
Appendix for the Report

Dosimetric Assessment of the Siemens CX70E (FCC ID: PWX-CX70E) According to the FCC Requirements

SAR Distribution Plots

September 23, 2004
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1 SAR Distribution Plots, PCS 1900 Head without Flash

Test Laboratory: IMST GmbH; File Name: [ARCplm_1.da4](#)

DUT: Siemens; Type: CX 70E; Serial: 004999003278248

Program Name: Cheek Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 19 V/m; Power Drift = 0.035 dB

Maximum value of SAR (measured) = 0.599 mW/g

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

Reference Value = 19 V/m; Power Drift = 0.035 dB

Maximum value of SAR (measured) = 0.627 mW/g

Peak SAR (extrapolated) = 0.953 W/kg

SAR(1 g) = 0.578 mW/g; SAR(10 g) = 0.333 mW/g

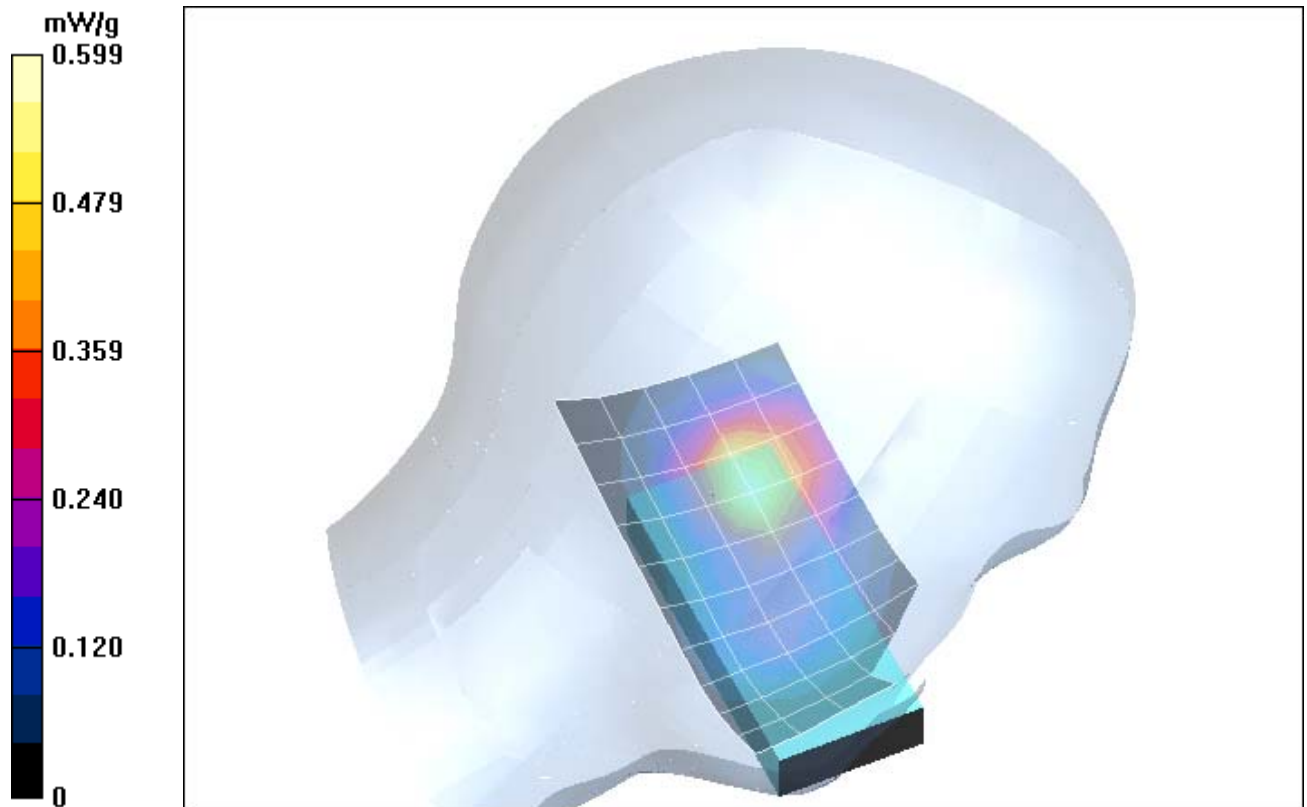


Fig. 1: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, ARC. (16.09.2004; Ambient Temperature: 20.7° C; Liquid Temperature: 20.0° C).

Test Laboratory: IMST GmbH; **File Name:** [ARCplm_2.da4](#)

DUT: Siemens; **Type:** CX 70E; **Serial:** 004999003278248

Program Name: Tilted Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Tilted Left/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 23 V/m; Power Drift = -0.059 dB

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

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

Reference Value = 23 V/m; Power Drift = -0.059 dB

Maximum value of SAR (measured) = 0.737 mW/g

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.666 mW/g; SAR(10 g) = 0.380 mW/g

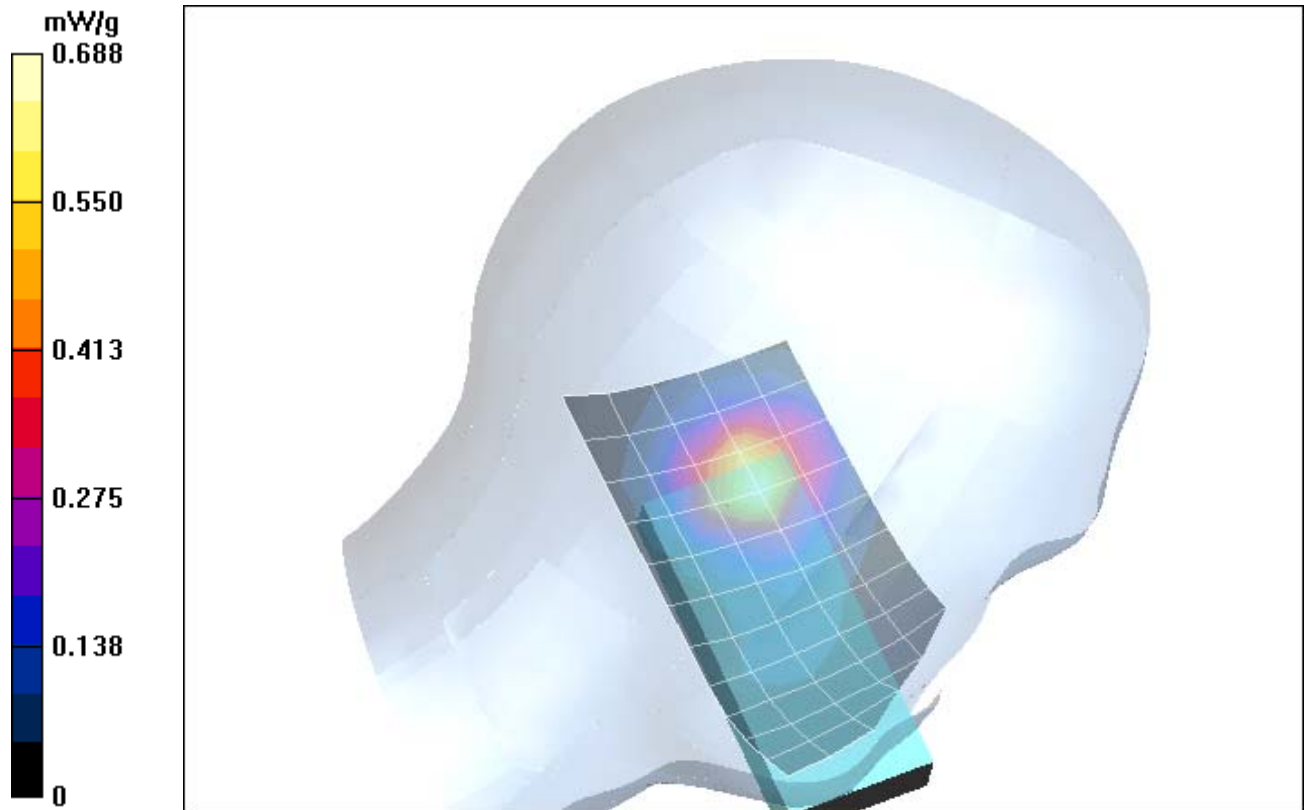


Fig. 2: SAR distribution for PCS 1900, channel 661, tilted position, left side of head, ARC. (16.09.2004; Ambient Temperature: 20.8° C; Liquid Temperature: 20.1° C).

Test Laboratory: IMST GmbH; File Name: [ARCprm_1.da4](#)

DUT: Siemens; Type: CX 70E; Serial: 004999003278248

Program Name: Cheek Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 19.8 V/m; Power Drift = -0.029 dB

Maximum value of SAR (measured) = 0.455 mW/g

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

Reference Value = 19.8 V/m; Power Drift = -0.029 dB

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

Peak SAR (extrapolated) = 0.683 W/kg

SAR(1 g) = 0.453 mW/g; SAR(10 g) = 0.276 mW/g

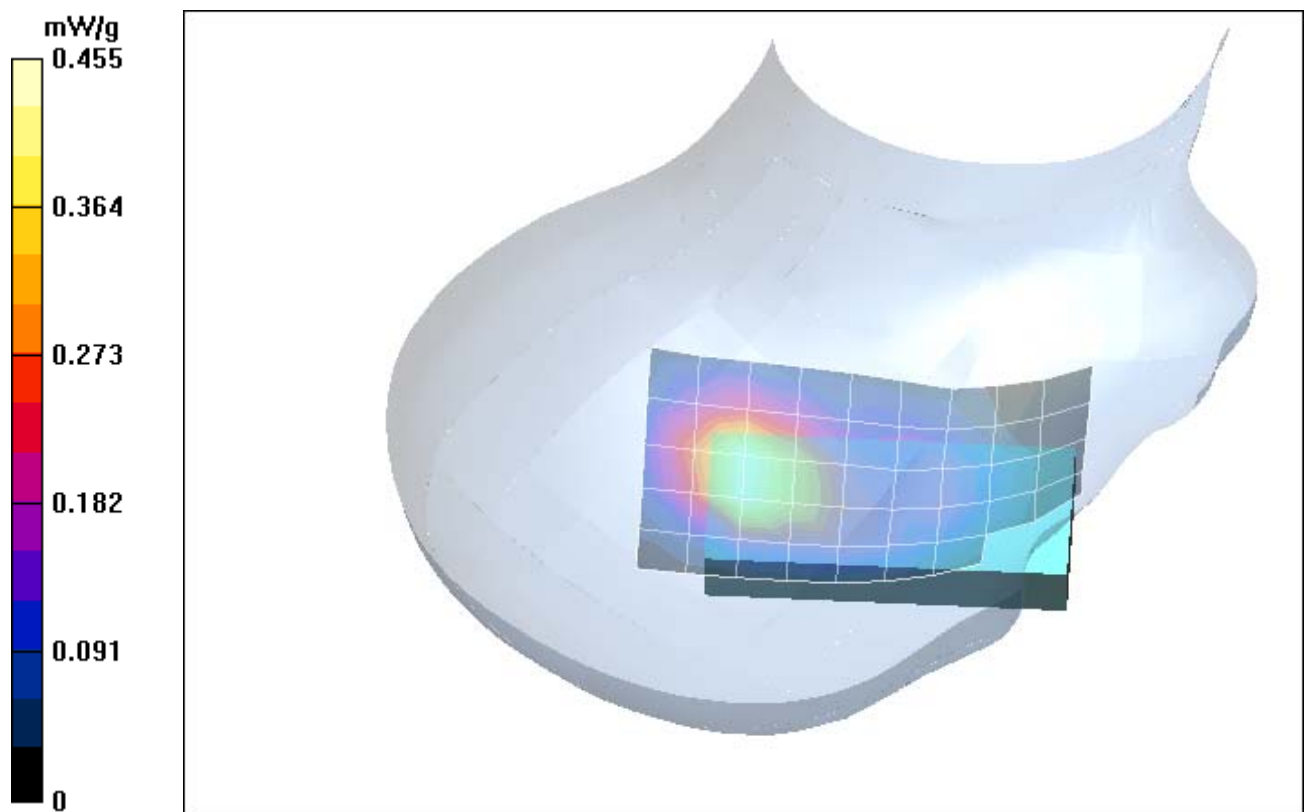


Fig. 3: SAR distribution for PCS 1900, channel 661, cheek position, right side of head, ARC. (16.09.2004; Ambient Temperature: 20.6° C; Liquid Temperature: 20.0° C).

