|  | **SAR MEASUREMENT REPORT** |
|---|---|
|  | **Project name :** |
|  | **KS070924A01** |

# I. RESULTS

| TYPE | BAND | PARAMETERS |
|---|---|---|
| **Noise** | -- | -- |
| **Validation** | -- | -- |
| **Phone** | **GSM1900** | Measurement 1: Validation Plane with Body device position on Low Channel in GMSK mode<br>Measurement 2: Validation Plane with Body device position on Middle Channel in GMSK mode<br>Measurement 3: Validation Plane with Body 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 33 seconds

Mobile Phone IMEI number: --

## A. Experimental conditions.

| Phantom File | surf_sam_plan.txt, Adaptative 2 max |
|---|---|
| Phantom | Validation plane |
| Device Position | Body |
| Band | GSM1900 |
| Channels | Low |
| Signal | 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 permitivity (real part) | 40.313000 |
| Relative permitivity (imaginary part) | 13.584900 |
| Conductivity (S/m) | 1.396528 |
| Variation (%) | 0.650000 |

| SURFACE SAR | VOLUME SAR |
|---|---|
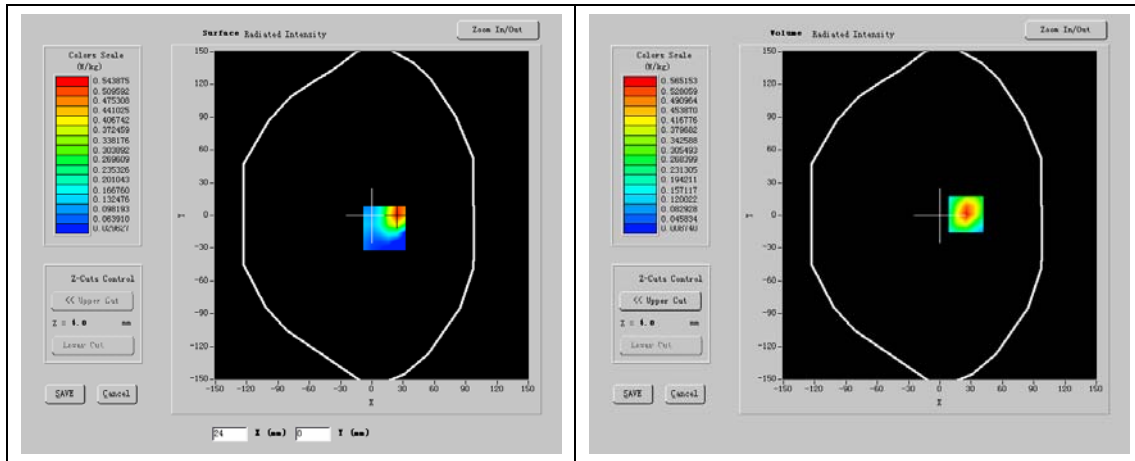
**Maximum location: X=25.00, Y=1.00**

