
Appendix for the Report

**Dosimetric Assessment of the Portable
Device 8900VS from
DAP Technologies (FCC ID: T5M8900V2)**

According to the FCC Requirements

SAR Distribution Plots

October 16, 2009

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1 SAR Distribution Plots, GPRS 850

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS_bahm_1_4TX.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: GPRS

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (11x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.001 mW/g

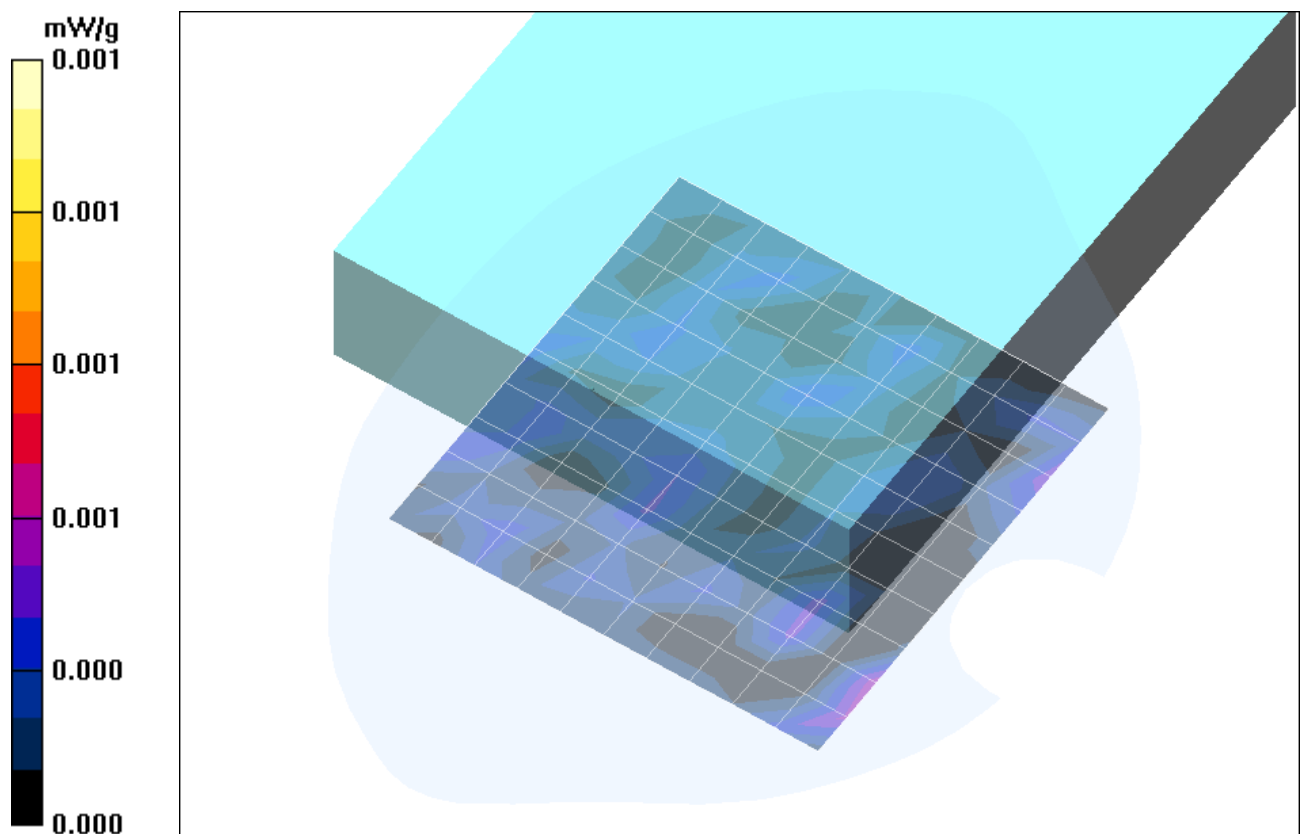


Fig. 1: SAR distribution for GPRS 850 (Class 12), channel 190, position 1 (October 12, 2009; Ambient Temperature: 21.2° C; Liquid Temperature: 20.7° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [8900VS_bahm_2_4TX.da4](#)

DUT: DAP; **Type:** 8900VS; **Serial:** HN00541

Program Name: GPRS

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x11x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.322 mW/g

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

Reference Value = 11.5 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 0.626 W/kg

SAR(1 g) = 0.313 mW/g; SAR(10 g) = 0.185 mW/g

Maximum value of SAR (measured) = 0.346 mW/g

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

Reference Value = 11.5 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 0.703 W/kg

SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.176 mW/g

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

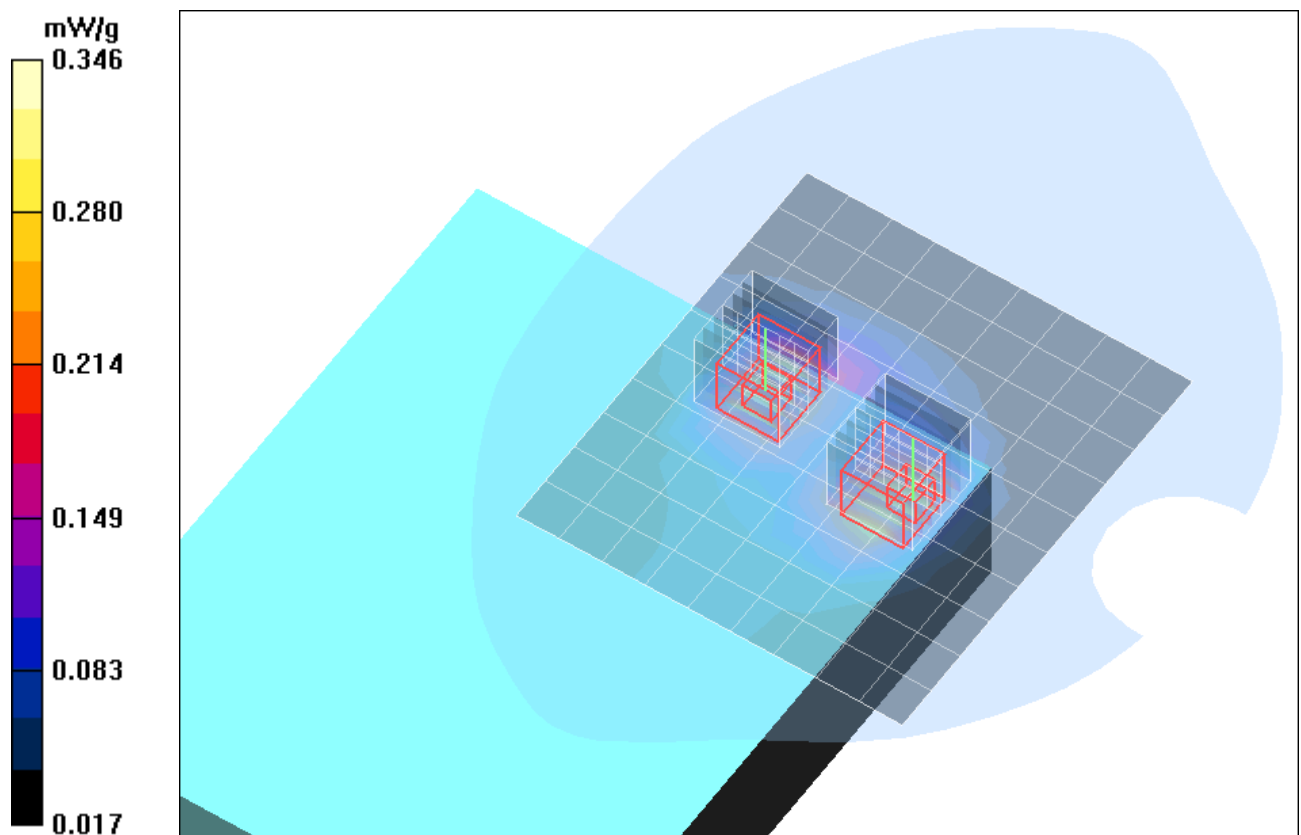


Fig. 2: SAR distribution for GPRS 850 (Class 12), channel 190, position 2 (October 12, 2009; Ambient Temperature: 21.2° C; Liquid Temperature: 20.7° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS_bahm_3_4TX.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: GPRS 850

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.004 mW/g

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

Reference Value = 1.63 V/m; Power Drift = 0.157 dB

Peak SAR (extrapolated) = 0.007 W/kg

SAR(1 g) = 0.00443 mW/g; SAR(10 g) = 0.0031 mW/g

Maximum value of SAR (measured) = 0.005 mW/g

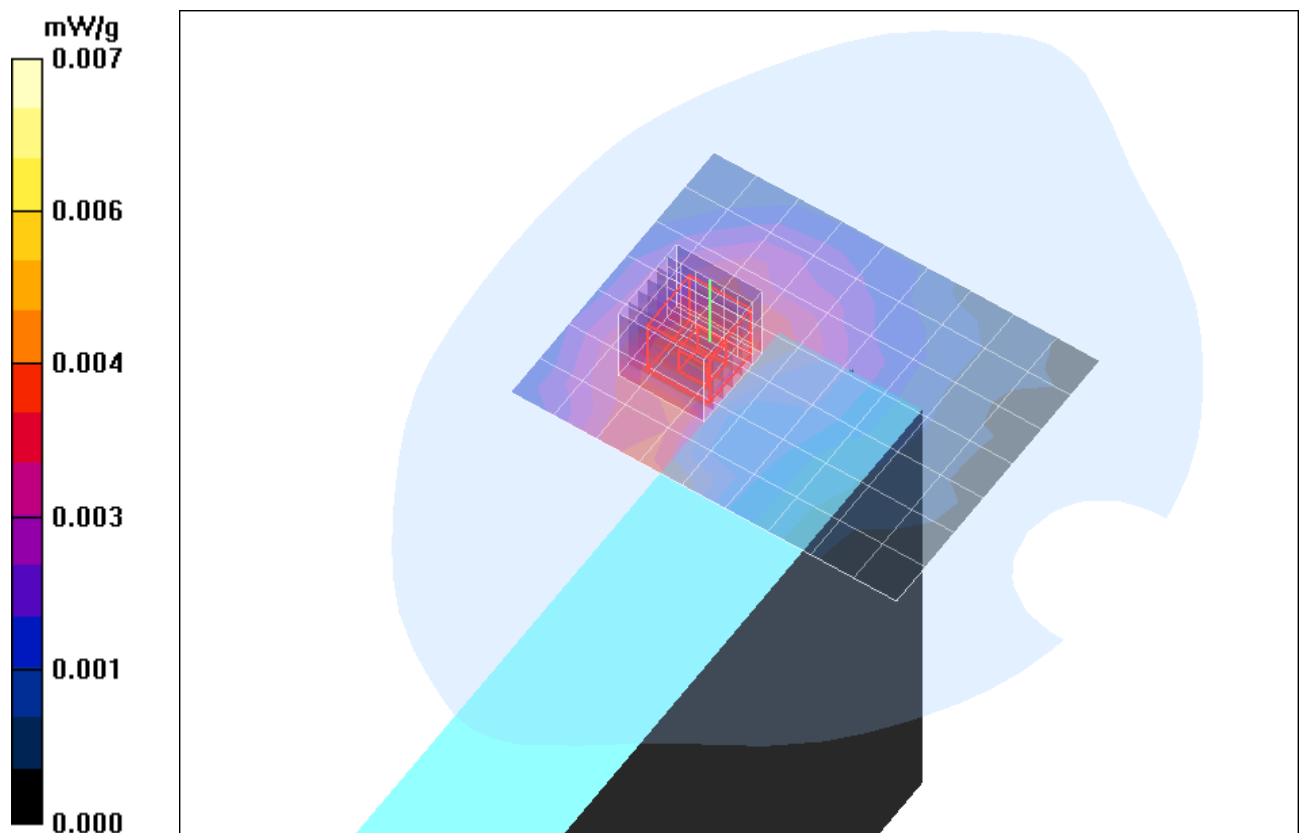


Fig. 3: SAR distribution for GPRS 850 (Class 12), channel 190, position 3 (October 12, 2009; Ambient Temperature: 21.2° C; Liquid Temperature: 20.7° C).

2 SAR Distribution Plots, EDGE 850

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS_bahm_1_4TX_edge.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: EDGE

Communication System: EDGE 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (11x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.001 mW/g

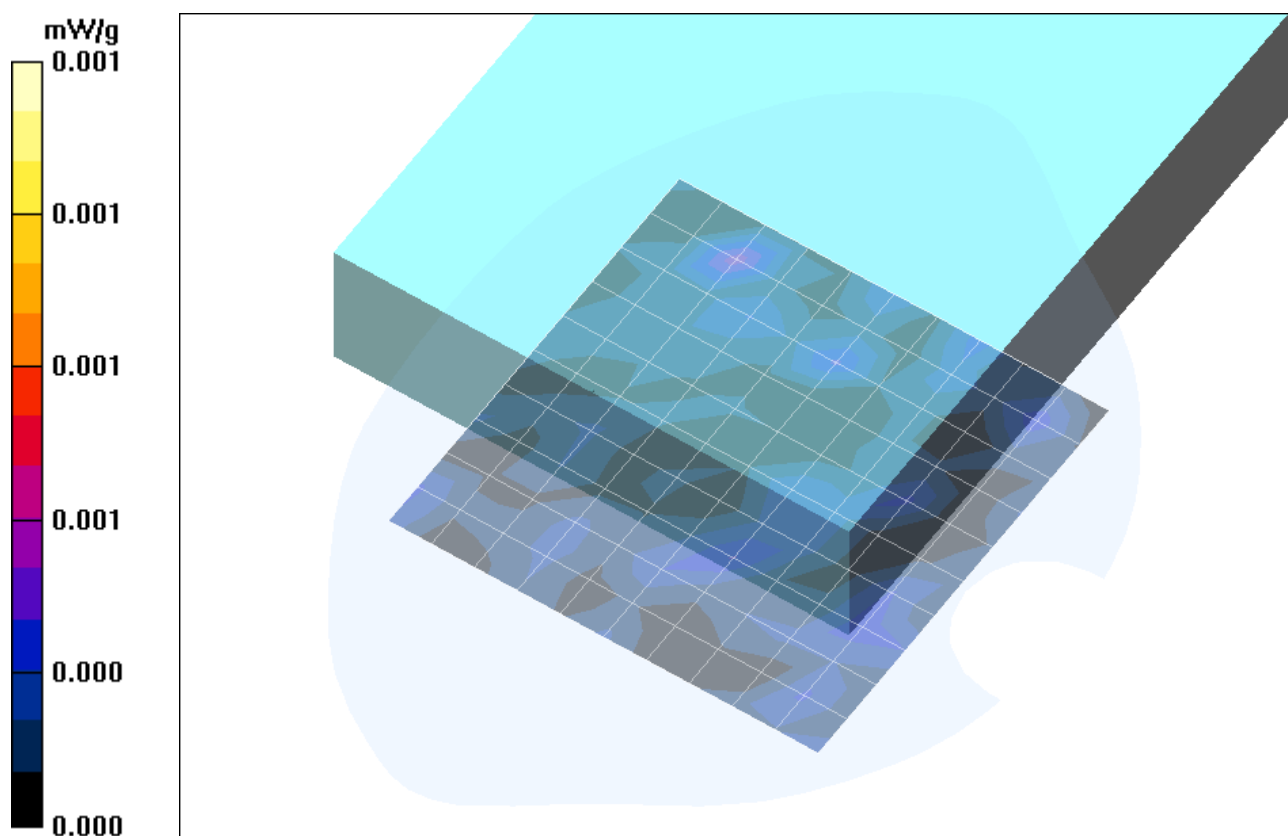


Fig. 4: SAR distribution for EDGE 850 (Class 12), channel 190, position 1 (October 12, 2009; Ambient Temperature: 21.2° C; Liquid Temperature: 20.7° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS_bahm_2_4TX_edge.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: EDGE

Communication System: EDGE 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.315 mW/g

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

Reference Value = 11.1 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 0.622 W/kg

SAR(1 g) = 0.307 mW/g; SAR(10 g) = 0.181 mW/g

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

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

Reference Value = 11.1 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.173 mW/g

