

For GSM Band

APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

A1: TEST CONFIGURATION

Body Worn Bottom Position



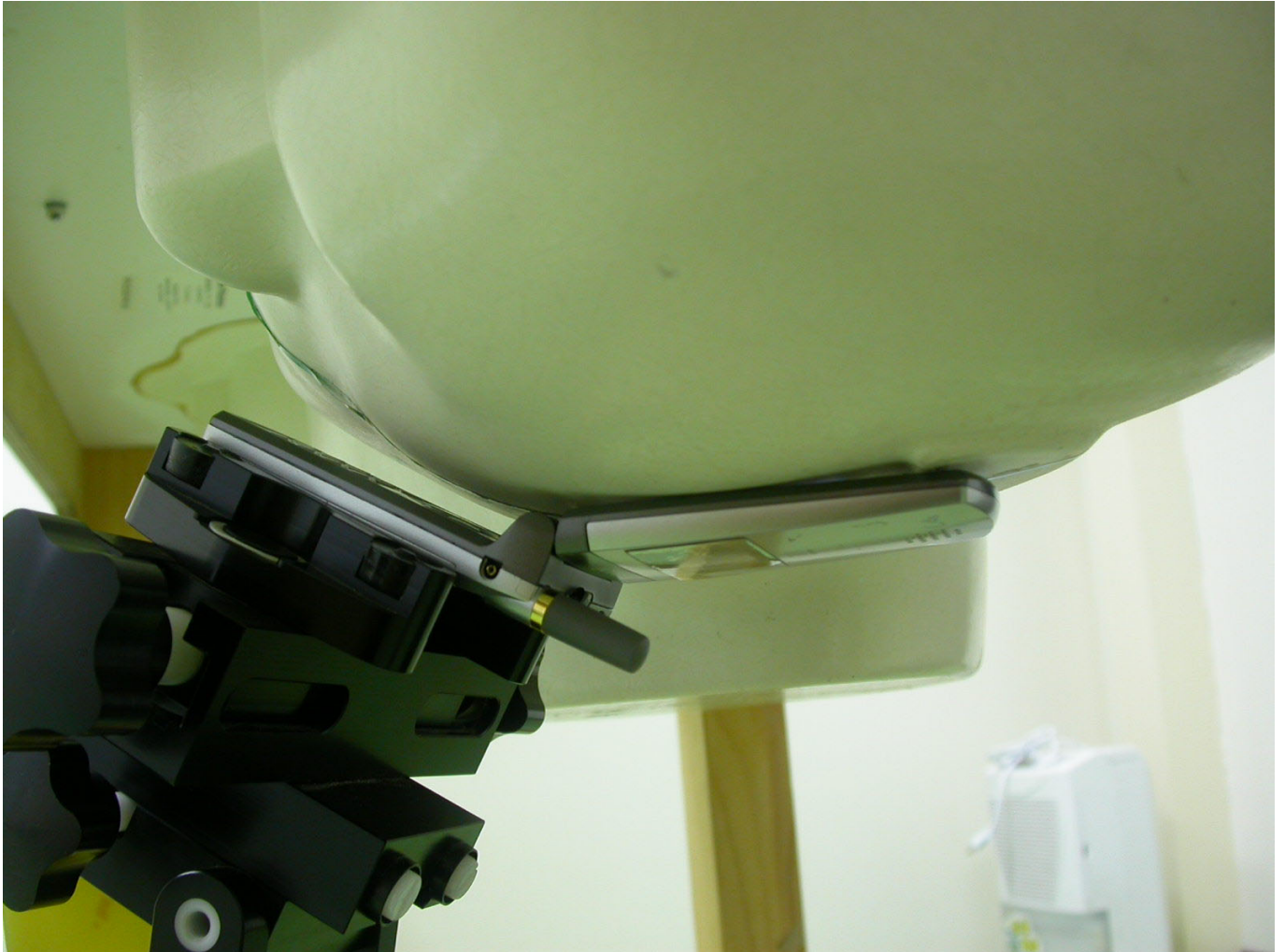
The bottom of the EUT to the flat phantom distance 15 mm

