

	<b>System Validation Plots</b>
	<b>Project name :</b>
	<b>KS100504B03</b>

## EUT DESCRIPTION

Product name: Mobile Phone

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

Trade name: Baoxing

Tested date: May 13, 2010

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

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

Air Temperature: 21 °C Liquefied Temperature: 20 °C

Crest Factor: CW: 1

GSM: 8

GPRS 12: 2

**Area Scan:** 7 x 7 x 1

dx=15mm

dy=15mm

**Zoom Scan:** 5 x 5 x 7

dx=5mm

dy=5mm

dz=5mm

**Z Axis Scan:** 1 x 1 x 21

dx=20mm

dy=20mm

dz=5mm

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

**Compliance Certification Services (Kunshan) Inc.**  
**No.10, Weiye Rd., Innovation Park, Eco & Tec. Development Part,**  
**Kunshan City, Jiangsu Province, PRC.**  
**TEL: 86-512-57355888**  
**FAX: 86-512-57370818**  
<http://www.ccsrf.com>

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## 850 HEAD VALIDATION

### I. RESULTS

	<u>TYPE</u>	<u>PARAMETERS</u>
<u>GSM850</u>	<u>Noise</u>	--
	<u>Validation</u>	<u>Measurement 1:</u> Validation Plane with Dipole device position on Middle Channel in CW mode
	<u>Phone</u>	--

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## MEASUREMENT 1

Type: Validation measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 41 seconds

Mobile Phone IMEI number: --

### **A. Experimental conditions.**

<b>Phantom File</b>	surf_sam_plan.txt, Adaptive 2 max
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Dipole
<b>Band</b>	GSM850
<b>Channels</b>	Middle
<b>Signal</b>	CW

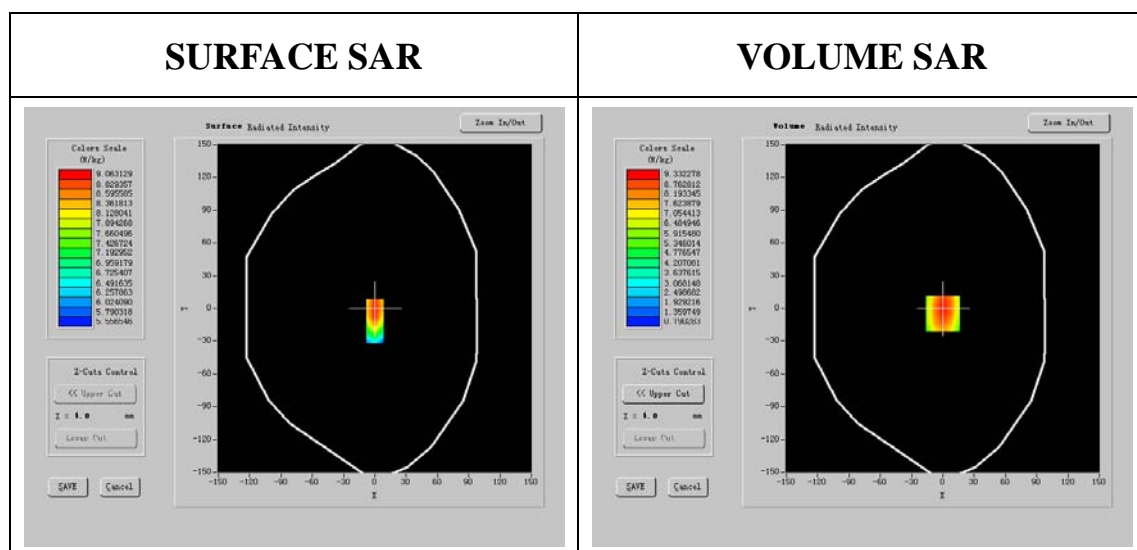
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## **B. Instrumentations.**

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

## C. SAR Measurement Results

<b>Frequency (MHz)</b>	835.000110
<b>Relative permittivity (real part)</b>	41.559001
<b>Relative permittivity (imaginary part)</b>	19.590210
<b>Conductivity (S/m)</b>	0.924310
<b>Variation (%)</b>	0.450000



