



Appendix A. Plots of System Performance Check

The plots are shown as follows.

System Check_Head_835MHz_130409

DUT: D835V2-SN: 4d091

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL_835_130409 Medium parameters used: $f = 835$ MHz; $\sigma = 0.918$ mho/m; $\epsilon_r = 41.297$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(9.56, 9.56, 9.56); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 3.17 W/kg

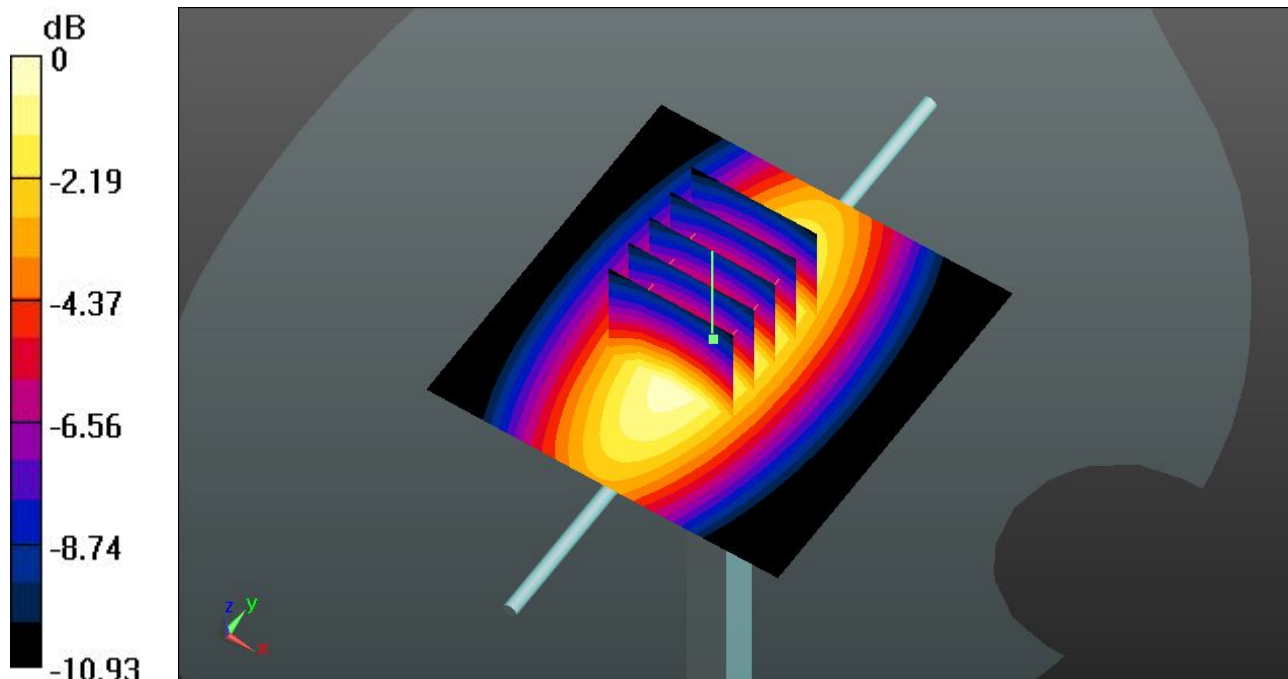
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 59.796 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.757 mW/g

SAR(1 g) = 2.49 mW/g; SAR(10 g) = 1.63 mW/g

Maximum value of SAR (measured) = 3.17 W/kg



0 dB = 3.17 W/kg

System Check_Head_1750MHz_130427

DUT: D1750V2-SN: 1023

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: HSL_1800_130427 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.378$ mho/m; $\epsilon_r = 41.34$;

$\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.9 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8.2, 8.2, 8.2); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.1 W/kg

