
Appendix for the Report

**Dosimetric Assessment of the
Portable Device buddi from buddi Ltd
(FCC ID: ZDLB83)**

**According to the FCC Requirements
SAR Distribution Plots**

April 06, 2011
IMST GmbH
Carl-Friedrich-Gauß-Str. 2
D-47475 Kamp-Lintfort

Customer
buddi Ltd
Kingfisher House
Walton Street
Aylesbury
Buckinghamshire HP21 7AY

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, GSM 850 Body

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Buddi_640_bahm_1.da4](#)

DUT: Buddi; Serial: 352451040744640

Program Name: GSM 850

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.32, 6.32, 6.32); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (measured) = 0.482 mW/g

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

Reference Value = 20.1 V/m; Power Drift = -0.181 dB

Peak SAR (extrapolated) = 2.12 W/kg

SAR(1 g) = 0.612 mW/g; SAR(10 g) = 0.279 mW/g

Maximum value of SAR (measured) = 0.659 mW/g

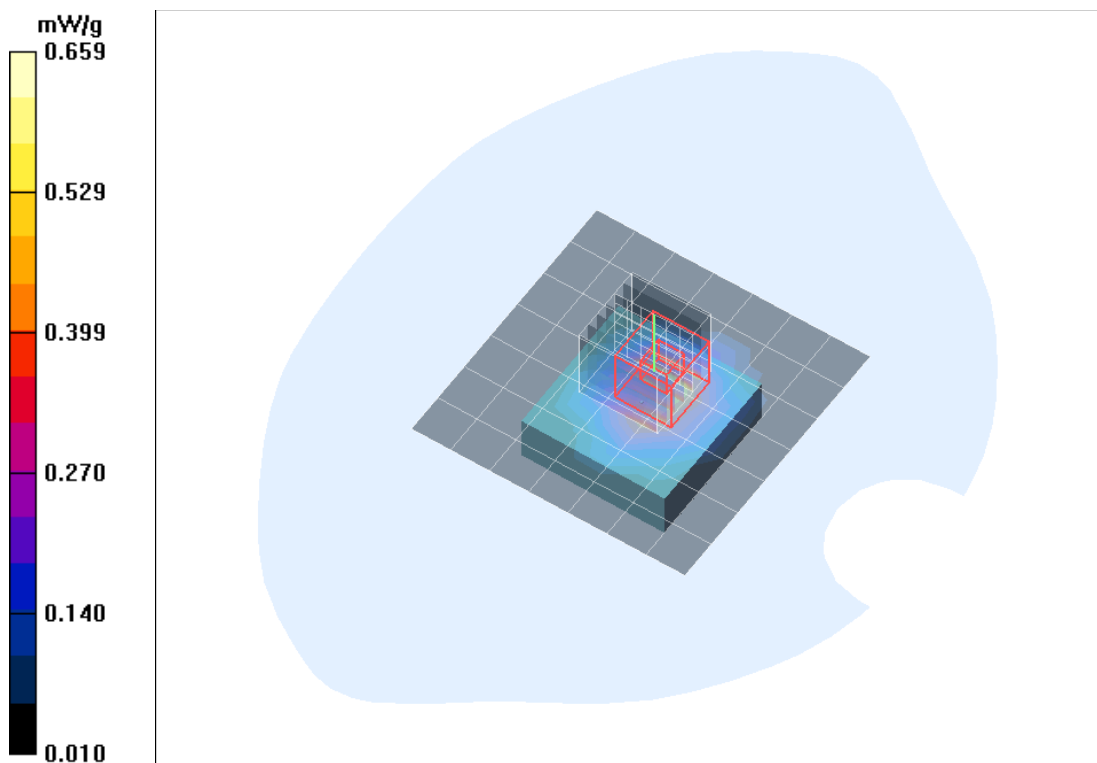


Fig. 1: SAR distribution for GSM 850 channel 190, Position 1 (March 29, 2011; Ambient Temperature: 20.8°C; Liquid Temperature: 20.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Buddi 640 bahm 2.da4](#)

DUT: Buddi; Serial: 352451040744640

Program Name: GSM 850

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(6.32, 6.32, 6.32); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

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

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

Reference Value = 2.52 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 0.014 W/kg

