



Appendix A. Plots of System Performance Check

The plots are shown as follows.

System Check_Head_835MHz_120201

DUT: Dipole 835 MHz

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

Medium: HSL_835_120201 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.909 \text{ mho/m}$; $\epsilon_r = 41.806$;

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

Ambient Temperature : $23.3 \text{ }^\circ\text{C}$; Liquid Temperature : $21.5 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(8.45, 8.45, 8.45); 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 (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.543 mW/g

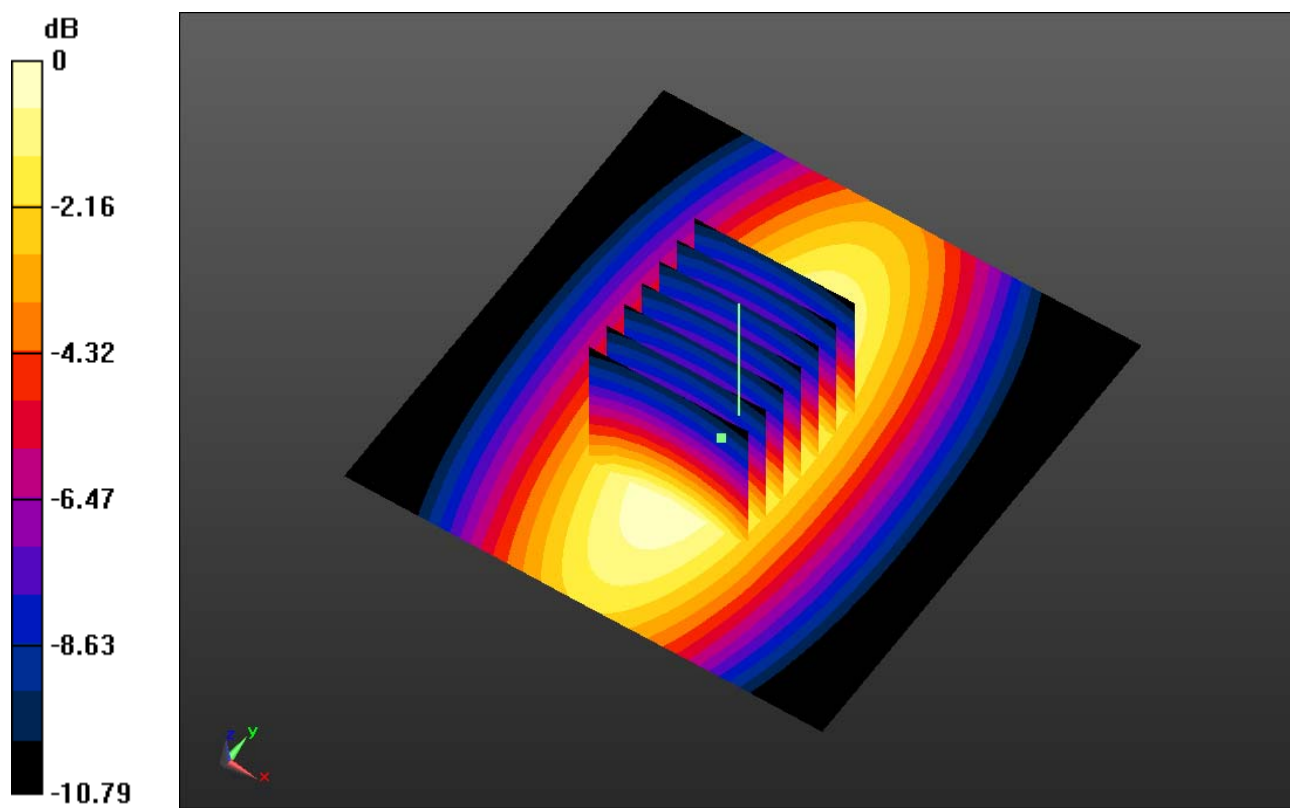
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.413 V/m ; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.469 W/kg

SAR(1 g) = 2.26 mW/g ; SAR(10 g) = 1.47 mW/g

Maximum value of SAR (measured) = 2.442 mW/g



0 dB = 2.440mW/g

System Check_Head_1900MHz_120201

DUT: Dipole 1900 MHz

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

Medium: HSL_1900_120201 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.453$ mho/m; $\epsilon_r =$

39.136; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(7.46, 7.46, 7.46); 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 (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.110 mW/g

