APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

Date/Time: 3/30/2010 5:53:43 PM

Test Laboratory: RIM TESTING SERVICES
File Name:
DipoleValidation_835MHz_Amb_Tem_23.5_Liq_Tem_22.4C_03_30_10.da4

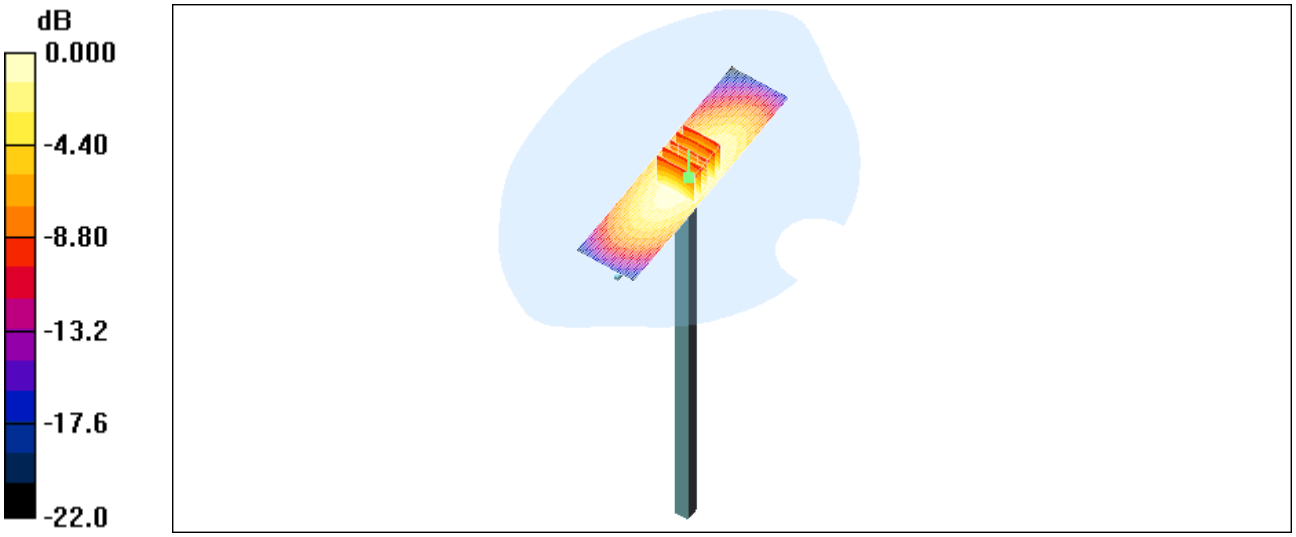
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446
Program Name: System Performance Check at 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.886 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3225; ConvF(6.12, 6.12, 6.12); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 107.3 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 13.8 W/kg
SAR(1 g) = 9.31 mW/g; SAR(10 g) = 6.11 mW/g
Maximum value of SAR (measured) = 10.0 mW/g

d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 10.0 mW/g



0 dB = 10.0mW/g

Date/Time: 3/29/2010 11:29:55 AM

Test Laboratory: RIM TESTING SERVICES
File Name:
DipoleValidation_1800MHz_Amb_Tem_22.7_Liq_Tem_20.9C_03_29_10.da4

