Appendix A. Plots of System Performance Check

The plots are shown as follows.

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 03.03.2012

System Check_Head_835MHz_120303

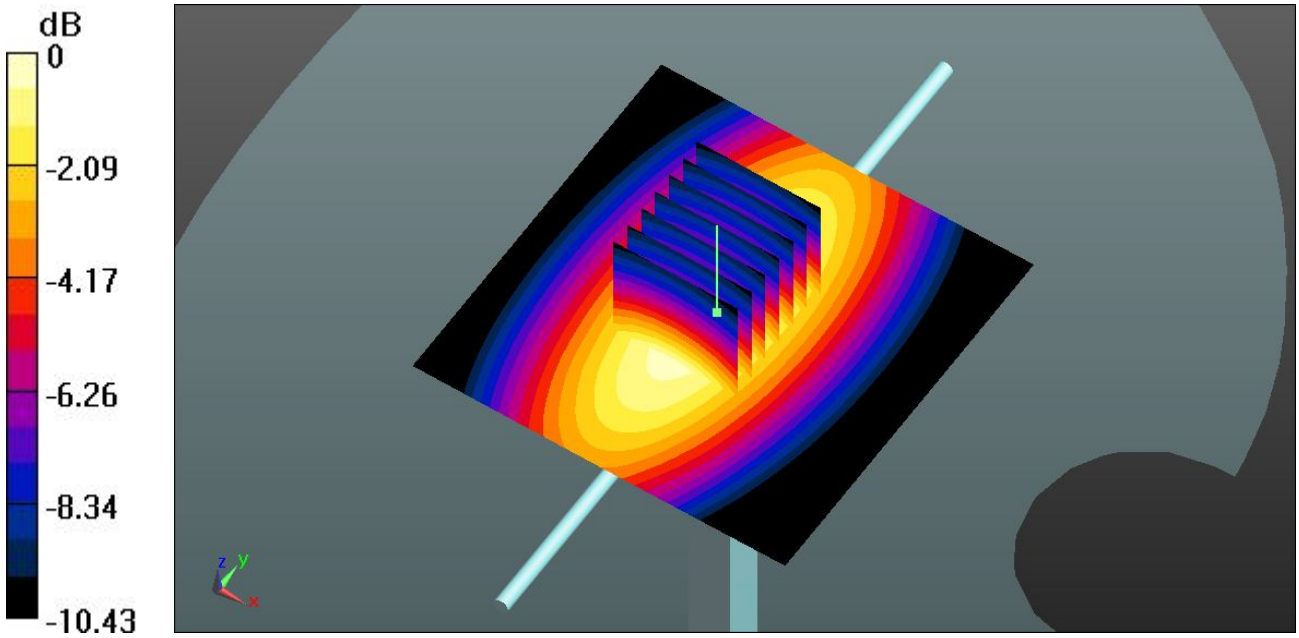
DUT: Dipole 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL_835_120303 Medium parameters used: f = 835 MHz; σ = 0.915 mho/m; ε_r = 41.529; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：21.4 ℃

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: 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) = 2.566 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.812 V/m; Power Drift = -0.0058 dB
Peak SAR (extrapolated) = 3.6050
SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.56 mW/g
Maximum value of SAR (measured) = 2.571 mW/g



0 dB = 2.570mW/g = 8.20 dB mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 02.03.2012

