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# **Appendix for the Report**

## **Dosimetric Assessment of the CeoTronics CT-DECT Base (FCC ID: L52CT-M6CEO1)**

### **According to the FCC Requirements**

### **SAR Distribution Plots**

May 23, 2011  
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Customer  
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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, Antenna 1

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [CT-Dect Base yplm\\_1\\_ant1.da4](#)

DUT: CeoTronics; Type: CT-Dect Base; Serial: N/A

Program Name: DECT

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.77, 7.77, 7.77); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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

**Cheek Left/Area Scan (11x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.005 mW/g

**Cheek Left/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.09 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 0.011 W/kg

**SAR(1 g) = 0.00296 mW/g; SAR(10 g) = 0.0011 mW/g**

Maximum value of SAR (measured) = 0.007 mW/g

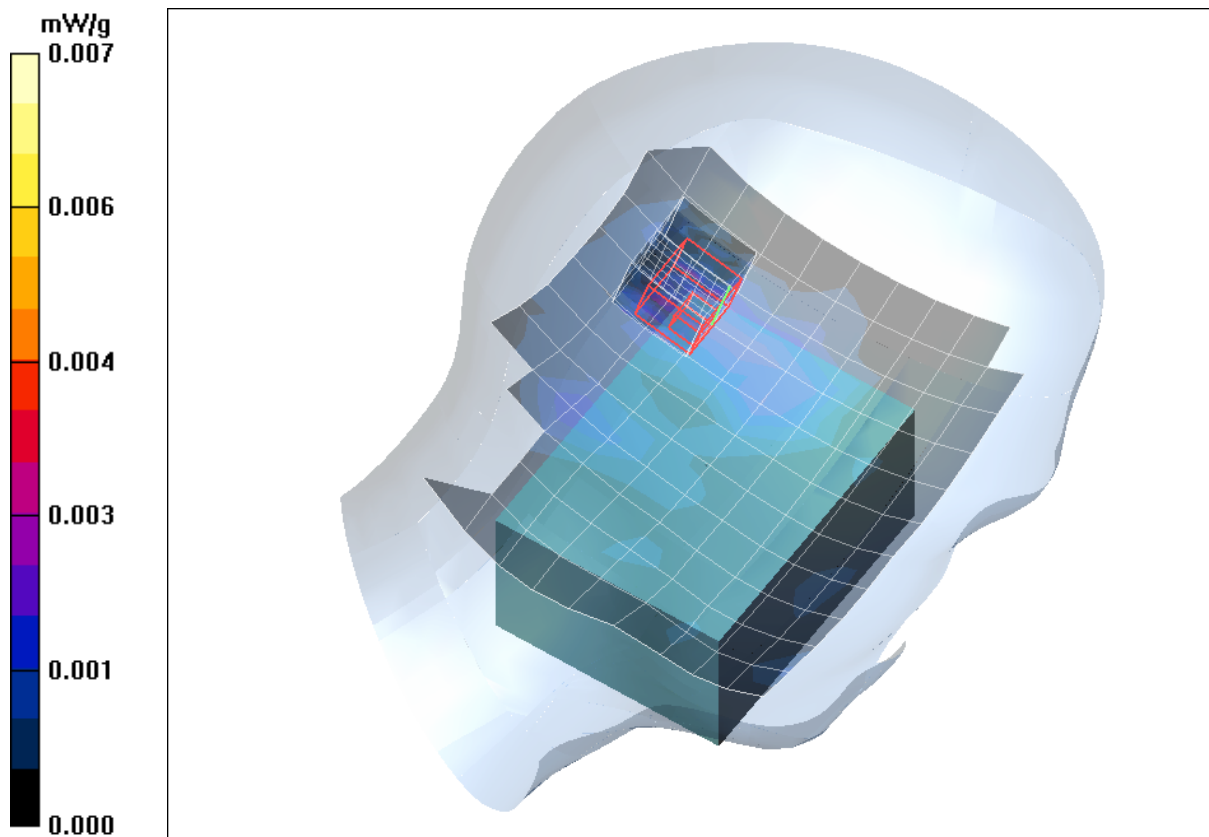


Fig. 1: SAR distribution for DECT US, antenna 1, channel 2, cheek left (May 19, 2011; Ambient Temperature: 21.5° C; Liquid Temperature: 21.3° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [CT-Dect Base yprm 1 ant1.da4](#)

