
Appendix for the Report

Dosimetric Assessment of the BenQ Siemens E71a (FCC ID: PWX-E71a)

According to the FCC Requirements

SAR Distribution Plots

July 24, 2006
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The test results only relate to the items tested.
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1 SAR Distribution Plots, GSM 850 Head

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [618balm_1.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Cheek Left

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.976 mW/g

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

Reference Value = 26.5 V/m; Power Drift = -0.121 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.913 mW/g; SAR(10 g) = 0.641 mW/g

Maximum value of SAR (measured) = 0.972 mW/g

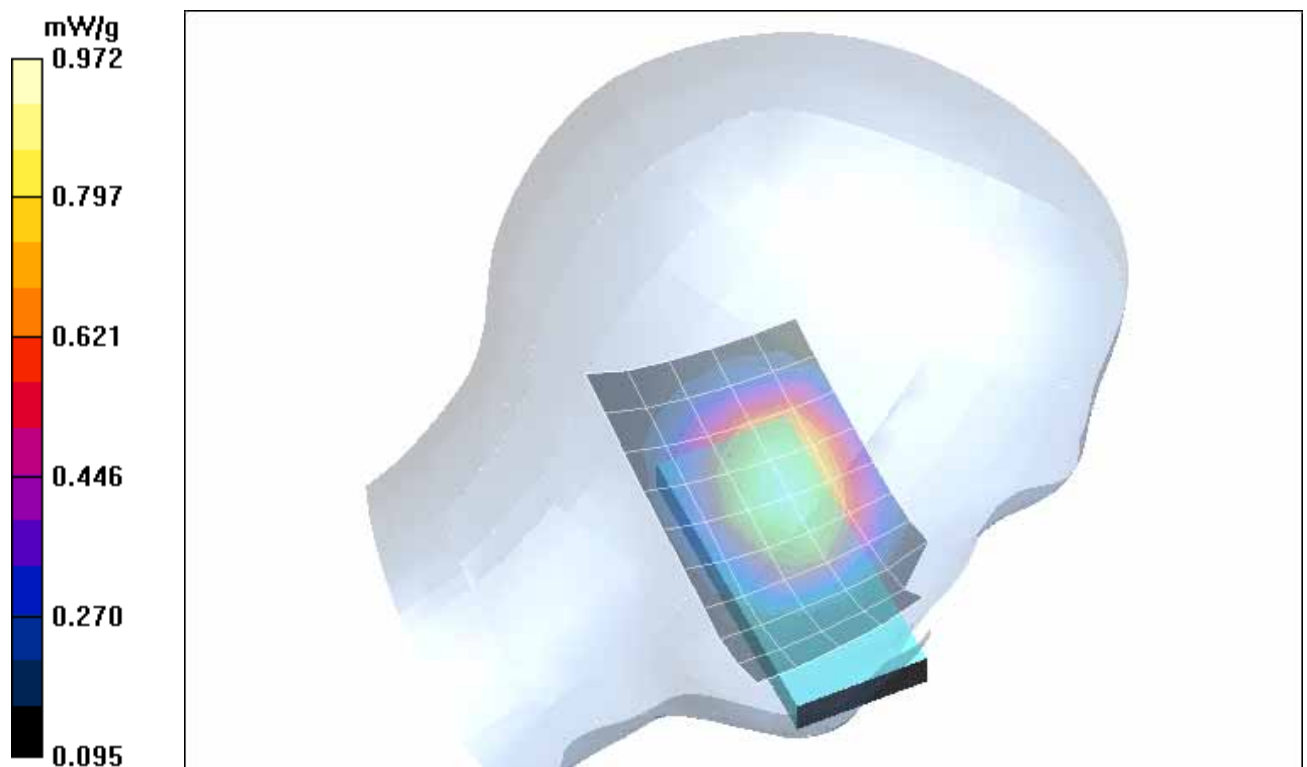


Fig. 1: SAR distribution for GSM 850, channel 190, cheek position, left side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [618balm 2.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Tilted Left

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.578 mW/g

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

Reference Value = 23.7 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 0.924 W/kg

SAR(1 g) = 0.544 mW/g; SAR(10 g) = 0.382 mW/g

Maximum value of SAR (measured) = 0.590 mW/g

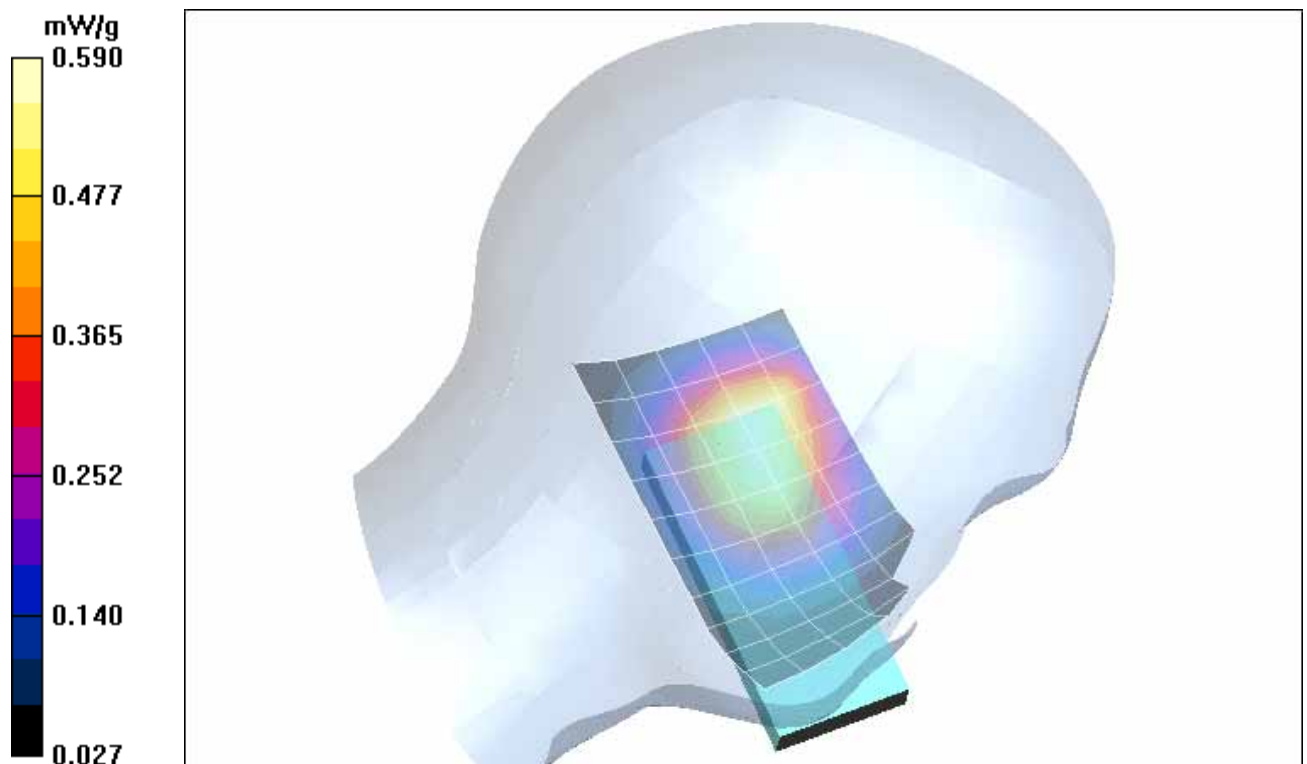


Fig. 2: SAR distribution for GSM 850, channel 190, tilted position, left side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [618barm_1.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Cheek Right

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.889 mW/g

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

Reference Value = 25.1 V/m; Power Drift = 0.080 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.882 mW/g; SAR(10 g) = 0.626 mW/g

Maximum value of SAR (measured) = 0.936 mW/g

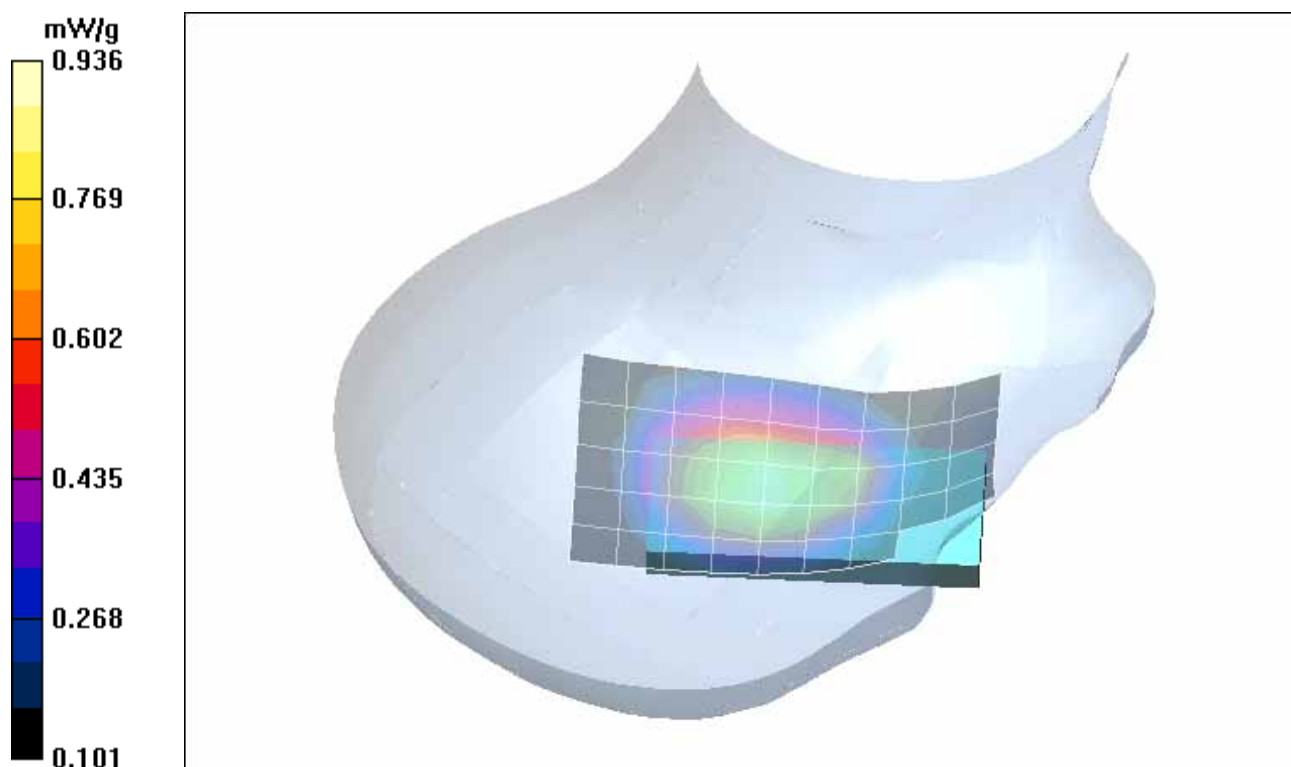


Fig. 3: SAR distribution for GSM 850, channel 190, cheek position, right side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [618barm 2.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Tilted Right

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.514 mW/g

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

Reference Value = 24.2 V/m; Power Drift = -0.164 dB

Peak SAR (extrapolated) = 0.669 W/kg

SAR(1 g) = 0.485 mW/g; SAR(10 g) = 0.350 mW/g

Maximum value of SAR (measured) = 0.524 mW/g

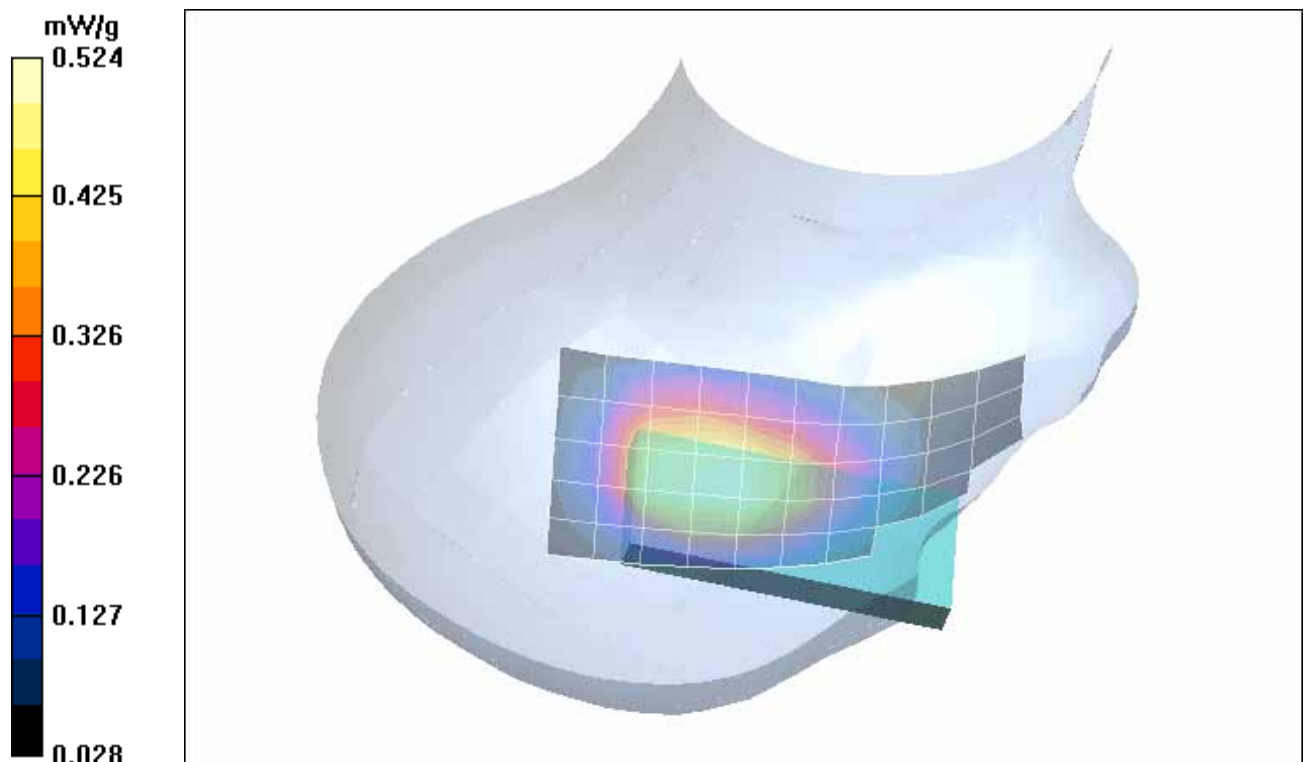


Fig. 4: SAR distribution for GSM 850, channel 190, tilted position, right side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [618ball_1.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Cheek Left

