
Appendix for the Report

Dosimetric Assessment of the Portable Device ELF from Datalogic (FCC ID: U4G0040)

According to the FCC Requirements

SAR Distribution Plots

May 19, 2010
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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.

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1 SAR Distribution Plots, IEEE 802.11 b Body

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [Elf_ywhm_b_CH6_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: WLAN

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ 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: DAE3 Sn335; Calibrated: 10.02.2010
- 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 (16x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.023 mW/g

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

Reference Value = 1.75 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 0.047 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.024 mW/g

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

Reference Value = 1.75 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 0.039 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.010 mW/g

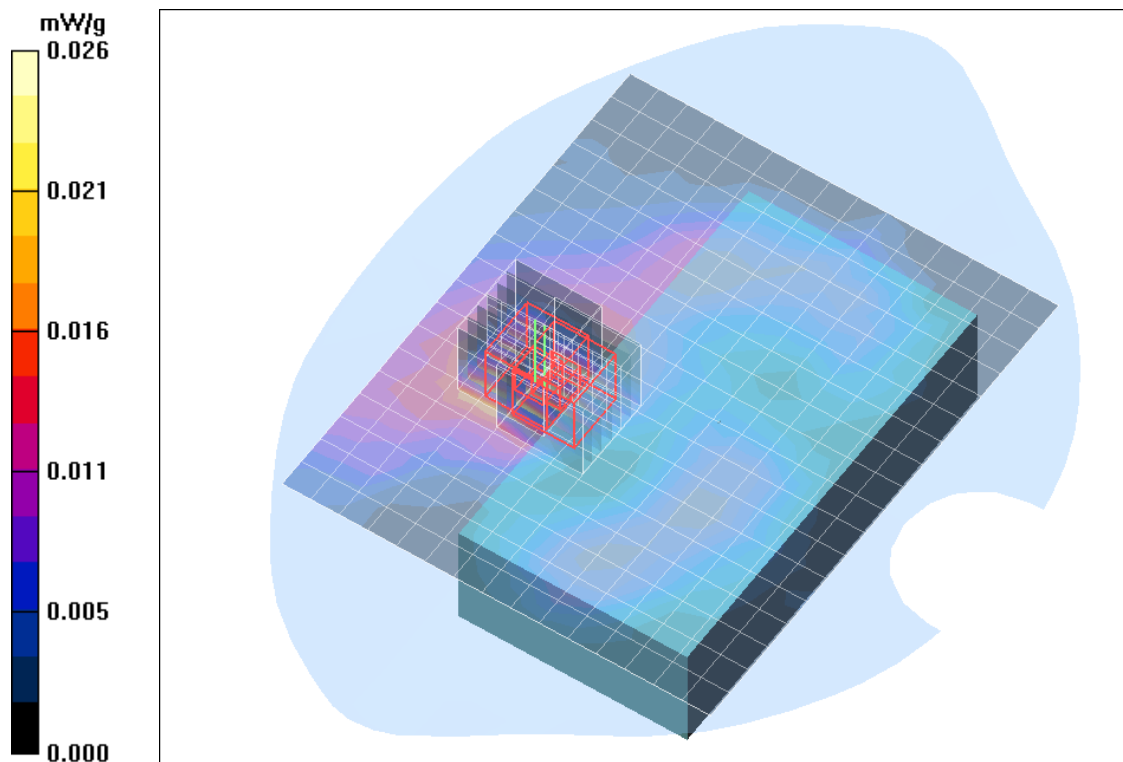


Fig. 1: SAR distribution for IEEE 802.11 b, channel 6, display towards the phantom (May 11, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.5°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [Elf_ywhm_b_CH6_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: WLAN

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ 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: DAE3 Sn335; Calibrated: 10.02.2010
- 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 (16x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.067 mW/g

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

Reference Value = 3.24 V/m; Power Drift = 0.134 dB

Peak SAR (extrapolated) = 0.113 W/kg

SAR(1 g) = 0.065 mW/g; SAR(10 g) = 0.036 mW/g

Maximum value of SAR (measured) = 0.072 mW/g

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

Reference Value = 3.24 V/m; Power Drift = 0.134 dB

Peak SAR (extrapolated) = 0.074 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.024 mW/g

Maximum value of SAR (measured) = 0.045 mW/g

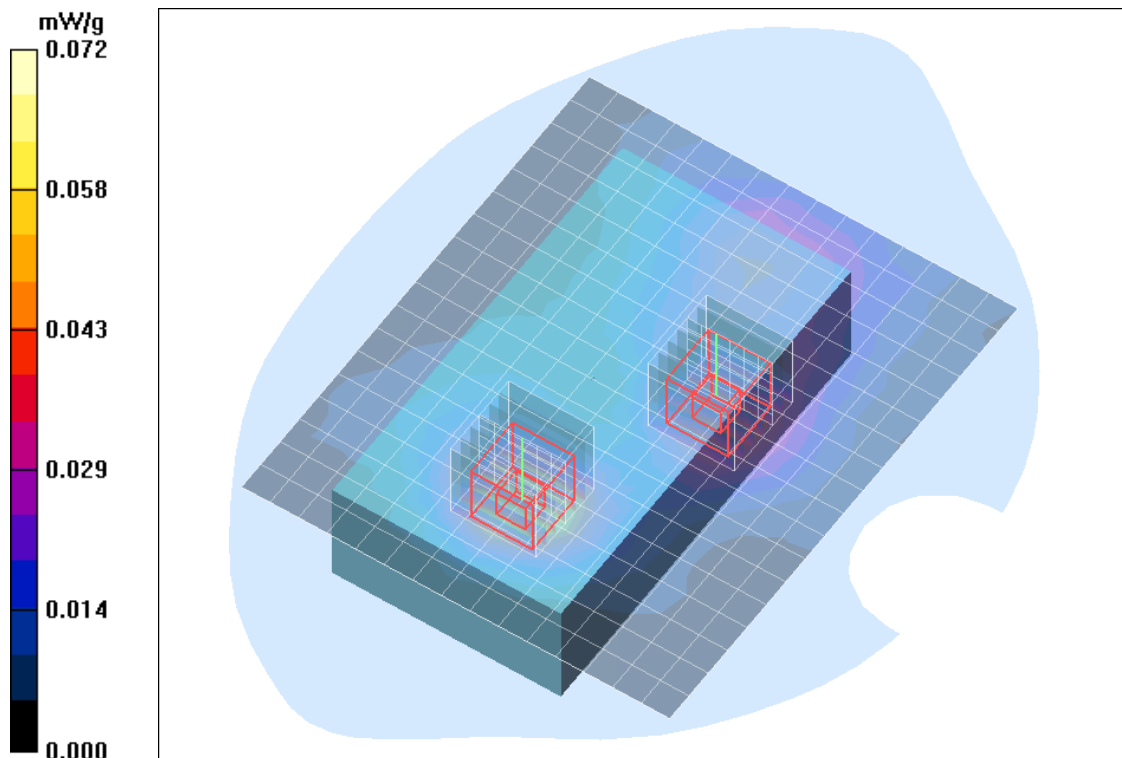


Fig. 2: SAR distribution for IEEE 802.11 b, channel 6, display towards the ground (May 11, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.5°C).

2 SAR Distribution Plots, IEEE 802.11 g Body

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [Elf_ywhm_g_CH6_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: WLAN

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ 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: DAE3 Sn335; Calibrated: 10.02.2010

- 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 (16x19x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

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

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

Reference Value = 2.06 V/m; Power Drift = 0.117 dB

Peak SAR (extrapolated) = 0.051 W/kg

SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.016 mW/g

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

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

Reference Value = 2.06 V/m; Power Drift = 0.117 dB

Peak SAR (extrapolated) = 0.047 W/kg

SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.011 mW/g

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

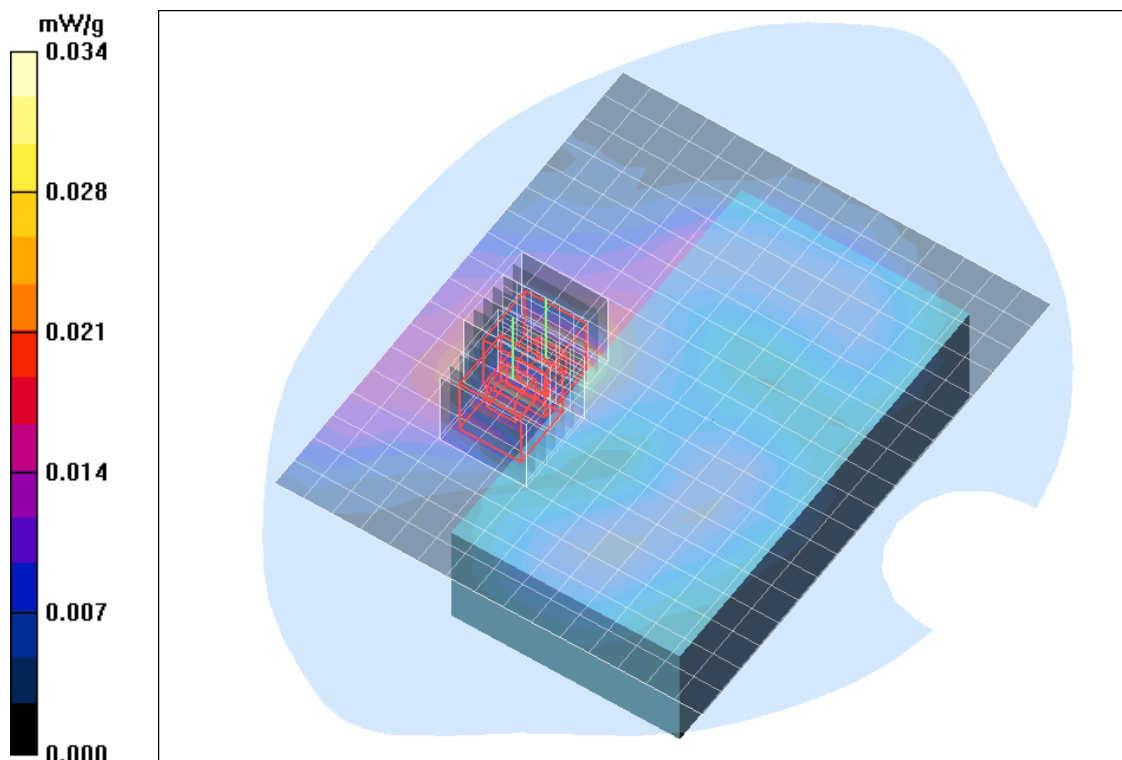


Fig. 3: SAR distribution for IEEE 802.11 g, channel 6, display towards the phantom (May 11, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.5°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [Elf_ywhm_g_CH6_dspl_down.da4](#)

DUT: Datalogic; **Type:** Elf 701-701; **Serial:** D10P00071

Program Name: WLAN

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ 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: DAE3 Sn335; Calibrated: 10.02.2010
- 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 (16x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.078 mW/g

