



TTI-P-G 158



Appendix for the Report

**Dosimetric Assessment of the
Siemens CX65 (FCC ID: PWX-CX-65)
According to the FCC Requirements**

SAR Distribution Plots

February 22, 2004
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The test results only relate to the items tested.
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approval of the testing laboratory.

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1 SAR Distribution Plots, PCS 1900 Head without Flash

Test Laboratory: IMST; File Name: [staplm_1.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 19.7 V/m

Power Drift = -0.002 dB

Maximum value of SAR = 0.65 mW/g

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

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.672 mW/g; SAR(10 g) = 0.392 mW/g

Reference Value = 19.7 V/m

Power Drift = -0.002 dB

Maximum value of SAR = 0.727 mW/g

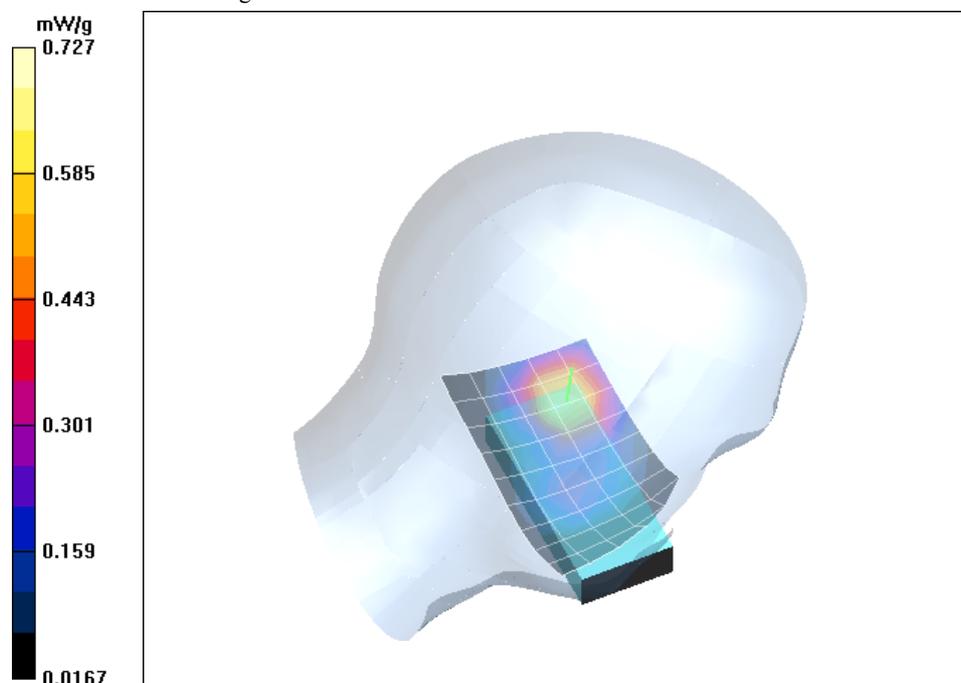


Fig. 1: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, Standard. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature: 19.8° C).

Test Laboratory: IMST; File Name: [staplm_2.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.774 mW/g; SAR(10 g) = 0.437 mW/g

Reference Value = 23.1 V/m

Power Drift = 0.05 dB

Maximum value of SAR = 0.843 mW/g

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

Reference Value = 23.1 V/m

Power Drift = 0.05 dB

Maximum value of SAR = 0.808 mW/g

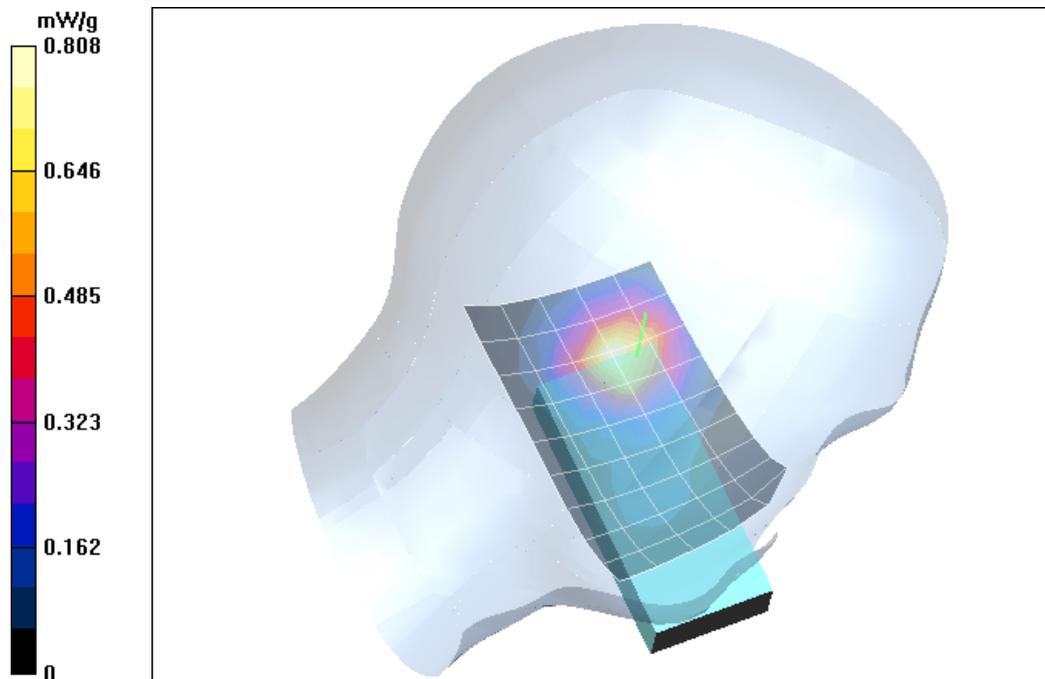


Fig. 2: SAR distribution for PCS 1900, channel 661, tilted position, left side of head, Standard. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [staprm_1.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 21.4 V/m

Power Drift = 0.004 dB

Maximum value of SAR = 0.574 mW/g

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

Peak SAR (extrapolated) = 0.847 W/kg

SAR(1 g) = 0.555 mW/g; SAR(10 g) = 0.336 mW/g

Reference Value = 21.4 V/m

Power Drift = 0.004 dB

Maximum value of SAR = 0.593 mW/g

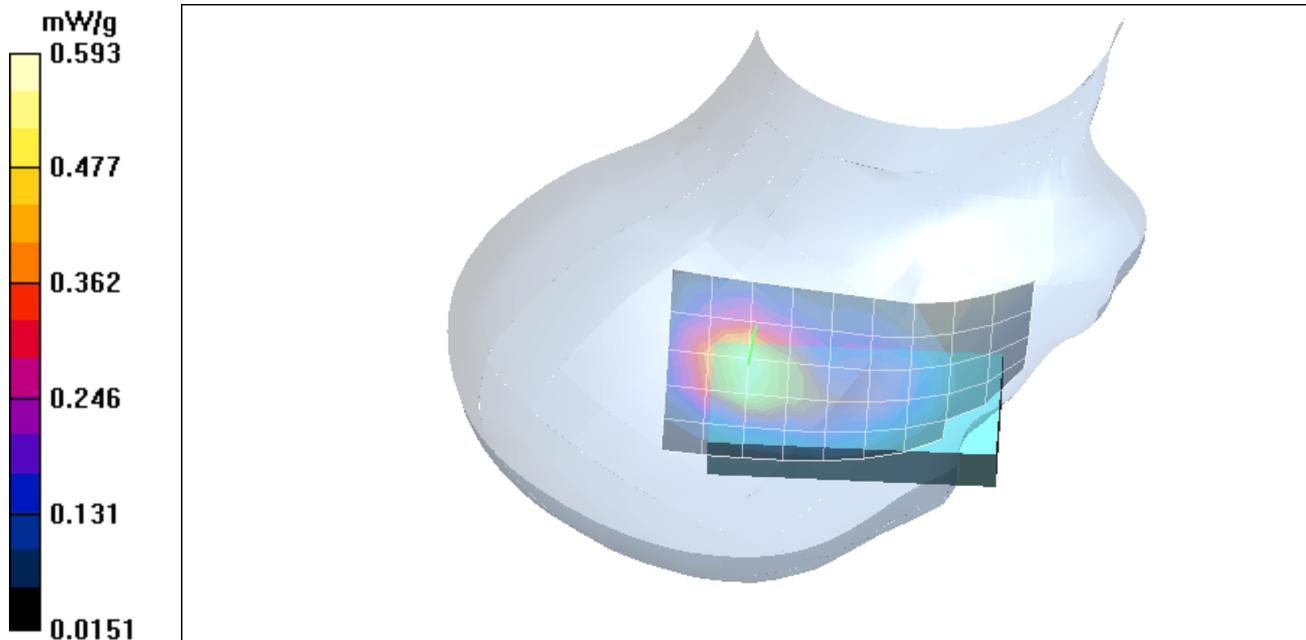


Fig. 3: SAR distribution for PCS 1900, channel 661, cheek position, right side of head, Standard. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [staprm_2.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 22.7 V/m

Power Drift = 0.003 dB

Maximum value of SAR = 0.557 mW/g

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

Peak SAR (extrapolated) = 0.952 W/kg

SAR(1 g) = 0.609 mW/g; SAR(10 g) = 0.352 mW/g

Reference Value = 22.7 V/m

Power Drift = 0.003 dB

Maximum value of SAR = 0.665 mW/g

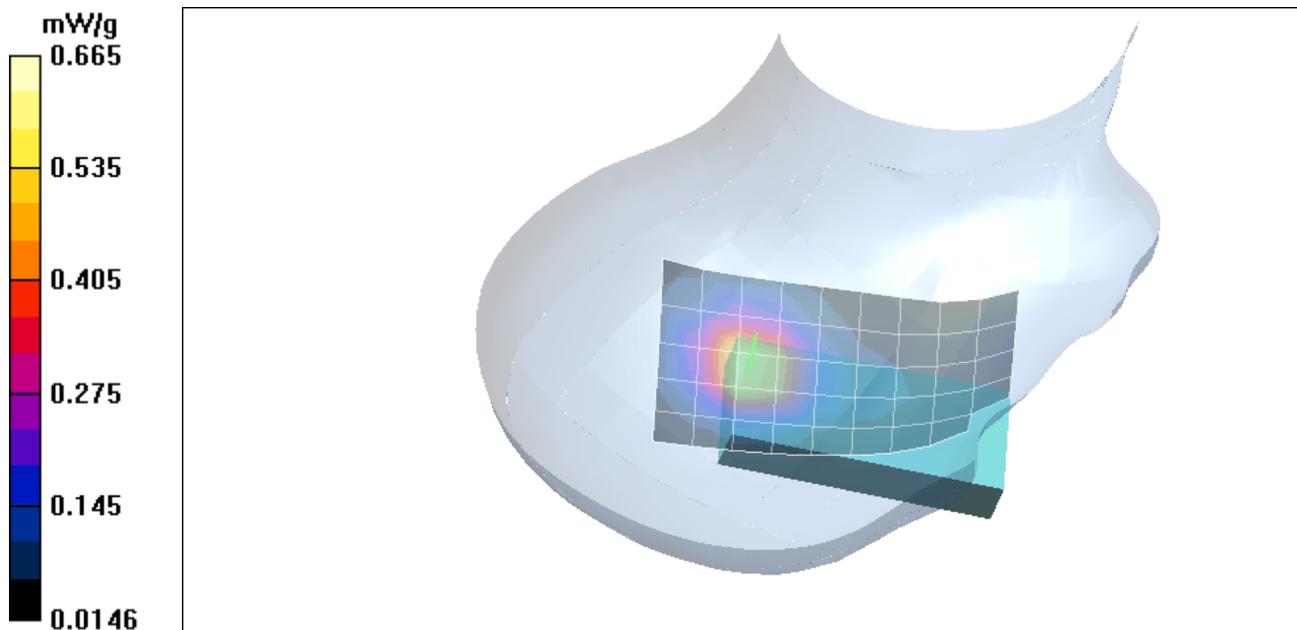


Fig. 4: SAR distribution for PCS 1900, channel 661, tilted position, right side of head, Standard. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [bfplm_1.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 19.2 V/m

Power Drift = -0.07 dB

Maximum value of SAR = 0.654 mW/g

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

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.723 mW/g; SAR(10 g) = 0.405 mW/g

Reference Value = 19.2 V/m

Power Drift = -0.07 dB

Maximum value of SAR = 0.762 mW/g

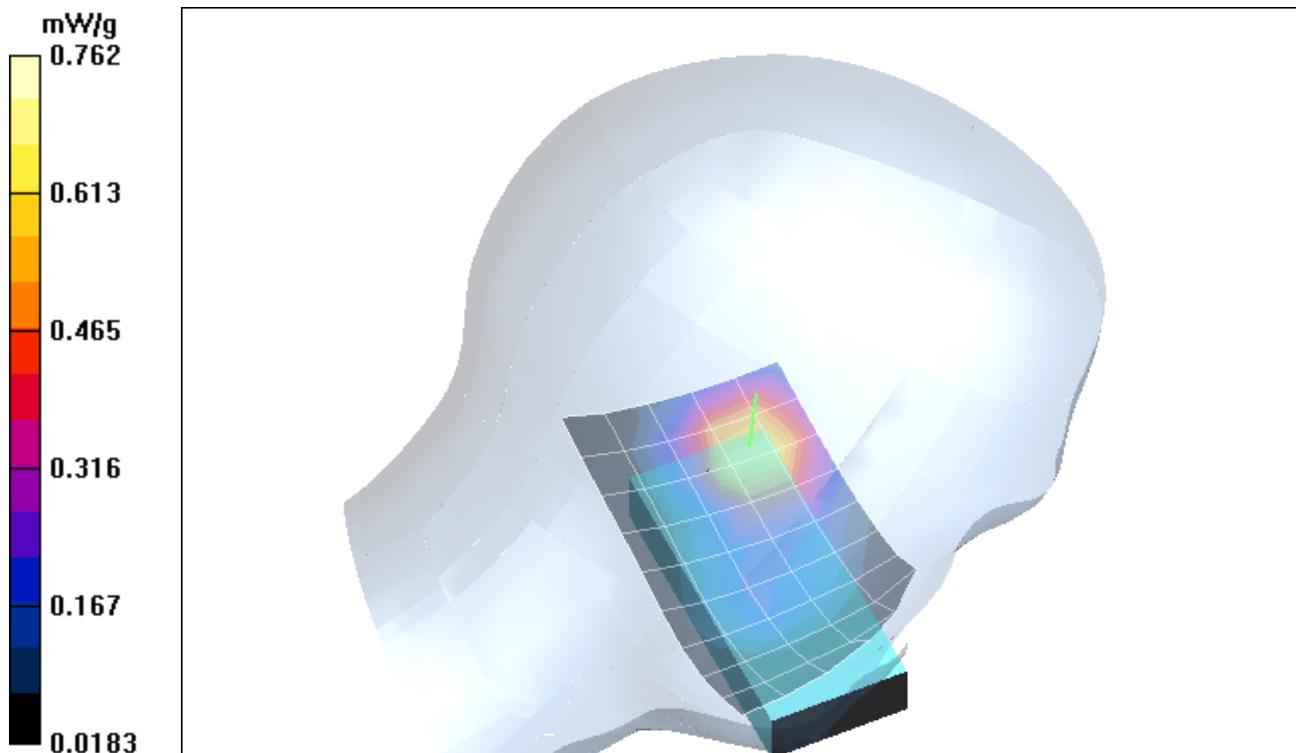


Fig. 5: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, BF. (18.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature: 19.8° C).

