

The Testcenter facility 'Dosimetric Test Lab' within IMST GmbH is accredited by the German National 'Deutsche Akkreditierungsstelle GmbH (DAkkS)' for testing according to the scope as listed in the accreditation certificate: D-PL-12139-01-01.

Appendix for the Report

Dosimetric Assessment of the Portable Device XYfi from Option tested in one host product (FCC ID: NCMOGI0643)

According to the FCC Requirements SAR Distribution Plots

September 27, 2011

IMST GmbH
Carl-Friedrich-Gauß-Str. 2
D-47475 Kamp-Lintfort

Customer
7layers AG
Borsigstrasse 11
D-40880 Ratingen

The test results only relate to the items tested. This report shall not be reproduced except in full without the written approval of the testing laboratory.

Table of Contents

1	SAR DISTRIBUTION PLOTS, GPRS 850 BODY	3
2	SAR DISTRIBUTION PLOTS, EDGE 850 BODY	8
3	SAR DISTRIBUTION PLOTS, GPRS 1900 BODY	9
4	SAR DISTRIBUTION PLOTS, EDGE 1900 BODY	14
5	SAR DISTRIBUTION PLOTS, WCDMA FDD II BODY	19
6	SAR DISTRIBUTION PLOTS, IEEE 802.11B BODY	28
7	SAR Z-AXIS SCANS (VALIDATION)	33
8	SAR Z-AXIS SCANS (MEASUREMENTS).....	35

1 SAR Distribution Plots, GPRS 850 Body

Test Laboratory: The name of your organization; File Name: [058_bahm_1_5mm.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: GPRS 850

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.67

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.32, 6.32, 6.32); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 186

Body Worn/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.507 mW/g

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

Reference Value = 22.6 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.920 W/kg

SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.316 mW/g

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

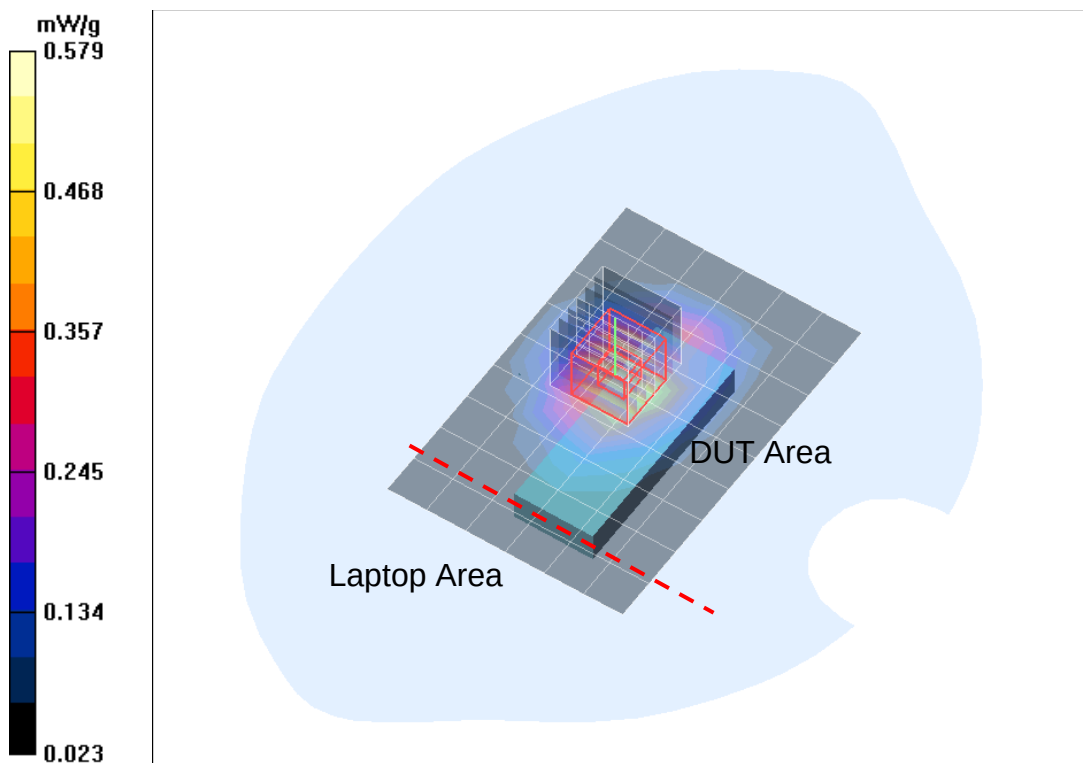


Fig. 1: SAR distribution for GPRS 850 (Class 11), channel 190, Position 1 (Dell Latitude X300, July 28, 2011; Ambient Temperature: 22.7°C; Liquid Temperature: 22.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [058_bahm_2_5mm.da4](#)

DUT: Option; **Type:** GI0643; **Serial:** 004401441460058

Program Name: GPRS 850

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.67

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.32, 6.32, 6.32); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.560 mW/g

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

Reference Value = 24.5 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.865 W/kg

SAR(1 g) = 0.544 mW/g; SAR(10 g) = 0.328 mW/g

Maximum value of SAR (measured) = 0.593 mW/g

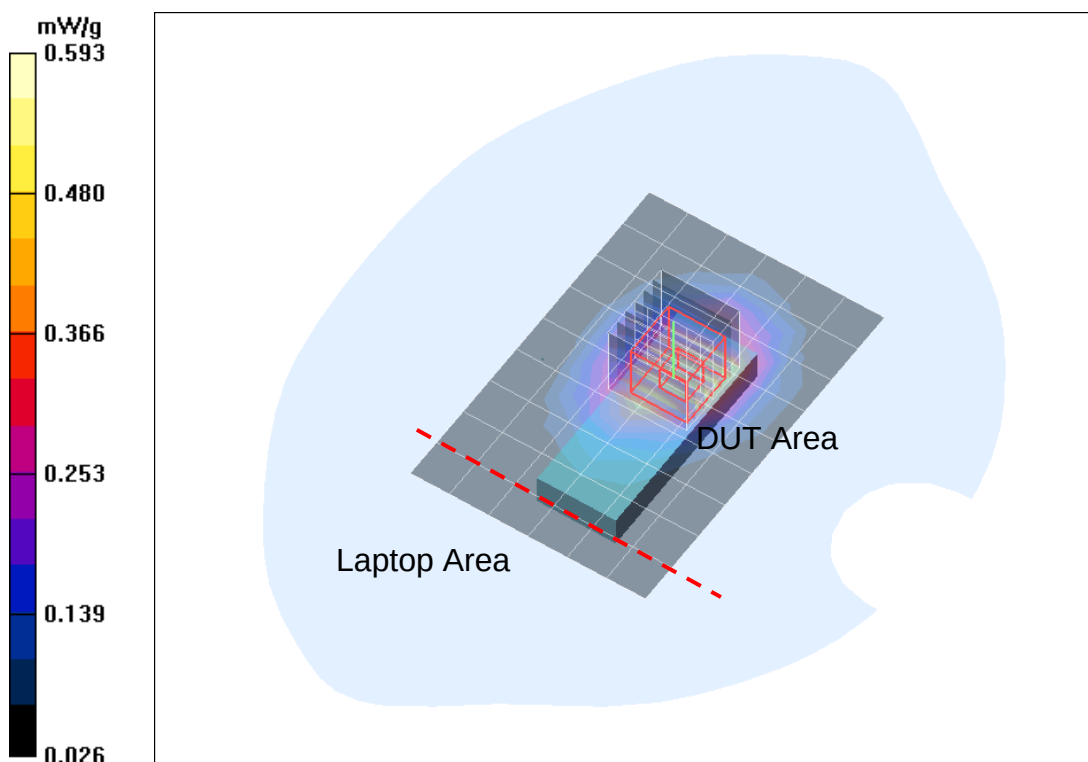


Fig. 2: SAR distribution for GPRS 850 (Class 11), channel 190, Position 2 (Dell Latitude X300, July 28, 2011; Ambient Temperature: 22.7°C; Liquid Temperature: 22.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [058_bahm_3_5mm.da4](#)

DUT: Option; **Type:** GI0643; **Serial:** 004401441460058

Program Name: GPRS 850

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.67

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.32, 6.32, 6.32); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 17.1 V/m; Power Drift = -0.150 dB

Peak SAR (extrapolated) = 0.512 W/kg

SAR(1 g) = 0.289 mW/g; SAR(10 g) = 0.184 mW/g

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

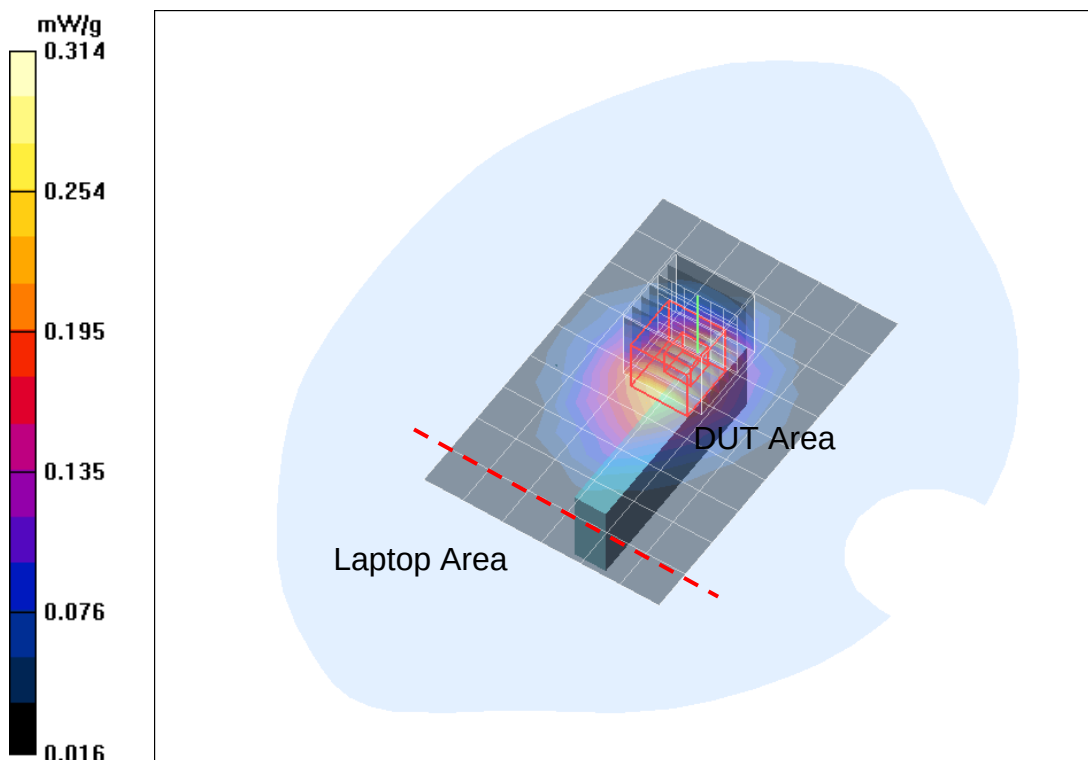


Fig. 3: SAR distribution for GPRS 850 (Class 11), channel 190, Position 3 (Dell Latitude X300, July 28, 2011; Ambient Temperature: 22.7°C; Liquid Temperature: 22.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [058_bahm_4_5mm.da4](#)

DUT: Option; **Type:** GI0643; **Serial:** 004401441460058

Program Name: GPRS 850

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.67

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.32, 6.32, 6.32); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.344 mW/g

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

Reference Value = 14.5 V/m; Power Drift = 0.132 dB

Peak SAR (extrapolated) = 0.664 W/kg

SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.363 mW/g

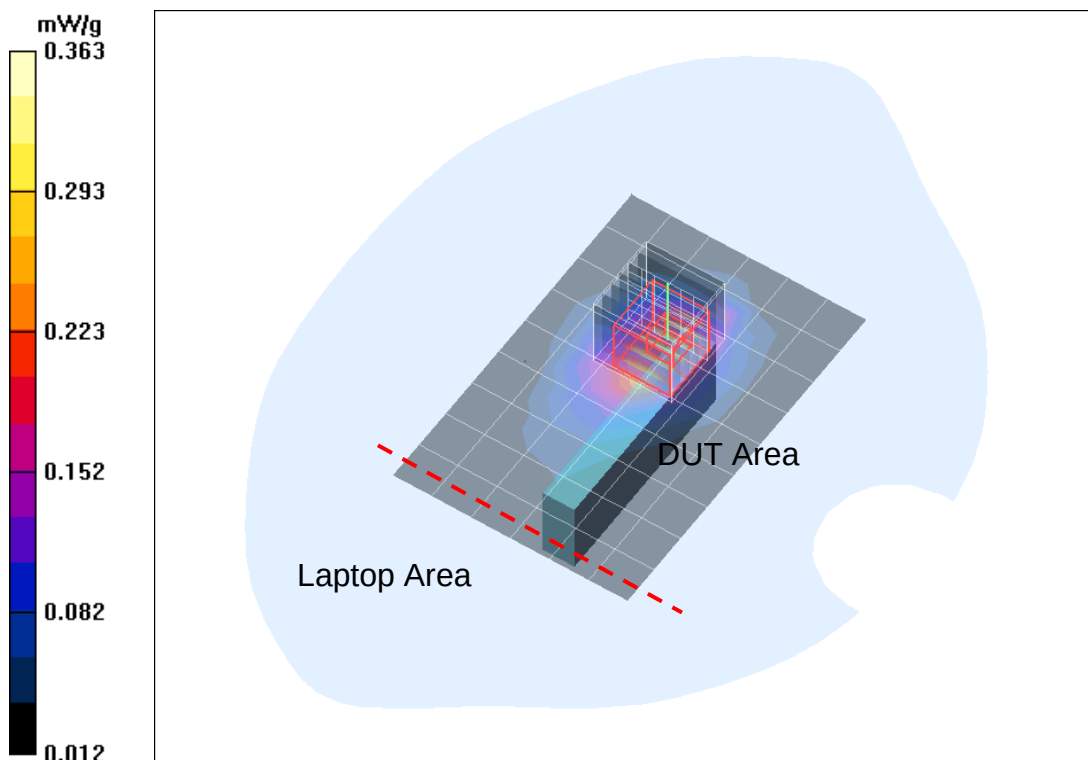


Fig. 4: SAR distribution for GPRS 850 (Class 11), channel 190, Position 4 (Dell Latitude X300, July 28, 2011; Ambient Temperature: 22.7°C; Liquid Temperature: 22.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [058_bahm_5_5mm.da4](#)

DUT: Option; **Type:** GI0643; **Serial:** 004401441460058

Program Name: GPRS 850

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.67

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.32, 6.32, 6.32); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (8x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.159 mW/g

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

Reference Value = 16.5 V/m; Power Drift = -0.065 dB

Peak SAR (extrapolated) = 0.641 W/kg

SAR(1 g) = 0.207 mW/g; SAR(10 g) = 0.086 mW/g

Maximum value of SAR (measured) = 0.222 mW/g

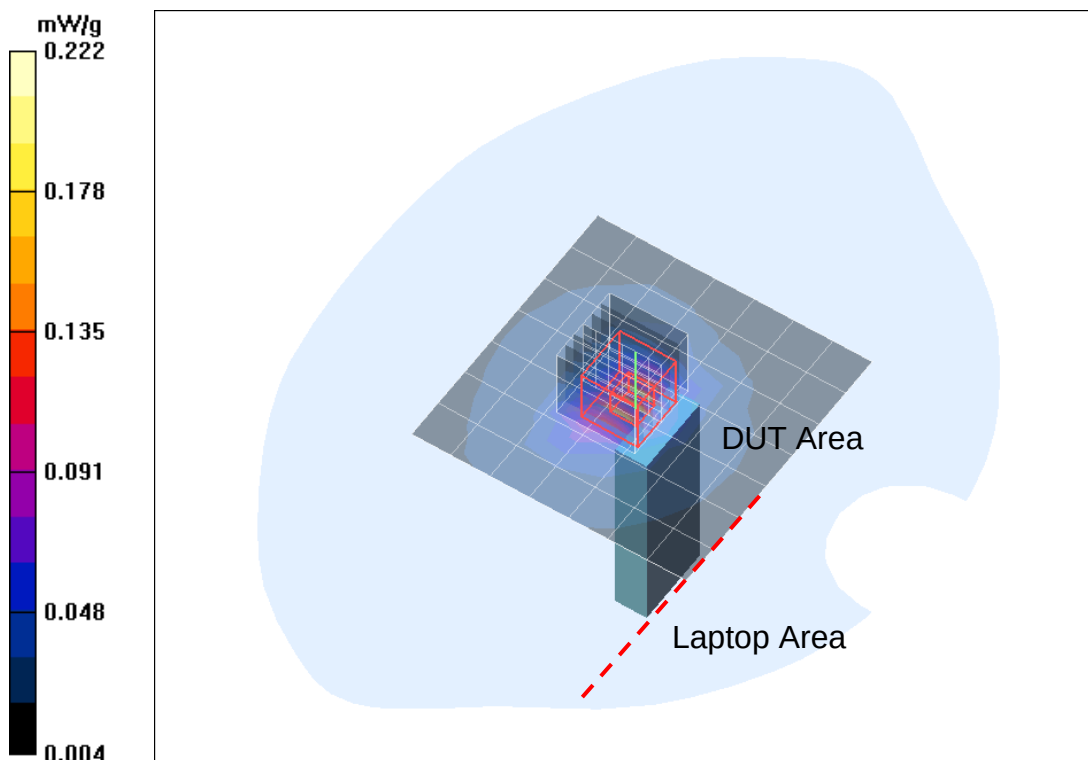


Fig. 5: SAR distribution for GPRS 850 (Class 11), channel 190, Position 5 (Dell Latitude X300, July 28, 2011; Ambient Temperature: 22.7°C; Liquid Temperature: 22.3°C).

2 SAR Distribution Plots, EDGE 850 Body

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [058_bahm_2_5mm_EDGE.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: EGPRS 850

Communication System: EDGE 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.67

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.32, 6.32, 6.32); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.407 mW/g

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

Reference Value = 19.1 V/m; Power Drift = -0.138 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.250 mW/g

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

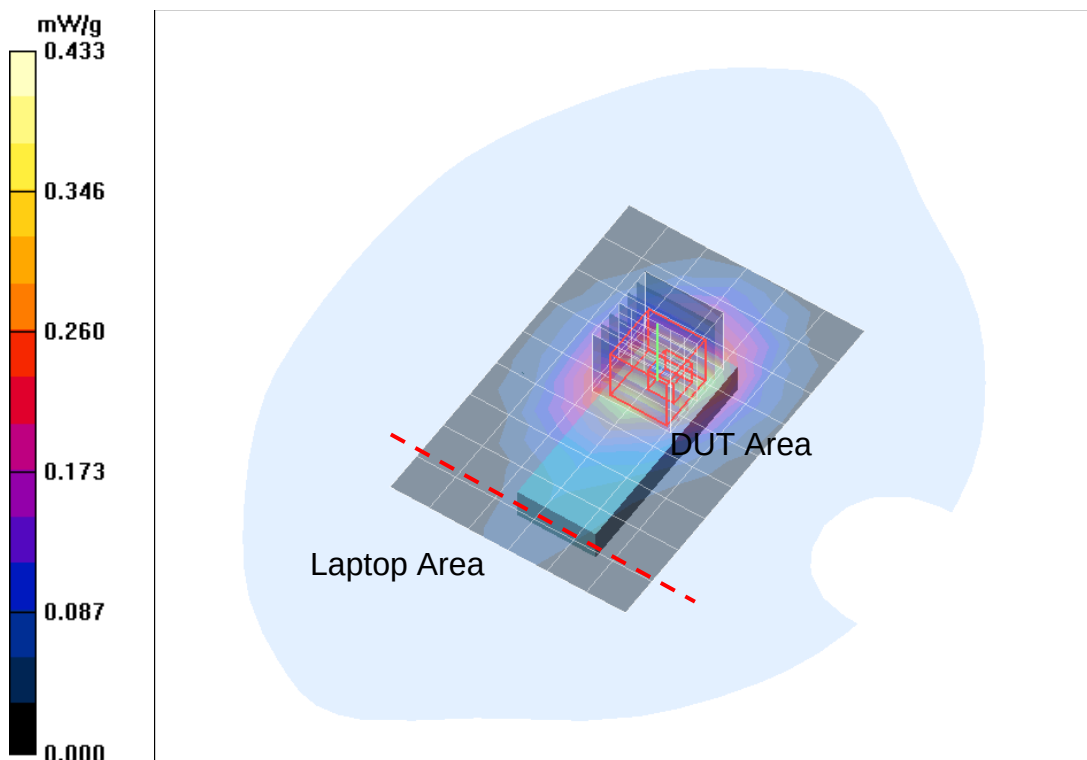


Fig. 6: SAR distribution for EDGE 850 (Class 11), channel 190, Position 2 (Dell Latitude X300, July 28, 2011; Ambient Temperature: 22.7°C; Liquid Temperature: 22.3°C).

3 SAR Distribution Plots, GPRS 1900 Body

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphl_1_5mm.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: GPRS 1900

Communication System: GPRS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium parameters used (extrapolated): $f = 1850.2$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.36 mW/g

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

Reference Value = 29.0 V/m; Power Drift = 0.149 dB

Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 1.26 mW/g; SAR(10 g) = 0.736 mW/g

Maximum value of SAR (measured) = 1.39 mW/g

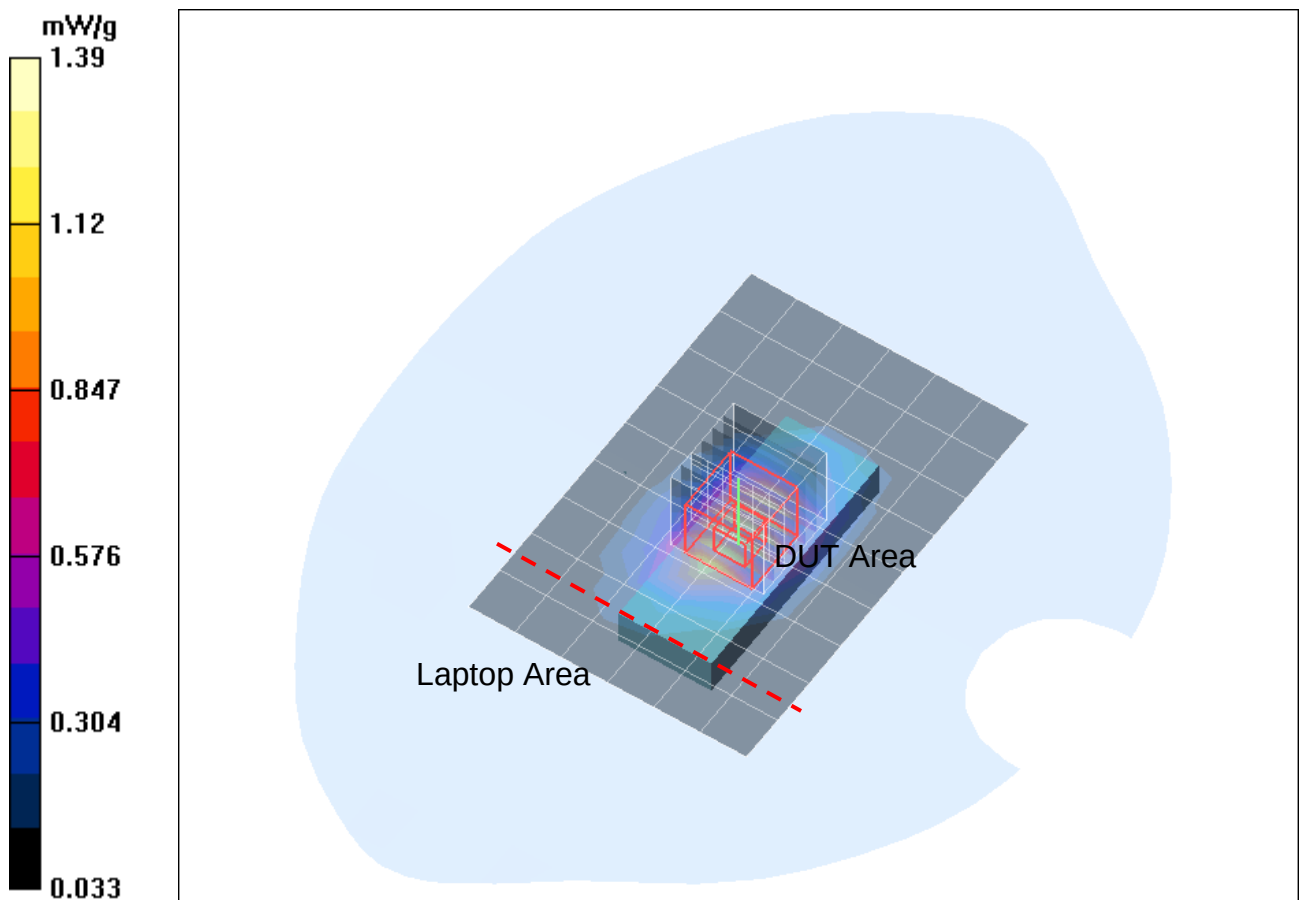


Fig. 7: SAR distribution for GPRS 1900 (Class 12), channel 512, Position 1 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphm_2_5mm.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: GPRS 1900

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.779 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 = 0.021 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.782 mW/g; SAR(10 g) = 0.469 mW/g

Maximum value of SAR (measured) = 0.849 mW/g

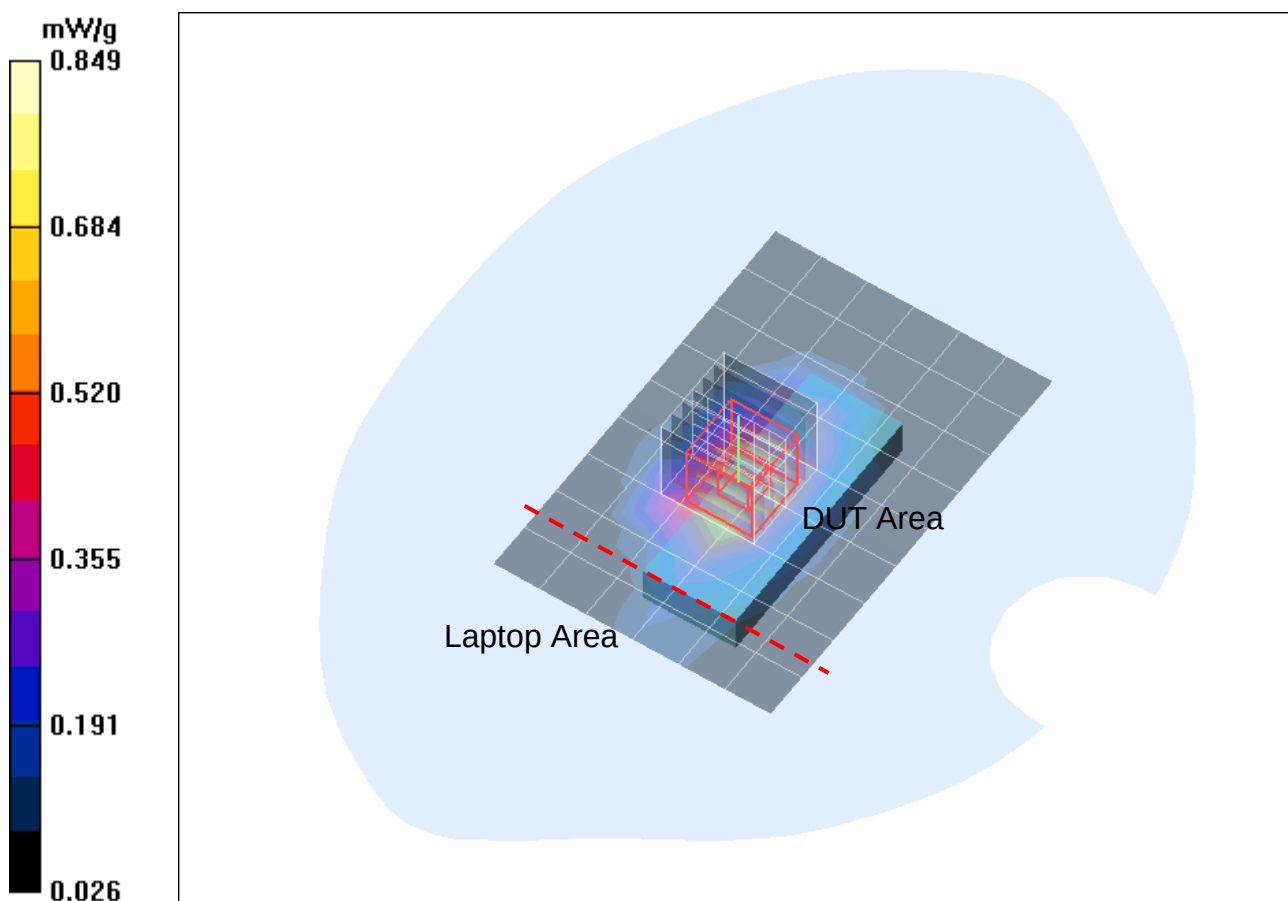


Fig. 8: SAR distribution for GPRS 1900 (Class 12), channel 661, Position 2 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphi_3_5mm.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: GPRS 1900

Communication System: GPRS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium parameters used (extrapolated): $f = 1850.2$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.07 mW/g

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

Reference Value = 26.9 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.582 mW/g

Maximum value of SAR (measured) = 1.13 mW/g

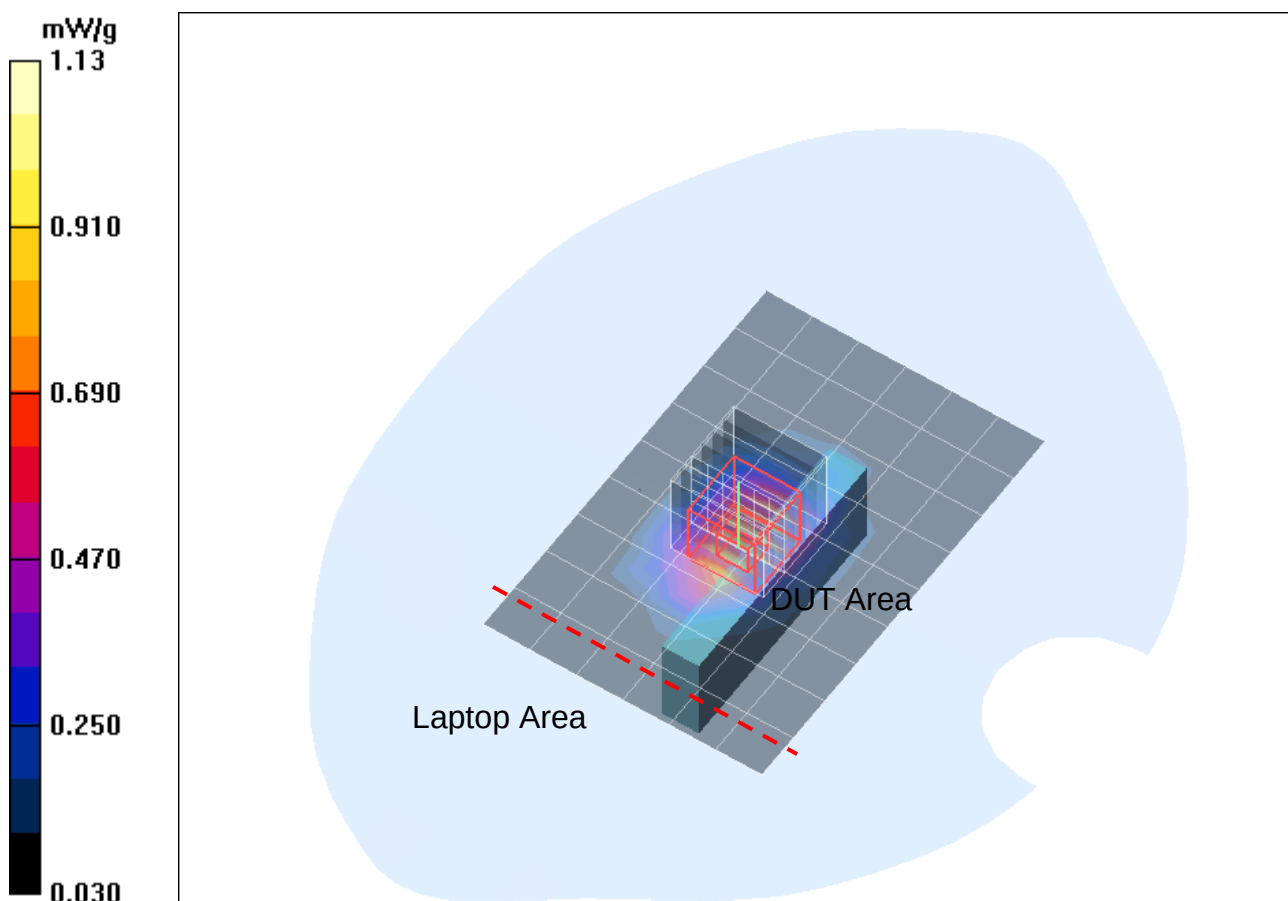


Fig. 9: SAR distribution for GPRS 1900 (Class 12), channel 512, Position 3 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphm_4_5mm.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: GPRS 1900

