Testing Services™	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				Page 2(55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	une 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF				FF90LW FK120LW

Date/Time: 6/15/2012 9:48:42 AM

Test Laboratory: RIM Testing Services

DipoleValidation_750MHz_06_15_12_Amb_Tem_23.3_Liq_Tem_22.7C

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1021

Communication System: CW; Frequency: 750 MHz

Medium parameters used: f = 750 MHz; $\sigma = 0.899$ mho/m; $\varepsilon_r = 42.08$; $\rho = 1000$ kg/m³

Phantom section: Flat 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/d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 9.242 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

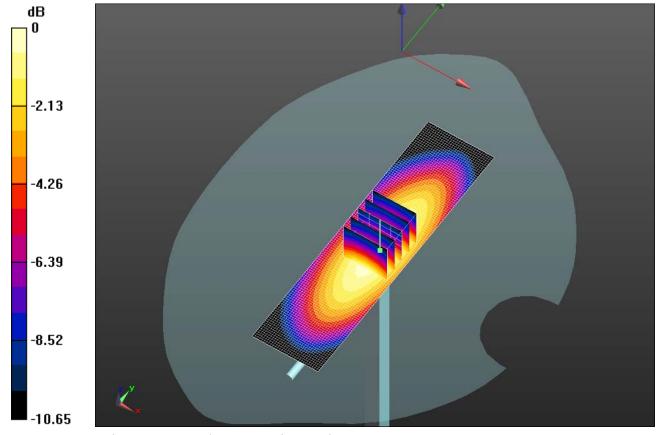
(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 105.9 V/m; Power Drift = 0.0014 dB

Peak SAR (extrapolated) = 12.0060

SAR(1 g) = 8.07 mW/g; SAR(10 g) = 5.27 mW/gMaximum value of SAR (measured) = 9.444 mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report 3(5)				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012					



Testing Services™	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				Page 4 (55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW

Date/Time: 6/18/2012 12:13:05 AM

Test Laboratory: RIM Testing Services

DipoleValidation_750MHz_06_18_12_Amb_Tem_23.2_Liq_Tem_21.6C

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1021

Communication System: CW; Frequency: 750 MHz

Medium parameters used: f = 750 MHz; $\sigma = 0.88$ mho/m; $\varepsilon_r = 43.211$; $\rho = 1000$ kg/m³

Phantom section: Flat 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/d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 9.108 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

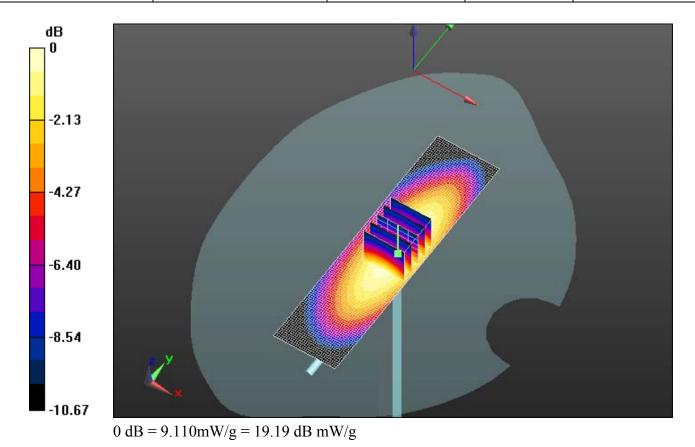
Reference Value = 105.1 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 11.5990

SAR(1 g) = 7.8 mW/g; SAR(10 g) = 5.09 mW/g

Maximum value of SAR (measured) = 9.111 mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012	FF90LW				
			L6ARFK120LW	2503A-R	FK120LW	



Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				Page 6(55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW

Date/Time: 10/29/2012 11:15:48 AM

Test Laboratory: RIM Testing Services

DipoleValidation_750MHz_10_29_12_Amb_Tem_24.1_Liq_Tem_22.9C

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1021

Communication System: CW; Frequency: 750 MHz

Medium parameters used: f = 750 MHz; $\sigma = 0.91 \text{ mho/m}$; $\varepsilon_r = 41.154$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 8.996 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

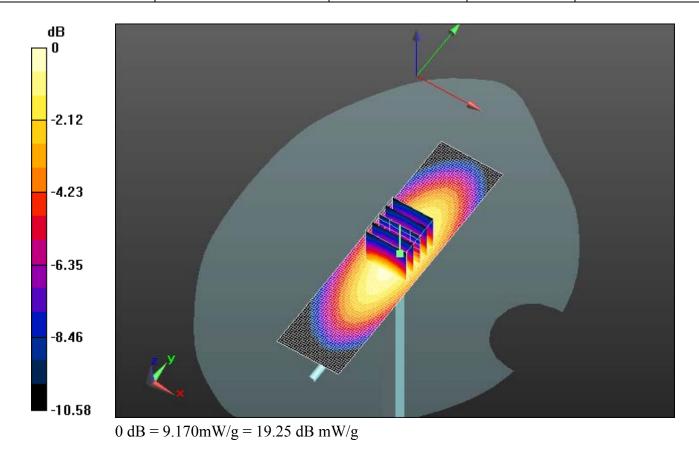
Reference Value = 104.2 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 11.6390

SAR(1 g) = 7.79 mW/g; SAR(10 g) = 5.08 mW/g

Maximum value of SAR (measured) = 9.166 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012	FF90LW FK120LW				



Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 8 (55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW	2503A-R	
			L6ARFK120LW	2503A-R	FK120LW

Date/Time: 6/4/2012 9:48:33 PM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_06_04_12_Amb_Tem_23.2_Liq_Tem_21.9C

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Communication System: CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.881$ mho/m; $\varepsilon_r = 39.935$; $\rho = 1000$ kg/m³

Phantom section: Flat 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/d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.790 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