SAR(1 g) = 0.00856 mW/g; SAR(10 g) = 0.00547 mW/g

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

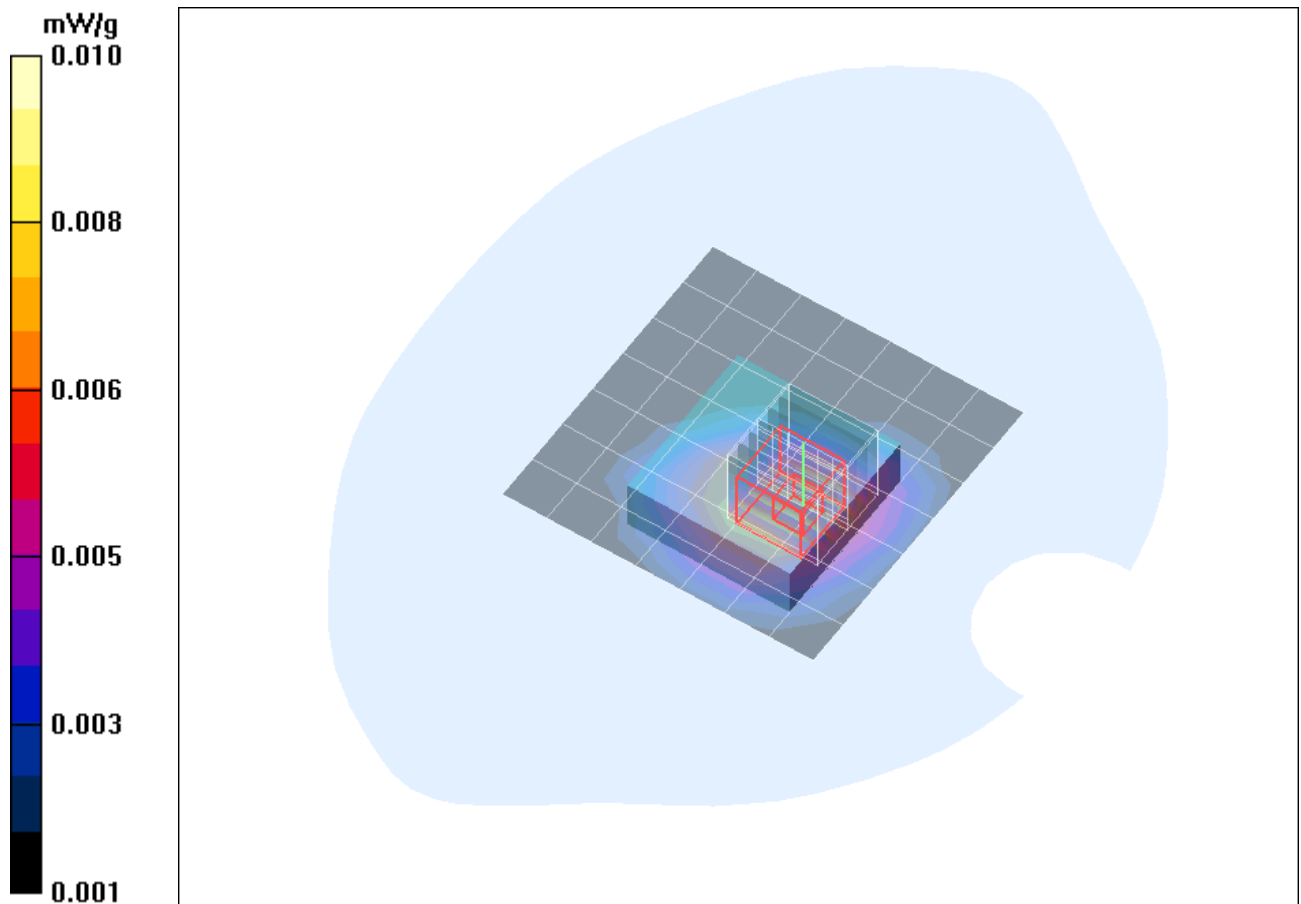


Fig. 2: SAR distribution for GSM 850, channel 190, Position 2 (March 29, 2011; Ambient Temperature: 20.8°C; Liquid Temperature: 20.3°C).

