
	SAR MEASUREMENT REPORT
	Project name :
	KS070924A01

I. RESULTS

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

Ambient temperature:19C

Liquid Temperature:20C__

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 26/10/2007

Measurement duration: 19 minutes 23 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

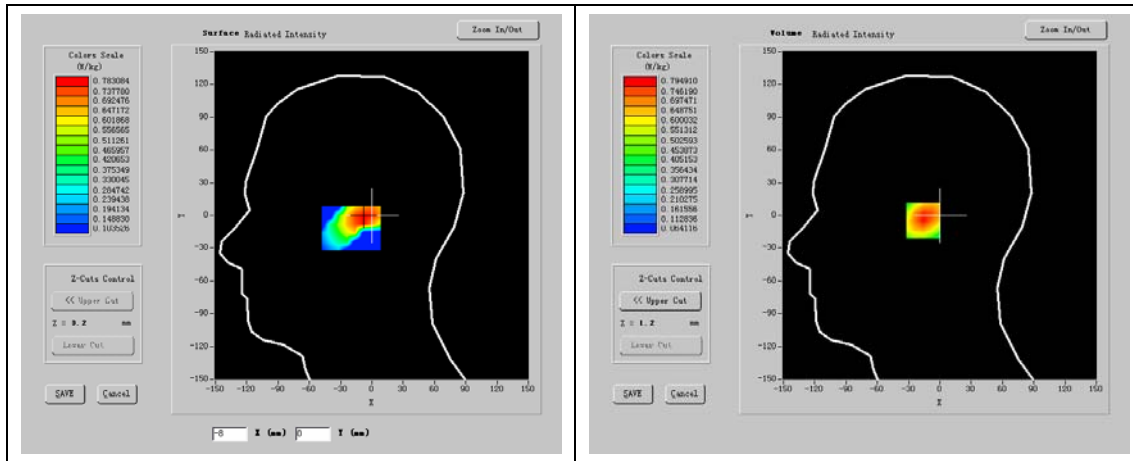
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.466999
Relative permittivity (imaginary part)	19.511101
Conductivity (S/m)	0.893392
Variation (%)	1.180000

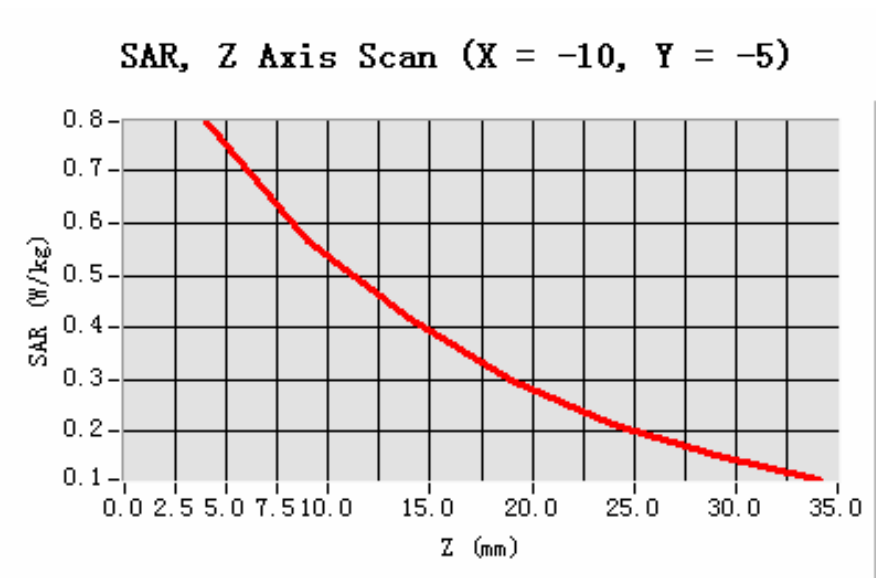
SURFACE SAR	VOLUME SAR
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Maximum location: X=-10.00, Y=-5.00

SAR 10g (W/Kg)	0.514359
SAR 1g (W/Kg)	0.759035

Z Axis Scan



MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 26/10/2007

Measurement duration: 19 minutes 23 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

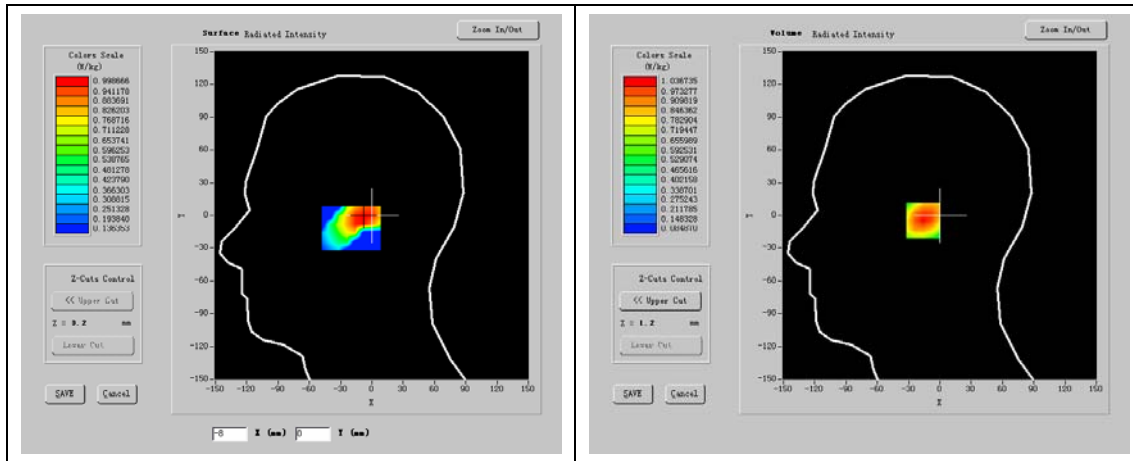
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Middle Band SAR (Channel 189):