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

Reference Value = 3.66 V/m; Power Drift = -0.184 dB

Peak SAR (extrapolated) = 0.127 W/kg

SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.040 mW/g

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

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

Reference Value = 3.66 V/m; Power Drift = -0.184 dB

Peak SAR (extrapolated) = 0.082 W/kg

SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.026 mW/g

Maximum value of SAR (measured) = 0.051 mW/g

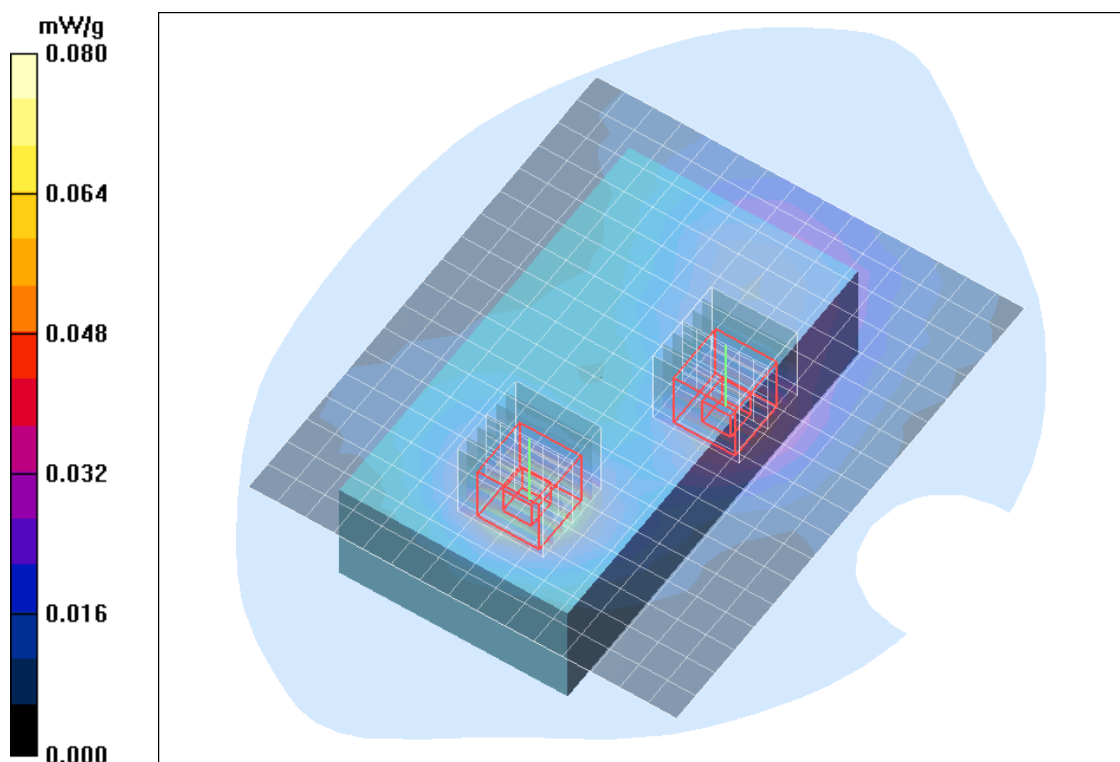


Fig. 4: SAR distribution for IEEE 802.11 g, channel 6, display towards the ground (May 11, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.5°C).

3 SAR Distribution Plots, IEEE 802.11 a Body (5200 MHz range)

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch36_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5180 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 5.33$ mho/m; $\epsilon_r = 48$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.54, 4.54, 4.54); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.092 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.29 V/m; Power Drift = -0.157 dB

Peak SAR (extrapolated) = 0.216 W/kg

SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.015 mW/g

Maximum value of SAR (measured) = 0.093 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.29 V/m; Power Drift = -0.157 dB

Peak SAR (extrapolated) = 0.109 W/kg

SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.015 mW/g

Maximum value of SAR (measured) = 0.090 mW/g

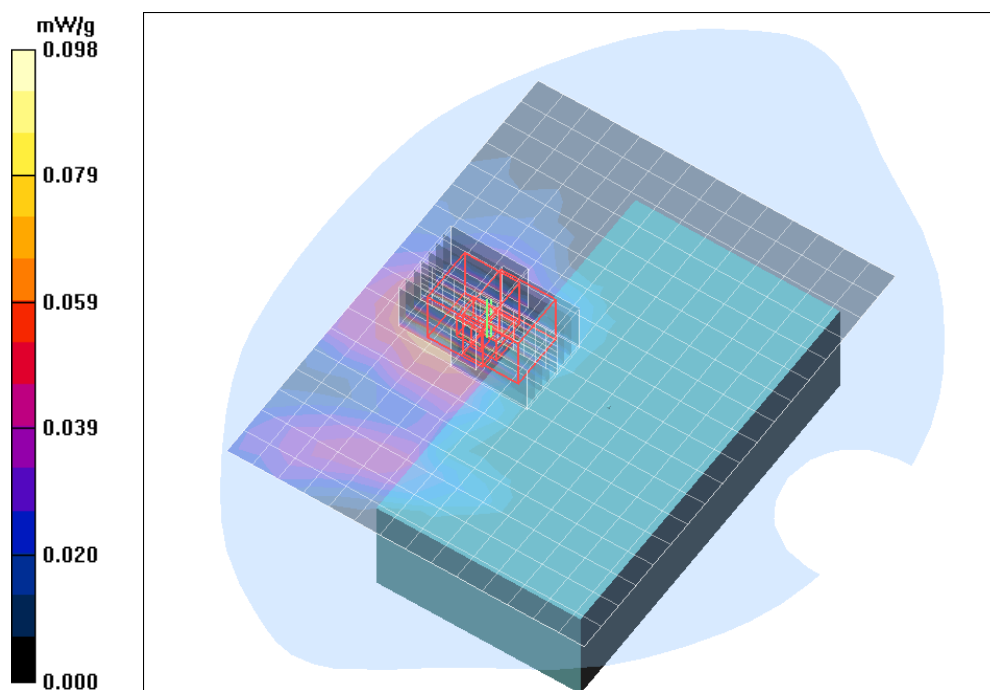


Fig. 5: SAR distribution for IEEE 802.11 a, channel 36, display towards the phantom (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch36_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 5.33$ mho/m; $\epsilon_r = 48$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.54, 4.54, 4.54); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.168 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.67 V/m; Power Drift = -0.162 dB

Peak SAR (extrapolated) = 0.268 W/kg

SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.035 mW/g

Maximum value of SAR (measured) = 0.171 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.67 V/m; Power Drift = -0.162 dB

Peak SAR (extrapolated) = 0.285 W/kg

SAR(1 g) = 0.080 mW/g; SAR(10 g) = 0.030 mW/g

Maximum value of SAR (measured) = 0.167 mW/g

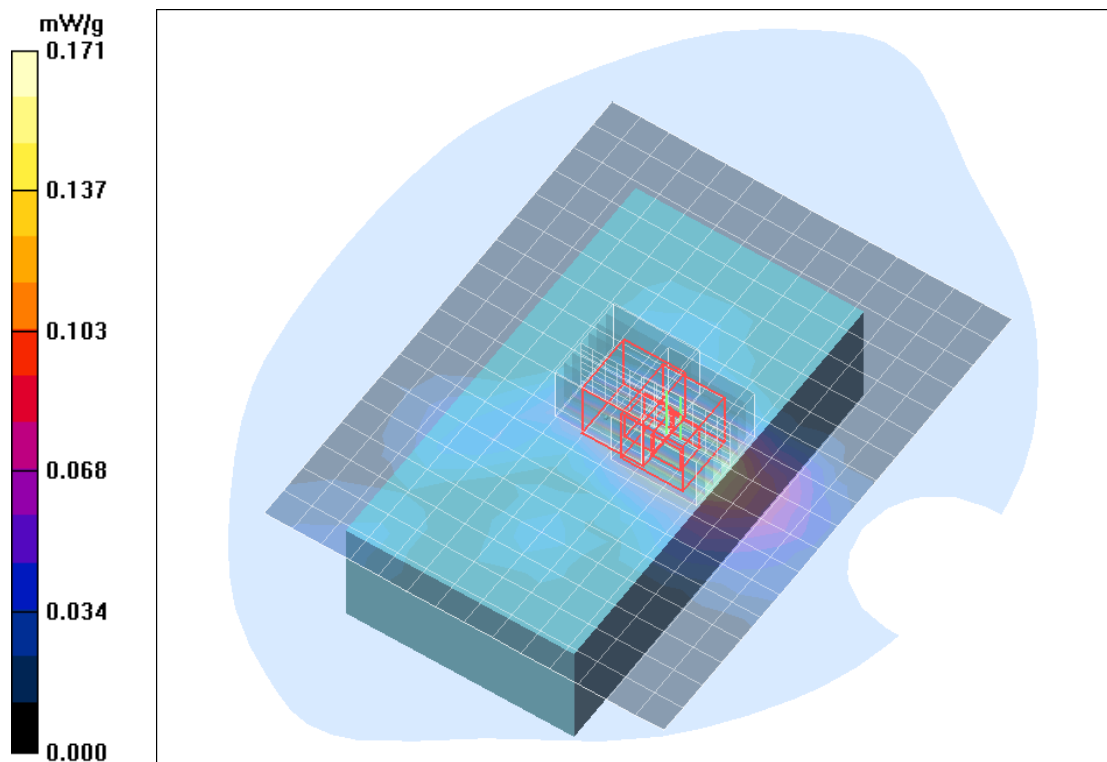


Fig. 6: SAR distribution for IEEE 802.11 a, channel 36, display towards the ground (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch48_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5240 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5240$ MHz; $\sigma = 5.38$ mho/m; $\epsilon_r = 47.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.54, 4.54, 4.54); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 3.03 V/m; Power Drift = -0.169 dB

Peak SAR (extrapolated) = 0.193 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.012 mW/g

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 3.03 V/m; Power Drift = -0.169 dB

Peak SAR (extrapolated) = 0.169 W/kg

SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.014 mW/g

Maximum value of SAR (measured) = 0.072 mW/g

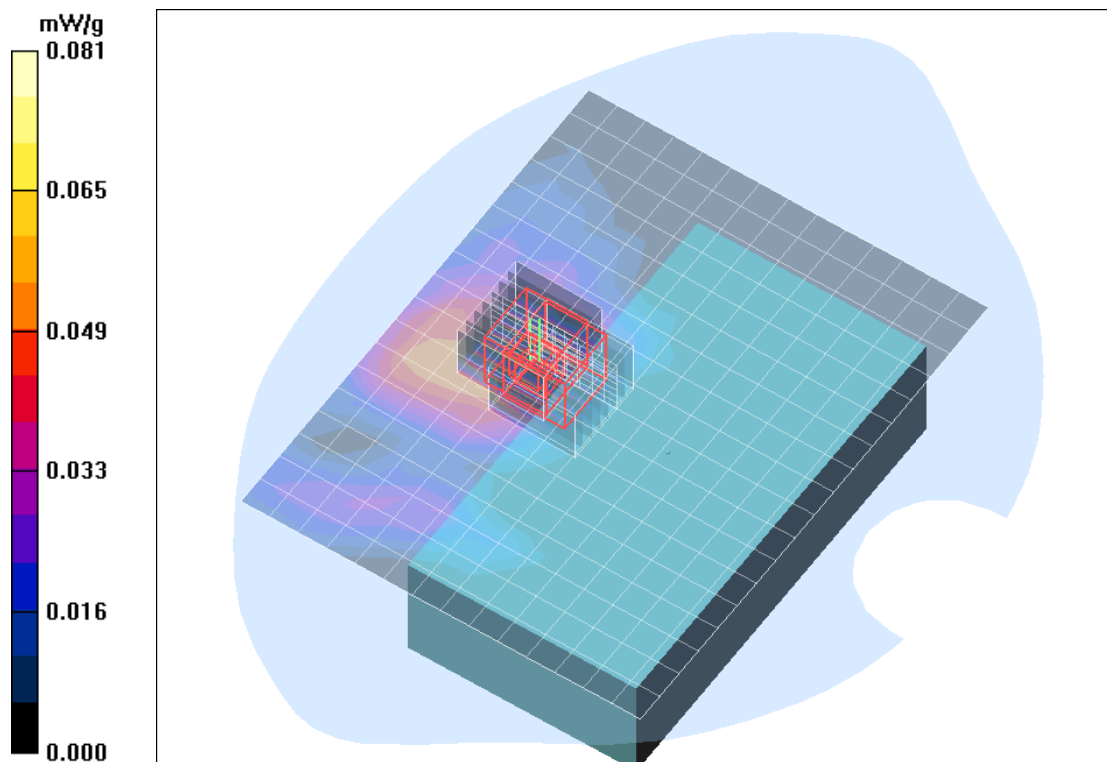


Fig. 7: SAR distribution for IEEE 802.11 a, channel 48, display towards the phantom (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch48_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5240 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5240$ MHz; $\sigma = 5.38$ mho/m; $\epsilon_r = 47.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.54, 4.54, 4.54); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.156 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.72 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 0.188 W/kg

SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.027 mW/g

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.72 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 0.182 W/kg

