
	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>GSM1900</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: 20 minutes 3 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

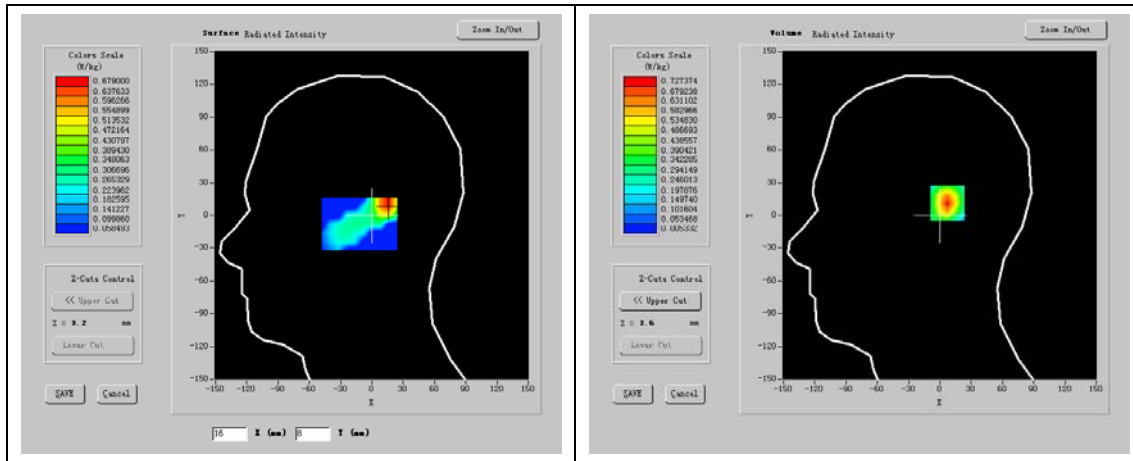
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Lower Band SAR (Channel 513):

Frequency (MHz)	1850.400024
Relative permittivity (real part)	40.313000
Relative permittivity (imaginary part)	13.584900
Conductivity (S/m)	1.396528
Variation (%)	-0.970000

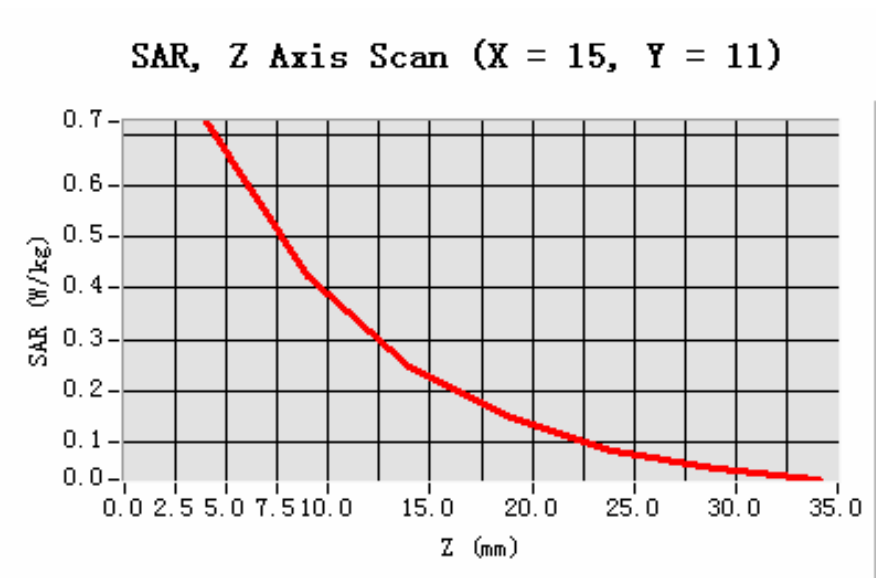
SURFACE SAR	VOLUME SAR
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Maximum location: X=15.00, Y=11.00

SAR 10g (W/Kg)	0.358514
SAR 1g (W/Kg)	0.668336

Z Axis Scan



MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 3 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

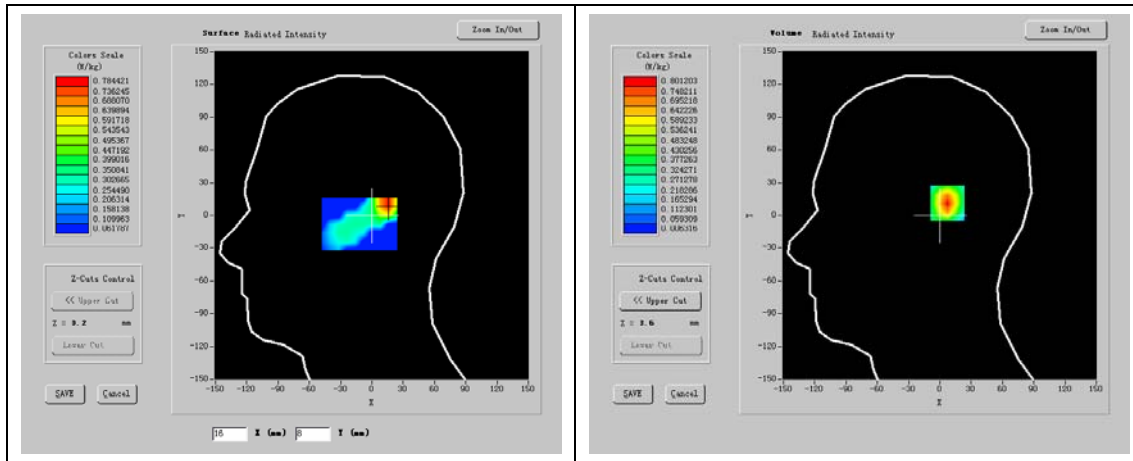
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.193001
Relative permittivity (imaginary part)	13.813800
Conductivity (S/m)	1.442775
Variation (%)	-0.970000