Frequency (MHz)	836.400024
Relative permittivity (real part)	41.466999
Relative permittivity (imaginary part)	19.511101
Conductivity (S/m)	0.906616
Variation (%)	1.180000

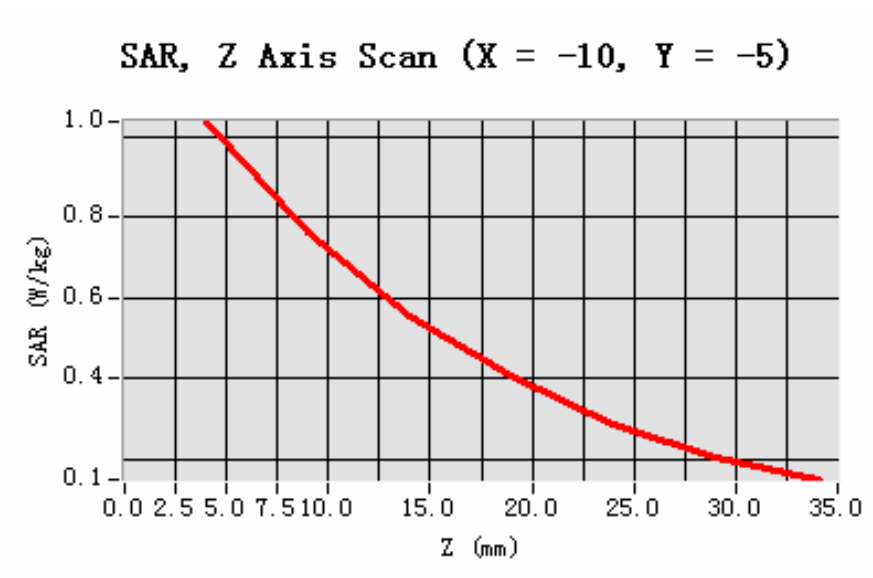
SURFACE SAR	VOLUME SAR
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Maximum location: X=-10.00, Y=-5.00

SAR 10g (W/Kg)	0.683275
SAR 1g (W/Kg)	0.994934

Z Axis Scan



MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 19 minutes 23 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

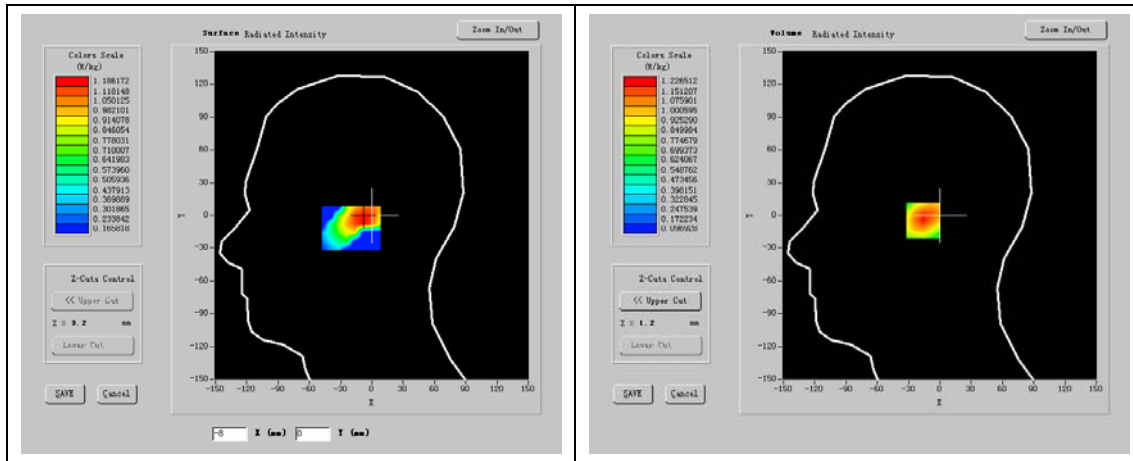
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthesizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Higher Band SAR (Channel 250):

Frequency (MHz)	848.599976
Relative permittivity (real part)	41.262001
Relative permittivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	1.180000

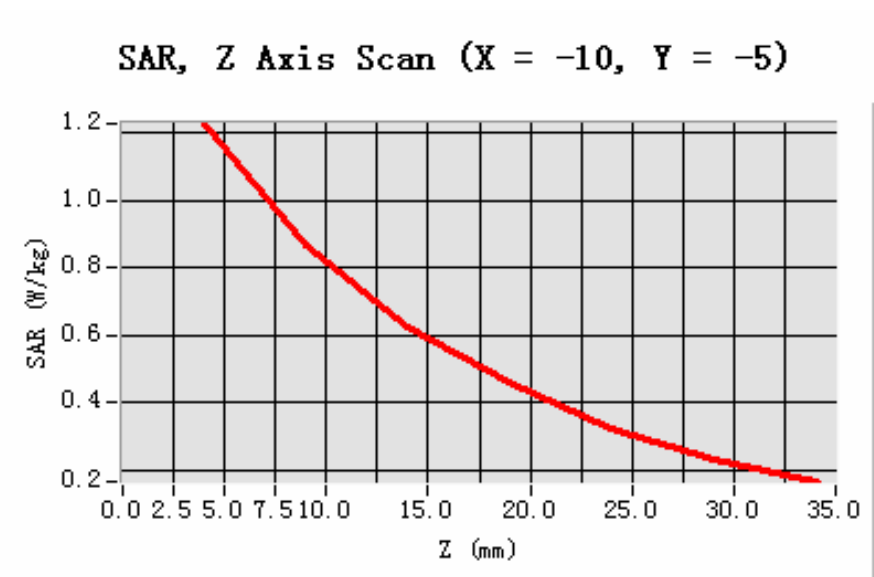
SURFACE SAR	VOLUME SAR
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Maximum location: X=-10.00, Y=-5.00

