



Appendix A. Plots of System Performance Check

The plots are shown as follows.

System Check_Head_835MHz_120423

DUT: D835V2 - SN: 4d091

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

Medium: HSL_835_120423 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.897 \text{ mho/m}$; $\epsilon_r = 40.781$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.6 °C; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(9.4, 9.4, 9.4); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 2.501 mW/g

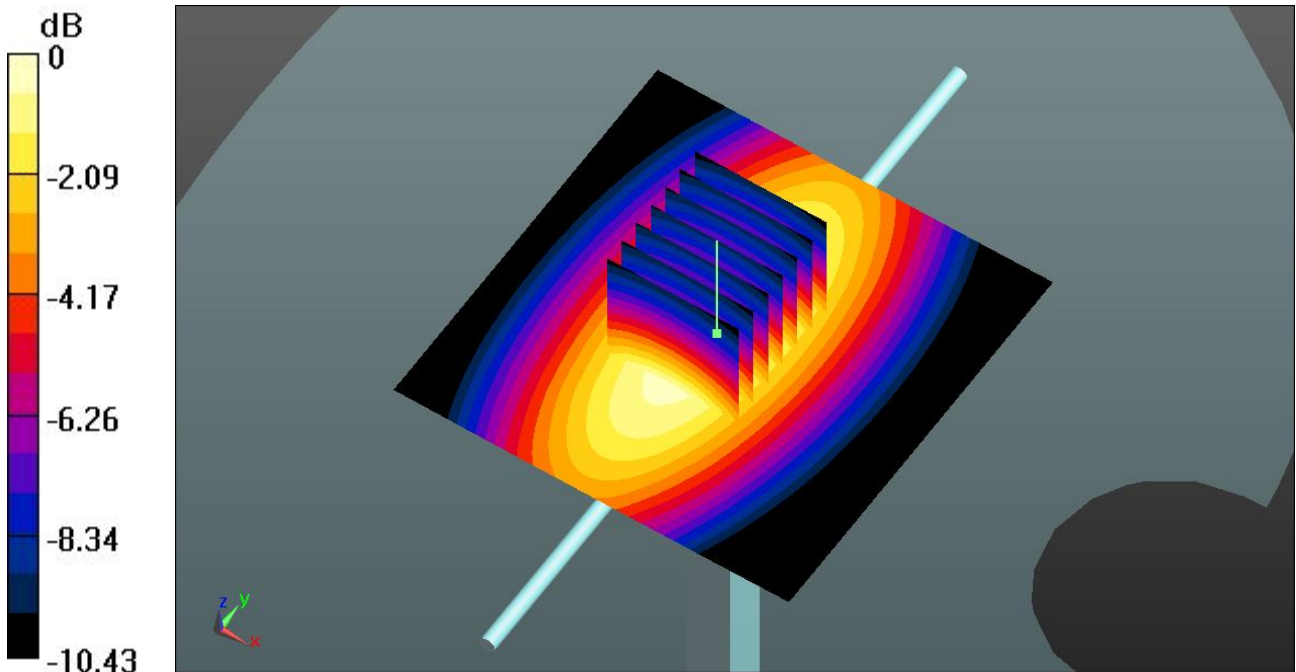
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.711 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.5070

SAR(1 g) = 2.33 mW/g; SAR(10 g) = 1.52 mW/g

Maximum value of SAR (measured) = 2.505 mW/g



0 dB = 2.510mW/g = 7.99 dB mW/g

System Check_Body_835MHz_120423

DUT: D835V2 - SN: 4d091

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

Medium: MSL_835_120423 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.976 \text{ mho/m}$; $\epsilon_r = 54.382$;

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

Ambient Temperature : 23.4 °C; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(9.72, 9.72, 9.72); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 2.697 mW/g

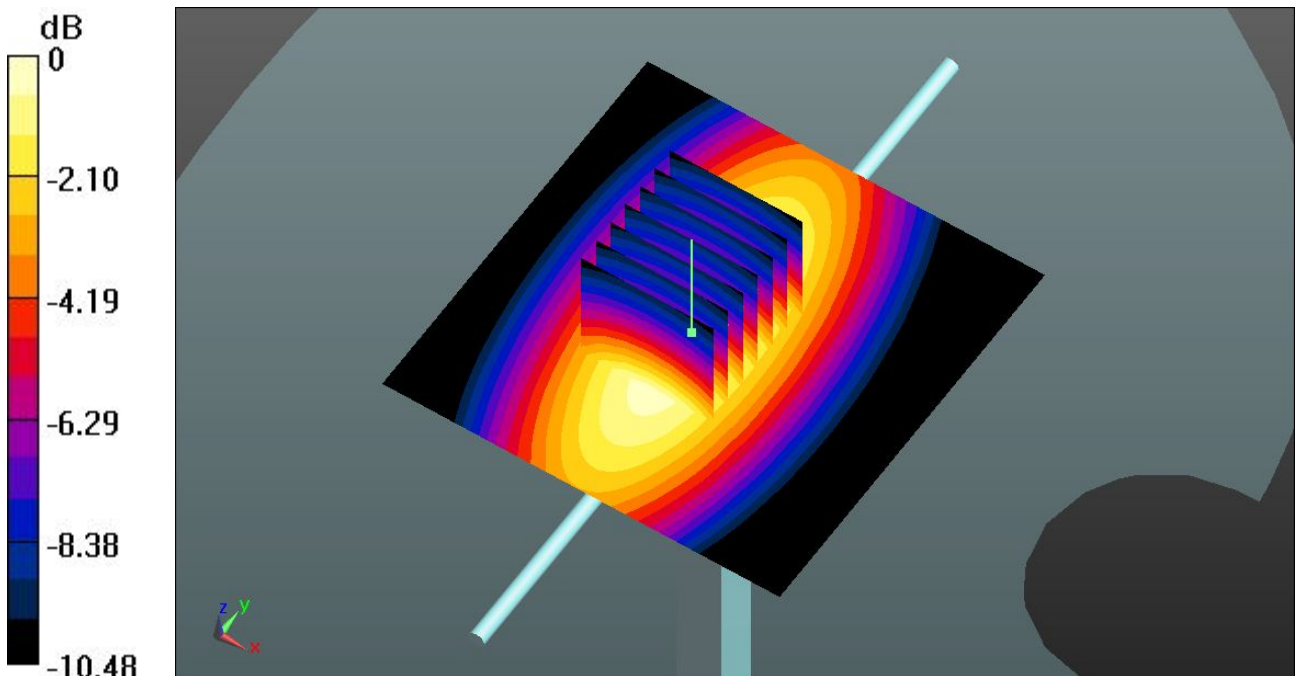
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.188 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.8130

SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.63 mW/g

Maximum value of SAR (measured) = 2.709 mW/g



0 dB = 2.710mW/g = 8.66 dB mW/g

System Check_Head_1800MHz_120420

DUT: D1800V2 - SN: 2d177

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: HSL_1800_120420 Medium parameters used: $f = 1800$ MHz; $\sigma = 1.437$ mho/m; $\epsilon_r =$

41.098; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8.69, 8.69, 8.69); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 11.519 mW/g

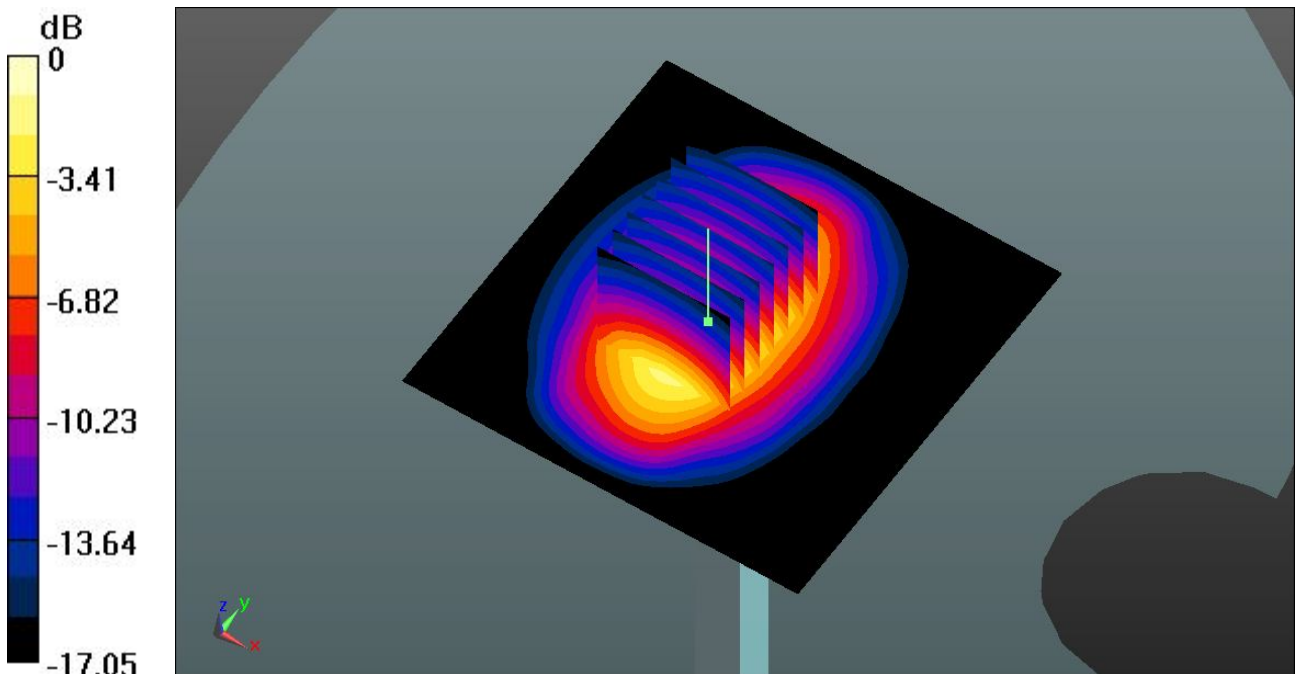
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 84.373 V/m; Power Drift = 0.0089 dB

Peak SAR (extrapolated) = 18.5830

SAR(1 g) = 10 mW/g; SAR(10 g) = 5.25 mW/g

Maximum value of SAR (measured) = 11.257 mW/g



0 dB = 11.260mW/g = 21.03 dB mW/g

System Check_Body_1800MHz_120422

DUT: D1800V2 - SN: 2d177

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: MSL_1800_120422 Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.576 \text{ mho/m}$; $\epsilon_r = 53.977$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.3 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8, 8, 8); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 11.798 mW/g