Body Worn Front Position

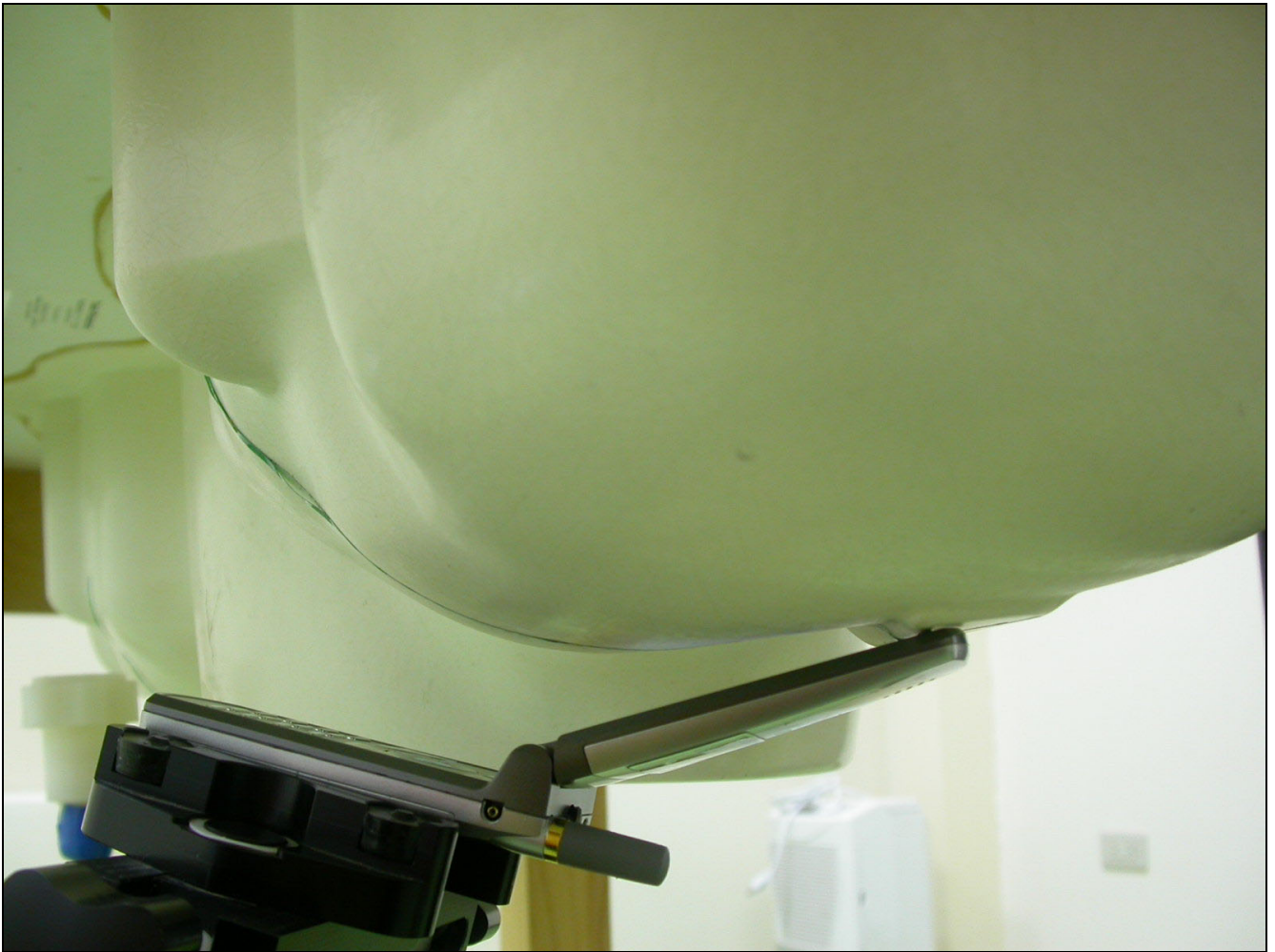


The front of the EUT to the flat phantom distance 15 mm

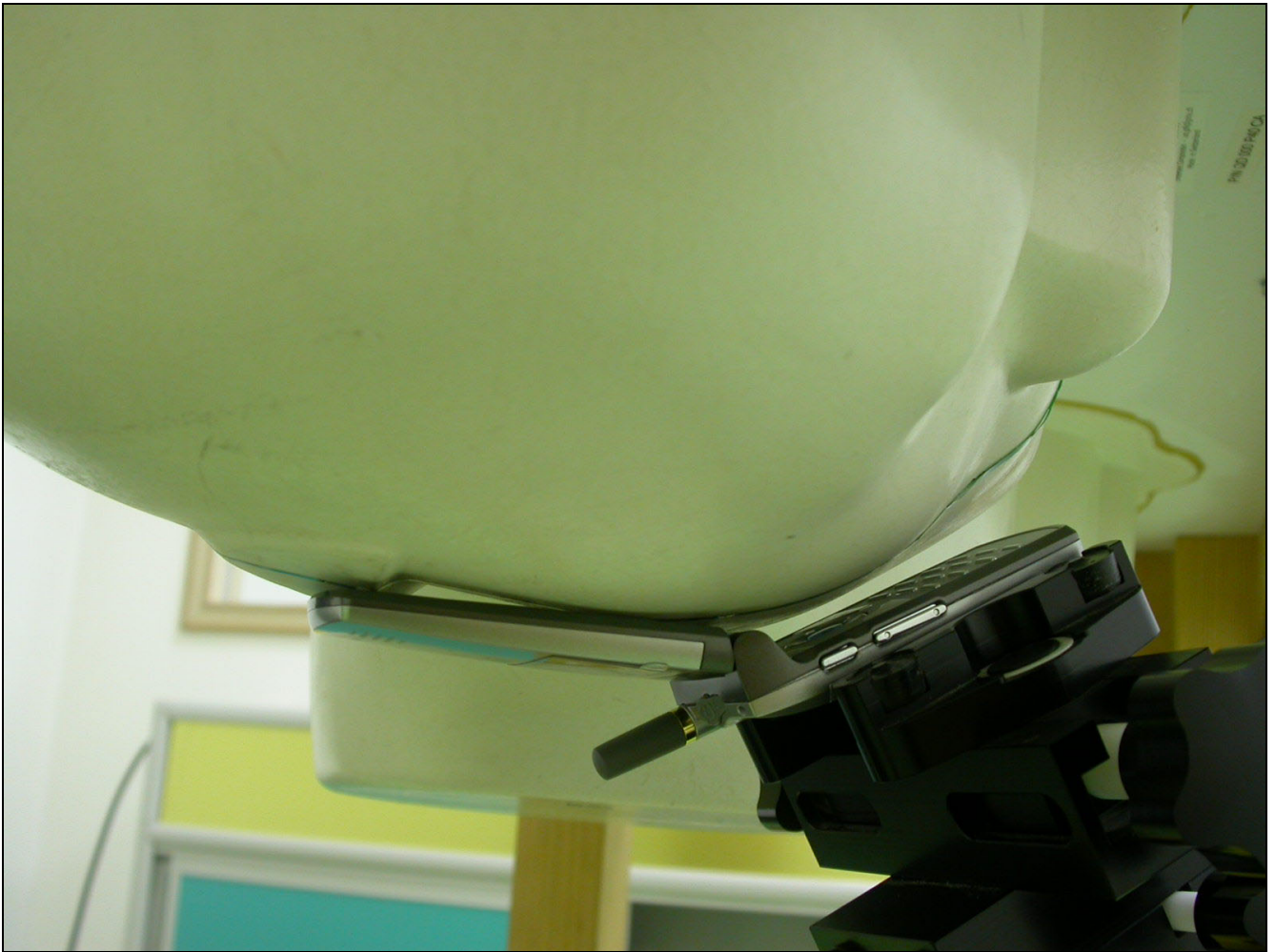
Left Head Cheek Position



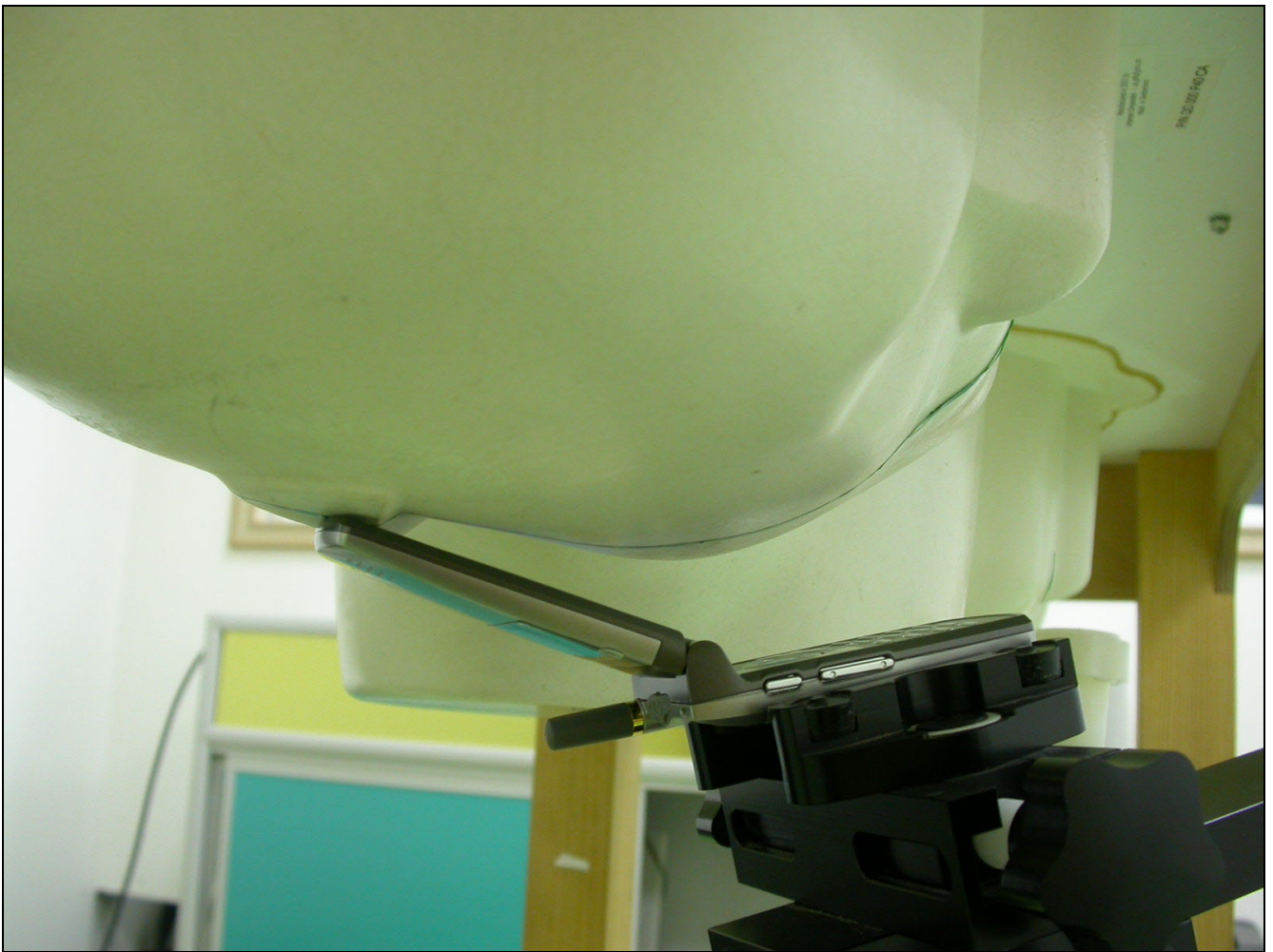
Left Head Tilt Position



Right Head Cheek Position



Right Head Tilt Position



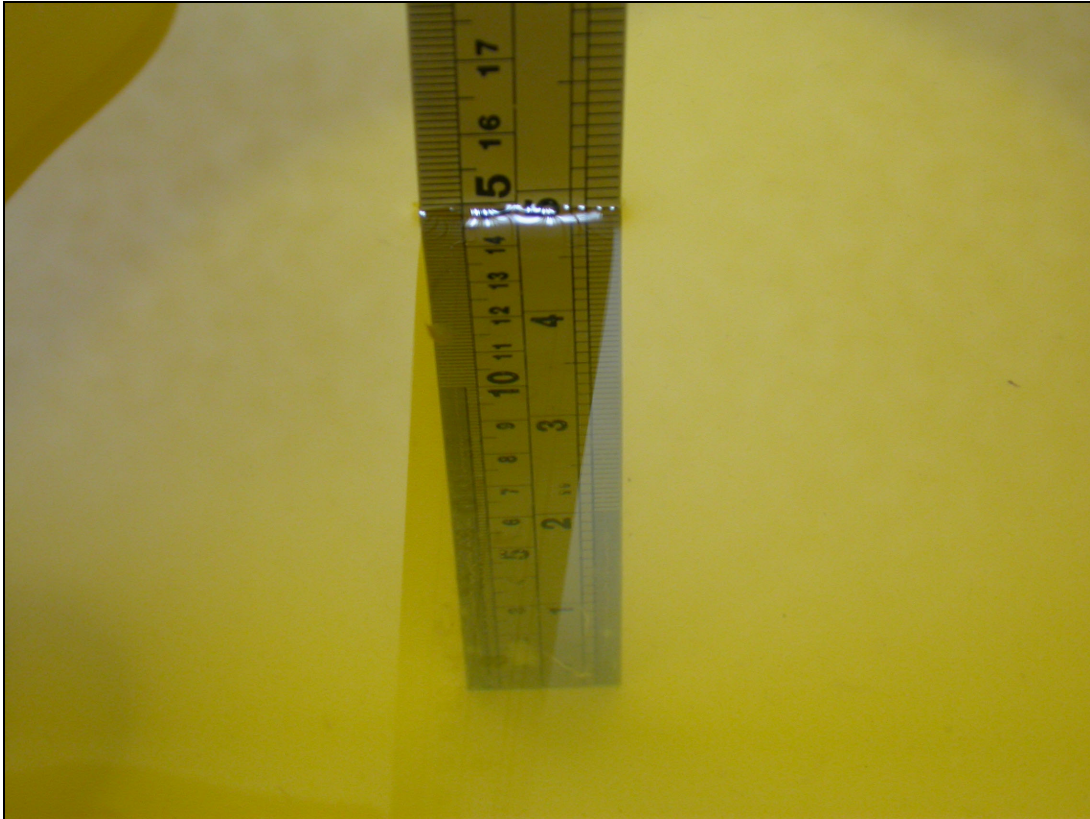
EUT Photo





Liquid Level Photo

900MHz D=150mm



1900MHz D=150mm



Test Laboratory: Advance Data Technology

CA8a Mode 8 BodyWorn Bottom 15mm - GSM850 GPRS

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 824.2 MHz

Communication System: PCS 850 ; Frequency: 824.2 MHz ; Duty Cycle: 1:4

Medium: MSL850 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.930 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

Low Channel 128/Area Scan (7x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.04 mW/g

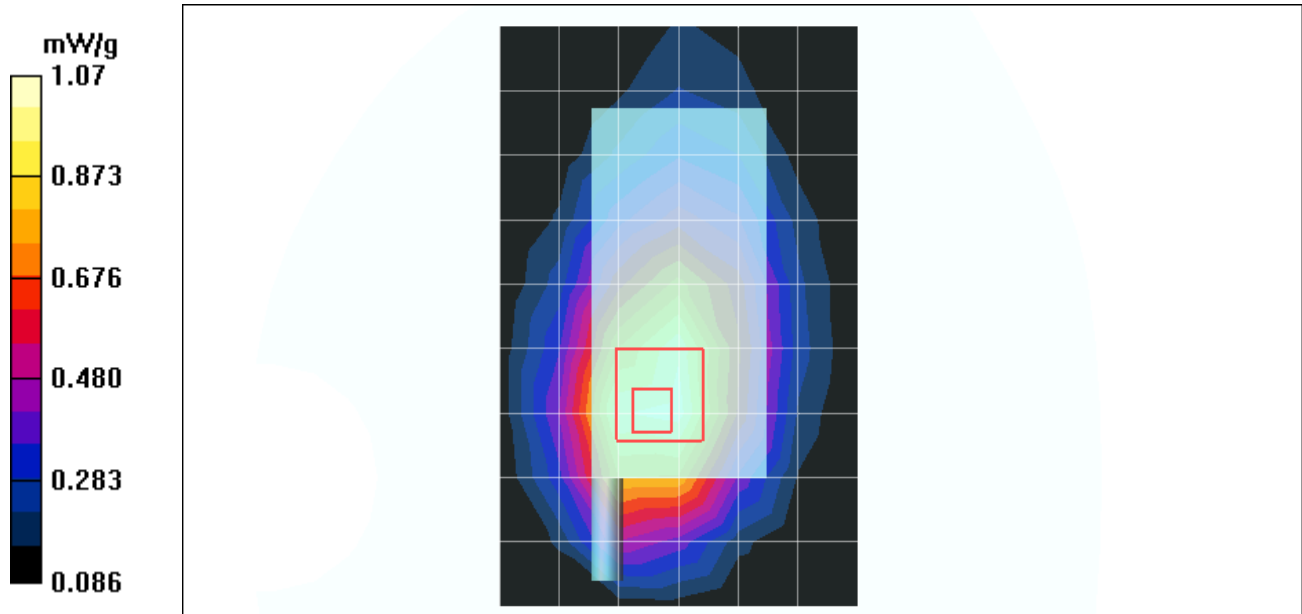
Low Channel 128/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.1 V/m

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 1.000 mW/g; SAR(10 g) = 0.705 mW/g

Maximum value of SAR (measured) = 1.07 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 8 BodyWorn Bottom 15mm - GSM850 GPRS

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 836.6 MHz

Communication System: PCS 850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4

Medium: MSL850 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.939 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

Middle Channel 190/Area Scan (7x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

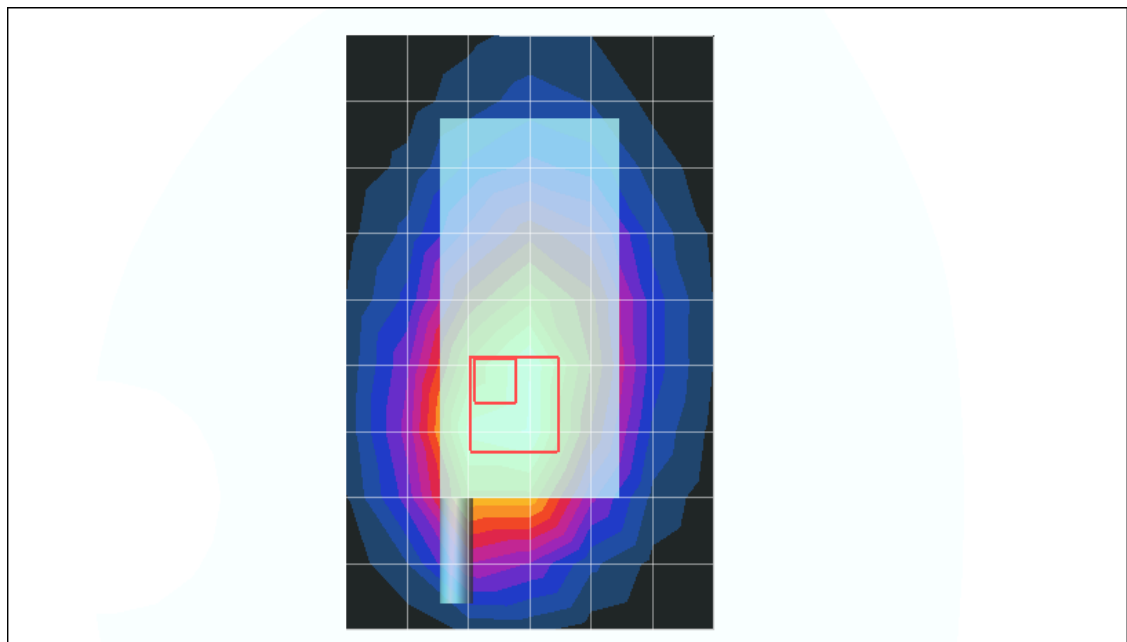
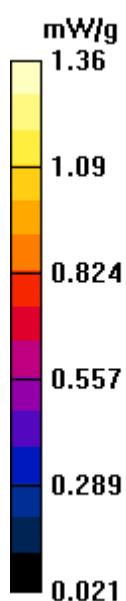
Middle Channel 190/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

