APPENDIX C1: SAR DISTRIBUTION PLOTS FOR BODY-WORN CONFIGURATION

GPRS 850

Date: 3/15/2013

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

Configuration: Body Worn 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

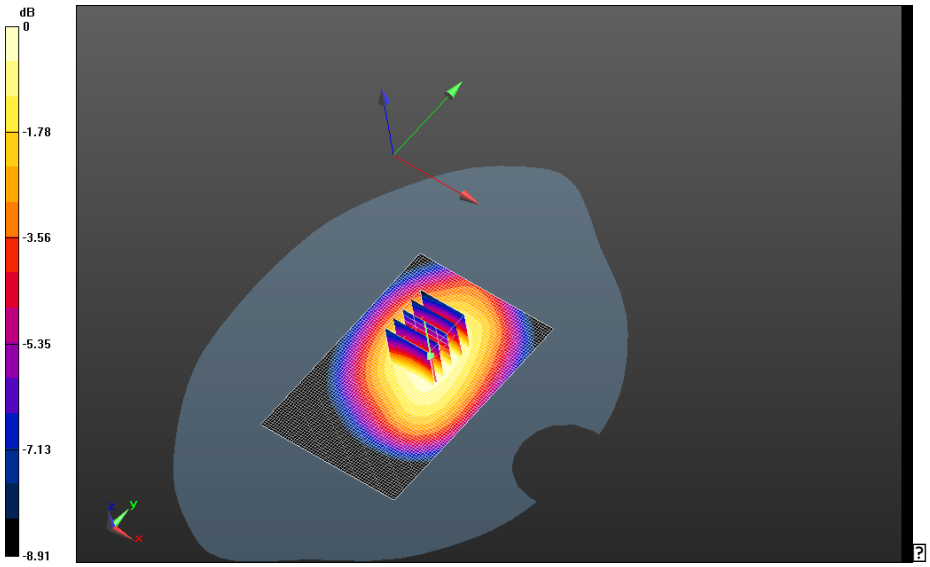
DASY Configuration:

- 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)

Body Worn MSL - GPRS 850/15mm 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 = 27.783 V/m; **Power Drift = 0.019 dB**

Body Worn MSL - GPRS 850/15mm Device Back - GPRS 850_3-slot_chan190_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 = 27.783 V/m; **Power Drift = 0.019 dB**

Averaged SAR: SAR(1g) = 0.708 W/kg; SAR(10g) = 0.525 W/kg
Maximum value of SAR (interpolated) = 0.920 W/kg

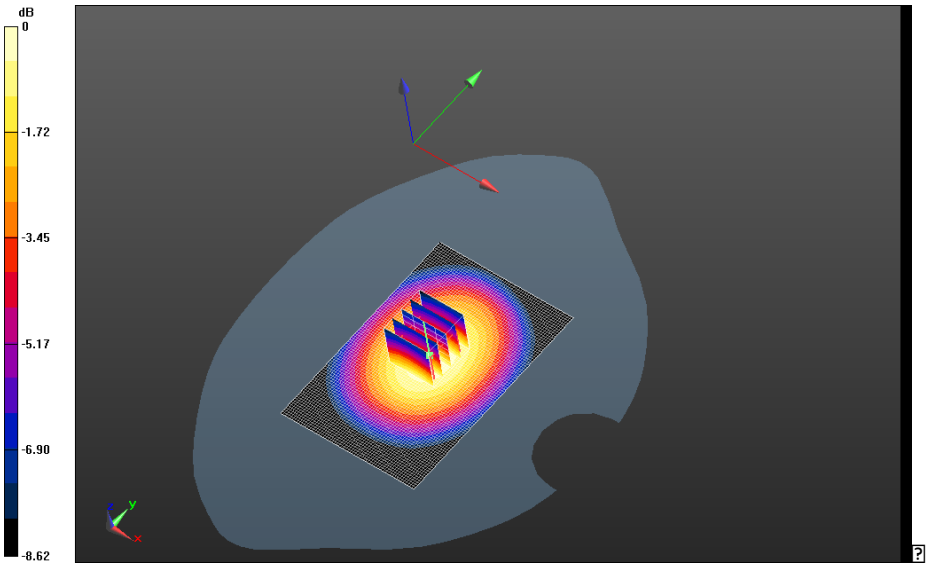


0 dB = 0.786 W/kg = -1.05 dBW/kg

Body Worn MSL - GPRS 850/Holster Device Back -GPRS 850_3-slot_chan128_amb_temp_23.5C_liq_temp_21.4C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 31.260 V/m; **Power Drift = 0.010 dB**

Body Worn MSL - GPRS 850/Holster Device Back -GPRS 850_3-slot_chan128_amb_temp_23.5C_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 = 31.260 V/m; **Power Drift = 0.010 dB**

Averaged SAR: SAR(1g) = 0.811 W/kg; SAR(10g) = 0.599 W/kg
Maximum value of SAR (interpolated) = 1.05 W/kg

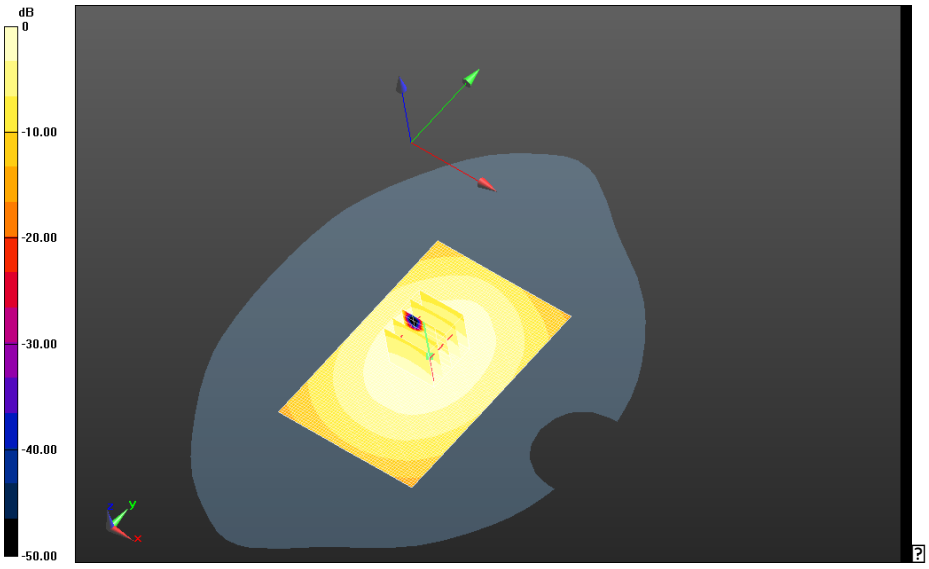


0 dB = 0.786 W/kg = -1.05 dBW/kg

Body Worn MSL - GPRS 850/Holster 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 = 32.052 V/m; **Power Drift = -0.060 dB**

