Deutscher Akkreditierungs Rat

TTI-P-G 158

Appendix for the Report

Dosimetric Assessment of the Siemens CF62 (FCC ID: PWX-CF62) According to the FCC Requirements

SAR Distribution Plots

February 12, 2004

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San Diego CA 92127

The test results only relate to the items tested.
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dasy_report_fcc_supplement_c_2.0.doc/25.09.2001/CH

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dasy_report_fcc_supplement_c_2.0.doc/25.09.2001/CH

1 SAR Distribution Plots, PCS 1900 Head without QuickPic Camera

Test Laboratory: IMST; File Name: 976plm_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 kg/m^3)

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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 4.24 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 1.01 mW/g

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

Peak SAR (extrapolated) = 2.38 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.554 mW/g

Reference Value = 4.24 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 1.25 mW/g

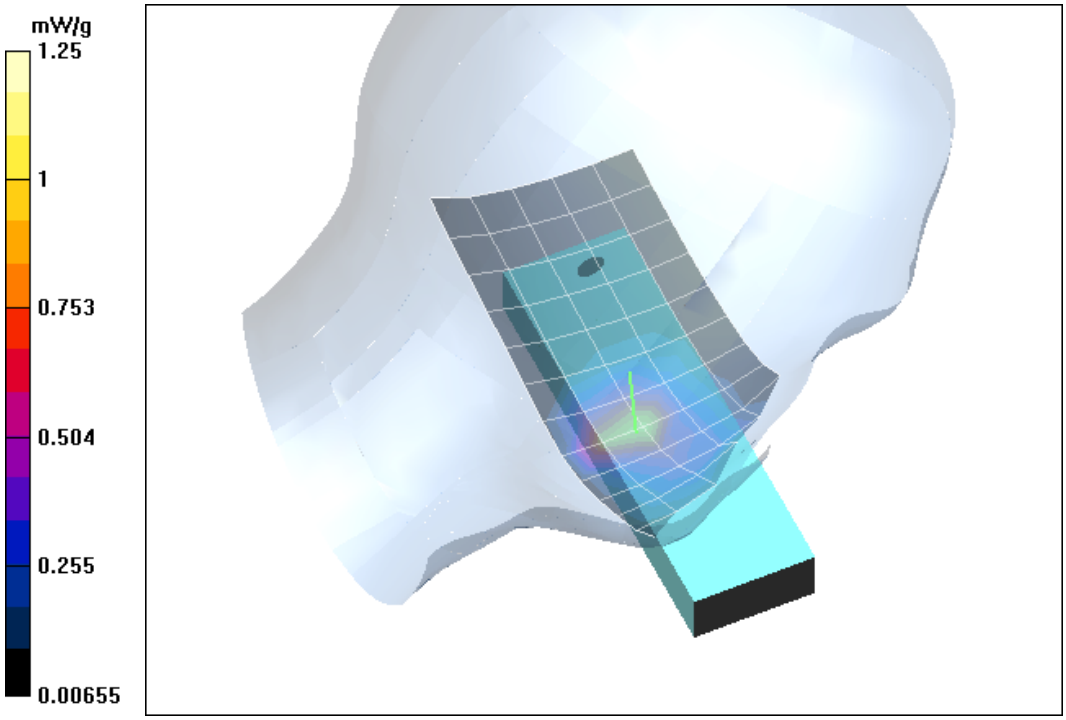

Fig. 1: SAR distribution for PCS 1900, channel 661, cheek position, left side of head. (10.02.2004; Ambient Temperature: 19.8° C; Liquid Temperature: 19.5° C).

Test Laboratory: IMST File Name: 976plm_2.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 kg/m^3)

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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 6.5 V/m

Power Drift = 0.08 dB

Maximum value of SAR = 0.0639 mW/g

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

Peak SAR (extrapolated) = 0.115 W/kg

SAR(1 g) = 0.0676 mW/g; SAR(10 g) = 0.0394 mW/g

Reference Value = 6.5 V/m

Power Drift = 0.08 dB

Maximum value of SAR = 0.0709 mW/g

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

Peak SAR (extrapolated) = 0.104 W/kg

SAR(1 g) = 0.0668 mW/g; SAR(10 g) = 0.0412 mW/g

Reference Value = 6.5 V/m

Power Drift = 0.08 dB

Maximum value of SAR = 0.0712 mW/g

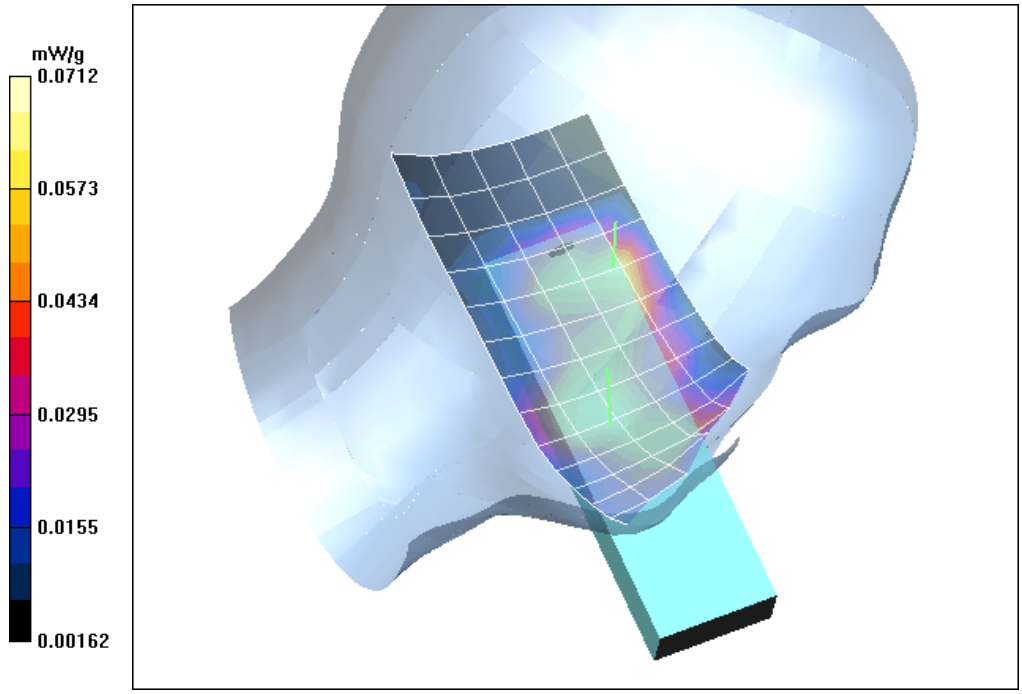

Fig. 2: SAR distribution for PCS 1900, channel 661, tilted position, left side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.6° C).

Test Laboratory: IMST File Name: 976prm_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 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

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

Reference Value = 3.69 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.957 mW/g

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

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 0.901 mW/g; SAR(10 g) = 0.509 mW/g

Reference Value = 3.69 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 1 mW/g

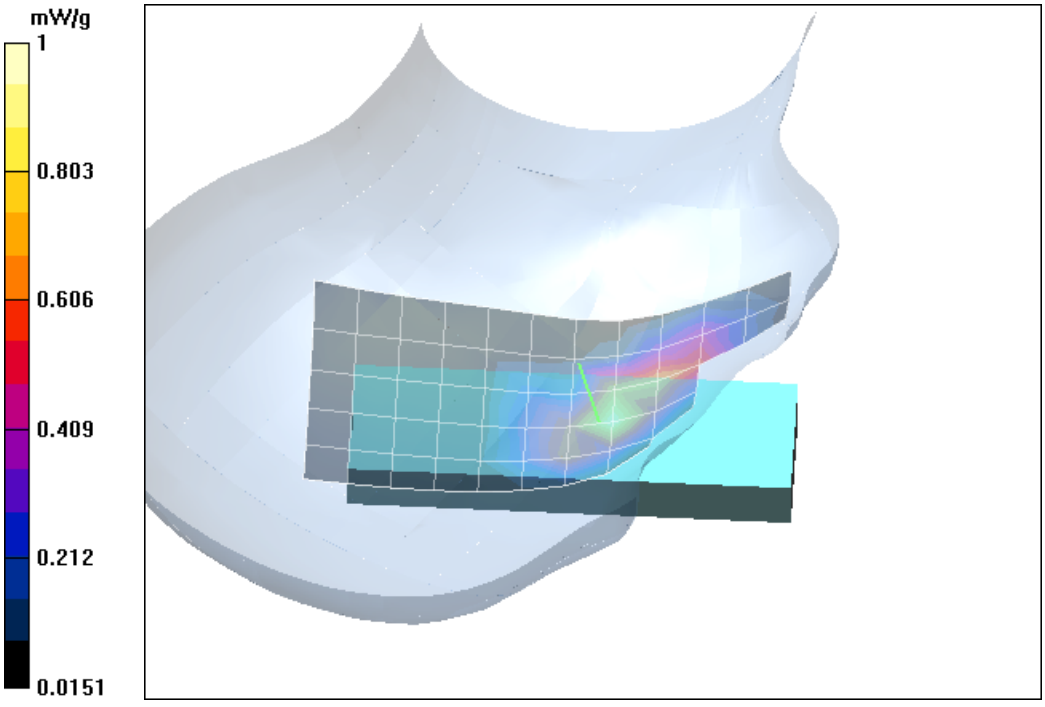

Fig. 3: SAR distribution for PCS 1900, channel 661, cheek position, right side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).

