
Appendix for the Report

Dosimetric Assessment of the CeoTronics GateCom Multi (FCC ID: L52CT-M6CEO1)

According to the FCC Requirements

SAR Distribution Plots

March 18, 2011
IMST GmbH
Carl-Friedrich-Gauß-Str. 2
D-47475 Kamp-Lintfort

Customer
CeoTronics AG
Adam-Opel-Str. 6
D-63322 Rödermark

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

Table of Contents

1	SAR DISTRIBUTION PLOTS, BODY MEASUREMENTS, ANTENNA 1	3
2	SAR DISTRIBUTION PLOTS, BODY MEASUREMENTS, ANTENNA 2	5
3	SAR Z-AXIS SCANS (VALIDATION)	7
4	SAR Z-AXIS SCANS (MEASUREMENTS).....	7

1 SAR Distribution Plots, Body Measurements, Antenna 1

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [GateCom Multi bphm 1 0x00.da4](#)

DUT: CeoTronics; Type: GateCom Compact; Serial: N/A

Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.63, 4.63, 4.63); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (9x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.044 mW/g

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

Reference Value = 0.000 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 0.061 W/kg

SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.025 mW/g

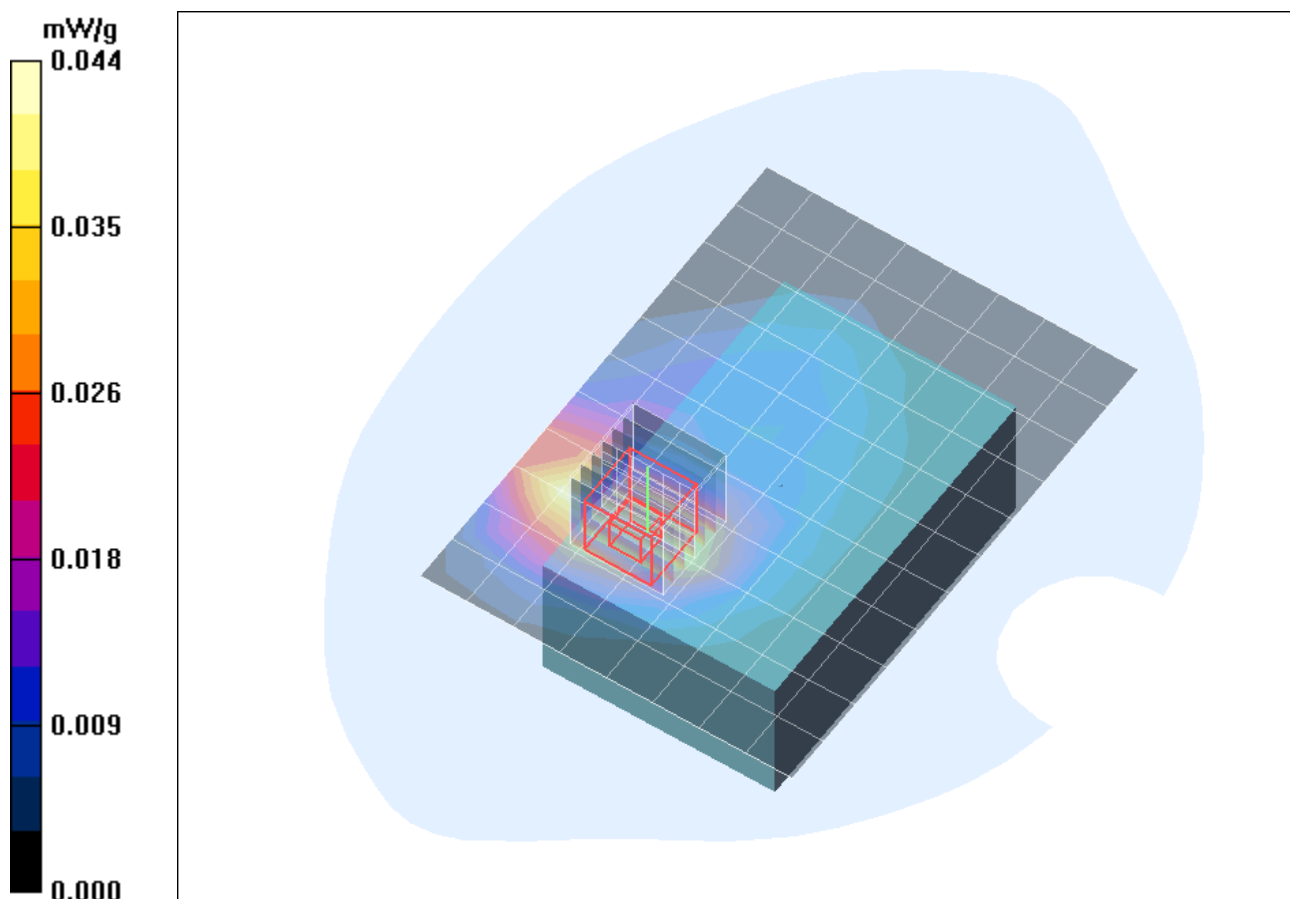


Fig. 1: SAR distribution for DECT US, antenna 1, channel 2, position 1, 0 mm distance (February 28, 2011; Ambient Temperature: 22.2° C; Liquid Temperature: 21.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [GateCom Multi bphm 2 0x00.da4](#)

DUT: CeoTronics; **Type:** GateCom Compact; **Serial:** N/A

Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.63, 4.63, 4.63); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (9x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.017 mW/g

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

Reference Value = 1.97 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.027 W/kg

SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.011 mW/g

Maximum value of SAR (measured) = 0.019 mW/g

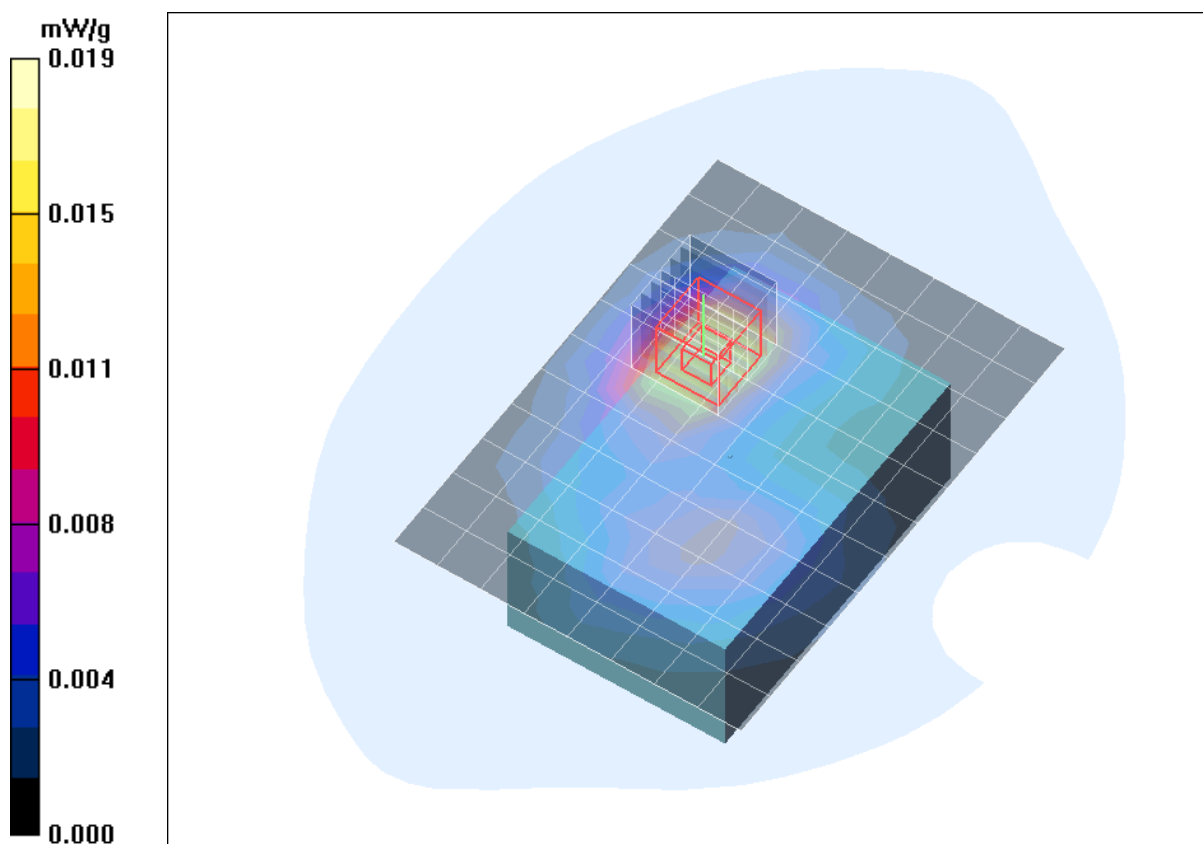


Fig. 2: SAR distribution for DECT US, antenna 1, channel 2, position 2, 0 mm distance (February 28, 2011; Ambient Temperature: 22.2° C; Liquid Temperature: 21.8° C).

