
Appendix for the Report

Dosimetric Assessment of the Portable Device

Option Magnum Lite PCMCIA Card

(FCC ID: NCMOGLE) tested in three host products

According to the FCC Requirements

SAR Distribution Plots

December 03, 2004

IMST GmbH

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Customer

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The test results only relate to the items tested.

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1 SAR Distribution Plots, GSM 850 Body

Test Laboratory: IMST GmbH; File Name: [Magbalm_1_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; $\rho = 1000 \text{ kg/m}^3$; $\epsilon_r = 53.7$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (8x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.492 mW/g

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

Reference Value = 18.9 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 0.933 W/kg

SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.313 mW/g

Maximum value of SAR (measured) = 0.516 mW/g

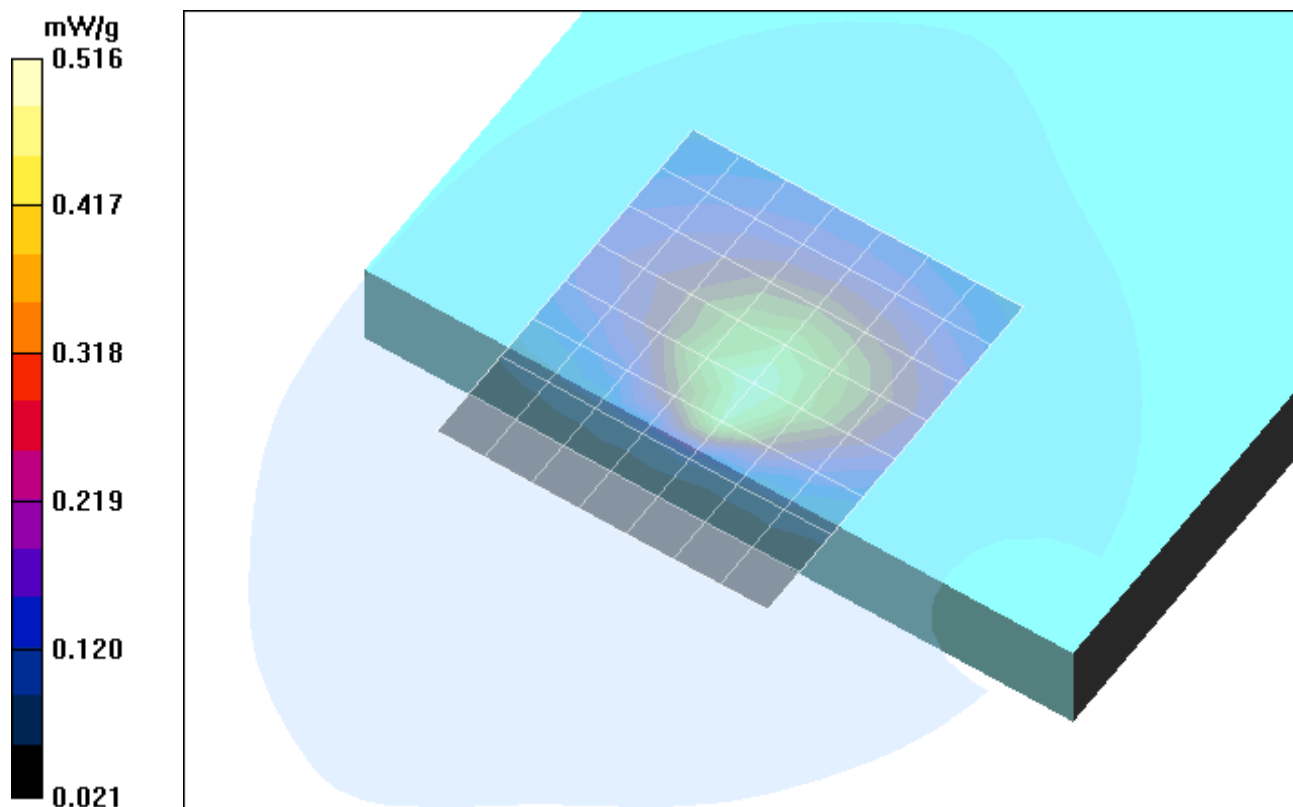


Fig. 1: SAR distribution for GSM 850, channel 190, DELL Latitude D505, position 1. (29.11.2004; Ambient Temperature: 21.2° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; File Name: [Magbalm 2_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.601 mW/g

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

Reference Value = 21.1 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.735 W/kg

SAR(1 g) = 0.492 mW/g; SAR(10 g) = 0.316 mW/g

Maximum value of SAR (measured) = 0.529 mW/g

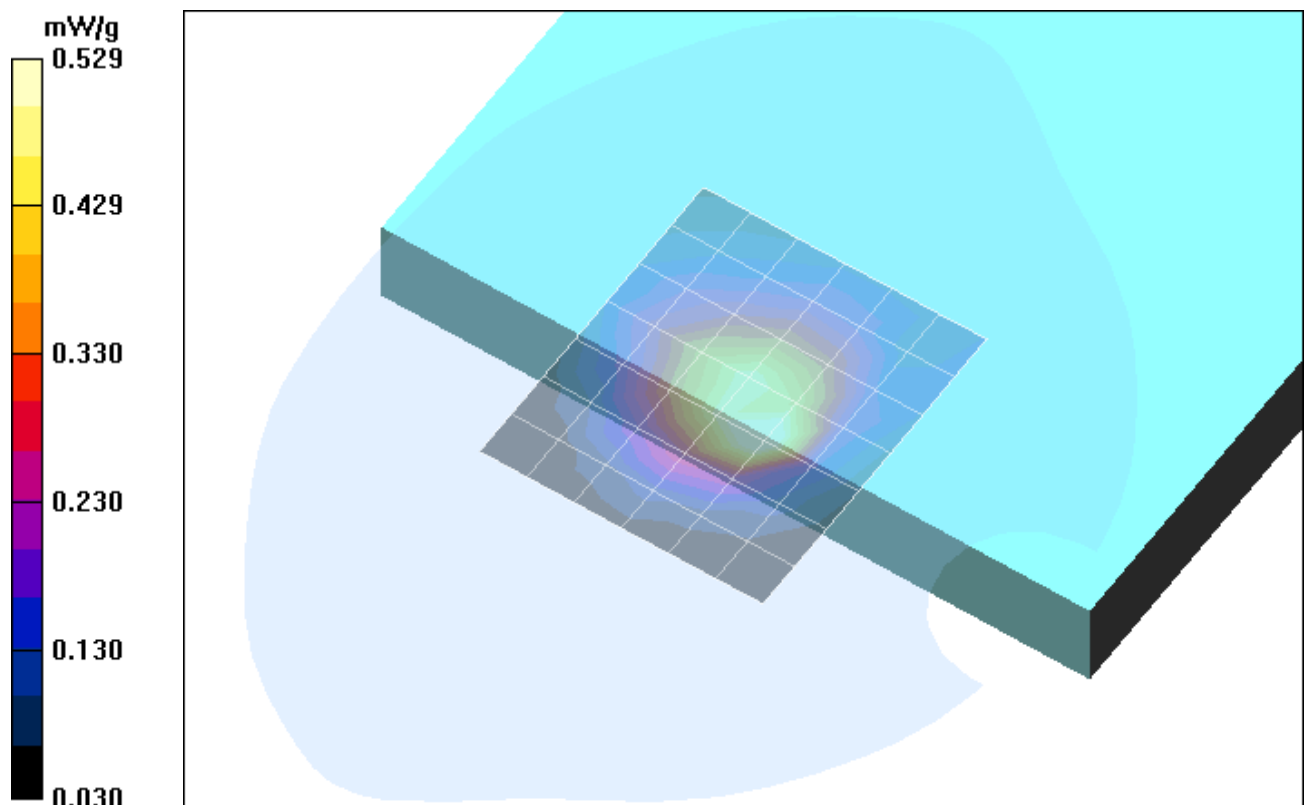


Fig. 2: SAR distribution for PCS 850, channel 190, DELL Latitude D505, position 2. (29.11.2004; Ambient Temperature: 21.2° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm_3_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.391 mW/g

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

Reference Value = 20.4 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.979 W/kg

SAR(1 g) = 0.376 mW/g; SAR(10 g) = 0.214 mW/g

Maximum value of SAR (measured) = 0.393 mW/g

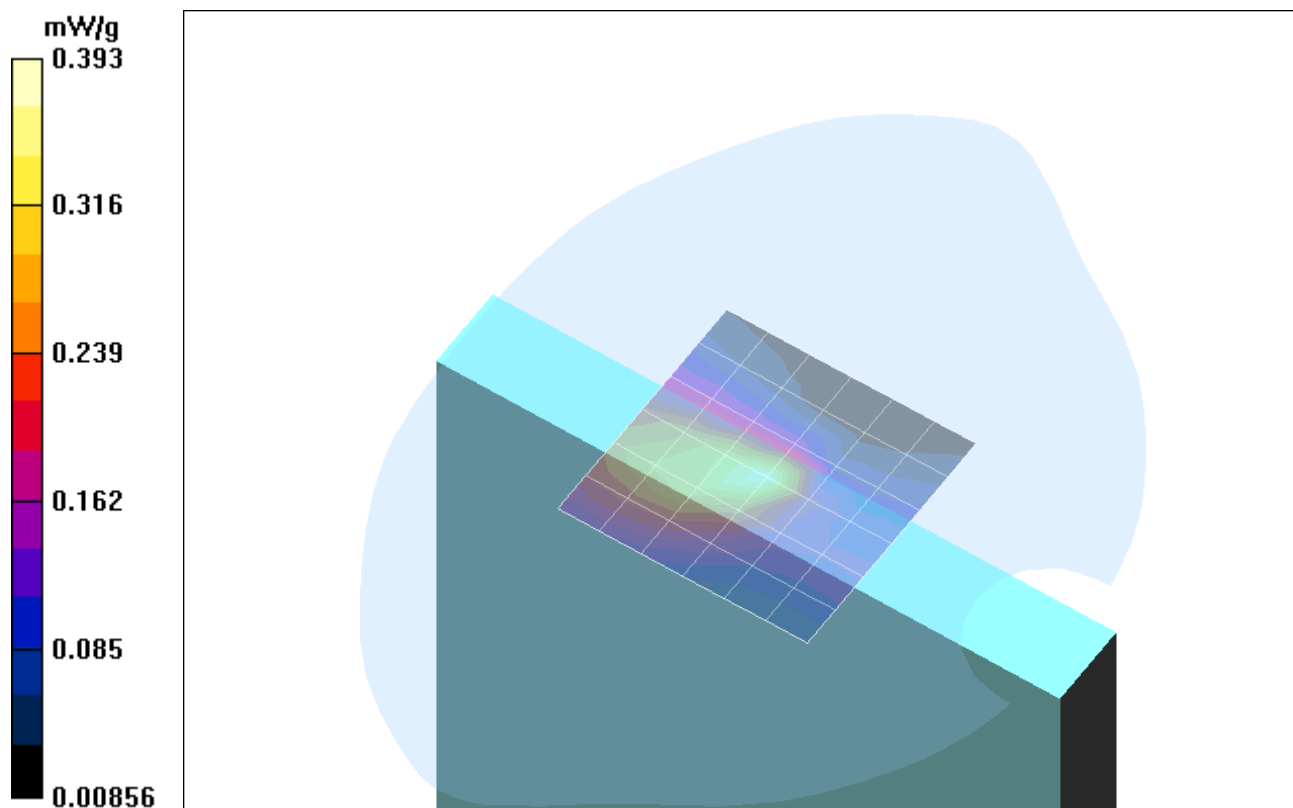


Fig. 3: SAR distribution for GSM 850, channel 190, DELL Latitude D505, position 3. (29.11.2004; Ambient Temperature: 21.1° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm_4_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.108 mW/g

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

Reference Value = 10.8 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.208 W/kg

SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.069 mW/g

Maximum value of SAR (measured) = 0.121 mW/g

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

Reference Value = 10.8 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.124 W/kg

SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.070 mW/g

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

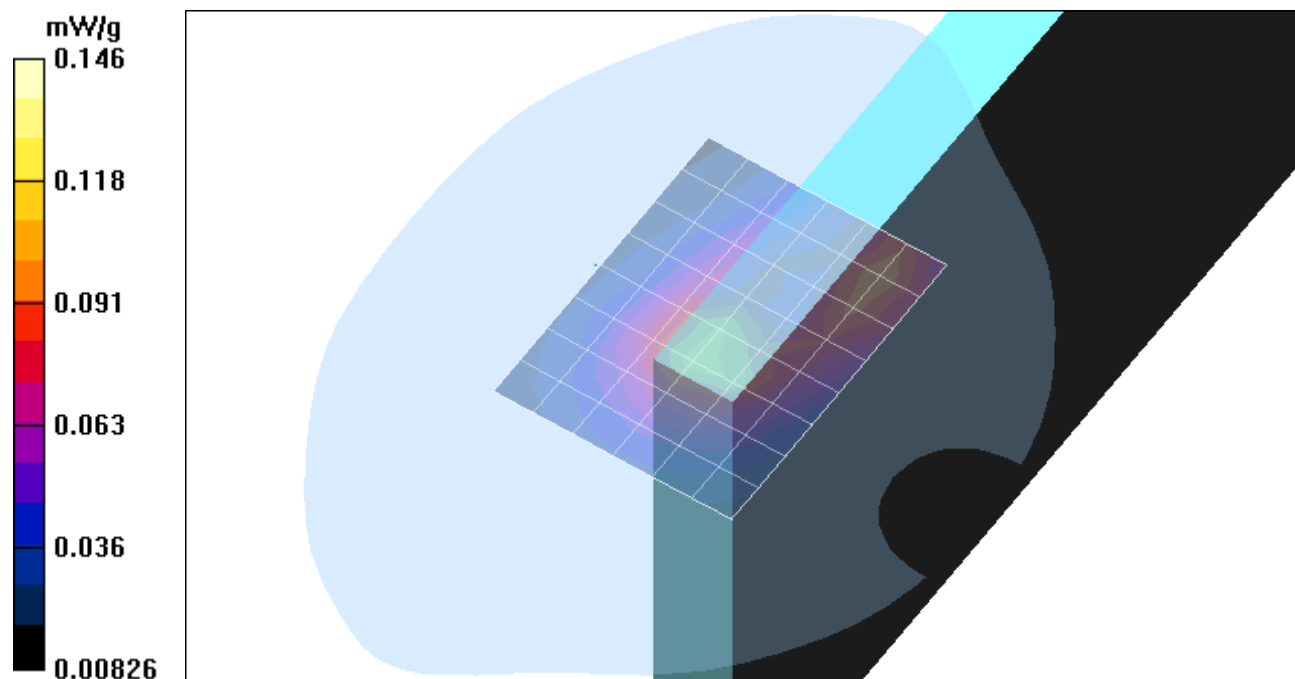


Fig. 4: SAR distribution for GSM 850, channel 190, DELL Latitude D505, position 4. (29.11.2004; Ambient Temperature: 21.10° C; Liquid Temperature: 20.4° C).