Test Laboratory: IMST File Name: 976prm_2.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 7.01 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.0699 mW/g

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

Peak SAR (extrapolated) = 0.114 W/kg

SAR(1 g) = 0.0716 mW/g; SAR(10 g) = 0.0427 mW/g

Reference Value = 7.01 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.0777 mW/g

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

Peak SAR (extrapolated) = 0.104 W/kg

SAR(1 g) = 0.0645 mW/g; SAR(10 g) = 0.0408 mW/g

Reference Value = 7.01 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.0707 mW/g

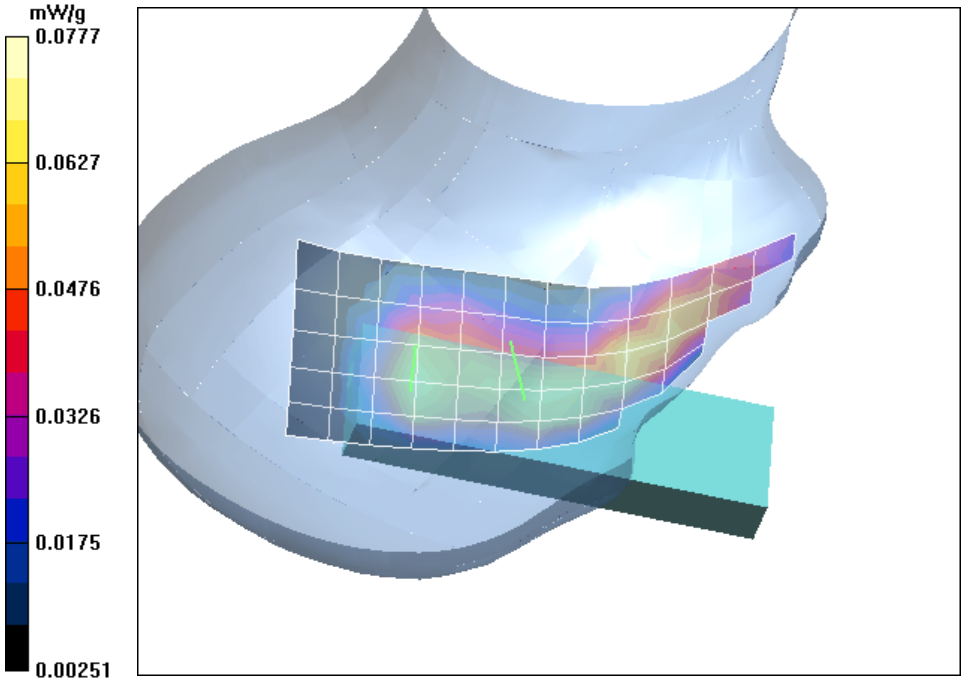

Fig. 4: SAR distribution for PCS 1900, channel 661, tilted position, right side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.6° C).

Test Laboratory: IMST File Name: 976pll_1wdh.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 kg/m^3)

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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 3.54 V/m

Power Drift = 0.07 dB

Maximum value of SAR = 1.07 mW/g

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

Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.536 mW/g

Reference Value = 3.54 V/m

Power Drift = 0.07 dB

Maximum value of SAR = 1.19 mW/g

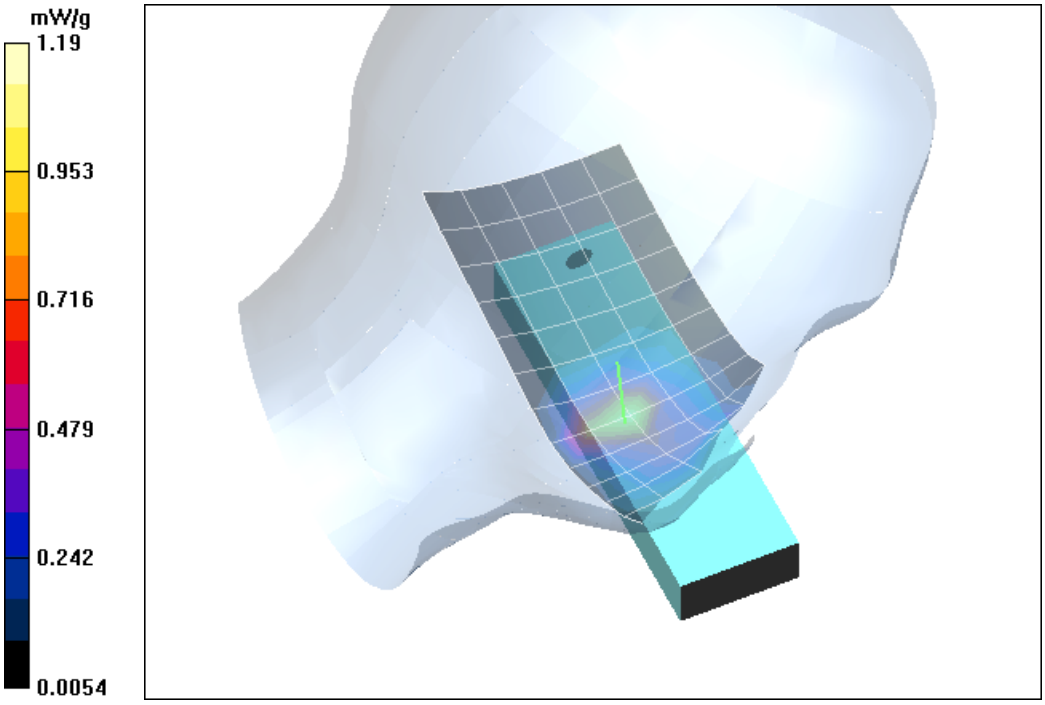

Fig. 5: SAR distribution for PCS 1900, channel 512, cheek position, left side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).

Test Laboratory: IMST File Name: 976plh_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 kg/m^3)

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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 5.08 V/m

Power Drift = 0.15 dB

Maximum value of SAR = 1 mW/g

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

Peak SAR (extrapolated) = 2.49 W/kg

SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.578 mW/g

Reference Value = 5.08 V/m

Power Drift = 0.15 dB

Maximum value of SAR = 1.23 mW/g

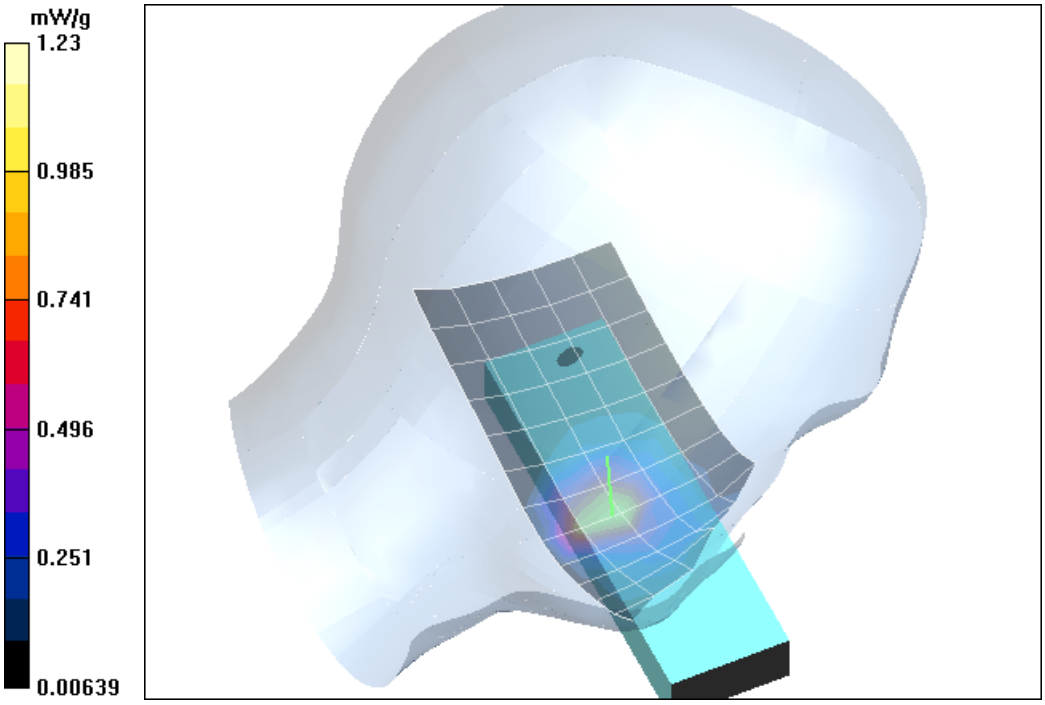

Fig. 6: SAR distribution for PCS 1900, channel 810, cheek position, left side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).