2 SAR Distribution Plots, PCS 1900 Body

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Buddi_640_bphm_1.da4](#)

DUT: Buddi; Serial: 352451040744640

Program Name: PCS 1900

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010

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

- Electronics: DAE4 Sn631; Calibrated: 17.09.2010

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

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

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

Maximum value of SAR (measured) = 1.16 mW/g

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

Reference Value = 28.2 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 3.16 W/kg

SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.580 mW/g

Maximum value of SAR (measured) = 1.47 mW/g

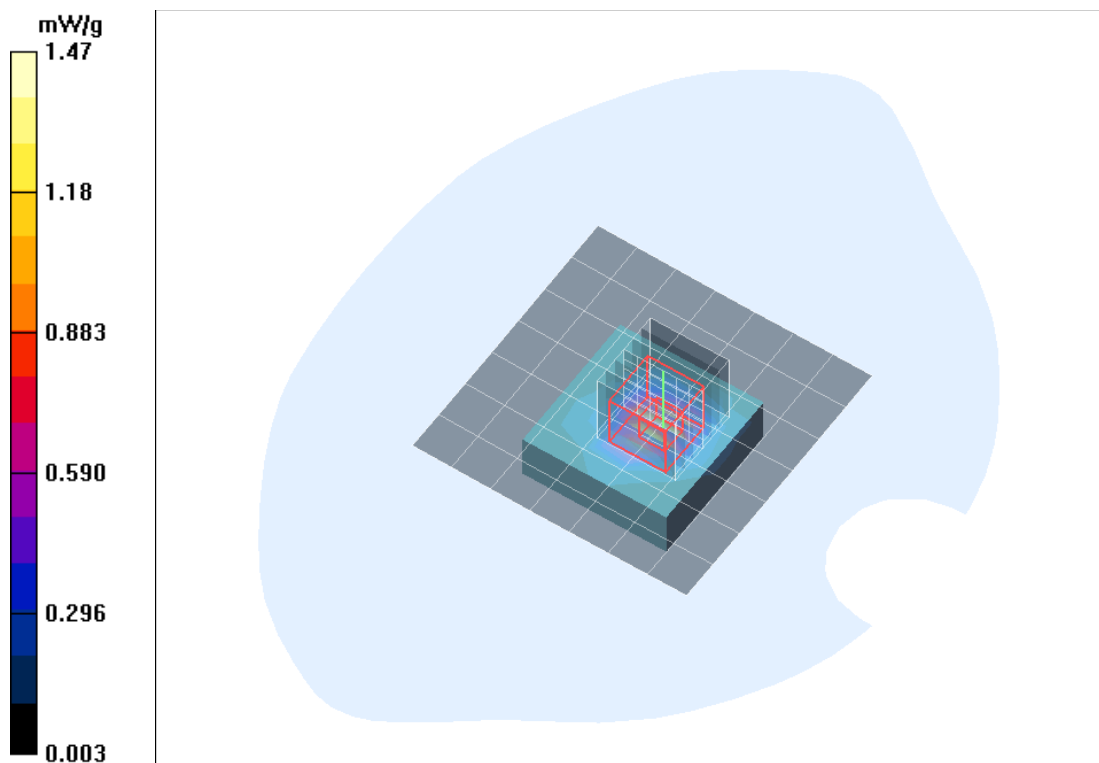


Fig. 3: SAR distribution for PCS 1900, channel 661, Position 1 (March 28, 2011; Ambient Temperature: 21.1°C; Liquid Temperature: 20.6°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Buddi 640 bphm 2.da4](#)

