



Appendix A. Plots of System Performance Check

The plots are shown as follows.

System Check_Head_835MHz_121229

DUT: D835V2 - SN:4d091

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

Medium: HSL_835_121229 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.885 \text{ mho/m}$; $\epsilon_r = 41.087$;

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

Ambient Temperature : $23.4 \text{ }^\circ\text{C}$; Liquid Temperature : $21.5 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(8.74, 8.74, 8.74); Calibrated: 2012-6-20
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 2.473 mW/g

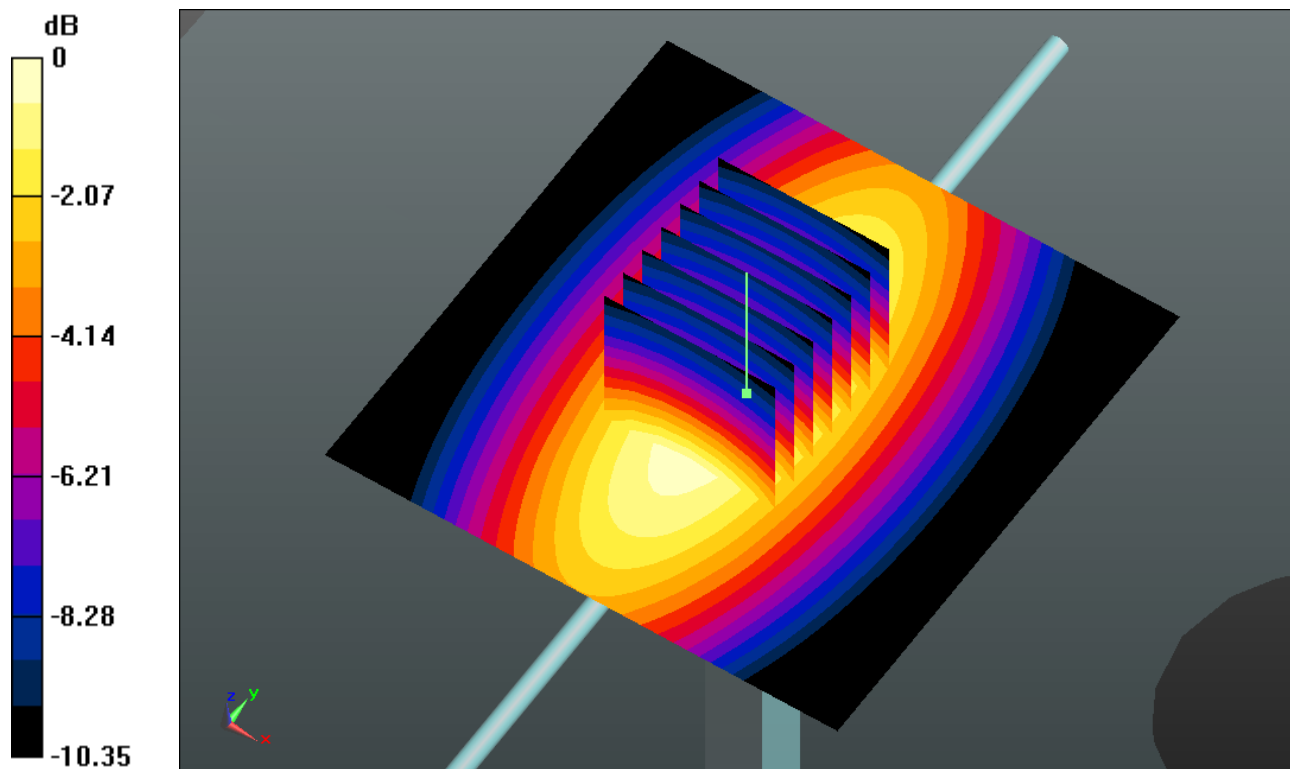
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.413 V/m ; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.321 W/kg

SAR(1 g) = 2.29 mW/g ; SAR(10 g) = 1.51 mW/g

Maximum value of SAR (measured) = 2.476 mW/g



0 dB = 2.480mW/g

System Check_Head_1900MHz_121229

DUT: D1900V2 - SN:5d118

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

Medium: HSL_1900_121229 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.423$ mho/m; $\epsilon_r =$

39.002; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(7.84, 7.84, 7.84); Calibrated: 2012-6-20
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 11.403 mW/g