DUT: CeoTronics; Type: CT-Dect Base; Serial: N/A

Program Name: DECT

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.77, 7.77, 7.77); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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

**Cheek Right/Area Scan (11x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.001 mW/g

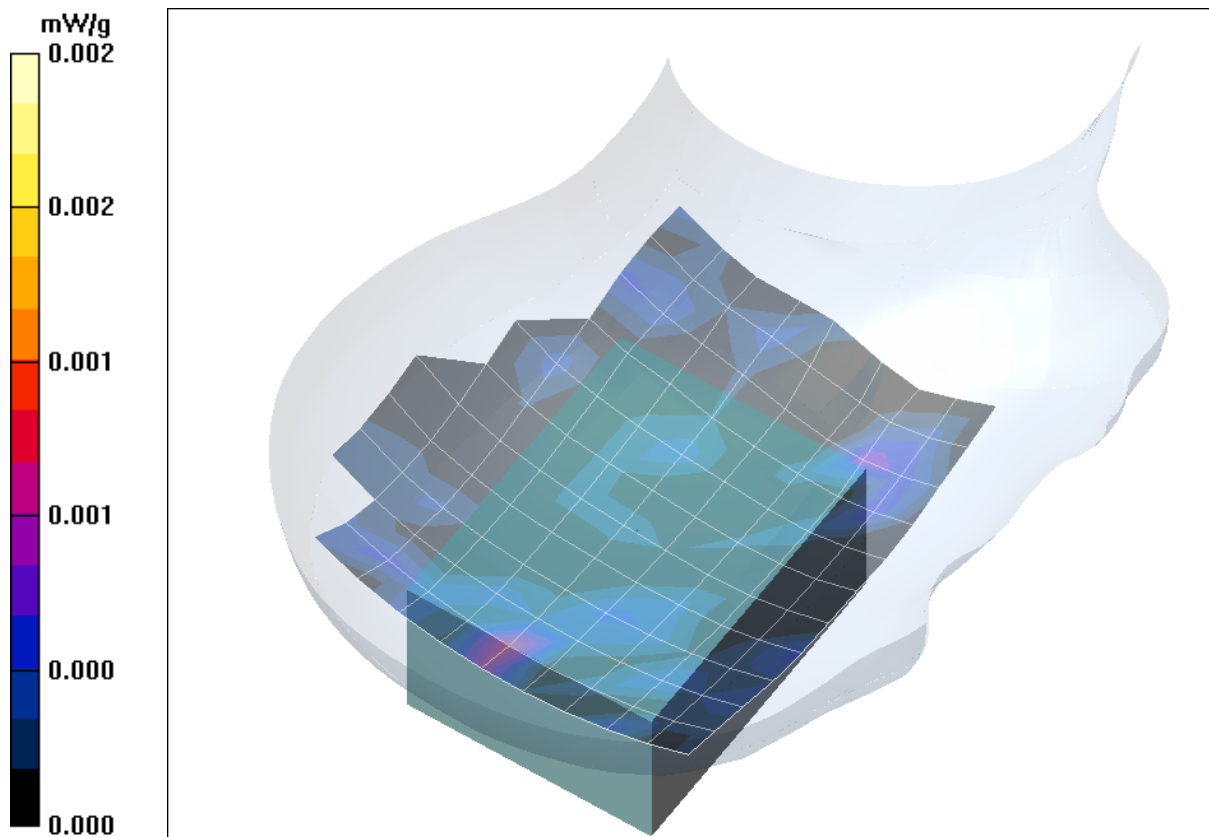


Fig. 2: SAR distribution for DECT US, antenna 1, channel 2, cheek right (May 19, 2011; Ambient Temperature: 21.5° C; Liquid Temperature: 21.3° C).

