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APPENDIX B1: SAR DISTRIBUTION PLOTS FOR HEAD CONFIGURATION

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Date/Time: 3/12/2012 10:34:53 AM

Test Laboratory: RIM Testing Services

RightHandSide_CDMA1700_low_chan_amb_temp_23.1C_liq_temp_21.2C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 331CEAA2

Communication System: CDMA AWS 1700; Frequency: 1711.25 MHz

Medium parameters used (interpolated): $f = 1711.25$ MHz; $\sigma = 1.377$ mho/m; $\epsilon_r = 41.054$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.23, 5.23, 5.23); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- 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 -/Area Scan (51x81x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 1.661 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.378 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 2.1480

SAR(1 g) = 1.45 mW/g; SAR(10 g) = 0.872 mW/g

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

Maximum value of SAR (measured) = 1.689 mW/g

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Configuration/Touch position -/Zoom Scan 2 (5x5x7) (8x7x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

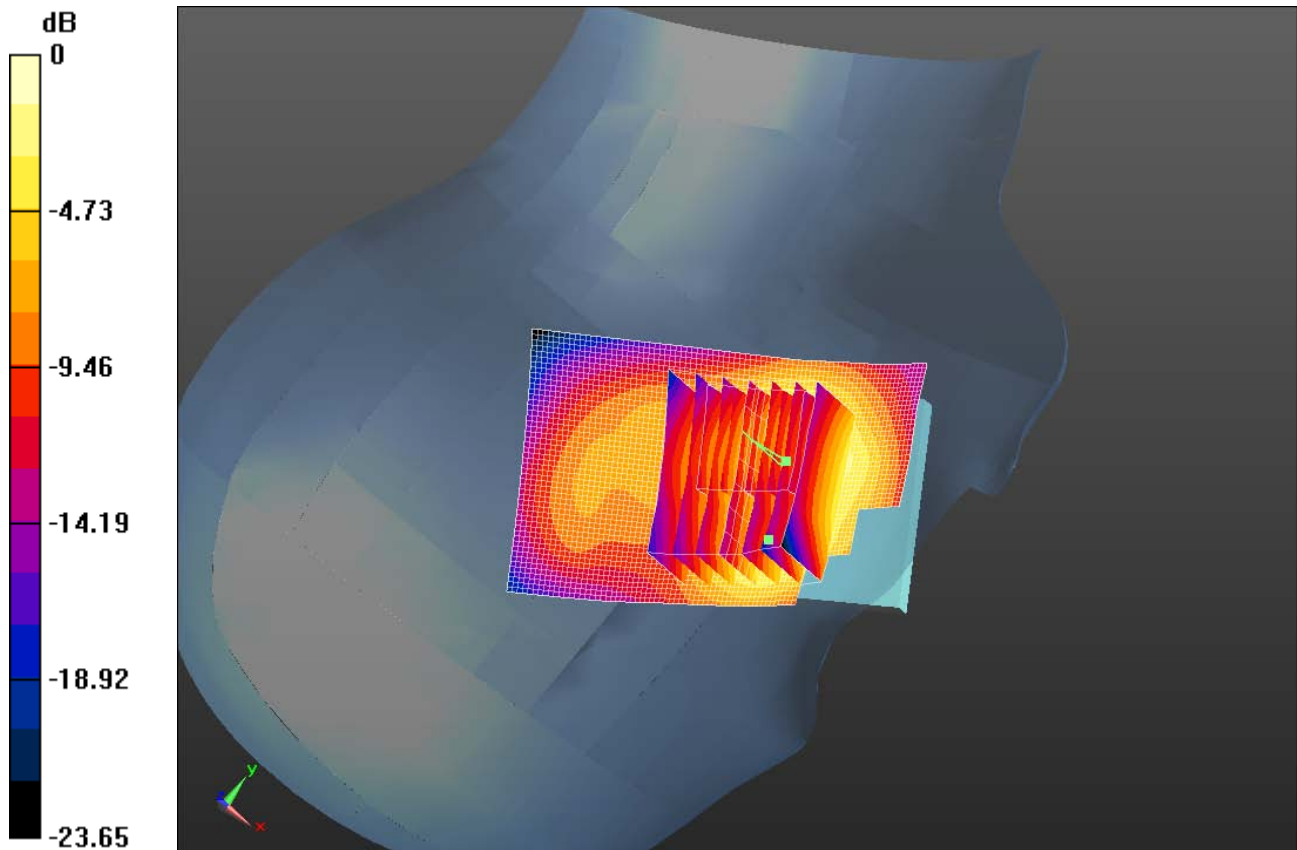
Reference Value = 13.378 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 2.1780

SAR(1 g) = 1.46 mW/g; SAR(10 g) = 0.873 mW/g

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

Maximum value of SAR (measured) = 1.612 mW/g



0 dB = 1.610mW/g = 4.14 dB mW/g

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Date/Time: 3/12/2012 11:55:49 AM

Test Laboratory: RIM Testing Services

RightHandSide_CDMA1700_mid_chan_amb_temp_23.4C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 331CEAA2

Communication System: CDMA AWS 1700; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 41.029$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.23, 5.23, 5.23); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- 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 -/Area Scan (51x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.726 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 14.596 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 2.2010

SAR(1 g) = 1.48 mW/g; SAR(10 g) = 0.887 mW/g

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

Maximum value of SAR (measured) = 1.719 mW/g

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Configuration/Touch position -/Zoom Scan 2 (5x5x7) (7x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

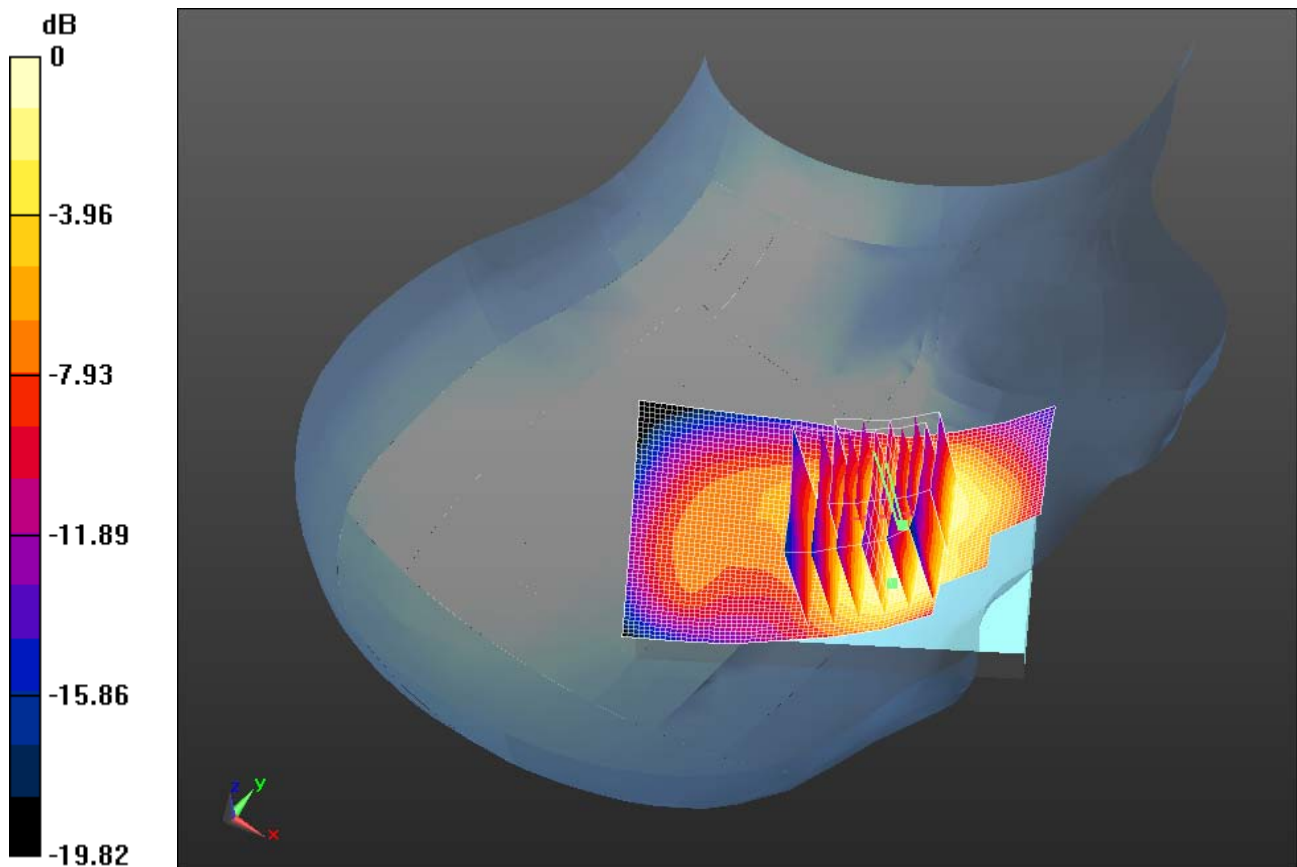
Reference Value = 14.596 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 2.1490

SAR(1 g) = 1.46 mW/g; SAR(10 g) = 0.880 mW/g

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

Maximum value of SAR (measured) = 1.655 mW/g



0 dB = 1.660mW/g = 4.40 dB mW/g

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Date/Time: 3/12/2012 1:13:42 PM

Test Laboratory: RIM Testing Services

RightHandSide_CDMA1700_high_chan_amb_temp_23.4C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 331CEAA2

Communication System: CDMA AWS 1700; Frequency: 1753.75 MHz

Medium parameters used (interpolated): $f = 1753.75 \text{ MHz}$; $\sigma = 1.416 \text{ mho/m}$; $\epsilon_r = 40.889$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.23, 5.23, 5.23); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- 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 -/Area Scan (51x81x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 1.736 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.924 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.2430

SAR(1 g) = 1.5 mW/g; SAR(10 g) = 0.892 mW/g

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

Maximum value of SAR (measured) = 1.762 mW/g

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Configuration/Touch position -/Zoom Scan 2 (5x5x7) (7x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

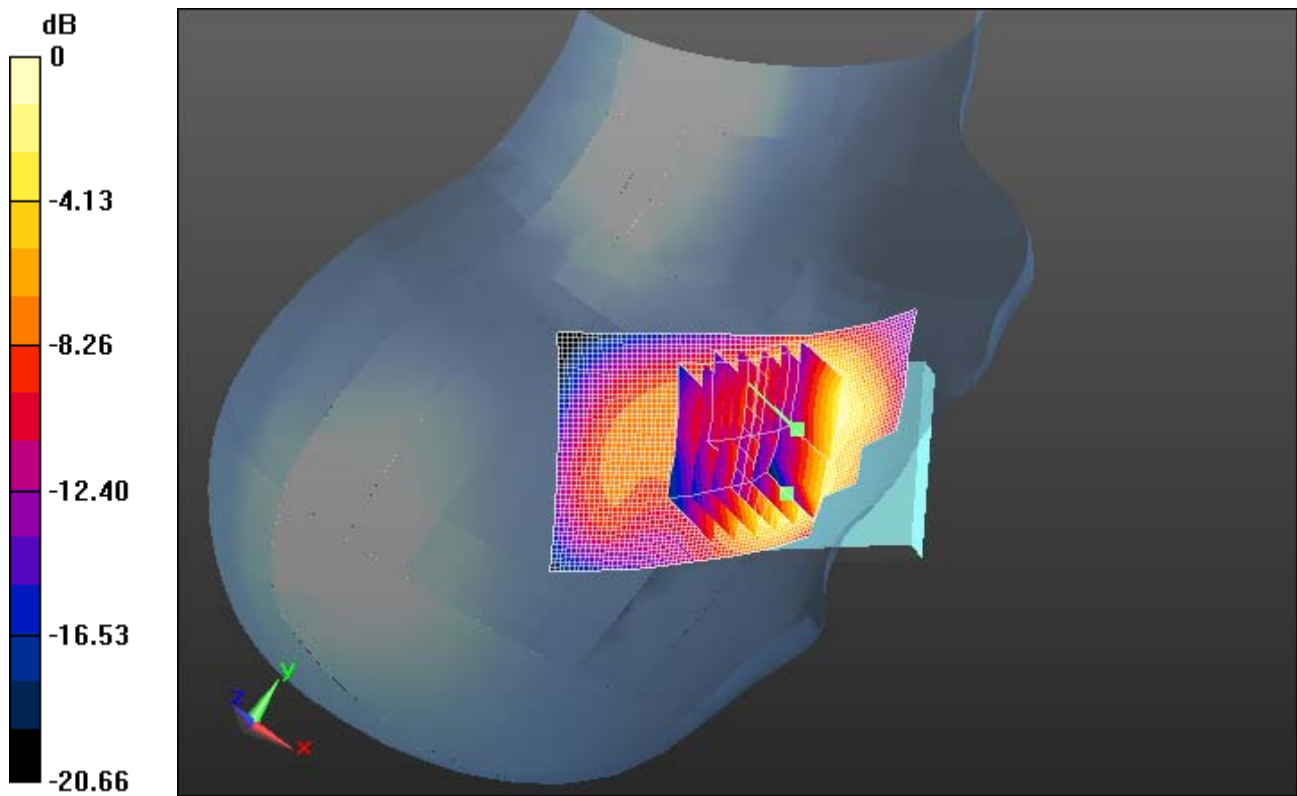
Reference Value = 13.924 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.2450

SAR(1 g) = 1.5 mW/g; SAR(10 g) = 0.889 mW/g

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

Maximum value of SAR (measured) = 1.707 mW/g



0 dB = 1.710mW/g = 4.66 dB mW/g

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Date/Time: 3/9/2012 6:16:45 PM

Test Laboratory: RIM Testing Services

RightHandSide_Tilt_CDMA1700_mid_chan_amb_temp_22.7C_liq_temp_20.4C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 331CEAA2

Communication System: CDMA AWS 1700; Frequency: 1732.5 MHz
Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.407$ mho/m; $\epsilon_r = 40.361$;
 $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.23, 5.23, 5.23); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- 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/Tilt position -/Area Scan (51x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.573 mW/g

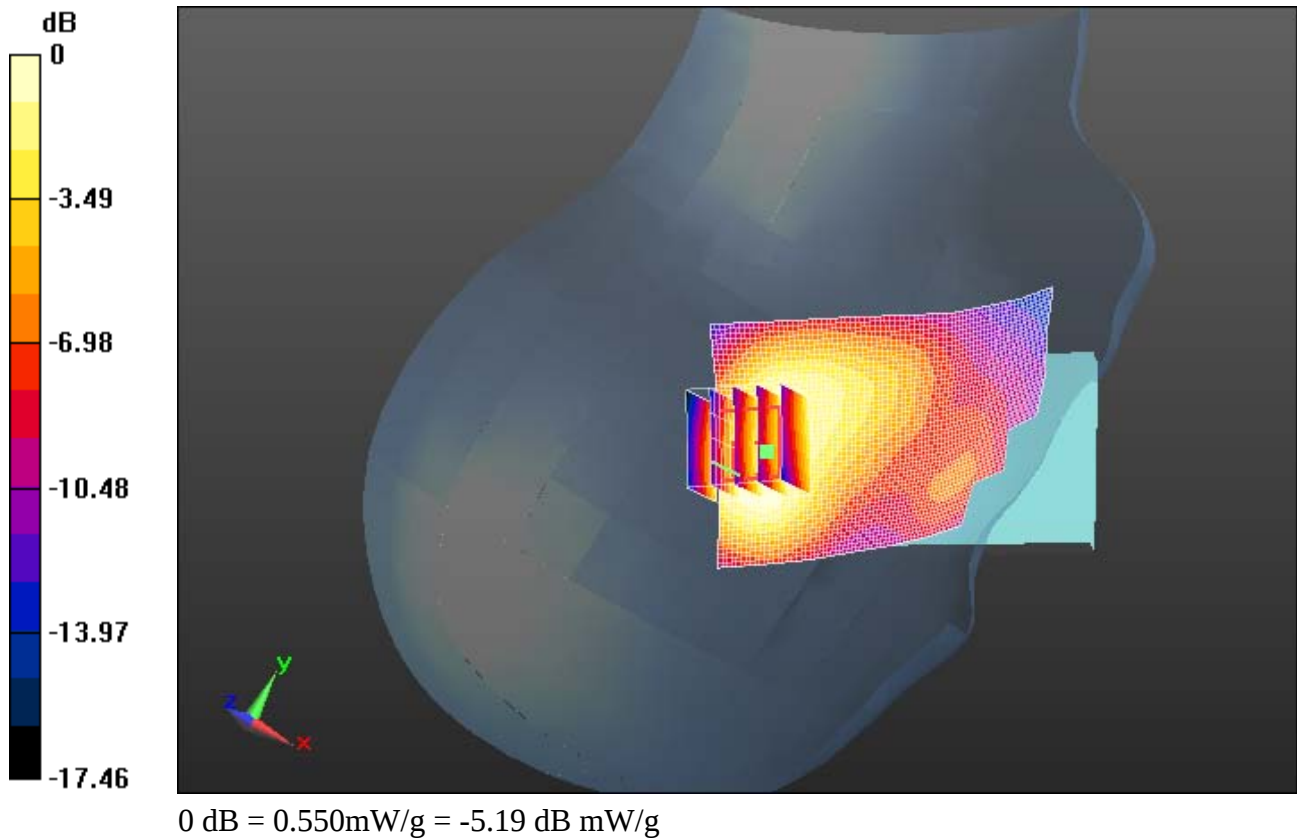
Configuration/Tilt position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 20.465 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.7280
SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.302 mW/g

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

Maximum value of SAR (measured) = 0.545 mW/g

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Date/Time: 3/9/2012 4:44:10 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_CDMA1700_low_chan_amb_temp_22.7C_liq_temp_20.3
C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 331CEAA2

Communication System: CDMA AWS 1700; Frequency: 1711.25 MHz

Medium parameters used (interpolated): $f = 1711.25$ MHz; $\sigma = 1.388$ mho/m; $\epsilon_r = 40.461$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.23, 5.23, 5.23); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- DASYS52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (51x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.455 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.164 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.9030

SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.711 mW/g

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

Maximum value of SAR (measured) = 1.432 mW/g

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Configuration/Touch position -/Zoom Scan 2 (5x5x7) (8x7x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

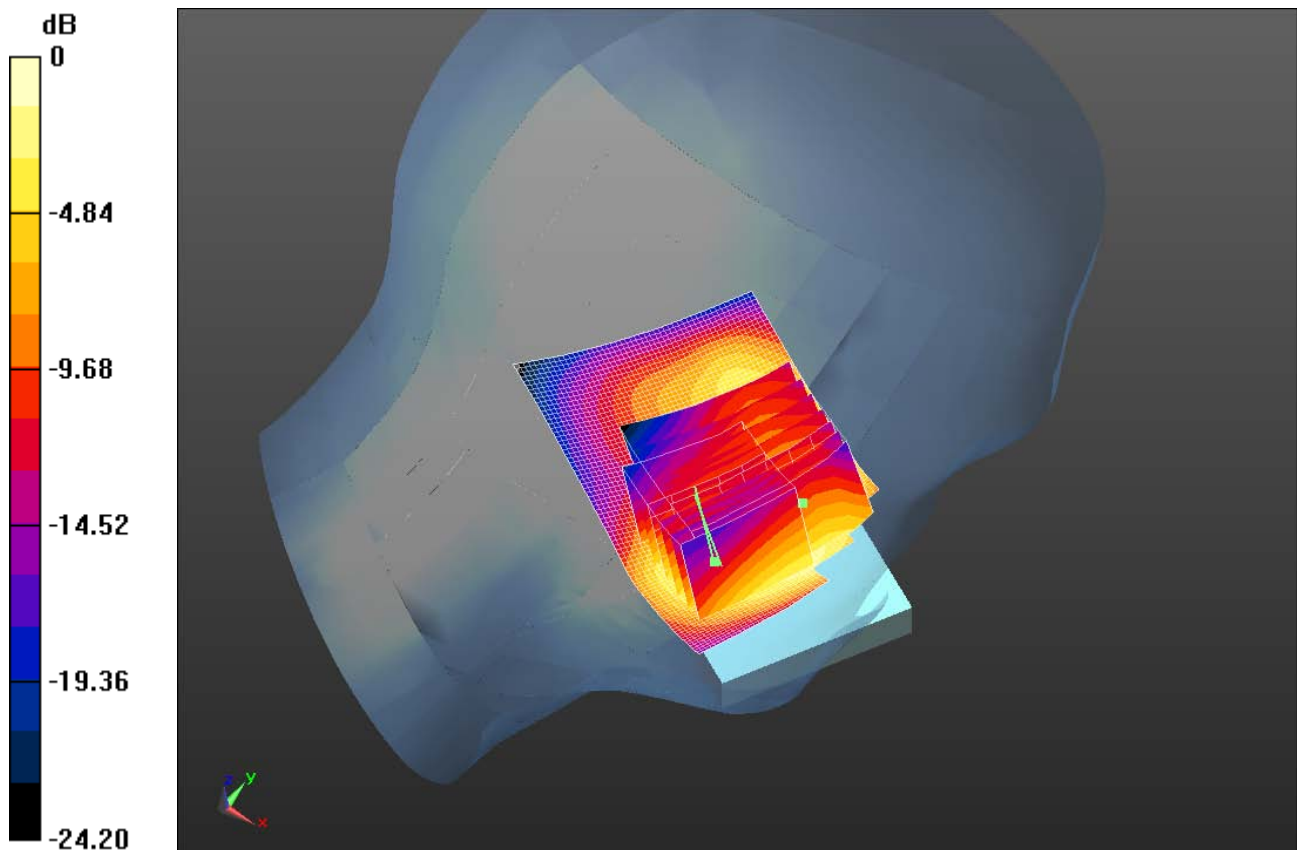
Reference Value = 12.164 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.8760

SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.704 mW/g

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

Maximum value of SAR (measured) = 1.423 mW/g



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

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Date/Time: 3/9/2012 4:11:27 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_CDMA1700_mid_chan_amb_temp_22.7C_liq_temp_20.3
C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 331CEAA2

Communication System: CDMA AWS 1700; Frequency: 1732.5 MHz
Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.407$ mho/m; $\epsilon_r = 40.361$;
 $\rho = 1000$ kg/m³
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.23, 5.23, 5.23); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- 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 -/Area Scan (51x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.560 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.545 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 2.0090
SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.757 mW/g

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

Maximum value of SAR (measured) = 1.520 mW/g

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Configuration/Touch position -/Zoom Scan 2 (5x5x7) (8x7x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

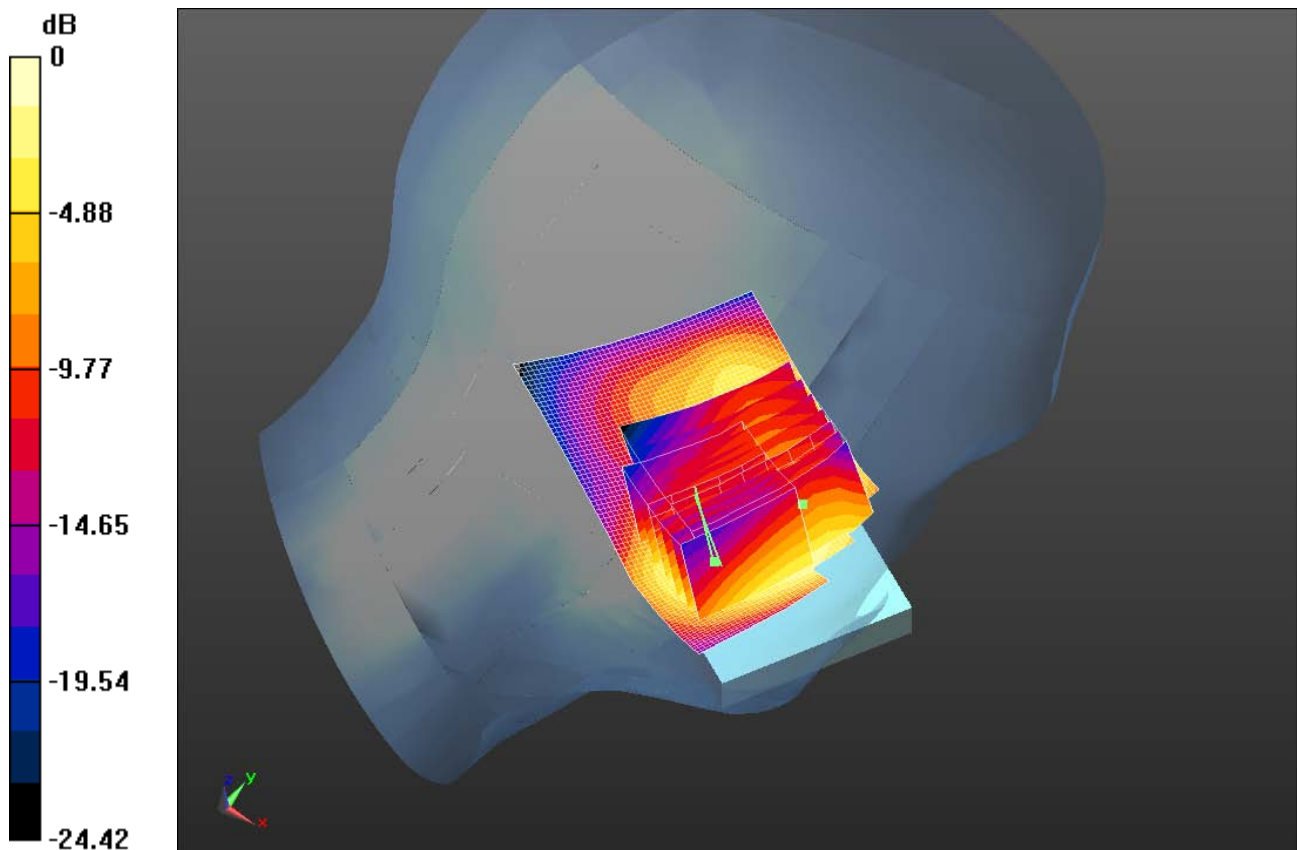
Reference Value = 12.545 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 2.0210

SAR(1 g) = 1.27 mW/g; SAR(10 g) = 0.748 mW/g

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

Maximum value of SAR (measured) = 1.504 mW/g



0 dB = 1.500mW/g = 3.52 dB mW/g

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Date/Time: 3/9/2012 5:14:29 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_CDMA1700_high_chan_amb_temp_22.7C_liq_temp_20.3
C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 331CEAA2

Communication System: CDMA AWS 1700; Frequency: 1753.75 MHz

Medium parameters used (interpolated): $f = 1753.75$ MHz; $\sigma = 1.429$ mho/m; $\epsilon_r = 40.253$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.23, 5.23, 5.23); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- 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 -/Area Scan (51x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.493 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.133 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.9380

SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.727 mW/g

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

Maximum value of SAR (measured) = 1.451 mW/g

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Configuration/Touch position -/Zoom Scan 2 (5x5x7) (8x7x7)/Cube 0:

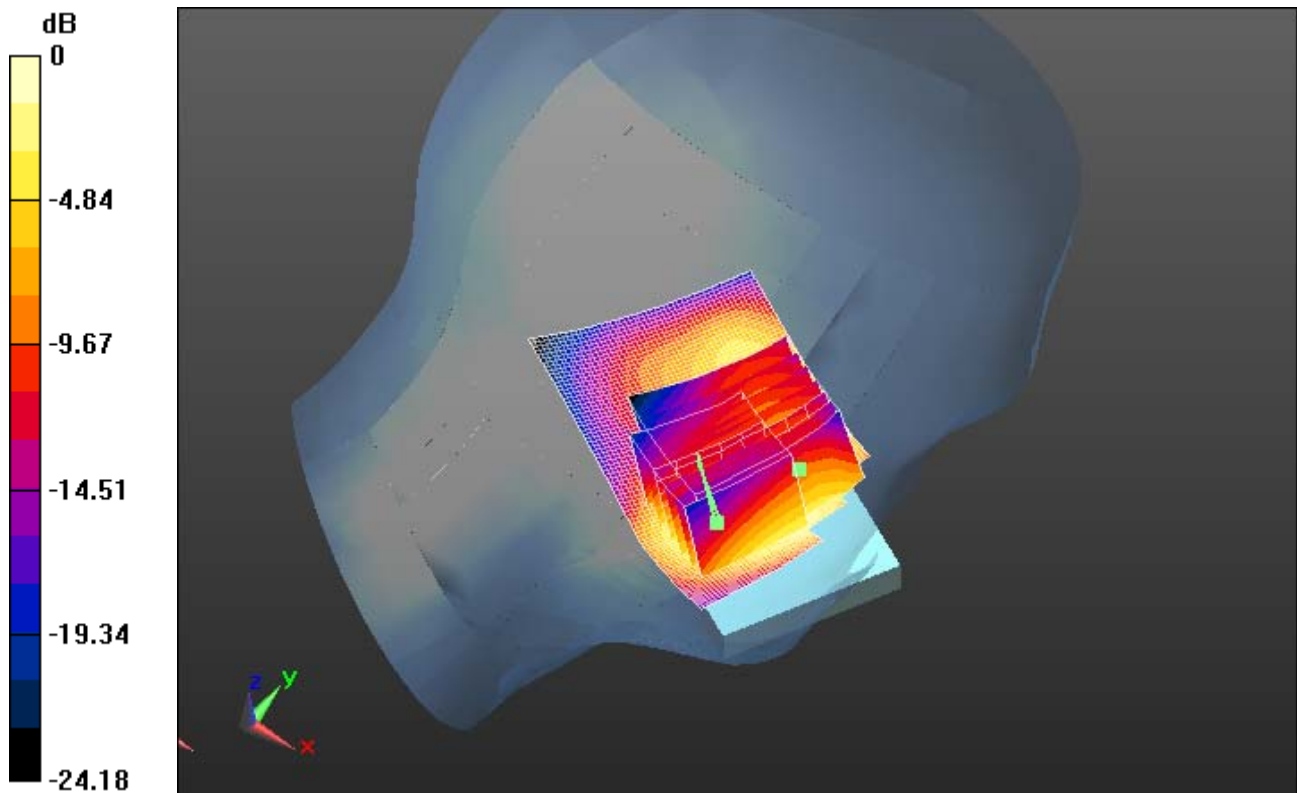
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.133 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.9310

SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.723 mW/g

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



0 dB = 1.450mW/g = 3.23 dB mW/g

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Date/Time: 3/9/2012 5:54:00 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_Tilt_CDMA1700_mid_chan_amb_temp_22.7C_liq_temp_2
0.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 331CEAA2

Communication System: CDMA AWS 1700; Frequency: 1732.5 MHz
Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.407$ mho/m; $\epsilon_r = 40.361$;
 $\rho = 1000$ kg/m³
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(5.23, 5.23, 5.23); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- 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/Tilt position -/Area Scan (51x81x1): Measurement grid:
dx=15mm, dy=15mm

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

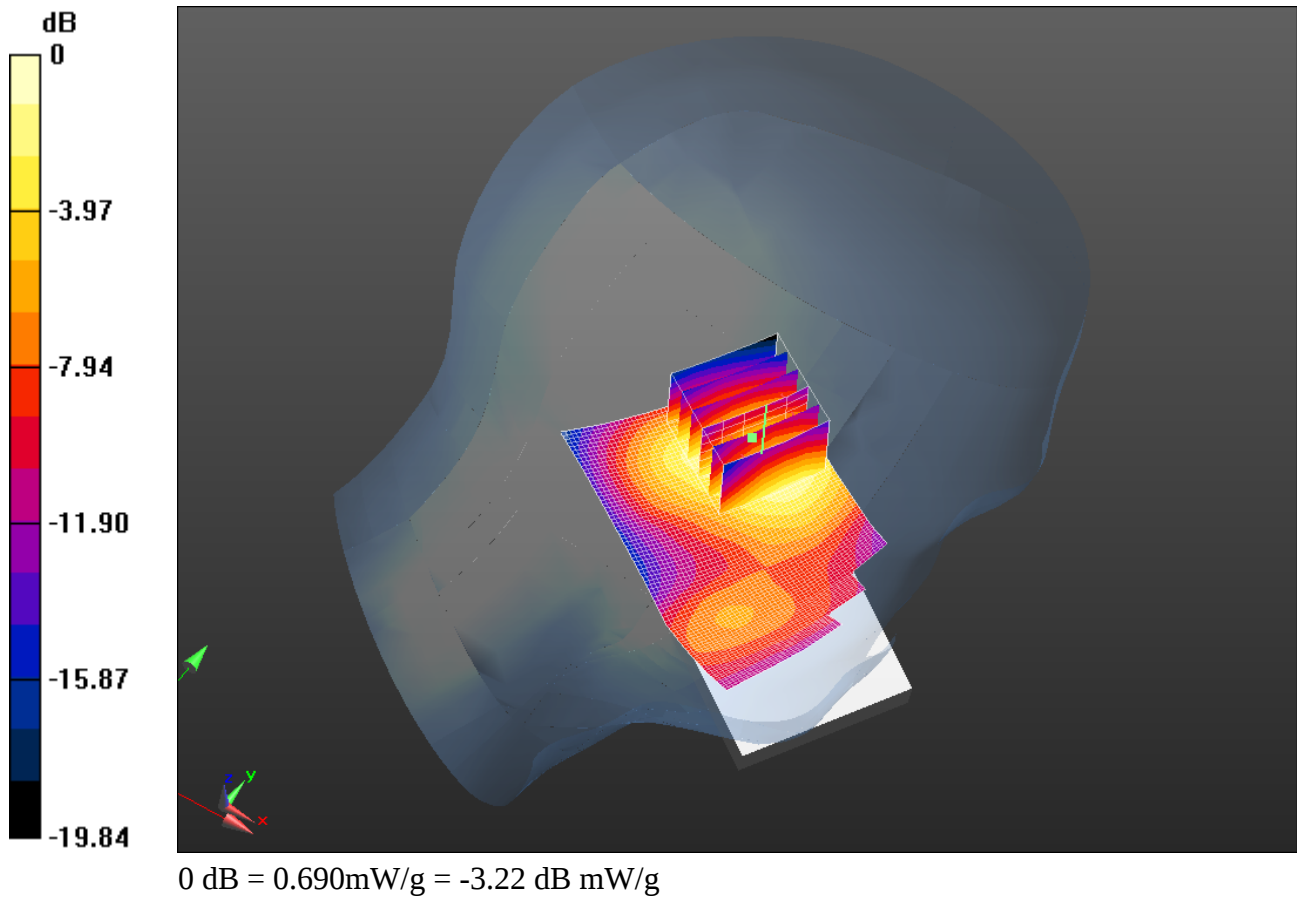
Maximum value of SAR (interpolated) = 0.811 mW/g

Configuration/Tilt position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 17.638 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.9210
SAR(1 g) = 0.601 mW/g; SAR(10 g) = 0.366 mW/g

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

Maximum value of SAR (measured) = 0.689 mW/g



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Z axis plot for the worst case head configuration