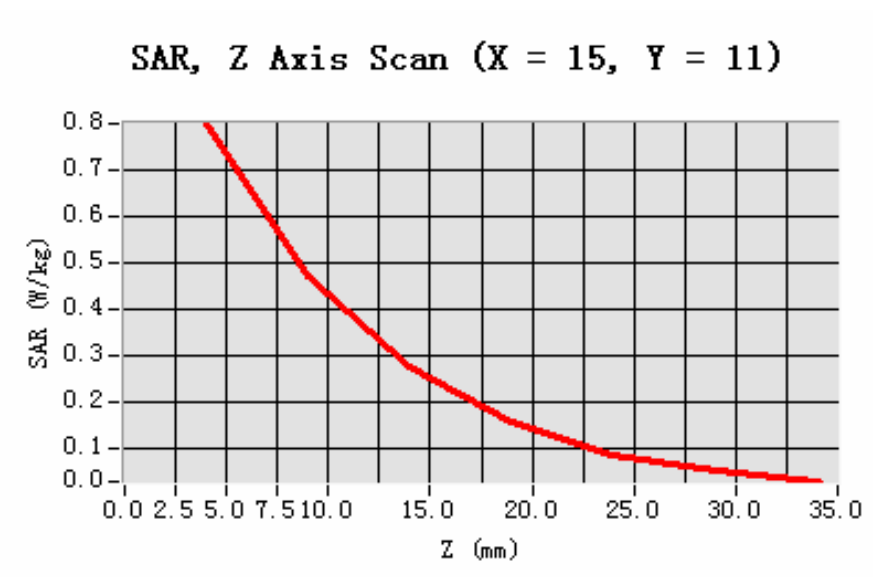
SURFACE SAR	VOLUME SAR
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Maximum location: X=15.00, Y=11.00

SAR 10g (W/Kg)	0.395702
SAR 1g (W/Kg)	0.736474

Z Axis Scan



MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 3 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

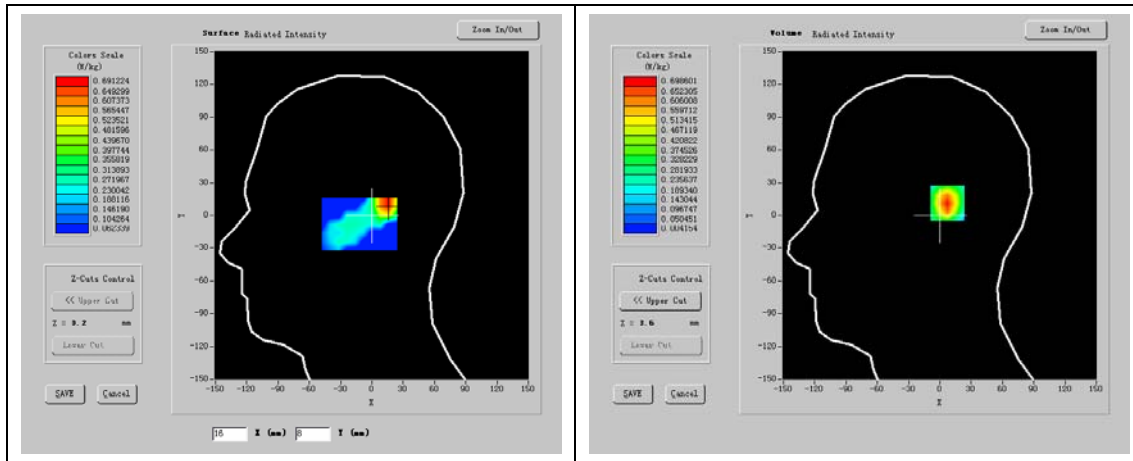
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthesizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Higher Band SAR (Channel 809):

Frequency (MHz)	1909.599976
Relative permittivity (real part)	40.285999
Relative permittivity (imaginary part)	13.669900
Conductivity (S/m)	1.450225
Variation (%)	-0.970000

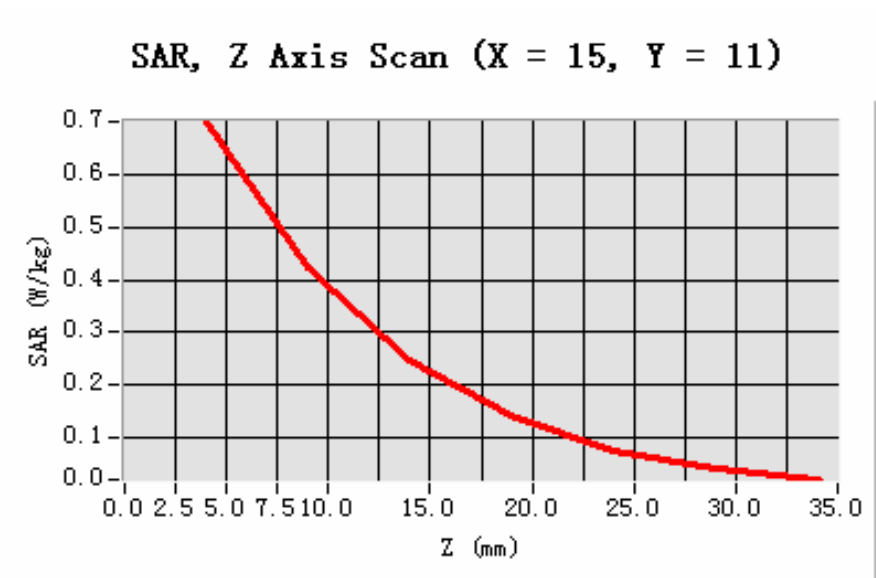
SURFACE SAR	VOLUME SAR
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Maximum location: X=15.00, Y=11.00