Body Worn MSL - GPRS 850/Holster Device Back -GPRS 850_3-slot_chan190_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 = 32.052 V/m; **Power Drift = -0.060 dB**

Averaged SAR: SAR(1g) = 0.813 W/kg; SAR(10g) = 0.596 W/kg
Maximum value of SAR (interpolated) = 1.06 W/kg

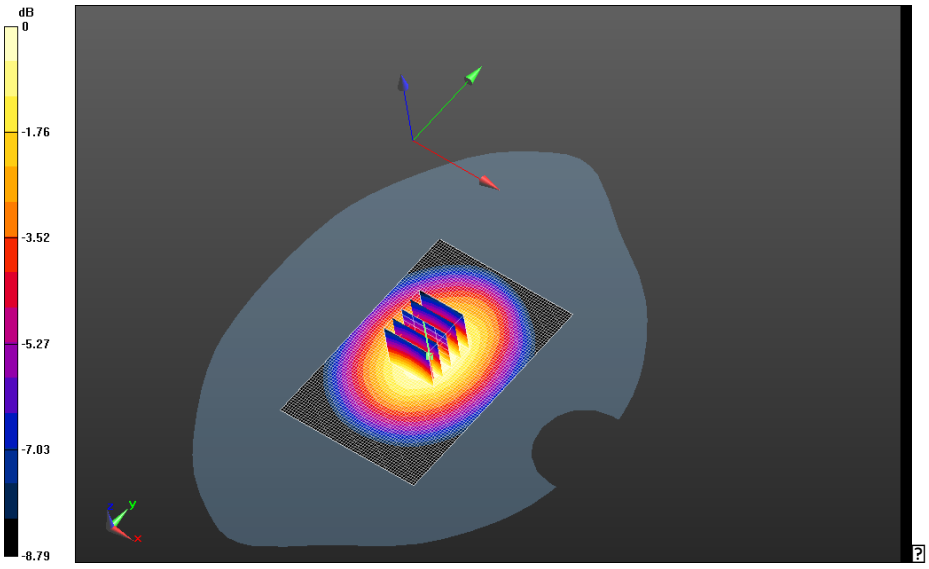


0 dB = 0.904 W/kg = -0.44 dBW/kg

Body Worn MSL - GPRS 850/Holster Device Back -GPRS 850_3-slot_chan190_amb_temp_23.4C_liq_temp_21.5C_2nd/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 31.364 V/m; **Power Drift = 0.226 dB**

Body Worn MSL - GPRS 850/Holster Device Back -GPRS 850_3-slot_chan190_amb_temp_23.4C_liq_temp_21.5C_2nd/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 31.364 V/m; **Power Drift = 0.226 dB**

Averaged SAR: SAR(1g) = 0.849 W/kg; SAR(10g) = 0.626 W/kg
Maximum value of SAR (interpolated) = 1.09 W/kg

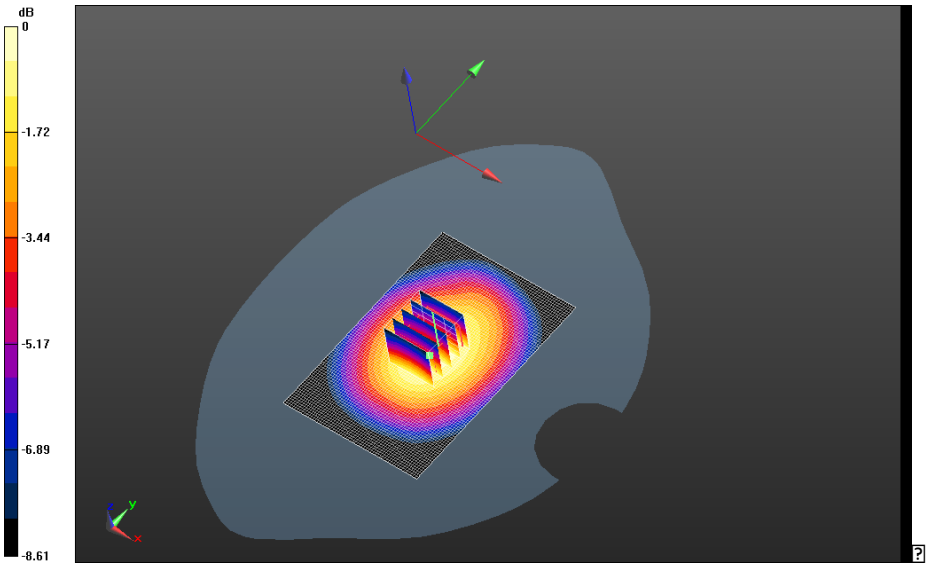


0 dB = 0.910 W/kg = -0.41 dBW/kg

Body Worn MSL - GPRS 850/Holster Device Back -GPRS 850_3-slot_chan251_amb_temp_23.6C_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 27.253 V/m; **Power Drift = -0.00544 dB**

Body Worn MSL - GPRS 850/Holster Device Back -GPRS 850_3-slot_chan251_amb_temp_23.6C_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 = 27.253 V/m; **Power Drift = -0.00544 dB**

Averaged SAR: SAR(1g) = 0.617 W/kg; SAR(10g) = 0.454 W/kg
Maximum value of SAR (interpolated) = 0.803 W/kg