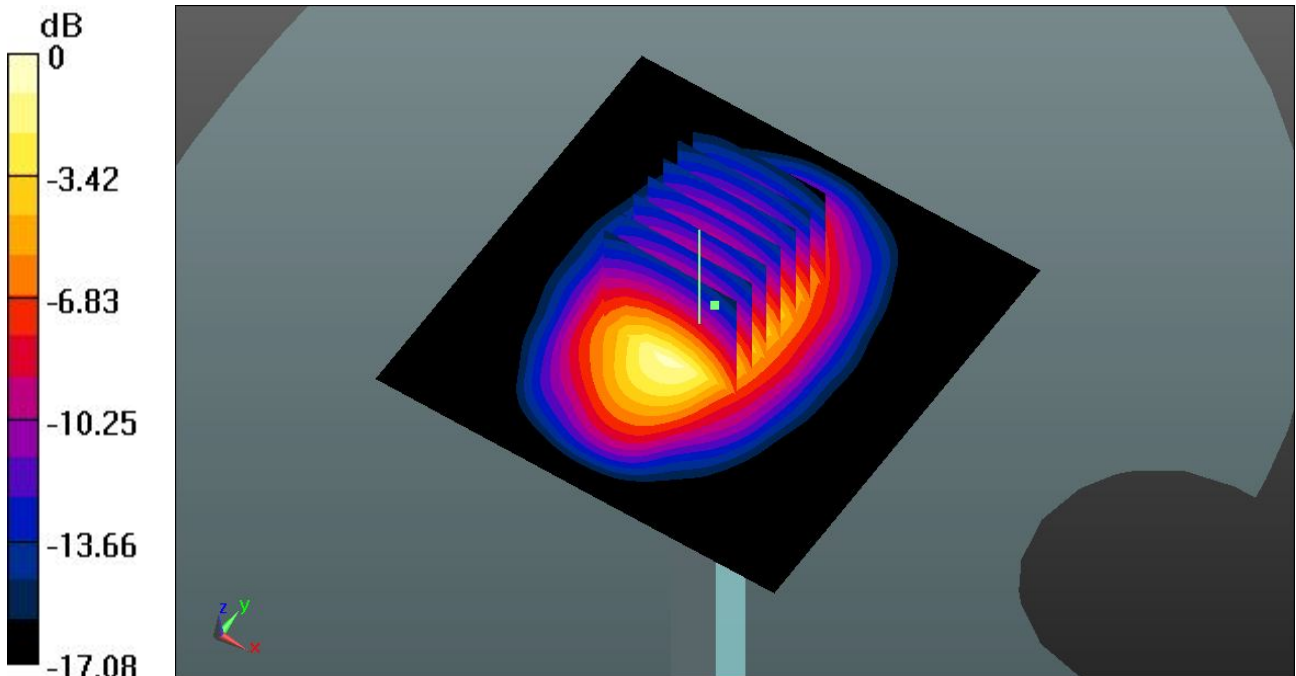
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.131 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 18.7190

SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.38 mW/g

Maximum value of SAR (measured) = 11.551 mW/g



0 dB = 11.550mW/g = 21.25 dB mW/g

System Check_Head_1800MHz_120421

DUT: D1800V2 - SN: 2d177

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: HSL_1800_120421 Medium parameters used: $f = 1800$ MHz; $\sigma = 1.437$ mho/m; $\epsilon_r =$

41.296; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8.69, 8.69, 8.69); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 11.236 mW/g

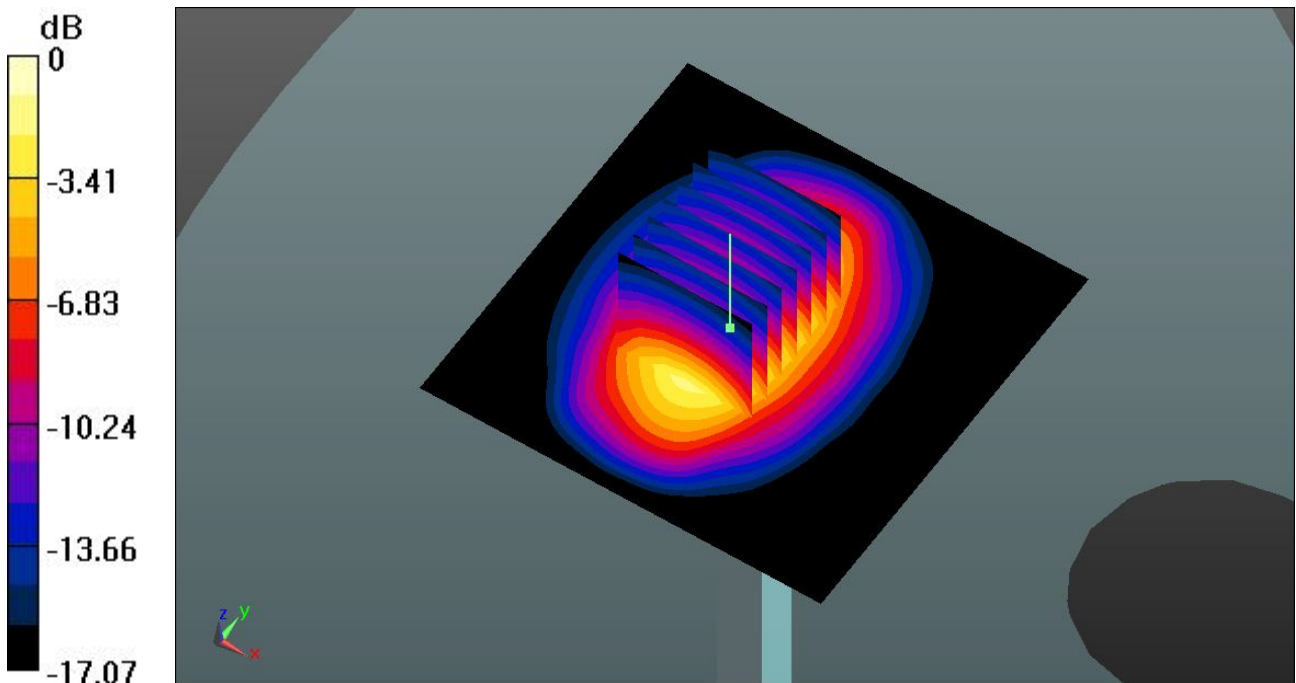
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 83.282 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.1300

SAR(1 g) = 9.77 mW/g; SAR(10 g) = 5.11 mW/g

Maximum value of SAR (measured) = 10.975 mW/g



0 dB = 10.980mW/g = 20.81 dB mW/g

System Check_Body_1800MHz_120424

DUT: D1800V2 - SN: 2d177

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: MSL_1800_120424 Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.571 \text{ mho/m}$; $\epsilon_r =$