## 2 SAR Distribution Plots, Antenna 2

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [CT-Dect Base yplm\\_1\\_ant2.da4](#)

DUT: CeoTronics; Type: CT-Dect Base; Serial: N/A

Program Name: DECT

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.77, 7.77, 7.77); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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

**Cheek Left/Area Scan (11x12x1):** Measurement grid: dx=15mm, dy=15mm

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

**Cheek Left/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.45 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.009 W/kg

**SAR(1 g) = 0.00471 mW/g; SAR(10 g) = 0.00185 mW/g**

Maximum value of SAR (measured) = 0.008 mW/g

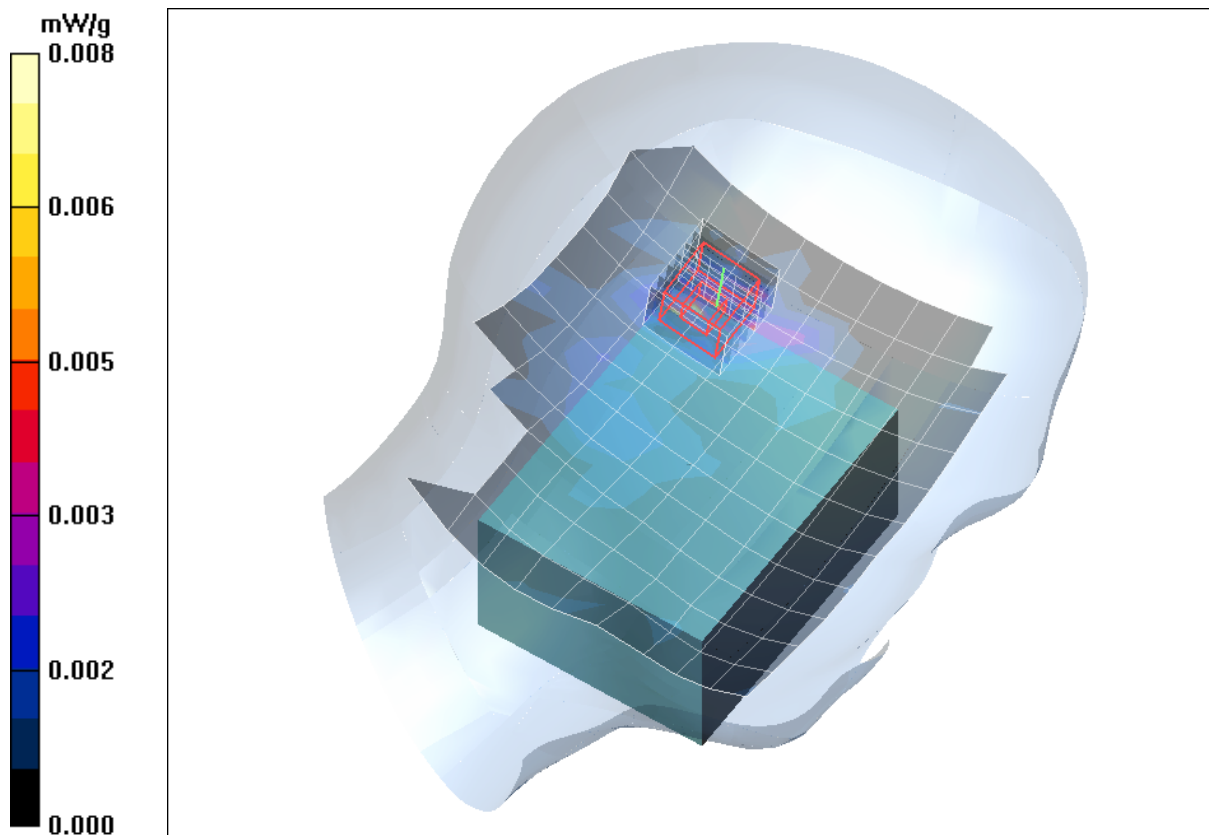


Fig. 3: SAR distribution for DECT US, antenna 2, channel 2, cheek left (May 19, 2011; Ambient Temperature: 21.5° C; Liquid Temperature: 21.3° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [CT-Dect Base yprm 1 ant2.da4](#)

DUT: CeoTronics; Type: CT-Dect Base; Serial: N/A

Program Name: DECT

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.77, 7.77, 7.77); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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

