APPENDIX C2: SAR DISTRIBUTION PLOTS FOR HOT SPOT CONFIGURATION

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LTE 17

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Date/Time: 12/17/2012 2:23:57 PM

Test Laboratory: RIM Testing Services

MHS_Body_SAR_LTE_17_10mm_Back

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: LTE_Band 17; Frequency: 710 MHz
Medium parameters used: f = 710 MHz; σ = 0.917 mho/m; ε_r = 54.177; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.27, 6.27, 6.27); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_21.8C/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 23.742 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 0.773 mW/g; SAR(10 g) = 0.526 mW/g
Maximum value of SAR (interpolated) = 0.886 mW/g

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_21.8C/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 23.742 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.1120
SAR(1 g) = 0.748 mW/g; SAR(10 g) = 0.504 mW/g
Maximum value of SAR (measured) = 0.858 mW/g

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_17_QPSK_RB25_Offset25_Amb_Temp_23.4C_Liq_Temp_21.9C/

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Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 20.366 V/m; Power Drift = 0.06 dB
Fast SAR: SAR(1 g) = 0.593 mW/g; SAR(10 g) = 0.411 mW/g
Maximum value of SAR (interpolated) = 0.682 mW/g

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Headset_Device_Back_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 21.645 V/m; Power Drift = 0.01 dB
Fast SAR: SAR(1 g) = 0.677 mW/g; SAR(10 g) = 0.467 mW/g
Maximum value of SAR (interpolated) = 0.784 mW/g

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_22.3C_2100mA_batt/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 21.943 V/m; Power Drift = -0.0059 dB
Fast SAR: SAR(1 g) = 0.748 mW/g; SAR(10 g) = 0.505 mW/g
Maximum value of SAR (interpolated) = 0.873 mW/g

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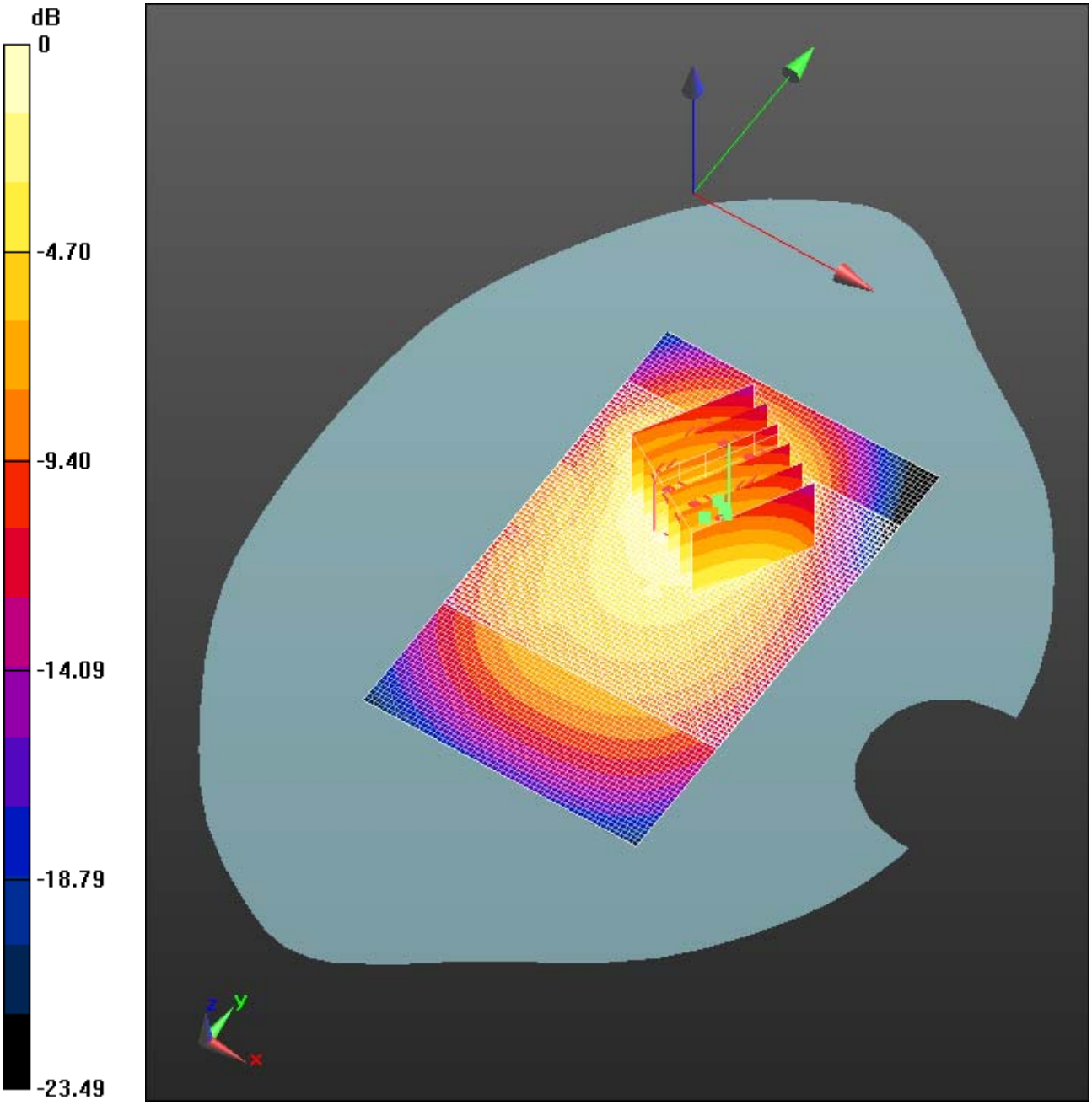

0 dB = 0.870mW/g = -1.21 dB mW/g

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Date/Time: 12/17/2012 7:41:43 PM

Test Laboratory: RIM Testing Services

MHS_Body_SAR_LTE_17_10mm_Bottom

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: LTE_Band 17; Frequency: 710 MHz
Medium parameters used: f = 710 MHz; σ = 0.917 mho/m; ε_r = 54.177; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.27, 6.27, 6.27); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 11.153 V/m; Power Drift = -0.14 dB
Fast SAR: SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.069 mW/g
Maximum value of SAR (interpolated) = 0.140 mW/g

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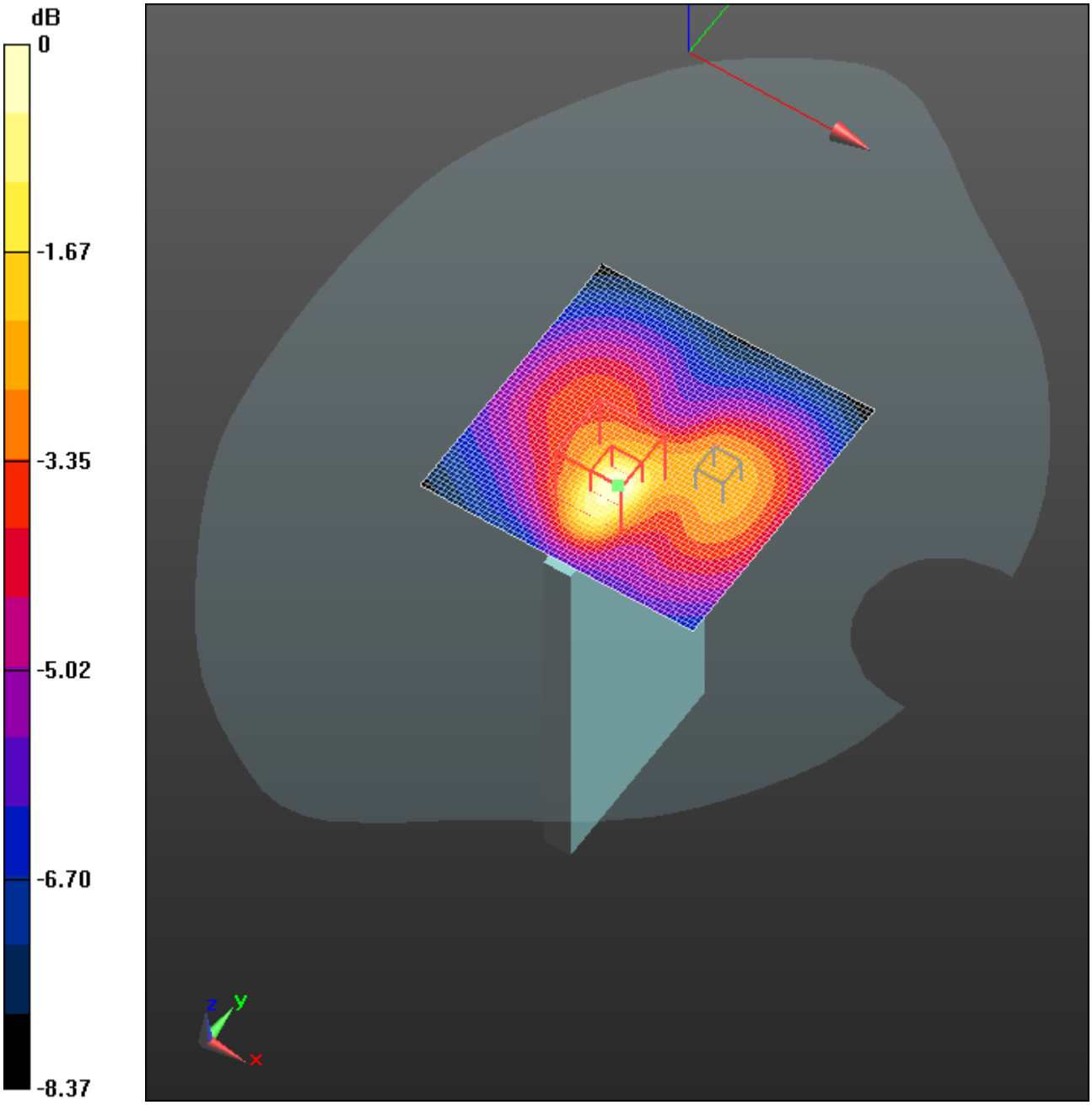

0 dB = 0.140mW/g = -17.08 dB mW/g

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Date/Time: 12/17/2012 3:02:00 PM

Test Laboratory: RIM Testing Services

MHS_Body_SAR_LTE_17_10mm_Front

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: LTE_Band 17; Frequency: 710 MHz
Medium parameters used: f = 710 MHz; σ = 0.917 mho/m; ε_r = 54.177; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.27, 6.27, 6.27); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.7C_Liq_Temp_22.0C/
Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 19.939 V/m; Power Drift = -0.0066 dB
Fast SAR: SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.358 mW/g
Maximum value of SAR (interpolated) = 0.576 mW/g

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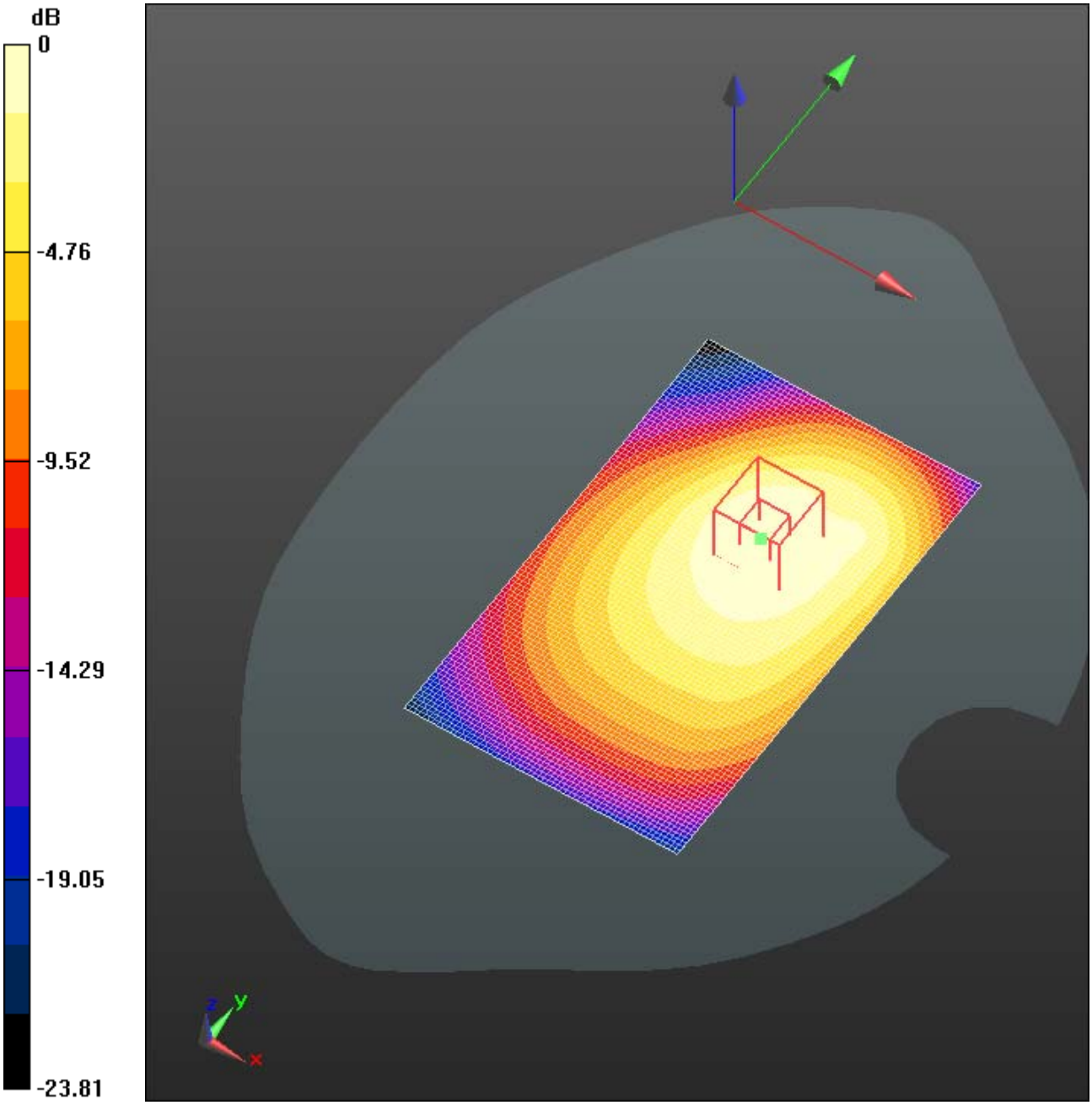

0 dB = 0.580mW/g = -4.73 dB mW/g

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Date/Time: 12/17/2012 7:14:56 PM

Test Laboratory: RIM Testing Services

MHS_Body_SAR_LTE_17_10mm_Left

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: LTE_Band 17; Frequency: 710 MHz
Medium parameters used: f = 710 MHz; σ = 0.917 mho/m; ε_r = 54.177; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.27, 6.27, 6.27); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 20.444 V/m; Power Drift = -0.0099 dB
Fast SAR: SAR(1 g) = 0.343 mW/g; SAR(10 g) = 0.241 mW/g
Maximum value of SAR (interpolated) = 0.383 mW/g

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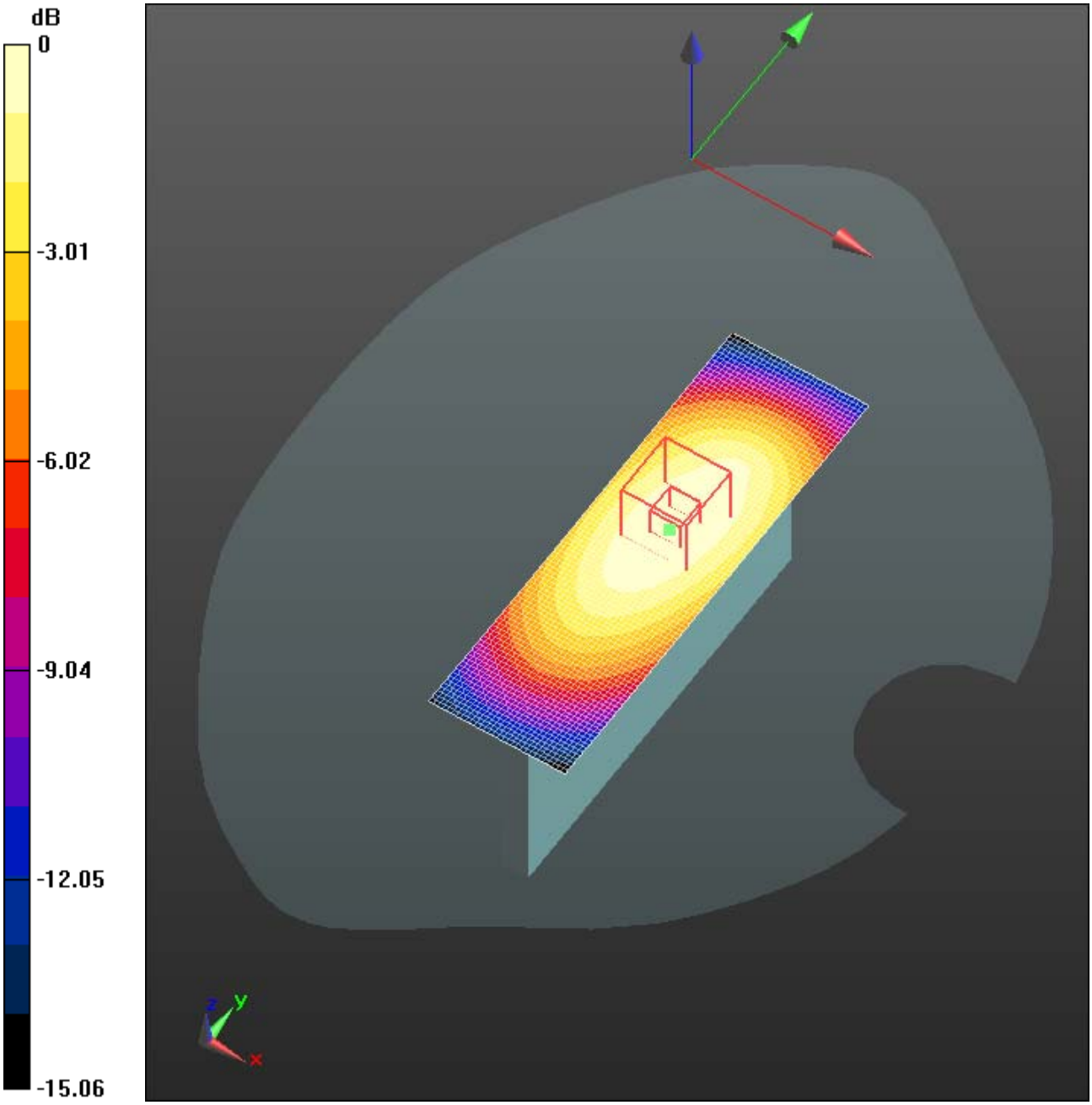

0 dB = 0.380mW/g = -8.40 dB mW/g

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Date/Time: 12/17/2012 6:00:31 PM

Test Laboratory: RIM Testing Services

MHS_Body_SAR_LTE_17_10mm_Right

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: LTE_Band 17; Frequency: 710 MHz
Medium parameters used: f = 710 MHz; σ = 0.917 mho/m; ε_r = 54.177; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.27, 6.27, 6.27); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_22.3C/
Area Scan (31x101x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 14.194 V/m; Power Drift = -0.03 dB
Fast SAR: SAR(1 g) = 0.153 mW/g; SAR(10 g) = 0.107 mW/g
Maximum value of SAR (interpolated) = 0.173 mW/g

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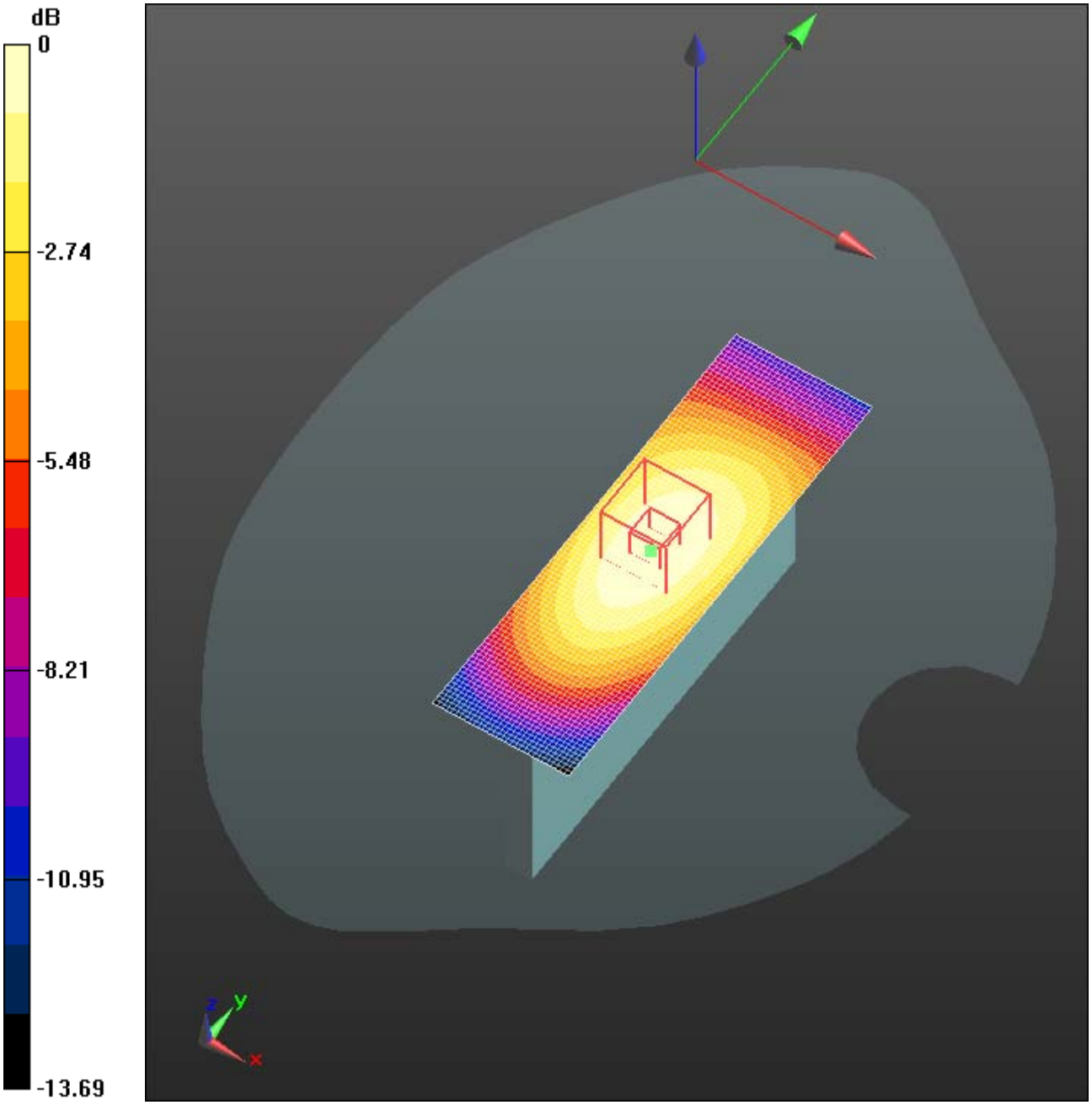

0 dB = 0.170mW/g = -15.39 dB mW/g

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Date/Time: 12/17/2012 2:23:57 PM

Test Laboratory: RIM Testing Services

MHS_Body_SAR_LTE_17_back

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: LTE_Band 17; Frequency: 710 MHz
Medium parameters used: f = 710 MHz; σ = 0.917 mho/m; ε_r = 54.177; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.27, 6.27, 6.27); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_21.8C/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 23.742 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 0.773 mW/g; SAR(10 g) = 0.526 mW/g
Maximum value of SAR (interpolated) = 0.886 mW/g

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_21.8C/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 23.742 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.1120
SAR(1 g) = 0.748 mW/g; SAR(10 g) = 0.504 mW/g
Maximum value of SAR (measured) = 0.858 mW/g

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_17_QPSK_RB25_Offset25_Amb_Temp_23.4C_Liq_Temp_21.9C/

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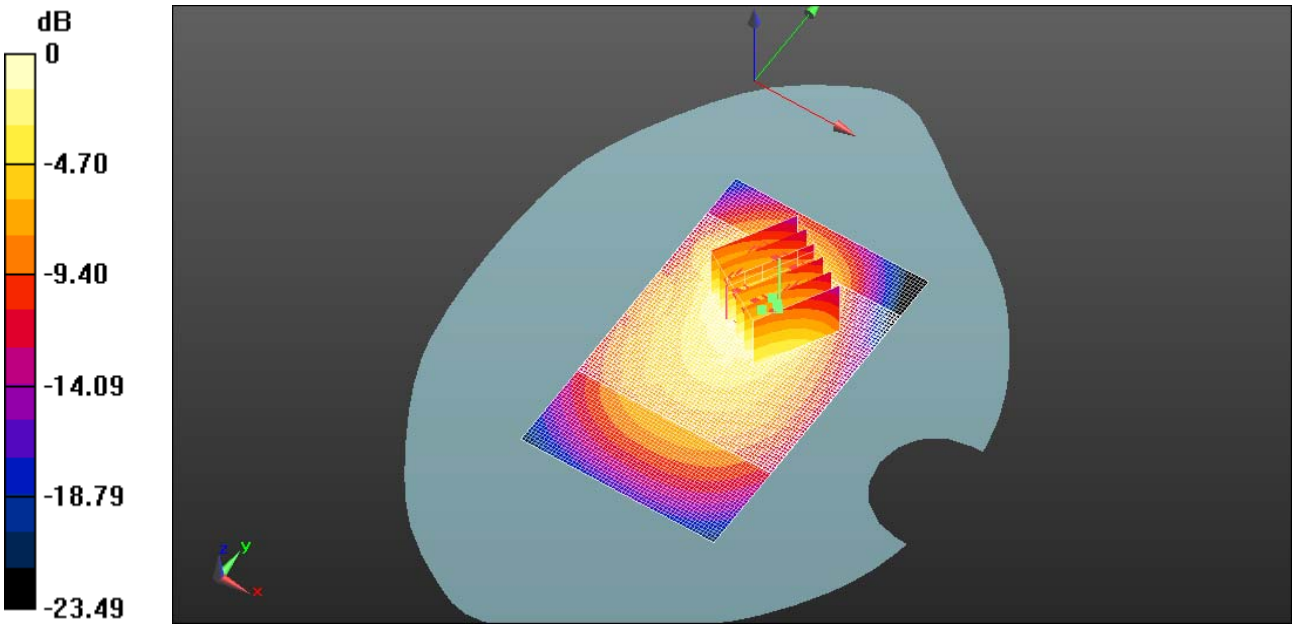
Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 20.366 V/m; Power Drift = 0.06 dB
Fast SAR: SAR(1 g) = 0.593 mW/g; SAR(10 g) = 0.411 mW/g
Maximum value of SAR (interpolated) = 0.682 mW/g

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Headset_Device_Back_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 21.645 V/m; Power Drift = 0.01 dB
Fast SAR: SAR(1 g) = 0.677 mW/g; SAR(10 g) = 0.467 mW/g
Maximum value of SAR (interpolated) = 0.784 mW/g

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.4C_Liq_Temp_22.3C_2100mA_batt/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 21.943 V/m; Power Drift = -0.0059 dB
Fast SAR: SAR(1 g) = 0.748 mW/g; SAR(10 g) = 0.505 mW/g
Maximum value of SAR (interpolated) = 0.873 mW/g



0 dB = 0.870mW/g = -1.21 dB mW/g

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Date/Time: 12/17/2012 3:02:00 PM

Test Laboratory: RIM Testing Services

MHS_Body_SAR_LTE_17_Front

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: LTE_Band 17; Frequency: 710 MHz
Medium parameters used: f = 710 MHz; σ = 0.917 mho/m; ε_r = 54.177; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.27, 6.27, 6.27); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_LTE_17_QPSK_RB1_Offset49_Amb_Temp_23.7C_Liq_Temp_22.0C/
Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 19.939 V/m; Power Drift = -0.0066 dB
Fast SAR: SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.358 mW/g
Maximum value of SAR (interpolated) = 0.576 mW/g

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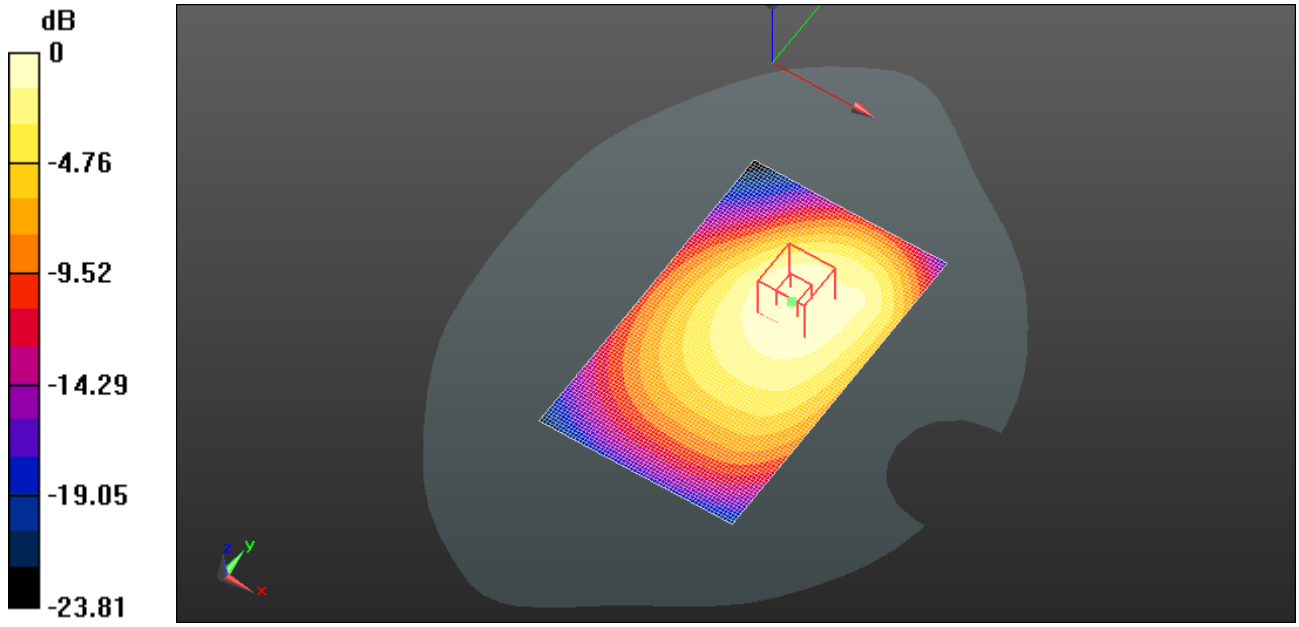

0 dB = 0.580mW/g = -4.73 dB mW/g

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LTE 5

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Date: 2/5/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2668C71D

Configuration: MHS_10mm_Body_SAR_Configuration

Communication System: LTE 5; Communication System Band: LTE 5; Frequency: 844 MHz
Medium Parameters used: f=844 MHz; σ = 0.992 S/m; ε_r = 52.923; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (6.06,6.06,6.06); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_5_High_QPSK_RB1_Offset0_Amb_Temp_23.3C_Liq_Temp_21.9C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.518 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_5_High_QPSK_RB1_Offset0_Amb_Temp_23.3C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 18.057 V/m; **Power Drift = -0.019 dB**

Averaged SAR: SAR(1g) = 0.485 W/kg; SAR(10g) = 0.361 W/kg
Maximum value of SAR (interpolated) = 0.601 W/kg

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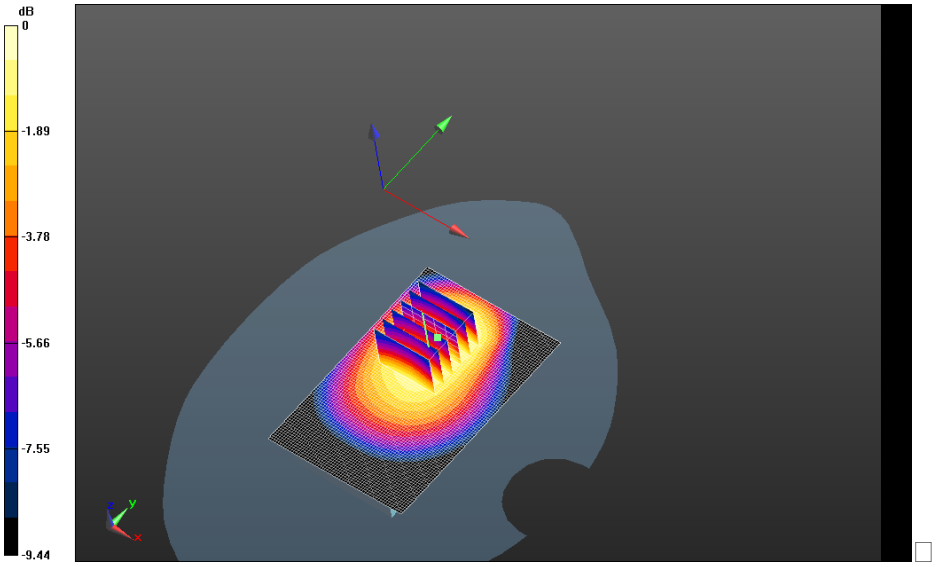

0 dB = 0.508 W/kg = -2.94 dBW/kg

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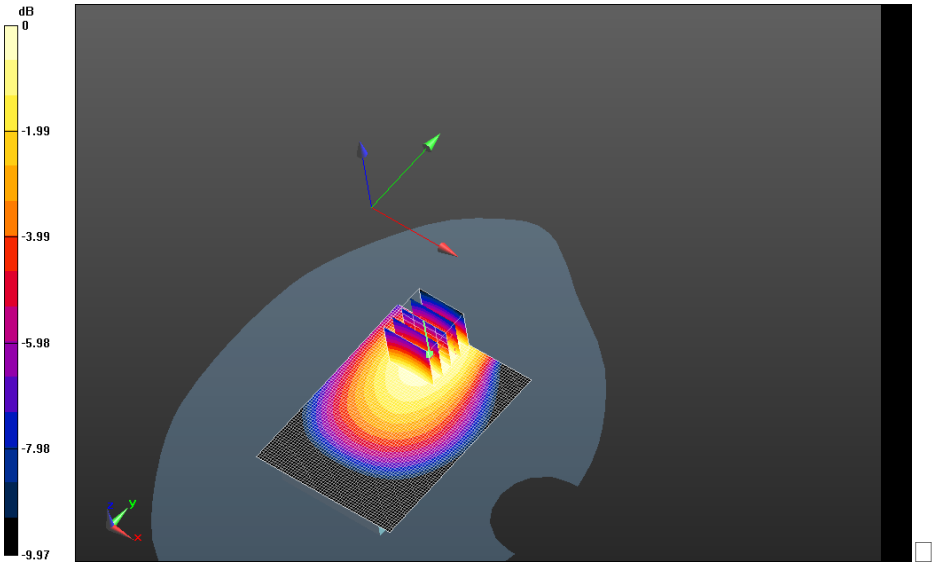
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_5_Low_Chan_QPSK_RB25_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.486 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_5_Low_Chan_QPSK_RB25_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 16.601 V/m; **Power Drift = -0.114 dB**

Averaged SAR: SAR(1g) = 0.448 W/kg; SAR(10g) = 0.331 W/kg
Maximum value of SAR (interpolated) = 0.582 W/kg



0 dB = 0.508 W/kg = -2.94 dBW/kg

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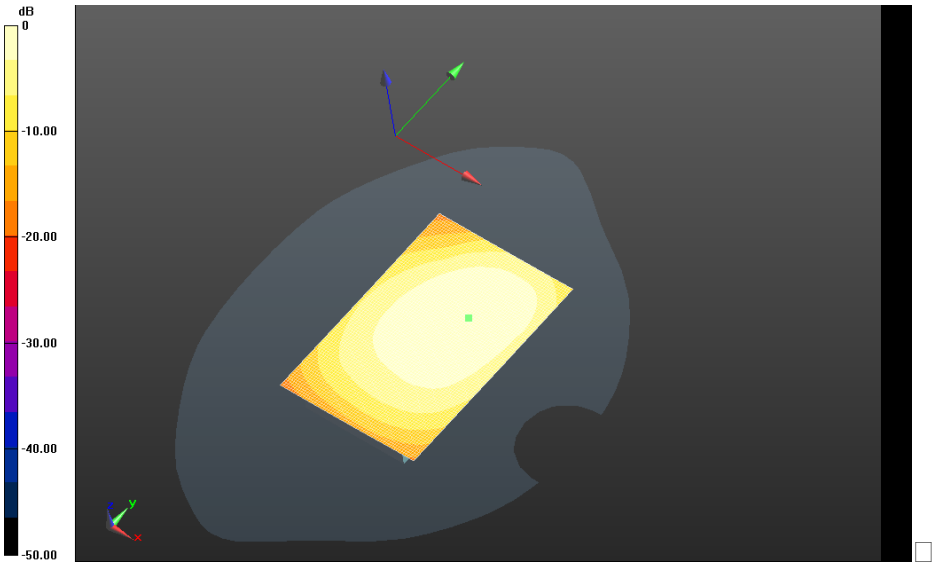
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.7C_Liq_Temp_22.0C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.418 W/kg



0 dB = 0.473 W/kg = -3.25 dBW/kg

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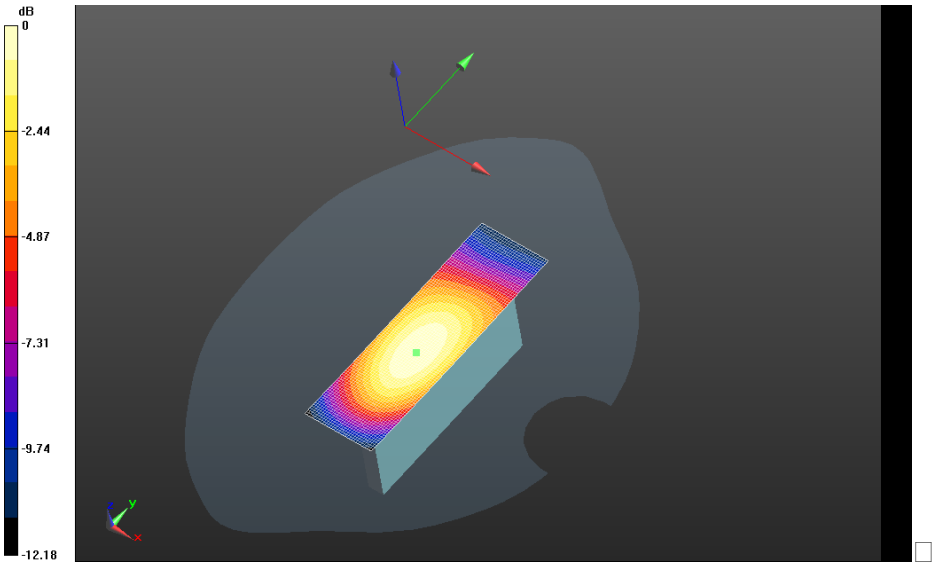
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.201 W/kg



0 dB = 0.418 W/kg = -3.79 dBW/kg

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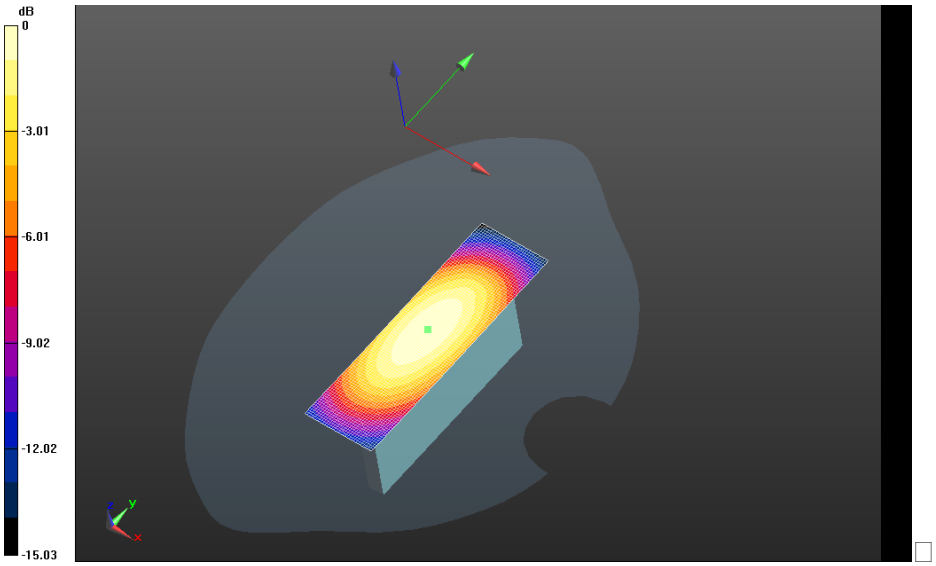
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.459 W/kg



0 dB = 0.201 W/kg = -6.97 dBW/kg

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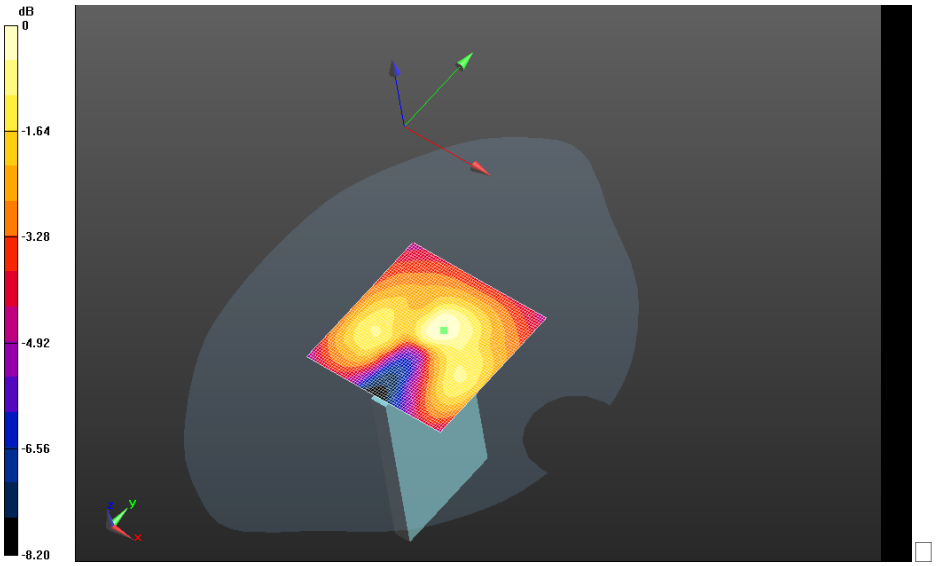
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0406 W/kg