Test Laboratory: IMST GmbH; File Name: [Magbalm_5_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 5.65 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 0.053 W/kg

SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.017 mW/g

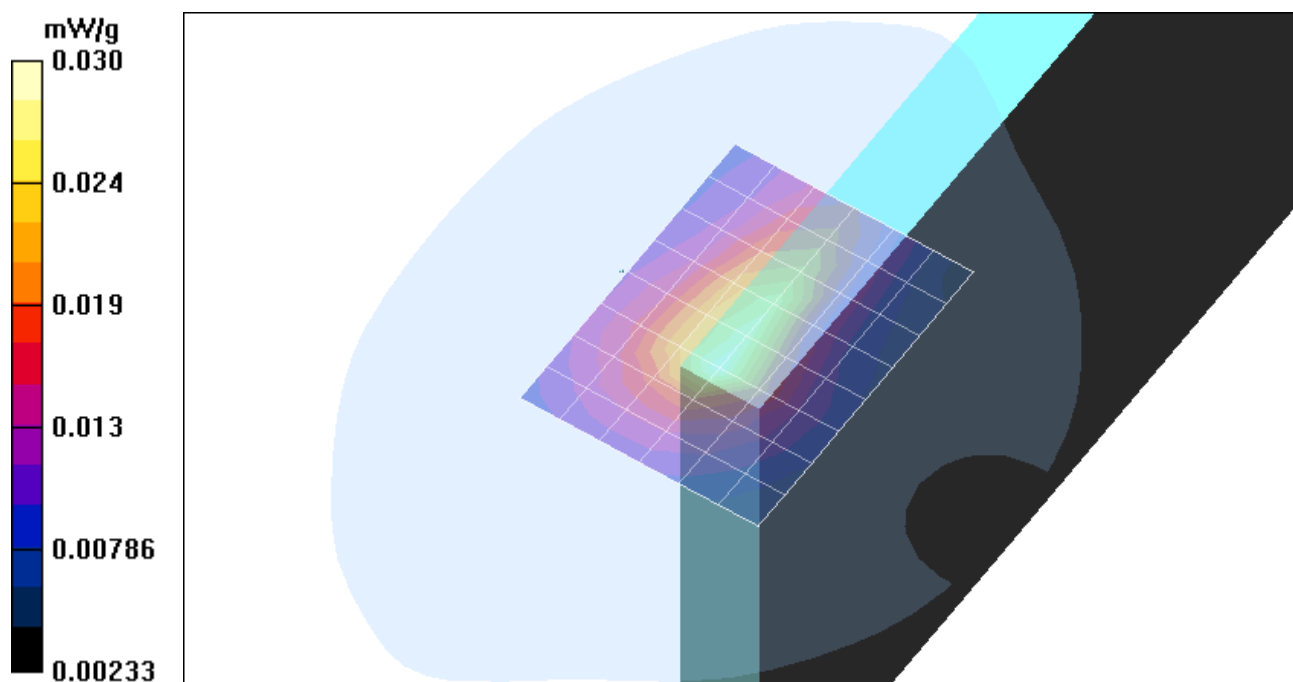


Fig. 5: SAR distribution for GSM 850, channel 190, DELL Latitude D505, position 5. (29.11.2004; Ambient Temperature: 21.0° C; Liquid Temperature: 20.4° C).

Test Laboratory: IMST GmbH; File Name: [Magbalm_1_PB.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.362 mW/g

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

Reference Value = 16.4 V/m; Power Drift = 0.146 dB

Peak SAR (extrapolated) = 0.707 W/kg

SAR(1 g) = 0.349 mW/g; SAR(10 g) = 0.229 mW/g

Maximum value of SAR (measured) = 0.371 mW/g

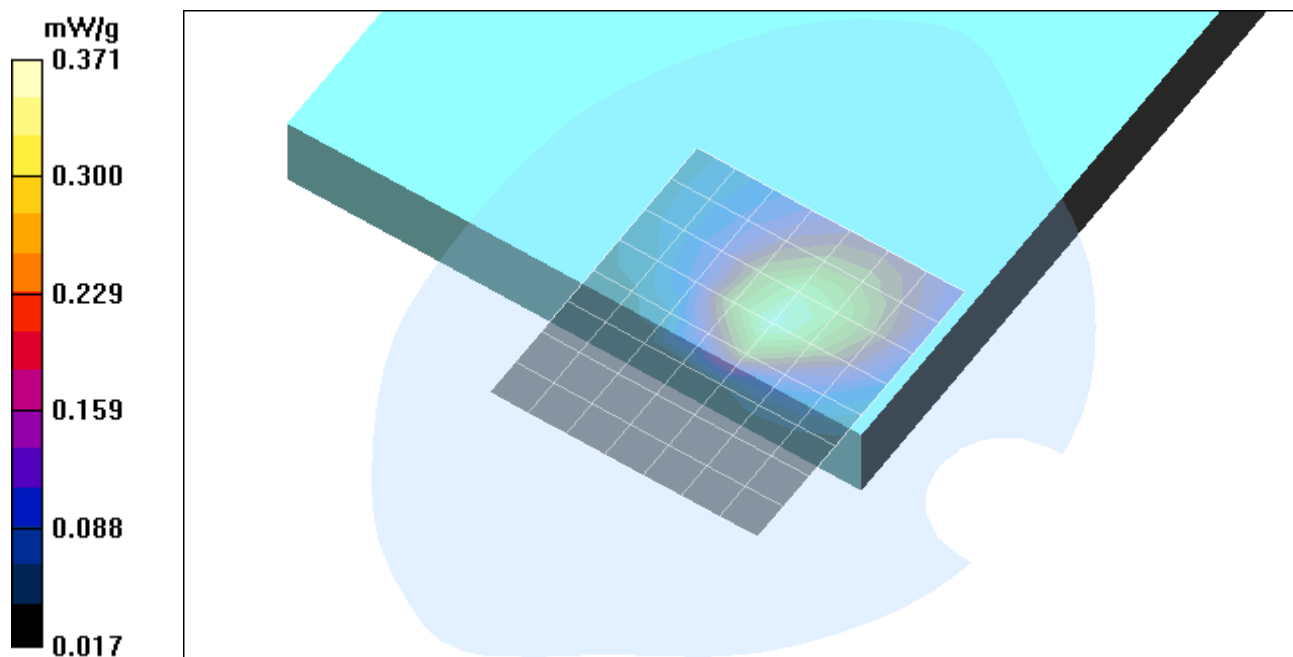


Fig. 6: SAR distribution for GSM 850, channel 190, Packard Bell Easy Note, position 1. (29.11.2004; Ambient Temperature: 21.2° C; Liquid Temperature: 20.6° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm 2_PB.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (9x10x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 16.2 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.447 W/kg

SAR(1 g) = 0.307 mW/g; SAR(10 g) = 0.202 mW/g

Maximum value of SAR (measured) = 0.331 mW/g

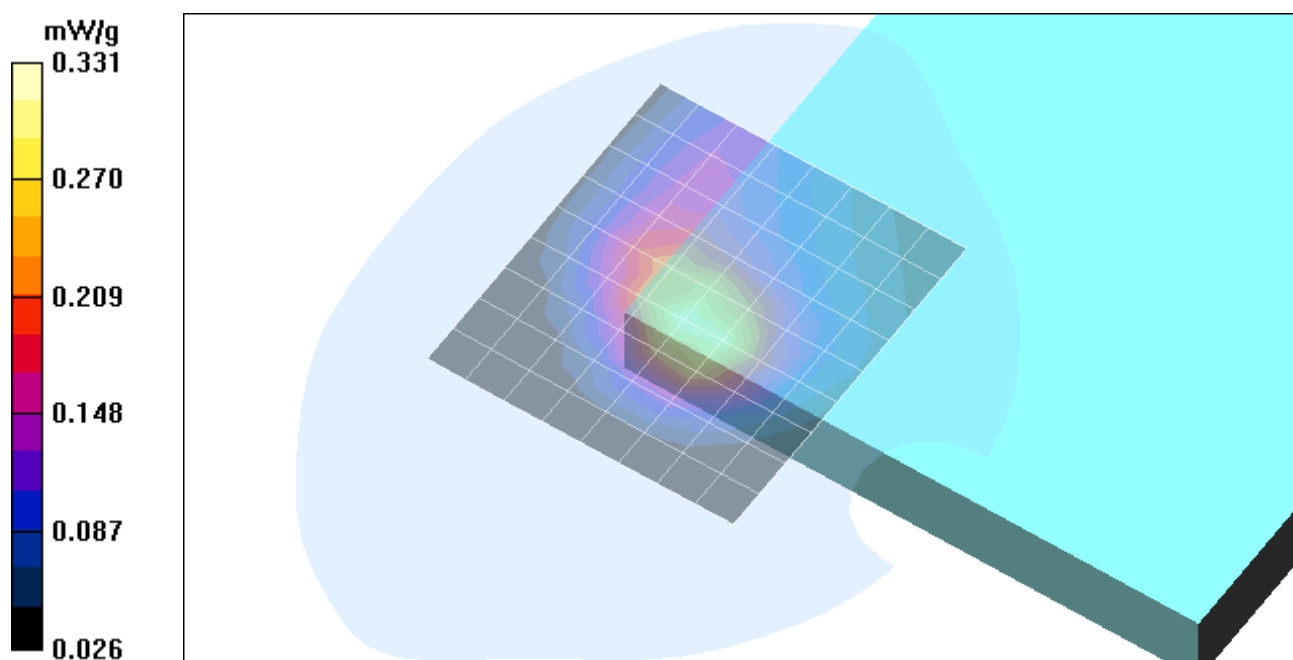


Fig. 7: SAR distribution for GSM 850, channel 190, Packard Bell Easy Note, position 2. (29.11.2004; Ambient Temperature: 21.3° C; Liquid Temperature: 20.6° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm_3_PB.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 19.2 V/m; Power Drift = -0.048 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.378 mW/g; SAR(10 g) = 0.198 mW/g

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

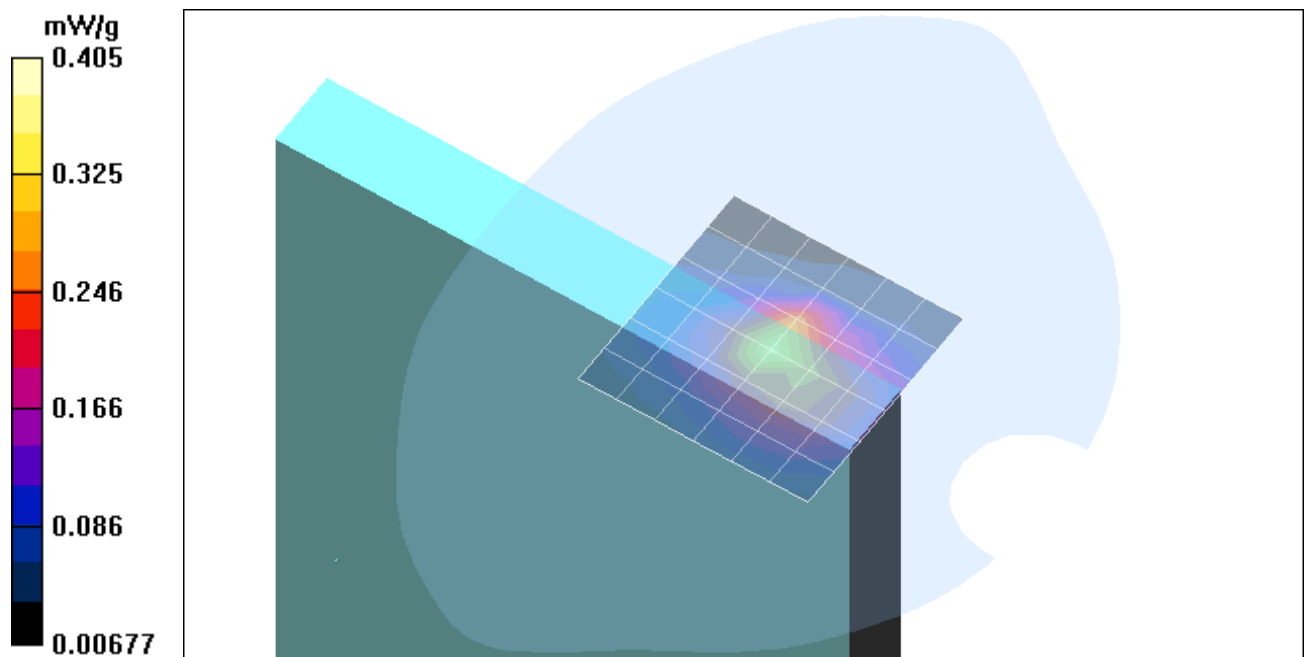


Fig. 8: SAR distribution for PCS GSM 850, channel 190, Packard Bell Easy Note, position 3. (29.11.2004; Ambient Temperature: 21.2° C; Liquid Temperature: 20.6° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm_4_PB.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 5.02 V/m; Power Drift = 0.151 dB

Peak SAR (extrapolated) = 0.054 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.019 mW/g

Maximum value of SAR (measured) = 0.033 mW/g

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

Reference Value = 5.02 V/m; Power Drift = 0.151 dB

Peak SAR (extrapolated) = 0.046 W/kg

SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.015 mW/g

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

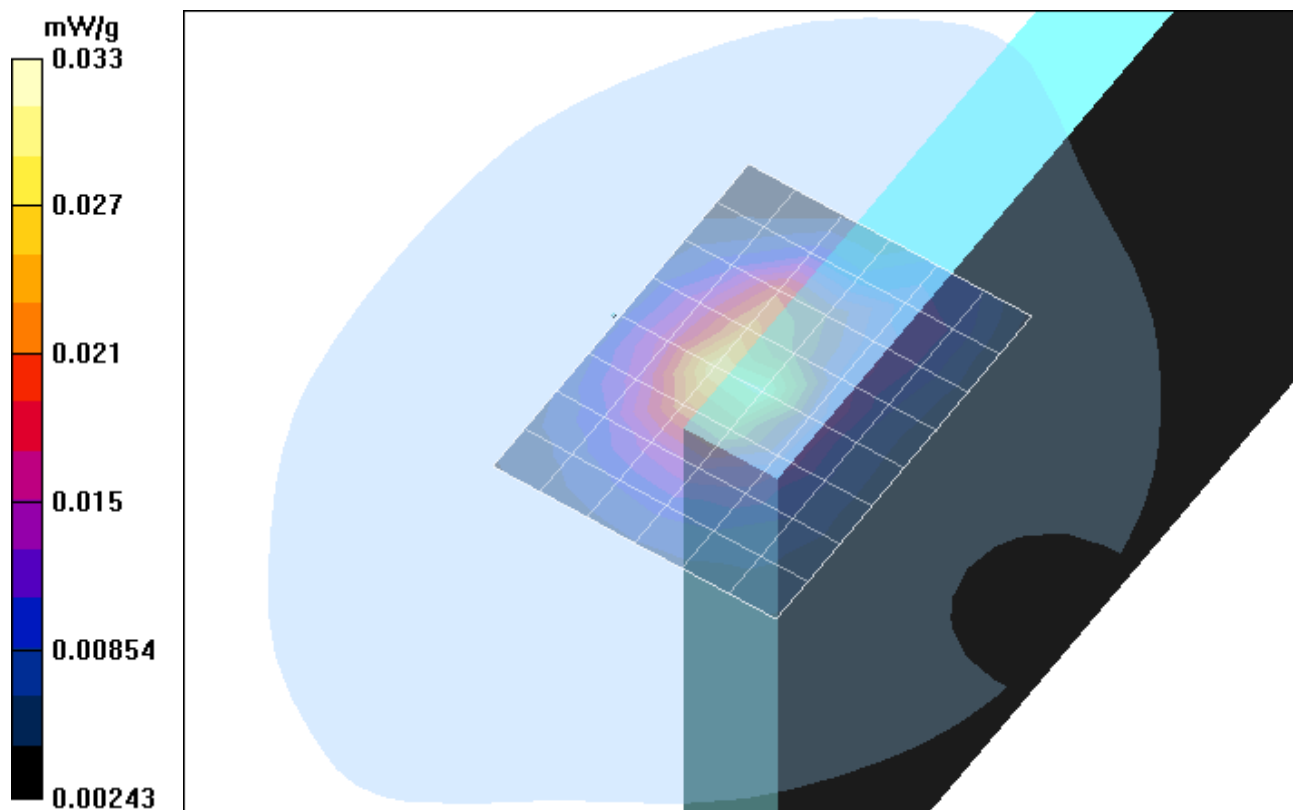


Fig. 9: SAR distribution for GSM 850, channel 190, Packard Bell Easy Note, position 4. (29.11.2004; Ambient Temperature: 21.2° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm_5_PB.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.317 mW/g

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

Reference Value = 17.3 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.694 W/kg

SAR(1 g) = 0.300 mW/g; SAR(10 g) = 0.161 mW/g

Maximum value of SAR (measured) = 0.342 mW/g

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

Reference Value = 17.3 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.400 W/kg

SAR(1 g) = 0.197 mW/g; SAR(10 g) = 0.114 mW/g

Maximum value of SAR (measured) = 0.214 mW/g

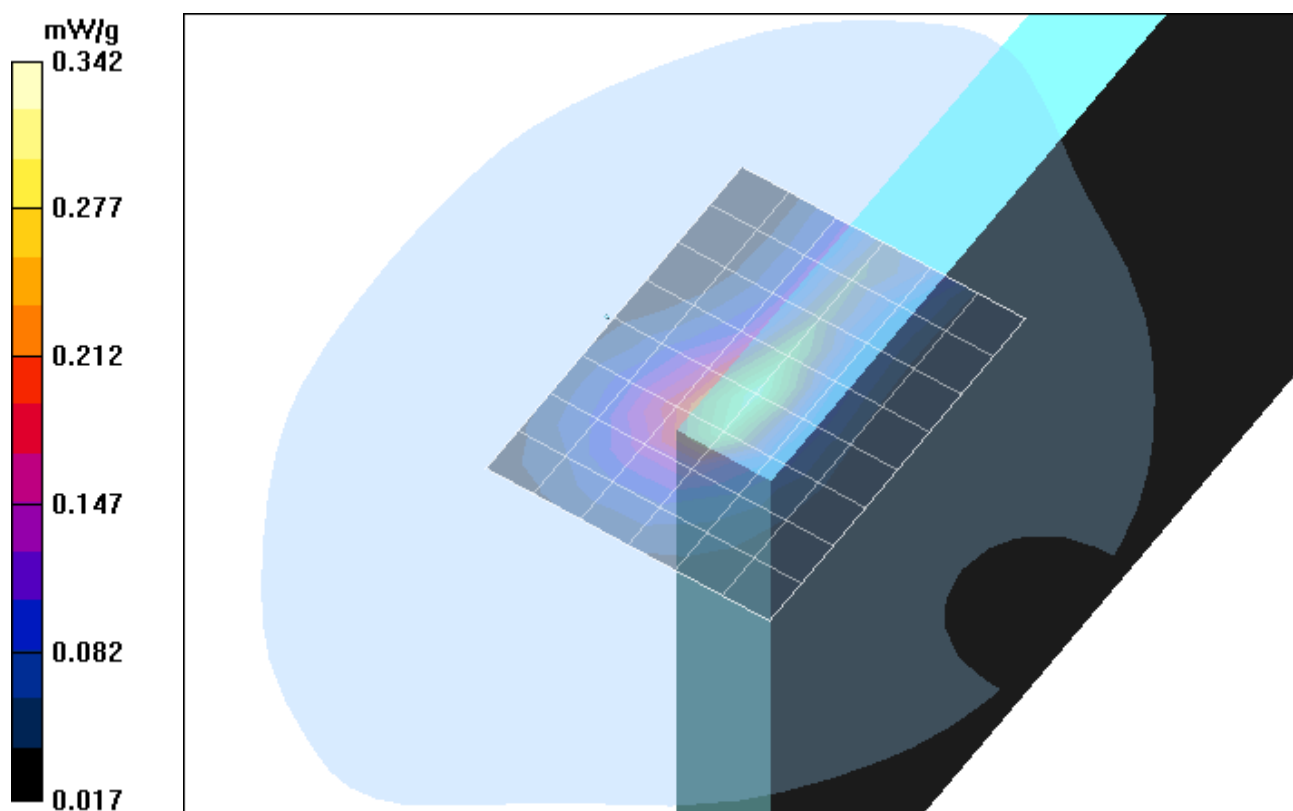


Fig. 10: SAR distribution for GSM 850, channel 190, Packard Bell Easy Note, position 5. (29.11.2004; Ambient Temperature: 21.2° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm_1_acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (8x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.758 mW/g

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

Reference Value = 20.5 V/m; Power Drift = 0.006 dB

Peak SAR (extrapolated) = 1.5 W/kg

SAR(1 g) = 0.772 mW/g; SAR(10 g) = 0.497 mW/g

Maximum value of SAR (measured) = 0.820 mW/g

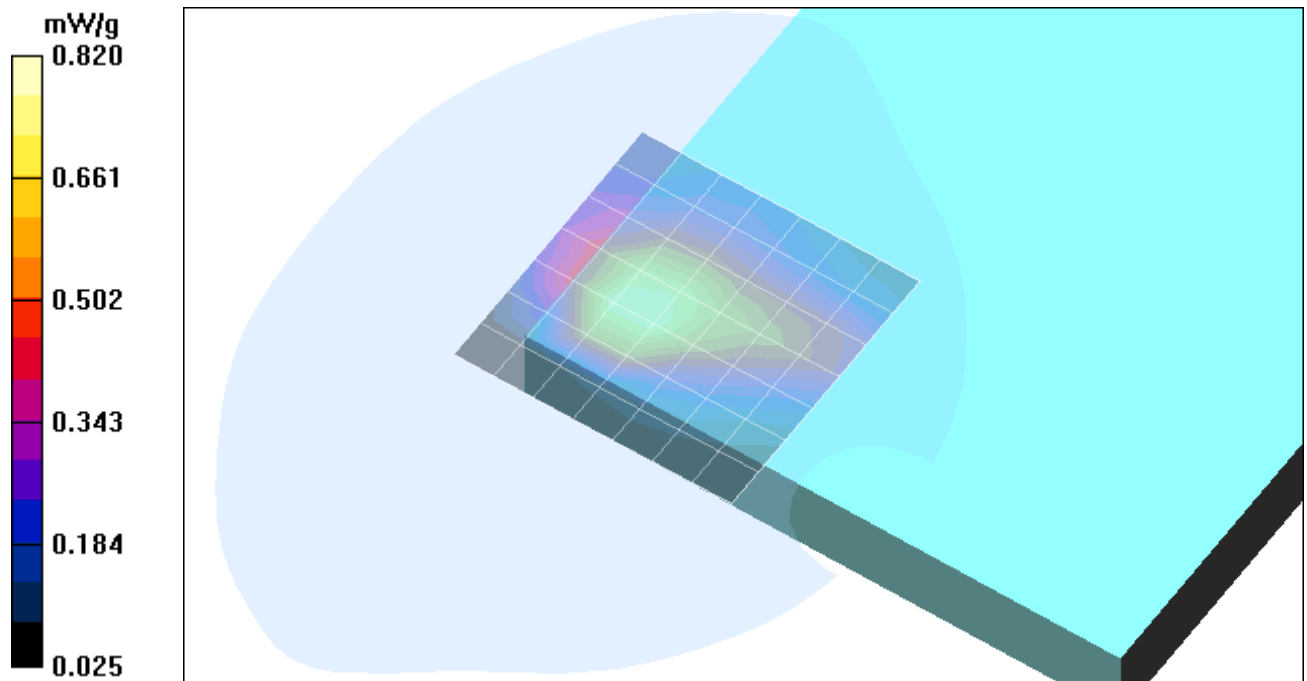


Fig. 11: SAR distribution for GSM 850, channel 190, Acer Aspire 2020, position 1. (29.11.2004; Ambient Temperature: 21.1° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm 2_Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.587 mW/g

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

Reference Value = 23.8 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 0.874 W/kg

SAR(1 g) = 0.577 mW/g; SAR(10 g) = 0.369 mW/g

Maximum value of SAR (measured) = 0.625 mW/g

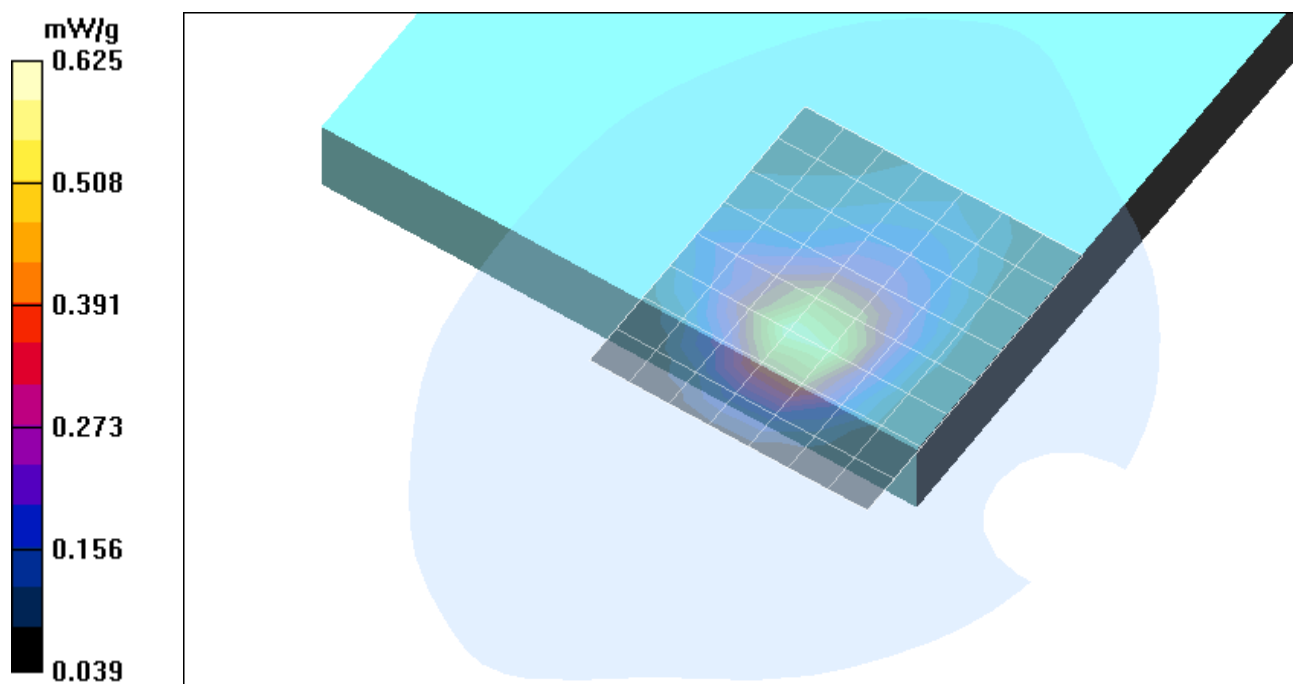


Fig. 12: SAR distribution for GSM 850, channel 190, Acer Aspire 2020, position 2. (29.11.2004; Ambient Temperature: 21.3° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm 3 Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.452 mW/g

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

Reference Value = 22.1 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.428 mW/g; SAR(10 g) = 0.232 mW/g

Maximum value of SAR (measured) = 0.451 mW/g

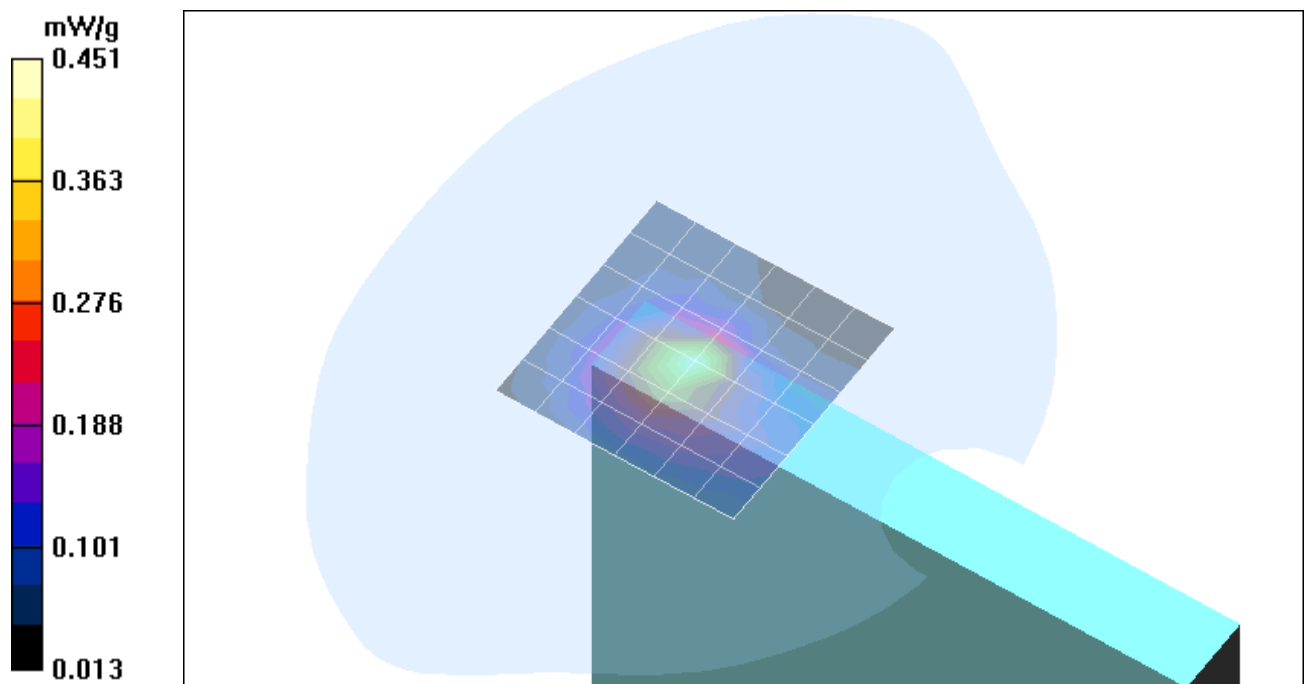


Fig. 13: SAR distribution for GSM 850, channel 190, Acer Aspire 2020, position 3. (29.11.2004; Ambient Temperature: 21.4° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm_4_Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 18.7 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.775 W/kg