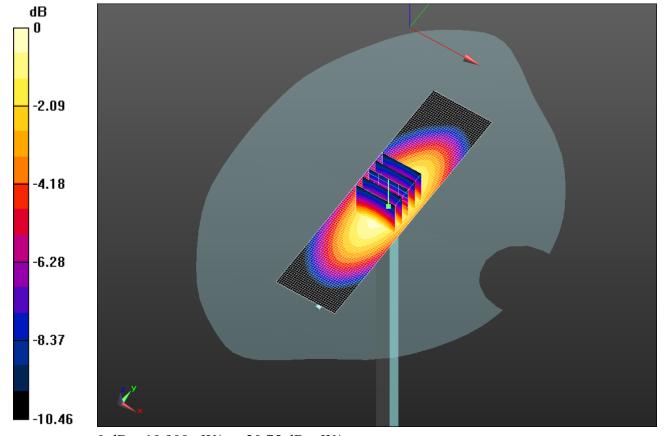
Reference Value = 114.7 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 13.6840

SAR(1 g) = 9.33 mW/g; SAR(10 g) = 6.12 mW/g

Maximum value of SAR (measured) = 10.898 mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012	FF90LW				
			L6ARFK120LW	2503A-R	FK120LW	



0 dB = 10.900 mW/g = 20.75 dB mW/g

Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 10(55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW

Date/Time: 6/6/2012 11:52:29 AM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_06_06_12_Amb_Tem_23.1_Liq_Tem_21.5C

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Communication System: CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.892$ mho/m; $\varepsilon_r = 42.615$; $\rho = 1000$ kg/m³

Phantom section: Flat 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/d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.720 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

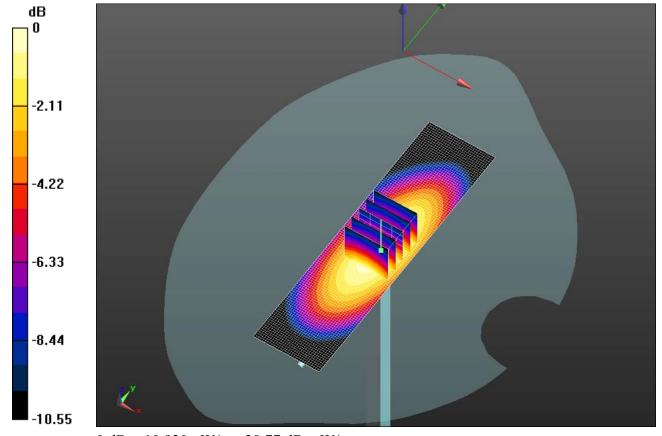
Reference Value = 113.8 V/m; Power Drift = -0.0015 dB

Peak SAR (extrapolated) = 13.6560

SAR(1 g) = 9.32 mW/g; SAR(10 g) = 6.11 mW/g

Maximum value of SAR (measured) = 10.927 mW/g

	Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW			
ſ	Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
	Andrew Becker	une 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF				
				L6ARFK120LW	2503A-R	FK120LW



0 dB = 10.930 mW/g = 20.77 dB mW/g

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				Page 12(55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	une 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF				FF90LW FK120LW

Date/Time: 6/14/2012 9:35:26 PM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_06_14_12_Amb_Tem_23.0_Liq_Tem_22.0C

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Communication System: CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.895$ mho/m; $\varepsilon_r = 41.157$; $\rho = 1000$ kg/m³

Phantom section: Flat 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/d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.726 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

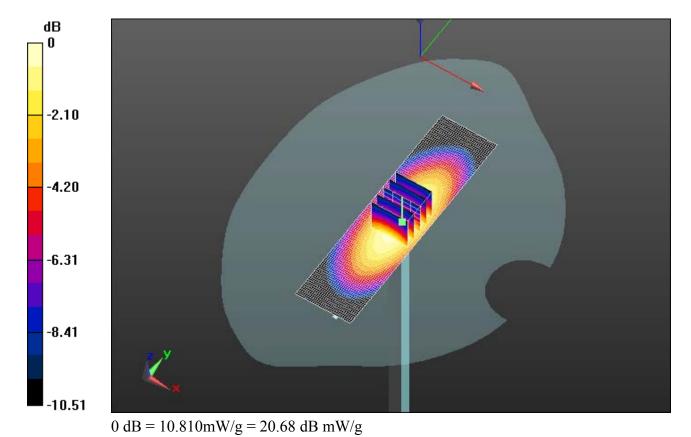
Reference Value = 113.7 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 13.6010

SAR(1 g) = 9.24 mW/g; SAR(10 g) = 6.06 mW/g

Maximum value of SAR (measured) = 10.807 mW/g

	Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW					
ſ	Author Data	Dates of Test	Test Report No	FCC ID:	IC ID			
	Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF						
				L6ARFK120LW	2503A-R	FK120LW		



Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW	

Date/Time: 9/21/2012 11:26:56 AM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_09_21_12_Amb_Tem_24.7_Liq_Tem_22.6C

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Communication System: CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.912$ mho/m; $\varepsilon_r = 40.143$; $\rho = 1000$ kg/m³

Phantom section: Flat 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/d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.071 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

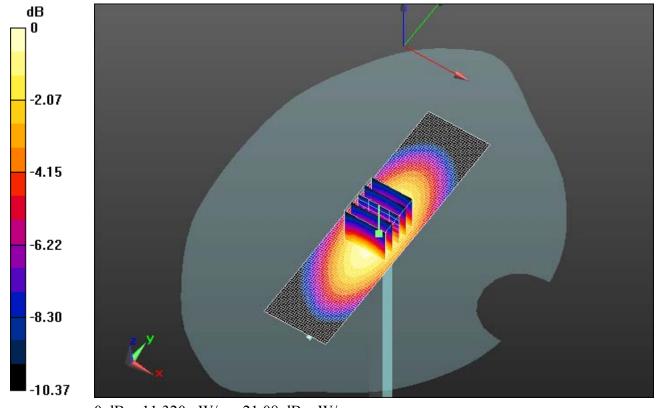
Reference Value = 114.5 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 14.1700

SAR(1 g) = 9.66 mW/g; SAR(10 g) = 6.35 mW/g

Maximum value of SAR (measured) = 11.315 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	ppendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID			
Andrew Becker	June 04 – October 29, 2012	The state of the s					



0 dB = 11.320 mW/g = 21.08 dB mW/g

Testing Services™	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF L6ARFK120LW 2503A-RF				