SAR(1 g) = 0.059 mW/g; SAR(10 g) = 0.023 mW/g

Maximum value of SAR (measured) = 0.133 mW/g

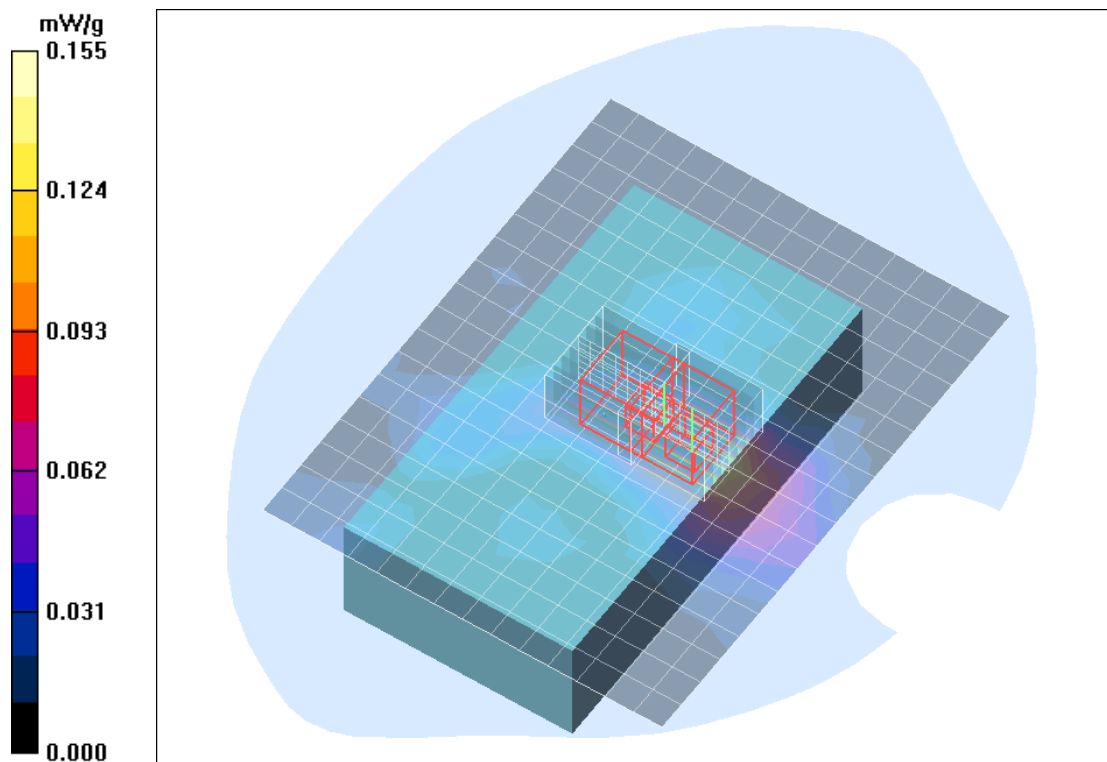


Fig. 8: SAR distribution for IEEE 802.11 a, channel 48, display towards the ground (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch52_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260$ MHz; $\sigma = 5.39$ mho/m; $\epsilon_r = 47.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.54, 4.54, 4.54); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.53 V/m; Power Drift = 0.199 dB

Peak SAR (extrapolated) = 0.231 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.013 mW/g

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.53 V/m; Power Drift = 0.199 dB

Peak SAR (extrapolated) = 0.128 W/kg

SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00463 mW/g

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

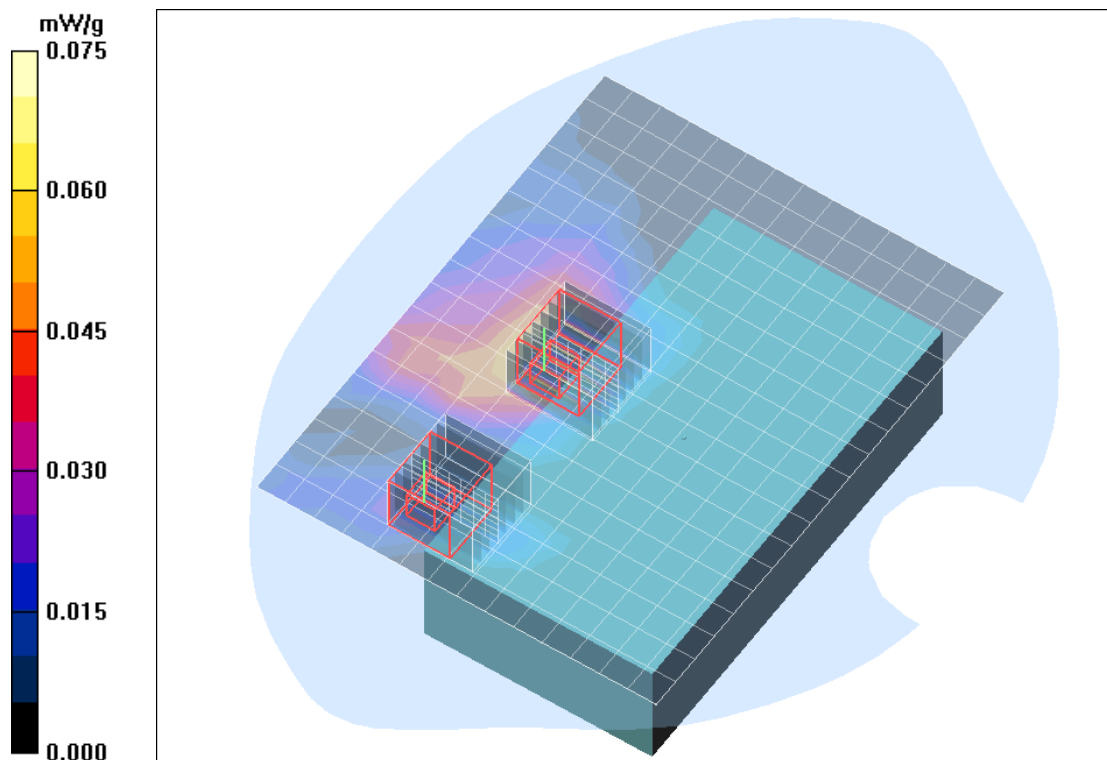


Fig. 9: SAR distribution for IEEE 802.11 a, channel 52, display towards the phantom (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch52_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260$ MHz; $\sigma = 5.39$ mho/m; $\epsilon_r = 47.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.54, 4.54, 4.54); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.148 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.48 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.167 W/kg

SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.026 mW/g

Maximum value of SAR (measured) = 0.153 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.48 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.190 W/kg

SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.106 mW/g

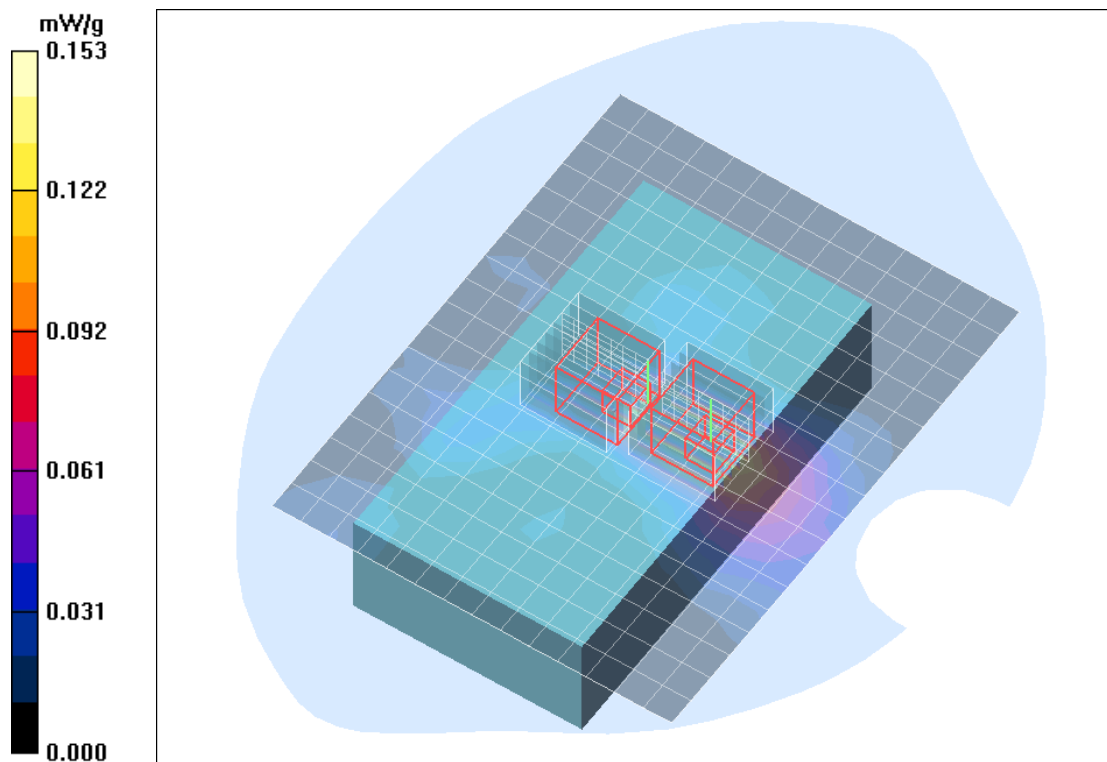


Fig. 10: SAR distribution for IEEE 802.11 a, channel 52, display towards the ground (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch64_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5320 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5320$ MHz; $\sigma = 5.49$ mho/m; $\epsilon_r = 47.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.54, 4.54, 4.54); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.20 V/m; Power Drift = -0.176 dB

Peak SAR (extrapolated) = 0.198 W/kg

SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.011 mW/g

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.20 V/m; Power Drift = -0.176 dB

Peak SAR (extrapolated) = 0.177 W/kg

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.010 mW/g

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

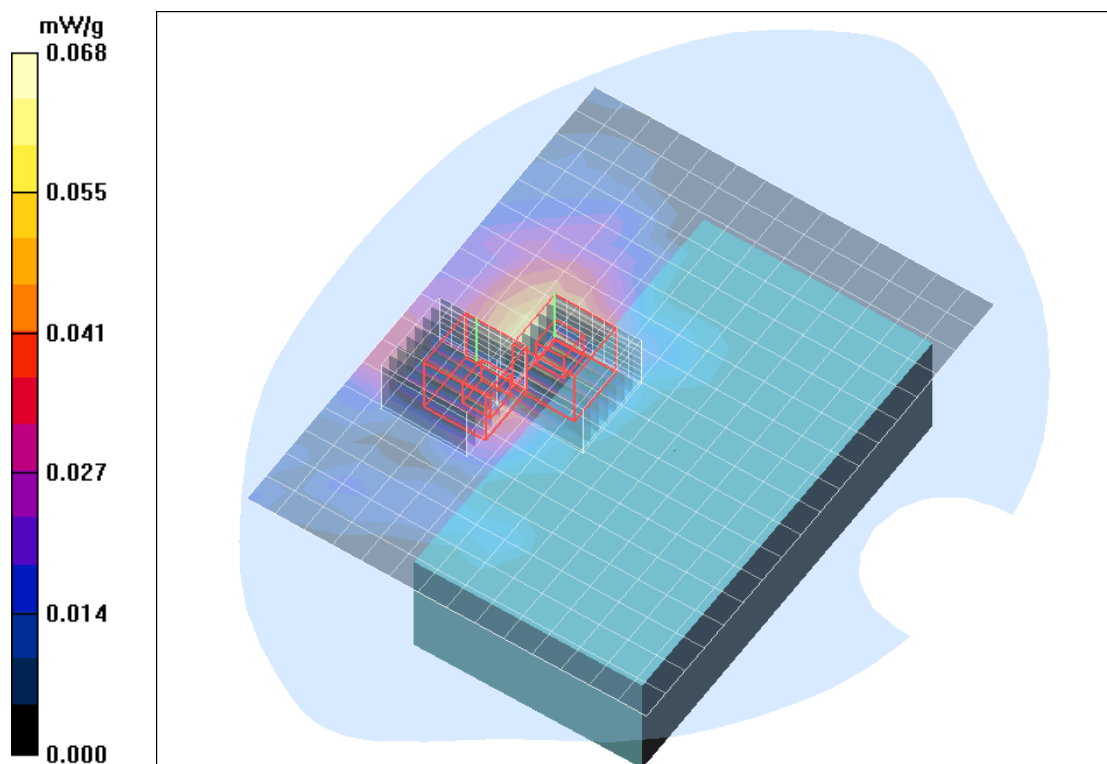


Fig. 11: SAR distribution for IEEE 802.11 a, channel 64, display towards the phantom (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch64_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5320 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5320$ MHz; $\sigma = 5.49$ mho/m; $\epsilon_r = 47.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.54, 4.54, 4.54); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.124 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 3.71 V/m; Power Drift = 0.147 dB

