APPENDIX C2: SAR DISTRIBUTION PLOTS FOR HOTSPOT CONFIGURATION

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

DTM/GSM 850

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/15/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - GPRS 850

Communication System: GSM 850; Communication System Band: GSM 850; Frequency: 836.8 MHz
Medium Parameters used: f=836.8 MHz; σ = 0.970 S/m; ε_r = 53.234; 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 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GSM850_chan190_amb_temp_22.8C_liq_temp_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 25.146 V/m; **Power Drift = 0.042 dB**

Fast SAR: SAR(1g) = 0.526 W/kg; SAR(10g) = 0.372 W/kg
Maximum value of SAR (interpolated) = 0.595 W/kg

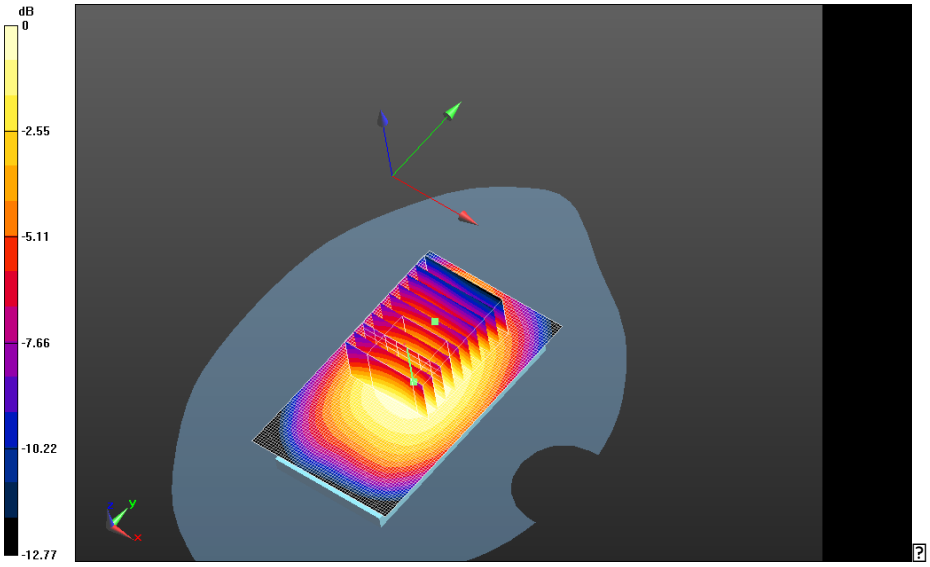
Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GSM850_chan190_amb_temp_22.8C_liq_temp_21.1C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 25.146 V/m; **Power Drift = 0.042 dB**

Averaged SAR: SAR(1g) = 0.545 W/kg; SAR(10g) = 0.417 W/kg
Maximum value of SAR (interpolated) = 0.676 W/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GSM850_chan190_amb_temp_22.8C_liq_temp_21.1C/Zoom Scan 2 (36x46x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 25.146 V/m; **Power Drift = 0.044 dB**

Averaged SAR: SAR(1g) = 0.549 W/kg; SAR(10g) = 0.420 W/kg
Maximum value of SAR (interpolated) = 0.688 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.602 W/kg = -2.20 dBW/kg

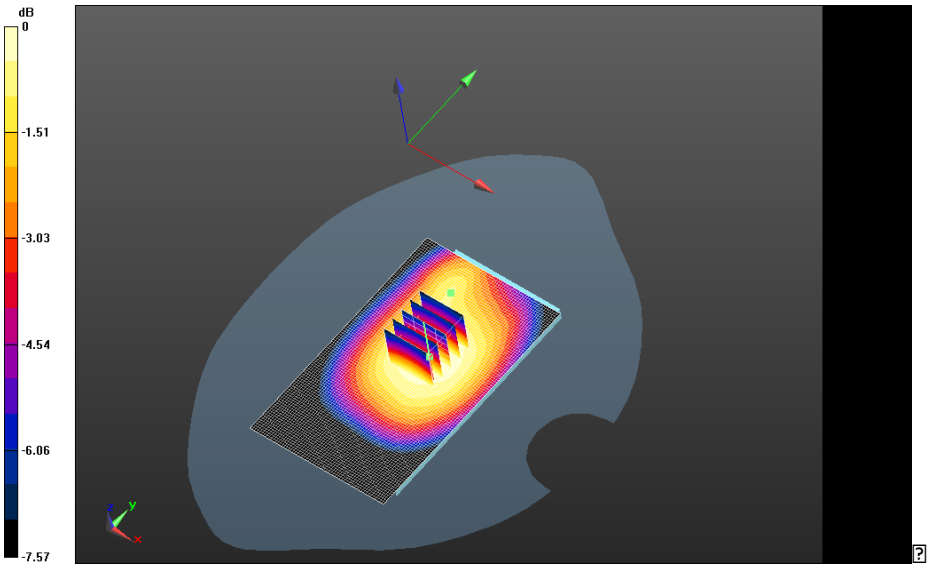
This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS850_chan190_amb_temp_22.8C_liq_temp_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 27.593 V/m; **Power Drift = -0.086 dB**

Fast SAR: SAR(1g) = 0.615 W/kg; SAR(10g) = 0.432 W/kg
Maximum value of SAR (interpolated) = 0.695 W/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS850_chan190_amb_temp_22.8C_liq_temp_21.1C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 27.593 V/m; **Power Drift = -0.086 dB**

Averaged SAR: SAR(1g) = 0.622 W/kg; SAR(10g) = 0.478 W/kg
Maximum value of SAR (interpolated) = 0.771 W/kg

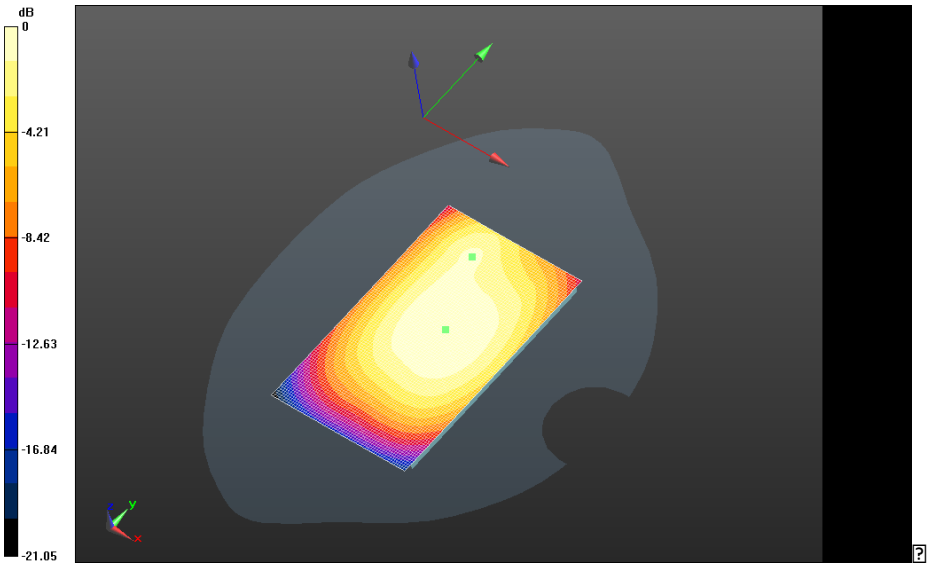


0 dB = 0.602 W/kg = -2.20 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS850_3-Slots_chan190_amb_temp_22.8C_liq_temp_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 27.160 V/m; **Power Drift = -0.044 dB**

Fast SAR: SAR(1g) = 0.593 W/kg; SAR(10g) = 0.420 W/kg
Maximum value of SAR (interpolated) = 0.668 W/kg

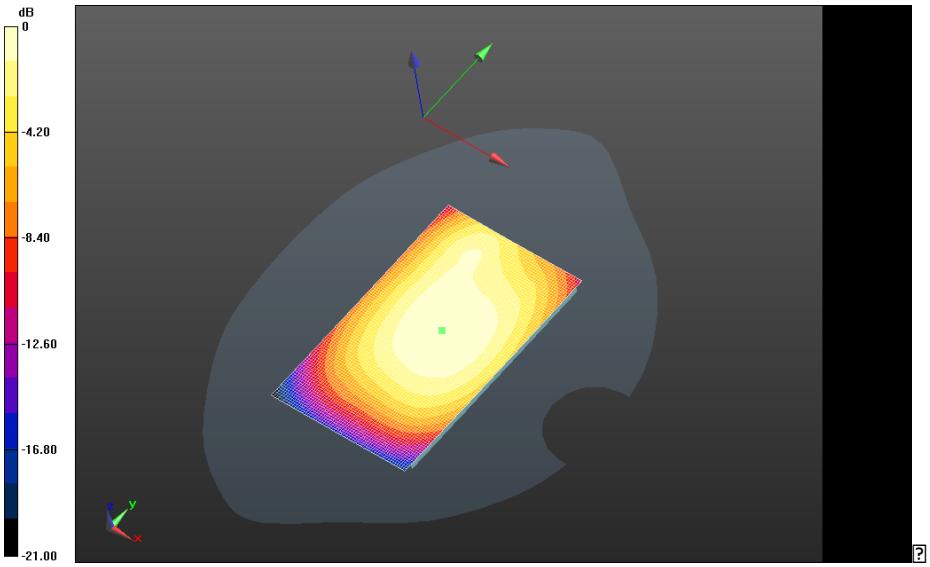


0 dB = 0.681 W/kg = -1.67 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS850_4-Slots_chan190_amb_temp_22.8C_liq_temp_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 26.160 V/m; **Power Drift = -0.173 dB**

Fast SAR: SAR(1g) = 0.552 W/kg; SAR(10g) = 0.390 W/kg
Maximum value of SAR (interpolated) = 0.622 W/kg

