APPENDIX C: SAR DISTRIBUTION PLOTS FOR BODY-WORN CONFIGURATION

Date/Time: 8/5/2011 10:24:15 AM, Date/Time: 8/5/2011 10:31:11 AM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_GPRS850_mid_chan_amb_temp_23.9_liq_temp_22.9C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: GPRS 850; Frequency: 836.8 MHz;Duty Cycle: 1:4.19952
Medium parameters used (interpolated): f = 836.8 MHz; σ = 0.998 mho/m; ε_r = 54.587; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY4 Configuration:

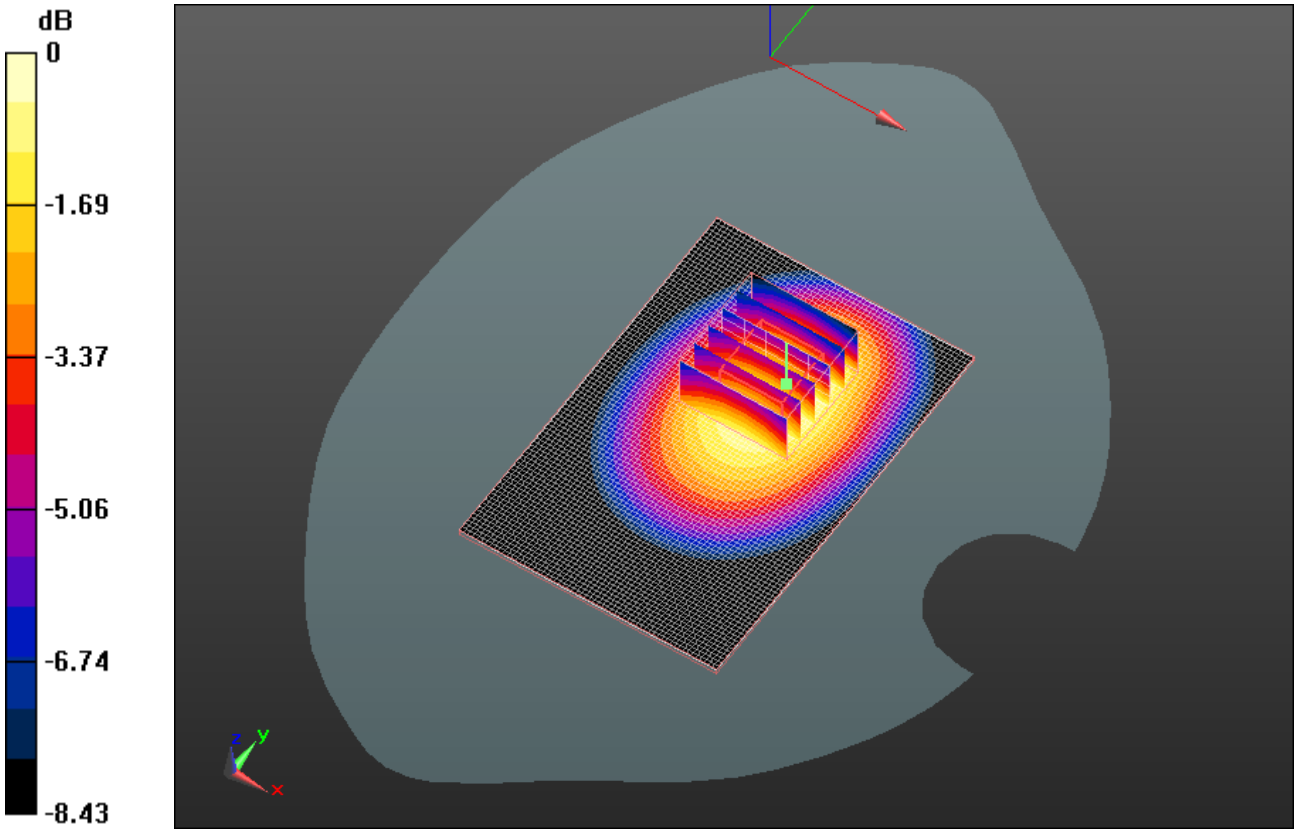
- Probe: ES3DV3 - SN3225; ConvF(6.3, 6.3, 6.3); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- ; SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.818 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 25.676 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.062 W/kg
SAR(1 g) = 0.768 mW/g; SAR(10 g) = 0.543 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.819 mW/g



0 dB = 0.820mW/g

Date/Time: 8/5/2011 11:15:54 AM, Date/Time: 8/5/2011 11:22:50 AM

Test Laboratory: RIM Testing Services

15mm_Front_GPRS850_mid_chan_amb_temp_23.7_liq_temp_22.7C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: GPRS 850; Frequency: 836.8 MHz;Duty Cycle: 1:4.19952
Medium parameters used (interpolated): f = 836.8 MHz; σ = 0.998 mho/m; ε_r = 54.587; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY4 Configuration:

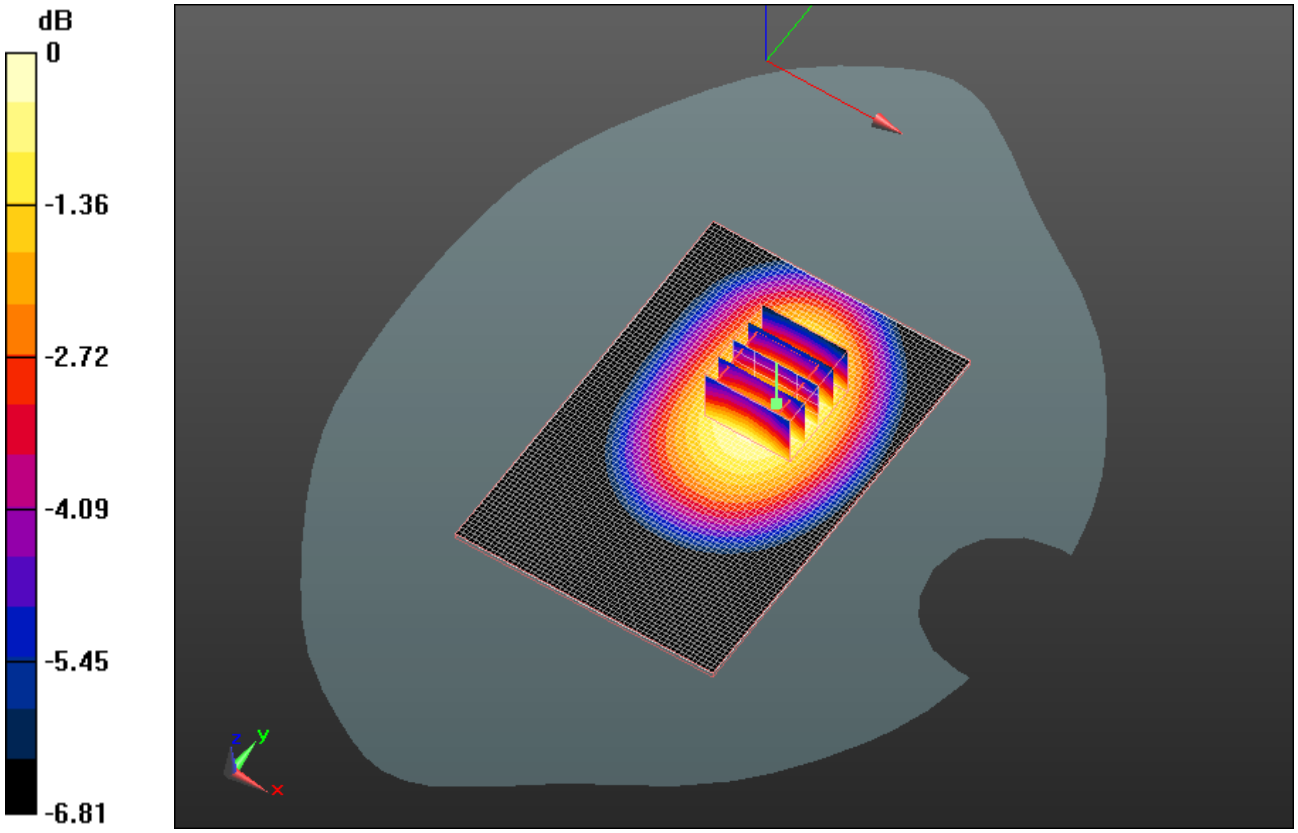
- Probe: ES3DV3 - SN3225; ConvF(6.3, 6.3, 6.3); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- ; SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.604 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 22.533 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.731 W/kg
SAR(1 g) = 0.565 mW/g; SAR(10 g) = 0.410 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.599 mW/g



0 dB = 0.600mW/g

Date/Time: 8/5/2011 10:55:39 AM, Date/Time: 8/5/2011 11:02:38 AM

Test Laboratory: RIM Testing Services

Vertical_Holster_Back_GPRS850_mid_chan_amb_temp_23.8_liq_temp_22.8C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: GPRS 850; Frequency: 836.8 MHz;Duty Cycle: 1:4.19952
Medium parameters used (interpolated): f = 836.8 MHz; σ = 0.998 mho/m; ε_r = 54.587; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY4 Configuration:

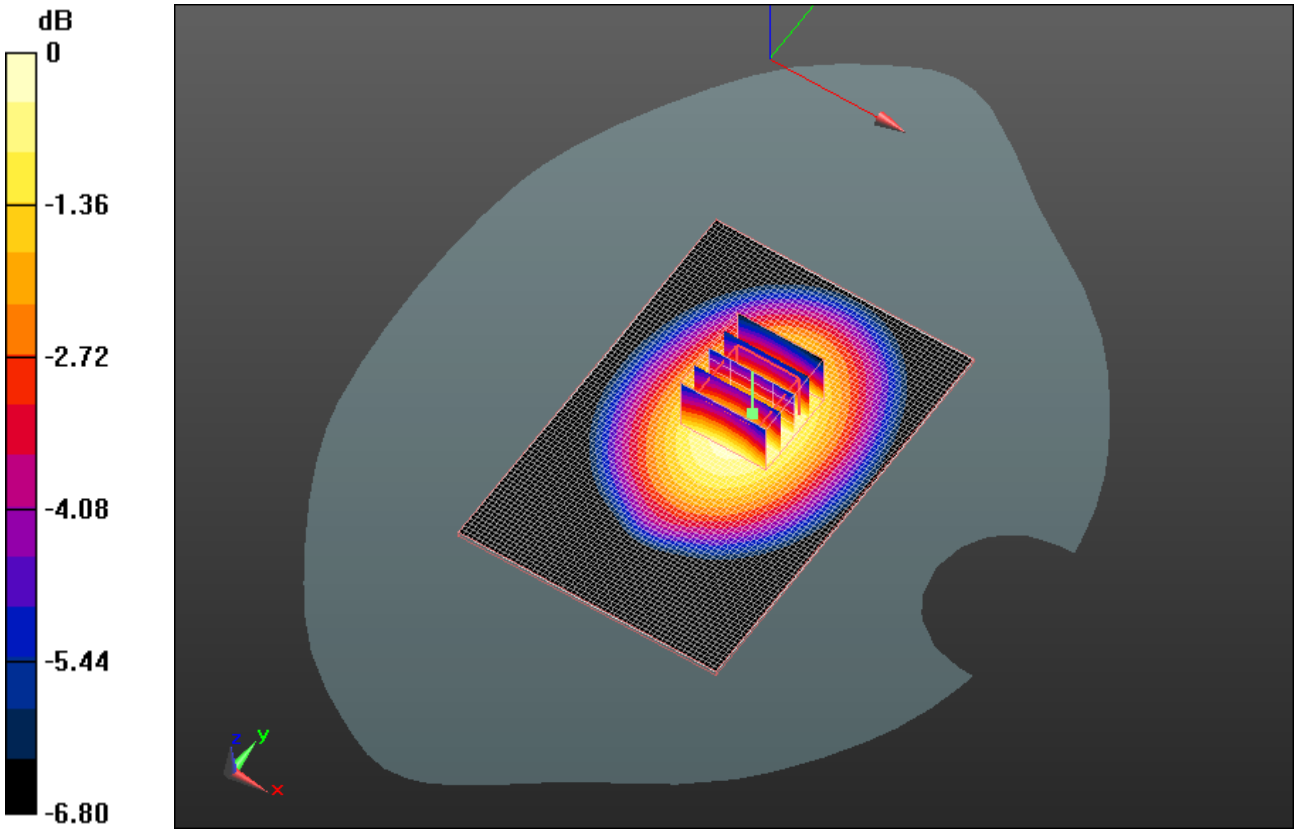
- Probe: ES3DV3 - SN3225; ConvF(6.3, 6.3, 6.3); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- ; SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.696 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 26.385 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.850 W/kg
SAR(1 g) = 0.660 mW/g; SAR(10 g) = 0.483 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.698 mW/g



0 dB = 0.700mW/g

Date/Time: 8/5/2011 10:39:44 AM, Date/Time: 8/5/2011 10:46:42 AM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_HS_GPRS850_mid_chan_amb_temp_23.8_liq_temp_22.8C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: GPRS 850; Frequency: 836.8 MHz;Duty Cycle: 1:4.19952
Medium parameters used (interpolated): f = 836.8 MHz; σ = 0.998 mho/m; ε_r = 54.587; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY4 Configuration:

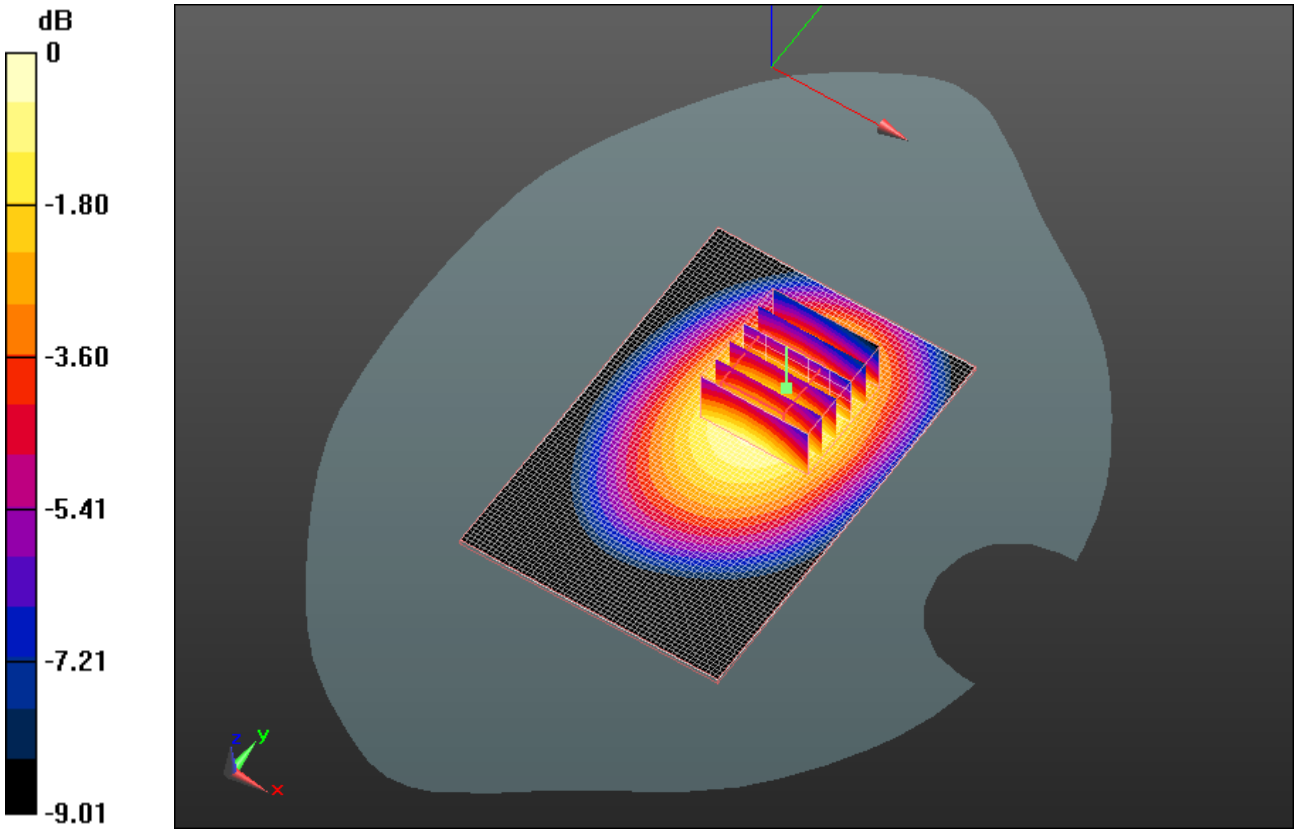
- Probe: ES3DV3 - SN3225; ConvF(6.3, 6.3, 6.3); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- ; SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.627 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 22.784 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.831 W/kg
SAR(1 g) = 0.593 mW/g; SAR(10 g) = 0.419 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.630 mW/g



0 dB = 0.630mW/g

Date/Time: 8/5/2011 12:53:39 PM, Date/Time: 8/5/2011 1:00:51 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_UMTS_band_V_mid_chan_amb_temp_23.3_liq_temp_22.3C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: WCDMA FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.997 mho/m; ε_r = 54.589; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY4 Configuration:

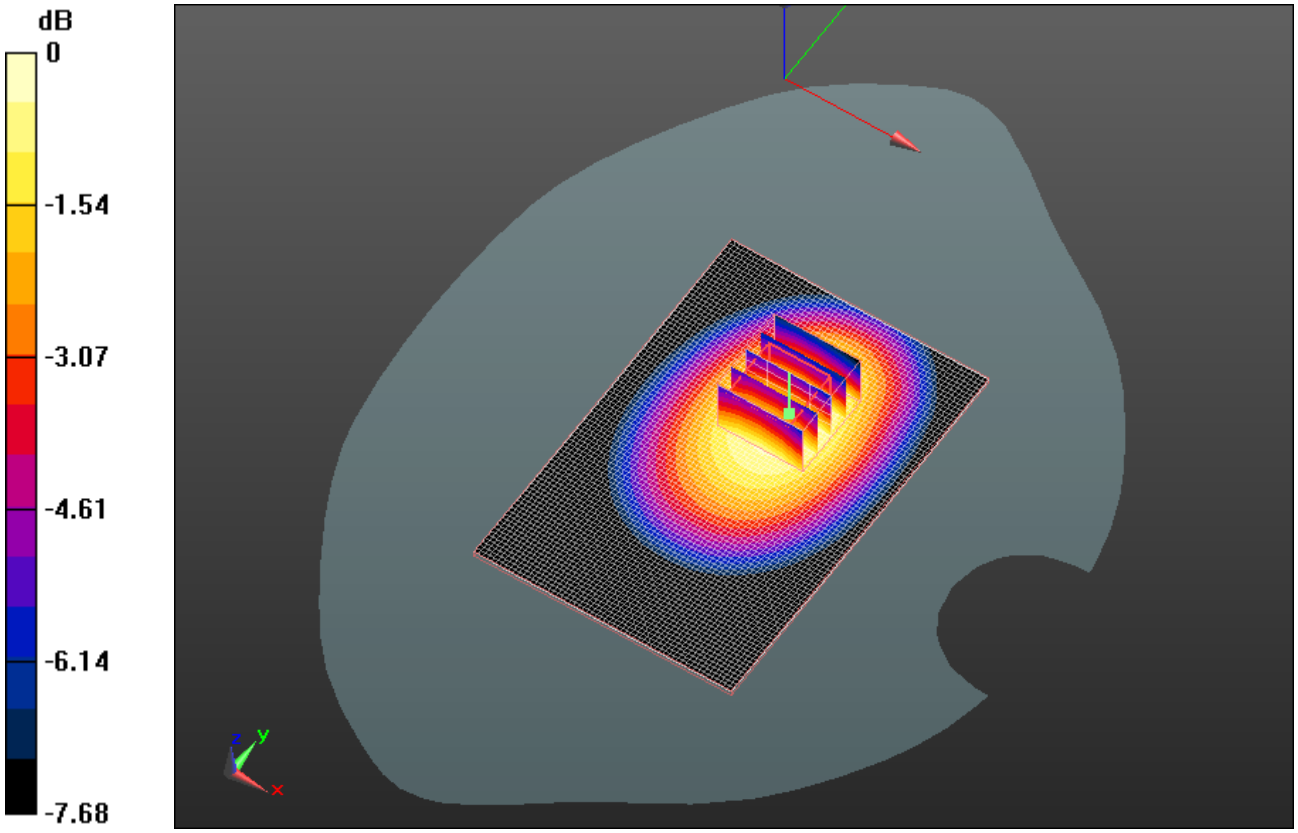
- Probe: ES3DV3 - SN3225; ConvF(6.3, 6.3, 6.3); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- ; SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.808 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 25.813 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.035 W/kg
SAR(1 g) = 0.762 mW/g; SAR(10 g) = 0.543 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.807 mW/g



0 dB = 0.810mW/g

Date/Time: 8/5/2011 11:50:23 AM, Date/Time: 8/5/2011 11:57:24 AM

Test Laboratory: RIM Testing Services

15mm_Holster_Front_UMTS_band_V_mid_chan_amb_temp_23.6_liq_temp_22.6C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: WCDMA FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.997 mho/m; ε_r = 54.589; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY4 Configuration:

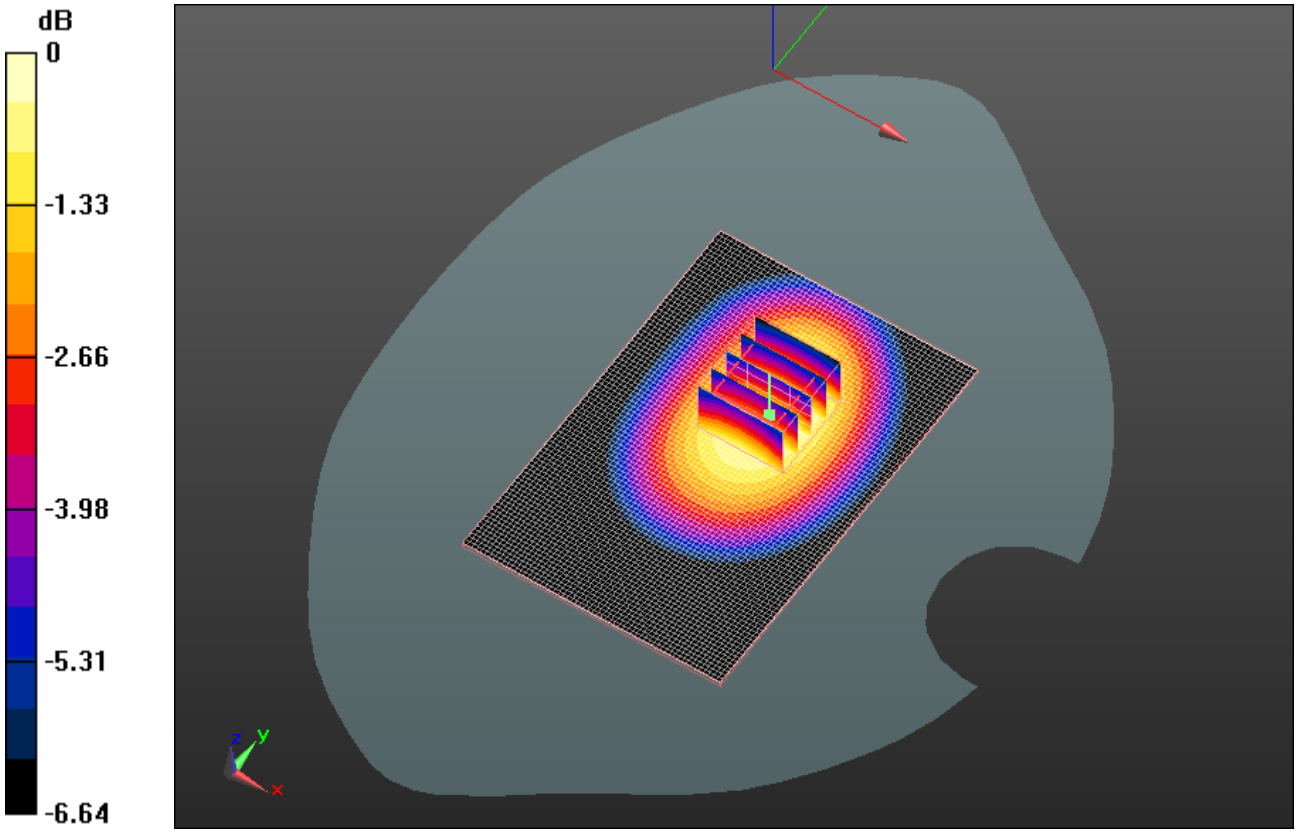
- Probe: ES3DV3 - SN3225; ConvF(6.3, 6.3, 6.3); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- ; SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.601 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 23.145 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.736 W/kg
SAR(1 g) = 0.569 mW/g; SAR(10 g) = 0.414 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.606 mW/g



0 dB = 0.610mW/g

Date/Time: 8/5/2011 12:03:40 PM, Date/Time: 8/5/2011 12:10:37 PM

Test Laboratory: RIM Testing Services

Vertical_Holster_Back_UMTS_band_V_mid_chan_amb_temp_23.4_liq_temp_22.4C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: WCDMA FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.997 mho/m; ε_r = 54.589; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY4 Configuration:

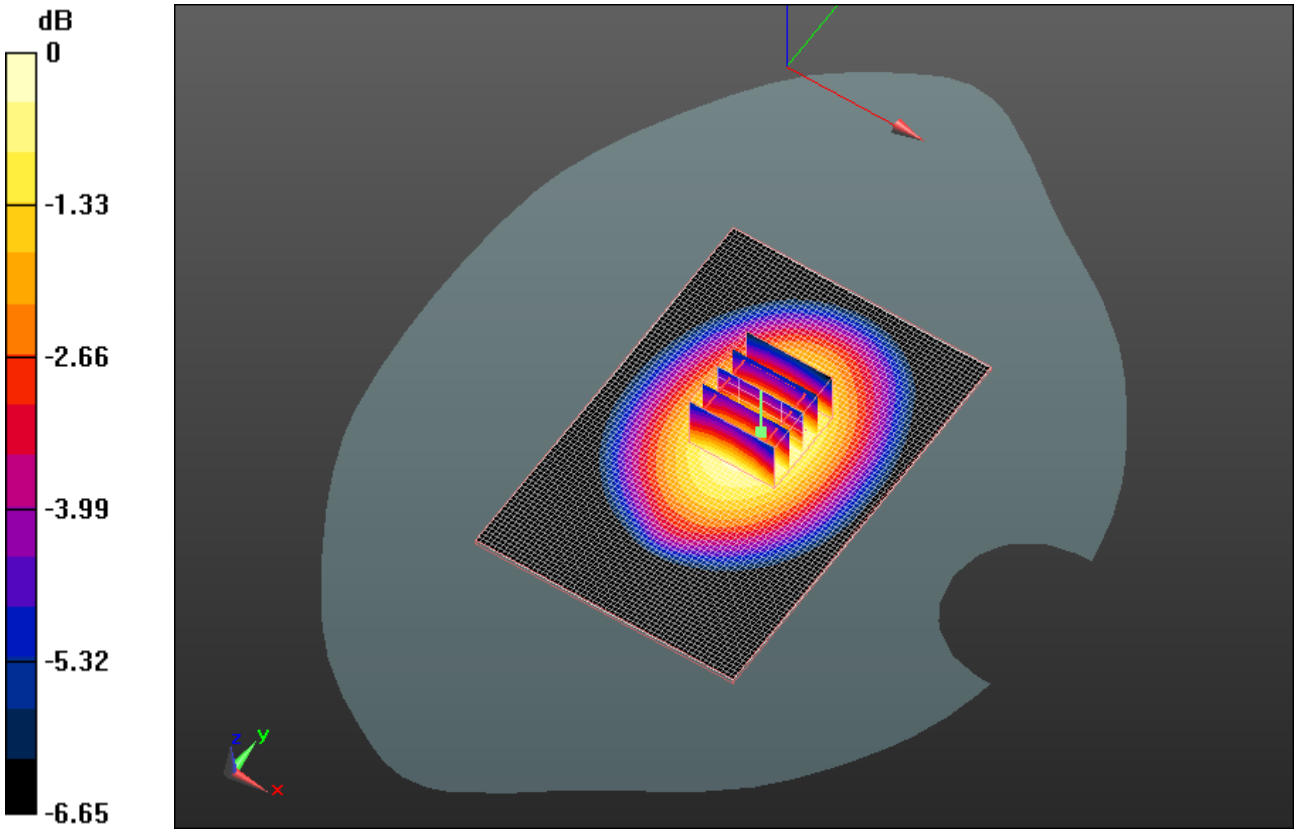
- Probe: ES3DV3 - SN3225; ConvF(6.3, 6.3, 6.3); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- ; SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.709 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 26.782 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.860 W/kg
SAR(1 g) = 0.674 mW/g; SAR(10 g) = 0.494 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.715 mW/g



0 dB = 0.710mW/g

Date/Time: 8/5/2011 12:17:37 PM, Date/Time: 8/5/2011 12:24:35 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_HS_UMTS_band_V_mid_chan_amb_temp_23.4_liq_temp_22.4C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: WCDMA FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.997 mho/m; ε_r = 54.589; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY4 Configuration:

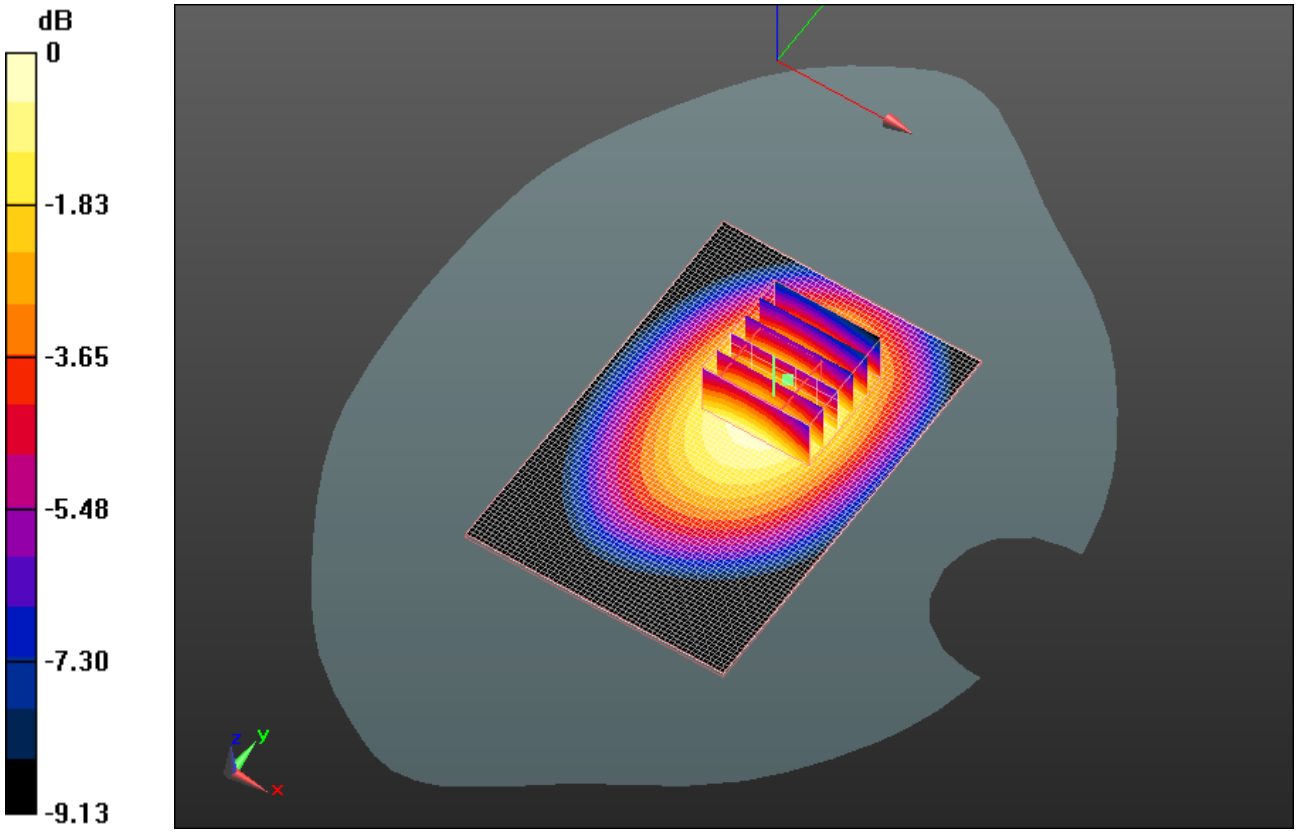
- Probe: ES3DV3 - SN3225; ConvF(6.3, 6.3, 6.3); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- ; SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.575 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 22.281 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.751 W/kg
SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.383 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.570 mW/g



0 dB = 0.570mW/g

Date/Time: 8/15/2011 9:06:04 PM, Date/Time: 8/15/2011 9:12:52 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_GPRS1900_mid_chan_amb_temp_22.7_liq_temp_22.7C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

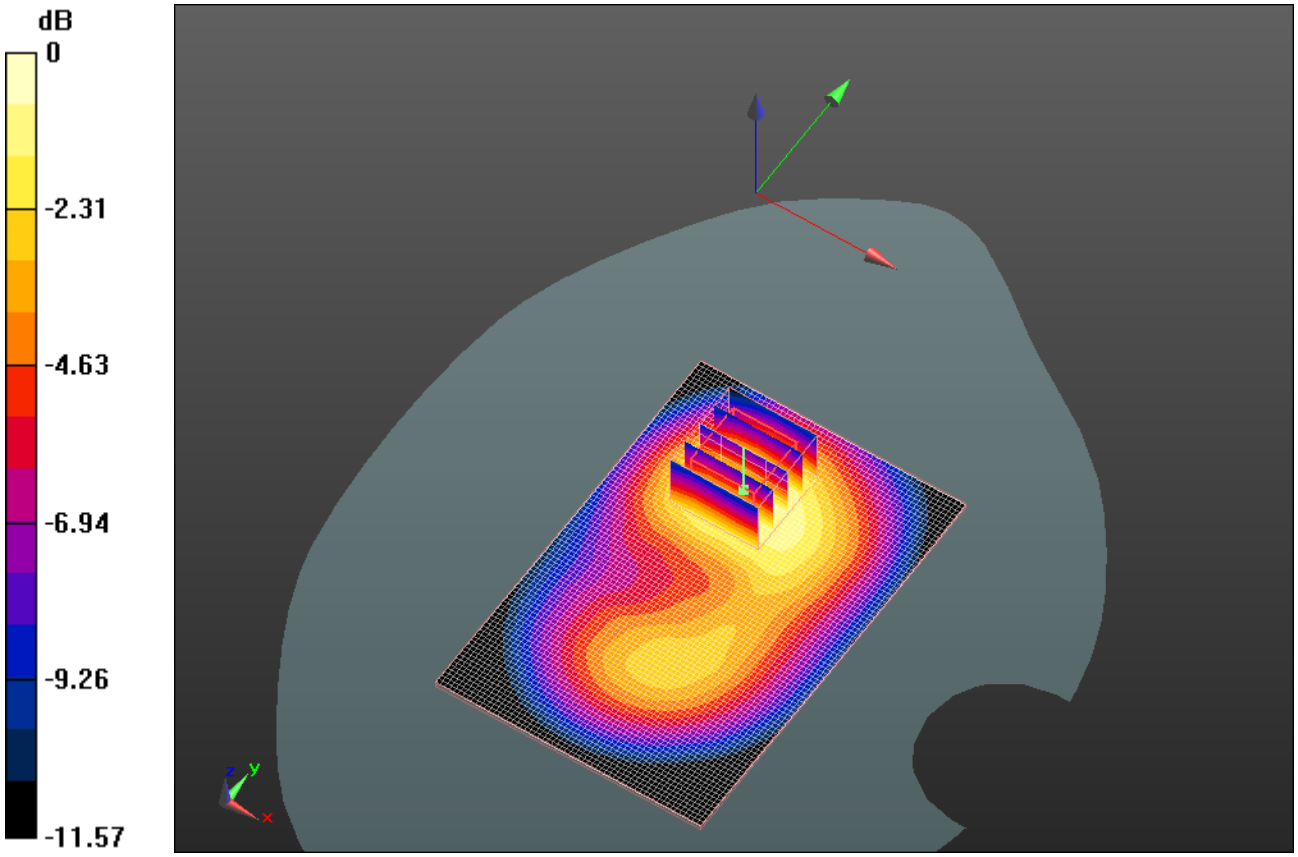
Communication System: GPRS 1900; Communication System Band: GPRS 1900;
Frequency: 1880 MHz;Communication System PAR: 6.232 dB
Medium parameters used: f = 1880 MHz; σ = 1.543 mho/m; ε_r = 52.13; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.562 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.298 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.704 W/kg
SAR(1 g) = 0.448 mW/g; SAR(10 g) = 0.271 mW/g
Maximum value of SAR (measured) = 0.533 mW/g



0 dB = 0.530mW/g

Date/Time: 8/15/2011 9:23:21 PM, Date/Time: 8/15/2011 9:30:10 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Front_GPRS1900_mid_chan_amb_temp_22.5_liq_temp_22.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

