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# **Appendix for the Report**

## **Dosimetric Assessment of the Siemens A76 (FCC ID: PWX-A76)**

### **According to the FCC Requirements**

### **SAR Distribution Plots**

July 04, 2005  
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# 1 SAR Distribution Plots, GSM 850 Head

Test Laboratory: IMST GmbH, DASY Yellow (II); File Name: [746yalm\\_1.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Cheek Left

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

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 40.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.88, 9.88, 9.88); Calibrated: 27.08.2004

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

- Electronics: DAE4 Sn631; Calibrated: 23.07.2004

- Phantom: SAM Sugar 1341; Type: QD 000 P40 CB; Serial: TP-1341

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Cheek Left/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.899 mW/g

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

Reference Value = 25.3 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 1.38 W/kg

**SAR(1 g) = 0.781 mW/g; SAR(10 g) = 0.467 mW/g**

Maximum value of SAR (measured) = 0.874 mW/g

**Cheek Left/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.3 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.599 mW/g; SAR(10 g) = 0.410 mW/g**

Maximum value of SAR (measured) = 0.660 mW/g

**Cheek Left/Zoom Scan (7x7x7)/Cube 2:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.3 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 0.811 W/kg

**SAR(1 g) = 0.580 mW/g; SAR(10 g) = 0.410 mW/g**

Maximum value of SAR (measured) = 0.744 mW/g

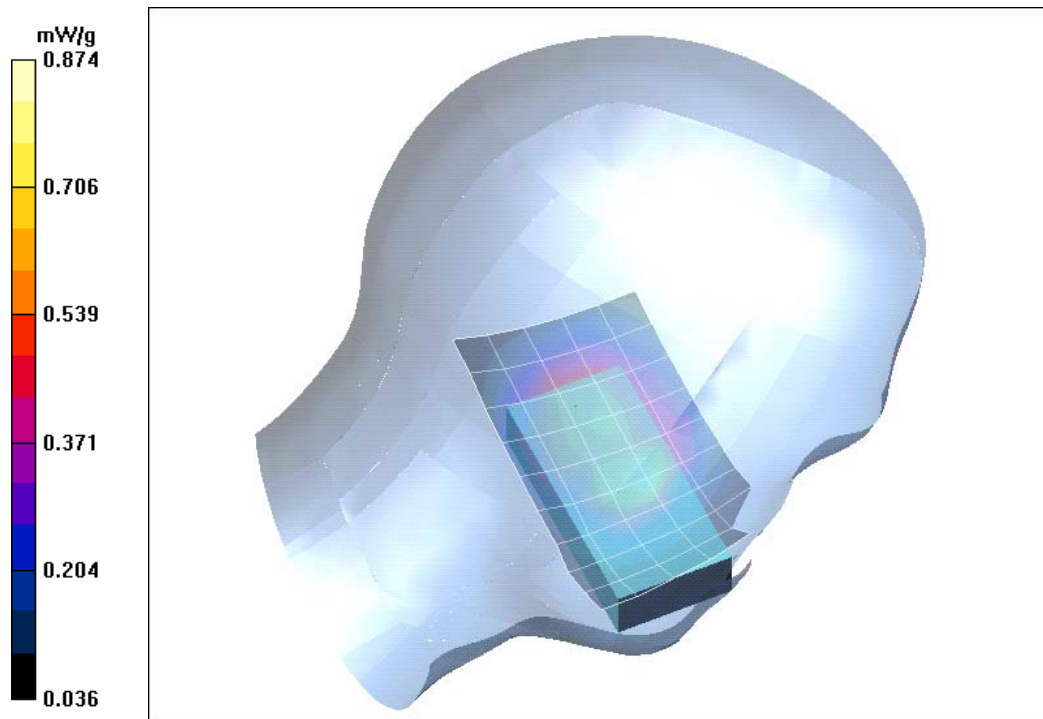


Fig. 1: SAR distribution for GSM 850, channel 190, cheek position, left side of head (June 24, 2005; Ambient Temperature: 21.6° C; Liquid Temperature: 21.0° C).

**Test Laboratory:** IMST GmbH, DASY Yellow (II); **File Name:** [746yalm\\_2.da4](#)

**DUT:** Siemens; **Type:** A76; **Serial:** 004400002106746

**Program Name:** Tilted Left

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

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 40.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.88, 9.88, 9.88); Calibrated: 27.08.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1341; Type: QD 000 P40 CB; Serial: TP-1341
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilted Left/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.600 mW/g

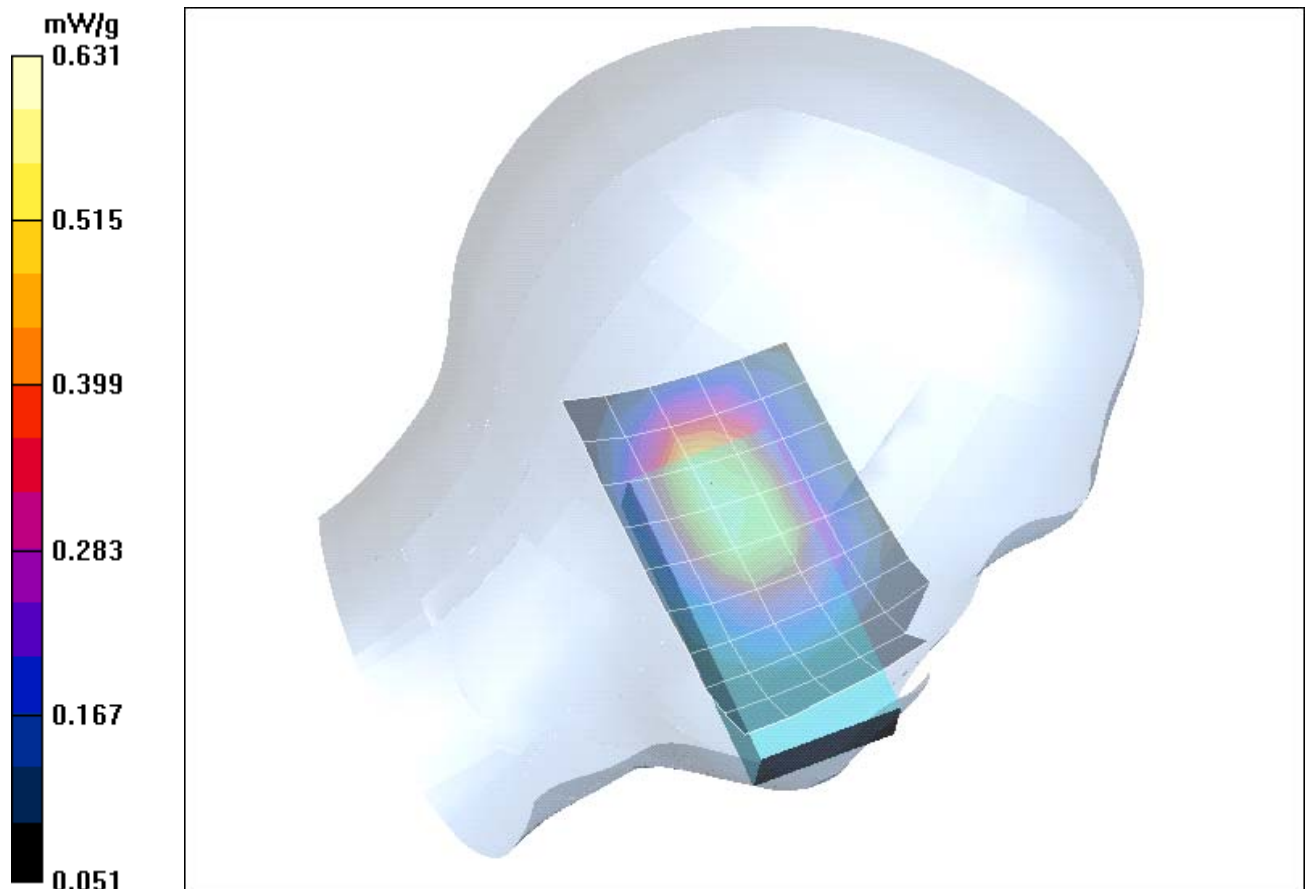
**Tilted Left/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.8 V/m; Power Drift = 0.042 dB

Peak SAR (extrapolated) = 0.801 W/kg

**SAR(1 g) = 0.596 mW/g; SAR(10 g) = 0.412 mW/g**

Maximum value of SAR (measured) = 0.631 mW/g



**Fig. 2:** SAR distribution for GSM 850, channel 190, tilted position, left side of head (June 24, 2005; Ambient Temperature: 21.7° C; Liquid Temperature : 21.0° C).