Date/Time: 9/24/2012 10:33:57 AM

Test Laboratory: RIM Testing Services

DipoleValidation_835MHz_09_24_12_Amb_Tem_24.2_Liq_Tem_22.0C

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Communication System: CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.892$ mho/m; $\varepsilon_r = 42.065$; $\rho = 1000$ kg/m³

Phantom section: Flat 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/d=15mm, Pin=1000mW/Area Scan (31x121x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.924 mW/g

Configuration/d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 2

(5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

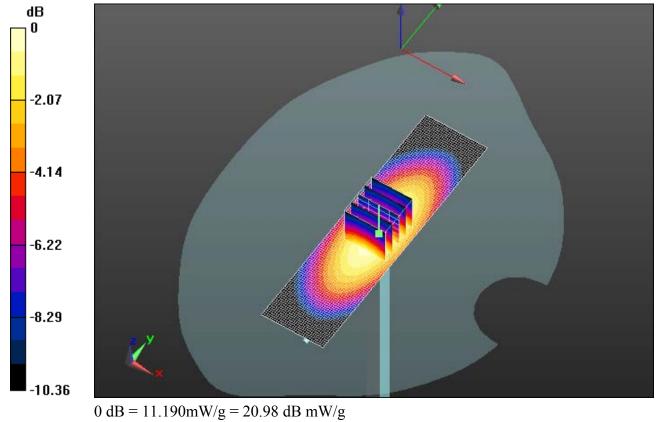
Reference Value = 116.4 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 14.0270

SAR(1 g) = 9.54 mW/g; SAR(10 g) = 6.26 mW/g

Maximum value of SAR (measured) = 11.195 mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	ppendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID			
Andrew Becker	June 04 – October 29, 2012	The state of the s					



Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
			FF90LW FK120LW		

Date/Time: 6/13/2012 3:42:33 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1800MHz_06_13_12_Amb_Tem_23.2_Liq_Tem_22.0C

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d020

Communication System: CW; Frequency: 1800 MHz

Medium parameters used: f = 1800 MHz; $\sigma = 1.453 \text{ mho/m}$; $\varepsilon_r = 38.101$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 46.920 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

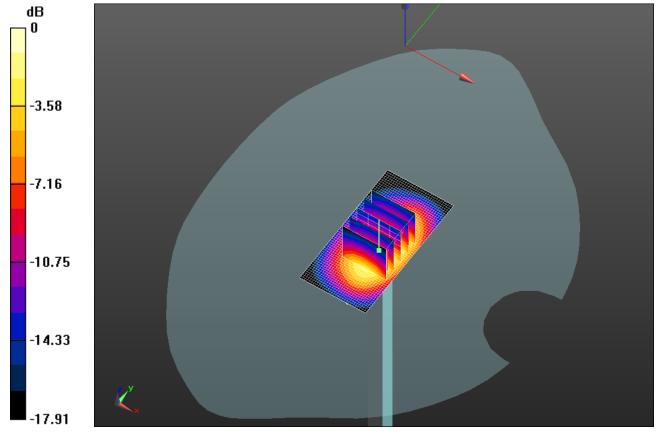
Reference Value = 181.5 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 68.0990

SAR(1 g) = 37 mW/g; SAR(10 g) = 19.2 mW/g

Maximum value of SAR (measured) = 46.902 mW/g

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW



Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF					
			L6ARFK120LW	2503A-R	FK120LW	

Date/Time: 6/18/2012 2:31:55 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1800MHz_06_18_12_Amb_Tem_23.3_Liq_Tem_22.2C

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d020

Communication System: CW; Frequency: 1800 MHz

Medium parameters used: f = 1800 MHz; $\sigma = 1.437 \text{ mho/m}$; $\varepsilon_r = 38.148$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 46.997 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

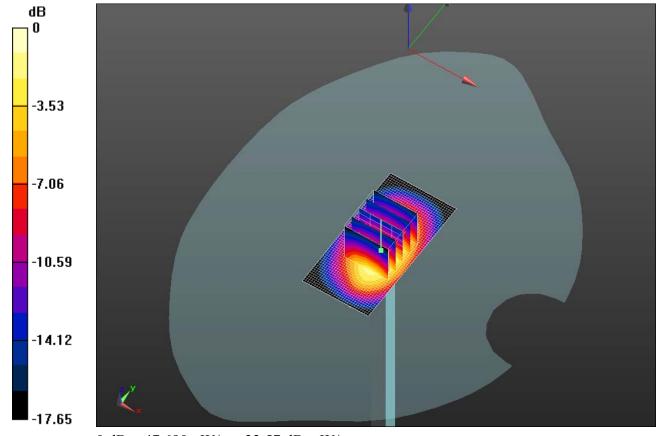
Reference Value = 188.2 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 68.7990

SAR(1 g) = 37.4 mW/g; SAR(10 g) = 19.5 mW/g

Maximum value of SAR (measured) = 47.689 mW/g

	Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW					
ſ	Author Data	Dates of Test	Test Report No	FCC ID:	IC ID			
	Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF						
				L6ARFK120LW	2503A-R	FK120LW		



0 dB = 47.690 mW/g = 33.57 dB mW/g

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF					
			L6ARFK120LW	2503A-R	FK120LW	

Date/Time: 9/12/2012 2:51:55 AM

Test Laboratory: RIM Testing Services

DipoleValidation_1800MHz_09_12_12_Amb_Tem_24.4_Liq_Tem_22.9C

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d020

Communication System: CW; Frequency: 1800 MHz

Medium parameters used: f = 1800 MHz; $\sigma = 1.464 \text{ mho/m}$; $\varepsilon_r = 38.541$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 45.086 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

