

## 11.0 TEST RESULTS

### 11.1 Conducted power results at maximum transmit power

GSM/EDGE/GPRS/DTM For Normal Mode					
Mode	Ch.	Freq. (MHz)	Max burst avg. conducted power (dBm) (GMSK) CS1	Max burst avg. conducted power (dBm) (GMSK) MCS1	Max burst avg. conducted power (dBm) (8PSK) MCS5
1-slot GSM 850 MHz	128	824.2	32.5		
	190	836.8	32.7		
	251	848.8	32.8		
2-slots DTM 850 MHz	128	824.2	30.8	30.7	30.7
	190	836.8	30.9	30.9	30.9
	251	848.8	31.0	31.0	31.0
3-slots DTM 850 MHz	128	824.2	29.4	29.4	29.4
	190	836.8	29.6	29.6	29.6
	251	848.8	29.2	29.2	29.2
1-slot EDGE/GPRS 850 MHz	128	824.2	32.7	32.6	26.7
	190	836.8	32.8	32.8	26.7
	251	848.8	32.9	32.9	26.7
2-slots EDGE/GPRS 850 MHz	128	824.2	30.8	30.8	25.0
	190	836.8	30.9	30.9	25.1
	251	848.8	31.0	31.0	25.1
3-slots EDGE/GPRS 850 MHz	128	824.2	29.4	29.4	23.4
	190	836.8	29.6	29.6	23.5
	251	848.8	29.2	29.2	23.5
4-slots EDGE/GPRS 850 MHz	128	824.2	27.6	27.5	22.2
	190	836.8	27.7	27.7	22.3
	251	848.8	27.7	27.8	22.4

**Table 11.1-1a GSM/EDGE/GPRS/DTM 850/1900 conducted power measurements for normal mode tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on GSM/EDGE/GPRS/DTM 850 was measured using RHK211LW and reused for RHT181LW.

GSM 850 MHz Calculation Of Time Based Average Power Per Slot For Normal Mode					
Mode	Ch.	Freq. (MHz)	Slot average power (measured) (dBm) CS1	# of slots	Time based average power (calculated) (dBm) CS1
1-slot GSM 850 MHz	128	824.2	32.5	1	23.5
	190	836.8	32.7	1	23.7
	251	848.8	32.8	1	23.8
2-slots DTM 850 MHz	128	824.2	30.8	2	24.8
	190	836.8	30.9	2	24.9
	251	848.8	31.0	2	25.0
3-slots DTM 850 MHz	128	824.2	29.4	3	25.1
	190	836.8	29.6	3	<b>25.3</b>
	251	848.8	29.2	3	24.9
1-slot EDGE/GPRS 850 MHz	128	824.2	32.7	1	23.7
	190	836.8	32.8	1	23.8
	251	848.8	32.9	1	23.9
2-slots EDGE/GPRS 850 MHz	128	824.2	30.8	2	24.8
	190	836.8	30.9	2	24.9
	251	848.8	31.0	2	25.0
3-slots EDGE/GPRS 850 MHz	128	824.2	29.4	3	25.1
	190	836.8	29.6	3	<b>25.3</b>
	251	848.8	29.2	3	24.9
4-slots EDGE/GPRS 850 MHz	128	824.2	27.6	4	24.6
	190	836.8	27.7	4	24.7
	251	848.8	27.7	4	24.7

**Table 11.1-1b GSM/EDGE/GPRS/DTM 850 calculation of time based average power per slot for normal mode tested on device model: RHK211LW**

**Note 1:** As per IEEE 1528 -2013 “both GSM and GPRS use GMSK, which is a constant amplitude modulation; therefore, the maximum time-averaged output power with respect to the maximum number of time slots used in each mode can be used to determine the most conservative mode for SAR testing. Similarly, EGPRS (which uses GMSK and 8PSK) can be included with GSM and GPRS in this determination of the most conservative mode for SAR testing due to its innate similarities to GSM and GPRS.”

**Note 2:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on GSM/EDGE/GPRS/DTM 850 was measured using RHK211LW and reused for RHT181LW.

GSM/EDGE/GPRS/DTM With Reduced Power For Hotspot Mode			
Mode	Ch.	Freq. (MHz)	Max burst avg. conducted power (dBm) (GMSK) CS1
3-slots EDGE/GPRS 850 MHz	128	824.2	27.5
	190	836.8	27.8
	251	848.8	27.6
4-slots EDGE/GPRS 850 MHz	128	824.2	25.8
	190	836.8	25.9
	251	848.8	26.0

**Table 11.1-1c GSM/EDGE/GPRS/DTM 850 conducted power measurements for Hotspot mode tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on Hotspot GSM/EDGE/GPRS/DTM 850 was measured using RHK211LW and reused for RHT181LW.

GSM 850 MHz Calculation Of Time Based Average Power Per Slot For Hotspot Mode					
Mode	Ch.	Freq. (MHz)	Slot average power (measured) (dBm) CS1	# of slots	Time based average power (calculated) (dBm) CS1
1-slot EDGE/GPRS 850 MHz	128	824.2	32.7	1	23.7
	190	836.8	32.8	1	23.8
	251	848.8	32.9	1	23.9
2-slots EDGE/GPRS 850 MHz	128	824.2	30.8	2	24.8
	190	836.8	30.9	2	24.9
	251	848.8	31.0	2	<b>25.0</b>
3-slots EDGE/GPRS 850 MHz	128	824.2	27.5	3	23.2
	190	836.8	27.8	3	23.5
	251	848.8	27.6	3	23.3
4-slots EDGE/GPRS 850 MHz	128	824.2	25.8	4	22.8
	190	836.8	25.9	4	22.9
	251	848.8	26.0	4	23.0

**Table 11.1-1d GSM/EDGE/GPRS/DTM 850 calculation of time based average power per slot for Hotspot mode tested on device model: RHK211LW**

**Note 1:** As per IEEE 1528 -2013 “both GSM and GPRS use GMSK, which is a constant amplitude modulation; therefore, the maximum time-averaged output power with respect to the maximum number of time slots used in each mode can be used to determine the most conservative mode for SAR testing. Similarly, EGPRS (which uses GMSK and 8PSK) can be included with GSM and GPRS in this determination of the most conservative mode for SAR testing due to its innate similarities to GSM and GPRS.”

**Note 2:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on GSM/EDGE/GPRS/DTM 850 was measured using RHK211LW and reused for RHT181LW.

Conducted output power GSM 1900 MHz (dBm)								
TS	mod.	upper limit	Slotted avg. power			Time based avg. power		
			CH 512	CH 661	CH 810	CH 512	CH 661	CH 810
			1850.2 MHz	1880.0 MHz	1909.8 MHz	1850.2 MHz	1880.0 MHz	1909.8 MHz
1	GMSK	31.5	30.2	30.3	30.4	21.17	21.27	21.37
2	GMSK	30.5	29.2	29.2	29.4	23.18	23.18	23.38
3	GMSK	28.0	26.4	26.4	26.4	22.14	22.14	22.14
4	GMSK	27.5	26.0	26.0	26.0	22.99	22.99	22.99
1	8PSK	27.5	25.5	25.5	25.4	16.47	16.47	16.37
2	8PSK	26.0	24.1	24.0	23.8	18.08	17.98	17.78
3	8PSK	25.0	23.0	22.9	22.8	18.74	18.64	18.54
4	8PSK	24.0	21.7	21.6	21.6	18.69	18.59	18.59

Conducted output power GSM 1900 MHz (dBm) DTM-Mode								
TS	mod.	upper limit	Slotted avg. power			Time based avg. power		
			CH 512	CH 661	CH 810	CH 512	CH 661	CH 810
			1850.2 MHz	1880.0 MHz	1909.8 MHz	1850.2 MHz	1880.0 MHz	1909.8 MHz
2	GMSK + 1GMSK	30.5	29.1	29.2	29.3	23.08	23.18	23.28
3	GMSK + 2GMSK	28.0	26.6	26.5	26.6	22.34	22.24	22.34
2	GMSK + 1 8PSK	30.5	24.3	24.3	24.0	18.28	18.28	17.98
3	GMSK + 2 8PSK	28.0	24.2	24.2	24.0	19.94	19.94	19.74

**Table 11.1-2a GSM/EDGE/GPRS/DTM 1900 conducted power measurements for normal mode tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on GSM/EDGE/GPRS/DTM 1900 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

Conducted output power GSM 1900 MHz (dBm) with Power Reduction								
TS	mod.	upper limit	Slotted avg. power			Time based avg. power		
			CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz
1	GMSK	31.5	30.3	30.4	29.9	21.27	21.37	20.87
2	GMSK	29.0	27.0	27.9	27.1	20.98	21.88	21.08
3	GMSK	27.0	25.5	25.6	25.5	21.24	21.34	21.24
4	GMSK	25.5	23.3	23.3	23.4	20.29	20.29	20.39
1	8PSK	27.5	25.5	25.5	25.4	16.47	16.47	16.37
2	8PSK	26.0	24.1	24.0	23.8	18.08	17.98	17.78
3	8PSK	25.0	23.0	22.9	22.8	18.74	18.64	18.54
4	8PSK	24.0	21.7	21.6	21.6	18.69	18.59	18.59


Conducted output power GSM 1900 MHz (dBm) DTM-Mode with Power Reduction								
TS	mod.	upper limit	Slotted avg. power			Time based avg. power		
			CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz	CH 512 1850.2 MHz	CH 661 1880.0 MHz	CH 810 1909.8 MHz
2	GMSK + 1GMSK	29.0	27.0	27.8	27.0	20.98	21.78	20.98
3	GMSK + 2GMSK	27.0	25.6	25.7	25.6	21.34	21.44	21.34
2	GMSK + 1 8PSK	29.0	24.4	24.3	24.2	18.38	18.28	18.18
3	GMSK + 2 8PSK	27.0	24.3	24.2	24.2	20.04	19.94	19.94

**Table 11.1-2b GSM/EDGE/GPRS/DTM 1900 calculation of time based average power per slot for Hotspot mode tested on device model: RHM181LW by CETECOM**

**Note 1:** As per IEEE 1528 -2013 “both GSM and GPRS use GMSK, which is a constant amplitude modulation; therefore, the maximum time-averaged output power with respect to the maximum number of time slots used in each mode can be used to determine the most conservative mode for SAR testing. Similarly, EGPRS (which uses GMSK and 8PSK) can be included with GSM and GPRS in this determination of the most conservative mode for SAR testing due to its innate similarities to GSM and GPRS.”

**Note 2:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on GSM/EDGE/GPRS/DTM 1900 was measured using RHM181LW and reused for RHT181LW.

**Note 3:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

		Document <b>SAR Compliance Test Report for the BlackBerry® Smartphone Model RHT181LW (STV100-2) Part 2/2</b>		Page <b>6(98)</b>
Author Data <b>Andrew Becker</b>	Dates of Test <b>Oct 06 – Nov 02, 2015</b>	Test Report No <b>RTS-6066-1511-01</b>	FCC ID: <b>L6ARHT180LW</b>	

WCDMA FDD V For Normal Mode On Model RHK211LW				
	Band	FDD V (850)		
	Channel	4132	4182	4233
	Frequency (MHz)	826.4	836.4	846.6
Band	Subtest	Max burst averaged conducted power (dBm)		
Rel99	12.2 kbps RMC	24.40	24.35	24.37
Rel99	12.2kbps, Voice, AMR, SRB 3.4 kbps	24.31	24.27	24.38
HSUPA	1	22.84	22.85	22.75
HSUPA	2	22.42	22.41	22.22
HSUPA	3	22.32	22.29	22.15
HSUPA	4	22.81	22.73	22.81
HSUPA	5	23.15	22.57	22.75
HSDPA+	1	23.42	23.38	23.42
HSDPA+	2	23.45	23.43	23.44
HSDPA+	3	22.94	22.85	22.90
HSDPA+	4	22.96	22.86	22.95
DC-HSDPA	1	23.21	23.08	23.40
DC-HSDPA	2	23.25	23.09	23.46
DC-HSDPA	3	22.69	22.54	22.92
DC-HSDPA	4	22.71	22.59	22.94

**Table 11.1-3 WCDMA FDD V (Rel99) / HSPA/HSPA+ conducted power measurements for normal mode tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on WCDMA FDD V was measured using RHK211LW and reused for RHT181LW.



Max. RMS output power FDD IV (1700MHz) / dBm									
mode	Channel / frequency								
	1312 / 1712.4 MHz			1412 / 1732.4 MHz			1513 / 1752.6 MHz		
	full	back off	diff.	full	back off	diff.	full	back off	diff.
RMC 12.2 kbit/s	24.1	21.5	2.6	23.9	21.3	2.6	23.7	21.1	2.6
RMC 64 kbit/s	24.1	21.4	2.7	23.9	21.2	2.7	23.7	21.0	2.7
RMC 144 kbit/s	24.0	21.4	2.6	23.9	21.3	2.6	23.7	21.1	2.6
RMC 384 kbit/s	24.1	21.4	2.7	23.8	21.1	2.7	23.6	20.9	2.7
AMR 4.75 kbit/s	24.0	21.4	2.6	23.9	21.3	2.6	23.7	21.1	2.6
AMR 5.15 kbit/s	24.1	21.5	2.6	23.8	21.2	2.6	23.6	21.0	2.6
AMR 5.9 kbit/s	24.0	21.2	2.8	23.8	21.0	2.8	23.6	20.8	2.8
AMR 6.7 kbit/s	24.0	21.4	2.6	23.8	21.2	2.6	23.6	21.0	2.6
AMR 7.4 kbit/s	24.0	21.4	2.6	23.9	21.3	2.6	23.7	21.1	2.6
AMR 7.95 kbit/s	24.1	21.4	2.7	23.8	21.1	2.7	23.6	20.9	2.7
AMR 10.2 kbit/s	24.0	21.4	2.6	23.7	21.1	2.6	23.6	21.0	2.6
AMR 12.2 kbit/s	24.1	21.5	2.6	23.7	21.1	2.6	23.7	21.1	2.6
HSDPA Sub test 1	22.9	20.4	2.5	22.6	20.0	2.6	22.5	20.0	2.5
HSDPA Sub test 2	21.4	18.7	2.7	21.3	18.8	2.5	21.1	18.6	2.5
HSDPA Sub test 3	21.0	18.4	2.6	20.7	18.1	2.6	20.6	17.9	2.7
HSDPA Sub test 4	19.8	17.2	2.6	19.6	17.0	2.6	19.5	16.7	2.8
DC-HSDPA Sub test 1	22.8	20.3	2.5	22.3	19.9	2.4	22.4	19.9	2.5
DC-HSDPA Sub test 2	22.8	20.3	2.5	22.2	19.9	2.3	22.3	19.8	2.5
DC-HSDPA Sub test 3	22.1	19.7	2.4	19.7	19.2	0.5	19.8	19.1	0.7
DC-HSDPA Sub test 4	22.2	19.8	2.4	19.7	19.2	0.5	19.7	19.2	0.5
HSUPA Sub test 1	22.4	19.9	2.5	22.3	19.7	2.6	21.4	18.8	2.6
HSUPA Sub test 2	20.8	18.1	2.7	20.7	18.1	2.6	20.6	17.8	2.8
HSUPA Sub test 3	22.0	19.4	2.6	21.7	19.0	2.7	21.4	19.3	2.1
HSUPA Sub test 4	20.3	17.5	2.8	21.1	18.4	2.7	20.9	18.3	2.6
HSUPA Sub test 5	23.0	20.2	2.8	22.4	19.7	2.7	22.5	19.8	2.7

**Table 11.1-4 WCDMA FDD IV (Rel99) / HSPA/HSPA+ conducted power measurements tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on WCDMA FDD IV was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

Max. RMS output power FDD II (1900MHz) / dBm									
mode	Channel / frequency								
	9262 / 1852.4 MHz			9400 / 1880.0 MHz			9538 / 1907.6 MHz		
	full	back off	diff.	full	back off	diff.	full	back off	diff.
RMC 12.2 kbit/s	23.9	21.8	2.1	24.6	21.5	3.1	23.9	21.2	2.7
RMC 64 kbit/s	23.8	21.7	2.1	24.6	21.4	3.2	23.9	21.2	2.7
RMC 144 kbit/s	23.8	21.7	2.1	24.6	21.4	3.2	23.9	21.2	2.7
RMC 384 kbit/s	23.7	21.7	2.0	24.6	21.4	3.2	23.9	21.2	2.7
AMR 4.75 kbit/s	23.7	21.7	2.0	24.5	21.4	3.1	23.8	21.2	2.6
AMR 5.15 kbit/s	23.8	21.7	2.1	24.6	21.5	3.1	23.9	21.2	2.7
AMR 5.9 kbit/s	23.8	21.7	2.1	24.6	21.5	3.1	23.9	21.2	2.7
AMR 6.7 kbit/s	23.7	21.7	2.0	24.5	21.5	3.0	23.8	21.2	2.6
AMR 7.4 kbit/s	23.8	21.7	2.1	24.6	21.5	3.1	23.8	21.2	2.6
AMR 7.95 kbit/s	23.8	21.8	2.0	24.6	21.5	3.1	23.8	21.2	2.6
AMR 10.2 kbit/s	23.8	21.8	2.0	24.6	21.4	3.2	23.9	21.2	2.7
AMR 12.2 kbit/s	23.8	21.8	2.0	24.6	21.5	3.1	23.9	21.2	2.7
HSDPA Sub test 1	22.8	20.7	2.1	23.0	21.5	1.5	22.9	21.0	1.9
HSDPA Sub test 2	21.8	19.8	2.0	22.0	20.1	1.9	21.6	19.7	1.9
HSDPA Sub test 3	20.3	18.2	2.1	20.4	18.3	2.1	20.4	18.4	2.0
HSDPA Sub test 4	20.1	18.0	2.1	20.3	18.2	2.1	20.4	18.3	2.1
DC-HSDPA Sub test 1	23.0	21.0	2.0	23.1	21.0	2.1	22.8	20.7	2.1
DC-HSDPA Sub test 2	22.9	21.0	1.9	23.0	20.9	2.1	22.7	20.6	2.1
DC-HSDPA Sub test 3	22.3	20.4	1.9	22.4	20.5	1.9	22.1	20.1	2.0
DC-HSDPA Sub test 4	22.4	20.5	1.9	22.4	20.4	2.0	22.2	20.0	2.2
HSUPA Sub test 1	23.0	21.0	2.0	23.1	21.0	2.1	22.5	20.5	2.0
HSUPA Sub test 2	20.4	18.5	1.9	20.6	18.6	2.0	20.6	18.5	2.1
HSUPA Sub test 3	21.5	19.4	2.1	21.5	19.3	2.2	21.6	19.5	2.1
HSUPA Sub test 4	21.2	18.8	2.4	21.2	18.9	2.3	21.0	19.0	2.0
HSUPA Sub test 5	23.0	20.9	2.1	23.0	21.0	2.0	23.0	20.9	2.1

**Table 11.1-5 WCDMA FDD II (Rel99) / HSPA/HSPA+ conducted power measurements tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on WCDMA FDD II was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A



Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**
**Conducted power measurements LTE FDD 2 1900 MHz**

Bandwidth (MHz)	Channel / Frequency (MHz)	Resource block allocation	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB
			QPSK	QPSK		16-QAM	16-QAM	
1.4	18607 / 1850.7	1 RB low	22.9	19.7	3.2	22.3	20.1	2.2
		1 RB mid	23.0	19.8	3.2	22.4	20.3	2.1
		1 RB high	23.0	20.0	3.0	22.3	20.1	2.2
		50% RB low	22.9	19.8	3.1	22.1	19.9	2.2
		50% RB mid	22.9	19.8	3.1	22.1	19.9	2.2
		50% RB high	22.9	19.7	3.2	22.1	19.9	2.2
		100% RB	21.9	19.7	2.2	20.8	19.7	1.1
	18900 / 1880.0	1 RB low	23.1	19.5	3.6	22.0	19.4	2.6
		1 RB mid	23.0	19.5	3.5	22.3	19.6	2.7
		1 RB high	23.1	19.4	3.7	22.1	19.4	2.7
		50% RB low	22.7	19.3	3.4	22.0	19.6	2.4
		50% RB mid	23.0	19.4	3.6	22.1	19.6	2.5
		50% RB high	22.8	19.2	3.6	22.1	19.5	2.6
	19193 / 1909.3	100% RB	21.9	19.3	2.6	21.1	19.5	1.6
		1 RB low	22.4	18.9	3.5	21.4	19.0	2.4
		1 RB mid	22.5	18.9	3.6	21.4	19.1	2.3
		1 RB high	22.4	18.9	3.5	21.5	19.0	2.5
		50% RB low	22.2	18.7	3.5	21.3	18.8	2.5
50% RB mid		22.2	18.7	3.5	21.4	18.9	2.5	
3.0	18615 / 1851.5	50% RB high	22.2	18.7	3.5	21.3	18.8	2.5
		100% RB	21.2	18.7	2.5	20.3	18.8	1.5
		1 RB low	22.9	20.3	2.6	22.3	20.4	1.9
		1 RB mid	23.1	19.9	3.2	22.4	20.2	2.2
		1 RB high	23.0	20.2	2.8	22.4	20.4	2.0
		50% RB low	21.9	19.8	2.1	20.8	19.7	1.1
		50% RB mid	22.0	19.8	2.2	20.9	19.8	1.1
	18900 / 1880.0	50% RB high	22.0	19.8	2.2	20.9	19.7	1.2
		100% RB	22.0	19.8	2.2	21.0	19.9	1.1
		1 RB low	23.0	19.5	3.5	22.0	19.6	2.4
		1 RB mid	23.1	19.4	3.7	22.1	19.6	2.5
		1 RB high	23.0	19.4	3.6	21.9	19.5	2.4
		50% RB low	21.9	19.4	2.5	21.1	19.7	1.4
		50% RB mid	21.9	19.4	2.5	21.1	19.6	1.5
	19185 / 1908.5	50% RB high	21.8	19.4	2.4	21.0	19.6	1.4
		100% RB	22.0	19.4	2.6	20.9	19.4	1.5
		1 RB low	22.1	18.8	3.3	21.2	18.9	2.3
		1 RB mid	22.1	18.8	3.3	21.3	18.8	2.5
1 RB high		22.2	18.7	3.5	21.4	19.0	2.4	
50% RB low		21.2	18.8	2.4	20.3	18.9	1.4	
50% RB mid		21.2	18.8	2.4	20.3	19.0	1.3	
50% RB high	21.3	18.8	2.5	20.4	19.0	1.4		
100% RB	21.2	18.8	2.4	20.3	18.9	1.4		



Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

Bandwidth (MHz)	Channel / Frequency (MHz)	Resource block allocation	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB
			QPSK	QPSK		16-QAM	16-QAM	
5.0	18625 / 1852.5	1 RB low	22.8	19.9	2.9	22.4	20.5	1.9
		1 RB mid	23.0	19.8	3.2	22.6	20.4	2.2
		1 RB high	23.1	20.0	3.1	22.7	20.5	2.2
		50% RB low	22.0	19.8	2.2	21.1	20.0	1.1
		50% RB mid	22.1	19.8	2.3	21.2	20.0	1.2
		50% RB high	22.1	19.8	2.3	21.3	20.0	1.3
	100% RB	22.0	19.8	2.2	21.1	19.9	1.2	
	18900 / 1880.0	1 RB low	23.4	19.6	3.8	22.2	19.6	2.6
		1 RB mid	22.9	19.4	3.5	21.9	19.6	2.3
		1 RB high	23.0	19.6	3.4	22.0	19.6	2.4
		50% RB low	22.0	19.4	2.6	21.0	19.4	1.6
		50% RB mid	22.0	19.5	2.5	21.0	19.5	1.5
		50% RB high	21.9	19.3	2.6	21.0	19.4	1.6
	100% RB	21.9	19.4	2.5	20.9	19.4	1.5	
	19175 / 1907.5	1 RB low	22.6	19.1	3.5	21.7	19.2	2.5
		1 RB mid	22.3	18.9	3.4	22.3	21.6	0.7
		1 RB high	22.4	18.9	3.5	21.5	19.2	2.3
		50% RB low	21.2	18.9	2.3	20.4	19.0	1.4
50% RB mid		21.1	18.8	2.3	20.2	19.0	1.2	
50% RB high		21.1	18.8	2.3	20.4	19.0	1.4	
100% RB	21.3	18.9	2.4	20.2	19.0	1.2		
10.0	18650 / 1855	1 RB low	22.8	20.3	2.5	22.1	20.2	1.9
		1 RB mid	23.2	20.0	3.2	22.5	20.4	2.1
		1 RB high	23.3	20.0	3.3	22.4	20.2	2.2
		50% RB low	22.0	19.7	2.3	21.0	19.7	1.3
		50% RB mid	22.1	19.8	2.3	21.2	19.9	1.3
		50% RB high	22.2	19.8	2.4	21.3	19.8	1.5
	100% RB	22.1	19.7	2.4	21.1	19.8	1.3	
	18900 / 1880	1 RB low	23.0	19.5	3.5	22.4	20.0	2.4
		1 RB mid	22.9	19.5	3.4	21.9	19.4	2.5
		1 RB high	22.8	19.4	3.4	22.1	19.5	2.6
		50% RB low	21.9	19.4	2.5	21.0	19.6	1.4
		50% RB mid	21.9	19.5	2.4	21.0	19.6	1.4
		50% RB high	21.8	19.4	2.4	20.9	19.5	1.4
	100% RB	21.8	19.4	2.4	20.8	19.5	1.3	
	19150 / 1905	1 RB low	22.5	19.0	3.5	22.0	19.4	2.6
		1 RB mid	22.3	18.9	3.4	21.5	18.8	2.7
		1 RB high	22.4	18.8	3.6	21.6	19.0	2.6
		50% RB low	21.4	18.9	2.5	20.4	18.9	1.5
50% RB mid		21.5	18.9	2.6	20.5	19.0	1.5	
50% RB high		21.3	18.9	2.4	20.3	18.9	1.4	
100% RB	21.5	19.0	2.5	20.3	19.0	1.3		

Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

Bandwidth (MHz)	Channel / Frequency (MHz)	Resource block allocation	Pavg (dBm)		dev. dB	Pavg (dBm)		dev. dB
			back off			back off		
			QPSK	QPSK		16-QAM	16-QAM	
15.0	18675 / 1857.5	1 RB low	23.0	20.2	2.8	22.3	20.3	2.0
		1 RB mid	23.2	20.0	3.2	22.5	20.3	2.2
		1 RB high	23.5	19.9	3.6	22.7	20.0	2.7
		50% RB low	22.1	20.0	2.1	21.2	20.0	1.2
		50% RB mid	22.2	19.9	2.3	21.3	19.9	1.4
		50% RB high	22.2	19.9	2.3	21.2	19.9	1.3
	18900 / 1880.0	1 RB low	23.2	19.5	3.7	22.3	19.9	2.4
		1 RB mid	23.1	19.6	3.5	22.2	19.8	2.4
		1 RB high	23.1	19.5	3.6	22.2	19.8	2.4
		50% RB low	22.1	19.5	2.6	21.0	19.5	1.5
		50% RB mid	22.1	19.6	2.5	21.1	19.5	1.6
		50% RB high	22.1	19.5	2.6	21.1	19.5	1.6
	19125 / 1902.5	1 RB low	22.9	19.6	3.3	21.6	19.2	2.4
		1 RB mid	22.7	19.4	3.3	21.4	18.9	2.5
		1 RB high	22.7	18.9	3.8	21.3	18.8	2.5
		50% RB low	21.6	19.2	2.4	20.6	19.2	1.4
		50% RB mid	21.6	19.1	2.5	20.6	19.1	1.5
		50% RB high	21.5	19.0	2.5	20.5	19.0	1.5
20.0	18700 / 1860	1 RB low	22.9	19.9	3.0	22.3	20.5	1.8
		1 RB mid	23.2	19.8	3.4	22.7	20.2	2.5
		1 RB high	23.2	19.5	3.7	23.0	20.6	2.4
		50% RB low	22.1	19.9	2.2	21.2	19.9	1.3
		50% RB mid	22.3	19.9	2.4	21.2	19.9	1.3
		50% RB high	22.3	19.7	2.6	21.3	19.7	1.6
	18900 / 1880	100% RB	22.3	19.9	2.4	21.2	19.9	1.3
		1 RB low	23.3	19.6	3.7	22.6	19.9	2.7
		1 RB mid	23.1	19.5	3.6	22.5	19.8	2.7
		1 RB high	22.9	19.4	3.5	22.3	19.9	2.4
		50% RB low	22.2	19.6	2.6	21.0	19.4	1.6
		50% RB mid	22.2	19.4	2.8	21.1	19.4	1.7
	19100 / 1900	50% RB high	22.1	19.5	2.6	21.1	19.5	1.6
		100% RB	22.0	19.5	2.5	21.1	19.5	1.6
		1 RB low	22.9	19.4	3.5	22.5	20.0	2.5
		1 RB mid	22.6	19.2	3.4	22.8	19.9	2.9
		1 RB high	22.5	19.0	3.5	22.2	19.7	2.5
		50% RB low	21.7	19.2	2.5	20.6	19.2	1.4
	50% RB mid	21.6	19.1	2.5	20.5	19.1	1.4	
		21.6	19.1	2.5	20.7	19.2	1.5	
	50% RB high	21.6	19.1	2.5	20.7	19.2	1.5	
		21.7	19.2	2.5	20.7	19.3	1.4	

**Table 11.1-6 LTE band 2 conducted power measurements tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 2 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**
**Conducted power measurements LTE FDD 4 1700 MHz**

Bandwidth (MHz)	Channel / Frequency (MHz)	Resource block allocation	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB
			QPSK	QPSK		16-QAM	16-QAM	
1.4	19957 / 1710.7	1 RB low	23.3	20.0	3.3	22.6	20.2	2.4
		1 RB mid	23.4	20.2	3.2	22.6	20.5	2.1
		1 RB high	23.4	20.1	3.3	22.7	20.3	2.4
		50% RB low	23.2	19.9	3.3	22.4	20.1	2.3
		50% RB mid	23.2	20.0	3.2	22.4	20.2	2.2
		50% RB high	23.2	19.9	3.3	22.5	20.1	2.4
		100% RB	22.1	19.8	2.3	20.9	19.7	1.2
	20175 / 1732.5	1 RB low	23.1	19.9	3.2	22.0	19.9	2.1
		1 RB mid	23.0	19.9	3.1	22.2	20.0	2.2
		1 RB high	23.0	19.9	3.1	21.9	19.9	2.0
		50% RB low	22.9	19.7	3.2	22.1	19.9	2.2
		50% RB mid	22.9	19.7	3.2	22.1	19.9	2.2
		50% RB high	22.8	19.7	3.1	22.1	19.9	2.2
		100% RB	21.8	19.7	2.1	21.0	19.9	1.1
	20393 / 1754.3	1 RB low	22.7	19.8	2.9	21.8	19.9	1.9
		1 RB mid	22.7	19.6	3.1	21.9	20.0	1.9
		1 RB high	22.8	19.7	3.1	21.9	19.9	2.0
		50% RB low	22.6	19.6	3.0	21.6	19.6	2.0
		50% RB mid	22.6	19.5	3.1	21.7	19.6	2.1
		50% RB high	22.7	19.5	3.2	21.7	19.6	2.1
		100% RB	21.5	19.5	2.0	20.6	19.6	1.0
3	19965 / 1711.5	1 RB low	23.3	19.9	3.4	22.6	20.4	2.2
		1 RB mid	23.4	20.0	3.4	22.7	20.5	2.2
		1 RB high	23.4	20.2	3.2	22.8	20.6	2.2
		50% RB low	22.1	19.9	2.2	21.0	19.7	1.3
		50% RB mid	22.1	19.9	2.2	21.0	19.8	1.2
		50% RB high	22.2	20.0	2.2	21.0	19.8	1.2
		100% RB	22.2	20.0	2.2	21.2	20.0	1.2
	20175 / 1732.5	1 RB low	23.0	19.8	3.2	22.0	19.9	2.1
		1 RB mid	22.8	19.9	2.9	22.1	19.9	2.2
		1 RB high	23.0	19.8	3.2	22.0	19.8	2.2
		50% RB low	21.9	19.8	2.1	21.1	20.0	1.1
		50% RB mid	21.9	19.8	2.1	21.0	20.0	1.0
		50% RB high	21.9	19.7	2.2	21.0	19.9	1.1
		100% RB	21.9	19.8	2.1	20.8	19.7	1.1
	20385 / 1753.5	1 RB low	22.7	19.8	2.9	21.6	19.7	1.9
		1 RB mid	22.6	19.6	3.0	21.6	19.4	2.2
		1 RB high	22.7	19.7	3.0	21.7	19.6	2.1
		50% RB low	21.6	19.7	1.9	20.7	19.7	1.0
		50% RB mid	21.6	19.6	2.0	20.6	19.7	0.9
		50% RB high	21.6	19.7	1.9	20.6	19.8	0.8
		100% RB	21.6	19.7	1.9	20.5	19.7	0.8



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FCC ID:

L6ARHT180LW

Bandwidth (MHz)	Channel / Frequency (MHz)	Resource block allocation	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB
			QPSK	QPSK		16-QAM	16-QAM	
5	19975 / 1712.5	1 RB low	23.3	20.0	3.3	23.2	20.9	2.3
		1 RB mid	23.0	19.9	3.1	22.8	20.5	2.3
		1 RB high	23.3	20.1	3.2	22.9	20.7	2.2
		50% RB low	22.1	20.0	2.1	21.2	20.2	1.0
		50% RB mid	22.2	20.0	2.2	21.2	20.2	1.0
		50% RB high	22.2	19.9	2.3	21.3	20.1	1.2
		100% RB	22.1	20.0	2.1	21.2	20.1	1.1
	20175 / 1732.5	1 RB low	23.3	20.0	3.3	22.2	20.1	2.1
		1 RB mid	22.8	19.7	3.1	21.6	19.8	1.8
		1 RB high	23.2	19.9	3.3	22.2	19.9	2.3
		50% RB low	21.9	19.8	2.1	21.0	19.8	1.2
		50% RB mid	21.9	19.8	2.1	20.9	19.8	1.1
		50% RB high	21.9	19.7	2.2	20.9	19.8	1.1
	20375 / 1752.5	100% RB	21.8	19.7	2.1	20.8	19.7	1.1
		1 RB low	22.9	20.0	2.9	21.9	19.9	2.0
		1 RB mid	22.8	19.7	3.1	23.0	22.2	0.8
		1 RB high	22.9	19.8	3.1	21.9	19.7	2.2
		50% RB low	21.6	19.6	2.0	20.7	19.7	1.0
50% RB mid		21.6	19.7	1.9	20.7	19.7	1.0	
10	20000 / 1715.0	50% RB high	21.5	19.6	1.9	20.6	19.7	0.9
		100% RB	21.6	19.7	1.9	20.6	19.7	0.9
		1 RB low	23.7	20.1	3.6	22.6	20.4	2.2
		1 RB mid	23.4	20.2	3.2	22.6	20.4	2.2
		1 RB high	23.5	20.1	3.4	22.6	20.3	2.3
		50% RB low	22.2	20.0	2.2	21.2	20.1	1.1
		50% RB mid	22.2	20.0	2.2	21.2	20.1	1.1
	20175 / 1732.5	50% RB high	22.2	19.9	2.3	21.2	20.0	1.2
		100% RB	22.2	20.0	2.2	21.2	20.0	1.2
		1 RB low	23.1	20.0	3.1	22.3	20.5	1.8
		1 RB mid	22.9	19.8	3.1	22.1	19.7	2.4
		1 RB high	22.9	19.7	3.2	22.2	20.1	2.1
		50% RB low	21.9	19.8	2.1	21.0	19.9	1.1
	20350 / 1750.0	50% RB mid	22.0	19.8	2.2	21.1	19.9	1.2
		50% RB high	22.0	19.7	2.3	21.0	19.8	1.2
		100% RB	21.8	19.7	2.1	20.9	19.8	1.1
		1 RB low	23.1	19.9	3.2	22.3	20.2	2.1
		1 RB mid	22.9	19.9	3.0	21.7	19.7	2.0
1 RB high		22.8	19.8	3.0	22.0	19.9	2.1	
50% RB low		21.6	19.6	2.0	20.6	19.6	1.0	
50% RB mid	21.7	19.7	2.0	20.6	19.7	0.9		
50% RB high	21.6	19.6	2.0	20.6	19.6	1.0		
100% RB	21.6	19.7	1.9	20.6	19.6	1.0		



Bandwidth (MHz)	Channel / Frequency (MHz)	Resource block allocation	P <sub>avg</sub> (dBm)		dev. dB	P <sub>avg</sub> (dBm)		dev. dB	
			back off			back off			
			QPSK	QPSK		16-QAM	16-QAM		
15	20025 / 1717.5	1 RB low	23.3	20.1	3.2	22.6	20.4	2.2	
		1 RB mid	23.5	20.0	3.5	22.7	20.3	2.4	
		1 RB high	23.4	20.1	3.3	22.6	20.4	2.2	
		50% RB low	22.2	19.9	2.3	21.3	20.0	1.3	
		50% RB mid	22.3	19.9	2.4	21.3	20.0	1.3	
		50% RB high	22.3	19.9	2.4	21.3	19.9	1.4	
	100% RB	22.2	19.9	2.3	21.2	20.0	1.2		
	20175 / 1732.5	1 RB low	23.3	19.9	3.4	22.6	20.3	2.3	
		1 RB mid	22.8	19.7	3.1	22.3	20.0	2.3	
		1 RB high	22.8	19.7	3.1	22.2	19.9	2.3	
		50% RB low	21.9	19.9	2.0	20.8	19.8	1.0	
		50% RB mid	21.9	19.8	2.1	21.0	19.8	1.2	
		50% RB high	21.9	19.7	2.2	20.9	19.7	1.2	
	100% RB	21.9	19.7	2.2	20.9	19.8	1.1		
	20325 / 1747.5	1 RB low	23.1	20.0	3.1	21.7	19.7	2.0	
		1 RB mid	22.9	19.7	3.2	21.7	19.6	2.1	
		1 RB high	23.1	19.8	3.3	21.7	19.5	2.2	
		50% RB low	21.8	19.7	2.1	20.7	19.7	1.0	
		50% RB mid	21.8	19.8	2.0	20.8	19.7	1.1	
		50% RB high	21.8	19.7	2.1	20.7	19.7	1.0	
	100% RB	21.7	19.7	2.0	20.7	19.7	1.0		
	20	20050 / 1720.0	1 RB low	23.3	20.0	3.3	23.2	20.6	2.6
			1 RB mid	23.4	20.0	3.4	22.9	20.3	2.6
			1 RB high	23.1	19.9	3.2	22.7	20.4	2.3
50% RB low			22.2	19.9	2.3	21.2	20.0	1.2	
50% RB mid			22.3	19.9	2.4	21.2	19.9	1.3	
50% RB high			22.1	20.0	2.1	21.1	20.0	1.1	
100% RB		22.2	20.0	2.2	21.2	20.0	1.2		
20175 / 1732.5		1 RB low	23.1	20.0	3.1	22.4	20.5	1.9	
		1 RB mid	22.9	19.7	3.2	22.1	20.1	2.0	
		1 RB high	22.6	19.6	3.0	22.0	20.1	1.9	
		50% RB low	21.9	19.9	2.0	20.9	19.9	1.0	
		50% RB mid	21.8	19.8	2.0	20.8	19.7	1.1	
		50% RB high	21.8	19.7	2.1	20.7	19.7	1.0	
100% RB		21.8	19.8	2.0	20.9	19.8	1.1		
20300 / 1745.0		1 RB low	23.2	19.7	3.5	22.6	20.5	2.1	
		1 RB mid	22.9	19.6	3.3	22.4	20.2	2.2	
		1 RB high	22.9	19.5	3.4	22.5	20.2	2.3	
		50% RB low	21.8	19.7	2.1	20.8	19.7	1.1	
		50% RB mid	21.9	19.7	2.2	20.8	19.7	1.1	
		50% RB high	21.9	19.7	2.2	20.9	19.7	1.2	
100% RB		21.9	19.7	2.2	20.9	19.7	1.2		

**Table 11.1-7 LTE band 4 conducted power measurements tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 4 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A



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Author Data

Andrew Becker

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L6ARHT180LW


LTE Band 5 On Model RHK211LW						
LTE Band	BW (MHz)	Mod.	Channel	RB #	OFFSET	Max avg. conducted power (dBm)
5	10	QPSK	20450	1	LOW	23.34
5	10	QPSK	20450	1	MID	23.30
5	10	QPSK	20450	1	HIGH	23.30
5	10	QPSK	20450	25	LOW	22.34
5	10	QPSK	20450	25	HIGH	22.21
5	10	QPSK	20450	50	LOW	22.27
5	10	Q16	20450	1	LOW	22.44
5	10	Q16	20450	1	MID	22.47
5	10	Q16	20450	1	HIGH	22.75
5	10	Q16	20450	30	LOW	21.38
5	10	Q16	20450	30	HIGH	21.26
5	10	Q16	20450	50	LOW	21.23
5	10	QPSK	20525	1	LOW	23.66
5	10	QPSK	20525	1	MID	23.63
5	10	QPSK	20525	1	HIGH	23.54
5	10	QPSK	20525	25	LOW	22.39
5	10	QPSK	20525	25	HIGH	22.36
5	10	QPSK	20525	50	LOW	22.30
5	10	Q16	20525	1	LOW	22.35
5	10	Q16	20525	1	MID	22.53
5	10	Q16	20525	1	HIGH	22.41
5	10	Q16	20525	30	LOW	21.51
5	10	Q16	20525	30	HIGH	21.53
5	10	Q16	20525	50	LOW	21.40
5	10	QPSK	20600	1	LOW	23.45
5	10	QPSK	20600	1	MID	23.61
5	10	QPSK	20600	1	HIGH	23.46
5	10	QPSK	20600	25	LOW	22.37
5	10	QPSK	20600	25	HIGH	22.48
5	10	QPSK	20600	50	LOW	22.53
5	10	Q16	20600	1	LOW	23.21
5	10	Q16	20600	1	MID	23.26
5	10	Q16	20600	1	HIGH	23.26
5	10	Q16	20600	30	LOW	21.36
5	10	Q16	20600	30	HIGH	21.46
5	10	Q16	20600	50	LOW	21.51
5	5	QPSK	20425	1	LOW	23.36
5	5	QPSK	20425	1	MID	23.55

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5	5	QPSK	20425	1	HIGH	23.45
5	5	QPSK	20425	10	LOW	22.30
5	5	QPSK	20425	10	HIGH	22.42
5	5	QPSK	20425	25	LOW	22.36
5	5	Q16	20425	1	LOW	22.55
5	5	Q16	20425	1	MID	22.82
5	5	Q16	20425	1	HIGH	22.68
5	5	Q16	20425	8	LOW	22.31
5	5	Q16	20425	8	HIGH	22.28
5	5	Q16	20425	25	LOW	21.31
5	5	QPSK	20525	1	LOW	23.58
5	5	QPSK	20525	1	MID	23.73
5	5	QPSK	20525	1	HIGH	23.39
5	5	QPSK	20525	10	LOW	22.41
5	5	QPSK	20525	10	HIGH	22.42
5	5	QPSK	20525	25	LOW	22.45
5	5	Q16	20525	1	LOW	22.88
5	5	Q16	20525	1	MID	22.75
5	5	Q16	20525	1	HIGH	22.63
5	5	Q16	20525	8	LOW	22.46
5	5	Q16	20525	8	HIGH	22.47
5	5	Q16	20525	25	LOW	21.41
5	5	QPSK	20625	1	LOW	23.40
5	5	QPSK	20625	1	MID	23.71
5	5	QPSK	20625	1	HIGH	23.48
5	5	QPSK	20625	10	LOW	22.38
5	5	QPSK	20625	10	HIGH	22.42
5	5	QPSK	20625	25	LOW	22.50
5	5	Q16	20625	1	LOW	22.61
5	5	Q16	20625	1	MID	22.56
5	5	Q16	20625	1	HIGH	22.63
5	5	Q16	20625	8	LOW	22.64
5	5	Q16	20625	8	HIGH	22.69
5	5	Q16	20625	25	LOW	21.52
5	3	QPSK	20415	1	LOW	23.20
5	3	QPSK	20415	1	MID	23.22
5	3	QPSK	20415	1	HIGH	23.28
5	3	QPSK	20415	6	LOW	22.27
5	3	QPSK	20415	6	HIGH	22.29
5	3	QPSK	20415	15	LOW	22.29
5	3	Q16	20415	1	LOW	22.37
5	3	Q16	20415	1	MID	22.40
5	3	Q16	20415	1	HIGH	22.46

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5	3	Q16	20415	4	LOW	22.40
5	3	Q16	20415	4	HIGH	22.46
5	3	Q16	20415	15	LOW	21.26
5	3	QPSK	20525	1	LOW	23.47
5	3	QPSK	20525	1	MID	23.77
5	3	QPSK	20525	1	HIGH	23.52
5	3	QPSK	20525	6	LOW	22.38
5	3	QPSK	20525	6	HIGH	22.45
5	3	QPSK	20525	15	LOW	22.44
5	3	Q16	20525	1	LOW	22.76
5	3	Q16	20525	1	MID	22.56
5	3	Q16	20525	1	HIGH	22.76
5	3	Q16	20525	4	LOW	22.56
5	3	Q16	20525	4	HIGH	22.56
5	3	Q16	20525	15	LOW	21.46
5	3	QPSK	20635	1	LOW	23.24
5	3	QPSK	20635	1	MID	23.40
5	3	QPSK	20635	1	HIGH	23.26
5	3	QPSK	20635	6	LOW	22.41
5	3	QPSK	20635	6	HIGH	22.46
5	3	QPSK	20635	15	LOW	22.42
5	3	Q16	20635	1	LOW	23.24
5	3	Q16	20635	1	MID	23.20
5	3	Q16	20635	1	HIGH	23.07
5	3	Q16	20635	4	LOW	22.84
5	3	Q16	20635	4	HIGH	22.90
5	3	Q16	20635	15	LOW	21.54
5	1.4	QPSK	20470	1	LOW	23.24
5	1.4	QPSK	20470	1	MID	23.32
5	1.4	QPSK	20470	1	HIGH	23.22
5	1.4	QPSK	20470	3	LOW	23.36
5	1.4	QPSK	20470	3	HIGH	23.24
5	1.4	QPSK	20470	6	LOW	22.28
5	1.4	Q16	20470	1	LOW	22.51
5	1.4	Q16	20470	1	MID	22.62
5	1.4	Q16	20470	1	HIGH	22.41
5	1.4	Q16	20470	5	LOW	22.33
5	1.4	Q16	20470	5	HIGH	22.33
5	1.4	Q16	20470	6	LOW	21.28
5	1.4	QPSK	20525	1	LOW	23.50
5	1.4	QPSK	20525	1	MID	23.54
5	1.4	QPSK	20525	1	HIGH	23.49
5	1.4	QPSK	20525	3	LOW	23.41

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Author Data <b>Andrew Becker</b>	Dates of Test <b>Oct 06 – Nov 02, 2015</b>	Test Report No <b>RTS-6066-1511-01</b>	FCC ID: <b>L6ARHT180LW</b>			

5	1.4	QPSK	20525	3	HIGH	23.45
5	1.4	QPSK	20525	6	LOW	22.41
5	1.4	Q16	20525	1	LOW	22.51
5	1.4	Q16	20525	1	MID	22.80
5	1.4	Q16	20525	1	HIGH	22.52
5	1.4	Q16	20525	5	LOW	22.43
5	1.4	Q16	20525	5	HIGH	22.37
5	1.4	Q16	20525	6	LOW	21.30
5	1.4	QPSK	20580	1	LOW	23.45
5	1.4	QPSK	20580	1	MID	23.39
5	1.4	QPSK	20580	1	HIGH	23.44
5	1.4	QPSK	20580	3	LOW	23.18
5	1.4	QPSK	20580	3	HIGH	23.18
5	1.4	QPSK	20580	6	LOW	22.31
5	1.4	Q16	20580	1	LOW	22.35
5	1.4	Q16	20580	1	MID	22.49
5	1.4	Q16	20580	1	HIGH	22.41
5	1.4	Q16	20580	5	LOW	22.43
5	1.4	Q16	20580	5	HIGH	22.44
5	1.4	Q16	20580	6	LOW	21.22

**Table 11.1-8 LTE band 5 conducted power measurements tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.



Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**
**Conducted power measurements LTE FDD 7 2600 MHz**

Bandwidth (MHz)	Channel / Frequency (MHz)	Resource block allocation	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB	P <sub>avg</sub> (dBm)	P <sub>avg</sub> (dBm) back off	dev. dB
			QPSK	QPSK		16-QAM	16-QAM	
5.0	20775 / 2502.5	1 RB low	23.1	20.0	3.1	22.6	20.6	2.0
		1 RB mid	23.0	20.0	3.0	22.6	20.6	2.0
		1 RB high	23.1	20.1	3.0	22.6	20.6	2.0
		50% RB low	22.0	20.0	2.0	21.1	20.1	1.0
		50% RB mid	22.0	20.0	2.0	21.1	20.1	1.0
		50% RB high	22.0	19.9	2.1	21.1	20.0	1.1
	21100 / 2535	100% RB	22.0	19.9	2.1	21.0	20.0	1.0
		1 RB low	23.0	19.9	3.1	22.0	19.9	2.1
		1 RB mid	22.9	19.8	3.1	21.8	19.7	2.1
		1 RB high	23.0	19.8	3.2	21.9	19.9	2.0
		50% RB low	21.8	19.7	2.1	20.9	19.8	1.1
		50% RB mid	21.9	19.8	2.1	20.9	19.9	1.0
	21425 / 2567.5	50% RB high	21.8	19.7	2.1	20.9	19.8	1.1
		100% RB	21.8	19.7	2.1	20.8	19.7	1.1
		1 RB low	22.6	19.5	3.1	21.7	19.5	2.2
		1 RB mid	22.7	19.6	3.1	22.3	21.8	0.5
		1 RB high	22.7	19.6	3.1	21.8	19.5	2.3
		50% RB low	21.5	19.3	2.2	20.5	19.4	1.1
10.0	20800 / 2505	50% RB mid	21.5	19.4	2.1	20.5	19.4	1.1
		50% RB high	21.5	19.4	2.1	20.6	19.5	1.1
		100% RB	21.5	19.4	2.1	20.5	19.4	1.1
		1 RB low	23.3	20.2	3.1	22.4	20.4	2.0
		1 RB mid	23.2	20.3	2.9	22.3	20.4	1.9
		1 RB high	23.1	20.0	3.1	22.4	20.3	2.1
	21100 / 2535	50% RB low	22.0	19.9	2.1	21.0	20.0	1.0
		50% RB mid	22.1	20.1	2.0	21.1	20.1	1.0
		50% RB high	22.0	20.0	2.0	21.0	20.1	0.9
		100% RB	22.1	20.0	2.1	21.0	20.0	1.0
		1 RB low	22.9	19.9	3.0	22.3	20.2	2.1
		1 RB mid	22.9	19.8	3.1	22.0	20.0	2.0
	21400 / 2565	1 RB high	22.9	19.9	3.0	22.4	20.3	2.1
		50% RB low	21.8	19.8	2.0	21.0	19.9	1.1
		50% RB mid	21.9	19.8	2.1	21.0	19.9	1.1
		50% RB high	21.8	19.7	2.1	20.9	19.9	1.0
		100% RB	21.8	19.8	2.0	20.9	19.8	1.1
		1 RB low	22.7	19.6	3.1	21.9	19.8	2.1
21400 / 2565	1 RB mid	22.6	19.4	3.2	21.6	19.6	2.0	
	1 RB high	22.6	19.7	2.9	21.8	19.8	2.0	
	50% RB low	21.6	19.5	2.1	20.6	19.5	1.1	
	50% RB mid	21.5	19.4	2.1	20.5	19.4	1.1	
	50% RB high	21.5	19.3	2.2	20.5	19.4	1.1	
	100% RB	21.6	19.4	2.2	20.5	19.5	1.0	

Author Data  
**Andrew Becker**

Dates of Test  
**Oct 06 – Nov 02, 2015**

Test Report No  
**RTS-6066-1511-01**

FCC ID:  
**L6ARHT180LW**

Bandwidth (MHz)	Channel / Frequency (MHz)	Resource block allocation	Pavg (dBm) QPSK	Pavg (dBm) back off QPSK	dev. dB	Pavg (dBm) 16-QAM	Pavg (dBm) back off 16-QAM	dev. dB
15.0	20825 / 2507.5	1 RB low	23.2	20.2	3.0	22.4	20.5	1.9
		1 RB mid	23.2	20.2	3.0	22.4	20.4	2.0
		1 RB high	23.0	20.0	3.0	22.2	20.3	1.9
		50% RB low	21.9	19.9	2.0	21.0	20.0	1.0
		50% RB mid	22.0	20.0	2.0	21.0	20.0	1.0
		50% RB high	21.9	20.0	1.9	21.0	20.0	1.0
	100% RB	21.9	19.9	2.0	21.0	20.0	1.0	
	21100 / 2535	1 RB low	22.8	19.9	2.9	22.2	20.2	2.0
		1 RB mid	22.8	19.8	3.0	22.3	20.3	2.0
		1 RB high	22.8	19.8	3.0	22.1	20.4	1.7
		50% RB low	21.8	19.8	2.0	20.9	19.8	1.1
		50% RB mid	21.9	19.9	2.0	20.9	19.8	1.1
		50% RB high	21.9	19.9	2.0	20.9	19.9	1.0
	100% RB	21.8	19.8	2.0	20.8	19.9	0.9	
	21375 / 2562.5	1 RB low	22.6	19.7	2.9	21.5	19.4	2.1
		1 RB mid	22.5	19.6	2.9	21.3	19.2	2.1
		1 RB high	22.7	19.7	3.0	21.3	19.2	2.1
		50% RB low	21.5	19.4	2.1	20.5	19.4	1.1
		50% RB mid	21.5	19.4	2.1	20.4	19.4	1.0
		50% RB high	21.3	19.3	2.0	20.3	19.2	1.1
	100% RB	21.4	19.3	2.1	20.4	19.4	1.0	
20.0	20850 / 2510	1 RB low	23.1	20.0	3.1	22.5	20.5	2.0
		1 RB mid	23.1	19.9	3.2	22.5	20.5	2.0
		1 RB high	22.9	19.7	3.2	22.3	20.4	1.9
		50% RB low	22.0	20.0	2.0	21.0	20.0	1.0
		50% RB mid	22.1	20.0	2.1	21.0	20.1	0.9
		50% RB high	21.9	19.9	2.0	20.9	19.9	1.0
	100% RB	21.9	19.9	2.0	20.9	19.9	1.0	
	21100 / 2535	1 RB low	22.9	19.8	3.1	22.2	20.3	1.9
		1 RB mid	22.9	19.9	3.0	22.3	20.3	2.0
		1 RB high	22.8	20.0	2.8	22.3	20.3	2.0
		50% RB low	21.9	19.8	2.1	20.9	19.8	1.1
		50% RB mid	21.9	19.8	2.1	20.9	19.8	1.1
		50% RB high	21.9	19.8	2.1	20.9	19.8	1.1
	100% RB	21.8	19.8	2.0	20.9	19.8	1.1	
	21350 / 2560	1 RB low	22.7	19.6	3.1	22.4	20.4	2.0
		1 RB mid	22.6	19.4	3.2	22.1	19.9	2.2
		1 RB high	22.4	19.2	3.2	22.0	19.8	2.2
		50% RB low	21.6	19.5	2.1	20.6	19.5	1.1
		50% RB mid	21.5	19.4	2.1	20.5	19.4	1.1
		50% RB high	21.4	19.3	2.1	20.4	19.3	1.1
	100% RB	21.4	19.4	2.0	20.6	19.5	1.1	