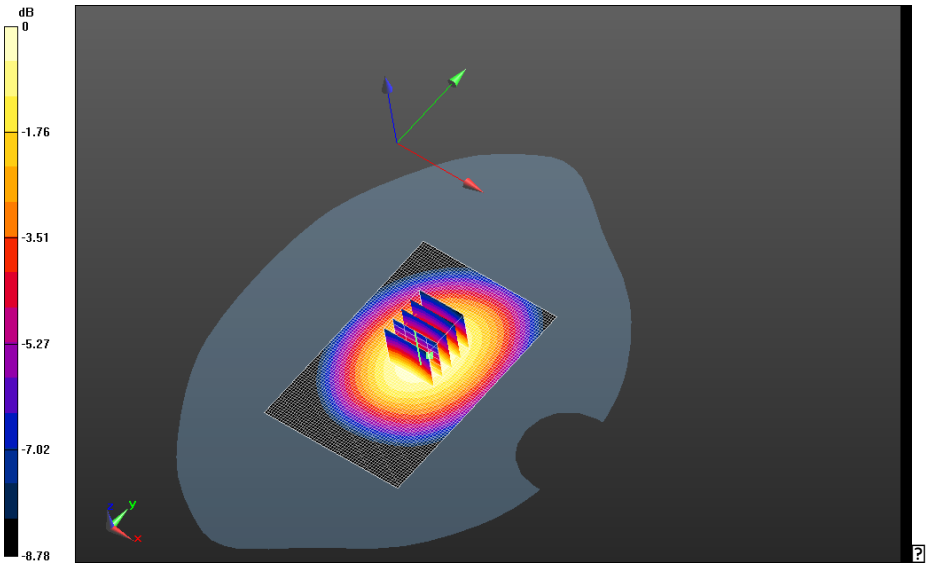


0 dB = 0.946 W/kg = -0.24 dBW/kg

Body Worn MSL - GPRS 850/Holster Device Front - 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 = 28.834 V/m; **Power Drift = -0.089 dB**

Body Worn MSL - GPRS 850/Holster Device Front - GPRS 850_3-slot_chan190_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 = 28.834 V/m; **Power Drift = -0.089 dB**

Averaged SAR: SAR(1g) = 0.681 W/kg; SAR(10g) = 0.502 W/kg
Maximum value of SAR (interpolated) = 0.893 W/kg



0 dB = 0.695 W/kg = -1.58 dBW/kg

UMTS Band V

Date: 3/18/2013

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

Configuration: Body-worn UMTS V

Communication System: WCDMA FDD V; Communication System Band: UMTS band V;
Frequency: 836.4 MHz
Medium Parameters used: f=836.4 MHz; σ = 0.974 S/m; ε_r = 52.975; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

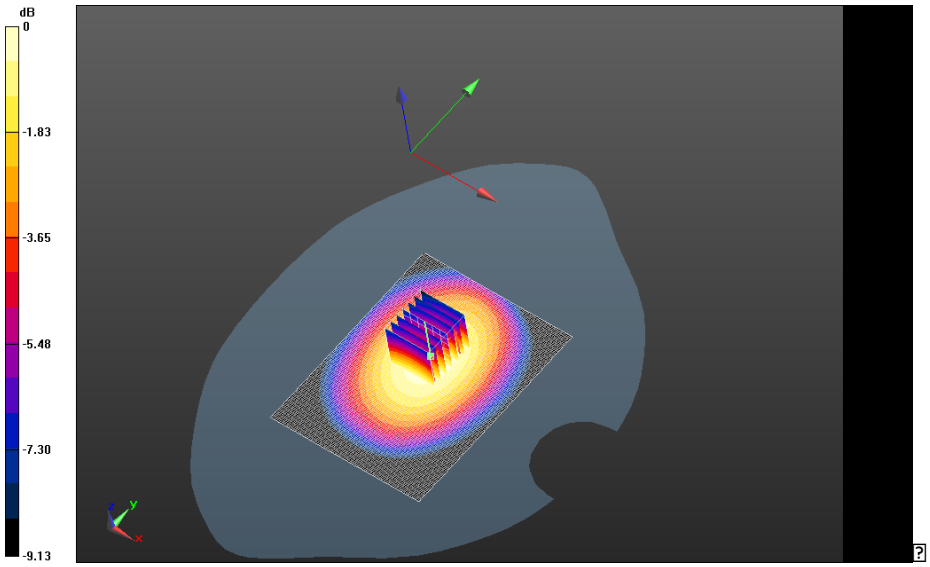
- Probe: ES3DV3 - SN3225; ConvF: (6.12,6.12,6.12); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Body-worn UMTS V/15mm_Back_UMTS_V_chan4182_amb_temp_23.6C_liq_temp_21.7C/Area Scan (101x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 27.490 V/m; **Power Drift = -0.187 dB**

Fast SAR: SAR(1g) = 0.615 W/kg; SAR(10g) = 0.428 W/kg
Maximum value of SAR (interpolated) = 0.699 W/kg

Body-worn UMTS V/15mm_Back_UMTS_V_chan4182_amb_temp_23.6C_liq_temp_21.7C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 27.490 V/m; **Power Drift = -0.187 dB**

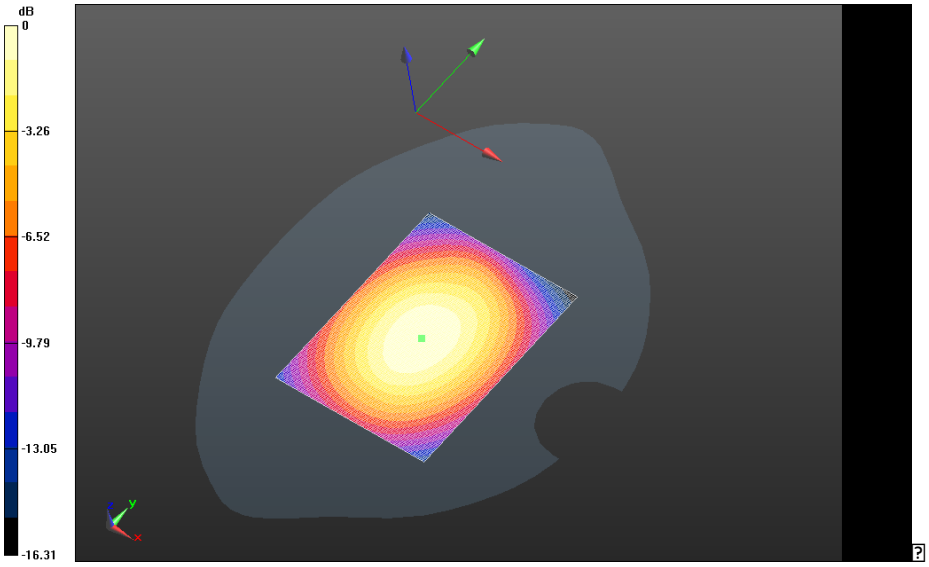
Averaged SAR: SAR(1g) = 0.629 W/kg; SAR(10g) = 0.467 W/kg
Maximum value of SAR (interpolated) = 0.812 W/kg