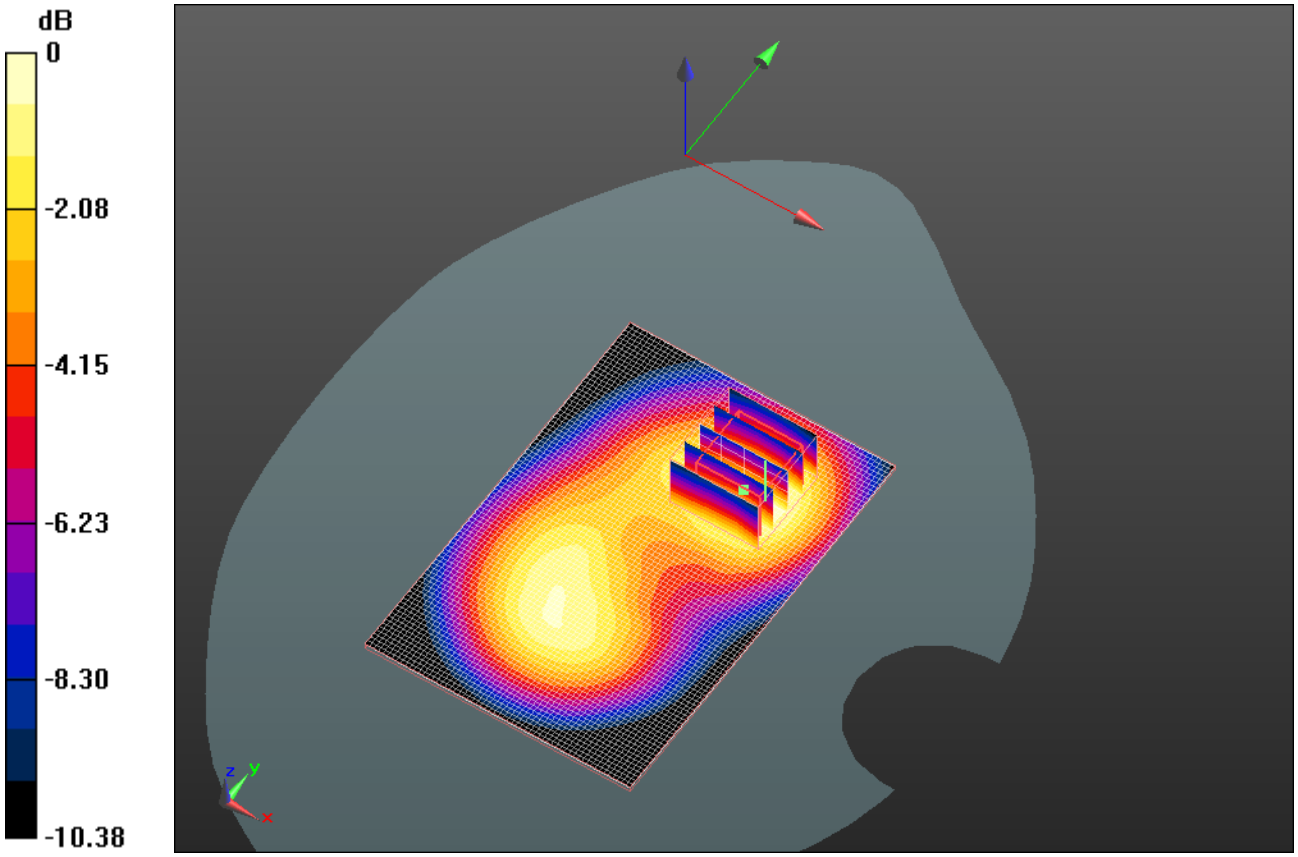
Communication System: GPRS 1900; Communication System Band: GPRS 1900;
Frequency: 1880 MHz;Communication System PAR: 6.232 dB
Medium parameters used: f = 1880 MHz; σ = 1.543 mho/m; ε_r = 52.13; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.398 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.531 V/m; Power Drift = -0.0027 dB
Peak SAR (extrapolated) = 0.527 W/kg
SAR(1 g) = 0.336 mW/g; SAR(10 g) = 0.206 mW/g
Maximum value of SAR (measured) = 0.395 mW/g



0 dB = 0.390mW/g

Date/Time: 8/15/2011 9:38:41 PM, Date/Time: 8/15/2011 9:45:32 PM

Test Laboratory: RIM Testing Services

Vertical Holster_Back_GPRS1900_mid_chan_amb_temp_22.6 _liq_temp_22.6C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

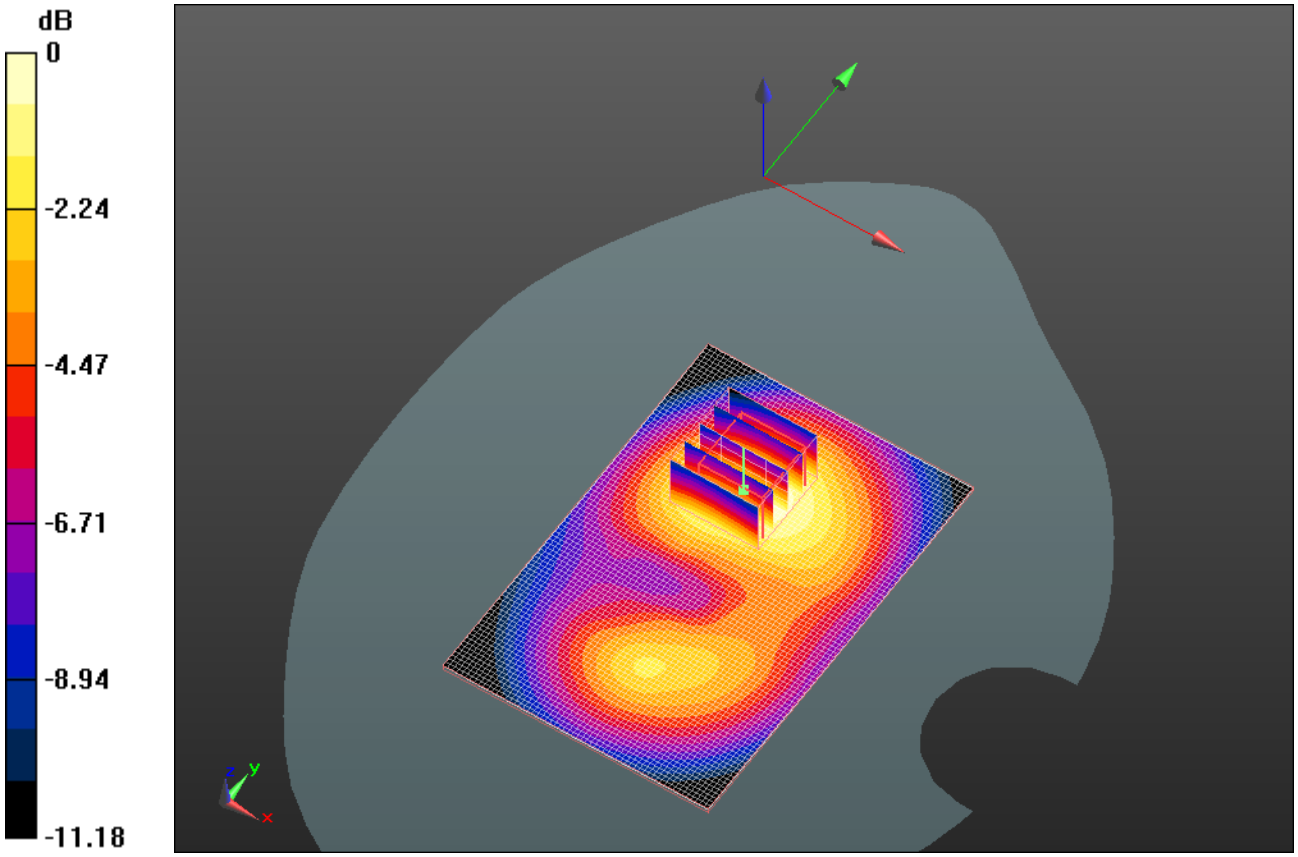
Communication System: GPRS 1900; Communication System Band: GPRS 1900;
Frequency: 1880 MHz;Communication System PAR: 6.232 dB
Medium parameters used: f = 1880 MHz; σ = 1.543 mho/m; ε_r = 52.13; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.298 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.672 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.368 W/kg
SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.150 mW/g
Maximum value of SAR (measured) = 0.287 mW/g



0 dB = 0.290mW/g

Date/Time: 8/15/2011 9:54:18 PM, Date/Time: 8/15/2011 10:01:05 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_Headset_GPRS1900_mid_chan_amb_temp_22.7_liq_temp_22.7C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

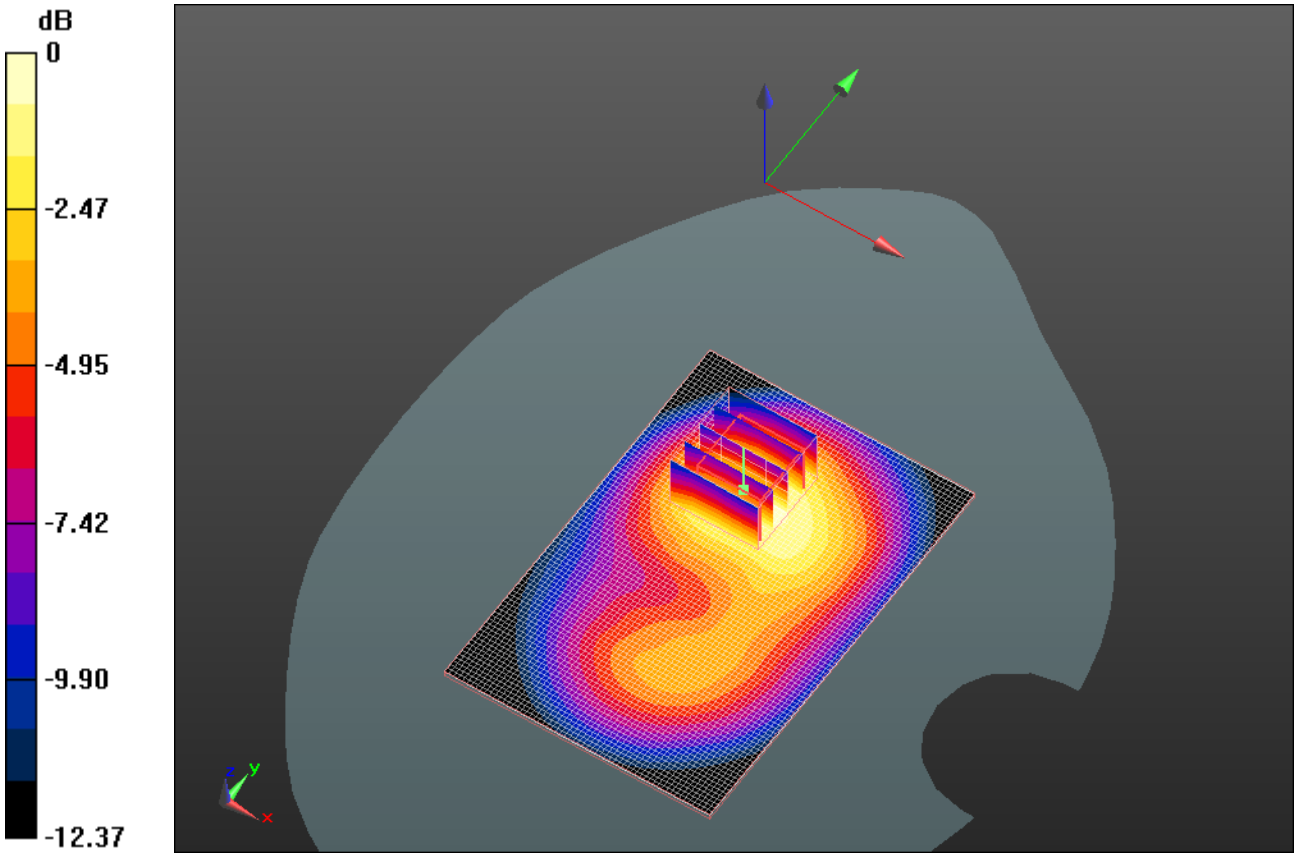
Communication System: GPRS 1900; Communication System Band: GPRS 1900;
Frequency: 1880 MHz;Communication System PAR: 6.232 dB
Medium parameters used: f = 1880 MHz; σ = 1.543 mho/m; ε_r = 52.13; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.632 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.863 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.773 W/kg
SAR(1 g) = 0.492 mW/g; SAR(10 g) = 0.299 mW/g
Maximum value of SAR (measured) = 0.586 mW/g



0 dB = 0.590mW/g

Date/Time: 8/15/2011 7:45:27 PM, Date/Time: 8/15/2011 7:52:16 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_UMTS_band_II_mid_chan_amb_temp_23.0_liq_temp_23.0C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