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

DUT: Siemens; **Type:** CX 70E; **Serial:** 004999003278248

Program Name: Tilted Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Tilted Right/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 20.9 V/m; Power Drift = 0.040 dB

Maximum value of SAR (measured) = 0.486 mW/g

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

Reference Value = 20.9 V/m; Power Drift = 0.040 dB

Maximum value of SAR (measured) = 0.589 mW/g

Peak SAR (extrapolated) = 0.816 W/kg

SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.310 mW/g

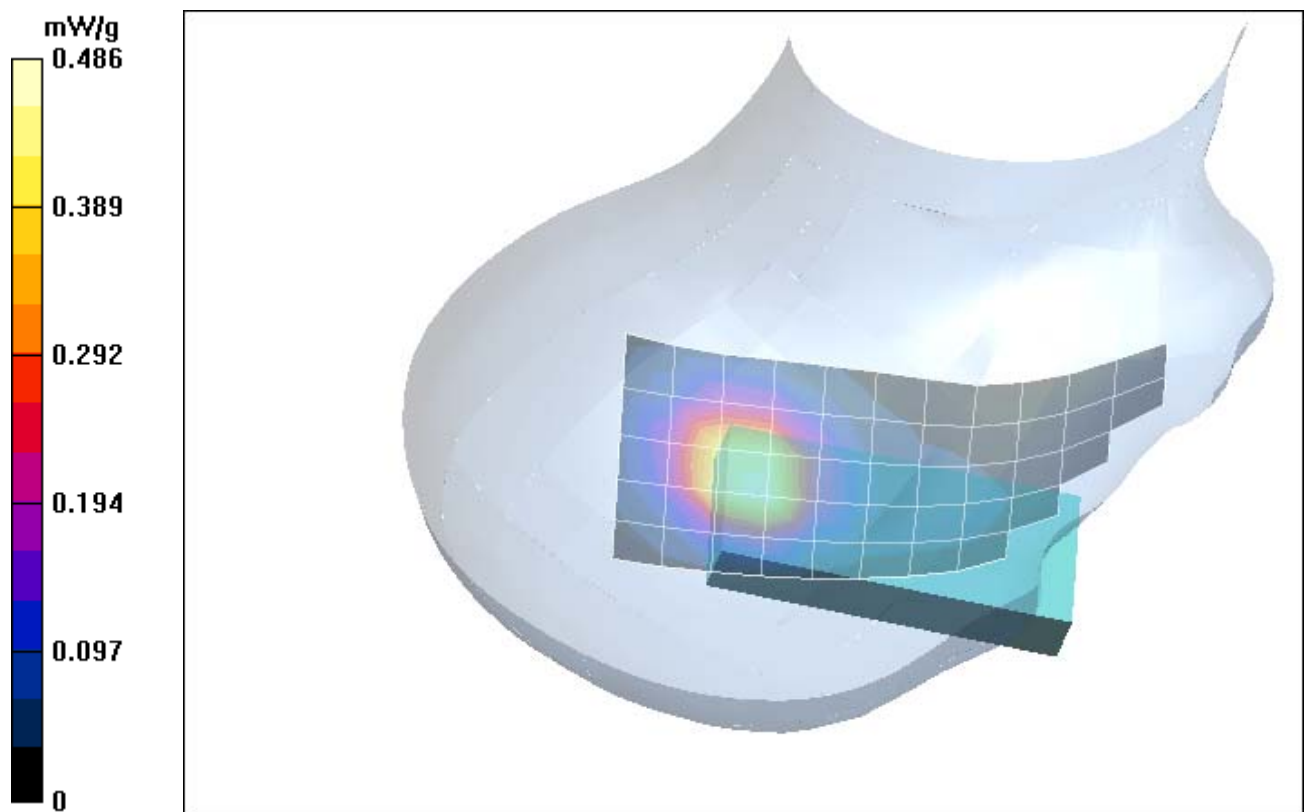


Fig. 4: SAR distribution for PCS 1900, channel 661, tilted position, right side of head, ARC. (16.09.2004; Ambient Temperature: 20.8° C; Liquid Temperature: 20.0° C).

Test Laboratory: IMST GmbH; **File Name:** [Actplm_1.da4](#)

DUT: Siemens; **Type:** CX 70E; **Serial:** 004999003278248

Program Name: Cheek Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 18.4 V/m; Power Drift = -0.035 dB

Maximum value of SAR (measured) = 0.579 mW/g

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

Reference Value = 18.4 V/m; Power Drift = -0.035 dB

Maximum value of SAR (measured) = 0.594 mW/g

Peak SAR (extrapolated) = 0.889 W/kg

SAR(1 g) = 0.550 mW/g; SAR(10 g) = 0.320 mW/g

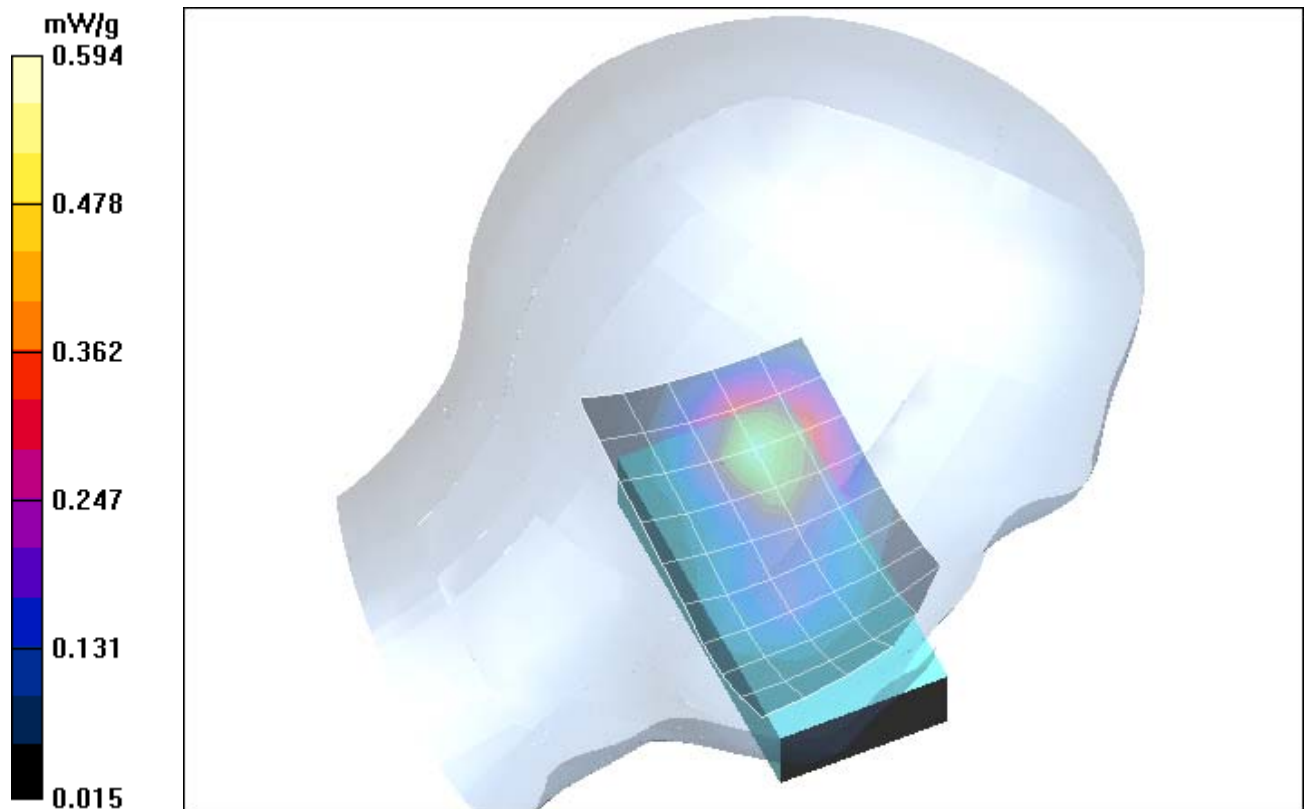


Fig. 5: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, Active. (16.09.2004; Ambient Temperature: 20.6° C; Liquid Temperature: 20.0° C).

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

DUT: Siemens; **Type:** CX 70E; **Serial:** 004999003278248

Program Name: Tilted Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 123

Tilted Left/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.608 mW/g

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

Reference Value = 21.1 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.933 W/kg

SAR(1 g) = 0.581 mW/g; SAR(10 g) = 0.332 mW/g

Maximum value of SAR (measured) = 0.634 mW/g

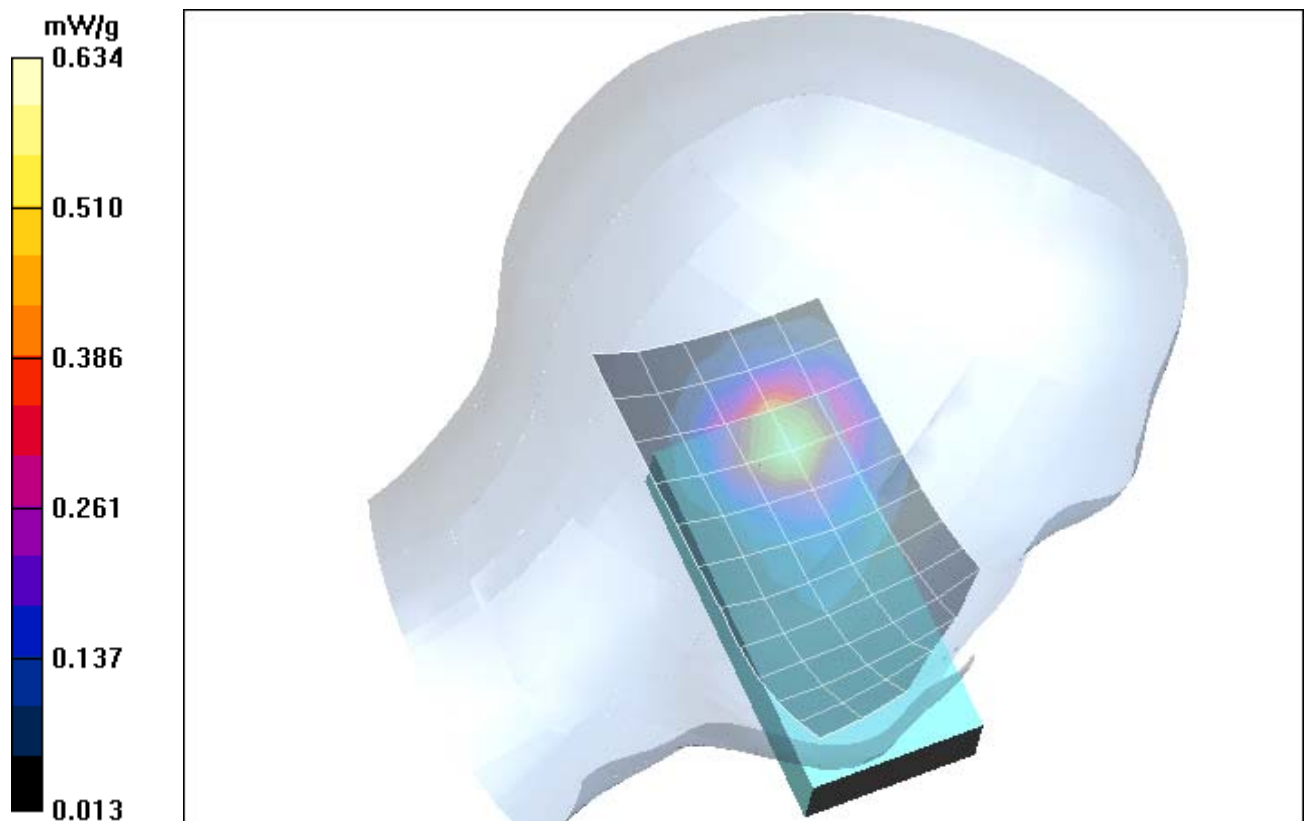


Fig. 6: SAR distribution for PCS 1900, channel 661, tilted position, left side of head, Active. (16.09.2004; Ambient Temperature: 20.7° C; Liquid Temperature: 19.9° C).

Test Laboratory: IMST GmbH; **File Name:** [Actprm_1.da4](#)

DUT: Siemens; **Type:** CX 70E; **Serial:** 004999003278248

Program Name: Cheek Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 19.6 V/m; Power Drift = -0.031 dB

Maximum value of SAR (measured) = 0.472 mW/g

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

Reference Value = 19.6 V/m; Power Drift = -0.031 dB

Maximum value of SAR (measured) = 0.525 mW/g

Peak SAR (extrapolated) = 0.725 W/kg

SAR(1 g) = 0.478 mW/g; SAR(10 g) = 0.290 mW/g

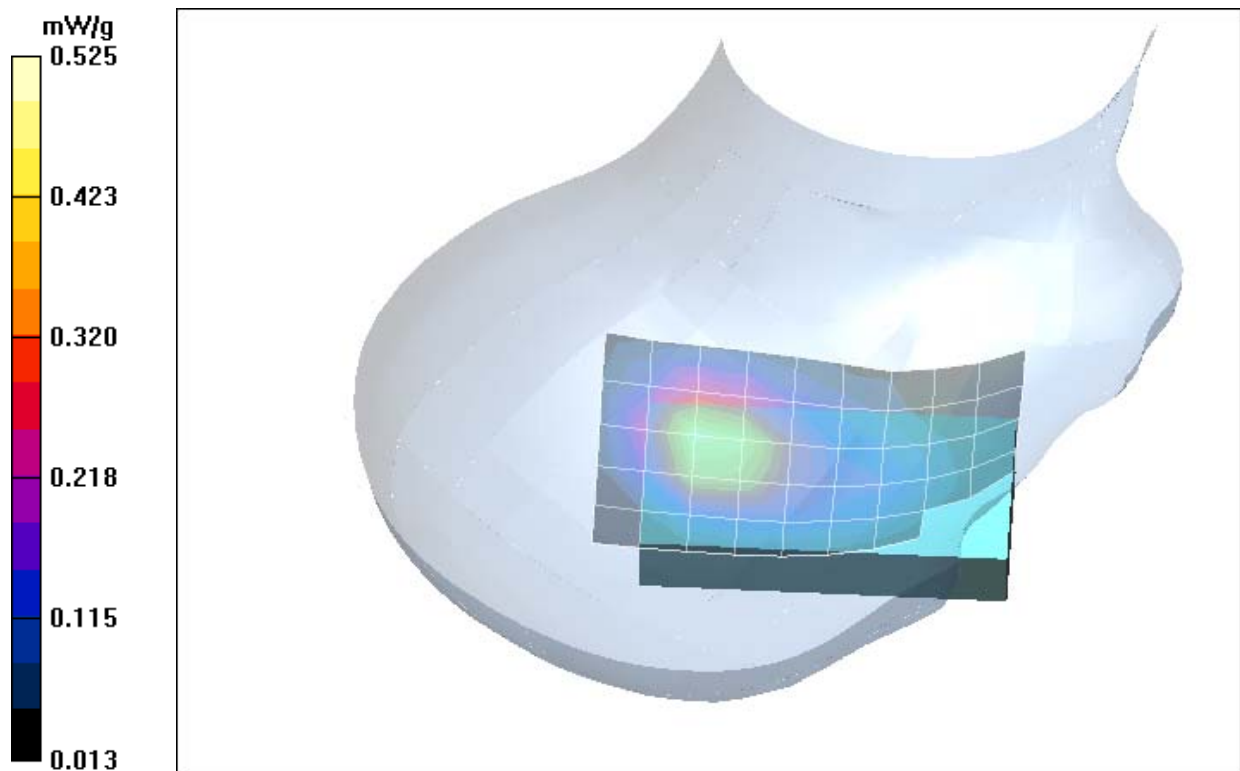


Fig. 7: SAR distribution for PCS 1900, channel 661, cheek position, right side of head, Active. (16.09.2004; Ambient Temperature: 20.8° C; Liquid Temperature: 19.9° C).