SAR 10g (W/Kg)	0.783368
SAR 1g (W/Kg)	1.166634

Z Axis Scan



MEASUREMENT 4

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 19 minutes 48 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	GMSK

B. Instrumentations.

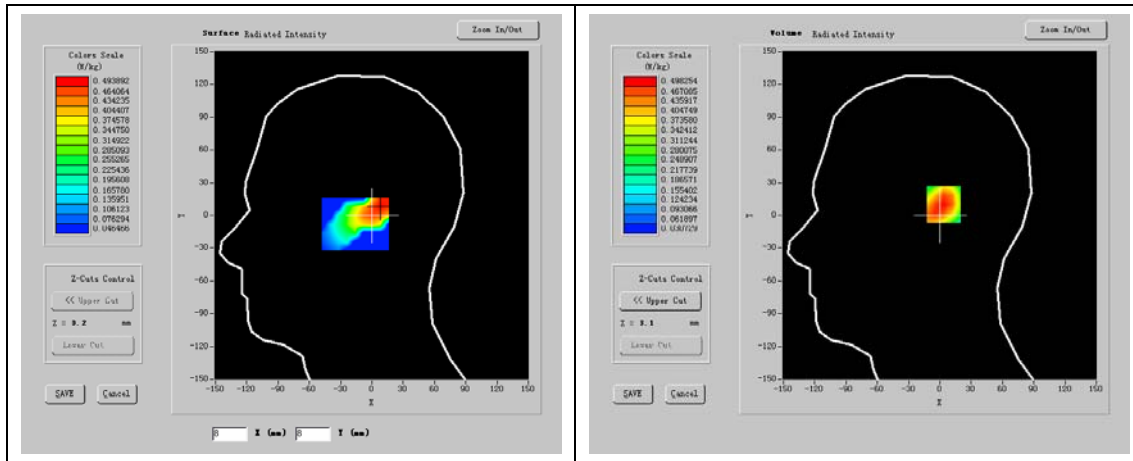
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthesizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.466999
Relative permittivity (imaginary part)	19.511101
Conductivity (S/m)	0.893392
Variation (%)	-0.480000

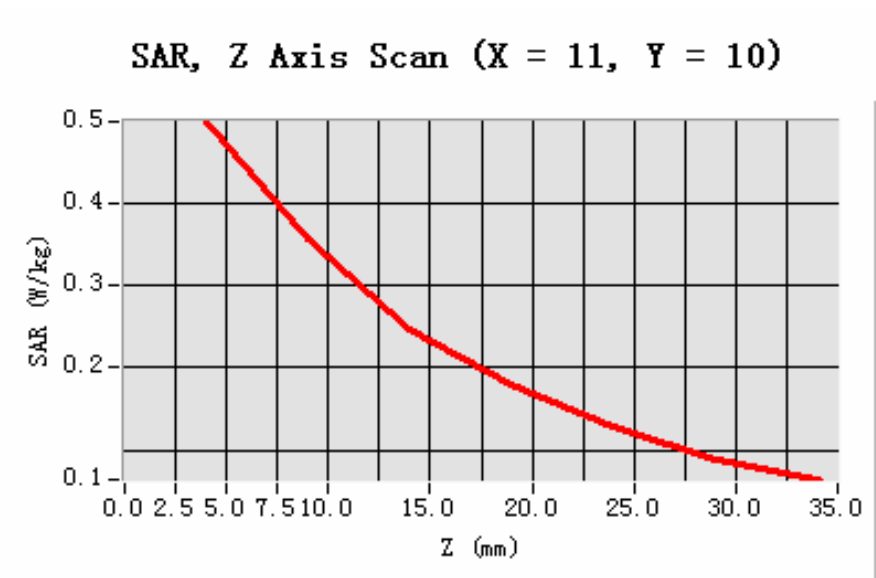
SURFACE SAR	VOLUME SAR
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Maximum location: X=11.00, Y=10.00

SAR 10g (W/Kg)	0.323696
SAR 1g (W/Kg)	0.480760

Z Axis Scan



MEASUREMENT 5

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 19 minutes 48 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

Phantom File	zinf15.txt, Adaptive 2 max
Phantom	Right hand
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GMSK

B. Instrumentations.

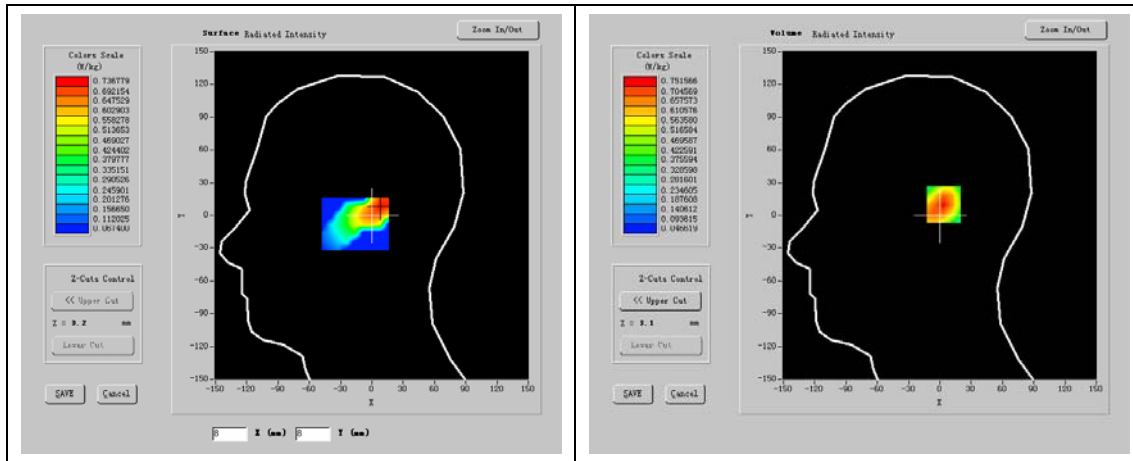
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthesizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Middle Band SAR (Channel 189):