Test Laboratory: IMST; File Name: [bfplm_2.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 22.4 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.785 mW/g

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

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.778 mW/g; SAR(10 g) = 0.436 mW/g

Reference Value = 22.4 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.849 mW/g

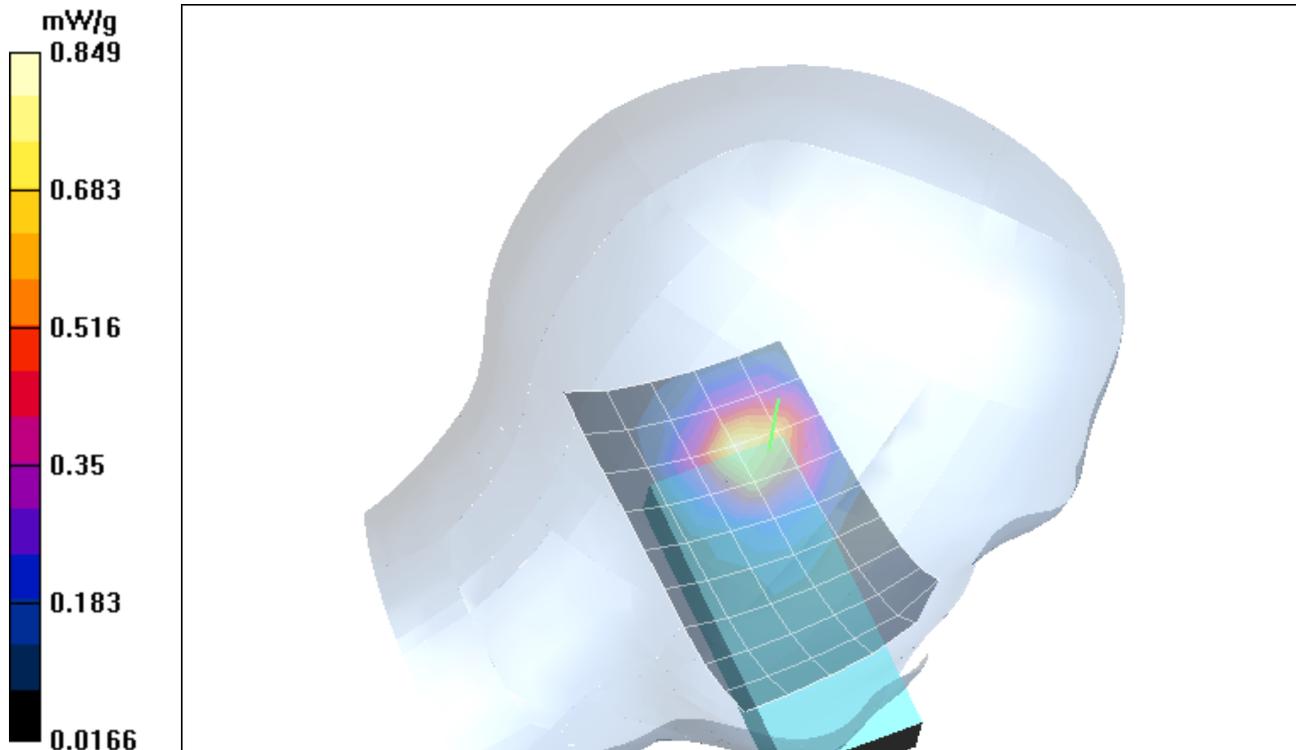


Fig. 6: SAR distribution for PCS 1900, channel 661, tilted position, left side of head, BF. (18.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [bfprm_1.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 22.3 V/m

Power Drift = 0.03 dB

Maximum value of SAR = 0.613 mW/g

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

Peak SAR (extrapolated) = 0.928 W/kg

SAR(1 g) = 0.617 mW/g; SAR(10 g) = 0.369 mW/g

Reference Value = 22.3 V/m

Power Drift = 0.03 dB

Maximum value of SAR = 0.666 mW/g

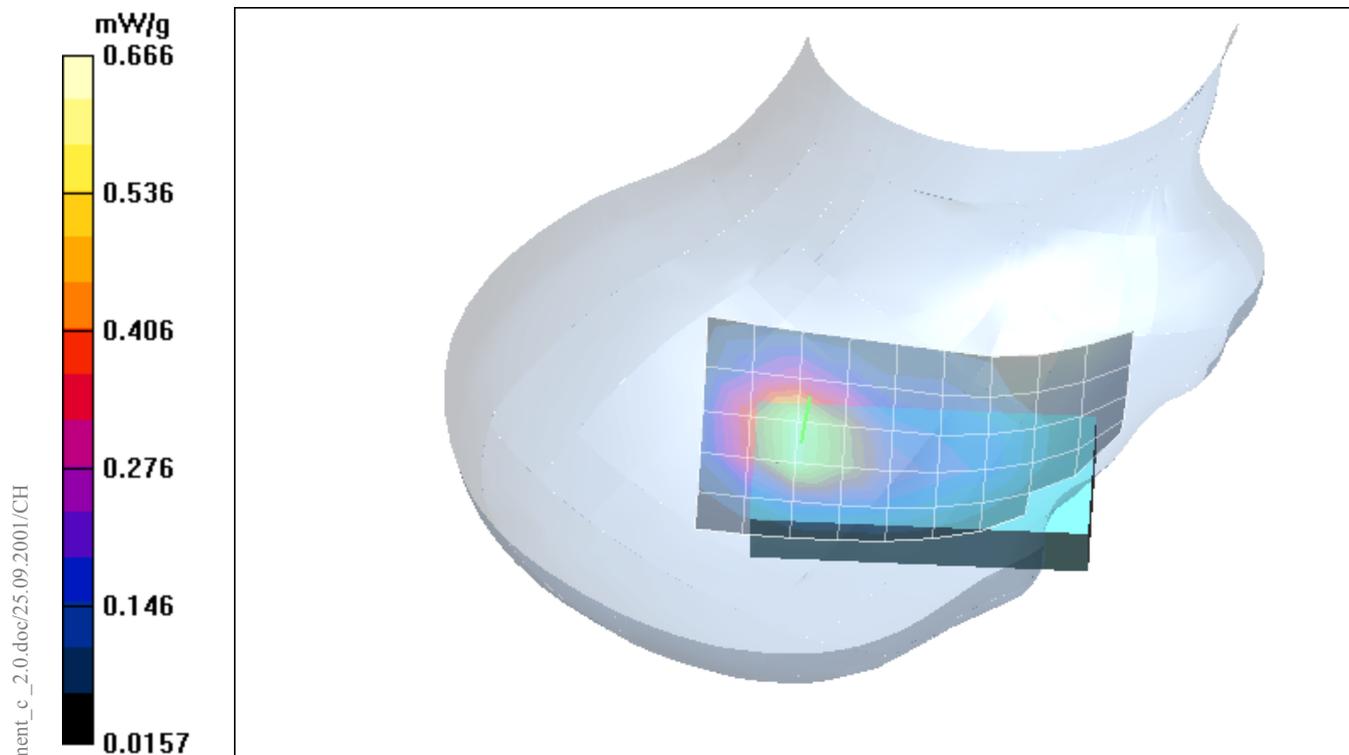


Fig. 7: SAR distribution for PCS 1900, channel 661, cheek position, right side of head, BF. (18.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [bfprm_2.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 23.7 V/m

Power Drift = 0.02 dB

Maximum value of SAR = 0.572 mW/g

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

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.655 mW/g; SAR(10 g) = 0.38 mW/g

Reference Value = 23.7 V/m

Power Drift = 0.02 dB

Maximum value of SAR = 0.716 mW/g

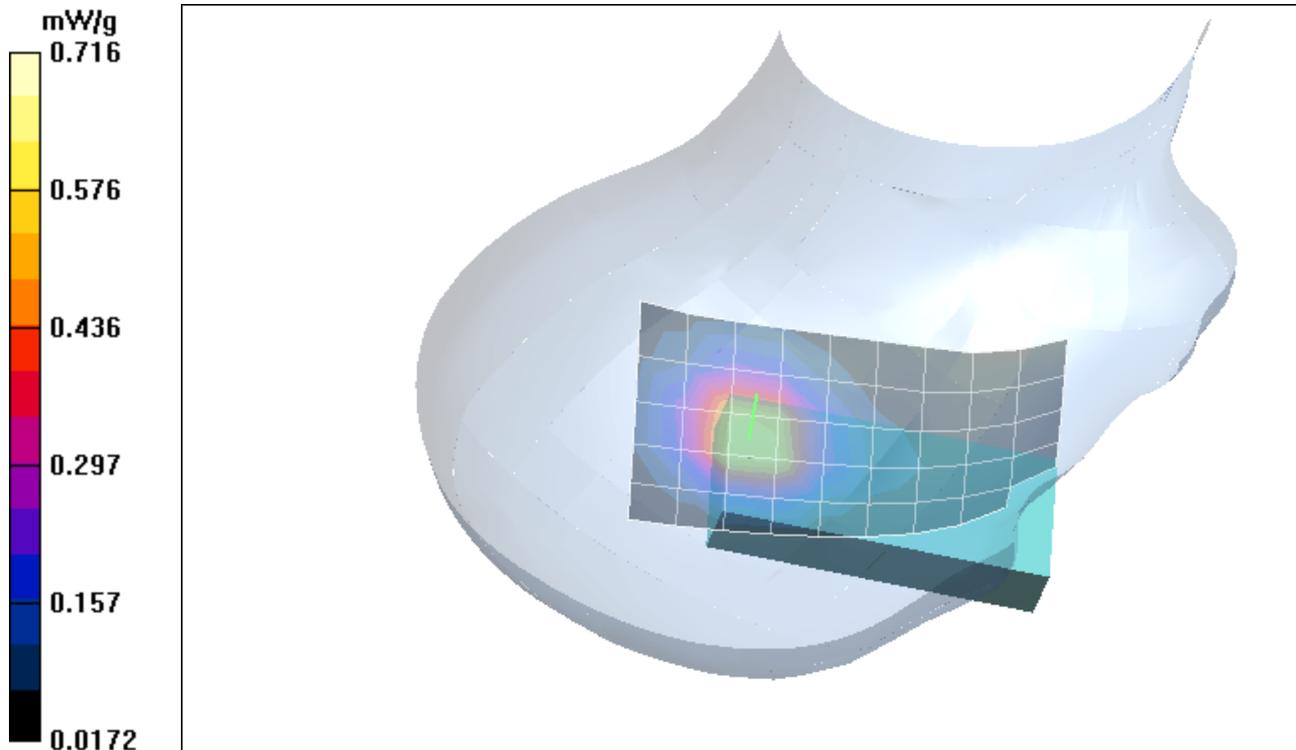


Fig. 8: SAR distribution for PCS 1900, channel 661, tilted position, right side of head, BF. (18.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [butplm_1.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 19.8 V/m

Power Drift = -0.01 dB

Maximum value of SAR = 0.725 mW/g

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

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.7 mW/g; SAR(10 g) = 0.403 mW/g

Reference Value = 19.8 V/m

Power Drift = -0.01 dB

Maximum value of SAR = 0.755 mW/g

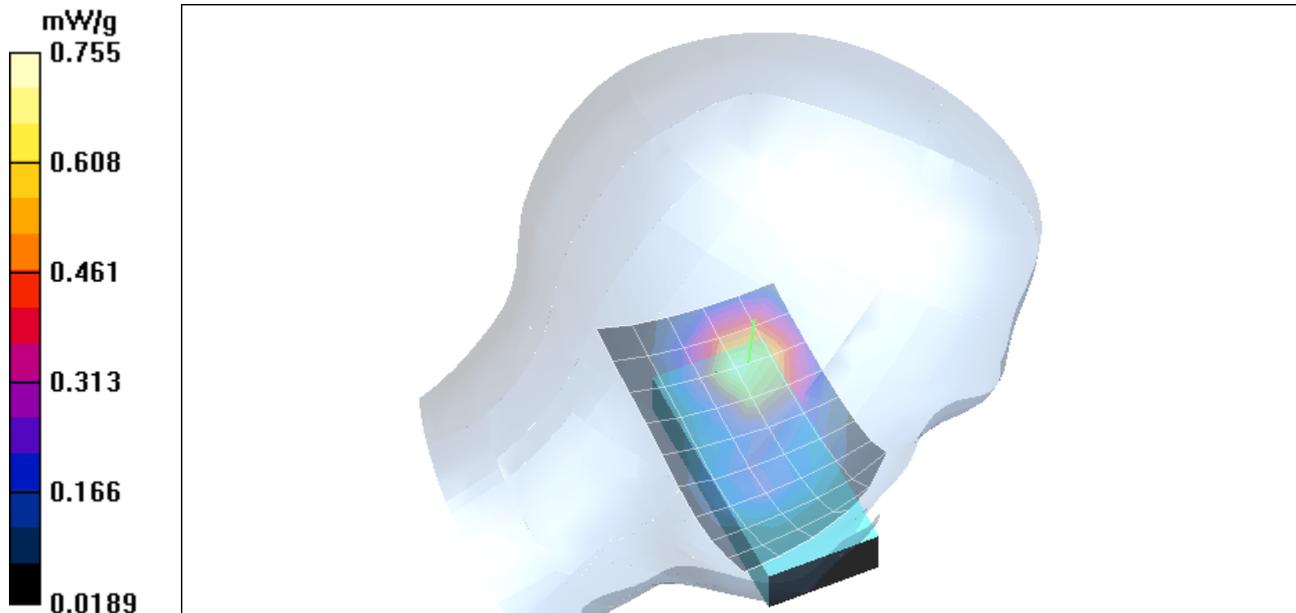


Fig. 9: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, Butterfly. (18.02.2004; Ambient Temperature: 20.9° C; Liquid Temperature: 19.8° C).

Test Laboratory: IMST; File Name: [butplm_2.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 23 V/m

Power Drift = 0.003 dB

Maximum value of SAR = 0.704 mW/g

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

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.741 mW/g; SAR(10 g) = 0.42 mW/g

Reference Value = 23 V/m

Power Drift = 0.003 dB

Maximum value of SAR = 0.799 mW/g

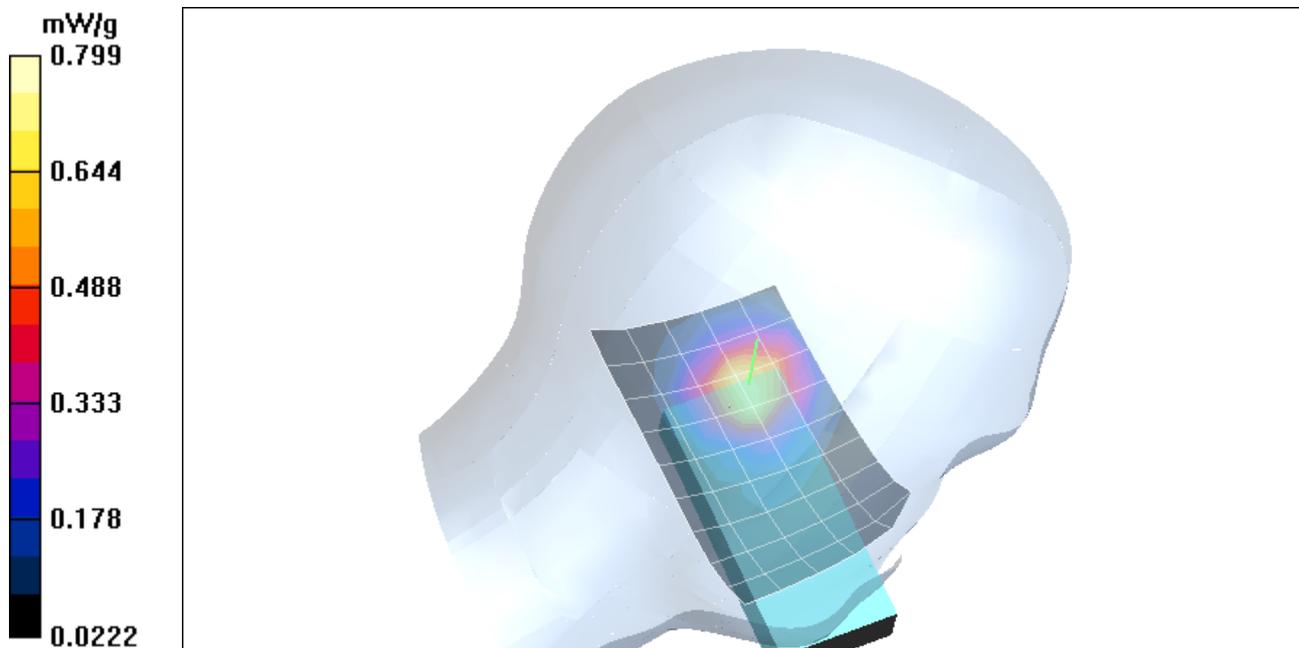


Fig. 10: SAR distribution for PCS 1900, channel 661, tilted position, left side of head, Butterfly. (18.02.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 19.9° C).

Test Laboratory: IMST; File Name: [butprm_1.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 22.4 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 0.603 mW/g

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

Peak SAR (extrapolated) = 0.884 W/kg

SAR(1 g) = 0.594 mW/g; SAR(10 g) = 0.358 mW/g

Reference Value = 22.4 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 0.646 mW/g

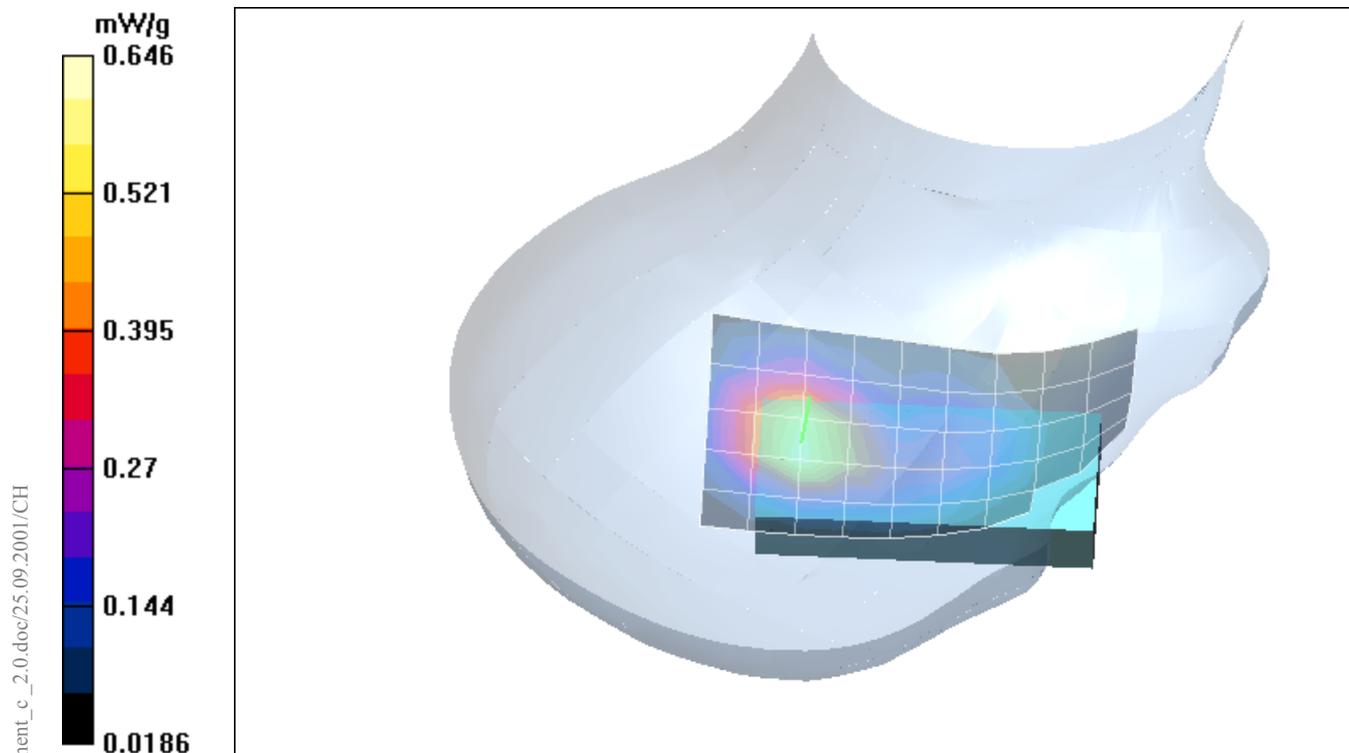


Fig. 11: SAR distribution for PCS 1900, channel 661, cheek position, right side of head, Butterfly. (18.02.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 19.9° C).

