

System Check_Head_835MHz_120211

DUT: Dipole 835 MHz

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

Medium: HSL_850_120211 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.885 \text{ mho/m}$; $\epsilon_r = 41.551$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 22.6 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(6.39, 6.39, 6.39); Calibrated: 2011/5/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: SAM Right; Type: QD000P40CD; Serial: TP:1644
- 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) = 2.515 mW/g

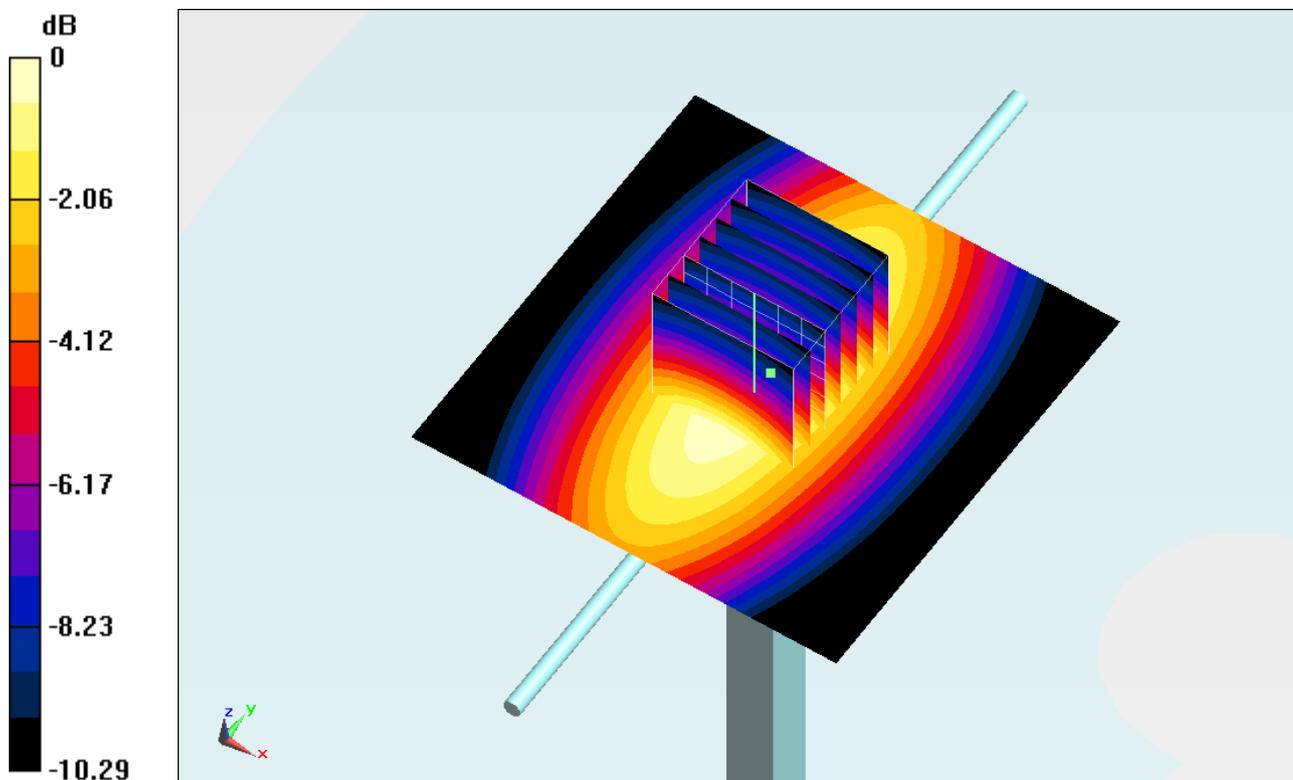
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.791 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.2500

SAR(1 g) = 2.32 mW/g; SAR(10 g) = 1.54 mW/g

Maximum value of SAR (measured) = 2.506 mW/g



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

System Check_Head_835MHz_120302

DUT: Dipole 835 MHz

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

Medium: HSL_850_120302 Medium parameters used: $f = 835$ MHz; $\sigma = 0.929$ mho/m; $\epsilon_r = 43.1$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.5 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(8.93, 8.93, 8.93); Calibrated: 2011-06-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2011-06-20
- Phantom: SAM_Right; Type: SAM; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 2.70 mW/g

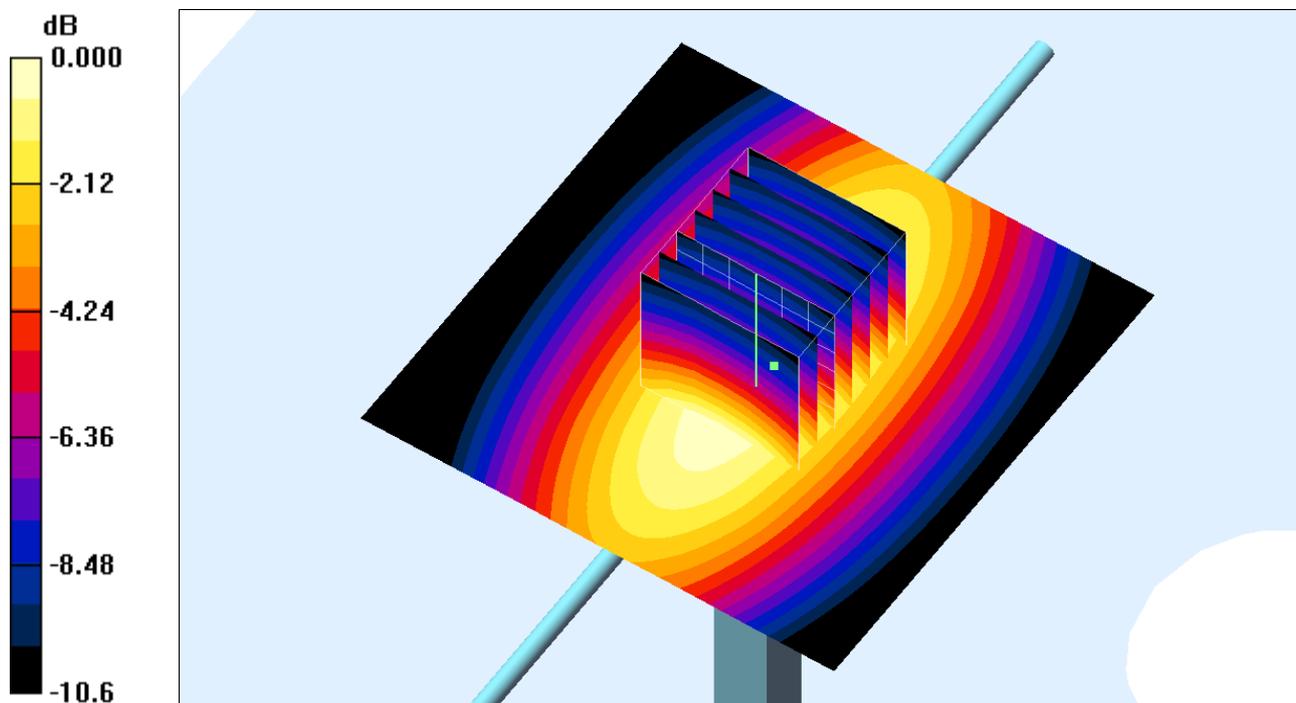
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.3 V/m; Power Drift = -0.131 dB