SAR(1 g) = 0.431 mW/g; SAR(10 g) = 0.259 mW/g

Maximum value of SAR (measured) = 0.465 mW/g

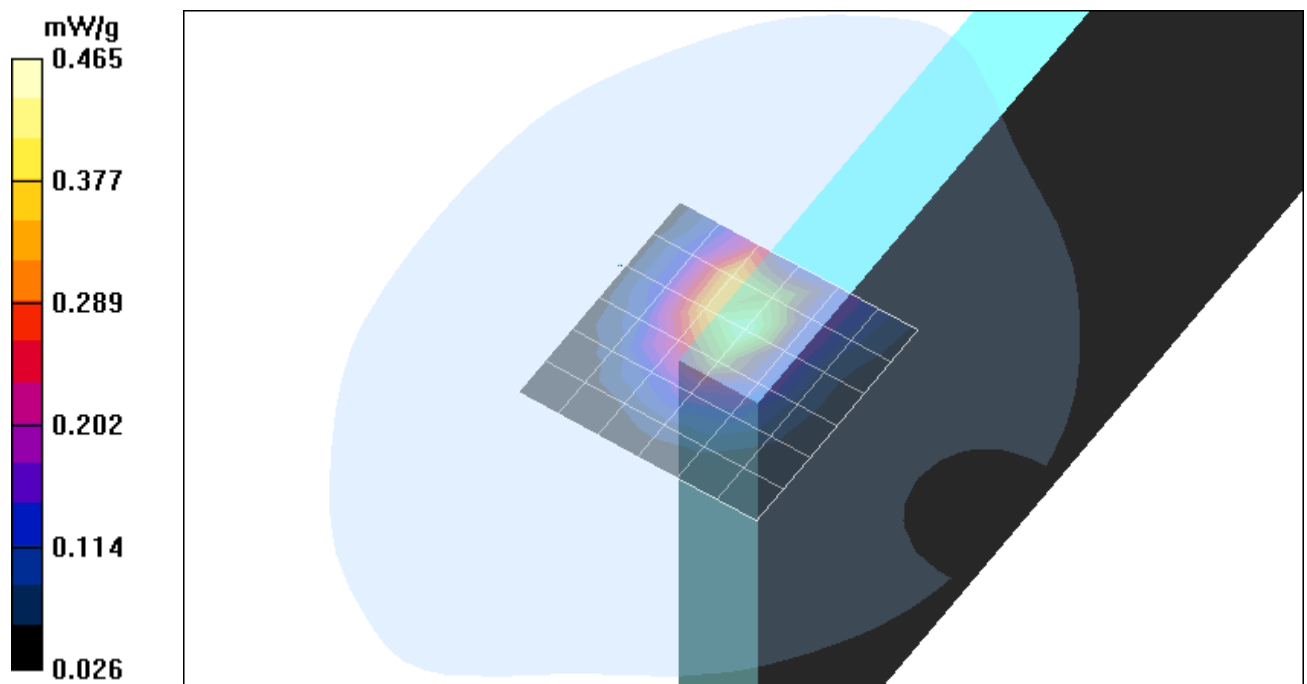


Fig. 14: SAR distribution for GSM 850, channel 190, Acer Aspire 2020, position 4. (29.11.2004; Ambient Temperature: 21.5° C; Liquid Temperature: 20.6° C).

Test Laboratory: IMST GmbH; **File Name:** [Magbalm 5 Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.01$; mho/m, $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(6.46, 6.46, 6.46); Calibrated: 01.09.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2004
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.3 Build 16; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 7.33 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 0.216 W/kg

SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.057 mW/g

Maximum value of SAR (measured) = 0.111 mW/g

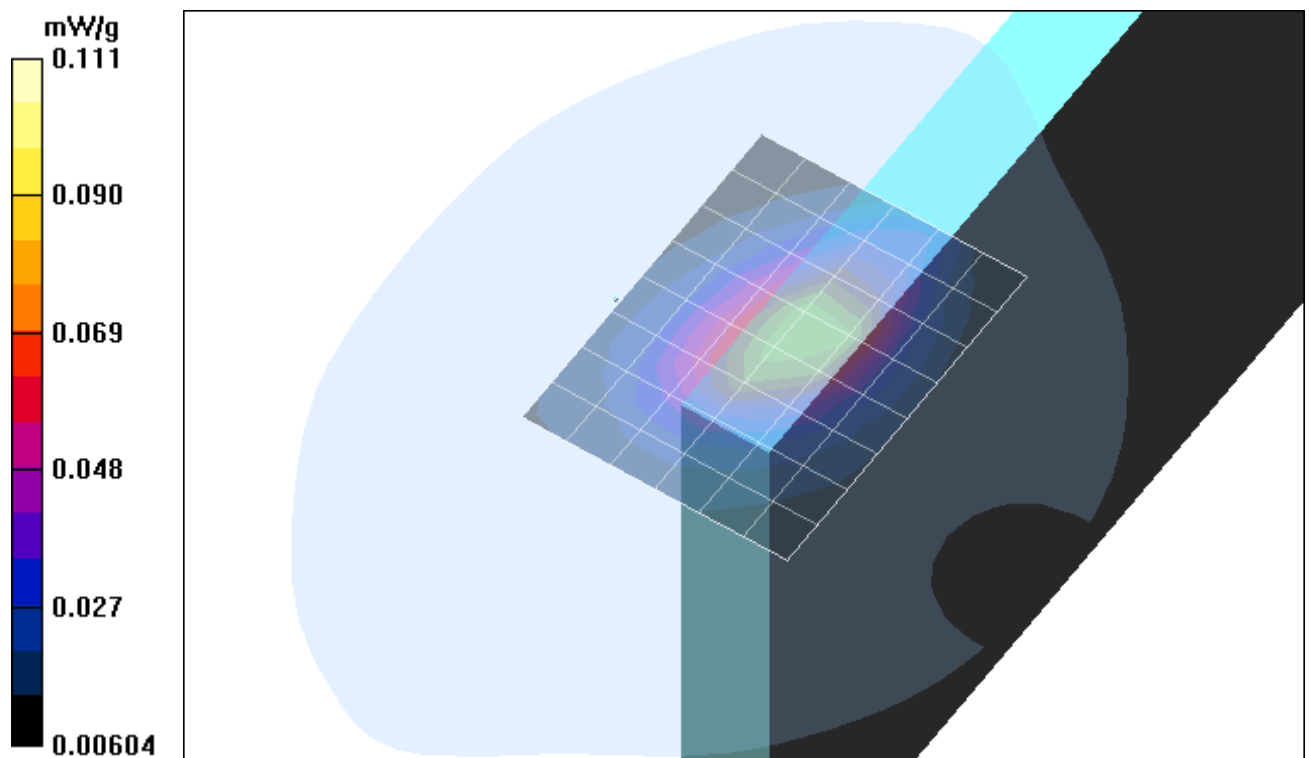


Fig. 15: SAR distribution for PCS 1900, channel 661, Acer Aspire 2020, position 5. (29.11.2004; Ambient Temperature: 21.6° C; Liquid Temperature: 20.6° C).

2 SAR Distribution Plots, GSM 1900 Body

Test Laboratory: IMST GmbH; File Name: [magyphm_1_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (9x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.099 mW/g

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

Reference Value = 5.47 V/m; Power Drift = -0.2 dB

Peak SAR (extrapolated) = 0.175 W/kg

SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.046 mW/g

Maximum value of SAR (measured) = 0.118 mW/g

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

Reference Value = 5.47 V/m; Power Drift = -0.2 dB

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

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

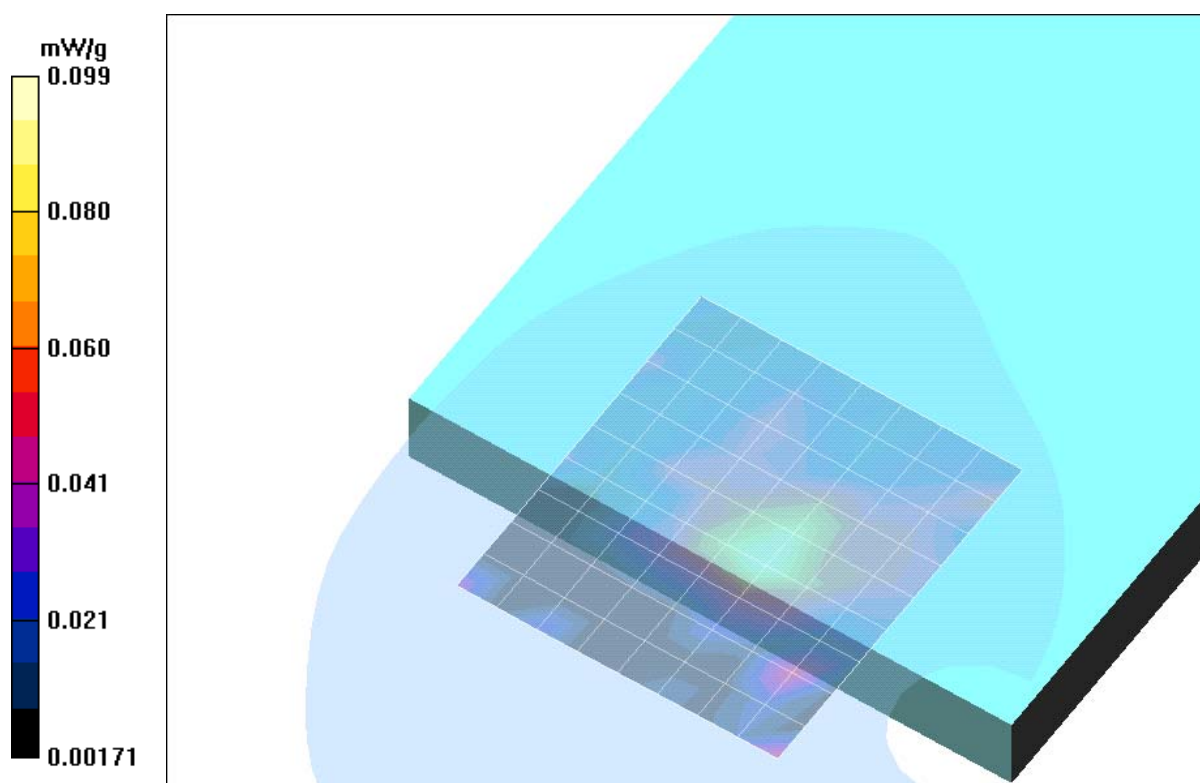


Fig. 16: SAR distribution for PCS 1900, channel 661, DELL Latitude D505, position 1. (01.12.2004; Ambient Temperature: 21.5° C; Liquid Temperature: 20.5° C).

Test Laboratory: IMST GmbH; File Name: [magyphm_2_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.119 mW/g

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

Reference Value = 5.26 V/m; Power Drift = -0.141 dB

Peak SAR (extrapolated) = 106.8 W/kg

SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.050 mW/g

Maximum value of SAR (measured) = 0.160 mW/g

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

Reference Value = 5.26 V/m; Power Drift = -0.141 dB

SAR(1 g) = 0.093 mW/g; SAR(10 g) = 0.048 mW/g

Maximum value of SAR (measured) = 0.141 mW/g

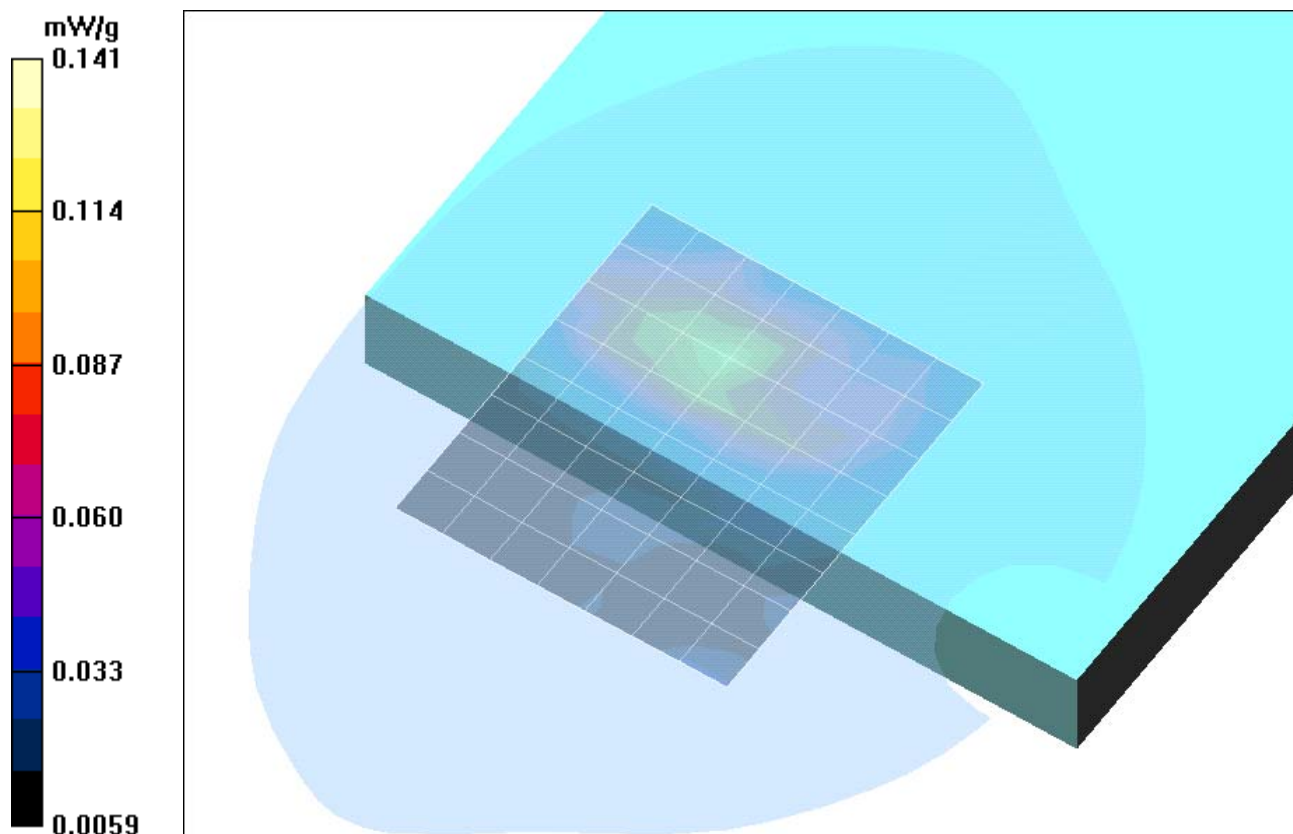


Fig. 17: SAR distribution for PCS 1900, channel 661, DELL Latitude D505, position 2. (01.12.2004; Ambient Temperature: 21.4° C; Liquid Temperature: 20.2° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm_3_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 5.53 V/m; Power Drift = 0.082 dB

