Deutscher Akkreditierungs Rat

DAT-P-152/98-01

Appendix for the Report

Dosimetric Assessment of the Portable Device Panasonic KX-TGA120 (FCC ID: ACJ96NKX-TGA120)

According to the FCC Requirements

SAR Distribution Plots

December 06, 2010

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3 SAR Z-AXIS SCANS (MEASUREMENTS) 7

1 SAR Distribution Plots, Head Measurements

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA120_yplm_1.da4

DUT: Panasonic; Type: KX-TGA120;

Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.44 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
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: DAE3 Sn335; Calibrated: 10.02.2010
- 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 (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.013 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.59 V/m; Power Drift = -0.146 dB
Peak SAR (extrapolated) = 0.025 W/kg
SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00629 mW/g
Maximum value of SAR (measured) = 0.015 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.59 V/m; Power Drift = -0.146 dB
Peak SAR (extrapolated) = 0.071 W/kg
SAR(1 g) = 0.00629 mW/g; SAR(10 g) = 0.000916 mW/g

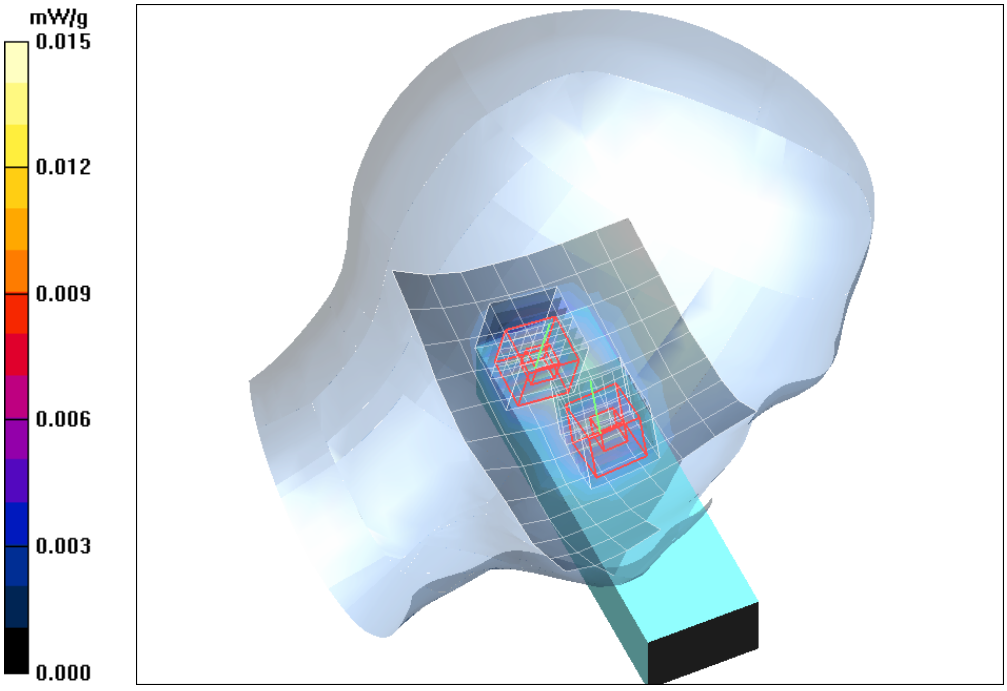

Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head (November 25, 2010; Ambient Temperature: 21.3°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA120_yplm_2.da4

DUT: Panasonic; Type: KX-TGA120;
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.44 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
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: DAE3 Sn335; Calibrated: 10.02.2010
- 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

Tilted Left/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.010 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.40 V/m; Power Drift = 0.154 dB
Peak SAR (extrapolated) = 0.022 W/kg
SAR(1 g) = 0.00925 mW/g; SAR(10 g) = 0.00435 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.40 V/m; Power Drift = 0.154 dB
Peak SAR (extrapolated) = 0.015 W/kg
SAR(1 g) = 0.00712 mW/g; SAR(10 g) = 0.00288 mW/g

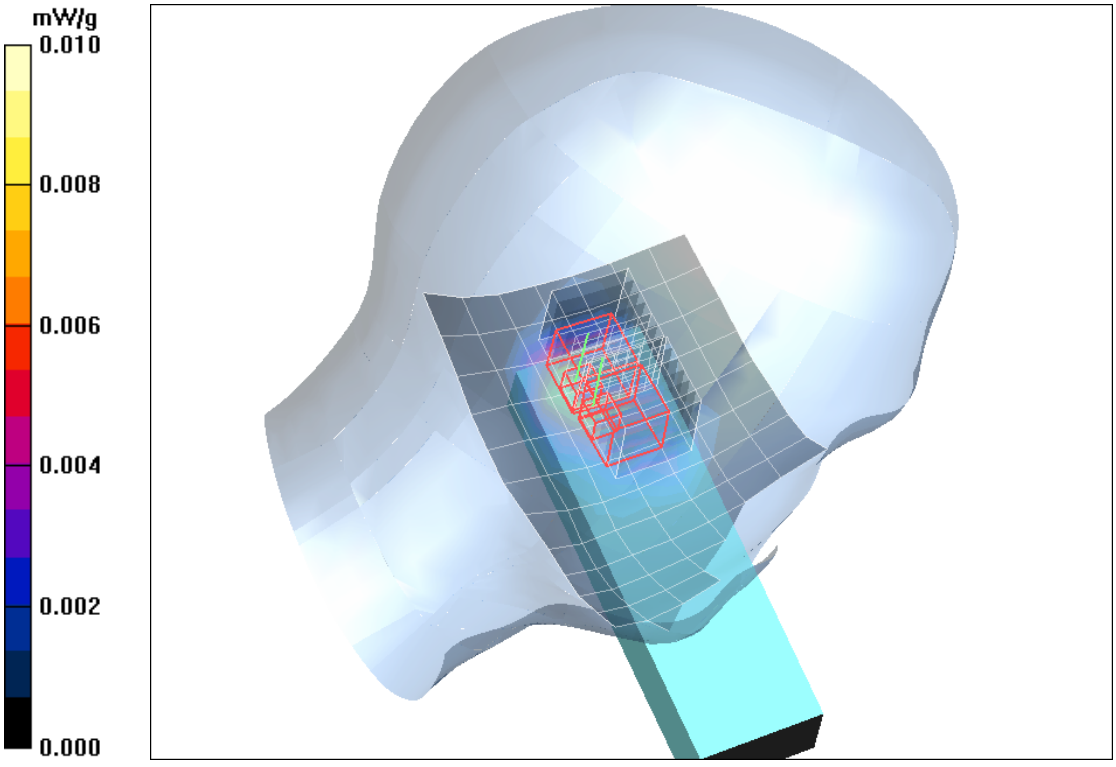

Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head (November 25, 2010; Ambient Temperature: 21.3°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA120_yprm_1.da4

DUT: Panasonic; Type: KX-TGA120;
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.44 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
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: DAE3 Sn335; Calibrated: 10.02.2010
- 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 (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.015 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.67 V/m; Power Drift = 0.136 dB
Peak SAR (extrapolated) = 0.023 W/kg
SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00669 mW/g

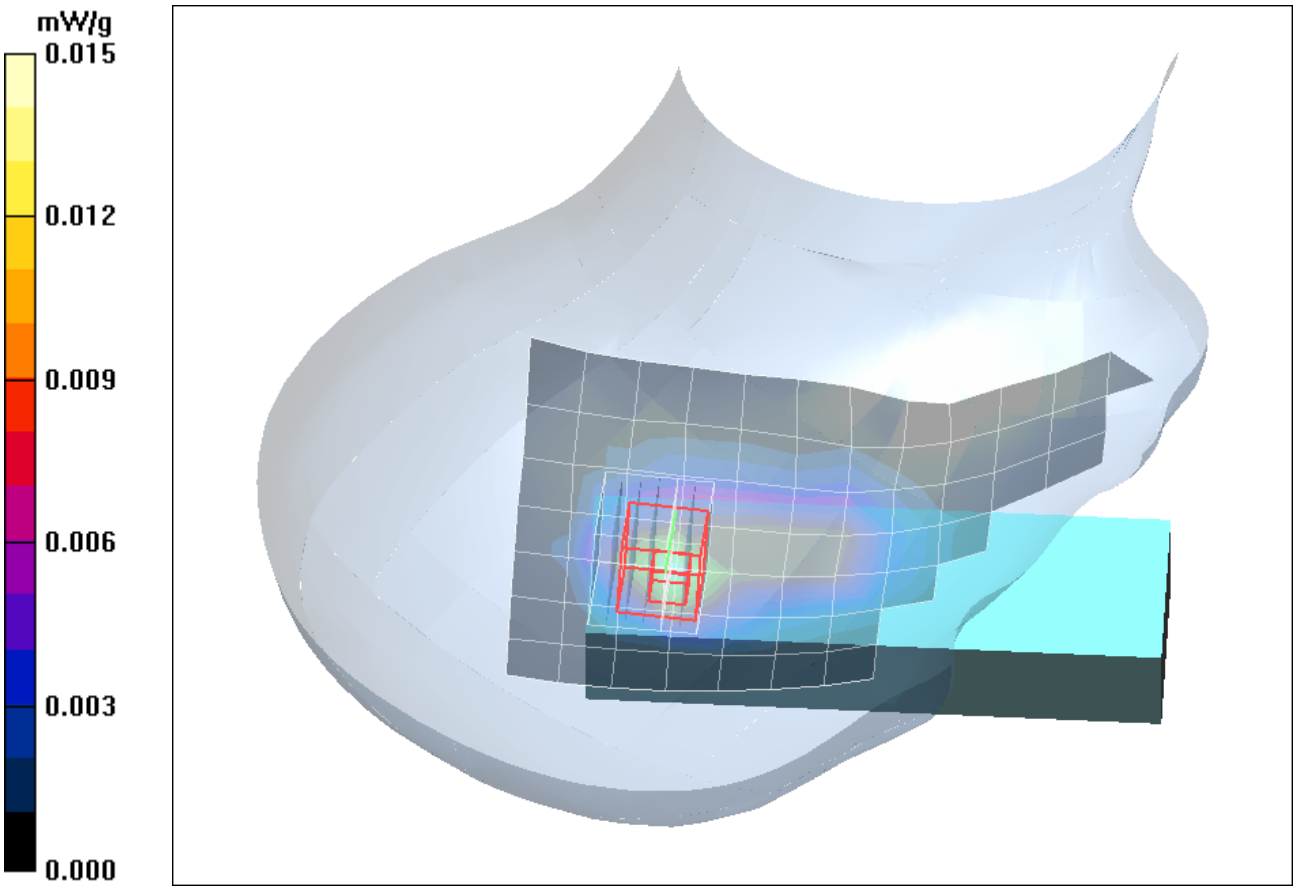

Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head (November 25, 2010; Ambient Temperature: 21.3°C; Liquid Temperature: 21.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA120_yprm_2.da4

DUT: Panasonic; Type: KX-TGA120;
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.44 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
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: DAE3 Sn335; Calibrated: 10.02.2010
- 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

Tilted Right/Area Scan (8x14x1): 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 = 2.48 V/m; Power Drift = 0.181 dB
Peak SAR (extrapolated) = 0.017 W/kg
SAR(1 g) = 0.00945 mW/g; SAR(10 g) = 0.00432 mW/g
Maximum value of SAR (measured) = 0.011 mW/g

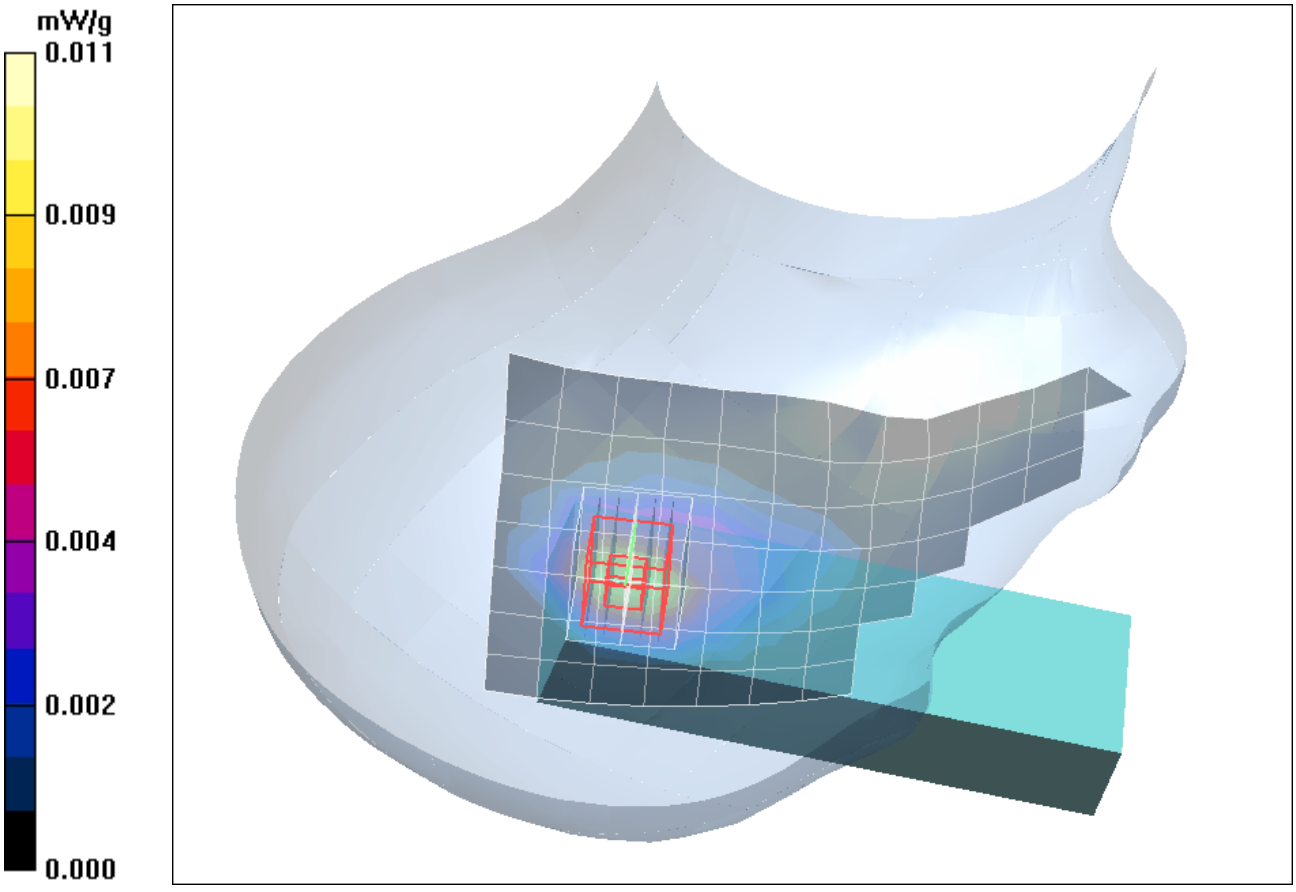

Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head (November 25, 2010; Ambient Temperature: 21.3°C; Liquid Temperature: 21.0°C)

2 SAR z-axis scans (Validation)

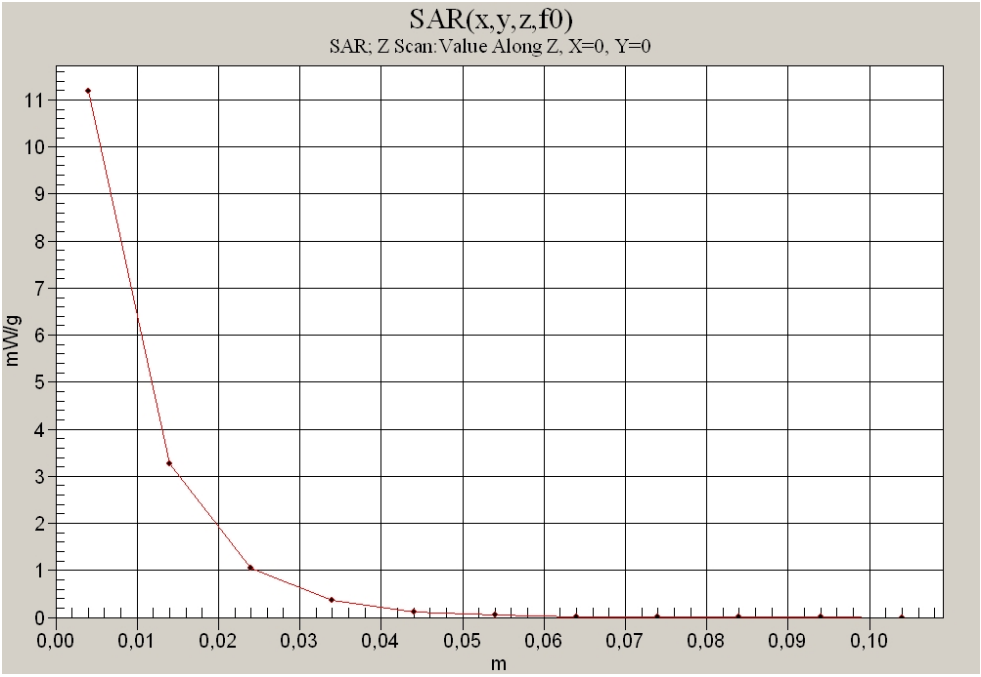

Fig. 5: SAR versus liquid depth, 1900 MHz, head (November 25, 2010; Ambient Temperature: 21.3° C; Liquid Temperature : 21.0° C).

3 SAR z-axis scans (Measurements)

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

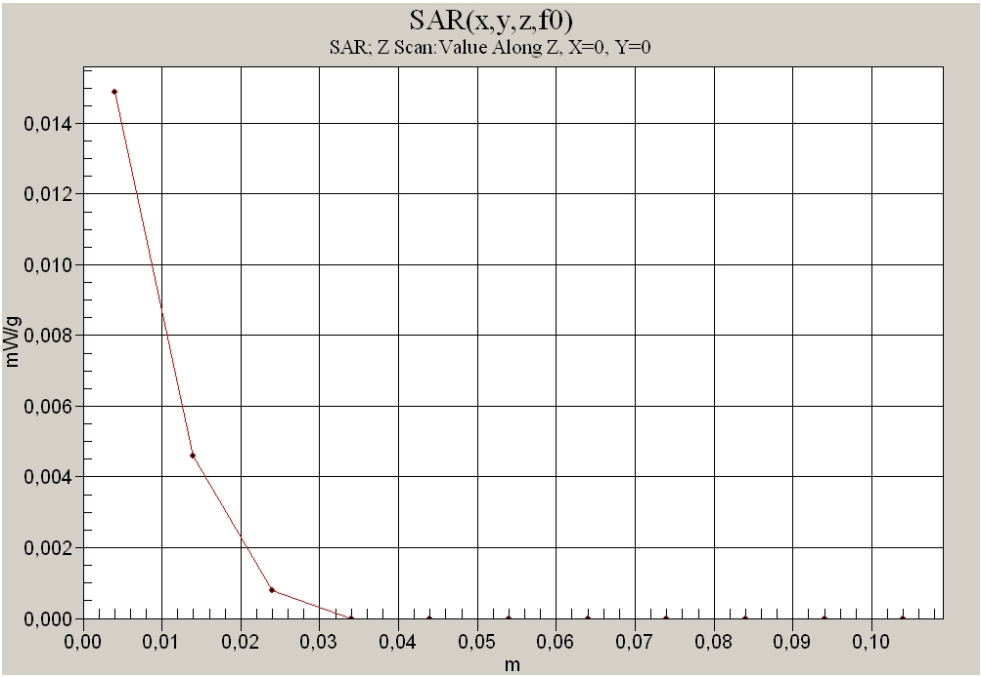

Fig. 6: SAR versus liquid depth, head: DECT US, channel 2, cheek position, right side of head (November 25, 2010; Ambient Temperature: 21.3° C; Liquid Temperature: 21.0° C).