Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

APPENDIX C2: SAR DISTRIBUTION PLOTS FOR HOT SPOT CONFIGURATION



Test Report No FCC ID: **RTS-6026-1302-18 L6ARFN80UW**

GPRS 850

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 Dates of Test
 Test Report No
 FCC ID:
 IC

 Nov 26, 2012- Feb 28, 2013
 RTS-6026-1302-18
 L6ARFN80UW
 2503A-RFN80UW

Date: 2/4/2013

Test Lab: RIM Testing Services

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2AB01FAD

Configuration: MHS_10mm_Body_SAR_Configuration

Communication System: EDGE 850 (2slots); Communication System Band: EDGE 850; Frequency: 836.8 MHz Medium Parameters used: f=836.8 MHz; $\sigma = 0.984$ S/m; $\epsilon_r = 53.016$; $\rho = 1.000$ g/cm³ Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 SN1644; ConvF: (6.06,6.06,6.06); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_EDGE 850_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.3C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 19.897 V/m; Power Drift = 0.078 dB

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_E DGE850_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.3C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 19.897 V/m; **Power Drift = 0.078 dB**

Averaged SAR: SAR(1g) = 0.433 W/kg; SAR(10g) = 0.318 W/kg Maximum value of SAR (interpolated) = 0.611 W/kg

Testing Services	Appendix C2 for the BlackBe Report	Page 4(73)			
Author Data Andrew Becker	Dates of Test Nov 26, 2012- Feb 28, 2013	Test Report No RTS-6026-1302-18	FCC ID: L6ARFN80UW	іс 2503А	A-RFN80UW
dB 0					



 $0 \ dB = 0.457 \ W/kg = -3.40 \ dBW/kg$

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_EDGE 850_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.4C/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 18.803 V/m; Power Drift = 0.194 dB

Fast SAR: SAR(1g) = 0.322 W/kg; SAR(10g) = 0.226 W/kg Maximum value of SAR (interpolated) = 0.341 W/kg



0 dB = 0.457 W/kg = -3.40 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	Nov 26, 2012- Feb 28, 2013 RTS-6026-1302-18 L6ARFN80UW 2503A			

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_EDGE8 50_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.4C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 20.578 V/m; Power Drift = 0.029 dB

Fast SAR: SAR(1g) = 0.363 W/kg; SAR(10g) = 0.251 W/kg Maximum value of SAR (interpolated) = 0.386 W/kg



0 dB = 0.341 W/kg = -4.67 dBW/kg

Testing Services	Document Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_EDGE 850_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.4C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 15.631 V/m; Power Drift = -0.052 dB

Fast SAR: SAR(1g) = 0.214 W/kg; SAR(10g) = 0.147 W/kg Maximum value of SAR (interpolated) = 0.228 W/kg



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

Testing Services	Document Page Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Page Report 8(73)				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013 RTS-6026-1302-18 L6ARFN80UW 2503A-				A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_ED GE850_Mid_chan_Amb_Temp_23.1C_Liq_Temp_21.4C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 7.935 V/m; Power Drift = -0.074 dB

Fast SAR: SAR(1g) = 0.0633 W/kg; SAR(10g) = 0.0390 W/kg Maximum value of SAR (interpolated) = 0.0725 W/kg



0 dB = 0.228 W/kg = -6.42 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_E DGE850_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.3C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 17.680 V/m; Power Drift = -0.052 dB

Fast SAR: SAR(1g) = 0.391 W/kg; SAR(10g) = 0.268 W/kg Maximum value of SAR (interpolated) = 0.412 W/kg



0 dB = 0.452 W/kg = -3.45 dBW/kg

Testing Services	Appendix C2 for the BlackBer Report	Page 10(73)			
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	A-RFN80UW			

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100m A_EDGE850_Mid_chan_Amb_Temp_23.1C_Liq_Temp_21.3C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 20.308 V/m; Power Drift = -0.020 dB

Fast SAR: SAR(1g) = 0.432 W/kg; SAR(10g) = 0.299 W/kg Maximum value of SAR (interpolated) = 0.452 W/kg