Frequency (MHz)	836.400024
Relative permittivity (real part)	41.466999
Relative permittivity (imaginary part)	19.511101
Conductivity (S/m)	0.906616
Variation (%)	-0.480000

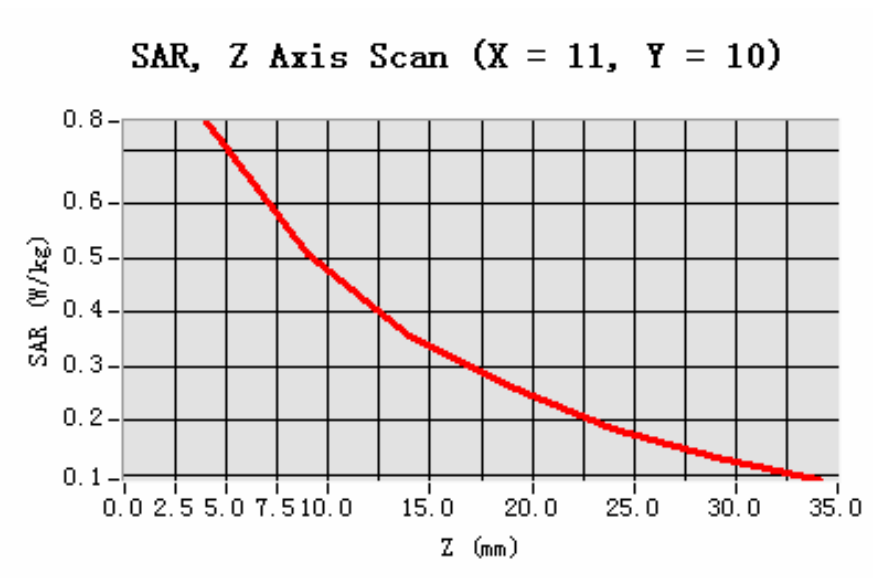
SURFACE SAR	VOLUME SAR
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Maximum location: X=11.00, Y=10.00

SAR 10g (W/Kg)	0.473972
SAR 1g (W/Kg)	0.716466

Z Axis Scan



MEASUREMENT 6

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 19 minutes 48 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

Phantom File	zinf15.txt, Adaptive 2 max
Phantom	Right hand
Device Position	Tilt
Band	GSM850
Channels	High
Signal	GMSK

B. Instrumentations.

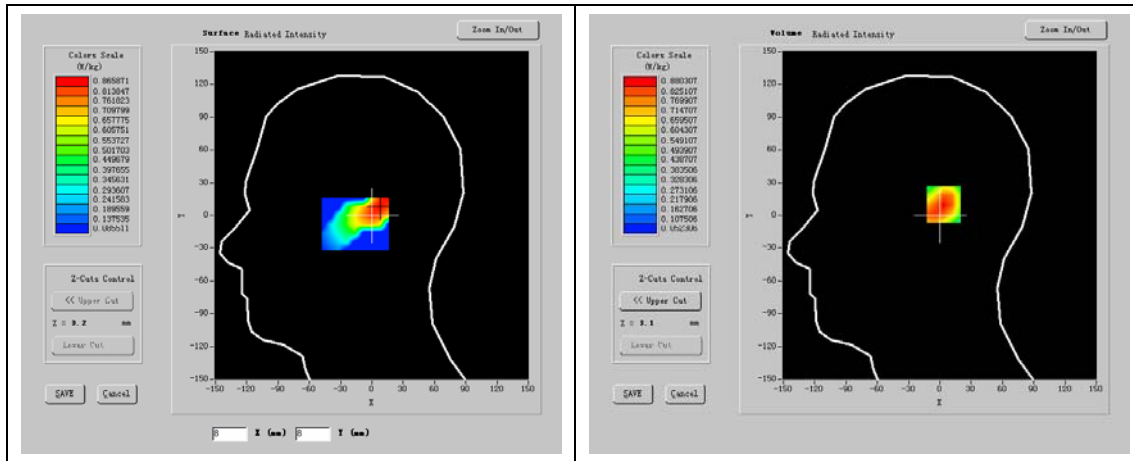
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Higher Band SAR (Channel 250):

Frequency (MHz)	848.599976
Relative permittivity (real part)	41.262001
Relative permittivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	-0.480000

