
Appendix for the Report

Dosimetric Assessment of the Siemens A65 (FCC ID: PWXA65)

According to the FCC Requirements

SAR Distribution Plots

March 14, 2005
IMST GmbH
Carl-Friedrich-Gauß-Str. 2
D-47475 Kamp-Lintfort

Customer
Siemens Information & Communication Mobile LLC
16475 West Bernado Dirve, Suite 400
CA 92127 San Diego

The test results only relate to the items tested.
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1 SAR Distribution Plots, PCS 1900 head, without camera

Test Laboratory: IMST GmbH; File Name: [944bplm_1.da4](#)

DUT: Siemens; Type: A65; Serial: 004400006010944

Program Name: Cheek Left

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

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.28, 5.28, 5.28); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

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

Maximum value of SAR (measured) = 0.306 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 = -0.2 dB

Peak SAR (extrapolated) = 0.455 W/kg

SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.170 mW/g

Maximum value of SAR (measured) = 0.311 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 = -0.2 dB

Peak SAR (extrapolated) = 0.473 W/kg

SAR(1 g) = 0.284 mW/g; SAR(10 g) = 0.157 mW/g

Maximum value of SAR (measured) = 0.325 mW/g

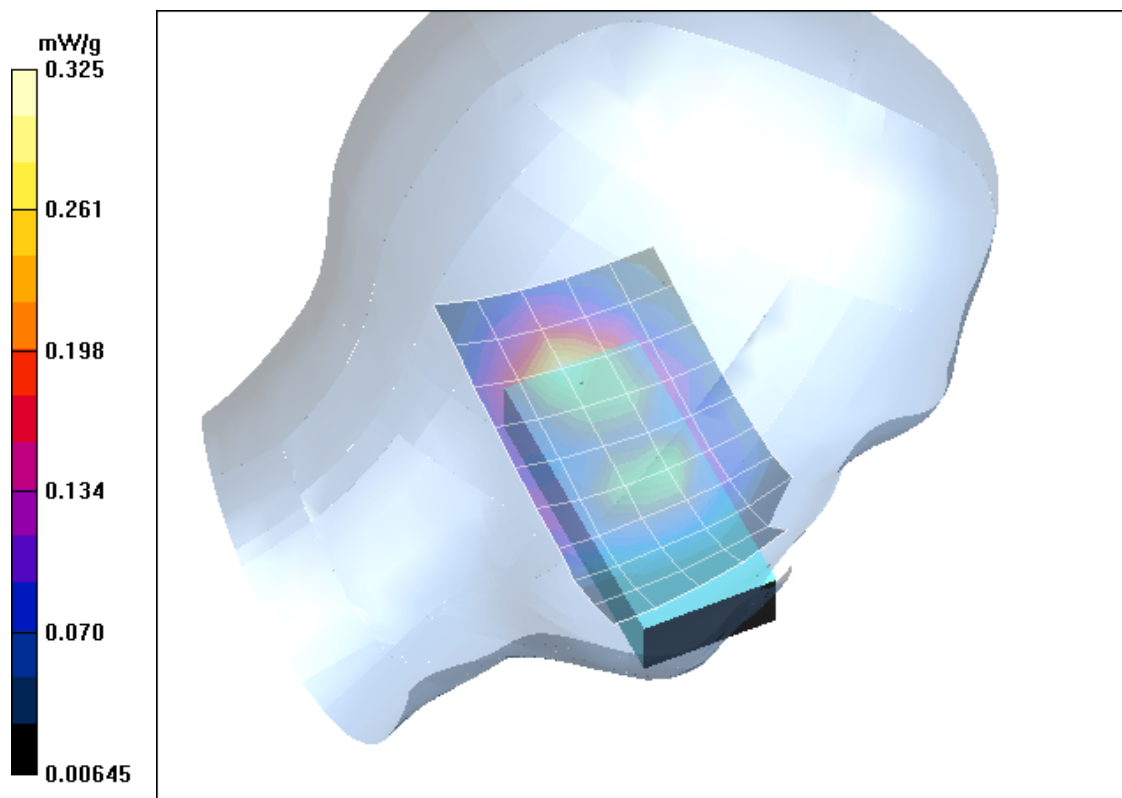


Fig. 1: SAR distribution for PCS 1900, channel 661, cheek position, left side of head (19.01.2005; Ambient Temperature: 21.5° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [944bplm_2.da4](#)

DUT: Siemens; **Type:** A65; **Serial:** 004400006010944

Program Name: Tilted Left

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

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.28, 5.28, 5.28); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

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

Maximum value of SAR (measured) = 0.335 mW/g

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

Reference Value = 15.1 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.498 W/kg

SAR(1 g) = 0.307 mW/g; SAR(10 g) = 0.177 mW/g

Maximum value of SAR (measured) = 0.336 mW/g

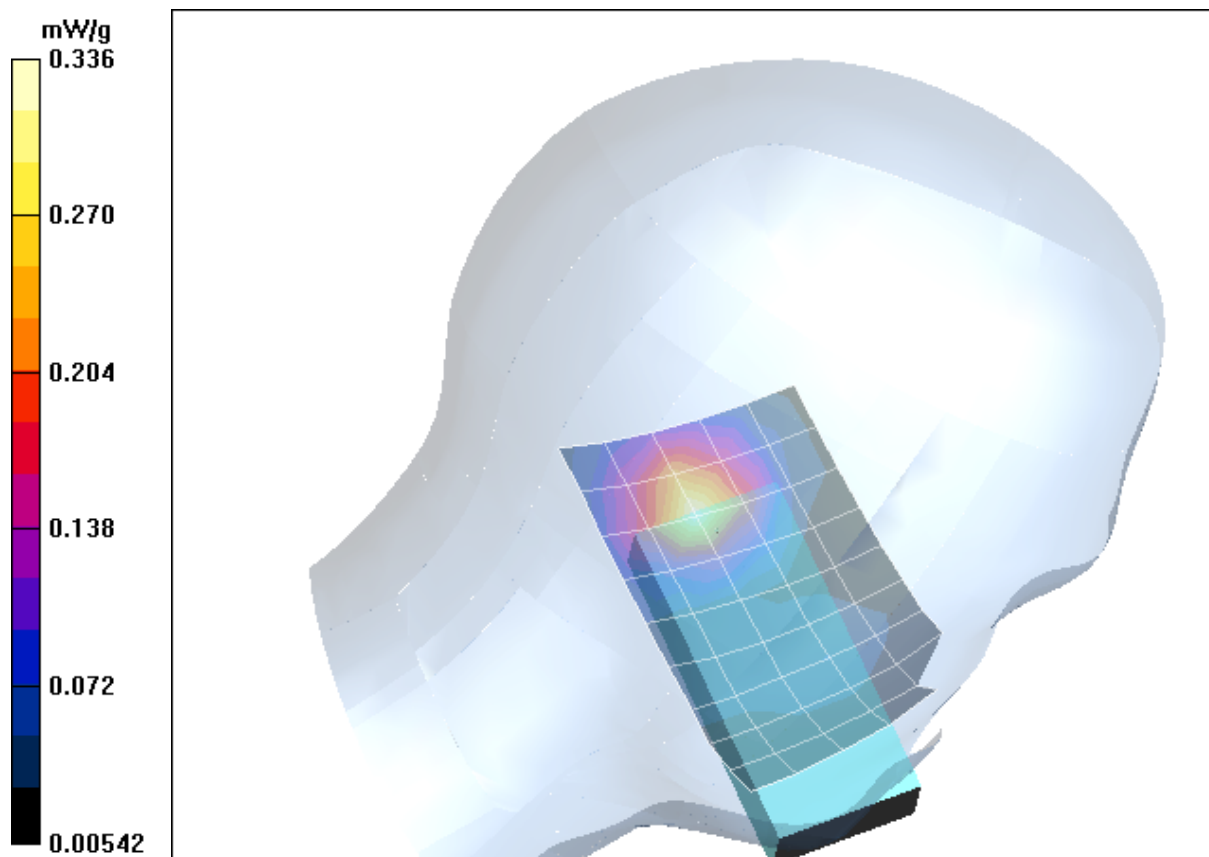


Fig. 2: SAR distribution for PCS 1900, channel 661, tilted position, left side of head (19.01.2005; Ambient Temperature: 21.5° C; Liquid Temperature : 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [944bprm_1.da4](#)

DUT: Siemens; **Type:** A65; **Serial:** 004400006010944

Program Name: Cheek Right

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

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 40$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.28, 5.28, 5.28); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

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

Maximum value of SAR (measured) = 0.466 mW/g

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

Reference Value = 11.8 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.782 W/kg

SAR(1 g) = 0.433 mW/g; SAR(10 g) = 0.233 mW/g

Maximum value of SAR (measured) = 0.483 mW/g

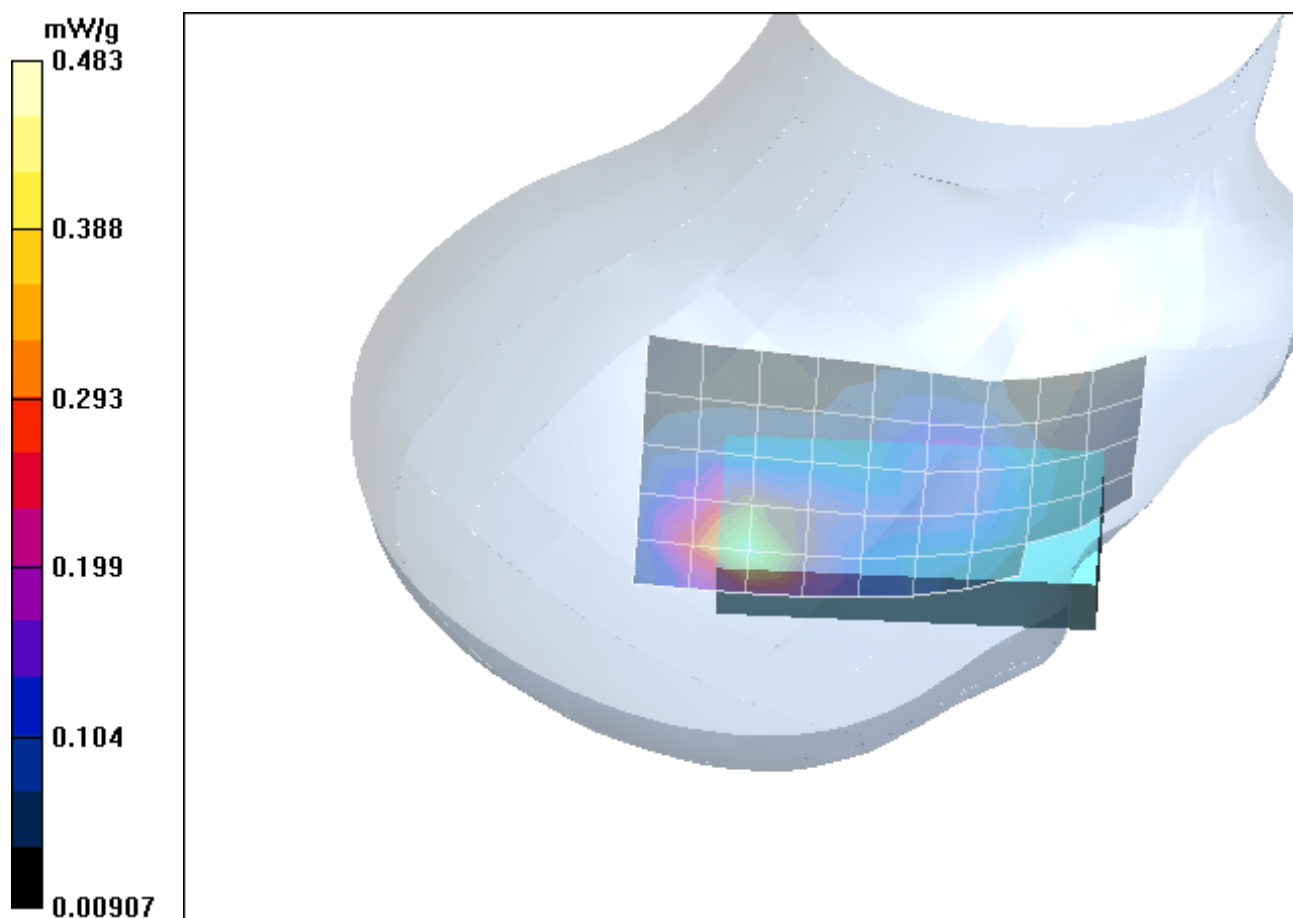


Fig. 3: SAR distribution for PCS 1900, channel 661, cheek position, right side of head (19.01.2005; Ambient Temperature: 21.5° C; Liquid Temperature : 20.6° C).

