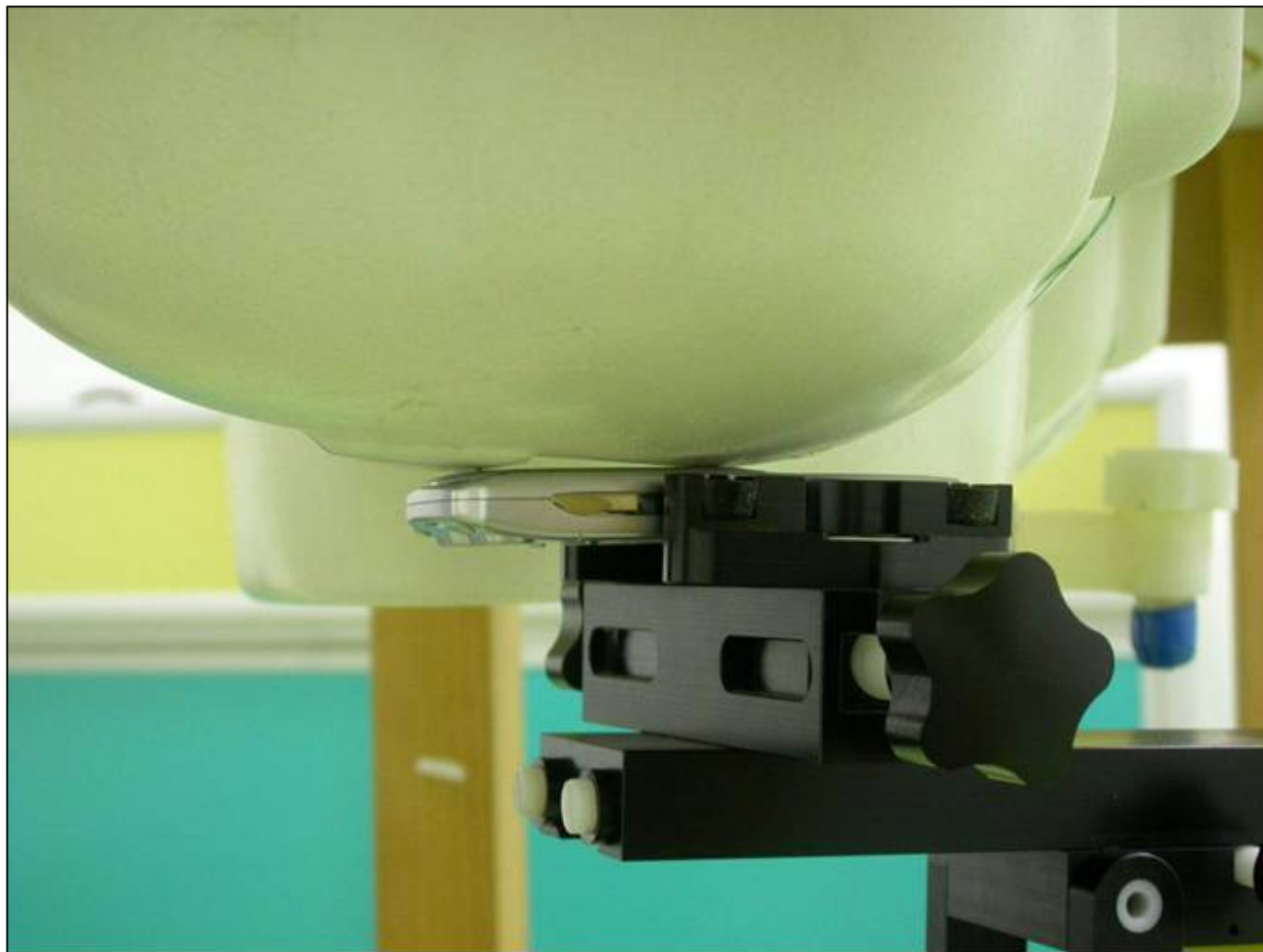


**APPENDIX A: TEST CONFIGURATIONS AND TEST DATA**  
**A1: TEST CONFIGURATION**

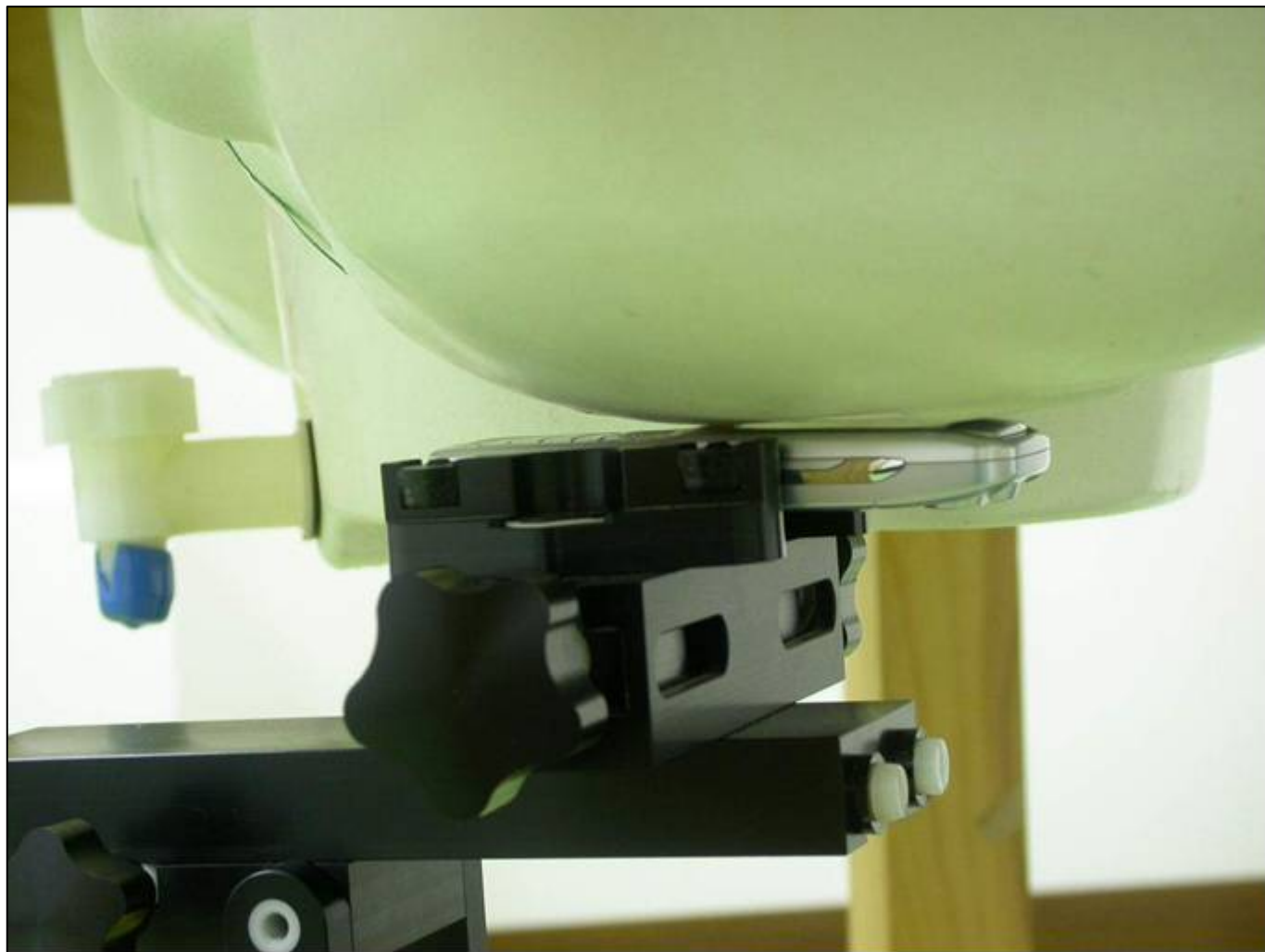
**Right Head Cheek Position**



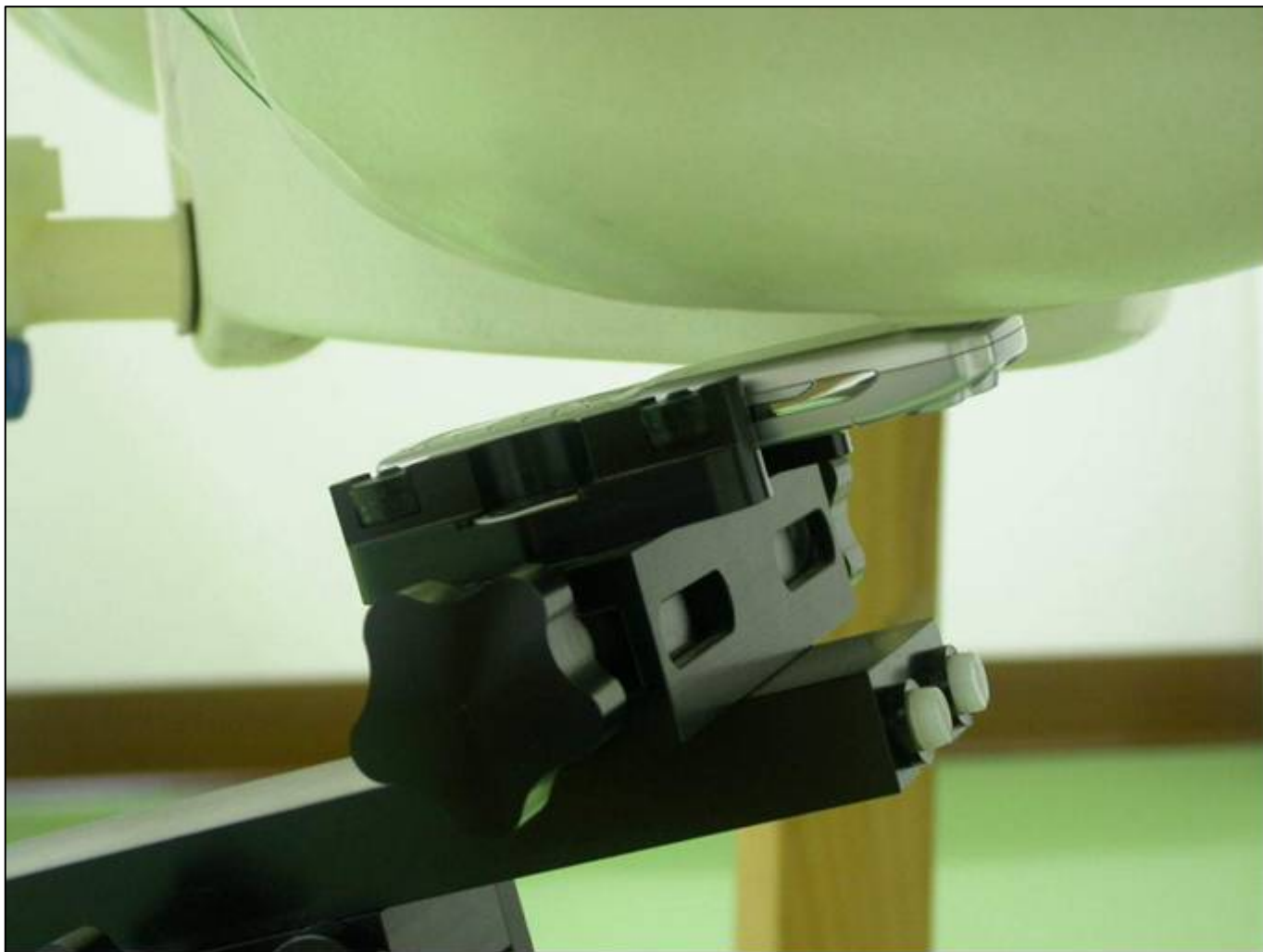
## Right Head Tilt Position



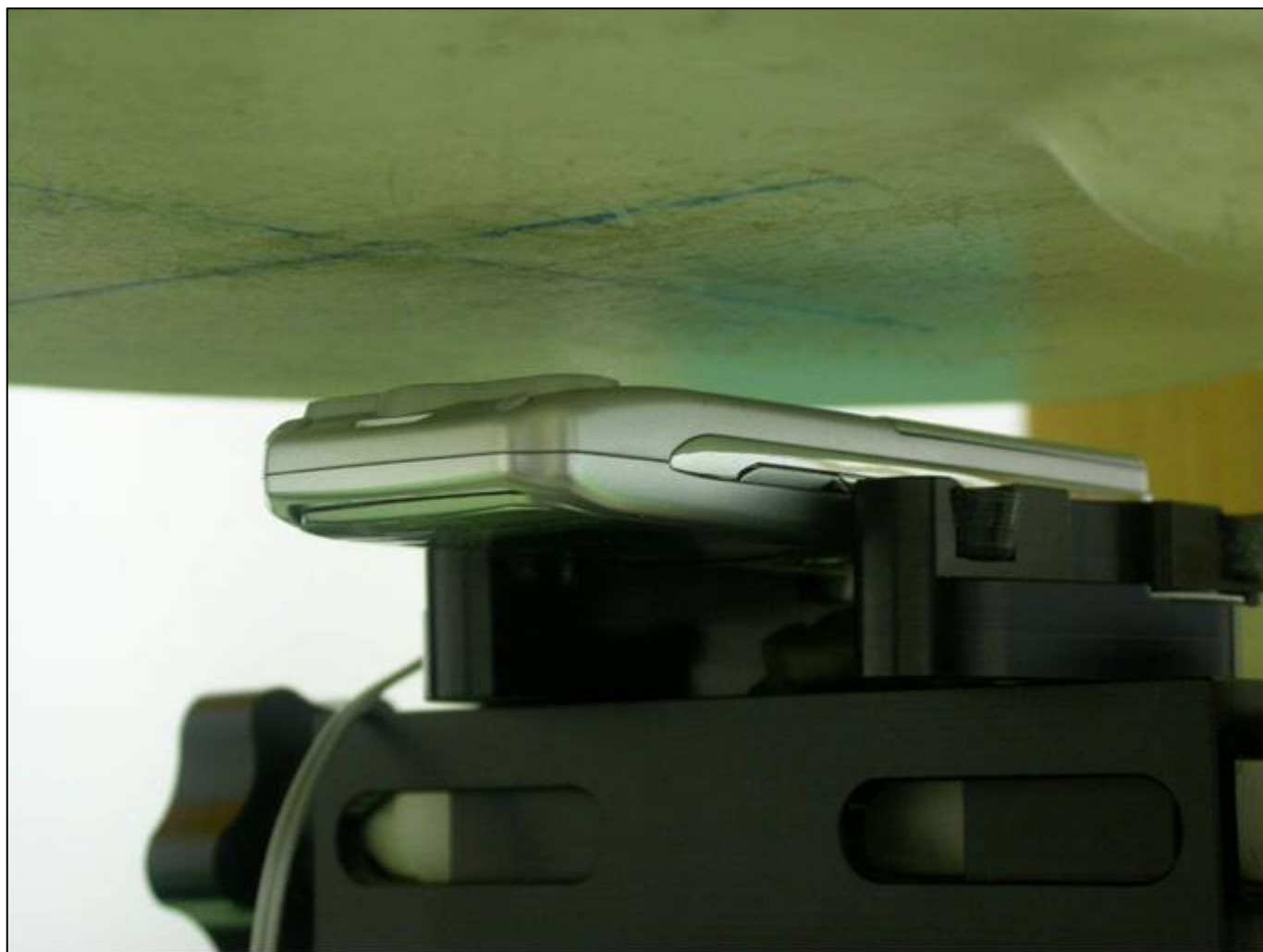
## Left Head Cheek Position



## Left Head Tilt Position

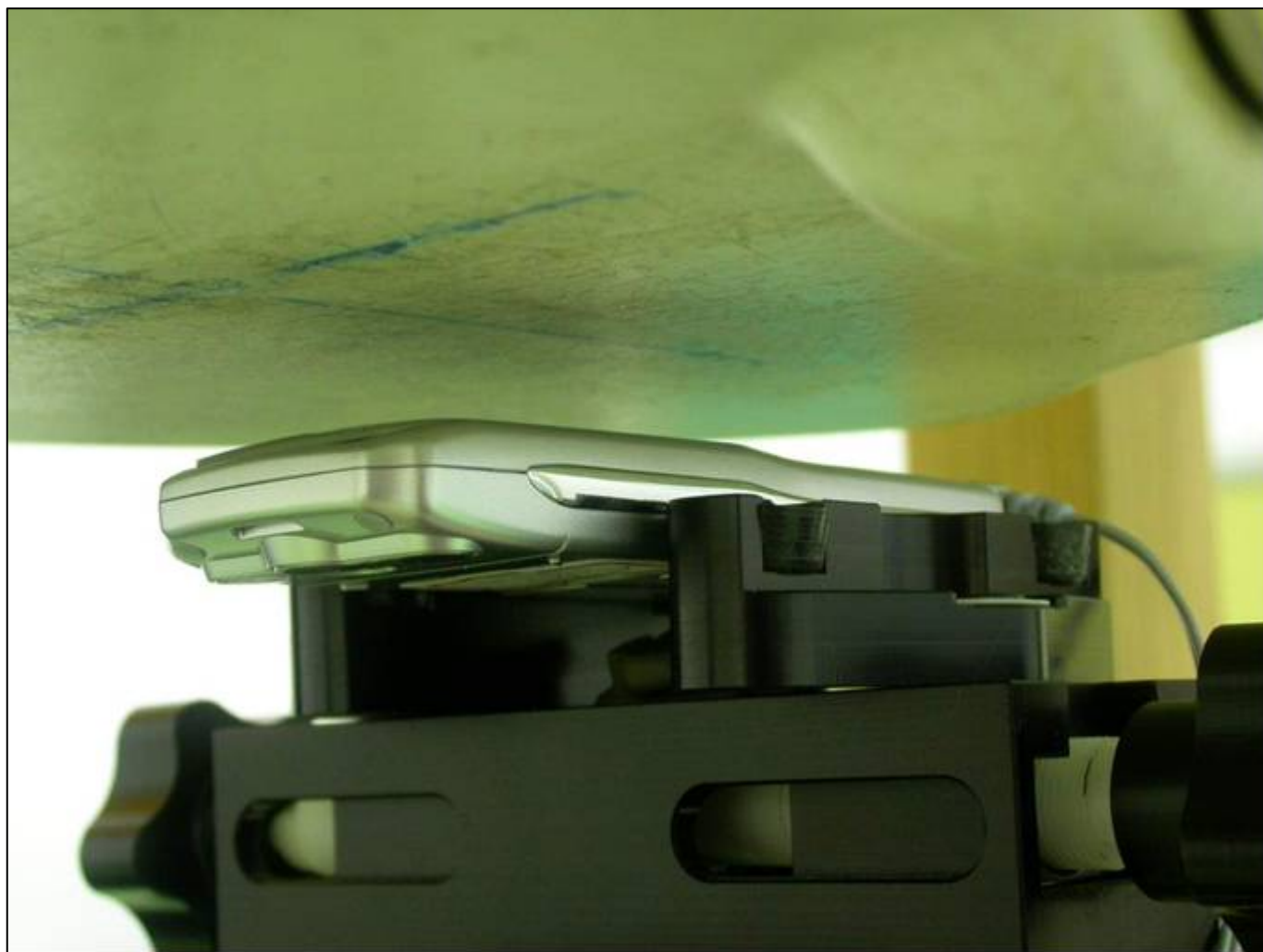


## Body Worn Position



**The bottom of the EUT to the flat phantom distance 15 mm**

## Body Worn Position



**The front of the EUT to the flat phantom distance 15 mm**

## EUT Photo





## Liquid Level Photo

Tissue HSL1900MHz D=155mm



Tissue MSL1900MHz D=151mm



Test Laboratory: Advance Data Technology

## Right Head-Cheek-PCS1900-Ch512-Mode 1

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz**

Communication System: PCS 1900 ; Frequency: 1850.2 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Touch position - Low Channel 512/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.777 mW/g