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.537 mW/g

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

Reference Value = 16.6 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 0.817 W/kg

SAR(1 g) = 0.494 mW/g; SAR(10 g) = 0.287 mW/g

Maximum value of SAR (measured) = 0.542 mW/g

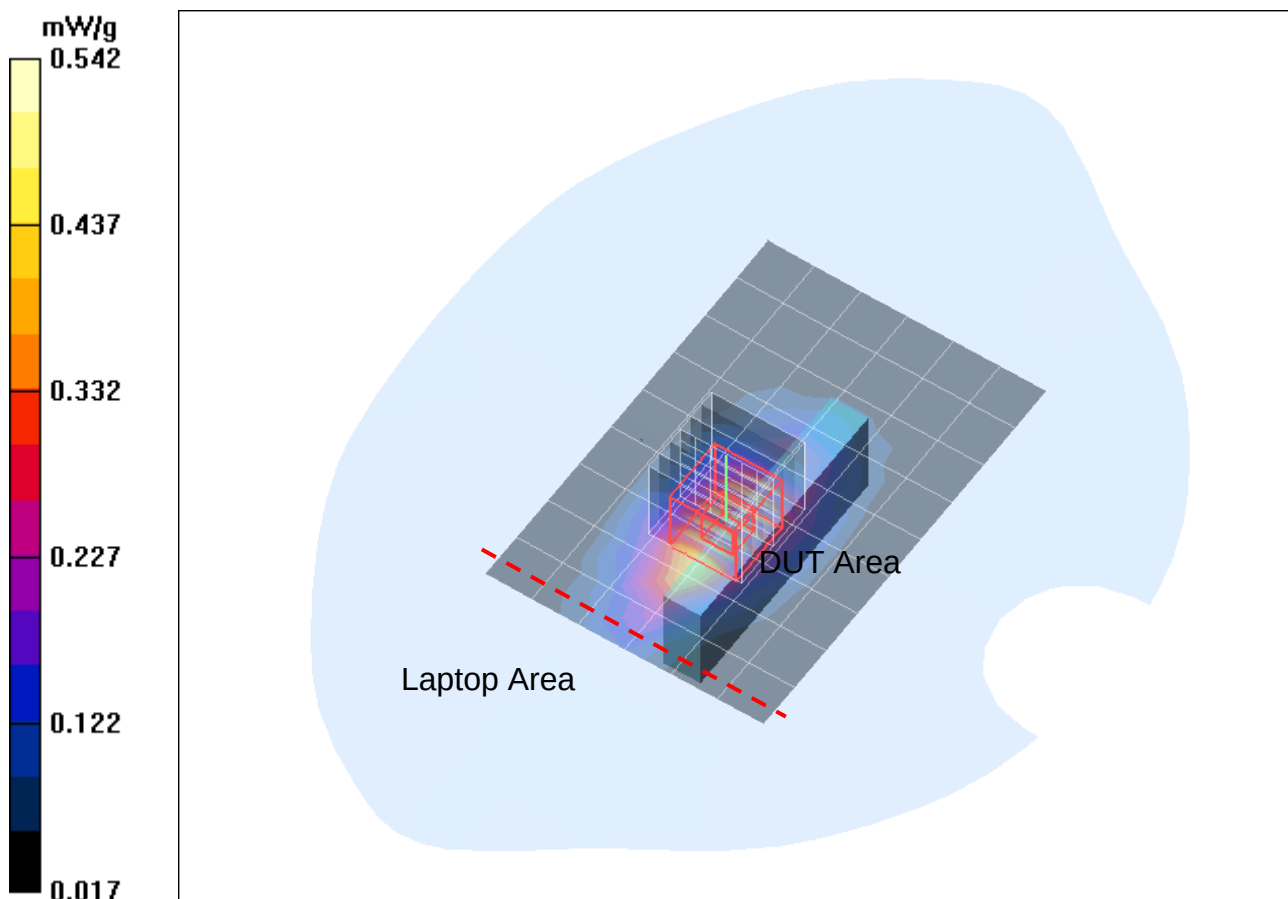


Fig. 10: SAR distribution for GPRS 1900 (Class 12), channel 661, Position 4 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_yphm_5_5mm.da4](#)

DUT: Option; **Type:** GI0643; **Serial:** 004401441460058

Program Name: GPRS 1900

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (8x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.057 mW/g

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

Reference Value = 5.63 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.108 W/kg

SAR(1 g) = 0.060 mW/g; SAR(10 g) = 0.035 mW/g

Maximum value of SAR (measured) = 0.065 mW/g

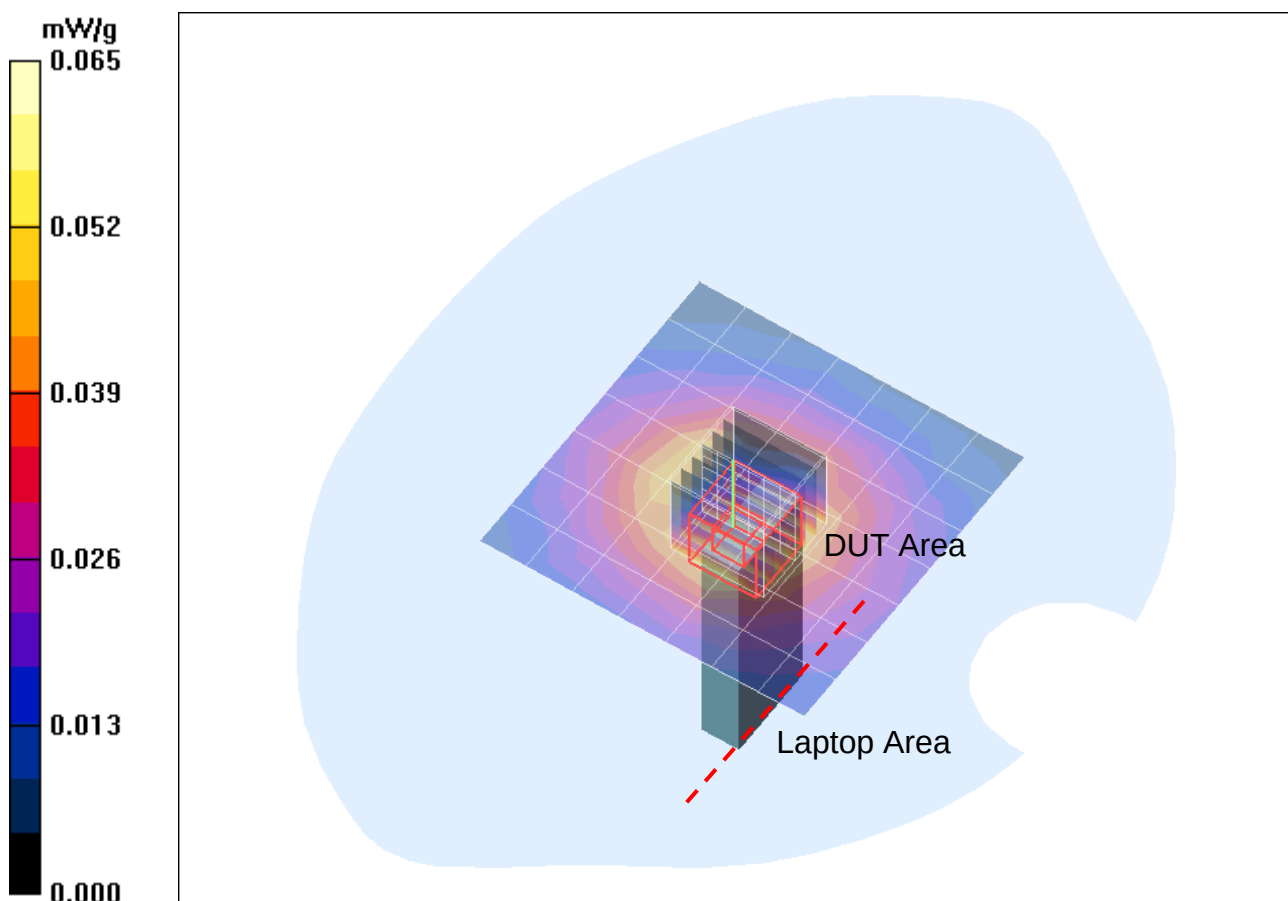


Fig. 11: SAR distribution for GPRS 1900 (Class 12), channel 661, Position 5 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

4 SAR Distribution Plots, EDGE 1900 Body

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphl_1_5mm_edge.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: EGPRS 1900

Communication System: EGPRS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium parameters used (extrapolated): $f = 1850.2$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.02 mW/g

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

Reference Value = 26.7 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.631 mW/g

Maximum value of SAR (measured) = 1.18 mW/g

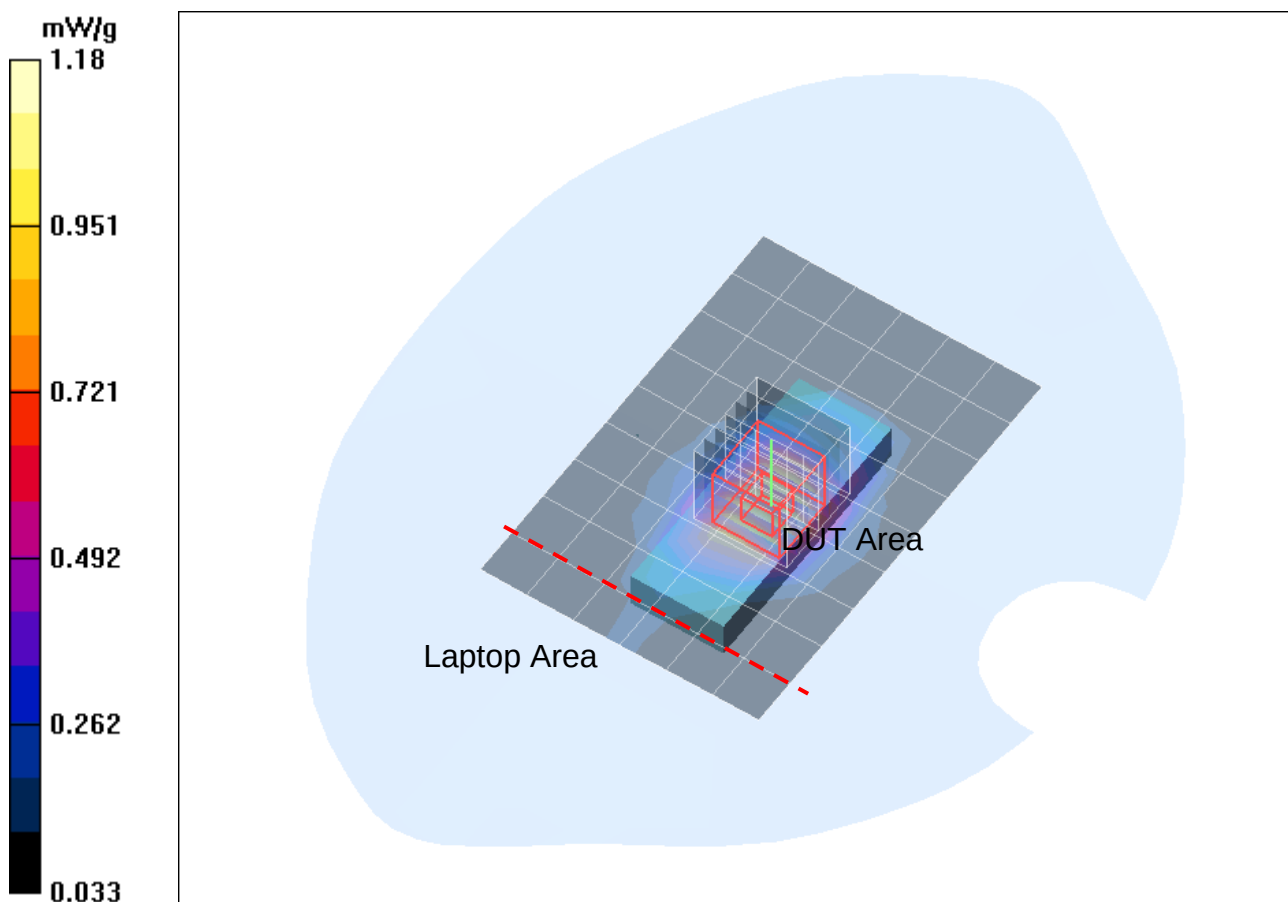


Fig. 12: SAR distribution for EDGE 1900 (Class 12), channel 512, Position 1 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphm_2_5mm_edge.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: EGPRS 1900

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.806 mW/g

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

Reference Value = 23.2 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.772 mW/g; SAR(10 g) = 0.465 mW/g

Maximum value of SAR (measured) = 0.837 mW/g

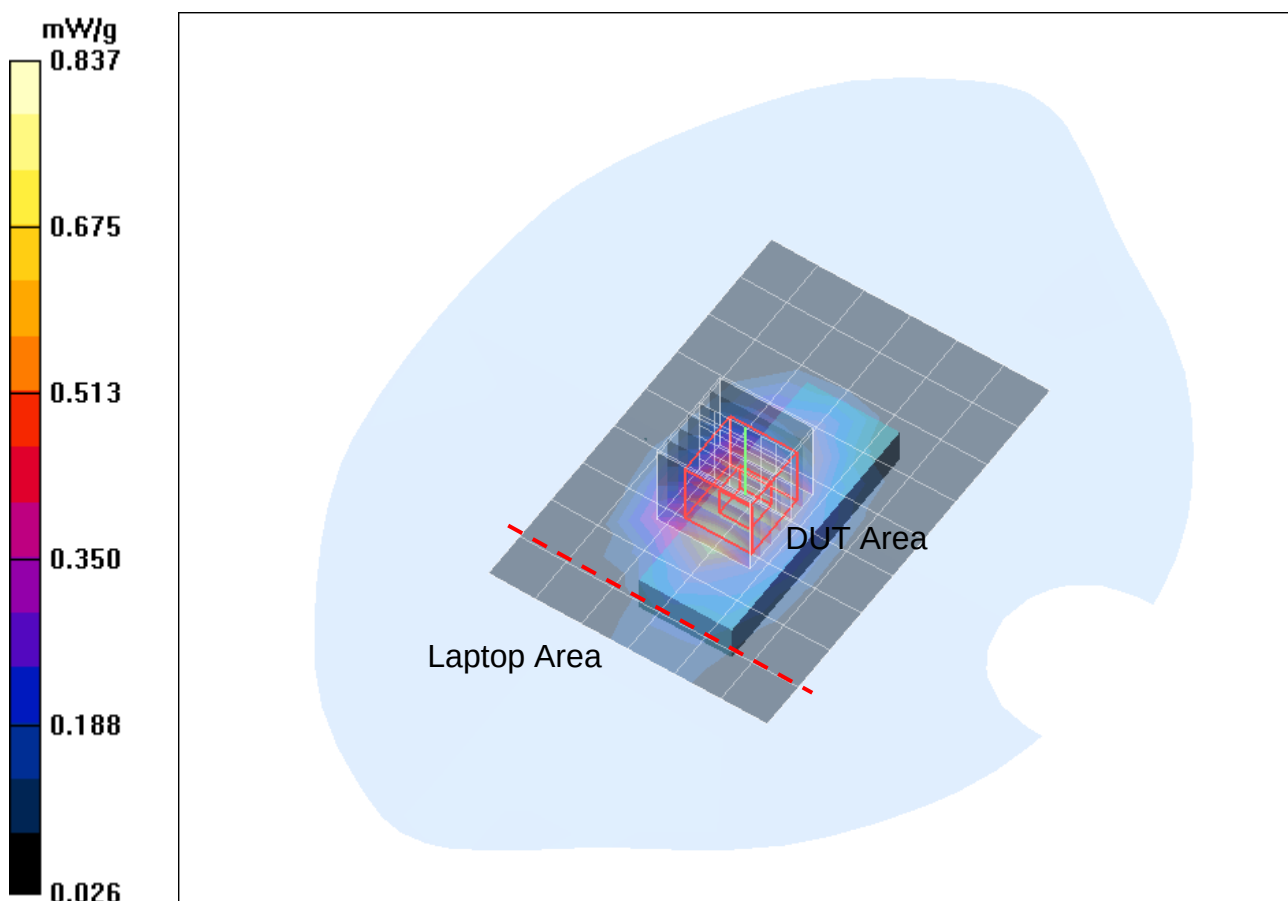


Fig. 13: SAR distribution for EDGE 1900 (Class 12), channel 661, Position 2 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphi_3_5mm_edge.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: EGPRS 1900

Communication System: EGPRS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium parameters used (extrapolated): $f = 1850.2$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.934 mW/g

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

Reference Value = 24.7 V/m; Power Drift = -0.071 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.983 mW/g; SAR(10 g) = 0.557 mW/g

Maximum value of SAR (measured) = 1.08 mW/g

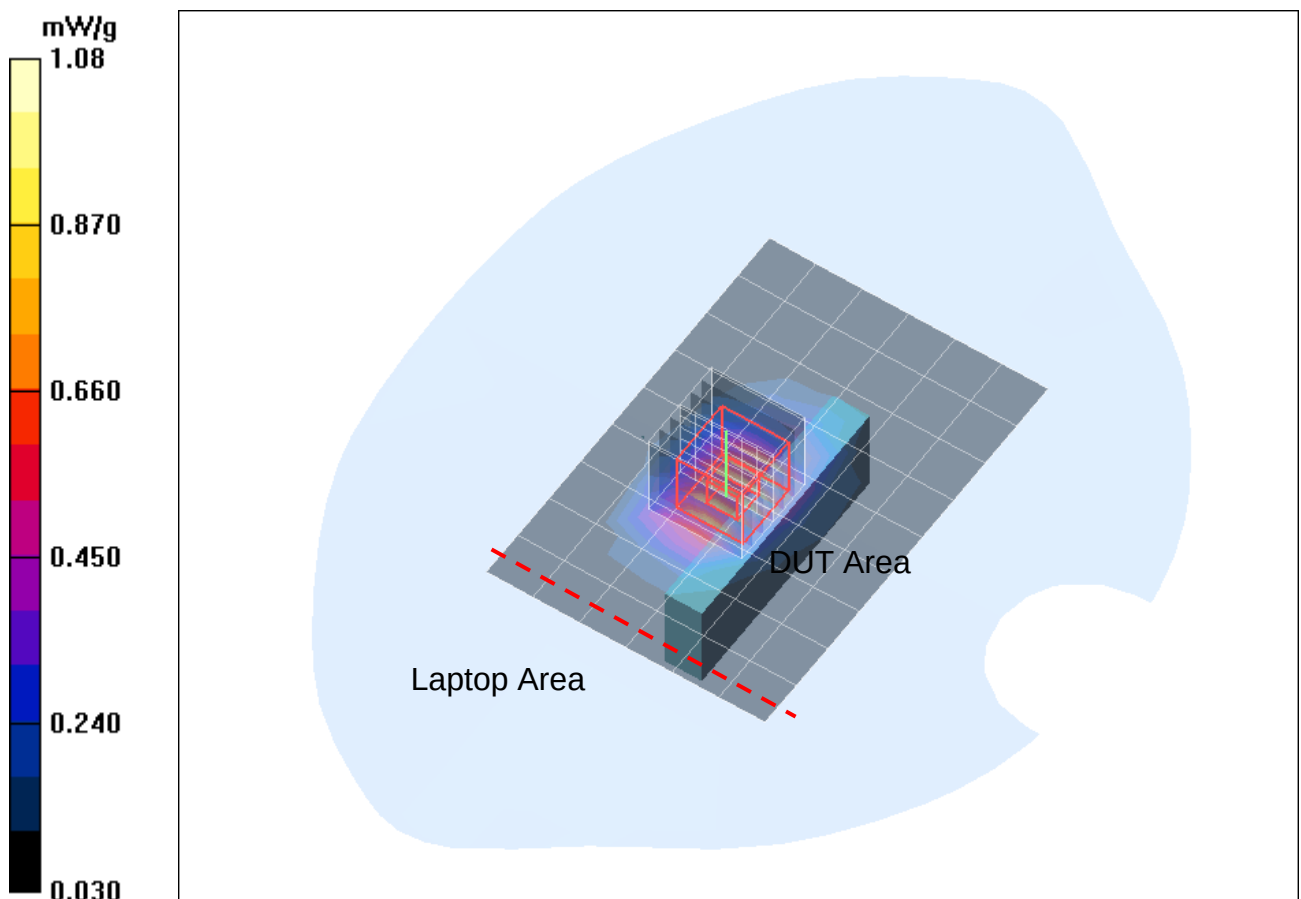


Fig. 14: SAR distribution for EDGE 1900 (Class 12), channel 512, Position 3 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphm_4_5mm_edge.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: EGPRS 1900

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.425 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 = 0.030 dB

Peak SAR (extrapolated) = 0.696 W/kg

SAR(1 g) = 0.430 mW/g; SAR(10 g) = 0.254 mW/g

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

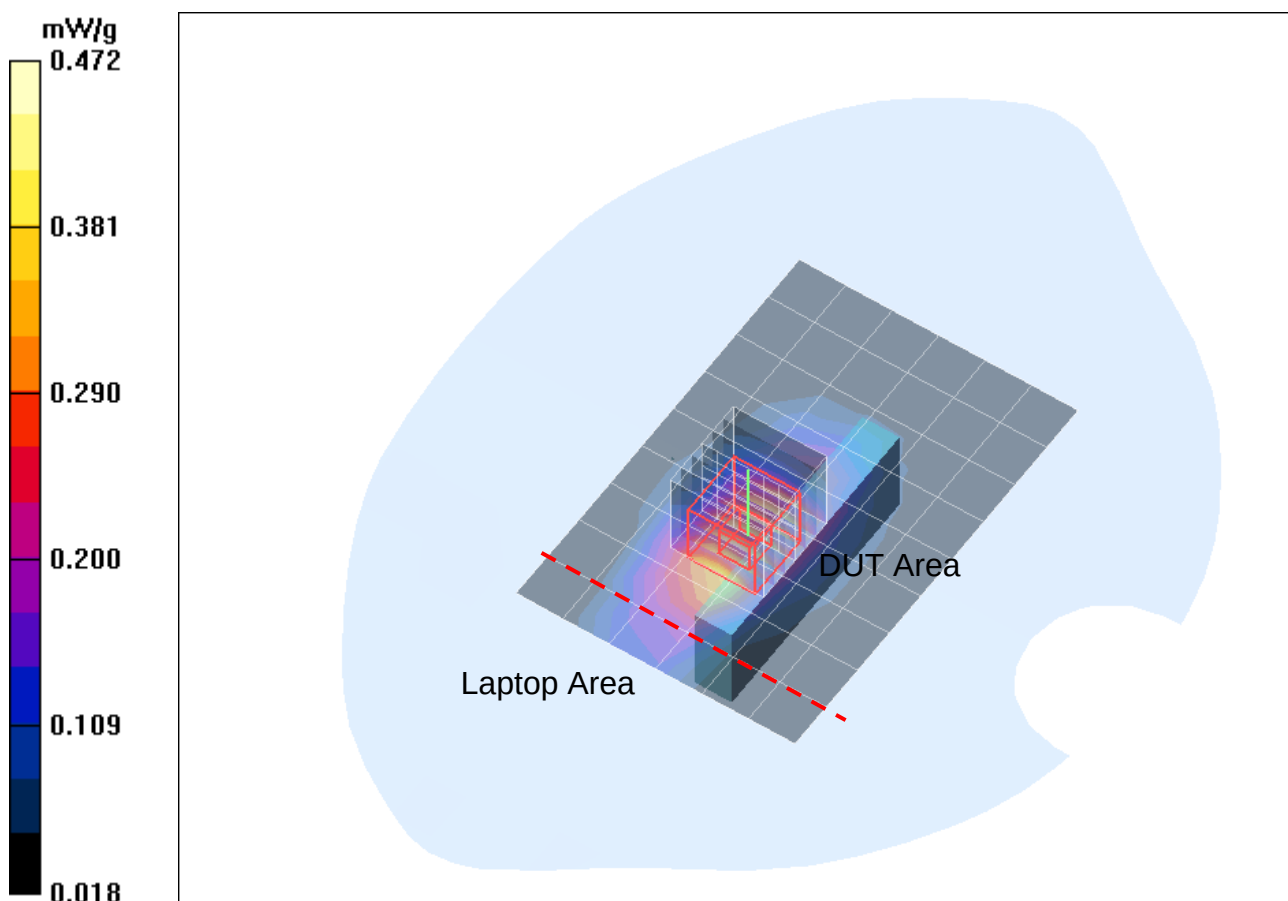


Fig. 15: SAR distribution for EDGE 1900 (Class 12), channel 661, Position 4 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yphm_5_5mm_edge.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: EGPRS 1900

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (8x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.068 mW/g

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

Reference Value = 6.13 V/m; Power Drift = 0.182 dB

Peak SAR (extrapolated) = 0.118 W/kg

SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.039 mW/g

Maximum value of SAR (measured) = 0.075 mW/g

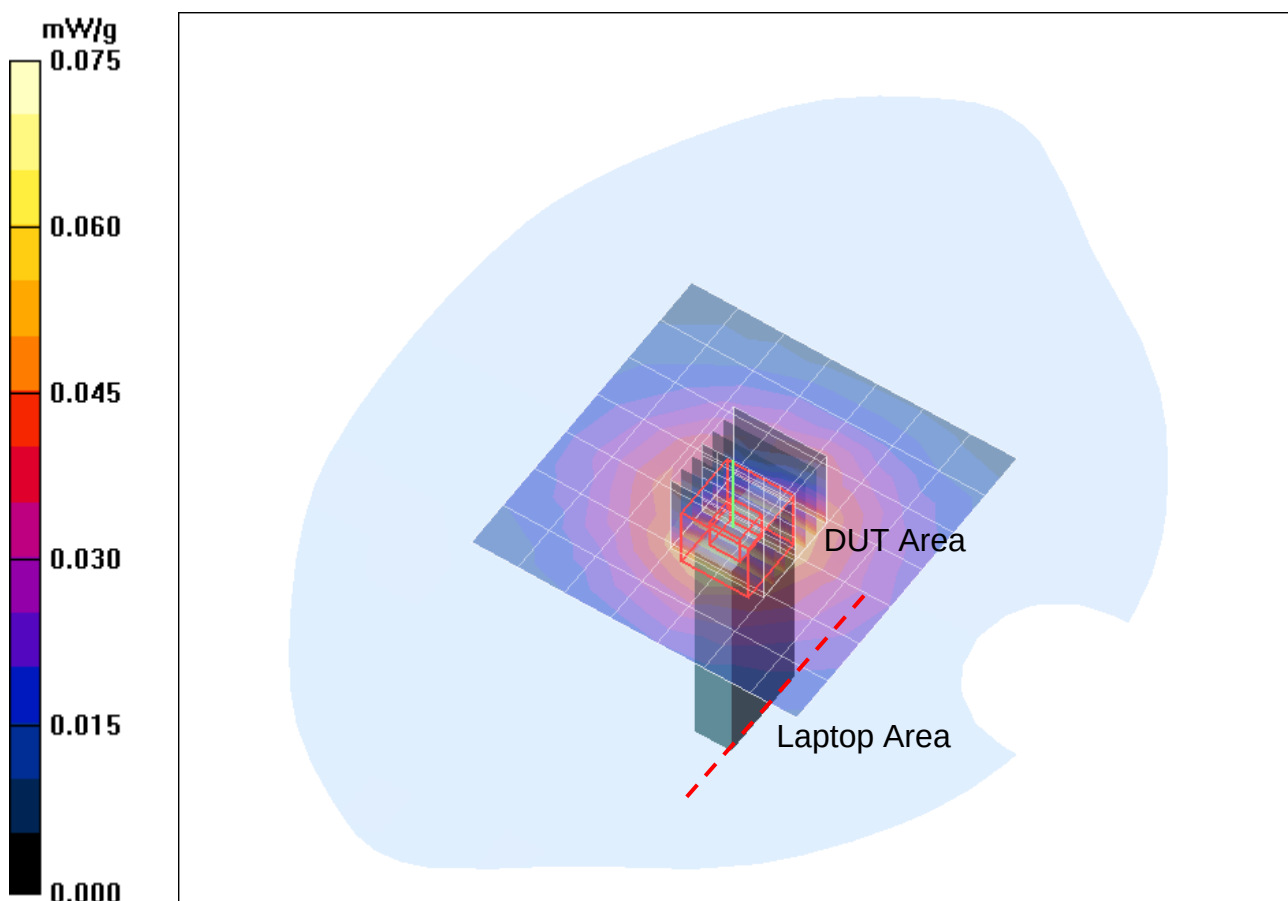


Fig. 16: SAR distribution for EDGE 1900 (Class 12), channel 661, Position 5 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

5 SAR Distribution Plots, WCDMA FDD II Body

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yullhm_1_5mm.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: WCDMA II

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.29 mW/g

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

Reference Value = 26.1 V/m; Power Drift = 0.005 dB

Peak SAR (extrapolated) = 2.13 W/kg

SAR(1 g) = 1.27 mW/g; SAR(10 g) = 0.723 mW/g

Maximum value of SAR (measured) = 1.40 mW/g

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

Reference Value = 26.1 V/m; Power Drift = 0.005 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.792 mW/g; SAR(10 g) = 0.411 mW/g

Maximum value of SAR (measured) = 0.996 mW/g

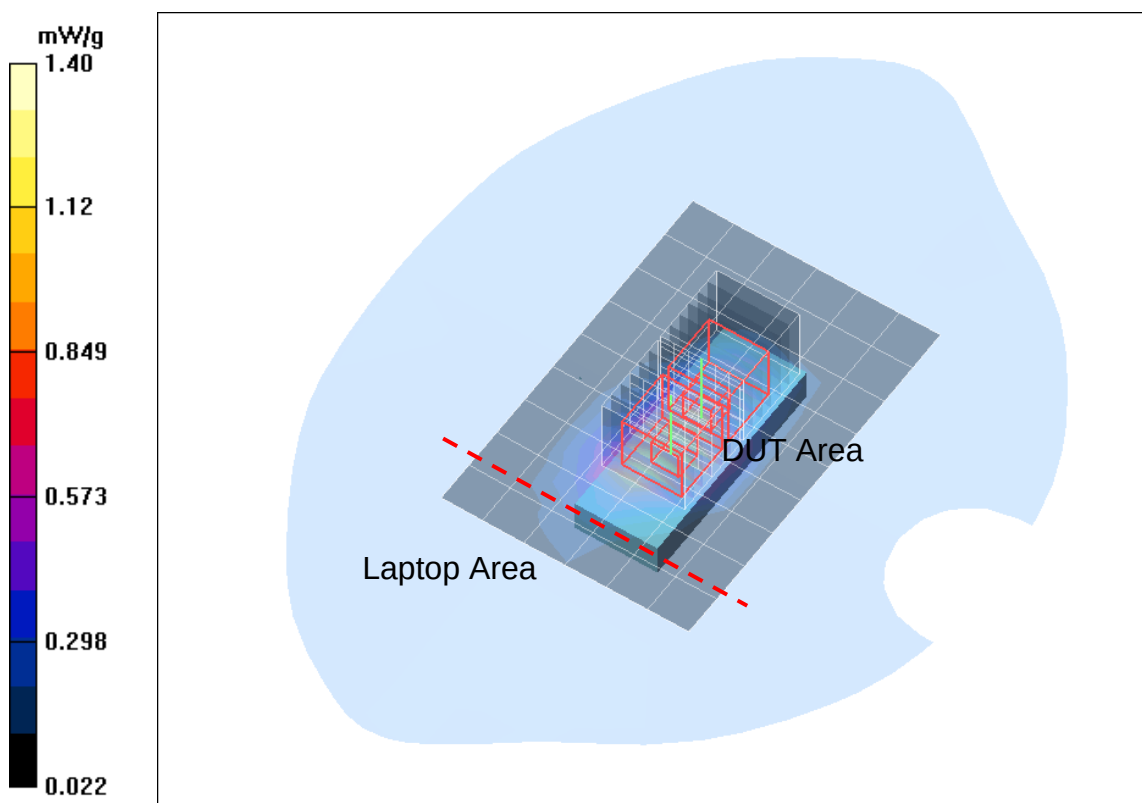


Fig. 17: SAR distribution for WCDMA II, channel 9400, Position 1 (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_yullhm_2_5mm.da4](#)

DUT: Option; **Type:** GI0643; **Serial:** 004401441460058

Program Name: WCDMA II

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.873 mW/g

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

Reference Value = 22.8 V/m; Power Drift = -0.168 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.805 mW/g; SAR(10 g) = 0.485 mW/g

Maximum value of SAR (measured) = 0.878 mW/g

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

Reference Value = 22.8 V/m; Power Drift = -0.168 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.745 mW/g; SAR(10 g) = 0.419 mW/g