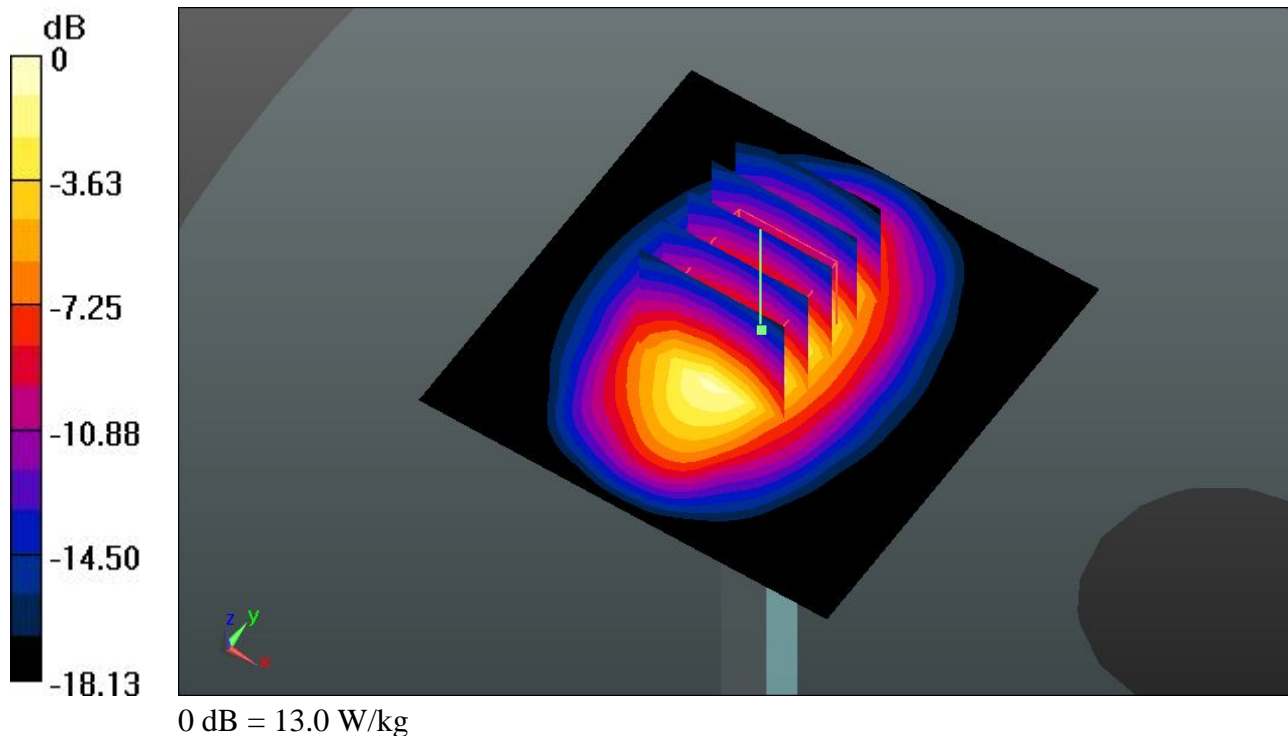
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 97.936 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 16.816 mW/g

SAR(1 g) = 9.15 mW/g; SAR(10 g) = 4.81 mW/g

Maximum value of SAR (measured) = 13.0 W/kg



System Check_Head_1900MHz_130409

DUT: D1900V2-SN: 5d118

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL_1900_130409 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.445$ mho/m; $\epsilon_r =$

39.686 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(7.84, 7.84, 7.84); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 14.7 W/kg