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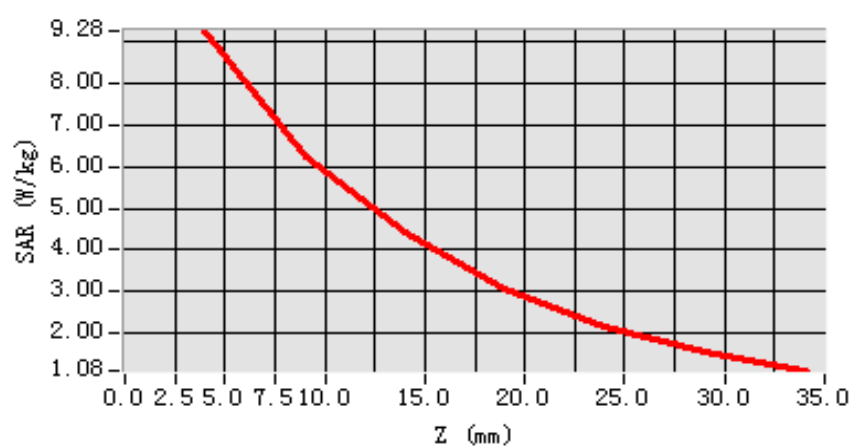
**Maximum location: X=0.00, Y=-5.00**

<b>SAR 1g (W/Kg)</b>	9.553001
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## Z Axis Scan

**SAR, Z Axis Scan (X = 0, Y = -5)**



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## 1900 HEAD VALIDATION

### I. RESULTS

	<b><u>TYPE</u></b>	<b><u>PARAMETERS</u></b>
<b><u>GSM1900</u></b>	<u>Noise</u>	--
	<u>Validation</u>	<u>Measurement 1:</u> Validation Plane with Cheek device position on Middle Channel in CW mode
	<u>Phone</u>	--



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## MEASUREMENT 1

Type: Validation measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 7 minutes 3 seconds

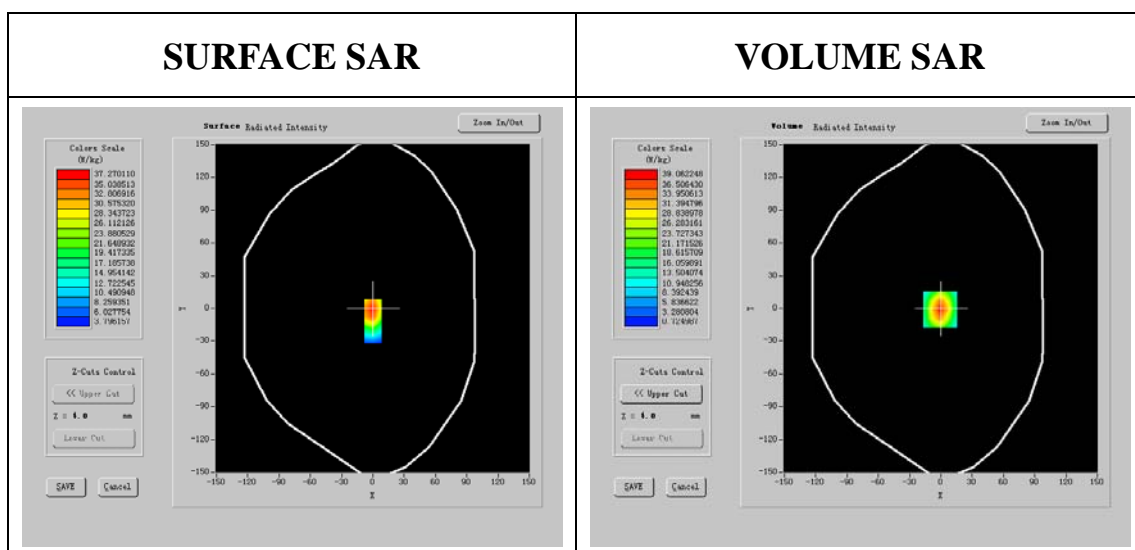
Mobile Phone IMEI number: --

### **A. Experimental conditions.**

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

## **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	1900.000020
<b>Relative permittivity (real part)</b>	41.211023
<b>Relative permittivity (imaginary part)</b>	13.210520
<b>Conductivity (S/m)</b>	1.441301
<b>Variation (%)</b>	0.450000



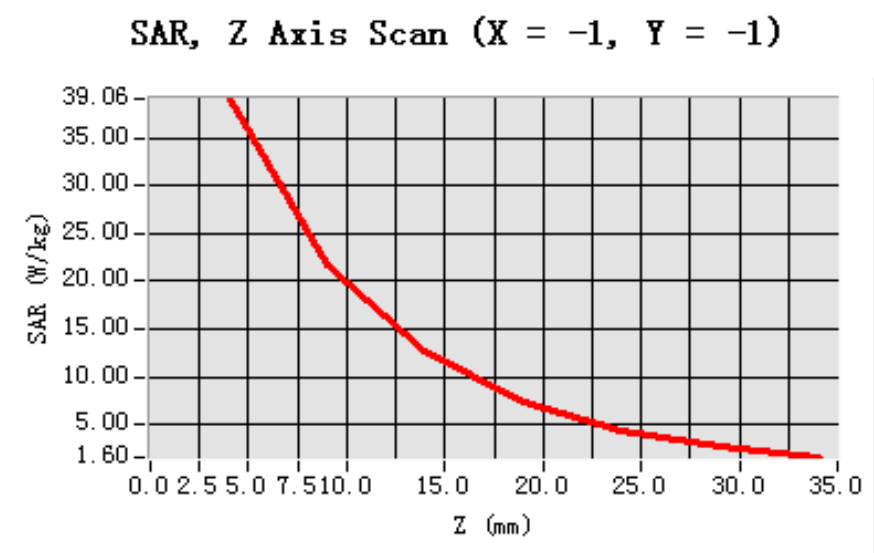
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**Maximum location: X=-1.00, Y=-1.00**

<b>SAR 1g (W/Kg)</b>	40.212323
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## Z Axis Scan



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## 850 BODY VALIDATION

### I. RESULTS

	<u><b>TYPE</b></u>	<u><b>PARAMETERS</b></u>
<u><b>GSM850</b></u>	<u>Noise</u>	--
	<u>Validation</u>	<u>Measurement 1:</u> Validation Plane with Dipole device position on Middle Channel in CW mode
	<u>Phone</u>	--

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## MEASUREMENT 1

Type: Validation measurement (Complete)

Date of measurement: 13/5/2010

Measurement duration: 6 minutes 51 seconds

Mobile Phone IMEI number: --

### **A. Experimental conditions.**

<b>Phantom File</b>	surf_sam_plan.txt, Adaptive 2 max
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Dipole
<b>Band</b>	GSM850
<b>Channels</b>	Middle
<b>Signal</b>	CW

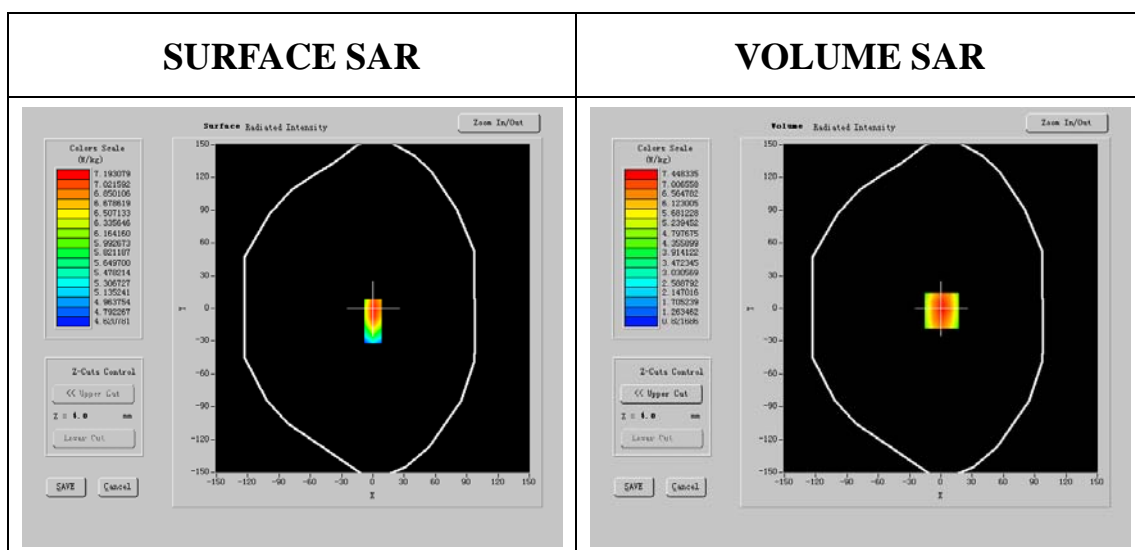
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## **B. Instrumentations.**

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

## C. SAR Measurement Results

<b>Frequency (MHz)</b>	835.000004
<b>Relative permittivity (real part)</b>	54.512300
<b>Relative permittivity (imaginary part)</b>	22.120012
<b>Conductivity (S/m)</b>	0.979110
<b>Variation (%)</b>	0.300000





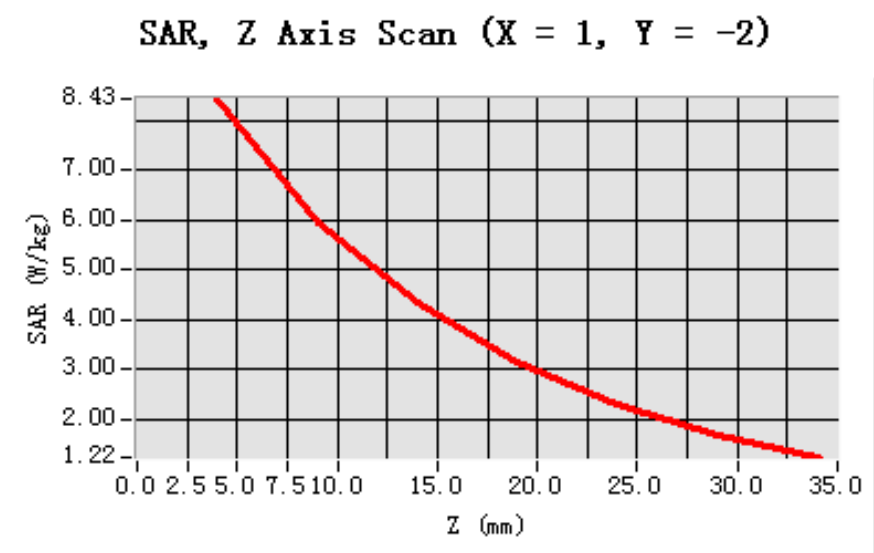
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**Maximum location: X=1.00, Y=-2.00**

<b>SAR 1g (W/Kg)</b>	9.683247
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## Z Axis Scan



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## 1900 BODY VALIDATION

### I. RESULTS

	<b><u>TYPE</u></b>	<b><u>PARAMETERS</u></b>
<b><u>GSM1900</u></b>	<u>Noise</u>	--
	<u>Validation</u>	<u>Measurement 1:</u> Validation Plane with Dipole device position on Middle Channel in CW mode
	<u>Phone</u>	--

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## MEASUREMENT 1

Type: Validation measurement (Complete)

Date of measurement: 4/5/2010

Measurement duration: 6 minutes 43 seconds

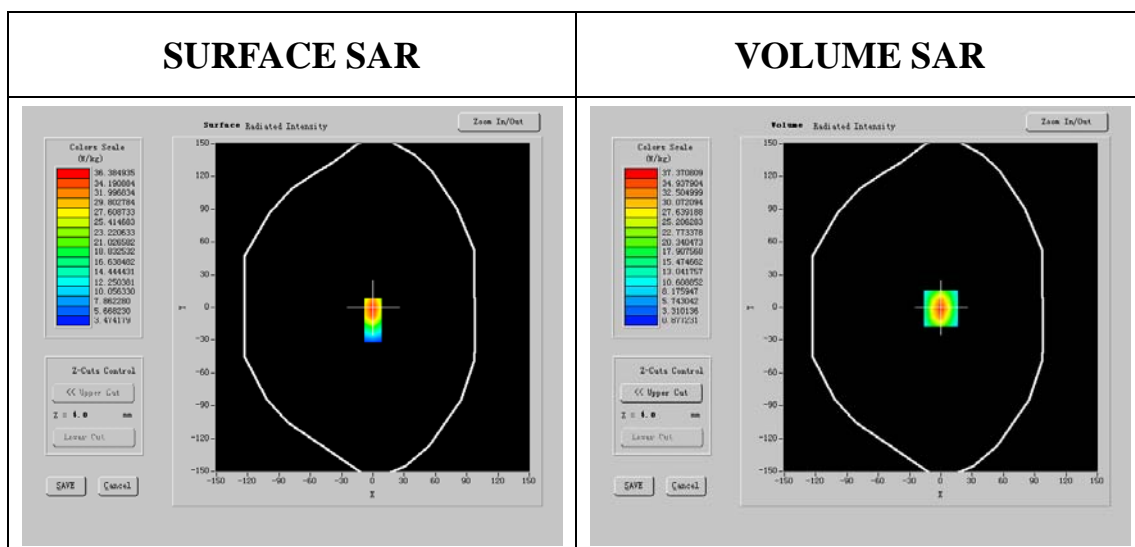
Mobile Phone IMEI number: --

### **A. Experimental conditions.**

<b>Phantom File</b>	surf_sam_plan.txt, Adaptive 2 max
<b>Phantom</b>	Validation plane
<b>Device Position</b>	Dipole
<b>Band</b>	GSM1900
<b>Channels</b>	Middle
<b>Signal</b>	CW

### **B. SAR Measurement Results**

<b>Frequency (MHz)</b>	1900.000000
<b>Relative permittivity (real part)</b>	52.953128
<b>Relative permittivity (imaginary part)</b>	13.621000
<b>Conductivity (S/m)</b>	1.490230
<b>Variation (%)</b>	-0.400000



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**Maximum location: X=0.00, Y=-1.00**

<b>SAR 1g (W/Kg)</b>	38.978202
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## Z Axis Scan