SAR 10g (W/Kg)	0.349340
SAR 1g (W/Kg)	0.648741

Z Axis Scan



MEASUREMENT 4

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 36 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

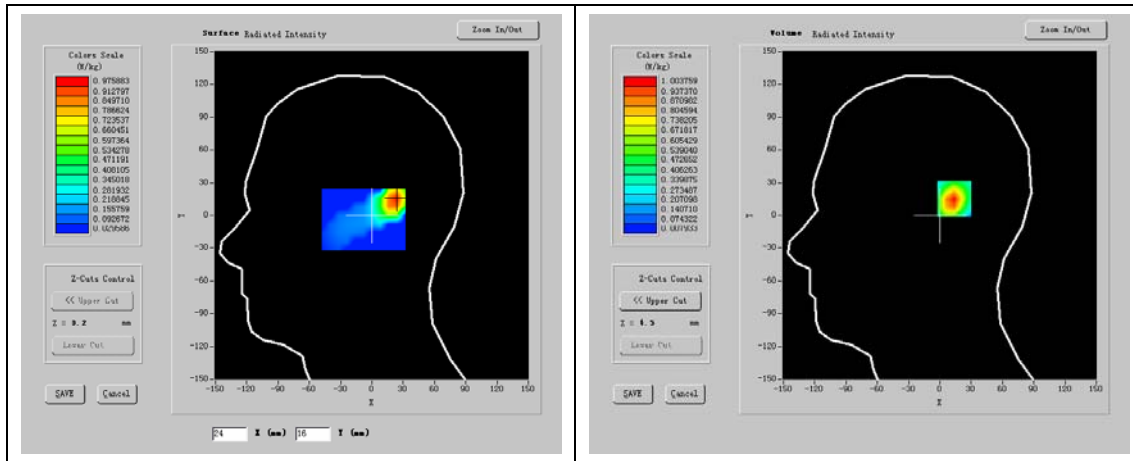
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Lower Band SAR (Channel 513):

Frequency (MHz)	1850.400024
Relative permittivity (real part)	40.313000
Relative permittivity (imaginary part)	13.584900
Conductivity (S/m)	1.396528
Variation (%)	0.420000

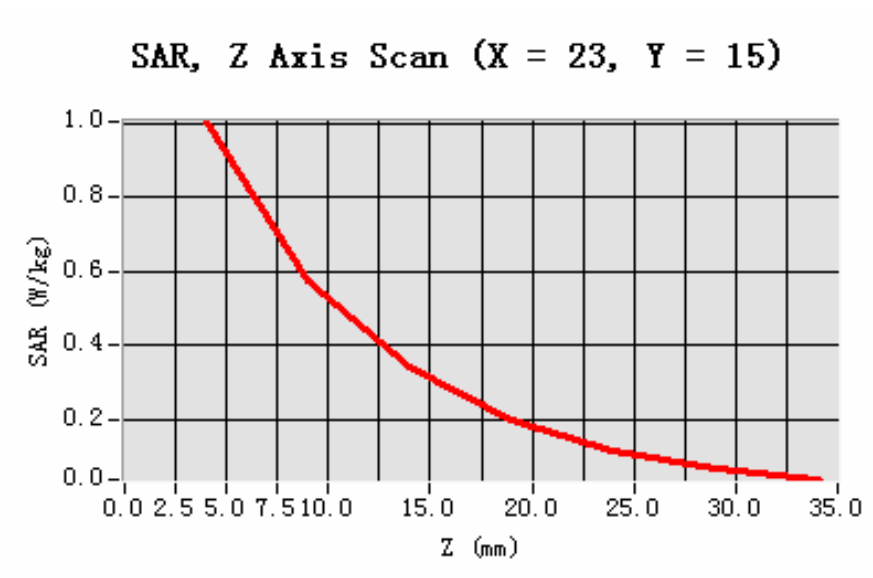
SURFACE SAR	VOLUME SAR
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Maximum location: X=23.00, Y=15.00

SAR 10g (W/Kg)	0.499056
SAR 1g (W/Kg)	0.939783

Z Axis Scan



MEASUREMENT 5

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 36 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

Phantom File	zinf15.txt, Adaptive 2 max
Phantom	Right hand
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GMSK

B. Instrumentations.

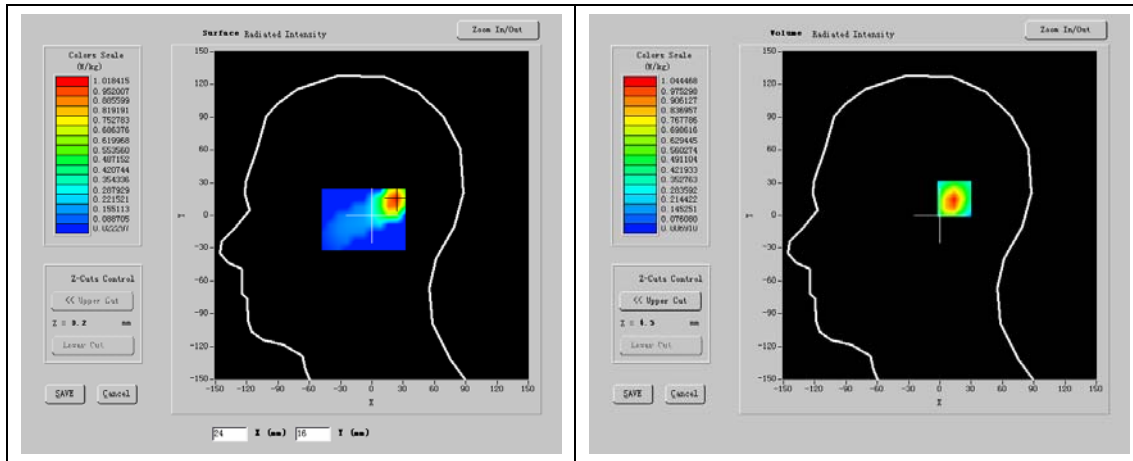
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.193001
Relative permittivity (imaginary part)	13.813800
Conductivity (S/m)	1.442775
Variation (%)	0.420000