**Table 11.1-9 LTE band 7 conducted power measurements tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 4 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

**Note 3:** LTE band 7 is not supported in the United States; however it is supported in Canada.

LTE band 13 Conducted Power On Model RHT180LW						
LTE Band	BW (MHz)	Mod.	Channel	RB#	OFFSET	Max avg. Conducted power (dBm)
13	10	QPSK	23230	1	LOW	23.05
13	10	QPSK	23230	1	MID	23.74
13	10	QPSK	23230	1	HIGH	23.64
13	10	QPSK	23230	25	LOW	22.58
13	10	QPSK	23230	25	HIGH	22.68
13	10	QPSK	23230	50	LOW	22.72
13	10	Q16	23230	1	LOW	22.68
13	10	Q16	23230	1	MID	23.54
13	10	Q16	23230	1	HIGH	23.29
13	10	Q16	23230	30	LOW	21.65
13	10	Q16	23230	30	HIGH	21.73
13	10	Q16	23230	50	LOW	21.63
13	10	QPSK	23230	1	LOW	23.00
13	10	QPSK	23230	1	MID	23.74
13	10	QPSK	23230	1	HIGH	23.63
13	10	QPSK	23230	25	LOW	22.63
13	10	QPSK	23230	25	HIGH	22.68
13	10	QPSK	23230	50	LOW	22.72
13	10	Q16	23230	1	LOW	22.67
13	10	Q16	23230	1	MID	23.36
13	10	Q16	23230	1	HIGH	23.28
13	10	Q16	23230	30	LOW	21.64
13	10	Q16	23230	30	HIGH	21.74
13	10	Q16	23230	50	LOW	21.71
13	10	QPSK	23230	1	LOW	22.98
13	10	QPSK	23230	1	MID	23.77
13	10	QPSK	23230	1	HIGH	23.63
13	10	QPSK	23230	25	LOW	22.60
13	10	QPSK	23230	25	HIGH	22.69
13	10	QPSK	23230	50	LOW	22.73
13	10	Q16	23230	1	LOW	22.66
13	10	Q16	23230	1	MID	23.52
13	10	Q16	23230	1	HIGH	23.31
13	10	Q16	23230	30	LOW	21.66
13	10	Q16	23230	30	HIGH	21.75
13	10	Q16	23230	50	LOW	21.67
13	5	QPSK	23205	1	LOW	22.69
13	5	QPSK	23205	1	MID	23.51

13	5	QPSK	23205	1	HIGH	23.63
13	5	QPSK	23205	10	LOW	22.41
13	5	QPSK	23205	10	HIGH	22.45
13	5	QPSK	23205	25	LOW	22.44
13	5	Q16	23205	1	LOW	22.19
13	5	Q16	23205	1	MID	22.85
13	5	Q16	23205	1	HIGH	22.97
13	5	Q16	23205	8	LOW	22.39
13	5	Q16	23205	8	HIGH	22.47
13	5	Q16	23205	25	LOW	21.50
13	5	QPSK	23230	1	LOW	23.51
13	5	QPSK	23230	1	MID	23.79
13	5	QPSK	23230	1	HIGH	23.86
13	5	QPSK	23230	10	LOW	22.66
13	5	QPSK	23230	10	HIGH	22.70
13	5	QPSK	23230	25	LOW	22.68
13	5	Q16	23230	1	LOW	22.79
13	5	Q16	23230	1	MID	22.91
13	5	Q16	23230	1	HIGH	23.01
13	5	Q16	23230	8	LOW	22.60
13	5	Q16	23230	8	HIGH	22.70
13	5	Q16	23230	25	LOW	21.76
13	5	QPSK	23255	1	LOW	23.62
13	5	QPSK	23255	1	MID	23.96
13	5	QPSK	23255	1	HIGH	23.77
13	5	QPSK	23255	10	LOW	22.75
13	5	QPSK	23255	10	HIGH	22.56
13	5	QPSK	23255	25	LOW	22.68
13	5	Q16	23255	1	LOW	22.82
13	5	Q16	23255	1	MID	22.73
13	5	Q16	23255	1	HIGH	22.79
13	5	Q16	23255	8	LOW	22.81
13	5	Q16	23255	8	HIGH	22.70
13	5	Q16	23255	25	LOW	21.84

**Table 11.1-10 LTE band 13 conducted power measurements on device model: RHT181LW**

CDMA 850 BC0 On model RHT181LW										
Band	Freq. (MHz)	Ch.	1xEvDO 153.6kbps Rev 0 (dBm)	1xEvDO 153.6kbps Rev A (dBm)	1xEvDO 153.6kbps Rev B (dBm)	CDMA 2000 RC	S03 Voice (dBm)	S055 Loopback (dBm)	TDSO/S032 Test Data Service FCH only (dBm)	TDSO/S032 Test Data Service FCH+SCH0 @9.6kbps (dBm)
CDMA 850 BC0	824.70	1013	24.10	24.10	N/A	RC1	24.10	24.10	N/A	N/A
						RC3	24.05	24.05	24.05	24.10
	836.52	384	24.20	24.20	N/A	RC1	24.22	24.22	N/A	N/A
						RC3	24.24	24.24	24.24	24.23
	848.31	777	24.40	24.40	N/A	RC1	24.45	24.45	N/A	N/A
						RC3	24.42	24.42	24.42	24.42

Table 11.1-11 CDMA 850 BC0 conducted power measurements on device model: RHT181LW


CDMA 1900 BC1 For Normal Mode On model RHT181LW										
Band	Freq. (MHz)	Ch.	1xEvDO 153.6kbps Rev 0 (dBm)	1xEvDO 153.6kbps Rev A (dBm)	1xEvDO 153.6kbps Rev B (dBm)	CDMA 2000 RC	S03 Voice (dBm)	S055 Loopback (dBm)	TDSO/S032 Test Data Service FCH only (dBm)	TDSO/S032 Test Data Service FCH+SCH0 @9.6kbps (dBm)
CDMA 1900 BC1	1851.25	25	22.90	22.90	N/A	RC1	22.82	22.82	N/A	N/A
						RC3	22.75	22.75	22.85	22.82
	1880.00	600	24.00	24.00	N/A	RC1	23.91	23.91	N/A	N/A
						RC3	23.90	23.90	23.95	23.96
	1908.75	1175	23.20	23.20	N/A	RC1	23.10	23.10	N/A	N/A
						RC3	23.07	23.07	23.12	23.13

Table 11.1-12a CDMA 1900 BC1 conducted power measurements for normal mode on device model: RHT181LW

CDMA 1900 BC1 Hotspot Mode On model RHT181LW									
Band	Freq. (MHz)	Ch.	1xEvDO 153.6kbps Rev 0 (dBm)	1xEvDO 153.6kbps Rev A (dBm)	1xEvDO 153.6kbps Rev B (dBm)	CDMA 2000 RC	S055 Loopback (dBm)	TDSO/S032 Test Data Service FCH only (dBm)	TDSO/S032 Test Data Service FCH+SCH0 @9.6kbps (dBm)
CDMA 1900 BC1	1851.25	25	21.5	21.5	N/A	RC1	21.45	N/A	N/A
						RC3	21.45	21.45	21.45
	1880.00	600	21.4	21.4	N/A	RC1	21.35	N/A	N/A
						RC3	21.35	21.35	21.35
	1908.75	1175	21.4	21.4	N/A	RC1	21.45	N/A	N/A
						RC3	21.44	21.44	21.45

Table 11.1-12b CDMA 1900 BC1 conducted power measurements for Hotspot mode on device model: RHT181LW



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Author Data <b>Andrew Becker</b>	Dates of Test <b>Oct 06 – Nov 02, 2015</b>	Test Report No <b>RTS-6066-1511-01</b>	FCC ID: <b>L6ARHT180LW</b>	

Channel	Freq. (MHz)	Mode	Conducted Avg. Transmit Power (dBm)
0	2402	DH5	5.5
39	2441		7.8
78	2480		5.4
0	2402	2-DH5	3.0
39	2441		4.4
78	2480		1.6
0	2402	3-DH5	3.1
39	2441		4.6
78	2480		1.6

**Table 11.1-13 Bluetooth conducted power measurements tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.

802.11 b/g/n For Normal Mode (Primary Antenna) SISO (Country Code: ALL)													
802.11b													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)								Mbit/s	Mod.	
			1	2	5.5	11							
B	1	2412	16.8										
	6	2437	17.3										
	11	2462	17.9	18.1	18.0	18.0							
	13	2472	17.2										
802.11g													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)								Mbit/s	Mod.	
			6	9	12	18	24	36	48	54			
G	1	2412	16.0										
	6	2437	16.2										
	11	2462	16.8	16.8	16.8	16.8		16.1		15.6			
	13	2472	16.2										
802.11n													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)									MCS8	MCS9
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7			
N	1	2412	15.7										
	6	2437	16.3										
	11	2462	16.8	16.7	16.6			15.7		14.3			
	13	2472	16.0										

**Table 11.1-14a 802.11 b/g/n modulation type/data rate vs. conducted power on the primary Wi-Fi antenna tested on device model: RHK211LW**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.

**Note 2:** Since Wi-Fi must be certified for FCC and R&TTE testing was done using the R&TTE conducted power levels. The only difference between the two modes is there is no band edge power reduction for R&TTE, so the SAR measurements done on low and high channel will actually be more conservative.

802.11 b/g/n With Reduced Power For Hotspot/GO Mode (Primary Antenna) SISO (Country Code: ALL)													
802.11b													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)					Mbit/s					
			1	2	5.5	11	22	Mod.					
B	1	2412	10.1		10.2		10.2						
	6	2437	10.2		10.4		10.4						
	11	2462	10.8		10.9		11.0						
	13	2472	10.4		10.6		10.3						
802.11g													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)								Mbit/s		
			6	9	12	18	24	36	48	54	Mod.		
G	1	2412	10.7					10.8			10.7		
	6	2437	11.0					11.0			11.2		
	11	2462	11.3					11.5			11.6		
	13	2472	10.7					11.0			10.9		
802.11n													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)									Mbit/s	
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	Mod.
N	1	2412	10.5					10.8				10.5	
	6	2437	11.0					11.3				11.0	
	11	2462	11.2					11.2				11.3	
	13	2472	10.9					11.0				11.0	

**Table 11.1-14b 802.11 b/g/n modulation type/data rate vs. conducted power on the primary Wi-Fi antenna for Hotspot mode tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.

802.11 b/g/n For Normal Mode (Secondary Antenna) SISO (Country Code: ALL)												
802.11b												
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)					Mbit/s	Mod.			
			1	2	5.5	11						
B	1	2412	17.5	17.5	17.5	17.5						
	6	2437	17.3									
	11	2462	17.3									
	13	2472	16.5									
802.11g												
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)								Mbit/s	Mod.
			6	9	12	18	24	36	48	54		
G	1	2412	16.3									
	6	2437	16.4	16.4	16.4	16.4		15.5		15.0		
	11	2462	16.2									
	13	2472	15.6									
802.11n												
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)									MCS9
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	
N	1	2412	16.3									
	6	2437	16.4	16.3	16.2			15.3		13.9		
	11	2462	16.2									
	13	2472	15.3									

**Table 11.1-15a 802.11 b/g/n modulation type/data rate vs. conducted power on the secondary Wi-Fi antenna tested on device model: RHK211LW**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.

**Note 2:** Since Wi-Fi must be certified for FCC and R&TTE testing was done using the R&TTE conducted power levels. The only difference between the two modes is there is no band edge power reduction for R&TTE, so the SAR measurements done on low and high channel will actually be more conservative.

802.11 b/g/n With Reduced Power For Hotspot/GO Mode (Secondary Antenna) SISO (Country Code: ALL)													
802.11b													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)							Mbit/s	Mod.		
			1	2	5.5	11	22						
B	1	2412	10.4										
	6	2437	10.2										
	11	2462	10.5	10.6	10.5	10.6							
	13	2472	9.6										
802.11g													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)								Mbit/s	Mod.	
			6	9	12	18	24	36	48	54			
G	1	2412	10.0	10.0		10.0		10.2		10.3			
	6	2437	10.0										
	11	2462	9.9										
	13	2472	9.2										
802.11n													
802.11	Ch.	F (MHz)	Maximum average conducted power (dBm)									MCS8	MCS9
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7			
N	1	2412	9.9										
	6	2437	10.3	10.3		10.4		10.4		10.0			
	11	2462	10.2										
	13	2472	9.0										

**Table 11.1-15b 802.11 b/g/n modulation type/data rate vs. conducted power on the secondary Wi-Fi antenna for Hotspot mode tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.



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Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

802.11a For Normal Mode (Primary Antenna) SISO (Country Code: ALL)												
802.11a (20 MHz)												
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)									Mbit/s Mod.
			6	9	12	18	24	36	48	54		
			BPSK	BPSK	QPSK	QPSK	16-QAM	16-QAM	64-QAM	64-QAM		
1	36	5180	15.0									
	40	5200	15.1									
	44	5220	15.0									
	48	5240	15.3	15.3	15.2	15.2	14.0			14.0		
2	52	5260	15.1									
	56	5280	15.0									
	60	5300	15.0									
	64	5320	15.3	15.2	15.0	15.0	14.1			14.0		
2C	L	100	5500	14.9								
		104	5520	15.0								
		108	5540	15.1								
		112	5560	15.1								
	U	116	5580	15.2								
		120	5600	15.2								
		124	5620	15.2								
		128	5640	15.4	15.3	15.2	15.2	14.0			14.1	
3	U	132	5660	15.3								
		136	5680	15.3								
		140	5700	15.1								
		144	5720									
		149	5745	15.8								
		153	5765	15.9	15.7	15.7	15.7	14.4			14.3	
		157	5785	15.6								
161	5805	15.4										
165	5825	15.3										
802.11n (20 MHz)												
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)									
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
1	48	5240	15.1	15.0	15.1	14.1		13.9		13.3		
2	64	5320	15.0	14.9	14.9	14.1		14.0		13.0		
2C	128	5640	15.3	15.3	15.3	14.1		13.7		13.0		
3	153	5765	15.5	15.5	15.5	14.5		14.0		13.4		
802.11n (40 MHz)												
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)									
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
1	38	5190	15.4									
	46	5230	15.6	15.6	15.7	14.2		14.3		13.6		
2	54	5270	15.3									
	62	5310	15.8	15.7	15.7	14.5		14.4		13.3		
2C	L	102	5510	15.4								
		110	5550	15.4								
		118	5590	15.6								
		126	5630	16.0	15.9	16.0	14.4		14.3		13.4	
U	134	5670	15.7									

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3	142	5710									
	151	5755	16.2	16.2	16.4	15.0		14.7		13.9	
	159	5795	16.1								

**Table 11.1-16a 802.11 a/n modulation type/data rate vs. conducted power on the primary Wi-Fi antenna tested on device model: RHK211LW**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.

**Note 2:** Since Wi-Fi must be certified for FCC and R&TTE testing was done using the R&TTE conducted power levels. The only difference between the two modes is there is no band edge power reduction for R&TTE, so the SAR measurements done on low and high channel will actually be more conservative.

<b>802.11a With Reduced Power For Hotspot/GO Mode (Primary Antenna) SISO (Country Code: ALL)</b>												
<b>802.11a (20 MHz)</b>												
U-NII-	Channel	F (MHz)	Maximum average conducted power (dBm)								Mbit/s	
			6 BPSK	9 BPSK	12 QPSK	18 QPSK	24 16-QAM	36 16-QAM	48 64-QAM	54 64-QAM		Mod.
1	36	5180	10.0					10.0			10.0	
	40	5200	10.3					10.3			9.9	
	44	5220	10.3					10.2			10.3	
	48	5240	10.4					10.3			10.4	
3	149	5745	10.7					10.7			10.7	
	153	5765	10.7					10.7			10.5	
	157	5785	10.6					10.6			10.6	
	161	5805	10.5					10.5			10.4	
	165	5825	10.3					10.3			10.3	
<b>802.11n (20 MHz)</b>												
U-NII-	Channel	F (MHz)	Maximum average conducted power (dBm)									
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
1	48	5240	10.5					10.5			10.2	
3	149	5745	10.6					10.6			10.8	
<b>802.11n (40 MHz)</b>												
U-NII-	Channel	F (MHz)	Maximum average conducted power (dBm)									
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
1	38	5190	10.4					10.3			10.4	
	46	5230	10.6					10.6			10.5	
3	151	5755	11.0					10.9			11.0	
	159	5795	10.8					10.8			10.8	

**Table 11.1-16b 802.11 a/n modulation type/data rate vs. conducted power on the primary Wi-Fi antenna for Hotspot mode tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.



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Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

802.11a For Normal Mode (Secondary Antenna) SISO (Country Code: ALL)													
802.11a (20 MHz)													
U-NII-	Channel	F (MHz)	Maximum average conducted power (dBm)								Mbit/s	Mod.	
			6	9	12	18	24	36	48	54			
			BPSK	BPSK	QPSK	QPSK	16-QAM	16-QAM	64-QAM	64-QAM			
1	36	5180	16.6	16.6	16.6	16.6	15.5				15.5		
	40	5200	16.5										
	44	5220	16.4										
	48	5240	16.3										
2	52	5260	15.4										
	56	5280	15.3										
	60	5300	15.4										
	64	5320	15.5	15.5	15.5	15.5	14.5				14.5		
2C	L	100	5500	15.8	15.8	15.8	15.8	14.7				14.7	
		104	5520	15.7									
		108	5540	15.7									
		112	5560	15.4									
		116	5580	15.5									
		120	5600	15.2									
		124	5620	15.1									
		128	5640	14.8									
3	U	132	5660	14.8									
		136	5680	14.5									
		140	5700	14.2									
		144	5720										
		149	5745	15.2	15.2	15.2	15.2	13.9				13.9	
		153	5765	15.0									
		157	5785	15.0									
		161	5805	15.0									
165	5825	14.9											

802.11n (20 MHz)												
U-NII-	Channel	F (MHz)	Maximum average conducted power (dBm)									
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
1	36	5180	16.6	16.6	16.6	15.5		15.5		14.5		
2	64	5320	15.5	15.5	15.5	14.4		14.3		13.5		
2C	100	5500	15.8	15.8	15.8	14.8		14.8		13.5		
3	149	5745	15.2	15.2	15.2	14.1		14.1		13.0		

802.11n (40 MHz)													
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)										
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	
1	38	5190	17.0	17.0	17.0	15.8		15.8		14.8			
	46	5230	17.0	17.0	17.0	15.5		15.7		14.6			
2	54	5270	16.1	16.1	16.1	15.0		15.0		13.8			
	62	5310	16.0										
2C	L	102	5510	16.5	16.5	16.5	15.0		15.0		13.9		
		110	5550	16.3									
		118	5590	16.0									
		126	5630	15.6	15.6	15.6	14.3		14.3		13.4		
3	U	134	5670	15.2									
		142	5710										

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3	151	5755	15.8	15.8	15.7	14.3		14.3		13.3		
	159	5795	15.4									

**Table 11.1-17a 802.11 a/n modulation type/data rate vs. conducted power on the secondary Wi-Fi antenna tested on device model: RHK211LW**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.

**Note 2:** Since Wi-Fi must be certified for FCC and R&TTE testing was done using the R&TTE conducted power levels. The only difference between the two modes is there is no band edge power reduction for R&TTE, so the SAR measurements done on low and high channel will actually be more conservative.

<b>802.11a With Reduced Power For Hotspot/GO Mode (Secondary Antenna) SISO (Country Code: ALL)</b>												
<b>802.11a (20 MHz)</b>												
U-NII-	Channel	F (MHz)	Maximum average conducted power (dBm)								Mbit/s	Mod.
			6 BPSK	9 BPSK	12 QPSK	18 QPSK	24 16-QAM	36 16-QAM	48 64-QAM	54 64-QAM		
1	36	5180	11.2					11.2			11.2	
	40	5200	11.1					11.1			11.1	
	44	5220	10.8					10.7			10.8	
	48	5240	10.7					10.6			10.7	
3	149	5745	9.8					9.8			9.6	
	153	5765	9.7					9.5			9.7	
	157	5785	9.5					9.5			9.4	
	161	5805	9.6					9.6			9.3	
	165	5825	9.4					9.3			9.4	
<b>802.11n (20 MHz)</b>												
U-NII-	Channel	F (MHz)	Maximum average conducted power (dBm)									
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
1	36	5180	11.3					11.3			11.1	
3	149	5745	9.9					9.9			9.6	
<b>802.11n (40 MHz)</b>												
U-NII-	Channel	F (MHz)	Maximum average conducted power (dBm)									
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
1	38	5190	11.3					11.0			11.2	
	46	5230	11.1					11.0			11.1	
3	151	5755	10.2					10.2			10.1	
	159	5795	10.0					9.9			9.6	

**Table 11.1-17b 802.11 a/n modulation type/data rate vs. conducted power on the secondary Wi-Fi antenna for Hotspot mode tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.



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Author Data

**Andrew Becker**

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<b>802.11ac For Normal Mode (Primary Antenna) SISO (Country Code: ALL)</b>														
<b>802.11ac (20 MHz)</b>														
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)										Band Edge Cut back	
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9		
1	36	5180	14.8											
	40	5200	15.0											
	44	5220	15.0											
	48	5240	15.1	15.1	15.1	14.1		13.9		13.3		6.4		
2	52	5260	14.8											
	56	5280	14.9											
	60	5300	14.9											
	64	5320	15.1	15.1	15.0	14.1		14.1		13.1		4.7		
2C	L	100	5500	14.7										
		104	5520	14.9										
		108	5540	15.0										
		112	5560	14.9										
	U	116	5580	15.0										
		120	5600	15.1										
		124	5620	15.2	15.2	15.2	14.0		13.9		13.1		4.9	
		128	5640	15.2										
3	L	132	5660	15.2										
		136	5680	15.2										
		140	5700	15.1										
		144	5720											
	U	149	5745	15.8	15.8	15.8	14.8		14.5		13.5		5.4	
		153	5765	15.8										
		157	5785	15.5										
		161	5805	15.3										
165	5825	15.2												
<b>802.11ac (40 MHz)</b>														
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)											
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9		
1	38	5190	15.4											
	46	5230	15.7	15.6	15.6	14.2		14.3		13.6		12.7		
2	54	5270	15.5											
	62	5310	15.7	15.7	15.7	14.4		14.4		13.4		12.5		
2C	L	102	5510	15.4										
		110	5550	15.5										
		118	5590	15.9	15.8	15.8	14.4		14.3		13.4		12.5	
	U	126	5630	15.7										
		134	5670	15.9										
3	U	142	5710											
		151	5755	16.3	16.3	16.3	14.8		14.8		14.0		13.0	
159	5795	16.3												
<b>802.11ac (80 MHz)</b>														
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)											
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9		
1	42	5210	14.0	14.0	14.0	13.8		13.8		13.0		11.4		
2	58	5290	14.0	14.0	13.9	13.7		13.7		12.8		10.9		
2C	106	5530	13.8											

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	122	5610	14.1	14.0	14.0	13.7		13.7		12.8		10.4
	138	5690										
3	155	5775	14.5	14.5	14.5	14.1		14.1		13.3		10.9

**Table 11.1-18 802.11 ac modulation type/data rate vs. conducted power on the primary Wi-Fi antenna tested on device model: RHK211LW**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.

**Note 2:** Since Wi-Fi must be certified for FCC and R&TTE testing was done using the R&TTE conducted power levels. The only difference between the two modes is there is no band edge power reduction for R&TTE, so the SAR measurements done on low and high channel will actually be more conservative.

802.11ac For Normal Mode (Secondary Antenna) SISO (Country Code: ALL)														
802.11ac (20 MHz)														
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)										Band Edge Cut back	
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9		
1	36	5180	16.6	16.5	16.5	15.5		15.5		14.6		7.9	13.9	
	40	5200	16.4										13.6	
	44	5220	16.2										13.3	
	48	5240	16.1										13.3	
2	52	5260	15.4										15.1	
	56	5280	15.4										15.2	
	60	5300	15.3										15.2	
	64	5320	15.5	15.5	15.5	14.5		14.5		13.5		5.3	14.4	
2C	L	100	5500	15.9	15.9	15.9	14.5		14.5		13.6		5.5	
		104	5520	15.6										
		108	5540	15.5										
		112	5560	15.3										
		116	5580	15.3										
		120	5600	15.1										
		124	5620	15.1										
		128	5640	14.6										
3	U	132	5660	14.7										
		136	5680	14.4										
		140	5700	14.3									14.0	
		144	5720											
		149	5745	15.2	15.2	15.2	14.0		14.1		13.0		5.0	
	153	5765	15.0											
	157	5785	14.7											
	161	5805	14.6											
	165	5825	14.6											
802.11ac (40 MHz)														
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)											
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9		
1	38	5190	17.3	17.3	17.2	16.0			15.7		15.0		14.0	
	46	5230	17.0											
2	54	5270	16.0											
	62	5310	16.1	16.1	16.1	14.9			14.9		13.8		12.9	


2C	L	102	5510	16.4	16.4	16.5	15.0		15.0		13.8		13.0	
		110	5550	16.2										
		118	5590	15.8										
		126	5630	15.5										
		134	5670	15.1										
3	U	142	5710											
		151	5755	15.9	15.8	15.8	14.3		14.3		13.4		12.6	
		159	5795	15.8										
<b>802.11ac (80 MHz)</b>														
U-NII-	Ch.	F (MHz)	Maximum average conducted power (dBm)											
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9		
1	42	5210	15.3	15.3	15.2	15.2	15.1	15.2	15.2	14.2	12.8	12.9		
2	58	5290	14.2	14.2		14.2		14.2		13.2	11.4	11.3		
2C	106	5530	14.6	14.6		14.2		14.3		13.2		10.9		
	122	5610	14.0											
	138	5690												
3	155	5775	14.0	13.9		13.7		13.7		12.7		10.6		

**Table 11.1-19 802.11 ac modulation type/data rate vs. conducted power on the secondary Wi-Fi antenna tested on device model: RHK211LW**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW share the same conducted RF circuitry and power level for this band. Due to this conducted power on LTE band 5 was measured using RHK211LW and reused for RHT181LW.

