
Appendix for the Report

Dosimetric Assessment of the BenQ Siemens EL71 (FCC ID: PWX-EL71)

According to the FCC Requirements

SAR Distribution Plots

March 13, 2006
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The test results only relate to the items tested.
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1 SAR Distribution Plots, PCS 1900 Head, slider up

Test Laboratory: Imst GmbH; File Name: [865yp1m_1_su.da4](#)

DUT: BenQ; Type: EL71; Serial: 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn909; Calibrated: 20.10.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.404 mW/g

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

Reference Value = 4.58 V/m; Power Drift = -0.104 dB

Peak SAR (extrapolated) = 0.680 W/kg

SAR(1 g) = 0.409 mW/g; SAR(10 g) = 0.230 mW/g

Maximum value of SAR (measured) = 0.450 mW/g

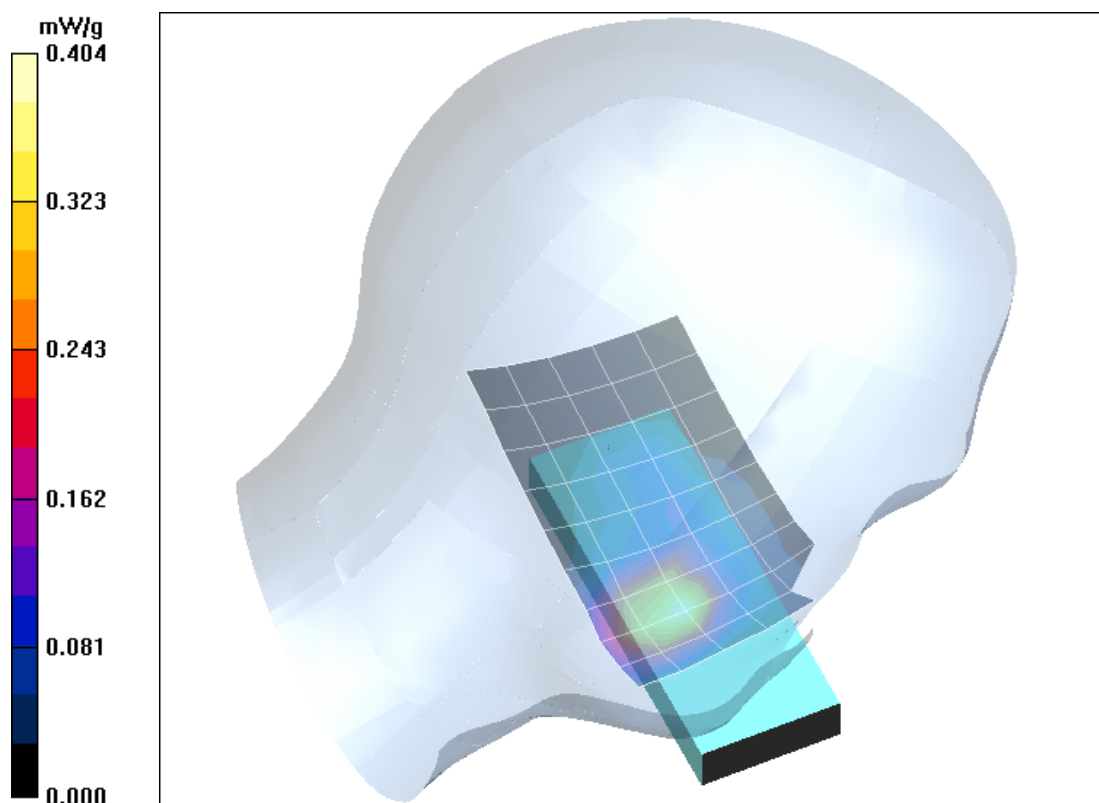


Fig. 1: SAR distribution for PCS 1900, channel 661, cheek position, left side of head (March 07, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.0° C).

Test Laboratory: Imst GmbH; **File Name:** [865yplm 2 su.da4](#)

DUT: BenQ; **Type:** EL71; **Serial:** 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn909; Calibrated: 20.10.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.187 mW/g

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

Reference Value = 9.50 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.175 mW/g; SAR(10 g) = 0.108 mW/g

Maximum value of SAR (measured) = 0.188 mW/g

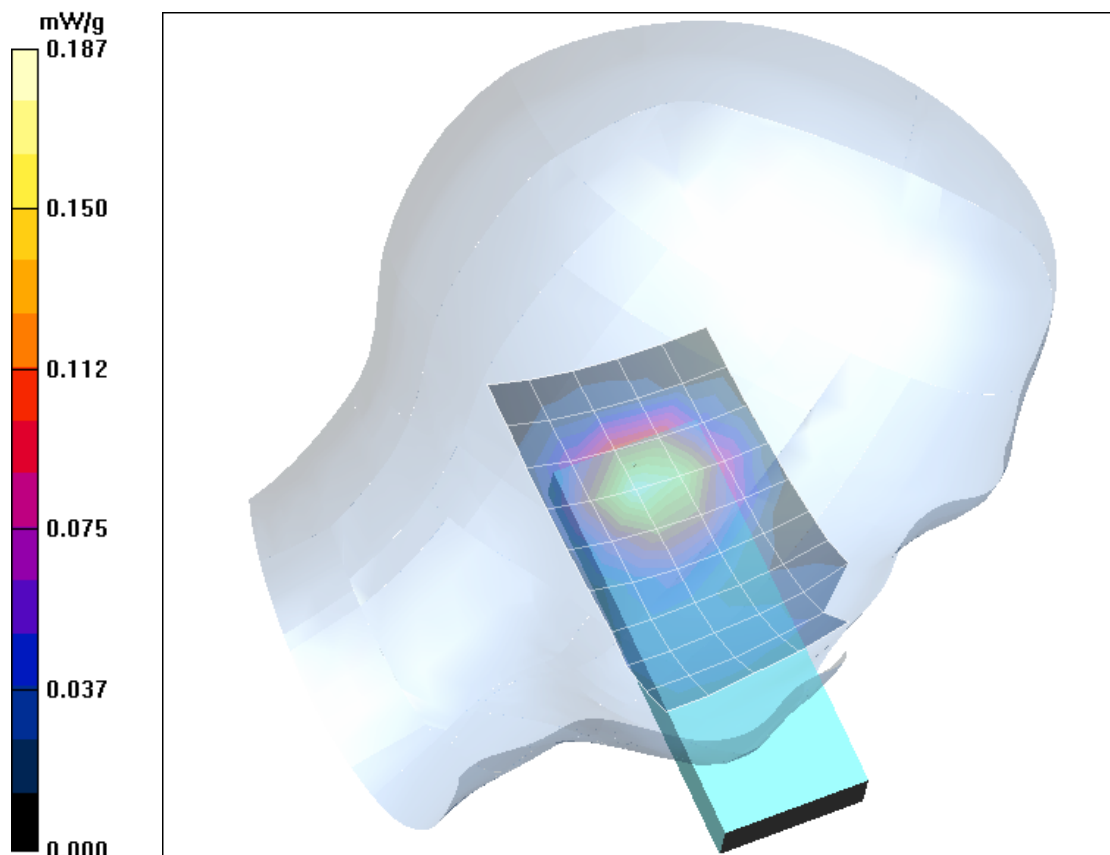


Fig. 2: SAR distribution for PCS 1900, channel 661, tilted position, left side of head (March 07, 2006; Ambient Temperature: 22.0°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH; File Name: [865yprm_1_su.da4](#)

DUT: BenQ; Type: EL71; Serial: 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn909; Calibrated: 20.10.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

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

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

Reference Value = 4.02 V/m; Power Drift = 0.120 dB

Peak SAR (extrapolated) = 0.427 W/kg

SAR(1 g) = 0.267 mW/g; SAR(10 g) = 0.158 mW/g

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

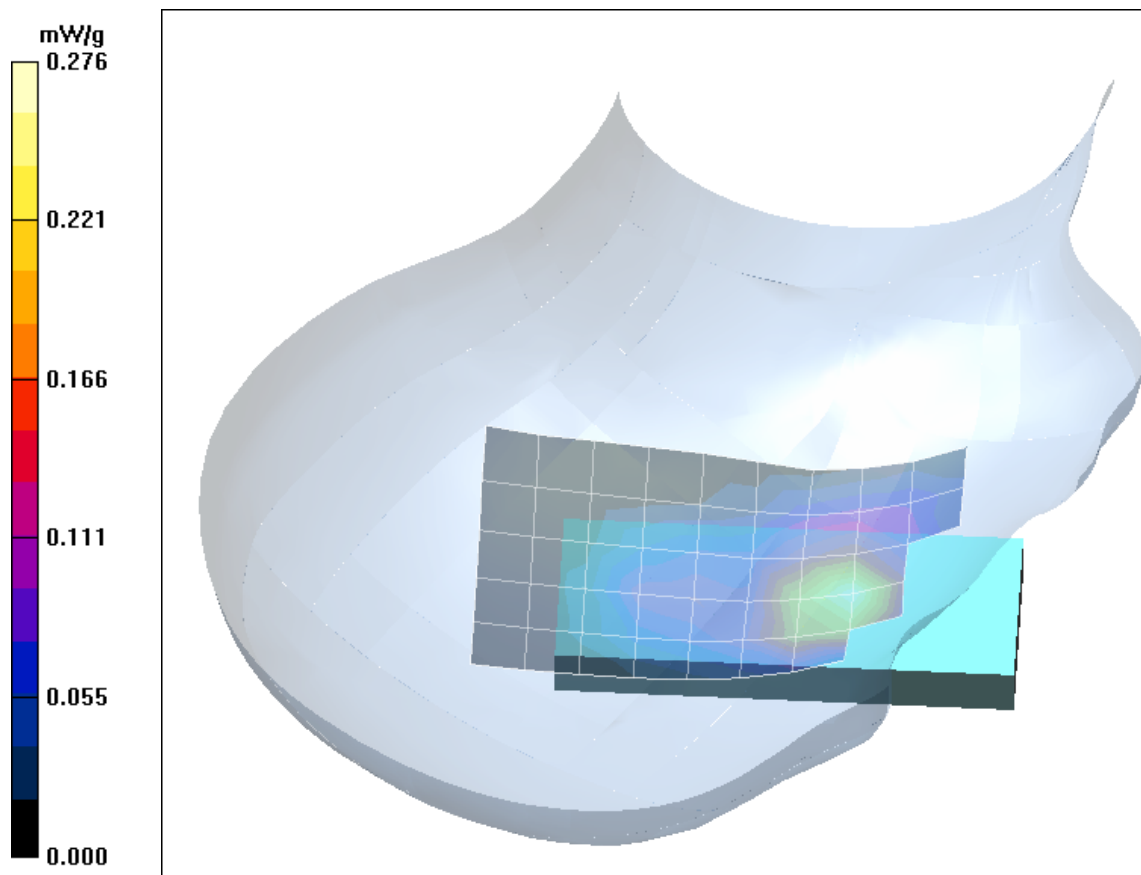


Fig. 3: SAR distribution for PCS 1900, channel 661, cheek position, right side of head (March 07, 2006; Ambient Temperature: 22.1°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH; **File Name:** [865yprm 2 su.da4](#)

DUT: BenQ; **Type:** EL71; **Serial:** 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn909; Calibrated: 20.10.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.206 mW/g

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

Reference Value = 8.23 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.380 W/kg

SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.134 mW/g

Maximum value of SAR (measured) = 0.253 mW/g

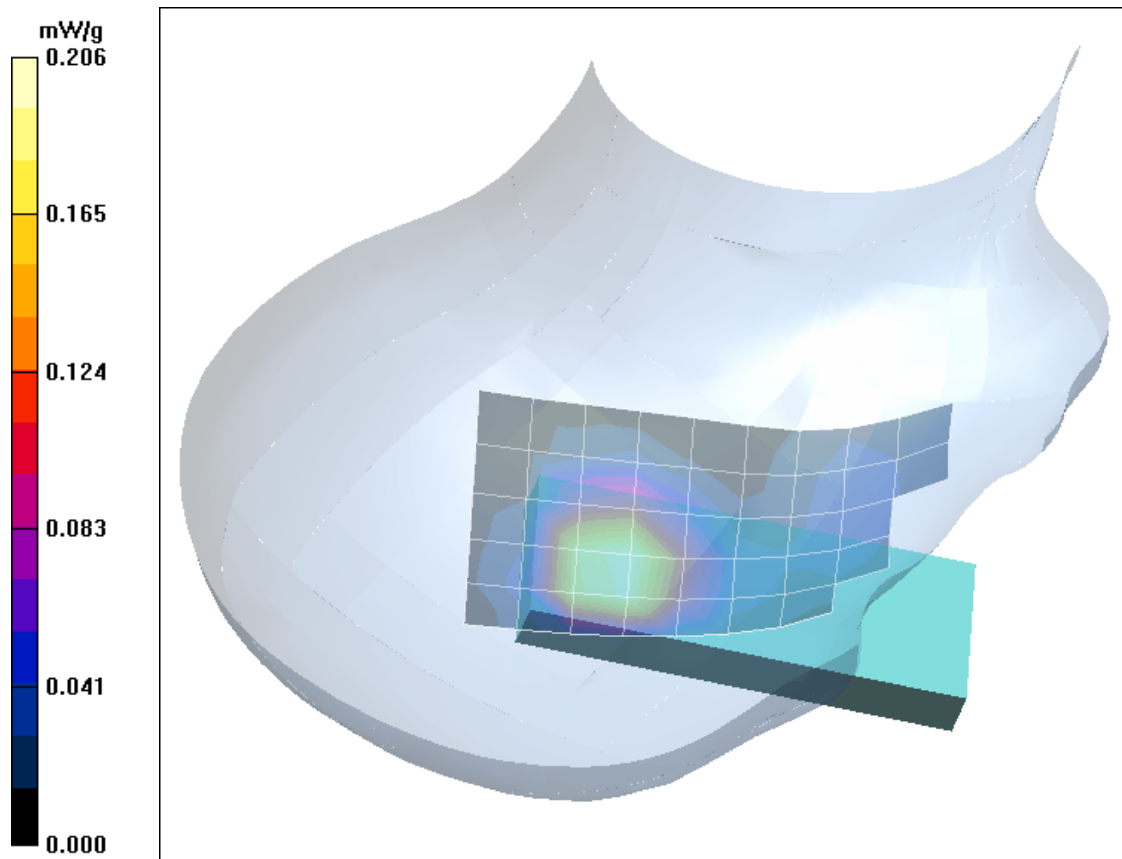


Fig. 4: SAR distribution for PCS 1900, channel 661, tilted position, right side of head (March 07, 2006; Ambient Temperature: 22.1°C; Liquid Temperature: 21.1°C)

2 SAR Distribution Plots, PCS 1900 Head, slider down

Test Laboratory: Imst GmbH; File Name: [865yplm_1_sd.da4](#)

DUT: BenQ; Type: EL71; Serial: 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005

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

- Electronics: DAE4 Sn909; Calibrated: 20.10.2005

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

- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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 = 8.29 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.676 W/kg

SAR(1 g) = 0.372 mW/g; SAR(10 g) = 0.212 mW/g

Maximum value of SAR (measured) = 0.417 mW/g

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

Reference Value = 8.29 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.658 W/kg

SAR(1 g) = 0.394 mW/g; SAR(10 g) = 0.233 mW/g

Maximum value of SAR (measured) = 0.427 mW/g

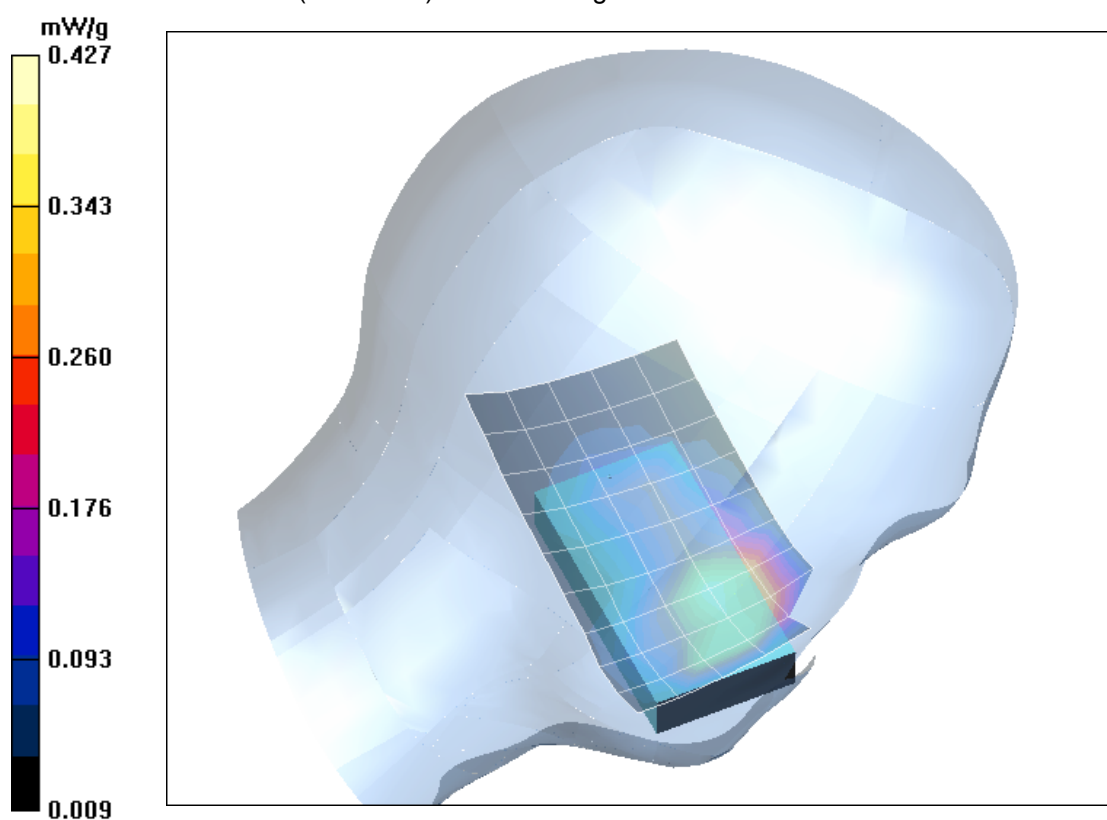


Fig. 5: SAR distribution for PCS 1900, channel 661, cheek position, left side of head (March 07, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.1° C).