Test Laboratory: IMST GmbH; **File Name:** [Actprm_2.da4](#)

DUT: Siemens; **Type:** CX 70E; **Serial:** 004999003278248

Program Name: Tilted Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Tilted Right/Area Scan (6x12x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Reference Value = 20.2 V/m; Power Drift = 0.009 dB

Maximum value of SAR (measured) = 0.453 mW/g

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

Reference Value = 20.2 V/m; Power Drift = 0.009 dB

Maximum value of SAR (measured) = 0.511 mW/g

Peak SAR (extrapolated) = 0.723 W/kg

SAR(1 g) = 0.466 mW/g; SAR(10 g) = 0.274 mW/g

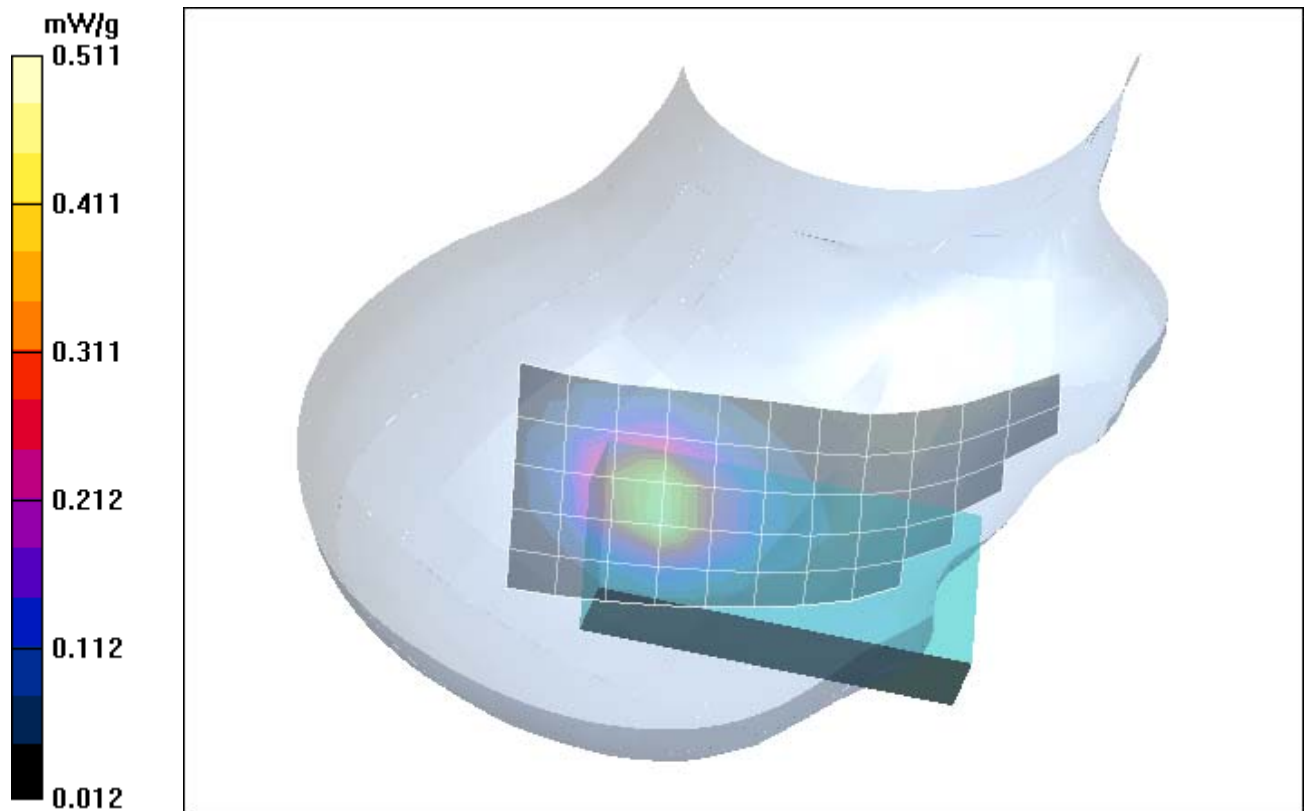


Fig. 8: SAR distribution for PCS 1900, channel 661, tilted position, right side of head, Active. (16.09.2004; Ambient Temperature: 20.8° C; Liquid Temperature: 20.0° C).

2 SAR Distribution Plots, PCS 1900 Head with Flash

Test Laboratory: IMST GmbH; File Name: [ARCP1m_1_flash.da4](#)

DUT: Siemens; Type: CX 70E ARC. + Flash; Serial: 004999003278248

Program Name: Cheek Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 18.2 V/m; Power Drift = -0.074 dB

Maximum value of SAR (measured) = 0.536 mW/g

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

Reference Value = 18.2 V/m; Power Drift = -0.074 dB

Maximum value of SAR (measured) = 0.568 mW/g

Peak SAR (extrapolated) = 0.845 W/kg

SAR(1 g) = 0.515 mW/g; SAR(10 g) = 0.300 mW/g

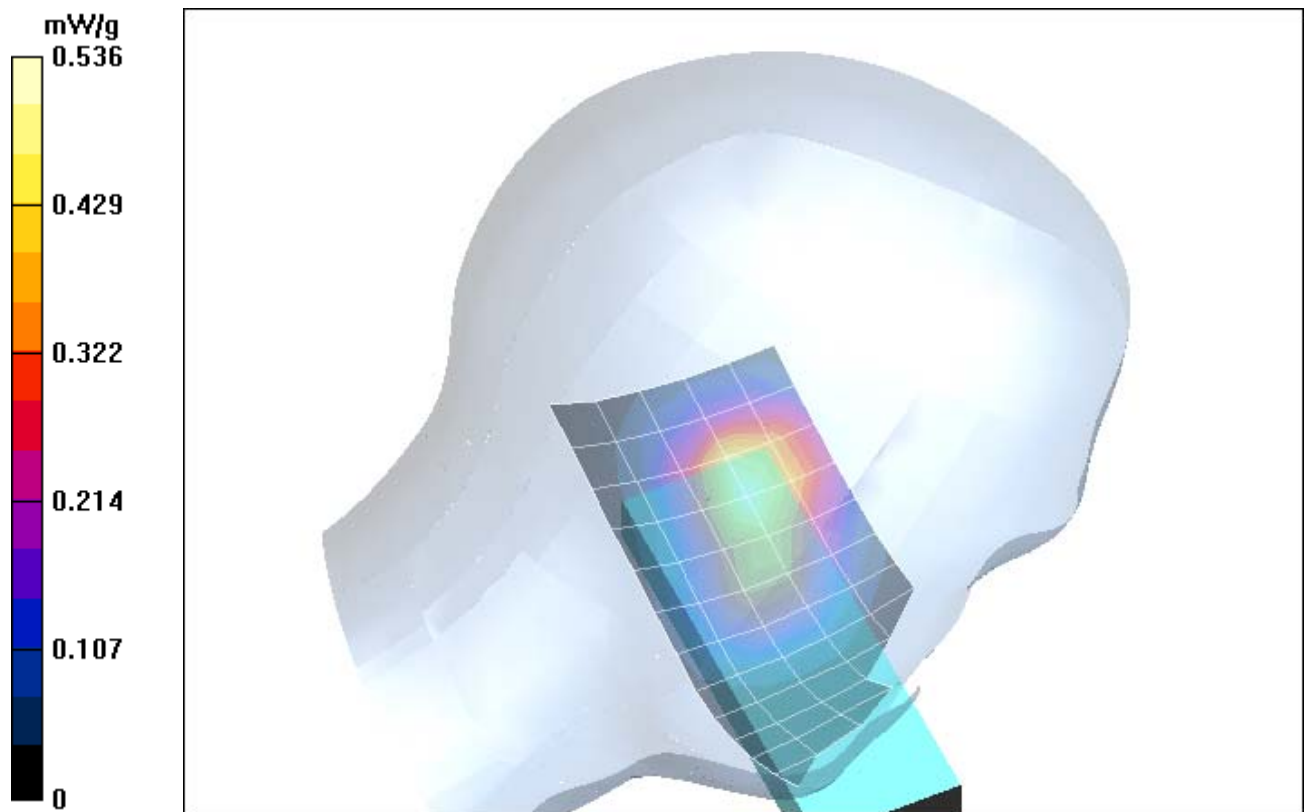


Fig. 9: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, ARC. (16.09.2004; Ambient Temperature: 21.3° C; Liquid Temperature : 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [ARCplm_2_flash.da4](#)

DUT: Siemens; **Type:** CX 70E ARC. + Flash; **Serial:** 004999003278248

Program Name: Tilted Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 20 V/m; Power Drift = -0.129 dB

Maximum value of SAR (measured) = 0.522 mW/g

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

Reference Value = 20 V/m; Power Drift = -0.129 dB

Maximum value of SAR (measured) = 0.619 mW/g

Peak SAR (extrapolated) = 0.930 W/kg

SAR(1 g) = 0.551 mW/g; SAR(10 g) = 0.312 mW/g

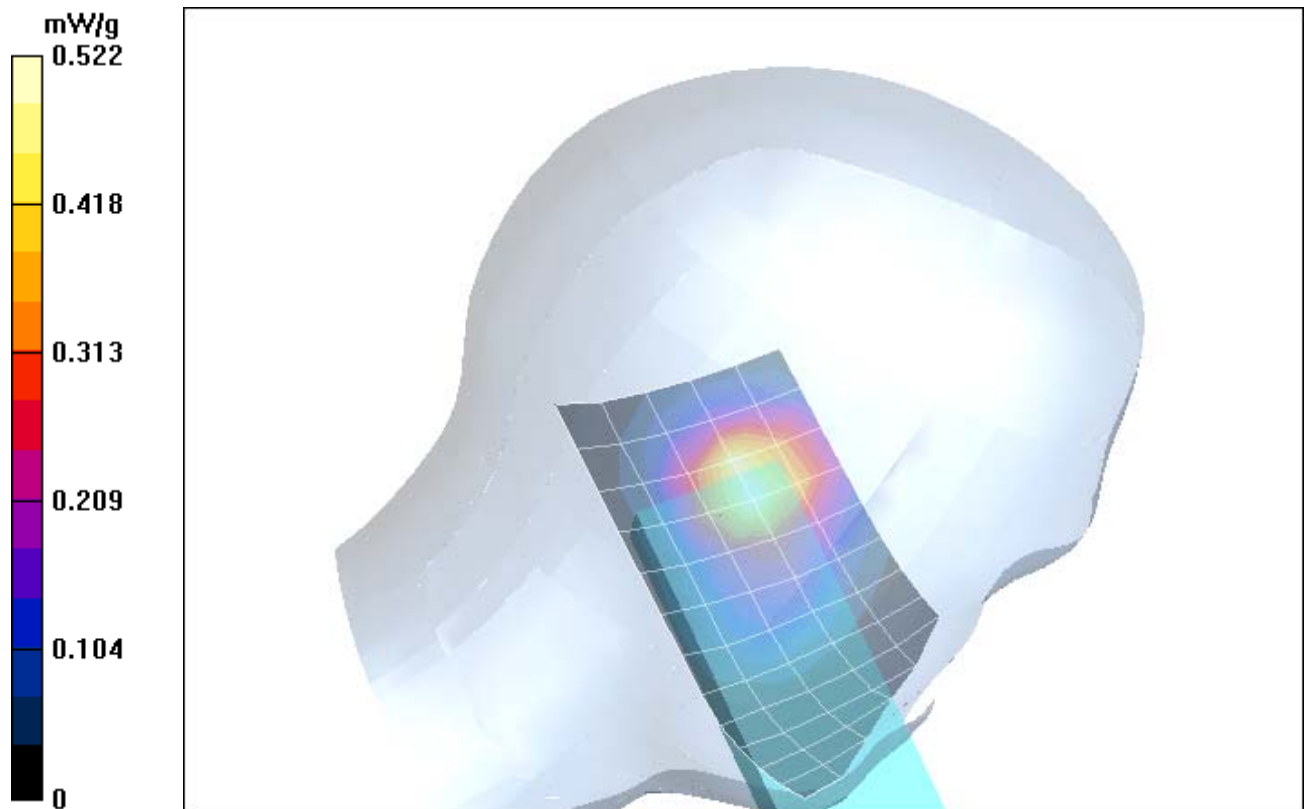


Fig. 10: SAR distribution for PCS 1900, channel 661, tilted position, left side of head, ARC. (16.09.2004; Ambient Temperature: 21.2° C; Liquid Temperature : 20.0° C).

