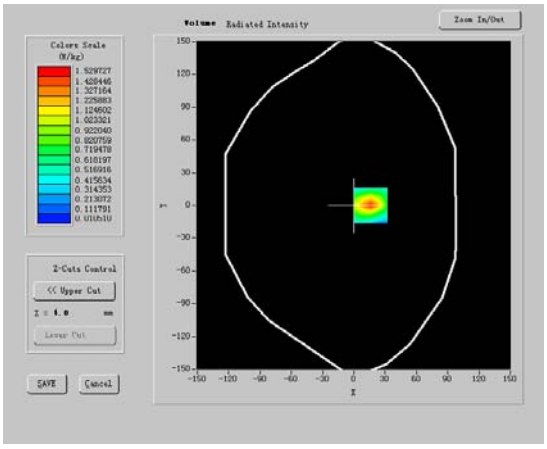
Phantom File	zinf15.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS1900
Channels	High
Signal	GPRS

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

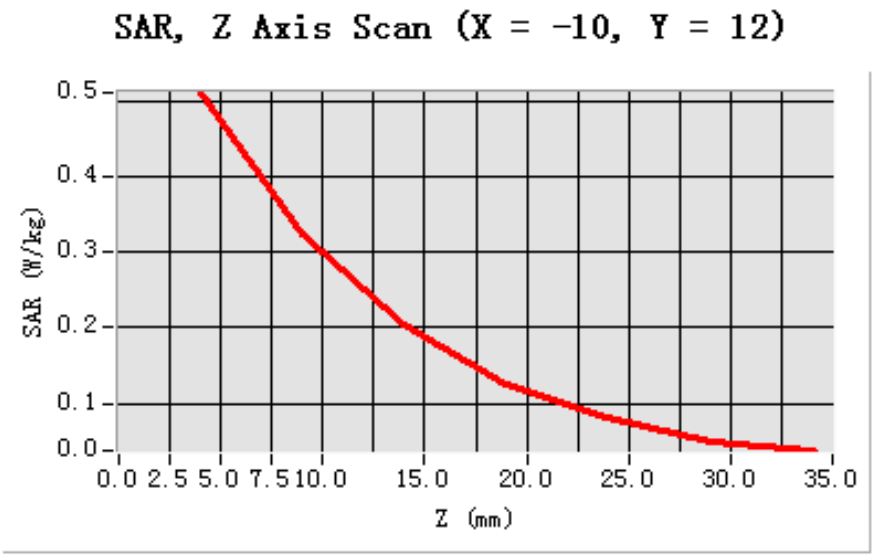
Frequency (MHz)	1910.029036
Relative permitivity (real part)	52.910010
Relative permitivity (imaginary part)	14.311200
Conductivity (S/m)	1.500102
Variation (%)	-0.100000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=2.00, Y=9.00

SAR 10g (W/Kg)	0.621407
SAR 1g (W/Kg)	0.823533

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)

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: 08/20/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GPRS Duty cycle: 1:2
Medium parameters used: f=824.2MHz; σ=56.55mho/m; εr=0.98; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

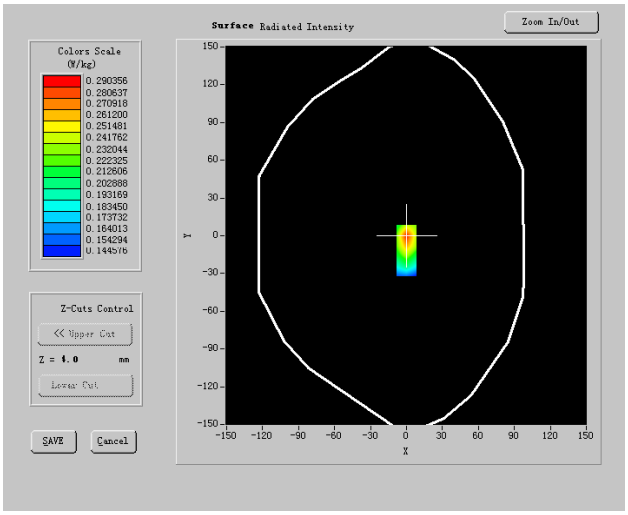
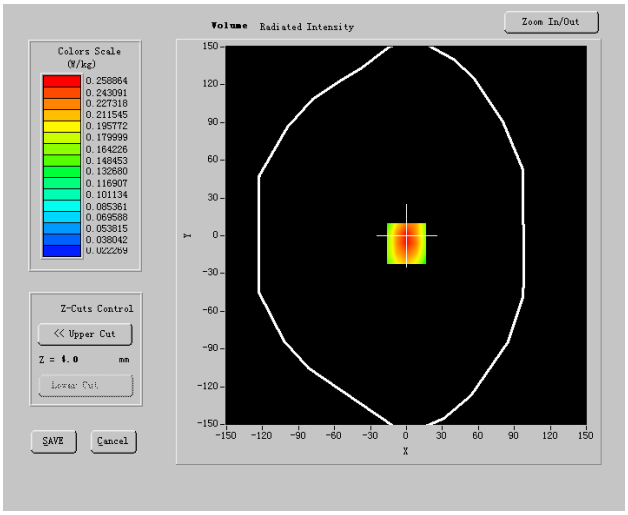
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	Low
Signal	GPRS

