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# **Appendix for the Report**

## **Dosimetric Assessment of the Portable Device Panasonic KX-TD 7695 (FCC ID: ACJ96NKX-TD7695)**

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

### **SAR Distribution Plots**

November 15, 2007  
**IMST GmbH**  
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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  
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## 1 SAR Distribution Plots, Head Measurements

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [7695\\_yplm\\_1.da4](#)

DUT: Panasonic; Type: KX-TD 7695; Serial: New Sample

Program Name: Cheek Left

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2007
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Cheek Left/Area Scan (6x11x1):** Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 2.53 V/m; Power Drift = 0.194 dB

Peak SAR (extrapolated) = 0.012 W/kg

**SAR(1 g) = 0.0080 mW/g; SAR(10 g) = 0.0048 mW/g**

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

**Cheek Left/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.53 V/m; Power Drift = 0.194 dB

Peak SAR (extrapolated) = 0.015 W/kg

**SAR(1 g) = 0.0084 mW/g; SAR(10 g) = 0.0050 mW/g**

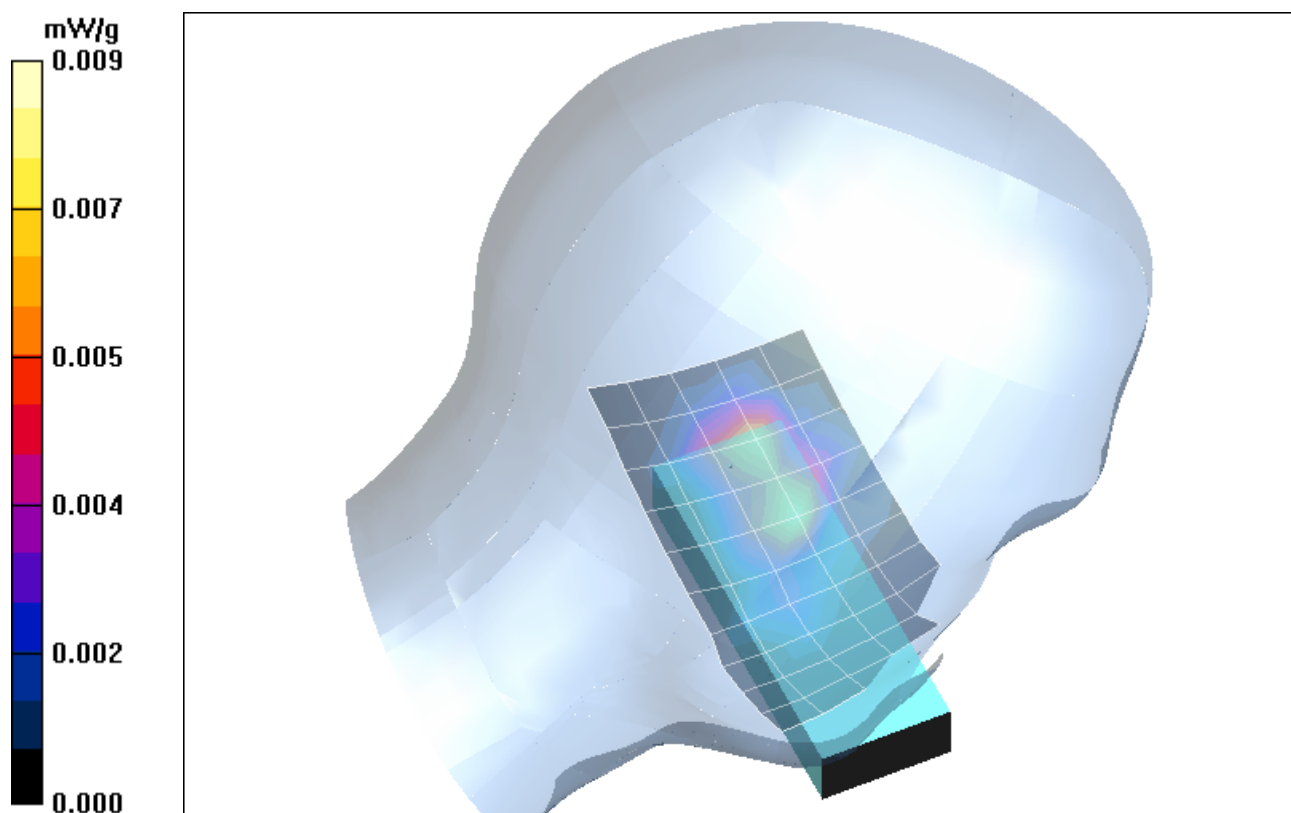


Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head (November 13, 2007; Ambient Temperature: 21.4°C; Liquid Temperature: 20.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [7695\\_vplm\\_2.da4](#)

DUT: Panasonic; Type: KX-TD 7695; Serial: New Sample

Program Name: Tilted Left

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2007
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Tilted Left/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.006 mW/g