Test Laboratory: Imst GmbH; File Name: [865yplm 2 sd.da4](#)

DUT: BenQ; Type: EL71; Serial: 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn909; Calibrated: 20.10.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.216 mW/g

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

Reference Value = 12.0 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 0.338 W/kg

SAR(1 g) = 0.215 mW/g; SAR(10 g) = 0.128 mW/g

Maximum value of SAR (measured) = 0.235 mW/g

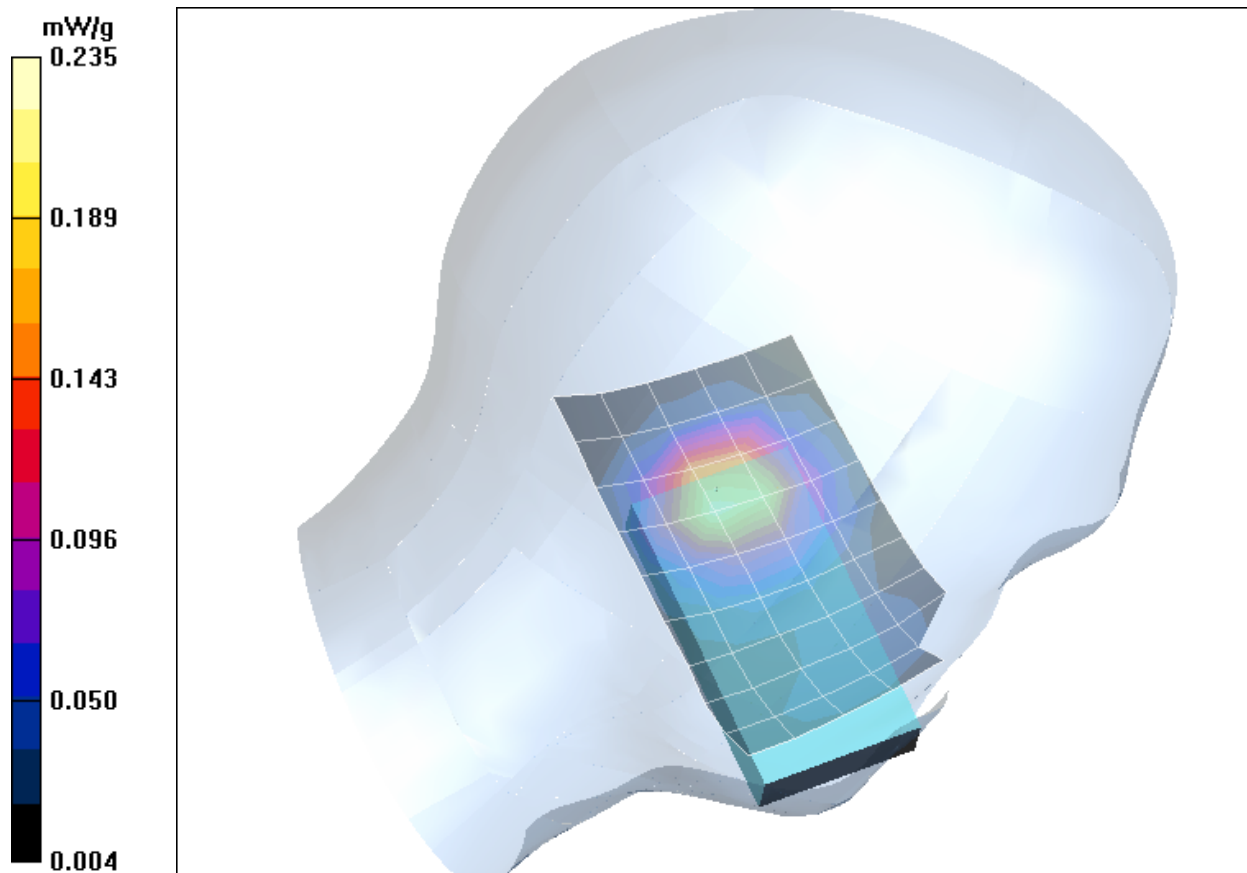


Fig. 6: SAR distribution for PCS 1900, channel 661, tilted position, left side of head (March 07, 2006; Ambient Temperature: 22.1°C; Liquid Temperature: 21.1°C).

Test Laboratory: Imst GmbH; **File Name:** [865yprm_1_sd.da4](#)

DUT: BenQ; **Type:** EL71; **Serial:** 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005

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

- Electronics: DAE4 Sn909; Calibrated: 20.10.2005

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

- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

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

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

Reference Value = 5.20 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 0.749 W/kg

SAR(1 g) = 0.412 mW/g; SAR(10 g) = 0.228 mW/g

Maximum value of SAR (measured) = 0.444 mW/g

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

Reference Value = 5.20 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.269 mW/g; SAR(10 g) = 0.171 mW/g

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

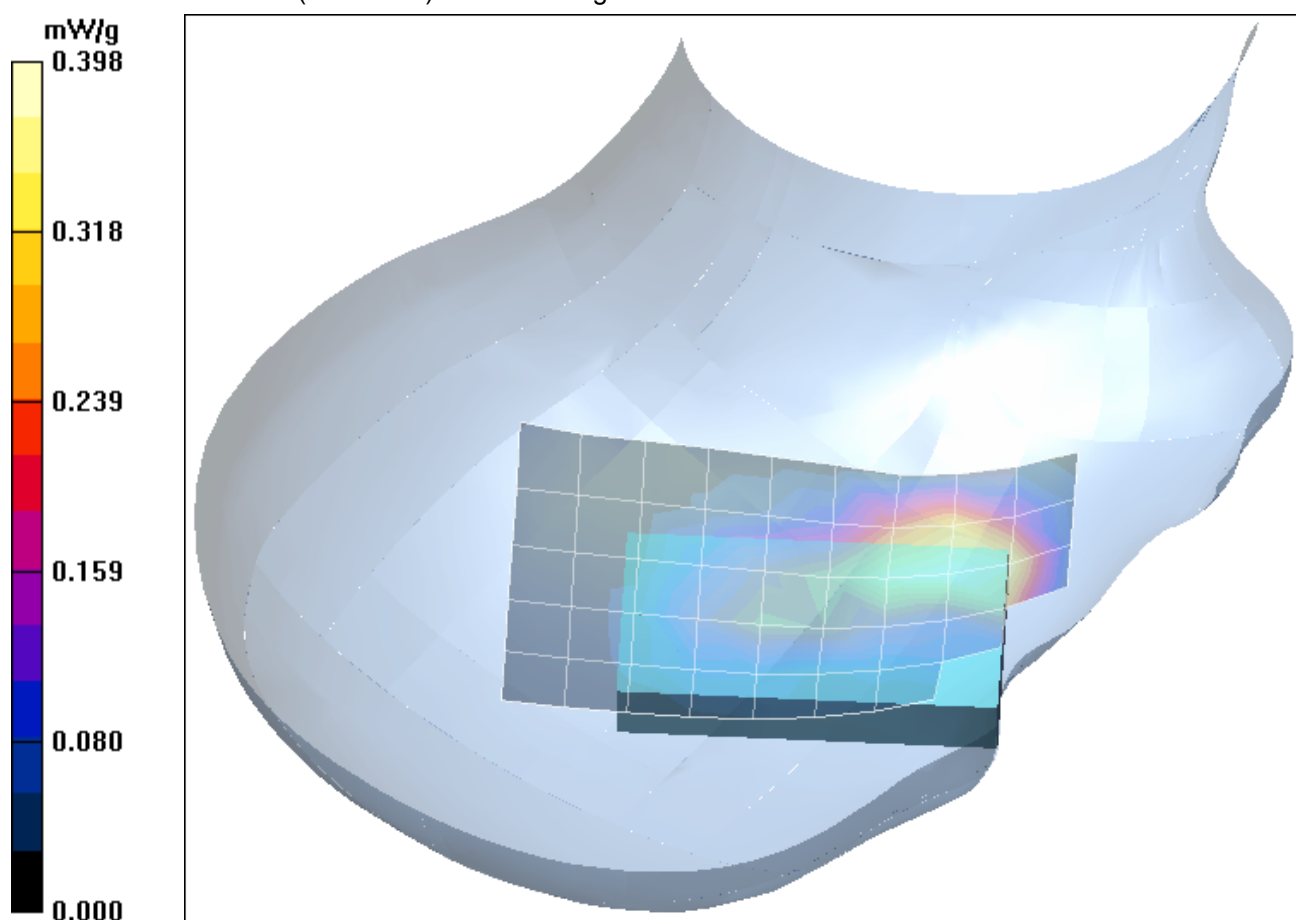


Fig. 7: SAR distribution for PCS 1900, channel 661, cheek position, right side of head (March 07, 2006; Ambient Temperature: 22.1°C; Liquid Temperature: 21.1°C).