0 dB = 0.0725 W/kg = -11.40 dBW/kg

Testing Services	Appendix C2 for the BlackBer Report	Page 11(73)			
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	A-RFN80UW			

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_3-Slot_EDGE850_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.3C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 19.923 V/m; Power Drift = -0.185 dB

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_3-Slot_EDGE850_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.3C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 19.923 V/m; **Power Drift = -0.185 dB**

Averaged SAR: SAR(1g) = 0.411 W/kg; SAR(10g) = 0.302 W/kg Maximum value of SAR (interpolated) = 0.570 W/kg





Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013 RTS-6026-1302-18 L6ARFN80UW 2503A-				A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_4-Slot_EDGE850_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.3C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 19.605 V/m; Power Drift = 0.048 dB

Fast SAR: SAR(1g) = 0.412 W/kg; SAR(10g) = 0.285 W/kg Maximum value of SAR (interpolated) = 0.433 W/kg



0 dB = 0.436 W/kg = -3.61 dBW/kg



2503A-RFN80UW

UMTS Band V

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Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A-RFN80UW
Dates of Test	Test Report No	FCC ID:	IC

Date: 2/5/2013

Test Lab: RIM Testing Services

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2AB01FAD

Configuration: MHS_10mm_Body_SAR_Configuration_UMTS_Band_V

Communication System: WCDMA FDD V; Communication System Band: UMTS band V; Frequency: 836.4 MHz

Medium Parameters used: f=836.4 MHz; $\sigma = 0.983$ S/m; $\epsilon_r = 53.022$; $\rho = 1.000$ g/cm³ Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 SN1644; ConvF: (6.06,6.06,6.06); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Dev ice_Back_UMTS_Band_V_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.3C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 19.625 V/m; Power Drift = -0.00193 dB

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer _Device_Back_UMTS_Band_V_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21. 3C/Zoom Scan (5x5x7) (26x31x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 19.625 V/m; **Power Drift = -0.00193 dB**

Averaged SAR: SAR(1g) = 0.380 W/kg; SAR(10g) = 0.283 W/kg Maximum value of SAR (interpolated) = 0.538 W/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Page 15(73) Report 15(73)					
Author Data Andrew Becker	Dates of Test Nov 26, 2012- Feb 28, 2013	Test Report No RTS-6026-1302-18	FCC ID: L6ARFN80UW	іс 2503 А	A-RFN80UW	
dB 0						



0 dB = 0.400 W/kg = -3.98 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 16(73)
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Dev ice_Front_UMTS_Band_V_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.4C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 18.921 V/m; Power Drift = -0.029 dB

Fast SAR: SAR(1g) = 0.343 W/kg; SAR(10g) = 0.241 W/kg Maximum value of SAR (interpolated) = 0.364 W/kg



0 dB = 0.400 W/kg = -3.98 dBW/kg

Testing Services	Document Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 17(73)
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013 RTS-6026-1302-18 L6ARFN80UW 2503A			A-RFN80UW	

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Dev ice_Left_UMTS_Band_V_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.4C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 19.802 V/m; Power Drift = 0.046 dB

Fast SAR: SAR(1g) = 0.341 W/kg; SAR(10g) = 0.237 W/kg Maximum value of SAR (interpolated) = 0.363 W/kg



0 dB = 0.364 W/kg = -4.39 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 18(73)
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013 RTS-6026-1302-18 L6ARFN80UW 2503A			A-RFN80UW	

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Dev ice_Right_UMTS_Band_V_Mid_chan_Amb_Temp_23.2C_Liq_Temp_21.4C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 15.509 V/m; Power Drift = 0.040 dB

Fast SAR: SAR(1g) = 0.203 W/kg; SAR(10g) = 0.140 W/kg Maximum value of SAR (interpolated) = 0.216 W/kg



0 dB = 0.363 W/kg = -4.40 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 19(73)
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013 RTS-6026-1302-18 L6ARFN80UW 2503A			A-RFN80UW	

