👯 BlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page 1(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

#### APPENDIX C2: SAR DISTRIBUTION PLOTS FOR HOT SPOT CONFIGURATION

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121	LW	Page <b>2(95)</b>
Author Data Andrew Becker	Dates of Te July 12	st 2 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

# LTE Band 17

Date: 7/12/2013

Test Lab: RIM Testing Services

Dates of Test

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE9A7

#### Configuration: Mobile Hot Spot MSL - LTE Band 17

Document

Communication System: LTE band 17; Communication System Band: LTE 17; Frequency: 709 MHz

Medium Parameters used: f=709 MHz;  $\sigma = 0.921$  S/m;  $\epsilon_r = 54.583$ ;  $\rho = 1.000$  g/cm<sup>3</sup> Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ES3DV3 - SN3225; ConvF: (6.27,6.27,6.27); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection) •
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013 •
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080 •
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) ٠

Mobile Hot Spot MSL - LTE Band 17/10mm Device Back -LTE Band 17 chan23780 RB1 Off0 amb temp 24.2C lig temp 22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 22.669 V/m; Power Drift = -0.00975 dB

Mobile Hot Spot MSL - LTE Band 17/10mm Device Back -LTE Band 17 chan23780 RB1 Off0 amb temp 24.2C liq temp 22.5C/Zoom Scan (26x31x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 22.669 V/m; Power Drift = -0.026 dB

#### Averaged SAR: SAR(1g) = 0.487 W/kg; SAR(10g) = 0.367 W/kg

Maximum value of SAR (interpolated) = 0.688 W/kg



0 dB = 0.541 W/kg = -2.67 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page 5(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 17/10mm Device Back -LTE\_Band\_17\_chan23780\_RB25\_Off0\_amb\_temp\_24.2C\_liq\_temp\_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 20.366 V/m; Power Drift = 0.018 dB

Fast SAR: SAR(1g) = 0.381 W/kg; SAR(10g) = 0.272 W/kg Maximum value of SAR (interpolated) = 0.426 W/kg



0 dB = 0.541 W/kg = -2.67 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page 6(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 17/10mm Device Front -LTE\_Band\_17\_chan23780\_RB1\_Off0\_amb\_temp\_24.1C\_liq\_temp\_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 21.595 V/m; Power Drift = 0.070 dB

Fast SAR: SAR(1g) = 0.462 W/kg; SAR(10g) = 0.328 W/kg Maximum value of SAR (interpolated) = 0.521 W/kg



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

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report			Page <b>7(95)</b>	
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 17/10mm Device Left -LTE\_Band\_17\_chan23780\_RB1\_Off0\_amb\_temp\_23.4C\_liq\_temp\_22.5C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 23.549 V/m; Power Drift = 0.037 dB

Fast SAR: SAR(1g) = 0.451 W/kg; SAR(10g) = 0.311 W/kg Maximum value of SAR (interpolated) = 0.510 W/kg



0 dB = 0.521 W/kg = -2.83 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>8(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 17/10mm Device Right -LTE\_Band\_17\_chan23780\_RB1\_Off0\_amb\_temp\_23.5C\_liq\_temp\_22.5C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 16.912 V/m; Power Drift = -0.029 dB

Fast SAR: SAR(1g) = 0.223 W/kg; SAR(10g) = 0.153 W/kg Maximum value of SAR (interpolated) = 0.253 W/kg



0 dB = 0.510 W/kg = -2.92 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>9(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 17/10mm Device Bottom -LTE\_Band\_17\_chan23780\_RB1\_Off0\_amb\_temp\_23.3C\_liq\_temp\_22.2C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.657 V/m; Power Drift = -0.00764 dB

Fast SAR: SAR(1g) = 0.143 W/kg; SAR(10g) = 0.0875 W/kg Maximum value of SAR (interpolated) = 0.175 W/kg



0 dB = 0.253 W/kg = -5.97 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121	LW	Page 10(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 1	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

## LTE 5

SlackBerry
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Author Data **Andrew Becker** 

FCC ID: Test Report No July 12 – October 16, 2013 RTS-6046-1310-25 L6ARFV120LW

Date: 7/15/2013

Test Lab: RIM Testing Services

Dates of Test

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE967

#### Configuration: Mobile Hot Spot MSL - LTE Band 5

Document

Communication System: LTE 5; Communication System Band: LTE 5; Frequency: 829 MHz Medium Parameters used: f=829 MHz;  $\sigma = 0.963$  S/m;  $\epsilon_r = 53.325$ ;  $\rho = 1.000$  g/cm<sup>3</sup> Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ES3DV3 SN3225; ConvF: (6.12,6.12,6.12); Calibrated: 1/10/2013; •
- Sensor-Surface: 3 mm (Mechanical Surface Detection) •
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) •

#### Mobile Hot Spot MSL - LTE Band 5/10mm Device Back -

LTE Band 5 chan20450 RB1 Off49 amb temp 23.2C lig temp 22.3C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 23.114 V/m; Power Drift = -0.203 dB

#### Mobile Hot Spot MSL - LTE Band 5/10mm Device Back -

LTE Band 5 chan20450 RB1 Off49 amb temp 23.2C liq temp 22.3C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 23.114 V/m; Power Drift = -0.244 dB

#### Averaged SAR: SAR(1g) = 0.441 W/kg; SAR(10g) = 0.338 W/kg

Maximum value of SAR (interpolated) = 0.546 W/kg



0 dB = 0.483 W/kg = -3.16 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page 13(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 5/10mm Device Back -LTE\_Band\_5\_chan20525\_RB25\_Off25\_amb\_temp\_23.2C\_liq\_temp\_22.3C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 20.388 V/m; Power Drift = 0.018 dB

Fast SAR: SAR(1g) = 0.342 W/kg; SAR(10g) = 0.242 W/kg Maximum value of SAR (interpolated) = 0.386 W/kg



0 dB = 0.483 W/kg = -3.16 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page 14(95)
Author Data Andrew Becker	Dates of Te July 12	<sup>st</sup> 2 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 5/10mm Device Front -LTE\_Band\_5\_chan20450\_RB1\_Off49\_amb\_temp\_23.3C\_liq\_temp\_22.3C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 22.585 V/m; Power Drift = 0.110 dB

