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To FCC

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## Overall Assessment Letter for RIM Model RBM41GW FCC id: LA6RBM40GW

I have reviewed this composite application and find it compliant This is an application for a handheld Blackberry which supports both GSM and Bluetooth Please note the following:

1: Part 15 Clause 15.203

While not explicitly reported within the Test report there is ready evidence within the application showing that the Antenna is internal to the equipment and not able to be changed without invalidating the grant.

2: Part 15 Clause 15.205
While not explicitly reported within the Test report the results for Clause 15.209
demonstrate that the equipment is compliant to this requirement.

3: Product Variants.

It is noted that the Radio Tests were conducted on the RBG41GW variant which includes an additional transmitter.

Furthermore modifications were made to the products during test.

The Client has supplied details of the inter-relation between the models and modifications; and stated the supplied BOM relates to the final product.

Please refer to exhibits HW Product Similarity Declaration, and RTS-0441-RBM41GW-01 for details .

I am satisfied the test results are representative of the final product,.

4: Part 22/24 tests in GSM mode

The testing was conducted in GSM mode. The client declared

"In GPRS and EDGE modes, the peak conducted power is 2 dB lower than the GSM band as shown in the SAR report page 4, Table 1 in order to pass SAR.

Since we have tested the worst case between GSM and GPRS 2-slot and since they both use the same modulation, there is no further testing required for GPRS.





As for EDGE 2-slot mode even though the power is lower as well by 2 dB, but since it's a different modulation we tested the radiated spurious emission and occupied bandwidth for both bands 850 and PCS in EDGE mode"

5: SAR

## 5.1 General

The highest reported Head SAR was 1.16 W/kg at 1850.2 MHz The Highest Reported Head SAR in the lower frequency Range was 0.97 W/kg at 836.6 MHz

The highest Reported Body SAR was 0.51 W/kg at 836.6 MHz. The Highest Reported Body SAR in the higher frequency Range was 0.5 W/kg at 1880 MHz both using Holster 2. The highest Body SAR with 2.5 cms separation was 0.5 at 836.6 MHz.

The SAR was evaluated using the FCC provided checklist. I received SAT Training from the FCC in May 2003.

5.2: EDGE

The following correspondence occurred:

**BABT**: Please either provide a justification why the product was not tested in Edge mode, or repeat the Head and Body tests as appropriate in the Edge mode.

**Response** GSM 2-slots head SAR and GPRS 2-slots body SAR also represent EDGE, since power level and duty cycle are the same for those modes. In addition, worst-case head SAR was re-tested with LCD 3 and different modes for justification as shown below.

The difference between 1-slot GSM and 2-slots GSM/GPRS SAR is significant as expected due to the higher average power for 2-slots. However, the difference between 2-slots GSM/GPRS and EDGE/EGPRS SAR is insignificant since power level and duty cycle are the same.

Mode	Freq. (MHz)	Cond. Output Power (dBm)	SAR, averaged over 1 g (W/kg)  Left-hand		
			1-slot GSM 1900 MHz	1850.2	30.5
2-slot GSM/GPRS 1900 MHz	1850.2	28.5	23.4	1.02	
2-slots EDGE/EGPRS 1900 MHz	1850.2	28.5	23.4	1.03	

BABT: I am satisfied with this data.

5.3: LCDs

The following correspondence occurred:

BABT:

I note section 1.7 lists 3 LCDs. Furthermore I note and accept the statement that LCD 2 showed only small variance from LCD 1. No reference is made to LCD 3.





Please perform a similar test on LCD 3 and either report similarity or perform appropriate SAR tests. (Note Experience has shown that alternate designs of Battery with identical power output and dimensions can have significant differences in SAR due to internal design ).

**Response E:** Based on the previous measurement results on LCD 1, LCD 2 and new test result on LCD 3 as shown below, it was determined that alternate LCD with identical design and specification has no impact on SAR unlike batteries.

Mode (LCD #)	Freq. (MHz)	Cond. Output Power (dBm)	SAR, averaged over 1 g (W/kg)  Left-hand			
			1-slot GSM 1900 MHz (LCD 1)	1850.2	30.5	23.2
1-slot GSM 1900 MHz ( LCD 3)	1850.2	30.5	23.5	0.95		

BABT: I am satisfied with this data.

## 5.4 Bluetooth and Co-Transmission

The Bluetooth Transmitter is categorically exempt and below the low threshold.. No SAR evaluation occurred with this transmitter operating singly.

The Product supports simultaneous transmission. There was no significant change in Body SAR value when both transmitters were active.

Yours sincerely

Hilton Carr

Task Manager, Certification and Technical Development

