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Appendix for the Report

Dosimetric Assessment of the Portable Device Avaya D160 (FCC ID: AMWUP683R) (IC: 513C-UP683)

According to the FCC Requirements SAR Distribution Plots

June 15, 2012

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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 Measurement

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [160_yDIm_1.da4](#)

DUT: Avaya D160;

Program Name: Cheek Left

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.13, 5.13, 5.13); Calibrated: 25.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 20.02.2012
- 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) = 0.002 mW/g

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

Reference Value = 1.20 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.004 W/kg

SAR(1 g) = 0.002 mW/g; SAR(10 g) = 0.000985 mW/g

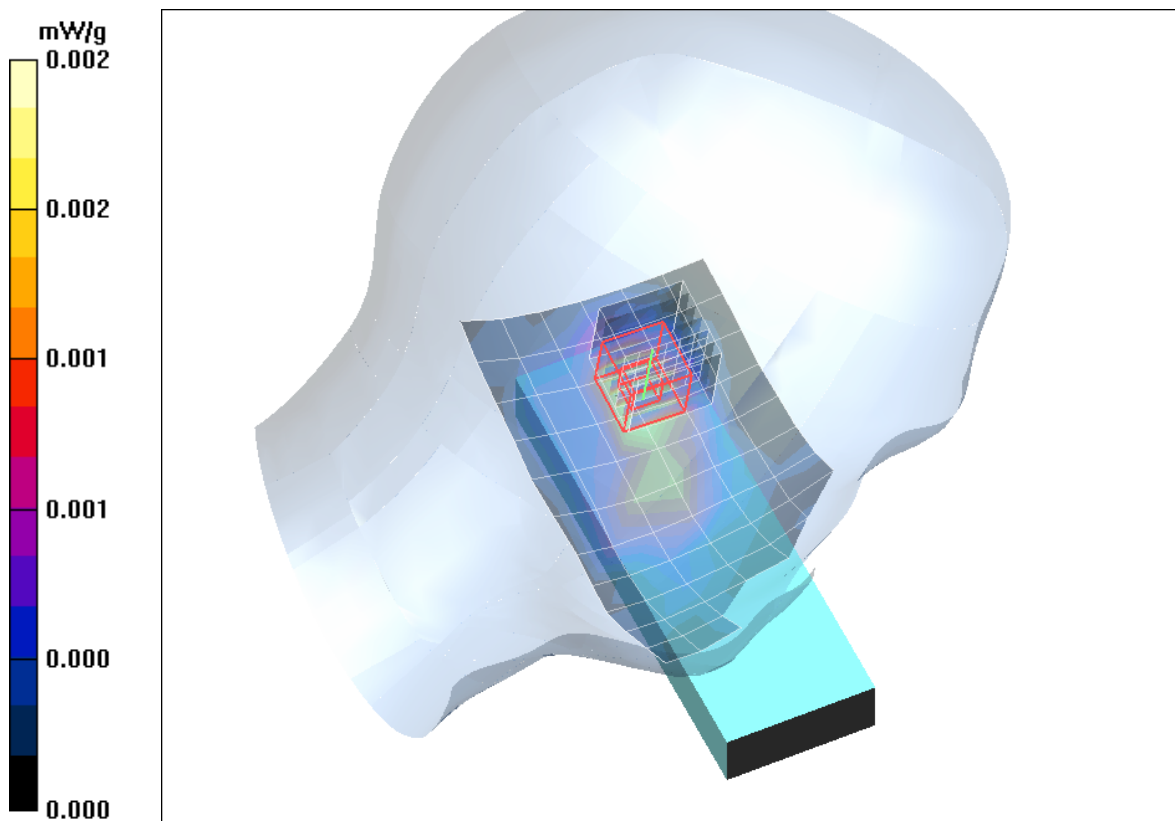


Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head, (May 29, 2012; Ambient Temperature: 22.0°C; Liquid Temperature: 21.8°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [160_yDIm_2.da4](#)

DUT: Avaya D160;

Program Name: Cheek Left

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.13, 5.13, 5.13); Calibrated: 25.01.2012