Fast SAR: SAR(1g) = 0.426 W/kg; SAR(10g) = 0.302 W/kg Maximum value of SAR (interpolated) = 0.480 W/kg



0 dB = 0.386 W/kg = -4.13 dBW/kg

Author Data Dates of		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 15(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 5/10mm Device Left -LTE\_Band\_5\_chan20450\_RB1\_Off49\_amb\_temp\_23.4C\_liq\_temp\_22.3C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 23.031 V/m; Power Drift = 0.031 dB

Fast SAR: SAR(1g) = 0.429 W/kg; SAR(10g) = 0.291 W/kg Maximum value of SAR (interpolated) = 0.490 W/kg



0 dB = 0.480 W/kg = -3.19 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 16(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 5/10mm Device Right -LTE\_Band\_5\_chan20450\_RB1\_Off49\_amb\_temp\_23.2C\_liq\_temp\_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 21.388 V/m; Power Drift = -0.192 dB

Fast SAR: SAR(1g) = 0.346 W/kg; SAR(10g) = 0.235 W/kg Maximum value of SAR (interpolated) = 0.394 W/kg



0 dB = 0.490 W/kg = -3.10 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>17(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 5/10mm Device Bottom -LTE\_Band\_5\_chan20450\_RB1\_Off49\_amb\_temp\_23.3C\_liq\_temp\_22.3C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 13.867 V/m; Power Drift = 0.085 dB

Fast SAR: SAR(1g) = 0.168 W/kg; SAR(10g) = 0.108 W/kg Maximum value of SAR (interpolated) = 0.194 W/kg



0 dB = 0.394 W/kg = -4.05 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 18(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

# DTM/GSM 850

Author Data **Andrew Becker** 

Test Report No FCC ID: July 12 – October 16, 2013 RTS-6046-1310-25 L6ARFV120LW

Date: 7/15/2013

Test Lab: BlackBerry RTS

#### DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE9A7

#### Configuration: Mobile Hot Spot MSL - GPRS 850

Document

Dates of Test

Communication System: GSM 850; Communication System Band: GSM 850; Frequency: 836.8 MHz

Medium Parameters used: f=836.8 MHz;  $\sigma$  = 0.970 S/m;  $\epsilon_r$  = 53.234;  $\rho$  = 1.000 g/cm<sup>3</sup> Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ES3DV3 SN3225; ConvF: (6.12,6.12,6.12); Calibrated: 1/10/2013; •
- Sensor-Surface: 3 mm (Mechanical Surface Detection) ٠
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080 ٠
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) ٠

Mobile Hot Spot MSL - GPRS 850/10mm Device Back -GSM850 chan190 amb temp 22.9C liq temp 21.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 26.217 V/m; Power Drift = -0.144 dB

Fast SAR: SAR(1g) = 0.550 W/kg; SAR(10g) = 0.387 W/kg Maximum value of SAR (interpolated) = 0.622 W/kg



SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 20(95)
Author Data Andrew Becker	Dates of Te July 12	st 2 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

0 dB = 0.622 W/kg = -2.06 dBW/kg

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS850\_2slots\_chan190\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 27.388 V/m; Power Drift = -0.014 dB

Fast SAR: SAR(1g) = 0.653 W/kg; SAR(10g) = 0.460 W/kg Maximum value of SAR (interpolated) = 0.736 W/kg

![](_page_19_Figure_5.jpeg)

0 dB = 0.622 W/kg = -2.06 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 21(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS850\_3-Slots\_chan190\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 27.965 V/m; Power Drift = -9.69e-005 dB

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS850\_3-Slots\_chan190\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 27.965 V/m; Power Drift = -9.69e-005 dB

Averaged SAR: SAR(1g) = 0.692 W/kg; SAR(10g) = 0.530 W/kg Maximum value of SAR (interpolated) = 0.868 W/kg

![](_page_20_Figure_4.jpeg)

0 dB = 0.736 W/kg = -1.33 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 22(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 850/10mm Device Back - GPRS850\_4-Slots\_chan190\_amb\_temp\_22.6C\_liq\_temp\_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 26.683 V/m; Power Drift = 0.011 dB

Fast SAR: SAR(1g) = 0.627 W/kg; SAR(10g) = 0.441 W/kg Maximum value of SAR (interpolated) = 0.707 W/kg

![](_page_21_Figure_3.jpeg)

0 dB = 0.760 W/kg = -1.19 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	Page <b>23(95)</b>			
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 850/10mm Device Front - GPRS850\_4-Slots\_chan190\_amb\_temp\_23.2C\_liq\_temp\_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 28.672 V/m; Power Drift = -0.066 dB

Fast SAR: SAR(1g) = 0.664 W/kg; SAR(10g) = 0.471 W/kg Maximum value of SAR (interpolated) = 0.751 W/kg

![](_page_22_Figure_3.jpeg)

0 dB = 0.707 W/kg = -1.51 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	Page 24(95)			
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 850/10mm Device Left - GPRS850\_4-Slots\_chan190\_amb\_temp\_22.8C\_liq\_temp\_22.1C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 27.210 V/m; Power Drift = -0.00138 dB

Fast SAR: SAR(1g) = 0.591 W/kg; SAR(10g) = 0.400 W/kg Maximum value of SAR (interpolated) = 0.671 W/kg

![](_page_23_Figure_3.jpeg)

0 dB = 0.751 W/kg = -1.24 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	Page <b>25(95)</b>			
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 850/10mm Device Right - GPRS850\_4-Slots\_chan190\_amb\_temp\_23.4C\_liq\_temp\_22.0C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 24.908 V/m; Power Drift = -0.077 dB

Fast SAR: SAR(1g) = 0.500 W/kg; SAR(10g) = 0.337 W/kg Maximum value of SAR (interpolated) = 0.572 W/kg

![](_page_24_Figure_3.jpeg)

0 dB = 0.671 W/kg = -1.73 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartpl	none Model RFV121	LW	Page <b>26(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 850/10mm Device Bottom - GPRS850\_4-Slots\_chan190\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 14.392 V/m; Power Drift = -0.079 dB