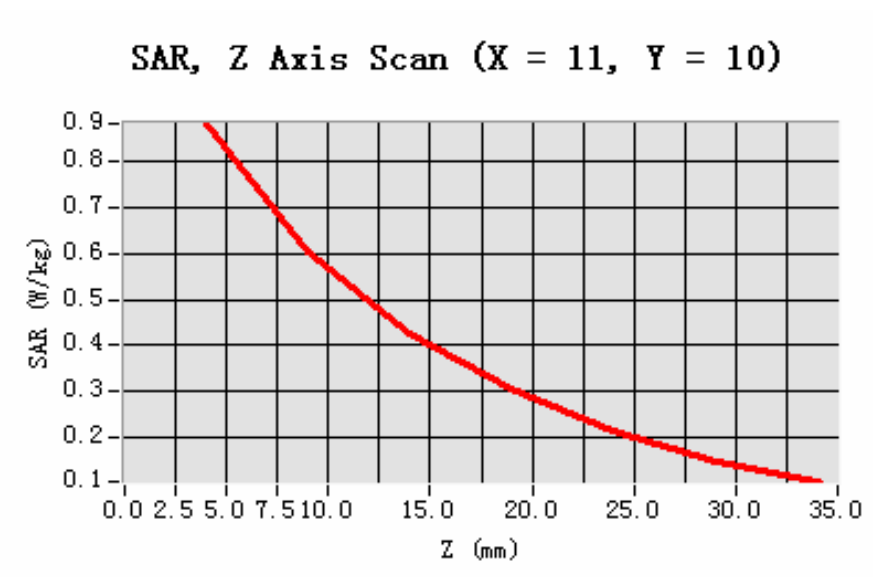
SURFACE SAR	VOLUME SAR
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Maximum location: X=11.00, Y=10.00

SAR 10g (W/Kg)	0.564766
SAR 1g (W/Kg)	0.849452

Z Axis Scan



MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 19 minutes 20 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

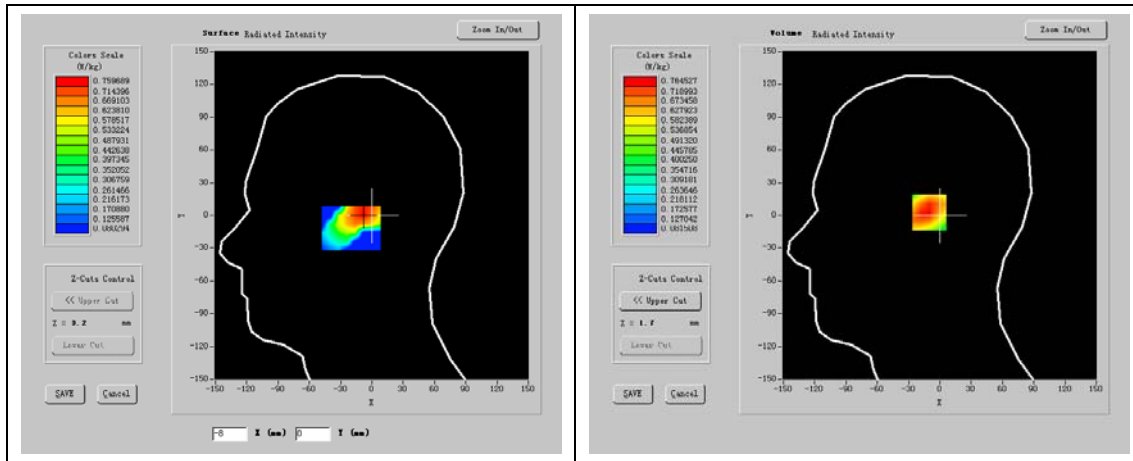
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthesizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.466999
Relative permittivity (imaginary part)	19.511101
Conductivity (S/m)	0.893392
Variation (%)	-0.970000

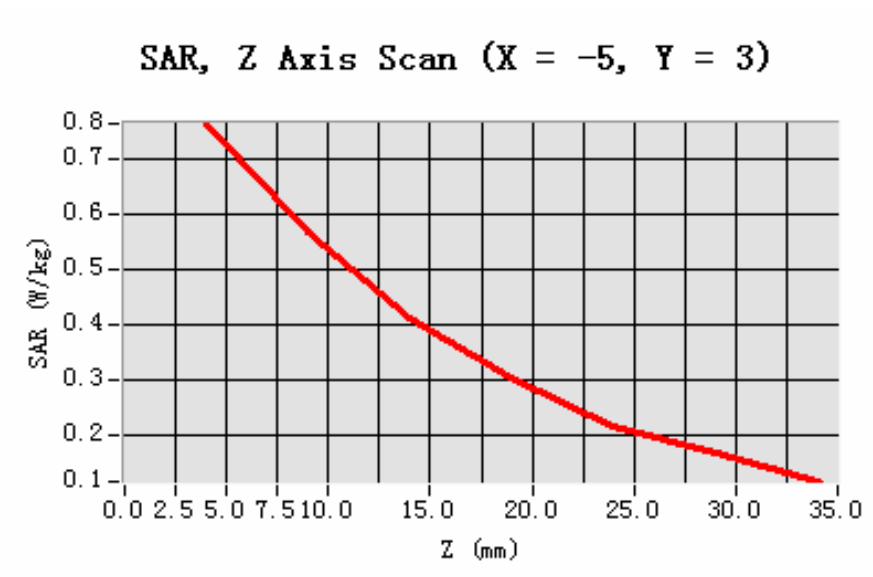
SURFACE SAR	VOLUME SAR
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Maximum location: X=-5.00, Y=3.00

SAR 10g (W/Kg)	0.511576
SAR 1g (W/Kg)	0.738474

Z Axis Scan



MEASUREMENT 8

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 19 minutes 20 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