**Note 2:** Since Wi-Fi must be certified for FCC and R&TTE testing was done using the R&TTE conducted power levels. The only difference between the two modes is there is no band edge power reduction for R&TTE, so the SAR measurements done on low and high channel will actually be more conservative.



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## 11.2 SAR measurement results at highest power for each exposure condition

**Note 1:** If the power drift is  $\leq -0.200$  dB, the extrapolated SAR is calculated using the formula:

$$\text{Extrapolated SAR} = (\text{Measured SAR}) * 10^{(|\text{Power Drift (dB)}| / 10)}$$

**Note 2:** Only Middle channel was tested when 1g reported SAR  $\leq 0.8$  W/Kg or 3dB lower than the limit. Low, Middle and High channels were tested on the worst case position regardless of the SAR level.

**Note 3a:** For KDB Fast SAR a zoom scan is required for each head position with 1g measured SAR  $\geq 0.8$  W/Kg and one additional zoom scan to cover all the remaining head positions. The scan is done on the worst case for the position(s)

**Note 3b:** For KDB Fast SAR the technique cannot be utilized when 1g measured SAR  $\geq 1.2$  W/Kg, an error message occurs, or difference between the zoom and area scan 1g SAR  $\geq 0.1$  W/kg for that configuration.

**Note 4:** A 2<sup>nd</sup> scan is required when 1g measured SAR  $\geq 0.8$  W/Kg. A 3<sup>rd</sup> scan is required when the 1g measured SAR  $\geq 1.45$  W/Kg or the 2<sup>nd</sup> scan SAR differs more than 20%. A 4<sup>th</sup> scan is required when the 1g measured SAR  $\geq 1.50$  W/Kg or the previous measurements differ more than 20%.

**Note 5a:** For LTE it is only required to test the configuration (channel and offset) yielding the highest conducted power for RB 1 and RB 50% when combined 1g avg. SAR  $< 0.8$  W/Kg or 3dB lower than the limit for both cases. Also, when the highest conducted power for RB 1 and RB 50% are both greater than RB 100%, then SAR testing for RB 100% can be excluded.

**Note 5b:** For LTE if 1g avg. SAR  $> 0.8$  W/Kg or not at least 3dB lower than the limit, then the remaining channels for that RB number must be tested and one additional scan must be done with RB 100%. For all additional scans the highest conducted power configuration (channel and offset) must be used.

**Note 5c:** For LTE if SAR  $\leq 1.45$ , then SAR tests for the smaller bandwidths are not required

**Note 5d:** For LTE the lower bandwidths are only tested on the cases where the conducted power is 0.5 dB greater than those found on the highest bandwidth or when the reported 1g SAR  $> 1.45$  for the highest bandwidth.

**Note 5e:** For LTE 16 QAM is only tested on the cases where its conducted power is 0.5 dB greater than QPSK or when the reported 1g SAR  $> 1.45$  for QPSK.

**Note 6a:** For IEEE 1528 Fast SAR requirements, additional zoom scans/Full SAR measurements are done for all Fast SAR scans that are above the “threshold 1” for that Band. Threshold 1 is determined for each band separately and is based off of the overall maximum Fast SAR value of that band.

**Note 6b:** For IEEE 1528 Fast SAR requirements, if the overall maximum Full SAR value of a band is below “threshold 2” then no additional zoom scans/Full SAR measurements need to be done on that band. Threshold 2 is based off of the overall maximum Full SAR value of the entire device and does not change like “threshold 1.”

**Note 6c:** Both thresholds are calculated using the measured SAR to avoid the thresholds changing should target power be changed throughout the testing period.

**Note 7:** Device was tested with 15 mm BLACKBERRY recommended separation distance to allow typical after-market holster to be used. RIM body-worn holsters with belt-clip have been designed to maintain ~ 20 mm separation distance from body.

**Note 8:** For Hot Spot mode any side of the phone that is further than 2.5 cm away from the transmitting antenna can be exempted from testing.

Measured/Extrapolated SAR Values - Head - LTE Band 13 700 MHz (BW 10 MHz)															
Position	Mod.	BW (MHz)	RB #	Ch.	Freq. (MHz)	RB OFF	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)					
							Declared	Measured		Extrapolated		Reported			
										FAST SAR	FULL SAR	FAST SAR	FULL SAR		
<b>Slider Closed</b>															
Right Cheek	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	-0.19	0.244	0.244	0.257	0.257		
			25												
				23230	782.0	25	23.0	22.7	0.01	0.212			0.228		
50															
	23230	782.0	0	23.0	22.7	-0.02	0.211			0.225					
Right 15° Tilt	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	0.03	0.178			0.188		
Left Cheek	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	0.05	0.232			0.245		
			25												
50															
Left 15° Tilt	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	0.13	0.197			0.208		
<b>Slider Open</b>															
Right Cheek	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	-0.07	0.170			0.179		
Right 15° Tilt	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	0.10	0.061			0.065		
Left Cheek	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	-0.19	0.196			0.207		
Left 15° Tilt	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	0.02	0.131			0.138		

**Table 11.2-1a SAR testing results for LTE Band 13 (10MHz BW) head configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - LTE Band 13 700 MHz (BW 10 MHz)																							
Position	Mod.	BW (MHz)	RB #	Ch.	Freq. (MHz)	RB OFF	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)													
							Declared	Measured		Extrapolated		Reported											
										FAST SAR	FULL SAR	FAST SAR	FULL SAR										
<b>Slider Closed</b>																							
10mm Back	QPSK	10.0	1		23230	782.0	25	24.0	23.8	-0.01	0.466	0.479	0.491	0.505									
															25	23230	782.0	25	23.0	22.7	0.02	0.336	0.361
															1	23230	782.0	25	24.0	23.8	-0.16	0.334	0.352
															1	23230	782.0	25	24.0	23.8	0.05	0.498	0.494
1	23230	782.0	25	24.0	23.8	0.03	0.408	0.430															
									1	23230	782.0												
<b>Slider Open</b>																							
10mm Back	QPSK	10.0	1		23230	782.0	25	24.0	23.8	0.09	0.407		0.429										
10mm Front	QPSK	10.0	1		23230	782.0	25	24.0	23.8	-0.05	0.295		0.311										
10mm Left	QPSK	10.0	1		23230	782.0	25	24.0	23.8	-0.07	0.195		0.206										
10mm Right	QPSK	10.0	1		23230	782.0	25	24.0	23.8	0.01	0.401		0.423										
10mm Bottom	QPSK	10.0	1		23230	782.0	25	24.0	23.8	-0.09	0.441		0.465										
10mm + Headset	QPSK	10.0	1		23230	782.0																	

**Table 11.2-1b SAR testing results for LTE Band 13 (10MHz BW) hotspot configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - LTE Band 13 700 MHz (BW 10 MHz)															
Position	Mod.	BW (MHz)	RB #	Ch.	Freq. (MHz)	RB OFF	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)					
							Declared	Measured		Extrapolated		Reported			
										FAST SAR	FULL SAR	FAST SAR	FULL SAR		
<b>Slider Closed</b>															
15mm Back	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	-0.03	0.289	0.298	0.305	0.314		
			25												
				23230	782.0	25	23.0	22.7	0.14	0.242		0.260			
50															
15mm Front	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	-0.03	0.279		0.294			
Holster Back	QPSK	10.0	1												
				23230	782.0	25	24.0	23.8	-0.11	0.280		0.295			

**Table 11.2-1c SAR testing results for LTE Band 13 (10MHz BW) body-worn configuration tested on device model: RHT181LW**

Threshold 1 For This Band: 0.381  
Max FAST SAR For Band: 0.498  
Threshold 2 For All Bands: 0.745  
Max FULL SAR For Band: 0.494  
Additional Full SAR Required: NO

**Table 11.2-1d Fast SAR testing thresholds for LTE Band 13**

Measured/Extrapolated SAR Values - Head - LTE Band 5 850 MHz (BW 10 MHz)															
Position	Mod.	BW (MHz)	RB #	Ch.	Freq. (MHz)	RB OFF	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)					
							Declared	Measured		Extrapolated		Reported			
										FAST SAR	FULL SAR	FAST SAR	FULL SAR		
<b>Slider Closed</b>															
Right Cheek	QPSK	10.0	1	20450	829.0	0	24.0	23.3	0.07	0.288		0.335			
				20525	836.5	0	24.0	23.7	0.03	0.299		0.323			
				20600	844.0	25	24.0	23.6	-0.03	0.311	0.313	0.340	0.342		
			25	20450	829.0										
				20525	836.5										
				20600	844.0	25	23.0	22.5	-0.01	0.220		0.248			
50	20600	844.0	0	23.0	22.5	0.09	0.224		0.250						
Right 15° Tilt	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	0.17	0.177		0.191			
				20600	844.0										
Left Cheek	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	-0.03	0.256		0.277			
				20600	844.0										
			25	20450	829.0										
				20525	836.5										
				20600	844.0										
50															
Left 15° Tilt	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	0.09	0.139		0.150			
				20600	844.0										
<b>Slider Open</b>															
Right Cheek	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	-0.06	0.201		0.217			
				20600	844.0										
Right 15° Tilt	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	0.12	0.113		0.122			
				20600	844.0										
Left Cheek	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	-0.03	0.172		0.186			
				20600	844.0										
Left 15° Tilt	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	0.03	0.105		0.114			
				20600	844.0										

**Table 11.2-2a SAR testing results for LTE Band 5 (10MHz BW) head configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - LTE Band 5 850 MHz (BW 10 MHz)														
Position	Mod.	BW (MHz)	RB #	Ch.	Freq. (MHz)	RB OFF	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)				
							Declared	Measured		Extrapolated		Reported		
										FAST SAR	FULL SAR	FAST SAR	FULL SAR	
<b>Slider Closed</b>														
10mm Back	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	-0.17	0.351		0.380		
				20600	844.0									
10mm Front	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	-0.01	0.304		0.329		
				20600	844.0									
10mm Left	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	-0.04	0.186		0.201		
				20600	844.0									
10mm Right	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	0.04	0.354		0.383		
				20600	844.0									
10mm Bottom	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	-0.17	0.349		0.377		
				20600	844.0									
<b>Slider Open</b>														
10mm Back	QPSK	10.0	1	20450	829.0	0	24.0	23.3	-0.03	0.470		0.547		
				20525	836.5	0	24.0	23.7	0.00	0.479	0.512	0.518	0.554	
				20600	844.0	25	24.0	23.6	0.02	0.407		0.445		
			25	20450	829.0									
				20525	836.5									
				20600	844.0	25	23.0	22.5	0.00	0.415		0.468		
50	20600	844.0	0	23.0	22.5	0.02	0.427		0.476					
10mm Front	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	0.13	0.338		0.366		
				20600	844.0									
10mm Left	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	-0.02	0.093		0.101		
				20600	844.0									
10mm Right	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	0.04	0.237		0.256		
				20600	844.0									
10mm Bottom	QPSK	10.0	1	20450	829.0									
				20525	836.5	0	24.0	23.7	0.00	0.419		0.453		
				20600	844.0									

**Table 11.2-2b SAR testing results for LTE Band 5 (10MHz BW) hotspot configuration tested on device model: RHT181LW**



Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - LTE Band 5 850 MHz (BW 10 MHz)															
Position	Mod.	BW (MHz)	RB #	Ch.	Freq. (MHz)	RB OFF	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)					
							Declared	Measured		Extrapolated		Reported			
										FAST SAR	FULL SAR	FAST SAR	FULL SAR		
<b>Slider Closed</b>															
15mm Back	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	0.02	0.244		0.264			
				20600	844.0										
15mm Front	QPSK	10.0	1	20450	829.0	0	24.0	23.3	0.04	0.298	0.315	0.347	0.367		
				20525	836.5	0	24.0	23.7	0.01	0.290		0.314			
				20600	844.0	25	24.0	23.6	-0.04	0.262		0.287			
			25	20450	829.0										
				20525	836.5										
				20600	844.0	25	23.0	22.5	0.00	0.213		0.240			
				20600	844.0	0	23.0	22.5	0.04	0.216		0.241			
Holster Front	QPSK	10.0	1	20450	829.0										
				20525	836.5	0	24.0	23.7	-0.05	0.230		0.249			
				20600	844.0										

**Table 11.2-2c SAR testing results for LTE Band 5 (10MHz BW) body-worn configuration tested on device model: RHT181LW**

Threshold 1 For This Band: 0.367  
 Max FAST SAR For Band: 0.479  
 Threshold 2 For All Bands: 0.745  
 Max FULL SAR For Band: 0.512  
 Additional Full SAR Required: NO

**Table 11.2-2d Fast SAR testing thresholds for LTE Band 5**

Measured/Extrapolated SAR Values - Head - GSM/EDGE/DTM 850 MHz										
Position	Time Slot	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
				Declared	Measured		Extrapolated		Reported	
							FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>										
Right Cheek	3	128	824.2	31.0	29.4	-0.01	0.258		0.373	
		190	836.6	31.0	29.6	-0.07	0.318		0.439	
		251	848.8	31.0	29.2	-0.14	0.421	0.417	0.637	0.631
Right 15° Tilt	3	128	824.2							
		190	836.6	31.0	29.6	0.07	0.174		0.240	
		251	848.8							
Left Cheek	3	128	824.2							
		190	836.6	31.0	29.6	0.09	0.266		0.367	
		251	848.8							
Left 15° Tilt	3	128	824.2							
		190	836.6	31.0	29.6	0.02	0.180		0.248	
		251	848.8							
<b>Slider Open</b>										
Right Cheek	3	128	824.2							
		190	836.6	31.0	29.6	-0.02	0.209		0.289	
		251	848.8							
Right 15° Tilt	3	128	824.2							
		190	836.6	31.0	29.6	-0.12	0.120		0.166	
		251	848.8							
Left Cheek	3	128	824.2							
		190	836.6	31.0	29.6	0.08	0.209		0.289	
		251	848.8							
Left 15° Tilt	3	128	824.2							
		190	836.6	31.0	29.6	0.00	0.105		0.145	
		251	848.8							

**Table 11.2-3a SAR testing results for GSM/EDGE/DTM 850 head configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - GSM/EDGE/DTM 850 MHz										
Position	Time Slot	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
				Declared	Measured		Extrapolated		Reported	
							FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>										
10mm Back	2	128	824.2							
		190	836.6	32.5	30.9	-0.02	0.446		0.645	
		251	848.8							
10mm Front	2	128	824.2							
		190	836.6	32.5	30.9	-0.01	0.413		0.597	
		251	848.8							
10mm Left	2	128	824.2							
		190	836.6	32.5	30.9	-0.08	0.272		0.393	
		251	848.8							
10mm Right	2	128	824.2							
		190	836.6	32.5	30.9	0.04	0.435		0.629	
		251	848.8							
10mm Bottom	2	128	824.2							
		190	836.6	32.5	30.9	-0.04	0.419		0.606	
		251	848.8							
10mm + Headset	2	128	824.2							
		190	836.6							
		251	848.8							
<b>Slider Open</b>										
10mm Back	2	128	824.2	32.5	30.8	-0.05	0.353		0.522	
		190	836.6	32.5	30.9	0.05	0.693	0.763	1.002	1.103
		251	848.8	32.5	31.0	0.03	0.576	0.553	0.814	0.781
10mm Front	2	128	824.2							
		190	836.6	32.5	30.9	0.05	0.428		0.619	
		251	848.8							
10mm Left	2	128	824.2							
		190	836.6	32.5	30.9	-0.02	0.164		0.237	
		251	848.8							
10mm Right	2	128	824.2							
		190	836.6	32.5	30.9	0.03	0.306		0.442	
		251	848.8							
10mm Bottom	2	128	824.2							
		190	836.6	32.5	30.9	-0.12	0.481		0.695	
		251	848.8							

**Table 11.2-3b SAR testing results GSM /GPRS/DTM 850 hotspot configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - GSM/EDGE/DTM 850 MHz										
Position	Time Slot	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
				Declared	Measured		Extrapolated		Reported	
							FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>										
15mm Back	3	128	824.2							
		190	836.6	31.0	29.6	-0.14	0.254		0.351	
		251	848.8							
15mm Front	3	128	824.2	31.0	29.4	-0.03	0.338		0.489	
		190	836.6	31.0	29.6	-0.02	0.369		0.509	
		251	848.8	31.0	29.2	-0.03	0.376	0.386	0.569	0.584
Holster Front	3	128	824.2							
		190	836.6	31.0	29.6	-0.08	0.298		0.411	
		251	848.8							

**Table 11.2-3c SAR testing results for GSM/GPRS/DTM 850 body-worn configuration tested on device model: RHT181LW**

Threshold 1 For This Band: 0.531  
 Max FAST SAR For Band: 0.693  
 Threshold 2 For All Bands: 0.745  
 Max FULL SAR For Band: 0.763  
 Additional Full SAR Required: YES

**Table 11.2-3d Fast SAR testing thresholds for GSM/GPRS/DTM 850**

Measured/Extrapolated SAR Values - Head - WCDMA FDD V 850 MHz									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
Right Cheek	4132	826.4	25.0	24.4	0.07	0.310		0.356	
	4182	836.4	25.0	24.4	0.01	0.331		0.384	
	4233	846.6	25.0	24.4	-0.08	0.357	0.354	0.413	0.409
Right 15° Tilt	4132	826.4							
	4182	836.4	25.0	24.4	-0.12	0.214		0.249	
	4233	846.6							
Left Cheek	4132	826.4							
	4182	836.4	25.0	24.4	-0.16	0.279		0.324	
	4233	846.6							
Left 15° Tilt	4132	826.4							
	4182	836.4	25.0	24.4	0.03	0.191		0.222	
	4233	846.6							
<b>Slider Open</b>									
Right Cheek	4132	826.4							
	4182	836.4	25.0	24.4	0.01	0.319		0.371	
	4233	846.6							
Right 15° Tilt	4132	826.4							
	4182	836.4	25.0	24.4	0.00	0.165		0.192	
	4233	846.6							
Left Cheek	4132	826.4							
	4182	836.4	25.0	24.4	0.17	0.241		0.280	
	4233	846.6							
Left 15° Tilt	4132	826.4							
	4182	836.4	25.0	24.4	0.01	0.148		0.172	
	4233	846.6							

**Table 11.2-4a SAR testing results for UMTS band V head configuration tested on device model:  
RHT181LW**

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - WCDMA FDD V 850 MHz									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
10mm Back	4132	826.4							
	4182	836.4	25.0	24.4	0.03	0.419		0.487	
	4233	846.6							
10mm Front	4132	826.4							
	4182	836.4	25.0	24.4	0.02	0.343		0.398	
	4233	846.6							
10mm Left	4132	826.4							
	4182	836.4	25.0	24.4	-0.02	0.253		0.294	
	4233	846.6							
10mm Right	4132	826.4							
	4182	836.4	25.0	24.4	-0.03	0.432		0.502	
	4233	846.6							
10mm Bottom	4132	826.4							
	4182	836.4	25.0	24.4	-0.01	0.409		0.475	
	4233	846.6							
<b>Slider Open</b>									
10mm Back	4132	826.4	25.0	24.4	0.00	0.516	0.553	0.592	0.635
	4182	836.4	25.0	24.4	-0.11	0.533	0.572	0.619	0.664
	4233	846.6	25.0	24.4	-0.07	0.612	0.657	0.708	0.760
10mm Front	4132	826.4							
	4182	836.4	25.0	24.4	0.00	0.392		0.455	
	4233	846.6							
10mm Left	4132	826.4							
	4182	836.4	25.0	24.4	-0.13	0.166		0.193	
	4233	846.6							
10mm Right	4132	826.4							
	4182	836.4	25.0	24.4	0.00	0.317		0.368	
	4233	846.6							
10mm Bottom	4132	826.4							
	4182	836.4	25.0	24.4	-0.02	0.407		0.473	
	4233	846.6							

**Table 11.2-4b SAR testing results UMTS band V hotspot configuration tested on device model: RHT181LW**



Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - WCDMA FDD V 850 MHz									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
15mm Back	4132	826.4	25.0	24.4	-0.01	0.305	0.308	0.350	0.354
	4182	836.4	25.0	24.4	-0.06	0.285		0.331	
	4233	846.6	25.0	24.4	0.02	0.278		0.321	
15mm Front	4132	826.4	25.0	24.4	0.09	0.349		0.401	
	4182	836.4	25.0	24.4	0.00	0.354	0.343	0.411	0.398
	4233	846.6	25.0	24.4	0.00	0.353		0.408	
Holster Front	4132	826.4							
	4182	836.4	25.0	24.4	0.01	0.286		0.332	
	4233	846.6							

**Table 11.2-4c SAR testing results for UMTS band V body-worn configuration tested on device model: RHT181LW**

Threshold 1 For This Band: 0.469  
Max FAST SAR For Band: 0.612  
Threshold 2 For All Bands: 0.745  
Max FULL SAR For Band: 0.657  
Additional Full SAR Required: NO

**Table 11.2-4d Fast SAR testing thresholds for UMTS band V**

Measured/Extrapolated SAR Values - Head - CDMA 850 MHz BC 0									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
Right Cheek	1013	824.70	25.0	24.1	0.02	0.283		0.352	
	384	836.52	25.0	24.2	0.02	0.358		0.426	
	777	848.31	25.0	24.4	0.00	0.388	0.389	0.443	0.445
Right 15° Tilt	1013	824.70							
	384	836.52	25.0	24.2	0.05	0.227		0.270	
	777	848.31							
Left Cheek	1013	824.70							
	384	836.52	25.0	24.2	0.01	0.269		0.320	
	777	848.31							
Left 15° Tilt	1013	824.70							
	384	836.52	25.0	24.2	0.06	0.167		0.201	
	777	848.31							
<b>Slider Open</b>									
Right Cheek	1013	824.70							
	384	836.52	25.0	24.2	-0.03	0.268		0.322	
	777	848.31							
Right 15° Tilt	1013	824.70							
	384	836.52	25.0	24.2	0.04	0.152		0.183	
	777	848.31							
Left Cheek	1013	824.70							
	384	836.52	25.0	24.2	-0.04	0.212		0.255	
	777	848.31							
Left 15° Tilt	1013	824.70							
	384	836.52	25.0	24.2	0.12	0.126		0.151	
	777	848.31							

**Table 11.2-5a SAR testing results for CDMA 850 BC0 head configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - CDMA 850 MHz BC 0									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
10mm Back	1013	824.70							
	384	836.52	25.0	24.2	0.00	0.488		0.585	
	777	848.31							
10mm Front	1013	824.70							
	384	836.52	25.0	24.2	0.01	0.404		0.485	
	777	848.31							
10mm Left	1013	824.70							
	384	836.52	25.0	24.2	0.01	0.246		0.295	
	777	848.31							
10mm Right	1013	824.70							
	384	836.52	25.0	24.2	0.00	0.401		0.481	
	777	848.31							
10mm Bottom	1013	824.70							
	384	836.52	25.0	24.2	-0.01	0.358		0.429	
	777	848.31							
<b>Slider Open</b>									
10mm Back	1013	824.70	25.0	24.1	0.01	0.484		0.602	
	384	836.52	25.0	24.2	-0.04	0.572	0.631	0.686	0.757
	777	848.31	25.0	24.4	-0.03	0.713	0.751	0.819	0.862
10mm Front	1013	824.70							
	384	836.52	25.0	24.2	-0.01	0.388	0.392	0.466	0.471
	777	848.31							
10mm Left	1013	824.70							
	384	836.52	25.0	24.2	0.07	0.17		0.204	
	777	848.31							
10mm Right	1013	824.70							
	384	836.52	25.0	24.2	0.01	0.319		0.384	
	777	848.31							
10mm Bottom	1013	824.70							
	384	836.52	25.0	24.2	-0.05	0.363	0.371	0.436	0.446
	777	848.31							

**Table 11.2-5b SAR testing results CDMA 850 BC0 hotspot configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - CDMA 850 MHz BC 0									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
15mm Back	1013	824.70							
	384	836.52	25.0	24.2	0.04	0.301		0.362	
	777	848.31							
15mm Front	1013	824.70	25.0	24.1	0.00	0.289		0.360	
	384	836.52	25.0	24.2	-0.04	0.339	0.342	0.407	0.410
	777	848.31	25.0	24.4	-0.04	0.334		0.383	
Holster Front	1013	824.70							
	384	836.52	25.0	24.2	-0.06	0.279		0.335	
	777	848.31							

**Table 11.2-5c SAR testing results for CDMA 850 BC0 body-worn configuration tested on device model: RHT181LW**

Threshold 1 For This Band: 0.546  
 Max FAST SAR For Band: 0.713  
 Threshold 2 For All Bands: 0.745  
 Max FULL SAR For Band: 0.751  
 Additional Full SAR Required: YES

**Table 11.2-5d Fast SAR testing thresholds for CDMA 850 BC0**

measured / extrapolated SAR numbers - Head - LTE FDD 4 1750 MHz											
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)
				declared**	meas.	meas.	extrap.	meas.	extrap.		
20MHz BW/1RB/QPSK											
20050	1720.0	50	left cheek	24.0	23.4	0.540	0.620	0.351	0.403	0.05	22.9
20050	1720.0	50	left tilted 15°	24.0	23.4	0.324	0.372	0.197	0.228	0.01	22.9
20050	1720.0	50	right cheek	24.0	23.4	0.297	0.341	0.195	0.224	-0.06	22.9
20050	1720.0	50	right tilted 15°	24.0	23.4	0.328	0.377	0.199	0.228	0.00	22.9
20MHz BW/50RB/QPSK											
20050	1720.0	25	left cheek	23.0	22.3	0.430	0.505	0.278	0.327	0.05	22.9
20050	1720.0	25	left tilted 15°	23.0	22.3	0.252	0.296	0.154	0.181	-0.01	22.9
20050	1720.0	25	right cheek	23.0	22.3	0.259	0.304	0.170	0.200	0.01	22.9
20050	1720.0	25	right tilted 15°	23.0	22.3	0.262	0.308	0.159	0.187	0.05	22.9
slider open											
20MHz BW/1RB/QPSK											
20050	1720.0	50	left cheek	24.0	23.4	0.541	0.621	0.349	0.401	-0.04	22.9
20175	1732.5	0	left cheek	24.0	23.1	0.577	0.710	0.384	0.472	0.10	22.9
20300	1745.0	0	left cheek	24.0	23.2	0.612	0.736	0.403	0.485	0.02	22.9
20050	1720.0	50	left tilted 15°	24.0	23.4	0.333	0.382	0.226	0.259	-0.05	22.9
20050	1720.0	50	right cheek	24.0	23.4	0.287	0.330	0.195	0.224	-0.09	22.9
20050	1720.0	50	right tilted 15°	24.0	23.4	0.325	0.373	0.213	0.245	0.01	22.9
20MHz BW/50RB/QPSK											
20050	1720.0	25	left cheek	23.0	22.3	0.428	0.503	0.277	0.325	0.00	22.9
20050	1720.0	25	left tilted 15°	23.0	22.3	0.265	0.311	0.179	0.210	0.04	22.9
20050	1720.0	25	right cheek	23.0	22.3	0.228	0.266	0.154	0.181	0.05	22.9
20050	1720.0	25	right tilted 15°	23.0	22.3	0.253	0.297	0.167	0.196	0.02	22.9