Peak SAR (extrapolated) = 3.81 W/kg

SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.64 mW/g

Maximum value of SAR (measured) = 2.70 mW/g



0 dB = 2.70mW/g

System Check_Body_835MHz_120210

DUT: Dipole 835 MHz

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

Medium: MSL_850_120210 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.996 \text{ mho/m}$; $\epsilon_r = 54.786$;

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

Ambient Temperature : $22.5 \text{ }^\circ\text{C}$; Liquid Temperature : $21.5 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(6.22, 6.22, 6.22); Calibrated: 2011/5/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: SAM Right; Type: QD000P40CD; Serial: TP:1644
- 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) = 2.694 mW/g

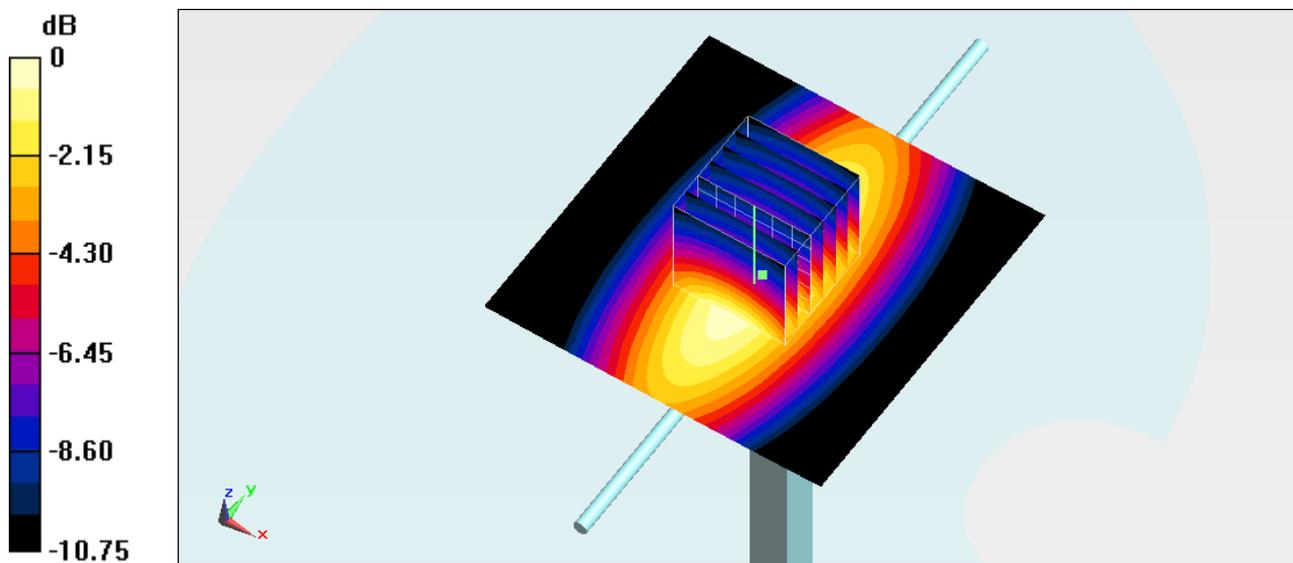
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.968 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 3.7510

SAR(1 g) = 2.48 mW/g ; SAR(10 g) = 1.57 mW/g

Maximum value of SAR (measured) = 2.708 mW/g



0 dB = $2.710\text{mW/g} = 8.66 \text{ dB mW/g}$

System Check_Body_835MHz_120218

DUT: Dipole 835 MHz

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

Medium: MSL_850_120218 Medium parameters used: $f = 835$ MHz; $\sigma = 0.963$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.4 °C; Liquid Temperature : 21.4 °C

DASY4 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(6.22, 6.22, 6.22); Calibrated: 2011-05-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2011-04-28
- Phantom: SAM_Right; Type: SAM; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 2.76 mW/g

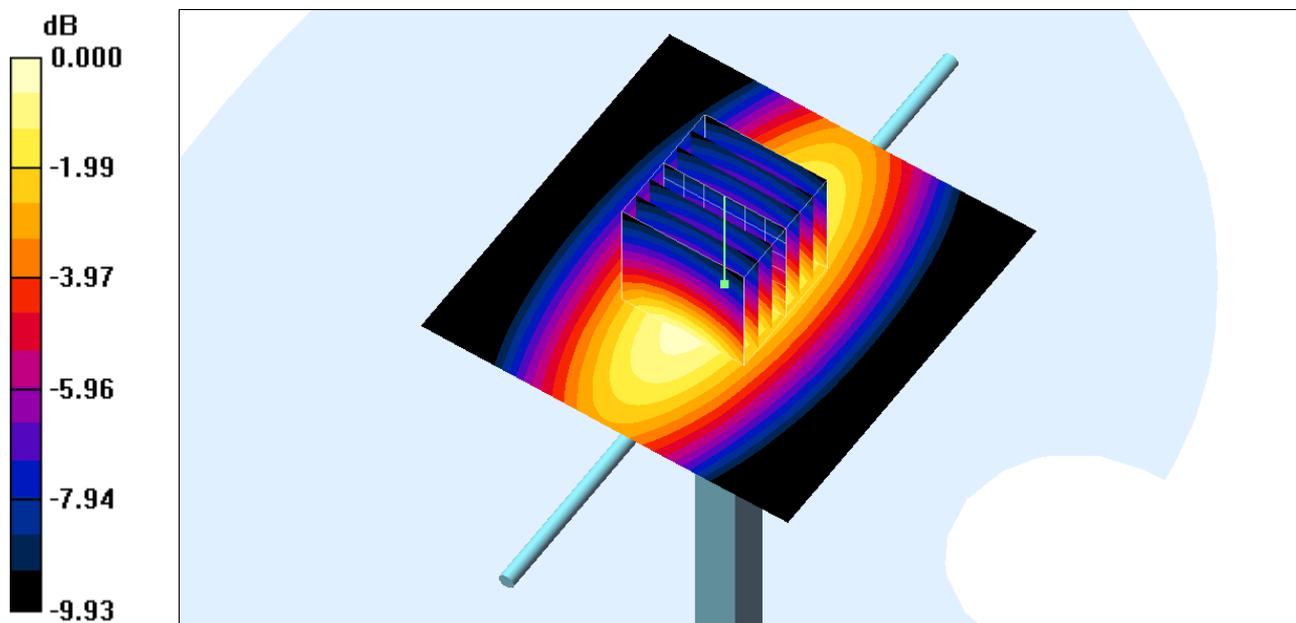
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.9 V/m; Power Drift = -0.014 dB

