APPENDIX C2: SAR DISTRIBUTION PLOTS FOR HOT SPOT CONFIGURATION

GPRS 850

Date: 3/14/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2AB02A49

Configuration: Mobile Hot Spot MSL - GPRS 850

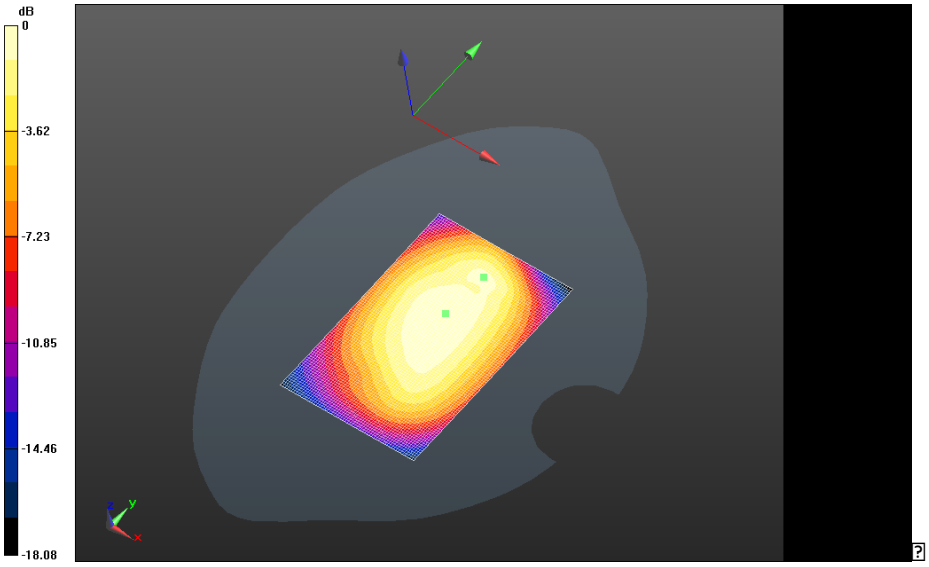
Communication System: GPRS 850; Communication System Band: GPRS 850; Frequency: 836.8 MHz
Medium Parameters used: f=836.8 MHz; σ = 0.977 S/m; ε_r = 54.597; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF: (6.12,6.12,6.12); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_chan190_amb_temp_23.4C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 30.269 V/m; **Power Drift = 0.283 dB**

Fast SAR: SAR(1g) = 0.781 W/kg; SAR(10g) = 0.544 W/kg; Secondary SAR(1g) = 0.629 W/kg
Maximum value of SAR (interpolated) = 0.887 W/kg



0 dB = 0.887 W/kg = -0.52 dBW/kg

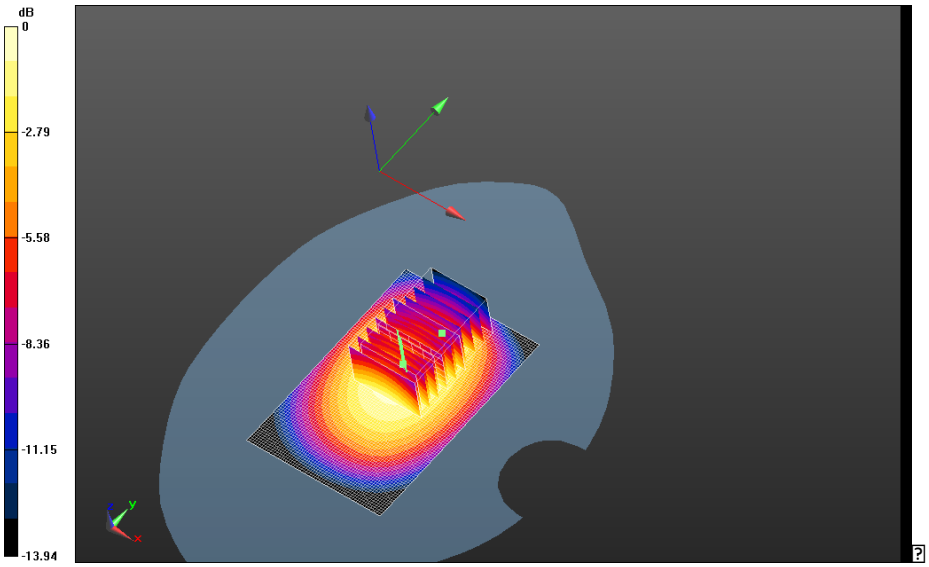
Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 36.033 V/m; **Power Drift = -0.018 dB**

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan (31x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 36.033 V/m; **Power Drift = -0.018 dB**

Averaged SAR: SAR(1g) = 1.14 W/kg; SAR(10g) = 0.838 W/kg
Maximum value of SAR (interpolated) = 1.49 W/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan 2 (26x41x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 36.033 V/m; **Power Drift = -0.040 dB**

Averaged SAR: SAR(1g) = 1.14 W/kg; SAR(10g) = 0.833 W/kg
Maximum value of SAR (interpolated) = 1.51 W/kg

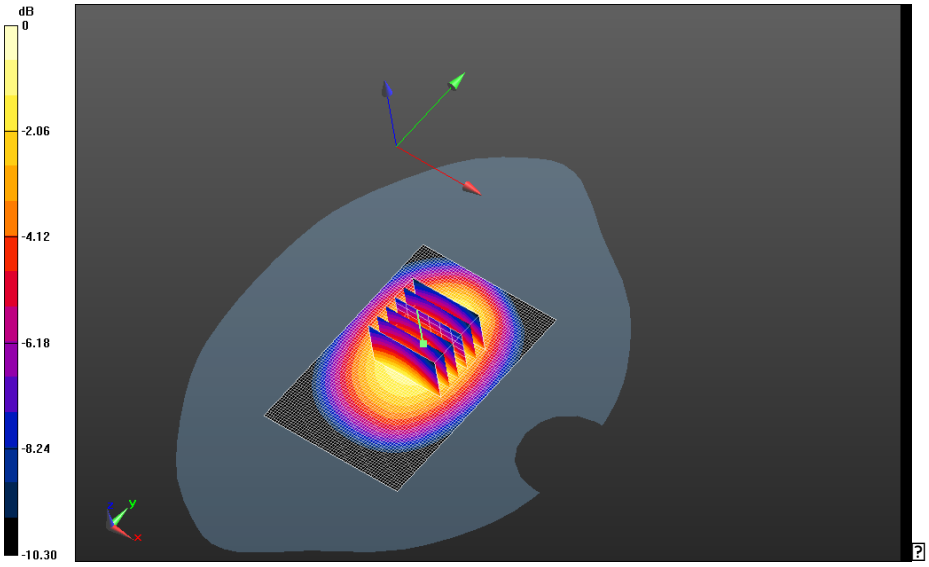


0 dB = 0.710 W/kg = -1.49 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan128_amb_temp_23.6C_liq_temp_21.7C_2nd scan/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 36.009 V/m; **Power Drift = -0.0061 dB**

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan128_amb_temp_23.6C_liq_temp_21.7C_2nd scan/Zoom Scan (31x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 36.009 V/m; **Power Drift = -0.0061 dB**

Averaged SAR: SAR(1g) = 1.15 W/kg; SAR(10g) = 0.845 W/kg
Maximum value of SAR (interpolated) = 1.52 W/kg



0 dB = 1.25 W/kg = 0.97 dBW/kg

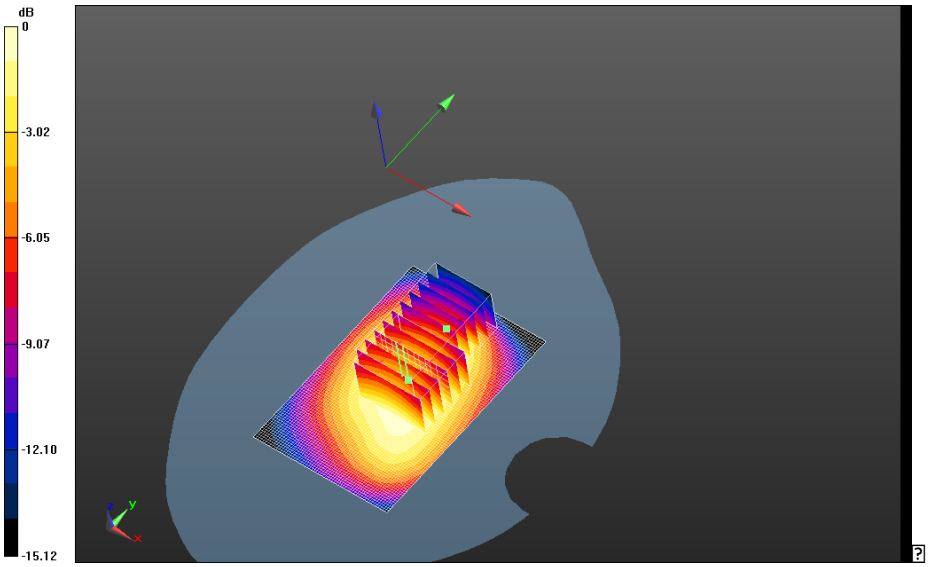
Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan190_amb_temp_23.4C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 33.544 V/m; **Power Drift = 0.090 dB**

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan190_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan (31x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 33.544 V/m; **Power Drift = 0.090 dB**

Averaged SAR: SAR(1g) = 0.957 W/kg; SAR(10g) = 0.706 W/kg
Maximum value of SAR (interpolated) = 1.24 W/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan190_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan 2 (26x46x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 33.544 V/m; **Power Drift = 0.00689 dB**

Averaged SAR: SAR(1g) = 0.949 W/kg; SAR(10g) = 0.700 W/kg
Maximum value of SAR (interpolated) = 1.25 W/kg



0 dB = 1.29 W/kg = 1.11 dBW/kg

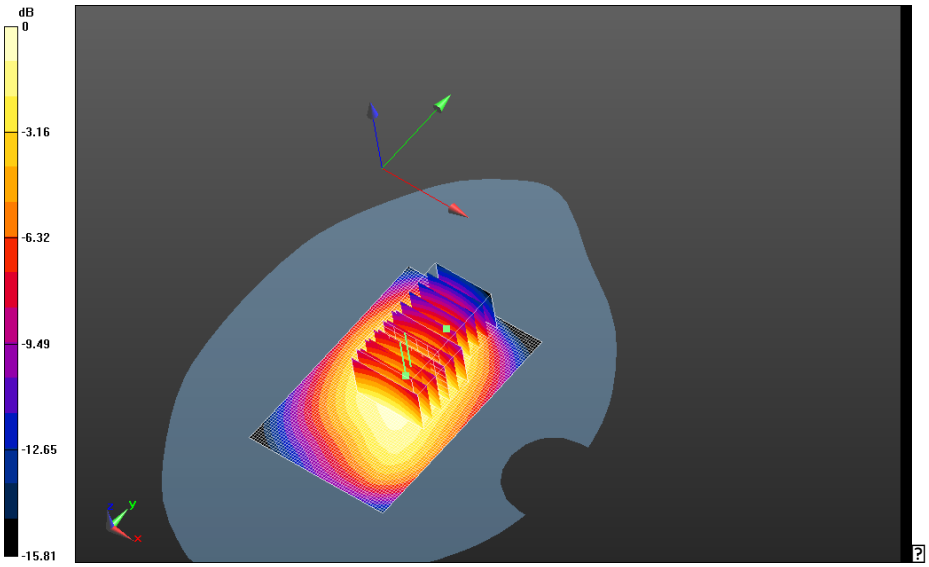
Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan251_amb_temp_23.4C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 31.315 V/m; **Power Drift = -0.071 dB**

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan251_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan (31x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 31.315 V/m; **Power Drift = -0.071 dB**

Averaged SAR: SAR(1g) = 0.845 W/kg; SAR(10g) = 0.619 W/kg
Maximum value of SAR (interpolated) = 1.11 W/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_3-slot_chan251_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan 2 (26x46x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 31.315 V/m; **Power Drift = -0.043 dB**

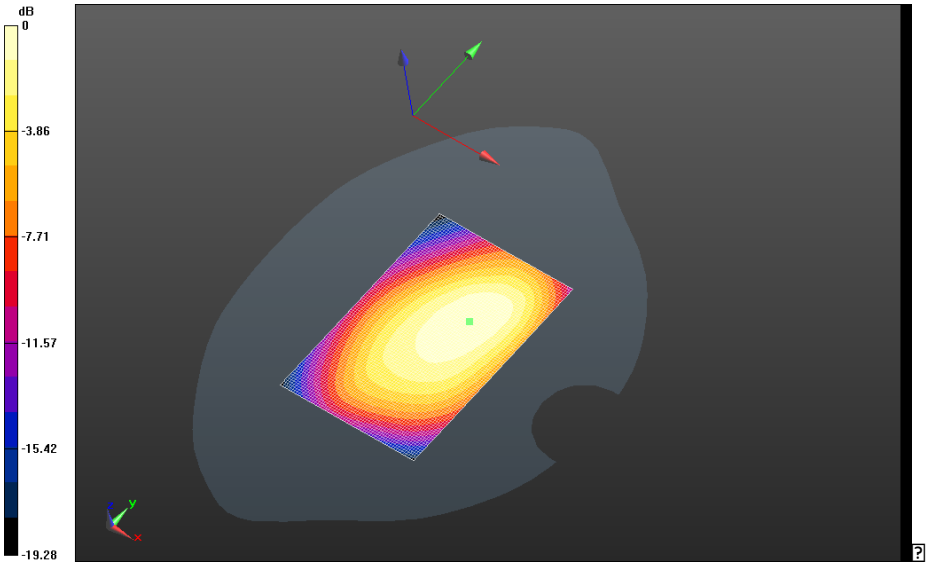
Averaged SAR: SAR(1g) = 0.846 W/kg; SAR(10g) = 0.616 W/kg
Maximum value of SAR (interpolated) = 1.11 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Front -GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.4C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 30.310 V/m; **Power Drift = -0.00342 dB**