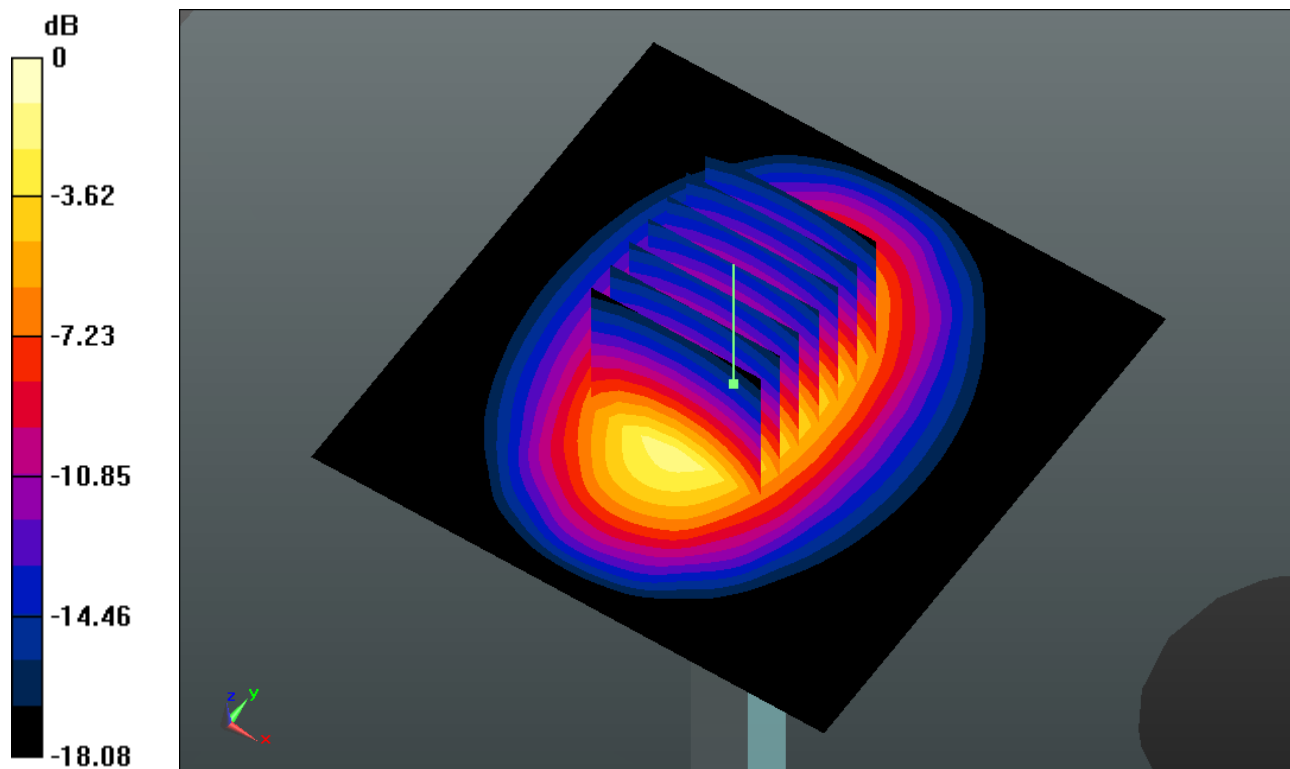
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.552 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 18.997 W/kg

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

Maximum value of SAR (measured) = 11.289 mW/g



0 dB = 11.290mW/g

System Check_Head_2450MHz_130111

DUT: D2450V2 - SN:736

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

Medium: HSL_2450_130111 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.834$ mho/m; $\epsilon_r =$

39.654; $\rho = 1000$ kg/m³

Ambient Temperature : 23.1 °C; Liquid Temperature : 21.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.87, 6.87, 6.87); Calibrated: 2012-6-20
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 21.592 mW/g

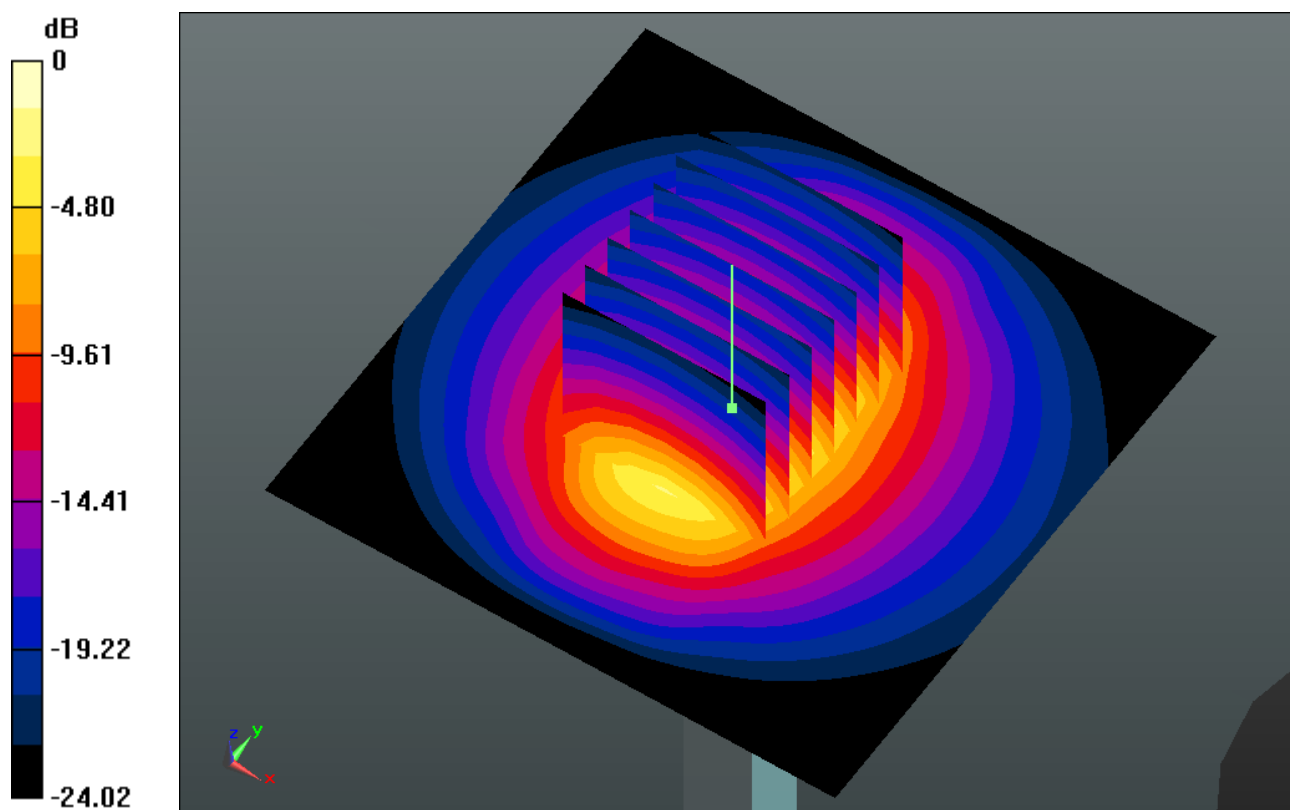
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.016 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 28.651 W/kg

SAR(1 g) = 13.5 mW/g; SAR(10 g) = 6.09 mW/g

Maximum value of SAR (measured) = 20.979 mW/g



0 dB = 20.980mW/g

System Check_Head_5200MHz_130122

DUT: D5GHzV2 - SN:1006

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL_5G_130122 Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 4.814 \text{ mho/m}$; $\epsilon_r = 35.458$;

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

Ambient Temperature : 23.1°C ; Liquid Temperature : 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(5.11, 5.11, 5.11); Calibrated: 2012-6-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

Pin=100mW/Area Scan (71x71x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 19.203 mW/g

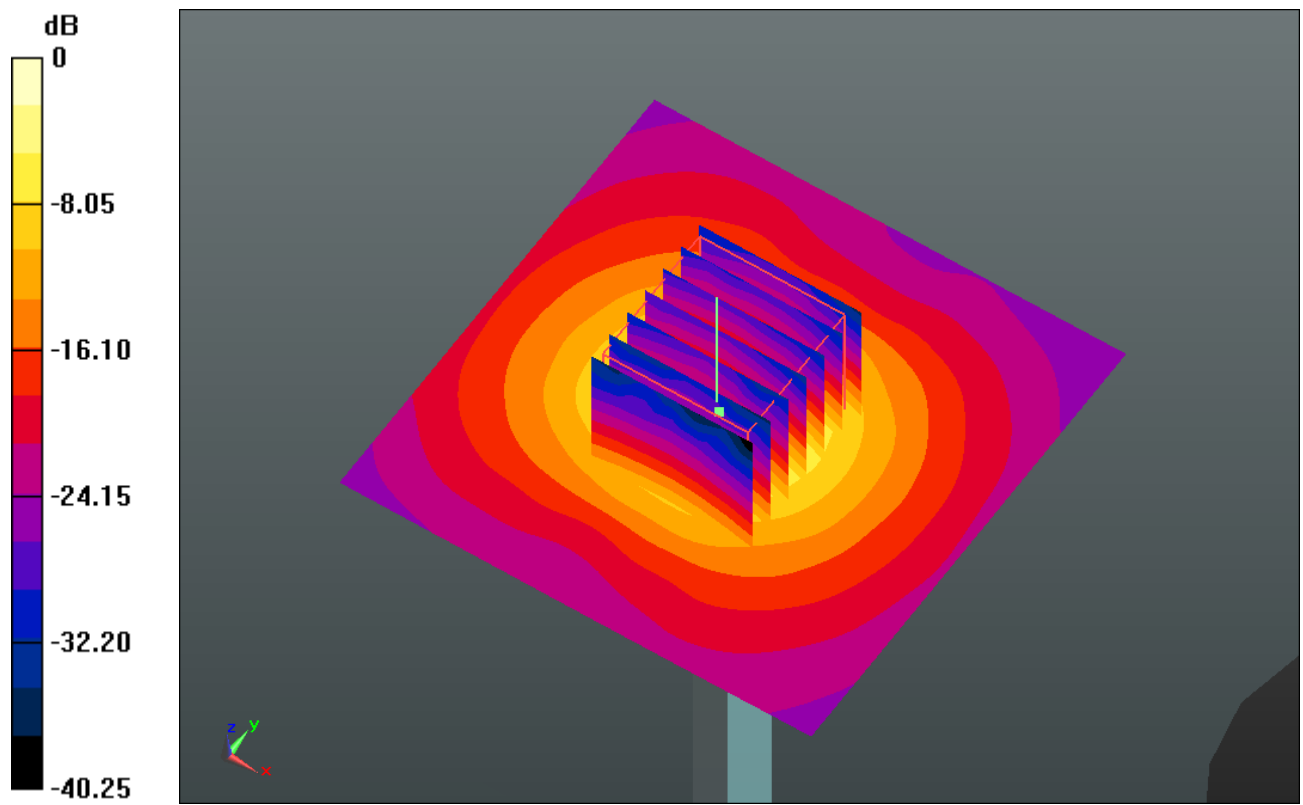
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 57.336 V/m ; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 31.533 W/kg

SAR(1 g) = 8.2 mW/g ; SAR(10 g) = 2.32 mW/g

Maximum value of SAR (measured) = 19.601 mW/g



0 dB = 19.600mW/g

System Check_Head_5800MHz_130122

DUT: D5GHzV2 - SN:1006

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: HSL_5000_130122 Medium parameters used: $f = 5800$ MHz; $\sigma = 5.423$ mho/m; $\epsilon_r = 34.346$;

$\rho = 1000$ kg/m³

Ambient Temperature : 23.1 °C ; Liquid Temperature : 21.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(4.69, 4.69, 4.69); Calibrated: 2012-6-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

Pin=100mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 19.893 mW/g

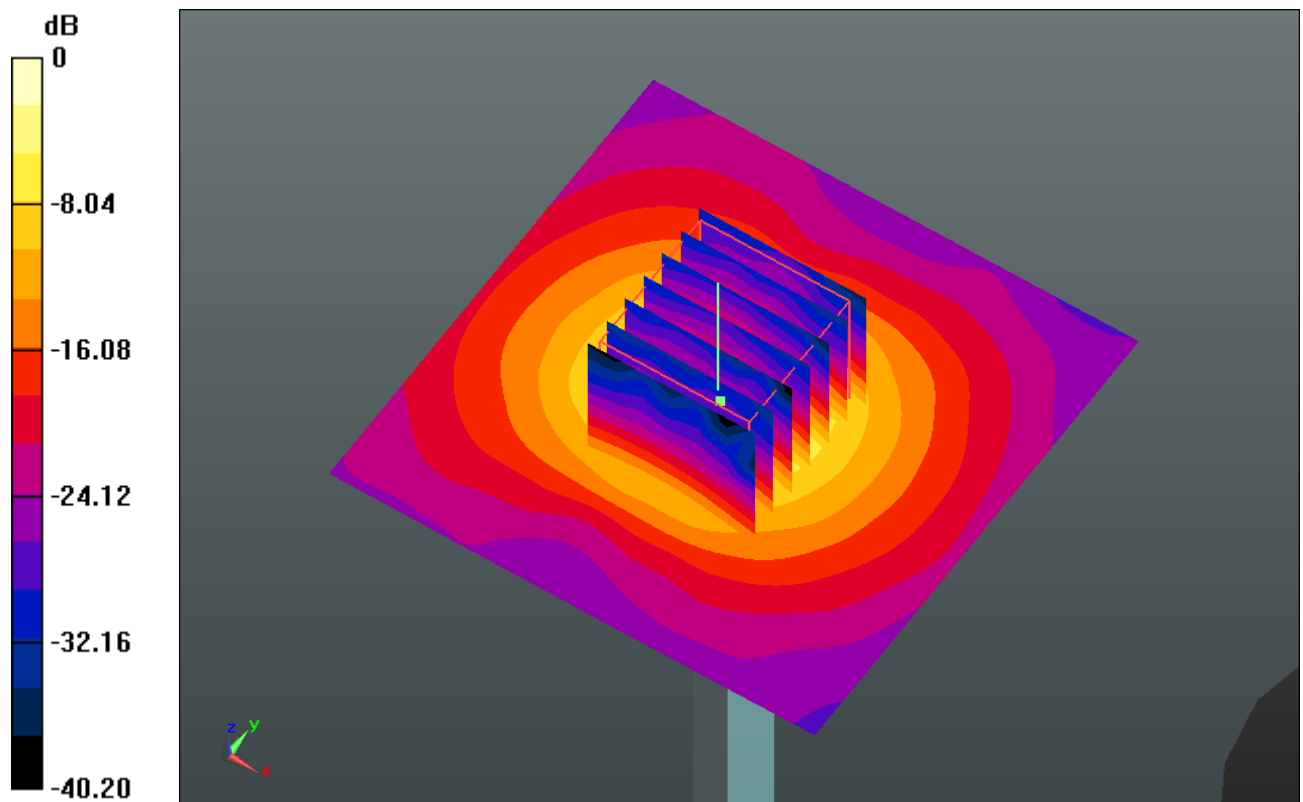
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 52.819 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 33.364 W/kg

SAR(1 g) = 7.95 mW/g; SAR(10 g) = 2.21 mW/g

Maximum value of SAR (measured) = 20.373 mW/g



0 dB = 20.370mW/g

System Check_Body_835MHz_130110

DUT: D835V2 - SN:4d091

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

Medium: MSL_835_130110 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.979 \text{ mho/m}$; $\epsilon_r = 54.09$;

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

Ambient Temperature : $23.2 \text{ }^\circ\text{C}$; Liquid Temperature : $21.3 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(8.98, 8.98, 8.98); Calibrated: 2012-6-20
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 2.464 mW/g

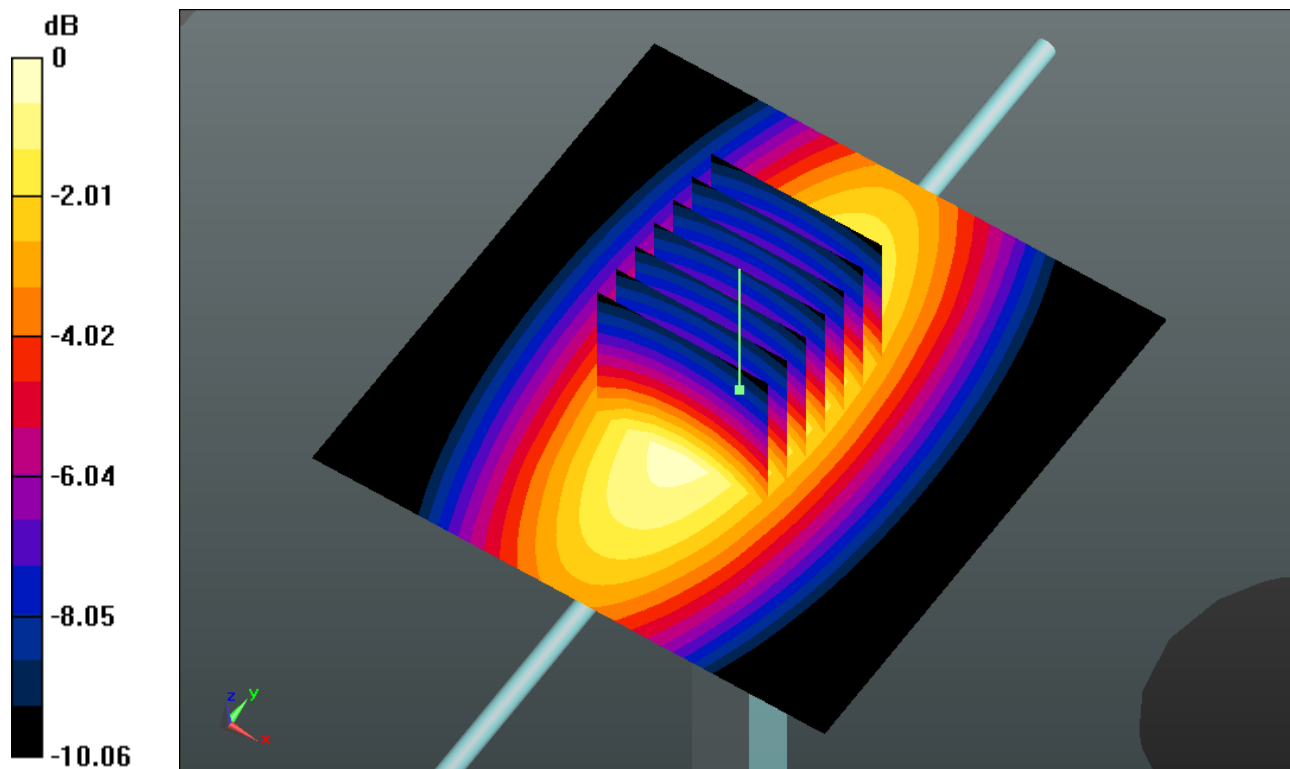
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 50.540 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.298 W/kg

SAR(1 g) = 2.28 mW/g ; SAR(10 g) = 1.51 mW/g

Maximum value of SAR (measured) = 2.468 mW/g



0 dB = 2.470mW/g

System Check_Body_835MHz_130124

DUT: D835V2 - SN:4d091

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

Medium: MSL_835_130124 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.478$;

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

Ambient Temperature : $23.3 \text{ }^\circ\text{C}$; Liquid Temperature : $21.2 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(8.98, 8.98, 8.98); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 2.427 mW/g

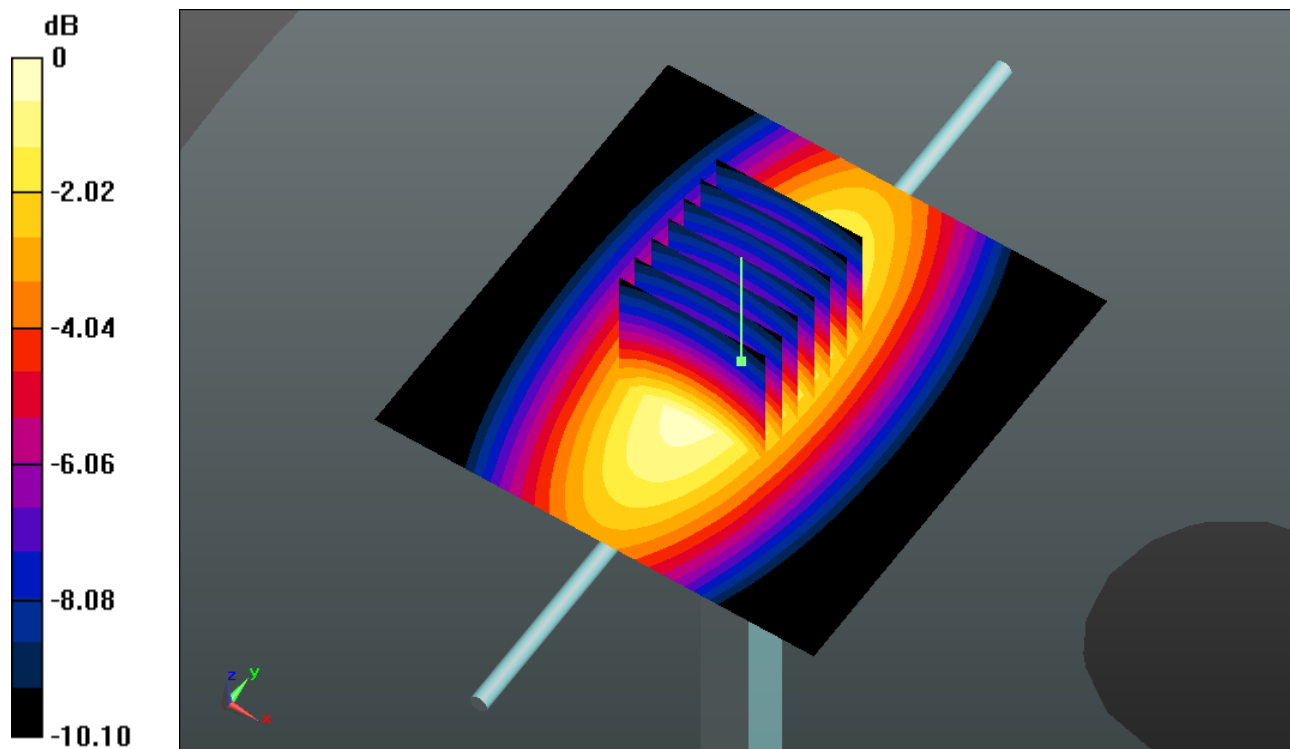
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 50.151 V/m ; Power Drift = 0.0051 dB

Peak SAR (extrapolated) = 3.253 W/kg

SAR(1 g) = 2.25 mW/g ; SAR(10 g) = 1.49 mW/g

Maximum value of SAR (measured) = 2.430 mW/g



0 dB = 2.430mW/g

System Check_Body_1900MHz_121230

DUT: D1900V2 - SN:5d118

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

Medium: MSL_1900_121230 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 53.37$;

$\rho = 1000$ kg/m³

Ambient Temperature : 23.1 °C ; Liquid Temperature : 21.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(7.35, 7.35, 7.35); Calibrated: 2012-6-20
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 12.238 mW/g

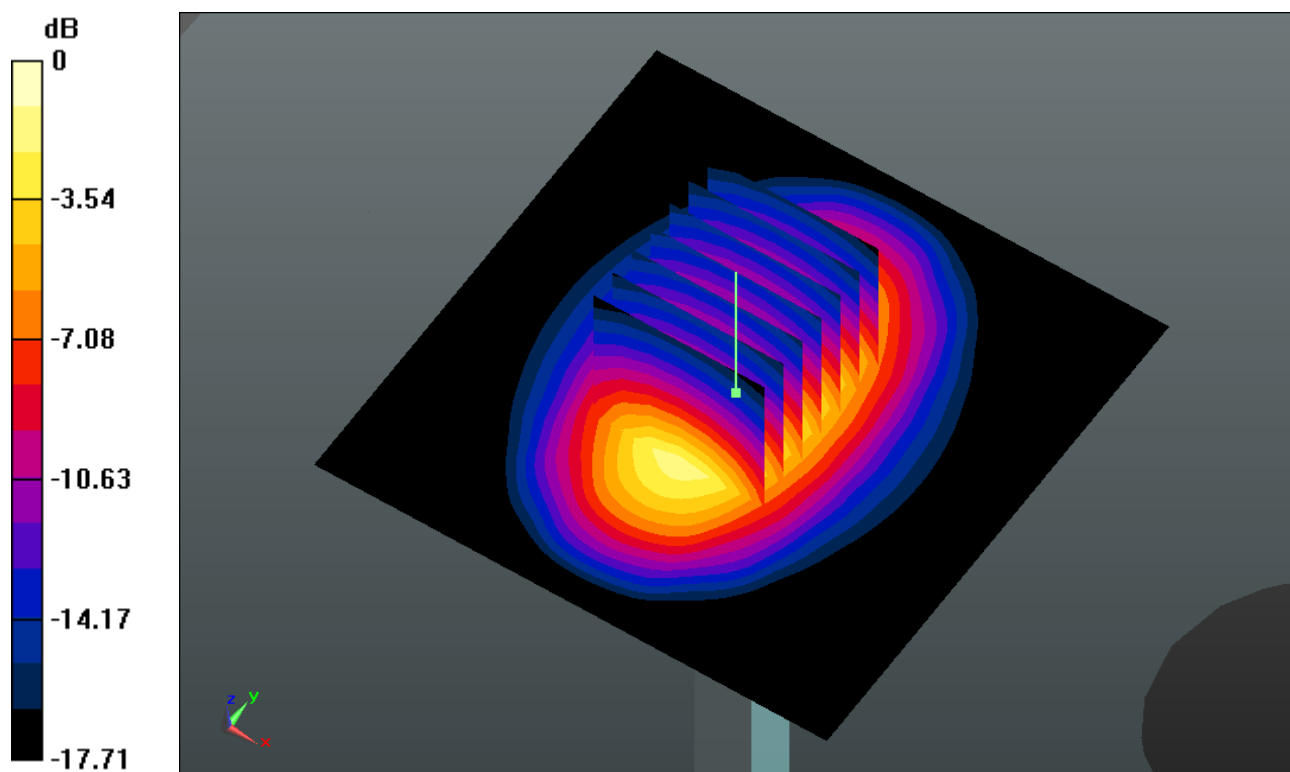
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.118 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 19.233 W/kg

SAR(1 g) = 10.6 mW/g; SAR(10 g) = 5.46 mW/g

Maximum value of SAR (measured) = 12.063 mW/g



0 dB = 12.060mW/g

System Check_Body_1900MHz_130124

DUT: D1900V2 - SN:5d118

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

Medium: MSL_1900_130124 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.551$ mho/m; $\epsilon_r =$

53.293; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(7.35, 7.35, 7.35); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 11.968 mW/g

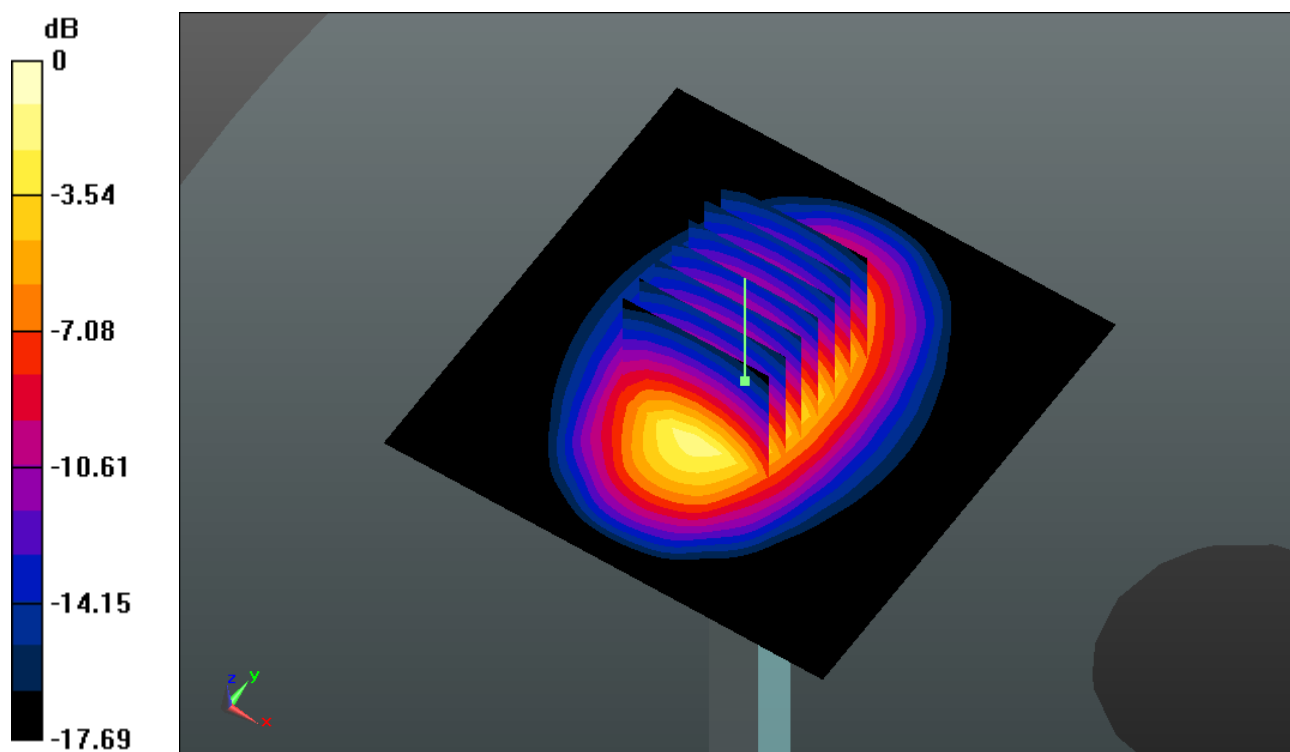
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.150 V/m; Power Drift = 0.0051 dB

Peak SAR (extrapolated) = 18.771 W/kg

SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.33 mW/g

Maximum value of SAR (measured) = 11.760 mW/g



0 dB = 11.760mW/g

System Check_Body_2450MHz_130111

DUT: D2450V2 - SN:736

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

Medium: MSL_2450_130111 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.939$ mho/m; $\epsilon_r =$

53.98; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.94, 6.94, 6.94); Calibrated: 2012-6-20
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 20.575 mW/g

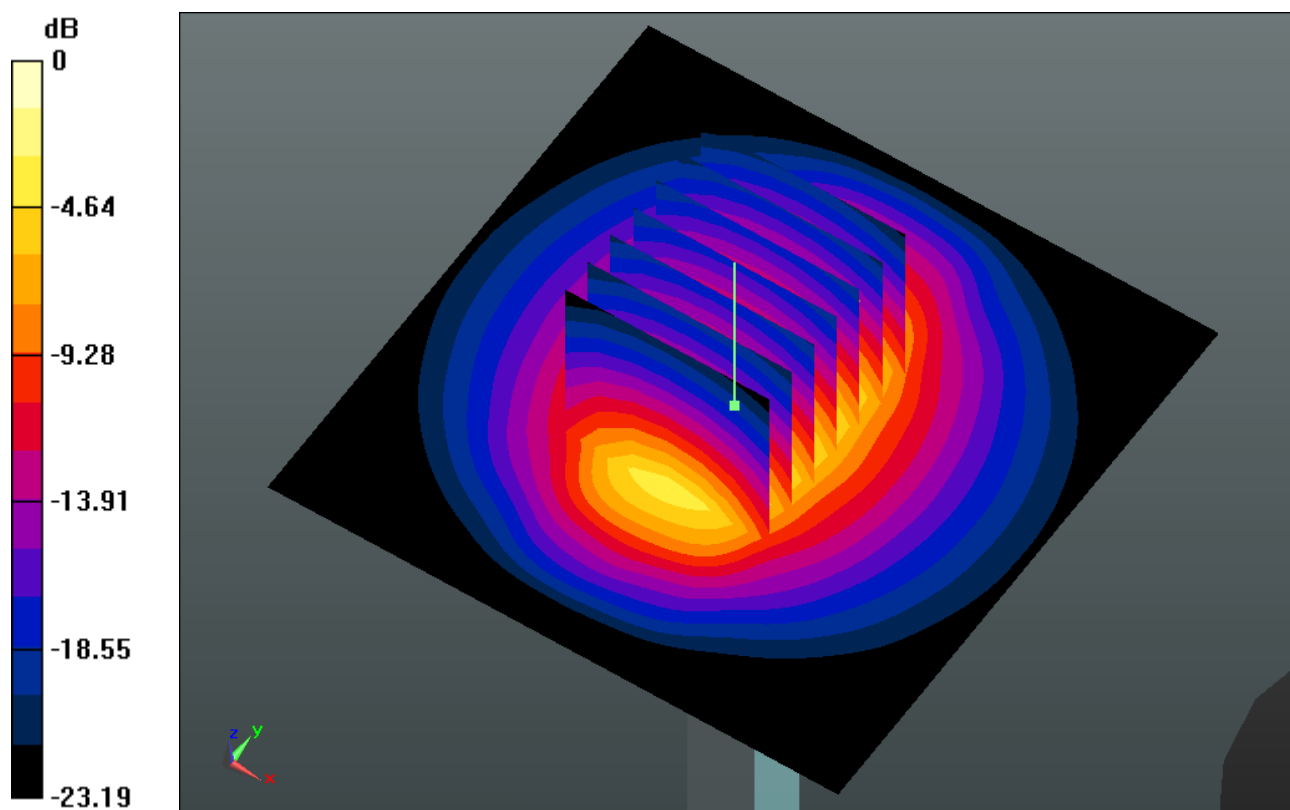
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.397 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 28.002 W/kg

SAR(1 g) = 13 mW/g; SAR(10 g) = 5.89 mW/g

Maximum value of SAR (measured) = 20.131 mW/g



0 dB = 20.130mW/g

System Check_Body_5200MHz_130203

DUT: D5GHzV2 - SN:1006

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: MSL_5000_130123 Medium parameters used: $f = 5200$ MHz; $\sigma = 5.264$ mho/m; $\epsilon_r =$

48.303; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(4.3, 4.3, 4.3); Calibrated: 2012-6-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

Pin=100mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 17.678 mW/g

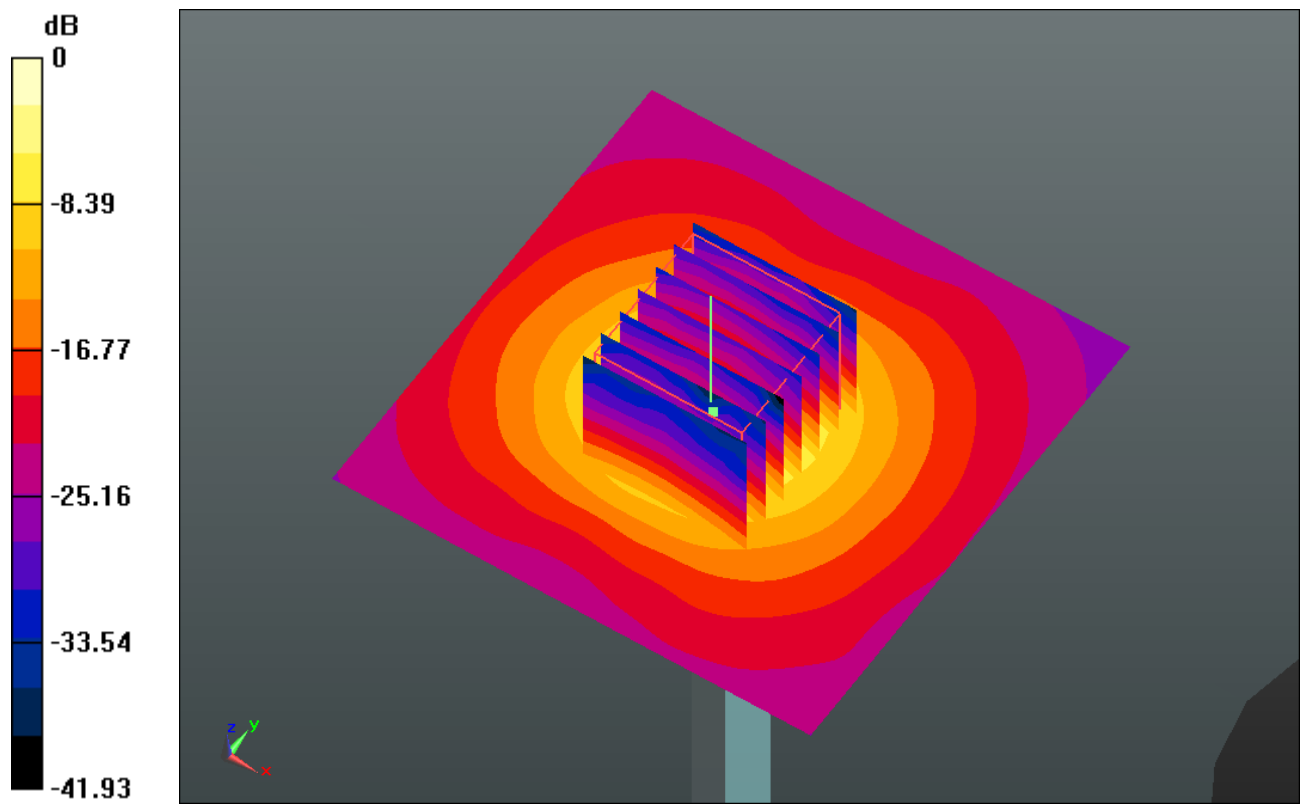
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 49.163 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 28.638 W/kg

SAR(1 g) = 7.64 mW/g; SAR(10 g) = 2.12 mW/g

Maximum value of SAR (measured) = 18.611 mW/g



0 dB = 18.610mW/g

System Check_Body_5800MHz_130123

DUT: D5GHzV2 - SN:1006

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: MSL_5000_130123 Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 6.096 \text{ mho/m}$; $\epsilon_r =$

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

Ambient Temperature : $23.2 \text{ }^\circ\text{C}$; Liquid Temperature : $21.5 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(3.99, 3.99, 3.99); Calibrated: 2012-6-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.4.5 (3634)

Pin=100mW/Area Scan (71x71x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 19.138 mW/g

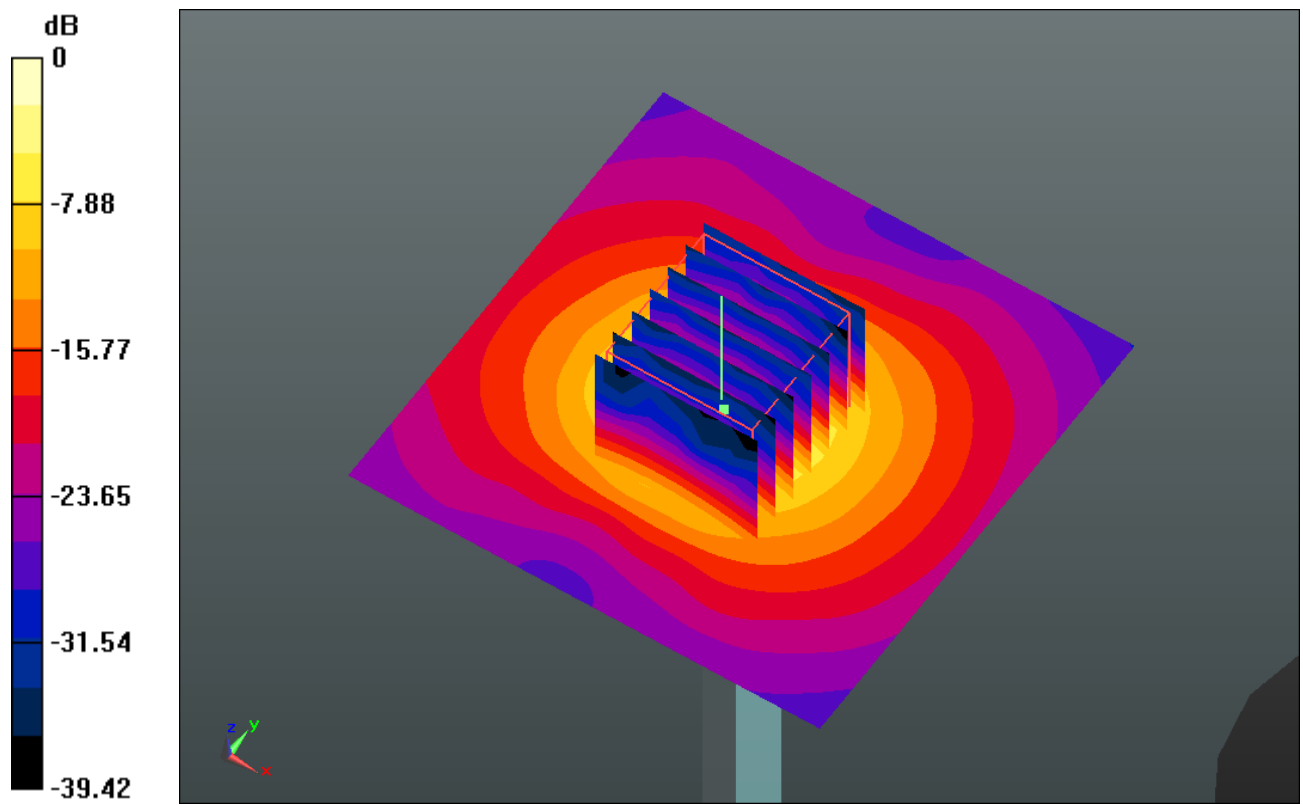
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 45.564 V/m ; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 31.774 W/kg

SAR(1 g) = 7.69 mW/g ; SAR(10 g) = 2.12 mW/g

Maximum value of SAR (measured) = 19.301 mW/g



0 dB = 19.300mW/g