System Check_Body_835MHz_120302

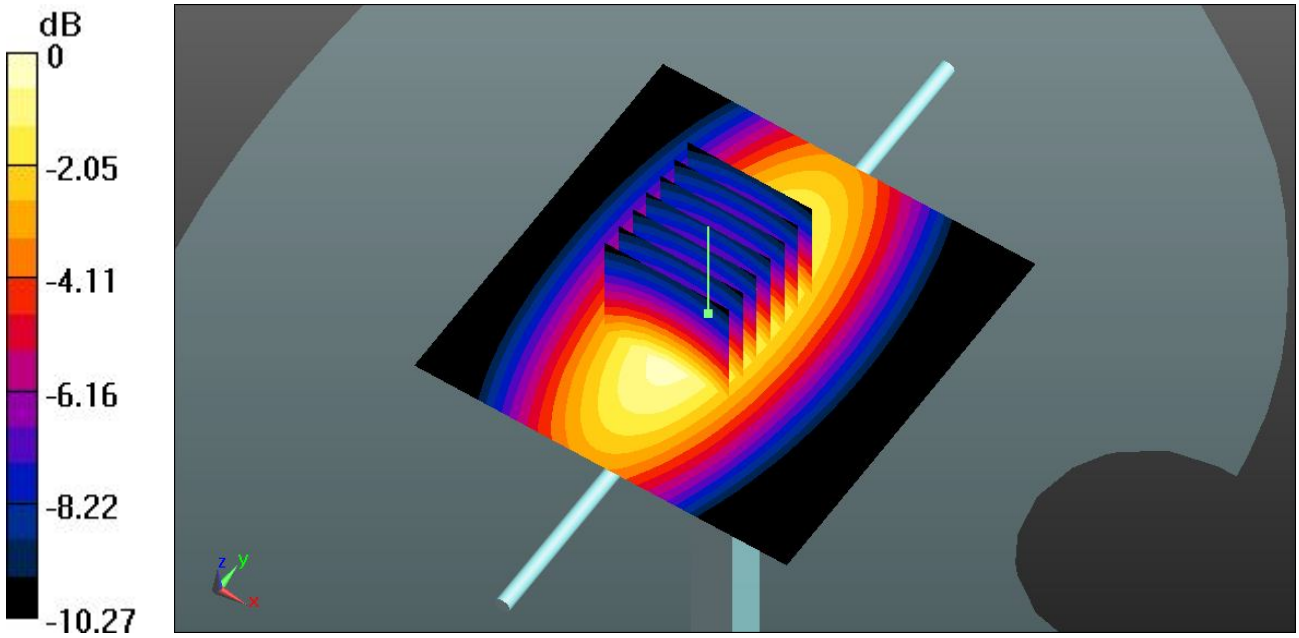
DUT: Dipole 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: MSL_835_120302 Medium parameters used: f = 835 MHz; σ = 0.976 mho/m; ε_r = 54.36; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：21.6 ℃

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) = 2.480 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.106 V/m; Power Drift = 0.0072 dB
Peak SAR (extrapolated) = 3.4660
SAR(1 g) = 2.31 mW/g; SAR(10 g) = 1.51 mW/g
Maximum value of SAR (measured) = 2.488 mW/g



0 dB = 2.490mW/g = 7.92 dB mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 03.03.2012

System Check_Head_1800MHz_120303

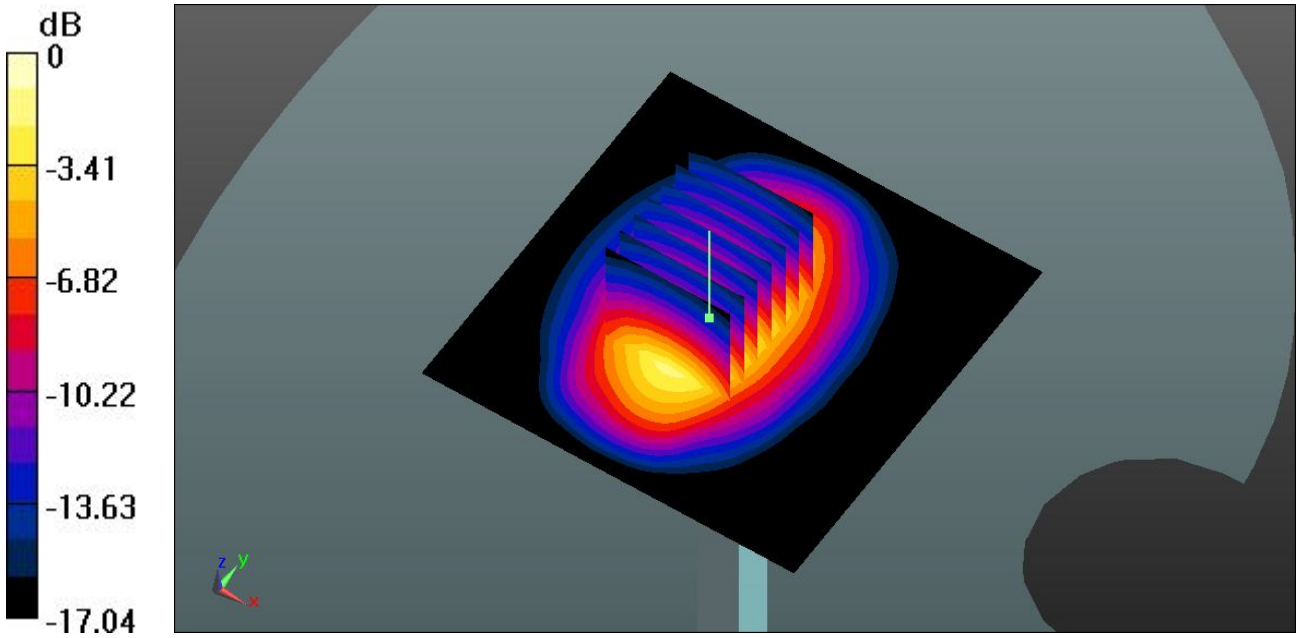
DUT: Dipole 1800 MHz

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium: HSL_1800_120303 Medium parameters used: f = 1800 MHz; σ = 1.44 mho/m; ε_r = 41.065; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature：21.5 ℃

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) = 11.244 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 83.253 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 18.1730
SAR(1 g) = 9.8 mW/g; SAR(10 g) = 5.14 mW/g
Maximum value of SAR (measured) = 10.997 mW/g



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

System Check_Body_1800MHz_120302

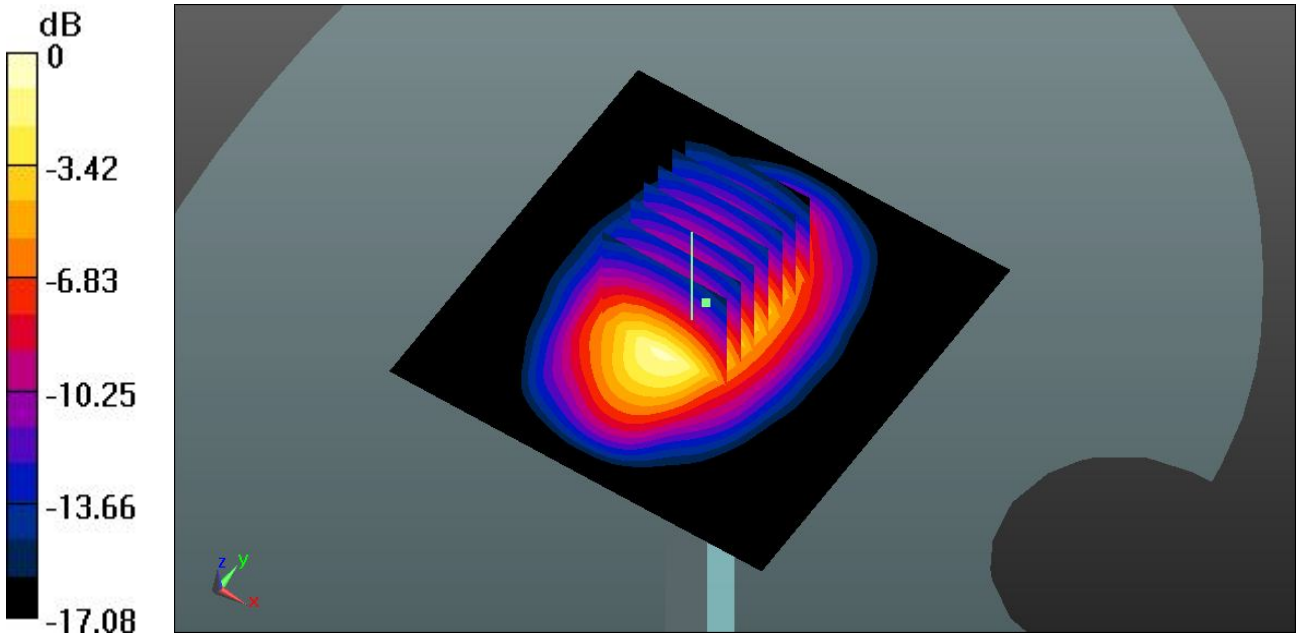
DUT: Dipole 1800 MHz

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium: MSL_1800_120302 Medium parameters used: f = 1800 MHz; σ = 1.576 mho/m; ε_r = 55.127; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：21.7 ℃

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) = 11.801 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) = 18.7230
SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.38 mW/g
Maximum value of SAR (measured) = 11.554 mW/g



