
Appendix for the Report

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

According to the FCC Requirements

SAR Distribution Plots

March 17, 2011

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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, Body Measurements, Antenna 1

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [GateCom Compact bphm 1.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) = 0.030 mW/g

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

Reference Value = 1.83 V/m; Power Drift = -0.130 dB

Peak SAR (extrapolated) = 0.084 W/kg

SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.013 mW/g

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

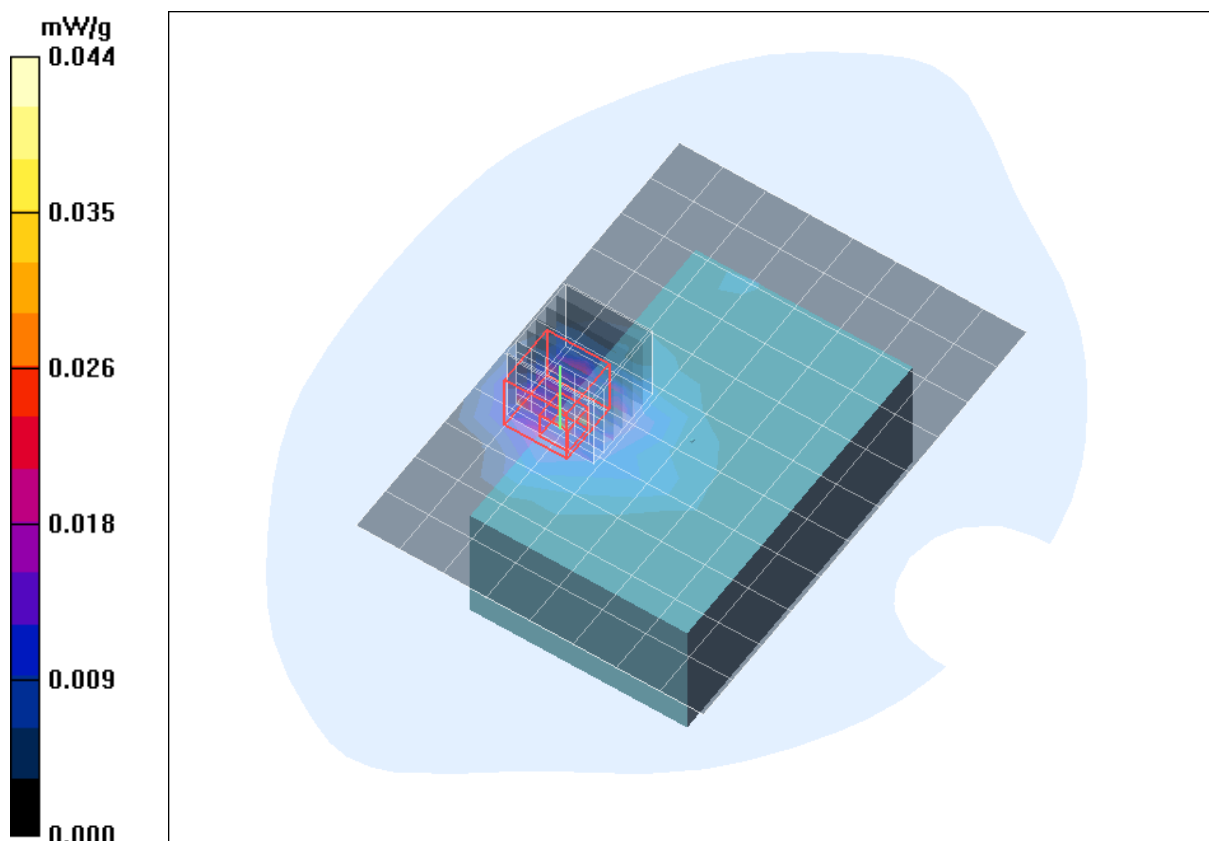


Fig. 1: SAR distribution plot for DECT US, antenna 1, channel 2, position 1, 0 mm distance (February 28, 2011; Ambient Temperature: 22.1° C; Liquid Temperature: 21.7° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [GateCom Compact bphm_2.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) = 0.002 mW/g

