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April 16, 2007

Steven Dayhoff Federal Communications Commission, **Equipment Authorization Division** Application Processing Branch 7435 Oakland Mills Road Columbia, MD 21045

Subject: Response to the FCC Correspondence Reference # 32903 for additional information on RIM BlackBerry Handheld FCC ID: L6ARBG40GW, 731 Confirmation # EA898689

Dear Steve.

The following addresses the comment on your Correspondence Reference # 32903, dated April 16, 2007.

- 1) NII part of composite application has updated (replacement) SAR report
  - please submit this also in PCE, DTS, DSS parts

The replacement SAR report has been submitted also in PCE, DTS, and DSS parts.

2) In general one-to-multi-slot SAR scaling is not appropriate for compliance demonstration, particularly for non constant envelope modulations. Please provide additional explanation how scaling is derived and is applicable, including info about all power levels and measured and scaled results.

Alternatively, please revise measured data using appropriate test egpt.

The device can operate in 1/8 slot GSM/GPRS/EDGE mode or 2/8 slots DTM (Dual Transfer Mode)/GPRS/EDGE.

For the head SAR measurements, since the CMU200 base station simulator did not support DTM mode, tests were conducted in 1 slot uplink GSM mode and the SAR values were compensated for the DTM 2-slots uplink mode.

The device software automatically lowers power by 1 PCL (Power Control Level) or 2 dB per slot when transmitting in 2-slot DTM/GPRS/EDGE mode.

The peak conducted power for 1-slot tx (GSM/GPRS/EDGE) 850 MHz band was measured to be ~ 32.3 dBm (1.698 W) and the peak conducted power for 2-slot tx (GPRS) was measured to be ~ 30.3 dBm (1.072 W).

Total tx power for 2-slot was calculated as follows:

- = 1.072 + 1.072 W
- = 2.144 W

In dBm:

= 10\*log(2.144) + 30

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= 33.3 dBm

Delta in power level between 2-slots and 1slot mode is: = 33.3 – 32.3 dBm = 1.0 dB

The following formula was used to calculate compensated head SAR in the DTM mode or when there is a large power drift.

SAR (compensated) = SAR (measured)  $*10^{(1)}$  (Power Drift or Delta in Power) (dB)  $| /10 \rangle$ 

SAR (compensated) = SAR (measured)  $* 10^{(1.0 \text{ dB})} / 10$ 

We are in the process of upgrading our CMU200 base station simulator so that for our future filings, head SAR measurements are performed in DTM or 2-slots uplink mode.

Please do not hesitate to contact the undersigned should you have any questions.

Yours truly,
M. Lttay

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