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Dev ice_Bottom_UMTS_Band_V_Mid_chan_Amb_Temp_23.1C_Liq_Temp_21.4C/Are a Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 8.692 V/m; Power Drift = -0.086 dB

Fast SAR: SAR(1g) = 0.0736 W/kg; SAR(10g) = 0.0461 W/kg Maximum value of SAR (interpolated) = 0.0821 W/kg



0 dB = 0.216 W/kg = -6.66 dBW/kg

Testing Services	Document Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 20(73)
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	-RFN80UW

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Dev ice_Back+HS_UMTS_Band_V_Mid_chan_Amb_Temp_23.3C_Liq_Temp_21.3C/Ar ea Scan (61x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 16.915 V/m; Power Drift = -0.055 dB

Fast SAR: SAR(1g) = 0.361 W/kg; SAR(10g) = 0.245 W/kg Maximum value of SAR (interpolated) = 0.382 W/kg



0 dB = 0.0821 W/kg = -10.86 dBW/kg

Testing Services	Document Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 21(73)
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration_UMTS_Band_V/MHS_10mm_Spacer_Dev ice_Back_2100mA_UMTS_Band_V_Mid_chan_Amb_Temp_23.1C_Liq_Temp_21.3 C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 18.844 V/m; Power Drift = 0.042 dB

Fast SAR: SAR(1g) = 0.384 W/kg; SAR(10g) = 0.269 W/kg Maximum value of SAR (interpolated) = 0.401 W/kg



0 dB = 0.382 W/kg = -4.18 dBW/kg

Testing Services	Doc Aj Re
Author Data Andrew Becker	Date

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GPRS 1900

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 Dates of Test
 Test Report No
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 Nov 26, 2012- Feb 28, 2013
 RTS-6026-1302-18
 FCC ID:
 IC

Date/Time: 11/27/2012 2:03:58 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_low_chan_amb_temp_24.0_liq_ temp_22.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1850.2 MHz Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.475$ mho/m; $\epsilon_r = 50.869$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (interpolated) = 1.150 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 10.941 V/m; Power Drift = -0.0075 dB Peak SAR (extrapolated) = 1.5530 SAR(1 g) = 0.913 mW/g; SAR(10 g) = 0.526 mW/g

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (measured) = 1.078 mW/g





 Dates of Test
 Test Report No
 FCC ID:
 IC

 Nov 26, 2012- Feb 28, 2013
 RTS-6026-1302-18
 L6ARFN80UW
 2503A-RFN80UW

Date/Time: 11/27/2012 9:44:34 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_low_2nd

Scan_chan_amb_temp_24.6_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1850.2 MHz Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.475$ mho/m; $\epsilon_r = 50.869$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (interpolated) = 1.144 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 10.937 V/m; Power Drift = -0.11 dB Peak SAR (extrapolated) = 1.5930 SAR(1 g) = 0.921 mW/g; SAR(10 g) = 0.529 mW/g

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (measured) = 1.125 mW/g



0 dB = 1.120 mW/g = 0.98 dB mW/g



 Dates of Test
 Test Report No
 FCC ID:
 IC

 Nov 26, 2012- Feb 28, 2013
 RTS-6026-1302-18
 L6ARFN80UW
 2503A-RFN80UW

Date/Time: 11/27/2012 12:57:40 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_mid_chan_amb_temp_24.0_liq_ temp_22.4C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1880 MHz Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ϵ_r = 50.828; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid:

dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.107 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mmReference Value = 9.369 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 1.4800 SAR(1 g) = 0.863 mW/g; SAR(10 g) = 0.494 mW/g Maximum value of SAR (measured) = 1.021 mW/g





RTS-6026-1302-18

Test Report No

Date/Time: 11/27/2012 2:24:53 PM

L6ARFN80UW

FCC ID:

