

Appendix for the SAR Test Report

Dosimetric Assessment of the Cordless DECT Headset DW 30 HS from Sennheiser Communications

(FCC ID: DMOCDDHDGG)

(IC: 2099A-D10HS)

According to the FCC Requirements SAR Distribution Plots

November 21, 2014

IMST GmbH

Carl-Friedrich-Gauß-Str. 2 - 4

D-47475 Kamp-Lintfort

Customer

Sennheiser Communications A/S

Industriparken 27

DK-2750 Ballerup

Denmark

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.

1 SAR Distribution Plots

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [DW30HS_ydhm_1_ant1.da4](#)

DUT: Sennheiser; Type: DW 30 HS; Serial: 50068050

Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:15

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.47$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5, 5, 5); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- 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 Worn/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.070 mW/g

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

Reference Value = 7.09 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 0.166 W/kg

SAR(1 g) = 0.069 mW/g; SAR(10 g) = 0.031 mW/g

Maximum value of SAR (measured) = 0.081 mW/g

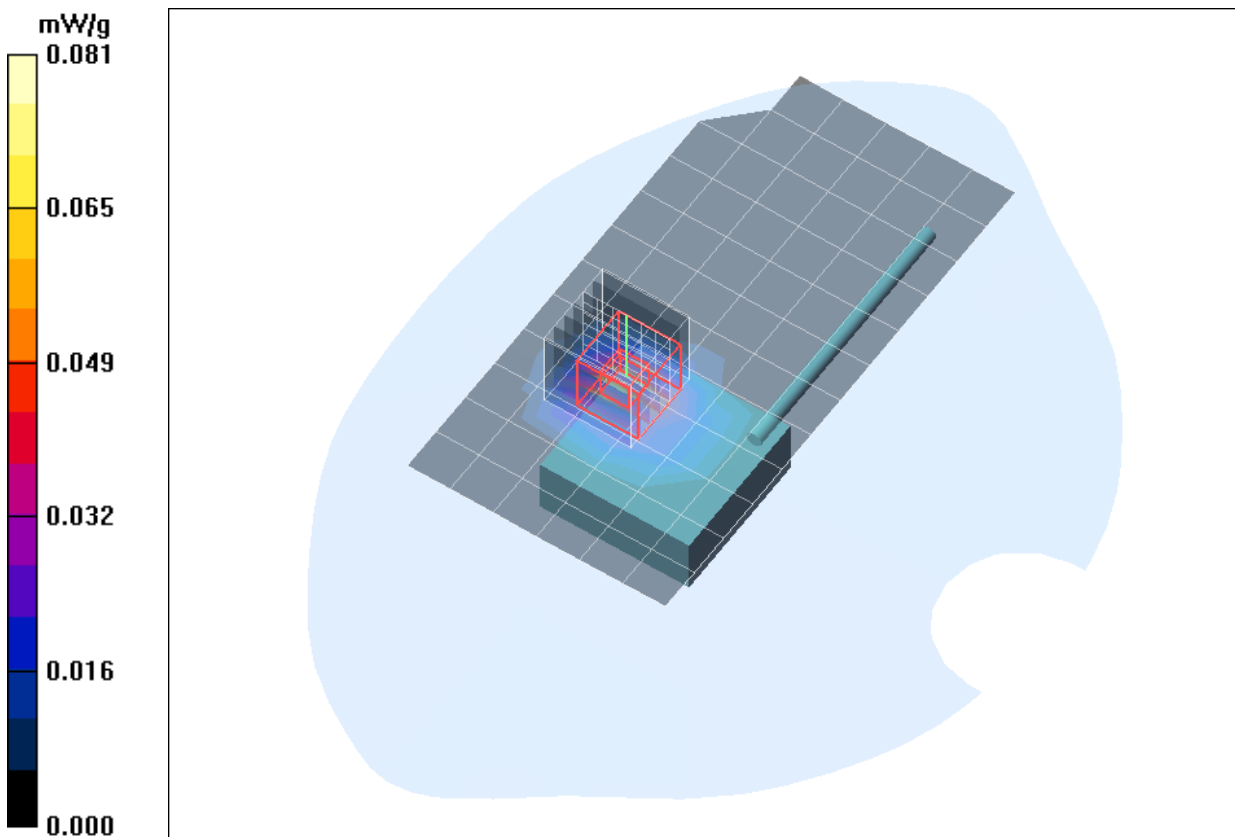


Fig. 1: SAR distribution for Sennheiser Communications DW 30 HS, head configuration below the flat part of SAM phantom, test position 1, antenna 1, mid channel.