Test Laboratory: IMST File Name: 976prl_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 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

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

Reference Value = 3.1 V/m

Power Drift = 0.15dB

Maximum value of SAR = 1.03 mW/g

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

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.969 mW/g; SAR(10 g) = 0.56 mW/g

Reference Value = 3.1 V/m

Power Drift = 0.15 dB

Maximum value of SAR = 1.07 mW/g

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

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.512 mW/g

Reference Value = 3.1 V/m

Power Drift = 0.15 dB

Maximum value of SAR = 0.877 mW/g

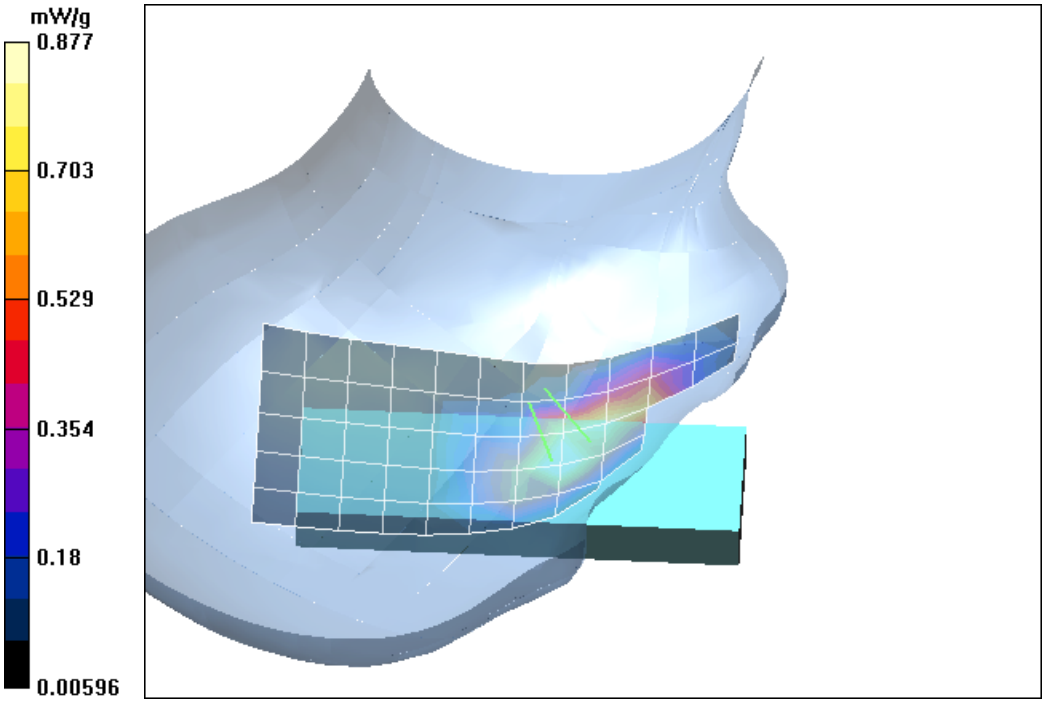

Fig. 7: SAR distribution for PCS 1900, channel 512, cheek position, right side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.6° C).

Test Laboratory: IMST File Name: 976prh_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 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

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

Reference Value = 4.51 V/m

Power Drift = -0.09 dB

Maximum value of SAR = 0.813 mW/g

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

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.754 mW/g; SAR(10 g) = 0.417 mW/g

Reference Value = 4.51 V/m

Power Drift = -0.09 dB

Maximum value of SAR = 0.829 mW/g

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

Peak SAR (extrapolated) = 0.818 W/kg

SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.338 mW/g

Reference Value = 4.51 V/m

Power Drift = -0.09 dB

Maximum value of SAR = 0.642 mW/g

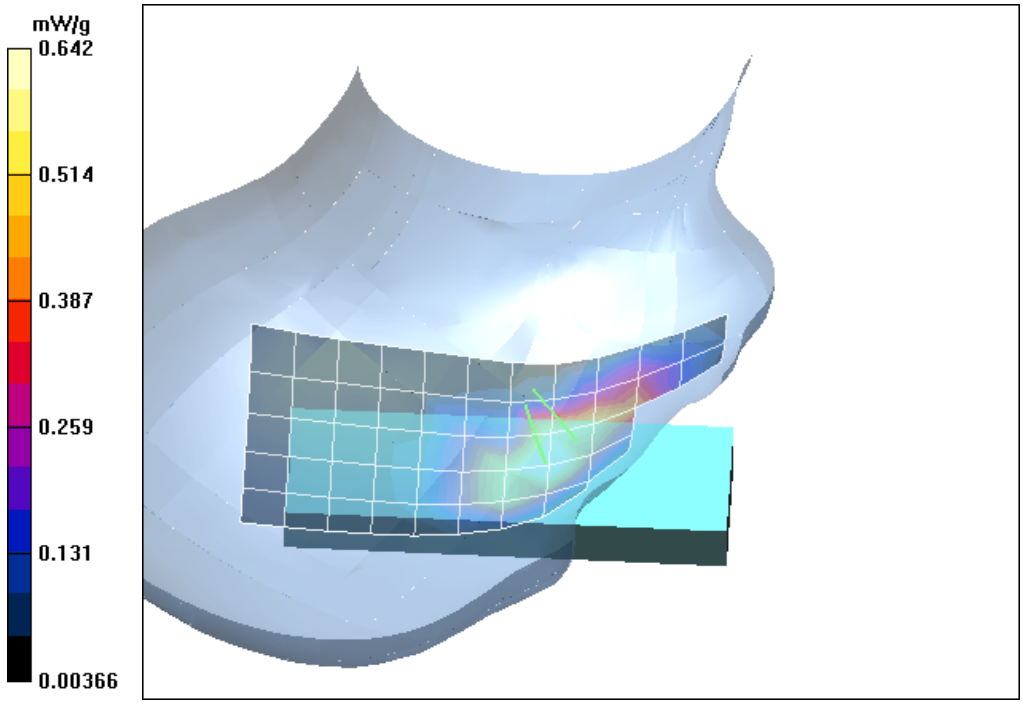

Fig. 8: SAR distribution for PCS 1900, channel 810, cheek position, right side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.6° C).

2 SAR Distribution Plots, PCS 1900 Head with QuickPic Camera

Test Laboratory: IMST File Name: 97cplm_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 kg/m^3)

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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 2.87 V/m

Power Drift = 0.09 dB

Maximum value of SAR = 0.975 mW/g

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

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.597 mW/g

Reference Value = 2.87 V/m

Power Drift = 0.09 dB

Maximum value of SAR = 1.26 mW/g

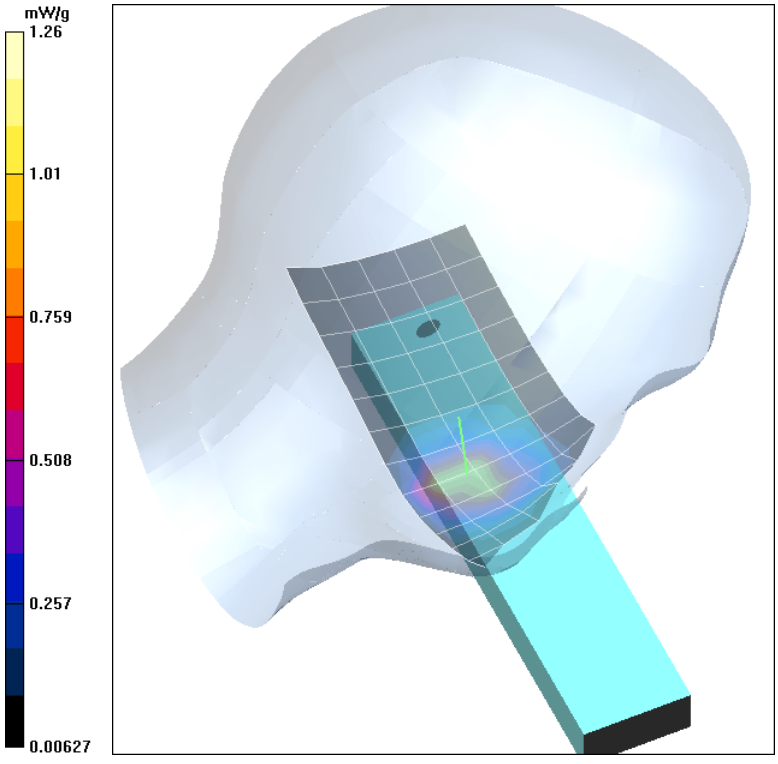

Fig. 9: SAR distribution for PCS 1900, channel 661, cheek position, left side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).

Test Laboratory: IMST File Name: 97cplm_2.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 kg/m^3)

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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 3.92 V/m

Power Drift = 0.08 dB

Maximum value of SAR = 0.112 mW/g

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

Peak SAR (extrapolated) = 0.168 W/kg

SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.073 mW/g

Reference Value = 3.92 V/m

Power Drift = 0.08 dB

Maximum value of SAR = 0.132 mW/g

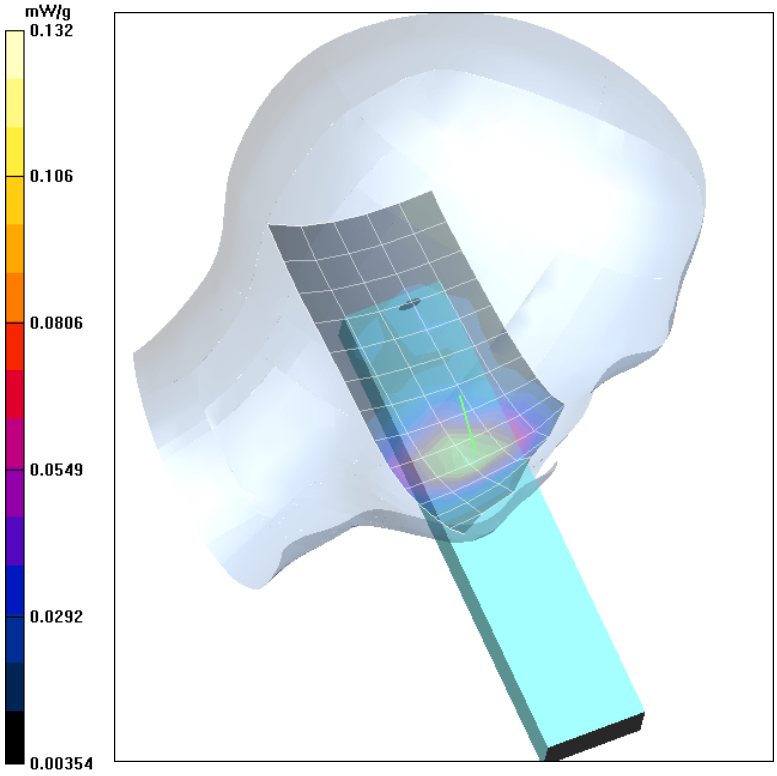

Fig. 10: SAR distribution for PCS 1900, channel 661, tilted position, left side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.6° C).