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 1.04 mW/g

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

Reference Value = 27.2 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.989 mW/g; SAR(10 g) = 0.694 mW/g

Maximum value of SAR (measured) = 1.05 mW/g

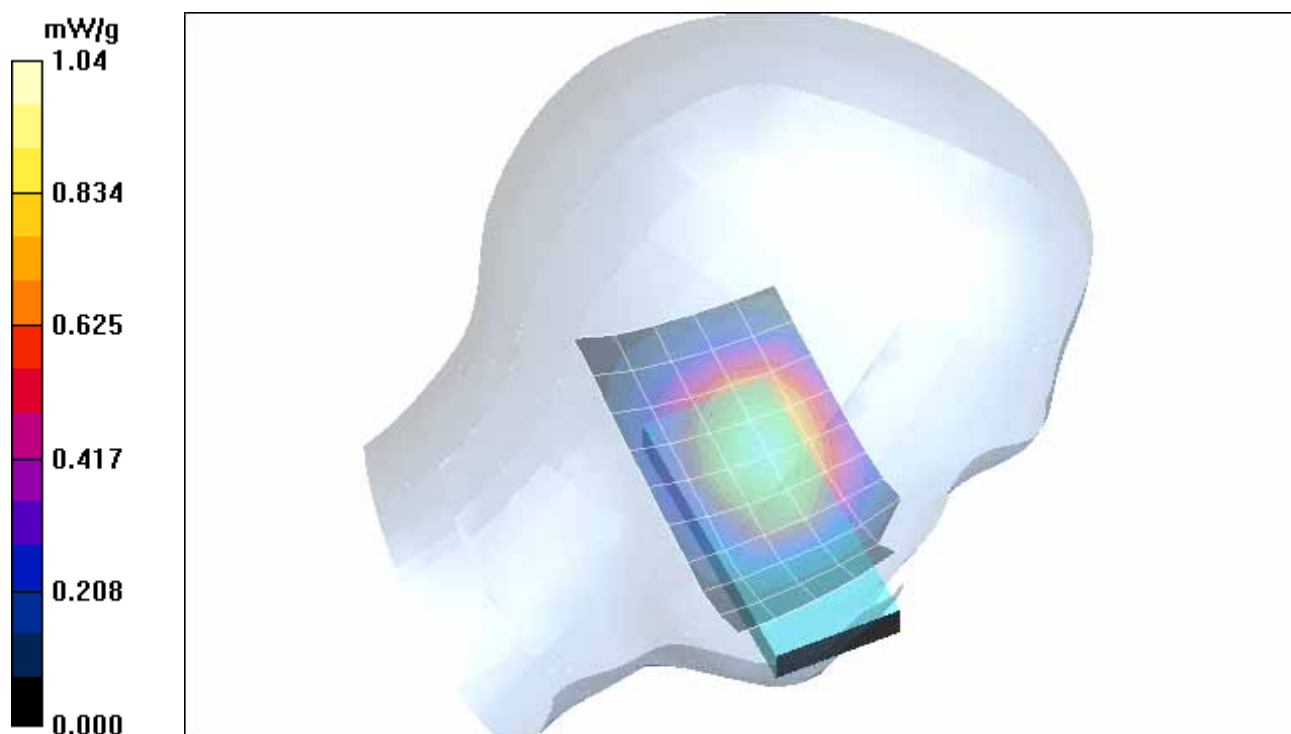


Fig. 5: SAR distribution for GSM 850, channel 128, cheek position, left side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [618balh_1.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Cheek Left

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 1.04 mW/g

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

Reference Value = 27.3 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.992 mW/g; SAR(10 g) = 0.696 mW/g

Maximum value of SAR (measured) = 1.06 mW/g

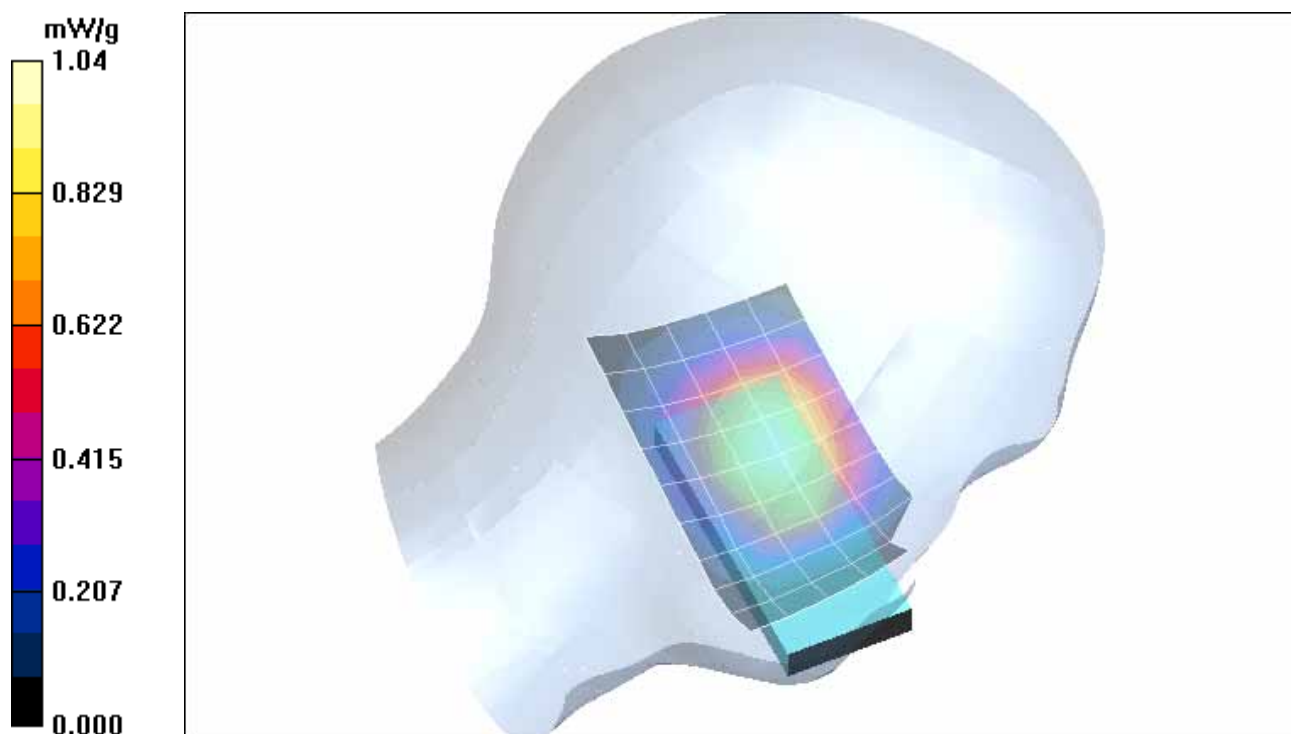


Fig. 6: SAR distribution for GSM 850, channel 251, cheek position, left side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [618barl_1.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Cheek Right

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.767 mW/g

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

Reference Value = 24.1 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.949 W/kg

SAR(1 g) = 0.727 mW/g; SAR(10 g) = 0.528 mW/g

Maximum value of SAR (measured) = 0.768 mW/g

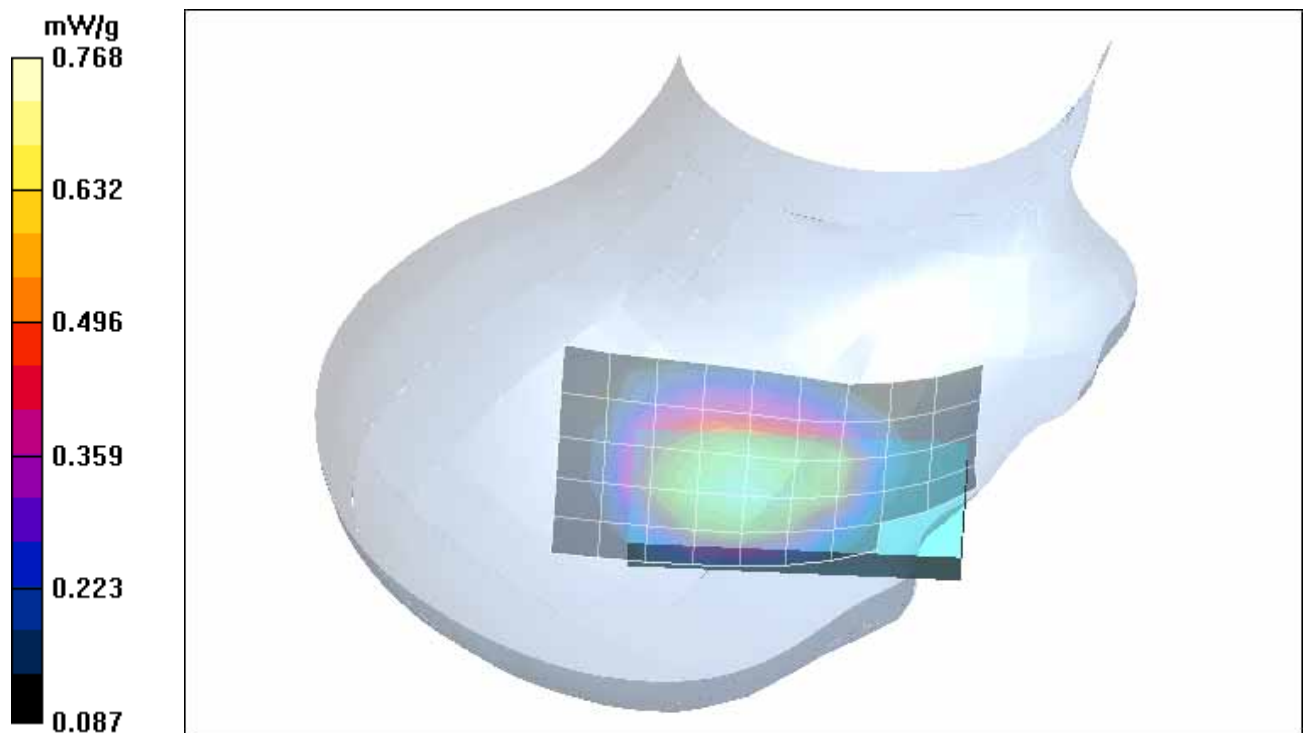


Fig. 7: SAR distribution for GSM 850, channel 128, cheek position, right side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [618barh_1.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Cheek Right

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.958 mW/g

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

Reference Value = 26.6 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.930 mW/g; SAR(10 g) = 0.672 mW/g

Maximum value of SAR (measured) = 0.990 mW/g

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

Reference Value = 26.6 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.888 mW/g; SAR(10 g) = 0.614 mW/g