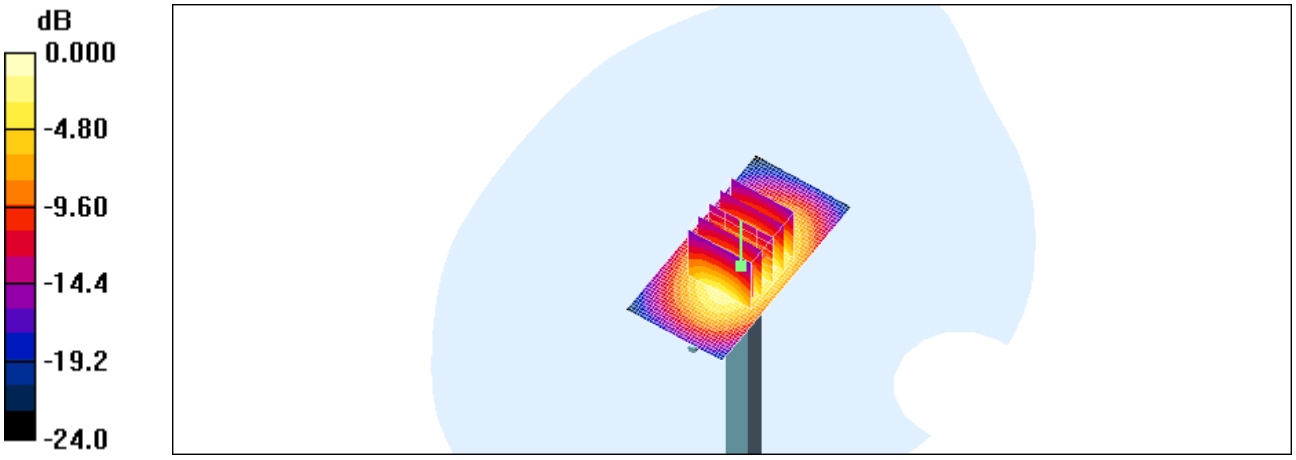
DUT: Dipole 1800 MHz; Type: D1800V2;
Program Name: System Performance Check at 1800 MHz

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.37 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3225; ConvF(5.14, 5.14, 5.14); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 177.2 V/m; Power Drift = 0.009 dB
Peak SAR (extrapolated) = 67.1 W/kg
SAR(1 g) = 37.5 mW/g; SAR(10 g) = 19.9 mW/g
Maximum value of SAR (measured) = 41.9 mW/g

d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 42.2 mW/g



0 dB = 42.2mW/g

Date/Time: 3/24/2010 8:39:21 PM

Test Laboratory: RIM TESTING SERVICES
File Name:
DipoleValidation_1900MHz_Amb_Tem_22.7_Liq_Tem_22.3_C_03_24_10.da4

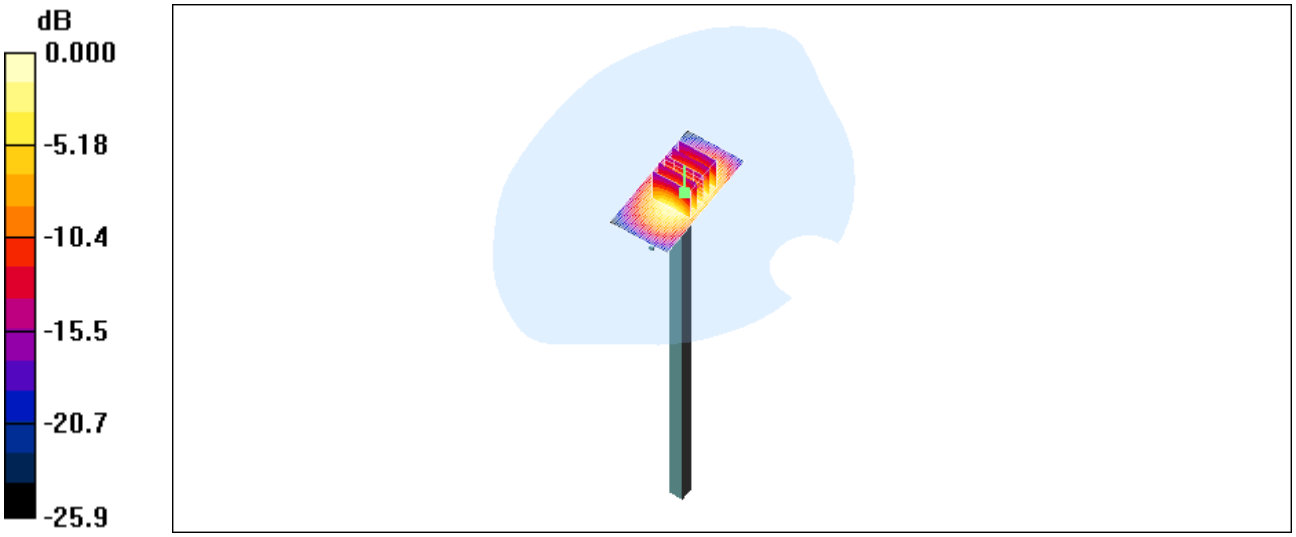
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545
Program Name: System Performance Check at 1900 MHz