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [DW30HS_ydhm_1_ant2.da4](#)

DUT: Sennheiser; **Type:** DW 30 HS; **Serial:** 50068050

Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:15

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.47$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5, 5, 5); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- 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 Worn/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.082 mW/g

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

Reference Value = 7.95 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.175 W/kg

SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.038 mW/g

Maximum value of SAR (measured) = 0.084 mW/g

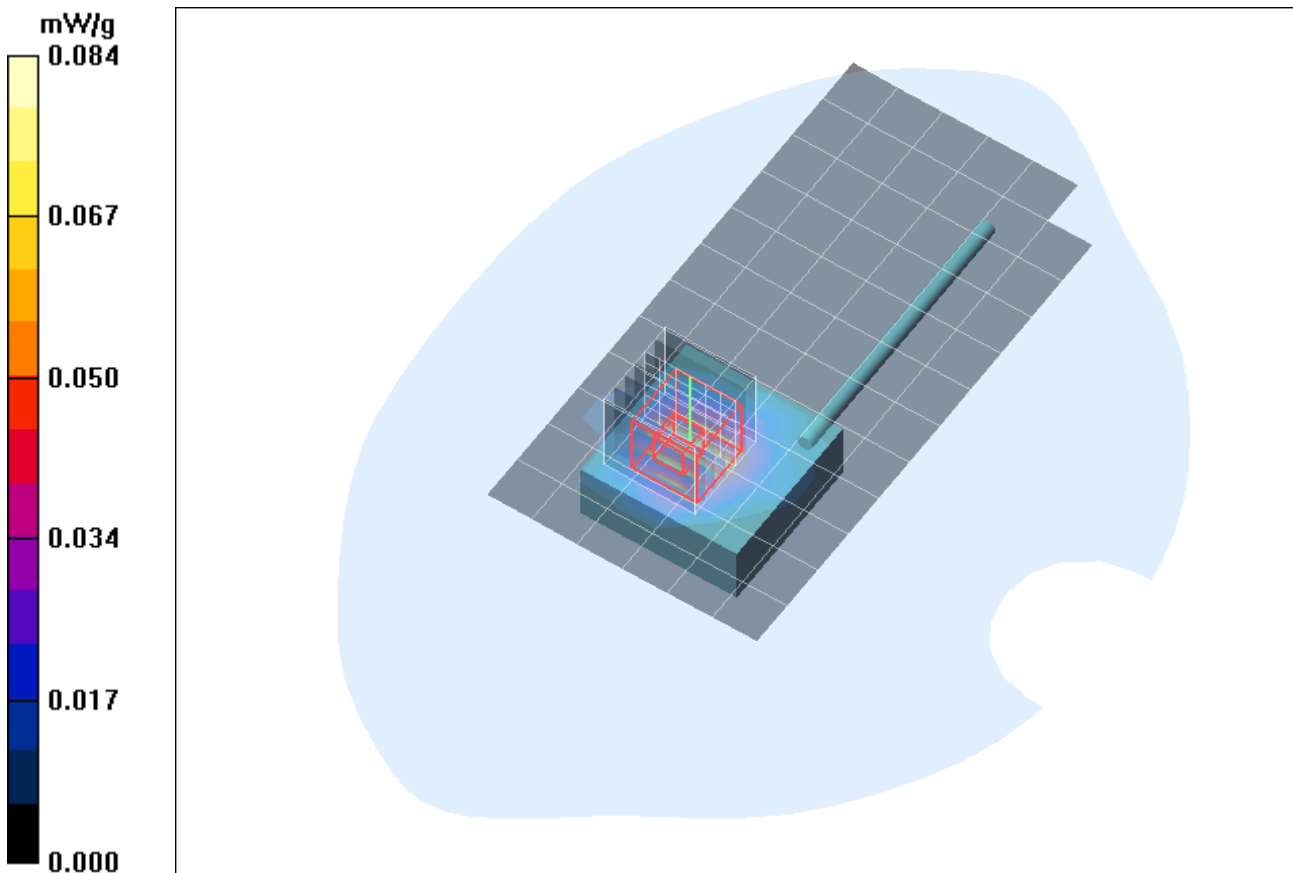


Fig. 2: SAR distribution for Sennheiser Communications DW 30 HS, head configuration below the flat part of SAM phantom, test position 1, antenna 2, mid channel.