Peak SAR (extrapolated) = 0.222 W/kg

SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.120 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 3.71 V/m; Power Drift = 0.147 dB

Peak SAR (extrapolated) = 0.209 W/kg

SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.097 mW/g

d=10mm, Pin=250mW/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.71 V/m; Power Drift = 0.147 dB

Peak SAR (extrapolated) = 0.378 W/kg

SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.028 mW/g

Maximum value of SAR (measured) = 0.063 mW/g

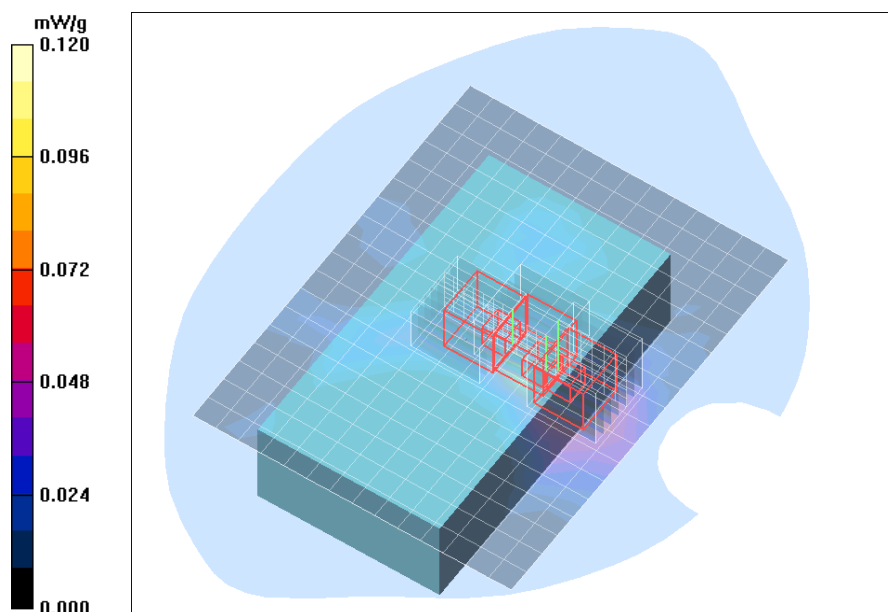


Fig. 12: SAR distribution for IEEE 802.11 a, channel 64, display towards the ground (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

4 SAR Distribution Plots, IEEE 802.11 a Body (5500 MHz range)

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch104_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5520 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5520$ MHz; $\sigma = 5.91$ mho/m; $\epsilon_r = 47.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.22, 4.22, 4.22); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (16x18x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.083 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.69 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.142 W/kg

SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.081 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.69 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.244 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.074 mW/g

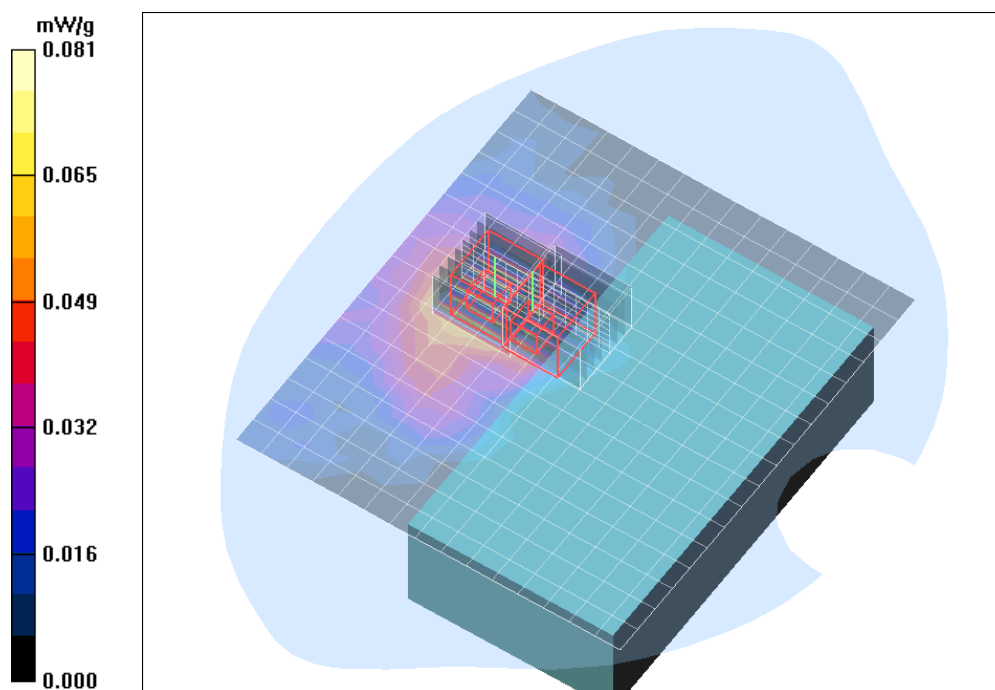


Fig. 13: SAR distribution for IEEE 802.11 a, channel 104, display towards the phantom (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch104_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5520 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5520$ MHz; $\sigma = 5.91$ mho/m; $\epsilon_r = 47.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.22, 4.22, 4.22); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x18x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.082 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.90 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 0.339 W/kg

SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.092 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.90 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 0.266 W/kg

SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.00986 mW/g

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

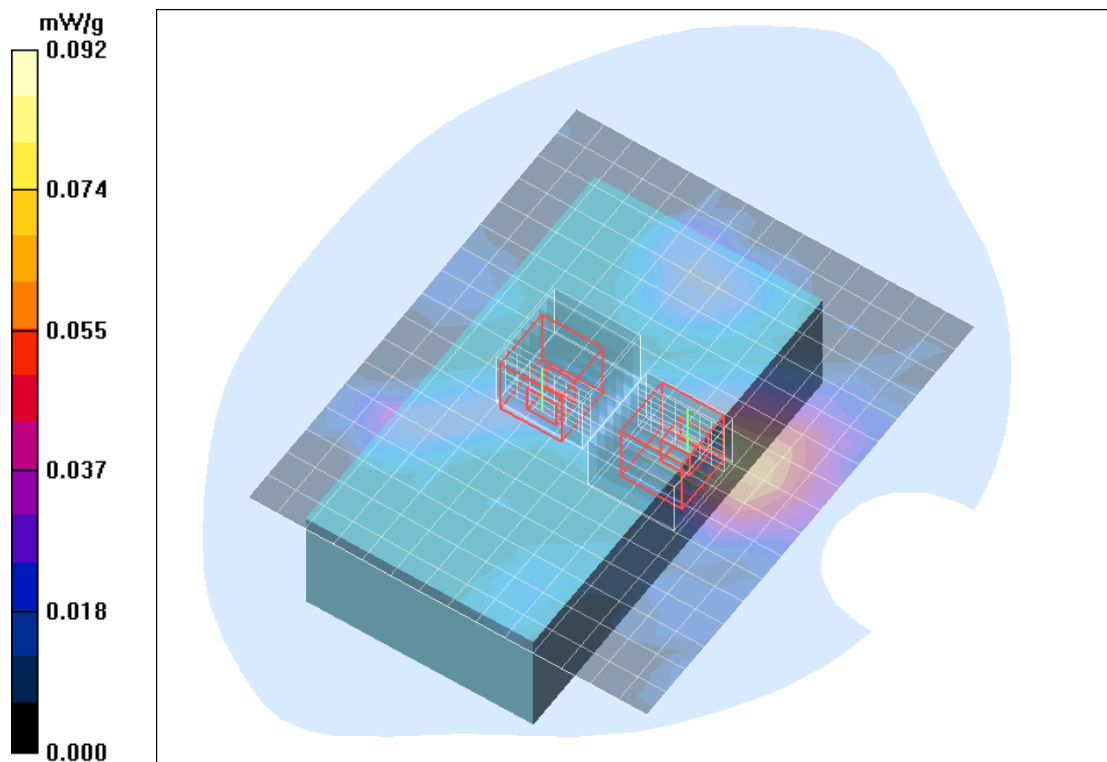


Fig. 14: SAR distribution for IEEE 802.11 a, channel 104, display towards the ground (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch116_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5580 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5580$ MHz; $\sigma = 5.95$ mho/m; $\epsilon_r = 47.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.22, 4.22, 4.22); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (16x18x1): Measurement grid: dx=10mm, dy=10mm

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.62 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.219 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.079 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.62 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.280 W/kg

SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.081 mW/g

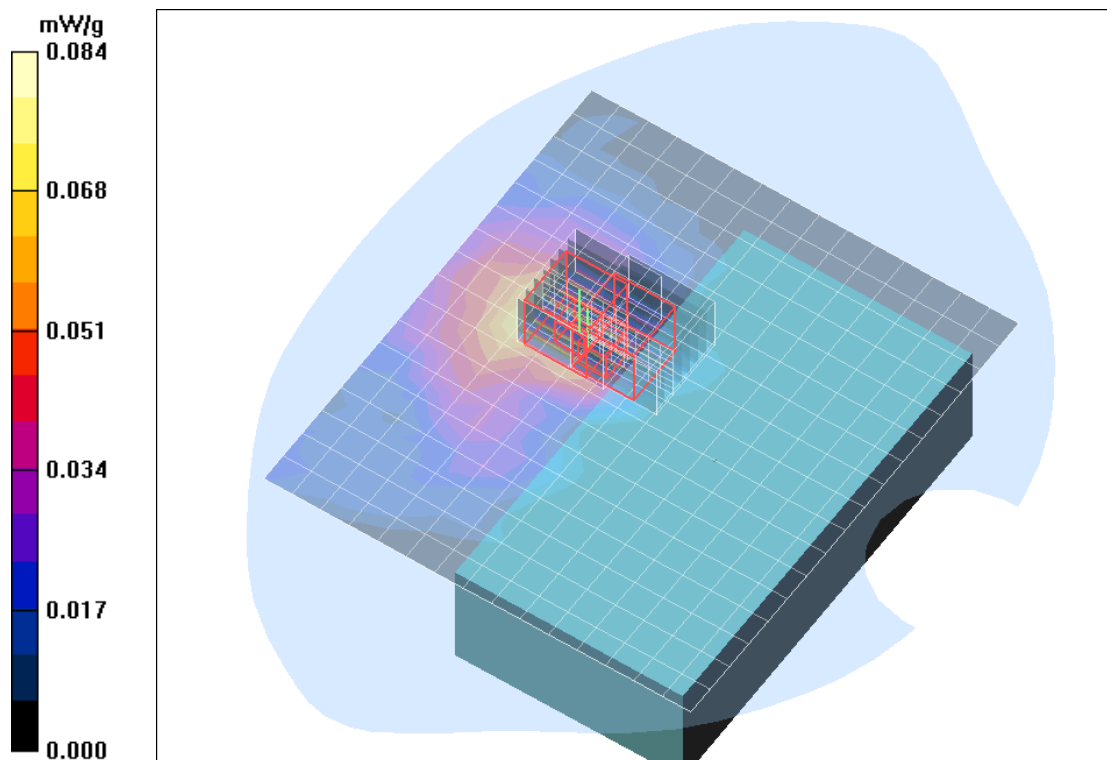


Fig. 15: SAR distribution for IEEE 802.11 a, channel 116, display towards the phantom (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch116_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5580 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5580$ MHz; $\sigma = 5.95$ mho/m; $\epsilon_r = 47.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.22, 4.22, 4.22); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x18x1): Measurement grid: dx=10mm, dy=10mm