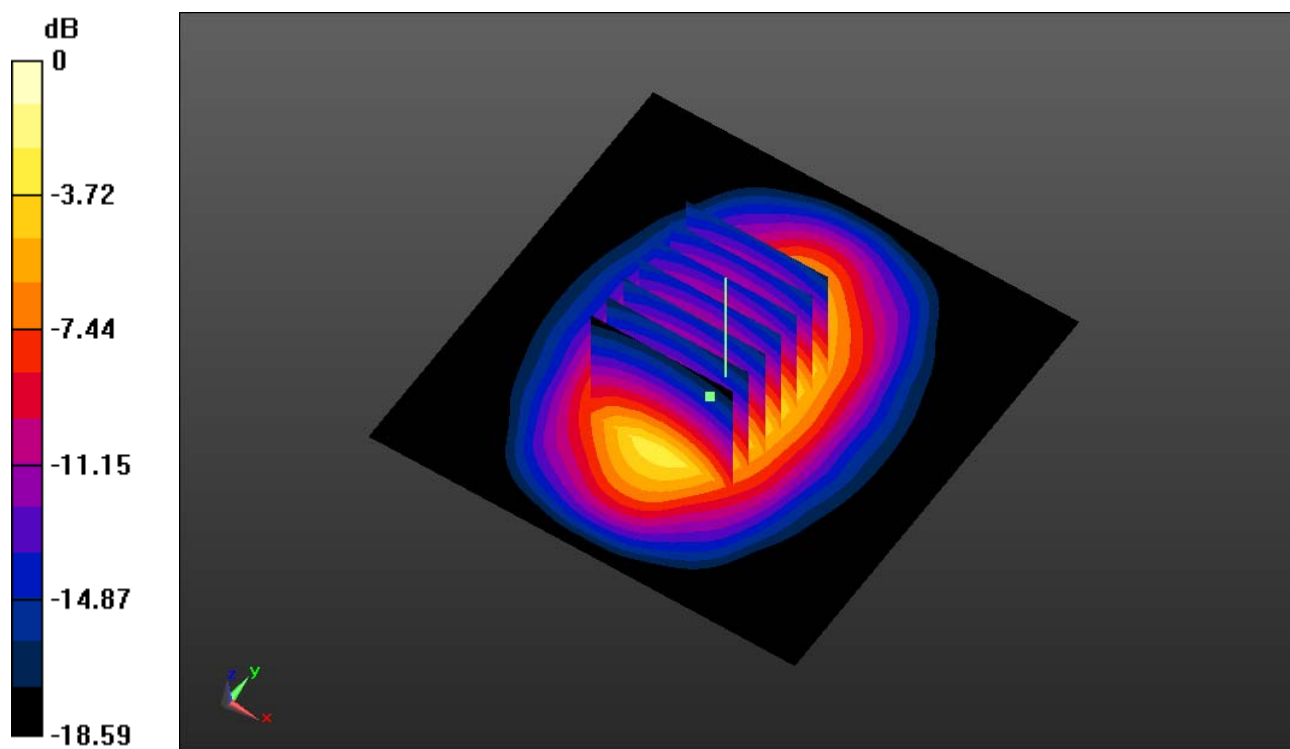
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.252 V/m; Power Drift = -0.0025 dB

Peak SAR (extrapolated) = 18.536 W/kg

SAR(1 g) = 9.81 mW/g; SAR(10 g) = 5.05 mW/g

Maximum value of SAR (measured) = 11.039 mW/g



0 dB = 11.040mW/g

System Check_Head_2450MHz_120203

DUT: Dipole 2450 MHz

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

Medium: HSL_2450_120203 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.823$ mho/m; $\epsilon_r =$

37.961 ; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 21.4 °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: 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) = 16.127 mW/g