Maximum value of SAR (measured) = 0.388 mW/g

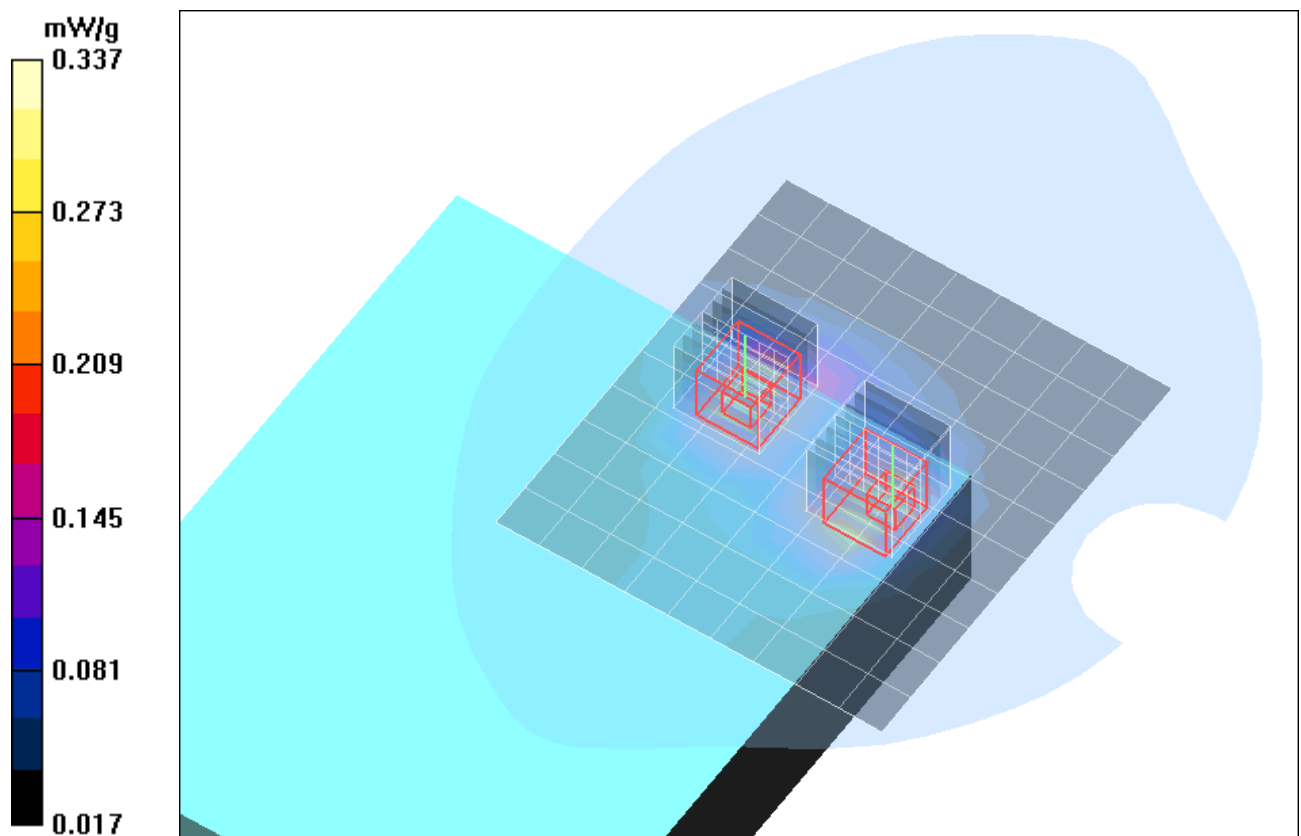


Fig. 5: SAR distribution for EDGE 850 (Class 12), channel 190, position 2 (October 12, 2009; Ambient Temperature: 21.2° C; Liquid Temperature: 20.7° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS_bahm_3_4TX_edge.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: EDGE 850

Communication System: EDGE 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.006 mW/g

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

Reference Value = 1.90 V/m; Power Drift = -0.191 dB

Peak SAR (extrapolated) = 0.009 W/kg

SAR(1 g) = 0.00534 mW/g; SAR(10 g) = 0.00366 mW/g

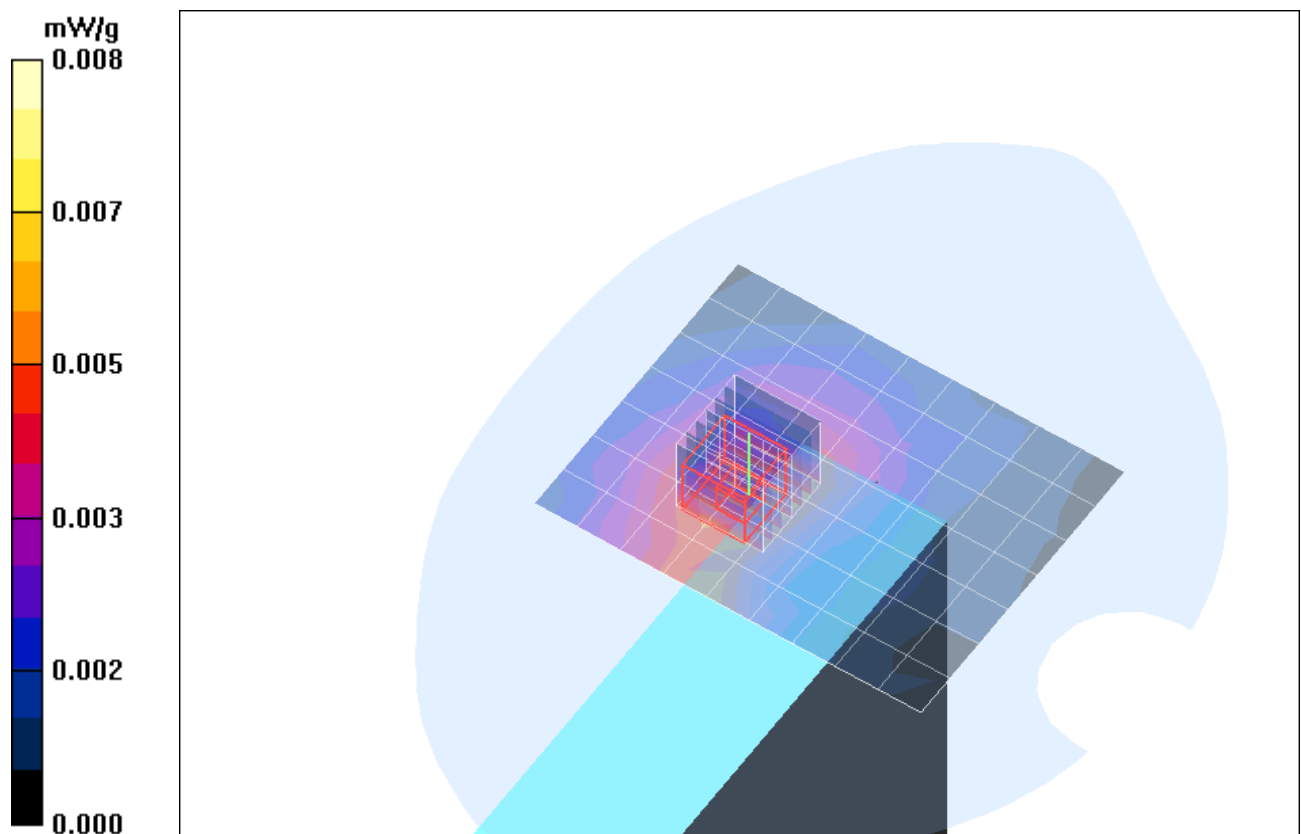


Fig. 6: SAR distribution for EDGE 850 (Class 12), channel 190, position 3 (October 12, 2009; Ambient Temperature: 21.2° C; Liquid Temperature: 20.7° C).

3 SAR Distribution Plots, GPRS 1900

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS bphm 1 4TX.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: GPRS 1900

Communication System: GPRS 1900; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.025 mW/g

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

Reference Value = 3.64 V/m; Power Drift = 0.152 dB

Peak SAR (extrapolated) = 0.051 W/kg

SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.018 mW/g

Maximum value of SAR (measured) = 0.029 mW/g

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

Reference Value = 3.64 V/m; Power Drift = 0.152 dB

Peak SAR (extrapolated) = 0.046 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.020 mW/g

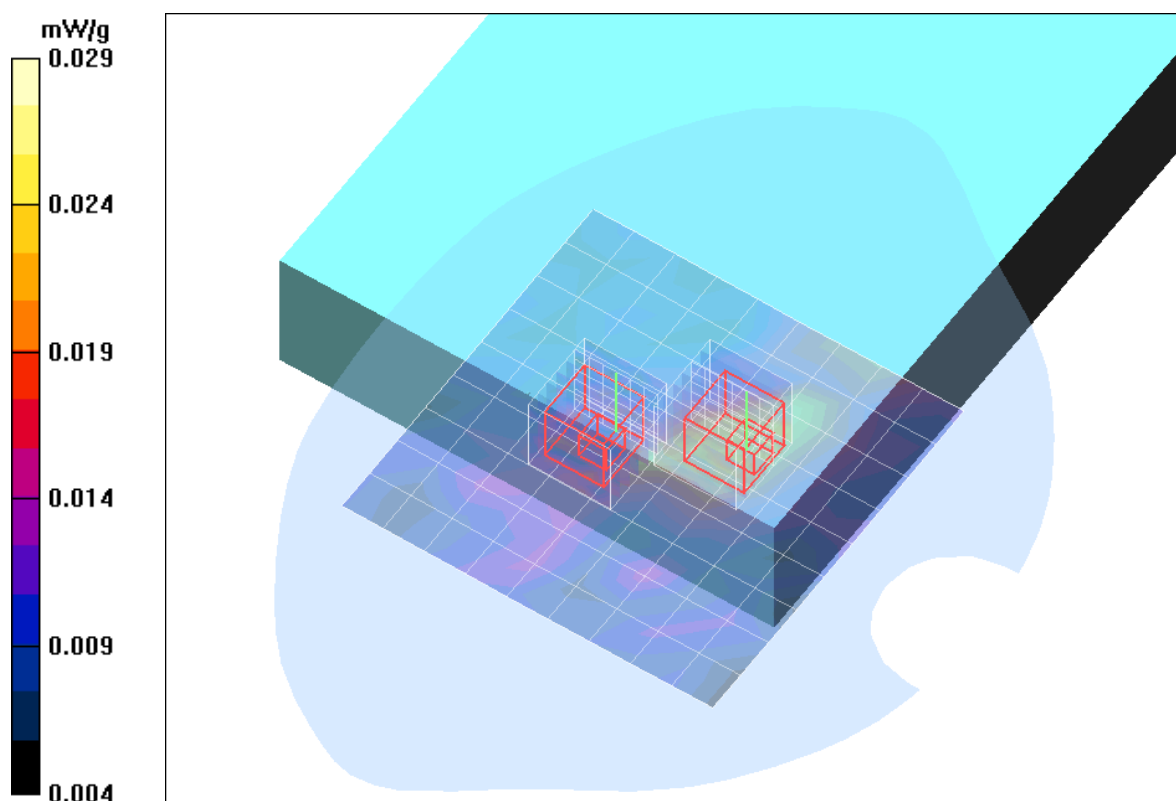


Fig. 7: SAR distribution for GPRS 1900 (Class 12), channel 661, position 1 (October 15, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS bphm 2 4TX.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: GPRS 1900

Communication System: GPRS 1900; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.339 mW/g

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

Reference Value = 7.07 V/m; Power Drift = 0.101 dB

Peak SAR (extrapolated) = 0.624 W/kg

SAR(1 g) = 0.368 mW/g; SAR(10 g) = 0.210 mW/g

Maximum value of SAR (measured) = 0.406 mW/g

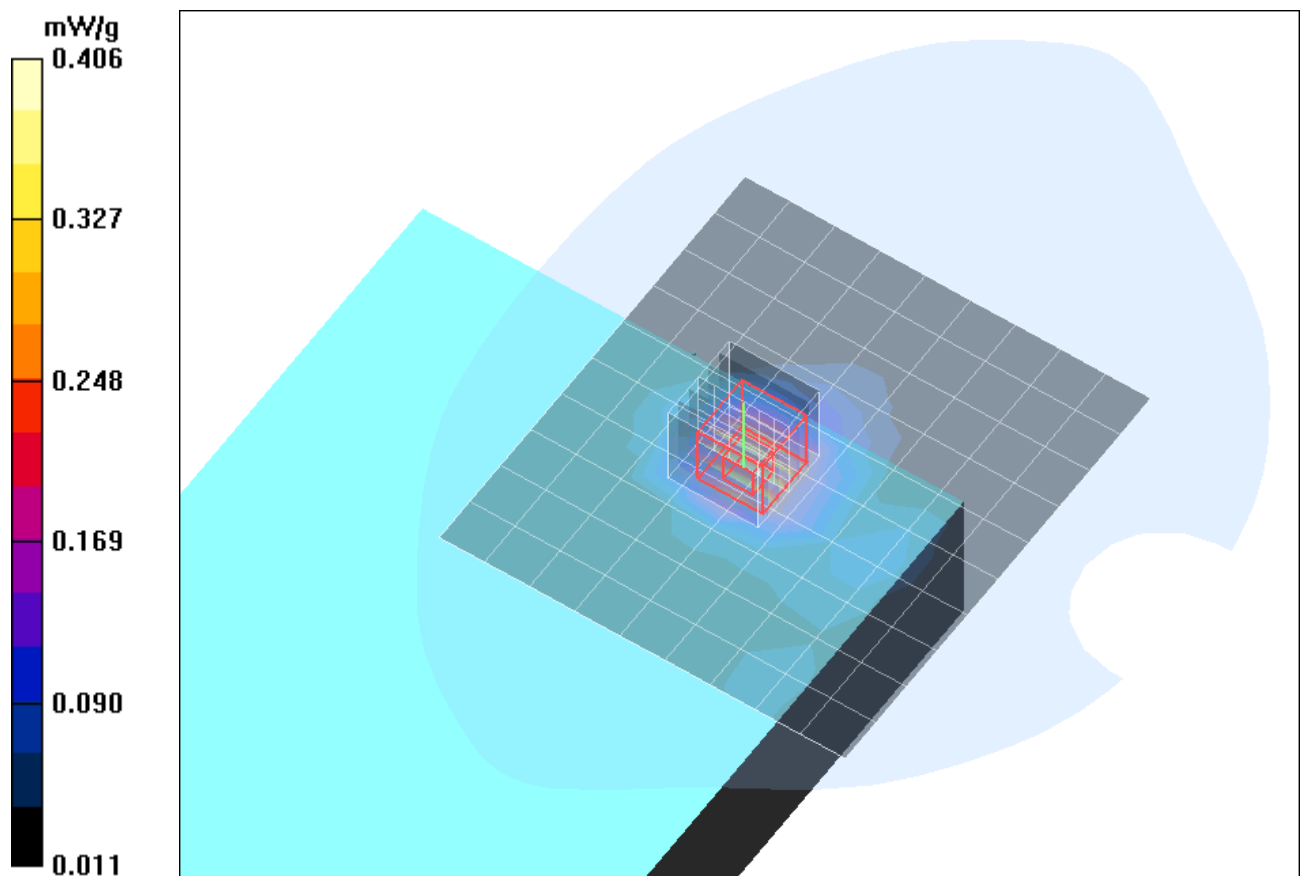


Fig. 8: SAR distribution for GPRS 1900 (Class 12), channel 661, position 2 (October 15, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS bphm 3 4TX.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: GPRS 1900

Communication System: GPRS 1900; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.054 mW/g

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

Reference Value = 2.78 V/m; Power Drift = 0.078 dB

Peak SAR (extrapolated) = 0.077 W/kg

SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.029 mW/g

Maximum value of SAR (measured) = 0.052 mW/g

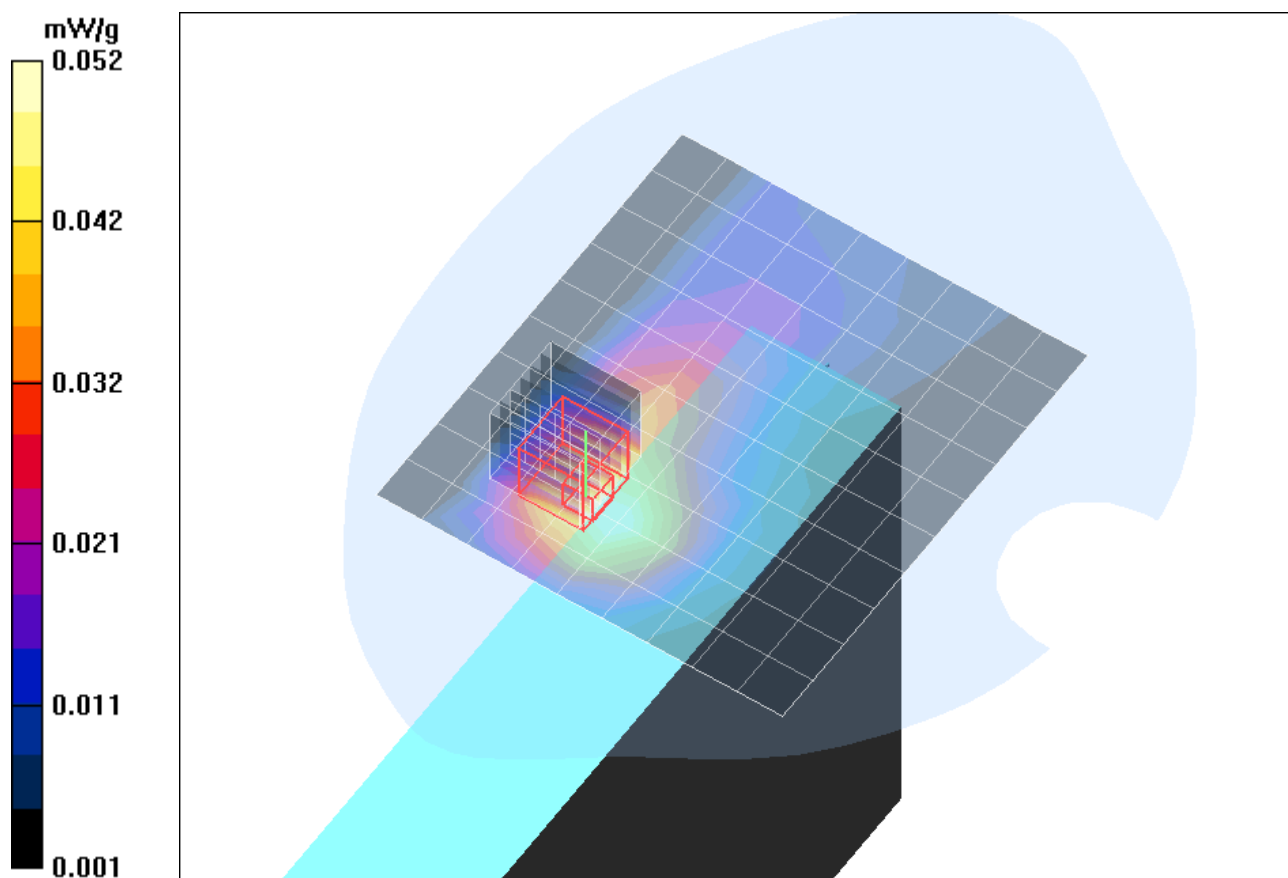


Fig. 9: SAR distribution for GPRS 1900 (Class 12), channel 661, position 3 (October 15, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

4 SAR Distribution Plots, EDGE 1900

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS bphm 1 4TX edge.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: EDGE 1900

Communication System: EDGE 1900; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.028 mW/g

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

Reference Value = 3.94 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.046 W/kg

SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.019 mW/g

Maximum value of SAR (measured) = 0.030 mW/g

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

Reference Value = 3.94 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.044 W/kg

SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.014 mW/g

Maximum value of SAR (measured) = 0.021 mW/g

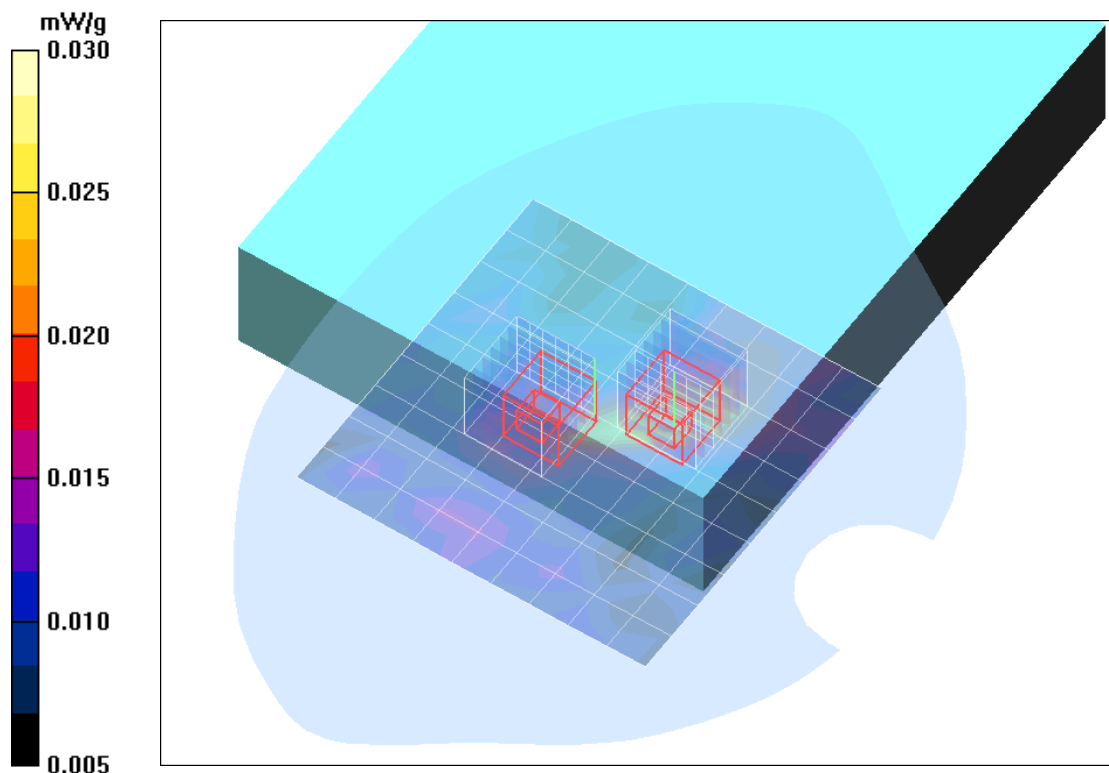


Fig. 10: SAR distribution for EDGE 1900 (Class 12), channel 661, position 1 (October 15, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS bphm 2 4TX edge.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: EDGE 1900

Communication System: EDGE 1900; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.330 mW/g

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

Reference Value = 7.24 V/m; Power Drift = 0.189 dB

Peak SAR (extrapolated) = 0.624 W/kg

SAR(1 g) = 0.370 mW/g; SAR(10 g) = 0.209 mW/g

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

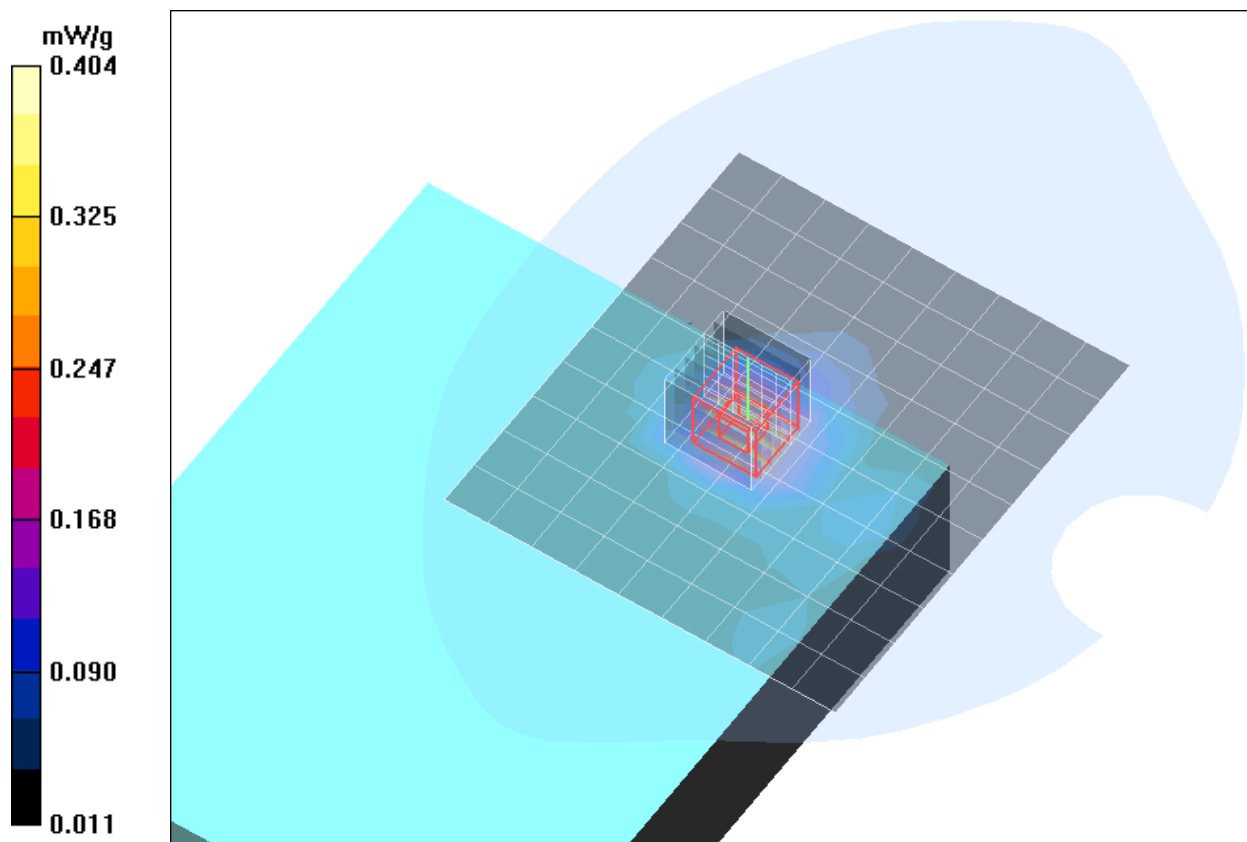


Fig. 11: SAR distribution for EDGE 1900 (Class 12), channel 661, position 2 (October 15, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS bphm 3 4TX edge.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: EDGE 1900

Communication System: EDGE 1900; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.058 mW/g

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

Reference Value = 2.88 V/m; Power Drift = -0.151 dB

Peak SAR (extrapolated) = 0.080 W/kg

SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.033 mW/g

Maximum value of SAR (measured) = 0.056 mW/g

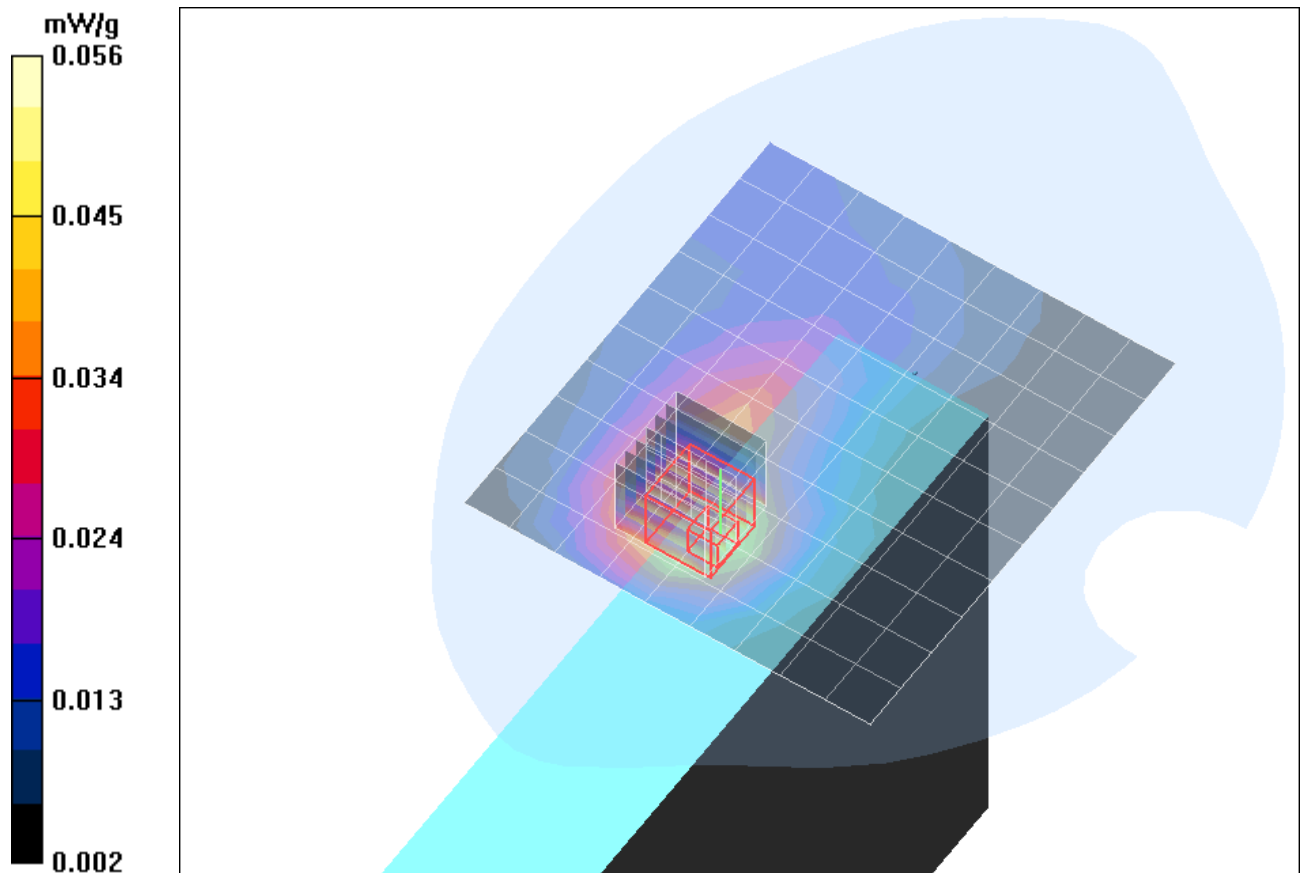


Fig. 12: SAR distribution for EDGE 1900 (Class 12), channel 661, position 3 (October 15, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

5 SAR Distribution Plots, WCDMA V

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS_buVhm_1.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WCDMA V

Communication System: WCDMA (FDD) Band V; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (11x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.002 mW/g

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

Reference Value = 0.862 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.003 W/kg

SAR(1 g) = 0.00213 mW/g; SAR(10 g) = 0.00139 mW/g

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

Reference Value = 0.862 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.003 W/kg

SAR(1 g) = 0.0018 mW/g; SAR(10 g) = 0.00121 mW/g

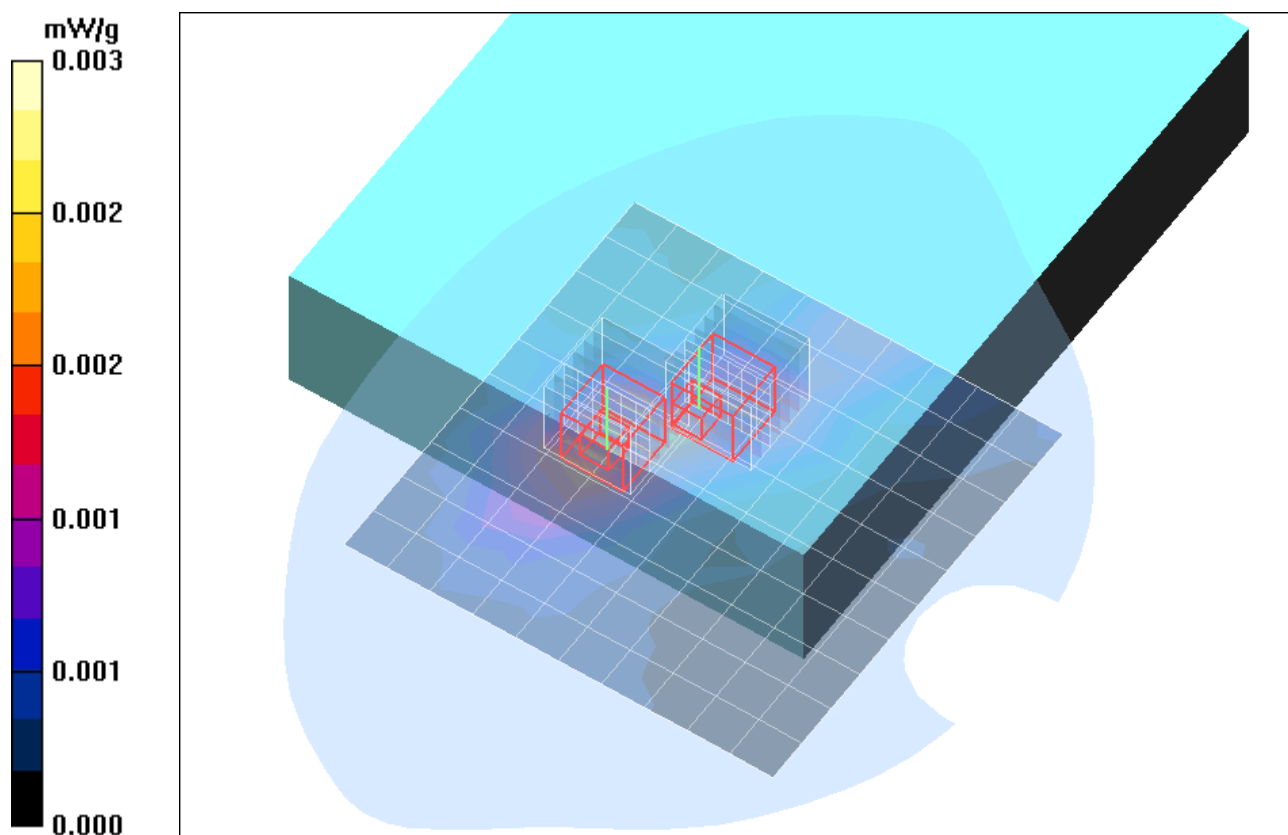


Fig. 13: SAR distribution for WCDMA V (FDD), channel 4183, position 1 (October 08, 2009; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS_buVhm_2.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WCDMA V

Communication System: WCDMA (FDD) Band V; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (11x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.129 mW/g

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

Reference Value = 5.89 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.260 W/kg

SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.143 mW/g

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

Reference Value = 5.89 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.225 W/kg

SAR(1 g) = 0.112 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.126 mW/g

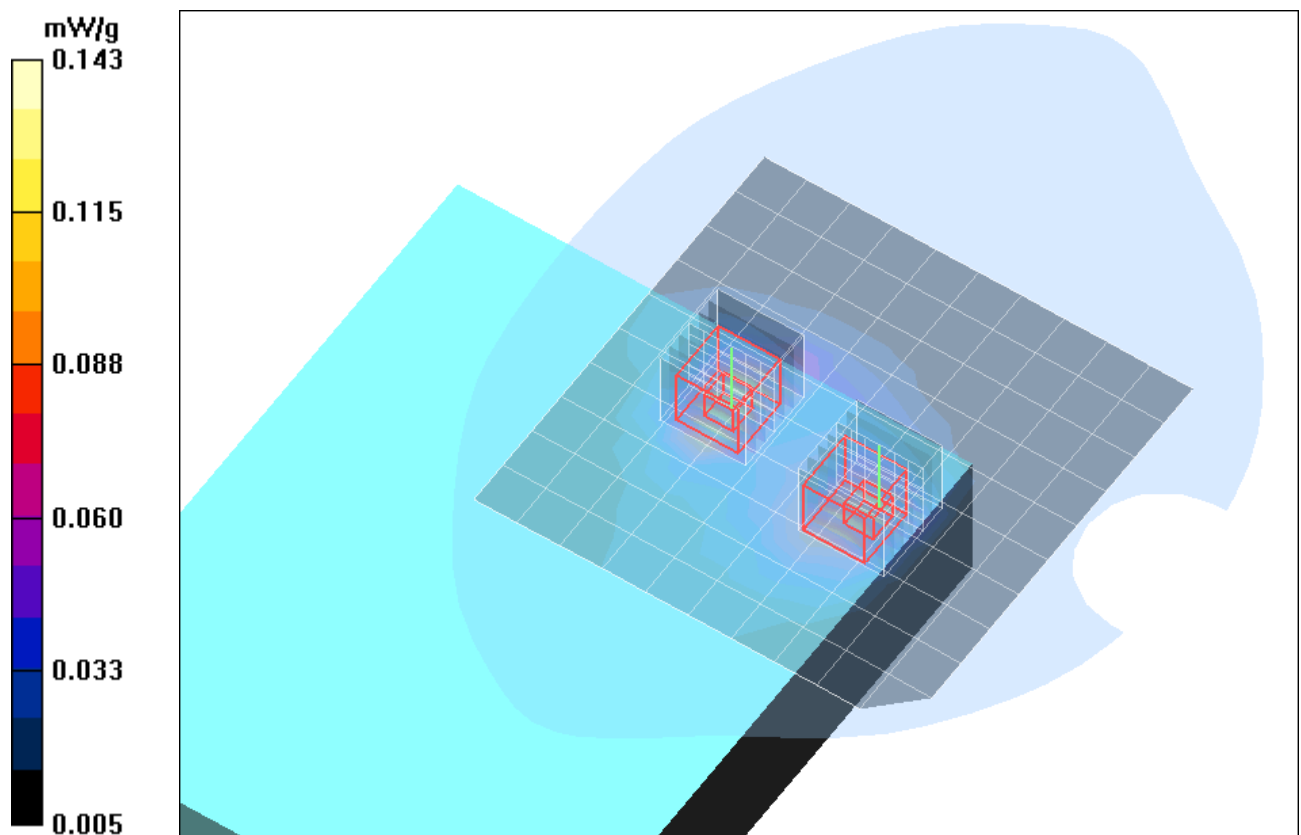


Fig. 14: SAR distribution for WCDMA V (FDD), channel 4183, position 2 (October 08, 2009; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [8900VS_buVhm_3.da4](#)

DUT: DAP; **Type:** 8900VS; **Serial:** HN00541

Program Name: WCDMA V

Communication System: WCDMA (FDD) Band V; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.002 mW/g

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

Reference Value = 1.07 V/m; Power Drift = 0.196 dB

Peak SAR (extrapolated) = 0.003 W/kg

SAR(1 g) = 0.00185 mW/g; SAR(10 g) = 0.00128 mW/g

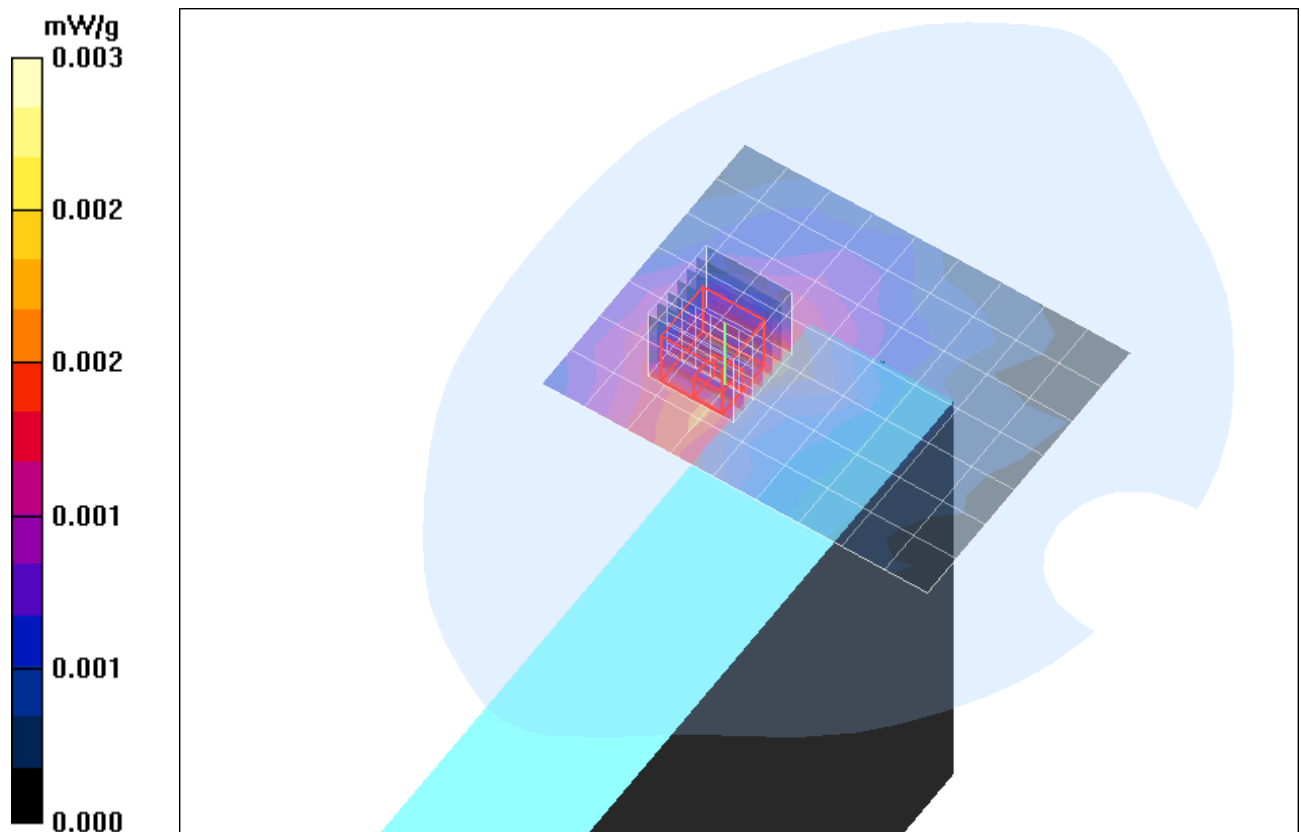


Fig. 15: SAR distribution for WCDMA V (FDD), channel 4183, position 3 (October 08, 2009; Ambient Temperature: 22.0° C; Liquid Temperature: 21.2° C).

6 SAR Distribution Plots, WCDMA II

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [8900VS_bullhm_1.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WCDMA II

Communication System: WCDMA FDD Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x10x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.025 mW/g

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

Reference Value = 3.23 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.035 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.013 mW/g

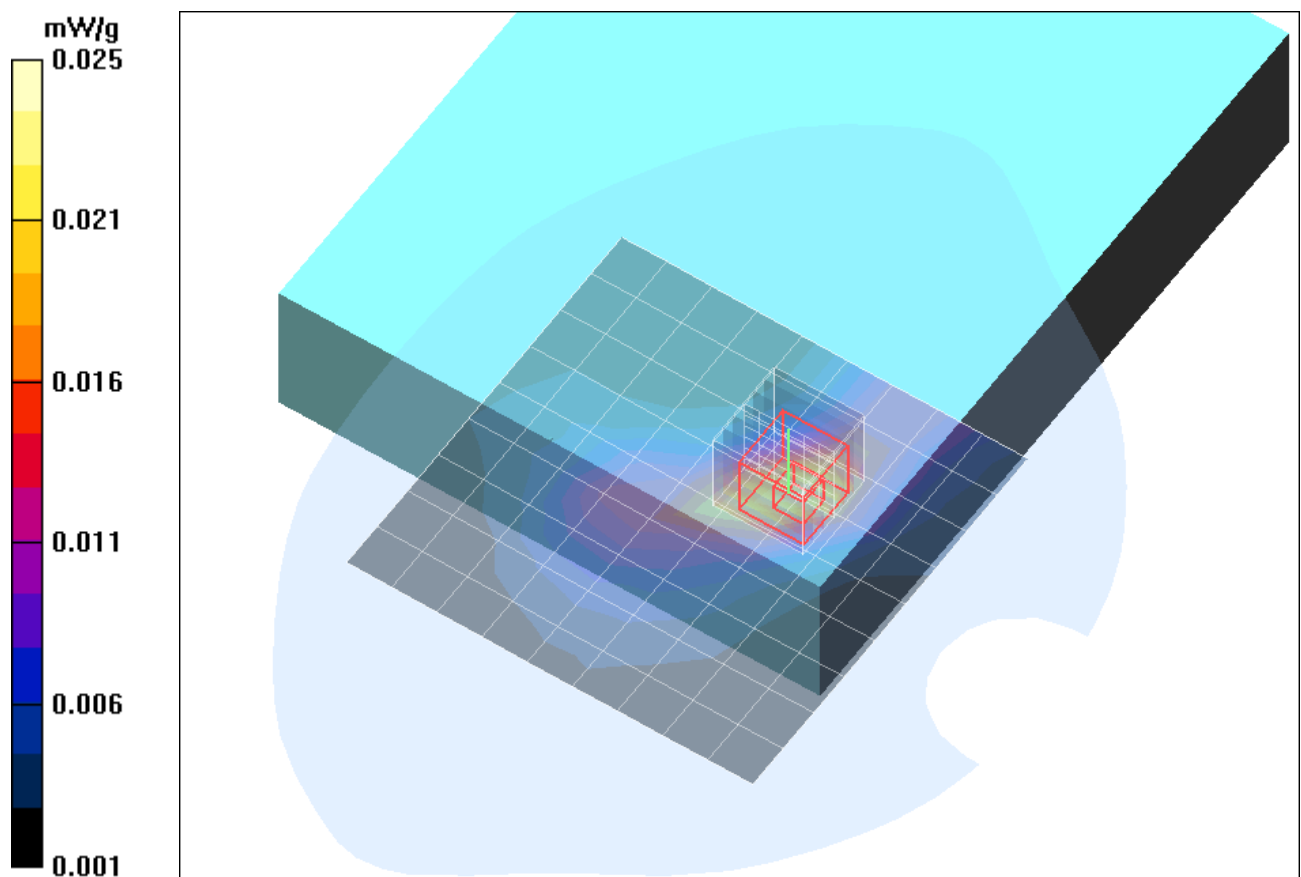


Fig. 16: SAR distribution for WCDMA II (FD), channel 9400, position 1 (October 13, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [8900VS_bullhm_2.da4](#)

DUT: DAP; **Type:** 8900VS; **Serial:** HN00541

Program Name: WCDMA II

Communication System: WCDMA FDD Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x11x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.446 mW/g

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

Reference Value = 8.33 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.776 W/kg

SAR(1 g) = 0.455 mW/g; SAR(10 g) = 0.256 mW/g

Maximum value of SAR (measured) = 0.489 mW/g

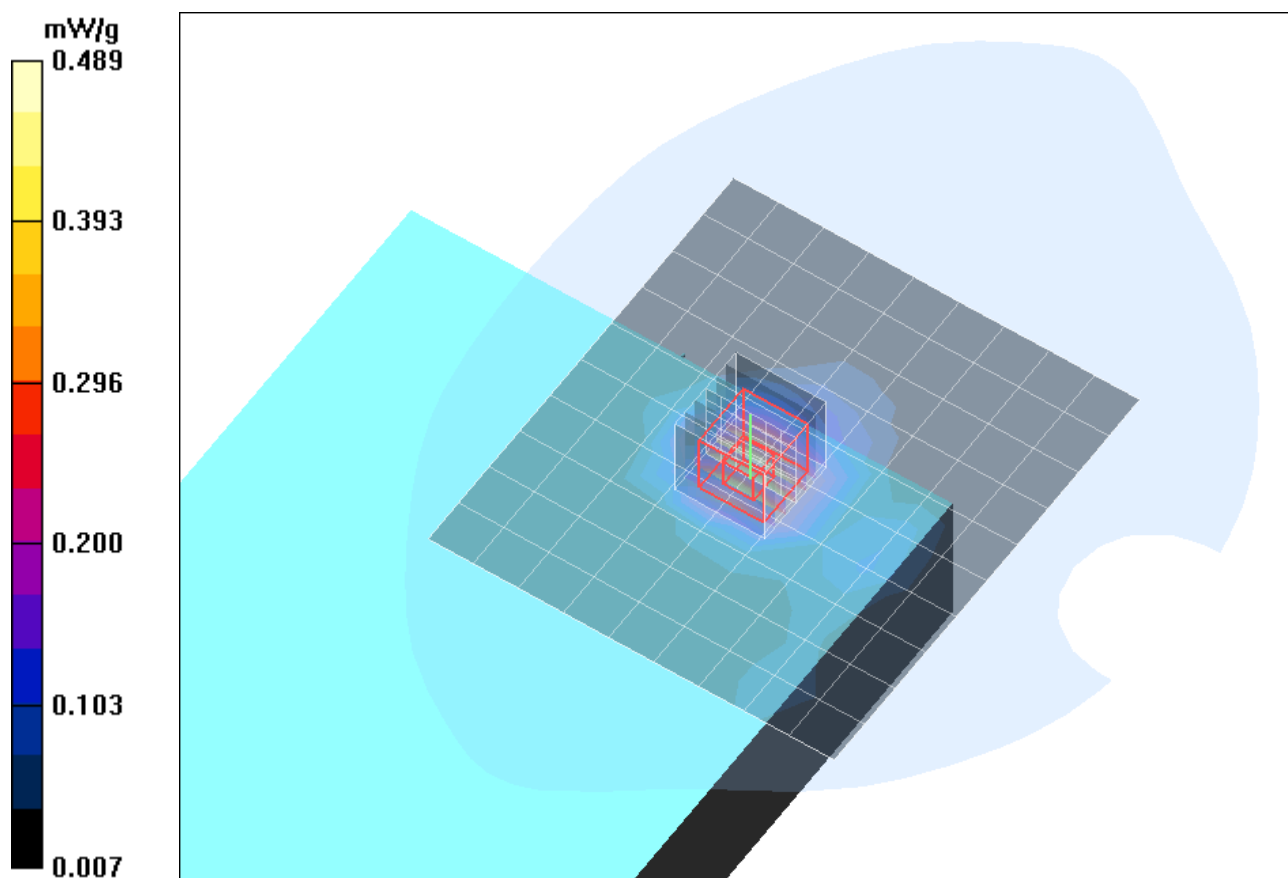


Fig. 17: SAR distribution for WCDMA II (FDD), channel 9400, position 2 (October 13, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [8900VS_bullhm_3.da4](#)

DUT: DAP; **Type:** 8900VS; **Serial:** HN00541

Program Name: WCDMA II

Communication System: WCDMA FDD Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.69, 4.69, 4.69); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (10x11x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.069 mW/g

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

Reference Value = 4.83 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.107 W/kg

SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.042 mW/g

Maximum value of SAR (measured) = 0.073 mW/g

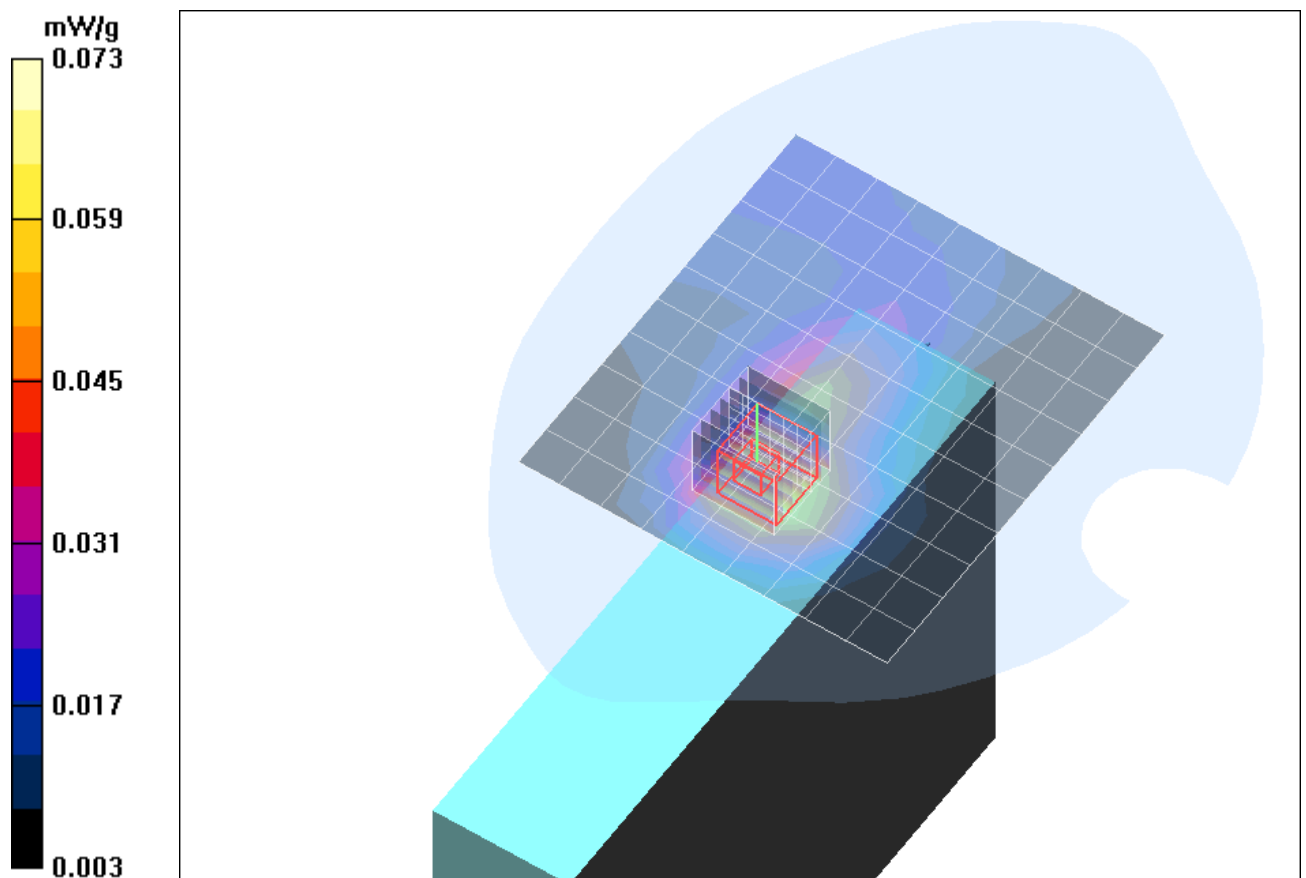


Fig. 18: SAR distribution for WCDMA II (FDD), channel 9400, position 3 (October 13, 2009; Ambient Temperature: 21.1° C; Liquid Temperature: 20.8° C).

7 SAR Distribution Plots, 2.450 MHz range, IEEE 802.11 b mode

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [8900VS_ywhm_b_CH6_1_main.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WLAN

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (13x26x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.002 mW/g

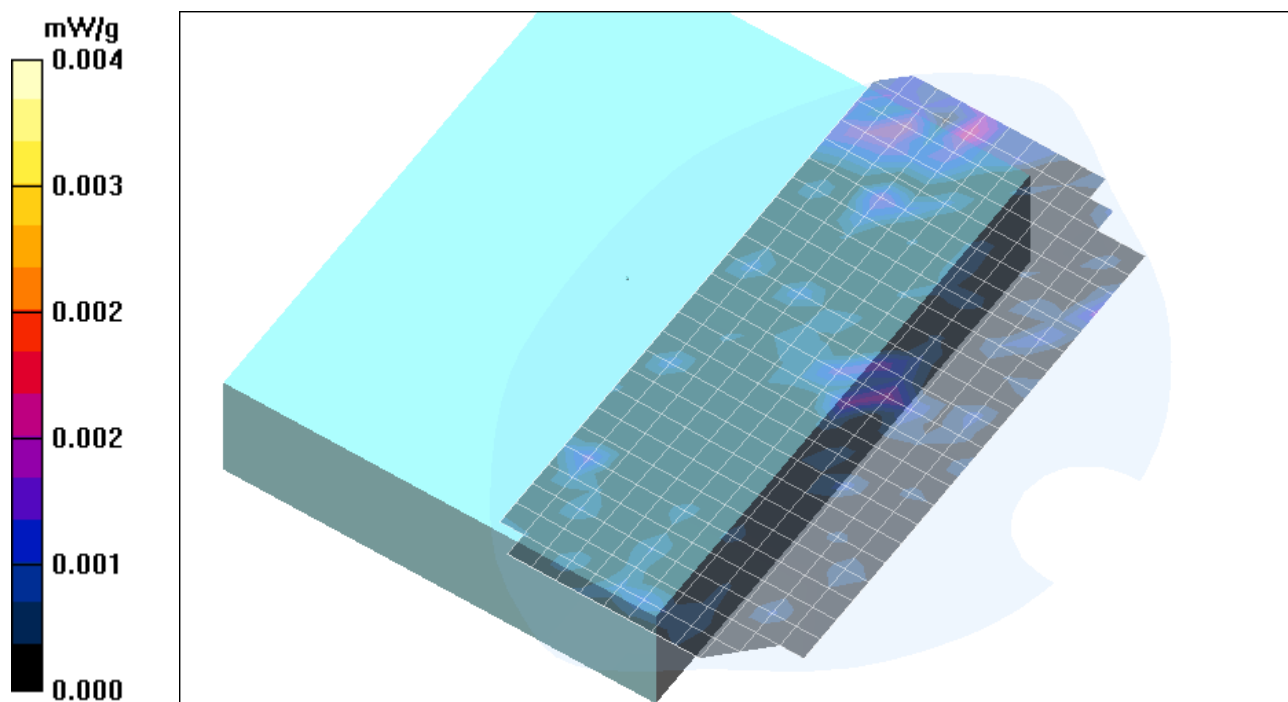


Fig. 19: SAR distribution for IEEE 802.11 b, channel 6, antenna “main”, position 1 (September 28, 2009; Ambient Temperature: 21.3° C; Liquid Temperature: 20.9° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [8900VS_ywhm_b_CH6_2_main.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WLAN

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (15x26x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.007 mW/g

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

Reference Value = 0.869 V/m; Power Drift = -0.126 dB

Peak SAR (extrapolated) = 0.032 W/kg

SAR(1 g) = 0.00742 mW/g; SAR(10 g) = 0.003 mW/g

Maximum value of SAR (measured) = 0.009 mW/g

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

Reference Value = 0.869 V/m; Power Drift = -0.126 dB

Peak SAR (extrapolated) = 0.013 W/kg

SAR(1 g) = 0.00467 mW/g; SAR(10 g) = 0.00198 mW/g

Maximum value of SAR (measured) = 0.006 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 2: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.869 V/m; Power Drift = -0.126 dB

Peak SAR (extrapolated) = 0.028 W/kg

SAR(1 g) = 0.00571 mW/g; SAR(10 g) = 0.00199 mW/g

Maximum value of SAR (measured) = 0.005 mW/g

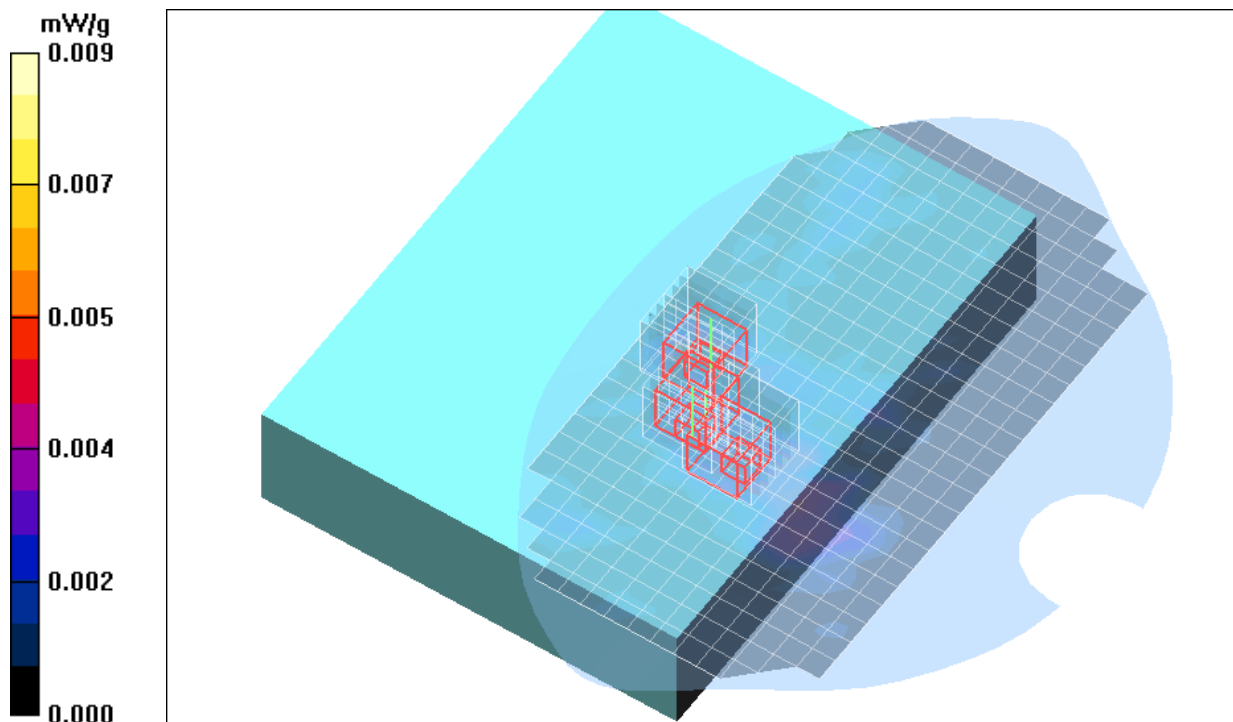


Fig. 20: SAR distribution for IEEE 802.11 b, channel 6, antenna "main", position 2 (September 28, 2009; Ambient Temperature: 21.3° C; Liquid Temperature: 20.9° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [8900VS_ywhm_b_CH6_3_main.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WLAN

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (13x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.018 mW/g

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

Reference Value = 2.34 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.030 W/kg

SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00768 mW/g

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

Reference Value = 2.34 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.056 W/kg

SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00716 mW/g

Maximum value of SAR (measured) = 0.021 mW/g

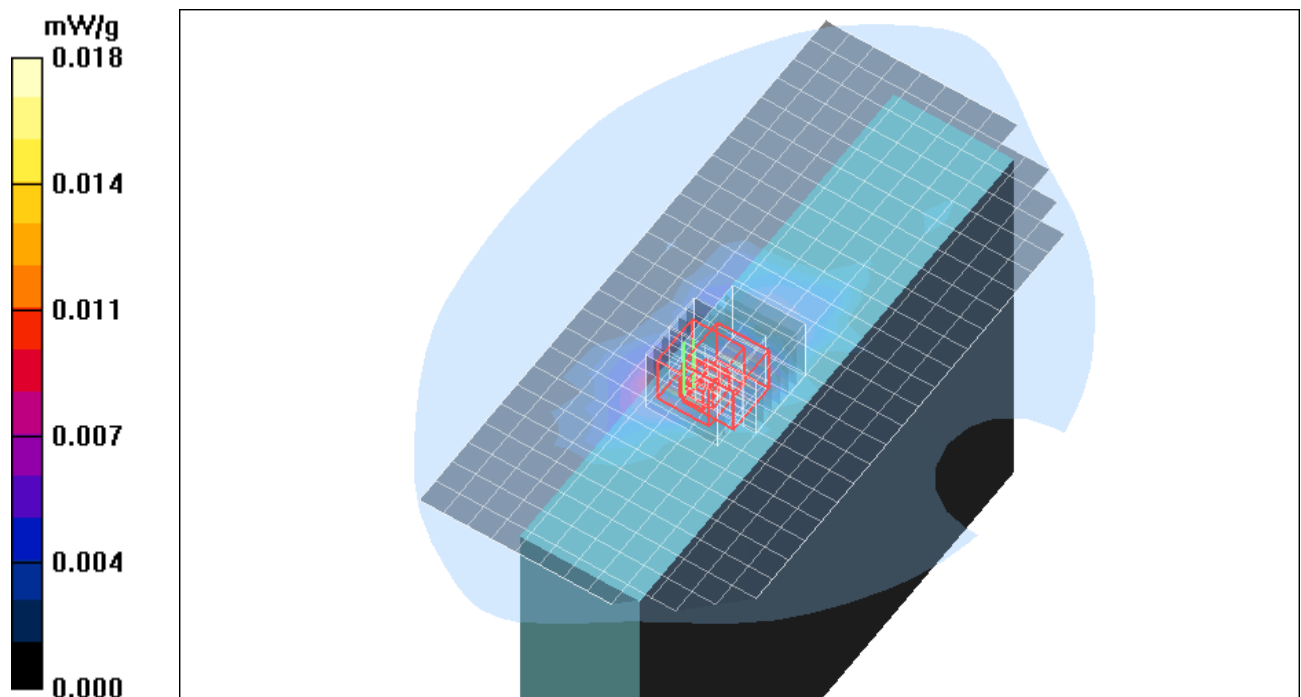


Fig. 21: SAR distribution for IEEE 802.11 b, channel 6, antenna "main", position 3 (September 28, 2009; Ambient Temperature: 21.3° C; Liquid Temperature: 20.9° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [8900VS_ywhm_b_CH6_1_aux.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WLAN

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (13x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.005 mW/g

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

Reference Value = 0.540 V/m; Power Drift = 0.149 dB

Peak SAR (extrapolated) = 0.014 W/kg

SAR(1 g) = 0.00301 mW/g; SAR(10 g) = 0.00122 mW/g

Maximum value of SAR (measured) = 0.004 mW/g

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

Reference Value = 0.540 V/m; Power Drift = 0.149 dB

Peak SAR (extrapolated) = 0.008 W/kg

SAR(1 g) = 0.00268 mW/g; SAR(10 g) = 0.00117 mW/g

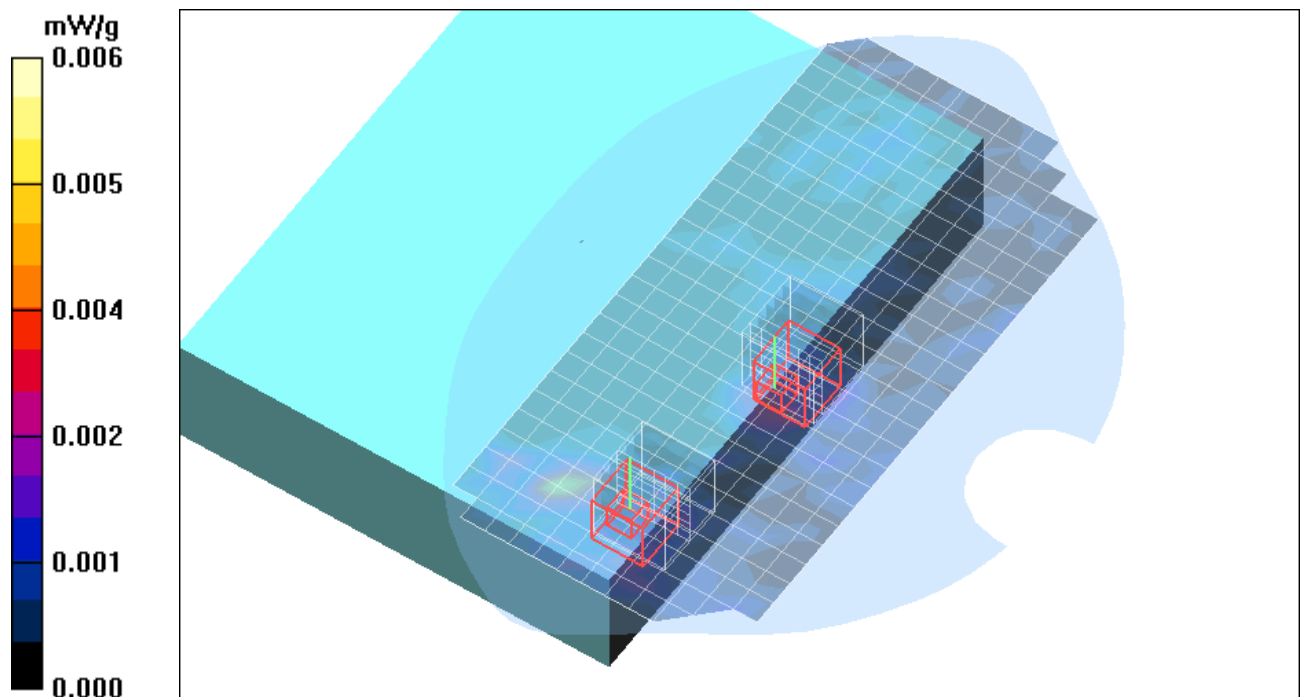


Fig. 22: SAR distribution for IEEE 802.11 b, channel 6, antenna "aux", position 1 (September 28, 2009; Ambient Temperature: 21.3° C; Liquid Temperature: 20.9° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [8900VS_ywhm_b_CH6_2_aux.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WLAN

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (13x26x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.294 mW/g

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

Reference Value = 1.61 V/m; Power Drift = 0.105 dB

Peak SAR (extrapolated) = 0.519 W/kg

SAR(1 g) = 0.276 mW/g; SAR(10 g) = 0.129 mW/g

Maximum value of SAR (measured) = 0.316 mW/g

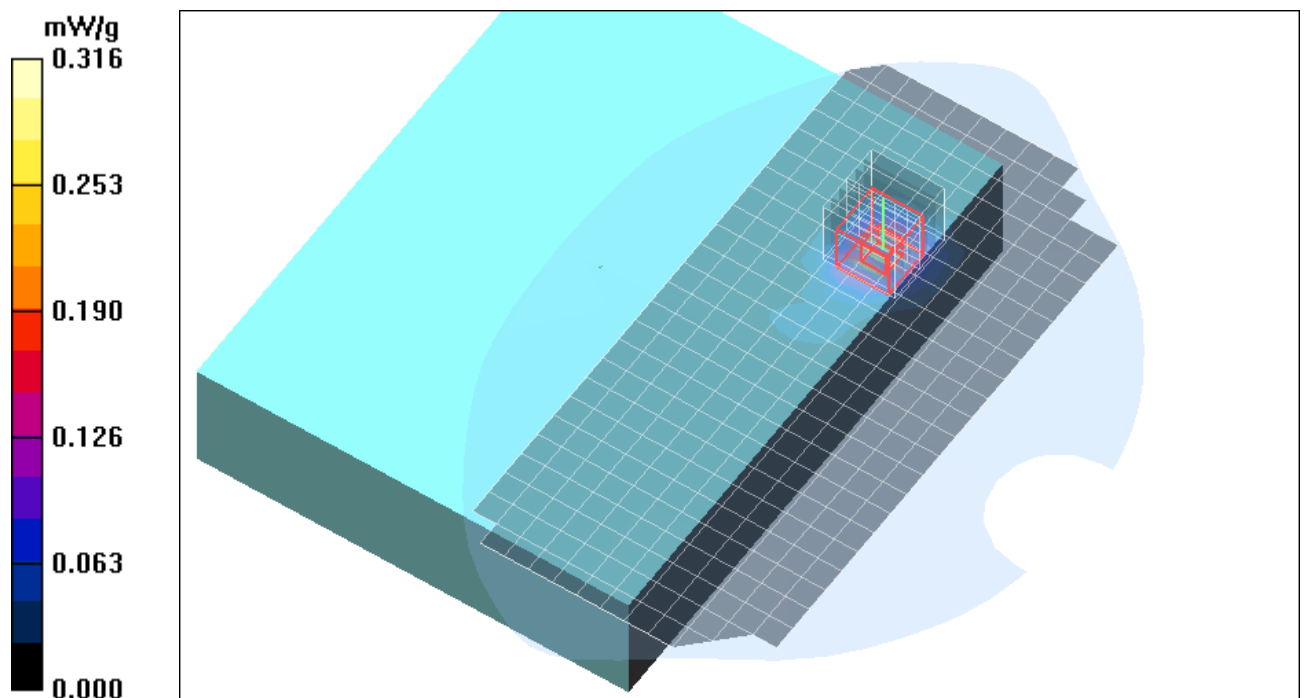


Fig. 23: SAR distribution for IEEE 802.11 b, channel 6, antenna "aux", position 2 (September 28, 2009; Ambient Temperature: 21.3° C; Liquid Temperature: 20.9° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [8900VS_ywhm_b_CH6_3_aux.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: WLAN

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (13x26x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.043 mW/g

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

Reference Value = 4.24 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.071 W/kg

SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.020 mW/g

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

Reference Value = 4.24 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.080 W/kg

SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.024 mW/g

Maximum value of SAR (measured) = 0.048 mW/g

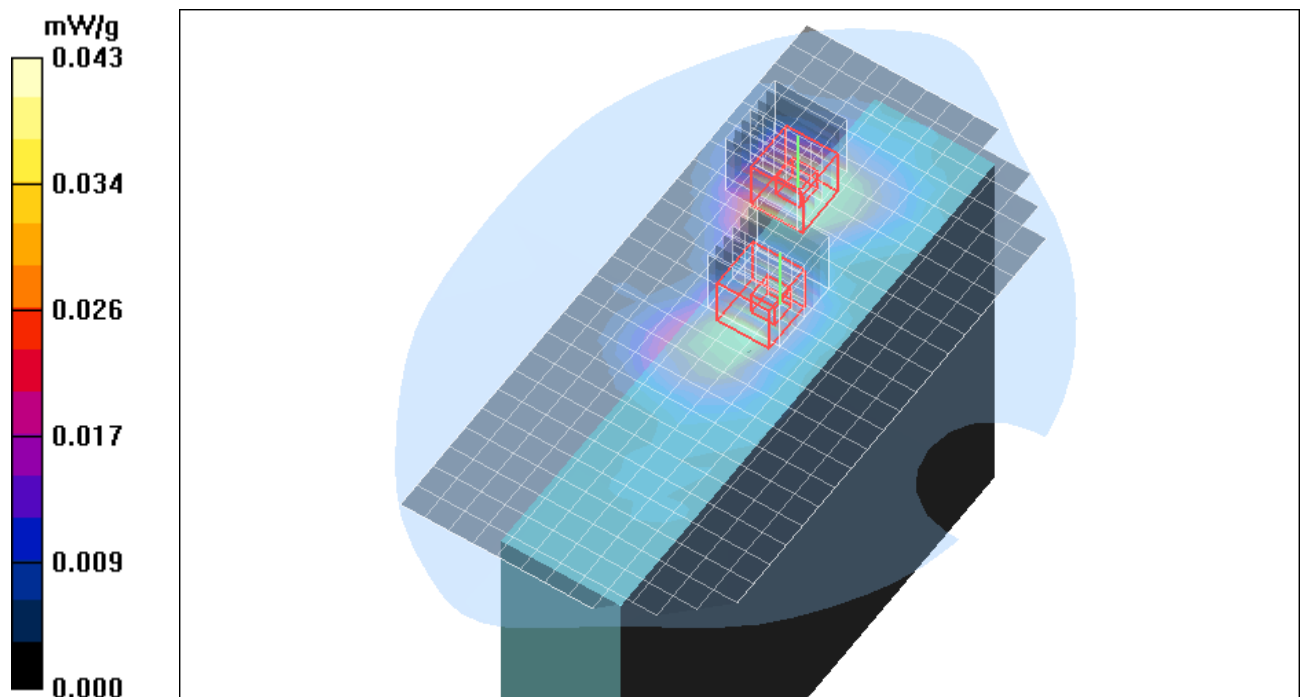


Fig. 24: SAR distribution for IEEE 802.11 b, channel 6, antenna "aux", position 3 (September 28, 2009; Ambient Temperature: 21.3° C; Liquid Temperature: 20.9° C).

8 SAR Distribution Plots, 2.450 MHz range, Bluetooth

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [8900VS_yhm_BT_1.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: BT

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2441$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (14x16x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.005 mW/g

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

Reference Value = 1.31 V/m; Power Drift = 0.126 dB

Peak SAR (extrapolated) = 0.014 W/kg

SAR(1 g) = 0.00437 mW/g; SAR(10 g) = 0.00195 mW/g

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

Reference Value = 1.31 V/m; Power Drift = 0.126 dB

Peak SAR (extrapolated) = 0.009 W/kg

SAR(1 g) = 0.00227 mW/g; SAR(10 g) = 0.000648 mW/g

Maximum value of SAR (measured) = 0.004 mW/g

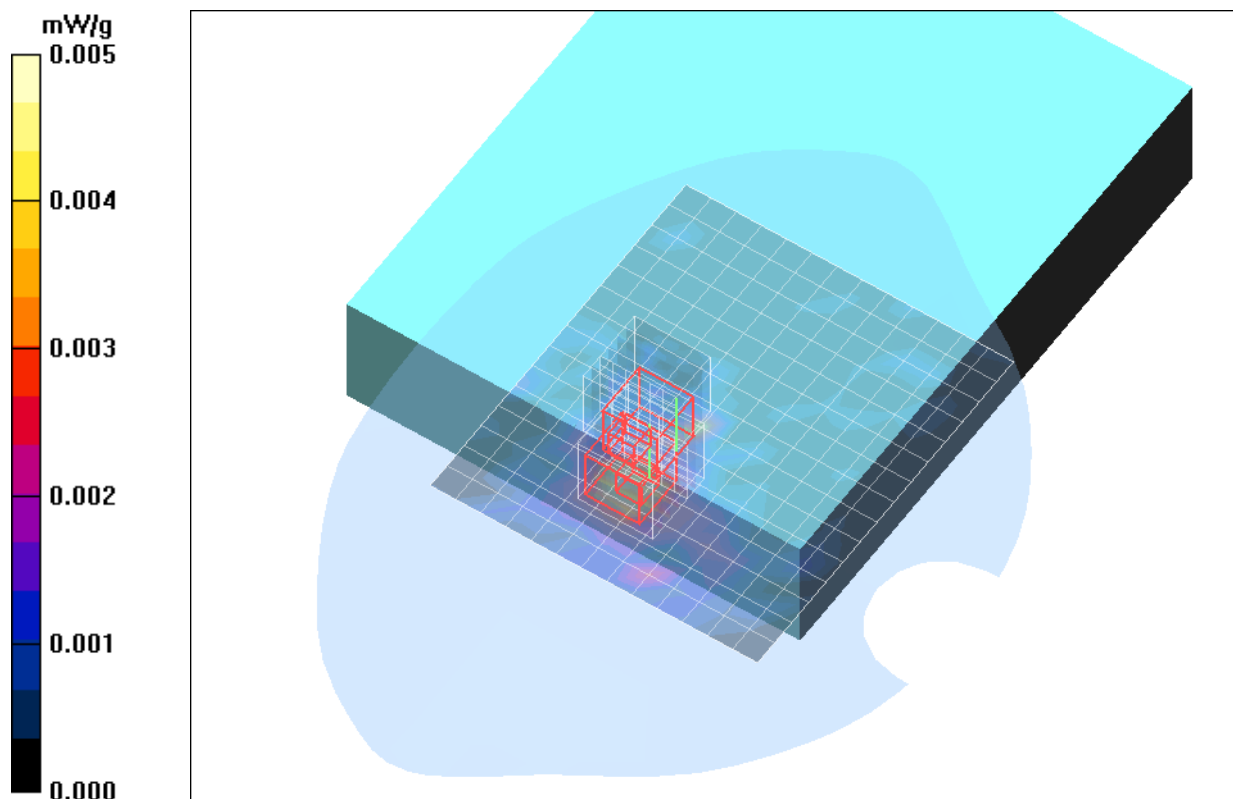


Fig. 25: SAR distribution for Bluetooth, channel 39, position 1 (September 30, 2009; Ambient Temperature: 21.4° C; Liquid Temperature: 20.9° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [8900VS_yhm_BT_2.da4](#)

DUT: DAP; **Type:** 8900VS; **Serial:** HN00541

Program Name: BT

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2441$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (14x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.025 mW/g

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

Reference Value = 0.680 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.043 W/kg

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.00926 mW/g

Maximum value of SAR (measured) = 0.027 mW/g

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

Reference Value = 0.680 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.048 W/kg

SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.00793 mW/g

Maximum value of SAR (measured) = 0.026 mW/g

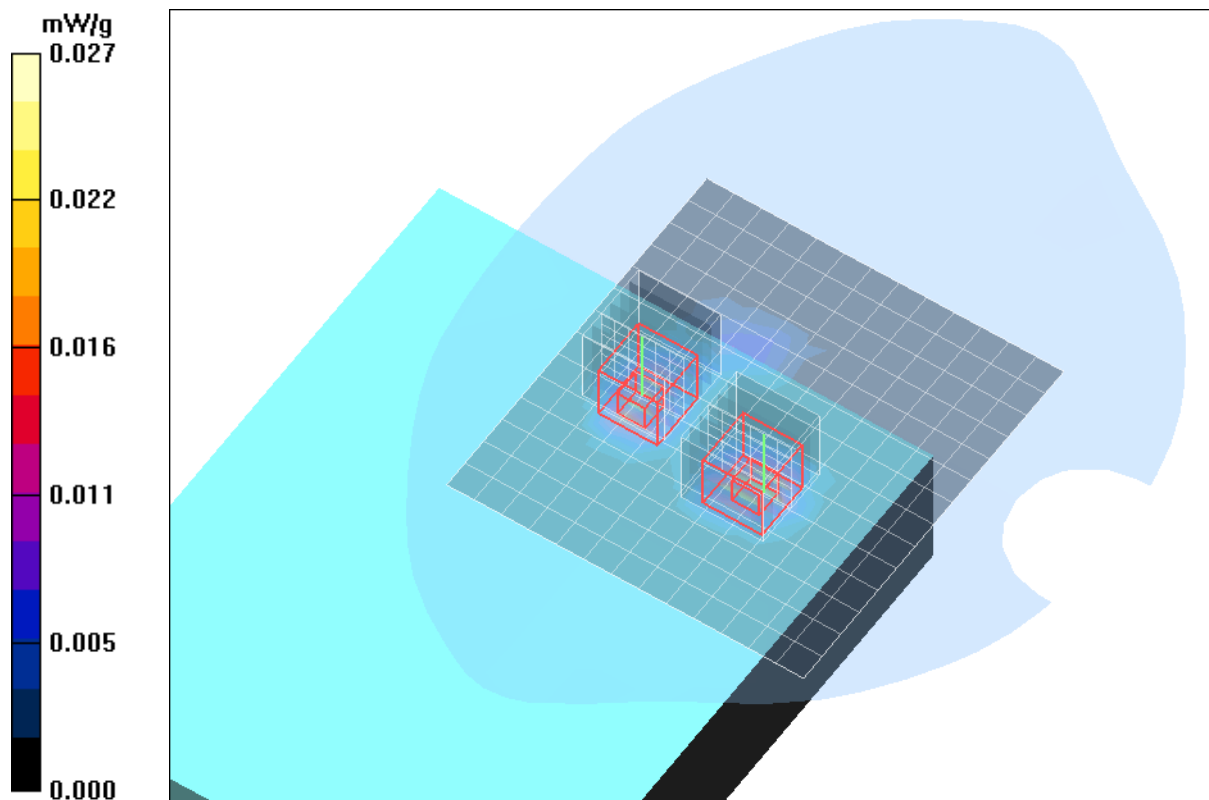


Fig. 26: SAR distribution for Bluetooth, channel 39, position 2 (September 30, 2009; Ambient Temperature: 21.4° C; Liquid Temperature: 20.9° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [8900VS_yhm_BT_3.da4](#)

DUT: DAP; Type: 8900VS; Serial: HN00541

Program Name: BT

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2441 \text{ MHz}$; $\sigma = 1.97 \text{ mho/m}$; $\epsilon_r = 51.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.57, 7.57, 7.57); Calibrated: 18.09.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 14.09.2009
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (14x14x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.096 mW/g

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

Reference Value = 5.71 V/m ; Power Drift = 0.200 dB

Peak SAR (extrapolated) = 0.183 W/kg

SAR(1 g) = 0.088 mW/g ; SAR(10 g) = 0.039 mW/g

Maximum value of SAR (measured) = 0.102 mW/g

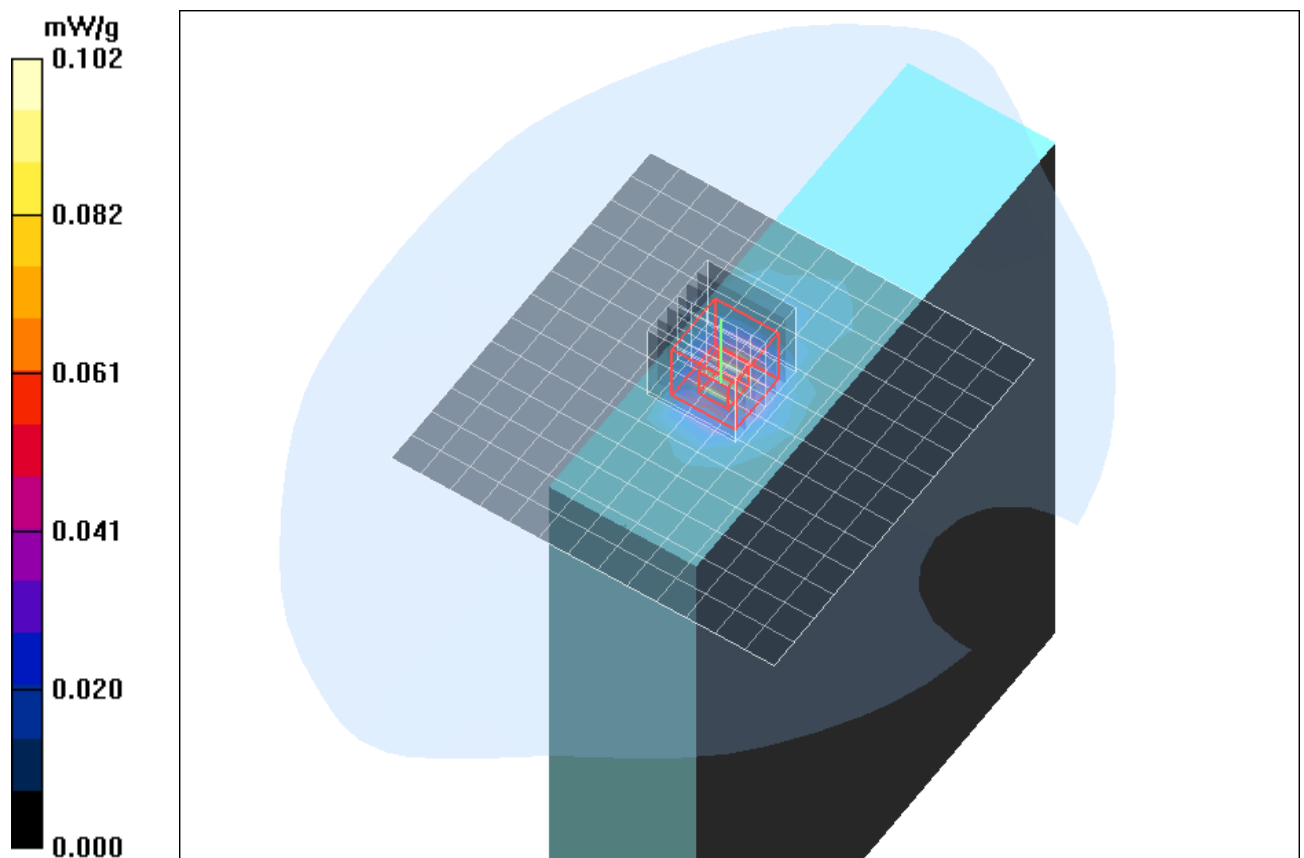


Fig. 27: SAR distribution for Bluetooth, channel 39, position 3 (September 30, 2009; Ambient Temperature: 21.4° C ; Liquid Temperature: 20.9° C).

9 SAR z-axis scans (Validation)

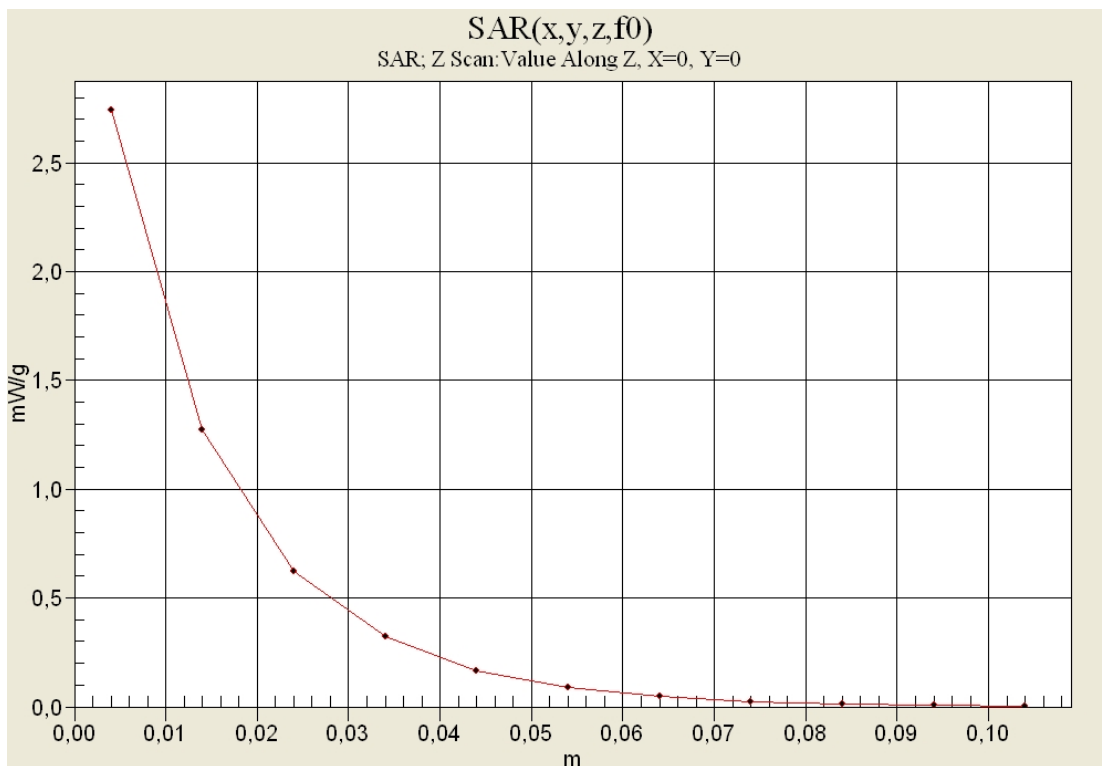


Fig. 28: SAR versus liquid depth, 835 MHz Body (GPRS/EDGE) (October 12, 2009; Ambient Temperature: 21.2° C; Liquid Temperature : 20.7° C).

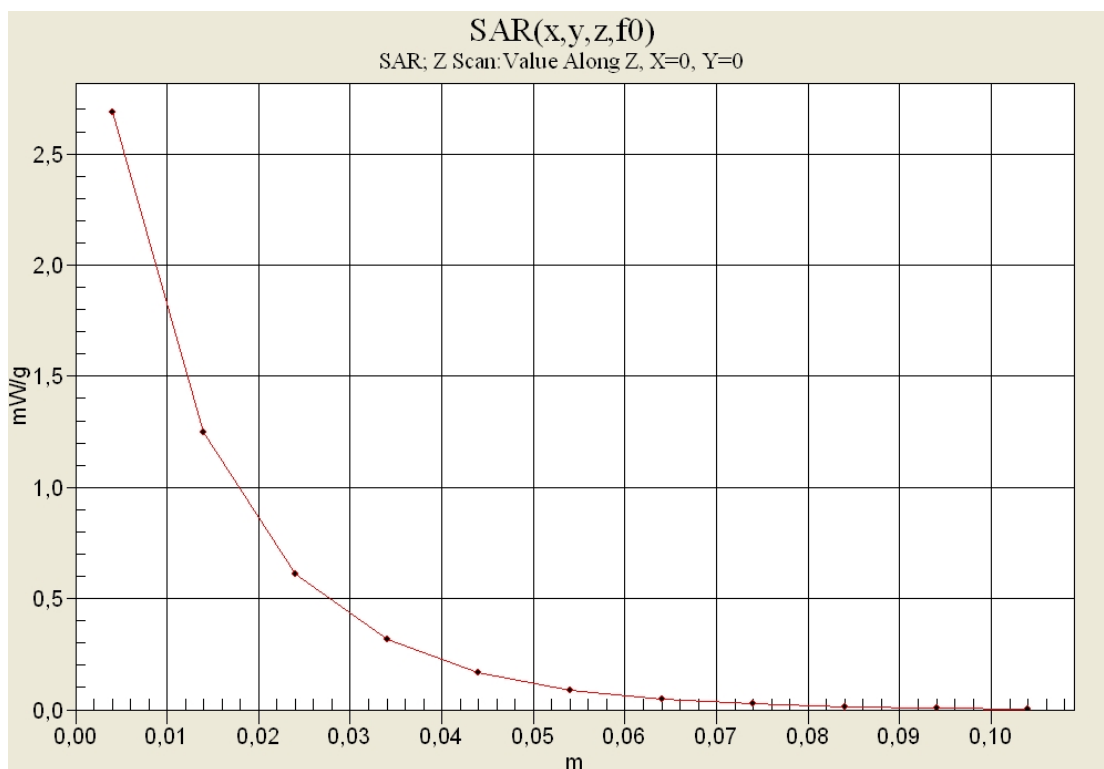


Fig. 29: SAR versus liquid depth, 835 MHz Body (WCDMA V) (October 08, 2009; Ambient Temperature: 21.8° C; Liquid Temperature : 21.1° C).

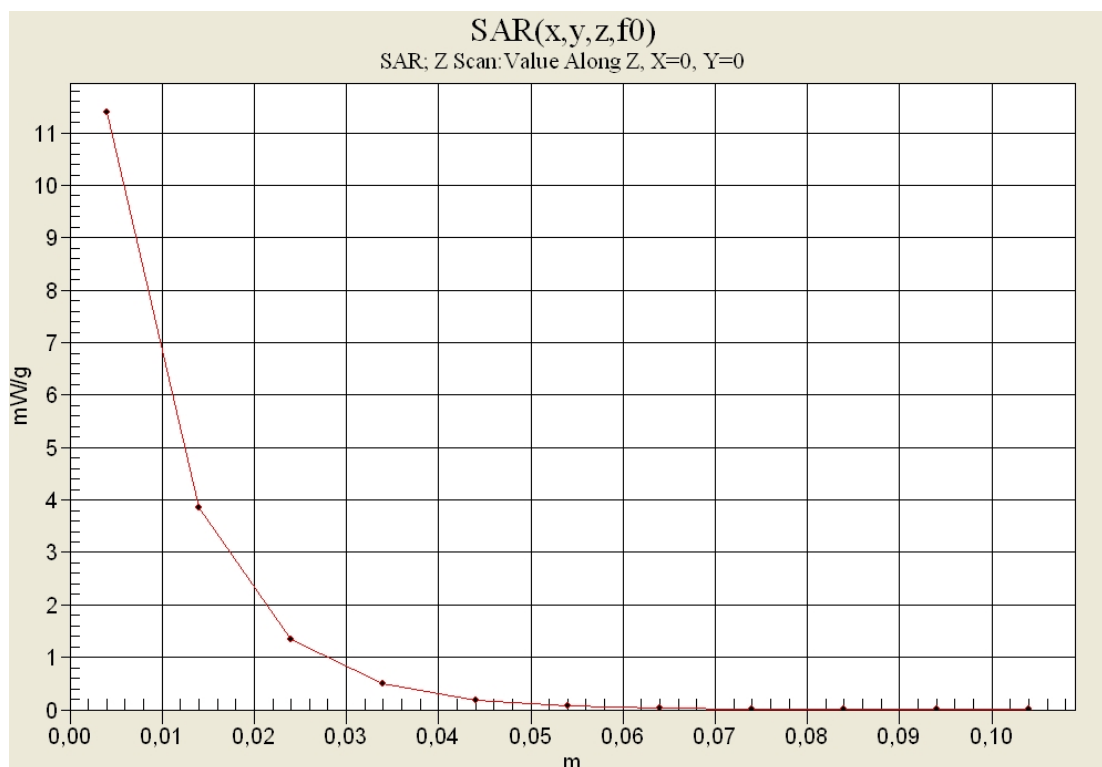


Fig. 30: SAR versus liquid depth, 1900 MHz Body (GPRS/EDGE) (October 15, 2009; Ambient Temperature: 21.1° C; Liquid Temperature : 20.8° C).

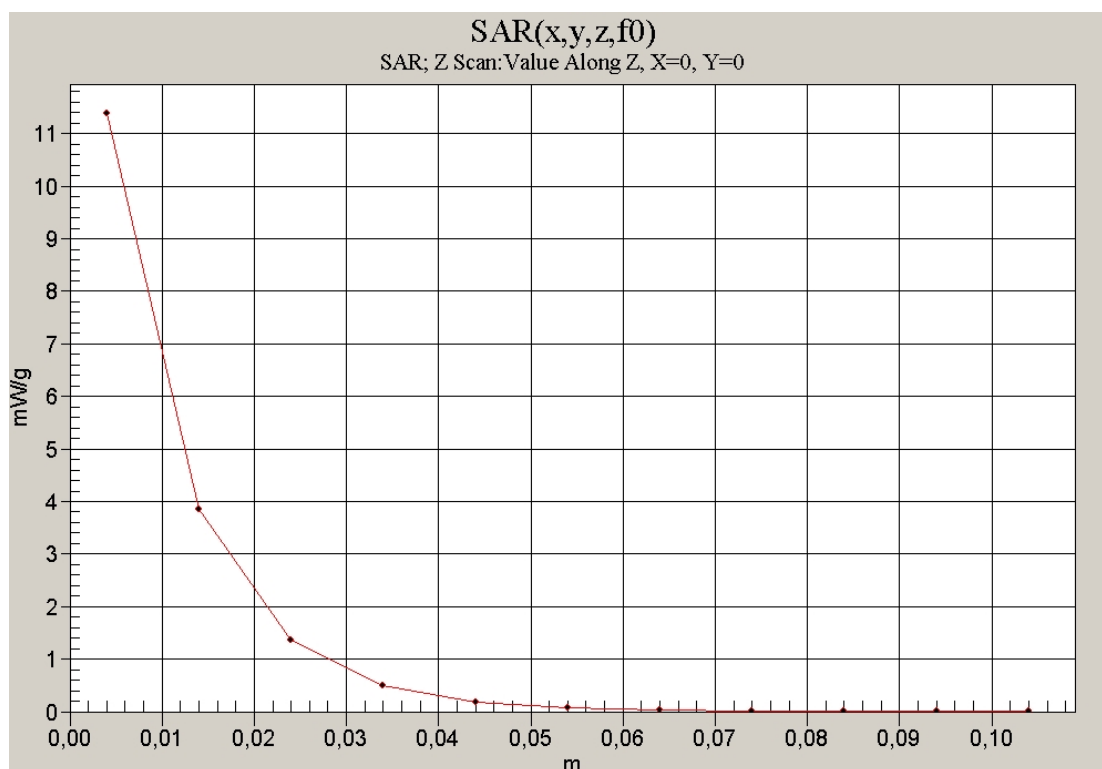


Fig. 31: SAR versus liquid depth, 1900 MHz Body (WCDMA II) (October 13, 2009; Ambient Temperature: 21.1° C; Liquid Temperature : 20.8° C).

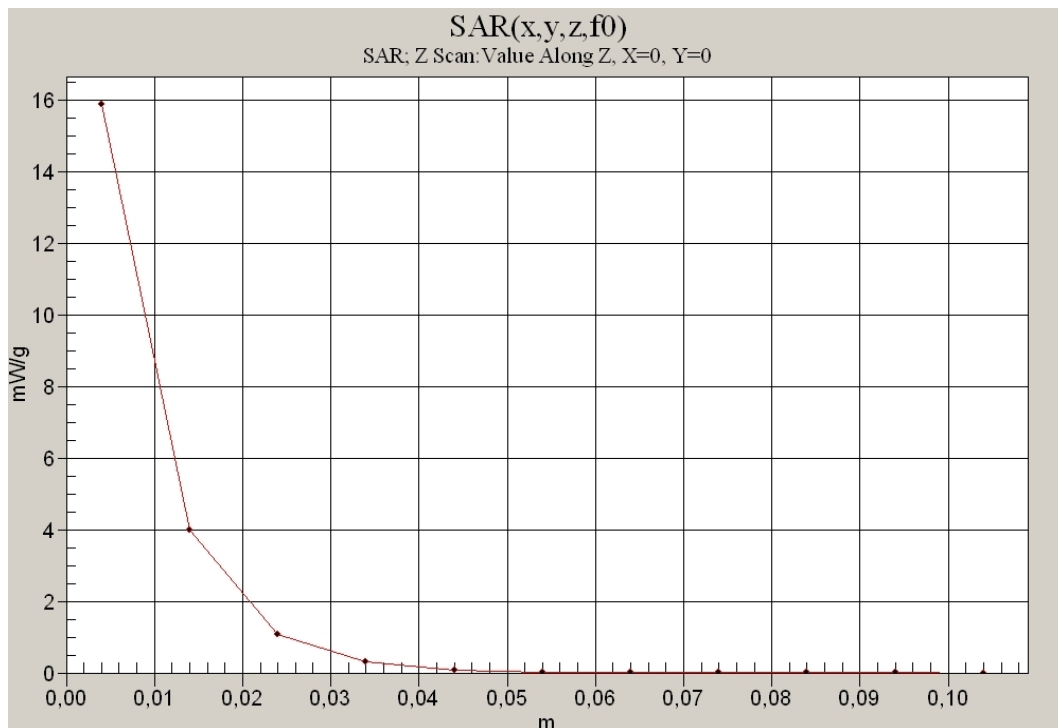


Fig. 32: SAR versus liquid depth, 2450 MHz Body (IEEE 802.11 b) (September 28, 2009; Ambient Temperature: 21.3° C; Liquid Temperature : 20.9° C).

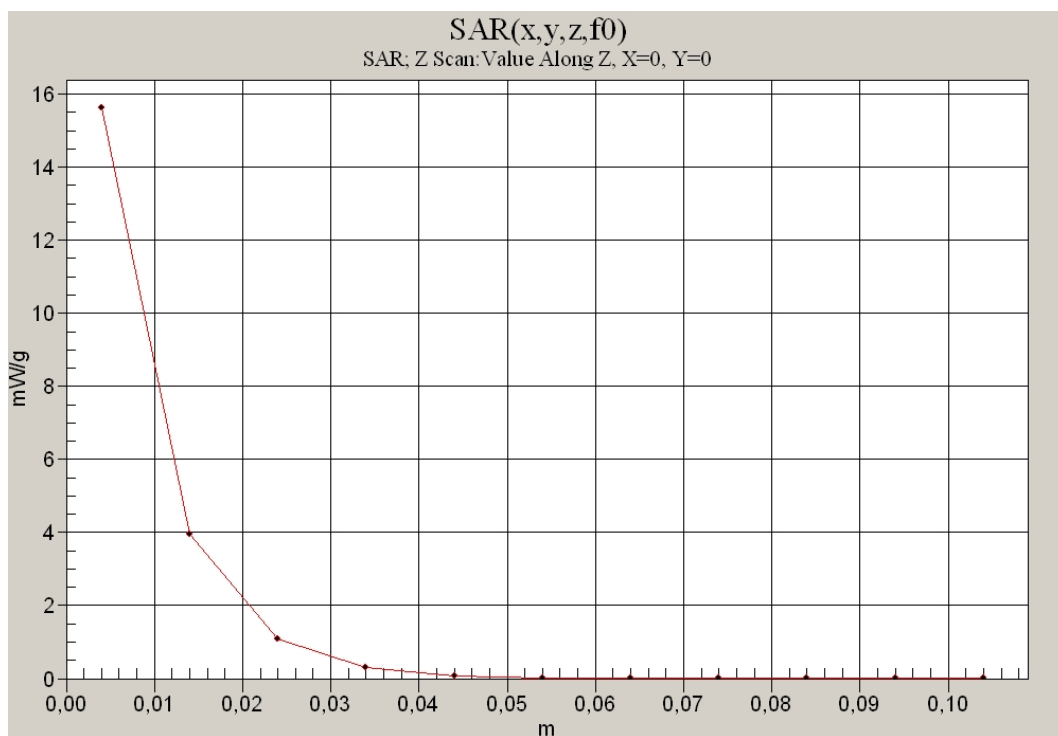


Fig. 33: SAR versus liquid depth, 2450 MHz Body (Bluetooth) (September 30, 2009; Ambient Temperature: 21.4° C; Liquid Temperature : 20.9° C).

10 SAR z-axis scans (Measurements)

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

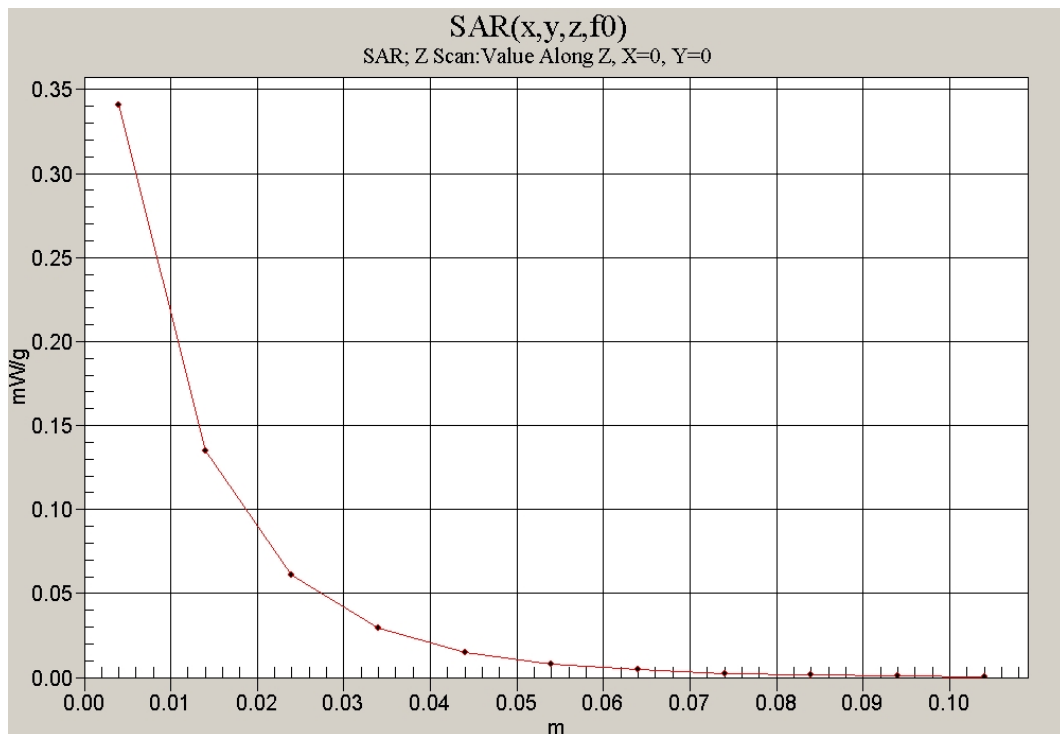


Fig. 34: SAR versus liquid depth, GPRS 850, position 2 (October 12, 2009; Ambient Temperature: 21.2° C; Liquid Temperature : 20.7° C).

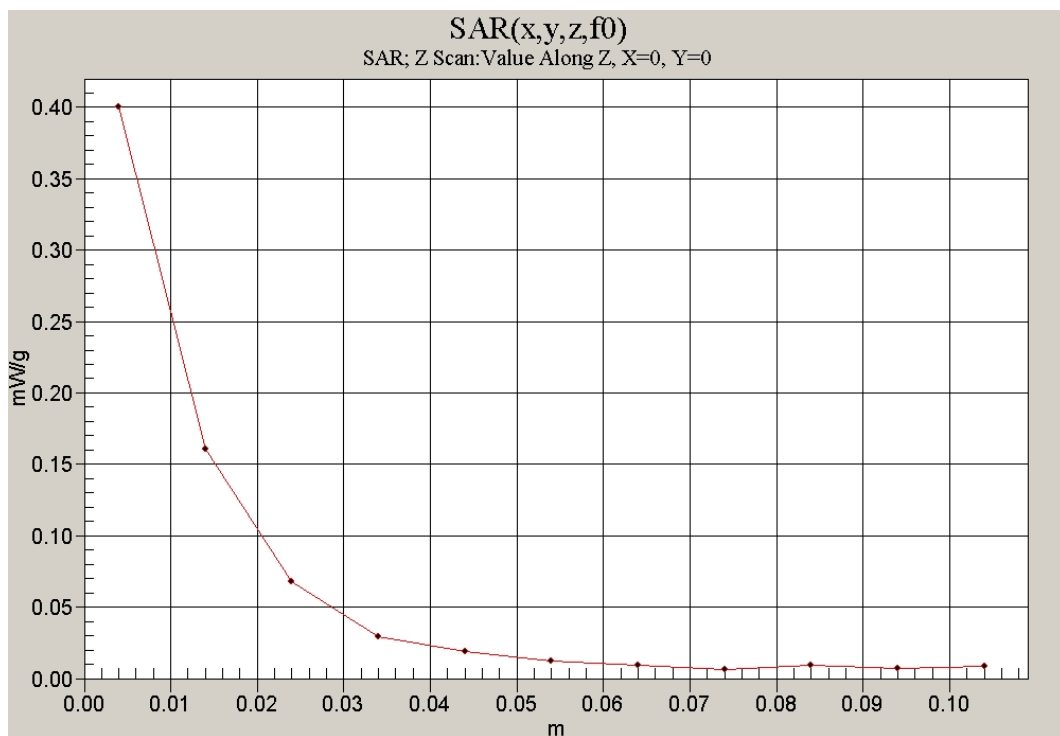


Fig. 35: SAR versus liquid depth, EDGE 1900, position 2 (October 15, 2009; Ambient Temperature: 21.1° C; Liquid Temperature : 20.8° C).

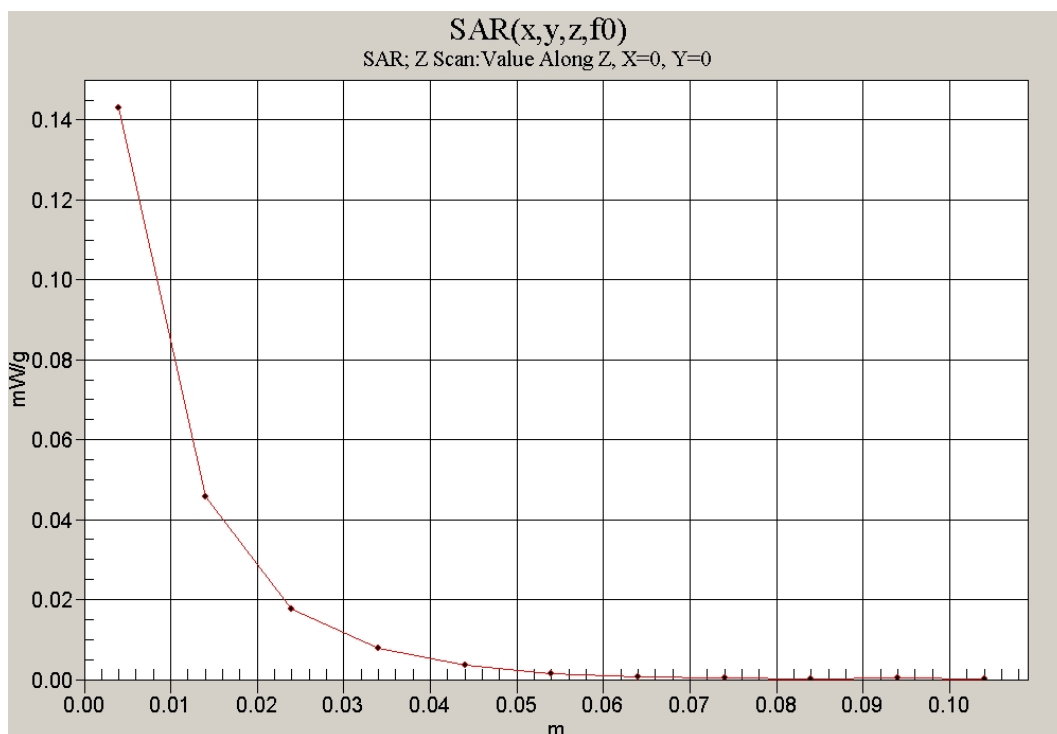


Fig. 36: SAR versus liquid depth, WCDMA V, position 2 (October 08, 2009; Ambient Temperature: 22.0° C; Liquid Temperature : 21.2° C).

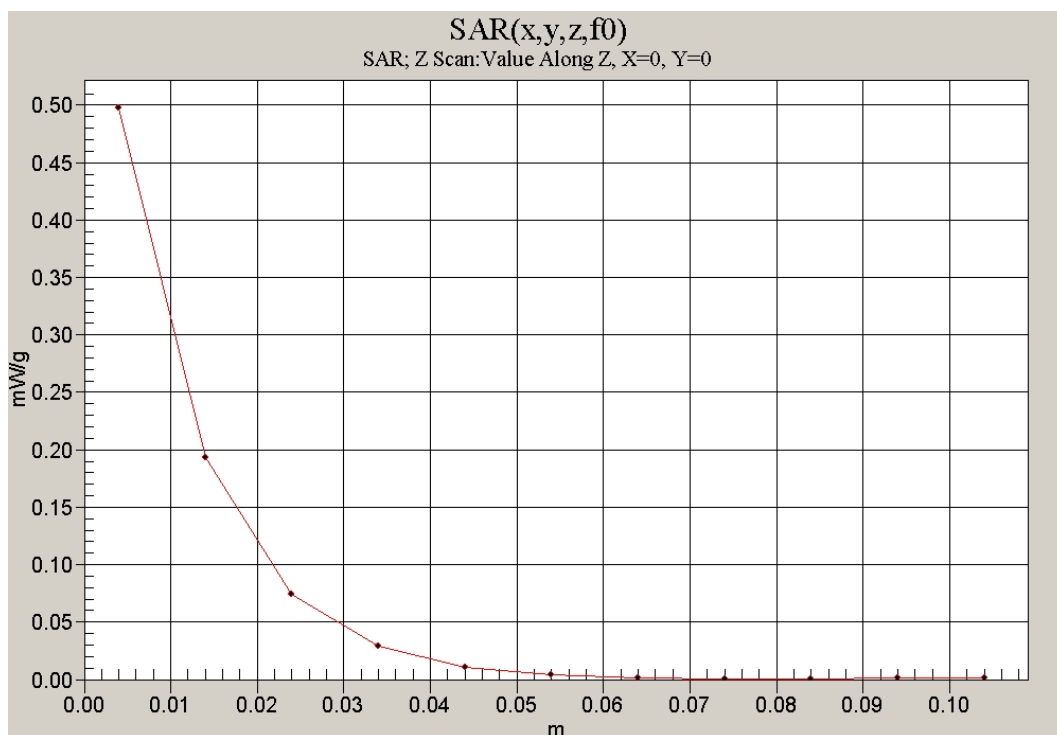


Fig. 37: SAR versus liquid depth, WCDMA II, position 2 (October 13, 2009; Ambient Temperature: 21.1° C; Liquid Temperature : 20.8° C).

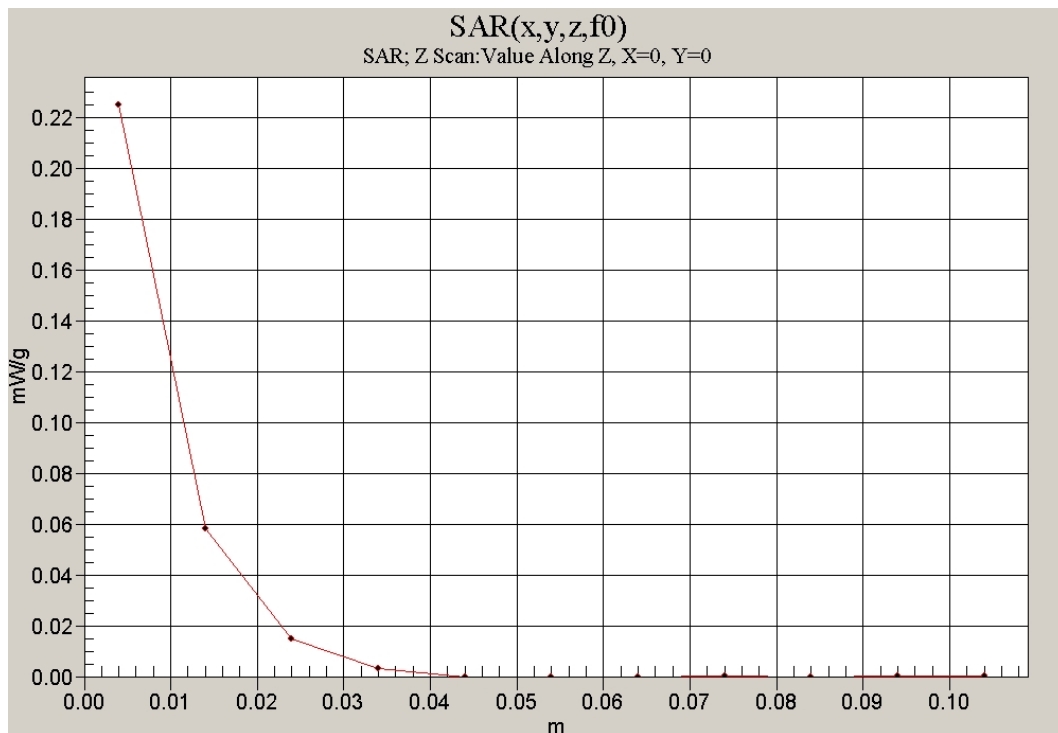


Fig. 38: SAR versus liquid depth, IEEE 802.11 b, antenna “aux”, position 2 (September 28, 2009; Ambient Temperature: 21.3° C; Liquid Temperature : 20.9° C).

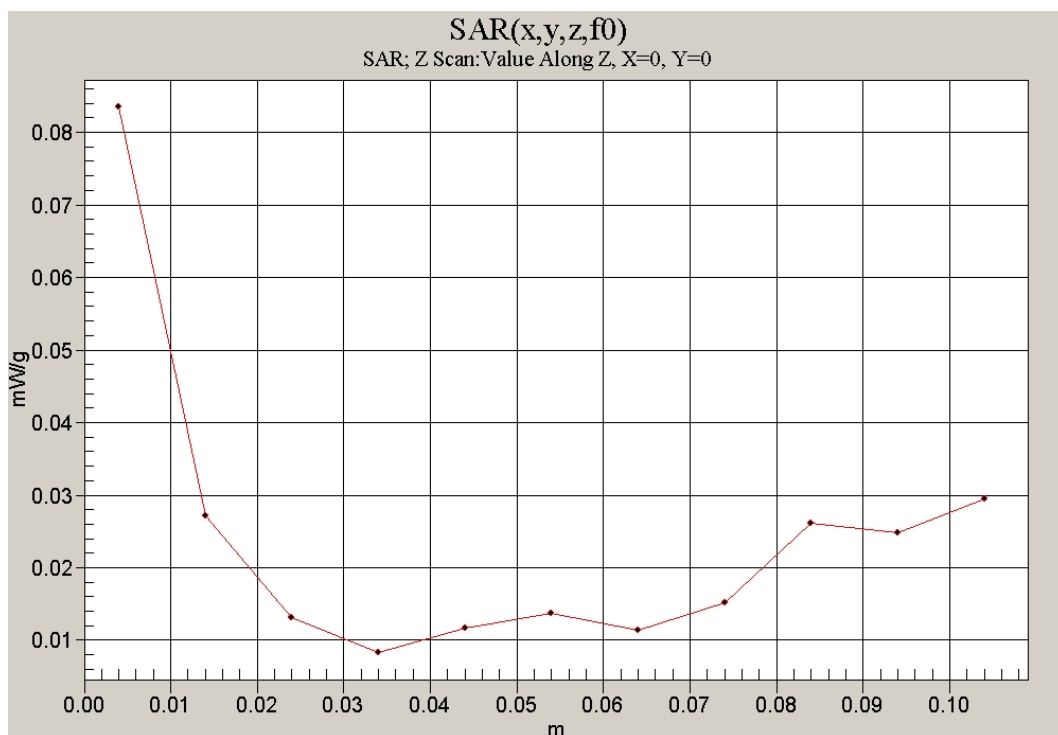


Fig. 39: SAR versus liquid depth, Bluetooth, position 3 (September 30, 2009; Ambient Temperature: 21.4° C; Liquid Temperature : 20.9° C).