Fast SAR: SAR(1g) = 0.188 W/kg; SAR(10g) = 0.120 W/kg Maximum value of SAR (interpolated) = 0.221 W/kg

![](_page_25_Figure_3.jpeg)

0 dB = 0.572 W/kg = -2.43 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>27(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

# UMTS Band V

Author Data Andrew Becker 
 Test Report No
 FCC ID:

 RTS-6046-1310-25
 L6ARFV120LW

Date: 7/15/2013

Test Lab: RIM Testing Services

Dates of Test

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE9A7

#### Configuration: Mobile Hot Spot MSL - UMTS band V

Document

July 12 – October 16, 2013

Communication System: WCDMA FDD V; Communication System Band: UMTS band V; Frequency: 836.4 MHz Medium Parameters used: f=836.4 MHz;  $\sigma$  = 0.970 S/m;  $\epsilon_r$  = 53.238;  $\rho$  = 1.000 g/cm<sup>3</sup> Phantom section: Flat Section

#### DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF: (6.12,6.12,6.12); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

Mobile Hot Spot MSL - UMTS band V/10mm Device Back - UMTS\_band V\_chan4182\_amb\_temp\_23.5C\_liq\_temp\_21.8C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 22.378 V/m; Power Drift = -0.00815 dB

Mobile Hot Spot MSL - UMTS band V/10mm Device Back - UMTS\_band V\_chan4182\_amb\_temp\_23.5C\_liq\_temp\_21.8C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 22.378 V/m; Power Drift = -0.00815 dB

### Averaged SAR: SAR(1g) = 0.428 W/kg; SAR(10g) = 0.328 W/kg

Maximum value of SAR (interpolated) = 0.530 W/kg

![](_page_28_Figure_0.jpeg)

0 dB = 0.467 W/kg = -3.31 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>30(95)</b>
Author Data Andrew Becker	Dates of Te July 12	st 2 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

Mobile Hot Spot MSL - UMTS band V/10mm Device Front - UMTS\_band V\_chan4182\_amb\_temp\_23.4C\_liq\_temp\_21.6C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 21.947 V/m; Power Drift = 0.071 dB

Fast SAR: SAR(1g) = 0.403 W/kg; SAR(10g) = 0.286 W/kg Maximum value of SAR (interpolated) = 0.455 W/kg

![](_page_29_Figure_3.jpeg)

0 dB = 0.467 W/kg = -3.31 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 31(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS band V/10mm Device Left - UMTS\_band V\_chan4182\_amb\_temp\_23.2C\_liq\_temp\_21.7C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 22.462 V/m; Power Drift = 0.085 dB

Fast SAR: SAR(1g) = 0.397 W/kg; SAR(10g) = 0.268 W/kg Maximum value of SAR (interpolated) = 0.451 W/kg

![](_page_30_Figure_3.jpeg)

0 dB = 0.455 W/kg = -3.42 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>32(95)</b>
Author Data Andrew Becker	Dates of Te July 12	st 2 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

Mobile Hot Spot MSL - UMTS band V/10mm Device Right - UMTS\_band V\_chan4182\_amb\_temp\_23.1C\_liq\_temp\_21.5C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 20.081 V/m; Power Drift = 0.067 dB

East SAD, SAD(1a) = 0.221 W/kg, SAD(10g) = 0.222 W/kg

Fast SAR: SAR(1g) = 0.331 W/kg; SAR(10g) = 0.223 W/kg Maximum value of SAR (interpolated) = 0.378 W/kg

![](_page_31_Figure_4.jpeg)

0 dB = 0.451 W/kg = -3.46 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 33(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS band V/10mm Device Bottom - UMTS\_band V\_chan4182\_amb\_temp\_23.C\_liq\_temp\_21.4C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.963 V/m; Power Drift = -0.00208 dB

Fast SAR: SAR(1g) = 0.158 W/kg; SAR(10g) = 0.100 W/kg Maximum value of SAR (interpolated) = 0.188 W/kg

![](_page_32_Figure_3.jpeg)

0 dB = 0.378 W/kg = -4.23 dBW/kg

SlackBerry		Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121L	W	Page <b>34(95)</b>
Author Data	Dates of Te	est	Test Report No	FCC ID:		
Andrew Becker	July 1	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

LTE 4

Author Data **Andrew Becker** 

Test Report No FCC ID: July 12 – October 16, 2013 RTS-6046-1310-25 L6ARFV120LW

Date: 7/11/2013

Test Lab: RIM Testing Services

Dates of Test

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE9A7

#### Configuration: Mobile Hot Spot MSL - LTE Band 4

Document

Communication System: LTE 4; Communication System Band: LTE 4; Frequency: 1720 MHz Medium Parameters used: f=1720 MHz;  $\sigma$  = 1.489 S/m;  $\epsilon_r$  = 50.876;  $\rho$  = 1.000 g/cm<sup>3</sup> Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ES3DV3 SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013; •
- Sensor-Surface: 3 mm (Mechanical Surface Detection) •
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) •

#### Mobile Hot Spot MSL - LTE Band 4/10mm Device Back -

LTE Band 4 chan20050 RB1 Off50 amb temp 23.0C liq temp 22.2C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 11.681 V/m; Power Drift = -0.036 dB

Fast SAR: SAR(1g) = 0.810 W/kg; SAR(10g) = 0.500 W/kg Maximum value of SAR (interpolated) = 0.967 W/kg

![](_page_34_Figure_19.jpeg)

0 dB = 0.967 W/kg = -0.15 dBW/kg

		Document Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>36(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back -LTE\_Band\_4\_chan20175\_RB1\_Off0\_amb\_temp\_23.0C\_liq\_temp\_22.2C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 11.539 V/m; Power Drift = 0.090 dB

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back -LTE\_Band\_4\_chan20175\_RB1\_Off0\_amb\_temp\_23.0C\_liq\_temp\_22.2C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 11.539 V/m; Power Drift = 0.031 dB

Averaged SAR: SAR(1g) = 0.869 W/kg; SAR(10g) = 0.529 W/kg Maximum value of SAR (interpolated) = 1.40 W/kg

![](_page_35_Figure_4.jpeg)