Test Laboratory: IMST; File Name: [Butprm_2.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42 \text{ mho/m}$, $\epsilon_r = 39.3$, $\rho = 1000 \text{ kg/m}^3$)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 23.1 V/m

Power Drift = -0.005 dB

Maximum value of SAR = 0.615 mW/g

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

Peak SAR (extrapolated) = 0.989 W/kg

SAR(1 g) = 0.636 mW/g; SAR(10 g) = 0.368 mW/g

Reference Value = 23.1 V/m

Power Drift = -0.005 dB

Maximum value of SAR = 0.693 mW/g

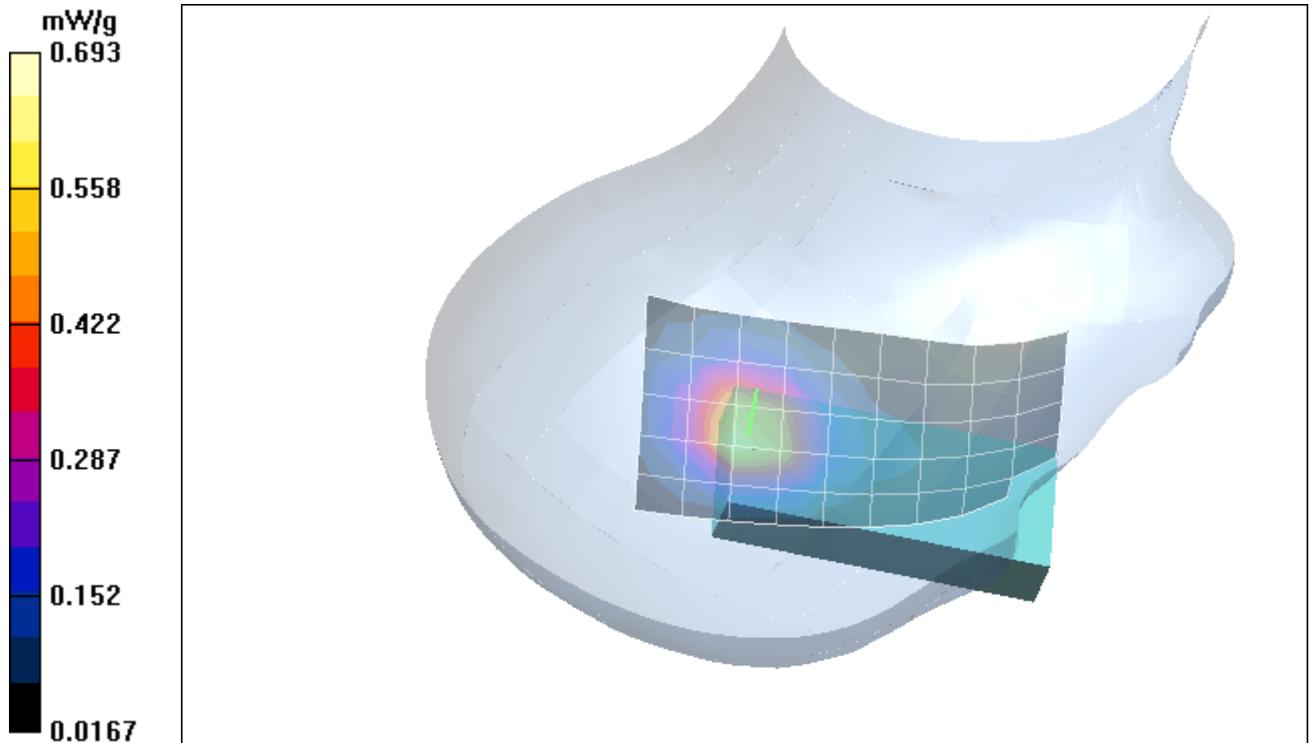


Fig. 12: SAR distribution for PCS 1900, channel 661, tilted position, right side of head, Butterfly. (18.02.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [arcplm_1.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 19.5 V/m

Power Drift = 0.03 dB

Maximum value of SAR = 0.666 mW/g

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

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.696 mW/g; SAR(10 g) = 0.396 mW/g

Reference Value = 19.5 V/m

Power Drift = 0.03 dB

Maximum value of SAR = 0.754 mW/g

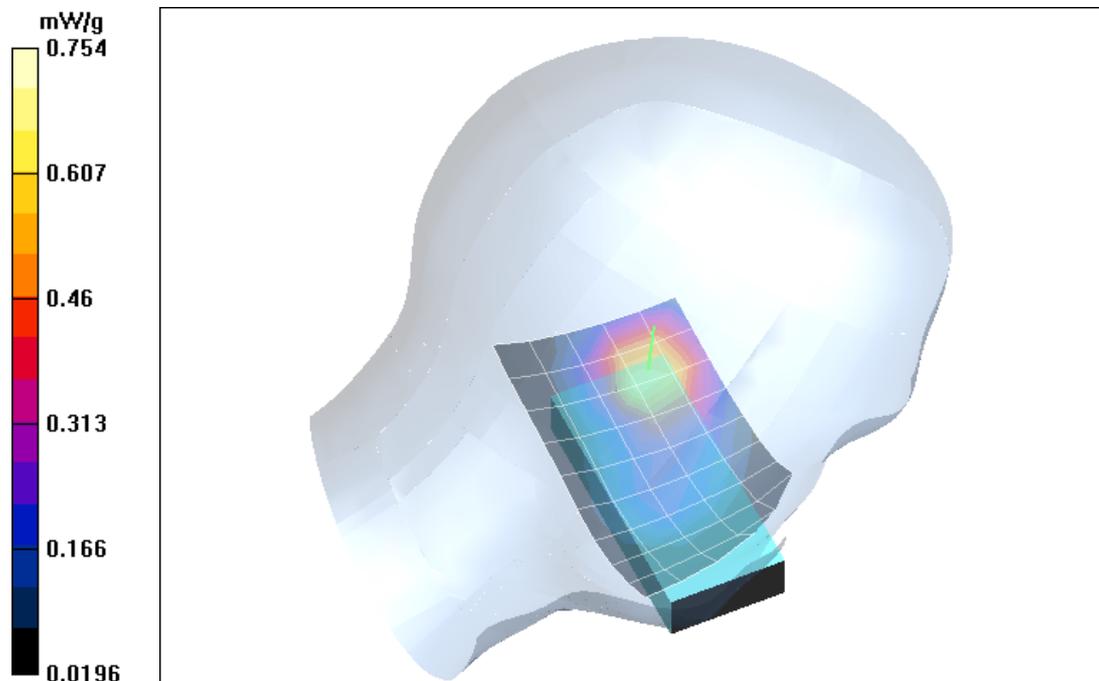


Fig. 13: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, ARC. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature: 19.8° C).

Test Laboratory: IMST; File Name: [arcplm_2.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 22.8 V/m

Power Drift = -0.0009 dB

Maximum value of SAR = 0.782 mW/g

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

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.753 mW/g; SAR(10 g) = 0.425 mW/g

Reference Value = 22.8 V/m

Power Drift = -0.0009 dB

Maximum value of SAR = 0.827 mW/g

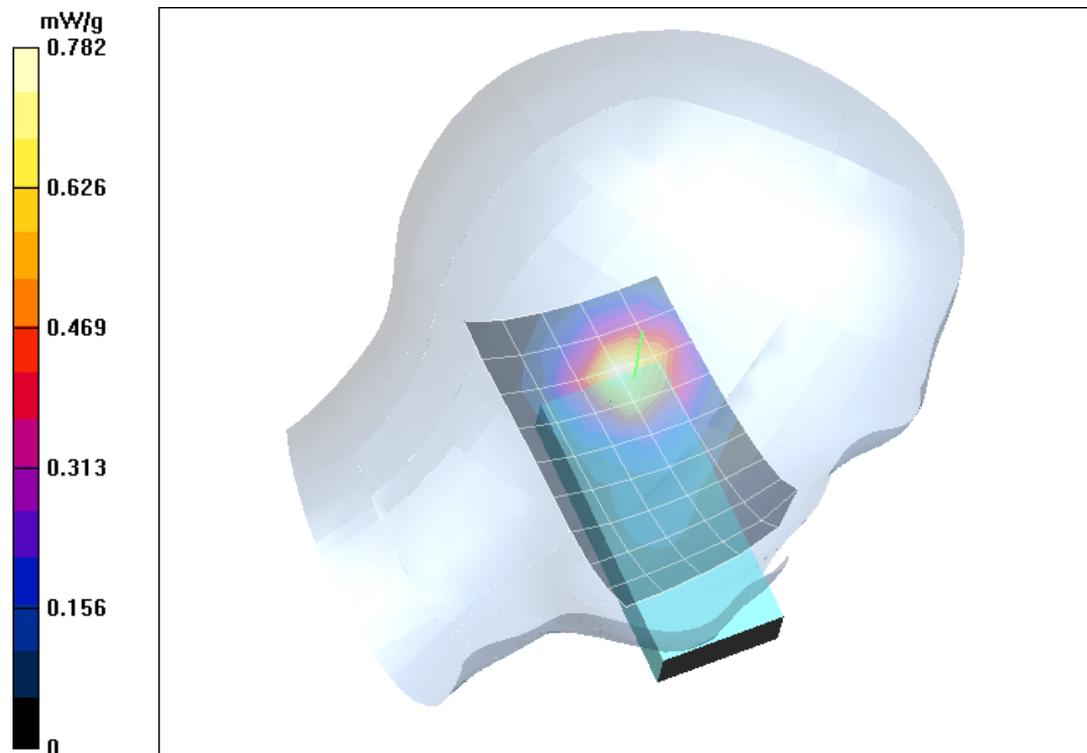


Fig. 14: SAR distribution for PCS 1900, channel 661, tilted position, left side of head, ARC. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [arcprm_1.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 22.2 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.595 mW/g

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

Peak SAR (extrapolated) = 0.884 W/kg

SAR(1 g) = 0.588 mW/g; SAR(10 g) = 0.353 mW/g

Reference Value = 22.2 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.636 mW/g

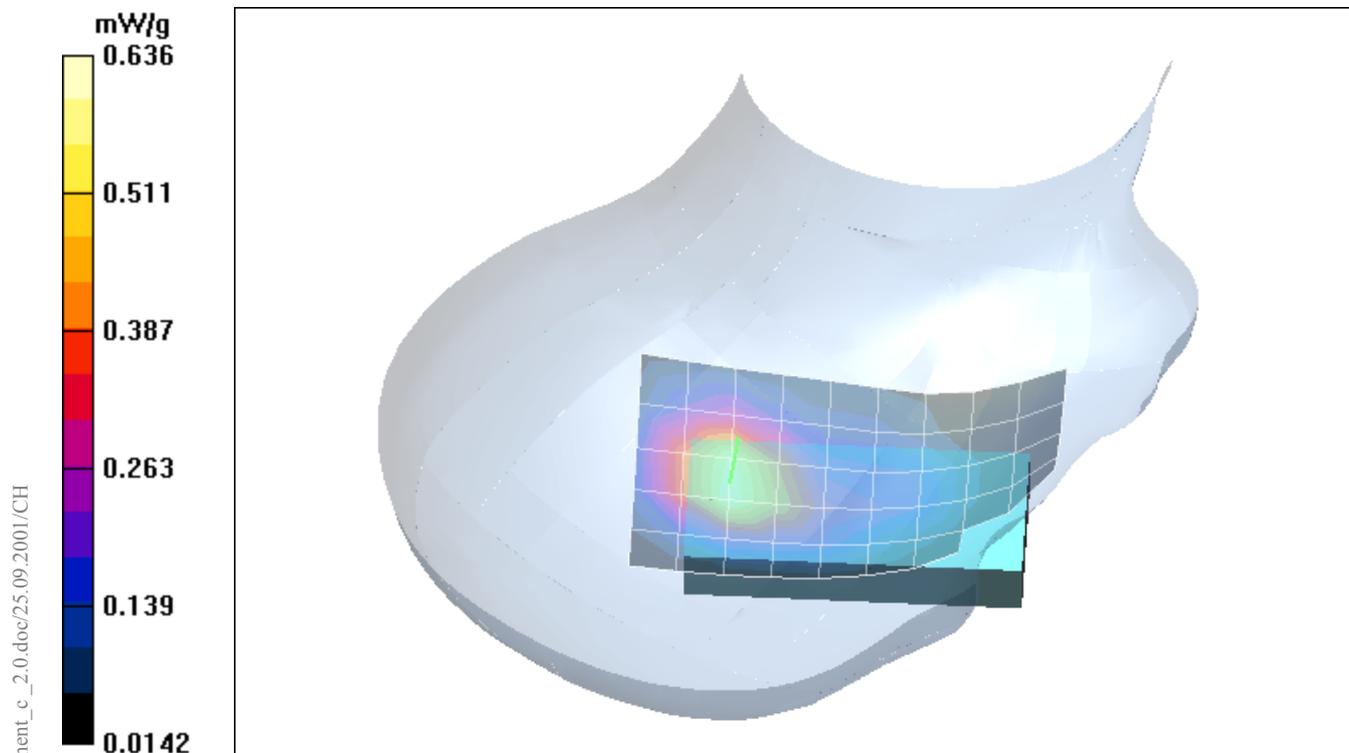


Fig. 15: SAR distribution for PCS 1900, channel 661, cheek position, right side of head, ARC. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [arcprm_2.da4](#)

DUT: Siemens CX 65; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 23.1 V/m

Power Drift = -0.003 dB

Maximum value of SAR = 0.6 mW/g

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

Peak SAR (extrapolated) = 0.995 W/kg

SAR(1 g) = 0.634 mW/g; SAR(10 g) = 0.366 mW/g

Reference Value = 23.1 V/m

Power Drift = -0.005 dB

Maximum value of SAR = 0.696 mW/g

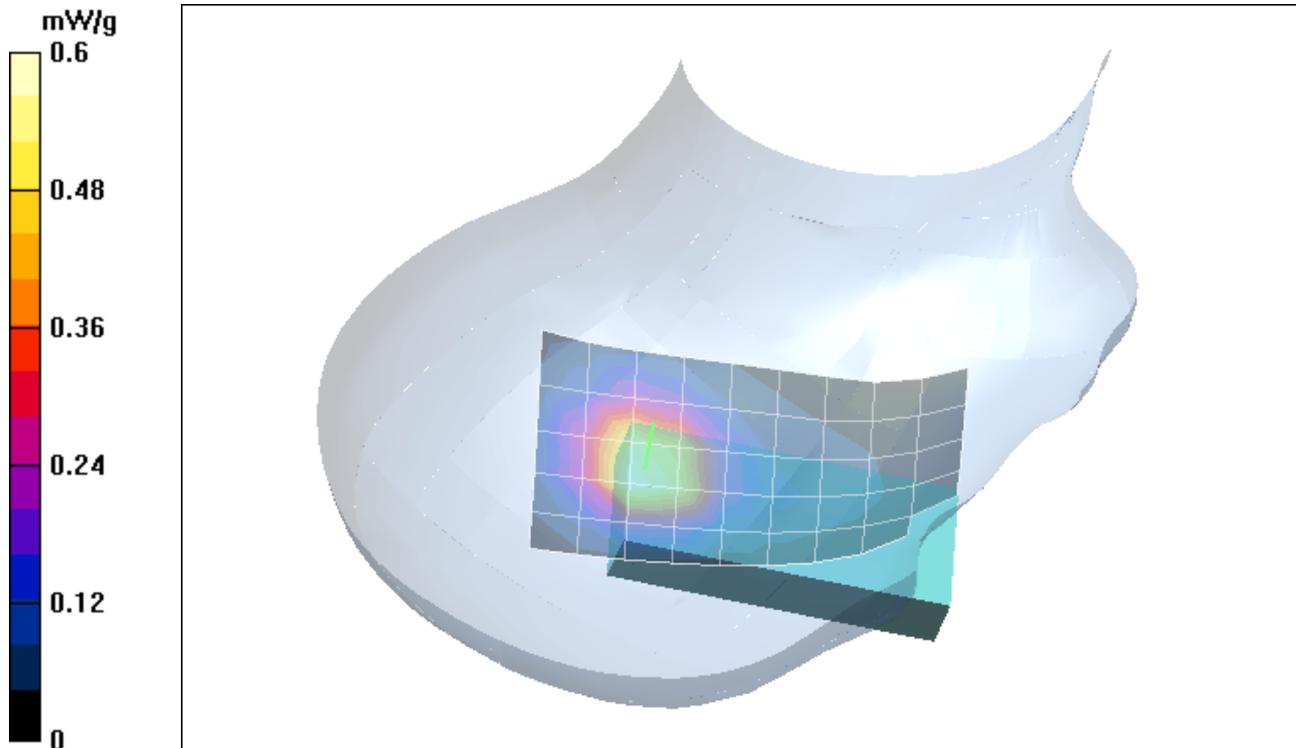


Fig. 16: SAR distribution for PCS 1900, channel 661, tilted position, right side of head, ARC. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

2 SAR Distribution Plots, PCS 1900 Head with Flash

Test Laboratory: IMST File Name: [staplm_1.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 18.2 V/m

Power Drift = -0.06 dB

Maximum value of SAR = 0.589 mW/g

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

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.658 mW/g; SAR(10 g) = 0.367 mW/g