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_high_chan_amb_temp_24.0_liq _temp_22.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1909.8 MHz Medium parameters used: f = 1910 MHz; σ = 1.527 mho/m; ϵ_r = 50.643; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid:

dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.057 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mmReference Value = 8.910 V/m; Power Drift = -0.08 dB Peak SAR (extrapolated) = 1.4420 SAR(1 g) = 0.827 mW/g; SAR(10 g) = 0.468 mW/g Maximum value of SAR (measured) = 0.984 mW/g





 Dates of Test
 Test Report No
 FCC ID:
 IC

 Nov 26, 2012- Feb 28, 2013
 Test Report No
 FCC ID:
 IC

Date/Time: 11/27/2012 5:38:36 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Front_GPRS1900_mid_chan_amb_temp_23.8_liq_ temp_21.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1880 MHz Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ϵ_r = 50.828; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid:

dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.625 mW/g

Configuration/Touch position -/Zoom Scan (5x5x7) (7x7x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 8.692 V/m; Power Drift = -0.12 dB Peak SAR (extrapolated) = 0.8330 SAR(1 g) = 0.498 mW/g; SAR(10 g) = 0.300 mW/g Maximum value of SAR (measured) = 0.599 mW/g

Configuration/Touch position -/Zoom Scan 2 (5x5x7) (6x7x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 8.692 V/m; Power Drift = -0.26 dB Peak SAR (extrapolated) = 0.8220 SAR(1 g) = 0.489 mW/g; SAR(10 g) = 0.295 mW/g Maximum value of SAR (measured) = 0.586 mW/g



0 dB = 0.590 mW/g = -4.58 dB mW/g



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 FCC ID:
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Test Laboratory: RIM Testing Services

Document

MHS_10mm_Spacer_Left_GPRS1900_mid_chan_amb_temp_23.9_liq_t emp_21.5C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1880 MHz Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ϵ_r = 50.828; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (41x111x1): Measurement grid:

dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.374 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 13.541 V/m; Power Drift = -0.08 dB Peak SAR (extrapolated) = 0.5250 **SAR(1 g) = 0.305 mW/g; SAR(10 g) = 0.173 mW/g** Maximum value of SAR (measured) = 0.376 mW/g





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 FCC ID:
 IC

Date/Time: 11/27/2012 6:56:29 PM

Test Laboratory: RIM Testing Services

Document

MHS_10mm_Spacer_Right_GPRS1900_mid_chan

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Communication System Band: GPRS 1900; Frequency: 1880 MHz;Communication System PAR: 6.232 dB; PMF: 2.04927 Medium parameters used: f = 1880 MHz; $\sigma = 1.499$ S/m; $\epsilon_r = 50.828$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012;
 Modulation Compensation: Not calibrated
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.8(7028)

Configuration/Touch position -/Area Scan (41x111x1): Interpolated grid:

dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 0.230 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 12.490 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 0.298 W/kg SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.110 W/kg Maximum value of SAR (measured) = 0.221 W/kg



-6.95

-10.42

-13.90

-17.37

0 dB = 0.221 W/kg = -6.56 dBW/kg

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 FCC ID:
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Date/Time: 11/27/2012 7:30:57 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Bottom_GPRS1900_mid_chan_amb_temp_24.2_li q_temp_21.6C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1880 MHz Medium parameters used: f = 1880 MHz; σ = 1.499 mho/m; ϵ_r = 50.828; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (41x81x1): Measurement grid:

dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.650 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 20.173 V/m; Power Drift = -0.07 dB Peak SAR (extrapolated) = 0.8780 SAR(1 g) = 0.521 mW/g; SAR(10 g) = 0.292 mW/g Maximum value of SAR (measured) = 0.646 mW/g



0 dB = 0.650 mW/g = -3.74 dB mW/g



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Date/Time: 11/27/2012 8:38:20 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_Headset_GPRS1900_low_chan_amb_temp _24.8_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1850.2 MHz Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.475$ mho/m; $\epsilon_r = 50.869$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (interpolated) = 1.094 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 11.016 V/m; Power Drift = -0.06 dB Peak SAR (extrapolated) = 1.4920 SAR(1 g) = 0.886 mW/g; SAR(10 g) = 0.517 mW/g