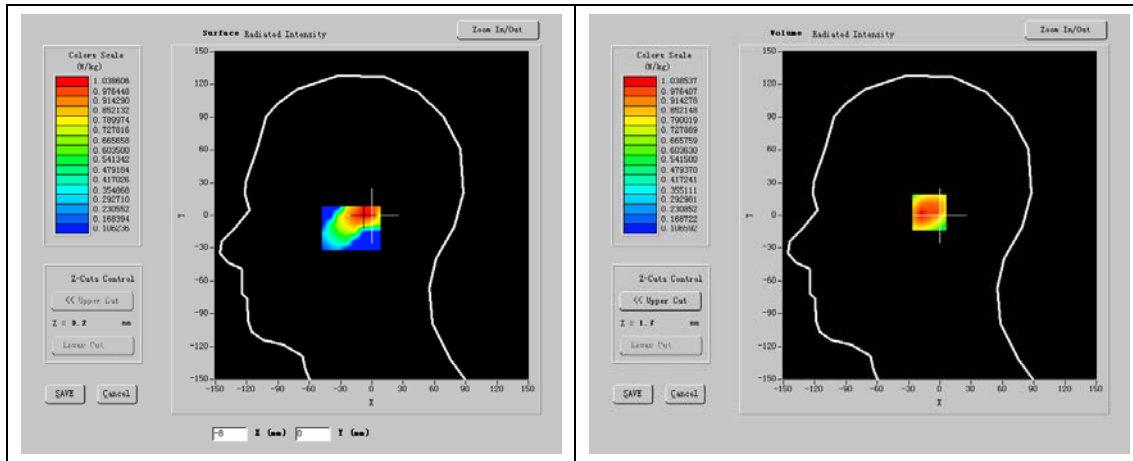
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Middle Band SAR (Channel 189):

Frequency (MHz)	836.400024
Relative permittivity (real part)	41.466999
Relative permittivity (imaginary part)	19.511101
Conductivity (S/m)	0.906616
Variation (%)	-0.970000

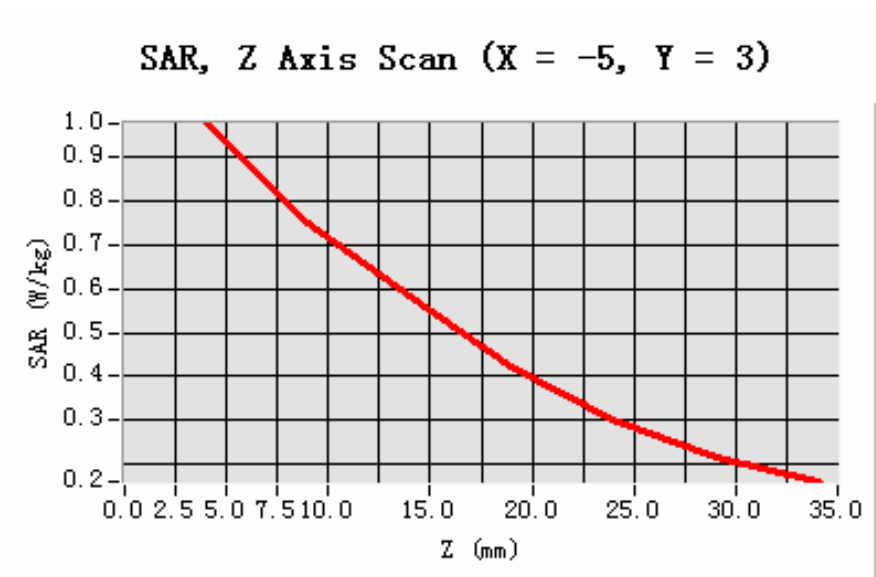
SURFACE SAR	VOLUME SAR
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Maximum location: X=-5.00, Y=3.00

SAR 10g (W/Kg)	0.684063
SAR 1g (W/Kg)	0.984106

Z Axis Scan



MEASUREMENT 9

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 19 minutes 20 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

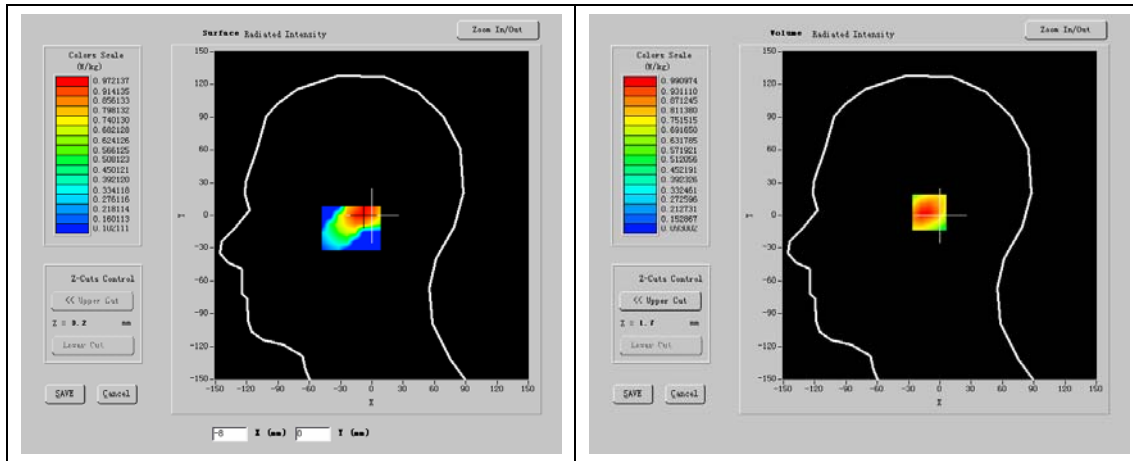
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Higher Band SAR (Channel 250):

Frequency (MHz)	848.599976
Relative permittivity (real part)	41.262001
Relative permittivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	-0.970000