Maximum value of SAR (measured) = 0.818 mW/g

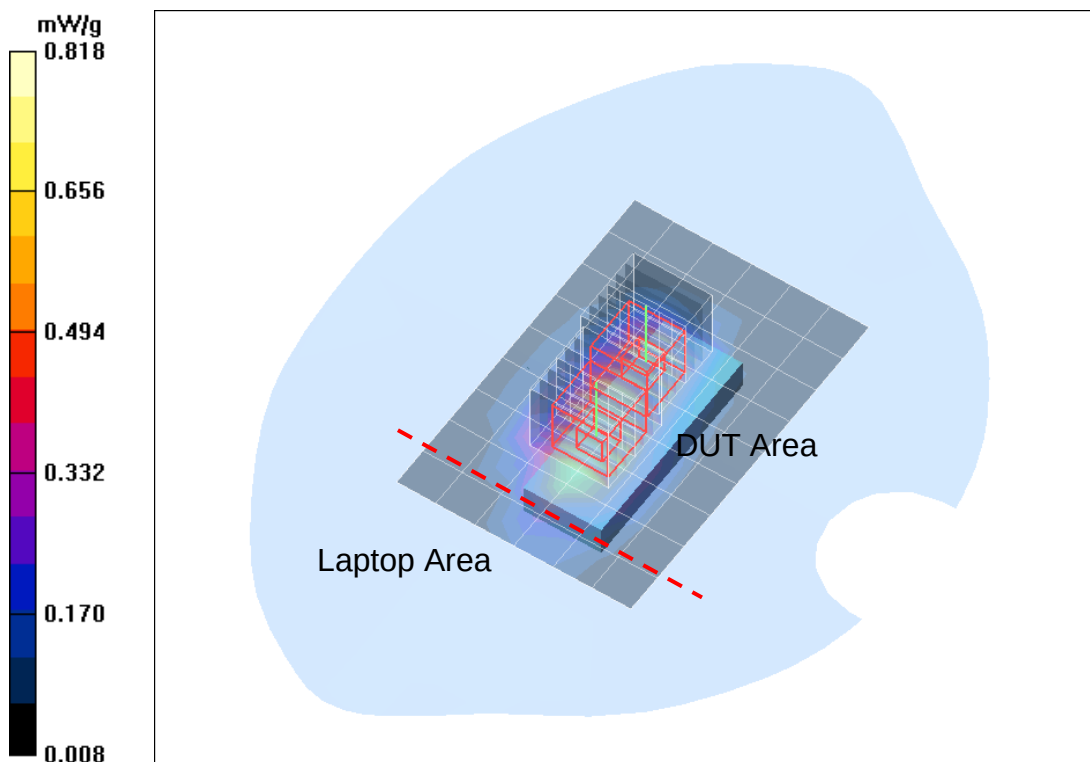


Fig. 18: SAR distribution for WCDMA II, channel 9400, Position 2 (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_yullhl_3_5mm.da4](#)

DUT: Option; Type: GI0643; **Serial:** 004401441460058

Program Name: WCDMA II

Communication System: WCDMA FDD Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1852.4$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.01 mW/g

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

Reference Value = 25.0 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 1.69 W/kg

SAR(1 g) = 0.979 mW/g; SAR(10 g) = 0.532 mW/g

Maximum value of SAR (measured) = 1.09 mW/g

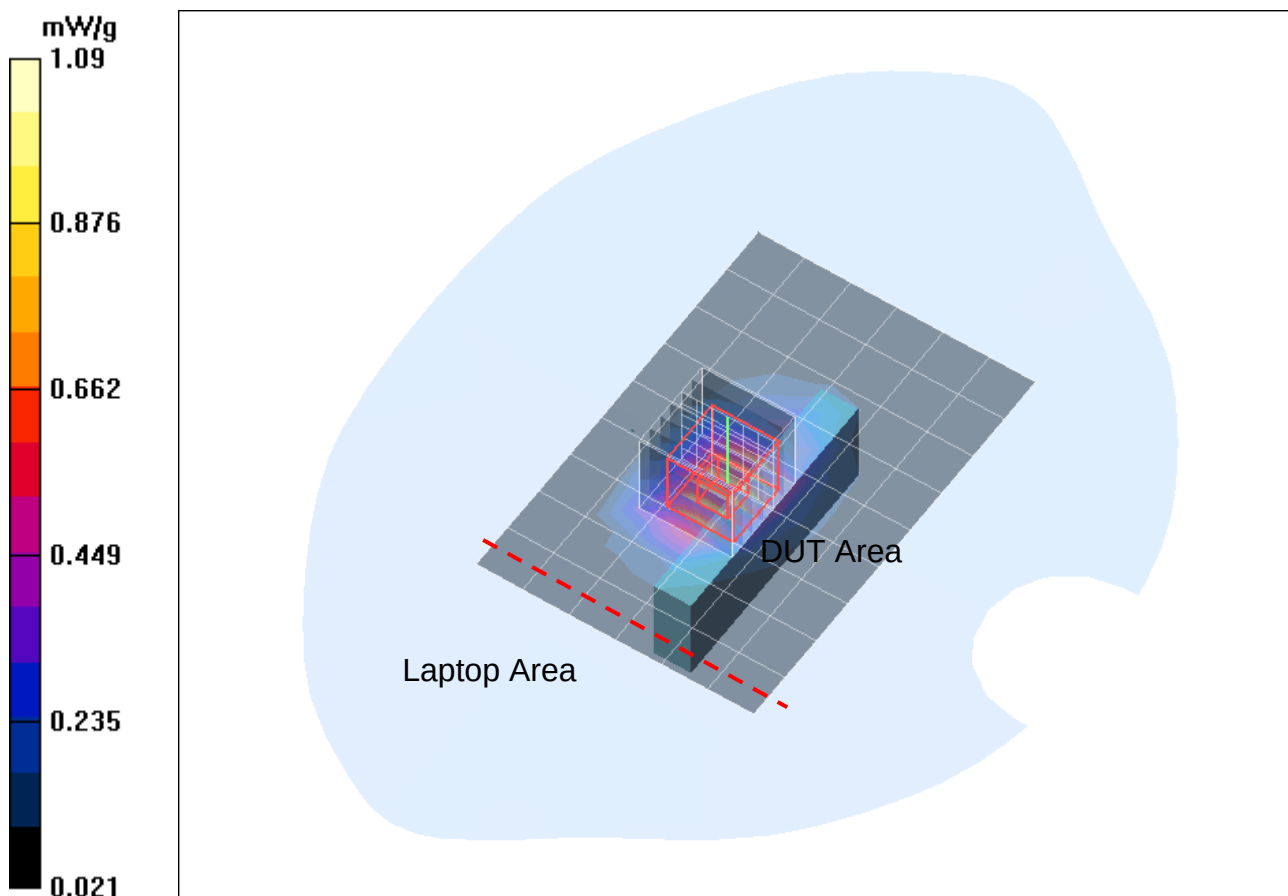


Fig. 19: SAR distribution for WCDMA II, channel 9262, Position 3 (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_yullhm_4_5mm.da4](#)

DUT: Option; **Type:** GI0643; **Serial:** 004401441460058

Program Name: WCDMA II

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.734 mW/g

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

Reference Value = 15.9 V/m; Power Drift = -0.014 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.711 mW/g; SAR(10 g) = 0.395 mW/g

Maximum value of SAR (measured) = 0.783 mW/g

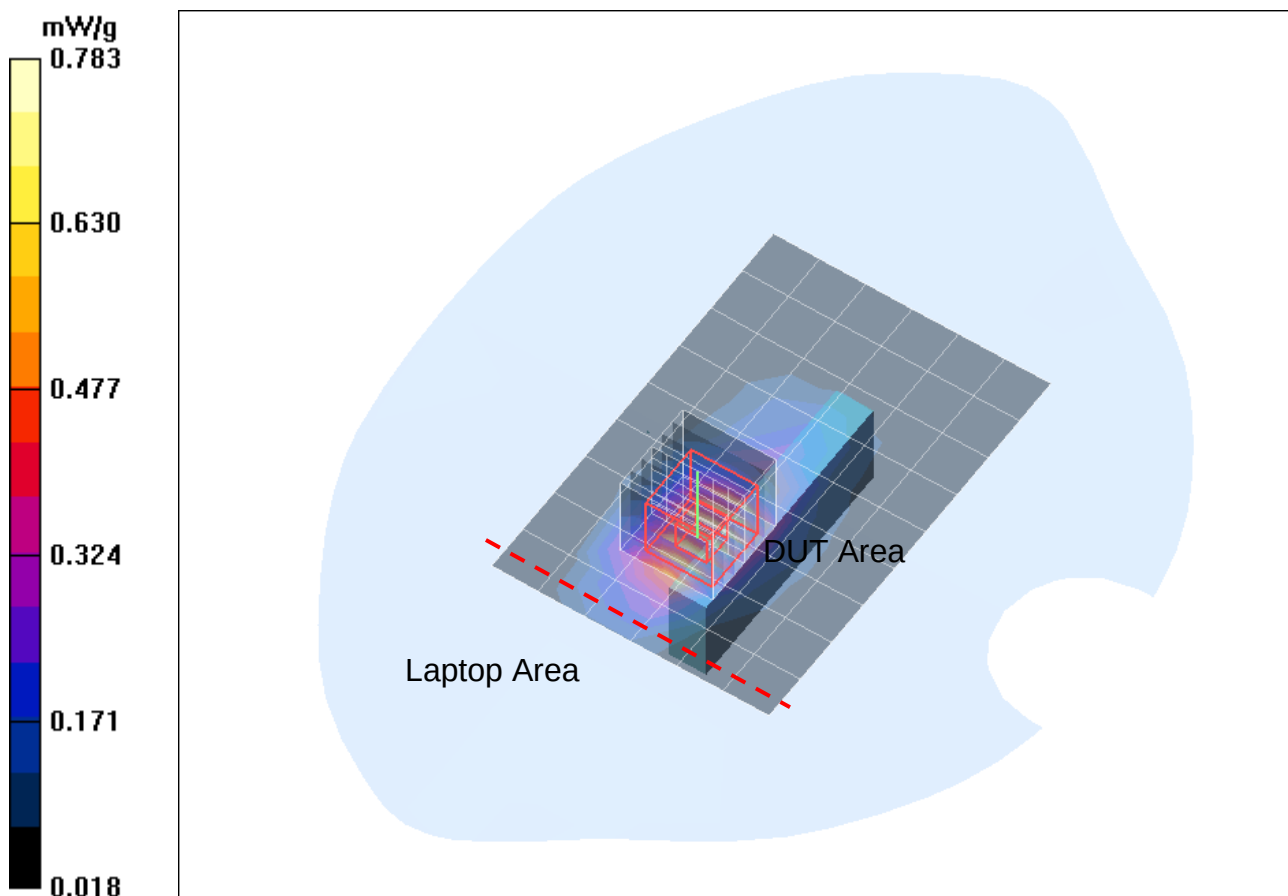


Fig. 20: SAR distribution for WCDMA II, channel 9400, Position 4 (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_yullhm_5_5mm.da4](#)

DUT: Option; Type: GI0643; **Serial:** 004401441460058

Program Name: WCDMA II

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (8x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.080 mW/g

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

Reference Value = 6.23 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.165 W/kg

SAR(1 g) = 0.091 mW/g; SAR(10 g) = 0.051 mW/g

Maximum value of SAR (measured) = 0.101 mW/g

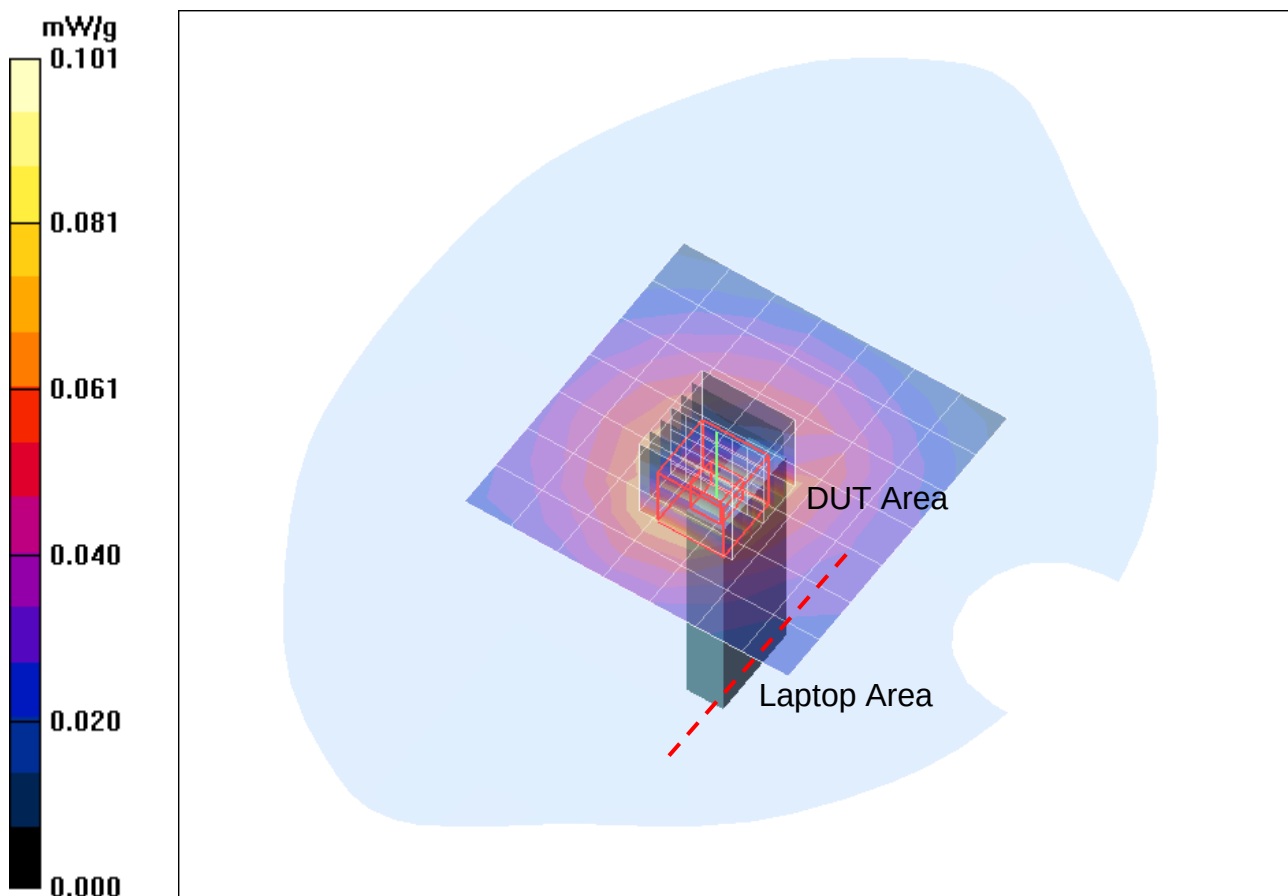


Fig. 21: SAR distribution for WCDMA II, channel 9400, Position 5 (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yullhm_6_5mm.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: WCDMA II

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (8x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.068 mW/g

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

Reference Value = 6.53 V/m; Power Drift = 0.127 dB

Peak SAR (extrapolated) = 0.108 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

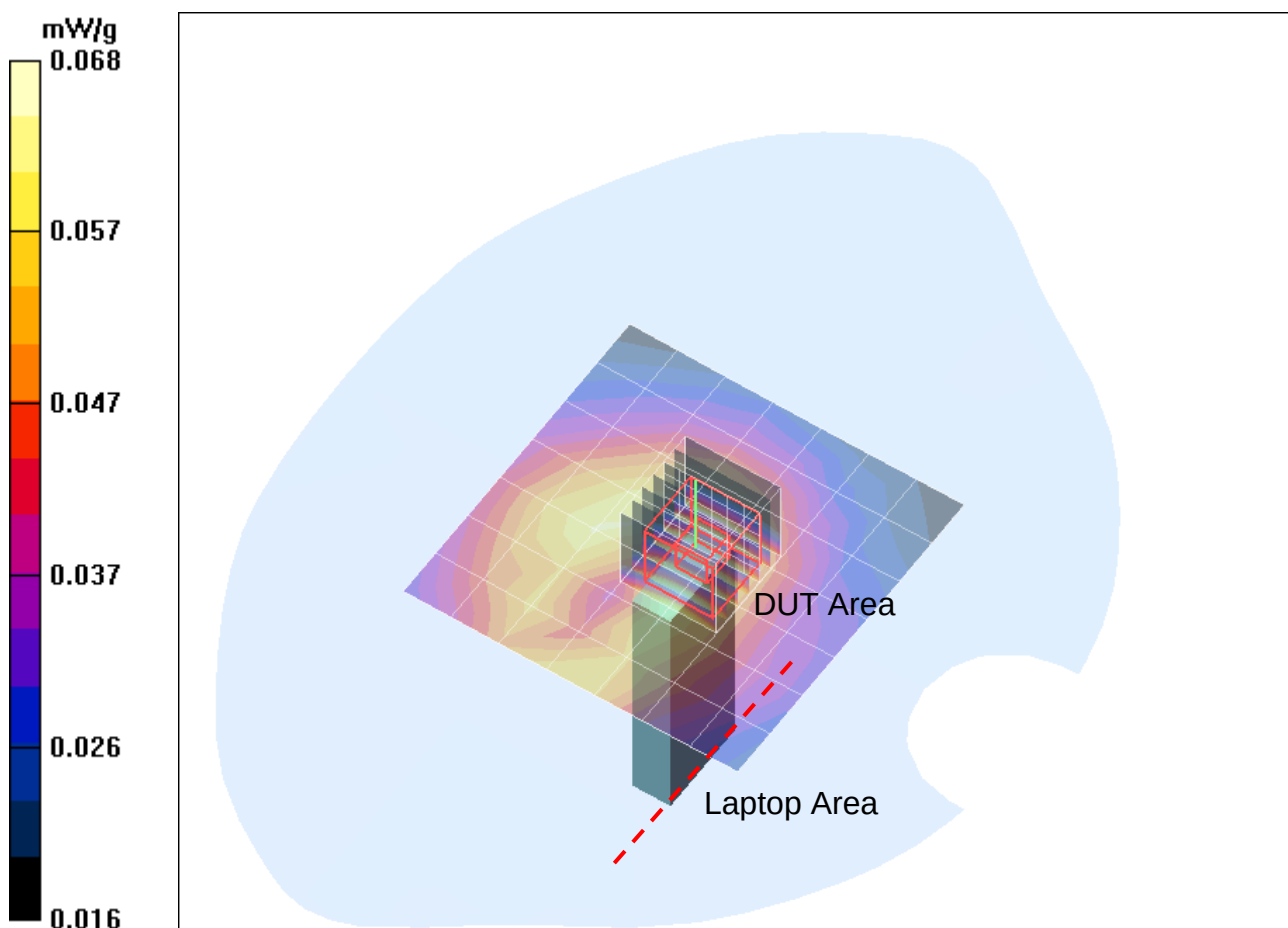


Fig. 22: SAR distribution for WCDMA II, channel 9400, Position 6, bottom tip (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_yullhm_1_5mm_HSDPA.da4](#)

DUT: Option; Type: GI0643; **Serial:** 004401441460058

Program Name: WCDMA II

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.20 mW/g

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

Reference Value = 25.2 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.693 mW/g

Maximum value of SAR (measured) = 1.34 mW/g

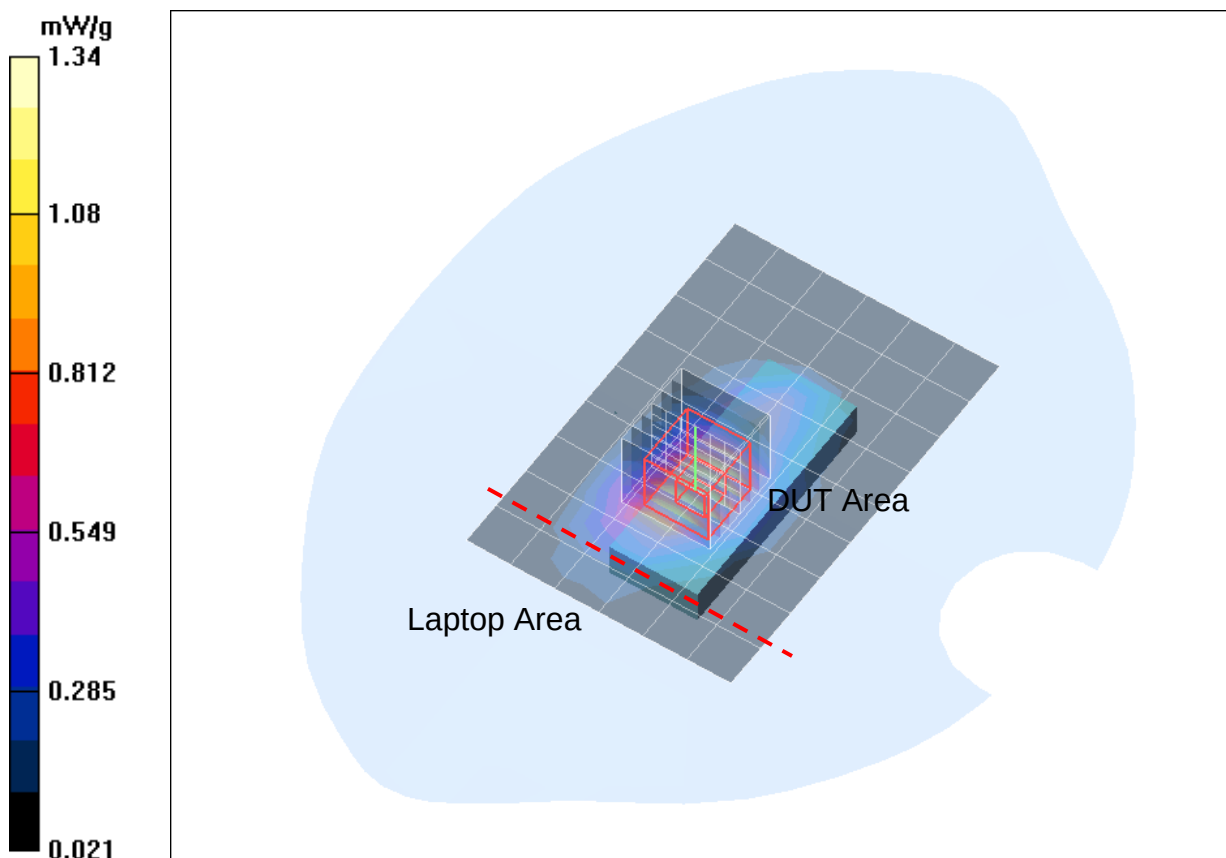


Fig. 23: SAR distribution for WCDMA II with HSDPA activated, channel 9400, Position 1 (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yullhm_1_5mm_HSUPA.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: WCDMA II

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 23.7 V/m; Power Drift = -0.083 dB

Peak SAR (extrapolated) = 1.74 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.599 mW/g

Maximum value of SAR (measured) = 1.14 mW/g

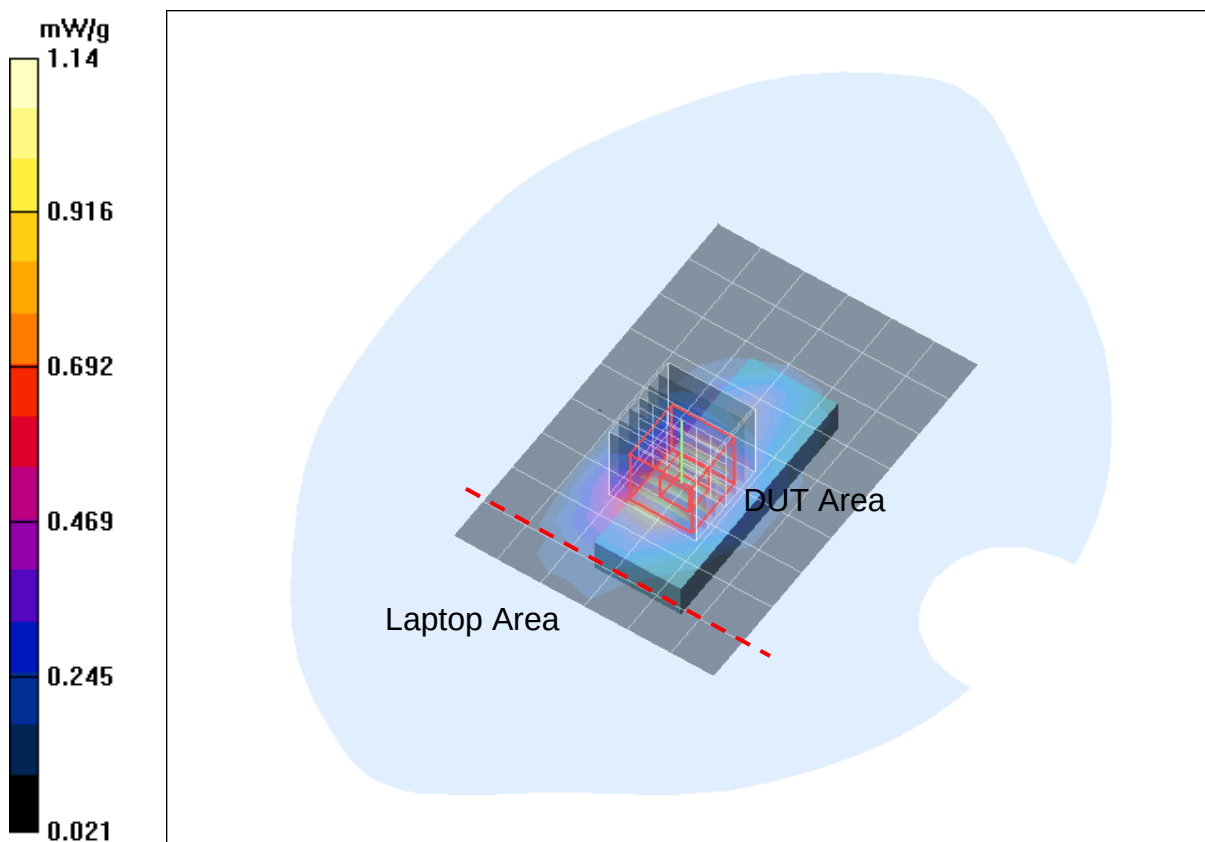


Fig. 24: SAR distribution for WCDMA II with HSUPA activated, channel 9400, Position 1 (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_yullhm_1_5mm_90.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: WCDMA II

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (10x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.21 mW/g

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

Reference Value = 28.5 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 2.44 W/kg

SAR(1 g) = 1.38 mW/g; SAR(10 g) = 0.781 mW/g

Maximum value of SAR (measured) = 1.61 mW/g

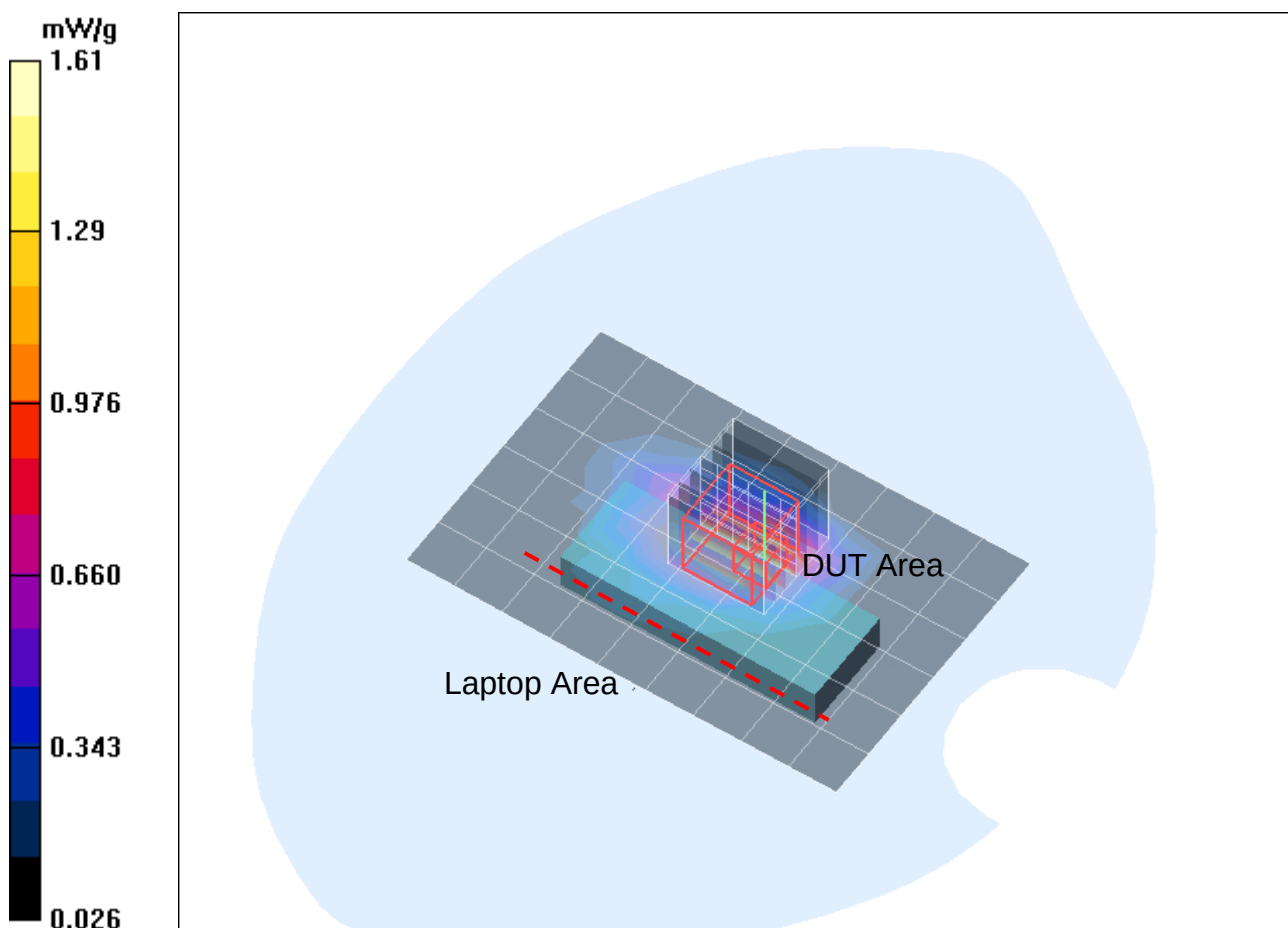


Fig. 25: SAR distribution for WCDMA II, channel 9400, position 1 in 90° configuration (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

6 SAR Distribution Plots, IEEE 802.11b Body

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [058_ywhm_1_CH6_5mm_b.da4](#)

DUT: Option; Type: GI0643; Serial: 004401441460058

Program Name: IEEE 802.11 b

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.057 mW/g

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

Reference Value = 4.21 V/m; Power Drift = 0.181 dB

Peak SAR (extrapolated) = 0.093 W/kg

SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.062 mW/g

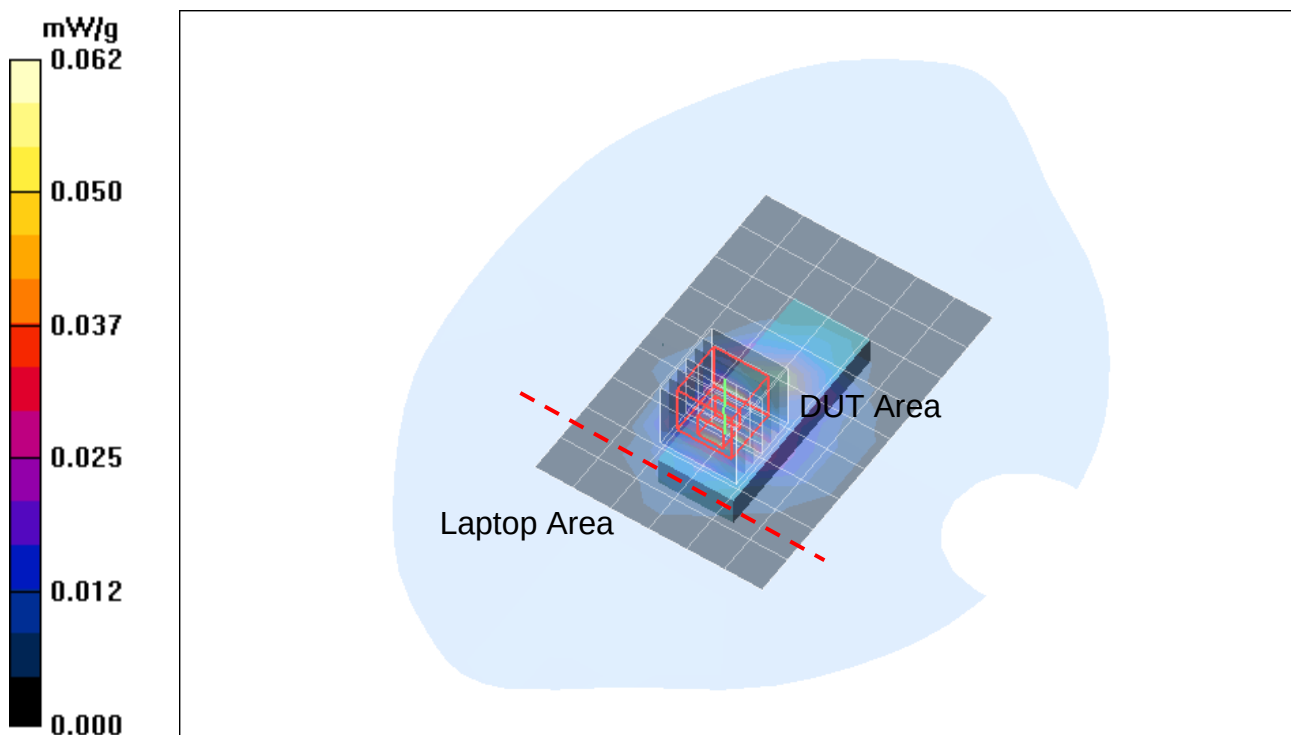


Fig. 26: SAR distribution for IEEE IEEE 802.11 b-mode, channel 6, Position 1 (Dell Latitude X300, September 07, 2011; Ambient Temperature: 22.0°C; Liquid Temperature: 21.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_ywhm_2_CH6_5mm_b.da4](#)