Test Laboratory: IMST GmbH; **File Name:** [944bprm_2.da4](#)

DUT: Siemens; **Type:** A65; **Serial:** 004400006010944

Program Name: Tilted Right

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

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.28, 5.28, 5.28); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

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

Maximum value of SAR (measured) = 0.388 mW/g

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

Reference Value = 11.5 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.765 W/kg

SAR(1 g) = 0.435 mW/g; SAR(10 g) = 0.229 mW/g

Maximum value of SAR (measured) = 0.495 mW/g

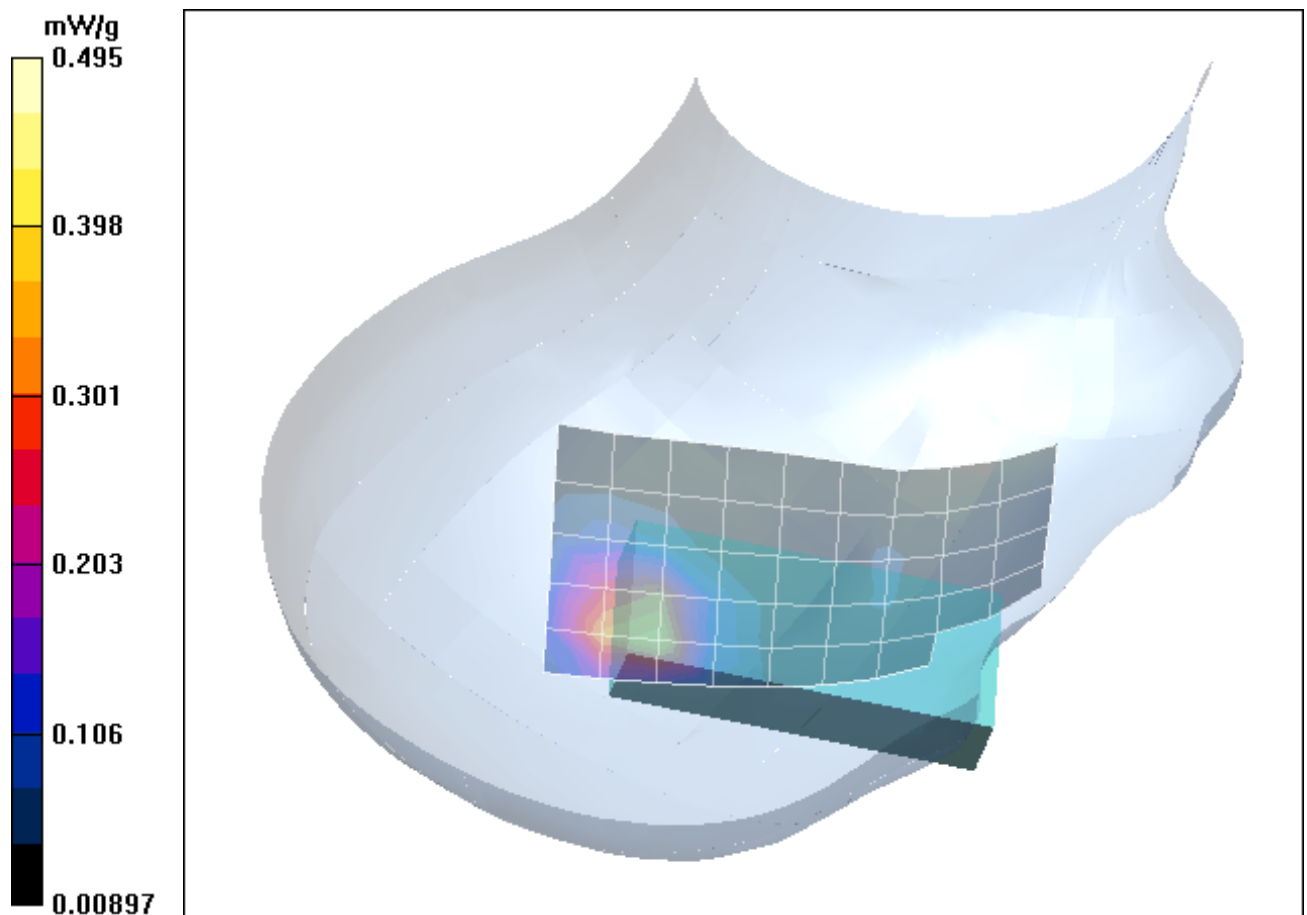


Fig. 4: SAR distribution for PCS 1900, channel 661, tilted position, right side of head (19.01.2005; Ambient Temperature: 21.5° C; Liquid Temperature : 20.6° C).

2 SAR Distribution Plots, PCS 1900 head, with camera

Test Laboratory: IMST GmbH; File Name: [944bplm_1_camflash.da4](#)

DUT: Siemens; Type: A65; Serial: 004400006010944

Program Name: Cheek Left

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

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.28, 5.28, 5.28); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Cheek Left/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.298 mW/g

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

Reference Value = 18.8 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.499 W/kg

SAR(1 g) = 0.294 mW/g; SAR(10 g) = 0.168 mW/g

Maximum value of SAR (measured) = 0.324 mW/g

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

Reference Value = 18.8 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.133 mW/g

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

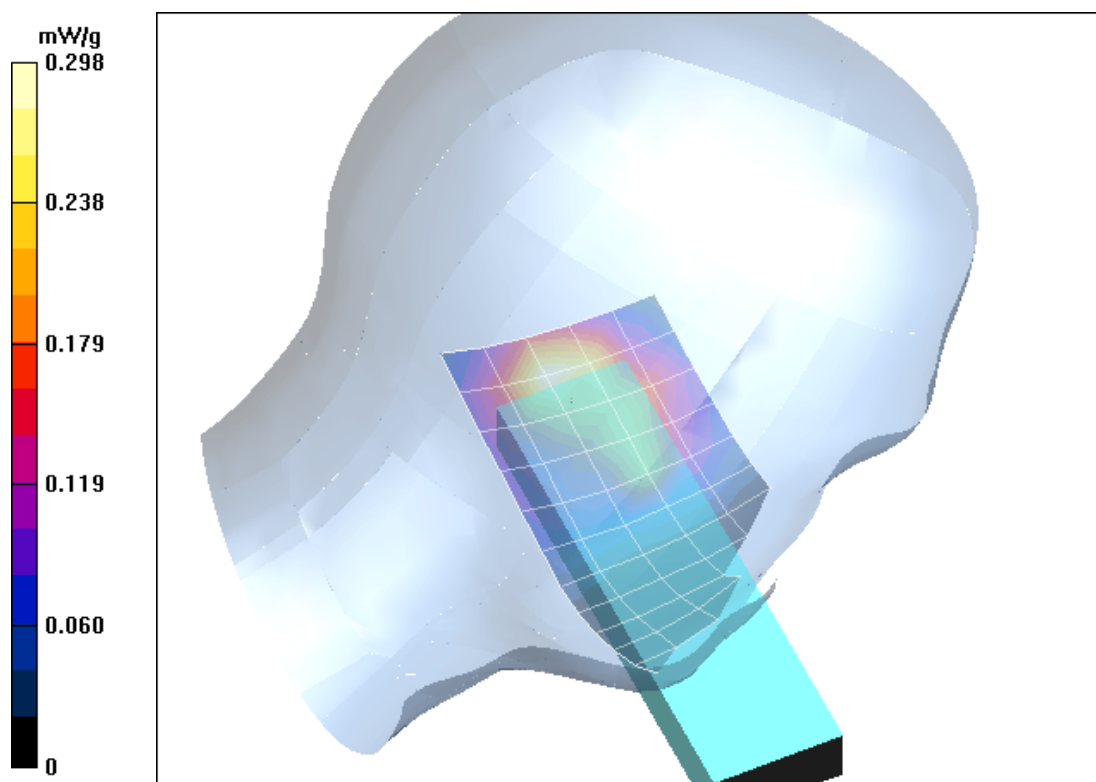


Fig. 5: SAR distribution for PCS 1900, channel 661, cheek position, left side of head (19.01.2005; Ambient Temperature: 21.5° C; Liquid Temperature: 20.6° C).

