Deutscher Akkreditierungs Rat

DAT-P-152/98-01

Appendix for the Report

Dosimetric Assessment of the Panasonic KX-TGA106 (FCC ID: ACJ96NKX-TGA106)

According to the FCC Requirements

SAR Distribution Plots

December 19, 2008

IMST GmbH

Carl-Friedrich-Gauß-Str. 2

D-47475 Kamp-Lintfort

Customer

Panasonic Communications Co., Ltd.

1-62, 4-chome, Minoshima, Hakata-ku

Fukuoka 812-8531 Japan

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1 SAR Distribution Plots, Head Measurements

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA106_yplm_1.da4

DUT: Panasonic; Type: KX-TGA106;
Program Name: Cheek Left

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.39 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(5.01, 5.01, 5.01); Calibrated: 23.01.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek Left/Area Scan (7x14x1): 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 = 3.29 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.022 W/kg
SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00704 mW/g
Maximum value of SAR (measured) = 0.014 mW/g

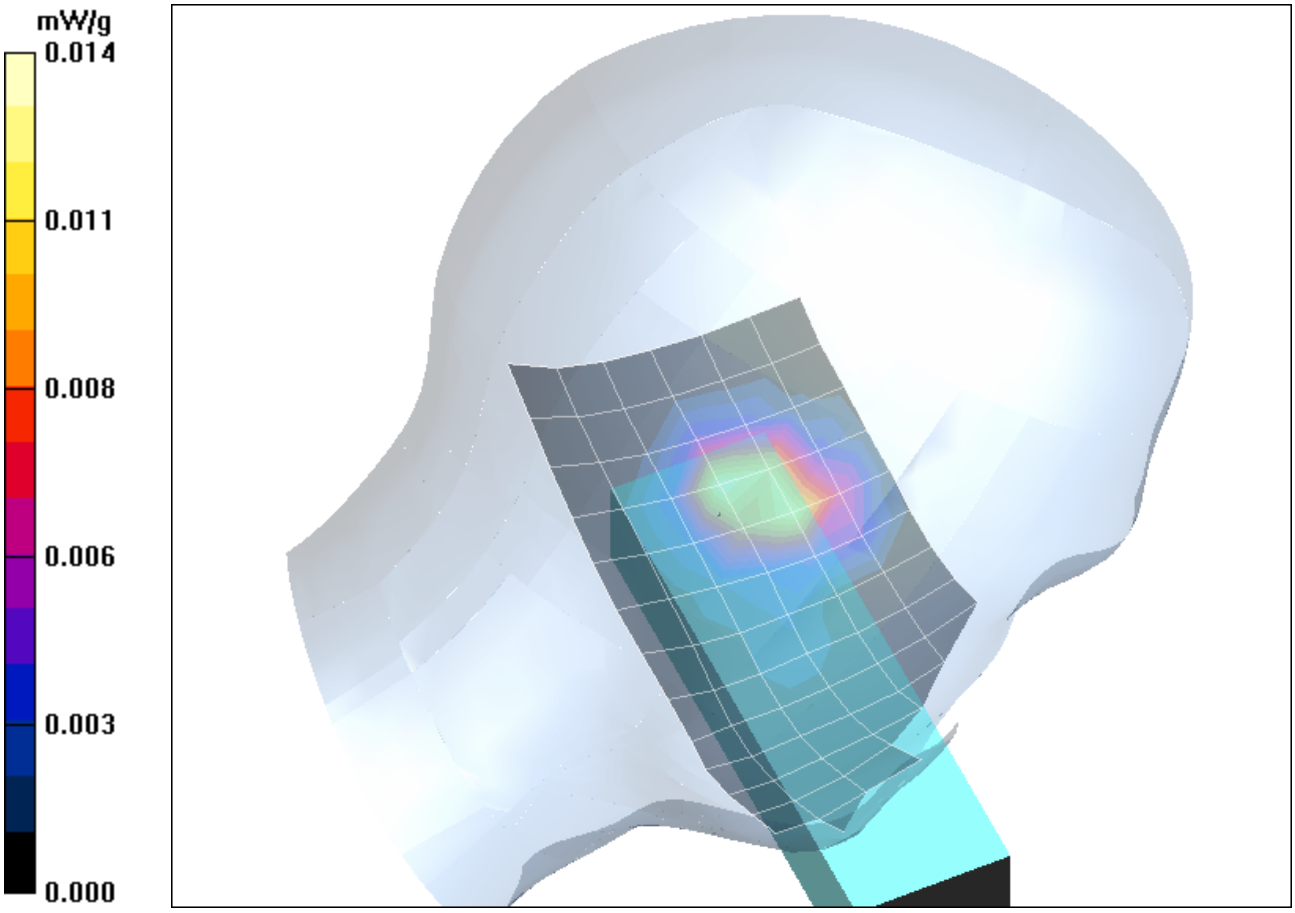

Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head (November 26, 2008; Ambient Temperature: 21.2°C; Liquid Temperature: 20.4°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA106_yplm_2.da4

DUT: Panasonic; Type: KX-TGA106;
Program Name: Tilted Left

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.39 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(5.01, 5.01, 5.01); Calibrated: 23.01.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilted Left/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.009 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.56 V/m; Power Drift = -0.063 dB
Peak SAR (extrapolated) = 0.014 W/kg
SAR(1 g) = 0.00852 mW/g; SAR(10 g) = 0.00468 mW/g
Maximum value of SAR (measured) = 0.010 mW/g

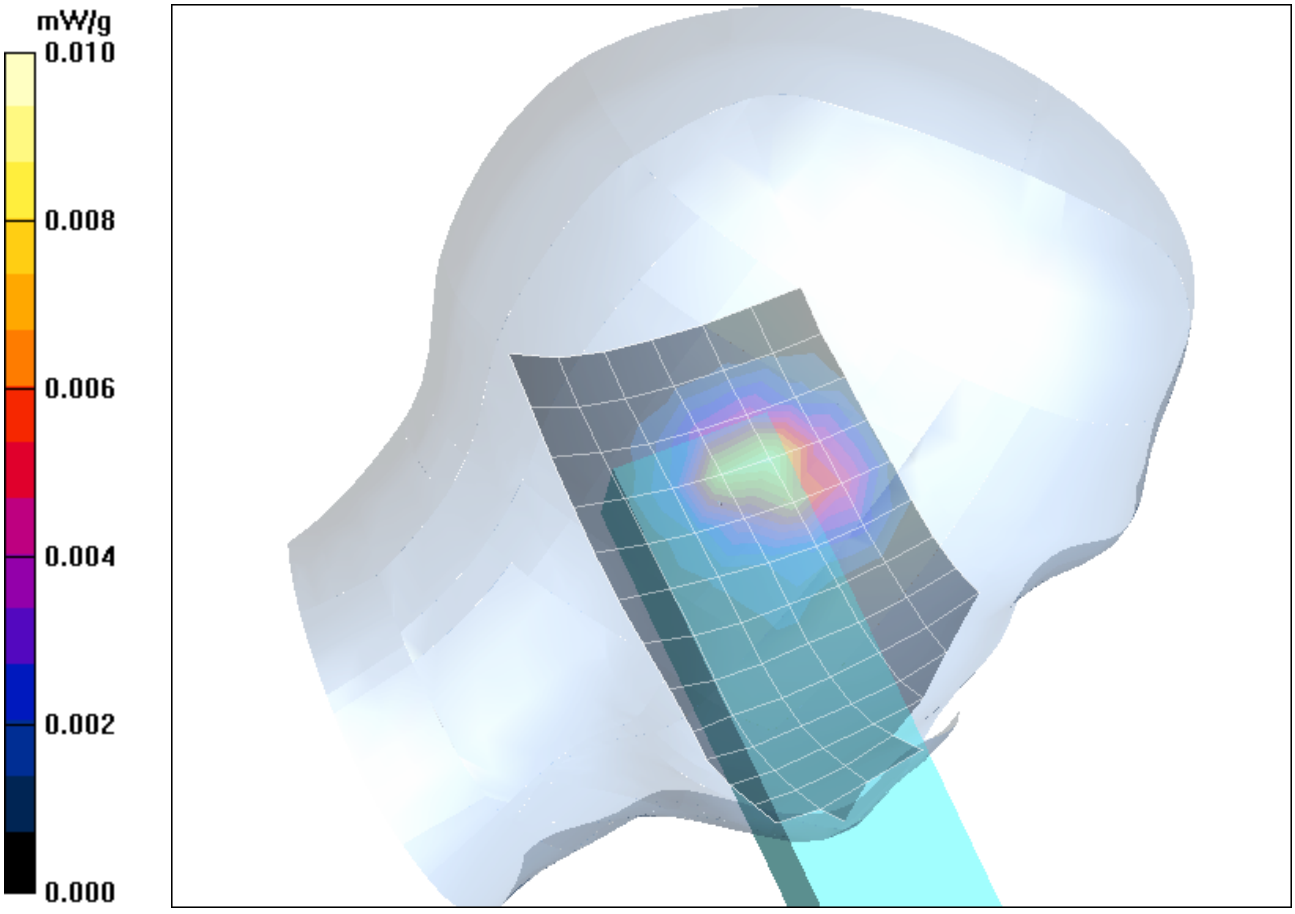

Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head (November 26, 2008; Ambient Temperature: 21.2°C; Liquid Temperature: 20.4°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA106_yprm_1.da4

DUT: Panasonic; Type: KX-TGA106;
Program Name: Cheek Right

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.39 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(5.01, 5.01, 5.01); Calibrated: 23.01.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek Right/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.012 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.11 V/m; Power Drift = 0.022 dB
Peak SAR (extrapolated) = 0.019 W/kg
SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00593 mW/g

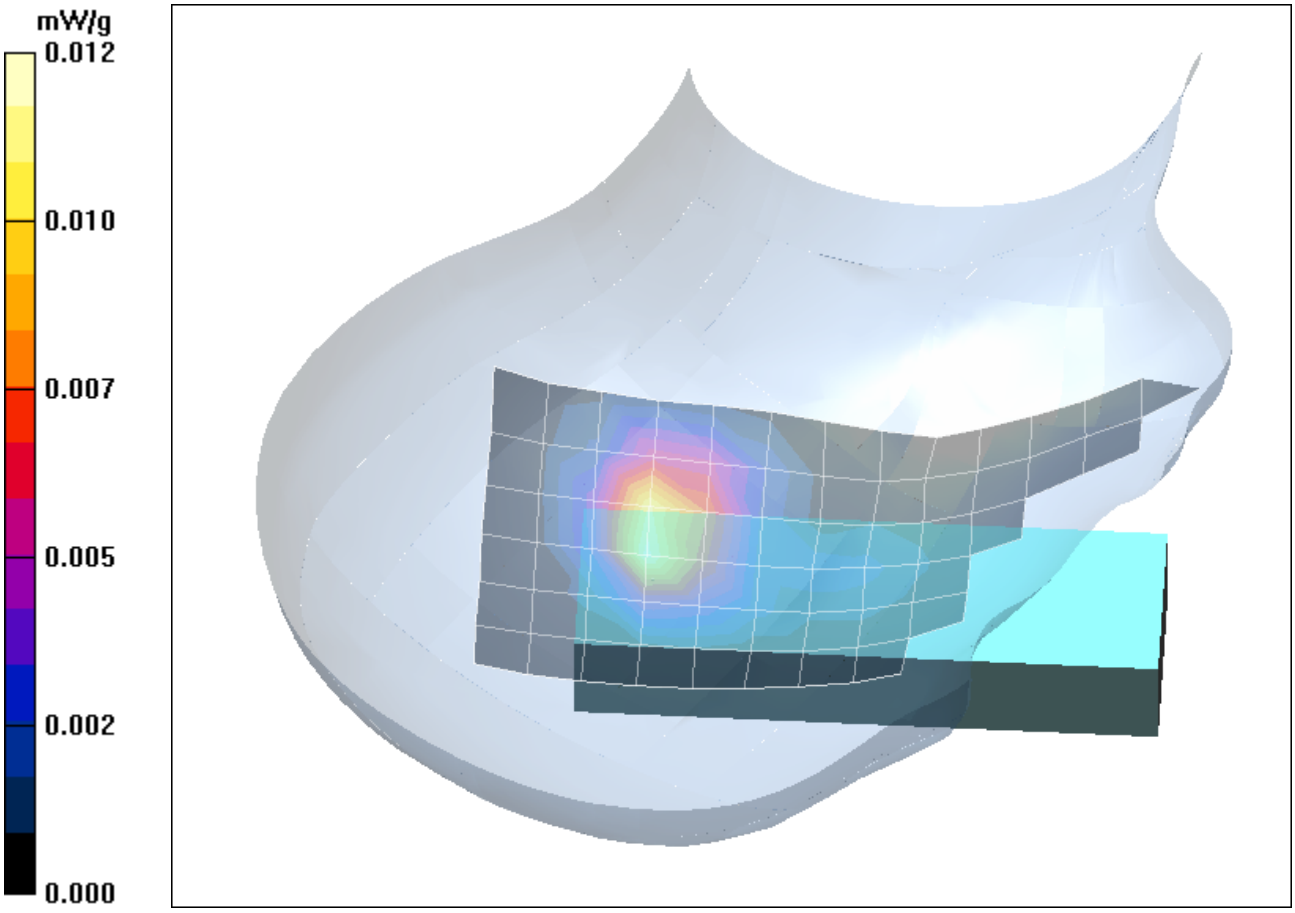

Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head (November 26, 2008; Ambient Temperature: 21.2°C; Liquid Temperature: 20.4°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA106_yprm_2.da4

DUT: Panasonic; Type: KX-TGA106;
Program Name: Tilted Right

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.39 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(5.01, 5.01, 5.01); Calibrated: 23.01.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilted Right/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.008 mW/g
Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.44 V/m; Power Drift = 0.176 dB
Peak SAR (extrapolated) = 0.014 W/kg
SAR(1 g) = 0.00767 mW/g; SAR(10 g) = 0.00427 mW/g
Maximum value of SAR (measured) = 0.009 mW/g

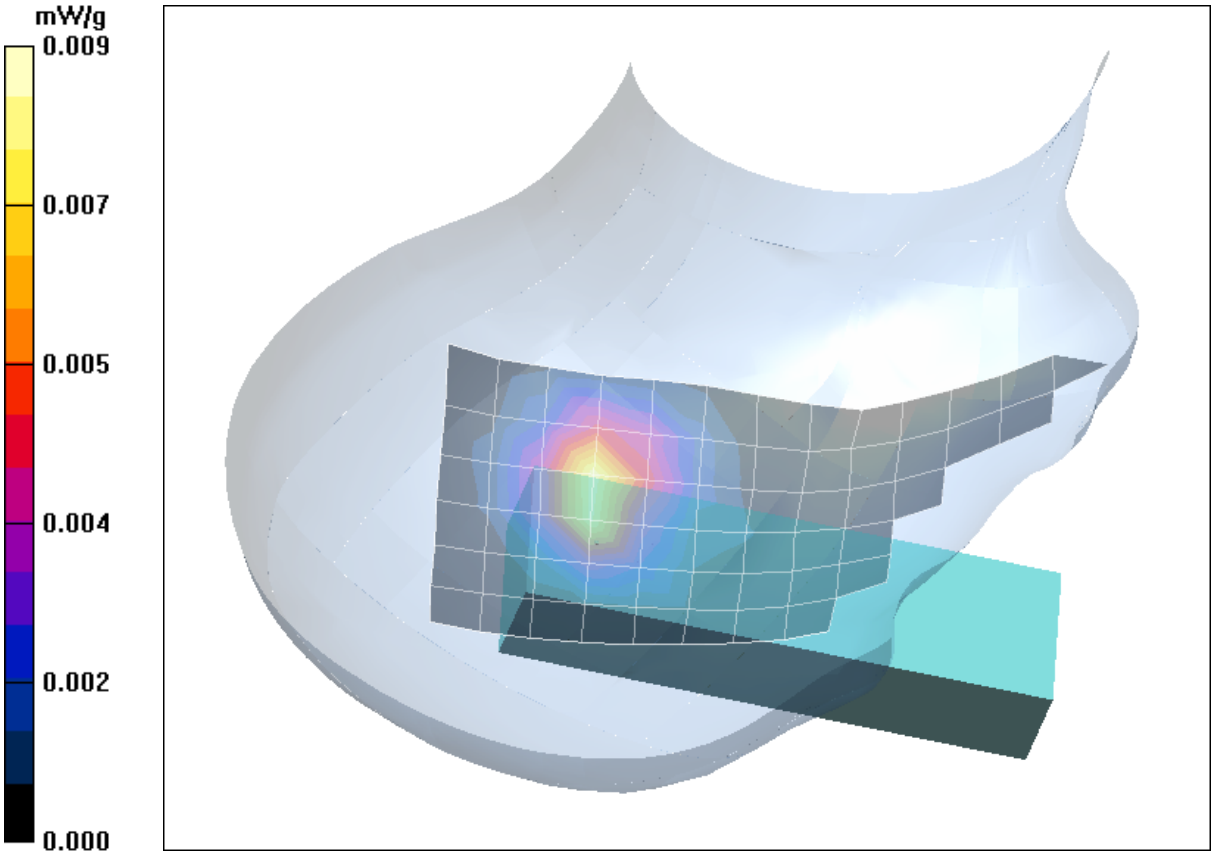

Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head (November 26, 2008; Ambient Temperature: 21.2°C; Liquid Temperature: 20.4°C)

2 SAR Distribution Plots, Body Measurements

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGA106_yphm_1_dspl_up_clip_HS.da4

DUT: Panasonic; Type: KX-TGA106;
Program Name: Body

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.56 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(4.63, 4.63, 4.63); Calibrated: 23.01.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.013 mW/g
Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.04 V/m; Power Drift = -0.083 dB
Peak SAR (extrapolated) = 0.022 W/kg
SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00656 mW/g