**Cheek Right/Area Scan (11x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.001 mW/g

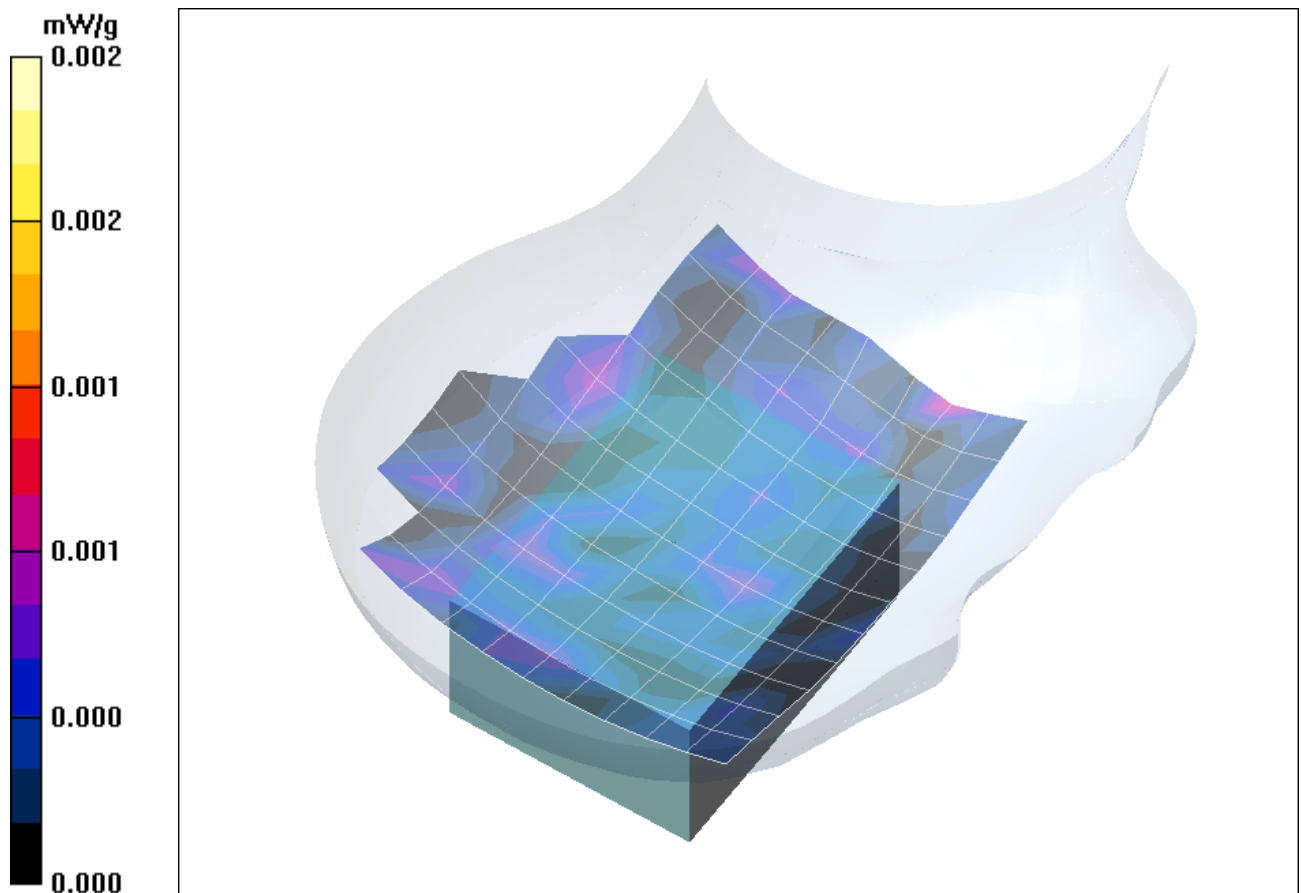


Fig. 4: SAR distribution for DECT US, antenna 2, channel 2, cheek right (May 19, 2011; Ambient Temperature: 21.5° C; Liquid Temperature: 21.3° C).