DUT: Buddi; Serial: 352451040744640

Program Name: PCS 1900

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010

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

- Electronics: DAE4 Sn631; Calibrated: 17.09.2010

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

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

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

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

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

Reference Value = 5.57 V/m; Power Drift = 0.181 dB

Peak SAR (extrapolated) = 0.073 W/kg

SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.028 mW/g

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

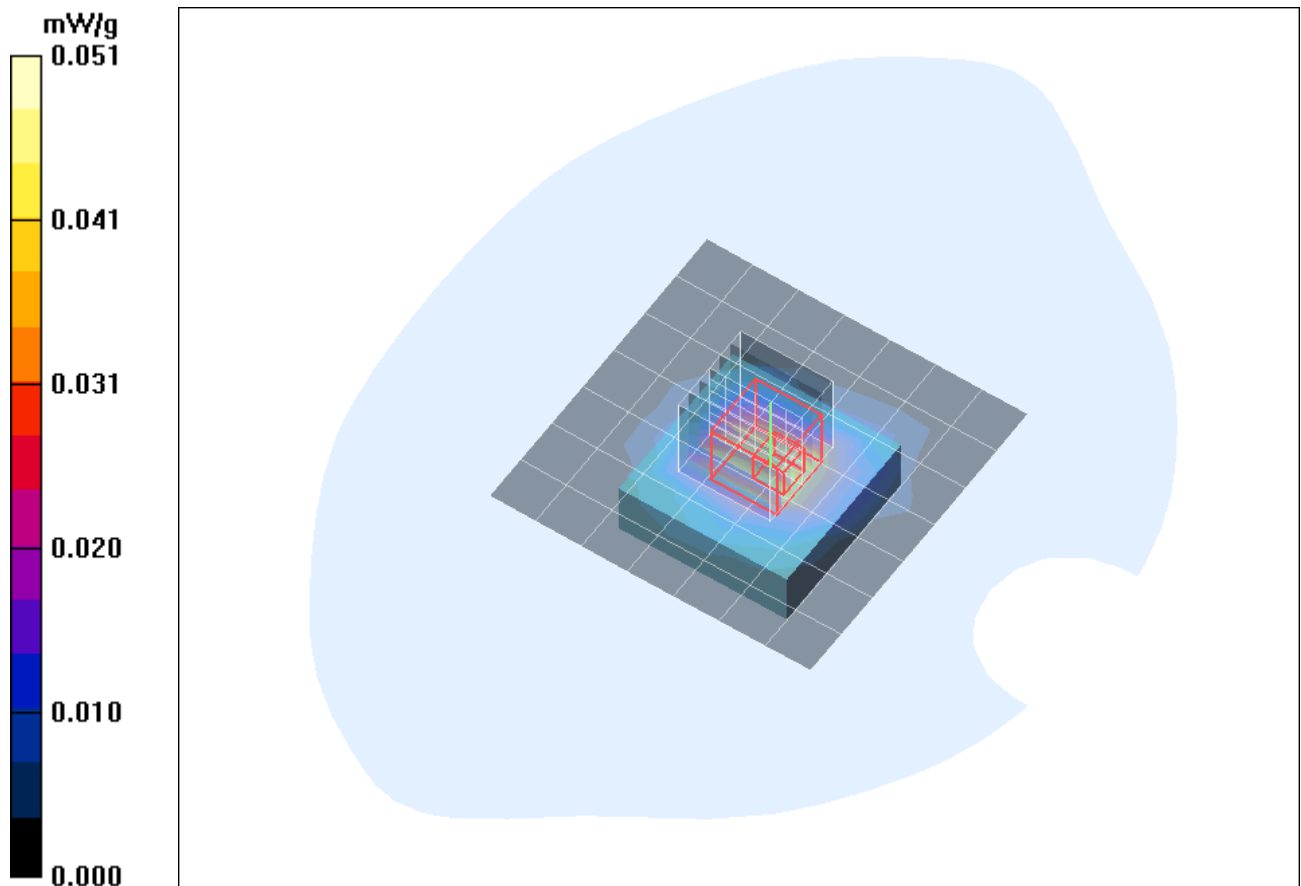


Fig. 4: SAR distribution for PCS 1900, channel 661, Position 2 (March 28, 2011; Ambient Temperature: 21.1°C; Liquid Temperature: 20.6°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Buddi 640 bphl 1.da4](#)

DUT: Buddi; Serial: 352451040744640

Program Name: PCS 1900

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010

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

- Electronics: DAE4 Sn631; Calibrated: 17.09.2010

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

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

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

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

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

Reference Value = 27.1 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 2.89 W/kg

SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.524 mW/g

Maximum value of SAR (measured) = 1.31 mW/g

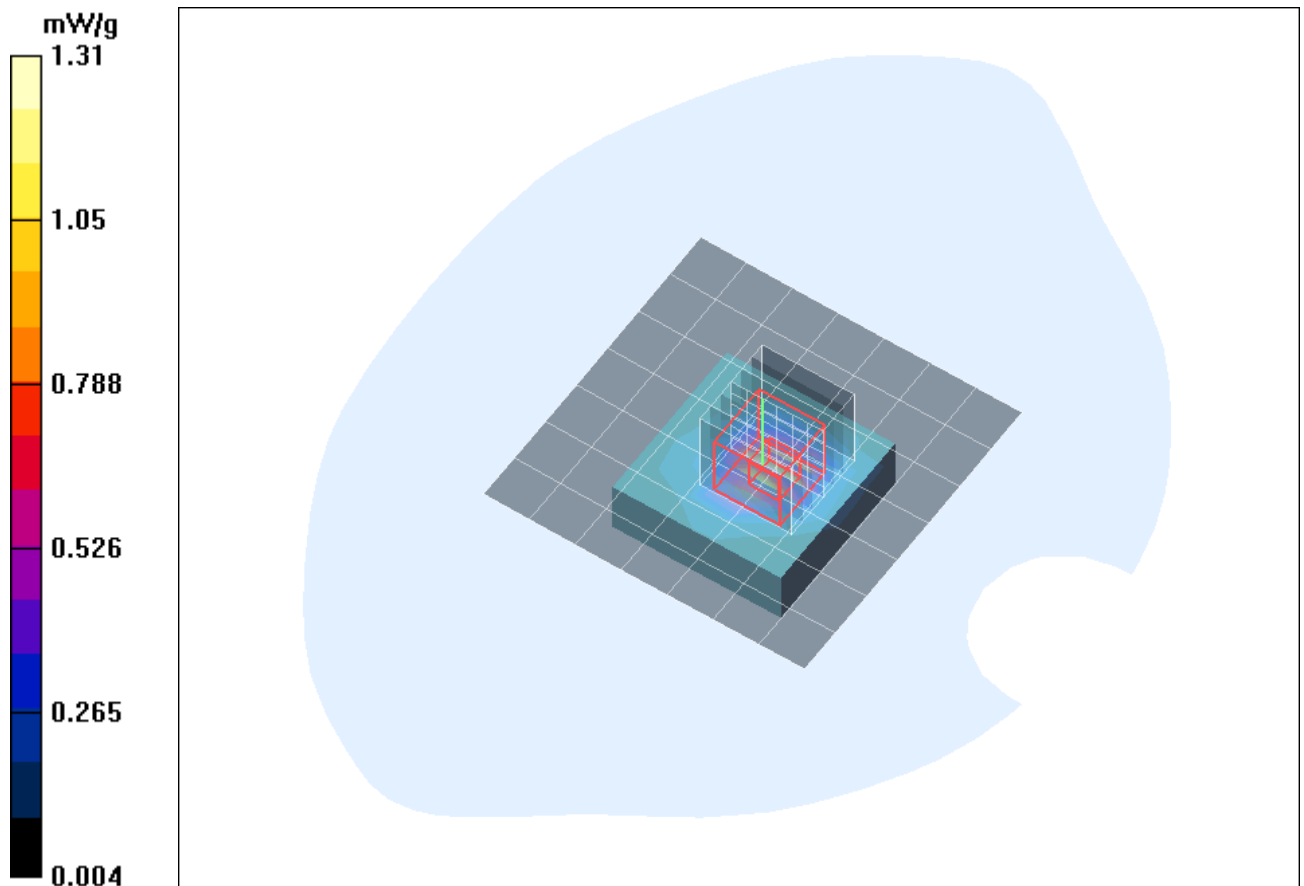


Fig. 5: SAR distribution for PCS 1900, channel 512, Position 1 (March 28, 2011; Ambient Temperature: 21.1°C; Liquid Temperature: 20.6°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [Buddi 640 bphh 1.da4](#)

