

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 1(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

APPENDIX B: SAR DISTRIBUTION PLOTS FOR HEAD CONFIGURATION

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 2(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 4:23:03 PM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_17_mid_chan_QPSK_RB_1_Offset_0_amb_temp_22.8C_liq_temp_21.4C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.410 mW/g

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

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

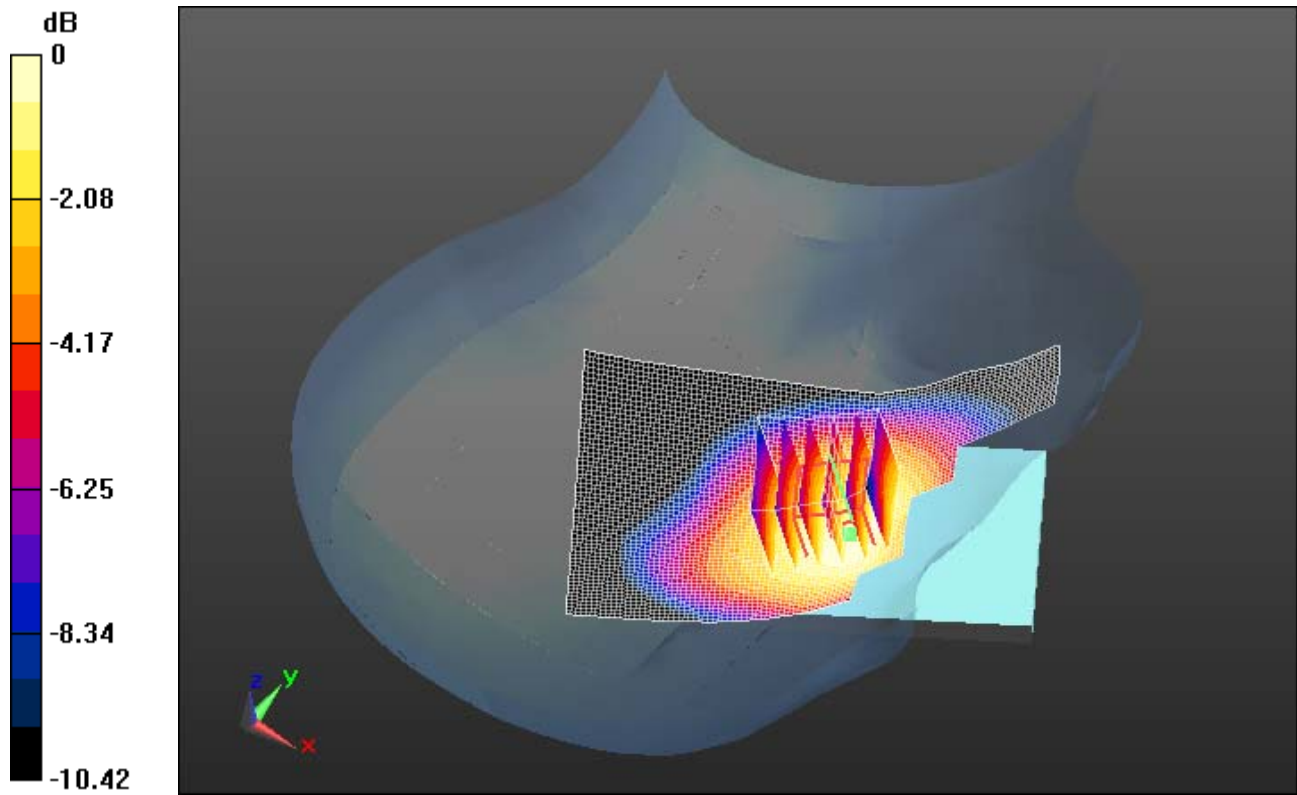
Reference Value = 6.082 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.4490

SAR(1 g) = 0.370 mW/g; SAR(10 g) = 0.287 mW/g

Maximum value of SAR (measured) = 0.397 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 3(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 4(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 5:03:39 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_17_mid_chan_QPSK_RB_1_Offset_49_amb_temp
_23.0C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.458 mW/g

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

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

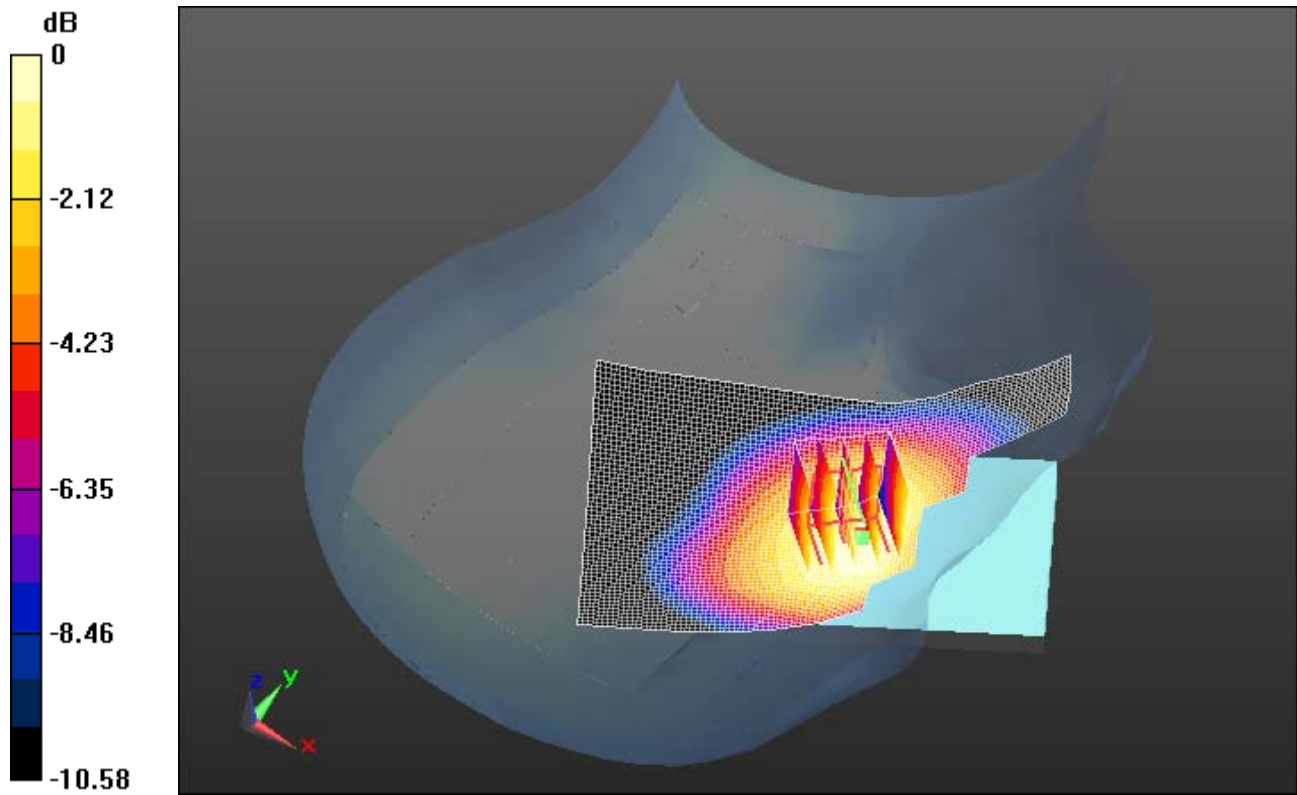
Reference Value = 5.967 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.4990

SAR(1 g) = 0.418 mW/g; SAR(10 g) = 0.319 mW/g

Maximum value of SAR (measured) = 0.452 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 5(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.450mW/g = -6.94 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 6(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 5:53:29 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_17_mid_chan_QPSK_RB_25_Offset_0_amb_temp
_23.2C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.320 mW/g

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

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

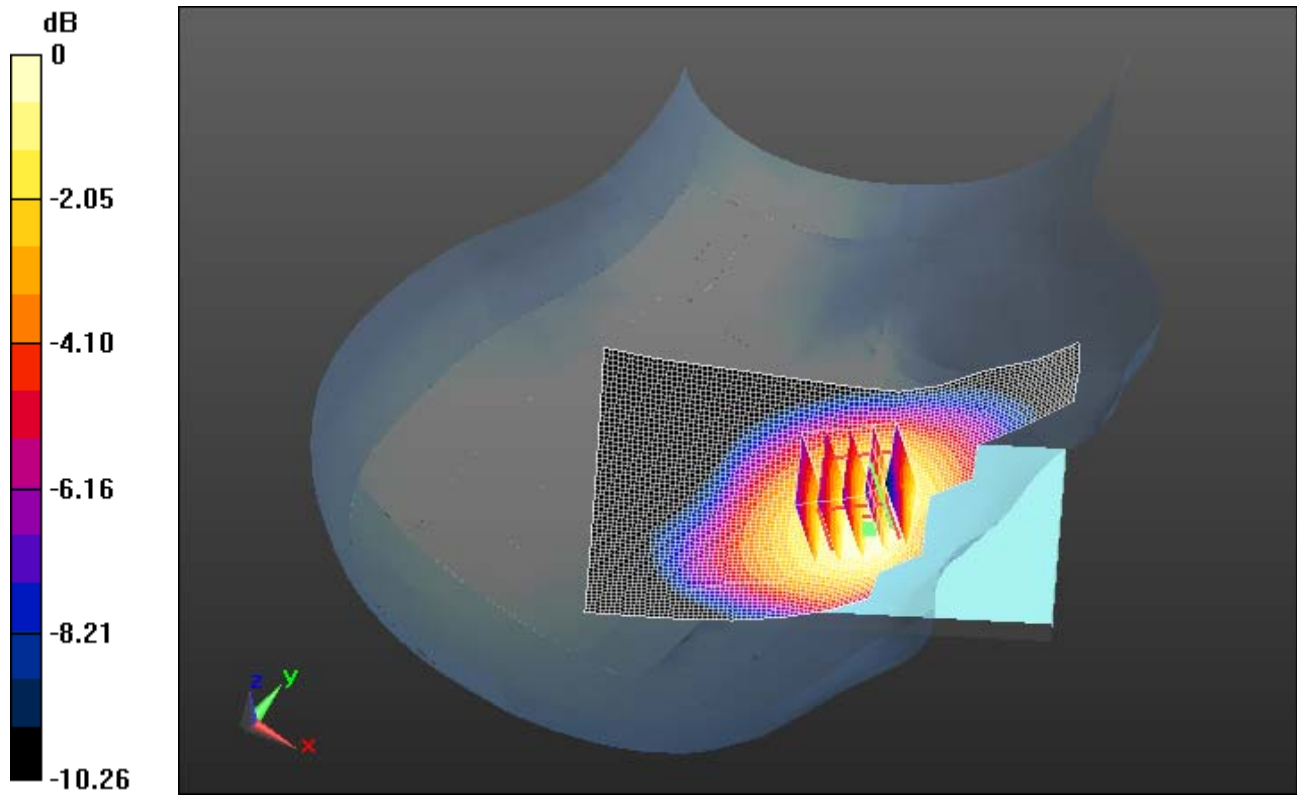
Reference Value = 5.157 V/m; Power Drift = 0.22 dB

Peak SAR (extrapolated) = 0.3410

SAR(1 g) = 0.287 mW/g; SAR(10 g) = 0.223 mW/g

Maximum value of SAR (measured) = 0.305 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 7(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.310mW/g = -10.17 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 8(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 6:09:13 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_17_mid_chan_16QAM_RB_1_Offset_0_amb_temp
_23.2C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.324 mW/g

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

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

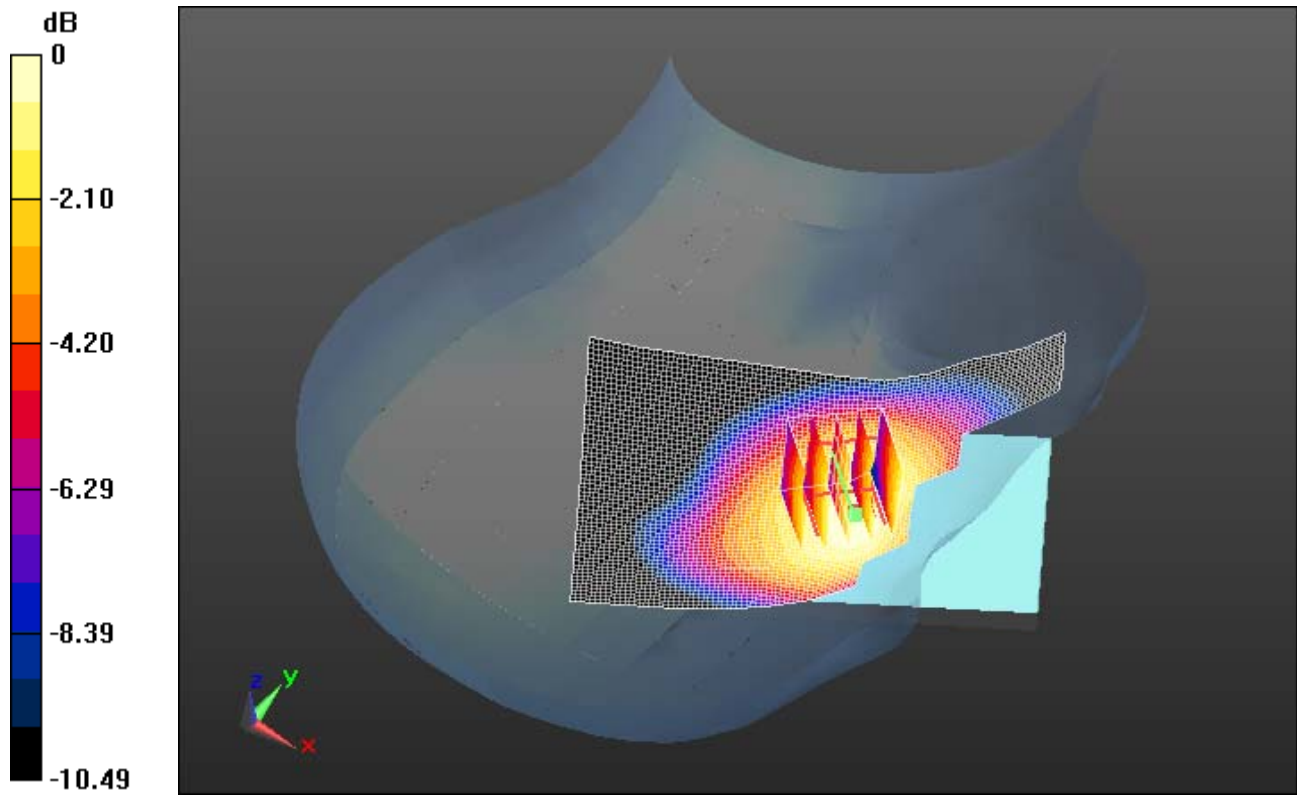
Reference Value = 5.133 V/m; Power Drift = 0.43 dB

Peak SAR (extrapolated) = 0.3640

SAR(1 g) = 0.298 mW/g; SAR(10 g) = 0.230 mW/g

Maximum value of SAR (measured) = 0.323 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 9(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.320mW/g = -9.90 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 10(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 7:19:06 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_17_mid_chan_16QAM_RB_1_Offset_49_amb_tem
p_23.2C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.363 mW/g

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

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

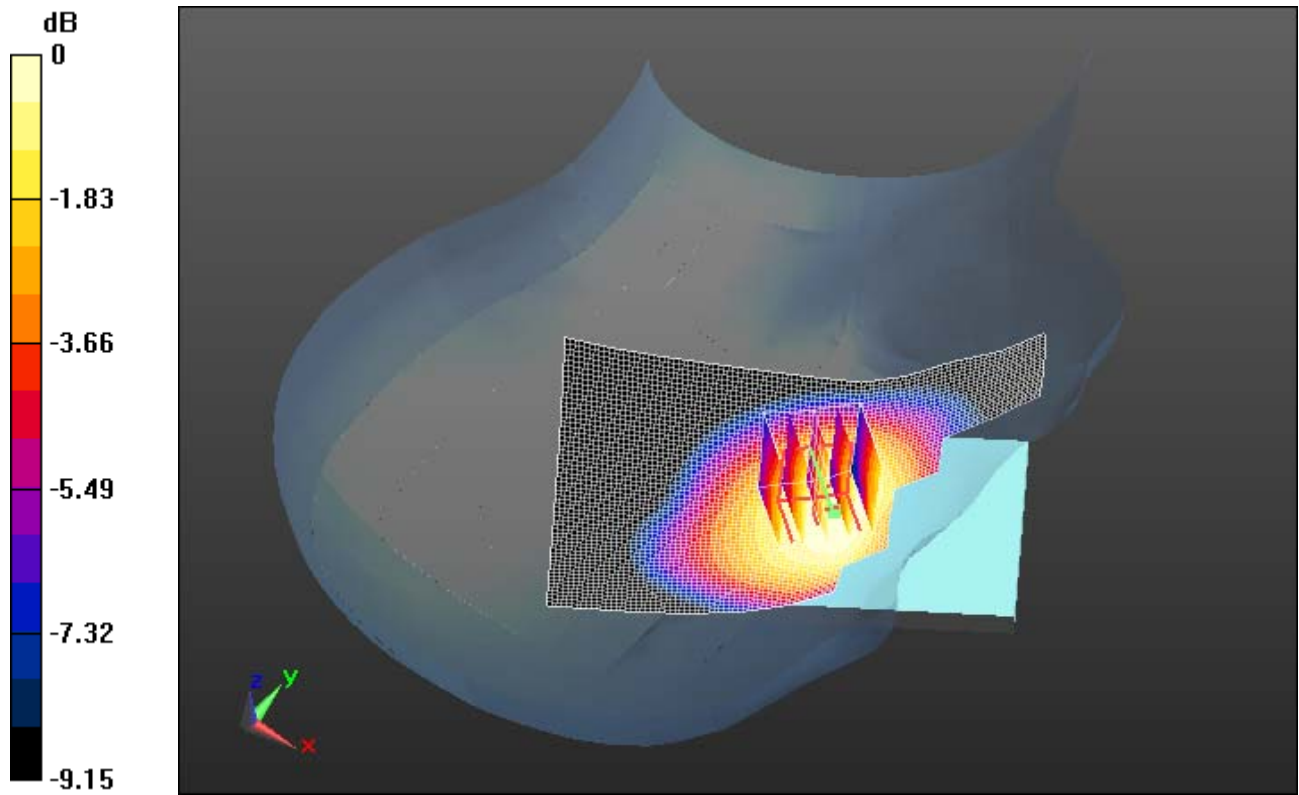
Reference Value = 5.244 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.3930

SAR(1 g) = 0.330 mW/g; SAR(10 g) = 0.254 mW/g

Maximum value of SAR (measured) = 0.354 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 11(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.350mW/g = -9.12 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 12(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/18/2012 1:07:48 AM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_17_mid_chan_16QAM_RB_30_Offset_0_amb_tem
p_23.0C_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.849 \text{ mho/m}$; $\epsilon_r = 43.136$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.267 mW/g

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

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

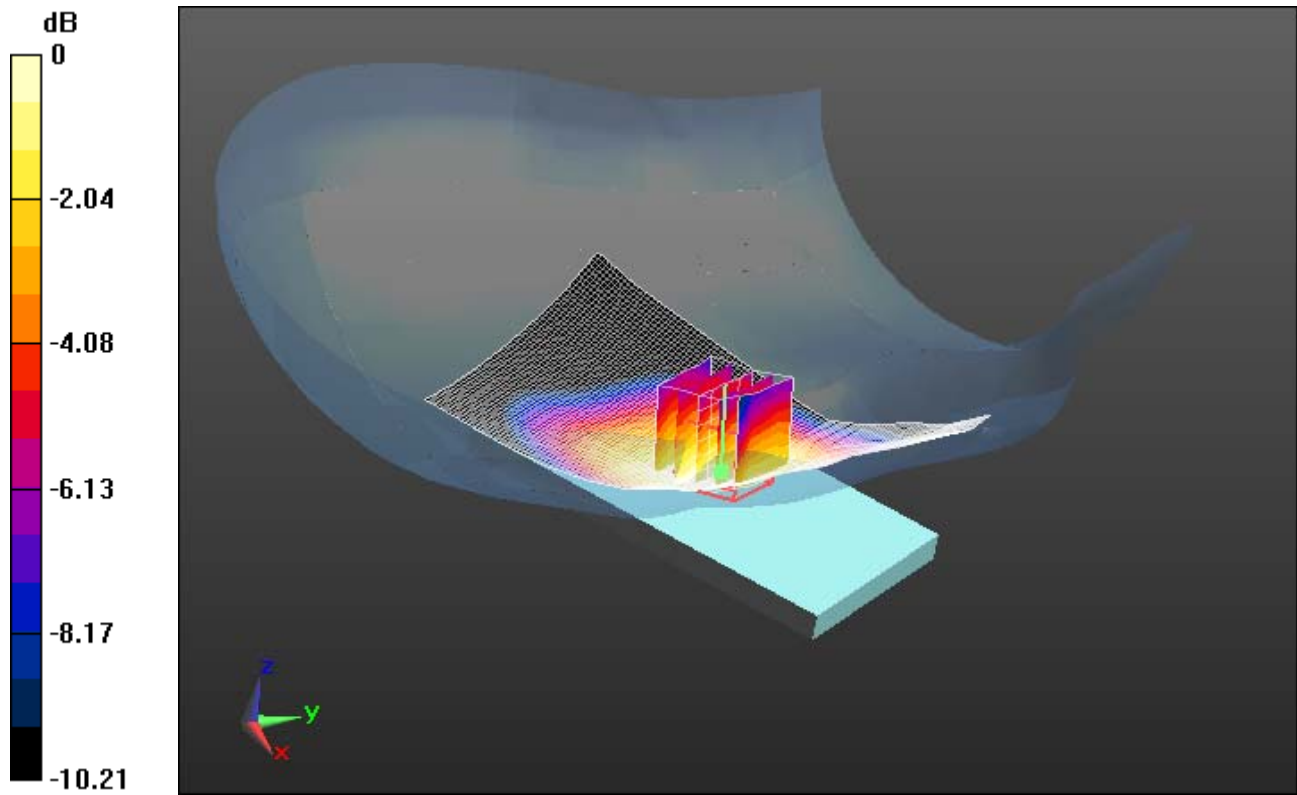
Reference Value = 4.843 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.2780

SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.178 mW/g

Maximum value of SAR (measured) = 0.245 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 13(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.240mW/g = -12.40 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 14(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/18/2012 1:27:35 AM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_LTE_17_mid_chan_QPSK_RB_1_Offset_0_amb_tem
p_23.1C_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.849 \text{ mho/m}$; $\epsilon_r = 43.136$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.228 mW/g

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

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

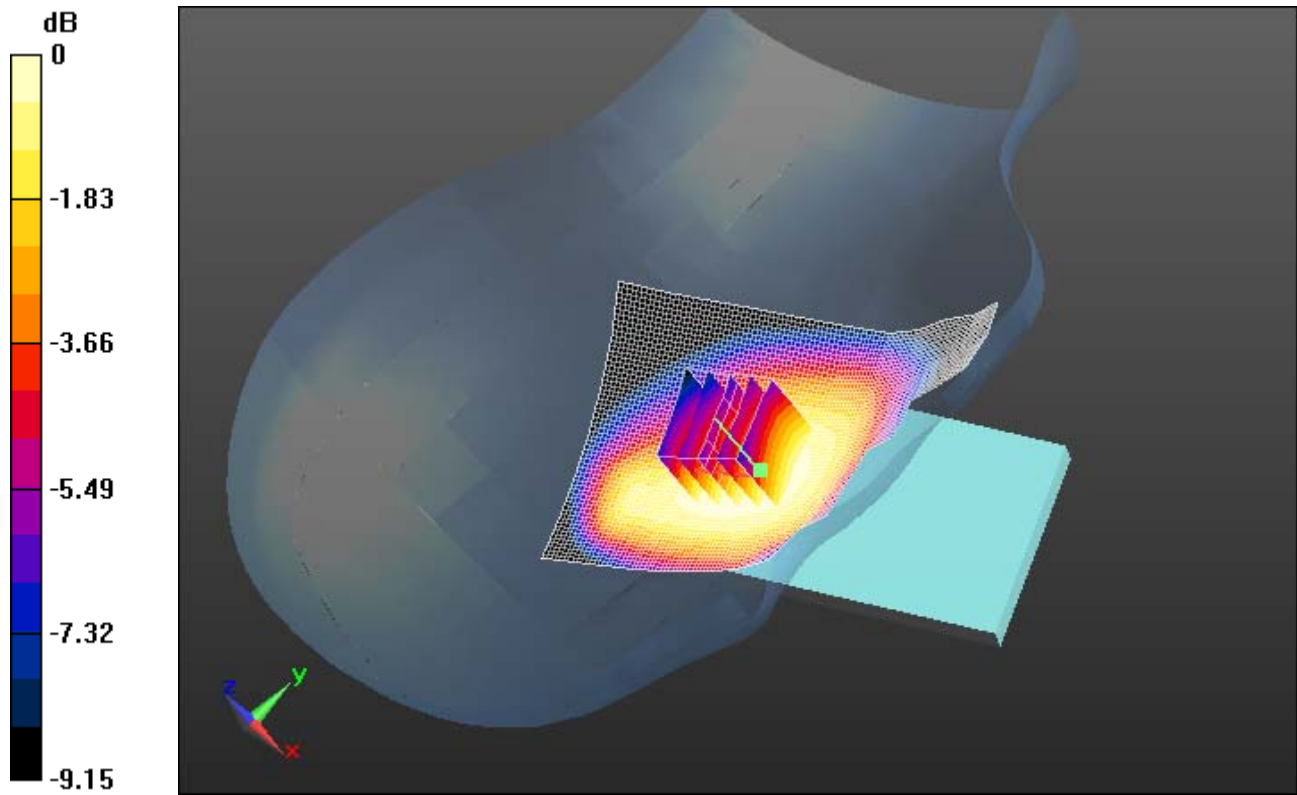
Reference Value = 10.321 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.2540

SAR(1 g) = 0.209 mW/g ; SAR(10 g) = 0.163 mW/g

Maximum value of SAR (measured) = 0.226 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 15(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 16(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/18/2012 1:43:22 AM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_LTE_17_mid_chan_16QAM_RB_1_Offset_0_amb_t
emp_23.0C_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.849 \text{ mho/m}$; $\epsilon_r = 43.136$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.172 mW/g

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

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

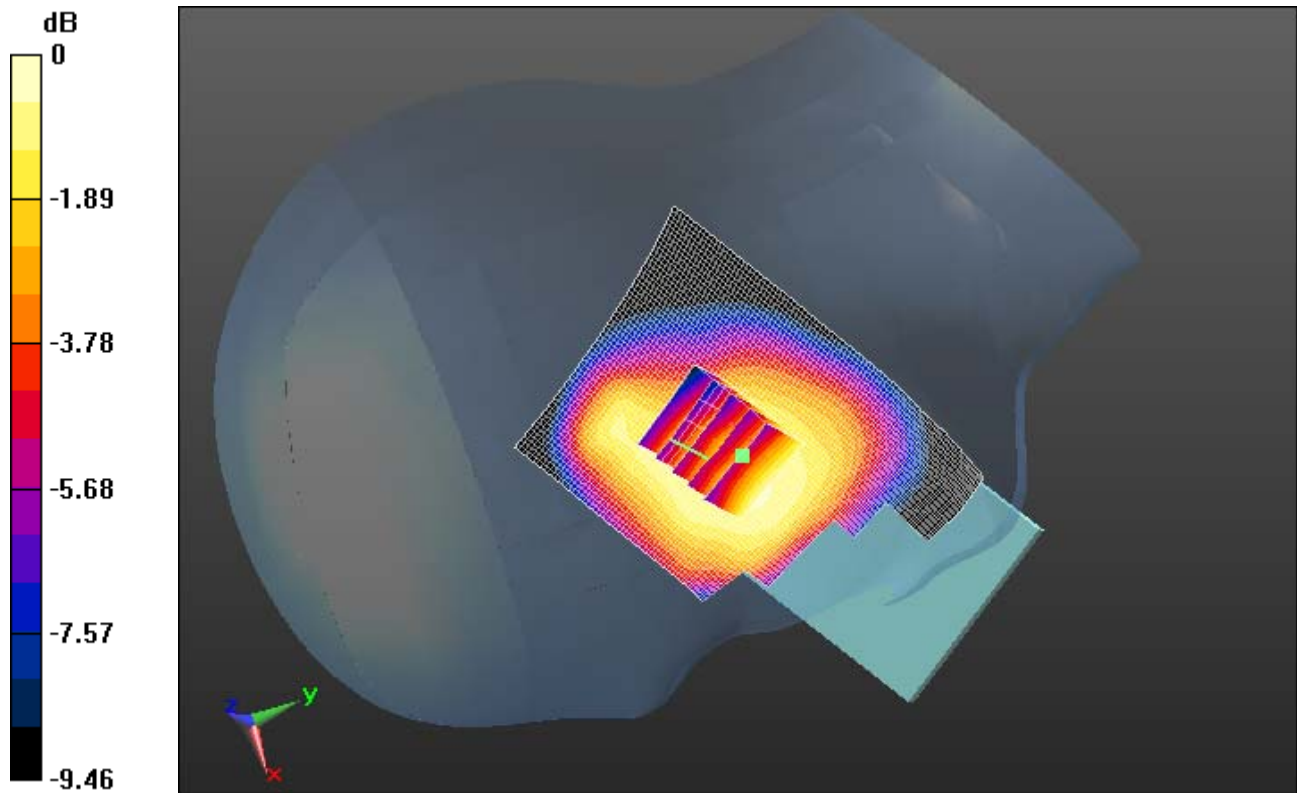
Reference Value = 8.775 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.2060

SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.129 mW/g

Maximum value of SAR (measured) = 0.183 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 17(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.180mW/g = -14.89 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 18(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 10:44:45 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_17_mid_chan_QPSK_RB_1_Offset_0_amb_temp_23
.6_liq_temp_22.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.556 mW/g

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

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

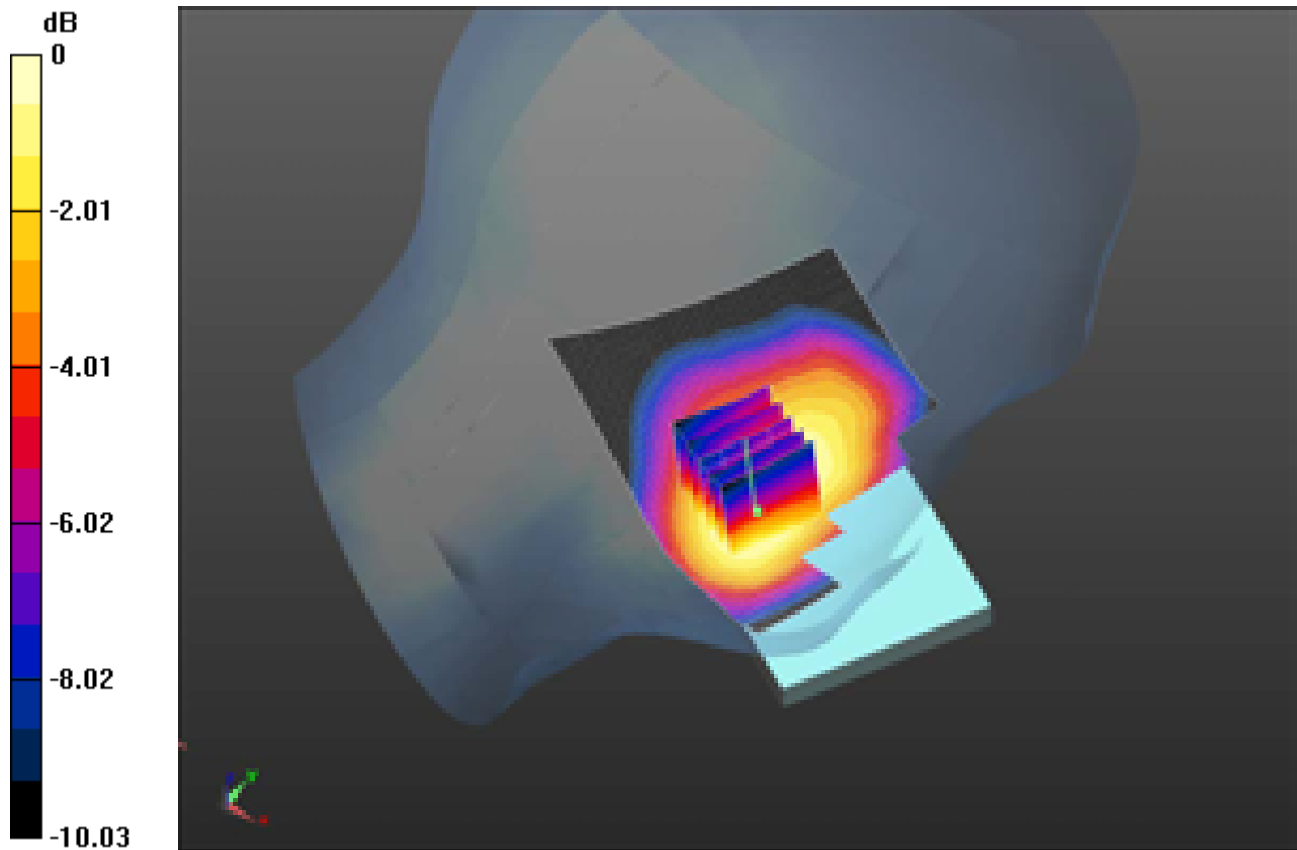
Reference Value = 7.928 V/m; Power Drift = -0.27 dB

Peak SAR (extrapolated) = 0.6630

SAR(1 g) = 0.485 mW/g; SAR(10 g) = 0.345 mW/g

Maximum value of SAR (measured) = 0.551 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 19(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.550mW/g = -5.19 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 20(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 11:00:36 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_17_mid_chan_QPSK_RB_1_Offset_49_amb_temp_2
2.9_liq_temp_22.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.578 mW/g

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

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

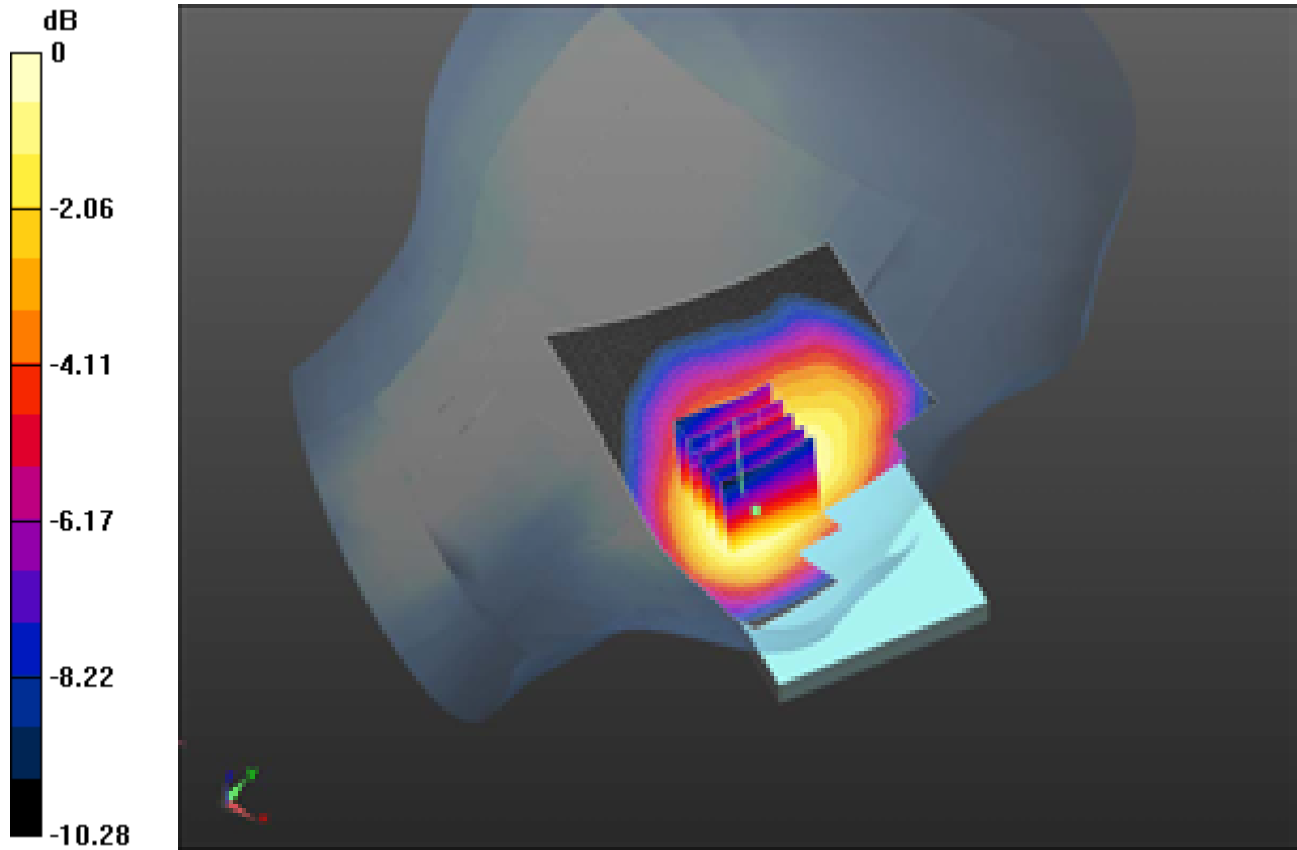
Reference Value = 7.681 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.6870

SAR(1 g) = 0.497 mW/g; SAR(10 g) = 0.357 mW/g

Maximum value of SAR (measured) = 0.564 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 21(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.560mW/g = -5.04 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 22(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 11:19:26 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_17_mid_chan_QPSK_RB_25_Offset_0_amb_temp_2
3.2_liq_temp_22.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.404 mW/g

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

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

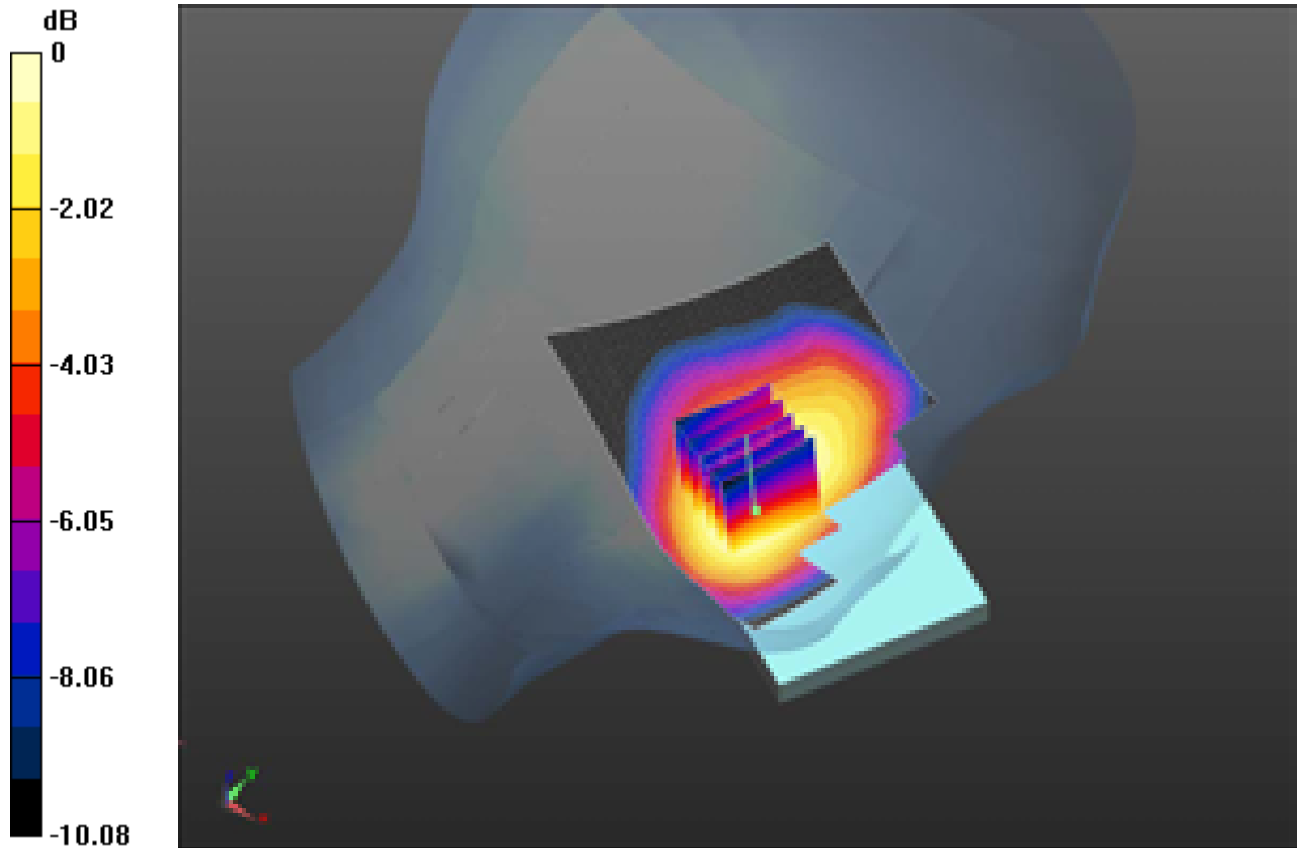
Reference Value = 6.459 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.4950

SAR(1 g) = 0.358 mW/g ; SAR(10 g) = 0.256 mW/g

Maximum value of SAR (measured) = 0.401 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 23(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 24(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 11:43:11 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_17_mid_chan_16QAM_RB_1_Offset_0_amb_temp_2
3.0_liq_temp_22.2C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.387 mW/g

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

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

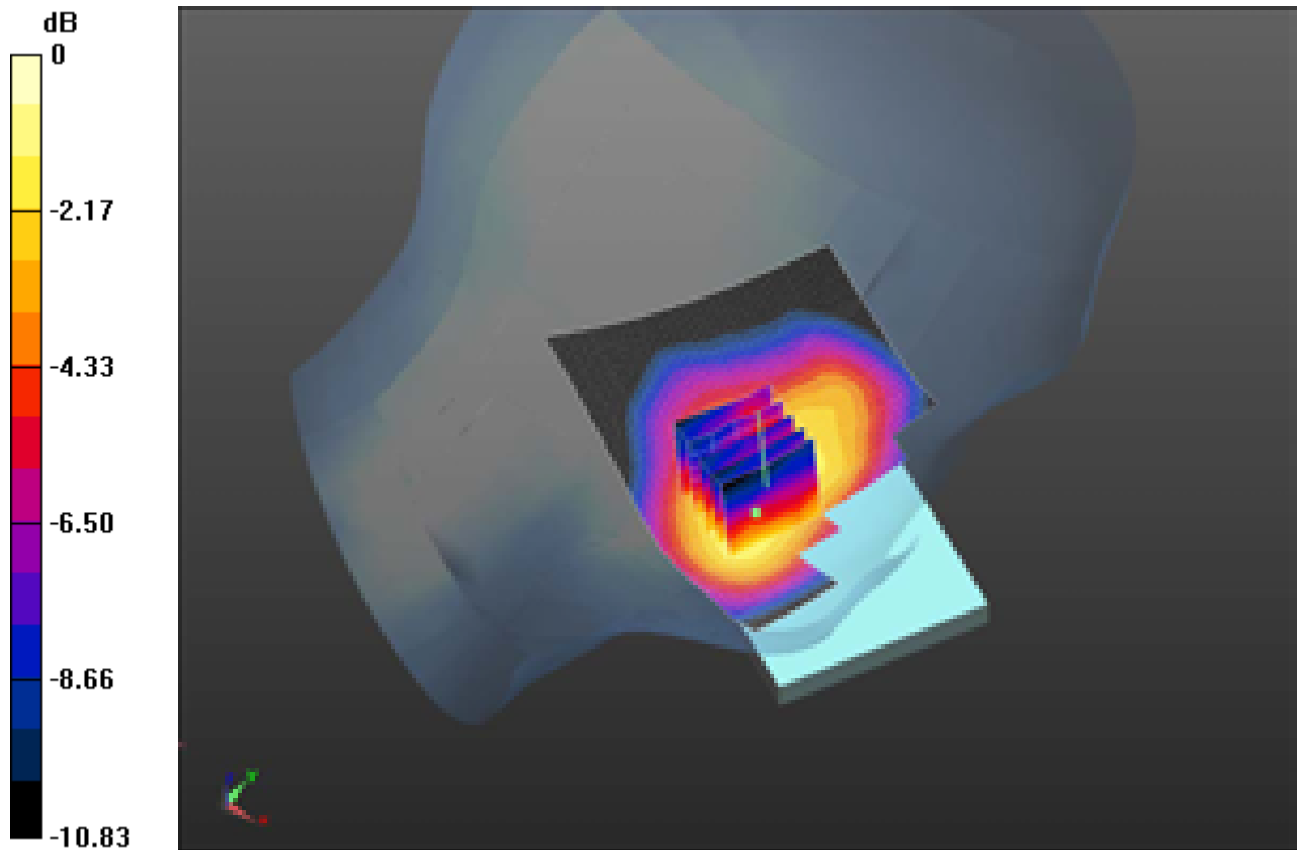
Reference Value = 6.654 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.5870

SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.272 mW/g

Maximum value of SAR (measured) = 0.508 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 25(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.510mW/g = -5.85 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 26(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 11:58:49 AM

Test Laboratory: RIM Testing Services

LeftHandside_LTE_17_mid_chan_16QAM_RB_1_Offset_49_amb_temp_22.8_liq_temp_22.1C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.457 mW/g

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

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

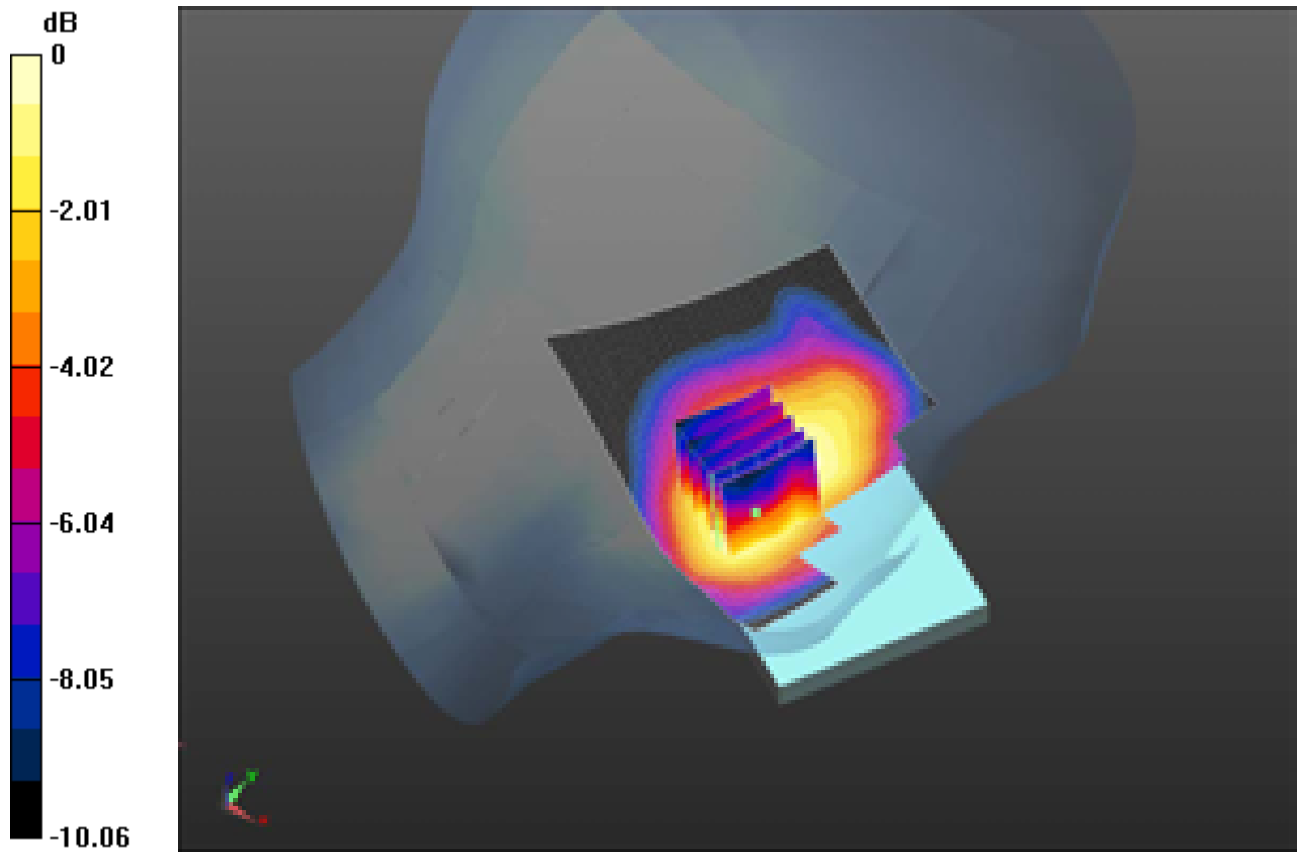
Reference Value = 6.470 V/m ; Power Drift = -0.0034 dB

Peak SAR (extrapolated) = 0.6040

SAR(1 g) = 0.373 mW/g ; SAR(10 g) = 0.260 mW/g

Maximum value of SAR (measured) = 0.435 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 27(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.440mW/g = -7.13 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 28(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 12:18:07 PM

Test Laboratory: RIM Testing Services

LeftHandside_LTE_17_mid_chan_16QAM_RB_30_Offset_0_amb_temp_22.8_liq_temp_22.2C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.330 mW/g

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

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

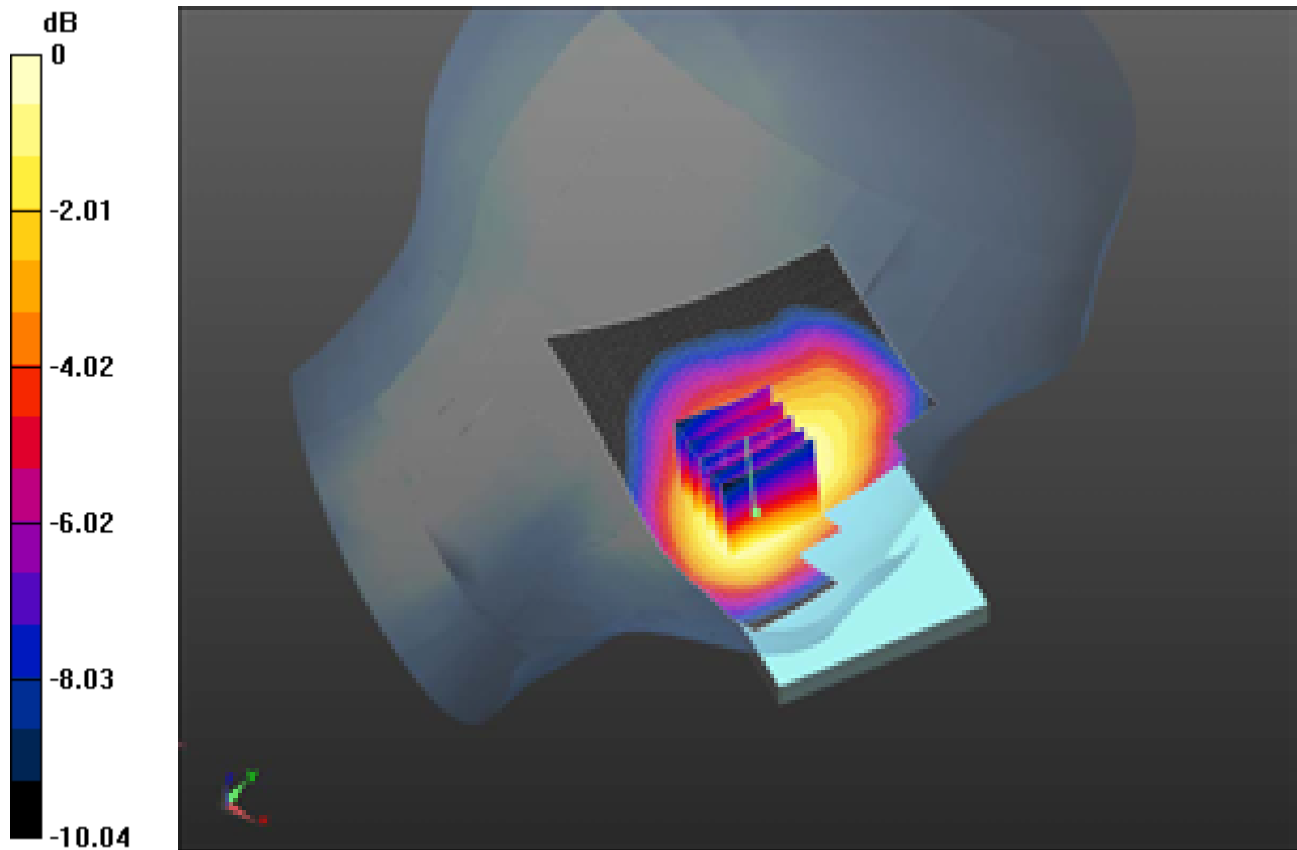
Reference Value = 5.830 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.4010

SAR(1 g) = 0.289 mW/g ; SAR(10 g) = 0.208 mW/g

Maximum value of SAR (measured) = 0.323 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 29(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.320mW/g = -9.90 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 30(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 12:55:53 PM

Test Laboratory: RIM Testing Services

**LeftHandside_Tilt_LTE_17_mid_chan_QPSK_RB_1_Offset_0_amb_tem
p_22.8_liq_temp_22.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.301 mW/g

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

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

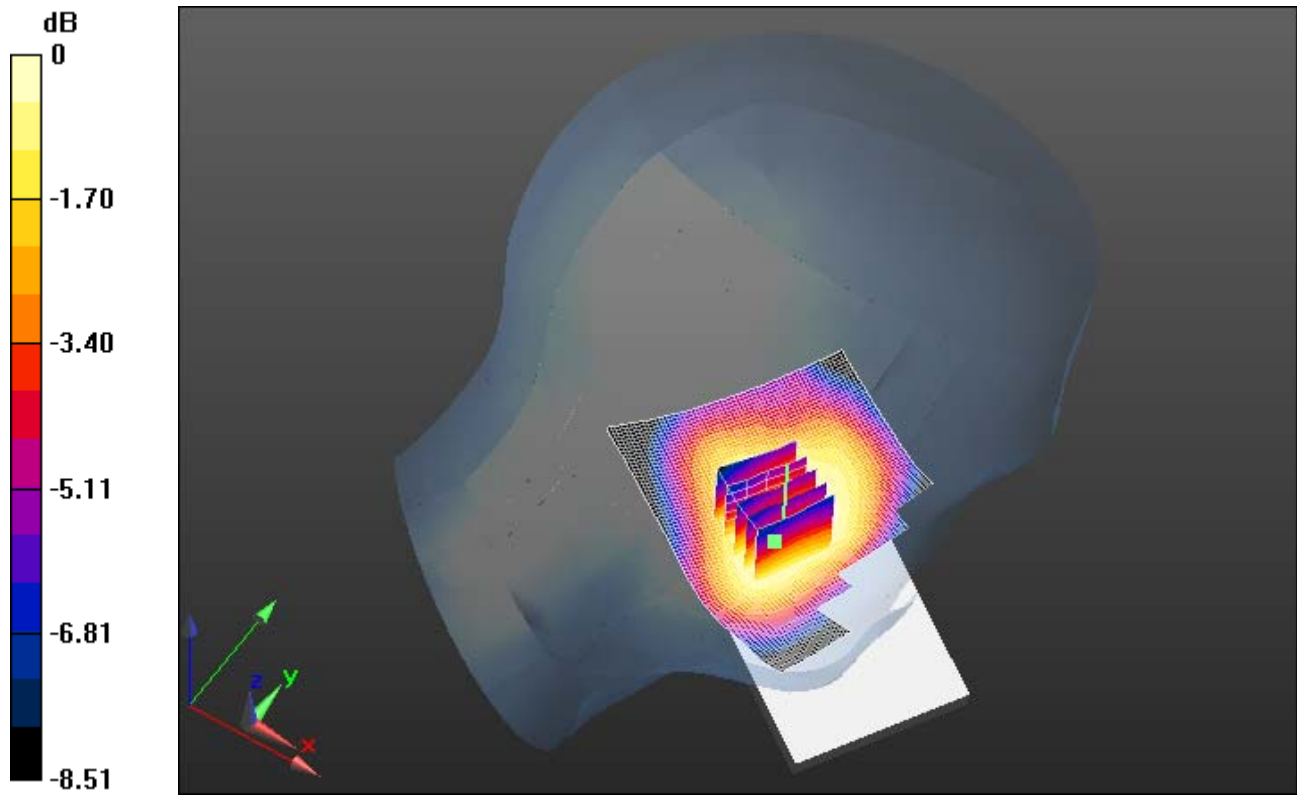
Reference Value = 11.972 V/m ; Power Drift = -0.30 dB

Peak SAR (extrapolated) = 0.3310

SAR(1 g) = 0.271 mW/g ; SAR(10 g) = 0.211 mW/g

Maximum value of SAR (measured) = 0.294 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 31(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.290mW/g = -10.75 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 32(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 1:15:35 PM

Test Laboratory: RIM Testing Services

**LeftHandside_Tilt_LTE_17_mid_chan_16QAM_RB_1_Offset_0_amb_tem
p_22.8_liq_temp_22.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.866 \text{ mho/m}$; $\epsilon_r = 42.591$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.233 mW/g

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

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

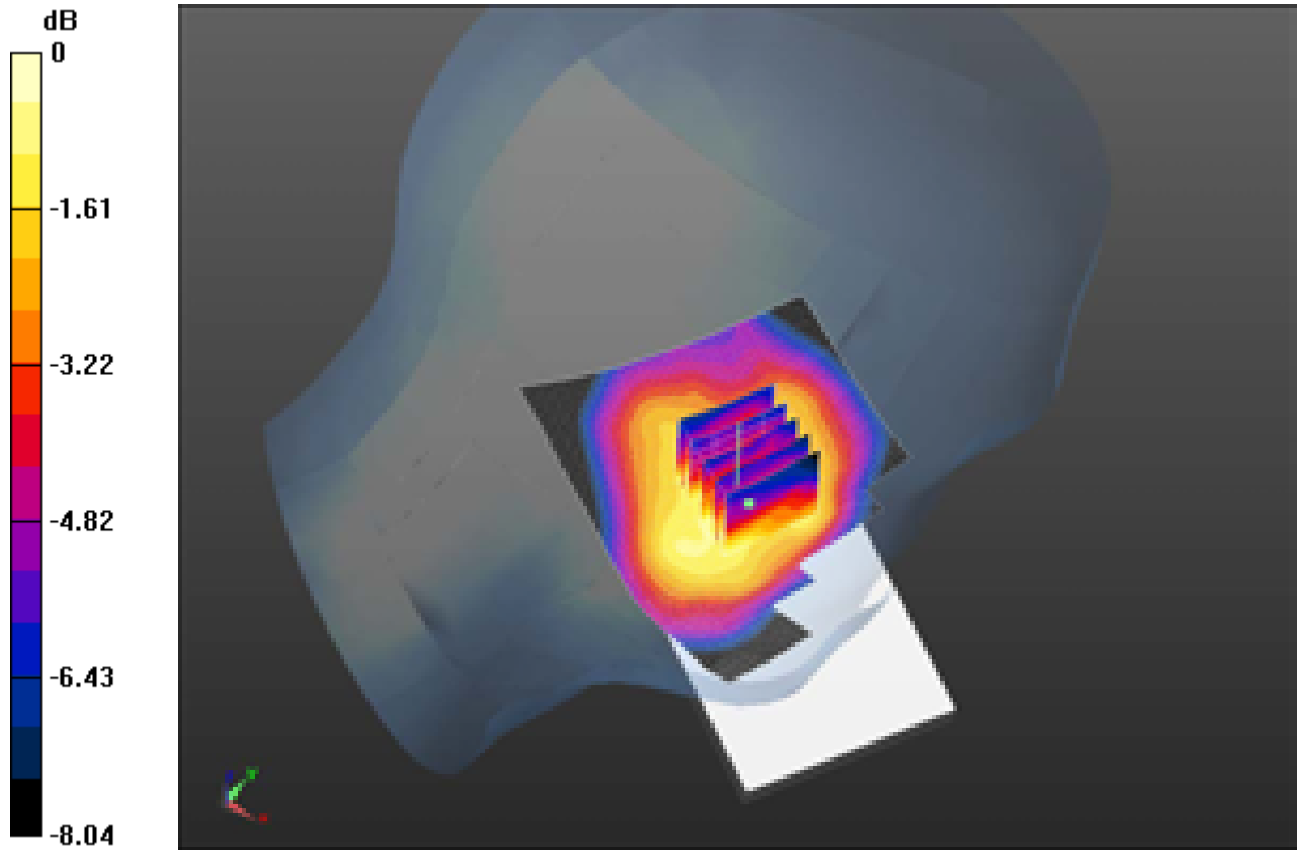
Reference Value = 10.464 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.2960

SAR(1 g) = 0.230 mW/g ; SAR(10 g) = 0.171 mW/g

Maximum value of SAR (measured) = 0.261 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 33(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.260mW/g = -11.70 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			34(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 10/29/2012 2:35:41 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_17_mid_chan_QPSK_RB_1_Offset_0_amb_temp_23
.8_liq_temp_22.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: LTE 700_Band 17; Frequency: 710 MHz

Medium parameters used: $f = 710 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 41.797$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.42, 6.42, 6.42); 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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.648 mW/g

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

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

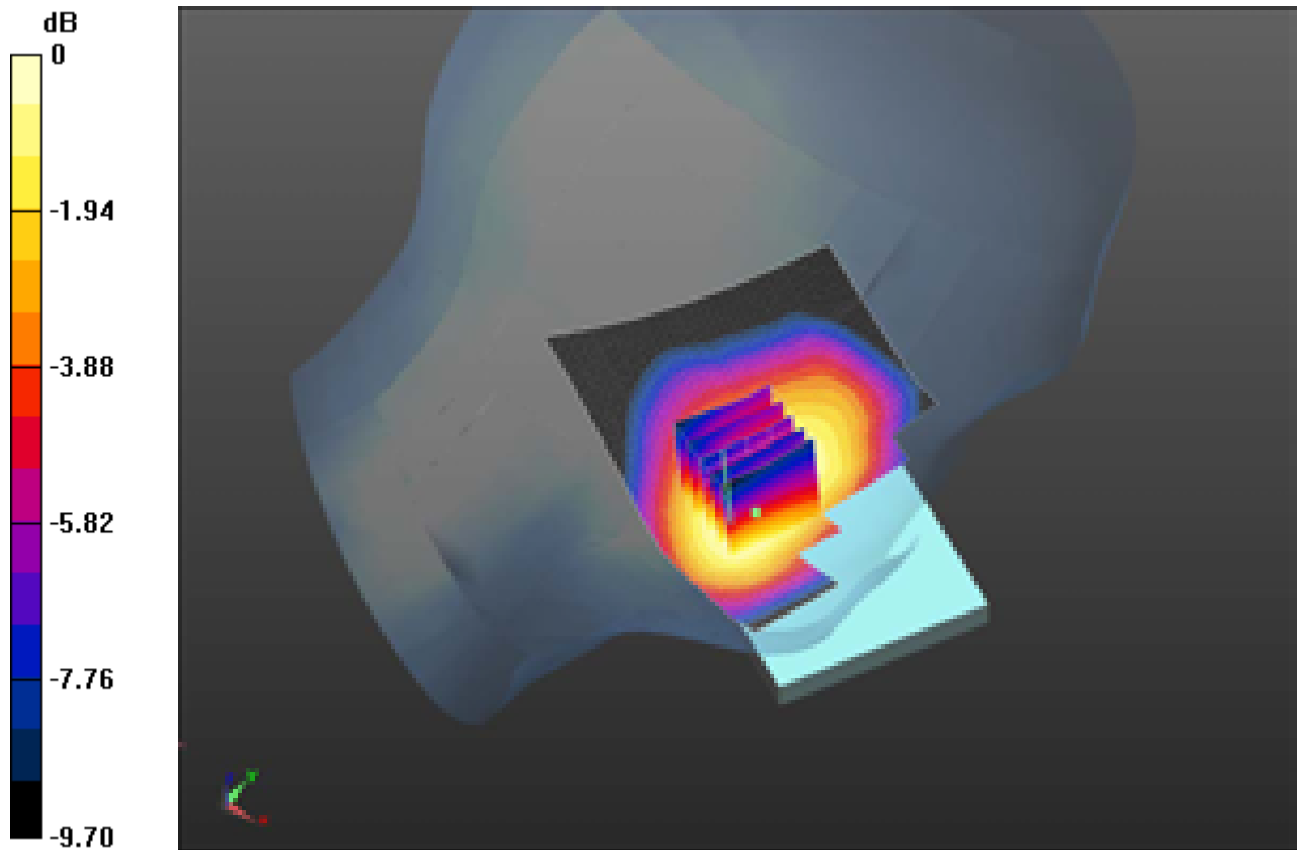
Reference Value = 8.012 V/m; Power Drift = 0.21 dB

Peak SAR (extrapolated) = 0.7790

SAR(1 g) = 0.572 mW/g; SAR(10 g) = 0.416 mW/g

Maximum value of SAR (measured) = 0.640 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 35(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.640mW/g = -3.88 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 36(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 11:15:24 AM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_5_mid_chan_QPSK_RB_25_Offset_0_amb_temp_23.0C_liq_temp_21.1C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.516 mW/g

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

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

Reference Value = 6.723 V/m; Power Drift = -0.12 dB

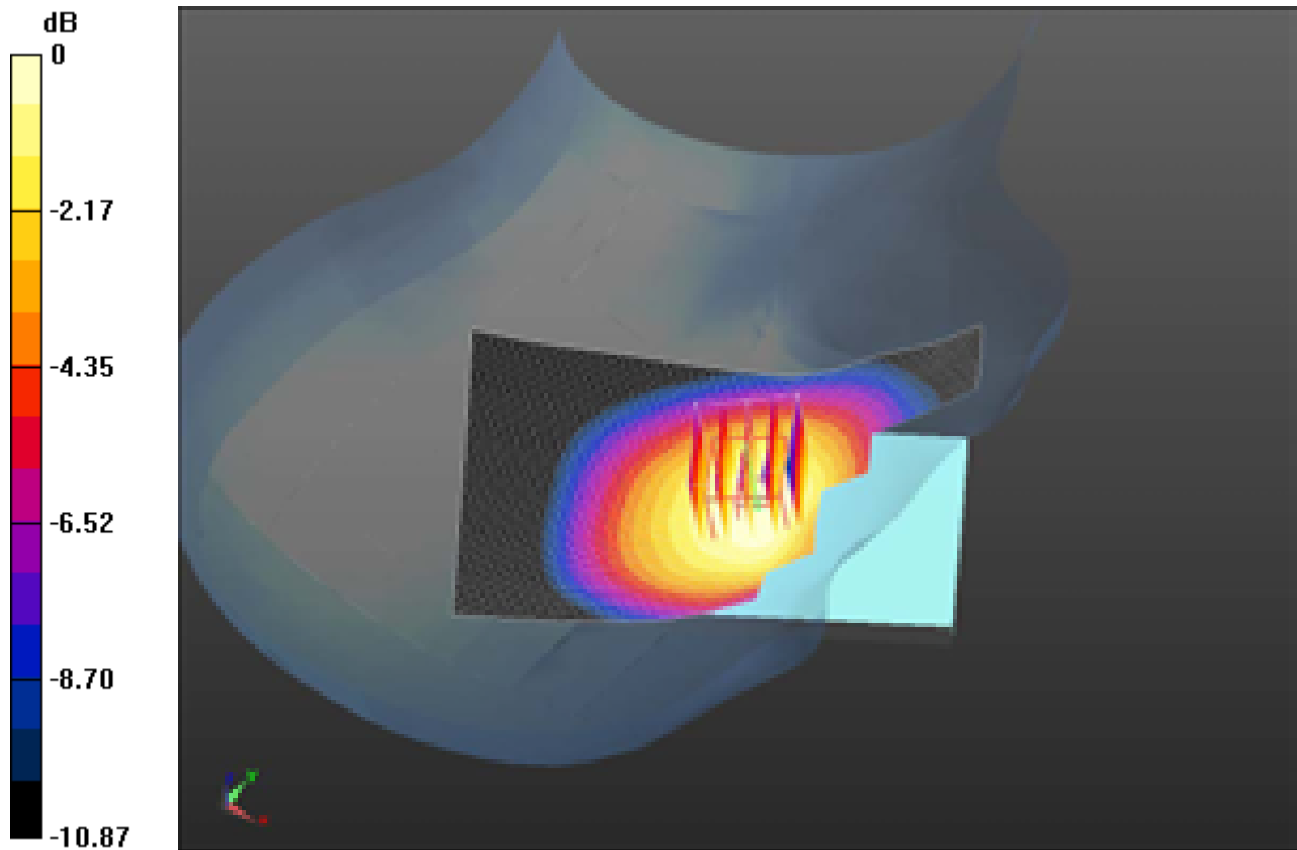
Peak SAR (extrapolated) = 0.5600

SAR(1 g) = 0.470 mW/g; SAR(10 g) = 0.362 mW/g

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

Maximum value of SAR (measured) = 0.509 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 37(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.510mW/g = -5.85 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 38(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 11:35:27 AM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_5_mid_chan_QPSK_RB_1_Offset_0_amb_temp_2
3.1C_liq_temp_21.0C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.656 mW/g

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

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

Reference Value = 7.239 V/m; Power Drift = -0.10 dB

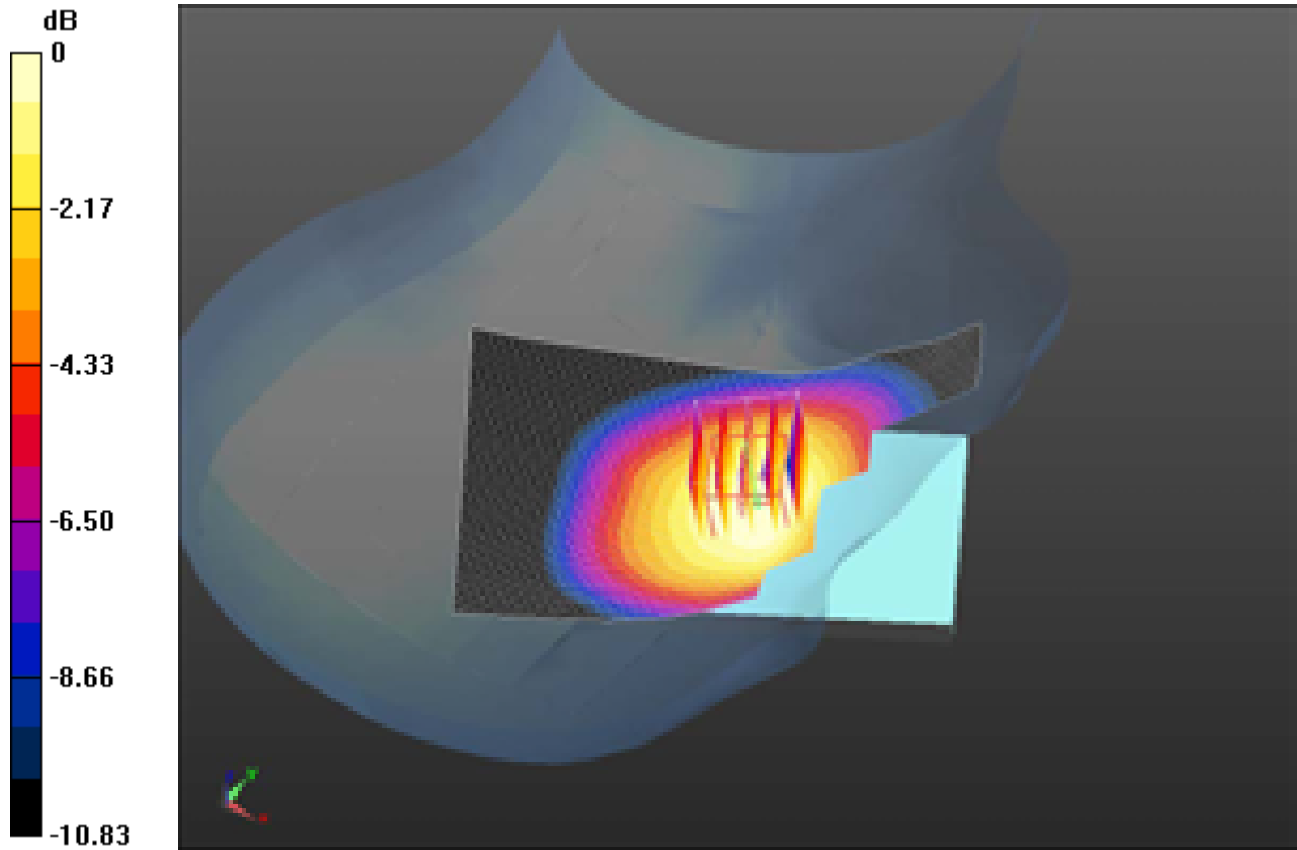
Peak SAR (extrapolated) = 0.7110

SAR(1 g) = 0.589 mW/g; SAR(10 g) = 0.456 mW/g

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

Maximum value of SAR (measured) = 0.634 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 39(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.630mW/g = -4.01 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 40(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 11:52:50 AM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_5_mid_chan_QPSK_RB_1_Offset_49_amb_temp_22.8C_liq_temp_21.7C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.651 mW/g

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

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

Reference Value = 7.107 V/m; Power Drift = 0.01 dB

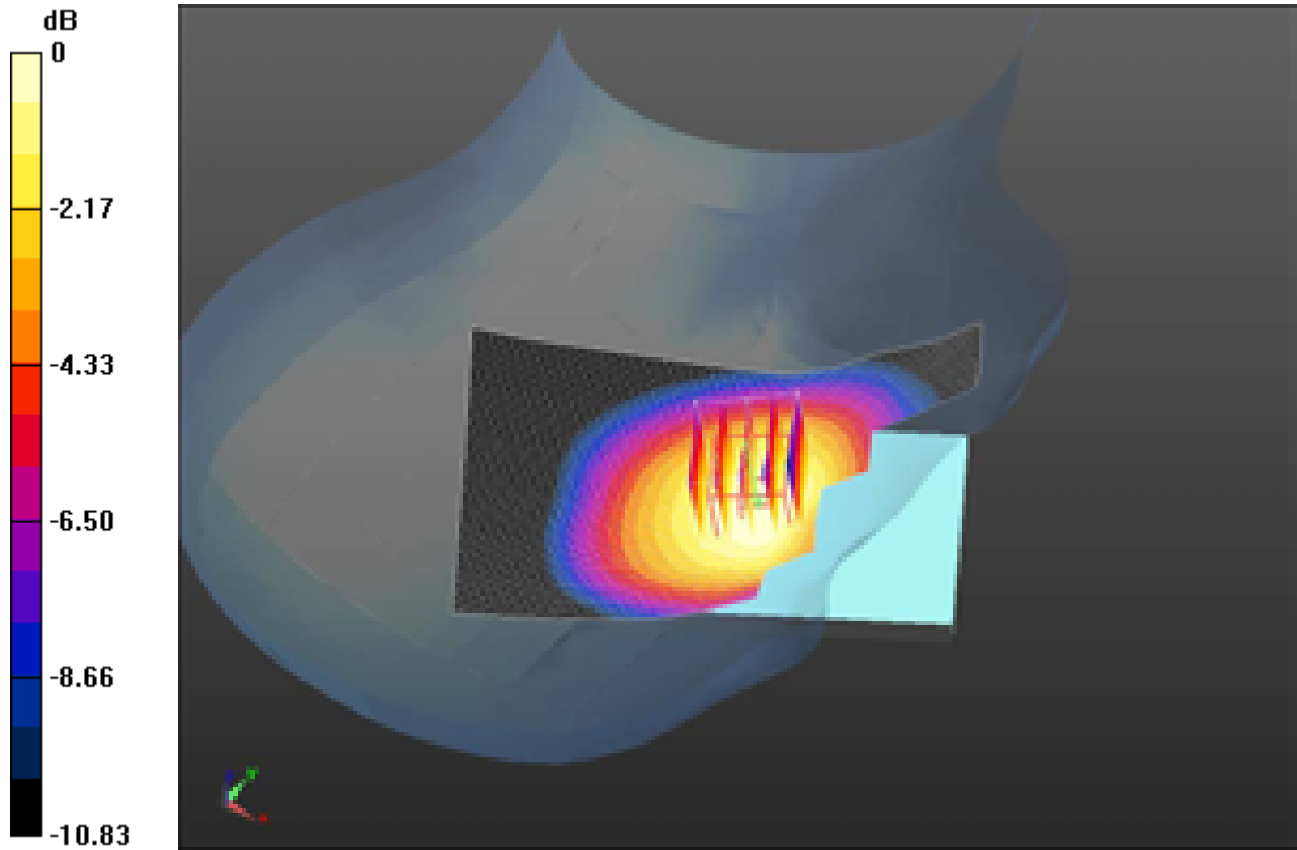
Peak SAR (extrapolated) = 0.7100

SAR(1 g) = 0.588 mW/g; SAR(10 g) = 0.452 mW/g

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

Maximum value of SAR (measured) = 0.642 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 41(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.640mW/g = -3.88 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 42(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 3:53:39 AM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_5_mid_chan_16QAM_RB_30_Offset_0_amb_temp
_22.5C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 41.132$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.442 mW/g

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

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

Reference Value = 5.840 V/m; Power Drift = -0.03 dB

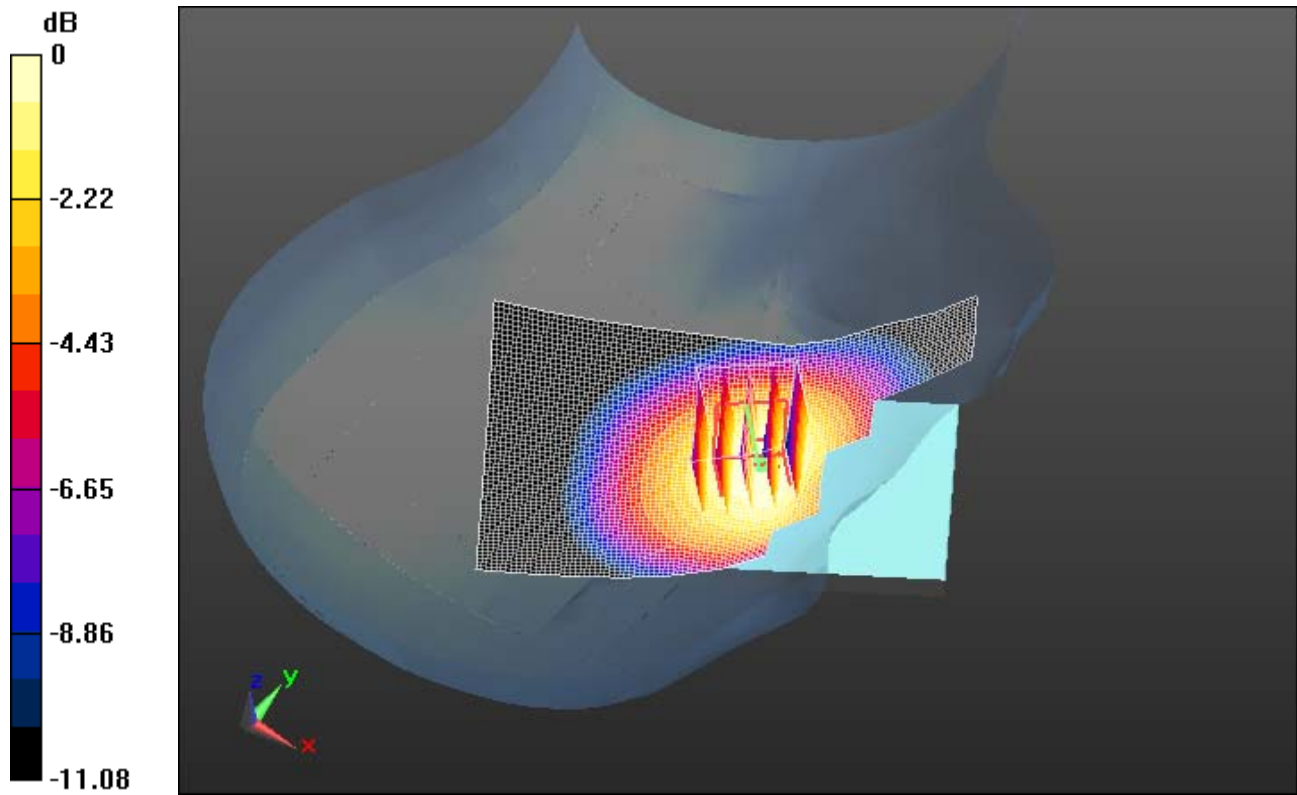
Peak SAR (extrapolated) = 0.4740

SAR(1 g) = 0.389 mW/g; SAR(10 g) = 0.298 mW/g

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

Maximum value of SAR (measured) = 0.419 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 43(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			44(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 4:11:46 AM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_5_mid_chan_16QAM_RB_1_Offset_0_amb_temp_22.5C_liq_temp_21.4C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 41.132$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.348 mW/g

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

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

Reference Value = 5.262 V/m; Power Drift = 0.07 dB

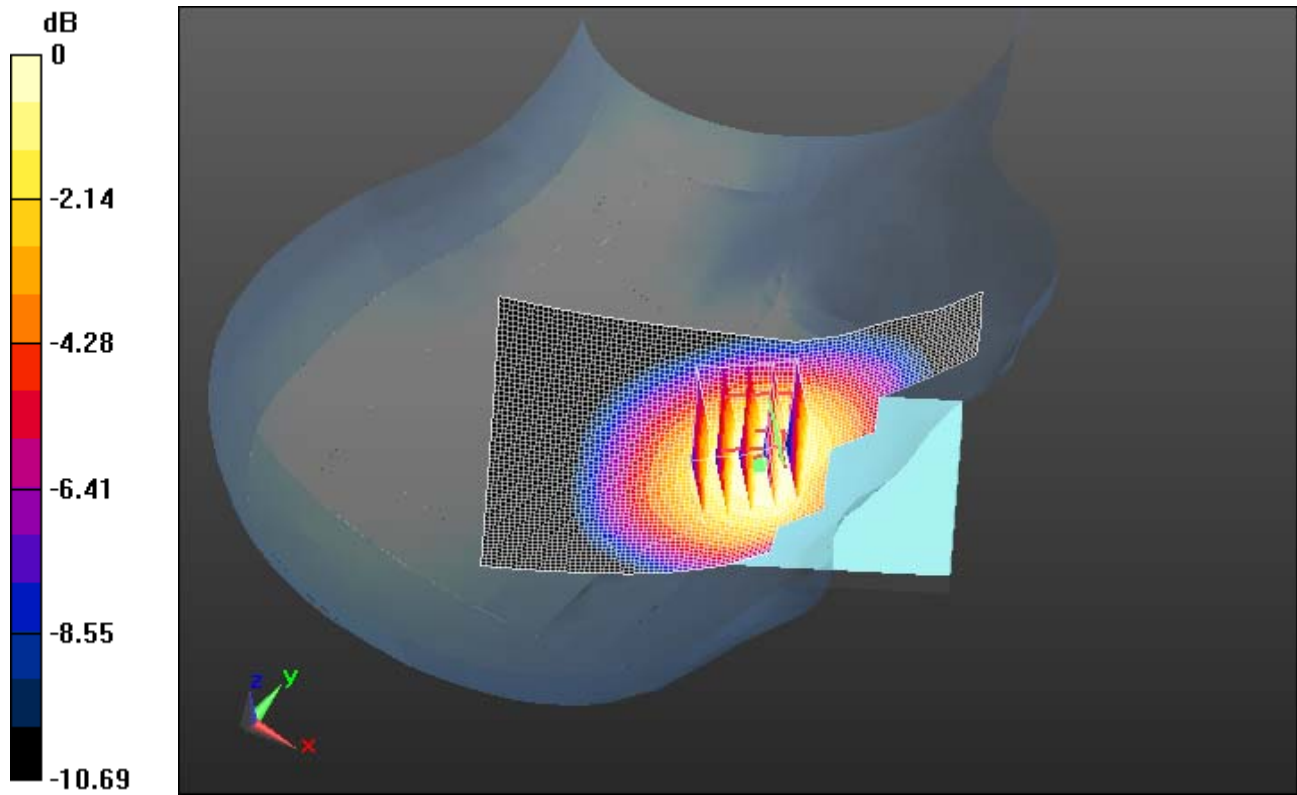
Peak SAR (extrapolated) = 0.3800

SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.241 mW/g

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

Maximum value of SAR (measured) = 0.345 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 45(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.340mW/g = -9.37 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 46(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 4:28:11 AM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_5_mid_chan_16QAM_RB_1_Offset_49_amb_temp
_22.5C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 41.132$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.462 mW/g

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

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

Reference Value = 6.158 V/m; Power Drift = -0.07 dB

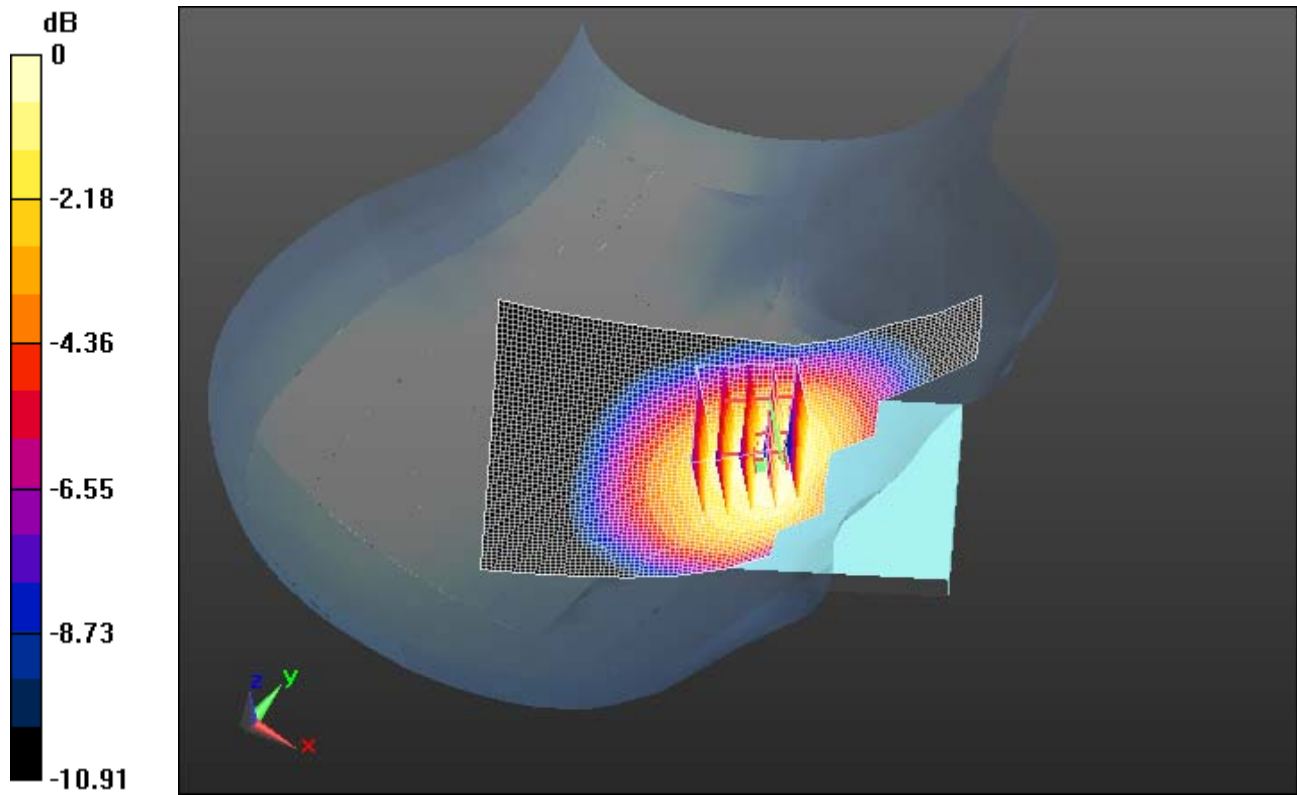
Peak SAR (extrapolated) = 0.5180

SAR(1 g) = 0.427 mW/g; SAR(10 g) = 0.328 mW/g

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

Maximum value of SAR (measured) = 0.473 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 47(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.470mW/g = -6.56 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 48(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 12:57:37 PM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_LTE_5_mid_chan_QPSK_RB_1_Offset_0_amb_tem
p_23.0C_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.403 mW/g

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

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

Reference Value = 10.634 V/m; Power Drift = -0.17 dB

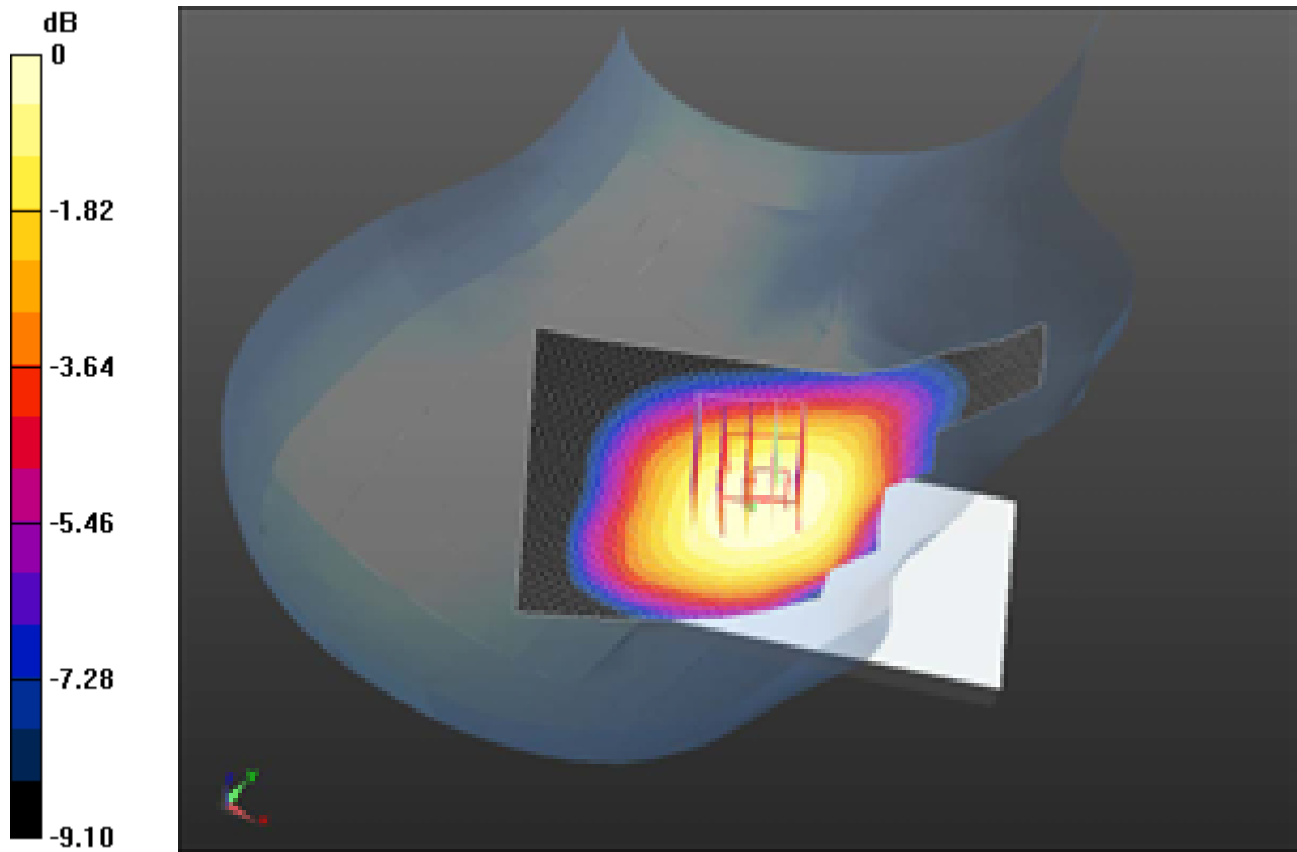
Peak SAR (extrapolated) = 0.4420

SAR(1 g) = 0.368 mW/g; SAR(10 g) = 0.289 mW/g

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

Maximum value of SAR (measured) = 0.395 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 49(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			50(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 4:48:50 AM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_LTE_5_mid_chan_16QAM_RB_1_Offset_49_amb_t
emp_23.4C_liq_temp_21.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE ; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 41.132$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.247 mW/g

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

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

Reference Value = 10.333 V/m; Power Drift = -0.12 dB

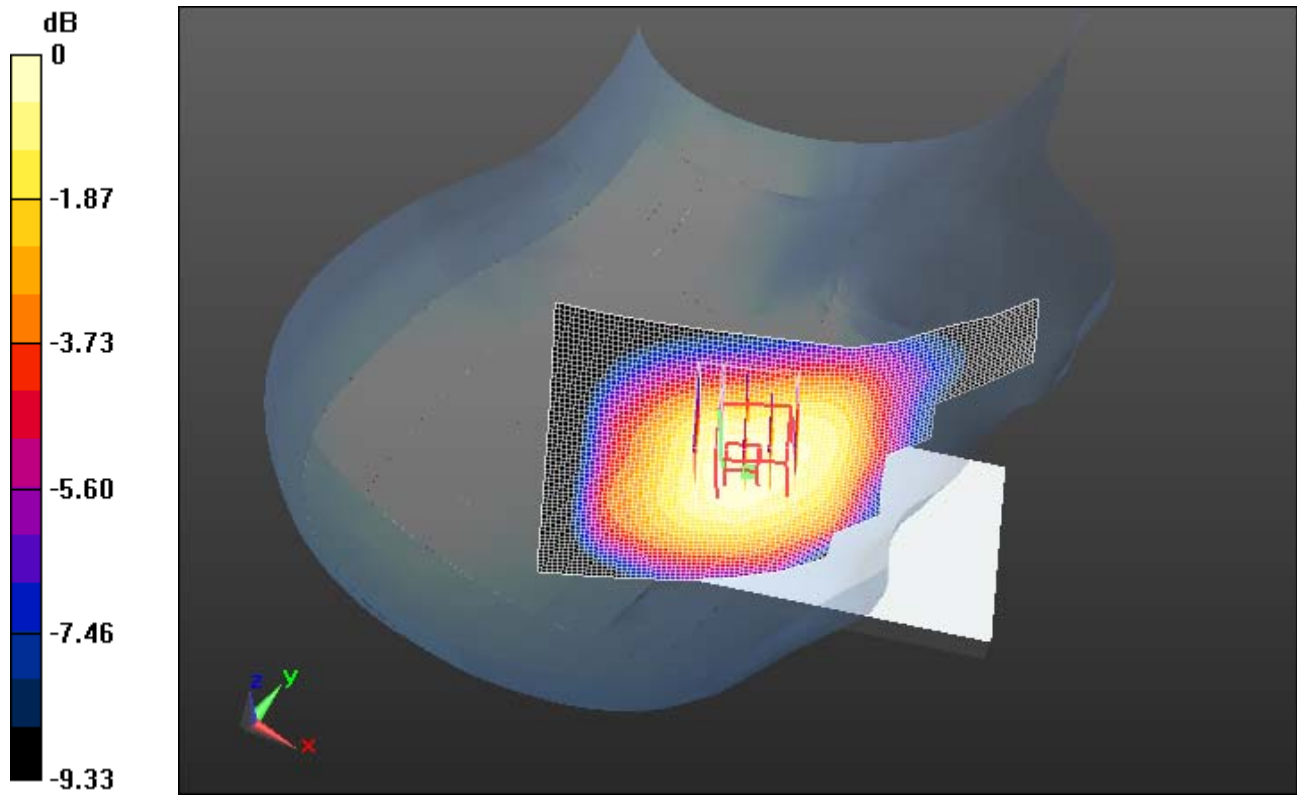
Peak SAR (extrapolated) = 0.2960

SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.185 mW/g

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

Maximum value of SAR (measured) = 0.261 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 51(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.260mW/g = -11.70 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 52(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 5:24:55 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_5_mid_chan_QPSK_RB_25_Offset_0_amb_temp_23
.4_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.520 mW/g

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

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

Reference Value = 5.605 V/m; Power Drift = 0.0027 dB

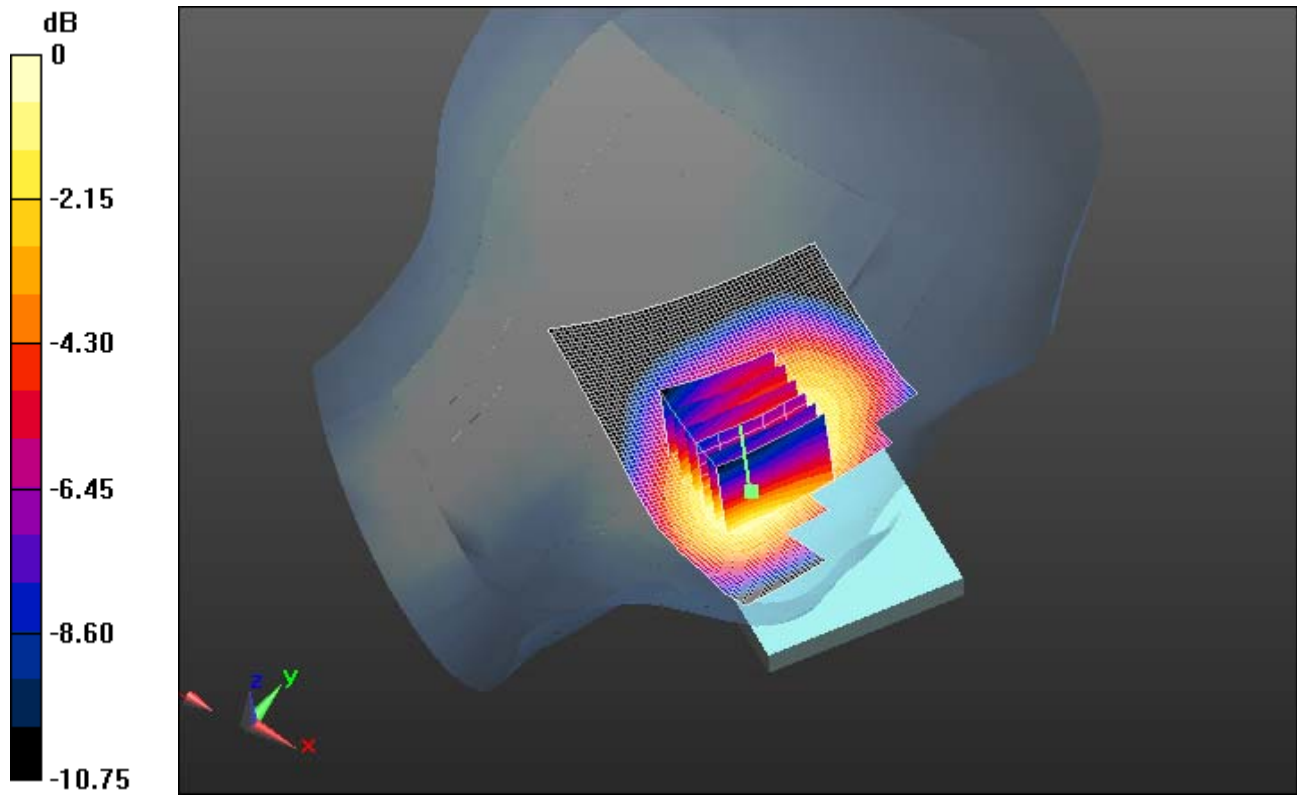
Peak SAR (extrapolated) = 0.6220

SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.343 mW/g

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

Maximum value of SAR (measured) = 0.516 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 53(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.520mW/g = -5.68 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			54(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 5:43:32 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_5_mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.
3_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.651 mW/g

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

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

Reference Value = 6.129 V/m; Power Drift = -0.04 dB

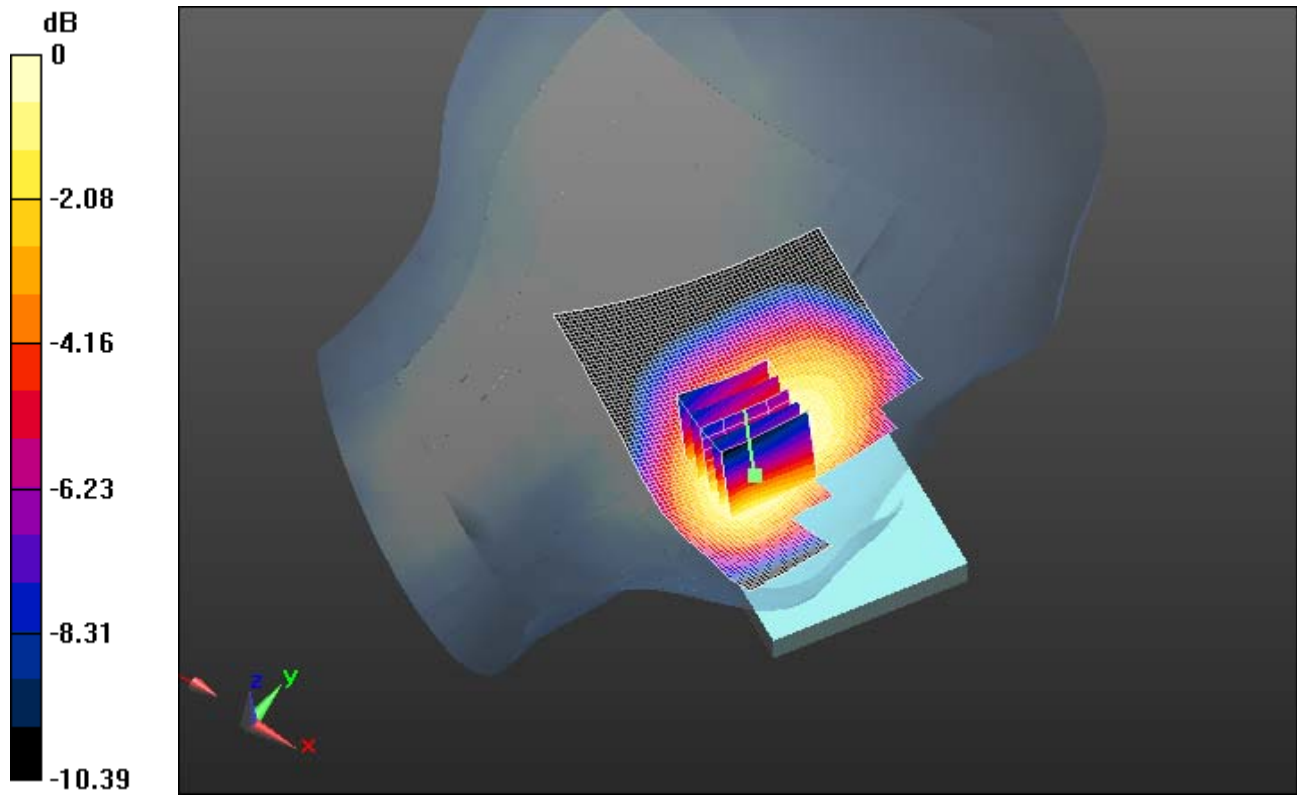
Peak SAR (extrapolated) = 0.7770

SAR(1 g) = 0.576 mW/g; SAR(10 g) = 0.422 mW/g

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

Maximum value of SAR (measured) = 0.643 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 55(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.640mW/g = -3.88 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 56(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 6:09:50 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_5_mid_chan_QPSK_RB_1_Offset_49_amb_temp_23
.3_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.651 mW/g

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

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

Reference Value = 6.015 V/m; Power Drift = 0.02 dB

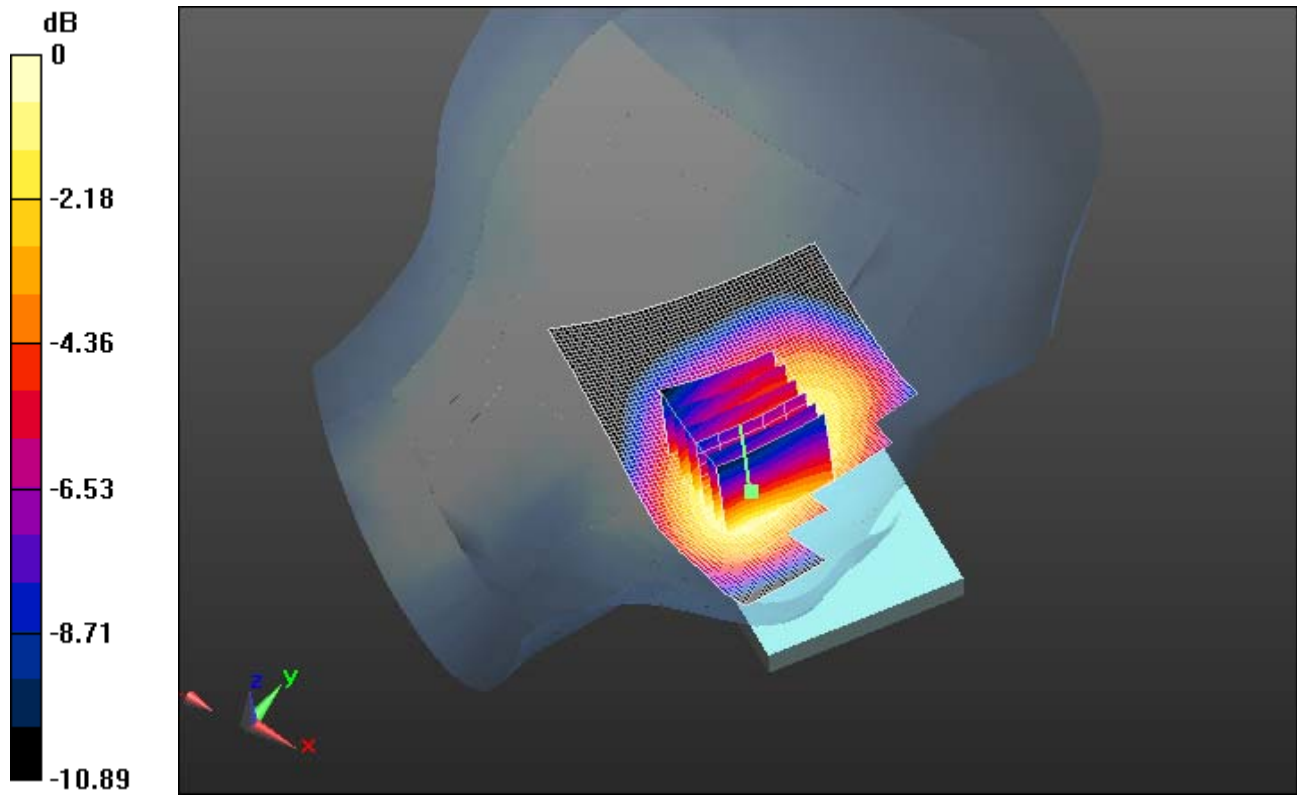
Peak SAR (extrapolated) = 0.7700

SAR(1 g) = 0.574 mW/g; SAR(10 g) = 0.423 mW/g

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

Maximum value of SAR (measured) = 0.643 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 57(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.640mW/g = -3.88 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			58(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 6:52:11 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_5_mid_chan_16QAM_RB_30_Offset_0_amb_temp_2
3.4_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.411 mW/g

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

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

Reference Value = 4.925 V/m; Power Drift = -0.14 dB

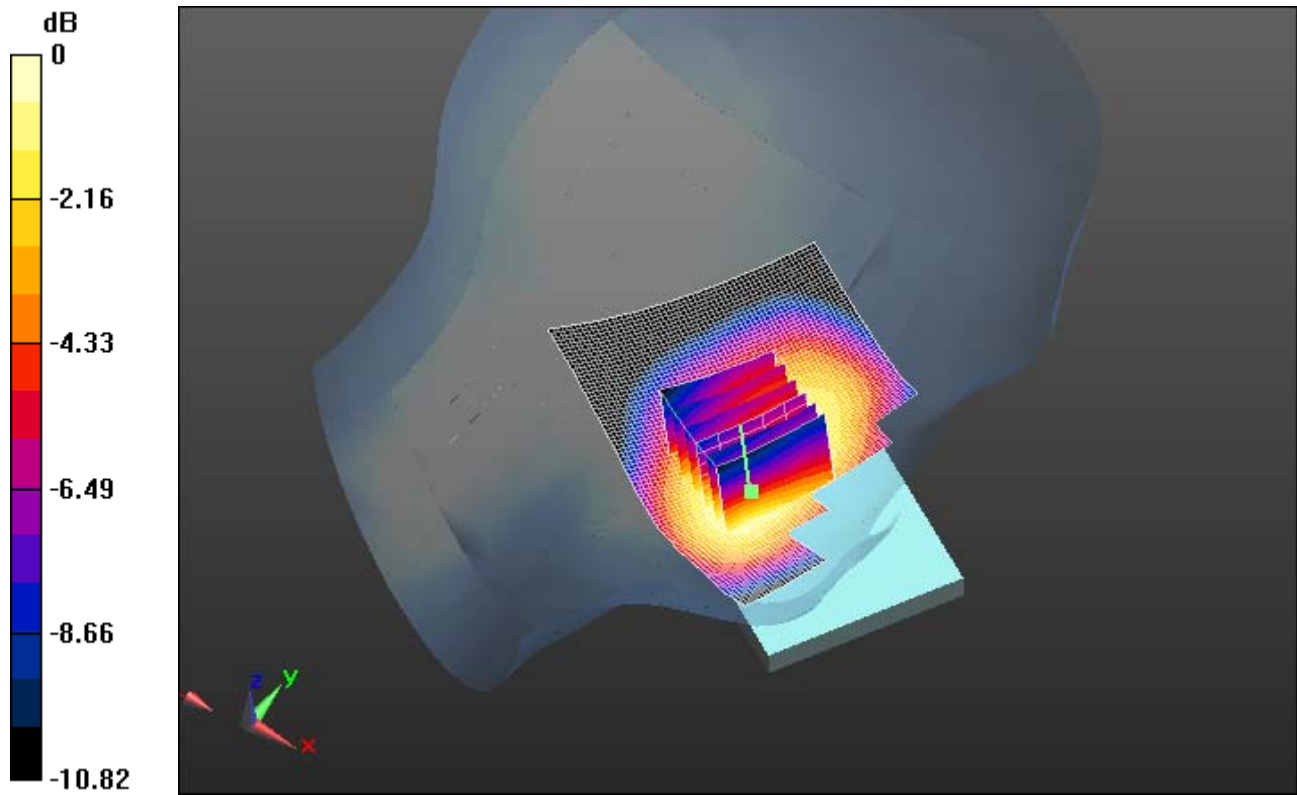
Peak SAR (extrapolated) = 0.4970

SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.271 mW/g

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

Maximum value of SAR (measured) = 0.411 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 59(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.410mW/g = -7.74 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 60(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 7:10:39 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_5_mid_chan_16QAM_RB_1_Offset_0_amb_temp_22
.9_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.537 mW/g

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

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

Reference Value = 5.442 V/m; Power Drift = -0.13 dB

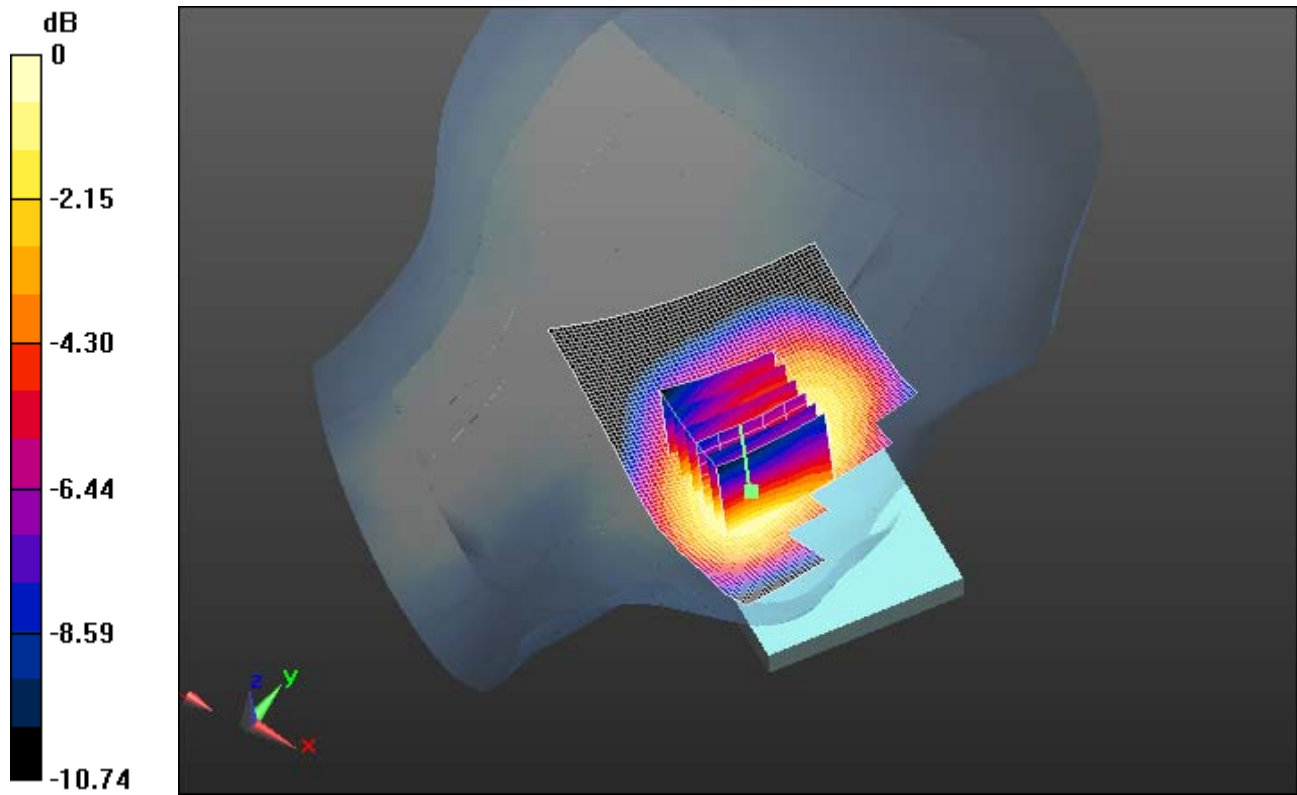
Peak SAR (extrapolated) = 0.6100

SAR(1 g) = 0.466 mW/g; SAR(10 g) = 0.344 mW/g

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

Maximum value of SAR (measured) = 0.515 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 61(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.510mW/g = -5.85 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			62(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 7:28:30 AM

Test Laboratory: RIM Testing Services

LeftHandside_LTE_5_mid_chan_16QAM_RB_1_Offset_49_amb_temp_2
3.2_liq_temp_21.6C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x91x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.533 mW/g

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

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

Reference Value = 5.454 V/m; Power Drift = 0.04 dB

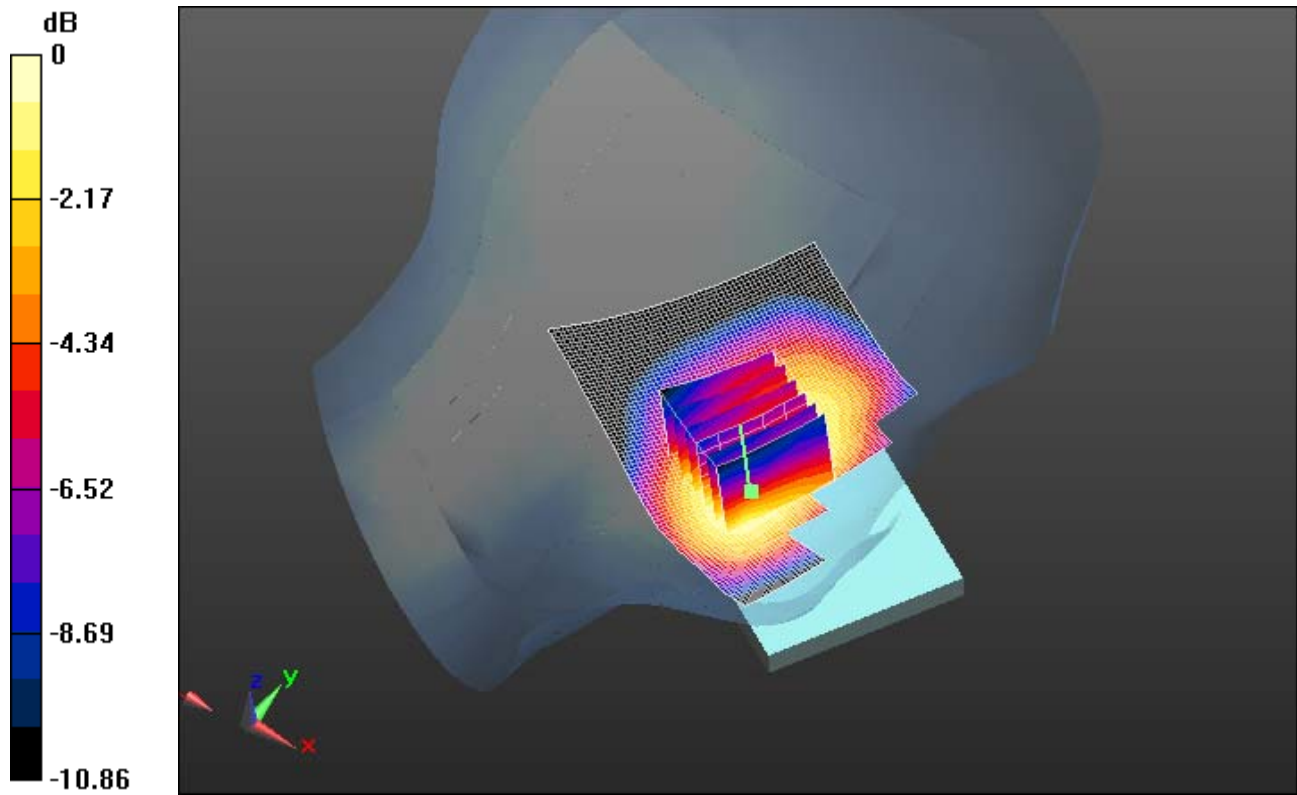
Peak SAR (extrapolated) = 0.6380

SAR(1 g) = 0.464 mW/g; SAR(10 g) = 0.343 mW/g

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

Maximum value of SAR (measured) = 0.528 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 63(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.530mW/g = -5.51 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 64(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/8/2012 7:51:29 AM

Test Laboratory: RIM Testing Services

**LeftHandside_Tilt_LTE_5_mid_chan_QPSK_RB_1_Offset_0_amb_temp
_23.2_liq_temp_21.6C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.592$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.359 mW/g

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

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

Reference Value = 10.767 V/m; Power Drift = 0.14 dB

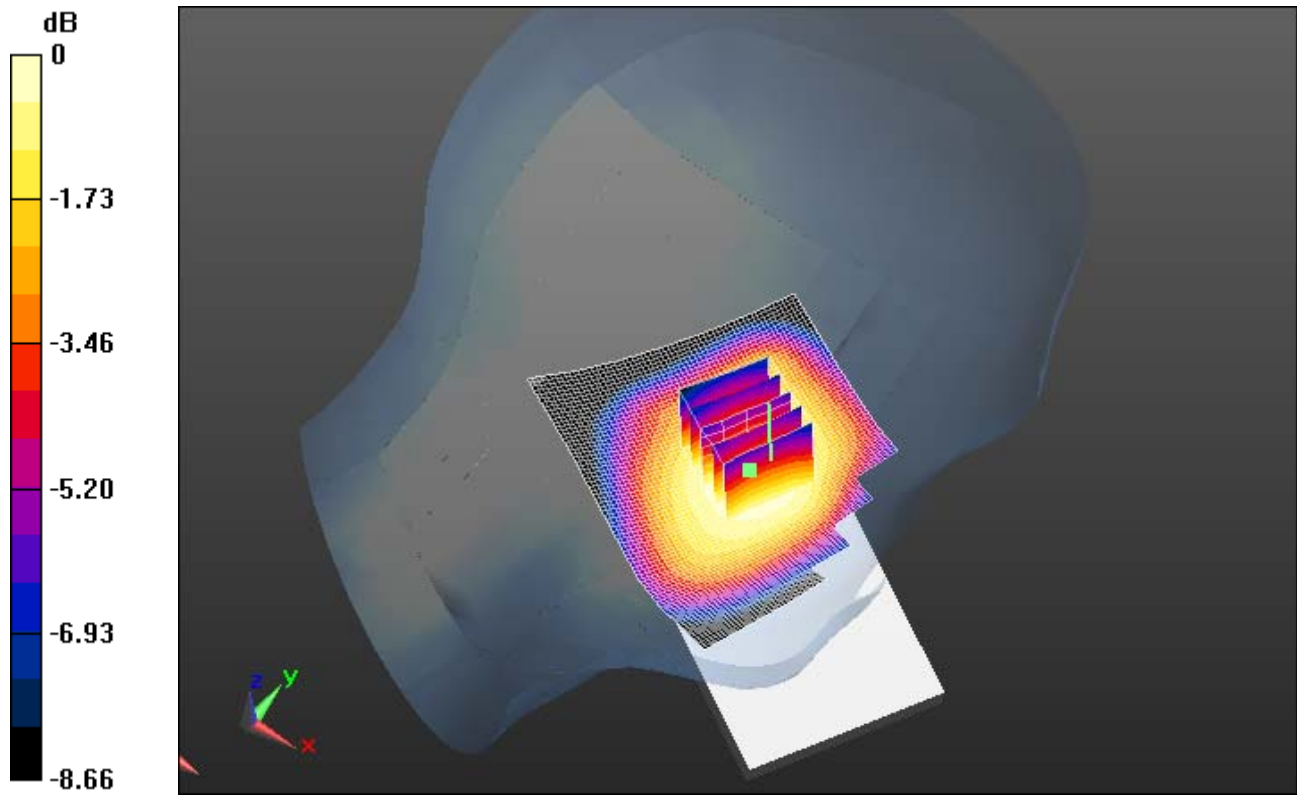
Peak SAR (extrapolated) = 0.4010

SAR(1 g) = 0.328 mW/g; SAR(10 g) = 0.255 mW/g

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

Maximum value of SAR (measured) = 0.353 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 65(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.350mW/g = -9.12 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 66(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/15/2012 5:49:22 AM

Test Laboratory: RIM Testing Services

**LeftHandside_Tilt_LTE_5_mid_chan_16QAM_RB_1_Offset_0_amb_tem
p_23.4_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 41.132$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.184 mW/g

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

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

Reference Value = 8.493 V/m; Power Drift = -0.22 dB

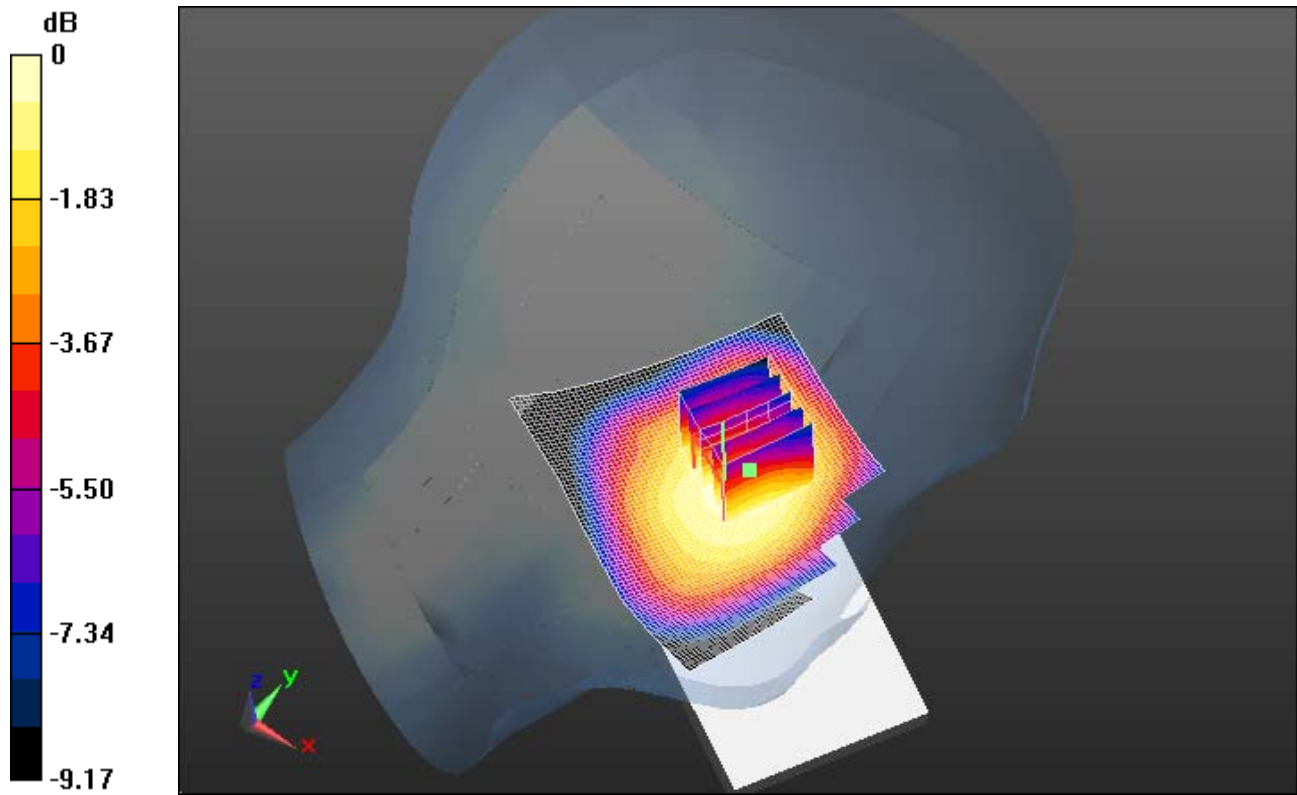
Peak SAR (extrapolated) = 0.2200

SAR(1 g) = 0.167 mW/g; SAR(10 g) = 0.129 mW/g

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

Maximum value of SAR (measured) = 0.186 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 67(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.190mW/g = -14.42 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			68(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/25/2012 10:32:04 AM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_5_mid_chan_QPSK_RB_1_Offset_0_amb_temp_2
4.2C_liq_temp_22.7C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: LTE 5; Frequency: 836.5 MHz

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.893$ mho/m; $\epsilon_r = 42.046$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.374 mW/g

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

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

Reference Value = 5.109 V/m; Power Drift = 0.67 dB

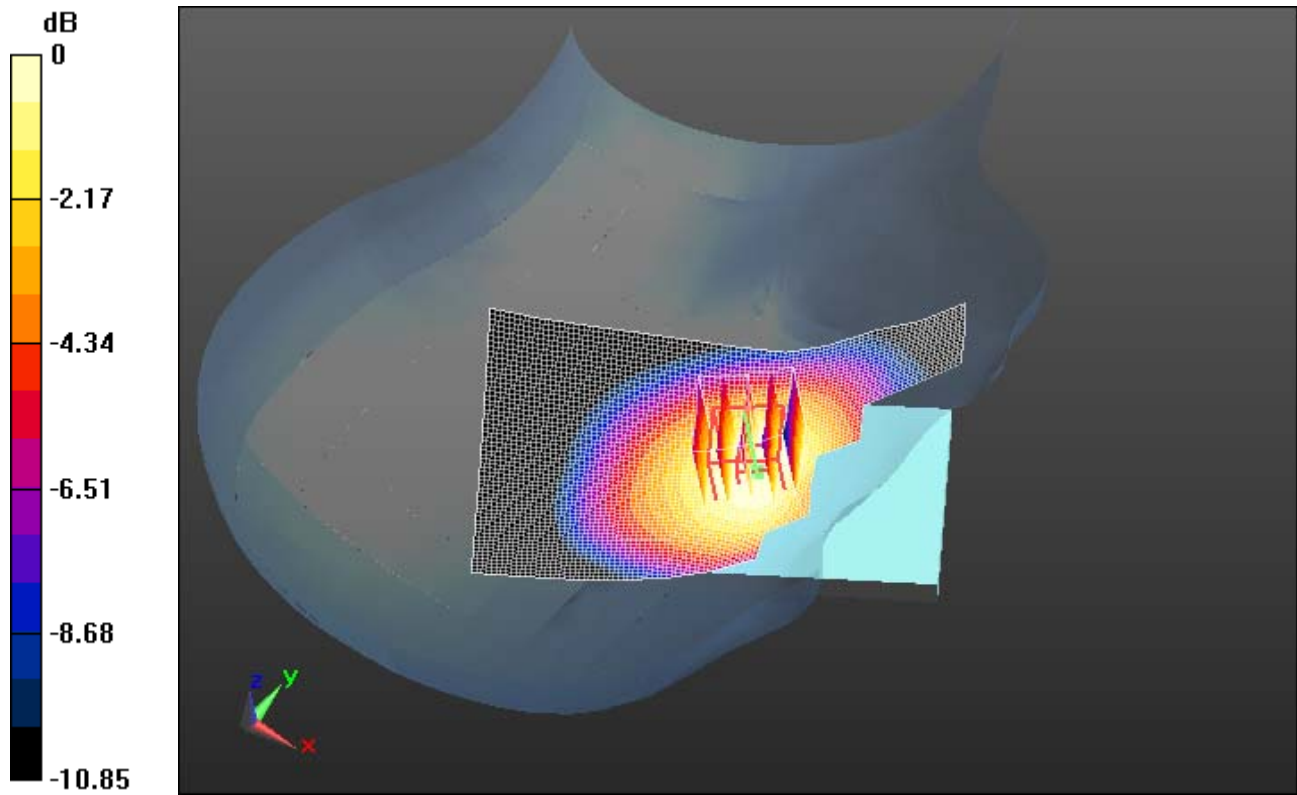
Peak SAR (extrapolated) = 0.4040

SAR(1 g) = 0.339 mW/g; SAR(10 g) = 0.261 mW/g

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

Maximum value of SAR (measured) = 0.366 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 69(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.370mW/g = -8.64 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 70(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 4:11:37 PM

Test Laboratory: RIM Testing Services

RightHandSide_EDGE850_mid_chan_amb_temp_22.7C_liq_temp_21.3

C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: EDGE 850 (2slots); Frequency: 836.8 MHz

Medium parameters used (interpolated): $f = 836.8$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.588$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.562 mW/g

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

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

Reference Value = 6.114 V/m; Power Drift = -0.16 dB

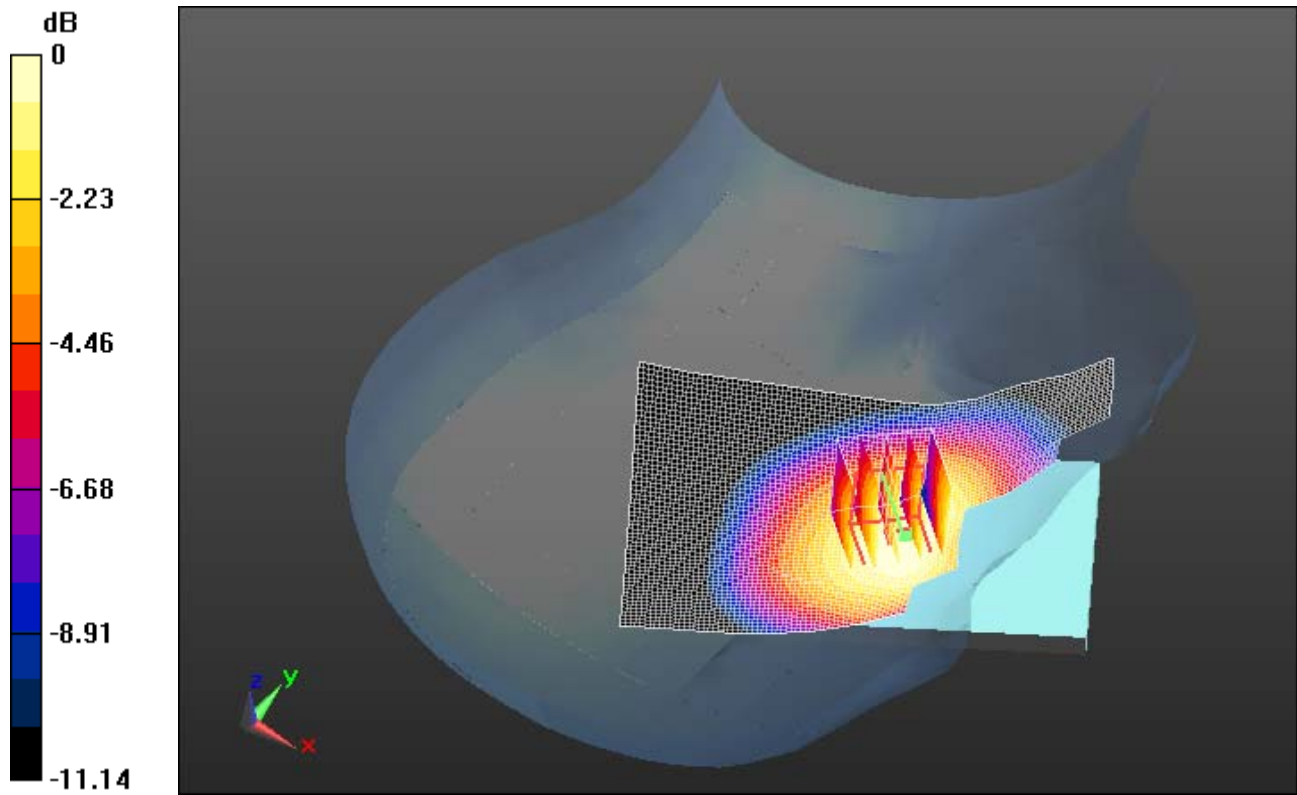
Peak SAR (extrapolated) = 0.6120

SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.384 mW/g

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

Maximum value of SAR (measured) = 0.544 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 71(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.540mW/g = -5.35 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 72(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 4:27:34 PM

Test Laboratory: RIM Testing Services

**RightHandSide_EDGE850_3-slots_mid_chan_amb_temp_22.3C_liq_
temp_21.1C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: EDGE 850 (3 slots); Frequency: 836.8 MHz
Medium parameters used (interpolated): $f = 836.8$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.588$; $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.512 mW/g

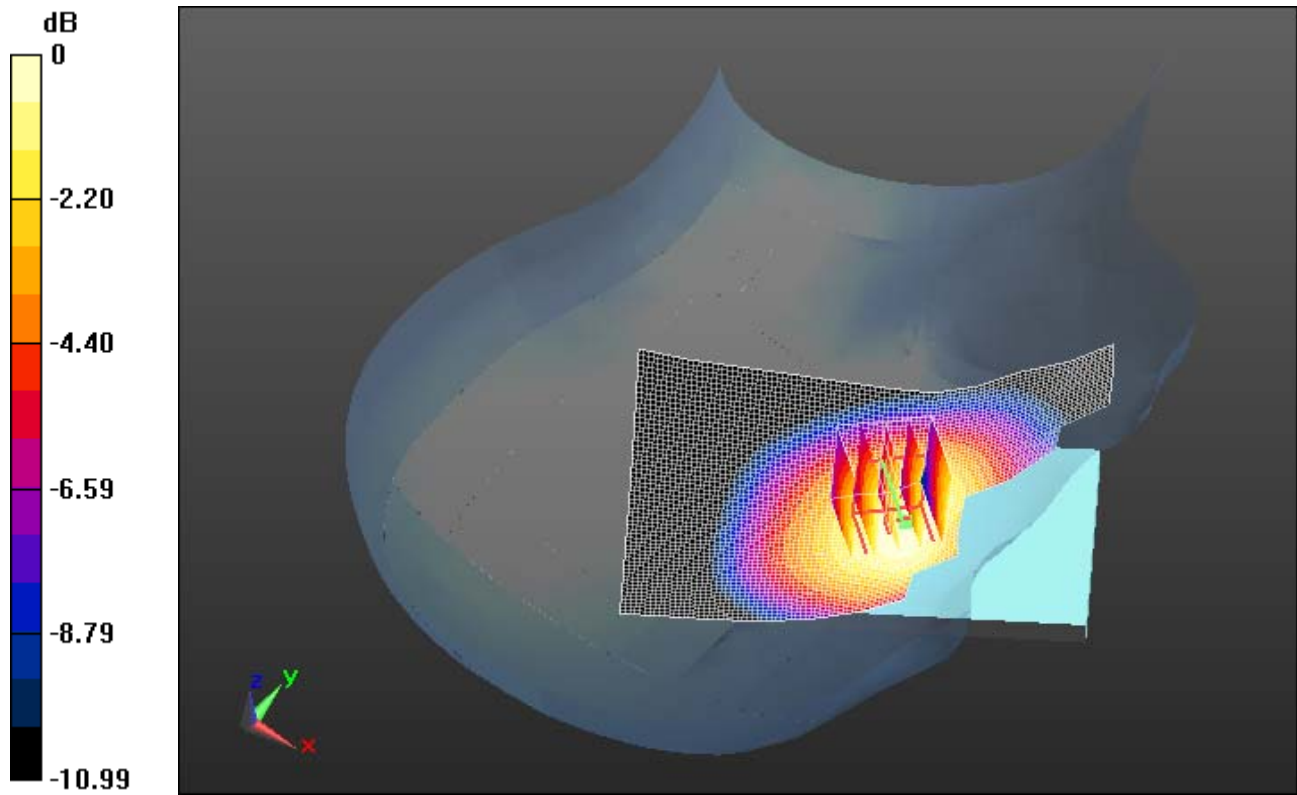
Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 5.718 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.5660
SAR(1 g) = 0.470 mW/g; SAR(10 g) = 0.359 mW/g

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

Maximum value of SAR (measured) = 0.509 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 73(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.510mW/g = -5.85 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 74(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 5:36:45 PM

Test Laboratory: RIM Testing Services

**RightHandSide_EDGE850_4-slots_mid_chan_amb_temp_22.4C_liq_
temp_21.1C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: EDGE 850 (4 slots); Frequency: 836.8 MHz
Medium parameters used (interpolated): $f = 836.8$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.588$; $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.443 mW/g

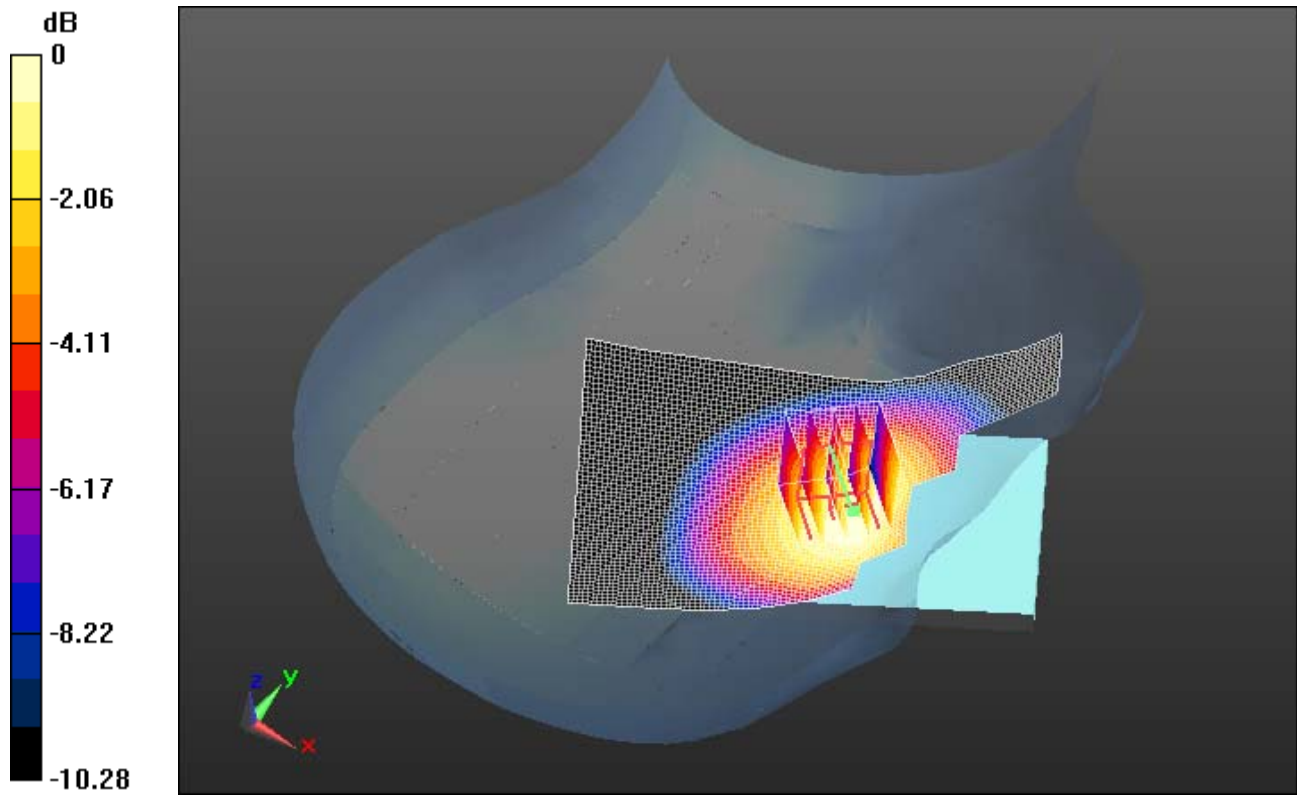
Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 5.641 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.4860
SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.305 mW/g

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

Maximum value of SAR (measured) = 0.433 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 75(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.430mW/g = -7.33 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			76(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 8:52:57 PM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_EDGE850_mid_chan_amb_temp_22.7C_liq_
temp_21.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: EDGE 850 (2slots); Frequency: 836.8 MHz
Medium parameters used (interpolated): $f = 836.8$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.588$; $\rho = 1000$ kg/m³
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.299 mW/g

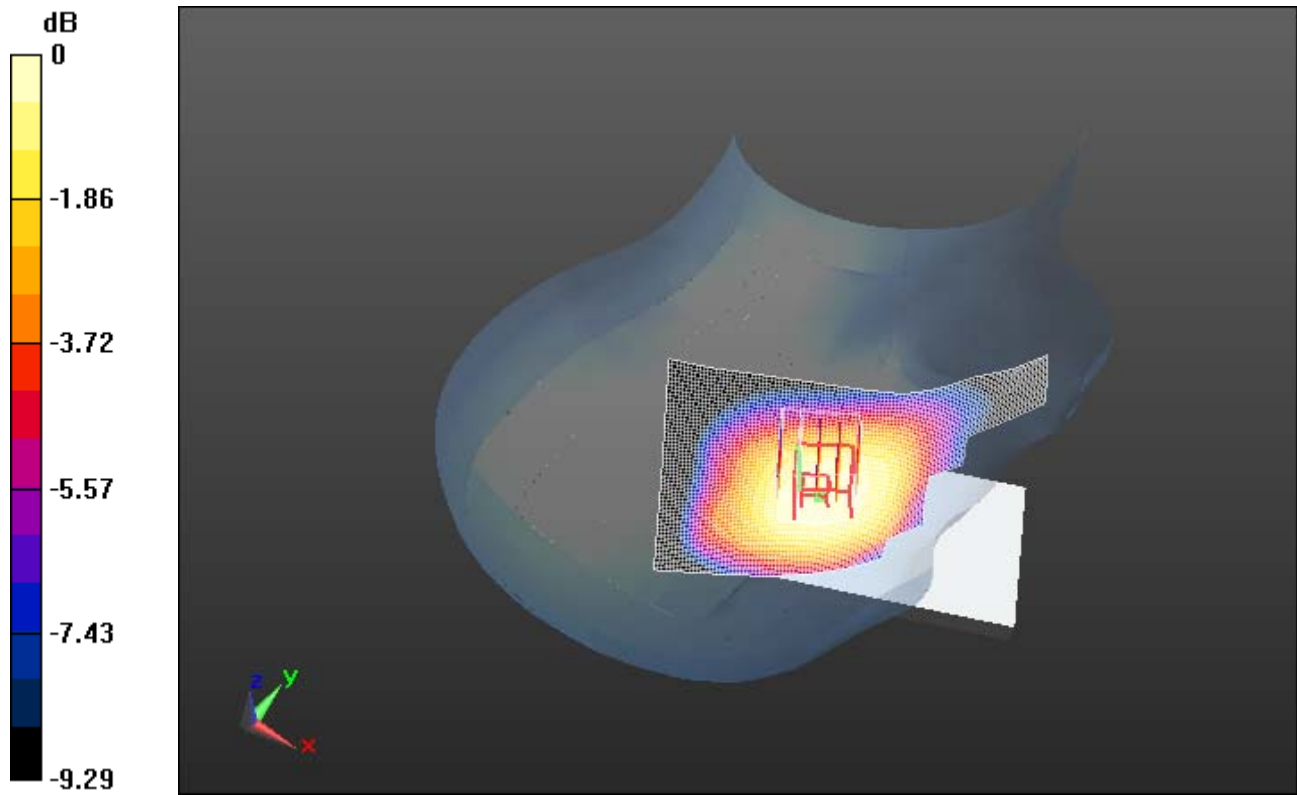
Configuration/Tilt position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 10.904 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.3420
SAR(1 g) = 0.281 mW/g; SAR(10 g) = 0.220 mW/g

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

Maximum value of SAR (measured) = 0.303 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 77(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.300mW/g = -10.46 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			78(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 8:21:48 PM

Test Laboratory: RIM Testing Services

RightHandSide_GSM850_mid_chan_amb_temp_22.8C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: GSM 850; Frequency: 836.8 MHz

Medium parameters used (interpolated): $f = 836.8$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.588$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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
- DASYS2 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.713 mW/g

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

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

Reference Value = 6.513 V/m; Power Drift = 0.05 dB

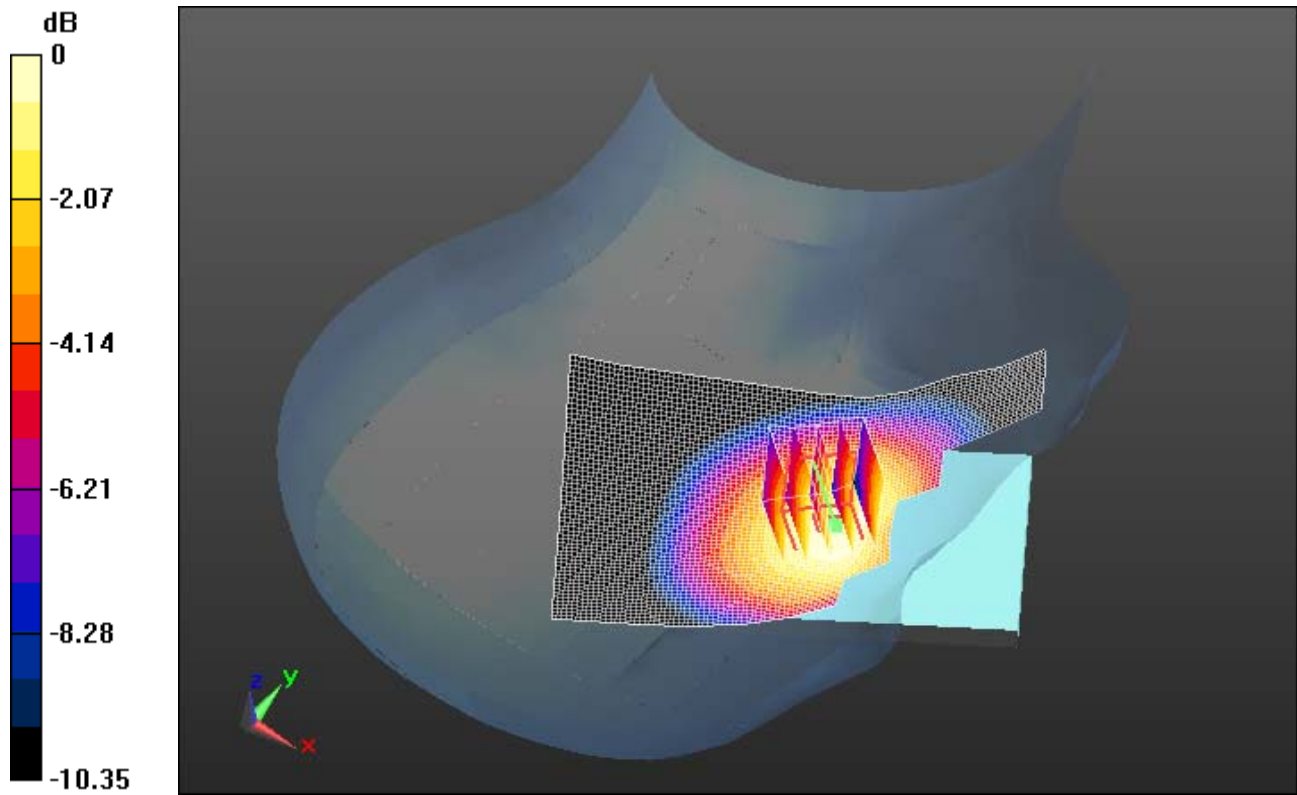
Peak SAR (extrapolated) = 0.7730

SAR(1 g) = 0.643 mW/g; SAR(10 g) = 0.485 mW/g

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

Maximum value of SAR (measured) = 0.692 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 79(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.690mW/g = -3.22 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 80(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 6:56:08 PM

Test Laboratory: RIM Testing Services

LeftHandSide_EDGE850_mid_chan_amb_temp_22.7C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: EDGE 850 (2slots); Frequency: 836.8 MHz

Medium parameters used (interpolated): $f = 836.8 \text{ MHz}$; $\sigma = 0.894 \text{ mho/m}$; $\epsilon_r = 42.588$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x81x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.583 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 = 5.406 V/m; Power Drift = 0.36 dB

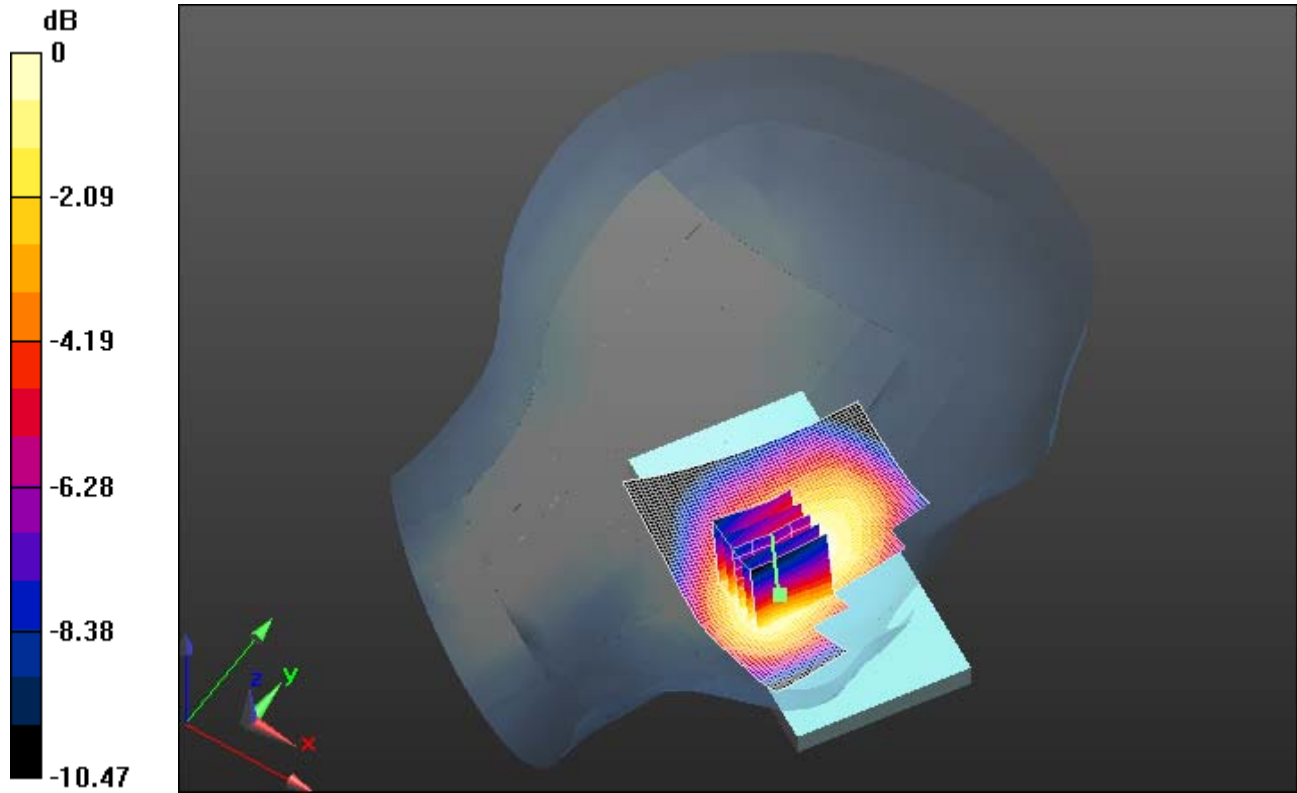
Peak SAR (extrapolated) = 0.6770

SAR(1 g) = 0.491 mW/g; SAR(10 g) = 0.356 mW/g

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

Maximum value of SAR (measured) = 0.549 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 81(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.550mW/g = -5.19 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 82(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 7:23:13 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_Tilt_EDGE850_mid_chan_amb_temp_22.7C_liq_temp_21
.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: GSM 850; Frequency: 836.8 MHz

Medium parameters used (interpolated): $f = 836.8$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.588$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.373 mW/g

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

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

Reference Value = 11.579 V/m; Power Drift = -0.03 dB

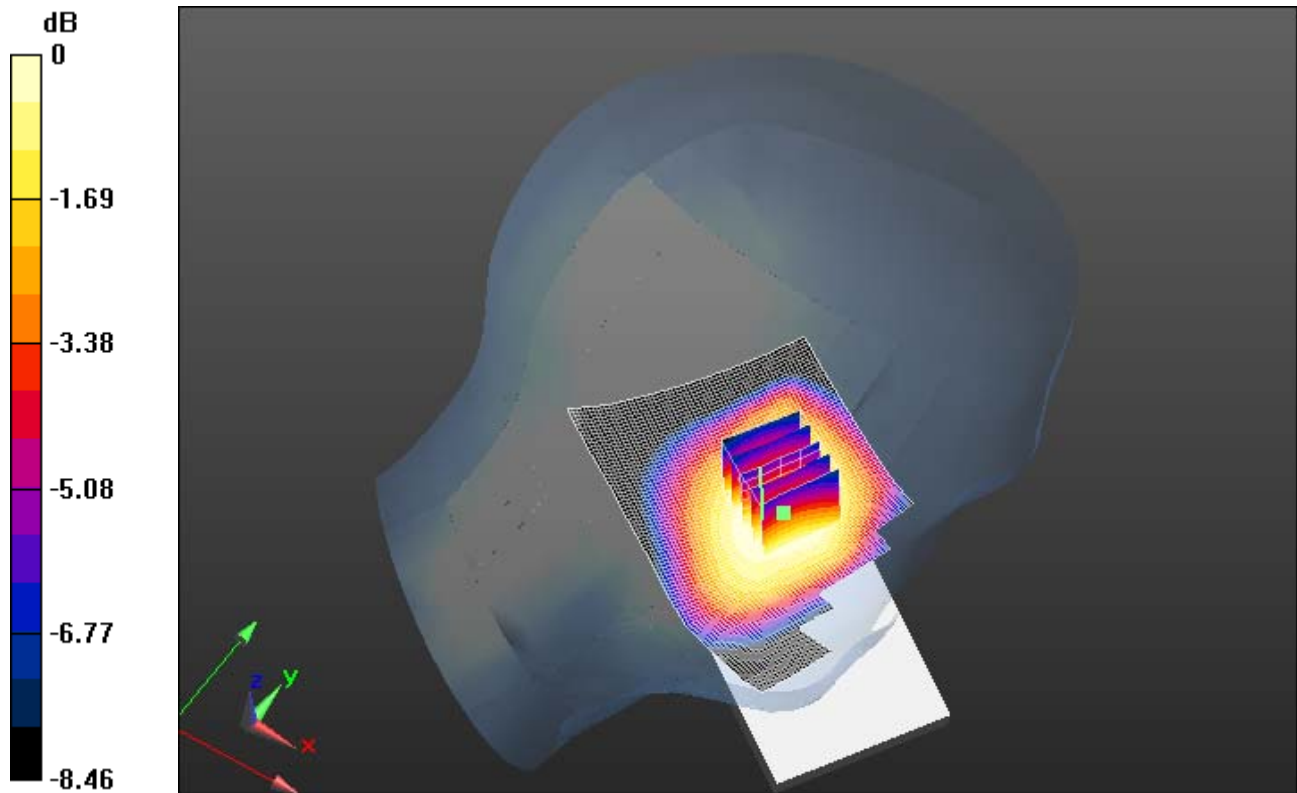
Peak SAR (extrapolated) = 0.3920

SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.247 mW/g

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

Maximum value of SAR (measured) = 0.345 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 83(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.340mW/g = -9.37 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 84(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 7:57:54 PM

Test Laboratory: RIM Testing Services

LeftHandSide_GSM850_mid_chan_amb_temp_22.7C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: GSM 850; Frequency: 836.8 MHz

Medium parameters used (interpolated): $f = 836.8 \text{ MHz}$; $\sigma = 0.894 \text{ mho/m}$; $\epsilon_r = 42.588$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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
- DASYS2 52.8.0(692); SEMCAD X 14.6.4(4989)

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

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

Maximum value of SAR (interpolated) = 0.691 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 = 6.022 V/m ; Power Drift = -0.05 dB

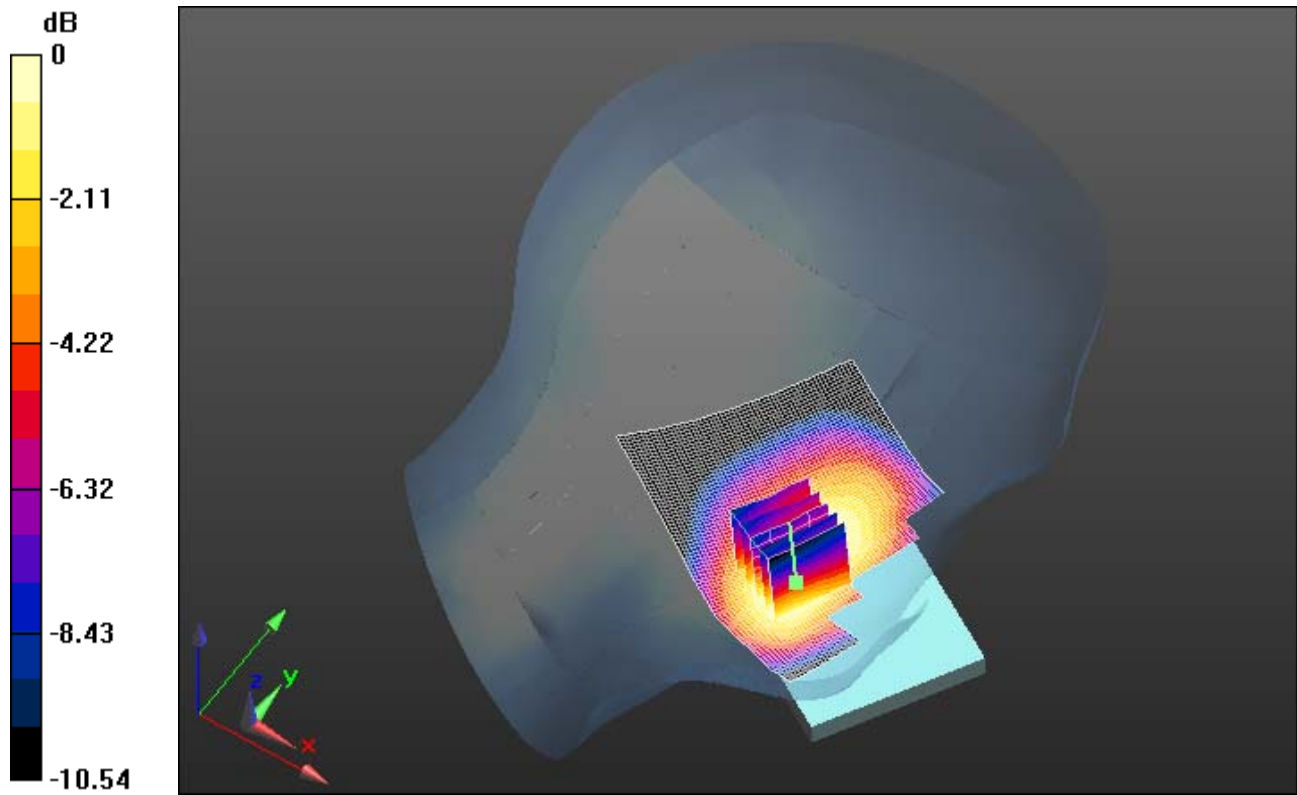
Peak SAR (extrapolated) = 0.8640

SAR(1 g) = 0.610 mW/g ; SAR(10 g) = 0.435 mW/g

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

Maximum value of SAR (measured) = 0.682 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 85(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.680mW/g = -3.35 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 86(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 1:51:09 PM

Test Laboratory: RIM Testing Services

RightHandSide_UMTS_Band_V_mid_chan_amb_temp_22.4C_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: WCDMA FDD V; Frequency: 836.4 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.594$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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/Touch position -/Area Scan (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.688 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 = 7.410 V/m; Power Drift = 0.12 dB

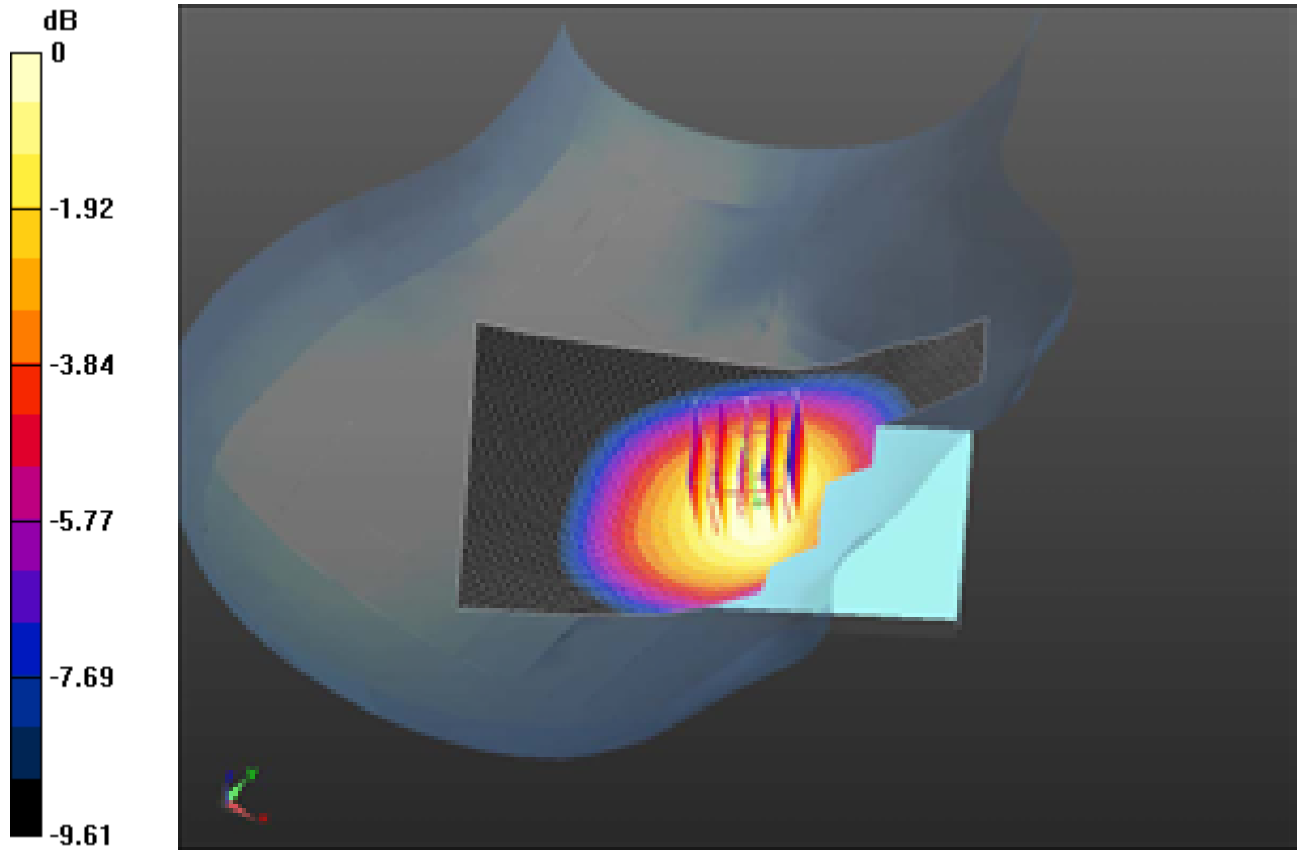
Peak SAR (extrapolated) = 0.7420

SAR(1 g) = 0.624 mW/g; SAR(10 g) = 0.479 mW/g

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

Maximum value of SAR (measured) = 0.671 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 87(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.670mW/g = -3.48 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			88(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 2:08:34 PM

Test Laboratory: RIM Testing Services

RightHandSide_Tilt_UMTS_Band_V_mid_chan_amb_temp_22.8C_liq_temper_21.6C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: WCDMA FDD V; Frequency: 836.4 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.594$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.405 mW/g

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

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

Reference Value = 11.794 V/m; Power Drift = 0.13 dB

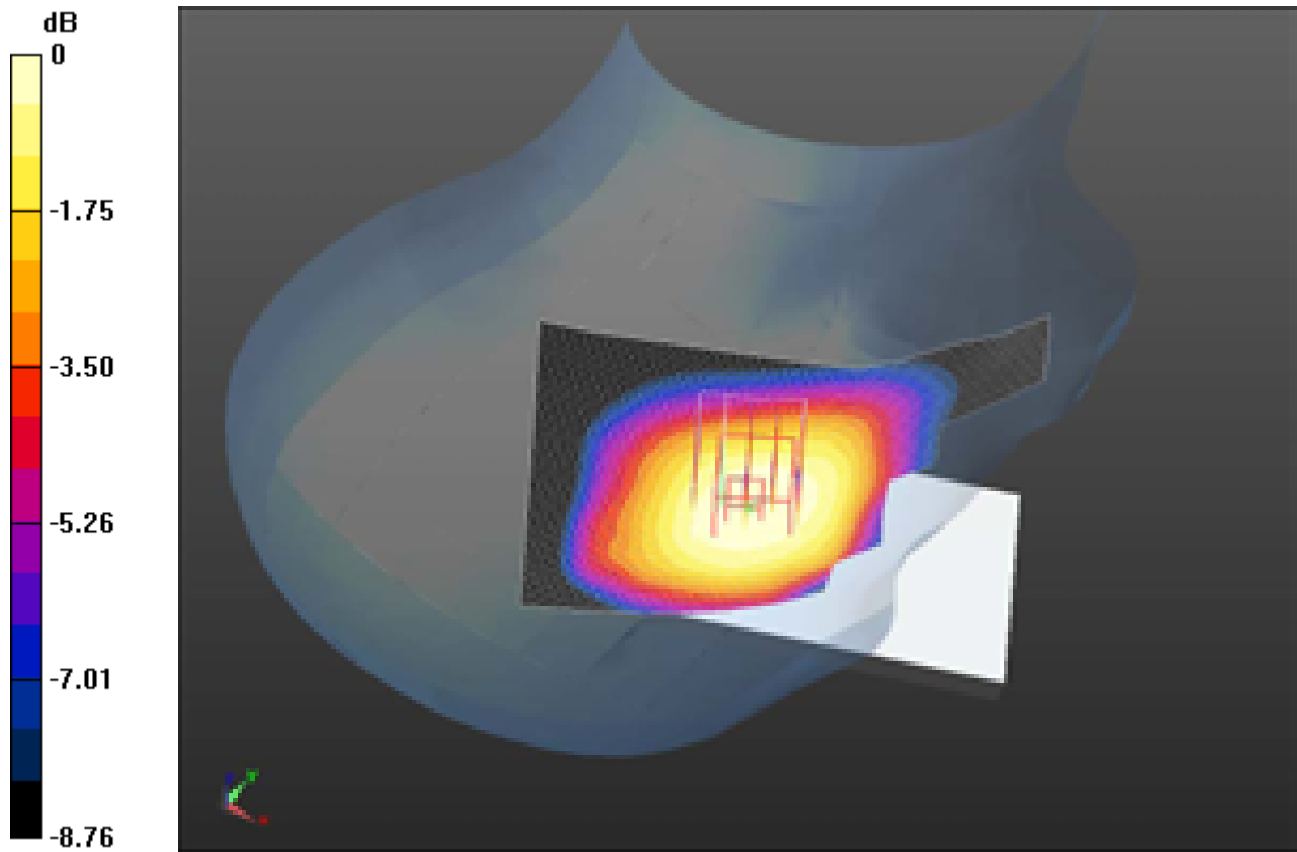
Peak SAR (extrapolated) = 0.4450

SAR(1 g) = 0.368 mW/g; SAR(10 g) = 0.289 mW/g

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

Maximum value of SAR (measured) = 0.397 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 89(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			90(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/21/2012 11:54:14 AM

Test Laboratory: RIM Testing Services

RightHandSide_GSM850_mid_chan_amb_temp_24.8C_liq_temp_22.6C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: GSM 850; Frequency: 836.8 MHz

Medium parameters used (interpolated): $f = 836.8$ MHz; $\sigma = 0.913$ mho/m; $\epsilon_r = 40.125$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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
- DASYS2 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.665 mW/g

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

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

Reference Value = 7.672 V/m; Power Drift = -0.28 dB

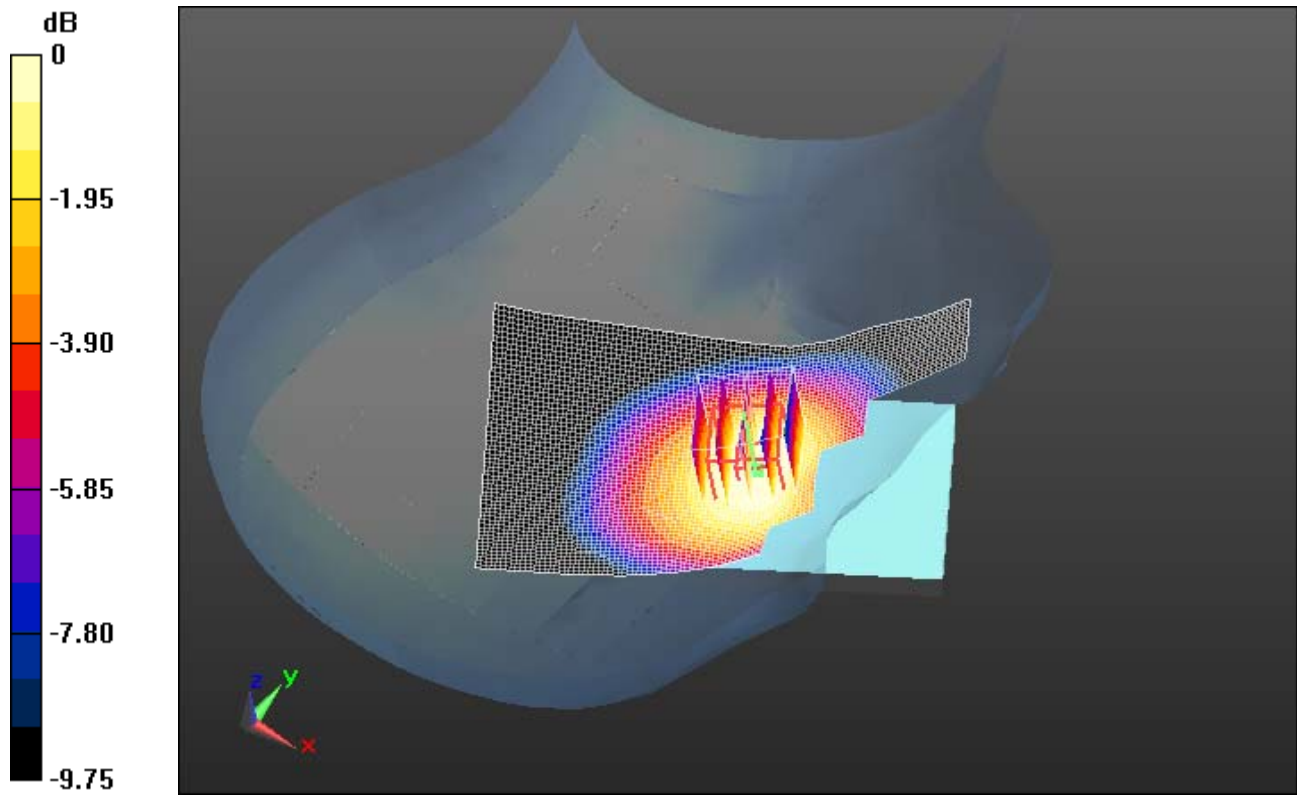
Peak SAR (extrapolated) = 0.7060

SAR(1 g) = 0.586 mW/g; SAR(10 g) = 0.444 mW/g

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

Maximum value of SAR (measured) = 0.634 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 91(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.630mW/g = -4.01 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 92(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 12:39:05 PM

Test Laboratory: RIM Testing Services

LeftHandSide_UMTS_Band_V_mid_chan_amb_temp_22.7C_liq_temp_2 1.4C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: WCDMA FDD V; Frequency: 836.4 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.594$; $\rho = 1000$ kg/m³

Phantom section: Left Section

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

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.687 mW/g

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

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

Reference Value = 6.332 V/m; Power Drift = 0.03 dB

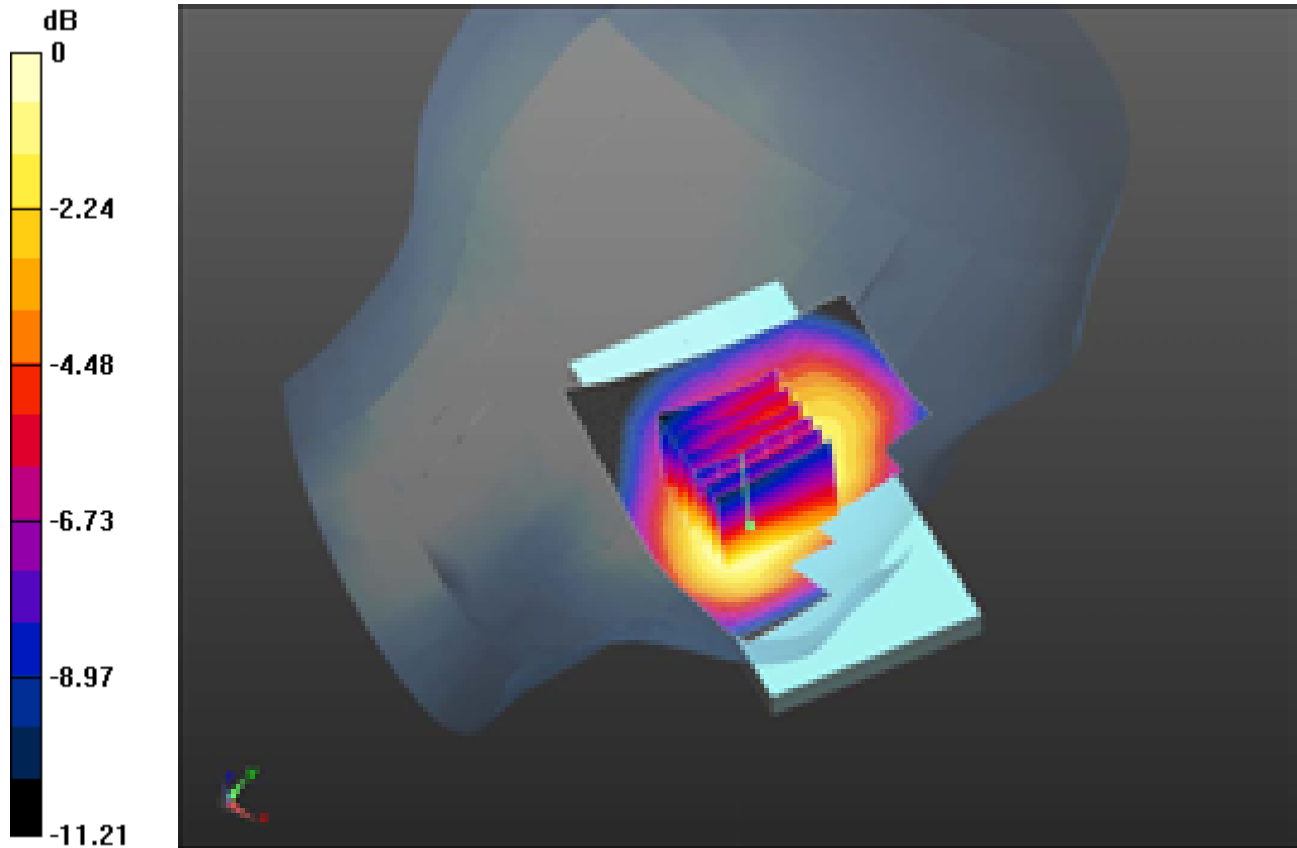
Peak SAR (extrapolated) = 0.8530

SAR(1 g) = 0.614 mW/g; SAR(10 g) = 0.437 mW/g

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

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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 93(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.690mW/g = -3.22 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 94(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/6/2012 12:57:20 PM

Test Laboratory: RIM Testing Services

LeftHandSide_Tilt_UMTS_Band_V_mid_chan_amb_temp_22.7C_liq_temper_21.6C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: WCDMA FDD V; Frequency: 836.4 MHz
Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.594$; $\rho = 1000$ kg/m³
Phantom section: Left Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 - SN3225; ConvF(6.06, 6.06, 6.06); 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 (61x81x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.423 mW/g

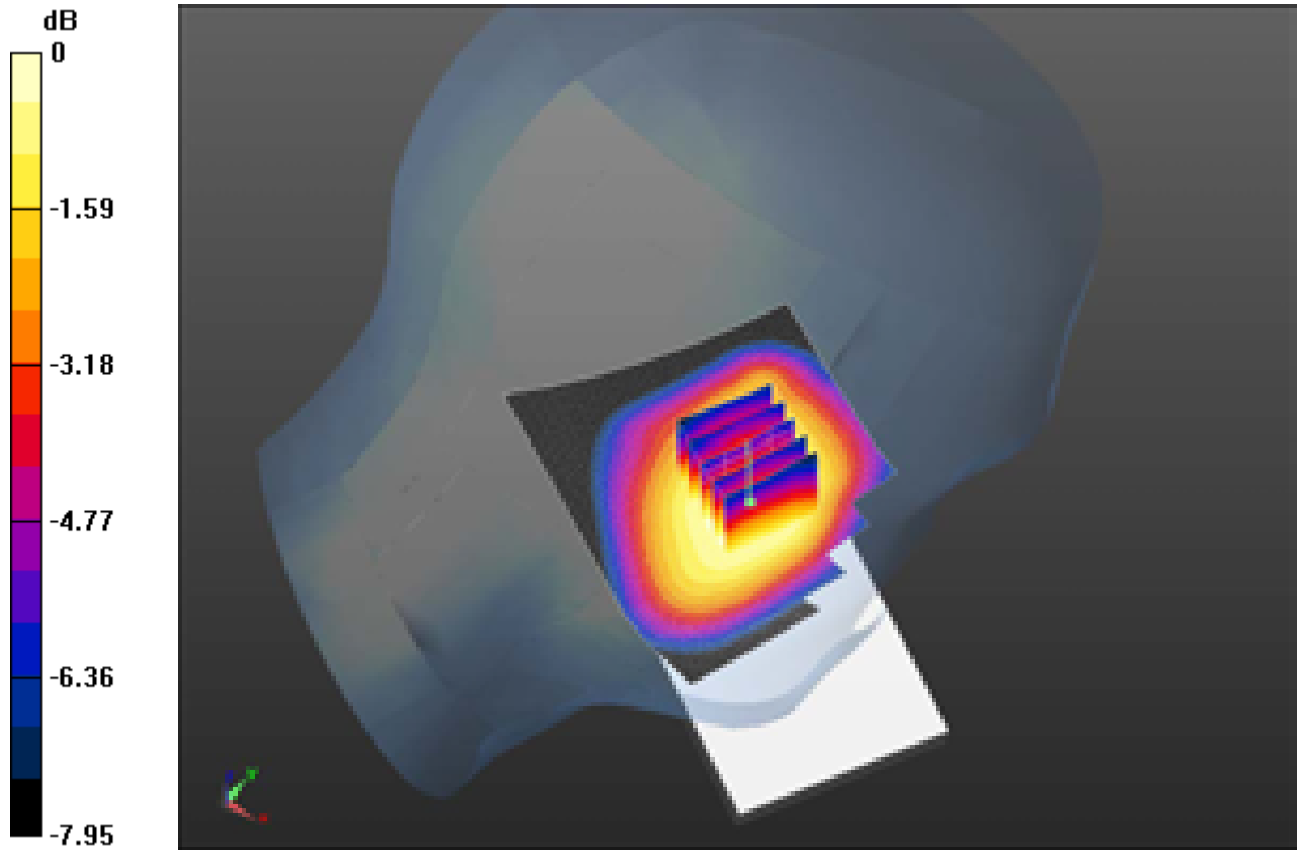
Configuration/Touch position -/Zoom Scan (5x5x7) (5x5x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 10.777 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.4550
SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.300 mW/g

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

Maximum value of SAR (measured) = 0.416 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 95(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 96(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 5:49:38 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_4_mid_chan_QPSK_RB_1_Offset_0_amb_temp_2
3.1C_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.805 mW/g

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

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

Reference Value = 12.352 V/m; Power Drift = 0.03 dB

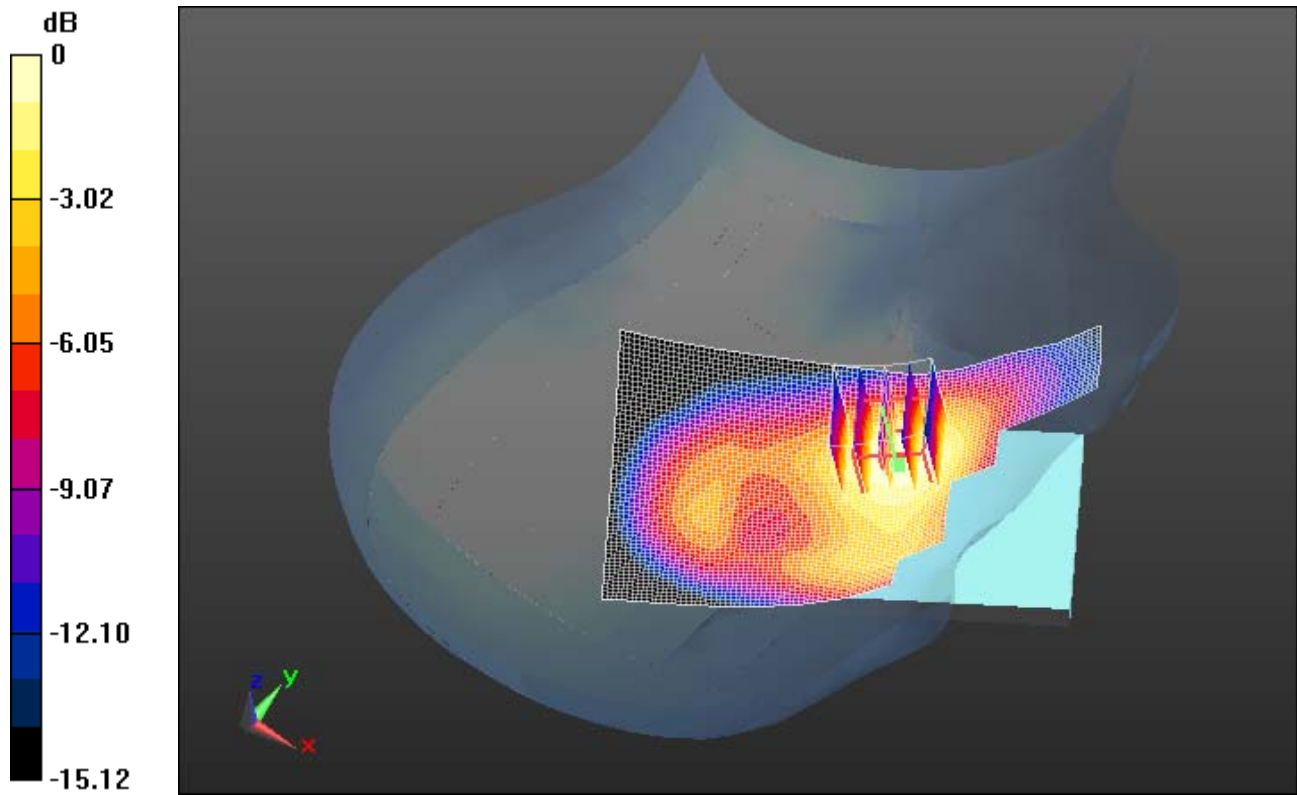
Peak SAR (extrapolated) = 1.0110

SAR(1 g) = 0.669 mW/g; SAR(10 g) = 0.416 mW/g

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

Maximum value of SAR (measured) = 0.760 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 97(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.760mW/g = -2.38 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 98(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 6:06:48 PM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_4_mid_chan_QPSK_RB_1_Offset_99_amb_temp_22.8C_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$; $\rho = 1000$ 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/Touch position -/Area Scan (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.749 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 = 11.380 V/m; Power Drift = 0.04 dB

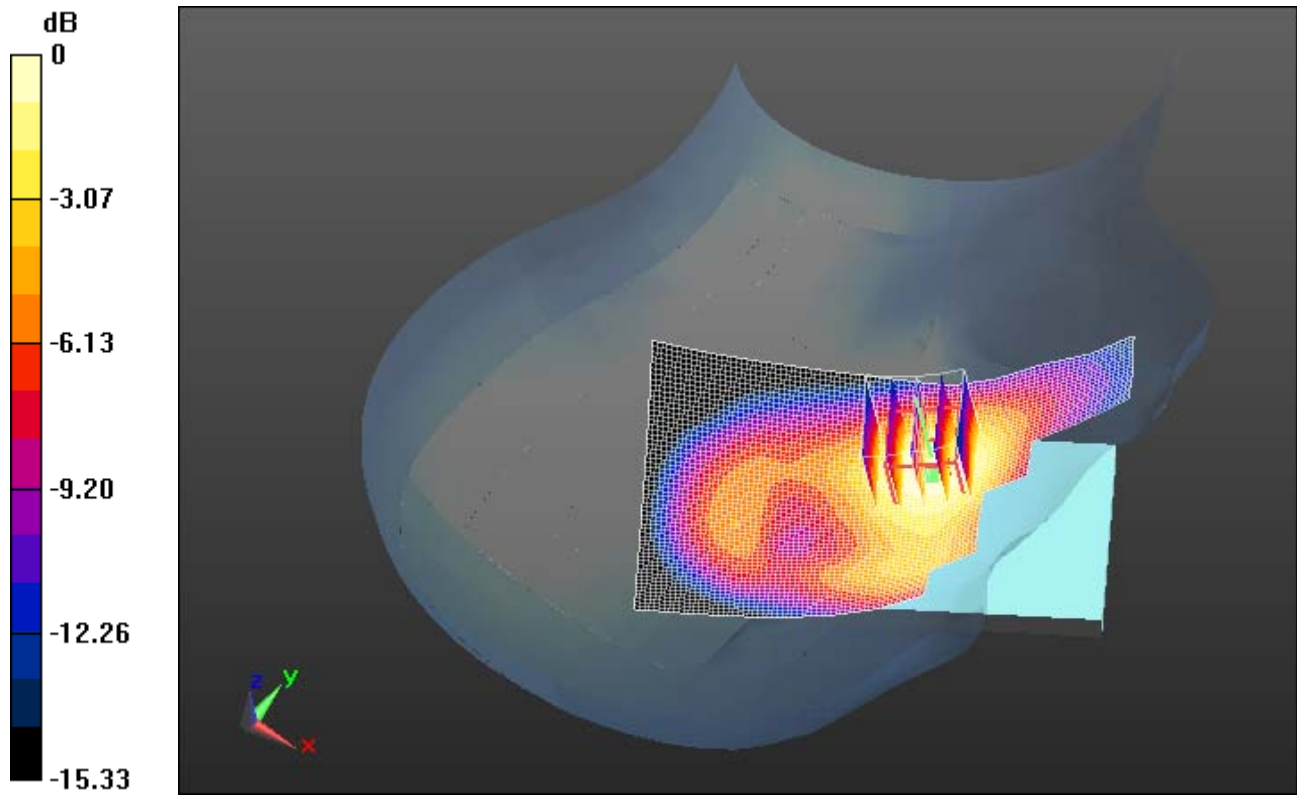
Peak SAR (extrapolated) = 0.9370

SAR(1 g) = 0.617 mW/g; SAR(10 g) = 0.383 mW/g

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

Maximum value of SAR (measured) = 0.698 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 99(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.700mW/g = -3.10 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 100(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 6:23:22 PM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_4_mid_chan_QPSK_RB_50_Offset_0_amb_temp_22.6C_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$; $\rho = 1000$ 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/Touch position -/Area Scan (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.659 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 = 11.057 V/m; Power Drift = 0.03 dB

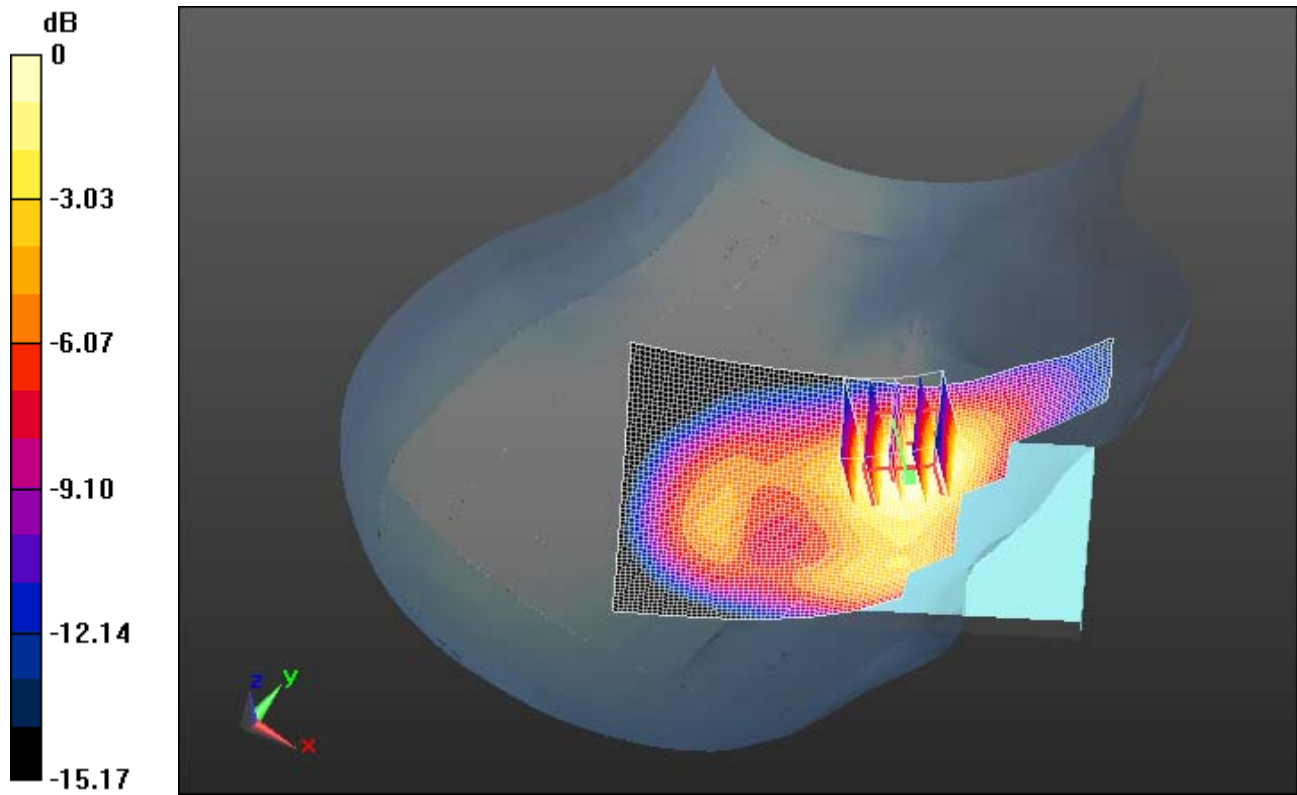
Peak SAR (extrapolated) = 0.8190

SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.338 mW/g

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

Maximum value of SAR (measured) = 0.613 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 101(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.610mW/g = -4.29 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 102(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 7:00:52 PM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_4_mid_chan_16QAM_RB_1_Offset_0_amb_temp_23.0C_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$; $\rho = 1000$ 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.643 mW/g

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

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

Reference Value = 10.971 V/m; Power Drift = 0.13 dB

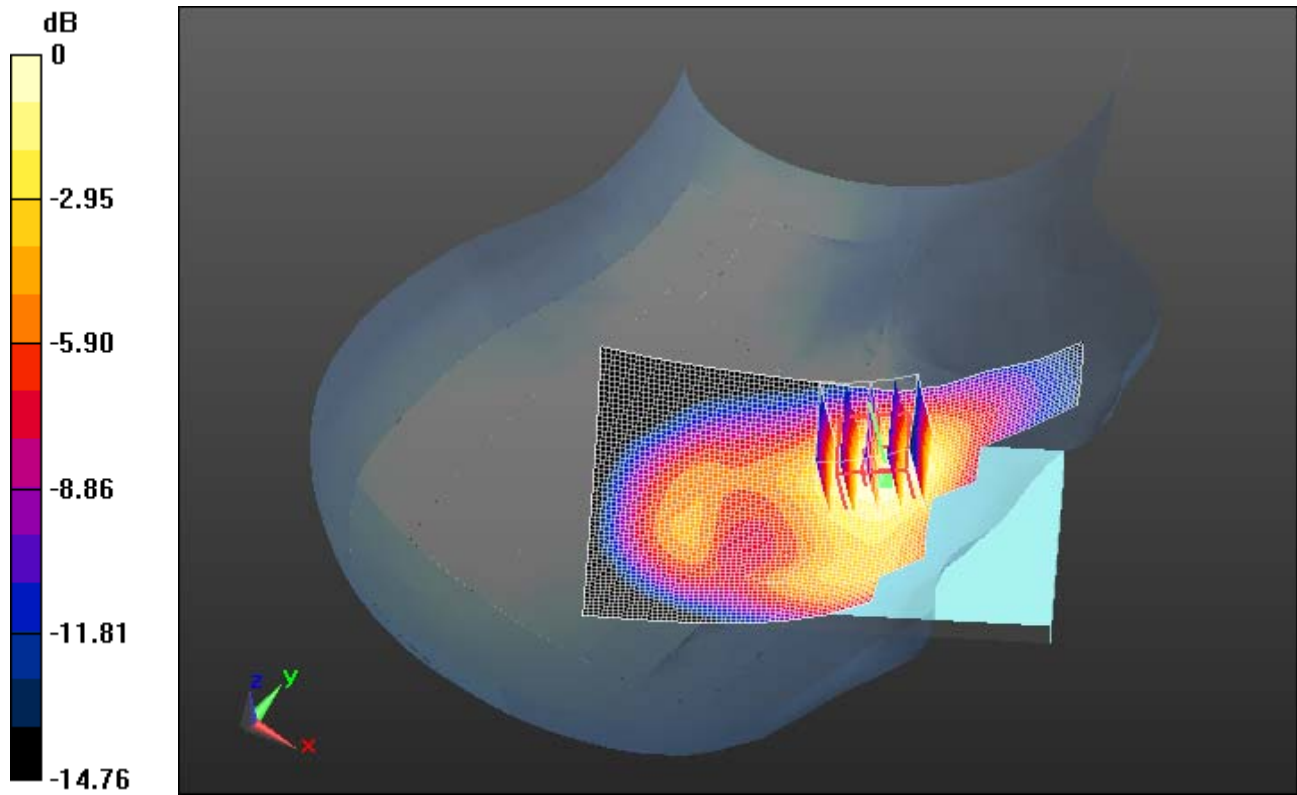
Peak SAR (extrapolated) = 0.8170

SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.336 mW/g

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

Maximum value of SAR (measured) = 0.611 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 103(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.610mW/g = -4.29 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 104(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 7:15:50 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_4_mid_chan_16QAM_RB_1_Offset_99_amb_temp
_22.7C_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.585 mW/g

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

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

Reference Value = 10.074 V/m; Power Drift = 0.03 dB

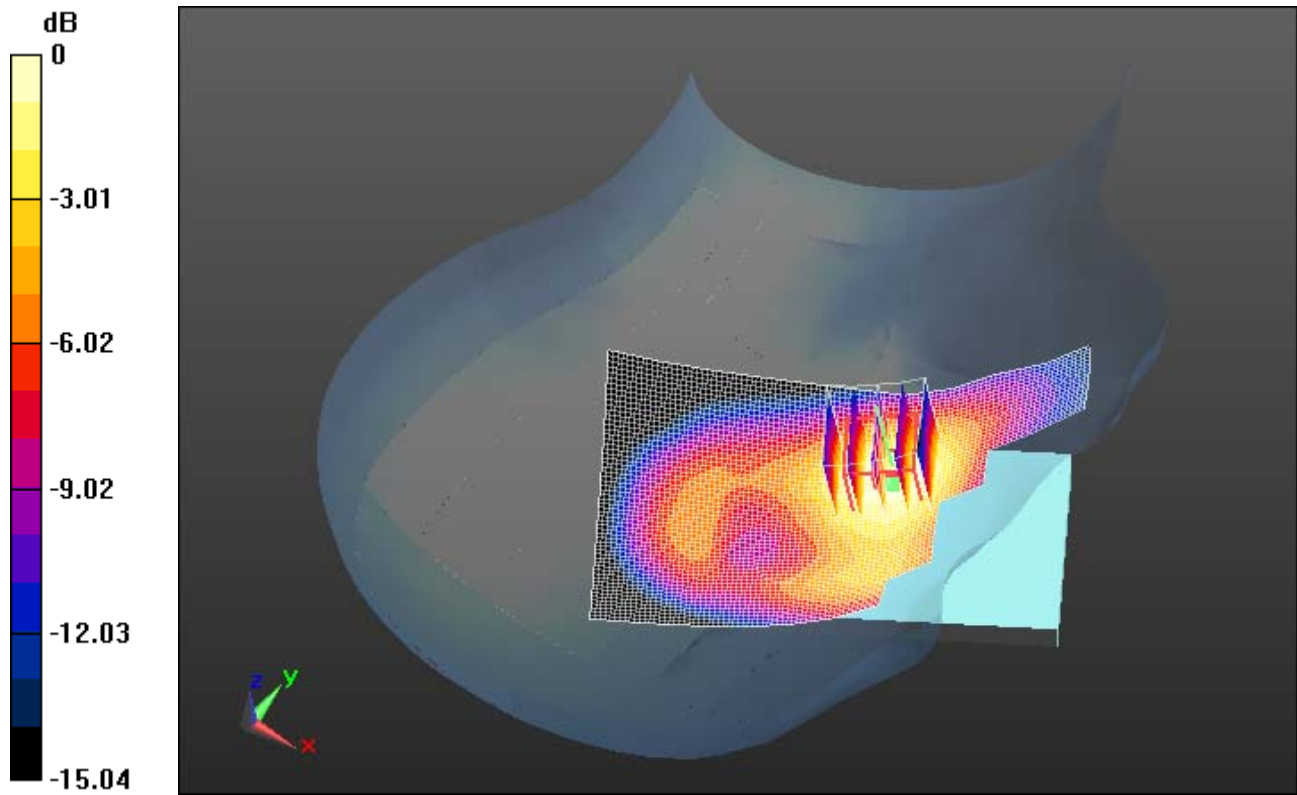
Peak SAR (extrapolated) = 0.7420

SAR(1 g) = 0.489 mW/g; SAR(10 g) = 0.304 mW/g

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

Maximum value of SAR (measured) = 0.560 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 105(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.560mW/g = -5.04 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 106(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 7:56:55 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_4_mid_chan_16QAM_RB_75_Offset_0_amb_temp
_22.8C_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.533 mW/g

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

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

Reference Value = 10.001 V/m; Power Drift = 0.04 dB

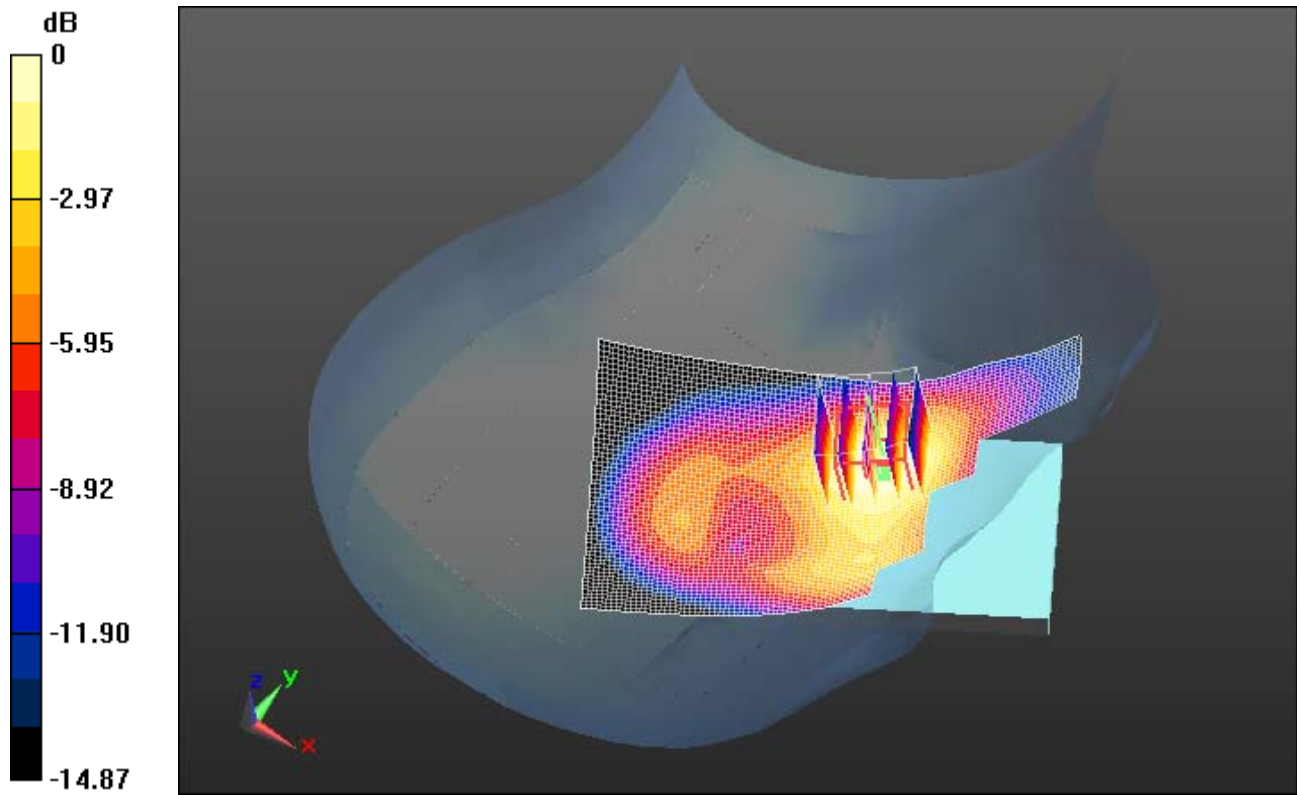
Peak SAR (extrapolated) = 0.6670

SAR(1 g) = 0.443 mW/g; SAR(10 g) = 0.274 mW/g

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

Maximum value of SAR (measured) = 0.502 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 107(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.500mW/g = -6.02 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 108(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 9:02:13 PM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_LTE_4_mid_chan_QPSK_RB_1_Offset_0_amb_tem
p_22.8C_liq_temp_21.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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/Tilt position -/Area Scan (61x101x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.539 mW/g

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

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

Reference Value = 19.371 V/m; Power Drift = -0.04 dB

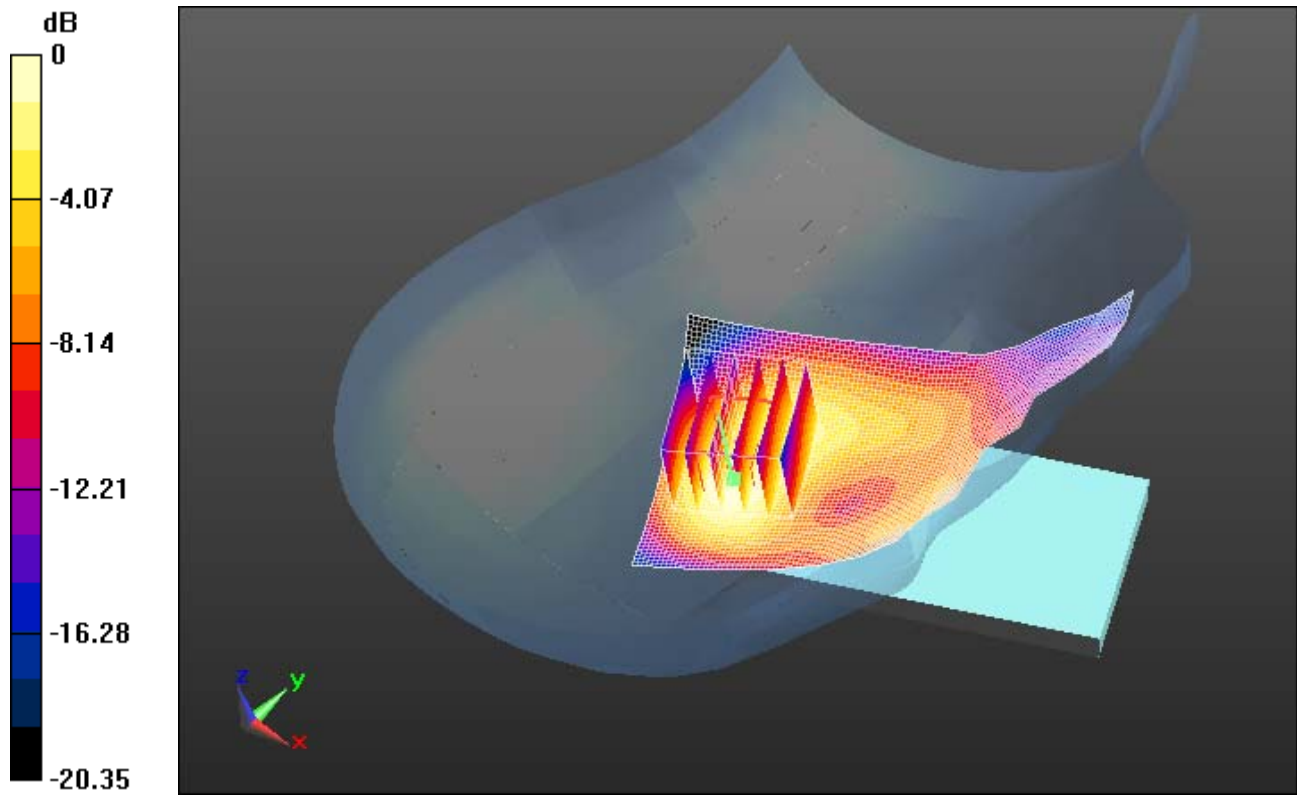
Peak SAR (extrapolated) = 0.6940

SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.269 mW/g

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

Maximum value of SAR (measured) = 0.528 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 109(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.530mW/g = -5.51 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 110(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 8:40:54 PM

Test Laboratory: RIM Testing Services

RightHandSide_Tilt_LTE_4_mid_chan_16QAM_RB_1_Offset_0_amb_temperatures_liq_temp_22.9C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$; $\rho = 1000$ 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 (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.458 mW/g

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

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

Reference Value = 18.028 V/m; Power Drift = -0.01 dB

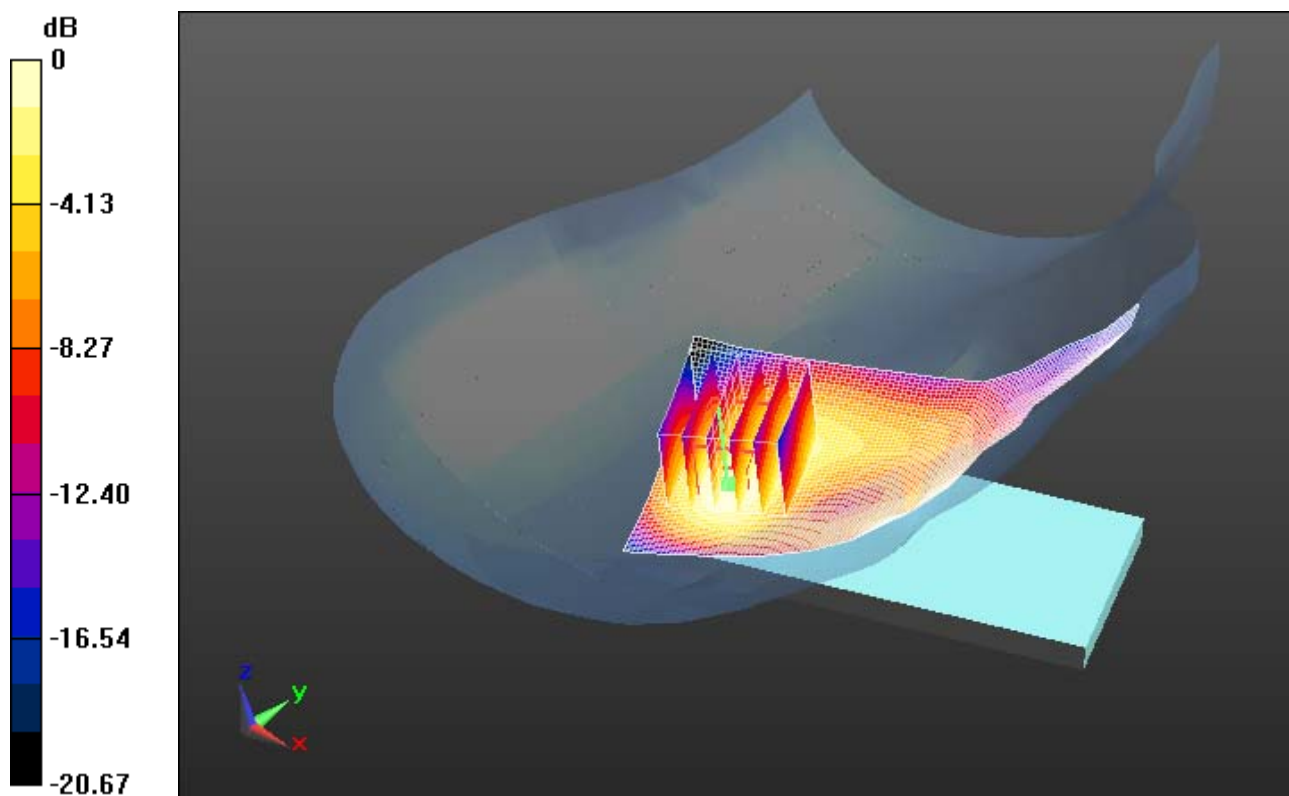
Peak SAR (extrapolated) = 0.5780

SAR(1 g) = 0.376 mW/g; SAR(10 g) = 0.230 mW/g

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

Maximum value of SAR (measured) = 0.443 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 111(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.440mW/g = -7.13 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 112(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 9:56:26 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.
1_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.963 mW/g

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

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

Reference Value = 10.421 V/m; Power Drift = -0.13 dB

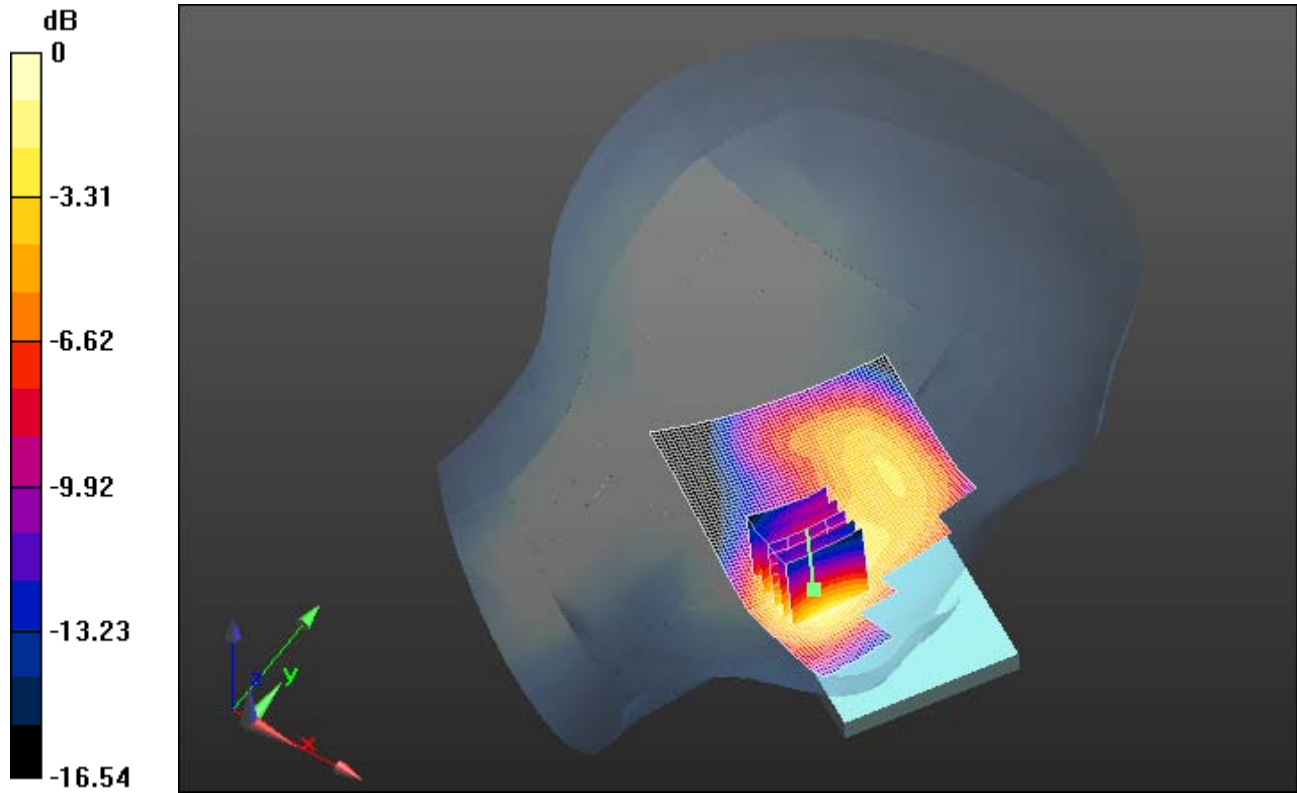
Peak SAR (extrapolated) = 1.2610

SAR(1 g) = 0.813 mW/g; SAR(10 g) = 0.492 mW/g

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

Maximum value of SAR (measured) = 0.967 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 113(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 114(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 10:12:16 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_mid_chan_QPSK_RB_1_Offset_99_amb_temp_22
.6_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.850 mW/g

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

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

Reference Value = 9.851 V/m; Power Drift = -0.03 dB

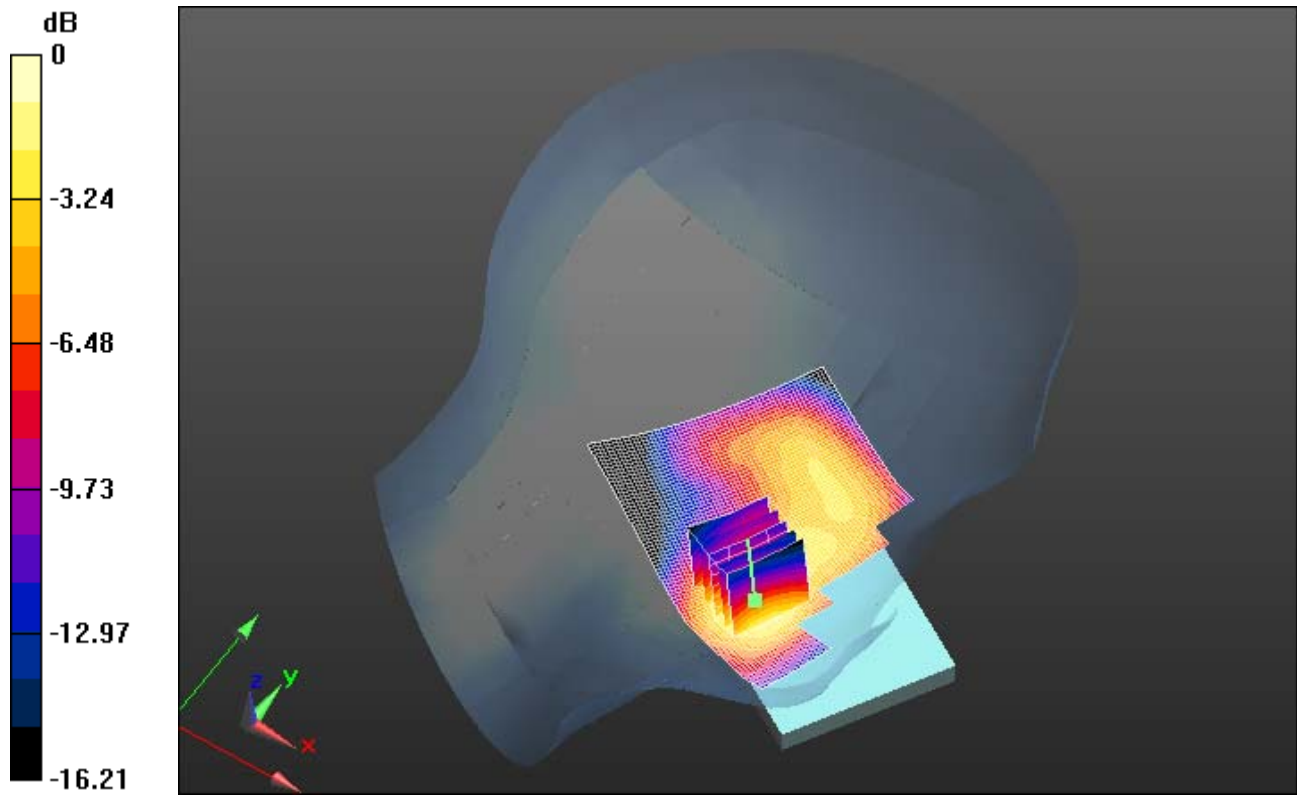
Peak SAR (extrapolated) = 1.1260

SAR(1 g) = 0.724 mW/g; SAR(10 g) = 0.438 mW/g

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

Maximum value of SAR (measured) = 0.854 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 115(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.850mW/g = -1.41 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 116(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 11:07:51 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_mid_chan_QPSK_RB_50_Offset_0_amb_temp_22
.9_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.731 mW/g

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

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

Reference Value = 9.147 V/m; Power Drift = -0.03 dB

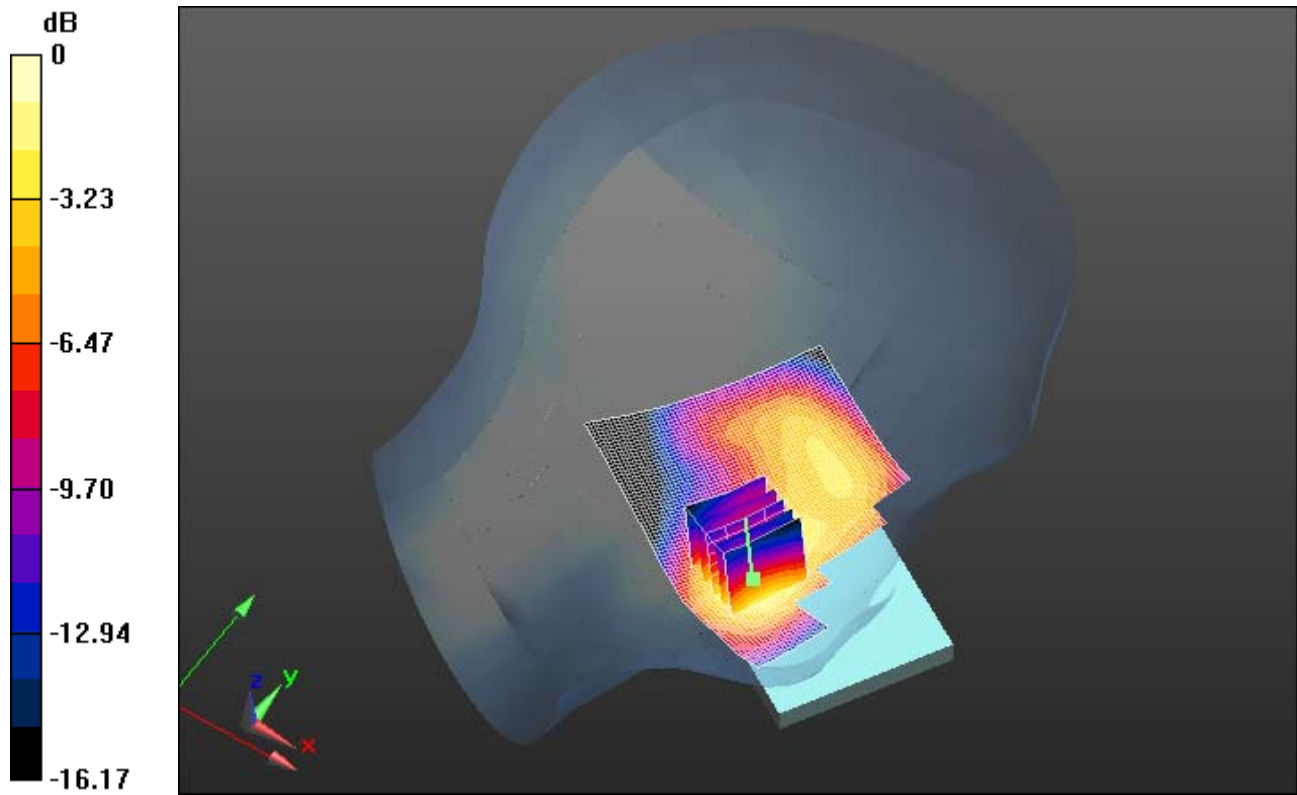
Peak SAR (extrapolated) = 0.9850

SAR(1 g) = 0.630 mW/g; SAR(10 g) = 0.379 mW/g

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

Maximum value of SAR (measured) = 0.755 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 117(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.760mW/g = -2.38 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 118(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 11:23:29 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_mid_chan_16QAM_RB_1_Offset_0_amb_temp_23
.3_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.790 mW/g

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

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

Reference Value = 9.454 V/m; Power Drift = -0.10 dB

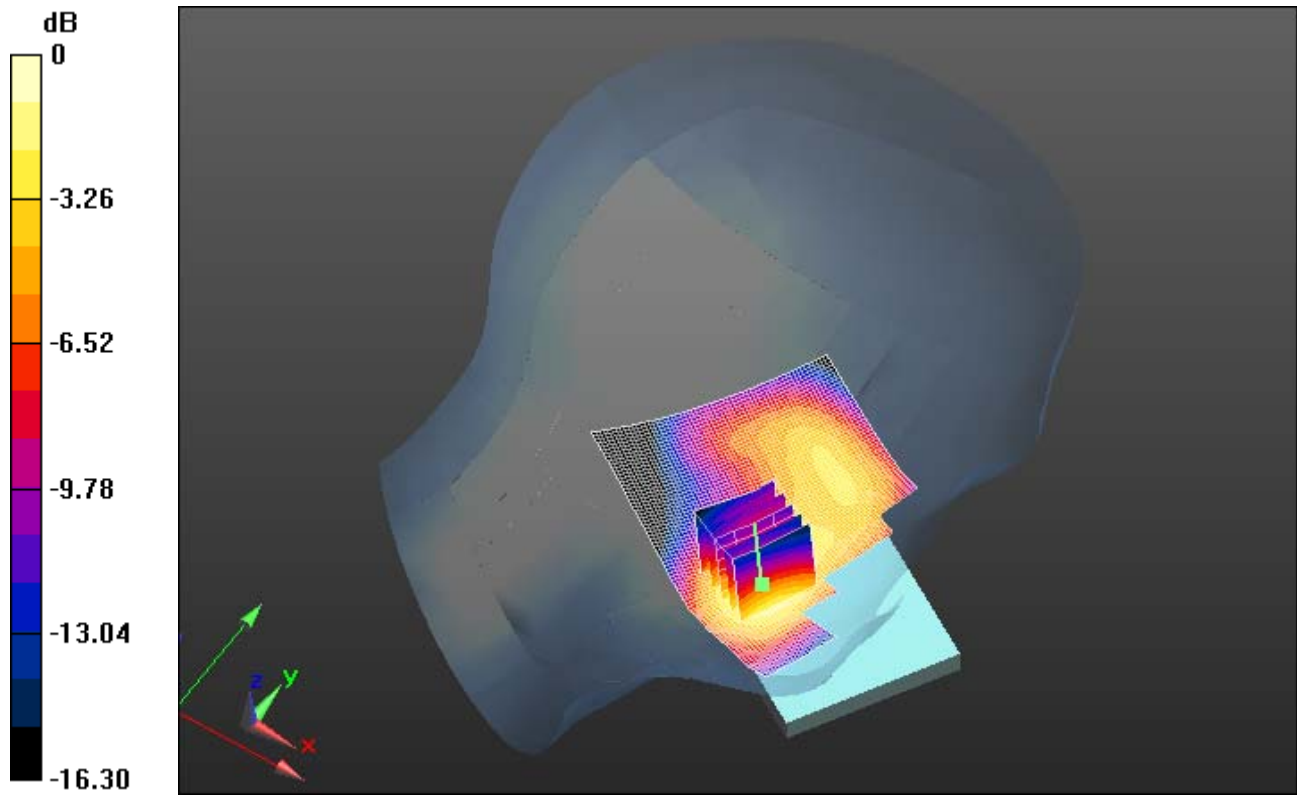
Peak SAR (extrapolated) = 1.0420

SAR(1 g) = 0.670 mW/g; SAR(10 g) = 0.406 mW/g

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

Maximum value of SAR (measured) = 0.800 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 119(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.800mW/g = -1.94 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 120(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 11:39:05 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_mid_chan_16QAM_RB_1_Offset_99_amb_temp_2
3.5_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.707 mW/g

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

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

Reference Value = 8.917 V/m; Power Drift = -0.10 dB

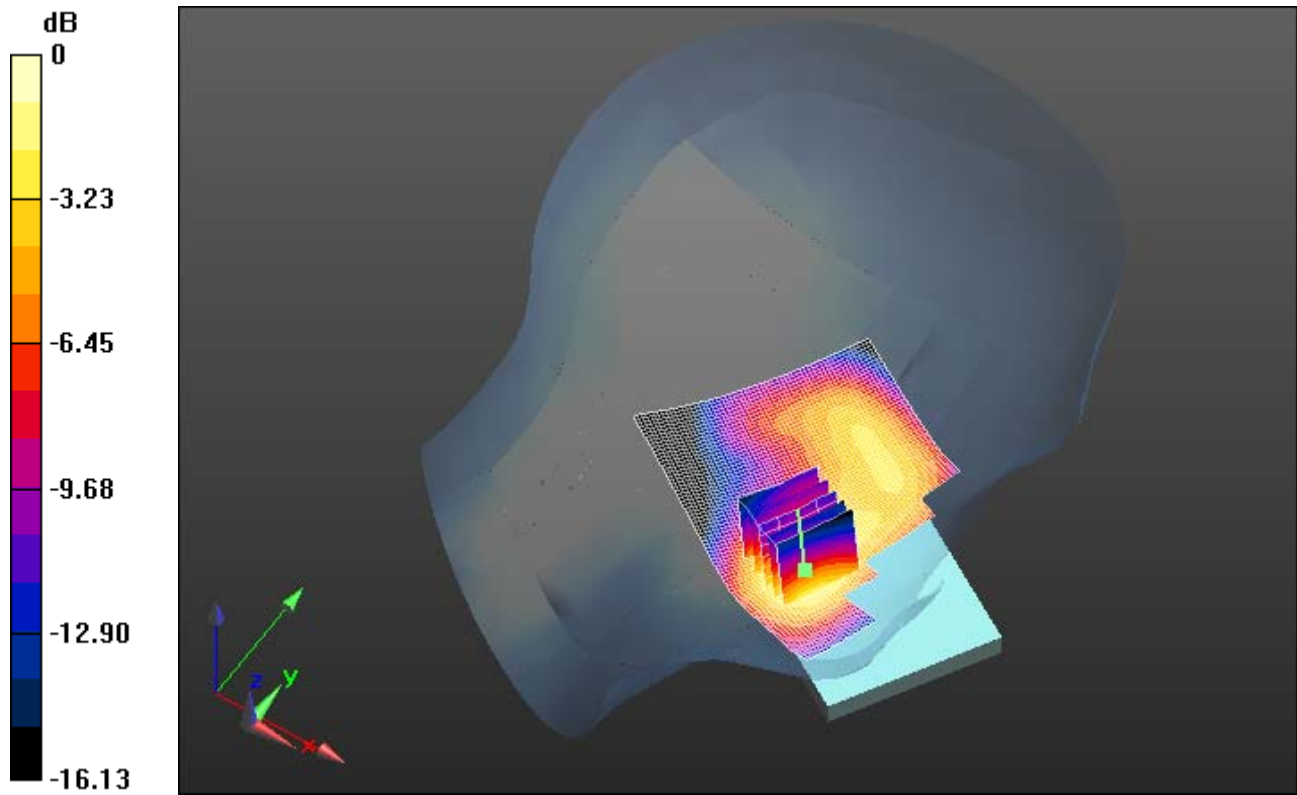
Peak SAR (extrapolated) = 0.9190

SAR(1 g) = 0.591 mW/g; SAR(10 g) = 0.356 mW/g

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

Maximum value of SAR (measured) = 0.704 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 121(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.700mW/g = -3.10 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 122(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/14/2012 1:22:41 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_mid_chan_16QAM_RB_75_Offset_0_amb_temp_2
3.3_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.608 mW/g

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

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

Reference Value = 8.394 V/m; Power Drift = -0.23 dB

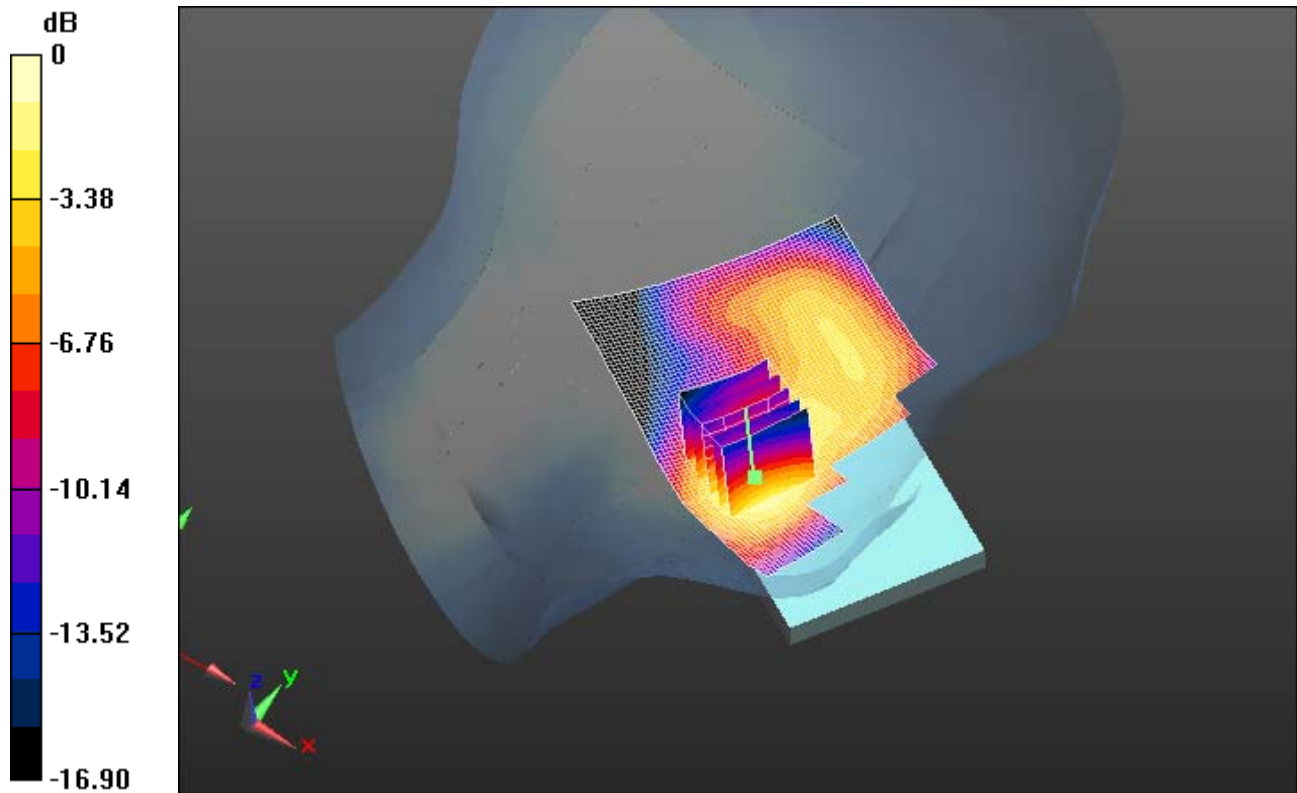
Peak SAR (extrapolated) = 0.7990

SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.308 mW/g

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

Maximum value of SAR (measured) = 0.610 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 123(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.610mW/g = -4.29 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			124(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/14/2012 1:46:02 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_low_chan_QPSK_RB_1_Offset_0_amb_temp_23.
6_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1720 MHz

Medium parameters used: $f = 1720 \text{ MHz}$; $\sigma = 1.376 \text{ mho/m}$; $\epsilon_r = 38.53$; $\rho = 1000 \text{ kg/m}^3$

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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.939 mW/g

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

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

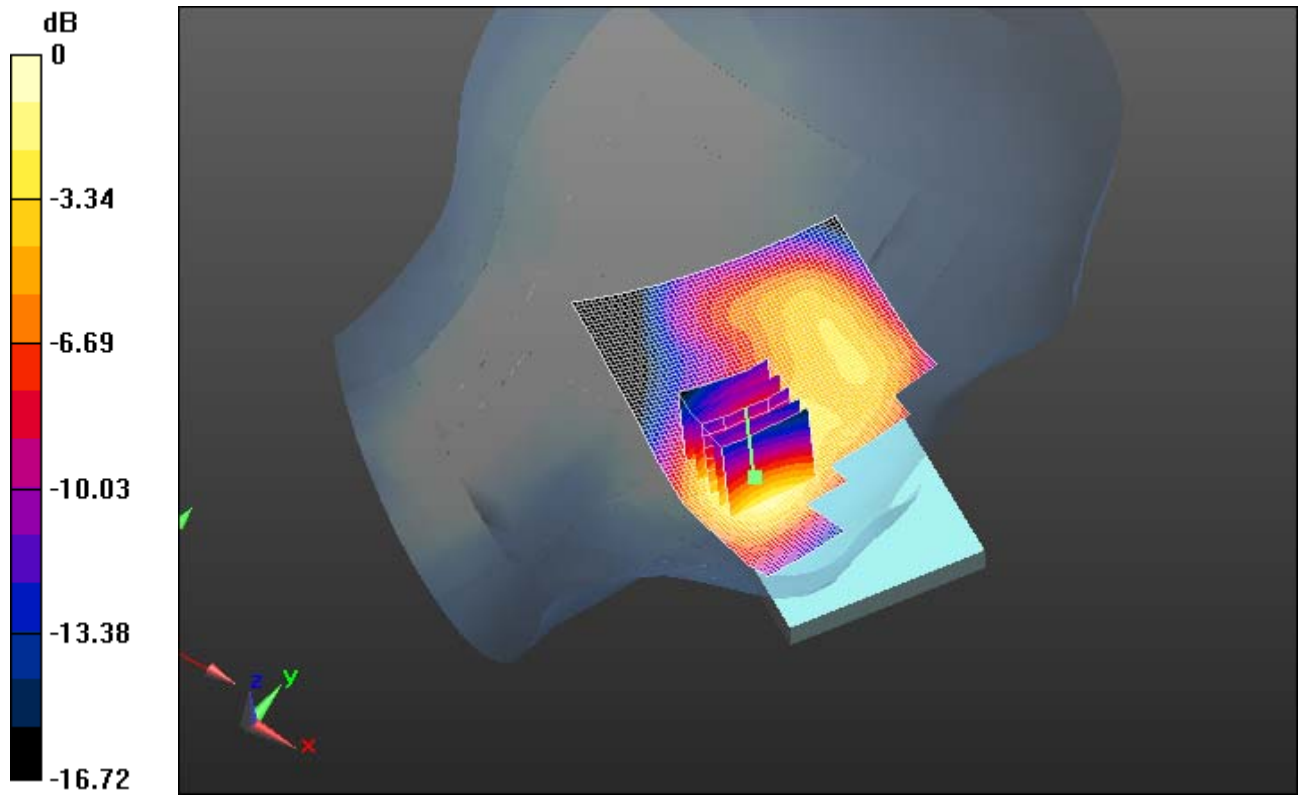
Reference Value = 9.983 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.2310

SAR(1 g) = 0.790 mW/g; SAR(10 g) = 0.479 mW/g

Maximum value of SAR (measured) = 0.944 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 125(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.940mW/g = -0.54 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 126(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/14/2012 2:01:36 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_high_chan_QPSK_RB_1_Offset_0_amb_temp_23.
5_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1745 MHz

Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.398 \text{ mho/m}$; $\epsilon_r = 38.396$; $\rho = 1000 \text{ kg/m}^3$

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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.877 mW/g

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

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

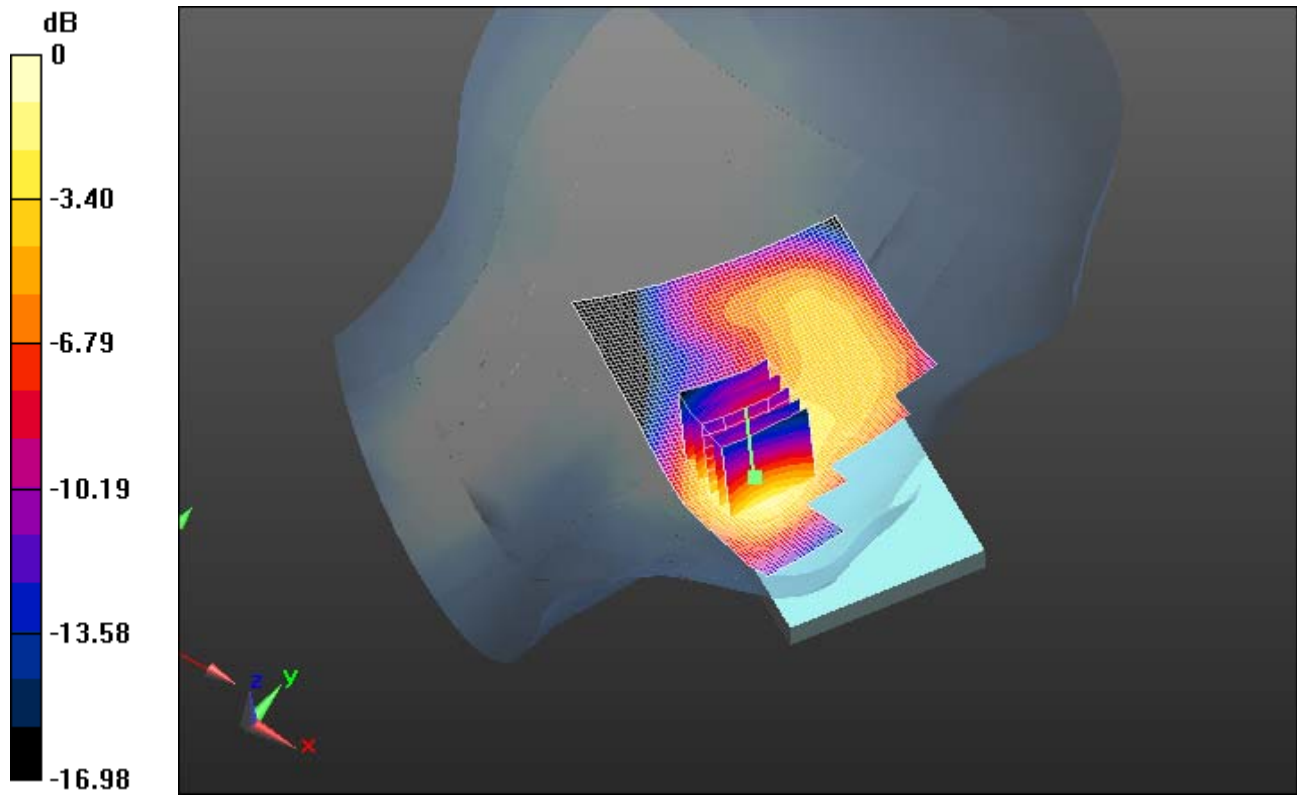
Reference Value = 10.153 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.1670

SAR(1 g) = 0.744 mW/g; SAR(10 g) = 0.449 mW/g

Maximum value of SAR (measured) = 0.894 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 127(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.890mW/g = -1.01 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 128(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/14/2012 2:33:36 AM

Test Laboratory: RIM Testing Services

**LeftHandside_Tilt_LTE_4_mid_chan_QPSK_RB_1_Offset_0_amb_temp
_23.6_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.631 mW/g

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

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

Reference Value = 18.118 V/m; Power Drift = 0.03 dB

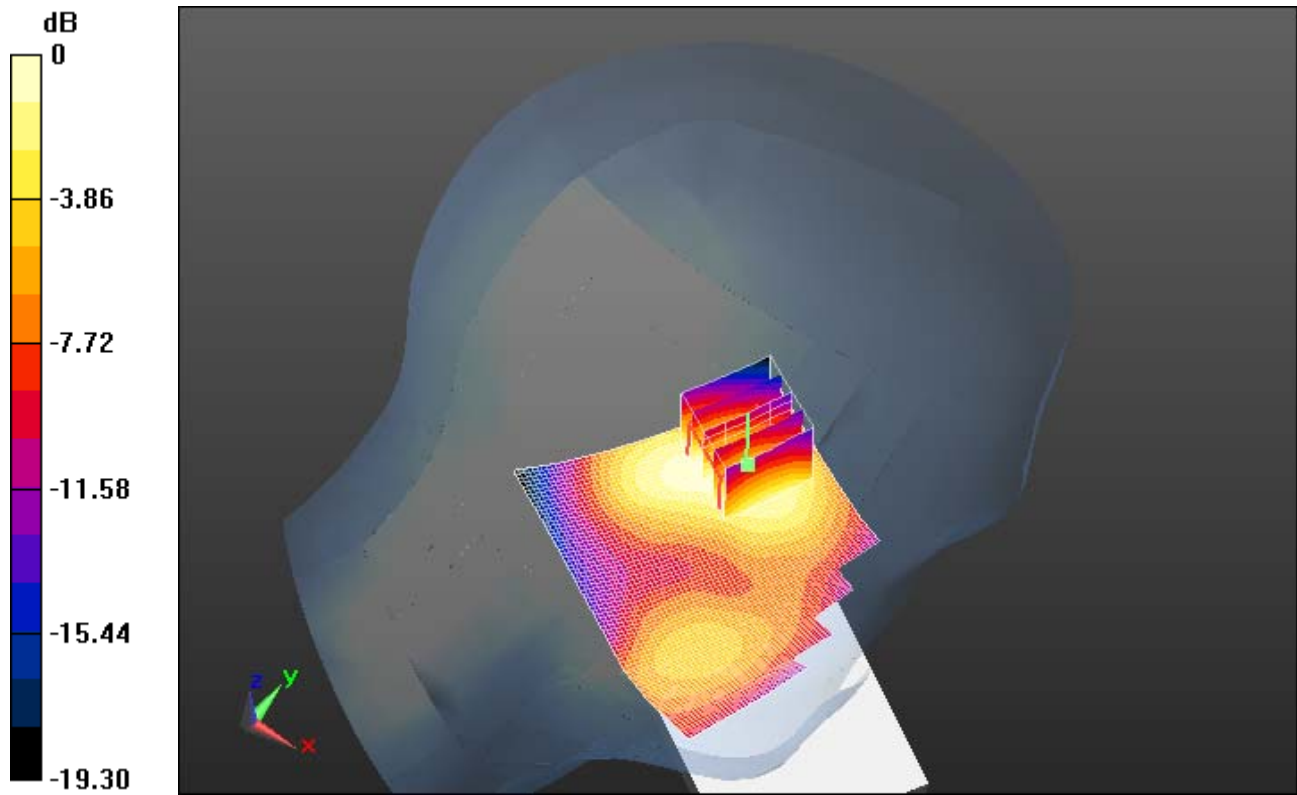
Peak SAR (extrapolated) = 0.7360

SAR(1 g) = 0.499 mW/g; SAR(10 g) = 0.309 mW/g

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

Maximum value of SAR (measured) = 0.561 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 129(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.560mW/g = -5.04 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 130(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/14/2012 2:48:31 AM

Test Laboratory: RIM Testing Services

**LeftHandside_Tilt_LTE_4_mid_chan_16QAM_RB_1_Offset_0_amb_tem
p_23.6_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1732.5 MHz

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.467$;
 $\rho = 1000$ 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 (61x81x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.518 mW/g

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

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

Reference Value = 16.336 V/m; Power Drift = 0.19 dB

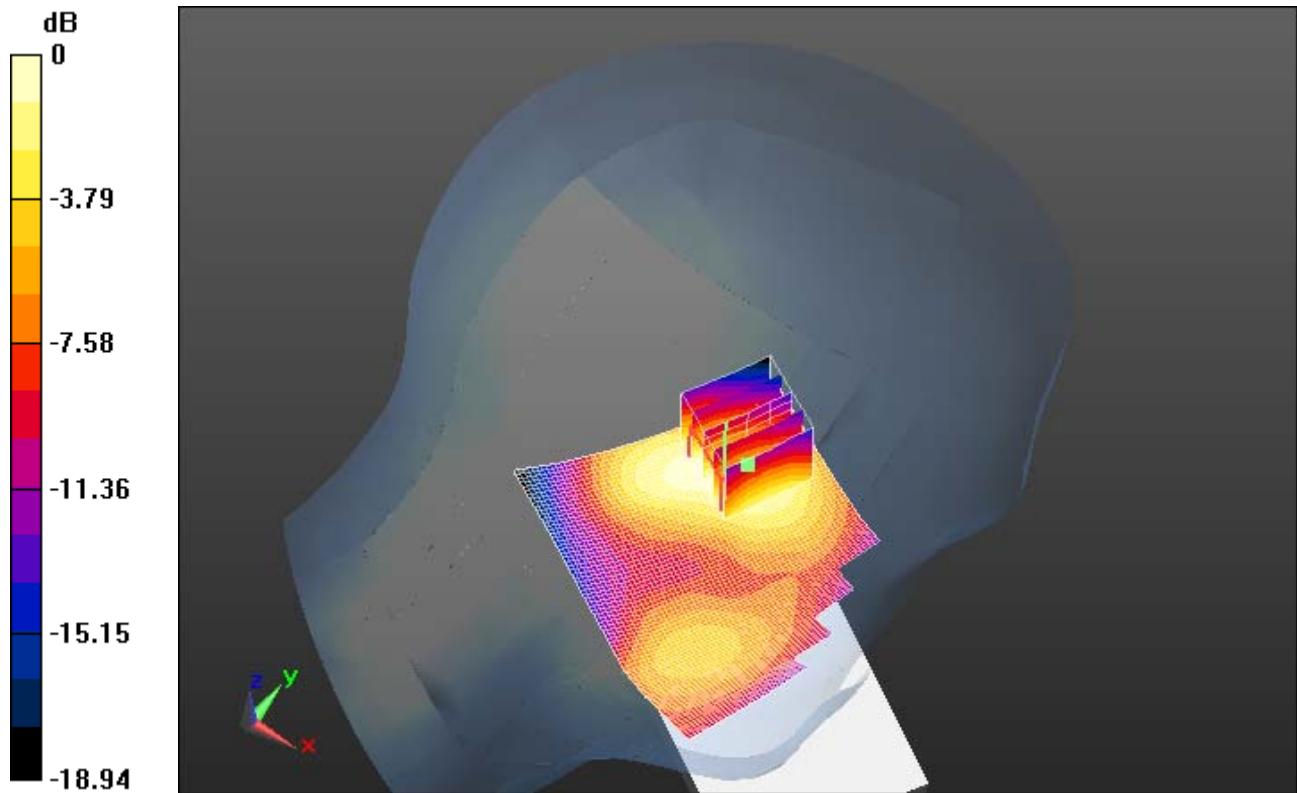
Peak SAR (extrapolated) = 0.6330

SAR(1 g) = 0.417 mW/g; SAR(10 g) = 0.260 mW/g

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

Maximum value of SAR (measured) = 0.479 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 131(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.480mW/g = -6.38 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 132(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 10/26/2012 2:34:07 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_4_mid_chan_QPSK_RB_1_Offset_0_amb_temp_24.
0_liq_temp_22.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: LTE 1800_Band 4; Frequency: 1732.5 MHz
Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.352$ mho/m; $\epsilon_r = 39.007$;
 $\rho = 1000$ 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 (61x91x1): Measurement grid:
dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.183 mW/g

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

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

Reference Value = 9.062 V/m; Power Drift = 0.0088 dB

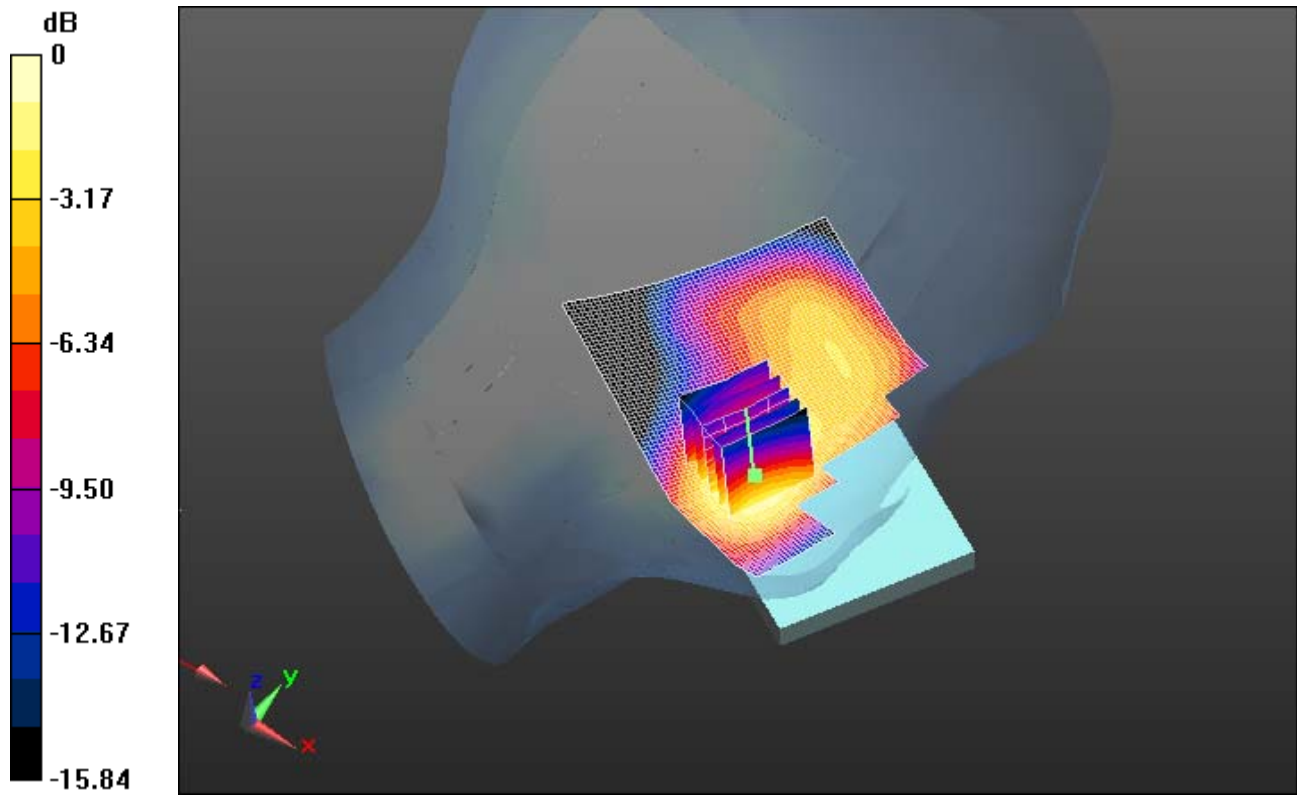
Peak SAR (extrapolated) = 1.4830

SAR(1 g) = 0.973 mW/g; SAR(10 g) = 0.589 mW/g

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

Maximum value of SAR (measured) = 1.136 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 133(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 134(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/10/2012 10:49:08 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_2_mid_chan_QPSK_RB_1_Offset_0_amb_temp_2
3.1C_liq_temp_21.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.358$ mho/m; $\epsilon_r = 38.54$; $\rho = 1000$ 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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.569 mW/g

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

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

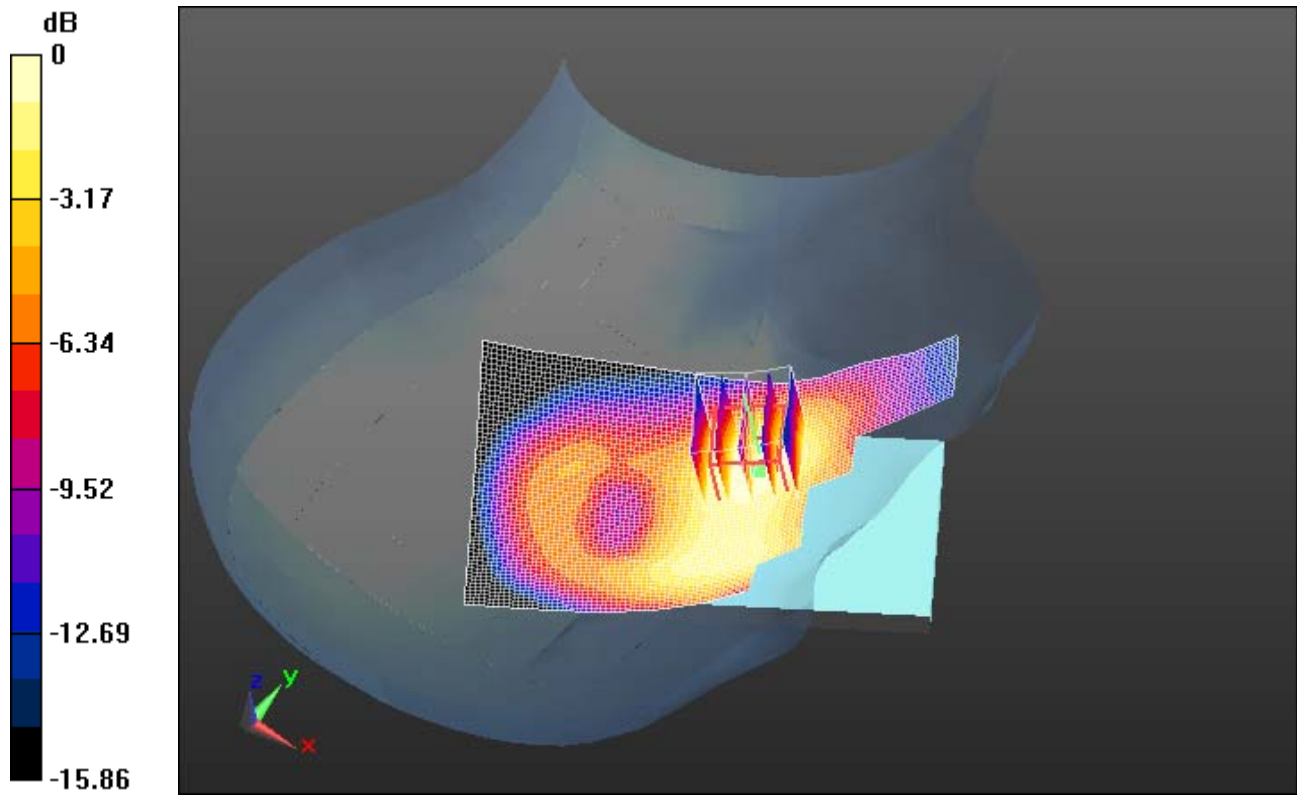
Reference Value = 11.172 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.6910

SAR(1 g) = 0.465 mW/g; SAR(10 g) = 0.290 mW/g

Maximum value of SAR (measured) = 0.524 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 135(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.520mW/g = -5.68 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 136(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/10/2012 11:07:54 PM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_2_mid_chan_QPSK_RB_1_Offset_99_amb_temp_23.2C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.572 mW/g

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

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

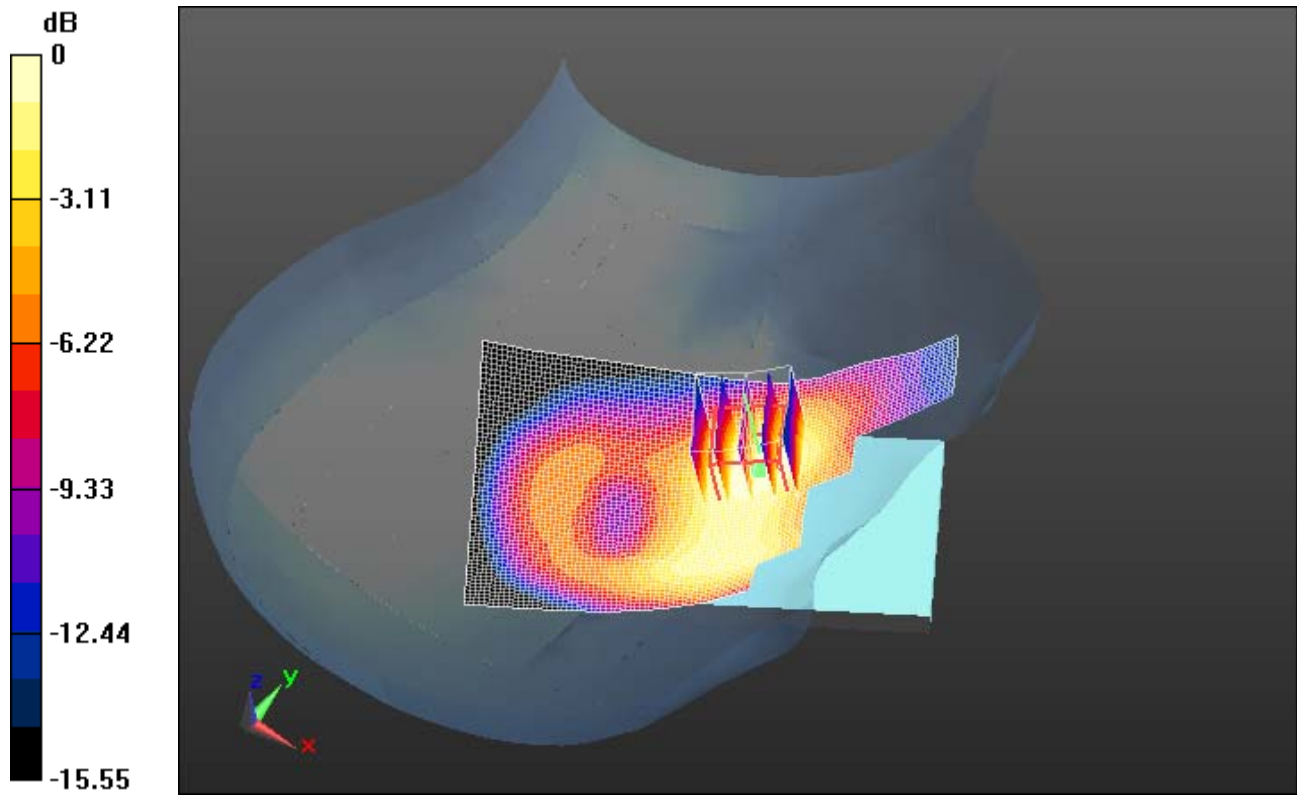
Reference Value = 11.003 V/m; Power Drift = 0.0035 dB

Peak SAR (extrapolated) = 0.6900

SAR(1 g) = 0.463 mW/g; SAR(10 g) = 0.289 mW/g

Maximum value of SAR (measured) = 0.526 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 137(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.530mW/g = -5.51 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			138(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/10/2012 11:23:57 PM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_2_mid_chan_QPSK_RB_50_Offset_0_amb_temp_23.1C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.518 mW/g

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

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

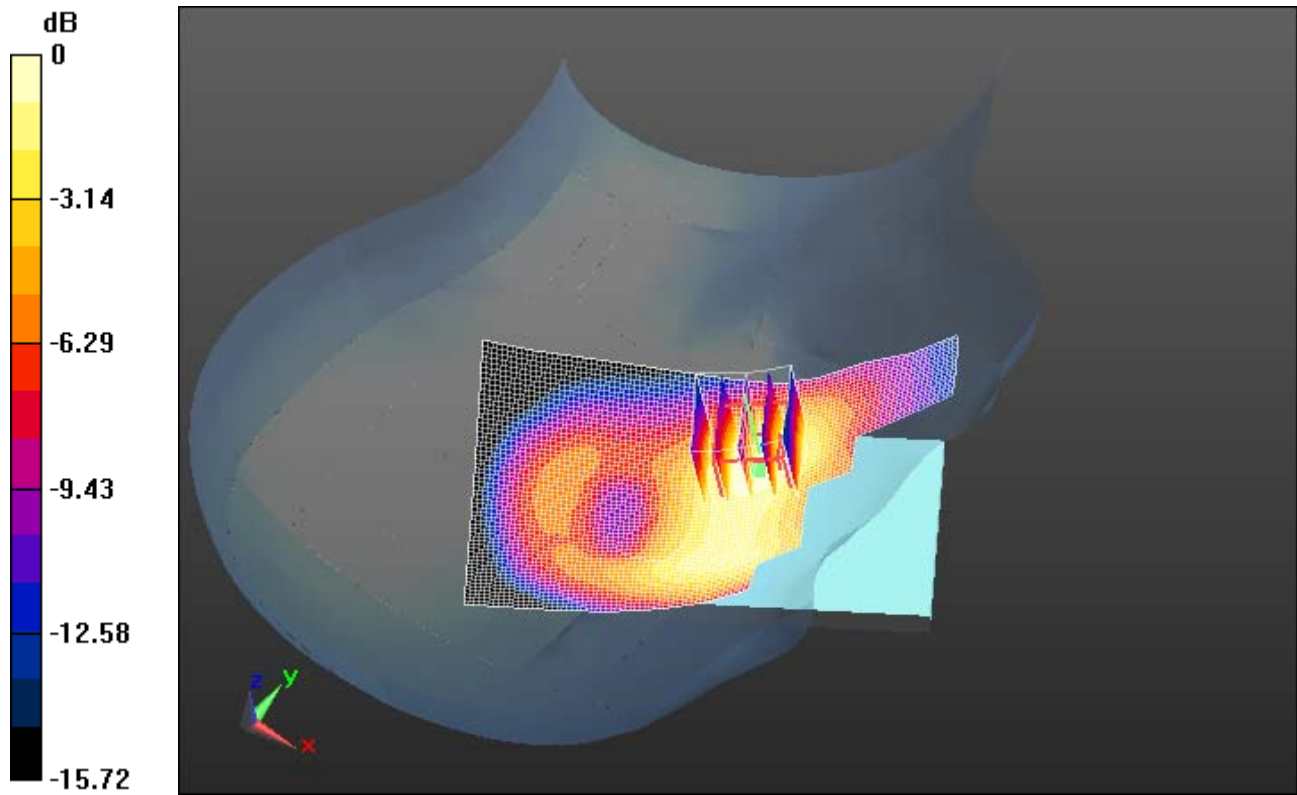
Reference Value = 10.201 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.6340

SAR(1 g) = 0.422 mW/g; SAR(10 g) = 0.262 mW/g

Maximum value of SAR (measured) = 0.476 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 139(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.480mW/g = -6.38 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			140(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/10/2012 11:41:11 PM

Test Laboratory: RIM Testing Services

RightHandSide_LTE_2_mid_chan_16QAM_RB_1_Offset_0_amb_temp_22.9C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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
- DASYS2 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.493 mW/g

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

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

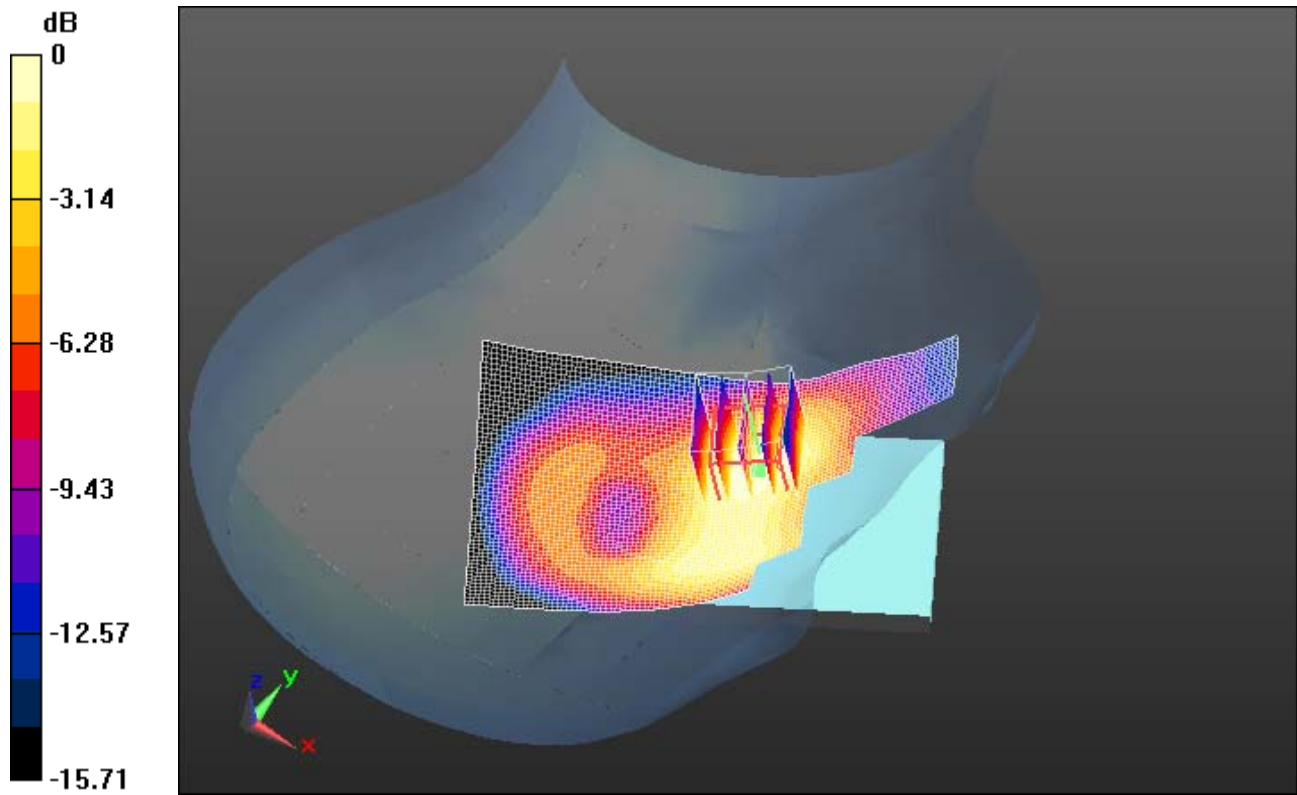
Reference Value = 10.300 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.5970

SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.255 mW/g

Maximum value of SAR (measured) = 0.459 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 141(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.460mW/g = -6.74 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 142(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/10/2012 11:56:49 PM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_2_mid_chan_16QAM_RB_1_Offset_99_amb_temp
_23.1C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.498 mW/g

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

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

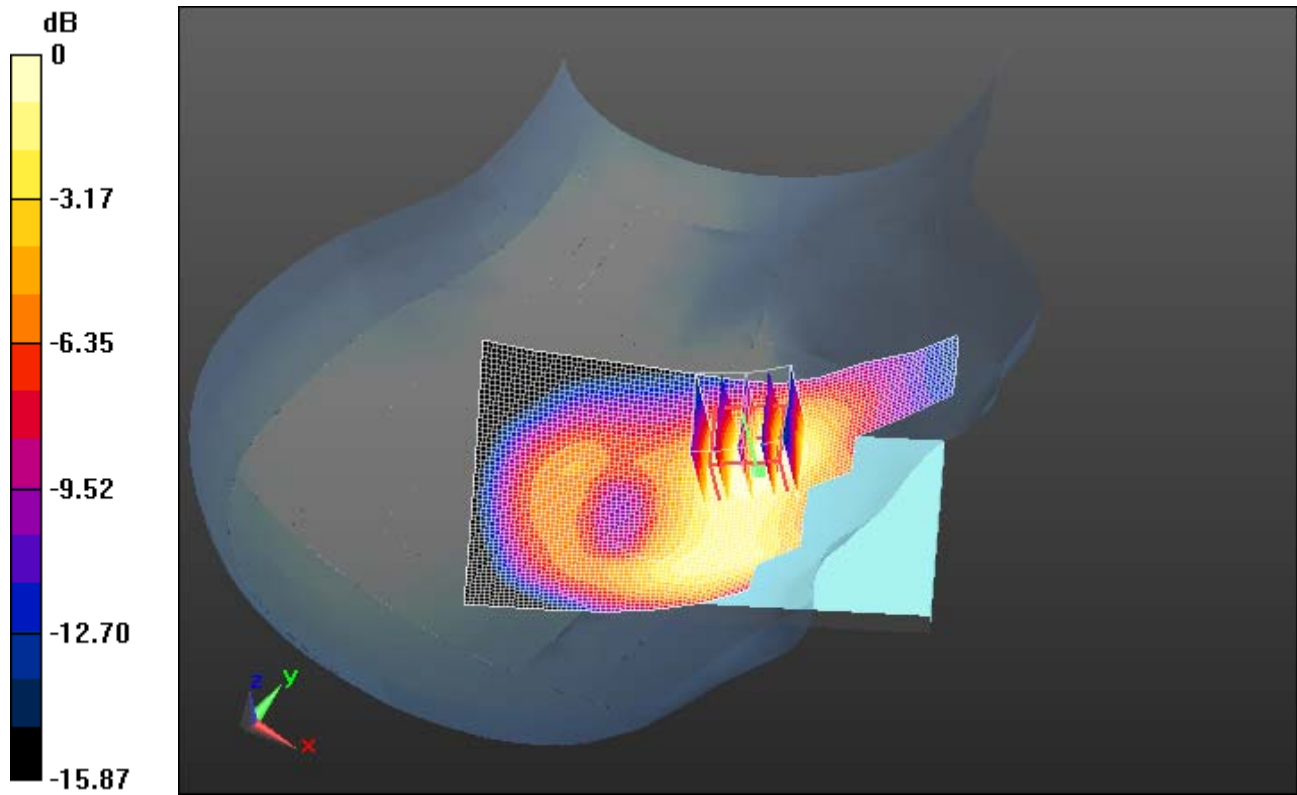
Reference Value = 10.320 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.6200

SAR(1 g) = 0.416 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.468 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 143(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.470mW/g = -6.56 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			144(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 12:18:23 AM

Test Laboratory: RIM Testing Services

**RightHandSide_LTE_2_mid_chan_16QAM_RB_75_Offset_25_amb_tem
p_23.0C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.412 mW/g

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

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

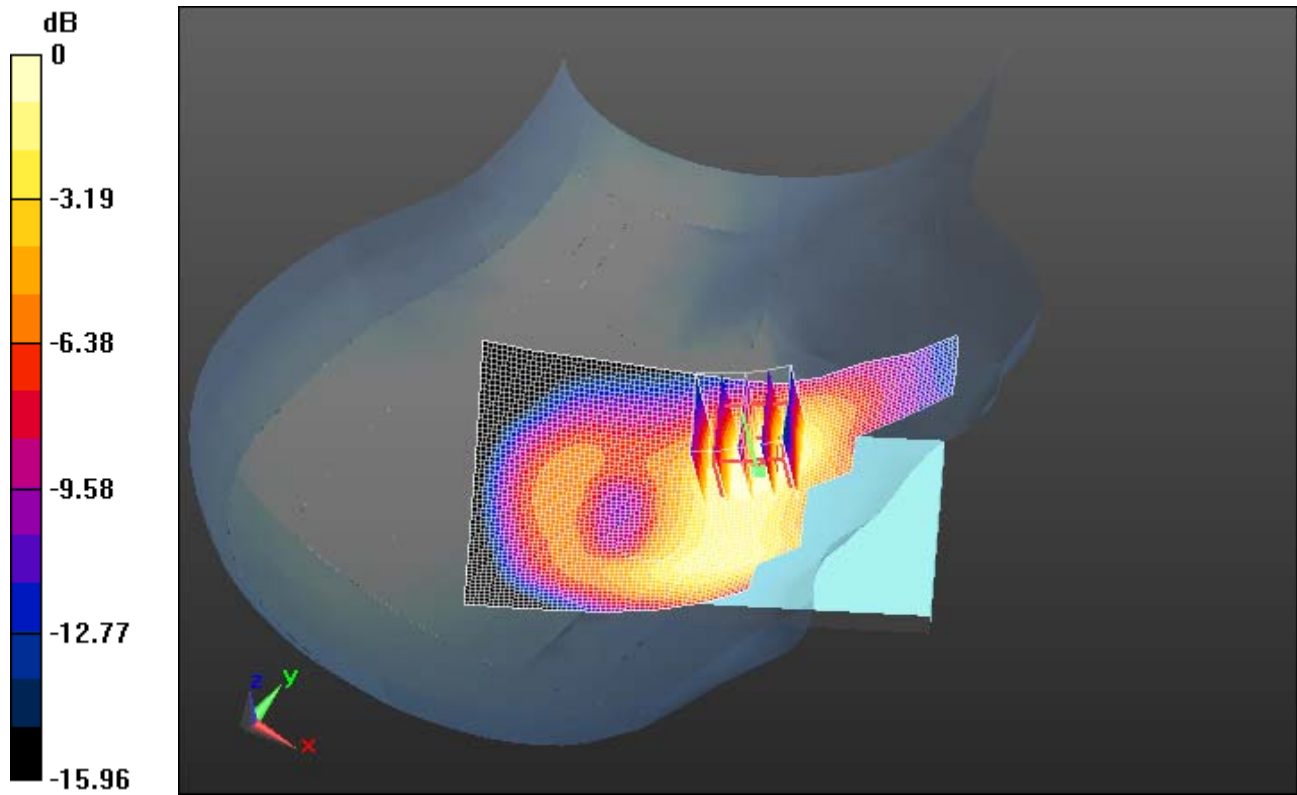
Reference Value = 9.113 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.5120

SAR(1 g) = 0.343 mW/g ; SAR(10 g) = 0.213 mW/g

Maximum value of SAR (measured) = 0.383 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 145(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 146(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 12:36:39 AM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_LTE_2_mid_chan_QPSK_RB_1_Offset_0_amb_tem
p_23.1C_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.200 mW/g

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

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

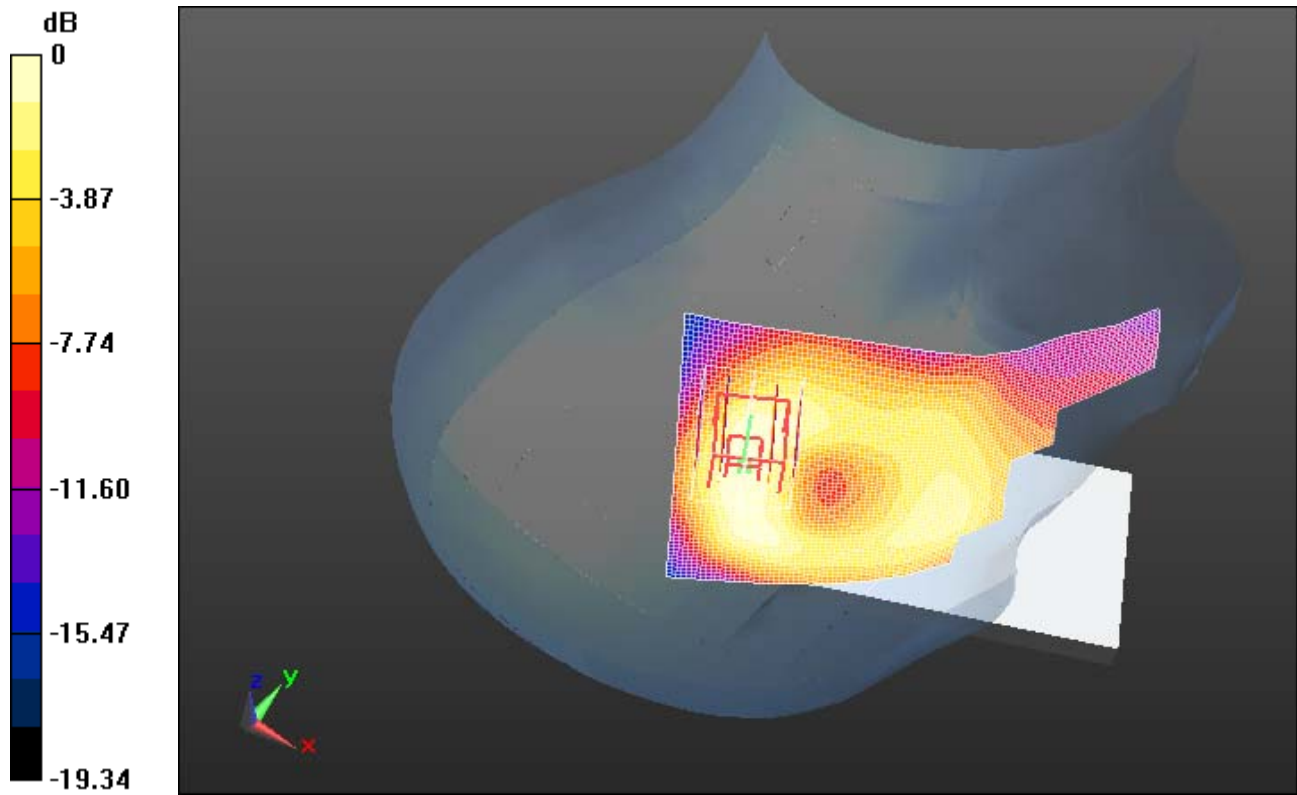
Reference Value = 12.341 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.2540

SAR(1 g) = 0.159 mW/g; SAR(10 g) = 0.094 mW/g

Maximum value of SAR (measured) = 0.194 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 147(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.190mW/g = -14.42 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			148(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 9:25:44 AM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_LTE_2_mid_chan_16QAM_RB_1_Offset_99_amb_t
emp_23.5C_liq_temp_21.7C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

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
- DASYS2 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.172 mW/g

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

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

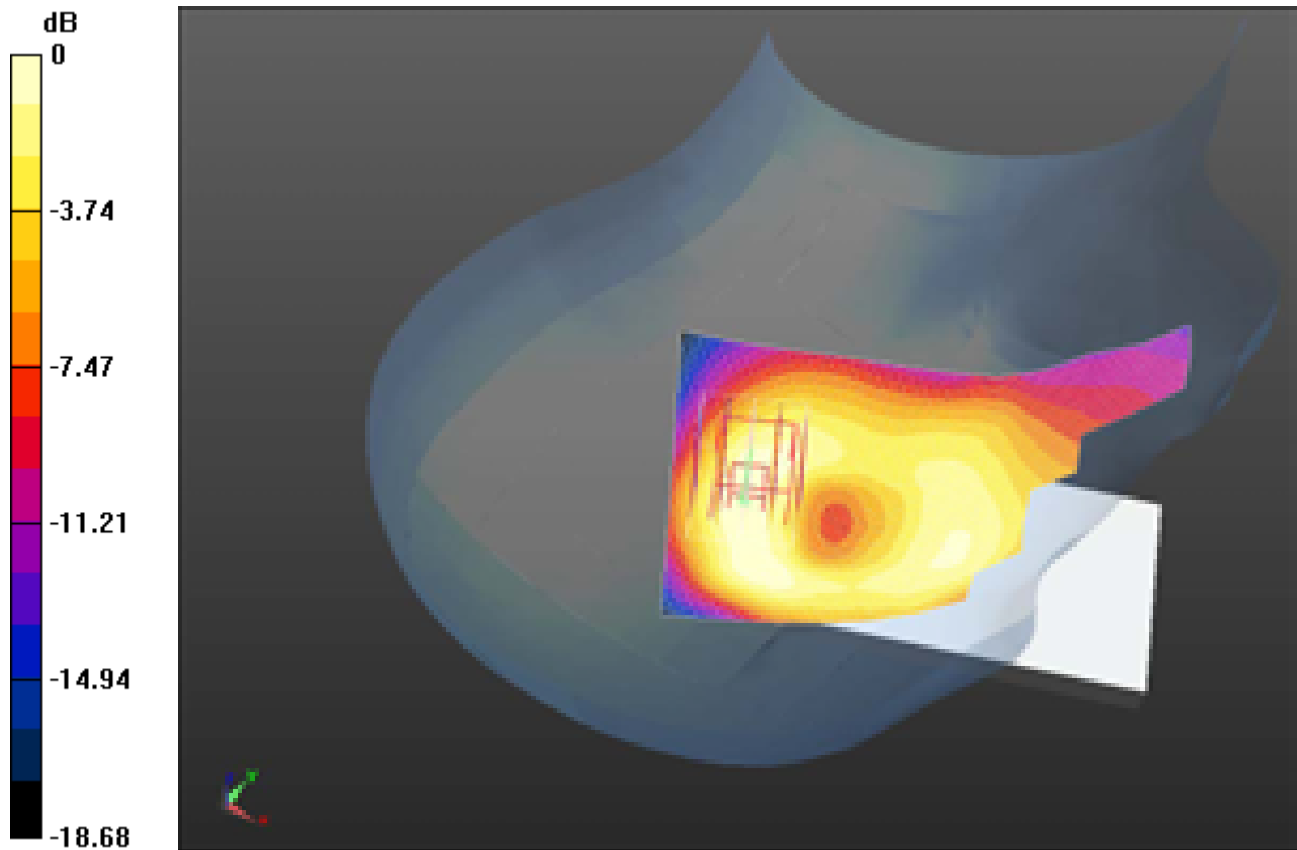
Reference Value = 11.632 V/m ; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.2250

SAR(1 g) = 0.141 mW/g ; SAR(10 g) = 0.083 mW/g

Maximum value of SAR (measured) = 0.171 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 149(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 150(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 12:59:35 AM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_2_mid_chan_QPSK_RB_1_Offset_0_amb_temp_23.
0_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.665 mW/g

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

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

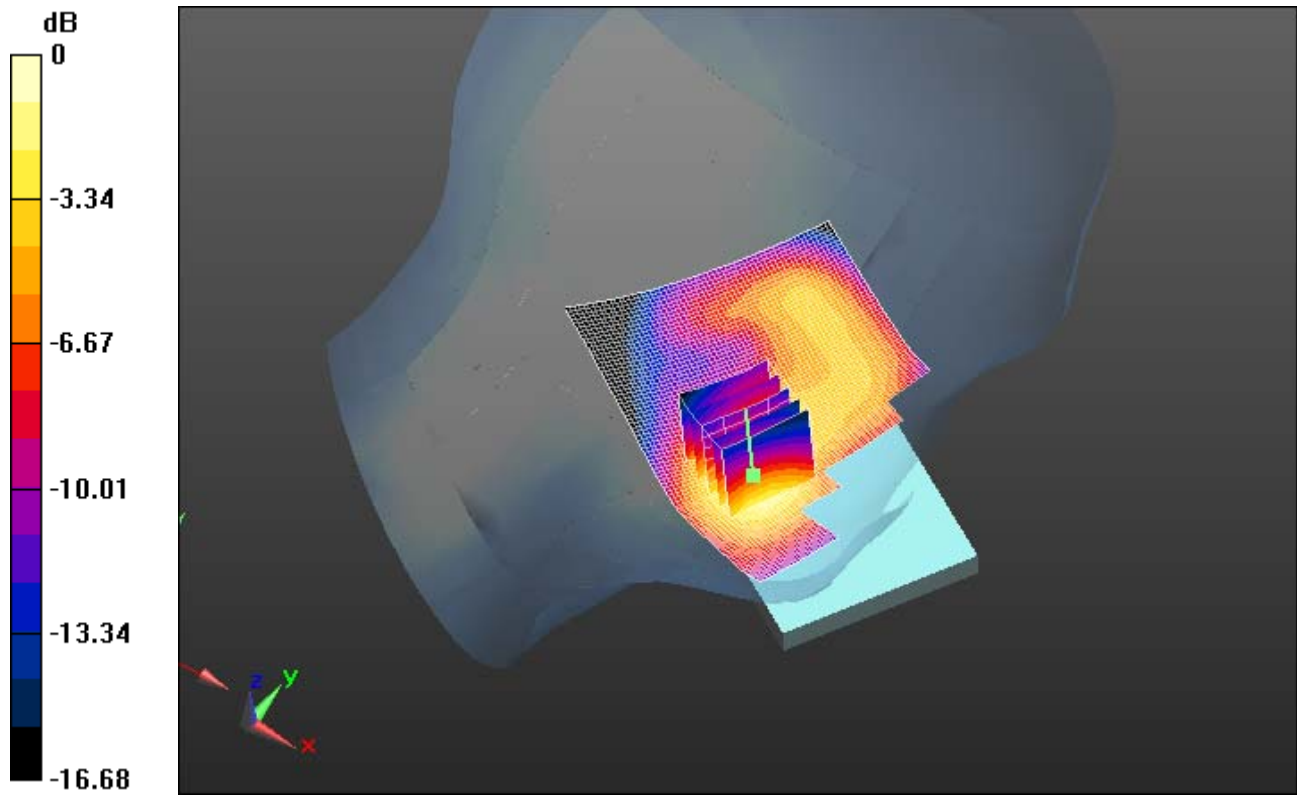
Reference Value = 8.586 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.8990

SAR(1 g) = 0.573 mW/g; SAR(10 g) = 0.344 mW/g

Maximum value of SAR (measured) = 0.686 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 151(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.690mW/g = -3.22 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			152(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 12:25:24 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_2_mid_chan_QPSK_RB_1_Offset_99_amb_temp_23
.1_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.612 mW/g

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

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

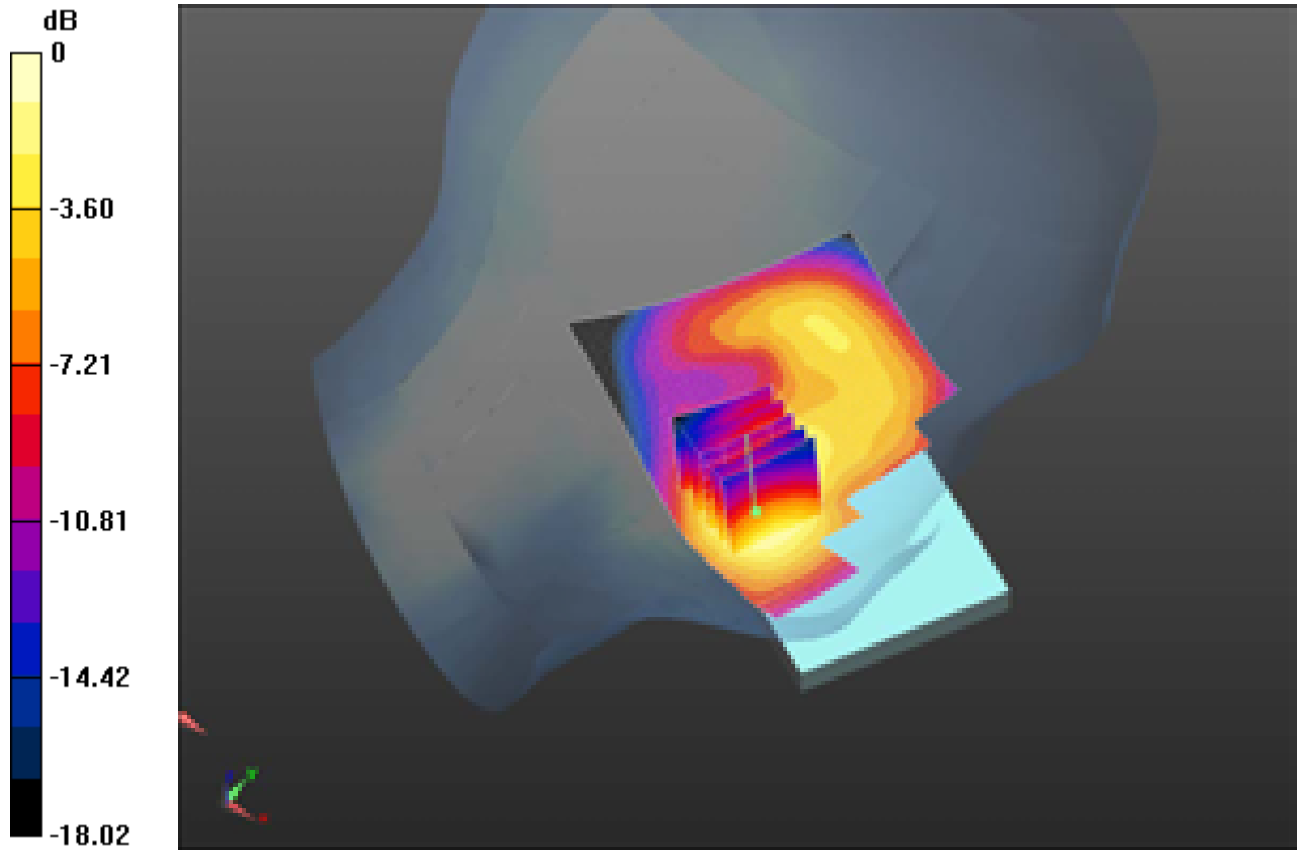
Reference Value = 8.713 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.7880

SAR(1 g) = 0.512 mW/g; SAR(10 g) = 0.307 mW/g

Maximum value of SAR (measured) = 0.598 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 153(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.600mW/g = -4.44 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 154(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 12:41:59 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_2_mid_chan_QPSK_RB_50_Offset_0_amb_temp_23
.1_liq_temp_21.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.575 mW/g

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

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

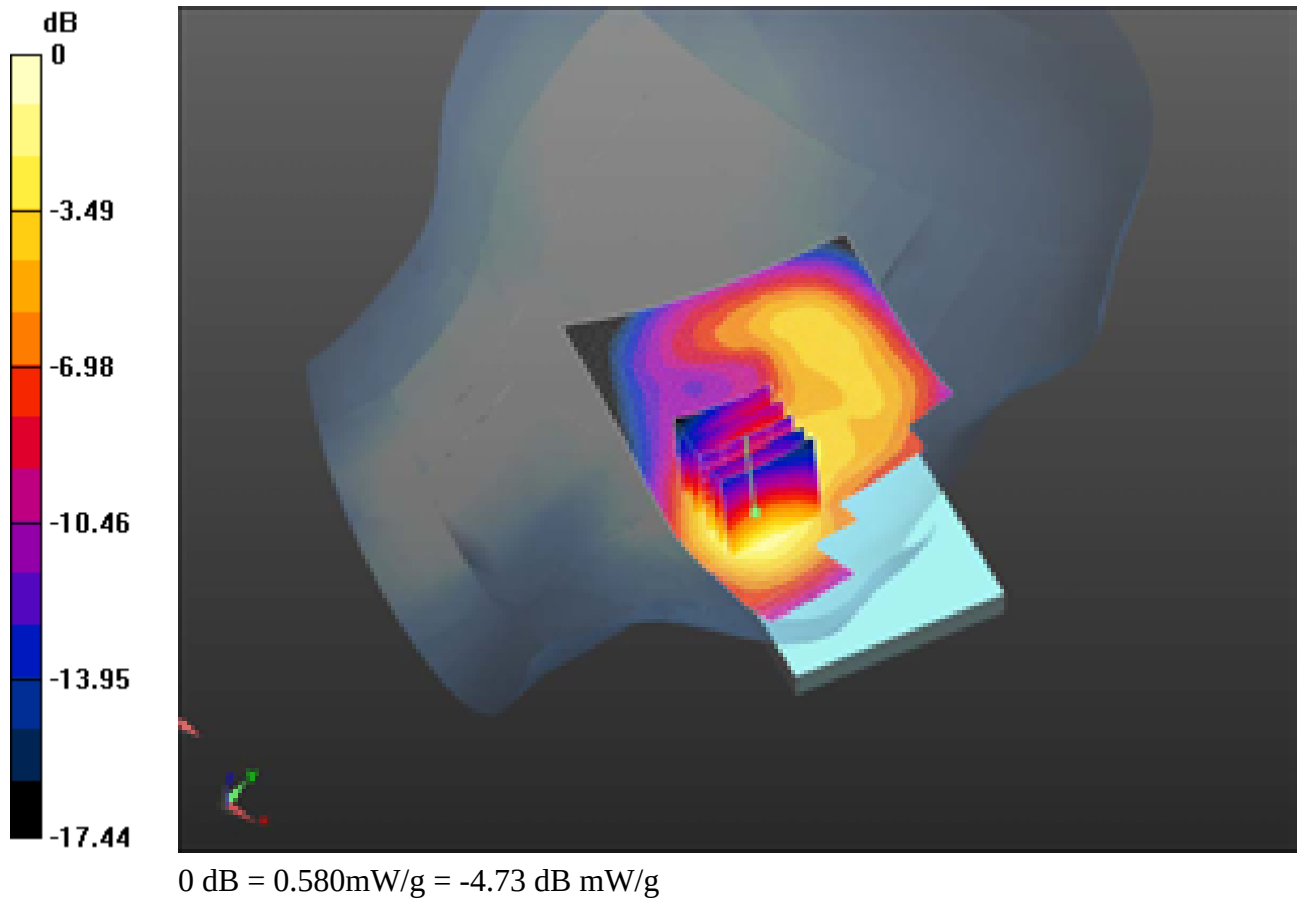
Reference Value = 8.186 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.7500

SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.292 mW/g

Maximum value of SAR (measured) = 0.577 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 155(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 156(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 12:57:57 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_2_mid_chan_16QAM_RB_1_Offset_0_amb_temp_23
.0_liq_temp_21.2C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.452 mW/g

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

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

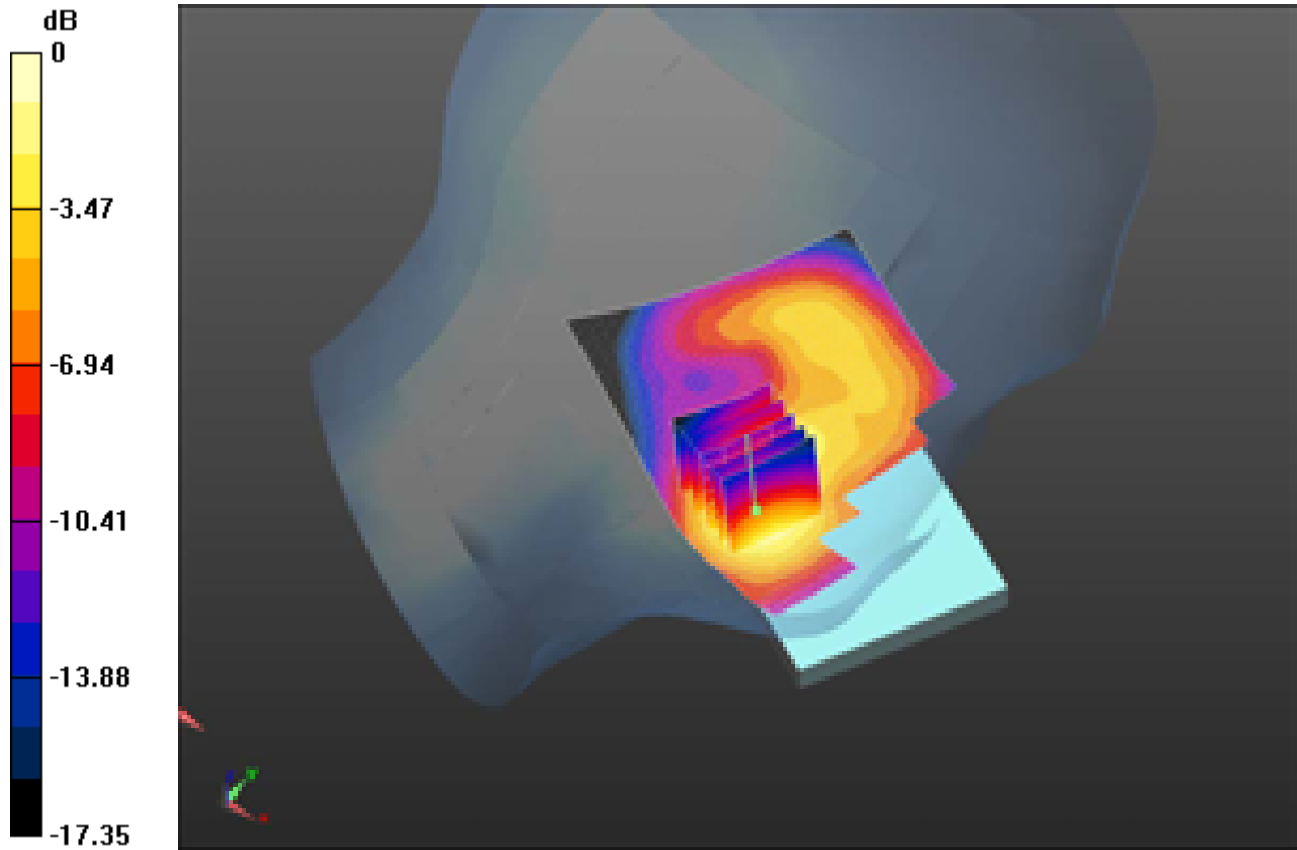
Reference Value = 7.264 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.6060

SAR(1 g) = 0.387 mW/g ; SAR(10 g) = 0.231 mW/g

Maximum value of SAR (measured) = 0.449 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 157(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.450mW/g = -6.94 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			158(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 1:12:12 PM

Test Laboratory: RIM Testing Services

LeftHandside_LTE_2_mid_chan_16QAM_RB_1_Offset_99_amb_temp_2

3.1_liq_temp_21.4C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.455 mW/g

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

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

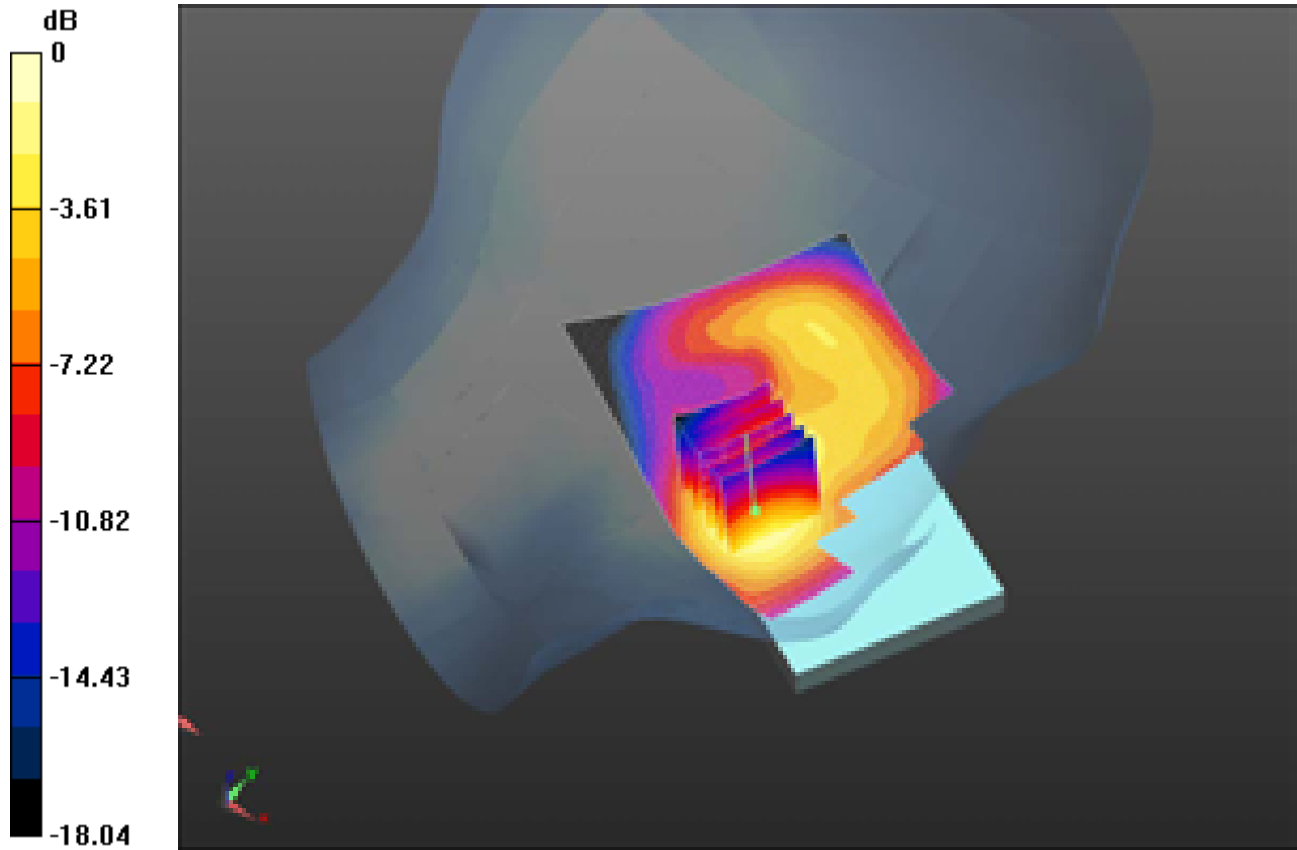
Reference Value = 7.400 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.5850

SAR(1 g) = 0.381 mW/g; SAR(10 g) = 0.229 mW/g

Maximum value of SAR (measured) = 0.455 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 159(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.450mW/g = -6.94 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 160(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 1:27:36 PM

Test Laboratory: RIM Testing Services

LeftHandside_LTE_2_mid_chan_16QAM_RB_75_Offset_25_amb_temp_23.1_liq_temp_21.4C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.466 mW/g

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

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

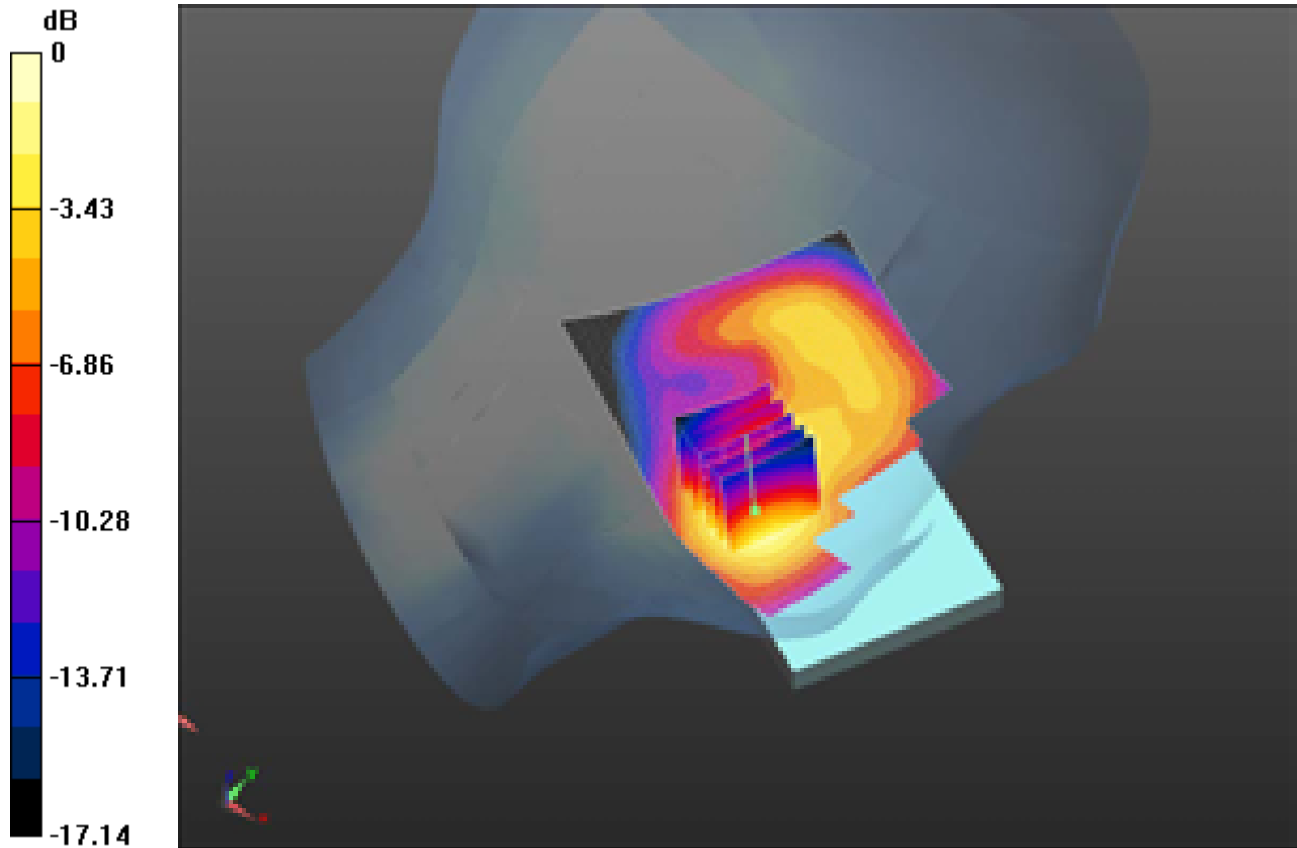
Reference Value = 7.028 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.6150

SAR(1 g) = 0.396 mW/g ; SAR(10 g) = 0.238 mW/g

Maximum value of SAR (measured) = 0.466 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 161(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.470mW/g = -6.56 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 162(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/11/2012 1:43:34 PM

Test Laboratory: RIM Testing Services

**LeftHandside_Tilt_LTE_2_mid_chan_QPSK_RB_1_Offset_0_amb_temp
_23.0_liq_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.285 mW/g

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

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

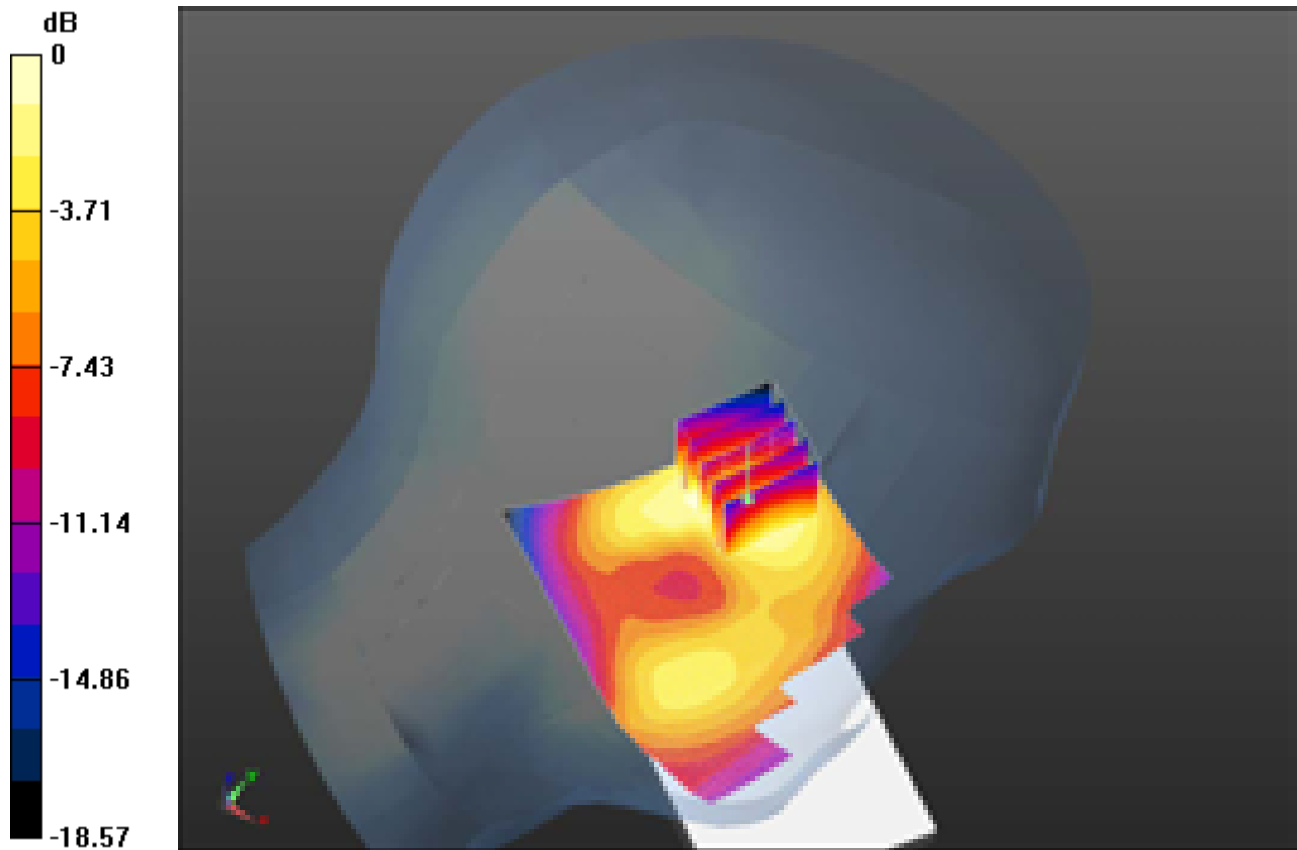
Reference Value = 10.733 V/m ; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.3280

SAR(1 g) = 0.219 mW/g ; SAR(10 g) = 0.132 mW/g

Maximum value of SAR (measured) = 0.256 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 163(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.260mW/g = -11.70 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 164(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/13/2012 9:06:05 AM

Test Laboratory: RIM Testing Services

**LeftHandside_Tilt_LTE_2_mid_chan_16QAM_RB75__Offset_0_amb_tem
p_22.5_liq_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left 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
- DASYS2 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.256 mW/g

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

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

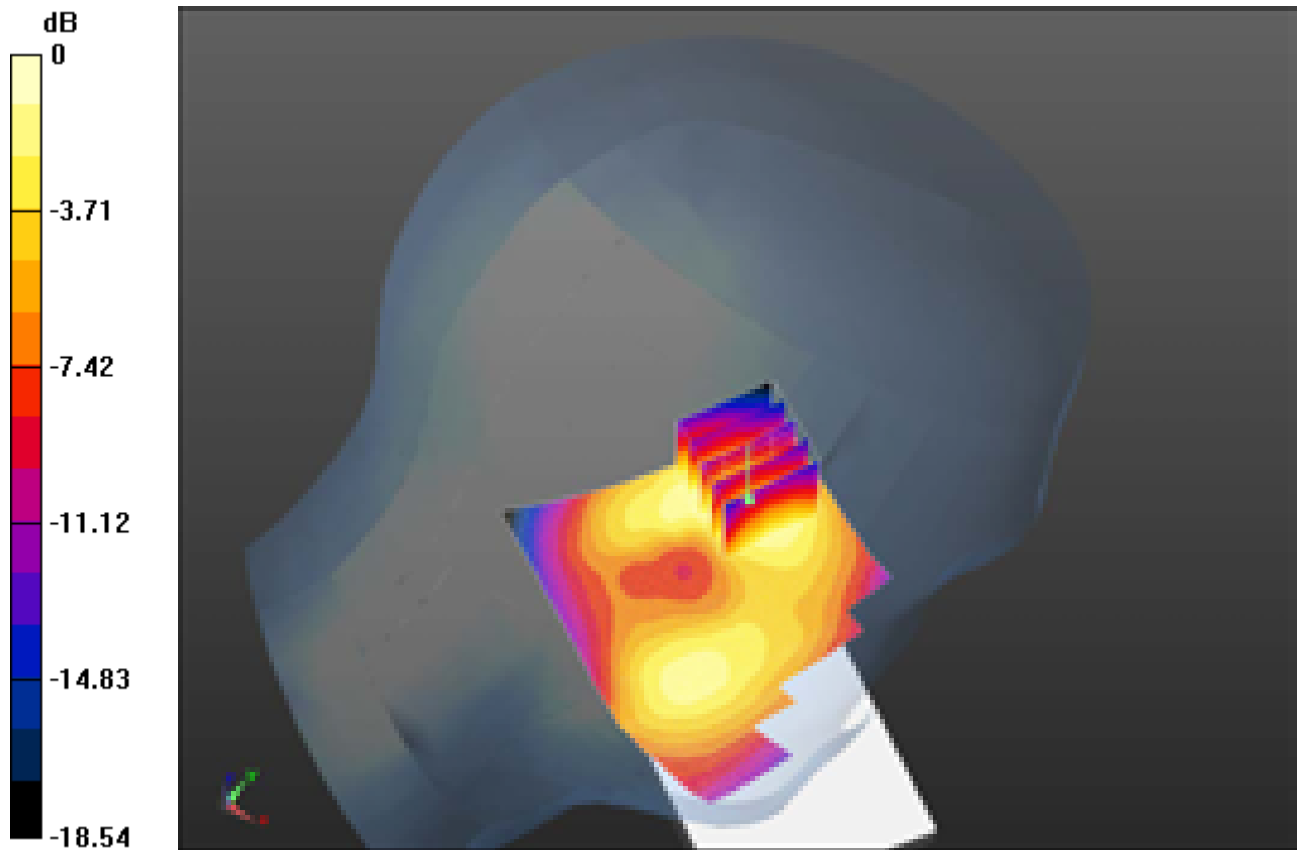
Reference Value = 9.811 V/m ; Power Drift = -0.25 dB

Peak SAR (extrapolated) = 0.2910

SAR(1 g) = 0.192 mW/g ; SAR(10 g) = 0.116 mW/g

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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 165(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 166(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/27/2012 3:34:39 PM

Test Laboratory: RIM Testing Services

**LeftHandside_LTE_2_mid_chan_QPSK_RB_1_Offset_0_amb_temp_24.
9_liq_temp_22.5C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: LTE; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.385 \text{ mho/m}$; $\epsilon_r = 38.179$; $\rho = 1000 \text{ kg/m}^3$

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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.865 mW/g

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

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

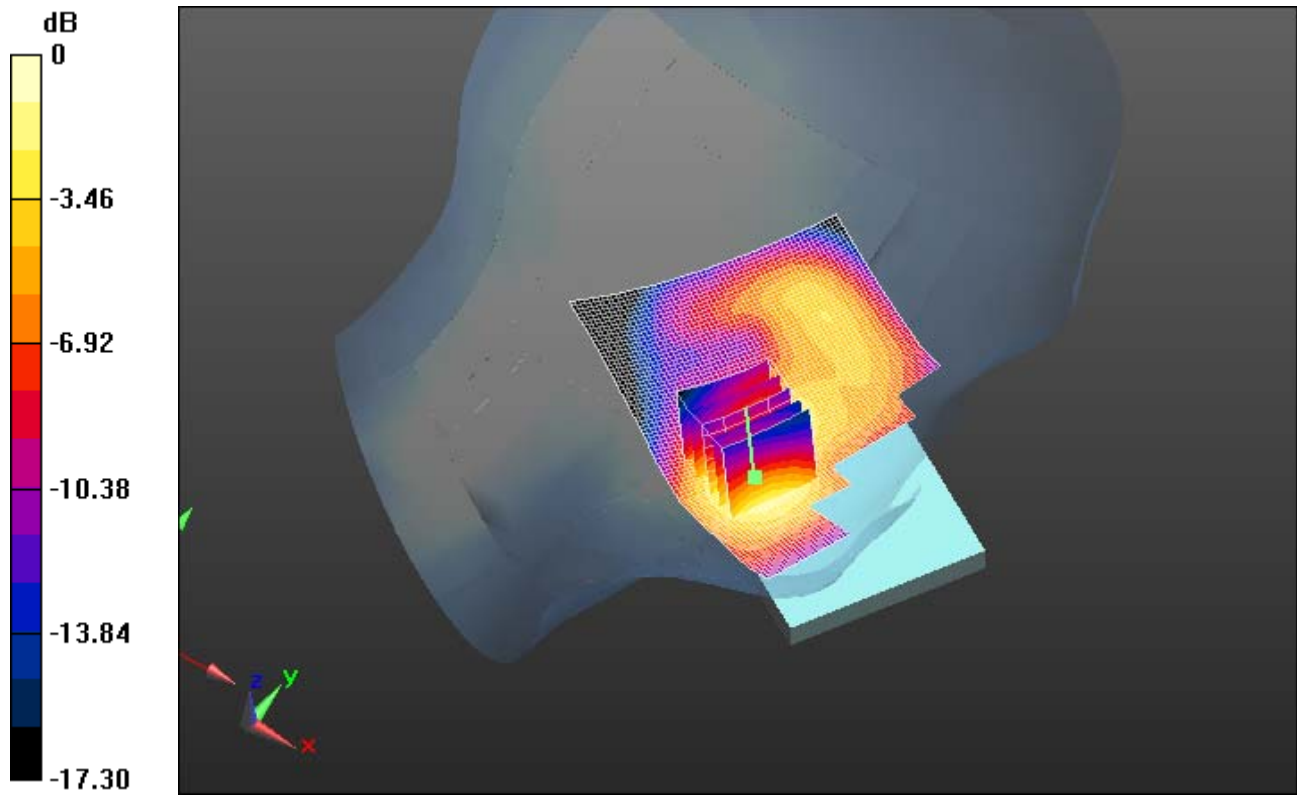
Reference Value = 8.436 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.1080

SAR(1 g) = 0.730 mW/g; SAR(10 g) = 0.449 mW/g

Maximum value of SAR (measured) = 0.860 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 167(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.860mW/g = -1.31 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 168(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 7:06:47 PM

Test Laboratory: RIM Testing Services

RightHandSide_EDGE1900_mid_chan_amb_temp_23.1C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: EDGE 1900; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.348 mW/g

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

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

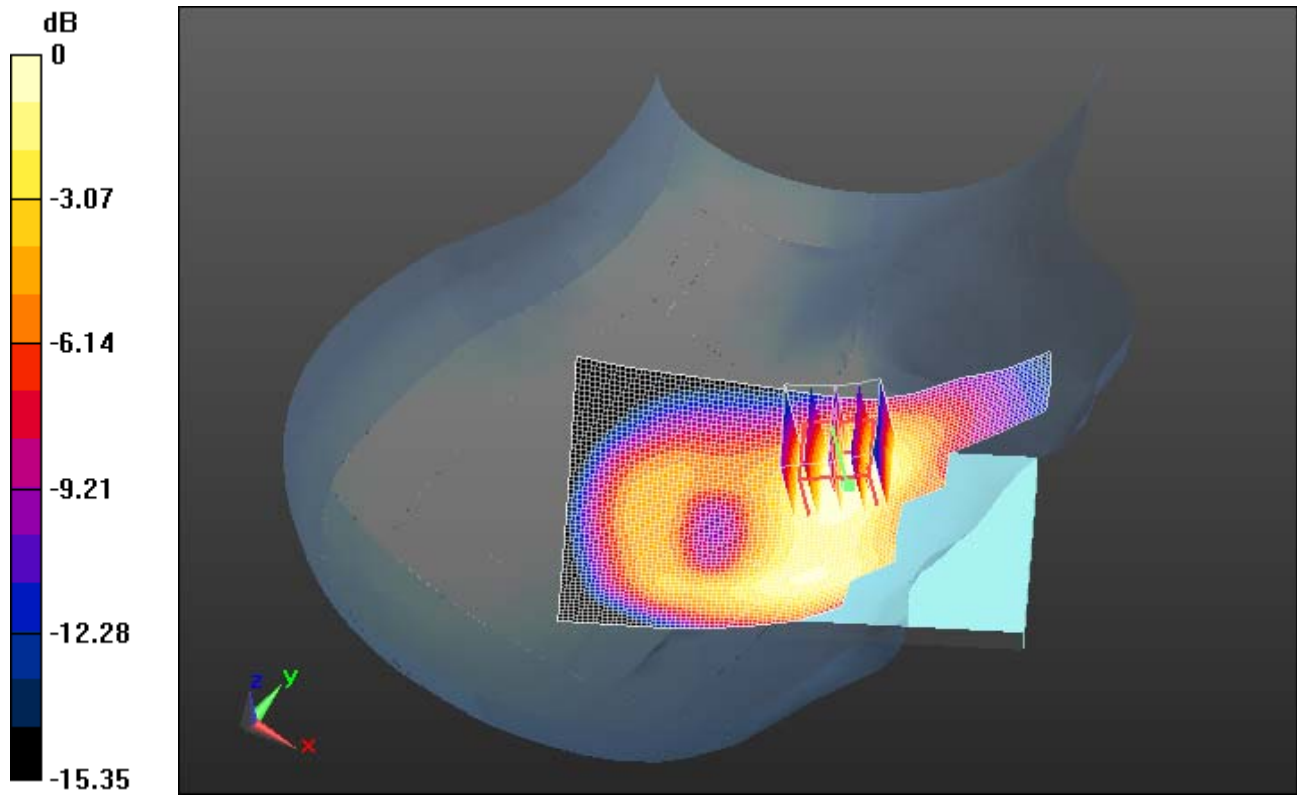
Reference Value = 9.784 V/m; Power Drift = -0.28 dB

Peak SAR (extrapolated) = 0.4170

SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.183 mW/g

Maximum value of SAR (measured) = 0.321 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 169(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.320mW/g = -9.90 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 170(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 7:27:53 PM

Test Laboratory: RIM Testing Services

**RightHandSide_EDGE1900_3-slots_mid_chan_amb_temp_23.2C_
liq_temp_21.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: EDGE 1900(3 slots); Frequency: 1880 MHz
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

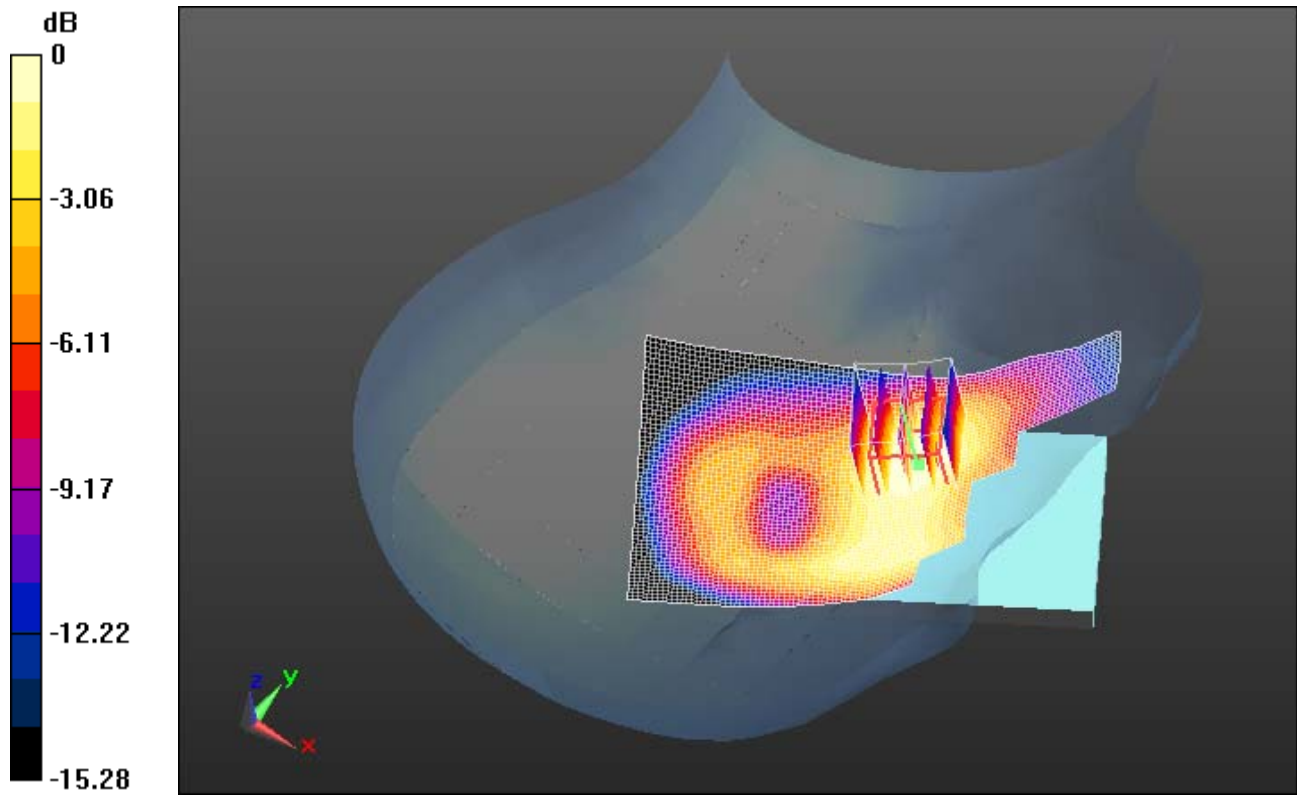
DASY Configuration:

- 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 (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.294 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 = 8.691 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.3590
SAR(1 g) = 0.248 mW/g; SAR(10 g) = 0.158 mW/g
Maximum value of SAR (measured) = 0.283 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 171(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.280mW/g = -11.06 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			172(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 7:47:16 PM

Test Laboratory: RIM Testing Services

**RightHandSide_EDGE1900_4-slots_mid_chan_amb_temp_22.9C_
liq_temp_21.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: EDGE 1900(4 slots); Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

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/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.354 mW/g

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

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

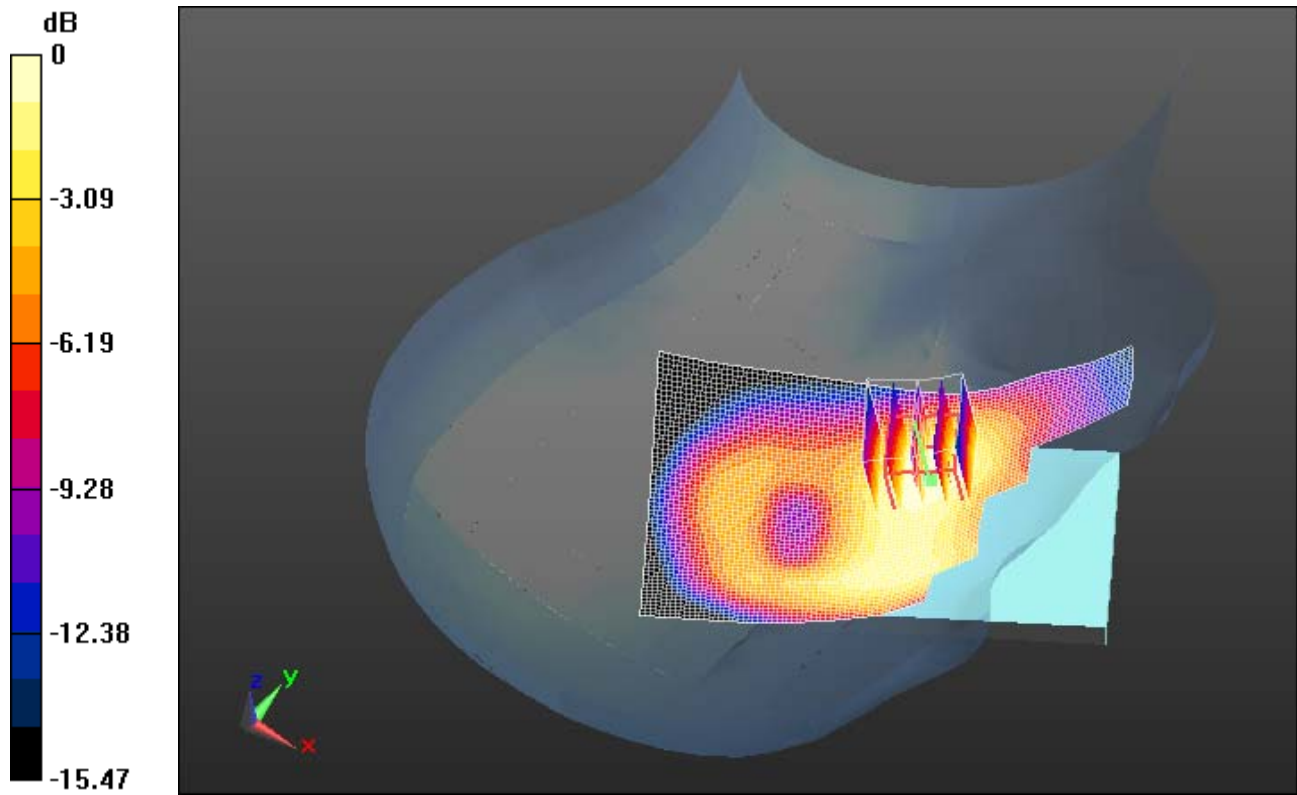
Reference Value = 9.478 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.4200

SAR(1 g) = 0.288 mW/g; SAR(10 g) = 0.184 mW/g

Maximum value of SAR (measured) = 0.326 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 173(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.330mW/g = -9.63 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 174(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 8:30:01 PM

Test Laboratory: RIM Testing Services

RightHandSide_Tilt_EDGE1900_mid_chan_amb_temp_22.8C_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: EDGE 1900; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

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/Tilt position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.137 mW/g

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

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

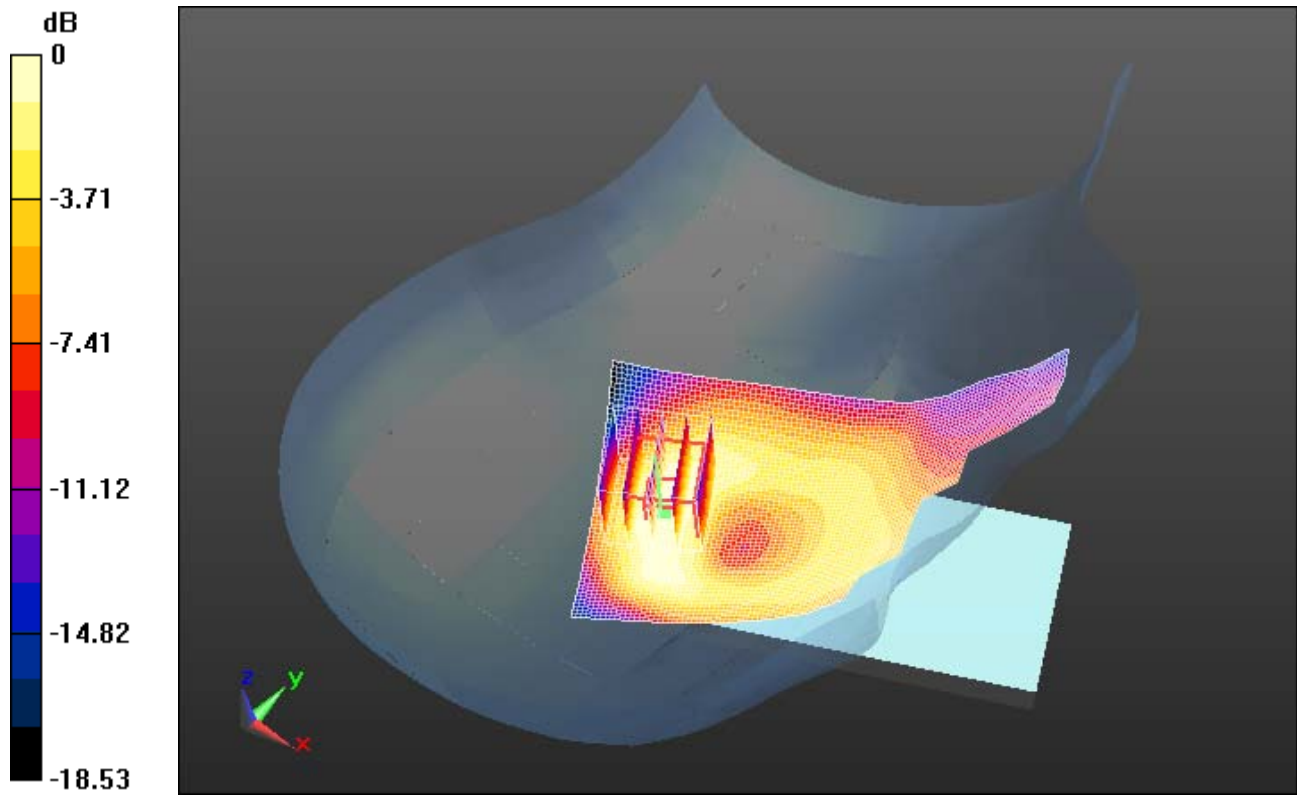
Reference Value = 10.133 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.1750

SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.134 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 175(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.130mW/g = -17.72 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			176(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 8:05:44 PM

Test Laboratory: RIM Testing Services

RightHandSide_GSM1900_mid_chan_amb_temp_23.0C_liq_temp_21.3

C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: GSM 1900; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

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/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.251 mW/g

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

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

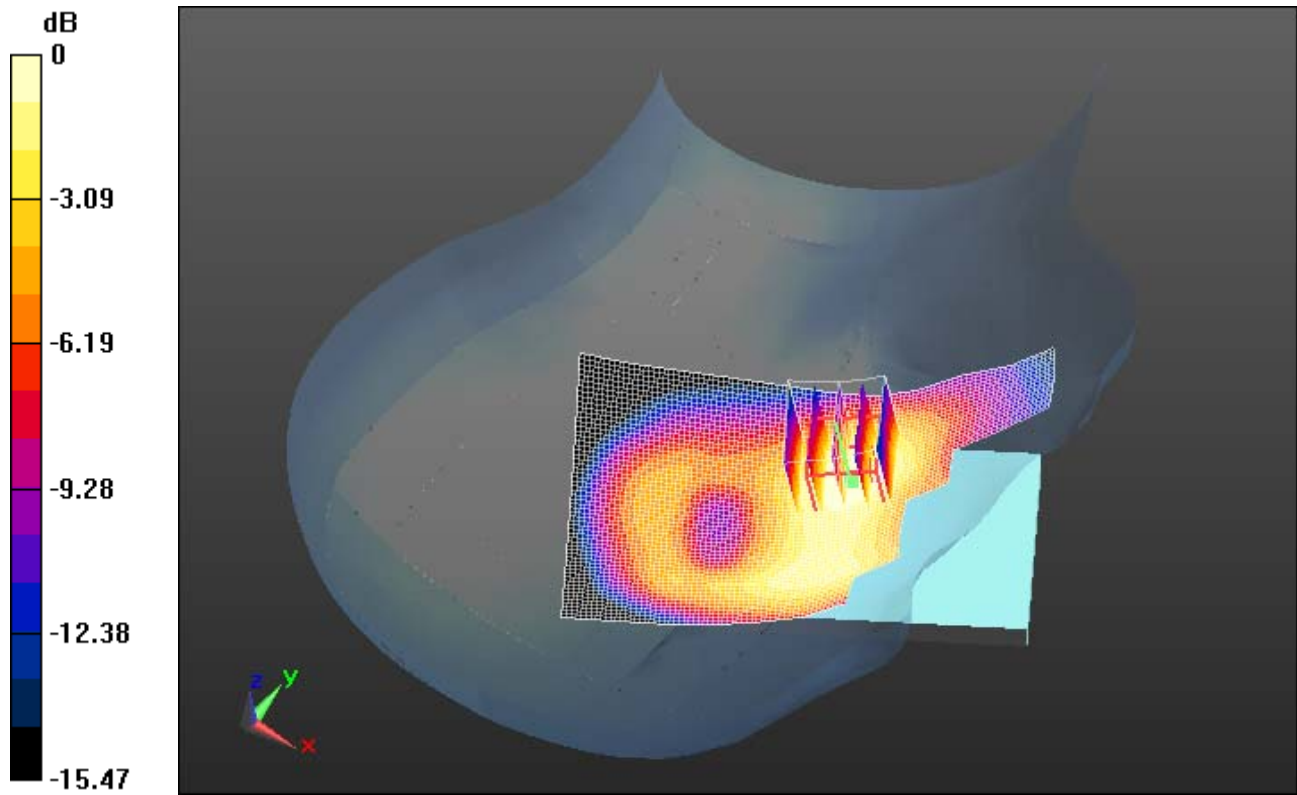
Reference Value = 7.757 V/m; Power Drift = 0.25 dB

Peak SAR (extrapolated) = 0.3190

SAR(1 g) = 0.214 mW/g; SAR(10 g) = 0.135 mW/g

Maximum value of SAR (measured) = 0.240 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 177(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.240mW/g = -12.40 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			178(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 9:16:43 PM

Test Laboratory: RIM Testing Services

LeftHandSide_EDGE1900_mid_chan_amb_temp_22.6C_liq_temp_21.2

C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: EDGE 1900; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left 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/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.509 mW/g

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

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

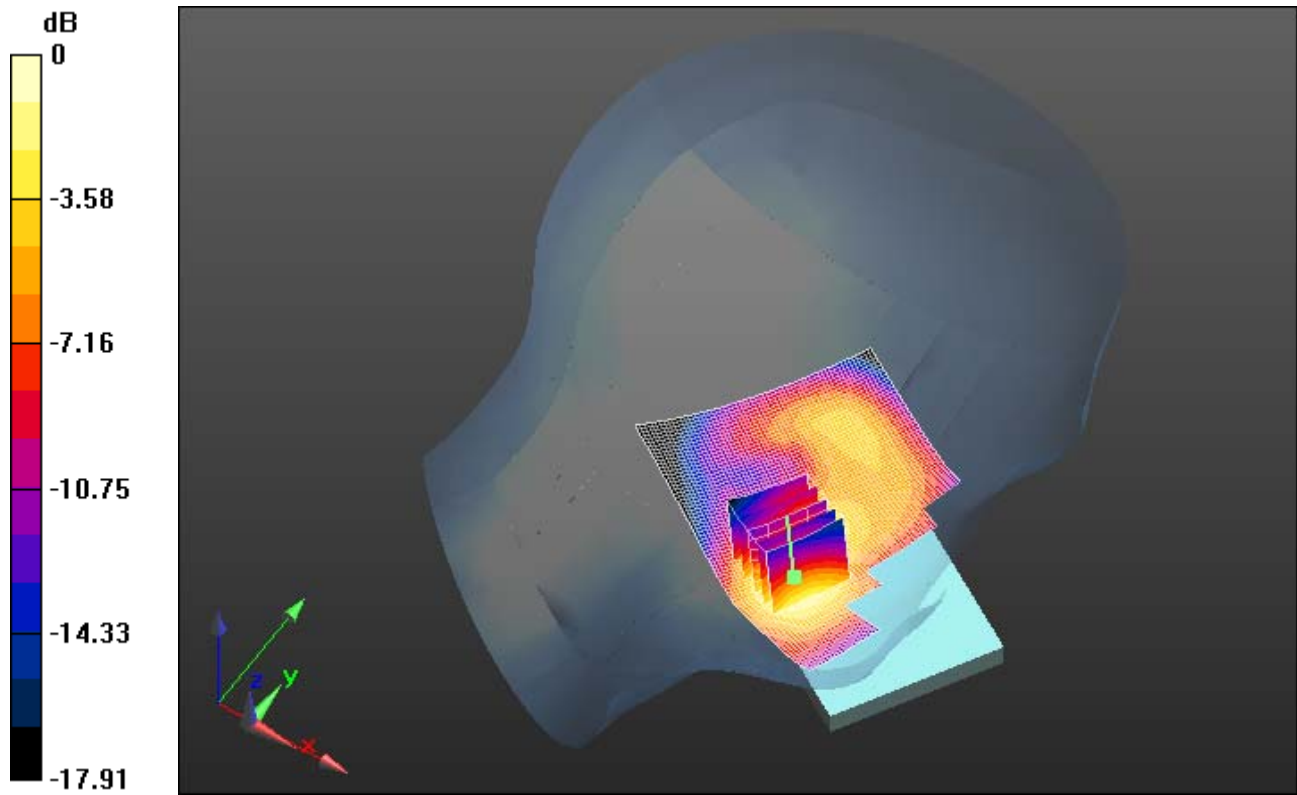
Reference Value = 7.491 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.6730

SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.263 mW/g

Maximum value of SAR (measured) = 0.519 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 179(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.520mW/g = -5.68 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 180(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 9:36:56 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_EDGE1900_3-slots_mid_chan_amb_temp_22.8C_
liq_temp_21.2C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: EDGE 1900(3 slots); Frequency: 1880 MHz
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

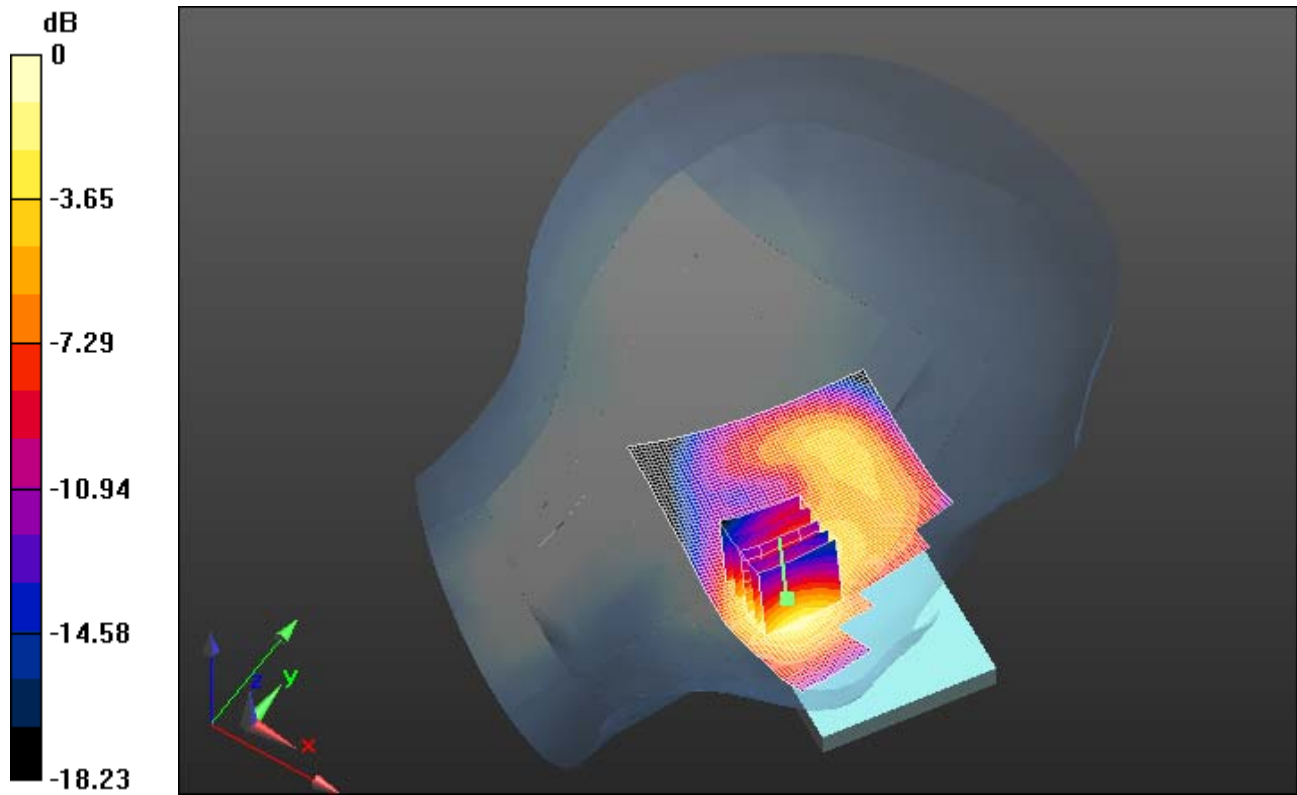
DASY Configuration:

- 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 (61x91x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.430 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 = 6.968 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.5760
SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.220 mW/g
Maximum value of SAR (measured) = 0.438 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 181(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.440mW/g = -7.13 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 182(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 9:55:04 PM

Test Laboratory: RIM Testing Services

LeftHandSide_EDGE1900_4-slots_mid_chan_amb_temp_22.8C_
liq_temp_21.2C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: EDGE 1900(4 slots); Frequency: 1880 MHz
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

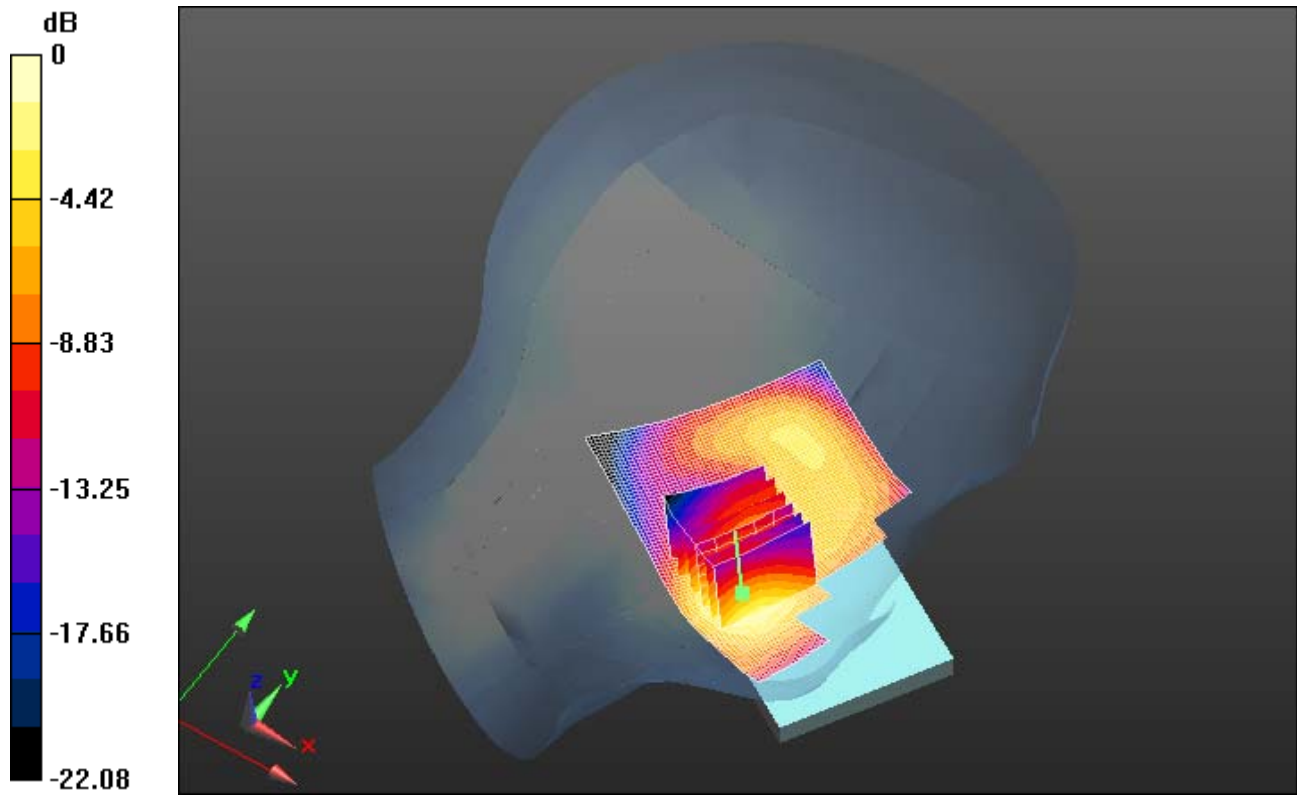
DASY Configuration:

- 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.505 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:
Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 7.483 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.6750
SAR(1 g) = 0.429 mW/g; SAR(10 g) = 0.255 mW/g
Maximum value of SAR (measured) = 0.507 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 183(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.510mW/g = -5.85 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 184(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 10:48:13 PM

Test Laboratory: RIM Testing Services

LeftHandSide_Tilt_EDGE1900_mid_chan_amb_temp_23.2C_liq_temp_2

1.2C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: EDGE 1900; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left 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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.198 mW/g

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

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

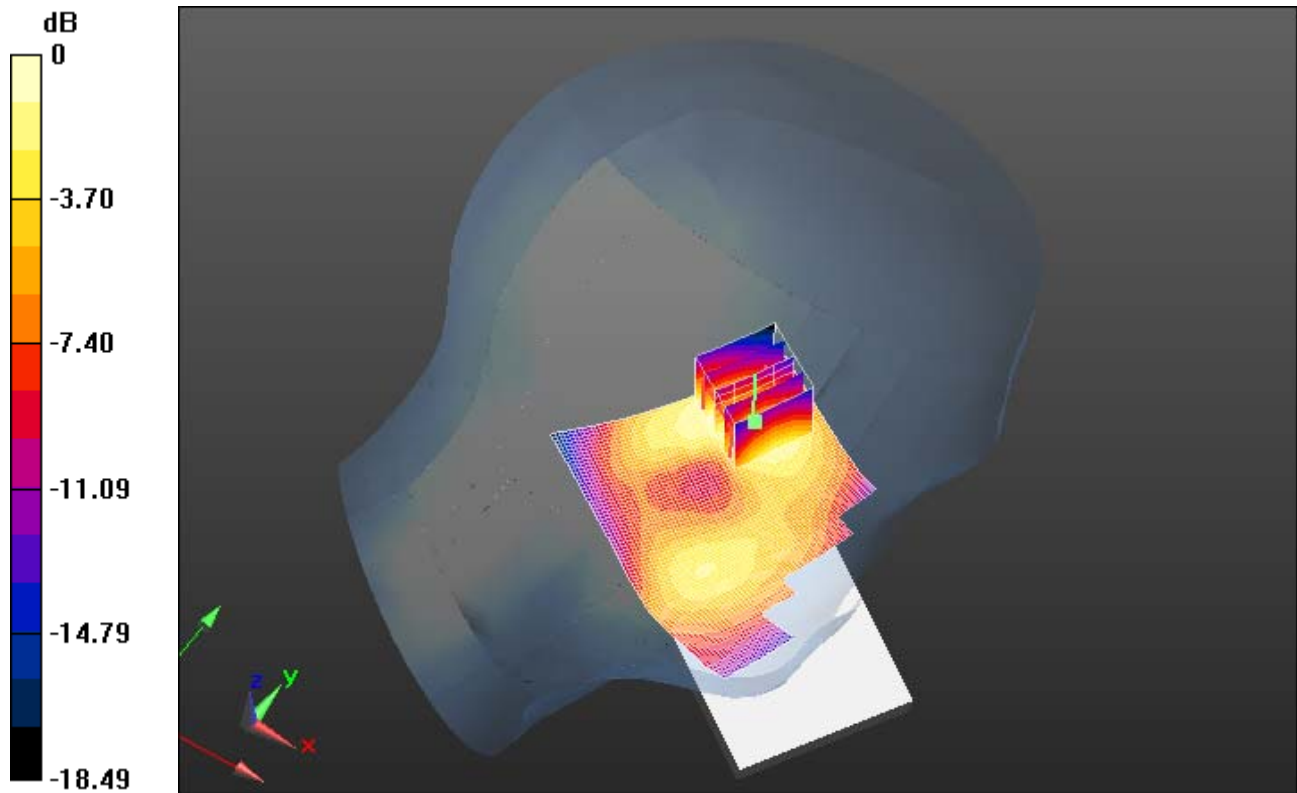
Reference Value = 9.222 V/m ; Power Drift = -0.22 dB

Peak SAR (extrapolated) = 0.2330

SAR(1 g) = 0.152 mW/g ; SAR(10 g) = 0.091 mW/g

Maximum value of SAR (measured) = 0.177 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 185(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.180mW/g = -14.89 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			186(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 10:25:15 PM

Test Laboratory: RIM Testing Services

LeftHandSide_GSM1900_mid_chan_amb_temp_23.2C_liq_temp_21.2C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: GSM 1900; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.379 \text{ mho/m}$; $\epsilon_r = 38.766$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.380 mW/g

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

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

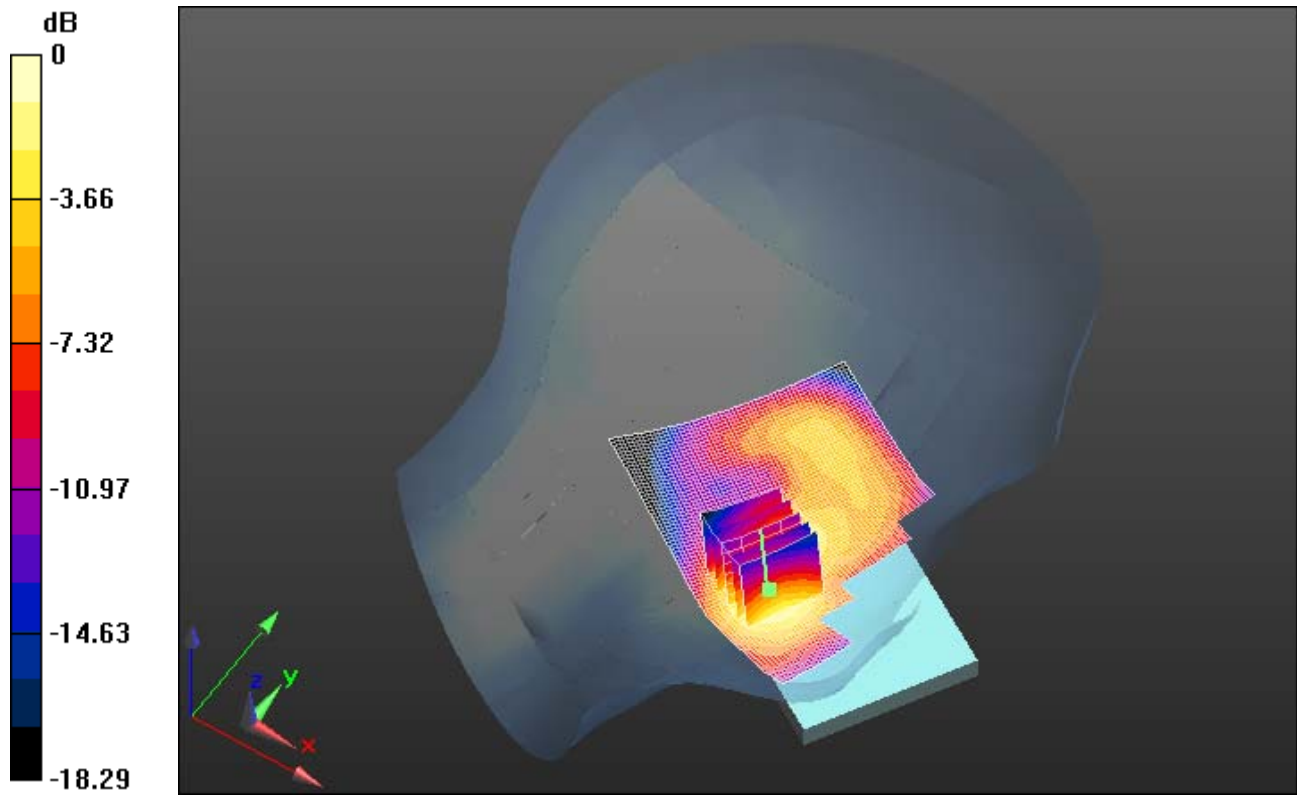
Reference Value = 6.584 V/m ; Power Drift = 0.0035 dB

Peak SAR (extrapolated) = 0.5120

SAR(1 g) = 0.327 mW/g ; SAR(10 g) = 0.196 mW/g

Maximum value of SAR (measured) = 0.389 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 187(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.390mW/g = -8.18 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			188(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/28/2012 1:48:47 AM

Test Laboratory: RIM Testing Services

LeftHandSide_EDGE1900_mid_chan_amb_temp_23.7C_liq_temp_21.5

C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: EDGE 1900; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.385 \text{ mho/m}$; $\epsilon_r = 38.179$; $\rho = 1000 \text{ kg/m}^3$

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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.498 mW/g

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

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

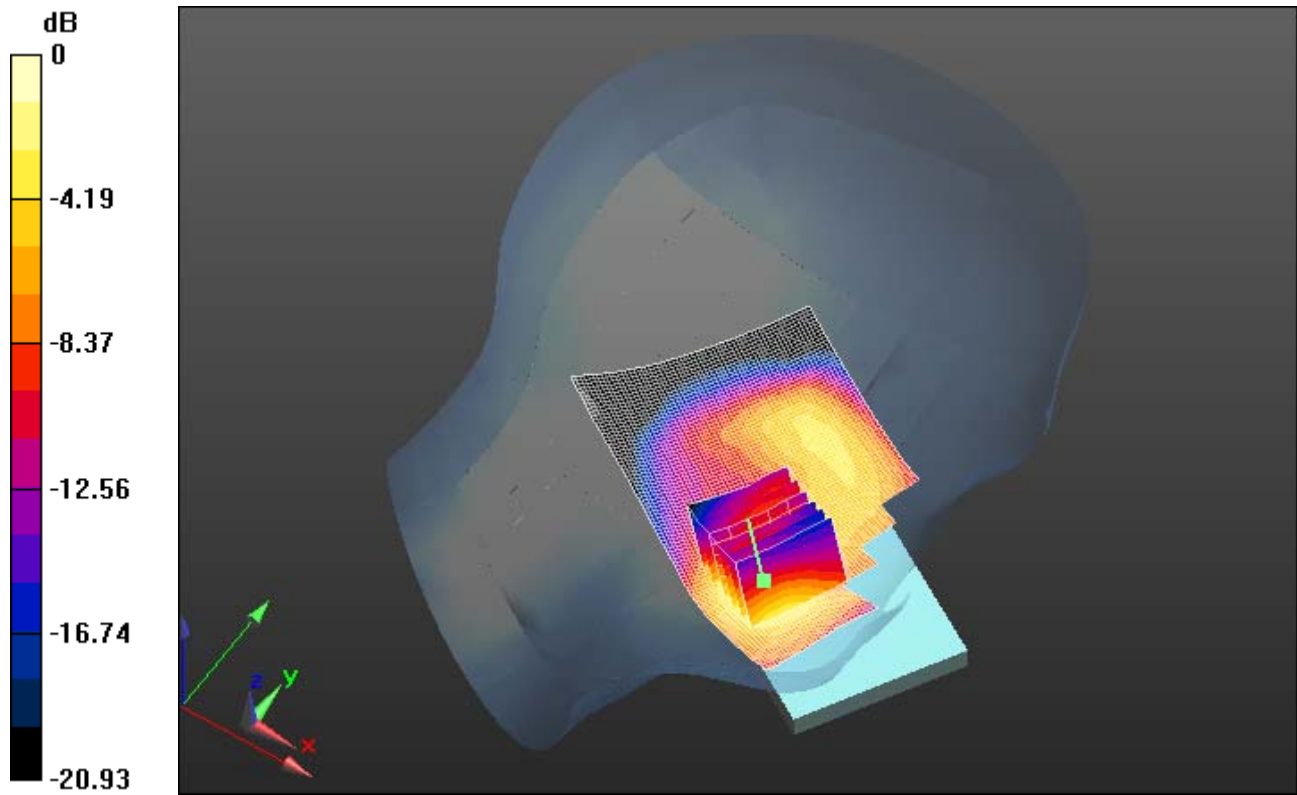
Reference Value = 5.936 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.6490

SAR(1 g) = 0.407 mW/g; SAR(10 g) = 0.240 mW/g

Maximum value of SAR (measured) = 0.489 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 189(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.490mW/g = -6.20 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 190(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 9:04:52 AM

Test Laboratory: RIM Testing Services

RightHandSide_UMTS_Band_II_mid_chan_amb_temp_22.9C_liq_temp_21.6C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: WCDMA FDD II; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.492 mW/g

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

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

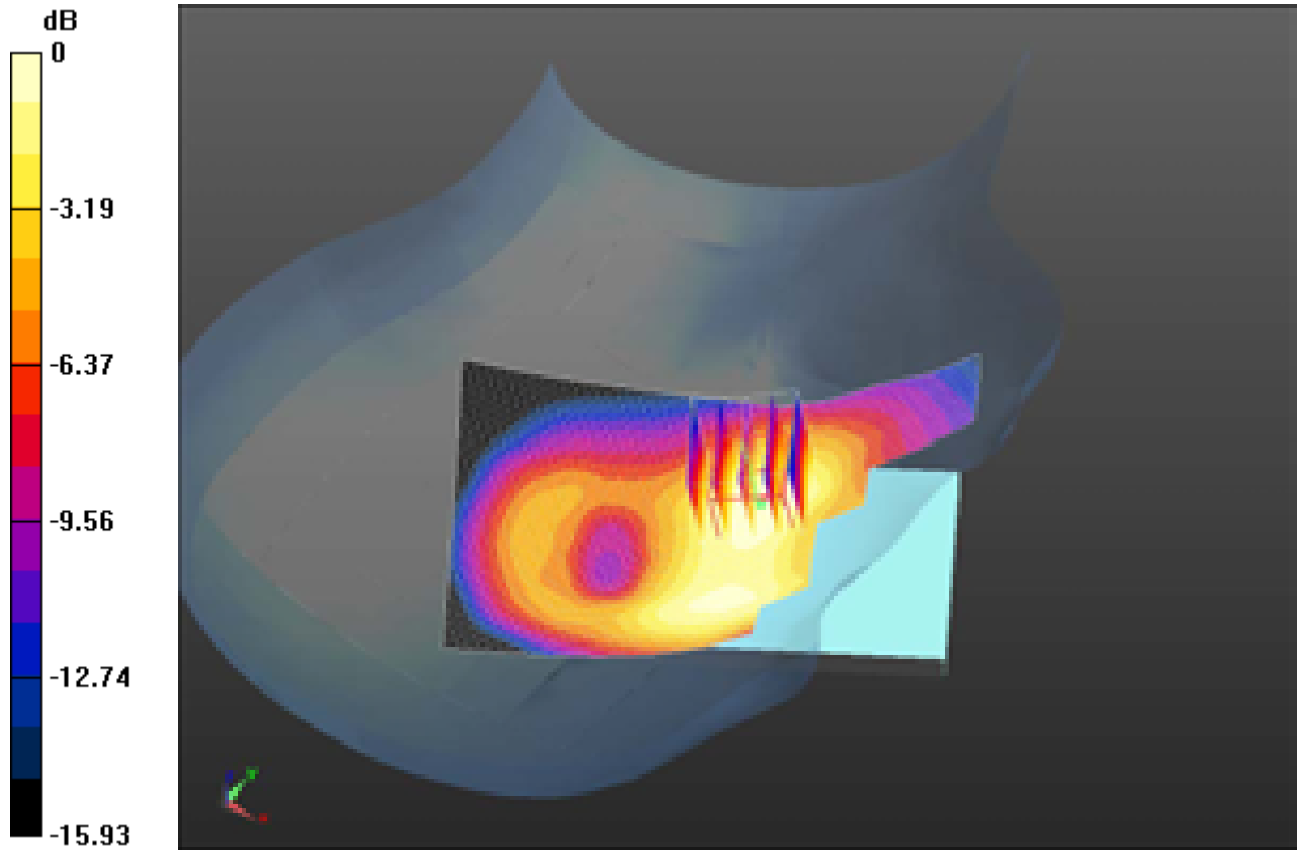
Reference Value = 10.932 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.5850

SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.252 mW/g

Maximum value of SAR (measured) = 0.447 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 191(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.450mW/g = -6.94 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 192(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 9:23:39 AM

Test Laboratory: RIM Testing Services

RightHandSide_Tilt_UMTS_Band_II_mid_chan_amb_temp_22.8C_liq_temperatures_21.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: WCDMA FDD II; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.214 mW/g

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

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

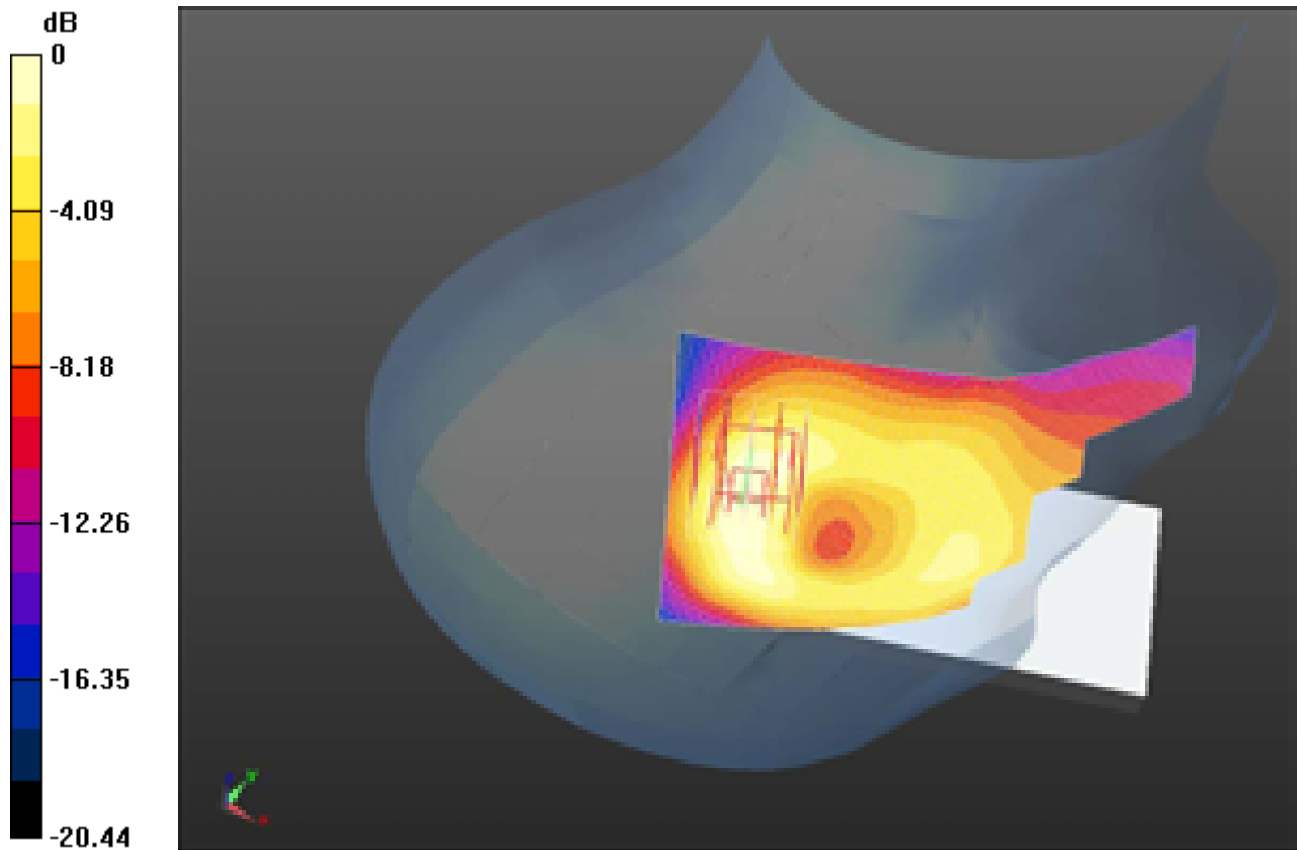
Reference Value = 12.711 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.2770

SAR(1 g) = 0.172 mW/g ; SAR(10 g) = 0.100 mW/g

Maximum value of SAR (measured) = 0.209 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 193(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.210mW/g = -13.56 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			194(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 8:17:16 AM

Test Laboratory: RIM Testing Services

LeftHandSide_UMTS_Band_II_mid_chan_amb_temp_22.6C_liq_temp_2 1.3C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: WCDMA FDD II; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x91x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.683 mW/g

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

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

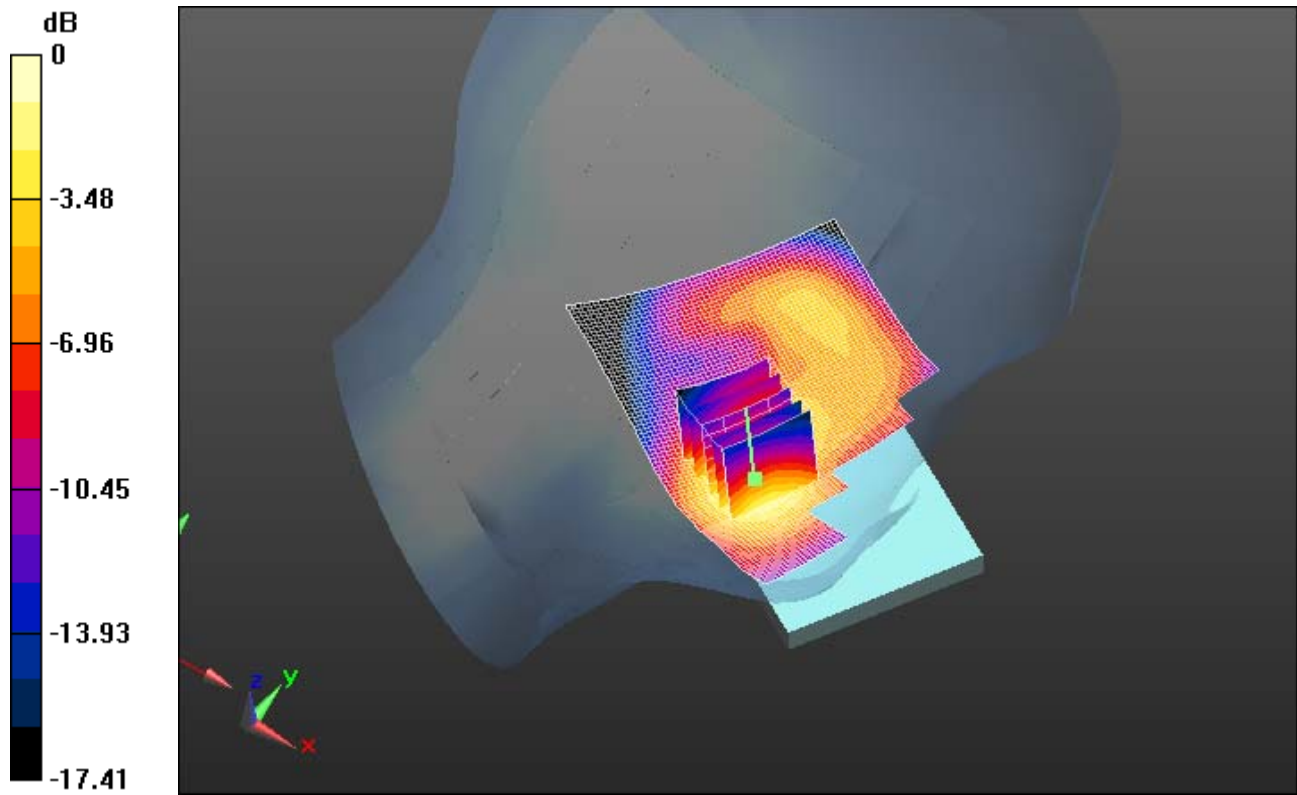
Reference Value = 8.998 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.9420

SAR(1 g) = 0.592 mW/g ; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.719 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 195(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.720mW/g = -2.85 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 196(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/12/2012 8:34:44 AM

Test Laboratory: RIM Testing Services

**LeftHandSide_Tilt_UMTS_Band_II_mid_chan_amb_temp_22.4C_liq_tem
p_21.3C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A20270D

Communication System: WCDMA FDD II; Frequency: 1880 MHz

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.358 \text{ mho/m}$; $\epsilon_r = 38.54$; $\rho = 1000 \text{ kg/m}^3$

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 (61x101x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.237 mW/g

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

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

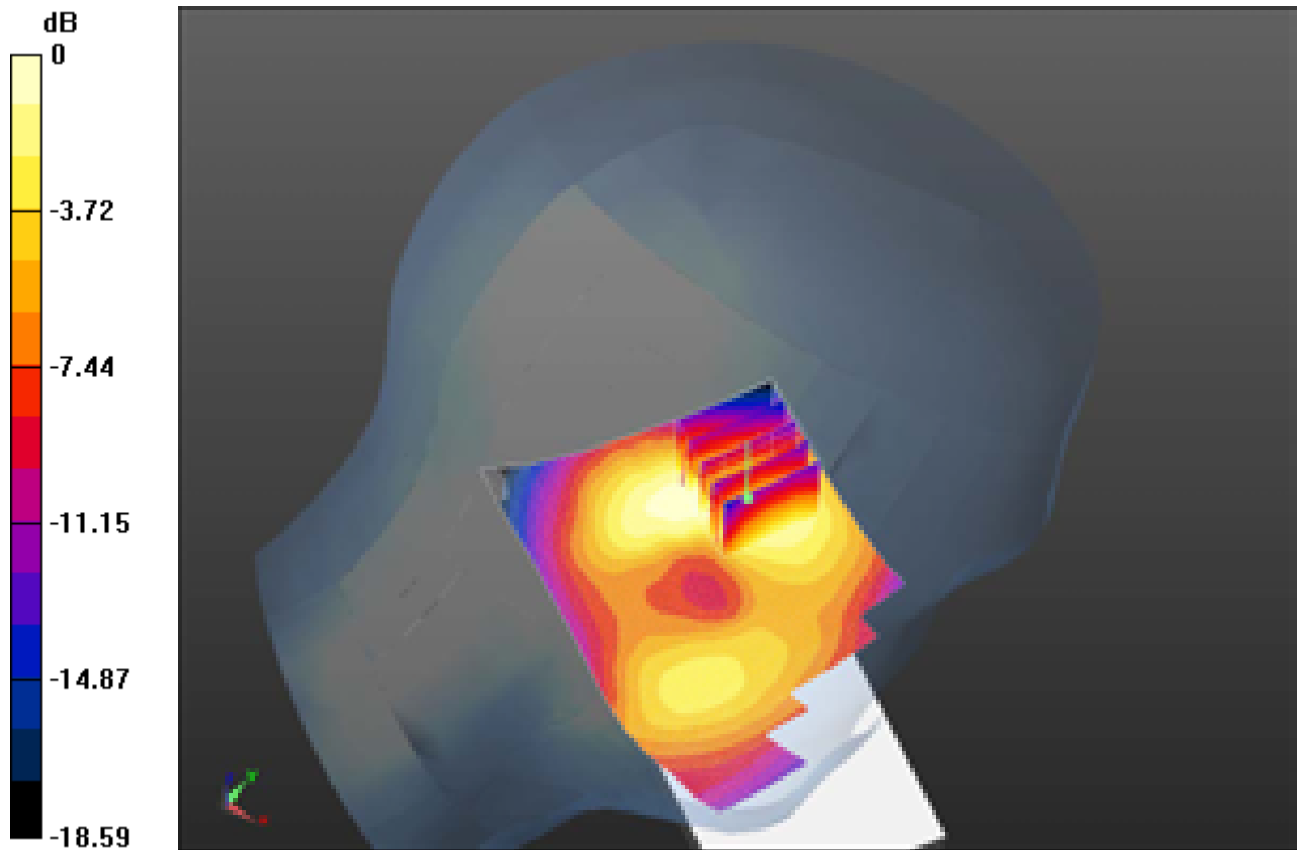
Reference Value = 11.503 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.2810

SAR(1 g) = 0.186 mW/g ; SAR(10 g) = 0.114 mW/g

Maximum value of SAR (measured) = 0.213 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 197(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.210mW/g = -13.56 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 198(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/28/2012 2:41:07 AM

Test Laboratory: RIM Testing Services

LeftHandSide_UMTS_Band_II_low_chan_amb_temp_23.4C_liq_temp_2 1.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz

Medium parameters used (interpolated): $f = 1852.4 \text{ MHz}$; $\sigma = 1.364 \text{ mho/m}$; $\epsilon_r = 38.29$; $\rho = 1000 \text{ kg/m}^3$

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 (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 1.012 mW/g

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

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

Reference Value = 8.077 V/m ; Power Drift = -0.09 dB

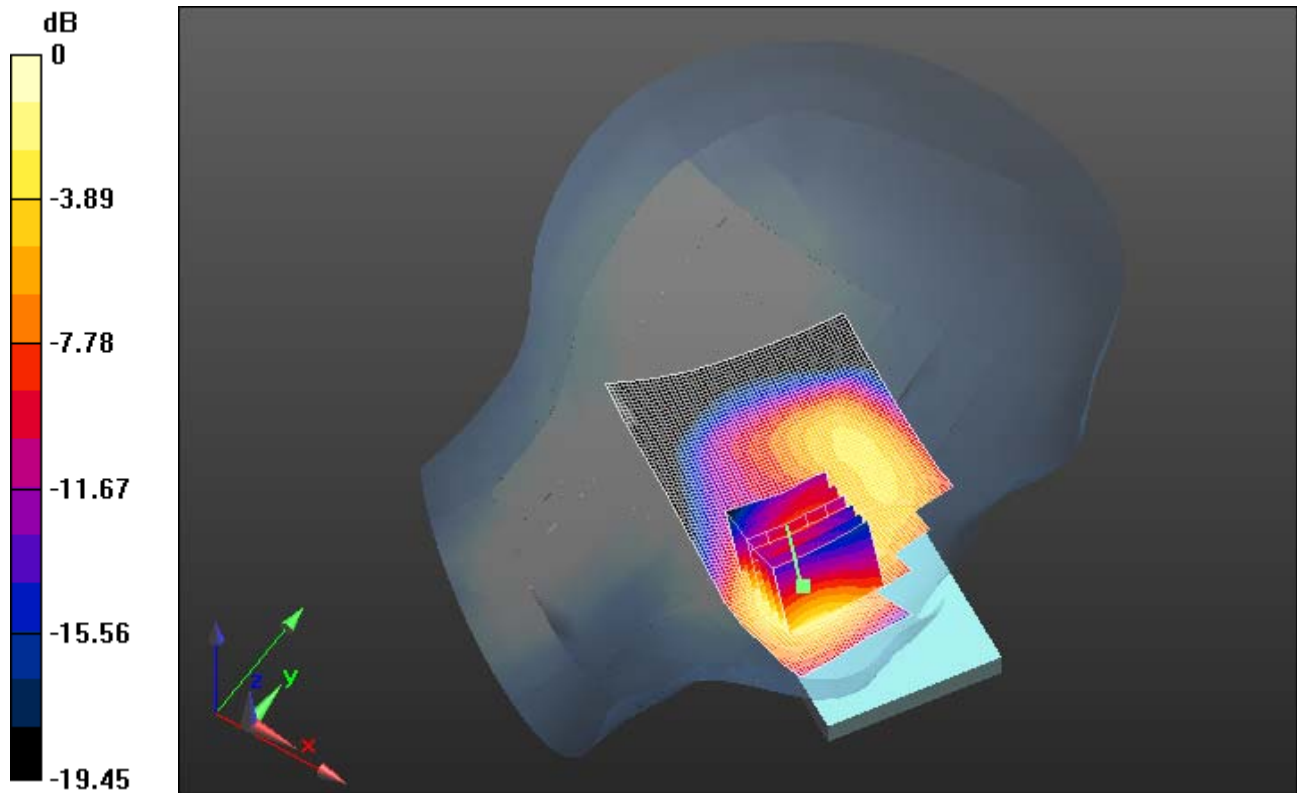
Peak SAR (extrapolated) = 1.3100

SAR(1 g) = 0.848 mW/g ; SAR(10 g) = 0.514 mW/g

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

Maximum value of SAR (measured) = 1.000 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 199(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 1.000mW/g = 0 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			200(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/28/2012 2:20:54 AM

Test Laboratory: RIM Testing Services

LeftHandSide_UMTS_Band_II_mid_chan_amb_temp_23.7C_liq_temp_2 1.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: WCDMA FDD II; Frequency: 1880 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 38.179$; $\rho = 1000$ kg/m³

Phantom section: Left 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 1.019 mW/g

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

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

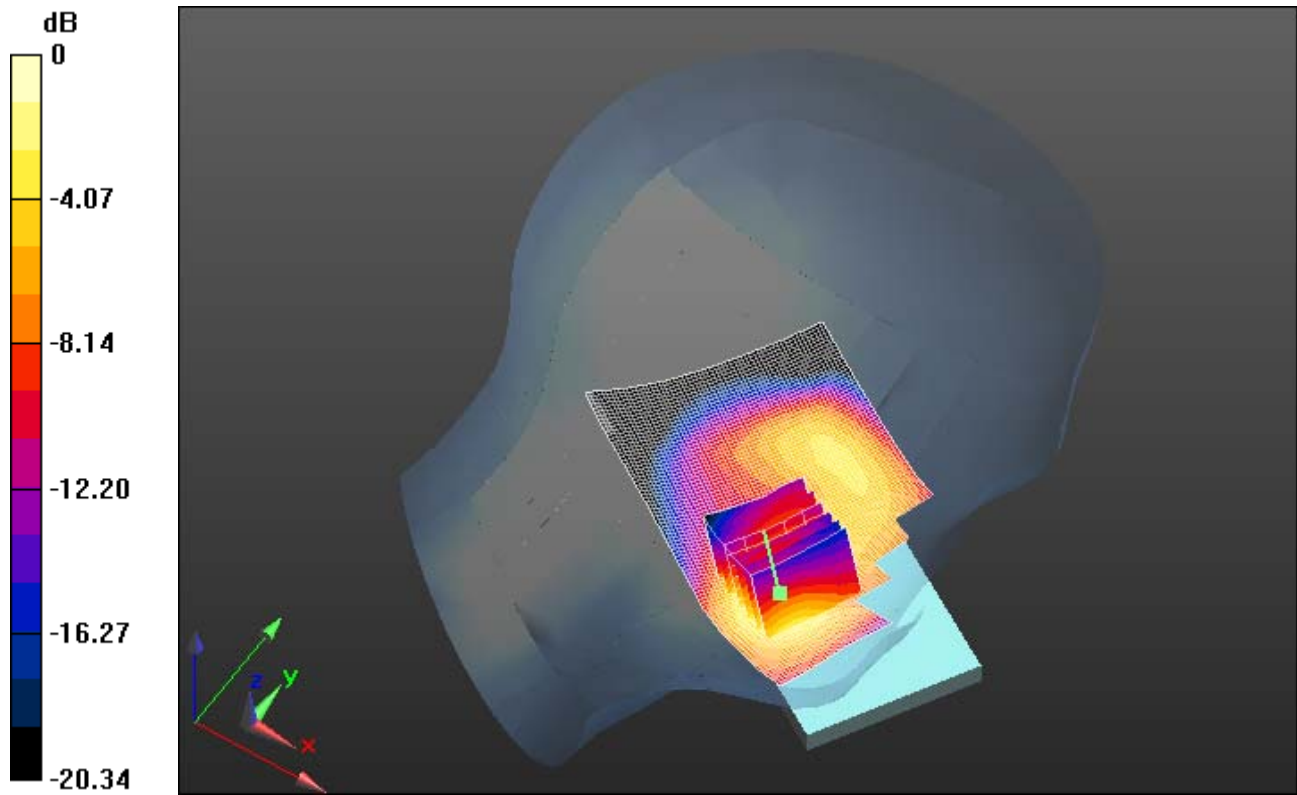
Reference Value = 8.764 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.3090

SAR(1 g) = 0.845 mW/g; SAR(10 g) = 0.509 mW/g

Maximum value of SAR (measured) = 1.006 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 201(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 1.010mW/g = 0.09 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 202(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/28/2012 3:19:39 AM

Test Laboratory: RIM Testing Services

LeftHandSide_UMTS_Band_II_high_chan_amb_temp_23.4C_liq_temp_2 1.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz
Medium parameters used (interpolated): $f = 1907.6 \text{ MHz}$; $\sigma = 1.405 \text{ mho/m}$; $\epsilon_r = 38.104$;
 $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left 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
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.867 mW/g

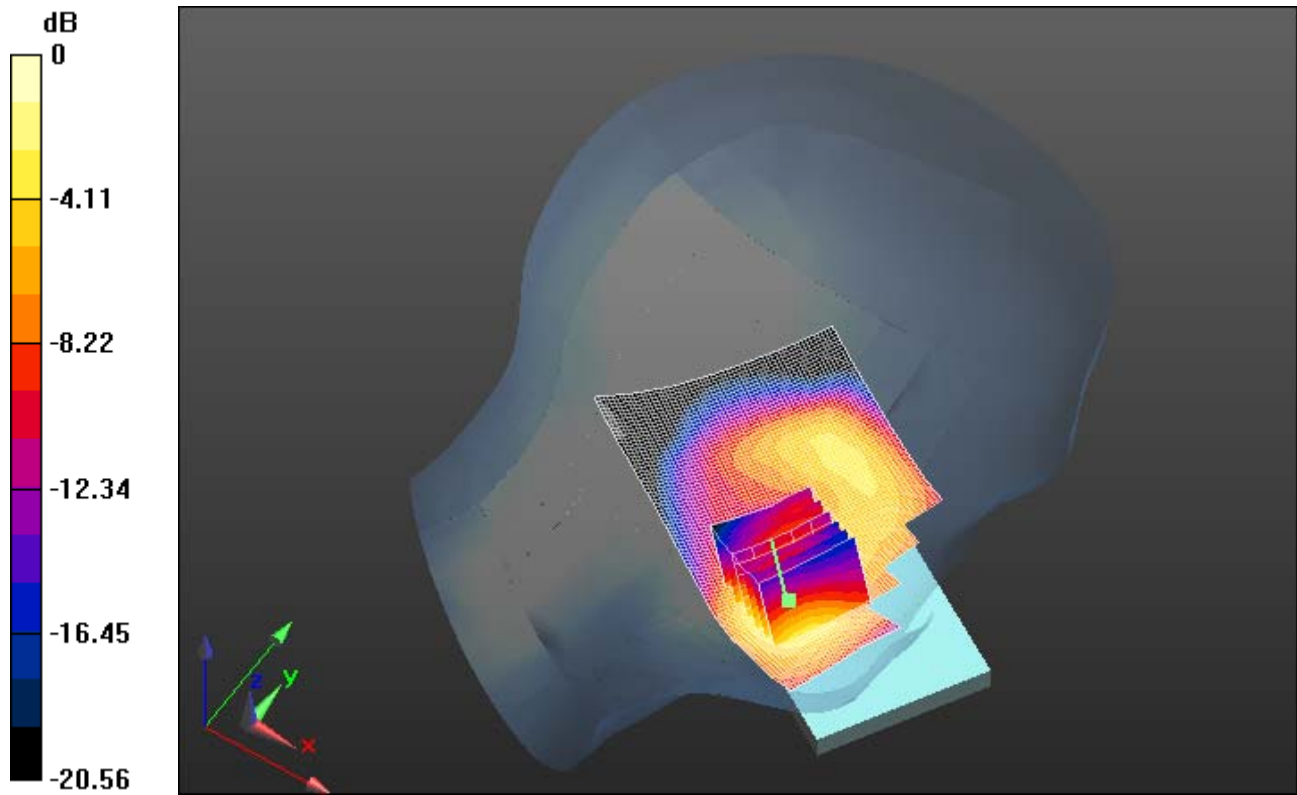
Configuration/Touch position -/Zoom Scan (5x5x7) (6x6x7)/Cube 0:

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 8.726 V/m; Power Drift = 0.30 dB
Peak SAR (extrapolated) = 1.1240
SAR(1 g) = 0.712 mW/g; SAR(10 g) = 0.423 mW/g

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

Maximum value of SAR (measured) = 0.855 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 203(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.850mW/g = -1.41 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 204(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/21/2012 3:23:04 AM

Test Laboratory: RIM Testing Services

RightHandSide__802.11b_mid_chan_amb_temp_22.4C_liq_temp_21.6C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11 b (2450); Frequency: 2437 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.755$ mho/m; $\epsilon_r = 38.279$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (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), $z = 2.0, 32.0$
- 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 (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.366 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 = 12.194 V/m; Power Drift = 0.21 dB

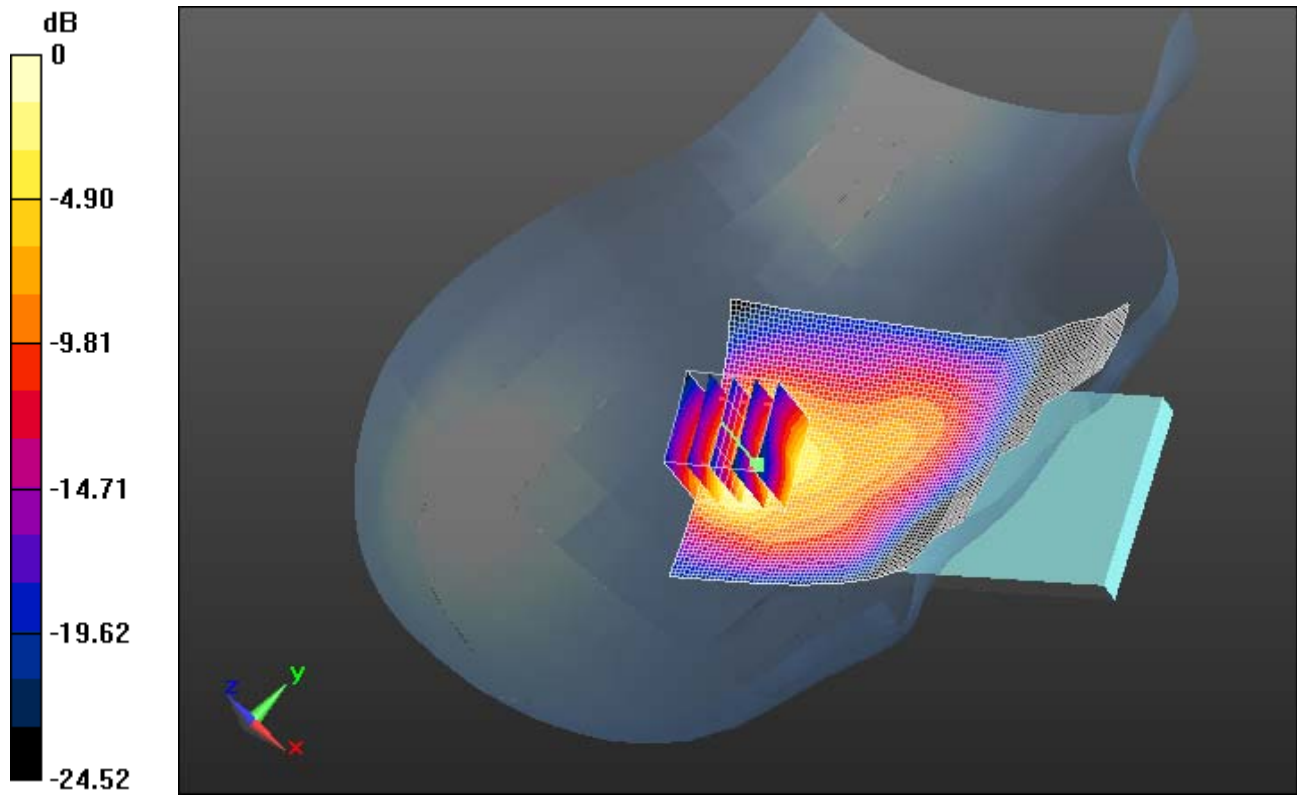
Peak SAR (extrapolated) = 0.5880

SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.124 mW/g

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

Maximum value of SAR (measured) = 0.351 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 205(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.350mW/g = -9.12 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 206(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/21/2012 3:48:09 AM

Test Laboratory: RIM Testing Services

RightHandSide_802.11b_Tilt_mid_chan_amb_temp_22.7C_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11 b (2450); Frequency: 2437 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.755$ mho/m; $\epsilon_r = 38.279$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (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), $z = 2.0, 32.0$
- 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 (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.359 mW/g

Configuration/Tilt 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 = 12.004 V/m; Power Drift = 0.04 dB

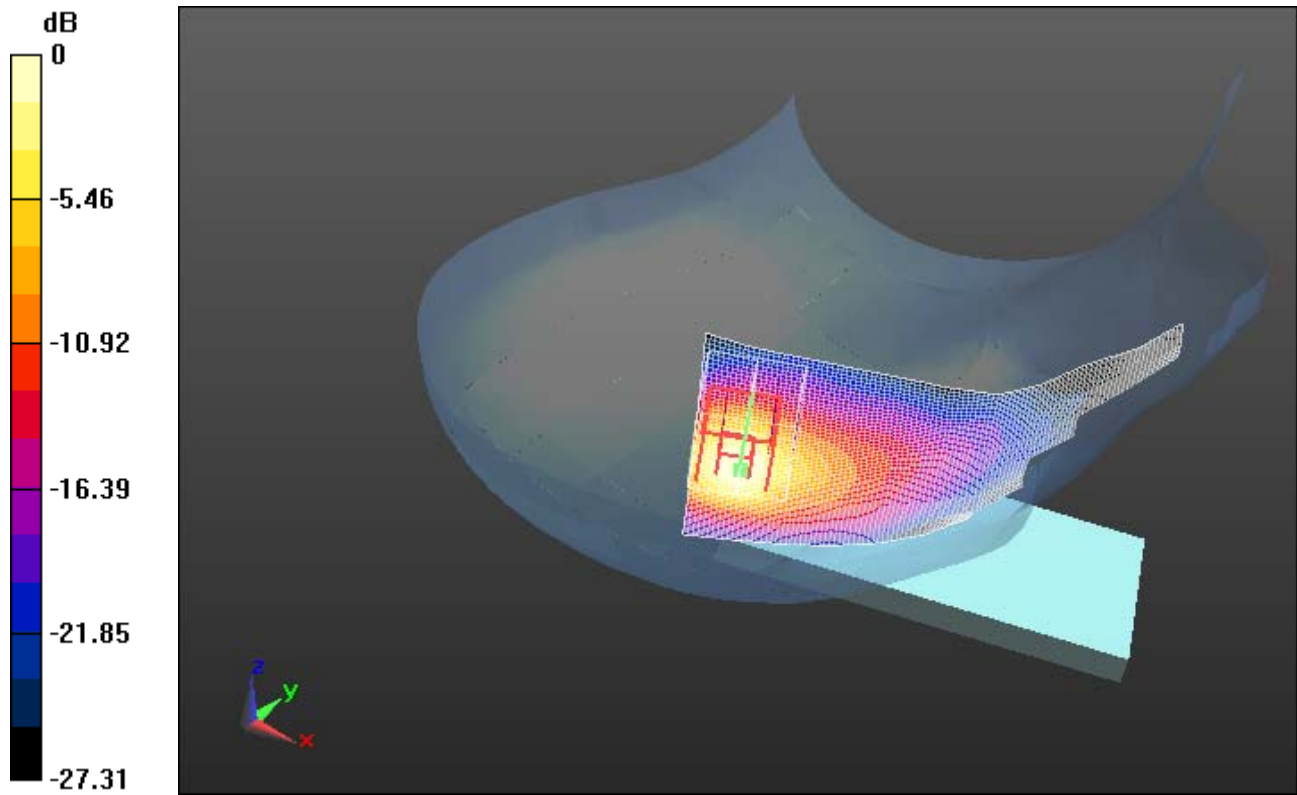
Peak SAR (extrapolated) = 0.5800

SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.123 mW/g

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

Maximum value of SAR (measured) = 0.368 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 207(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.370mW/g = -8.64 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 208(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/21/2012 4:38:57 AM

Test Laboratory: RIM Testing Services

LeftHandSide_802.11b_mid_chan_amb_temp_22.3C_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11 b (2450); Frequency: 2437 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.755$ mho/m; $\epsilon_r = 38.279$; $\rho = 1000$ kg/m³

Phantom section: Left 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), $z = 2.0, 32.0$
- 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/Touch position -/Area Scan (61x91x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.394 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 = 15.646 V/m; Power Drift = 0.04 dB

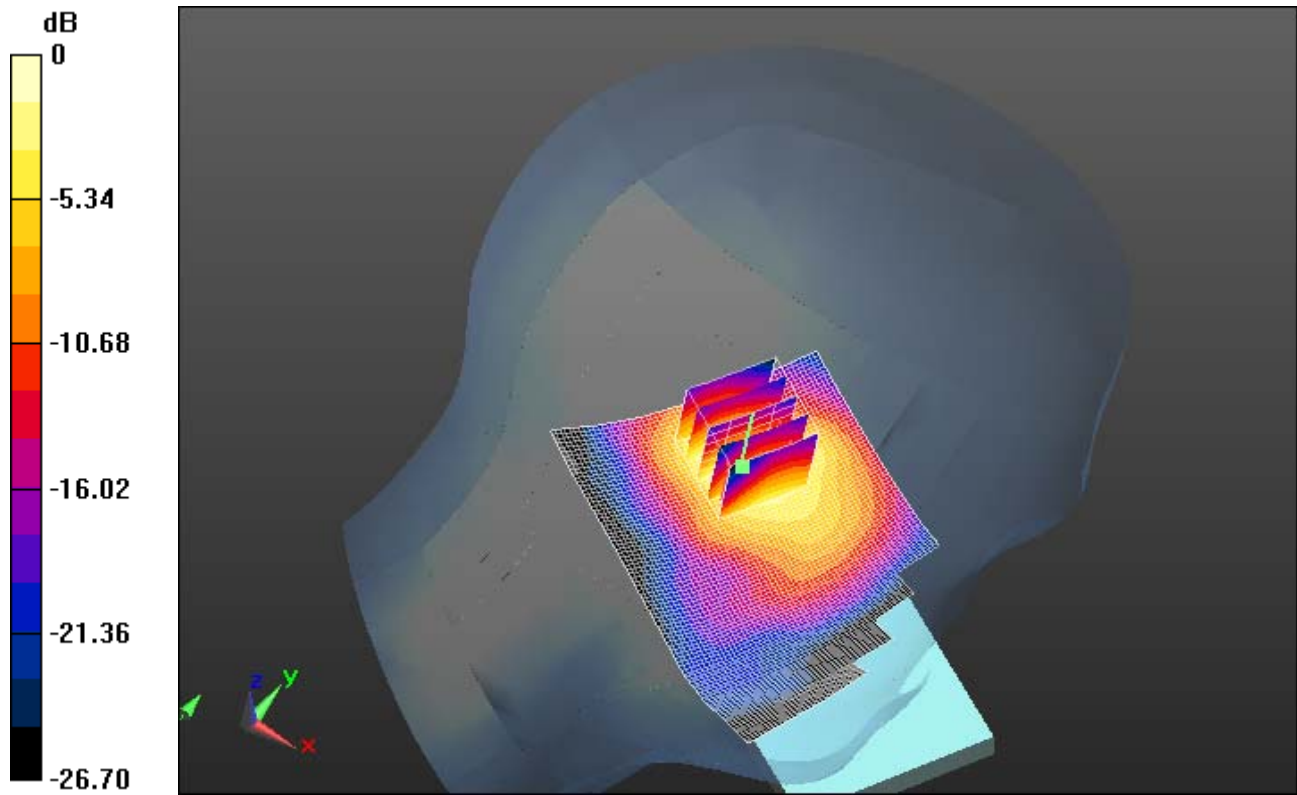
Peak SAR (extrapolated) = 0.6610

SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.149 mW/g

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

Maximum value of SAR (measured) = 0.378 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 209(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



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

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 210(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/21/2012 4:57:38 AM

Test Laboratory: RIM Testing Services

**LeftHandSide_Tilt_802.11b_mid_chan_amb_temp_22.9C_liq_temp_21.4
C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11 b (2450); Frequency: 2437 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.755$ mho/m; $\epsilon_r = 38.279$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5 (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), $z = 2.0, 32.0$
- 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 (61x91x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.347 mW/g

Configuration/Tilt 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 = 14.697 V/m; Power Drift = 0.02 dB

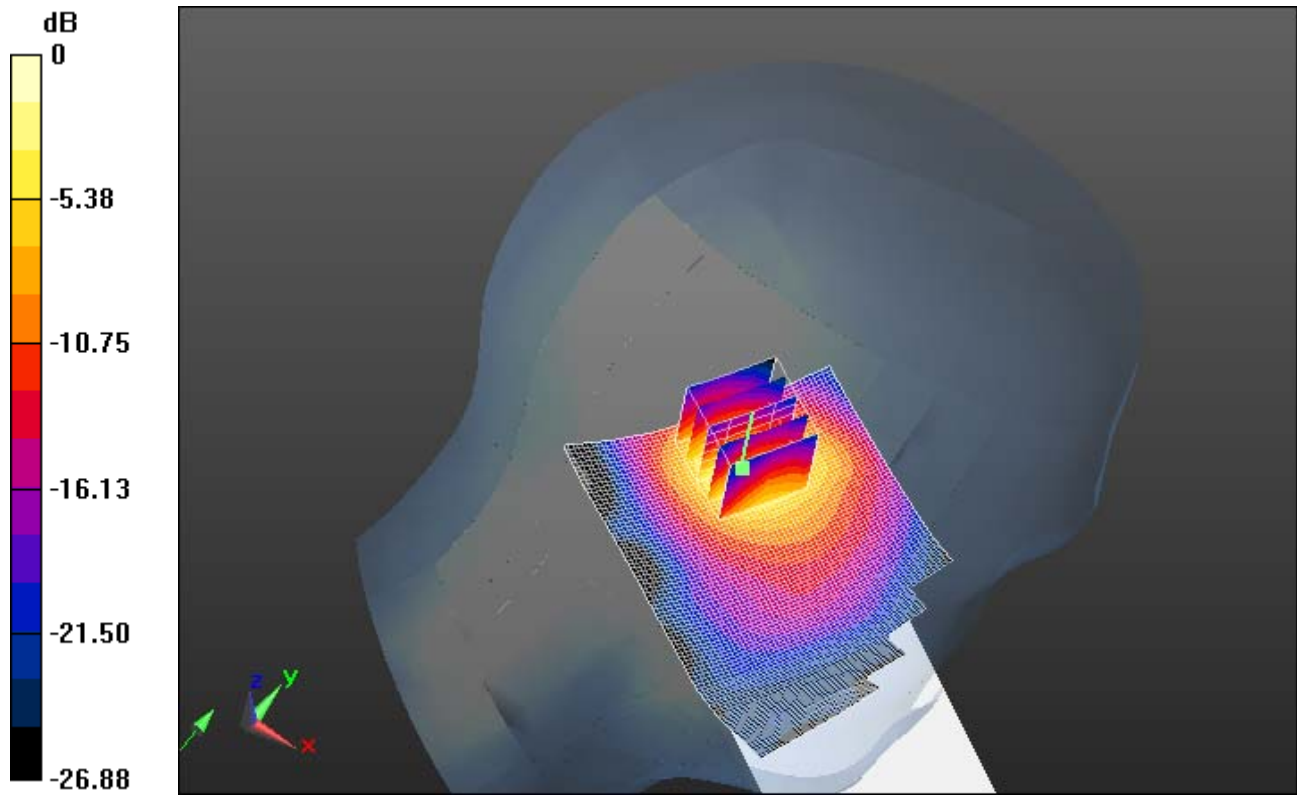
Peak SAR (extrapolated) = 0.6180

SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.136 mW/g

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

Maximum value of SAR (measured) = 0.411 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 211(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.410mW/g = -7.74 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 212(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/13/2012 9:56:38 PM

Test Laboratory: RIM Testing Services

RightHandSide_802.11b_low_chan_amb_temp_23.9C_liq_temp_21.6C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: 802.11 b (2450); Frequency: 2412 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.719$ mho/m; $\epsilon_r = 37.862$; $\rho = 1000$ 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), $z = 2.0, 32.0$
- 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/Touch position -/Area Scan (61x101x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.278 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 = 14.017 V/m; Power Drift = 0.52 dB

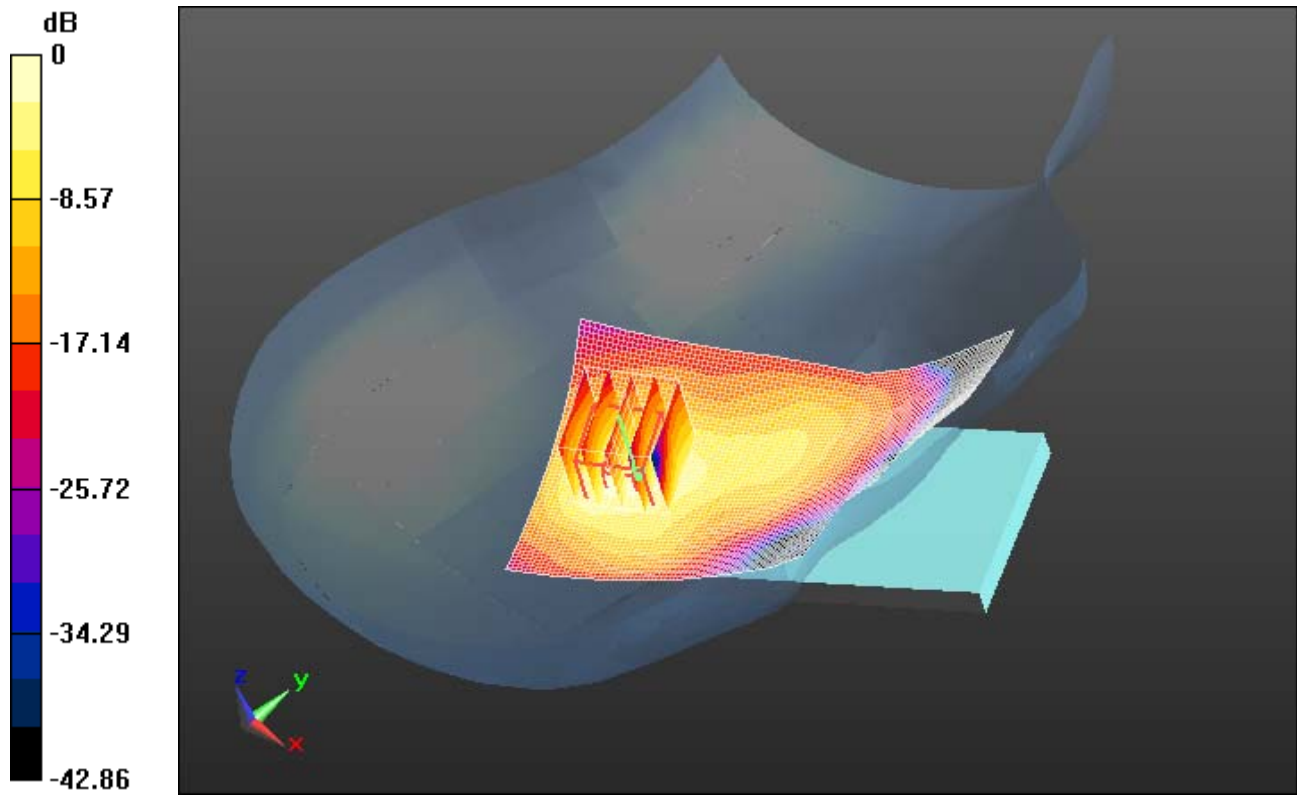
Peak SAR (extrapolated) = 0.5810

SAR(1 g) = 0.268 mW/g; SAR(10 g) = 0.115 mW/g

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

Maximum value of SAR (measured) = 0.333 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 213(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.330mW/g = -9.63 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 214(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/13/2012 9:31:31 PM

Test Laboratory: RIM Testing Services

LeftHandSide_802.11b_low_chan_amb_temp_22.8C_liq_temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: 802.11 b (2450); Frequency: 2412 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.719$ mho/m; $\epsilon_r = 37.862$; $\rho = 1000$ kg/m³

Phantom section: Left 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), $z = 2.0, 32.0$
- 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/Touch position -/Area Scan (61x91x1): Measurement grid:
 $dx=15\text{mm}$, $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.441 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 = 16.265 V/m; Power Drift = -0.05 dB

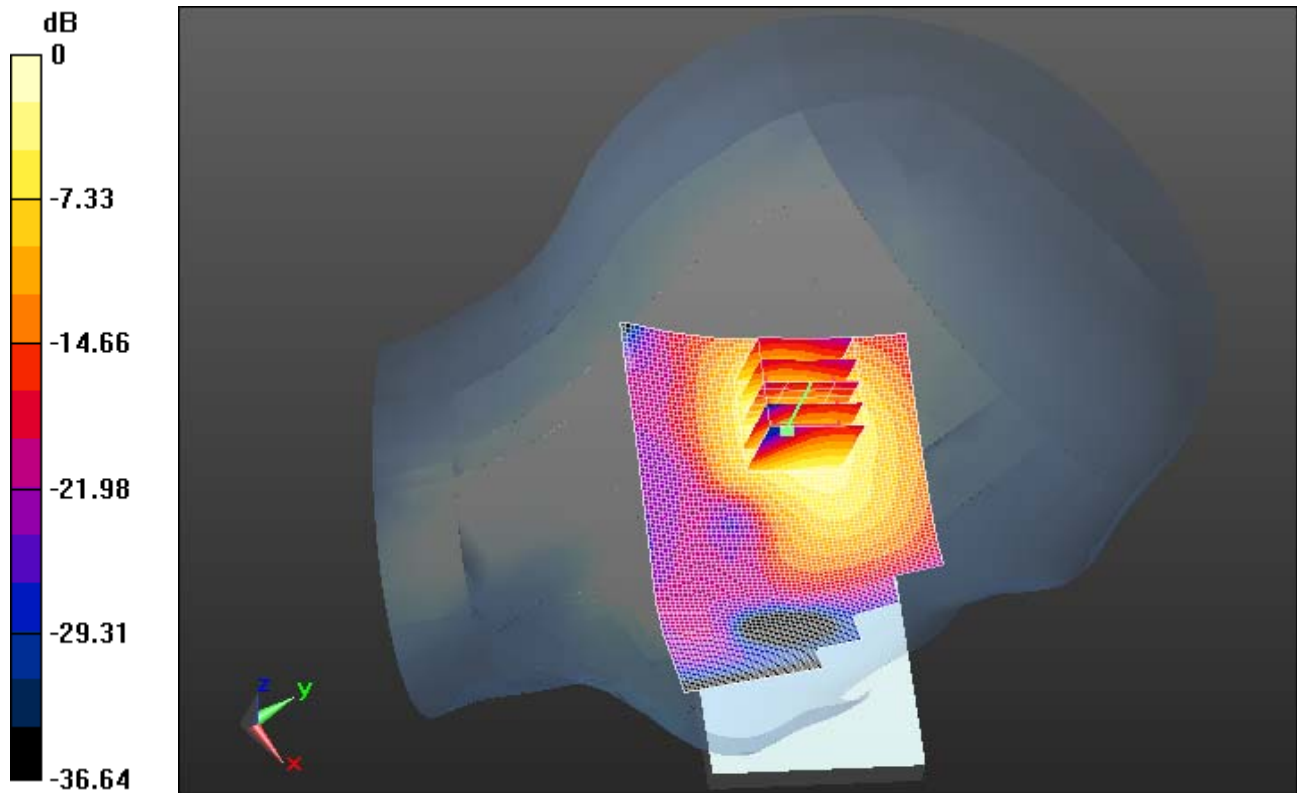
Peak SAR (extrapolated) = 0.6820

SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.139 mW/g

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

Maximum value of SAR (measured) = 0.375 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 215(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.370mW/g = -8.64 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			216(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/23/2012 2:36:02 AM

Test Laboratory: RIM Testing Services

**RightHandSide_802.11a_low_band_chan_48_amb_temp_22.9C_liq_tem
p_21.6C**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5240 MHz

Medium parameters used: $f = 5240 \text{ MHz}$; $\sigma = 4.682 \text{ mho/m}$; $\epsilon_r = 35.402$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.5, 4.5, 4.5); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 (51x61x1): Measurement grid:

$dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.052 mW/g

Configuration/Touch position 2 -/Area Scan (91x131x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.061 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (9x9x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

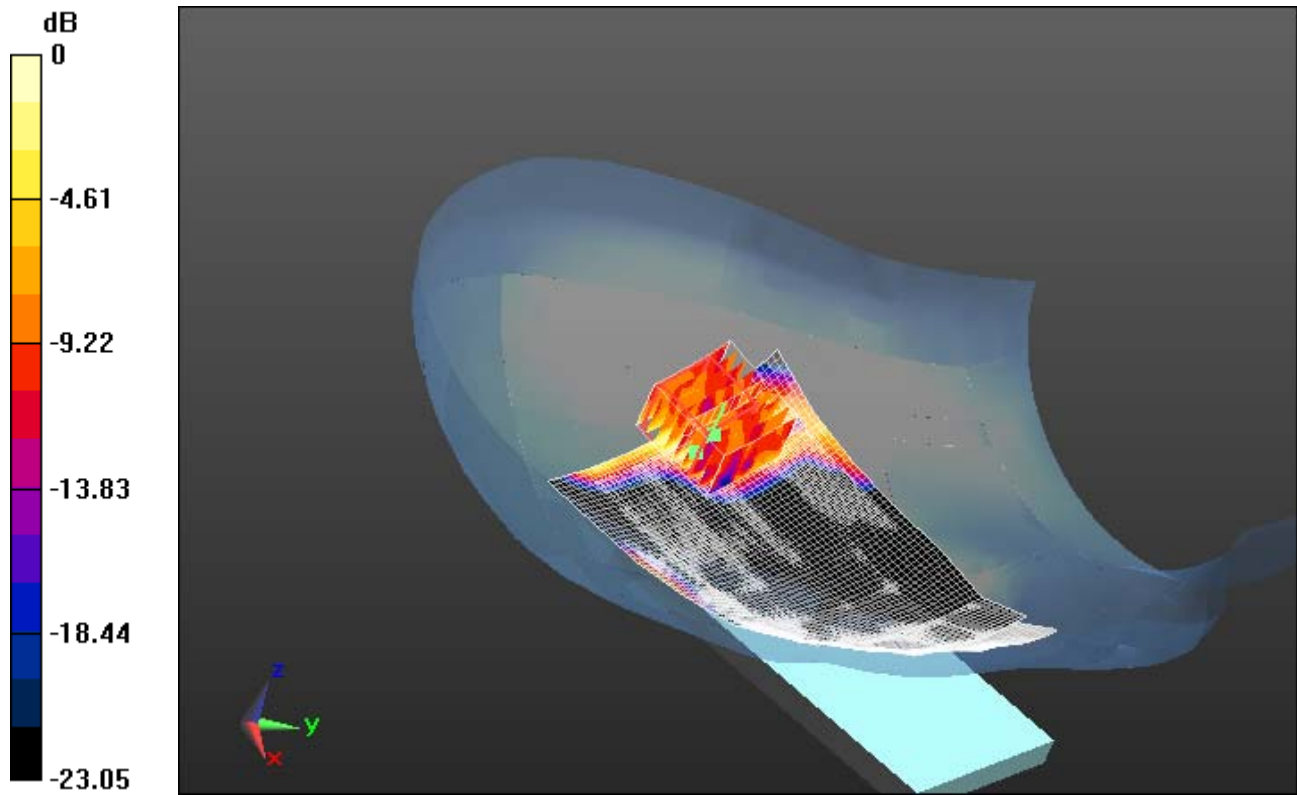
Reference Value = 3.355 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.0950

SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.054 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 217(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.050mW/g = -26.02 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 218(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/27/2012 1:32:39 AM

Test Laboratory: RIM Testing Services

**RightHandSide_802.11a_mid_band_chan_60_amb_temp_23.1C_liq_tem
p_21.5C**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5300 MHz

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 4.773 \text{ mho/m}$; $\epsilon_r = 35.37$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.5, 4.5, 4.5); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 -/Area Scan (51x61x1): Measurement grid:

$dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.048 mW/g

Configuration/Touch position 2 -/Area Scan (91x151x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.043 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (7x7x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

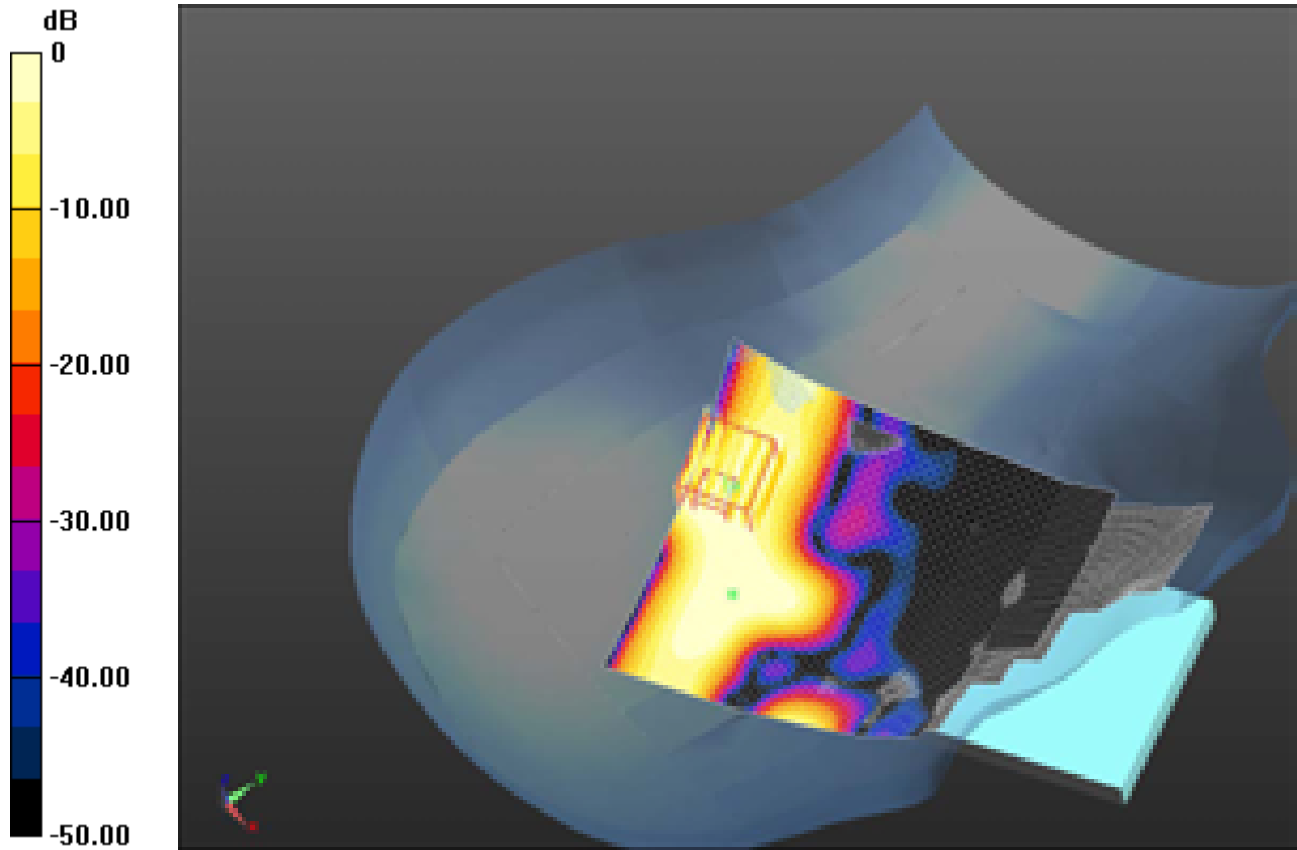
Reference Value = 2.722 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.0610

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00628 mW/g

Maximum value of SAR (measured) = 0.032 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 219(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.030mW/g = -30.46 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 220(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/23/2012 5:40:45 AM

Test Laboratory: RIM Testing Services

**RightHandSide_802.11a_upper_band_l_chan_104_amb_temp_23.1C_li
q_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5520 MHz

Medium parameters used: $f = 5520 \text{ MHz}$; $\sigma = 4.996 \text{ mho/m}$; $\epsilon_r = 34.341$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.25, 4.25, 4.25); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 (51x61x1): Measurement grid:

$dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.026 mW/g

Configuration/Touch position 2 -/Area Scan (91x131x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.111 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (8x8x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

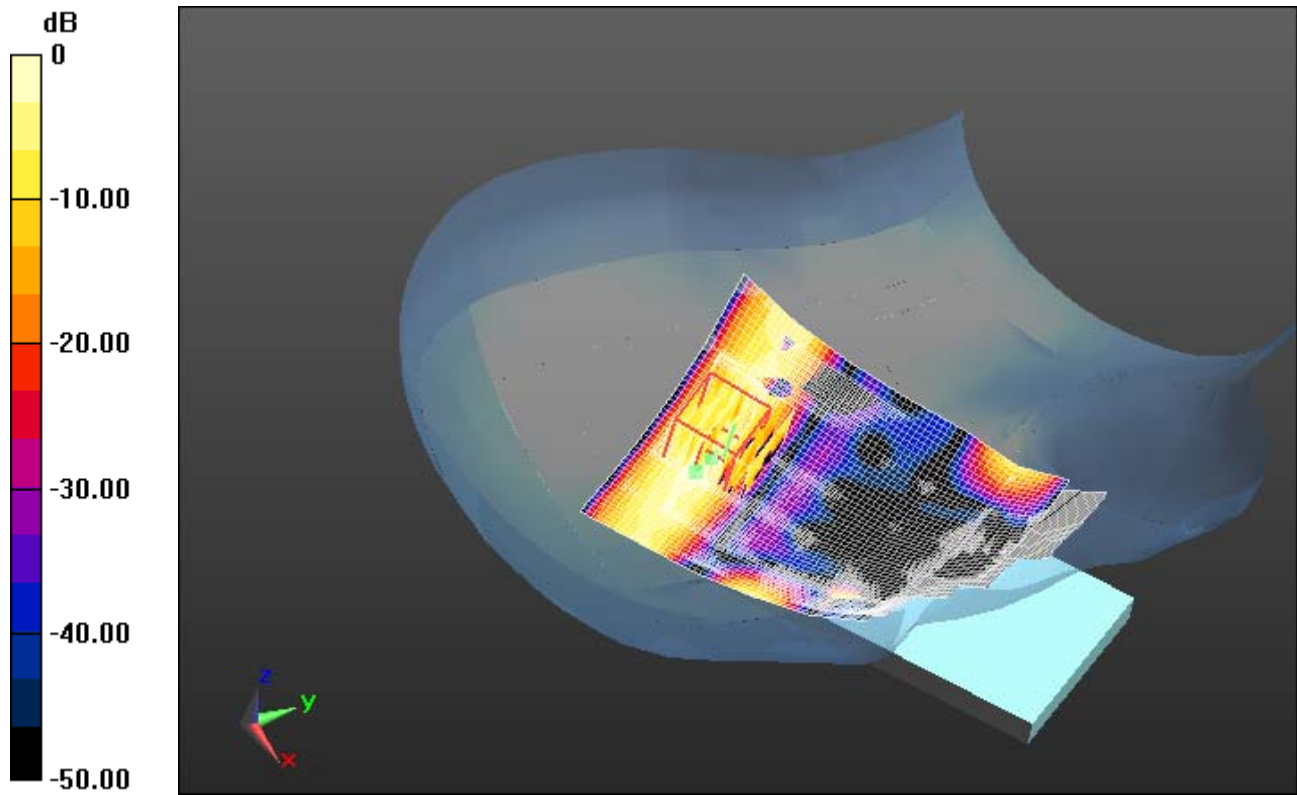
Reference Value = 2.805 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.1300

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00611 mW/g

Maximum value of SAR (measured) = 0.039 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 221(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.040mW/g = -27.96 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 222(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/23/2012 6:21:17 AM

Test Laboratory: RIM Testing Services

**RightHandSide_802.11a_upper_band_II_chan_149_amb_temp_23.1C_li
q_temp_21.5C**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5745 MHz

Medium parameters used: $f = 5745 \text{ MHz}$; $\sigma = 5.248 \text{ mho/m}$; $\epsilon_r = 33.807$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(3.98, 3.98, 3.98); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 -/Area Scan (51x61x1): Measurement grid:

$dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.013 mW/g

Configuration/Touch position 2 -/Area Scan (91x131x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.062 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (8x8x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

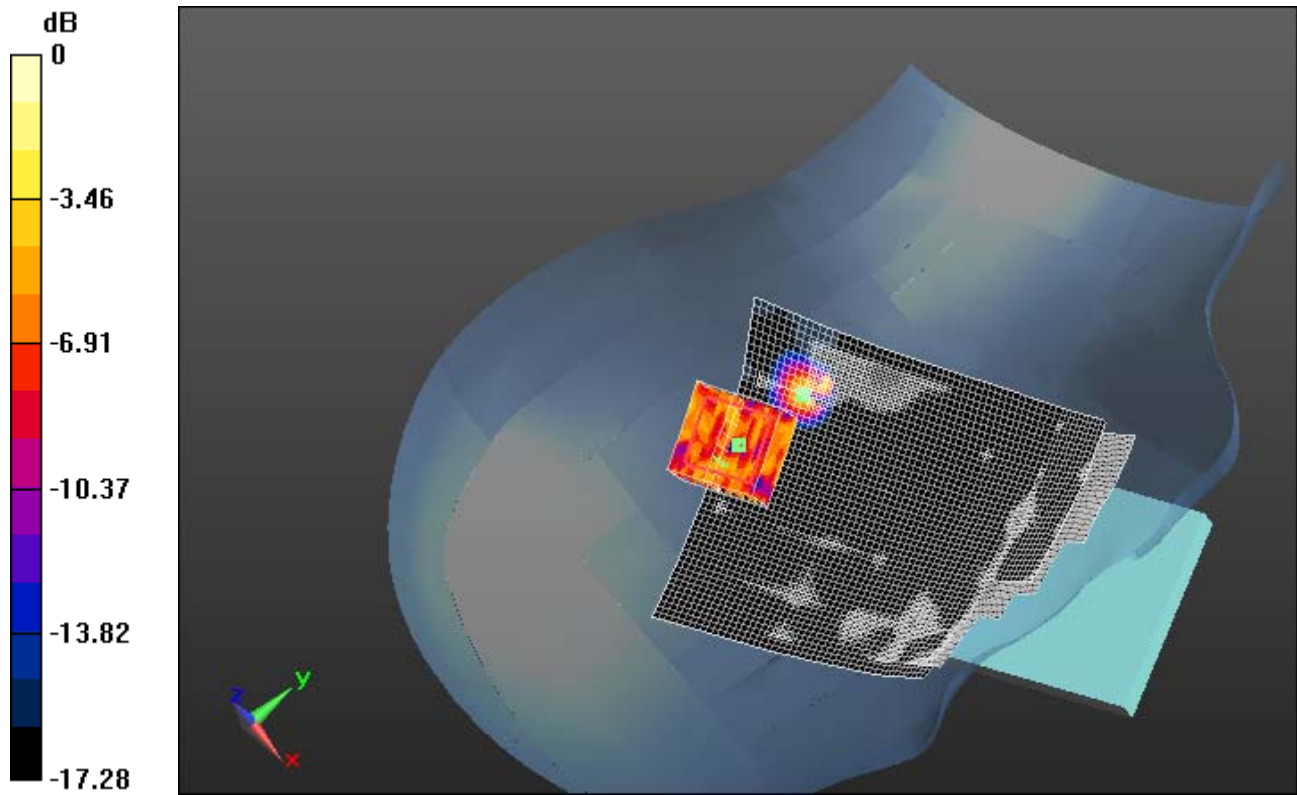
Reference Value = 2.523 V/m ; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.0880

SAR(1 g) = 0.015 mW/g ; SAR(10 g) = 0.00628 mW/g

Maximum value of SAR (measured) = 0.030 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 223(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.030mW/g = -30.46 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 224(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/27/2012 2:18:59 AM

Test Laboratory: RIM Testing Services

**RightHandSide_Tilt_802.11a_low_band_chan_48_amb_temp_23.2C_liq
_temp_21.4C**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5240 MHz

Medium parameters used: $f = 5240 \text{ MHz}$; $\sigma = 4.713 \text{ mho/m}$; $\epsilon_r = 35.438$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.5, 4.5, 4.5); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 (51x61x1): Measurement grid:

$dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.033 mW/g

Configuration/Tilt position 2 -/Area Scan (91x161x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.061 mW/g

Configuration/Tilt position 2 -/Zoom Scan (7x7x9) (9x9x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

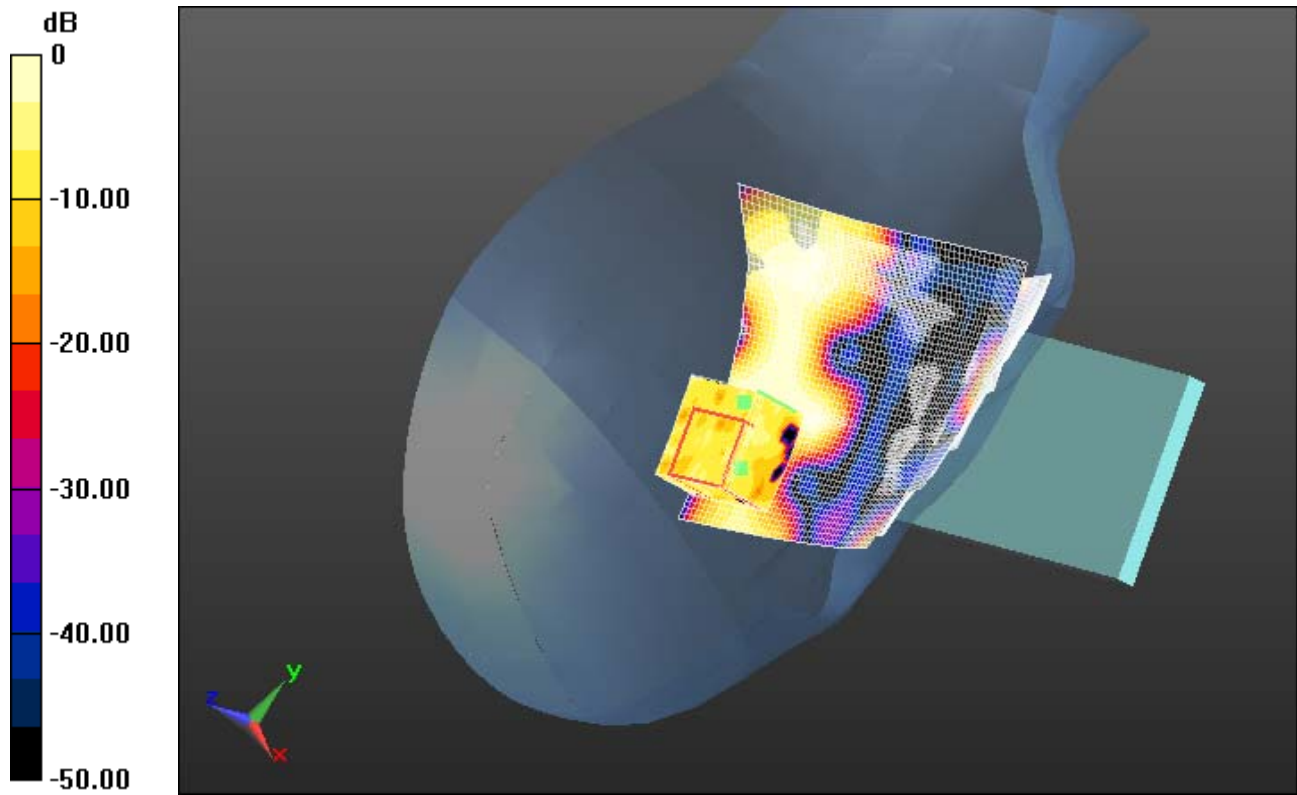
Reference Value = 2.612 V/m; Power Drift = 0.83 dB

Peak SAR (extrapolated) = 0.1260

SAR(1 g) = 0.010 mW/g; SAR(10 g) = 0.00196 mW/g

Maximum value of SAR (measured) = 0.029 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 225(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.030mW/g = -30.46 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 226(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/22/2012 3:49:04 PM

Test Laboratory: RIM Testing Services

LeftHandSide_802.11a_low_band_chan_48_amb_temp_23.6_liq_temp_21.8C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5240 MHz

Medium parameters used: $f = 5240 \text{ MHz}$; $\sigma = 4.682 \text{ mho/m}$; $\epsilon_r = 35.402$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.5, 4.5, 4.5); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 2 -/Area Scan (91x131x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.067 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (8x8x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

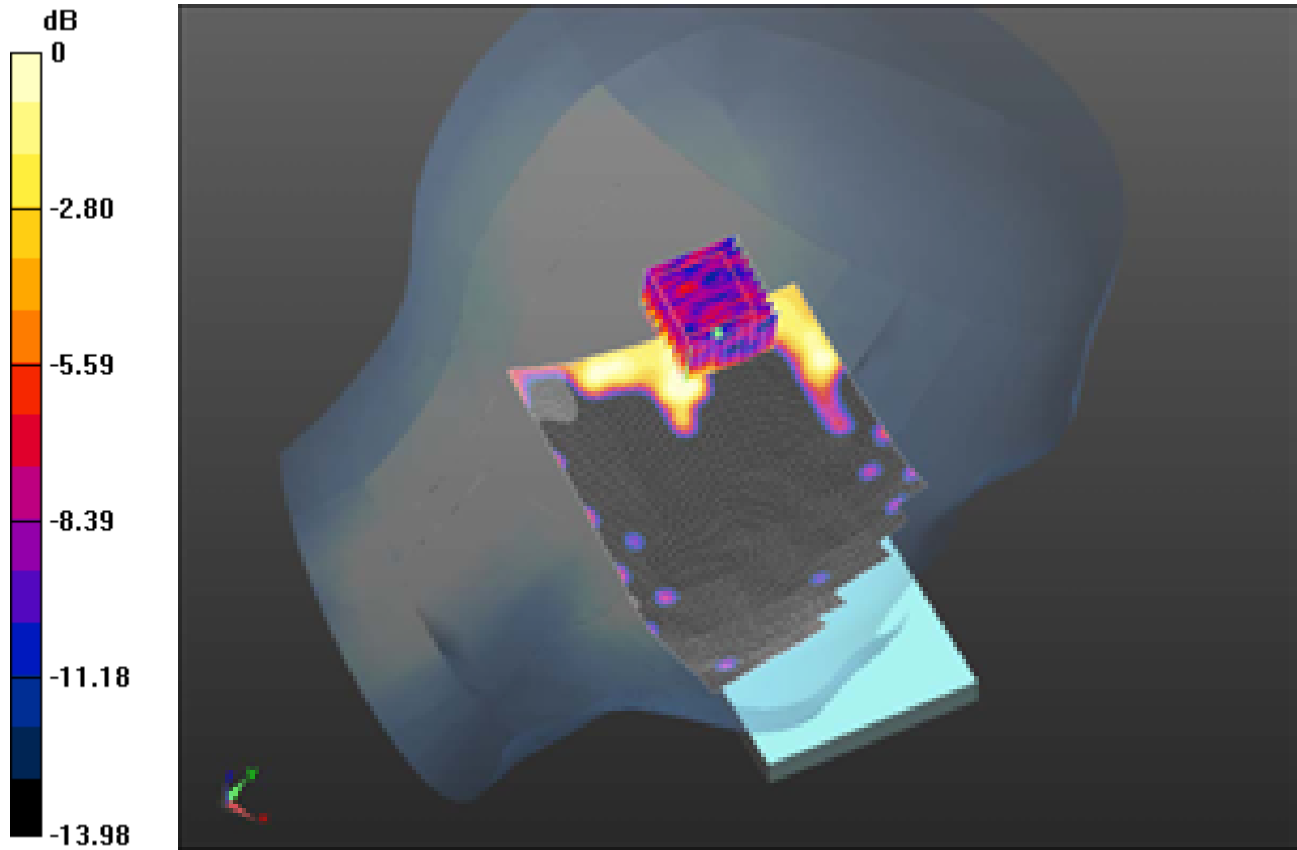
Reference Value = 3.393 V/m ; Power Drift = 0.37 dB

Peak SAR (extrapolated) = 0.0850

SAR(1 g) = 0.022 mW/g ; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.048 mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			227(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.050mW/g = -26.02 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			228(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/22/2012 5:28:36 PM

Test Laboratory: RIM Testing Services

LeftHandSide_802.11a_mid_band_chan_60_amb_temp_22.8_liq_temp_21.7C

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5300 MHz

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 4.748 \text{ mho/m}$; $\epsilon_r = 35.283$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.5, 4.5, 4.5); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 2 -/Area Scan (91x161x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.078 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (11x9x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

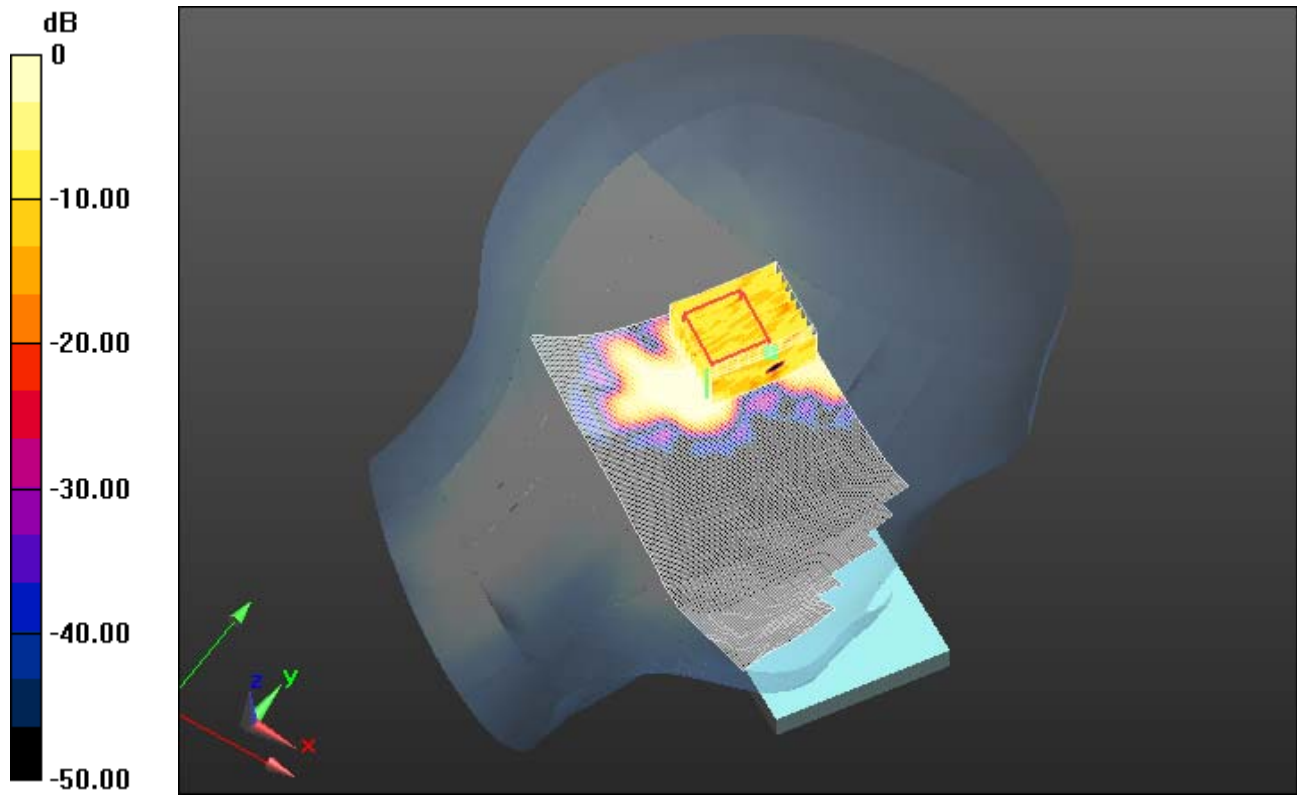
Reference Value = 4.046 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.0890

SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.048 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 229(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.050mW/g = -26.02 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 230(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/22/2012 6:27:52 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_802.11a_upper_band_l_chan_104_amb_temp_22.3_liq_t
emp_21.7C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5520 MHz

Medium parameters used: $f = 5520 \text{ MHz}$; $\sigma = 4.996 \text{ mho/m}$; $\epsilon_r = 34.341$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.25, 4.25, 4.25); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 2 -/Area Scan (91x161x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.042 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (12x10x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

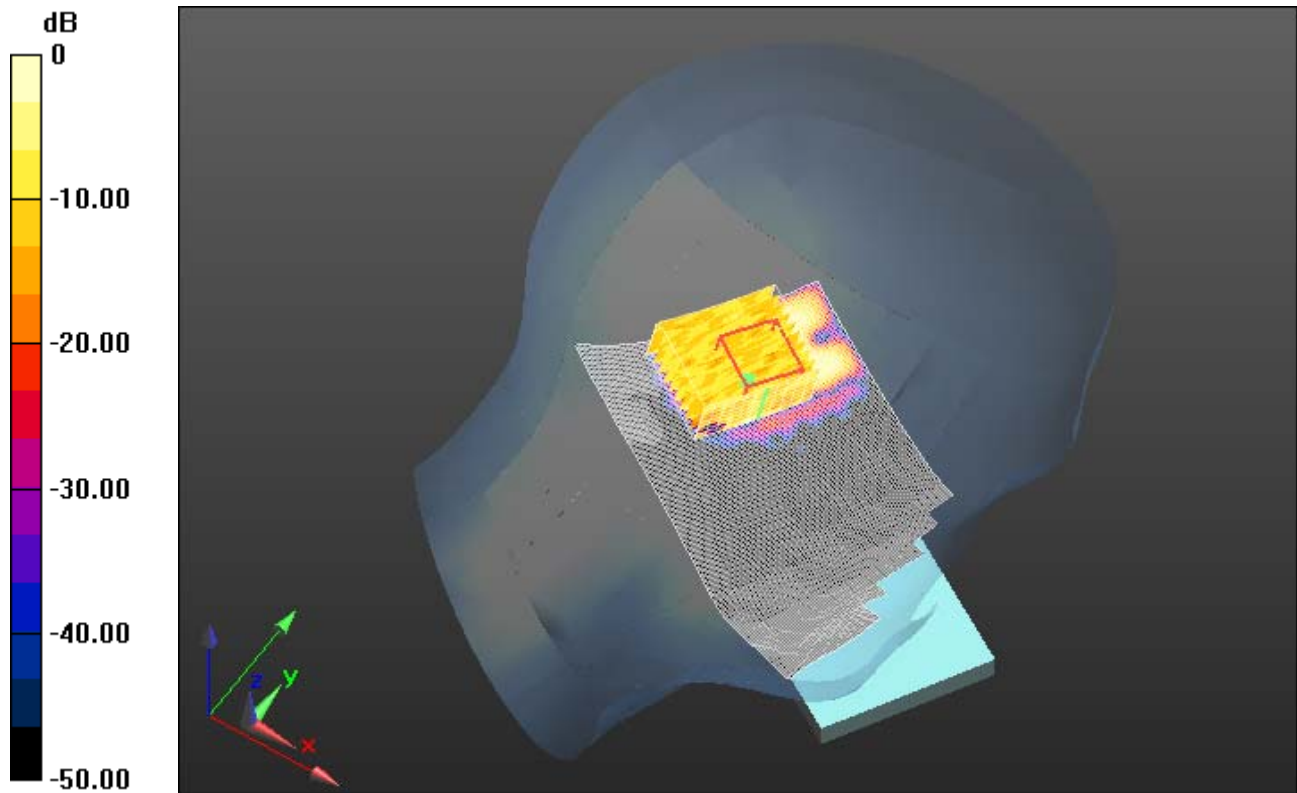
Reference Value = 3.844 V/m; Power Drift = 0.91 dB

Peak SAR (extrapolated) = 0.2750

SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.011 mW/g

Maximum value of SAR (measured) = 0.057 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 231(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.060mW/g = -24.44 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			232(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/22/2012 9:00:01 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_802.11a_upper_band_ll_chan_149_amb_temp_22.1_liq_t
emp_21.7C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5745 MHz

Medium parameters used: $f = 5745 \text{ MHz}$; $\sigma = 5.248 \text{ mho/m}$; $\epsilon_r = 33.807$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(3.98, 3.98, 3.98); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 2 -/Area Scan (91x161x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.074 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (11x9x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

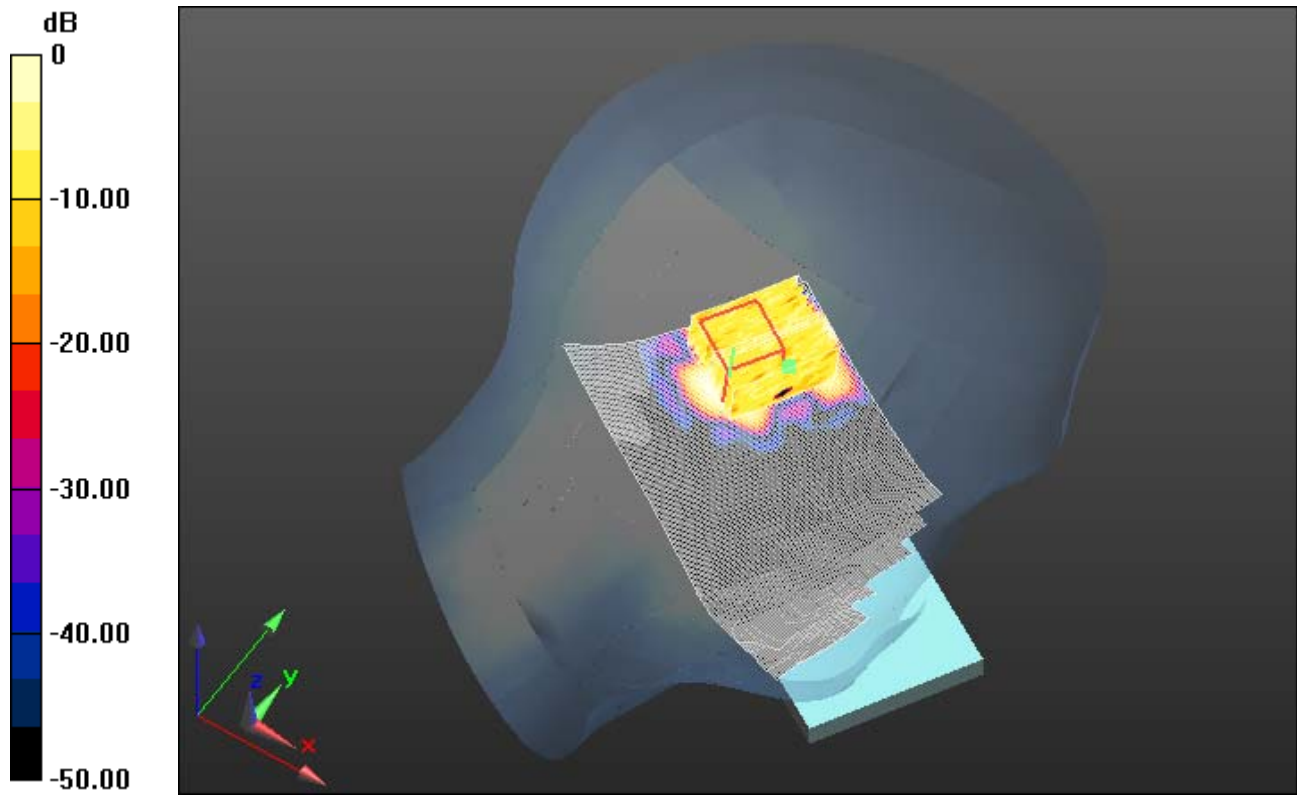
Reference Value = 2.453 V/m ; Power Drift = 0.22 dB

Peak SAR (extrapolated) = 0.0960

SAR(1 g) = 0.025 mW/g ; SAR(10 g) = 0.011 mW/g

Maximum value of SAR (measured) = 0.041 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 233(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.040mW/g = -27.96 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			234(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 6/22/2012 10:43:59 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_Tilt_802.11a_upper_band_I_chan_104_amb_temp_22.2_li
q_temp_21.7C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A211C01

Communication System: 802.11a ; Frequency: 5520 MHz

Medium parameters used: $f = 5520 \text{ MHz}$; $\sigma = 4.996 \text{ mho/m}$; $\epsilon_r = 34.341$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.25, 4.25, 4.25); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 2 -/Area Scan (91x161x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.091 mW/g

Configuration/Tilt position 2 -/Zoom Scan (7x7x9) (13x11x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

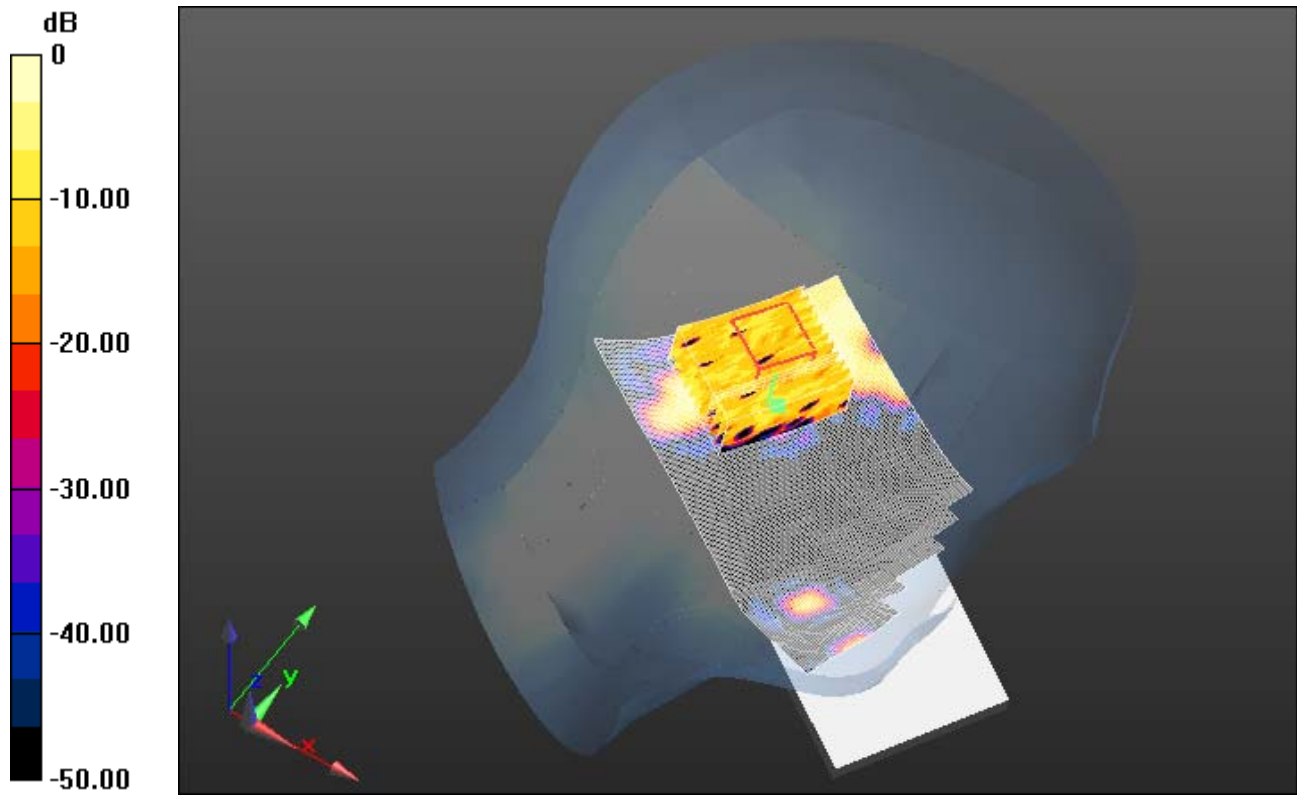
Reference Value = 4.404 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.2540

SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.010 mW/g

Maximum value of SAR (measured) = 0.073 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 235(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.070mW/g = -23.10 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 236(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/17/2012 9:31:05 PM

Test Laboratory: RIM Testing Services

**RightHandSide_802.11a_upper_band_l_chan_104_amb_temp_23.9C_li
q_temp_22.0C**

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A8C7018

Communication System: 802.11a ; Frequency: 5520 MHz

Medium parameters used: $f = 5520 \text{ MHz}$; $\sigma = 5.039 \text{ mho/m}$; $\epsilon_r = 34.588$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.38, 4.38, 4.38); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 2 -/Area Scan (91x151x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.240 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (8x8x5)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

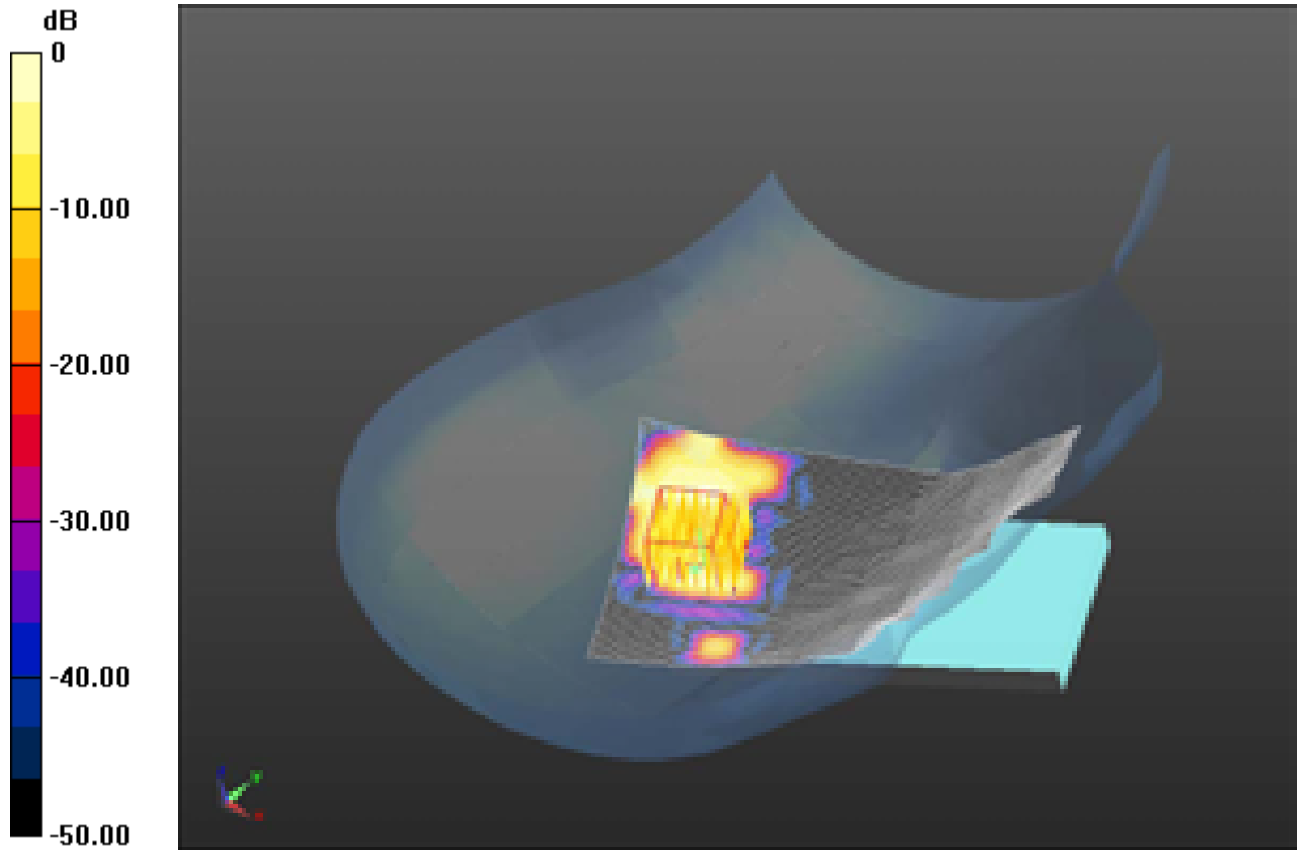
Reference Value = 4.099 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.3090

SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.015 mW/g

Maximum value of SAR (measured) = 0.093 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 237(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.090mW/g = -20.92 dB mW/g

	Document			Page
	Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			238(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Date/Time: 9/17/2012 10:26:28 PM

Test Laboratory: RIM Testing Services

**LeftHandSide_802.11a_upper_band_l_chan_104_amb_temp_23.5_liq_t
emp_21.9C**

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2A8C7018

Communication System: 802.11a ; Frequency: 5520 MHz

Medium parameters used: $f = 5520 \text{ MHz}$; $\sigma = 5.039 \text{ mho/m}$; $\epsilon_r = 34.588$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3592; ConvF(4.38, 4.38, 4.38); Calibrated: 11/16/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 21.0$
- 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 2 -/Area Scan (91x161x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.159 mW/g

Configuration/Touch position 2 -/Zoom Scan (7x7x9) (9x9x9)/Cube 0:

Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

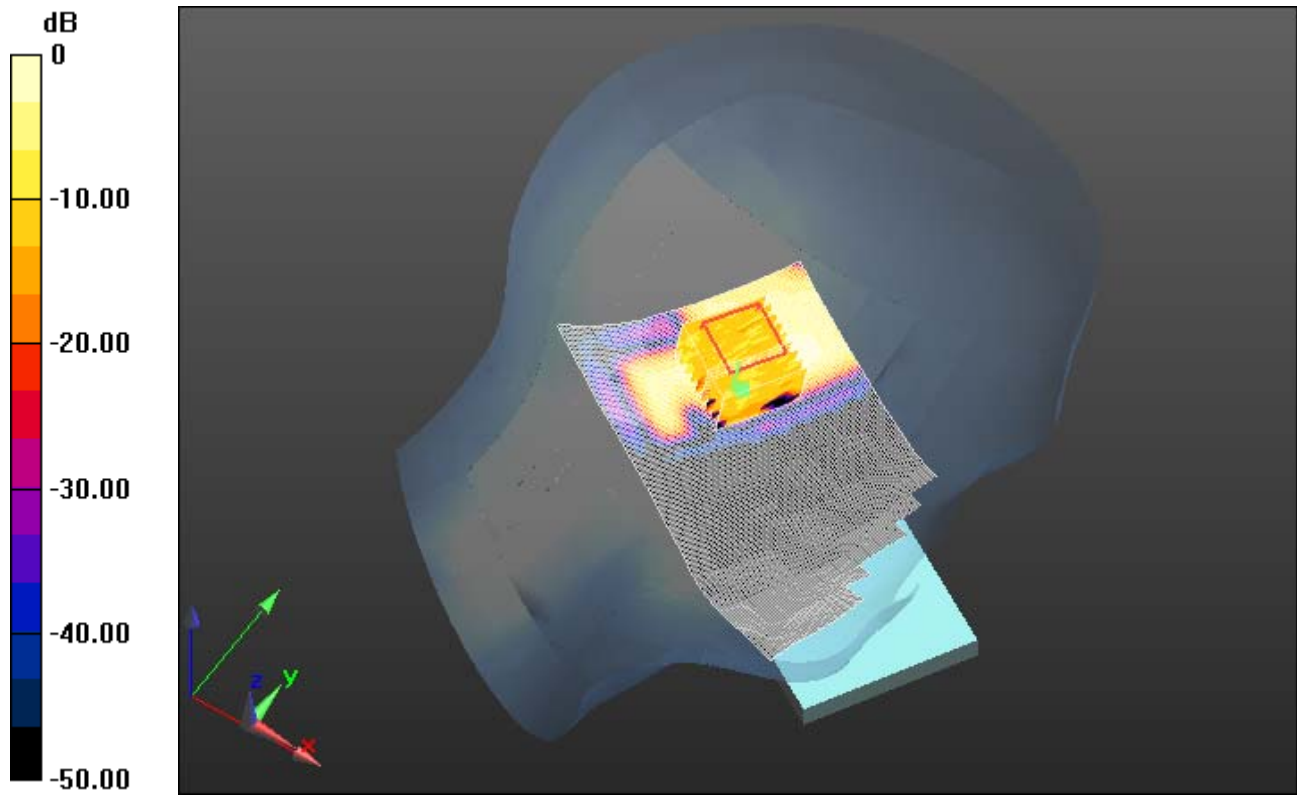
Reference Value = 4.667 V/m; Power Drift = 0.68 dB

Peak SAR (extrapolated) = 0.2050

SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.019 mW/g

Maximum value of SAR (measured) = 0.100 mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 239(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW



0 dB = 0.100mW/g = -20.00 dB mW/g

	Document Appendix B for the BlackBerry® Smartphone Model RFF91LW SAR Report			Page 240(240)
Author Data Andrew Becker	Dates of Test June 04 – October 29, 2012	Test Report No RTS-6012-1208-35	FCC ID: L6ARFF90LW	IC ID 2503A-RFF90LW

Z axis plot for the worst case head configuration