**Touch position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m

Peak SAR (extrapolated) = 1.41 W/kg

**SAR(1 g) = 0.714 mW/g; SAR(10 g) = 0.368 mW/g**

Maximum value of SAR (measured) = 0.795 mW/g

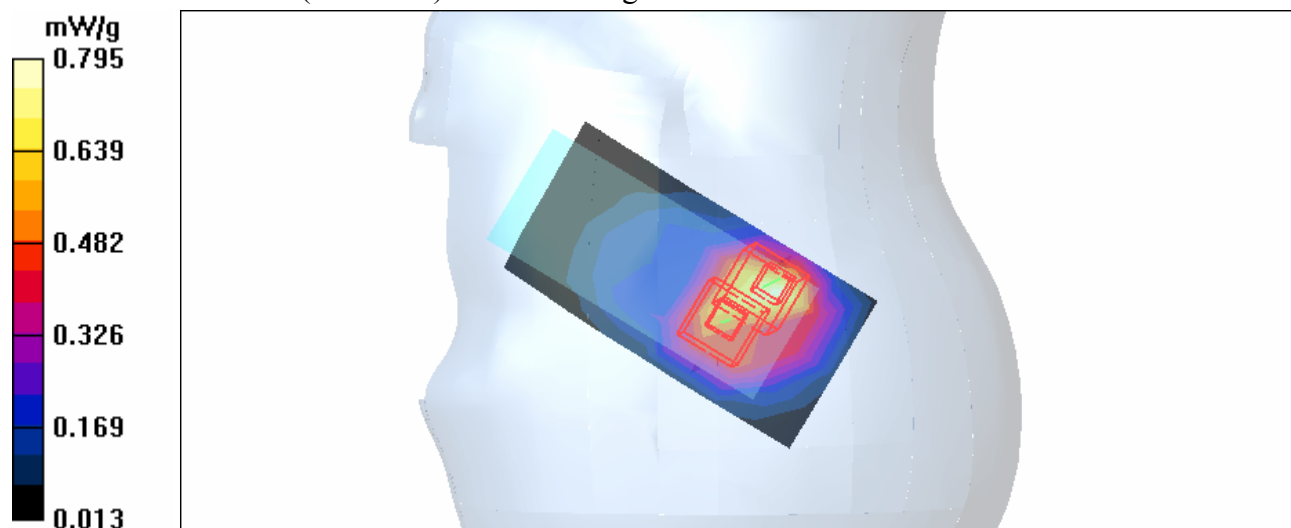
**Touch position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.596 mW/g; SAR(10 g) = 0.342 mW/g**

Maximum value of SAR (measured) = 0.654 mW/g



Test Laboratory: Advance Data Technology

## Right Head-Cheek-PCS1900-Ch661-Mode 1

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz**

Communication System: PCS 1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Touch position - Mid Channel 661/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.888 mW/g

**Touch position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.6 V/m

Peak SAR (extrapolated) = 1.67 W/kg

**SAR(1 g) = 0.828 mW/g; SAR(10 g) = 0.418 mW/g**

Maximum value of SAR (measured) = 0.917 mW/g

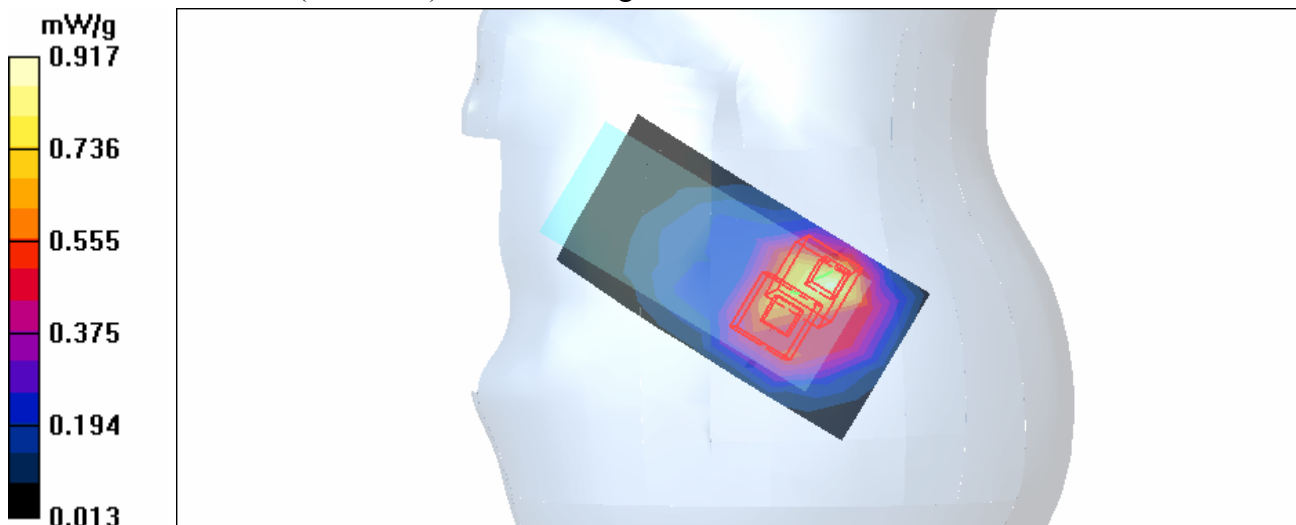
**Touch position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.6 V/m

Peak SAR (extrapolated) = 1.22 W/kg

**SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.368 mW/g**

Maximum value of SAR (measured) = 0.725 mW/g



Test Laboratory: Advance Data Technology

## Right Head-Cheek-PCS1900-Ch810-Mode 1

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz**

Communication System: PCS 1900 ; Frequency: 1909.8 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Touch position - High Channel 810/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.13 mW/g

**Touch position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.3 V/m

Peak SAR (extrapolated) = 2.24 W/kg

**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.561 mW/g**

Maximum value of SAR (measured) = 1.22 mW/g

**Touch position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:

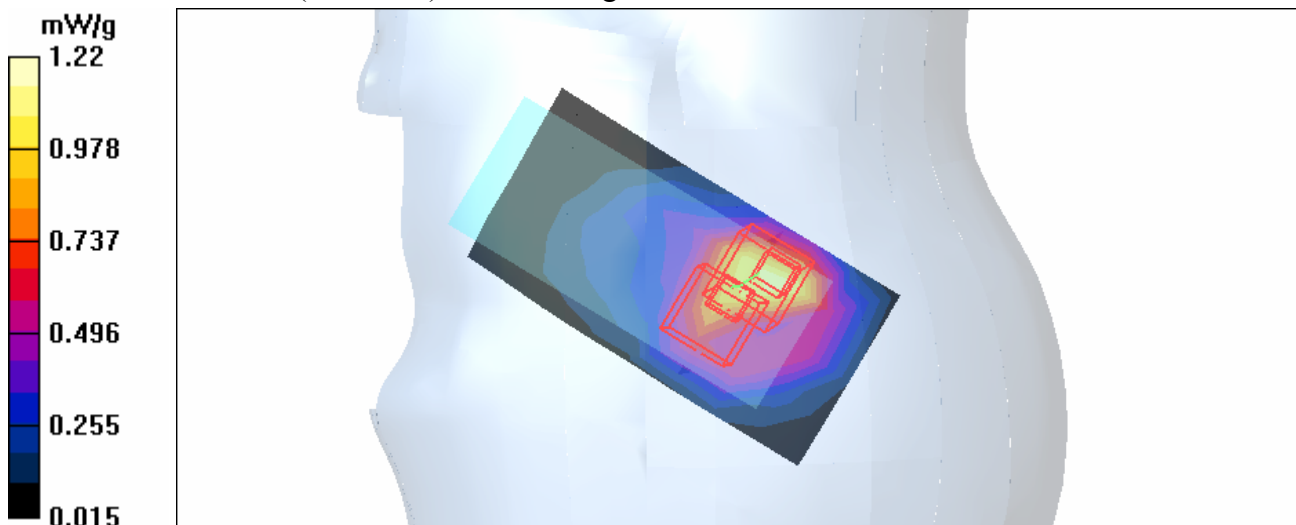
dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.3 V/m

Peak SAR (extrapolated) = 1.72 W/kg

**SAR(1 g) = 0.840 mW/g; SAR(10 g) = 0.457 mW/g**

Maximum value of SAR (measured) = 1.01 mW/g



Test Laboratory: Advance Data Technology

## Right Head-Tilt-PCS1900-Ch512-Mode 2

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz**

Communication System: PCS 1900 ; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Tilt position - Low Channel 512/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.892 mW/g