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.91 V/m; Power Drift = -0.196 dB

Peak SAR (extrapolated) = 0.294 W/kg

SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.019 mW/g

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.91 V/m; Power Drift = -0.196 dB

Peak SAR (extrapolated) = 0.249 W/kg

SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.011 mW/g

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

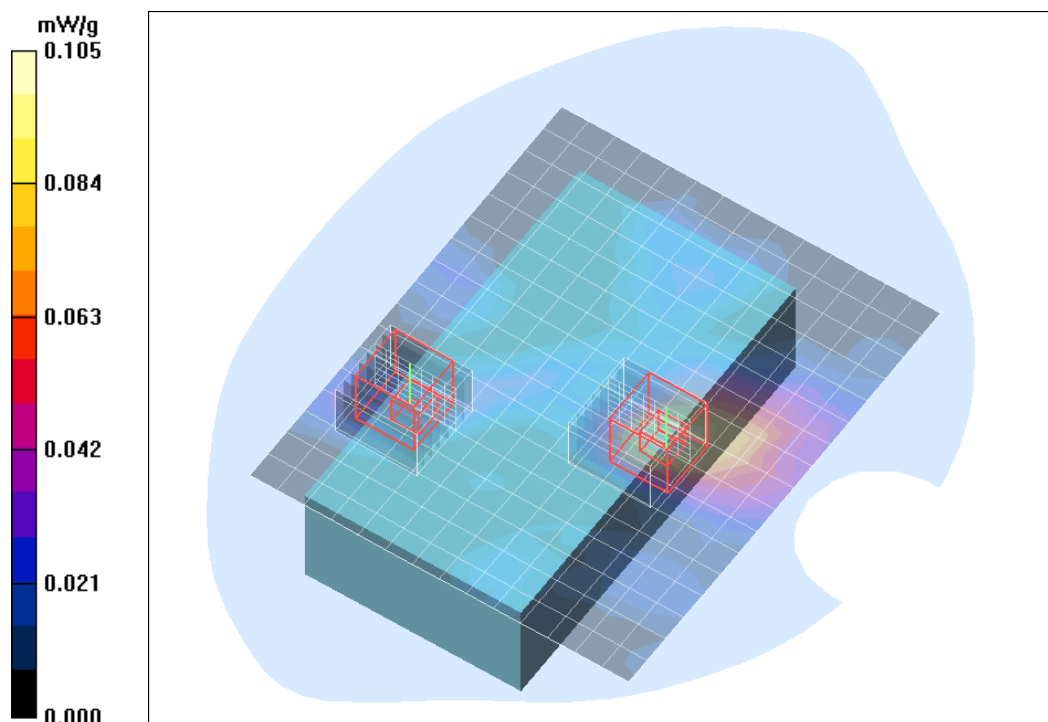


Fig. 16: SAR distribution for IEEE 802.11 a, channel 116, display towards the ground (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch124_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5620 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5620$ MHz; $\sigma = 5.96$ mho/m; $\epsilon_r = 47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.22, 4.22, 4.22); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (16x18x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.072 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.38 V/m; Power Drift = 0.140 dB

Peak SAR (extrapolated) = 0.239 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.077 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.38 V/m; Power Drift = 0.140 dB

Peak SAR (extrapolated) = 0.263 W/kg

SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.014 mW/g

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

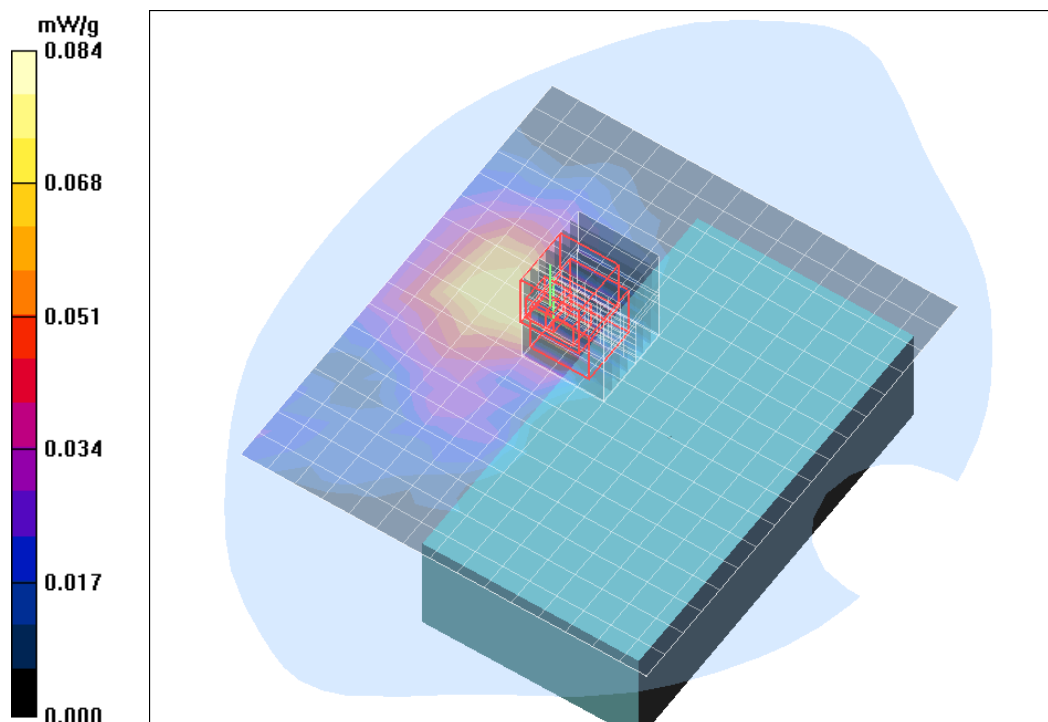


Fig. 17: SAR distribution for IEEE 802.11 a, channel 124, display towards the phantom (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch124_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5620 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5620$ MHz; $\sigma = 5.96$ mho/m; $\epsilon_r = 47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.22, 4.22, 4.22); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x18x1): Measurement grid: dx=10mm, dy=10mm

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.65 V/m; Power Drift = -0.126 dB

Peak SAR (extrapolated) = 0.291 W/kg

SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (measured) = 0.110 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.65 V/m; Power Drift = -0.126 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.010 mW/g

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

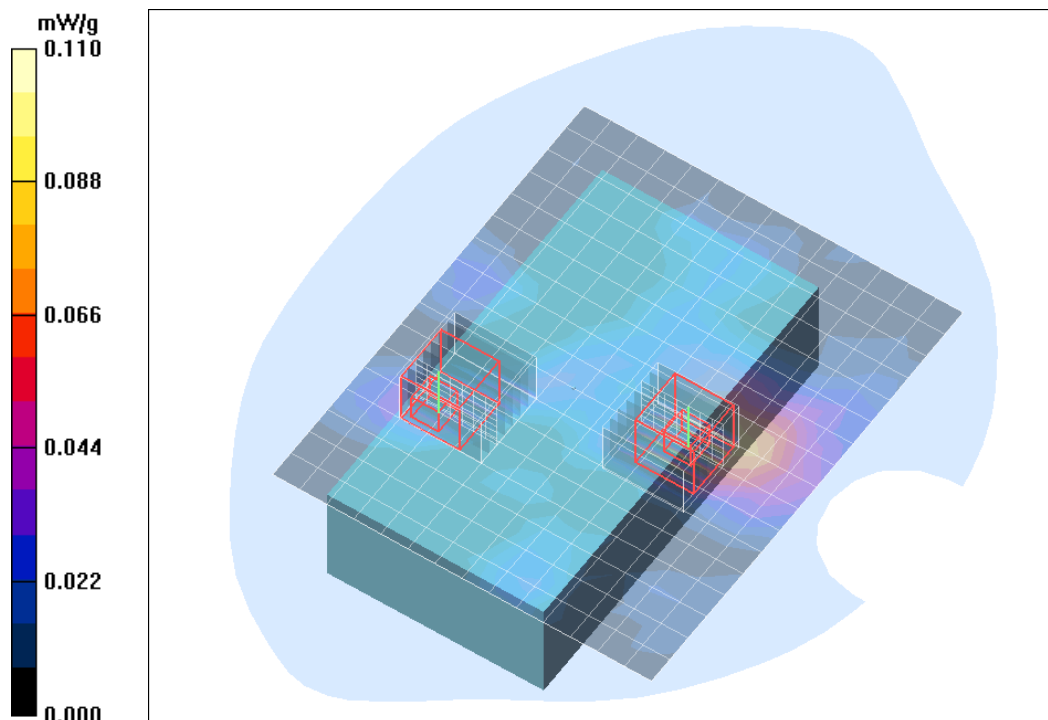


Fig. 18: SAR distribution for IEEE 802.11 a, channel 124, display towards the ground (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch136_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5680 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5680$ MHz; $\sigma = 6.06$ mho/m; $\epsilon_r = 47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.22, 4.22, 4.22); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (16x18x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.070 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.53 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.235 W/kg

SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.00918 mW/g

Maximum value of SAR (measured) = 0.061 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.53 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.266 W/kg

SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.014 mW/g

Maximum value of SAR (measured) = 0.076 mW/g

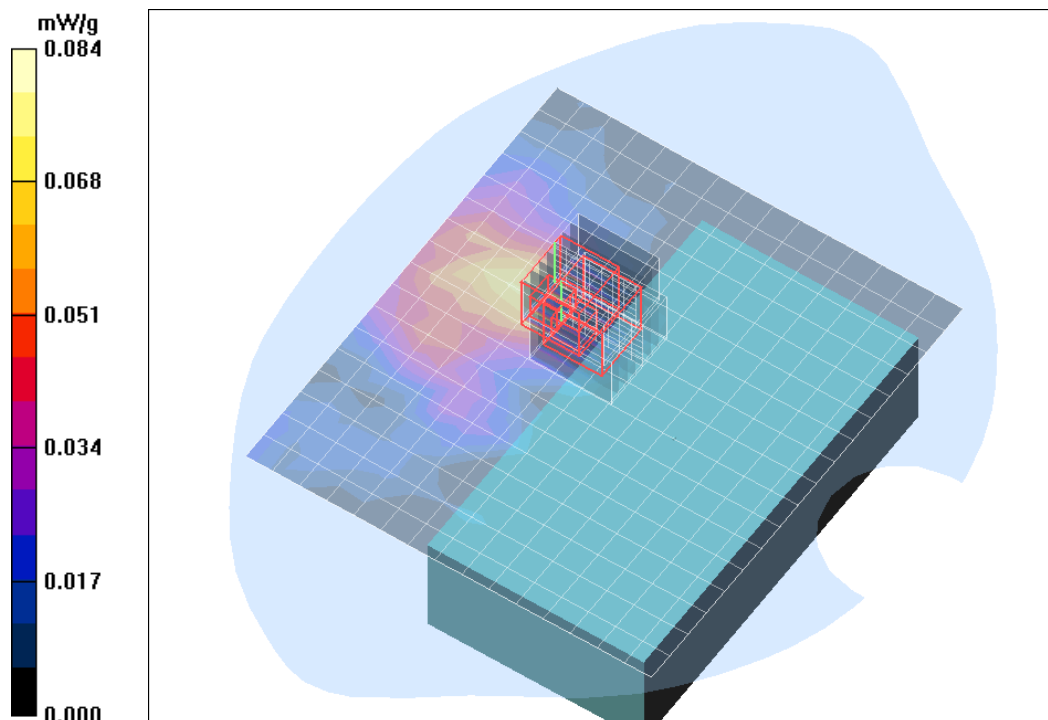


Fig. 19: SAR distribution for IEEE 802.11 a, channel 136, display towards the phantom (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch136_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5680 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5680$ MHz; $\sigma = 6.06$ mho/m; $\epsilon_r = 47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.22, 4.22, 4.22); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (16x18x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.085 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.89 V/m; Power Drift = 0.128 dB