Test Laboratory: IMST GmbH; **File Name:** [944bplm_2_camflash.da4](#)

DUT: Siemens; **Type:** A65; **Serial:** 004400006010944

Program Name: Tilted Left

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

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.28, 5.28, 5.28); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Tilted Left/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.318 mW/g

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

Reference Value = 15.7 V/m; Power Drift = 0.005 dB

Peak SAR (extrapolated) = 0.580 W/kg

SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.184 mW/g

Maximum value of SAR (measured) = 0.370 mW/g

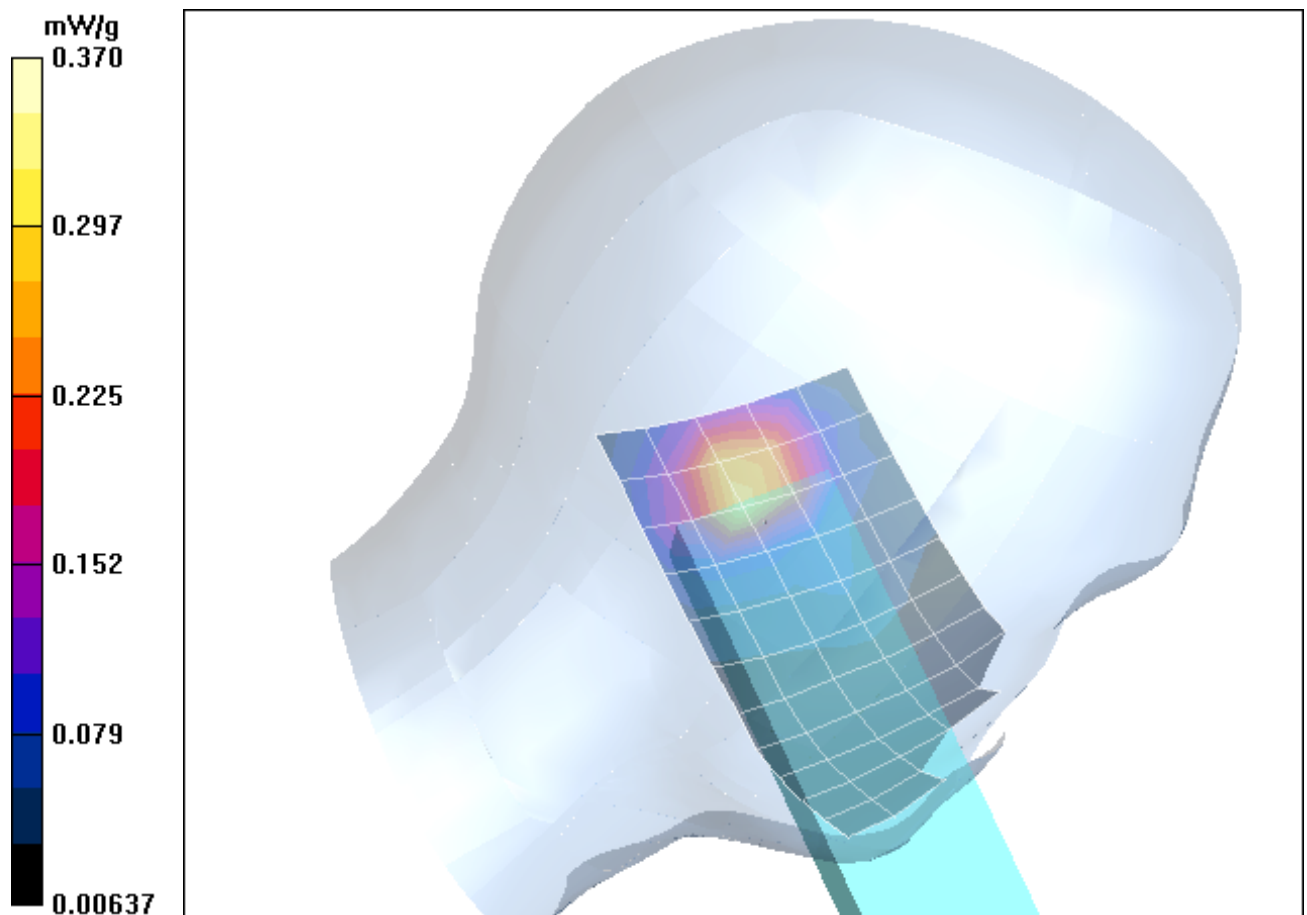


Fig. 6: SAR distribution for PCS 1900, channel 661, tilted position, left side of head (19.01.2005; Ambient Temperature: 21.5° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [944bprm_1_camflash.da4](#)

DUT: Siemens; **Type:** A65; **Serial:** 004400006010944

Program Name: Cheek Right

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

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 40$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.28, 5.28, 5.28); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Cheek Right/Area Scan (6x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.439 mW/g

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

Reference Value = 12.4 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 0.762 W/kg

SAR(1 g) = 0.413 mW/g; SAR(10 g) = 0.219 mW/g

Maximum value of SAR (measured) = 0.464 mW/g

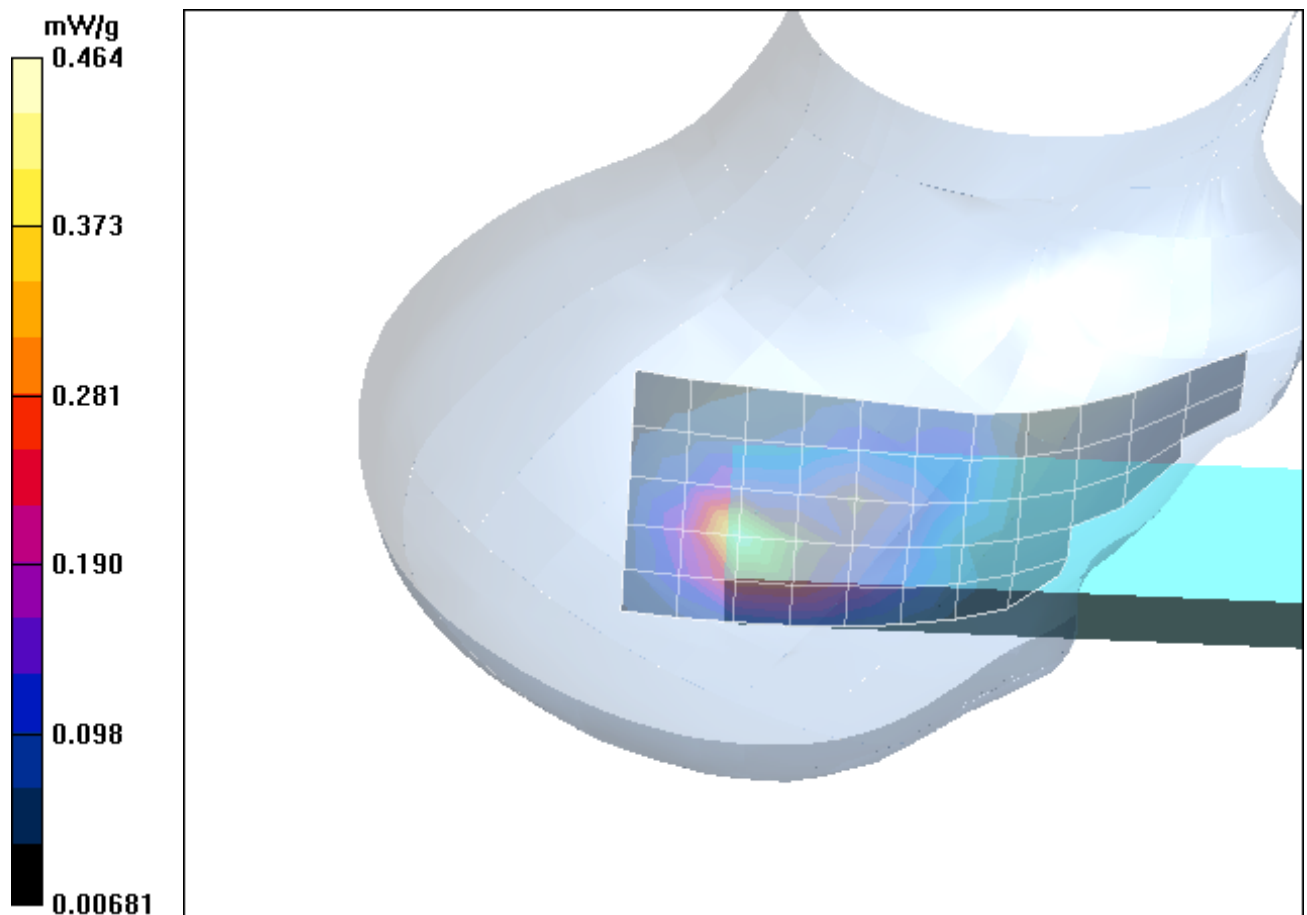


Fig. 7: SAR distribution for PCS 1900, channel 661, cheek position, right side of head (19.01.2005; Ambient Temperature: 21.6° C; Liquid Temperature : 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [944bprm 2 camflash.da4](#)

DUT: Siemens; **Type:** A65; **Serial:** 004400006010944

Program Name: Tilted Right

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

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.28, 5.28, 5.28); Calibrated: 13.01.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Tilted Right/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.325 mW/g

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

Reference Value = 11.7 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.696 W/kg

SAR(1 g) = 0.393 mW/g; SAR(10 g) = 0.206 mW/g

Maximum value of SAR (measured) = 0.443 mW/g

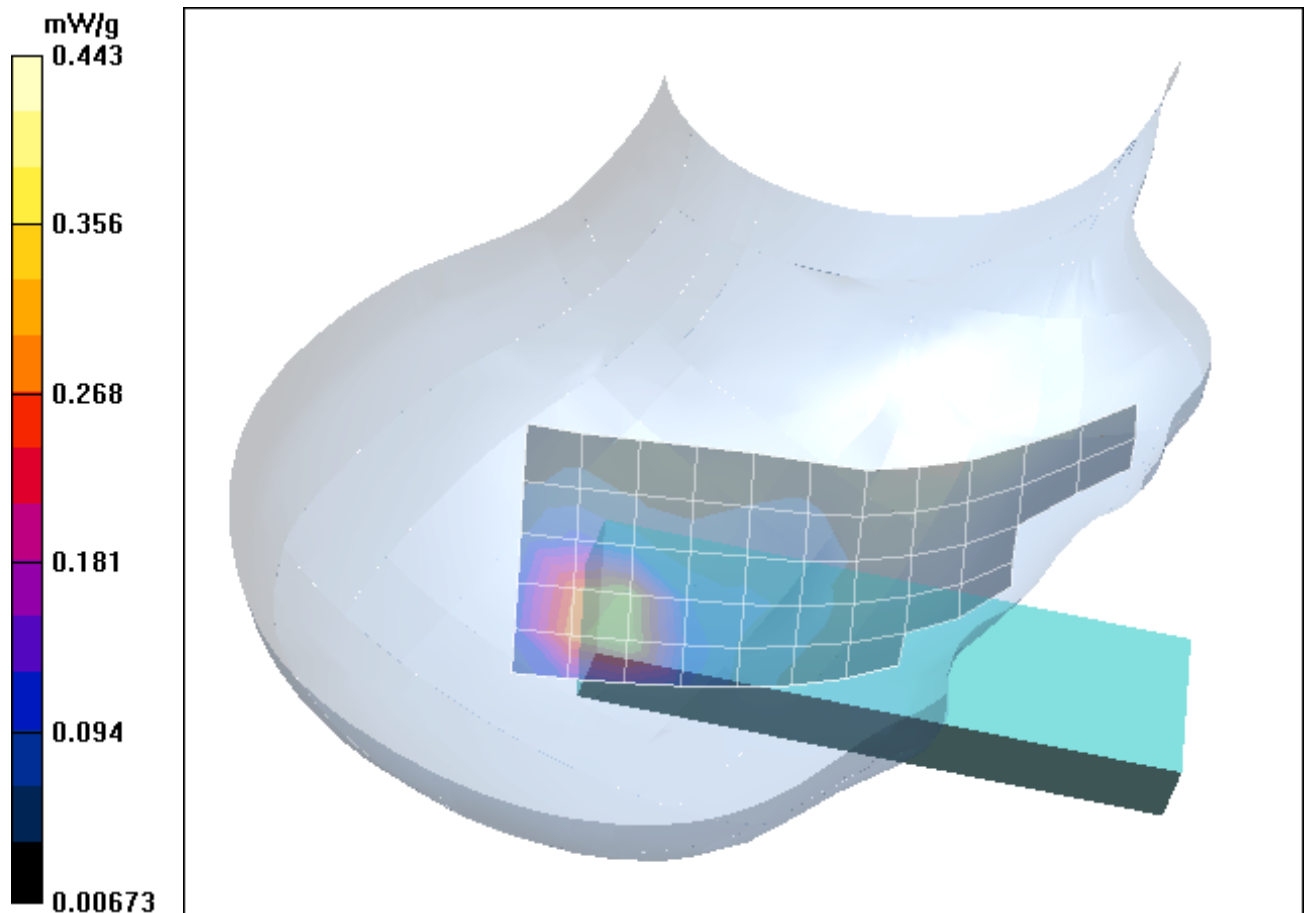


Fig. 8: SAR distribution for PCS 1900, channel 661, tilted position, right side of head (19.01.2005; Ambient Temperature: 21.6 °C; Liquid Temperature : 20.6° C)

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

Test Laboratory: IMST GmbH; File Name: [944yphm_3.da4](#)