Table 83: Test results head SAR LTE FDD 4 1750 MHz (see max. SAR plot in Annex B.8: LTE FDD 4 page 186)

**Table 11.2-6a SAR testing results for LTE Band 4 (20MHz BW) head configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 4 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A



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**SAR Compliance Test Report for the BlackBerry®  
Smartphone Model RHT181LW (STV100-2) Part 2/2**

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Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

measured / extrapolated SAR numbers - hotspot mode - LTE FDD 4 1750 MHz												
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
20MHz BW/1RB/QPSK												
20050	1720.0	0	front	21.0	20.0	0.370	0.466	0.243	0.306	-0.14	21.0	10
20050	1720.0	0	rear	21.0	20.0	0.537	0.676	0.342	0.431	-0.03	21.0	10
20050	1720.0	0	left edge	21.0	20.0	0.260	0.327	0.166	0.209	0.14	21.0	10
20050	1720.0	0	right edge	21.0	20.0	0.052	0.066	0.032	0.041	-0.04	21.0	10
20050	1720.0	0	top edge	21.0	20.0	0.201	0.253	0.123	0.155	-0.07	21.0	10
20050	1720.0	0	bottom edge	21.0	20.0	0.198	0.249	0.115	0.145	-0.02	21.0	10
20MHz BW/50RB/QPSK												
20050	1720.0	50	front	20.0	20.0	0.306	0.306	0.200	0.200	0.00	21.0	10
20050	1720.0	50	rear	20.0	20.0	0.491	0.491	0.312	0.312	0.00	21.0	10
20050	1720.0	50	left edge	20.0	20.0	0.235	0.235	0.150	0.150	-0.04	21.0	10
20050	1720.0	50	right edge	20.0	20.0	0.029	0.029	0.018	0.018	-0.04	21.0	10
20050	1720.0	50	top edge	20.0	20.0	0.132	0.132	0.080	0.080	0.01	21.0	10
20050	1720.0	50	bottom edge	20.0	20.0	0.156	0.156	0.092	0.092	0.03	21.0	10
slider open												
20MHz BW/1RB/QPSK												
20050	1720.0	0	front	21.0	20.0	0.425	0.535	0.271	0.341	0.01	21.0	10
20050	1720.0	0	rear	21.0	20.0	0.817	1.029	0.500	0.629	0.10	21.0	10
20175	1732.5	0	rear	21.0	20.0	0.786	0.990	0.477	0.601	-0.02	21.0	10
20300	1745.0	0	rear	21.0	19.7	0.741	1.000	0.451	0.608	-0.09	21.0	10
20050	1720.0	0	left edge	21.0	20.0	0.563	0.709	0.365	0.460	-0.10	21.0	10
20050	1720.0	0	right edge	21.0	20.0	0.168	0.211	0.104	0.131	-0.05	21.0	10
20050	1720.0	0	top edge	21.0	20.0	0.055	0.069	0.036	0.045	0.18	21.0	10
20050	1720.0	0	bottom edge	21.0	20.0	0.578	0.728	0.348	0.438	0.10	21.0	10
20050	1720	0	rear*	21.0	20.0	0.832	1.047	0.513	0.646	-0.02	21.0	10
20MHz BW/50RB/QPSK												
20050	1720.0	50	front	20.0	20.0	0.403	0.403	0.256	0.256	-0.01	21.0	10
20050	1720.0	50	rear	20.0	20.0	0.779	0.779	0.473	0.473	-0.03	21.0	10
20050	1720.0	50	left edge	20.0	20.0	0.430	0.430	0.277	0.277	-0.02	21.0	10
20050	1720.0	50	right edge	20.0	20.0	0.121	0.121	0.075	0.075	-0.01	21.0	10
20050	1720.0	50	top edge	20.0	20.0	0.056	0.056	0.035	0.035	-0.04	21.0	10
20050	1720.0	50	bottom edge	20.0	20.0	0.354	0.354	0.217	0.217	-0.07	21.0	10
20MHz BW/100RB/QPSK												
20050	1720.0	0	front	20.0	20.0	0.402	0.402	0.256	0.256	-0.03	21.0	10
20050	1720.0	0	rear	20.0	20.0	0.796	0.796	0.483	0.483	0.03	21.0	10
20050	1720.0	0	left edge	20.0	20.0	0.290	0.290	0.187	0.187	-0.04	21.0	10
20050	1720.0	0	right edge	20.0	20.0	0.070	0.070	0.043	0.043	0.00	21.0	10
20050	1720.0	0	top edge	20.0	20.0	0.076	0.076	0.049	0.049	-0.03	21.0	10
20050	1720.0	0	bottom edge	20.0	20.0	0.227	0.227	0.140	0.140	0.01	21.0	10


Table 84: Test results hotspot mode SAR LTE FDD 4 1750 MHz (see max. SAR plot in Annex B.8: LTE FDD 4)

\* - repeated at the highest SAR measurement according to the FCC KDB 885664

\*\* - maximum possible output power declared by manufacturer

**Table 11.2-6b SAR testing results LTE Band 4 (20MHz BW) hotspot configuration tested on device model: RHM181LW by Cetecom**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 4 was measured using RHM181LW and reused for RHT181LW.

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Author Data <b>Andrew Becker</b>		Dates of Test <b>Oct 06 – Nov 02, 2015</b>		Test Report No <b>RTS-6066-1511-01</b>		FCC ID: <b>L6ARHT180LW</b>	

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - Body worn - LTE FDD 4 1750 MHz													
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)	
				declared**	meas.	meas.	extrap.	meas.	extrap.				
20MHz BW/1RB/QPSK													
20050	1720.0	50	front	24.0	23.4	0.458	0.528	0.315	0.362	-0.02	21.4	15	
20050	1720.0	50	rear	24.0	23.4	0.597	0.885	0.391	0.449	-0.08	21.4	15	
20175	1732.5	0	rear	24.0	23.1	0.555	0.883	0.368	0.450	-0.05	21.4	15	
20300	1745.0	0	rear	24.0	23.2	0.619	0.744	0.404	0.488	0.20	21.4	15	
20300	1745.0	0	rear + holster	24.0	23.2	0.260	0.313	0.176	0.212	-0.03	21.4	0	
20MHz BW/50RB/QPSK													
20050	1720.0	25	front	23.0	22.3	0.318	0.371	0.217	0.255	0.00	21.4	15	
20050	1720.0	25	rear	23.0	22.3	0.475	0.558	0.311	0.365	0.00	21.4	15	

Table 85: Test results body worn SAR LTE FDD 4 1750 MHz (see max. SAR plot in Annex B.8: LTE FDD 4)

**Table 11.2-6c SAR testing results for LTE Band 4 (20MHz BW) body-worn configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 4 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A



measured / extrapolated SAR numbers - Head - UMTS FDD IV 1700 MHz											
Ch.	Freq. (MHz)	test cond.	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)
				declared**	measured	meas.	extrap.	meas.	extrap.		
1312	1712	RMC	left cheek	25.0	24.1	0.868	1.065	0.561	0.690	-0.07	22.5
1413	1732	RMC	left cheek	25.0	23.9	0.896	1.154	0.568	0.732	0.03	22.5
1513	1753	RMC	left cheek	25.0	23.7	0.844	1.139	0.538	0.726	0.01	22.5
1413	1732	RMC	left tilted 15°	25.0	23.9	0.408	0.523	0.258	0.332	-0.04	22.5
1413	1732.4	RMC	right cheek	25.0	23.9	0.385	0.470	0.240	0.309	0.03	22.5
1413	1732.4	RMC	right tilted 15°	25.0	23.9	0.418	0.536	0.247	0.318	0.00	22.5
1413	1732	RMC	left cheek*	25.0	23.9	0.868	1.116	0.557	0.718	-0.06	22.5
slider open											
1413	1732	RMC	left cheek	25.0	23.9	0.574	0.739	0.373	0.481	-0.03	22.5
1413	1732	RMC	left tilted 15°	25.0	23.9	0.413	0.532	0.275	0.354	-0.02	22.5
1413	1732	RMC	right cheek	25.0	23.9	0.314	0.405	0.210	0.271	0.03	22.5
1413	1732	RMC	right tilted 15°	25.0	23.9	0.399	0.514	0.251	0.323	0.01	22.5

Table 74: Test results head SAR UMTS FDD IV 1700 MHz (see max. SAR plot in Annex B.5: UMTS FDD IV page 175)

\* - repeated at the highest SAR measurement according to the FCC KDB 865664

\*\* - maximum possible output power declared by manufacturer

**Table 11.2-7a SAR testing results for UMTS band IV head configuration tested on device model:  
RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on UMTS band IV was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - hotspot mode - UMTS FDD IV 1700 MHz												
Ch.	Freq. (MHz)	test cond.	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
1413	1732	RMC	front	22.0	21.3	0.498	0.585	0.327	0.384	-0.04	21.9	10
1312	1712	RMC	rear	22.0	21.5	0.720	0.808	0.428	0.480	-0.04	21.9	10
1413	1732	RMC	rear	22.0	21.3	0.670	0.787	0.384	0.451	-0.01	21.9	10
1513	1753	RMC	rear	22.0	21.1	0.651	0.801	0.373	0.459	-0.03	21.9	10
1413	1732	RMC	left edge	22.0	21.3	0.316	0.371	0.201	0.236	-0.04	21.9	10
1413	1732	RMC	right edge	22.0	21.3	0.082	0.096	0.051	0.060	0.03	21.9	10
1413	1732	RMC	bottom edge	22.0	21.3	0.271	0.318	0.162	0.190	-0.02	21.9	10
1413	1732	RMC	top	22.0	21.3	0.117	0.137	0.072	0.084	-0.03	21.9	10
slider open												
1413	1732	RMC	front	22.0	21.3	0.531	0.624	0.338	0.397	-0.01	21.9	10
1312	1712	RMC	rear	22.0	21.8	1.090	1.141	0.663	0.694	-0.05	21.9	10
1413	1732	RMC	rear	22.0	21.3	0.992	1.165	0.607	0.713	-0.03	21.9	10
1513	1753	RMC	rear	22.0	21.1	0.921	1.133	0.570	0.701	0.00	21.9	10
1413	1732	RMC	left edge	22.0	21.3	0.335	0.394	0.215	0.253	-0.01	21.9	10
1413	1732	RMC	right edge	22.0	21.3	0.101	0.119	0.063	0.074	0.04	21.9	10
1413	1732	RMC	top edge	22.0	21.3	0.075	0.088	0.049	0.058	0.00	21.9	10
1413	1732	RMC	bottom edge	22.0	21.3	0.200	0.235	0.125	0.147	-0.04	21.9	10
1312	1712.4	RMC	rear <sup>*</sup>	22.0	21.8	1.000	1.047	0.598	0.626	-0.02	21.9	10

Table 75: Test results hotspot mode SAR UMTS FDD IV 1700 MHz (see max. SAR plot in Annex B.5: UMTS FDD IV)

\* - repeated at the highest SAR measurement according to the FCC KDB 865664  
 \*\* - maximum possible output power declared by manufacturer

**Table 11.2-7b SAR testing results UMTS band IV hotspot configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on UMTS band IV was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - Body worn - UMTS FDD IV 1700 MHz												
Ch.	Freq. (MHz)	test cond.	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
1312	1712	RMC	front	25.0	24.1	0.696	0.858	0.464	0.571	-0.07	22.6	15
1413	1732	RMC	front	25.0	23.9	0.692	0.891	0.461	0.594	-0.10	22.6	15
1513	1753	RMC	front	25.0	23.7	0.623	0.840	0.416	0.561	0.02	22.6	15
1312	1712	RMC	rear	25.0	24.1	0.662	0.871	0.432	0.522	-0.12	21.9	15
1413	1732	RMC	rear	25.0	23.9	0.631	0.871	0.378	0.522	-0.10	22.6	15
1513	1753	RMC	rear	25.0	23.7	0.626	0.844	0.378	0.510	-0.06	21.9	15
1413	1732	RMC	front+holster	25.0	23.9	0.345	0.444	0.238	0.307	-0.05	22.6	0

Table 76: Test results body worn SAR UMTS FDD IV 1700 MHz (see max. SAR plot in Annex B.5: UMTS FDD IV)

**Table 11.2-7c SAR testing results for UMTS band IV body-worn configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on UMTS band IV was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - Head - LTE FDD 2 1900 MHz											
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)
				declared**	meas.	meas.	extrap.	meas.	extrap.		
20MHz BW/1RB/QPSK											
18900	1880.0	0	left cheek	24.0	23.3	0.531	0.624	0.336	0.395	0.17	22.2
18900	1880.0	0	left tilted 15°	24.0	23.3	0.270	0.317	0.166	0.195	-0.06	22.2
18900	1880.0	0	right cheek	24.0	23.3	0.285	0.335	0.188	0.221	0.08	22.2
18900	1880.0	0	right tilted 15°	24.0	23.3	0.277	0.325	0.168	0.197	-0.01	22.2
20MHz BW/50RB/QPSK											
18700	1860.0	25	left cheek	23.0	22.3	0.387	0.455	0.248	0.291	0.06	22.2
18700	1860.0	25	left tilted 15°	23.0	22.3	0.192	0.226	0.118	0.139	0.03	22.2
18700	1860.0	25	right cheek	23.0	22.3	0.183	0.215	0.121	0.142	0.06	22.2
18700	1860.0	25	right tilted 15°	23.0	22.3	0.191	0.224	0.115	0.135	0.04	22.2
slider open											
20MHz BW/1RB/QPSK											
18700	1860.0	50	left cheek	24.0	23.2	0.622	0.748	0.393	0.472	0.10	22.2
18900	1880.0	0	left cheek	24.0	23.3	0.604	0.710	0.387	0.455	0.11	22.2
19100	1900.0	0	left cheek	24.0	22.9	0.629	0.810	0.399	0.514	0.11	22.2
18900	1880.0	0	left tilted 15°	24.0	23.3	0.350	0.411	0.233	0.274	0.01	22.2
18900	1880.0	0	right cheek	24.0	23.3	0.322	0.378	0.210	0.247	0.07	22.2
18900	1880.0	0	right tilted 15°	24.0	23.3	0.335	0.394	0.215	0.253	0.04	22.2
20MHz BW/50RB/QPSK											
18700	1860.0	25	left cheek	23.0	22.3	0.432	0.508	0.276	0.324	0.04	22.2
18700	1860.0	25	left tilted 15°	23.0	22.3	0.262	0.308	0.173	0.203	0.10	22.2
18700	1860.0	25	right cheek	23.0	22.3	0.230	0.270	0.150	0.176	0.10	22.2
18700	1860.0	25	right tilted 15°	23.0	22.3	0.244	0.287	0.155	0.182	-0.03	22.2

Table 80: Test results head SAR LTE FDD 2 1900 MHz (see max. SAR plot in Annex B.7: LTE FDD 2 page 183)

**Table 11.2-8a SAR testing results for LTE Band 2 (20MHz BW) head configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 2 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A



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Author Data  
**Andrew Becker**

Dates of Test  
**Oct 06 – Nov 02, 2015**

Test Report No  
**RTS-6066-1511-01**

FCC ID:  
**L6ARHT180LW**

measured / extrapolated SAR numbers - hotspot mode - LTE FDD 2 1900 MHz												
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
20MHz BW/1RB/QPSK												
18700	1860.0	0	front	21.0	19.9	0.364	0.469	0.231	0.298	0.00	21.3	10
18700	1860.0	0	rear	21.0	19.9	0.471	0.607	0.266	0.343	-0.04	21.3	10
18900	1880.0	0	left edge	21.0	19.9	0.526	0.678	0.322	0.415	0.11	21.3	10
18900	1880.0	0	right edge	21.0	19.9	0.134	0.173	0.075	0.096	-0.05	21.3	10
18900	1880.0	0	top edge	21.0	19.9	0.071	0.092	0.043	0.055	0.10	21.3	10
18900	1880.0	0	bottom edge	21.0	19.9	0.326	0.420	0.184	0.237	-0.04	21.3	10
20MHz BW/50RB/QPSK												
18700	1860.0	0	front	20.0	19.9	0.282	0.289	0.177	0.181	-0.01	21.3	10
18700	1860.0	0	rear	20.0	19.9	0.471	0.482	0.272	0.278	-0.02	21.3	10
18900	1880.0	0	left edge	20.0	19.9	0.411	0.421	0.251	0.257	0.00	21.3	10
18900	1880.0	0	right edge	20.0	19.9	0.096	0.099	0.055	0.056	-1.16	21.3	10
18900	1880.0	0	top edge	20.0	19.9	0.056	0.057	0.034	0.035	0.01	21.3	10
18900	1880.0	0	bottom edge	20.0	19.9	0.240	0.246	0.136	0.139	-0.01	21.3	10
slider open												
20MHz BW/1RB/QPSK												
18700	1860	0	front	21.0	19.9	0.395	0.509	0.251	0.323	-0.02	21.3	10
18700	1860	0	rear	21.0	19.9	0.595	0.767	0.369	0.475	0.02	21.3	10
18900	1880.0	0	rear	21.0	19.6	0.662	0.914	0.410	0.566	-0.04	21.3	10
19100	1900.0	0	rear	21.0	19.4	0.645	0.932	0.394	0.570	0.00	21.3	10
18700	1860	0	left edge	21.0	19.9	0.252	0.325	0.156	0.201	-0.03	21.3	10
18700	1860	0	right edge	21.0	19.9	0.070	0.090	0.042	0.054	-0.02	21.3	10
18700	1860	0	top edge	21.0	19.9	0.073	0.094	0.045	0.058	0.01	21.3	10
18700	1860	0	bottom edge	21.0	19.9	0.176	0.227	0.106	0.137	0.03	21.3	10
20MHz BW/50RB/QPSK												
18700	1860	0	front	20.0	19.9	0.399	0.408	0.252	0.258	0.00	21.3	10
18700	1860	0	rear	20.0	19.9	0.605	0.619	0.374	0.383	0.01	21.3	10
18700	1860	0	left edge	20.0	19.9	0.253	0.259	0.157	0.161	0.03	21.3	10
18700	1860	0	right edge	20.0	19.9	0.071	0.072	0.043	0.044	-0.04	21.3	10
18700	1860	0	top edge	20.0	19.9	0.074	0.076	0.045	0.046	0.00	21.3	10
18700	1860	0	bottom edge	20.0	19.9	0.172	0.176	0.104	0.106	0.02	21.3	10

Table 81: Test results hotspot mode SAR LTE FDD 2 1900 MHz (see max. SAR plot in Annex B.7: LTE FDD 2)

**Table 11.2-8b SAR testing results LTE Band 2 (20MHz BW) hotspot configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 2 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - Body worn - LTE FDD 2 1900 MHz												
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
20MHz BW/1RB/QPSK												
18900	1880.0	0	front	24.0	23.3	0.214	0.251	0.124	0.148	0.03	21.7	15
18700	1860.0	50	rear	24.0	23.2	0.501	0.602	0.325	0.391	-0.01	21.7	15
18900	1880.0	0	rear	24.0	23.3	0.608	0.714	0.394	0.463	0.02	21.7	15
19100	1900.0	0	rear	24.0	22.9	0.519	0.669	0.335	0.432	-0.02	21.7	15
18900	1880.0	0	rear+holster	24.0	23.3	0.287	0.314	0.173	0.203	-0.03	21.7	0
20MHz BW/50RB/QPSK												
18700	1860.0	25	front	23.0	22.3	0.155	0.182	0.090	0.106	-0.04	21.7	15
18700	1860.0	25	rear	23.0	22.3	0.397	0.466	0.258	0.303	0.01	21.7	15

Table 82: Test results body worn SAR LTE FDD 2 1900 MHz (see max. SAR plot in Annex B.7: LTE FDD 2)

\*\* - maximum possible output power declared by manufacturer

**Table 11.2-8c SAR testing results for LTE Band 2 (20MHz BW) body-worn configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 2 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A



measured / extrapolated SAR numbers - Head - GSM 1900 MHz											
Ch.	Freq. (MHz)	time slots	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)
				declared**	measured	meas.	extrap.	meas.	extrap.		
661	1880.0	2	left cheek	30.5	29.2	0.434	0.585	0.279	0.378	0.02	22.2
661	1880.0	2	left tilted 15°	30.5	29.2	0.248	0.335	0.151	0.204	-0.12	22.2
661	1880.0	2	right cheek	30.5	29.2	0.218	0.294	0.145	0.196	0.01	22.2
661	1880.0	2	right tilted 15°	30.5	29.2	0.232	0.313	0.140	0.189	-0.11	22.2
slider open											
512	1850.2	2	left cheek	30.5	29.2	0.469	0.633	0.305	0.411	0.17	22.2
661	1880.0	2	left cheek	30.5	29.2	0.520	0.701	0.326	0.440	0.04	22.2
810	1909.8	2	left cheek	30.5	29.4	0.383	0.493	0.245	0.318	0.10	22.2
661	1880.0	2	left tilted 15°	30.5	29.2	0.260	0.351	0.173	0.233	0.02	22.2
661	1880.0	2	right cheek	30.5	29.2	0.242	0.326	0.159	0.214	0.07	22.2
661	1880.0	2	right tilted 15°	30.5	29.2	0.259	0.349	0.161	0.217	0.03	22.2

Table 68: Test results head SAR GSM 1900MHz GMSK 2TS in uplink (see max. SAR plot in Annex B.3: GSM 1900MHz page 167)

Note: The device supports DTM class 11 with max. 3 timeslots in uplink. SAR measurements were performed in the configuration with highest calculated time based averaged output power (see section 7.1.2). Therefore 2 timeslots in uplink were used for test.

**Table 11.2-9a SAR testing results for GSM/EDGE/DTM 1900 head configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on GSM/GPRS/DTM 1900 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A



measured / extrapolated SAR numbers - hotspot mode - GSM 1900 MHz												
Ch.	Freq. (MHz)	time slots	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
661	1880.0	2	front	29.0	27.9	0.289	0.372	0.162	0.209	0.08	22.4	10
661	1880.0	2	rear	29.0	27.9	0.515	0.663	0.314	0.405	-0.02	22.4	10
661	1880.0	2	left edge	29.0	27.9	0.322	0.415	0.195	0.251	0.01	22.4	10
661	1880.0	2	right edge	29.0	27.9	0.057	0.073	0.035	0.045	-0.10	22.4	10
661	1880.0	2	top edge	29.0	27.9	0.043	0.055	0.028	0.036	0.04	22.4	10
661	1880.0	2	bottom edge	29.0	27.9	0.220	0.283	0.122	0.157	0.04	22.4	10
slider open												
661	1880.0	2	front	29.0	27.9	0.375	0.483	0.236	0.304	-0.01	22.4	10
512	1850.2	2	rear	29.0	27.0	0.720	1.141	0.441	0.699	-0.04	22.4	10
661	1880.0	2	rear	29.0	27.9	0.626	0.806	0.379	0.488	-0.04	22.4	10
810	1909.8	2	rear	29.0	27.1	0.556	0.861	0.335	0.519	-0.02	22.4	10
661	1880.0	2	left edge	29.0	27.9	0.248	0.319	0.154	0.198	-0.01	22.4	10
661	1880.0	2	right edge	29.0	27.9	0.058	0.074	0.035	0.045	0.03	22.4	10
661	1880.0	2	top edge	29.0	27.9	0.083	0.106	0.050	0.065	0.54	22.4	10
661	1880.0	2	bottom edge	29.0	27.9	0.118	0.152	0.073	0.094	-0.54	22.4	10

Table 69: Test results hotspot mode SAR GSM 1900 (see max. SAR plot in Annex B.3: GSM 1900MHz)

**Table 11.2-9b SAR testing results GSM/GPRS/DTM 1900 hotspot configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on GSM/GPRS/DTM 1900 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - Body worn - GSM 1900 MHz												
Ch.	Freq. (MHz)	time slots	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
661	1880.0	2	front	30.5	29.2	0.166	0.224	0.097	0.131	0.07	21.3	15
512	1850.2	2	rear	30.5	29.2	0.537	0.724	0.354	0.478	0.01	21.3	15
661	1880.0	2	rear	30.5	29.2	0.445	0.600	0.290	0.391	0.02	21.3	15
810	1909.8	2	rear	30.5	29.4	0.367	0.473	0.235	0.303	-0.04	21.3	15
512	1850	2	rear + holster	30.5	29.2	0.254	0.343	0.169	0.228	-0.03	21.3	0

Table 70: Test results body worn SAR GSM 1900 (see max. SAR plot in Annex B.3: GSM 1900MHz)

\*\* - maximum possible output power declared by manufacturer

**Table 11.2-9c SAR testing results for GSM/GPRS/DTM 1900 body-worn configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on GSM/GPRS/DTM 1900 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - Head - UMTS FDD II 1880 MHz											
Ch.	Freq. (MHz)	test cond.	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift(dB)	liquid (°C)
				declared**	measured	meas.	extrap.	meas.	extrap.		
9400	1880.0	RMC	left cheek	25.0	24.6	0.507	0.556	0.329	0.361	0.12	22.2
9400	1880.0	RMC	left tilted 15°	25.0	24.6	0.243	0.266	0.153	0.168	-0.05	22.2
9400	1880.0	RMC	right cheek	25.0	24.6	0.284	0.311	0.191	0.209	0.03	22.2
9400	1880.0	RMC	right tilted 15°	25.0	24.6	0.255	0.280	0.155	0.170	-0.06	22.2
slider open											
9262	1852.4	RMC	left cheek	25.0	23.9	0.518	0.667	0.341	0.439	0.05	22.2
9400	1880.0	RMC	left cheek	25.0	24.6	0.557	0.611	0.365	0.400	0.10	22.2
9538	1907.6	RMC	left cheek	25.0	23.9	0.505	0.651	0.327	0.421	0.04	22.2
9400	1880.0	RMC	left tilted 15°	25.0	24.6	0.383	0.420	0.253	0.277	0.01	22.2
9400	1880.0	RMC	right cheek	25.0	24.6	0.319	0.350	0.212	0.232	0.02	22.2
9400	1880.0	RMC	right tilted 15°	25.0	24.6	0.384	0.421	0.240	0.263	-0.02	22.2

Table 71: Test results head SAR UMTS FDD II 1880 MHz (see max. SAR plot in Annex B.4: UMTS FDD II page 170)