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

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 01.03.2012

System Check_Head_1900MHz_120301

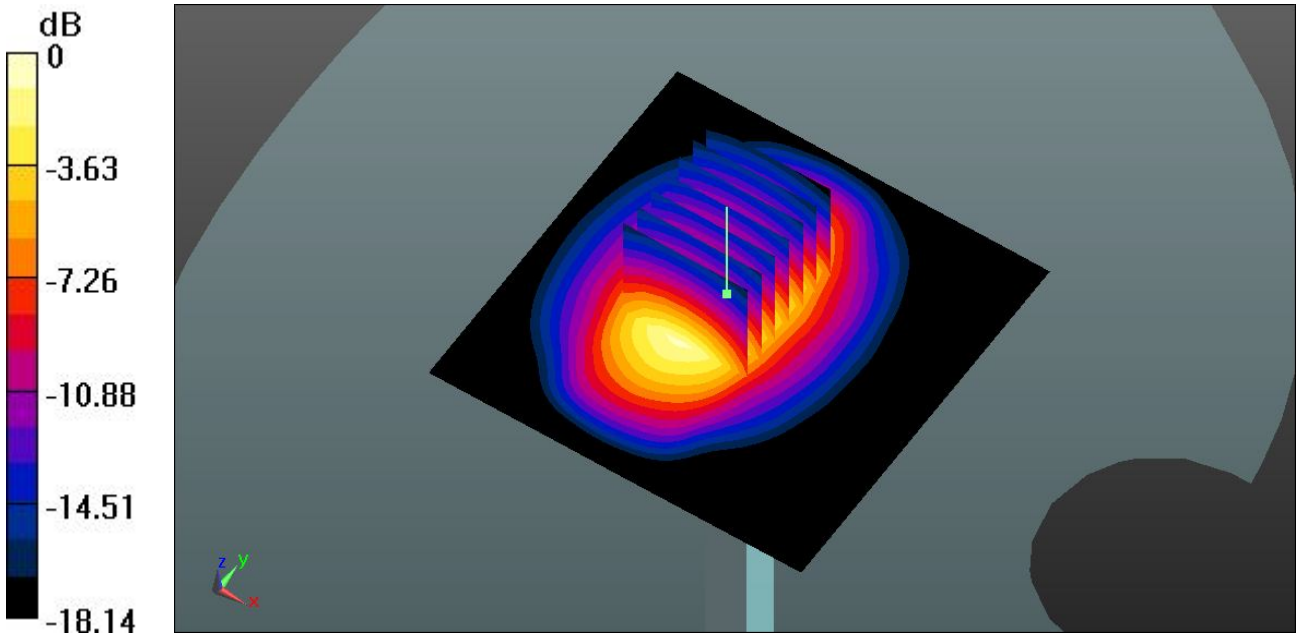
DUT: Dipole 1900 MHz

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900_120301 Medium parameters used: f = 1900 MHz; σ = 1.427 mho/m; ε_r = 41.191; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：21.4 ℃

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) = 12.158 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 78.700 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 19.5030
SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.34 mW/g
Maximum value of SAR (measured) = 11.553 mW/g