Test Laboratory: Imst GmbH; File Name: [865yprm 2 sd.da4](#)

DUT: BenQ; Type: EL71; Serial: 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn909; Calibrated: 20.10.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.218 mW/g

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

Reference Value = 9.92 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 0.389 W/kg

SAR(1 g) = 0.241 mW/g; SAR(10 g) = 0.141 mW/g

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

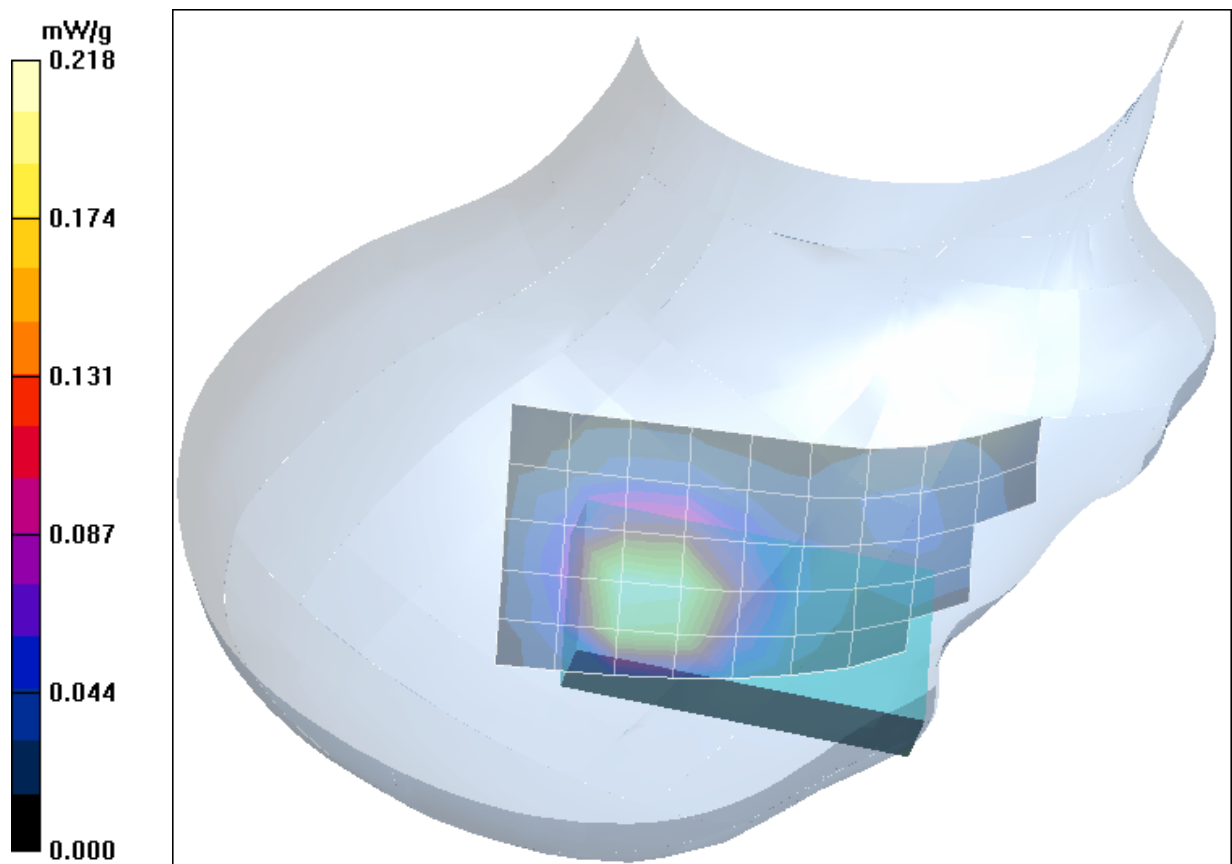


Fig. 8: SAR distribution for PCS 1900, channel 661, tilted position, right side of head (March 07, 2006; Ambient Temperature: 22.1°C; Liquid Temperature: 21.1°C)

3 SAR Distribution Plots, PCS 1900 Head, slider down, BT activated

Test Laboratory: Imst GmbH; File Name: [865yprm_1_BT_sd.da4](#)

DUT: BenQ; Type: EL71; Serial: 004400016196865

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; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.25, 8.25, 8.25); Calibrated: 23.09.2005

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

- Electronics: DAE4 Sn909; Calibrated: 20.10.2005

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

- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.382 mW/g

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

Reference Value = 6.32 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 0.731 W/kg

SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.220 mW/g

Maximum value of SAR (measured) = 0.436 mW/g

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

Reference Value = 6.32 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 0.359 W/kg

SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.161 mW/g

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

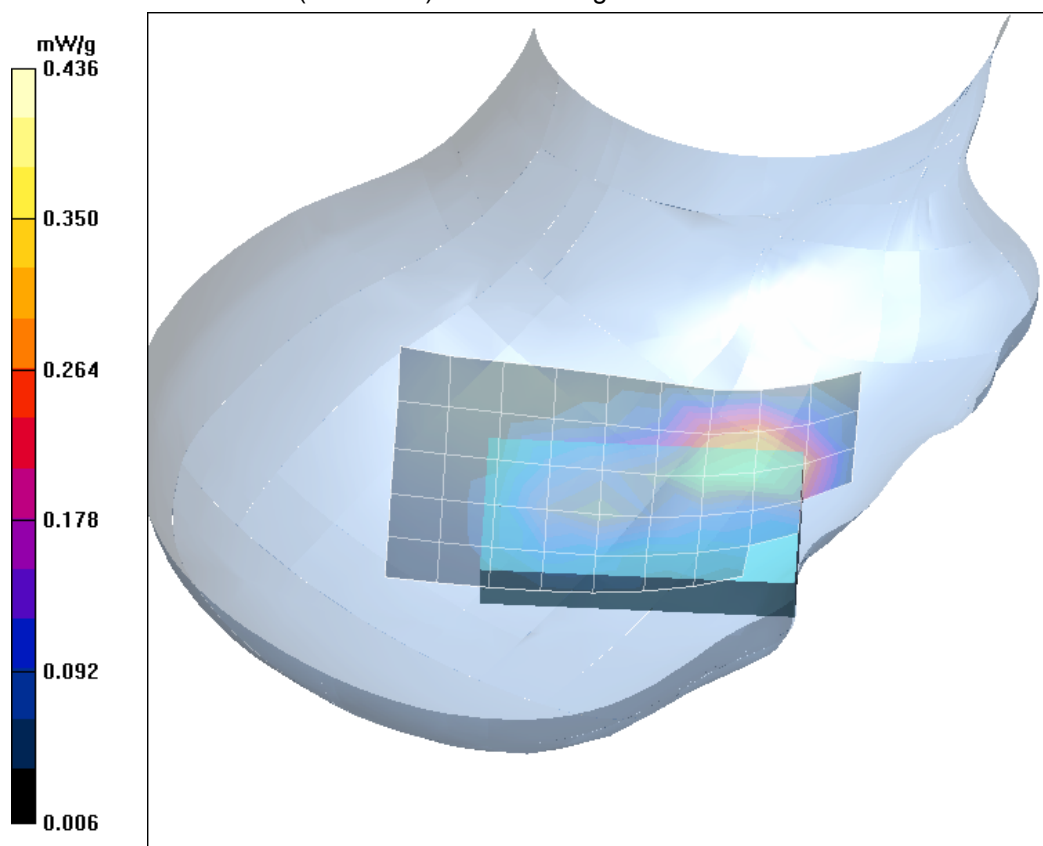


Fig. 9: SAR distribution for PCS 1900, channel 661, cheek position, right side of head (March 07, 2006; Ambient Temperature: 22.1°C; Liquid Temperature: 21.1°C).

4 SAR Distribution Plots, PCS 1900 Body

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [865bphm_4_ohne_15mm.da4](#)

DUT: BenQ; Type: EL71; Serial: 004400016196865

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.47, 4.47, 4.47); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.213 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 = -0.191 dB

Peak SAR (extrapolated) = 0.315 W/kg

SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.131 mW/g

Maximum value of SAR (measured) = 0.217 mW/g

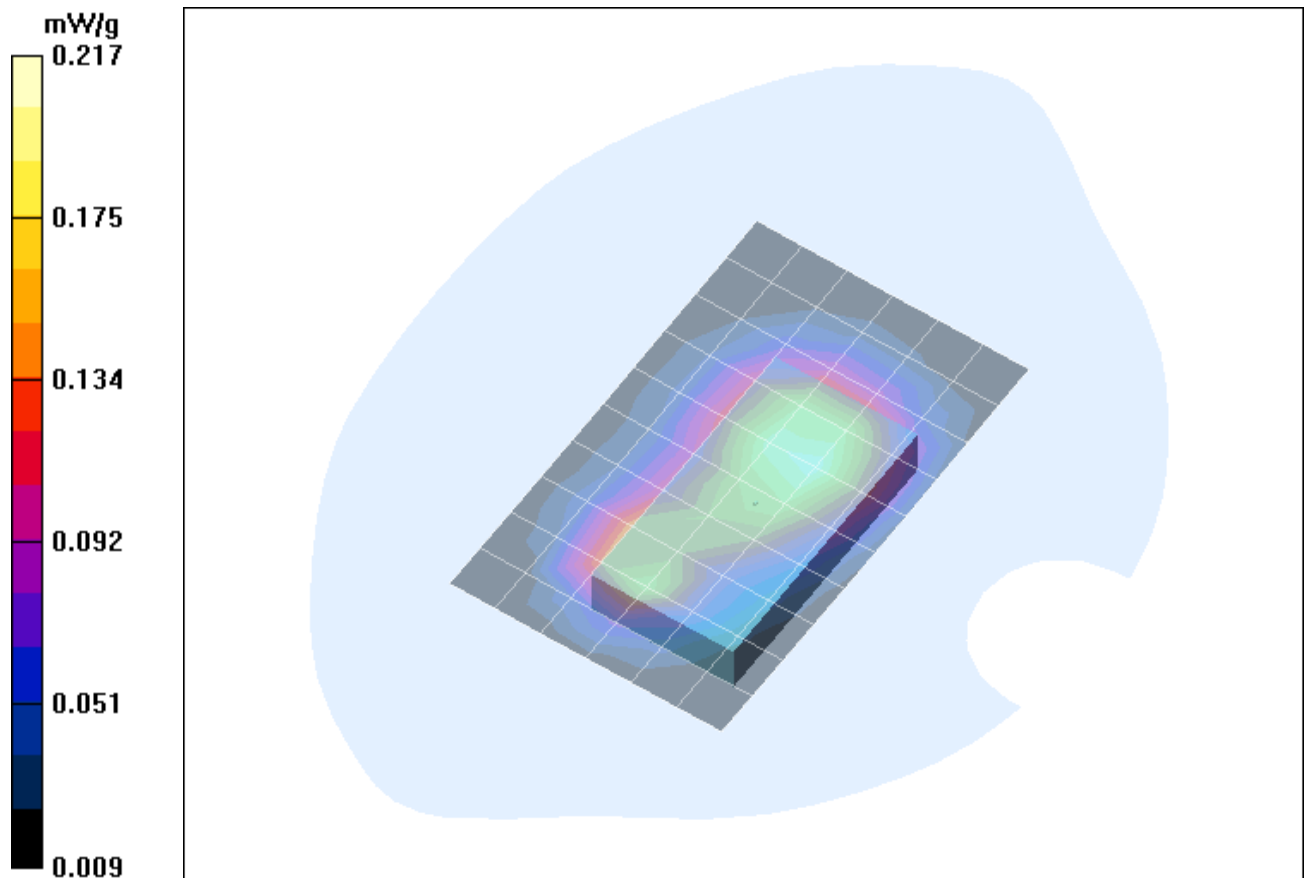


Fig. 10: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, without accessory 15 mm distance (March 10, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.3° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [865bphm 5 headset 15mm.da4](#)

DUT: BenQ; **Type:** EL71; **Serial:** 004400016196865

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.47, 4.47, 4.47); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.221 mW/g

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

Reference Value = 11.9 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.383 W/kg

SAR(1 g) = 0.210 mW/g; SAR(10 g) = 0.120 mW/g

Maximum value of SAR (measured) = 0.227 mW/g

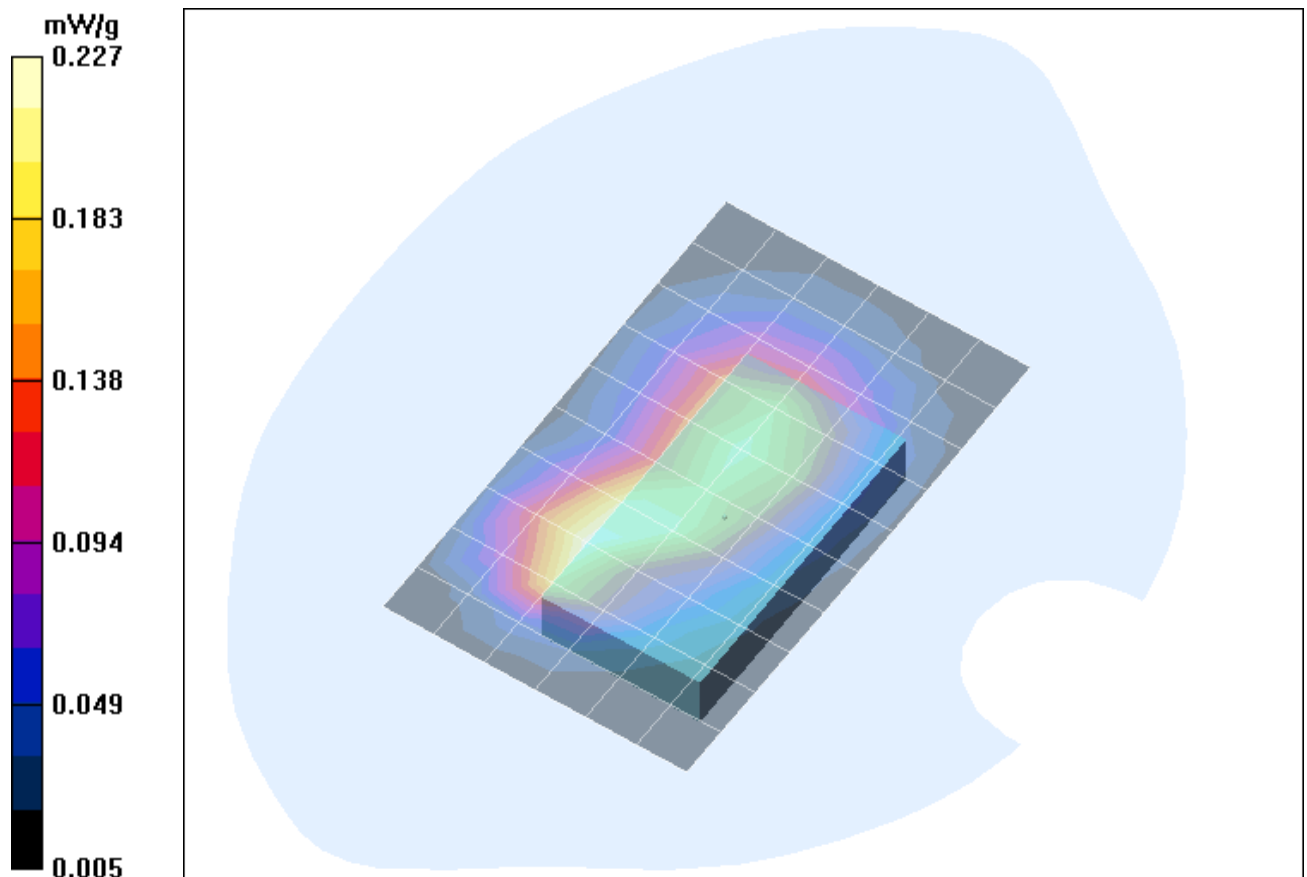


Fig. 11: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with headset, with 15 mm distance (March 10, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.3° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [865bphm 6 data 15mm.da4](#)

DUT: BenQ; **Type:** EL71; **Serial:** 004400016196865

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.47, 4.47, 4.47); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.338 mW/g

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

Reference Value = 14.3 V/m; Power Drift = -0.163 dB

Peak SAR (extrapolated) = 0.581 W/kg

SAR(1 g) = 0.333 mW/g; SAR(10 g) = 0.196 mW/g

Maximum value of SAR (measured) = 0.361 mW/g

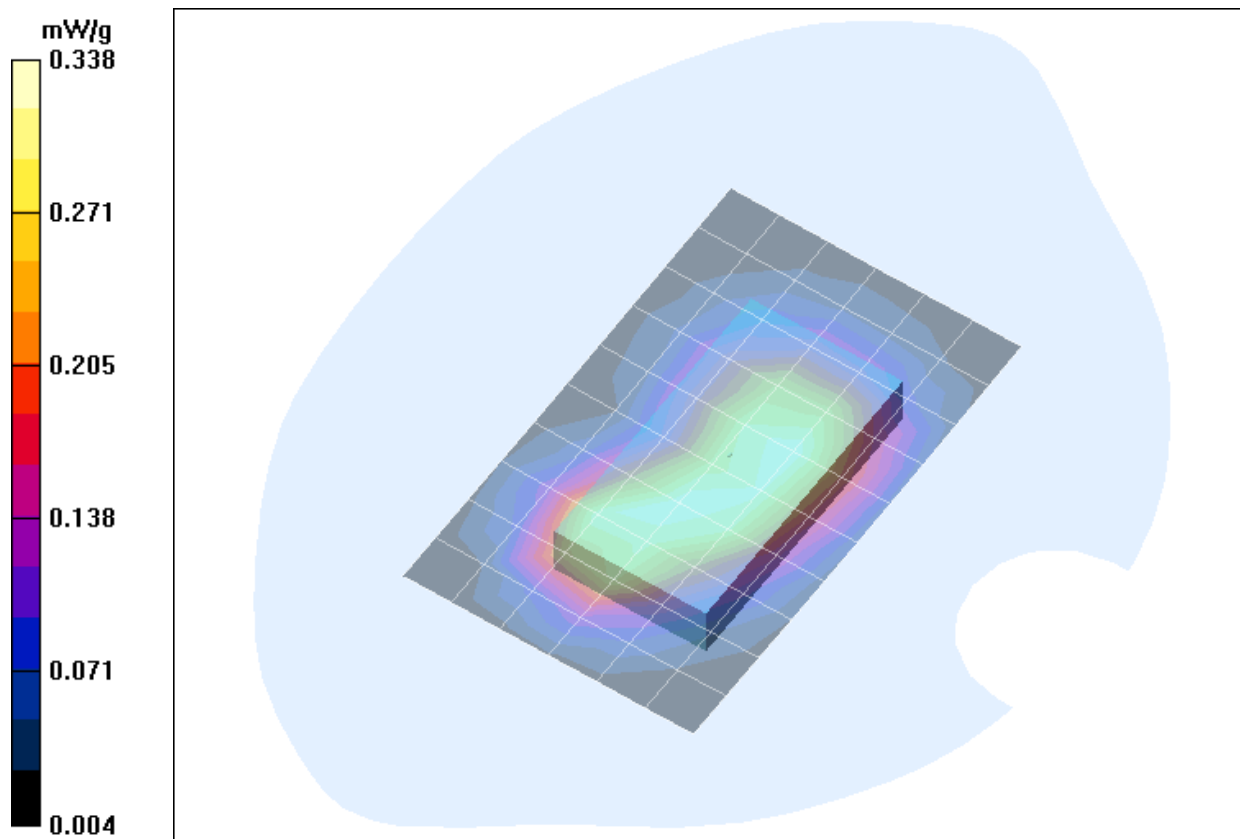


Fig. 12: SAR distribution for GPRS 1900 (Class10), channel 661, body worn configuration, antenna towards the phantom, with data cable, with 15 mm distance (March 10, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [865bphm 11 ohne 15mm BT.da4](#)

DUT: BenQ; **Type:** EL71; **Serial:** 004400016196865

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.47, 4.47, 4.47); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.337 mW/g

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

Reference Value = 14.2 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 0.588 W/kg

SAR(1 g) = 0.325 mW/g; SAR(10 g) = 0.192 mW/g

Maximum value of SAR (measured) = 0.352 mW/g

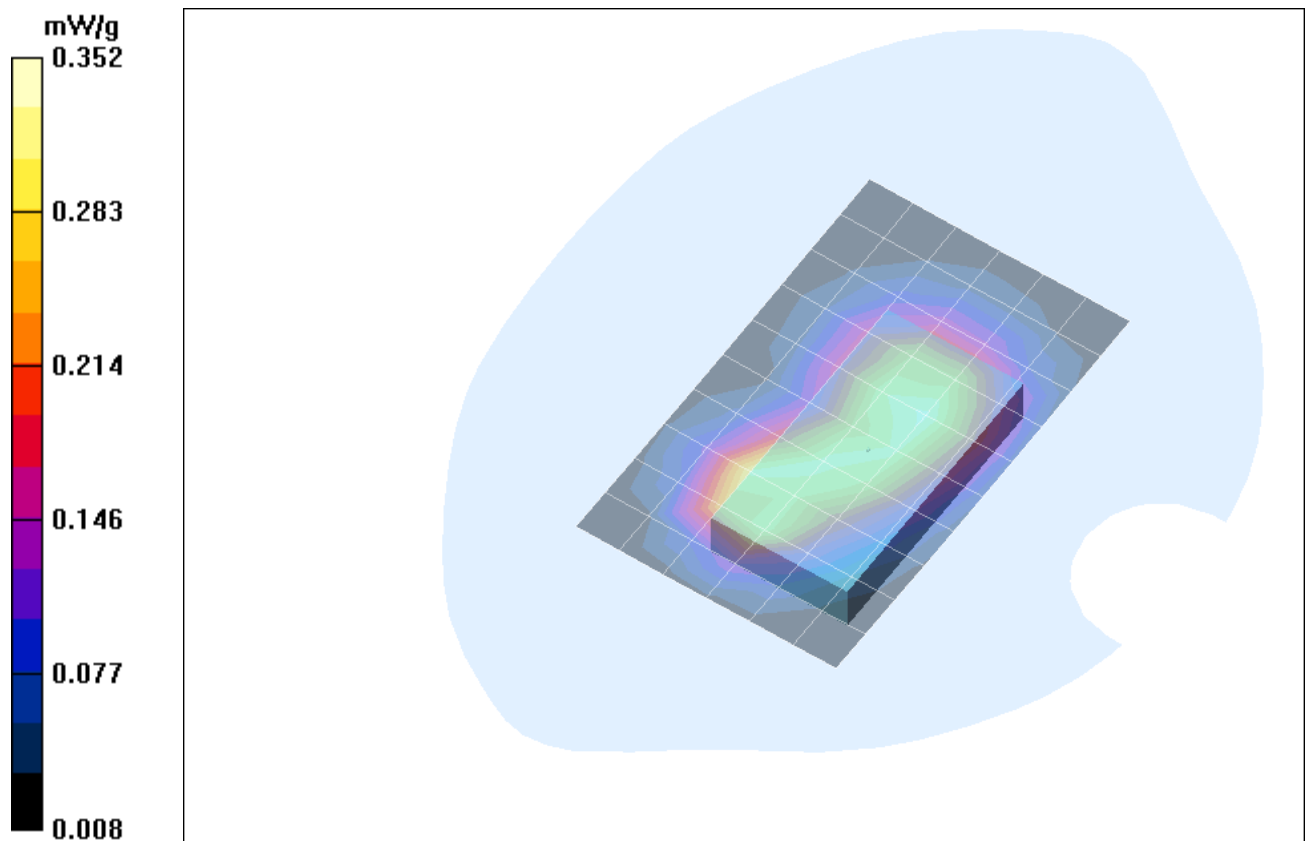


Fig. 13: SAR distribution for GPRS 1900 (Class 10), channel 661, body worn configuration, antenna towards the phantom, with Bluetooth activated, with 15 mm distance (March 10, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

5 SAR Distribution Plots, PCS 1900 Body with FCL 170 carry case

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [865bphm_15_FCL170_BT_1_wdh.da4](#)

DUT: BenQ; Type: EL71; Serial: 004400016196865

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.47, 4.47, 4.47); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.203 mW/g

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

Reference Value = 10.8 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.348 W/kg

SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.108 mW/g

Maximum value of SAR (measured) = 0.210 mW/g

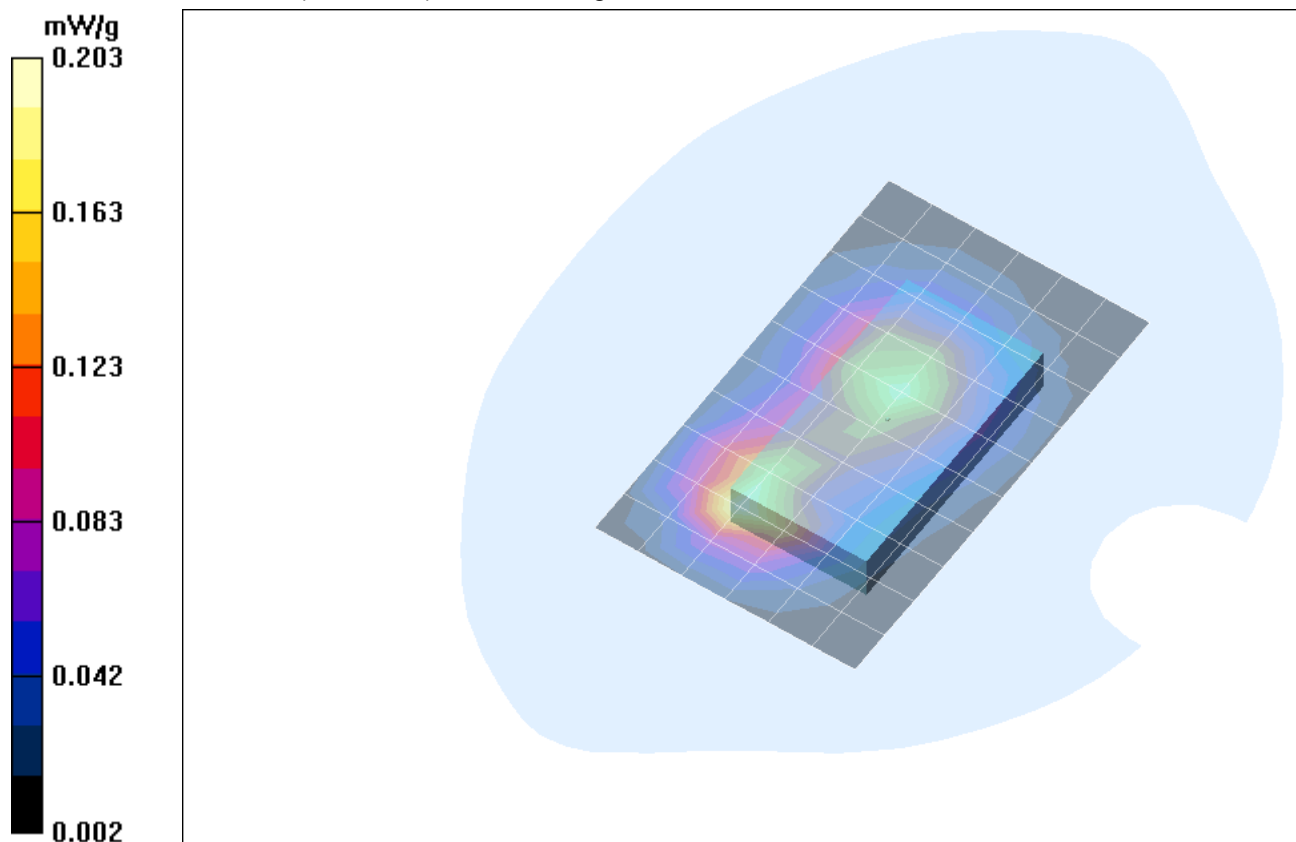


Fig. 14: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with Bluetooth activated 15 mm distance (March 10, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [865bphm_15_FCL170_BT_2_wdh.da4](#)

DUT: BenQ; **Type:** EL71; **Serial:** 004400016196865

Program Name: Body Worn

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.47, 4.47, 4.47); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (measured) = 0.421 mW/g

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

Reference Value = 15.5 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.706 W/kg

SAR(1 g) = 0.389 mW/g; SAR(10 g) = 0.216 mW/g

Maximum value of SAR (measured) = 0.425 mW/g

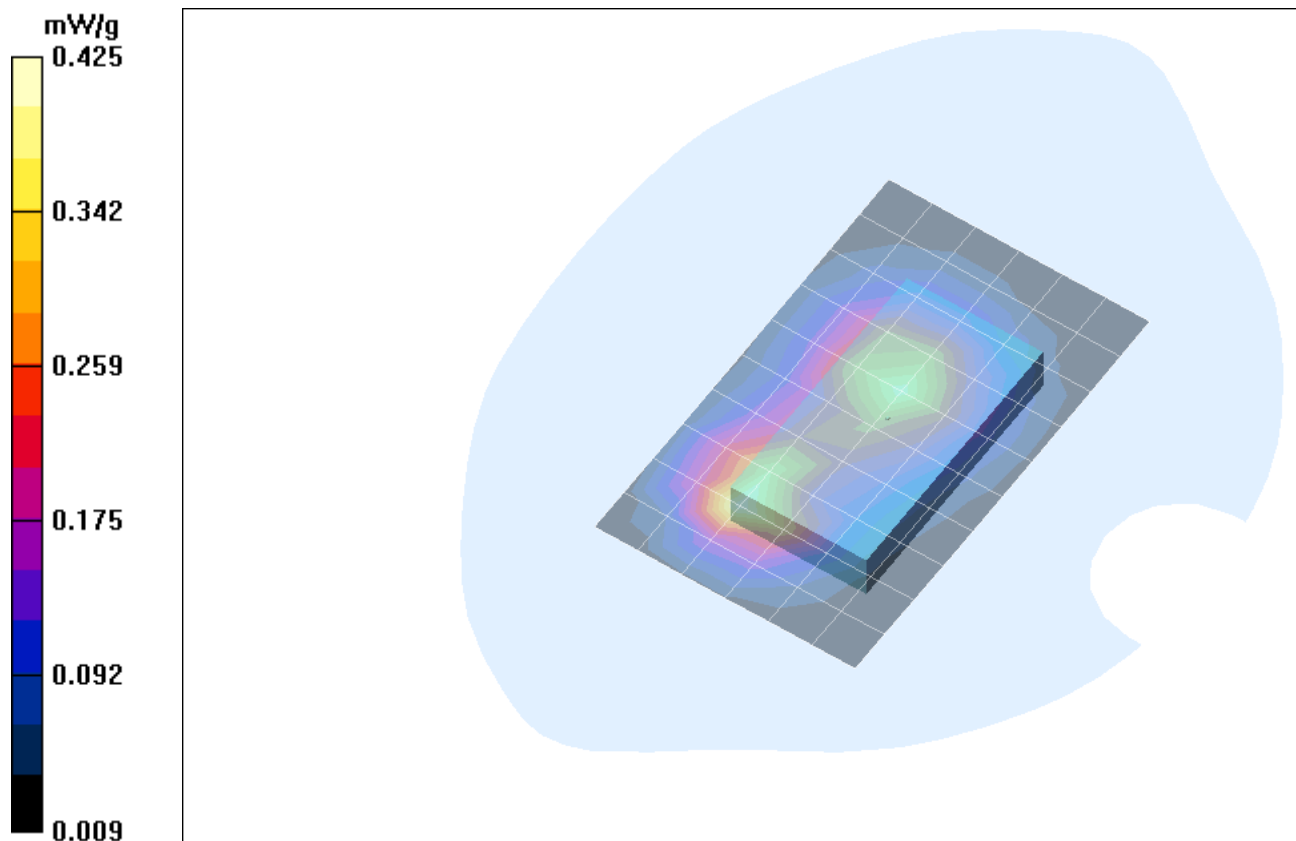


Fig. 15: SAR distribution for GPRS 1900 (Class 10), channel 661, body worn configuration, antenna towards the phantom, with Bluetooth activated, with 15 mm distance (March 10, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

6 SAR z-axis scans (Validation)

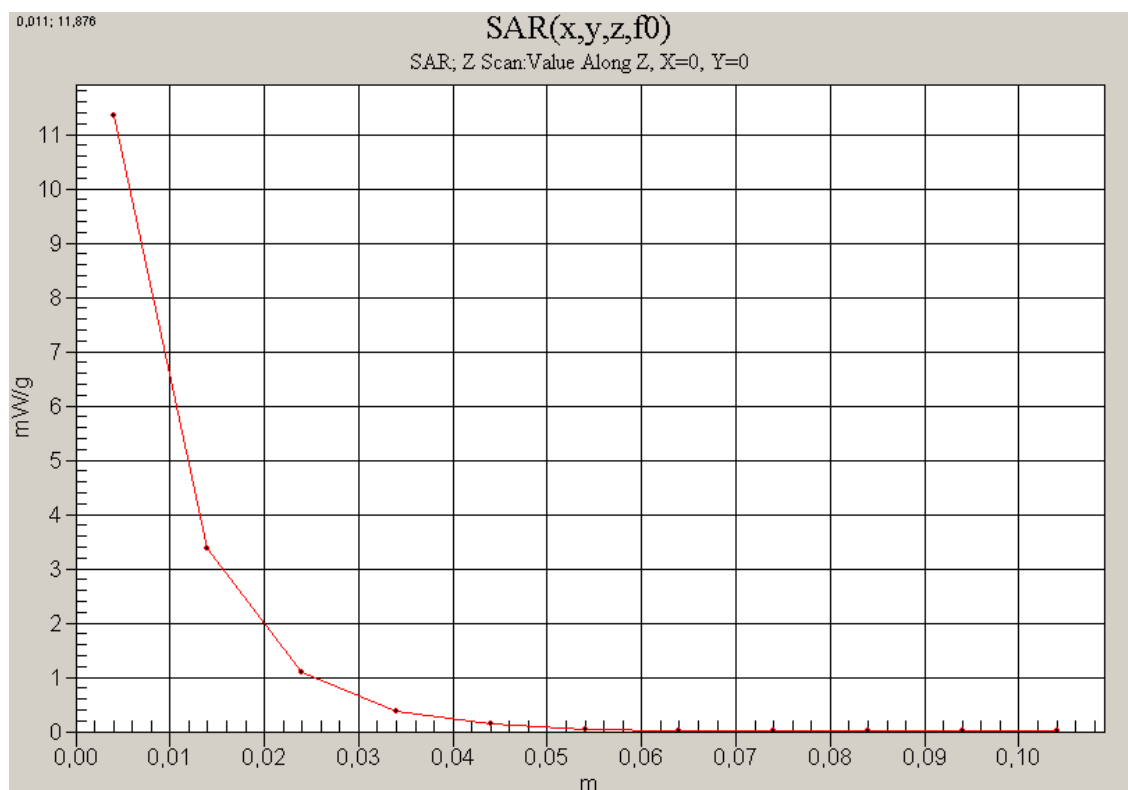


Fig. 16: SAR versus liquid depth, 1900 MHz, head (March 07, 2006; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

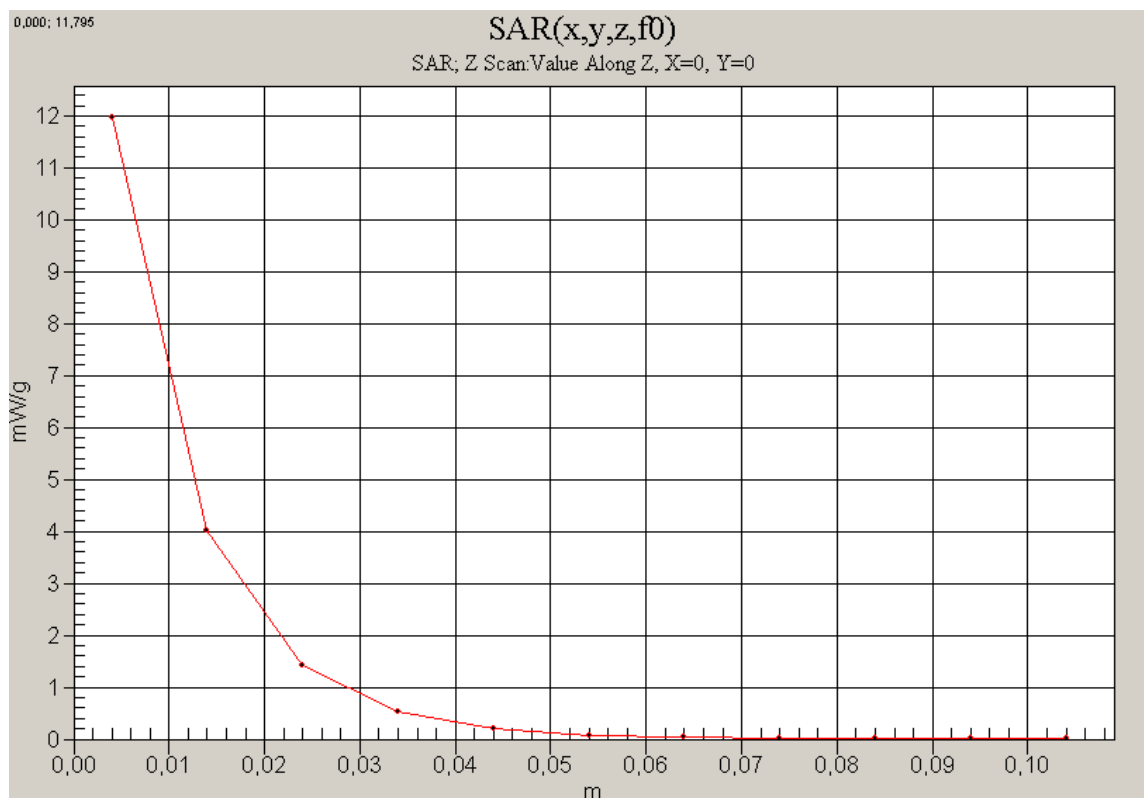


Fig. 17: SAR versus liquid depth, 1900 MHz, body (March 10, 2006; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

7 SAR z-axis scans (Measurements)

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

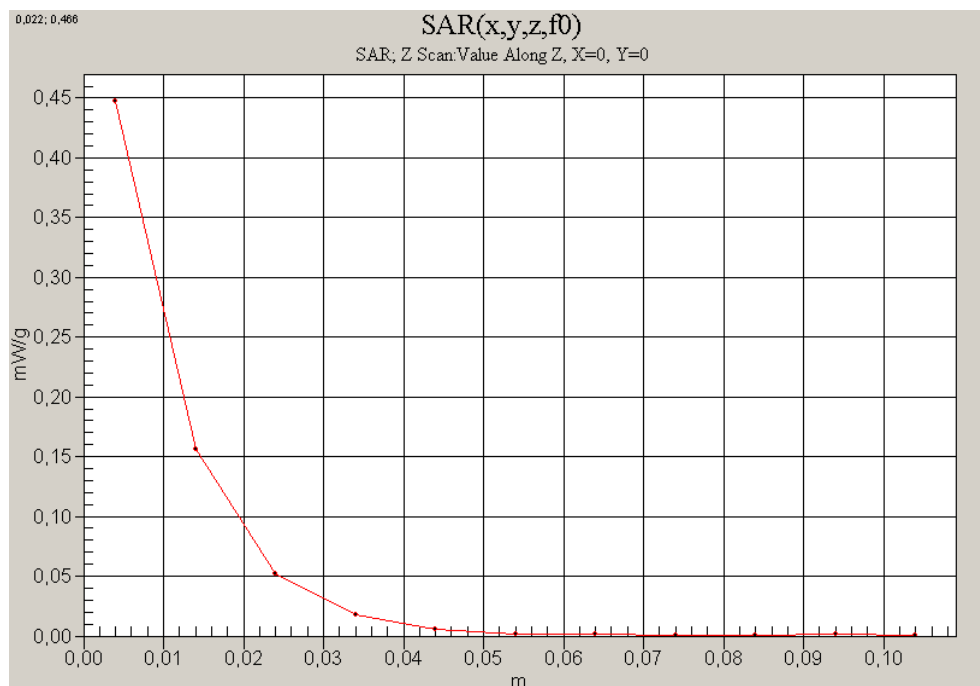


Fig. 18: SAR versus liquid depth, head: PCS 1900, channel 661, cheek position, right side of head, slider down (March 07, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.1° C).

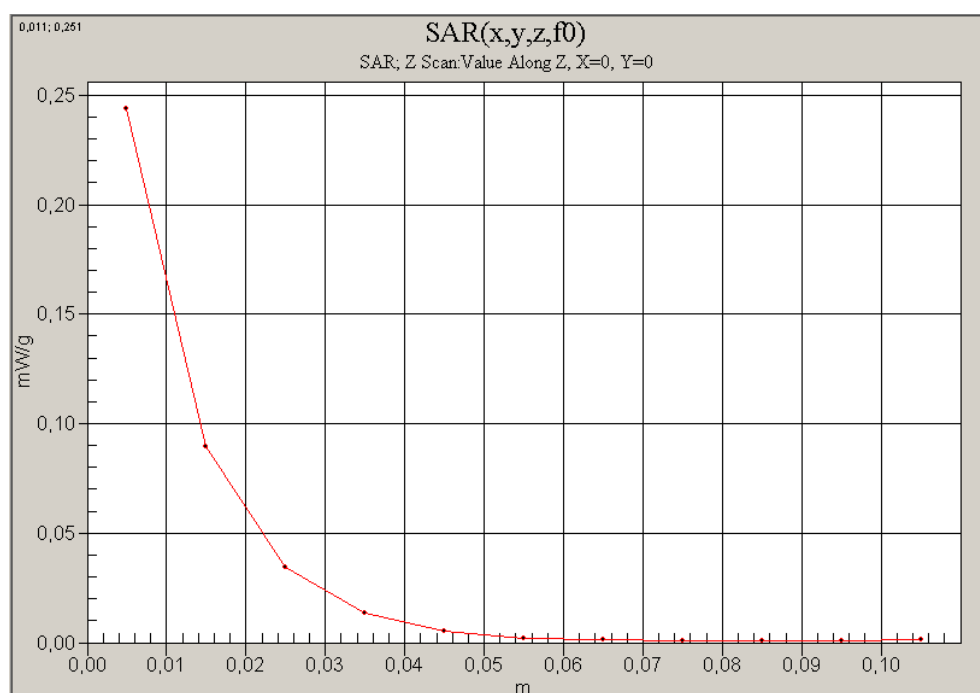


Fig. 19: SAR versus liquid depth, body: GPRS 1900 (Class 10), channel 661, body worn configuration, antenna towards the phantom, with data cable, with 15 mm distance (March 10, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).