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

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8, 8, 8); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 11.862 mW/g

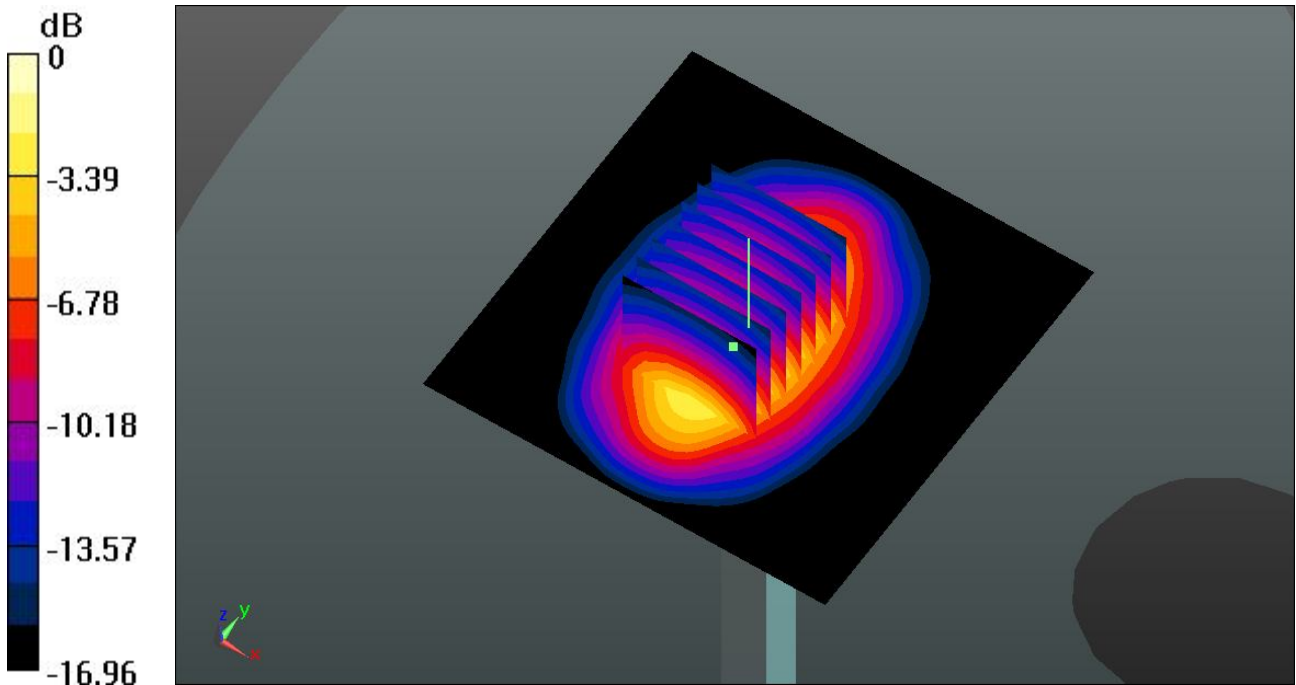
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 84.554 V/m ; Power Drift = 0.0053 dB

Peak SAR (extrapolated) = 18.6120

SAR(1 g) = 10.2 mW/g ; SAR(10 g) = 5.38 mW/g

Maximum value of SAR (measured) = 11.502 mW/g



0 dB = $11.500\text{mW/g} = 21.21 \text{ dB mW/g}$

System Check_Head_1800MHz_120423

DUT: D1800V2 - SN: 2d177

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: HSL_1800_120423 Medium parameters used: $f = 1800$ MHz; $\sigma = 1.443$ mho/m; $\epsilon_r =$

41.041; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8.69, 8.69, 8.69); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 11.284 mW/g

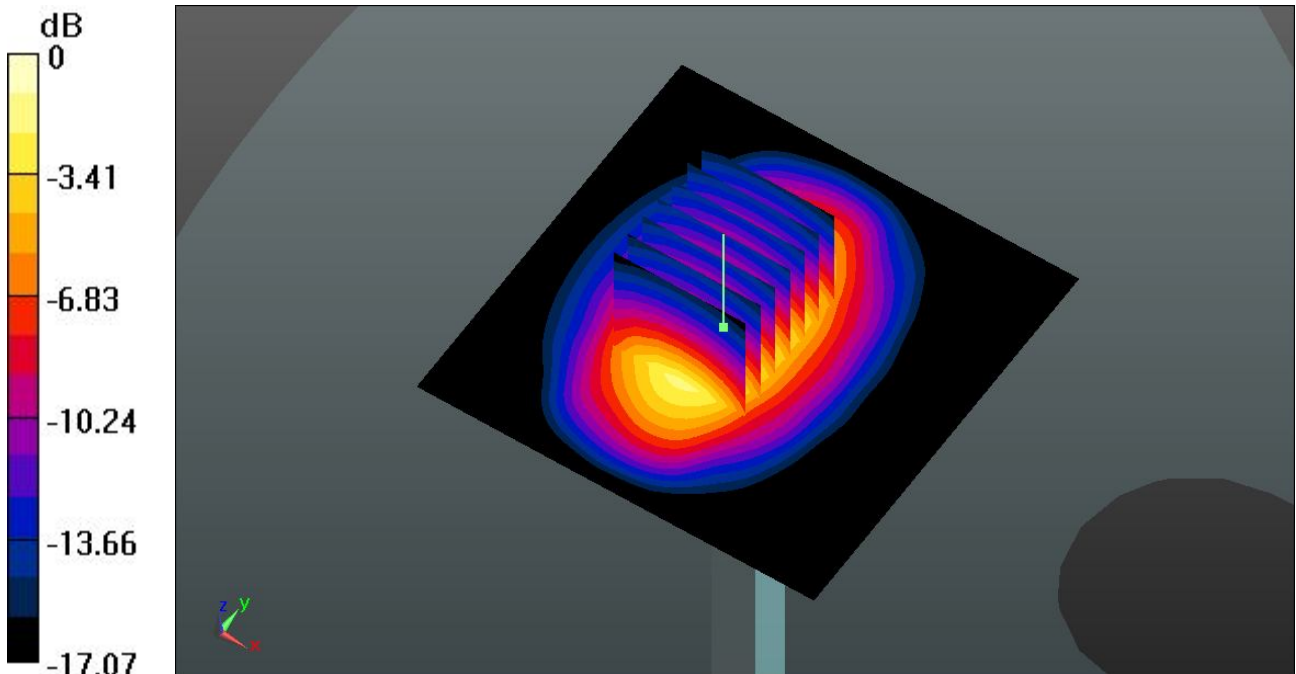
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 83.282 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.2060