Peak SAR (extrapolated) = 0.768 W/kg

SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.030 mW/g

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

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

Reference Value = 5.53 V/m; Power Drift = 0.082 dB

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

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

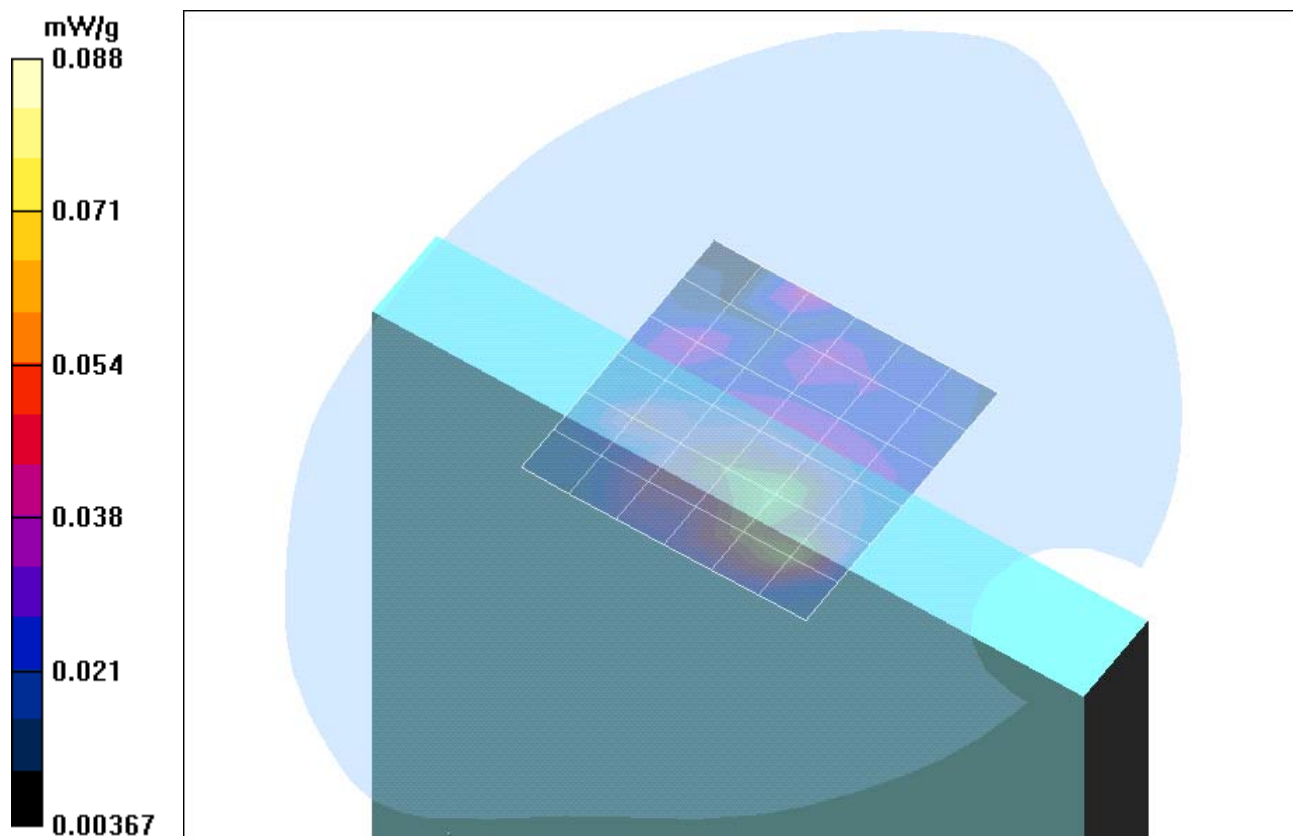


Fig. 18: SAR distribution for PCS 1900, channel 661, DELL Latitude D505, position 3. (01.12.2004; Ambient Temperature: 21.4° C; Liquid Temperature: 20.3° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm_4_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.049 mW/g

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

Reference Value = 5.23 V/m; Power Drift = 0.040 dB

Peak SAR (extrapolated) = 1325259.3 W/kg

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

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

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

Reference Value = 5.23 V/m; Power Drift = 0.040 dB

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.010 mW/g

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

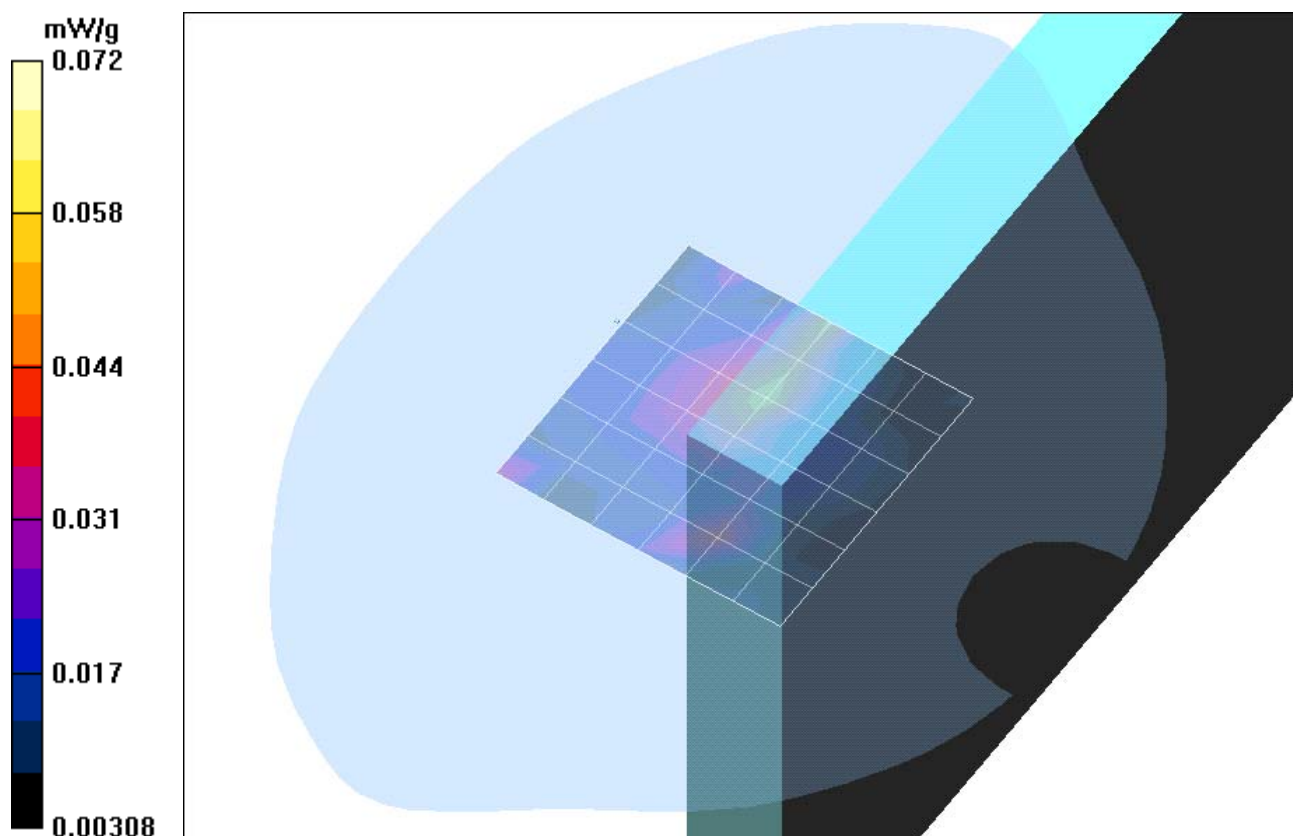


Fig. 19: SAR distribution for PCS 1900, channel 661, DELL Latitude D505, position 4. (01.12.2004; Ambient Temperature: 21.3° C; Liquid Temperature: 20.3° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm_5_dell.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 4.77 V/m; Power Drift = -0.163 dB

Peak SAR (extrapolated) = 109342.1 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.012 mW/g

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

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

Reference Value = 4.77 V/m; Power Drift = -0.163 dB

SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.010 mW/g

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

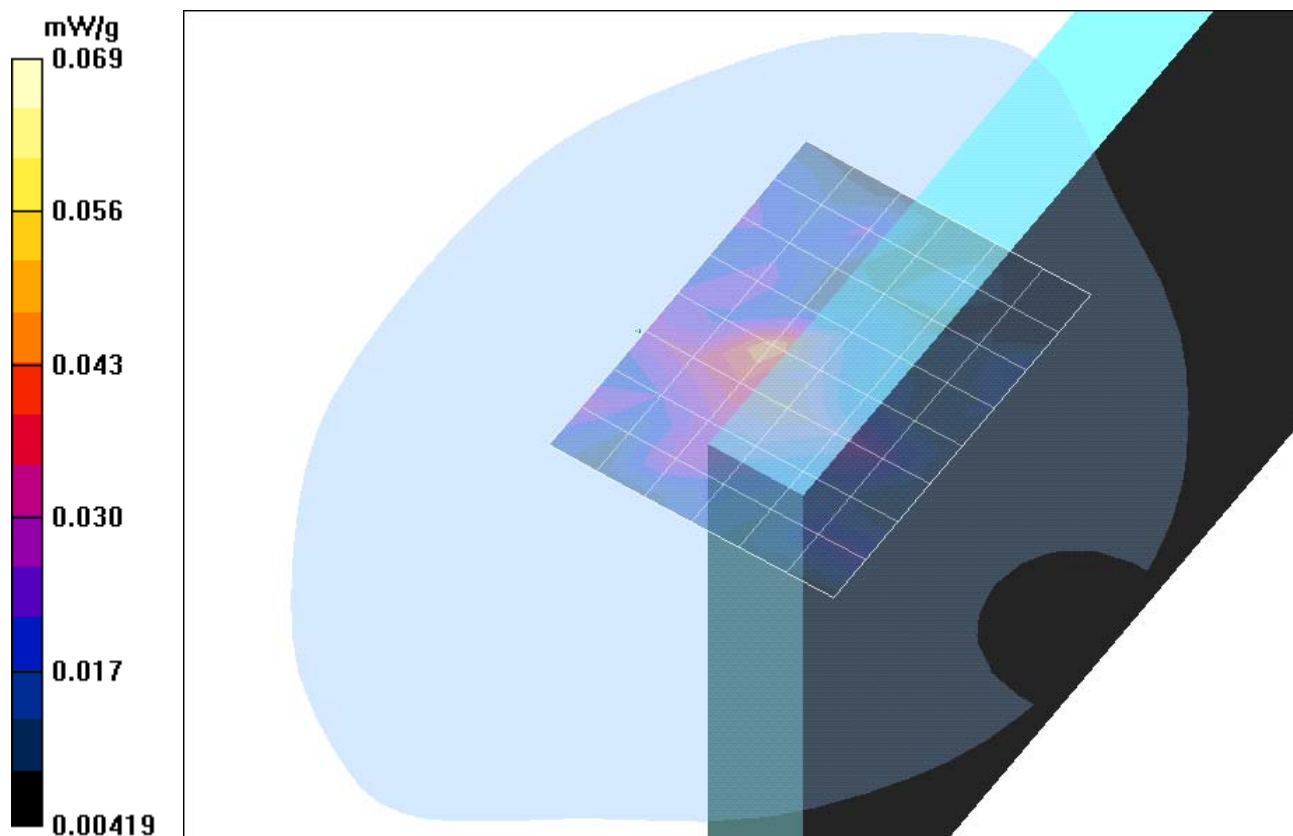


Fig. 20: SAR distribution for PCS 1900, channel 661, DELL Latitude D505, position 5. (01.12.2004; Ambient Temperature: 21.4° C; Liquid Temperature: 20.4° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm 1 PB.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

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

- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (9x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.113 mW/g

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

Reference Value = 5.12 V/m; Power Drift = -0.136 dB

Peak SAR (extrapolated) = 0.151 W/kg

SAR(1 g) = 0.083 mW/g; SAR(10 g) = 0.042 mW/g

Maximum value of SAR (measured) = 0.121 mW/g

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

Reference Value = 5.12 V/m; Power Drift = -0.136 dB

Peak SAR (extrapolated) = 11386.5 W/kg

SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.00989 mW/g

Maximum value of SAR (measured) = 0.053 mW/g

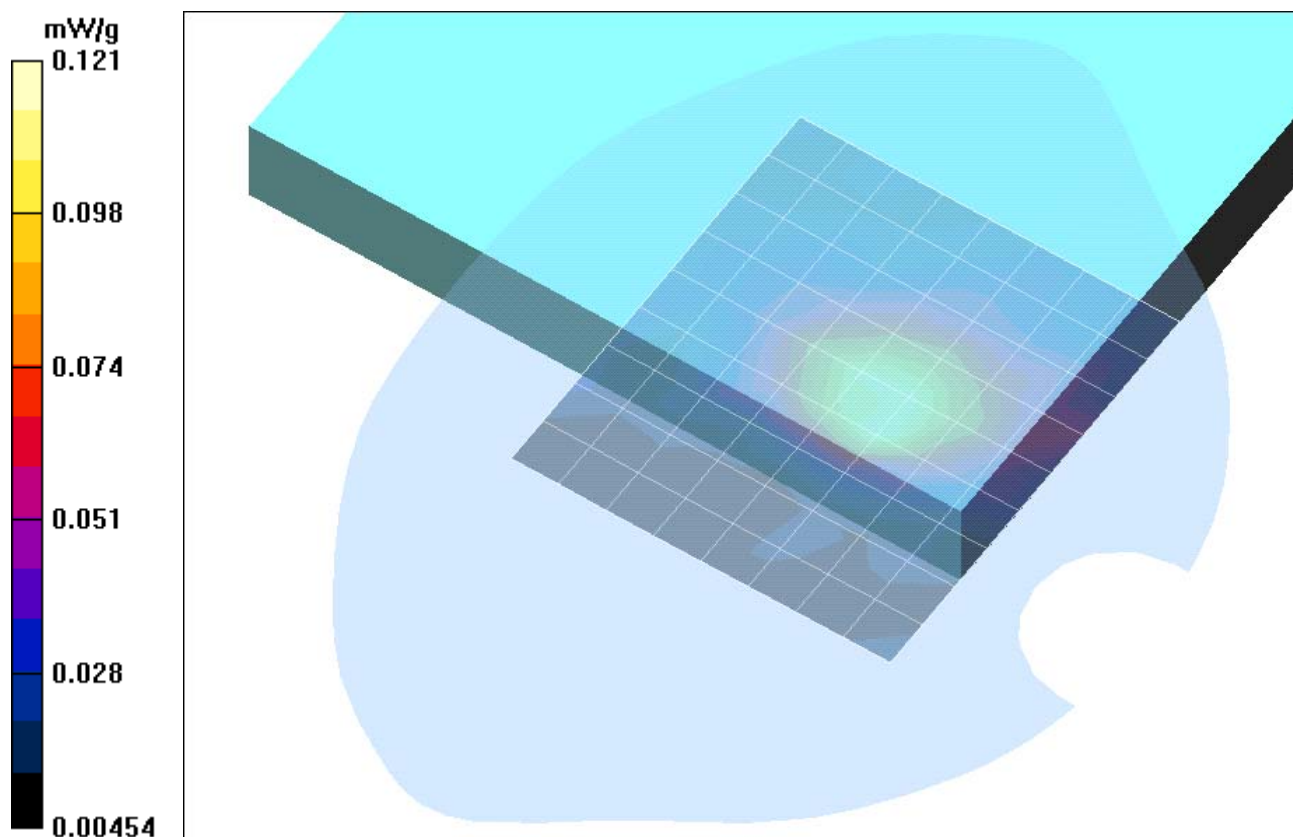


Fig. 21: SAR distribution for PCS 1900, channel 661, Packard Bell Easy Note, position 1. (01.12.2004; Ambient Temperature: 21.1° C; Liquid Temperature: 20.2° C).