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (measured) = 1.034 mW/g





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 FCC ID:
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Date/Time: 11/27/2012 9:02:10 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_3-

slots_low_chan_amb_temp_24.8_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900 (3-slots); Frequency: 1850.2 MHz Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.475$ mho/m; $\epsilon_r = 50.869$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (interpolated) = 0.923 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 9.881 V/m; Power Drift = 0.11 dB Peak SAR (extrapolated) = 1.2470 SAR(1 g) = 0.739 mW/g; SAR(10 g) = 0.427 mW/g

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (measured) = 0.893 mW/g



0 dB = 0.890 mW/g = -1.01 dB mW/g



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 L6ARFN80UW
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Date/Time: 11/27/2012 9:22:03 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_4-

slots_low_chan_amb_temp_24.6_liq_temp_21.3C

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900 (4-slots); Frequency: 1850.2 MHz Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.475$ mho/m; $\epsilon_r = 50.869$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (interpolated) = 1.074 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 10.480 V/m; Power Drift = 0.04 dB Peak SAR (extrapolated) = 1.4280 SAR(1 g) = 0.847 mW/g; SAR(10 g) = 0.489 mW/g

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (measured) = 1.009 mW/g



0 dB = 1.010 mW/g = 0.09 dB mW/g



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Date/Time: 12/2/2012 7:03:15 PM

Test Laboratory: RIM Testing Services

MHS_10mm_Spacer_Back_GPRS1900_low_chan_amb_temp_24.3_liq_ temp_21.9C_2100

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 25CF0BA5

Communication System: GPRS 1900; Frequency: 1850.2 MHz Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 52.375$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV3 SN3225; ConvF(4.92, 4.92, 4.92); Calibrated: 1/11/2012
- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 2.0, 32.0
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Configuration/Touch position -/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (interpolated) = 1.136 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 14.037 V/m; Power Drift = -0.0025 dB Peak SAR (extrapolated) = 1.5830 SAR(1 g) = 0.942 mW/g; SAR(10 g) = 0.549 mW/g

Info: Interpolated medium parameters used for SAR evaluation. Maximum value of SAR (measured) = 1.138 mW/g



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 L6ARFN80UW

UMTS Band II

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Dates of Test	Test Report No	FCC ID:	IC

Date: 1/30/2013

Test Lab: RIM Testing Services

DUT Name: BlackBerry Smartphone, Type: Sample, Serial: 2AB01FAD

Configuration: MHS_10mm_Body_SAR_Configuration

Communication System: WCDMA FDD II; Communication System Band: UMTS FDD II; Frequency: 1907.6 MHz Medium Parameters used: f=1907.6 MHz; σ = 1.571 S/m; ϵ_r = 50.831; ρ = 1.000 g/cm³ Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 SN1644; ConvF: (4.75,4.75,4.75); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS _II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 10.388 V/m; Power Drift = 0.028 dB

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_U MTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 10.388 V/m; **Power Drift = 0.028 dB**

Averaged SAR: SAR(1g) = 1.20 W/kg; SAR(10g) = 0.688 W/kg Maximum value of SAR (interpolated) = 1.89 W/kg





0 dB = 1.28 W/kg = 1.07 dBW/kg

Testing Services	Appendix C2 for the BlackBer Report	Document Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report			
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS _II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 10.819 V/m; Power Drift = 0.103 dB

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_U MTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 10.819 V/m; **Power Drift = 0.103 \text{ dB}**

Averaged SAR: SAR(1g) = 1.10 W/kg; SAR(10g) = 0.629 W/kg Maximum value of SAR (interpolated) = 1.73 W/kg



0 dB = 1.28 W/kg = 1.07 dBW/kg

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Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_UMTS _II_Low_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 12.027 V/m; Power Drift = 0.171 dB

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_U MTS_II_Low_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 12.027 V/m; Power Drift = 0.171 dB

Averaged SAR: SAR(1g) = 1.10 W/kg; SAR(10g) = 0.622 W/kg Maximum value of SAR (interpolated) = 1.74 W/kg



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

Testing Services	Appendix C2 for the BlackBer Report	Document Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report			
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Front_UMT S_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 9.639 V/m; Power Drift = -0.113 dB

Fast SAR: SAR(1g) = 0.525 W/kg; SAR(10g) = 0.314 W/kg; Secondary SAR(1g) = 0.442 W/kg Maximum value of SAR (interpolated) = 0.585 W/kg



0 dB = 1.19 W/kg = 0.76 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 53(73)
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013 RTS-6026-1302-18 L6ARFN80UW 2503A-			A-RFN80UW	

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Right_UMTS _II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 10.188 V/m; **Power Drift = 0.040 dB**

Fast SAR: SAR(1g) = 0.155 W/kg; SAR(10g) = 0.0902 W/kg; Secondary SAR(1g) = 0.0742 W/kg Maximum value of SAR (interpolated) = 0.171 W/kg



0 dB = 0.585 W/kg = -2.33 dBW/kg

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Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Left_UMTS_ II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (31x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 13.038 V/m; Power Drift = 0.109 dB

Fast SAR: SAR(1g) = 0.356 W/kg; SAR(10g) = 0.198 W/kg; Secondary SAR(1g) = 0.212 W/kg Maximum value of SAR (interpolated) = 0.407 W/kg



0 dB = 0.171 W/kg = -7.67 dBW/kg

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Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Bottom_UM TS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.3C/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 17.292 V/m; Power Drift = 0.058 dB

Fast SAR: SAR(1g) = 0.556 W/kg; SAR(10g) = 0.304 W/kg; Secondary SAR(1g) = 0.212 W/kg Maximum value of SAR (interpolated) = 0.640 W/kg



0 dB = 0.407 W/kg = -3.90 dBW/kg

Testing Services	Document Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 56(73)
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Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+HS_U MTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 10.535 V/m; Power Drift = -0.059 dB

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back+H S_UMTS_II_Mid_chan_Amb_Temp_23.4C_Liq_Temp_22.5C 2/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 10.535 V/m; **Power Drift = -0.059 dB**

Averaged SAR: SAR(1g) = 1.03 W/kg; SAR(10g) = 0.606 W/kg Maximum value of SAR (interpolated) = 1.61 W/kg



0 dB = 0.640 W/kg = -1.94 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				Page 57(73)
Author Data	Dates of Test	Test Report No	FCC ID:	іс	A-RFN80UW
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503А	

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2100m A_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 11.081 V/m; Power Drift = 0.102 dB

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2 100mA_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 11.081 V/m; **Power Drift = 0.102 \text{ dB}**

Averaged SAR: SAR(1g) = 1.13 W/kg; SAR(10g) = 0.668 W/kg Maximum value of SAR (interpolated) = 1.78 W/kg



0 dB = 1.09 W/kg = 0.37 dBW/kg

Testing Services	Document Appendix C2 for the BlackBer Report	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report			
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Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503А	

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2nd_sc an_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Reference Value = 10.466 V/m; Power Drift = 0.087 dB

MHS_10mm_Body_SAR_Configuration/MHS_10mm_Spacer_Device_Back_2 nd_scan_UMTS_II_High_chan_Amb_Temp_23.4C_Liq_Temp_22.5C/Zoom Scan (5x5x7) (26x26x36)/Cube 0: Interpolated grid: dx=1.500 mm, dy=1.500 mm, dz=1.000 mm

Reference Value = 10.466 V/m; **Power Drift = 0.087 \text{ dB}**

Averaged SAR: SAR(1g) = 1.30 W/kg; SAR(10g) = 0.728 W/kg Maximum value of SAR (interpolated) = 2.09 W/kg



0 dB = 1.24 W/kg = 0.93 dBW/kg

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Andrew Becker	Nov 26, 2012, Feb 28, 2013	RTS-6026-1302-18	L6AREN8011W	2503A	-RENSOLIW

802.11b

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Dates of Test	Test Report No
Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18

2503A-RFN80UW

Date: 1/21/2013

L6ARFN80UW

Test Lab: RIM Testing Services

DUT Name: BlackBerry Smartphone_Left_Right Side, Type: Sample , Serial: 25CF0AD9

Configuration: Flat-Section MSL_MHS_Body_SAR_Left_Right_802.11b

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

Medium Parameters used: f=2437 MHz; σ = 1.889 S/m; ϵ_r = 51.148; ρ = 1.000 g/cm³ Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 SN1644; ConvF: (4.11,4.11,4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_Body_SAR_Left_Right/Device

Left_10mm_Amb_Temp_23.8C_Liquid_Temp_22.0C/Area Scan (41x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.317 W/kg



0 dB = 0.317 W/kg = -4.99 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	-RFN80UW

Flat-Section MSL_MHS_Body_SAR_Left_Right/Device Right_10mm_Amb_Temp_23.3C_Liquid_Temp_21.4C/Area Scan (41x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0918 W/kg



0 dB = 0.317 W/kg = -4.99 dBW/kg



RTS-6026-1302-18 L6ARFN80UW 2503

2503A-RFN80UW

Date: 1/21/2013

Test Lab: RIM Testing Services DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 25CF0AD9

Configuration: Flat-Section MSL_MHS_Body_SAR_802.11b

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

Medium Parameters used: f=2437 MHz; σ = 1.889 S/m; ϵ_r = 51.148; ρ = 1.000 g/cm³ Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 SN1644; ConvF: (4.11,4.11,4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_Body_SAR/Device Front_10mm_Amb_Temp_23.7C_Liquid_Temp_22.1C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.114 W/kg

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Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013 RTS-6026-1302-18 L6ARFN80UW 2503A-RFN80UW				
dB	•	·		•	



0 dB = 0.833 W/kg = -0.79 dBW/kg

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Testing Services	Document Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

Flat-Section MSL_MHS_Body_SAR/Device Top_10mm_Amb_Temp_23.4C_Liquid_Temp_21.4C/Area Scan (41x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.258 W/kg



0 dB = 0.114 W/kg = -9.43 dBW/kg

L6ARFN80UW 2503A-RFN80UW

Date: 2/28/2013

Test Lab: RIM Testing Services

DUT Name: BlackBerry Smartphone_Top_Bottom, Type: Sample , Serial: 2AB01FAD

Configuration: Flat-Section MSL_MHS_Body_SAR 802.11b Rev3-02

Communication System: 802.11 b (2450); Communication System Band: 802.11 b; Frequency: 2437 MHz Medium Parameters used: f=2437 MHz: $\alpha = 1.919$ S/m: s = 50.246: o = 1.000 g/cm³

Medium Parameters used: f=2437 MHz; σ = 1.919 S/m; ϵ_r = 50.246; ρ = 1.000 g/cm³ 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: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_Body_SAR 802.11b Rev3-02/Device

Back_10mm_802.11b_Chan_6_Amb_Temp_24.2C_Liquid_Temp_20.5C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.491 W/kg

Flat-Section MSL_MHS_Body_SAR 802.11b Rev3-02/Device Back_10mm_802.11b_Chan_6_Amb_Temp_24.2C_Liquid_Temp_20.5C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm Reference Value = 6.386 V/m; Power Drift = -0.039 dB

Averaged SAR: SAR(1g) = 0.374 W/kg; SAR(10g) = 0.178 W/kg

Maximum value of SAR (interpolated) = 0.785 W/kg

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Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503 A	A-RFN80UW
dB	V	*			

0 dB = 0.481 W/kg = -3.18 dBW/kg

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Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Recker	Nov 26 2012, Feb 28 2013	RTS-6026-1302-18	I 6A RENSOLIW	25034	-RENSOLIW

Flat-Section MSL_MHS_Body_SAR 802.11b Rev3-02/Device Back_10mm_Headset_802.11b_Chan_6_Amb_Temp_23.6C_Liquid_Temp_20.6C/Area Scan (71x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.325 W/kg