0 dB = 0.967 W/kg = -0.15 dBW/kg
SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV1211	LW	Page <b>37(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back - LTE\_Band\_4\_chan20175\_2nd scan\_RB1\_Off0\_amb\_temp\_22.8C\_liq\_temp\_22.2C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.062 V/m; Power Drift = 0.050 dB

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back - LTE\_Band\_4\_chan20175\_2nd scan\_RB1\_Off0\_amb\_temp\_22.8C\_liq\_temp\_22.2C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 12.062 V/m; Power Drift = 0.046 dB

Averaged SAR: SAR(1g) = 0.903 W/kg; SAR(10g) = 0.549 W/kg Maximum value of SAR (interpolated) = 1.45 W/kg



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

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>38(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back -LTE\_Band\_4\_chan20300\_RB1\_Off50\_amb\_temp\_23.0C\_liq\_temp\_22.2C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 11.327 V/m; Power Drift = 0.063 dB

Fast SAR: SAR(1g) = 0.758 W/kg; SAR(10g) = 0.471 W/kg Maximum value of SAR (interpolated) = 0.904 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>39(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back -LTE\_Band\_4\_chan20050\_RB50\_Off0\_amb\_temp\_22.7C\_liq\_temp\_22.2C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 10.197 V/m; Power Drift = -0.070 dB

Fast SAR: SAR(1g) = 0.631 W/kg; SAR(10g) = 0.389 W/kg Maximum value of SAR (interpolated) = 0.754 W/kg



0 dB = 0.904 W/kg = -0.44 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>40(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Back -LTE\_Band\_4\_chan20050\_RB100\_Off0\_amb\_temp\_23.4C\_liq\_temp\_22.2C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 10.165 V/m; Power Drift = 0.032 dB

Fast SAR: SAR(1g) = 0.629 W/kg; SAR(10g) = 0.389 W/kg Maximum value of SAR (interpolated) = 0.753 W/kg



0 dB = 0.754 W/kg = -1.23 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>41(95)</b>
Author Data	Dates of Te	st Notahan 16 2012	Test Report No	FCC ID:		
Andrew Decker	July L	2 – October 10, 2015	K15-0040-1510-25	LOAKF VIZULW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Front -LTE\_Band\_4\_chan20050\_RB1\_Off50\_amb\_temp\_23.8C\_liq\_temp\_22.8C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 11.025 V/m; Power Drift = 0.046 dB

Fast SAR: SAR(1g) = 0.727 W/kg; SAR(10g) = 0.447 W/kg Maximum value of SAR (interpolated) = 0.876 W/kg



0 dB = 0.753 W/kg = -1.23 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>42(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Left -LTE\_Band\_4\_chan20050\_RB1\_Off50\_amb\_temp\_23.4C\_liq\_temp\_22.2C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.459 V/m; Power Drift = 0.015 dB

Fast SAR: SAR(1g) = 0.420 W/kg; SAR(10g) = 0.244 W/kg Maximum value of SAR (interpolated) = 0.509 W/kg



0 dB = 0.876 W/kg = -0.57 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>43(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Right -LTE\_Band\_4\_chan20050\_RB1\_Off50\_amb\_temp\_23.3C\_liq\_temp\_22.2C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 8.872 V/m; Power Drift = -0.123 dB

Fast SAR: SAR(1g) = 0.145 W/kg; SAR(10g) = 0.0851 W/kg Maximum value of SAR (interpolated) = 0.175 W/kg



0 dB = 0.509 W/kg = -2.93 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	one Model RFV121	LW	Page <b>44(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 4/10mm Device Bottom -LTE\_Band\_4\_chan20050\_RB1\_Off50\_amb\_temp\_23.3C\_liq\_temp\_22.2C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 16.812 V/m; Power Drift = -0.00986 dB

Fast SAR: SAR(1g) = 0.390 W/kg; SAR(10g) = 0.222 W/kg Maximum value of SAR (interpolated) = 0.488 W/kg



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

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartpl	none Model RFV121	LW	Page <b>45(95)</b>
Author Data	Dates of Te	est	Test Report No	FCC ID:		
Andrew Becker	July 1	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

# UMTS Band IV

SlackBerry	
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Author Data **Andrew Becker** 

Test Report No FCC ID: July 12 – October 16, 2013 RTS-6046-1310-25 L6ARFV120LW

Date: 7/10/2013

**Test Lab: RIM Testing Services** 

Dates of Test

#### DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE9A7

# **Configuration: Mobile Hot Spot MSL - UMTS IV**

Document

Communication System: WCDMA FDD IV; Communication System Band: UMTS band IV; Frequency: 1712.4 MHz Medium Parameters used: f=1712.4 MHz;  $\sigma$  = 1.479 S/m;  $\epsilon_r$  = 50.873;  $\rho$  = 1.000 g/cm<sup>3</sup> Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ES3DV3 SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013; •
- Sensor-Surface: 3 mm (Mechanical Surface Detection) ٠
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080 ٠
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) ٠

#### Mobile Hot Spot MSL - UMTS IV/10mm Device Back -UMTS IV chan1312 amb temp 23.3C liq temp 22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 13.193 V/m; Power Drift = 0.00942 dB

Mobile Hot Spot MSL - UMTS IV/10mm Device Back -UMTS\_IV\_chan1312\_amb\_temp\_23.3C\_liq\_temp\_22.5C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 13.193 V/m; Power Drift = 0.00942 dB

# Averaged SAR: SAR(1g) = 1.10 W/kg; SAR(10g) = 0.670 W/kg

Maximum value of SAR (interpolated) = 1.77 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121	LW	Page <b>48(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Back - UMTS\_IV\_chan1312\_2nd scan\_amb\_temp\_23.2C\_liq\_temp\_22.7C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 13.281 V/m; Power Drift = 0.037 dB

Mobile Hot Spot MSL - UMTS IV/10mm Device Back - UMTS\_IV\_chan1312\_2nd scan\_amb\_temp\_23.2C\_liq\_temp\_22.7C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 13.281 V/m; Power Drift = 0.037 dB