| SAR 10g (W/Kg) | 0.288753 |
|---|---|
| SAR 1g   (W/Kg) | 0.519696 |

# Z Axis Scan

SAR, Z Axis Scan (X = 25, Y = 1)
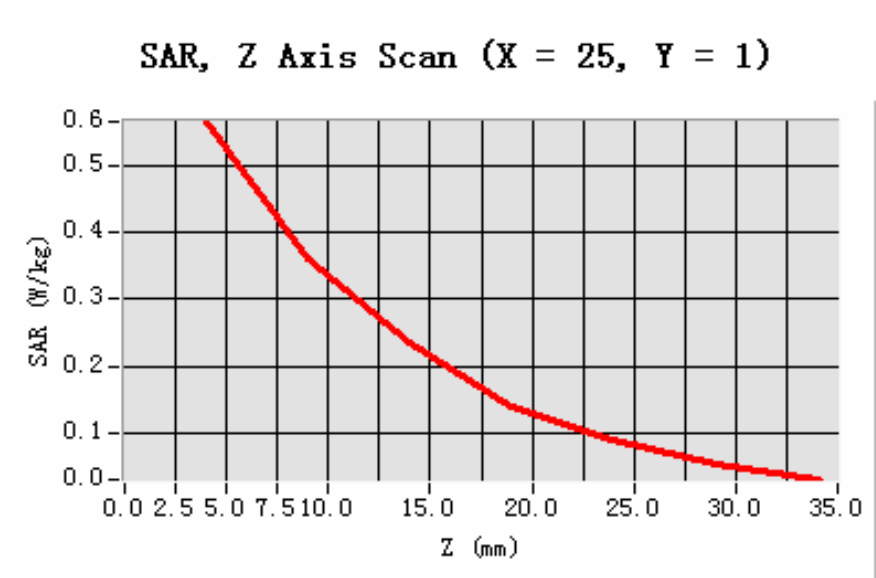
# MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 26/10/2007

Measurement duration: 19 minutes 33 seconds

Mobile Phone IMEI number: --

## A. Experimental conditions.

| Phantom File | surf_sam_plan.txt, Adaptative 2 max |
|---|---|
| Phantom | Validation plane |
| Device Position | Body |
| Band | GSM1900 |
| Channels | Middle |
| Signal | 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 permitivity (real part)** | 40.193001 |
| **Relative permitivity (imaginary part)** | 13.813800 |
| **Conductivity (S/m)** | 1.442775 |
| **Variation (%)** | 0.650000 |

| SURFACE SAR | VOLUME SAR |
|---|---|
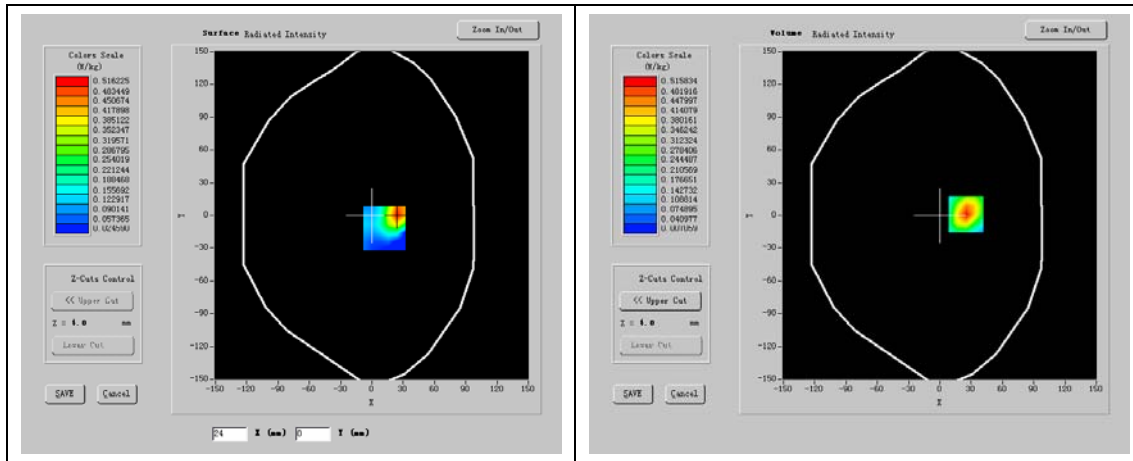
**Maximum location: X=25.00, Y=1.00**

| SAR 10g (W/Kg) | 0.262912 |
|---|---|
| SAR 1g   (W/Kg) | 0.472307 |

# Z Axis Scan

## SAR, Z Axis Scan (X = 25, Y = 1)
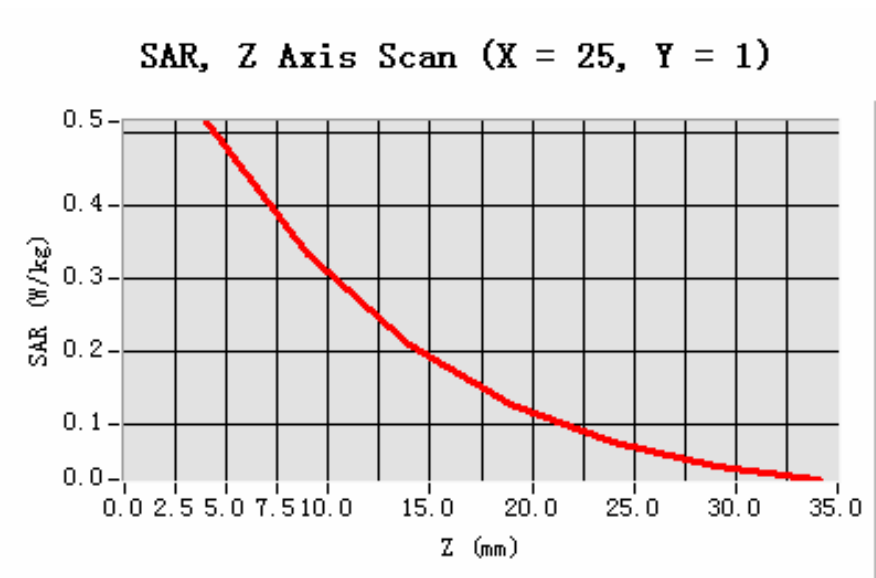
# MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 26/10/2007

Measurement duration: 19 minutes 33 seconds

Mobile Phone IMEI number: --

## A. Experimental conditions.

| Phantom File | surf_sam_plan.txt, Adaptative 2 max |
|---|---|
| Phantom | Validation plane |
| Device Position | Body |
| Band | GSM1900 |
| Channels | High |
| Signal | 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 permitivity (real part) | 40.285999 |
| Relative permitivity (imaginary part) | 13.669900 |
| Conductivity (S/m) | 1.450225 |
| Variation (%) | 0.650000 |

| SURFACE SAR | VOLUME SAR |
|---|---|
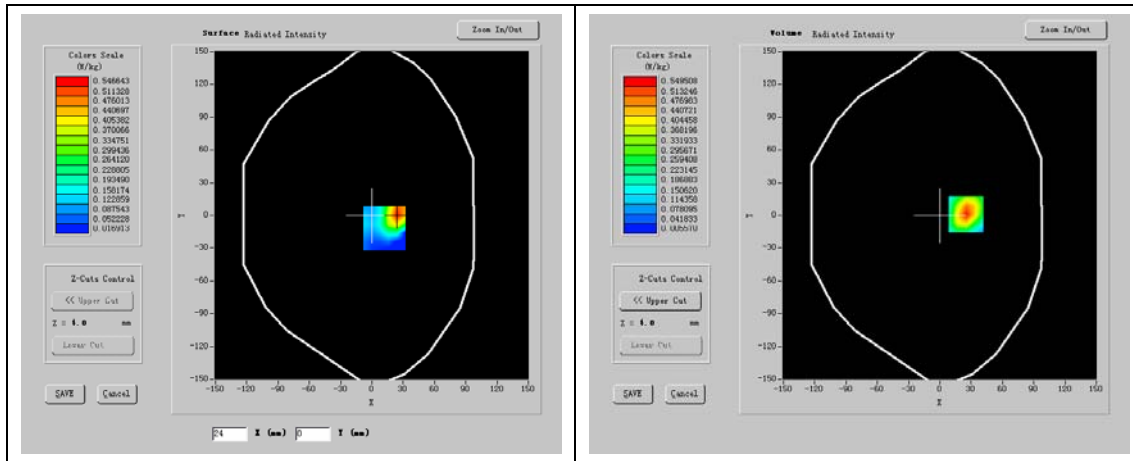
## Maximum location: X=25.00, Y=1.00

| SAR 10g (W/Kg) | 0.279086 |
|:---:|:---:|
| SAR 1g　(W/Kg) | 0.503692 |

# Z Axis Scan



SAR, Z Axis Scan (X = 25, Y = 1)