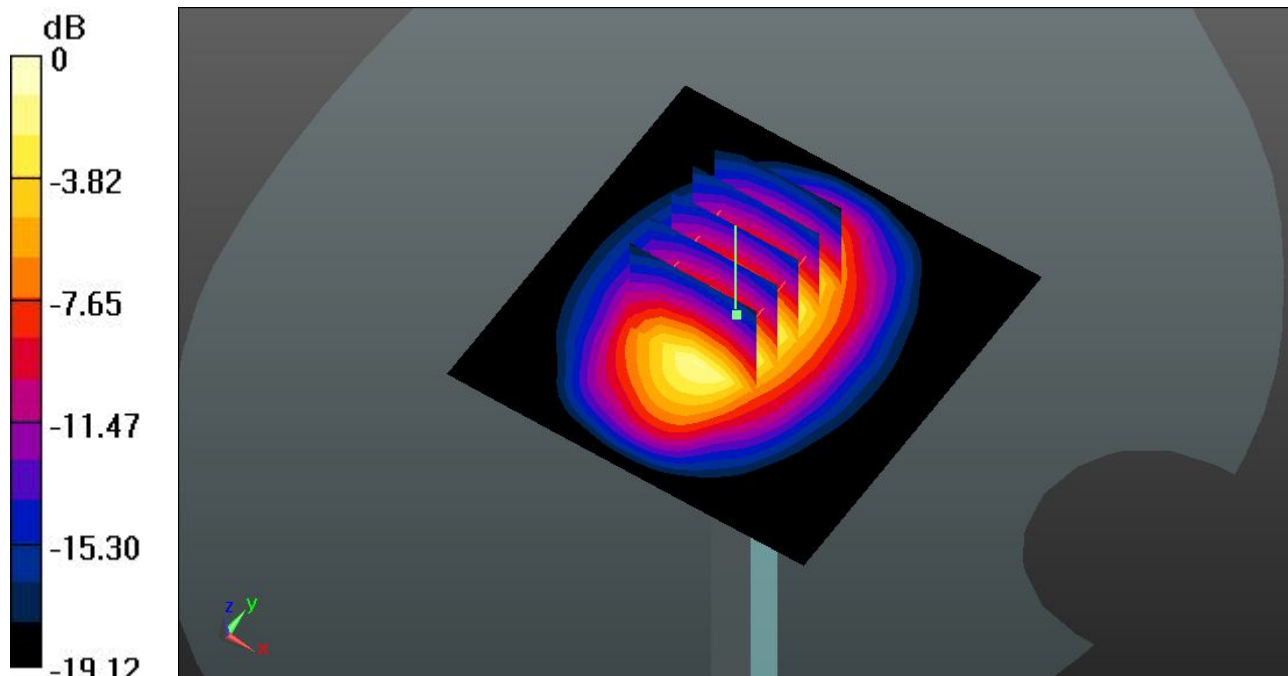
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 101.6 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.996 mW/g

SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.23 mW/g

Maximum value of SAR (measured) = 14.3 W/kg



0 dB = 14.3 W/kg

System Check_Head_1900MHz_130427

DUT: D1900V2-SN: 5d118

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL_1900_130427 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.412 \text{ mho/m}$; $\epsilon_r =$

39.311 ; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.5 \text{ }^\circ\text{C}$; Liquid Temperature : $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(7.84, 7.84, 7.84); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 14.4 W/kg

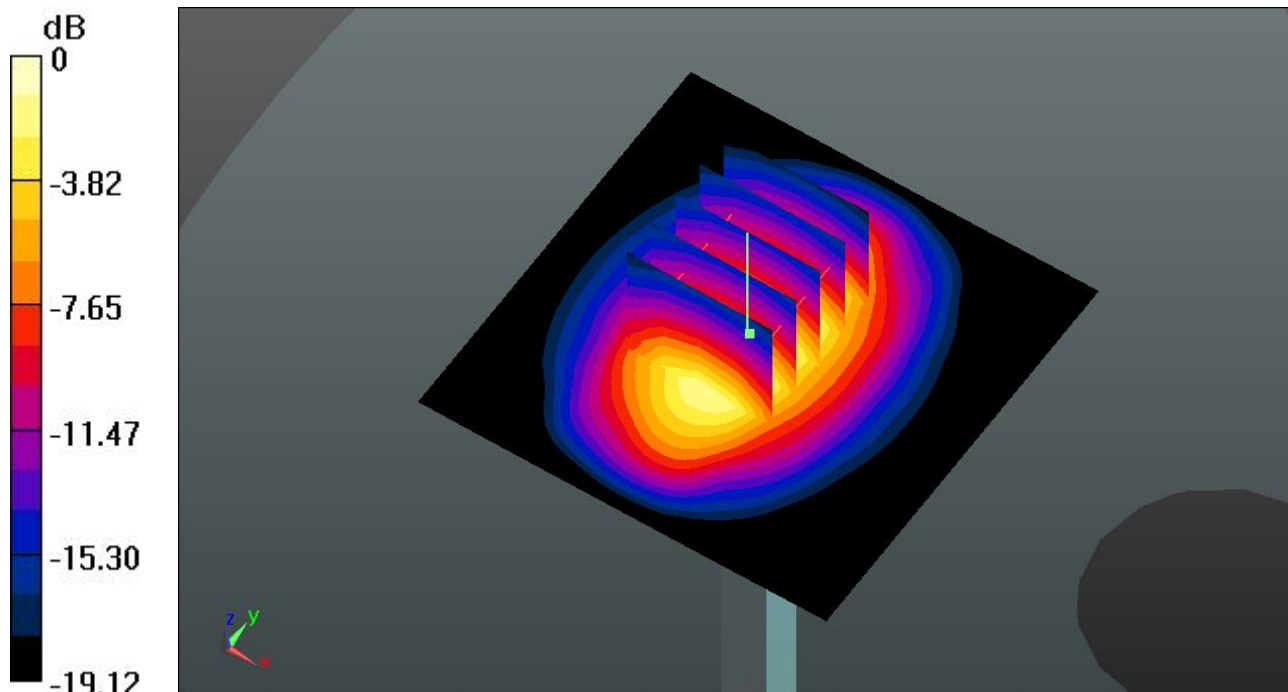
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 101.6 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.562 mW/g