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

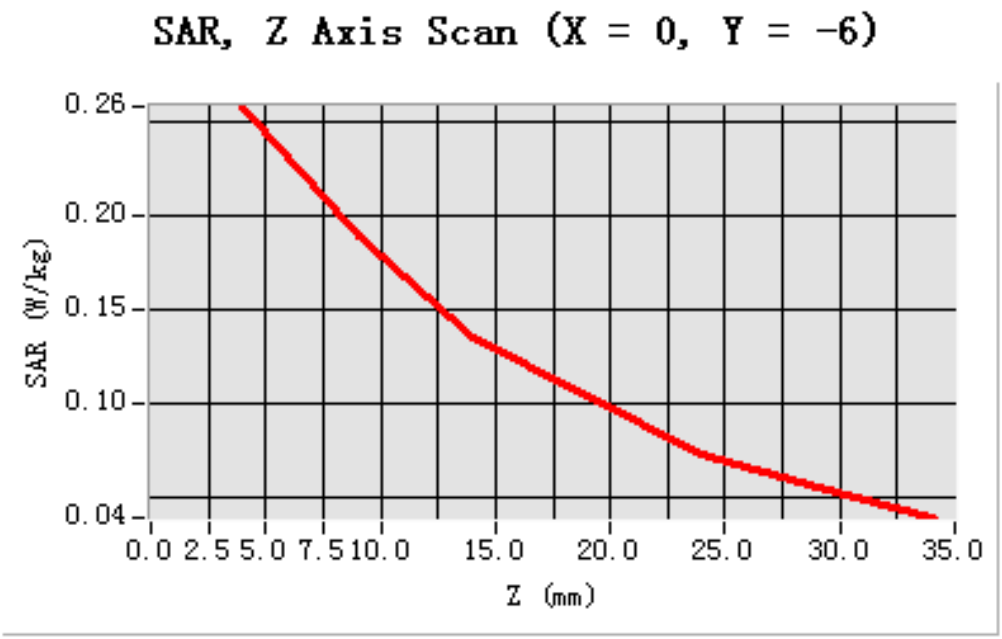
Frequency (MHz)	824.200012
Relative permitivity (real part)	56.552000
Relative permitivity (imaginary part)	21.672100
Conductivity (S/m)	0.980120
Variation (%)	-0.130000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.205444
SAR 1g (W/Kg)	0.564711

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: 08/20/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GPRS Duty cycle: 1:2
Medium parameters used: f=836.6MHz; σ=55.51mho/m; εr=0.98; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

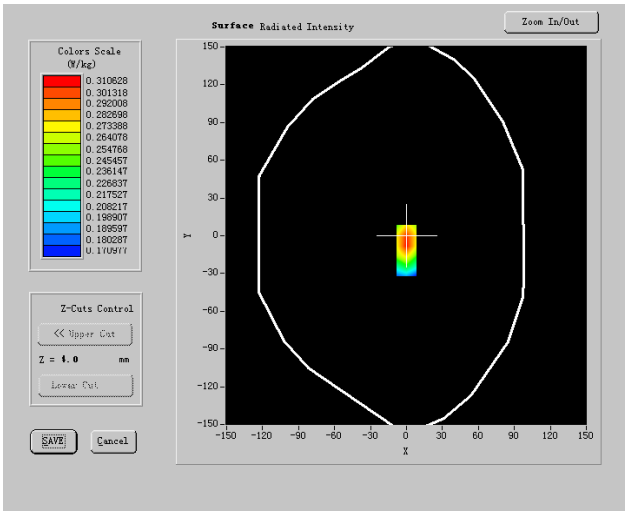
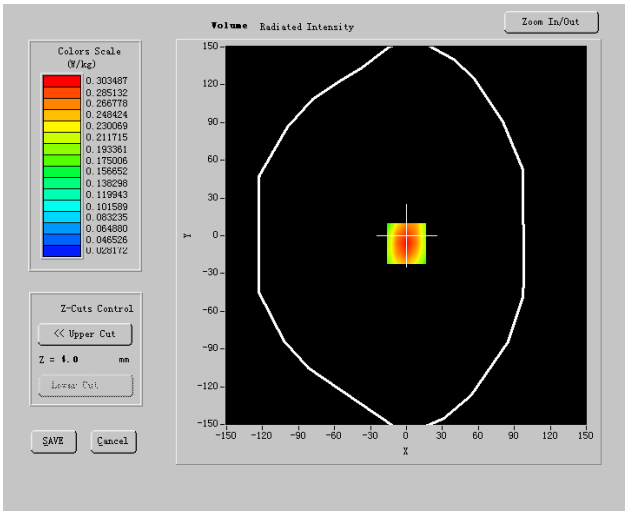
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	Middle
Signal	GPRS