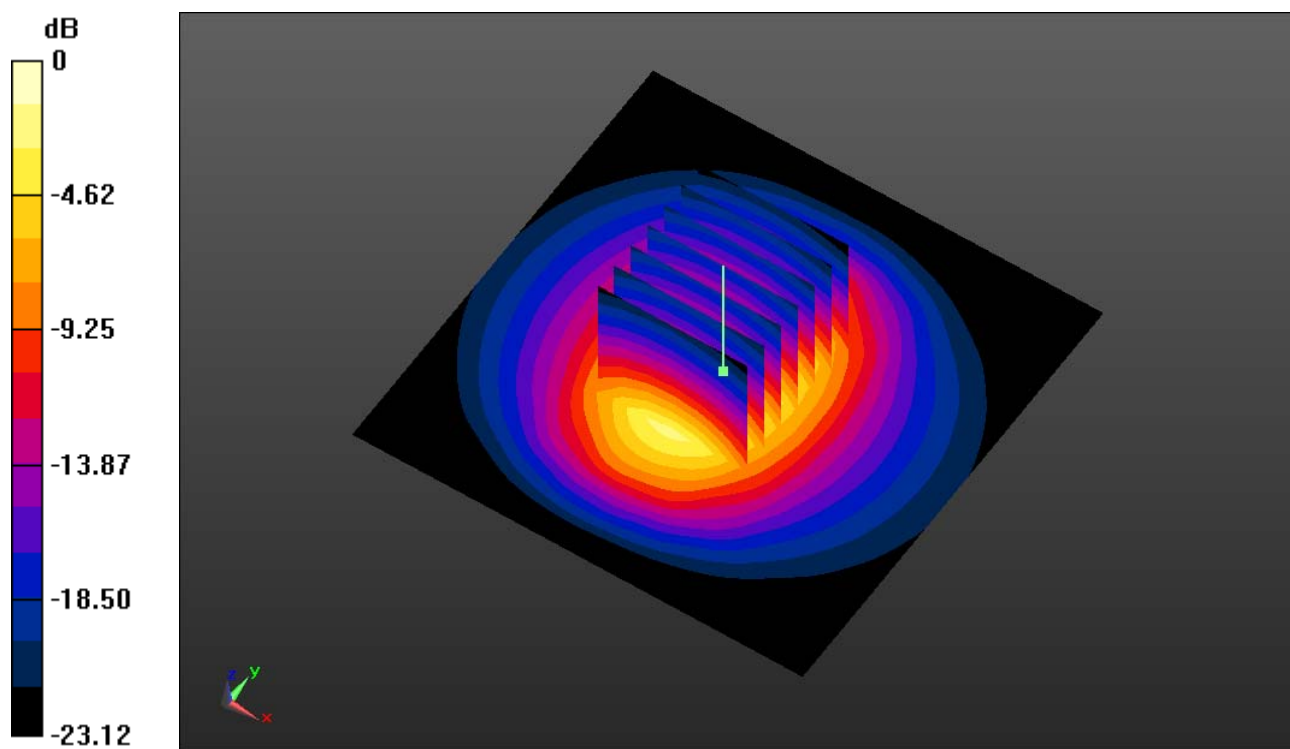
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.105 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 30.857 W/kg

SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.21 mW/g

Maximum value of SAR (measured) = 15.783 mW/g



0 dB = 15.780mW/g

System Check_Body_835MHz_120202

DUT: Dipole 835 MHz

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

Medium: MSL_835_120202 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.976 \text{ mho/m}$; $\epsilon_r = 54.388$;

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

Ambient Temperature : $23.3 \text{ }^\circ\text{C}$; Liquid Temperature : $21.4 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(8.67, 8.67, 8.67); 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 (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.662 mW/g

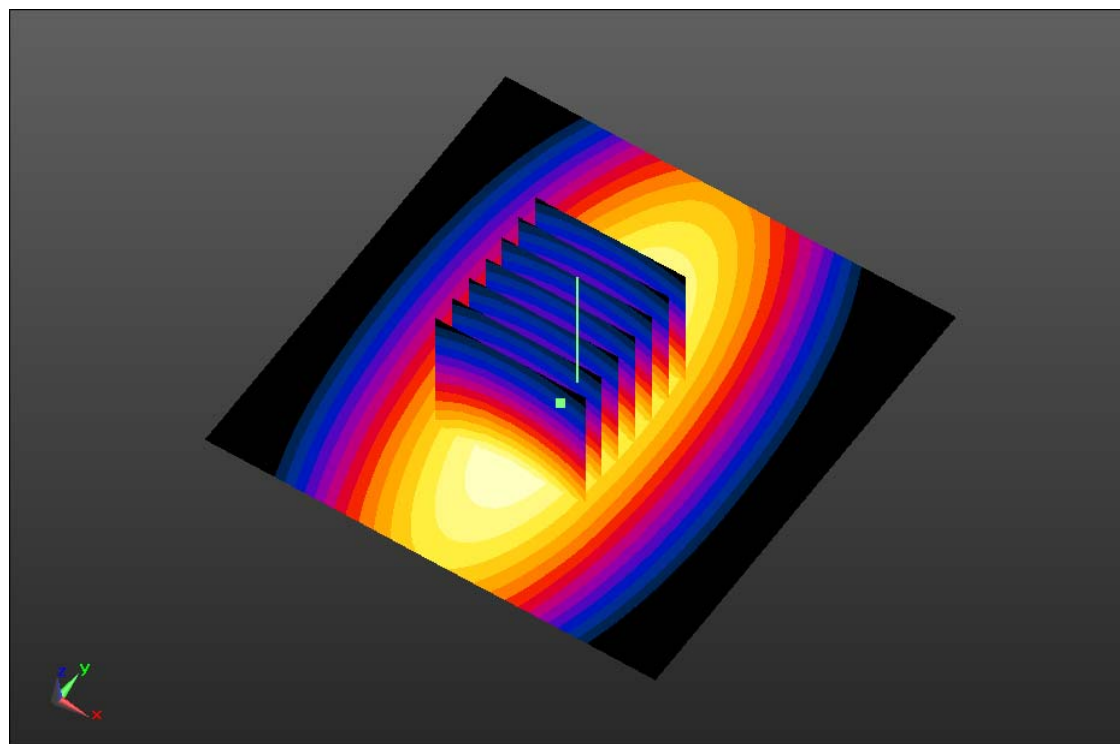
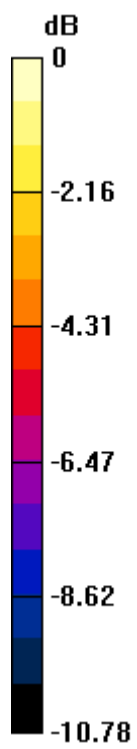
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 52.731 V/m ; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.627 W/kg