SAR(1 g) = 9.81 mW/g; SAR(10 g) = 5.14 mW/g

Maximum value of SAR (measured) = 11.022 mW/g



0 dB = 11.020mW/g = 20.84 dB mW/g

System Check_Head_1900MHz_120420

DUT: D1900V2 - SN: 5d118

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

Medium: HSL_1900_120420 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.427$ mho/m; $\epsilon_r =$

41.191; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8.36, 8.36, 8.36); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 12.505 mW/g

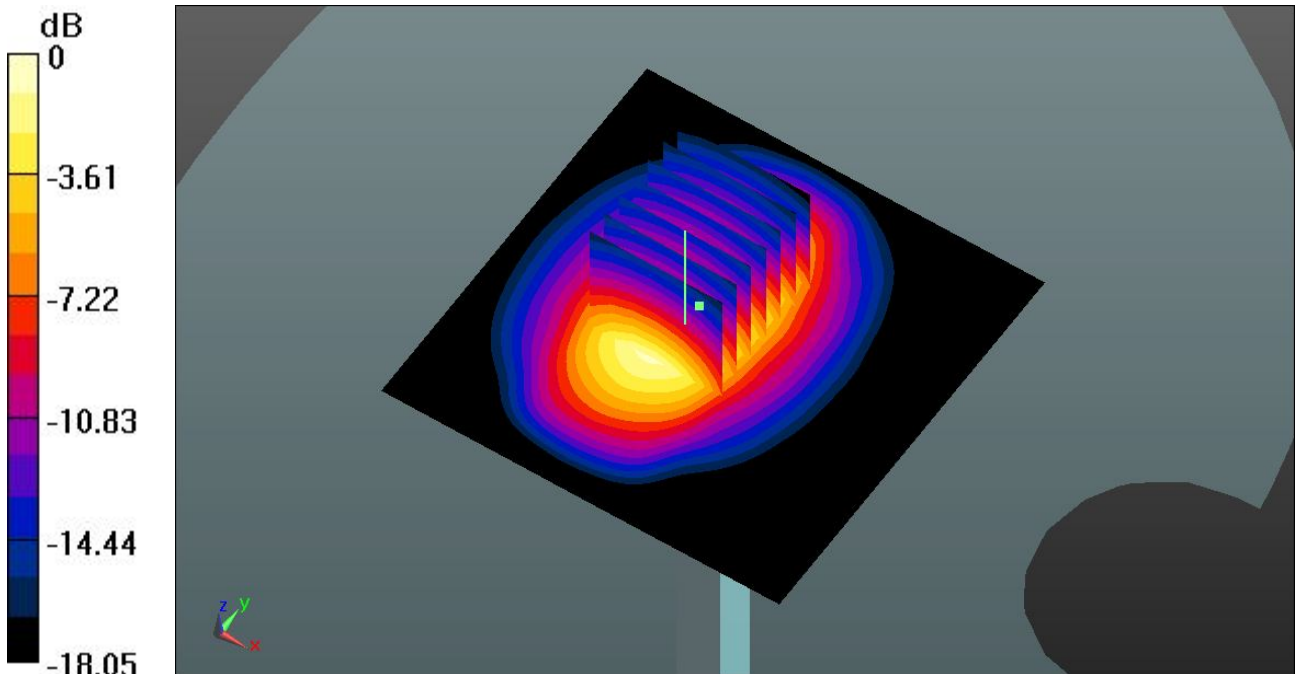
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 79.975 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 19.9920

SAR(1 g) = 10.6 mW/g; SAR(10 g) = 5.49 mW/g

Maximum value of SAR (measured) = 11.854 mW/g



0 dB = 11.850mW/g = 21.47 dB mW/g

System Check_Body_1900MHz_120421

DUT: D1900V2 - SN: 5d118

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

Medium: MSL_1900_120421 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.535 \text{ mho/m}$; $\epsilon_r = 54.565$; $\rho = 1000 \text{ kg/m}^3$

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(7.71, 7.71, 7.71); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 12.616 mW/g