**Table 11.2-10a SAR testing results for UMTS band II head configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on UMTS band II was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - hotspot mode - UMTS FDD II 1880 MHz												
Ch.	Freq. (MHz)	test cond.	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift(dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
9400	1880.0	RMC	front	22.0	21.5	0.234	0.263	0.129	0.145	0.00	21.3	10
9282	1852.4	RMC	rear	22.0	21.8	0.778	0.815	0.486	0.509	0.01	21.3	10
9400	1880.0	RMC	rear	22.0	21.5	0.719	0.807	0.441	0.495	0.08	21.3	10
9538	1907.6	RMC	rear	22.0	21.2	0.644	0.774	0.387	0.465	0.02	21.3	10
9400	1880.0	RMC	left edge	22.0	21.5	0.435	0.488	0.257	0.288	-0.01	21.3	10
9400	1880.0	RMC	right edge	22.0	21.5	0.054	0.060	0.033	0.037	0.11	21.3	10
9400	1880.0	RMC	top edge	22.0	21.5	0.083	0.093	0.056	0.063	0.03	21.3	10
9400	1880.0	RMC	bottom edge	22.0	21.5	0.387	0.434	0.211	0.237	-0.01	21.3	10
slider open												
9400	1880.0	RMC	front	22.0	21.5	0.577	0.647	0.362	0.406	0.00	21.3	10
9282	1852.4	RMC	rear	22.0	21.8	0.809	0.847	0.501	0.525	-0.01	21.3	10
9400	1880.0	RMC	rear	22.0	21.5	0.815	0.914	0.501	0.562	0.01	21.3	10
9538	1907.6	RMC	rear	22.0	21.2	0.769	0.925	0.469	0.564	0.11	21.3	10
9400	1880.0	RMC	left edge	22.0	21.5	0.325	0.365	0.201	0.226	0.00	21.3	10
9400	1880.0	RMC	right edge	22.0	21.5	0.106	0.119	0.063	0.071	-0.02	21.3	10
9400	1880.0	RMC	top edge	22.0	21.5	0.074	0.083	0.047	0.052	-0.09	21.3	10
9400	1880.0	RMC	bottom edge	22.0	21.5	0.213	0.239	0.129	0.145	0.01	21.3	10
9400	1880.0	RMC	rear*	22.0	21.5	0.778	0.873	0.486	0.545	0.00	21.3	10

Table 72: Test results hotspot mode SAR UMTS FDD II 1880 MHz (see max. SAR plot in Annex B.4: UMTS FDD II)

\* - repeated at the highest SAR measurement according to the FCC KDB 865664  
 \*\* - maximum possible output power declared by manufacturer

**Table 11.2-10b SAR testing results UMTS band II hotspot configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on UMTS band II was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

measured / extrapolated SAR numbers - Body worn - UMTS FDD II 1880 MHz												
Ch.	Freq. (MHz)	test cond.	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift(dB)	liquid (°C)	dist. (mm)
				declared**	meas.	meas.	extrap.	meas.	extrap.			
9400	1880.0	RMC	front	25.0	24.6	0.231	0.253	0.135	0.148	0.01	21.3	15
9282	1852.4	RMC	rear	25.0	23.9	0.725	0.934	0.473	0.609	0.02	21.3	15
9400	1880.0	RMC	rear	25.0	24.6	0.878	0.743	0.440	0.482	0.01	21.3	15
9538	1907.6	RMC	rear	25.0	23.9	0.537	0.692	0.344	0.443	0.03	21.3	15
9282	1852.4	RMC	rear+holster	25.0	24.6	0.348	0.379	0.226	0.248	0.00	21.3	0

Table 73: Test results body worn SAR UMTS FDD II 1880 MHz (see max. SAR plot in Annex B.4: UMTS FDD II)

**Table 11.2-10c SAR testing results for UMTS band II body-worn configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on UMTS band II was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

Measured/Extrapolated SAR Values - Head - CDMA 1900 MHz BC 1									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
Right Cheek	25	1851.25							
	600	1880.00	25.0	23.9	0.02	0.311		0.401	
	1175	1908.75							
Right 15° Tilt	25	1851.25							
	600	1880.00	25.0	23.9	-0.17	0.284		0.366	
	1175	1908.75							
Left Cheek	25	1851.25							
	600	1880.00	25.0	23.9	-0.01	0.533		0.687	
	1175	1908.75							
Left 15° Tilt	25	1851.25							
	600	1880.00	25.0	23.9	-0.19	0.327		0.421	
	1175	1908.75							
<b>Slider Open</b>									
Right Cheek	25	1851.25							
	600	1880.00	25.0	23.9	-0.09	0.347		0.447	
	1175	1908.75							
Right 15° Tilt	25	1851.25							
	600	1880.00	25.0	23.9	-0.05	0.343		0.442	
	1175	1908.75							
Left Cheek	25	1851.25	25.0	22.8	0.00	0.526		0.883	
	600	1880.00	25.0	23.9	-0.12	0.657	0.652	0.846	0.840
	1175	1908.75	25.0	23.1	-0.07	0.577	0.589	0.900	0.919
Left 15° Tilt	25	1851.25							
	600	1880.00	25.0	23.9	0.12	0.474	0.476	0.611	0.613
	1175	1908.75							

**Table 11.2-11a SAR testing results for CDMA 1900 BC1 head configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - CDMA 1900 MHz BC 1									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
10mm Back	25	1851.25							
	600	1880.00	22.0	21.5	0.01	0.697	0.719	0.791	0.816
	1175	1908.75							
10mm Front	25	1851.25							
	600	1880.00	22.0	21.5	-0.09	0.193		0.219	
	1175	1908.75							
10mm Left	25	1851.25							
	600	1880.00	22.0	21.5	-0.02	0.370		0.420	
	1175	1908.75							
10mm Right	25	1851.25							
	600	1880.00	22.0	21.5	-0.08	0.059		0.067	
	1175	1908.75							
10mm Bottom	25	1851.25							
	600	1880.00	22.0	21.5	-0.03	0.150		0.170	
	1175	1908.75							
10mm + Headset	25	1851.25							
	600	1880.00							
	1175	1908.75							
<b>Slider Open</b>									
10mm Back	25	1851.25	22.0	21.5	-0.01	0.868	0.830	0.985	0.942
	600	1880.00	22.0	21.4	0.00	0.854	0.859	0.992	0.998
	1175	1908.75	22.0	21.4	0.01	0.852	0.879	0.969	1.000
10mm Front	25	1851.25							
	600	1880.00	22.0	21.4	-0.07	0.567		0.659	
	1175	1908.75							
10mm Left	25	1851.25							
	600	1880.00	22.0	21.4	0.01	0.364		0.423	
	1175	1908.75							
10mm Right	25	1851.25							
	600	1880.00	22.0	21.4	-0.14	0.128		0.149	
	1175	1908.75							
10mm Bottom	25	1851.25							
	600	1880.00	22.0	21.4	-0.04	0.252		0.293	
	1175	1908.75							
10mm + Headset	25	1851.25							
	600	1880.00							
	1175	1908.75							
<b>Slider Open Repeat Scans</b>									
2nd Scan	1175	1908.75	22.0	21.4	0.01	0.818	0.849	0.931	0.966

**Table 11.2-11b SAR testing results CDMA 1900 BC1 hotspot configuration tested on device model: RHT181LW**

Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - CDMA 1900 MHz BC 1									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
15mm Back	25	1851.25	25.0	22.9	-0.07	0.425		0.697	
	600	1880.00	25.0	24.0	-0.04	0.700	0.691	0.891	0.880
	1175	1908.75	25.0	23.1	-0.06	0.615	0.617	0.948	0.951
15mm Front	25	1851.25							
	600	1880.00	25.0	24.0	0.05	0.213		0.271	
	1175	1908.75							
Holster Back	25	1851.25							
	600	1880.00	25.0	24.0	-0.04	0.240		0.306	
	1175	1908.75							

**Table 11.2-11c SAR testing results for CDMA 1900 BC1 body-worn configuration tested on device model: RHT181LW**

Threshold 1 For This Band: 0.665  
 Max FAST SAR For Band: 0.868  
 Threshold 2 For All Bands: 0.745  
 Max FULL SAR For Band: 0.879  
 Additional Full SAR Required: YES

**Table 11.2-11d Fast SAR testing thresholds for CDMA 1900 BC1**



measured / extrapolated SAR numbers - Head - LTE FDD 7 2600 MHz											
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)
				declared**	meas.	meas.	extrap.	meas.	extrap.		
20MHz BW/1RB/QPSK											
20850	2510	0	left cheek	24.0	23.1	0.077	0.095	0.041	0.050	-0.06	21.0
20850	2510	0	left tilted 15°	24.0	23.1	0.076	0.093	0.037	0.046	0.15	21.0
20850	2510	0	right cheek	24.0	23.1	0.170	0.209	0.090	0.111	0.11	21.0
20850	2510	0	right tilted 15°	24.0	23.1	0.054	0.066	0.027	0.033	0.08	21.0
20MHz BW/50RB/QPSK											
20850	2510	25	left cheek	23.0	22.1	0.057	0.070	0.030	0.037	0.18	21.0
20850	2510	25	left tilted 15°	23.0	22.1	0.064	0.078	0.031	0.038	0.07	21.0
20850	2510	25	right cheek	23.0	22.1	0.131	0.161	0.070	0.086	0.11	21.0
20850	2510	25	right tilted 15°	23.0	22.1	0.045	0.055	0.022	0.028	0.04	21.0
slider open											
20MHz BW/1RB/QPSK											
20850	2510	0	left cheek	24.0	23.1	0.107	0.132	0.060	0.074	-0.02	21.0
20850	2510	0	left tilted 15°	24.0	23.1	0.105	0.129	0.054	0.067	0.08	21.0
20850	2510	0	right cheek	24.0	23.1	0.241	0.296	0.130	0.160	-0.12	21.0
21100	2535	0	right cheek	24.0	22.9	0.231	0.298	0.124	0.160	0.12	21.0
21350	2580	0	right cheek	24.0	22.7	0.197	0.266	0.104	0.140	0.08	21.0
20850	2510	0	right tilted 15°	24.0	23.1	0.081	0.099	0.042	0.052	0.01	21.0
20MHz BW/50RB/QPSK											
20850	2510	25	left cheek	23.0	22.1	0.077	0.095	0.044	0.054	0.13	21.0
20850	2510	25	left tilted 15°	23.0	22.1	0.077	0.094	0.038	0.047	0.06	21.0
20850	2510	25	right cheek	23.0	22.1	0.190	0.234	0.101	0.124	0.00	21.0
20850	2510	25	right tilted 15°	23.0	22.1	0.064	0.079	0.033	0.041	0.03	21.0

Table 86: Test results head SAR LTE FDD 7 2600 MHz (see max. SAR plot in Annex B.9: LTE FDD 7 page 189)

**Table 11.2-12a SAR testing results for LTE Band 7 (20MHz BW) head configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 7 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A



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Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

measured / extrapolated SAR numbers - hotspot mode - LTE FDD 7 2600 MHz												
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	measured	meas.	extrap.	meas.	extrap.			
20MHz BW/1RB/QPSK												
20850	2510	0	front	20.5	20.0	0.312	0.350	0.150	0.168	-0.08	22.6	10
20850	2510	0	rear	20.5	20.0	0.385	0.432	0.184	0.206	-0.01	22.6	10
21100	2535	0	left edge	20.5	20.0	0.025	0.028	0.017	0.019	0.17	22.6	10
21100	2535	0	right edge	20.5	20.0	0.278	0.312	0.143	0.160	0.01	22.6	10
21100	2535	0	top edge	20.5	20.0	0.020	0.022	0.011	0.012	0.09	22.6	10
21100	2535	0	bottom edge	20.5	20.0	0.580	0.651	0.270	0.303	0.08	22.6	10
20MHz BW/50RB/QPSK												
20850	2510	0	front	20.5	20.0	0.319	0.358	0.153	0.172	0.00	22.6	10
20850	2510	0	rear	20.5	20.0	0.395	0.443	0.187	0.210	-0.01	22.6	10
20850	2510	0	left edge	20.5	20.0	0.025	0.027	0.017	0.019	-0.07	22.6	10
20850	2510	0	right edge	20.5	20.0	0.288	0.323	0.148	0.166	-0.03	22.6	10
20850	2510	0	top edge	20.5	20.0	0.022	0.025	0.012	0.014	-0.02	22.6	10
20850	2510	0	bottom edge	20.5	20.0	0.619	0.695	0.287	0.322	-0.05	22.6	10
slider open												
20MHz BW/1RB/QPSK												
20850	2510	0	front	20.5	20.0	0.462	0.518	0.225	0.253	0.06	22.6	10
20850	2510	0	rear	20.5	20.0	0.472	0.530	0.231	0.259	-0.01	22.6	10
20850	2510	0	left edge	20.5	20.0	0.081	0.090	0.045	0.050	0.01	22.6	10
20850	2510	0	right edge	20.5	20.0	0.228	0.256	0.118	0.132	-0.04	22.6	10
20850	2510	0	top edge	20.5	20.0	0.021	0.023	0.011	0.012	-0.06	22.6	10
20850	2510	0	bottom edge	20.5	20.0	0.740	0.830	0.352	0.395	0.13	22.6	10
21100	2535	99	bottom edge	20.5	20.0	0.779	0.874	0.371	0.416	0.02	22.6	10
21350	2560	0	bottom edge	20.5	19.6	0.769	0.946	0.364	0.448	0.02	22.6	10
20MHz BW/50RB/QPSK												
20850	2510	0	front	20.5	20.0	0.457	0.513	0.225	0.252	-0.01	22.6	10
20850	2510	0	rear	20.5	20.0	0.076	0.085	0.042	0.047	0.04	22.6	10
20850	2510	0	left edge	20.5	20.0	0.076	0.085	0.042	0.047	0.04	22.6	10
20850	2510	0	right edge	20.5	20.0	0.230	0.258	0.118	0.132	-0.04	22.6	10
20850	2510	0	top edge	20.5	20.0	0.020	0.022	0.011	0.012	0.32	22.6	10
20850	2510	0	bottom edge	20.5	20.0	0.744	0.835	0.352	0.395	-0.01	22.6	10


Table 87: Test results hotspot mode SAR LTE FDD 7 2600 MHz (see max. SAR plot in Annex B.9: LTE FDD 7)

\*\* - maximum possible output power declared by manufacturer

**Table 11.2-12b SAR testing results LTE Band 7 (20MHz BW) hotspot configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 7 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

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Author Data <b>Andrew Becker</b>		Dates of Test <b>Oct 06 – Nov 02, 2015</b>		Test Report No <b>RTS-6066-1511-01</b>		FCC ID: <b>L6ARHT180LW</b>	

measured / extrapolated SAR numbers - Body worn - LTE FDD 7 2600 MHz												
Ch.	Freq. (MHz)	RB offset	Position	cond. P <sub>max</sub> (dBm)		SAR <sub>1g</sub> (W/kg)		SAR <sub>10g</sub> (W/kg)		power drift (dB)	liquid (°C)	dist. (mm)
				declared**	measured	meas.	extrap.	meas.	extrap.			
20MHz BW/1RB/QPSK												
20850	2510	0	front	24.0	23.1	0.318	0.391	0.167	0.205	0.12	22.8	15
20850	2510	0	rear	24.0	23.1	0.378	0.465	0.196	0.241	0.12	22.8	15
20850	2510	0	rear + holster	24.0	23.1	0.275	0.338	0.150	0.185	-0.13	22.8	0
20MHz BW/50RB/QPSK												
20850	2510	25	front	23.0	22.1	0.260	0.320	0.137	0.169	0.01	22.8	15
20850	2510	25	rear	23.0	22.1	0.308	0.379	0.160	0.197	0.02	22.8	15

Table 88: Test results body worn SAR LTE FDD 7 2600 MHz (see max. SAR plot in Annex B.9: LTE FDD 7)

**Table 11.2-12c SAR testing results for LTE Band 7 (20MHz BW) body-worn configuration tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for this band. Due to this SAR on LTE band 7 was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

Measured/Extrapolated SAR Values - Head - Bluetooth 2450 MHz									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
Right Cheek	0	2402.0							
	39	2441.0	9.0	7.8	0.03	0.012	0.011	0.015	0.015
	78	2480.0							
Right 15° Tilt	0	2402.0							
	39	2441.0	9.0	7.8	-0.10	0.004	0.004	0.005	0.005
	78	2480.0							
Left Cheek	0	2402.0							
	39	2441.0	9.0	7.8	0.09	0.005	0.004	0.006	0.006
	78	2480.0							
Left 15° Tilt	0	2402.0							
	39	2441.0							
	78	2480.0							
<b>Slider Open</b>									
Right Cheek	0	2402.0							
	39	2441.0	9.0	7.8	-0.06	0.009	0.009	0.011	0.012
	78	2480.0							

**Table 11.2-13a SAR testing results for Bluetooth head configuration tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on Bluetooth was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - Bluetooth 2450 MHz									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
10mm Back	0	2402.0							
	39	2441.0	9.0	7.8	-0.15	0.017		0.023	
	78	2480.0							
<b>Slider Open</b>									
10mm Back	0	2402.0							
	39	2441.0	9.0	7.8	0.23	0.017	0.019	0.023	0.025
	78	2480.0							

**Table 11.2-13b SAR testing results Bluetooth hotspot configuration tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on Bluetooth was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - Bluetooth 2450 MHz									
Position	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Power Drift (dB)	1g SAR (W/Kg)			
			Declared	Measured		Extrapolated		Reported	
						FAST SAR	FULL SAR	FAST SAR	FULL SAR
<b>Slider Closed</b>									
15mm Back	0	2402.0							
	39	2441.0	9.0	7.8	0.17	0.009	0.007	0.012	0.009
	78	2480.0							

**Table 11.2-13c SAR testing results for Bluetooth body-worn configuration tested on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on Bluetooth was measured using RHK211LW and reused for RHT181LW.

Threshold 1 For This Band: 0.013  
 Max FAST SAR For Band: 0.017  
 Threshold 2 For All Bands: 0.745  
 Max FULL SAR For Band: 0.019  
 Additional Full SAR Required: NO

**Table 11.2-13d Fast SAR testing thresholds for Bluetooth**

Measured/Extrapolated SAR Values - Head - 802.11b DSSS 2450 MHz (Primary Antenna)											
Position	Data Rate (Mbps)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	1g SAR (W/Kg)				
				Declared	Measured		Extrapolated		Reported		FULL SAR at 100% DF
							FAST SAR	FULL SAR	FAST SAR	FULL SAR	
<b>Slider Closed</b>											
Right Cheek	1	1	2412.0	18.5	16.8	95.0	0.083	0.080	0.122	0.118	0.124
		6	2437.0	18.5	17.3	95.0	0.108	0.114	0.142	0.150	0.158
		11	2462.0	18.5	17.9	95.0	0.184	0.199	0.211	0.228	0.240
Right 15° Tilt	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.142	0.154	0.163	0.177	0.186
Left Cheek	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.087	0.085	0.099	0.097	0.102
Left 15° Tilt	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.072	0.071	0.082	0.082	0.086
<b>Slider Open</b>											
Right Cheek	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.174	0.182	0.200	0.209	0.219
Right 15° Tilt	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.062	0.066	0.071	0.076	0.080
Left Cheek	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.178	0.172	0.204	0.197	0.207
Left 15° Tilt	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.077	0.078	0.088	0.090	0.095

**Table 11.2-14a SAR testing results for 802.11b DSSS head configuration for primary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11b was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - 802.11b DSSS 2450 MHz (Primary Antenna)											
Position	Data Rate (Mbps)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	1g SAR (W/Kg)				
				Declared	Measured		Extrapolated		Reported		SAR at 100% DF
							FAST SAR	FULL SAR	FAST SAR	FULL SAR	
<b>Slider Closed</b>											
10mm Back	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0	0.032	0.033	0.038	0.038	0.040
10mm Front	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0	0.007	0.007	0.008	0.008	0.009
10mm Left	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0	0.014	0.014	0.017	0.016	0.017
10mm Right	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0					
10mm Top	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0					
10mm + Headset	1	1	2412.0								
		6	2437.0								
		11	2462.0								
<b>Slider Open</b>											
10mm Back	1	1	2412.0	11.5	10.1	95.0	0.027	0.028	0.037	0.038	0.040
		6	2437.0	11.5	10.2	95.0	0.034	0.034	0.046	0.046	0.049
		11	2462.0	11.5	10.8	95.0	0.042	0.043	0.050	0.051	0.053
10mm Front	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0	0.009	0.009	0.011	0.011	0.011
10mm Left	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0	0.026		0.031		0.032
10mm Right	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0	0.000		0.001		0.001
10mm Top	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.8	95.0	0.010		0.012		0.012

**Table 11.2-14b SAR testing results 802.11b DSSS hotspot configuration for primary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11b was measured using RHK211LW and reused for RHT181LW.



Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - 802.11b DSSS 2450 MHz (Primary Antenna)							1g SAR (W/Kg)				
Position	Data Rate (Mbps)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	Extrapolated		Reported		FULL SAR at 100% DF
				Declared	Measured		FAST SAR	FULL SAR	FAST SAR	FULL SAR	
Slider Closed											
15mm Back	1	1	2412.0	18.5	16.8	95.0	0.035	0.035	0.051	0.051	0.054
		6	2437.0	18.5	17.3	95.0	0.065	0.062	0.085	0.082	0.086
		11	2462.0	18.5	17.9	95.0	0.091	0.093	0.105	0.106	0.112
15mm Front	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.021	0.022	0.024	0.025	0.026
Holster Back	1	1	2412.0								
		6	2437.0								
		11	2462.0	18.5	17.9	95.0	0.050	0.049	0.057	0.056	0.059

**Table 11.2-14c SAR testing results for 802.11b DSSS body-worn configuration for primary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11b was measured using RHK211LW and reused for RHT181LW.

Threshold 1 For This Band:	0.141
Max FAST SAR For Band:	0.184
Threshold 2 For All Bands:	0.745
Max FULL SAR For Band:	0.199
Additional Full SAR Required:	NO

**Table 11.2-14d Fast SAR testing thresholds for 802.11b DSSS for primary Wi-Fi antenna**

Measured/Extrapolated SAR Values - Head - 802.11b DSSS 2450 MHz (Secondary Antenna)											
Position	Data Rate (Mbps)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	1g SAR (W/Kg)				
				Declared	Measured		Extrapolated		Reported		FULL SAR at 100% DF
							FAST SAR	FULL SAR	FAST SAR	FULL SAR	
<b>Slider Closed</b>											
Right Cheek	1	1	2412.0	18.5	17.5	95.0	0.028	0.029	0.035	0.037	0.038
		6	2437.0								
		11	2462.0								
Right 15° Tilt	1	1	2412.0	18.5	17.5	95.0	0.035	0.035	0.044	0.044	0.046
		6	2437.0								
		11	2462.0								
Left Cheek	1	1	2412.0	18.5	17.5	95.0	0.046	0.055	0.058	0.069	0.073
		6	2437.0	18.5	17.3	95.0	0.068	0.074	0.089	0.097	0.102
		11	2462.0	18.5	17.3	95.0	0.063	0.070	0.082	0.092	0.096
Left 15° Tilt	1	1	2412.0	18.5	17.5	95.0	0.063	0.070	0.079	0.087	0.092
		6	2437.0	18.5	17.3	95.0	0.070	0.080	0.093	0.105	0.111
		11	2462.0	18.5	17.3	95.0	0.062	0.071	0.082	0.093	0.098
<b>Slider Open</b>											
Right Cheek	1	1	2412.0	18.5	17.5	95.0	0.022	0.022	0.028	0.028	0.029
		6	2437.0								
		11	2462.0								
Right 15° Tilt	1	1	2412.0	18.5	17.5	95.0	0.017	0.018	0.022	0.022	0.023
		6	2437.0								
		11	2462.0								
Left Cheek	1	1	2412.0	18.5	17.5	95.0	0.025	0.025	0.032	0.031	0.033
		6	2437.0								
		11	2462.0								
Left 15° Tilt	1	1	2412.0	18.5	17.5	95.0	0.015	0.016	0.019	0.020	0.021
		6	2437.0								
		11	2462.0								

**Table 11.2-15a SAR testing results for 802.11b DSSS head configuration for secondary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11b was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - 802.11b DSSS 2450 MHz (Secondary Antenna)							1g SAR (W/Kg)				
Position	Data Rate (Mbps)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	Extrapolated		Reported		SAR at 100% DF
				Declared	Measured		FAST SAR	FULL SAR	FAST SAR	FULL SAR	
<b>Slider Closed</b>											
10mm Back	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.5	95.0	0.020		0.025		0.026
10mm Front	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.5	95.0	0.003		0.004		0.004
10mm Left	1	1	2412.0								
		6	2437.0								
		11	2462.0								
10mm Right	1	1	2412.0								
		6	2437.0								
		11	2462.0								
10mm Top	1	1	2412.0								
		6	2437.0								
		11	2462.0								
10mm + Headset	1	1	2412.0								
		6	2437.0								
		11	2462.0								
<b>Slider Open</b>											
10mm Back	1	1	2412.0	11.5	10.4	95.0	0.025		0.032		0.034
		6	2437.0	11.5	10.2	95.0	0.030		0.040		0.042
		11	2462.0	11.5	10.5	95.0	0.033	0.035	0.041	0.044	0.046
10mm Front	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.5	95.0	0.003		0.004		0.004
10mm Left	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.5	95.0	0.000		0.000		0.000
10mm Right	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.5	95.0	0.009		0.011		0.012
10mm Top	1	1	2412.0								
		6	2437.0								
		11	2462.0	11.5	10.5	95.0	0.002		0.002		0.002

**Table 11.2-15b SAR testing results 802.11b DSSS hotspot configuration for secondary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11b was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - 802.11b DSSS 2450 MHz (Secondary Antenna)							1g SAR (W/Kg)				
Position	Data Rate (Mbps)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	Extrapolated		Reported		FULL SAR at 100% DF
				Declared	Measured		FAST SAR	FULL SAR	FAST SAR	FULL SAR	
Slider Closed											
15mm Back	1	1	2412.0	18.5	17.5	95.0	0.033	0.035	0.042	0.044	0.046
		6	2437.0	18.5	17.3	95.0	0.038	0.036	0.050	0.048	0.050
		11	2462.0	18.5	17.3	95.0	0.040	0.038	0.053	0.051	0.053
15mm Front	1	1	2412.0	18.5	17.5	95.0	0.006	0.006	0.008	0.008	0.008
		6	2437.0								
		11	2462.0								
Holster Back	1	1	2412.0	18.5	17.5	95.0	0.018	0.017	0.023	0.022	0.023
		6	2437.0								
		11	2462.0								

**Table 11.2-15c SAR testing results for 802.11b DSSS body-worn configuration for secondary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11b was measured using RHK211LW and reused for RHT181LW.