DUT: Siemens; Type: A65; Serial: 004400006010944

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.5$; mho/m, $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

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: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Body Worn/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 33.4 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.686 W/kg

SAR(1 g) = 0.480 mW/g; SAR(10 g) = 0.302 mW/g

Maximum value of SAR (measured) = 0.520 mW/g

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

Reference Value = 33.4 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.406 W/kg

SAR(1 g) = 0.248 mW/g; SAR(10 g) = 0.154 mW/g

Maximum value of SAR (measured) = 0.266 mW/g

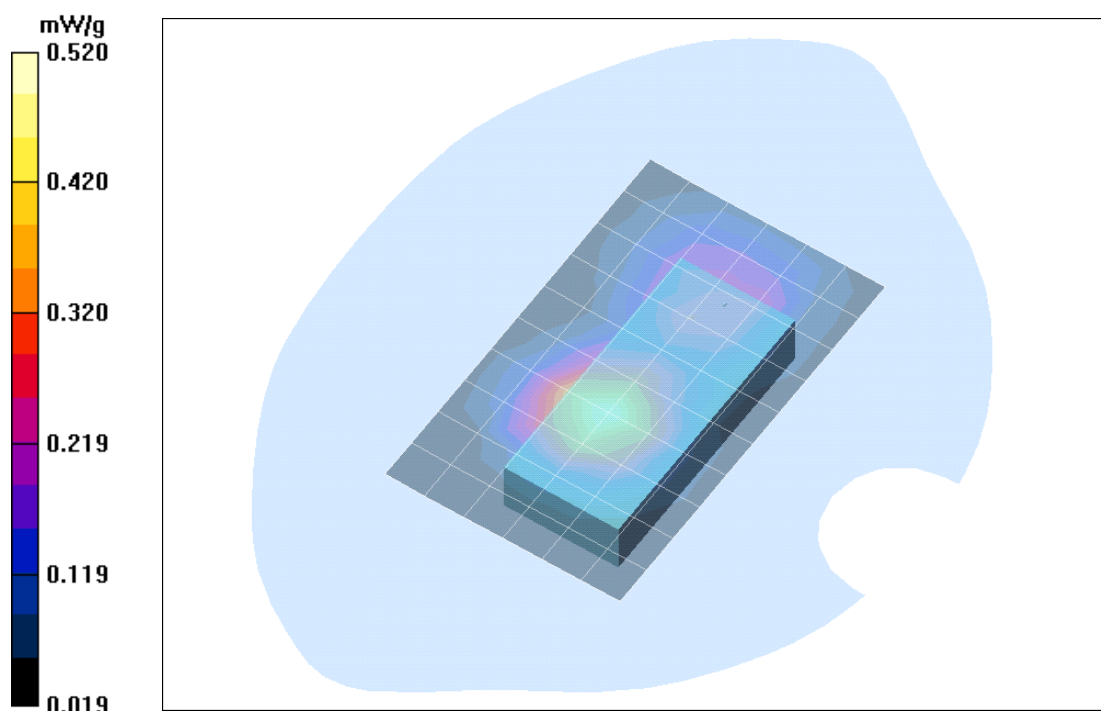


Fig. 9: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with headset and FCT 650 carry case with 10 mm distance (20.01.2005; Ambient Temperature: 22.1° C; Liquid Temperature: 21.1° C).

Test Laboratory: IMST GmbH; **File Name:** [944yphm_1.da4](#)

DUT: Siemens; **Type:** A65; **Serial:** 004400006010944

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.5$; mho/m, $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

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: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Body Worn/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.333 mW/g

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

Reference Value = 23.8 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 0.457 W/kg

SAR(1 g) = 0.304 mW/g; SAR(10 g) = 0.192 mW/g

Maximum value of SAR (measured) = 0.329 mW/g

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

Reference Value = 23.8 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 0.436 W/kg

SAR(1 g) = 0.304 mW/g; SAR(10 g) = 0.195 mW/g

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

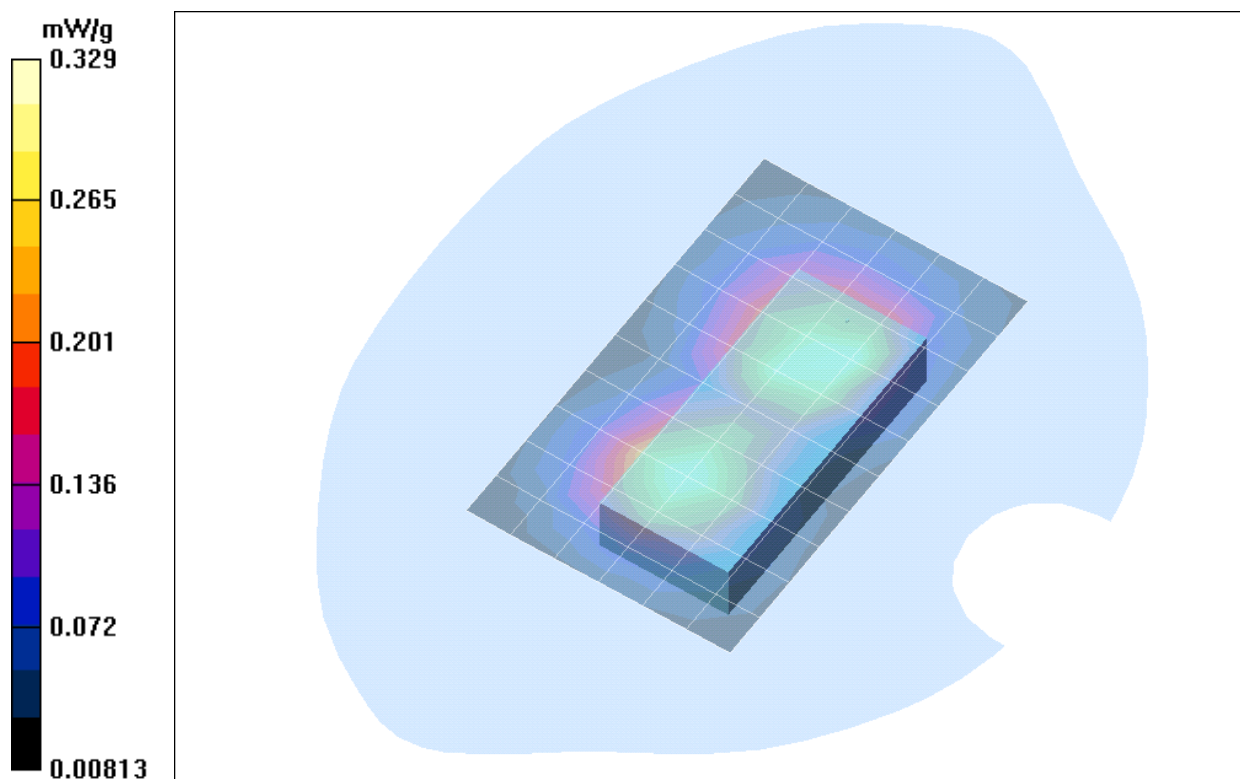


Fig. 10: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with headset and FCL 600 carry case with 13 mm distance (20.01.2005; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