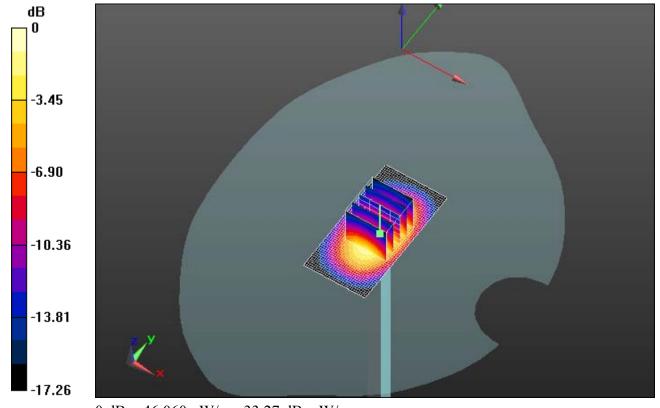
Reference Value = 183.7 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 65.8140

SAR(1 g) = 36.2 mW/g; SAR(10 g) = 19 mW/g

Maximum value of SAR (measured) = 46.064 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	1C ID 2503A-RFF90LW				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID				
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW					



 $\overline{0 \text{ dB}} = 46.060 \text{mW/g} = 33.27 \text{ dB mW/g}$

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF					
			L6ARFK120LW	2503A-R	FK120LW	

Date/Time: 10/25/2012 4:36:58 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1800MHz_10_25_12_Amb_Tem_23.8_Liq_Tem_22.7C

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d020

Communication System: CW; Frequency: 1800 MHz

Medium parameters used: f = 1800 MHz; $\sigma = 1.433$ mho/m; $\varepsilon_r = 38.755$; $\rho = 1000$ kg/m³

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 45.065 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

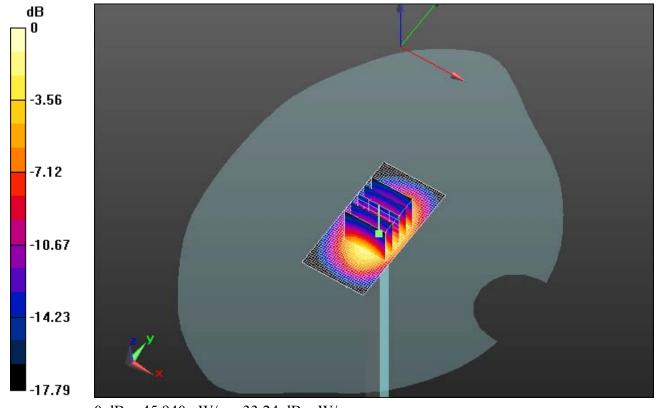
Reference Value = 182.7 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 66.5230

SAR(1 g) = 35.8 mW/g; SAR(10 g) = 18.6 mW/g

Maximum value of SAR (measured) = 45.941 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW 2					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID			
Andrew Becker	June 04 – October 29, 2012	FF90LW FK120LW					



 $\frac{1}{0 \text{ dB}} = 45.940 \text{mW/g} = 33.24 \text{ dB mW/g}$

Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID			
Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF						
			L6ARFK120LW	2503A-R	FK120LW		

Date/Time: 6/10/2012 9:21:00 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_06_10_12_Amb_Tem_23.2_Liq_Tem_21.4C

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: CW; Frequency: 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.379 \text{ mho/m}$; $\varepsilon_r = 38.423$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 49.680 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

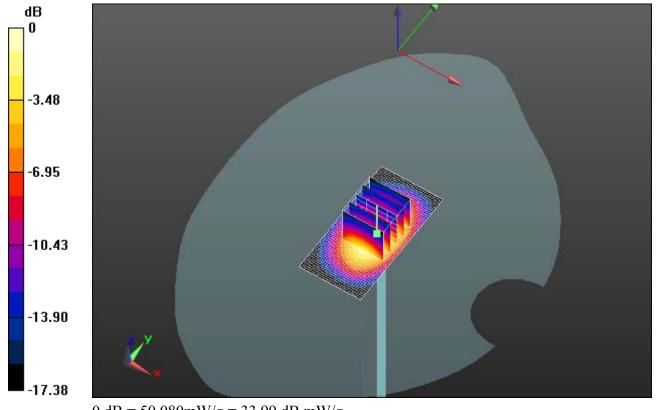
Reference Value = 195.1 V/m; Power Drift = 0.00074 dB

Peak SAR (extrapolated) = 71.4580

SAR(1 g) = 39.2 mW/g; SAR(10 g) = 20.4 mW/g

Maximum value of SAR (measured) = 50.084 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	K121LW Page 27(55)					
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID					
Andrew Becker	June 04 – October 29, 2012	The state of the s							



 $\overline{0 \text{ dB} = 50.080 \text{mW/g} = 33.99 \text{ dB mW/g}}$

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B		2503A-R	
			L6ARFK120LW	2503A-R	FK120LW

Date/Time: 6/12/2012 6:17:23 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_06_12_12_Amb_Tem_23.1_Liq_Tem_21.3C

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: CW; Frequency: 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.402 \text{ mho/m}$; $\varepsilon_r = 38.675$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 50.120 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

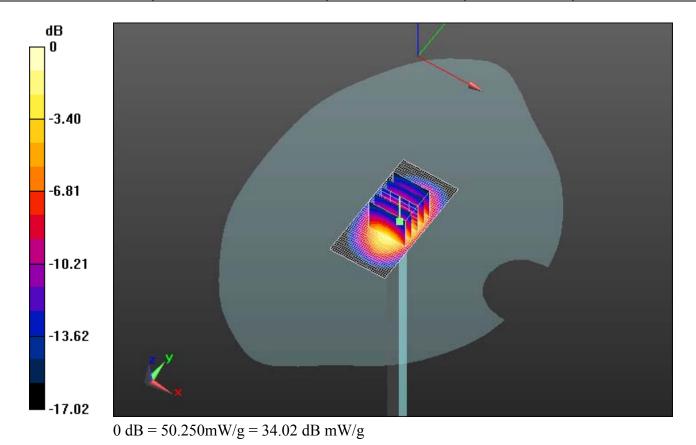
Reference Value = 194.3 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 71.0030

SAR(1 g) = 39.8 mW/g; SAR(10 g) = 21 mW/g

Maximum value of SAR (measured) = 50.248 mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	Tune 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF					
			L6ARFK120LW	2503A-R	FK120LW	



Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW

Date/Time: 9/27/2012 2:40:24 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_09_27_12_Amb_Tem_25.2_Liq_Tem_22.5C