Peak SAR (extrapolated) = 3.51 W/kg

SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.69 mW/g

Maximum value of SAR (measured) = 2.76 mW/g



0 dB = 2.76mW/g

System Check_Body_835MHz_120302

DUT: Dipole 835 MHz

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

Medium: MSL_850_120302 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.953 \text{ mho/m}$; $\epsilon_r = 52.622$;

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

Ambient Temperature : $22.5 \text{ }^\circ\text{C}$; Liquid Temperature : $21.5 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(6.22, 6.22, 6.22); Calibrated: 2011/5/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: SAM Left; Type: QD000P40CD; Serial: TP:1542
- 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) = 2.579 mW/g

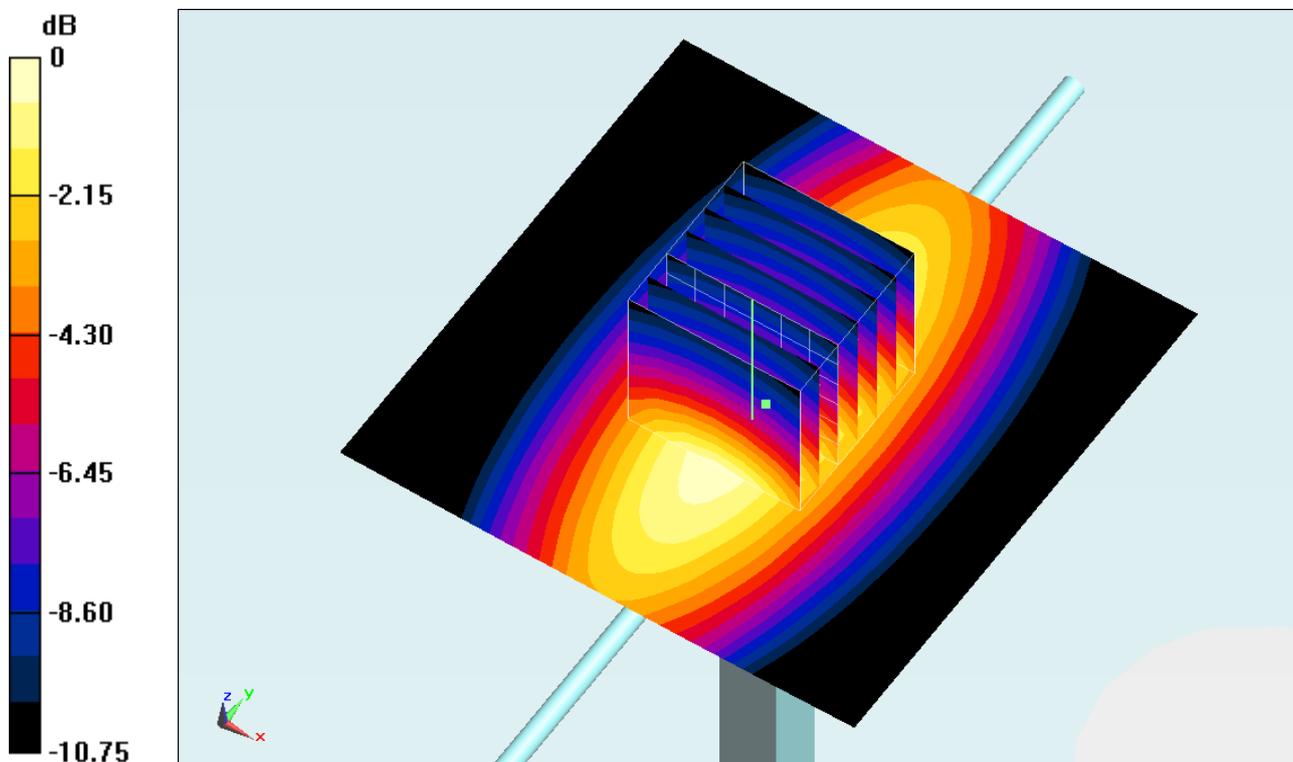
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.968 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 3.5910

SAR(1 g) = 2.37 mW/g ; SAR(10 g) = 1.5 mW/g

Maximum value of SAR (measured) = 2.592 mW/g



$0 \text{ dB} = 2.590 \text{ mW/g} = 8.27 \text{ dB mW/g}$

System Check_Head_1900MHz_120211

DUT: Dipole 1900 MHz

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

Medium: HSL_1900_120211 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.428$ mho/m; $\epsilon_r =$

39.197 ; $\rho = 1000$ kg/m³

Ambient Temperature : 22.6 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(5.03, 5.03, 5.03); Calibrated: 2011/5/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: SAM Right; Type: QD000P40CD; Serial: TP:1644
- 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) = 11.168 mW/g