4 SAR Distribution Plots, PCS 1900 Body with data cable, GPRS class 8

Test Laboratory: IMST GmbH; File Name: [944vphm_2.da4](#)

DUT: Siemens; Type: A65; Serial: 004400006010944

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.5$; mho/m, $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

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: DAE4 Sn631; Calibrated: 23.07.2004

- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340

- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Body Worn/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.260 mW/g

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

Reference Value = 24.1 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.393 W/kg

SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.166 mW/g

Maximum value of SAR (measured) = 0.283 mW/g

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

Reference Value = 24.1 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.222 mW/g; SAR(10 g) = 0.143 mW/g

Maximum value of SAR (measured) = 0.238 mW/g

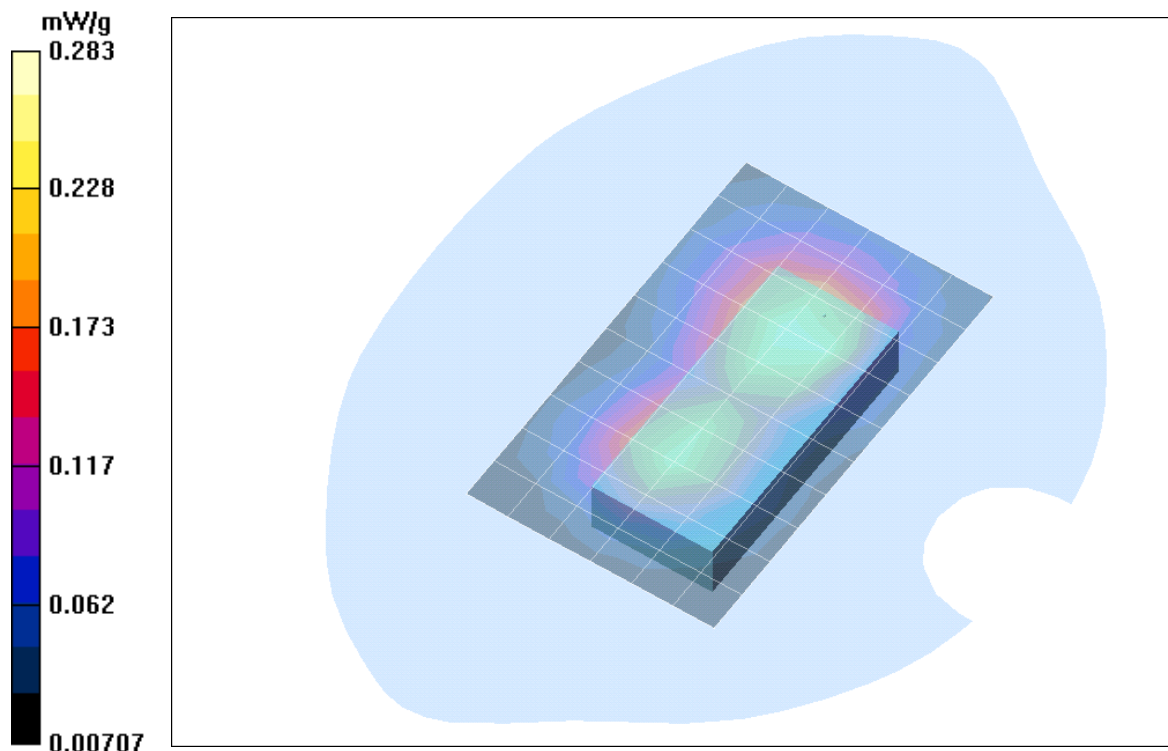


Fig. 11: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with data cable GPRS class 8 and FCL 600 carry case with 13 mm distance (20.01.2005; Ambient Temperature: 22.1° C; Liquid Temperature : 21.0° C).

5 SAR z-axis scans (Validation)

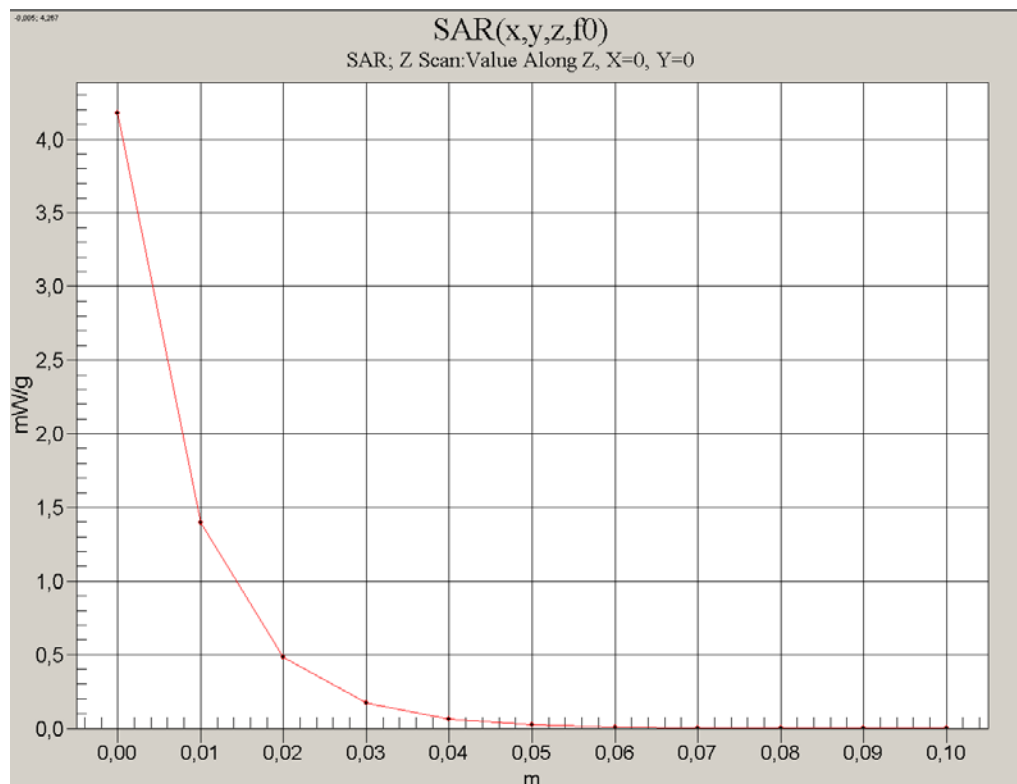


Fig. 12: SAR versus liquid depth, 1900 MHz, head (19.01.2005; Ambient Temperature: 21.8° C; Liquid Temperature : 21.4° C).