Averaged SAR: SAR(1g) = 1.11 W/kg; SAR(10g) = 0.674 W/kg Maximum value of SAR (interpolated) = 1.79 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartpl	none Model RFV121	LW	Page <b>49(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Back -UMTS\_IV\_chan1413\_amb\_temp\_23.4C\_liq\_temp\_22.9C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.713 V/m; Power Drift = -0.047 dB

Fast SAR: SAR(1g) = 0.969 W/kg; SAR(10g) = 0.590 W/kg Maximum value of SAR (interpolated) = 1.15 W/kg



0 dB = 1.33 W/kg = 1.24 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 50(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Back -UMTS\_IV\_chan1513\_amb\_temp\_23.3C\_liq\_temp\_22.9C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 13.598 V/m; Power Drift = 0.013 dB

Fast SAR: SAR(1g) = 1.06 W/kg; SAR(10g) = 0.647 W/kg Maximum value of SAR (interpolated) = 1.27 W/kg



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

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 51(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Front -UMTS\_IV\_chan1312\_amb\_temp\_23.0C\_liq\_temp\_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 13.545 V/m; Power Drift = 0.142 dB

Fast SAR: SAR(1g) = 0.993 W/kg; SAR(10g) = 0.612 W/kg Maximum value of SAR (interpolated) = 1.18 W/kg



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

SlackBerry		Appendix C2 for the SAR Report	BlackBerry® Smartpl	none Model RFV121	LW	Page 52(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Front -UMTS\_IV\_chan1413\_amb\_temp\_23.0C\_liq\_temp\_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.438 V/m; Power Drift = 0.098 dB

Fast SAR: SAR(1g) = 0.909 W/kg; SAR(10g) = 0.560 W/kg Maximum value of SAR (interpolated) = 1.08 W/kg



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

SlackBerry		Appendix C2 for the SAR Report	BlackBerry® Smartpl	none Model RFV121	LW	Page 53(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Front -UMTS\_IV\_chan1513\_amb\_temp\_23.0C\_liq\_temp\_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 13.049 V/m; Power Drift = 0.028 dB

Fast SAR: SAR(1g) = 0.976 W/kg; SAR(10g) = 0.603 W/kg Maximum value of SAR (interpolated) = 1.16 W/kg



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

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 54(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Left -UMTS\_IV\_chan1413\_amb\_temp\_22.8C\_liq\_temp\_22.0C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.881 V/m; Power Drift = -0.011 dB

Fast SAR: SAR(1g) = 0.488 W/kg; SAR(10g) = 0.282 W/kg Maximum value of SAR (interpolated) = 0.593 W/kg



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

Author Data Dates of		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 55(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Right -UMTS\_IV\_chan1413\_amb\_temp\_22.9C\_liq\_temp\_22.1C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 9.484 V/m; Power Drift = -0.056 dB

Fast SAR: SAR(1g) = 0.158 W/kg; SAR(10g) = 0.0931 W/kg Maximum value of SAR (interpolated) = 0.187 W/kg



0 dB = 0.593 W/kg = -2.27 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>56(95)</b>
Author Data Andrew Becker	Dates of Te July 12	<sup>st</sup> 2 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

Mobile Hot Spot MSL - UMTS IV/10mm Device Bottom -UMTS\_IV\_chan1413\_amb\_temp\_22.8C\_liq\_temp\_22.2C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 17.619 V/m; Power Drift = -0.098 dB

Fast SAR: SAR(1g) = 0.427 W/kg; SAR(10g) = 0.244 W/kg Maximum value of SAR (interpolated) = 0.532 W/kg



0 dB = 0.187 W/kg = -7.28 dBW/kg

		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>57(95)</b>
Author Data	Dates of Te	st Dotobor 16 2012	Test Report No <b>DTS 6046 1310 25</b>	FCC ID:		
Anurew Decker	July L	2 - 00000017 10, 2013	K15-0040-1510-25	LUARF VIZUL W		

# DTM/GSM 1900

Date: 7/5/2013

Test Lab: RIM Testing Services DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE967

## Configuration: Mobile Hot Spot MSL - GPRS 1900

Communication System: GSM 1900; Communication System Band: GSM 1900; Frequency: 1880 MHz

Medium Parameters used: f=1880 MHz;  $\sigma$  = 1.549 S/m;  $\epsilon_r$  = 51.206;  $\rho$  = 1.000 g/cm<sup>3</sup> Phantom section: Flat Section

#### DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117)

#### Mobile Hot Spot MSL - GPRS 1900/10mm Device Back -

**GSM1900\_chan661\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 8.156 V/m; **Power Drift = 0.187 dB** 

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back -GSM1900\_chan661\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 8.156 V/m; Power Drift = 0.187 dB

# Averaged SAR: SAR(1g) = 0.479 W/kg; SAR(10g) = 0.273 W/kg

Maximum value of SAR (interpolated) = 0.787 W/kg



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

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 60(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back -GPRS1900\_chan661\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 7.769 V/m; Power Drift = 0.019 dB

Fast SAR: SAR(1g) = 0.405 W/kg; SAR(10g) = 0.225 W/kg Maximum value of SAR (interpolated) = 0.510 W/kg



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

SlackBerry		Appendix C2 for the SAR Report	BlackBerry® Smartpl	none Model RFV121	LW	Page 61(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS1900\_3-Slots\_chan661\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 7.893 V/m; Power Drift = 0.062 dB

Fast SAR: SAR(1g) = 0.421 W/kg; SAR(10g) = 0.234 W/kg Maximum value of SAR (interpolated) = 0.530 W/kg



0 dB = 0.510 W/kg = -2.92 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartpl	none Model RFV121	LW	Page 62(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 1900/10mm Device Back - GPRS1900\_4-Slots\_chan661\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 7.667 V/m; Power Drift = 0.063 dB

Fast SAR: SAR(1g) = 0.401 W/kg; SAR(10g) = 0.224 W/kg Maximum value of SAR (interpolated) = 0.504 W/kg



0 dB = 0.530 W/kg = -2.76 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 63(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 1900/10mm Device Front -GSM1900\_chan661\_amb\_temp\_23.6C\_liq\_temp\_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 6.410 V/m; Power Drift = 0.022 dB