Reference Value = 18.2 V/m

Power Drift = -0.06 dB

Maximum value of SAR = 0.694 mW/g

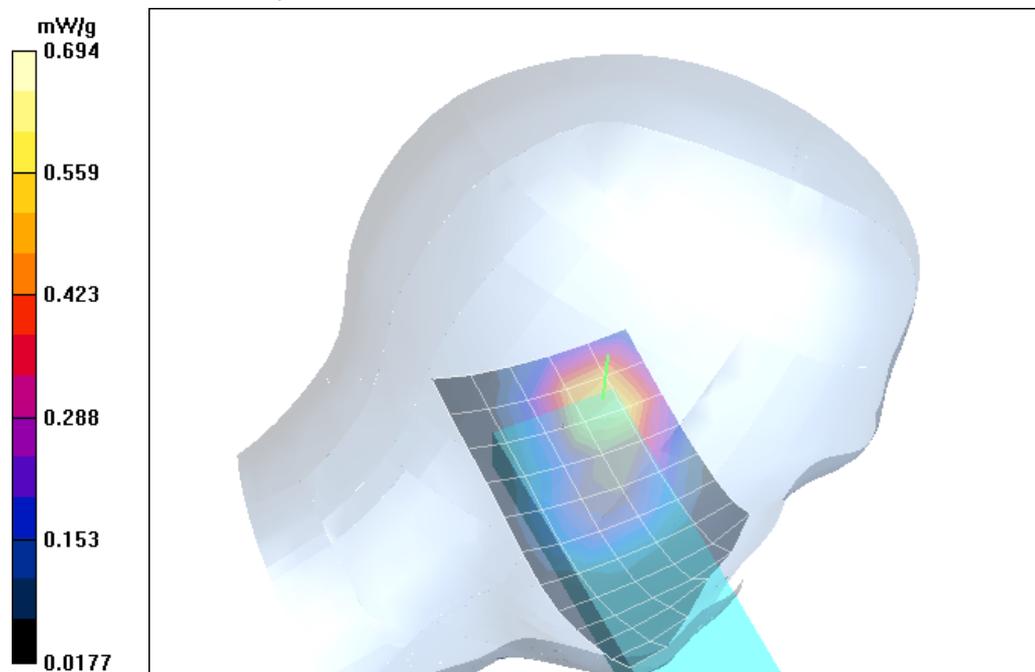


Fig. 17: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, Standard. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [staplm_2.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 20.8 V/m

Power Drift = 0.05 dB

Maximum value of SAR = 0.715 mW/g

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

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.709 mW/g; SAR(10 g) = 0.401 mW/g

Reference Value = 20.8 V/m

Power Drift = 0.05 dB

Maximum value of SAR = 0.757 mW/g

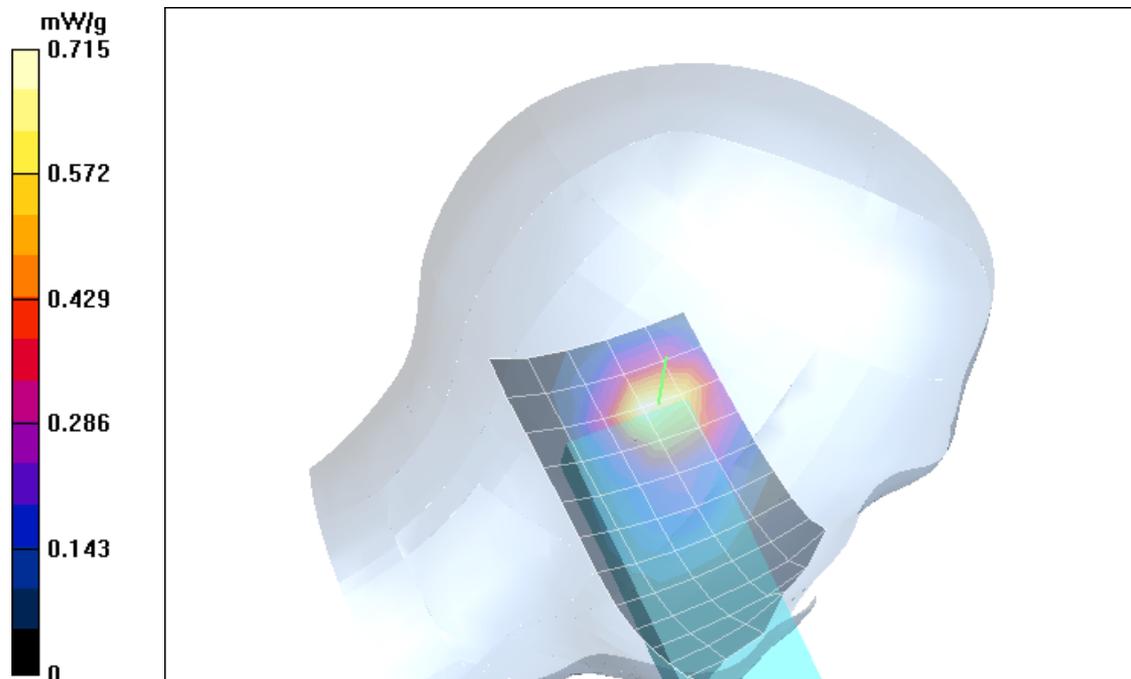


Fig. 18: SAR distribution for PCS 1900, channel 661, tilted position, left side of head, Standard. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [staprm_1.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 19.4 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.488 mW/g

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

Peak SAR (extrapolated) = 0.734 W/kg

SAR(1 g) = 0.49 mW/g; SAR(10 g) = 0.309 mW/g

Reference Value = 19.4 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.528 mW/g

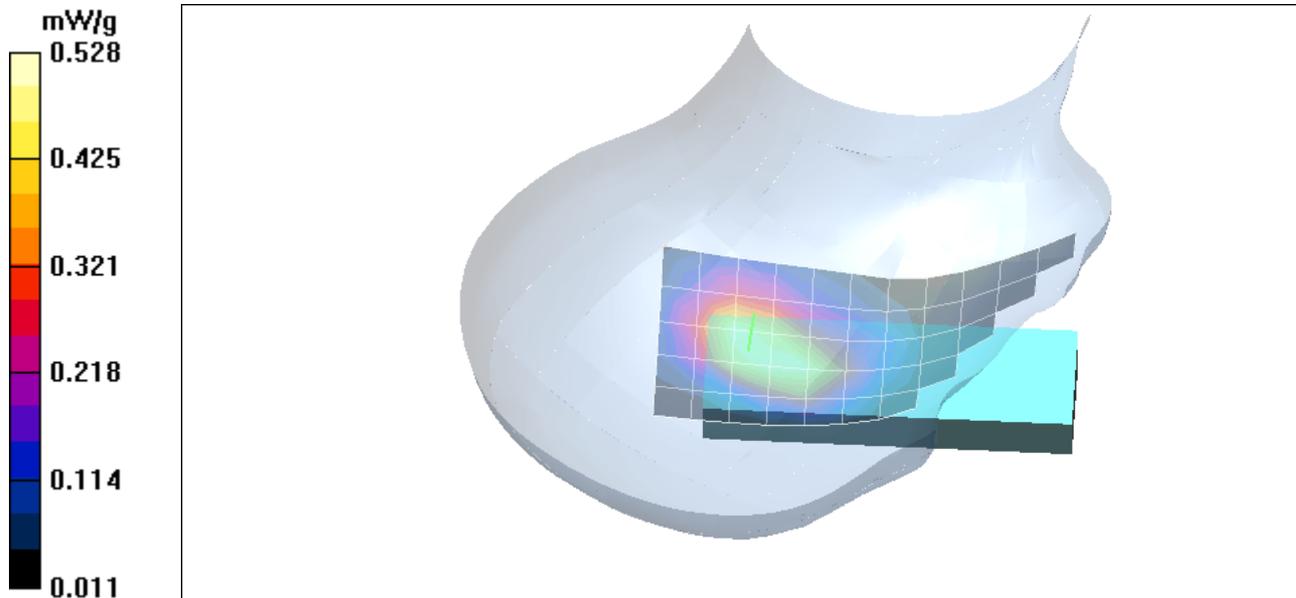


Fig. 19: SAR distribution for PCS 1900, channel 661, cheek position, right side of head, Standard. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [staprm_2.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 20.1 V/m

Power Drift = 0.07 dB

Maximum value of SAR = 0.45 mW/g

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

Peak SAR (extrapolated) = 0.762 W/kg

SAR(1 g) = 0.487 mW/g; SAR(10 g) = 0.288 mW/g

Reference Value = 20.1 V/m

Power Drift = 0.07 dB

Maximum value of SAR = 0.527 mW/g

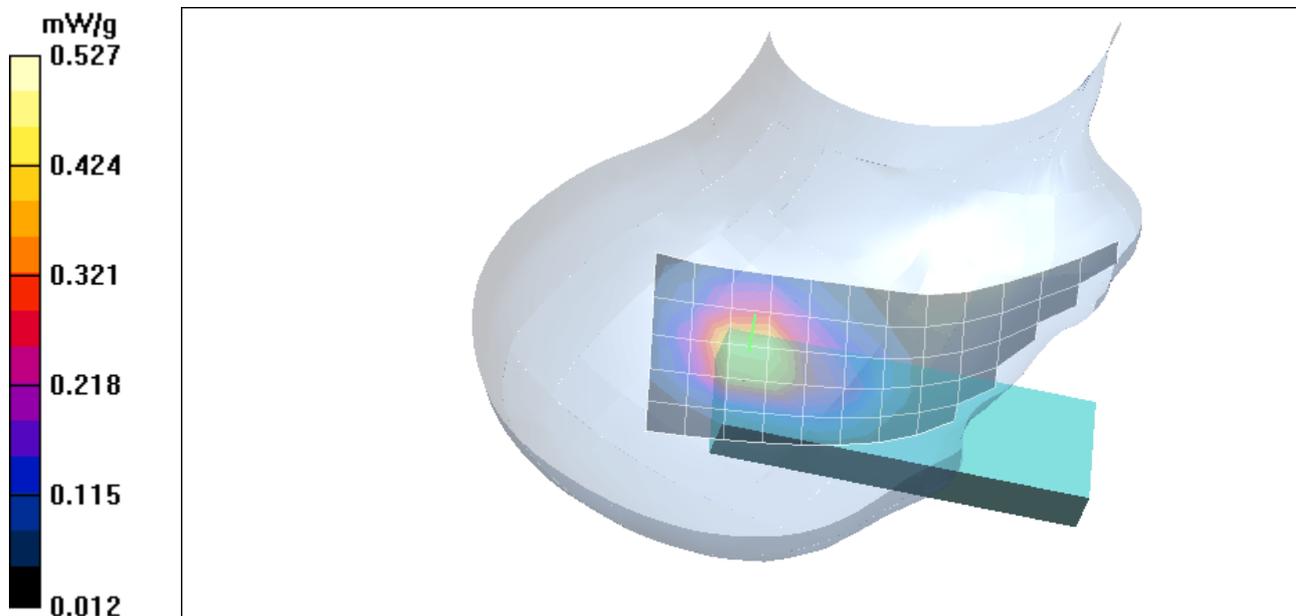


Fig. 20: SAR distribution for PCS 1900, channel 661, tilted position, right side of head, Standard. (18.02.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [bfplm_1.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 18.2 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.627 mW/g

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

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.674 mW/g; SAR(10 g) = 0.383 mW/g

Reference Value = 18.2 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.72 mW/g

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

Peak SAR (extrapolated) = 0.749 W/kg

SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.284 mW/g

Reference Value = 18.2 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.547 mW/g

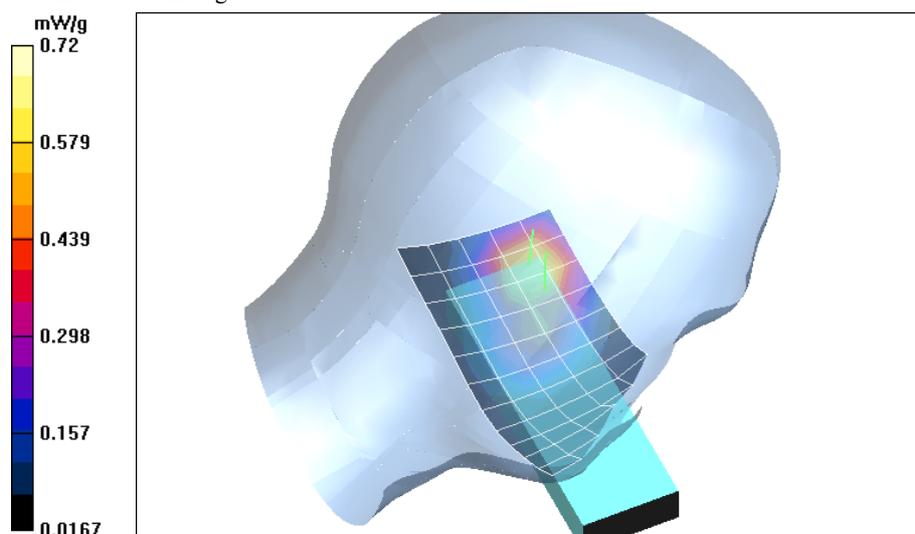


Fig. 21: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, BF. (18.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [bfplm_2.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 20.8 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.716 mW/g

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

Peak SAR (extrapolated) = 1.2 W/kg

SAR(1 g) = 0.724 mW/g; SAR(10 g) = 0.409 mW/g

Reference Value = 20.8 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.777 mW/g

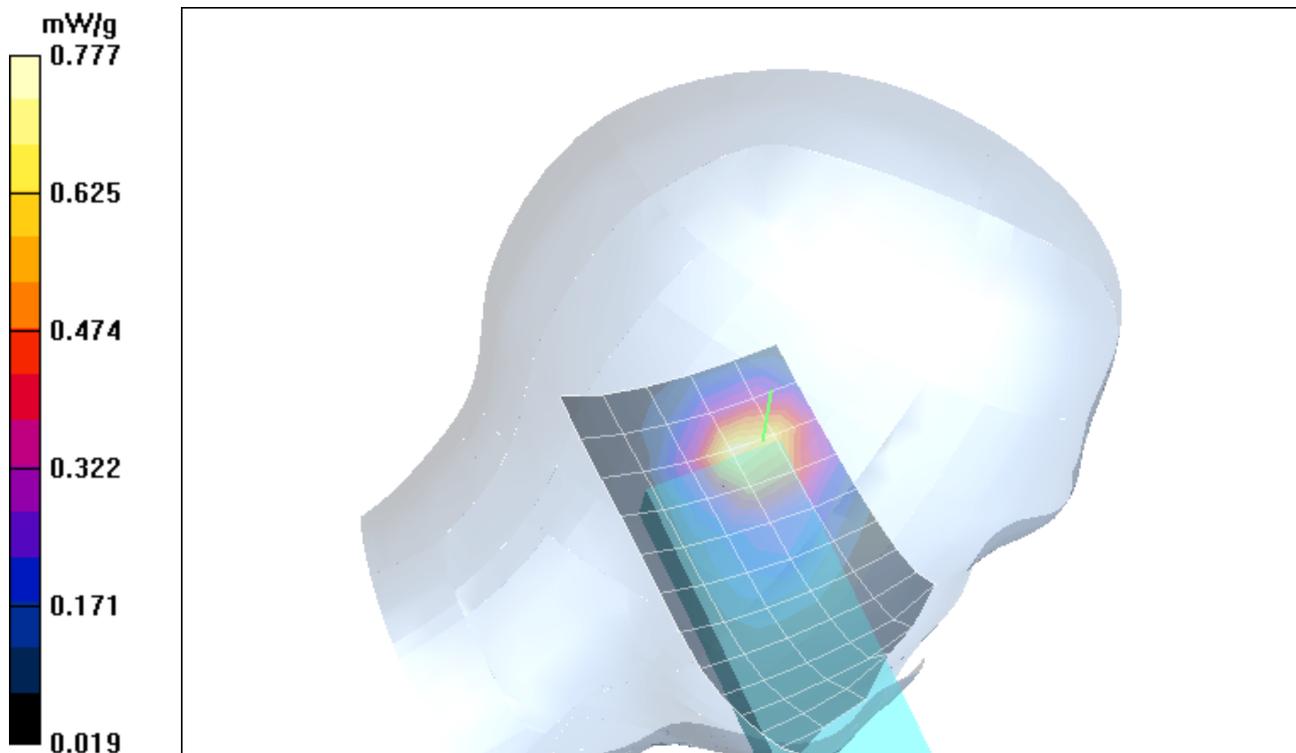


Fig. 22: SAR distribution for PCS 1900, channel 810, cheek position, left side of head BF. (18.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [bfprm_1.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 21.1 V/m