**Test Laboratory:** IMST GmbH, DASY Yellow (II); **File Name:** [746yarm\\_1.da4](#)

**DUT:** Siemens; **Type:** A76; **Serial:** 004400002106746

**Program Name:** Cheek Right

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

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 40.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.88, 9.88, 9.88); Calibrated: 27.08.2004

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

- Electronics: DAE4 Sn631; Calibrated: 23.07.2004

- Phantom: SAM Sugar 1341; Type: QD 000 P40 CB; Serial: TP-1341

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Cheek Right/Area Scan (6x10x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.809 mW/g

**Cheek Right/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 24.3 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 1.16 W/kg

**SAR(1 g) = 0.700 mW/g; SAR(10 g) = 0.454 mW/g**

Maximum value of SAR (measured) = 0.773 mW/g

**Cheek Right/Zoom Scan (7x7x7)/Cube 1:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 24.3 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 1.11 W/kg

**SAR(1 g) = 0.674 mW/g; SAR(10 g) = 0.423 mW/g**

Maximum value of SAR (measured) = 0.745 mW/g

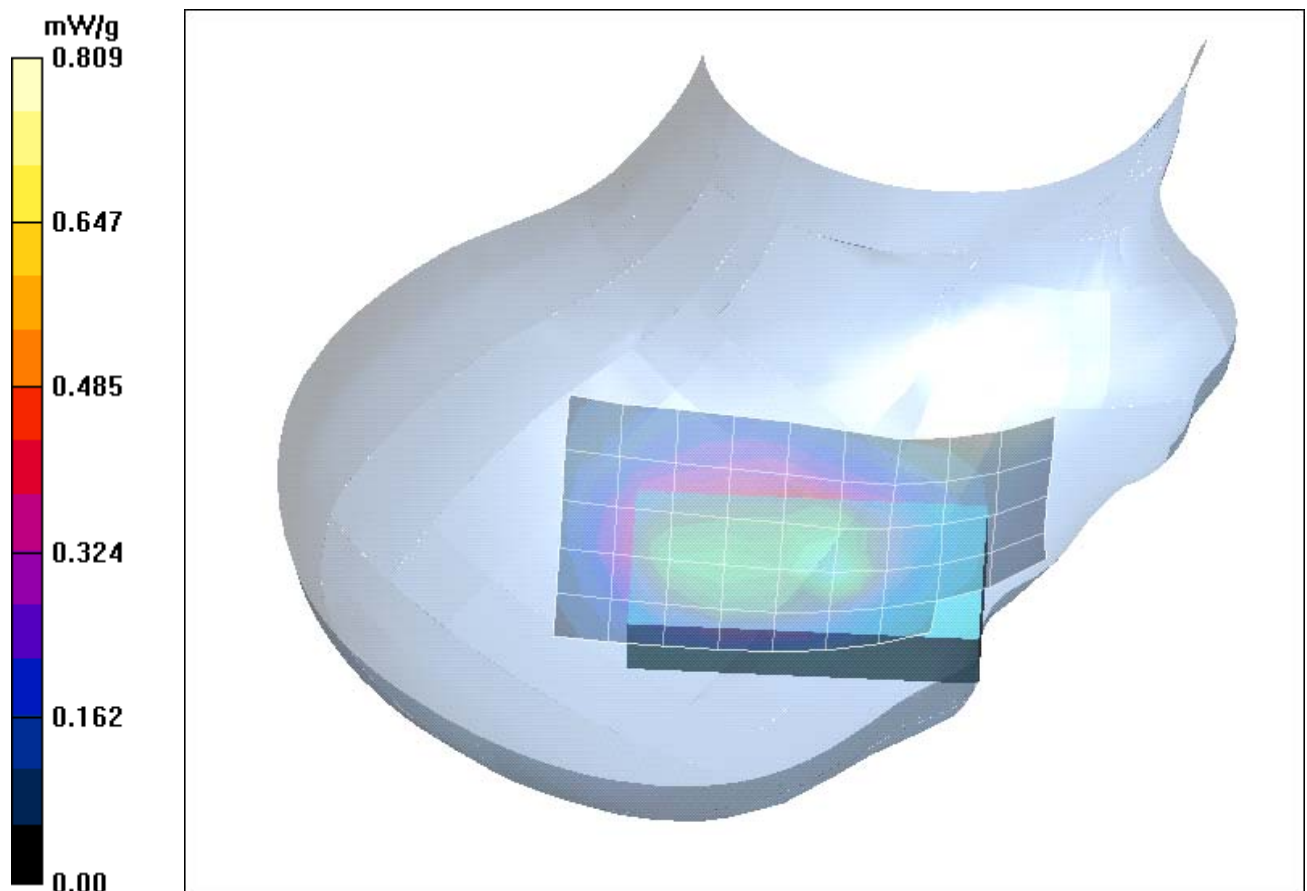


Fig. 3: SAR distribution for GSM 850, channel 190, cheek position, right side of head (June 24, 2005; Ambient Temperature: 21.7° C; Liquid Temperature : 21.0° C).

Test Laboratory: IMST GmbH, DASY Yellow (II); File Name: [746yarm\\_2.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Tilted Right

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

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 40.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.88, 9.88, 9.88); Calibrated: 27.08.2004

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

- Electronics: DAE4 Sn631; Calibrated: 23.07.2004

- Phantom: SAM Sugar 1341; Type: QD 000 P40 CB; Serial: TP-1341

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilted Right/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 23.5 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.846 W/kg

**SAR(1 g) = 0.528 mW/g; SAR(10 g) = 0.363 mW/g**

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

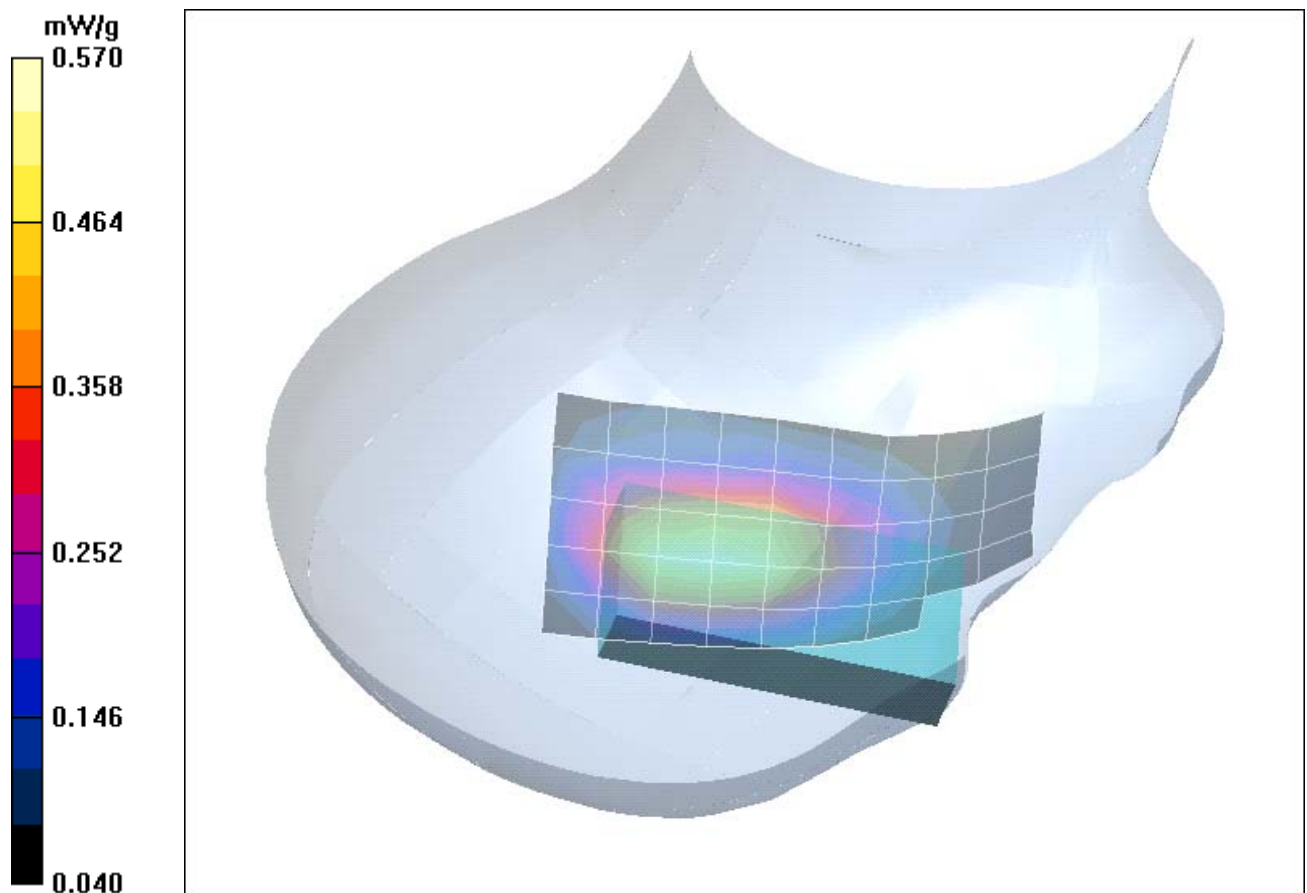


Fig. 4: SAR distribution for GSM 850, channel 190, tilted position, right side of head (June 24, 2005; Ambient Temperature: 21.8° C; Liquid Temperature : 21.0° C).

## 2 SAR Distribution Plots, PCS 1900 Head

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bplm\\_1.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Cheek Left

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.11, 5.11, 5.11); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Cheek Left/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.314 mW/g

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

Reference Value = 15.1 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 0.441 W/kg

**SAR(1 g) = 0.281 mW/g; SAR(10 g) = 0.161 mW/g**

Maximum value of SAR (measured) = 0.308 mW/g

**Cheek Left/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.1 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 0.494 W/kg