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

Reference Value = 0.553 V/m; Power Drift = 0.192 dB

Peak SAR (extrapolated) = 0.004 W/kg

SAR(1 g) = 0.0016 mW/g; SAR(10 g) = 0.000532 mW/g

Maximum value of SAR (measured) = 0.003 mW/g

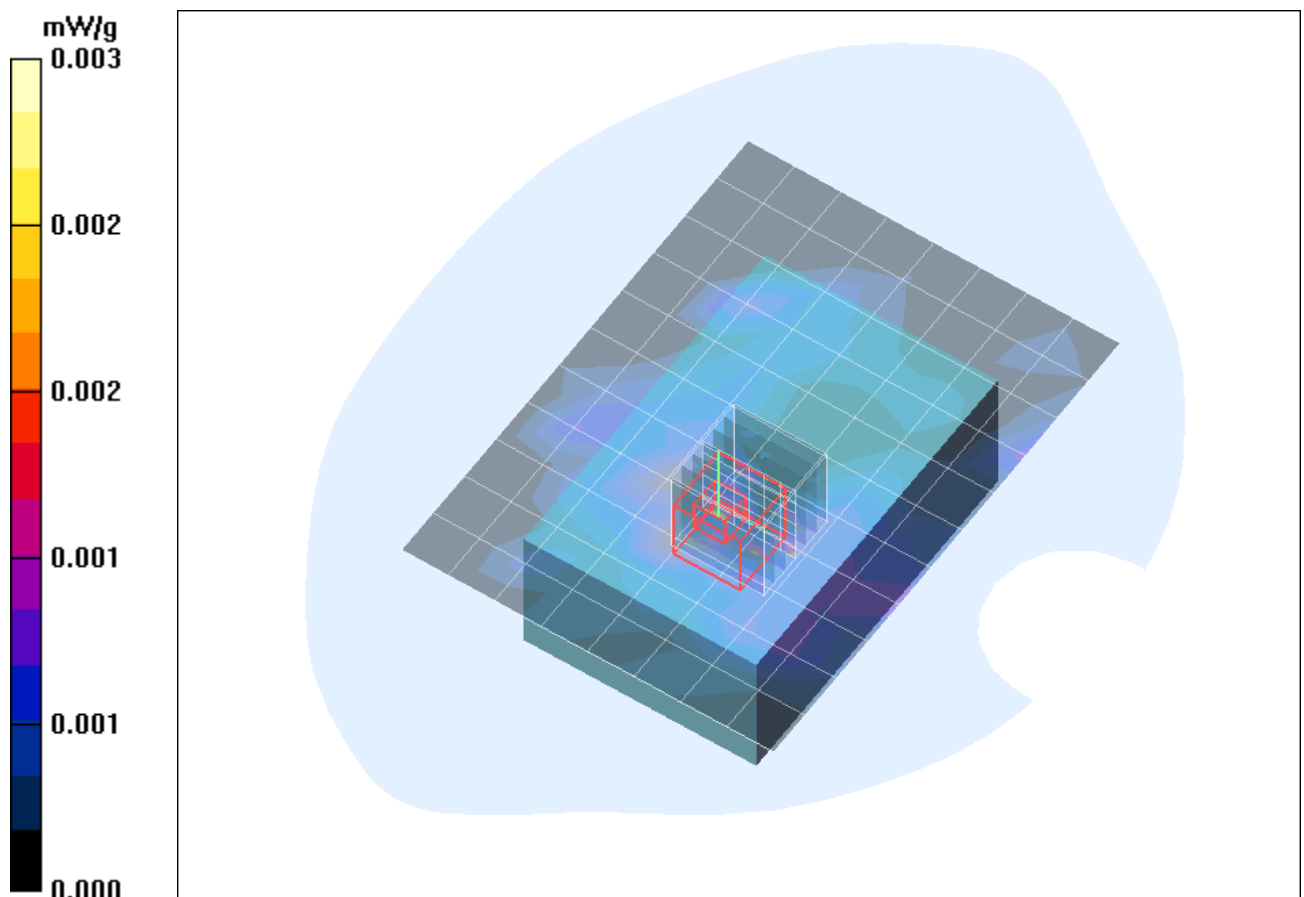


Fig. 2: SAR distribution plot for DECT US, antenna 1, channel 2, position 2, 0 mm distance (February 28, 2011; Ambient Temperature: 22.1° C; Liquid Temperature: 21.7° C).