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

System Check_Body_1900MHz_120301

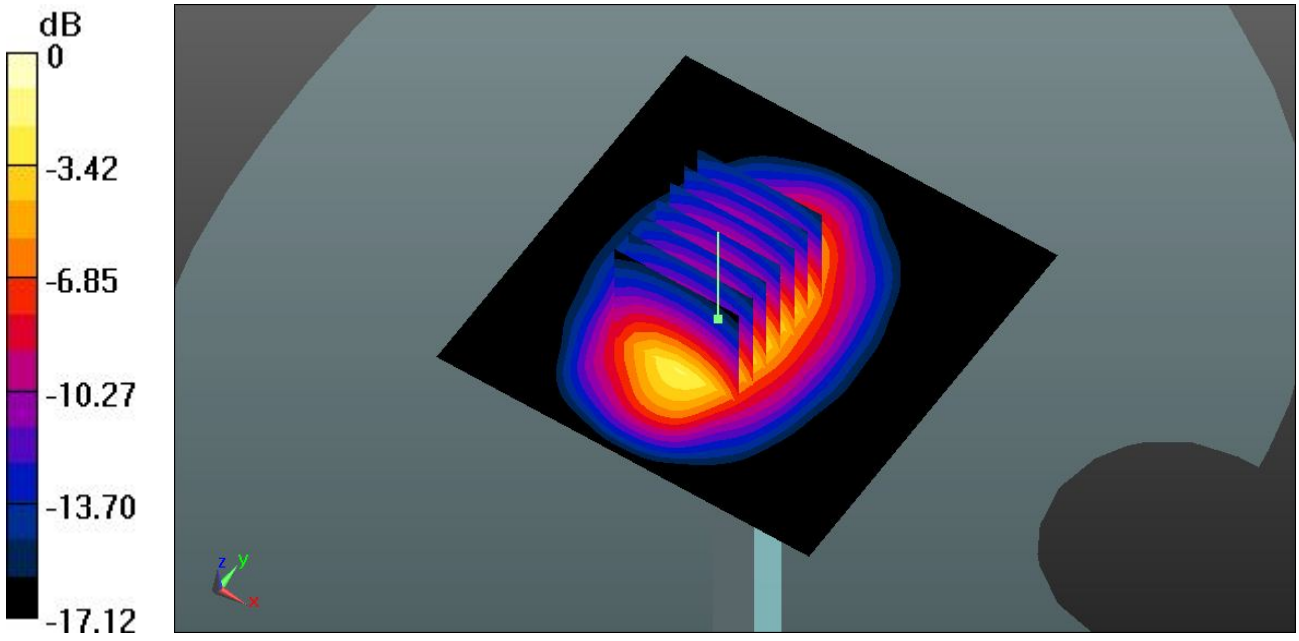
DUT: Dipole 1900 MHz

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: MSL_1900_120301 Medium parameters used: f = 1900 MHz; σ = 1.525 mho/m; ε_r = 54.504; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：21.3 ℃

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) = 12.416 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 86.036 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 19.2320
SAR(1 g) = 10.5 mW/g; SAR(10 g) = 5.47 mW/g
Maximum value of SAR (measured) = 11.702 mW/g



0 dB = 11.700mW/g = 21.36 dB mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 06.03.2012