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

- Electronics: DAE3 Sn335; Calibrated: 20.02.2012

- 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) = 0.020 mW/g

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

Reference Value = 3.94 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 0.055 W/kg

SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00836 mW/g

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

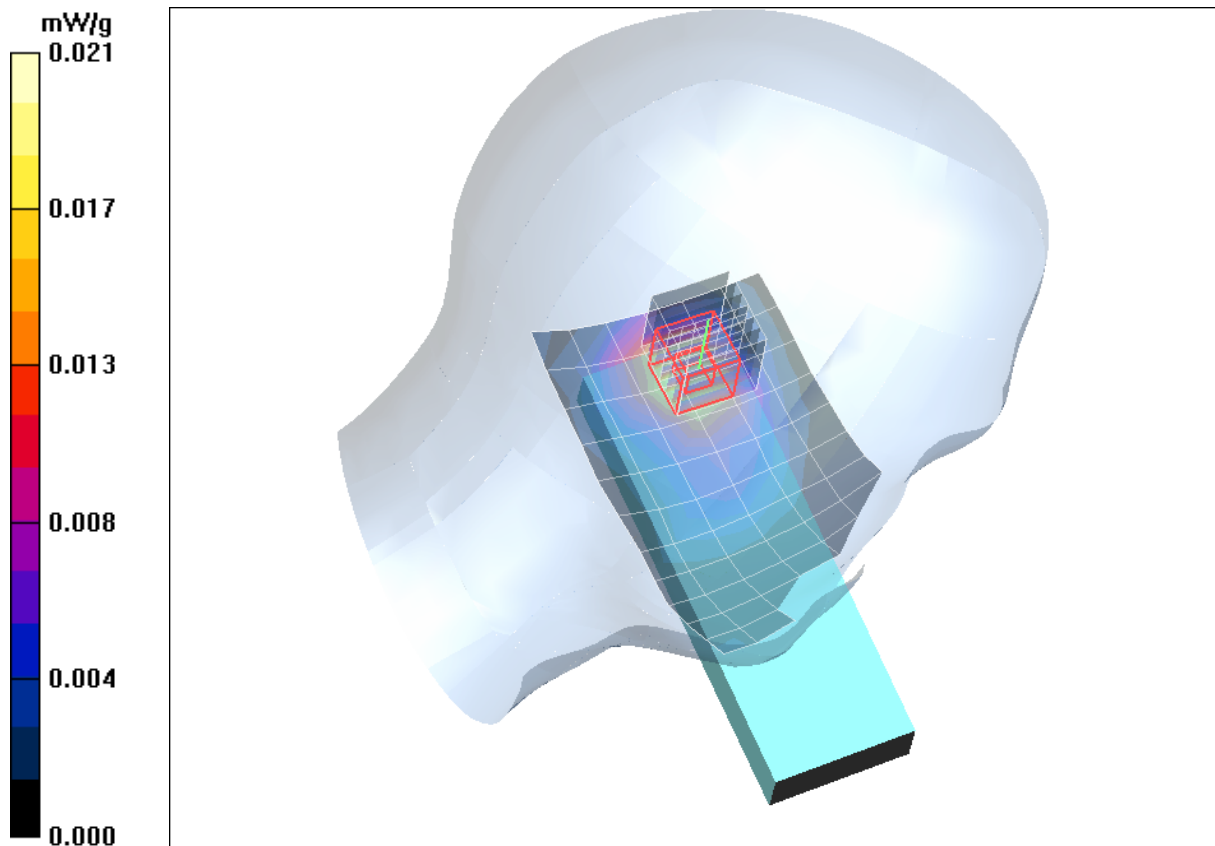


Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head, (May 29, 2012; Ambient Temperature: 22.0°C; Liquid Temperature: 21.8°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [160_yDrm_1.da4](#)

DUT: Avaya D160;

Program Name: Cheek Right

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.13, 5.13, 5.13); Calibrated: 25.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 20.02.2012
- 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) = 0.021 mW/g