2 SAR Distribution Plots, Body Measurements, Antenna 2

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [GateCom Compact 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) = 0.023 mW/g

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

Reference Value = 0.932 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 0.072 W/kg

SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.039 mW/g

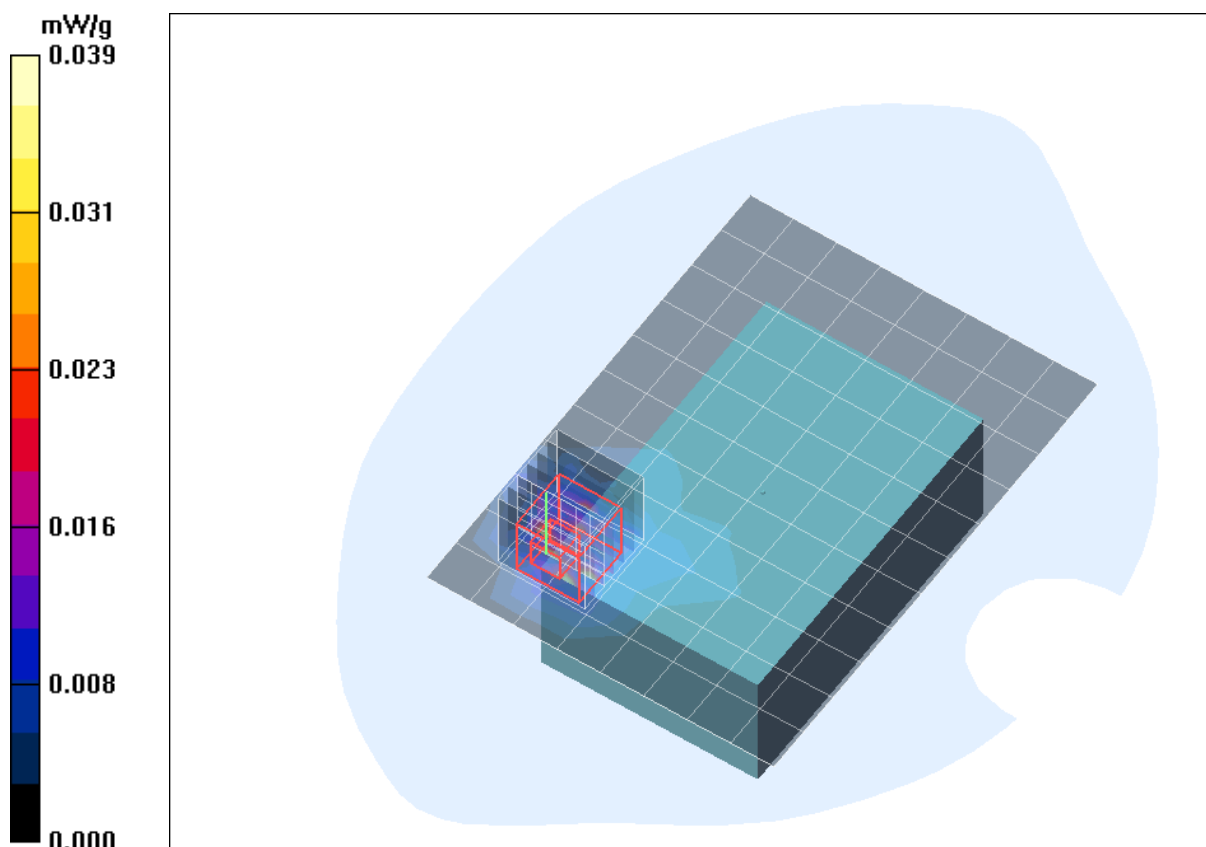


Fig. 3: SAR distribution plot for DECT US, antenna 1, channel 2, position 1, 0 mm distance (February 28, 2011; Ambient Temperature: 22.1° C; Liquid Temperature: 21.7° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [GateCom Compact 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) = 0.002 mW/g