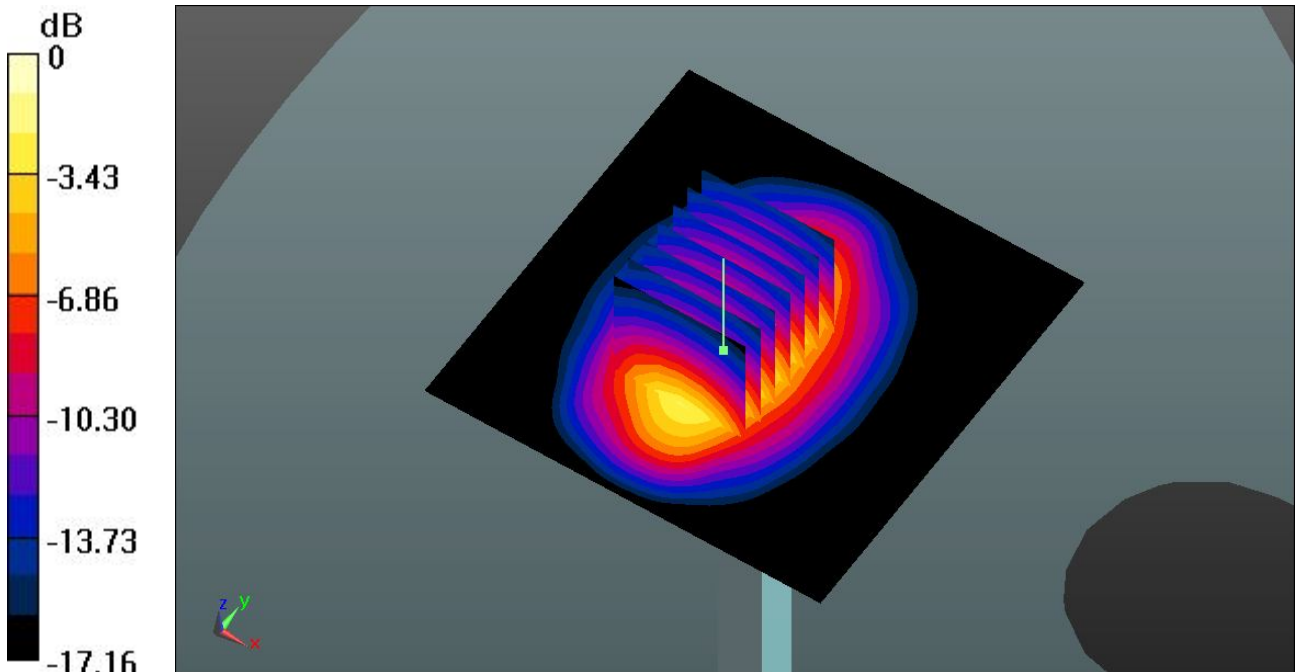
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.630 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 20.1270

SAR(1 g) = 11 mW/g; SAR(10 g) = 5.74 mW/g

Maximum value of SAR (measured) = 12.264 mW/g



0 dB = 12.260mW/g = 21.77 dB mW/g

System Check_Head_1900MHz_120423

DUT: D1900V2 - SN: 5d118

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

Medium: HSL_1900_120423 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.407$ mho/m; $\epsilon_r =$

39.644 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8.36, 8.36, 8.36); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 11.156 mW/g

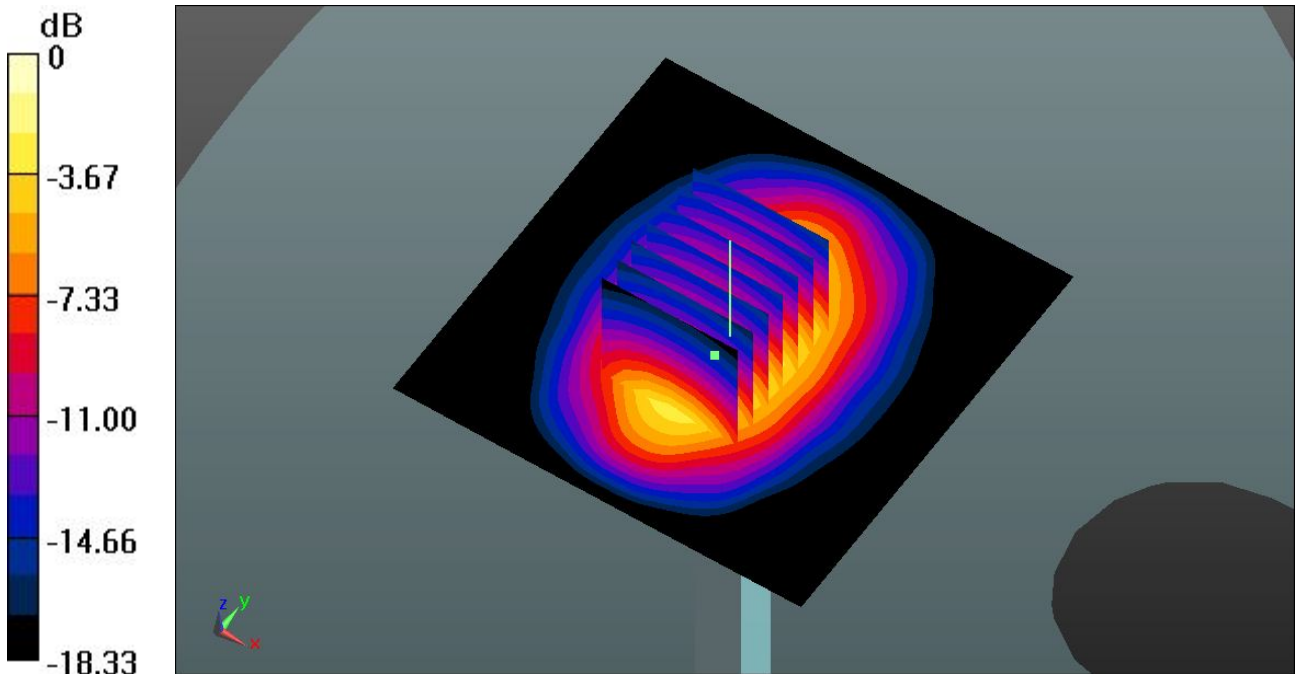
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.450 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 18.2900

SAR(1 g) = 9.76 mW/g; SAR(10 g) = 5.07 mW/g

Maximum value of SAR (measured) = 11.001 mW/g



0 dB = 11.000mW/g = 20.83 dB mW/g

System Check_Body_1900MHz_120424

DUT: D1900V2 - SN: 5d118

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

Medium: MSL_1900_120424 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.532 \text{ mho/m}$; $\epsilon_r =$