Peak SAR (extrapolated) = 0.216 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.091 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.89 V/m; Power Drift = 0.128 dB

Peak SAR (extrapolated) = 0.273 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.012 mW/g

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

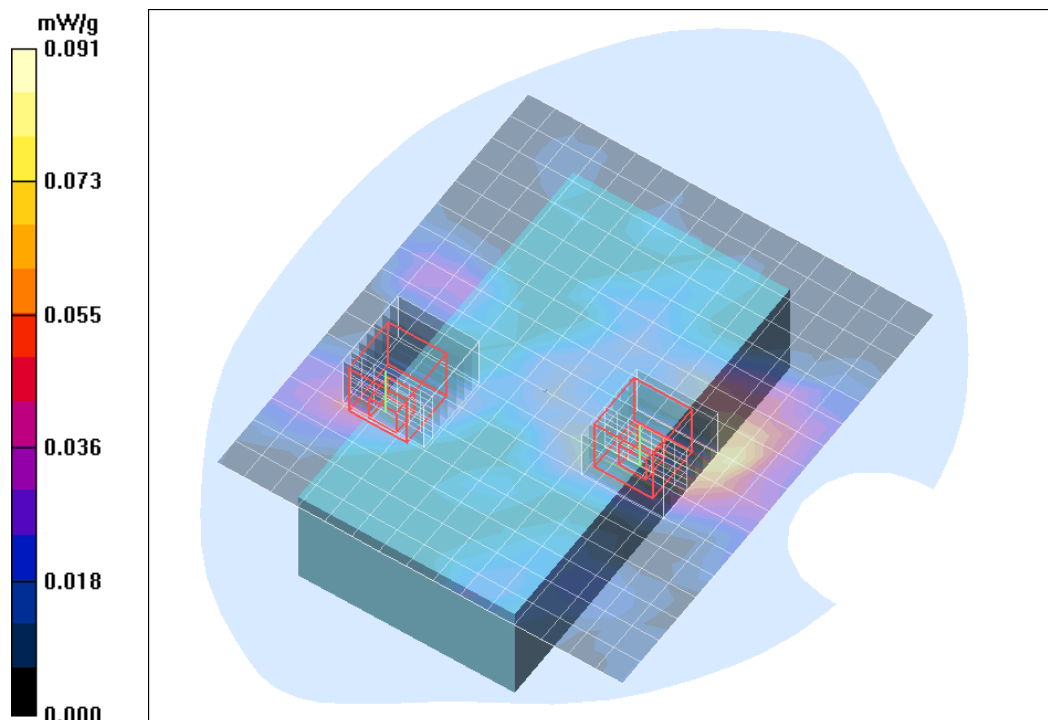


Fig. 20: SAR distribution for IEEE 802.11 a, channel 136, display towards the ground (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

5 SAR Distribution Plots, IEEE 802.11 a Body (5800 MHz range)

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch149_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5745 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5745$ MHz; $\sigma = 6.2$ mho/m; $\epsilon_r = 46.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.2, 4.2, 4.2); Calibrated: 18.09.2009

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn335; Calibrated: 10.02.2010

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

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (16x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.086 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.72 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.246 W/kg

SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.015 mW/g

Maximum value of SAR (measured) = 0.089 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.72 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.261 W/kg

SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.088 mW/g

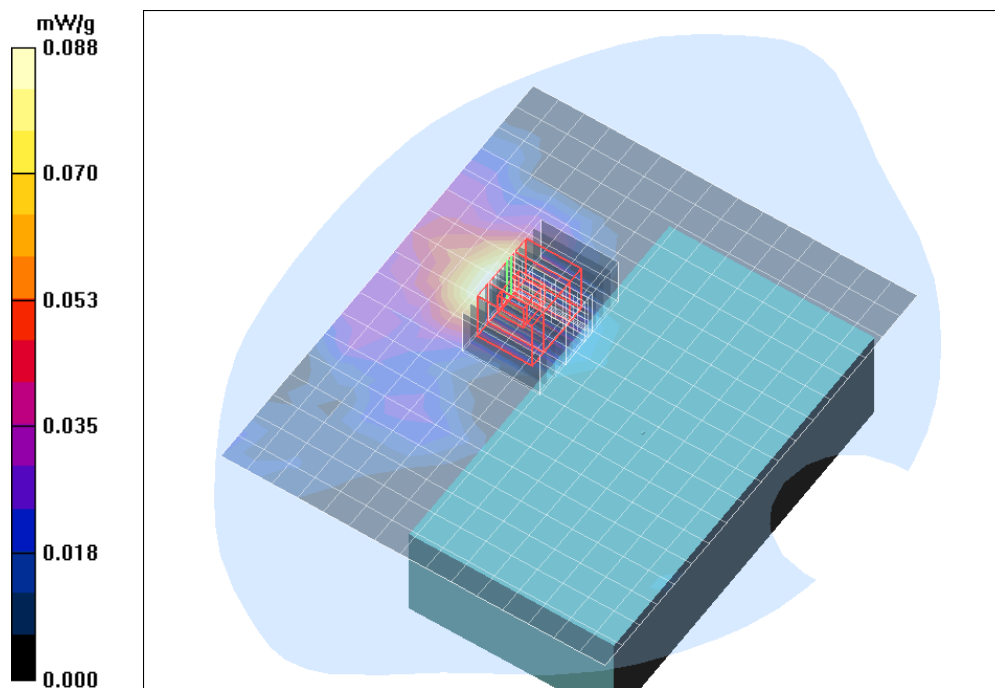


Fig. 21: SAR distribution for IEEE 802.11 a, channel 149, display towards the phantom (May 14, 2010; Ambient Temperature: 21.8°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch149_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5745$ MHz; $\sigma = 6.2$ mho/m; $\epsilon_r = 46.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.2, 4.2, 4.2); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

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

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.20 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.259 W/kg

SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.027 mW/g

Maximum value of SAR (measured) = 0.150 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.20 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.225 W/kg

SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.089 mW/g

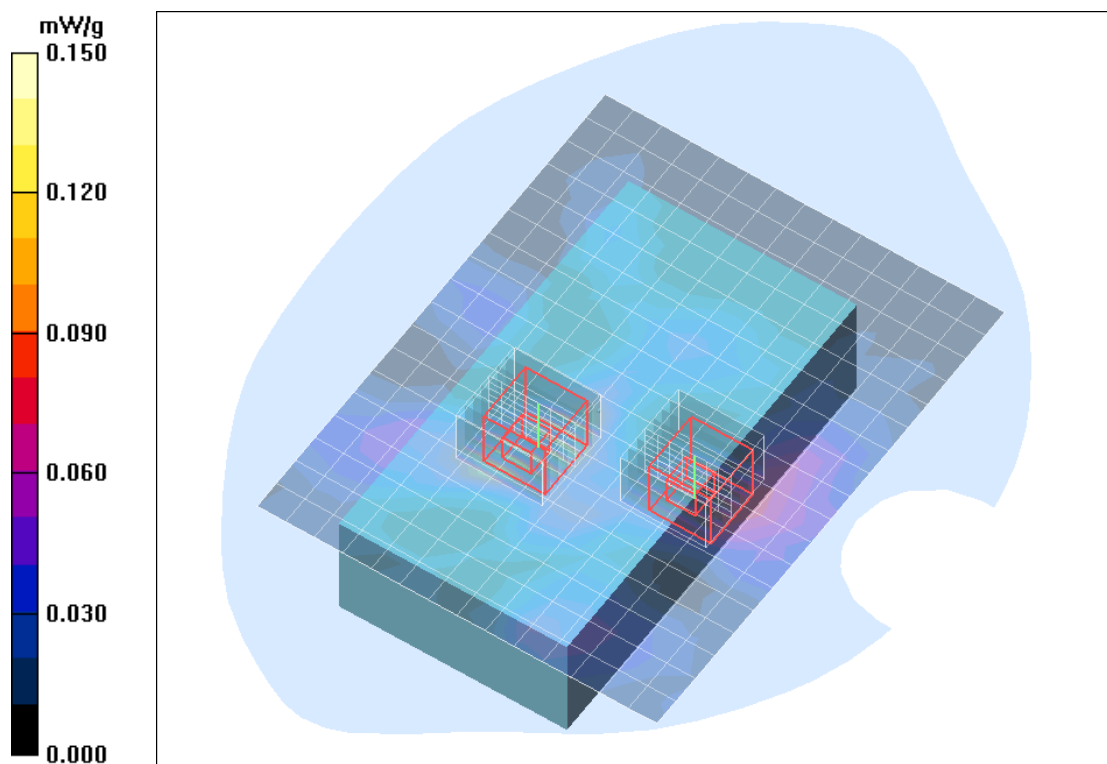


Fig. 22: SAR distribution for IEEE 802.11 a, channel 149, display towards the ground (May 14, 2010; Ambient Temperature: 21.8°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch161_15mm_dspl_up.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5805 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5805$ MHz; $\sigma = 6.27$ mho/m; $\epsilon_r = 46.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.2, 4.2, 4.2); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (16x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.085 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.78 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 0.175 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.018 mW/g

Maximum value of SAR (measured) = 0.094 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.78 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.088 mW/g

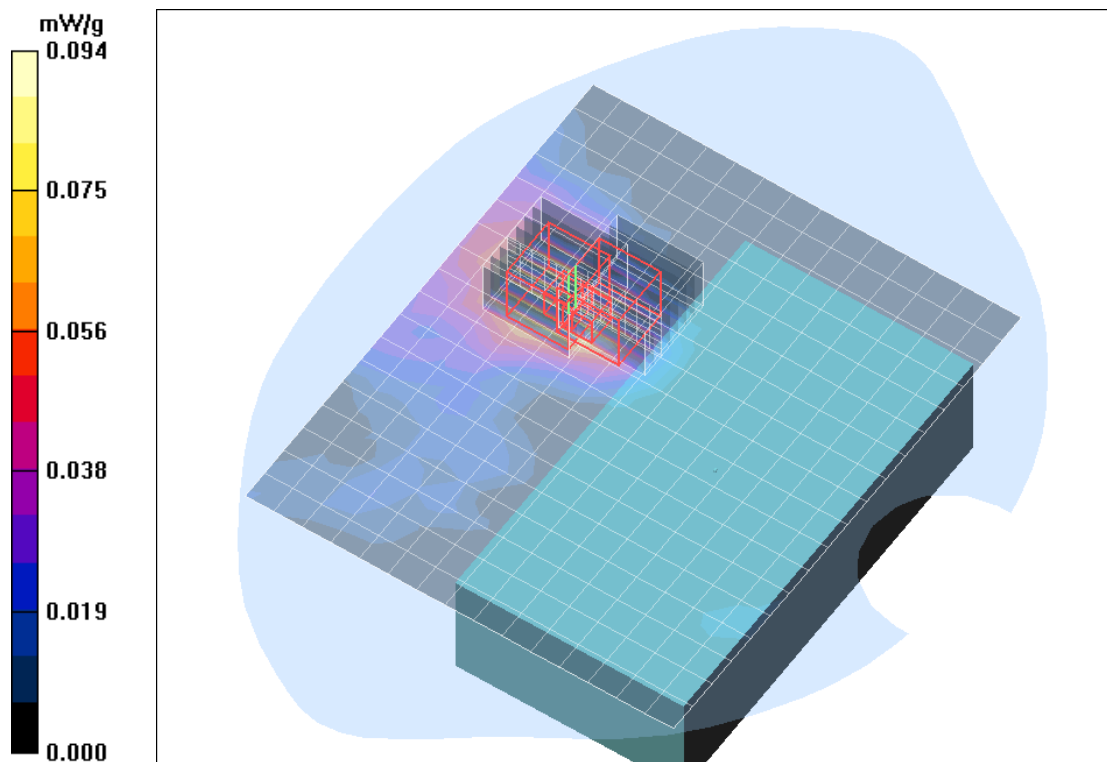


Fig. 23: SAR distribution for IEEE 802.11 a, channel 161, display towards the phantom (May 14, 2010; Ambient Temperature: 21.8°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Elf_bwhm_ch161_15mm_dspl_down.da4](#)

