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APPENDIX B2: VOLUME SCANS AND MULTI-BAND AVERAGE SAR DISTRIBUTION PLOTS FOR HEAD CONFIGURATION

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Test Laboratory: RIM Testing Services

Volume-

**Scan_RightHandSide_CDMA1900_low_chan_amb_temp_23.2C_liq_tem
p_21.4C_Single Layer**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 297DF9E4

Communication System: CDMA 1900; Frequency: 1851.25 MHz

Medium parameters used (interpolated): $f = 1851.25$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 39.68$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(5.1, 5.1, 5.1); Calibrated: 11/15/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 32.7$
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position - Volume Scan/Volume Scan

(13x15x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm


Reference Value = 12.750 V/m; Power Drift = 0.05 dB

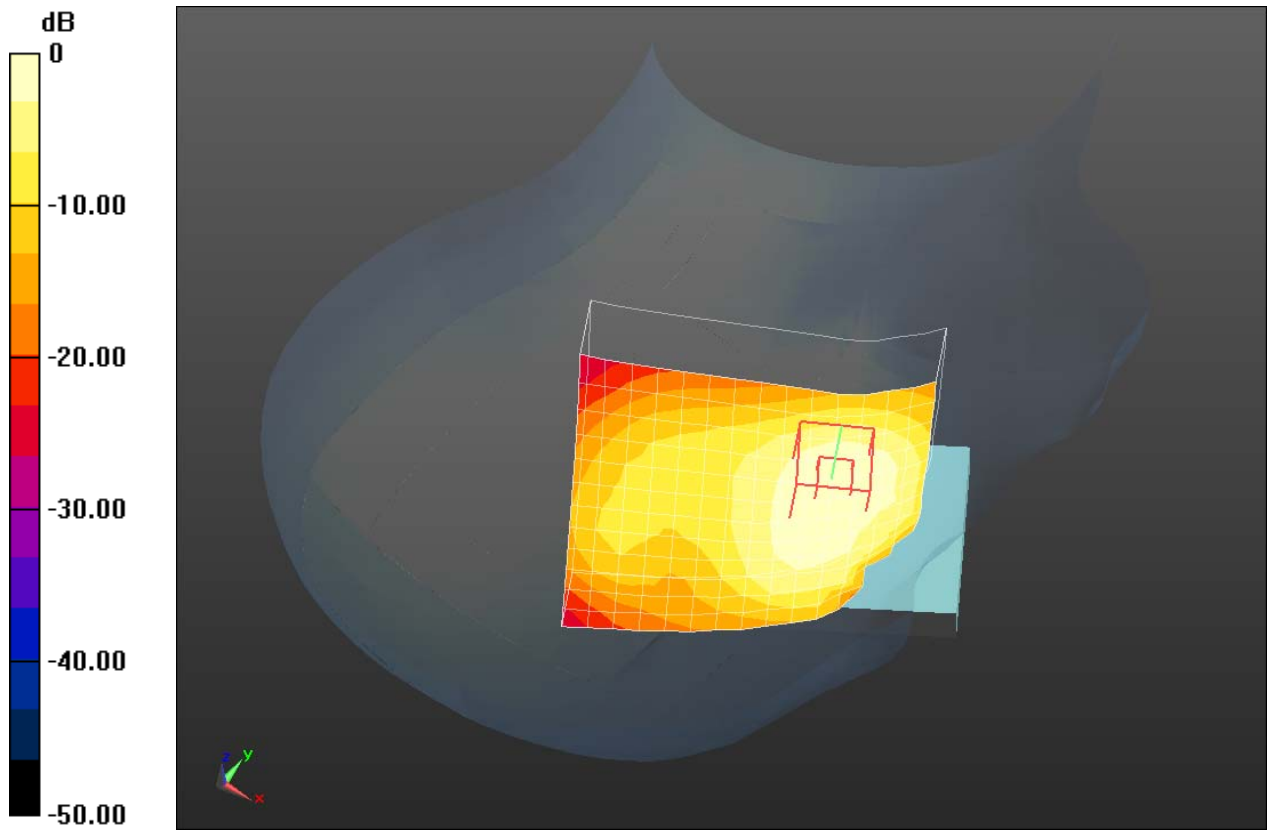
Peak SAR (extrapolated) = 1.9690

SAR(1 g) = 1.47 mW/g; SAR(10 g) = 0.921 mW/g


[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.584 mW/g

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0 dB = 1.580mW/g = 3.97 dB mW/g

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Date/Time: 3/5/2012 1:18:31 PM

Test Laboratory: RIM Testing Services

Volume-

**Scan_RightHandSide_CDMA1900_low_chan_amb_temp_23.2C_liq_tem
p_21.4C_Multiple Layers**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 297DF9E4

Communication System: CDMA 1900; Frequency: 1851.25 MHz
Medium parameters used (interpolated): $f = 1851.25$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 39.68$; $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ET3DV6 - SN1644; ConvF(5.1, 5.1, 5.1); Calibrated: 11/15/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 32.7$
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position - Volume Scan/Volume Scan

(13x15x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm


Reference Value = 12.750 V/m; Power Drift = 0.05 dB

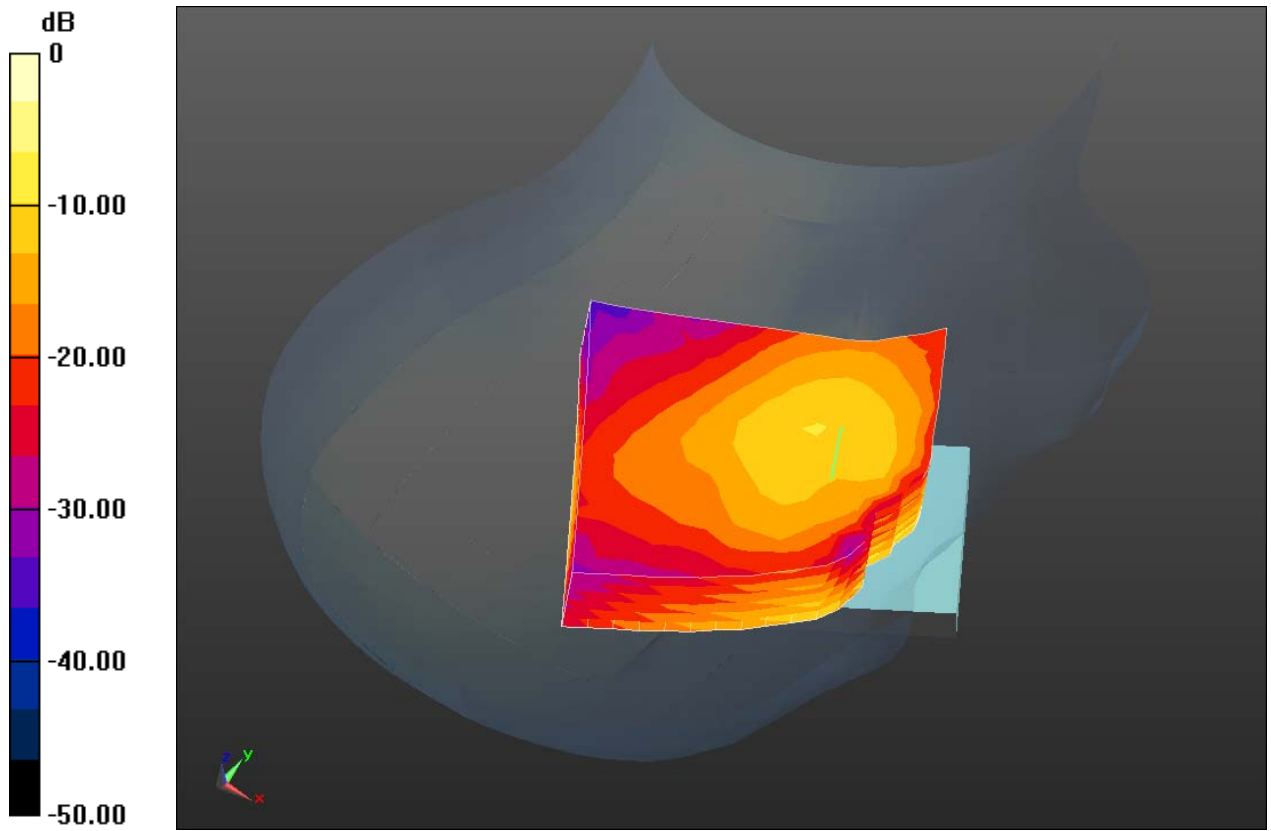
Peak SAR (extrapolated) = 1.9690

SAR(1 g) = 1.47 mW/g; SAR(10 g) = 0.921 mW/g


[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.584 mW/g

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0 dB = 1.580mW/g = 3.97 dB mW/g

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Date/Time: 3/6/2012 4:26:56 PM

Test Laboratory: RIM Testing Services

**Volume_Scan_RightHandSide_802.11b_low_chan_amb_temp_22.4C_li
q_temp_20.6C_Single Layer**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 297DF9E4

Communication System: 802.11 b (2450); Frequency: 2412 MHz
Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.812$ mho/m; $\epsilon_r = 37.761$; $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:


- Probe: ES3DV3 - SN3225; ConvF(4.5, 4.5, 4.5); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 32.0$
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.0(692); SEMCAD X 14.6.4(4989)

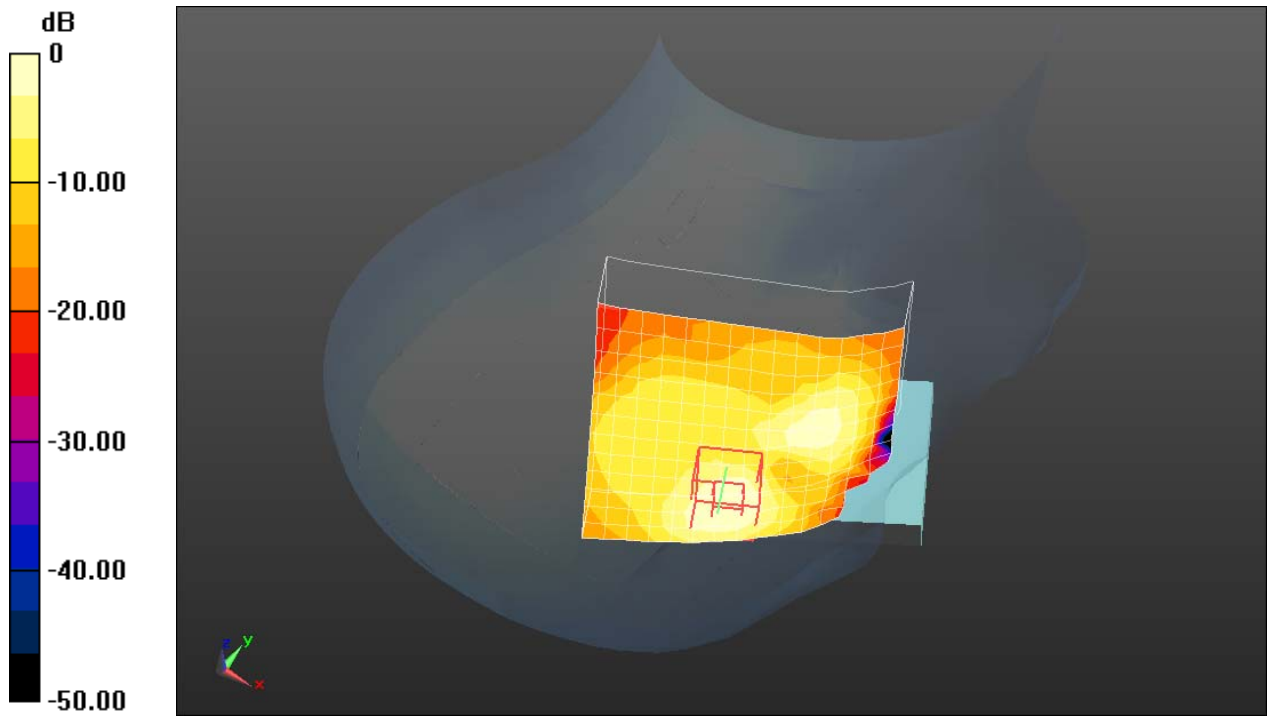
Configuration/Touch position - Volume Scan/Volume Scan

(13x15x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 5.331 V/m; Power Drift = 0.20 dB
Peak SAR (extrapolated) = 0.3930
SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.091 mW/g


[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.229 mW/g

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0 dB = 0.230mW/g = -12.77 dB mW/g

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Date/Time: 3/6/2012 4:26:56 PM

Test Laboratory: RIM Testing Services

**Volume_Scan_RightHandSide_802.11b_low_chan_amb_temp_22.4C_li
q_temp_20.6C_Multiple Layers**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 297DF9E4

Communication System: 802.11 b (2450); Frequency: 2412 MHz
Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.812$ mho/m; $\epsilon_r = 37.761$; $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:


- Probe: ES3DV3 - SN3225; ConvF(4.5, 4.5, 4.5); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 32.0$
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS 52.8.0(692); SEMCAD X 14.6.4(4989)

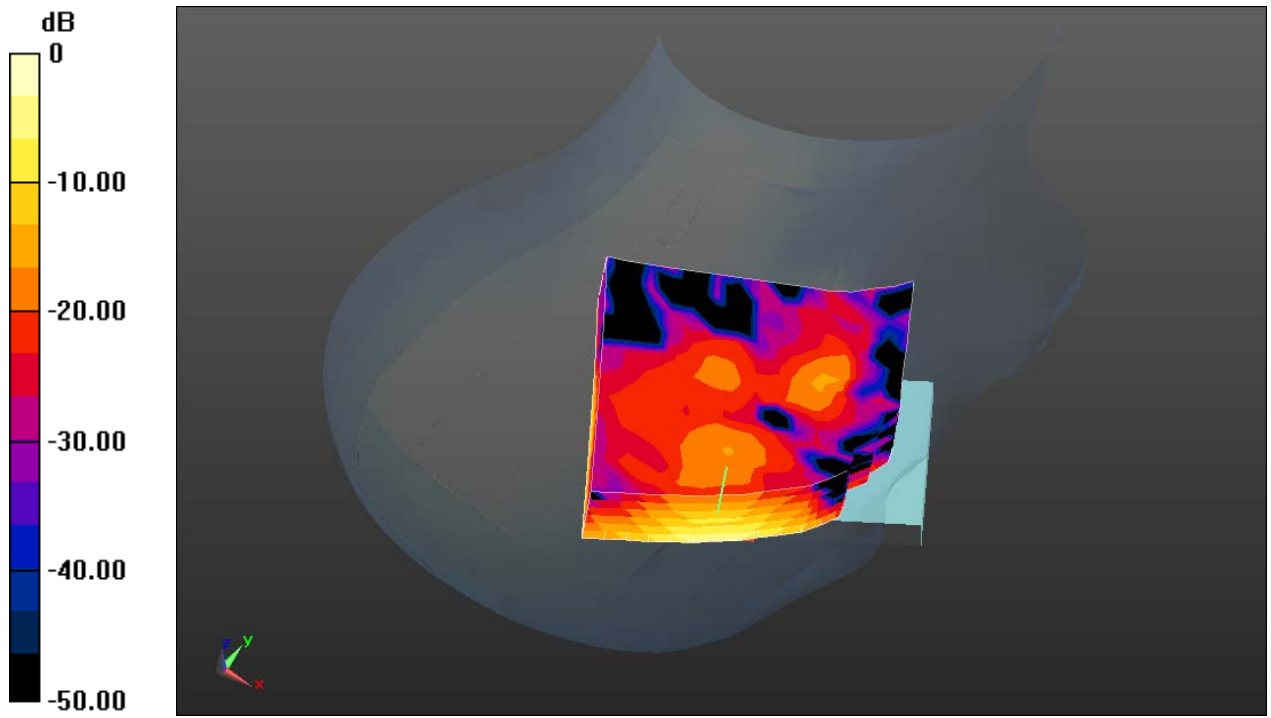
Configuration/Touch position - Volume Scan/Volume Scan

(13x15x7)/Cube 0: Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 5.331 V/m; Power Drift = 0.20 dB
Peak SAR (extrapolated) = 0.3930
SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.091 mW/g


[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.229 mW/g

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0 dB = 0.230mW/g = -12.77 dB mW/g

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Multiband_CDMA_WiFi

Multi-Band Configurations:

DASY Configuration for Configuration/Touch position - Volume Scan/Volume Scan:

Date/Time: 3/5/2012 1:18:31 PM

Test Laboratory: RIM Testing Services

File Name: [Volume-](#)

[Scan_RightHandSide_CDMA1900_low_chan_amb_temp_23.2C_liq_temp_21.4C.da52:0](#)

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 297DF9E4

Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1;

Medium: HSL1900 Medium parameters used (interpolated): $f = 1851.25$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 39.68$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: ET3DV6 - SN1644; ConvF(5.1, 5.1, 5.1); Calibrated: 11/15/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY52, Version 52.8 (0)

DASY Configuration for Configuration/Touch position - Volume Scan/Volume Scan:

Date/Time: 3/6/2012 4:26:56 PM

Test Laboratory: RIM Testing Services


File Name:

[Volume Scan_RightHandSide_802.11b_low_chan_amb_temp_22.4C_liq_temp_20.6C.da52:0](#)

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 297DF9E4

Communication System: 802.11 b (2450); Frequency: 2412 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL2450 Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.812$ mho/m; $\epsilon_r = 37.761$; $\rho = 1000$ kg/m³

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Phantom section: Right Section

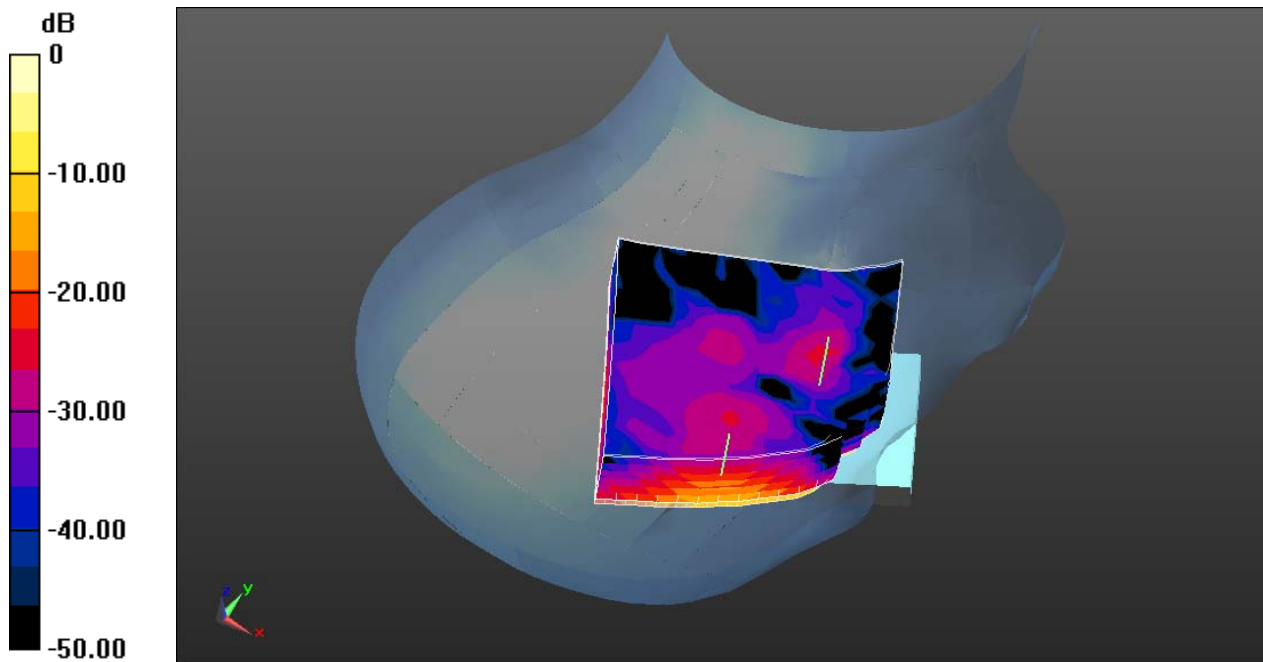
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: ES3DV3 - SN3225; ConvF(4.5, 4.5, 4.5); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY52, Version 52.8 (0)


Multi Band Result:

SAR(1 g) = 1.58 mW/g; SAR(10 g) = 0.981 mW/g

Maximum value of SAR (interpolated) = 2.127 mW/g



0 dB = 2.130mW/g = 6.57 dB mW/g

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Multiband_CDMA_WiFi

Multi-Band Configurations:

DASY Configuration for Configuration/Touch position - Volume Scan/Volume Scan:

Date/Time: 3/5/2012 1:18:31 PM

Test Laboratory: RIM Testing Services

File Name: [Volume-](#)

[Scan_RightHandSide_CDMA1900_low_chan_amb_temp_23.2C_liq_temp_21.4C.da52:0](#)

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 297DF9E4

Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1851.25 \text{ MHz}$; $\sigma = 1.35 \text{ mho/m}$; $\epsilon_r = 39.68$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: ET3DV6 - SN1644; ConvF(5.1, 5.1, 5.1); Calibrated: 11/15/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY52, Version 52.8 (0)

DASY Configuration for Configuration/Touch position - Volume Scan/Volume Scan:

Date/Time: 3/6/2012 4:26:56 PM

Test Laboratory: RIM Testing Services


File Name:

[Volume Scan_RightHandSide 802.11b_low_chan_amb_temp_22.4C_liq_temp_20.6C.da52:0](#)

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 297DF9E4

Communication System: 802.11 b (2450); Frequency: 2412 MHz; Duty Cycle: 1:1; PMF: 1

Medium: HSL2450 Medium parameters used (interpolated): $f = 2412 \text{ MHz}$; $\sigma = 1.812 \text{ mho/m}$; $\epsilon_r = 37.761$; $\rho = 1000 \text{ kg/m}^3$

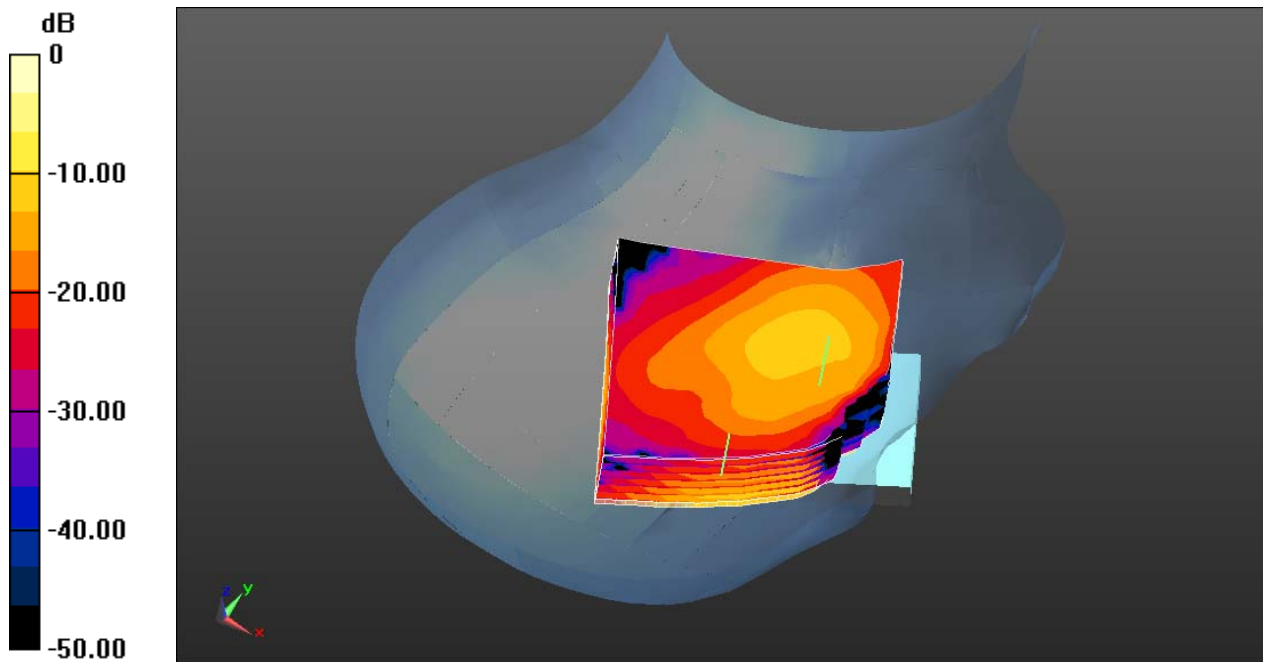
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| | Author Data Andrew Becker | Dates of Test February 23 – March 6 , 2012 | Test Report No RTS-5994-1203-47 | FCC ID: L6AREY20CW |

Phantom section: Right Section
 Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: ES3DV3 - SN3225; ConvF(4.5, 4.5, 4.5); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY52, Version 52.8 (0)

Multi Band Result:

SAR(1 g) = 1.58 mW/g; SAR(10 g) = 0.981 mW/g
 Maximum value of SAR (interpolated) = 2.127 mW/g



0 dB = 2.130mW/g = 6.57 dB mW/g

SEMCAD X Version 14.6.4 (4989)

SEMCAD X Version 14.6.4 (4989)