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

Ambient Temperature : $23.5 \text{ }^\circ\text{C}$; Liquid Temperature : $21.5 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(7.71, 7.71, 7.71); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 12.470 mW/g

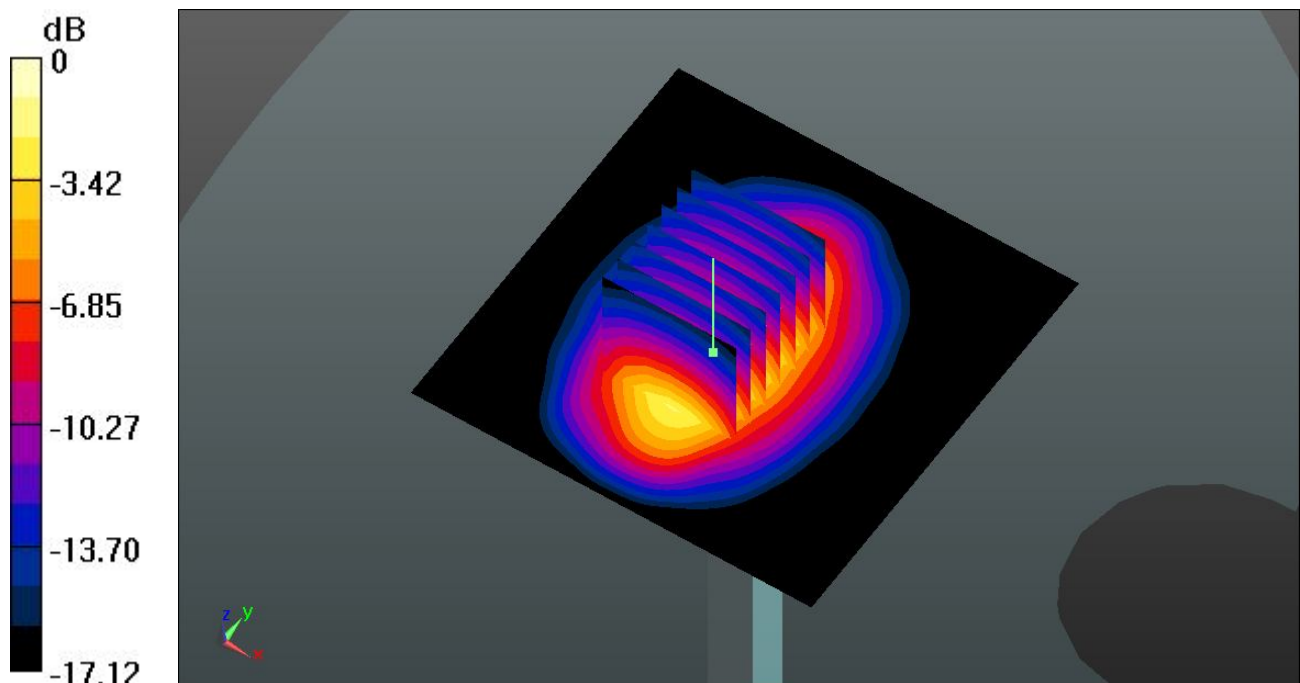
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 86.036 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 19.3160

SAR(1 g) = 10.5 mW/g ; SAR(10 g) = 5.5 mW/g

Maximum value of SAR (measured) = 11.753 mW/g



0 dB = $11.750\text{mW/g} = 21.40 \text{ dB mW/g}$

System Check_Head_2450MHz_120505

DUT: D2450V2 - SN: 736

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

Medium: HSL_2450_120505 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.825$ mho/m; $\epsilon_r =$

39.664 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 21.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(6.67, 6.67, 6.67); Calibrated: 2011-9-2
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

Pin=250mW/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.494 mW/g

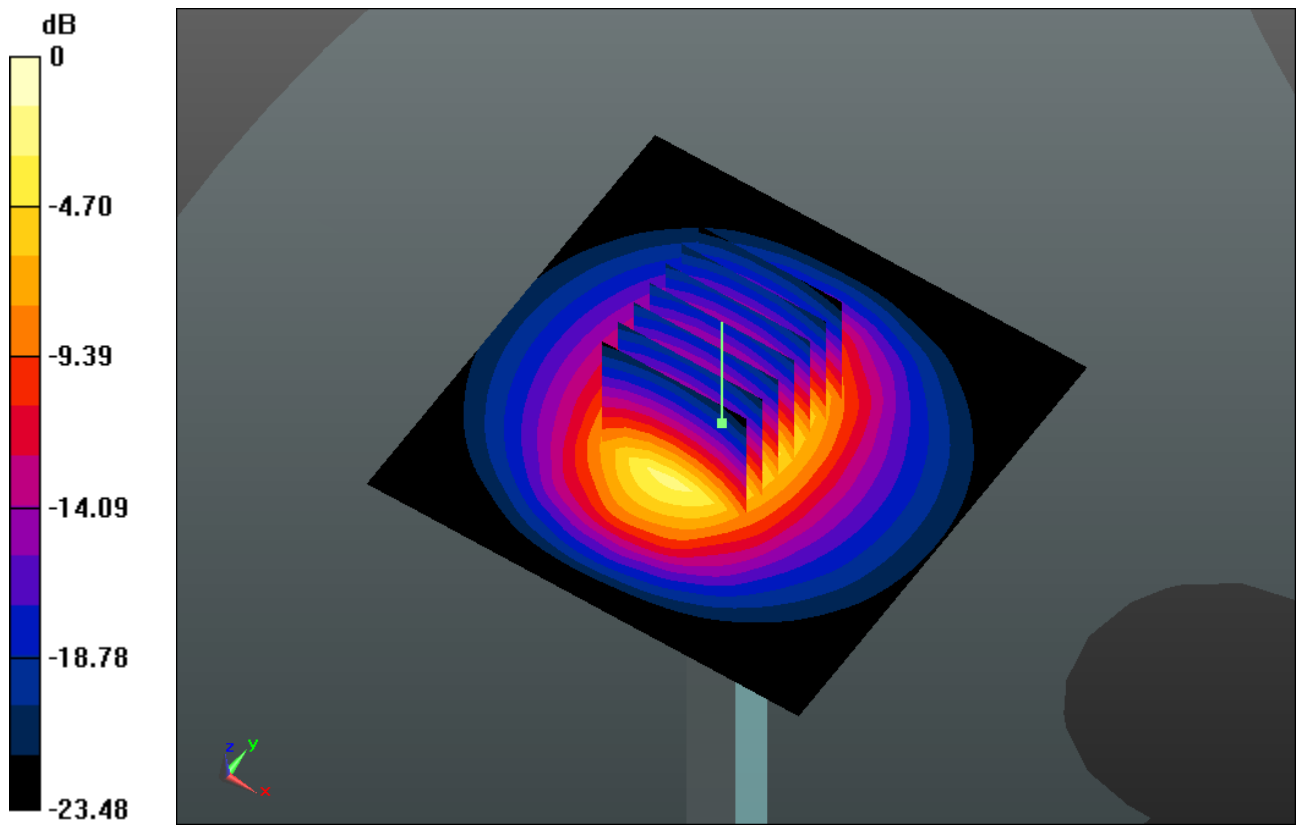
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.481 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 31.413 W/kg