### 3 SAR Z-axis Scans (Validation)

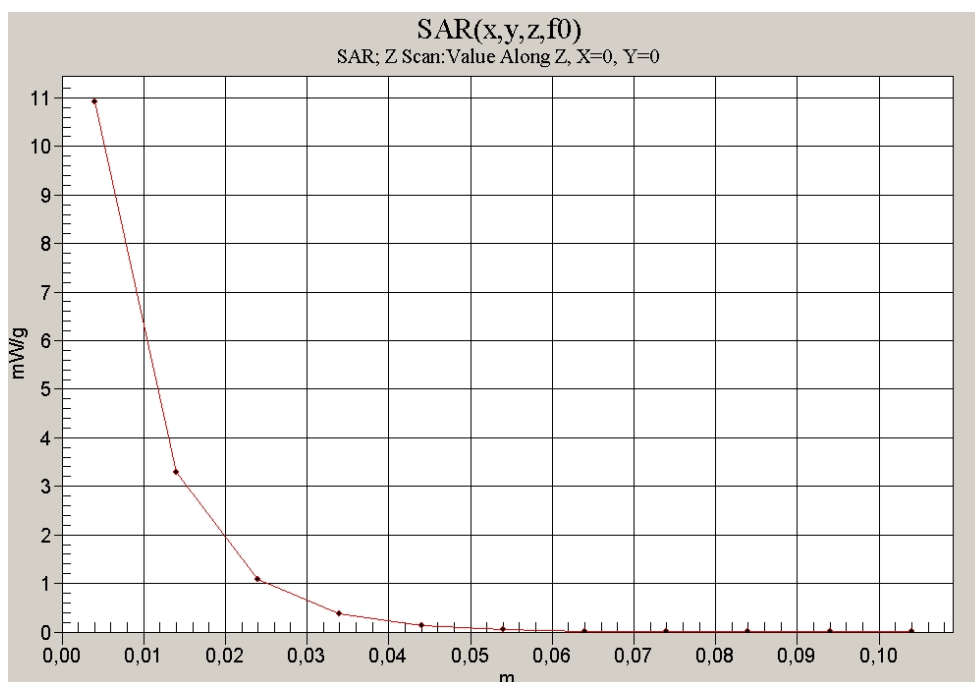


Fig. 5: SAR versus liquid depth, 1900 MHz, head  
(May 19, 2011; Ambient Temperature: 21.5° C; Liquid Temperature : 21.3° C).

### 4 SAR Z-axis Scans (Measurements)

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

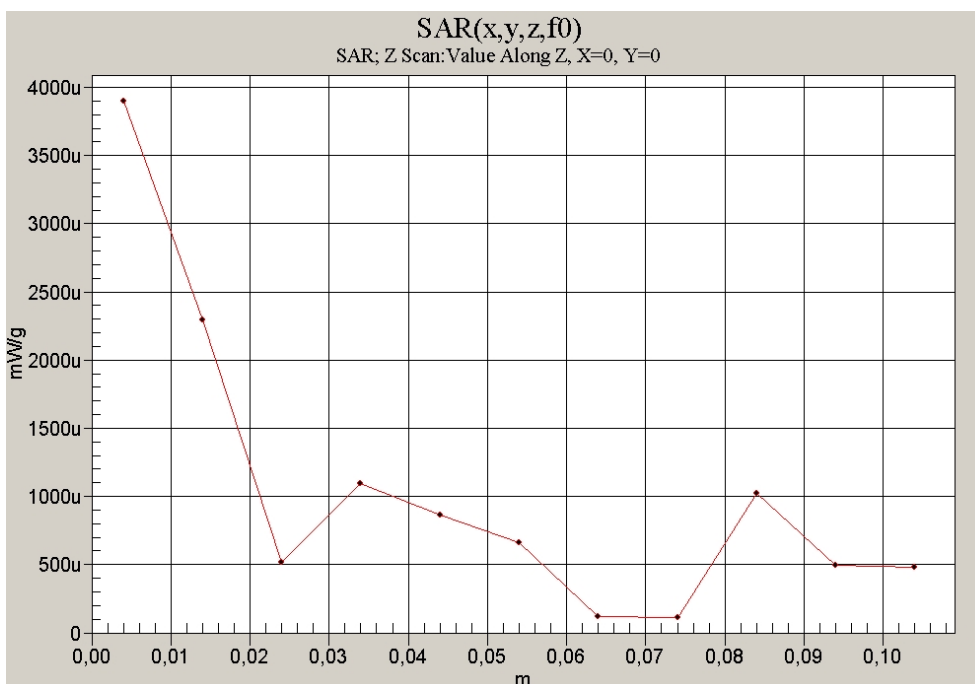


Fig. 6: SAR versus liquid depth, head: DECT US, antenna 2, channel 2, cheek left  
(May 19, 2011; Ambient Temperature: 21.5° C; Liquid Temperature: 21.3° C).