SAR(1 g) = 2.37 mW/g ; SAR(10 g) = 1.54 mW/g

Maximum value of SAR (measured) = 2.556 mW/g



0 dB = 2.560mW/g

System Check_Body_1900MHz_120202

DUT: Dipole 1900 MHz

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

Medium: MSL_1900_120202 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.535$ mho/m; $\epsilon_r =$

54.579; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(6.96, 6.96, 6.96); 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 (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12.215 mW/g

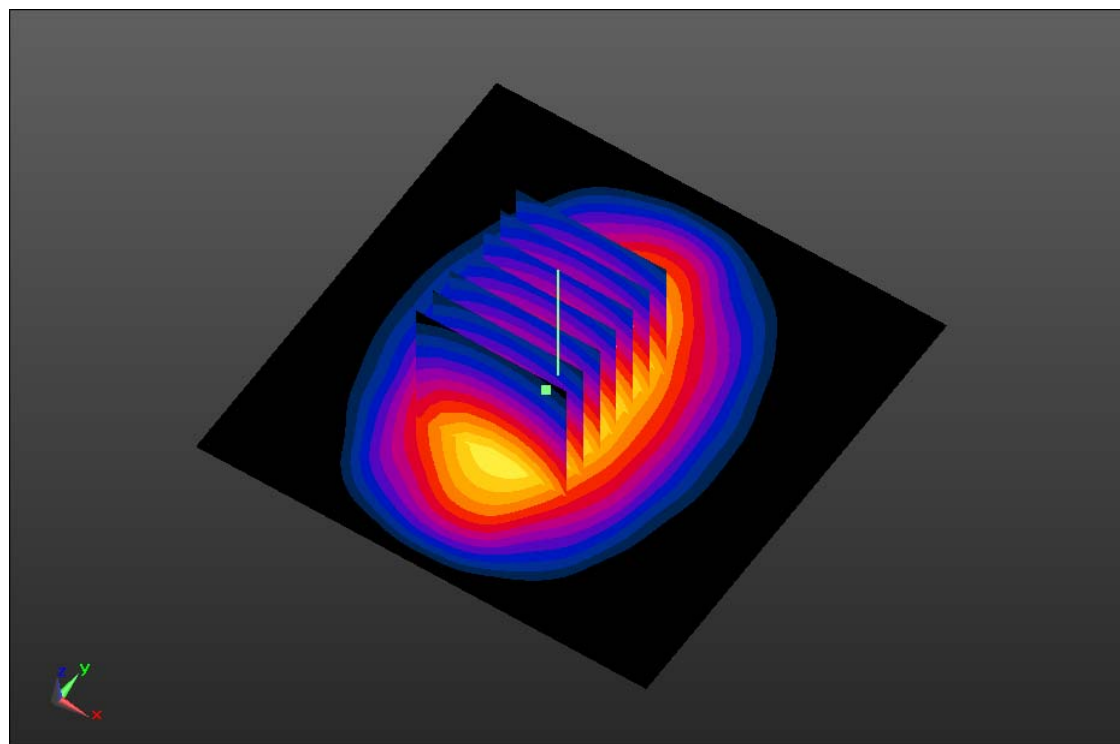
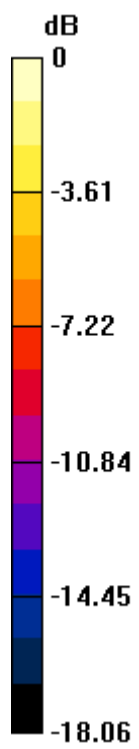
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.338 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 20.089 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 5.51 mW/g