DUT: Datalogic; Type: Elf 701-701; Serial: D10P00071

Program Name: Body Worn

Communication System: 5 GHz ; Frequency: 5805 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5805$ MHz; $\sigma = 6.27$ mho/m; $\epsilon_r = 46.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(4.2, 4.2, 4.2); Calibrated: 18.09.2009
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 10.02.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (15x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.170 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.03 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.293 W/kg

SAR(1 g) = 0.091 mW/g; SAR(10 g) = 0.033 mW/g

Maximum value of SAR (measured) = 0.194 mW/g

d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.03 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.300 W/kg

SAR(1 g) = 0.081 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.191 mW/g

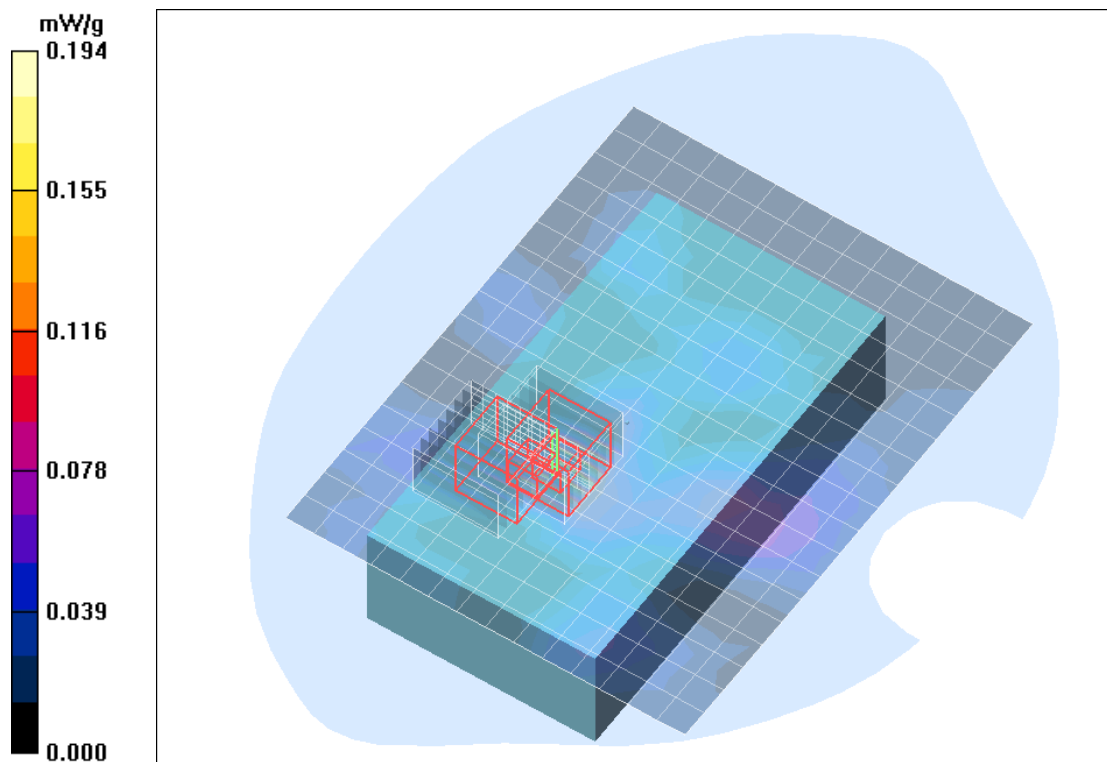


Fig. 24: SAR distribution for IEEE 802.11 a, channel 161, display towards the ground (May 14, 2010; Ambient Temperature: 21.8°C; Liquid Temperature: 21.2°C).

6 SAR z-axis scans (Validation)

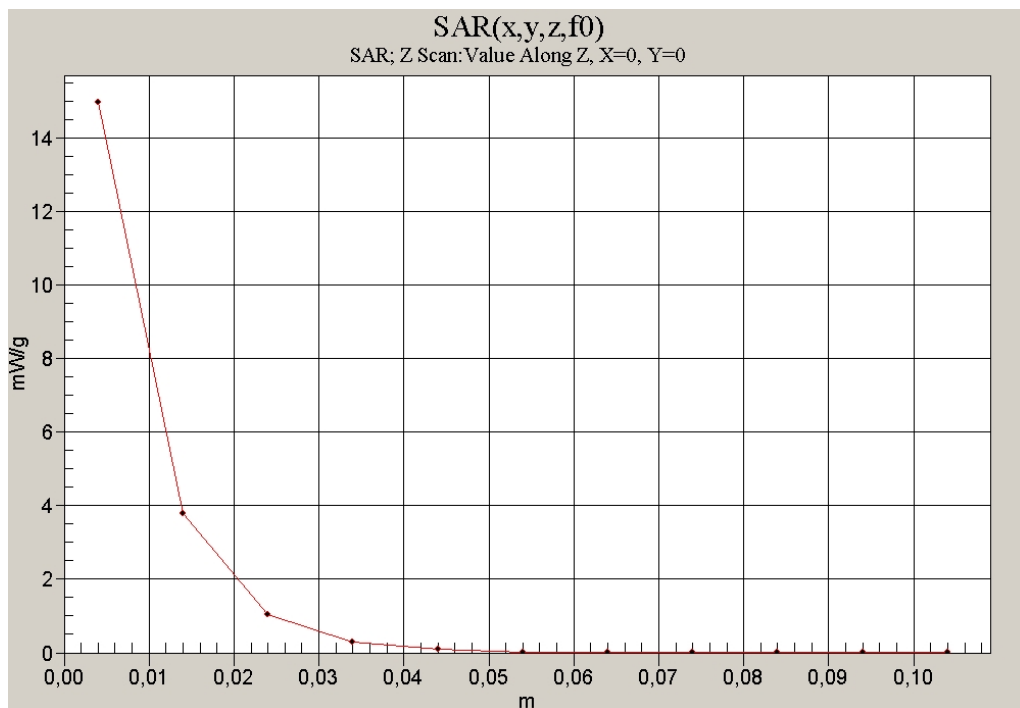


Fig. 25: SAR versus liquid depth, 2450 MHz, body (May 11, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.5°C).

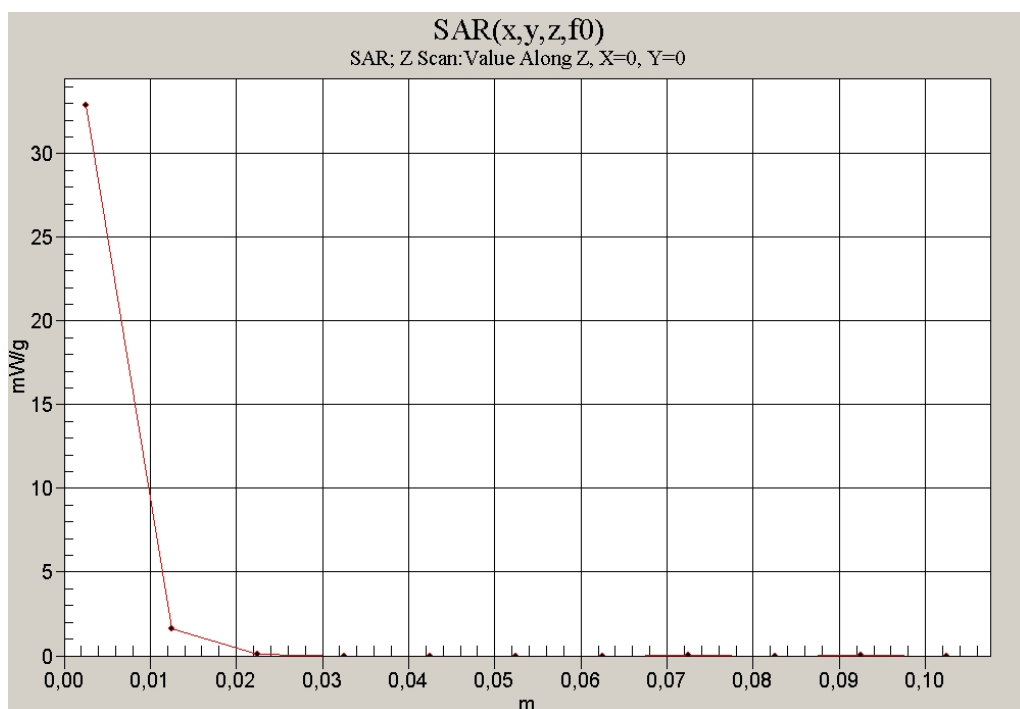


Fig. 26: SAR versus liquid depth, 5200 MHz, body (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

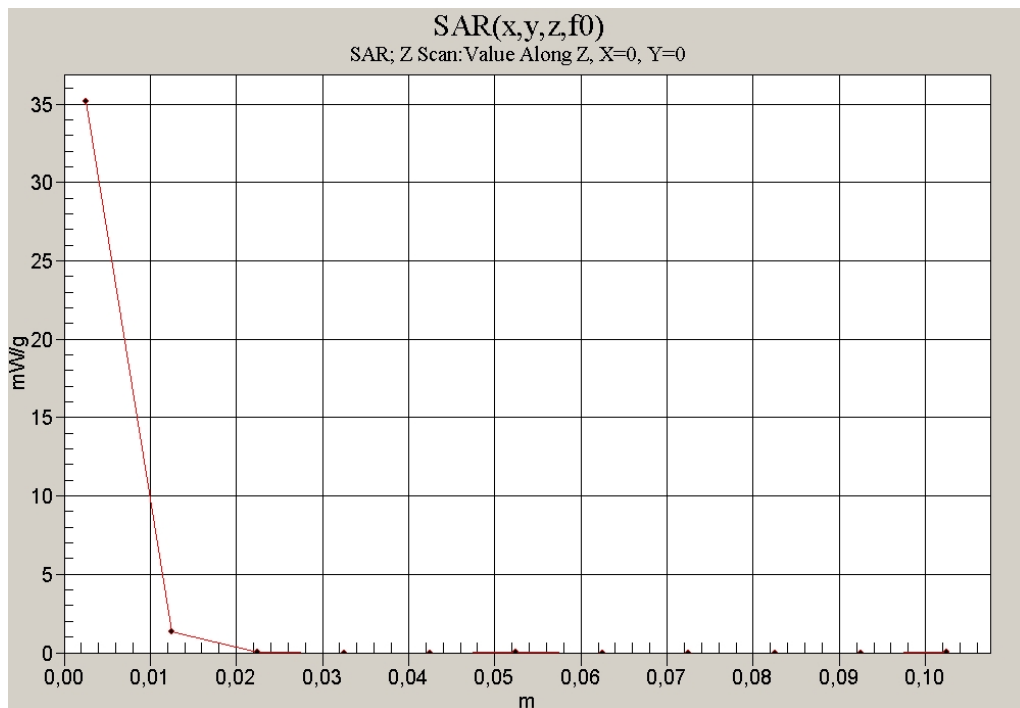


Fig. 27: SAR versus liquid depth, 5500 MHz, body (May 18, 2010; Ambient Temperature: 22.0°C; Liquid Temperature: 21.3°C).