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

Reference Value = 0.470 V/m; Power Drift = 0.126 dB

Peak SAR (extrapolated) = 0.005 W/kg

SAR(1 g) = 0.00161 mW/g; SAR(10 g) = 0.000625 mW/g

Maximum value of SAR (measured) = 0.003 mW/g

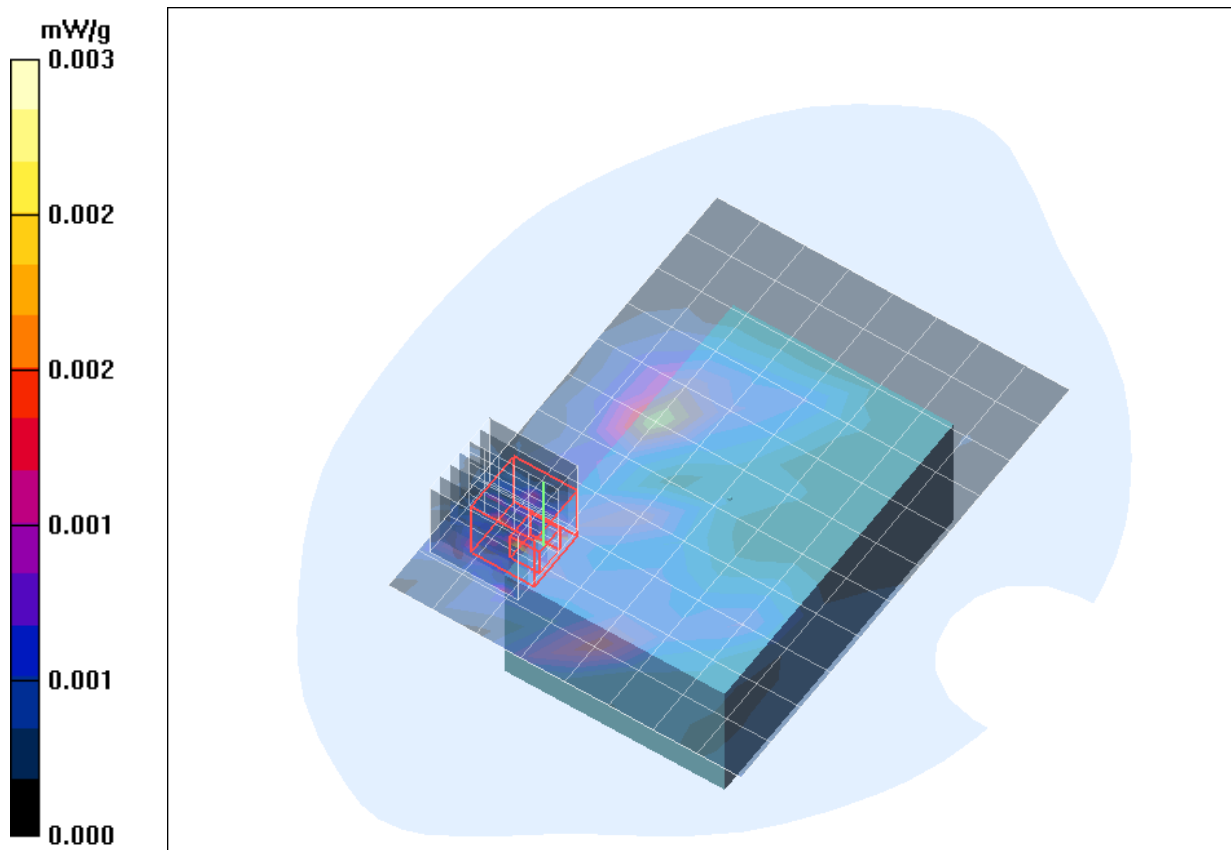


Fig. 4: SAR distribution plot for DECT US, antenna 2, channel 2, position 2, 0 mm distance (February 28, 2011; Ambient Temperature: 22.1° C; Liquid Temperature: 21.7° C).