Test Laboratory: IMST GmbH; **File Name:** [ARCprm_1_flash.da4](#)

DUT: Siemens; **Type:** CX 70E ARC. + Flash; **Serial:** 004999003278248

Program Name: Cheek Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004

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

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

- Phantom: SAM Glycol; Type: Speag; Serial: 1176

- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 19.3 V/m; Power Drift = -0.122 dB

Maximum value of SAR (measured) = 0.396 mW/g

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

Reference Value = 19.3 V/m; Power Drift = -0.122 dB

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

Peak SAR (extrapolated) = 0.655 W/kg

SAR(1 g) = 0.430 mW/g; SAR(10 g) = 0.264 mW/g

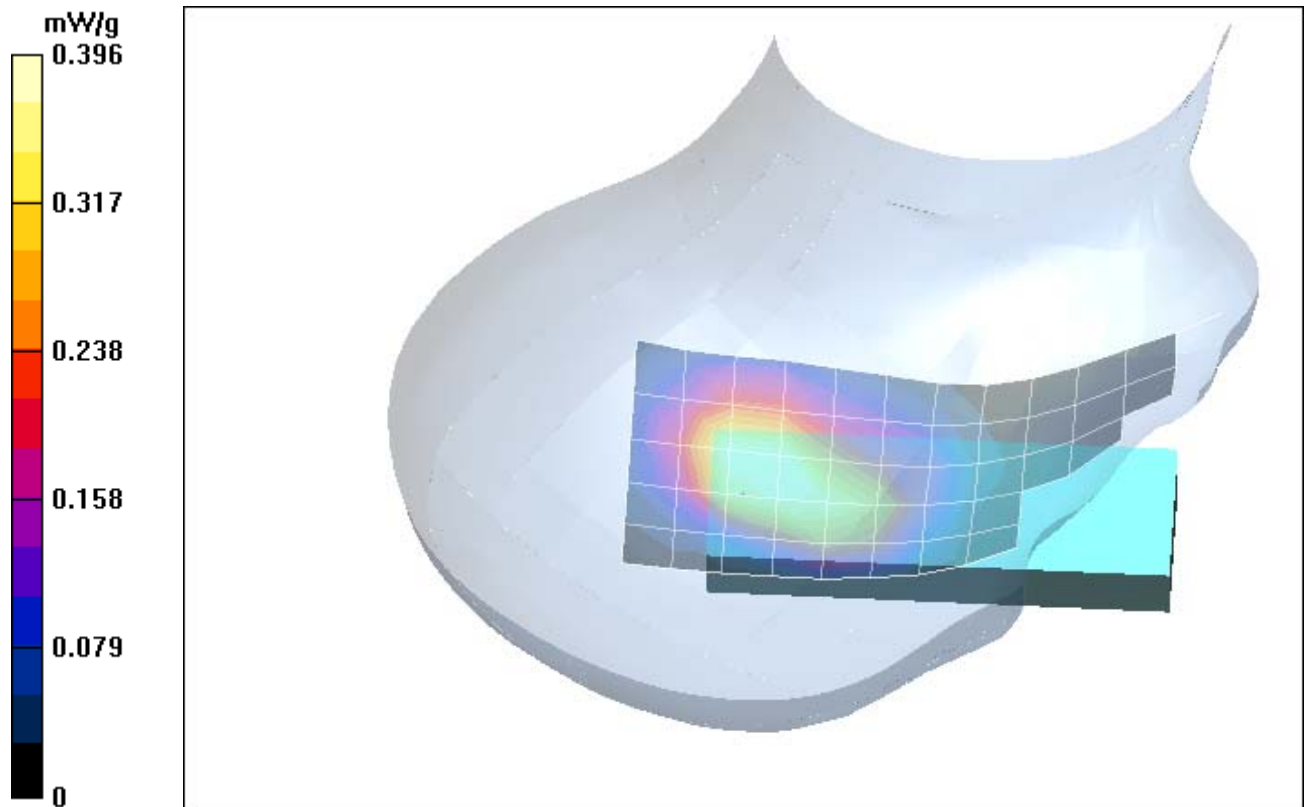


Fig. 11: SAR distribution for PCS 1900, channel 661, cheek position, right side of head, ARC. (16.09.2004; Ambient Temperature: 21.1° C; Liquid Temperature : 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [ARCprm_2_flash.da4](#)

DUT: Siemens; **Type:** CX 70E ARC. + Flash; **Serial:** 004999003278248

Program Name: Tilted Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 19.2 V/m; Power Drift = -0.066 dB

Maximum value of SAR (measured) = 0.405 mW/g

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

Reference Value = 19.2 V/m; Power Drift = -0.066 dB

Maximum value of SAR (measured) = 0.486 mW/g

Peak SAR (extrapolated) = 0.700 W/kg

SAR(1 g) = 0.441 mW/g; SAR(10 g) = 0.259 mW/g

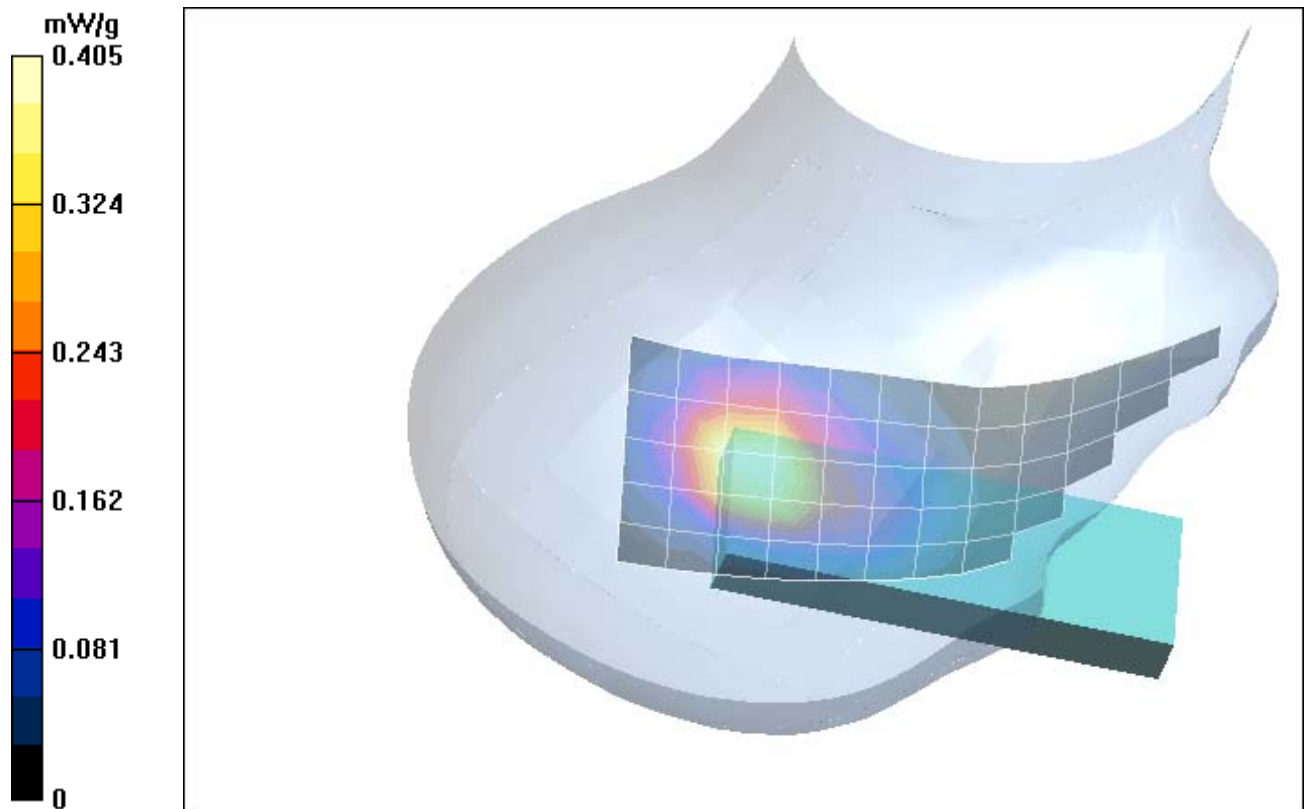


Fig. 12: SAR distribution for PCS 1900, channel 661, tilted position, right side of head, ARC. (16.09.2004; Ambient Temperature: 21.3° C; Liquid Temperature : 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [Actplm_1_flash.da4](#)

DUT: Siemens; **Type:** CX 70E + flash; **Serial:** 004999003278248

Program Name: Cheek Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 16.3 V/m; Power Drift = -0.034 dB

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

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

Reference Value = 16.3 V/m; Power Drift = -0.034 dB

Maximum value of SAR (measured) = 0.538 mW/g

Peak SAR (extrapolated) = 0.779 W/kg

SAR(1 g) = 0.486 mW/g; SAR(10 g) = 0.282 mW/g

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

Reference Value = 16.3 V/m; Power Drift = -0.034 dB

Maximum value of SAR (measured) = 0.374 mW/g

Peak SAR (extrapolated) = 0.501 W/kg

SAR(1 g) = 0.349 mW/g; SAR(10 g) = 0.228 mW/g

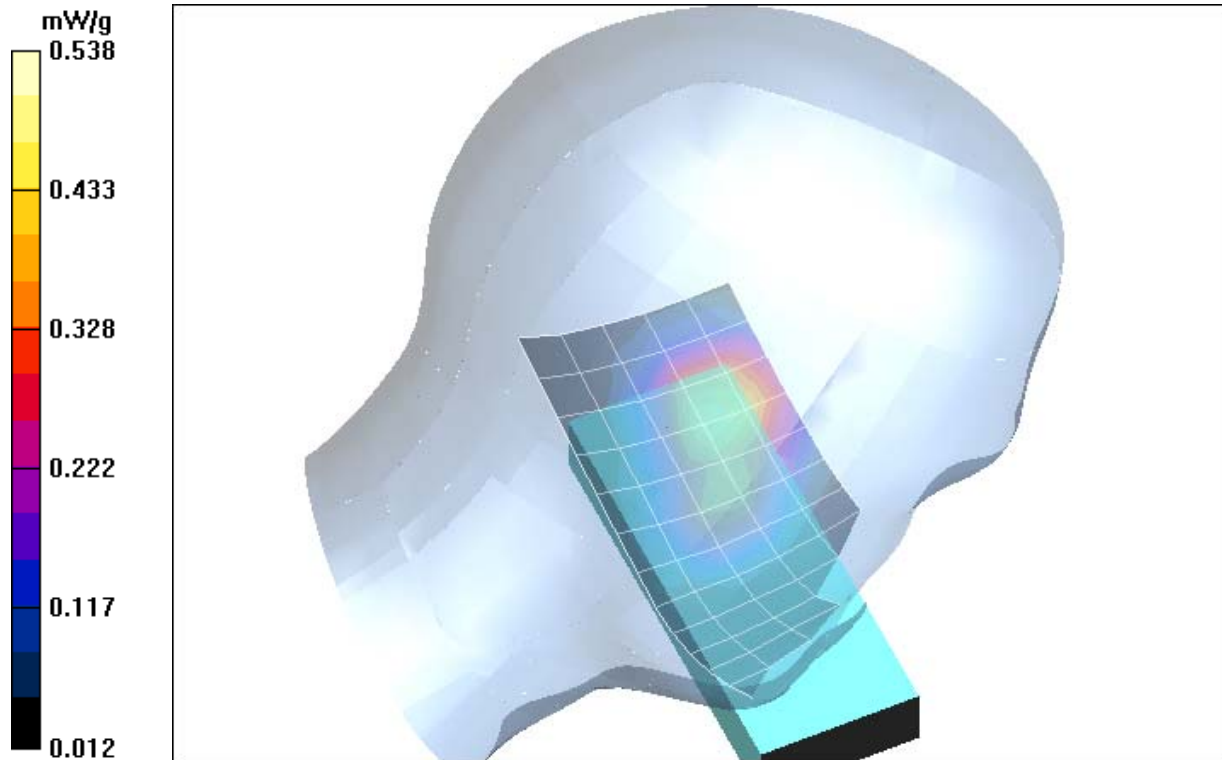


Fig. 13: SAR distribution for PCS 1900, channel 661, cheek position, left side of head, Active. (16.09.2004; Ambient Temperature: 21.3° C; Liquid Temperature : 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [Actplm_2_flash.da4](#)