Maximum value of SAR (measured) = 0.970 mW/g

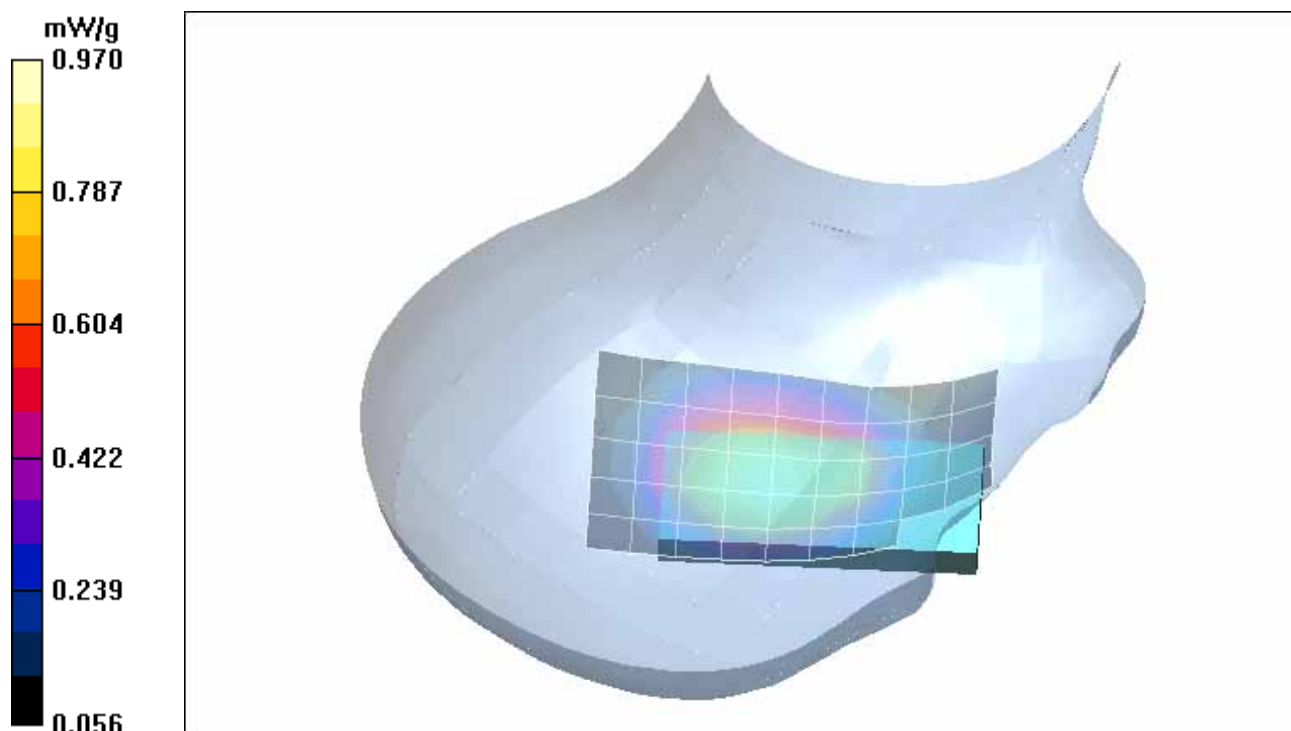


Fig. 8: SAR distribution for GSM 850, channel 251, cheek position, right side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [618balh_1_bt.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Cheek Left

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(9.72, 9.72, 9.72); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 1.04 mW/g

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

Reference Value = 27.6 V/m; Power Drift = -0.186 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.976 mW/g; SAR(10 g) = 0.684 mW/g

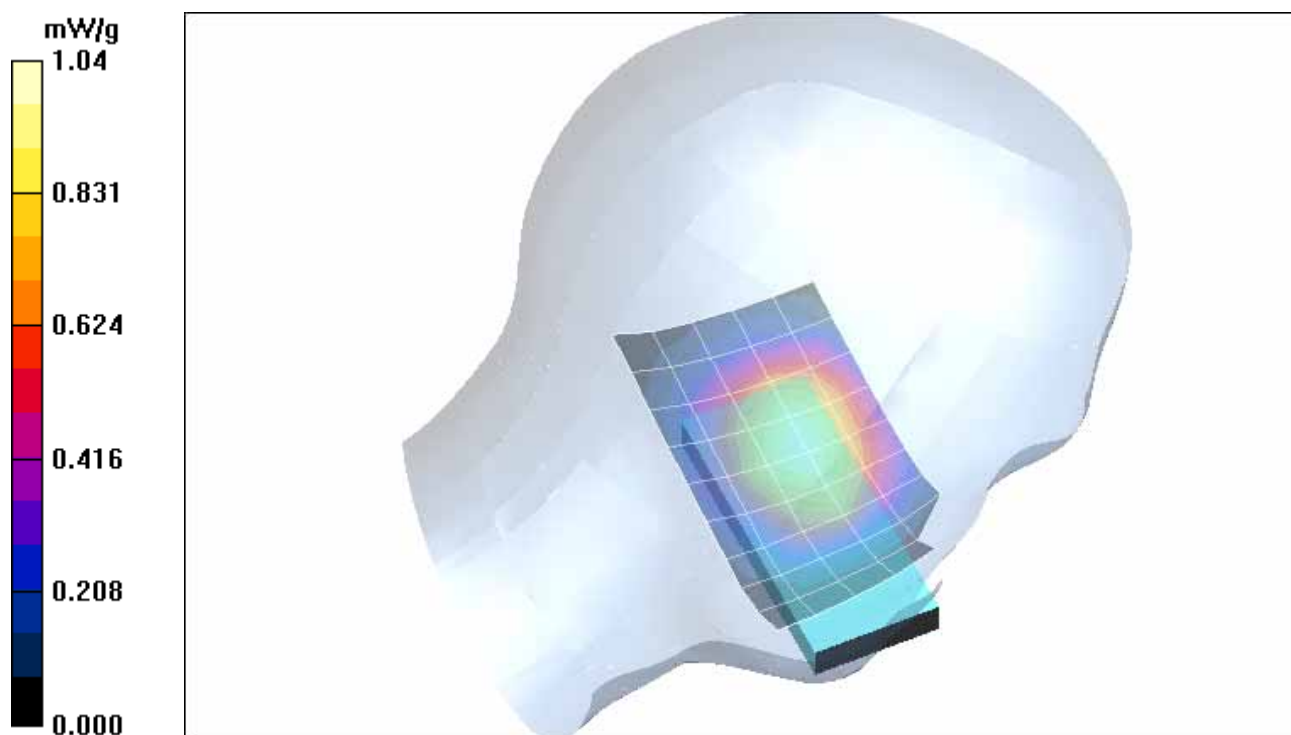


Fig. 9: SAR distribution for GSM 850, channel 251, cheek position, right side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.4° C).

2 SAR Distribution Plots, PCS 1900 Head

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [618yplm_1.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Cheek Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.99, 4.99, 4.99); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

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

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

Reference Value = 14.7 V/m; Power Drift = 0.067 dB

Peak SAR (extrapolated) = 0.599 W/kg

SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.217 mW/g

Maximum value of SAR (measured) = 0.398 mW/g

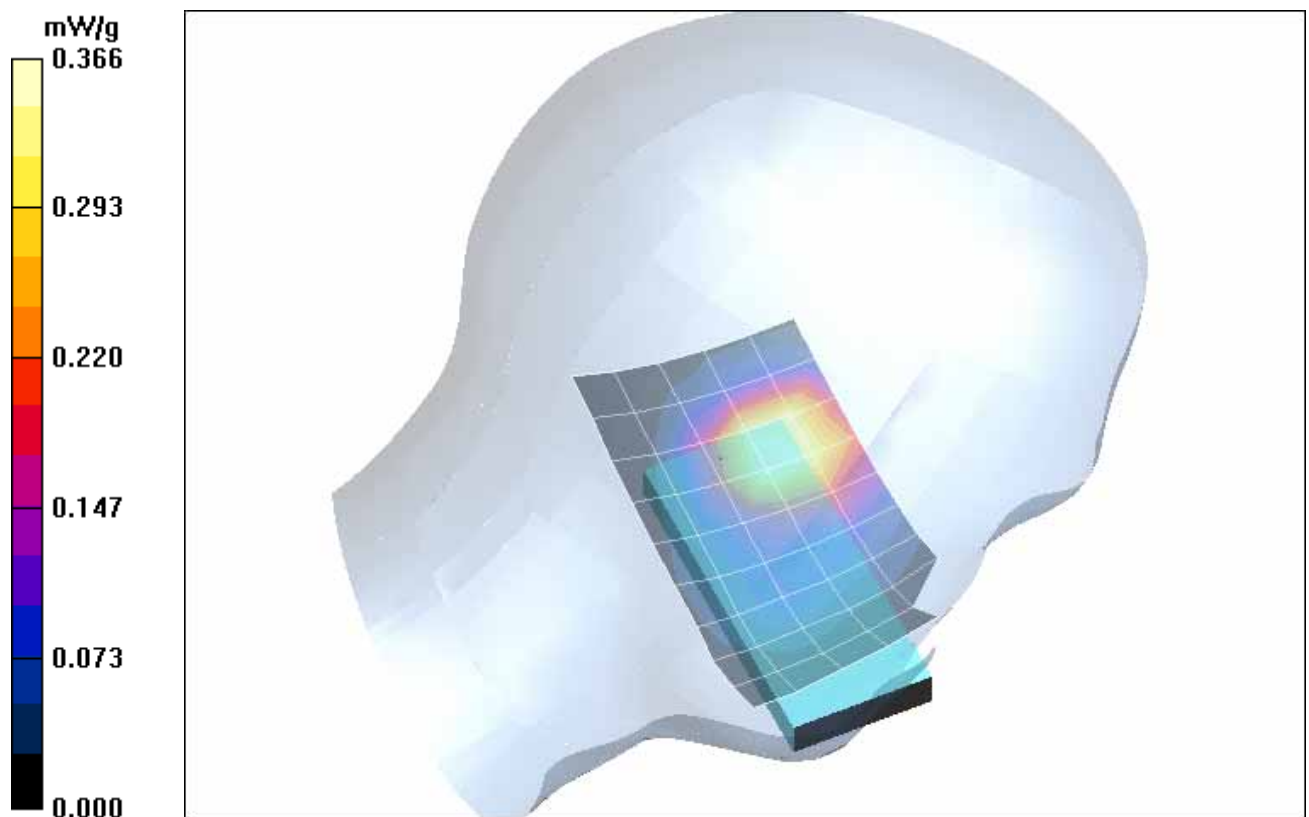


Fig. 10: SAR distribution for PCS 1900, channel 661, cheek position, left side of head (July 18, 2006; Ambient Temperature: 22.3° C; Liquid Temperature : 21.5° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [618yplm_2.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Tilted Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.99, 4.99, 4.99); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

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

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

Reference Value = 15.2 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 0.513 W/kg

SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.176 mW/g

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

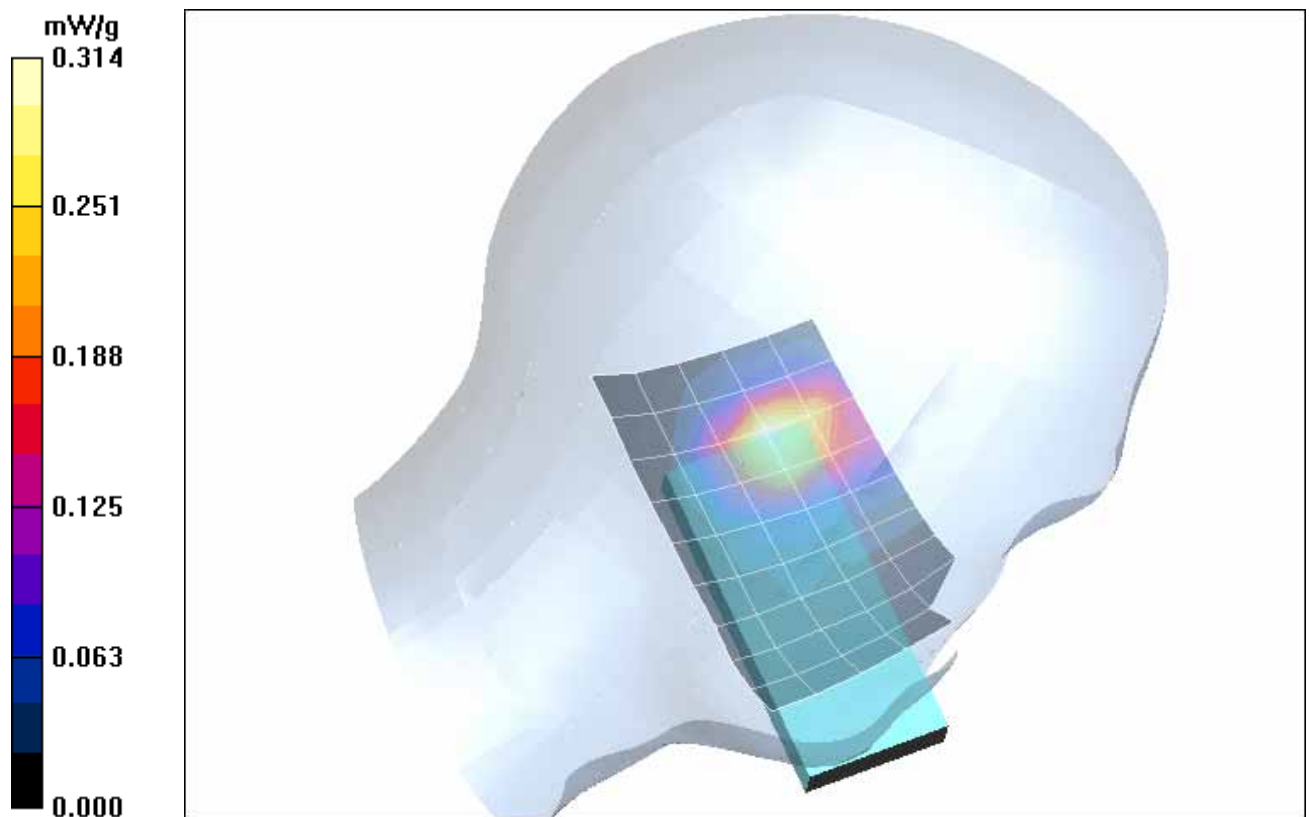


Fig. 11: SAR distribution for PCS 1900, channel 661, tilted position, left side of head (July 18, 2006; Ambient Temperature: 22.3° C; Liquid Temperature : 21.5° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [618yprm_1.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Cheek Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.99, 4.99, 4.99); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.270 mW/g

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

Reference Value = 14.4 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 0.399 W/kg

SAR(1 g) = 0.267 mW/g; SAR(10 g) = 0.159 mW/g

Maximum value of SAR (measured) = 0.293 mW/g

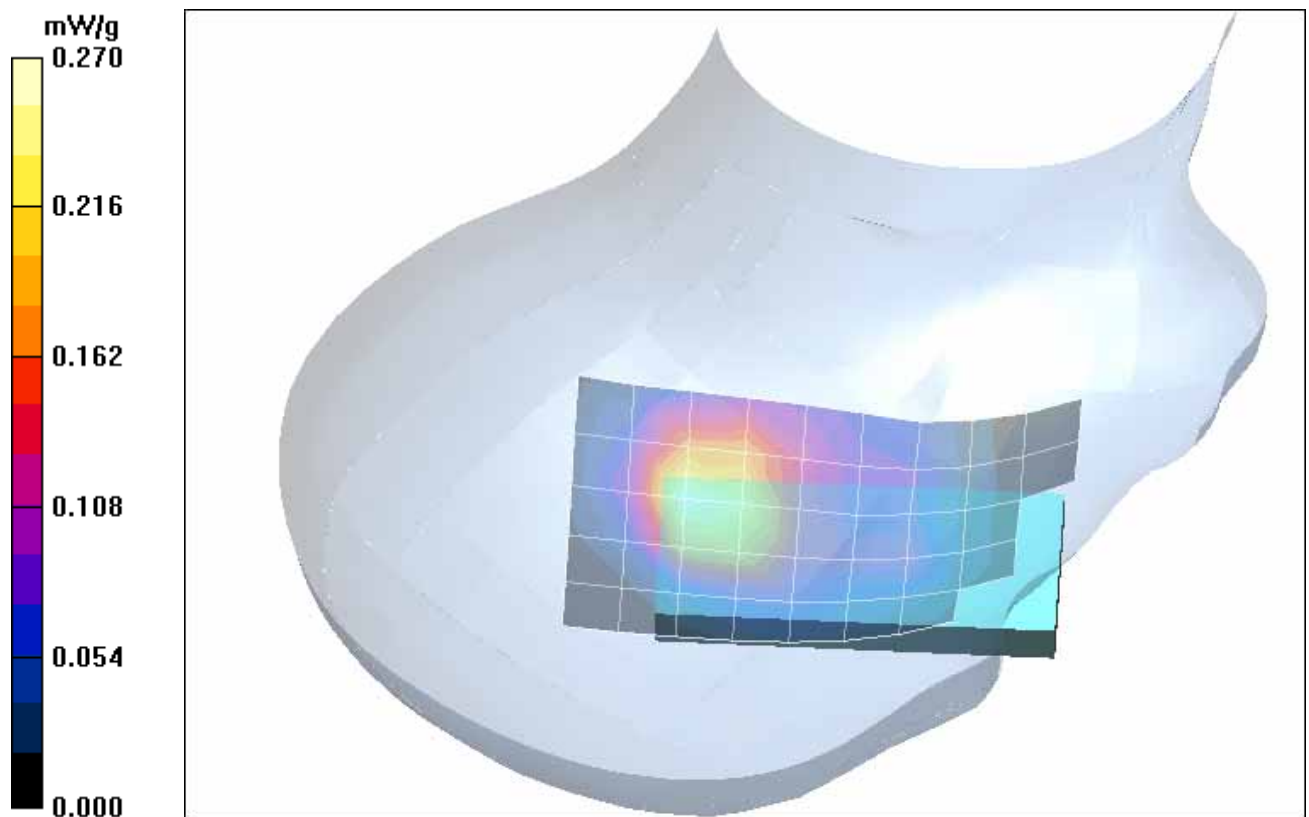


Fig. 12: SAR distribution for PCS 1900, channel 661, cheek position, right side of head (July 18, 2006; Ambient Temperature: 22.3° C; Liquid Temperature : 21.5° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [618yprm_2.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Tilted Right

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.99, 4.99, 4.99); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.257 mW/g

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

Reference Value = 14.9 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.393 W/kg

SAR(1 g) = 0.252 mW/g; SAR(10 g) = 0.143 mW/g

Maximum value of SAR (measured) = 0.276 mW/g

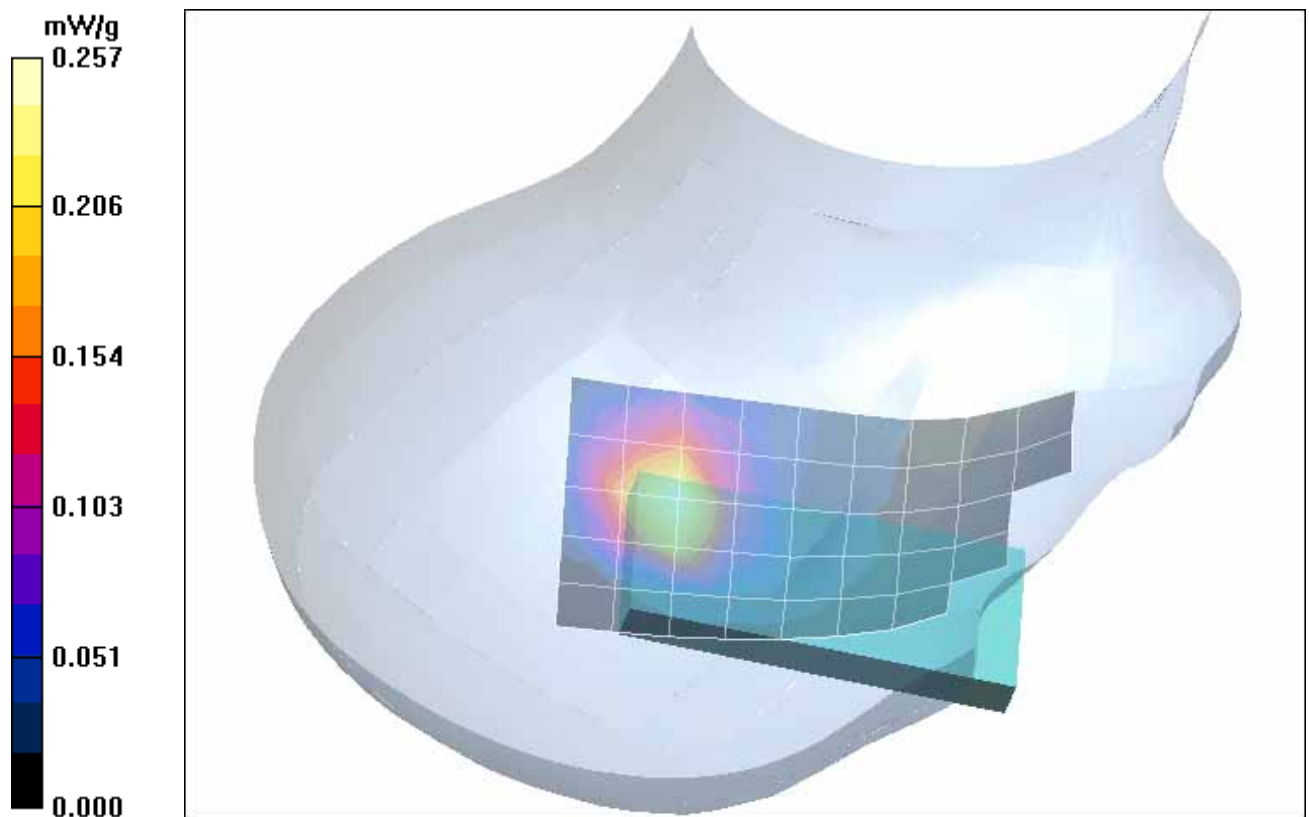


Fig. 13: SAR distribution for PCS 1900, channel 661, tilted position, right side of head (July 18, 2006; Ambient Temperature: 22.3 °C; Liquid Temperature : 21.5° C)

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [618yplm_1_BT.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Cheek Left

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.99, 4.99, 4.99); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

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

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

Reference Value = 16.0 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.658 W/kg

SAR(1 g) = 0.405 mW/g; SAR(10 g) = 0.233 mW/g

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

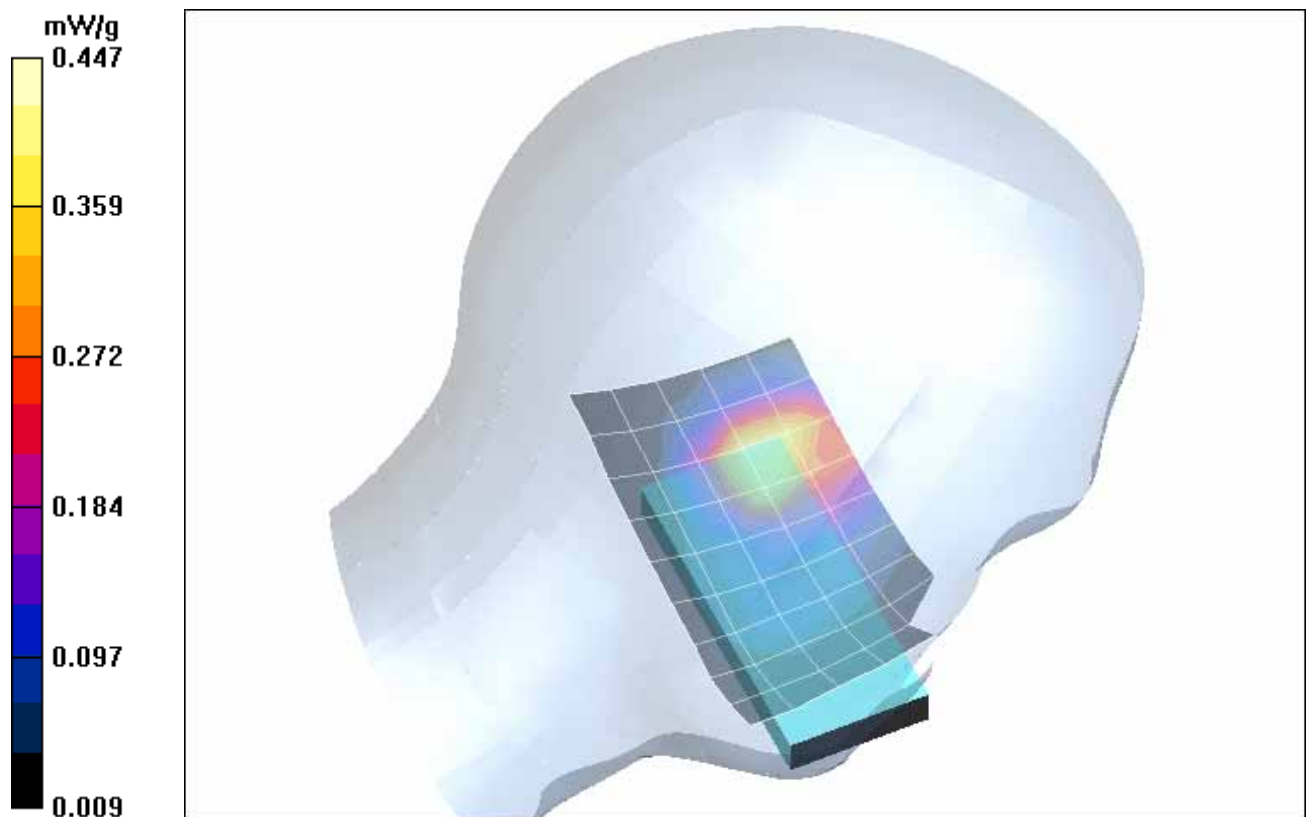


Fig. 14: SAR distribution for PCS 1900, channel 661, cheek position, left side of head (July 18, 2006; Ambient Temperature: 22.3°C; Liquid Temperature : 21.5° C)

3 SAR Distribution Plots, GSM 850 Body worn configuration

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [618yahm_5_ohne_20mm.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Body Worn

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.33, 6.33, 6.33); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Sugar 1341; Type: QD 000 P40 CB; Serial: TP-1341
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.519 mW/g

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

Reference Value = 22.9 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 0.695 W/kg

SAR(1 g) = 0.498 mW/g; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.528 mW/g

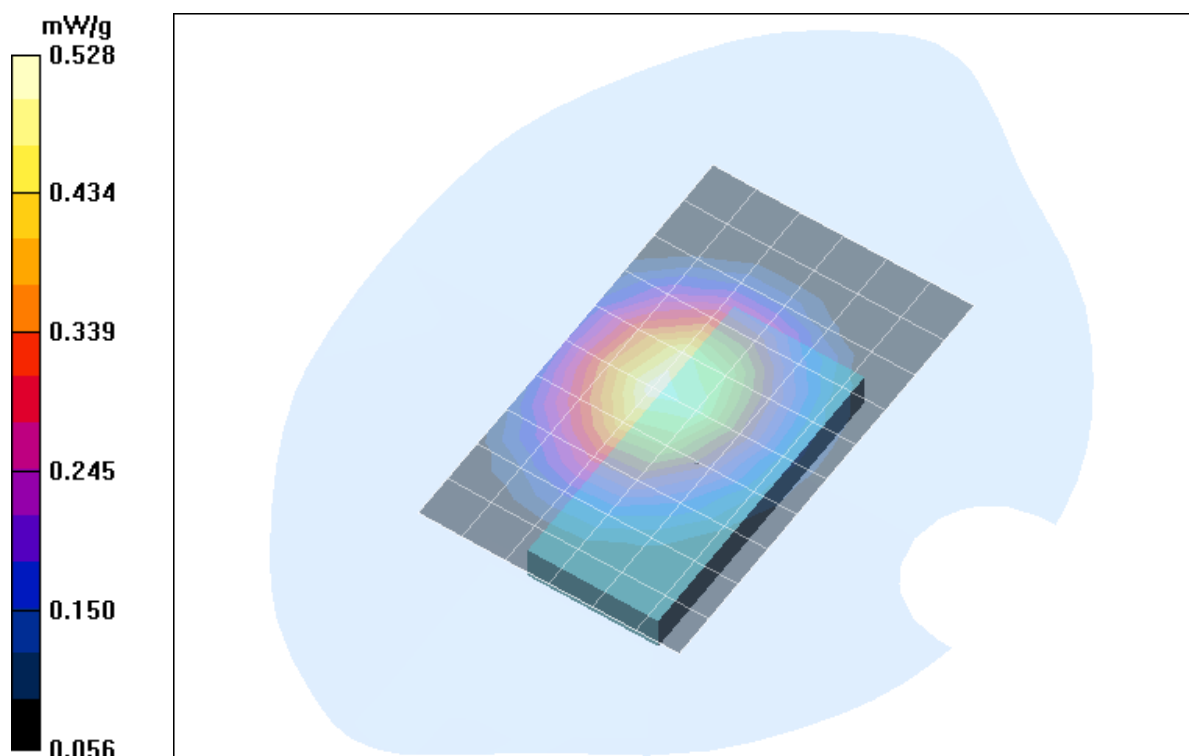


Fig. 15: SAR distribution for GSM 850, channel 190, body worn configuration, antenna towards the phantom, without accessory with 20 mm distance (July 19, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.3° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [618yahm 6 headset 20mm.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Body Worn

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.33, 6.33, 6.33); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Sugar 1341; Type: QD 000 P40 CB; Serial: TP-1341
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.498 mW/g

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

Reference Value = 22.4 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.724 W/kg

SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.342 mW/g

Maximum value of SAR (measured) = 0.510 mW/g

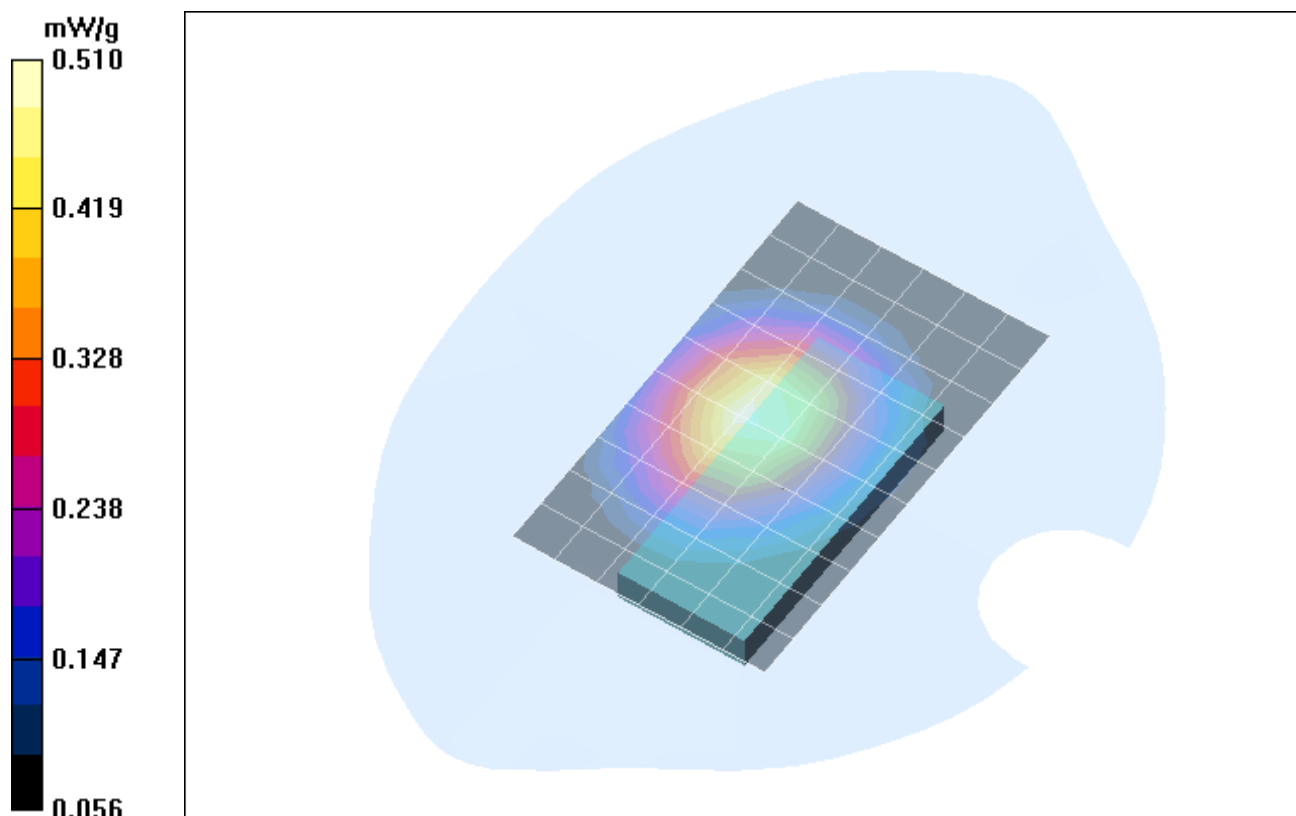


Fig. 16: SAR distribution for GSM 850, channel 190, body worn configuration, antenna towards the phantom, with headset, with 20 mm distance (July 19, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.3° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [618yahm 7 BT 20mm.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Body Worn

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.33, 6.33, 6.33); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Sugar 1341; Type: QD 000 P40 CB; Serial: TP-1341
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

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

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

Reference Value = 23.0 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.668 W/kg

SAR(1 g) = 0.505 mW/g; SAR(10 g) = 0.358 mW/g

Maximum value of SAR (measured) = 0.534 mW/g

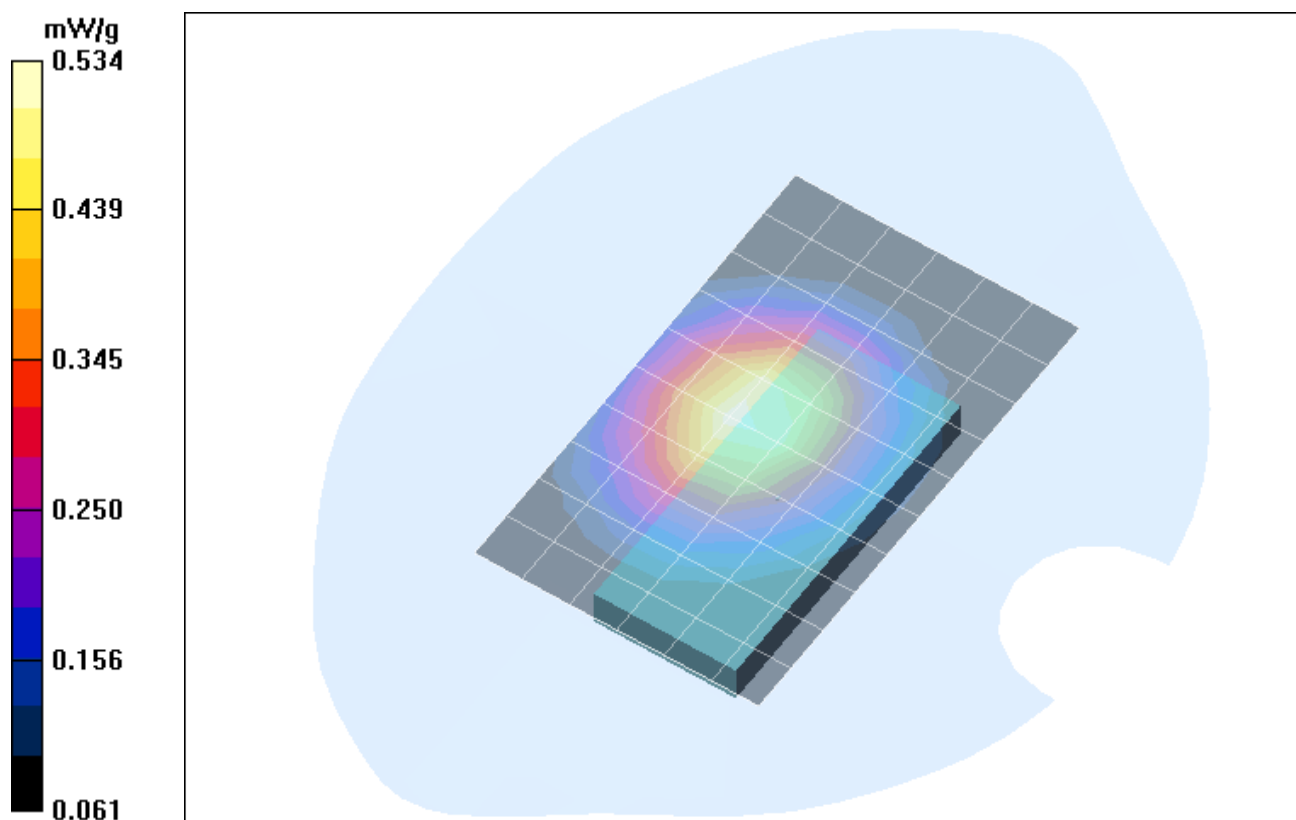


Fig. 17: SAR distribution for GSM 850, channel 190, body worn configuration, antenna towards the phantom, without accessory, Bluetooth activated, with 20 mm distance (July 19, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.3° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [618yahm 8 data 20mm.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Body Worn

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.33, 6.33, 6.33); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 11.07.2006
- Phantom: SAM Sugar 1341; Type: QD 000 P40 CB; Serial: TP-1341
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.533 mW/g