Fast SAR: SAR(1g) = 0.343 W/kg; SAR(10g) = 0.201 W/kg Maximum value of SAR (interpolated) = 0.428 W/kg



0 dB = 0.504 W/kg = -2.98 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 64(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 1900/10mm Device Left -GSM1900\_chan661\_amb\_temp\_22.9C\_liq\_temp\_21.9C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 7.773 V/m; Power Drift = 0.013 dB

Fast SAR: SAR(1g) = 0.170 W/kg; SAR(10g) = 0.0977 W/kg Maximum value of SAR (interpolated) = 0.206 W/kg



0 dB = 0.428 W/kg = -3.69 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 65(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 1900/10mm Device Right -GSM1900\_chan661\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 5.345 V/m; Power Drift = 0.061 dB

Fast SAR: SAR(1g) = 0.0451 W/kg; SAR(10g) = 0.0279 W/kg Maximum value of SAR (interpolated) = 0.0539 W/kg



0 dB = 0.206 W/kg = -6.86 dBW/kg

SlackBerry		Appendix C2 for the SAR Report	Page 66(95)			
Author Data Dates of T		st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - GPRS 1900/10mm Device Bottom -GSM1900\_chan661\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 14.507 V/m; Power Drift = -0.065 dB

Mobile Hot Spot MSL - GPRS 1900/10mm Device Bottom -GSM1900\_chan661\_amb\_temp\_22.8C\_liq\_temp\_21.1C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 14.507 V/m; Power Drift = -0.065 dB

Averaged SAR: SAR(1g) = 0.454 W/kg; SAR(10g) = 0.247 W/kg Maximum value of SAR (interpolated) = 0.777 W/kg



0 dB = 0.0539 W/kg = -12.68 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>67(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

# UMTS Band II

FCC ID:

L6ARFV120LW

Author Data **Andrew Becker** 

Test Report No July 12 – October 16, 2013 RTS-6046-1310-25

Date: 7/5/2013

Test Lab: RIM Testing Services

Dates of Test

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE967

# **Configuration: Mobile Hot Spot MSL - UMTS II**

Document

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1852.4 MHz Medium Parameters used: f=1852.4 MHz;  $\sigma = 1.521$  S/m;  $\epsilon_r = 51.316$ ;  $\rho = 1.000$  g/cm<sup>3</sup> Phantom section: Flat Section

## **DASY Configuration:**

- Probe: ES3DV3 SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013; •
- Sensor-Surface: 3 mm (Mechanical Surface Detection) ٠
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080 •
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) ٠

## Mobile Hot Spot MSL - UMTS II/10mm Device Back -

UMTS II chan9262 amb temp 22.8C lig temp 22.1C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 13.290 V/m; Power Drift = -0.017 dB

Mobile Hot Spot MSL - UMTS II/10mm Device Back -UMTS\_II\_chan9262\_amb\_temp\_22.8C\_liq\_temp\_22.1C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 13.290 V/m; Power Drift = -0.017 dB

#### Averaged SAR: SAR(1g) = 0.987 W/kg; SAR(10g) = 0.567 W/kg Maximum value of SAR (interpolated) = 1.61 W/kg



0 dB = 1.20 W/kg = 0.79 dBW/kg

SlackBerry		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>70(95)</b>
Author Data	Dates of Test		Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS II/10mm Device Back - UMTS\_II\_chan9262\_2nd scan\_amb\_temp\_22.9C\_liq\_temp\_22.4C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 13.191 V/m; Power Drift = 0.059 dB

Mobile Hot Spot MSL - UMTS II/10mm Device Back - UMTS\_II\_chan9262\_2nd scan\_amb\_temp\_22.9C\_liq\_temp\_22.4C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 13.191 V/m; Power Drift = 0.059 dB

Averaged SAR: SAR(1g) = 0.980 W/kg; SAR(10g) = 0.563 W/kg Maximum value of SAR (interpolated) = 1.58 W/kg



0 dB = 1.20 W/kg = 0.79 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 71(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS II/10mm Device Back -UMTS\_II\_chan9400\_amb\_temp\_23.0C\_liq\_temp\_22.4C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.909 V/m; Power Drift = -0.117 dB

Fast SAR: SAR(1g) = 0.846 W/kg; SAR(10g) = 0.484 W/kg; Secondary SAR(1g) = 0.838 W/kg Maximum value of SAR (interpolated) = 1.07 W/kg



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

SlackBerry	/	Appendix C2 for the SAR Report	Page 72(95)			
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS II/10mm Device Back -UMTS\_II\_chan9538\_amb\_temp\_23.1C\_liq\_temp\_22.4C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.298 V/m; Power Drift = 0.010 dB

Fast SAR: SAR(1g) = 0.956 W/kg; SAR(10g) = 0.506 W/kg; Secondary SAR(1g) = 0.838 W/kg Maximum value of SAR (interpolated) = 1.25 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg
Author Data Dates of		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>73(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS II/10mm Device Front -UMTS\_II\_chan9400\_amb\_temp\_23.0C\_liq\_temp\_22.3C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 8.422 V/m; Power Drift = 0.091 dB

Fast SAR: SAR(1g) = 0.540 W/kg; SAR(10g) = 0.311 W/kg; Secondary SAR(1g) = 0.838 W/kg Maximum value of SAR (interpolated) = 0.678 W/kg



0 dB = 1.25 W/kg = 0.97 dBW/kg

Author Data Dates of		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>74(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS II/10mm Device Left -UMTS\_II\_chan9400\_amb\_temp\_23.0C\_liq\_temp\_22.0C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 6.955 V/m; Power Drift = 0.094 dB

Fast SAR: SAR(1g) = 0.0813 W/kg; SAR(10g) = 0.0500 W/kg; Secondary SAR(1g) = 0.838 W/kg Maximum value of SAR (interpolated) = 0.0972 W/kg



0 dB = 0.678 W/kg = -1.69 dBW/kg

Author Data Andreavy Bookcor		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>75(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS II/10mm Device Right -UMTS\_II\_chan9400\_amb\_temp\_22.9C\_liq\_temp\_22.1C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 9.930 V/m; Power Drift = 0.084 dB