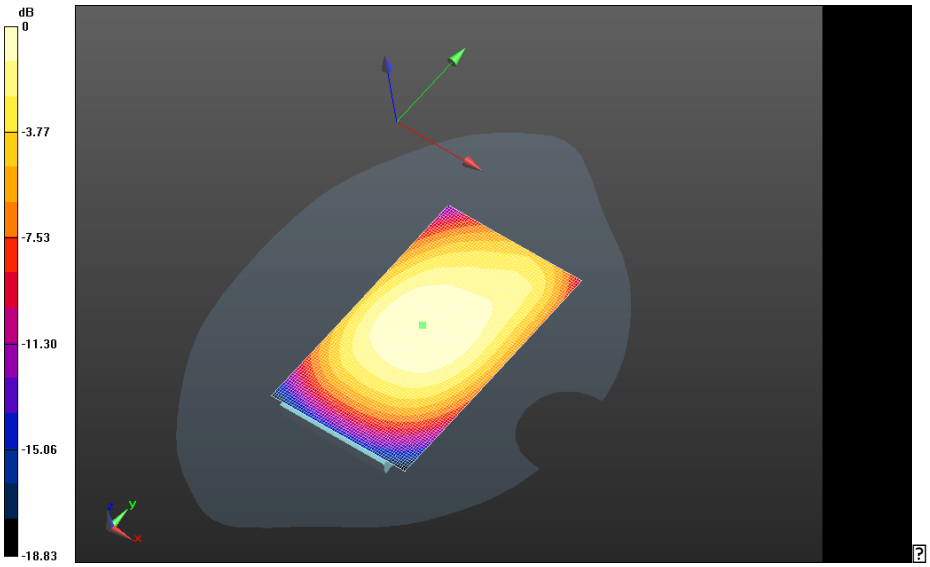


0 dB = 0.668 W/kg = -1.75 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 850/10mm Device Front - GPRS850_chan190_amb_temp_23.6C_liq_temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 26.348 V/m; **Power Drift = -0.146 dB**

Fast SAR: SAR(1g) = 0.566 W/kg; SAR(10g) = 0.401 W/kg
Maximum value of SAR (interpolated) = 0.637 W/kg

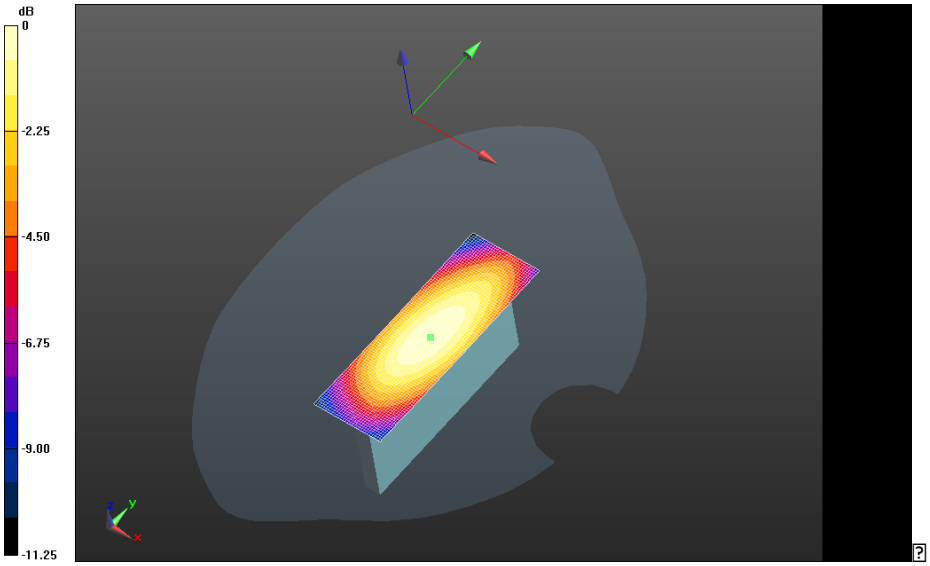


0 dB = 0.622 W/kg = -2.06 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 850/10mm Device Left - GPRS850_chan190_amb_temp_22.9C_liq_temp_21.9C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 24.200 V/m; **Power Drift = -1.04e-005 dB**

Fast SAR: SAR(1g) = 0.463 W/kg; SAR(10g) = 0.313 W/kg
Maximum value of SAR (interpolated) = 0.526 W/kg

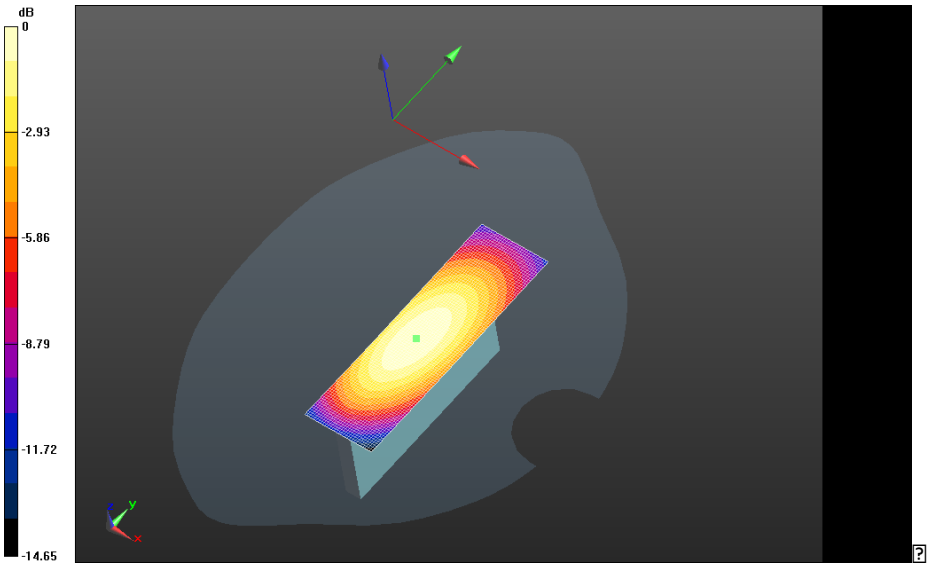


0 dB = 0.637 W/kg = -1.96 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 850/10mm Device Right - GPRS850_chan190_amb_temp_22.8C_liq_temp_21.1C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 22.776 V/m; **Power Drift = 0.00474 dB**

Fast SAR: SAR(1g) = 0.416 W/kg; SAR(10g) = 0.281 W/kg
Maximum value of SAR (interpolated) = 0.476 W/kg

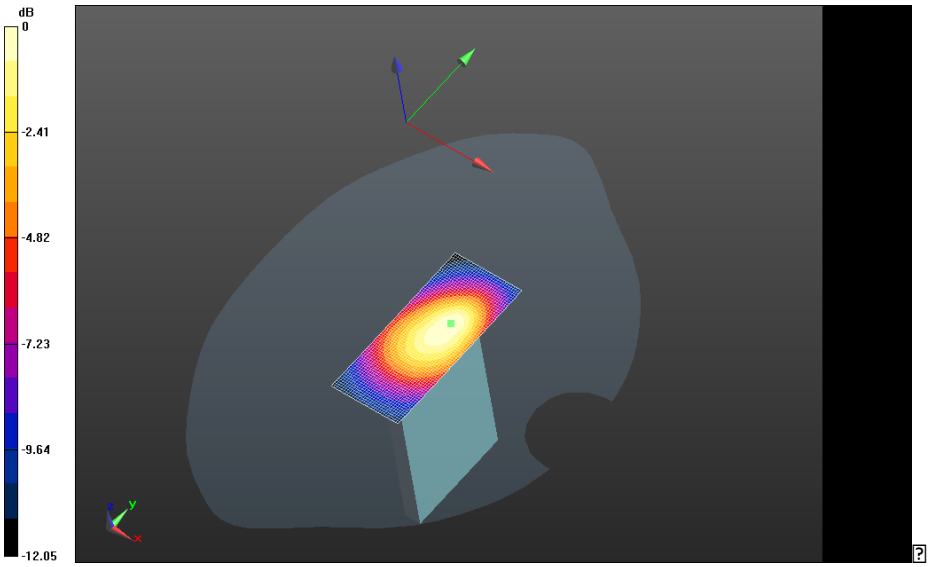


0 dB = 0.526 W/kg = -2.79 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 850/10mm Device Bottom - GPRS850_chan190_amb_temp_22.8C_liq_temp_21.1C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.794 V/m; **Power Drift = -0.043 dB**

Fast SAR: SAR(1g) = 0.175 W/kg; SAR(10g) = 0.111 W/kg
Maximum value of SAR (interpolated) = 0.210 W/kg



0 dB = 0.476 W/kg = -3.22 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

UMTS Band V

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/15/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - UMTS band V

Communication System: WCDMA FDD V; Communication System Band: UMTS band V;
Frequency: 836.4 MHz
Medium Parameters used: f=836.4 MHz; σ = 0.970 S/m; ε_r = 53.238; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

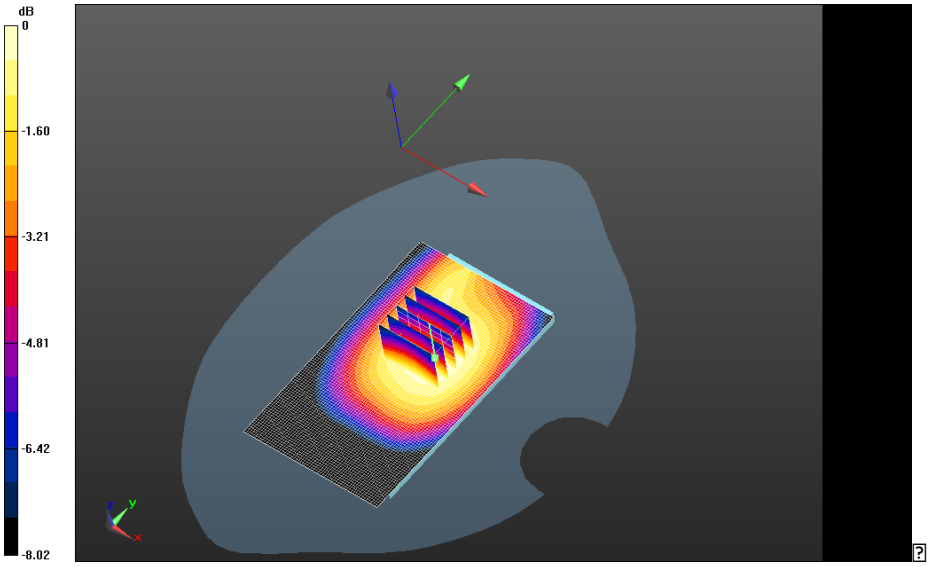
- Probe: ES3DV3 - SN3225; ConvF: (6.12,6.12,6.12); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS band V/10mm Device Back - UMTS_band V_chan4182_amb_temp_23.5C_liq_temp_21.8C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 24.132 V/m; **Power Drift = -0.020 dB**