DUT: Siemens; **Type:** CX 70E + flash; **Serial:** 004999003278248

Program Name: Tilted Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 17.9 V/m; Power Drift = -0.005 dB

Maximum value of SAR (measured) = 0.506 mW/g

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

Reference Value = 17.9 V/m; Power Drift = -0.005 dB

Maximum value of SAR (measured) = 0.574 mW/g

Peak SAR (extrapolated) = 0.842 W/kg

SAR(1 g) = 0.515 mW/g; SAR(10 g) = 0.295 mW/g

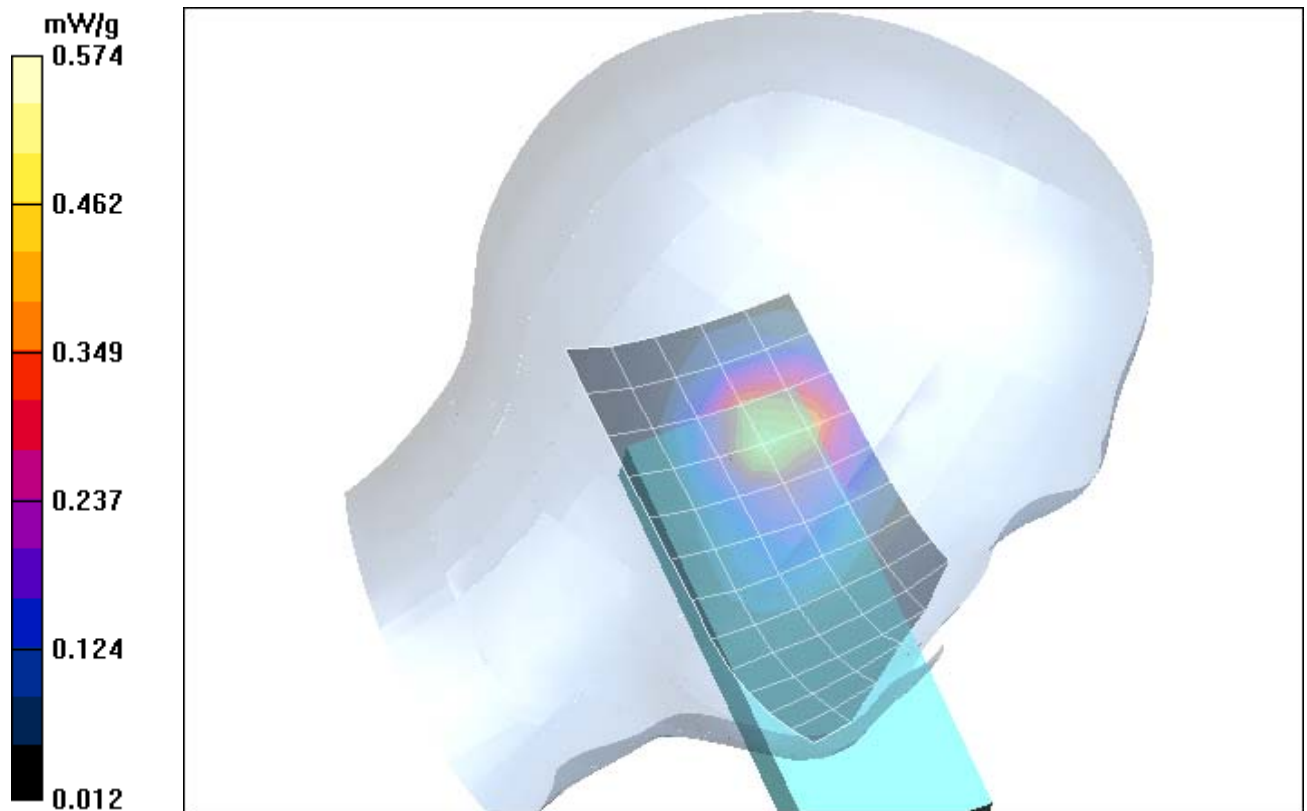


Fig. 14: SAR distribution for PCS 1900, channel 661, tilted position, left side of head Active. (16.09.2004; Ambient Temperature: 21.3° C; Liquid Temperature : 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [Actprm_1_flash.da4](#)

DUT: Siemens; **Type:** CX 70E + flash; **Serial:** 004999003278248

Program Name: Cheek Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004

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

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

- Phantom: SAM Glycol; Type: Speag; Serial: 1176

- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 18.1 V/m; Power Drift = -0.079 dB

Maximum value of SAR (measured) = 0.379 mW/g

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

Reference Value = 18.1 V/m; Power Drift = -0.079 dB

Maximum value of SAR (measured) = 0.433 mW/g

Peak SAR (extrapolated) = 0.611 W/kg

SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.245 mW/g

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

Reference Value = 18.1 V/m; Power Drift = -0.079 dB

Maximum value of SAR (measured) = 0.350 mW/g

Peak SAR (extrapolated) = 0.441 W/kg

SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.212 mW/g

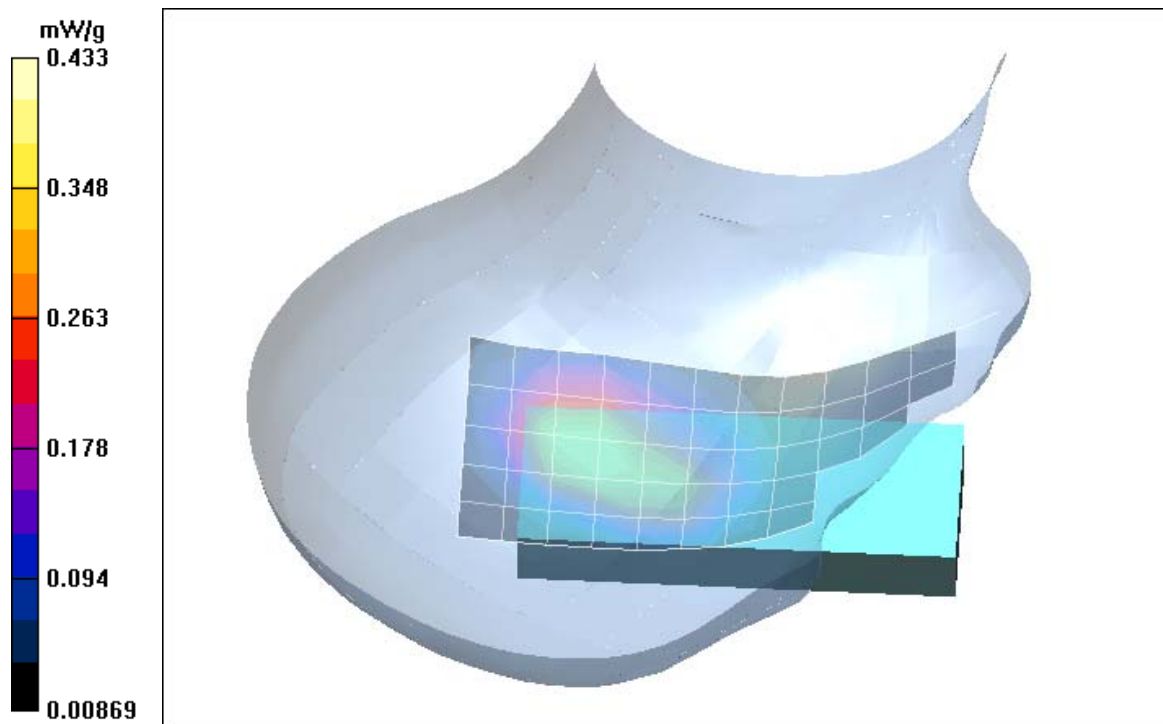


Fig. 15: SAR distribution for PCS 1900, channel 661, cheek position, right side of head Active. (16.09.2004; Ambient Temperature: 21.3° C; Liquid Temperature : 20.1° C).

Test Laboratory: IMST GmbH; File Name: [Actprm 2 flash.da4](#)

DUT: Siemens; Type: CX 70 + Flash; Serial: 004999003279147

Program Name: Tilted Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(5.19, 5.19, 5.19); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 18.7 V/m; Power Drift = -0.036 dB

Maximum value of SAR (measured) = 0.395 mW/g

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

Reference Value = 18.7 V/m; Power Drift = -0.036 dB

Maximum value of SAR (measured) = 0.447 mW/g

Peak SAR (extrapolated) = 0.646 W/kg

SAR(1 g) = 0.407 mW/g; SAR(10 g) = 0.240 mW/g

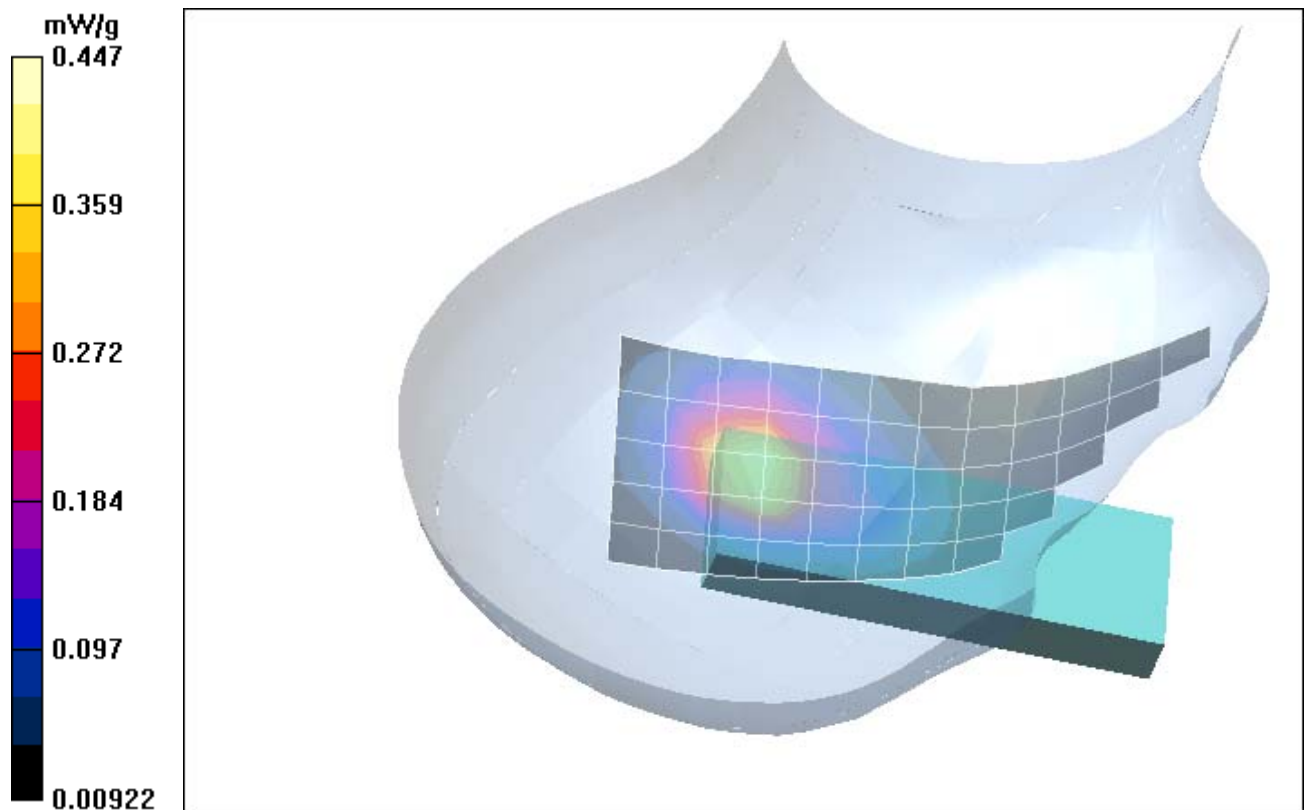


Fig. 16: SAR distribution for PCS 1900, channel 661, tilted position, right side of head Active. (16.09.2004; Ambient Temperature: 21.3° C; Liquid Temperature : 20.1° C).