Test Laboratory: IMST File Name: 97cprm_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 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

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

Reference Value = 2.46 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 1.3 mW/g

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

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.683 mW/g

Reference Value = 2.46 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 1.29 mW/g

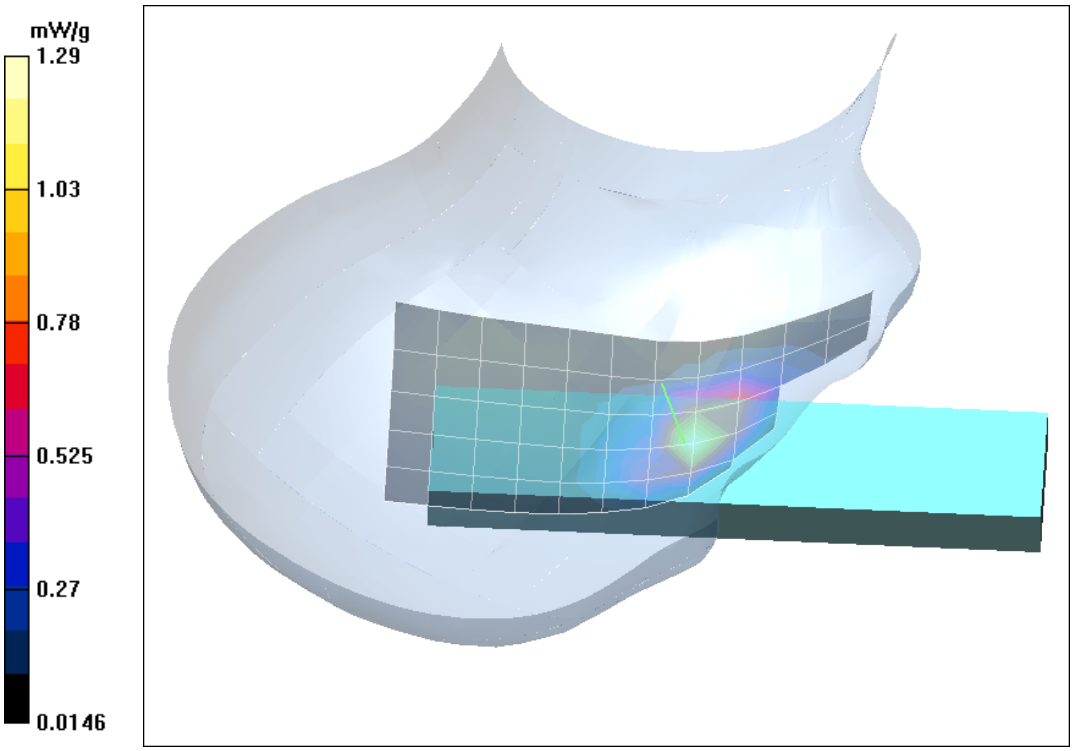

Fig. 11: SAR distribution for PCS 1900, channel 661, cheek position, right side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.6° C).

Test Laboratory: IMST File Name: 97cprm_2.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 3.92 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.161 mW/g

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

Peak SAR (extrapolated) = 0.251 W/kg

SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.103 mW/g

Reference Value = 3.92 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.177 mW/g

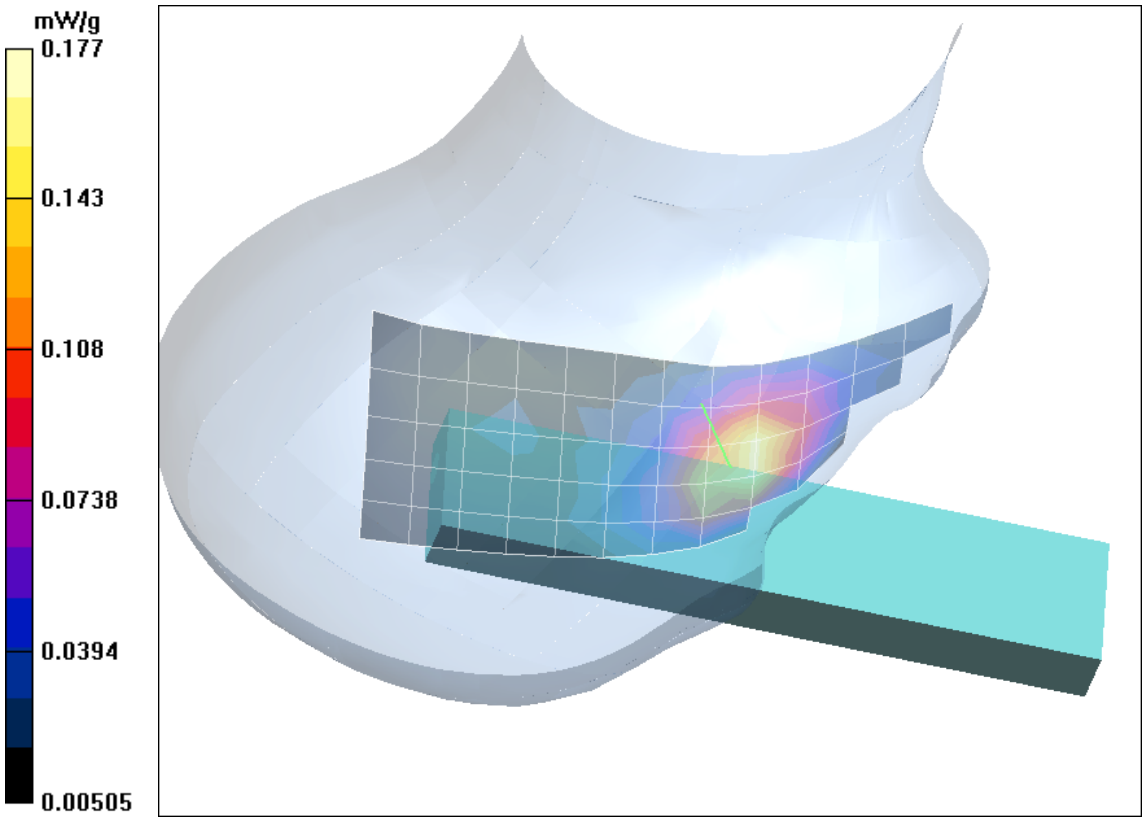

Fig. 12: SAR distribution for PCS 1900, channel 661, tilted position, right side of head. (10.02.2004; Ambient Temperature: 19.8° C; Liquid Temperature : 19.6° C).

Test Laboratory: IMST File Name: 97cpll_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 kg/m^3)

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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 2.72 V/m

Power Drift = 0.08 dB

Maximum value of SAR = 1.24 mW/g

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

Peak SAR (extrapolated) = 2.14 W/kg

SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.755 mW/g

Reference Value = 2.72 V/m

Power Drift = 0.08 dB

Maximum value of SAR = 1.43 mW/g

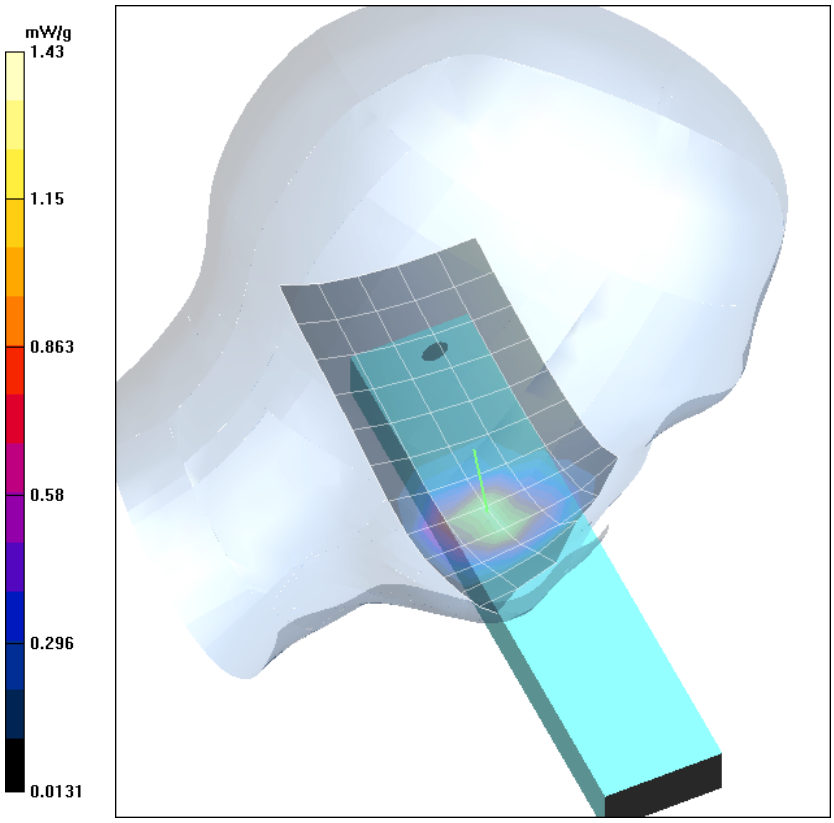

Fig. 13: SAR distribution for PCS 1900, channel 512, cheek position, left side of head. (10.02.2004; Ambient Temperature: 19.8° C; Liquid Temperature : 19.5° C).