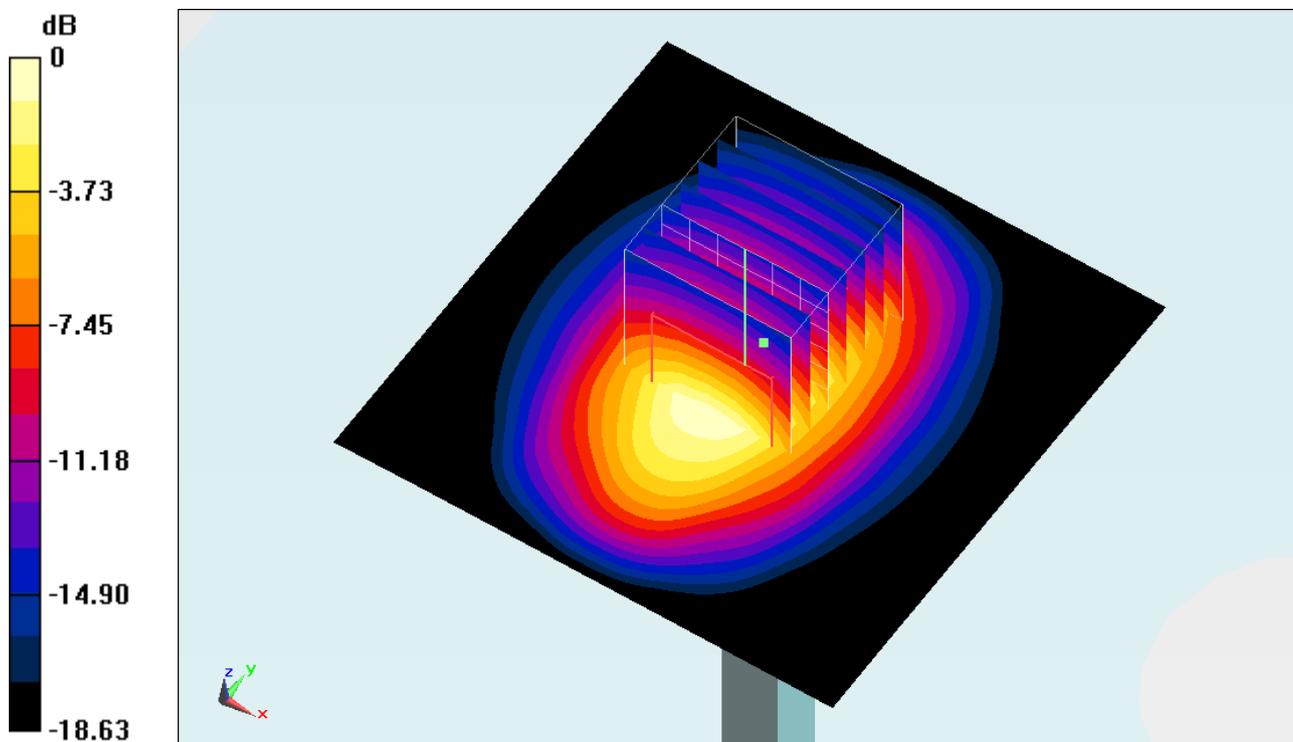
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.980 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 16.6530

SAR(1 g) = 9.4 mW/g; SAR(10 g) = 4.97 mW/g

Maximum value of SAR (measured) = 10.610 mW/g



0 dB = 10.610mW/g = 20.51 dB mW/g

System Check_Head_1900MHz_120302

DUT: Dipole 1900 MHz

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

Medium: HSL_1900_120302 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.3 °C ; Liquid Temperature : 21.3 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(7.76, 7.76, 7.76); Calibrated: 2011-06-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2011-06-20
- Phantom: SAM_Right; Type: SAM; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 11.2 mW/g

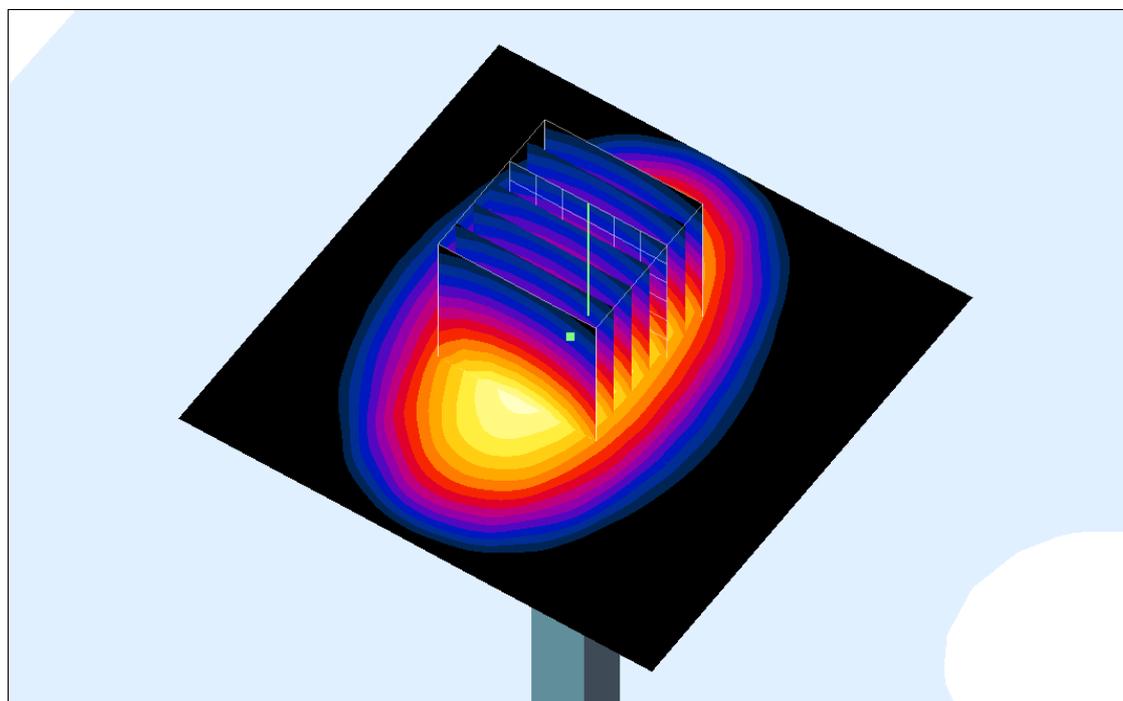
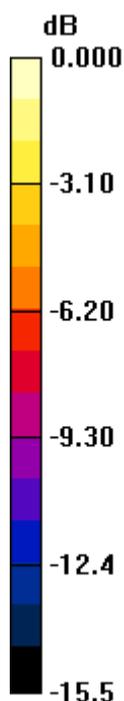
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.1 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 18.5 W/kg

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.58 mW/g

Maximum value of SAR (measured) = 11.1 mW/g



0 dB = 11.1mW/g

System Check_Body_1900MHz_120209

DUT: Dipole 1900 MHz

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

Medium: MSL_1900_120209 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.517$ mho/m; $\epsilon_r =$

53.129 ; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(4.48, 4.48, 4.48); Calibrated: 2011/5/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: SAM Left; Type: QD000P40CD; Serial: TP:1542
- 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) = 12.586 mW/g