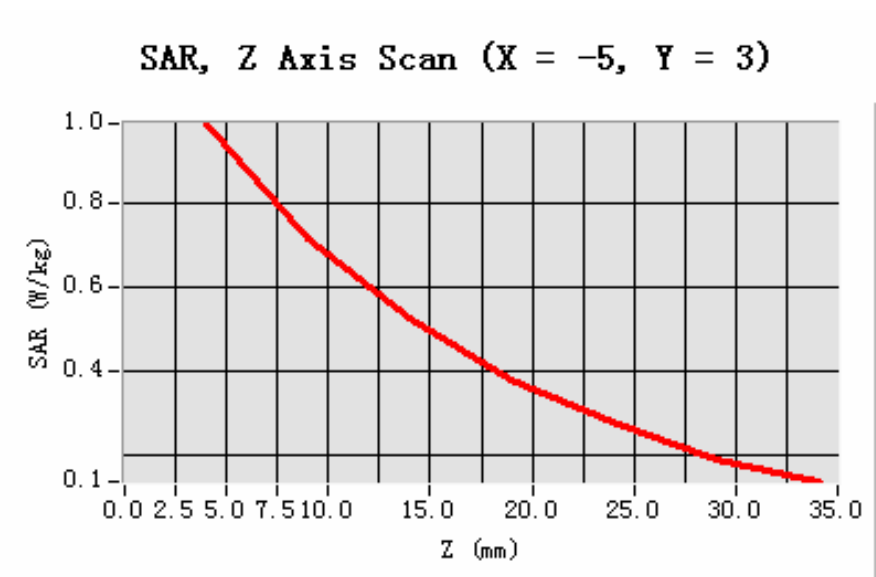
SURFACE SAR	VOLUME SAR
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Maximum location: X=-5.00, Y=3.00

SAR 10g (W/Kg)	0.649254
SAR 1g (W/Kg)	0.954054

Z Axis Scan



MEASUREMENT 10

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 29 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

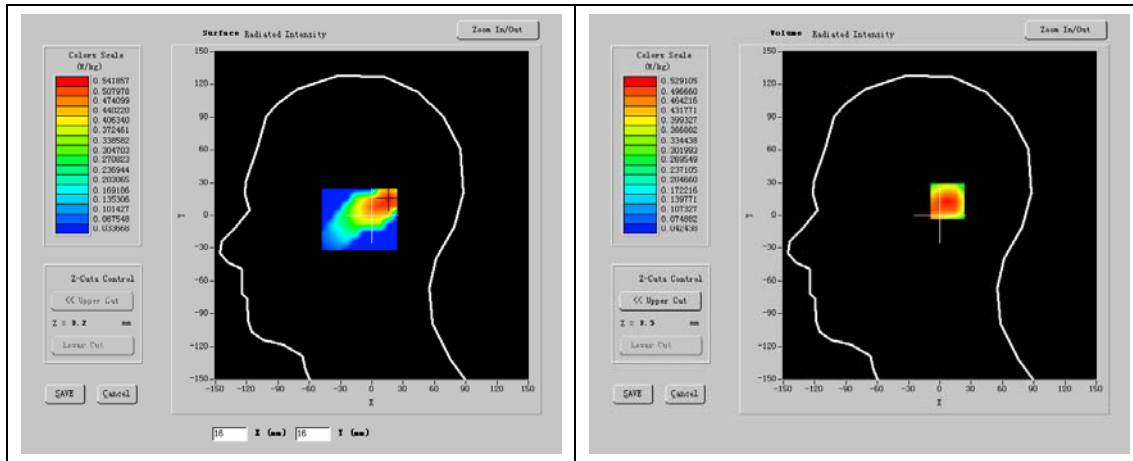
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.466999
Relative permittivity (imaginary part)	19.511101
Conductivity (S/m)	0.893392
Variation (%)	1.170000

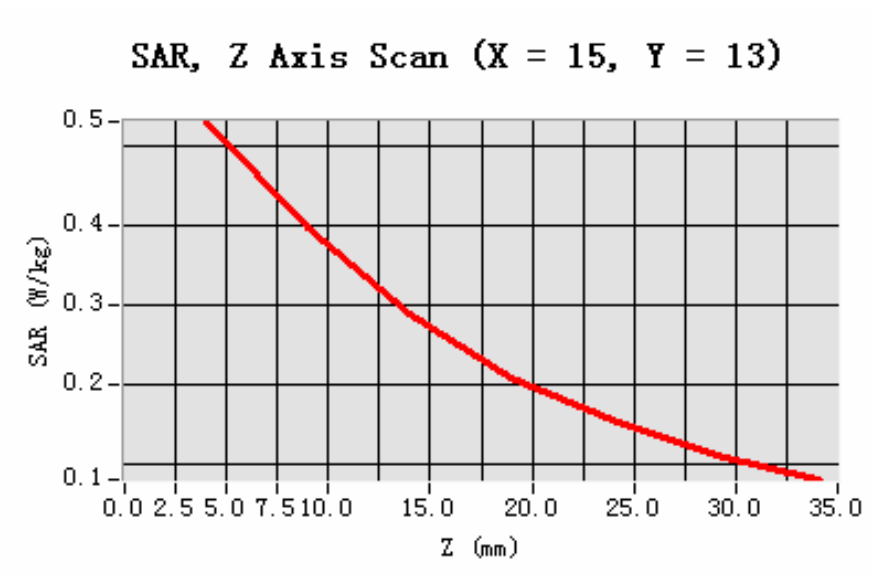
SURFACE SAR	VOLUME SAR
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Maximum location: X=15.00, Y=13.00

SAR 10g (W/Kg)	0.349376
SAR 1g (W/Kg)	0.509342

Z Axis Scan



MEASUREMENT 11

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 29 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