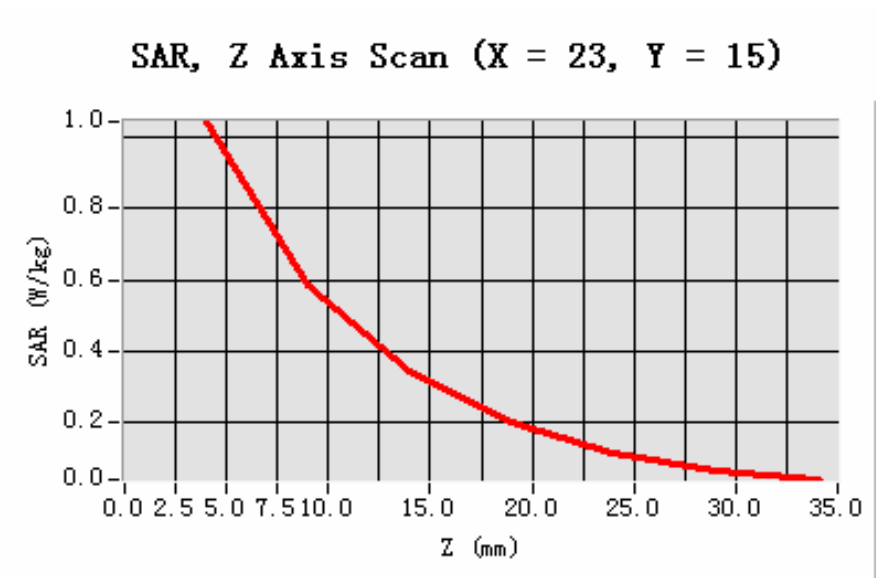
SURFACE SAR	VOLUME SAR
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Maximum location: X=23.00, Y=15.00

SAR 10g (W/Kg)	0.508431
SAR 1g (W/Kg)	0.969369

Z Axis Scan



MEASUREMENT 6

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 36 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

Phantom File	zinf15.txt, Adaptive 2 max
Phantom	Right hand
Device Position	Tilt
Band	GSM1900
Channels	High
Signal	GMSK

B. Instrumentations.

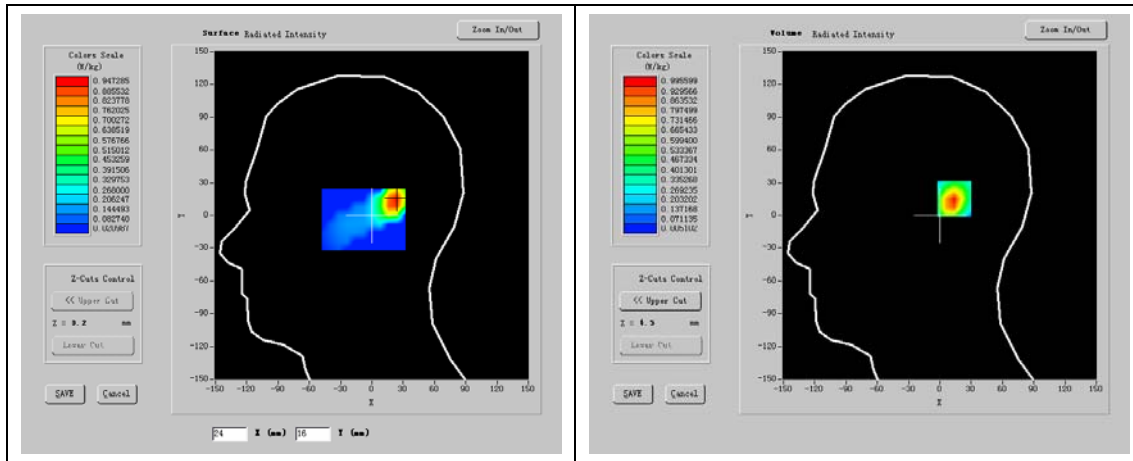
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Higher Band SAR (Channel 809):

Frequency (MHz)	1909.599976
Relative permittivity (real part)	40.285999
Relative permittivity (imaginary part)	13.669900
Conductivity (S/m)	1.450225
Variation (%)	0.420000

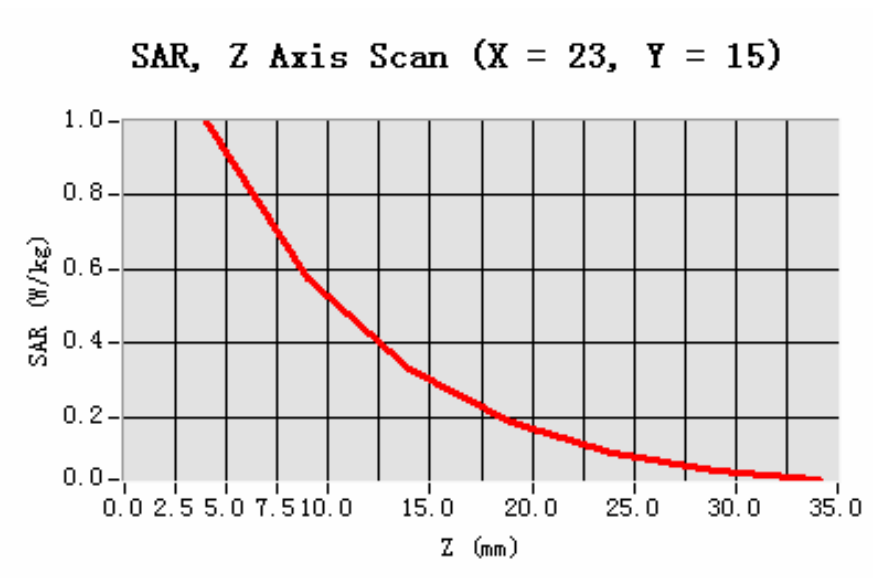
SURFACE SAR	VOLUME SAR
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Maximum location: X=23.00, Y=15.00

