
Appendix for the Report

Dosimetric Assessment of the
Portable Device 8630
(FCC ID: T7HRTX8630)
(IC ID: 4979B-RTX8630)

According to the FCC Requirements

SAR Distribution Plots

March 30, 2011
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.

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1 SAR Distribution Plots, Head Measurements, Antenna 1

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [RTX8630_yplm_1_ant1.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ 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: DAE4 Sn631; Calibrated: 17.09.2010
- 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) = 0.017 mW/g

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

Reference Value = 3.08 V/m; Power Drift = 0.144 dB

Peak SAR (extrapolated) = 0.033 W/kg

SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.012 mW/g

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

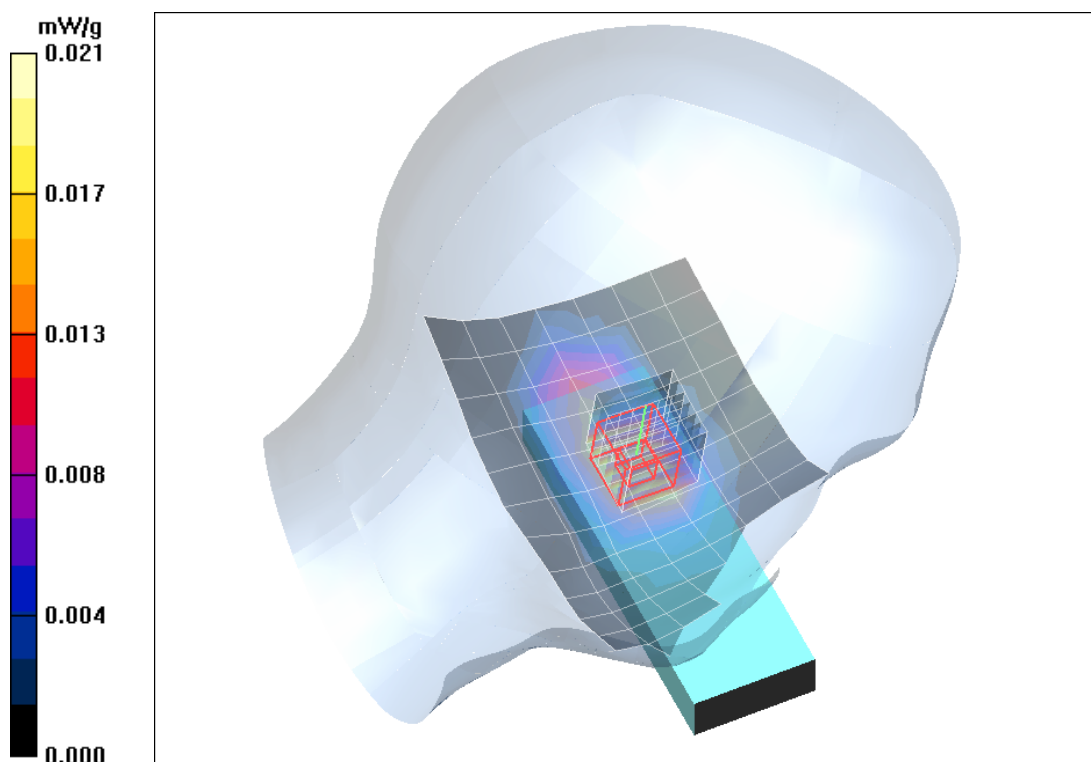


Fig. 1: SAR distribution for DECT US, antenna 1, channel 2, cheek position, left side of head (March 29, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 20.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [RTX8630_yplm 2_ant1.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ 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: DAE4 Sn631; Calibrated: 17.09.2010
- 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) = 0.012 mW/g

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

Reference Value = 2.78 V/m; Power Drift = -0.173 dB

Peak SAR (extrapolated) = 0.023 W/kg

SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00553 mW/g

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

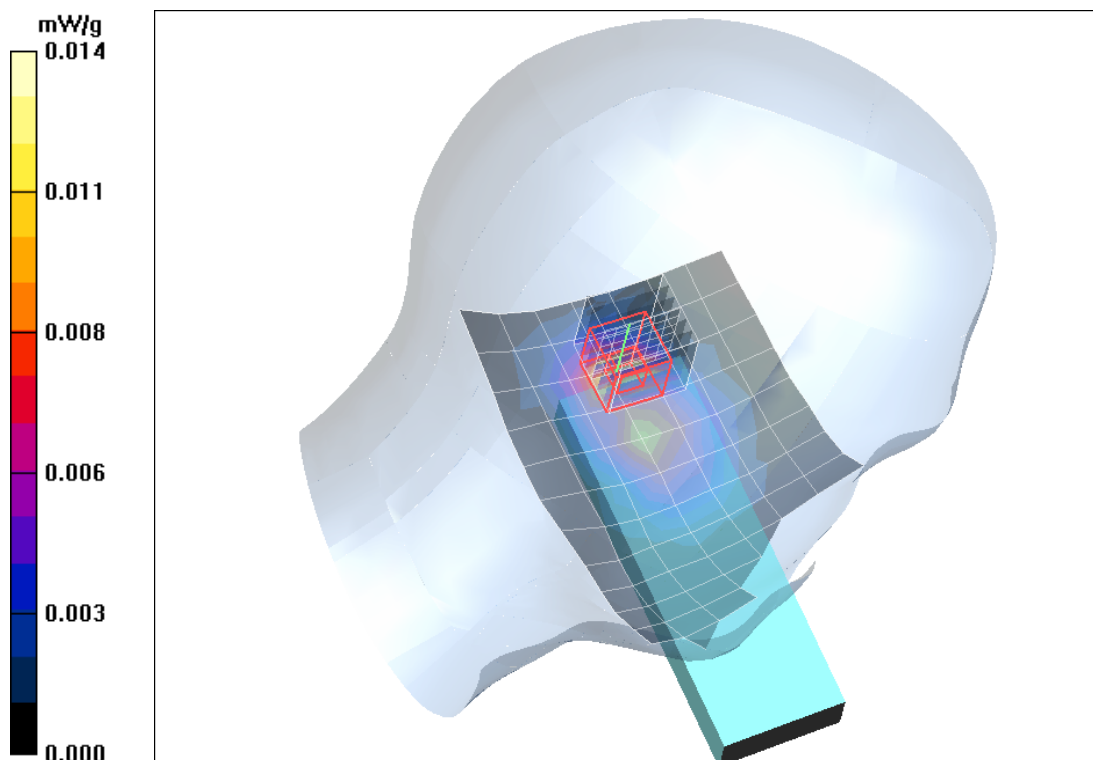


Fig. 2: SAR distribution for DECT US, antenna 1, channel 2, tilted position, left side of head (March 29, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 20.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [RTX8630_yprm_1_ant1.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ 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: DAE4 Sn631; Calibrated: 17.09.2010
- 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) = 0.022 mW/g

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

Reference Value = 2.82 V/m; Power Drift = 0.101 dB

Peak SAR (extrapolated) = 0.035 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

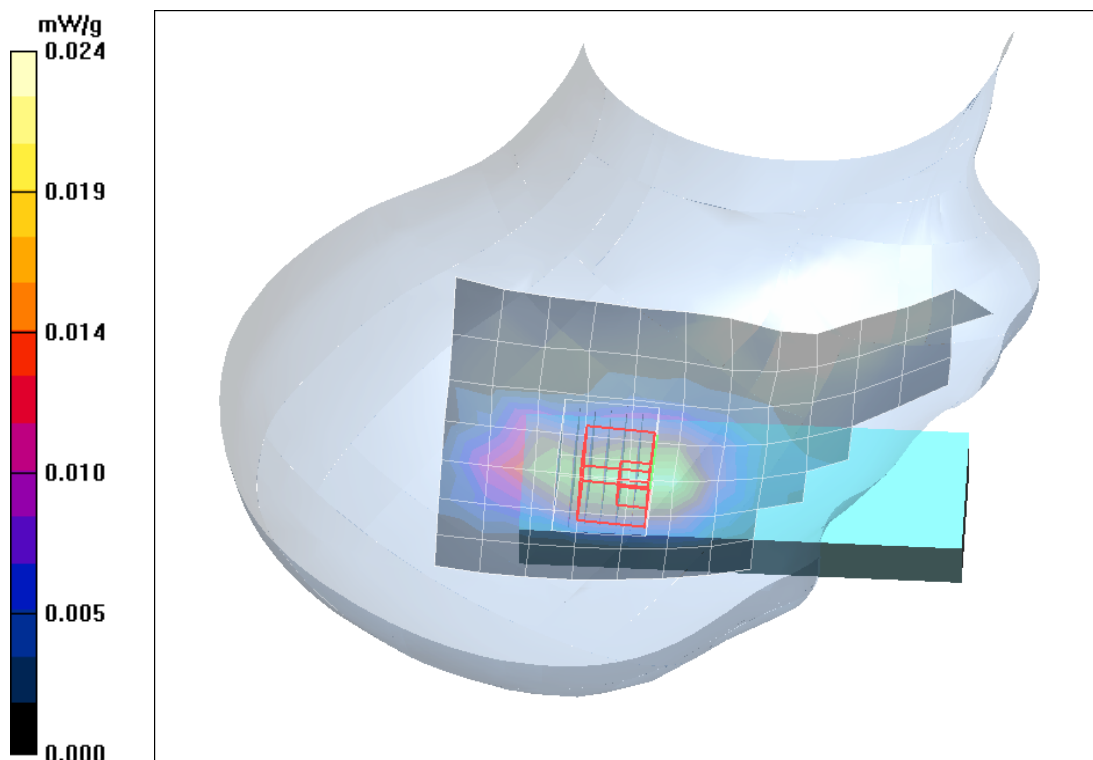


Fig. 3: SAR distribution for DECT US, antenna 1, channel 2, cheek position, right side of head (March 29, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 20.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [RTX8630_yprm_2_ant1.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ 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: DAE4 Sn631; Calibrated: 17.09.2010
- 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) = 0.013 mW/g

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

Reference Value = 2.20 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.028 W/kg

SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00732 mW/g

Maximum value of SAR (measured) = 0.017 mW/g

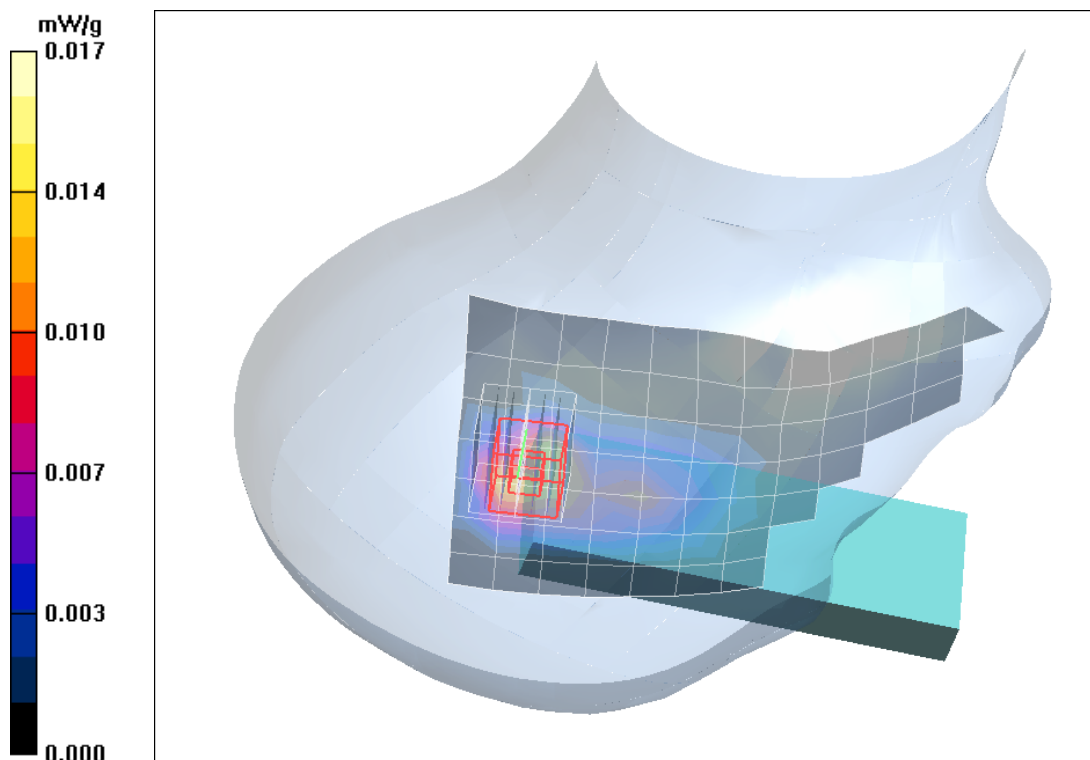


Fig. 4: SAR distribution for DECT US, antenna 1, channel 2, tilted position, right side of head (March 29, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 20.7°C)

2 SAR Distribution Plots, Head Measurements, Antenna 2

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [RTX8630_yplm_1_ant2.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ 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: DAE4 Sn631; Calibrated: 17.09.2010
- 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) = 0.024 mW/g

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

Reference Value = 4.06 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.054 W/kg

SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.014 mW/g

Maximum value of SAR (measured) = 0.030 mW/g

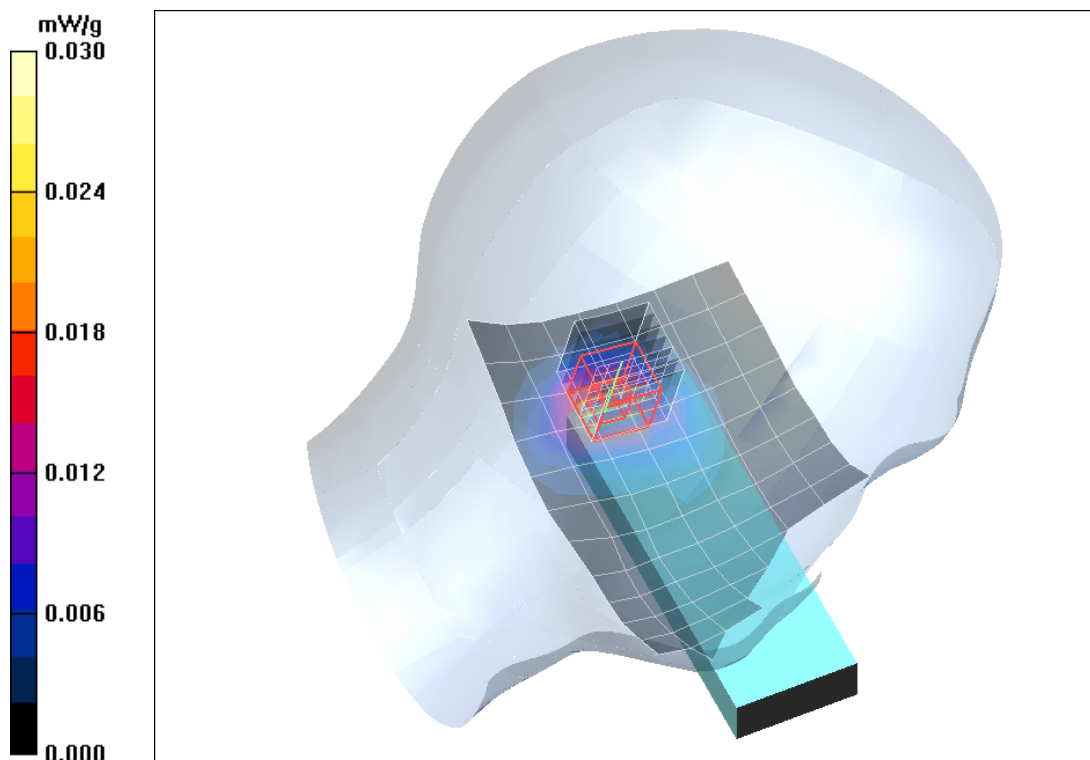


Fig. 5: SAR distribution for DECT US, antenna 2, channel 2, cheek position, left side of head (March 29, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 20.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [RTX8630_yplm 2_ant2.da4](#)

DUT: RTX; **Type:** 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ 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: DAE4 Sn631; Calibrated: 17.09.2010
- 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) = 0.021 mW/g

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

Reference Value = 3.74 V/m; Power Drift = -0.192 dB

Peak SAR (extrapolated) = 0.108 W/kg

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.026 mW/g

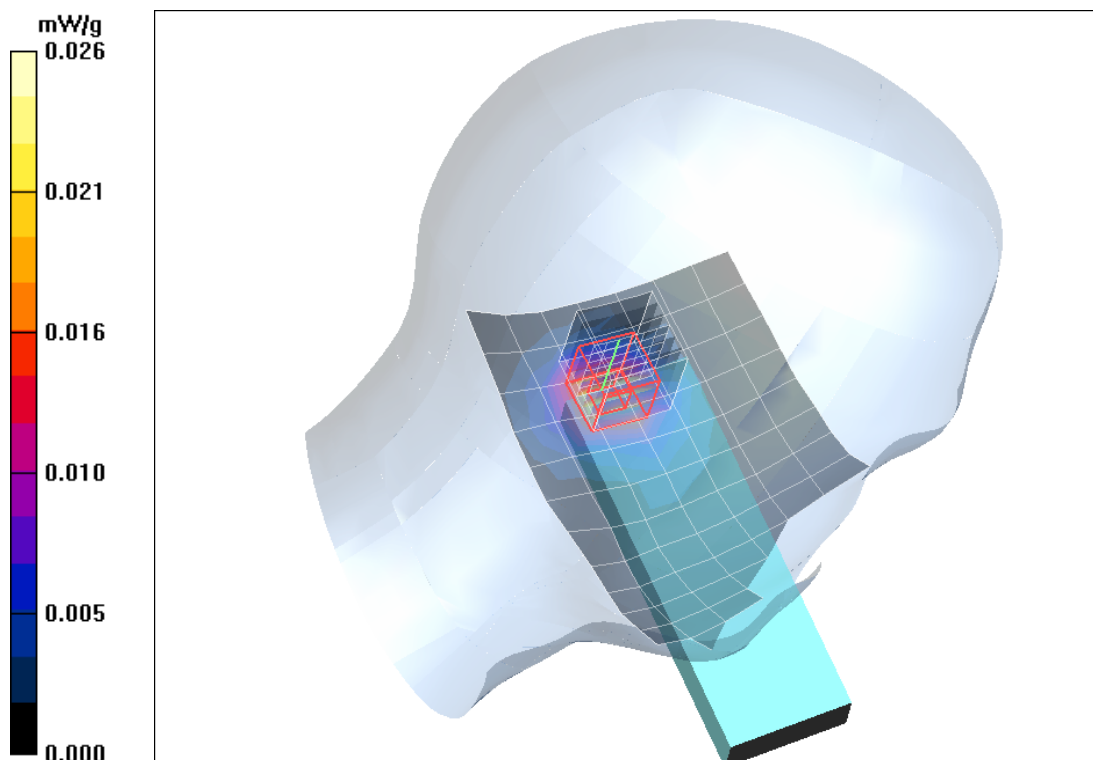


Fig. 6: SAR distribution for DECT US, antenna 2, channel 2, tilted position, left side of head (March 29, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 20.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [RTX8630_yprm_1_ant2.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ 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: DAE4 Sn631; Calibrated: 17.09.2010
- 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) = 0.042 mW/g

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

Reference Value = 3.88 V/m; Power Drift = 0.193 dB

Peak SAR (extrapolated) = 0.086 W/kg

SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.020 mW/g

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

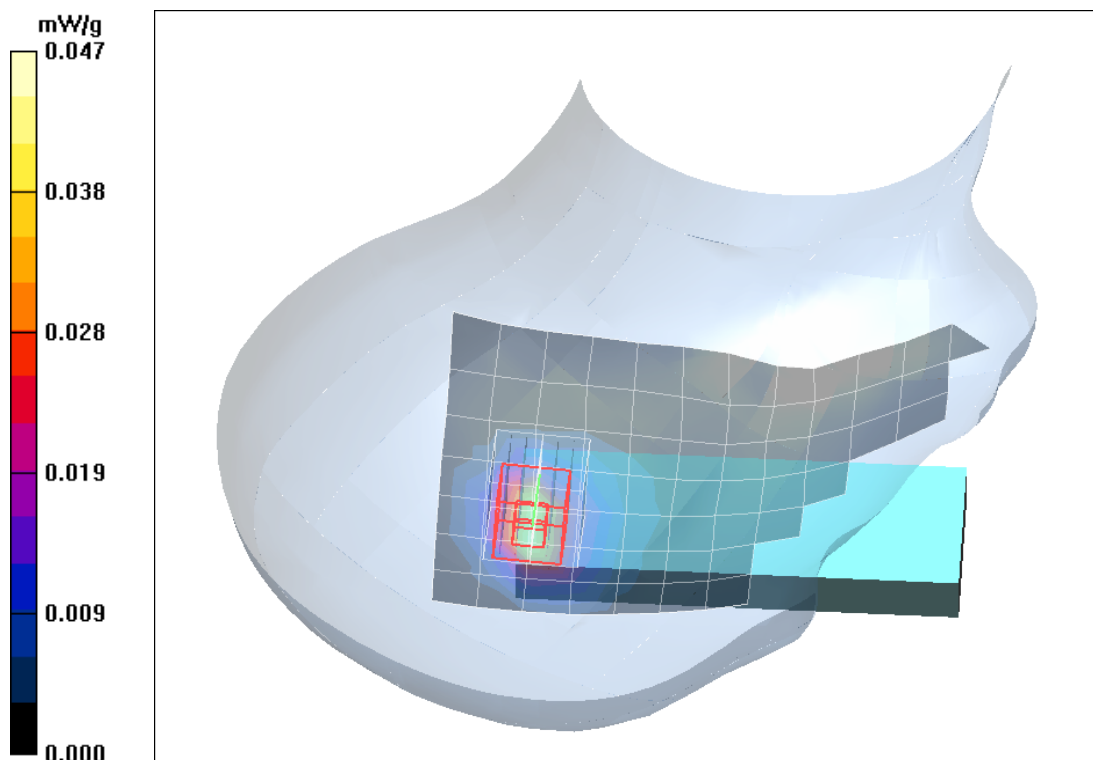


Fig. 7: SAR distribution for DECT US, antenna 2, channel 2, cheek position, right side of head (March 29, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 20.7°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [RTX8630_yprm_2_ant2.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ 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: DAE4 Sn631; Calibrated: 17.09.2010
- 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) = 0.038 mW/g

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

Reference Value = 3.76 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 0.074 W/kg

SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.018 mW/g

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

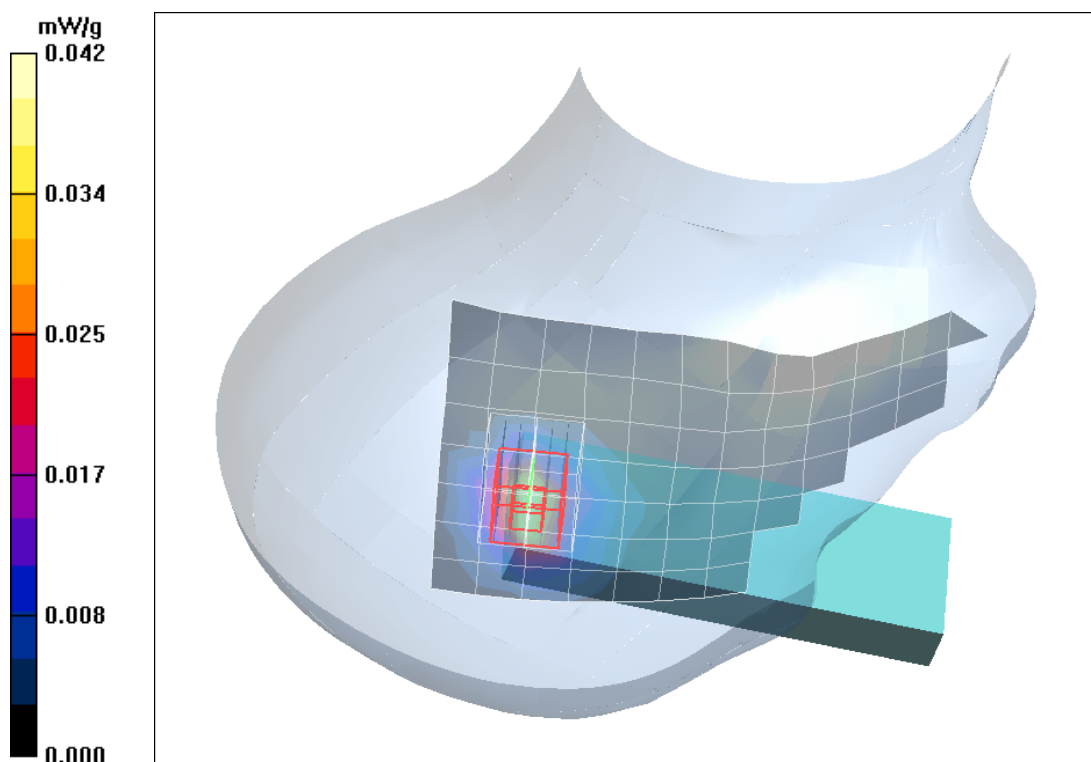


Fig. 8: SAR distribution for DECT US, antenna 2, channel 2, tilted position, right side of head (March 29, 2011; Ambient Temperature: 21.2°C; Liquid Temperature: 20.7°C)

3 SAR Distribution Plots, Body Measurements, Antenna 1

Test Laboratory: IMST GmbH, DASY Blue (I); File Name:

[RTX8630 bphm 1 dsp up clip HS ant1.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.58$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.015 mW/g

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

Reference Value = 3.13 V/m; Power Drift = -0.141 dB

Peak SAR (extrapolated) = 0.027 W/kg

SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00777 mW/g

Maximum value of SAR (measured) = 0.016 mW/g

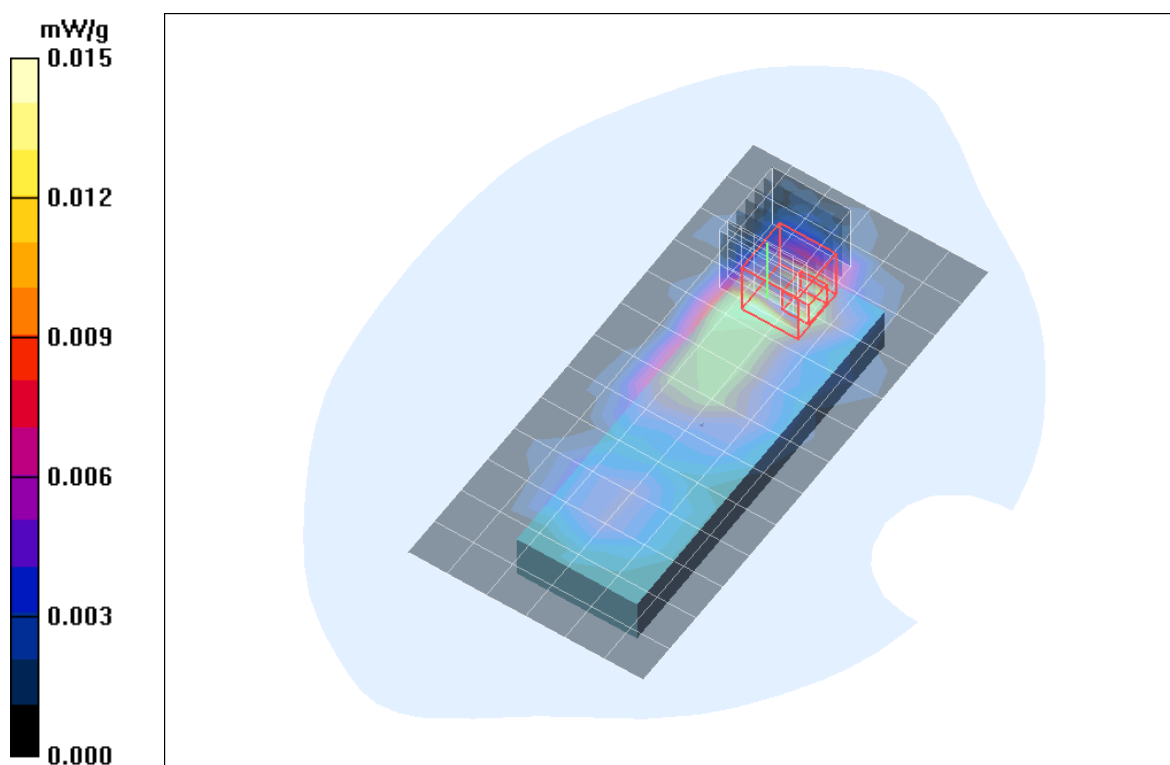


Fig. 9: SAR distribution for DECT US, antenna 1, channel 2, body worn configuration, display towards the phantom, with headset and 0 mm distance (March 28, 2011; Ambient Temperature: 20.7° C; Liquid Temperature: 20.3° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name:

[RTX8630_bphm_2_dsp_down_clip_HS_ant1.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.58$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (7x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

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

Reference Value = 1.94 V/m; Power Drift = 0.182 dB

Peak SAR (extrapolated) = 0.011 W/kg

SAR(1 g) = 0.0063 mW/g; SAR(10 g) = 0.00355 mW/g

Maximum value of SAR (measured) = 0.007 mW/g

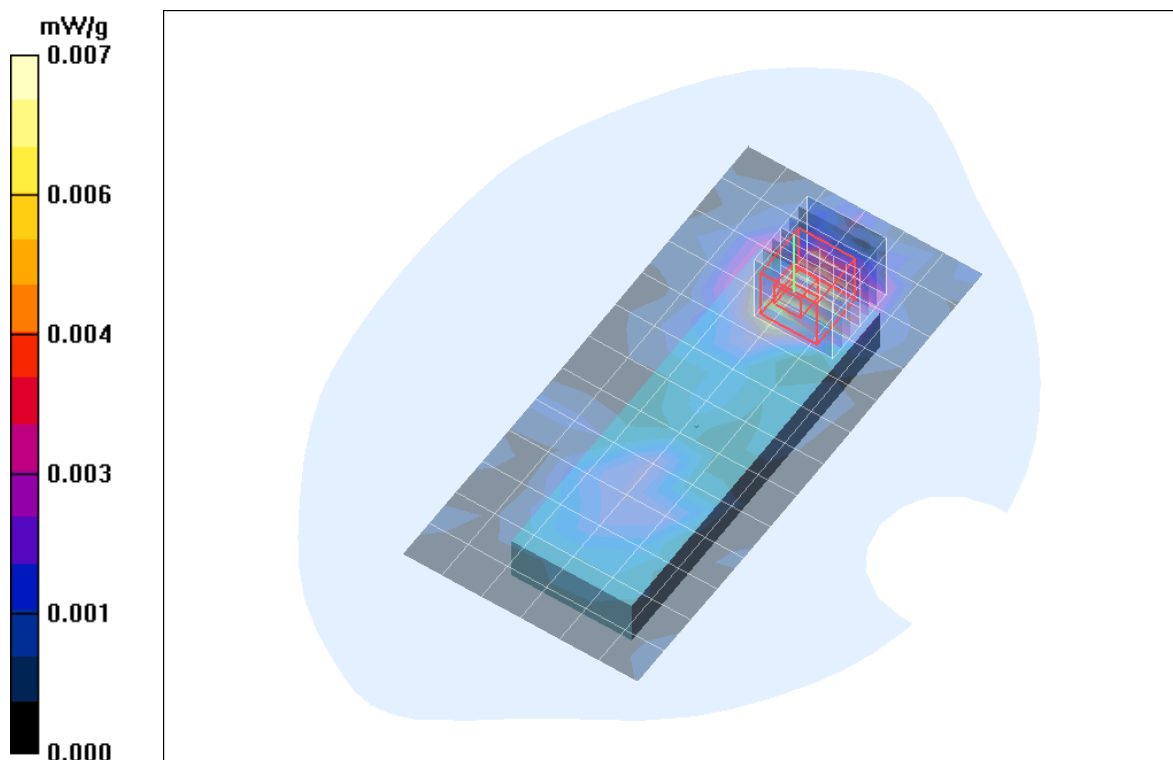


Fig. 10: SAR distribution for DECT US, antenna 1, channel 2, body worn configuration, display towards the ground, with headset and 0 mm distance (March 28, 2011; Ambient Temperature: 20.7° C; Liquid Temperature: 20.3° C).

4 SAR Distribution Plots, Body Measurements, Antenna 2

Test Laboratory: IMST GmbH, DASY Blue (I); File Name:

[RTX8630_bphm_1_dsp_up_clip_HS_ant2.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.58$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.034 mW/g

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

Reference Value = 4.62 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 0.072 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.038 mW/g

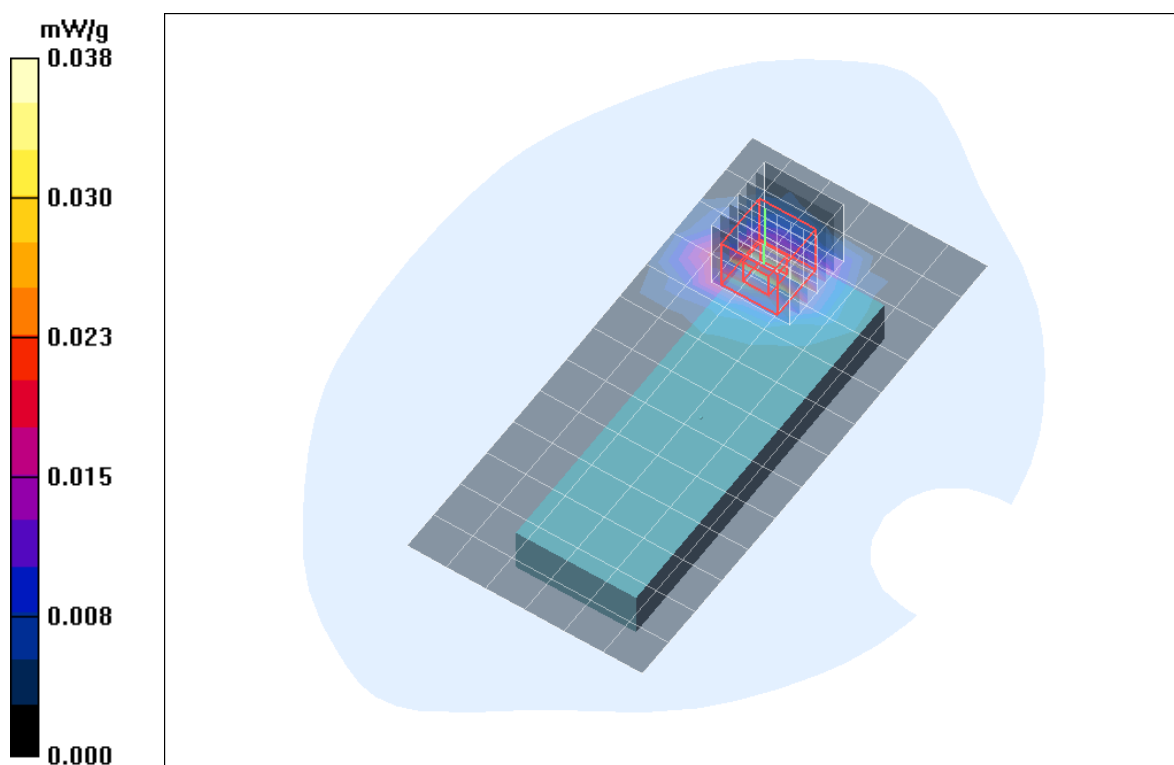


Fig. 11: SAR distribution for DECT US, antenna 2, channel 2, body worn configuration, display towards the phantom, with headset and 0 mm distance (March 28, 2011; Ambient Temperature: 20.7° C; Liquid Temperature: 20.3° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name:

[RTX8630_bphm_2_dsp_down_clip_HS_ant2.da4](#)

DUT: RTX; Type: 8630;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.58$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.89, 7.89, 7.89); Calibrated: 16.09.2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.016 mW/g

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

Reference Value = 3.14 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.028 W/kg

SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00898 mW/g

Maximum value of SAR (measured) = 0.017 mW/g

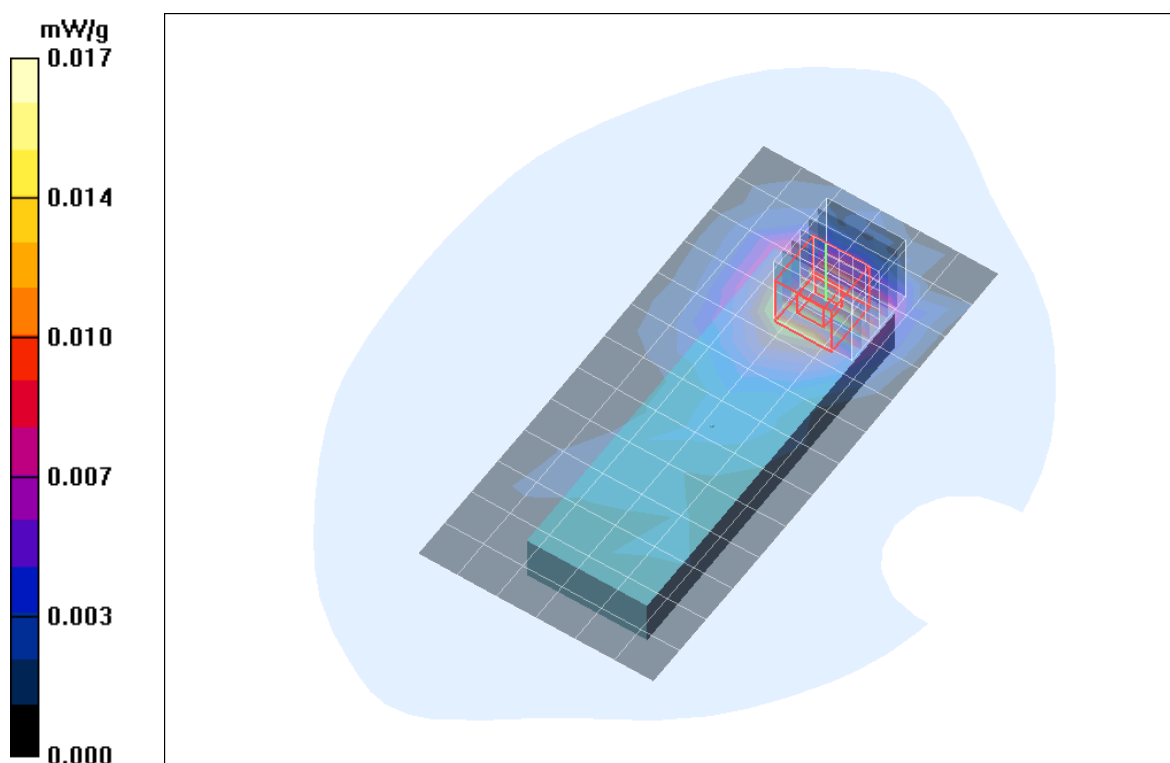


Fig. 12: SAR distribution for DECT US, antenna 2, channel 2, body worn configuration, display towards the ground, with headset and 0 mm distance (March 28, 2011; Ambient Temperature: 20.7° C; Liquid Temperature: 20.3° C).

5 SAR Z-Axis Scans (Validation)

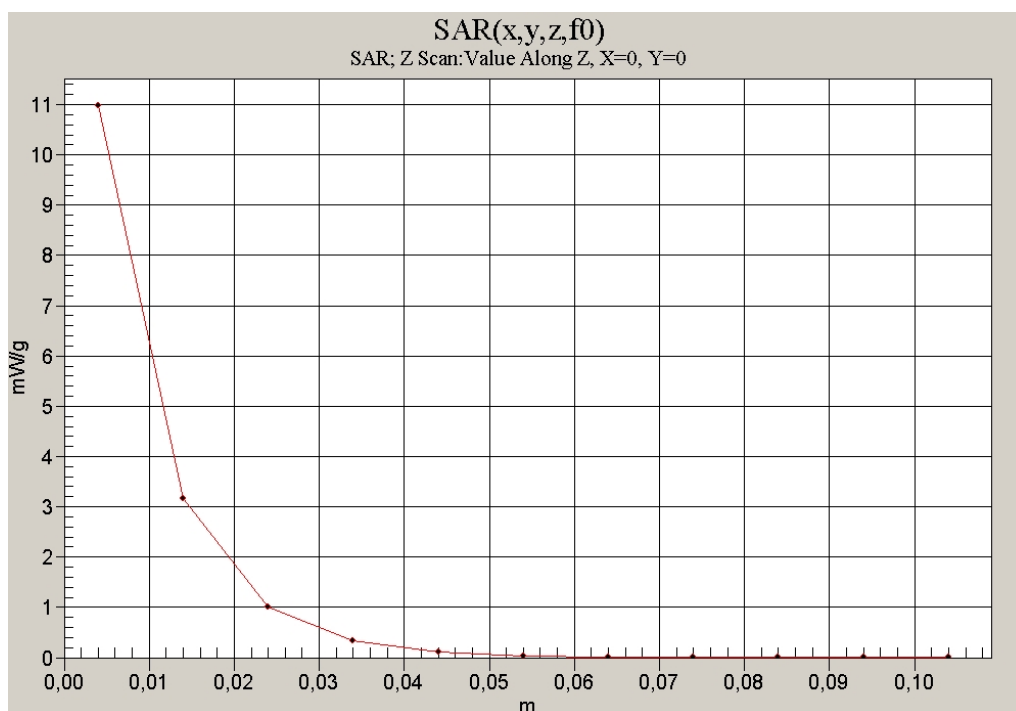


Fig. 13: SAR versus liquid depth, 1900 MHz, head (March 29, 2011; Ambient Temperature: 21.0° C; Liquid Temperature : 20.6° C).

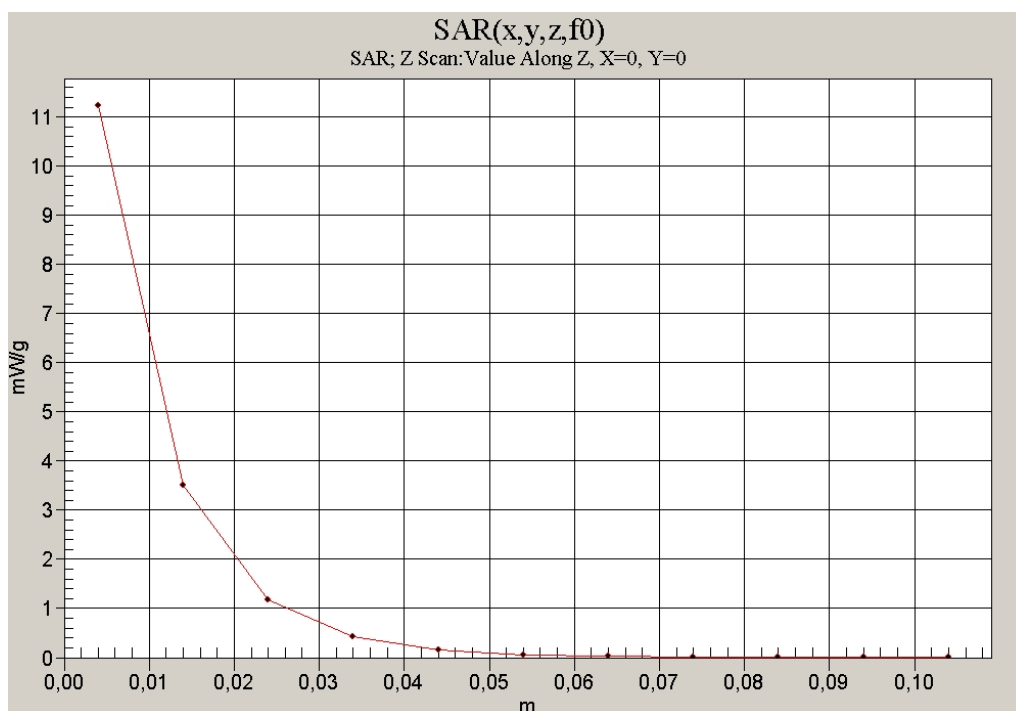


Fig. 14: SAR versus liquid depth, 1900 MHz, body (March 28, 2011; Ambient Temperature: 20.7° C; Liquid Temperature : 20.3° C).

6 SAR Z-Axis Scans (Measurements)

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

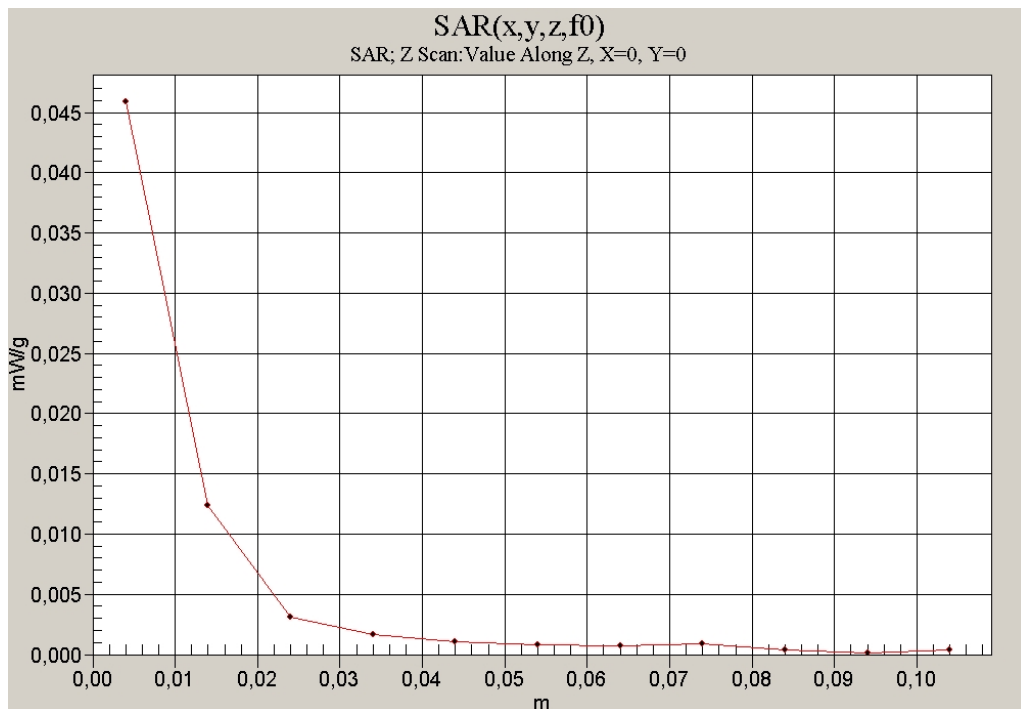


Fig. 15: SAR versus liquid depth, head: DECT US, antenna 2, channel 2, cheek position, right side of head (March 29, 2011; Ambient Temperature: 21.2° C; Liquid Temperature : 20.7° C).

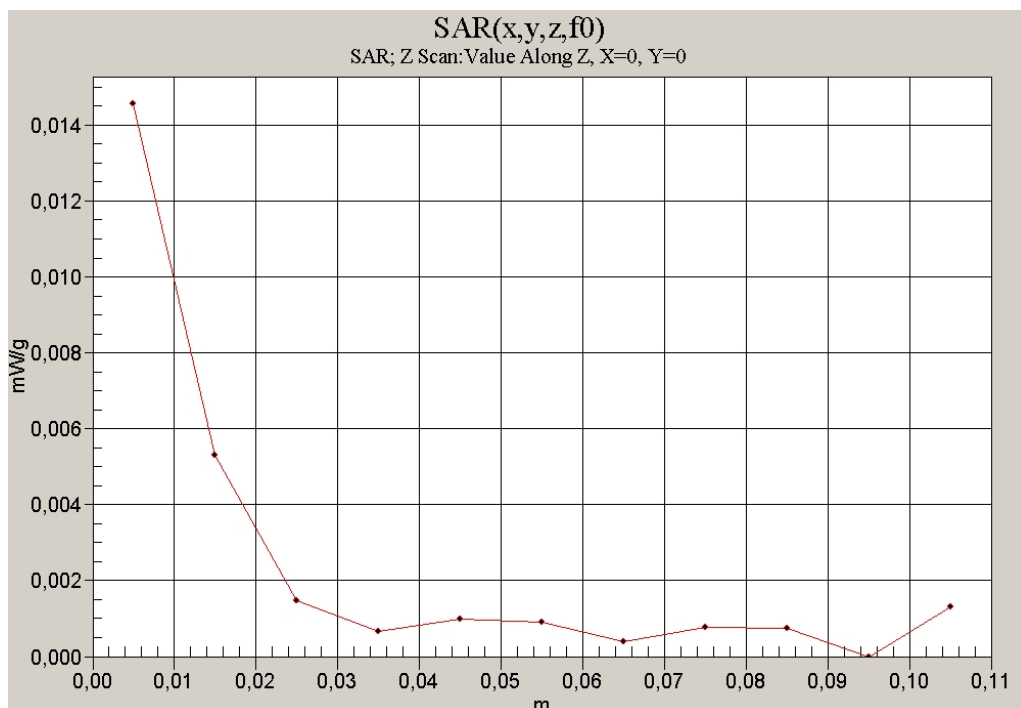


Fig. 16: SAR versus liquid depth, body: DECT US, antenna 2, channel 2, headset and 0 mm distance, display towards the phantom (March 28, 2011; Ambient Temperature: 20.7° C; Liquid Temperature: 20.3° C).