DUT: Buddi; Serial: 352451040744640

Program Name: PCS 1900

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010

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

- Electronics: DAE4 Sn631; Calibrated: 17.09.2010

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

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

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

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

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

Reference Value = 29.0 V/m; Power Drift = -0.113 dB

Peak SAR (extrapolated) = 3.42 W/kg

SAR(1 g) = 1.41 mW/g; SAR(10 g) = 0.633 mW/g

Maximum value of SAR (measured) = 1.60 mW/g

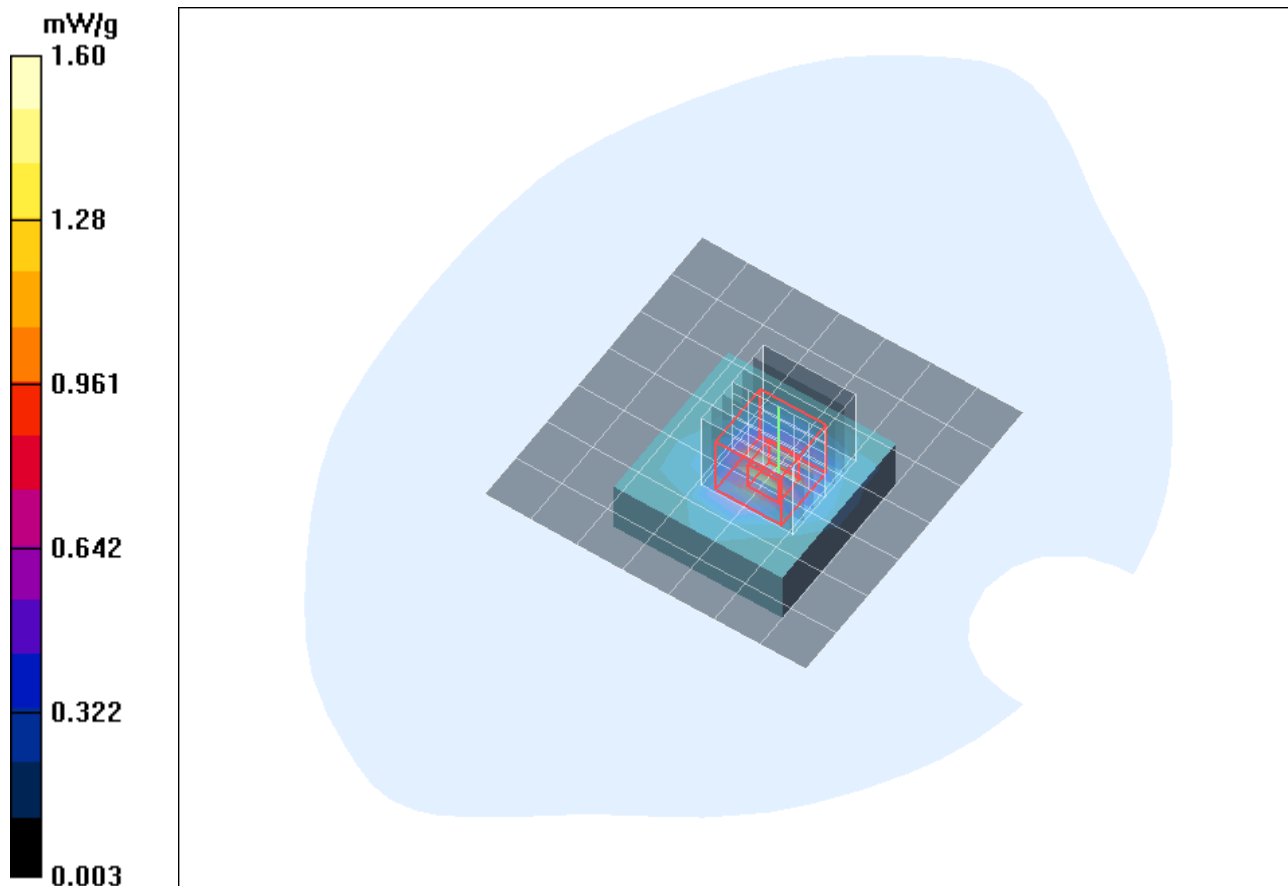


Fig. 6: SAR distribution for PCS 1900, channel 810, Position 1 (March 28, 2011; Ambient Temperature: 21.1°C; Liquid Temperature: 20.6°C).

