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Appendix for the Report

Dosimetric Assessment of the Portable Device KX-TGA277 (FCC ID: ACJ96NKX-TGA277) (IC: 216A-KXTGA277)

According to the FCC Requirements SAR Distribution Plots

July 11, 2013

IMST GmbH

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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. This version supersedes all previous versions of this report.

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1 SAR Distribution Plots, Head Measurement

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGA277_yplm_1.da4](#)

DUT: Panasonic; Type: KX-TGA277;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.89, 4.89, 4.89); Calibrated: 19.02.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 20.09.2012
- 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 (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.047 mW/g

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

Reference Value = 4.60 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 0.090 W/kg

SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.026 mW/g

Maximum value of SAR (measured) = 0.051 mW/g

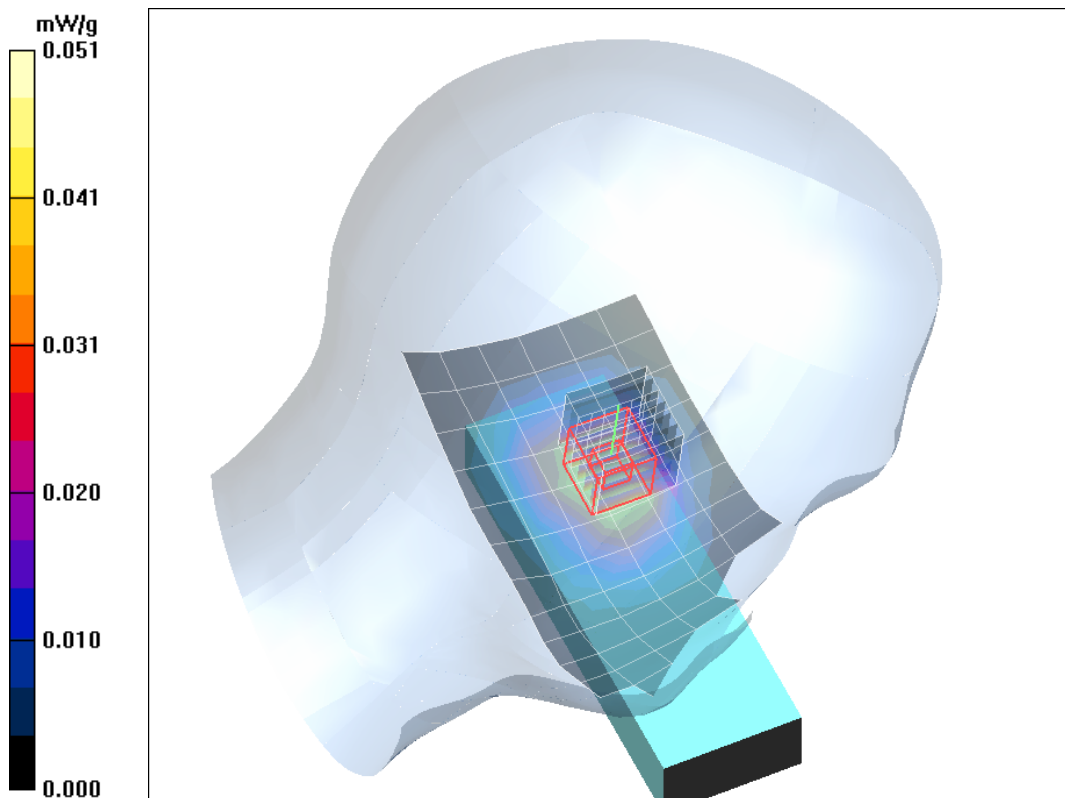


Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head, (July 10, 2013; Ambient Temperature: 22.4°C; Liquid Temperature: 22.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [TGA277_yplm_2.da4](#)

DUT: Panasonic; **Type:** KX-TGA277;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.89, 4.89, 4.89); Calibrated: 19.02.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 20.09.2012
- 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 (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.022 mW/g

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

Reference Value = 4.01 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.037 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.023 mW/g