Test Laboratory: IMST File Name: 97cplh_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 kg/m^3)

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 (6x14x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 3.73 V/m

Power Drift = 0.09 dB

Maximum value of SAR = 1.03 mW/g

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

Peak SAR (extrapolated) = 1.8 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.611 mW/g

Reference Value = 3.73 V/m

Power Drift = 0.09 dB

Maximum value of SAR = 1.21 mW/g

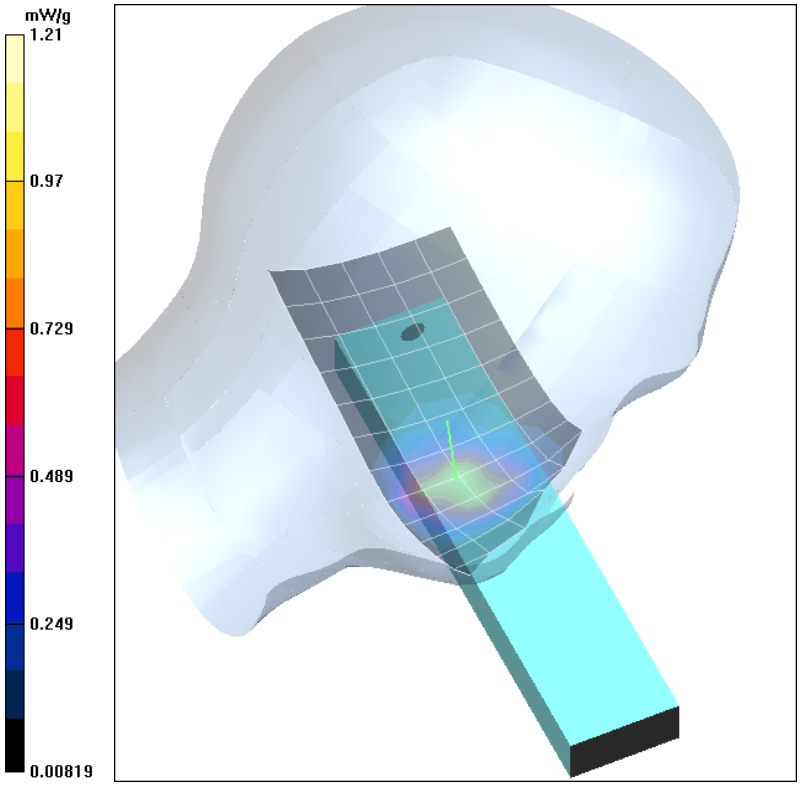

Fig. 14: SAR distribution for PCS 1900, channel 810, cheek position, left side of head. (10.02.2004; Ambient Temperature: 19.8° C; Liquid Temperature : 19.5° C).

Test Laboratory: IMST File Name: 97cprl_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 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

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

Reference Value = 2.13 V/m

Power Drift = 0.07 dB

Maximum value of SAR = 1.41 mW/g

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

Peak SAR (extrapolated) = 2 W/kg

SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.789 mW/g

Reference Value = 2.13 V/m

Power Drift = 0.07 dB

Maximum value of SAR = 1.44 mW/g

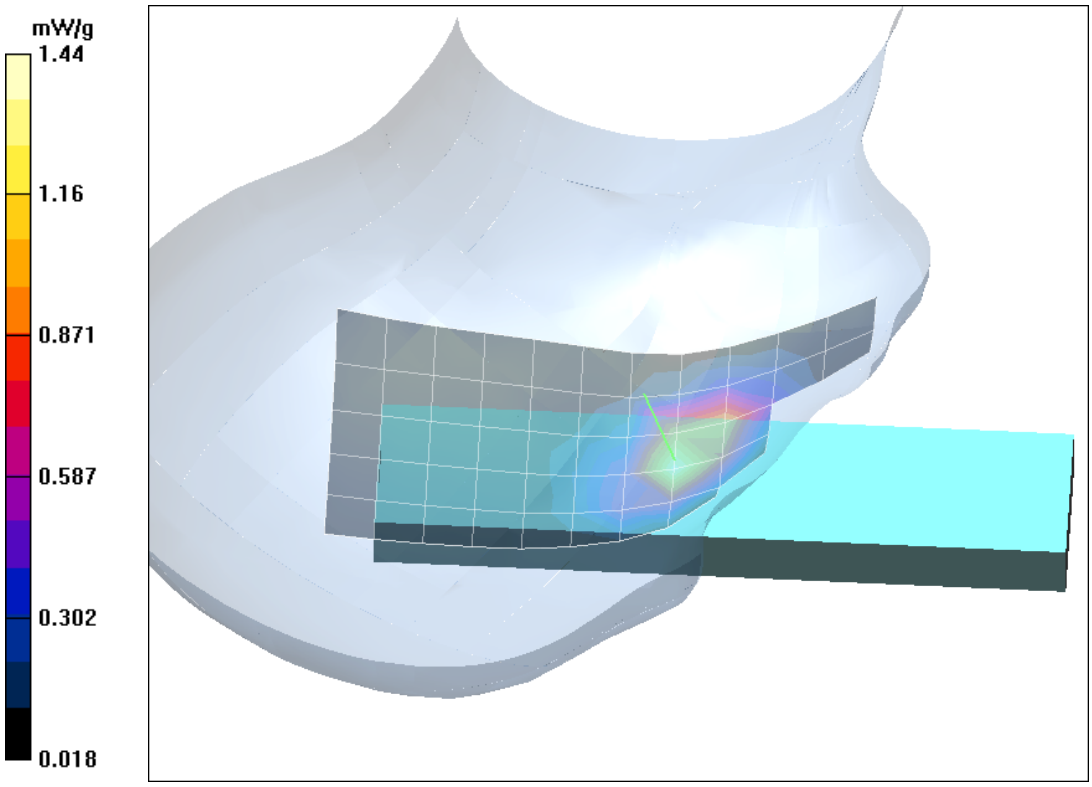

Fig. 15: SAR distribution for PCS 1900, channel 512, cheek position, right side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).

Test Laboratory: IMST File Name: 97cprh_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8

Medium: Head 1900 MHz (σ = 1.44 mho/m, ε_r = 40, ρ = 1000 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

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

Reference Value = 1.74 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 1.22 mW/g

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

Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.673 mW/g

Reference Value = 1.74 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 1.26 mW/g

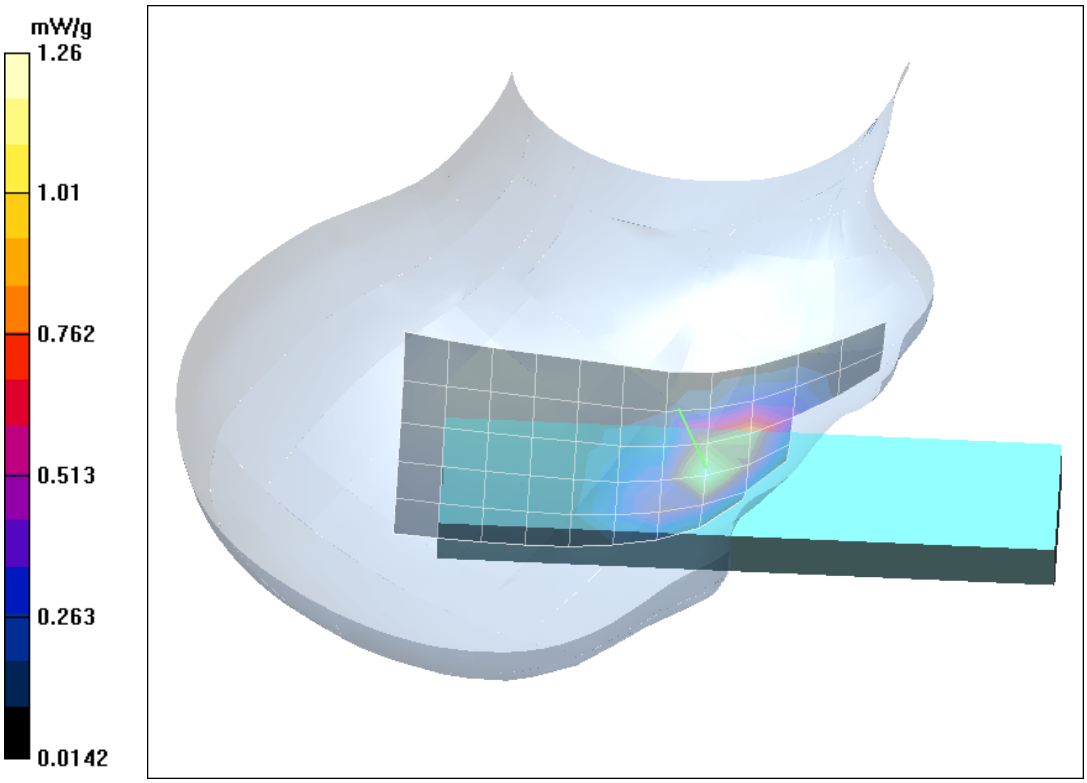

Fig. 16: SAR distribution for PCS 1900, channel 810, cheek position, right side of head. (10.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).