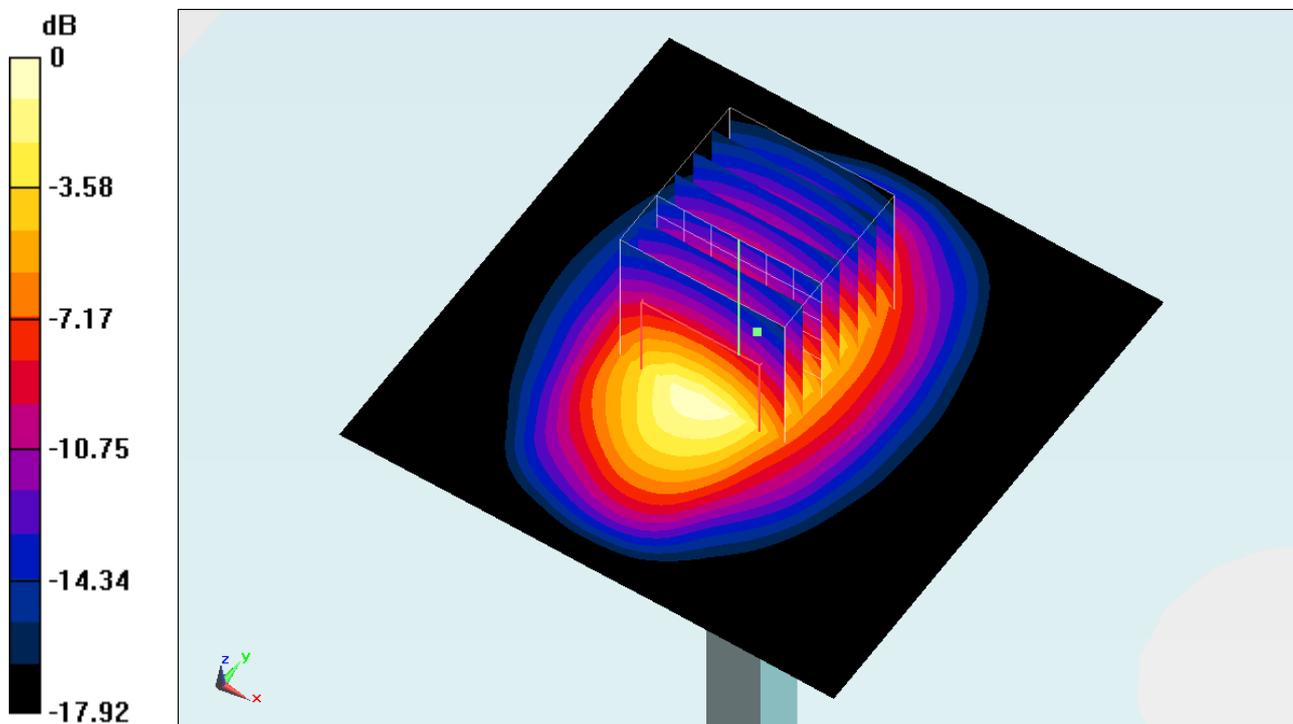
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.605 V/m; Power Drift = -0.0023 dB

Peak SAR (extrapolated) = 18.1420

SAR(1 g) = 10.5 mW/g; SAR(10 g) = 5.58 mW/g

Maximum value of SAR (measured) = 11.991 mW/g



0 dB = 11.990mW/g = 21.58 dB mW/g

System Check_Body_1900MHz_120218

DUT: Dipole 1900 MHz

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

Medium: MSL_1900_120218 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.4 °C; Liquid Temperature : 21.4 °C

DASY4 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(4.48, 4.48, 4.48); Calibrated: 2011-05-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2011-04-28
- Phantom: SAM_Right; Type: SAM; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 12.9 mW/g

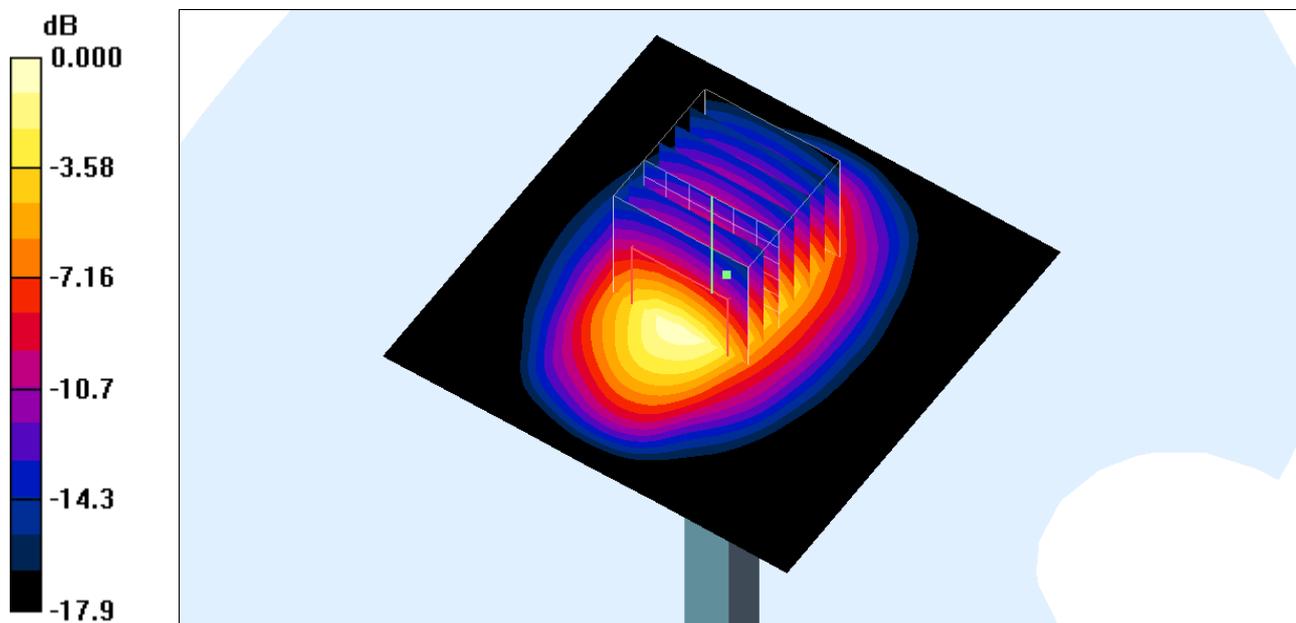
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.9 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 18.4 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 5.69 mW/g

Maximum value of SAR (measured) = 12.2 mW/g



0 dB = 12.2mW/g

System Check_Body_1900MHz_120303

DUT: Dipole 1900 MHz

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

Medium: MSL_1900_120303 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.5 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(7.17, 7.17, 7.17); Calibrated: 2011-06-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2011-06-20
- Phantom: SAM_Right; Type: SAM; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 11.0 mW/g