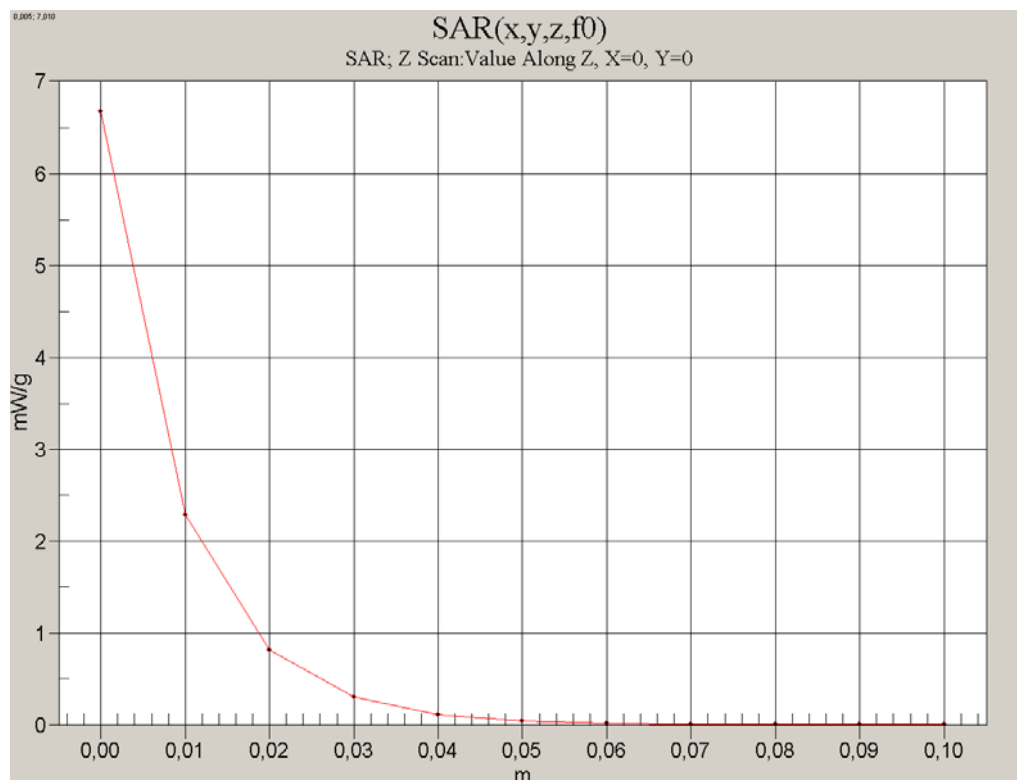


Fig. 13: SAR versus liquid depth, 1900 MHz, body (20.01.2005; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

6 SAR z-axis scans (Measurements)

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

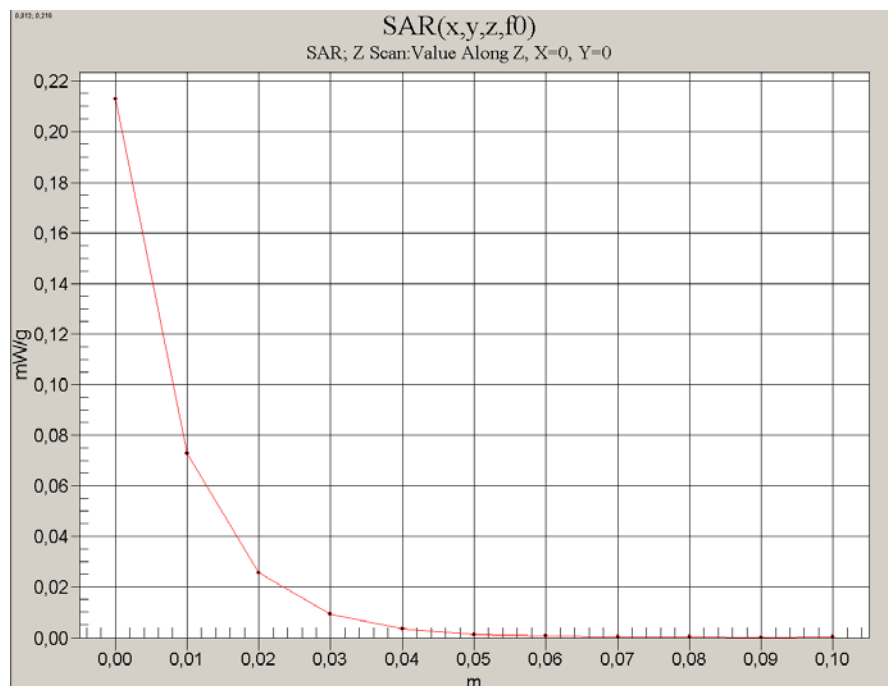


Fig. 14: SAR versus liquid depth, head: PCS 1900, channel 661, tilted position, right side of head without cam (19.01.2005, Ambient Temperature: 21.5° C; Liquid Temperature : 20.6° C).

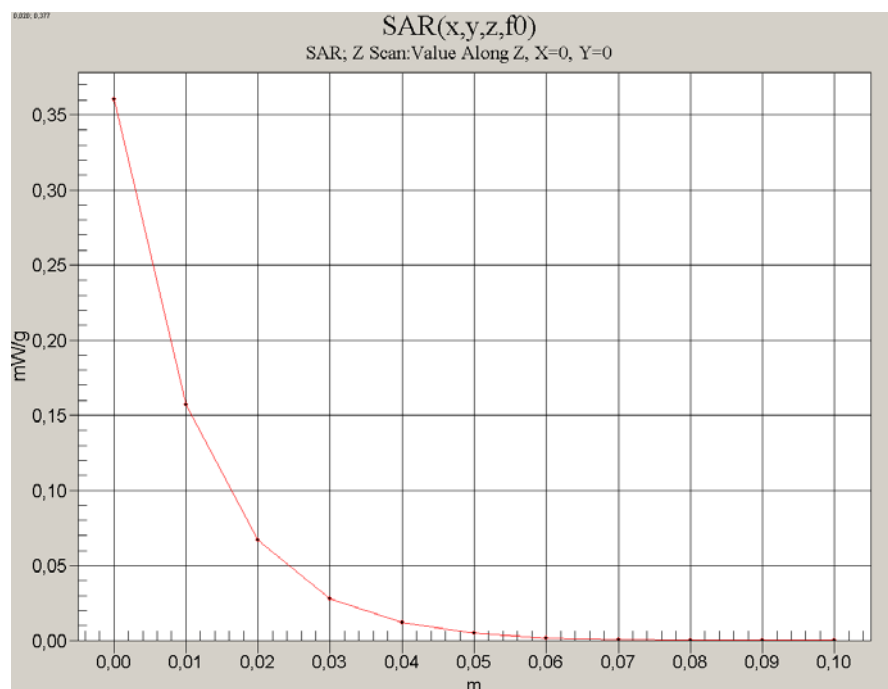


Fig. 15: SAR versus liquid depth: PCS 1900, channel 661, body worn configuration, antenna towards the phantom, headset, GSM mode and FCT 650 carry case with 10 mm distance (20.01.2005, Ambient Temperature: 22.1° C; Liquid Temperature: 21.1° C).