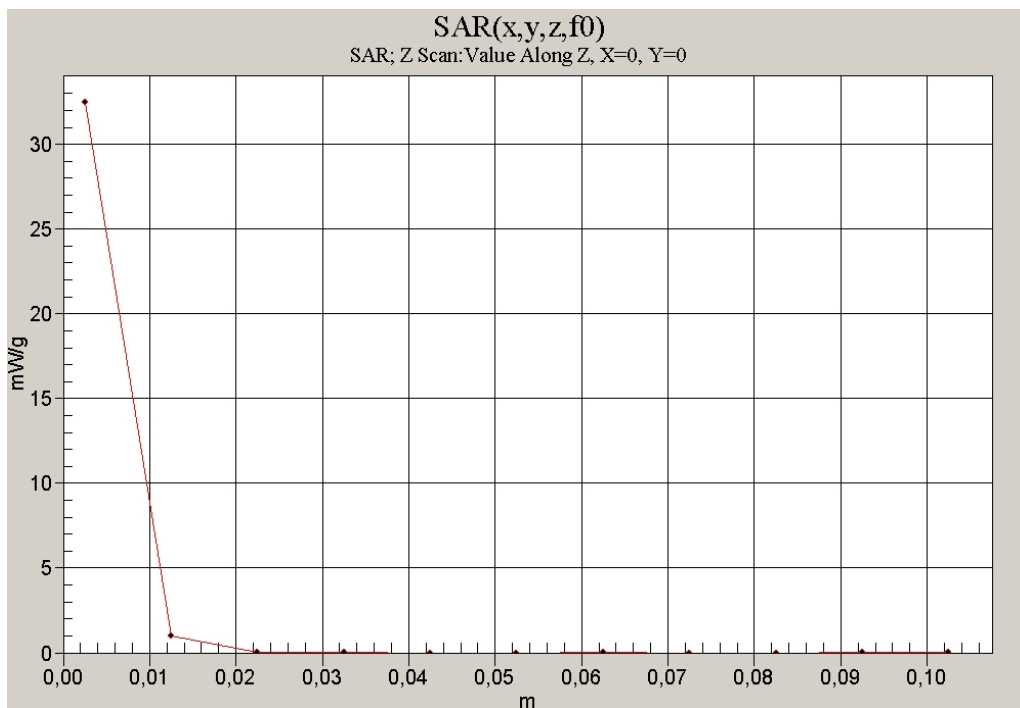


Fig. 28: SAR versus liquid depth, 5800 MHz, body (May 14, 2010; Ambient Temperature: 21.8°C; Liquid Temperature: 21.2°C).

7 SAR z-axis scans (Measurements)

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

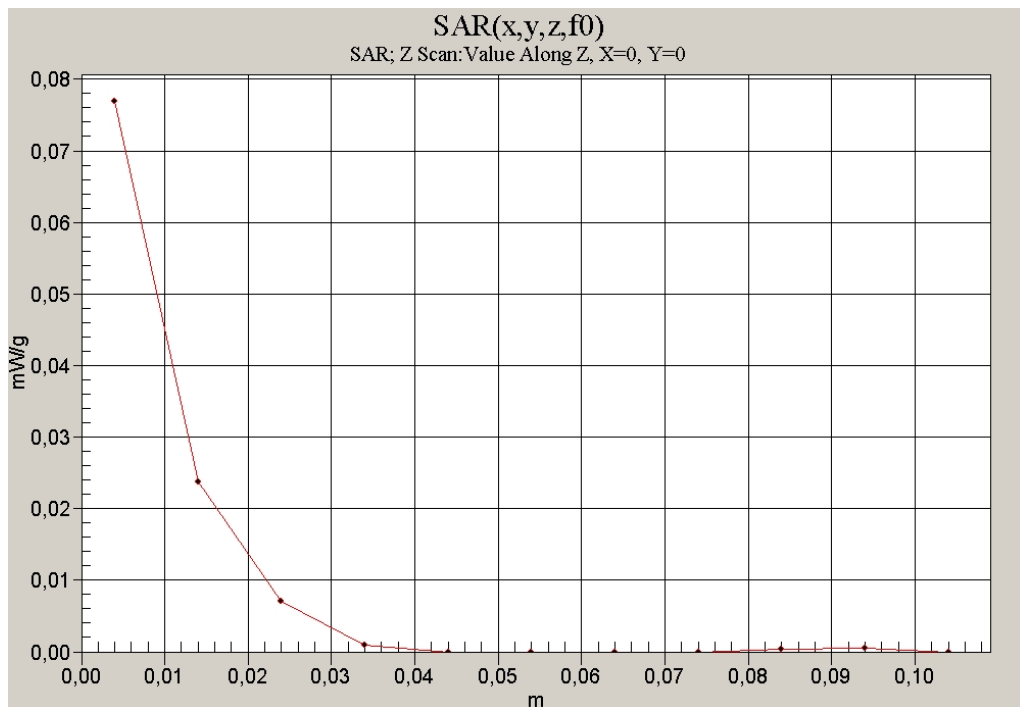


Fig. 29: SAR versus liquid depth, body: IEEE 802.11 g, channel 6, display towards the ground (May 11, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.5°C).

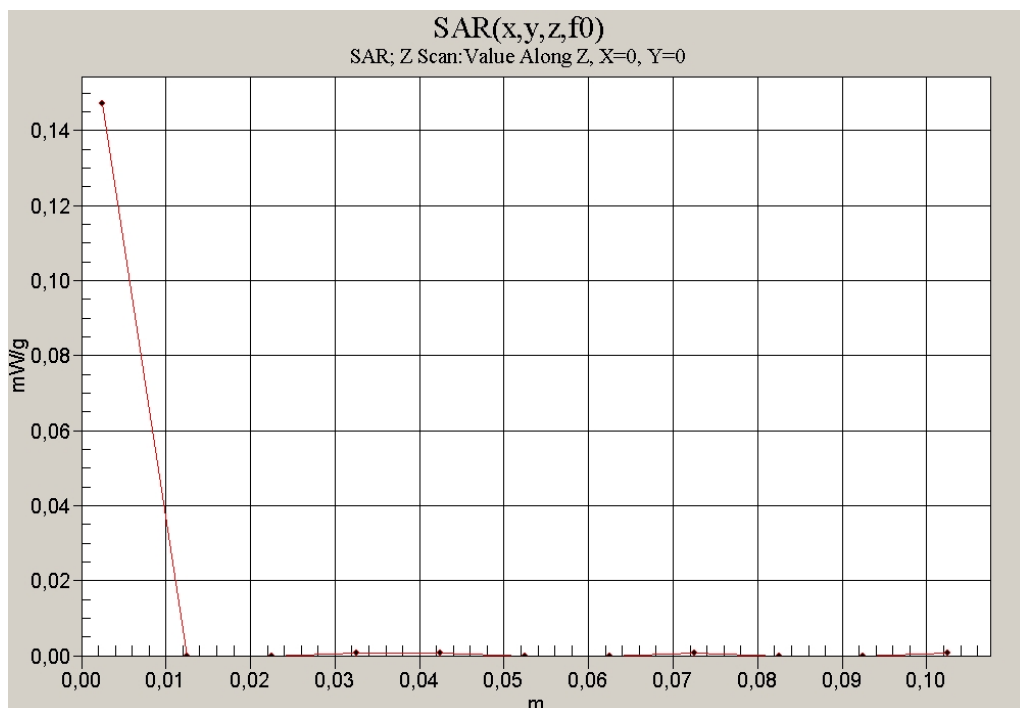


Fig. 30: SAR versus liquid depth, body: IEEE 802.11 a (5200 MHz range), channel 36, display towards the ground (May 12, 2010; Ambient Temperature: 21.6°C; Liquid Temperature: 21.2°C).

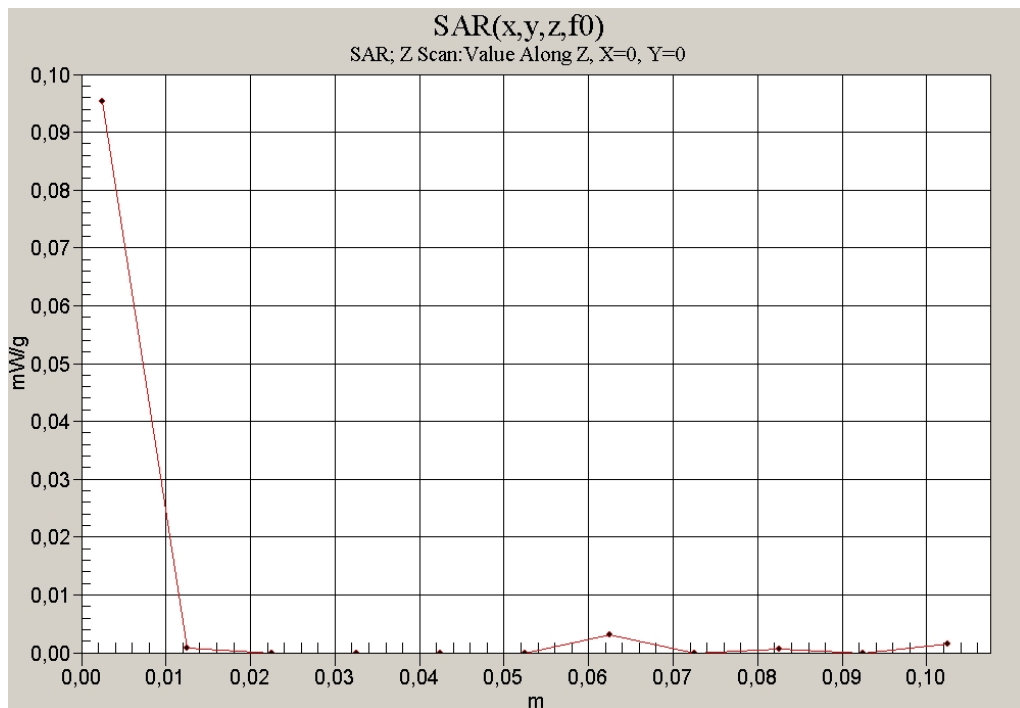


Fig. 31: SAR versus liquid depth, body: IEEE 802.11 a (5500 MHz range), channel 124, display towards the ground (May 18, 2010; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

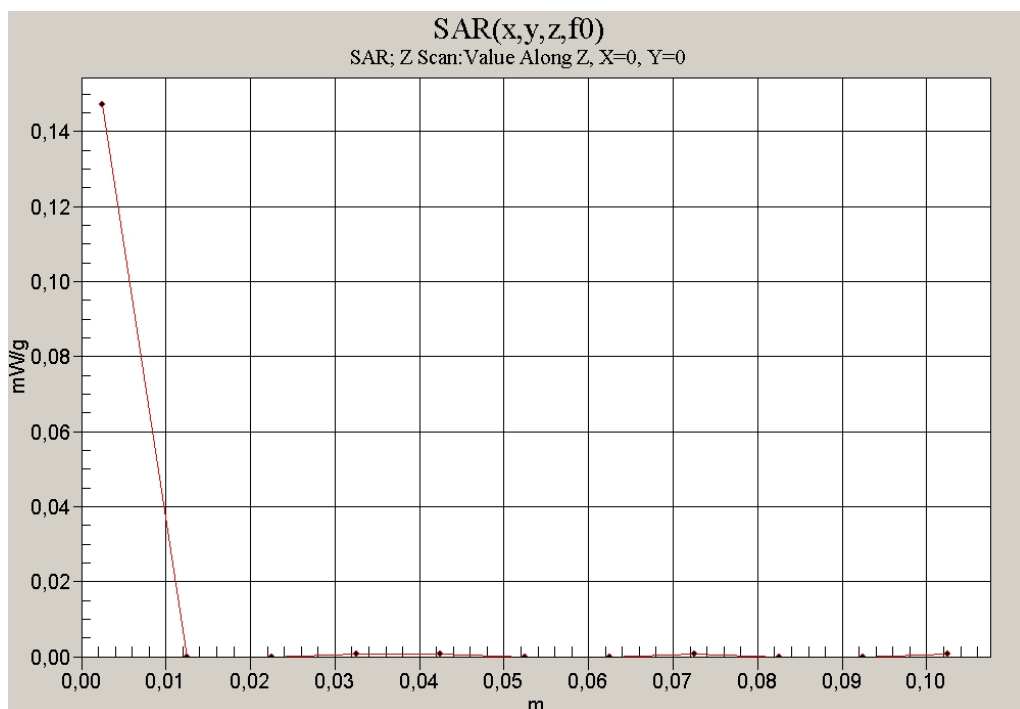


Fig. 32: SAR versus liquid depth, body: IEEE 802.11 a (5800 MHz range), channel 161, display towards the ground (May 14, 2010; Ambient Temperature: 21.8°C; Liquid Temperature: 21.2°C).