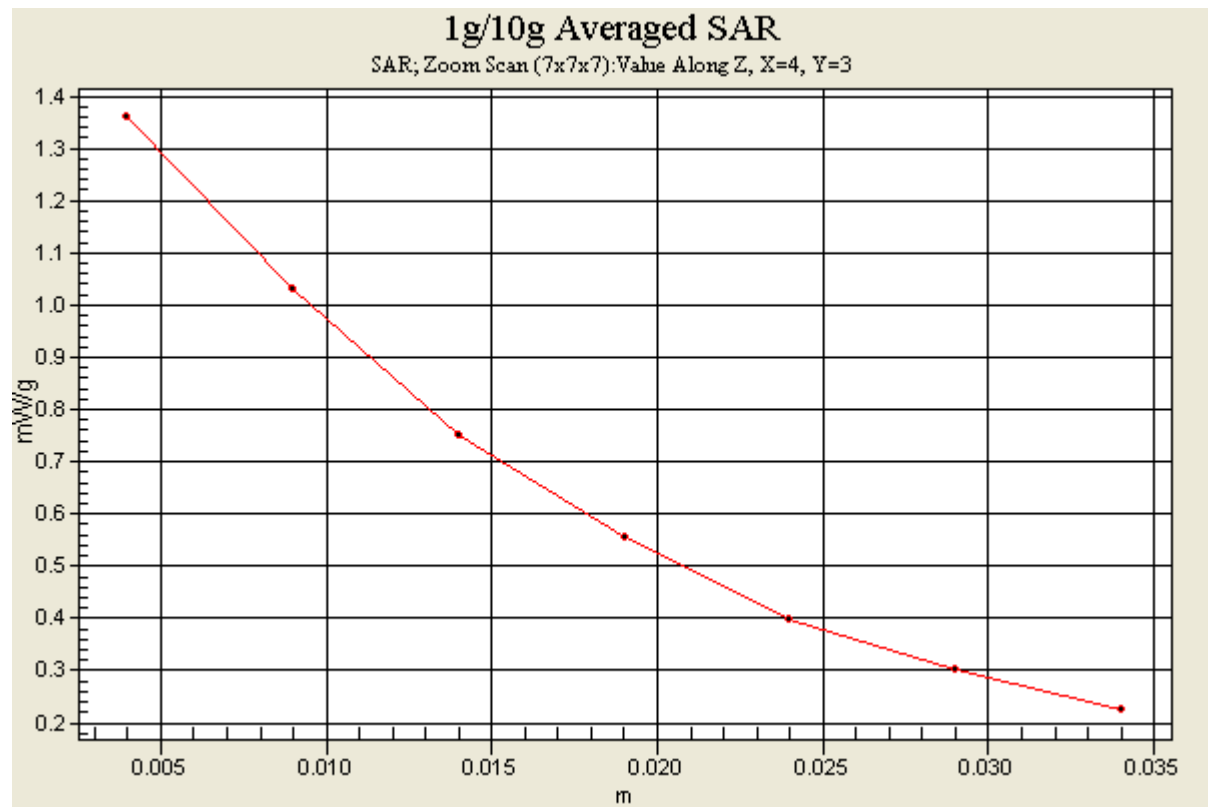
Reference Value = 33 V/m

Peak SAR (extrapolated) = 13.4 W/kg

SAR(1 g) = 1.29 mW/g; SAR(10 g) = 0.903 mW/g

Maximum value of SAR (measured) = 1.36 mW/g





Test Laboratory: Advance Data Technology

CA8a Mode 8 BodyWorn Bottom 15mm - GSM850 GPRS

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 848.8 MHz

Communication System: PCS 850 ; Frequency: 848.8 MHz ; Duty Cycle: 1:4

Medium: MSL850 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.946 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

High Channel 251/Area Scan (7x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.26 mW/g

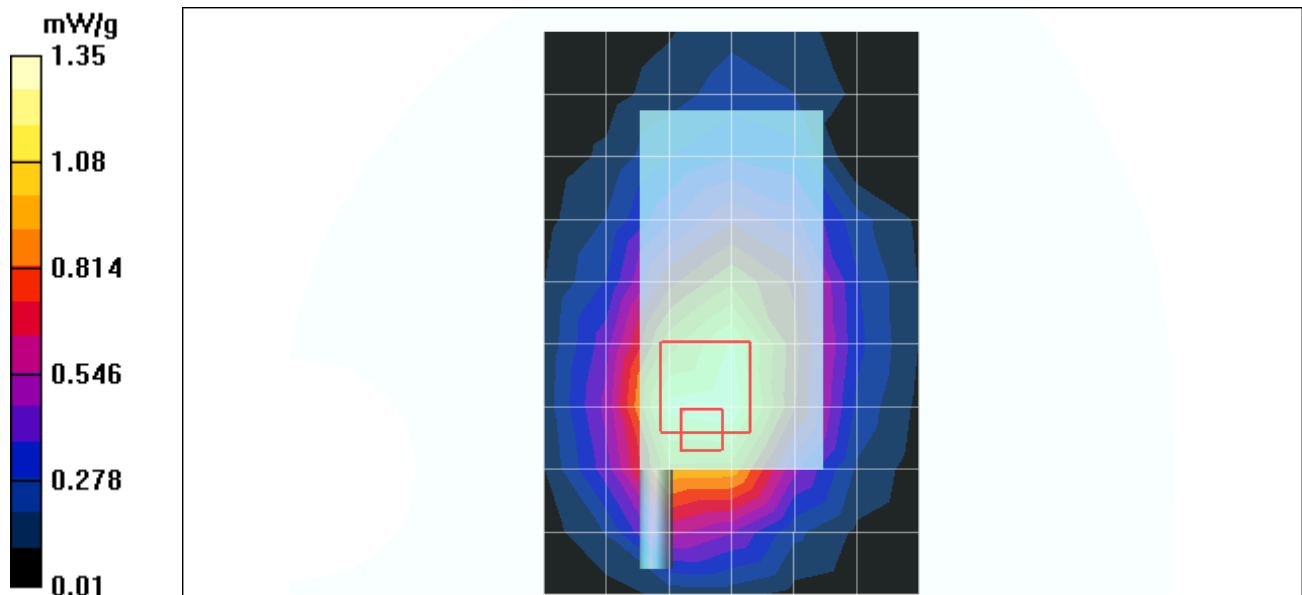
High Channel 251/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.2 V/m

Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.818 mW/g

Maximum value of SAR (measured) = 1.35 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 9 Body Worn Front 15mm - GSM850 GPRS

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 824.2 MHz

Communication System: PCS 850 ; Frequency: 824.2 MHz ; Duty Cycle: 1:4

Medium: MSL 850 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.930$ mho/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³ ; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

Low Channel 128/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.523 mW/g

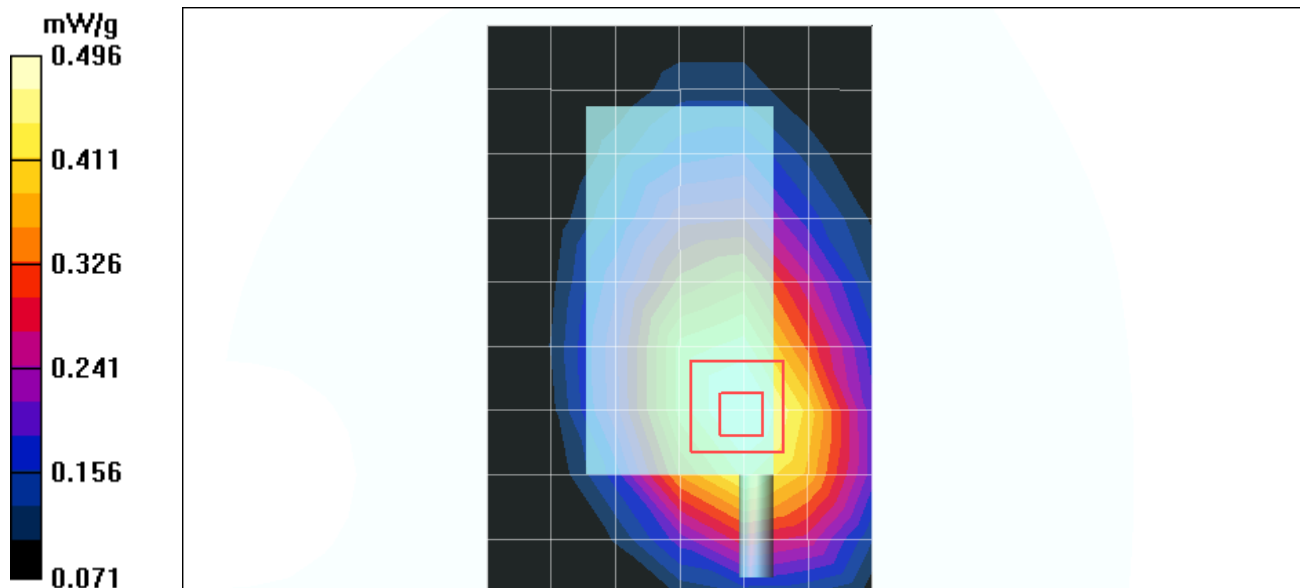
Low Channel 128/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.8 V/m

Peak SAR (extrapolated) = 0.555 W/kg

SAR(1 g) = 0.470 mW/g; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.496 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 9 Body Worn Front 15mm - GSM850 GPRS

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 836.6 MHz

Communication System: PCS 850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4

Medium: MSL 850 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.939$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³ ; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

Mid Channel 190/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.492 mW/g

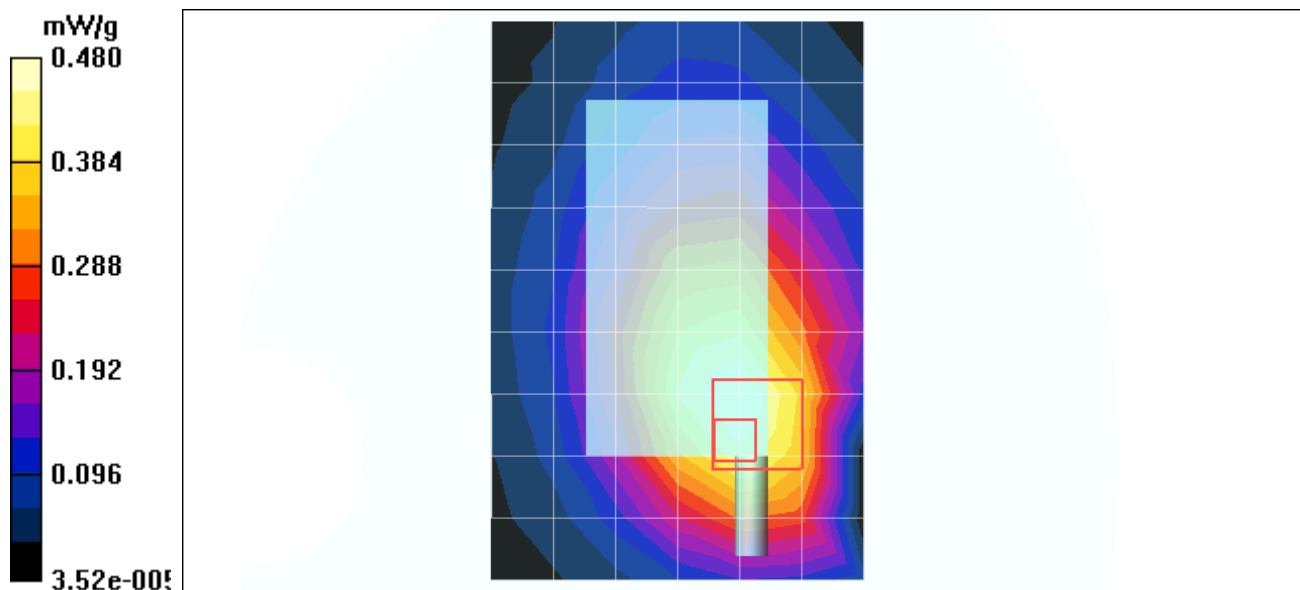
Mid Channel 190/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.2 V/m