Flat-Section MSL_MHS_Body_SAR 802.11b Rev3-02/Device Back_10mm_Headset_802.11b_Chan_6_Amb_Temp_23.6C_Liquid_Temp_20.6C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm Reference Value = 5.456 V/m; Power Drift = 0.016 dB

Averaged SAR: SAR(1g) = 0.272 W/kg; SAR(10g) = 0.129 W/kg

Maximum value of SAR (interpolated) = 0.582 W/kg

0 dB = 0.481 W/kg = -3.18 dBW/kg

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Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012, Feb 28, 2013	RTS-6026-1302-18	L6AREN80UW	25034	-RFN80UW

Flat-Section MSL_MHS_Body_SAR 802.11b Rev3-02/Device Back_10mm_802.11b_Chan_6_2100mA_Batt_Amb_Temp_23.3C_Liquid_Temp_20.6C/Area Scan (71x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.478 W/kg

Flat-Section MSL_MHS_Body_SAR 802.11b Rev3-02/Device Back_10mm_802.11b_Chan_6_2100mA_Batt_Amb_Temp_23.3C_Liquid_Temp_20.6C/Zoom Scan (31x31x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm Reference Value = 6.780 V/m; Power Drift = 0.071 dB

Averaged SAR: SAR(1g) = 0.371 W/kg; SAR(10g) = 0.175 W/kg Maximum value of SAR (interpolated) = 0.784 W/kg

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

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Andrew Becker]

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Bluetooth

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 FCC ID:
 IC

 Nov 26, 2012- Feb 28, 2013
 RTS-6026-1302-18
 L6ARFN80UW
 2503A-RFN80UW

Date: 1/22/2013

Test Lab: RIM Testing Services

DUT Name: BlackBerry Smartphone, Type: Sample , Serial: 25CF0BA5

Configuration: Flat-Section MSL_MHS_Body_SAR

Communication System: Bluetooth; Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 2441 MHz Medium Parameters used: f=2441 MHz; $\sigma = 1.894$ S/m; $\epsilon_r = 51.135$; $\rho = 1.000$ g/cm³ Phantom section: Flat Section

DASY Configuration:

- Probe: ET3DV6 SN1644; ConvF: (4.11,4.11,4.11); Calibrated: 11/13/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- DASY52 52.8.4(1052); SEMCAD X Version 14.6.8 (7028)

Flat-Section MSL_MHS_Body_SAR/Device

Back_10mm_Amb_Temp_24.0C_Liquid_Temp_22C/Area Scan (71x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Reference Value = 0.224 V/m; Power Drift = -0.011 dB

Flat-Section MSL_MHS_Body_SAR/Device Back_10mm_Amb_Temp_24.0C_Liquid_Temp_22C/Zoom Scan (36x51x36)/Cube 0: Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 0.224 V/m; **Power Drift = -0.011 dB**

Averaged SAR: SAR(1g) = 0.000246 W/kg; SAR(10g) = 0.0000593 W/kg Maximum value of SAR (interpolated) = 0.00692 W/kg

0 dB = 0.00692 W/kg = -21.60 dBW/kg

Testing Services	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report				
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

Flat-Section MSL_MHS_Body_SAR/Device Top_10mm_Amb_Temp_23.4C_Liquid_Temp_21.4C/Area Scan (41x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Reference Value = 0.470 V/m; Power Drift = 0.140 dB

Fast SAR: SAR(1g) = 0.00120 W/kg; SAR(10g) = 0.000254 W/kg; Secondary SAR(1g) = 0.000389 W/kg Maximum value of SAR (interpolated) = 0.00411 W/kg

0 dB = 0.00692 W/kg = -21.60 dBW/kg
Testing Services	Appendix C2 for the BlackBer Report	Appendix C2 for the BlackBerry® Smartphone Model RFN81UW SAR Report			
Author Data	Dates of Test	Test Report No	FCC ID:	IC	
Andrew Becker	Nov 26, 2012- Feb 28, 2013	RTS-6026-1302-18	L6ARFN80UW	2503A	A-RFN80UW

Z axis plot for the worst case hot spot configuration



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