**Tilt position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

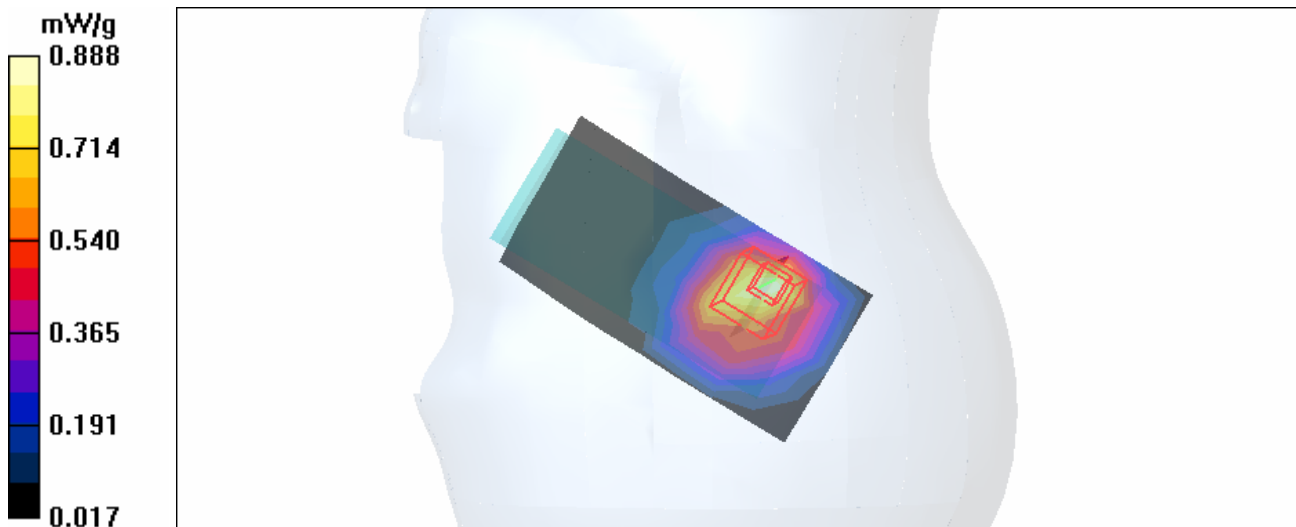
dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.7 V/m

Peak SAR (extrapolated) = 1.51 W/kg

**SAR(1 g) = 0.801 mW/g; SAR(10 g) = 0.435 mW/g**

Maximum value of SAR (measured) = 0.888 mW/g



Test Laboratory: Advance Data Technology

## Right Head-Tilt-PCS1900-Ch661-Mode 2

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz**

Communication System: PCS 1900 ; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;

Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Tilt position - Mid Channel 661/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.993 mW/g

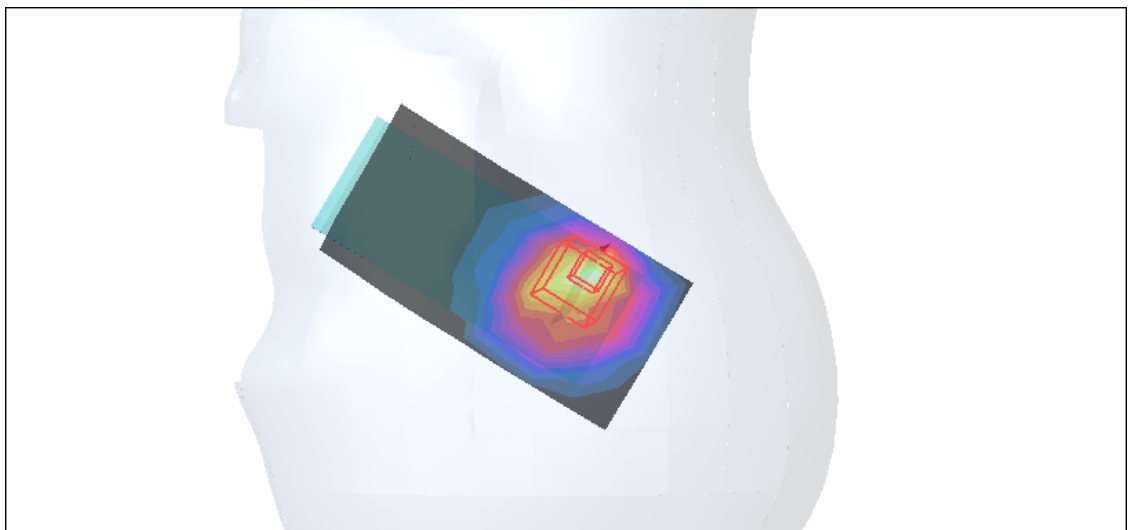
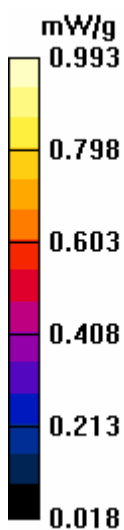
**Tilt position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.7 V/m

Peak SAR (extrapolated) = 1.71 W/kg

**SAR(1 g) = 0.897 mW/g; SAR(10 g) = 0.483 mW/g**



Test Laboratory: Advance Data Technology

## Right Head-Tilt-PCS1900-Ch810-Mode 2

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz**

Communication System: PCS 1900 ; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: GMSK

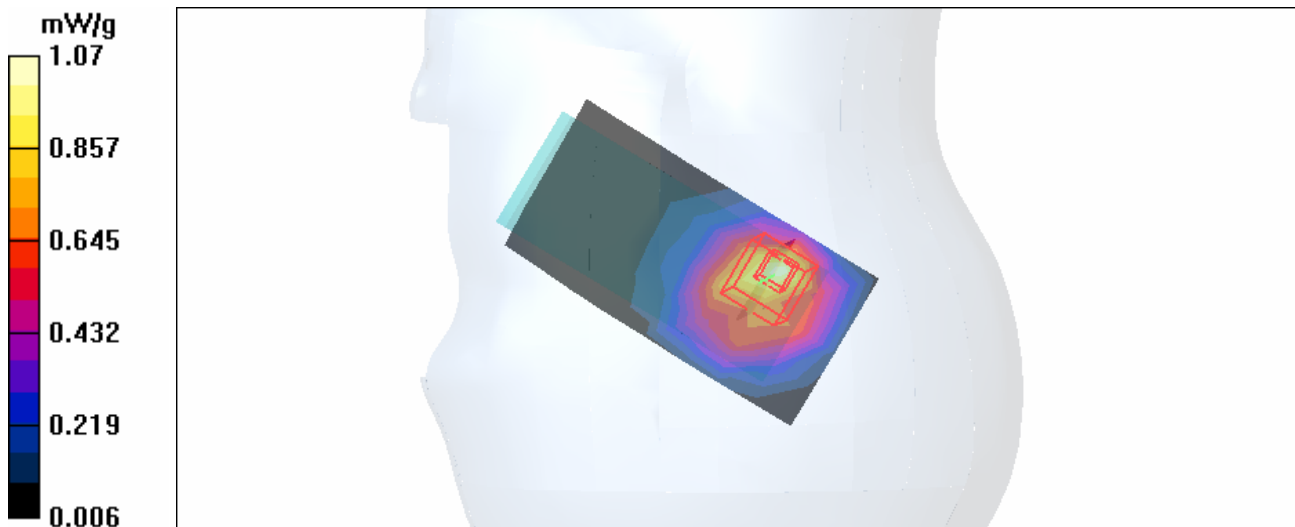
Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Tilt position - High Channel 810/Area Scan (5x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (measured) = 1.07 mW/g

**Tilt position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 23.4 V/m  
Peak SAR (extrapolated) = 1.84 W/kg  
**SAR(1 g) = 0.955 mW/g; SAR(10 g) = 0.508 mW/g**  
Maximum value of SAR (measured) = 1.04 mW/g



Test Laboratory: Advance Data Technology

### Left Head-Cheek-PCS1900-Ch512-Mode 3

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz**

Communication System: PCS 1900 ; Frequency: 1850.2 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Touch position - Low Channel 512/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

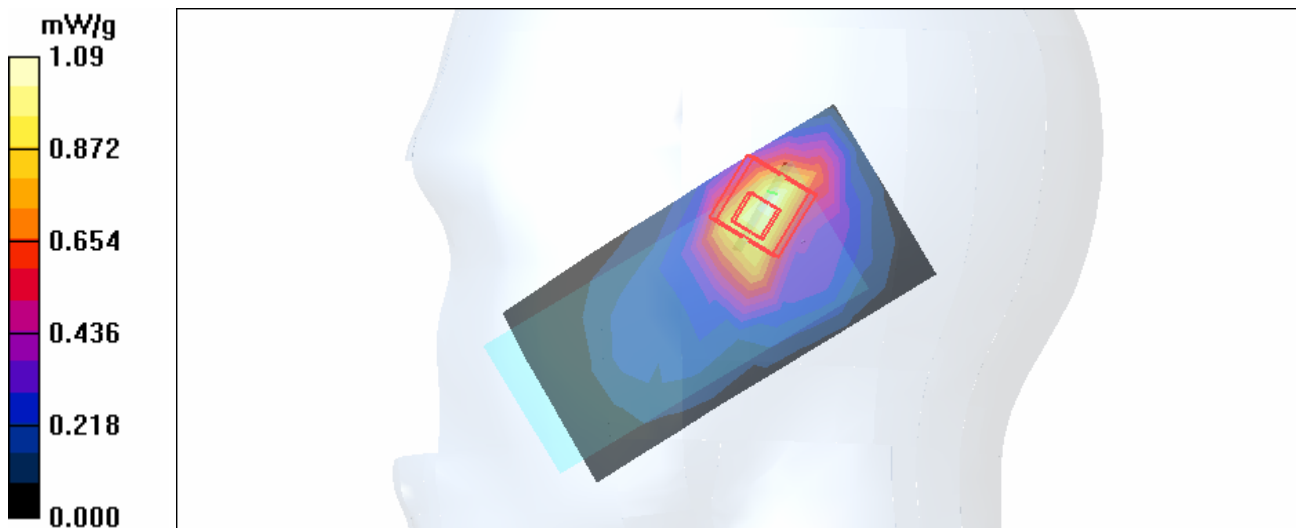
Maximum value of SAR (measured) = 1.09 mW/g

**Touch position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.0 V/m

Peak SAR (extrapolated) = 2.43 W/kg

SAR(1 g) = **0.995 mW/g**; SAR(10 g) = 0.496 mW/g



Test Laboratory: Advance Data Technology

### Left Head-Cheek-PCS1900-Ch661-Mode 3

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz**

Communication System: PCS 1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39$ ;  $\rho = 1000 \text{ kg/m}^3$  ;

Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Touch position - Mid Channel 661/Area Scan (5x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.42 mW/g

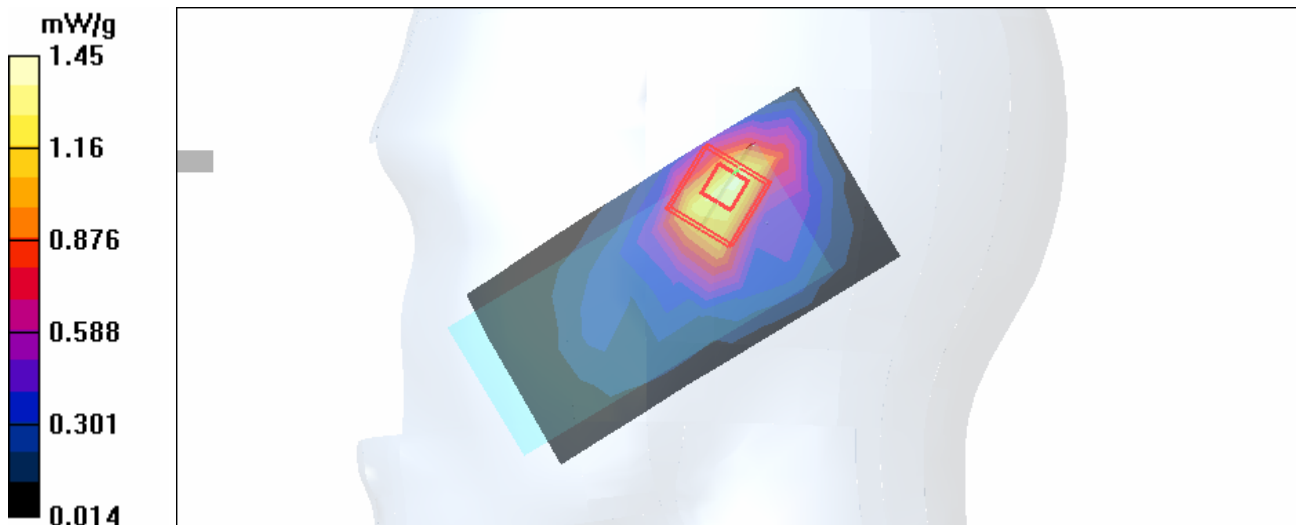
**Touch position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.7 V/m

Peak SAR (extrapolated) = 2.82 W/kg

**SAR(1 g) = 1.29 mW/g; SAR(10 g) = 0.641 mW/g**

Maximum value of SAR (measured) = 1.45 mW/g



Test Laboratory: Advance Data Technology

### Left Head-Cheek-PCS1900-Ch810-Mode 3

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz**

Communication System: PCS 1900 ; Frequency: 1909.8 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Touch position - High Channel 810/Area Scan (5x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.56 mW/g

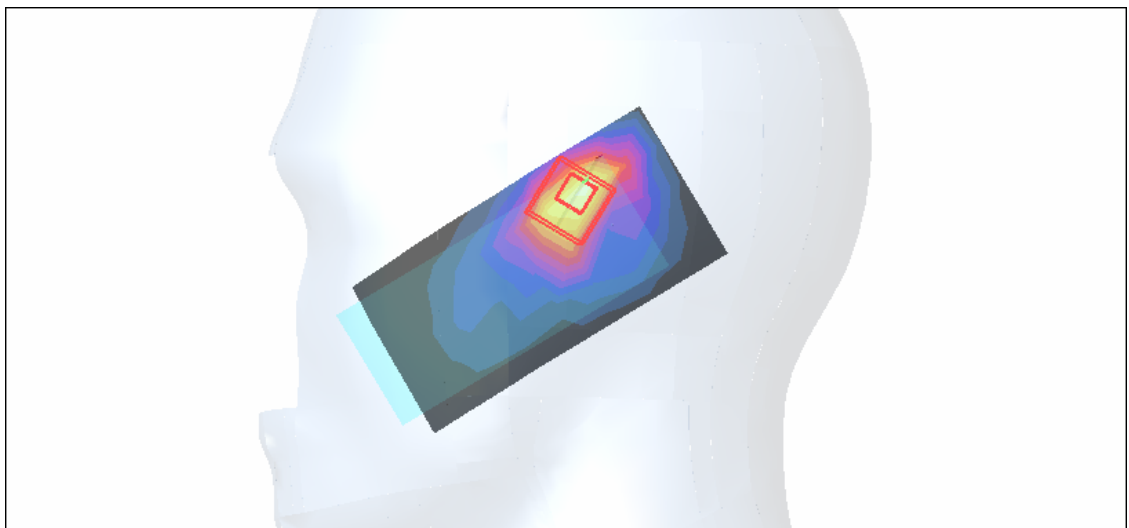
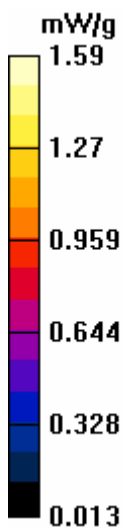
**Touch position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

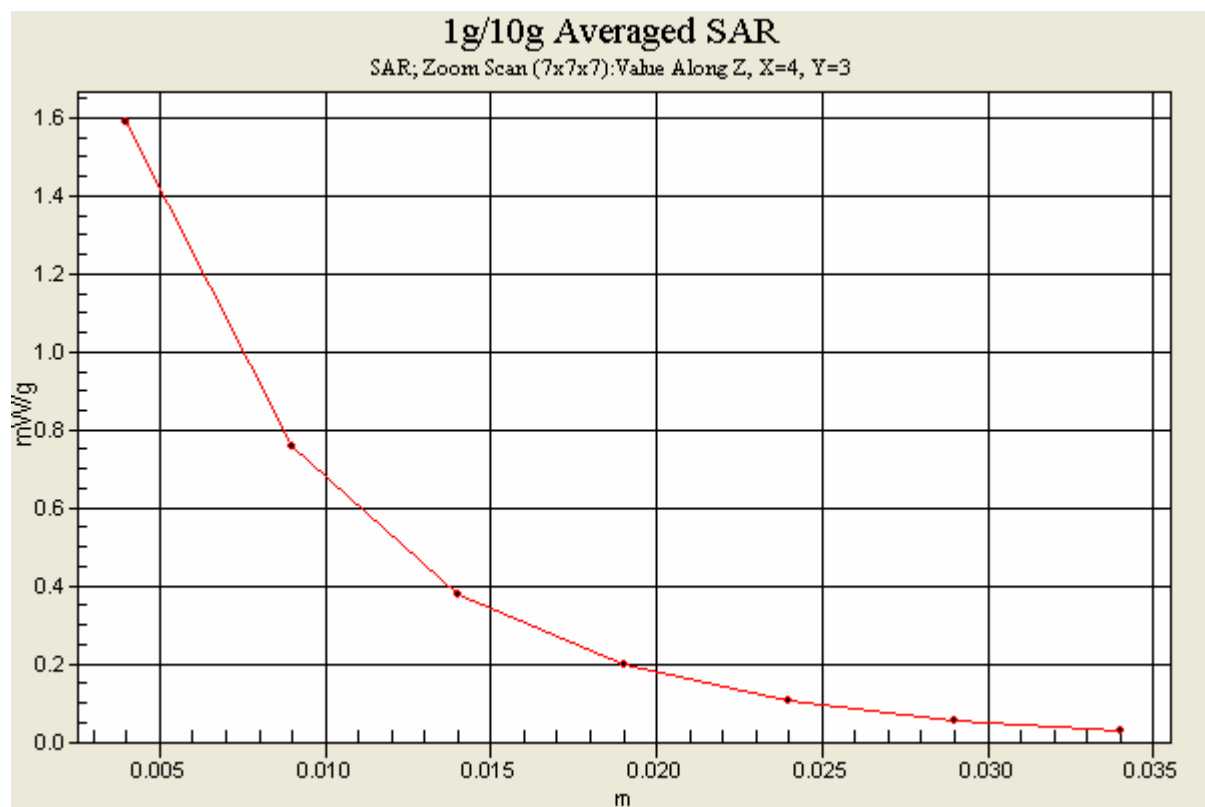
Reference Value = 18.8 V/m

Peak SAR (extrapolated) = 3.10 W/kg

**SAR(1 g) = 1.41 mW/g; SAR(10 g) = 0.696 mW/g**

Maximum value of SAR (measured) = 1.59 mW/g





Test Laboratory: Advance Data Technology

## Left Head-Tilt-PCS1900-Ch512-Mode 4

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz**

Communication System: PCS 1900 ; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Tilt position - Low Channel 512/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.971 mW/g

**Tilt position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

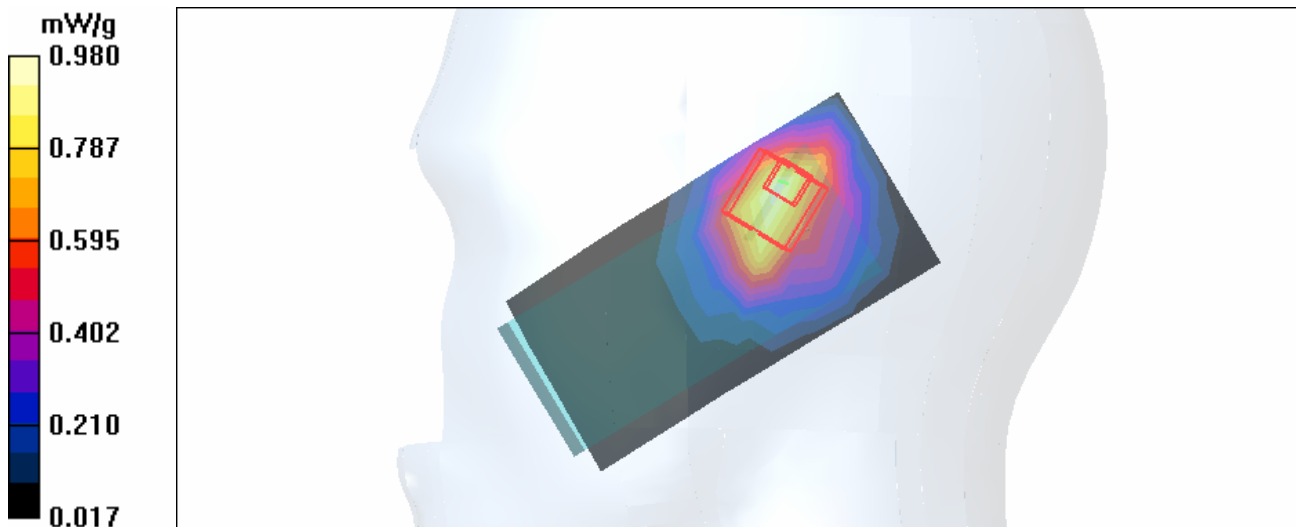
dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.8 V/m

Peak SAR (extrapolated) = 1.81 W/kg

**SAR(1 g) = 0.881 mW/g; SAR(10 g) = 0.463 mW/g**

Maximum value of SAR (measured) = 0.980 mW/g



Test Laboratory: Advance Data Technology

## Left Head-Tilt-PCS1900-Ch661-Mode 4

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz**

Communication System: PCS 1900 ; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;

Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Tilt position - Mid Channel 661/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.13 mW/g

**Tilt position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

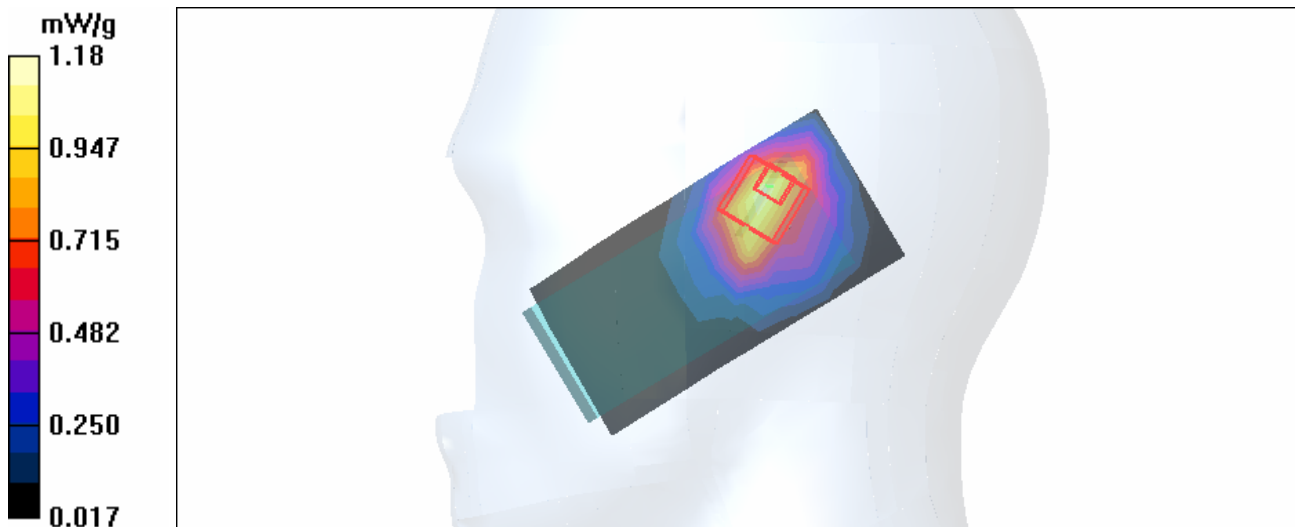
dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.1 V/m

Peak SAR (extrapolated) = 2.19 W/kg

**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.539 mW/g**

Maximum value of SAR (measured) = 1.18 mW/g



Test Laboratory: Advance Data Technology

## Left Head-Tilt-PCS1900-Ch810-Mode 4

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz**

Communication System: PCS 1900 ; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Tilt position - High Channel 810/Area Scan (5x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.22 mW/g

**Tilt position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

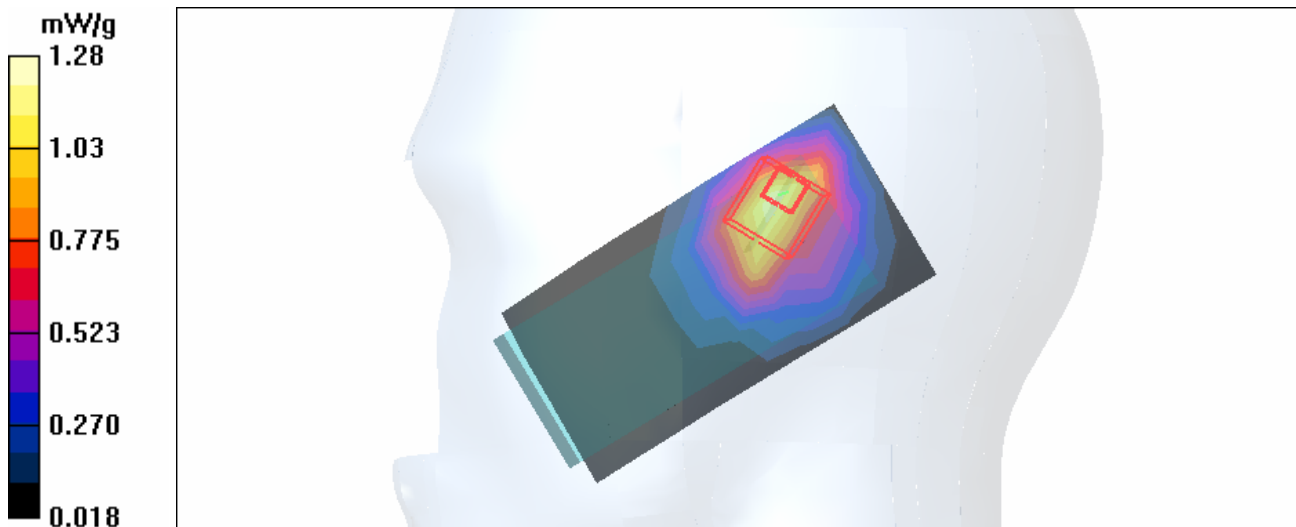
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 23.5 V/m

Peak SAR (extrapolated) = 2.32 W/kg

**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.577 mW/g**

Maximum value of SAR (measured) = 1.28 mW/g



Test Laboratory: Advance Data Technology

## BodyWorn-GPRS1900-Ch512-Keypad Down-Mode 5

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz**

Communication System: PCS 1900 ; Frequency: 1850.2 MHz ; Duty Cycle: 1:4

Medium: MSL1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.51$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots

Separation Distance : 15 mm ( The bottom side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23

- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202

- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

**Low Channel 512/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.861 mW/g

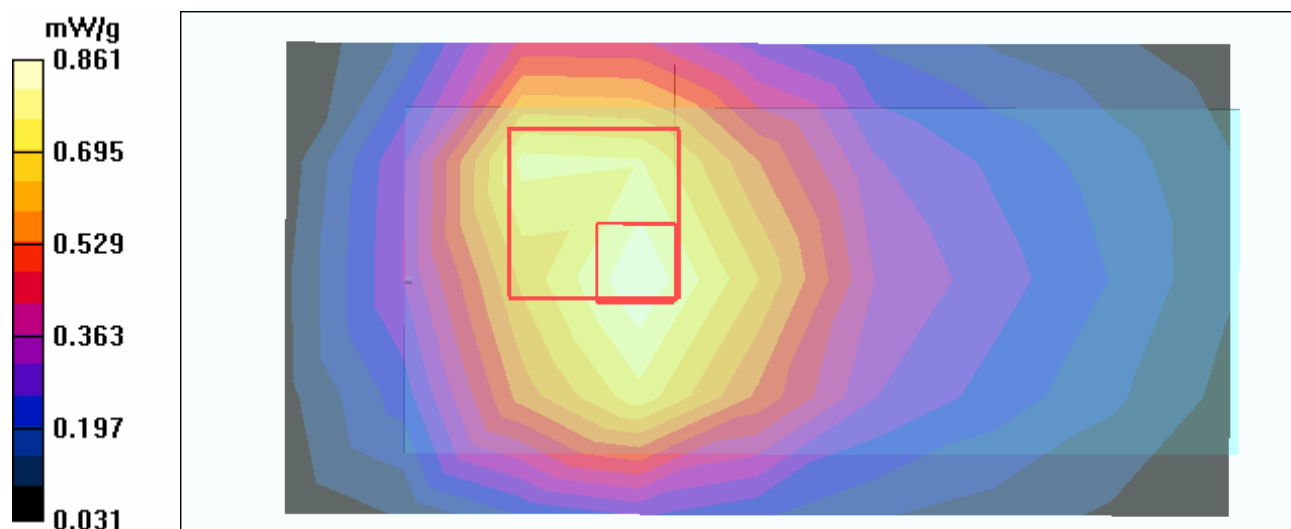
**Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.5 V/m

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.750 mW/g; SAR(10 g) = 0.447 mW/g**

Maximum value of SAR (measured) = 0.851 mW/g



Test Laboratory: Advance Data Technology

## BodyWorn-GPRS1900-Ch661-Keypad Down-Mode 5

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz**

Communication System: PCS 1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4

Medium: MSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots

Separation Distance : 15 mm ( The bottom side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23

- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202

- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

**Mid Channel 661/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.964 mW/g

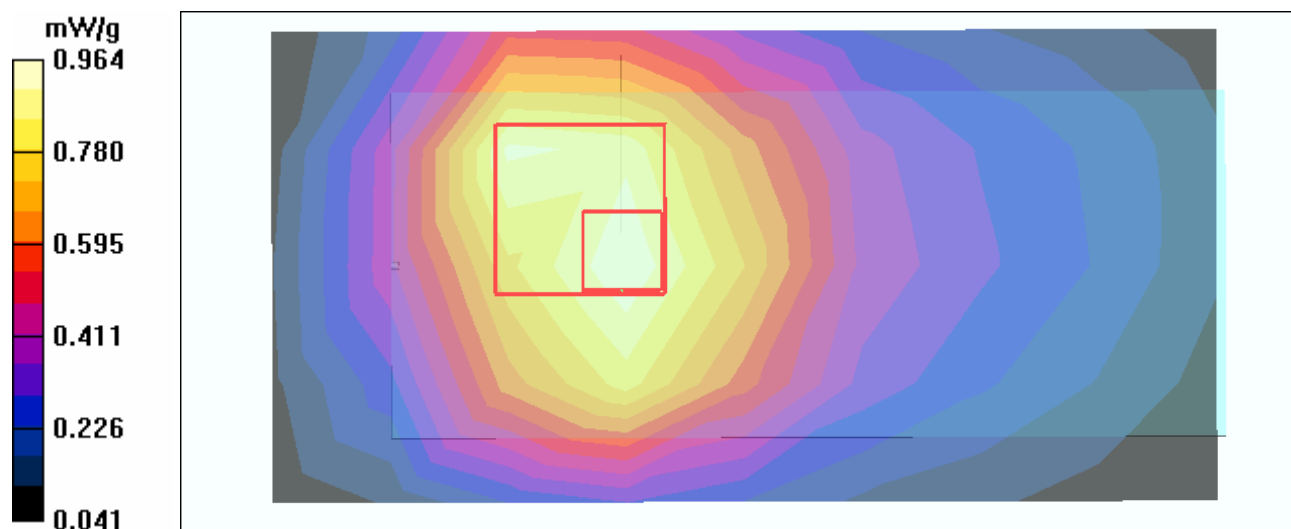
**Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

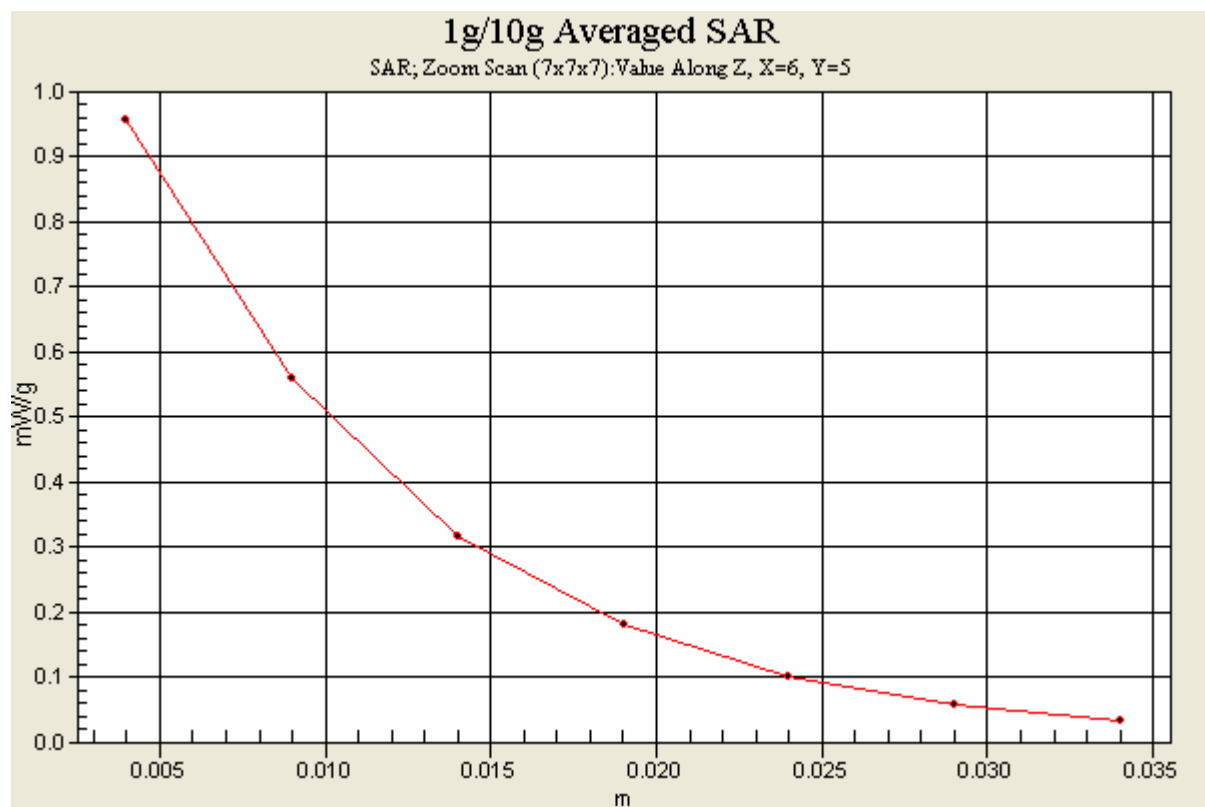
Reference Value = 17.5 V/m

Peak SAR (extrapolated) = 1.40 W/kg

**SAR(1 g) = 0.859 mW/g; SAR(10 g) = 0.523 mW/g**

Maximum value of SAR (measured) = 0.954 mW/g





Test Laboratory: Advance Data Technology

## BodyWorn-GPRS1900-Ch810-Keypad Down-Mode 5

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz**

Communication System: PCS 1900 ; Frequency: 1909.8 MHz ; Duty Cycle: 1:4

Medium: MSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.57 \text{ mho/m}$ ;  $\epsilon_r = 51.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots  
Separation Distance : 15 mm ( The bottom side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

**High Channel 810/Area Scan (5x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.910 mW/g

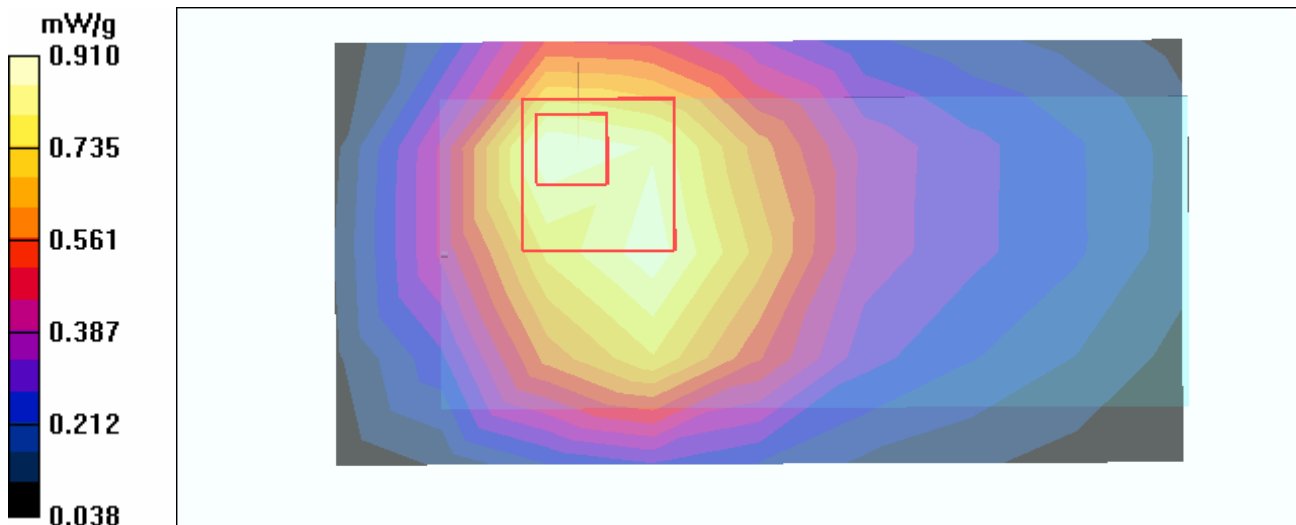
**High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.2 V/m

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.823 mW/g; SAR(10 g) = 0.505 mW/g**

Maximum value of SAR (measured) = 0.892 mW/g



Test Laboratory: Advance Data Technology

## BodyWorn-GPRS1900-Ch512-Keypad Up-Mode 6

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz**

Communication System: PCS 1900 ; Frequency: 1850.2 MHz ; Duty Cycle: 1:4

Medium: MSL1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.51$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots

Separation Distance : 15 mm ( The front side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23

- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202

- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

**Low Channel 512/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.588 mW/g

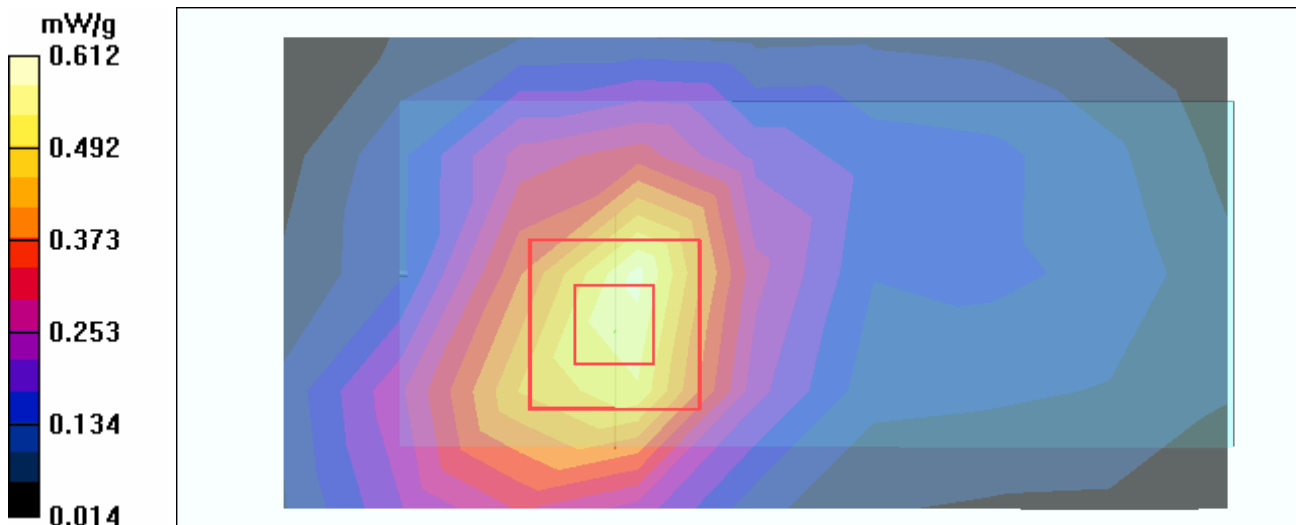
**Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.1 V/m

Peak SAR (extrapolated) = 0.883 W/kg

**SAR(1 g) = 0.548 mW/g; SAR(10 g) = 0.313 mW/g**

Maximum value of SAR (measured) = 0.612 mW/g



Test Laboratory: Advance Data Technology

## BodyWorn-GPRS1900-Ch661-Keypad Up-Mode 6

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz**

Communication System: PCS 1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4

Medium: MSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots  
Separation Distance : 15 mm ( The front side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

**Mid Channel 661/Area Scan (5x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.565 mW/g

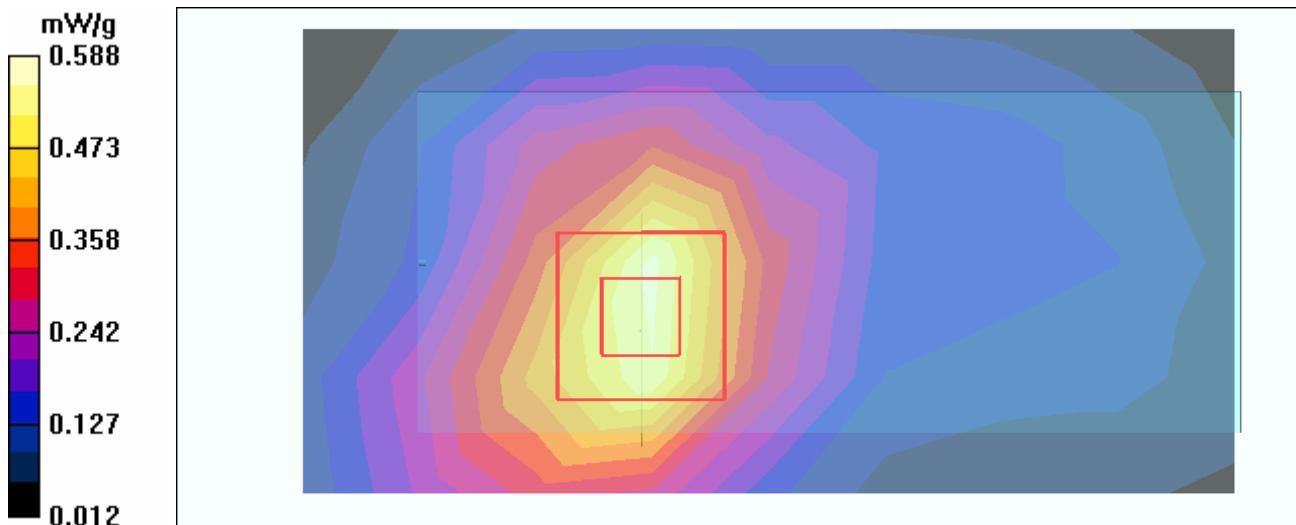
**Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.4 V/m

Peak SAR (extrapolated) = 0.855 W/kg

**SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.305 mW/g**

Maximum value of SAR (measured) = 0.588 mW/g



Test Laboratory: Advance Data Technology

## BodyWorn-GPRS1900-Ch810-Keypad Up-Mode 6

**DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz**

Communication System: PCS 1900 ; Frequency: 1909.8 MHz ; Duty Cycle: 1:4

Medium: MSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.57 \text{ mho/m}$ ;  $\epsilon_r = 51.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots  
Separation Distance : 15 mm ( The front side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

**High Channel 810/Area Scan (5x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.546 mW/g

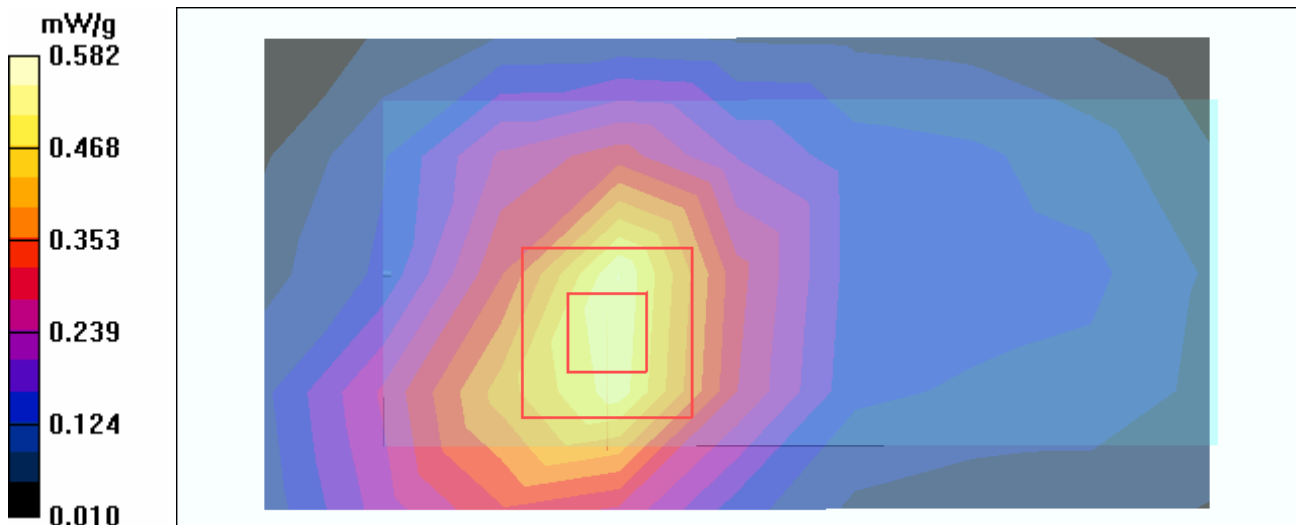
**High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 10.00 V/m

Peak SAR (extrapolated) = 0.864 W/kg

**SAR(1 g) = 0.523 mW/g; SAR(10 g) = 0.298 mW/g**

Maximum value of SAR (measured) = 0.582 mW/g



Test Laboratory: Advance Data Technology

## System Validation Check-HSL 1900MHz

**DUT: Dipole 1900 MHz ; Type: D1900V2 ; Serial: 5d036 ; Test Frequency: 1900 MHz**

Communication System: CW ; Frequency: 1900 MHz; Duty Cycle: 1:1; Modulation type: CW  
Medium: HSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 155 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 10.6 mW/g

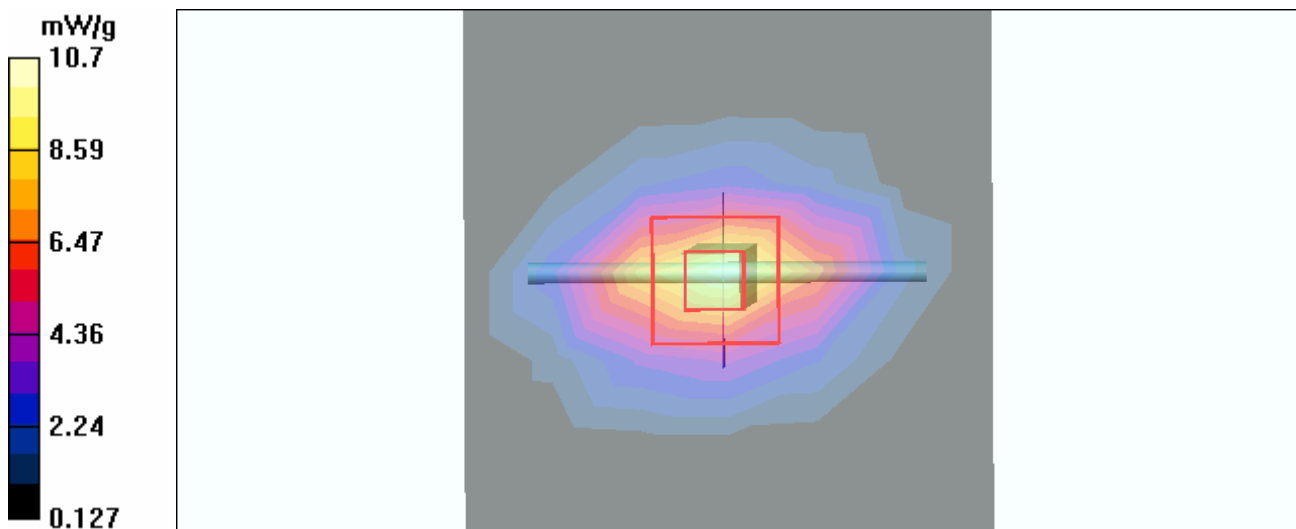
**d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.1 V/m; Power Drift = -0.072 dB

Peak SAR (extrapolated) = 17.4 W/kg

**SAR(1 g) = 9.48 mW/g; SAR(10 g) = 4.87 mW/g**

Maximum value of SAR (measured) = 10.7 mW/g



Test Laboratory: Advance Data Technology

## System Validation Check-MSL 1900MHz

**DUT: Dipole 1900 MHz ; Type: D1900V2 ; Serial: 5d036 ; Test Frequency: 1900 MHz**

Communication System: CW ; Frequency: 1900 MHz; Duty Cycle: 1:1; Modulation type: CW  
Medium: MSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.56$  mho/m;  $\epsilon_r = 51.7$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 151 mm  
Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom)  
Air temp. : 22.0 degrees ; Liquid temp. : 20.9 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 10.6 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.1 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 16.5 W/kg

**SAR(1 g) = 9.55 mW/g; SAR(10 g) = 4.97 mW/g**

Maximum value of SAR (measured) = 10.8 mW/g