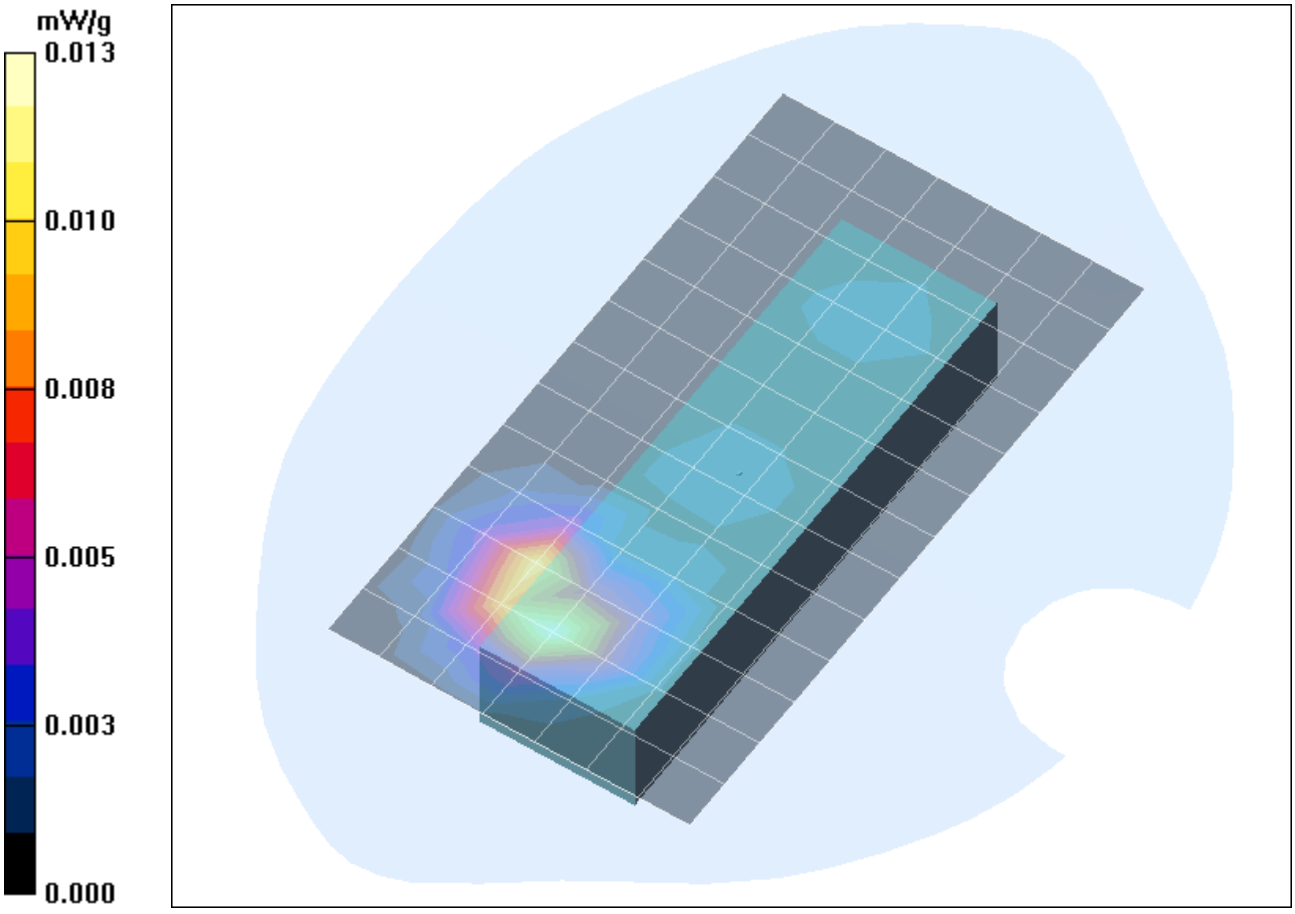

Fig. 5: SAR distribution for DECT US, channel 2, body worn configuration, display towards the phantom, with headset and belt clip, 0 mm distance (November 26, 2008; Ambient Temperature: 21.4° C; Liquid Temperature: 20.6° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name:
TGA106_yphm_2_dspl_down_clip_HS.da4

DUT: Panasonic; Type: KX-TGA106;
Program Name: Body

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.56 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(4.63, 4.63, 4.63); Calibrated: 23.01.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.012 mW/g
Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.485 V/m; Power Drift = -0.121 dB
Peak SAR (extrapolated) = 0.025 W/kg
SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00746 mW/g
Maximum value of SAR (measured) = 0.015 mW/g

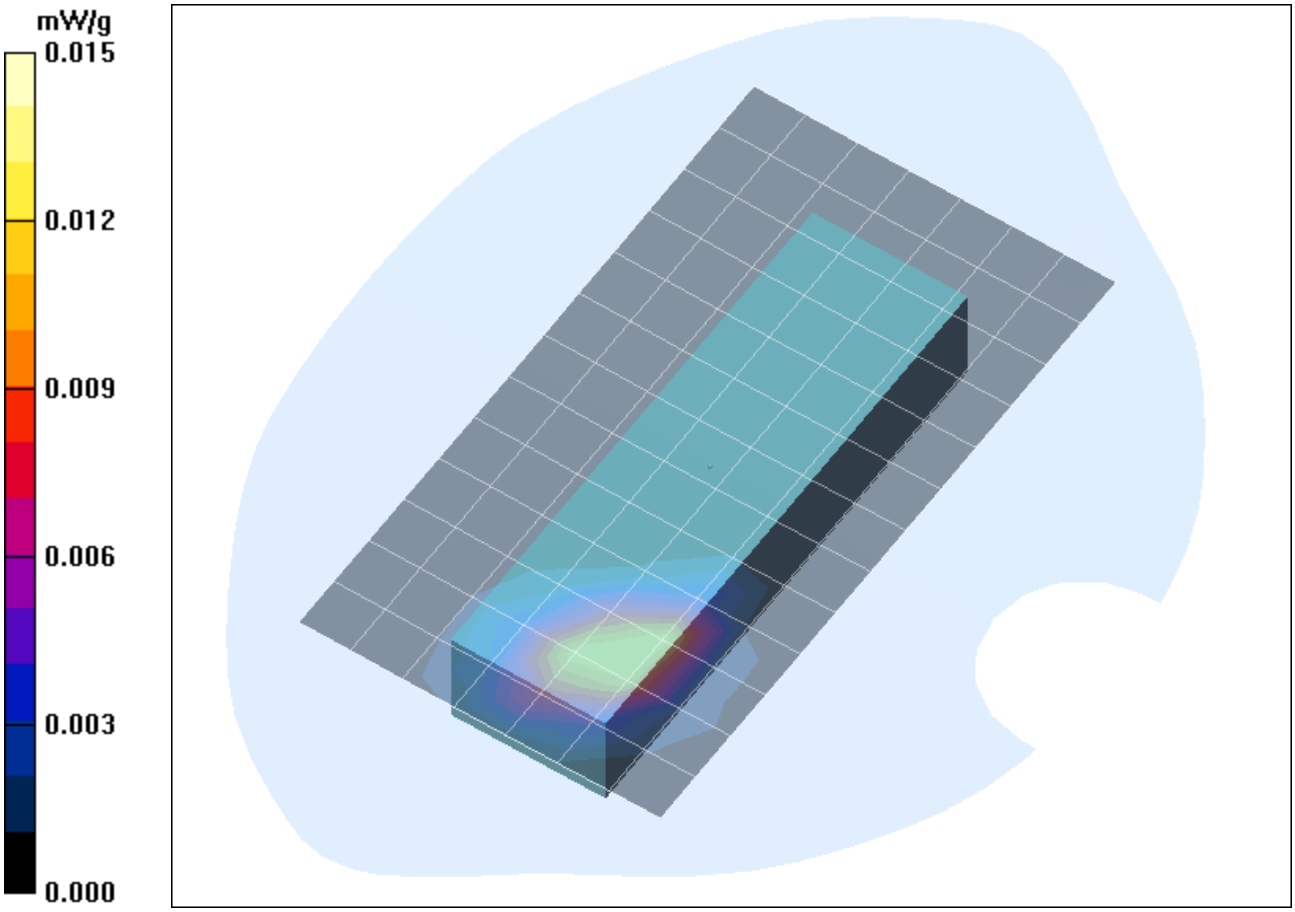

Fig. 6: SAR distribution for DECT US, channel 2, body worn configuration, display towards the ground, with headset and belt clip, 0 mm distance (November 26, 2008; Ambient Temperature: 21.4° C; Liquid Temperature: 20.6° C).

3 SAR z-axis scans (Validation)

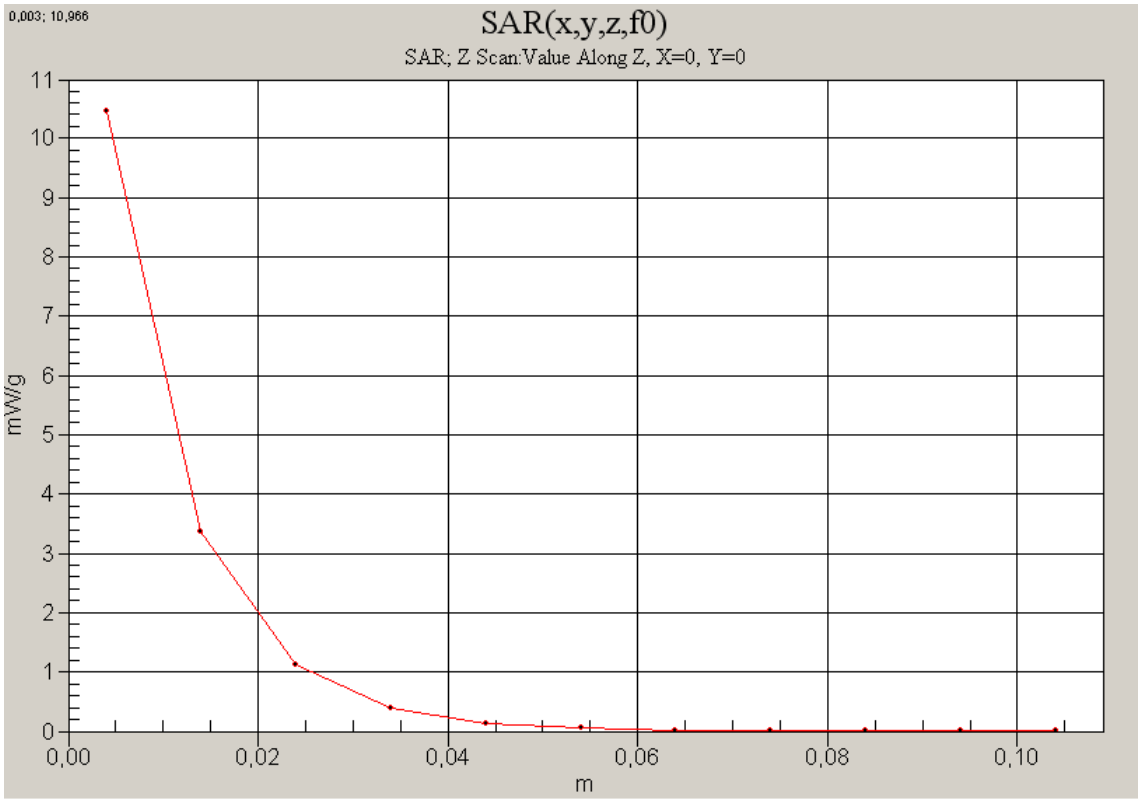

Fig. 7: SAR versus liquid depth, 1900 MHz, head (November 26, 2008; Ambient Temperature: 21.0° C; Liquid Temperature : 20.4° C).

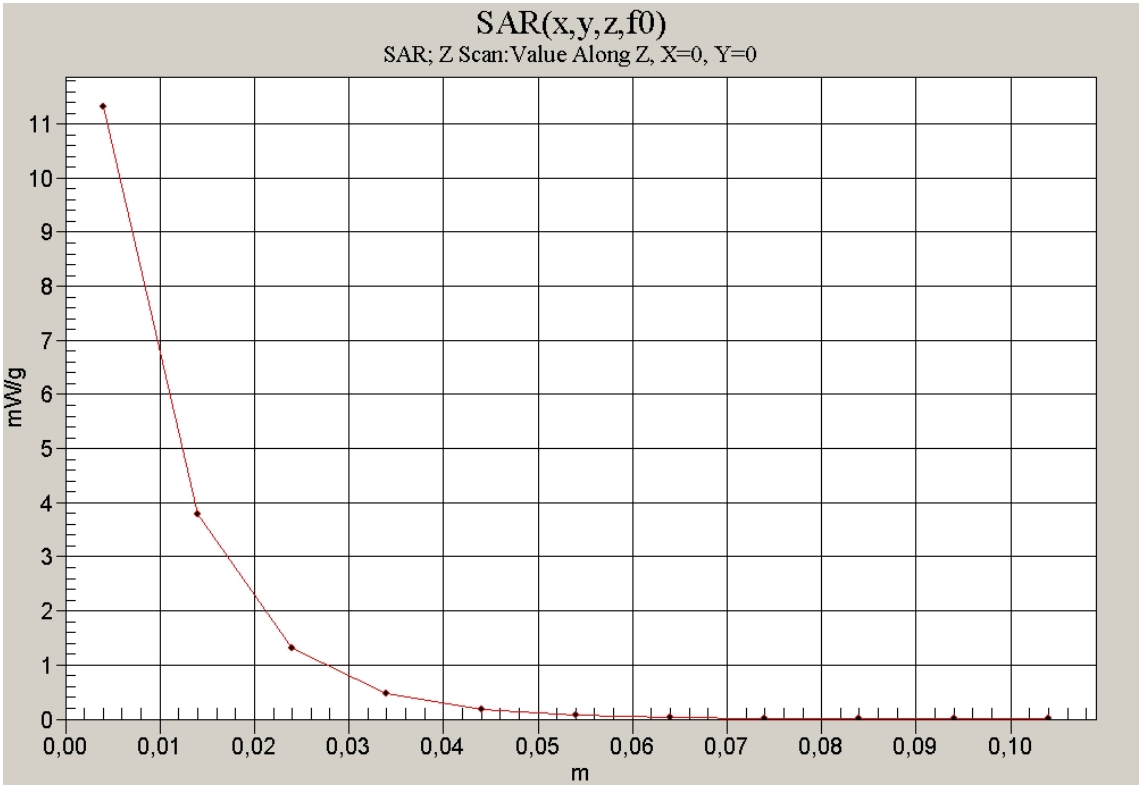

Fig. 8: SAR versus liquid depth, 1900 MHz, body (November 26, 2008; Ambient Temperature: 21.3° C; Liquid Temperature : 20.6° C).

4 SAR z-axis scans (Measurements)

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

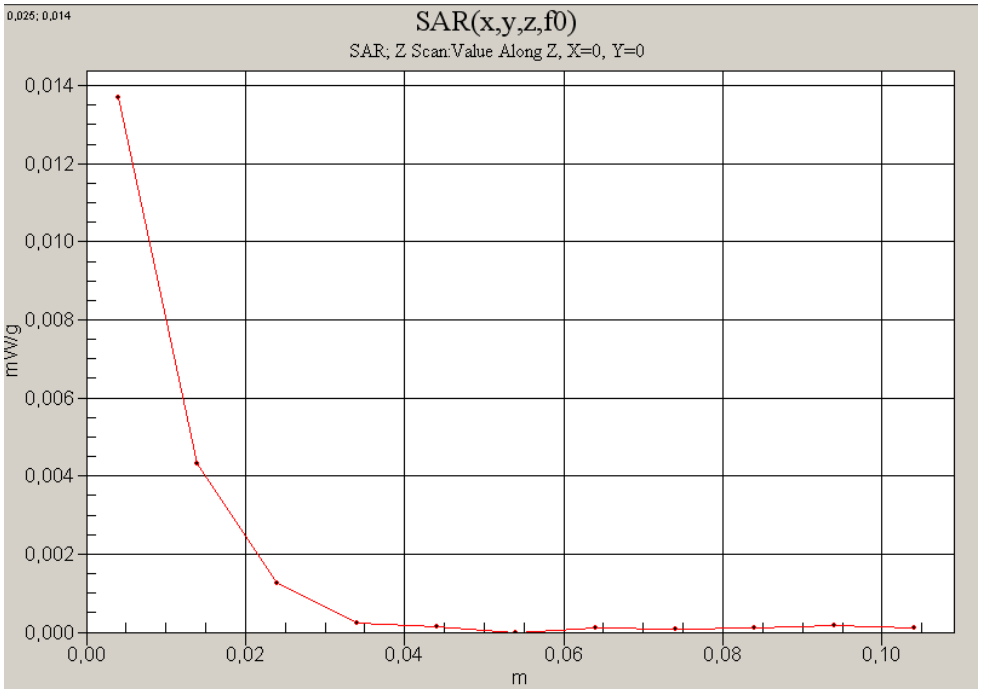

Fig. 9: SAR versus liquid depth, head: DECT US, channel 2, cheek position, left side of head (November 26, 2008; Ambient Temperature: 21.2° C; Liquid Temperature : 20.4° C).

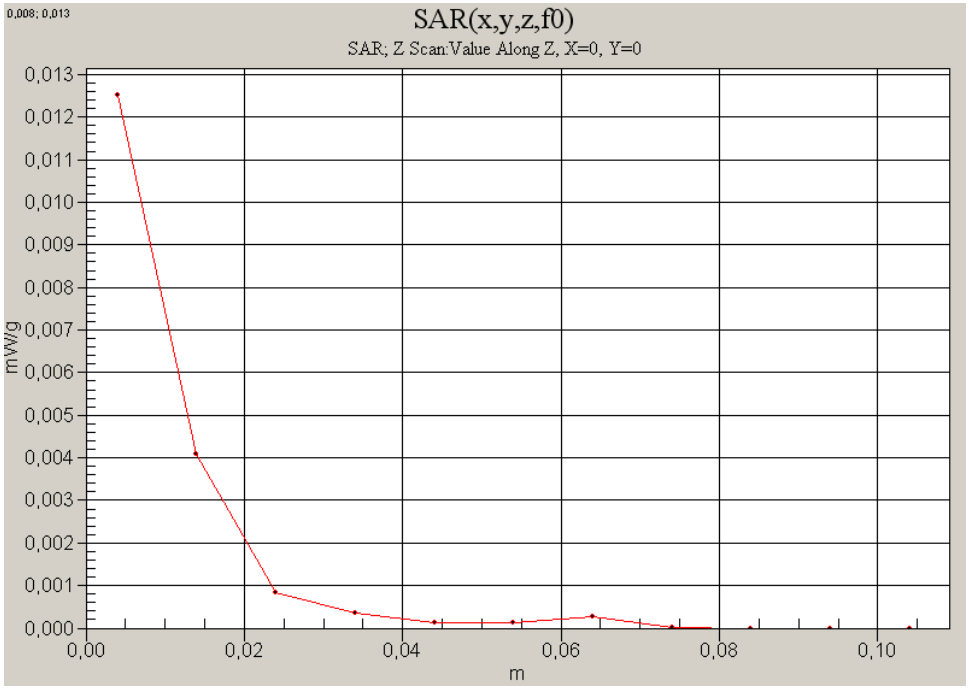

Fig. 10: SAR versus liquid depth, body: DECT US 1900, channel 2, with belt clip and headset, display towards the ground (November 26, 2008; Ambient Temperature: Temperature: 21.4° C; Liquid Temperature: 20.6° C).