Mobile Hot Spot MSL - UMTS band V/10mm Device Back - UMTS_band V_chan4182_amb_temp_23.5C_liq_temp_21.8C/Zoom Scan (26x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 24.132 V/m; **Power Drift = -0.020 dB**

Averaged SAR: SAR(1g) = 0.505 W/kg; SAR(10g) = 0.386 W/kg
Maximum value of SAR (interpolated) = 0.623 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

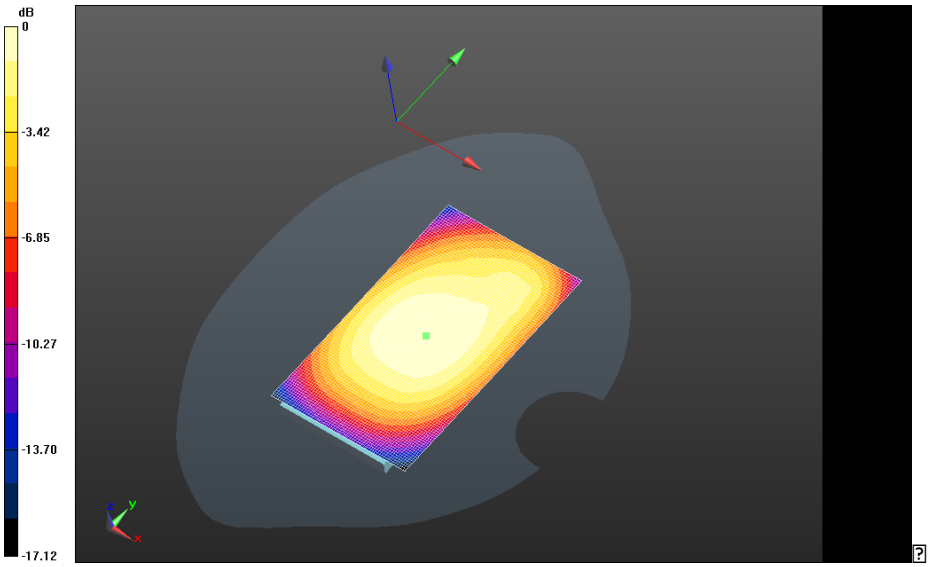


0 dB = 0.550 W/kg = -2.60 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - UMTS band V/10mm Device Front - UMTS_band V_chan4182_amb_temp_23.4C_liq_temp_21.6C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 24.544 V/m; **Power Drift = -0.052 dB**

Fast SAR: SAR(1g) = 0.489 W/kg; SAR(10g) = 0.347 W/kg
Maximum value of SAR (interpolated) = 0.552 W/kg

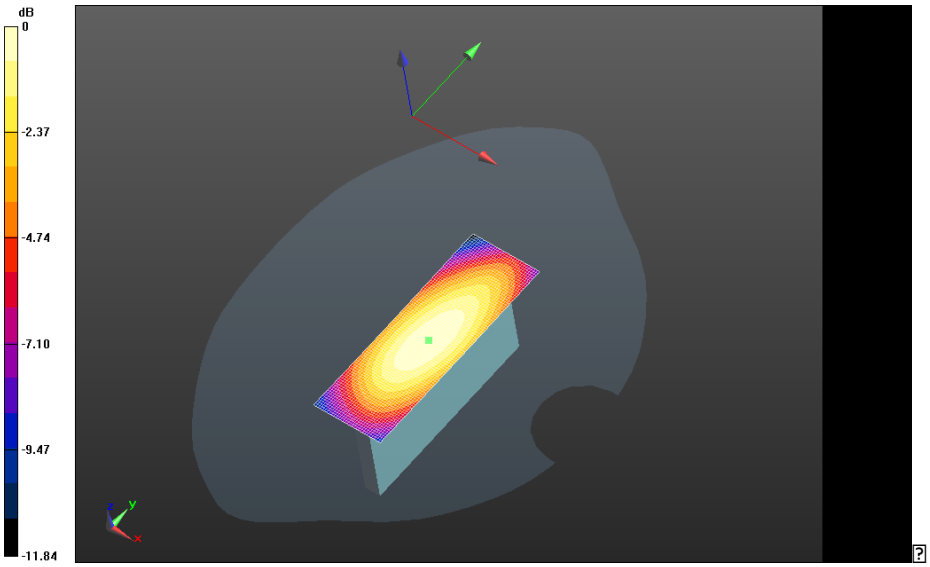


0 dB = 0.550 W/kg = -2.60 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - UMTS band V/10mm Device Left - UMTS_band V_chan4182_amb_temp_23.2C_liq_temp_21.7C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 22.598 V/m; **Power Drift = -0.013 dB**

Fast SAR: SAR(1g) = 0.406 W/kg; SAR(10g) = 0.275 W/kg
Maximum value of SAR (interpolated) = 0.461 W/kg

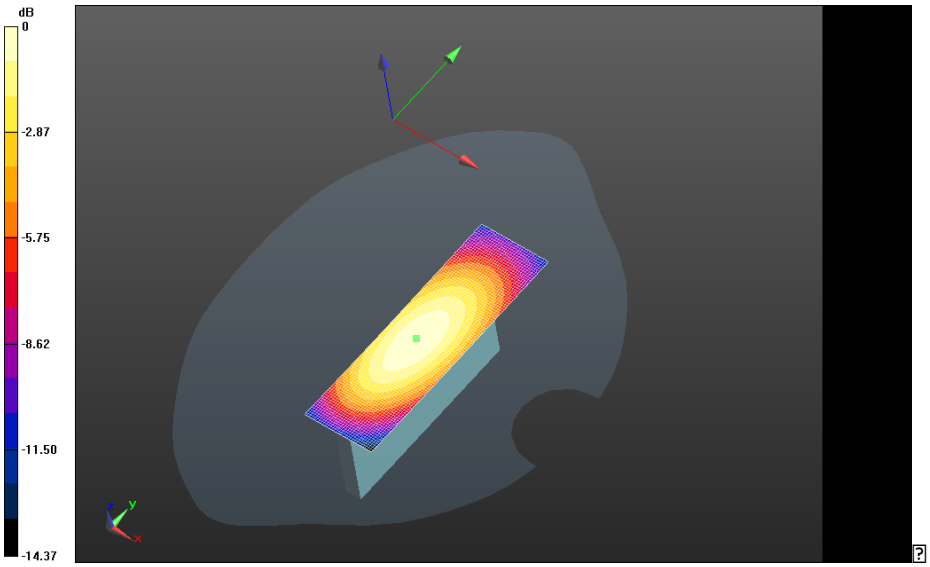


0 dB = 0.552 W/kg = -2.58 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - UMTS band V/10mm Device Right - UMTS_band V_chan4182_amb_temp_23.1C_liq_temp_21.5C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 21.179 V/m; **Power Drift = 0.090 dB**

Fast SAR: SAR(1g) = 0.368 W/kg; SAR(10g) = 0.248 W/kg
Maximum value of SAR (interpolated) = 0.422 W/kg

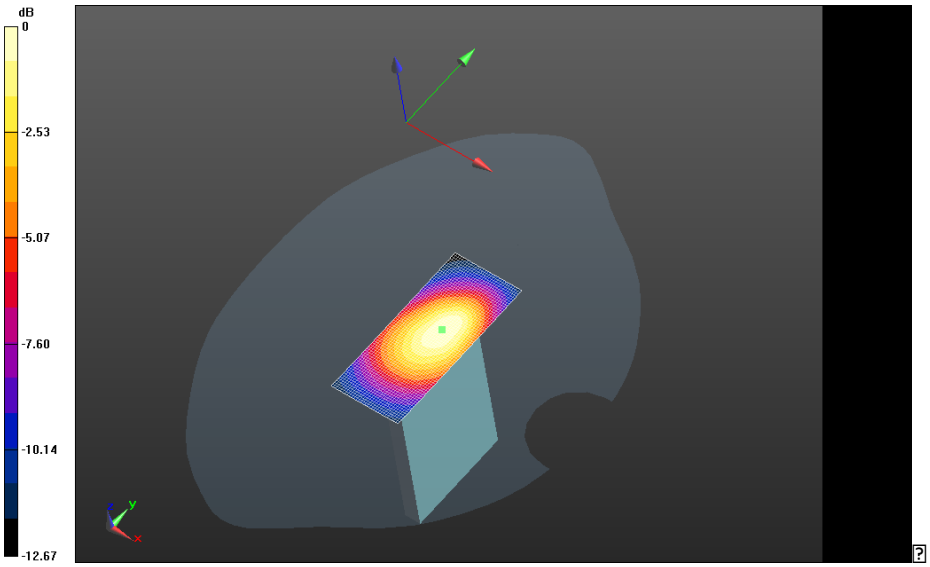


0 dB = 0.461 W/kg = -3.36 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - UMTS band V/10mm Device Bottom - UMTS_band V_chan4182_amb_temp_23.C_liq_temp_21.4C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.833 V/m; **Power Drift = -0.149 dB**

Fast SAR: SAR(1g) = 0.166 W/kg; SAR(10g) = 0.105 W/kg
Maximum value of SAR (interpolated) = 0.197 W/kg



0 dB = 0.422 W/kg = -3.75 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

DTM/GSM 1900

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/8/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - GPRS 1900

Communication System: GSM 1900; Communication System Band: GSM 1900; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.524 S/m; ε_r = 50.997; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