Fast SAR: SAR(1g) = 0.288 W/kg; SAR(10g) = 0.165 W/kg; Secondary SAR(1g) = 0.838 W/kg Maximum value of SAR (interpolated) = 0.355 W/kg



0 dB = 0.0972 W/kg = -10.12 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>76(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - UMTS II/10mm Device Bottom -UMTS\_II\_chan9400\_amb\_temp\_22.8C\_liq\_temp\_22.2C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 19.933 V/m; Power Drift = 0.016 dB

Fast SAR: SAR(1g) = 0.668 W/kg; SAR(10g) = 0.359 W/kg; Secondary SAR(1g) = 0.838 W/kg Maximum value of SAR (interpolated) = 0.854 W/kg



0 dB = 0.355 W/kg = -4.50 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121	LW	Page 77(95)
Author Data Andrew Becker	Dates of Te July 12	<sup>st</sup> 2 – October 16, 2013	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

### LTE 2

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121	LW	Page <b>78(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Date: 7/9/2013

Test Lab: RIM Testing Services

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE9A7

#### Configuration: Mobile Hot Spot MSL - LTE Band 2

Communication System: LTE 2; Communication System Band: LTE Band 2; Frequency: 1860 MHz Medium Parameters used: f=1860 MHz;  $\sigma$  = 1.502 S/m;  $\epsilon_r$  = 51.048;  $\rho$  = 1.000 g/cm<sup>3</sup> Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ES3DV3 SN3225; ConvF: (5.04,5.04,5.04); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection) •
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) •

#### Mobile Hot Spot MSL - LTE Band 2/10mm Device Back -

LTE\_Band\_2\_chan18700\_RB1\_Off50\_amb\_temp\_23.8C\_liq\_temp\_22.8C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 10.032 V/m; Power Drift = -0.076 dB

Mobile Hot Spot MSL - LTE Band 2/10mm Device Back -LTE Band 2 chan18700 RB1 Off50 amb temp 23.8C liq temp 22.8C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 10.032 V/m; Power Drift = -0.079 dB

#### Averaged SAR: SAR(1g) = 0.738 W/kg; SAR(10g) = 0.424 W/kg

Maximum value of SAR (interpolated) = 1.20 W/kg



0 dB = 0.867 W/kg = -0.62 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>80(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 2/10mm Device Back -LTE\_Band\_2\_chan18700\_RB50\_Off50\_amb\_temp\_23.8C\_liq\_temp\_22.8C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 8.720 V/m; Power Drift = 0.072 dB

Fast SAR: SAR(1g) = 0.531 W/kg; SAR(10g) = 0.313 W/kg Maximum value of SAR (interpolated) = 0.648 W/kg



0 dB = 0.867 W/kg = -0.62 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page <b>81(95)</b>
Author Data	Dates of Te	st Detahen 1(-2012	Test Report No	FCC ID:		
Andrew Becker	July L	2 – October 10, 2015	K15-0040-1310-25	LOAKF VIZULW		

Mobile Hot Spot MSL - LTE Band 2/10mm Device Front -LTE\_Band\_2\_chan18700\_RB1\_Off50\_amb\_temp\_23.8C\_liq\_temp\_22.8C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 9.234 V/m; Power Drift = -0.039 dB

Fast SAR: SAR(1g) = 0.618 W/kg; SAR(10g) = 0.357 W/kg Maximum value of SAR (interpolated) = 0.769 W/kg



0 dB = 0.648 W/kg = -1.88 dBW/kg

Author Data Dates of July		Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 82(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - LTE Band 2/10mm Device Left -LTE\_Band\_2\_chan18700\_RB1\_Off50\_amb\_temp\_23.8C\_liq\_temp\_22.8C/Area Scan (31x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 11.438 V/m; Power Drift = 0.00917 dB

Fast SAR: SAR(1g) = 0.323 W/kg; SAR(10g) = 0.187 W/kg Maximum value of SAR (interpolated) = 0.391 W/kg



0 dB = 0.769 W/kg = -1.14 dBW/kg

SlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 83(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Anarew Becker	July L	2 – October 16, 2013	K15-0040-1310-25	LOAKF VIZULW		

Mobile Hot Spot MSL - LTE Band 2/10mm Device Right -LTE\_Band\_2\_chan18700\_RB1\_Off50\_amb\_temp\_23.8C\_liq\_temp\_22.8C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 7.332 V/m; Power Drift = -0.00117 dB

Fast SAR: SAR(1g) = 0.0835 W/kg; SAR(10g) = 0.0518 W/kg Maximum value of SAR (interpolated) = 0.0996 W/kg



0 dB = 0.391 W/kg = -4.08 dBW/kg

Author Data Dates of Julies		Document Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 84(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6AREV120LW		

Mobile Hot Spot MSL - LTE Band 2/10mm Device Bottom -LTE\_Band\_2\_chan18700\_RB1\_Off50\_amb\_temp\_23.8C\_liq\_temp\_22.8C/Area Scan (31x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 19.689 V/m; Power Drift = 0.00517 dB

Mobile Hot Spot MSL - LTE Band 2/10mm Device Bottom -LTE\_Band\_2\_chan18700\_RB1\_Off50\_amb\_temp\_23.8C\_liq\_temp\_22.8C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 19.689 V/m; Power Drift = 0.00517 dB

Averaged SAR: SAR(1g) = 0.717 W/kg; SAR(10g) = 0.395 W/kg Maximum value of SAR (interpolated) = 1.21 W/kg



0 dB = 0.0996 W/kg = -10.02 dBW/kg

*# BlackBerry	/	Appendix C2 for the BlackBerry® Smartphone Model RFV121LW SAR Report				Page 85(95)
Author Data Andrew Becker	Dates of Te July 1	<sup>sst</sup> <b>2 – October 16, 2013</b>	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

# 802.11b power

**Andrew Becker** 

Author Data

Test Report No FCC ID: July 12 – October 16, 2013 RTS-6046-1310-25 L6ARFV120LW

Date: 10/8/2013

Test Lab: BlackBerry RTS

#### DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFF7DAD

#### Configuration: Mobile Hot Spot MSL - 802.11g

Document

Dates of Test

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2437 MHz

Medium Parameters used: f=2437 MHz;  $\sigma$  = 2.006 S/m;  $\epsilon_r$  = 50.271;  $\rho$  = 1.000 g/cm<sup>3</sup> Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ES3DV3 SN3225; ConvF: (4.35,4.35,4.35); Calibrated: 1/10/2013; •
- Sensor-Surface: 3 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080 ٠
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) ٠