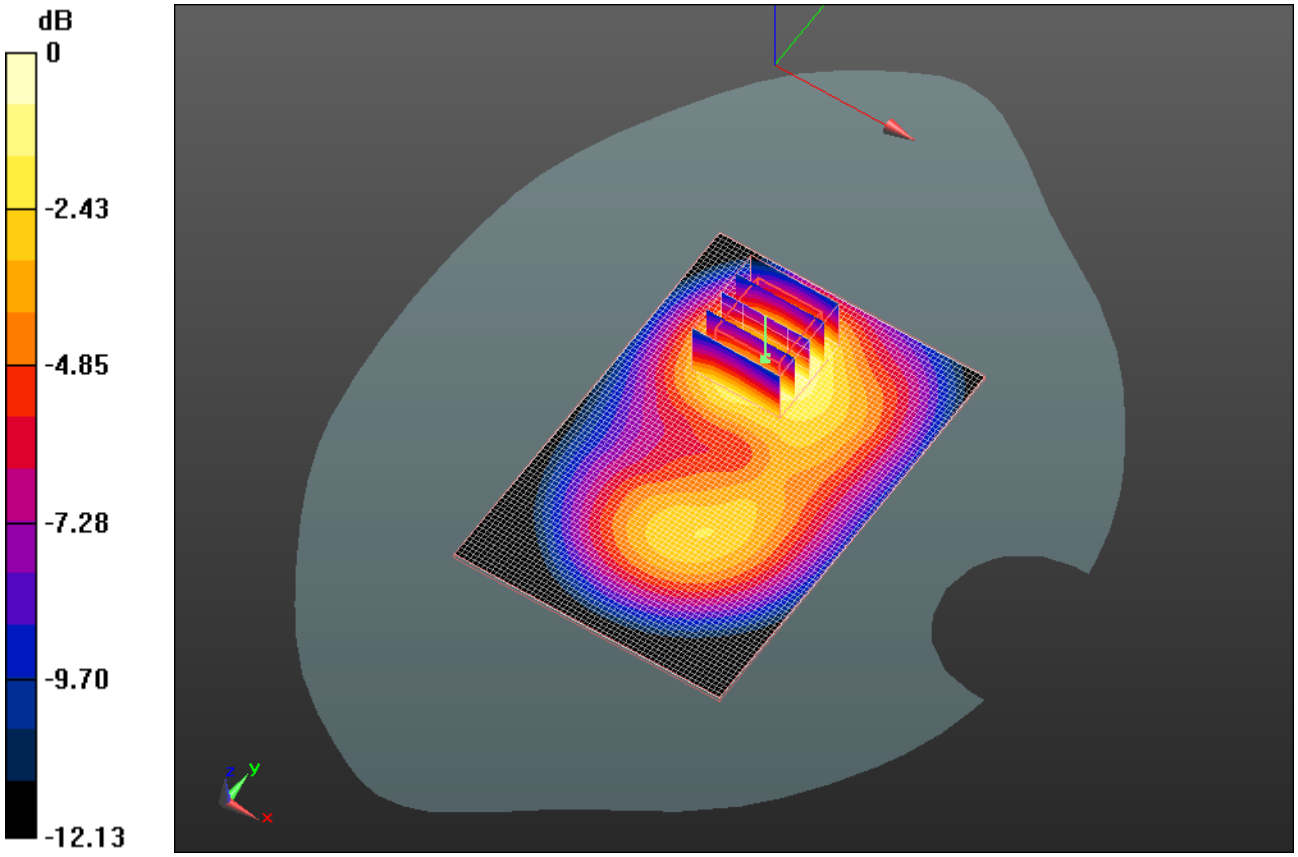
Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 1880 MHz; σ = 1.543 mho/m; ε_r = 52.13; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.729 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.230 V/m; Power Drift = 0.0033 dB
Peak SAR (extrapolated) = 0.929 W/kg
SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.350 mW/g
Maximum value of SAR (measured) = 0.701 mW/g



0 dB = 0.700mW/g

Date/Time: 8/15/2011 8:02:27 PM, Date/Time: 8/15/2011 8:09:17 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Front_UMTS_band_II_mid_chan_amb_temp_22.9_liq_temp_22.9C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

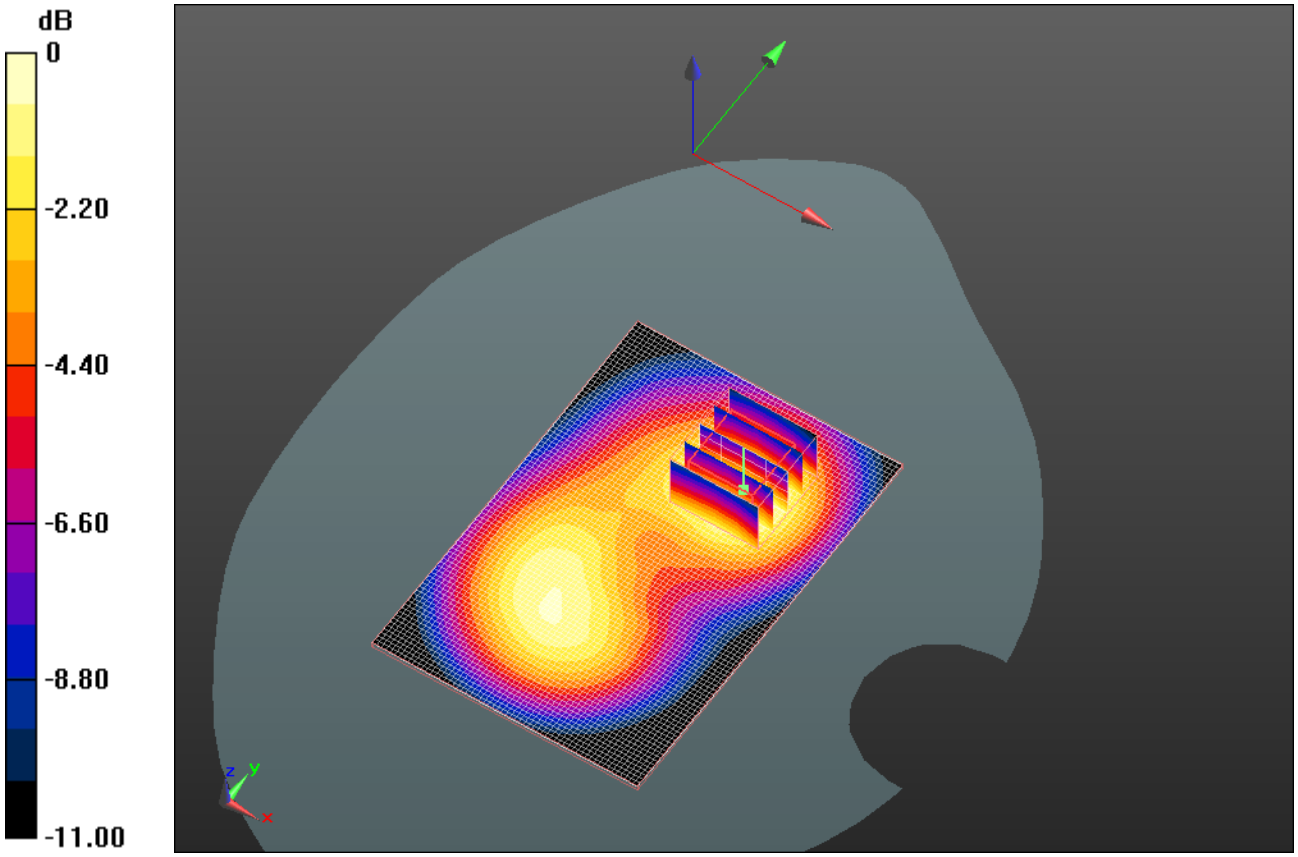
Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 1880 MHz; σ = 1.543 mho/m; ε_r = 52.13; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.526 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.017 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.659 W/kg
SAR(1 g) = 0.420 mW/g; SAR(10 g) = 0.256 mW/g
Maximum value of SAR (measured) = 0.499 mW/g



0 dB = 0.500mW/g

Date/Time: 8/15/2011 8:17:59 PM, Date/Time: 8/15/2011 8:24:47 PM

Test Laboratory: RIM Testing Services

Vertical Holster_Back_UMTS_band_II_mid_chan_amb_temp_22.8 _liq_temp_22.8C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

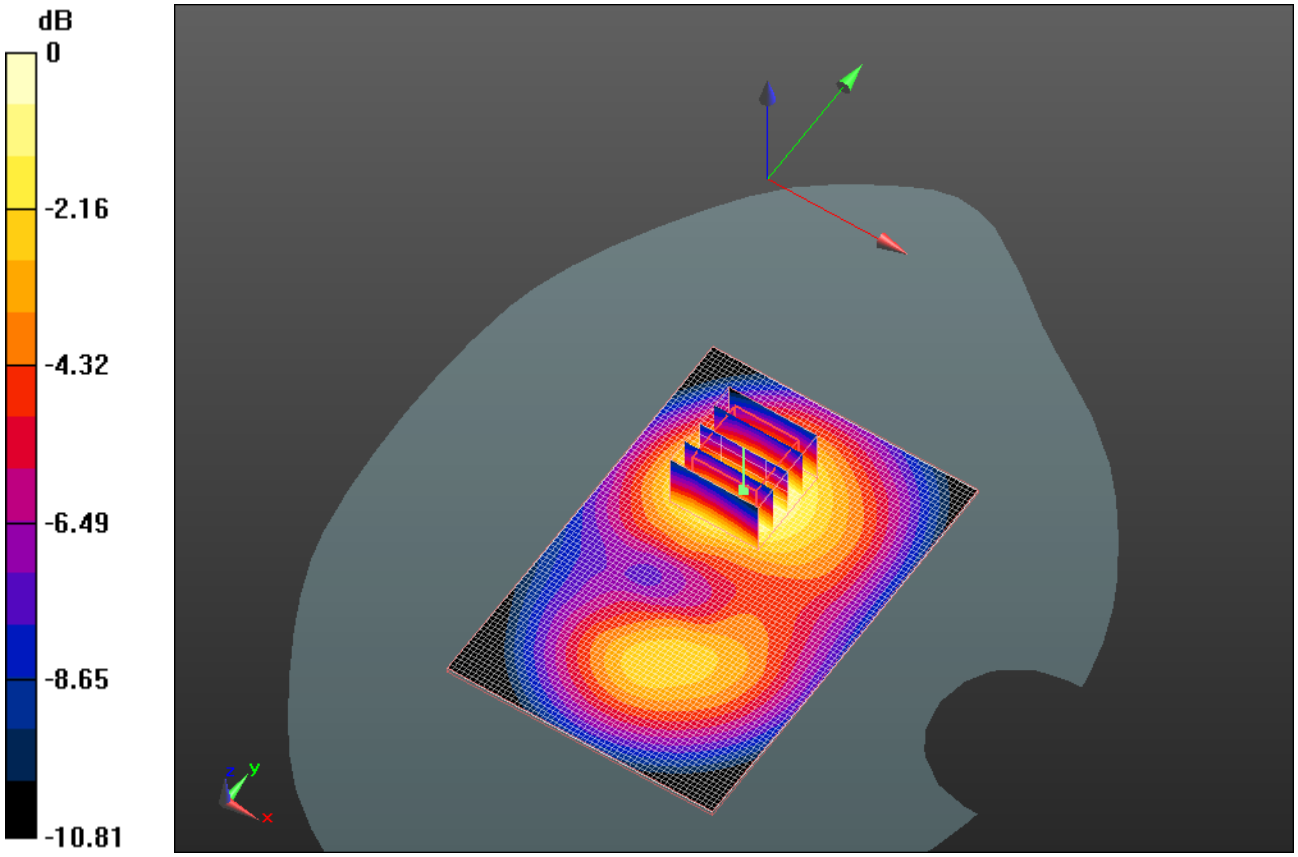
Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 1880 MHz; σ = 1.543 mho/m; ε_r = 52.13; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.366 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.315 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.462 W/kg
SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.186 mW/g
Maximum value of SAR (measured) = 0.357 mW/g



0 dB = 0.360mW/g

Date/Time: 8/15/2011 8:33:51 PM, Date/Time: 8/15/2011 8:40:37 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_Headset_UMTS_band_II_mid_chan_amb_temp_22.7_liq_temp_22.7C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

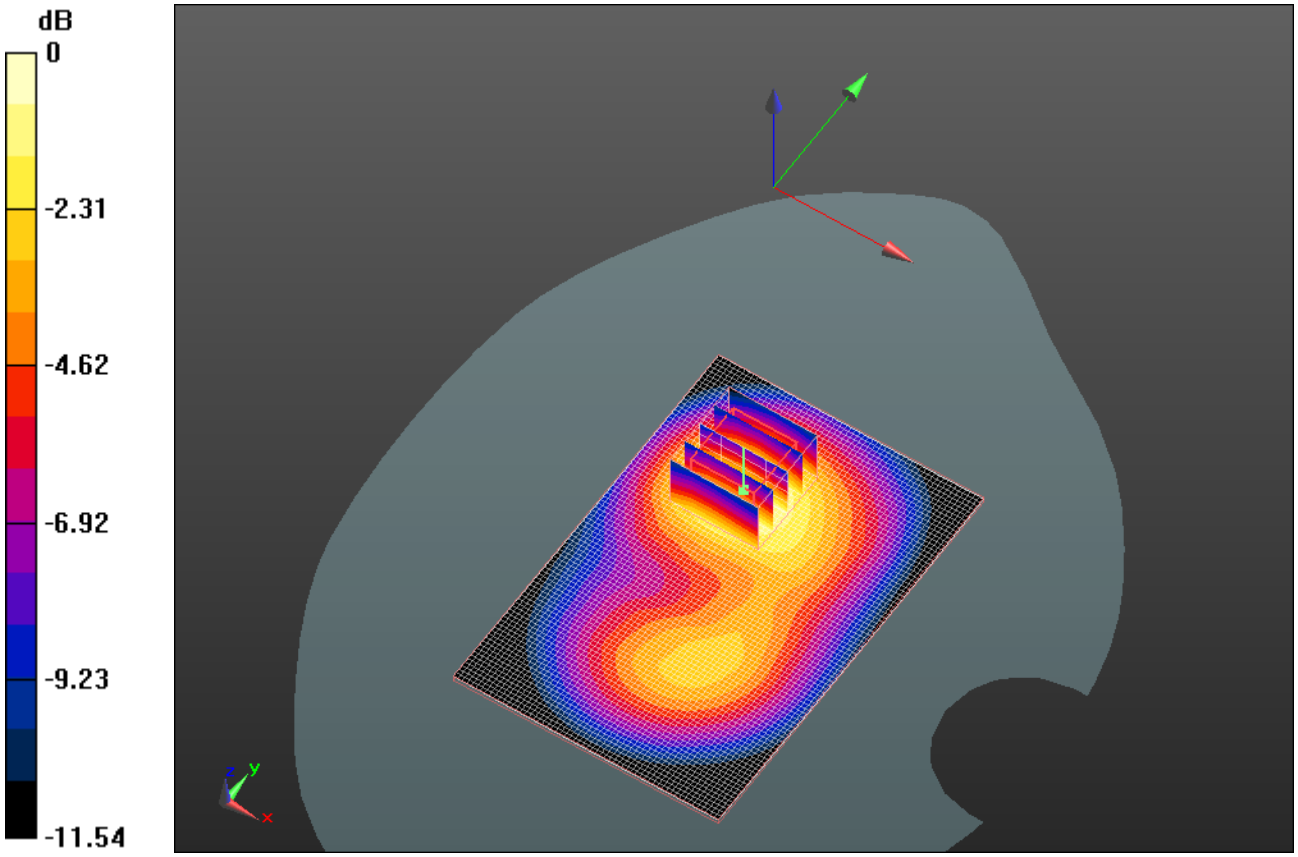
Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1880 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 1880 MHz; σ = 1.543 mho/m; ε_r = 52.13; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.715 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.801 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.924 W/kg
SAR(1 g) = 0.585 mW/g; SAR(10 g) = 0.351 mW/g
Maximum value of SAR (measured) = 0.694 mW/g