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [DW30HS_ydhm_2_ant1.da4](#)

DUT: Sennheiser; **Type:** DW 30 HS; **Serial:** 50068050

Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:15

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.47$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5, 5, 5); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- 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 Worn/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.000 mW/g

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

Reference Value = 0.231 V/m; Power Drift = 2.42 dB

Peak SAR (extrapolated) = 0.000 W/kg

SAR(1 g) = 2.9e-007 mW/g; SAR(10 g) = 1.63e-008 mW/g

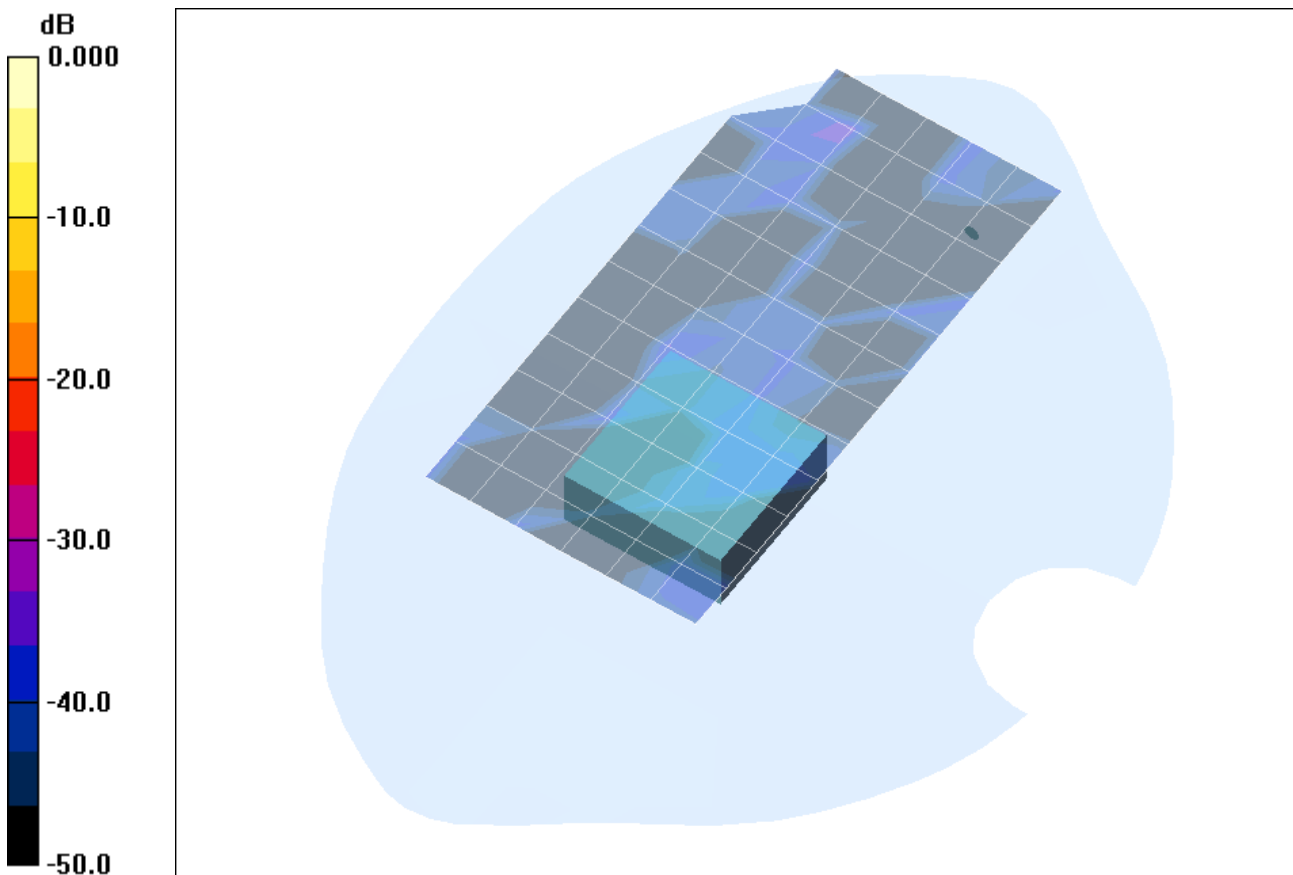


Fig. 3: SAR distribution for Sennheiser Communications DW 30 HS, head configuration below the flat part of SAM phantom, test position 2, antenna 1, mid channel.

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:** [DW30HS_ydhm_2_ant2.da4](#)

DUT: Sennheiser; **Type:** DW 30 HS; **Serial:** 50068050

Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:15

Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.47$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5, 5, 5); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- 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 Worn/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.000 mW/g

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

Reference Value = 0.292 V/m; Power Drift = -999.0 dB

Peak SAR (extrapolated) = 0.000 W/kg

SAR(1 g) = 5.42e-006 mW/g; SAR(10 g) = 9.9e-007 mW/g

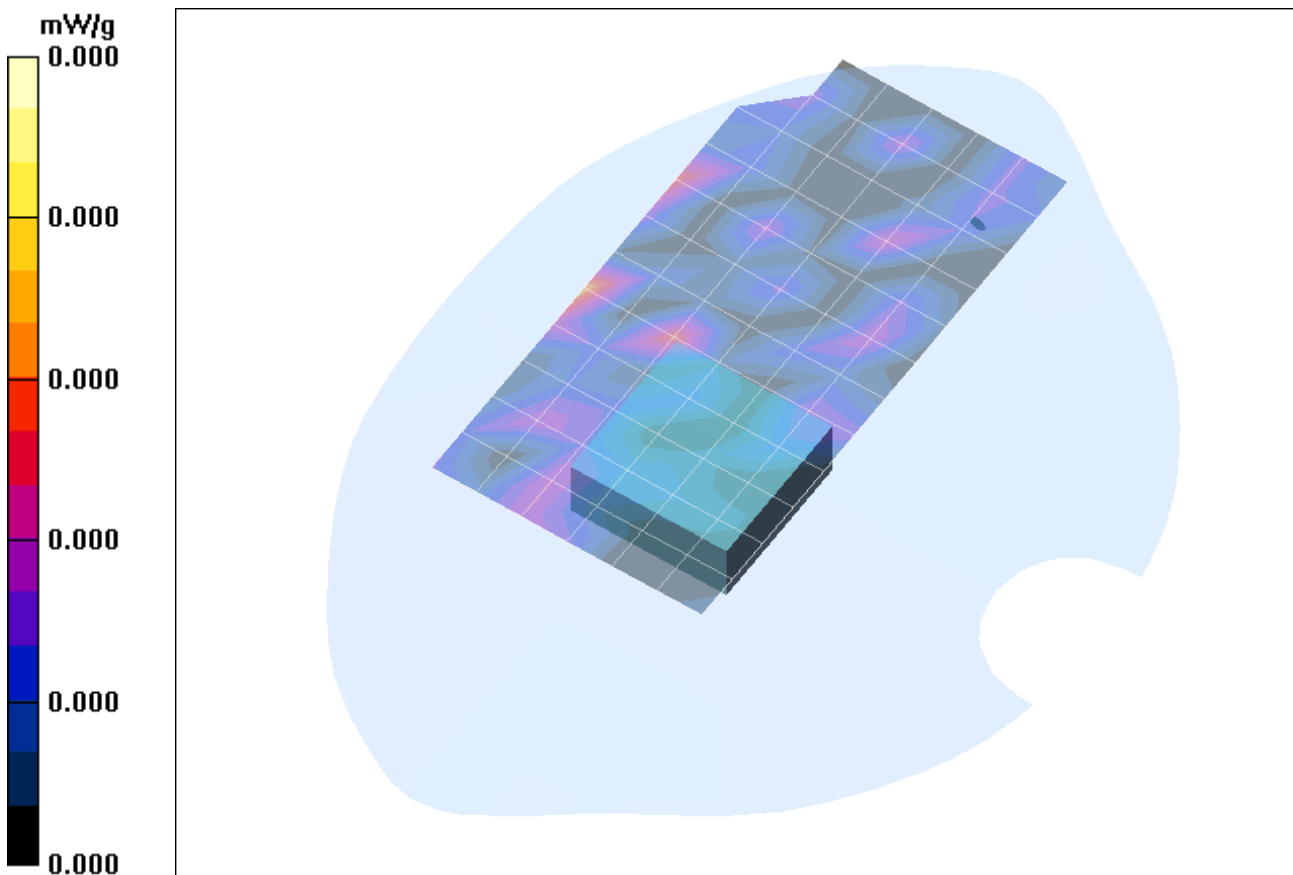


Fig. 4: SAR distribution for Sennheiser Communications DW 30 HS, head configuration below the flat part of SAM phantom, test position 2, antenna 2, mid channel.