**SAR(1 g) = 0.262 mW/g; SAR(10 g) = 0.138 mW/g**

Maximum value of SAR (measured) = 0.307 mW/g

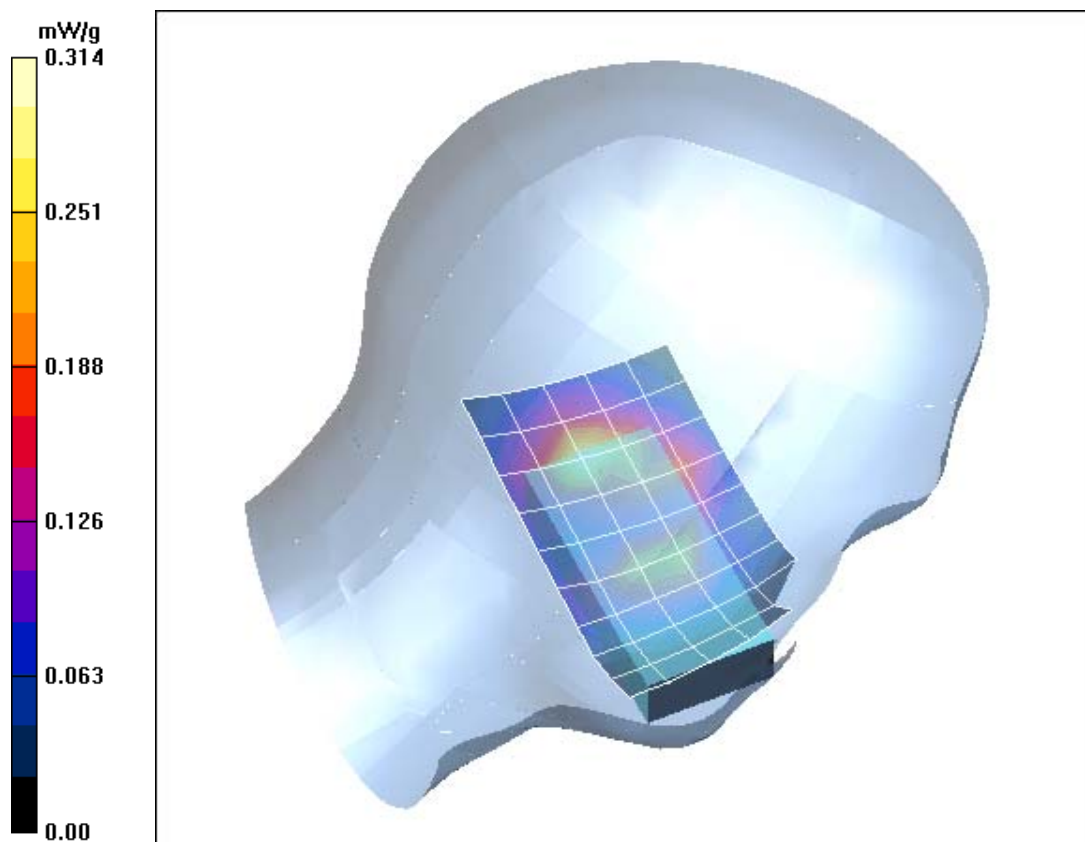


Fig. 5: SAR distribution for PCS 1900, channel 661, cheek position, left side of head (June 27, 2005; Ambient Temperature: 22.3° C; Liquid Temperature : 21.5° C).

**Test Laboratory:** IMST GmbH, DASY Blue (I); **File Name:** [746bplm\\_2.da4](#)

**DUT:** Siemens; **Type:** A76; **Serial:** 004400002106746

**Program Name:** Tilted Left

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.11, 5.11, 5.11); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilted Left/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.339 mW/g

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

Reference Value = 15.6 V/m; Power Drift = -0.047 dB

Peak SAR (extrapolated) = 0.500 W/kg

**SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.172 mW/g**

Maximum value of SAR (measured) = 0.340 mW/g

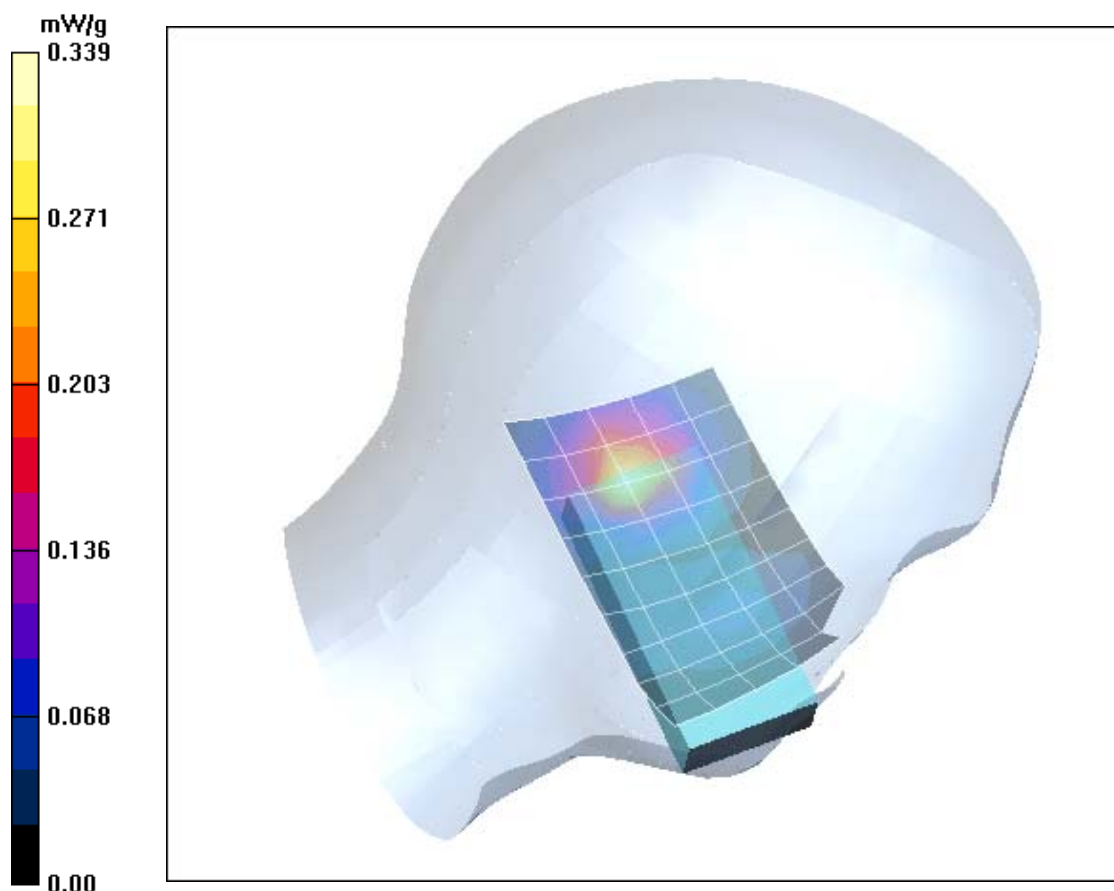


Fig. 6: SAR distribution for PCS 1900, channel 661, tilted position, left side of head (June 27, 2005; Ambient Temperature: 22.2° C; Liquid Temperature : 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bprm\\_1.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Cheek Right

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.11, 5.11, 5.11); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Cheek Right/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.434 mW/g

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

Reference Value = 12.6 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 0.805 W/kg

**SAR(1 g) = 0.449 mW/g; SAR(10 g) = 0.241 mW/g**

Maximum value of SAR (measured) = 0.508 mW/g

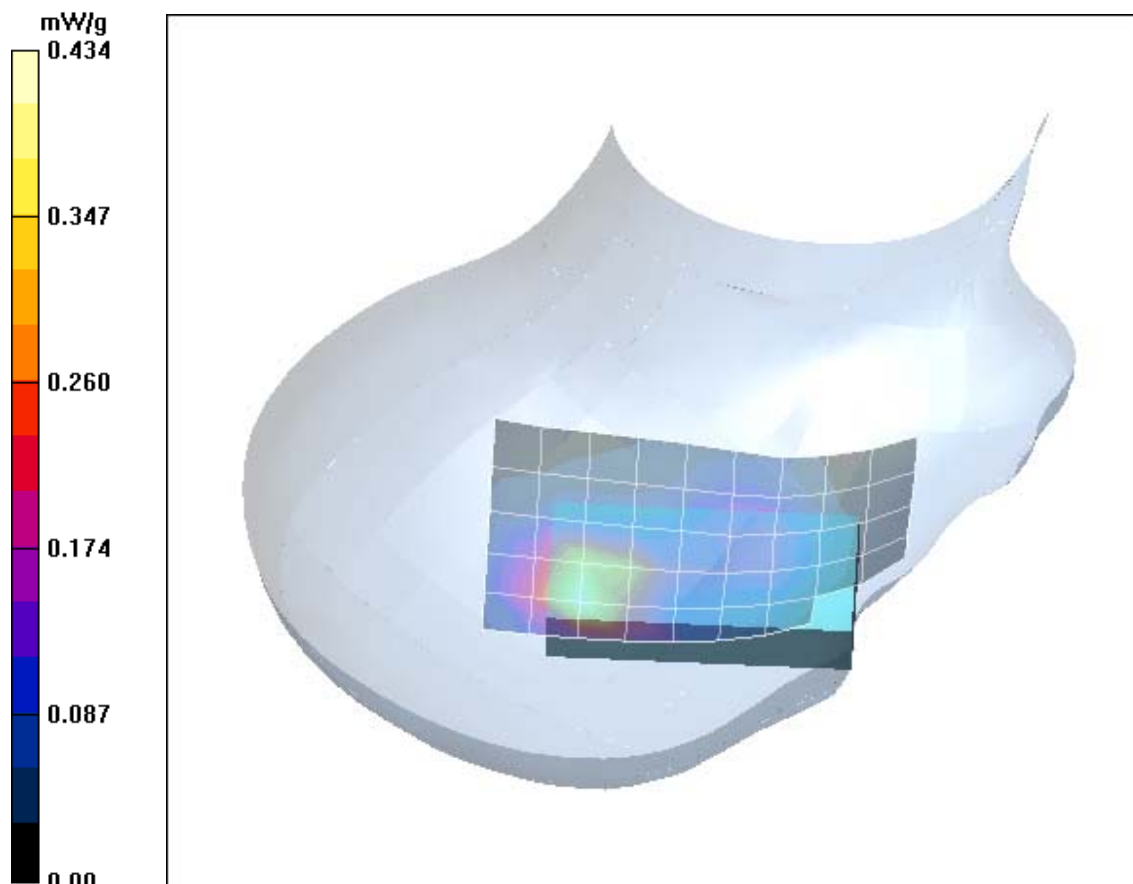


Fig. 7: SAR distribution for PCS 1900, channel 661, cheek position, right side of head (June 27, 2005; Ambient Temperature: 22.4° C; Liquid Temperature : 21.5° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bprm\\_2.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Tilted Right

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.11, 5.11, 5.11); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilted Right/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.351 mW/g