0 dB = 0.690mW/g

Date/Time: 8/22/2011 7:34:00 PM, Date/Time: 8/22/2011 7:40:46 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_802.11b_high_chan_amb_temp_23.6_liq_temp_22.8C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2462 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.968 mho/m; ε_r = 50.525; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

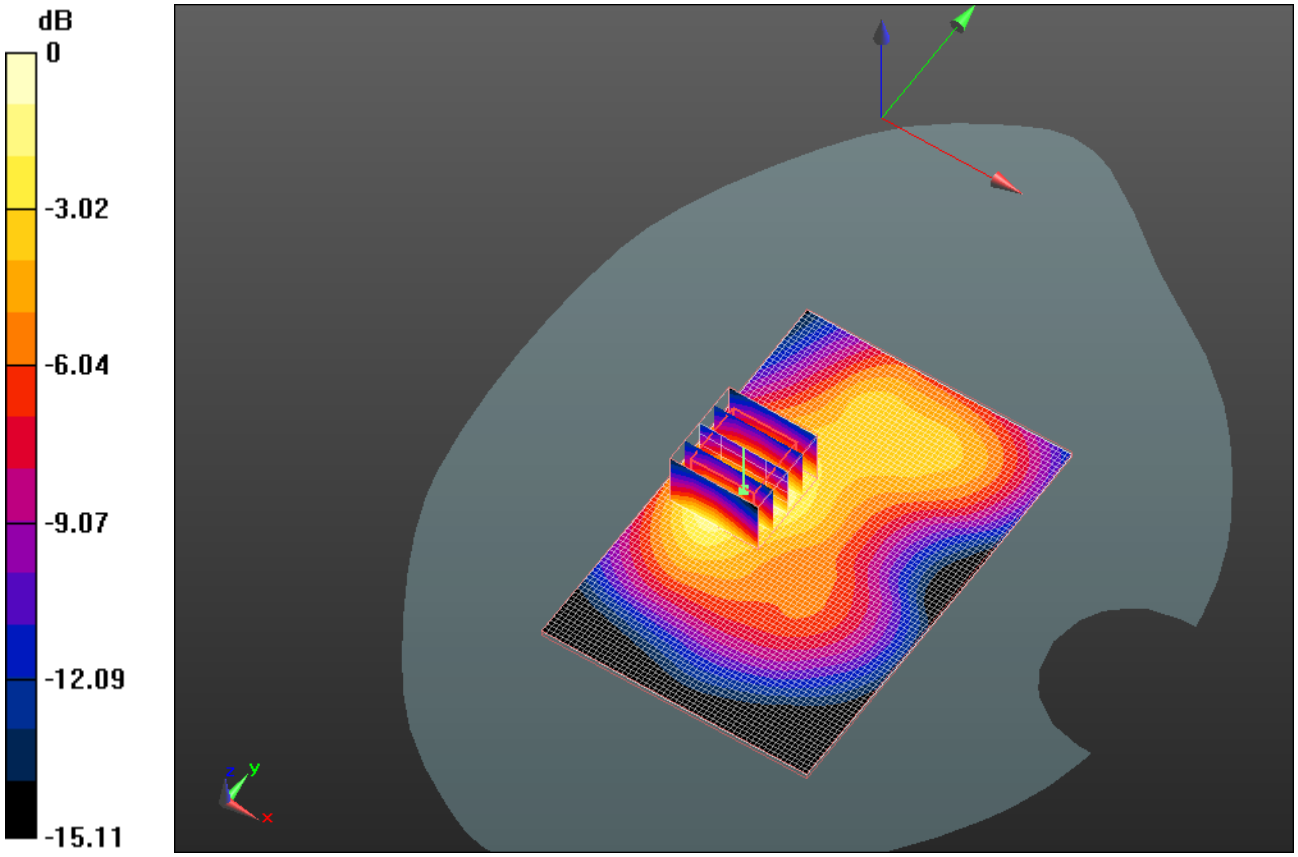
- Probe: ES3DV3 - SN3225; ConvF(4.43, 4.43, 4.43); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.159 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.905 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.250 W/kg
SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.066 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.157 mW/g



0 dB = 0.160mW/g

Date/Time: 8/22/2011 7:51:26 PM, Date/Time: 8/22/2011 7:58:15 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Front_802.11b_high_chan_amb_temp_23.3_liq_temp_22.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2462 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.968 mho/m; ε_r = 50.525; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

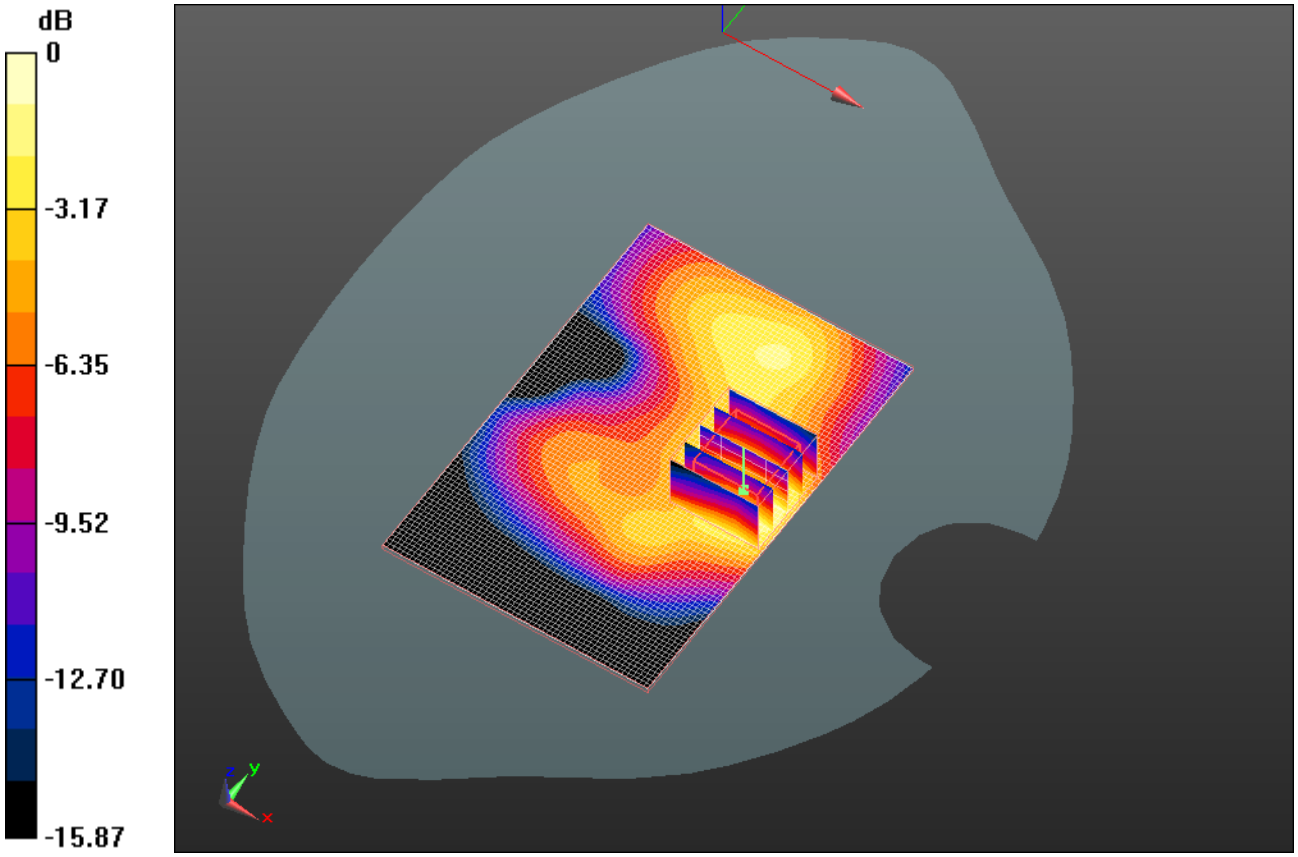
- Probe: ES3DV3 - SN3225; ConvF(4.43, 4.43, 4.43); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.072 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 3.379 V/m; Power Drift = 0.30 dB
Peak SAR (extrapolated) = 0.113 W/kg
SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.029 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.071 mW/g



0 dB = 0.070mW/g

Date/Time: 8/22/2011 8:15:53 PM, Date/Time: 8/22/2011 8:22:40 PM

Test Laboratory: RIM Testing Services

Vertical Holster_Back_802.11b_high_chan_amb_temp_23.2 _liq_temp_22.4C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2462 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.968 mho/m; ε_r = 50.525; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

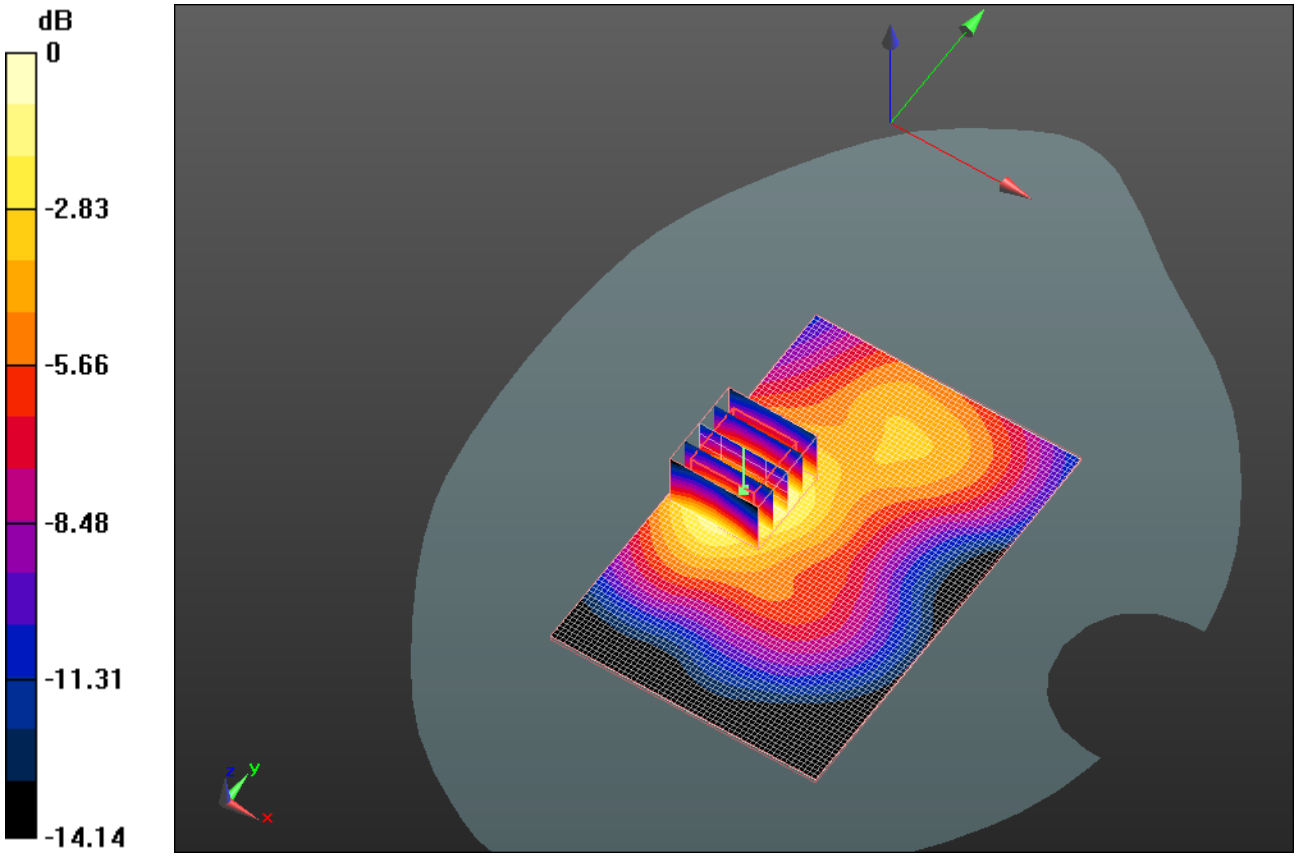
- Probe: ES3DV3 - SN3225; ConvF(4.43, 4.43, 4.43); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.108 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.720 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.163 W/kg
SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.047 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.106 mW/g