3 SAR Distribution Plots, PCS 1900 Body with headset (gap = 22 mm)

Test Laboratory: IMST GmbH; File Name: [ARCphm_1.da4](#)

DUT: Siemens; Type: CX 70E; Serial: 004999003278248

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.55$; mho/m, $\epsilon_r = 51.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.57, 4.57, 4.57); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 5.62 V/m; Power Drift = 0.105 dB

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

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

Reference Value = 5.62 V/m; Power Drift = 0.105 dB

Maximum value of SAR (measured) = 0.300 mW/g

Peak SAR (extrapolated) = 0.431 W/kg

SAR(1 g) = 0.276 mW/g; SAR(10 g) = 0.166 mW/g

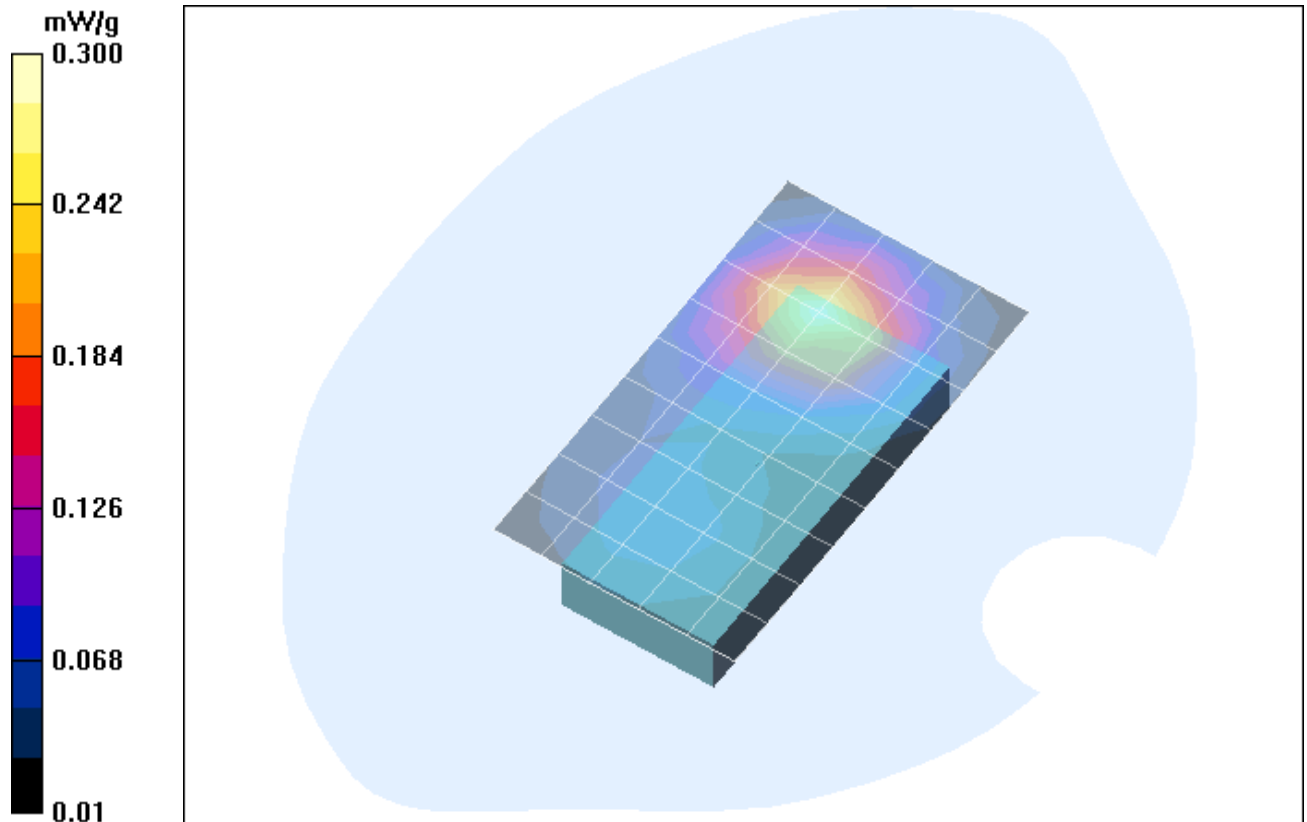


Fig. 17: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, ARC cover with headset GSM mode 1 TX (13.09.2004; Ambient Temperature: 21.7° C; Liquid Temperature : 20.7° C).

Test Laboratory: IMST GmbH; **File Name:** [Actphm_1.da4](#)

DUT: Siemens; **Type:** CX 70E; **Serial:** 004999003278248

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.55$; mho/m, $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.57, 4.57, 4.57); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 5.83 V/m; Power Drift = 0.040 dB

Maximum value of SAR (measured) = 0.158 mW/g

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

Reference Value = 5.83 V/m; Power Drift = 0.040 dB

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

Peak SAR (extrapolated) = 0.235 W/kg

SAR(1 g) = 0.150 mW/g; SAR(10 g) = 0.0925 mW/g

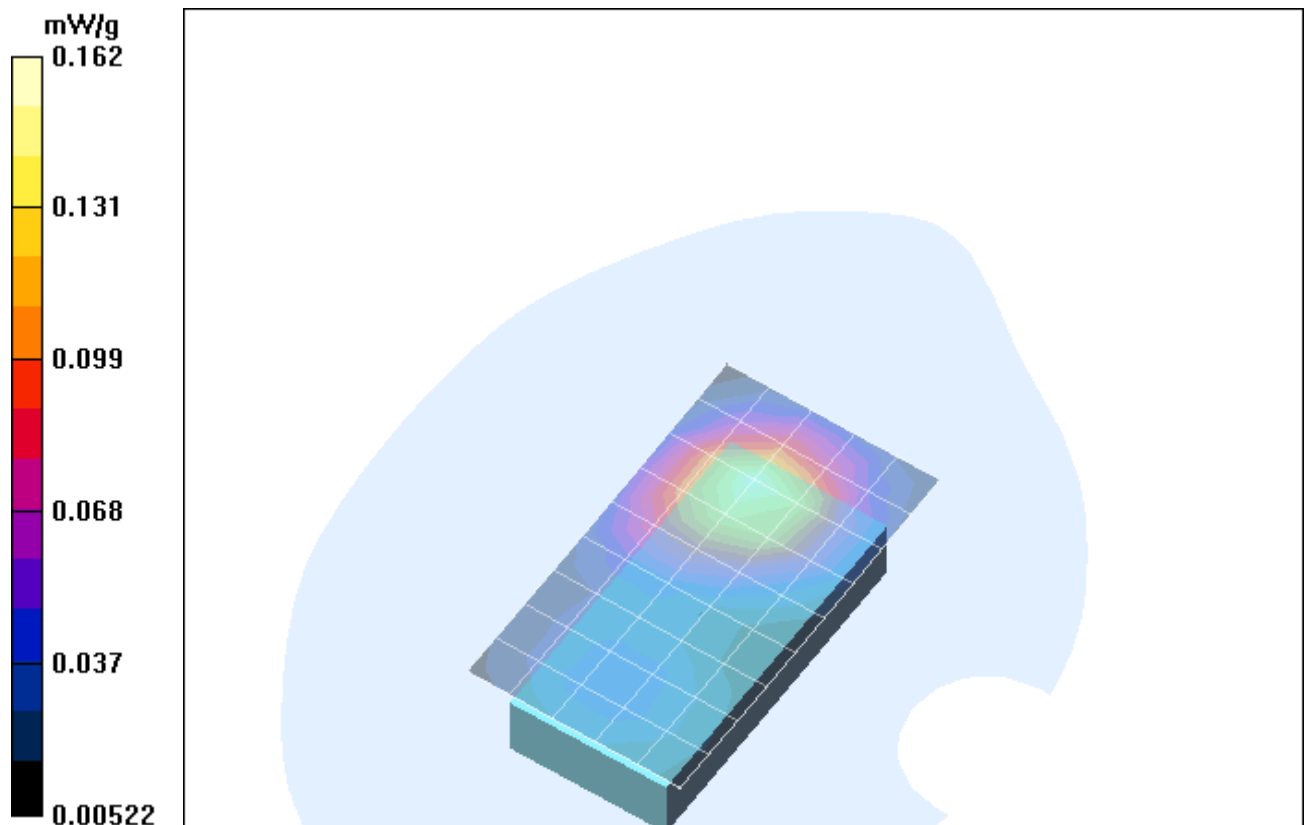


Fig. 18: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, Active cover with headset, GSM mode 1 TX (13.09.2004; Ambient Temperature: 21.8° C; Liquid Temperature : 20.7° C).

4 SAR Distribution Plots, PCS 1900 Body with data cable (gap = 22 mm)

Test Laboratory: IMST GmbH; File Name: [ARCphm_2.da4](#)

DUT: Siemens; Type: CX 70E; Serial: 004999003278248

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.55$; mho/m, $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.57, 4.57, 4.57); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 8.7 V/m; Power Drift = -0.192 dB

Maximum value of SAR (measured) = 0.697 mW/g

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

Reference Value = 8.7 V/m; Power Drift = -0.192 dB

Maximum value of SAR (measured) = 0.702 mW/g

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.377 mW/g

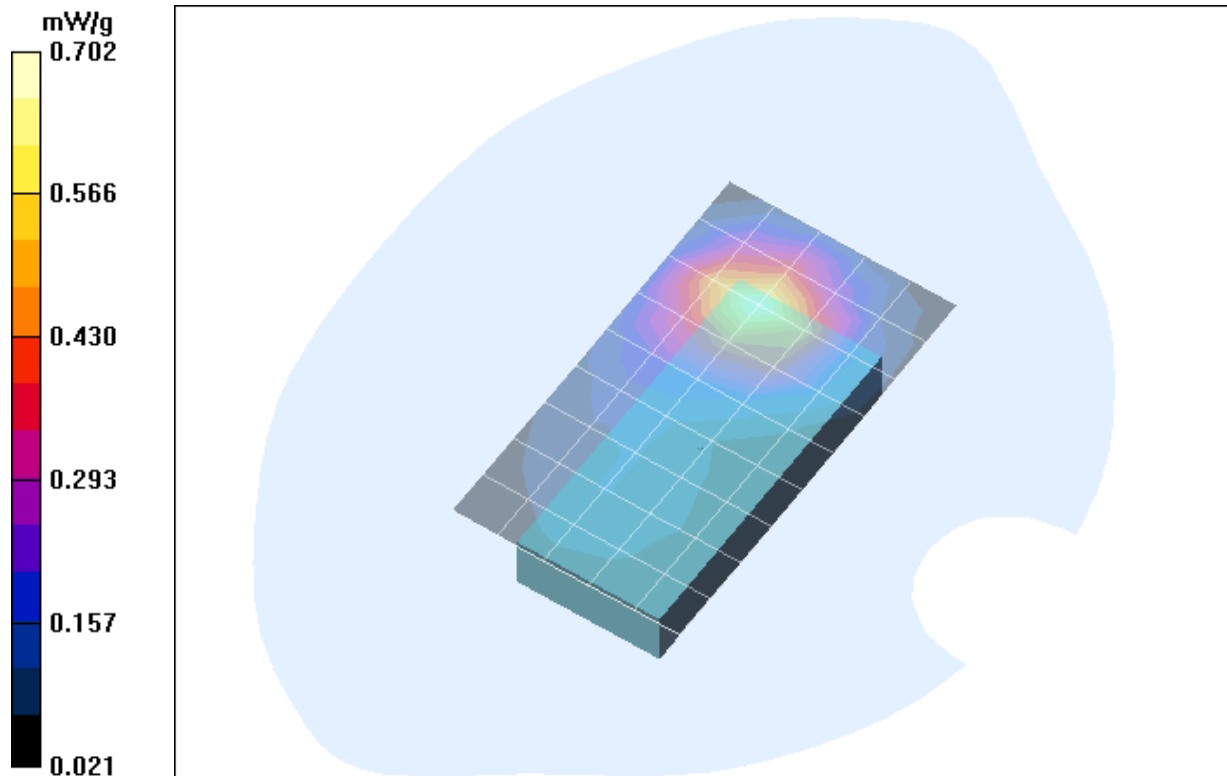


Fig. 19: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, ARC cover with data cable, GPRS mode2 TX (13.09.2004; Ambient Temperature: 21.7° C; Liquid Temperature : 20.7° C).

Test Laboratory: IMST GmbH; File Name: [Actphm_2.da4](#)

DUT: Siemens; Type: CX 70E; Serial: 004999003278248

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.55$; mho/m, $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.57, 4.57, 4.57); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 9.18 V/m; Power Drift = -0.104 dB

Maximum value of SAR (measured) = 0.289 mW/g

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

Reference Value = 9.18 V/m; Power Drift = -0.104 dB

Maximum value of SAR (measured) = 0.310 mW/g

Peak SAR (extrapolated) = 0.458 W/kg

SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.176 mW/g

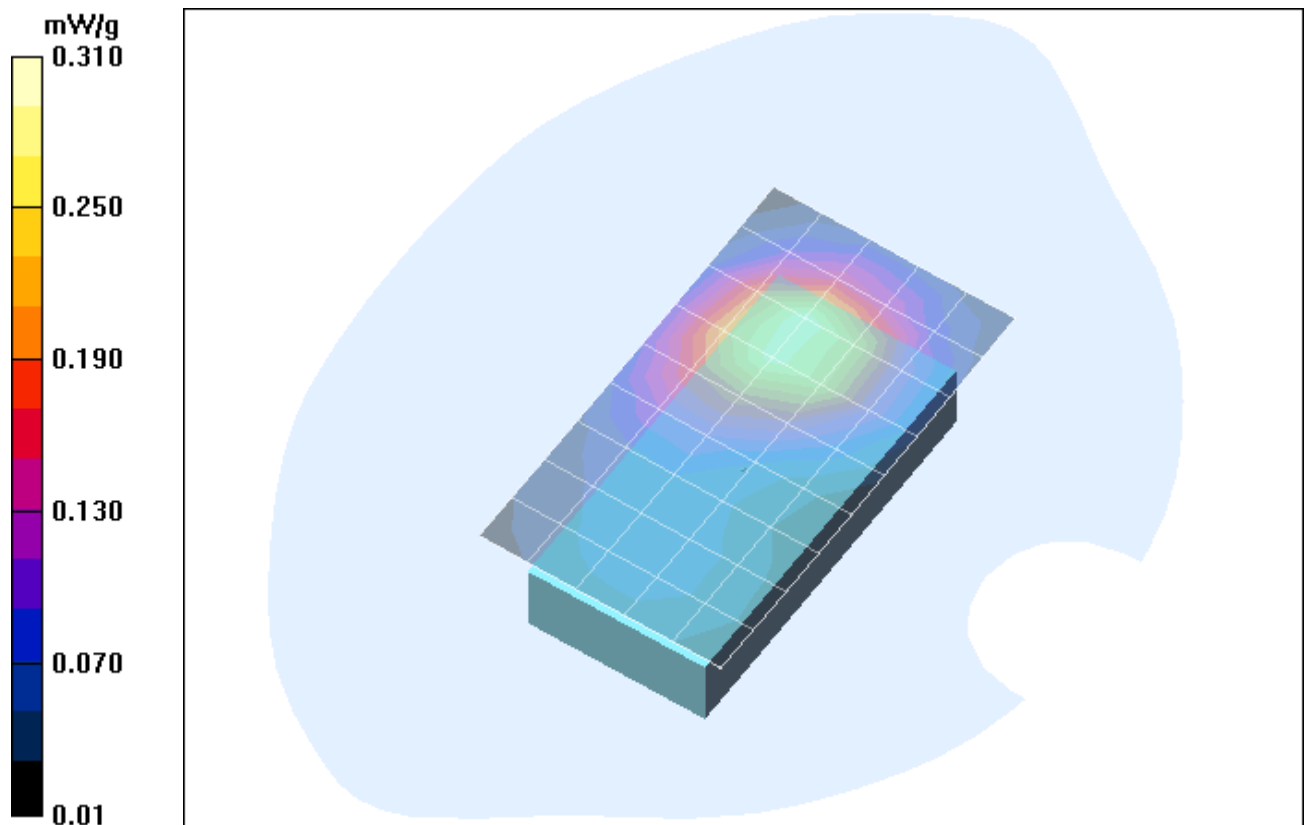


Fig. 20: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, Active cover with data cable, GPRS mode 2 TX (13.09.2004; Ambient Temperature: 21.8° C; Liquid Temperature : 20.7° C).