Maximum value of SAR (measured) = 12.028 mW/g



0 dB = 12.030mW/g

System Check_Body_2450MHz_120203

DUT: Dipole 2450 MHz

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

Medium: MSL_2450_120203 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.002$ mho/m; $\epsilon_r =$

53.464; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 21.6 °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) = 15.887 mW/g

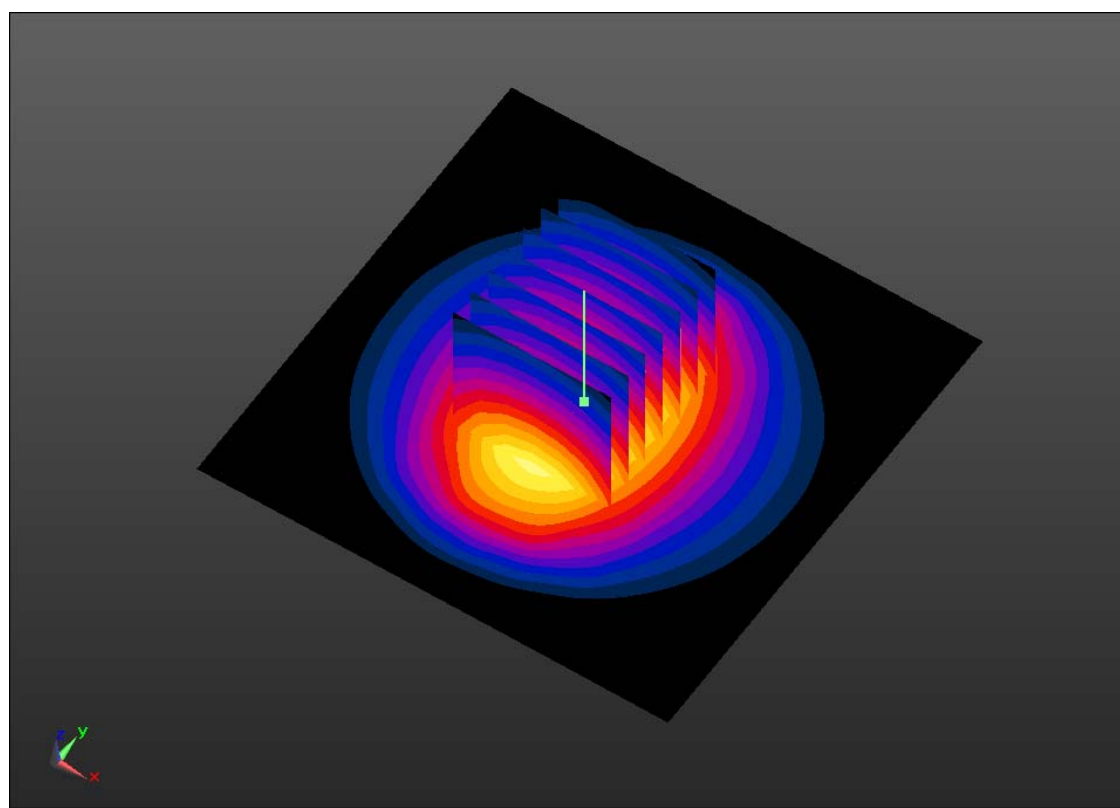
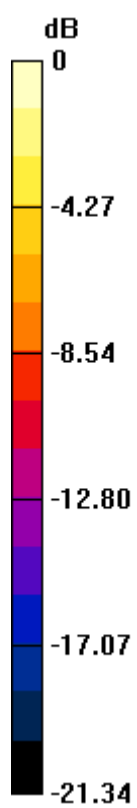
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.221 V/m; Power Drift = -0.0053 dB

Peak SAR (extrapolated) = 26.984 W/kg

SAR(1 g) = 13.3 mW/g; SAR(10 g) = 6.11 mW/g

Maximum value of SAR (measured) = 15.238 mW/g



0 dB = 15.240mW/g