0 dB = 0.459 W/kg = -3.38 dBW/kg

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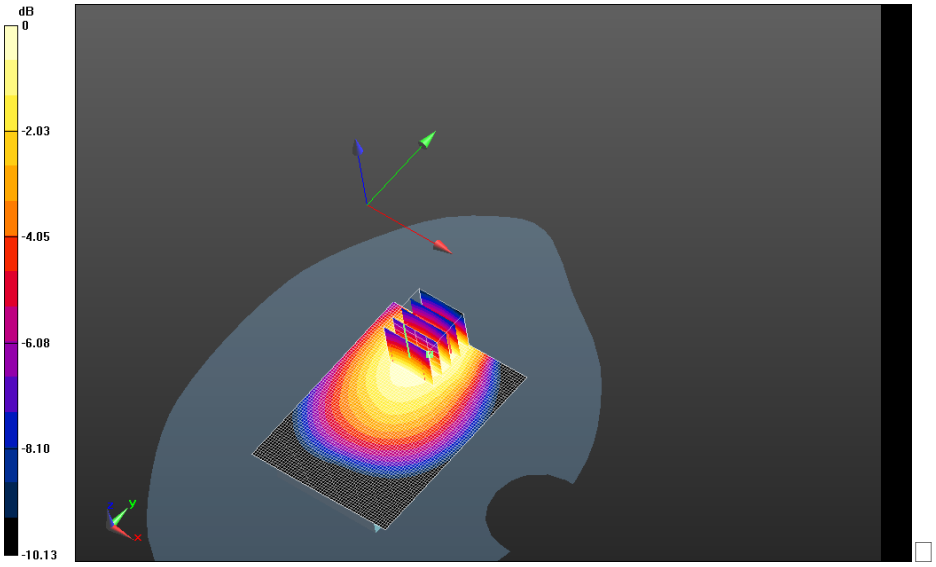
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.462 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 16.029 V/m; **Power Drift = 0.150 dB**

Averaged SAR: SAR(1g) = 0.432 W/kg; SAR(10g) = 0.322 W/kg
Maximum value of SAR (interpolated) = 0.545 W/kg



0 dB = 0.0406 W/kg = -13.91 dBW/kg

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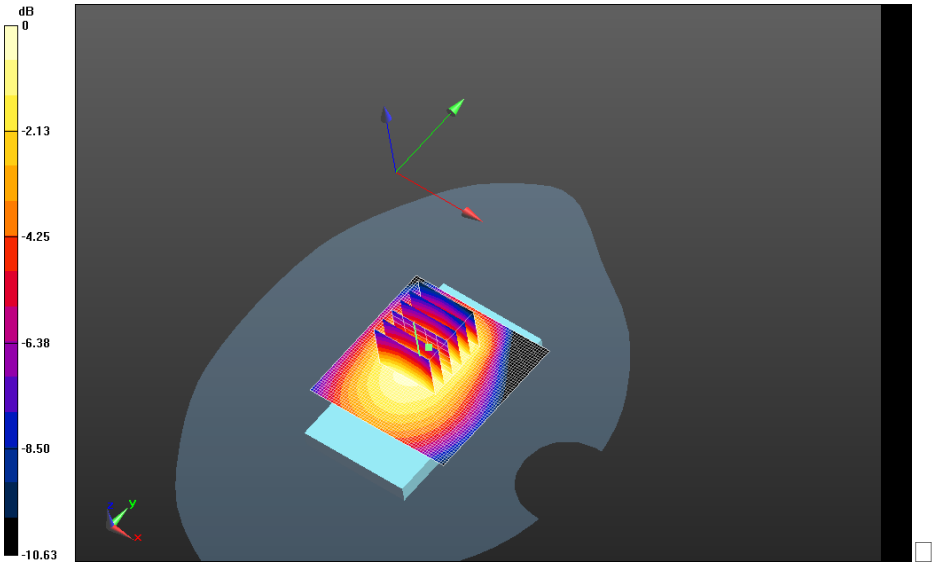
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+2100mA_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/ Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.512 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+2100mA_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 22.015 V/m; **Power Drift = -0.080 dB**

Averaged SAR: SAR(1g) = 0.498 W/kg; SAR(10g) = 0.371 W/kg
Maximum value of SAR (interpolated) = 0.630 W/kg



0 dB = 0.453 W/kg = -3.44 dBW/kg

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EDGE 850

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Date: 2/4/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2668C71D

Configuration: MHS_10mm_Body_SAR_Configuration_EDGE850

Communication System: EDGE 850 (2slots); Communication System Band: EDGE 850; Frequency: 836.8 MHz
Medium Parameters used: f=836.8 MHz; σ = 0.984 S/m; ε_r = 53.016; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (6.06,6.06,6.06); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_EDGE 850_Mid_chan_Amb_Temp_23.6C_Liq_Temp_22.6C/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 19.573 V/m; **Power Drift = -0.100 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_EDGE850_Mid_chan_Amb_Temp_23.6C_Liq_Temp_22.6C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 19.573 V/m; **Power Drift = -0.100 dB**

Averaged SAR: SAR(1g) = 0.429 W/kg; SAR(10g) = 0.321 W/kg
Maximum value of SAR (interpolated) = 0.554 W/kg

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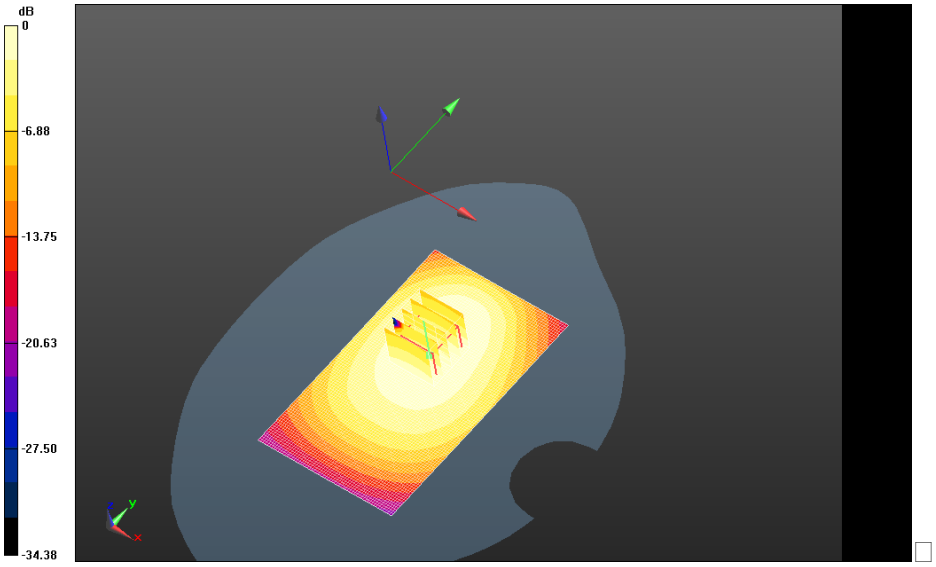

0 dB = 0.448 W/kg = -3.49 dBW/kg

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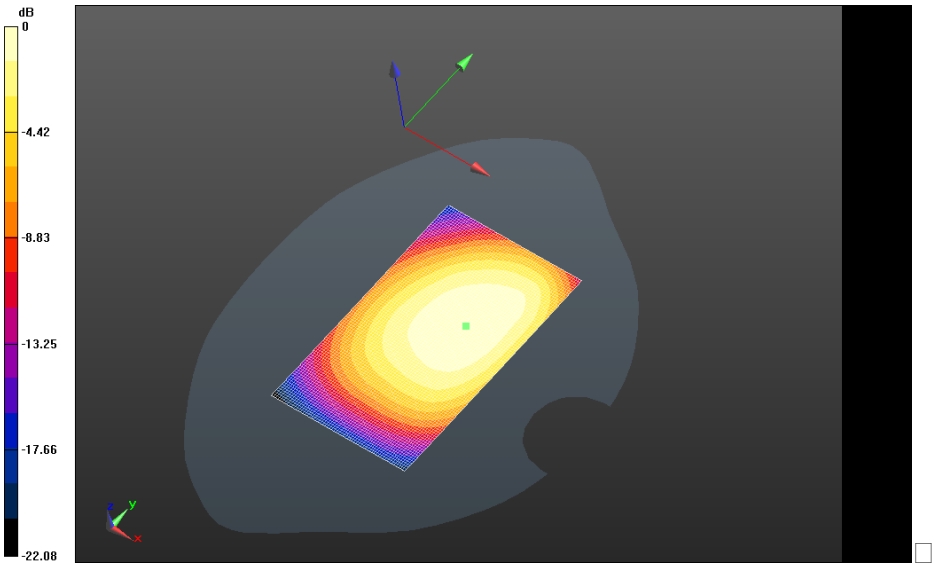
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_EDGE 850_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 18.407 V/m; **Power Drift = -0.057 dB**

Fast SAR: SAR(1g) = 0.369 W/kg; SAR(10g) = 0.259 W/kg
Maximum value of SAR (interpolated) = 0.389 W/kg



0 dB = 0.448 W/kg = -3.49 dBW/kg

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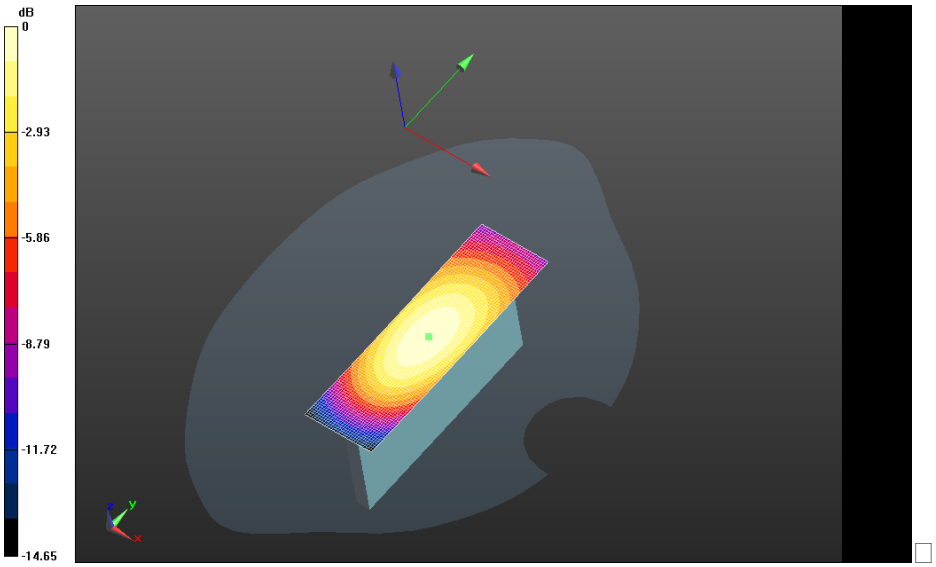
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_EDGE 850_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.643 V/m; **Power Drift = -0.00521 dB**

Fast SAR: SAR(1g) = 0.210 W/kg; SAR(10g) = 0.145 W/kg
Maximum value of SAR (interpolated) = 0.224 W/kg



0 dB = 0.389 W/kg = -4.10 dBW/kg

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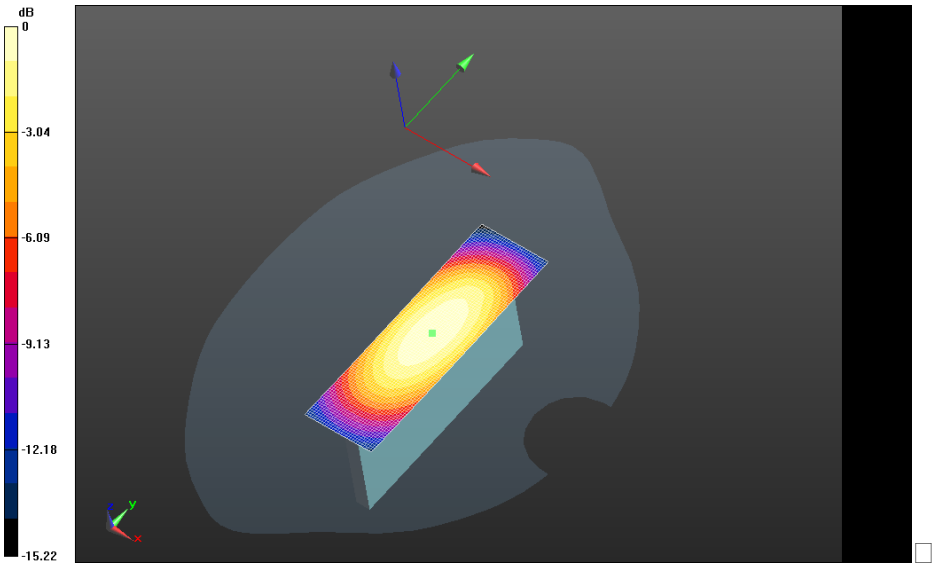
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_EDGE850_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 21.630 V/m; **Power Drift = 0.014 dB**

Fast SAR: SAR(1g) = 0.412 W/kg; SAR(10g) = 0.284 W/kg
Maximum value of SAR (interpolated) = 0.436 W/kg



0 dB = 0.224 W/kg = -6.50 dBW/kg

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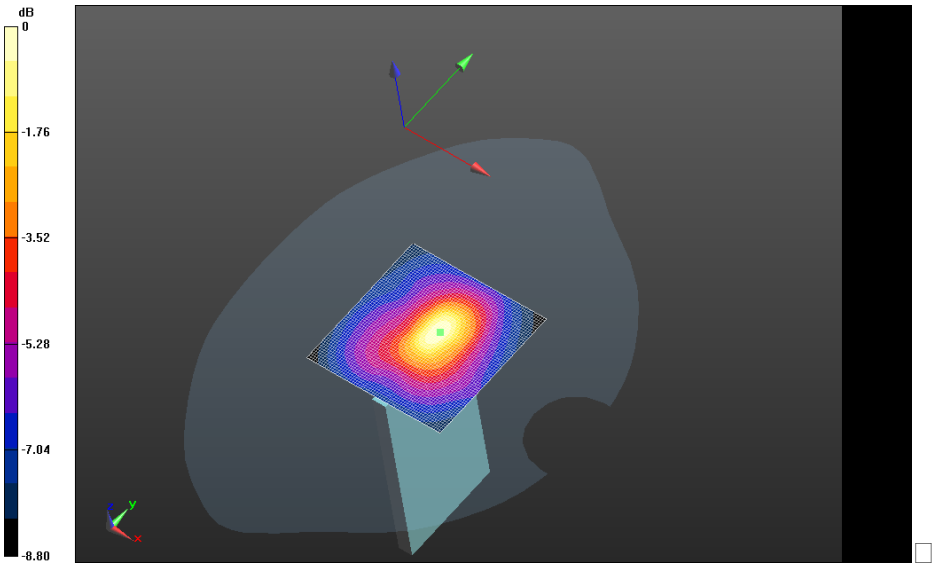
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_EDGE850_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 7.494 V/m; **Power Drift = -0.067 dB**

Fast SAR: SAR(1g) = 0.0556 W/kg; SAR(10g) = 0.0350 W/kg
Maximum value of SAR (interpolated) = 0.0640 W/kg



0 dB = 0.436 W/kg = -3.61 dBW/kg

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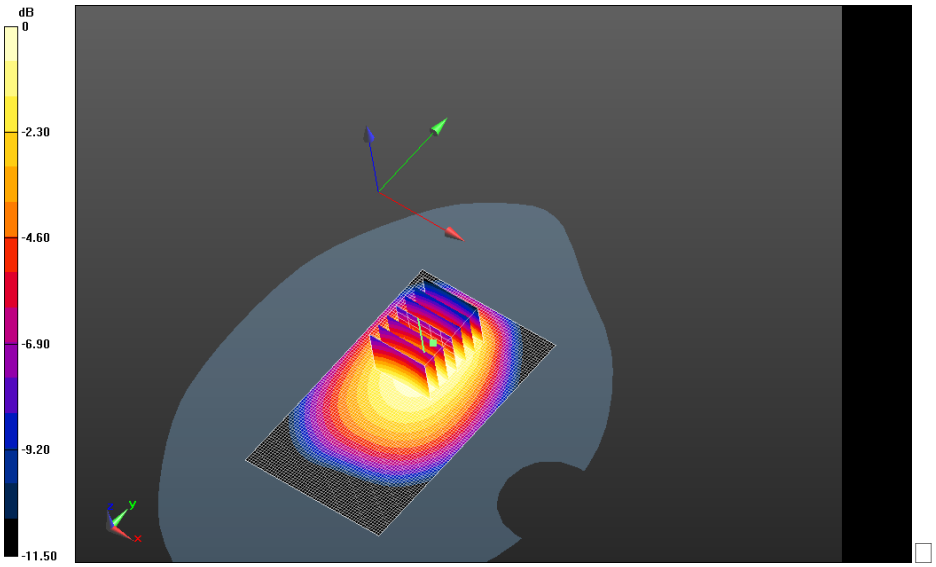
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_EDGE850_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 17.024 V/m; **Power Drift = -0.081 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_EDGE850_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Zoom Scan (5x5x7) (26x31x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 17.024 V/m; **Power Drift = -0.081 dB**

Averaged SAR: SAR(1g) = 0.358 W/kg; SAR(10g) = 0.265 W/kg
Maximum value of SAR (interpolated) = 0.472 W/kg



0 dB = 0.0640 W/kg = -11.94 dBW/kg

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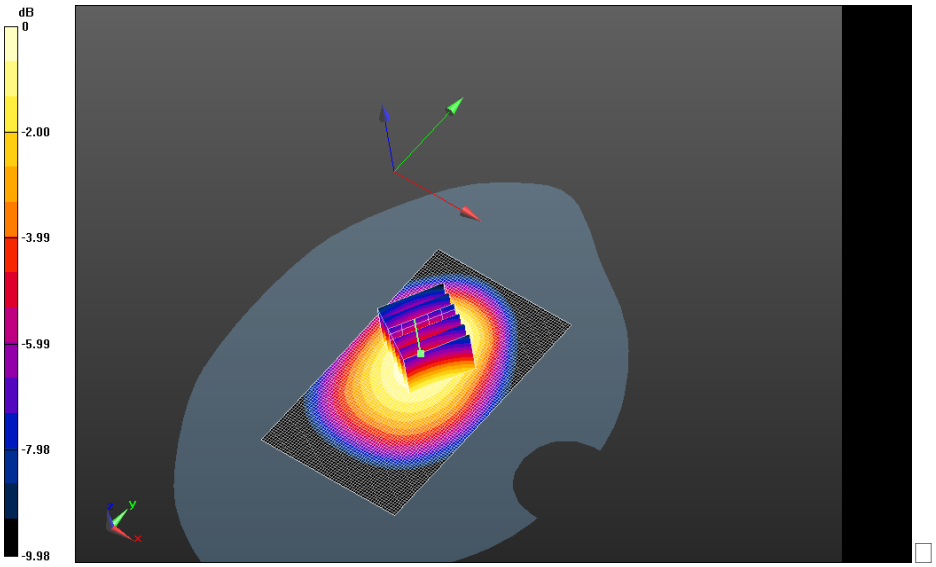
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100mA_EDGE850_Mid_chan_Amb_Temp_23.5C_Liq_Temp_22.6C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 21.499 V/m; **Power Drift = -0.087 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100mA_EDGE850_Mid_chan_Amb_Temp_23.5C_Liq_Temp_22.6C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 21.499 V/m; **Power Drift = -0.087 dB**

Averaged SAR: SAR(1g) = 0.451 W/kg; SAR(10g) = 0.336 W/kg
Maximum value of SAR (interpolated) = 0.577 W/kg



0 dB = 0.376 W/kg = -4.25 dBW/kg

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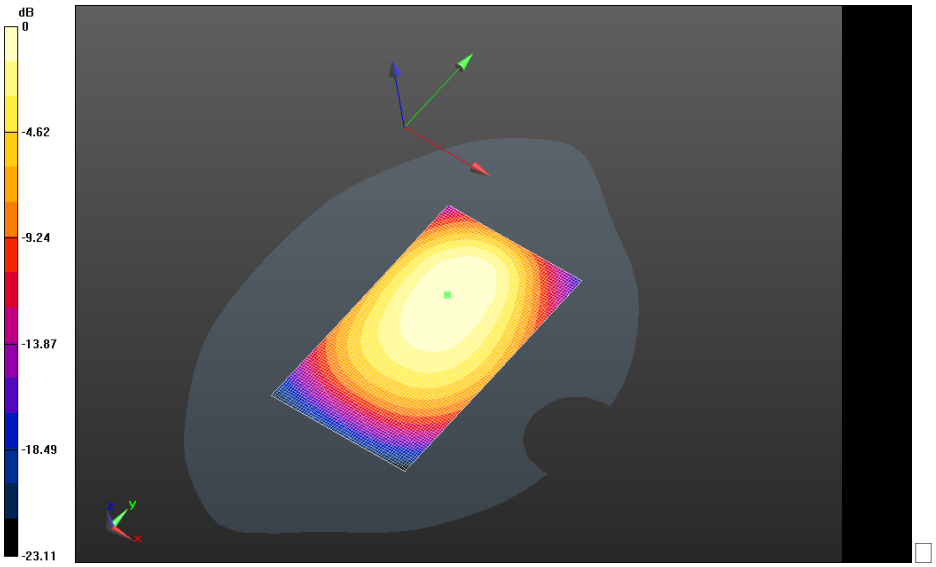
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_3-Slot_EDGE850_Mid_chan_Amb_Temp_23.6C_Liq_Temp_22.6C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 19.005 V/m; **Power Drift = -0.118 dB**

Fast SAR: SAR(1g) = 0.410 W/kg; SAR(10g) = 0.287 W/kg
Maximum value of SAR (interpolated) = 0.432 W/kg



0 dB = 0.474 W/kg = -3.24 dBW/kg

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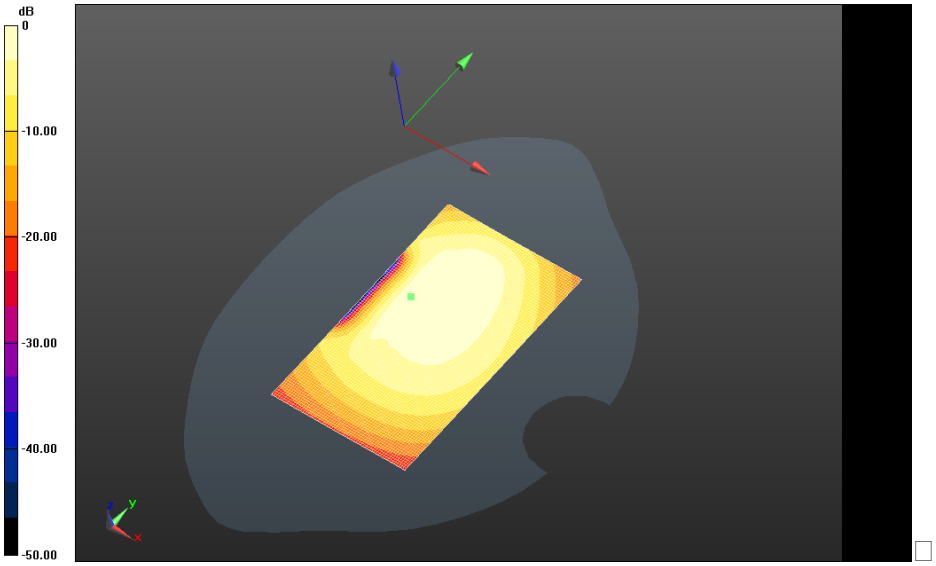
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_4-Slot_EDGE850_Mid_chan_Amb_Temp_23.6C_Liq_Temp_22.6C 2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 18.764 V/m; **Power Drift = 0.014 dB**

Fast SAR: SAR(1g) = 0.429 W/kg; SAR(10g) = 0.297 W/kg; Secondary SAR(1g) = 0.415 W/kg
Maximum value of SAR (interpolated) = 0.525 W/kg



0 dB = 0.432 W/kg = -3.65 dBW/kg

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UMTS Band V

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Date: 2/4/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2668C71D

Configuration: MHS_10mm_Body_SAR_Configuration_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 = 0.983 S/m; ε_r = 53.022; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (6.06,6.06,6.06); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS_V_Mid_chan_Amb_Temp_23.6C_Liq_Temp_22.6C/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 22.729 V/m; **Power Drift = -0.087 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS_V_Mid_chan_Amb_Temp_23.6C_Liq_Temp_22.6C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 22.729 V/m; **Power Drift = -0.087 dB**

Averaged SAR: SAR(1g) = 0.624 W/kg; SAR(10g) = 0.463 W/kg
Maximum value of SAR (interpolated) = 0.793 W/kg

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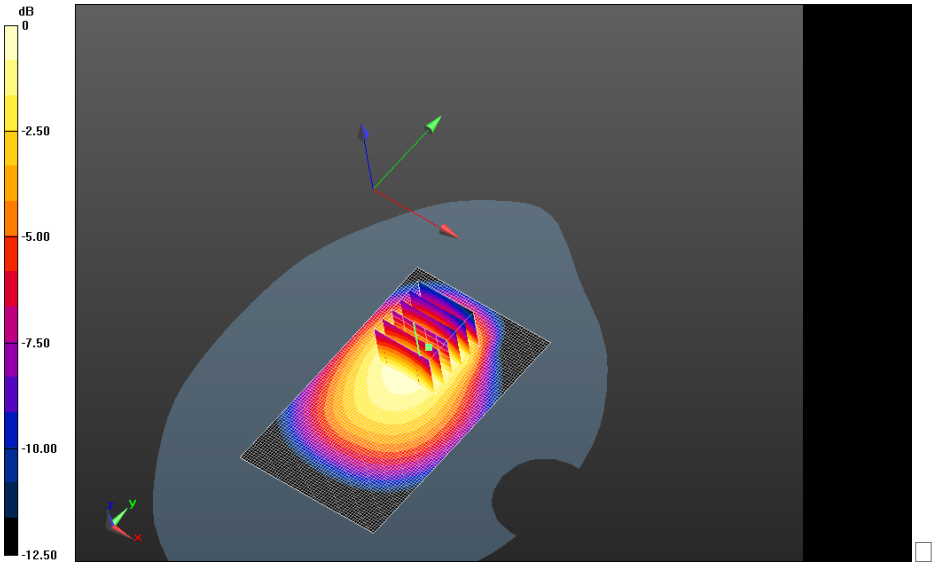

0 dB = 0.656 W/kg = -1.83 dBW/kg

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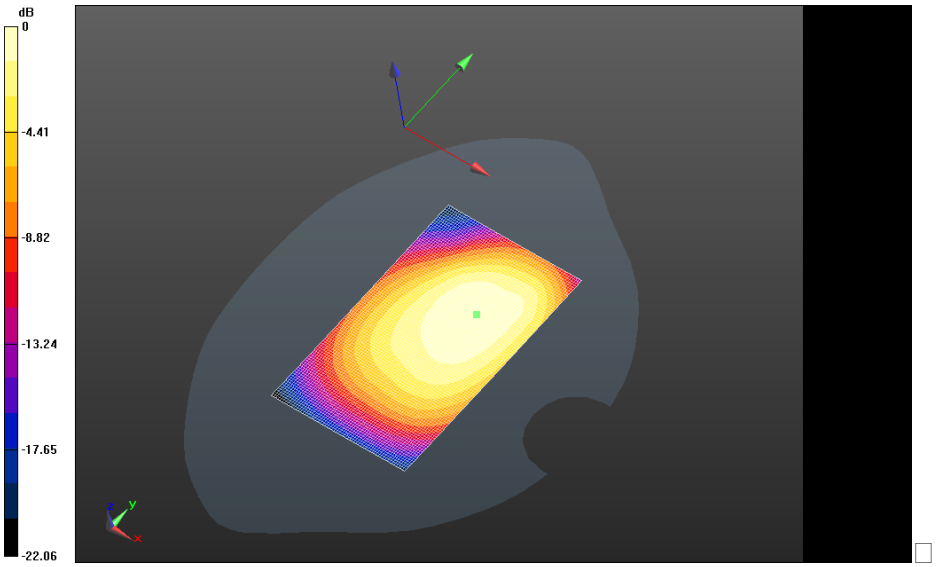
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_UMTS_V_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 20.689 V/m; **Power Drift = 0.084 dB**

Fast SAR: SAR(1g) = 0.523 W/kg; SAR(10g) = 0.364 W/kg
Maximum value of SAR (interpolated) = 0.550 W/kg



0 dB = 0.656 W/kg = -1.83 dBW/kg

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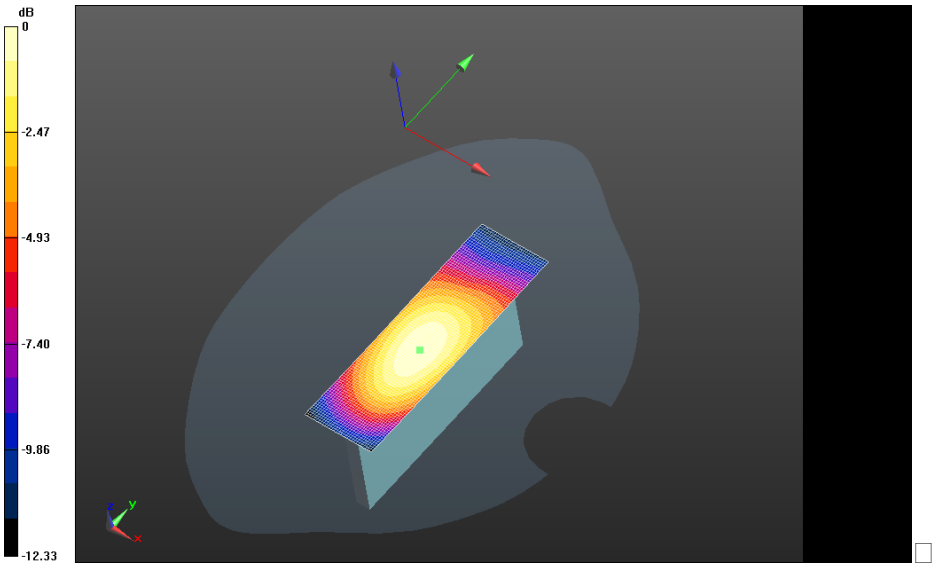
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_UMTS_V_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 16.932 V/m; **Power Drift = 0.098 dB**

Fast SAR: SAR(1g) = 0.250 W/kg; SAR(10g) = 0.172 W/kg
Maximum value of SAR (interpolated) = 0.266 W/kg



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

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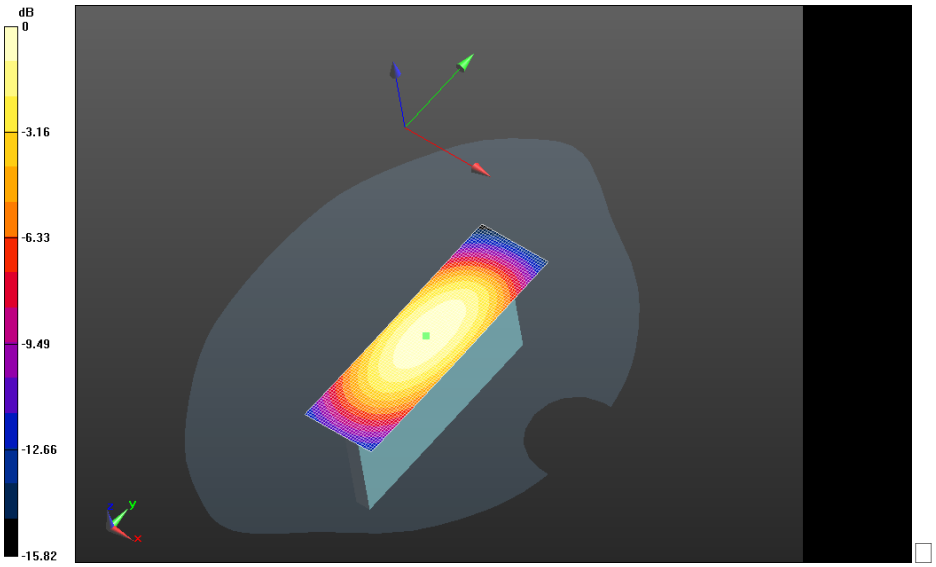
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_UMTS_V_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 25.231 V/m; **Power Drift = 0.00344 dB**

Fast SAR: SAR(1g) = 0.554 W/kg; SAR(10g) = 0.382 W/kg
Maximum value of SAR (interpolated) = 0.588 W/kg



0 dB = 0.266 W/kg = -5.75 dBW/kg

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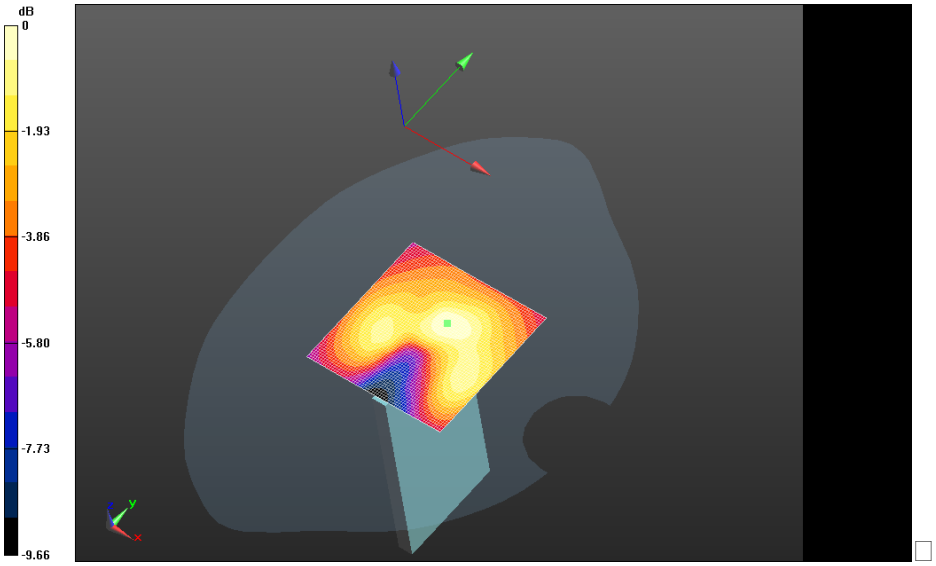
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_UMTS_V_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 5.311 V/m; **Power Drift = -0.094 dB**

Fast SAR: SAR(1g) = 0.0475 W/kg; SAR(10g) = 0.0319 W/kg; Secondary SAR(1g) = 0.0398 W/kg
Maximum value of SAR (interpolated) = 0.0519 W/kg



0 dB = 0.588 W/kg = -2.31 dBW/kg

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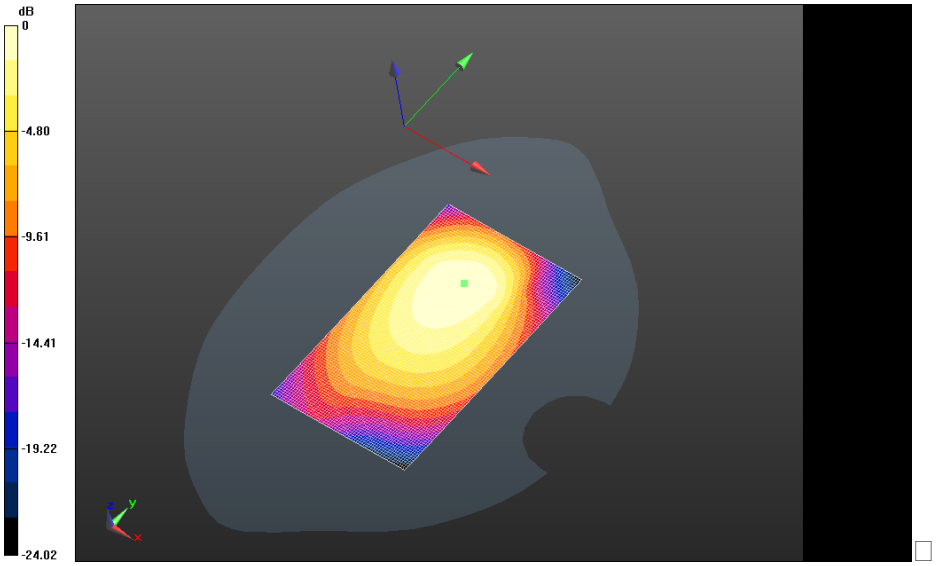
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_UMTS_V_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 18.983 V/m; **Power Drift = 0.078 dB**

Fast SAR: SAR(1g) = 0.552 W/kg; SAR(10g) = 0.377 W/kg; Secondary SAR(1g) = 0.0398 W/kg
Maximum value of SAR (interpolated) = 0.590 W/kg



0 dB = 0.0519 W/kg = -12.85 dBW/kg

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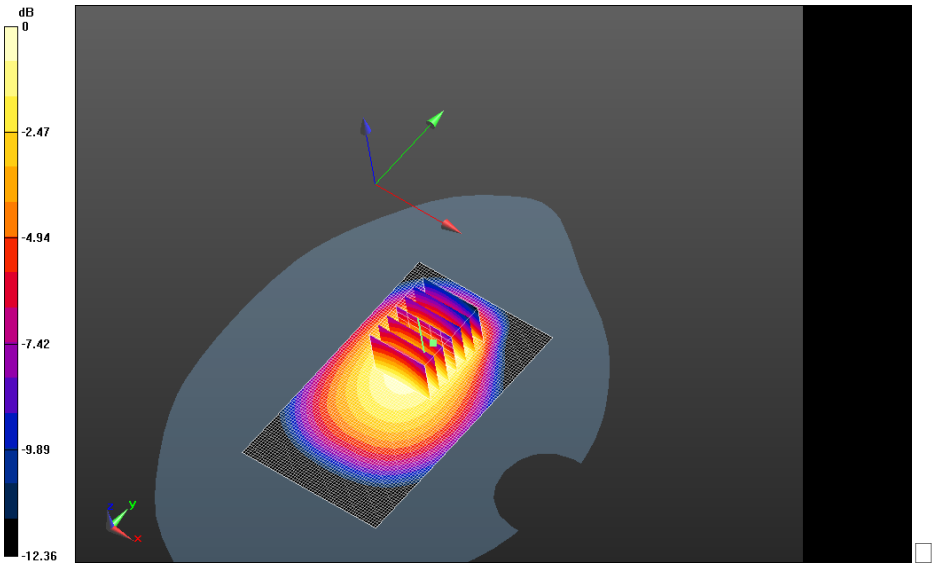
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100mA_UMTS_V_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 23.135 V/m; **Power Drift = -0.100 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100mA_UMTS_V_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x31x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 23.135 V/m; **Power Drift = -0.100 dB**

Averaged SAR: SAR(1g) = 0.618 W/kg; SAR(10g) = 0.461 W/kg
Maximum value of SAR (interpolated) = 0.793 W/kg



0 dB = 0.590 W/kg = -2.29 dBW/kg

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LTE 4

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Date: 1/31/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2668C71D

Configuration: MHS_10mm_Body_SAR_Configuration

Communication System: LTE 4; Communication System Band: LTE 4; Frequency: 1745 MHz
Medium Parameters used: f=1745 MHz; σ = 1.530 S/m; ε_r = 51.403; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (4.75,4.75,4.75); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_High_QPSK_RB1_Offset99_Amb_Temp_23.8C_Liq_Temp_22.0C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.586 V/m; **Power Drift = 0.122 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_High_QPSK_RB1_Offset99_Amb_Temp_23.8C_Liq_Temp_22.0C/Zoom Scan (5x5x7) (26x31x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 12.586 V/m; **Power Drift = 0.122 dB**

Averaged SAR: SAR(1g) = 1.02 W/kg; SAR(10g) = 0.607 W/kg
Maximum value of SAR (interpolated) = 1.56 W/kg

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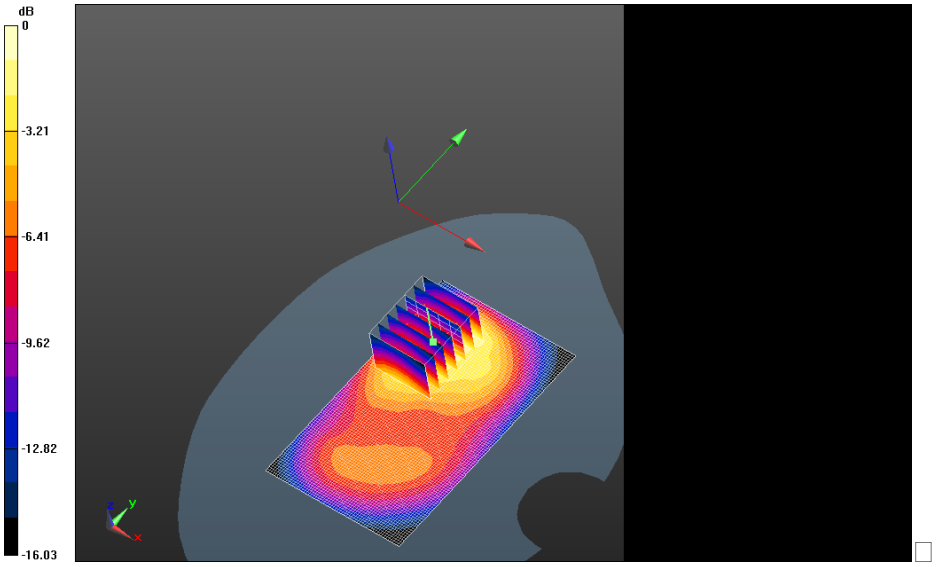