0 dB = 0.700 W/kg = -1.55 dBW/kg

Body-worn UMTS V/Holster_Device_Back_UMTS_V_chan4182_amb_temp_23.6C_liq_temp_21.7C/Area Scan (101x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 25.519 V/m; **Power Drift = -0.097 dB**

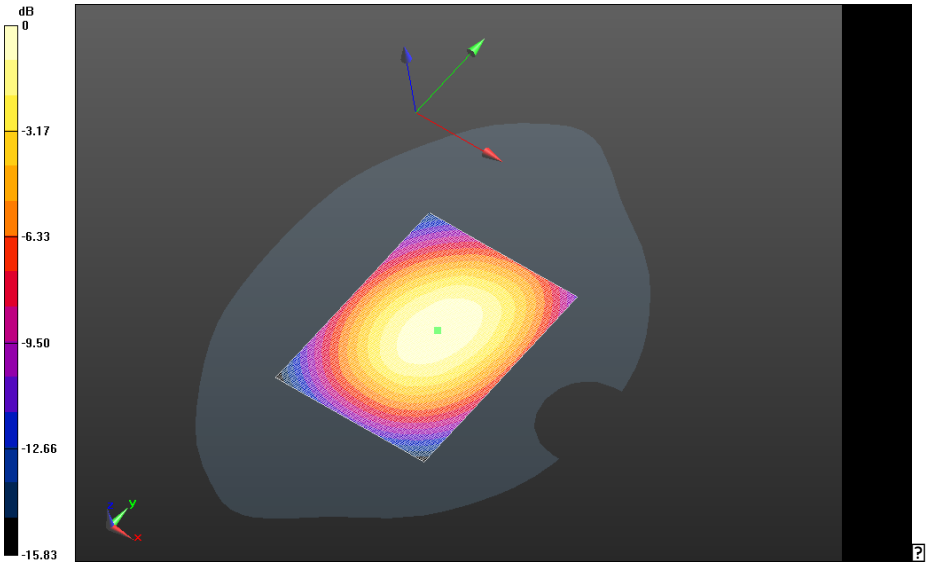
Fast SAR: SAR(1g) = 0.528 W/kg; SAR(10g) = 0.367 W/kg
Maximum value of SAR (interpolated) = 0.600 W/kg



0 dB = 0.700 W/kg = -1.55 dBW/kg

Body-worn UMTS V/Holster_Device_Front_UMTS_V_chan4182_amb_temp_23.6C_liq_temp_21.7C/Area Scan (101x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 22.545 V/m; **Power Drift = -0.00942 dB**

Fast SAR: SAR(1g) = 0.412 W/kg; SAR(10g) = 0.285 W/kg
Maximum value of SAR (interpolated) = 0.470 W/kg



0 dB = 0.600 W/kg = -2.22 dBW/kg

GPRS 1900

Date: 3/24/2013

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

Configuration: Body Worn 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

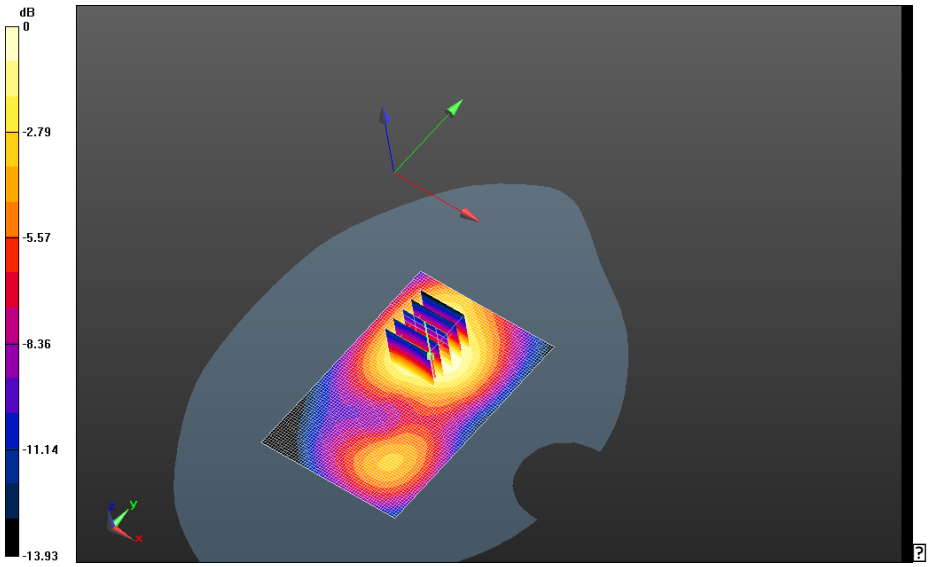
DASY Configuration:

- 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)

Body Worn MSL - GPRS 1900/15mm Device Back - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.730 V/m; **Power Drift = -0.053 dB**

Body Worn MSL - GPRS 1900/15mm Device Back - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.730 V/m; **Power Drift = -0.053 dB**

Averaged SAR: SAR(1g) = 0.358 W/kg; SAR(10g) = 0.226 W/kg
Maximum value of SAR (interpolated) = 0.541 W/kg