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.43 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3225; ConvF(5.14, 5.14, 5.14); Calibrated: 12/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 180.3 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 76.9 W/kg
SAR(1 g) = 40.9 mW/g; SAR(10 g) = 21 mW/g
Maximum value of SAR (measured) = 46.2 mW/g

d=15mm, Pin=1000mW/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 46.4 mW/g



0 dB = 46.4mW/g

Date/Time: 3/11/2010 3:45:15 PM

Test Laboratory: RIM TESTING SERVICES
File Name: DipoleValidation_2450MHz_Amb_Tem_23.0_Liq_Tem_22.5C.da4

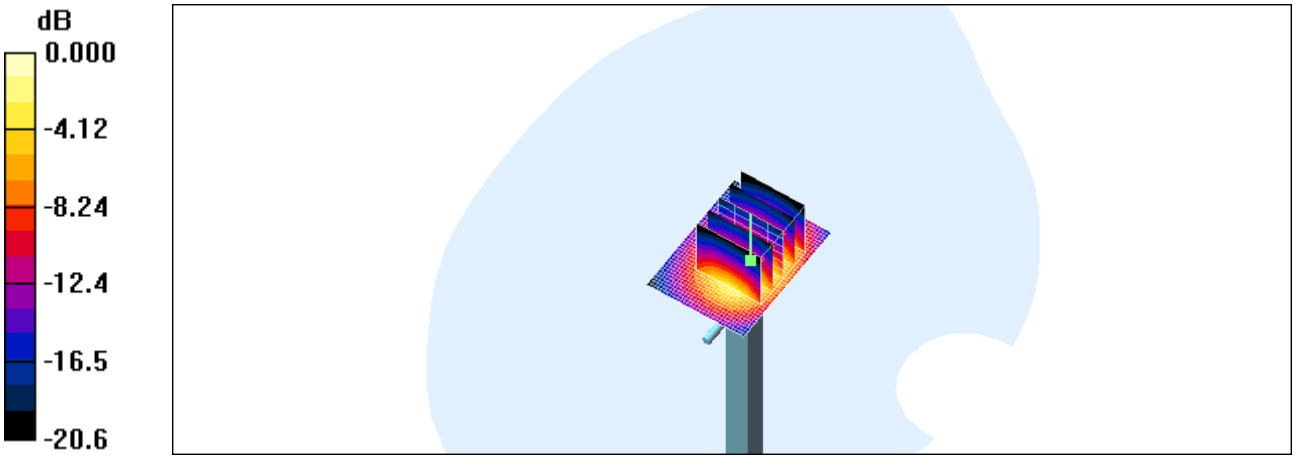
DUT: Dipole 2450 MHz; Type: D2450V2 - SN:747
Program Name: System Performance Check at 2450 MHz

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.88 mho/m; ε_r = 37.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1644; ConvF(4.5, 4.5, 4.5); Calibrated: 11/11/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 188.3 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 126.3 W/kg
SAR(1 g) = 55.9 mW/g; SAR(10 g) = 25.7 mW/g
Maximum value of SAR (measured) = 62.0 mW/g

d=15mm, Pin=1000mW/Area Scan (31x41x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 63.7 mW/g



0 dB = 63.7mW/g