Threshold 1 For This Band:	0.054
Max FAST SAR For Band:	0.070
Threshold 2 For All Bands:	0.745
Max FULL SAR For Band:	0.080
Additional Full SAR Required:	NO

**Table 11.2-15d Fast SAR testing thresholds for 802.11b DSSS for secondary Wi-Fi antenna**

Measured/Extrapolated SAR Values - Head - 802.11 5000 MHz (Primary Antenna)											1g SAR (W/Kg)			
Pos.	U-NII	802.11 Mode	Data Rate (Mbps)	BW (MHz)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	Extra.	Repo.	FULL SAR at 100% DF		
							Decl.	Meas.		FULL SAR	FULL SAR			
<b>Slider Closed</b>														
Right Cheek	1	N		40			38	5190						
							46	5230						
	2A	N	MCS0	40			54	5270	17.0	15.3	95.0	0.079	0.117	0.123
							62	5310	17.0	15.8	95.0	0.076	0.100	0.105
	2C	N	MCS0	40			134	5670	17.0	15.7	95.0	0.050	0.067	0.071
3	N	MCS0	40			151	5755	17.0	16.2	95.0	0.065	0.078	0.082	
Right 15° Tilt	1	N		40										
	2A	N	MCS0	40	54	5270	17.0	15.3	95.0	0.095	0.140	0.147		
	2C	N	MCS0	40										
	3	N	MCS0	40										
Left Cheek	1	N		40			38	5190						
							46	5230						
	2A	N	MCS0	40			54	5270	17.0	15.3	95.0	0.087	0.129	0.136
							62	5310	17.0	15.7	95.0	0.048	0.064	0.068
	2C	N	MCS0	40			134	5670	17.0	15.7	95.0	0.048	0.064	0.068
3	N	MCS0	40			151	5755	17.0	16.2	95.0	0.073	0.088	0.092	
Left 15° Tilt	1	N		40										
	2A	N	MCS0	40	54	5270	17.0	15.3	95.0	0.109	0.161	0.169		
	2C	N	MCS0	40										
	3	N	MCS0	40										
<b>Slider Open</b>														
Right Cheek	1	N		40										
	2A	N	MCS0	40	54	5270	17.0	15.3	95.0	0.104	0.154	0.162		
	2C	N	MCS0	40										
	3	N	MCS0	40										
Right 15° Tilt	1	N		40										
	2A	N	MCS0	40	54	5270	17.0	15.3	95.0	0.083	0.123	0.129		
	2C	N	MCS0	40										
	3	N	MCS0	40										
Left Cheek	1	N		40										
	2A	N	MCS0	40	54	5270	17.0	15.3	95.0	0.032	0.047	0.049		
	2C	N	MCS0	40										
	3	N	MCS0	40										
Left 15° Tilt	1	N		40										
	2A	N	MCS0	40	54	5270	17.0	15.3	95.0	0.053	0.079	0.082		
	2C	N	MCS0	40										
	3	N	MCS0	40										

**Table 11.2-16a SAR testing results for 802.11a/n/ac OFDM head configuration for primary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11a was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - 802.11 5000 MHz (Primary Antenna)											1g SAR (W/Kg)		
Pos.	U-NII	802.11 Mode	Data Rate (Mbps)	BW (MHz)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	Extra.	Repo.	FULL SAR at 100% DF	
							Decl.	Meas.		FULL SAR	FULL SAR		
<b>Slider Closed</b>													
10mm Back	1	N	MCS0	40	38	5190							
					46	5230	11.5	10.6	95.0	0.107	0.132	0.138	
	2A	N	MCS0	40	54	5270							
					62	5310							
					102	5510							
	2C	N	MCS0	40	118	5590							
					134	5670							
	3	N	MCS0	40	151	5755	11.5	11.0	95.0	0.089	0.100	0.105	
159					5795								
<b>Slider Open</b>													
10mm Back	1	N	MCS0	40	38	5190	11.5	10.4	95.0	0.133	0.171	0.180	
					46	5230	11.5	10.6	95.0	0.125	0.154	0.161	
	2A	N	MCS0	40	54	5270							
					62	5310							
					102	5510							
	2C	N	MCS0	40	118	5590							
					134	5670							
	3	N	MCS0	40	151	5755	11.5	11.0	95.0	0.116	0.130	0.137	
159					5795								
10mm Front	1	N	MCS0	40	46	5230	11.5	10.6	95.0	0.011	0.013	0.014	
	2A	N	MCS0										
	2C	N	MCS0										
	3	N	MCS0										
10mm Left	1	N	MCS0	40	46	5230	11.5	10.6	95.0	0.108	0.133	0.140	
	2A	N	MCS0										
	2C	N	MCS0										
	3	N	MCS0										
10mm Top	1	N	MCS0	40	46	5230	11.5	10.6	95.0	0.016	0.020	0.021	
	2A	N	MCS0										
	2C	N	MCS0										
	3	N	MCS0										

**Table 11.2-16b SAR testing results 802.11a/n/ac OFDM hotspot configuration for primary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11a was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - 802.11a/n/ac OFDM 5000 MHz (Primary Antenna)													
Pos.	U-NII	802.11 Mode	Data Rate (Mbps)	BW (MHz)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	1g SAR (W/Kg)			
							Decl.	Meas.		Extra. FULL SAR	Repo. FULL SAR	FULL SAR at 100% DF	
<b>Slider Closed</b>													
15mm Back	1	N	MCS0	40		38	5190						
						46	5230						
	2A	N	MCS0	40		54	5270	17.0	15.3	95.0	0.219	0.324	0.340
						62	5310	17.0	15.8	95.0	0.274	0.361	0.379
	2C	N	MCS0	40		102	5510						
						118	5590						
						134	5670	17.0	15.7	95.0	0.141	0.190	0.200
	3	N	MCS0	40		151	5755	17.0	16.2	95.0	0.232	0.279	0.293
159						5795							
15mm Front	1	N	MCS0	40									
	2A	N	MCS0	40	62	5310	17.0	15.8	95.0	0.030	0.040	0.042	
	2C	N	MCS0	40									
	3	N	MCS0	40									
Holster Back	1	N	MCS0	40									
	2A	N	MCS0	40	62	5310	17.0	15.8	95.0	0.264	0.348	0.365	
	2C	N	MCS0	40									
3	N	MCS0	40										

**Table 11.2-16c SAR testing results for 802.11a/n/ac OFDM body-worn configuration for primary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11a was measured using RHK211LW and reused for RHT181LW.





Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

Measured/Extrapolated SAR Values - Head - 802.11 5000 MHz (Secondary Antenna)											1g SAR (W/Kg)		
Pos.	U-NII	802.11 Mode	Data Rate (Mbps)	BW (MHz)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	Extra.	Repo.	FULL SAR at 100% DF	
							Decl.	Meas.					
<b>Slider Closed</b>													
Right Cheek	1	N	MCS 0	40		38	5190						
						46	5230						
	2A	N	MCS 0	40		54	5270	17.0	16.1	95.0	0.007	0.008	0.009
	2C	N	MCS 0	40		102	5510	17.0	16.5	95.0	0.009	0.010	0.011
	3	N	MCS 0	40		151	5755	17.0	15.8	95.0	0.018	0.024	0.025
						159	5795						
Right 15° Tilt	1	A	MCS 0	40									
	2A	N	MCS 0	40									
	2C	N	MCS 0	40									
	3	N	MCS 0	40		151	5755	17.0	15.8	95.0	0.018	0.024	0.025
Left Cheek	1	N	MCS 0	40		38	5190						
						46	5230						
	2A	N	MCS 0	40		54	5270	17.0	16.1	95.0	0.015	0.018	0.019
						62	5310						
	2C	N	MCS 0	40		102	5510	17.0	16.5	95.0	0.002	0.002	0.002
						118	5590						
	3	N	MCS 0	40		151	5755	17.0	15.8	95.0	0.029	0.038	0.040
						159	5795						
Left 15° Tilt	1	N	MCS 0	40									
	2A	N	MCS 0	40									
	2C	N	MCS 0	40									
	3	N	MCS 0	40		151	5755	17.0	15.8	95.0	0.026	0.034	0.036
<b>Slider Open</b>													
Right Cheek	1	N	MCS 0	40									
	2A	N	MCS 0	40									
	2C	N	MCS 0	40									
	3	N	MCS 0	40		151	5755	17.0	15.8	95.0	0.028	0.037	0.039
Right 15° Tilt	1	N	MCS 0	40									
	2A	N	MCS 0	40									
	2C	N	MCS 0	40									
Left Cheek	1	N	MCS 0	40									
	2A	N	MCS 0	40									
	2C	N	MCS 0	40									
	3	N	MCS 0	40		151	5755	17.0	15.8	95.0	0.003	0.004	0.004
Left 15° Tilt	1	N	MCS 0	40									
	2A	N	MCS 0	40									
	2C	N	MCS 0	40									
Left 15° Tilt	1	N	MCS 0	40									
	2A	N	MCS 0	40									
	2C	N	MCS 0	40									
	3	N	MCS 0	40		151	5755	17.0	15.8	95.0	0.010	0.013	0.014

**Table 11.2-17a SAR testing results for 802.11a OFDM head configuration for secondary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11a was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Hotspot (10mm Spacing) - 802.11 5000 MHz (Secondary Antenna)													
Pos.	U-NII	802.11 Mode	Data Rate (Mbps)	BW (MHz)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	FULL SAR	FULL SAR	FULL SAR at 100% DF	
							Decl.	Meas.					
<b>Slider Closed</b>													
10mm Back	1	N	MCS0	40	38	5190	11.5	11.3	95.0	0.047	0.050	0.052	
					46	5230							
	2A	N	MCS0	40	54	5270							
					62	5310							
	2C	N	MCS0	40	102	5510							
					118	5590							
	3	N	MCS0	40	151	5755	11.5	10.2	95.0	0.066	0.089	0.094	
					159	5795							
<b>Slider Open</b>													
10mm Back	1	N	MCS0	40	38	5190	11.5	11.3	95.0	0.067	0.070	0.073	
					46	5230							
	2A	N	MCS0	40	54	5270							
					62	5310							
	2C	N	MCS0	40	102	5510							
					118	5590							
	3	N	MCS0	40	151	5755	11.5	10.2	95.0	0.065	0.088	0.092	
					159	5795	11.5	10.0	95.0	0.075	0.106	0.112	
	10mm Front	1	N	MCS0	40								
		2A	N	MCS0	40								
2C		N	MCS0	40									
3		N	MCS0	40	159	5795	11.5	10.0	95.0	0.014	0.019	0.020	
10mm Right	1	N	MCS0	40									
	2A	N	MCS0	40									
	2C	N	MCS0	40									
	3	N	MCS0	40	159	5795	11.5	10.0	95.0	0.032	0.044	0.047	
10mm Top	1	N	MCS0	40									
	2A	N	MCS0	40									
	2C	N	MCS0	40									
	3	N	MCS0	40	159	5795	11.5	10.0	95.0	0.013	0.019	0.020	

**Table 11.2-17b SAR testing results 802.11a OFDM hotspot configuration for secondary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11a was measured using RHK211LW and reused for RHT181LW.

Measured/Extrapolated SAR Values - Body-Worn (15mm Spacing) - 802.11a 5000 MHz (Secondary Antenna)													
Pos.	U-NII	802.11 Mode	Data Rate (Mbps)	BW (MHz)	Ch.	Freq. (MHz)	Cond. Output Power (dBm)		Duty Factor (%)	FULL SAR	FULL SAR	FULL SAR at 100% DF	
							Decl.	Meas.					
<b>Slider Closed</b>													
15mm Back	1	N	MCS0	40		38	5190						
						46	5230						
	2A	N	MCS0	40		54	5270	17.0	16.1	95.0	0.087	0.108	0.113
						62	5310	17.0	16.0	95.0	0.063	0.079	0.083
	2C	N	MCS0	40		102	5510	17.0	16.5	95.0	0.065	0.073	0.077
						118	5590						
						134	5670						
	3	N	MCS0	40		151	5755	17.0	15.8	95.0	0.028	0.037	0.039
159						5795							
15mm Front	1	N	MCS0	40									
	2A	N	MCS0	40	54	5270	17.0	16.1	95.0	0.011	0.013	0.014	
	2C	N	MCS0	40									
	3	N	MCS0	40									
Holster Back	1	N	MCS0	40									
	2A	N	MCS0	40	54	5270	17.0	16.1	95.0	0.076	0.094	0.098	
	2C	N	MCS0	40									
3	N	MCS0	40										

**Table 11.2-17c SAR testing results for 802.11a OFDM body-worn configuration for secondary Wi-Fi antenna on device model: RHK211LW**

**Note:** According to the hardware similarity document BlackBerry models RHT181LW and RHK211LW are identical for this band. Due to this SAR on 802.11a was measured using RHK211LW and reused for RHT181LW.

### 11.3 Simultaneous transmission analysis for SAR measurement results

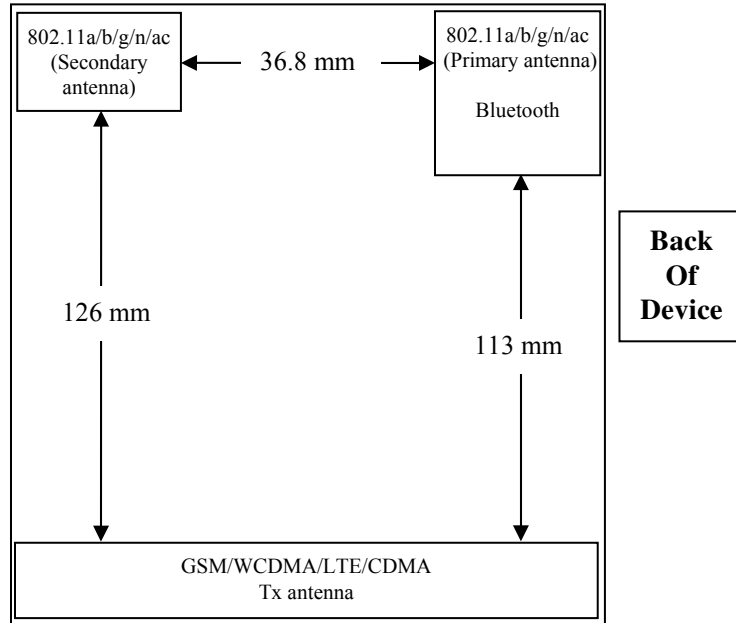


Figure 11.3-1 Back view of device showing closest distance between antenna pairs

Separate Transmitting Antenna	
Separate Antenna	Technologies Utilized By Each Antenna
Antenna 1	GSM, WCDMA, LTE, CDMA
Antenna 2	Wi-Fi 2.4 GHz/5.0 GHz(Primary), Bluetooth
Antenna 3	Wi-Fi 2.4 GHz/5.0 GHz (Secondary)
Simultaneous Transmission Combinations	
1	GSM/WCDMA/LTE/CDMA + Bluetooth + Wi-Fi 2.4/5.0 GHz(Primary)
2	GSM/WCDMA/LTE/CDMA + Bluetooth + Wi-Fi 2.4/5.0 GHz(Secondary)
3	GSM/WCDMA/LTE/CDMA + Bluetooth + Wi-Fi 2.4/5.0 GHz(Primary) + Wi-Fi 2.4/5.0 GHz(Secondary)

Table 11.3-1 Simultaneous Transmission Scenarios

**Note 1:** LTE and GSM/WCDMA/CDMA cannot transmit simultaneously since it shares the same antenna.

**Note 2:** 2.4 GHz and 5.0 GHz Wi-Fi cannot transmit at the same time, both Wi-Fi antennas must be transmitting the same Wi-Fi frequency band.



Document

**SAR Compliance Test Report for the BlackBerry®  
Smartphone Model RHT181LW (STV100-2) Part 2/2**

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Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

Standalone SAR Values Summation On The Same Test Position (Primary Wi-Fi Antenna + Bluetooth)									
Band	Config.	Main Transmitter		Unlicensed Transmitters			Max Summation (W/Kg)		
		Position	1g SAR (W/Kg)	BT	2.4GHz Wi-Fi	5.0GHz Wi-Fi	Main + BT	Main + BT + 2.4GHz Wi-Fi	Main + BT + 5.0GHz Wi-Fi
				1g SAR	1g SAR	1g SAR			
LTE Band 13	Head	Right Cheek	0.257	0.015	0.240	0.162	0.272	0.512	0.434
		Right Tilt	0.188	0.005	0.186	0.147	0.193	0.379	0.340
		Left Cheek	0.245	0.006	0.207	0.136	0.251	0.458	0.387
		Left Tilt	0.208		0.095	0.169	0.208	0.303	0.377
	Hotspot (10mm)	Back	0.505	0.025	0.053	0.180	0.530	0.583	0.710
		Front	0.352		0.011	0.014	0.352	0.363	0.366
		Left	0.269		0.032	0.140	0.269	0.301	0.409
		Right	0.521		0.001		0.521	0.522	0.521
		Top			0.012	0.021		0.012	0.021
	Body-worn	Bottom	0.465				0.465	0.465	0.465
		15mm Back	0.314	0.009	0.112	0.379	0.323	0.435	0.702
		15mm Front	0.294		0.026	0.042	0.294	0.320	0.336
		Hol. Back	0.295		0.059	0.365	0.295	0.354	0.660
LTE Band 5	Head	Right Cheek	0.342	0.015	0.240	0.162	0.357	0.597	0.519
		Right Tilt	0.191	0.005	0.186	0.147	0.196	0.382	0.343
		Left Cheek	0.277	0.006	0.207	0.136	0.283	0.490	0.419
		Left Tilt	0.150		0.095	0.169	0.150	0.245	0.319
	Hotspot (10mm)	Back	0.554	0.025	0.053	0.180	0.579	0.632	0.759
		Front	0.366		0.011	0.014	0.366	0.377	0.380
		Left	0.201		0.032	0.140	0.201	0.233	0.341
		Right	0.383		0.001		0.383	0.384	0.383
		Top			0.012	0.021		0.012	0.021
	Body-worn	Bottom	0.453				0.453	0.453	0.453
		15mm Back	0.264	0.009	0.112	0.379	0.273	0.385	0.652
		15mm Front	0.367		0.026	0.042	0.367	0.393	0.409
		Hol. Back			0.059	0.365		0.059	0.365
GSM/DTM 850	Head	Hol. Front	0.249				0.249	0.249	0.249
		Right Cheek	0.631	0.015	0.240	0.162	0.646	0.886	0.808
		Right Tilt	0.240	0.005	0.186	0.147	0.245	0.431	0.392
		Left Cheek	0.367	0.006	0.207	0.136	0.373	0.580	0.509
	Hotspot (10mm)	Left Tilt	0.248		0.095	0.169	0.248	0.343	0.417
		Back	1.103	0.025	0.053	0.180	1.128	1.181	1.308
		Front	0.619		0.011	0.014	0.619	0.630	0.633
		Left	0.393		0.032	0.140	0.393	0.425	0.533
		Right	0.629		0.001		0.629	0.630	0.629
		Top			0.012	0.021		0.012	0.021
	Body-worn	Bottom	0.695				0.695	0.695	0.695
		15mm Back	0.351	0.009	0.112	0.379	0.360	0.472	0.739
		15mm Front	0.584		0.026	0.042	0.584	0.610	0.626
Hol. Back				0.059	0.365		0.059	0.365	
UMTS V	Head	Hol. Front	0.411				0.411	0.411	0.411
		Right Cheek	0.409	0.015	0.240	0.162	0.424	0.664	0.586
		Right Tilt	0.249	0.005	0.186	0.147	0.254	0.440	0.401

		Left Cheek	0.324	0.006	0.207	0.136	0.330	0.537	0.466	
		Left Tilt	0.222		0.095	0.169	0.222	0.317	0.391	
	Hotspot (10mm)	Back	0.760	0.025	0.053	0.180	0.785	0.838	0.965	
		Front	0.455		0.011	0.014	0.455	0.466	0.469	
		Left	0.294		0.032	0.140	0.294	0.326	0.434	
		Right	0.502		0.001		0.502	0.503	0.502	
		Top			0.012	0.021		0.012	0.021	
		Bottom	0.475				0.475	0.475	0.475	
	Body- worn	15mm Back	0.354	0.009	0.112	0.379	0.363	0.475	0.742	
		15mm Front	0.408		0.026	0.042	0.408	0.434	0.450	
Hol. Back				0.059	0.365		0.059	0.365		
Hol. Front		0.332				0.332	0.332	0.332		
CDMA BC0	Head	Right Cheek	0.445	0.015	0.240	0.162	0.460	0.700	0.622	
		Right Tilt	0.270	0.005	0.186	0.147	0.275	0.461	0.422	
		Left Cheek	0.320	0.006	0.207	0.136	0.326	0.533	0.462	
		Left Tilt	0.201		0.095	0.169	0.201	0.296	0.370	
	Hotspot (10mm)	Back	0.862	0.025	0.053	0.180	0.887	0.940	1.067	
		Front	0.485		0.011	0.014	0.485	0.496	0.499	
		Left	0.295		0.032	0.140	0.295	0.327	0.435	
		Right	0.481		0.001		0.481	0.482	0.481	
		Top			0.012	0.021		0.012	0.021	
		Bottom	0.446				0.446	0.446	0.446	
	Body- worn	15mm Back	0.362	0.009	0.112	0.379	0.371	0.483	0.750	
		15mm Front	0.410		0.026	0.042	0.410	0.436	0.452	
		Hol. Back			0.059	0.365		0.059	0.365	
		Hol. Front	0.335				0.335	0.335	0.335	
	CDMA BC1	Head	Right Cheek	0.447	0.015	0.240	0.162	0.462	0.702	0.624
			Right Tilt	0.442	0.005	0.186	0.147	0.447	0.633	0.594
Left Cheek			0.919	0.006	0.207	0.136	0.925	1.132	1.061	
Left Tilt			0.613		0.095	0.169	0.613	0.708	0.782	
Hotspot (10mm)		Back	1.000	0.025	0.053	0.180	1.025	1.078	1.205	
		Front	0.659		0.011	0.014	0.659	0.670	0.673	
		Left	0.423		0.032	0.140	0.423	0.455	0.563	
		Right	0.149		0.001		0.149	0.150	0.149	
		Top			0.012	0.021		0.012	0.021	
		Bottom	0.293				0.293	0.293	0.293	
Body- worn		15mm Back	0.951	0.009	0.112	0.379	0.960	1.072	1.339	
		15mm Front	0.271		0.026	0.042	0.271	0.297	0.313	
	Hol. Back	0.306		0.059	0.365	0.306	0.365	0.671		
	Hol. Front									

**Table 11.3-2 Highest SAR values and summation on the same test position between the main transmitter and primary Wi-Fi antenna on device model RHT181LW**

**Note 1:** If sum of 1 g SAR < 1.6 W/kg, Simultaneous SAR measurement is not required.

**Note 2:** If sum of 1 g SAR > 1.6 W/kg, ratio of SAR to peak separation distance for pair of transmitters calculated.

**Note 3:** The worst case between slider closed and open for applicable positions are used in this table



Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

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**RTS-6066-1511-01**

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Standalone SAR Values Summation On The Same Test Position (Secondary Wi-Fi Antenna + Bluetooth)								
Band	Config.	Main Transmitter		Unlicensed Transmitters			Max Summation (W/Kg)	
		Position	1g SAR (W/Kg)	BT	2.4GHz Wi-Fi	5.0GHz Wi-Fi	Main + BT + 2.4GHz Wi-Fi	Main + BT + 5.0GHz Wi-Fi
				1g SAR	1g SAR	1g SAR		
LTE Band 13	Head	Right Cheek	0.257	0.015	0.038	0.039	0.310	0.311
		Right Tilt	0.188	0.005	0.046	0.025	0.239	0.218
		Left Cheek	0.245	0.006	0.102	0.040	0.353	0.291
		Left Tilt	0.208		0.111	0.036	0.319	0.244
	Hotspot (10mm)	Back	0.505	0.025	0.046	0.112	0.576	0.642
		Front	0.352		0.040	0.020	0.392	0.372
		Left	0.269		0.000	0.000	0.269	0.269
		Right	0.521		0.011	0.047	0.532	0.568
		Top			0.002	0.020	0.002	0.020
	Body-worn	Bottom	0.465			0.000	0.465	0.465
		15mm Back	0.314	0.009	0.053	0.113	0.376	0.436
		15mm Front	0.294		0.008	0.014	0.302	0.308
		Holster Back	0.295		0.023	0.098	0.318	0.393
		Holster Front						
LTE Band 5	Head	Right Cheek	0.342	0.015	0.038	0.039	0.395	0.396
		Right Tilt	0.191	0.005	0.046	0.025	0.242	0.221
		Left Cheek	0.277	0.006	0.102	0.040	0.385	0.323
		Left Tilt	0.150		0.111	0.036	0.261	0.186
	Hotspot (10mm)	Back	0.554	0.025	0.046	0.112	0.625	0.691
		Front	0.366		0.040	0.020	0.406	0.386
		Left	0.201		0.000	0.000	0.201	0.201
		Right	0.383		0.011	0.047	0.394	0.430
		Top			0.002	0.020	0.002	0.020
	Body-worn	Bottom	0.453			0.000	0.453	0.453
		15mm Back	0.264	0.009	0.053	0.113	0.326	0.386
		15mm Front	0.367		0.008	0.014	0.375	0.381
		Holster Back			0.023	0.098	0.023	0.098
		Holster Front	0.249			0.249	0.249	
GSM/DTM 850	Head	Right Cheek	0.631	0.015	0.038	0.039	0.684	0.685
		Right Tilt	0.240	0.005	0.046	0.025	0.291	0.270
		Left Cheek	0.367	0.006	0.102	0.040	0.475	0.413
		Left Tilt	0.248		0.111	0.036	0.359	0.284
	Hotspot (10mm)	Back	1.103	0.025	0.046	0.112	1.174	1.240
		Front	0.619		0.040	0.020	0.659	0.639
		Left	0.393		0.000	0.000	0.393	0.393
		Right	0.629		0.011	0.047	0.640	0.676
		Top			0.002	0.020	0.002	0.020
	Body-worn	Bottom	0.695			0.000	0.695	0.695
		15mm Back	0.351	0.009	0.053	0.113	0.413	0.473
		15mm Front	0.584		0.008	0.014	0.592	0.598
		Holster Back			0.023	0.098	0.023	0.098
		Holster Front	0.411			0.411	0.411	