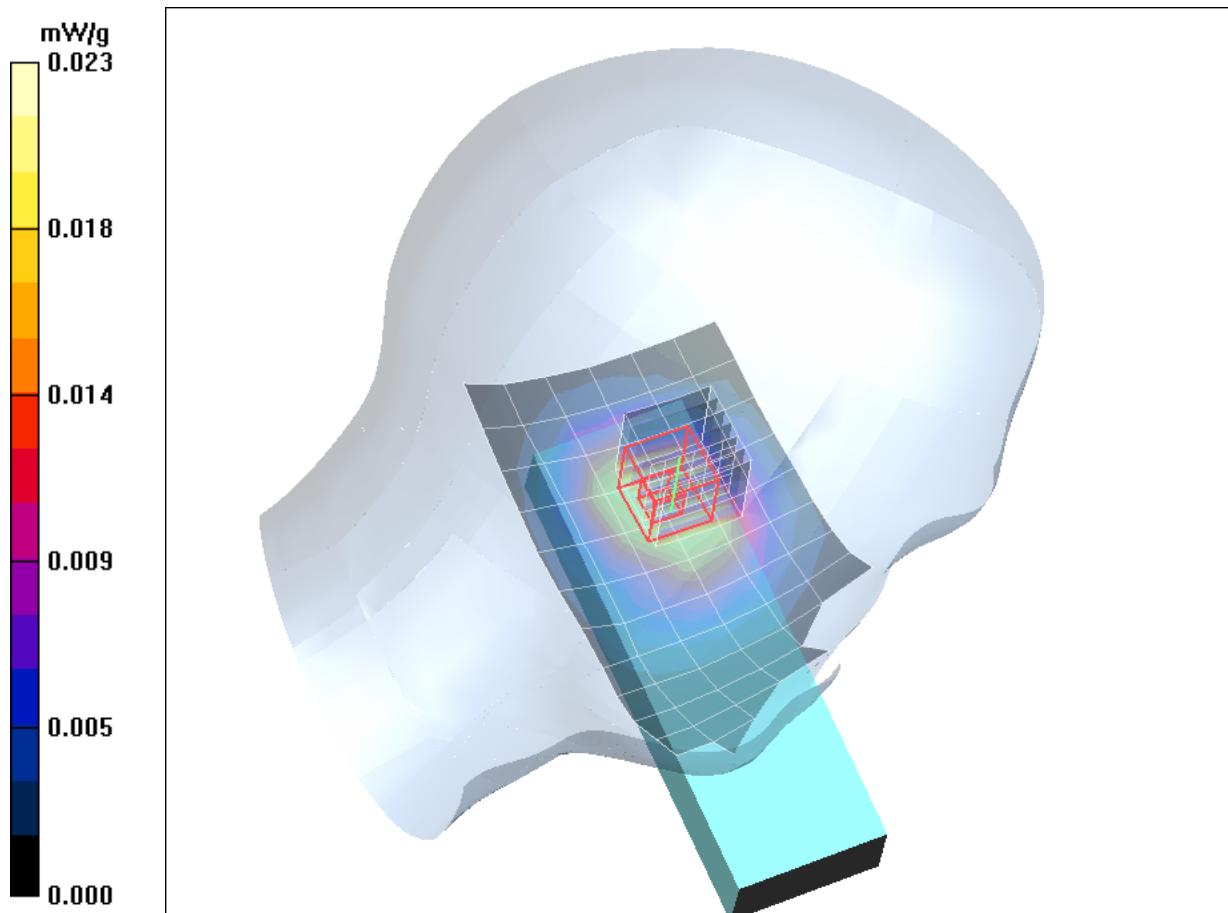


Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head, (July 10, 2013; Ambient Temperature: 22.4°C; Liquid Temperature: 22.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGA277_yprm_1.da4](#)

DUT: Panasonic; Type: KX-TGA277;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.89, 4.89, 4.89); Calibrated: 19.02.2013