SAR(1 g) = 14.1 mW/g; SAR(10 g) = 6.33 mW/g

Maximum value of SAR (measured) = 16.047 mW/g



0 dB = 16.050mW/g

System Check_Body_2450MHz_120505

DUT: D2450V2 - SN: 736

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

Medium: MSL_2450_120505 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.002$ mho/m; $\epsilon_r =$

53.464; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(6.73, 6.73, 6.73); Calibrated: 2011-9-2
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

Pin=250mW/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.280 mW/g

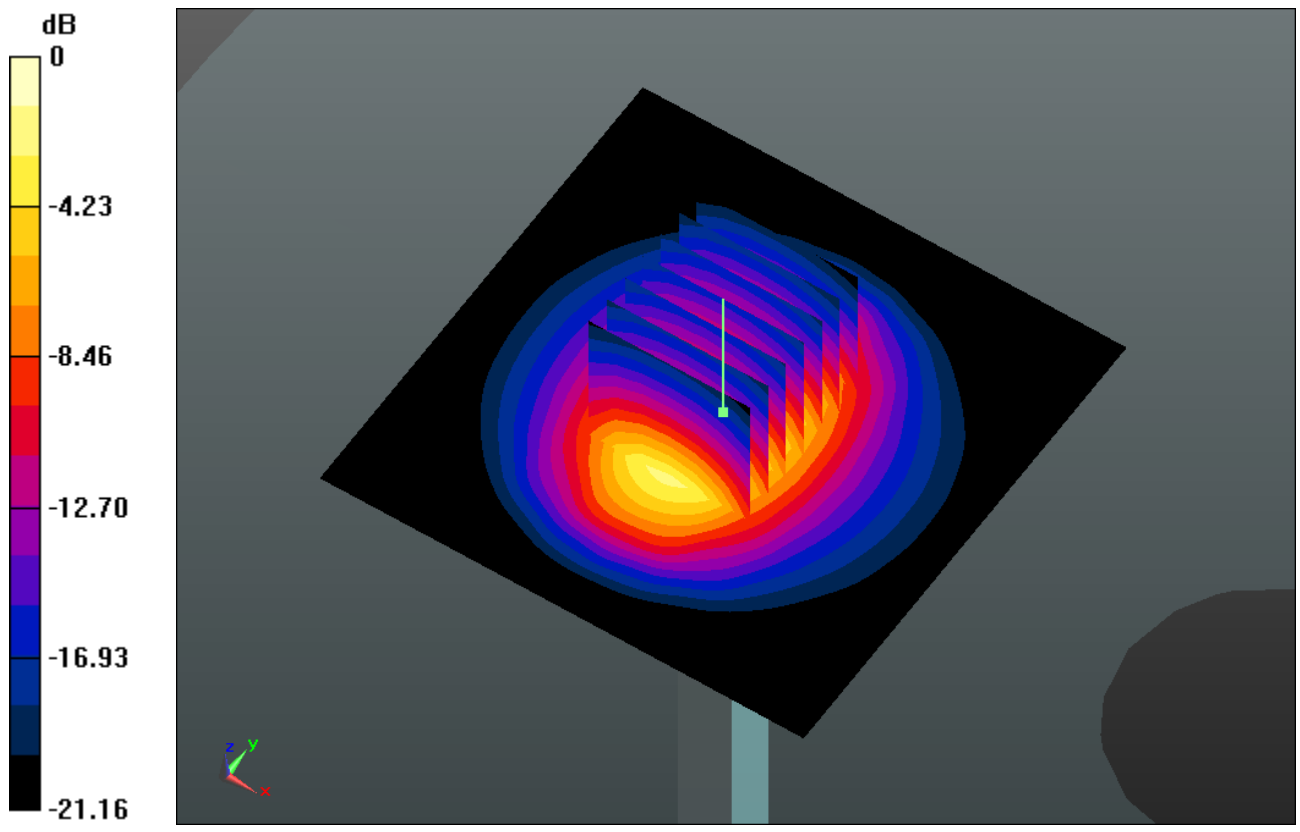
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.365 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 27.536 W/kg

SAR(1 g) = 13.6 mW/g; SAR(10 g) = 6.32 mW/g

Maximum value of SAR (measured) = 15.543 mW/g



0 dB = 15.540mW/g