Fast SAR: SAR(1g) = 0.870 W/kg; SAR(10g) = 0.601 W/kg; Secondary SAR(1g) = 0.641 W/kg
Maximum value of SAR (interpolated) = 0.990 W/kg

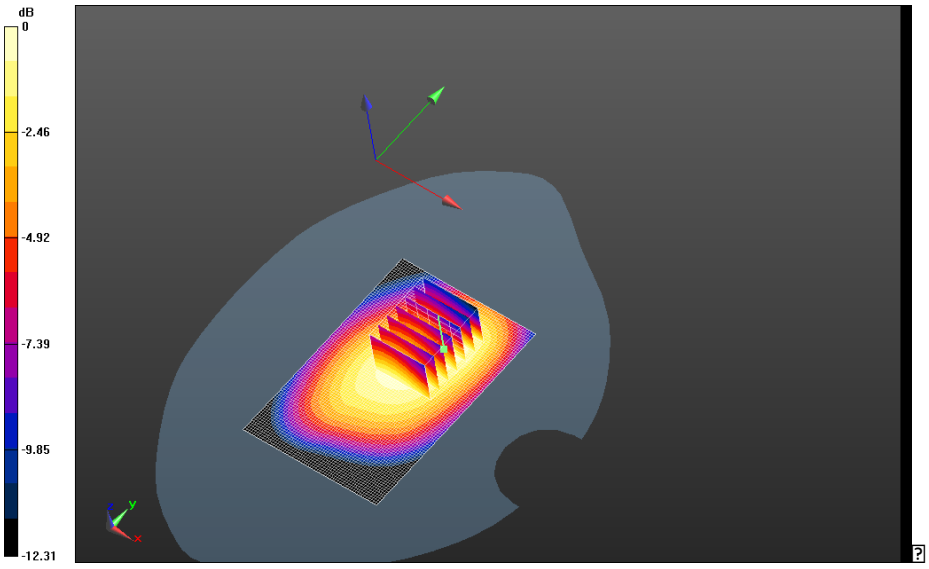


0 dB = 0.936 W/kg = -0.29 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Front -GPRS 850_3-slot_chan190_amb_temp_23.4C_liq_temp_21.4C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 30.635 V/m; **Power Drift = 0.083 dB**

Mobile Hot Spot MSL - GPRS 850/10mm Device Front -GPRS 850_3-slot_chan190_amb_temp_23.4C_liq_temp_21.4C/Zoom Scan (26x31x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 30.635 V/m; **Power Drift = 0.083 dB**

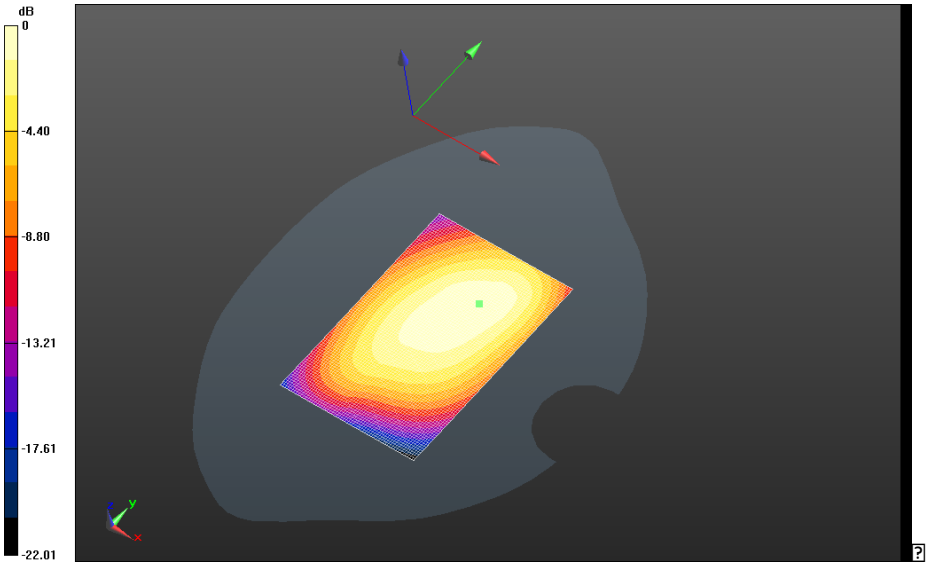
Averaged SAR: SAR(1g) = 0.921 W/kg; SAR(10g) = 0.675 W/kg
Maximum value of SAR (interpolated) = 1.27 W/kg



0 dB = 0.990 W/kg = -0.04 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Front -GPRS 850_3-slot_chan251_amb_temp_23.3C_liq_temp_21.4C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.251 V/m; **Power Drift = 0.014 dB**

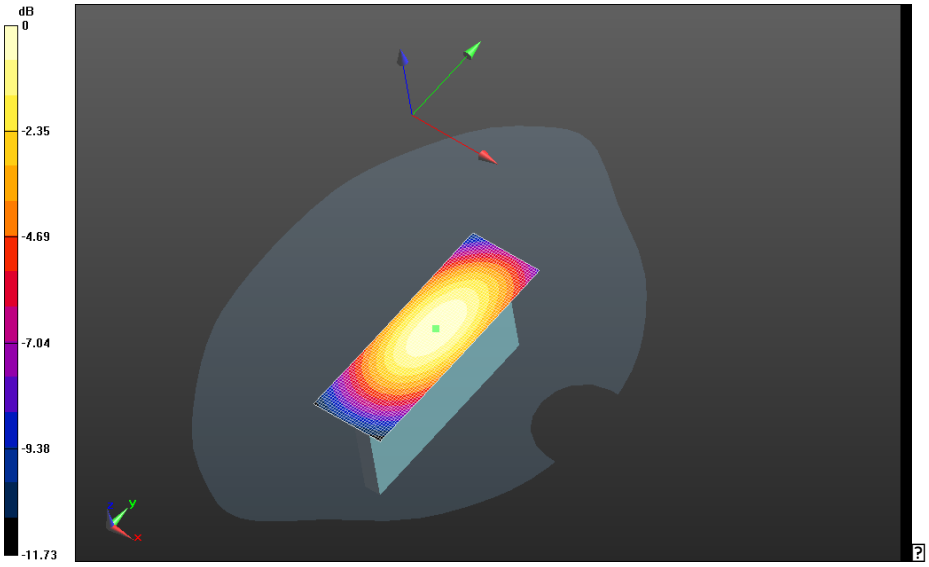
Fast SAR: SAR(1g) = 0.839 W/kg; SAR(10g) = 0.575 W/kg; Secondary SAR(1g) = 0.641 W/kg
Maximum value of SAR (interpolated) = 0.962 W/kg



0 dB = 1.03 W/kg = 0.13 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Left - GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.4C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 26.406 V/m; **Power Drift = -0.020 dB**

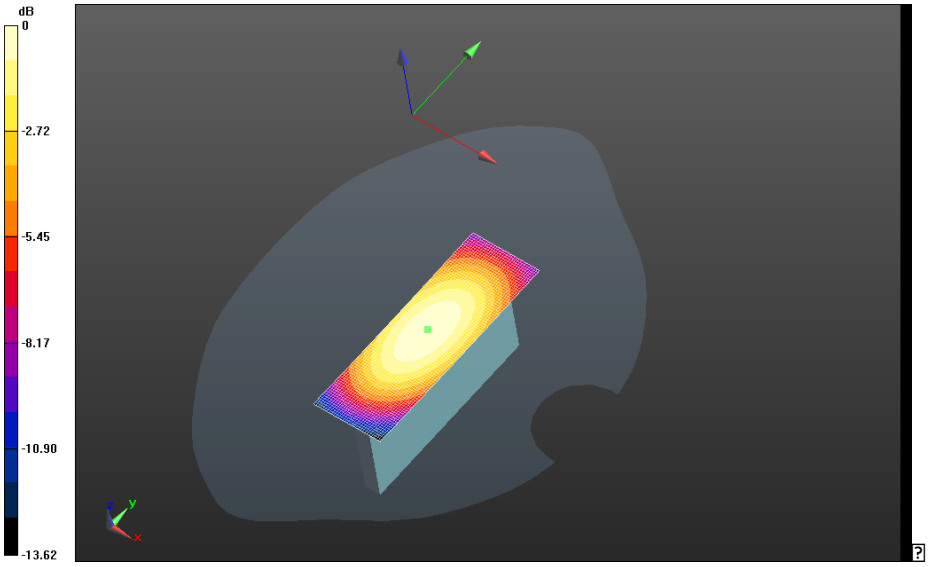
Fast SAR: SAR(1g) = 0.540 W/kg; SAR(10g) = 0.366 W/kg; Secondary SAR(1g) = 0.641 W/kg
Maximum value of SAR (interpolated) = 0.613 W/kg



0 dB = 0.962 W/kg = -0.17 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Right - GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.4C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 27.173 V/m; **Power Drift = -0.00814 dB**

Fast SAR: SAR(1g) = 0.576 W/kg; SAR(10g) = 0.393 W/kg; Secondary SAR(1g) = 0.641 W/kg
Maximum value of SAR (interpolated) = 0.655 W/kg

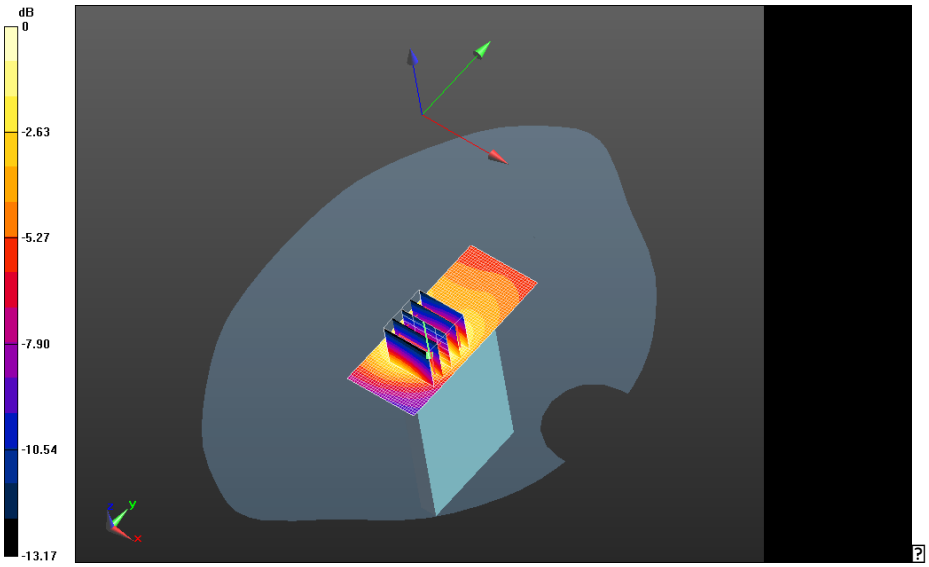


0 dB = 0.613 W/kg = -2.13 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Bottom - GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.5C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.153 W/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Bottom - GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.742 V/m; **Power Drift = -0.034 dB**

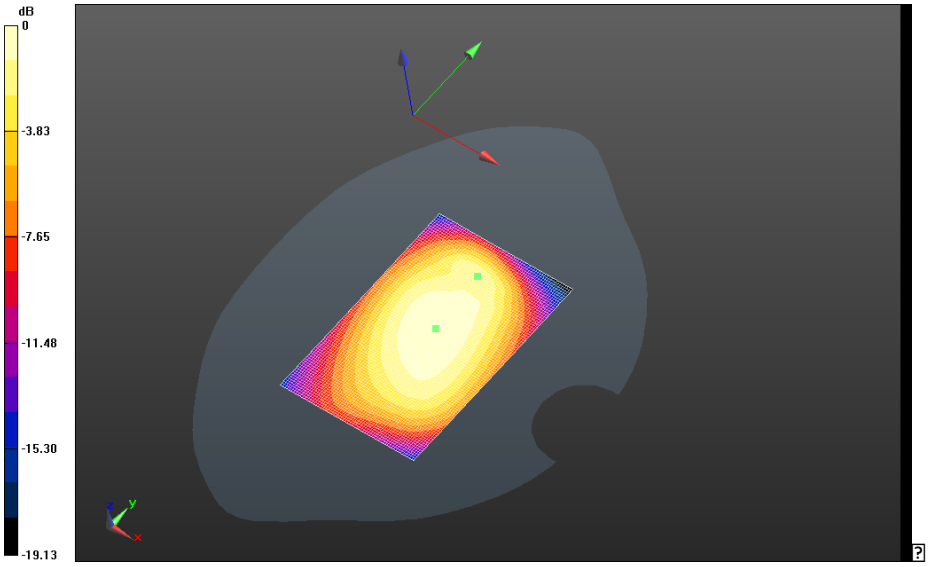
Averaged SAR: SAR(1g) = 0.123 W/kg; SAR(10g) = 0.0707 W/kg
Maximum value of SAR (interpolated) = 0.229 W/kg



0 dB = 0.155 W/kg = -8.10 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back+HS - GPRS 850_3-slot_chan128_amb_temp_23.4C_liq_temp_21.4C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 32.156 V/m; **Power Drift = 0.035 dB**

Fast SAR: SAR(1g) = 0.838 W/kg; SAR(10g) = 0.586 W/kg; Secondary SAR(1g) = 0.641 W/kg
Maximum value of SAR (interpolated) = 0.951 W/kg

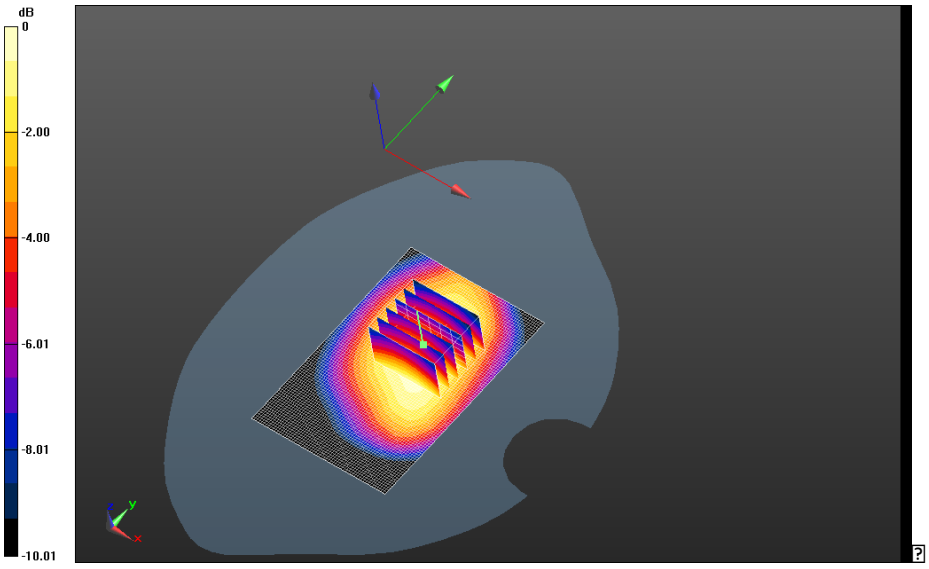


0 dB = 0.655 W/kg = -1.84 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_4-slot_chan190_amb_temp_23.4C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 27.638 V/m; **Power Drift = -0.082 dB**

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS 850_4-slot_chan190_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan (31x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 27.638 V/m; **Power Drift = -0.082 dB**

Averaged SAR: SAR(1g) = 0.698 W/kg; SAR(10g) = 0.517 W/kg
Maximum value of SAR (interpolated) = 0.910 W/kg



0 dB = 0.951 W/kg = -0.22 dBW/kg

UMTS Band V

Date: 3/15/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2AB02A49

Configuration: Mobile Hot Spot MSL - UMTS Band V

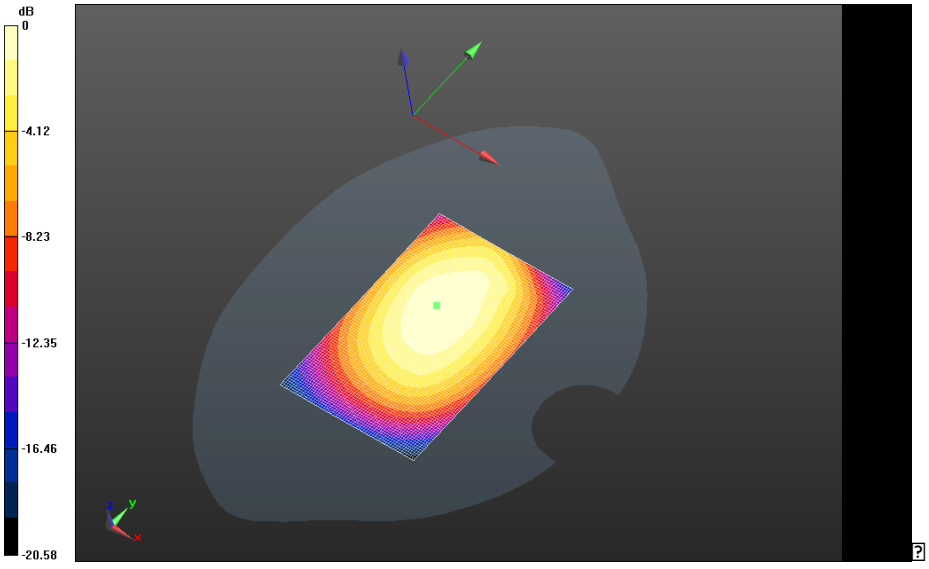
Communication System: WCDMA FDD V; Communication System Band: UMTS band V;
Frequency: 826.4 MHz
Medium Parameters used: f=826.4 MHz; σ = 0.965 S/m; ε_r = 53.050; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF: (6.12,6.12,6.12); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Mobile Hot Spot MSL - UMTS Band V/10mm Device Back - UMTS_Band_V_chan4132_amb_temp_23.3C_liq_temp_21.0C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.252 V/m; **Power Drift = -0.022 dB**

Fast SAR: SAR(1g) = 0.756 W/kg; SAR(10g) = 0.524 W/kg
Maximum value of SAR (interpolated) = 0.859 W/kg

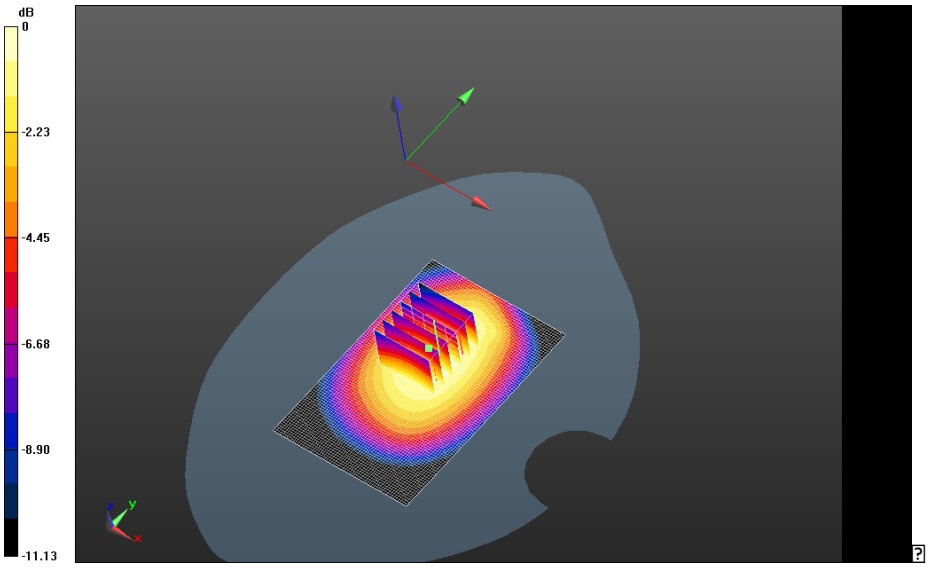


0 dB = 0.859 W/kg = -0.66 dBW/kg

Mobile Hot Spot MSL - UMTS Band V/10mm Device Back - UMTS_Band_V_chan4182_amb_temp_23.6C_liq_temp_21.0C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.386 V/m; **Power Drift = -0.022 dB**

Mobile Hot Spot MSL - UMTS Band V/10mm Device Back - UMTS_Band_V_chan4182_amb_temp_23.6C_liq_temp_21.0C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 29.386 V/m; **Power Drift = -0.022 dB**

Averaged SAR: SAR(1g) = 0.798 W/kg; SAR(10g) = 0.588 W/kg
Maximum value of SAR (interpolated) = 1.04 W/kg

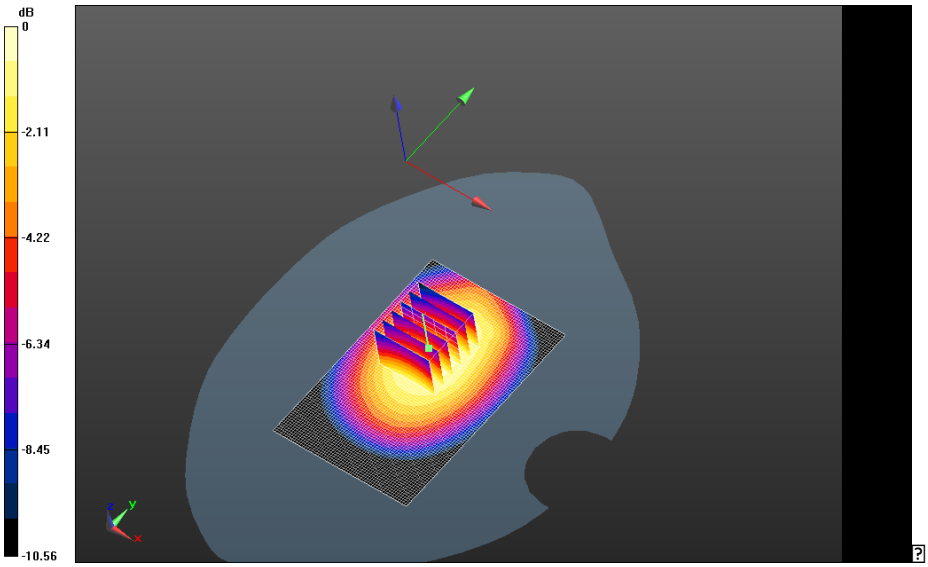


0 dB = 0.859 W/kg = -0.66 dBW/kg

Mobile Hot Spot MSL - UMTS Band V/10mm Device Back - UMTS_Band_V_chan4182_2nd_Scan_amb_temp_23.6C_liq_temp_21.0C 2/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.729 V/m; **Power Drift = -0.066 dB**

Mobile Hot Spot MSL - UMTS Band V/10mm Device Back - UMTS_Band_V_chan4182_2nd_Scan_amb_temp_23.6C_liq_temp_21.0C 2/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 29.729 V/m; **Power Drift = -0.066 dB**

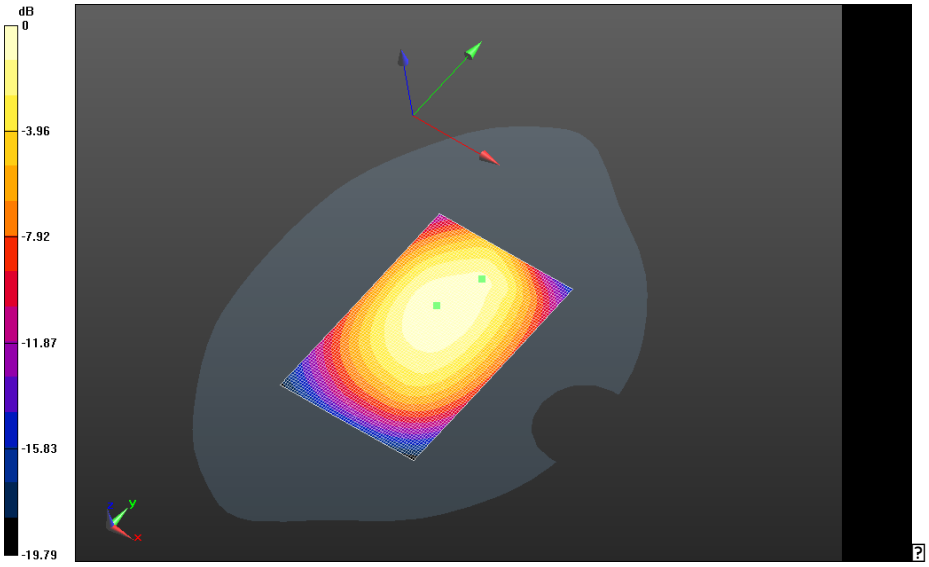
Averaged SAR: SAR(1g) = 0.831 W/kg; SAR(10g) = 0.615 W/kg
Maximum value of SAR (interpolated) = 1.08 W/kg



0 dB = 0.885 W/kg = -0.53 dBW/kg

Mobile Hot Spot MSL - UMTS Band V/10mm Device Back - UMTS_Band_V_chan4233_amb_temp_23.9C_liq_temp_21.0C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.024 V/m; **Power Drift = -0.019 dB**

Fast SAR: SAR(1g) = 0.731 W/kg; SAR(10g) = 0.505 W/kg
Maximum value of SAR (interpolated) = 0.834 W/kg

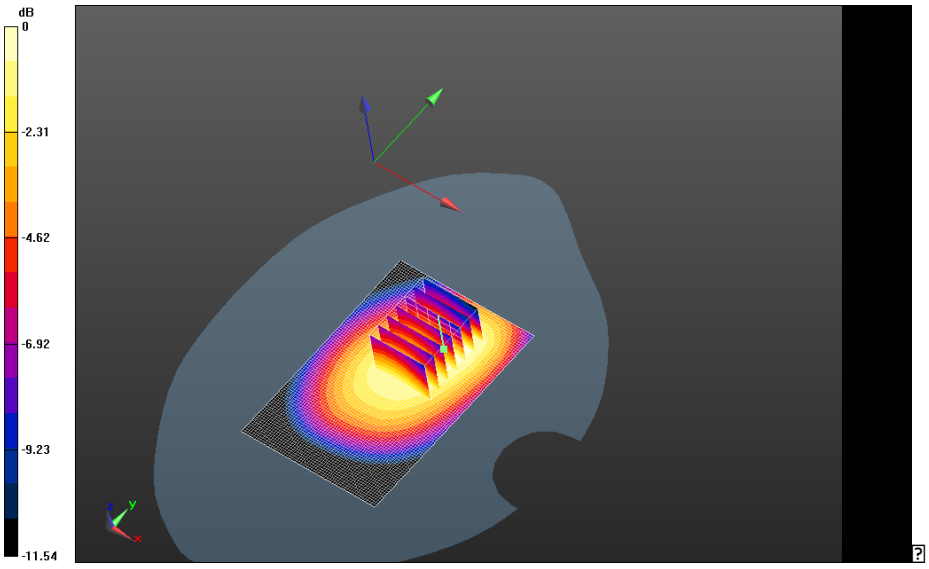


0 dB = 0.913 W/kg = -0.40 dBW/kg

Mobile Hot Spot MSL - UMTS Band V/10mm Device Front - UMTS_Band_V_chan4182_amb_temp_23.3C_liq_temp_21.0C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 23.580 V/m; **Power Drift = 0.004 dB**

Mobile Hot Spot MSL - UMTS Band V/10mm Device Front - UMTS_Band_V_chan4182_amb_temp_23.3C_liq_temp_21.0C/Zoom Scan (26x31x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 23.580 V/m; **Power Drift = 0.004 dB**

Averaged SAR: SAR(1g) = 0.556 W/kg; SAR(10g) = 0.409 W/kg
Maximum value of SAR (interpolated) = 0.754 W/kg

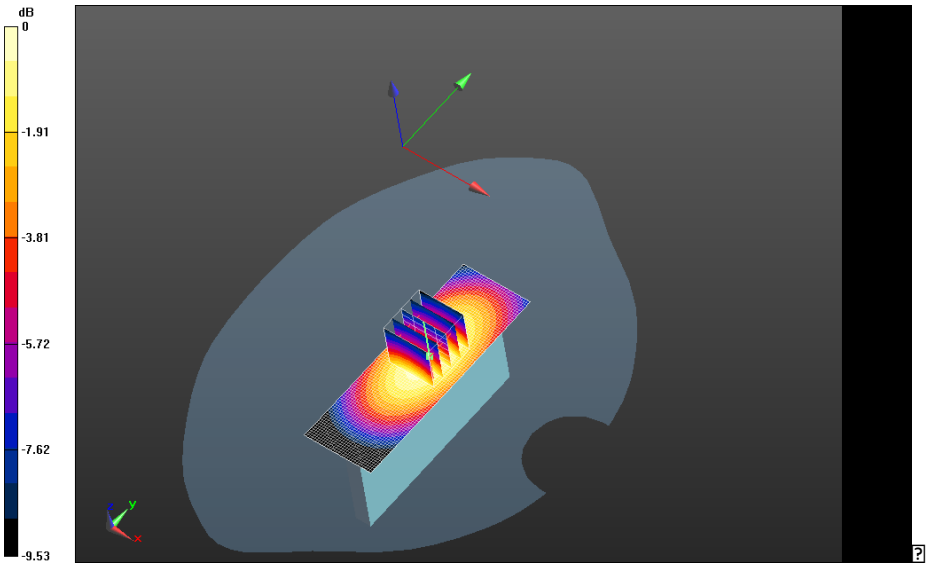


0 dB = 0.834 W/kg = -0.79 dBW/kg

Mobile Hot Spot MSL - UMTS Band V/10mm Device Left - UMTS_Band_V_chan4182_amb_temp_23.9C_liq_temp_21.0C/Area Scan (31x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 23.360 V/m; **Power Drift = -0.066 dB**

Mobile Hot Spot MSL - UMTS Band V/10mm Device Left - UMTS_Band_V_chan4182_amb_temp_23.9C_liq_temp_21.0C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 23.360 V/m; **Power Drift = -0.066 dB**

Averaged SAR: SAR(1g) = 0.443 W/kg; SAR(10g) = 0.307 W/kg
Maximum value of SAR (interpolated) = 0.615 W/kg

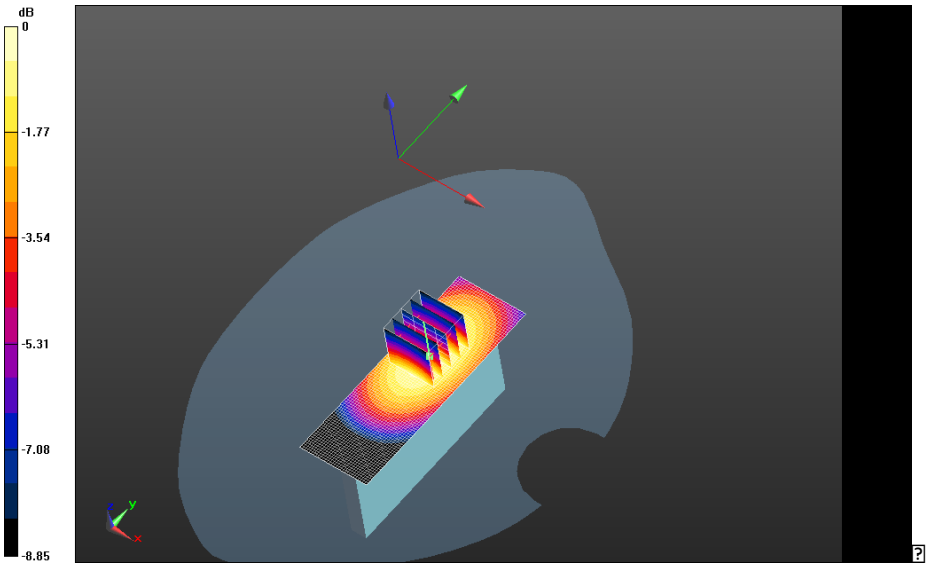


0 dB = 0.625 W/kg = -2.04 dBW/kg

Mobile Hot Spot MSL - UMTS Band V/10mm Device Right - UMTS_Band_V_chan4182_amb_temp_23.9C_liq_temp_21.0C/Area Scan (31x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 21.547 V/m; **Power Drift = 0.048 dB**

Mobile Hot Spot MSL - UMTS Band V/10mm Device Right - UMTS_Band_V_chan4182_amb_temp_23.9C_liq_temp_21.0C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 21.547 V/m; **Power Drift = 0.048 dB**

Averaged SAR: SAR(1g) = 0.422 W/kg; SAR(10g) = 0.298 W/kg
Maximum value of SAR (interpolated) = 0.572 W/kg

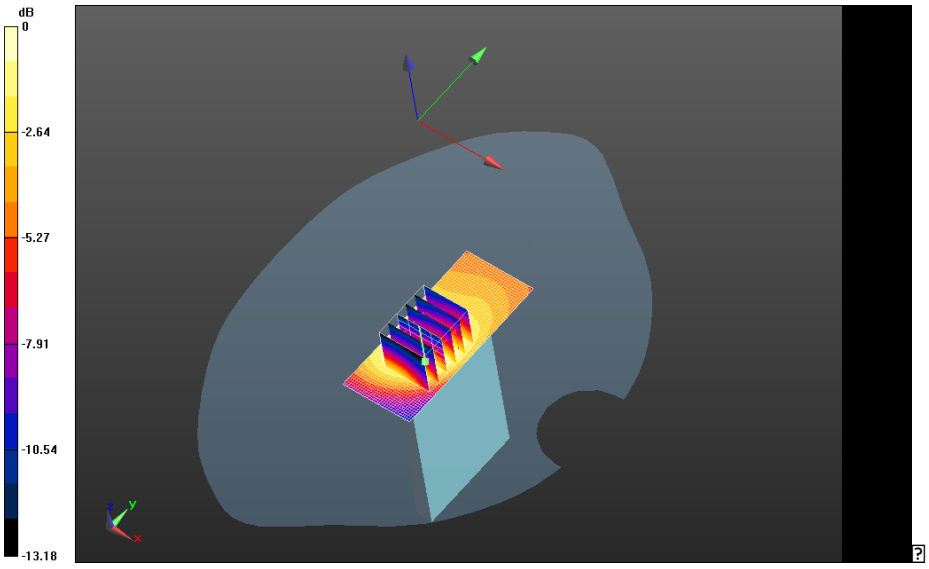


0 dB = 0.507 W/kg = -2.95 dBW/kg

Mobile Hot Spot MSL - UMTS Band V/10mm Device Bottom - UMTS_Band_V_chan4182_amb_temp_23.9C_liq_temp_21.0C/Area Scan (31x71x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 9.669 V/m; **Power Drift = -0.021 dB**

Mobile Hot Spot MSL - UMTS Band V/10mm Device Bottom - UMTS_Band_V_chan4182_amb_temp_23.9C_liq_temp_21.0C/Zoom Scan (21x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 9.669 V/m; **Power Drift = -0.021 dB**

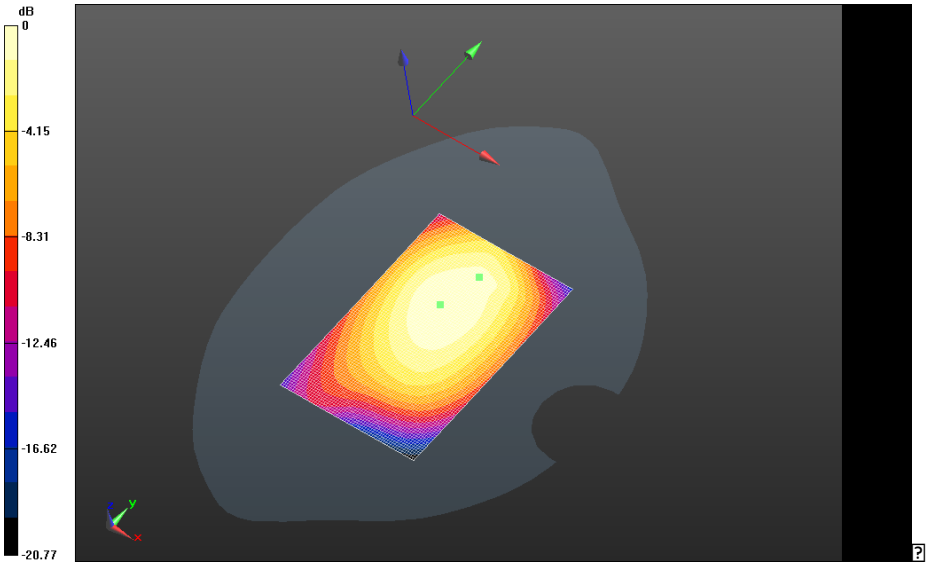
Averaged SAR: SAR(1g) = 0.0971 W/kg; SAR(10g) = 0.0561 W/kg
Maximum value of SAR (interpolated) = 0.170 W/kg



0 dB = 0.478 W/kg = -3.21 dBW/kg

Mobile Hot Spot MSL - UMTS Band V/10mm Device Back+HS - UMTS_Band_V_chan4182_amb_temp_23.6C_liq_temp_21.0C/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 25.163 V/m; **Power Drift = 0.075 dB**

Fast SAR: SAR(1g) = 0.609 W/kg; SAR(10g) = 0.420 W/kg
Maximum value of SAR (interpolated) = 0.690 W/kg



0 dB = 0.107 W/kg = -9.71 dBW/kg

GPRS 1900

Date: 3/24/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2AB04D29

Configuration: Mobile Hot Spot MSL - GPRS 1900

Communication System: GPRS 1900; Communication System Band: GPRS 1900; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.513 S/m; ε_r = 50.890; ρ = 1.000 g/cm^3
Phantom section: Flat Section

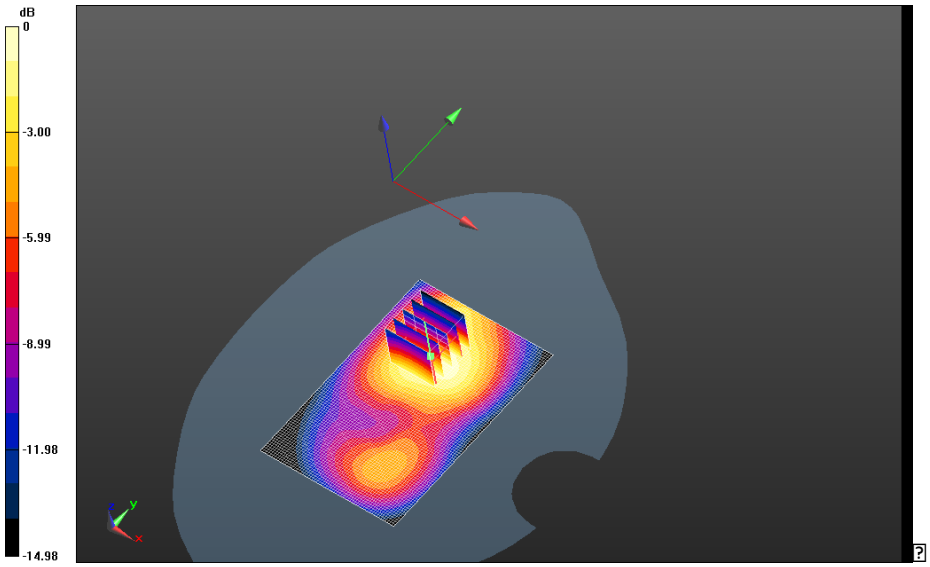
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS 1900_mid_chan_amb_temp_23.7C_liq_temp_22.0C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.681 V/m; **Power Drift = 0.082 dB**

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS 1900_mid_chan_amb_temp_23.7C_liq_temp_22.0C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.681 V/m; **Power Drift = 0.082 dB**

Averaged SAR: SAR(1g) = 0.606 W/kg; SAR(10g) = 0.379 W/kg
Maximum value of SAR (interpolated) = 0.935 W/kg

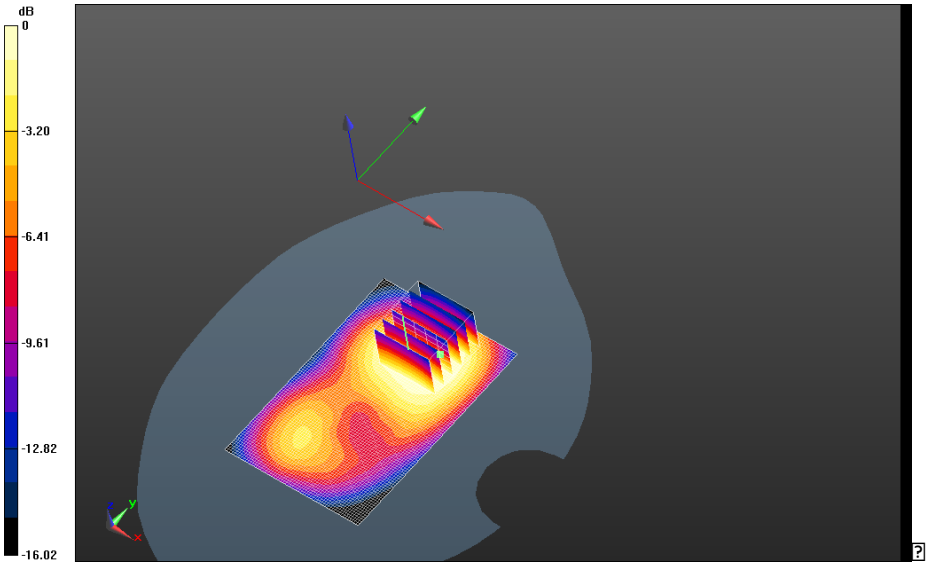


0 dB = 0.711 W/kg = -1.48 dBW/kg

Mobile Hot Spot MSL - GPRS 1900/10mm Device Front - GPRS 1900_mid_chan_amb_temp_23.0C_liq_temp_21.1C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.258 V/m; **Power Drift = -0.119 dB**