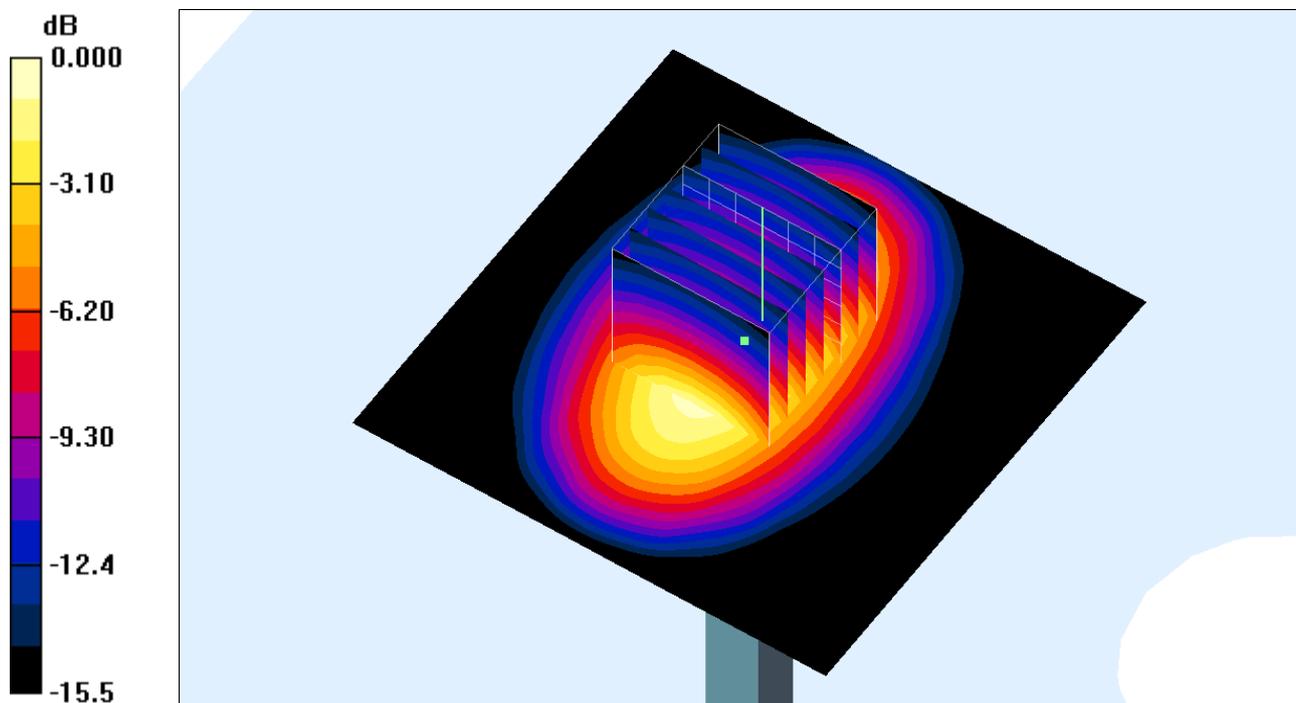
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.8 V/m; Power Drift = 0.077 dB

Peak SAR (extrapolated) = 18.3 W/kg

SAR(1 g) = 9.96 mW/g; SAR(10 g) = 5.51 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



0 dB = 11.0mW/g

System Check_Head_2450MHz_120214

DUT: Dipole 2450 MHz

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

Medium: HSL_2450_120214 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.2 °C; Liquid Temperature : 21.2 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3831; ConvF(6.84, 6.84, 6.84); Calibrated: 2012-01-04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2011-06-24
- Phantom: SAM_Left; Type: SAM; Serial: TP-1150
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 17.9 mW/g

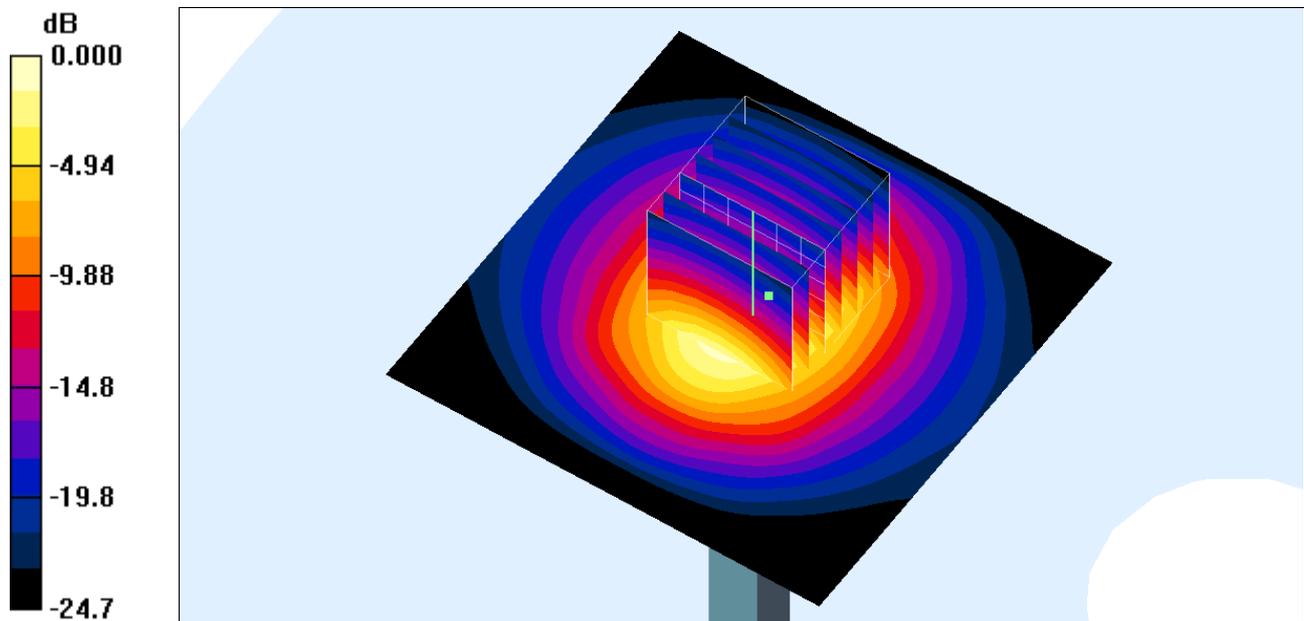
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.1 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 33.4 W/kg

SAR(1 g) = 14.7 mW/g; SAR(10 g) = 6.57 mW/g

Maximum value of SAR (measured) = 16.4 mW/g



0 dB = 16.4mW/g

System Check_Head_2450MHz_120302

DUT: Dipole 2450 MHz

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

Medium: HSL_2450_120302 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.85$ mho/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.5 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(6.92, 6.92, 6.92); Calibrated: 2011-06-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2011-06-20
- Phantom: SAM_Right; Type: SAM; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 16.0 mW/g