Power Drift = 0.007 dB

Maximum value of SAR = 0.546 mW/g

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

Peak SAR (extrapolated) = 0.812 W/kg

SAR(1 g) = 0.549 mW/g; SAR(10 g) = 0.339 mW/g

Reference Value = 21.1 V/m

Power Drift = 0.007 dB

Maximum value of SAR = 0.593 mW/g

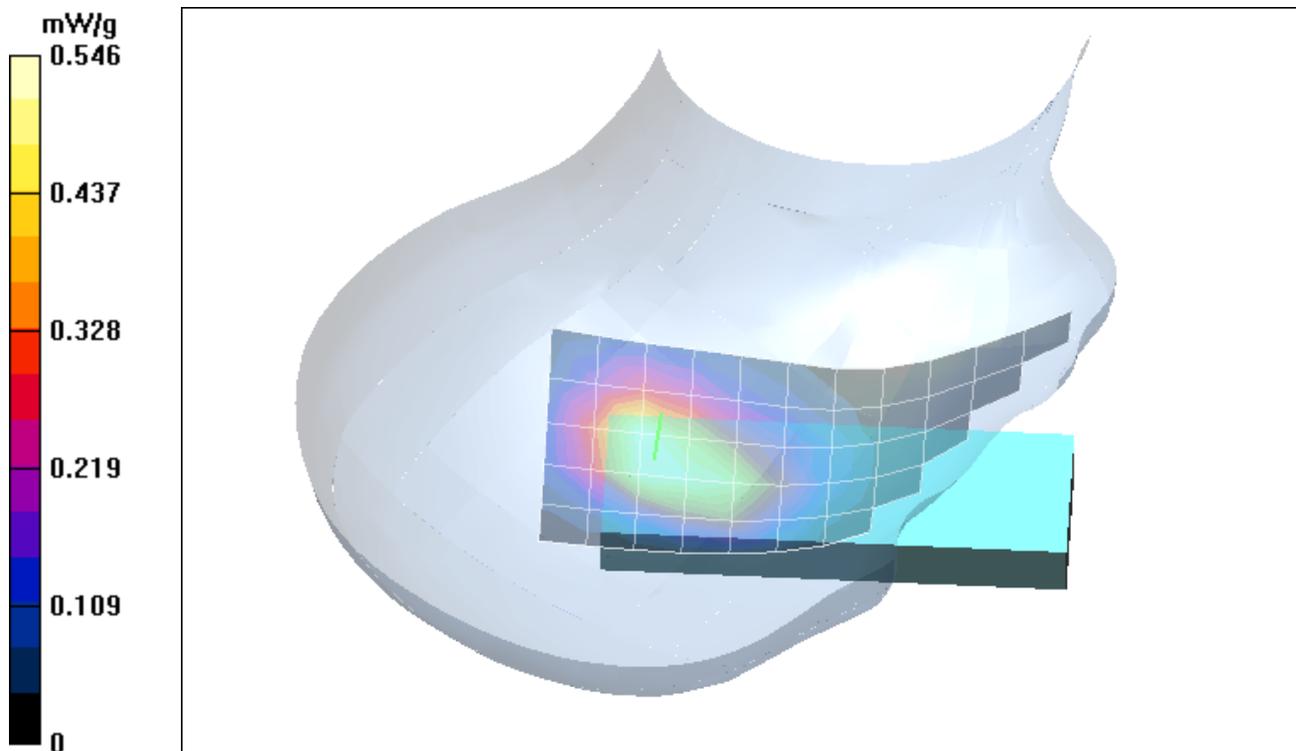


Fig. 23: SAR distribution for PCS 1900, channel 661, cheek position, right side of head BF. (18.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [bfbrm_2_wdh.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42 \text{ mho/m}$, $\epsilon_r = 39.3$, $\rho = 1000 \text{ kg/m}^3$)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 21.5 V/m

Power Drift = -0.03 dB

Maximum value of SAR = 0.493 mW/g

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

Peak SAR (extrapolated) = 0.85 W/kg

SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.317 mW/g

Reference Value = 21.5 V/m

Power Drift = -0.03 dB

Maximum value of SAR = 0.586 mW/g

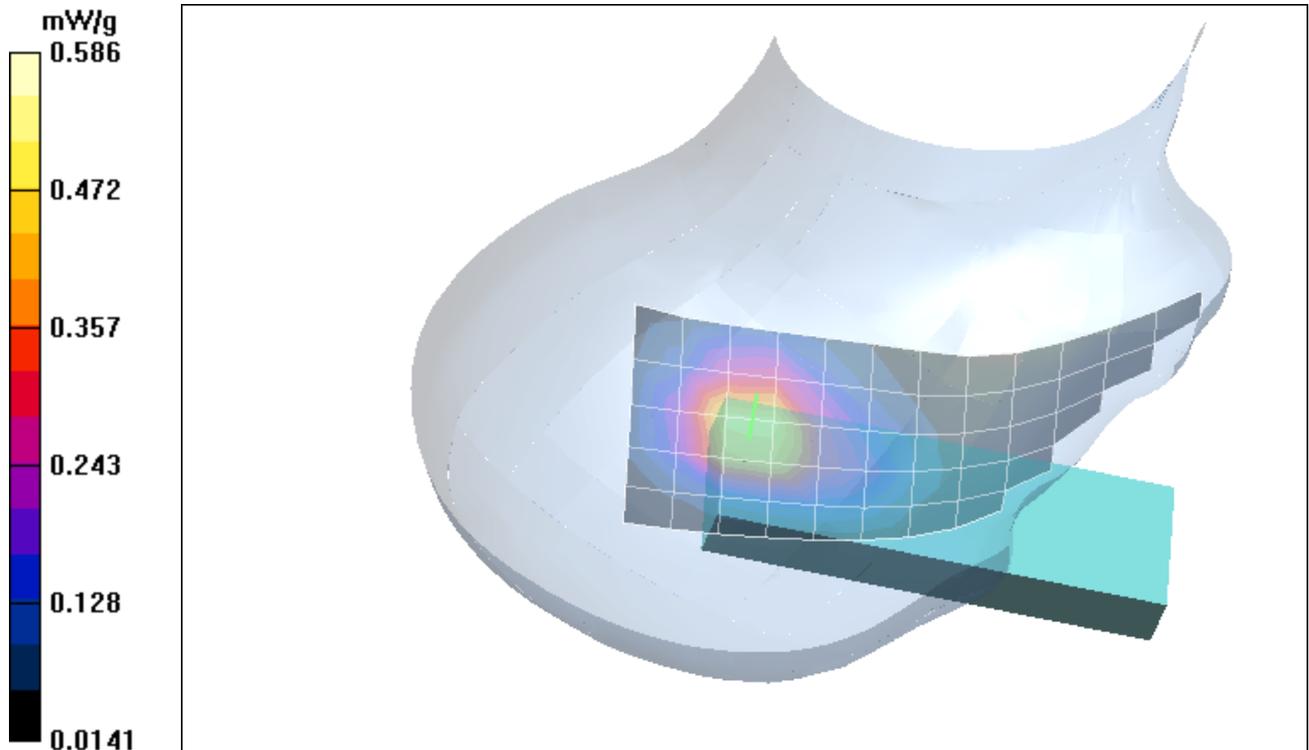


Fig. 24: SAR distribution for PCS 1900, channel 661, cheek position, right side of head BF. (18.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [butplm_1.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 19.5 V/m

Power Drift = -0.03 dB

Maximum value of SAR = 0.643 mW/g

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

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.634 mW/g; SAR(10 g) = 0.363 mW/g

Reference Value = 19.5 V/m

Power Drift = -0.03 dB

Maximum value of SAR = 0.686 mW/g

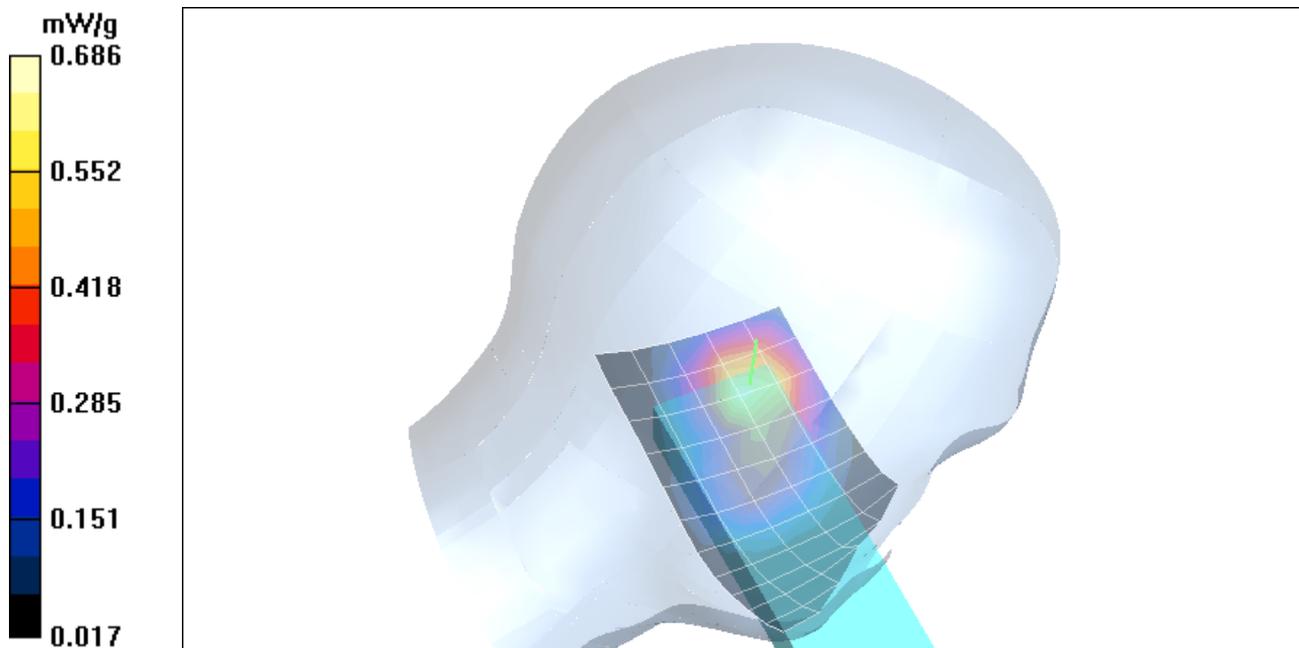


Fig. 25: SAR distribution for PCS 1900, channel 661, cheek position, left side of head Butterfly. (18.02.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [butplm_2.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 21.4 V/m

Power Drift = 0.02 dB

Maximum value of SAR = 0.651 mW/g

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

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.646 mW/g; SAR(10 g) = 0.366 mW/g

Reference Value = 21.4 V/m

Power Drift = 0.02 dB

Maximum value of SAR = 0.7 mW/g

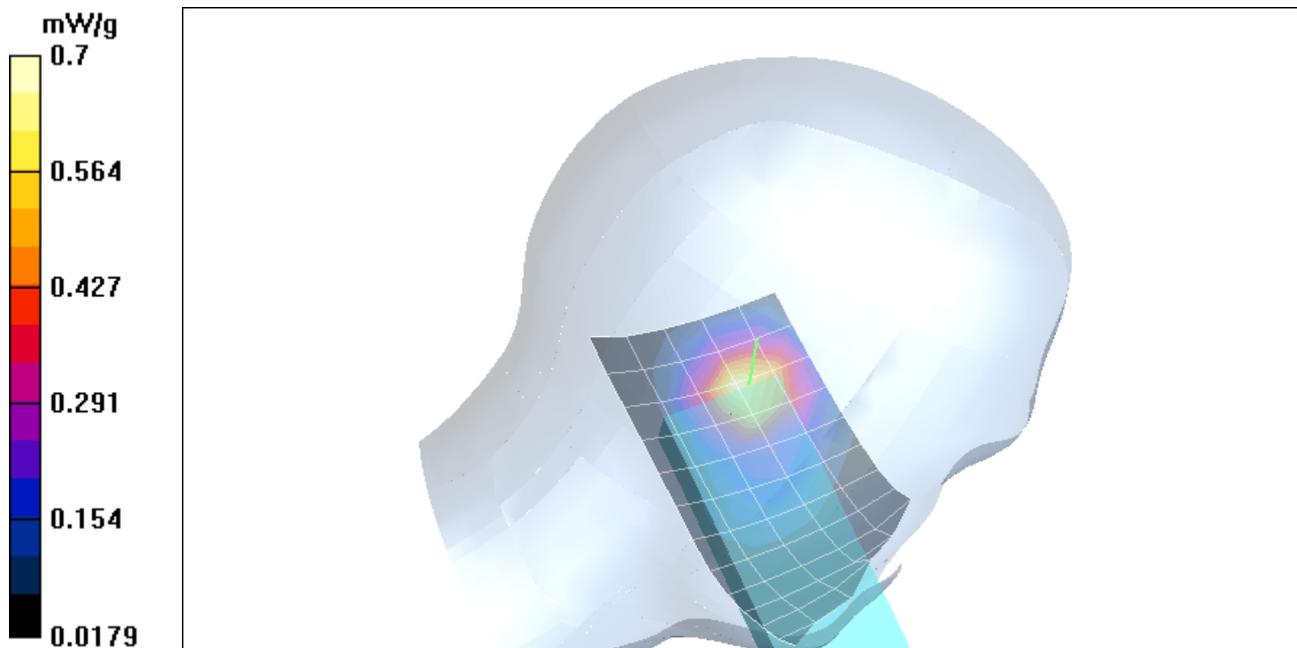


Fig. 26: SAR distribution for PCS 1900, channel 661, cheek position, left side of head Butterfly. (18.02.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [butprm_1.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 20.9 V/m

Power Drift = -0.003 dB

Maximum value of SAR = 0.576 mW/g

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

Peak SAR (extrapolated) = 0.864 W/kg

SAR(1 g) = 0.571 mW/g; SAR(10 g) = 0.349 mW/g

Reference Value = 20.9 V/m

Power Drift = -0.003 dB

Maximum value of SAR = 0.611 mW/g

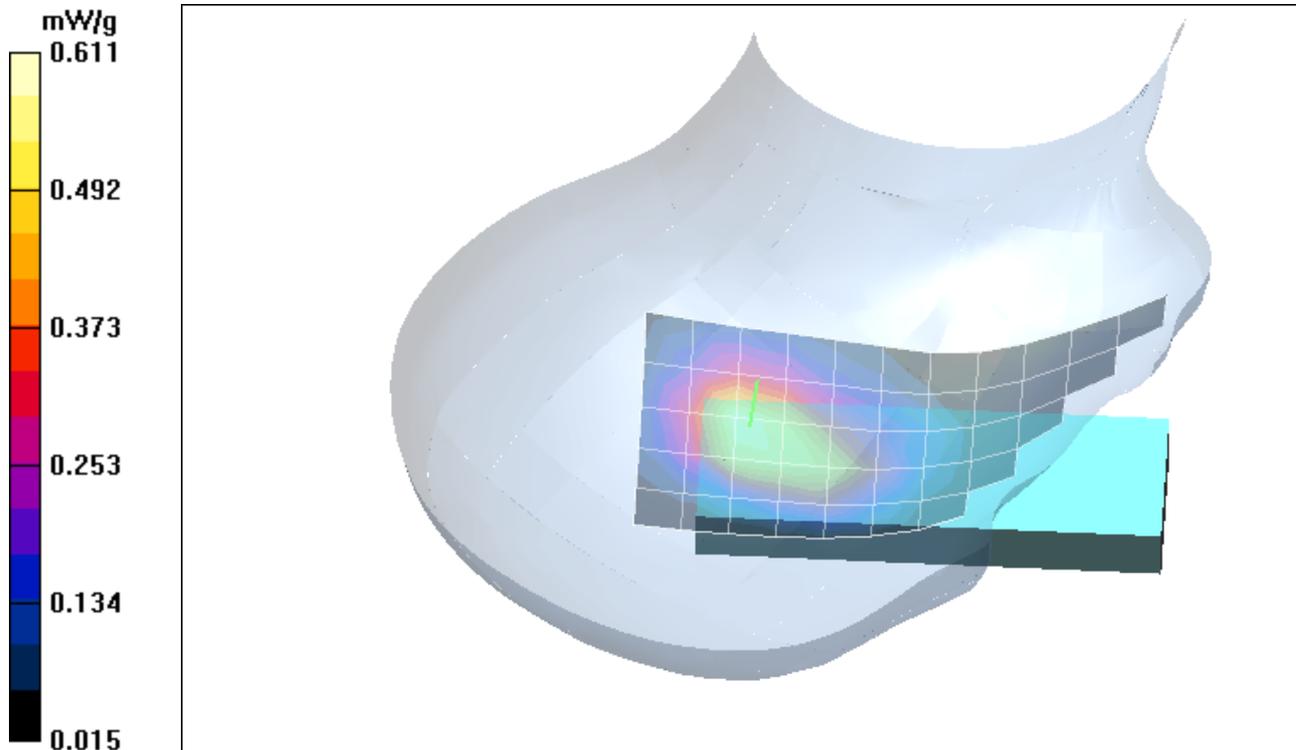


Fig. 27: SAR distribution for PCS 1900, channel 661, cheek position, right side of head Butterfly. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [butprm_2.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 20.8 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 0.475 mW/g

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

Peak SAR (extrapolated) = 0.792 W/kg

SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.3 mW/g

Reference Value = 20.8 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 0.553 mW/g

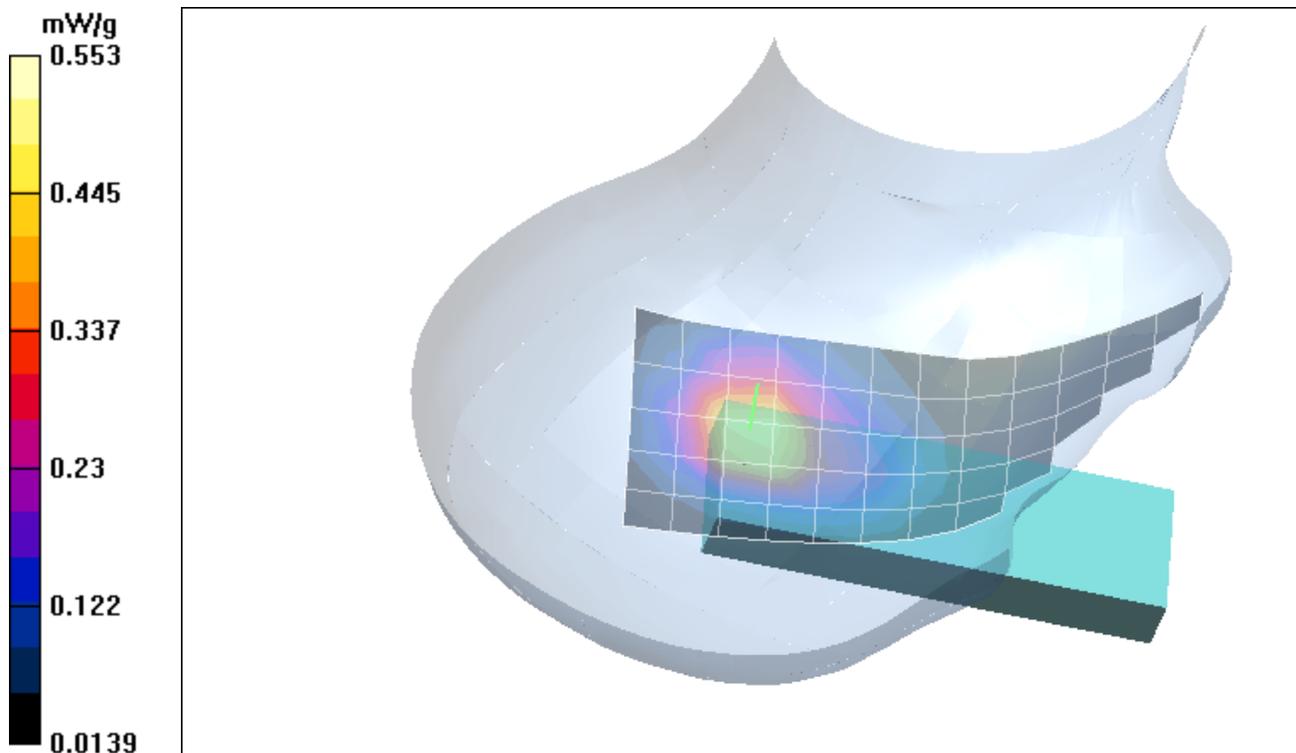


Fig. 28: SAR distribution for PCS 1900, channel 810, cheek position, right side of head Butterfly. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [arcplm_1.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 16.7 V/m