System Check_Head_2450MHz_120306

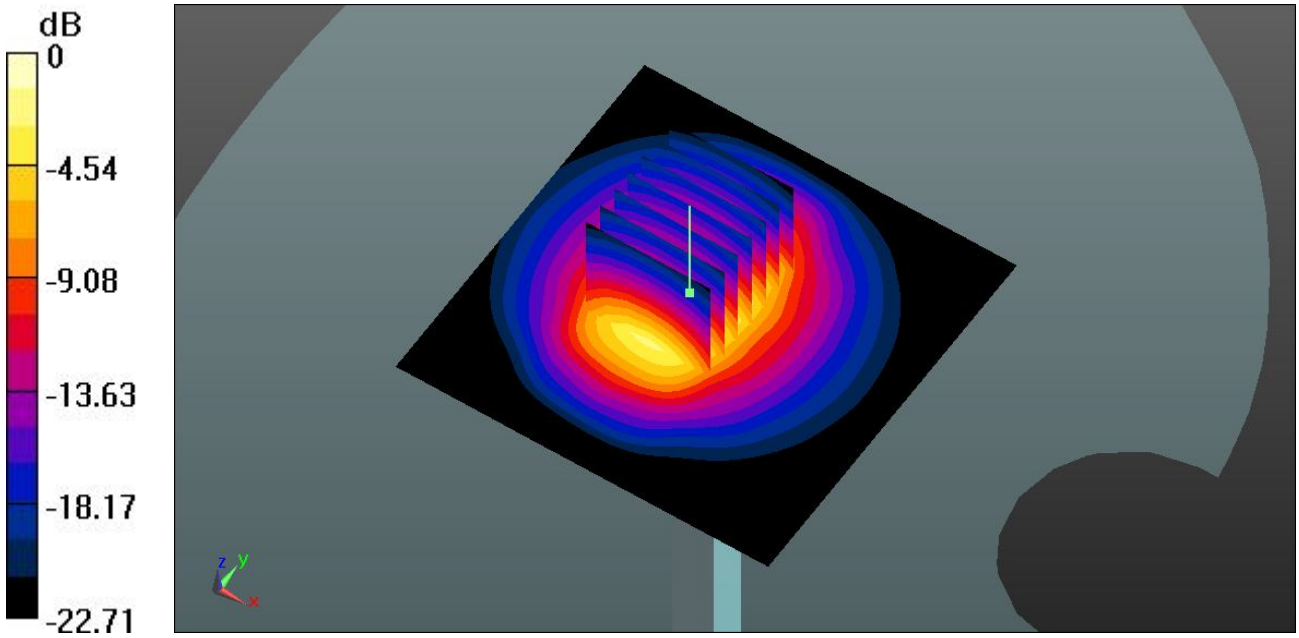
DUT: Dipole 2450 MHz

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL_2450_120306 Medium parameters used: f = 2450 MHz; σ = 1.857 mho/m; ε_r = 37.67; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：21.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3819; ConvF(7.33, 7.33, 7.33); 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) = 15.740 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 79.187 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 28.8440
SAR(1 g) = 13.4 mW/g; SAR(10 g) = 6.09 mW/g
Maximum value of SAR (measured) = 15.177 mW/g



0 dB = 15.180mW/g = 23.63 dB mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 06.03.2012

System Check_Body_2450MHz_120306

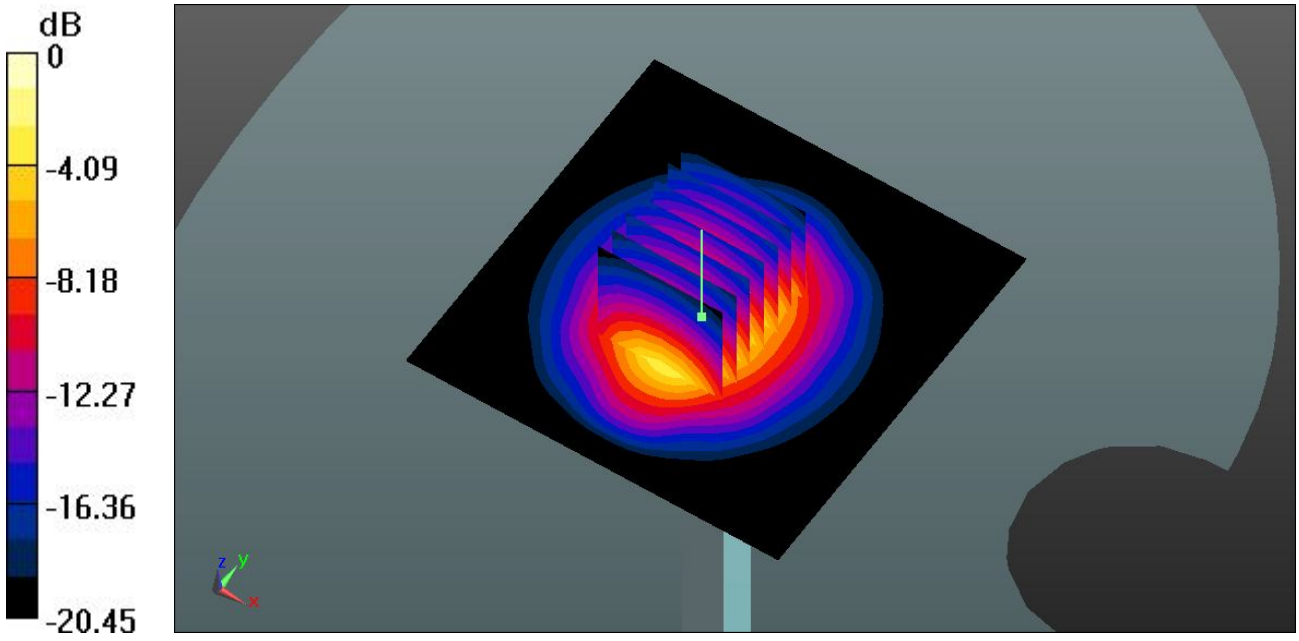
DUT: Dipole 2450 MHz

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: MSL_2450_120306 Medium parameters used: f = 2450 MHz; σ = 1.939 mho/m; ε_r = 53.98; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：21.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3819; ConvF(7.4, 7.4, 7.4); 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) = 14.842 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 86.533 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 25.3440
SAR(1 g) = 12.8 mW/g; SAR(10 g) = 6.05 mW/g
Maximum value of SAR (measured) = 14.690 mW/g



0 dB = 14.690mW/g = 23.34 dB mW/g