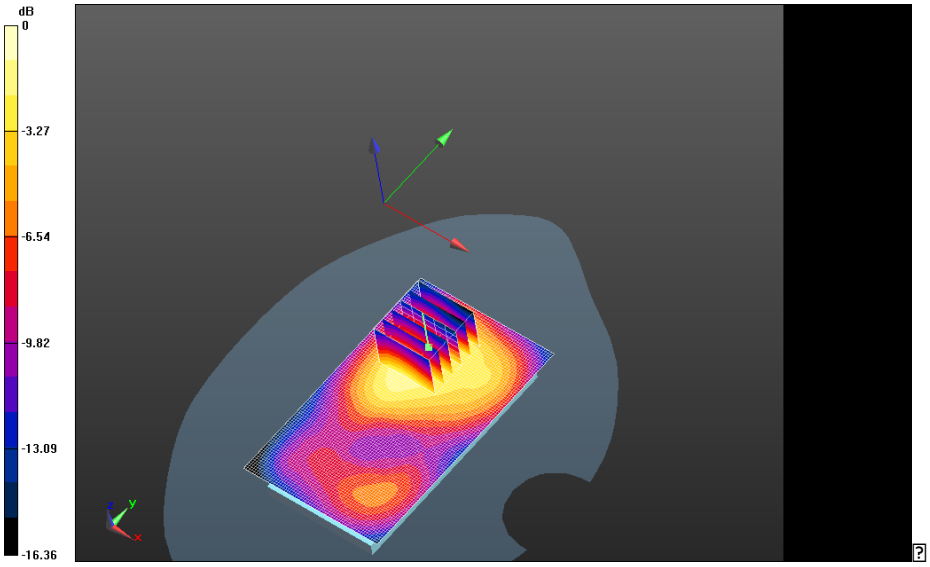
- Probe: ES3DV3 - SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GSM1900_chan661_amb_temp_24.2C_liq_temp_22.6C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 9.388 V/m; **Power Drift = 0.015 dB**

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GSM1900_chan661_amb_temp_24.2C_liq_temp_22.6C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 9.388 V/m; **Power Drift = 0.054 dB**

Averaged SAR: SAR(1g) = 0.512 W/kg; SAR(10g) = 0.302 W/kg
Maximum value of SAR (interpolated) = 0.867 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

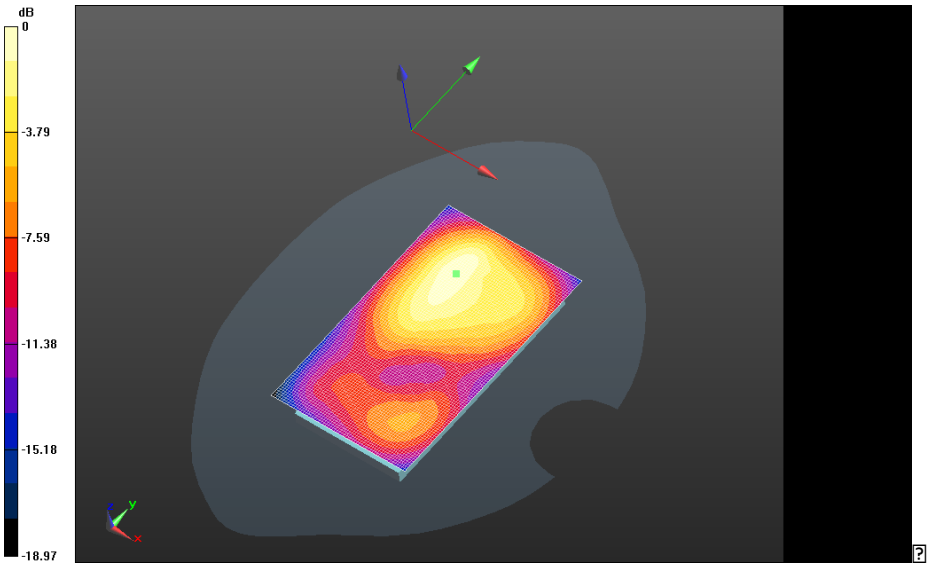


0 dB = 0.624 W/kg = -2.05 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS1900_chan661_amb_temp_24.4C_liq_temp_22.7C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 9.303 V/m; **Power Drift = -0.106 dB**

Fast SAR: SAR(1g) = 0.488 W/kg; SAR(10g) = 0.276 W/kg
Maximum value of SAR (interpolated) = 0.611 W/kg

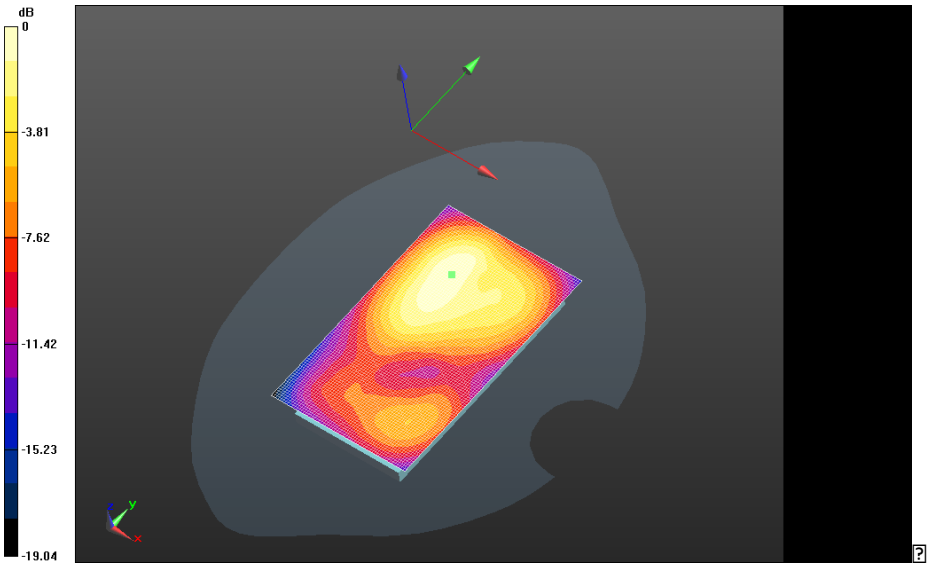


0 dB = 0.624 W/kg = -2.05 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS1900_3-Slots_chan661_amb_temp_24.5C_liq_temp_22.8C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 9.011 V/m; **Power Drift = 0.129 dB**

Fast SAR: SAR(1g) = 0.433 W/kg; SAR(10g) = 0.256 W/kg
Maximum value of SAR (interpolated) = 0.529 W/kg

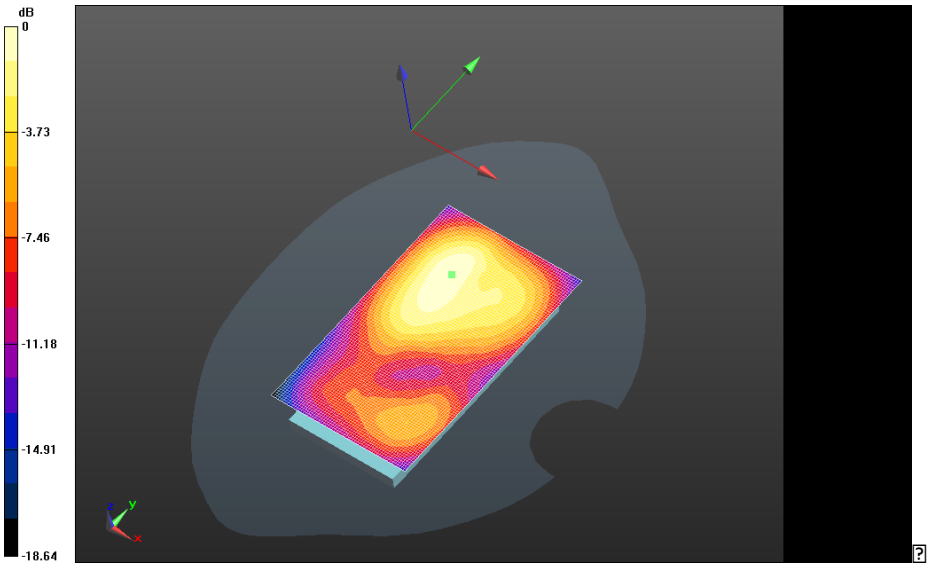


0 dB = 0.611 W/kg = -2.14 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS1900_4-Slots_chan661_amb_temp_24.4C_liq_temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 8.779 V/m; **Power Drift = -0.086 dB**

Fast SAR: SAR(1g) = 0.406 W/kg; SAR(10g) = 0.241 W/kg
Maximum value of SAR (interpolated) = 0.494 W/kg

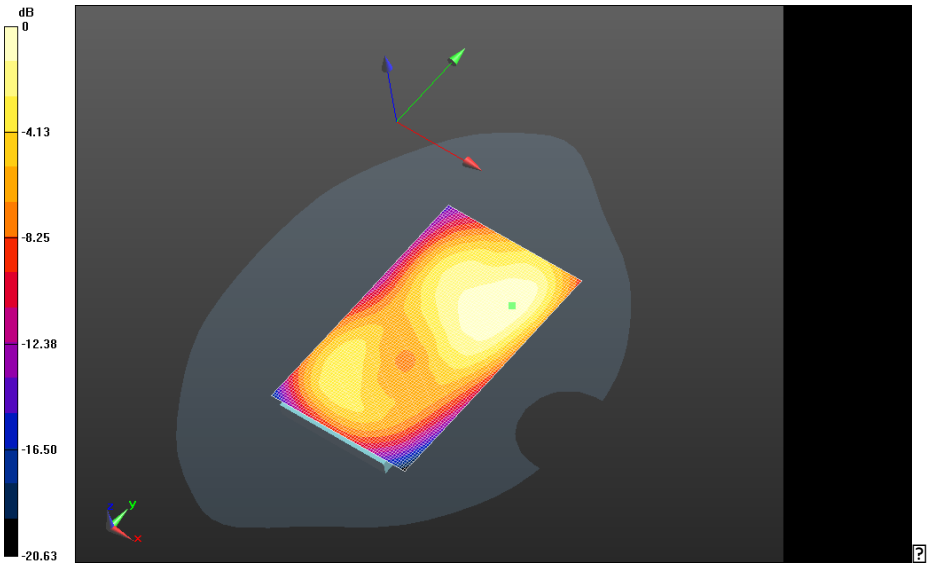


0 dB = 0.529 W/kg = -2.77 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 1900/10mm Device Front - GSM1900_chan661_amb_temp_24.3C_liq_temp_22.8C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 8.293 V/m; **Power Drift = 0.052 dB**