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

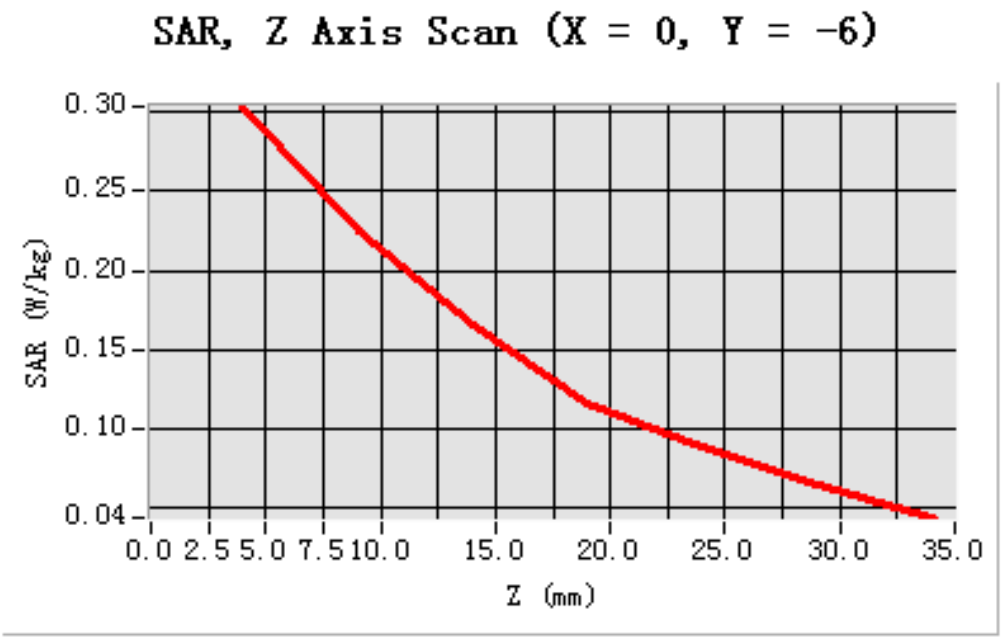
Frequency (MHz)	836.600004
Relative permitivity (real part)	55.511019
Relative permitivity (imaginary part)	21.833209
Conductivity (S/m)	0.981052
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.222369
SAR 1g (W/Kg)	0.652747

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: 08/20/2010

Measurement duration: 14 minutes 29 seconds

Mobile Phone IMEI number:

Air Temperature: 21 °C Liqued Temperature: 20 °C
Crest Factor: GPRS Duty cycle: 1:2
Medium parameters used: f=848.8MHz; σ=55.51mho/m; εr=0.98; ρ =1000kg/m^3
Area Scan: 7 x 7 x 1 dx=15mm dy=15mm
Zoom Scan: 5 x 5 x 7 dx=5mm dy=5mm dz=5mm
Z Axis Scan: 1 x 1 x 21 dx=20mm dy=20mm dz=5mm

A. Experimental conditions.

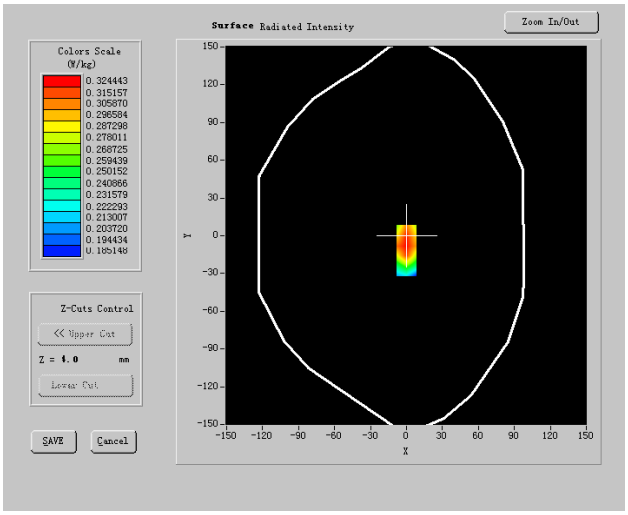
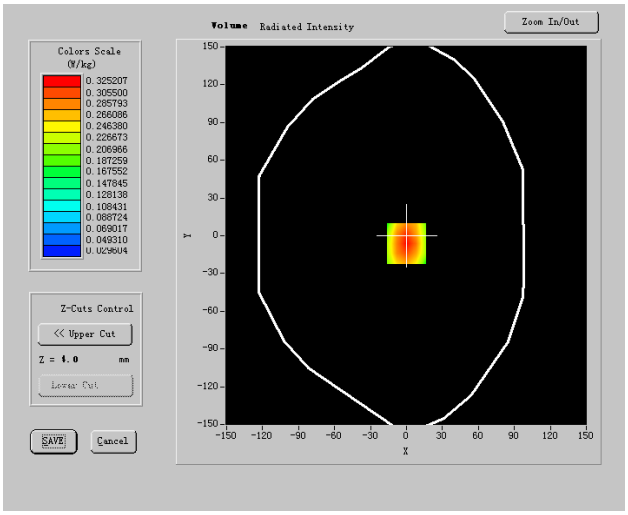
Phantom File	surf_sam_plan.txt, Adaptative 2 max
Phantom	Validation plane
Device Position	Body
Band	GPRS850
Channels	High
Signal	GPRS

B. Instrumentations.

PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)	Calibrated: N/A
Network Emulator	R&S (CMU200, SN:B23-03291)	Calibrated: 06/17/2010
Voltmeter	Keithley (2000, SN:1015843)	Calibrated: 05/01/2010
Synthetizer	Agilent (E8257C, SN:MY43321570)	Calibrated: 08/07/2010
Amplifier	Mini-Circuits (ZHL-42, SN:110405)	Calibrated: 07/29/2010
Power Meter	Agilent (E4416A, SN:QB41292714)	Calibrated: 07/29/2010
Probe	Antennessa (SN:SN_1109_EP_100)	Calibrated: 04/16/2010
Phantom	Antennessa (SN:SN41_05_SAM29)	Calibrated: N/A
Liquid	Antennessa	Calibrated: N/A
Measurement SW:	OPEN SAR V2.1	Calibrated: N/A

C. SAR Measurement Results

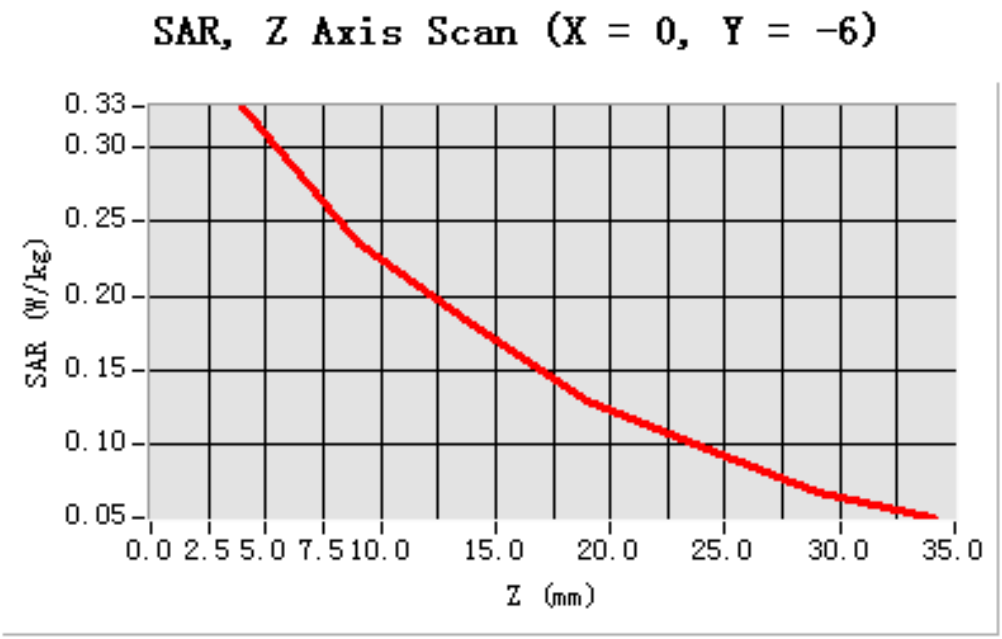
Frequency (MHz)	848.799001
Relative permitivity (real part)	55.512010
Relative permitivity (imaginary part)	21.820101
Conductivity (S/m)	0.979012
Variation (%)	-0.200000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=0.00, Y=-6.00

SAR 10g (W/Kg)	0.215476
SAR 1g (W/Kg)	0.513222

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)