Test Laboratory: IMST GmbH; **File Name:** [magvphm_2_pb.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

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

- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.154 mW/g

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

Reference Value = 7.06 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 35.2 W/kg

SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.072 mW/g

Maximum value of SAR (measured) = 0.179 mW/g

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

Reference Value = 7.06 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.280 W/kg

SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.051 mW/g

Maximum value of SAR (measured) = 0.142 mW/g

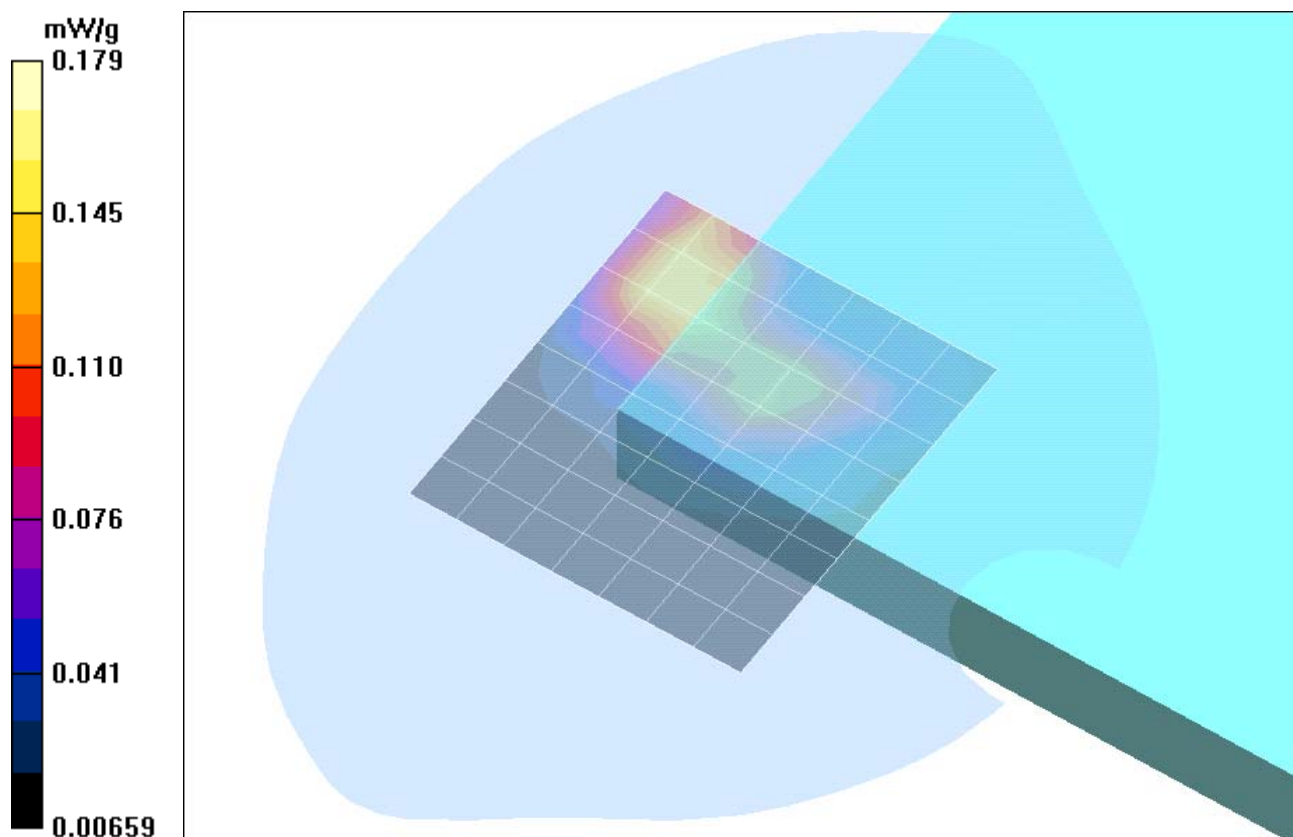


Fig. 22: SAR distribution for PCS 1900, channel 661, Packard Bell Easy Note, position 2. (01.12.2004; Ambient Temperature: 21.0° C; Liquid Temperature: 20.2° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm_3_pb.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

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

- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 4.93 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 20 W/kg

SAR(1 g) = 0.061 mW/g; SAR(10 g) = 0.032 mW/g

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

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

Reference Value = 4.93 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.133 W/kg

SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.036 mW/g

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

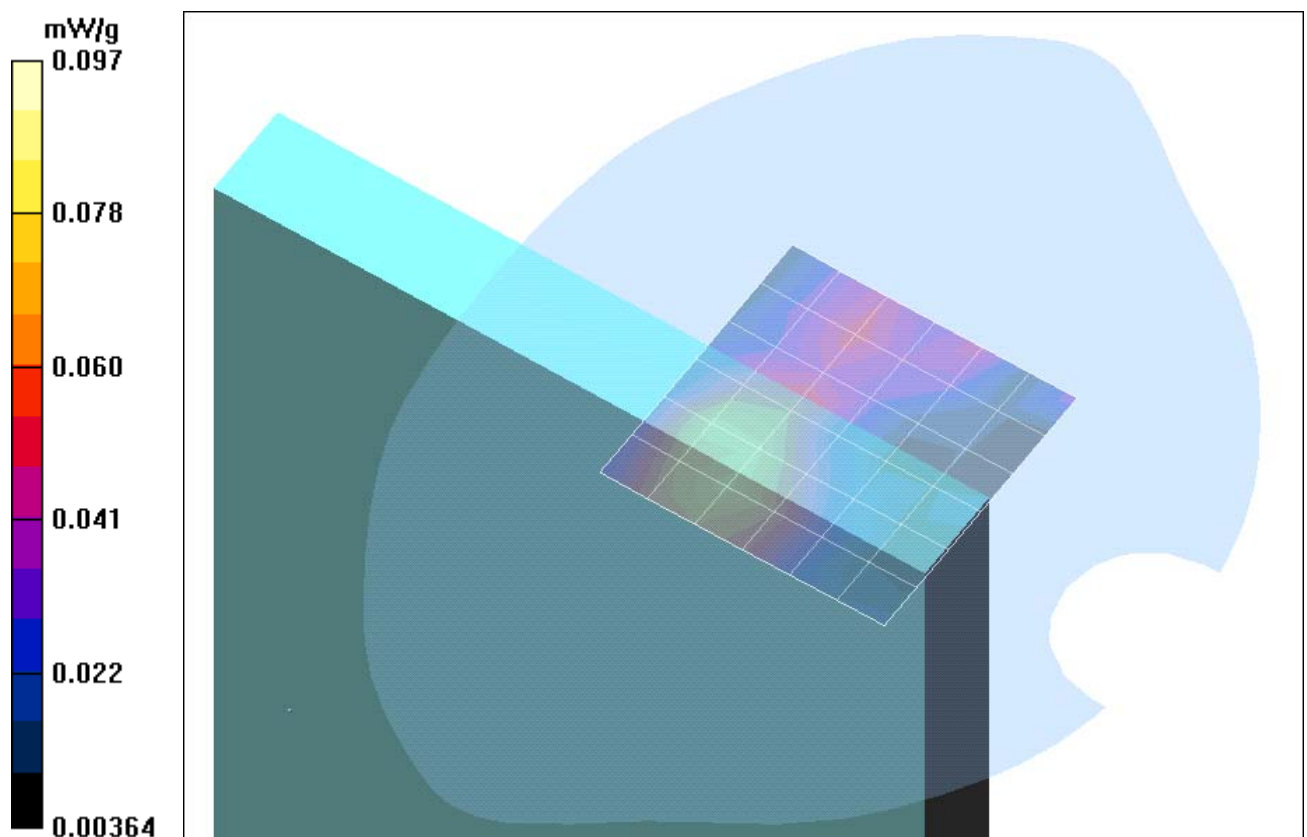


Fig. 23: SAR distribution for PCS 1900, channel 661, Packard Bell Easy Note, position 3. (01.12.2004; Ambient Temperature: 21.1° C; Liquid Temperature: 20.2° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm_4_pb.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

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

- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 4.22 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 455.0 W/kg

SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.018 mW/g

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

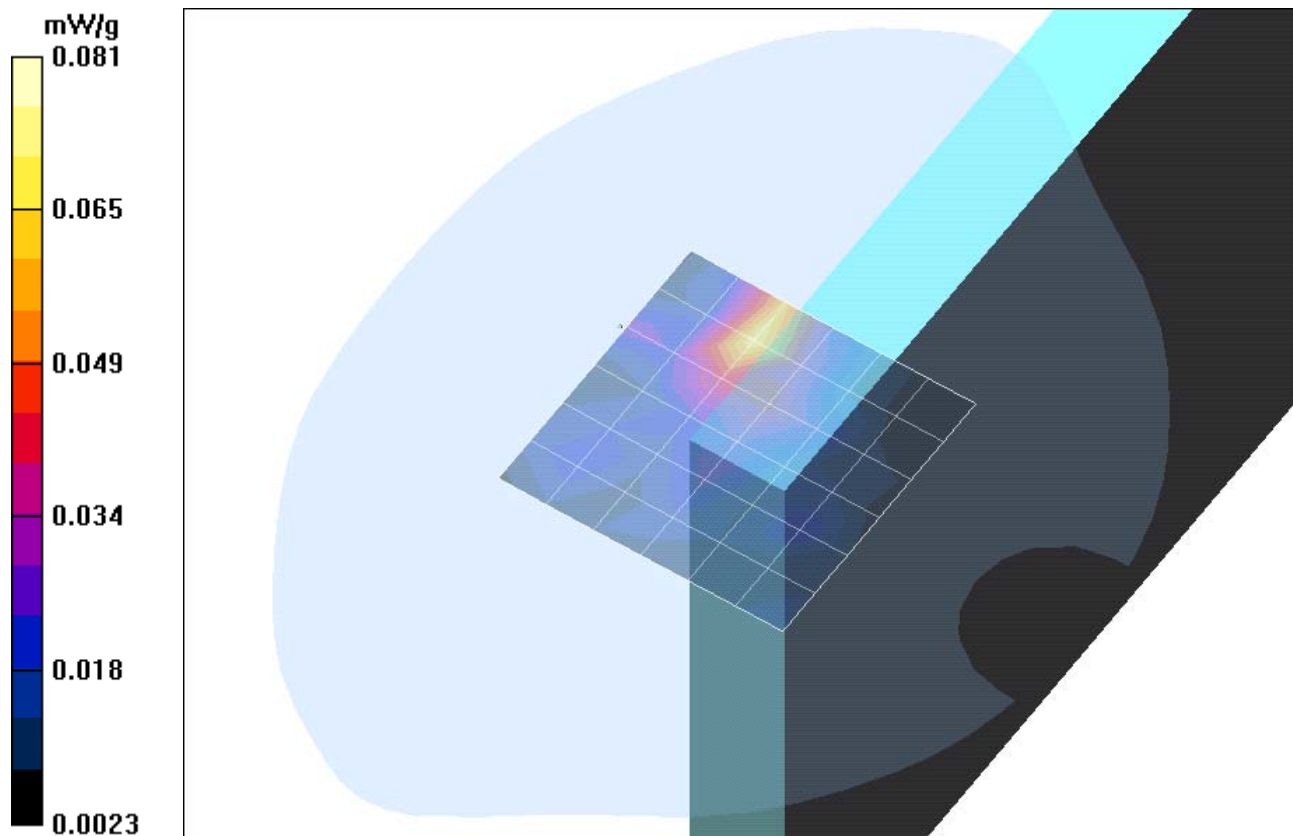


Fig. 24: SAR distribution for PCS 1900, channel 661, Packard Bell Easy Note, position 4. (01.12.2004; Ambient Temperature: 21.0° C; Liquid Temperature: 20.0° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm 5 PB.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.267 mW/g

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

Reference Value = 6.18 V/m; Power Drift = 0.092 dB

Peak SAR (extrapolated) = 0.554 W/kg

SAR(1 g) = 0.170 mW/g; SAR(10 g) = 0.097 mW/g

Maximum value of SAR (measured) = 0.305 mW/g

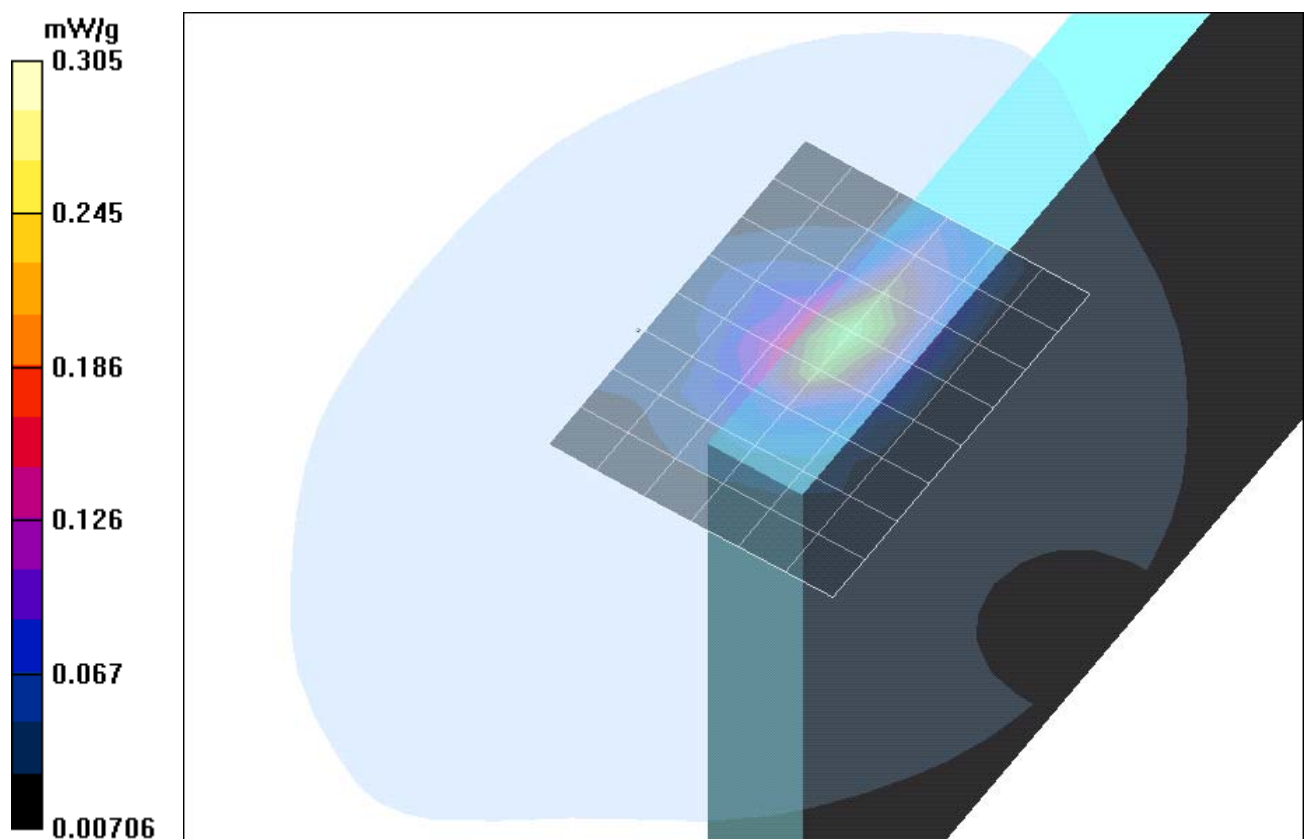


Fig. 25: SAR distribution for PCS 1900, channel 661, Packard Bell Easy Note, position 5. (01.12.2004; Ambient Temperature: 21.2° C; Liquid Temperature: 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm 1 Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

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

- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (9x10x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 3.85 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 0.179 W/kg

SAR(1 g) = 0.090 mW/g; SAR(10 g) = 0.056 mW/g

Maximum value of SAR (measured) = 0.134 mW/g

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

Reference Value = 3.85 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 9953.9 W/kg