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

Reference Value = 3.94 V/m; Power Drift = -0.148 dB

Peak SAR (extrapolated) = 0.031 W/kg

SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.0099 mW/g

Maximum value of SAR (measured) = 0.020 mW/g

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

Reference Value = 3.94 V/m; Power Drift = -0.148 dB

Peak SAR (extrapolated) = 0.032 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.0099 mW/g

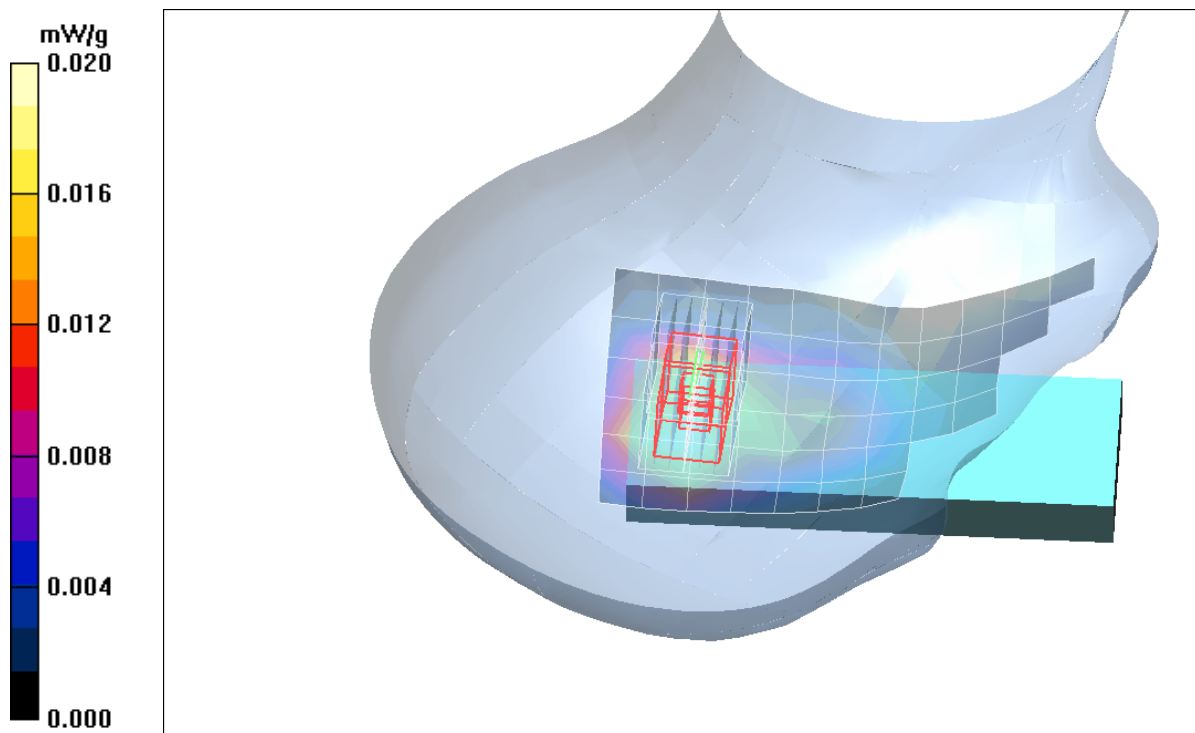


Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head, (May 29, 2012; Ambient Temperature: 22.0°C; Liquid Temperature: 21.8°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [160_yDrm_2.da4](#)

DUT: Avaya D160;

Program Name: Cheek Right

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.13, 5.13, 5.13); Calibrated: 25.01.2012

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

- Electronics: DAE3 Sn335; Calibrated: 20.02.2012

- 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) = 0.018 mW/g

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

Reference Value = 3.58 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 0.029 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00942 mW/g

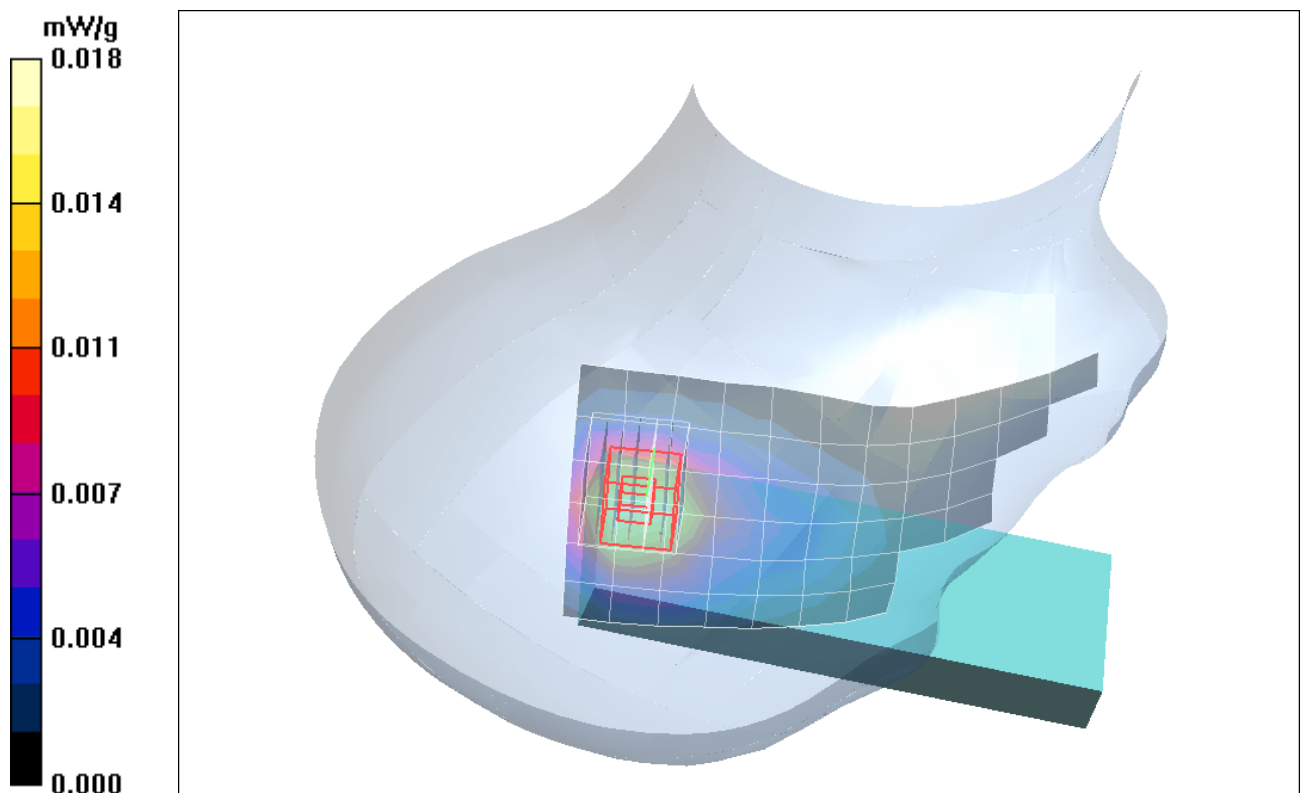


Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head, (May 29, 2012; Ambient Temperature: 22.0°C; Liquid Temperature: 21.8°C)

2 SAR Distribution Plots, Body Measurements

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [160_yDhm_1_dspl_up_hs_clip.da4](#)

DUT: Avaya D160;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.03, 8.03, 8.03); Calibrated: 26.09.2011

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

- Electronics: DAE4 Sn631; Calibrated: 21.09.2011

- 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 (7x14x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 2.84 V/m; Power Drift = 0.107 dB

Peak SAR (extrapolated) = 0.051 W/kg

SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.033 mW/g

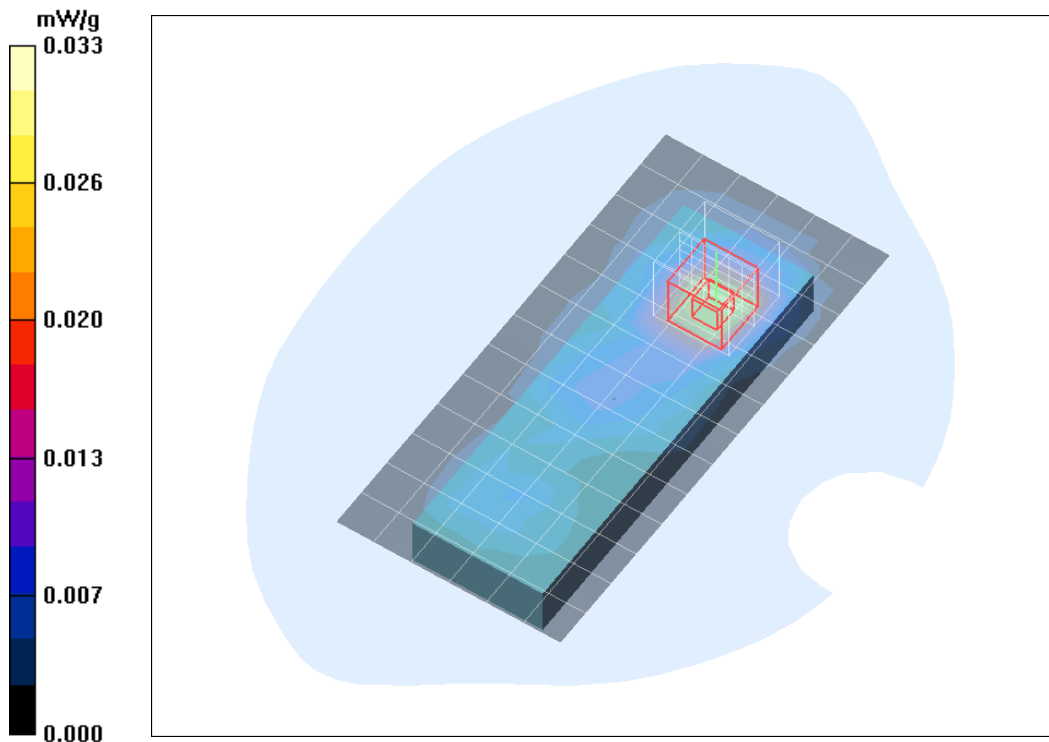


Fig. 5: SAR distribution for DECT US, channel 2, body worn configuration, display towards the phantom, with headset and clip, 0 mm distance (June 11, 2012; Ambient Temperature: 21.5° C; Liquid Temperature: 21.4° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [160_yDhm 2 dspl down hs clip.da4](#)

DUT: Avaya D160;

Program Name: DECT

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

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(8.03, 8.03, 8.03); Calibrated: 26.09.2011

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

- Electronics: DAE4 Sn631; Calibrated: 21.09.2011

- 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 (7x14x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 2.71 V/m; Power Drift = 0.158 dB

Peak SAR (extrapolated) = 0.038 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

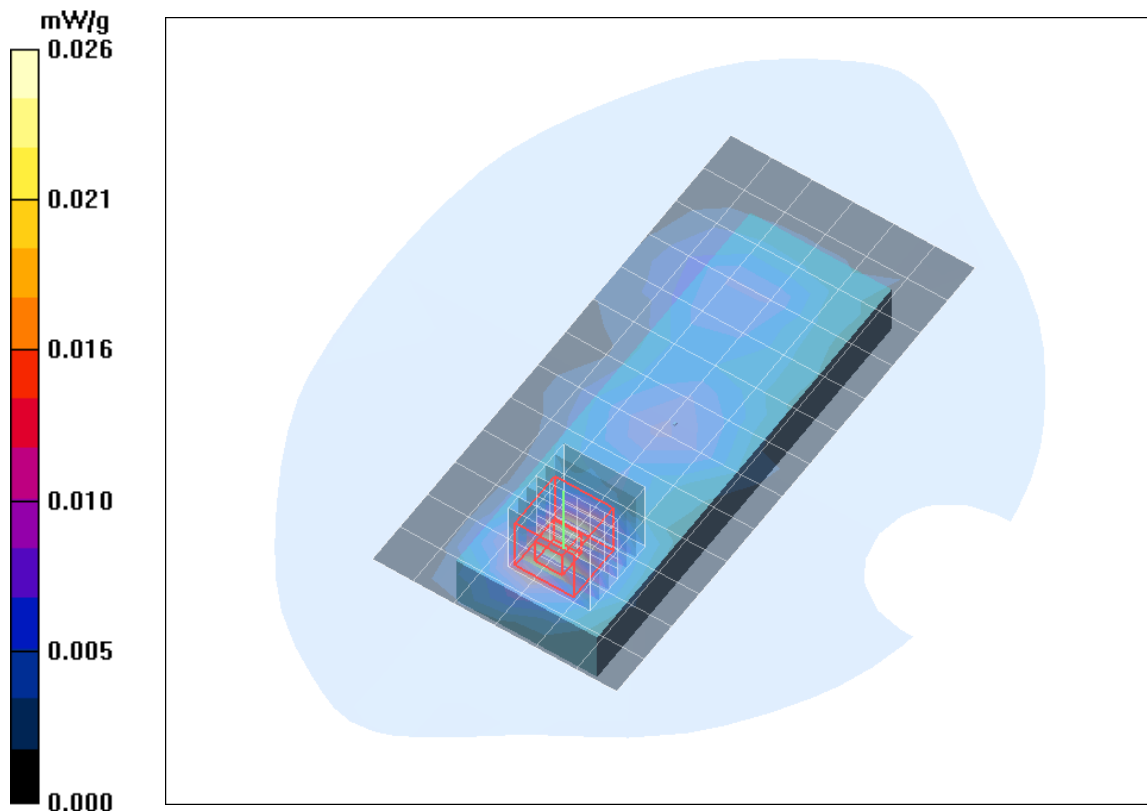


Fig. 6: SAR distribution for DECT US, channel 2, body worn configuration, display towards the ground, with headset and clip, 0 mm distance (June 11, 2012; Ambient Temperature: 21.5° C; Liquid Temperature: 21.3° C).

3 SAR Z-Axis Scans (Validation)

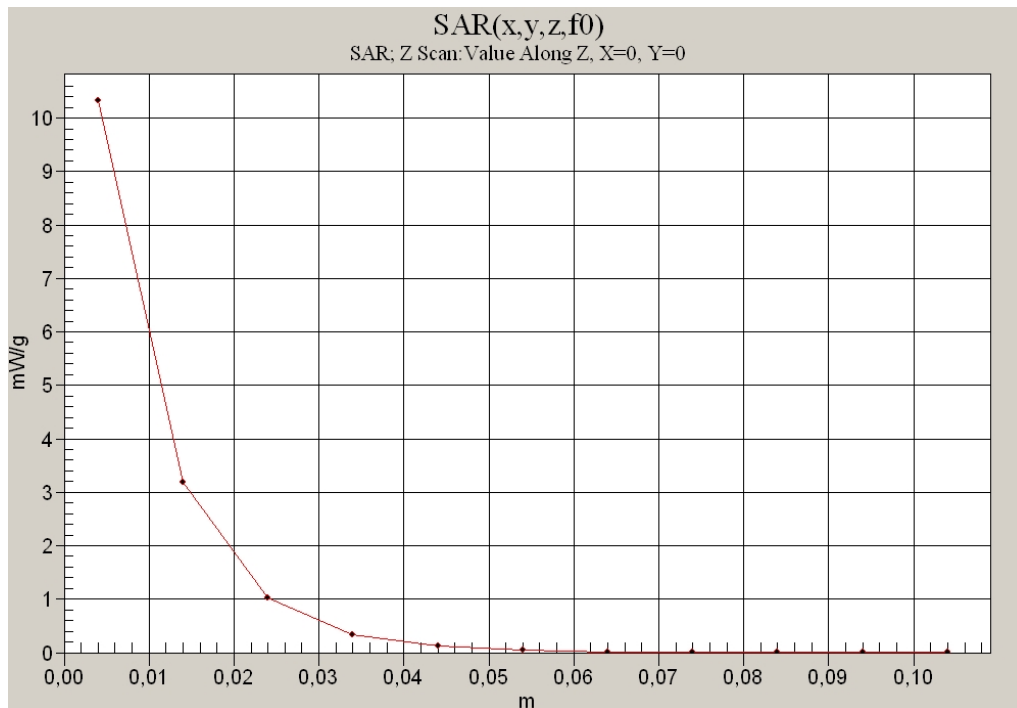


Fig. 7: SAR versus liquid depth, 1900 MHz, head (May 29, 2012; Ambient Temperature: 22.0° C; Liquid Temperature: 21.8° C).