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

Reference Value = 23.4 V/m; Power Drift = -0.193 dB

Peak SAR (extrapolated) = 0.702 W/kg

SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.365 mW/g

Maximum value of SAR (measured) = 0.551 mW/g

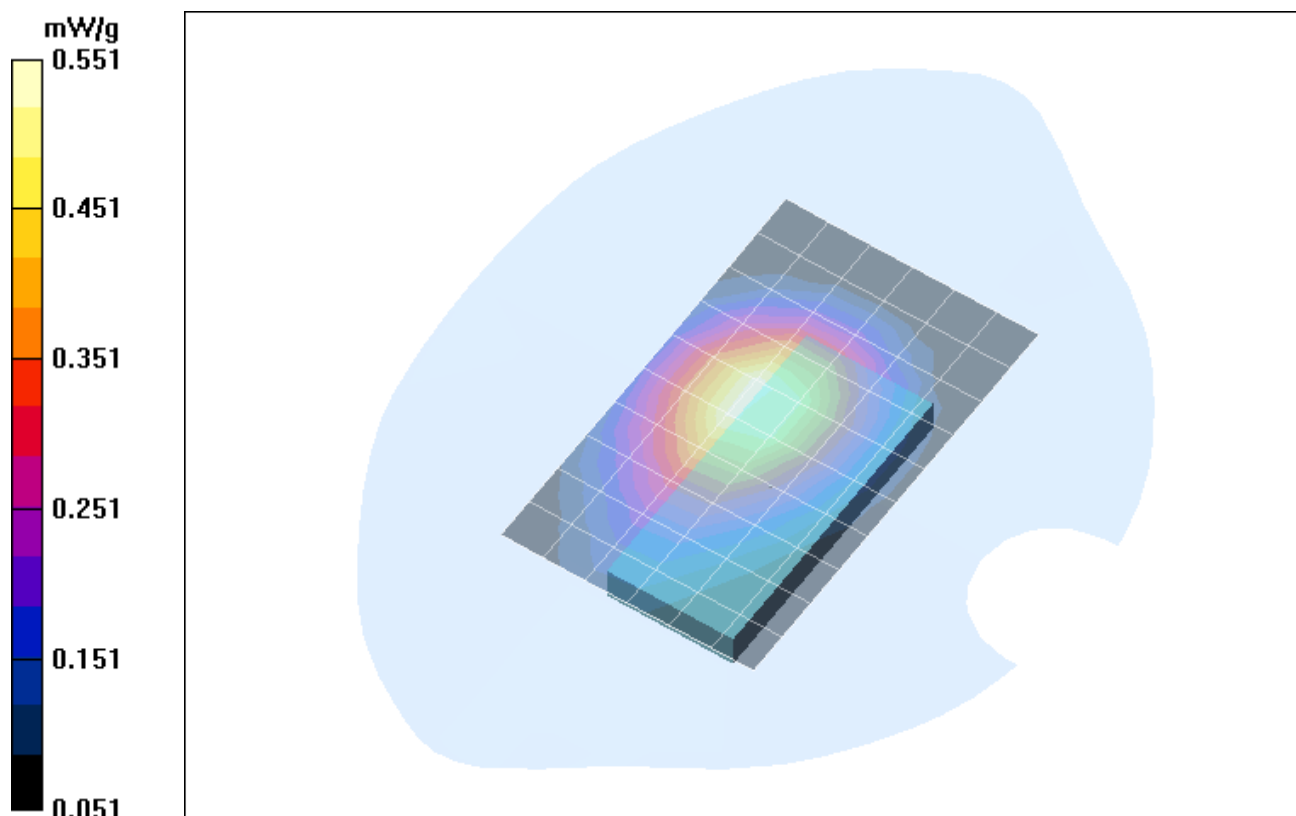


Fig. 18: SAR distribution for GPRS 850, channel 190, body worn configuration, antenna towards the phantom, with data cable, with 20 mm distance (July 19, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.3° C).

4 SAR Distribution Plots, PCS 1900 Body worn configuration

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [618bphm_5_ohne_20mm.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.84, 7.84, 7.84); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.268 mW/g

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

Reference Value = 8.55 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.430 W/kg

SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.157 mW/g

Maximum value of SAR (measured) = 0.291 mW/g

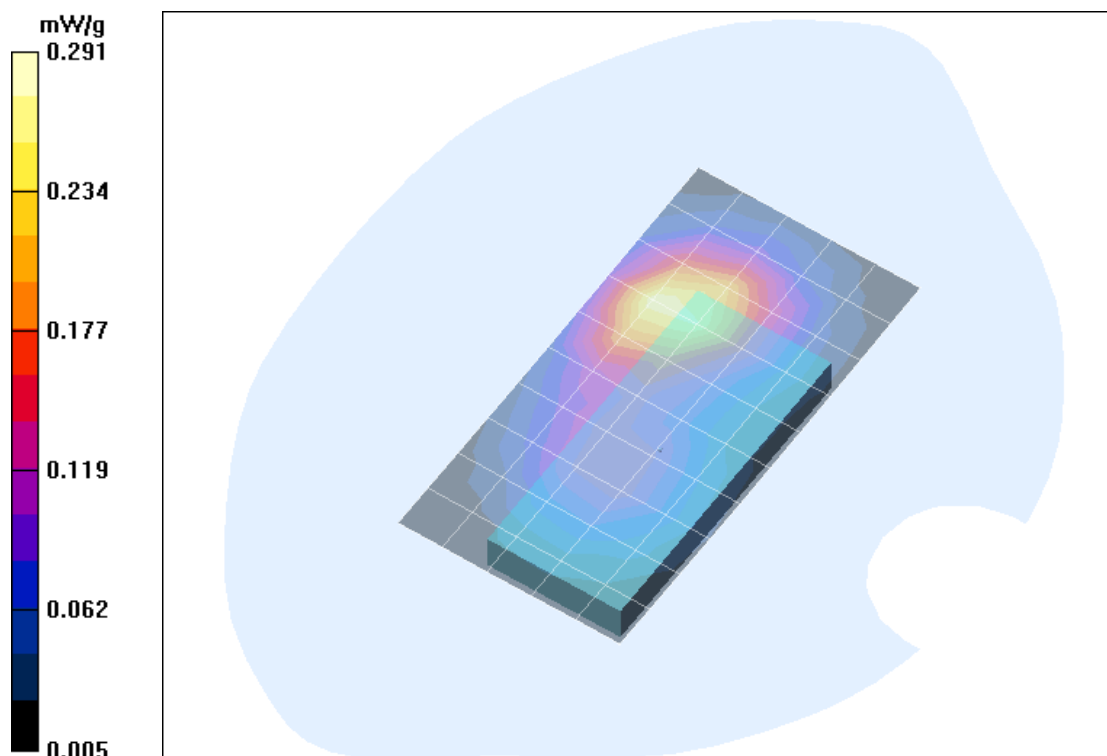


Fig. 19: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, without accessory, with 20 mm distance (July 21, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [618bphm 6 headset 20mm.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.84, 7.84, 7.84); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.268 mW/g

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

Reference Value = 8.16 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.445 W/kg

SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.160 mW/g

Maximum value of SAR (measured) = 0.295 mW/g

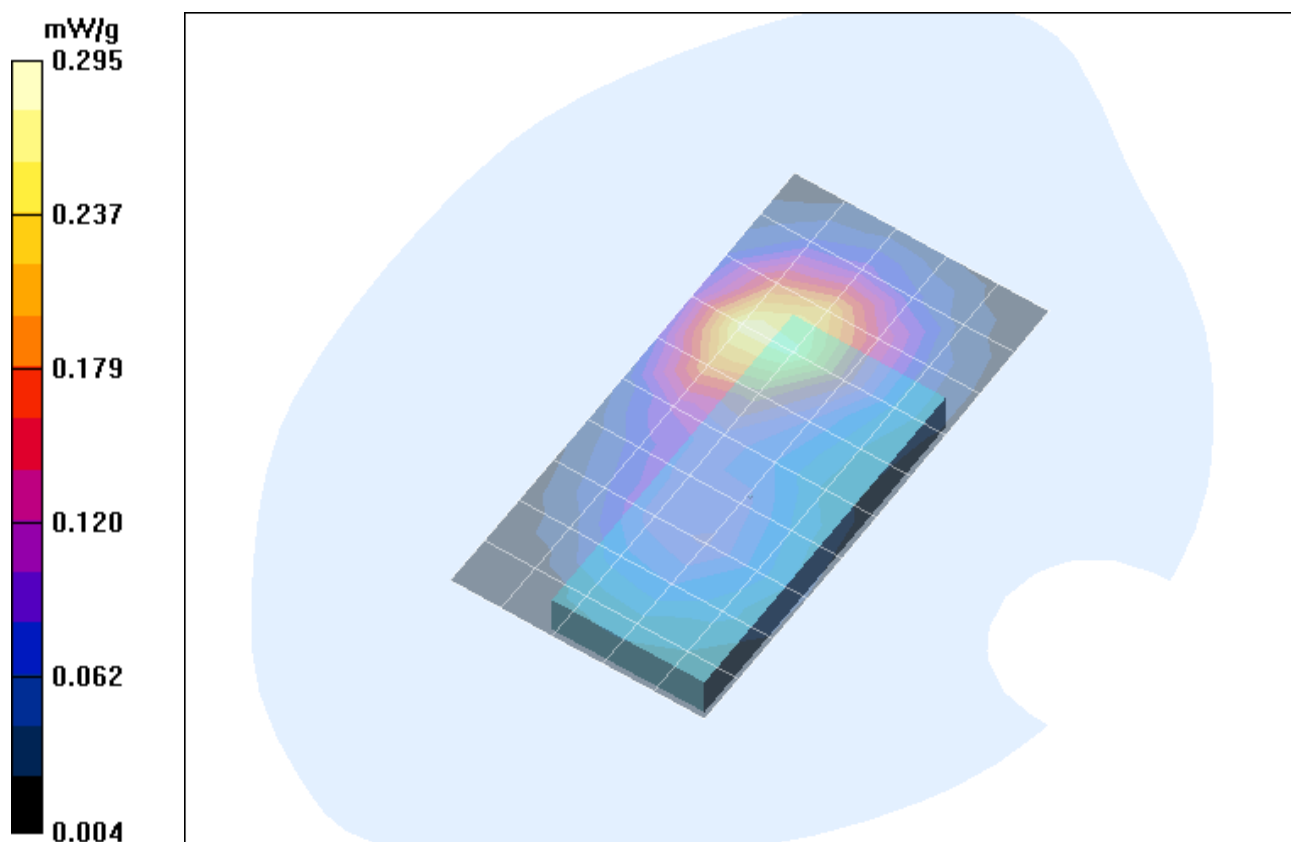


Fig. 20: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with headset, with 20 mm distance (July 21, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [618bphm 7 BT 20mm.da4](#)

DUT: BenQ Siemenes ; Type: E71A; Serial: 004401490150618

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.84, 7.84, 7.84); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.247 mW/g

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

Reference Value = 8.83 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.400 W/kg

SAR(1 g) = 0.247 mW/g; SAR(10 g) = 0.146 mW/g

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

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

Reference Value = 8.83 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.218 W/kg

SAR(1 g) = 0.140 mW/g; SAR(10 g) = 0.087 mW/g

Maximum value of SAR (measured) = 0.151 mW/g

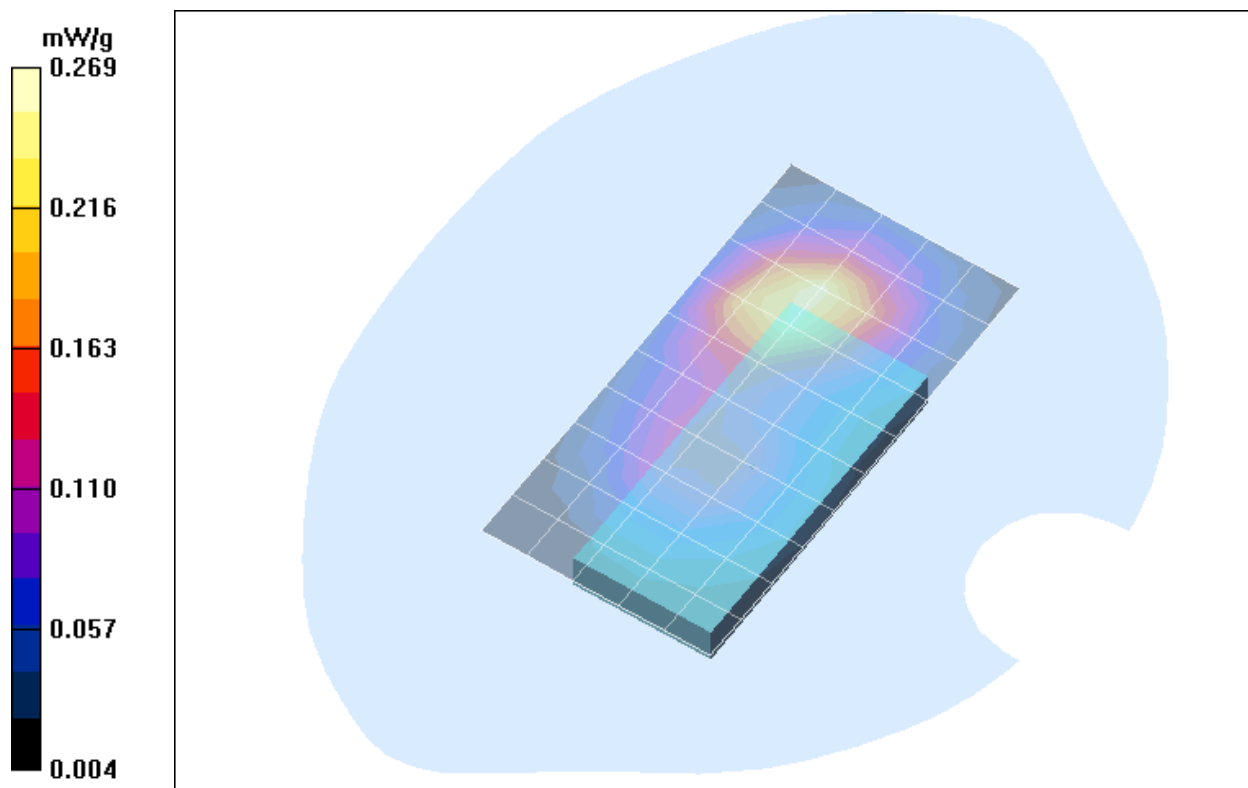


Fig. 21: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, without accessory, Bluetooth activated, with 20 mm distance (July 21, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [618bphm 8 data 20mm.da4](#)