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

- Electronics: DAE4 Sn631; Calibrated: 20.09.2012

- 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 (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.037 mW/g

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

Reference Value = 5.15 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 0.061 W/kg

SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.042 mW/g

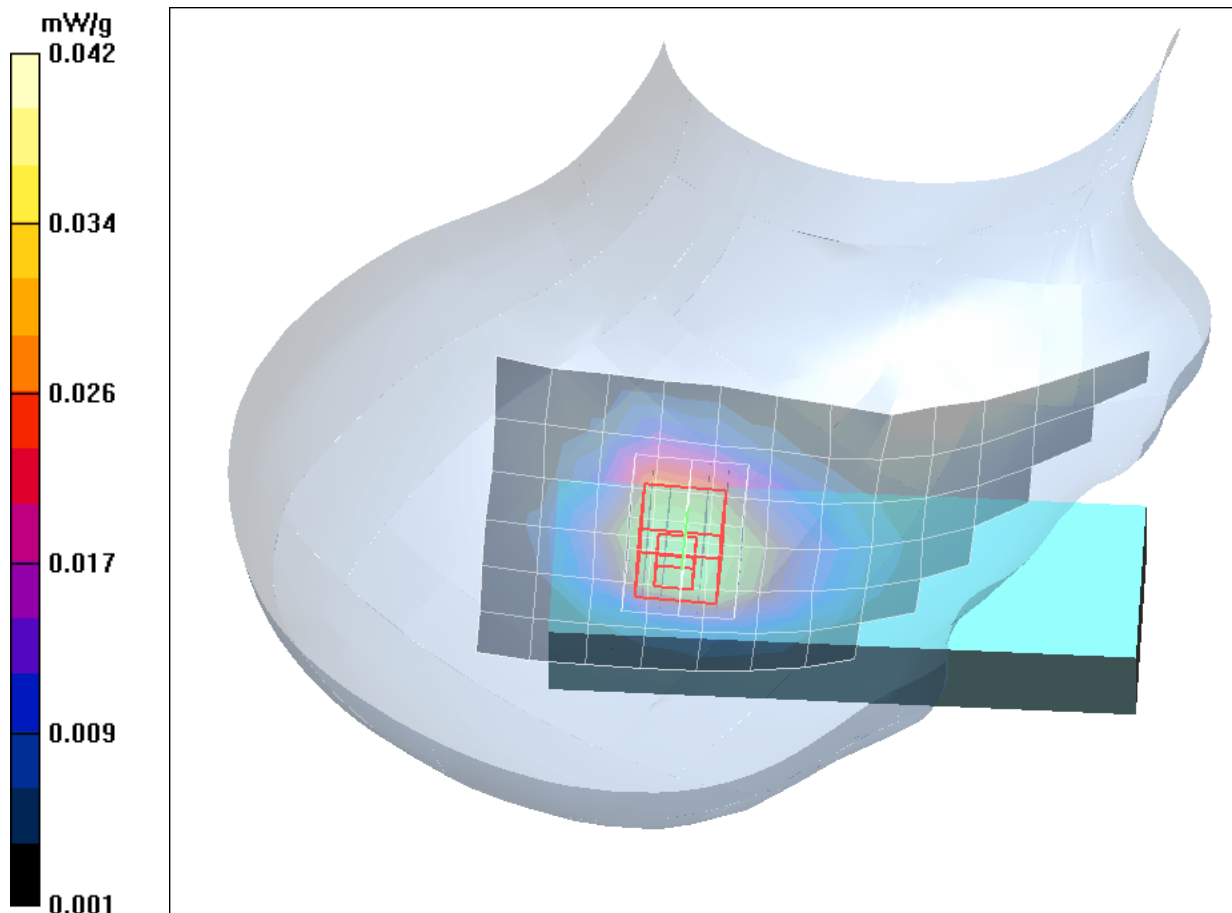


Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head, (July 10, 2013; Ambient Temperature: 22.4°C; Liquid Temperature: 22.0°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGA277_yprm_2.da4](#)