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

Reference Value = 12.6 V/m; Power Drift = -0.177 dB

Peak SAR (extrapolated) = 0.709 W/kg

**SAR(1 g) = 0.405 mW/g; SAR(10 g) = 0.217 mW/g**

Maximum value of SAR (measured) = 0.456 mW/g

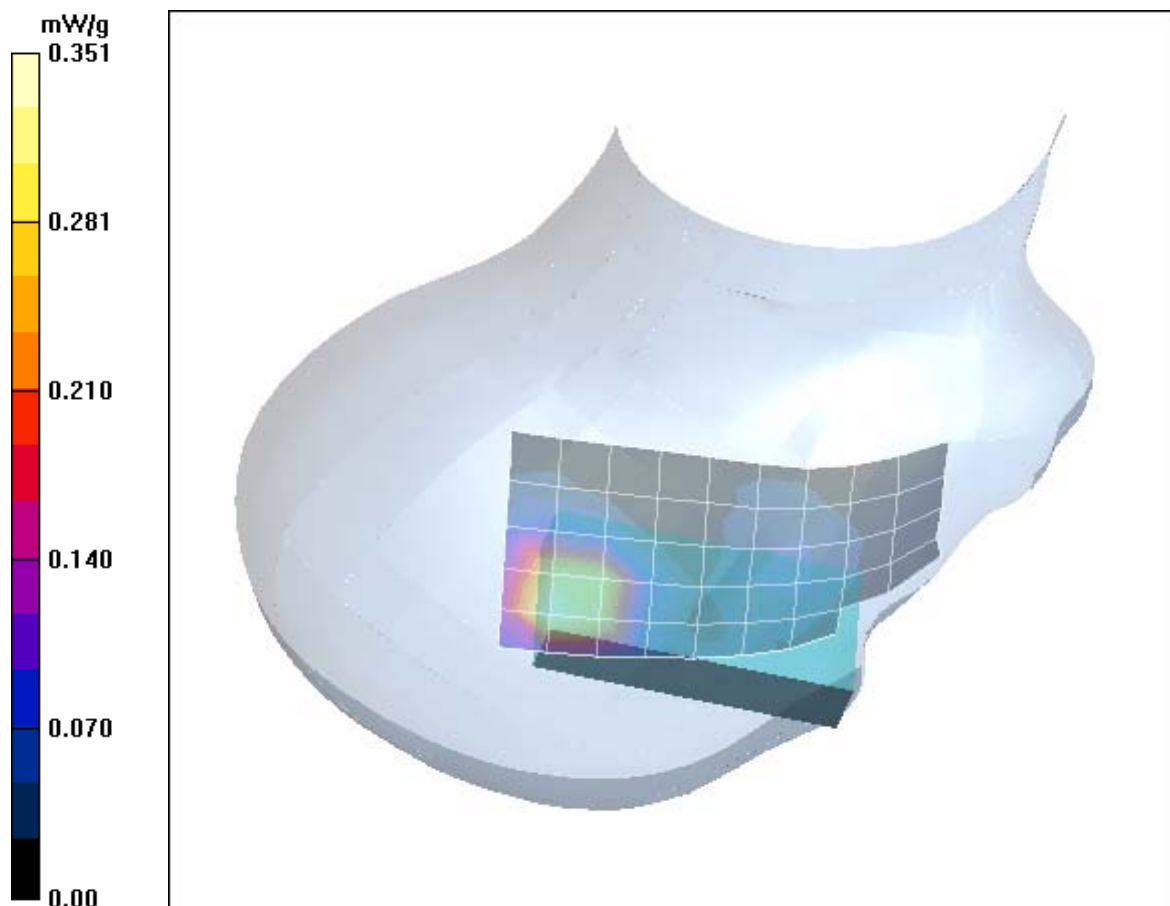


Fig. 8: SAR distribution for PCS 1900, channel 661, tilted position, right side of head (June 27, 2005; Ambient Temperature: 22.2 °C; Liquid Temperature : 21.3° C)

### 3 SAR Distribution Plots, GSM 850 Body with headset in GSM mode

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bahm\\_7.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Body Worn

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

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 1$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.39, 6.39, 6.39); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Body Worn/Area Scan (6x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.692 mW/g

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

Reference Value = 27.8 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.909 W/kg

**SAR(1 g) = 0.667 mW/g; SAR(10 g) = 0.462 mW/g**

Maximum value of SAR (measured) = 0.707 mW/g

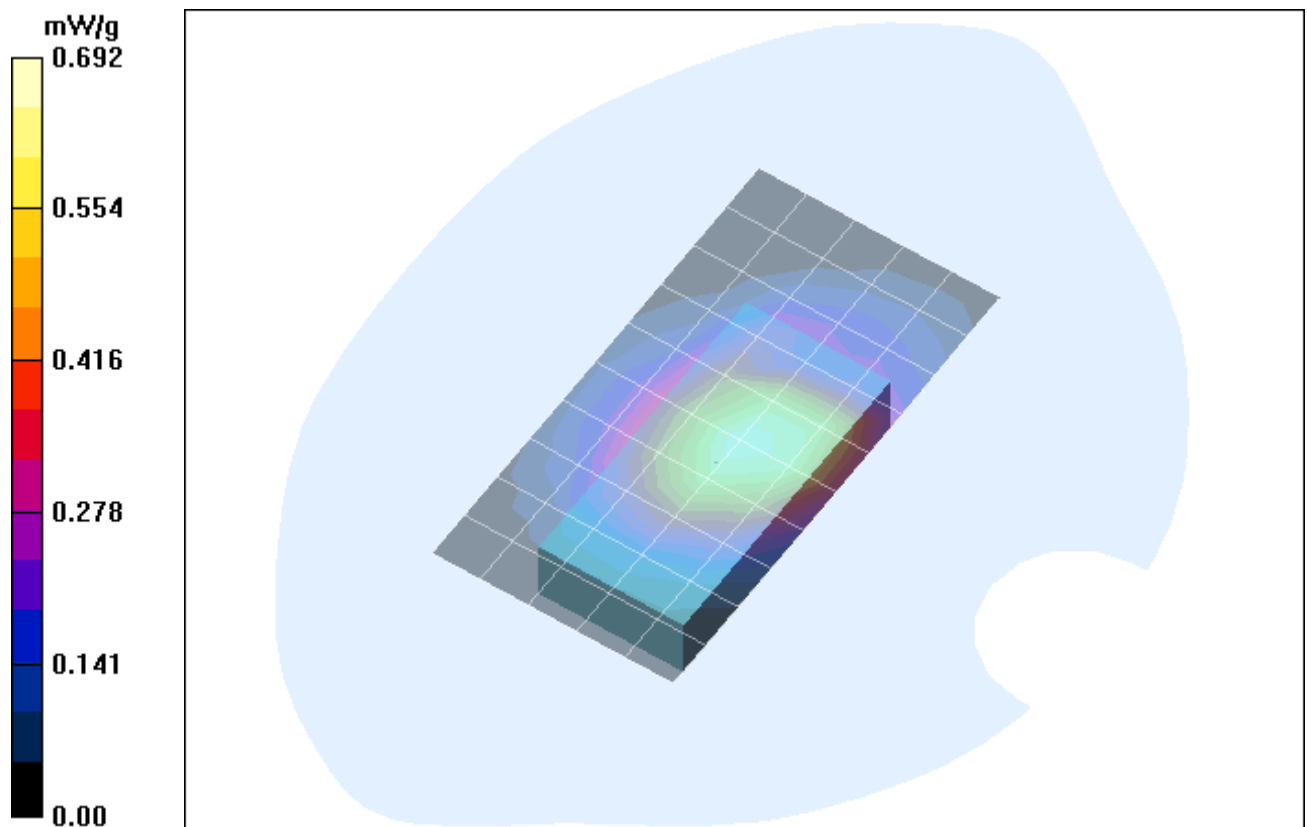


Fig. 9: SAR distribution for GSM 850, channel 190, body worn configuration, antenna towards the phantom, with headset and FCT 650 carry case with 10 mm distance (June 23, 2005; Ambient Temperature: 22.1° C; Liquid Temperature: 21.3° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bahm\\_8.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Body Worn

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

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 1$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.39, 6.39, 6.39); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Body Worn/Area Scan (6x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.356 mW/g