DUT: Option; Type: GI0643; **Serial:** 004401441460058

Program Name: IEEE 802.11 b

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.249 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 = 0.003 dB

Peak SAR (extrapolated) = 0.467 W/kg

SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.111 mW/g

Maximum value of SAR (measured) = 0.344 mW/g

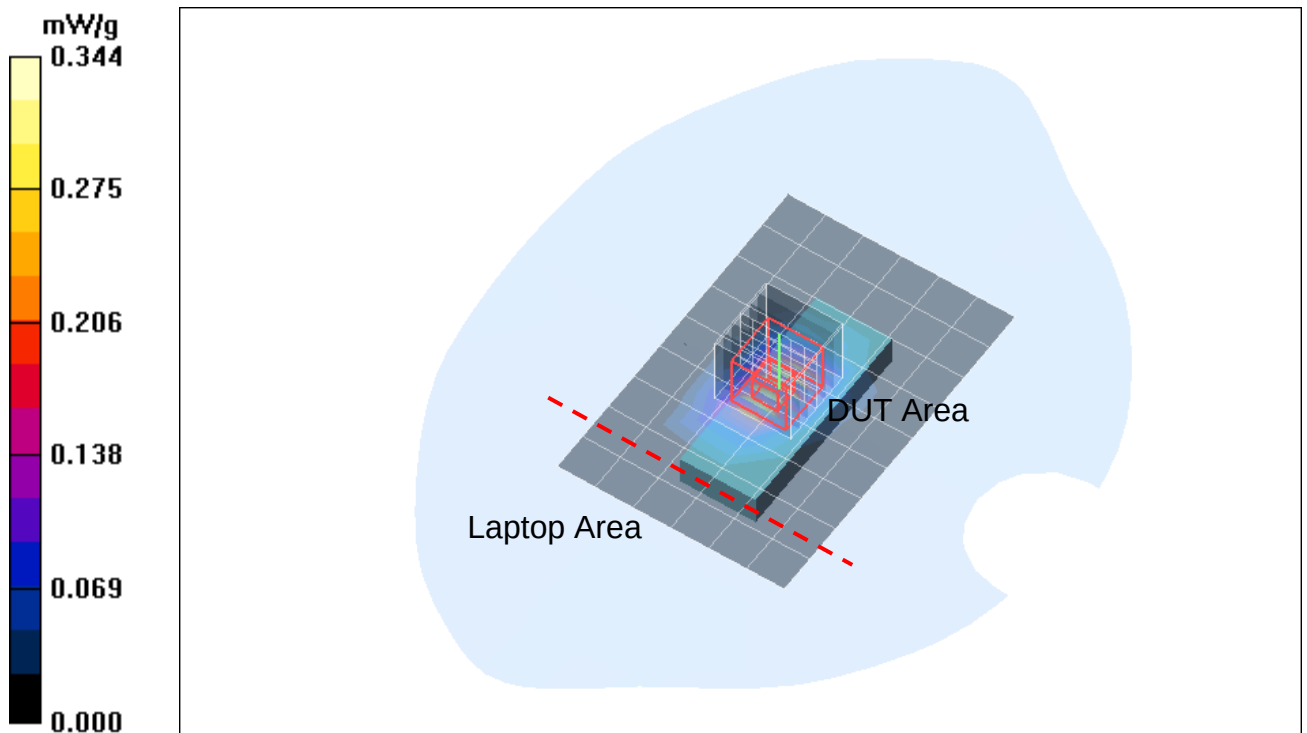


Fig. 27: SAR distribution for IEEE 802.11 b-mode, channel 6, Position 2 (Dell Latitude X300, September 07, 2011; Ambient Temperature: 22.0°C; Liquid Temperature: 21.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_ywhm_3_CH6_5mm_b.da4](#)

DUT: Option; **Type:** GI0643; **Serial:** 004401441460058

Program Name: IEEE 802.11 b

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.103 mW/g

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

Reference Value = 6.56 V/m; Power Drift = -0.097 dB

Peak SAR (extrapolated) = 0.146 W/kg

SAR(1 g) = 0.071 mW/g; SAR(10 g) = 0.034 mW/g

Maximum value of SAR (measured) = 0.105 mW/g

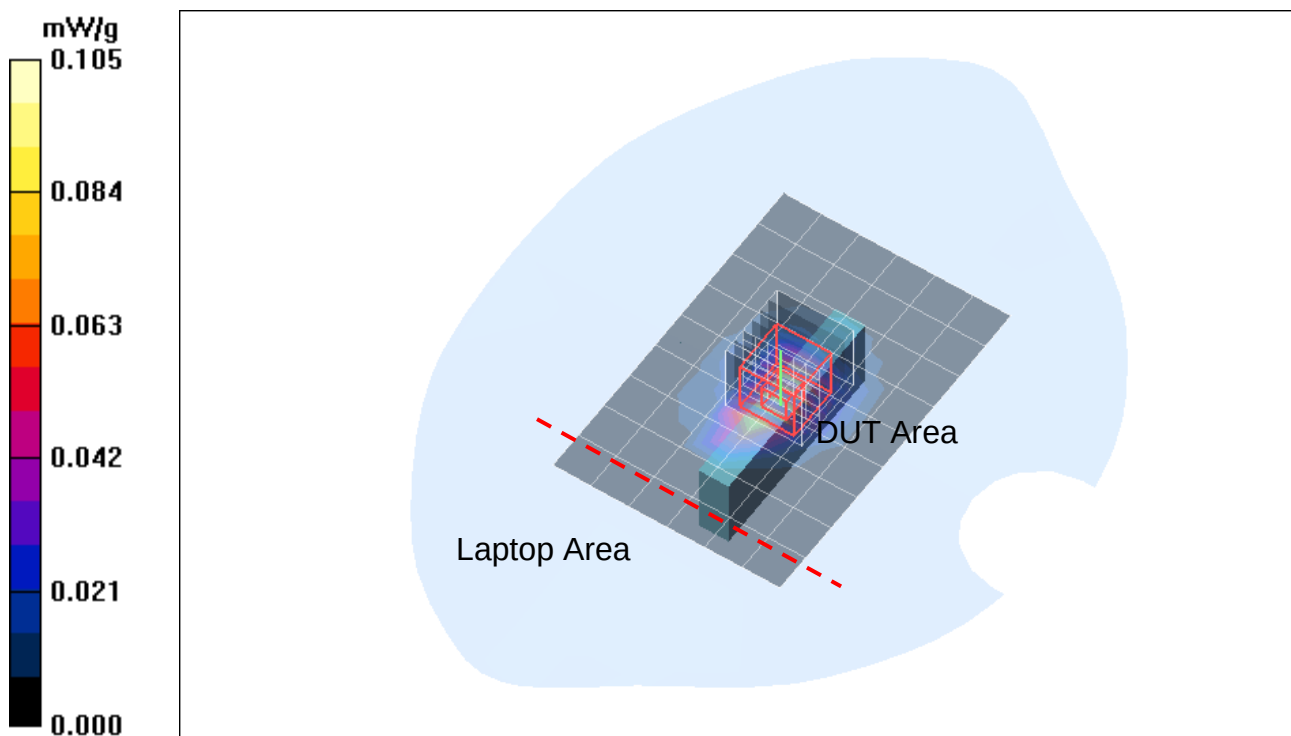


Fig. 28: SAR distribution for IEEE 802.11 b-mode, channel 6, Position 3 (Dell Latitude X300, September 07, 2011; Ambient Temperature: 22.0°C; Liquid Temperature: 21.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_ywhm_4_CH6_5mm_b.da4](#)

DUT: Option; Type: GI0643; **Serial:** 004401441460058

Program Name: IEEE 802.11 b

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.060 mW/g

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

Reference Value = 4.52 V/m; Power Drift = -0.083 dB

Peak SAR (extrapolated) = 0.088 W/kg

SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.066 mW/g

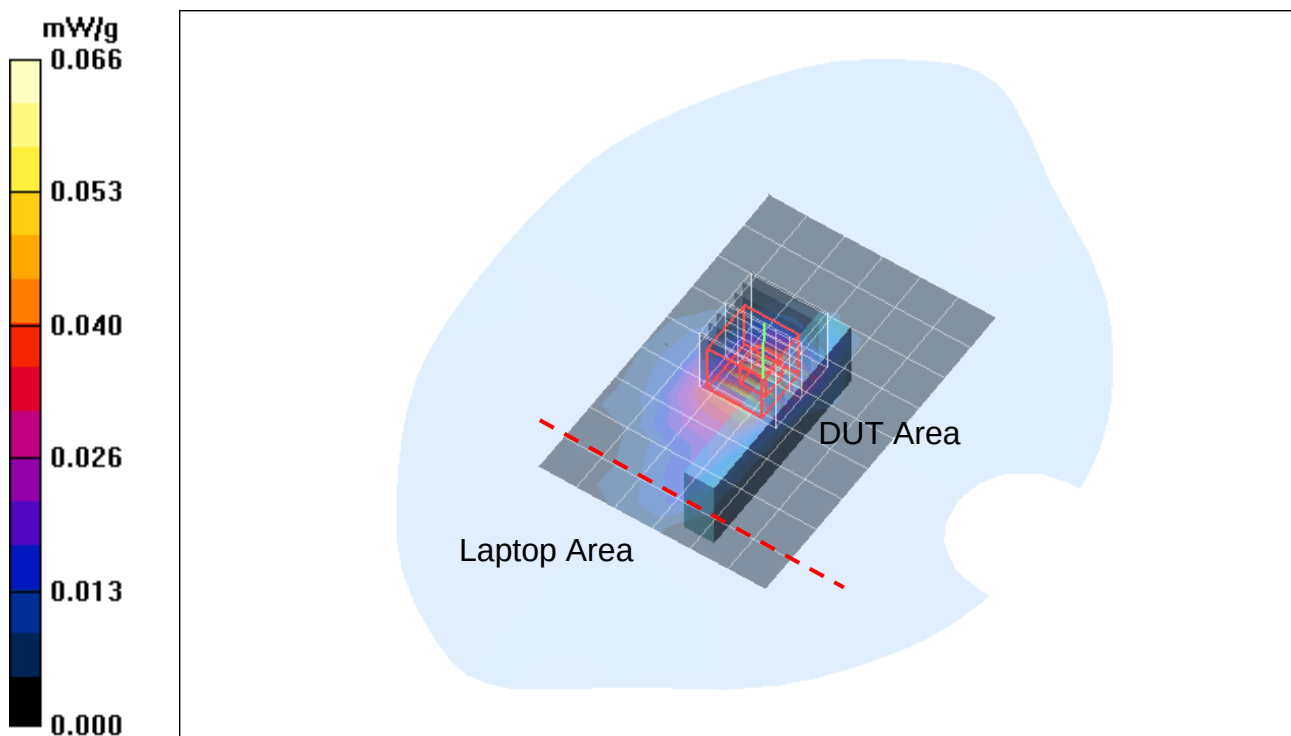


Fig. 29: SAR distribution for IEEE 802.11 b-mode, channel 6, Position 4 (Dell Latitude X300, September 07, 2011; Ambient Temperature: 22.0°C; Liquid Temperature: 21.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [058_ywhm_5_CH6_5mm_b.da4](#)

DUT: Option; Type: GI0643; **Serial:** 004401441460058

Program Name: IEEE 802.11 b

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.010 mW/g

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

Reference Value = 2.04 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.014 W/kg

SAR(1 g) = 0.00731 mW/g; SAR(10 g) = 0.00394 mW/g

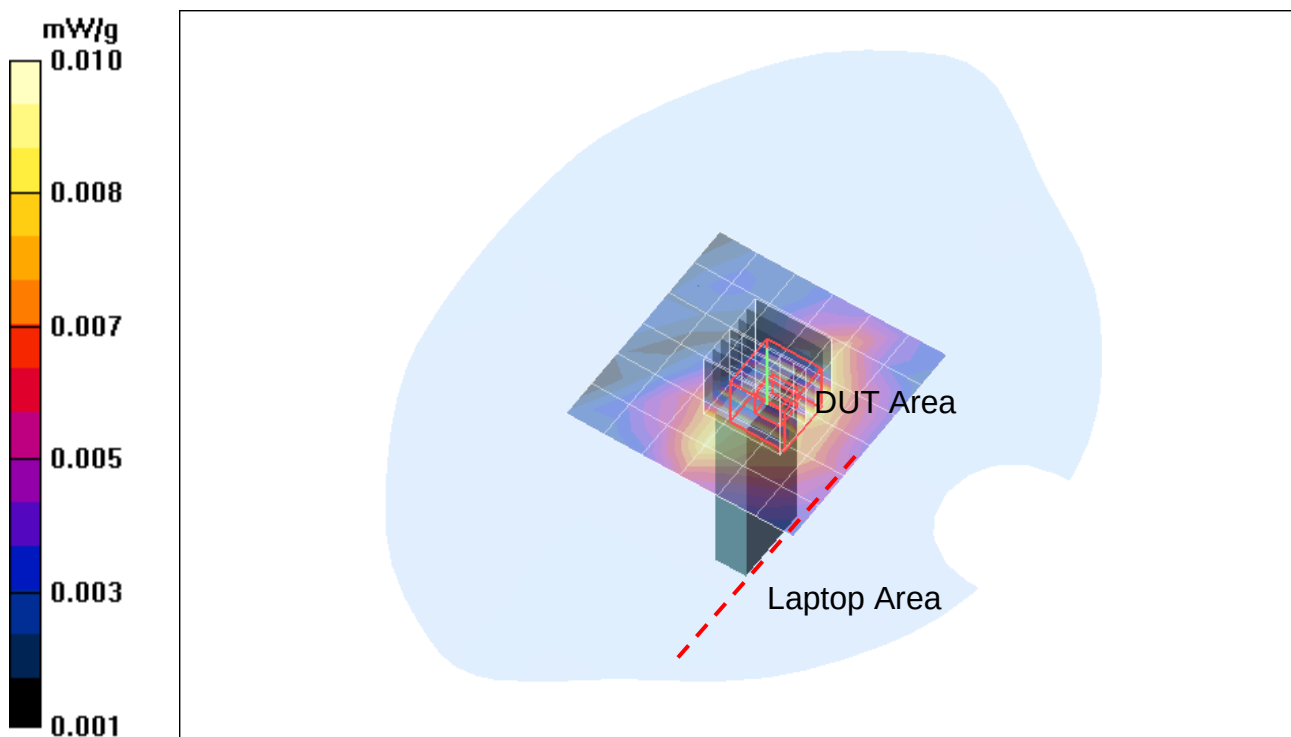


Fig. 30: SAR distribution for IEEE 802.11 b-mode, channel 6, Position 5 (Dell Latitude X300, September 07, 2011; Ambient Temperature: 22.0°C; Liquid Temperature: 21.7°C).

