

	Document Partial SAR Compliance Test Report for the BlackBerry® Smartphone RFX101LW SAR Report			Page 1(6)
Author Data Daoud Attayi	Dates of Test March 24-26, 2014	Test Report No RTS-6046-1404-01	FCC ID: L6AREX100LW	IC ID

Testing Lab:	BlackBerry RTS 440 Phillip Street Waterloo, Ontario Canada N2L 5R9 Phone: 519-888-7465 Fax: 519-746-0189	Applicant:	BlackBerry Limited 295 Phillip Street Waterloo, Ontario Canada N2L 3W8 Phone: 519-888-7465 Fax: 519-888-6906
---------------------	---	-------------------	---

Web site: www.BlackBerry.com

Statement of Compliance: BlackBerry RTS declares under its sole responsibility that the product to which this declaration relates, is in conformity with the appropriate RF exposure standards, recommendations and guidelines. It also declares that the product was tested in accordance with the appropriate measurement standards, guidelines and recommended practices.

Device Category: This BlackBerry® Smartphone is a portable device, designed to be used in direct contact with the user's head, hand and to be carried in approved accessories when carried on the user's body.

RF Exposure Environment: This device has been shown to be in compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in, FCC 96-326, IEEE Std. C95.1-2005, Health Canada's Safety Code 6, as reproduced in RSS-102 issue 4-2010 and has been tested in accordance with the measurement procedures specified in latest FCC OET KDB Procedures, ANSI/IEEE Std. C95.3-2002, IEEE 1528-2003, IEC 62209-1-2005, IEC 62209 - 2-2010 and Health Canada's Safety Code 6.

Andrew Becker
SAR & HAC Compliance Specialist
(Author of the Test Report)

Daoud Attayi
Compliance Systems Analyst II
SAR & HAC Compliance Lead
(Verification and responsible of the Test Report)

Masud S. Attayi
Manager, Regulatory Compliance
(Approval for the Test Report)

RTS is accredited
according to
EN ISO/IEC 17025 by:



592

	Document Partial SAR Compliance Test Report for the BlackBerry® Smartphone RFX101LW SAR Report			Page 2(6)
Author Data Daoud Attayi	Dates of Test March 24-26, 2014	Test Report No RTS-6046-1404-01	FCC ID: L6AREX100LW	IC ID

Revision History:

Partial SAR test report number: RTS-6046-1404-01 has been issued on April 30, 2014.

Measured conducted power data for Wi-Fi Direct/GO mode in the Table 1.

For full SAR test data and report, please refer to Cetecom test report number: 1-6234_13-06-02-C.

	Document Partial SAR Compliance Test Report for the BlackBerry® Smartphone RFX101LW SAR Report			Page 3(6)
	Author Data Daoud Attayi	Dates of Test March 24-26, 2014	Test Report No RTS-6046-1404-01	FCC ID: L6AREX100LW

1.0 TEST RESULTS

802.11b @ 1Mbps		802.11g @ 6Mbps		802.11n @ 6.5 Mbps	
Chan	Max. Avg. Cond. Power (dBm)	Chan	Max. Avg. Cond. Power (dBm)	Chan	Max. Avg. Cond. Power (dBm)
1	10.3	1	9.9	1	10.0
6	10.1	6	10.1	6	10.1
11	10.2	11	10.2	11	10.2
802.11g			802.11b		
Date Rate (Mbps)	Mod.	Channel 11	Data Rate (Mbps)	Mod .	Channel 11
		Max. Avg. Cond. Power (dBm)			Max. Avg. Cond. Power (dBm)
18	QPSK	10.1	5.5	CCK	10.2
54	64-QAM	10.1	11	CCK	10.1
802.11n					
Date Rate (Mbps)	Mod.	Channel 11			
		Max. Avg. Cond. Power (dBm)			
	MCS3	10.2			
	MCS7	10.1			

Table 1: 802.11 b/g/n modulation type/data rate vs. maximum average conducted power in Wi-Fi Direct/GO mode

	Document Partial SAR Compliance Test Report for the BlackBerry® Smartphone RFX101LW SAR Report			Page 4(6)
Author Data Daoud Attayi	Dates of Test March 24-26, 2014	Test Report No RTS-6046-1404-01	FCC ID: L6AREX100LW	IC ID

2.0 TEST EQUIPMENT

Manufacturer	Test Equipment	Model Number	Serial Number	Cal. Due Date (MM/DD/YY)
Agilent Technologies	Power meter	N1911A	MY45100905	05/29/2015
Agilent Technologies	Power sensor	N1921A	SG45240281	12/04/2014

Table 2: Equipment list for Wi-Fi Direct/GO additional testing

	Document Partial SAR Compliance Test Report for the BlackBerry® Smartphone RFX101LW SAR Report			Page 5(6)
Author Data Daoud Attayi	Dates of Test March 24-26, 2014	Test Report No RTS-6046-1404-01	FCC ID: L6AREX100LW	IC ID

3.0 REFERENCES

[1] IEEE 1528-2003: Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

[2] EN 50360: 2001, Product standard to demonstrate the compliance of mobile phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz – 3 GHz)

[3] ICNIRP, International Commission on Non-Ionizing Radiation Protection (2009), Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz).

[4] Council Recommendation 1999/519/EC of July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)

[5] IEEE C95.3-2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave.

[6] IEEE C95.1-2005, IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

[7] FCC 96-326, Guidelines for Evaluating the Environmental Effects of Radio-Frequency Radiation.

[8] DASY 5 DOSIMETRIC ASSESSMENT SYSTEM SOFTWARE MANUAL, Schmid & Partner Engineering AG.

[9] Health Canada, Safety Code 6, 2009: Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency range from 3 kHz to 300 GHz.

[10] RSS-102, issue 4-2010: Evaluation Procedure for Mobile and Portable Radio Transmitters with respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields.

[11] IEC 62209-1, First Edition-2005: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz).

[12] IEC 62209-2, Edition 1.0-2010: Human exposure to radio frequency fields from hand-held and body-mount wireless communication devices – Human Models, instrumentation, and procedures - part 2 - procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz).

[13] IEC/EN 62311-2008: Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz).

[14] 3GPP TS 36.521-1 V10.0.0 (2011-12): Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 1: Conformance testing

	Document Partial SAR Compliance Test Report for the BlackBerry® Smartphone RFX101LW SAR Report			Page 6(6)
Author Data Daoud Attayi	Dates of Test March 24-26, 2014	Test Report No RTS-6046-1404-01	FCC ID: L6AREX100LW	IC ID

[15] FCC OET SAR measurement 100 MHz to 6 GHz, KDB 865664 D01 v01, October 24, 2012.

[16] FCC OET SAR Measurement Procedures for 802.11 a/b/g Transmitters, KDB 248227 D01 v01r02, May, 2007.

[17] FCC OET SAR Evaluation Considerations for Handsets with Multiple Transmitters & Antennas, KDB 648474 D04 v01, October 24, 2012.

[18] FCC OET SAR Test Reduction Procedure for GSM/GPRS/EDGE, KDB 941225 D03 vo1, December, 2008.

[19] FCC OET SAR Test Procedure for Evaluating SAR for GSM/(E)GPRS Dual Transfer Mode, KDB 941225 D04 v01, January 27, 2010.

[20] FCC OET RF Exposure Procedures for Mobile and Portable Devices, and Equipment Authorization Policies, KDB 447498 D01 v05, October 24, 2012.

[21] FCC OET SAR Measurements Procedures for 3G Devices, KDB 941225 D01 v02, October, 2007.

[22] FCC OET SAR Evaluation Procedure for Portable Devices with Wireless Router capability, KDB 941225 D06 Hot Spot SAR v01, April 04, 2011.

[23] FCC OET SAR Evaluation Considerations for LTE Devices, KDB 941225 D05 v02, October 24, 2012.

[24] FCC OET RF Exposure Compliance Reporting and Documentation Considerations, KDB 865664 D02 v01, October 24, 2012.

[25] IEEE 1528-2011: Draft “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.”

[26] IEC 62209-1: 2011, Draft “Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz