



Appendix A. Plots of System Performance Check

The plots are shown as follows.

System Check_Head_835MHz_130424

DUT: D835V2 - SN:4d091

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

Medium: HSL_835_130424 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.905 \text{ mho/m}$; $\epsilon_r = 42.26$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.3 \text{ }^\circ\text{C}$; Liquid Temperature : $21.1 \text{ }^\circ\text{C}$

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 (4); 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) = 2.511 mW/g

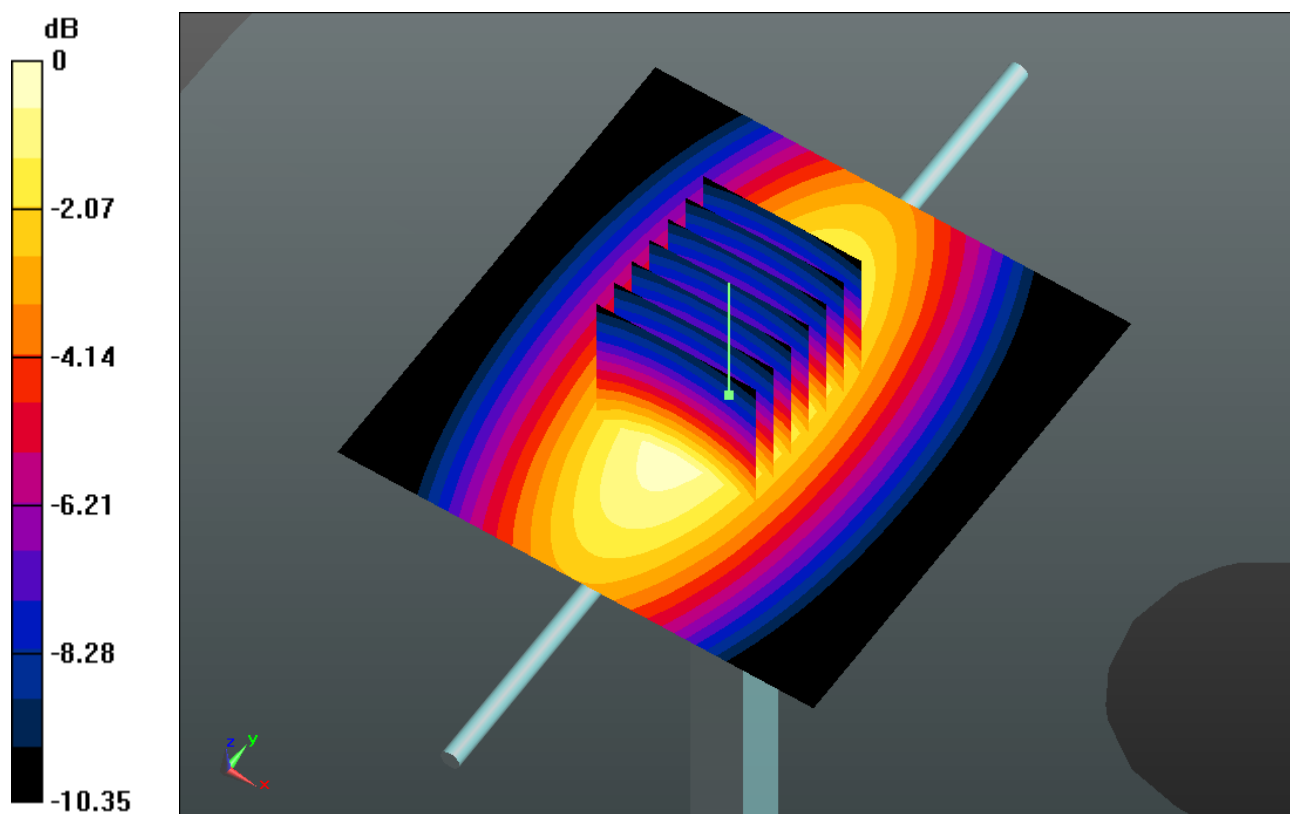
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.193 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.381 W/kg

SAR(1 g) = 2.33 mW/g ; SAR(10 g) = 1.53 mW/g

Maximum value of SAR (measured) = 2.514 mW/g



0 dB = 2.510mW/g

System Check_Head_1900MHz_130423

DUT: D1900V2 - SN:5d118

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

Medium: HSL_1900_130423 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.424$ mho/m; $\epsilon_r =$

38.881 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 21.3 °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 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 11.353 mW/g

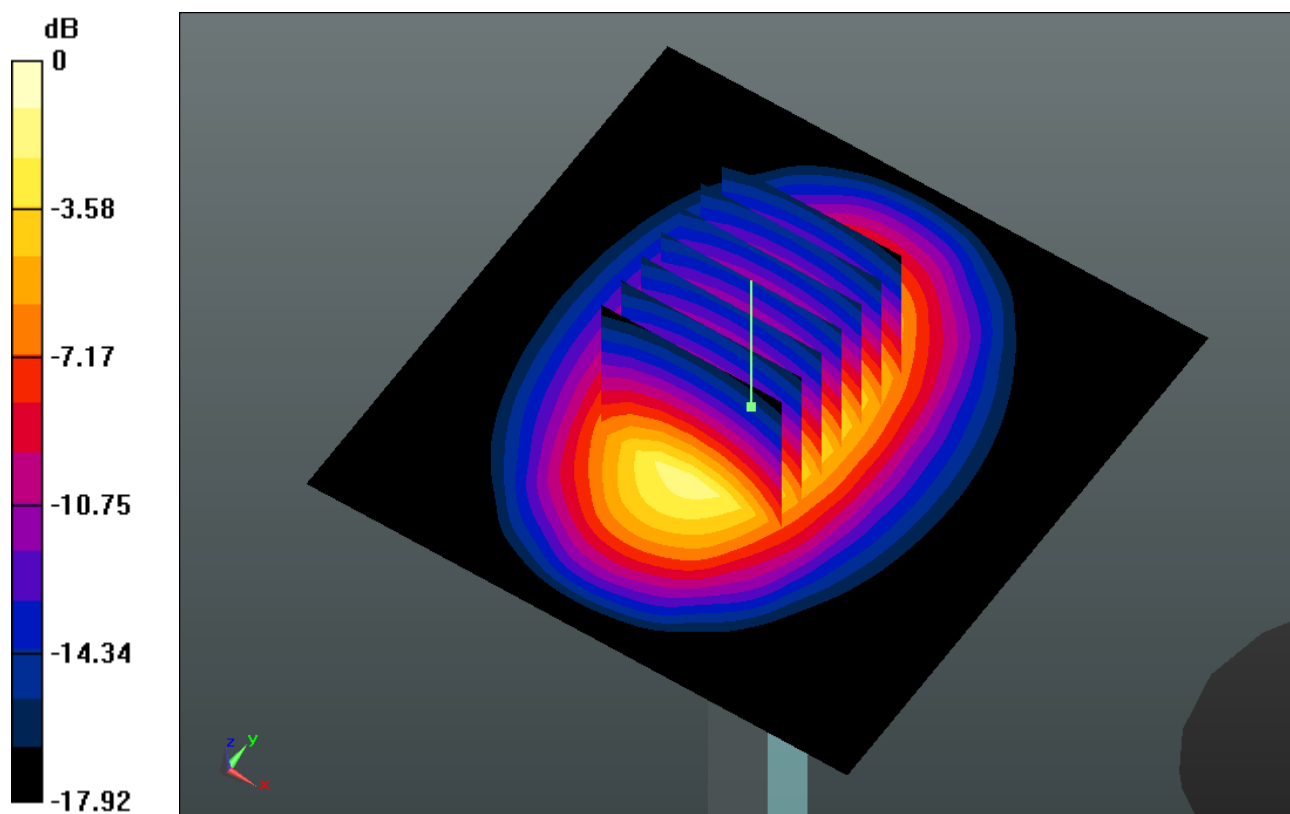
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.519 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.871 W/kg

SAR(1 g) = 9.99 mW/g; SAR(10 g) = 5.14 mW/g

Maximum value of SAR (measured) = 11.249 mW/g



0 dB = 11.250mW/g

System Check_Head_2450MHz_130429

DUT: D2450V2 - SN:736

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

Medium: HSL_2450_130429 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.842$ mho/m; $\epsilon_r =$

39.923 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 21.3 °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: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 21.677 mW/g

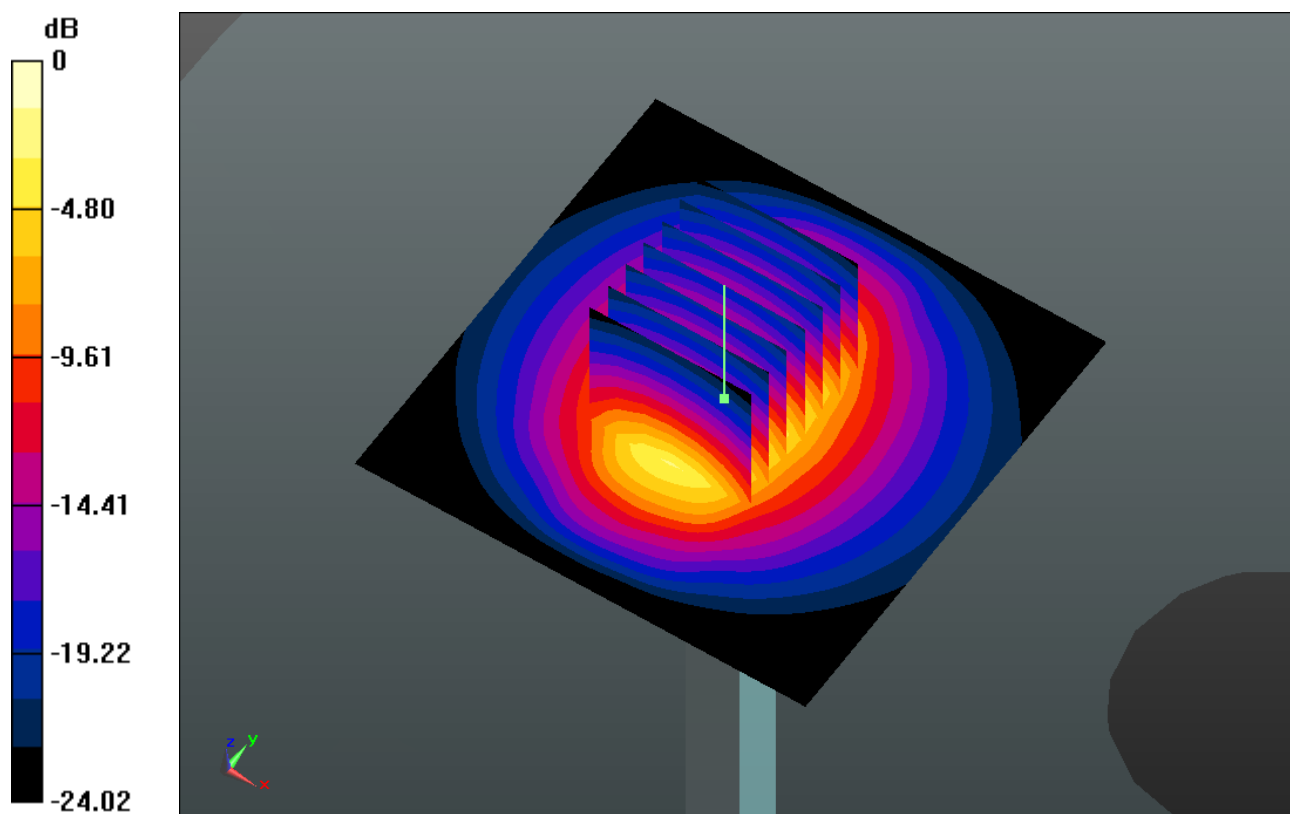
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

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

Peak SAR (extrapolated) = 28.764 W/kg

SAR(1 g) = 13.5 mW/g; SAR(10 g) = 6.11 mW/g

Maximum value of SAR (measured) = 21.061 mW/g



0 dB = 21.060mW/g

System Check_Head_5200MHz_130429

DUT: D5000V2 - SN:1113

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

Medium: HSL_5000_130429 Medium parameters used: $f = 5200$ MHz; $\sigma = 4.805$ mho/m; $\epsilon_r =$

35.479 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °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 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 19.168 mW/g

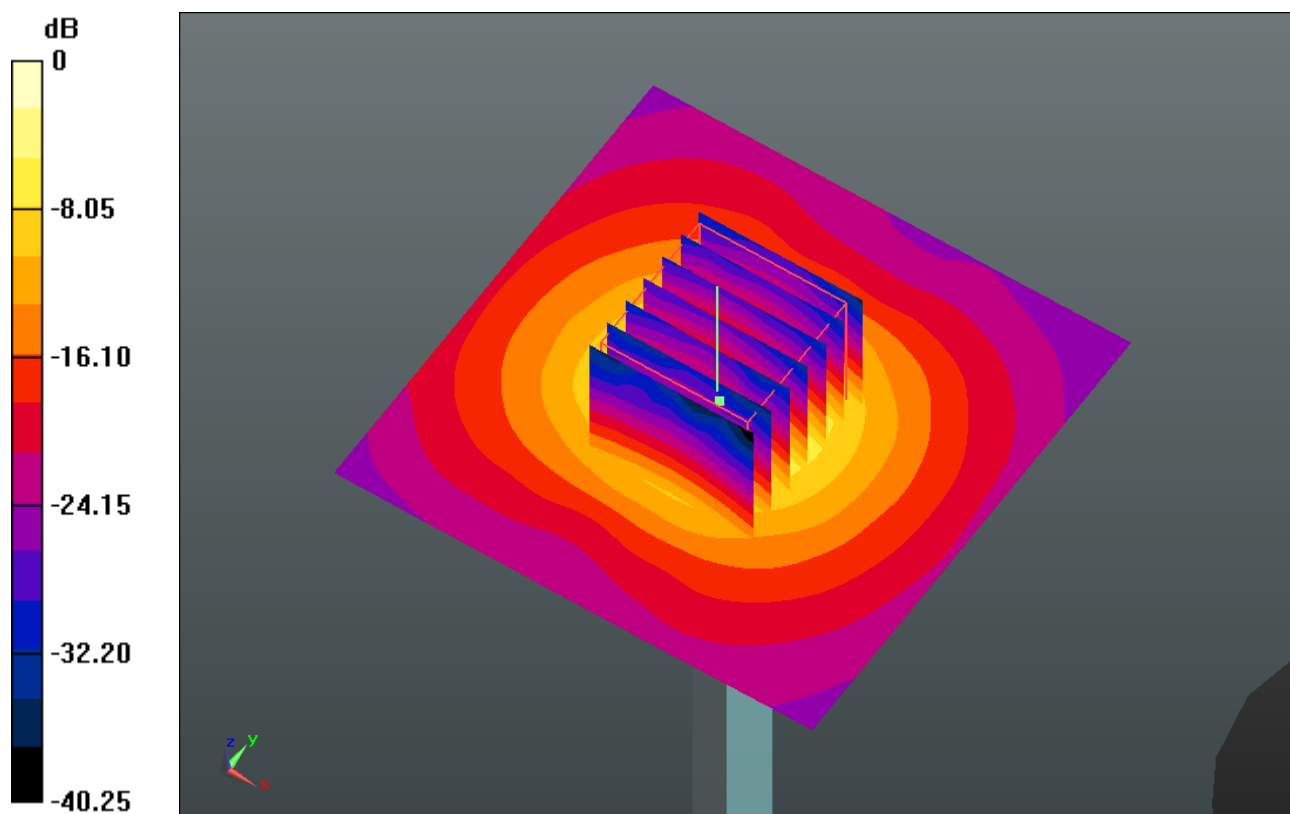
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

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

Peak SAR (extrapolated) = 31.475 W/kg

SAR(1 g) = 8.18 mW/g; SAR(10 g) = 2.32 mW/g

Maximum value of SAR (measured) = 19.565 mW/g



0 dB = 19.560mW/g

System Check_Head_5800MHz_130429

DUT: D5000V2 - SN:1113

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

Medium: HSL_5000_130429 Medium parameters used: $f = 5800$ MHz; $\sigma = 5.407$ mho/m; $\epsilon_r =$

34.377; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °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 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 19.836 mW/g

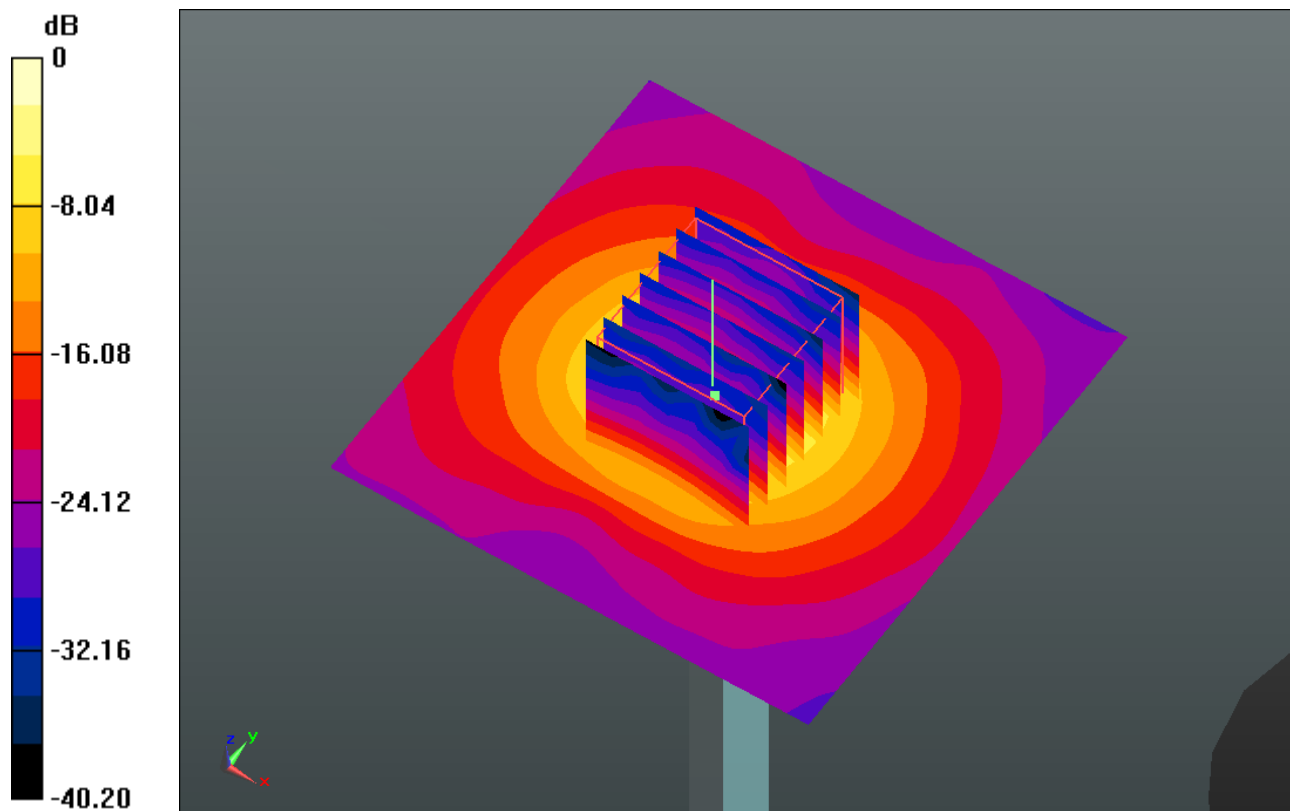
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

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

Peak SAR (extrapolated) = 33.269 W/kg

SAR(1 g) = 7.93 mW/g; SAR(10 g) = 2.2 mW/g

Maximum value of SAR (measured) = 20.315 mW/g



0 dB = 20.310mW/g

System Check_Body_835MHz_130421

DUT: D835V2 - SN:4d091

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

Medium: MSL_835_130421 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.481$;

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

Ambient Temperature : $23.4 \text{ }^\circ\text{C}$; Liquid Temperature : $21.4 \text{ }^\circ\text{C}$

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 (4); 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

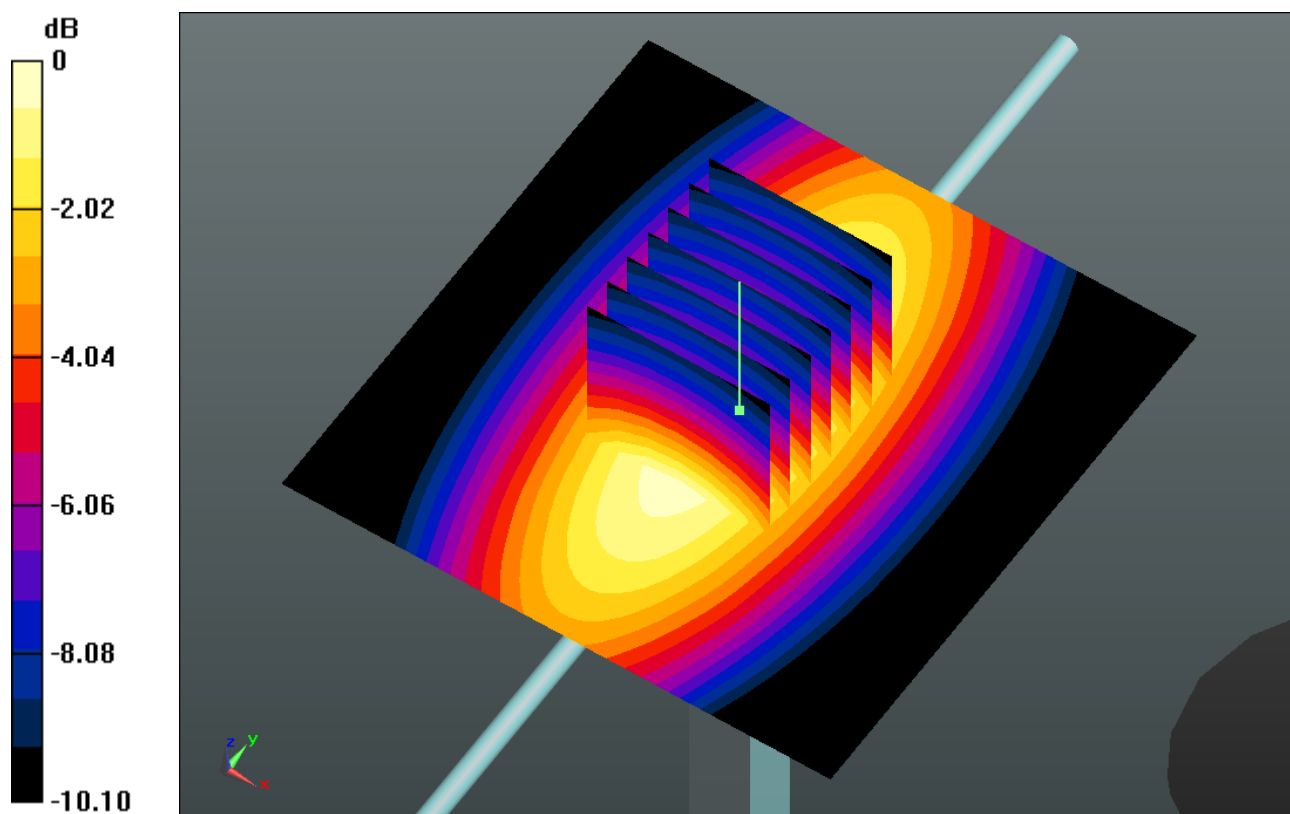
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 52.15 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_835MHz_130430

DUT: D835V2 - SN:4d091

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

Medium: MSL_835_130430 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.983 \text{ mho/m}$; $\epsilon_r = 55.184$;

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

Ambient Temperature : $23.4 \text{ }^\circ\text{C}$; 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: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (4); 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) = 2.434 mW/g

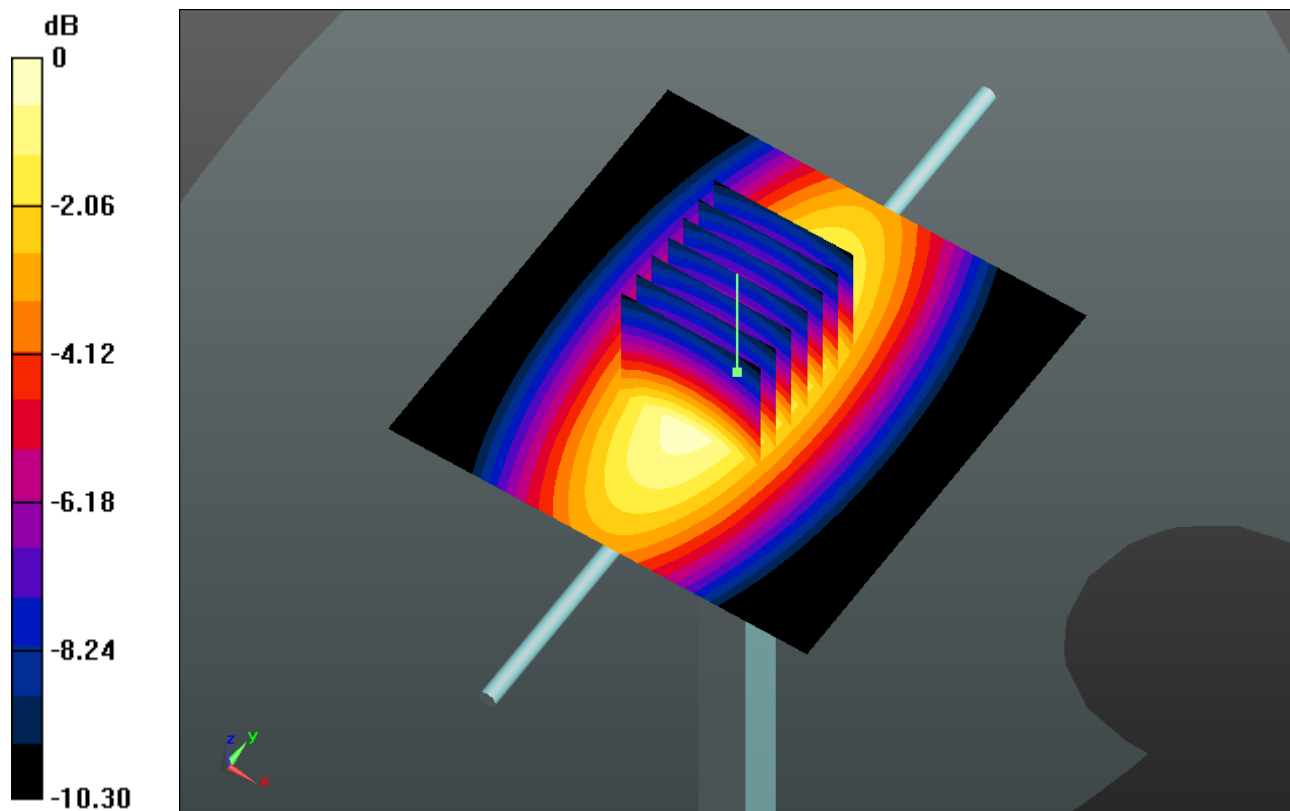
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 50.151 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.263 W/kg

SAR(1 g) = 2.24 mW/g ; SAR(10 g) = 1.49 mW/g

Maximum value of SAR (measured) = 2.438 mW/g



0 dB = 2.440mW/g

System Check_Body_1900MHz_130422

DUT: D1900V2 - SN:5d118

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

Medium: MSL_1900_130422 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.551$ mho/m; $\epsilon_r =$

53.249; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.4 °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 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 11.797 mW/g

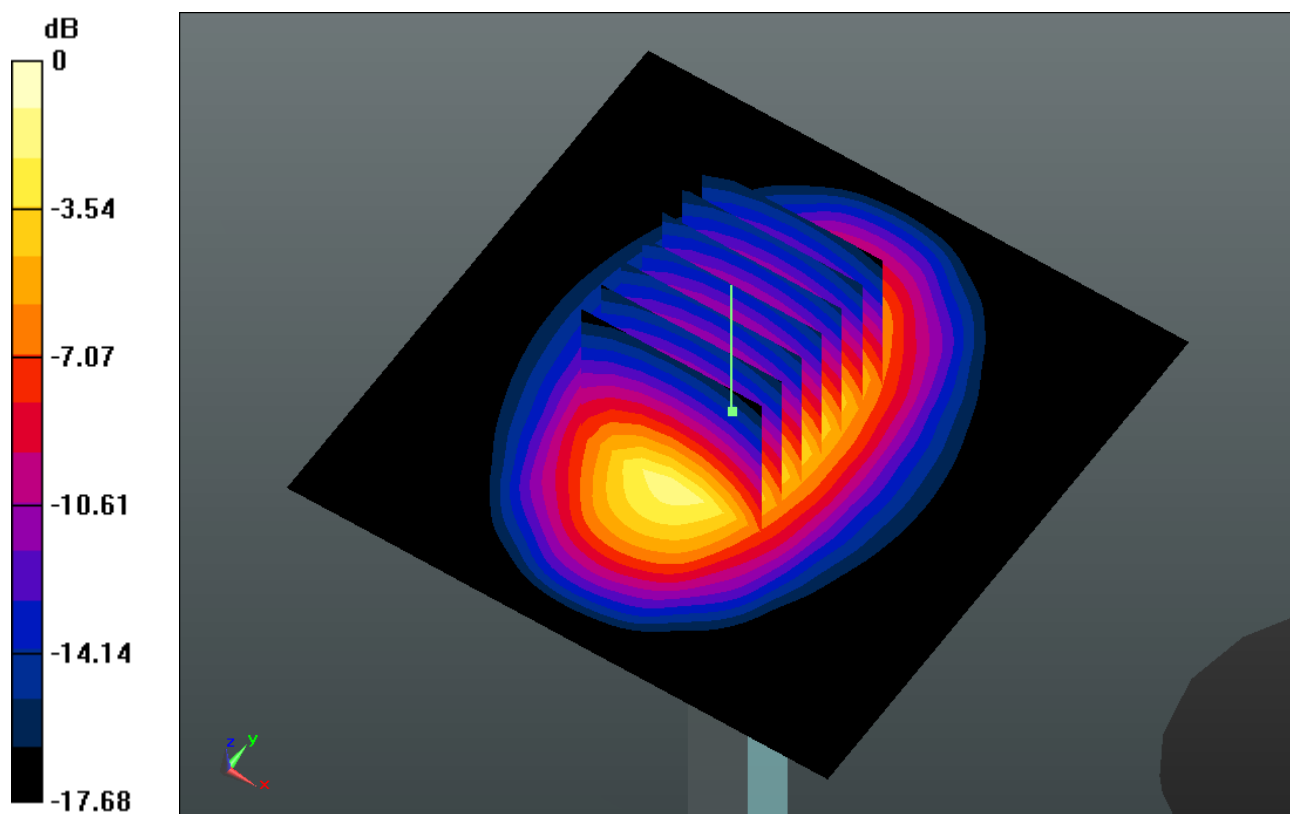
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.544 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.578 W/kg

SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.27 mW/g

Maximum value of SAR (measured) = 11.632 mW/g



0 dB = 11.630mW/g

System Check_Body_1900MHz_130430

DUT: D1900V2 - SN:5d118

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

Medium: MSL_1900_130430 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.555$ mho/m; $\epsilon_r =$

53.533; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 21.5 °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 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 11.823 mW/g

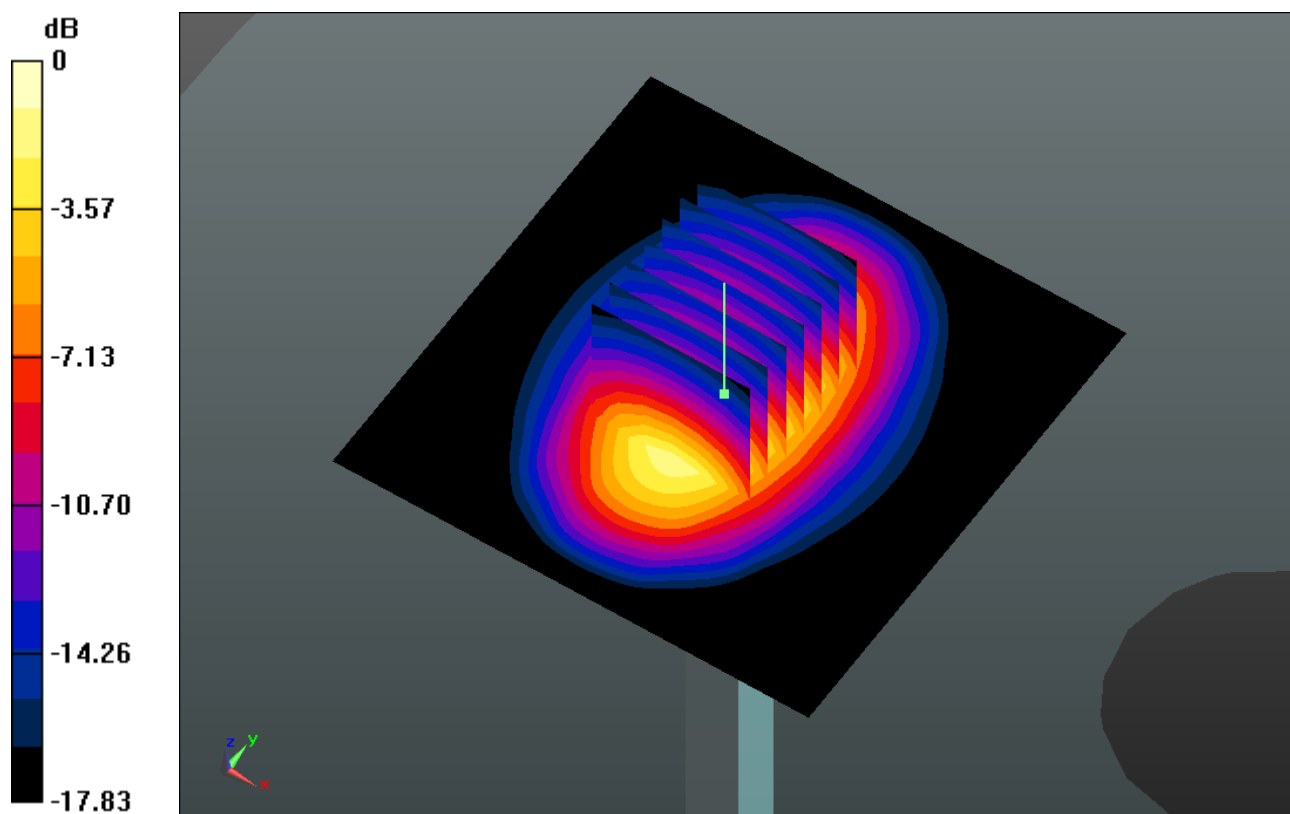
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.64 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.618 W/kg

SAR(1 g) = 10.4 mW/g; SAR(10 g) = 5.29 mW/g

Maximum value of SAR (measured) = 11.657 mW/g



0 dB = 11.660mW/g

System Check_Body_2450MHz_130430

DUT: D2450V2 - SN:736

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

Medium: MSL_2450_130430 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.949$ mho/m; $\epsilon_r =$

51.497; $\rho = 1000$ kg/m³

Ambient Temperature : 23.1 °C; Liquid Temperature : 21.3 °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 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 20.684 mW/g

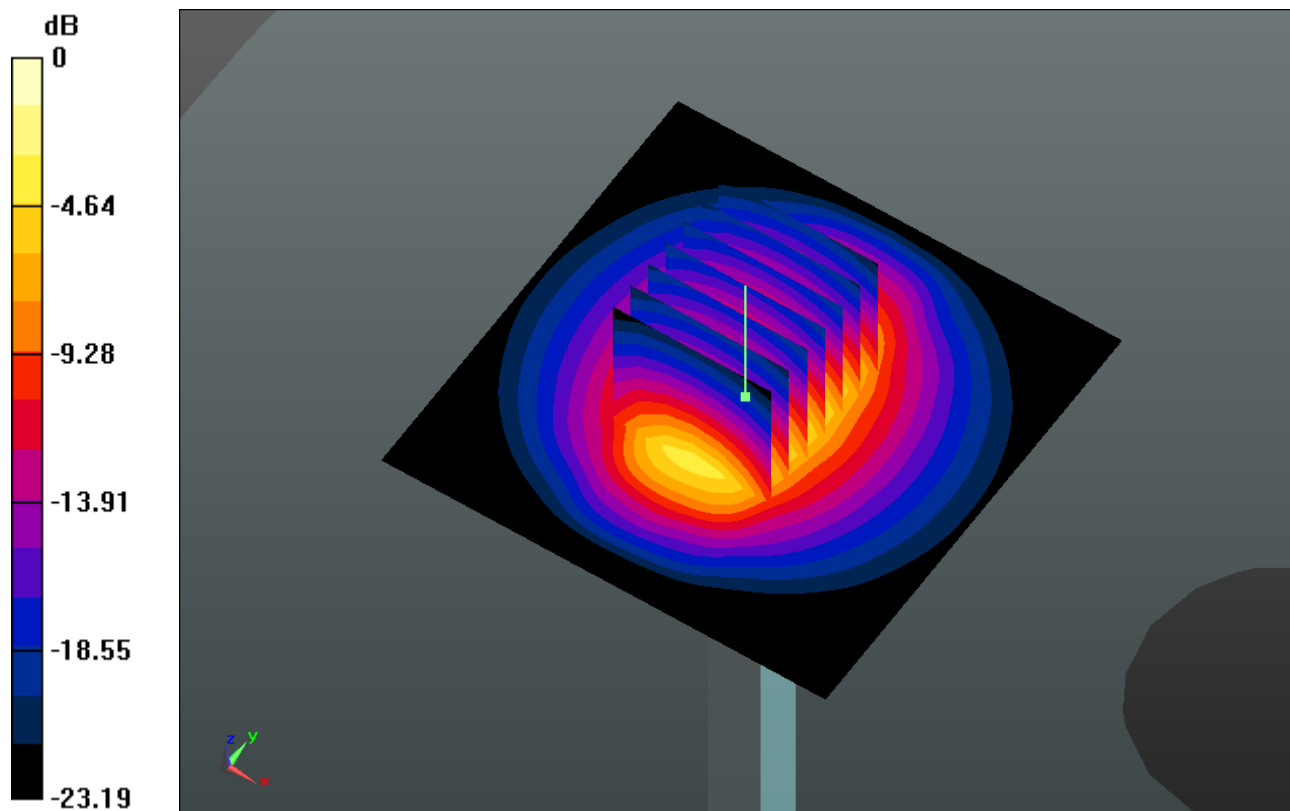
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 28.150 W/kg

SAR(1 g) = 13.1 mW/g; SAR(10 g) = 5.92 mW/g

Maximum value of SAR (measured) = 20.238 mW/g



0 dB = 20.240mW/g

System Check_Body_5200MHz_130430

DUT: D5000V2 - SN:1113

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

Medium: MSL_5000_130430 Medium parameters used: $f = 5200$ MHz; $\sigma = 5.297$ mho/m; $\epsilon_r =$

49.185; $\rho = 1000$ 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 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 17.790 mW/g

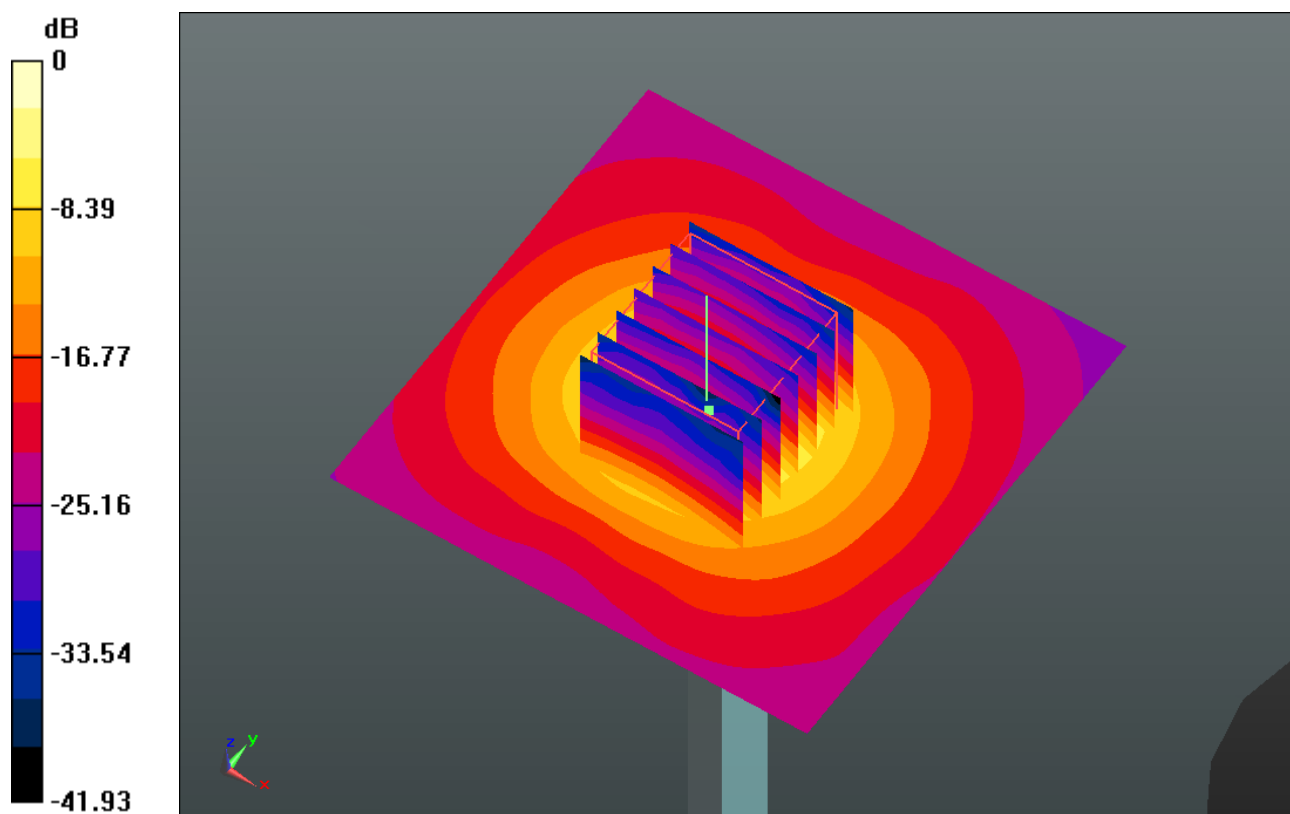
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

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

Peak SAR (extrapolated) = 28.818 W/kg

SAR(1 g) = 7.69 mW/g; SAR(10 g) = 2.13 mW/g

Maximum value of SAR (measured) = 18.728 mW/g



System Check_Body_5800MHz_130430

DUT: D5000V2 - SN:1113

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

Medium: MSL_5000_130430 Medium parameters used: $f = 5800$ MHz; $\sigma = 6.127$ mho/m; $\epsilon_r =$

47.784; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 21.5 °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 (4); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 20.347 mW/g

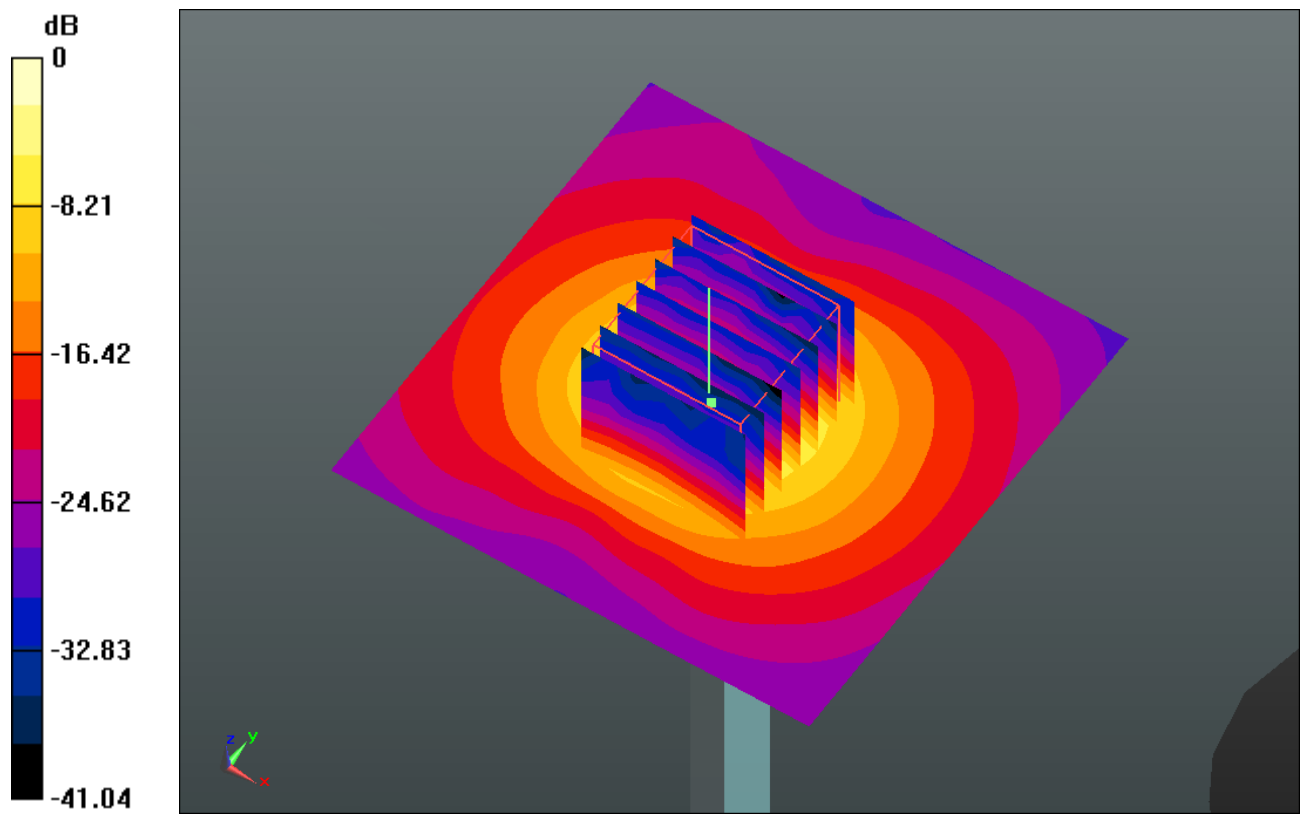
Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 47.023 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 33.949 W/kg

SAR(1 g) = 8.16 mW/g; SAR(10 g) = 2.25 mW/g

Maximum value of SAR (measured) = 20.632 mW/g



0 dB = 20.630mW/g