Mobile Hot Spot MSL - GPRS 1900/10mm Device Front - GPRS 1900_mid_chan_amb_temp_23.0C_liq_temp_21.1C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 13.258 V/m; **Power Drift = -0.119 dB**

Averaged SAR: SAR(1g) = 0.699 W/kg; SAR(10g) = 0.453 W/kg
Maximum value of SAR (interpolated) = 1.13 W/kg

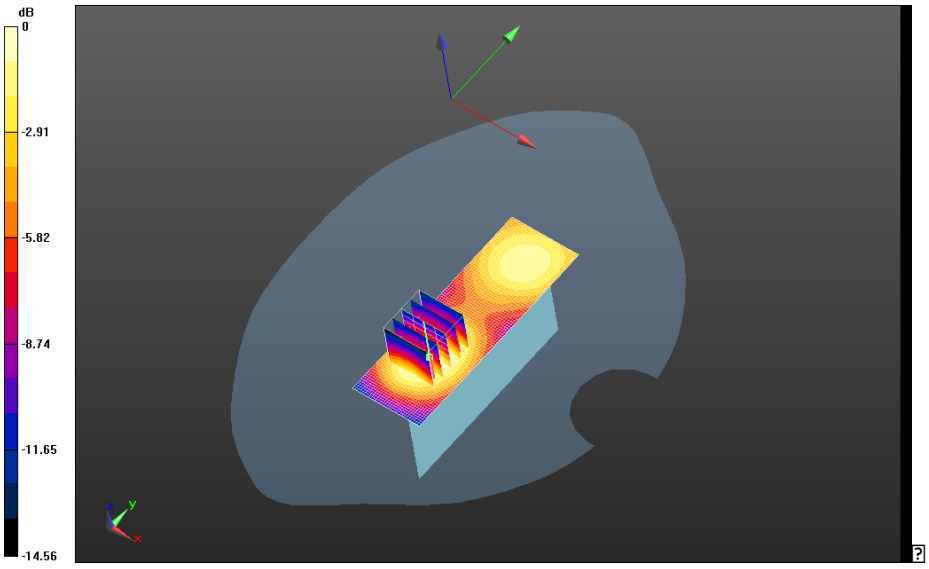


0 dB = 0.711 W/kg = -1.48 dBW/kg

Mobile Hot Spot MSL - GPRS 1900/10mm Device Right - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.5C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 8.545 V/m; **Power Drift = -0.106 dB**

Mobile Hot Spot MSL - GPRS 1900/10mm Device Right - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 13.148 V/m; **Power Drift = -0.106 dB**

Averaged SAR: SAR(1g) = 0.239 W/kg; SAR(10g) = 0.143 W/kg
Maximum value of SAR (interpolated) = 0.384 W/kg

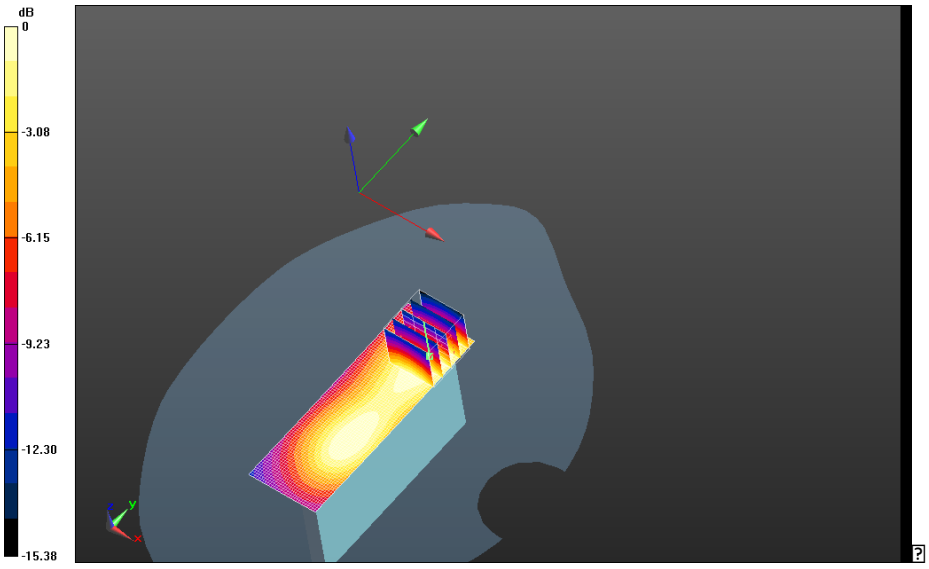


0 dB = 0.741 W/kg = -1.30 dBW/kg

Mobile Hot Spot MSL - GPRS 1900/10mm Device Left - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.5C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.190 V/m; **Power Drift = -0.084 dB**

Mobile Hot Spot MSL - GPRS 1900/10mm Device Left - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.5C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.190 V/m; **Power Drift = -0.084 dB**

Averaged SAR: SAR(1g) = 0.237 W/kg; SAR(10g) = 0.141 W/kg
Maximum value of SAR (interpolated) = 0.390 W/kg

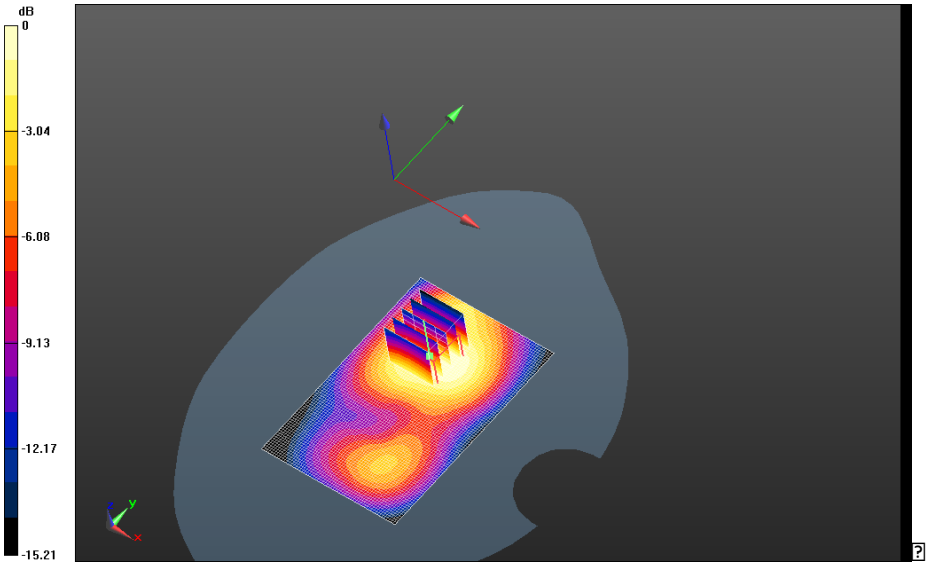


0 dB = 0.263 W/kg = -5.80 dBW/kg

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back+HS - GPRS 1900_mid_chan_amb_temp_23.2C_liq_temp_21.4C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.473 V/m; **Power Drift = 0.00112 dB**

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back+HS - GPRS 1900_mid_chan_amb_temp_23.2C_liq_temp_21.4C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.473 V/m; **Power Drift = 0.00112 dB**

Averaged SAR: SAR(1g) = 0.598 W/kg; SAR(10g) = 0.373 W/kg
Maximum value of SAR (interpolated) = 0.927 W/kg

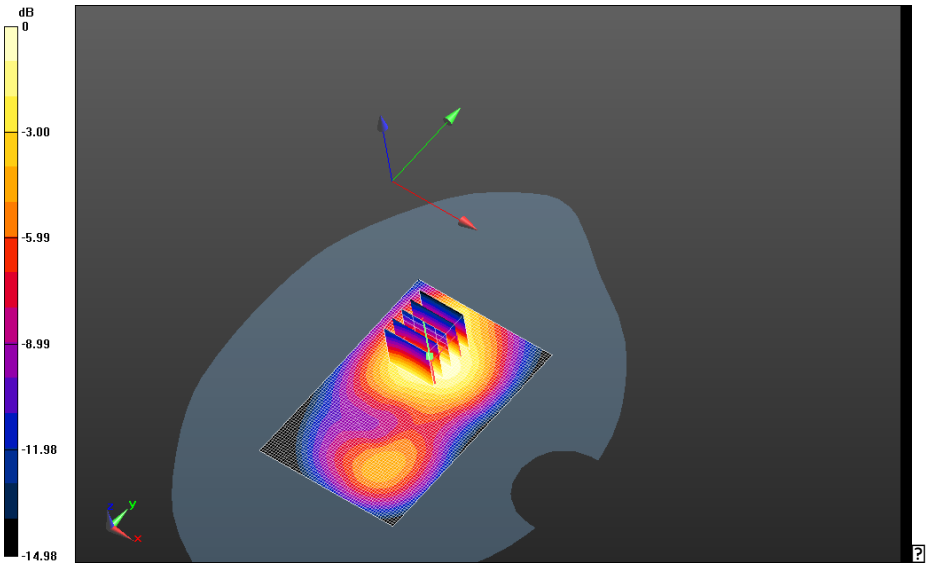


0 dB = 0.258 W/kg = -5.88 dBW/kg

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS 1900_3-slot_mid_chan_amb_temp_23.3C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.265 V/m; **Power Drift = 0.012 dB**

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS 1900_3-slot_mid_chan_amb_temp_23.3C_liq_temp_21.5C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.265 V/m; **Power Drift = 0.012 dB**

Averaged SAR: SAR(1g) = 0.562 W/kg; SAR(10g) = 0.351 W/kg
Maximum value of SAR (interpolated) = 0.870 W/kg

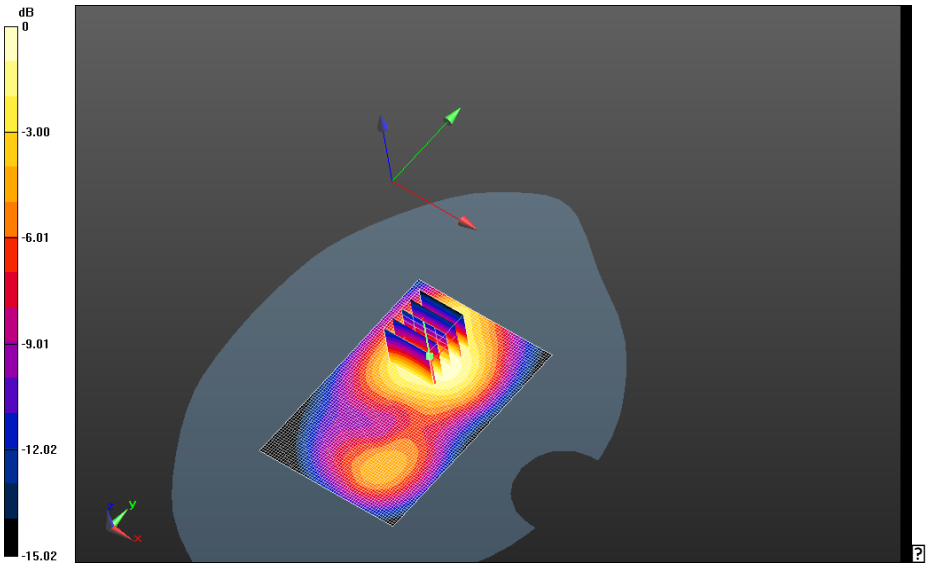


0 dB = 0.643 W/kg = -1.92 dBW/kg

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS 1900_4-slot_mid_chan_amb_temp_23.3C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.856 V/m; **Power Drift = 0.030 dB**

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS 1900_4-slot_mid_chan_amb_temp_23.3C_liq_temp_21.5C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 11.856 V/m; **Power Drift = 0.030 dB**

Averaged SAR: SAR(1g) = 0.524 W/kg; SAR(10g) = 0.328 W/kg
Maximum value of SAR (interpolated) = 0.791 W/kg



0 dB = 0.660 W/kg = -1.80 dBW/kg

Date/Time: 5/13/2013 5:42:25 AM

Test Laboratory: RIM Testing Services

MHS_Bottom_EDGE1900-Rev2-01

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB04D29

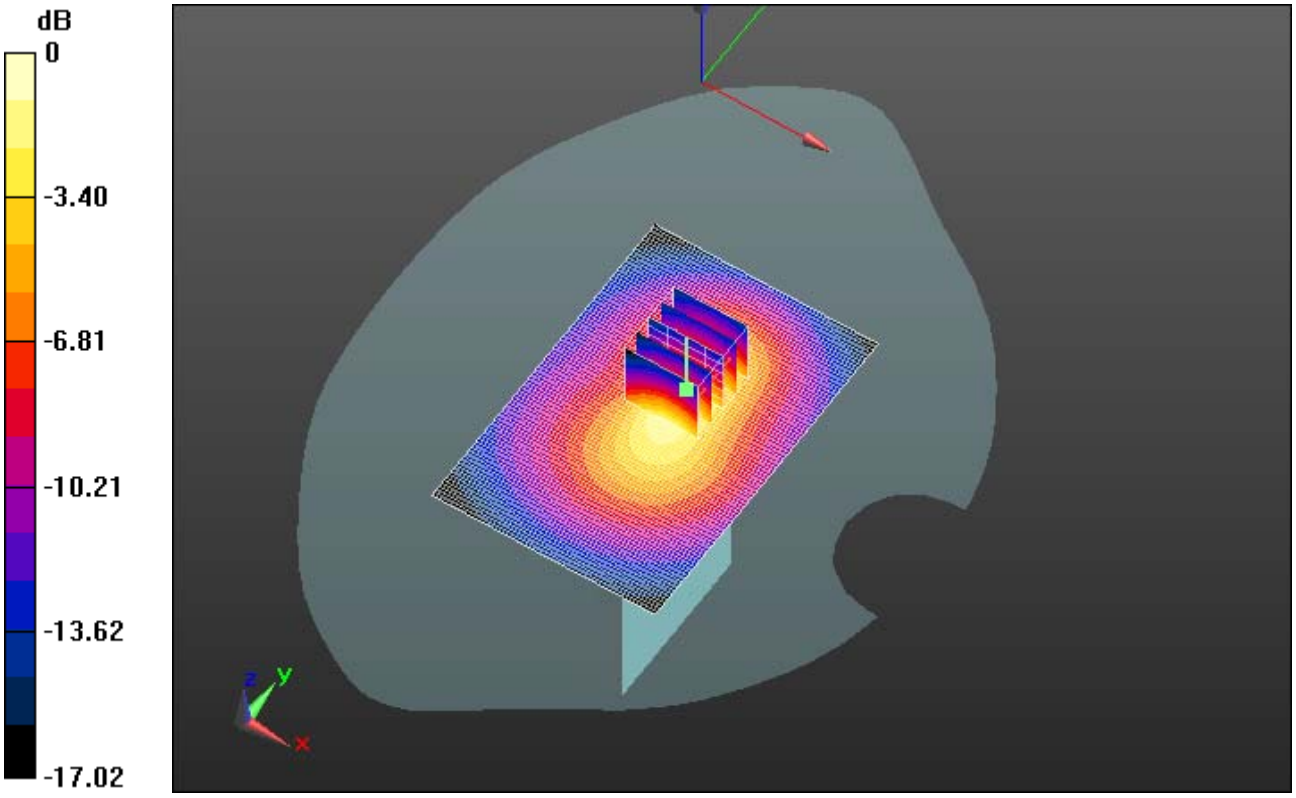
Communication System: GPRS 1900; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.517 S/m; ε_r = 51.026; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.04, 5.04, 5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Mobile Hot Spot MSL - GPRS 1900 Bottom/10mm Device Bottom - GPRS 1900_2-slot_mid_chan_amb_temp_23.3C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.528 W/kg

Mobile Hot Spot MSL - GPRS 1900 Bottom/10mm Device Bottom - GPRS 1900_2-slot_mid_chan_amb_temp_23.3C_liq_temp_21.5C/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 17.201 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.758 W/kg
SAR(1 g) = 0.442 W/kg; SAR(10 g) = 0.240 W/kg
Maximum value of SAR (measured) = 0.559 W/kg



0 dB = 0.559 W/kg = -2.53 dBW/kg

UMTS Band II

Date: 4/9/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2AB04D29

Configuration: Mobile Hot Spot MSL - UMTS Band II

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.515 S/m; ε_r = 50.915; ρ = 1.000 g/cm^3
Phantom section: Flat Section

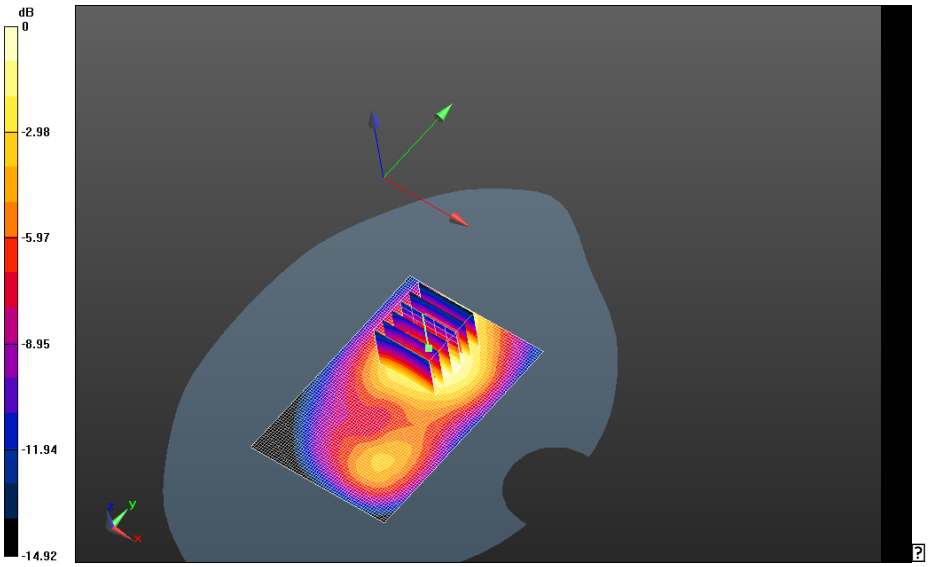
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Mobile Hot Spot MSL - UMTS Band II/10mm Device Back - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.621 V/m; **Power Drift = -0.081 dB**

Mobile Hot Spot MSL - UMTS Band II/10mm Device Back - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 22.846 V/m; **Power Drift = -0.081 dB**

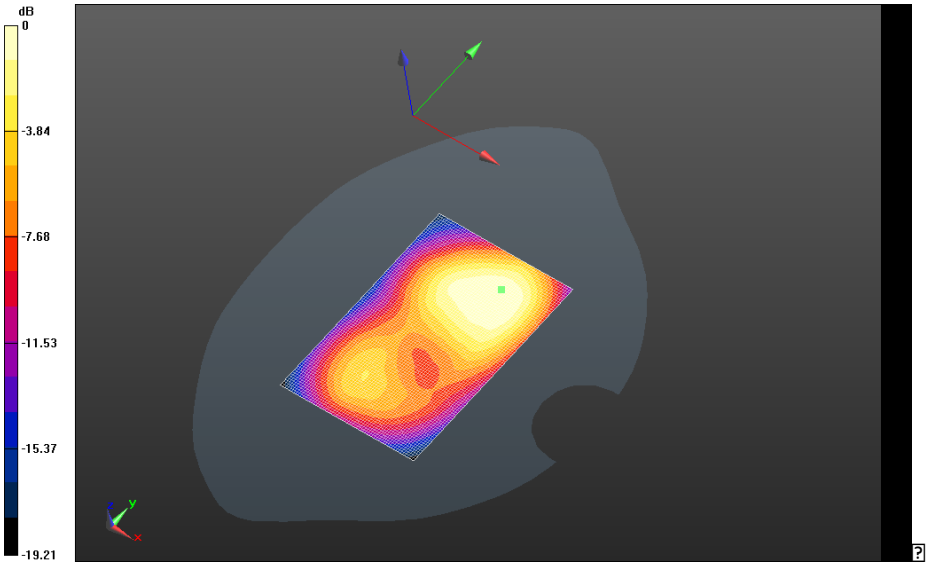
Averaged SAR: SAR(1g) = 0.648 W/kg; SAR(10g) = 0.412 W/kg
Maximum value of SAR (interpolated) = 0.977 W/kg



0 dB = 0.747 W/kg = -1.27 dBW/kg

Mobile Hot Spot MSL - UMTS Band II/10mm Device Front - UMTS_II_chan9262_amb_temp_23.3C_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 14.386 V/m; **Power Drift = 0.00824 dB**

Fast SAR: SAR(1g) = 0.932 W/kg; SAR(10g) = 0.584 W/kg; Secondary SAR(1g) = 0.388 W/kg
Maximum value of SAR (interpolated) = 1.12 W/kg

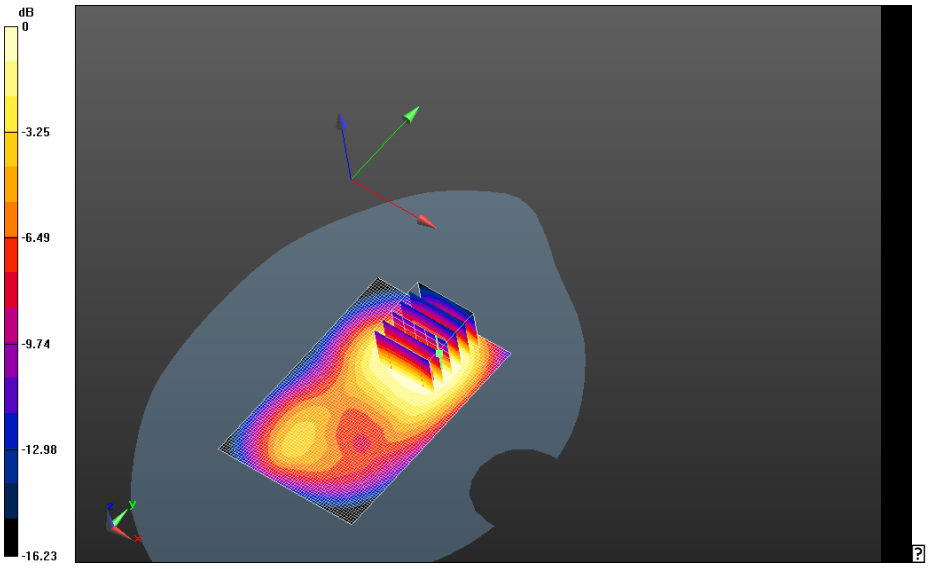


0 dB = 0.747 W/kg = -1.27 dBW/kg

Mobile Hot Spot MSL - UMTS Band II/10mm Device Front - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.650 V/m; **Power Drift = -0.020 dB**

Mobile Hot Spot MSL - UMTS Band II/10mm Device Front - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 27.010 V/m; **Power Drift = -0.020 dB**

Averaged SAR: SAR(1g) = 0.876 W/kg; SAR(10g) = 0.571 W/kg
Maximum value of SAR (interpolated) = 1.43 W/kg

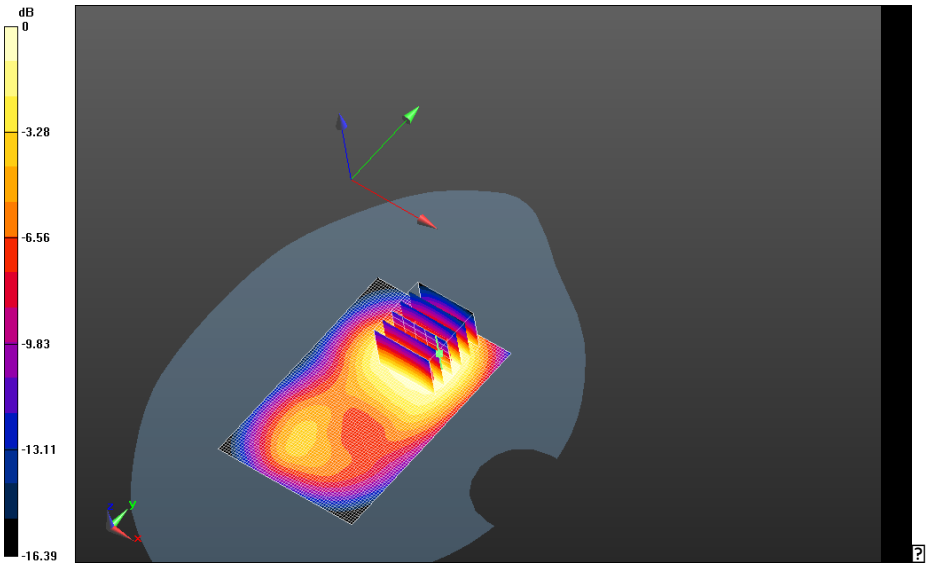


0 dB = 1.12 W/kg = 0.49 dBW/kg

Mobile Hot Spot MSL - UMTS Band II/10mm Device Front - UMTS_II_chan9538_amb_temp_23.3C_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.584 V/m; **Power Drift = 0.079 dB**

Mobile Hot Spot MSL - UMTS Band II/10mm Device Front - UMTS_II_chan9538_amb_temp_23.3C_liq_temp_21.2C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 27.292 V/m; **Power Drift = 0.079 dB**

Averaged SAR: SAR(1g) = 0.933 W/kg; SAR(10g) = 0.600 W/kg
Maximum value of SAR (interpolated) = 1.56 W/kg

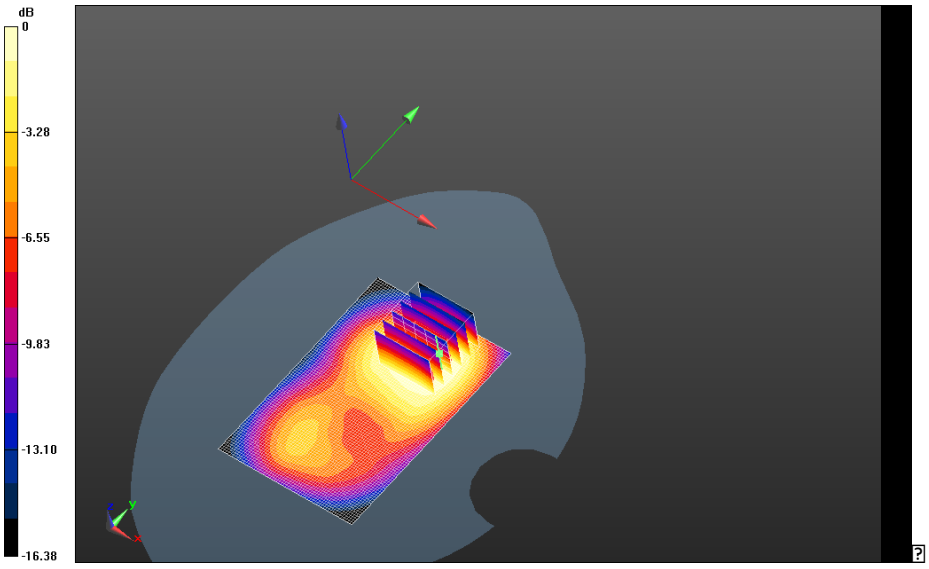


0 dB = 1.02 W/kg = 0.09 dBW/kg

Mobile Hot Spot MSL - UMTS Band II/10mm Device Front - UMTS_II_chan9538_amb_temp_23.3C_liq_temp_21.2C_2nd_Scan/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.631 V/m; **Power Drift = -0.018 dB**

Mobile Hot Spot MSL - UMTS Band II/10mm Device Front - UMTS_II_chan9538_amb_temp_23.3C_liq_temp_21.2C_2nd_Scan/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 27.535 V/m; **Power Drift = -0.018 dB**

Averaged SAR: SAR(1g) = 0.924 W/kg; SAR(10g) = 0.595 W/kg
Maximum value of SAR (interpolated) = 1.54 W/kg

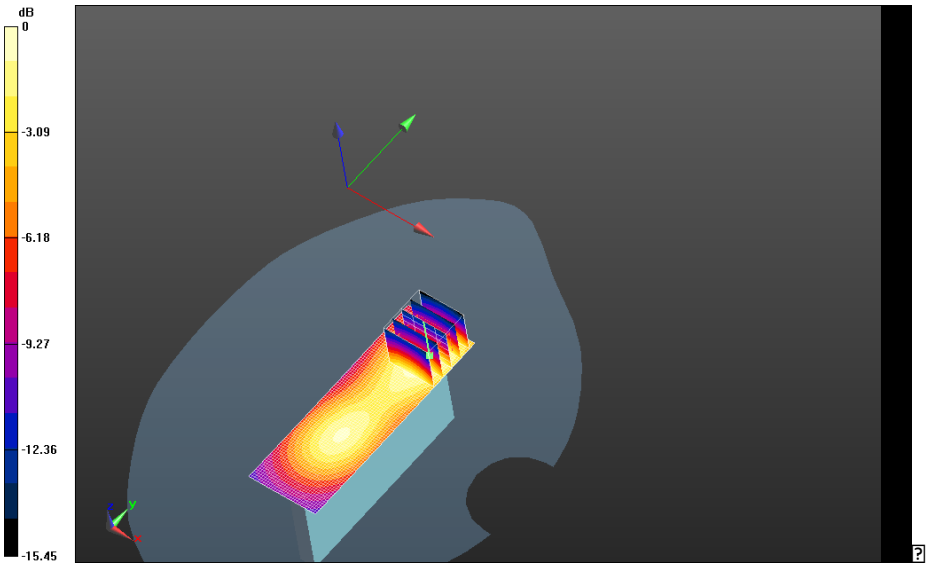


0 dB = 1.09 W/kg = 0.37 dBW/kg

Mobile Hot Spot MSL - UMTS Band II/10mm Device Left - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.838 V/m; **Power Drift = -0.033 dB**

Mobile Hot Spot MSL - UMTS Band II/10mm Device Left - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 16.278 V/m; **Power Drift = -0.033 dB**

Averaged SAR: SAR(1g) = 0.314 W/kg; SAR(10g) = 0.183 W/kg
Maximum value of SAR (interpolated) = 0.525 W/kg

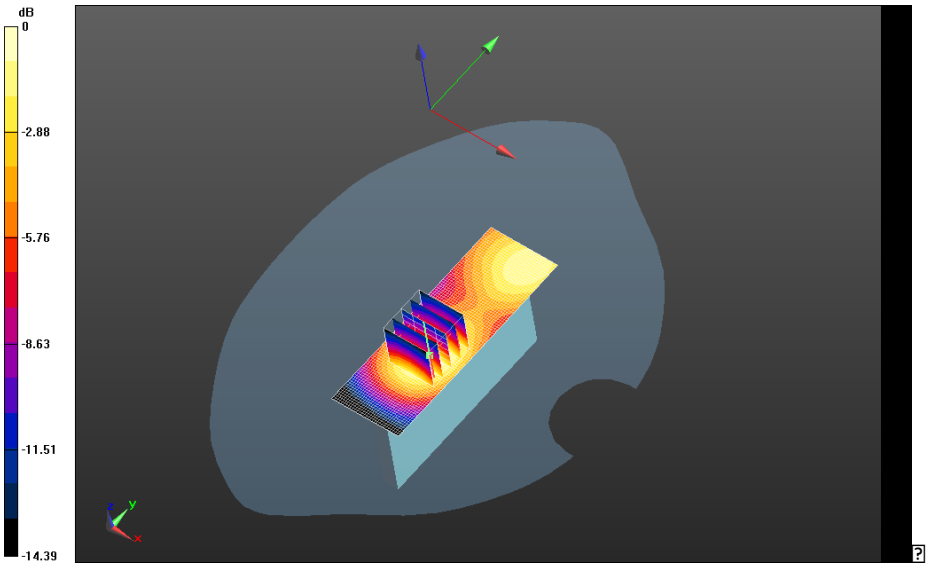


0 dB = 1.08 W/kg = 0.33 dBW/kg

Mobile Hot Spot MSL - UMTS Band II/10mm Device Right - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.237 V/m; **Power Drift = -0.097 dB**

Mobile Hot Spot MSL - UMTS Band II/10mm Device Right - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 13.534 V/m; **Power Drift = -0.097 dB**

Averaged SAR: SAR(1g) = 0.236 W/kg; SAR(10g) = 0.141 W/kg
Maximum value of SAR (interpolated) = 0.375 W/kg

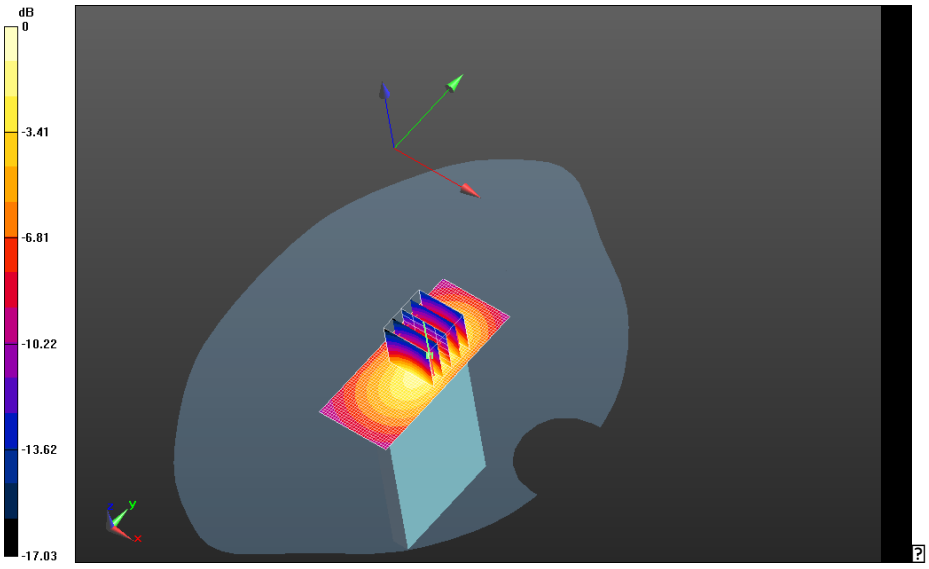


0 dB = 0.382 W/kg = -4.18 dBW/kg

Mobile Hot Spot MSL - UMTS Band II/10mm Device Bottom - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 18.171 V/m; **Power Drift = 0.061 dB**

Mobile Hot Spot MSL - UMTS Band II/10mm Device Bottom - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 18.881 V/m; **Power Drift = 0.061 dB**

Averaged SAR: SAR(1g) = 0.491 W/kg; SAR(10g) = 0.265 W/kg
Maximum value of SAR (interpolated) = 0.867 W/kg

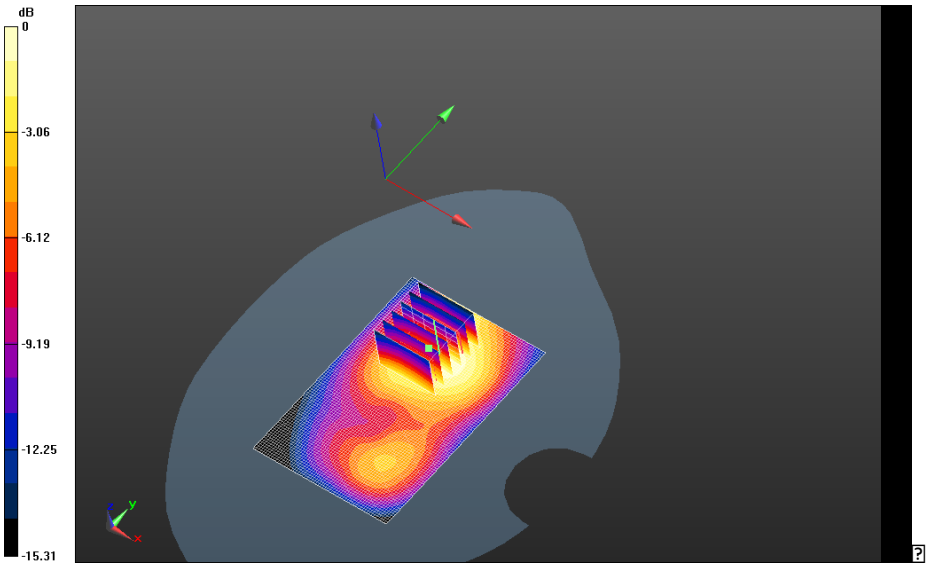


0 dB = 0.283 W/kg = -5.48 dBW/kg

Mobile Hot Spot MSL - UMTS Band II/Headset 10mm Device Back - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.410 V/m; **Power Drift = 0.078 dB**

Mobile Hot Spot MSL - UMTS Band II/Headset 10mm Device Back - UMTS_II_chan9400_amb_temp_23.3C_liq_temp_21.2C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 22.671 V/m; **Power Drift = 0.078 dB**

Averaged SAR: SAR(1g) = 0.640 W/kg; SAR(10g) = 0.407 W/kg
Maximum value of SAR (interpolated) = 0.973 W/kg



0 dB = 0.621 W/kg = -2.07 dBW/kg

802.11b

Date: 3/22/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2AB04D29

Configuration: Flat-Section MSL_MHS_Body_SAR – 802.11b

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2437 MHz
Medium Parameters used: f=2437 MHz; σ = 1.957 S/m; ε_r = 50.407; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

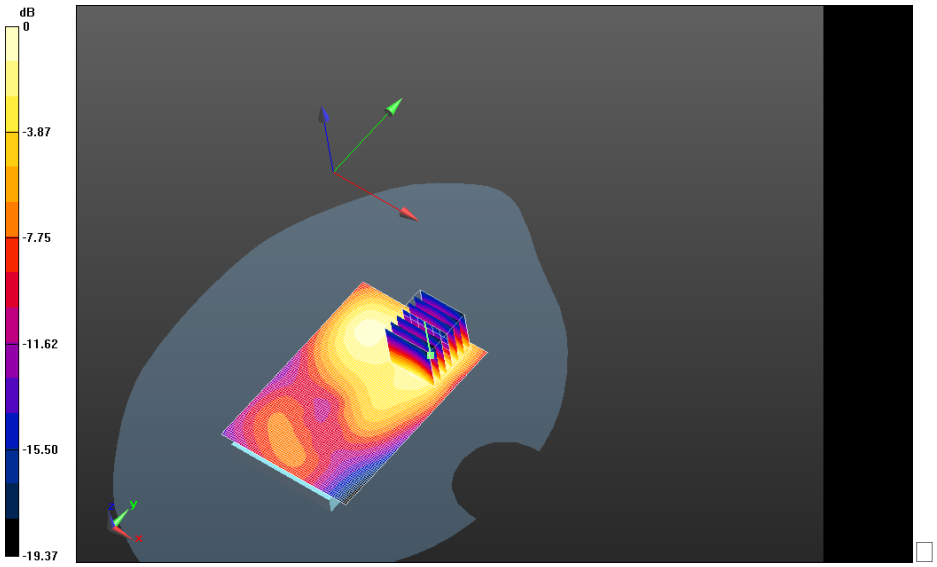
- Probe: ES3DV3 - SN3225; ConvF: (4.35,4.35,4.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_802.11b_Mid_Chan_Amb_Temp_23.5C_Liquid_Temp_21.6C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.337 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_802.11b_Mid_Chan _Amb_Temp_23.5C_Liquid_Temp_21.6C/Zoom Scan (31x31x36)/Cube 0:
Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 12.211 V/m; **Power Drift = 0.071 dB**

Averaged SAR: SAR(1g) = 0.267 W/kg; SAR(10g) = 0.144 W/kg
Maximum value of SAR (interpolated) = 0.521 W/kg