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: CW; Frequency: 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.399 \text{ mho/m}$; $\varepsilon_r = 38.115$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 51.329 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

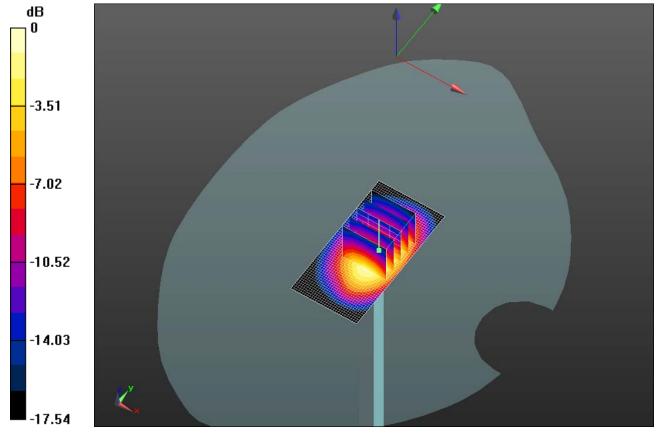
Reference Value = 192.0 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 72.1330

SAR(1 g) = 40 mW/g; SAR(10 g) = 21 mW/g

Maximum value of SAR (measured) = 50.726 mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW 3				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012	FF90LW FK120LW				



0 dB = 50.730 mW/g = 34.11 dB mW/g

Testing Services	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF					
			L6ARFK120LW	2503A-R	FK120LW	

Date/Time: 10/22/2012 6:33:05 PM

Test Laboratory: RIM Testing Services

DipoleValidation_1900MHz_10_22_12_Amb_Tem_23.7_Liq_Tem_21.6C

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: CW; Frequency: 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.373 \text{ mho/m}$; $\varepsilon_r = 38.295$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x61x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 48.477 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

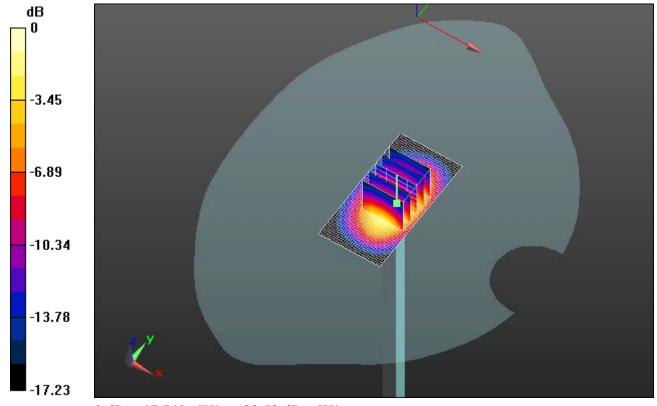
Reference Value = 193.3 V/m; Power Drift = -0.0042 dB

Peak SAR (extrapolated) = 68.0040

SAR(1 g) = 37.8 mW/g; SAR(10 g) = 19.8 mW/g

Maximum value of SAR (measured) = 47.737 mW/g

	Testing Services™	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	1C ID 2503A-RFF90LW				
ſ	Author Data	Dates of Test	Test Report No	FCC ID:	IC ID				
	Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B						
١				L6ARFK120LW	2503A-R	FK120LW			



0 dB = 47.740 mW/g = 33.58 dB mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 34(55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	FF90LW FK120LW			

Date/Time: 6/20/2012 7:54:24 PM

Test Laboratory: RIM Testing Services

DipoleValidation_2450MHz_06_20_12_Amb_Tem_23.4Liq_Tem_22.6C

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:747

Communication System: CW; Frequency: 2450 MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.771 \text{ mho/m}$; $\varepsilon_r = 38.25$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x41x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 69.488 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

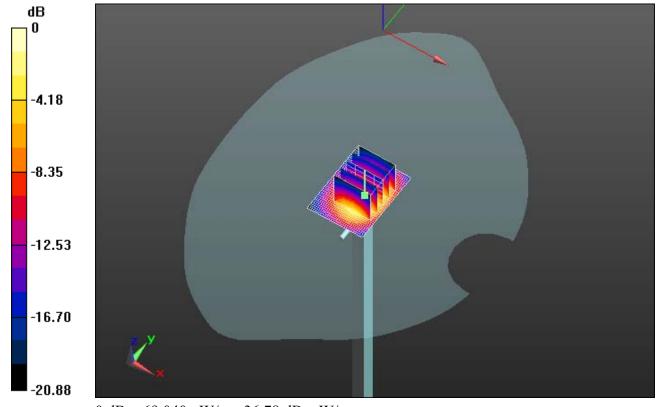
Reference Value = 204.4 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 104.50

SAR(1 g) = 52.8 mW/g; SAR(10 g) = 25.1 mW/g

Maximum value of SAR (measured) = 69.039 mW/g

	Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW				
ſ	Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
	Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF					
				L6ARFK120LW	2503A-R	FK120LW	



Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-RF				
			L6ARFK120LW	2503A-R	FK120LW

Date/Time: 9/13/2012 3:32:54 PM

Test Laboratory: RIM Testing Services

DipoleValidation_2450MHz_09_13_12_Amb_Tem_23.7_Liq_Tem_22.2C

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:747

Communication System: CW; Frequency: 2450 MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.758 \text{ mho/m}$; $\varepsilon_r = 37.704$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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/d=10mm, Pin=1000mW/Area Scan (31x41x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 69.825 mW/g

Configuration/d=10mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube

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

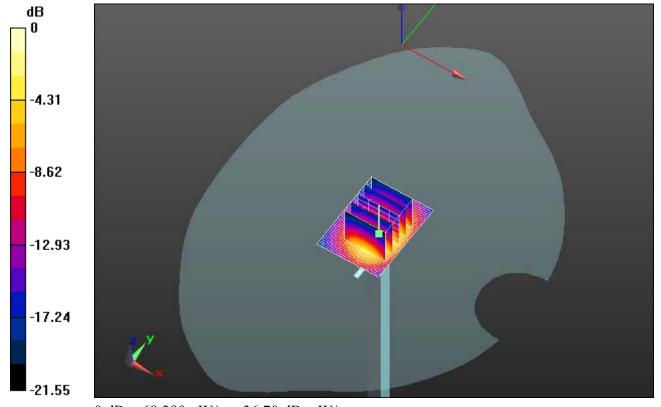
Reference Value = 201.4 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 105.20

SAR(1 g) = 52.5 mW/g; SAR(10 g) = 24.7 mW/g

Maximum value of SAR (measured) = 68.389 mW/g

	Testing Services™	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 37 (55)
ſ	Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
	Andrew Becker	June 04 – October 29, 2012	FF90LW			
				L6ARFK120LW	2503A-R	FK120LW



0 dB = 68.390 mW/g = 36.70 dB mW/g

Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 38(55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	FF90LW FK120LW			

Date/Time: 6/22/2012 1:33:28 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5200

MHz_06_22_12_Amb_Tem_23.2_Liq_Tem_21.5C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW; Frequency: 5200 MHz

Medium parameters used: f = 5200 MHz; $\sigma = 4.637$ mho/m; $\varepsilon_r = 35.482$; $\rho = 1000$ kg/m³

Phantom section: Flat 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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Area Scan (41x51x1): Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (interpolated) = 177.4 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

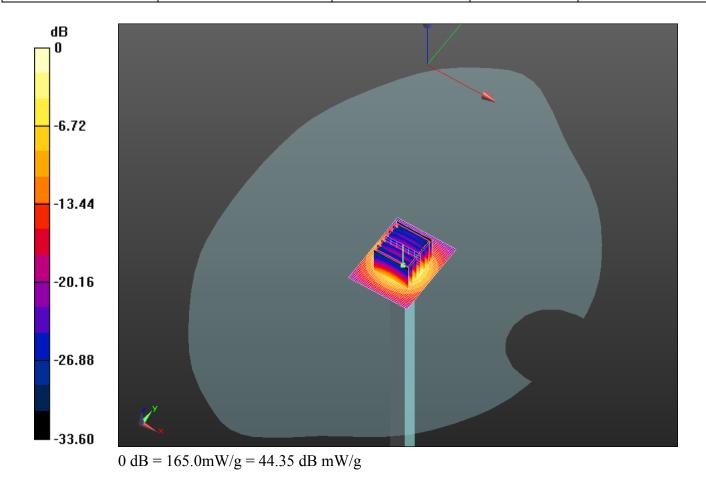
Reference Value = 202.9 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 293.60

SAR(1 g) = 79.3 mW/g; SAR(10 g) = 22.9 mW/g

Maximum value of SAR (measured) = 165.0 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW			
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012				



Testing Services	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW			
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	FF90LW FK120LW			

Date/Time: 6/25/2012 8:17:29 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5200

MHz_06_25_12_Amb_Tem_23.8_Liq_Tem_21.8C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW; Frequency: 5200 MHz

Medium parameters used: f = 5200 MHz; $\sigma = 4.652 \text{ mho/m}$; $\varepsilon_r = 35.544$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat 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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Area Scan (41x51x1): Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (interpolated) = 194.2 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

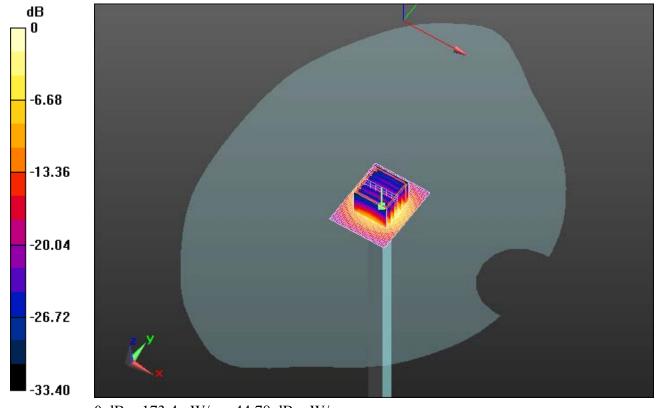
Reference Value = 206.6 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 306.40

SAR(1 g) = 83.8 mW/g; SAR(10 g) = 24.3 mW/g

Maximum value of SAR (measured) = 173.4 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	rry® Smartphone Mode	I RFF91LW, RFK12	21LW	Page 41 (55)	
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID		
Andrew Becker	June 04 – October 29, 2012	The state of the s				



0 dB = 173.4 mW/g = 44.78 dB mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW			
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	FF90LW FK120LW			

Date/Time: 6/22/2012 1:53:53 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5500

MHz_06_22_12_Amb_Tem_23.6_Liq_Tem_21.7C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW-5GHz; Frequency: 5500 MHz

Medium parameters used: f = 5500 MHz; $\sigma = 4.967$ mho/m; $\varepsilon_r = 34.381$; $\rho = 1000$ kg/m³

Phantom section: Flat 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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000mW, f=5500 MHz/Area Scan (91x91x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 171.8 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm,

Pin=1000mW, f=5500 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

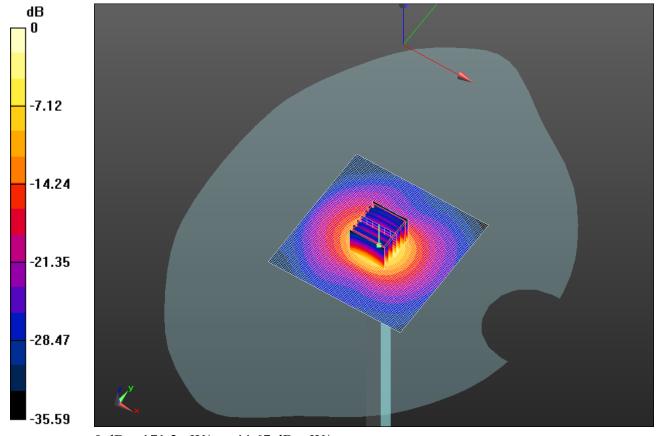
Reference Value = 201.0 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 308.00

SAR(1 g) = 81.1 mW/g; SAR(10 g) = 23 mW/g

Maximum value of SAR (measured) = 171.2 mW/g

Testing Services™	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 43 (55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	FF90LW			
			L6ARFK120LW	2503A-R	FK120LW



 $0 \ dB = 171.2 mW/g = 44.67 \ dB \ mW/g$

Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 44 (55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	FF90LW			
			L6ARFK120LW	2503A-R	FK120LW

Date/Time: 6/25/2012 9:32:50 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5500

MHz_06_25_12_Amb_Tem_23.3_Liq_Tem_21.8C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW-5GHz; Frequency: 5500 MHz

Medium parameters used: f = 5500 MHz; $\sigma = 4.967$ mho/m; $\varepsilon_r = 34.381$; $\rho = 1000$ kg/m³

Phantom section: Flat 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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000mW, f=5500 MHz/Area Scan (91x91x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 191.6 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm,

Pin=1000mW, f=5500 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

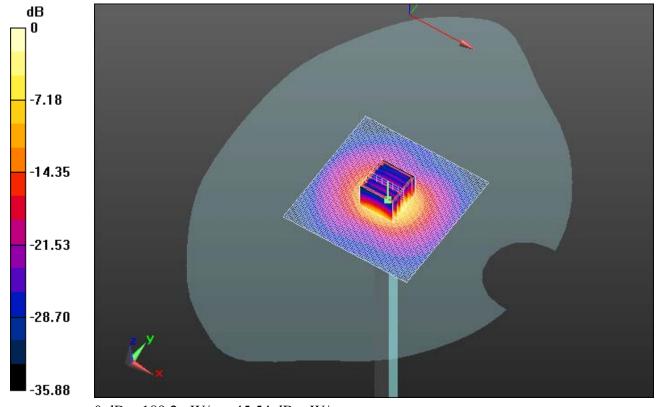
Reference Value = 209.9 V/m; Power Drift = -0.0093 dB

Peak SAR (extrapolated) = 346.00

SAR(1 g) = 89.3 mW/g; SAR(10 g) = 25.2 mW/g

Maximum value of SAR (measured) = 189.2 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 45 (55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B		2503A-R	
			L6ARFK120LW	2503A-K	FK120LW



0 dB = 189.2 mW/g = 45.54 dB mW/g

Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 46 (55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012 RTS-6012-1208-35B L6ARFF90LW 2503A-R				
			L6ARFK120LW	2503A-R	FK120LW

Date/Time: 6/22/2012 2:30:33 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5800

MHz_06_22_12_Amb_Tem_23.4_Liq_Tem_21.6C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW-5GHz; Frequency: 5800 MHz

Medium parameters used: f = 5800 MHz; $\sigma = 5.317 \text{ mho/m}$; $\varepsilon_r = 33.735$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000mW, f=5800 MHz/Area Scan (91x91x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 172.1 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm,

Pin=1000mW, f=5800 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

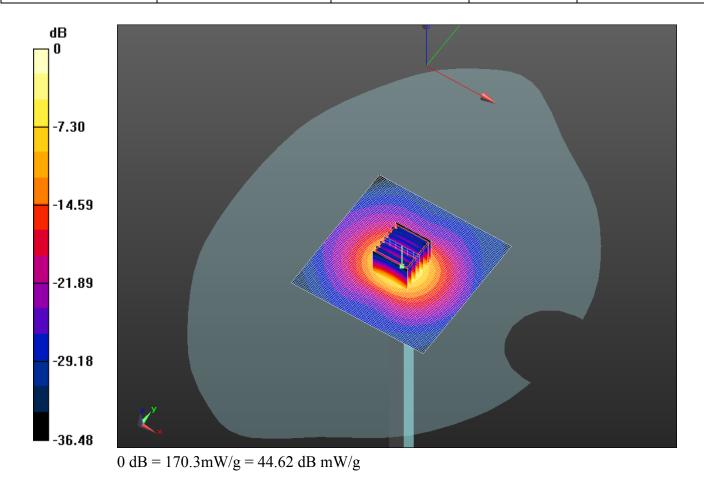
Reference Value = 195.5 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 316.50

SAR(1 g) = 80.1 mW/g; SAR(10 g) = 22.8 mW/g

Maximum value of SAR (measured) = 170.3 mW/g

Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 47 (55)
Author Data	SAR Report SAR				
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW		FF90LW FK120LW



Testing Services	Appendix A for the BlackBer SAR Report	ry® Smartphone Model	RFF91LW, RFK12	21LW	Page 48 (55)
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	FF90LW FK120LW			

Date/Time: 6/25/2012 10:25:20 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5800

MHz_06_25_12_Amb_Tem_23.4_Liq_Tem_21.8C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW-5GHz; Frequency: 5800 MHz

Medium parameters used: f = 5800 MHz; $\sigma = 5.355 \text{ mho/m}$; $\varepsilon_r = 34.231$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000mW, f=5800 MHz/Area Scan (91x91x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 188.7 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm,

Pin=1000mW, f=5800 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

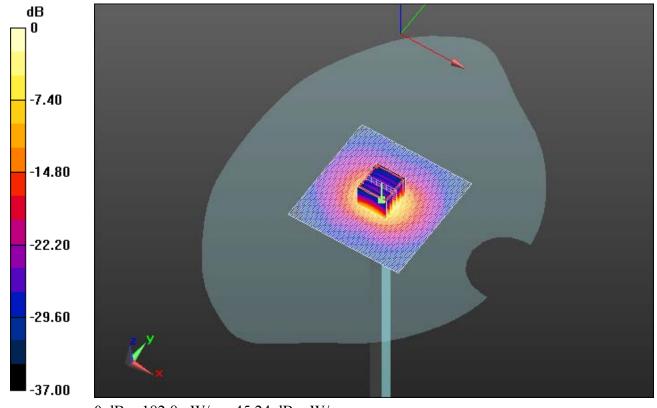
Reference Value = 201.5 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 340.70

SAR(1 g) = 85.6 mW/g; SAR(10 g) = 24.3 mW/g

Maximum value of SAR (measured) = 182.8 mW/g

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW



 $0 \ dB = 182.8 mW/g = 45.24 \ dB \ mW/g$

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R	FF90LW FK120LW

Date/Time: 9/17/2012 3:31:26 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5200

MHz_09_17_12_Amb_Tem_24.4_Liq_Tem_22.3C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW; Frequency: 5200 MHz

Medium parameters used: f = 5200 MHz; $\sigma = 4.746 \text{ mho/m}$; $\varepsilon_r = 34.439$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 SN3592; ConvF(4.5, 4.5, 4.5); Calibrated: 11/18/2010
- 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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Area Scan (41x51x1): Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (interpolated) = 197.0 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000 mW, f=5200 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

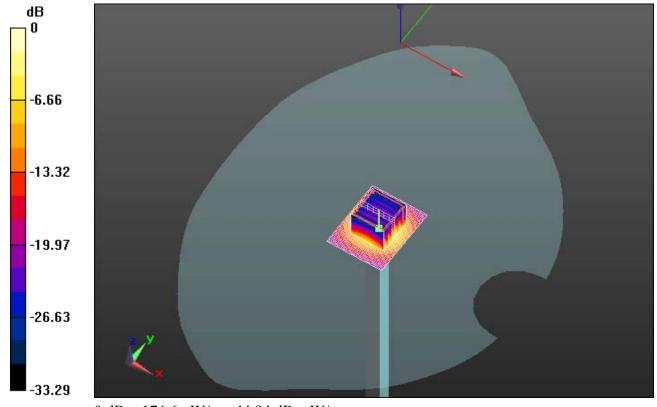
Reference Value = 214.3 V/m; Power Drift = -0.30 dB

Peak SAR (extrapolated) = 313.60

SAR(1 g) = 85.4 mW/g; SAR(10 g) = 24.6 mW/g

Maximum value of SAR (measured) = 176.6 mW/g

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW



0 dB = 176.6 mW/g = 44.94 dB mW/g

Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW

Date/Time: 9/17/2012 3:51:39 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5500

MHz_09_17_12_Amb_Tem_24.1_Liq_Tem_22.3C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW-5GHz; Frequency: 5500 MHz

Medium parameters used: f = 5500 MHz; $\sigma = 5.007$ mho/m; $\varepsilon_r = 34.468$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 SN3592; ConvF(4.25, 4.25, 4.25); Calibrated: 11/18/2010
- 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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000mW, f=5500 MHz/Area Scan (91x91x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 194.6 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm,

Pin=1000mW, f=5500 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

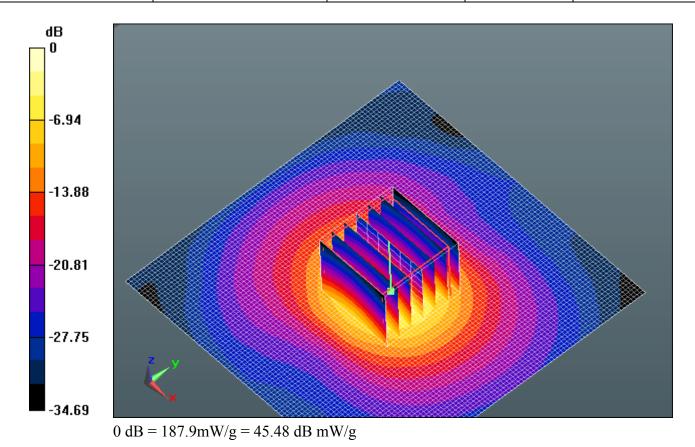
Reference Value = 212.3 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 340.50

SAR(1 g) = 89.6 mW/g; SAR(10 g) = 25.5 mW/g

Maximum value of SAR (measured) = 187.9 mW/g

Testing Services™	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW



Testing Services	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B	L6ARFF90LW L6ARFK120LW	2503A-R 2503A-R	FF90LW FK120LW

Date/Time: 9/17/2012 4:17:23 PM

Test Laboratory: RIM Testing Services

Dipole Validation_5800

MHz_09_17_12_Amb_Tem_24.4_Liq_Tem_22.4C

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1033

Communication System: CW-5GHz; Frequency: 5800 MHz

Medium parameters used: f = 5800 MHz; $\sigma = 5.304 \text{ mho/m}$; $\varepsilon_r = 34.066$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 SN3592; ConvF(3.98, 3.98, 3.98); Calibrated: 11/18/2010
- 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)

System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=1000mW, f=5800 MHz/Area Scan (91x91x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 184.3 mW/g

System Performance Check with D5GHzV2 Dipole/d=10mm,

Pin=1000mW, f=5800 MHz/Zoom Scan -Ext(24x24x20), Step (4x4x2.5mm),

dist=2mm (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

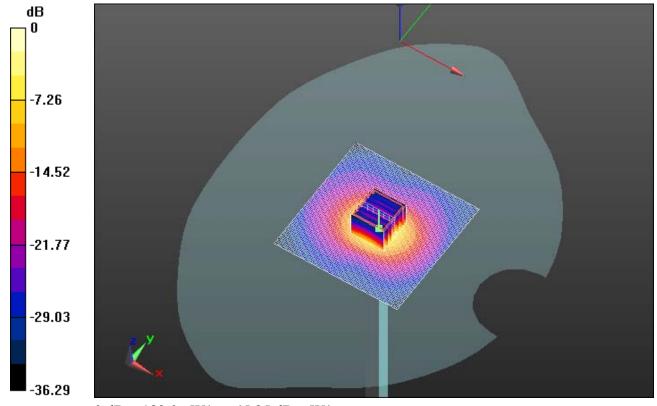
Reference Value = 201.2 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 343.60

SAR(1 g) = 85.7 mW/g; SAR(10 g) = 24.4 mW/g

Maximum value of SAR (measured) = 183.0 mW/g

	Testing Services™	Appendix A for the BlackBerry® Smartphone Model RFF91LW, RFK121LW SAR Report				
ſ	Author Data	Dates of Test	Test Report No	FCC ID:	IC ID	
	Andrew Becker	June 04 – October 29, 2012	RTS-6012-1208-35B		2503A-R	
				L6ARFK120LW	2503A-R	FK120LW



 $0 \ dB = 183.0 mW/g = 45.25 \ dB \ mW/g$