3 SAR Distribution Plots, Body Measurements, Worst case

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [GateCom Compact 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) = 0.013 mW/g

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

Reference Value = 0.972 V/m; Power Drift = 0.149 dB

Peak SAR (extrapolated) = 0.045 W/kg

SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00758 mW/g

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

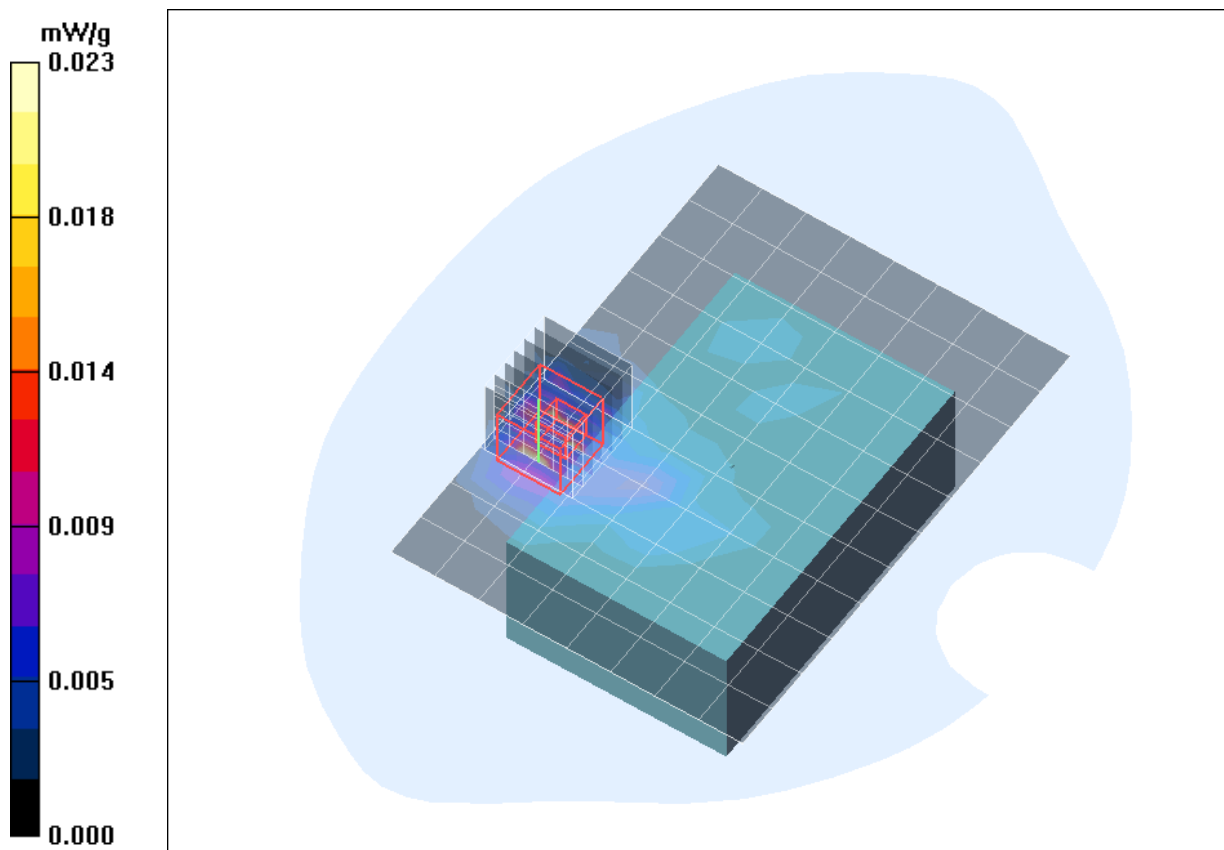


Fig. 5: SAR distribution for DECT US, antenna 1, channel 2, position 1 with case, (February 28, 2011; Ambient Temperature: 22.1° C; Liquid Temperature: 21.7° C).

4 SAR z-axis scans (Validation)

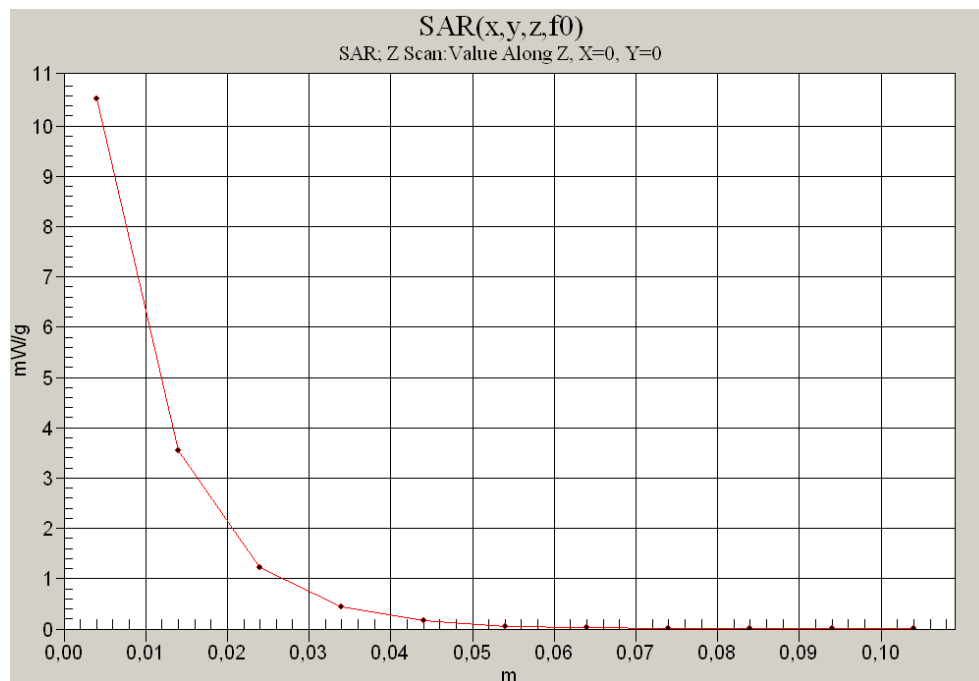


Fig. 6: SAR versus liquid depth, 1900 MHz, body (February 28, 2011; Ambient Temperature: 22.1° C; Liquid Temperature : 21.7° C).

5 SAR z-axis scans (Measurements)

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

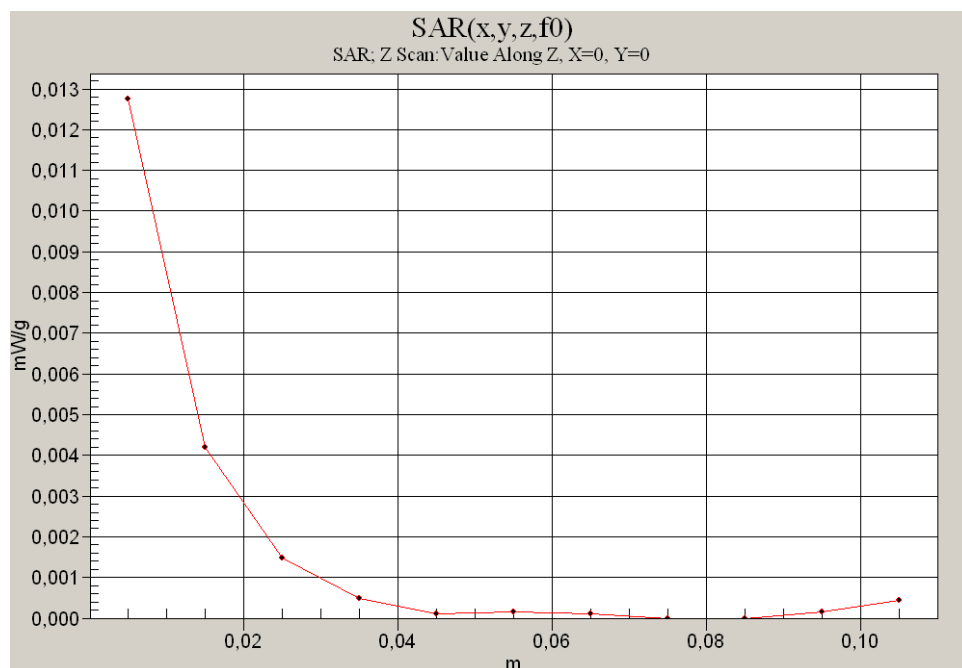


Fig. 7: SAR versus liquid depth, body: DECT US, antenna 1, channel 2, Position 1, 0 mm distance (February 28, 2011; Ambient Temperature: 22.1° C; Liquid Temperature: 21.7° C).