0 dB = 0.110mW/g

Date/Time: 8/22/2011 8:42:05 PM, Date/Time: 8/22/2011 8:48:52 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_Headset_802.11b_high_chan_amb_temp_23.2_liq _temp_22.4C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2462 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.968 mho/m; ε_r = 50.525; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

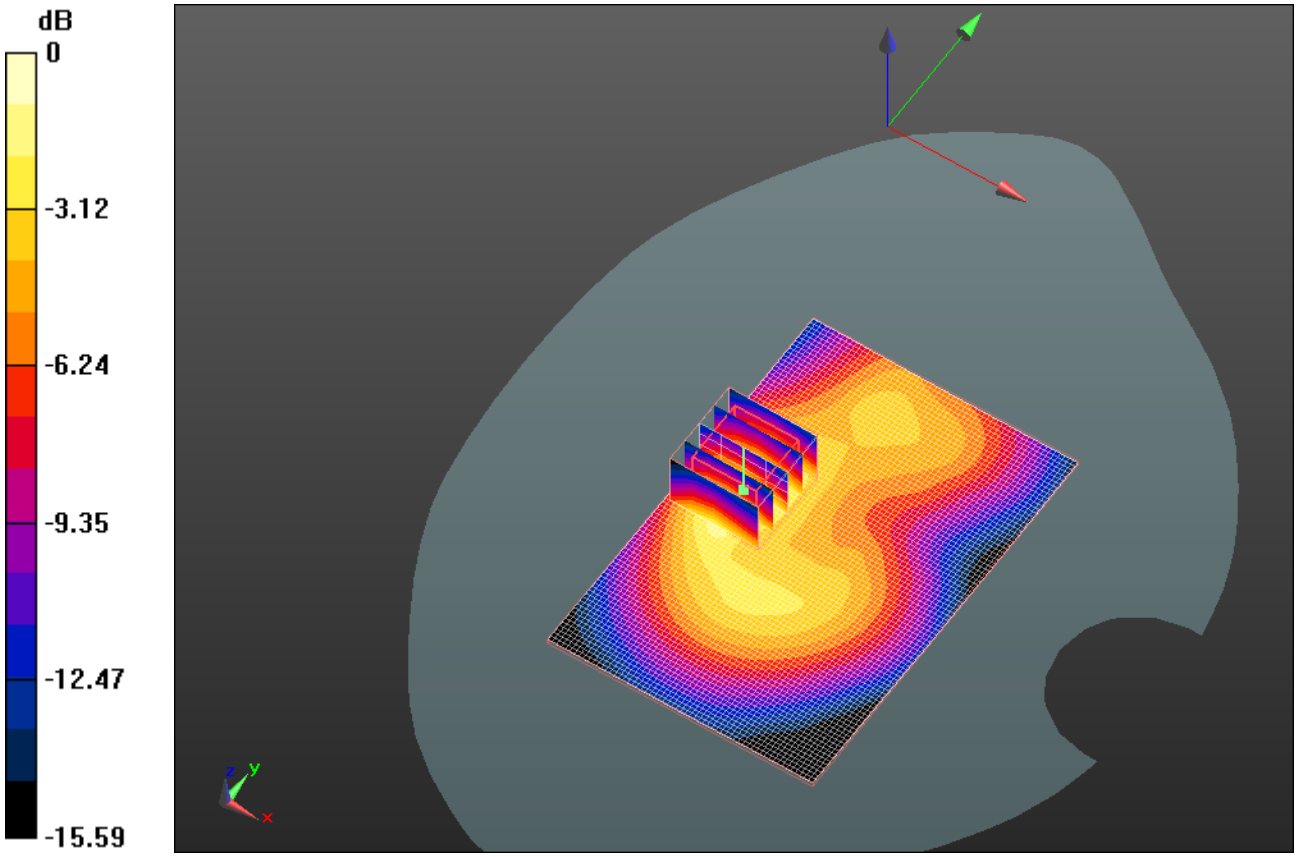
- Probe: ES3DV3 - SN3225; ConvF(4.43, 4.43, 4.43); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.147 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.766 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.229 W/kg
SAR(1 g) = 0.112 mW/g; SAR(10 g) = 0.056 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.144 mW/g



0 dB = 0.140mW/g

Date/Time: 8/22/2011 9:35:56 PM, Date/Time: 8/22/2011 9:42:42 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_Bluetooth_high_chan_amb_temp_23.2_liq_temp_22.4C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27EB7923

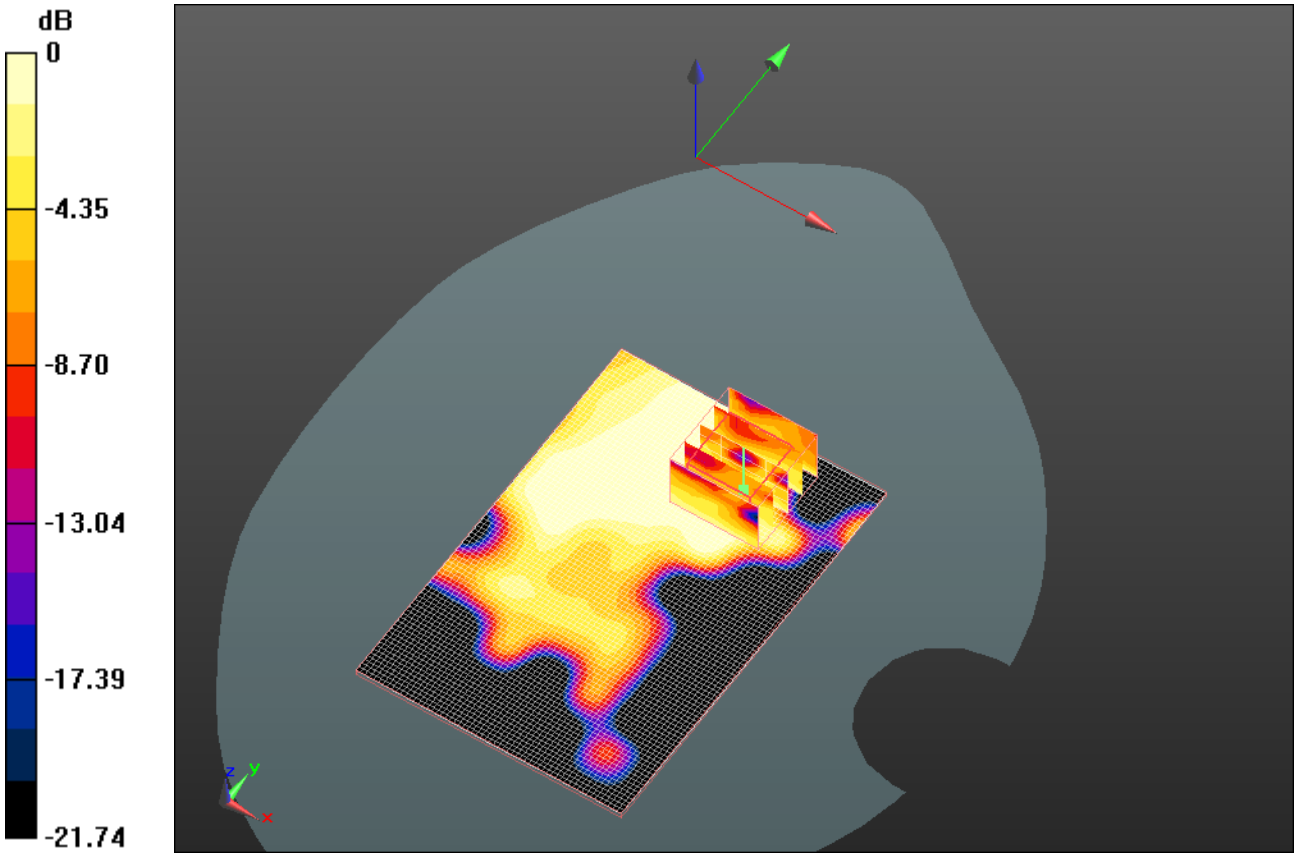
Communication System: Bluetooth; Communication System Band: Bluetooth;
Frequency: 2480 MHz;Communication System PAR: 0 dB
Medium parameters used: f = 2480 MHz; σ = 1.856 mho/m; ε_r = 50.18; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.43, 4.43, 4.43); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.00496 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 1.152 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.00453 W/kg
SAR(1 g) = 0.00244 mW/g; SAR(10 g) = 0.00131 mW/g
Maximum value of SAR (measured) = 0.00322 mW/g



0 dB = 0.0032mW/g

Z axis plot for the worst case body configuration:

Date/Time: 8/10/2011 10:08:41 PM, Date/Time: 8/10/2011 10:15:32 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_UMTS_band_IV_mid_chan_amb_temp_22.5_liq_temp_22.1C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27F38A38

Communication System: WCDMA FDD IV; Communication System Band: UMTS band IV; Frequency: 1732.6 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 1732.6 MHz; σ = 1.526 mho/m; ε_r = 54.502; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

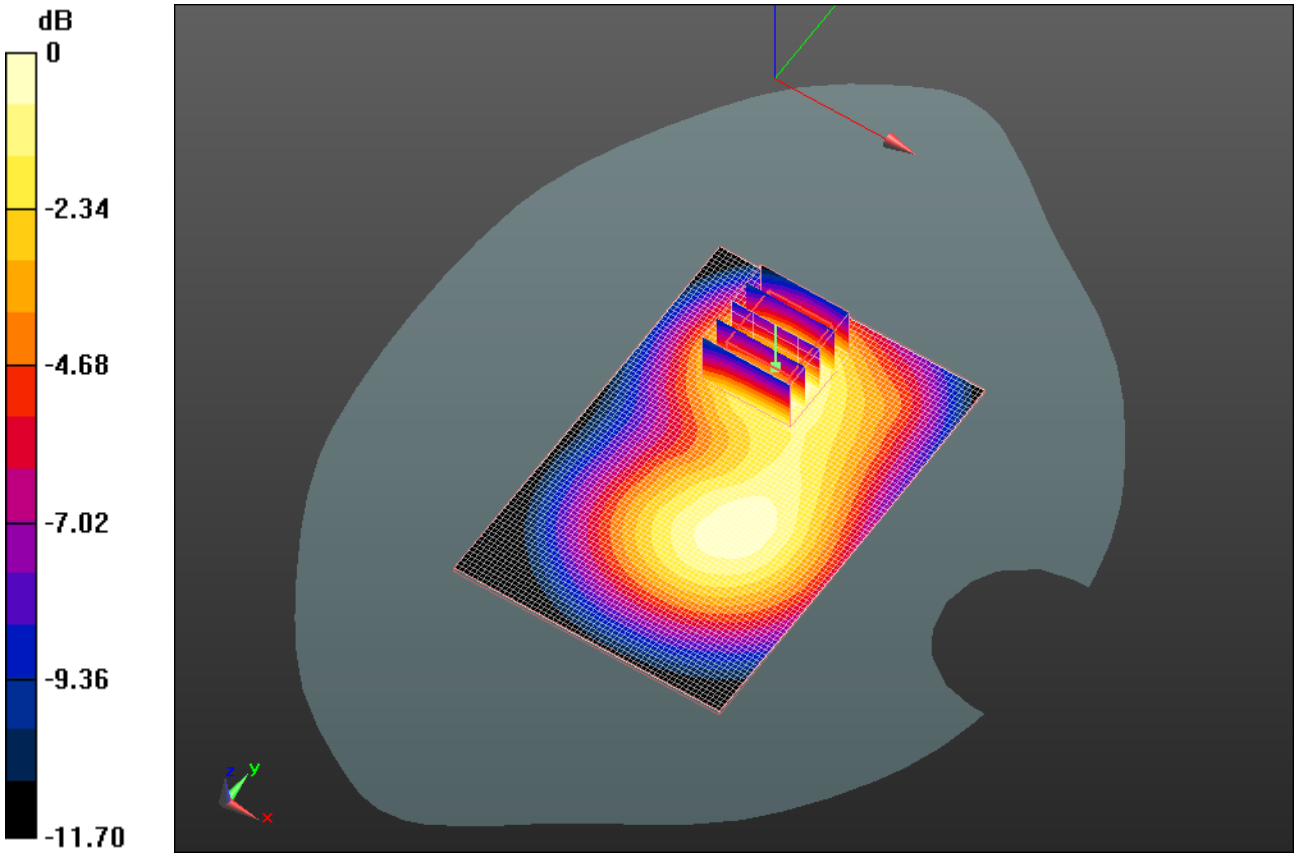
- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.527 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 15.144 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.673 W/kg
SAR(1 g) = 0.430 mW/g; SAR(10 g) = 0.261 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.515 mW/g