3 SAR Z-axis Scans (Validation)

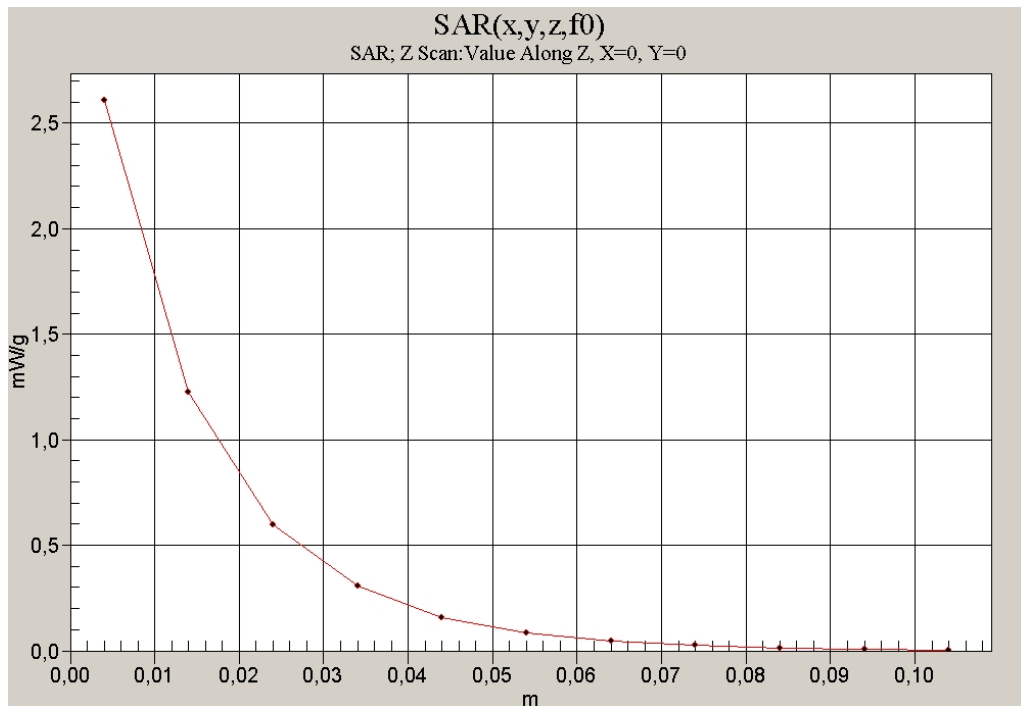


Fig. 7: SAR versus liquid depth, 835 MHz, body (March 29, 2011; Ambient Temperature: 20.8°C; Liquid Temperature: 20.3°C).

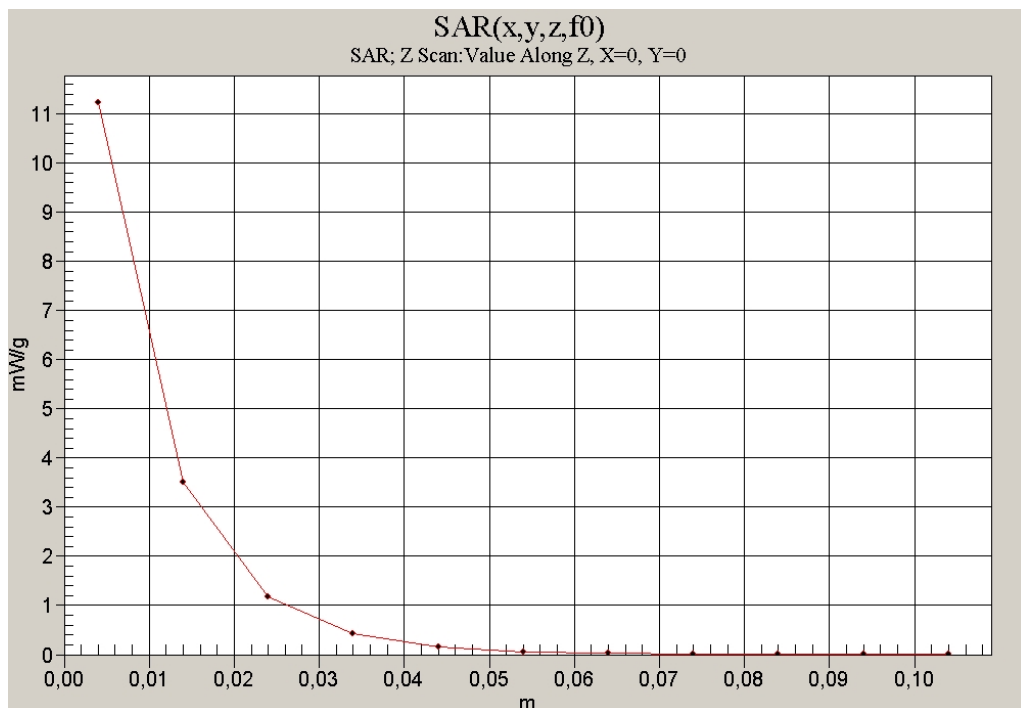


Fig. 8: SAR versus liquid depth, 1900 MHz, body (March 28, 2011; Ambient Temperature: 20.7°C; Liquid Temperature: 20.3°C).