5 SAR Distribution Plots, PCS 1900 Body PTT mode (gap = 25 mm)

Test Laboratory: IMST GmbH; File Name: [ARCphm_3.da4](#)

DUT: Siemens; Type: CX 70E; Serial: 004999003278248

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.55$; mho/m, $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.57, 4.57, 4.57); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 6.93 V/m; Power Drift = 0.073 dB

Maximum value of SAR (measured) = 0.149 mW/g

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

Reference Value = 6.93 V/m; Power Drift = 0.073 dB

Maximum value of SAR (measured) = 0.155 mW/g

Peak SAR (extrapolated) = 0.214 W/kg

SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.094 mW/g

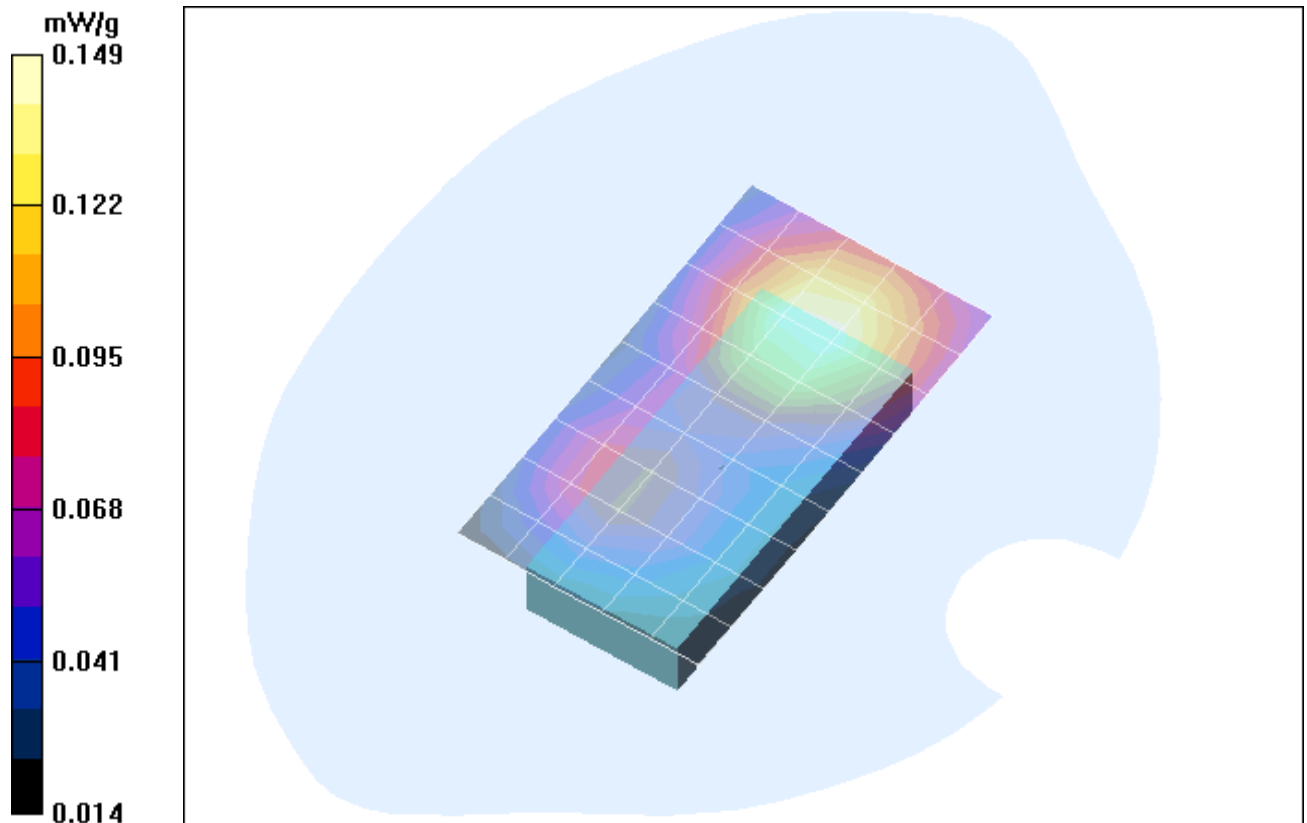


Fig. 21: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the ground, ARC cover in PTT mode, 2 TX (13.09.2004; Ambient Temperature: 21.7° C; Liquid Temperature : 20.7° C).

Test Laboratory: IMST GmbH; **File Name:** [Actphm_3.da4](#)

DUT: Siemens; **Type:** CX 70E; **Serial:** 004999003278248

Program Name: Body Worn

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

Medium parameters used: $\sigma = 1.55$; mho/m, $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.57, 4.57, 4.57); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 7.73 V/m; Power Drift = -0.073 dB

Maximum value of SAR (measured) = 0.135 mW/g

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

Reference Value = 7.73 V/m; Power Drift = -0.073 dB

Maximum value of SAR (measured) = 0.145 mW/g

Peak SAR (extrapolated) = 0.200 W/kg

SAR(1 g) = 0.135 mW/g; SAR(10 g) = 0.087 mW/g

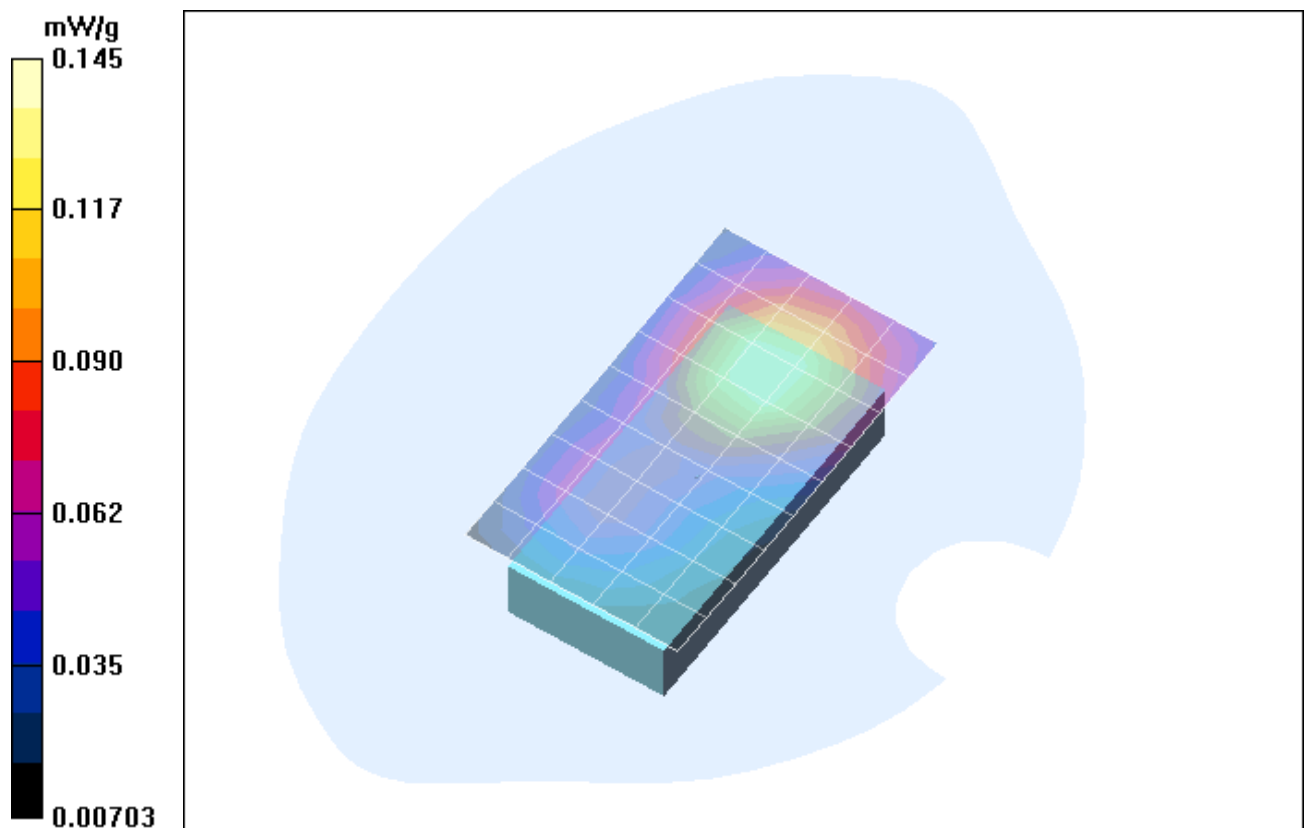


Fig. 22: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, Active cover in PTT mode, 2 TX (13.09.2004; Ambient Temperature: 21.8° C; Liquid Temperature : 20.7° C).

6 SAR z-axis scans (Validation)

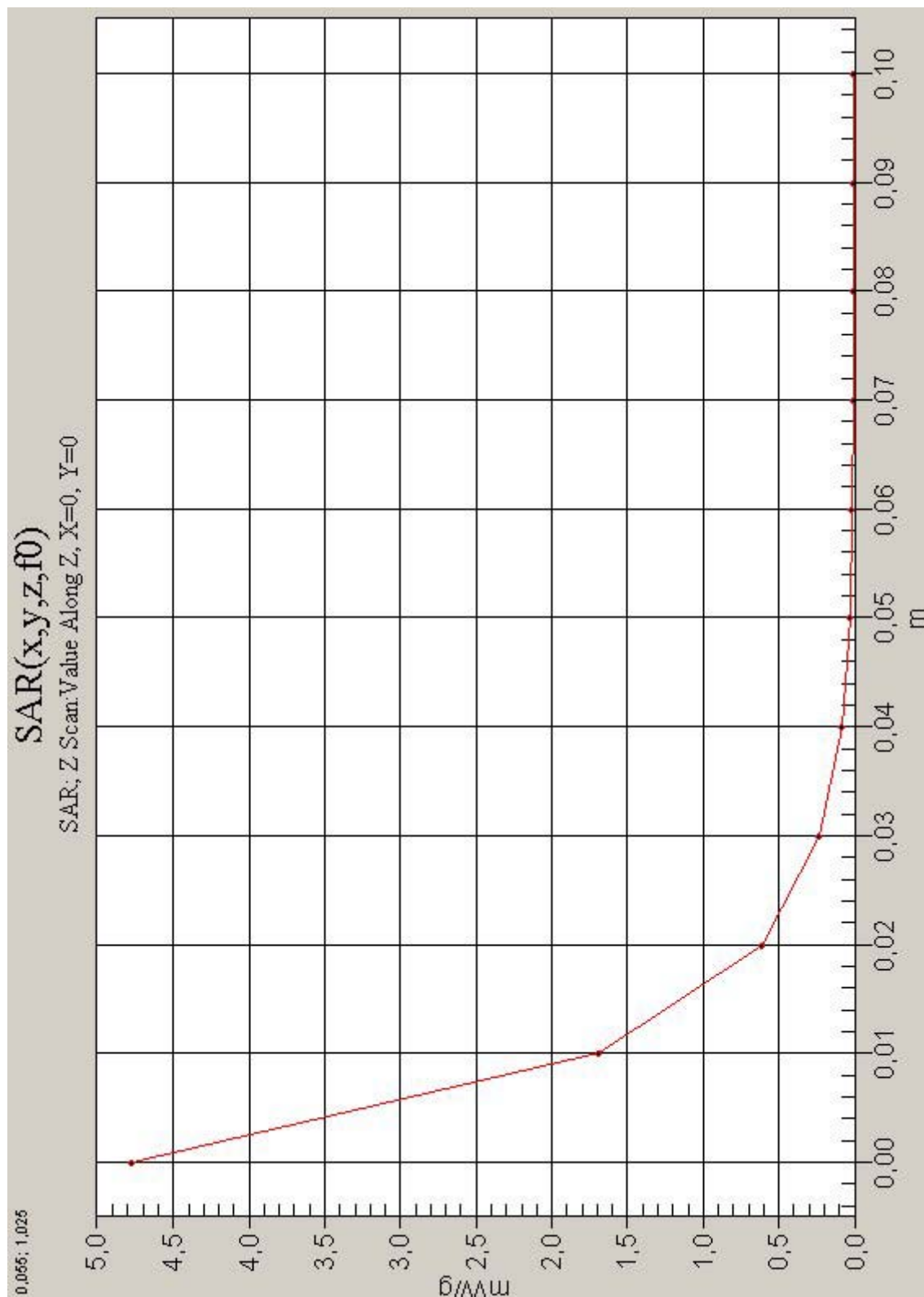


Fig. 23: SAR versus liquid depth, 1900 MHz, head (16.09.2004; Ambient Temperature: 20.6° C; Liquid Temperature : 19.9° C).