SAR(1 g) = 0.061 mW/g; SAR(10 g) = 0.033 mW/g

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

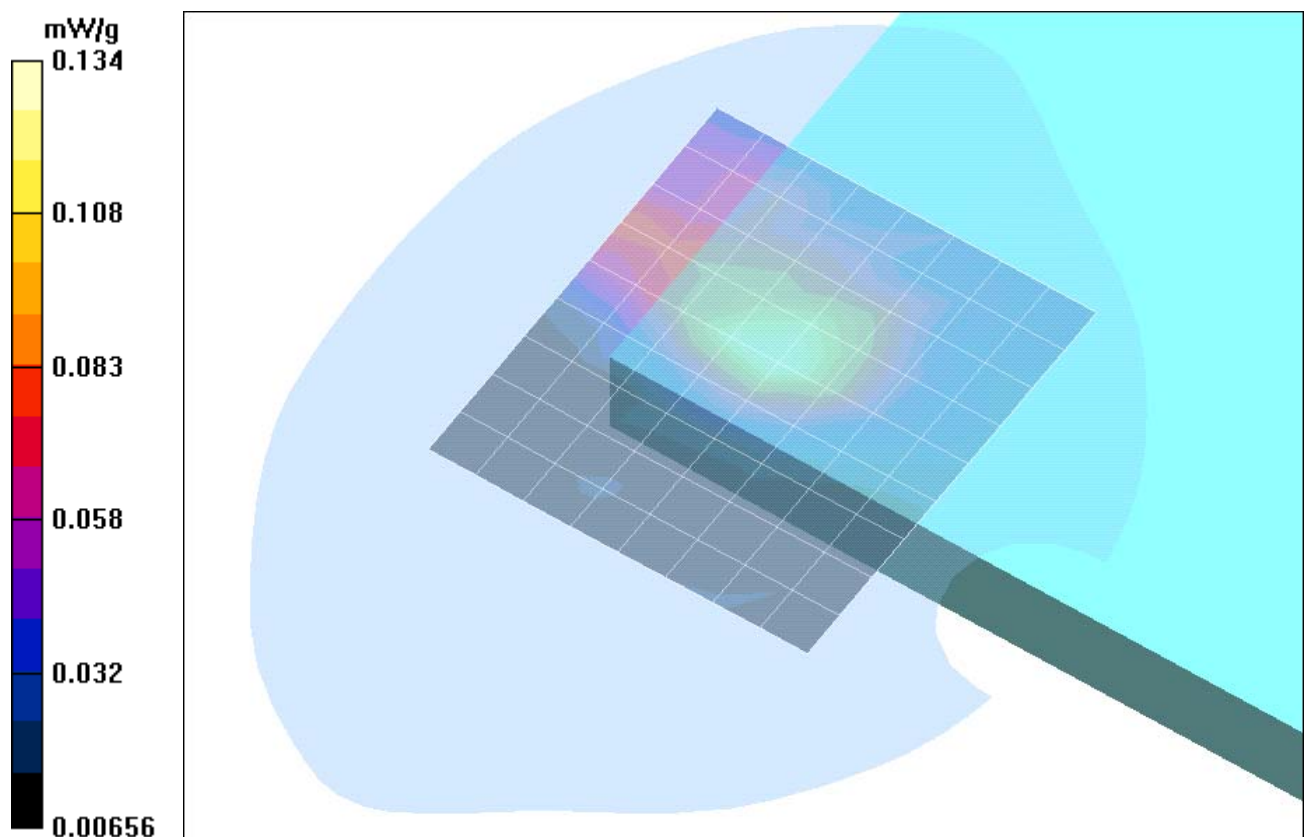


Fig. 26: SAR distribution for PCS 1900, channel 661, Acer Aspire 2020, position 1. (01.12.2004; Ambient Temperature: 21.1° C; Liquid Temperature: 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [magyphm 2 Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

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

- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.186 mW/g

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

Reference Value = 6.62 V/m; Power Drift = -0.193 dB

Peak SAR (extrapolated) = 0.261 W/kg

SAR(1 g) = 0.128 mW/g; SAR(10 g) = 0.072 mW/g

Maximum value of SAR (measured) = 0.195 mW/g

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

Reference Value = 6.62 V/m; Power Drift = -0.193 dB

Peak SAR (extrapolated) = 0.219 W/kg

SAR(1 g) = 0.091 mW/g; SAR(10 g) = 0.055 mW/g

Maximum value of SAR (measured) = 0.135 mW/g

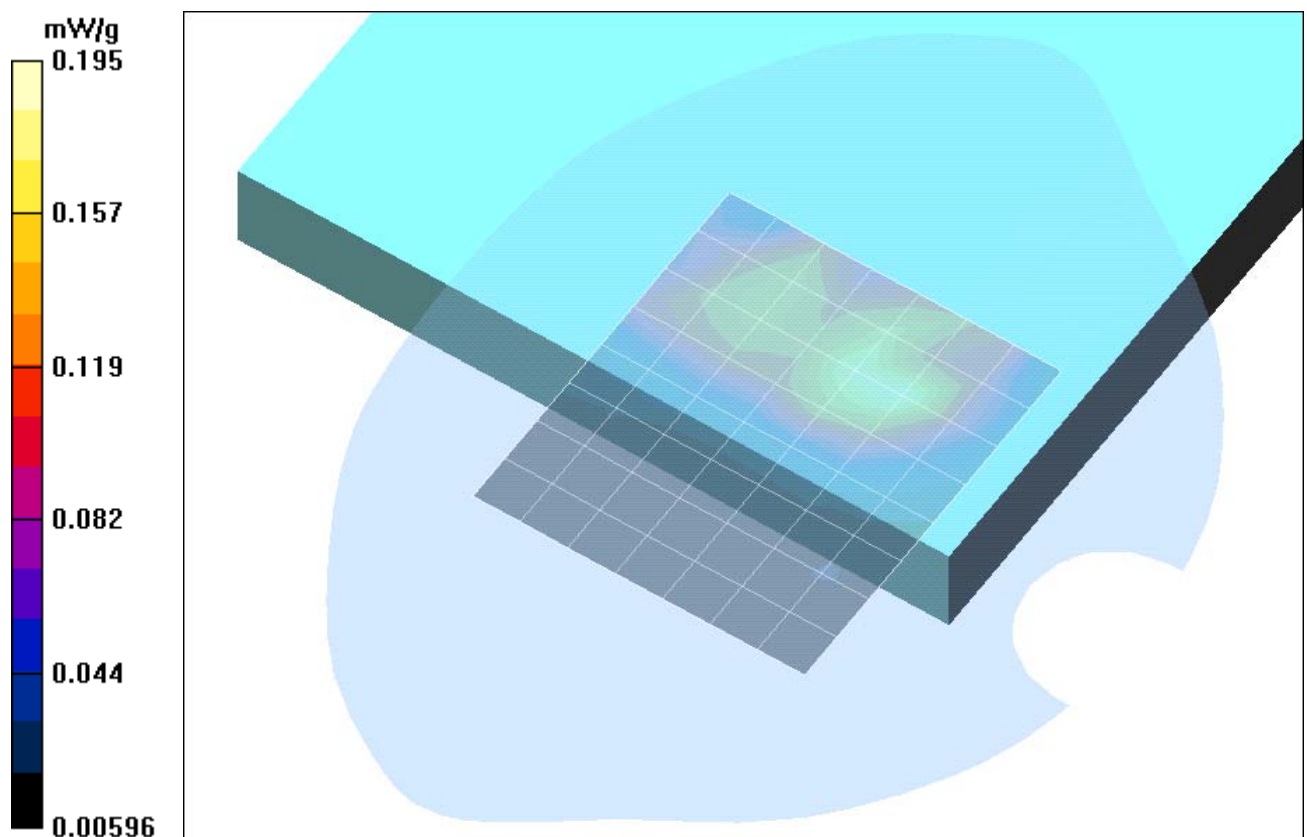


Fig. 27: SAR distribution for PCS 1900, channel 661, Acer Aspire 2020, position 2. (01.12.2004; Ambient Temperature: 21.0° C; Liquid Temperature: 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm 3 Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004

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

- Electronics: DAE3 Sn335; Calibrated: 05.08.2004

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

- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.064 mW/g

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

Reference Value = 5.37 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 21878.5 W/kg

SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.028 mW/g

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

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

Reference Value = 5.37 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 33878.5 W/kg

SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.024 mW/g

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

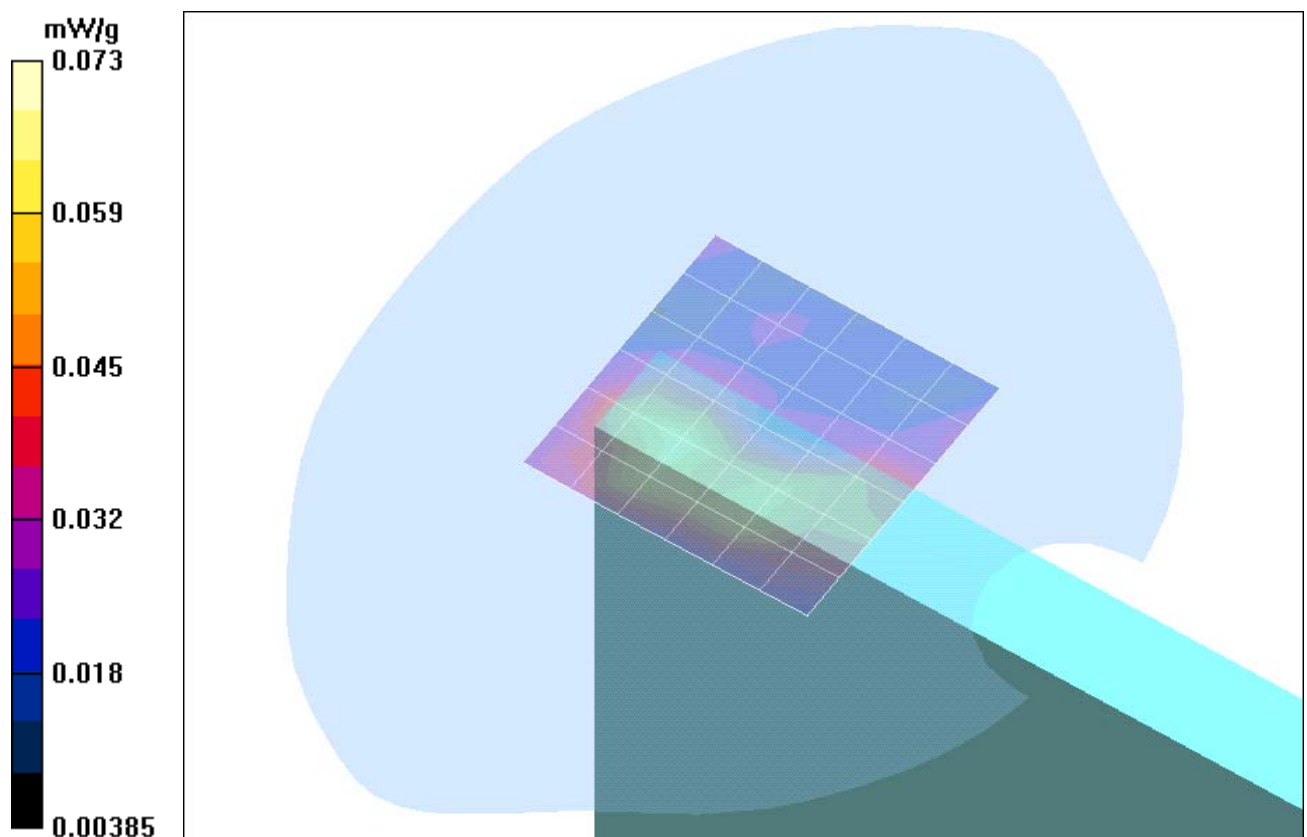


Fig. 28: SAR distribution for PCS 1900, channel 661, Acer Aspire 2020, position 3. (01.12.2004; Ambient Temperature: 21.1° C; Liquid Temperature: 20.° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm 4 Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.272 mW/g

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

Reference Value = 9.23 V/m; Power Drift = -0.141 dB

Peak SAR (extrapolated) = 0.388 W/kg

SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.091 mW/g

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

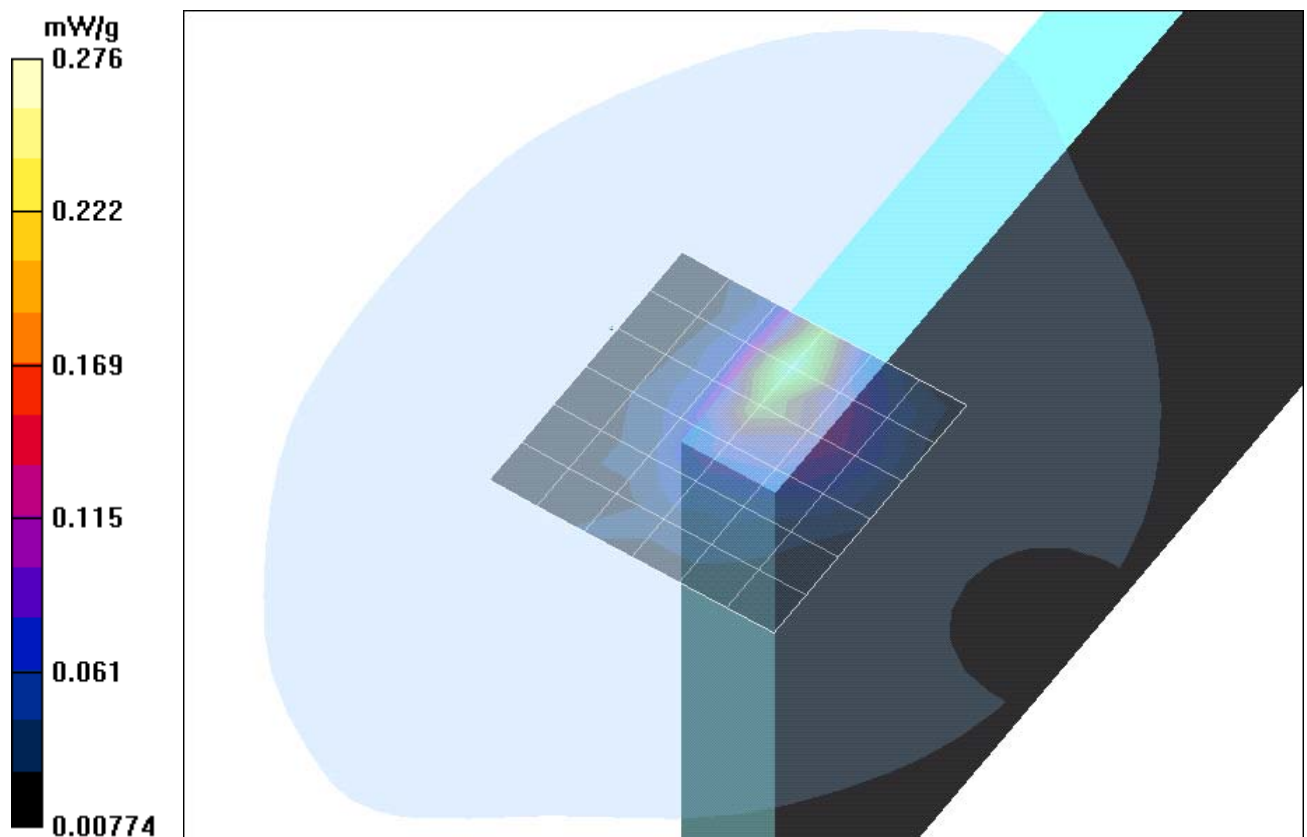


Fig. 29: SAR distribution for PCS 1900, channel 661, Acer Aspire 2020, position 4. (01.12.2004; Ambient Temperature: 21.0° C; Liquid Temperature: 20.1° C).