4 SAR Z-axis Scans (Measurements)

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

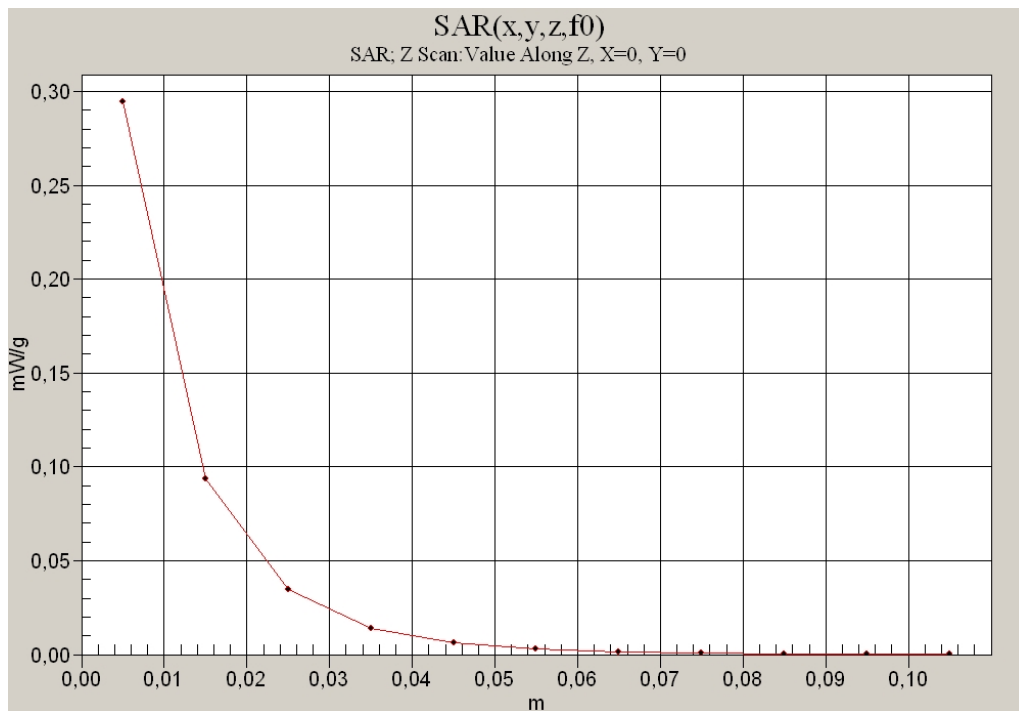


Fig. 9: SAR versus liquid depth, body: GSM 850, channel 190, Position 1 (March 29, 2011; Ambient Temperature: 20.8°C; Liquid Temperature: 20.3°C).

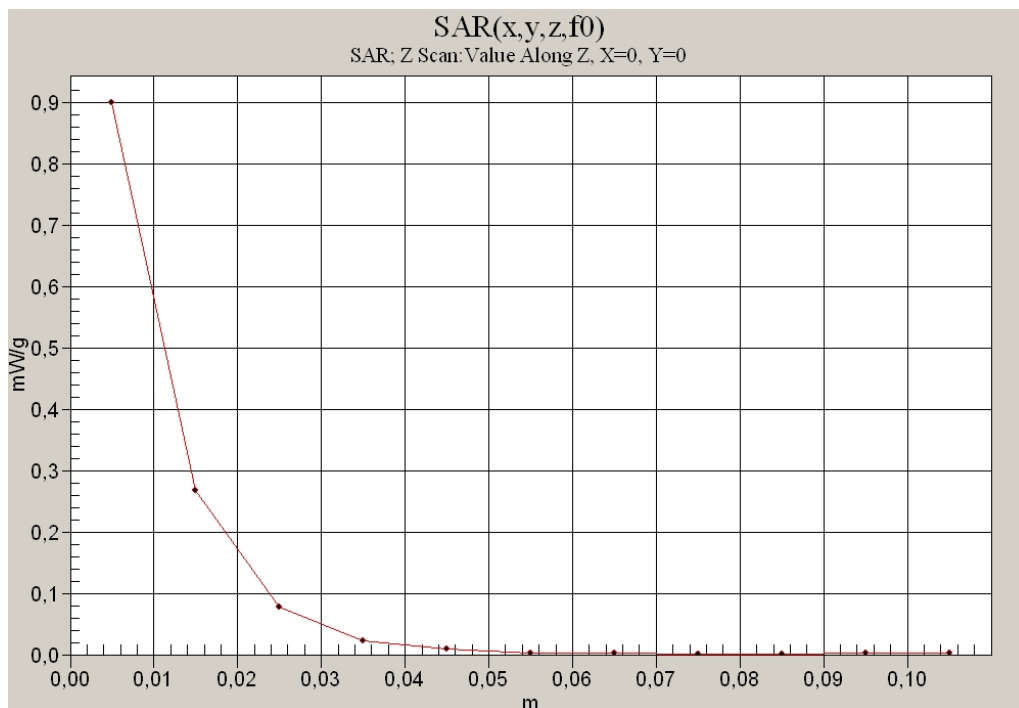


Fig. 10: SAR versus liquid depth, body: PCS 1900, channel 810, Position 1 (March 28, 2011; Ambient Temperature: 21.1°C; Liquid Temperature: 20.6°C).