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.505 mW/g; SAR(10 g) = 0.231 mW/g

Maximum value of SAR (measured) = 0.480 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 9 Body Worn Front 15mm - GSM850 GPRS

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 848.8 MHz

Communication System: PCS 850 ; Frequency: 848.8 MHz ; Duty Cycle: 1:4

Medium: MSL 850 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.946 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

High Channel 251/Area Scan (7x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.478 mW/g

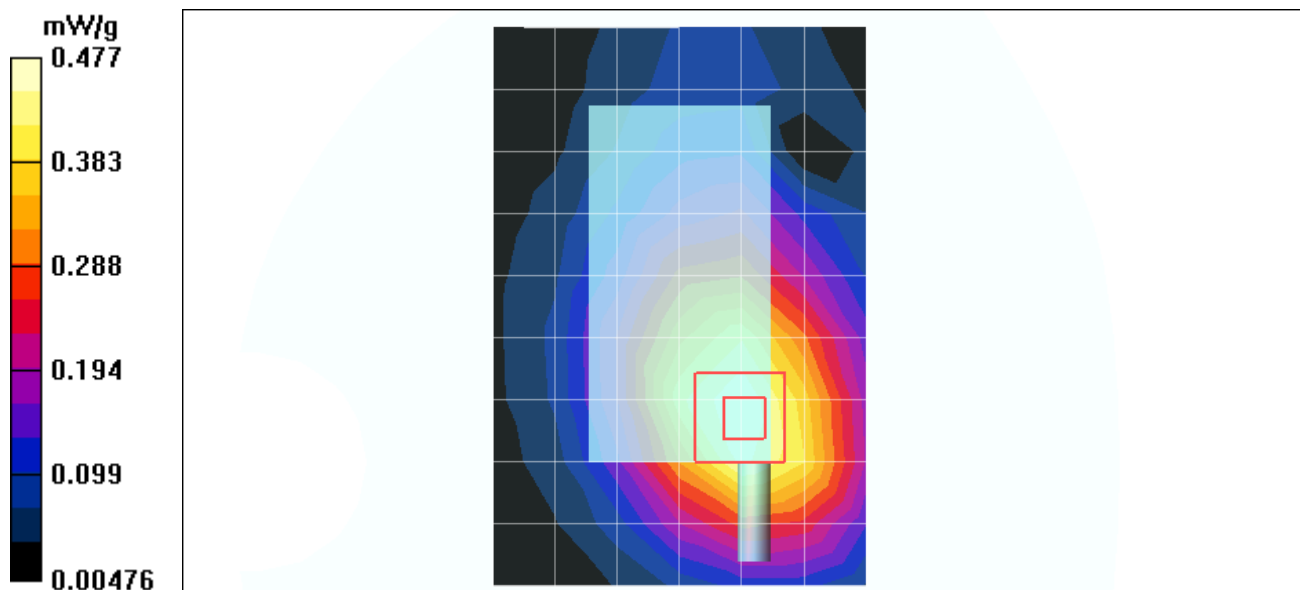
High Channel 251/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.3 V/m

Peak SAR (extrapolated) = 0.771 W/kg

SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.331 mW/g

Maximum value of SAR (measured) = 0.477 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 10 BodyWorn Bottom 15mm - GSM850 GSM

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 824.2 MHz

Communication System: PCS 850 ; Frequency: 824.2 MHz ; Duty Cycle: 1:8.3

Medium: MSL850 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.930 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

Low Channel 128 2/Area Scan (7x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.620 mW/g

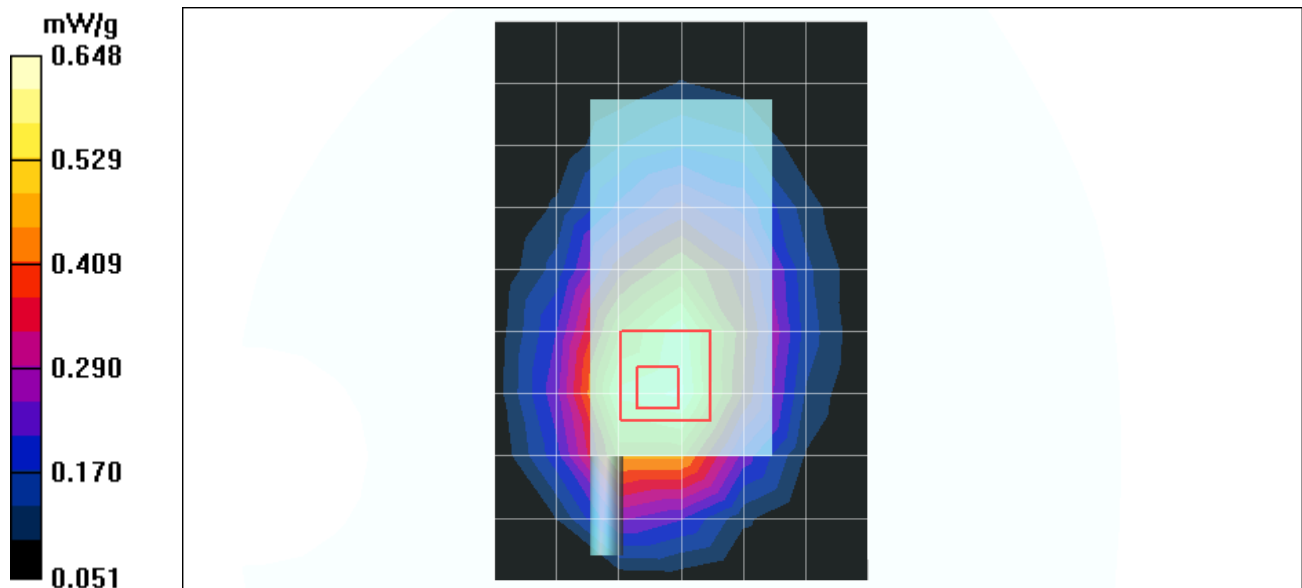
Low Channel 128 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.8 V/m

Peak SAR (extrapolated) = 0.829 W/kg

SAR(1 g) = 0.606 mW/g; SAR(10 g) = 0.426 mW/g

Maximum value of SAR (measured) = 0.648 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 10 BodyWorn Bottom 15mm - GSM850 GSM

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 836.6 MHz

Communication System: PCS 850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3

Medium: MSL850 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.939 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

Mid Channel 190/Area Scan (7x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.716 mW/g

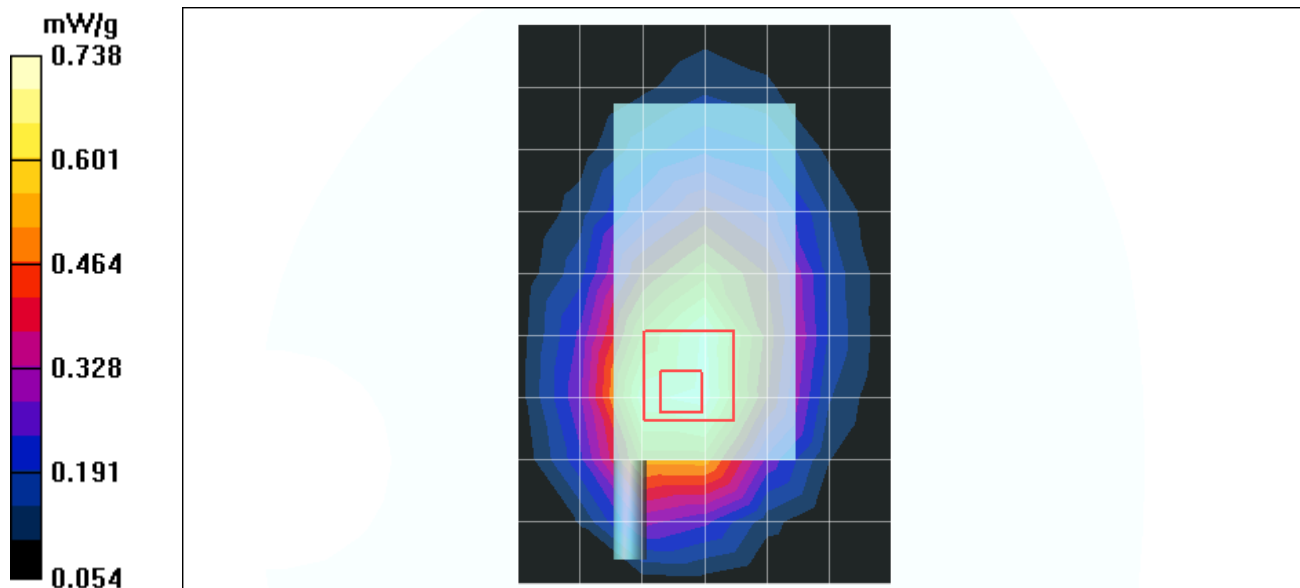
Mid Channel 190/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.3 V/m

Peak SAR (extrapolated) = 0.915 W/kg

SAR(1 g) = 0.689 mW/g; SAR(10 g) = 0.486 mW/g

Maximum value of SAR (measured) = 0.738 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 10 BodyWorn Bottom 15mm - GSM850 GSM

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 848.8 MHz

Communication System: PCS 850 ; Frequency: 848.8 MHz ; Duty Cycle: 1:8.3

Medium: MSL850 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.946 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 150mm

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 : External Antenna ; Air Temp. : 22.0 degrees ; Liquid Temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2004/8/17
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3 ; Postprocessing SW: SEMCAD, V1.8 Build 130

High Channel 251/Area Scan (7x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.687 mW/g

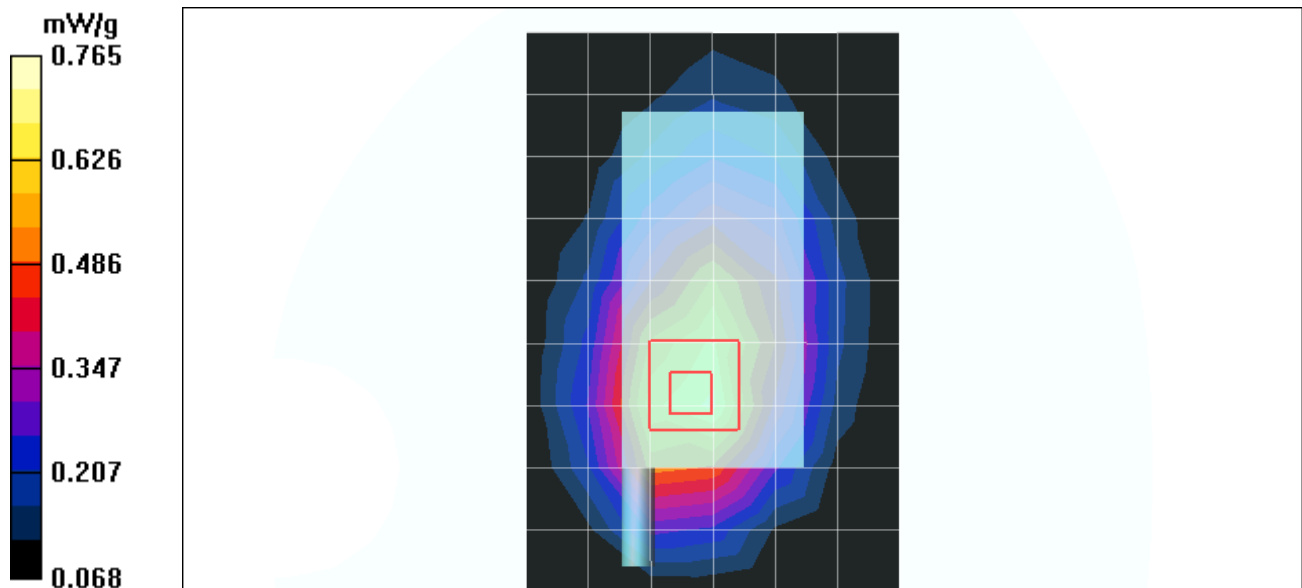
High Channel 251/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.5 V/m

Peak SAR (extrapolated) = 0.982 W/kg

SAR(1 g) = 0.709 mW/g; SAR(10 g) = 0.497 mW/g

Maximum value of SAR (measured) = 0.765 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 11 LeftHead Cheek GSM 850

DUT: Mobil Phone ; Type: CA8a ; Test Frequency: 824.2 MHz

Communication System: PCS 850 ; Frequency: 824.2 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.879$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³ ; Liquid level: 150mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - Low Channel/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.628 mW/g

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

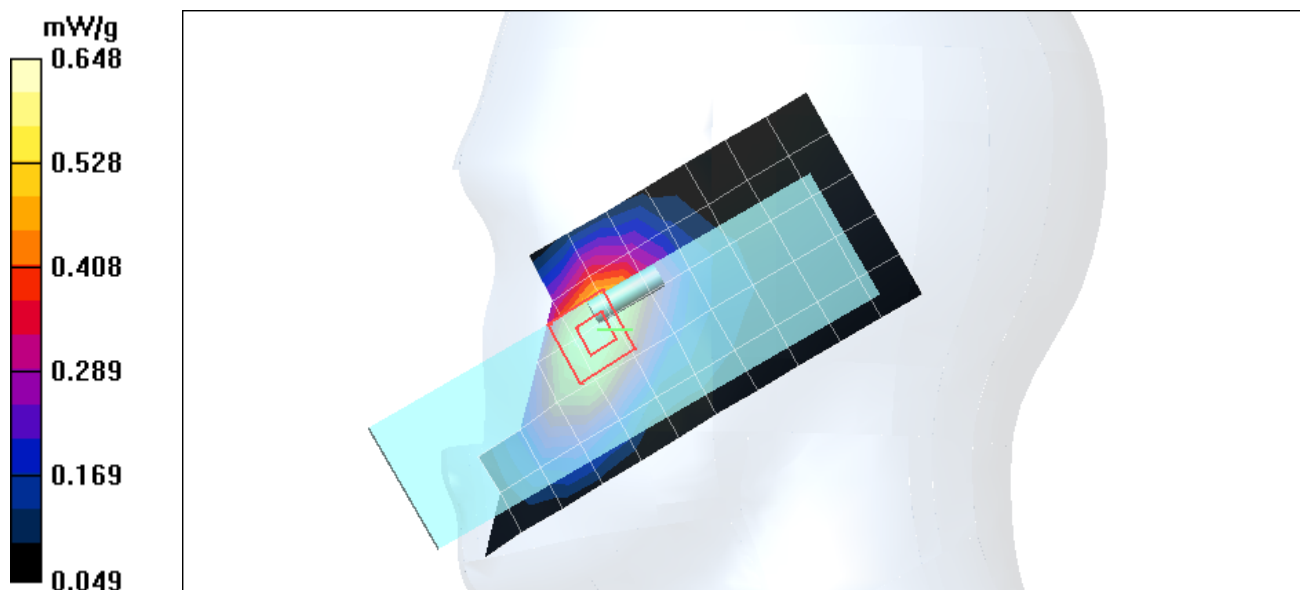
dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.34 V/m

Peak SAR (extrapolated) = 0.741 W/kg

SAR(1 g) = 0.608 mW/g; SAR(10 g) = 0.424 mW/g

Maximum value of SAR (measured) = 0.648 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 11 LeftHead Cheek GSM 850

DUT: Mobil Phone ; Type: CA8a ; Test Frequency: 836.6 MHz

Communication System: PCS 850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.897 \text{ mho/m}$; $\epsilon_r = 42.4$; $\rho = 1000 \text{ kg/m}^3$; Liquid level: 150mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - Middle Channel/Area Scan (6x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.688 mW/g

Touch position - Middle Channel/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

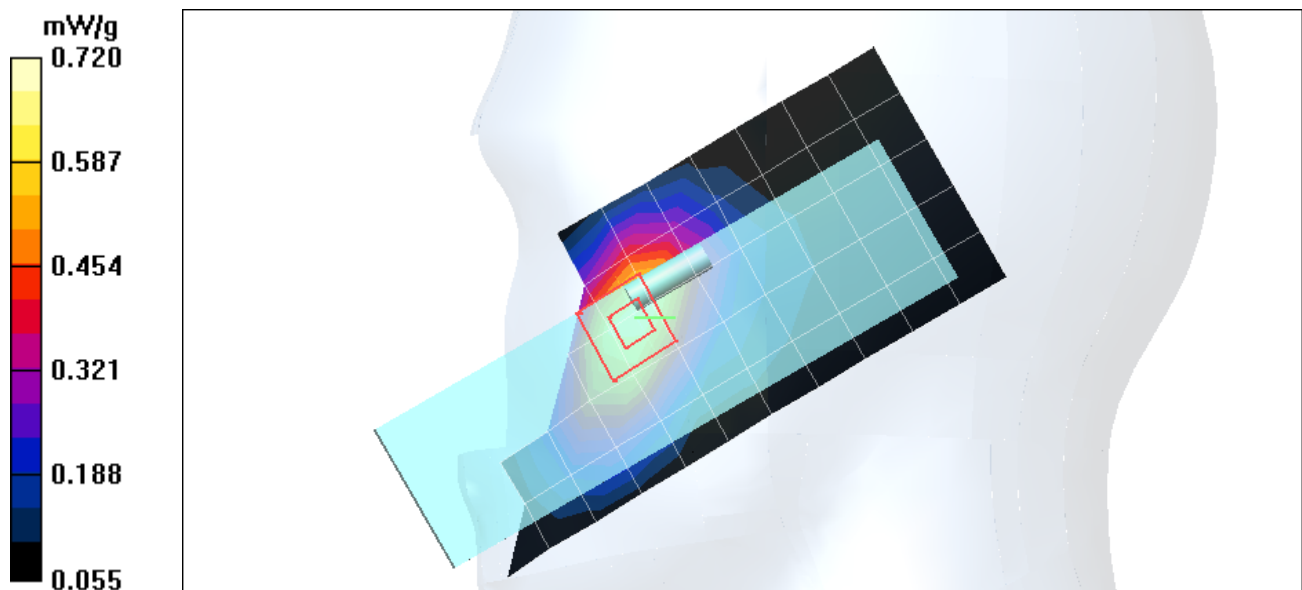
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.26 V/m

Peak SAR (extrapolated) = 0.830 W/kg

SAR(1 g) = 0.680 mW/g; SAR(10 g) = 0.473 mW/g

Maximum value of SAR (measured) = 0.720 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 11 LeftHead Cheek GSM 850

DUT: Mobil Phone ; Type: CA8a ; Test Frequency: 848.8 MHz

Communication System: PCS 850 ; Frequency: 848.8 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.900 \text{ mho/m}$; $\epsilon_r = 42.2$; $\rho = 1000 \text{ kg/m}^3$; Liquid level: 150mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - High Channel/Area Scan (6x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.731 mW/g

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

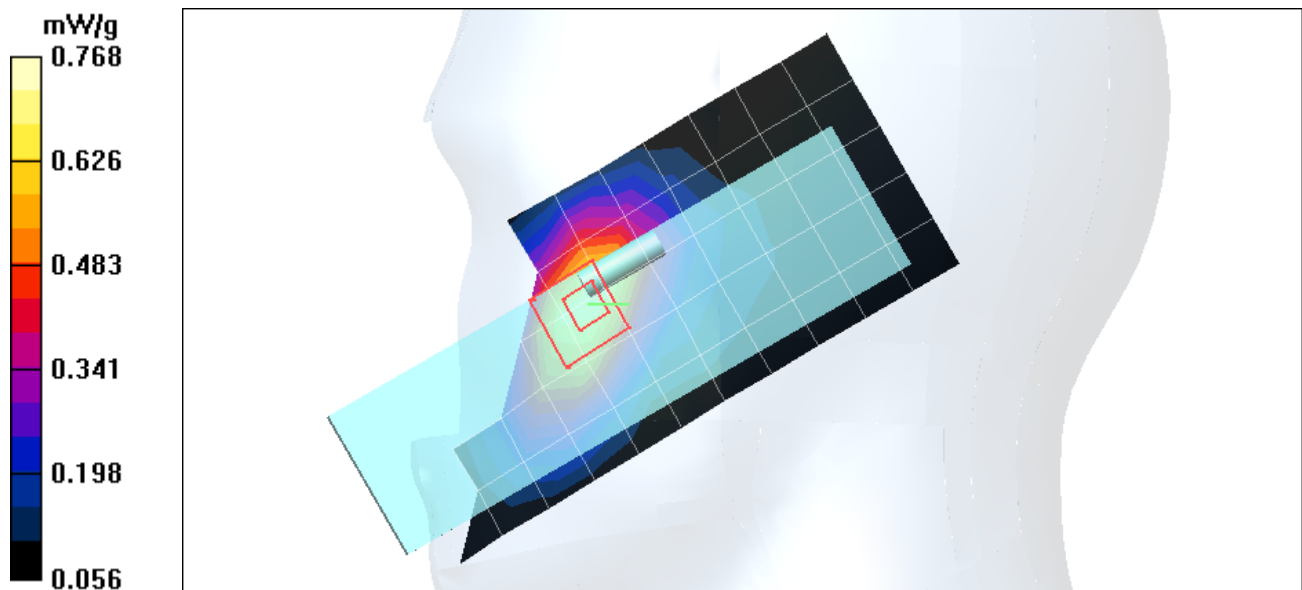
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

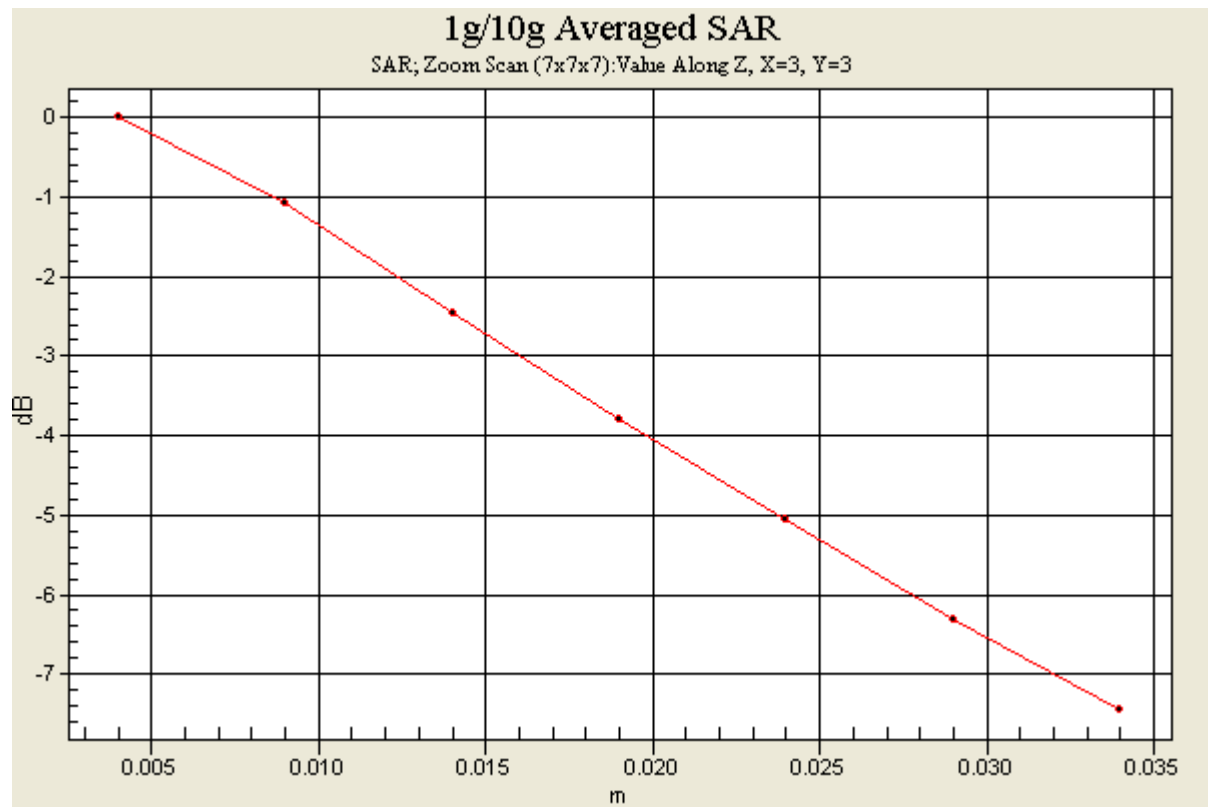
Reference Value = 7.66 V/m

Peak SAR (extrapolated) = 0.883 W/kg

SAR(1 g) = 0.715 mW/g; SAR(10 g) = 0.499 mW/g

Maximum value of SAR (measured) = 0.768 mW/g





Test Laboratory: Advance Data Technology

CA8a Mode 12 LeftHead Tilt GSM 850

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 824.2 MHz

Communication System: PCS 850 ; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: HSL850 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.879$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³ ; Liquid level: 150 mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Tilt position - Low Channel 2/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.162 mW/g

Tilt position - Low Channel 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

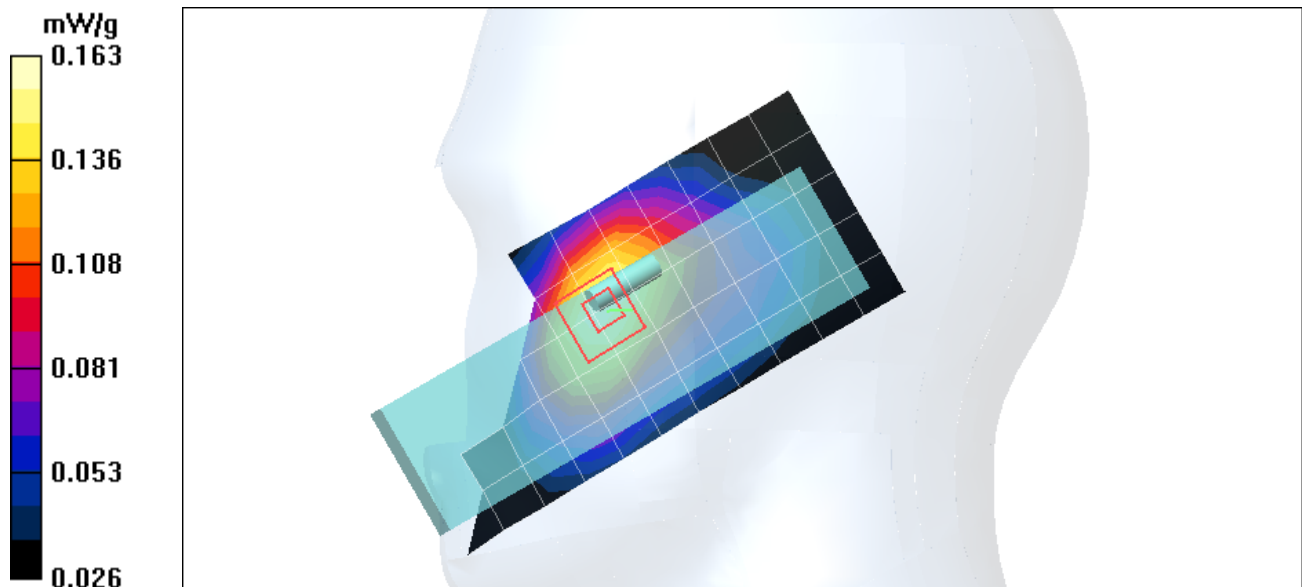
dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.95 V/m

Peak SAR (extrapolated) = 0.179 W/kg

SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.118 mW/g

Maximum value of SAR (measured) = 0.163 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 12 LeftHead Tilt GSM 850

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 836.6 MHz

Communication System: PCS 850 ; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: HSL850 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.897$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³ ; Liquid level: 150 mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Tilt position - Middle Channel/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.176 mW/g

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

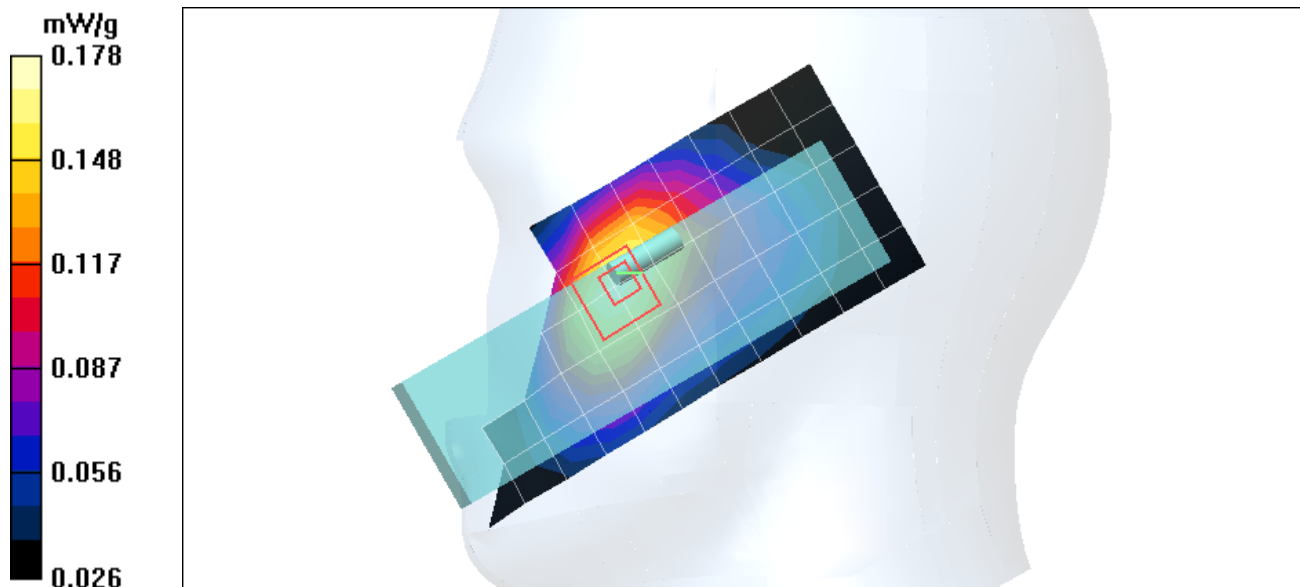
dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.87 V/m

Peak SAR (extrapolated) = 0.202 W/kg

SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.128 mW/g

Maximum value of SAR (measured) = 0.178 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 12 LeftHead Tilt GSM 850

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 848.8 MHz

Communication System: PCS 850 ; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: HSL850 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.900 \text{ mho/m}$; $\epsilon_r = 42.2$; $\rho = 1000 \text{ kg/m}^3$; Liquid level: 150 mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Tilt position - High Channel/Area Scan (6x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.180 mW/g

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

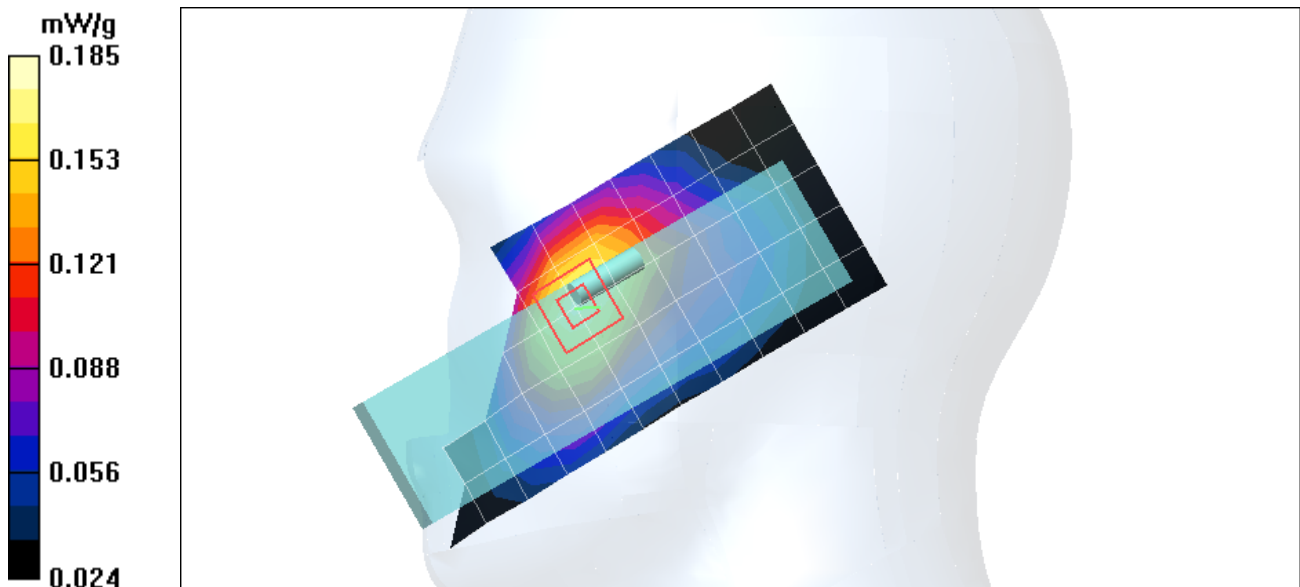
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.1 V/m

Peak SAR (extrapolated) = 0.212 W/kg

SAR(1 g) = 0.175 mW/g; SAR(10 g) = 0.130 mW/g

Maximum value of SAR (measured) = 0.185 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 13 RightHead Cheek GSM850

DUT: Mobil Phone ; Type: CA8a ; Test Frequency: 824.2 MHz

Communication System: PCS 850 ; Frequency: 824.2 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.879$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³ ; Liquid level: 150mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - Low Channel/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.445 mW/g

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

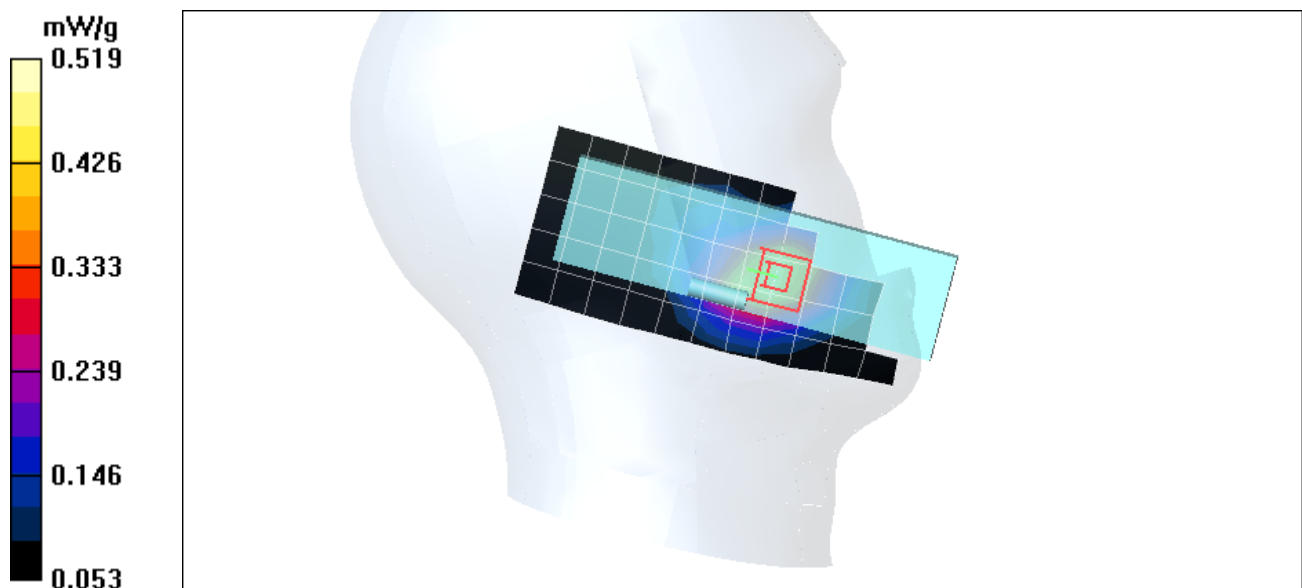
dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.06 V/m

Peak SAR (extrapolated) = 0.609 W/kg

SAR(1 g) = 0.480 mW/g; SAR(10 g) = 0.334 mW/g

Maximum value of SAR (measured) = 0.519 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 13 RightHead Cheek GSM850

DUT: Mobil Phone ; Type: CA8a ; Test Frequency: 836.6 MHz

Communication System: PCS 850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.897 \text{ mho/m}$; $\epsilon_r = 42.4$; $\rho = 1000 \text{ kg/m}^3$; Liquid level: 150mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - Middle Channel/Area Scan (6x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.513 mW/g

Touch position - Middle Channel/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

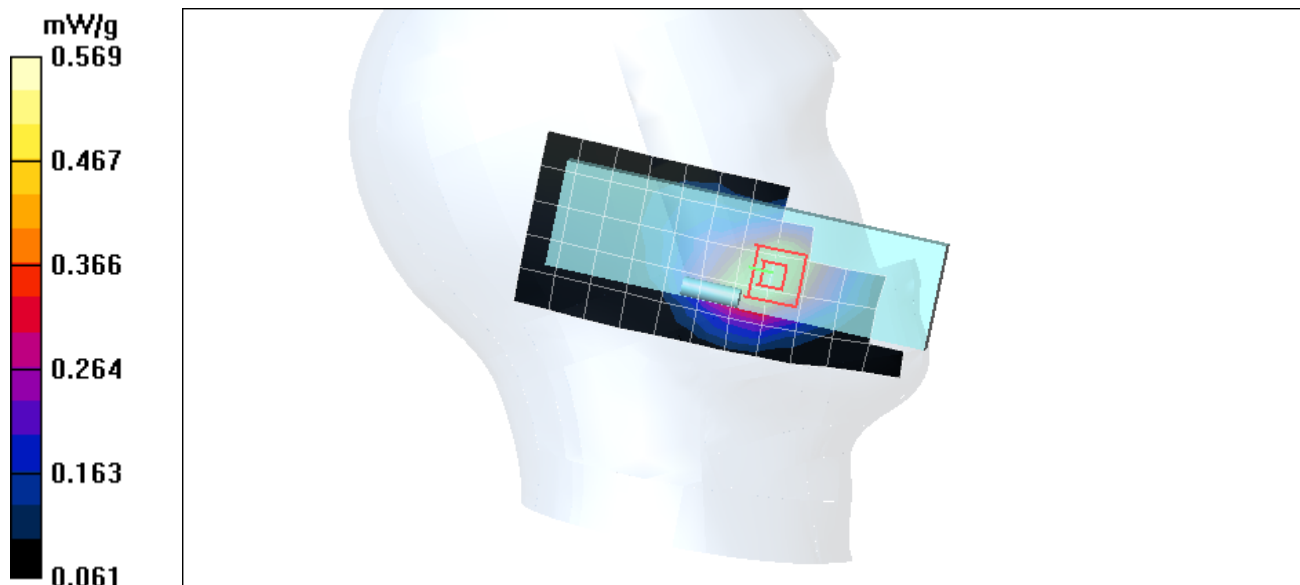
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.7 V/m

Peak SAR (extrapolated) = 0.638 W/kg

SAR(1 g) = 0.529 mW/g; SAR(10 g) = 0.374 mW/g

Maximum value of SAR (measured) = 0.569 mW/g



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Test Laboratory: Advance Data Technology

CA8a Mode 13 RightHead Cheek GSM850

DUT: Mobil Phone ; Type: CA8a ; Test Frequency: 848.8 MHz

Communication System: PCS 850 ; Frequency: 848.8 MHz ; Duty Cycle: 1:8.3

Phantom: SAM 12 Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.900$ mho/m; $\epsilon_r = 42.2$; $\rho = 1000$ kg/m³ ; Liquid level: 150mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - High Channel/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.570 mW/g

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

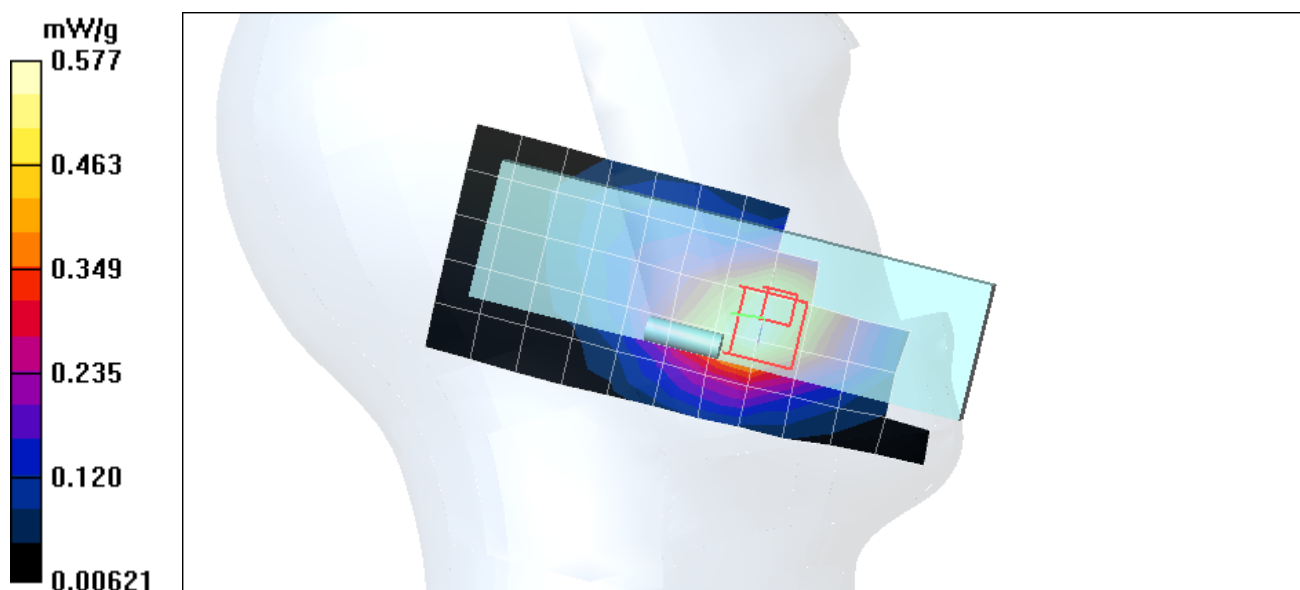
dx=5mm, dy=5mm, dz=5mm

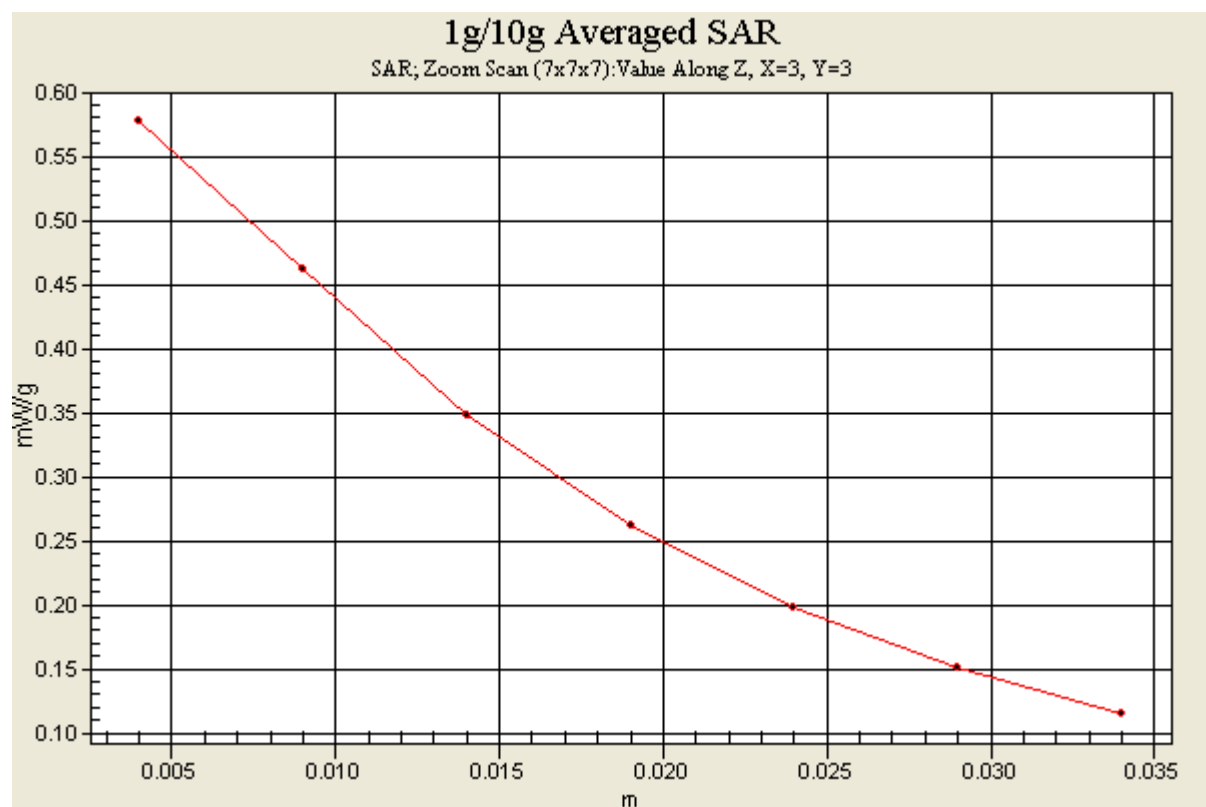
Reference Value = 5.03 V/m

Peak SAR (extrapolated) = 0.965 W/kg

SAR(1 g) = 0.540 mW/g; SAR(10 g) = 0.365 mW/g

Maximum value of SAR (measured) = 0.577 mW/g





Test Laboratory: Advance Data Technology

CA8a Mode 14 Right Head Tilt GSM850

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 824.2 MHz

Communication System: PCS 850 ; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: HSL850 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.879$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³ ; Liquid level: 150 mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - Low Channel/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.147 mW/g

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

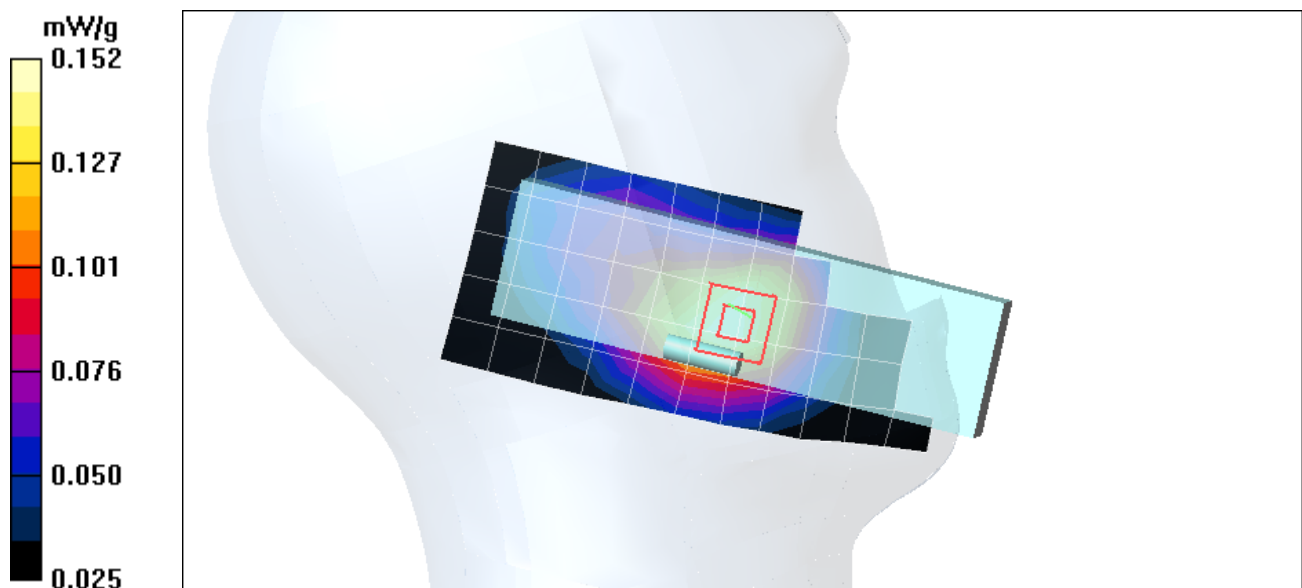
dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.44 V/m

Peak SAR (extrapolated) = 0.167 W/kg

SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.110 mW/g

Maximum value of SAR (measured) = 0.152 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 14 Right Head Tilt GSM850

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 836.6 MHz

Communication System: PCS 850 ; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: HSL850 Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.897$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³ ; Liquid level: 150 mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - Middle Channel/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.157 mW/g

Touch position - Middle Channel/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

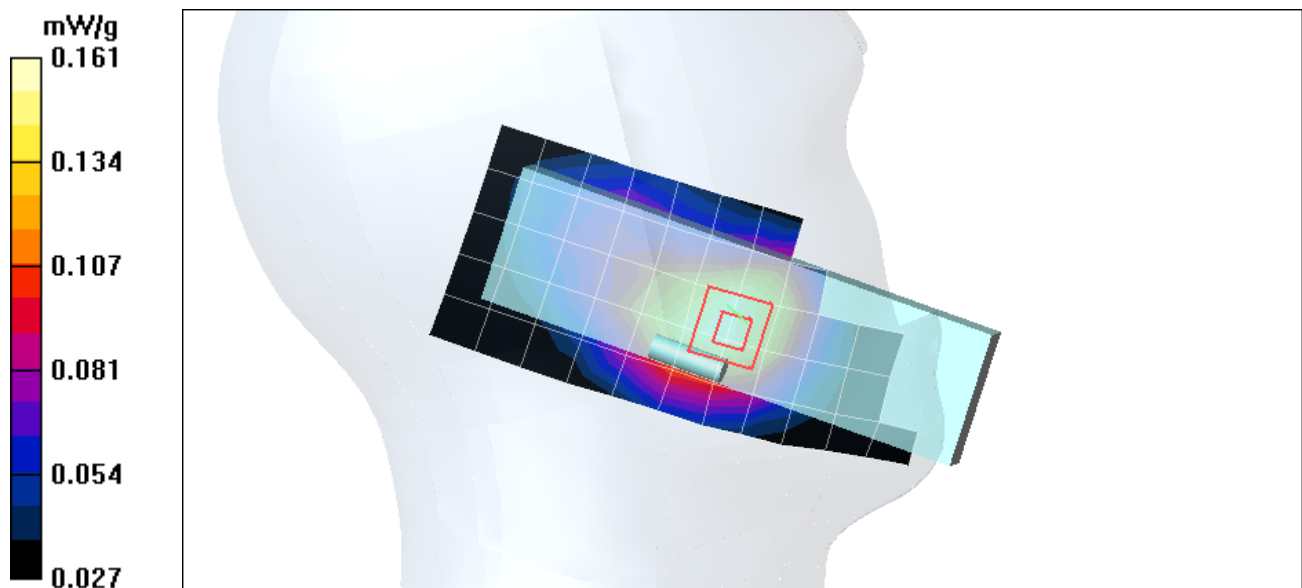
dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.35 V/m

Peak SAR (extrapolated) = 0.178 W/kg

SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.117 mW/g

Maximum value of SAR (measured) = 0.161 mW/g



Test Laboratory: Advance Data Technology

CA8a Mode 14 Right Head Tilt GSM850

DUT: Mobil Phone ; Type: CA8a ; Test Channel Frequency: 848.8 MHz

Communication System: PCS 850 ; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: HSL850 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.900 \text{ mho/m}$; $\epsilon_r = 42.2$; $\rho = 1000 \text{ kg/m}^3$; Liquid level: 150 mm

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

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Touch position - High Channel/Area Scan (6x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.163 mW/g

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

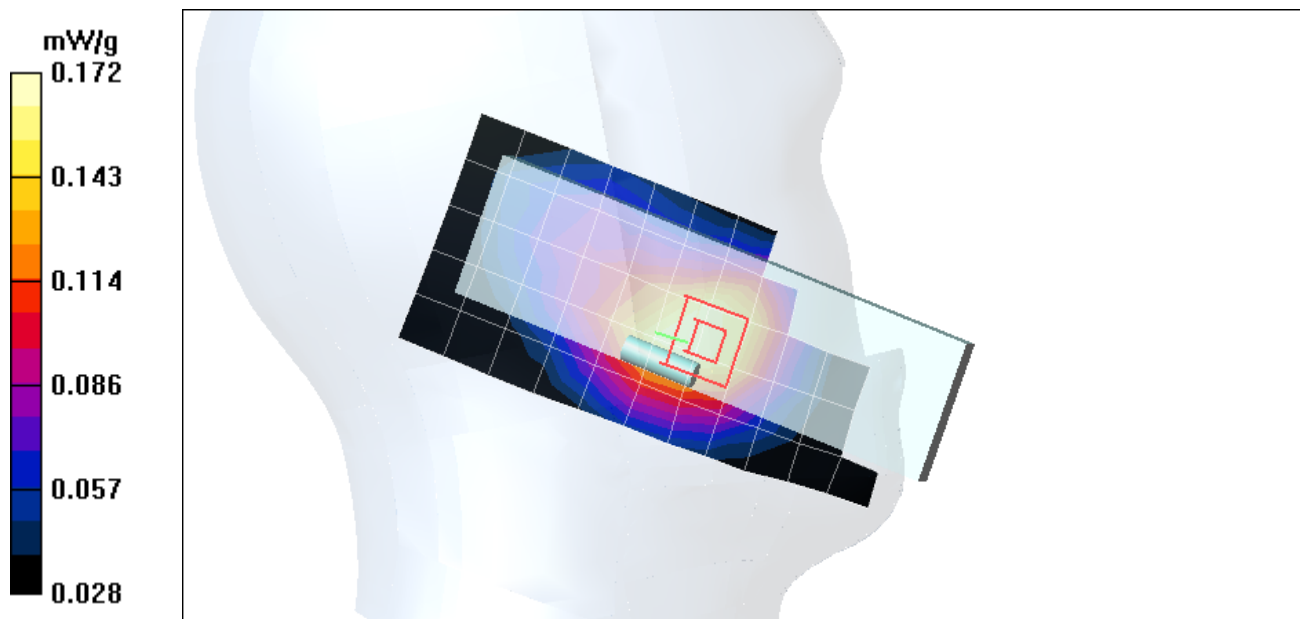
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.3 V/m

Peak SAR (extrapolated) = 0.196 W/kg

SAR(1 g) = 0.162 mW/g; SAR(10 g) = 0.121 mW/g

Maximum value of SAR (measured) = 0.172 mW/g



Test Laboratory: Advance Data Technology

System Validation Check MSL 900MHz 2005-03-19

DUT: Dipole 900 MHz ; Type: D900V2 ; Serial: D900V2 - SN:156 ; Test Frequency: 900 MHz

Communication System: CW ; Frequency: 900 MHz; Duty Cycle: 1:1; Modulation type: CW

Medium: MSL850; Medium parameters used: $f = 900$ MHz; $\sigma = 1.001$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³ ;
Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

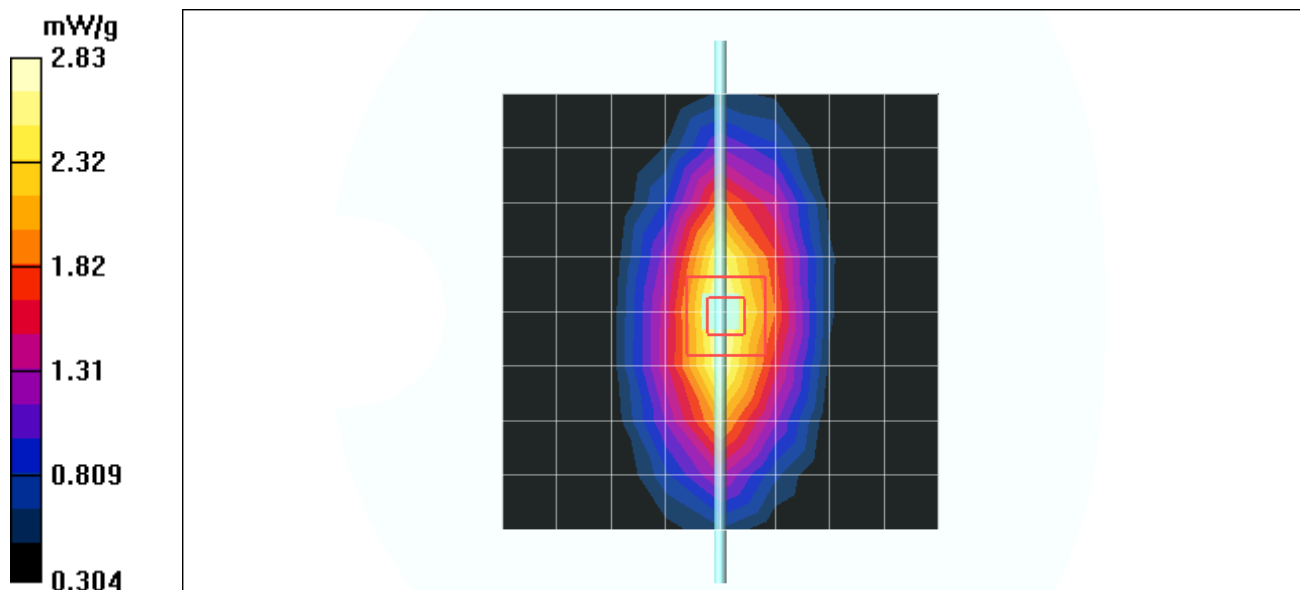
DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.06, 6.06, 6.06) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

d=15mm, Pin=250mW/Area Scan (9x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.84 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.6 V/m
Peak SAR (extrapolated) = 3.46 W/kg

SAR(1 g) = 2.61 mW/g; SAR(10 g) = 1.77 mW/g
Maximum value of SAR (measured) = 2.83 mW/g



Test Laboratory: Advance Data Technology

System Validation Check HSL 900 MHz 2005-03-19

DUT: Dipole 900 MHz ; Type: D900V2 ; Serial: D900V2 - SN:156 ; Test Frequency: 900 MHz

Communication System: CW ; Frequency: 900 MHz; Duty Cycle: 1:1; Modulation type: CW

Medium: HSL850; Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.964 \text{ mho/m}$; $\epsilon_r = 42.4$; $\rho = 1000 \text{ kg/m}^3$;

Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(6.34, 6.34, 6.34) ; Calibrated: 2004/8/26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2004/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

d=10mm, Pin=250mW/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.74 mW/g

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

Reference Value = 55.5 V/m

Peak SAR (extrapolated) = 3.27 W/kg

SAR(1 g) = 2.63 mW/g; SAR(10 g) = 1.72 mW/g

Maximum value of SAR (measured) = 2.71 mW/g