0 dB = 1.13 W/kg = 0.53 dBW/kg

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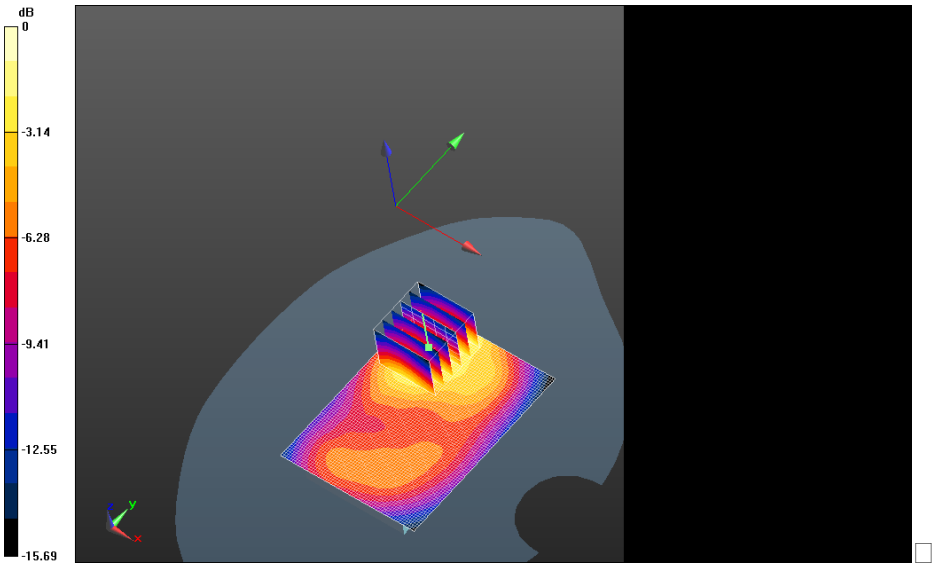
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.951 V/m; **Power Drift = -0.029 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 12.951 V/m; **Power Drift = -0.029 dB**

Averaged SAR: SAR(1g) = 1.04 W/kg; SAR(10g) = 0.609 W/kg
Maximum value of SAR (interpolated) = 1.59 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

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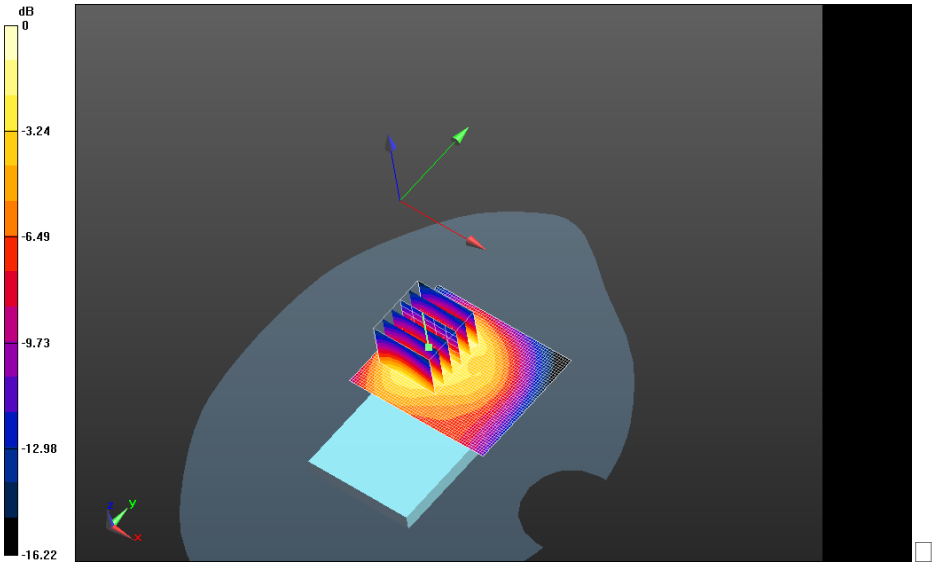
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_2nd Scan_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.5C_Liq_Temp_21.4C/Area Scan (61x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.07 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_2nd Scan_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.5C_Liq_Temp_21.4C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 13.773 V/m; **Power Drift = -0.021 dB**

Averaged SAR: SAR(1g) = 1.01 W/kg; SAR(10g) = 0.596 W/kg
Maximum value of SAR (interpolated) = 1.56 W/kg



0 dB = 1.14 W/kg = 0.57 dBW/kg

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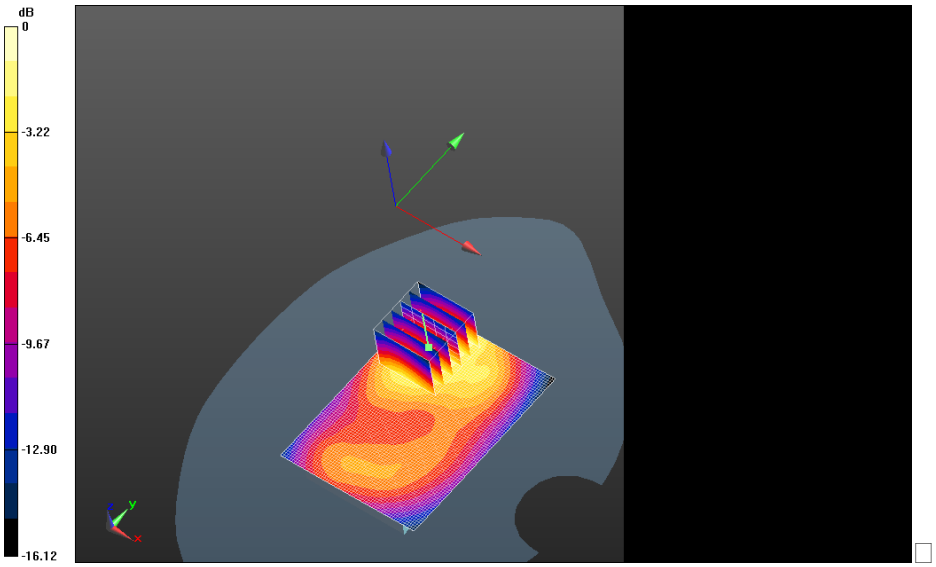
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB1_Offset99_Amb_Temp_23.4C_Liq_Temp_21.9C 2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.154 V/m; **Power Drift = -0.106 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB1_Offset99_Amb_Temp_23.4C_Liq_Temp_21.9C 2/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 13.154 V/m; **Power Drift = -0.106 dB**

Averaged SAR: SAR(1g) = 1.03 W/kg; SAR(10g) = 0.609 W/kg
Maximum value of SAR (interpolated) = 1.56 W/kg



0 dB = 1.15 W/kg = 0.61 dBW/kg

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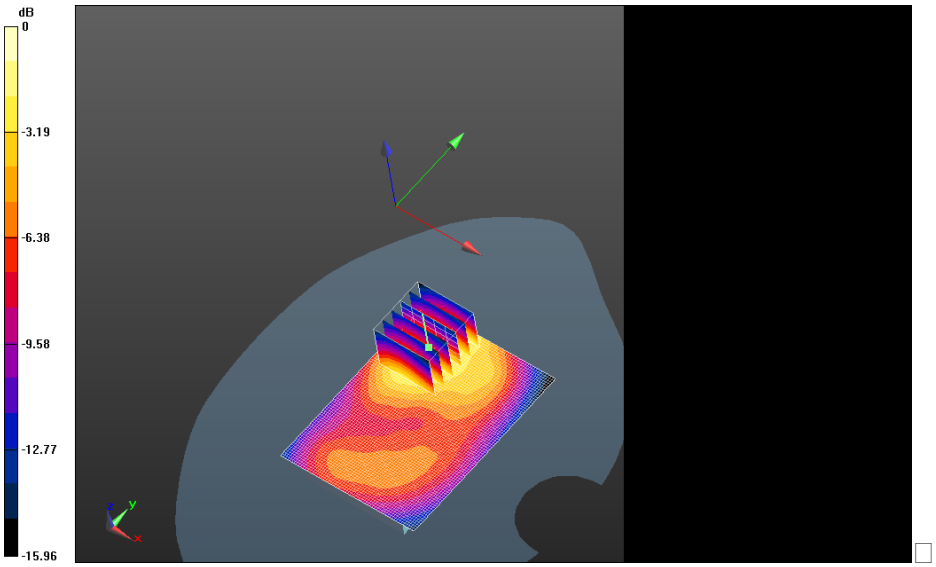
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB50_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.443 V/m; **Power Drift = 0.053 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB50_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.443 V/m; **Power Drift = 0.053 dB**

Averaged SAR: SAR(1g) = 0.865 W/kg; SAR(10g) = 0.508 W/kg
Maximum value of SAR (interpolated) = 1.33 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

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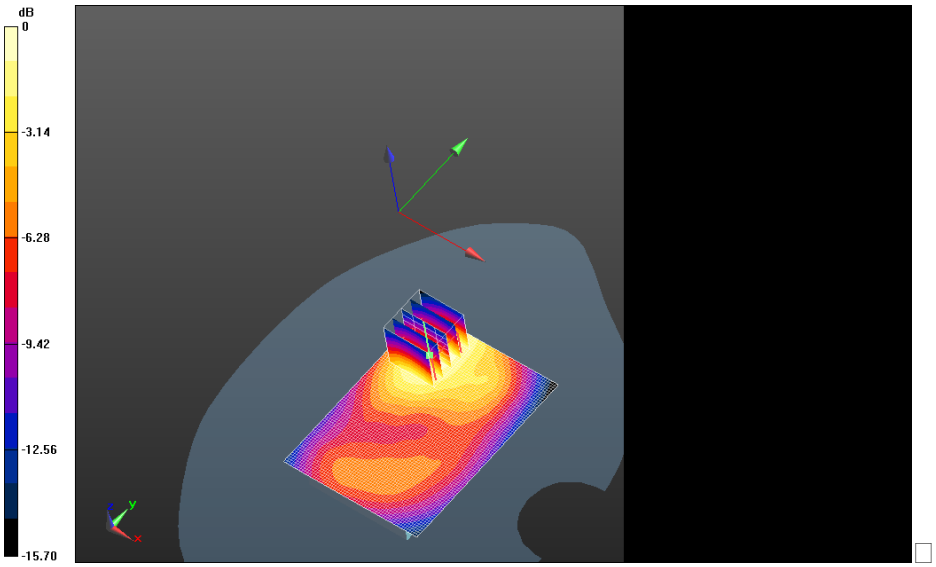
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Mid_Chan_QPSK_RB50_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.787 V/m; **Power Drift = -0.045 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Mid_Chan_QPSK_RB50_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.787 V/m; **Power Drift = -0.045 dB**

Averaged SAR: SAR(1g) = 0.902 W/kg; SAR(10g) = 0.533 W/kg
Maximum value of SAR (interpolated) = 1.39 W/kg



0 dB = 0.963 W/kg = -0.16 dBW/kg

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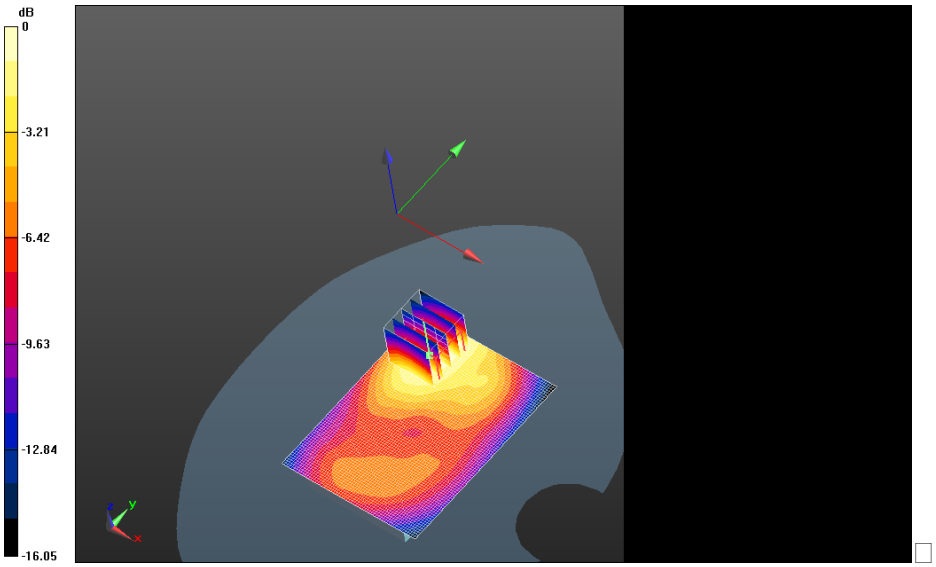
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_High_Chan_QPSK_RB50_Offset50_Amb_Temp_23.4C_Liq_Temp_21.9C 2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.751 V/m; **Power Drift = -0.014 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_High_Chan_QPSK_RB50_Offset50_Amb_Temp_23.4C_Liq_Temp_21.9C 2/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.751 V/m; **Power Drift = -0.014 dB**

Averaged SAR: SAR(1g) = 0.907 W/kg; SAR(10g) = 0.536 W/kg
Maximum value of SAR (interpolated) = 1.40 W/kg



0 dB = 1.01 W/kg = 0.04 dBW/kg

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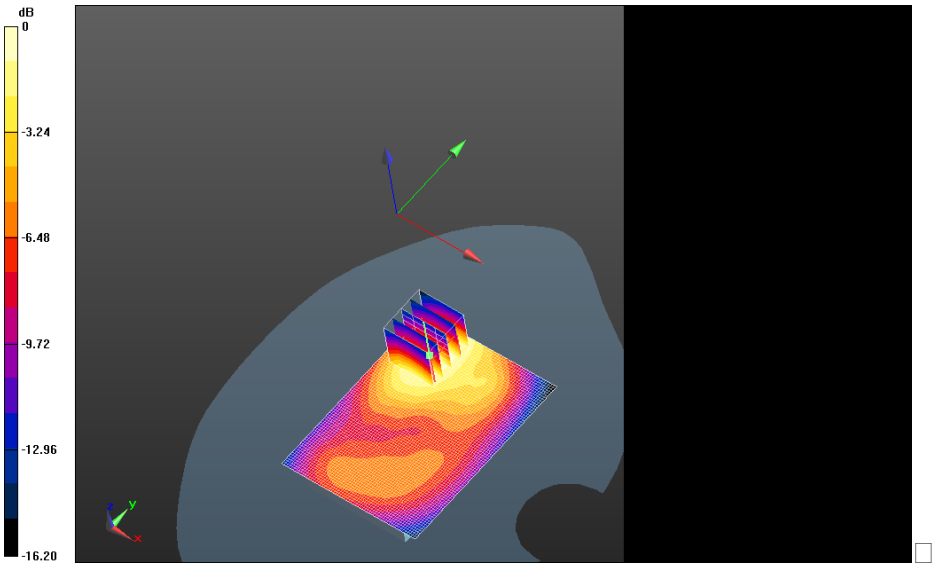
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB100_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.704 V/m; **Power Drift = 0.021 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB100_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.704 V/m; **Power Drift = 0.021 dB**

Averaged SAR: SAR(1g) = 0.890 W/kg; SAR(10g) = 0.525 W/kg
Maximum value of SAR (interpolated) = 1.36 W/kg



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

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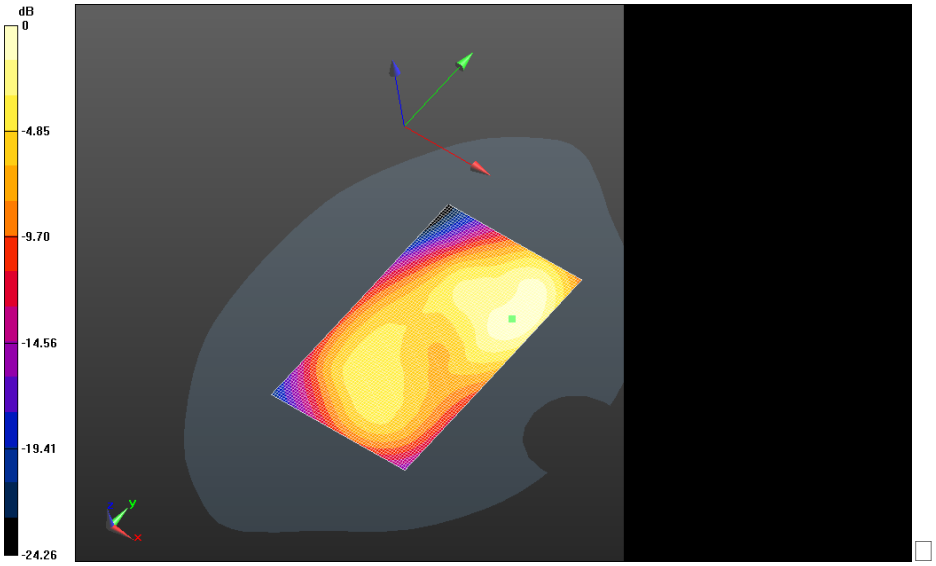
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.7C_Liq_Temp_22.0C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.885 V/m; **Power Drift = 0.068 dB**

Fast SAR: SAR(1g) = 0.567 W/kg; SAR(10g) = 0.341 W/kg; Secondary SAR(1g) = 0.266 W/kg
Maximum value of SAR (interpolated) = 0.624 W/kg



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

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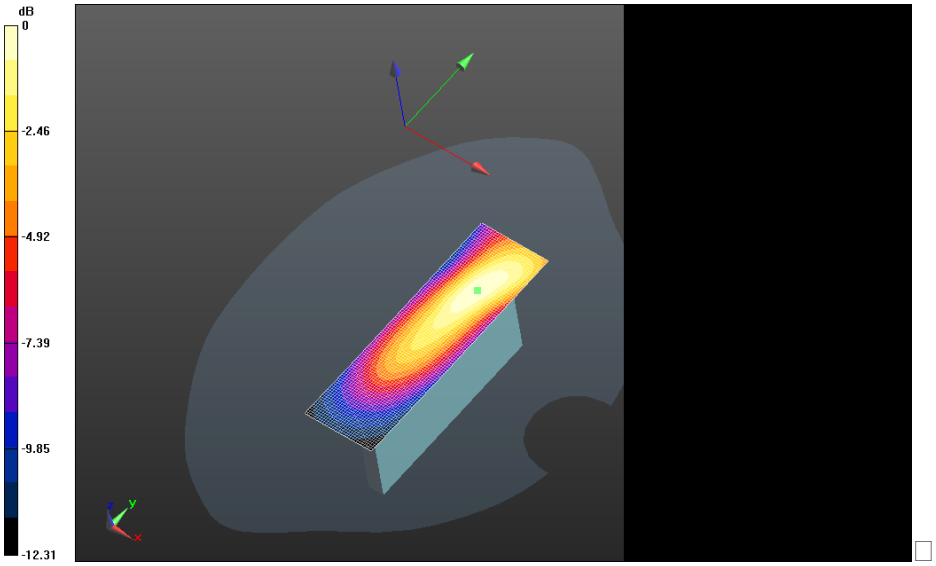
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.703 V/m; **Power Drift = -0.049 dB**

Fast SAR: SAR(1g) = 0.308 W/kg; SAR(10g) = 0.178 W/kg; Secondary SAR(1g) = 0.0628 W/kg
Maximum value of SAR (interpolated) = 0.348 W/kg



0 dB = 0.175 W/kg = -7.57 dBW/kg

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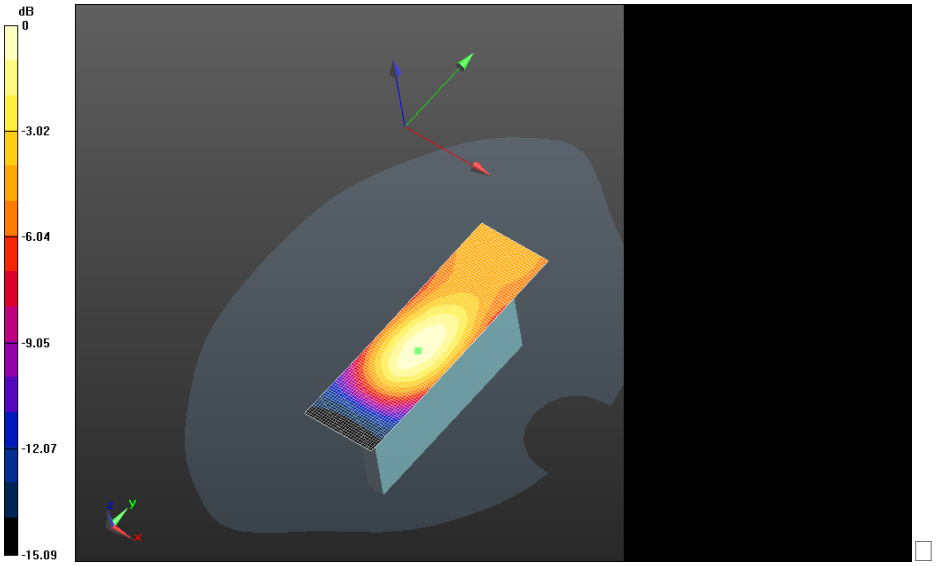
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.506 V/m; **Power Drift = 0.092 dB**

Fast SAR: SAR(1g) = 0.158 W/kg; SAR(10g) = 0.0943 W/kg; Secondary SAR(1g) = 0.0628 W/kg
Maximum value of SAR (interpolated) = 0.175 W/kg



0 dB = 0.584 W/kg = -2.34 dBW/kg

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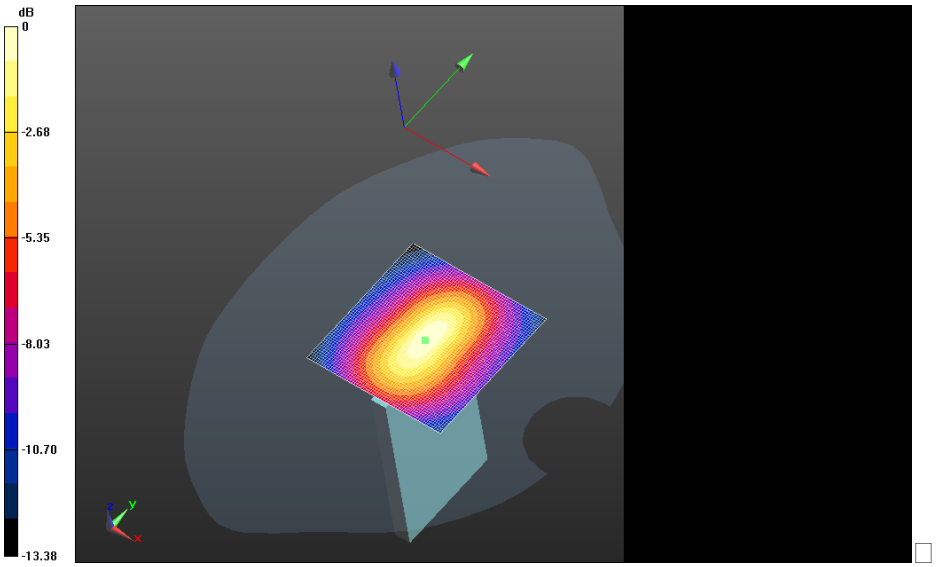
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_LTE_4_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 21.230 V/m; **Power Drift = -0.00268 dB**

Fast SAR: SAR(1g) = 0.517 W/kg; SAR(10g) = 0.295 W/kg; Secondary SAR(1g) = 0.266 W/kg
Maximum value of SAR (interpolated) = 0.584 W/kg



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

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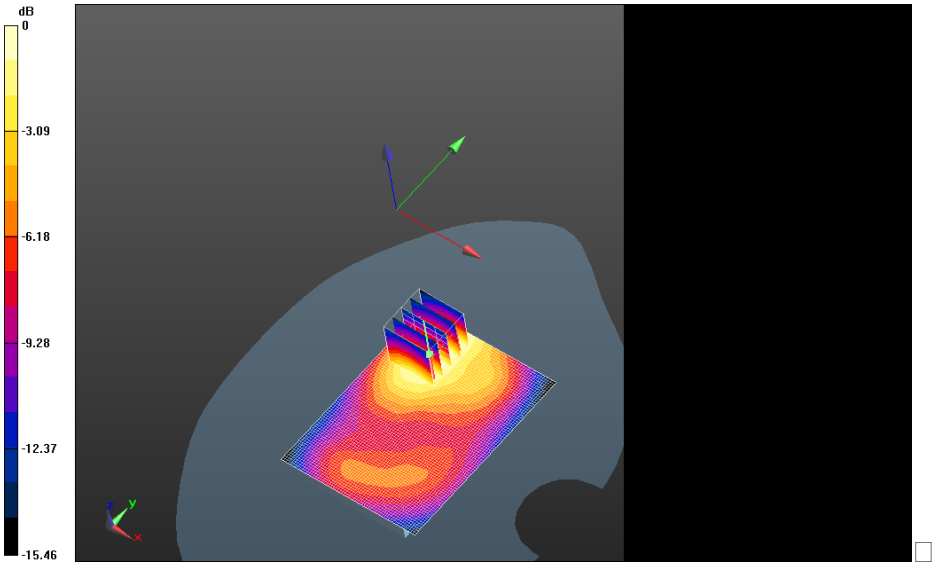
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_LTE_4_Md_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.734 V/m; **Power Drift = 0.116 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_LTE_4_Md_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.734 V/m; **Power Drift = 0.116 dB**

Averaged SAR: SAR(1g) = 0.974 W/kg; SAR(10g) = 0.575 W/kg
Maximum value of SAR (interpolated) = 1.48 W/kg



0 dB = 0.996 W/kg = -0.02 dBW/kg

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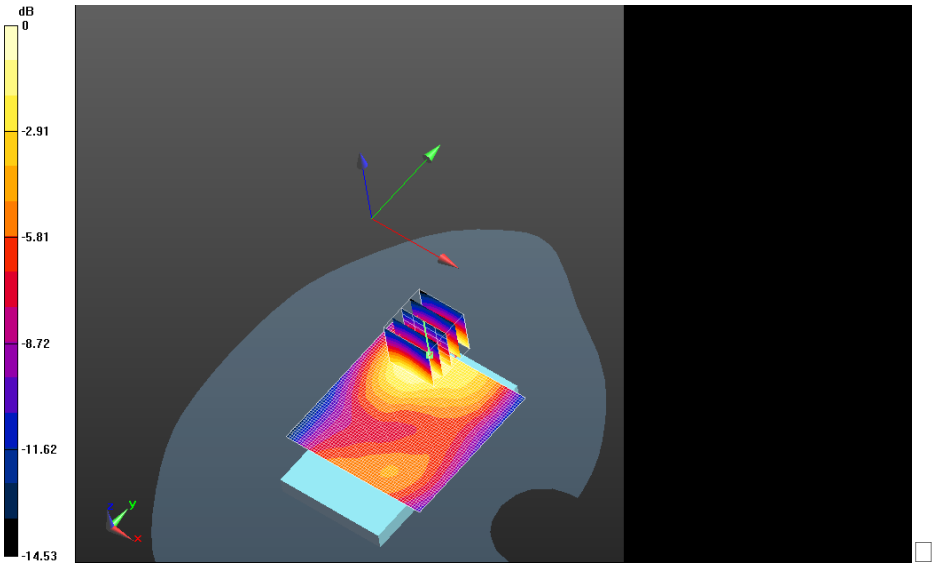
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+2100mA_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/ Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.539 V/m; **Power Drift = 0.172 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+2100mA_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 12.539 V/m; **Power Drift = 0.172 dB**

Averaged SAR: SAR(1g) = 0.913 W/kg; SAR(10g) = 0.544 W/kg
Maximum value of SAR (interpolated) = 1.38 W/kg



0 dB = 0.348 W/kg = -4.58 dBW/kg

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Date: 1/31/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2668C71D

Configuration: MHS_10mm_Body_SAR_Configuration

Communication System: LTE 4; Communication System Band: LTE 4; Frequency: 1745 MHz
Medium Parameters used: f=1745 MHz; σ = 1.530 S/m; ε_r = 51.403; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (4.75,4.75,4.75); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_High_QPSK_RB1_Offset99_Amb_Temp_23.8C_Liq_Temp_22.0C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.586 V/m; **Power Drift = 0.122 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_High_QPSK_RB1_Offset99_Amb_Temp_23.8C_Liq_Temp_22.0C/Zoom Scan (5x5x7) (26x31x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 12.586 V/m; **Power Drift = 0.122 dB**

Averaged SAR: SAR(1g) = 1.02 W/kg; SAR(10g) = 0.607 W/kg
Maximum value of SAR (interpolated) = 1.56 W/kg

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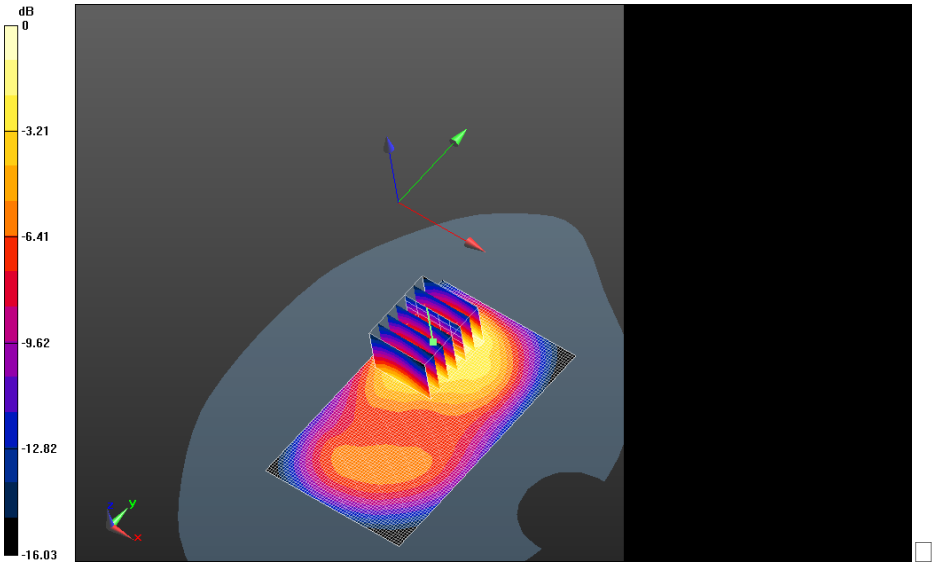

0 dB = 1.13 W/kg = 0.53 dBW/kg

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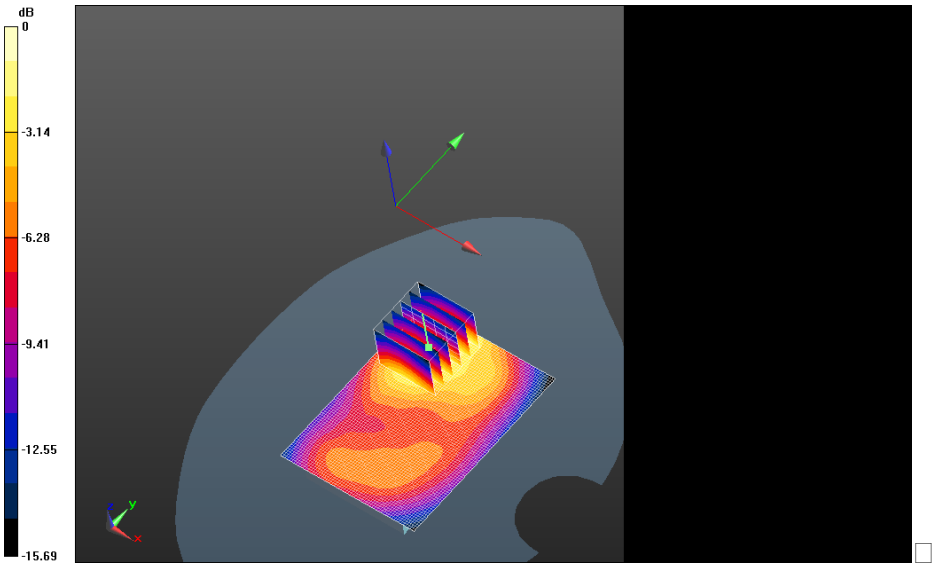
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.951 V/m; **Power Drift = -0.029 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 12.951 V/m; **Power Drift = -0.029 dB**

Averaged SAR: SAR(1g) = 1.04 W/kg; SAR(10g) = 0.609 W/kg
Maximum value of SAR (interpolated) = 1.59 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

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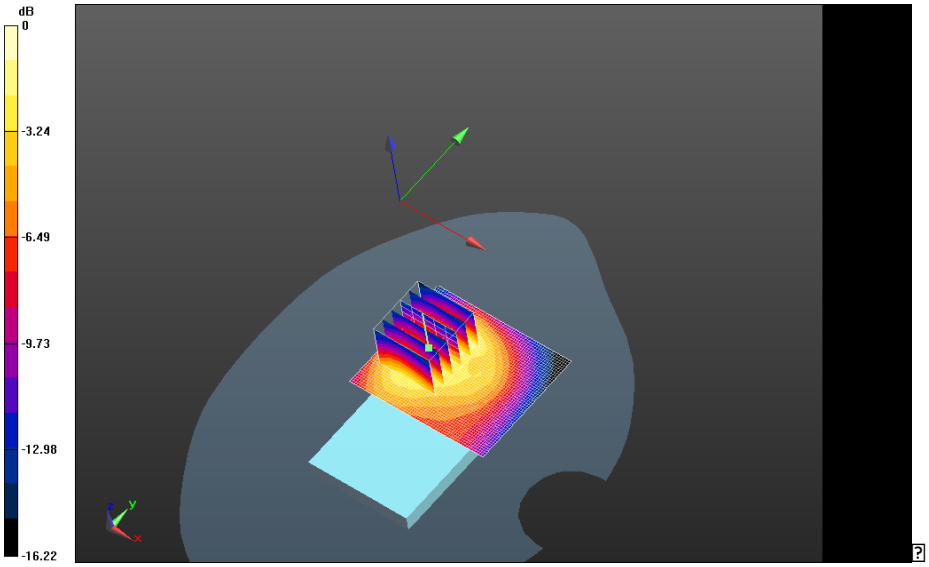
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_2nd Scan_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.5C_Liq_Temp_21.4C/Area Scan (61x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.07 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_2nd Scan_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.5C_Liq_Temp_21.4C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 13.773 V/m; **Power Drift = -0.021 dB**

Averaged SAR: SAR(1g) = 1.01 W/kg; SAR(10g) = 0.596 W/kg
Maximum value of SAR (interpolated) = 1.56 W/kg



0 dB = 1.14 W/kg = 0.57 dBW/kg

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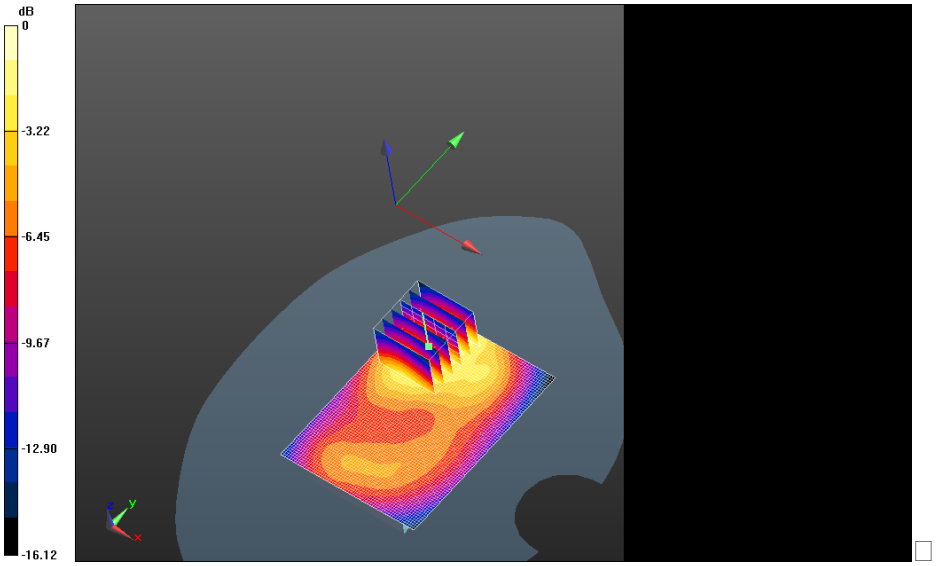
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB1_Offset99_Amb_Temp_23.4C_Liq_Temp_21.9C 2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.154 V/m; **Power Drift = -0.106 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB1_Offset99_Amb_Temp_23.4C_Liq_Temp_21.9C 2/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 13.154 V/m; **Power Drift = -0.106 dB**

Averaged SAR: SAR(1g) = 1.03 W/kg; SAR(10g) = 0.609 W/kg
Maximum value of SAR (interpolated) = 1.56 W/kg



0 dB = 1.15 W/kg = 0.61 dBW/kg

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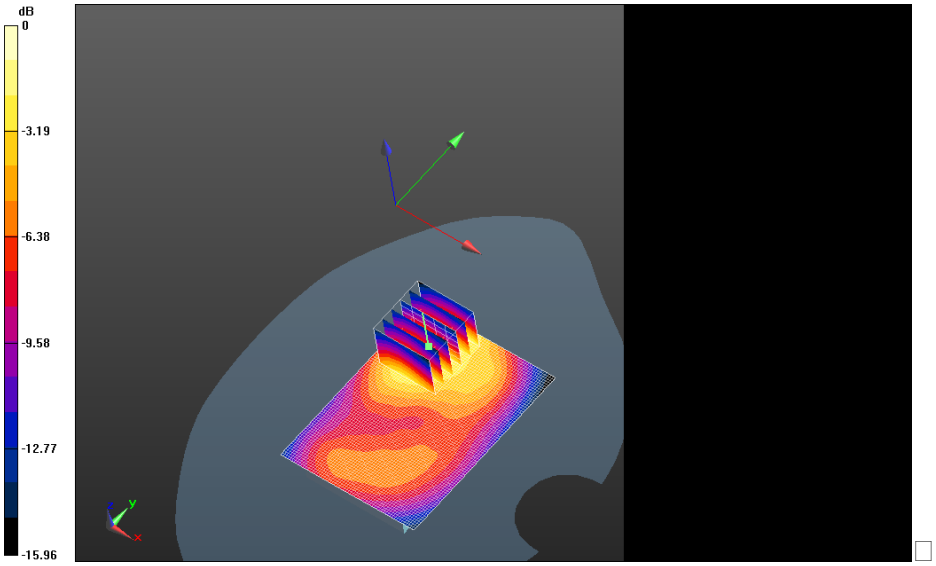
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB50_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.443 V/m; **Power Drift = 0.053 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB50_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.443 V/m; **Power Drift = 0.053 dB**

Averaged SAR: SAR(1g) = 0.865 W/kg; SAR(10g) = 0.508 W/kg
Maximum value of SAR (interpolated) = 1.33 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

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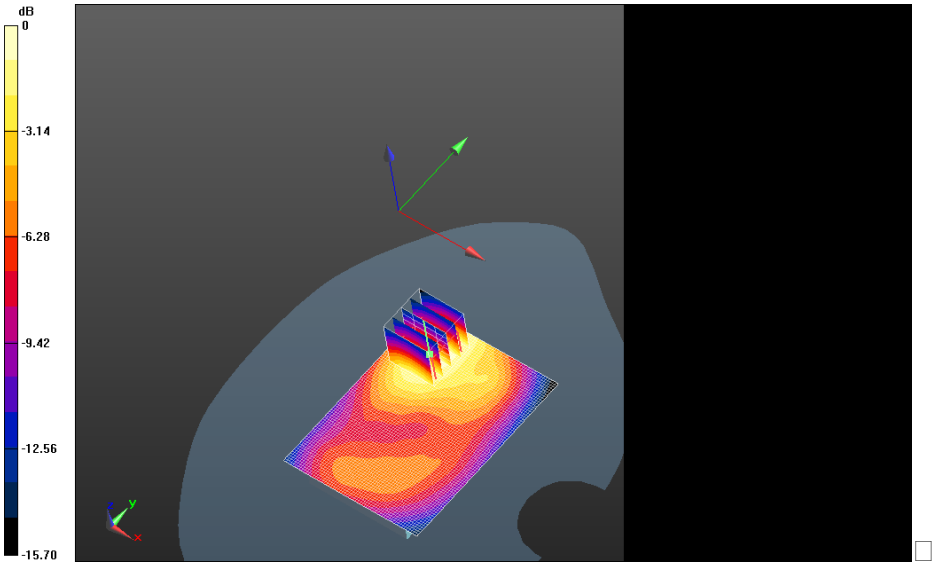
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Mid_Chan_QPSK_RB50_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.787 V/m; **Power Drift = -0.045 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Mid_Chan_QPSK_RB50_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.787 V/m; **Power Drift = -0.045 dB**

Averaged SAR: SAR(1g) = 0.902 W/kg; SAR(10g) = 0.533 W/kg
Maximum value of SAR (interpolated) = 1.39 W/kg



0 dB = 0.963 W/kg = -0.16 dBW/kg

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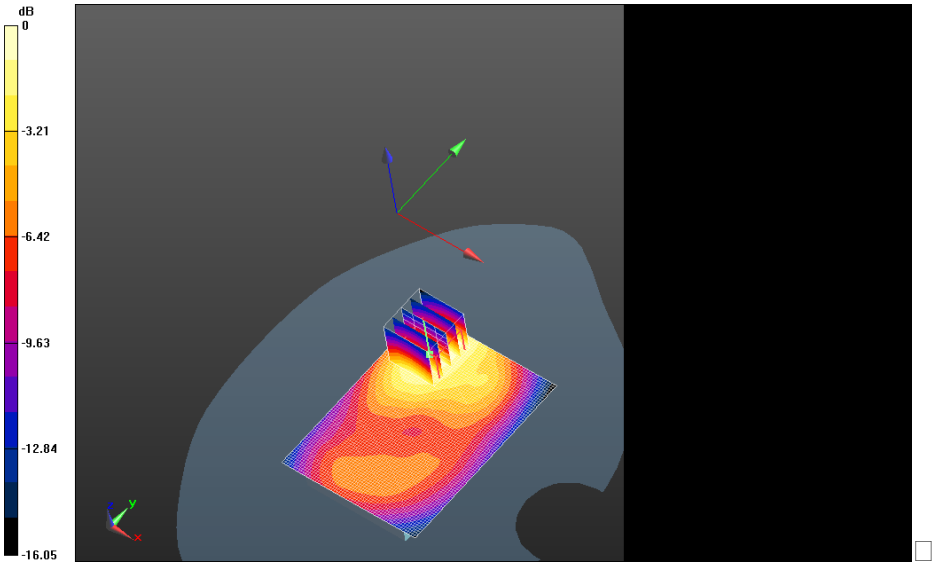
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_High_Chan_QPSK_RB50_Offset50_Amb_Temp_23.4C_Liq_Temp_21.9C 2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.751 V/m; **Power Drift = -0.014 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_High_Chan_QPSK_RB50_Offset50_Amb_Temp_23.4C_Liq_Temp_21.9C 2/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.751 V/m; **Power Drift = -0.014 dB**

Averaged SAR: SAR(1g) = 0.907 W/kg; SAR(10g) = 0.536 W/kg
Maximum value of SAR (interpolated) = 1.40 W/kg



0 dB = 1.01 W/kg = 0.04 dBW/kg

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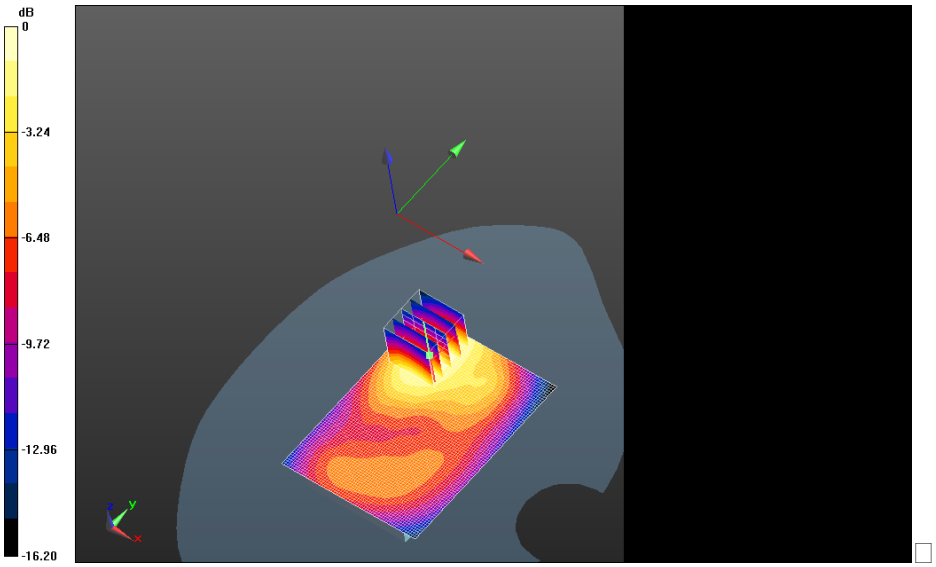
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB100_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.704 V/m; **Power Drift = 0.021 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_LTE_4_Low_Chan_QPSK_RB100_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.704 V/m; **Power Drift = 0.021 dB**

Averaged SAR: SAR(1g) = 0.890 W/kg; SAR(10g) = 0.525 W/kg
Maximum value of SAR (interpolated) = 1.36 W/kg



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

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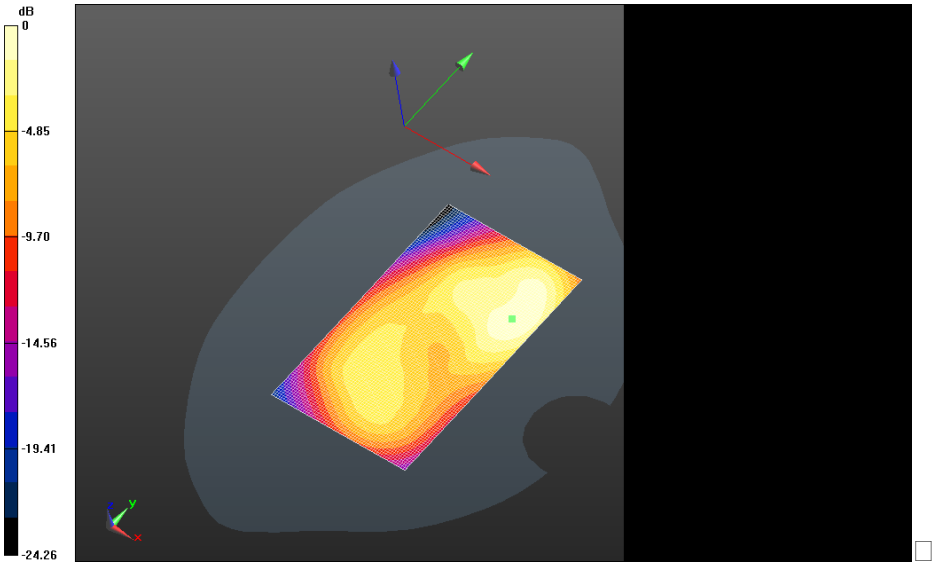
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.7C_Liq_Temp_22.0C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.885 V/m; **Power Drift = 0.068 dB**

Fast SAR: SAR(1g) = 0.567 W/kg; SAR(10g) = 0.341 W/kg; Secondary SAR(1g) = 0.266 W/kg
Maximum value of SAR (interpolated) = 0.624 W/kg



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

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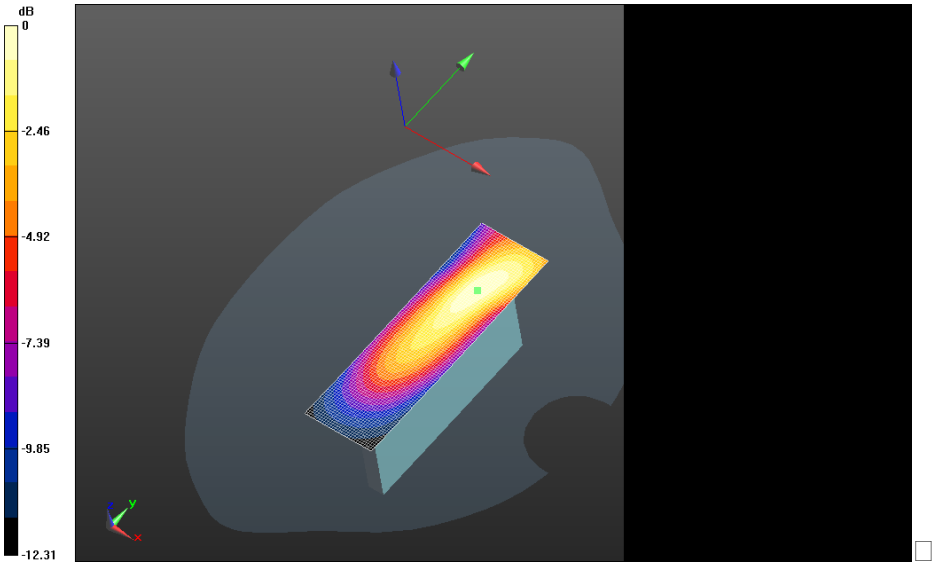
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.703 V/m; **Power Drift = -0.049 dB**

Fast SAR: SAR(1g) = 0.308 W/kg; SAR(10g) = 0.178 W/kg; Secondary SAR(1g) = 0.0628 W/kg
Maximum value of SAR (interpolated) = 0.348 W/kg



0 dB = 0.175 W/kg = -7.57 dBW/kg

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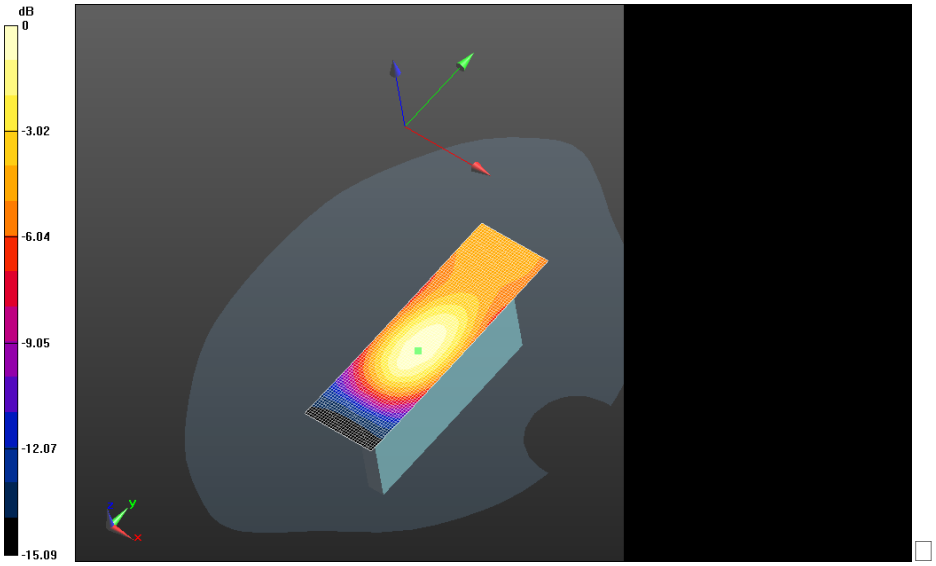
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.506 V/m; **Power Drift = 0.092 dB**

Fast SAR: SAR(1g) = 0.158 W/kg; SAR(10g) = 0.0943 W/kg; Secondary SAR(1g) = 0.0628 W/kg
Maximum value of SAR (interpolated) = 0.175 W/kg



0 dB = 0.584 W/kg = -2.34 dBW/kg

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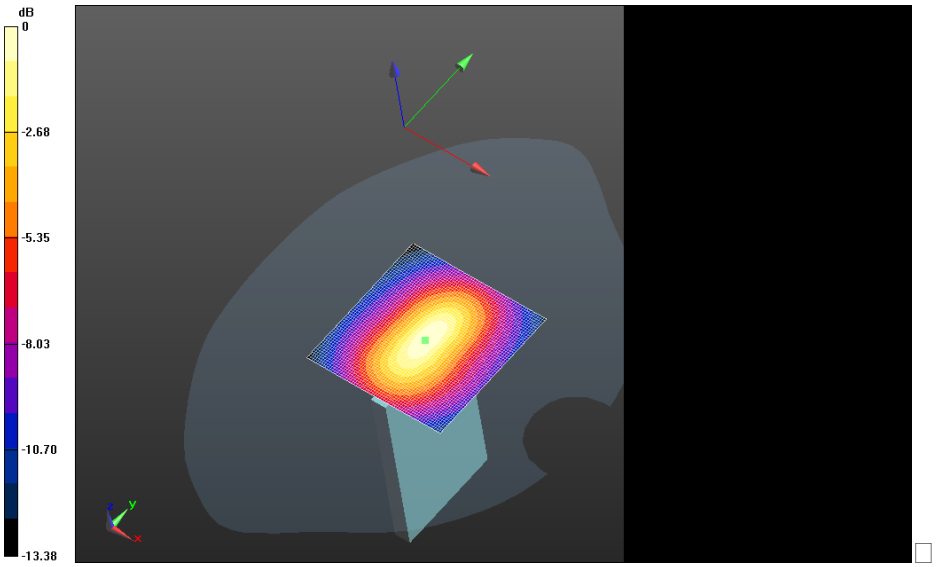
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_LTE_4_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 21.230 V/m; **Power Drift = -0.00268 dB**

Fast SAR: SAR(1g) = 0.517 W/kg; SAR(10g) = 0.295 W/kg; Secondary SAR(1g) = 0.266 W/kg
Maximum value of SAR (interpolated) = 0.584 W/kg



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

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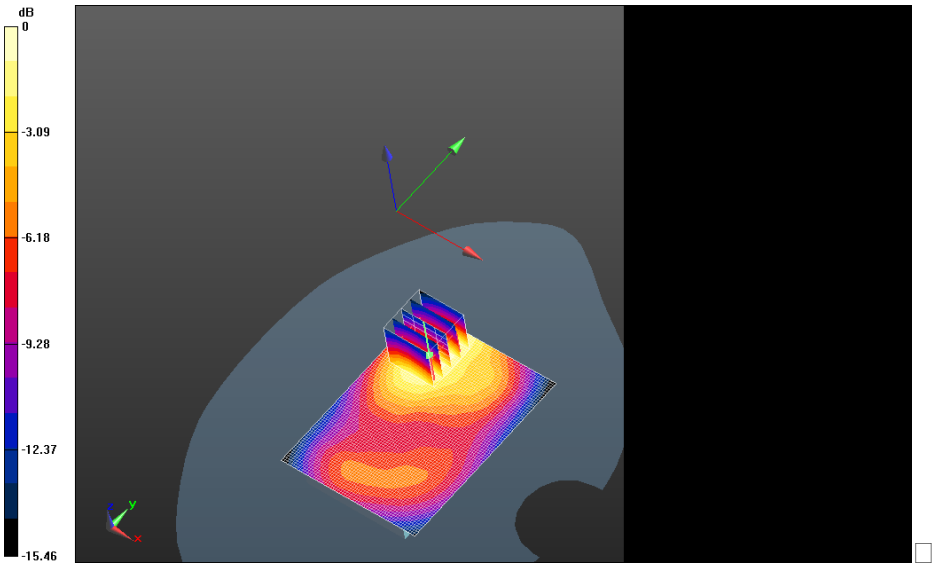
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_LTE_4_Md_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.734 V/m; **Power Drift = 0.116 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_LTE_4_Md_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_21.9C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.734 V/m; **Power Drift = 0.116 dB**

Averaged SAR: SAR(1g) = 0.974 W/kg; SAR(10g) = 0.575 W/kg
Maximum value of SAR (interpolated) = 1.48 W/kg



0 dB = 0.996 W/kg = -0.02 dBW/kg

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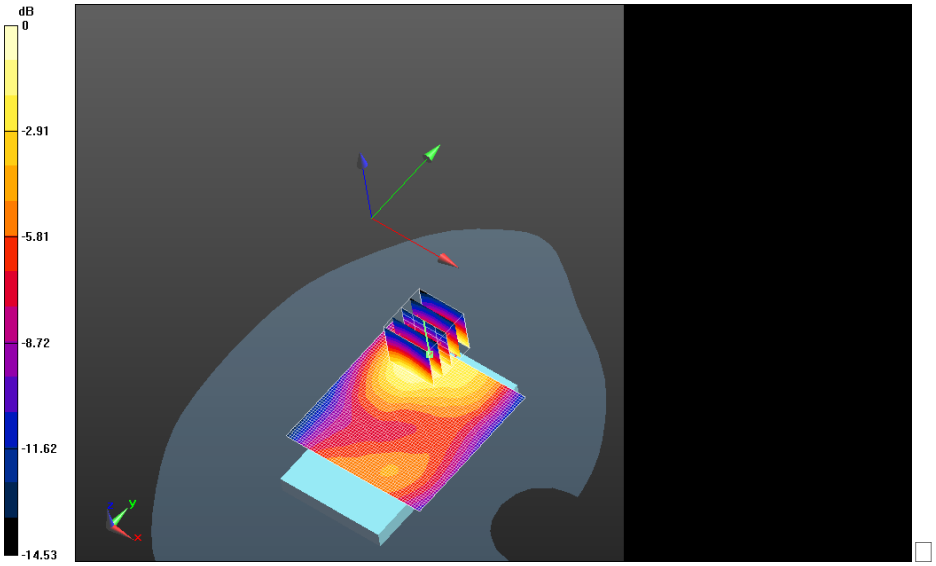
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+2100mA_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/ Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.539 V/m; **Power Drift = 0.172 dB**

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+2100mA_LTE_4_Mid_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 12.539 V/m; **Power Drift = 0.172 dB**

Averaged SAR: SAR(1g) = 0.913 W/kg; SAR(10g) = 0.544 W/kg
Maximum value of SAR (interpolated) = 1.38 W/kg



0 dB = 0.348 W/kg = -4.58 dBW/kg

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LTE 2

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Date/Time: 12/3/2012 3:48:34 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_high_chan_QPSK_RB_1_Offset_99_amb_temp_23.4_liq_temp_21.9C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.511 mho/m; ε_r = 51.986; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.458 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.800 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.9570
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.631 mW/g
Maximum value of SAR (measured) = 1.333 mW/g

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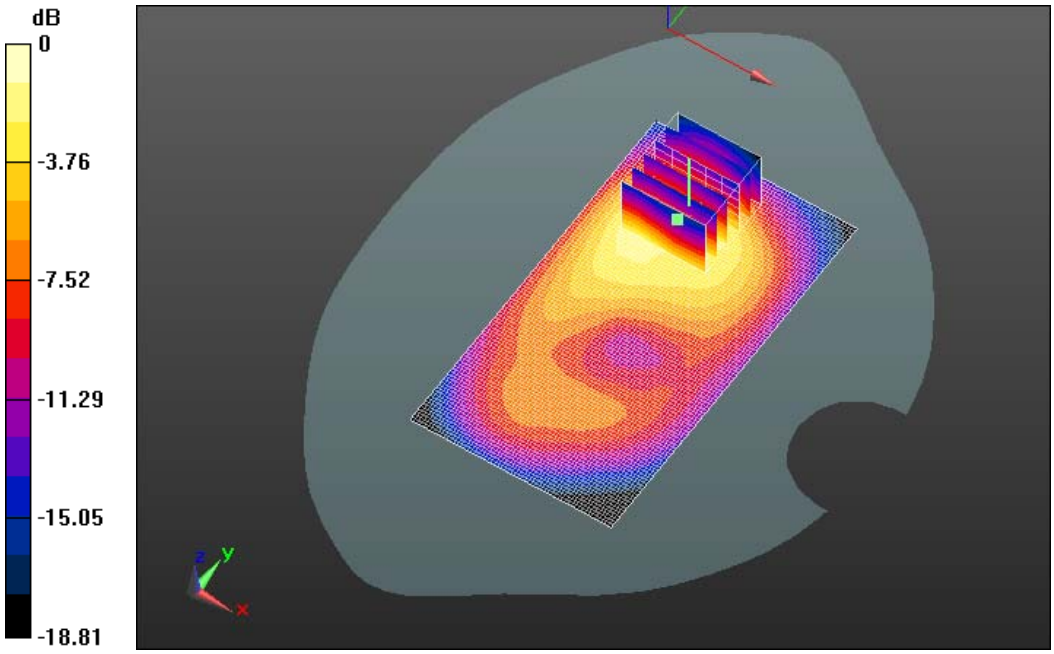

0 dB = 1.330mW/g = 2.48 dB mW/g

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Date/Time: 1/24/2013 3:49:09 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_low_chan_QPSK_RB_1_Offset_0_amb_temp_24.3_liq_temp_22.1C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE band 2; Communication System Band: LTE band 2;
Frequency: 1860 MHz;Communication System PAR: 0 dB; PMF: 1.12202e-005
Medium parameters used: f = 1860 MHz; σ = 1.538 S/m; ε_r = 50.941; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.75, 4.75, 4.75); Calibrated: 11/13/2012;
  - Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Configuration/Touch position -/Area Scan (61x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.08 W/kg

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.419 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.51 W/kg
SAR(1 g) = 0.974 W/kg; SAR(10 g) = 0.554 W/kg
Maximum value of SAR (measured) = 1.04 W/kg

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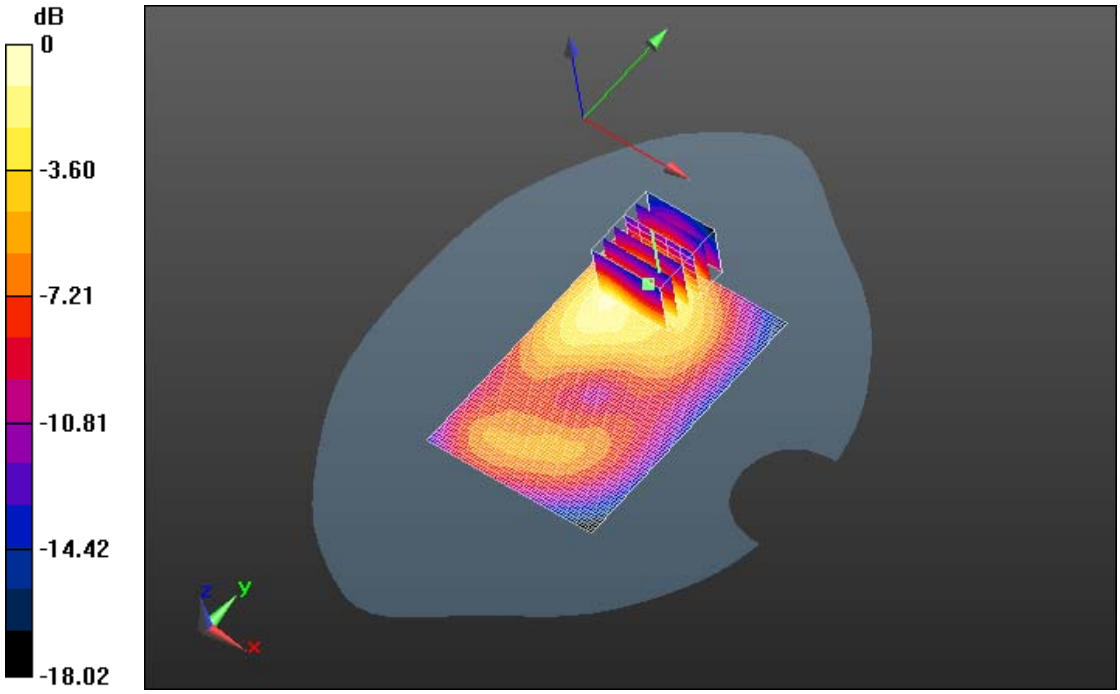

0 dB = 1.04 W/kg = 0.17 dBW/kg

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Date/Time: 12/3/2012 2:22:15 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_low_chan_QPSK_RB_1_Offset_99_amb_temp_23.5_liq_temp_21.9C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1860 MHz
Medium parameters used: f = 1860 MHz; σ = 1.463 mho/m; ε_r = 52.302; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.154 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.644 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.4500
SAR(1 g) = 0.875 mW/g; SAR(10 g) = 0.488 mW/g
Maximum value of SAR (measured) = 1.068 mW/g

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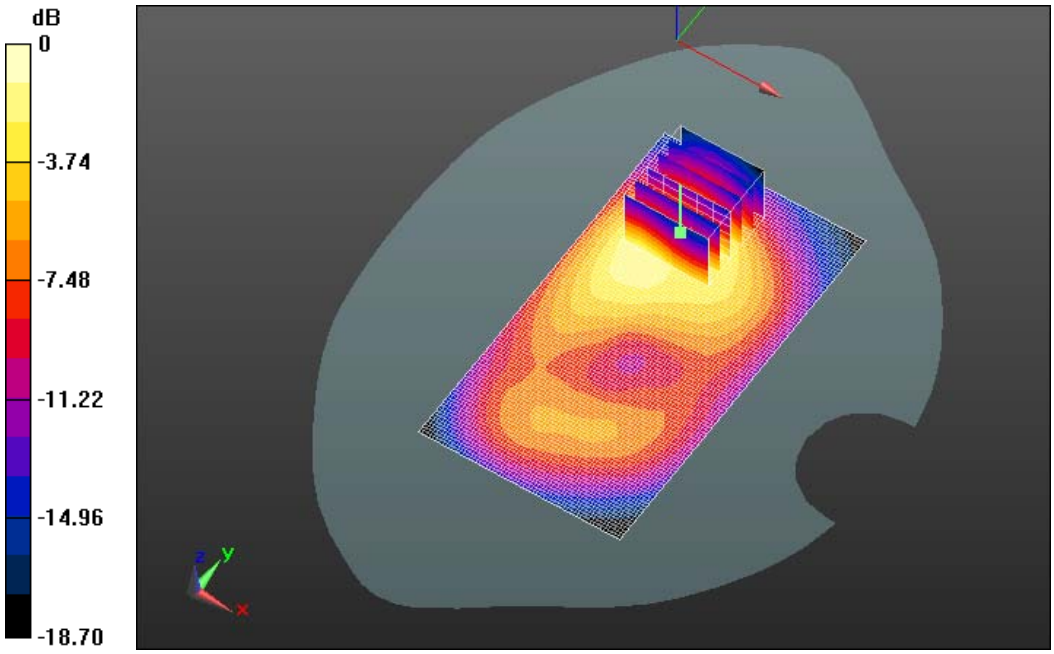

0 dB = 1.070mW/g = 0.59 dB mW/g

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Date/Time: 12/2/2012 7:40:49 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_mid_chan_QPSK_RB_1_Offset_0_amb_temp_24.3_liq_temp_22.1C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.487 mho/m; ε_r = 52.143; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.265 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.079 V/m; Power Drift = 0.34 dB
Peak SAR (extrapolated) = 1.5940
SAR(1 g) = 0.944 mW/g; SAR(10 g) = 0.523 mW/g
Maximum value of SAR (measured) = 1.165 mW/g

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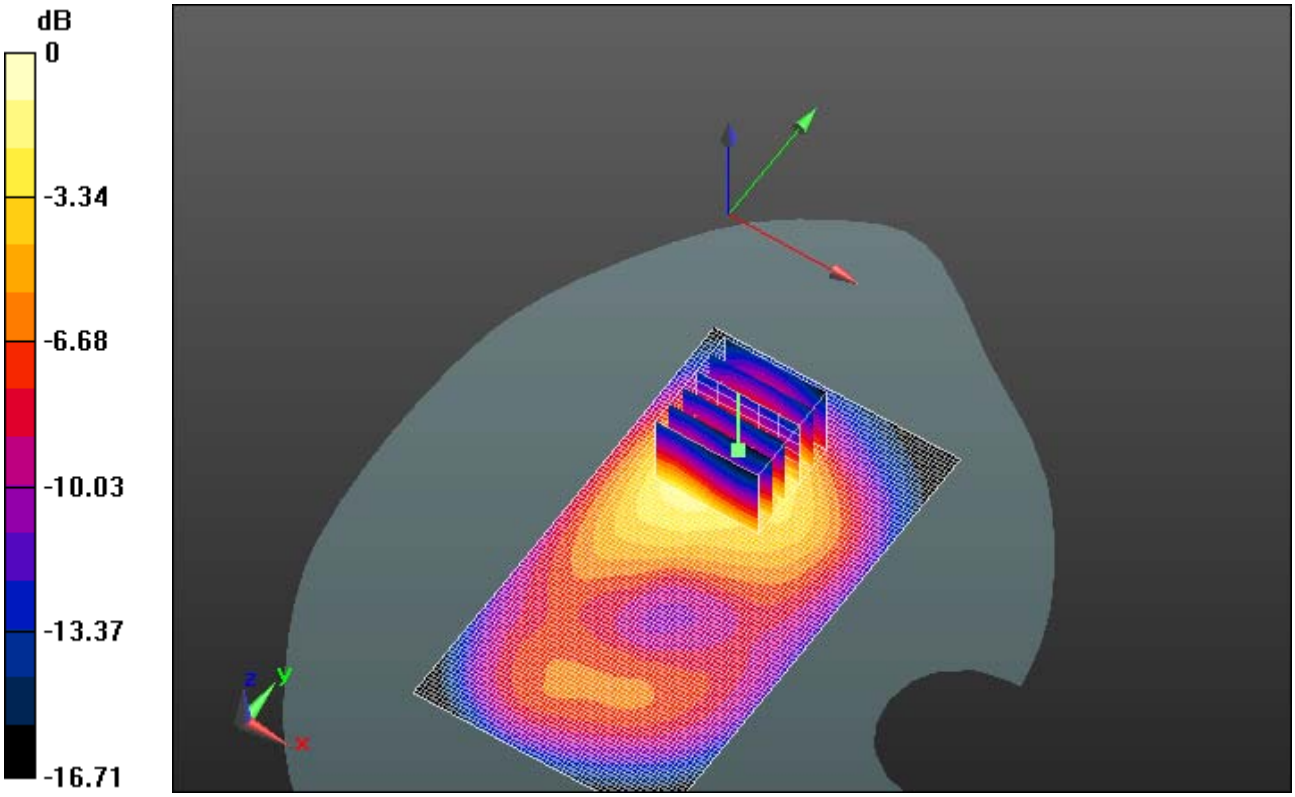

0 dB = 1.160mW/g = 1.29 dB mW/g

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Date/Time: 12/2/2012 8:03:45 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_mid_chan_QPSK_RB_1_Offset_99_amb_temp_24.3_liq_temp_22.1C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.487 mho/m; ε_r = 52.143; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.348 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.046 V/m; Power Drift = 0.20 dB
Peak SAR (extrapolated) = 1.7540
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.563 mW/g
Maximum value of SAR (measured) = 1.287 mW/g

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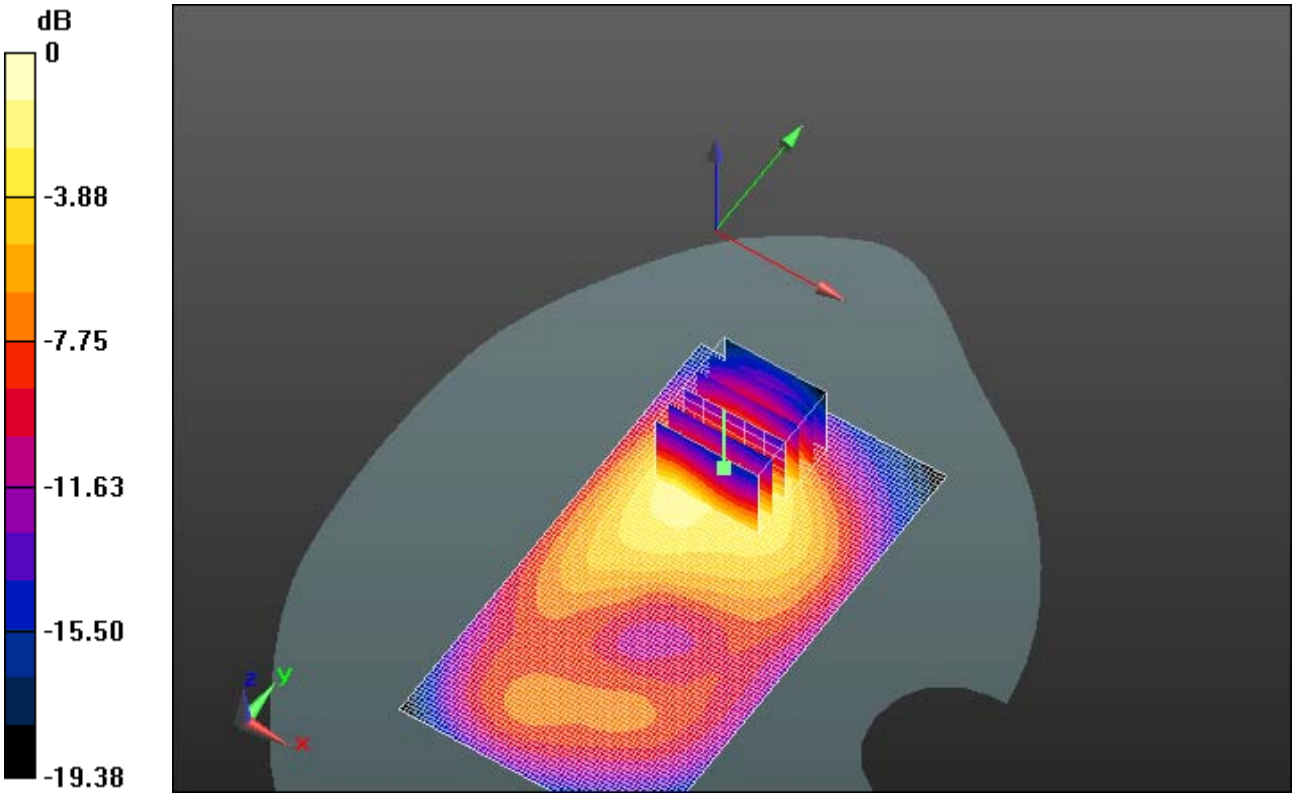

0 dB = 1.290mW/g = 2.21 dB mW/g

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Date/Time: 12/2/2012 8:29:15 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_mid_chan_QPSK_RB_50_Offset_0_amb_temp_24.0_liq_temp_22.2C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.487 mho/m; ε_r = 52.143; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.015 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.812 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 1.3050
SAR(1 g) = 0.768 mW/g; SAR(10 g) = 0.422 mW/g
Maximum value of SAR (measured) = 0.960 mW/g

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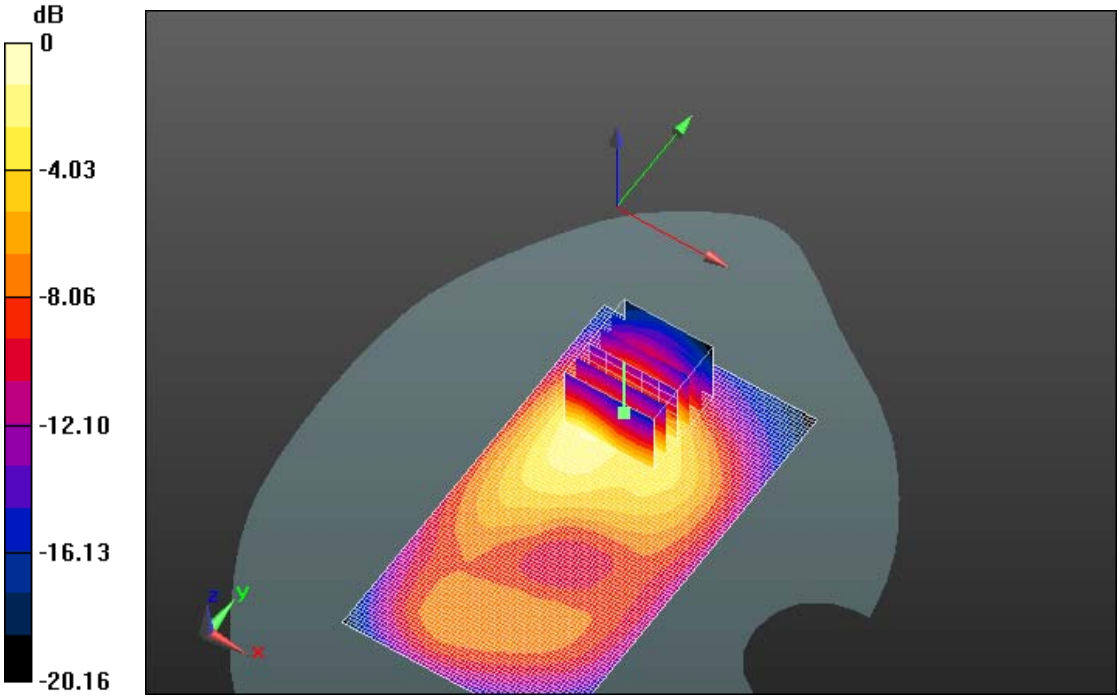

0 dB = 0.960mW/g = -0.35 dB mW/g

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Date/Time: 1/29/2013 7:27:42 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_low_chan_QPSK_RB_100_Offset_0_amb_temp_23.1_liq_temp_20.7C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE band 2; Frequency: 1860 MHz
Medium parameters used: f = 1860 MHz; σ = 1.52 S/m; ε_r = 50.946; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.75, 4.75, 4.75); Calibrated: 11/13/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Configuration/Touch position -/Area Scan (61x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.812 W/kg

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.816 V/m; Power Drift = 0.29 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.676 W/kg; SAR(10 g) = 0.388 W/kg
Maximum value of SAR (measured) = 0.755 W/kg

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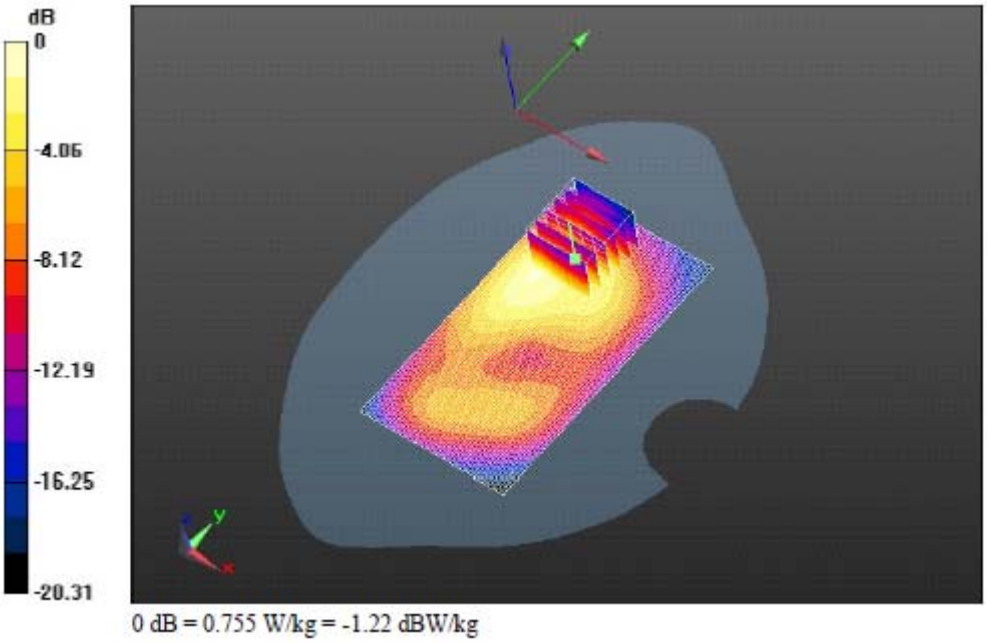

0 dB = 0.755 W/kg = -1.22 dBW/kg

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Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Bottom_LTE_2_mid_chan_QPSK_RB_1_Offset_99_amb_temp_23.9_liq_temp_21.2C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.487 mho/m; ε_r = 52.143; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.934 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 24.192 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.3070
SAR(1 g) = 0.786 mW/g; SAR(10 g) = 0.439 mW/g
Maximum value of SAR (measured) = 0.966 mW/g

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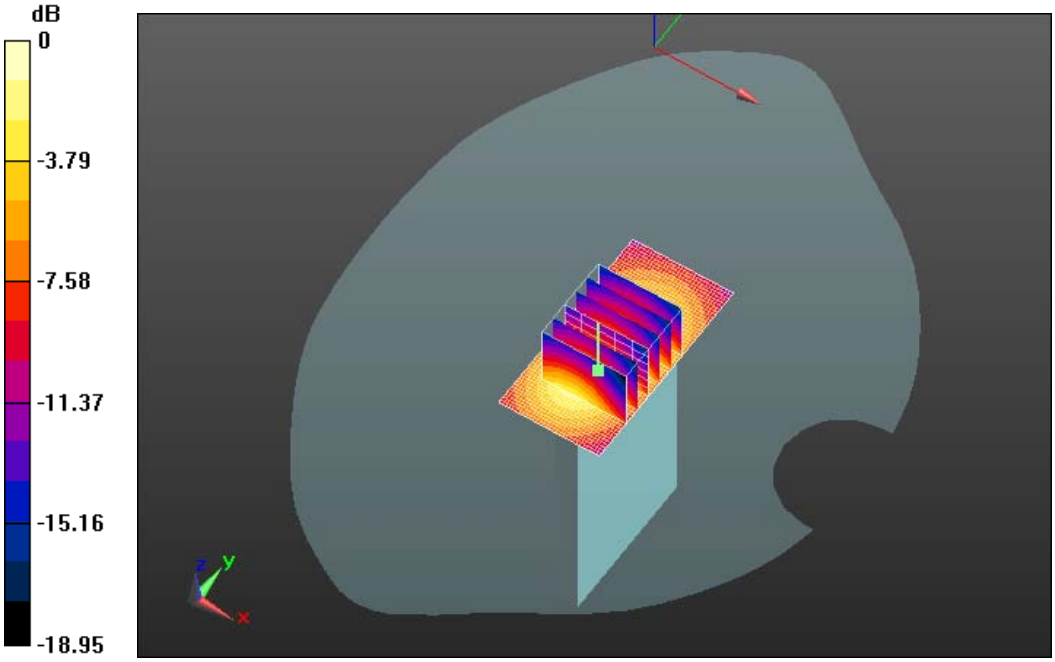

0 dB = 0.970mW/g = -0.26 dB mW/g

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Date/Time: 12/3/2012 6:36:34 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Front_LTE_2_mid_chan_QPSK_RB_1_Offset_99_amb_temp_23.6_liq_temp_21.2C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.487 mho/m; ε_r = 52.143; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.712 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.675 V/m; Power Drift = 0.22 dB
Peak SAR (extrapolated) = 1.0060
SAR(1 g) = 0.611 mW/g; SAR(10 g) = 0.343 mW/g
Maximum value of SAR (measured) = 0.753 mW/g

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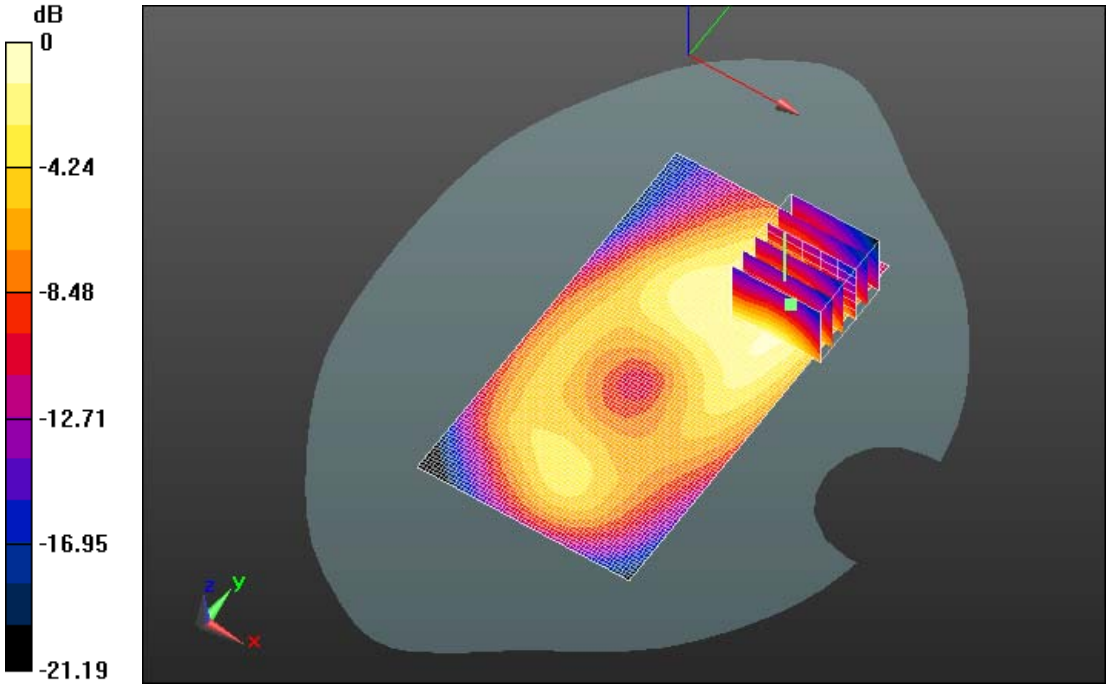

0 dB = 0.750mW/g = -2.50 dB mW/g

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Date/Time: 12/3/2012 7:34:48 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Left_LTE_2_mid_chan_QPSK_RB_1_Offset_99_amb_temp_23.7_liq_temp_21.2C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.487 mho/m; ε_r = 52.143; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (31x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.415 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 15.026 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.5820
SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.197 mW/g
Maximum value of SAR (measured) = 0.416 mW/g

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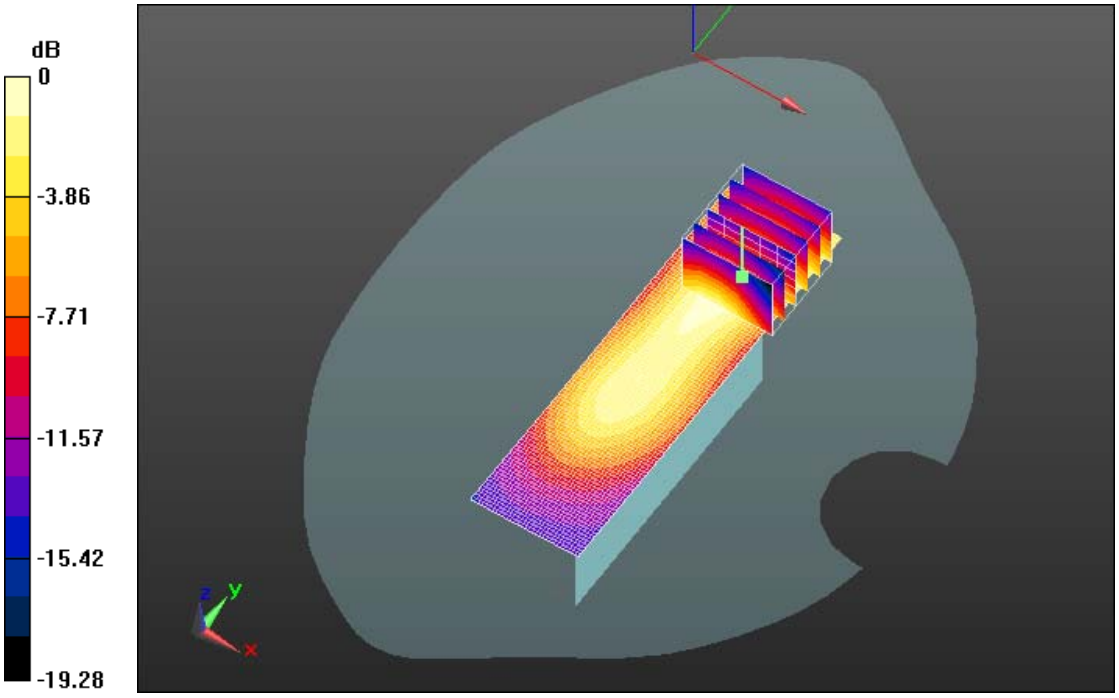

0 dB = 0.420mW/g = -7.54 dB mW/g

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Date/Time: 12/3/2012 7:10:40 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Right_LTE_2_mid_chan_QPSK_RB_1_Offset_99_amb_temp_23.6_liq_temp_21.2C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.487 mho/m; ε_r = 52.143; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (31x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.177 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.579 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.2370
SAR(1 g) = 0.146 mW/g; SAR(10 g) = 0.087 mW/g
Maximum value of SAR (measured) = 0.175 mW/g

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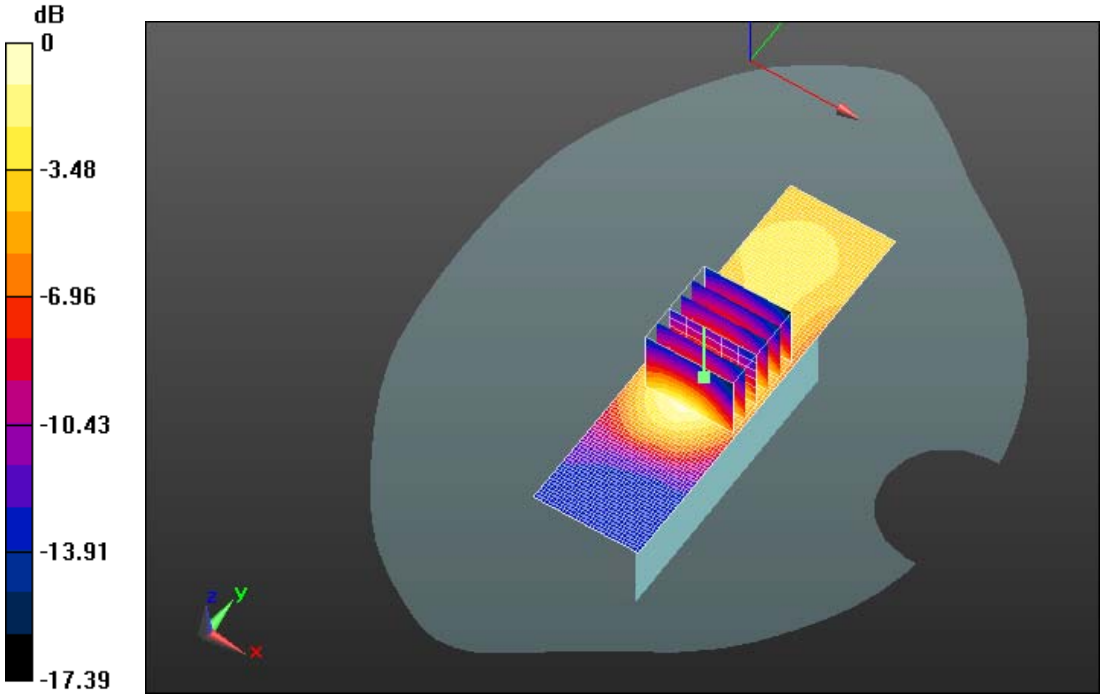

0 dB = 0.170mW/g = -15.39 dB mW/g

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Date/Time: 12/4/2012 3:38:34 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_Headset_LTE_2_high_chan_QPSK_RB_1_Offset_99_amb_temp_24.1_liq_temp_22.6C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.511 mho/m; ε_r = 51.986; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.200 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.577 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.5870
SAR(1 g) = 0.936 mW/g; SAR(10 g) = 0.516 mW/g
Maximum value of SAR (measured) = 1.144 mW/g

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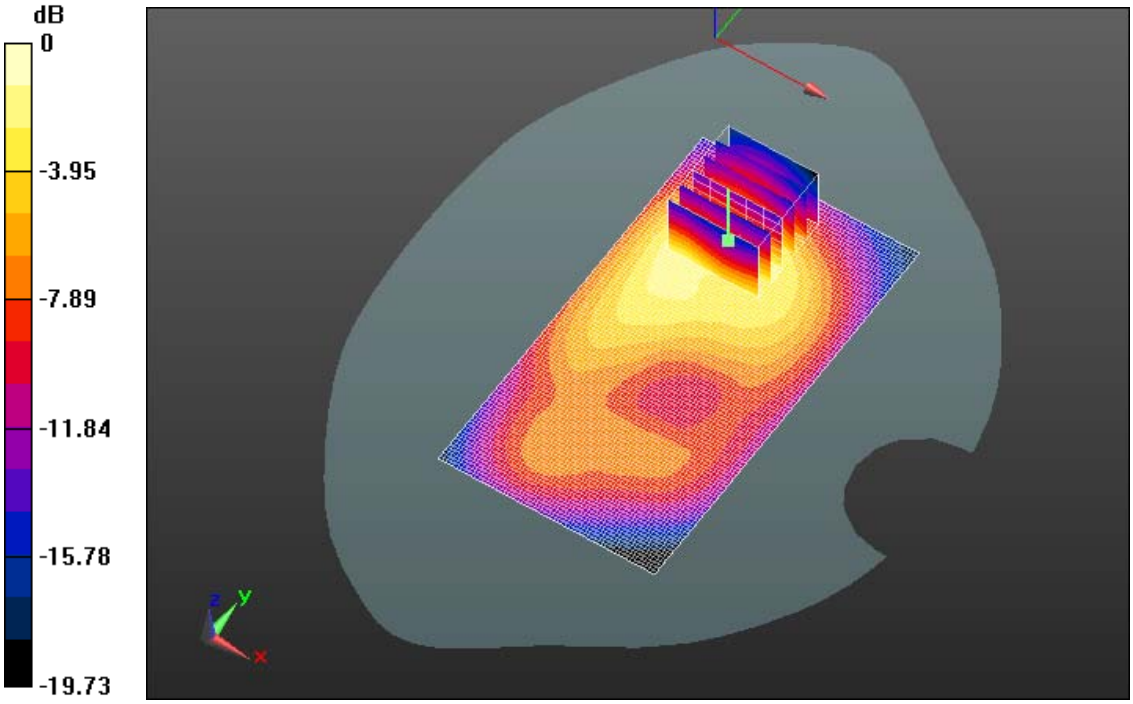

0 dB = 1.140mW/g = 1.14 dB mW/g

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Date/Time: 12/4/2012 4:30:38 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_high_chan_2nd Scan_QPSK_RB_1_Offset_99_amb_temp_24.1_liq_temp_22.6C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.511 mho/m; ε_r = 51.986; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.452 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.668 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.8430
SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.605 mW/g
Maximum value of SAR (measured) = 1.290 mW/g

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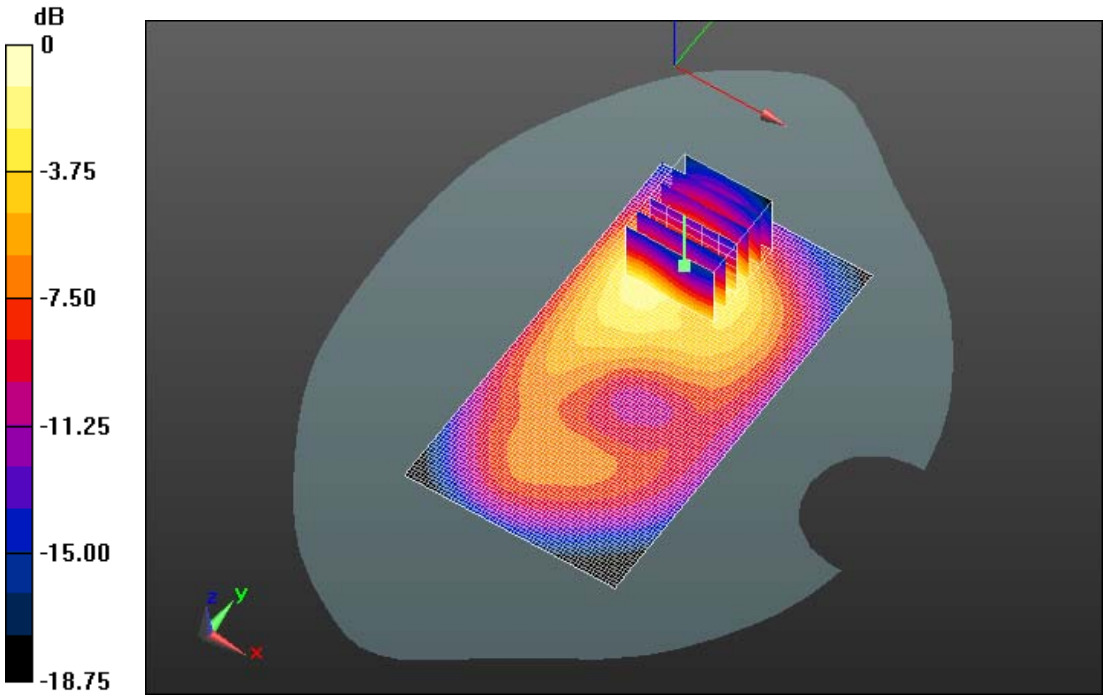

0 dB = 1.290mW/g = 2.21 dB mW/g

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Date/Time: 12/4/2012 5:21:44 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_LTE_2_high_chan_QPSK_RB_1_Offset_99_amb_temp_24.5_liq_temp_22.6C_2100

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: LTE 1900_Band 2; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.511 mho/m; ε_r = 51.986; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.364 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.679 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.8280
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.598 mW/g
Maximum value of SAR (measured) = 1.280 mW/g

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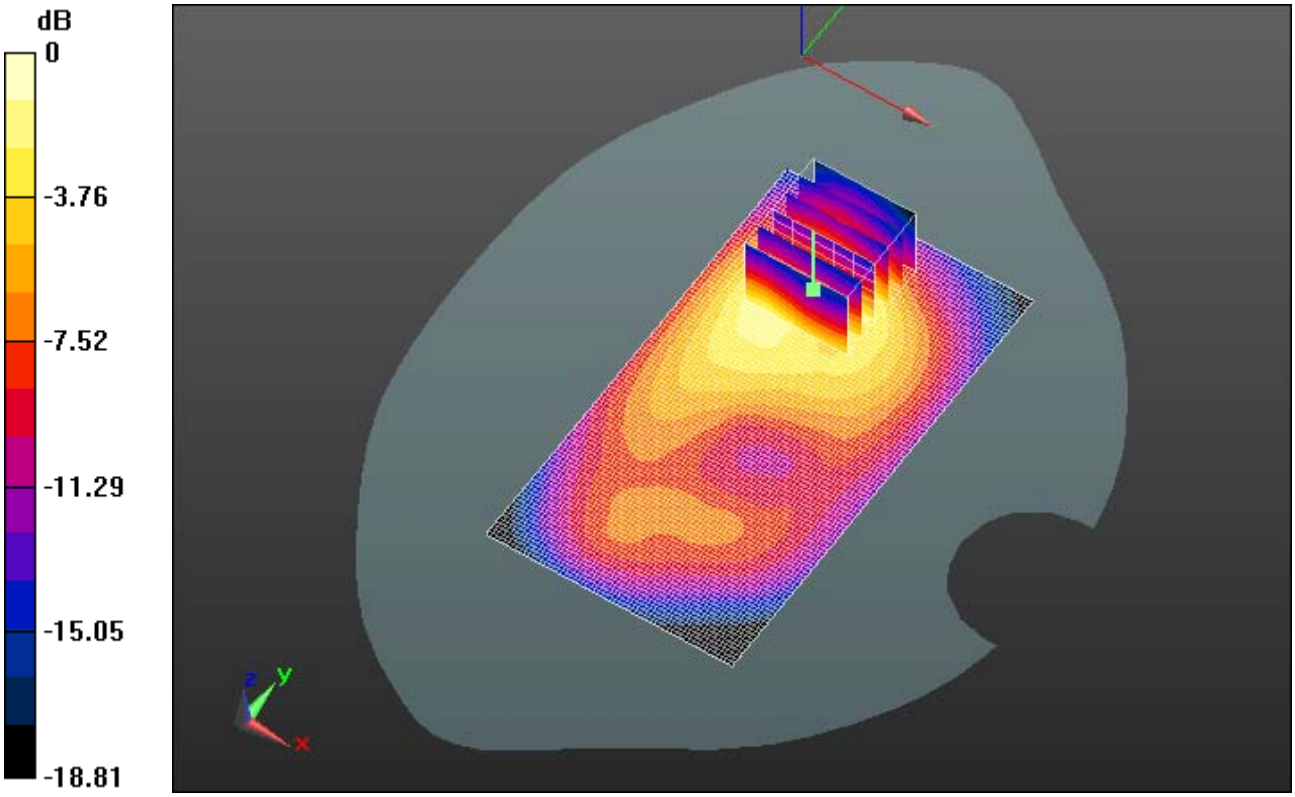

0 dB = 1.280mW/g = 2.14 dB mW/g

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EDGE 1900

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Date/Time: 11/29/2012 12:05:39 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_EDGE1900_high_chan_amb_temp_24.0_liq_temp_22.3C_2nd

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: GPRS 1900; Frequency: 1909.8 MHz
Medium parameters used: f = 1910 MHz; σ = 1.579 mho/m; ε_r = 50.879; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.302 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.462 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.7220
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.554 mW/g
Maximum value of SAR (measured) = 1.258 mW/g

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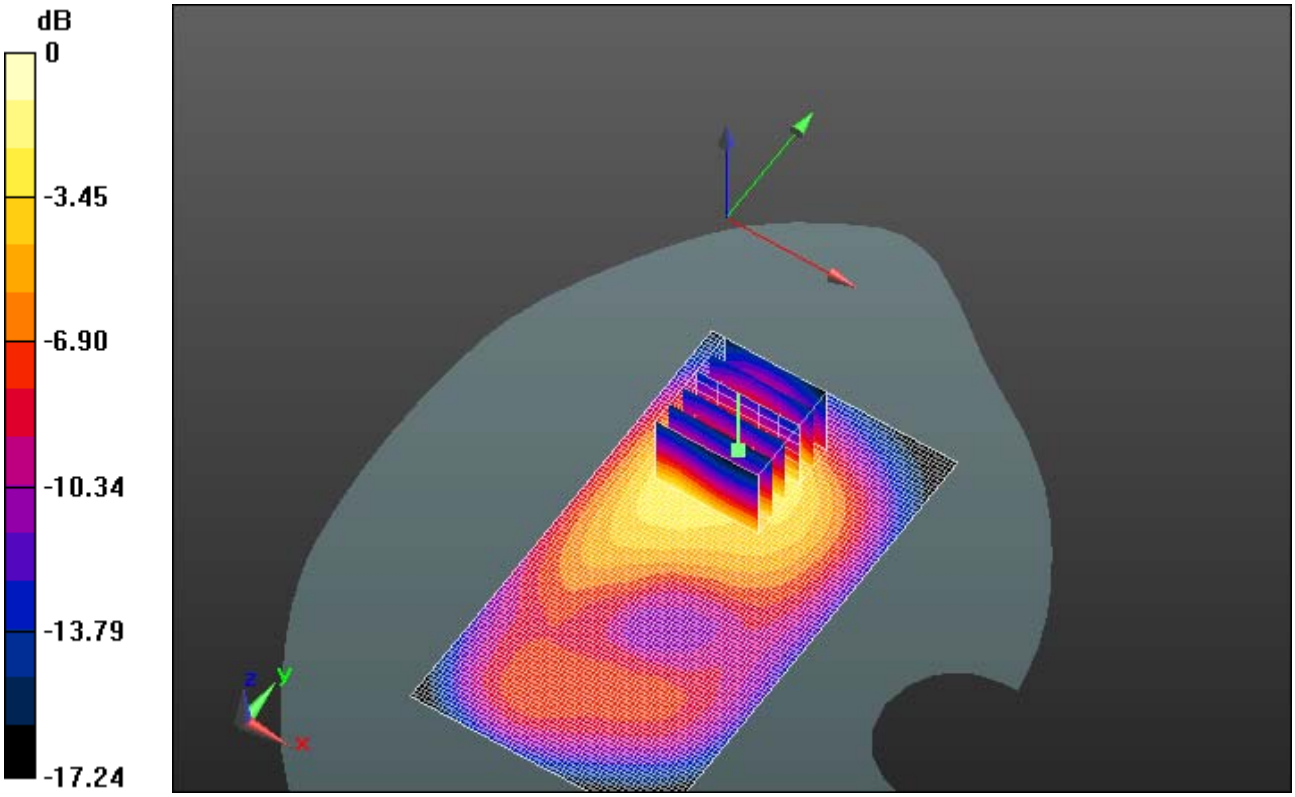

0 dB = 1.260mW/g = 2.01 dB mW/g

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Date/Time: 11/27/2012 12:41:58 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_EDGE1900_high_chan_amb_temp_23.7_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: EDGE 1900; Frequency: 1909.8 MHz
Medium parameters used: f = 1910 MHz; σ = 1.527 mho/m; ε_r = 50.643; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.301 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.438 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.8230
SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.595 mW/g
Maximum value of SAR (measured) = 1.316 mW/g

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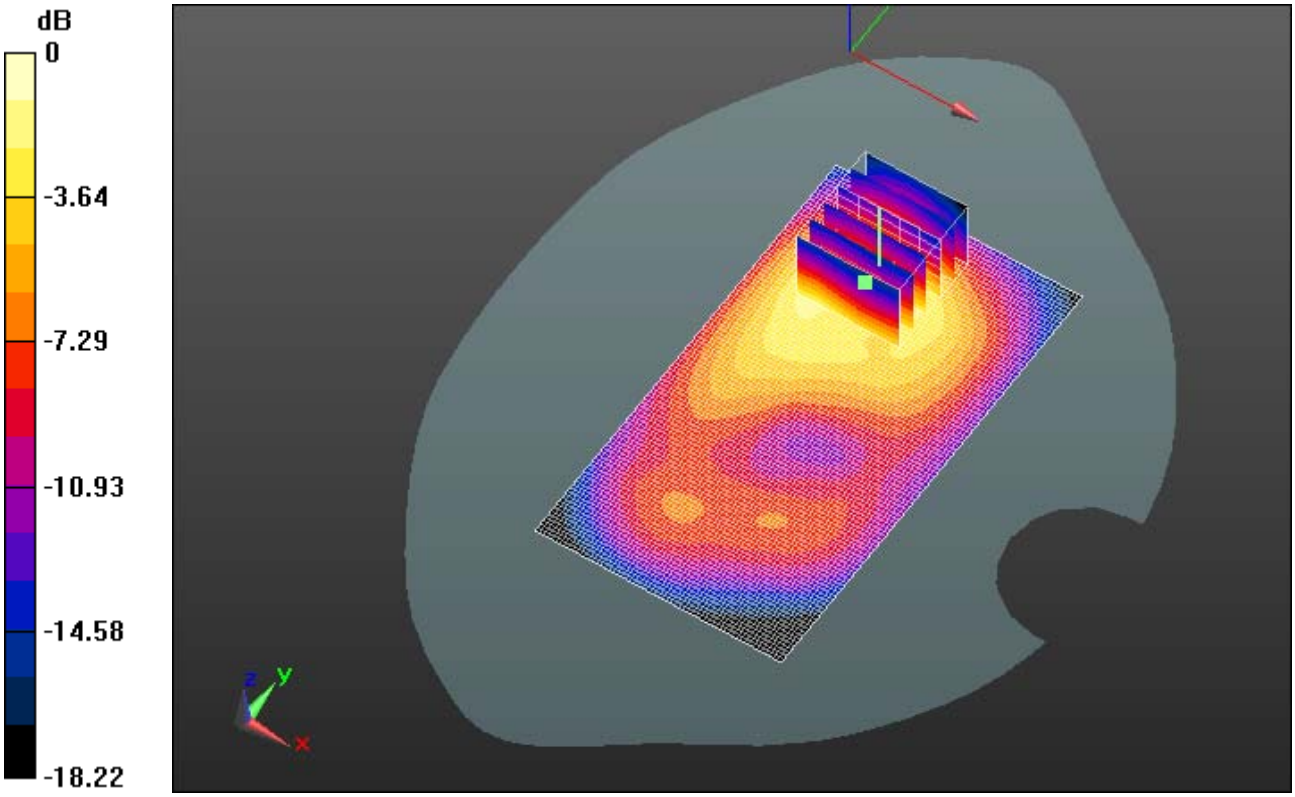

0 dB = 1.320mW/g = 2.41 dB mW/g

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Date/Time: 11/27/2012 12:16:51 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_EDGE1900_low_chan_amb_temp_23.7_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: EDGE 1900; Frequency: 1850.2 MHz
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.475 mho/m; ε_r = 50.869; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.304 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.180 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.7420
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.594 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.257 mW/g

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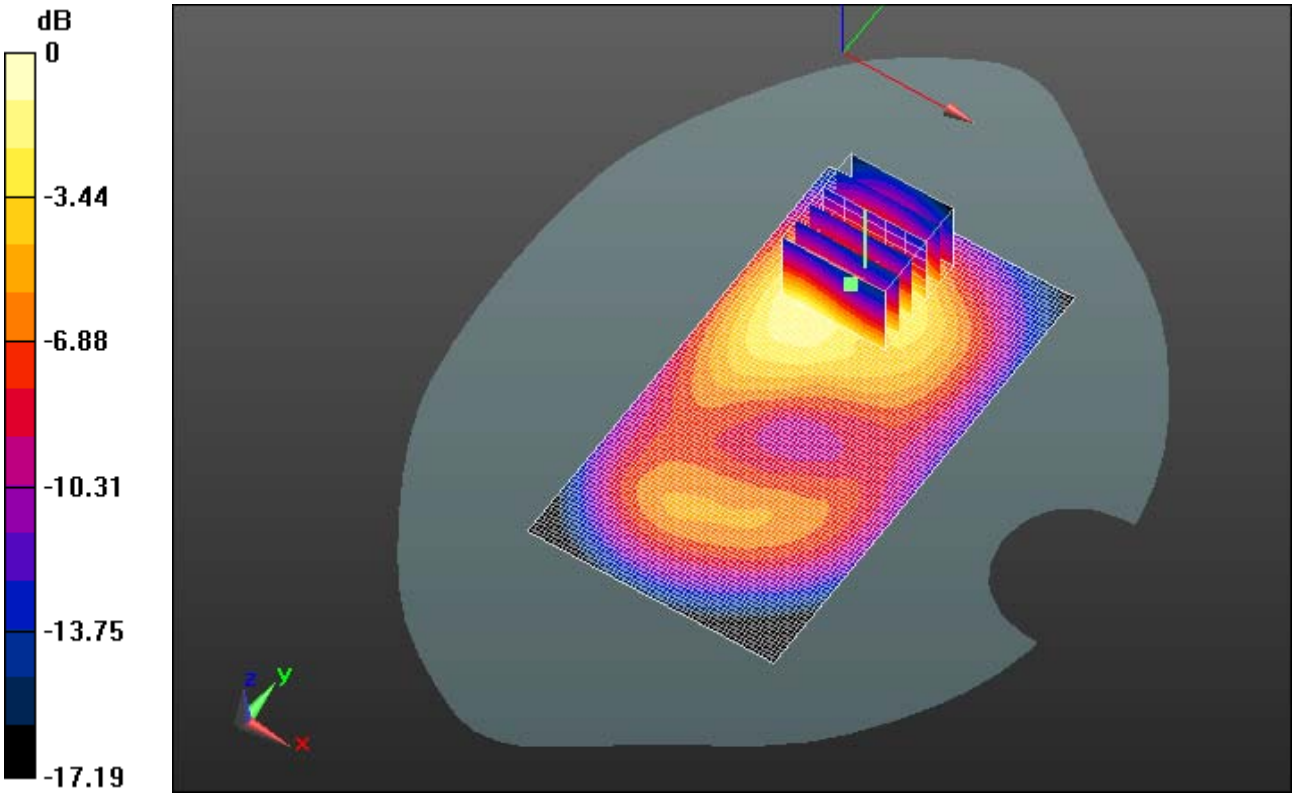

0 dB = 1.260mW/g = 2.01 dB mW/g

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Date/Time: 11/26/2012 11:51:25 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_EDGE1900_mid_chan_amb_temp_23.7_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: EDGE 1900; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ε_r = 50.828; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.269 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.743 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.7410
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.580 mW/g
Maximum value of SAR (measured) = 1.265 mW/g

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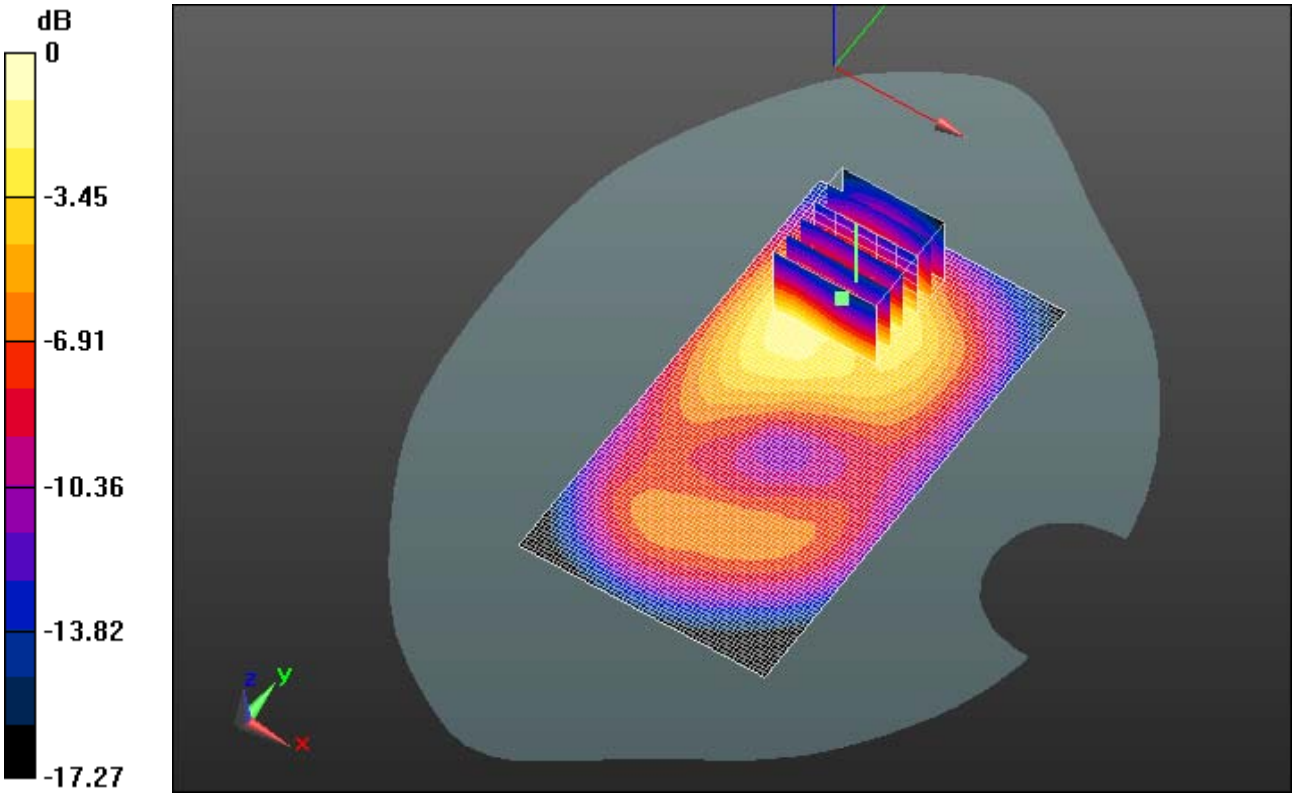

0 dB = 1.270mW/g = 2.08 dB mW/g

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Date/Time: 11/29/2012 2:14:32 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_high_chan_amb_temp_23.9_liq_temp_22.5C_2100

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: GPRS 1900; Frequency: 1909.8 MHz
Medium parameters used: f = 1910 MHz; σ = 1.579 mho/m; ε_r = 50.879; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.529 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.047 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 2.0760
SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.665 mW/g
Maximum value of SAR (measured) = 1.421 mW/g

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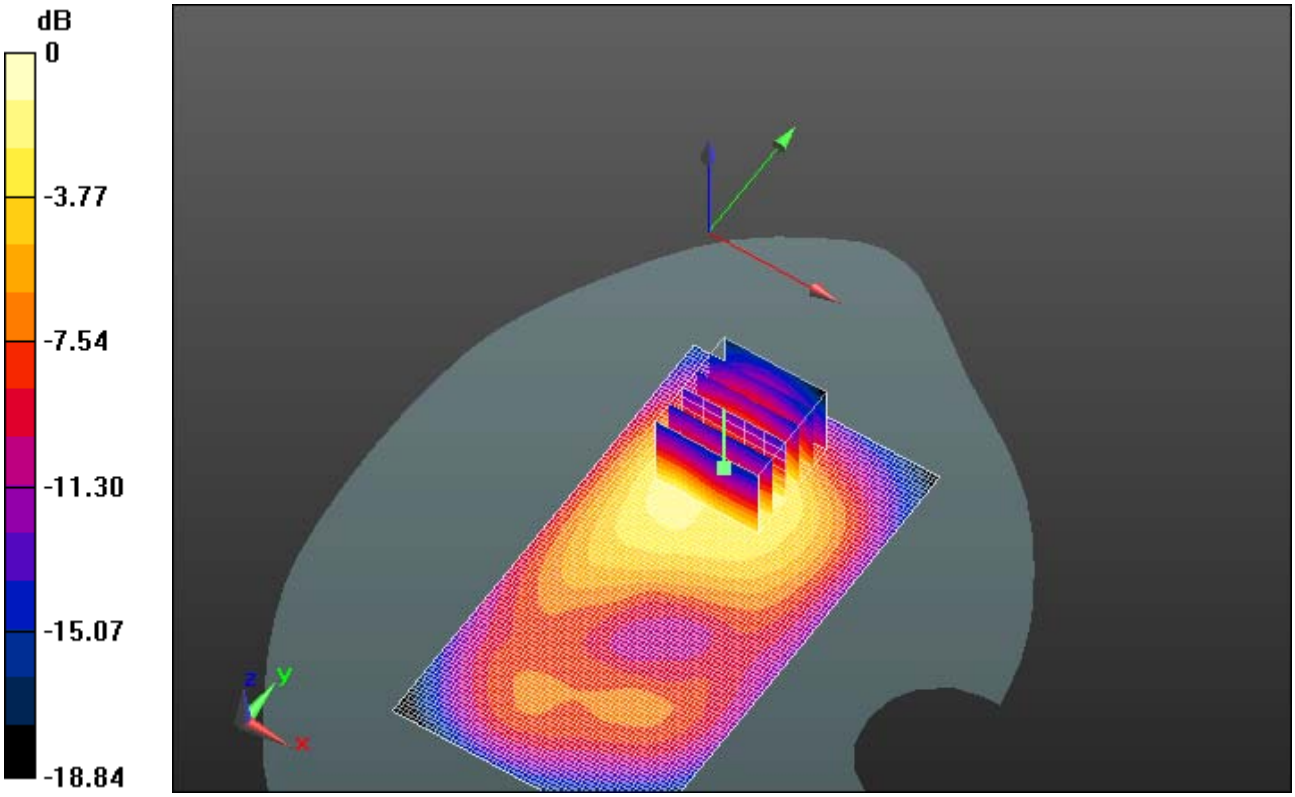

0 dB = 1.420mW/g = 3.05 dB mW/g

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Date/Time: 11/27/2012 9:00:17 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_Headset_GPRS1900_high_chan_amb_temp_23.6_liq_temp_22.1C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: GPRS 1900; Frequency: 1909.8 MHz
Medium parameters used: f = 1910 MHz; σ = 1.527 mho/m; ε_r = 50.643; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.309 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.010 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.7090
SAR(1 g) = 1 mW/g; SAR(10 g) = 0.548 mW/g
Maximum value of SAR (measured) = 1.260 mW/g

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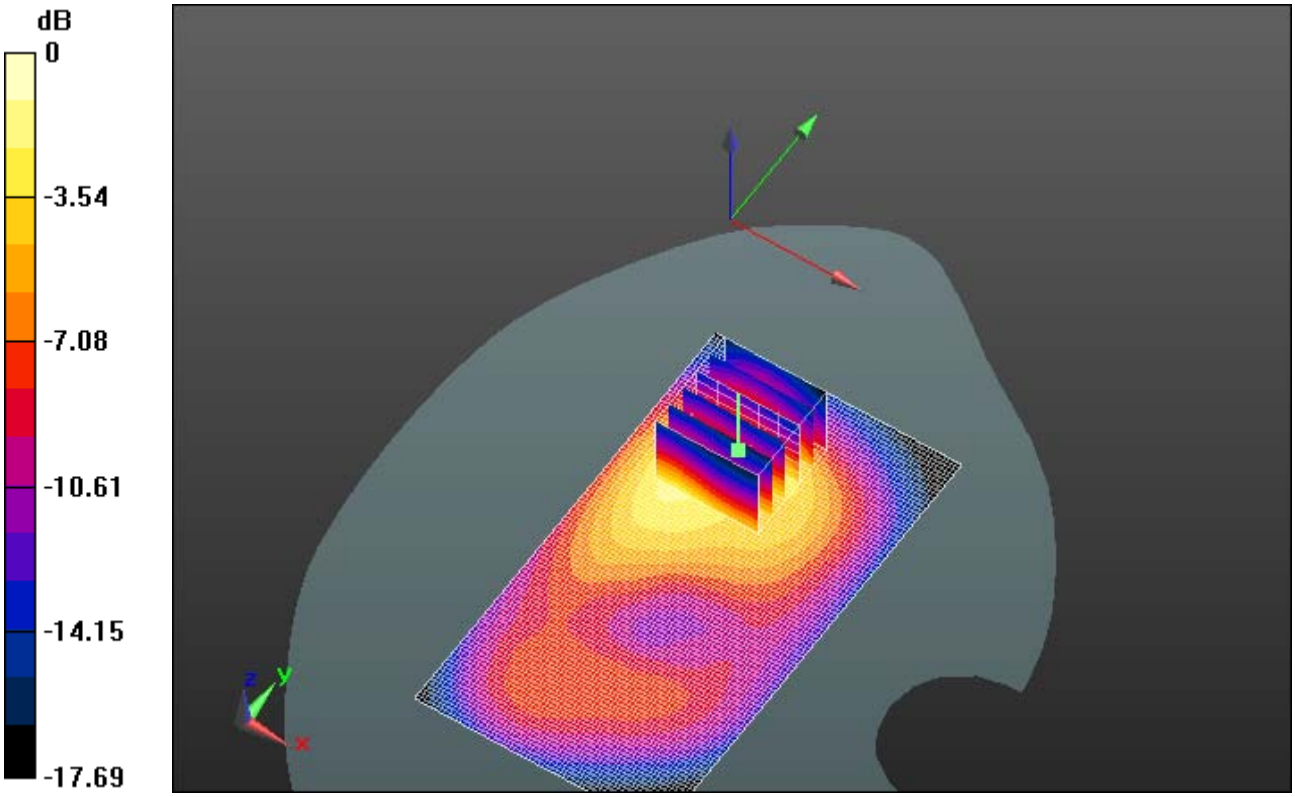

0 dB = 1.260mW/g = 2.01 dB mW/g

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Date/Time: 11/27/2012 8:28:33 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Bottom_GPRS1900_mid_chan_amb_temp_24.0_liq_temp_22.7C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: GPRS 1900; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ε_r = 50.828; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.909 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 21.913 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.2290
SAR(1 g) = 0.751 mW/g; SAR(10 g) = 0.428 mW/g
Maximum value of SAR (measured) = 0.921 mW/g

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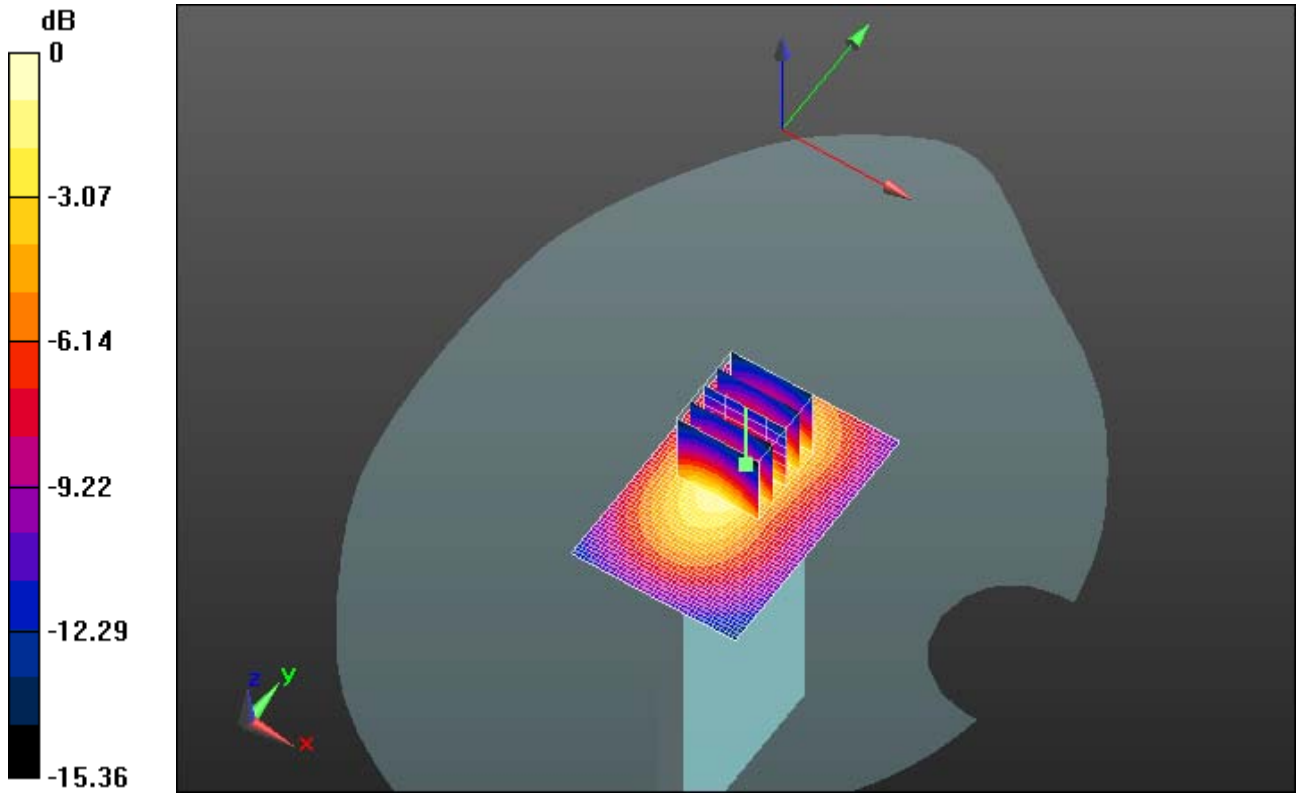

0 dB = 0.920mW/g = -0.72 dB mW/g

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Date/Time: 11/27/2012 1:07:57 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Front_EDGE1900_mid_chan_amb_temp_23.7_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: EDGE 1900; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ε_r = 50.828; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.769 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (7x7x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.958 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.0650
SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.369 mW/g
Maximum value of SAR (measured) = 0.794 mW/g

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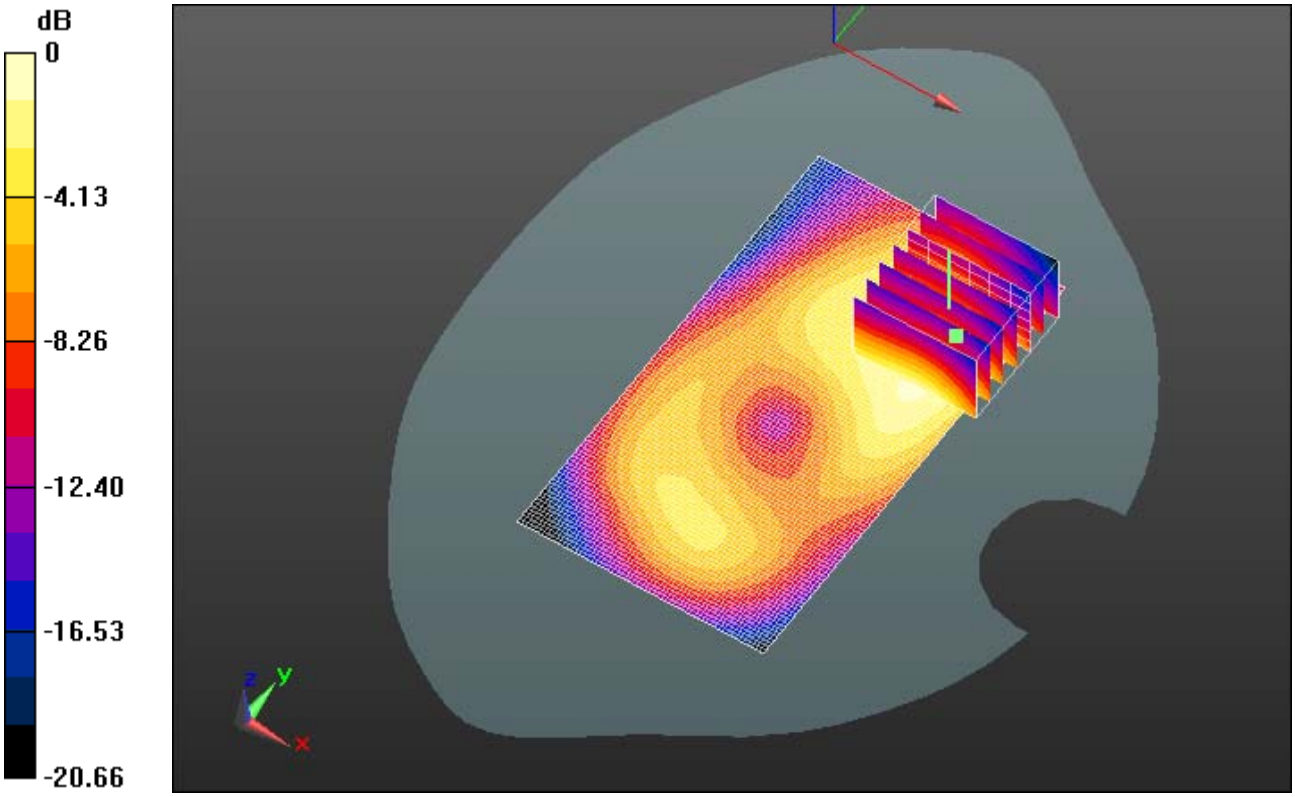

0 dB = 0.790mW/g = -2.05 dB mW/g

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Date/Time: 11/27/2012 2:45:05 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Left_EDGE1900_mid_chan_amb_temp_23.7_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: EDGE 1900; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ε_r = 50.828; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.394 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.261 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.5580
SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.184 mW/g
Maximum value of SAR (measured) = 0.397 mW/g

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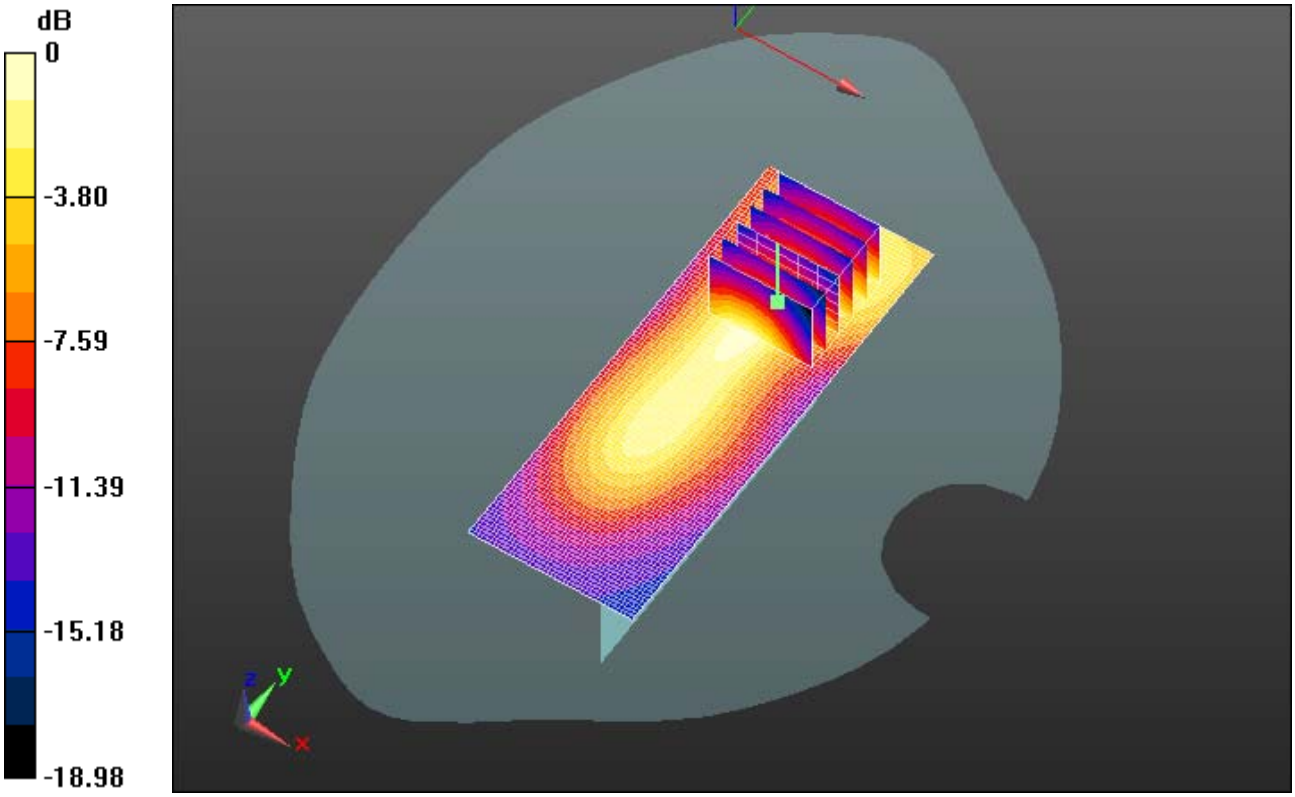

0 dB = 0.400mW/g = -7.96 dB mW/g

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Date/Time: 11/27/2012 1:47:12 AM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Right_EDGE1900_mid_chan_amb_temp_23.7_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: EDGE 1900; Frequency: 1880 MHz
Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ε_r = 50.828; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (31x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.151 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.558 V/m; Power Drift = 0.0033 dB
Peak SAR (extrapolated) = 0.2020
SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.076 mW/g
Maximum value of SAR (measured) = 0.152 mW/g

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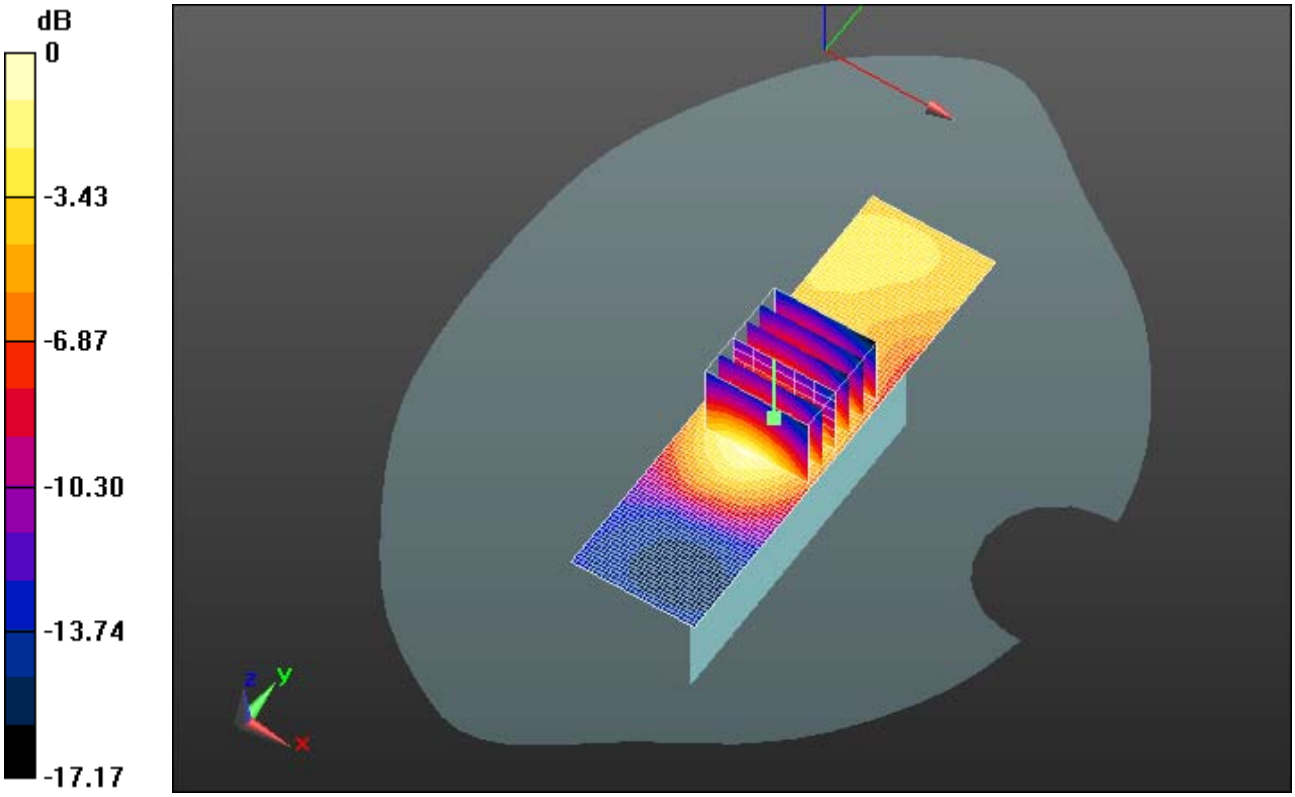

0 dB = 0.150mW/g = -16.48 dB mW/g

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Date/Time: 1/29/2013 3:54:41 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_high_chan_amb_temp_23.9_liq_temp_22.5C_2100_2nd_scan

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: GPRS 1900; Communication System Band: GPRS 1900;
Frequency: 1909.8 MHz;Communication System PAR: 6.232 dB; PMF: 2.04927
Medium parameters used: f = 1910 MHz; σ = 1.574 S/m; ε_r = 50.849; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.75, 4.75, 4.75); Calibrated: 11/13/2012;
  - Modulation Compensation: Not calibrated
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Configuration/Touch position -/Area Scan (61x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.26 W/kg

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.131 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.76 W/kg
SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.632 W/kg
Maximum value of SAR (measured) = 1.26 W/kg

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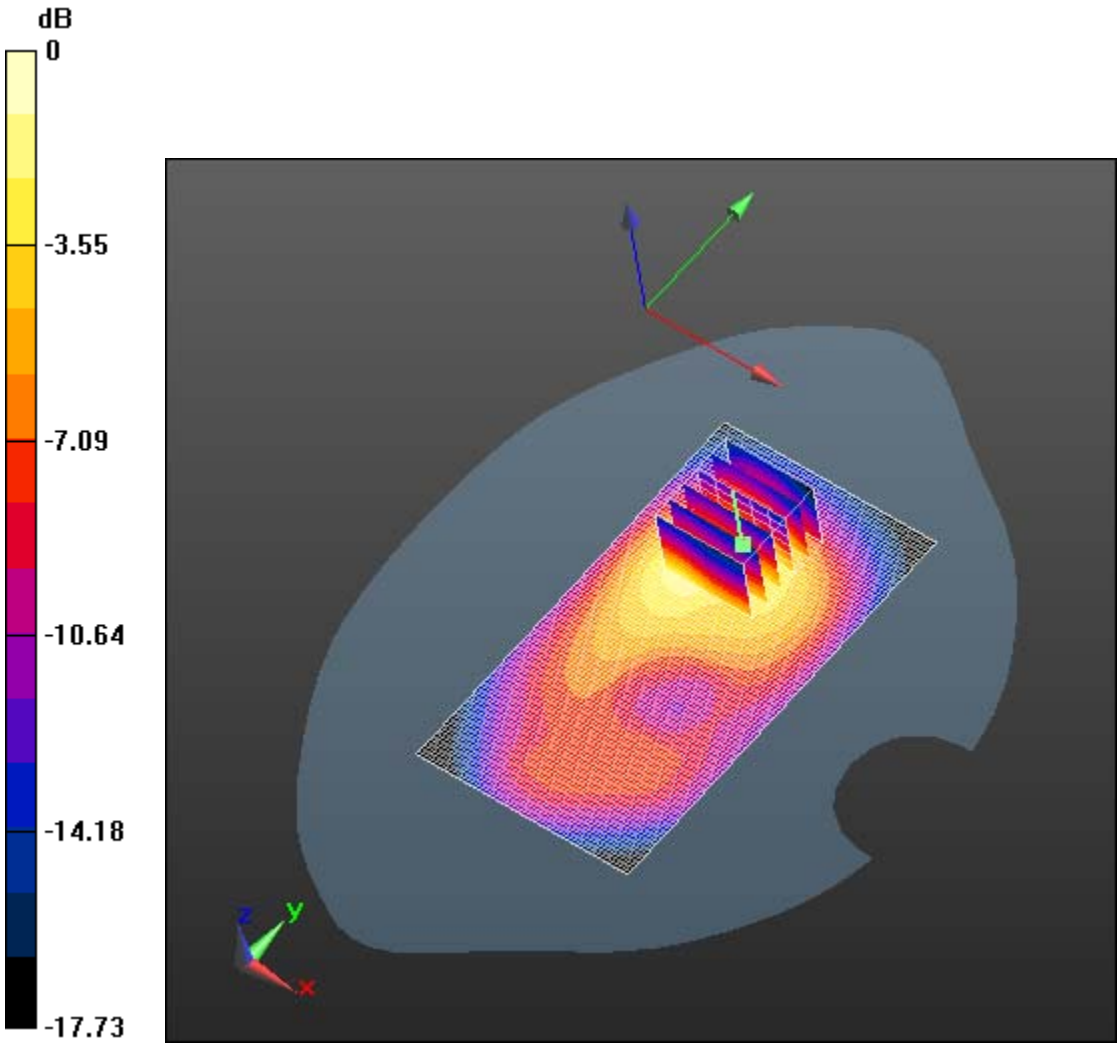

0 dB = 1.26 W/kg = 1.00 dBW/kg

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UMTS Band II

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Date: 1/29/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 25CF0AD9

Configuration: MHS_10mm_Body_SAR_Configuration

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1907.6 MHz
Medium Parameters used: f=1907.6 MHz; σ = 1.571 S/m; ε_r = 50.831; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (4.75,4.75,4.75); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.39 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.304 V/m; **Power Drift = 0.023 dB**

Averaged SAR: SAR(1g) = 1.28 W/kg; SAR(10g) = 0.727 W/kg
Maximum value of SAR (interpolated) = 2.01 W/kg

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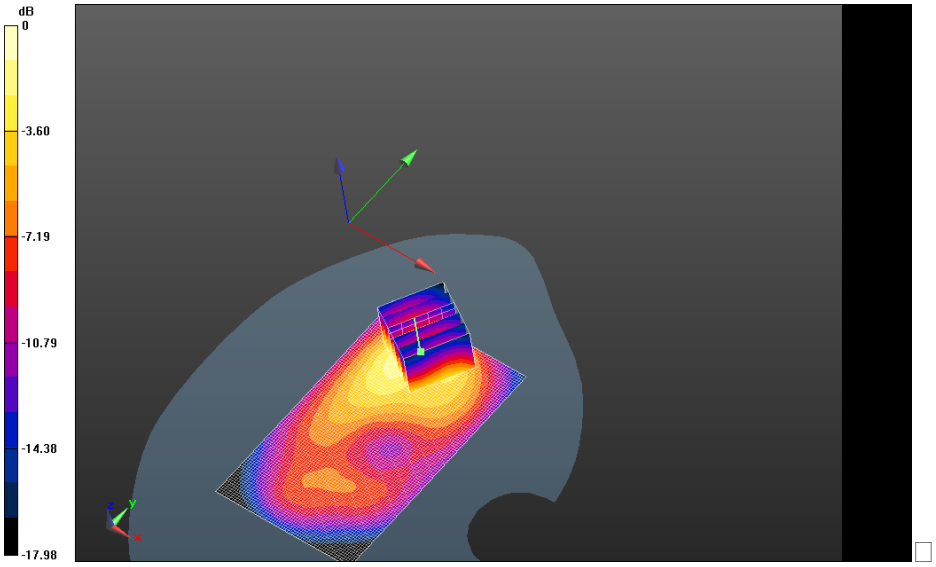

0 dB = 1.43 W/kg = 1.55 dBW/kg

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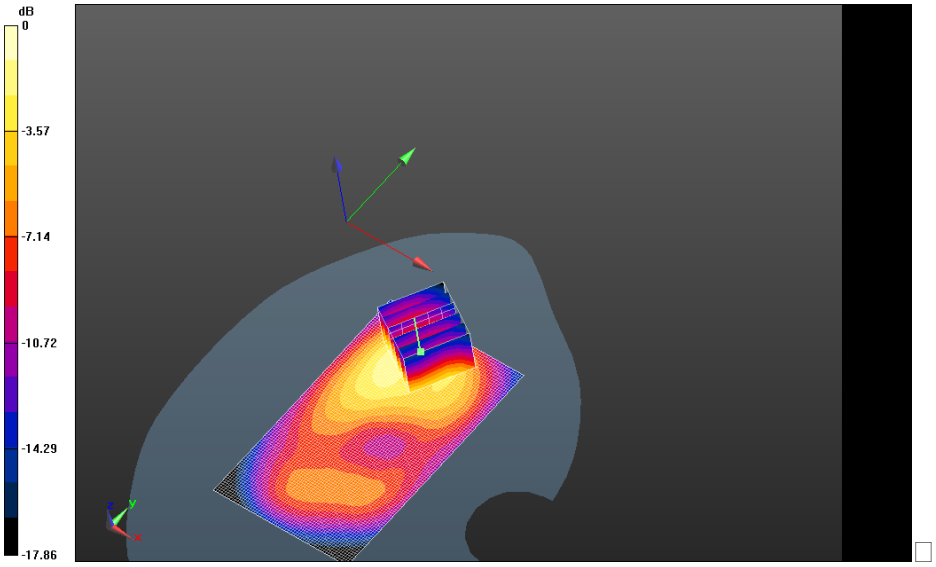
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.29 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 10.784 V/m; **Power Drift = -0.071 dB**

Averaged SAR: SAR(1g) = 1.17 W/kg; SAR(10g) = 0.666 W/kg
Maximum value of SAR (interpolated) = 1.83 W/kg



0 dB = 1.43 W/kg = 1.55 dBW/kg

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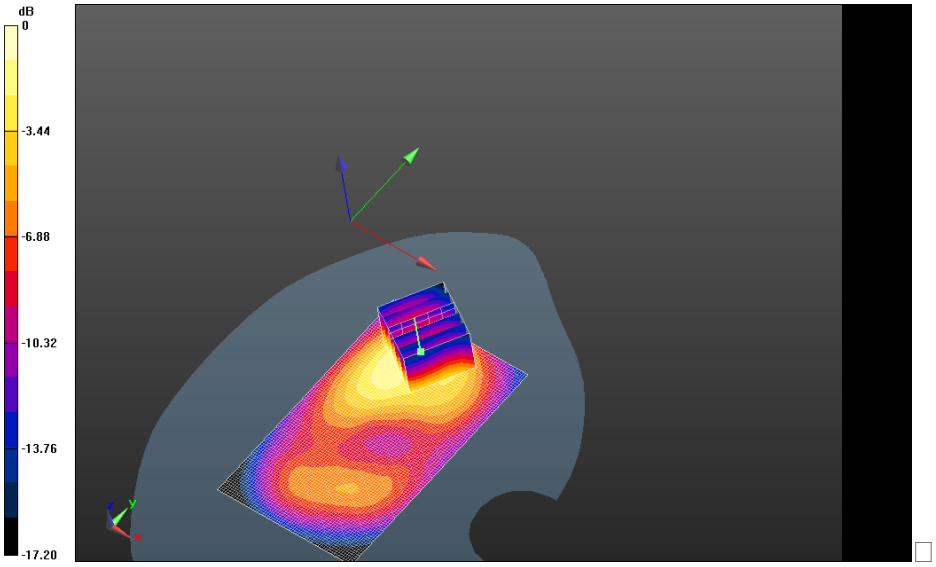
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS_II_Low_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.23 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS_II_Low_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 10.584 V/m; **Power Drift = 0.133 dB**

Averaged SAR: SAR(1g) = 1.12 W/kg; SAR(10g) = 0.643 W/kg
Maximum value of SAR (interpolated) = 1.74 W/kg



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

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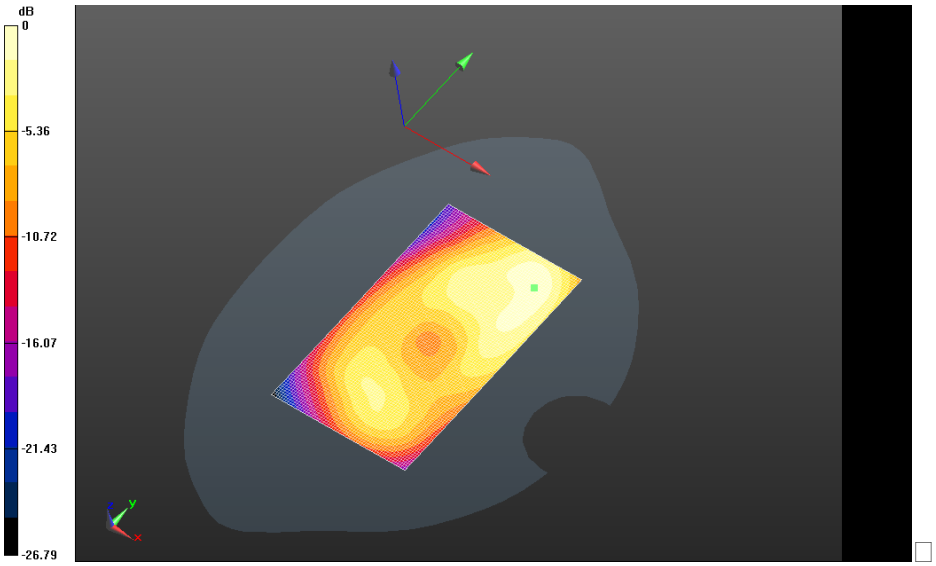
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_UMTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.793 W/kg



0 dB = 1.24 W/kg = 0.93 dBW/kg

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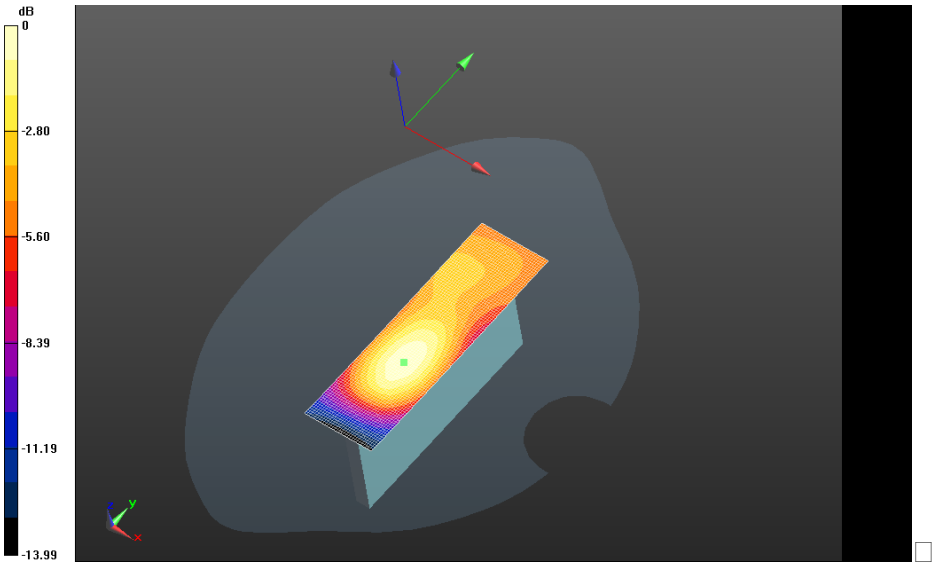
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_UMTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.165 W/kg



0 dB = 0.793 W/kg = -1.01 dBW/kg

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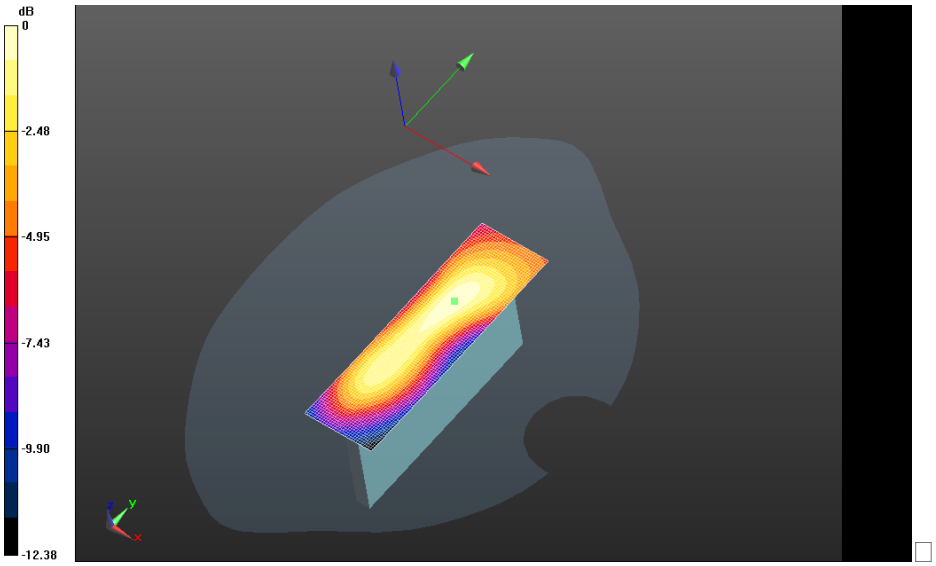
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_UMTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.390 W/kg



0 dB = 0.165 W/kg = -7.83 dBW/kg

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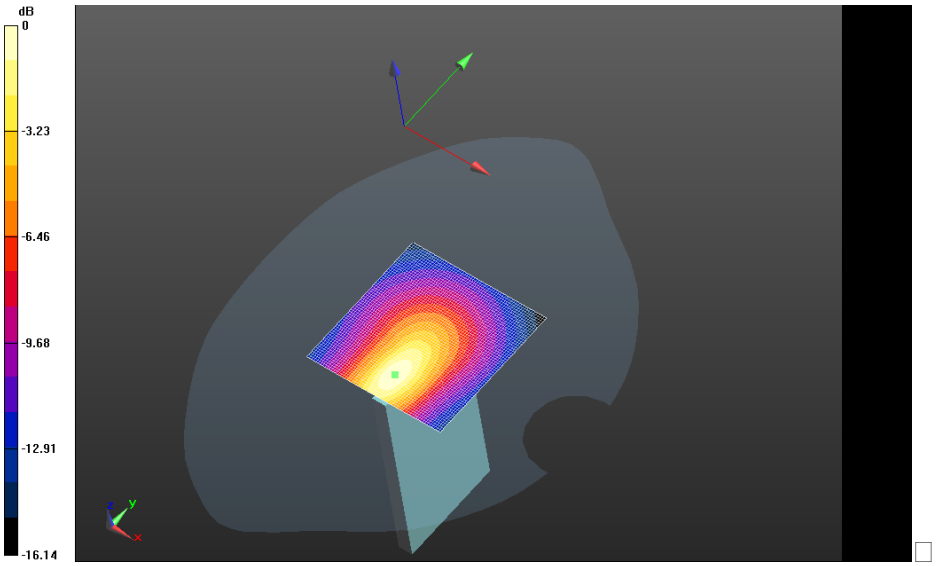
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_UMTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.865 W/kg



0 dB = 0.390 W/kg = -4.09 dBW/kg

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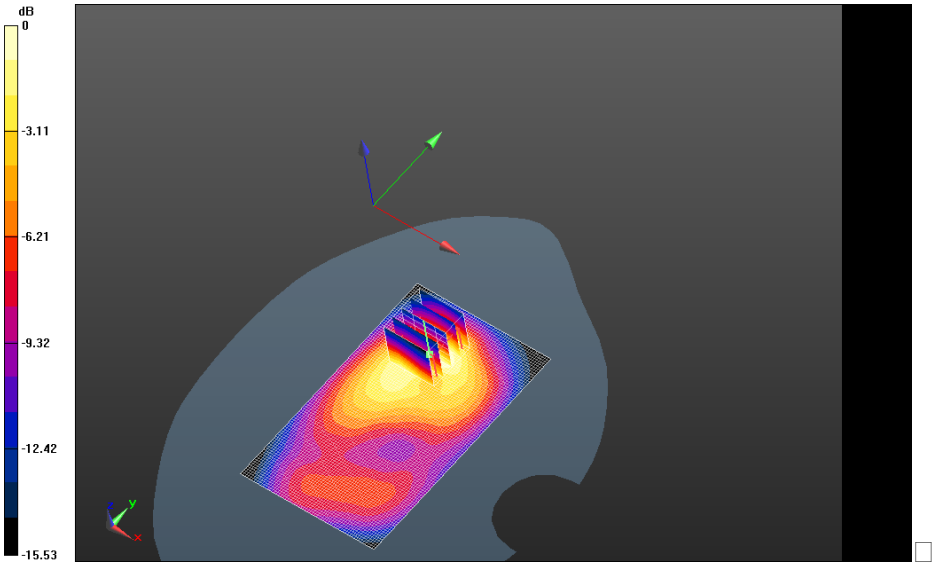
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.39 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Zoom Scan (5x5x7) (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 14.758 V/m; **Power Drift = 0.135 dB**

Averaged SAR: SAR(1g) = 1.19 W/kg; SAR(10g) = 0.675 W/kg
Maximum value of SAR (interpolated) = 1.84 W/kg



0 dB = 0.865 W/kg = -0.63 dBW/kg

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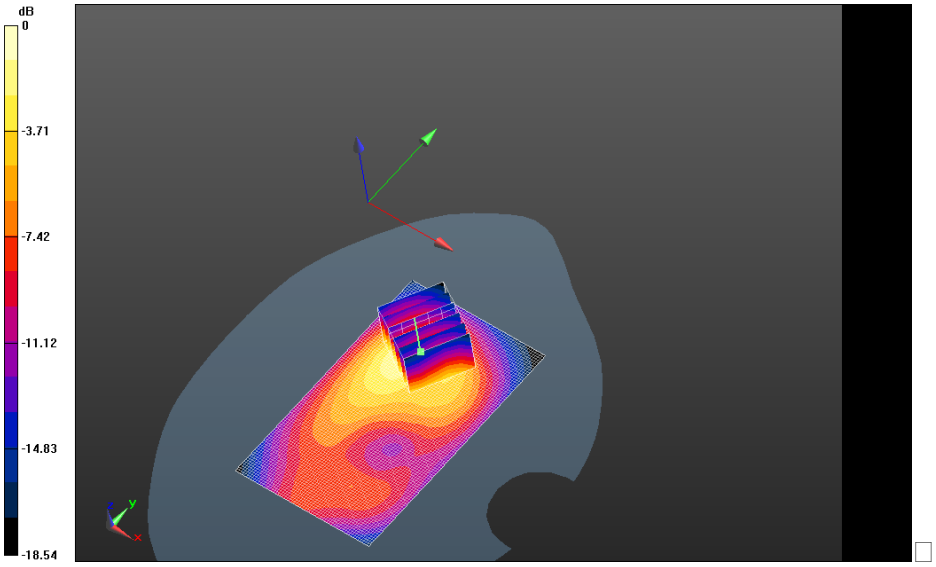
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100mA_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.50 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100mA_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 14.766 V/m; **Power Drift = -0.118 dB**

Averaged SAR: SAR(1g) = 1.35 W/kg; SAR(10g) = 0.749 W/kg
Maximum value of SAR (interpolated) = 2.16 W/kg



0 dB = 1.27 W/kg = 1.04 dBW/kg

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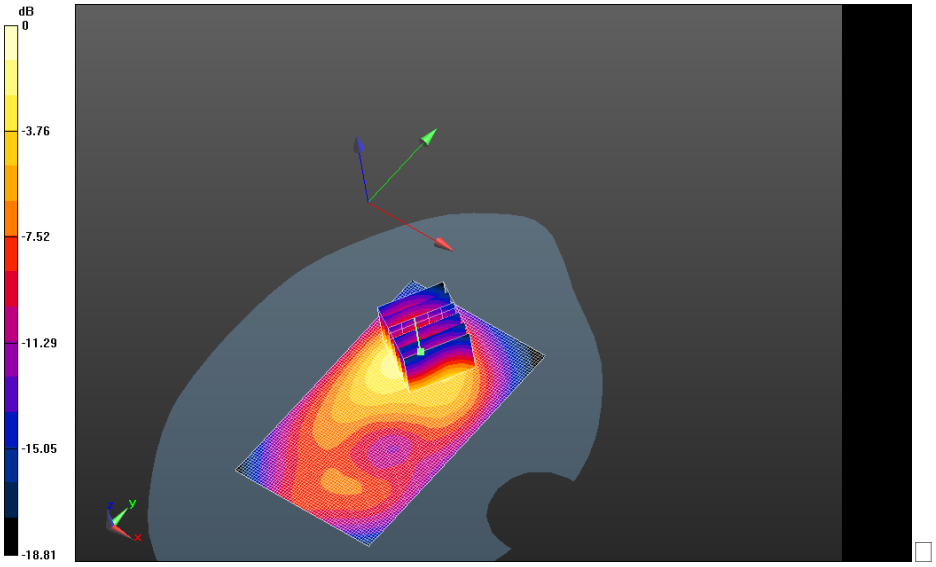
MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100mA_2nd_scan_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.51 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100mA_2nd_scan_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 14.567 V/m; **Power Drift = 0.074 dB**

Averaged SAR: SAR(1g) = 1.36 W/kg; SAR(10g) = 0.755 W/kg
Maximum value of SAR (interpolated) = 2.18 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

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802.11b

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Date/Time: 1/7/2013 12:59:43 PM

Test Laboratory: RIM Testing Services

MHS_SAR_802.11b_Device_Front_10mm

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: 802.11 b (2450); Frequency: 2437 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.888 S/m; ε_r = 51.662; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.11, 4.11, 4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Flat-Section MSL_MHS_Body_SAR/Device Front_10mm_Amb_Temp_23.7C_Liquid_Temp_22.1C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 4.038 V/m; Power Drift = 0.11 dB
Fast SAR: SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.061 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.120 W/kg

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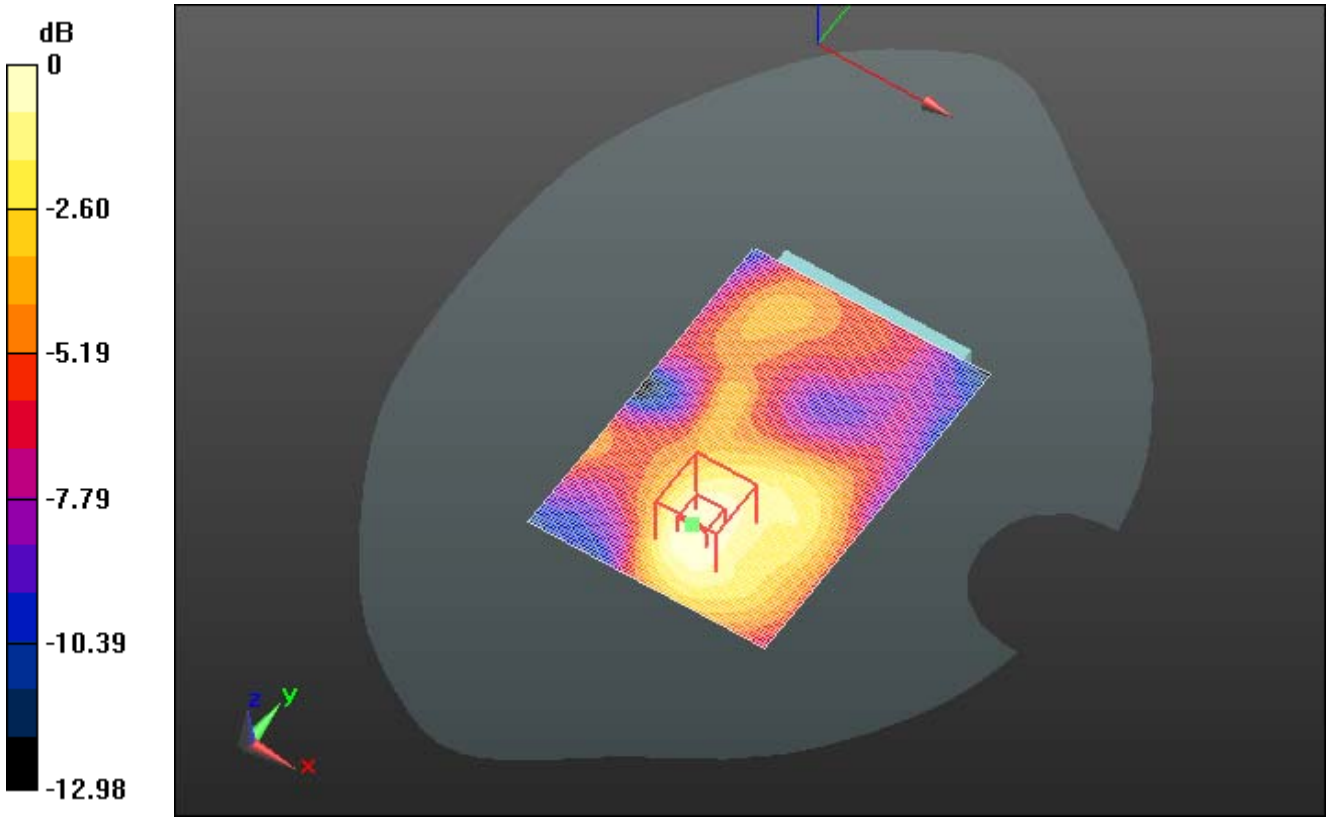

0 dB = 0.120 W/kg = -9.20 dBW/kg

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Date/Time: 1/7/2013 1:59:29 PM

Test Laboratory: RIM Testing Services

MHS_SAR_802.11b_Device_Left_10mm

DUT: BlackBerry Smartphone_Left_Right Side; Type: Sample ; Serial: 25CF0AD9

Communication System: 802.11 b (2450); Frequency: 2437 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.888 S/m; ε_r = 51.662; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.11, 4.11, 4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Flat-Section MSL_MHS_Body_SAR/Device Left_10mm_Amb_Temp_23.4C_Liquid_Temp_22.0C/Area Scan (41x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 8.092 V/m; Power Drift = 0.05 dB
Fast SAR: SAR(1 g) = 0.200 W/kg; SAR(10 g) = 0.107 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.228 W/kg

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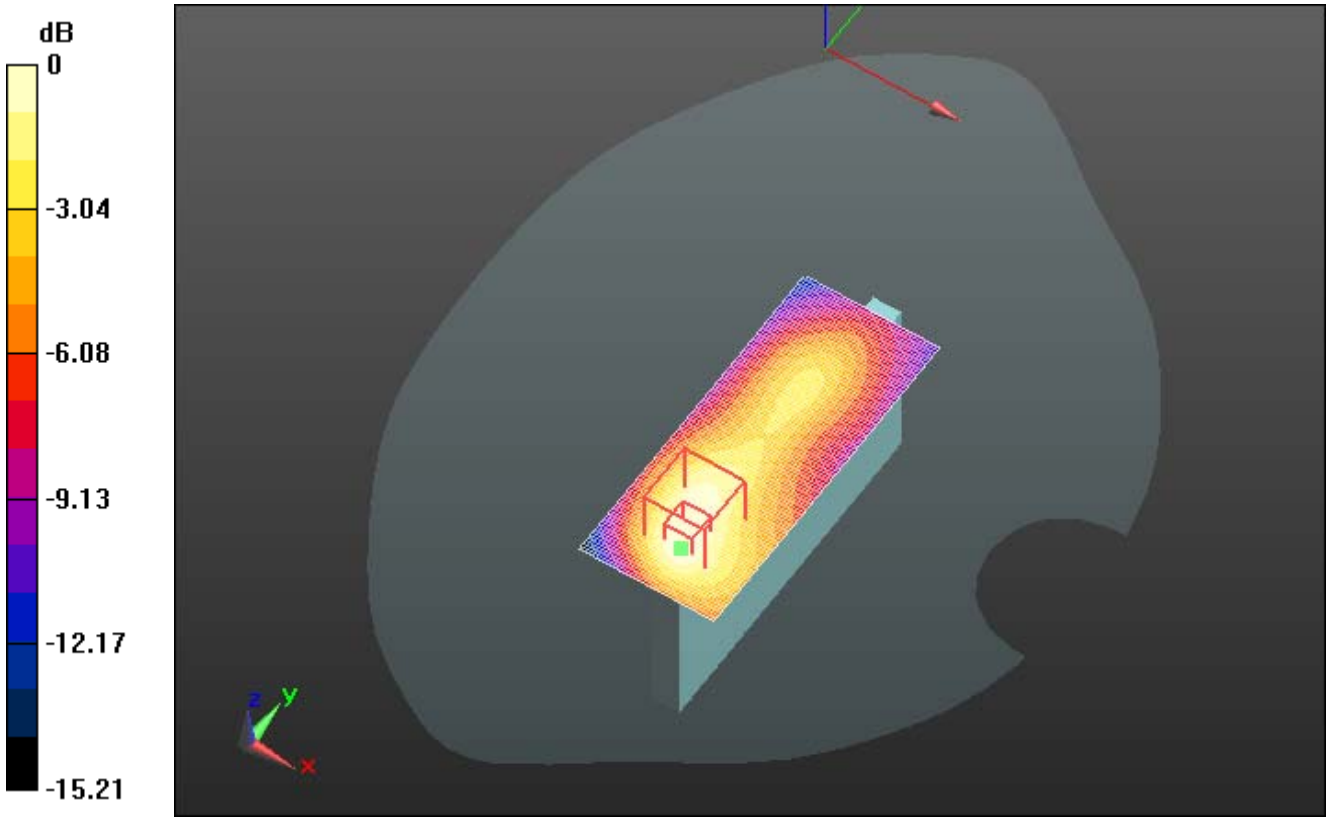

0 dB = 0.228 W/kg = -6.42 dBW/kg

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Date/Time: 1/7/2013 2:09:19 PM

Test Laboratory: RIM Testing Services

MHS_SAR_802.11b_Device_Right_10mm

DUT: BlackBerry Smartphone_Left_Right Side; Type: Sample ; Serial: 25CF0AD9

Communication System: 802.11 b (2450); Frequency: 2437 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.888 S/m; ε_r = 51.662; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.11, 4.11, 4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Flat-Section MSL_MHS_Body_SAR/Device Right_10mm_Amb_Temp_23.3C_Liquid_Temp_21.4C/Area Scan (41x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 4.520 V/m; Power Drift = 0.30 dB
Fast SAR: SAR(1 g) = 0.083 W/kg; SAR(10 g) = 0.038 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.104 W/kg

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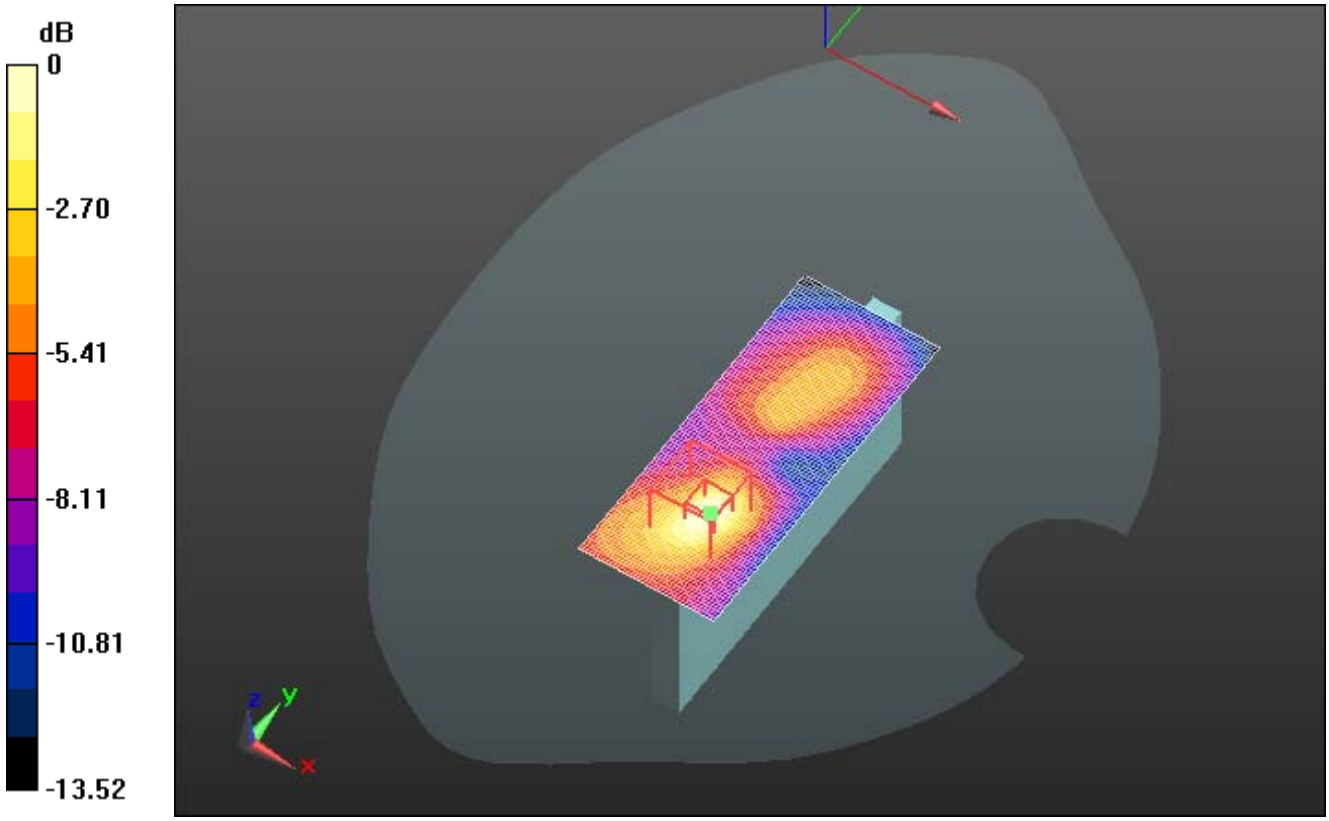

0 dB = 0.104 W/kg = -9.82 dBW/kg

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Date/Time: 1/7/2013 2:22:34 PM

Test Laboratory: RIM Testing Services

MHS_SAR_802.11b_Device_Top_10mm

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9

Communication System: 802.11 b (2450); Frequency: 2437 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.888 S/m; ε_r = 51.662; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.11, 4.11, 4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Flat-Section MSL_MHS_Body_SAR/Device Top_10mm_Amb_Temp_23.4C_Liquid_Temp_21.4C/Area Scan (41x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Reference Value = 11.815 V/m; Power Drift = -0.10 dB
Fast SAR: SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.125 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.248 W/kg

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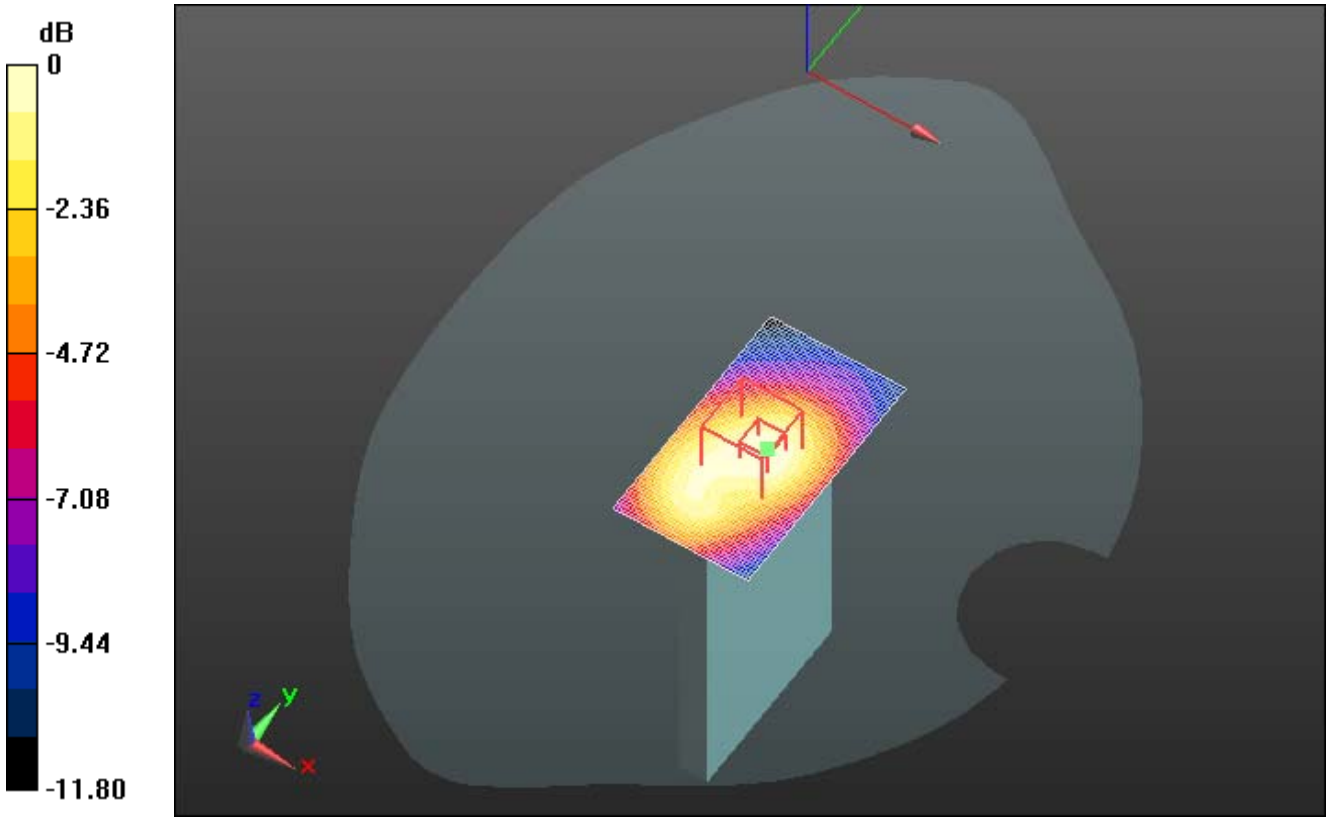

0 dB = 0.248 W/kg = -6.06 dBW/kg

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DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0AD9
Procedure Name: Device Back_10mm_2100mA_Batt_Headset_Amb_Temp_23.9C_Liquid_Temp_22.3C

Communication System: 802.11 b (2450); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.888 S/m; ε_r = 51.662; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1644; ConvF(4.11, 4.11, 4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_2100mA_Batt_Headset_Amb_Temp_23.9C_Liquid_Temp_22.3C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.440 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_2100mA_Batt_Headset_Amb_Temp_23.9C_Liquid_Temp_22.3C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.861 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.920 W/kg
SAR(1 g) = 0.388 W/kg; SAR(10 g) = 0.191 W/kg

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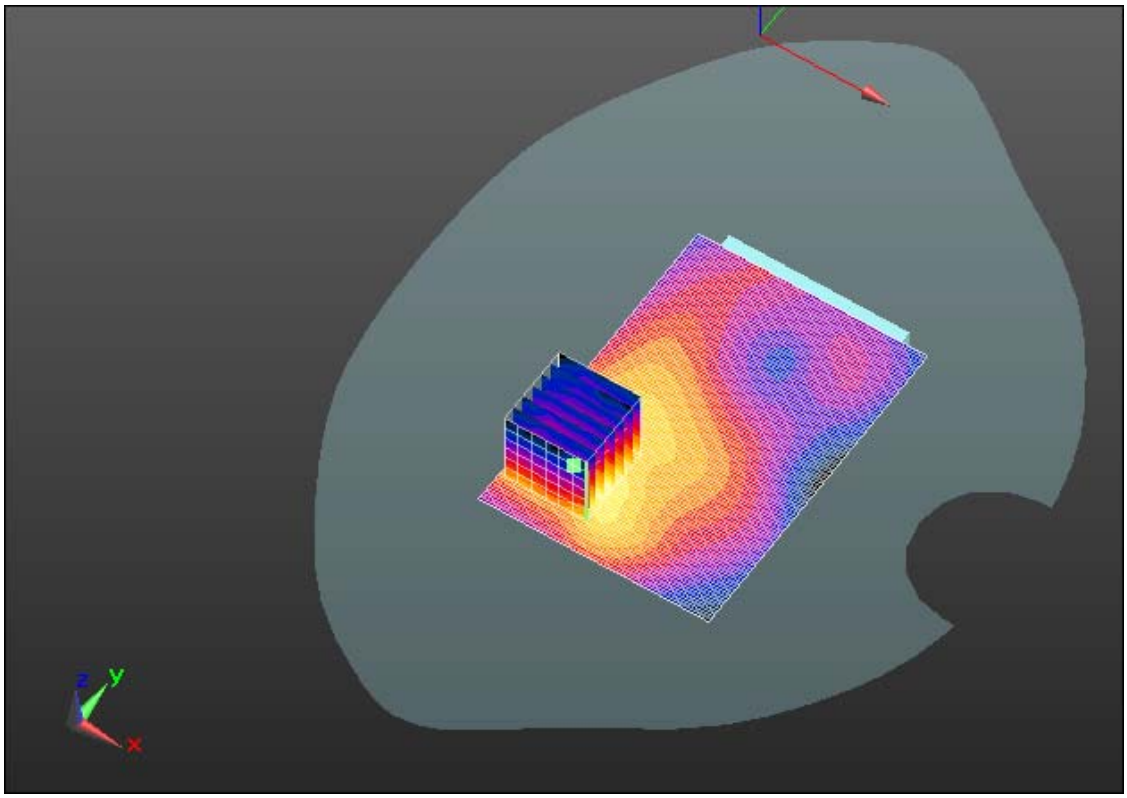
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.404 W/kg



0 dB = 0.440 W/kg = -3.56 dBW/kg

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Date: 2/28/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2668C71D

Configuration: Flat-Section MSL_MHS_Body_SAR 802.11b Rev 3-03

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2437 MHz
Medium Parameters used: f=2437 MHz; σ = 1.919 S/m; ε_r = 50.246; 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: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_802.11b_Chan_6_Amb_Temp_24.2C_Liquid_Temp_20.5C/Area Scan (71x101x1):
Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.660 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_802.11b_Chan_6_Amb_Temp_24.2C_Liquid_Temp_20.5C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 7.673 V/m; **Power Drift = 0.026 dB**

Averaged SAR: SAR(1g) = 0.484 W/kg; SAR(10g) = 0.224 W/kg
Maximum value of SAR (interpolated) = 1.04 W/kg

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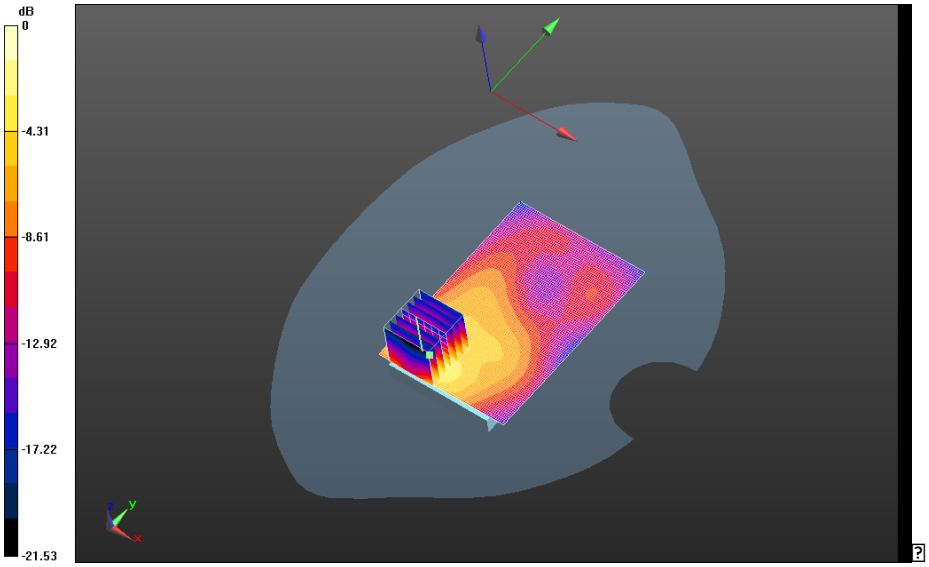

0 dB = 0.642 W/kg = -1.92 dBW/kg

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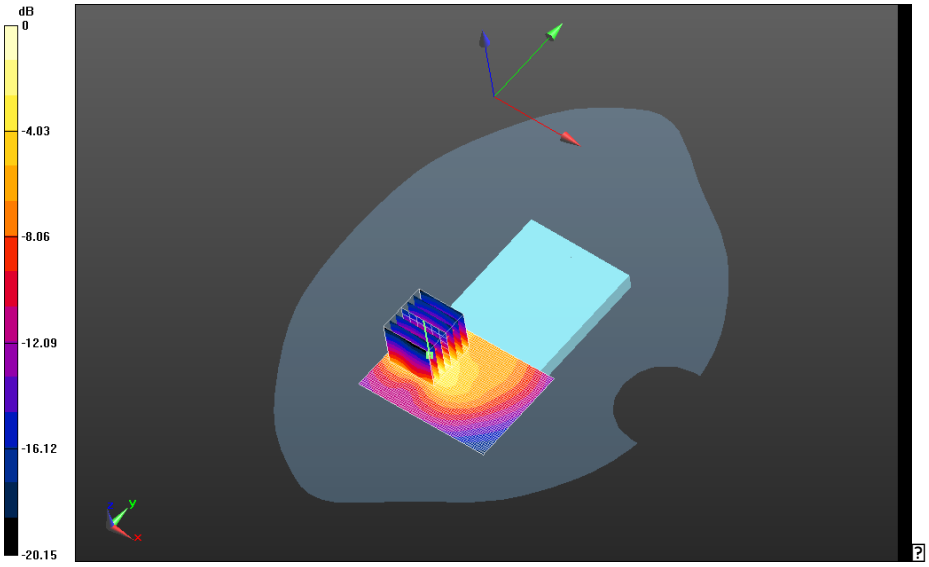
Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_Headset_802.11b_Chan_6_Amb_Temp_23.6C_Liquid_Temp_20.6C/Area Scan (71x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.407 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_Headset_802.11b_Chan_6_Amb_Temp_23.6C_Liquid_Temp_20.6C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 6.294 V/m; **Power Drift = 0.072 dB**

Averaged SAR: SAR(1g) = 0.335 W/kg; SAR(10g) = 0.154 W/kg
Maximum value of SAR (interpolated) = 0.739 W/kg



0 dB = 0.642 W/kg = -1.92 dBW/kg

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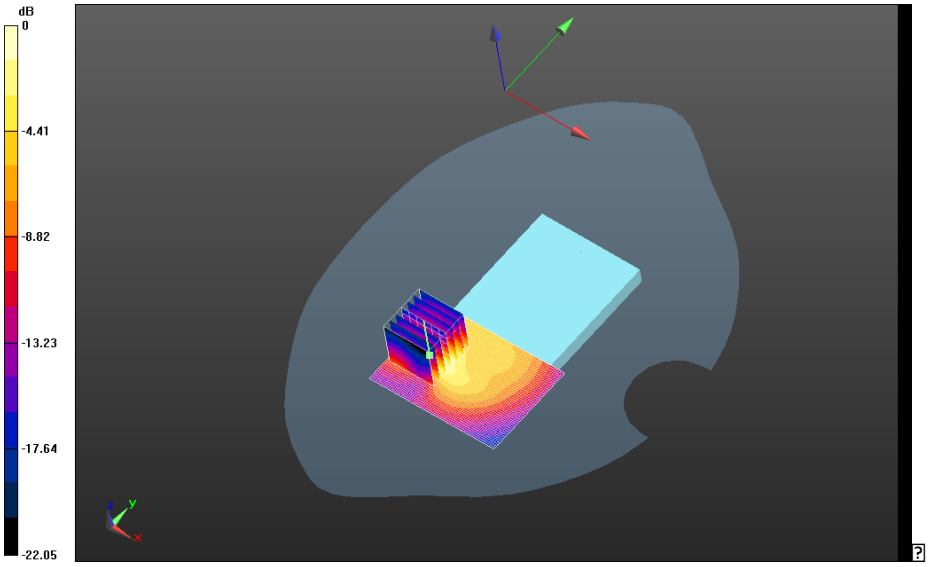
Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_2100mA_Batt_802.11b_Chan_6_Amb_Temp_23.3C_Liquid_Temp_20.6C/Area Scan (71x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.597 W/kg

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_2100mA_Batt_802.11b_Chan_6_Amb_Temp_23.3C_Liquid_Temp_20.6C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 7.337 V/m; **Power Drift = -0.00417 dB**

Averaged SAR: SAR(1g) = 0.479 W/kg; SAR(10g) = 0.220 W/kg
Maximum value of SAR (interpolated) = 1.05 W/kg



0 dB = 0.426 W/kg = -3.71 dBW/kg

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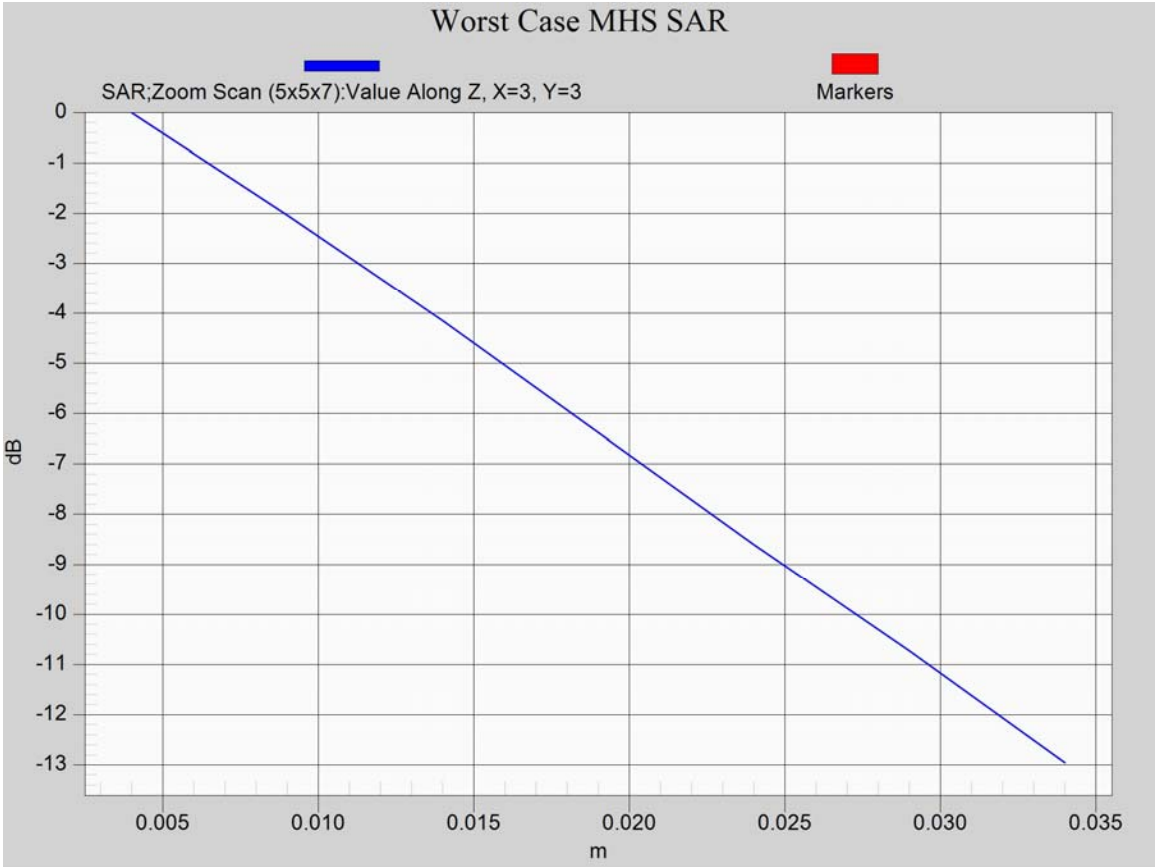
Z axis plot for the worst case hot spot configuration



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RFP121LW

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LTE 5

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Date: 2/5/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2641D6A8

Configuration: MHS_10mm_Body_SAR_Configuration – LTE 5

Communication System: LTE 5; Communication System Band: LTE 5; Frequency: 844 MHz
Medium Parameters used: f=844 MHz; σ = 0.992 S/m; ε_r = 52.923; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (6.06,6.06,6.06); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+2100mA_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.487 W/kg

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+2100mA_LTE_5_High_Chan_QPSK_RB1_Offset0_Amb_Temp_23.4C_Liq_Temp_22.3C/Zoom Scan (5x5x7) (21x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 21.335 V/m; **Power Drift = -0.045 dB**

Averaged SAR: SAR(1g) = 0.467 W/kg; SAR(10g) = 0.341 W/kg
Maximum value of SAR (interpolated) = 0.616 W/kg

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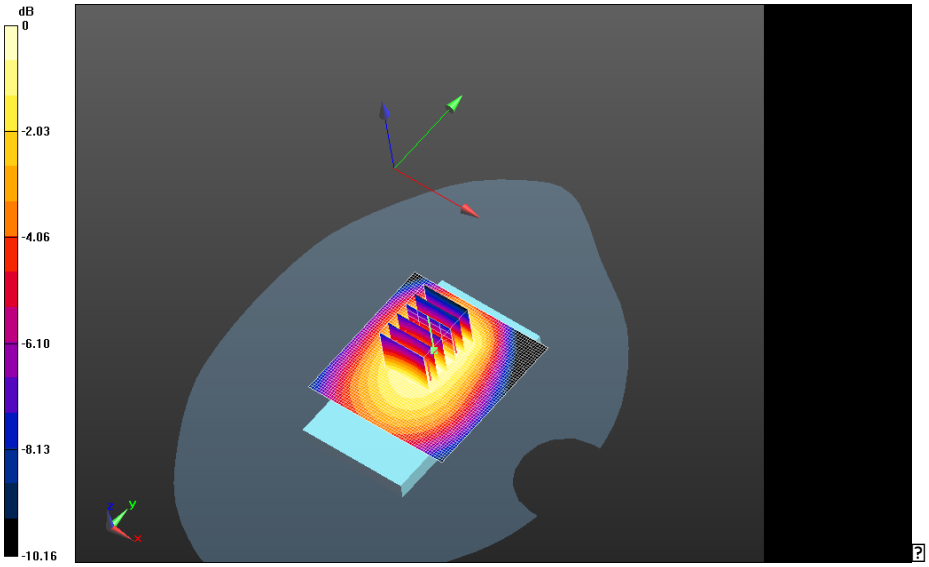

0 dB = 0.498 W/kg = -3.03 dBW/kg

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EDGE 850

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Date: 2/5/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2641D6A8

Configuration: MHS_10mm_Body_SAR_Configuration_EDGE850

Communication System: EDGE 850 (2slots); Communication System Band: EDGE 850; Frequency: 824.2 MHz
Medium Parameters used: f=825 MHz; σ = 0.971 S/m; ε_r = 53.184; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (6.06,6.06,6.06); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration_EDGE850/MHS_10mm_Spacer_Device_Back_2100mA_EDGE850_Low_chan_Amb_Temp_23.5C_Liq_Temp_22.6C/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.961 W/kg

MHS_10mm_Body_SAR_Configuration_EDGE850/MHS_10mm_Spacer_Device_Back_2100mA_EDGE850_Low_chan_Amb_Temp_23.5C_Liq_Temp_22.6C/Zoom Scan (5x5x7) (31x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 23.443 V/m; **Power Drift = -0.00567 dB**

Averaged SAR: SAR(1g) = 0.884 W/kg; SAR(10g) = 0.629 W/kg
Maximum value of SAR (interpolated) = 1.30 W/kg

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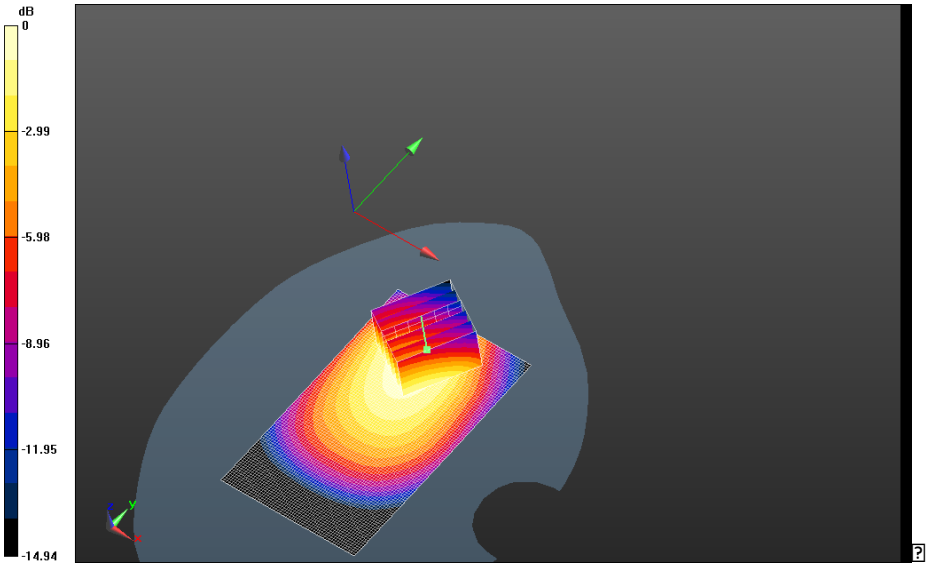

0 dB = 0.947 W/kg = -0.24 dBW/kg

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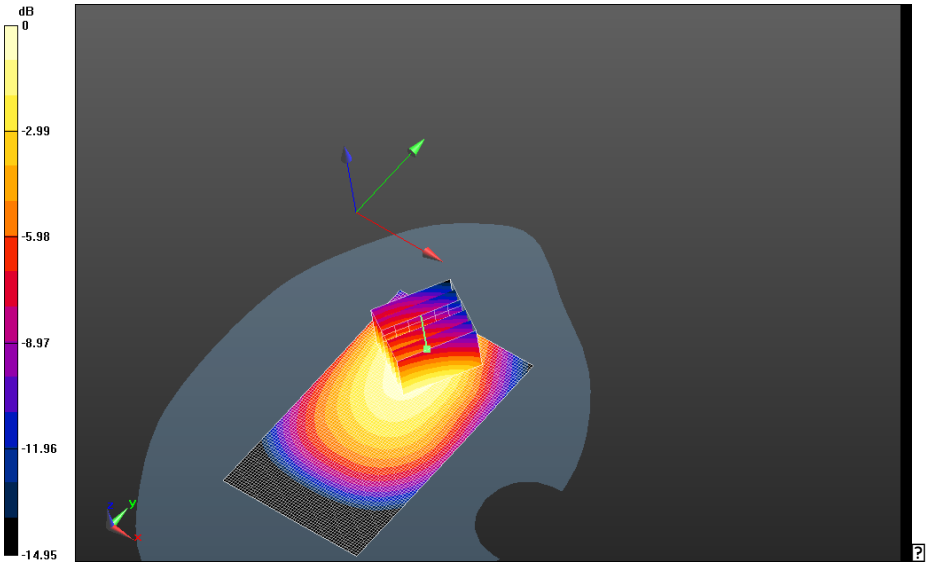
MHS_10mm_Body_SAR_Configuration_EDGE850/MHS_10mm_Spacer_Device_Back_2100mA_EDGE850_Mid_chan_Amb_Temp_23.5C_Liq_Temp_22.6C 2/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.928 W/kg

MHS_10mm_Body_SAR_Configuration_EDGE850/MHS_10mm_Spacer_Device_Back_2100mA_EDGE850_Mid_chan_Amb_Temp_23.5C_Liq_Temp_22.6C 2/Zoom Scan (5x5x7) (31x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 22.772 V/m; **Power Drift = -0.018 dB**

Averaged SAR: SAR(1g) = 0.838 W/kg; SAR(10g) = 0.598 W/kg
Maximum value of SAR (interpolated) = 1.21 W/kg



0 dB = 0.947 W/kg = -0.24 dBW/kg

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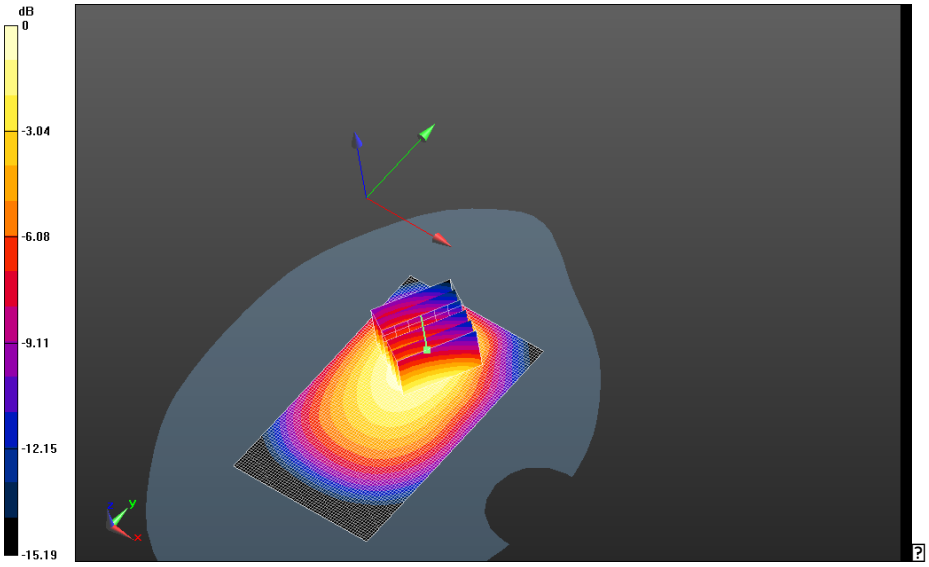
MHS_10mm_Body_SAR_Configuration_EDGE850/MHS_10mm_Spacer_Device_Back_2100mA_EDGE850_High_chan_Amb_Temp_23.5C_Liq_Temp_22.6C 2 2/Area Scan (61x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.846 W/kg

MHS_10mm_Body_SAR_Configuration_EDGE850/MHS_10mm_Spacer_Device_Back_2100mA_EDGE850_High_chan_Amb_Temp_23.5C_Liq_Temp_22.6C 2 2/Zoom Scan (5x5x7) (31x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 22.530 V/m; **Power Drift = -0.180 dB**

Averaged SAR: SAR(1g) = 0.746 W/kg; SAR(10g) = 0.510 W/kg
Maximum value of SAR (interpolated) = 1.13 W/kg



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

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UMTS Band V

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Date: 2/5/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2641D6A8

Configuration: MHS_10mm_Body_SAR_Configuration_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 = 0.983 S/m; ε_r = 53.022; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (6.06,6.06,6.06); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Device_Back_UMTS_V_Mid_chan_Amb_Temp_23.6C_Liq_Temp_22.6C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.548 W/kg

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Device_Back_UMTS_V_Mid_chan_Amb_Temp_23.6C_Liq_Temp_22.6C/Zoom Scan (5x5x7) (21x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 19.070 V/m; **Power Drift = 0.011 dB**

Averaged SAR: SAR(1g) = 0.507 W/kg; SAR(10g) = 0.373 W/kg
Maximum value of SAR (interpolated) = 0.657 W/kg

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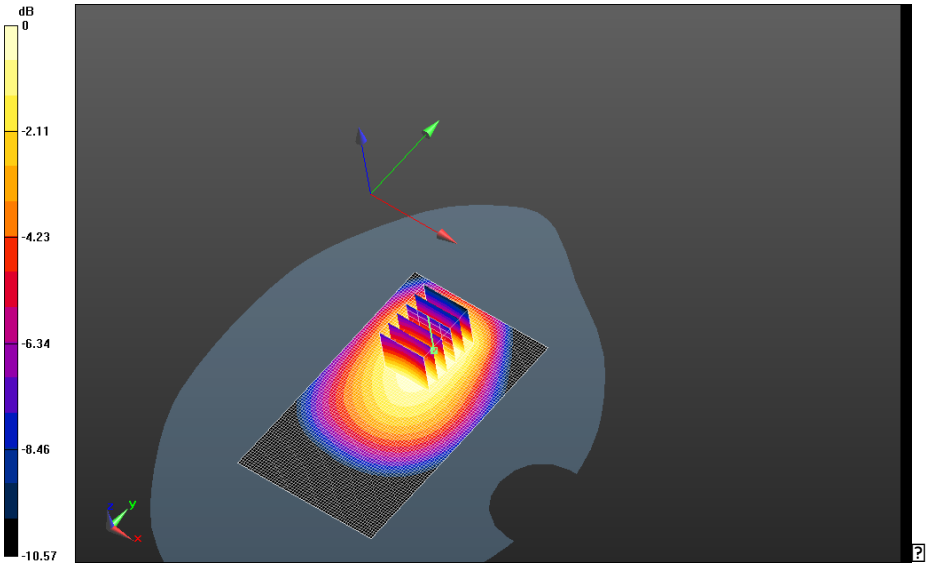

0 dB = 0.532 W/kg = -2.74 dBW/kg

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LTE 4

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Date: 2/1/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2641D6A8

Configuration: Mobile Hot Spot MSL - LTE Band 4

Communication System: LTE 4; Communication System Band: LTE 4; Frequency: 1732.5 MHz
Medium Parameters used: f=1732.5 MHz; σ = 1.516 S/m; ε_r = 51.512; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (4.75,4.75,4.75); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back - LTE_4_Mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.4_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back - LTE_4_Mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.4_liq_temp_21.2C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.344 V/m; **Power Drift = -0.123 dB**

Averaged SAR: SAR(1g) = 1.05 W/kg; SAR(10g) = 0.627 W/kg
Maximum value of SAR (interpolated) = 1.57 W/kg

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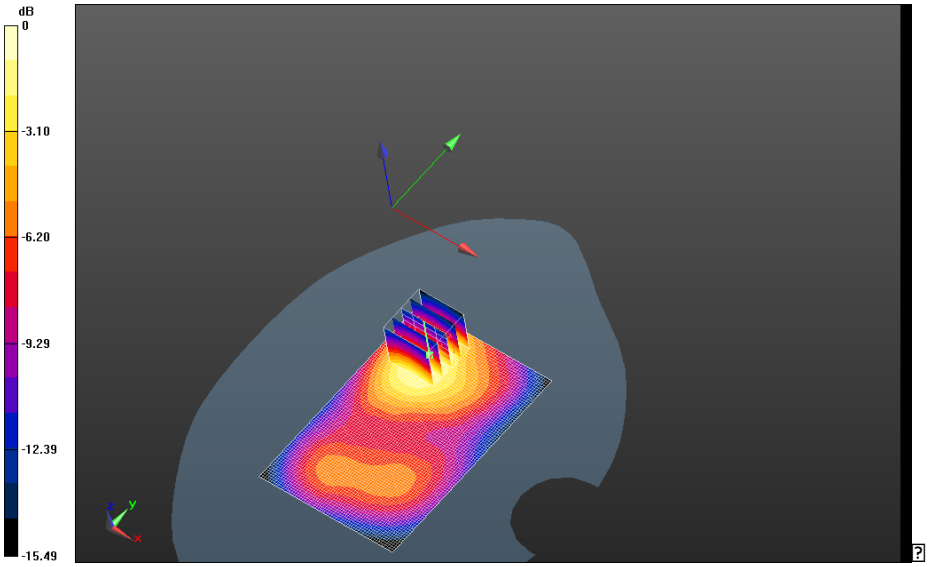

0 dB = 1.17 W/kg = 0.68 dBW/kg

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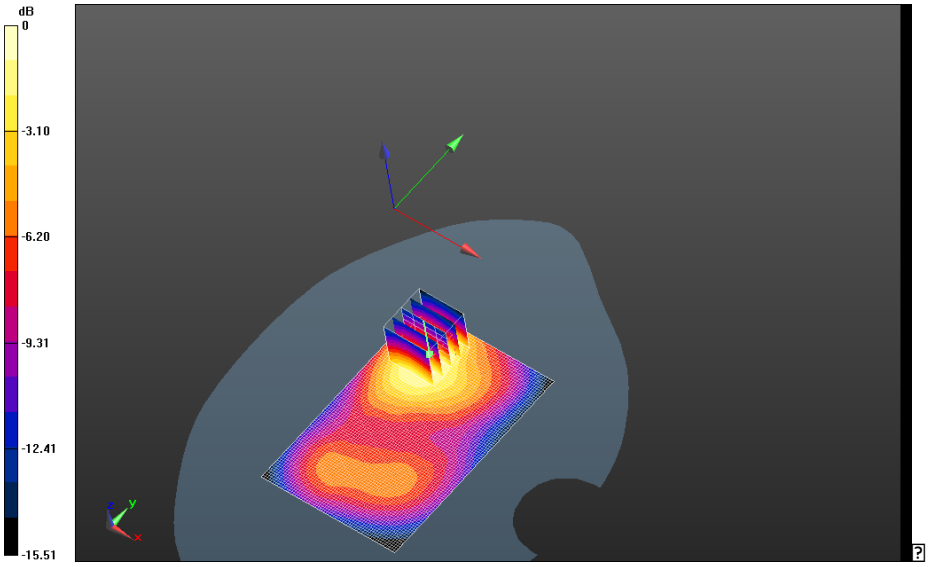
Mobile Hot Spot MSL - LTE Band 4/10mm Device Back - LTE_4_2nd Scan_Mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.4_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.18 W/kg

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back - LTE_4_2nd Scan_Mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.4_liq_temp_21.2C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.182 V/m; **Power Drift = -0.077 dB**

Averaged SAR: SAR(1g) = 1.04 W/kg; SAR(10g) = 0.618 W/kg
Maximum value of SAR (interpolated) = 1.53 W/kg



0 dB = 1.17 W/kg = 0.68 dBW/kg

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UMTS Band IV

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Date: 2/1/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2641D6A8

Configuration: Mobile Hot Spot MSL - UMTS Band IV

Communication System: WCDMA FDD IV; Communication System Band: UMTS band IV;
Frequency: 1712.4 MHz
Medium Parameters used: f=1712.4 MHz; σ = 1.496 S/m; ε_r = 51.518; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (4.75,4.75,4.75); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back - UMTS_IV_Low_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back - UMTS_IV_Low_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.276 V/m; **Power Drift = 0.055 dB**

Averaged SAR: SAR(1g) = 1.08 W/kg; SAR(10g) = 0.639 W/kg
Maximum value of SAR (interpolated) = 1.61 W/kg

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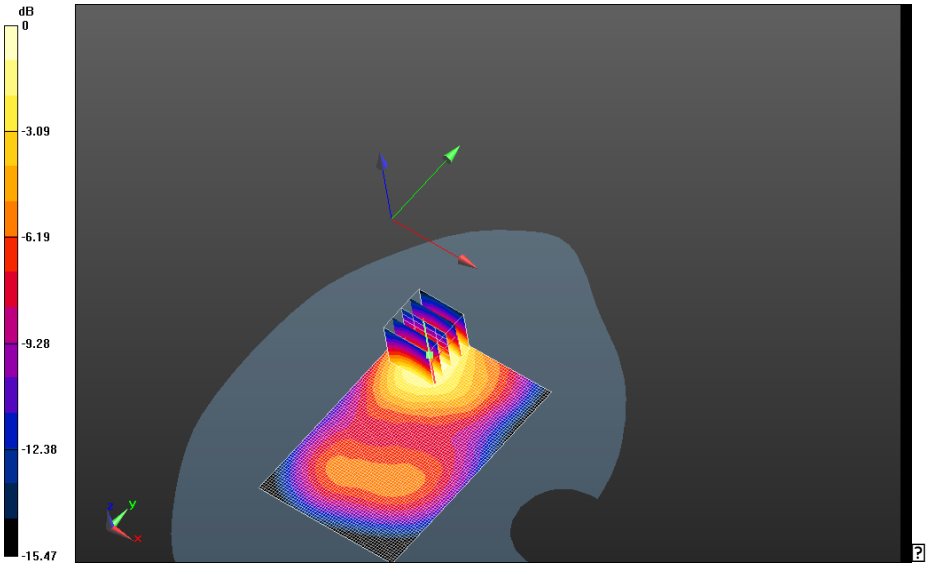

0 dB = 1.18 W/kg = 0.72 dBW/kg

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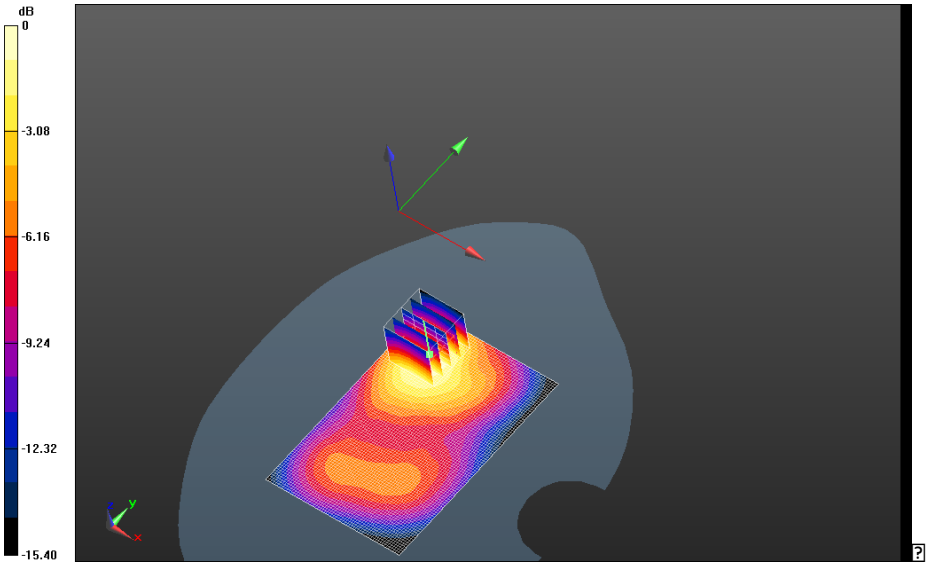
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back - UMTS_IV_Low_chan_amb_temp_23.2C_liq_temp_22.3C_2nd_scan/Area Scan (61x91x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.23 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back - UMTS_IV_Low_chan_amb_temp_23.2C_liq_temp_22.3C_2nd_scan/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.655 V/m; **Power Drift = -0.00162 dB**

Averaged SAR: SAR(1g) = 1.06 W/kg; SAR(10g) = 0.633 W/kg
Maximum value of SAR (interpolated) = 1.57 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

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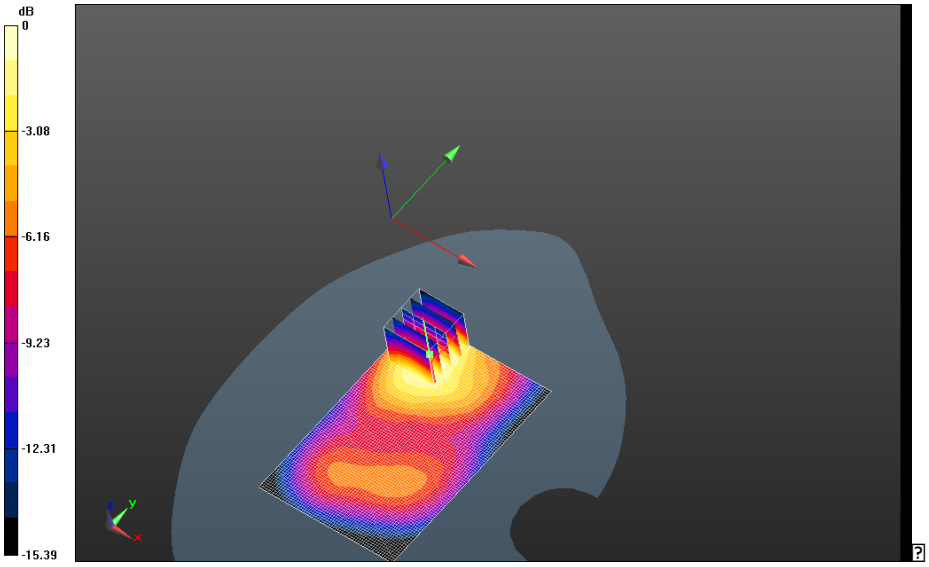
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.13 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 11.680 V/m; **Power Drift = 0.00109 dB**

Averaged SAR: SAR(1g) = 1.01 W/kg; SAR(10g) = 0.603 W/kg
Maximum value of SAR (interpolated) = 1.53 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

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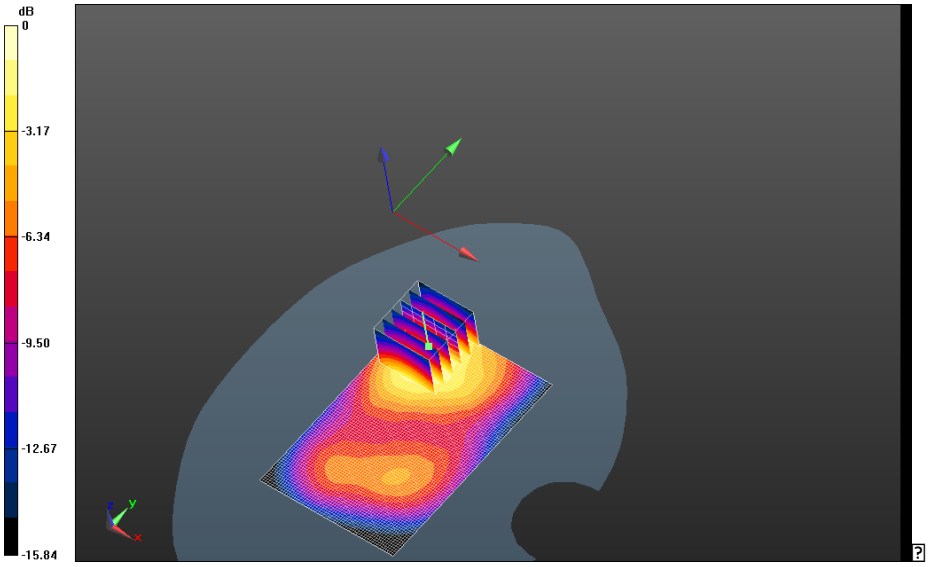
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back - UMTS_IV_High_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.18 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back - UMTS_IV_High_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (26x26x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 11.801 V/m; **Power Drift = 0.163 dB**

Averaged SAR: SAR(1g) = 1.06 W/kg; SAR(10g) = 0.625 W/kg
Maximum value of SAR (interpolated) = 1.62 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

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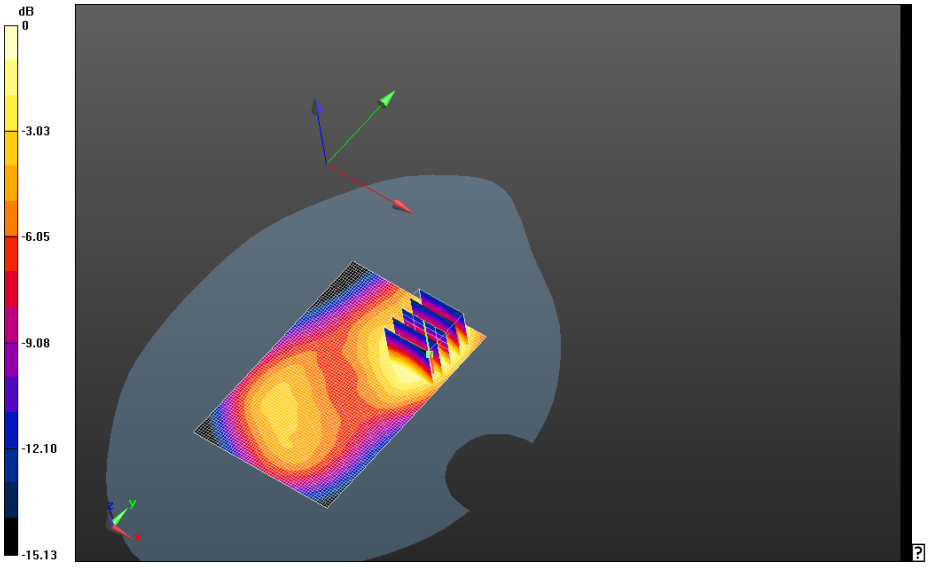
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Front - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.677 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Front - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.311 V/m; **Power Drift = 0.080 dB**

Averaged SAR: SAR(1g) = 0.604 W/kg; SAR(10g) = 0.361 W/kg
Maximum value of SAR (interpolated) = 0.941 W/kg



0 dB = 1.15 W/kg = 0.61 dBW/kg

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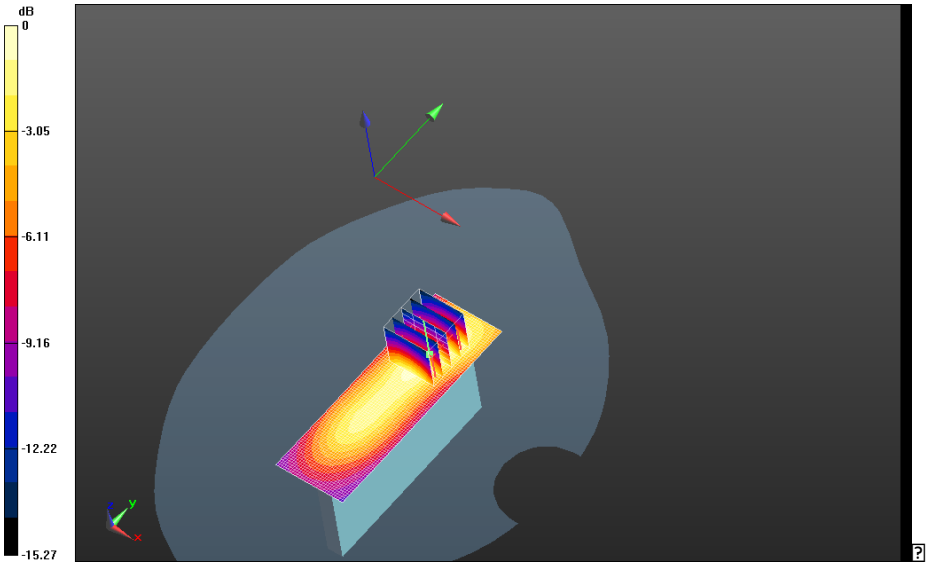
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Left - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.440 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Left - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 15.007 V/m; **Power Drift = 0.077 dB**

Averaged SAR: SAR(1g) = 0.373 W/kg; SAR(10g) = 0.217 W/kg
Maximum value of SAR (interpolated) = 0.578 W/kg



0 dB = 0.666 W/kg = -1.77 dBW/kg

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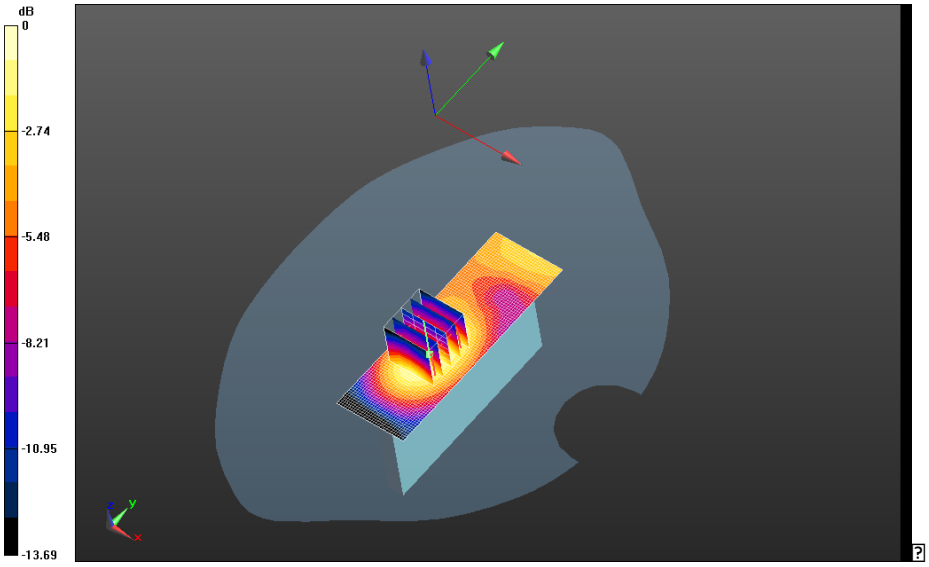
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Right - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.112 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Right - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 8.354 V/m; **Power Drift = 0.023 dB**

Averaged SAR: SAR(1g) = 0.104 W/kg; SAR(10g) = 0.0638 W/kg
Maximum value of SAR (interpolated) = 0.155 W/kg



0 dB = 0.416 W/kg = -3.81 dBW/kg

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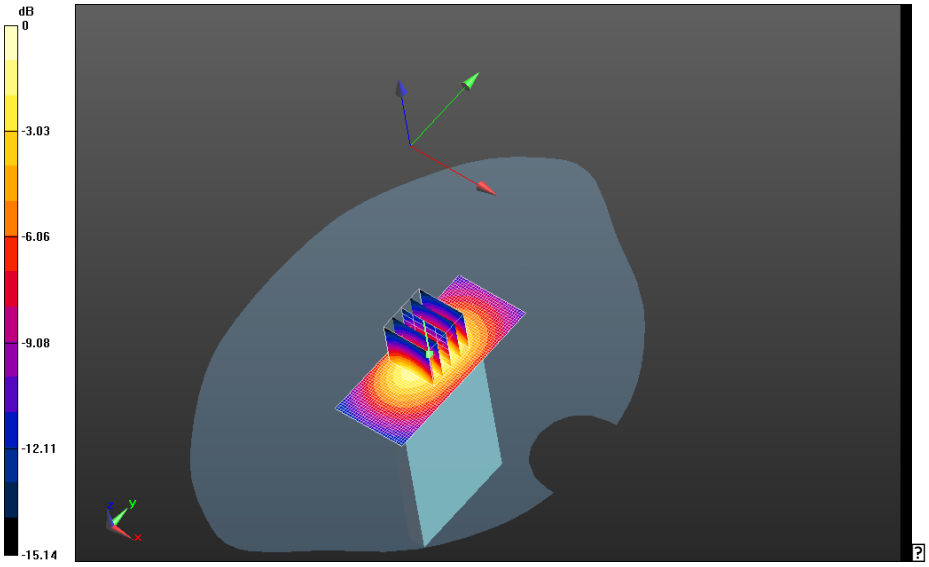
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Bottom - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.669 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Bottom - UMTS_IV_Mid_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 22.990 V/m; **Power Drift = 0.00392 dB**

Averaged SAR: SAR(1g) = 0.625 W/kg; SAR(10g) = 0.352 W/kg
Maximum value of SAR (interpolated) = 0.979 W/kg



0 dB = 0.115 W/kg = -9.39 dBW/kg

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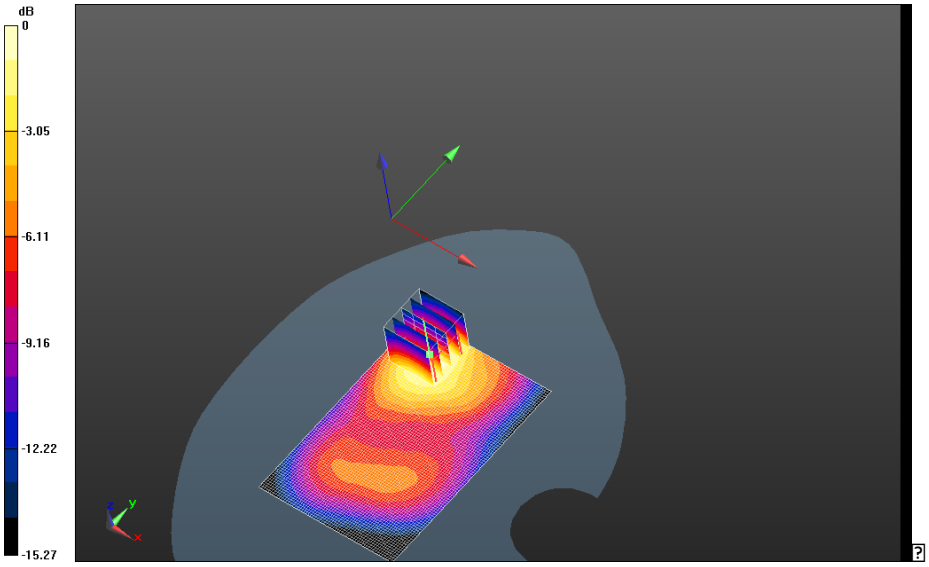
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back+HS - UMTS_IV_Low_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.12 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back+HS - UMTS_IV_Low_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.322 V/m; **Power Drift = 0.093 dB**

Averaged SAR: SAR(1g) = 1.04 W/kg; SAR(10g) = 0.616 W/kg
Maximum value of SAR (interpolated) = 1.56 W/kg



0 dB = 0.703 W/kg = -1.53 dBW/kg

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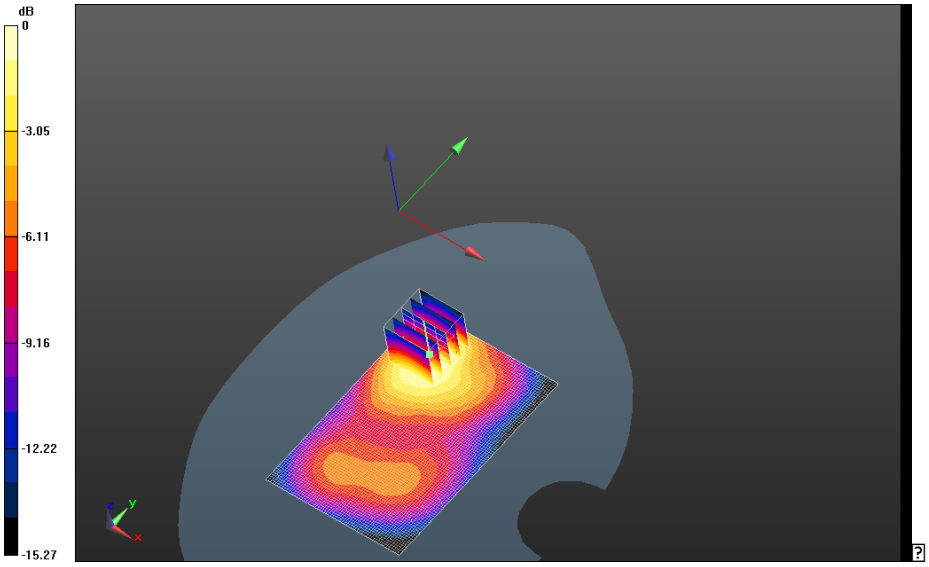
Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back+2100mA - UMTS_IV_Low_chan_amb_temp_23.2C_liq_temp_22.3C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.24 W/kg

Mobile Hot Spot MSL - UMTS Band IV/10mm Device Back+2100mA - UMTS_IV_Low_chan_amb_temp_23.2C_liq_temp_22.3C/Zoom Scan (21x21x36)/Cube 0:
Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 12.707 V/m; **Power Drift = 0.114 dB**

Averaged SAR: SAR(1g) = 1.07 W/kg; SAR(10g) = 0.640 W/kg
Maximum value of SAR (interpolated) = 1.59 W/kg



0 dB = 1.16 W/kg = 0.64 dBW/kg

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LTE 2

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Date: 2/15/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 26703205

Configuration: Mobile Hot Spot MSL - LTE Band 2

Communication System: LTE band 2; Communication System Band: LTE band 2; Frequency: 1880 MHz
Medium Parameters used: f=1880 MHz; σ = 1.527 S/m; ε_r = 50.751; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (4.75,4.75,4.75); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Mobile Hot Spot MSL - LTE Band 2/10mm Device Back - LTE_2_Mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.4_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.06 W/kg

Mobile Hot Spot MSL - LTE Band 2/10mm Device Back - LTE_2_Mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.4_liq_temp_21.2C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.844 V/m; **Power Drift = -0.016 dB**

Averaged SAR: SAR(1g) = 0.969 W/kg; SAR(10g) = 0.582 W/kg
Maximum value of SAR (interpolated) = 1.51 W/kg

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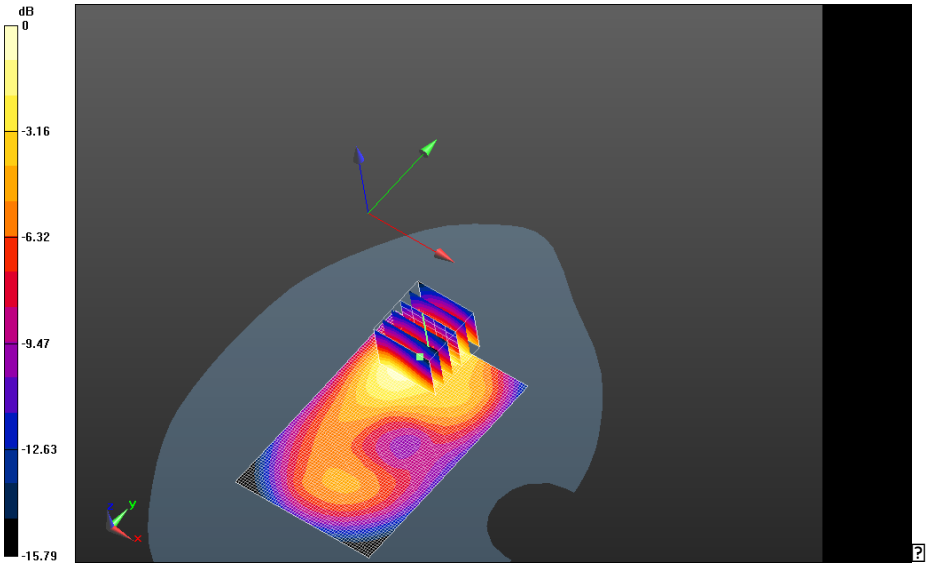

0 dB = 1.05 W/kg = 0.21 dBW/kg

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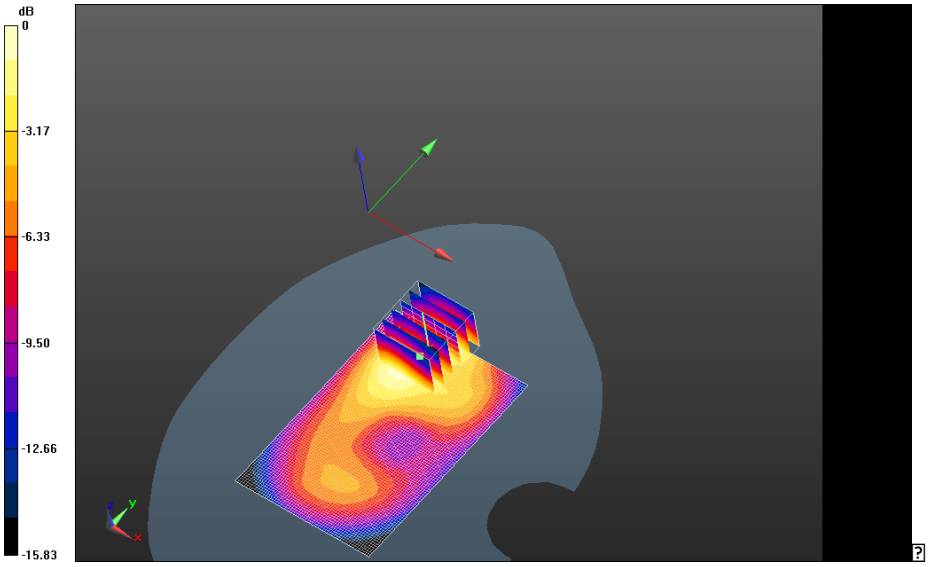
Mobile Hot Spot MSL - LTE Band 2/10mm Device Back - LTE_2_Mid_chan_QPSK_RB_1_Offset_50_amb_temp_23.4_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.10 W/kg

Mobile Hot Spot MSL - LTE Band 2/10mm Device Back - LTE_2_Mid_chan_QPSK_RB_1_Offset_50_amb_temp_23.4_liq_temp_21.2C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 11.017 V/m; **Power Drift = -0.090 dB**

Averaged SAR: SAR(1g) = 0.997 W/kg; SAR(10g) = 0.600 W/kg
Maximum value of SAR (interpolated) = 1.51 W/kg



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

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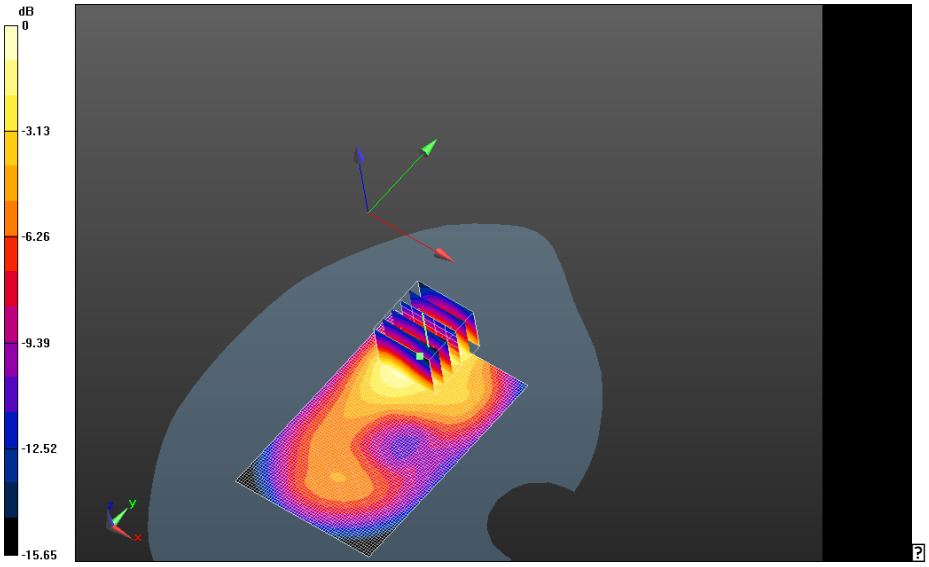
Mobile Hot Spot MSL - LTE Band 2/10mm Device Back - LTE_2_Mid_chan_QPSK_RB_1_Offset_99_amb_temp_23.4_liq_temp_21.2C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.09 W/kg

Mobile Hot Spot MSL - LTE Band 2/10mm Device Back - LTE_2_Mid_chan_QPSK_RB_1_Offset_99_amb_temp_23.4_liq_temp_21.2C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.685 V/m; **Power Drift = 0.093 dB**

Averaged SAR: SAR(1g) = 1.03 W/kg; SAR(10g) = 0.615 W/kg
Maximum value of SAR (interpolated) = 1.60 W/kg



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

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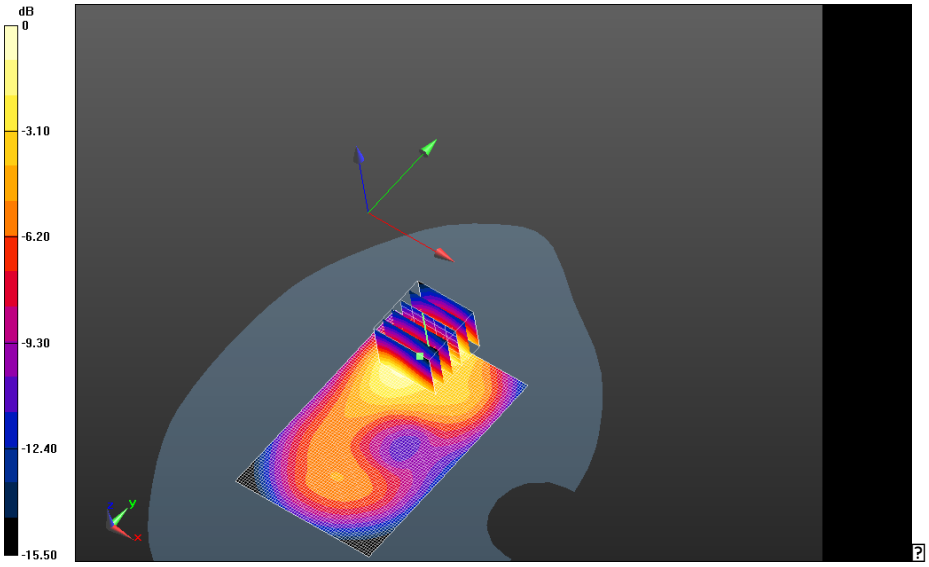
Mobile Hot Spot MSL - LTE Band 2/10mm Device Back - LTE_2_High_chan_QPSK_RB_1_Offset_0_amb_temp_23.5_liq_temp_21.5C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.07 W/kg

Mobile Hot Spot MSL - LTE Band 2/10mm Device Back - LTE_2_High_chan_QPSK_RB_1_Offset_0_amb_temp_23.5_liq_temp_21.5C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm
Reference Value = 10.748 V/m; **Power Drift = 0.029 dB**

Averaged SAR: SAR(1g) = 1.01 W/kg; SAR(10g) = 0.601 W/kg
Maximum value of SAR (interpolated) = 1.54 W/kg



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

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802.11b

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Date: 2/28/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 26703205

Configuration: Flat-Section MSL_MHS_SAR 802.11b Rev2-02

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2437 MHz
Medium Parameters used: f=2437 MHz; σ = 1.919 S/m; ε_r = 50.246; 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: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_SAR 802.11b Rev2-02/Device Back_10mm_802.11b_Chan_6_Amb_Temp_23.4C_Liquid_Temp_20.6C/Area Scan (71x101x1):
Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.702 W/kg

Flat-Section MSL_MHS_SAR 802.11b Rev2-02/Device Back_10mm_802.11b_Chan_6_Amb_Temp_23.4C_Liquid_Temp_20.6C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 6.671 V/m; **Power Drift = -0.124 dB**

Averaged SAR: SAR(1g) = 0.526 W/kg; SAR(10g) = 0.250 W/kg
Maximum value of SAR (interpolated) = 1.10 W/kg

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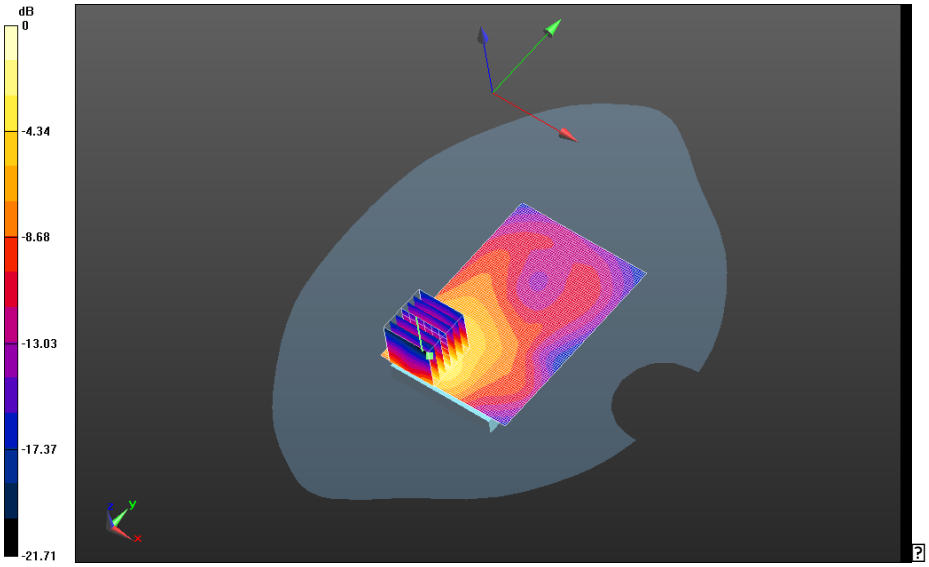

0 dB = 0.683 W/kg = -1.66 dBW/kg

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Bluetooth

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Date: 1/22/2013

Test Lab: RIM Testing Services
DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 2641D6A8

Configuration: Flat-Section MSL_MHS_SAR - 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 = 1.894 S/m; ε_r = 51.135; ρ = 1.000 g/cm^3
Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF: (4.11,4.11,4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_SAR/Device Back_10mm_Amb_Temp_24.0C_Liquid_Temp_22C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.00296 W/kg

Flat-Section MSL_MHS_SAR/Device Back_10mm_Amb_Temp_24.0C_Liquid_Temp_22C/Zoom Scan (31x36x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm
Reference Value = 0.347 V/m; **Power Drift = 0.357 dB**

Averaged SAR: SAR(1g) = 0.000870 W/kg; SAR(10g) = 0.000258 W/kg
Maximum value of SAR (interpolated) = 0.0159 W/kg

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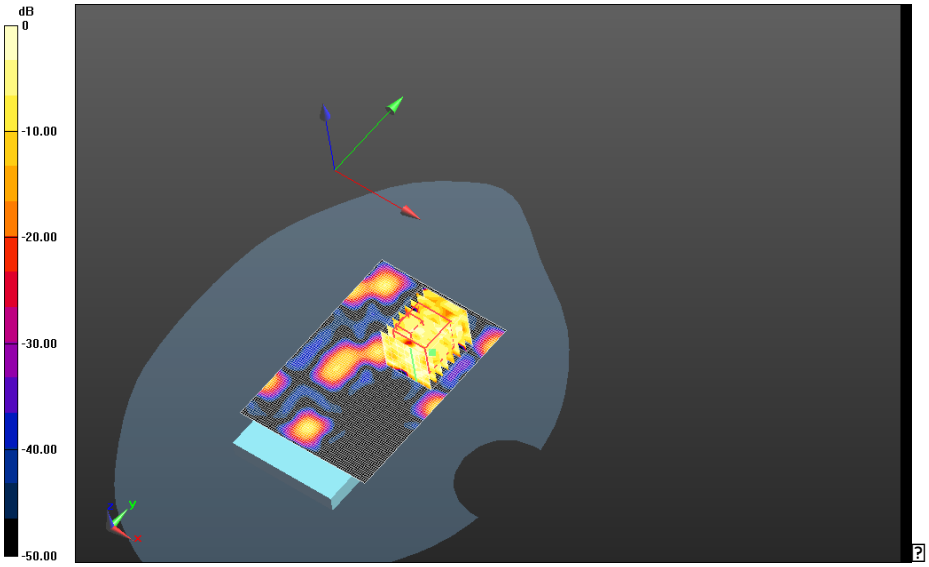

0 dB = 0.0103 W/kg = -19.87 dBW/kg

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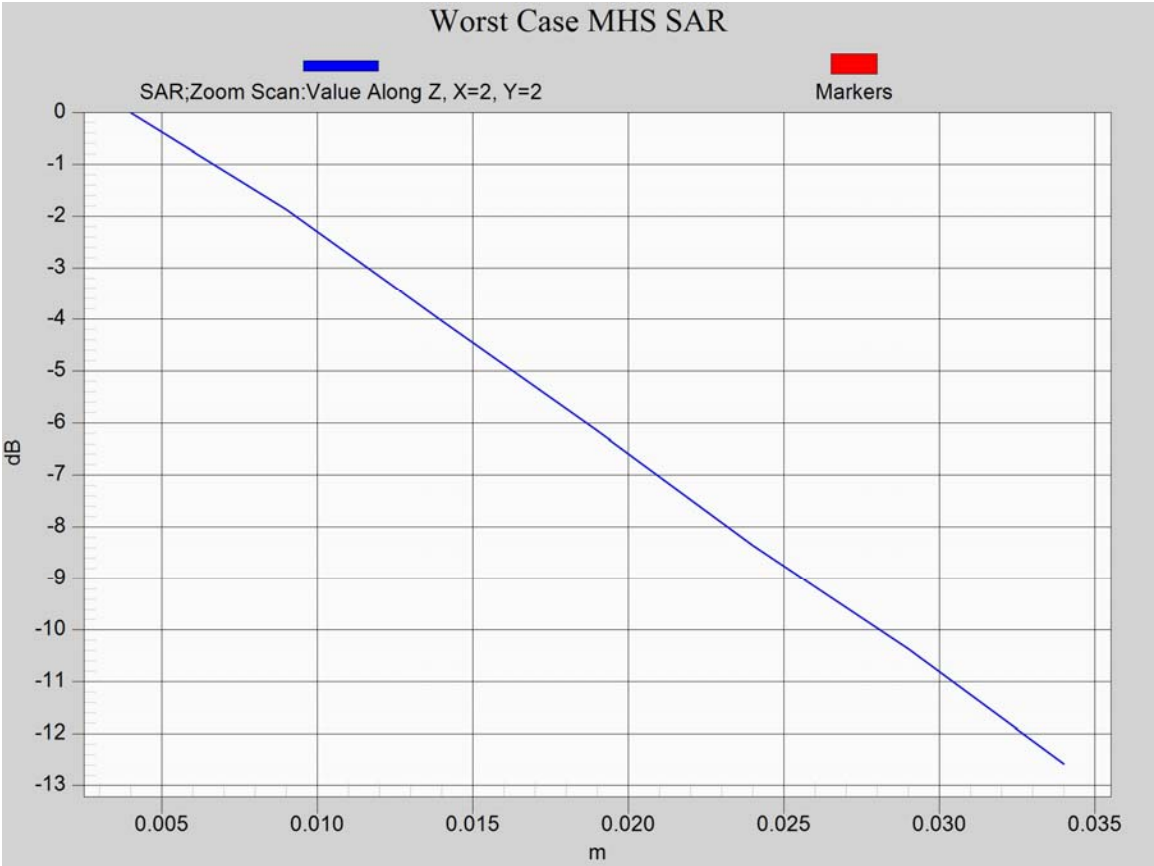
Z axis plot for the worst case hot spot configuration



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