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

Reference Value = 2.64 V/m; Power Drift = 0.165 dB

Peak SAR (extrapolated) = 0.014 W/kg

**SAR(1 g) = 0.0081 mW/g; SAR(10 g) = 0.0044 mW/g**

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

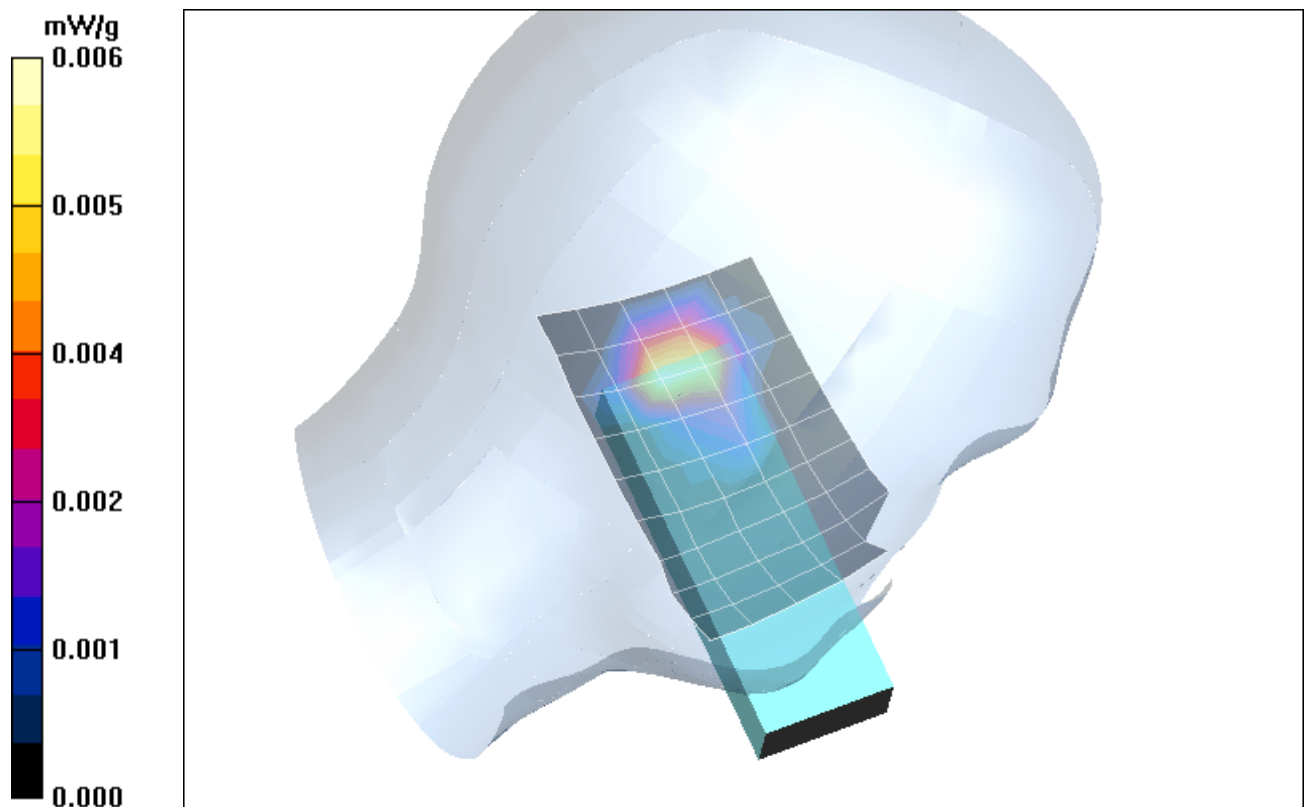


Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head (November 13, 2007; Ambient Temperature: 21.4°C; Liquid Temperature: 20.7°C).

**Test Laboratory:** Imst GmbH, DASY Yellow (II); **File Name:** [7695\\_yprm\\_1.da4](#)

**DUT:** Panasonic; **Type:** KX-TD 7695; **Serial:** New Sample

**Program Name:** Cheek Right

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2007
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Cheek Right/Area Scan (6x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.011 mW/g

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

Reference Value = 3.08 V/m; Power Drift = 0.124 dB

Peak SAR (extrapolated) = 0.063 W/kg

**SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.0060 mW/g**

Maximum value of SAR (measured) = 0.014 mW/g

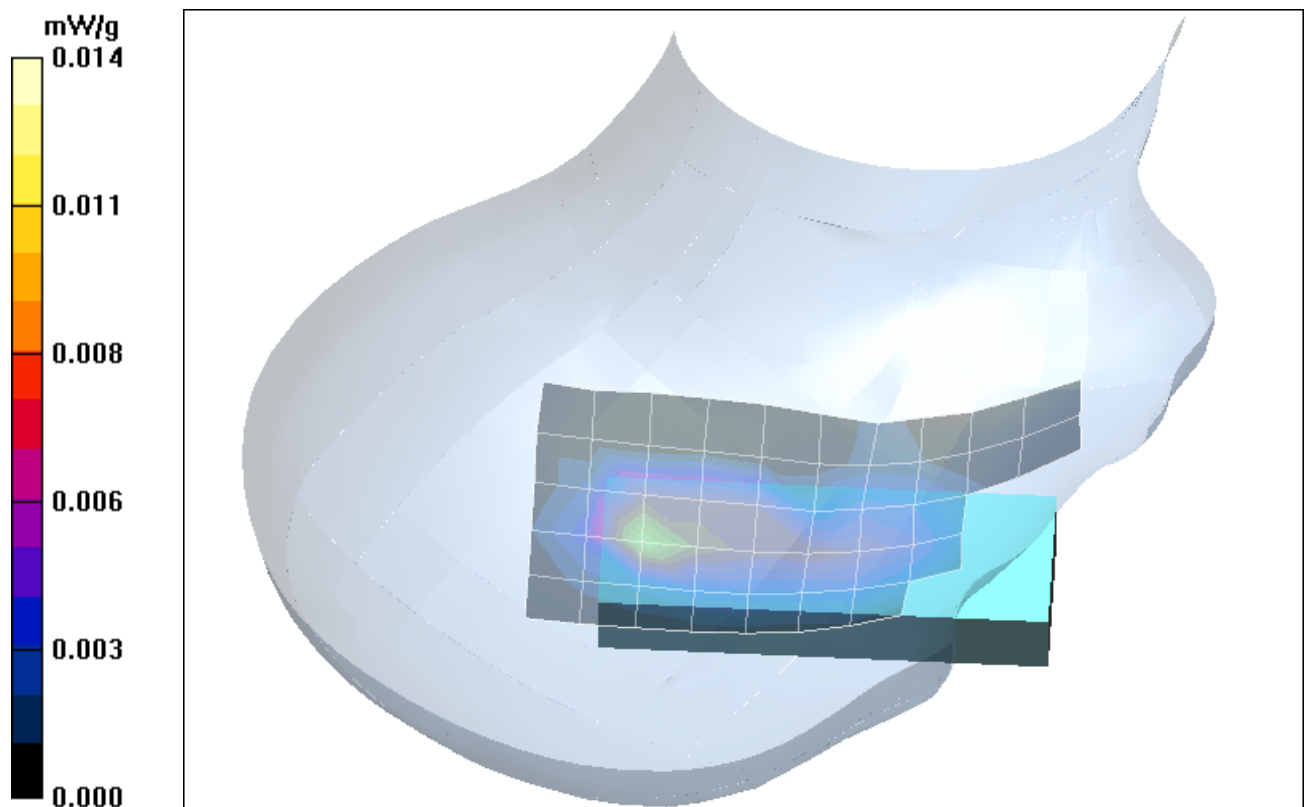


Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head (November 13, 2007; Ambient Temperature: 21.4°C; Liquid Temperature: 20.7°C).

**Test Laboratory:** Imst GmbH, DASY Yellow (II); **File Name:** [7695\\_yprm\\_2.da4](#)

**DUT: Panasonic; Type: KX-TD 7695; Serial: New Sample**

**Program Name: Tilted Right**

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007

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

- Electronics: DAE3 Sn335; Calibrated: 09.02.2007

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

- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Tilted Right/Area Scan (6x11x1):** Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 2.62 V/m; Power Drift = -0.164 dB

Peak SAR (extrapolated) = 0.015 W/kg

**SAR(1 g) = 0.0093 mW/g; SAR(10 g) = 0.0043 mW/g**

Maximum value of SAR (measured) = 0.011 mW/g

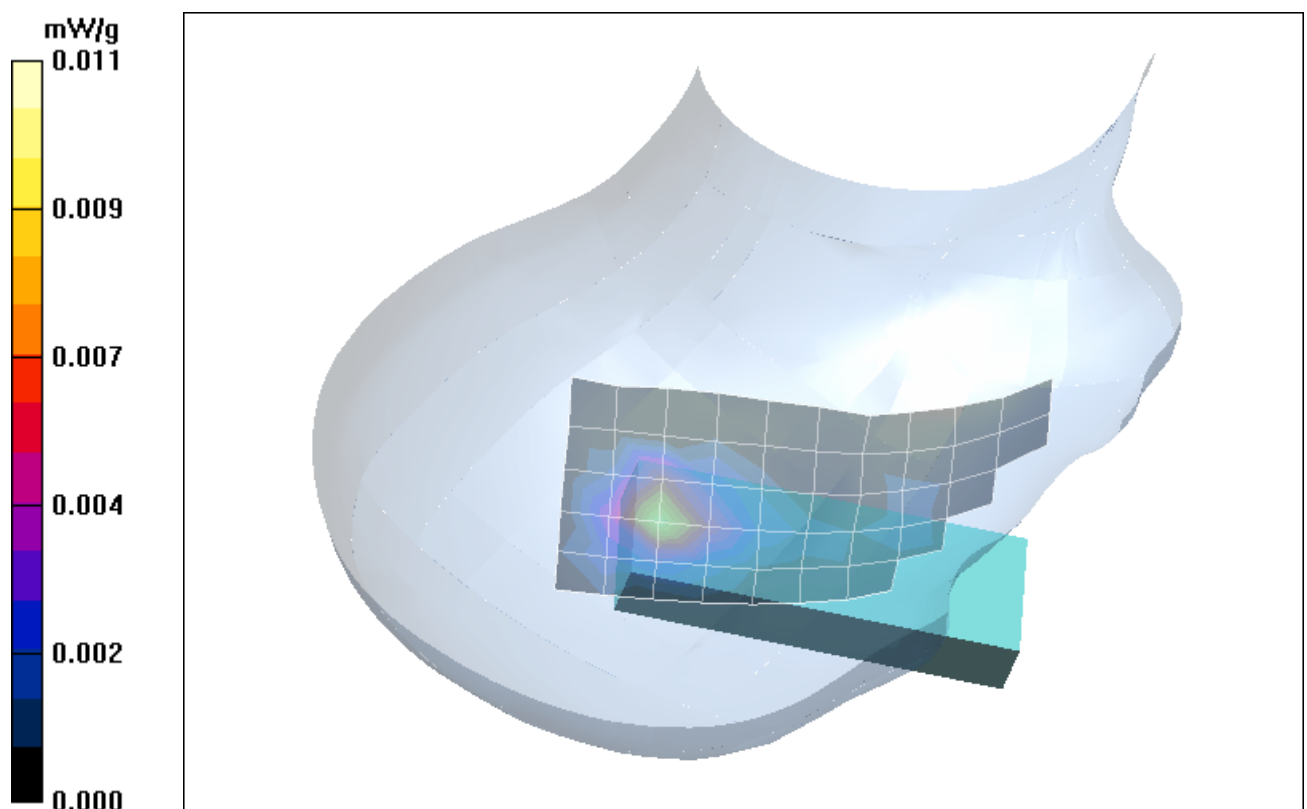


Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head (November 13, 2007; Ambient Temperature: 21.4°C; Liquid Temperature: 20.7°C)

## 2 SAR Distribution Plots, Body Measurements

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [KX-TD7695\\_bphm\\_2\\_headset.da4](#)

DUT: Panasonic; Type: KX-TD 7695; Serial: New Sample

Program Name: Body

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

Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.58$  mho/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.67, 7.67, 7.67); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (8x13x1):** Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 1.08 V/m; Power Drift = 0.083 dB

Peak SAR (extrapolated) = 0.019 W/kg

**SAR(1 g) = 0.0093 mW/g; SAR(10 g) = 0.0034 mW/g**

Maximum value of SAR (measured) = 0.011 mW/g

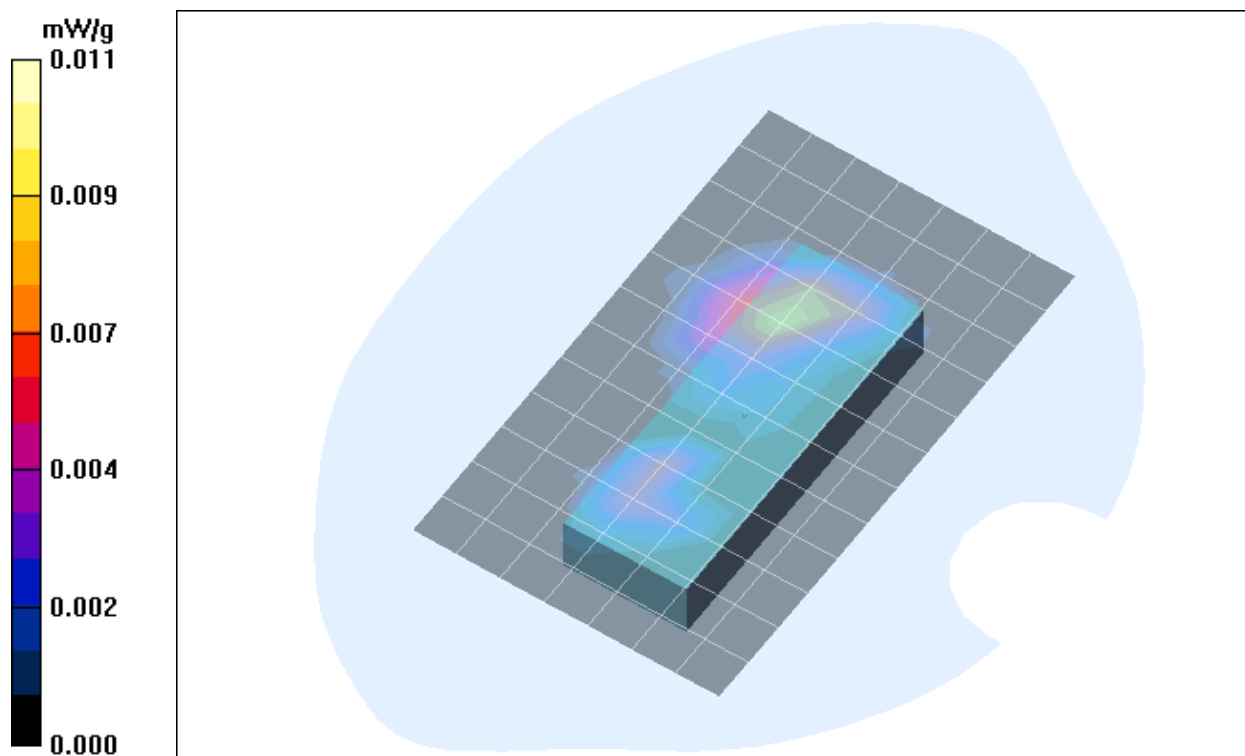


Fig. 5: SAR distribution for DECT US, channel 2, body worn configuration, antenna towards the phantom, with belt clip and headset, 0 mm distance (November 12, 2007; Ambient Temperature: 21.3° C; Liquid Temperature: 20.8° C).

### 3 SAR z-axis scans (Validation)

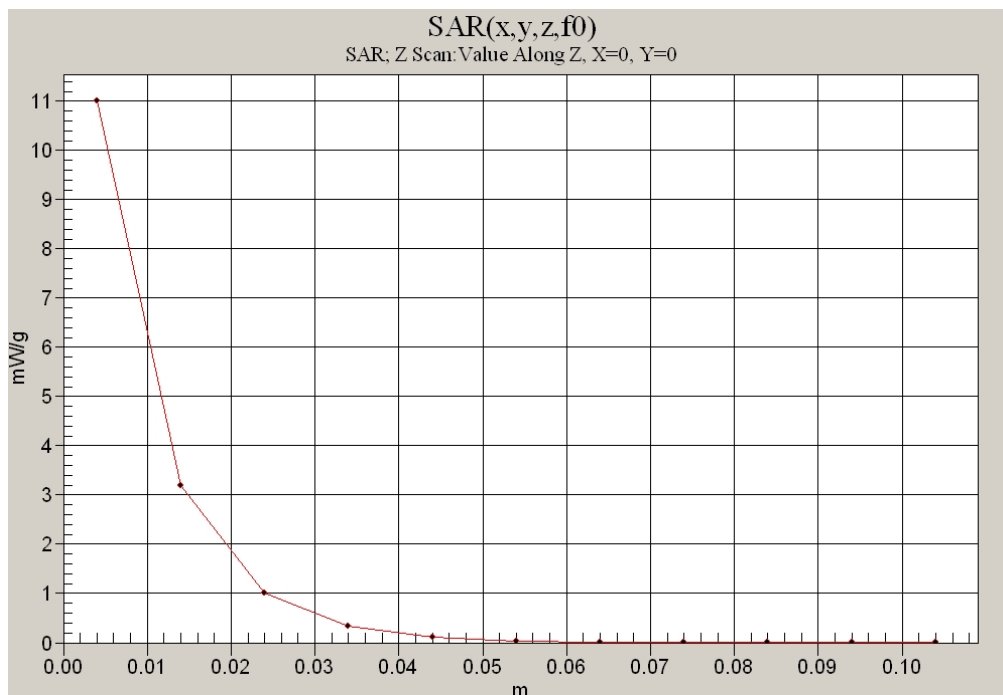


Fig. 6: SAR versus liquid depth, 1900 MHz, head (November 13, 2007; Ambient Temperature: 21.4° C; Liquid Temperature : 20.7° C).

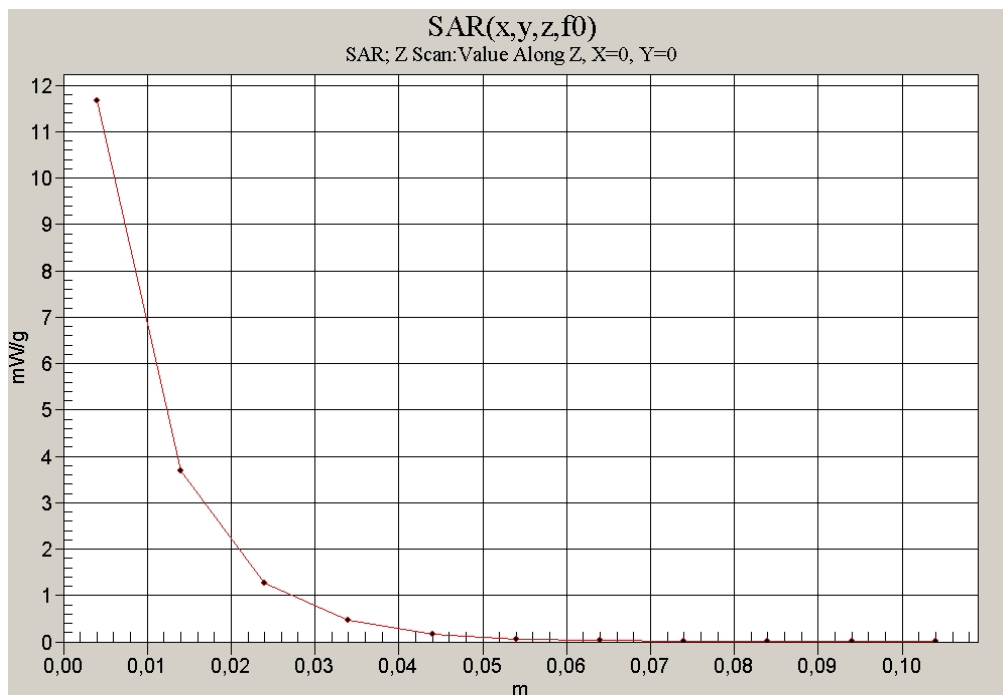


Fig. 7: SAR versus liquid depth, 1900 MHz, body (November 12, 2007; Ambient Temperature: 21.3° C; Liquid Temperature : 20.8° C).



#### 4 SAR z-axis scans (Measurements)

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

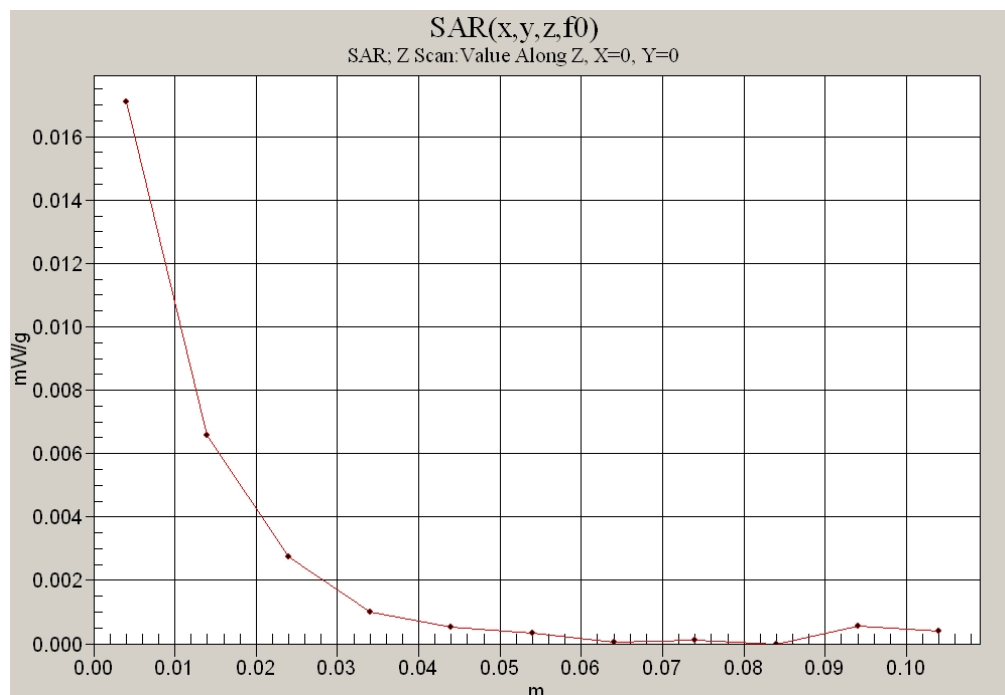


Fig. 8: SAR versus liquid depth, head: DECT US, channel 2, cheek position, right side of head, (November 13, 2007; Ambient Temperature: 21.4° C; Liquid Temperature: 20.7° C).

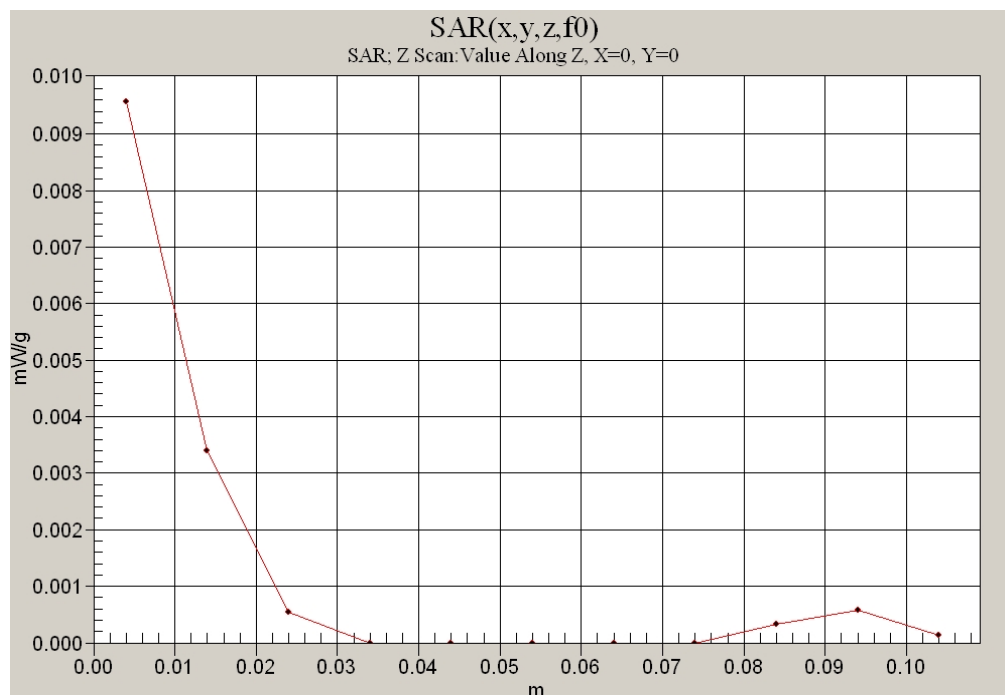


Fig. 9: SAR versus liquid depth, body: DECT US 1900, channel 2, antenna towards the phantom, display towards the ground, with belt clip and headset, 0 mm distance (November 12, 2007; Ambient Temperature: 21.3° C; Liquid Temperature: 20.8° C).