SAR(1 g) = 9.95 mW/g ; SAR(10 g) = 5.12 mW/g

Maximum value of SAR (measured) = 14.0 W/kg



0 dB = 14.0 W/kg

System Check_Head_2450MHz_130412

DUT: D2450V2-SN: 736

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL_2450_130412 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.857$ mho/m; $\epsilon_r = 37.67$;

$\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(6.99, 6.99, 6.99); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 21.9 W/kg

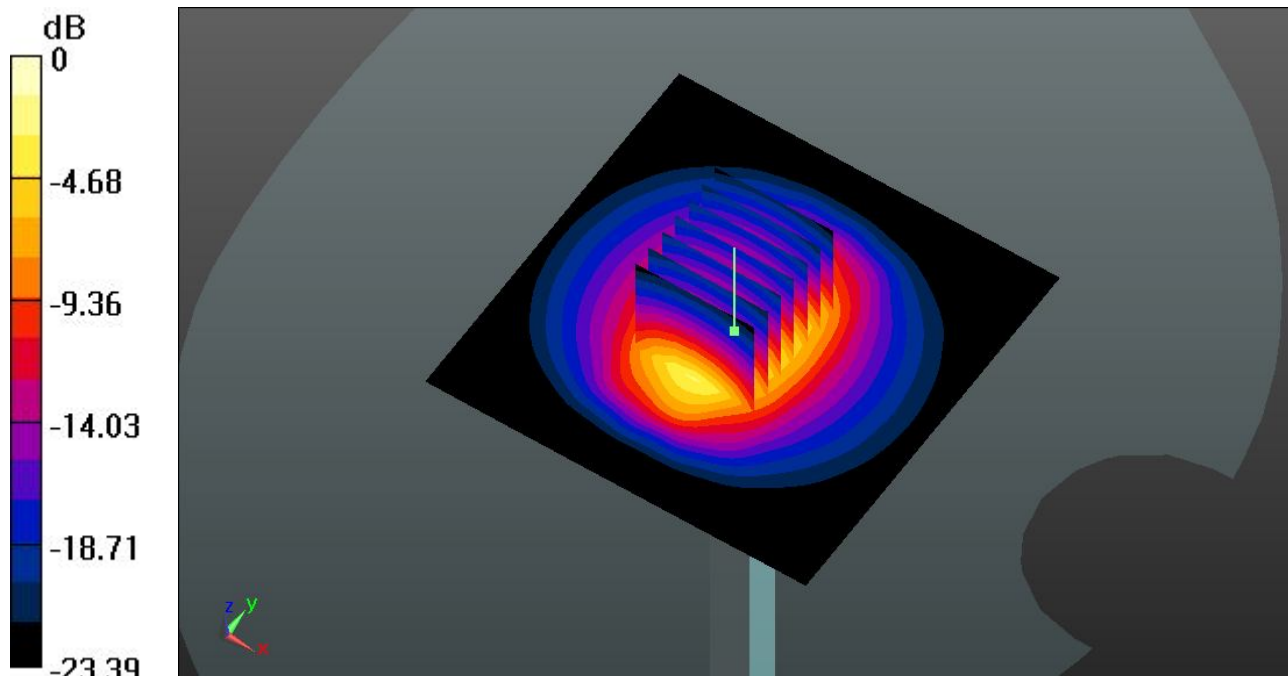
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.333 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 30.507 mW/g

SAR(1 g) = 14.2 mW/g; SAR(10 g) = 6.46 mW/g

Maximum value of SAR (measured) = 22.2 W/kg



0 dB = 22.2 W/kg

System Check_Body_835MHz_130409

DUT: D835V2-SN: 4d091

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL_835_130409 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.975 \text{ mho/m}$; $\epsilon_r = 54.307$;

$\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.6 \text{ }^\circ\text{C}$; Liquid Temperature : $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(9.5, 9.5, 9.5); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.40 W/kg

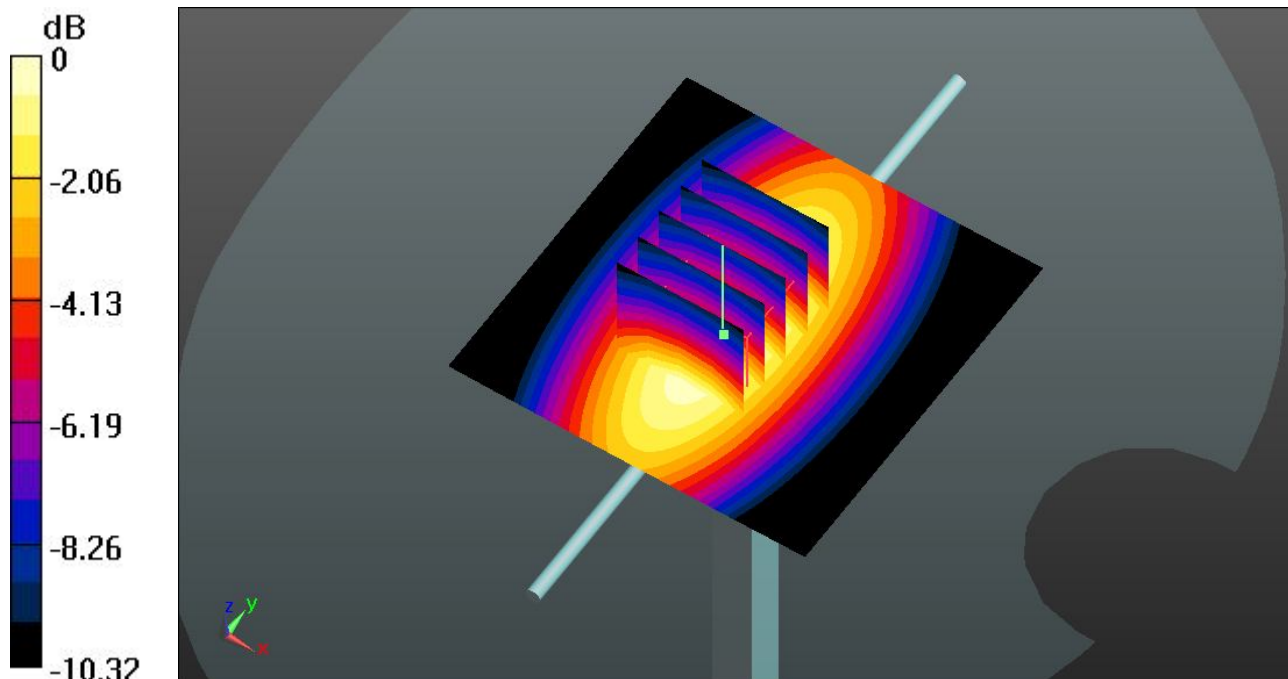
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 49.462 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.269 mW/g

SAR(1 g) = 2.22 mW/g ; SAR(10 g) = 1.47 mW/g

Maximum value of SAR (measured) = 2.39 W/kg



0 dB = 2.39 W/kg

System Check_Body_835MHz_130410

DUT: D835V2-SN: 4d091

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL_835_130410 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.964 \text{ mho/m}$; $\epsilon_r = 56.27$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.5 \text{ }^\circ\text{C}$; Liquid Temperature : $21.2 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(9.5, 9.5, 9.5); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.53 W/kg