SAR 10g (W/Kg)	0.486260
SAR 1g (W/Kg)	0.935848

Z Axis Scan



MEASUREMENT 7

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	Left head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GMSK

B. Instrumentations.

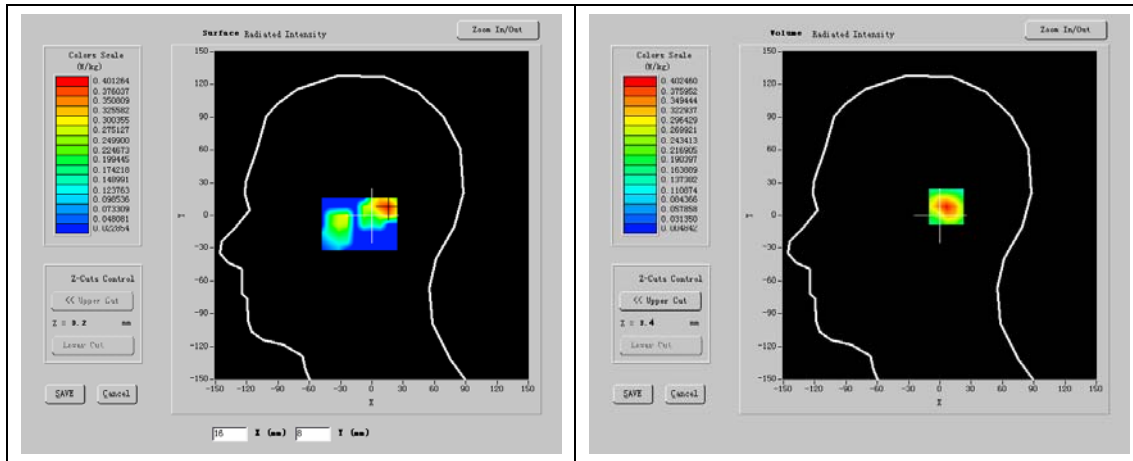
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Lower Band SAR (Channel 513):

Frequency (MHz)	1850.400024
Relative permittivity (real part)	40.313000
Relative permittivity (imaginary part)	13.584900
Conductivity (S/m)	1.396528
Variation (%)	-1.180000

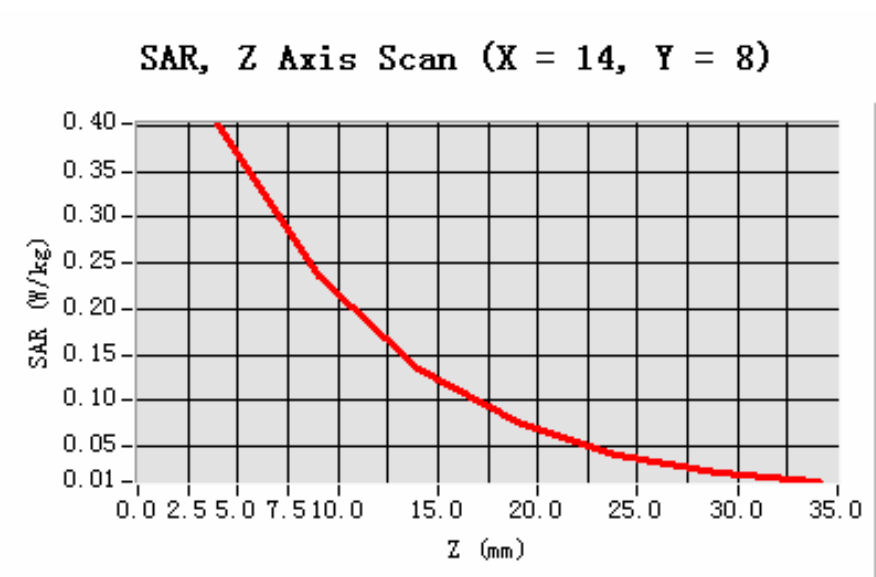
SURFACE SAR	VOLUME SAR
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Maximum location: X=14.00, Y=8.00

SAR 10g (W/Kg)	0.204555
SAR 1g (W/Kg)	0.375010

Z Axis Scan



MEASUREMENT 8

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	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GMSK

B. Instrumentations.

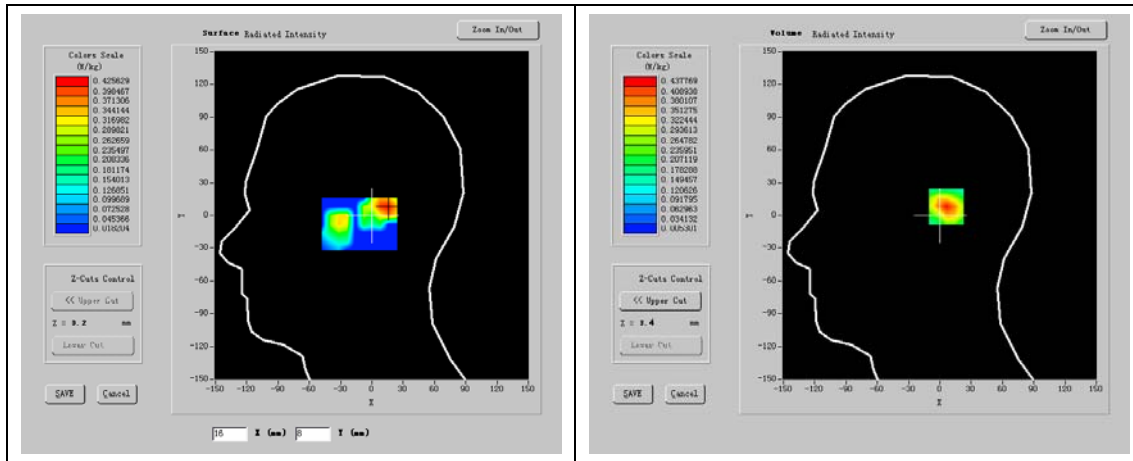
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.193001
Relative permittivity (imaginary part)	13.813800
Conductivity (S/m)	1.442775
Variation (%)	-1.180000

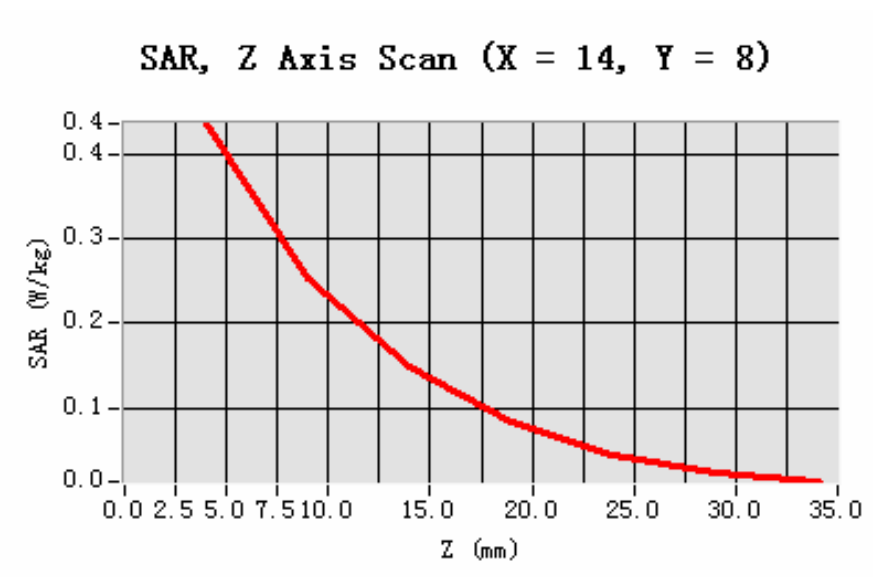
SURFACE SAR	VOLUME SAR
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Maximum location: X=14.00, Y=8.00

SAR 10g (W/Kg)	0.221142
SAR 1g (W/Kg)	0.405338

Z Axis Scan



MEASUREMENT 9

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	Left head
Device Position	Cheek
Band	GSM1900
Channels	High
Signal	GMSK

B. Instrumentations.

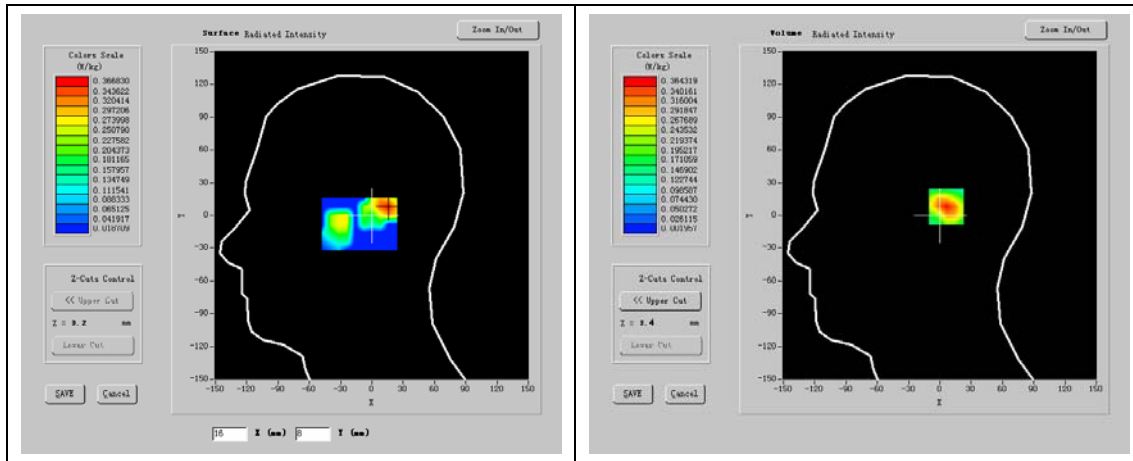
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthesizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Higher Band SAR (Channel 809):

Frequency (MHz)	1909.599976
Relative permittivity (real part)	40.285999
Relative permittivity (imaginary part)	13.669900
Conductivity (S/m)	1.450225
Variation (%)	-1.180000

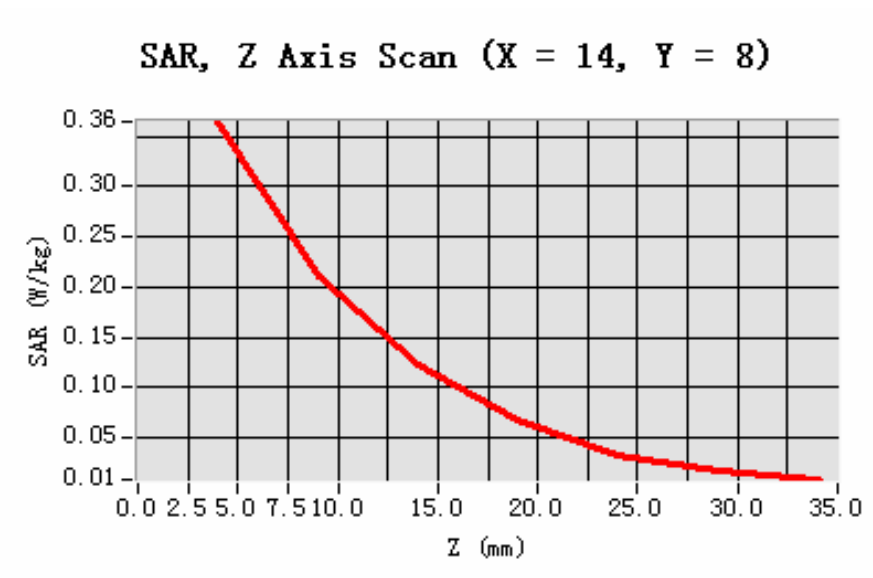
SURFACE SAR	VOLUME SAR
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Maximum location: X=14.00, Y=8.00

SAR 10g (W/Kg)	0.185292
SAR 1g (W/Kg)	0.340932

Z Axis Scan



MEASUREMENT 10

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 38 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

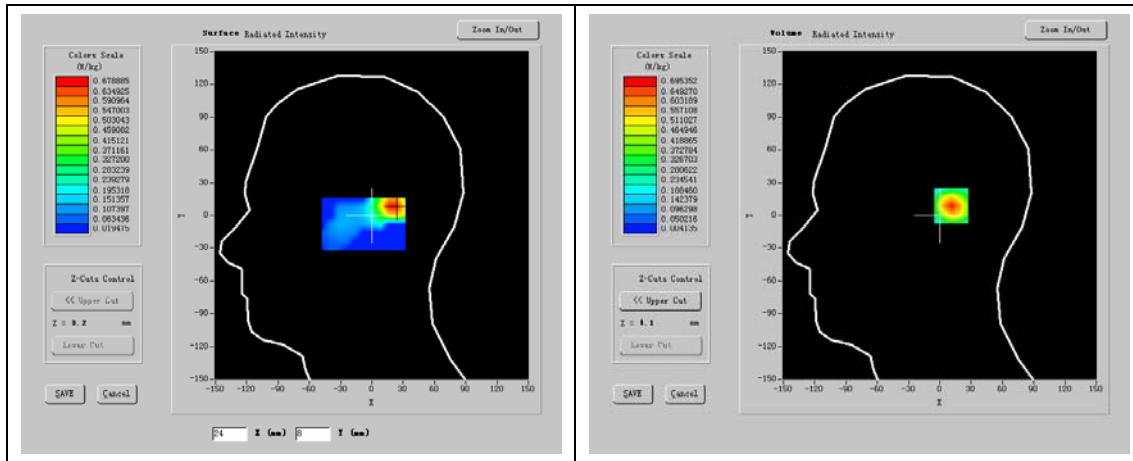
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Lower Band SAR (Channel 513):

Frequency (MHz)	1850.400024
Relative permittivity (real part)	40.313000
Relative permittivity (imaginary part)	13.584900
Conductivity (S/m)	1.396528
Variation (%)	-0.350000

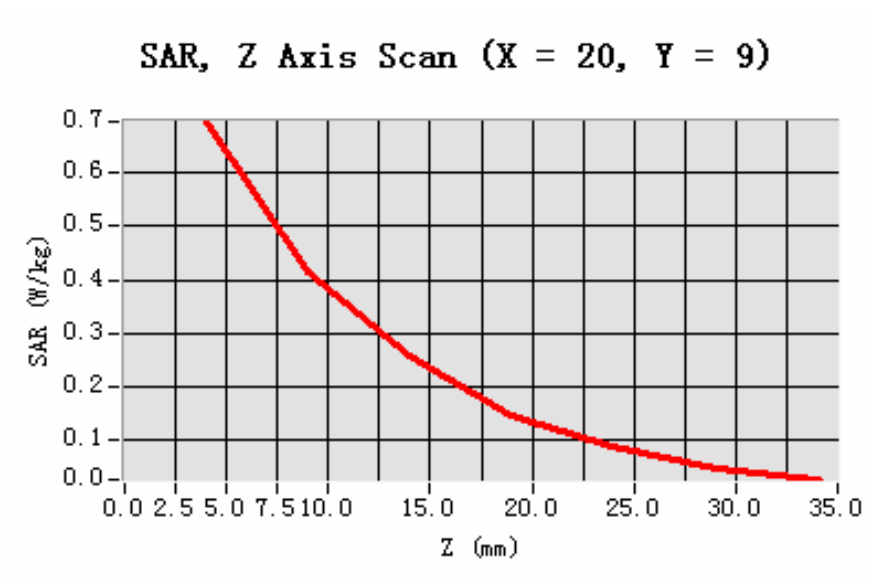
SURFACE SAR	VOLUME SAR
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Maximum location: X=20.00, Y=9.00

SAR 10g (W/Kg)	0.351648
SAR 1g (W/Kg)	0.641293

Z Axis Scan



MEASUREMENT 11

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 38 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

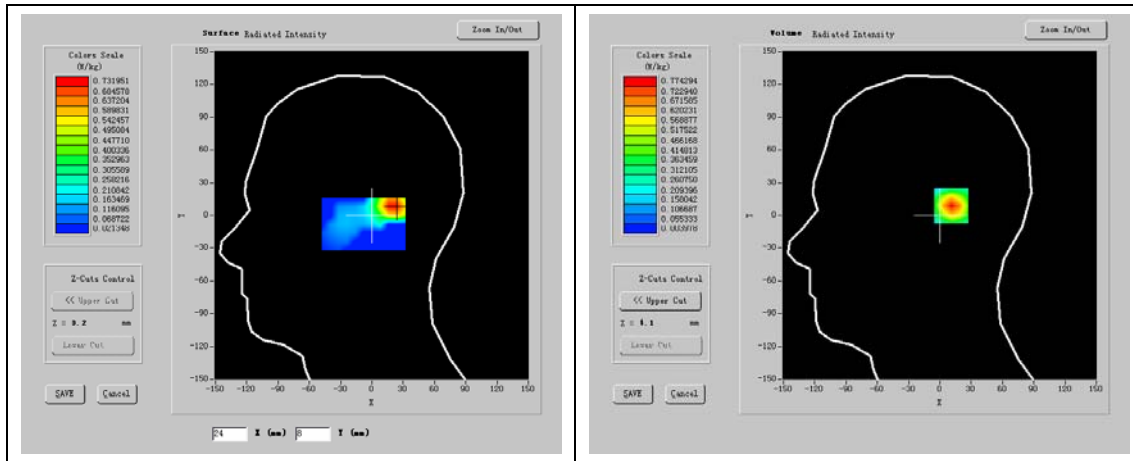
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.193001
Relative permittivity (imaginary part)	13.813800
Conductivity (S/m)	1.442775
Variation (%)	-0.350000

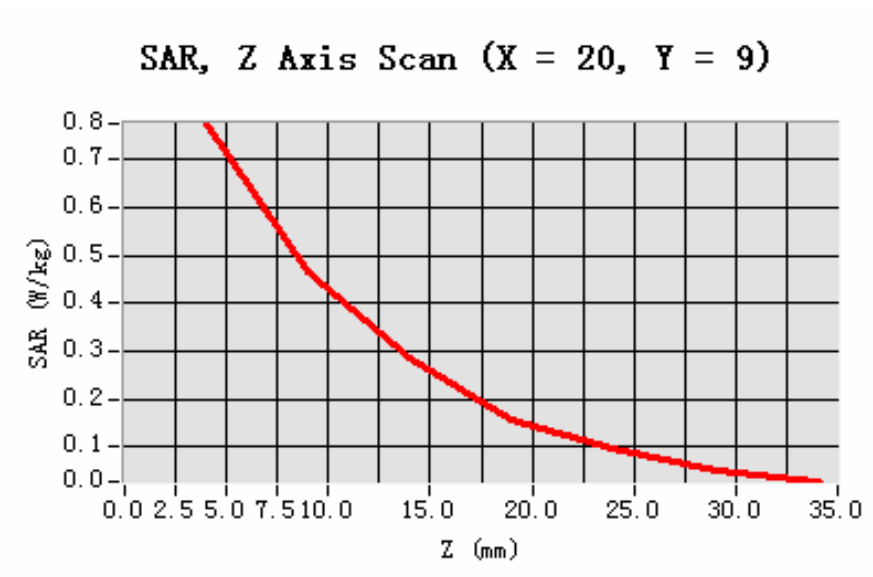
SURFACE SAR	VOLUME SAR
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Maximum location: X=20.00, Y=9.00

SAR 10g (W/Kg)	0.387312
SAR 1g (W/Kg)	0.712193

Z Axis Scan



MEASUREMENT 12

Type: Phone measurement (Complete)

Date of measurement: 25/10/2007

Measurement duration: 20 minutes 38 seconds

Mobile Phone IMEI number: --

A. Experimental conditions.

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

B. Instrumentations.

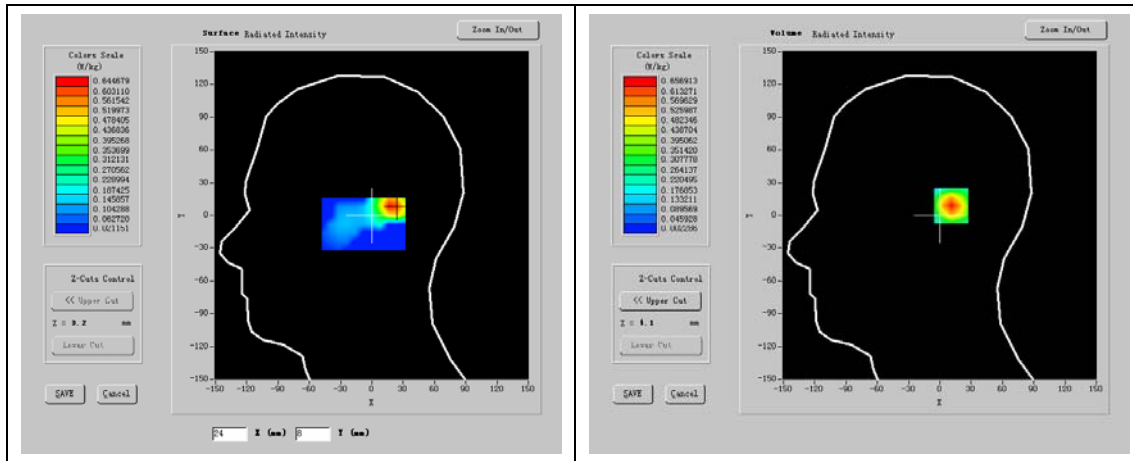
PC	HP (Pentium(R) V3.06GHz, SN:375052-AA1)
Network Emulator	R&S (CMU200, SN:B23-03291)
Voltmeter	Keithley (2000, SN:1015843)
Synthetizer	Agilent (E8257C, SN:MY43321570)
Amplifier	Mini-Circuits (ZHL-42, SN:110405)
Power Meter	Agilent (E4416A, SN:QB41292714)
Probe	Antennessa (SN:SN_0807_EP_74)
Phantom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

C. SAR Measurement Results

Higher Band SAR (Channel 809):

Frequency (MHz)	1909.599976
Relative permittivity (real part)	40.285999
Relative permittivity (imaginary part)	13.669900
Conductivity (S/m)	1.450225
Variation (%)	-0.350000

SURFACE SAR	VOLUME SAR
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Maximum location: X=20.00, Y=9.00

SAR 10g (W/Kg)	0.329377
SAR 1g (W/Kg)	0.610866

Z Axis Scan