UMTS V	Head	Right Cheek	0.409	0.015	0.038	0.039	0.462	0.463
		Right Tilt	0.249	0.005	0.046	0.025	0.300	0.279
		Left Cheek	0.324	0.006	0.102	0.040	0.432	0.370
		Left Tilt	0.222		0.111	0.036	0.333	0.258
	Hotspot (10mm)	Back	0.760	0.025	0.046	0.112	0.831	0.897
		Front	0.455		0.040	0.020	0.495	0.475
		Left	0.294		0.000	0.000	0.294	0.294
		Right	0.502		0.011	0.047	0.513	0.549
		Top			0.002	0.020	0.002	0.020
	Body-worn	Bottom	0.475			0.000	0.475	0.475
		15mm Back	0.354	0.009	0.053	0.113	0.416	0.476
		15mm Front	0.408		0.008	0.014	0.416	0.422
		Holster Back			0.023	0.098	0.023	0.098
	Holster Front	0.332				0.332	0.332	
CDMA BC0	Head	Right Cheek	0.445	0.015	0.038	0.039	0.498	0.499
		Right Tilt	0.270	0.005	0.046	0.025	0.321	0.300
		Left Cheek	0.320	0.006	0.102	0.040	0.428	0.366
		Left Tilt	0.201		0.111	0.036	0.312	0.237
	Hotspot (10mm)	Back	0.862	0.025	0.046	0.112	0.933	0.999
		Front	0.485		0.040	0.020	0.525	0.505
		Left	0.295		0.000	0.000	0.295	0.295
		Right	0.481		0.011	0.047	0.492	0.528
		Top			0.002	0.020	0.002	0.020
	Body-worn	Bottom	0.446			0.000	0.446	0.446
		15mm Back	0.362	0.009	0.053	0.113	0.424	0.484
		15mm Front	0.410		0.008	0.014	0.418	0.424
		Holster Back			0.023	0.098	0.023	0.098
	Holster Front	0.335				0.335	0.335	
CDMA BC1	Head	Right Cheek	0.447	0.015	0.038	0.039	0.500	0.501
		Right Tilt	0.442	0.005	0.046	0.025	0.493	0.472
		Left Cheek	0.919	0.006	0.102	0.040	1.027	0.965
		Left Tilt	0.613		0.111	0.036	0.724	0.649
	Hotspot (10mm)	Back	1.000	0.025	0.046	0.112	1.071	1.137
		Front	0.659		0.040	0.020	0.699	0.679
		Left	0.423		0.000	0.000	0.423	0.423
		Right	0.149		0.011	0.047	0.160	0.196
		Top			0.002	0.020	0.002	0.020
	Body-worn	Bottom	0.293			0.000	0.293	0.293
		15mm Back	0.951	0.009	0.053	0.113	1.013	1.073
		15mm Front	0.271		0.008	0.014	0.279	0.285
		Holster Back	0.306		0.023	0.098	0.329	0.404
	Holster Front							

**Table 11.3-3 Highest SAR values and summation on the same test position between the main transmitter and secondary Wi-Fi antenna on device model RHT181LW**

**Note 1:** If sum of 1 g SAR < 1.6 W/kg, Simultaneous SAR measurement is not required.

**Note 2:** If sum of 1 g SAR > 1.6 W/kg, ratio of SAR to peak separation distance for pair of transmitters calculated.

**Note 3:** The worst case between slider closed and open for applicable positions are used in this table



Document

**SAR Compliance Test Report for the BlackBerry®  
Smartphone Model RHT181LW (STV100-2) Part 2/2**

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Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

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**L6ARHT180LW**

MIMO SAR Values Summation On The Same Test Position										
Band	Config.	Main Transmitter		BT	MIMO Pair 1		MIMO Pair 2		Max Summation (W/Kg)	
		Position	1g SAR (W/Kg)		Primary 2.4GHz Wi-Fi	Secondary 2.4GHz Wi-Fi	Primary 5.0GHz Wi-Fi	Secondary 5.0GHz Wi-Fi	Main + BT+ MIMO 2.4GHz Wi-Fi	Main + BT+ MIMO 5.0GHz Wi-Fi
				1g SAR	1g SAR	1g SAR	1g SAR	1g SAR		
LTE Band 13	Head	Right Cheek	0.257	0.015	0.240	0.038	0.162	0.039	0.550	0.473
		Right Tilt	0.188	0.005	0.186	0.046	0.147	0.025	0.425	0.365
		Left Cheek	0.245	0.006	0.207	0.102	0.136	0.040	0.560	0.427
		Left Tilt	0.208		0.095	0.111	0.169	0.036	0.414	0.413
	Hotspot (10mm)	Back	0.505	0.025	0.053	0.046	0.180	0.112	0.629	0.822
		Front	0.352		0.011	0.040	0.014	0.020	0.403	0.386
		Left	0.269		0.032	0.000	0.140	0.000	0.301	0.409
		Right	0.521		0.001	0.011		0.047	0.533	0.568
		Top			0.012	0.002	0.021	0.020	0.014	0.041
	Body-worn	15mm Back	0.314	0.009	0.112	0.053	0.379	0.113	0.488	0.815
		15mm Front	0.294		0.026	0.008	0.042	0.014	0.328	0.350
		Holster Back	0.295		0.059	0.023	0.365	0.098	0.377	0.758
		Holster Front								
LTE Band 5	Head	Right Cheek	0.342	0.015	0.240	0.038	0.162	0.039	0.635	0.558
		Right Tilt	0.191	0.005	0.186	0.046	0.147	0.025	0.428	0.368
		Left Cheek	0.277	0.006	0.207	0.102	0.136	0.040	0.592	0.459
		Left Tilt	0.150		0.095	0.111	0.169	0.036	0.356	0.355
	Hotspot (10mm)	Back	0.554	0.025	0.053	0.046	0.180	0.112	0.678	0.871
		Front	0.366		0.011	0.040	0.014	0.020	0.417	0.400
		Left	0.201		0.032	0.000	0.140	0.000	0.233	0.341
		Right	0.383		0.001	0.011		0.047	0.395	0.430
		Top			0.012	0.002	0.021	0.020	0.014	0.041
	Body-worn	15mm Back	0.264	0.009	0.112	0.053	0.379	0.113	0.438	0.765
		15mm Front	0.367		0.026	0.008	0.042	0.014	0.401	0.423
		Holster Back			0.059	0.023	0.365	0.098	0.082	0.463
		Holster Front	0.249						0.249	0.249
GSM/DTM 850	Head	Right Cheek	0.631	0.015	0.240	0.038	0.162	0.039	0.924	0.847
		Right Tilt	0.240	0.005	0.186	0.046	0.147	0.025	0.477	0.417
		Left Cheek	0.367	0.006	0.207	0.102	0.136	0.040	0.682	0.549
		Left Tilt	0.248		0.095	0.111	0.169	0.036	0.454	0.453
	Hotspot (10mm)	Back	1.103	0.025	0.053	0.046	0.180	0.112	1.227	1.420
		Front	0.619		0.011	0.040	0.014	0.020	0.670	0.653
		Left	0.393		0.032	0.000	0.140	0.000	0.425	0.533
		Right	0.629		0.001	0.011		0.047	0.641	0.676
		Top			0.012	0.002	0.021	0.020	0.014	0.041
	Body-worn	Bottom	0.695					0.000	0.695	0.695
		15mm Back	0.351	0.009	0.112	0.053	0.379	0.113	0.525	0.852
		15mm Front	0.584		0.026	0.008	0.042	0.014	0.618	0.640
		Holster Back			0.059	0.023	0.365	0.098	0.082	0.463
Holster Front	0.411						0.411	0.411		

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Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

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**L6ARHT180LW**

UMTS V	Head	Right Cheek	0.409	0.015	0.240	0.038	0.162	0.039	0.702	0.625
		Right Tilt	0.249	0.005	0.186	0.046	0.147	0.025	0.486	0.426
		Left Cheek	0.324	0.006	0.207	0.102	0.136	0.040	0.639	0.506
		Left Tilt	0.222		0.095	0.111	0.169	0.036	0.428	0.427
	Hotspot (10mm)	Back	0.760	0.025	0.053	0.046	0.180	0.112	0.884	1.077
		Front	0.455		0.011	0.040	0.014	0.020	0.506	0.489
		Left	0.294		0.032	0.000	0.140	0.000	0.326	0.434
		Right	0.502		0.001	0.011		0.047	0.514	0.549
		Top			0.012	0.002	0.021	0.020	0.014	0.041
	Body- worn	Bottom	0.475					0.000	0.475	0.475
		15mm Back	0.354	0.009	0.112	0.053	0.379	0.113	0.528	0.855
		15mm Front	0.408		0.026	0.008	0.042	0.014	0.442	0.464
		Holster Back			0.059	0.023	0.365	0.098	0.082	0.463
	Holster Front	0.332						0.332	0.332	
CDMA BC0	Head	Right Cheek	0.445	0.015	0.240	0.038	0.162	0.039	0.738	0.661
		Right Tilt	0.270	0.005	0.186	0.046	0.147	0.025	0.507	0.447
		Left Cheek	0.320	0.006	0.207	0.102	0.136	0.040	0.635	0.502
		Left Tilt	0.201		0.095	0.111	0.169	0.036	0.407	0.406
	Hotspot (10mm)	Back	0.862	0.025	0.053	0.046	0.180	0.112	0.986	1.179
		Front	0.485		0.011	0.040	0.014	0.020	0.536	0.519
		Left	0.295		0.032	0.000	0.140	0.000	0.327	0.435
		Right	0.481		0.001	0.011		0.047	0.493	0.528
		Top			0.012	0.002	0.021	0.020	0.014	0.041
	Body- worn	Bottom	0.446					0.000	0.446	0.446
		15mm Back	0.362	0.009	0.112	0.053	0.379	0.113	0.536	0.863
		15mm Front	0.410		0.026	0.008	0.042	0.014	0.444	0.466
		Holster Back			0.059	0.023	0.365	0.098	0.082	0.463
	Holster Front	0.335						0.335	0.335	
CDMA BC1	Head	Right Cheek	0.447	0.015	0.240	0.038	0.162	0.039	0.740	0.663
		Right Tilt	0.442	0.005	0.186	0.046	0.147	0.025	0.679	0.619
		Left Cheek	0.919	0.006	0.207	0.102	0.136	0.040	1.234	1.101
		Left Tilt	0.613		0.095	0.111	0.169	0.036	0.819	0.818
	Hotspot (10mm)	Back	1.000	0.025	0.053	0.046	0.180	0.112	1.124	1.317
		Front	0.659		0.011	0.040	0.014	0.020	0.710	0.693
		Left	0.423		0.032	0.000	0.140	0.000	0.455	0.563
		Right	0.149		0.001	0.011		0.047	0.161	0.196
		Top			0.012	0.002	0.021	0.020	0.014	0.041
	Body- worn	Bottom	0.293					0.000	0.293	0.293
		15mm Back	0.951	0.009	0.112	0.053	0.379	0.113	1.125	1.452
		15mm Front	0.271		0.026	0.008	0.042	0.014	0.305	0.327
		Holster Back	0.306		0.059	0.023	0.365	0.098	0.388	0.769
	Holster Front									

**Table 11.3-4a Highest SAR values and summation on the same test position between the main transmitter and MIMO Wi-Fi antennas on device model RHT181LW**

**Note 1:** If sum of 1 g SAR < 1.6 W/kg, Simultaneous SAR measurement is not required.

**Note 2:** If sum of 1 g SAR > 1.6 W/kg, ratio of SAR to peak separation distance for pair of transmitters calculated.

**Note 3:** The worst case between slider closed and open for applicable positions are used in this table

Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

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**L6ARHT180LW**

reported SAR WWAN, BT and WLAN2.4GHz, SAR evaluation slider closed						
Frequency band	Position	SAR <sub>max</sub> /W/kg				ΣSAR <1.6W/kg
		WWAN	BT	WLAN2.4 (0)	WLAN2.4 (1)	
UMTS FDD II	left cheek	0.556	0.006	0.102	0.102	0.766
	left tilted 15°	0.266	0.006	0.086	0.111	0.469
	right cheek	0.311	0.015	0.240	0.038	0.604
	right tilted 15°	0.280	0.005	0.186	0.046	0.517
	front 10mm	0.263	0.025	0.009	0.004	0.301
	rear 10mm	0.815	0.025	0.040	0.025	0.905
	front 15mm	0.253	0.009	0.026	0.008	0.296
	rear 15mm	0.934	0.009	0.112	0.053	1.108
WCDMA FDD IV	left cheek	1.154	0.006	0.102	0.102	1.364
	left tilted 15°	0.523	0.006	0.086	0.111	0.726
	right cheek	0.470	0.015	0.240	0.038	0.763
	right tilted 15°	0.536	0.005	0.186	0.046	0.773
	front 10mm	0.585	0.025	0.009	0.004	0.623
	rear 10mm	0.808	0.025	0.040	0.025	0.898
	front 15mm	0.891	0.009	0.026	0.008	0.934
	rear 15mm	0.871	0.009	0.112	0.053	1.045
LTE FDD 2	left cheek	0.624	0.006	0.102	0.102	0.834
	left tilted 15°	0.317	0.006	0.086	0.111	0.520
	right cheek	0.335	0.015	0.240	0.038	0.628
	right tilted 15°	0.325	0.005	0.186	0.046	0.562
	front 10mm	0.469	0.025	0.009	0.004	0.507
	rear 10mm	0.607	0.025	0.040	0.025	0.697
	front 15mm	0.251	0.009	0.026	0.008	0.294
	rear 15mm	0.714	0.009	0.112	0.053	0.888
LTE FDD 4	left cheek	0.620	0.006	0.102	0.102	0.830
	left tilted 15°	0.372	0.006	0.086	0.111	0.575
	right cheek	0.341	0.015	0.240	0.038	0.634
	right tilted 15°	0.377	0.005	0.186	0.046	0.614
	front 10mm	0.466	0.025	0.009	0.004	0.504
	rear 10mm	0.676	0.025	0.040	0.025	0.766
	front 15mm	0.526	0.009	0.026	0.008	0.569
	rear 15mm	0.744	0.009	0.112	0.053	0.918
GSM 1900	left cheek	0.585	0.006	0.102	0.102	0.795
	left tilted 15°	0.335	0.006	0.086	0.111	0.538
	right cheek	0.294	0.015	0.240	0.038	0.587
	right tilted 15°	0.313	0.005	0.186	0.046	0.550
	front 10mm	0.372	0.025	0.009	0.004	0.410
	rear 10mm	0.663	0.025	0.040	0.025	0.753
	front 15mm	0.224	0.009	0.026	0.008	0.267
	rear 15mm	0.724	0.009	0.112	0.053	0.898
LTE FDD 7	left cheek	0.095	0.006	0.102	0.102	0.305
	left tilted 15°	0.093	0.006	0.086	0.111	0.296
	right cheek	0.209	0.015	0.240	0.038	0.502
	right tilted 15°	0.066	0.005	0.186	0.046	0.303
	front 10mm	0.350	0.025	0.009	0.004	0.388
	rear 10mm	0.432	0.025	0.040	0.025	0.522
	front 15mm	0.391	0.009	0.026	0.008	0.434
	rear 15mm	0.465	0.009	0.112	0.053	0.639

**Table 11.3-5a Highest SAR values and summation on the same test position between the main transmitter and secondary 2.4 GHz Wi-Fi antenna for slider closed, tested on device model: RHM181LW by CETECOM**

reported SAR WWAN, BT and WLAN2.4GHz, ΣSAR evaluation slider open						
Frequency band	Position	SAR <sub>max</sub> /W/kg				ΣSAR <1.6W/kg
		WWAN	BT	WLAN2.4 (0)	WLAN2.4 (1)	
UMTS FDD II	left cheek	0.667	0.012	0.207	0.033	0.919
	left tilted 15°	0.420	0.012	0.095	0.021	0.548
	right cheek	0.350	0.012	0.219	0.029	0.610
	right tilted 15°	0.421	0.012	0.080	0.023	0.536
	front 10mm	0.647	0.025	0.011	0.046	0.729
	rear 10mm	0.925	0.025	0.053	0.046	1.049
WCDMA FDD IV	left cheek	0.739	0.012	0.207	0.033	0.991
	left tilted 15°	0.532	0.012	0.095	0.021	0.660
	right cheek	0.405	0.012	0.219	0.029	0.665
	right tilted 15°	0.514	0.012	0.080	0.023	0.629
	front 10mm	0.624	0.025	0.011	0.046	0.706
	rear 10mm	1.165	0.025	0.053	0.046	1.289
LTE FDD 2	left cheek	0.810	0.012	0.207	0.033	1.062
	left tilted 15°	0.411	0.012	0.095	0.021	0.539
	right cheek	0.378	0.012	0.219	0.029	0.638
	right tilted 15°	0.394	0.012	0.080	0.023	0.509
	front 10mm	0.509	0.025	0.011	0.046	0.591
	rear 10mm	0.932	0.025	0.053	0.046	1.056
LTE FDD 4	left cheek	0.736	0.012	0.207	0.033	0.988
	left tilted 15°	0.382	0.012	0.095	0.021	0.510
	right cheek	0.330	0.012	0.219	0.029	0.590
	right tilted 15°	0.373	0.012	0.080	0.023	0.488
	front 10mm	0.535	0.025	0.011	0.046	0.617
	rear 10mm	1.047	0.025	0.053	0.046	1.171
GSM 1900	left cheek	0.701	0.012	0.207	0.033	0.953
	left tilted 15°	0.351	0.012	0.095	0.021	0.479
	right cheek	0.326	0.012	0.219	0.029	0.586
	right tilted 15°	0.349	0.012	0.080	0.023	0.484
	front 10mm	0.483	0.025	0.011	0.046	0.565
	rear 10mm	1.141	0.025	0.053	0.046	1.265
LTE FDD 7	left cheek	0.132	0.012	0.207	0.033	0.384
	left tilted 15°	0.129	0.012	0.095	0.021	0.257
	right cheek	0.298	0.012	0.219	0.029	0.558
	right tilted 15°	0.099	0.012	0.080	0.023	0.214
	front 10mm	0.518	0.025	0.011	0.046	0.600
	rear 10mm	0.530	0.025	0.053	0.046	0.654

**Table 11.3-6b Highest SAR values and summation on the same test position between the main transmitter and secondary 2.4 GHz Wi-Fi antenna for slider open tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for these bands. Due to this SAR was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A

Author Data

**Andrew Becker**

Dates of Test

**Oct 06 – Nov 02, 2015**

Test Report No

**RTS-6066-1511-01**

FCC ID:

**L6ARHT180LW**

reported SAR WWAN, BT and WLAN 5GHz, ΣSAR evaluation slider closed						
Frequency band	Position	SAR <sub>max</sub> /W/kg				ΣSAR <1.6W/kg
		WWAN	BT	WLAN5 (0)	WLAN5 (1)	
UMTS FDD II	left cheek	0.556	0.006	0.136	0.040	0.738
	left tilted 15°	0.266	0.006	0.169	0.036	0.477
	right cheek	0.311	0.015	0.123	0.025	0.474
	right tilted 15°	0.280	0.005	0.147	0.025	0.457
	front 10mm	0.263	0.025	0.138	0.094	0.520
	rear 10mm	0.815	0.025	0.138	0.094	1.072
	front 15mm	0.253	0.009	0.042	0.014	0.318
rear 15mm	0.934	0.009	0.379	0.113	1.435	
WCDMA FDD IV	left cheek	1.154	0.006	0.136	0.040	1.336
	left tilted 15°	0.523	0.006	0.169	0.036	0.734
	right cheek	0.470	0.015	0.123	0.025	0.633
	right tilted 15°	0.536	0.005	0.147	0.025	0.713
	front 10mm	0.585	0.025	0.138	0.094	0.842
	rear 10mm	0.808	0.025	0.138	0.094	1.065
	front 15mm	0.891	0.009	0.042	0.014	0.956
rear 15mm	0.871	0.009	0.379	0.113	1.372	
LTE FDD 2	left cheek	0.624	0.006	0.136	0.040	0.806
	left tilted 15°	0.317	0.006	0.169	0.036	0.528
	right cheek	0.335	0.015	0.123	0.025	0.498
	right tilted 15°	0.325	0.005	0.147	0.025	0.502
	front 10mm	0.489	0.025	0.138	0.094	0.726
	rear 10mm	0.607	0.025	0.138	0.094	0.864
	front 15mm	0.251	0.009	0.042	0.014	0.316
rear 15mm	0.714	0.009	0.379	0.113	1.215	
LTE FDD 4	left cheek	0.620	0.006	0.136	0.040	0.802
	left tilted 15°	0.372	0.006	0.169	0.036	0.583
	right cheek	0.341	0.015	0.123	0.025	0.504
	right tilted 15°	0.377	0.005	0.147	0.025	0.554
	front 10mm	0.466	0.025	0.138	0.094	0.723
	rear 10mm	0.676	0.025	0.138	0.094	0.933
	front 15mm	0.526	0.009	0.042	0.014	0.591
rear 15mm	0.744	0.009	0.379	0.113	1.245	
GSM 1900	left cheek	0.585	0.006	0.136	0.040	0.767
	left tilted 15°	0.335	0.006	0.169	0.036	0.546
	right cheek	0.294	0.015	0.123	0.025	0.457
	right tilted 15°	0.313	0.005	0.147	0.025	0.490
	front 10mm	0.372	0.025	0.138	0.094	0.629
	rear 10mm	0.663	0.025	0.138	0.094	0.920
	front 15mm	0.224	0.009	0.042	0.014	0.289
rear 15mm	0.724	0.009	0.379	0.113	1.225	
LTE FDD 7	left cheek	0.095	0.006	0.136	0.040	0.277
	left tilted 15°	0.093	0.006	0.169	0.036	0.304
	right cheek	0.209	0.015	0.123	0.025	0.372
	right tilted 15°	0.066	0.005	0.147	0.025	0.243
	front 10mm	0.350	0.025	0.138	0.094	0.607
	rear 10mm	0.432	0.025	0.138	0.094	0.689
	front 15mm	0.391	0.009	0.042	0.014	0.456
rear 15mm	0.465	0.009	0.379	0.113	0.966	

**Table 11.3-7a Highest SAR values and summation on the same test position between the main transmitter and secondary 5 GHz Wi-Fi antenna for slider closed tested on device model: RHM181LW by CETECOM**



reported SAR WWAN, BT and WLAN 5GHz, ΣSAR evaluation slider open						
Frequency band	Position	SAR <sub>max</sub> /W/kg				ΣSAR <1.6W/kg
		WWAN	BT	WLAN5 (0)	WLAN5 (1)	
UMTS FDD II	left cheek	0.667	0.012	0.049	0.004	0.732
	left tilted 15°	0.420	0.012	0.082	0.014	0.528
	right cheek	0.350	0.012	0.162	0.039	0.563
	right tilted 15°	0.421	0.012	0.129	0.037	0.599
	front 10mm	0.647	0.025	0.014	0.020	0.706
	rear 10mm	0.925	0.025	0.180	0.112	1.242
WCDMA FDD IV	left cheek	0.739	0.012	0.049	0.004	0.804
	left tilted 15°	0.532	0.012	0.082	0.014	0.640
	right cheek	0.405	0.012	0.162	0.039	0.618
	right tilted 15°	0.514	0.012	0.129	0.037	0.692
	front 10mm	0.624	0.025	0.014	0.020	0.683
	rear 10mm	1.165	0.025	0.180	0.112	1.482
LTE FDD 2	left cheek	0.810	0.012	0.049	0.004	0.875
	left tilted 15°	0.411	0.012	0.082	0.014	0.519
	right cheek	0.378	0.012	0.162	0.039	0.591
	right tilted 15°	0.394	0.012	0.129	0.037	0.572
	front 10mm	0.509	0.025	0.014	0.020	0.568
	rear 10mm	0.932	0.025	0.180	0.112	1.249
LTE FDD 4	left cheek	0.736	0.012	0.049	0.004	0.801
	left tilted 15°	0.382	0.012	0.082	0.014	0.490
	right cheek	0.330	0.012	0.162	0.039	0.543
	right tilted 15°	0.373	0.012	0.129	0.037	0.551
	front 10mm	0.535	0.025	0.014	0.020	0.594
	rear 10mm	1.047	0.025	0.180	0.112	1.364
GSM 1900	left cheek	0.701	0.012	0.049	0.004	0.766
	left tilted 15°	0.351	0.012	0.082	0.014	0.459
	right cheek	0.326	0.012	0.162	0.039	0.539
	right tilted 15°	0.349	0.012	0.129	0.037	0.527
	front 10mm	0.483	0.025	0.014	0.020	0.542
	rear 10mm	1.141	0.025	0.180	0.112	1.458
LTE FDD 7	left cheek	0.132	0.012	0.049	0.004	0.197
	left tilted 15°	0.129	0.012	0.082	0.014	0.237
	right cheek	0.298	0.012	0.162	0.039	0.511
	right tilted 15°	0.099	0.012	0.129	0.037	0.277
	front 10mm	0.518	0.025	0.014	0.020	0.577
	rear 10mm	0.530	0.025	0.180	0.112	0.847

**Table 11.3-7b Highest SAR values and summation on the same test position between the main transmitter and secondary 5 GHz Wi-Fi antenna for slider open tested on device model: RHM181LW by CETECOM**

**Note 1:** According to the hardware similarity document BlackBerry models RHT181LW and RHM181LW are identical for these bands. Due to this SAR was measured using RHM181LW and reused for RHT181LW.

**Note 2:** Model RHM181LW was tested using the external lab CETECOM ICT Services GmbH. This information was taken from the CETECOM SAR test report for model RHM181LW, report number 1-0042/15-01-15-A




#### 11.4 LTE Rel. 10 Carrier Aggregation Conducted Power Delta Measurements

The measurement was done with/without DL CA active to cover FCC KDB for LTE Rel. 10 requirements.

<b>LTE In Normal Mode Vs Carrier Aggregation Activated on model RHT181LW</b>				
	<b>Band</b>	<b>LTE band 4 (1700)</b>		
	<b>Freq. (MHz)</b>	1720.0	1732.5	1745.0
	<b>Channel</b>	20050	20175	20300
<b>Mode</b>	<b>Configuration</b>	<b>Max burst averaged conducted power (dBm)</b>		
LTE band 4 UL/Tx DL CA/SCC OFF	QPSK, RB1, Offset: Mid	23.45	23.50	23.65
+ LTE band 4 DL CA active SCC ON	QPSK, RB1, Offset: Mid	23.40	23.50	23.60
+ LTE band 5 DL CA active SCC ON	QPSK, RB1, Offset: Mid	23.45	23.52	23.60
+ LTE band 13 DL CA active SCC ON	QPSK, RB1, Offset: Mid	23.42	27.50	23.65
	<b>Band</b>	<b>LTE band 2 (1900)</b>		
	<b>Freq. (MHz)</b>	1860.0	1880.0	1900.0
	<b>Channel</b>	18700	18900	19100
<b>Mode</b>	<b>Configuration</b>	<b>Max burst averaged conducted power (dBm)</b>		
LTE band 2 UL/Tx DL CA/SCC OFF	QPSK, RB1, Offset: High	23.45	23.25	23.10
+ LTE band 2 DL CA active SCC ON	QPSK, RB1, Offset: High	23.40	23.25	23.10
+ LTE band 4 DL CA active SCC ON	QPSK, RB1, Offset: High	23.40	23.22	23.08
+ LTE band 5 DL CA active SCC ON	QPSK, RB1, Offset: High	23.42	23.21	23.10
+ LTE band 13 DL CA active SCC ON	QPSK, RB1, Offset: High	23.45	23.25	23.10

**Table 11.4-1 Conducted power delta measurements between LTE in normal mode and when LTE Rel. 10 carrier aggregation is activated.  
Measured using model RHT181LW**

		Document <b>SAR Compliance Test Report for the BlackBerry® Smartphone Model RHT181LW (STV100-2) Part 2/2</b>		Page <b>98(98)</b>
Author Data <b>Andrew Becker</b>	Dates of Test <b>Oct 06 – Nov 02, 2015</b>	Test Report No <b>RTS-6066-1511-01</b>	FCC ID: <b>L6ARHT180LW</b>	

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