DUT: BenQ Siemenes ; **Type:** E71A; **Serial:** 004401490150618

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.84, 7.84, 7.84); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.03.2006
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (measured) = 0.467 mW/g

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

Reference Value = 11.5 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.797 W/kg

SAR(1 g) = 0.491 mW/g; SAR(10 g) = 0.293 mW/g

Maximum value of SAR (measured) = 0.533 mW/g

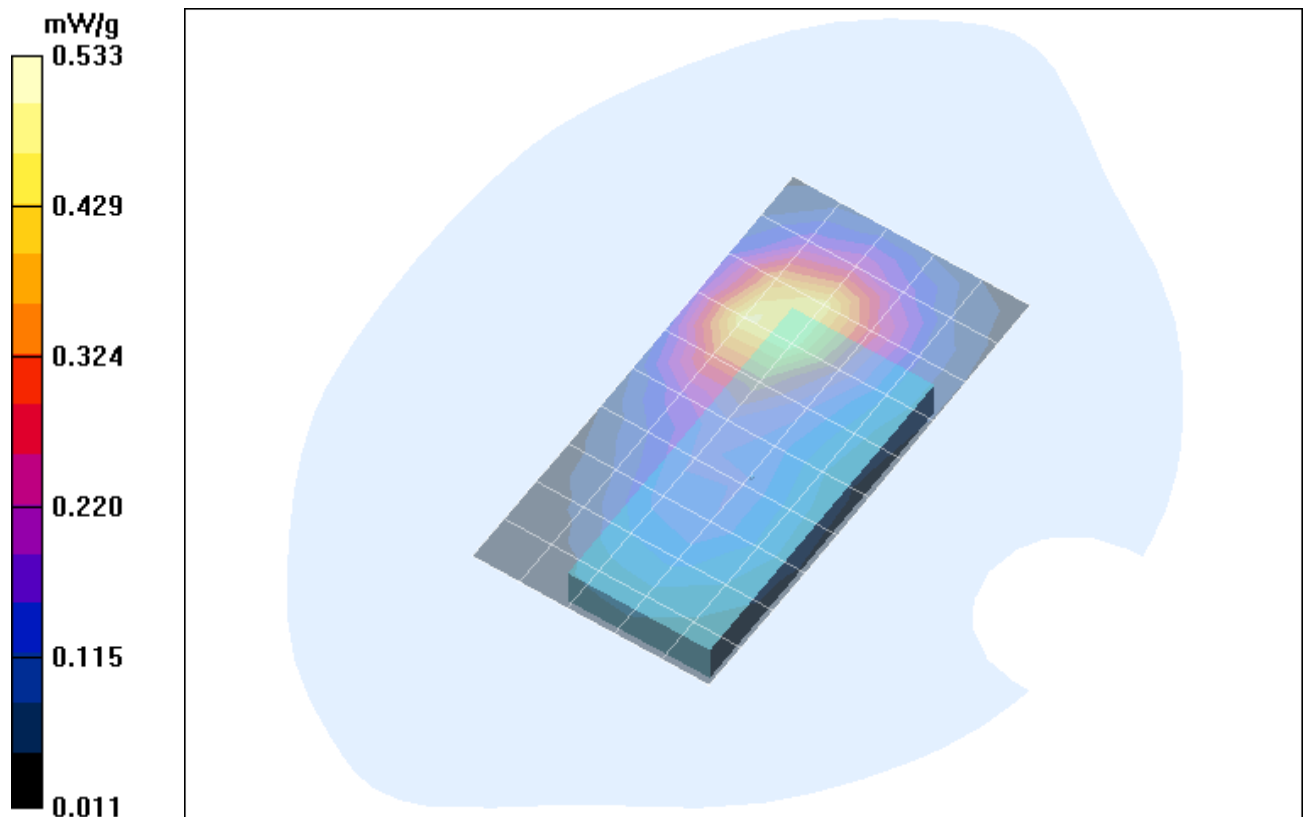


Fig. 22: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with data cable, with 20 mm distance (July 21, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).

5 SAR z-axis scans (Validation)

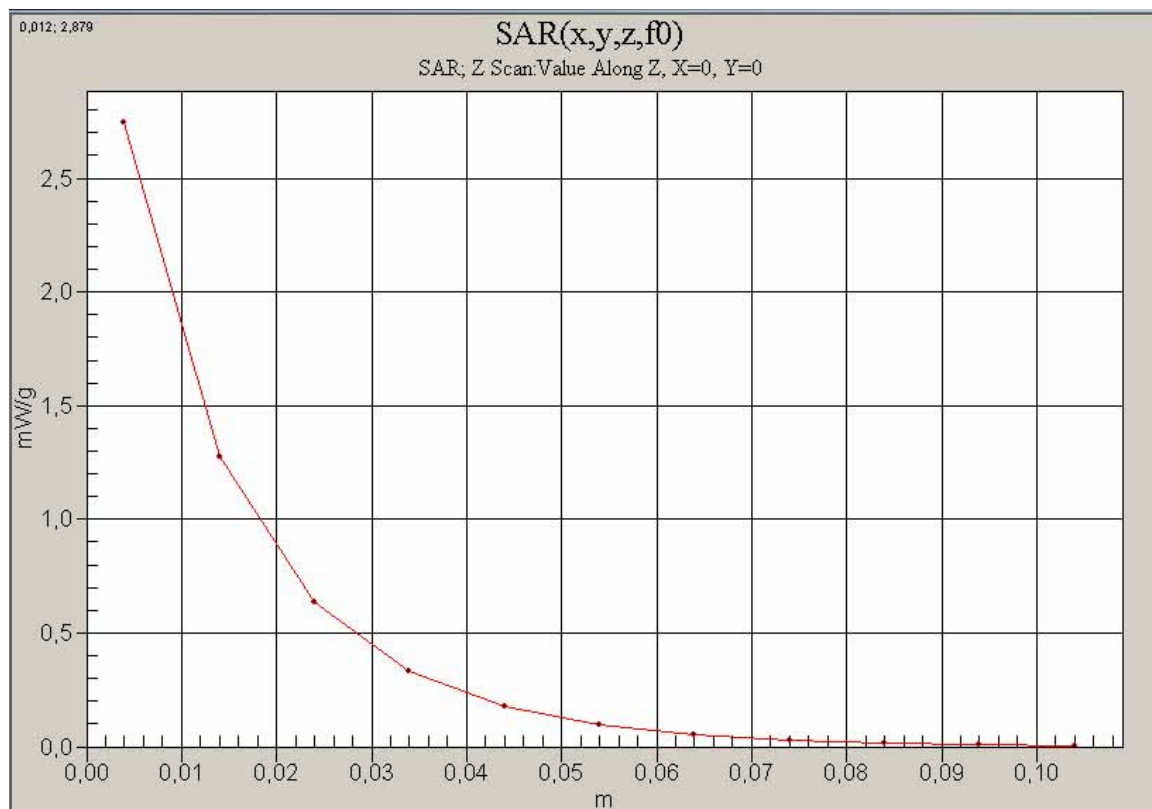


Fig. 23: SAR versus liquid depth, 835 MHz, head (July 18, 2006; Ambient Temperature: 22.2° C; Liquid Temperature : 21.5° C).

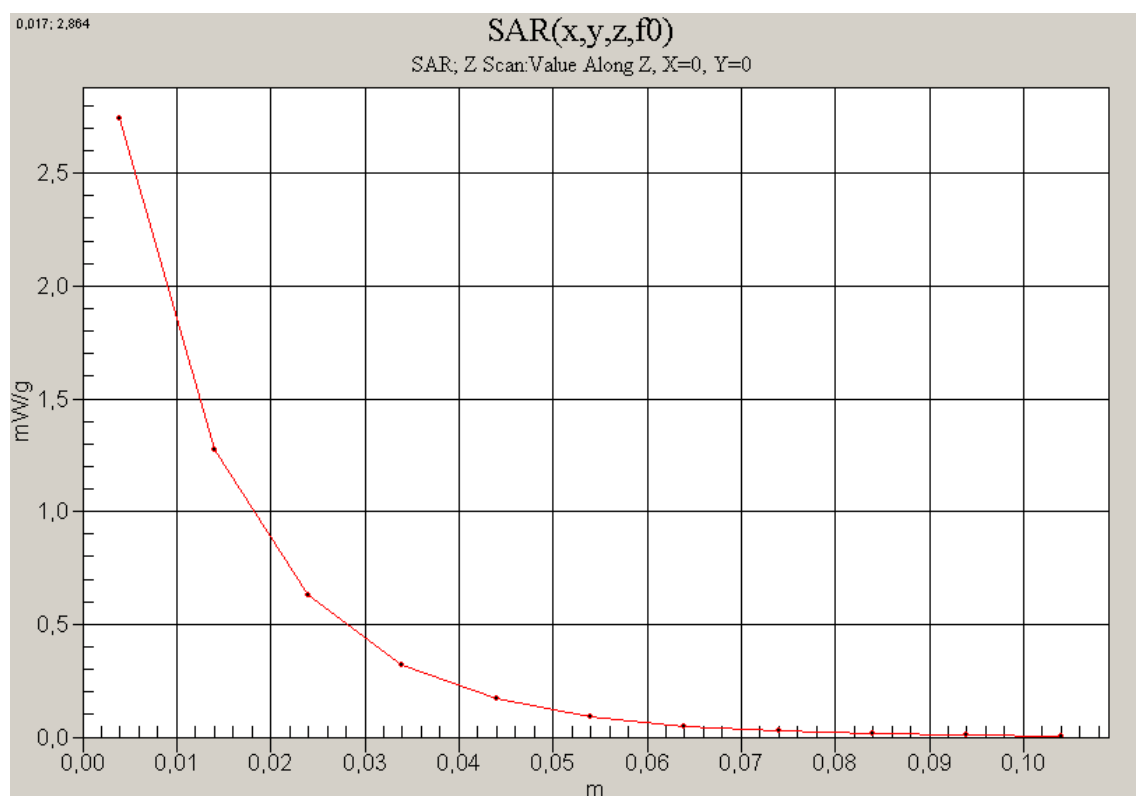


Fig. 24: SAR versus liquid depth, 835 MHz, body (July 19, 2006; Ambient Temperature: 22.2° C; Liquid Temperature : 21.3° C).

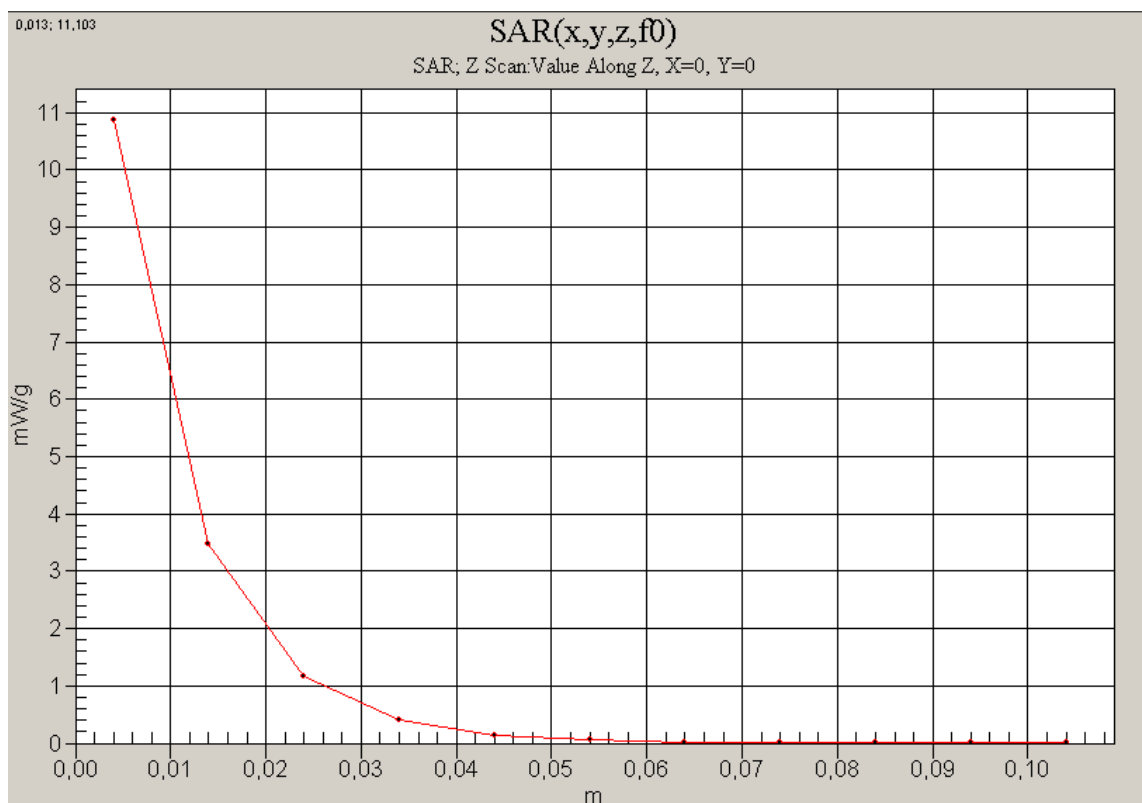


Fig. 25: SAR versus liquid depth, 1900 MHz, head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.3° C).