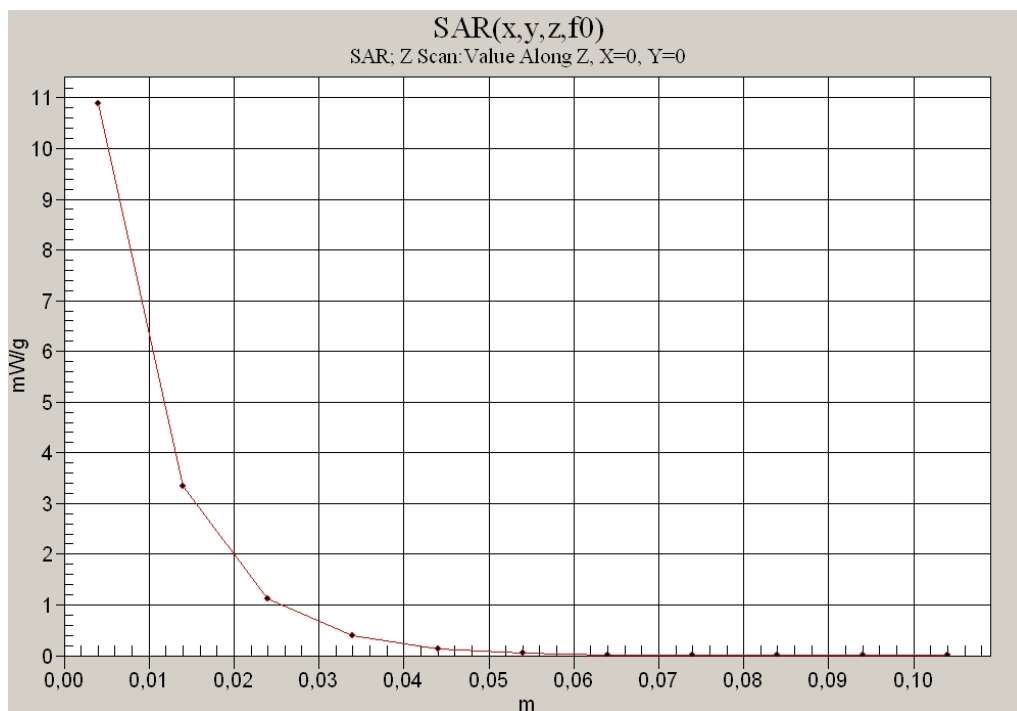


Fig. 8: SAR versus liquid depth, 1900 MHz, body (June 11, 2012; Ambient Temperature: 21.5° C; Liquid Temperature: 21.3° C).