DUT: Panasonic; Type: KX-TGA277;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.89, 4.89, 4.89); Calibrated: 19.02.2013

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

- Electronics: DAE4 Sn631; Calibrated: 20.09.2012

- 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 (7x13x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 4.41 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.037 W/kg

SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.013 mW/g

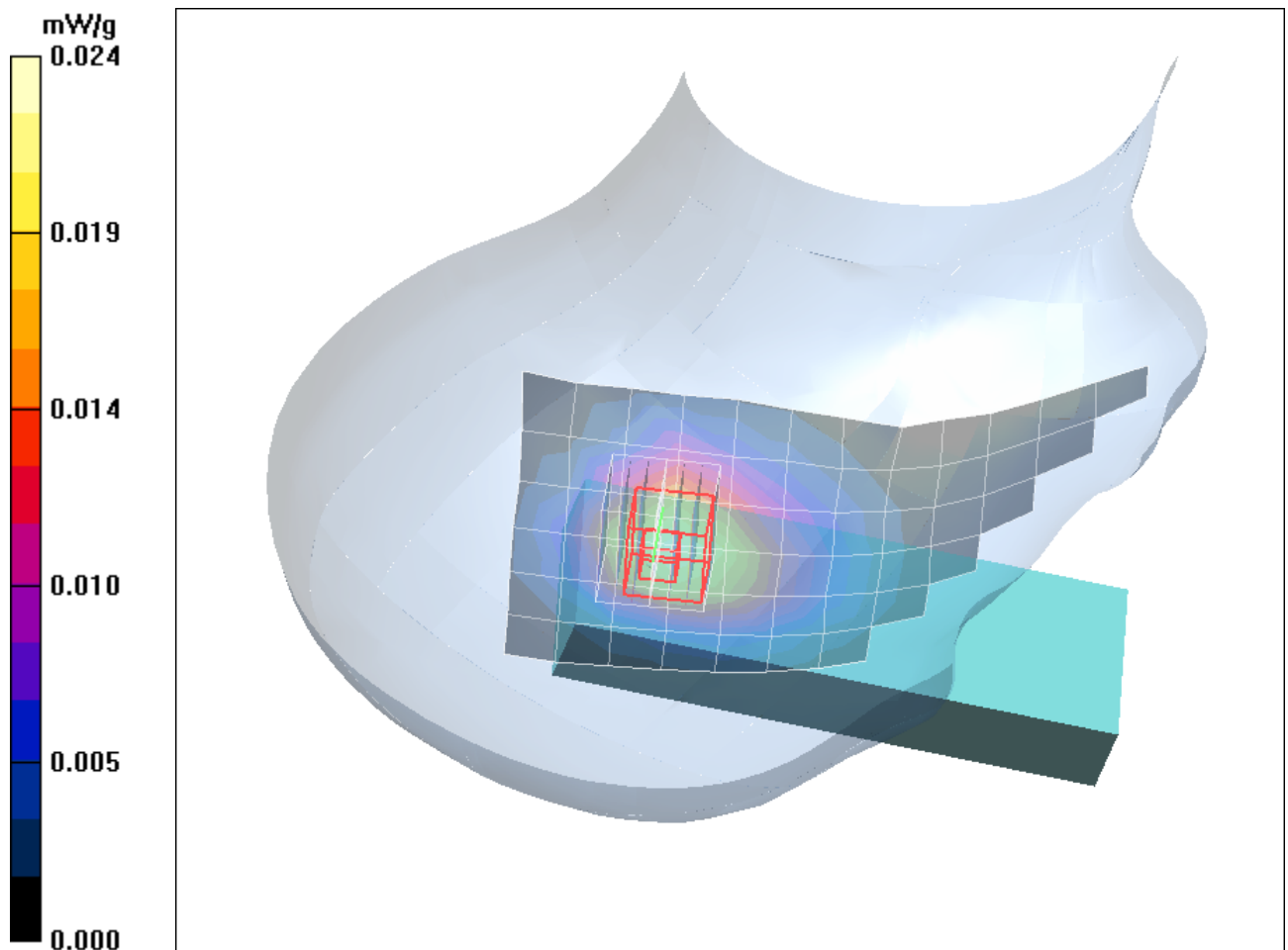


Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head, (July 10, 2013; Ambient Temperature: 22.4°C; Liquid Temperature: 22.0°C)

2 SAR Distribution Plots, Body Measurement

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGA277_yphm_1_up.da4](#)

DUT: Panasonic; Type: KX-TGA277;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.68, 4.68, 4.68); Calibrated: 19.02.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 20.09.2012
- 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

Body/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.046 mW/g

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

Reference Value = 1.63 V/m; Power Drift = -0.150 dB

Peak SAR (extrapolated) = 0.070 W/kg

SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.025 mW/g

Maximum value of SAR (measured) = 0.048 mW/g

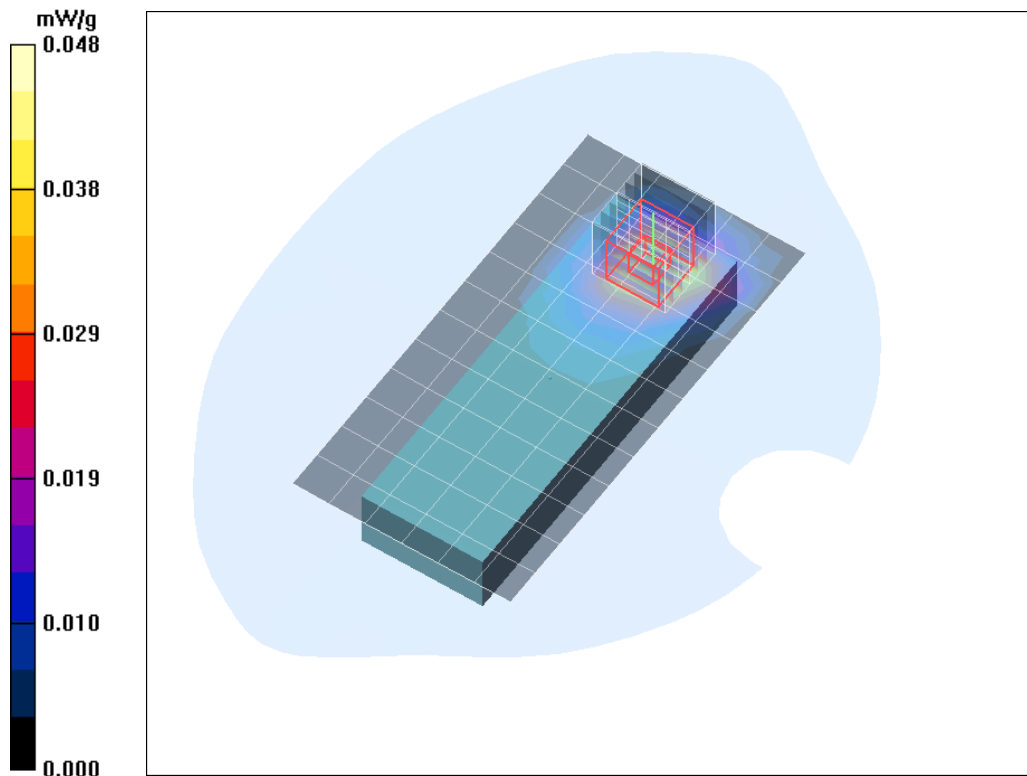


Fig. 5: SAR distribution for DECT US, channel 2, display up, 0 mm distance (July 10, 2013; Ambient Temperature: 22.6°C; Liquid Temperature: 22.3°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [TGA277_yphm_2_down.da4](#)

DUT: Panasonic; Type: KX-TGA277;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1669; ConvF(4.68, 4.68, 4.68); Calibrated: 19.02.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 20.09.2012
- 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

Body/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.036 mW/g

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

Reference Value = 1.43 V/m; Power Drift = 0.153 dB

Peak SAR (extrapolated) = 0.056 W/kg

SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.019 mW/g

Maximum value of SAR (measured) = 0.037 mW/g

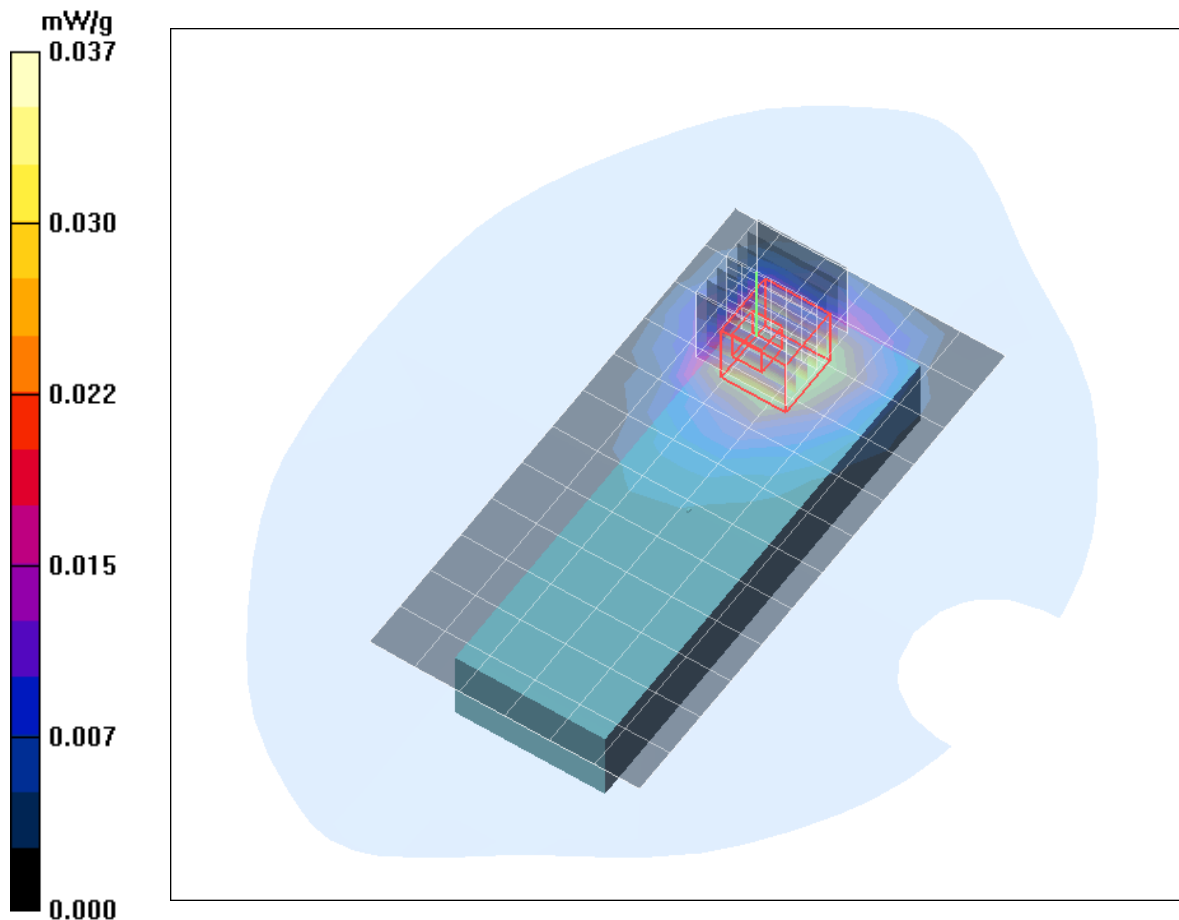


Fig. 6: SAR distribution for DECT US, channel 2, 0 mm distance (July 10, 2013; Ambient Temperature: 22.6°C; Liquid Temperature: 22.3°C).