7 SAR Z-Axis Scans (Validation)

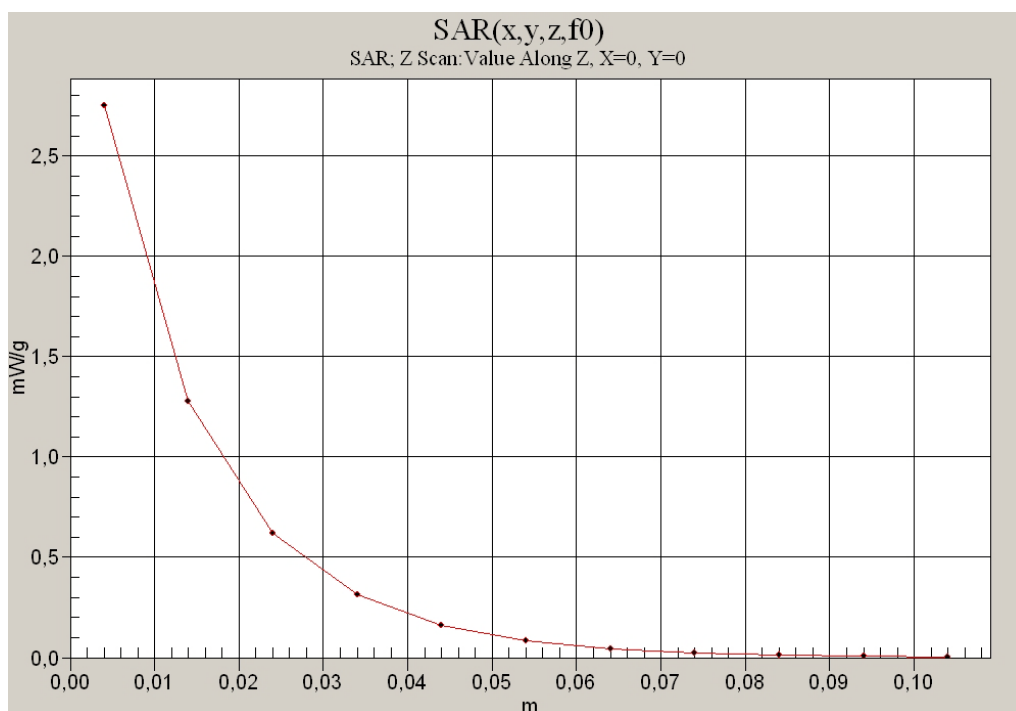


Fig. 31: SAR versus liquid depth, 835 MHz, body (July 28, 2011; Ambient Temperature: 22.8°C; Liquid Temperature: 22.3°C).

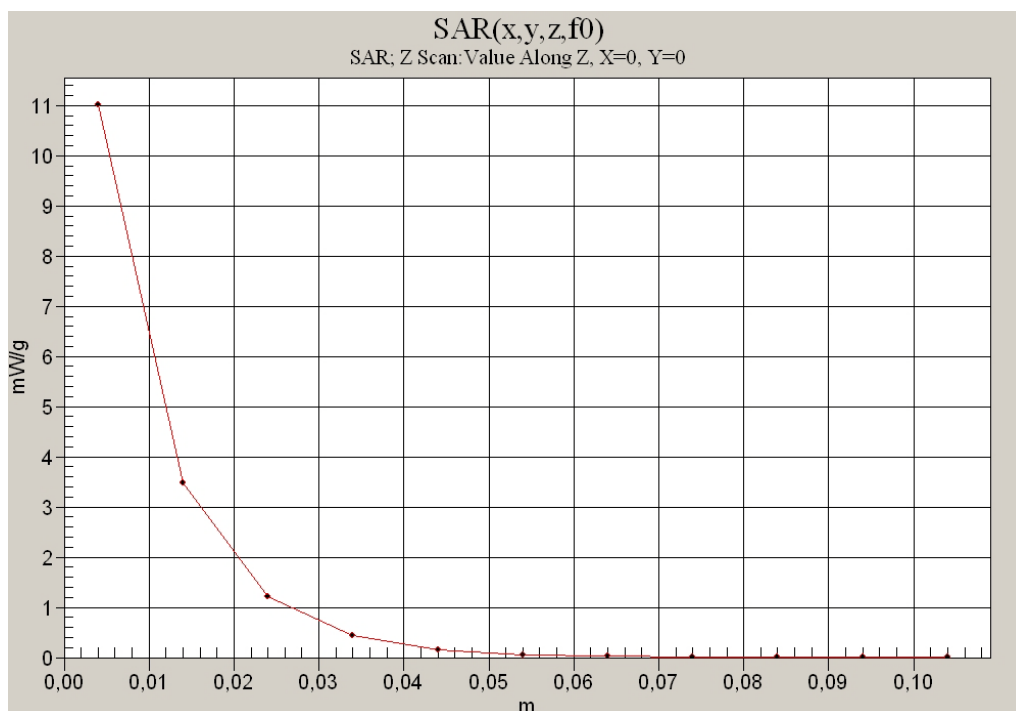


Fig. 32: SAR versus liquid depth, 1900 MHz, body (July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

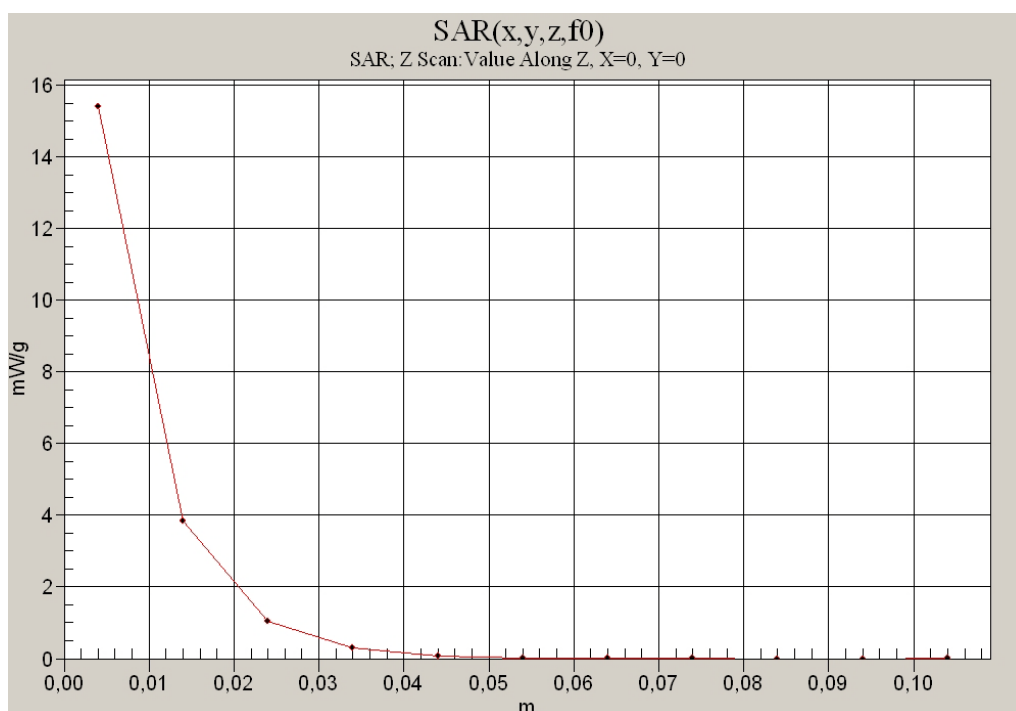


Fig. 33: SAR versus liquid depth, 2450 MHz, body (September 07, 2011; Ambient Temperature: 22.0°C; Liquid Temperature: 21.7°C).

8 SAR Z-Axis Scans (Measurements)

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

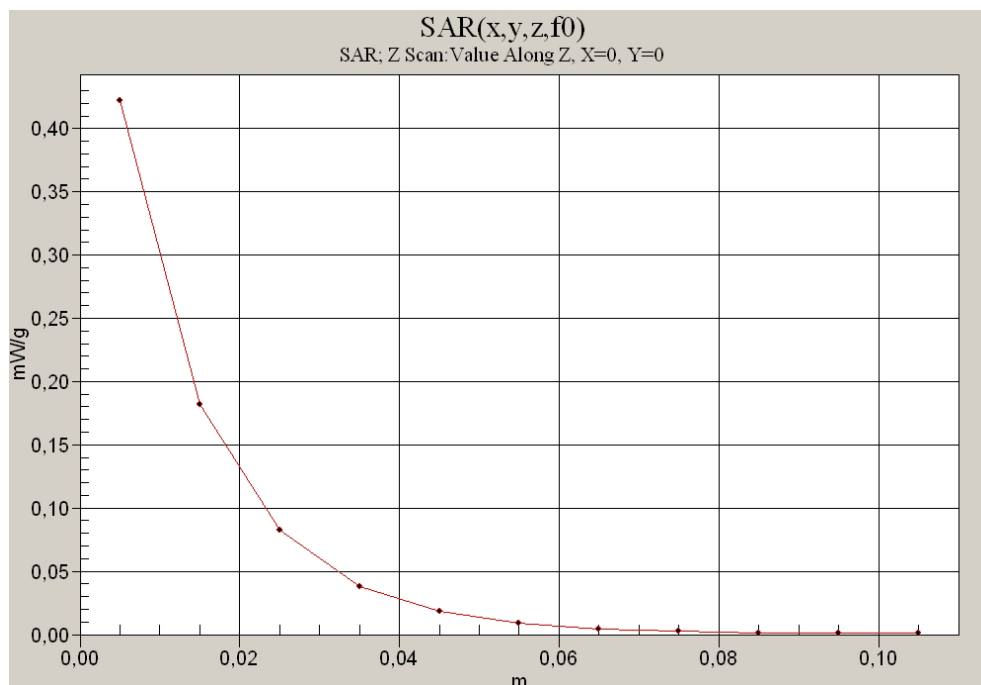


Fig. 34: SAR versus liquid depth, body: GPRS 850 (Class 11), channel 190, Position 2 (Dell Latitude X300, July 28, 2011; Ambient Temperature: 22.7°C; Liquid Temperature: 22.3°C).

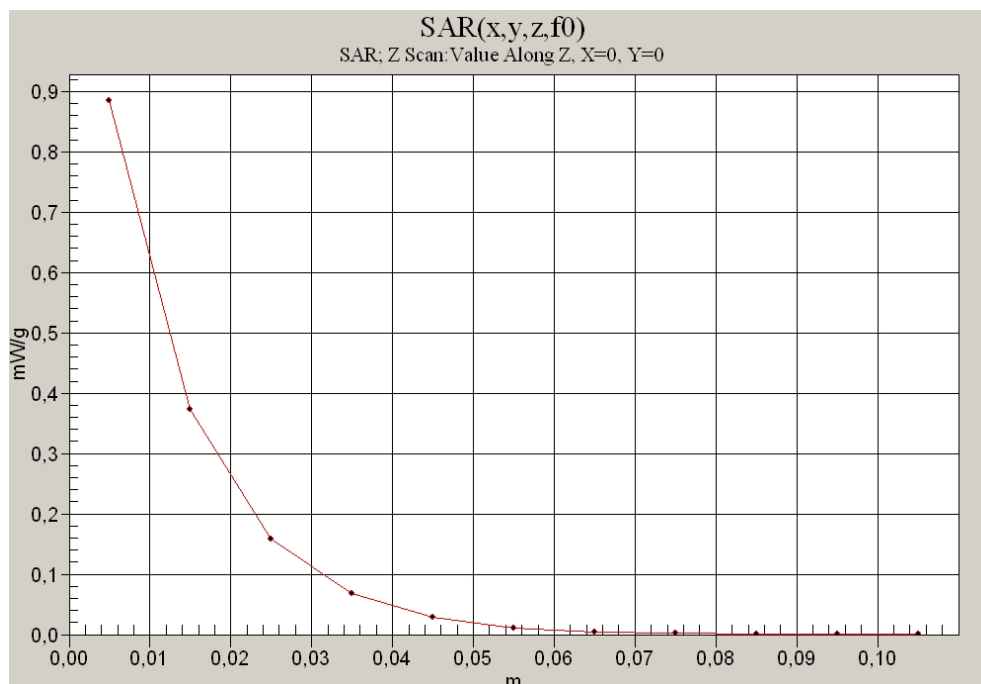


Fig. 35: SAR versus liquid depth, body: GPRS 1900 (Class 12), channel 512, Position 1 (Dell Latitude X300, July 27, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 21.0°C).

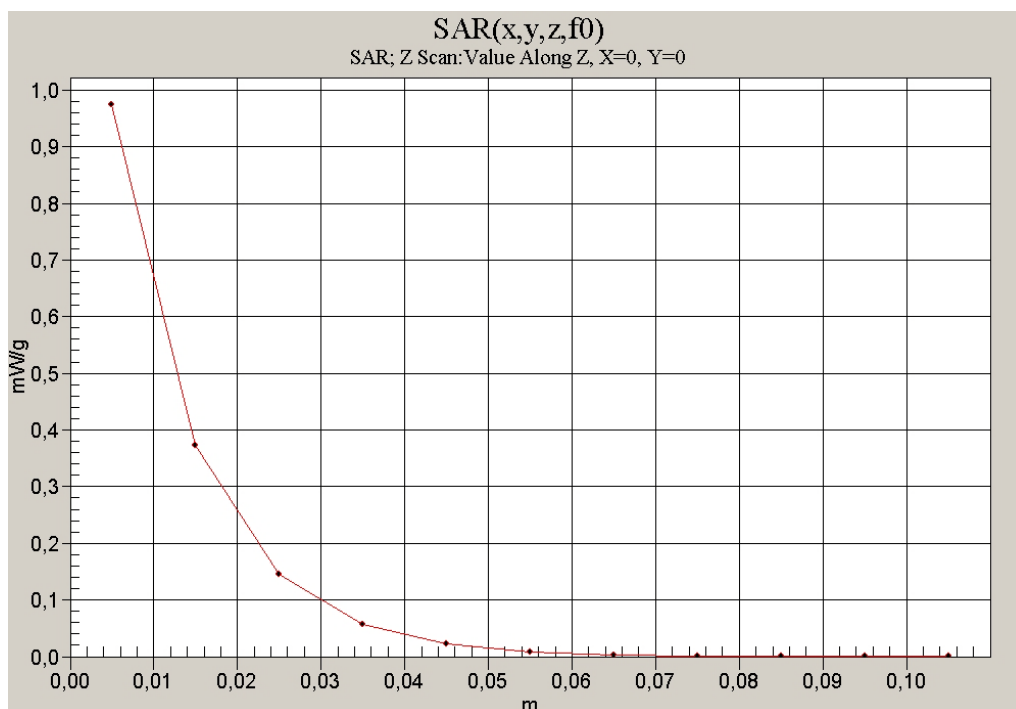


Fig. 36: SAR versus liquid depth, body: WCDMA II, channel 9400, Position 1 in 90° configuration (Dell Latitude X300, July 26, 2011; Ambient Temperature: 21.4°C; Liquid Temperature: 21.2°C).

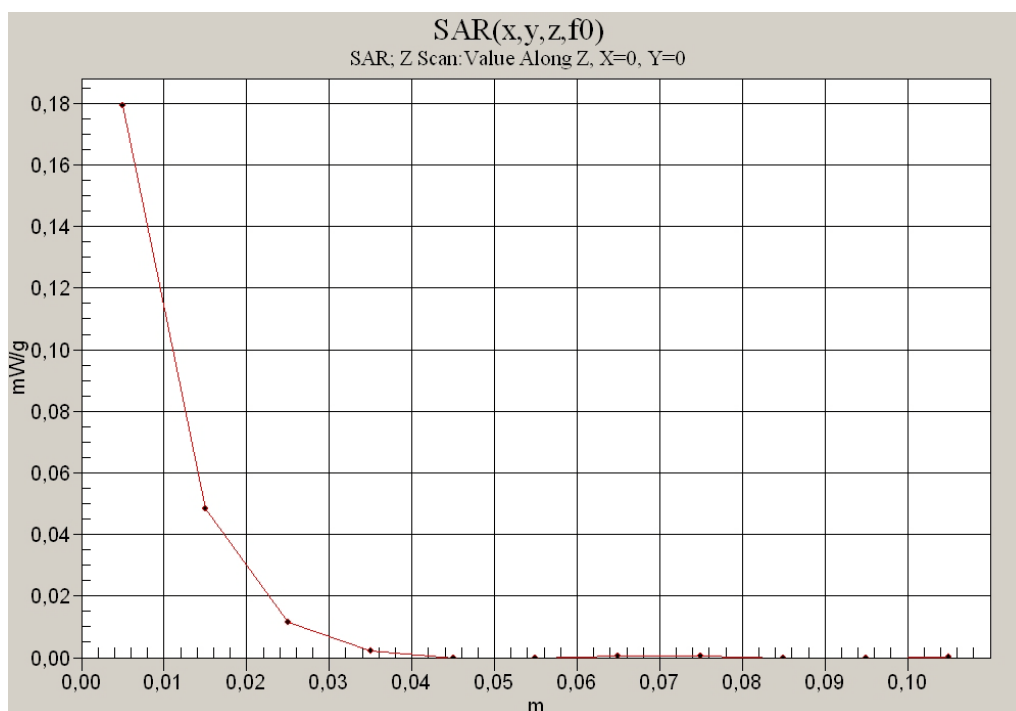


Fig. 37: SAR versus liquid depth, body: IEEE 802.11b, channel 6, Position 2 (Dell Latitude X300, September 07, 2011; Ambient Temperature: 22.0°C; Liquid Temperature: 21.7°C).