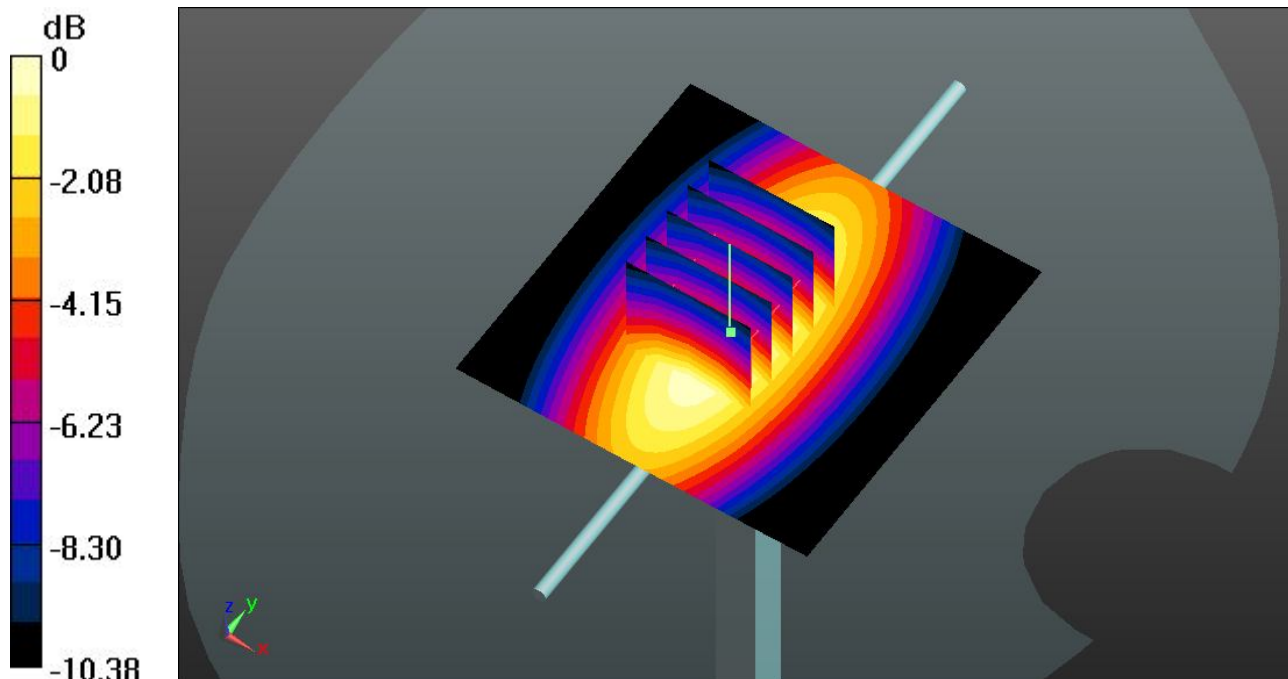
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 51.216 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.439 mW/g

SAR(1 g) = 2.34 mW/g ; SAR(10 g) = 1.55 mW/g

Maximum value of SAR (measured) = 2.51 W/kg



0 dB = 2.51 W/kg

System Check_Body_1750MHz_130427

DUT: D1750V2-SN: 1023

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: MSL_1800_130427 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r =$

55.246 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8, 8, 8); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.9 W/kg

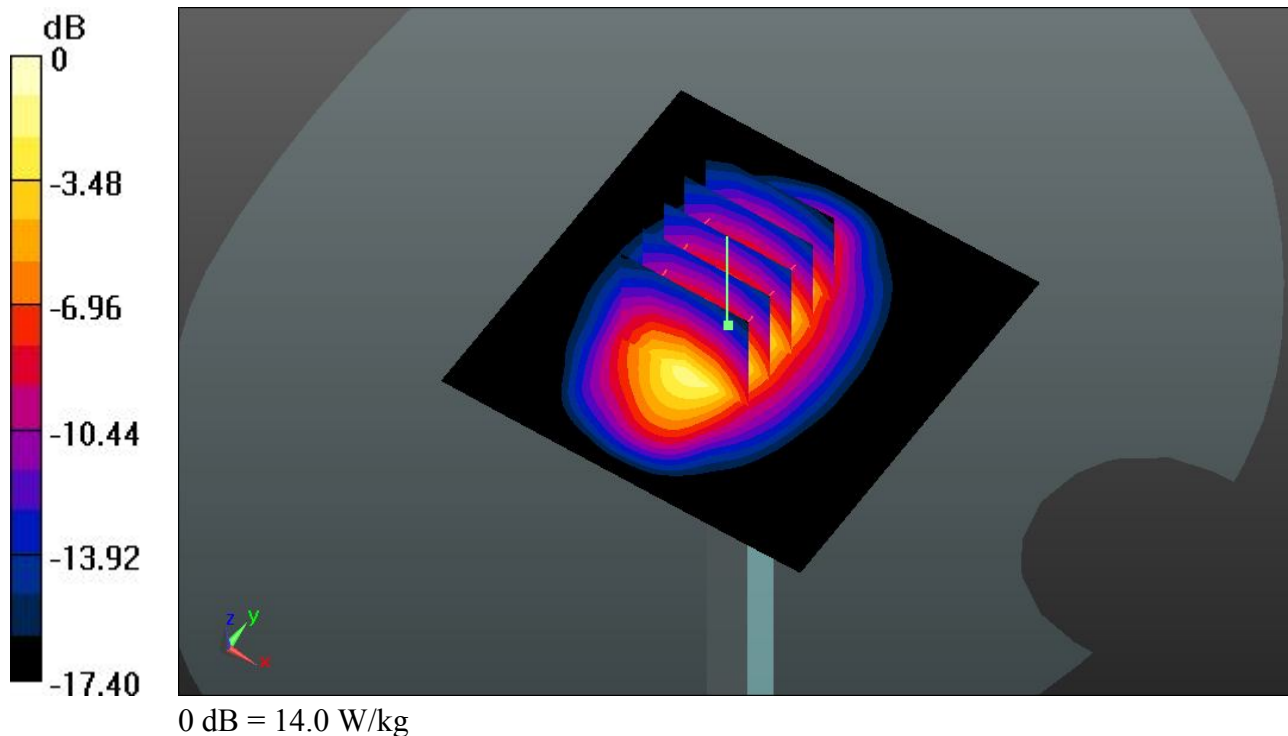
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 94.499 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 17.544 mW/g

SAR(1 g) = 9.93 mW/g; SAR(10 g) = 5.21 mW/g

Maximum value of SAR (measured) = 14.0 W/kg



System Check_Body_1900MHz_130411

DUT: D1900V2-SN: 5d118

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: MSL_1900_130411 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.512$ mho/m; $\epsilon_r =$

53.903 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(7.67, 7.67, 7.67); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 14.5 W/kg

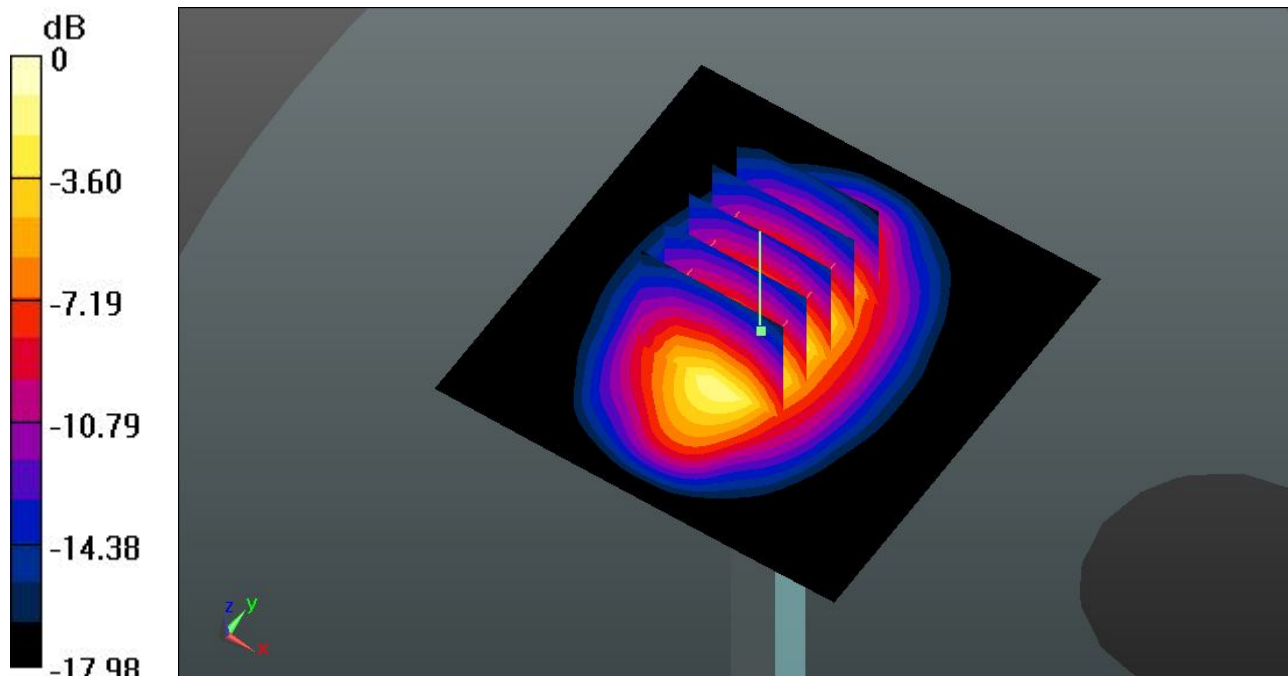
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 86.897 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.108 mW/g

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.28 mW/g

Maximum value of SAR (measured) = 14.2 W/kg



0 dB = 14.2 W/kg

System Check_Body_1900MHz_130426

DUT: D1900V2-SN: 5d118

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: MSL_1900_130426 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.519 \text{ mho/m}$; $\epsilon_r =$

53.569 ; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.4 \text{ }^\circ\text{C}$; Liquid Temperature : $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(7.67, 7.67, 7.67); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 14.6 W/kg

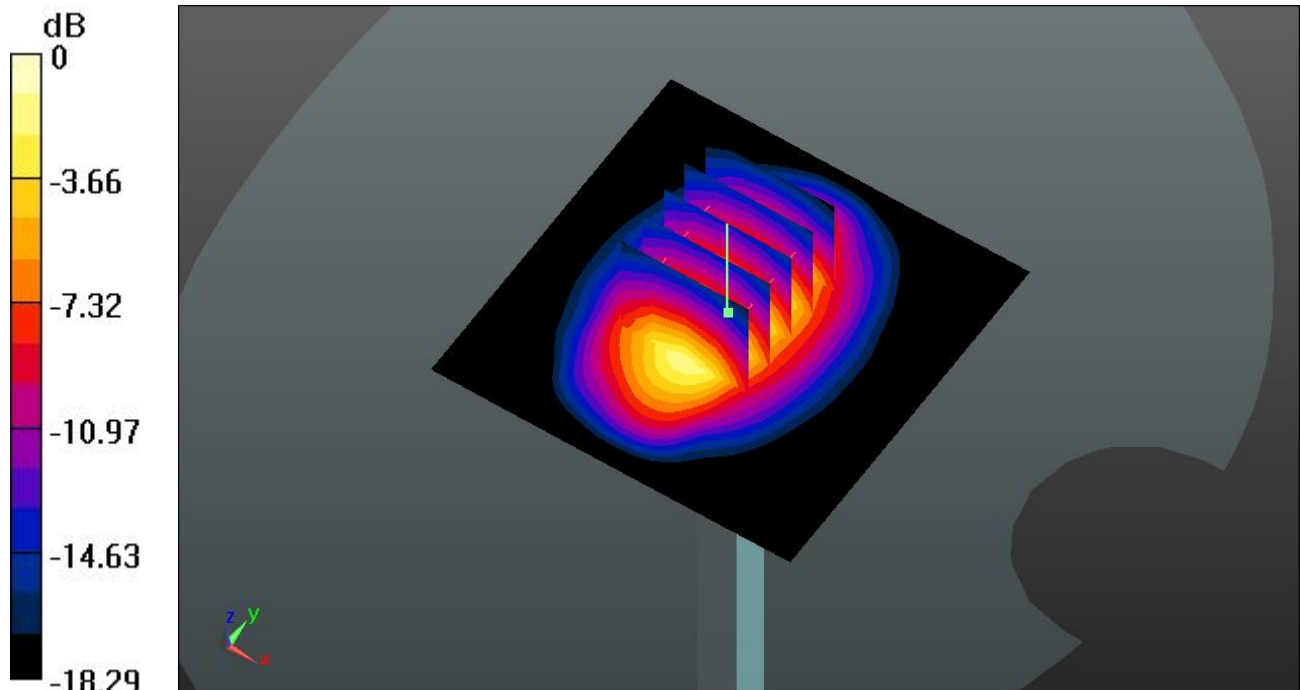
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 86.748 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 18.612 mW/g

SAR(1 g) = 10.3 mW/g ; SAR(10 g) = 5.31 mW/g

Maximum value of SAR (measured) = 14.7 W/kg



0 dB = 14.7 W/kg

System Check_Body_2450MHz_130411

DUT: D2450V2-SN: 736

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: MSL_2450_130411 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.976$ mho/m; $\epsilon_r = 54.13$;

$\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(7.21, 7.21, 7.21); Calibrated: 26.11.2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 22.11.2012
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 20.1 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.952 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 27.338 mW/g

SAR(1 g) = 13.1 mW/g; SAR(10 g) = 6.01 mW/g

Maximum value of SAR (measured) = 20.0 W/kg