Fast SAR: SAR(1g) = 0.330 W/kg; SAR(10g) = 0.204 W/kg
Maximum value of SAR (interpolated) = 0.396 W/kg

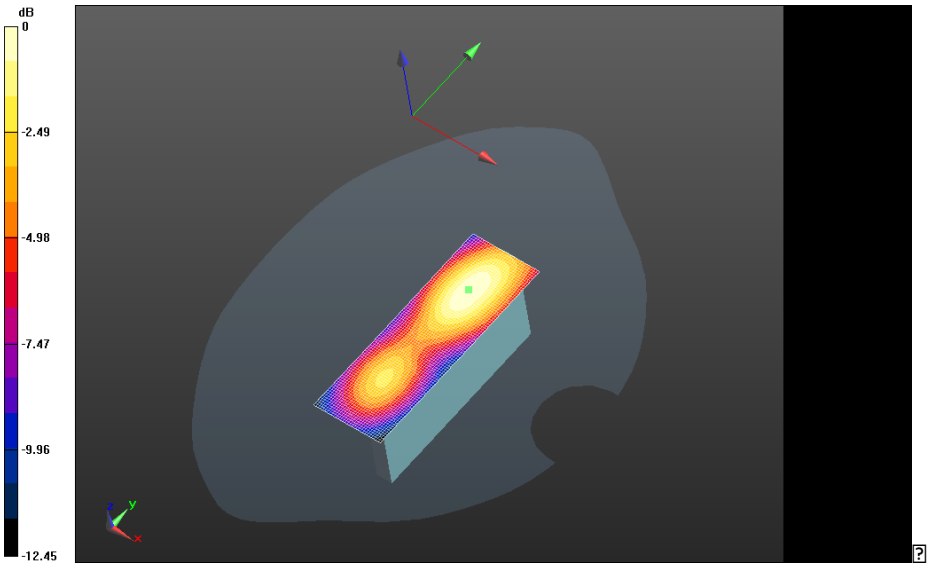


0 dB = 0.494 W/kg = -3.06 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 1900/10mm Device Left - GSM1900_chan661_amb_temp_24.2C_liq_temp_22.8C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.109 V/m; **Power Drift = 0.054 dB**

Fast SAR: SAR(1g) = 0.279 W/kg; SAR(10g) = 0.160 W/kg
Maximum value of SAR (interpolated) = 0.339 W/kg

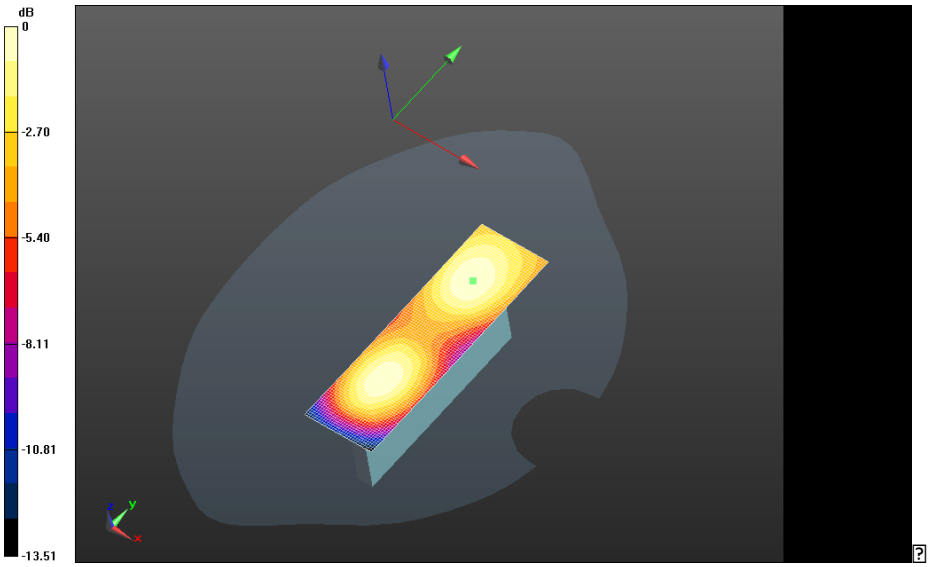


0 dB = 0.396 W/kg = -4.02 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 1900/10mm Device Right - GSM1900_chan661_amb_temp_24.2C_liq_temp_22.5C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 5.613 V/m; **Power Drift = 0.029 dB**

Fast SAR: SAR(1g) = 0.0804 W/kg; SAR(10g) = 0.0484 W/kg
Maximum value of SAR (interpolated) = 0.0966 W/kg

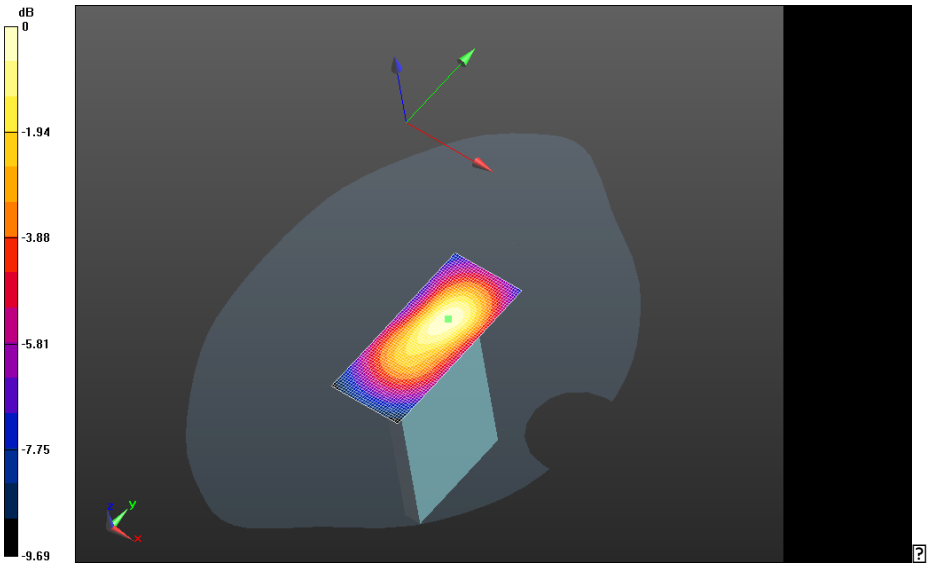


0 dB = 0.339 W/kg = -4.70 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - GPRS 1900/10mm Device Bottom - GSM1900_chan661_amb_temp_24.3C_liq_temp_22.6C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.946 V/m; **Power Drift = -0.022 dB**

Fast SAR: SAR(1g) = 0.170 W/kg; SAR(10g) = 0.0973 W/kg
Maximum value of SAR (interpolated) = 0.211 W/kg



0 dB = 0.0966 W/kg = -10.15 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

UMTS Band II

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 8/15/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - UMTS II

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1852.4 MHz
Medium Parameters used: f=1852.4 MHz; σ = 1.502 S/m; ε_r = 51.051; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

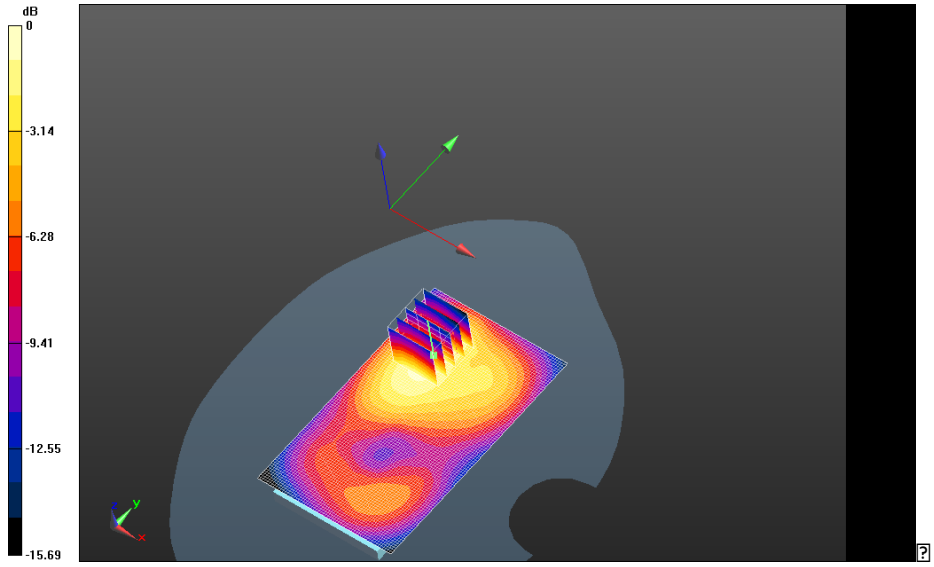
- Probe: ES3DV3 - SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS II/10mm Device Back - UMTS_II_chan9262_amb_temp_22.8C_liq_temp_22.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.746 W/kg

Mobile Hot Spot MSL - UMTS II/10mm Device Back - UMTS_II_chan9262_amb_temp_22.8C_liq_temp_22.1C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.608 V/m; **Power Drift = 0.127 dB**

Averaged SAR: SAR(1g) = 0.626 W/kg; SAR(10g) = 0.379 W/kg
Maximum value of SAR (interpolated) = 1.02 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.746 W/kg = -1.27 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/8/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - UMTS II

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.524 S/m; ε_r = 50.997; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

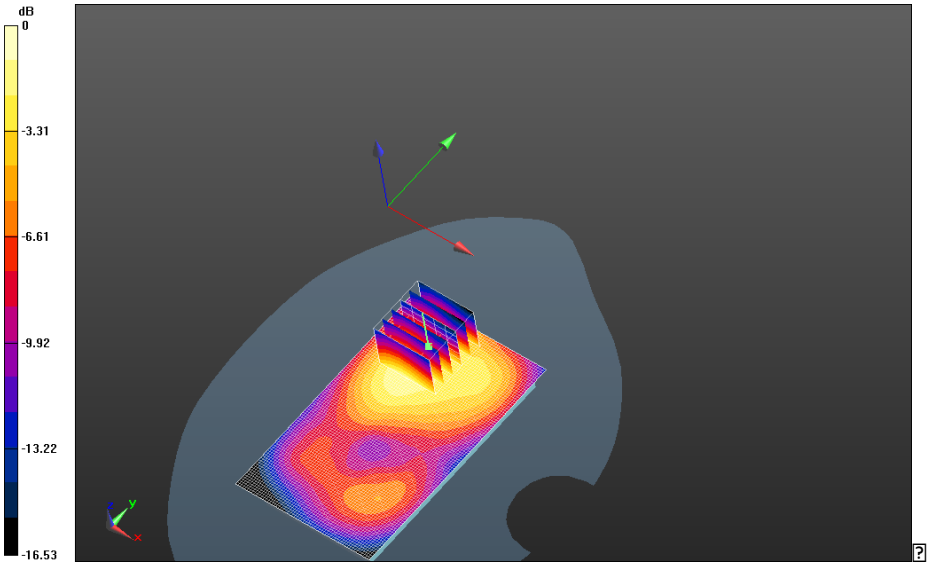
- Probe: ES3DV3 - SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS II/10mm Device Back - UMTS_II_chan9400_amb_temp_23.0C_liq_temp_22.4C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.928 V/m; **Power Drift = 0.049 dB**

Mobile Hot Spot MSL - UMTS II/10mm Device Back - UMTS_II_chan9400_amb_temp_23.0C_liq_temp_22.4C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.928 V/m; **Power Drift = 0.049 dB**

Averaged SAR: SAR(1g) = 0.790 W/kg; SAR(10g) = 0.467 W/kg
Maximum value of SAR (interpolated) = 1.32 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.950 W/kg = -0.22 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 8/15/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - UMTS II Extra

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1852.4 MHz
Medium Parameters used: f=1852.4 MHz; σ = 1.502 S/m; ε_r = 51.051; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

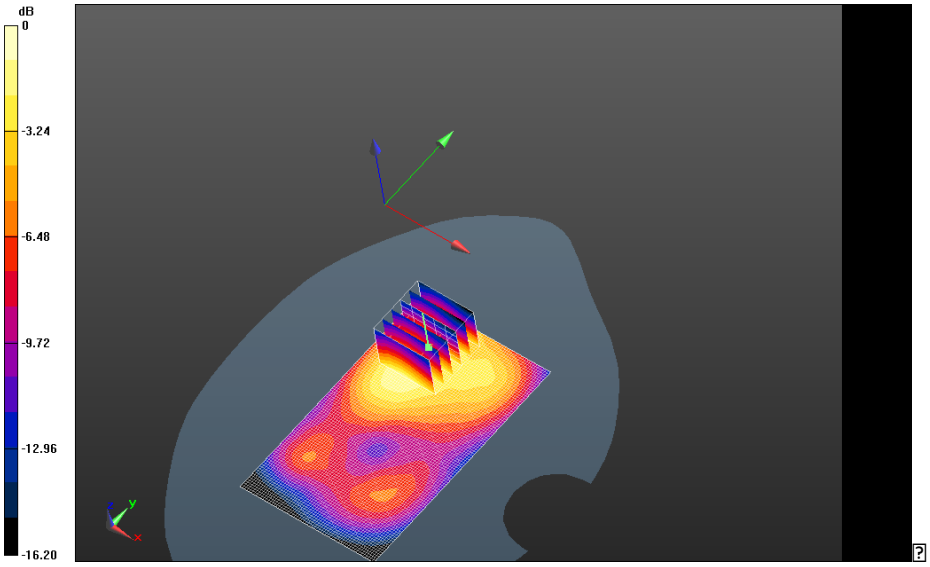
- Probe: ES3DV3 - SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS II Extra/10mm Device Back - UMTS_II_chan9538_amb_temp_23.1C_liq_temp_22.4C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.779 W/kg

Mobile Hot Spot MSL - UMTS II Extra/10mm Device Back - UMTS_II_chan9538_amb_temp_23.1C_liq_temp_22.4C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.938 V/m; **Power Drift = -0.100 dB**

Averaged SAR: SAR(1g) = 0.680 W/kg; SAR(10g) = 0.405 W/kg
Maximum value of SAR (interpolated) = 1.12 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.746 W/kg = -1.27 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/8/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - UMTS II

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.524 S/m; ε_r = 50.997; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

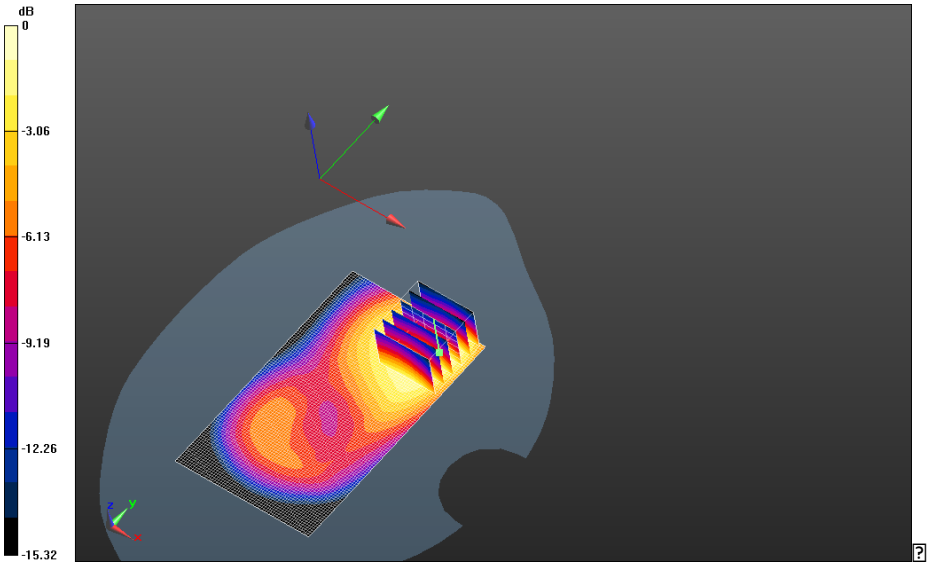
- Probe: ES3DV3 - SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS II/10mm Device Front - UMTS_II_chan9400_amb_temp_23.0C_liq_temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.459 V/m; **Power Drift = 0.00202 dB**

Mobile Hot Spot MSL - UMTS II/10mm Device Front - UMTS_II_chan9400_amb_temp_23.0C_liq_temp_22.5C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.459 V/m; **Power Drift = 0.00202 dB**

Averaged SAR: SAR(1g) = 0.740 W/kg; SAR(10g) = 0.447 W/kg
Maximum value of SAR (interpolated) = 1.22 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.950 W/kg = -0.22 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/8/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - UMTS II

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.524 S/m; ε_r = 50.997; ρ = 1.000 g/cm^3
Phantom section: Flat Section

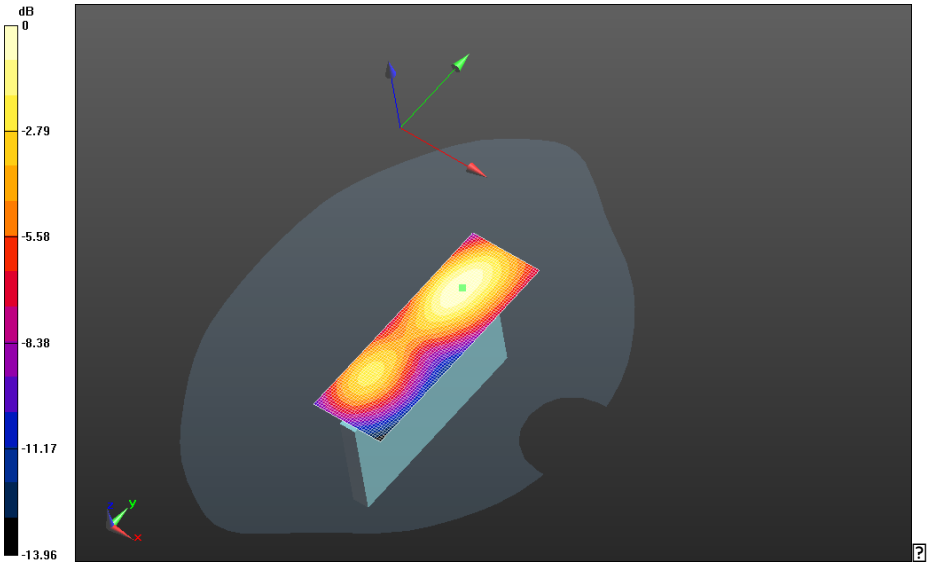
DASY Configuration:

- 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 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS II/10mm Device Left - UMTS_II_chan9400_amb_temp_24.1C_liq_temp_22.5C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.727 V/m; **Power Drift = 0.024 dB**

Fast SAR: SAR(1g) = 0.484 W/kg; SAR(10g) = 0.274 W/kg
Maximum value of SAR (interpolated) = 0.594 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.890 W/kg = -0.51 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/8/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - UMTS II

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.524 S/m; ε_r = 50.997; ρ = 1.000 g/cm^3
Phantom section: Flat Section

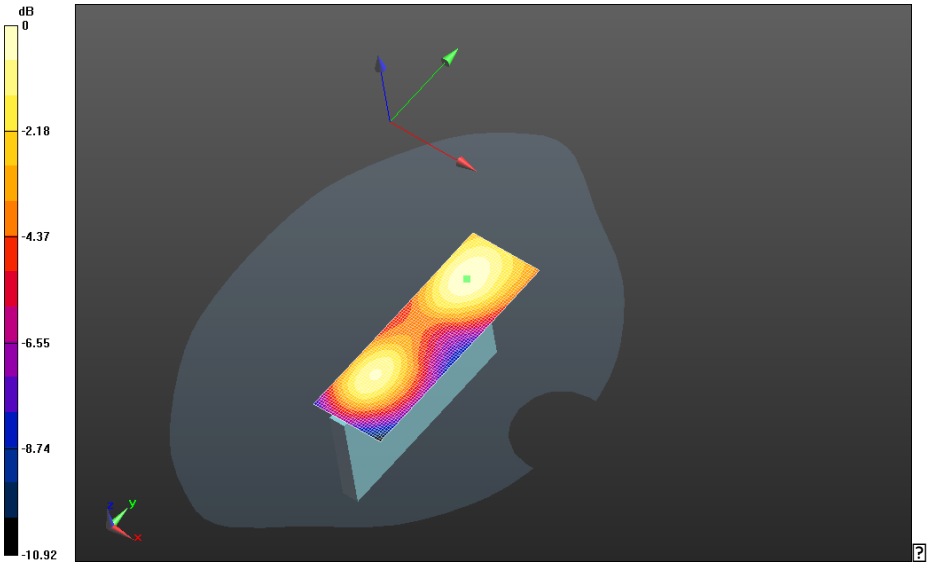
DASY Configuration:

- 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 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS II/10mm Device Right - UMTS_II_chan9400_amb_temp_24.1C_liq_temp_22.5C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 6.910 V/m; **Power Drift = 0.033 dB**

Fast SAR: SAR(1g) = 0.122 W/kg; SAR(10g) = 0.0733 W/kg
Maximum value of SAR (interpolated) = 0.147 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.594 W/kg = -2.26 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/8/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE461

Configuration: Mobile Hot Spot MSL - UMTS II

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.524 S/m; ε_r = 50.997; ρ = 1.000 g/cm^3
Phantom section: Flat Section

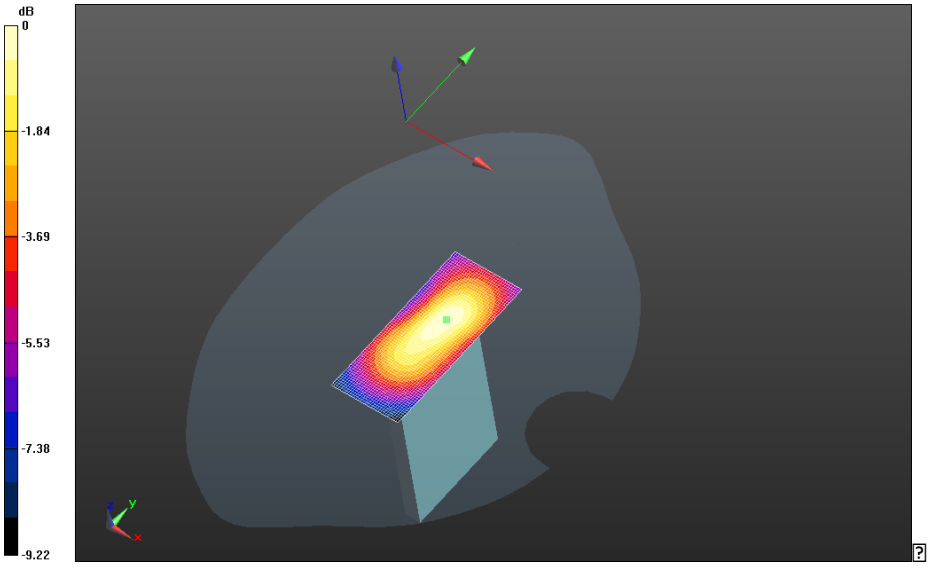
DASY Configuration:

- 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 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS II/10mm Device Bottom - UMTS_II_chan9400_amb_temp_24.1C_liq_temp_22.5C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 14.277 V/m; **Power Drift = -0.077 dB**

Fast SAR: SAR(1g) = 0.265 W/kg; SAR(10g) = 0.154 W/kg
Maximum value of SAR (interpolated) = 0.327 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.147 W/kg = -8.33 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

802.11b

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/24/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE4E2

Configuration: Mobile Hot Spot MSL - 802.11b

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2437 MHz
Medium Parameters used: f=2437 MHz; σ = 2.022 S/m; ε_r = 50.993; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

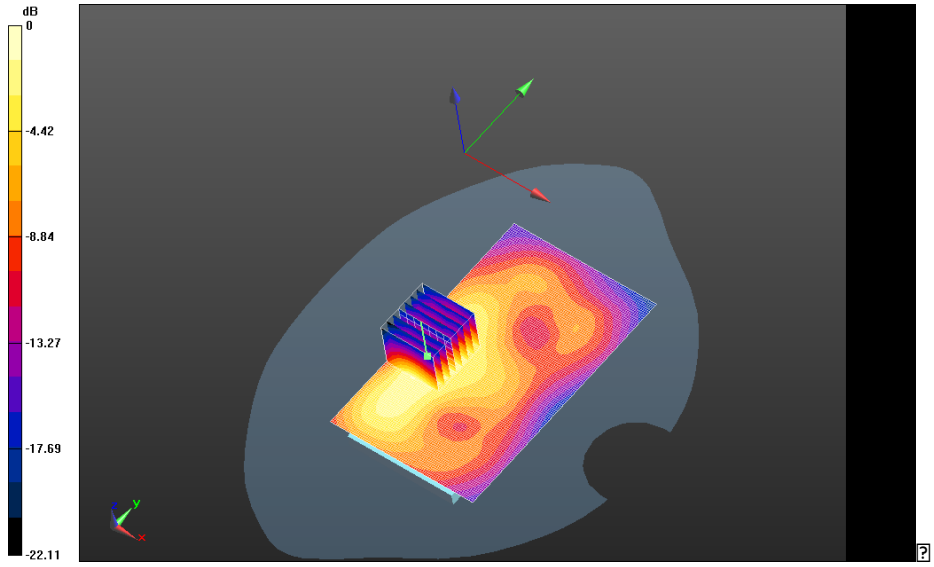
- Probe: ES3DV3 - SN3225; ConvF: (4.35,4.35,4.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - 802.11b/10mm Device Back - 802.11b_chan6_amb_temp_23.5C_liq_temp_22.4C/Area Scan (81x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 6.575 V/m; **Power Drift = 0.102 dB**

Mobile Hot Spot MSL - 802.11b/10mm Device Back - 802.11b_chan6_amb_temp_23.5C_liq_temp_22.4C/Zoom Scan (36x36x36)/Cube 0:
Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 9.801 V/m; **Power Drift = 0.102 dB**

Averaged SAR: SAR(1g) = 0.165 W/kg; SAR(10g) = 0.0836 W/kg
Maximum value of SAR (interpolated) = 0.360 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



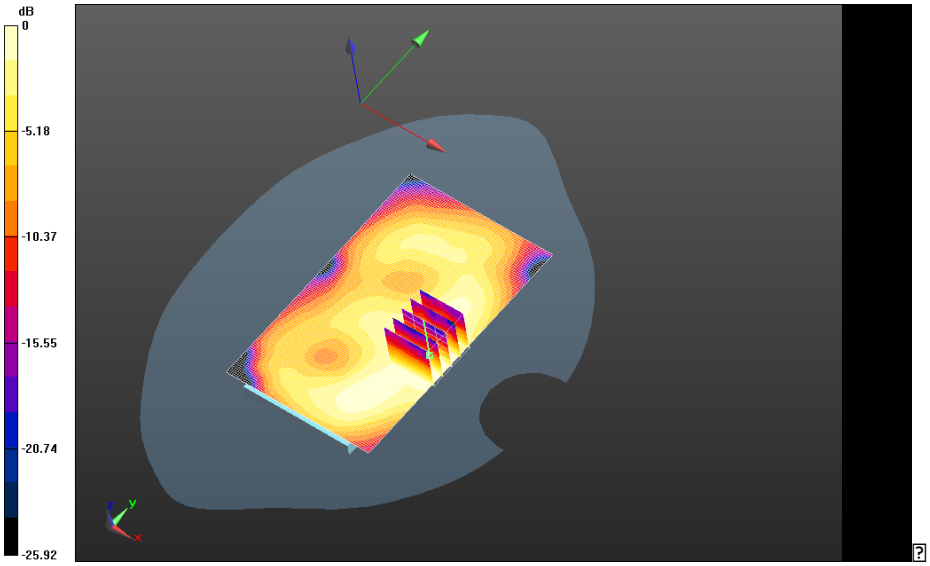
0 dB = 0.219 W/kg = -6.60 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - 802.11b/10mm Device Front - 802.11b_chan6_amb_temp_23.5C_liq_temp_22.4C/Area Scan (81x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 3.380 V/m; **Power Drift = 0.182 dB**

Mobile Hot Spot MSL - 802.11b/10mm Device Front - 802.11b_chan6_amb_temp_23.5C_liq_temp_22.4C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 3.380 V/m; **Power Drift = 0.182 dB**

Averaged SAR: SAR(1g) = 0.0386 W/kg; SAR(10g) = 0.0204 W/kg
Maximum value of SAR (interpolated) = 0.0782 W/kg

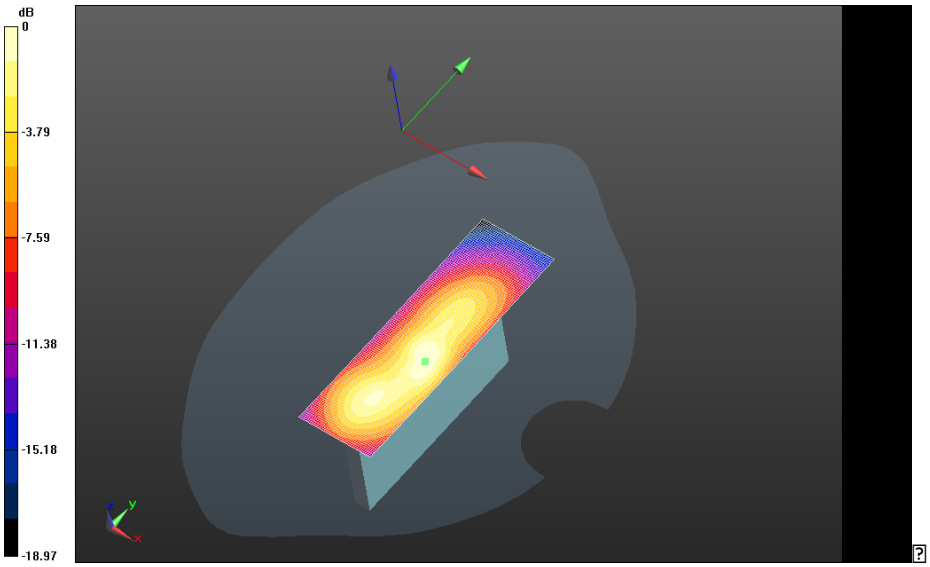


0 dB = 0.219 W/kg = -6.60 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - 802.11b/10mm Device Left - 802.11b_chan6_amb_temp_23.5C_liq_temp_22.4C/Area Scan (41x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 9.845 V/m; **Power Drift = 0.024 dB**

Fast SAR: SAR(1g) = 0.154 W/kg; SAR(10g) = 0.0786 W/kg
Maximum value of SAR (interpolated) = 0.205 W/kg

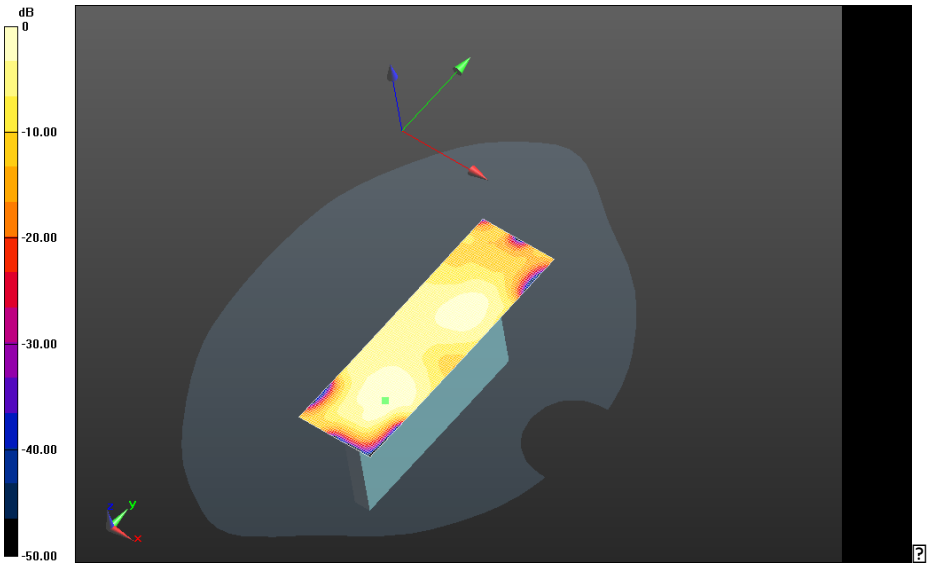


0 dB = 0.0422 W/kg = -13.75 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - 802.11b/10mm Device Right - 802.11b_chan6_amb_temp_23.5C_liq_temp_22.4C/Area Scan (41x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 1.443 V/m; **Power Drift = -0.097 dB**

Fast SAR: SAR(1g) = 0.0132 W/kg; SAR(10g) = 0.00665 W/kg
Maximum value of SAR (interpolated) = 0.0174 W/kg

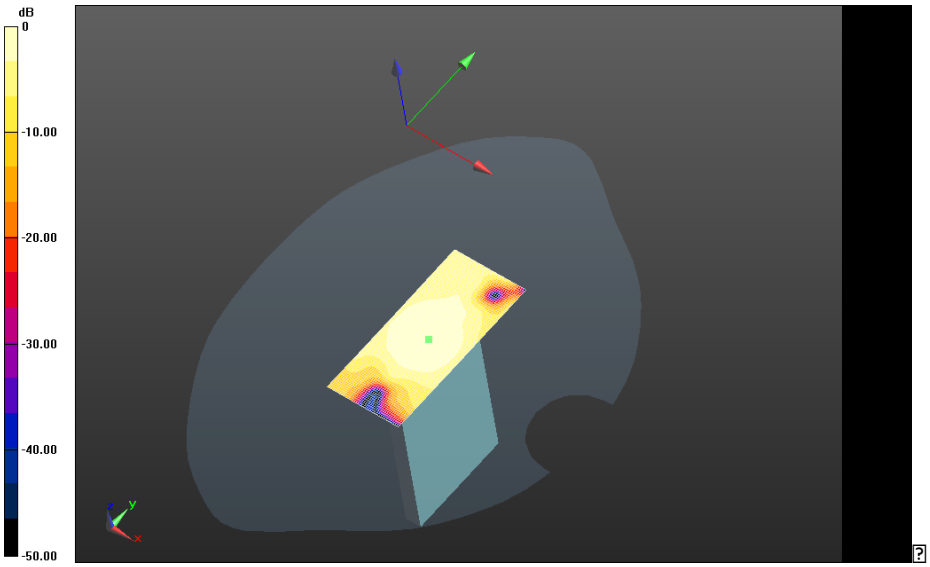


0 dB = 0.205 W/kg = -6.88 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - 802.11b/10mm Device Bottom - 802.11b_chan6_amb_temp_23.5C_liq_temp_22.4C/Area Scan (41x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 2.523 V/m; **Power Drift = -0.101 dB**

Fast SAR: SAR(1g) = 0.0101 W/kg; SAR(10g) = 0.00556 W/kg
Maximum value of SAR (interpolated) = 0.0125 W/kg

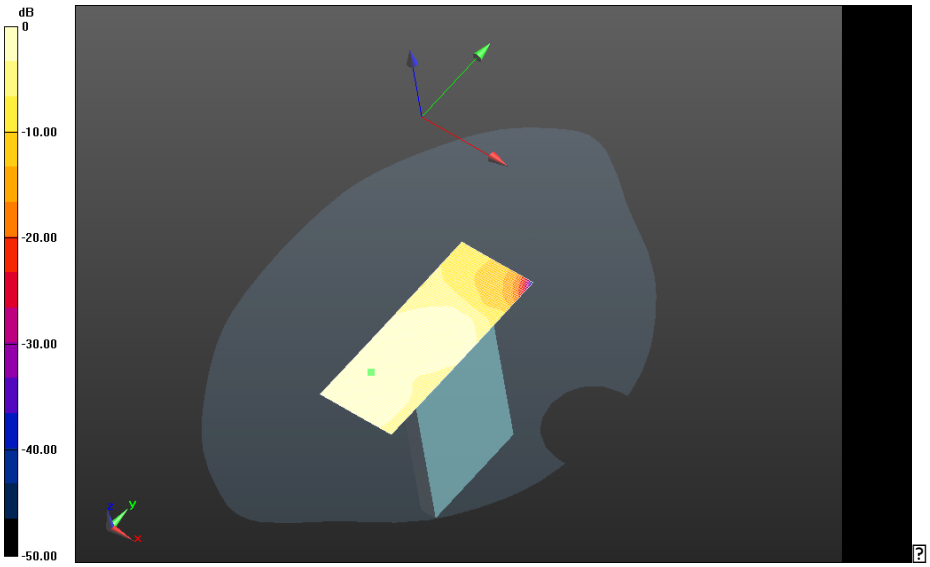


0 dB = 0.0174 W/kg = -17.59 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Mobile Hot Spot MSL - 802.11b/10mm Device Top - 802.11b_chan6_amb_temp_23.5C_liq_temp_22.4C/Area Scan (41x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 2.726 V/m; **Power Drift = 0.143 dB**

Fast SAR: SAR(1g) = 0.0124 W/kg; SAR(10g) = 0.00725 W/kg
Maximum value of SAR (interpolated) = 0.0152 W/kg



0 dB = 0.0125 W/kg = -19.03 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Bluetooth

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited

Date: 7/19/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE447

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 = 1.998 S/m; ε_r = 50.773; 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 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Body Worn MSL - Bluetooth/15mm Device Back - Bluetooth_chan39_amb_temp_23.5C_liq_temp_22.4C/Area Scan (81x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.00707 W/kg

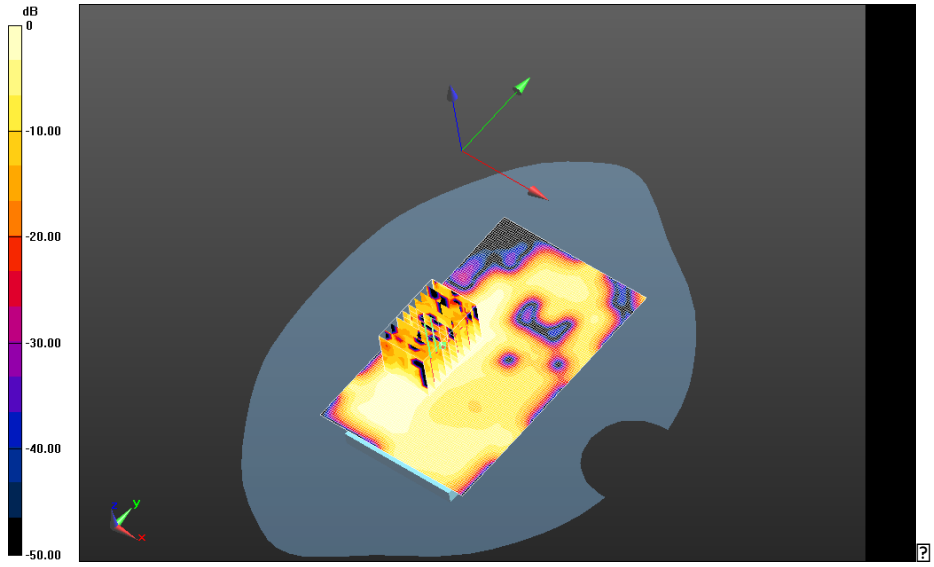
Body Worn MSL - Bluetooth/15mm Device Back - Bluetooth_chan39_amb_temp_23.5C_liq_temp_22.4C/Zoom Scan (31x31x36)/Cube 0:
Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 1.937 V/m; **Power Drift = -0.151 dB**

Averaged SAR: SAR(1g) = 0.00543 W/kg; SAR(10g) = 0.00249 W/kg
Maximum value of SAR (interpolated) = 0.0106 W/kg

Body Worn MSL - Bluetooth/15mm Device Back - Bluetooth_chan39_amb_temp_23.5C_liq_temp_22.4C/Zoom Scan 2 (31x46x36)/Cube 0:
Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 1.937 V/m; **Power Drift = 0.012 dB**

Averaged SAR: SAR(1g) = 0.00540 W/kg; SAR(10g) = 0.00243 W/kg
Maximum value of SAR (interpolated) = 0.0121 W/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited



0 dB = 0.00734 W/kg = -21.34 dBW/kg

This report shall NOT be reproduced except in full without the written consent of RTS
Copyright 2005-2013, RTS, a division of BlackBerry Limited