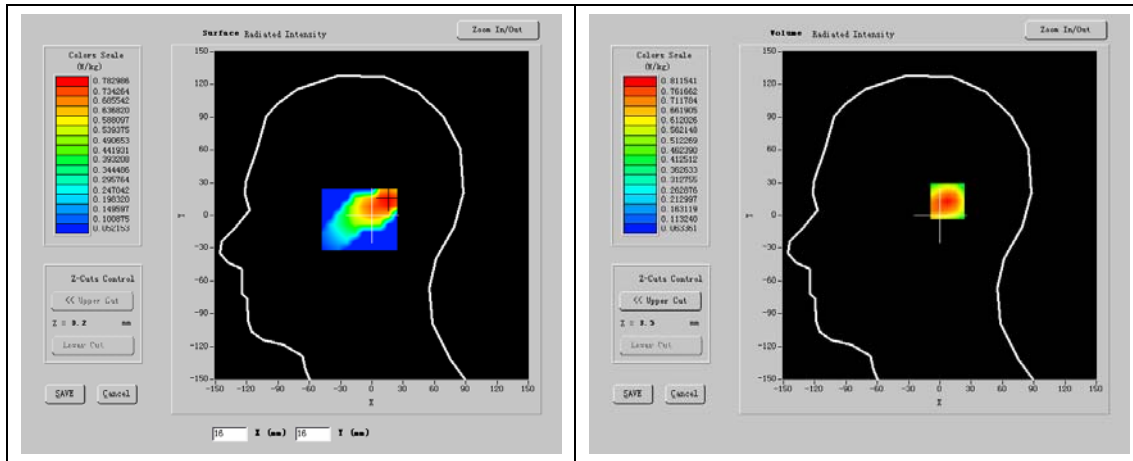
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Middle Band SAR (Channel 189):

Frequency (MHz)	836.400024
Relative permittivity (real part)	41.466999
Relative permittivity (imaginary part)	19.511101
Conductivity (S/m)	0.906616
Variation (%)	1.170000

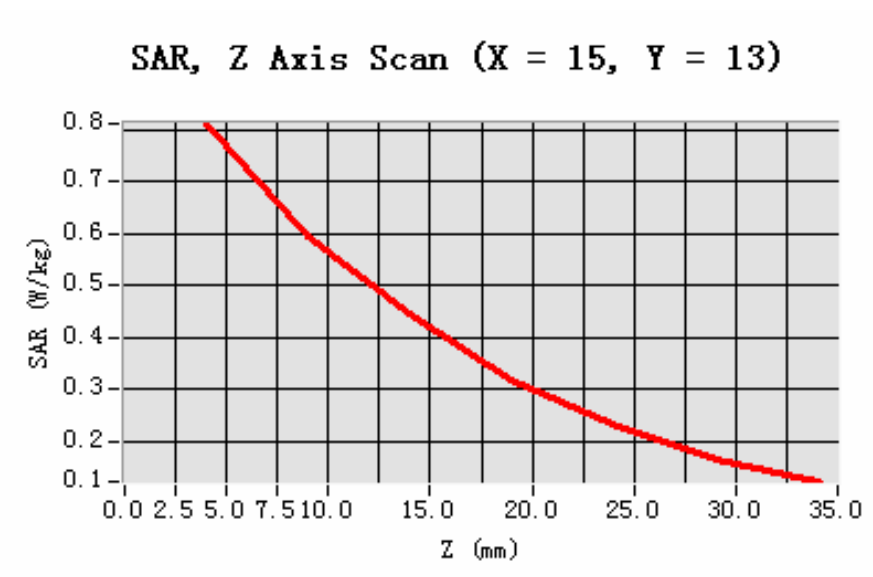
SURFACE SAR	VOLUME SAR
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Maximum location: X=15.00, Y=13.00

SAR 10g (W/Kg)	0.531093
SAR 1g (W/Kg)	0.771021

Z Axis Scan



MEASUREMENT 12

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 29 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

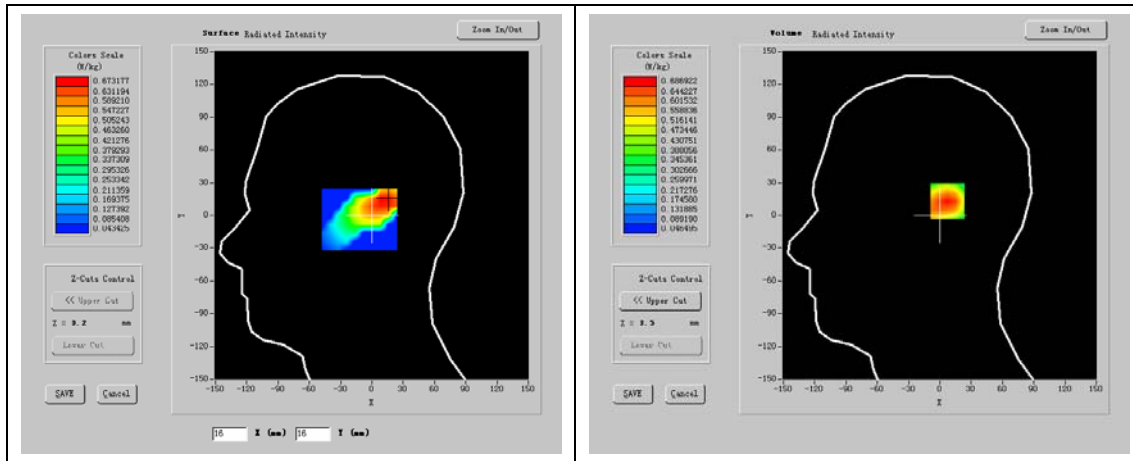
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthesizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom	Antennessa (SN:SN41_05_SAM29)
Liquid	Antennessa (Last Calibration:02/2006)

C. SAR Measurement Results

Higher Band SAR (Channel 250):

Frequency (MHz)	848.599976
Relative permittivity (real part)	41.262001
Relative permittivity (imaginary part)	19.598200
Conductivity (S/m)	0.923946
Variation (%)	1.170000

SURFACE SAR	VOLUME SAR
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Maximum location: X=15.00, Y=13.00

SAR 10g (W/Kg)	0.444826
SAR 1g (W/Kg)	0.653757

Z Axis Scan