Power Drift = 0.02 dB

Maximum value of SAR = 0.636 mW/g

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

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.675 mW/g; SAR(10 g) = 0.377 mW/g

Reference Value = 16.7 V/m

Power Drift = 0.02 dB

Maximum value of SAR = 0.708 mW/g

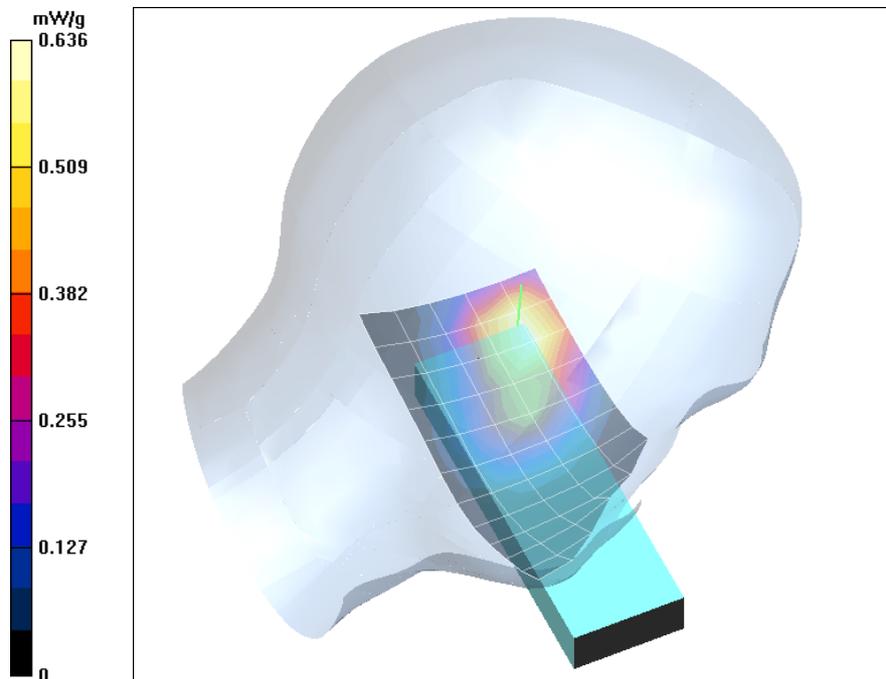


Fig. 29: SAR distribution for PCS 1900, channel 661, cheek position, left side of head ARC. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [arcplm_2.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 19.1 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.729 mW/g

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

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.73 mW/g; SAR(10 g) = 0.407 mW/g

Reference Value = 19.1 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.792 mW/g

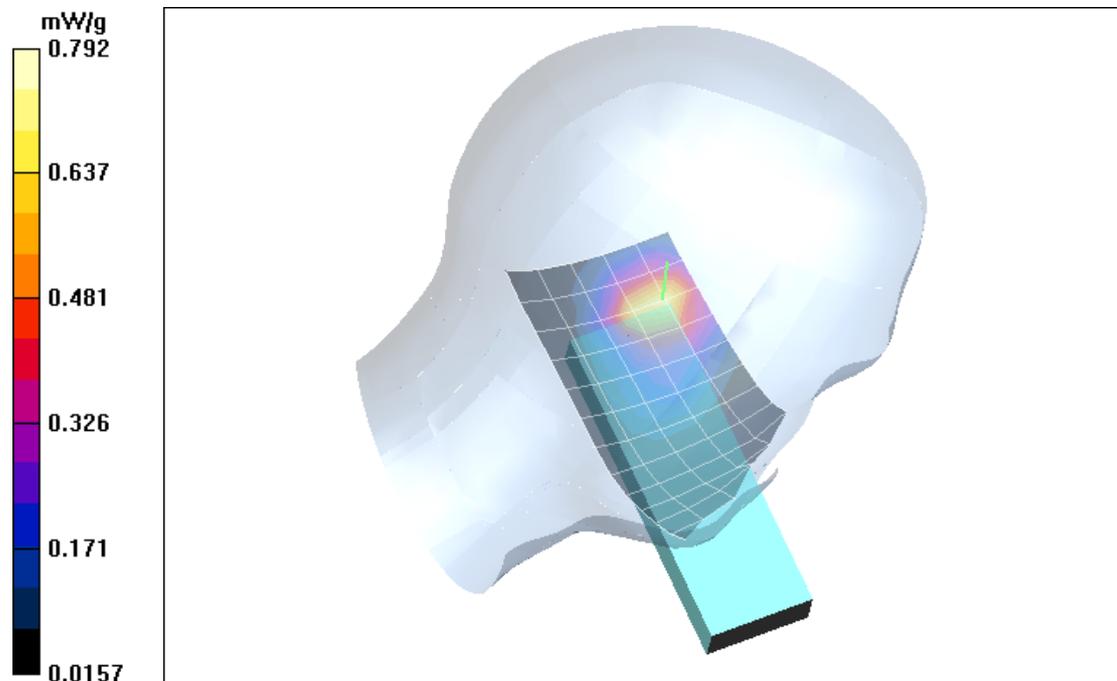


Fig. 30: SAR distribution for PCS 1900, channel 810, cheek position, left side of head ARC. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [acrprm_1.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 21.2 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.565 mW/g

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

Peak SAR (extrapolated) = 0.826 W/kg

SAR(1 g) = 0.563 mW/g; SAR(10 g) = 0.353 mW/g

Reference Value = 21.2 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.61 mW/g

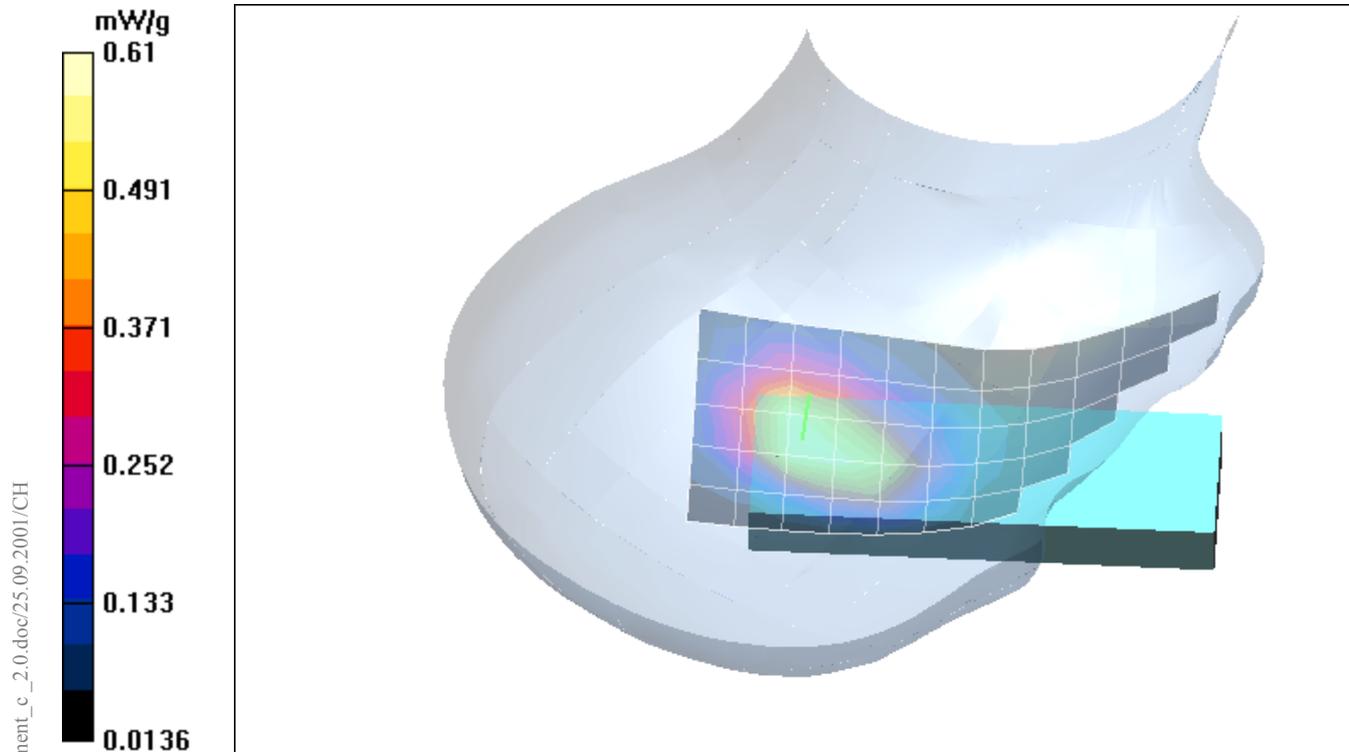


Fig. 31: SAR distribution for PCS 1900, channel 661, cheek position, right side of head ARC. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

Test Laboratory: IMST; File Name: [acrprm_2.da4](#)

DUT: Siemens CX 65 & Flash; Type: CX 65; Serial: 004999002956240

Program: Measurement

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Head 1900 MHz ($\sigma = 1.42$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(5.2, 5.2, 5.2); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 21.2 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.481 mW/g

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

Peak SAR (extrapolated) = 0.859 W/kg

SAR(1 g) = 0.54 mW/g; SAR(10 g) = 0.318 mW/g

Reference Value = 21.2 V/m

Power Drift = 0.01 dB

Maximum value of SAR = 0.582 mW/g

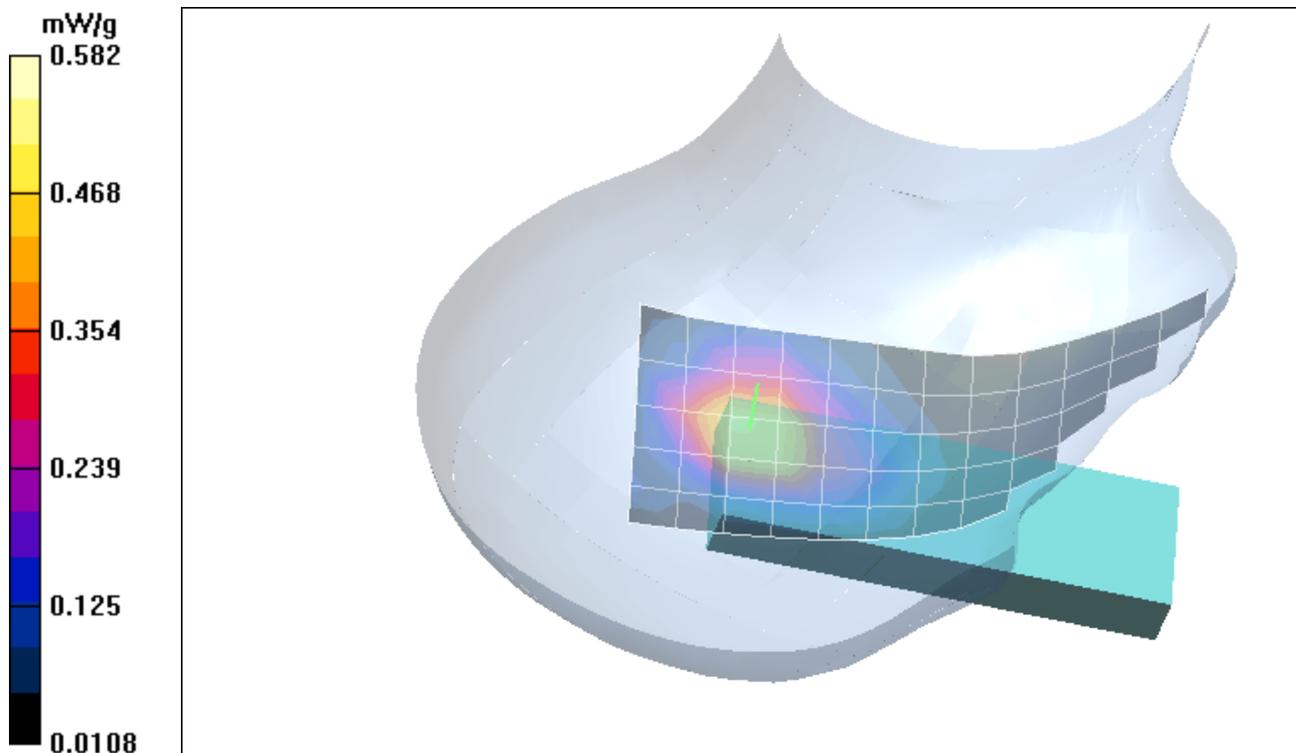


Fig. 32: SAR distribution for PCS 1900, channel 810, cheek position, right side of head ARC. (18.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

3 SAR Distribution Plots, PCS 1900 Body with headset

Test Laboratory: IMST; File Name: [staphm_3.da4](#)

DUT: Siemens CX 65 BODY; Type: CX 65; Serial: 004999002956240

Program: Unnamed Program

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Body1900 MHz ($\sigma = 1.54$ mho/m, $\epsilon_r = 52.7$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.8, 4.8, 4.8); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Unnamed procedure/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 6.11 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 0.394 mW/g

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

Peak SAR (extrapolated) = 0.676 W/kg

SAR(1 g) = 0.416 mW/g; SAR(10 g) = 0.248 mW/g

Reference Value = 6.11 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 0.444 mW/g

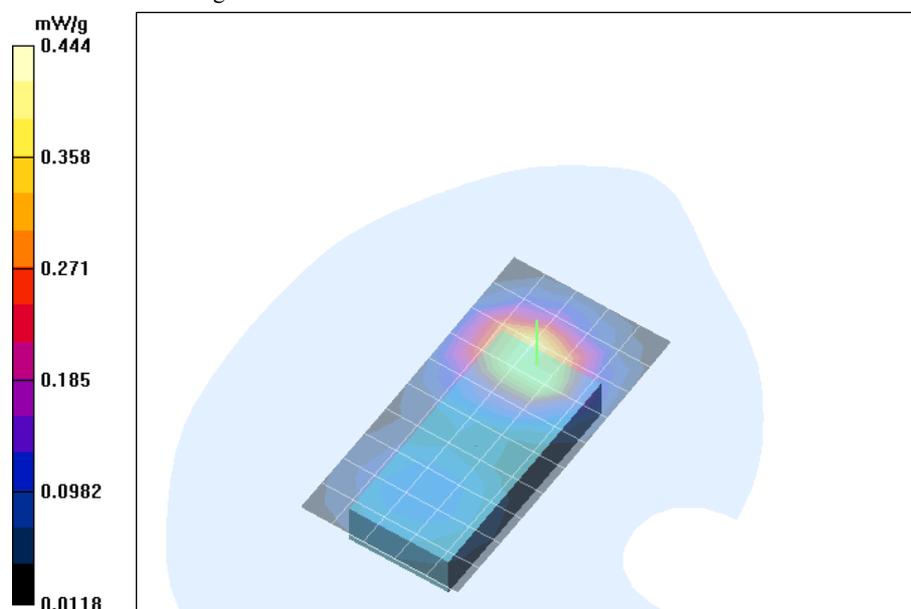


Fig. 33: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, Standard cover with headset (22.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [bfphm_3.da4](#)

DUT: Siemens CX 65 BODY; Type: CX 65; Serial: 004999002956240

Program: Unnamed Program

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Body1900 MHz ($\sigma = 1.54$ mho/m, $\epsilon_r = 52.7$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.8, 4.8, 4.8); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Unnamed procedure/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 6.41 V/m