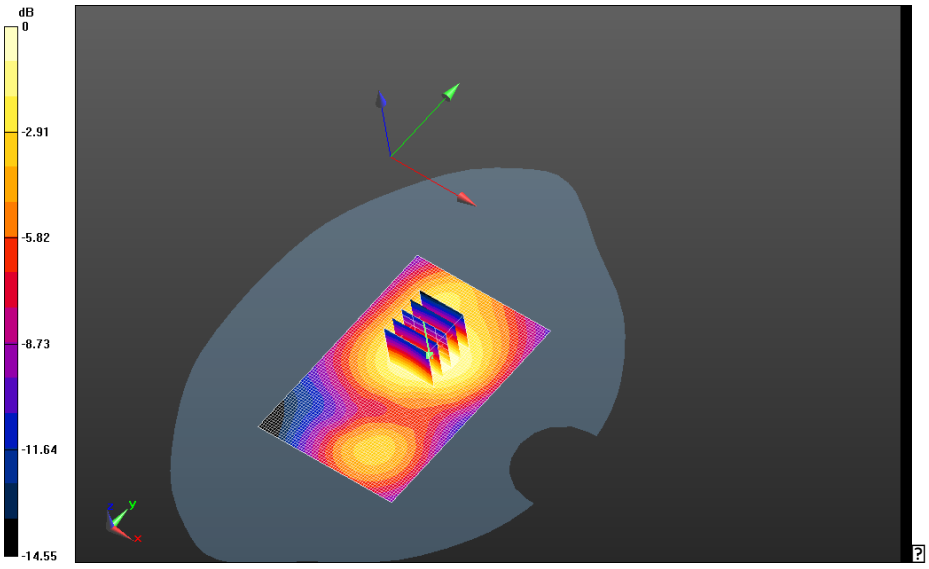


0 dB = 0.419 W/kg = -3.78 dBW/kg

Body Worn MSL - GPRS 1900/Holster Device Back - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.532 V/m; **Power Drift = -0.135 dB**

Body Worn MSL - GPRS 1900/Holster Device Back - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 11.532 V/m; **Power Drift = -0.135 dB**

Averaged SAR: SAR(1g) = 0.218 W/kg; SAR(10g) = 0.136 W/kg
Maximum value of SAR (interpolated) = 0.334 W/kg

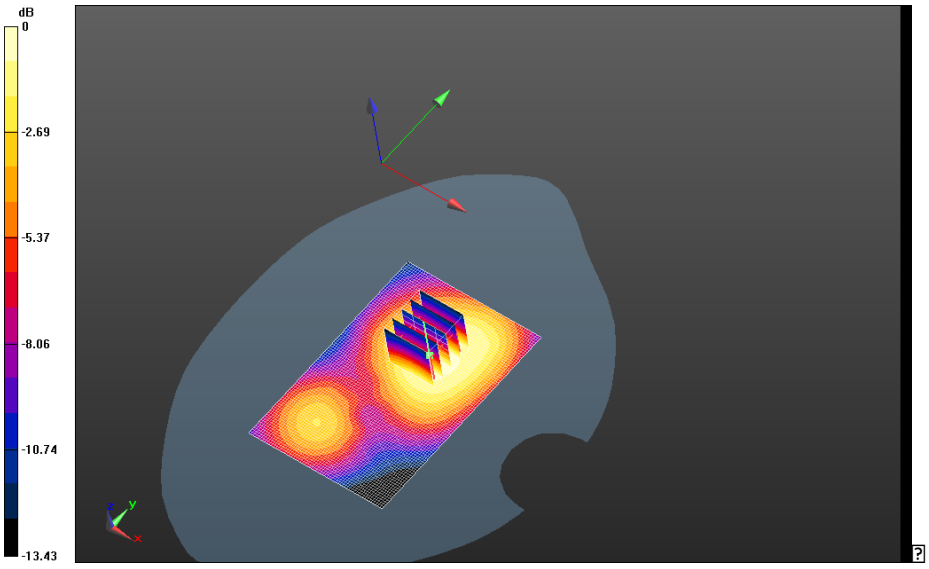


0 dB = 0.419 W/kg = -3.78 dBW/kg

Body Worn MSL - GPRS 1900/Holster Device Front - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.036 V/m; **Power Drift = 0.096 dB**

Body Worn MSL - GPRS 1900/Holster Device Front - GPRS 1900_mid_chan_amb_temp_23.4C_liq_temp_21.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 11.036 V/m; **Power Drift = 0.096 dB**

Averaged SAR: SAR(1g) = 0.268 W/kg; SAR(10g) = 0.171 W/kg
Maximum value of SAR (interpolated) = 0.420 W/kg



0 dB = 0.255 W/kg = -5.93 dBW/kg

UMTS Band II

Date: 3/12/2013

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

Configuration: Body Worn 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 = 1.539 S/m; ε_r = 51.659; ρ = 1.000 g/cm^3
Phantom section: Flat Section

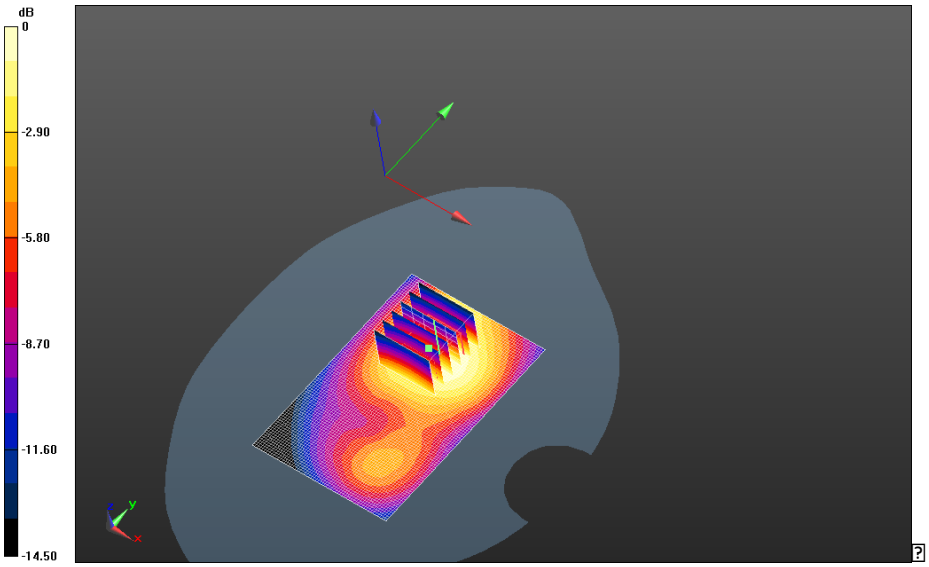
DASY Configuration:

- 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)

Body Worn MSL - UMTS Band II/15mm Device Back - UMTS_II_mid_chan_amb_temp_23.7C_liq_temp_22.0C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.602 W/kg

Body Worn MSL - UMTS Band II/15mm Device Back - UMTS_II_mid_chan_amb_temp_23.7C_liq_temp_22.0C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 13.426 V/m; **Power Drift = -0.00204 dB**

Averaged SAR: SAR(1g) = 0.529 W/kg; SAR(10g) = 0.338 W/kg
Maximum value of SAR (interpolated) = 0.800 W/kg

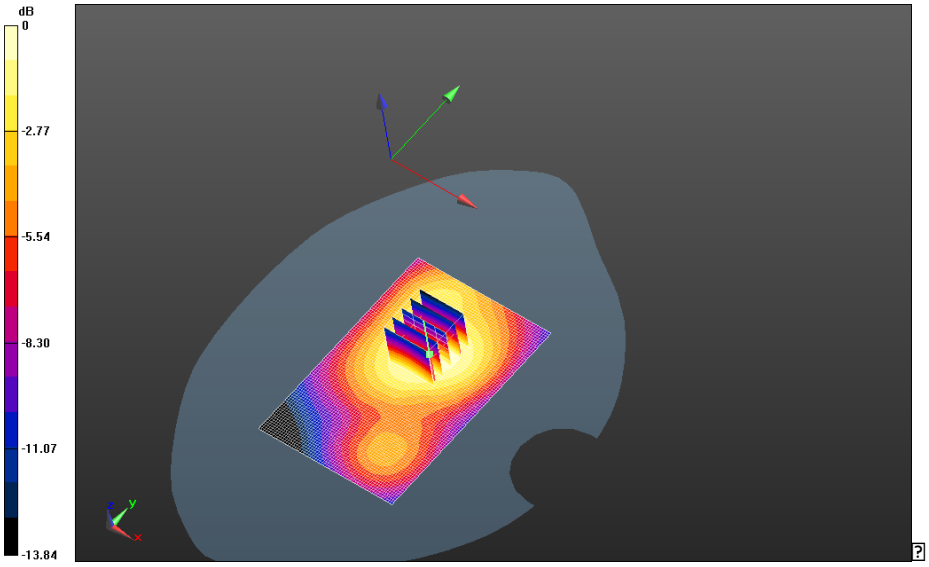


0 dB = 0.607 W/kg = -2.17 dBW/kg

Body Worn MSL - UMTS Band II/Holster Device Back - UMTS_II_mid_chan_amb_temp_23.7C_liq_temp_22.0C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.376 W/kg

Body Worn MSL - UMTS Band II/Holster Device Back - UMTS_II_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 = 13.810 V/m; **Power Drift = -0.079 dB**

Averaged SAR: SAR(1g) = 0.321 W/kg; SAR(10g) = 0.203 W/kg
Maximum value of SAR (interpolated) = 0.490 W/kg

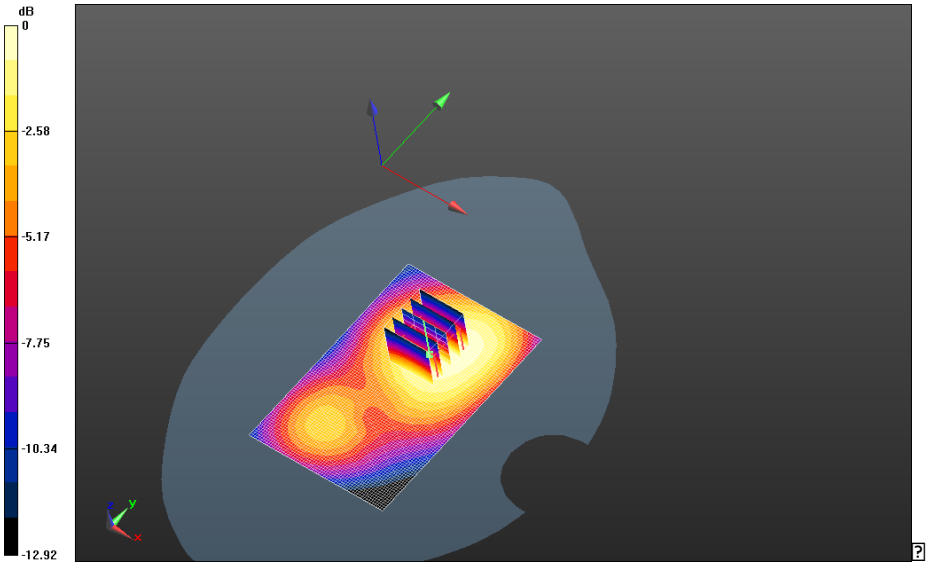


0 dB = 0.607 W/kg = -2.17 dBW/kg

Body Worn MSL - UMTS Band II/Holster Device Front - UMTS_II_mid_chan_amb_temp_23.6C_liq_temp_22.0C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.466 W/kg

Body Worn MSL - UMTS Band II/Holster Device Front - UMTS_II_mid_chan_amb_temp_23.6C_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 = 13.295 V/m; **Power Drift = -0.040 dB**

Averaged SAR: SAR(1g) = 0.392 W/kg; SAR(10g) = 0.254 W/kg
Maximum value of SAR (interpolated) = 0.603 W/kg



0 dB = 0.374 W/kg = -4.27 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_Body-Worn 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:

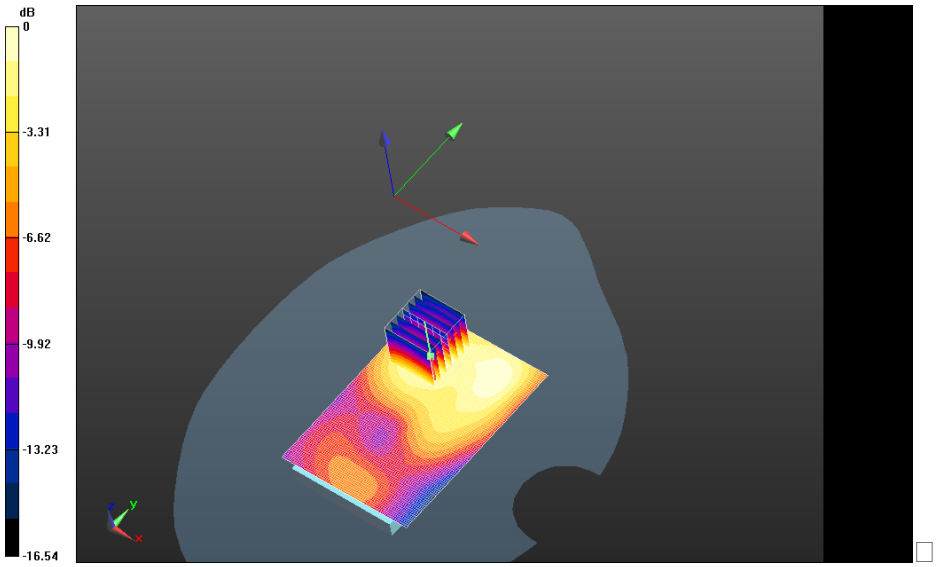
- Probe: ES3DV3 - SN3225; ConvF: (4.35,4.35,4.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_Body-Worn SAR/Device Back_15mm_802.11b_Mid_Chan_Amb_Temp_23.3C_Liquid_Temp_21.6C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.161 W/kg

Flat-Section MSL_Body-Worn SAR/Device Back_15mm_802.11b_Mid_Chan _Amb_Temp_23.3C_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 = 5.310 V/m; **Power Drift = -0.096 dB**

Averaged SAR: SAR(1g) = 0.149 W/kg; SAR(10g) = 0.0877 W/kg
Maximum value of SAR (interpolated) = 0.255 W/kg



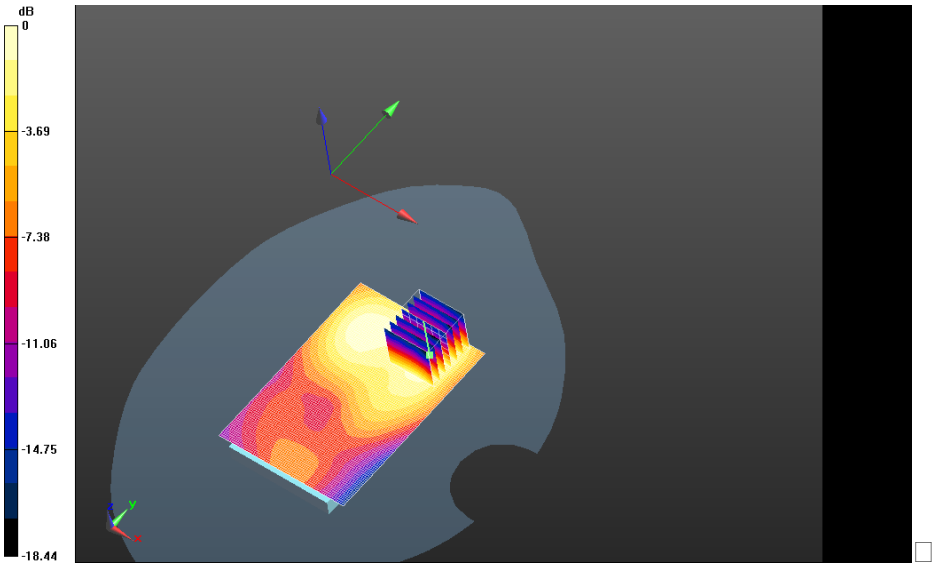
0 dB = 0.161 W/kg = -7.93 dBW/kg

Flat-Section MSL_Body-Worn SAR/Device Back+HS_15mm_802.11b_Mid_Chan _Amb_Temp_23.5C_Liquid_Temp_21.4C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.164 W/kg

Flat-Section MSL_Body-Worn SAR/Device Back+HS_15mm_802.11b_Mid_Chan_Amb_Temp_23.5C_Liquid_Temp_21.4 C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 8.998 V/m; **Power Drift = 0.125 dB**

Averaged SAR: SAR(1g) = 0.148 W/kg; SAR(10g) = 0.0846 W/kg
Maximum value of SAR (interpolated) = 0.273 W/kg



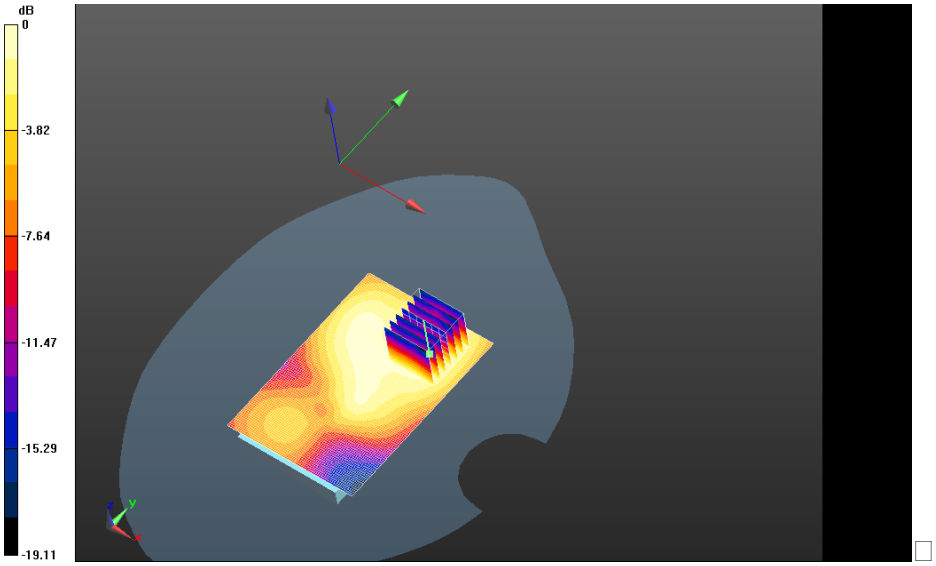
0 dB = 0.161 W/kg = -7.93 dBW/kg

Flat-Section MSL_Body-Worn SAR/Holster_Device_Back_802.11b_Mid_Chan _Amb_Temp_23.5C_Liquid_Temp_21.5C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0917 W/kg

Flat-Section MSL_Body-Worn SAR/Holster_Device_Back_802.11b_Mid_Chan _Amb_Temp_23.5C_Liquid_Temp_21.5C/Zoom Scan (31x31x36)/Cube 0:
Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 6.860 V/m; **Power Drift = -0.027 dB**

Averaged SAR: SAR(1g) = 0.0824 W/kg; SAR(10g) = 0.0466 W/kg
Maximum value of SAR (interpolated) = 0.154 W/kg



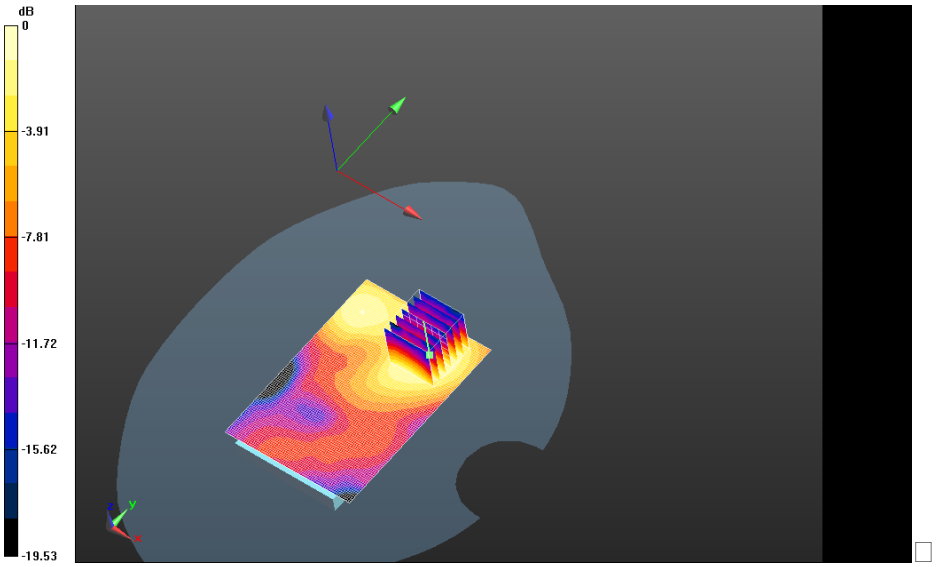
0 dB = 0.161 W/kg = -7.93 dBW/kg

Flat-Section MSL_Body-Worn SAR/Holster_Device_Front_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) = 0.0609 W/kg

Flat-Section MSL_Body-Worn SAR/Holster_Device_Front_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 = 5.578 V/m; **Power Drift = 0.096 dB**

Averaged SAR: SAR(1g) = 0.0560 W/kg; SAR(10g) = 0.0319 W/kg
Maximum value of SAR (interpolated) = 0.104 W/kg



0 dB = 0.0895 W/kg = -10.48 dBW/kg

Bluetooth

Date: 3/21/2013

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

Configuration: Body Worn 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

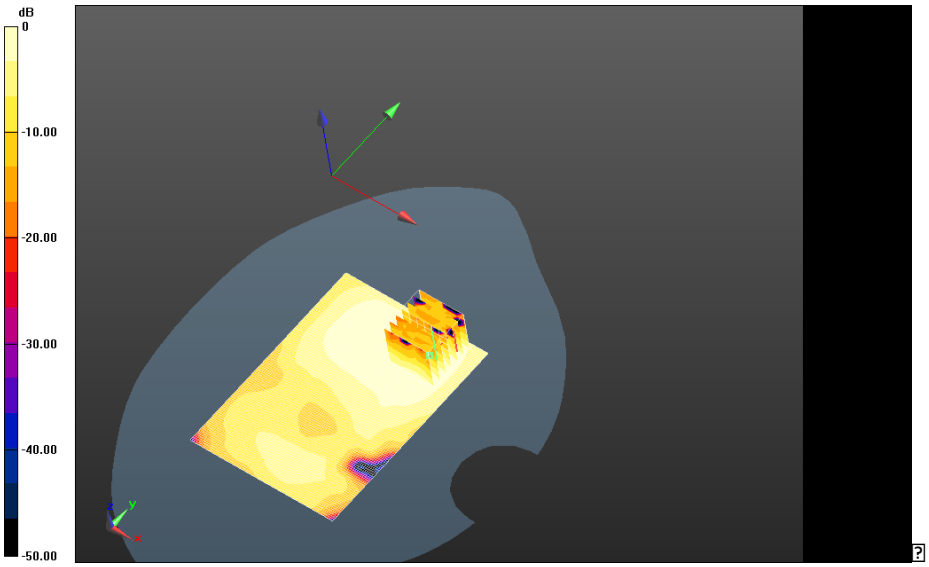
DASY Configuration:

- 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)

Body Worn MSL - Bluetooth/15mm Device Back - Bluetooth_chan39_amb_temp_23.4C_liq_temp_21.6C/Area Scan (81x111x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0171 W/kg

Body Worn MSL - Bluetooth/15mm Device Back - Bluetooth_chan39_amb_temp_23.4C_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 = 2.913 V/m; **Power Drift = -0.049 dB**

Averaged SAR: SAR(1g) = 0.0135 W/kg; SAR(10g) = 0.00750 W/kg
Maximum value of SAR (interpolated) = 0.0251 W/kg



0 dB = 0.0166 W/kg = -17.80 dBW/kg

Z axis plot for the worst case body configuration