3 SAR Distribution Plots, PCS 1900 Body with headset

Test Laboratory: IMST File Name: 976phm_3.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976
Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8
Medium: Body1900 MHz (σ = 1.54 mho/m, ε_r = 51.4, ρ = 1000 kg/m^3)
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 (7x10x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 12.2 V/m
Power Drift = 0.15 dB
Maximum value of SAR = 0.249 mW/g
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.359 W/kg
SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.156 mW/g
Reference Value = 12.2 V/m
Power Drift = 0.15 dB
Maximum value of SAR = 0.261 mW/g
Unnamed procedure/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.3 W/kg
SAR(1 g) = 0.167 mW/g; SAR(10 g) = 0.0984 mW/g
Reference Value = 12.2 V/m
Power Drift = 0.15 dB
Maximum value of SAR = 0.176 mW/g

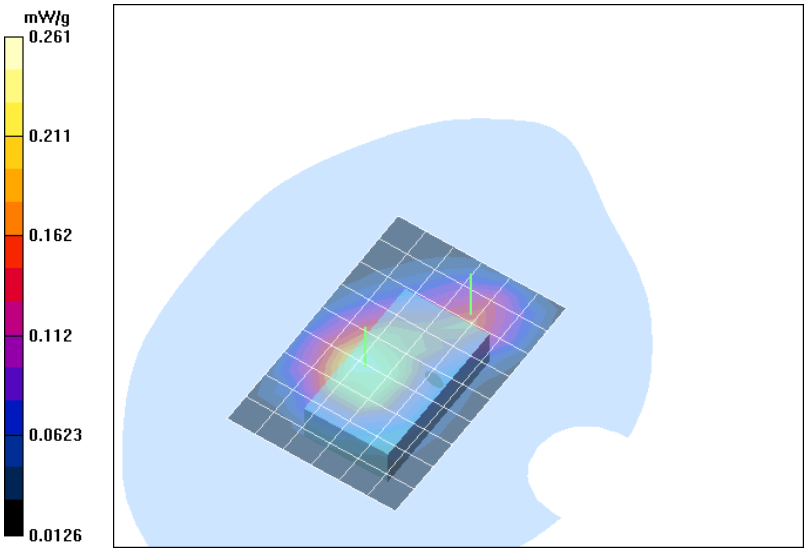

Fig. 17: SAR distribution for PCS 1900, channel 661, body worn configuration, battery towards the phantom, with headset (12.02.2004; Ambient Temperature: 20.0° C; Liquid Temperature : 19.6° C).

Test Laboratory: IMST; File Name: 976phm_4.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Body1900 MHz (σ = 1.54 mho/m, ε_r = 51.4, ρ = 1000 kg/m^3)

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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 11.1 V/m

Power Drift = 0.09 dB

Maximum value of SAR = 0.179 mW/g

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

Peak SAR (extrapolated) = 0.289 W/kg

SAR(1 g) = 0.172 mW/g; SAR(10 g) = 0.109 mW/g

Reference Value = 11.1 V/m

Power Drift = 0.09 dB

Maximum value of SAR = 0.186 mW/g

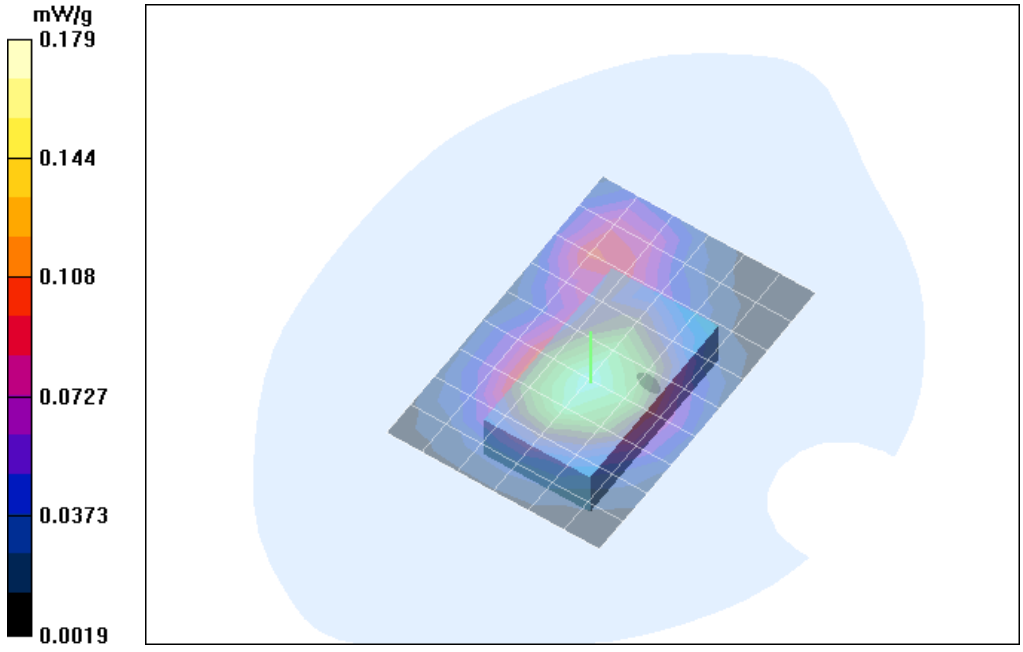

Fig. 18: SAR distribution for PCS 1900, channel 661, body worn configuration, battery towards the ground, with headset (12.02.2004; Ambient Temperature: 20.0° C; Liquid Temperature : 19.6° C).

4 SAR Distribution Plots, PCS 1900 Body with datacable

Test Laboratory: IMST; File Name: 976phm_1.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976
Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: Body1900 MHz (σ = 1.54 mho/m, ε_r = 51.4, ρ = 1000 kg/m^3)
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 (7x10x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 15.3 V/m
Power Drift = -0.08 dB
Maximum value of SAR = 0.364 mW/g
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.516 W/kg
SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.235 mW/g
Reference Value = 15.3 V/m
Power Drift = -0.08 dB
Maximum value of SAR = 0.384 mW/g
Unnamed procedure/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.444 W/kg
SAR(1 g) = 0.305 mW/g; SAR(10 g) = 0.177 mW/g
Reference Value = 15.3 V/m
Power Drift = -0.08 dB
Maximum value of SAR = 0.351 mW/g

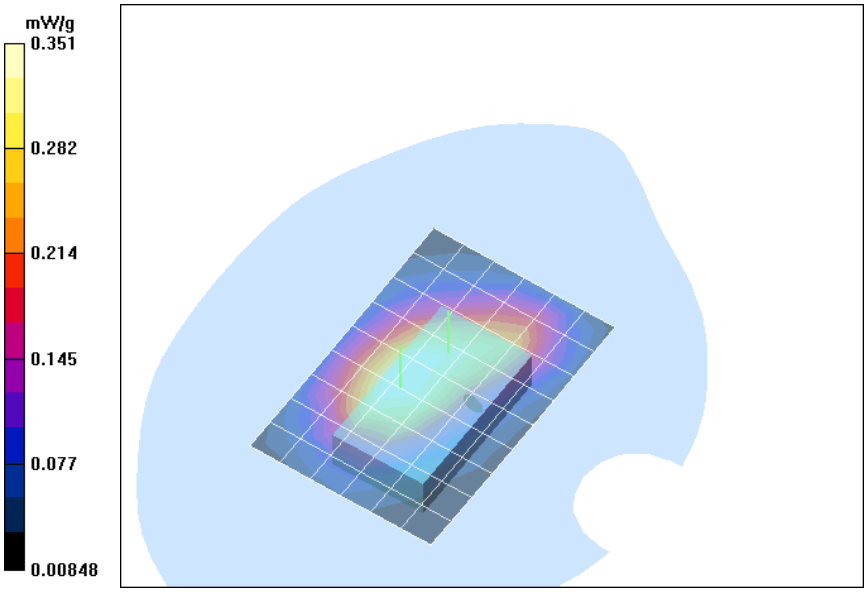

Fig. 19: SAR distribution for PCS 1900, channel 661, body worn configuration, battery towards the phantom, with data cable, 2TX (12.02.2004; Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).