#### Mobile Hot Spot MSL - 802.11g/10mm Device Back -

802.11g chan6 amb temp 23.5C liq temp 22.4C/Area Scan (81x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.0785 W/kg

Mobile Hot Spot MSL - 802.11g/10mm Device Back -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm Reference Value = 3.819 V/m; Power Drift = 0.087 dB

#### Averaged SAR: SAR(1g) = 0.0642 W/kg; SAR(10g) = 0.0300 W/kg

Maximum value of SAR (interpolated) = 0.147 W/kg



0 dB = 0.0838 W/kg = -10.77 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartph	none Model RFV121	LW	Page 88(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - 802.11g/10mm Device Front -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Area Scan (81x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.0196 W/kg

Mobile Hot Spot MSL - 802.11g/10mm Device Front -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 1.905 V/m; Power Drift = -0.024 dB

Averaged SAR: SAR(1g) = 0.0155 W/kg; SAR(10g) = 0.00835 W/kg Maximum value of SAR (interpolated) = 0.0315 W/kg



0 dB = 0.0838 W/kg = -10.77 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartpl	none Model RFV121	LW	Page <b>89(95)</b>
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - 802.11g/10mm Device Left -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Area Scan (41x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.0759 W/kg

Mobile Hot Spot MSL - 802.11g/10mm Device Left -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Zoom Scan (31x41x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 6.263 V/m; Power Drift = -0.033 dB

Averaged SAR: SAR(1g) = 0.0554 W/kg; SAR(10g) = 0.0295 W/kg Maximum value of SAR (interpolated) = 0.114 W/kg



0 dB = 0.0168 W/kg = -17.75 dBW/kg

SlackBerr	Y	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121	LW	Page 90(95)
Author Data	Dates of Te	est 2 October 16 2013	Test Report No <b>PTS_60/6_1310_25</b>	FCC ID: I 6A PFV120I W		

Mobile Hot Spot MSL - 802.11g/10mm Device Right -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Area Scan (41x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.00809 W/kg

Mobile Hot Spot MSL - 802.11g/10mm Device Right -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 1.868 V/m; Power Drift = 0.021 dB

Averaged SAR: SAR(1g) = 0.00329 W/kg; SAR(10g) = 0.000859 W/kg Maximum value of SAR (interpolated) = 0.0162 W/kg



0 dB = 0.0612 W/kg = -12.13 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121	LW	Page 91(95)
Author Data	Dates of Te	st 2 Octobor 16 2013	Test Report No <b>DTS 6046 1310 25</b>	FCC ID: I 6 A DEV1201 W		

Mobile Hot Spot MSL - 802.11g/10mm Device Top -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Area Scan (51x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.00602 W/kg

Mobile Hot Spot MSL - 802.11g/10mm Device Top -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Zoom Scan (21x21x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 1.794 V/m; Power Drift = -0.045 dB

Averaged SAR: SAR(1g) = 0.00444 W/kg; SAR(10g) = 0.00213 W/kg Maximum value of SAR (interpolated) = 0.0129 W/kg



0 dB = 0.00278 W/kg = -25.56 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV1211	LW	Page 92(95)
Author Data	Dates of Te	st	Test Report No	FCC ID:		
Andrew Becker	July 12	2 – October 16, 2013	RTS-6046-1310-25	L6ARFV120LW		

Mobile Hot Spot MSL - 802.11g/10mm Device Bottom -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Area Scan (41x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.00385 W/kg

Mobile Hot Spot MSL - 802.11g/10mm Device Bottom -802.11g\_chan6\_amb\_temp\_23.5C\_liq\_temp\_22.4C/Zoom Scan (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm Reference Value = 1.220 V/m; Power Drift = -0.179 dB

Averaged SAR: SAR(1g) = 0.00152 W/kg; SAR(10g) = 0.000458 W/kg Maximum value of SAR (interpolated) = 0.00628 W/kg



0 dB = 0.00539 W/kg = -22.68 dBW/kg

SlackBerry	/	Appendix C2 for the SAR Report	BlackBerry® Smartp	hone Model RFV121	LW	Page 93(95)
Author Data Andrew Becker	Dates of Te July 12	<sup>sst</sup> <b>2 – October 16, 2013</b>	Test Report No RTS-6046-1310-25	FCC ID: L6ARFV120LW		

## Bluetooth

SlackBerry
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FCC ID:

L6ARFV120LW

Date: 7/19/2013

Test Lab: RIM Testing Services

Dates of Test

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2FFFE4E2

#### **Configuration: Mobile Hot Spot MSL -Bluetooth**

Document

Communication System: Bluetooth; Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 2441 MHz Medium Parameters used: f=2441 MHz;  $\sigma$  = 1.998 S/m;  $\varepsilon_r$  = 50.773;  $\rho$  = 1.000 g/cm<sup>3</sup> Phantom section: Flat Section

#### **DASY Configuration:**

- Probe: ES3DV3 - SN3225; ConvF: (4.35,4.35,4.35); Calibrated: 1/10/2013;
- Sensor-Surface: 3 mm (Mechanical Surface Detection) •
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080 •
- DASY52 52.8.6(1115); SEMCAD X Version 14.6.9 (7117) •

Mobile Hot Spot MSL -Bluetooth/10mm Device Back -Bluetooth chan39 amb temp 23.5C lig temp 22.4C/Area Scan (81x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.0153 W/kg

Mobile Hot Spot MSL -Bluetooth/10mm Device Back -Bluetooth chan39 amb temp 23.5C liq temp 22.4C/Zoom Scan (36x36x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm Reference Value = 2.681 V/m; Power Drift = 0.345 dB

#### Averaged SAR: SAR(1g) = 0.0135 W/kg; SAR(10g) = 0.00617 W/kg

Maximum value of SAR (interpolated) = 0.0722 W/kg



0 dB = 0.0184 W/kg = -17.35 dBW/kg