
Appendix for the Report

Dosimetric Assessment of the Portable Device Panasonic KX-TGA410 (FCC ID: ACJ96NKX-TGA410)

According to the FCC Requirements

SAR Distribution Plots

December 03, 2010
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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, Head Measurements

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGA410_yplm_1.da4](#)

DUT: Panasonic; Type: KX-TGA410;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

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) = 0.027 mW/g

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

Reference Value = 3.49 V/m; Power Drift = -0.131 dB

Peak SAR (extrapolated) = 0.042 W/kg

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

Maximum value of SAR (measured) = 0.028 mW/g

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

Reference Value = 3.49 V/m; Power Drift = -0.131 dB

Peak SAR (extrapolated) = 0.115 W/kg

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

Maximum value of SAR (measured) = 0.029 mW/g

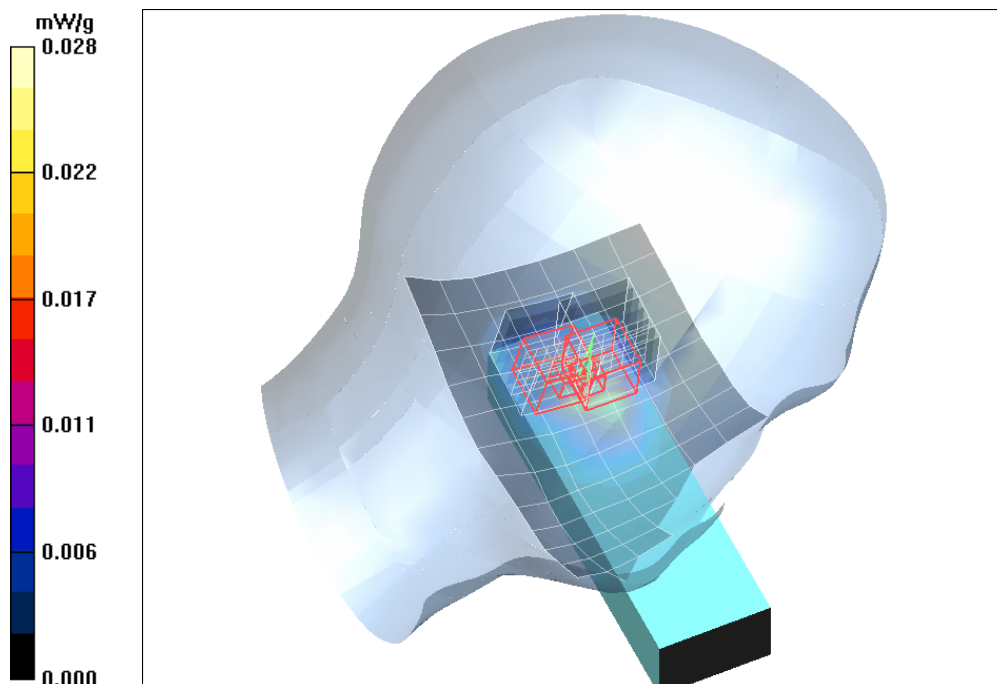


Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head (November 26, 2010; Ambient Temperature: 21.0°C; Liquid Temperature: 20.8°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [TGA410_yplm_2.da4](#)

DUT: Panasonic; **Type:** KX-TGA410;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

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) = 0.020 mW/g

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

Reference Value = 3.57 V/m; Power Drift = 0.156 dB

Peak SAR (extrapolated) = 0.036 W/kg

SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.00995 mW/g

Maximum value of SAR (measured) = 0.021 mW/g

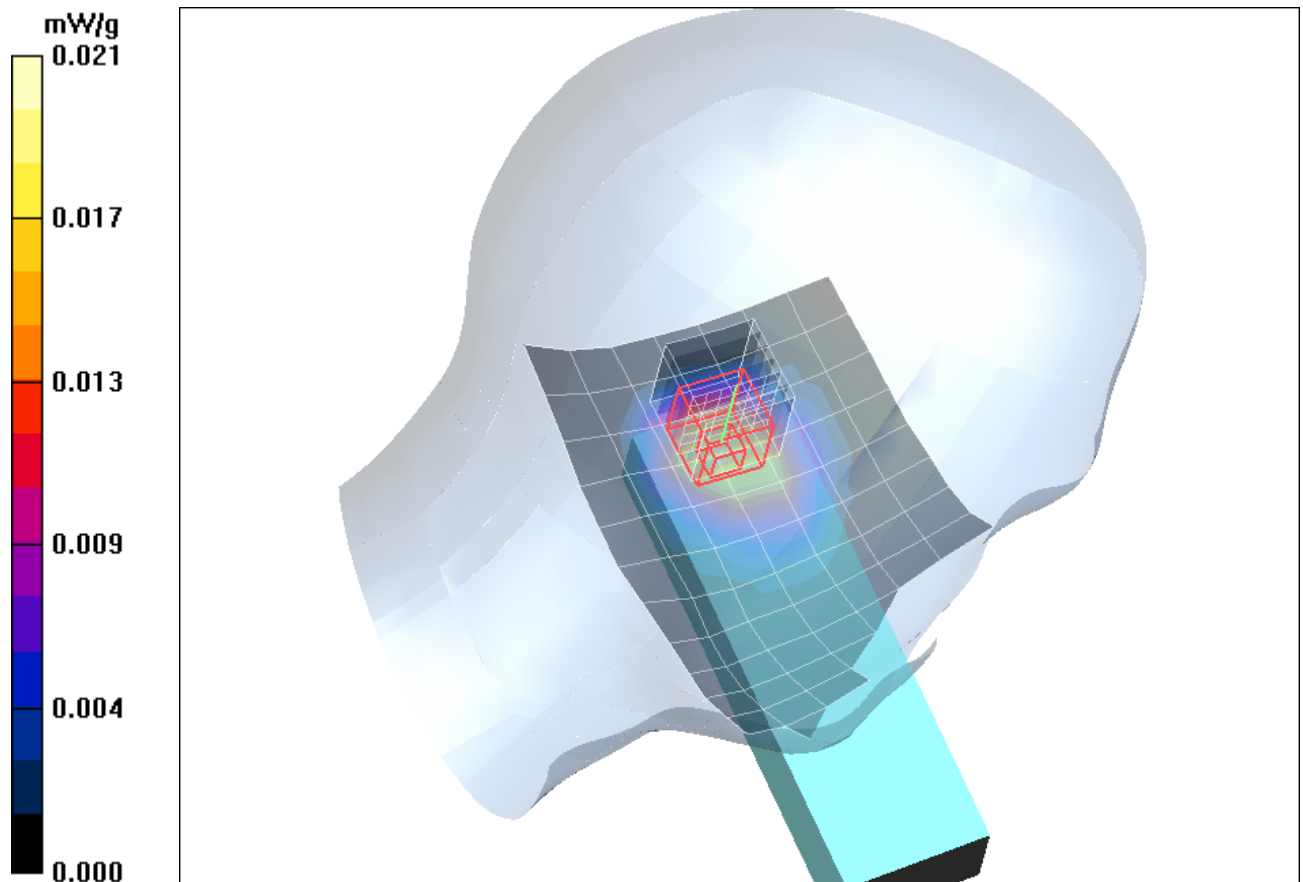


Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head (November 26, 2010; Ambient Temperature: 21.0°C; Liquid Temperature: 20.8°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [TGA410_yprm_1.da4](#)

DUT: Panasonic; **Type:** KX-TGA410;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

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) = 0.023 mW/g

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

Reference Value = 3.44 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.037 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.024 mW/g

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

Reference Value = 3.44 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.043 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.011 mW/g

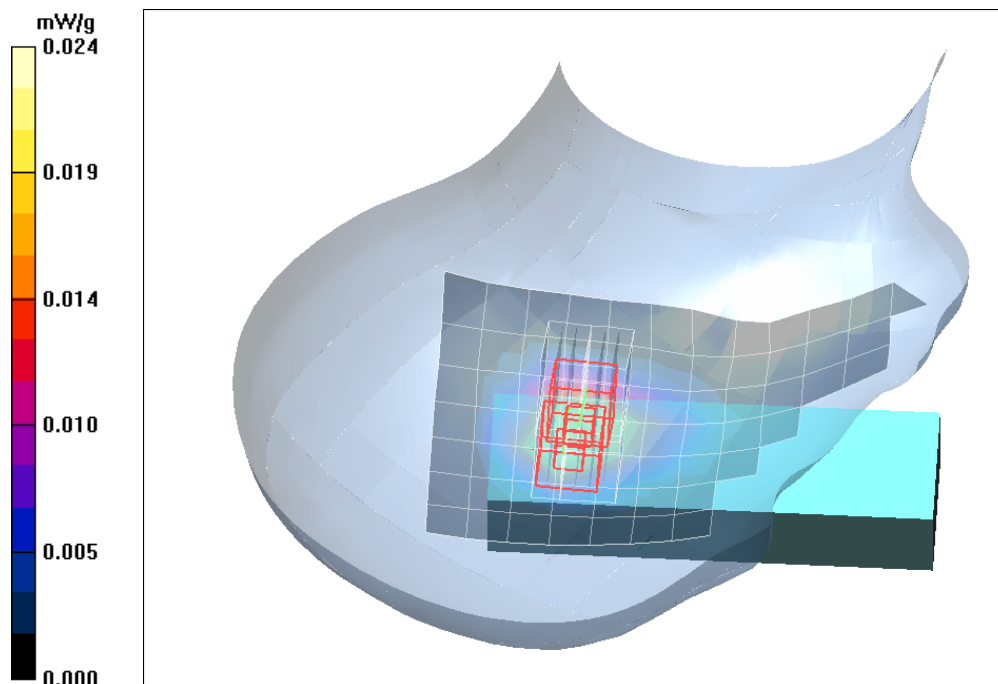


Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head (November 26, 2010; Ambient Temperature: 21.0°C; Liquid Temperature: 20.8°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [TGA410_yprm_2.da4](#)

DUT: Panasonic; **Type:** KX-TGA410;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

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) = 0.019 mW/g

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

Reference Value = 3.43 V/m; Power Drift = 0.156 dB

Peak SAR (extrapolated) = 0.030 W/kg

SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00964 mW/g

Tilted Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.43 V/m; Power Drift = 0.156 dB

Peak SAR (extrapolated) = 0.028 W/kg

SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00673 mW/g

Maximum value of SAR (measured) = 0.018 mW/g

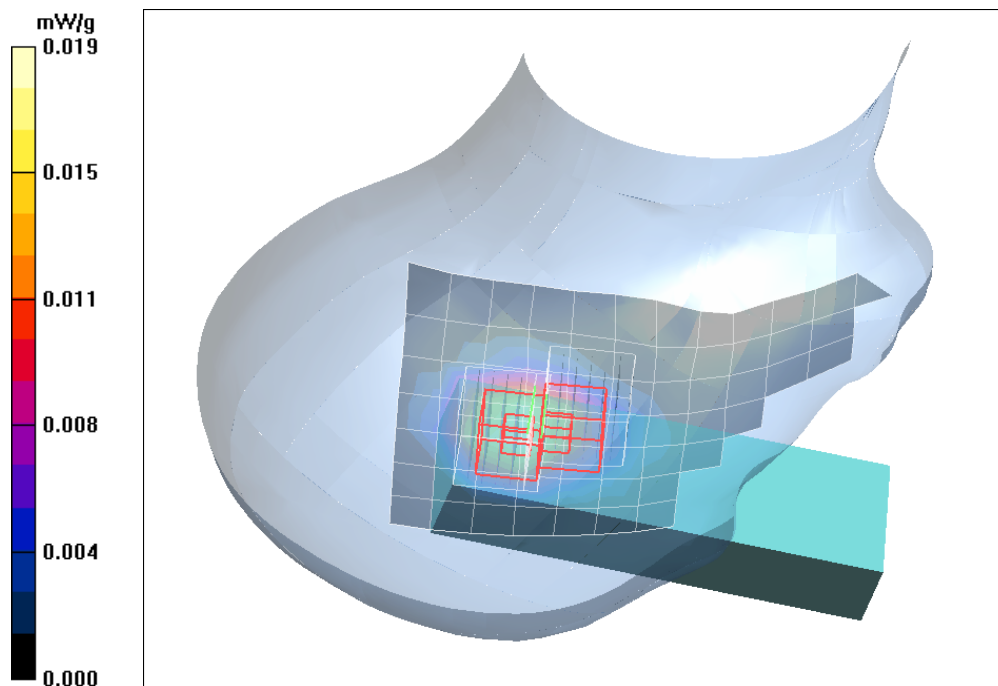


Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head (November 26, 2010; Ambient Temperature: 21.0°C; Liquid Temperature: 20.8°C)

2 SAR z-axis scans (Validation)

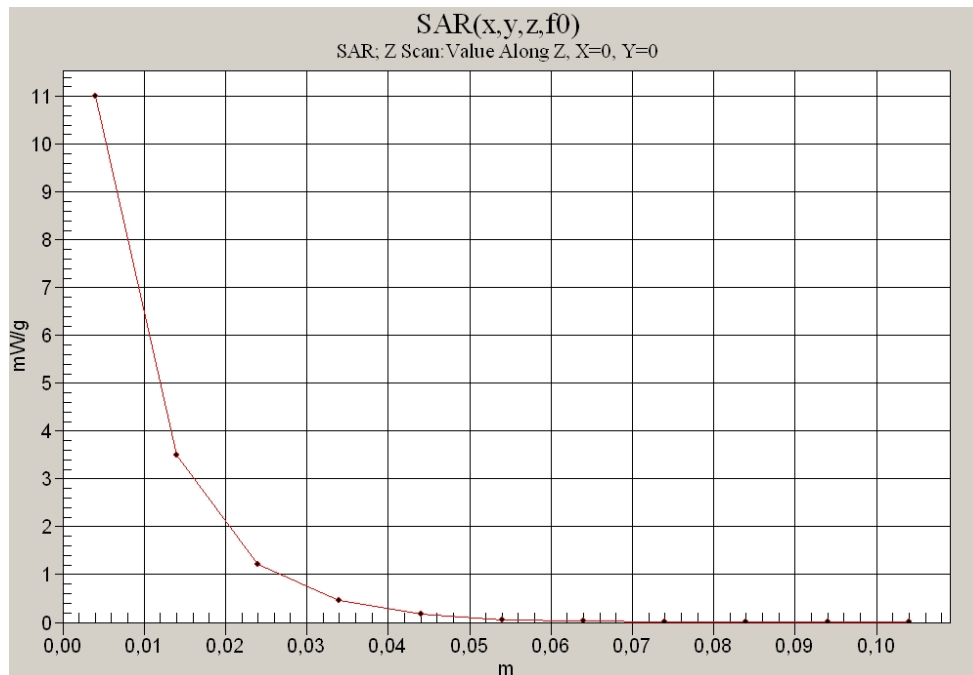


Fig. 5: SAR versus liquid depth, 1900 MHz, head (November 26, 2010; Ambient Temperature: 21.0° C; Liquid Temperature : 20.8° C).

3 SAR z-axis scans (Measurements)

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

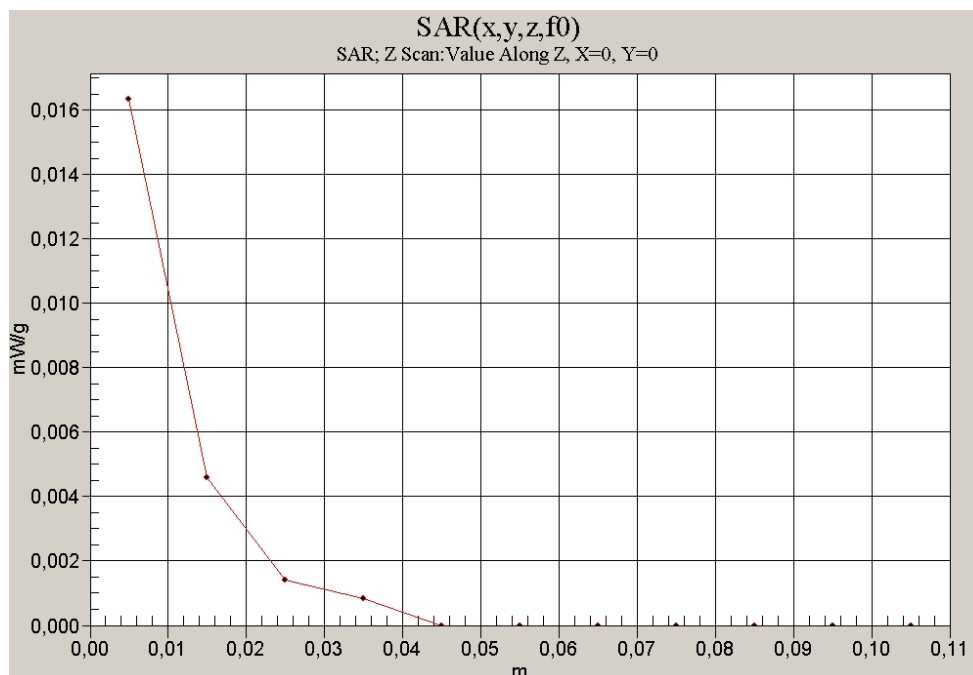


Fig. 6: SAR versus liquid depth, head: DECT US, channel 2, cheek position, left side of head (November 26, 2010; Ambient Temperature: 21.0° C; Liquid Temperature: 20.8° C).