4 SAR Z-Axis Scans (Measurements)

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

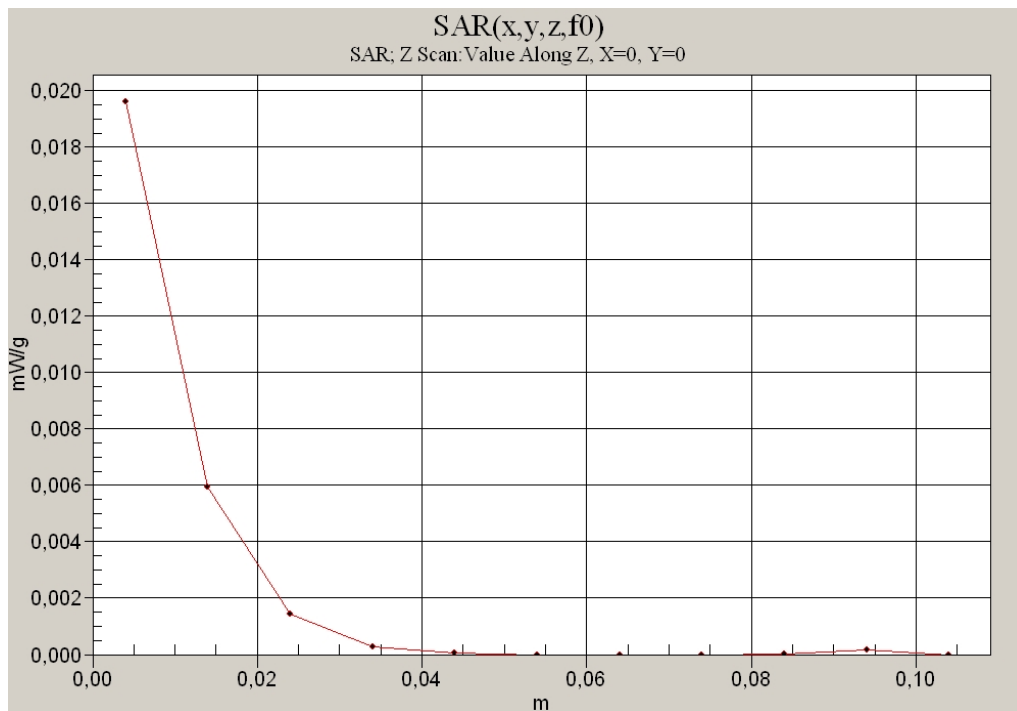


Fig. 9: SAR versus liquid depth, head: DECT US, channel 2, cheek position, right side of head (May 29, 2012; Ambient Temperature: 22.0° C; Liquid Temperature : 21.8° C).

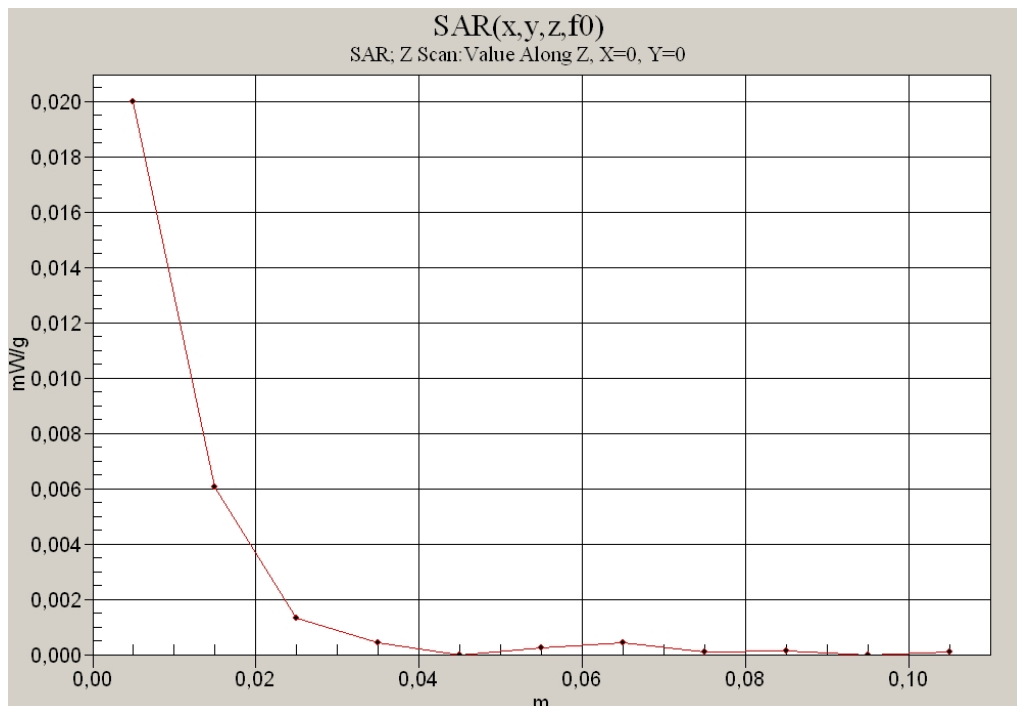


Fig. 10: SAR versus liquid depth, body: DECT US, channel 2, position 1, headset and clip attached, 0 mm distance, display towards the phantom (June 11, 2012; Ambient Temperature: 21.5° C; Liquid Temperature: 21.3° C).