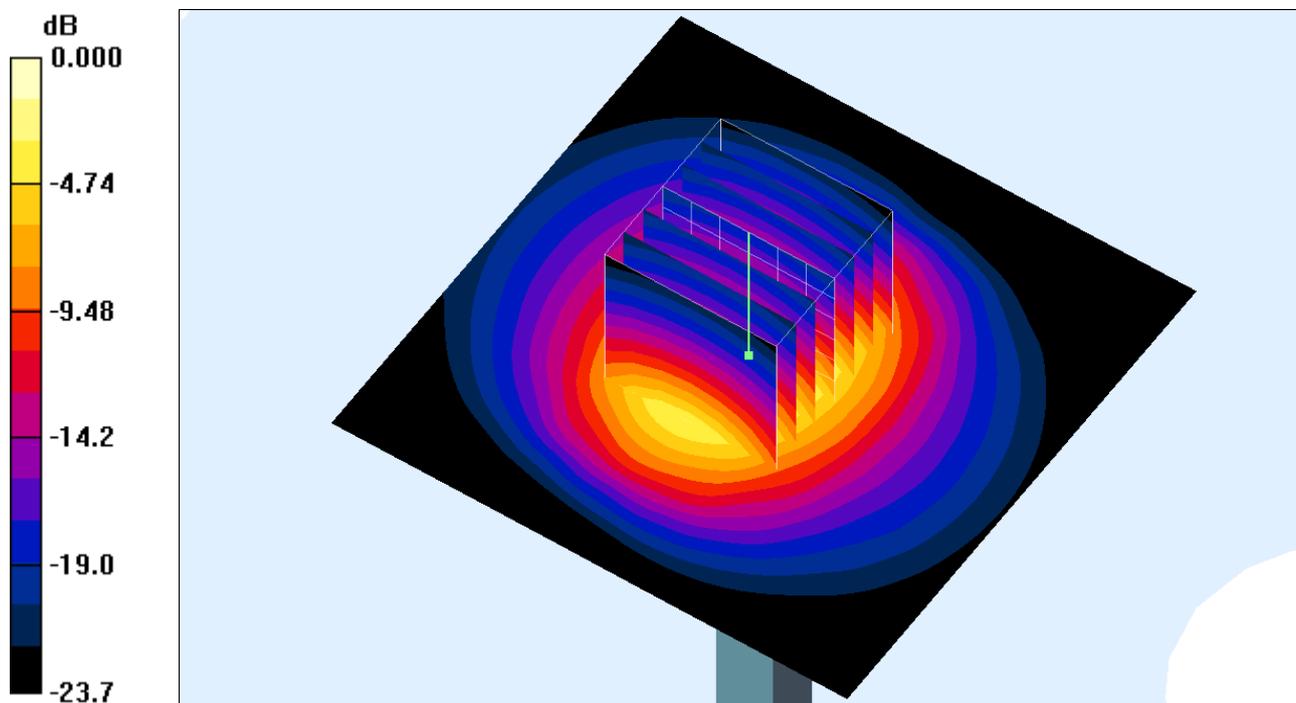
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.3 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 31.6 W/kg

SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.16 mW/g

Maximum value of SAR (measured) = 15.8 mW/g



0 dB = 15.8mW/g

System Check_Body_2450MHz_120214

DUT: Dipole 2450 MHz

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

Medium: MSL_2450_120214 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.2 °C; Liquid Temperature : 21.2 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3831; ConvF(6.82, 6.82, 6.82); Calibrated: 2012-01-04
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2011-06-24
- Phantom: SAM_Right; Type: SAM; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 16.0 mW/g

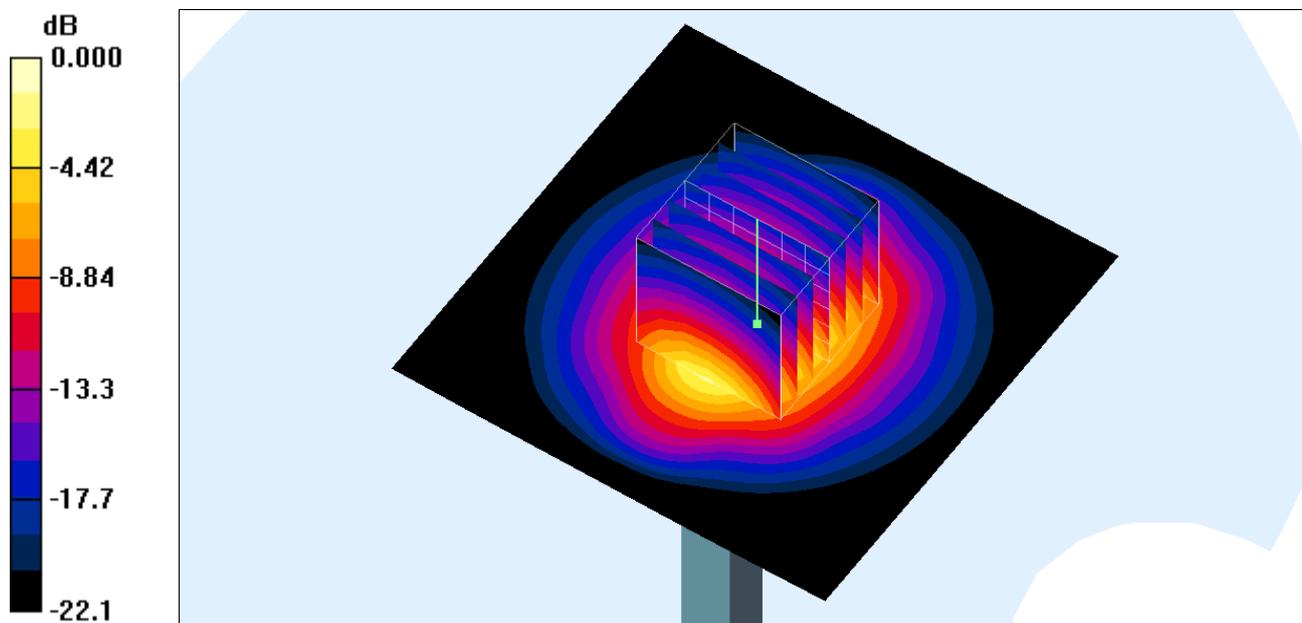
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.0 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 28.8 W/kg

SAR(1 g) = 14 mW/g; SAR(10 g) = 6.45 mW/g

Maximum value of SAR (measured) = 16.1 mW/g



System Check_Body_2450MHz_120218

DUT: Dipole 2450 MHz

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

Medium: MSL2450_120218 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.4 °C; Liquid Temperature : 21.4 °C

DASY4 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-05-20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn495; Calibrated: 2011-04-28