Power Drift = -0.08 dB

Maximum value of SAR = 0.378 mW/g

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

Peak SAR (extrapolated) = 0.613 W/kg

SAR(1 g) = 0.38 mW/g; SAR(10 g) = 0.224 mW/g

Reference Value = 6.41 V/m

Power Drift = -0.08 dB

Maximum value of SAR = 0.407 mW/g

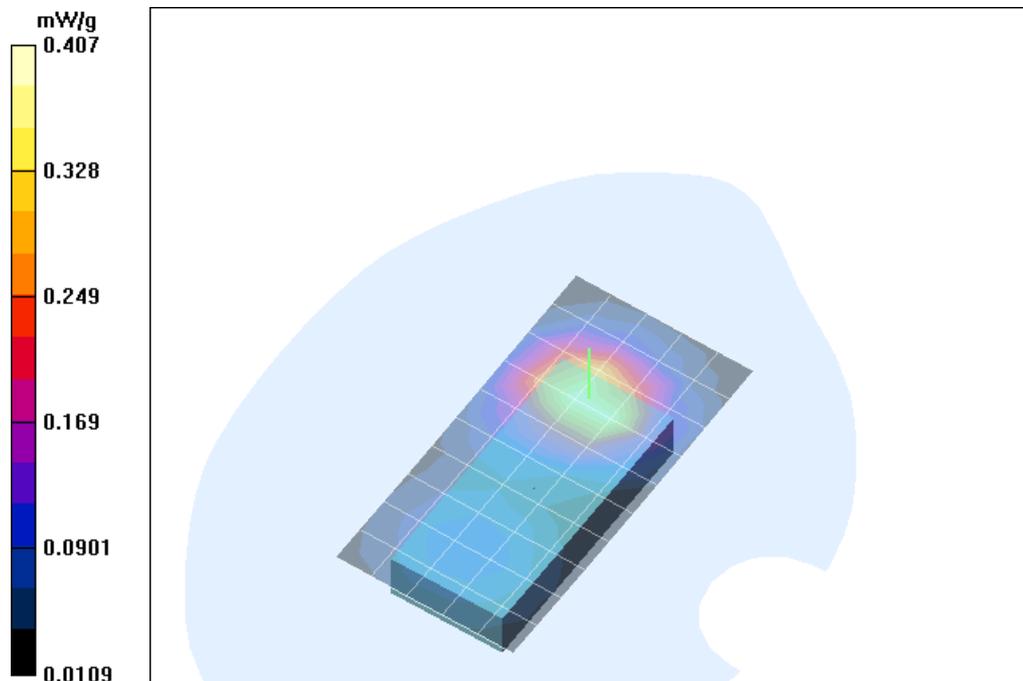


Fig. 34: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, BF cover with headset (22.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [butphm_3.da4](#)

DUT: Siemens CX 65 BODY; Type: CX 65; Serial: 004999002956240

Program: Unnamed Program

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Body1900 MHz ($\sigma = 1.54$ mho/m, $\epsilon_r = 52.7$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.8, 4.8, 4.8); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Unnamed procedure/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 6.03 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.402 mW/g

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

Peak SAR (extrapolated) = 0.685 W/kg

SAR(1 g) = 0.417 mW/g; SAR(10 g) = 0.247 mW/g

Reference Value = 6.03 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.446 mW/g

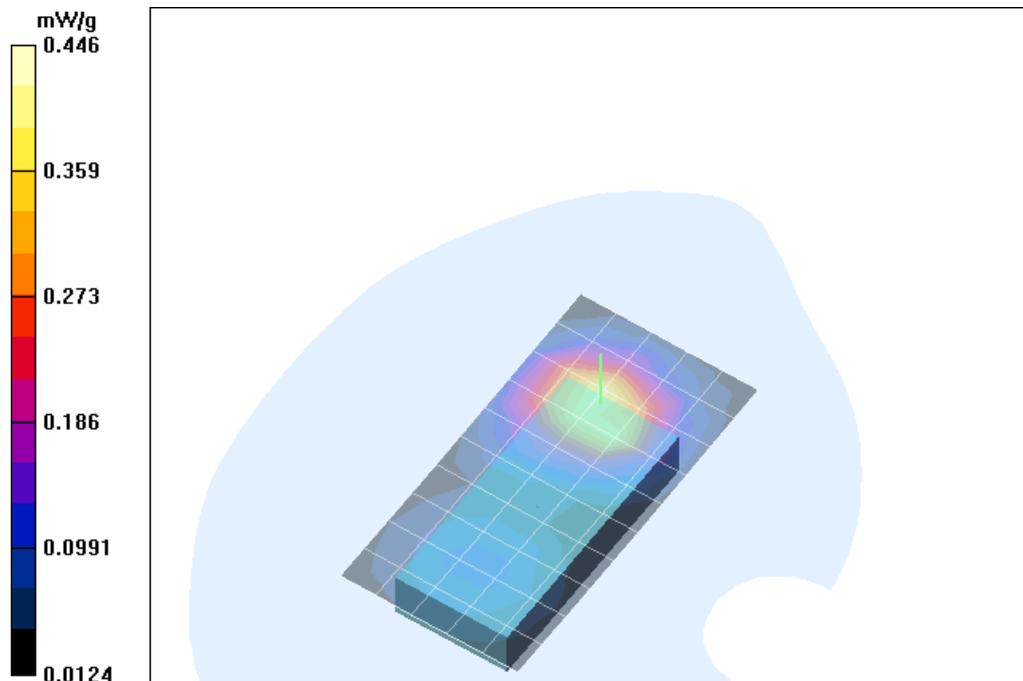


Fig. 35: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, Butterfly cover with headset (22.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [arcphm_3.da4](#)

DUT: Siemens CX 65 BODY; Type: CX 65; Serial: 004999002956240

Program: Unnamed Program

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: Body1900 MHz ($\sigma = 1.54$ mho/m, $\epsilon_r = 52.7$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.8, 4.8, 4.8); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Unnamed procedure/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 6.25 V/m

Power Drift = -0.07 dB

Maximum value of SAR = 0.38 mW/g

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

Peak SAR (extrapolated) = 0.614 W/kg

SAR(1 g) = 0.381 mW/g; SAR(10 g) = 0.225 mW/g

Reference Value = 6.25 V/m

Power Drift = -0.07 dB

Maximum value of SAR = 0.409 mW/g

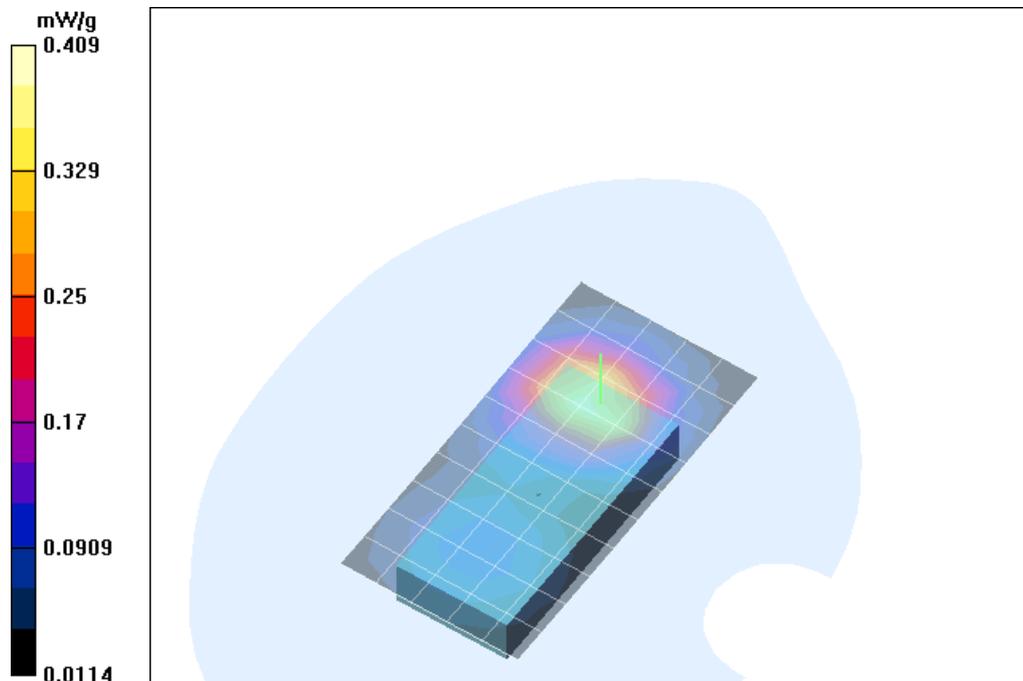


Fig. 36: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, ARC cover with headset (22.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.7° C).

4 SAR Distribution Plots, PCS 1900 Body with data cable

Test Laboratory: IMST; File Name: [staphm_1.da4](#)

DUT: Siemens CX 65 BODY; Type: CX 65; Serial: 004999002956240

Program: Unnamed Program

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

Medium: Body1900 MHz ($\sigma = 1.54$ mho/m, $\epsilon_r = 52.7$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.8, 4.8, 4.8); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 9.73 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.669 mW/g

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

Peak SAR (extrapolated) = 0.987 W/kg

SAR(1 g) = 0.616 mW/g; SAR(10 g) = 0.37 mW/g

Reference Value = 9.73 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.66 mW/g

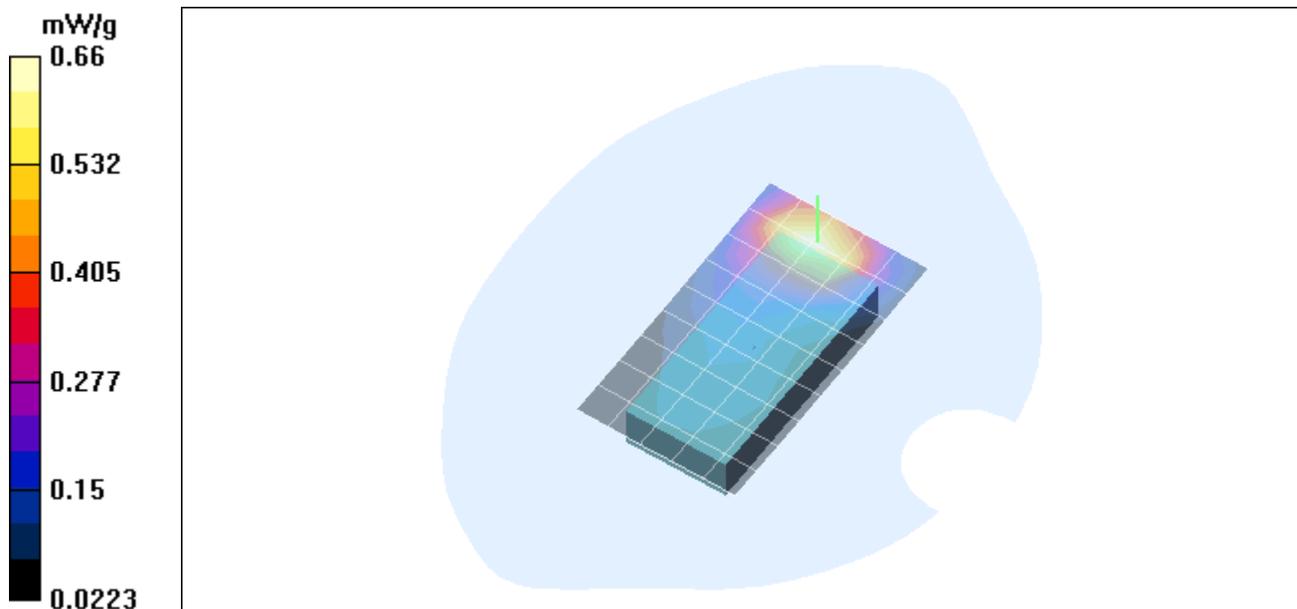


Fig. 37: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, Standard cover with data cable, 2 TX (22.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [bfphm_1.da4](#)

DUT: Siemens CX 65 BODY; Type: CX 65; Serial: 004999002956240

Program: Unnamed Program

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

Medium: Body1900 MHz ($\sigma = 1.54$ mho/m, $\epsilon_r = 52.7$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.8, 4.8, 4.8); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Unnamed procedure/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 10.5 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 0.765 mW/g

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

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.723 mW/g; SAR(10 g) = 0.425 mW/g

Reference Value = 10.5 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 0.779 mW/g

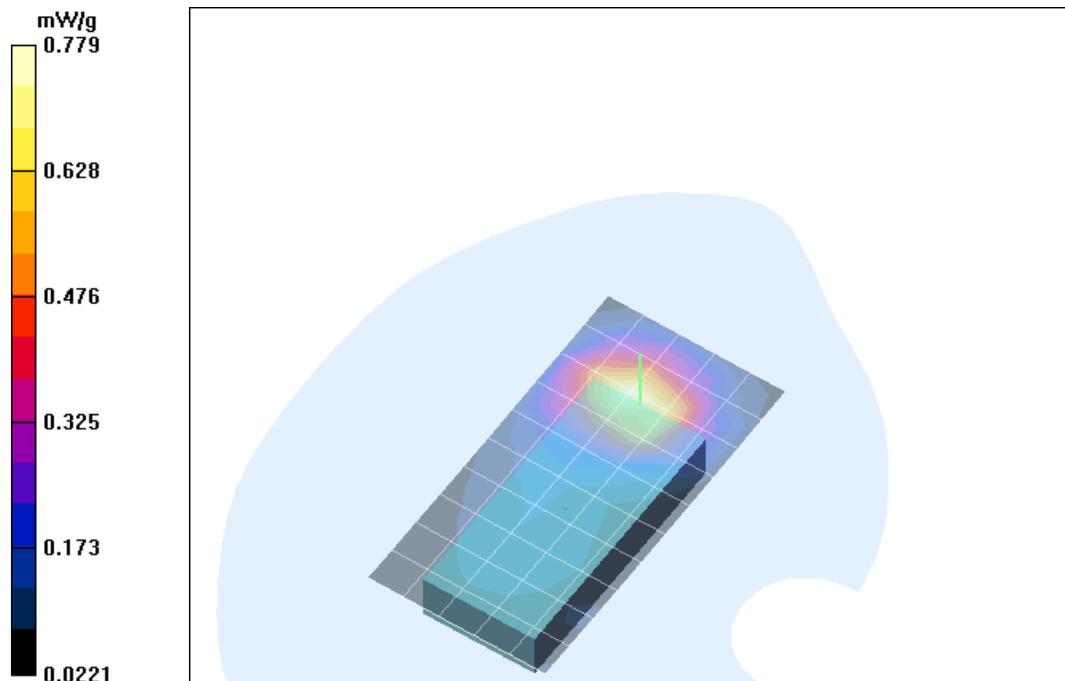


Fig. 38: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, BF cover with data cable, 2 TX (22.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.8 C).

Test Laboratory: IMST; File Name: [butphm_1.da4](#)

DUT: Siemens CX 65 BODY; Type: CX 65; Serial: 004999002956240

Program: Unnamed Program

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

Medium: Body1900 MHz ($\sigma = 1.54$ mho/m, $\epsilon_r = 52.7$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.8, 4.8, 4.8); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

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

Reference Value = 9.47 V/m

Power Drift = -0.01 dB

Maximum value of SAR = 0.747 mW/g

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

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.696 mW/g; SAR(10 g) = 0.412 mW/g

Reference Value = 9.47 V/m

Power Drift = -0.01 dB

Maximum value of SAR = 0.757 mW/g

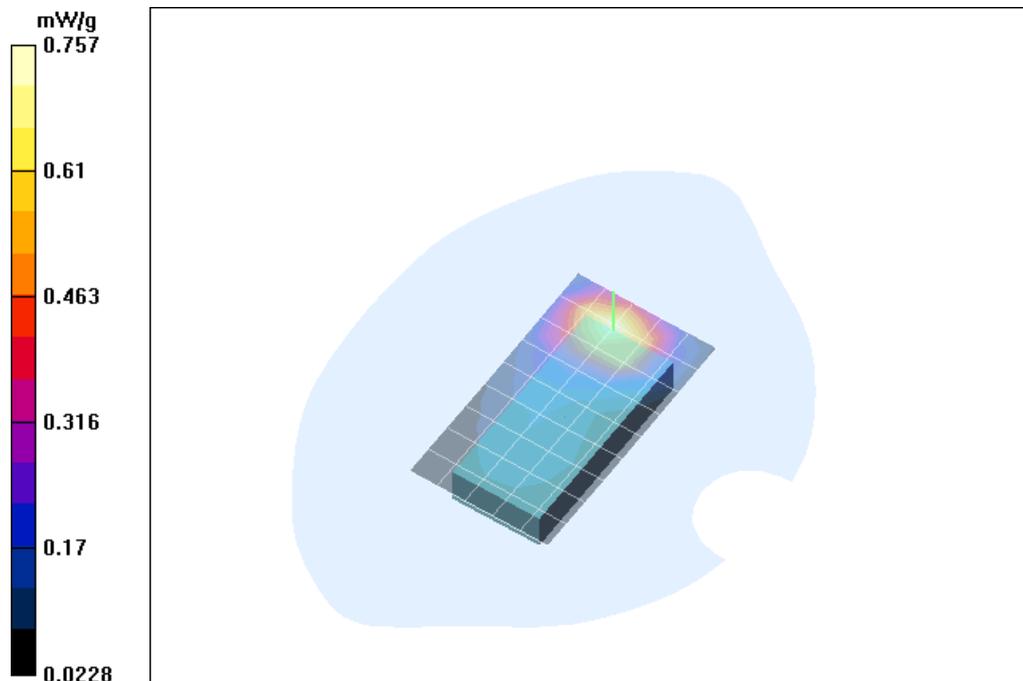


Fig. 39: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, Butterfly cover with data cable, 2 TX (22.02.2004; Ambient Temperature: 20.7° C; Liquid Temperature : 19.7° C).