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

Reference Value = 19.4 V/m; Power Drift = -0.079 dB

Peak SAR (extrapolated) = 0.480 W/kg

**SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.231 mW/g**

Maximum value of SAR (measured) = 0.366 mW/g

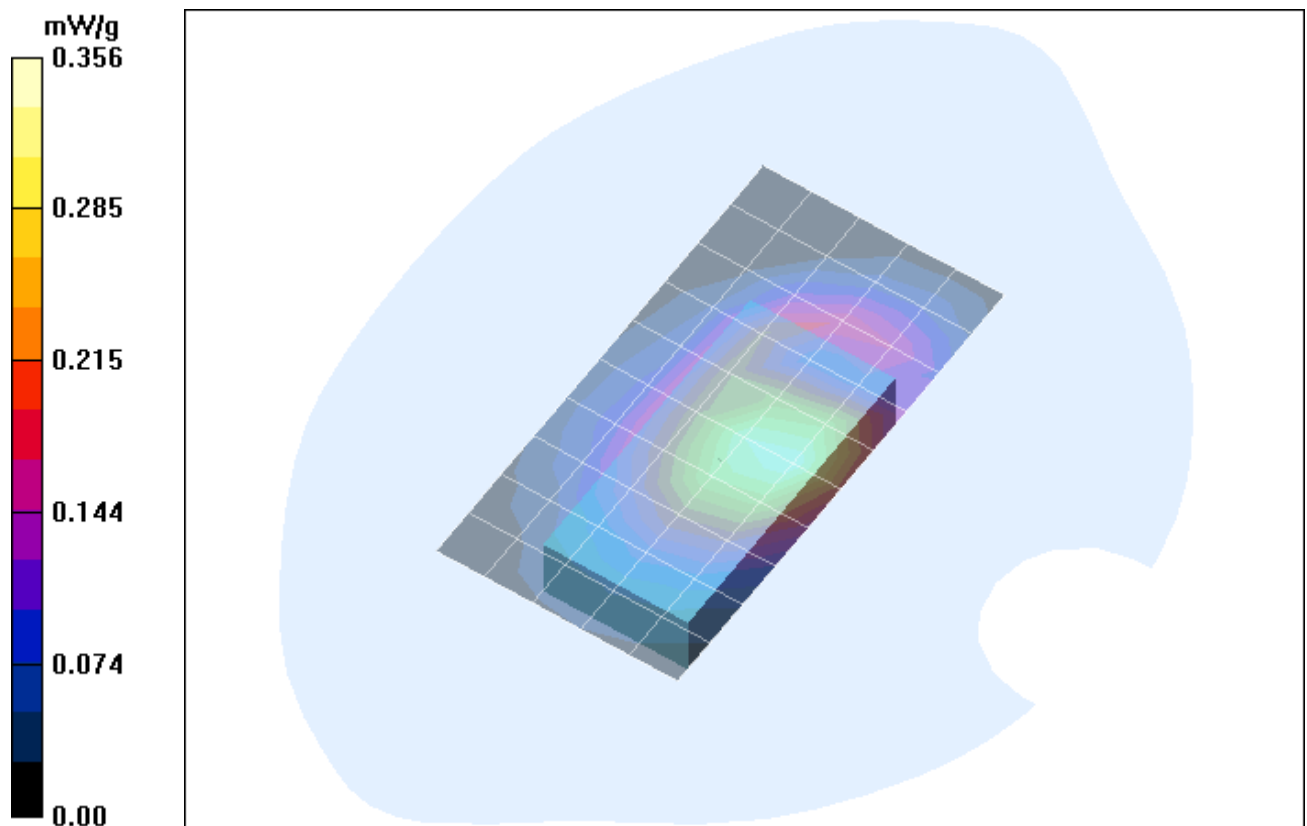


Fig. 10: SAR distribution for GSM 850, channel 190, body worn configuration, antenna towards the phantom, with headset and FCL 600 carry case with 13 mm distance (June 23, 2005; Ambient Temperature: 22.1° C; Liquid Temperature: 21.3° C).

## 4 SAR Distribution Plots, GSM 850 Body with data cable in GPRS mode

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bahm\\_9.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Body Worn

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

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 1$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.39, 6.39, 6.39); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Body Worn/Area Scan (6x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.330 mW/g

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

Reference Value = 19.0 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.459 W/kg

**SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.222 mW/g**

Maximum value of SAR (measured) = 0.349 mW/g

**Body Worn/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.440 W/kg

**SAR(1 g) = 0.247 mW/g; SAR(10 g) = 0.149 mW/g**

Maximum value of SAR (measured) = 0.311 mW/g

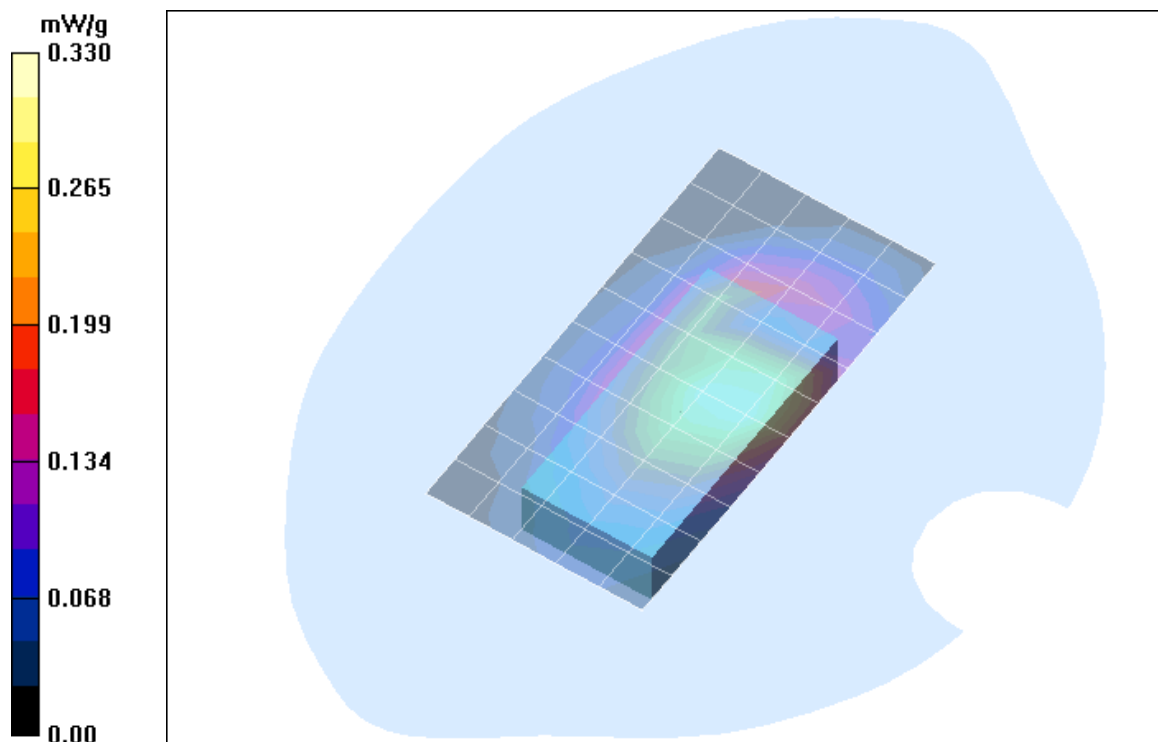


Fig. 11: SAR distribution for GPRS 850, channel 190, body worn configuration, antenna towards the phantom, with headset and FCL 600 carry case with 13 mm distance (June 23, 2005; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

## 5 SAR Distribution Plots, PCS 1900 Body with headset in GSM mode

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bphm\\_7.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Body Worn

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.52, 4.52, 4.52); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Body Worn/Area Scan (6x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.371 mW/g

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

Reference Value = 14.3 V/m; Power Drift = -0.092 dB

Peak SAR (extrapolated) = 0.597 W/kg

**SAR(1 g) = 0.363 mW/g; SAR(10 g) = 0.219 mW/g**

Maximum value of SAR (measured) = 0.399 mW/g

**Body Worn/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.3 V/m; Power Drift = -0.092 dB

Peak SAR (extrapolated) = 0.372 W/kg

**SAR(1 g) = 0.250 mW/g; SAR(10 g) = 0.162 mW/g**

Maximum value of SAR (measured) = 0.269 mW/g

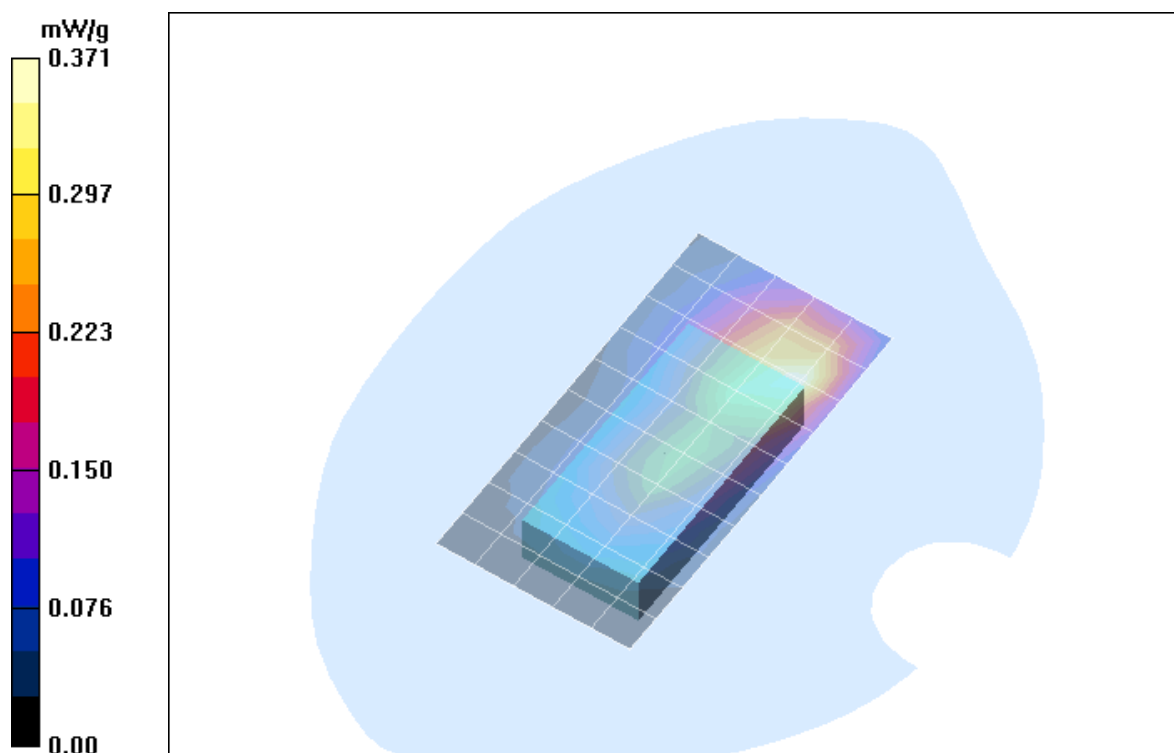


Fig. 12: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with headset and FCT 650 carry case with 10 mm distance (June 21, 2005; Ambient Temperature: 22.1° C; Liquid Temperature: 21.3° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bphm\\_8.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Body Worn

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.52, 4.52, 4.52); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Body Worn/Area Scan (6x11x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.353 mW/g

**Body Worn/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 12.4 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.490 W/kg

**SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.218 mW/g**

Maximum value of SAR (measured) = 0.368 mW/g

**Body Worn/Zoom Scan (7x7x7)/Cube 1:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 12.4 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.777 W/kg

**SAR(1 g) = 0.288 mW/g; SAR(10 g) = 0.143 mW/g**

Maximum value of SAR (measured) = 0.262 mW/g

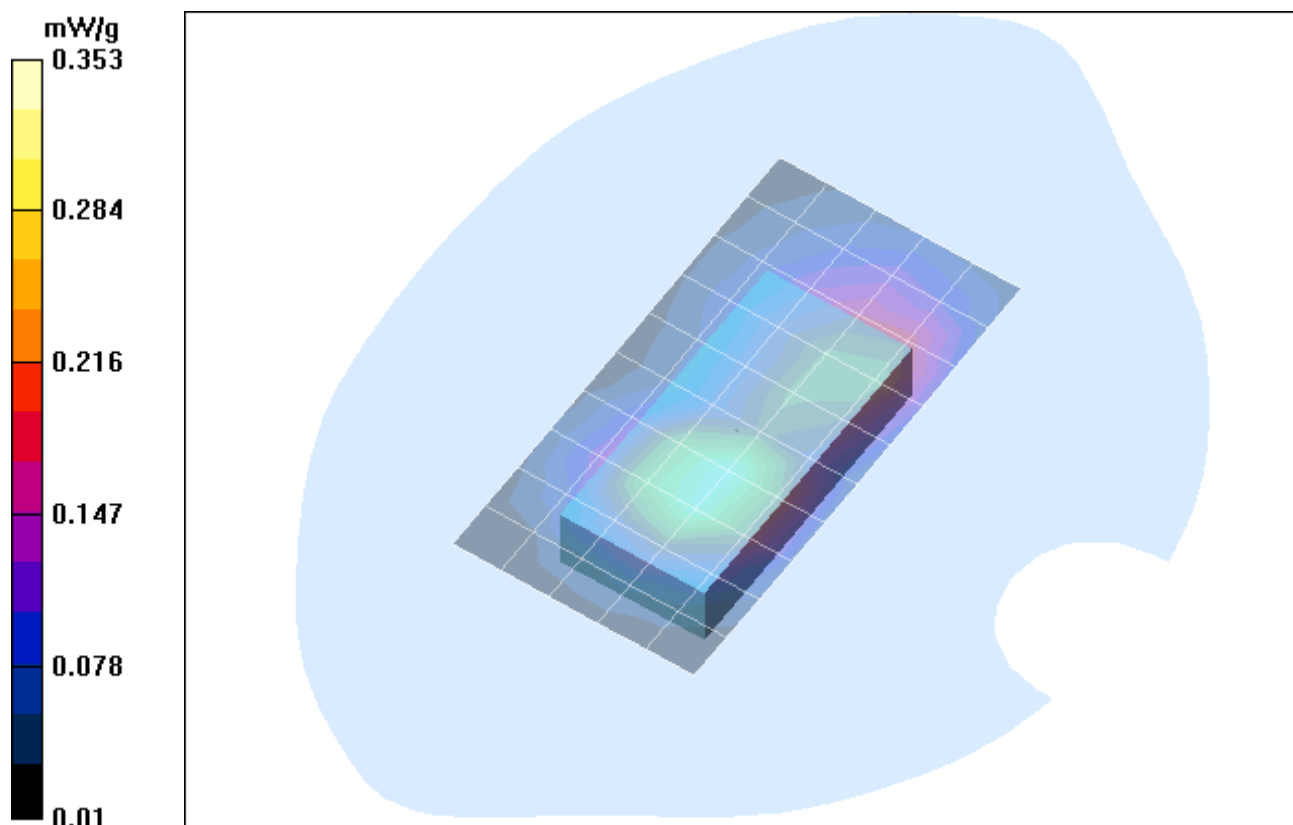


Fig. 13: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with headset and FCL 600 carry case with 13 mm distance (June 21, 2005; Ambient Temperature: 22.1° C; Liquid Temperature: 21.3° C).

## 6 SAR Distribution Plots, PCS 1900 Body with data cable in GPRS mode

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [746bphm\\_9.da4](#)

DUT: Siemens; Type: A76; Serial: 004400002106746

Program Name: Body Worn

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.52, 4.52, 4.52); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Body Worn/Area Scan (6x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.319 mW/g

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

Reference Value = 13.2 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.435 W/kg

**SAR(1 g) = 0.303 mW/g; SAR(10 g) = 0.193 mW/g**

Maximum value of SAR (measured) = 0.327 mW/g

**Body Worn/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.2 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.354 W/kg

**SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.139 mW/g**

Maximum value of SAR (measured) = 0.243 mW/g

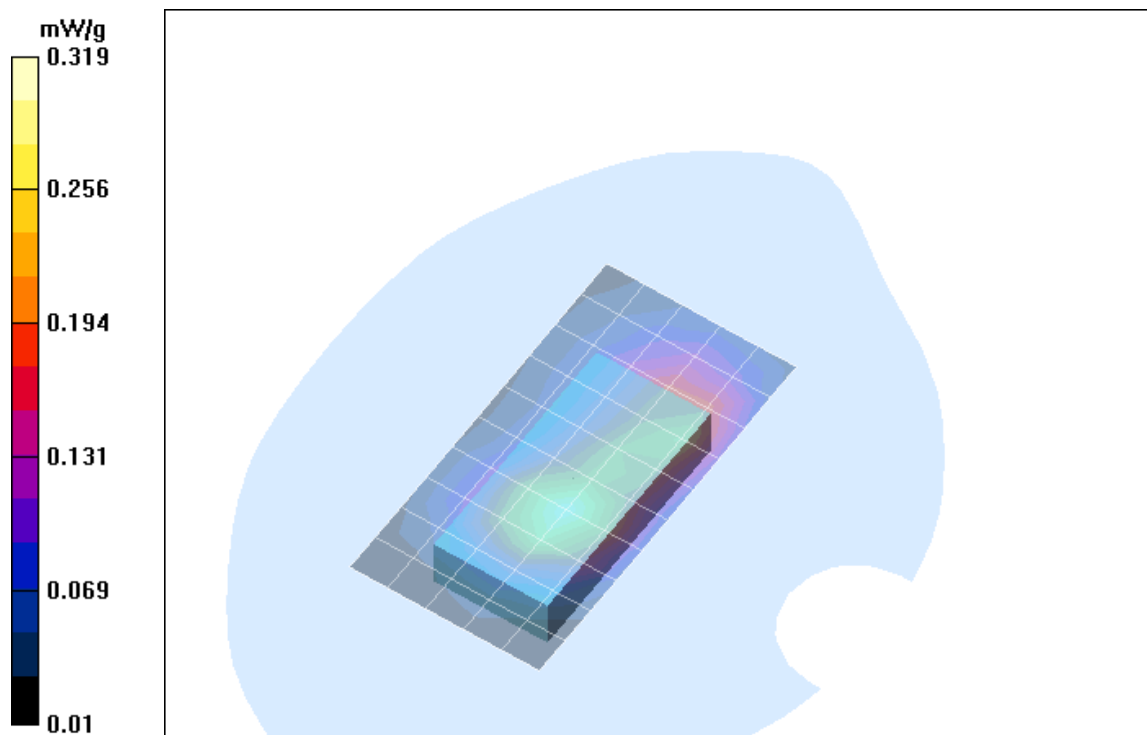


Fig. 14: SAR distribution for GPRS 1900, channel 661, body worn configuration, antenna towards the phantom, with data cable and FCL 600 carry case with 13 mm distance (June 21, 2005; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

## 7 SAR z-axis scans (Validation)

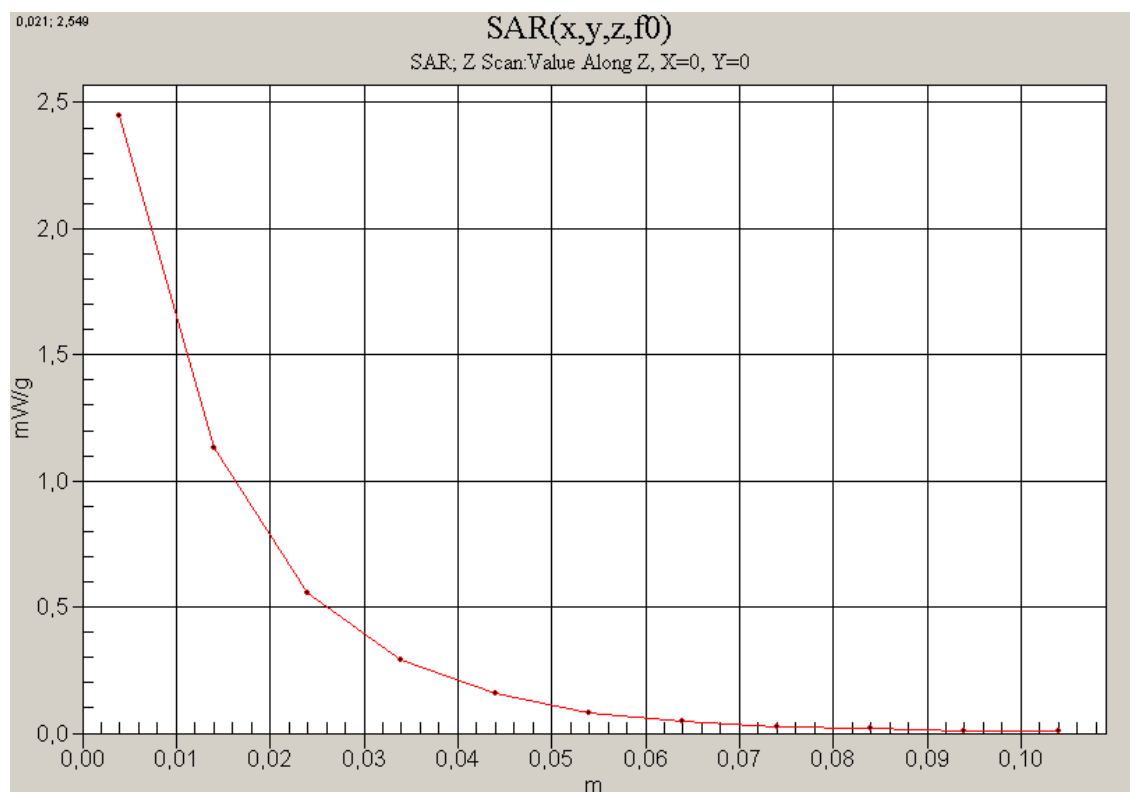


Fig. 15: SAR versus liquid depth, 835 MHz, head (June 24, 2005; Ambient Temperature: 22.0° C; Liquid Temperature : 21.8° C).

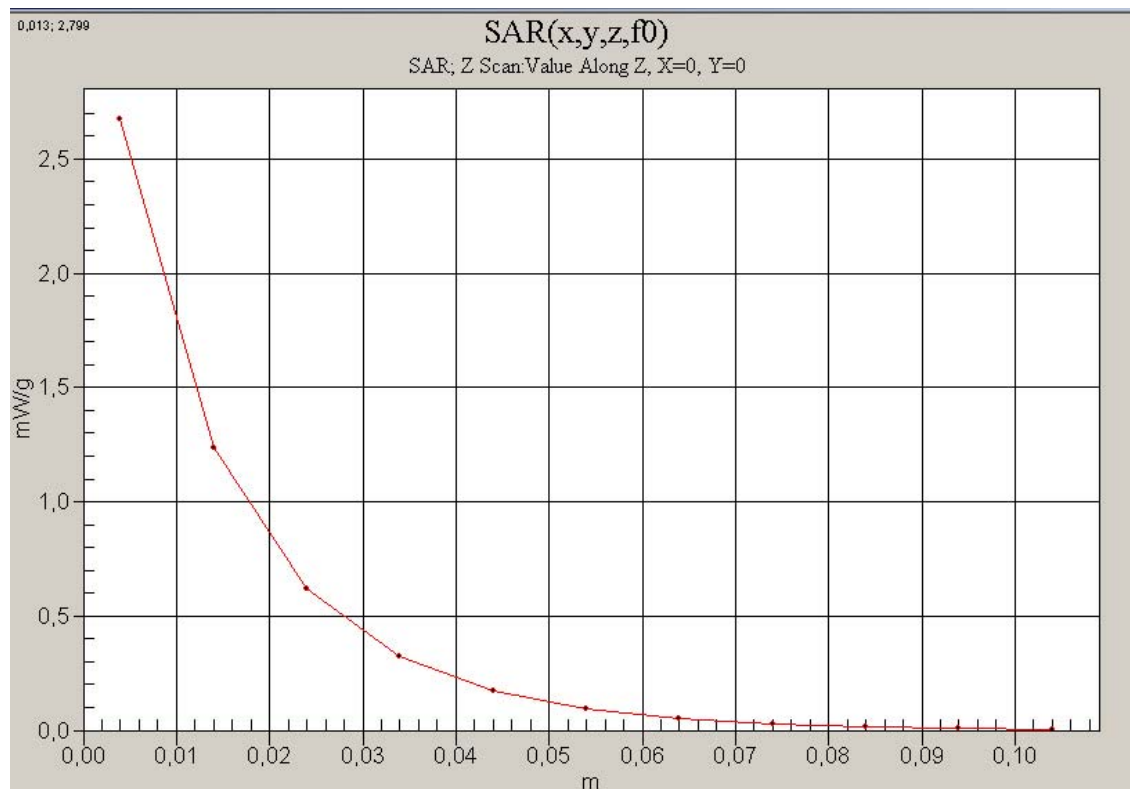


Fig. 16: SAR versus liquid depth, 835 MHz, body (June 23, 2005; Ambient Temperature: 22.1° C; Liquid Temperature : 22.0° C).

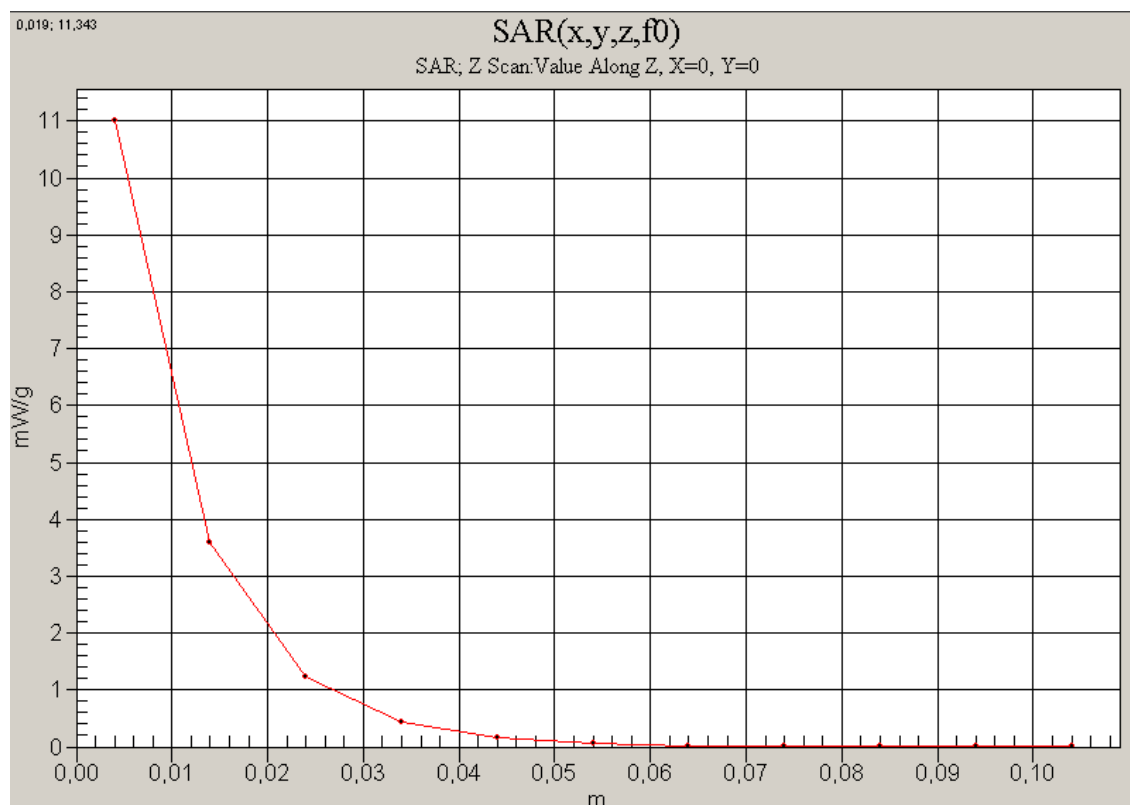


Fig. 17: SAR versus liquid depth, 1900 MHz, head (June 27, 2005; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

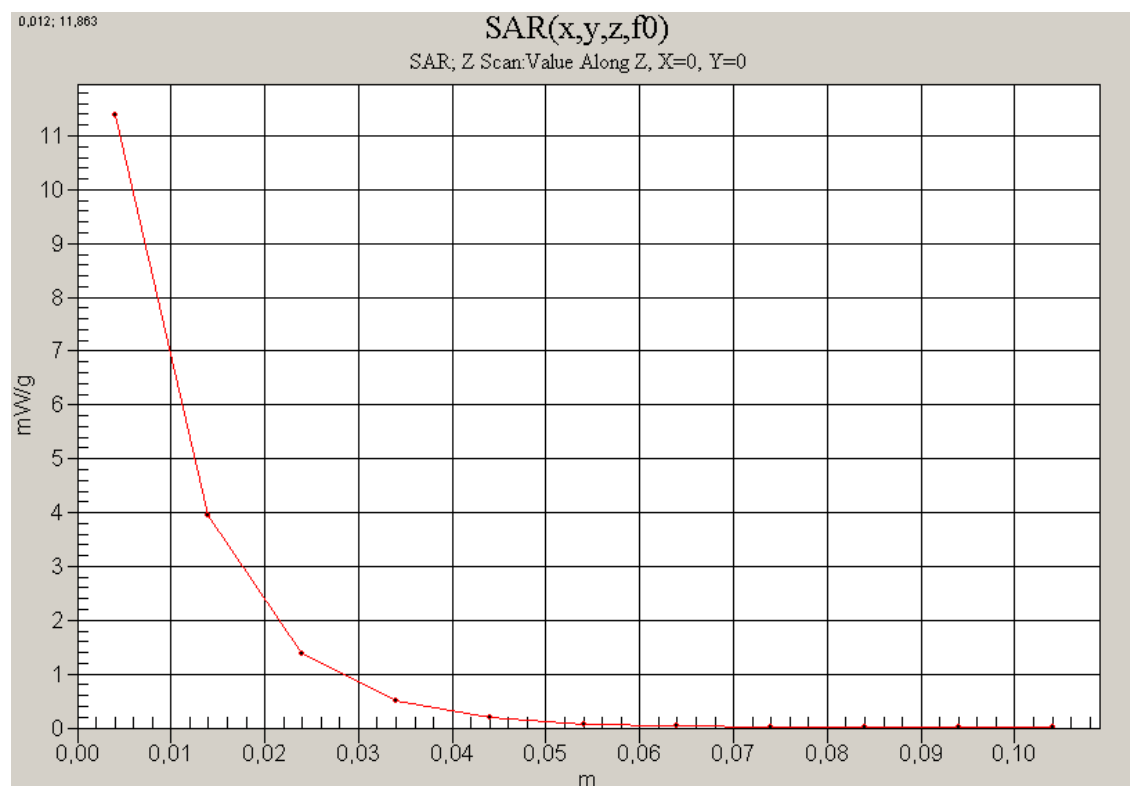


Fig. 18: SAR versus liquid depth, 1900 MHz, body (June 21, 2005; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

## 8 SAR z-axis scans (Measurements)

The following pictures show the plots of SAR versus liquid depth for the worst case values.