- Phantom: SAM_Right; Type: SAM; Serial: TP-1303

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 16.8 mW/g

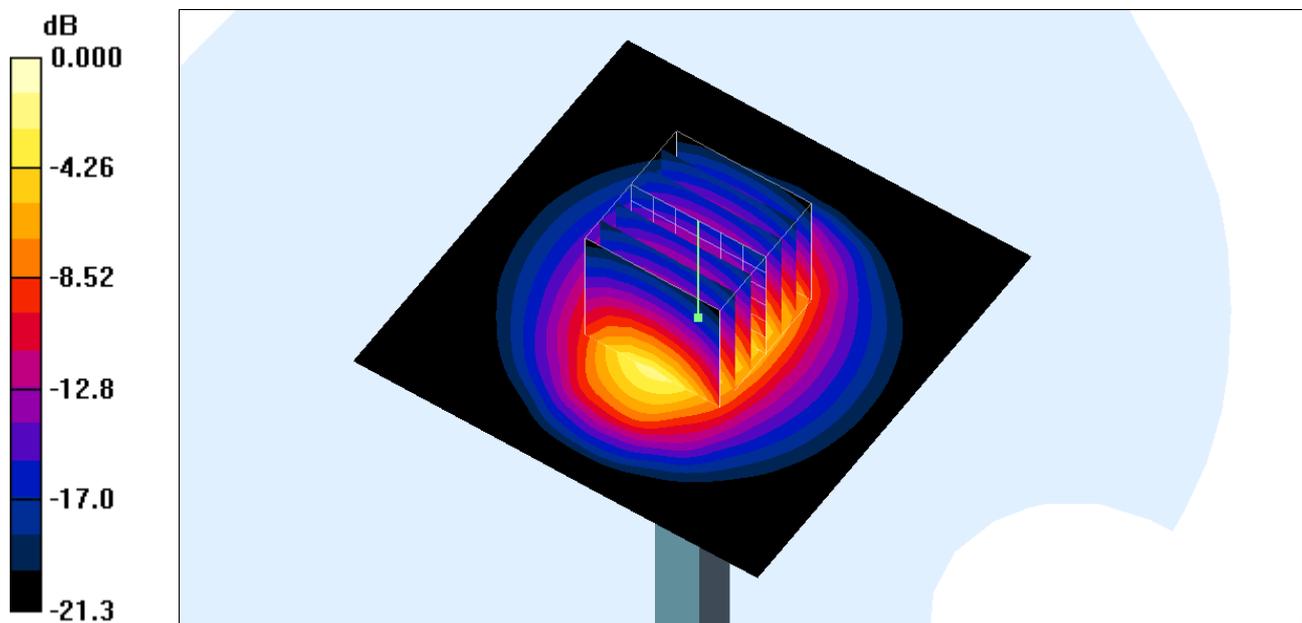
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.6 V/m; Power Drift = -0.123 dB

Peak SAR (extrapolated) = 36.4 W/kg

SAR(1 g) = 14.8 mW/g; SAR(10 g) = 6.78 mW/g

Maximum value of SAR (measured) = 16.3 mW/g



System Check_Body_2450MHz_120303

DUT: Dipole 2450 MHz

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

Medium: MSL_2450_120303 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.4 °C ; Liquid Temperature : 21.4 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(6.67, 6.67, 6.67); Calibrated: 2011-06-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2011-06-20
- Phantom: SAM_Right; Type: SAM; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 16.0 mW/g

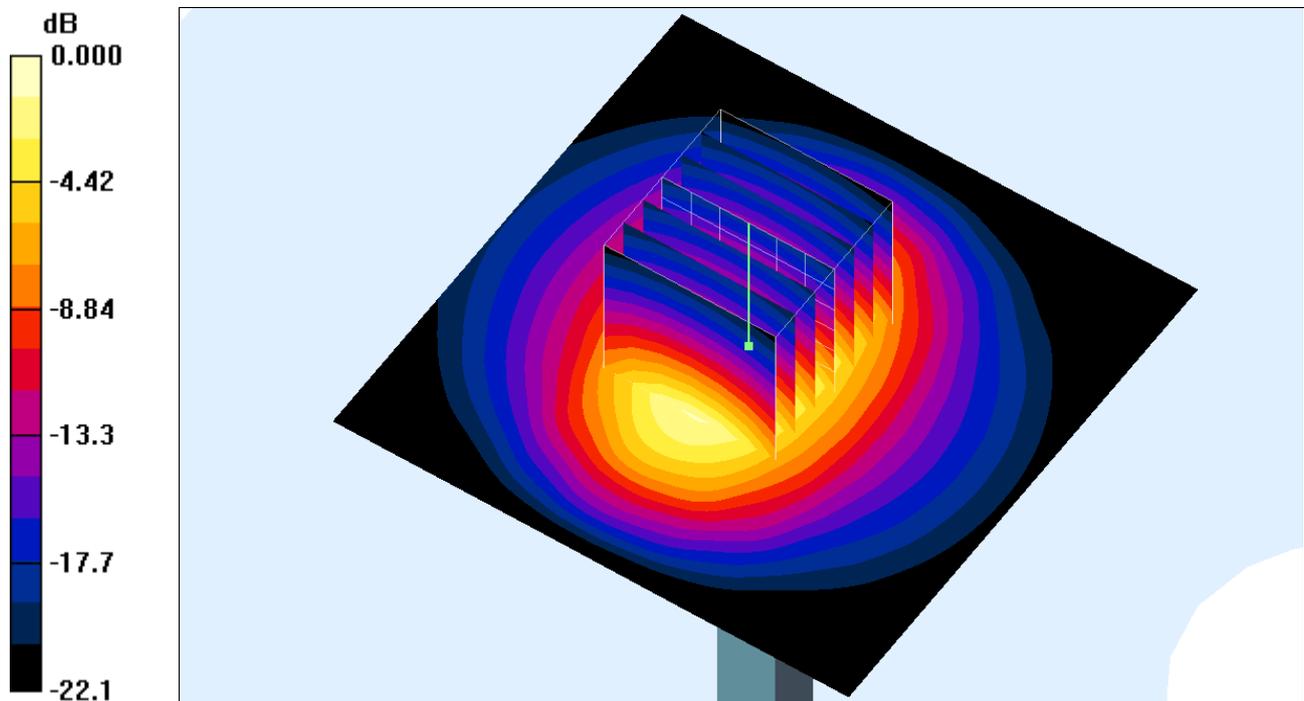
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.0 V/m; Power Drift = 0.143 dB

Peak SAR (extrapolated) = 30.8 W/kg

SAR(1 g) = 14.1 mW/g; SAR(10 g) = 6.7 mW/g

Maximum value of SAR (measured) = 15.6 mW/g



0 dB = 15.6mW/g