Test Laboratory: IMST; File Name: [arcphm_1.da4](#)

DUT: Siemens CX 65 BODY; Type: CX 65; Serial: 004999002956240

Program: Unnamed Program

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

Medium: Body1900 MHz ($\sigma = 1.54$ mho/m, $\epsilon_r = 52.7$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.8, 4.8, 4.8); Calibrated: 21.03.2003

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

- Electronics: DAE3 Sn335; Calibrated: 05.05.2003

- Phantom: SAM TP:1176;

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Unnamed procedure/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 9.91 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.718 mW/g

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

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.723 mW/g; SAR(10 g) = 0.427 mW/g

Reference Value = 9.91 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.776 mW/g

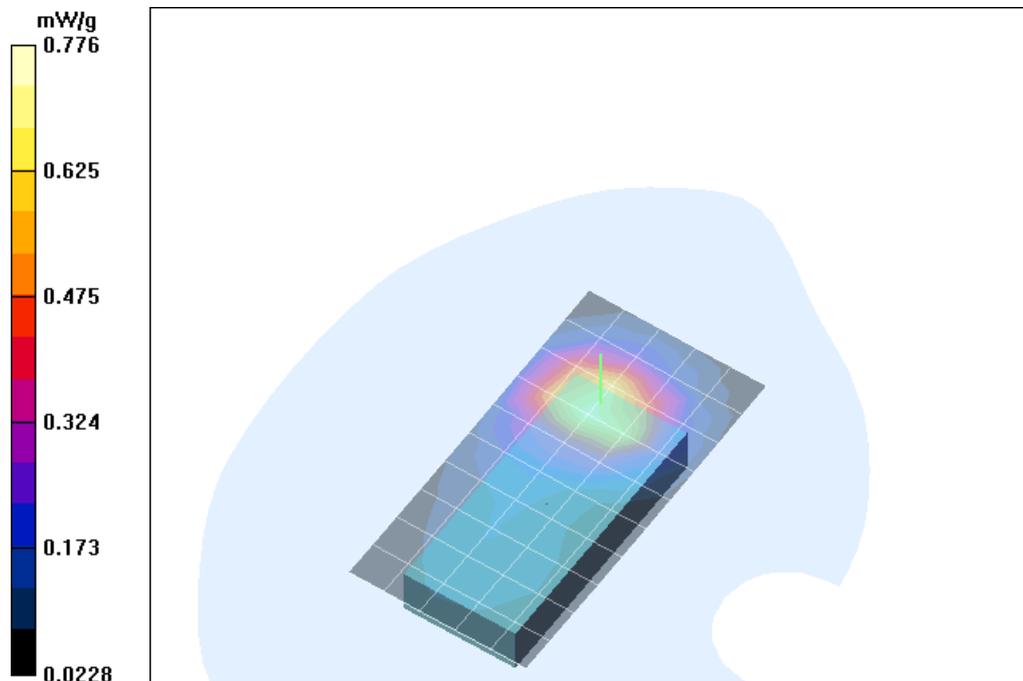


Fig. 40: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, ARC cover with data cable, 2 TX (22.02.2004; Ambient Temperature: 20.8° C; Liquid Temperature : 19.8° C).

5 SAR z-axis scans (Validation)

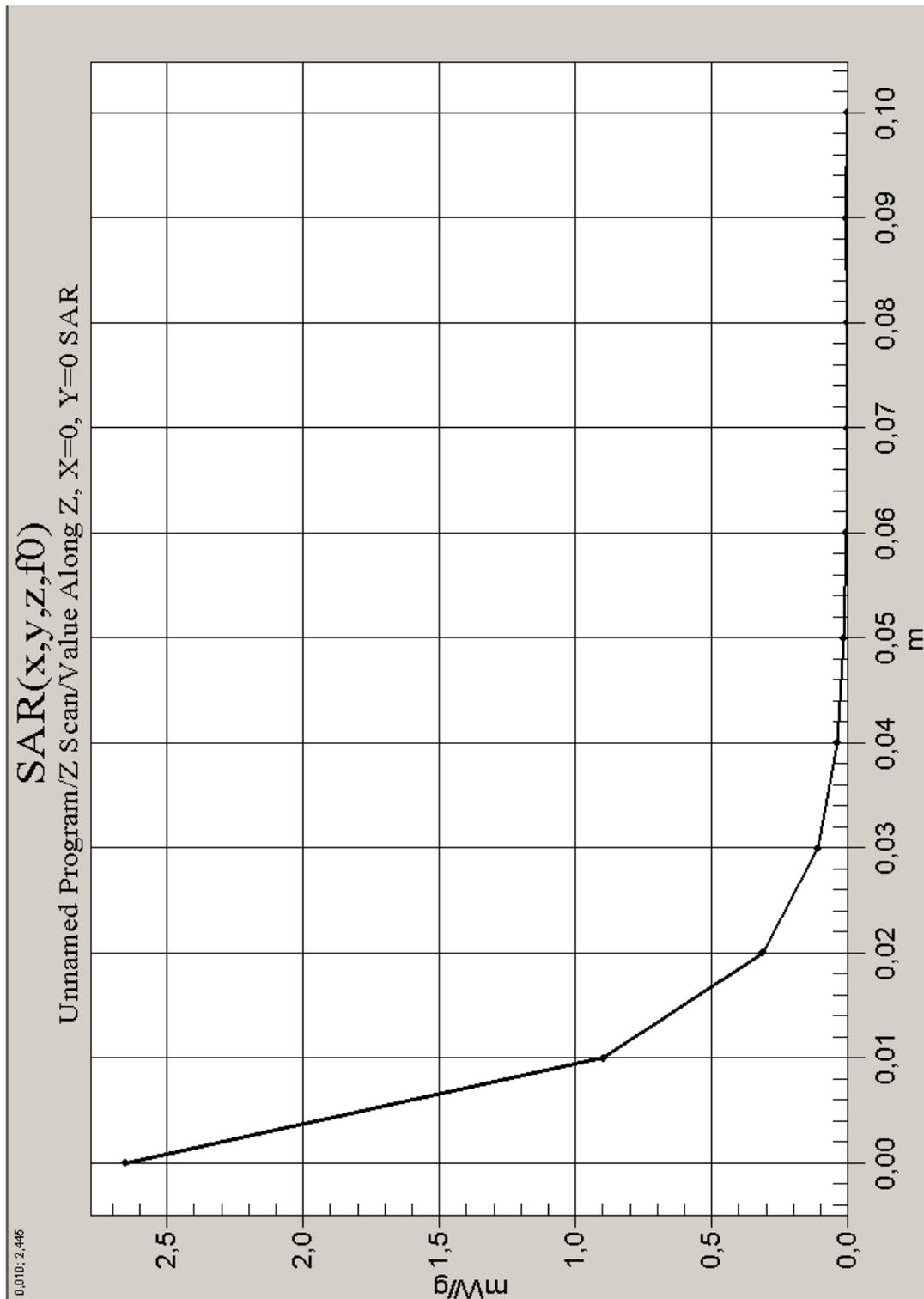


Fig. 41: SAR versus liquid depth, 1900 MHz, head (18.02.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 19.8° C).

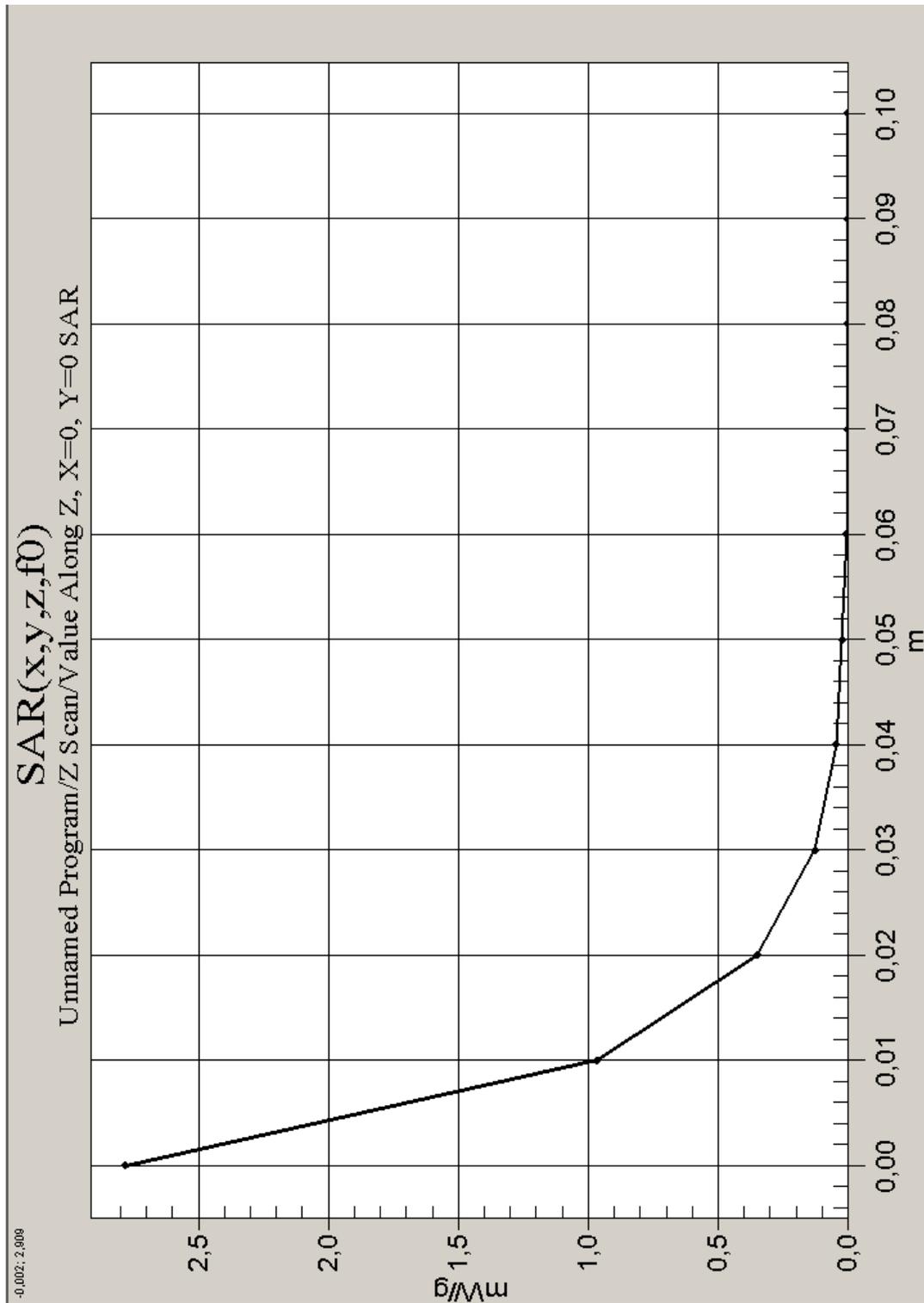


Fig. 42: SAR versus liquid depth, 1900 MHz, body (22.02.2004; Ambient Temperature: 20.4° C; Liquid Temperature : 19.6° C).

6 SAR z-axis scans (Measurements)

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

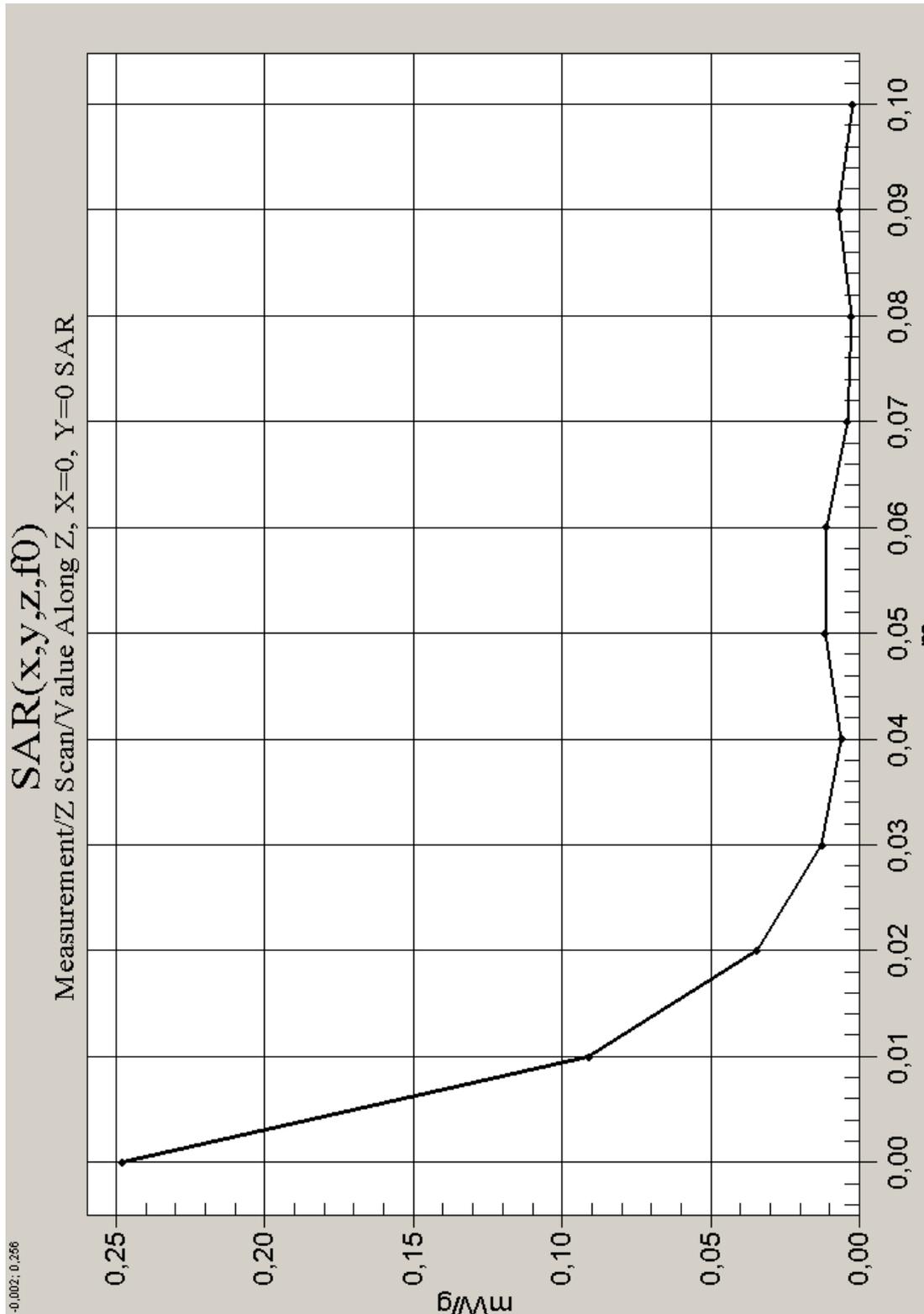


Fig. 43: SAR versus liquid depth, head: without flash, PCS 1900, channel 661, tilted position, left side of head with BF cover. (18.02.2004, Ambient Temperature: 20.7° C; Liquid Temperature : 19.8° C).

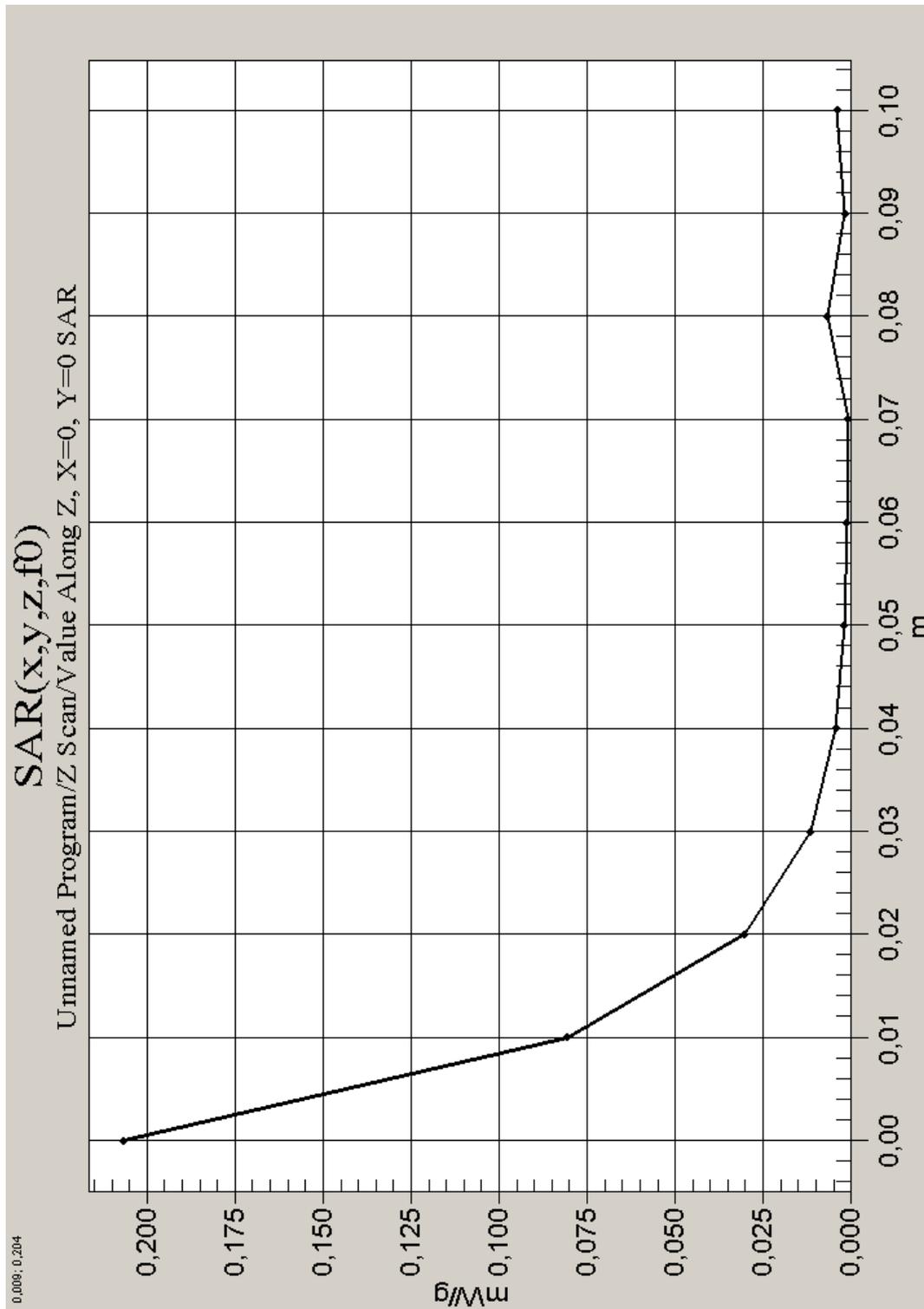


Fig. 44: SAR versus liquid depth: PCS 1900 body, channel 661, body worn configuration, antenna towards the phantom, data cable, 2 TX with BF cover (22.02.2004, Ambient Temperature: 20.7° C; Liquid Temperature : 19.8° C).