Test Laboratory: IMST; File Name: 976phm_2.da4

DUT: Siemens; Type: CF62 FCC; Serial: 004999003098976

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

Medium: Body1900 MHz (σ = 1.54 mho/m, ε_r = 51.4, ρ = 1000 kg/m^3)

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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 12.9 V/m

Power Drift = 0.15 dB

Maximum value of SAR = 0.229 mW/g

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

Peak SAR (extrapolated) = 0.419 W/kg

SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.145 mW/g

Reference Value = 12.9 V/m

Power Drift = 0.15 dB

Maximum value of SAR = 0.264 mW/g

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

Peak SAR (extrapolated) = 0.311 W/kg

SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.114 mW/g

Reference Value = 12.9 V/m

Power Drift = 0.15 dB

Maximum value of SAR = 0.196 mW/g

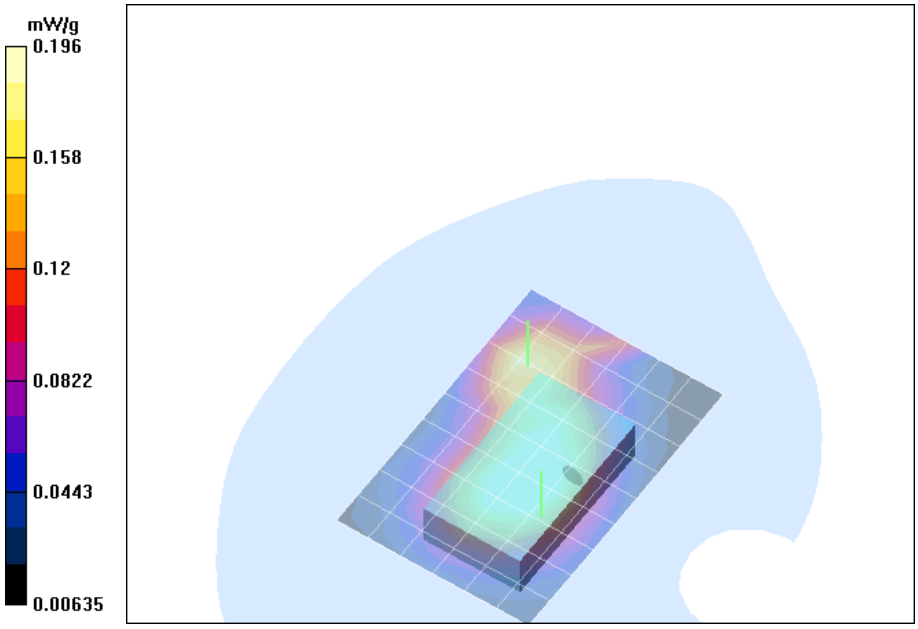

Fig. 20: SAR distribution for PCS 1900, channel 661, body worn configuration, battery towards the ground, with data cable, 2TX (12.02.2004; Ambient Temperature: 20.0° C; Liquid Temperature : 19.6° C).

5 SAR z-axis scans (Validation)

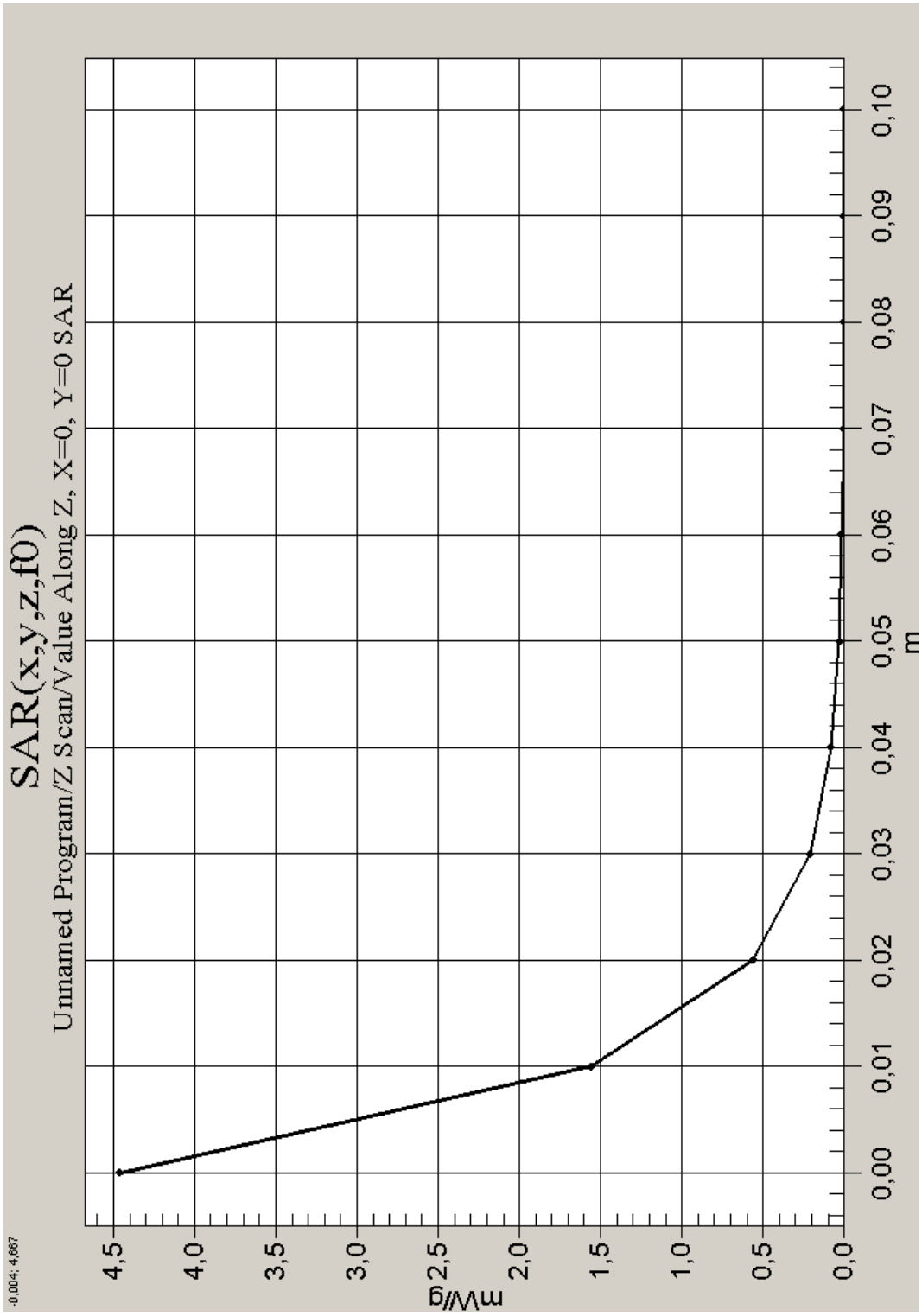

Fig. 21: SAR versus liquid depth, 1900 MHz, head (10.02.2004; Ambient Temperature: 19.8° C; Liquid Temperature : 19.5° C).

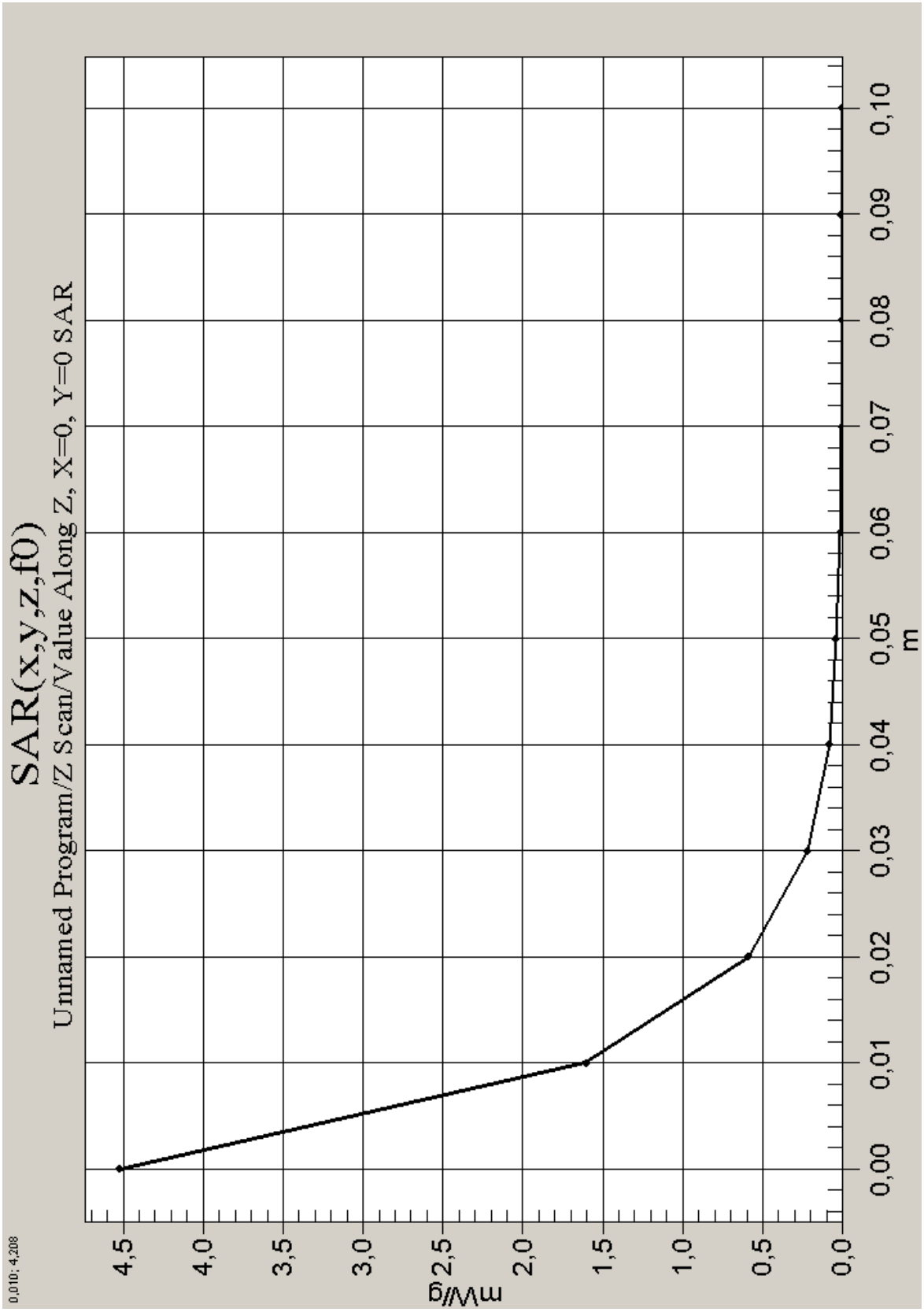

Fig. 22: SAR versus liquid depth, 1900 MHz, body (12.02.2004; Ambient Temperature: 19.8° C; Liquid Temperature : 19.5° C).

6 SAR z-axis scans (Measurements)

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

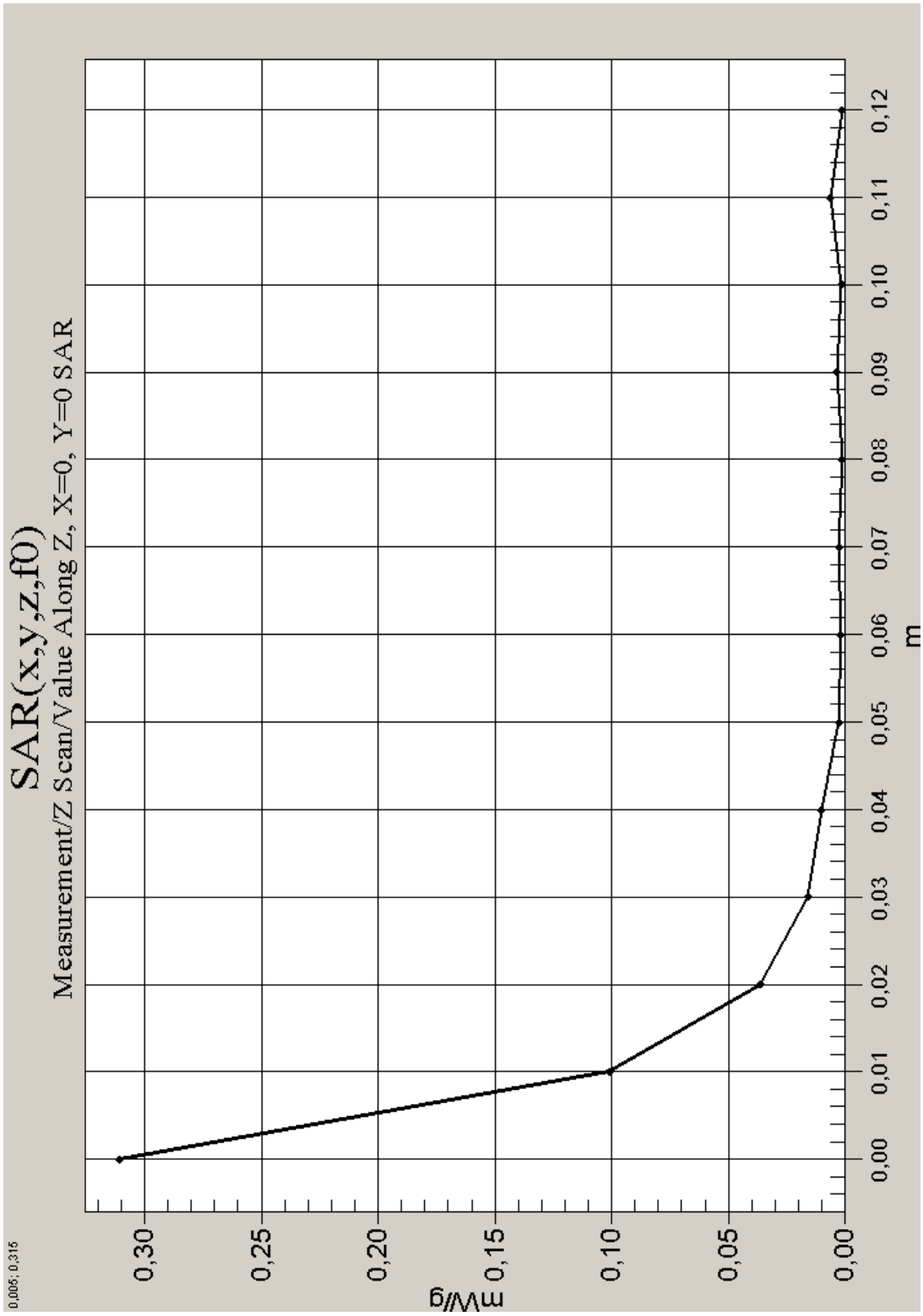

Fig. 23: SAR versus liquid depth, head: with QuickPic camera , PCS 1900, channel 512, cheek position, right side of head. (10.02.2004, Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).

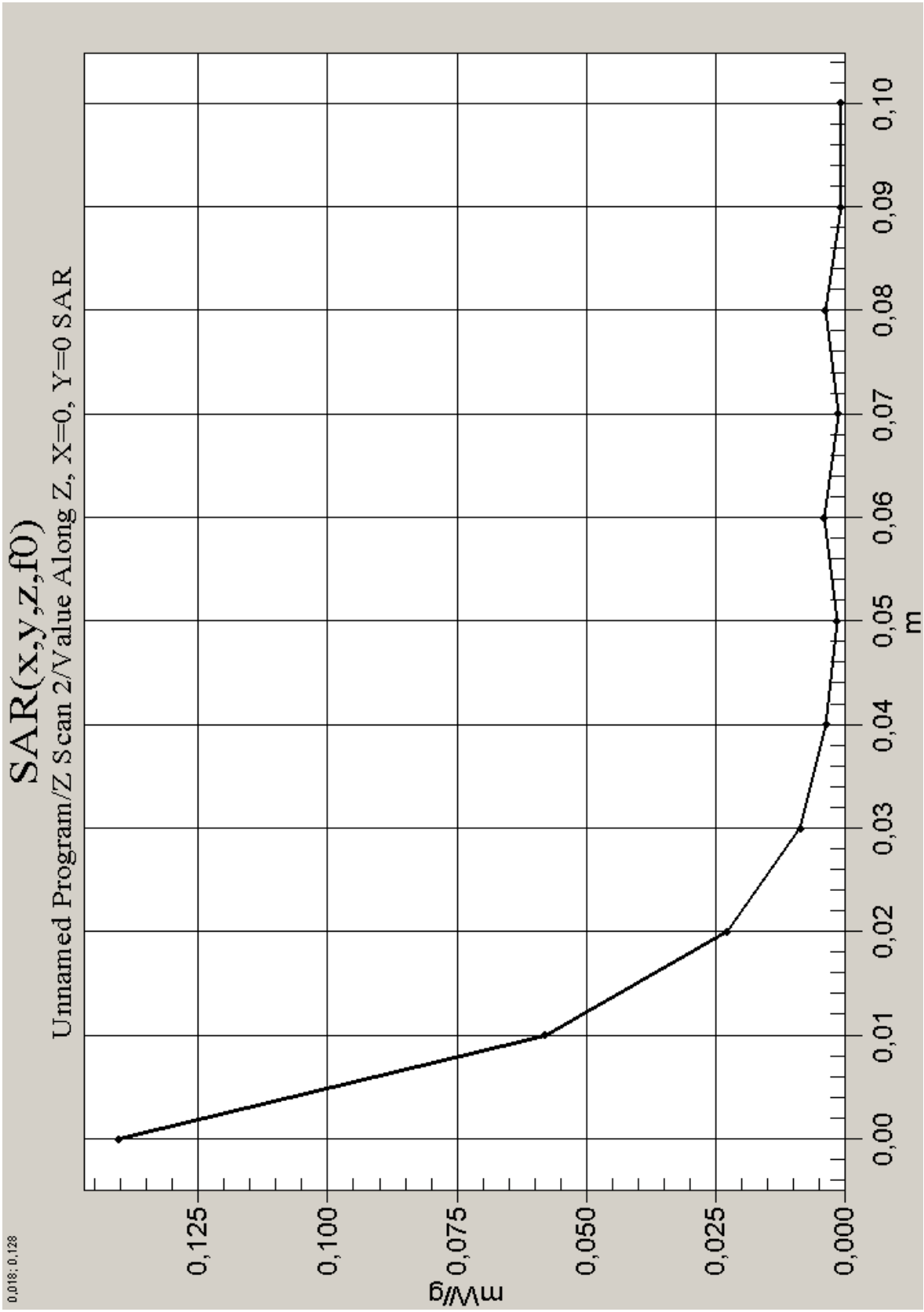

Fig. 24: SAR versus liquid depth: PCS 1900, channel 661, body worn configuration, battery towards the phantom, data cable, 2TX (12.02.2004, Ambient Temperature: 19.9° C; Liquid Temperature : 19.5° C).