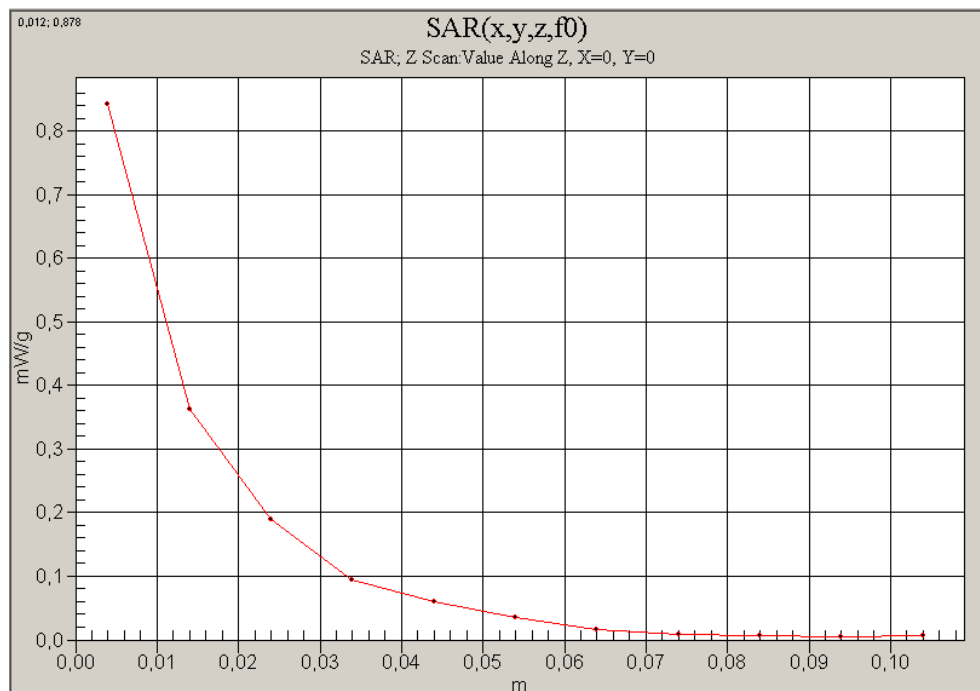


Fig. 19: SAR versus liquid depth, head: GSM 850, channel 190, cheek position, left side of head (June 24, 2005; Ambient Temperature: 21.6° C; Liquid Temperature : 21.0° C).

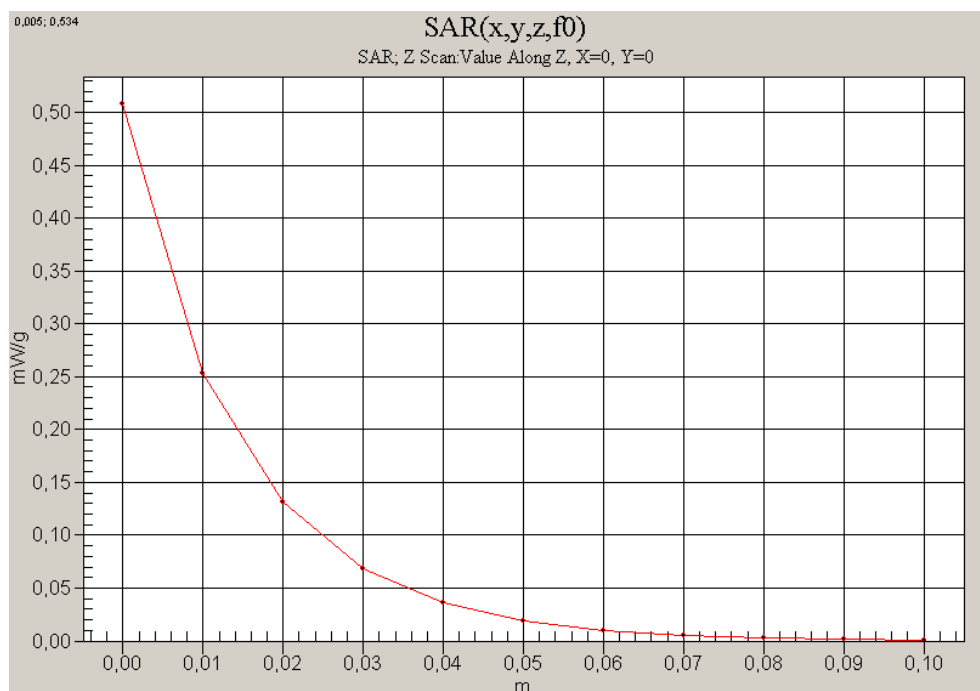


Fig. 20: SAR versus liquid depth, body: GSM 850, channel 190, headset and FCT 650 carry case (June 23, 2005; Ambient Temperature: 22.1° C; Liquid Temperature : 21.3° C).

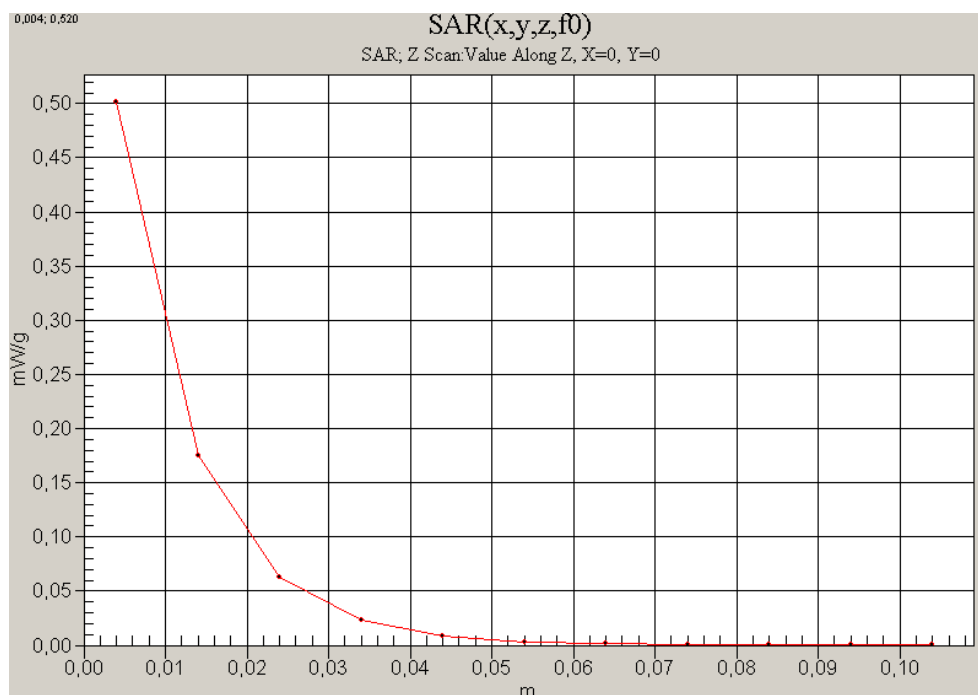


Fig. 21: SAR versus liquid depth, head: PCS 1900, channel 661, cheek position, right side of head (June 27, 2005; Ambient Temperature: 22.4° C; Liquid Temperature : 21.5° C).

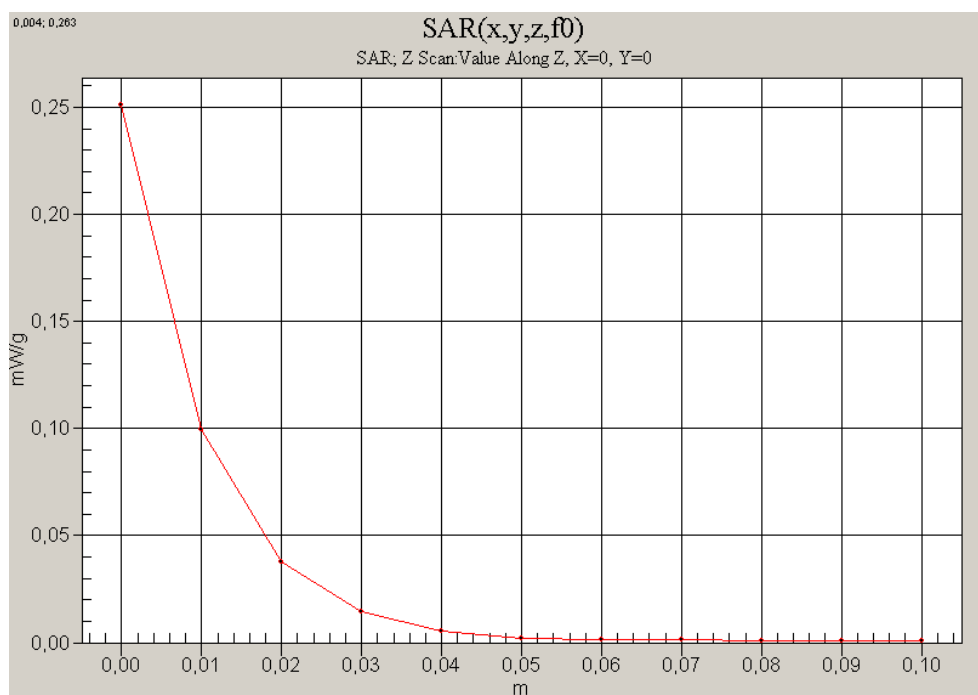


Fig. 22: SAR versus liquid depth, body: PCS 1900, channel 661, headset and FCT 650 carry case (June 21, 2005; Ambient Temperature: 22.1° C; Liquid Temperature : 21.3° C).