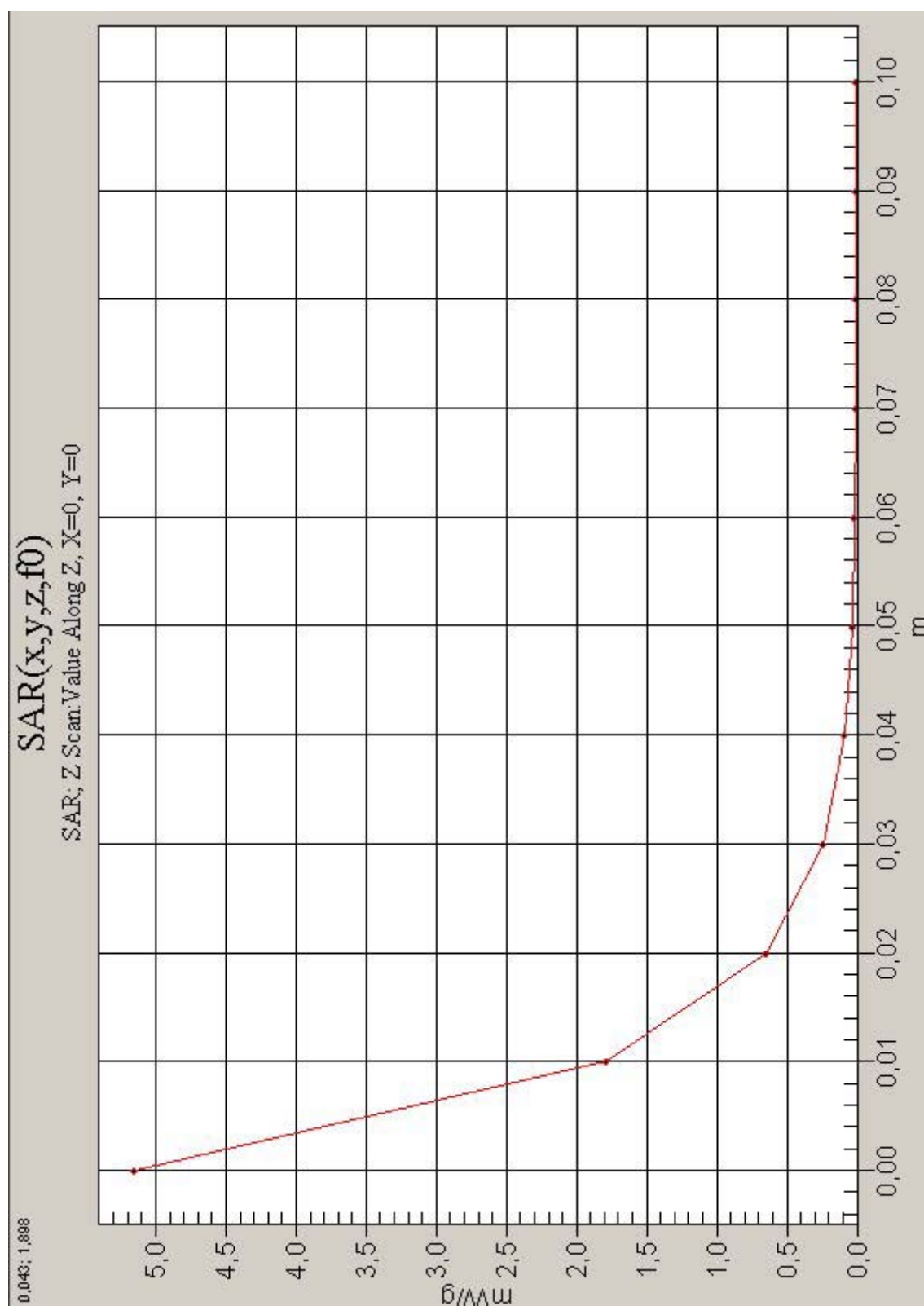


Fig. 24: SAR versus liquid depth, 1900 MHz, body (13.09.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 20.4° C).

7 SAR z-axis scans (Measurements)

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

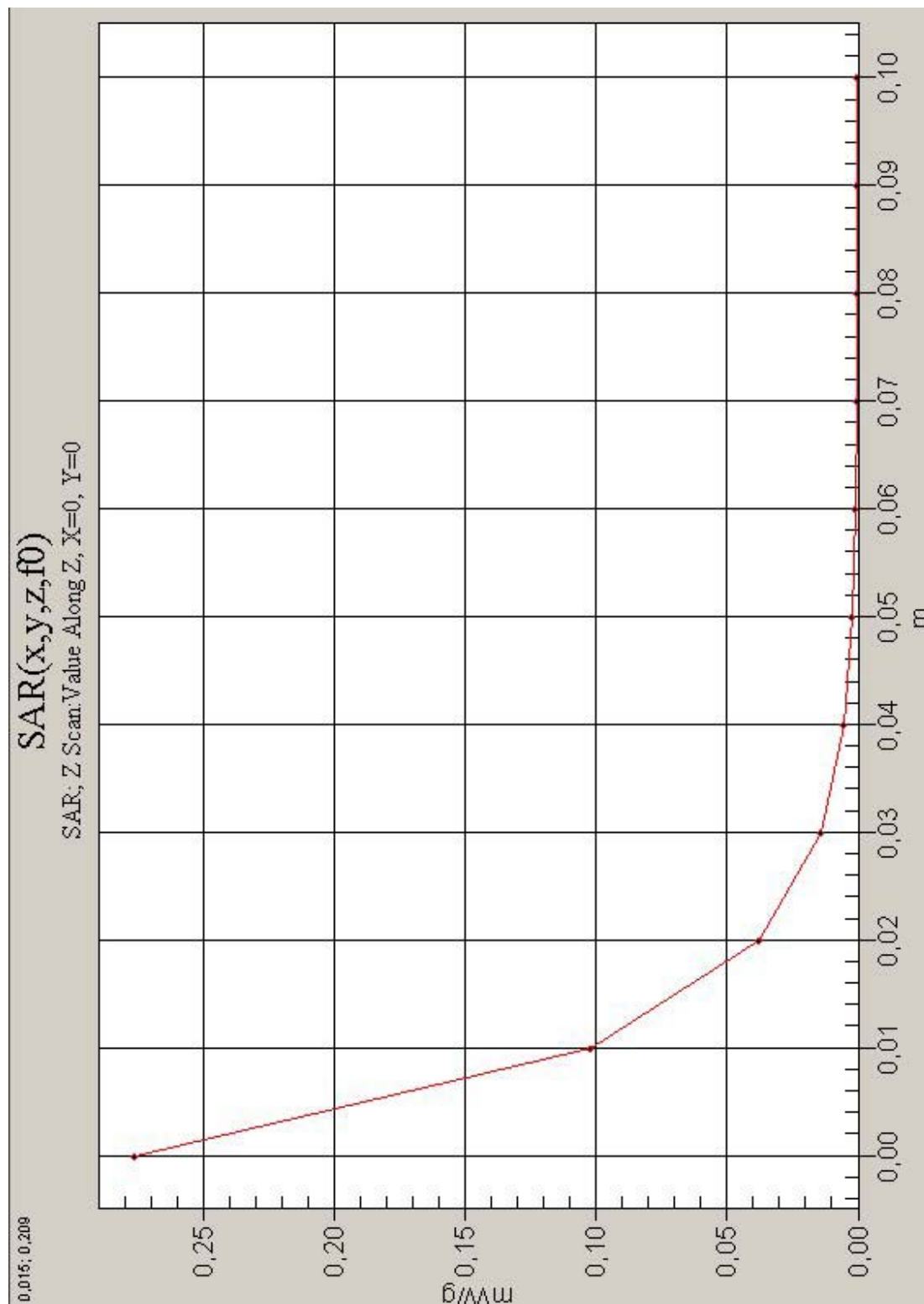


Fig. 25: SAR versus liquid depth, head: with flash, PCS 1900, channel 661, tilted position, left side of head with ARC cover. (16.09.2004, Ambient Temperature: 20.8° C; Liquid Temperature : 20.1° C).

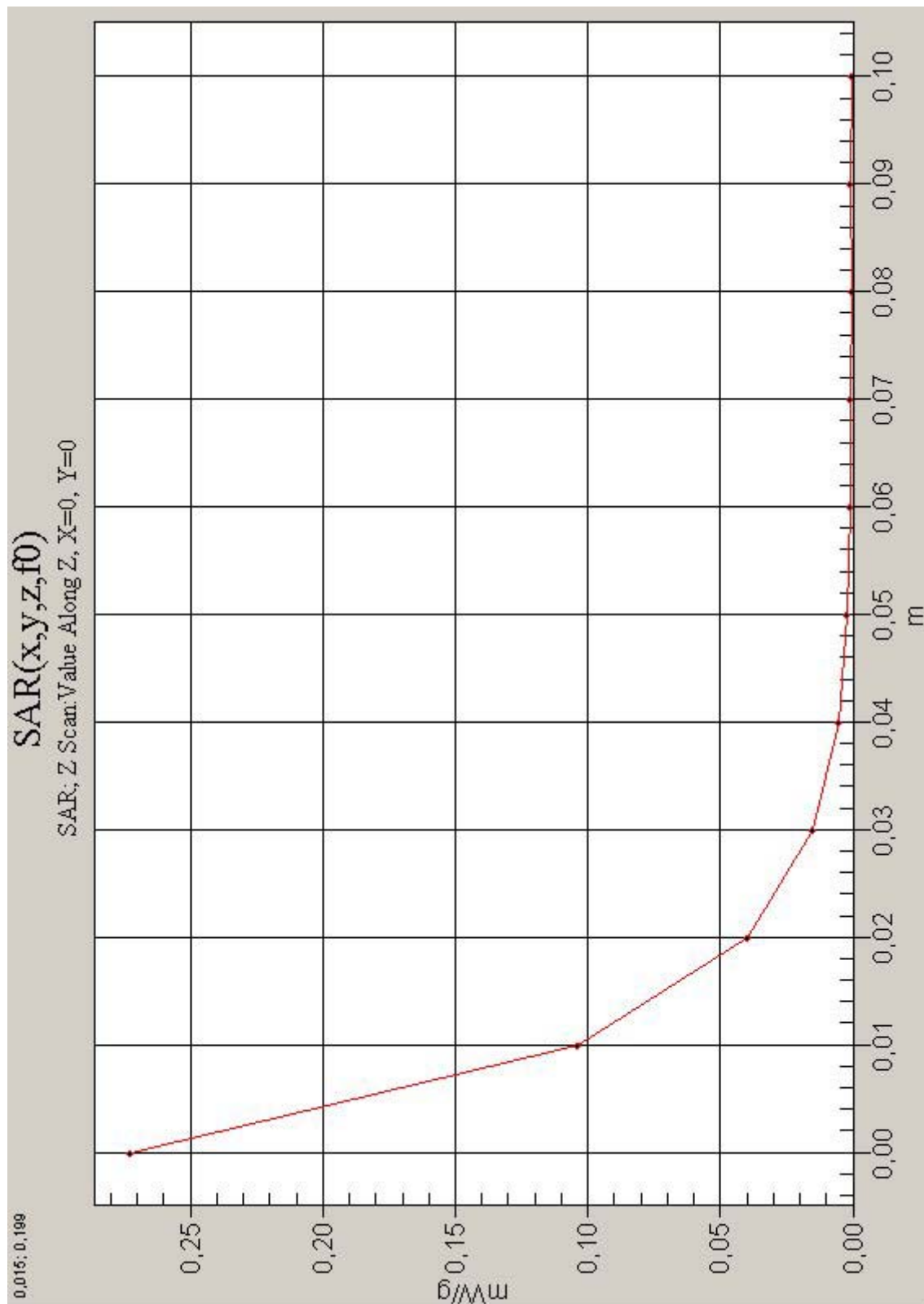


Fig. 26: SAR versus liquid depth: PCS 1900 body, channel 661, body worn configuration, antenna towards the phantom, data cable, 2 TX with ARC cover (13.09.2004, Ambient Temperature: 21.7° C; Liquid Temperature : 20.7° C).