2 SAR Distribution Plots, Body Measurements, Antenna 2

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [GateCom Multi bphm 1 0x01.da4](#)

DUT: CeoTronics; Type: GateCom Compact; Serial: N/A

Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.63, 4.63, 4.63); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (9x12x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 1.24 V/m; Power Drift = -0.114 dB

Peak SAR (extrapolated) = 0.044 W/kg

SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.016 mW/g

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

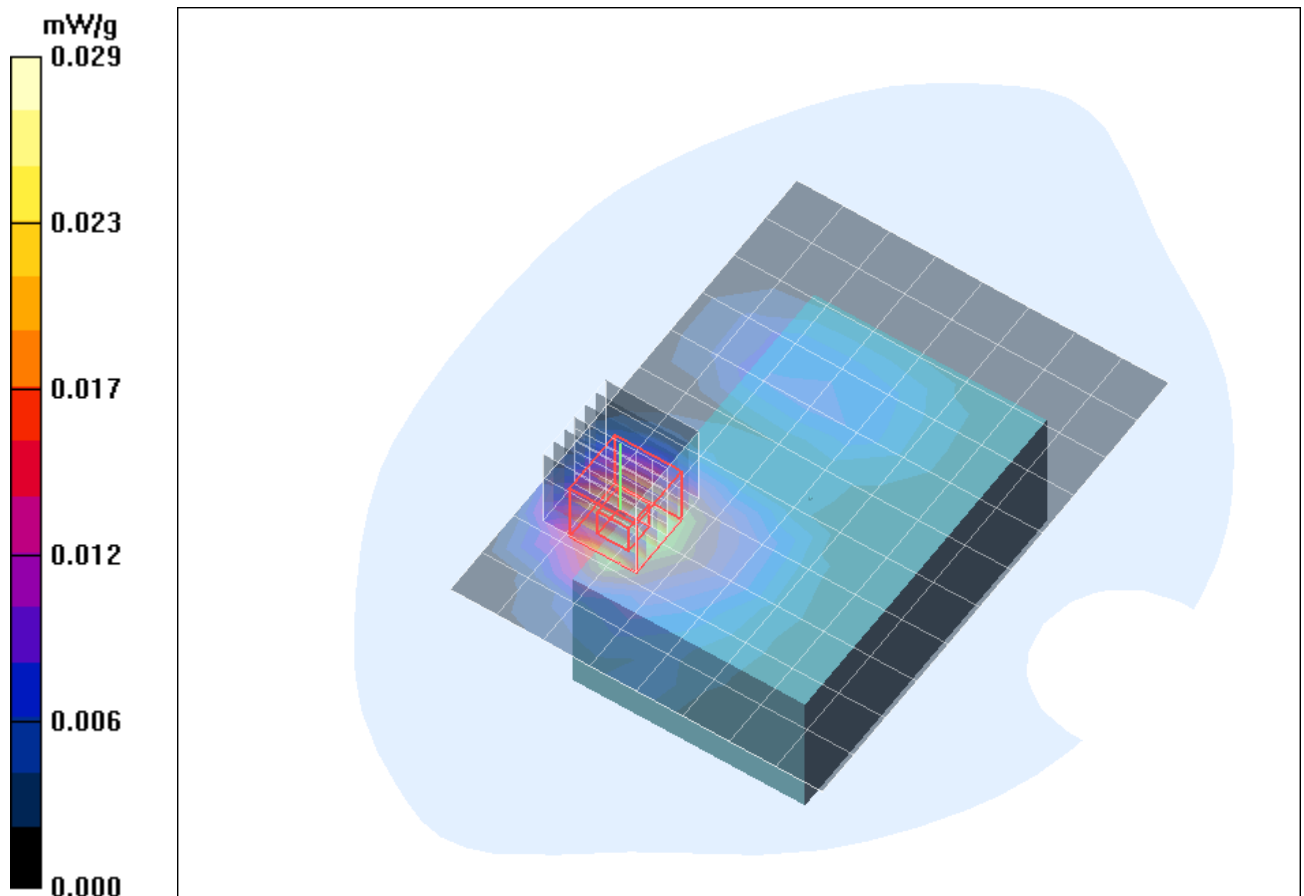


Fig. 3: SAR distribution for DECT US, antenna 2, channel 2, position 1, 0 mm distance (February 28, 2011; Ambient Temperature: 22.2° C; Liquid Temperature: 21.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); **File Name:** [GateCom Multi bphm 2 0x01.da4](#)

DUT: CeoTronics; **Type:** GateCom Compact; **Serial:** N/A

Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.63, 4.63, 4.63); Calibrated: 21.02.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 22.02.2011
- 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 (9x12x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 2.42 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.018 W/kg

SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00638 mW/g

Maximum value of SAR (measured) = 0.012 mW/g

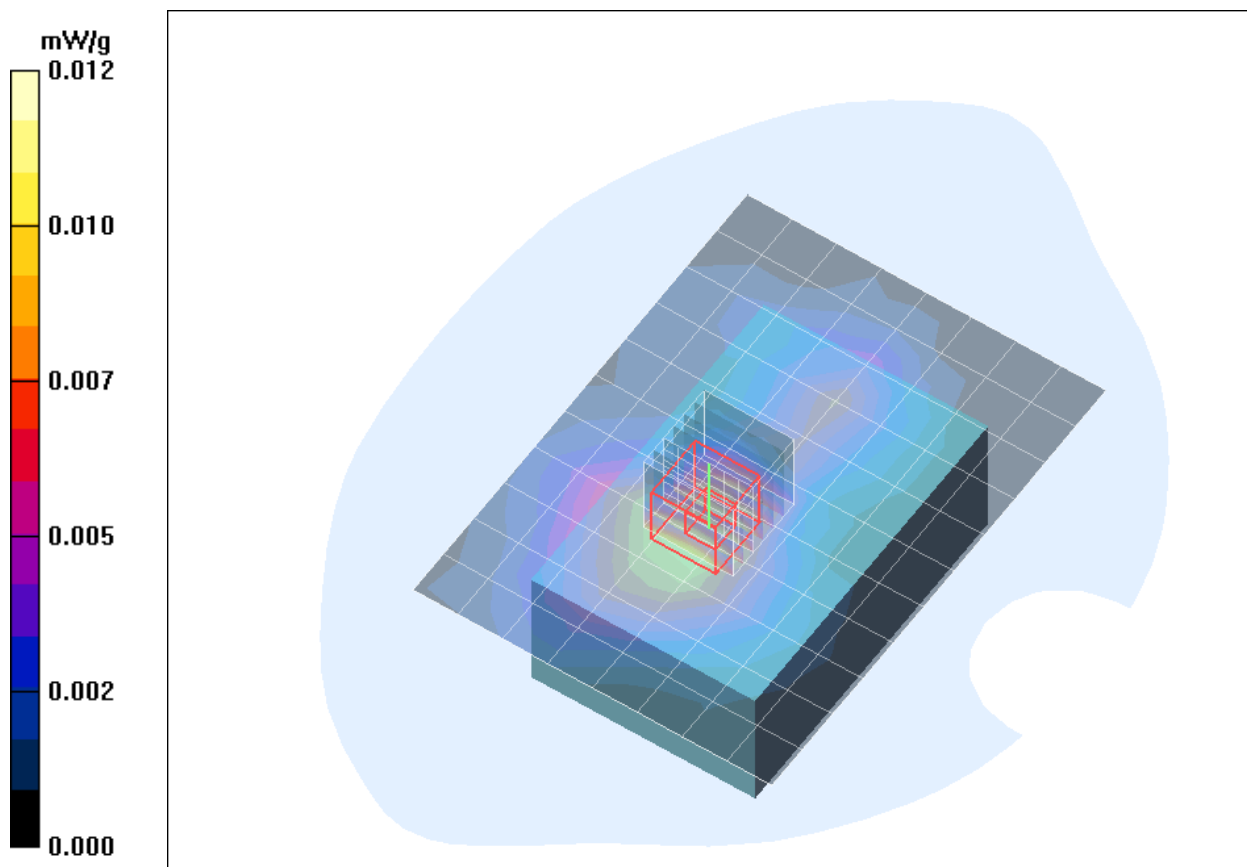


Fig. 4: SAR distribution for DECT US, antenna 2, channel 2, position 2, 0 mm distance (February 28, 2011; Ambient Temperature: 22.2° C; Liquid Temperature: 21.8° C).