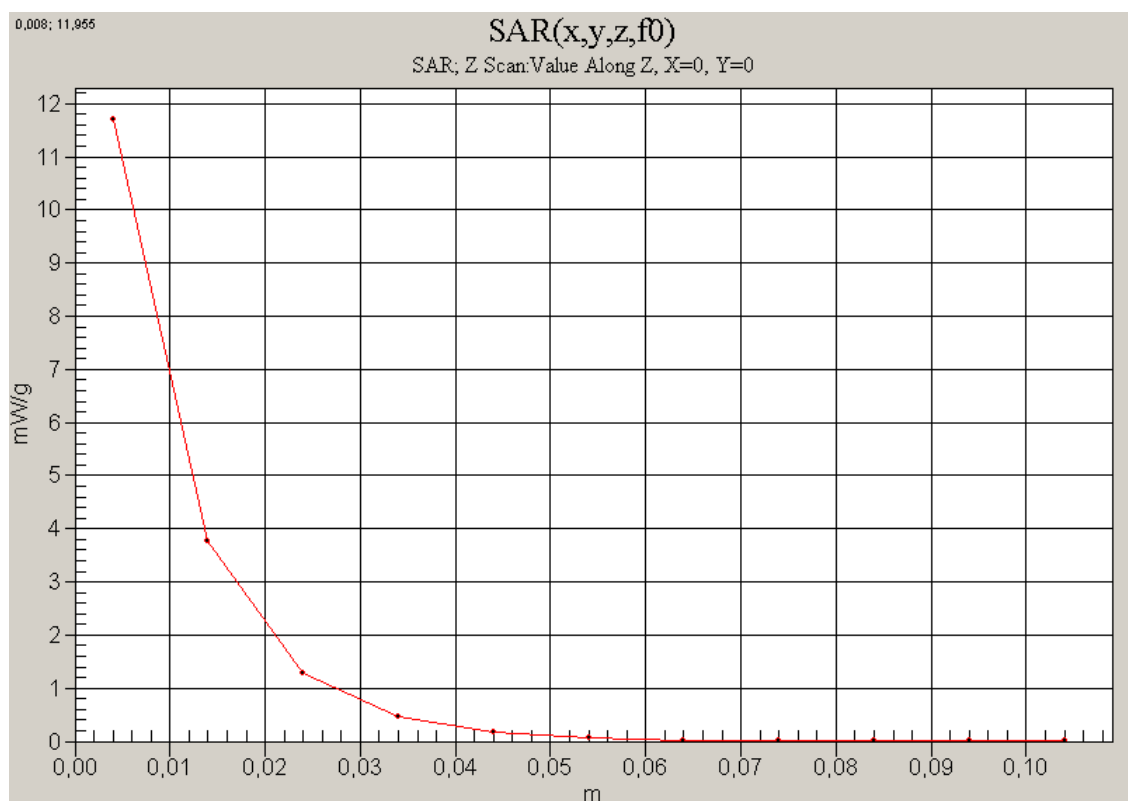


Fig. 26: SAR versus liquid depth, 1900 MHz, body (July 21, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.3° C).

6 SAR z-axis scans (Measurements)

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

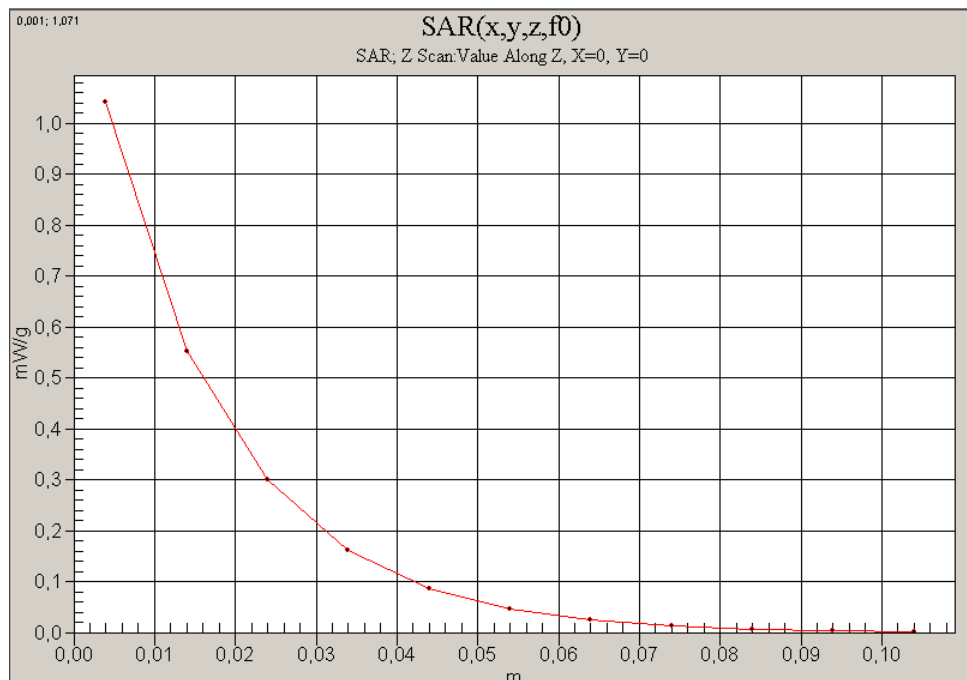


Fig. 27: SAR versus liquid depth, head: GSM 850, channel 251, cheek position, left side of head (July 18, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).

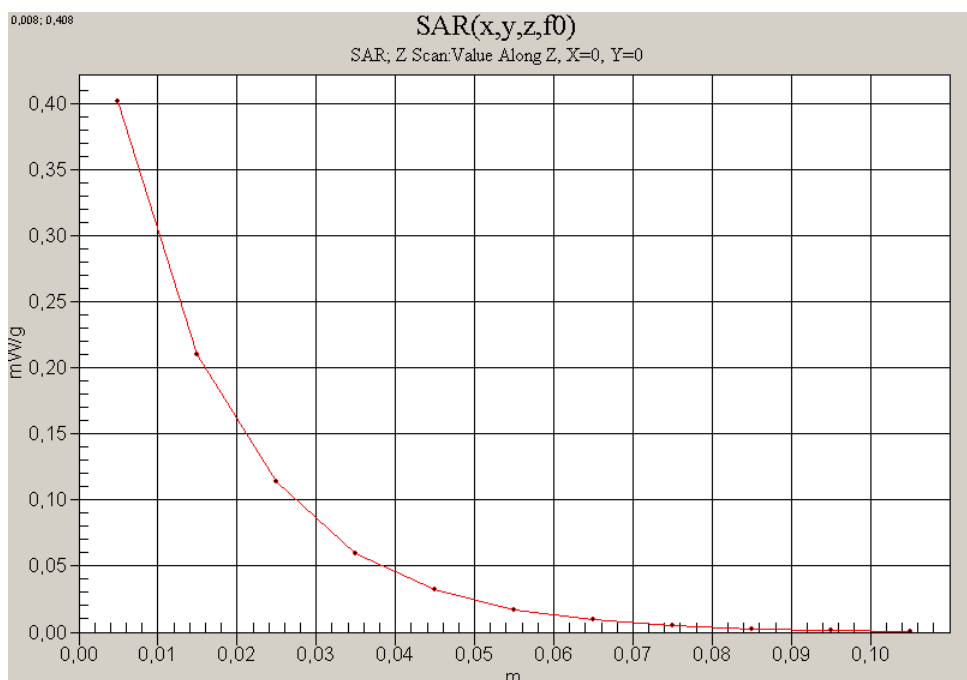


Fig. 28: SAR versus liquid depth, body: GPRS 850, channel 190, data cable, with 20 mm distance (July 19, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.3° C).

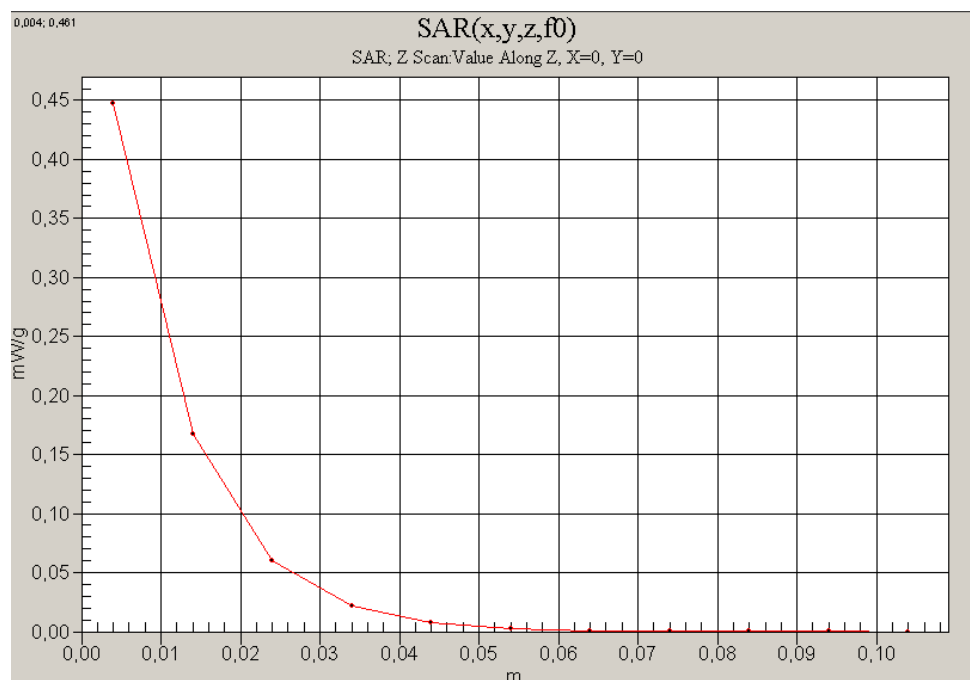


Fig. 29: SAR versus liquid depth, head: PCS 1900, channel 661, cheek position, left side of head, BT activated (July 18, 2006; Ambient Temperature: 22.3° C; Liquid Temperature : 21.5° C).

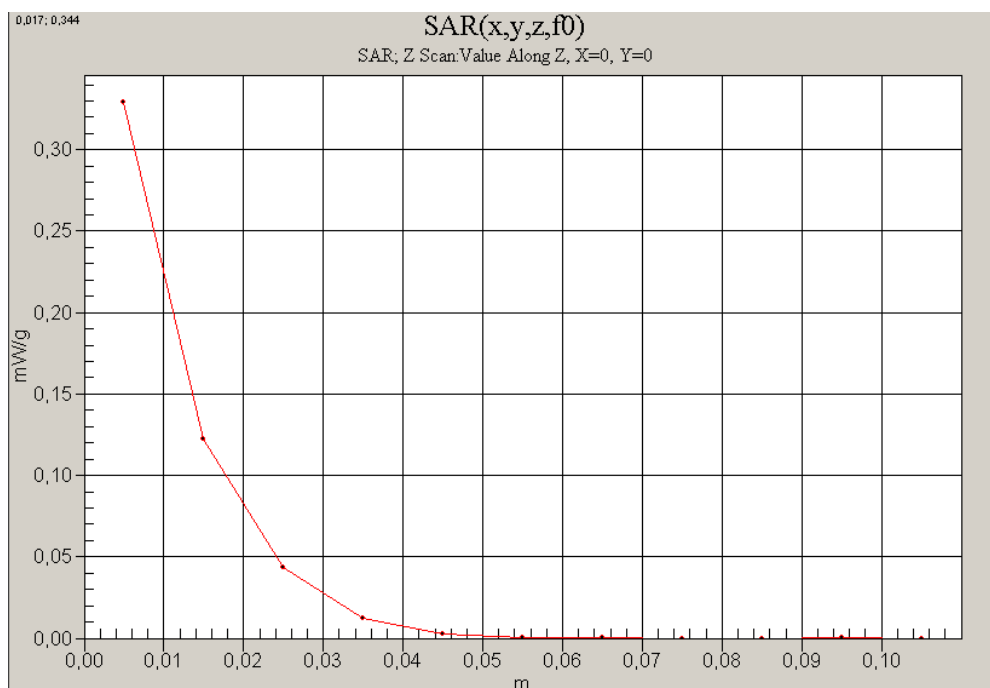


Fig. 30: SAR versus liquid depth, body: PCS 1900, channel 661, data cable, with 20 mm distance (July 21, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.4° C).