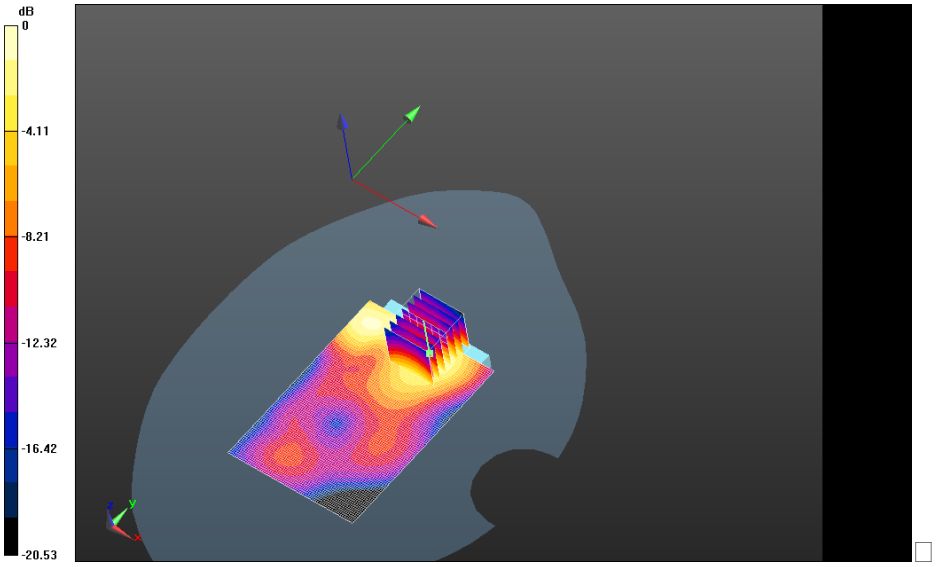
0 dB = 0.328 W/kg = -4.84 dBW/kg

Flat-Section MSL_MHS_Body_SAR/Device Front_10mm_802.11b_Mid_Chan _Amb_Temp_23.7C_Liquid_Temp_22.1C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.218 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Front_10mm_802.11b_Mid_Chan _Amb_Temp_23.7C_Liquid_Temp_22.1C/Zoom Scan (31x31x36)/Cube 0:
Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 4.181 V/m; **Power Drift = 0.103 dB**

Averaged SAR: SAR(1g) = 0.202 W/kg; SAR(10g) = 0.112 W/kg
Maximum value of SAR (interpolated) = 0.370 W/kg



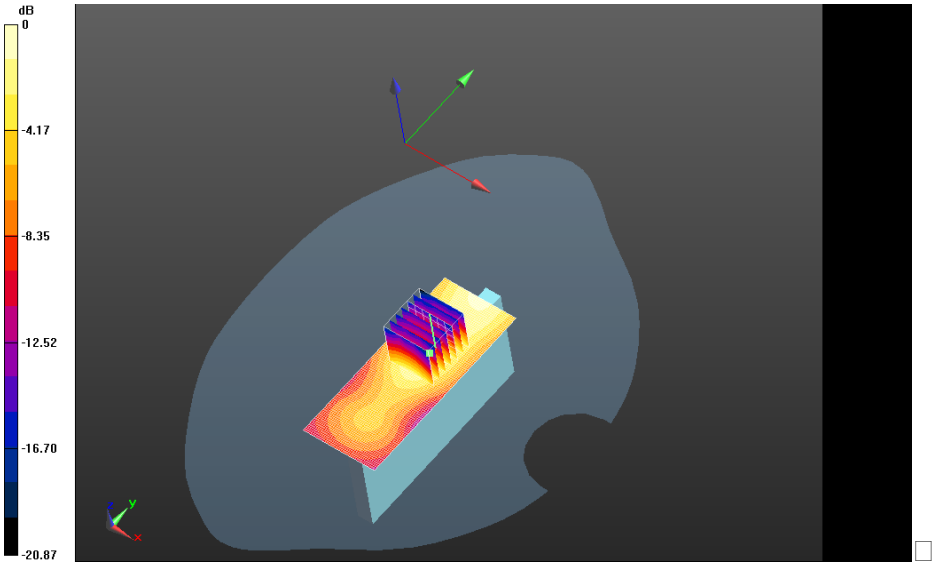
0 dB = 0.328 W/kg = -4.84 dBW/kg

Flat-Section MSL_MHS_Body_SAR/Device Right_10mm_802.11b_Mid_Chan _Amb_Temp_23.3C_Liquid_Temp_21.4C/Area Scan (41x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.139 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Right_10mm_802.11b_Mid_Chan _Amb_Temp_23.3C_Liquid_Temp_21.4C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 8.402 V/m; **Power Drift = 0.075 dB**

Averaged SAR: SAR(1g) = 0.129 W/kg; SAR(10g) = 0.0711 W/kg
Maximum value of SAR (interpolated) = 0.244 W/kg



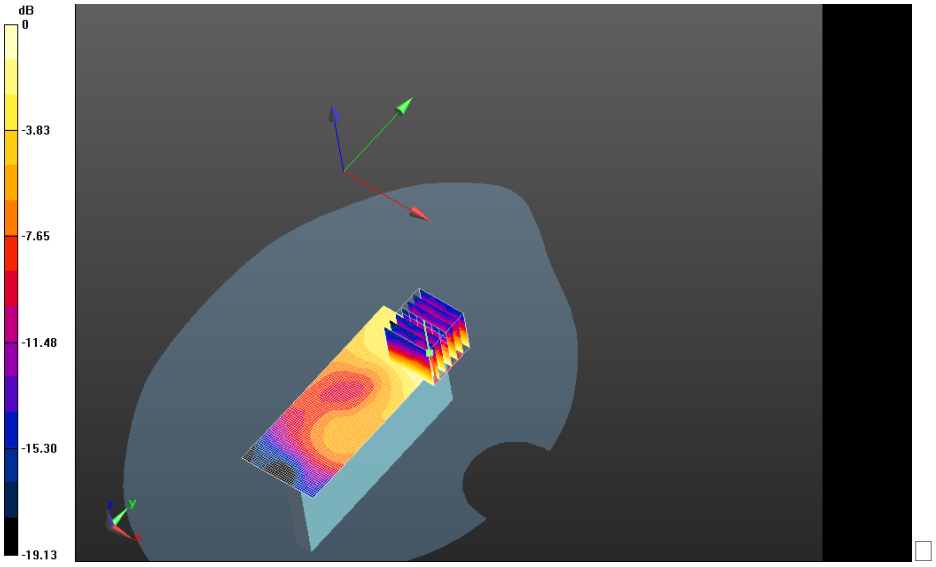
0 dB = 0.249 W/kg = -6.04 dBW/kg

Flat-Section MSL_MHS_Body_SAR/Device Left_10mm_802.11b_Mid_Chan _Amb_Temp_23.3C_Liquid_Temp_21.4C/Area Scan (41x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0529 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Left_10mm_802.11b_Mid_Chan _Amb_Temp_23.3C_Liquid_Temp_21.4C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 5.199 V/m; **Power Drift = 0.129 dB**

Averaged SAR: SAR(1g) = 0.0494 W/kg; SAR(10g) = 0.0289 W/kg
Maximum value of SAR (interpolated) = 0.0895 W/kg



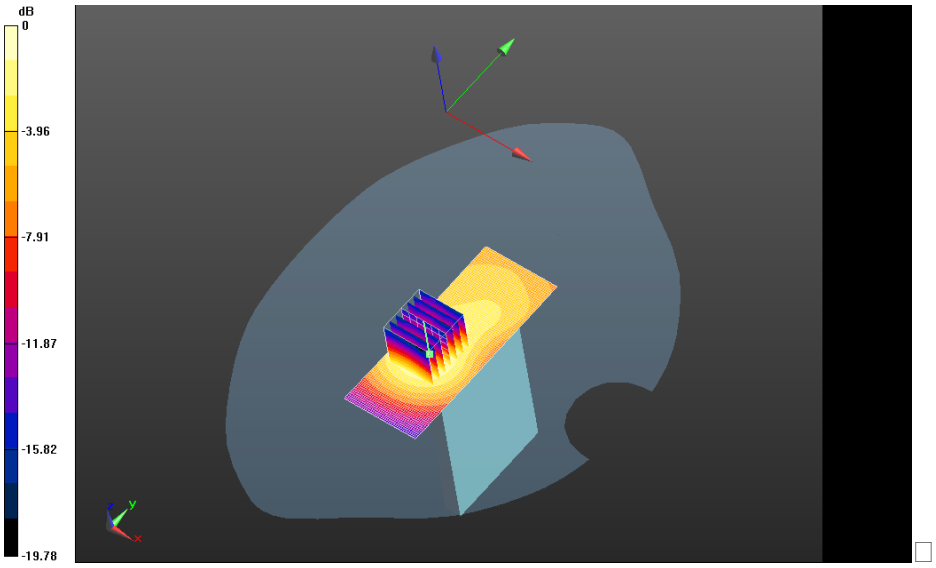
0 dB = 0.160 W/kg = -7.96 dBW/kg

Flat-Section MSL_MHS_Body_SAR/Device Bottom_10mm_802.11b_Mid_Chan _Amb_Temp_23.3C_Liquid_Temp_21.4C/Area Scan (41x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.112 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Bottom_10mm_802.11b_Mid_Chan_Amb_Temp_23.3C_Liquid_Temp_21.4C /Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 7.411 V/m; **Power Drift = -0.00647 dB**

Averaged SAR: SAR(1g) = 0.103 W/kg; SAR(10g) = 0.0573 W/kg
Maximum value of SAR (interpolated) = 0.194 W/kg



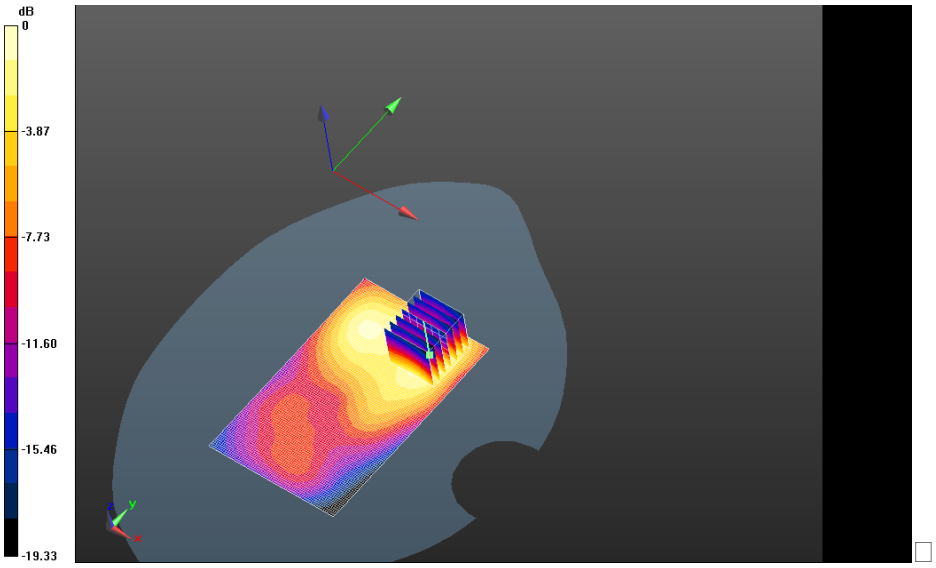
0 dB = 0.0599 W/kg = -12.23 dBW/kg

Flat-Section MSL_MHS_Body_SAR/Device Back+HS_10mm_802.11b_Mid_Chan _Amb_Temp_23.6C_Liquid_Temp_21.5C/Area Scan (71x111x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.340 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Back+HS_10mm_802.11b_Mid_Chan_Amb_Temp_23.6C_Liquid_Temp_21.5 C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 12.455 V/m; **Power Drift = 0.015 dB**

Averaged SAR: SAR(1g) = 0.277 W/kg; SAR(10g) = 0.149 W/kg
Maximum value of SAR (interpolated) = 0.540 W/kg



0 dB = 0.126 W/kg = -9.00 dBW/kg

Bluetooth

Date: 3/21/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2AB02A54

Configuration: Mobile Hot Spot MSL - Bluetooth

Communication System: Bluetooth; Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 2441 MHz
Medium Parameters used: f=2441 MHz; σ = 1.961 S/m; ε_r = 50.399; ρ = 1.000 g/cm^3
Phantom section: Flat Section

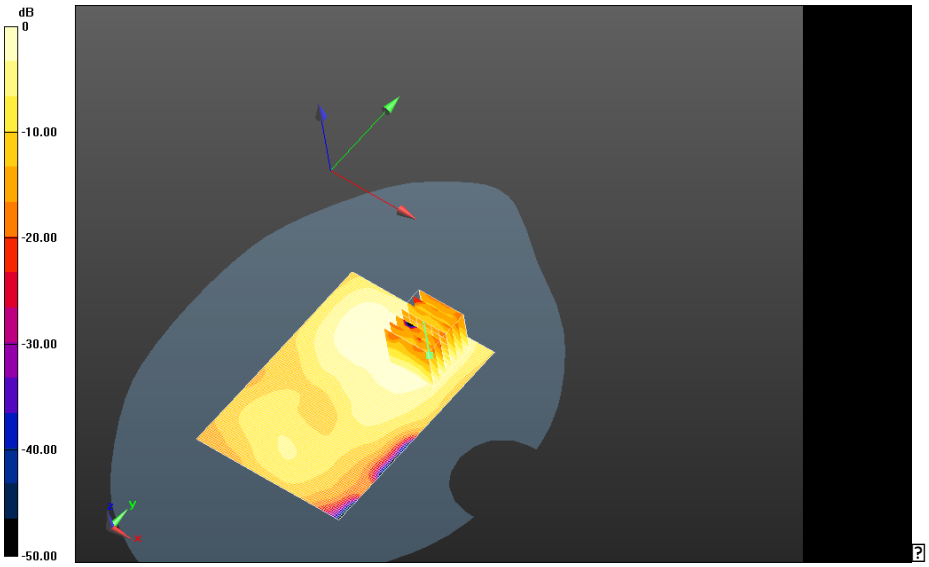
DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF: (4.35,4.35,4.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Mobile Hot Spot MSL - Bluetooth/10mm Device Back - Bluetooth_chan39_amb_temp_24.1C_liq_temp_21.6C/Area Scan (81x111x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0340 W/kg

Mobile Hot Spot MSL - Bluetooth/10mm Device Back - Bluetooth_chan39_amb_temp_24.1C_liq_temp_21.6C/Zoom Scan (31x31x36)/Cube 0:
Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 3.899 V/m; **Power Drift = 0.049 dB**

Averaged SAR: SAR(1g) = 0.0262 W/kg; SAR(10g) = 0.0142 W/kg
Maximum value of SAR (interpolated) = 0.0495 W/kg



0 dB = 0.0328 W/kg = -14.84 dBW/kg

Z axis plot for the worst case MHS configuration