3 SAR z-axis scans (Validation)

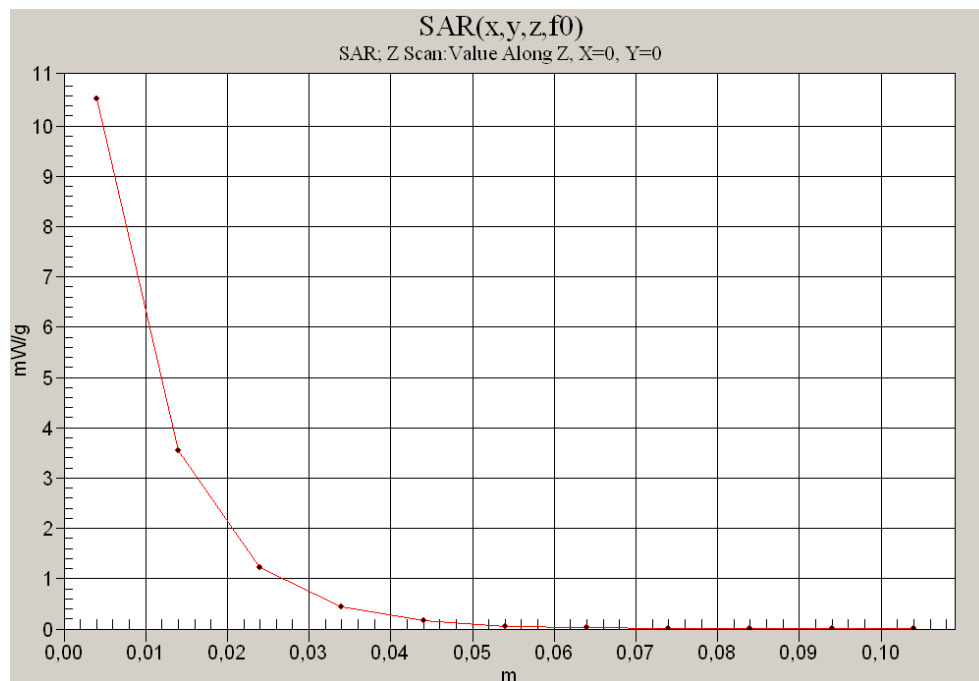


Fig. 5: SAR versus liquid depth, 1900 MHz, body (February 28, 2011; Ambient Temperature: 22.1° C; Liquid Temperature : 21.7° C).

4 SAR z-axis scans (Measurements)

The following picture shows the plot of SAR versus liquid depth for the worst case value.

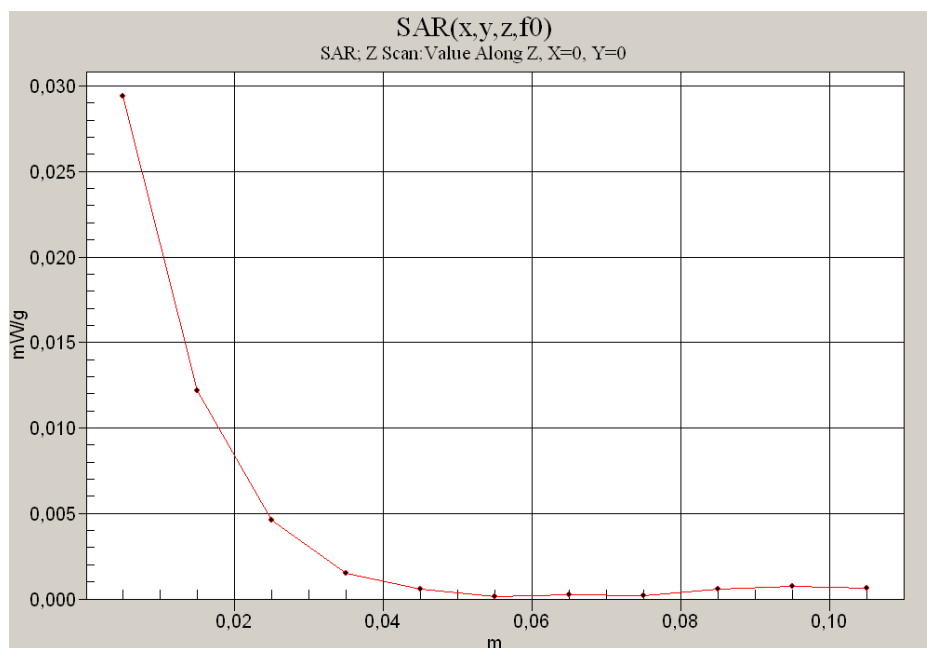


Fig. 6: SAR versus liquid depth, body: DECT US, antenna 1, channel 2, Position 1, 0 mm distance (February 28, 2011; Ambient Temperature: 22.2° C; Liquid Temperature: 21.8° C).