Test Laboratory: IMST GmbH; **File Name:** [Magyphm 5 Acer.da4](#)

DUT: Option; Type: Magnum; Serial: 004400000440130

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

Medium parameters used: $\sigma = 1.53$; mho/m, $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.3 Build 22; Postprocessing SW: SEMCAD, V1.8 Build 127

Unnamed procedure/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.047 mW/g

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

Reference Value = 3.63 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 341876.4 W/kg

SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.00789 mW/g

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

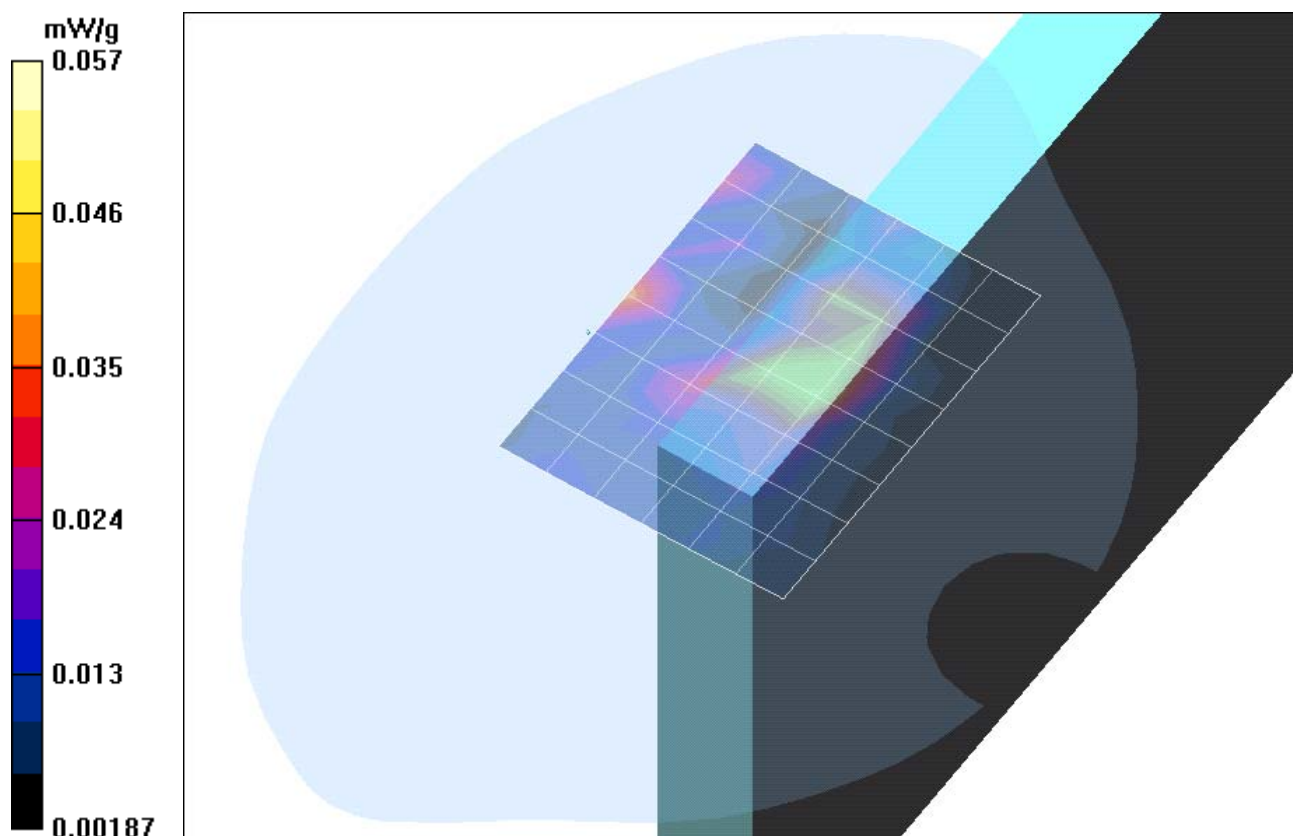


Fig. 30: SAR distribution for PCS 1900, channel 661, Acer Aspire 2020, position 5. (01.12.2004; Ambient Temperature: 21.1° C; Liquid Temperature: 20.2° C).

3 SAR z-axis scans (Validation)

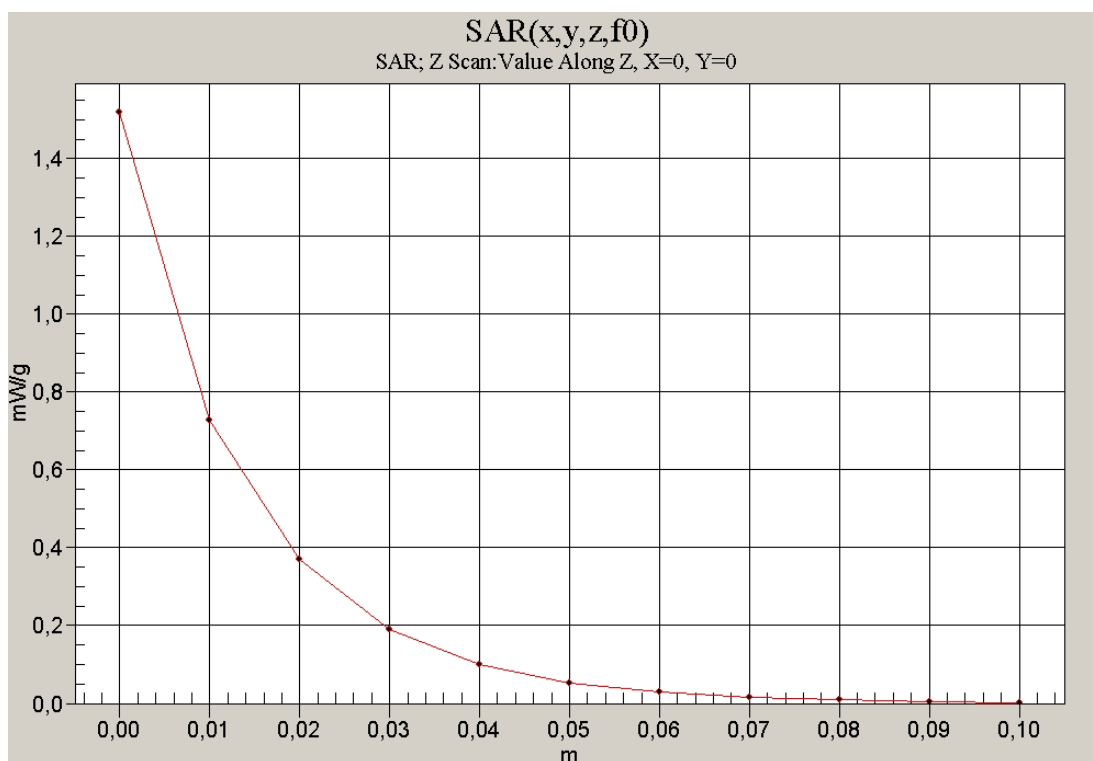


Fig. 31: SAR versus liquid depth, 835 MHz, body (29.11.2004; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

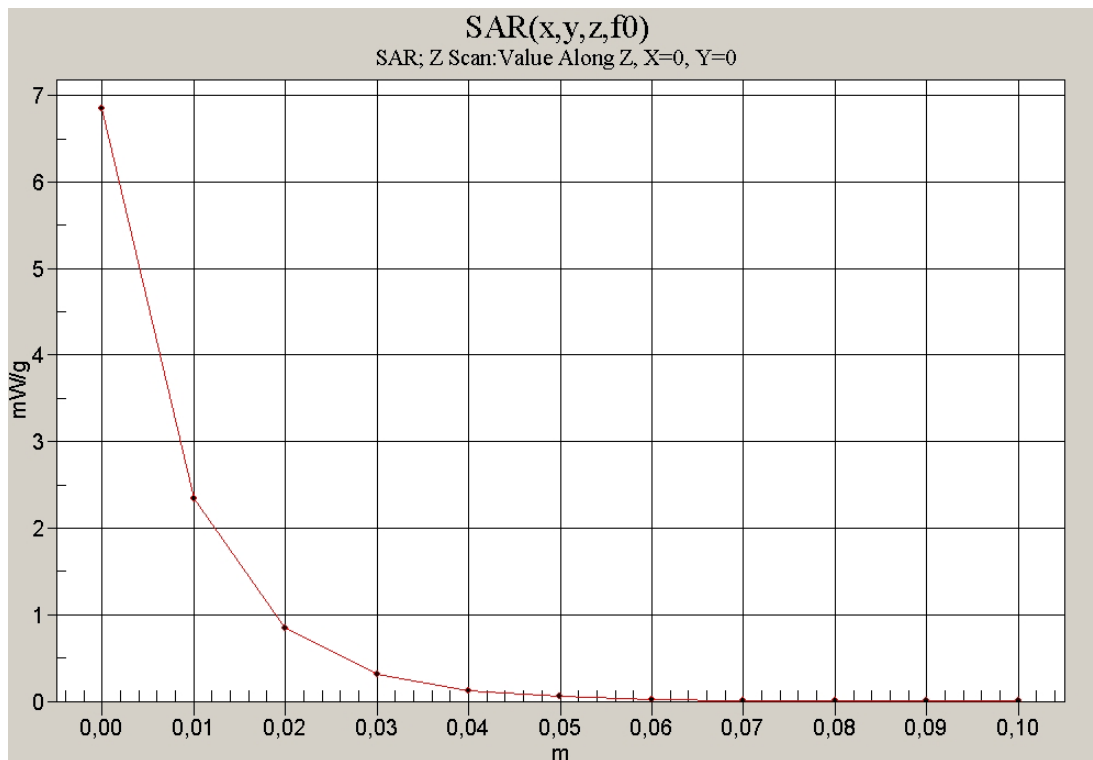


Fig. 32: SAR versus liquid depth, 1900 MHz, body (01.12.2004; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

4 SAR z-axis scans (Measurements)

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

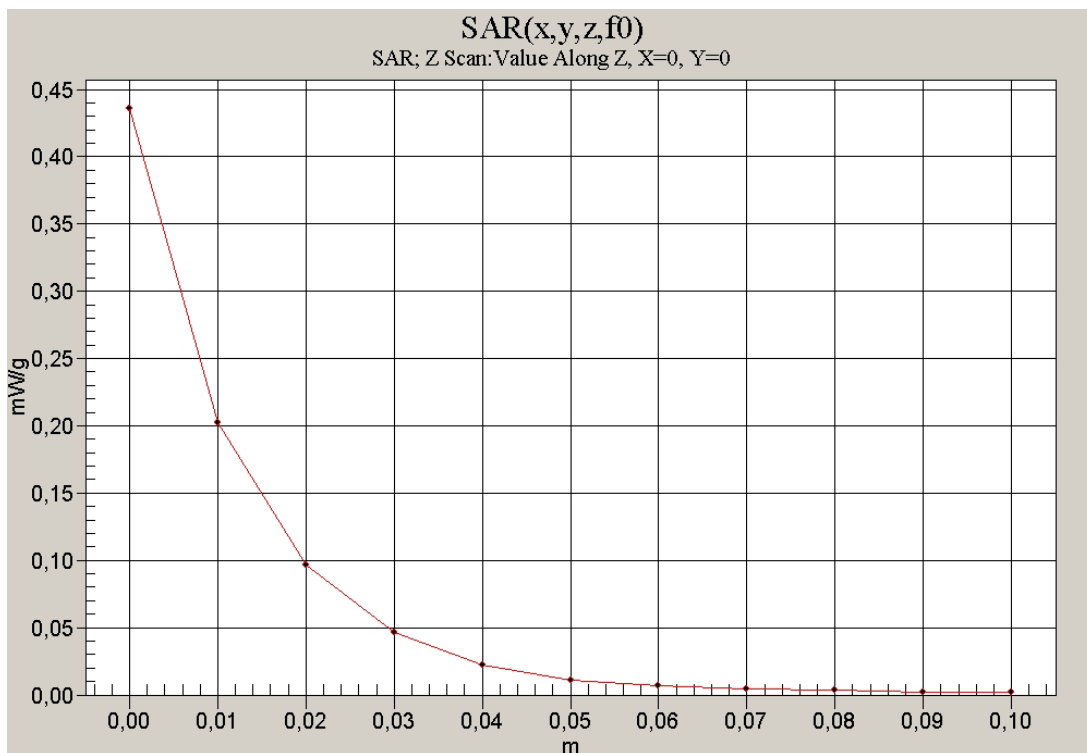


Fig. 33: SAR versus liquid depth, head: GSM 850, channel 190, Acer Aspire 2020 Notebook position 1. (29.11.2004, Ambient Temperature: 21.1° C; Liquid Temperature : 20.5° C).

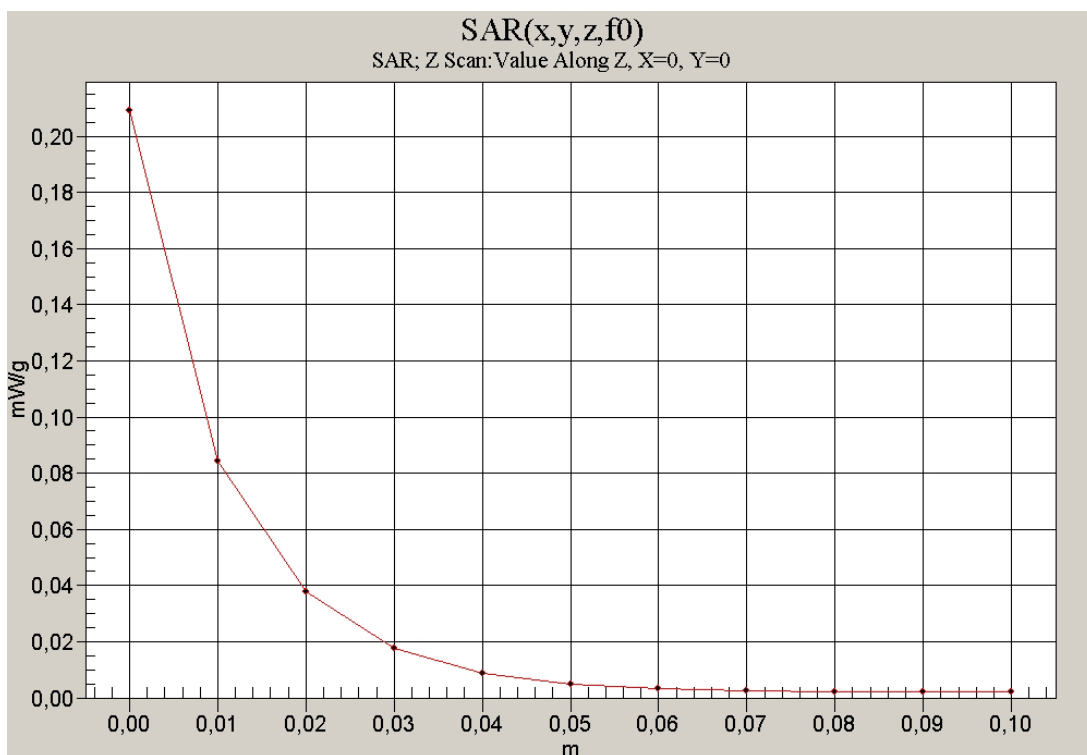


Fig. 34: SAR versus liquid depth, body: PCS 1900, channel 661, Acer Aspire 2020 Notebook position 4. (01.12.2004, Ambient Temperature: 21.0° C; Liquid Temperature : 20.1° C).