0 dB = 0.510mW/g

Date/Time: 8/10/2011 10:27:01 PM, Date/Time: 8/10/2011 10:33:52 PM

Test Laboratory: RIM Testing Services

15mm_Spacer_Front_UMTS_band_IV_mid_chan_amb_temp_23.0_liq_temp_22.3C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27F38A38

Communication System: WCDMA FDD IV; Communication System Band: UMTS band IV; Frequency: 1732.6 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 1732.6 MHz; σ = 1.526 mho/m; ε_r = 54.502; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

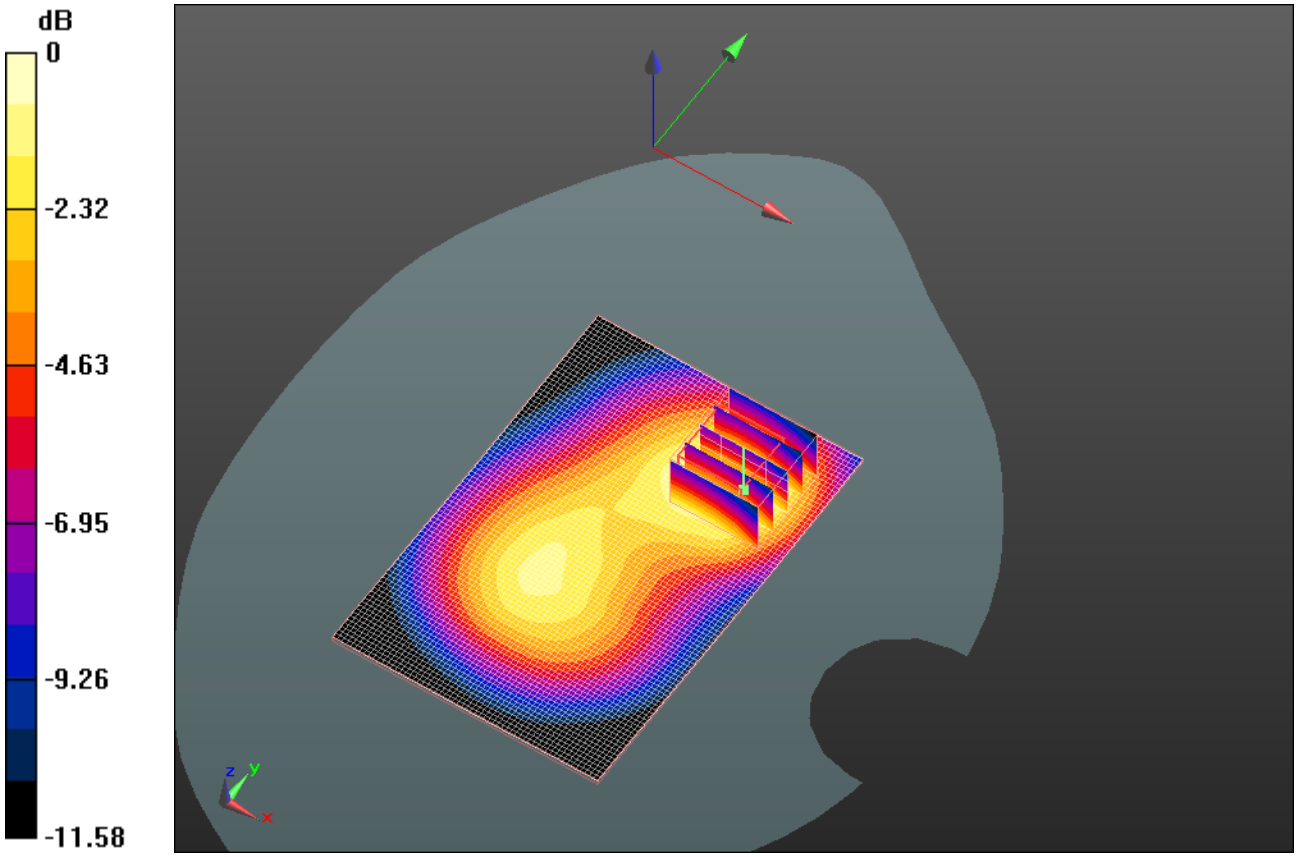
- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.504 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.641 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.669 W/kg
SAR(1 g) = 0.425 mW/g; SAR(10 g) = 0.261 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.501 mW/g



0 dB = 0.500mW/g

Date/Time: 8/10/2011 10:54:45 PM, Date/Time: 8/10/2011 11:01:36 PM

Test Laboratory: RIM Testing Services

Vertical Holster_Back_UMTS_band_IV_mid_chan_amb_temp_23.7 _liq_temp_22.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27F38A38

Communication System: WCDMA FDD IV; Communication System Band: UMTS band IV; Frequency: 1732.6 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 1732.6 MHz; σ = 1.526 mho/m; ε_r = 54.502; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

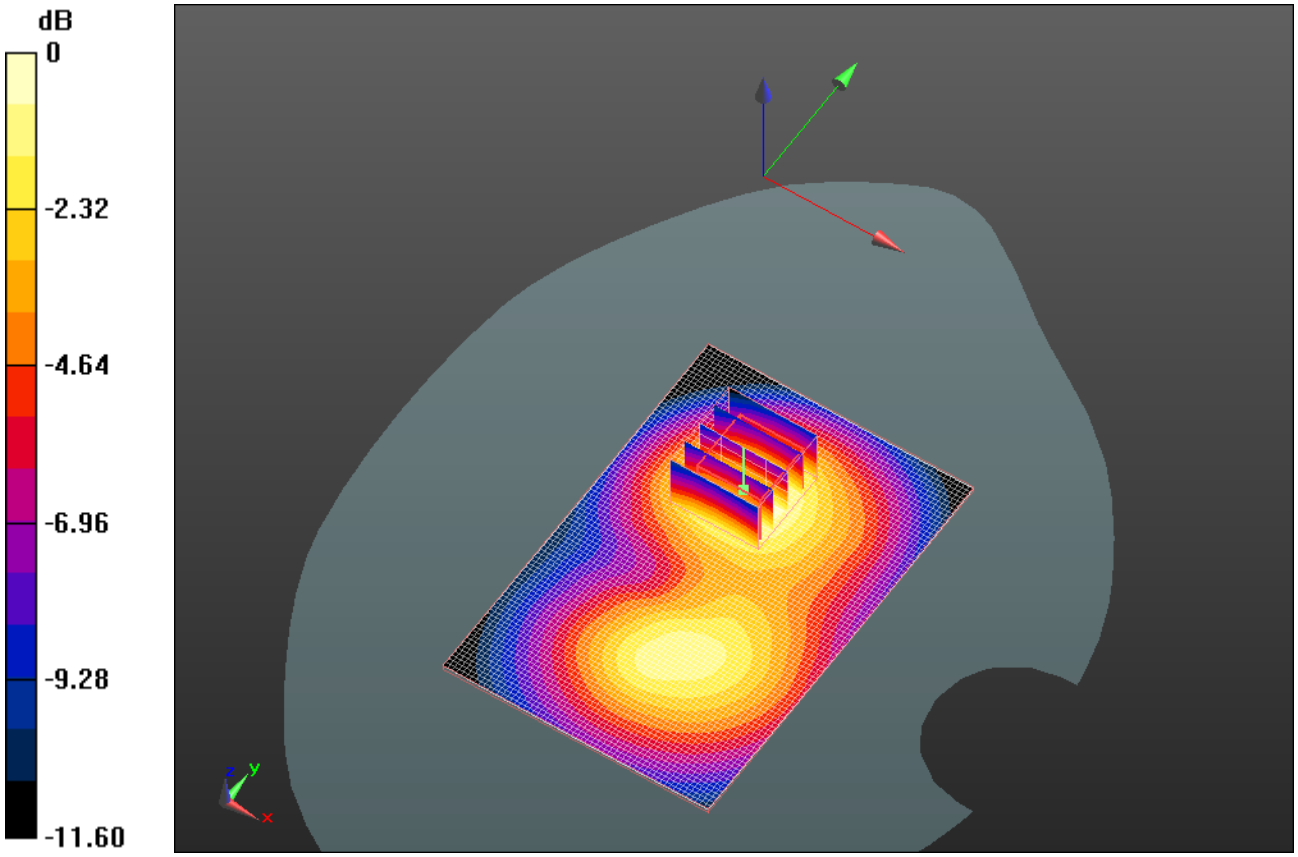
- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.377 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.356 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.465 W/kg
SAR(1 g) = 0.302 mW/g; SAR(10 g) = 0.186 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.357 mW/g



0 dB = 0.360mW/g

Date/Time: 8/10/2011 11:56:47 PM, Date/Time: 8/11/2011 12:03:38 AM

Test Laboratory: RIM Testing Services

15mm_Spacer_Back_Headset_UMTS_band_IV_mid_chan_amb_temp_23.7_liq_temp_22.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 27F38A38

Communication System: WCDMA FDD IV; Communication System Band: UMTS band IV; Frequency: 1732.6 MHz;Communication System PAR: 0 dB
Medium parameters used (interpolated): f = 1732.6 MHz; σ = 1.526 mho/m; ε_r = 54.502; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

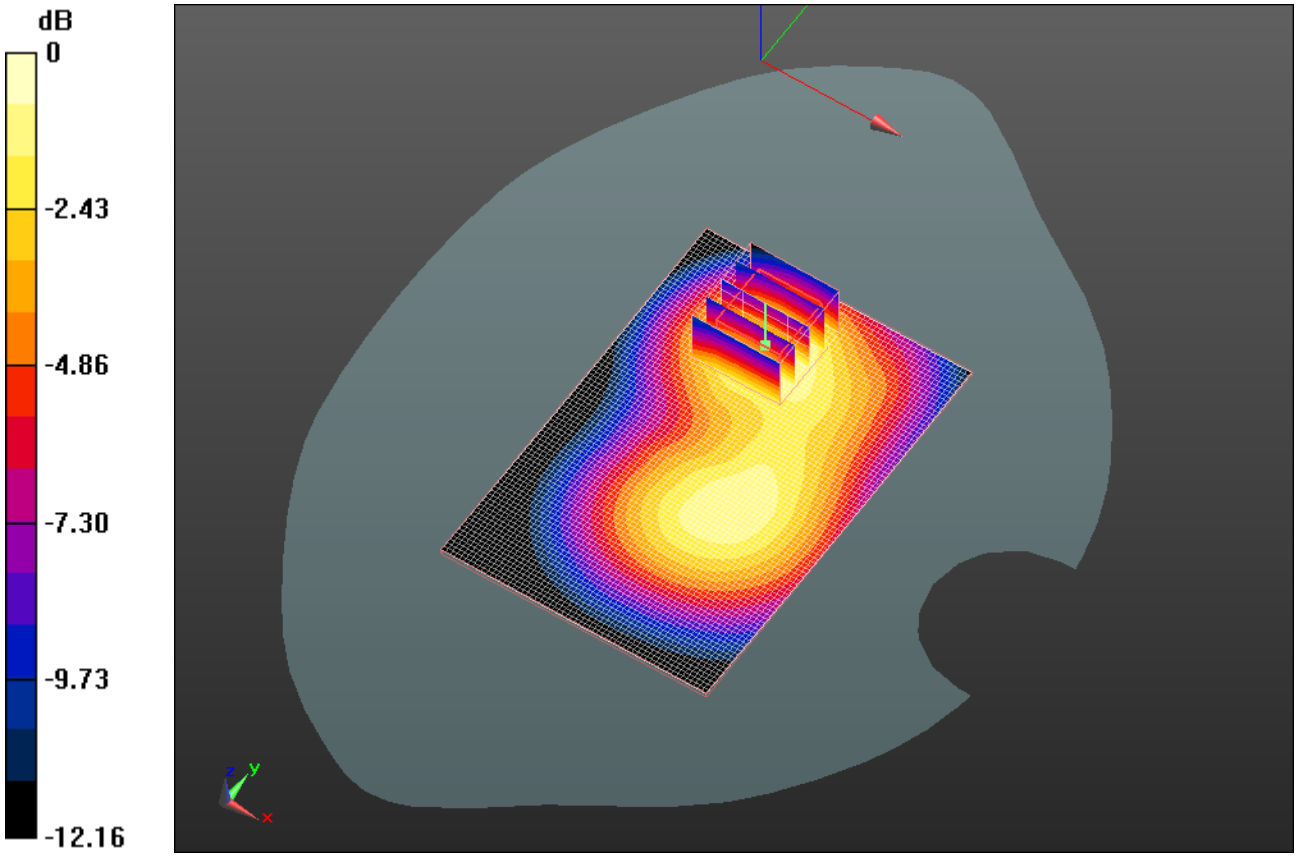
- Probe: ES3DV3 - SN3225; ConvF(4.88, 4.88, 4.88); Calibrated: 1/13/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.609 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 15.081 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.788 W/kg
SAR(1 g) = 0.495 mW/g; SAR(10 g) = 0.297 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.597 mW/g



0 dB = 0.600mW/g

Z axis plot for the worst case body configuration: