



American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

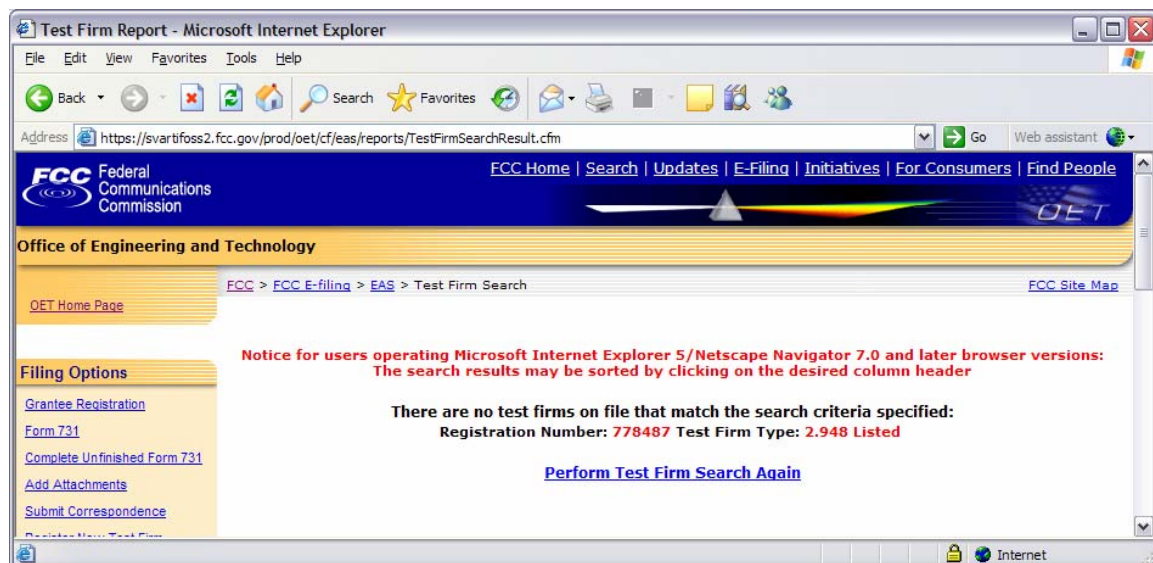
November 7, 2004

RE: Research in Motion Limited

FCC ID: L6ARAS10WW

After a review of the submitted information, I have a few comments on the above referenced Application.

- 1) There are 2 requirements near the bandedge for 2.4 GHz DTS devices. First, all emissions outside of the band must meet the -20 dBc requirement. This is shown in the report. Secondly, any emissions falling in restricted bands must also meet the radiated peak/average limits of 74/54 dBuV/m. This does not appear to be shown for highest emissions falling in the ≤ 2.39 GHz and ≥ 2.4835 GHz restricted bands located near the bandedges. Because of the bandedge and concerns with how to take accurate radiate measurements, it is usually necessary to use a method where the fundamental is maximized and measured, and then the side lobe is determined by correcting the radiated measurement by the dBc numbers. See attached document that discusses this. Please provide information to support compliance with the 74 and 54 dBuV/m peak/average limits. Note you mentioned a previous application regarding Bluetooth. First Bluetooth is typically a much lower power, narrower bandwidth fundamental, and the frequency hopping nature allows a significant averaging factor that can be applied. Compliance of a Bluetooth at the bandedge is usually not a concern, much unlike a 802.11 device.
- 2) To test device under Part 15, regardless of the application type (Certification, Verification, DoC) the OAT's is required to be currently listed with the FCC via 2.948 or through your accrediting agent (A2LA or NVLAP if applicable). Currently the site was not found on the FCC's database. I am inquiring directly with the FCC as to the status. However the site number you provided does not appear to be listed, nor does anything appear for RIM in Canada.



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- 3) Please note that for Certification as a PC peripheral as well as a TX, you would normally receive an additional grant just for the PC peripheral Certification (composite application where multiple grants issued, all using the same FCC ID). It appears that this may not have been fully done in the past. Under the Grant line entry of "Equipment Type" located on your grants, you would see "PC Peripheral" if you were following a Certification route for this portion of the device as well. To properly denote this in your application to ATCB, you should list the various equipment codes on Section II, Part 4(a) of the 731 form applicable to this device. For this application, DTS would be listed for the 15.247 TX and JBP for PC Peripheral. This would clearly denote the composite application request. Please note that there has been some confusion in past years as to these types of applications. Also, depending on the use of the device, it is sometimes not clear if it should be considered a PC peripheral. Because of the issues on similar types of devices, the FCC recently issued a reminder about the Certification requirements (see attached public notice). From reviewing the manual, it does appear that this device would likely be considered a PC peripheral if it can be directly attached to a computer via a cable for purposed other than initial setup (TX files, storage, synchronization, etc.). If so a PC peripheral application should also be performed. If it connects only via a docking station, please note that in this case, the docking station would receive a PC peripheral Certification or DoC. However, it is assumed that this device may directly attach via a cable to a computer. Please confirm that you wish to receive 2 grants on this application. One for the DTS transmitter, another for the PC peripheral.
- 4) The SAR report mentions the TX range as 2402-2483, but it was thought that the device TX from 2412-2462. Please review/correct as necessary.
- 5) Uses manual cites 15 mm while SAR report cites 13 mm. Please explain and/or correct.
- 6) SAR table suggests that only center channel was tested, while some results appear < 3 dB from the limit. In these cases, results for low and high channels should also be reported. Please review and correct as necessary.
- 7) Page 22 suggests that 1.08 was the highest SAR tested. Note that the results for 13 mm spacing were highest.
- 8) Test photos should be provided for the 13 mm spacing configurations as well.
- 9) The FCC asks that the Conducted power in SAR report should be greater than or equal to what's in EMC report, but not exceeding tune-up/tolerance. It appears the maximum power in the SAR report is 15.0 dBm, while in the EMC report it is 15.5 dBm. Please explain/correct as necessary.
- 10) The users manual mentions to only use RIM approved accessories. The manual should not exclude 3rd party access. Typically most manufactures include a statements such as:

.....to maintain compliance with FCC RF exposure guidelines,use only RIM approved accessories or accessories that contain no metallic components and\provide a separation distance of 1.3 cm to the body. Use of other accessories may violate FCC RF exposure guidelines and should be avoided.
- 11) Please provide more information regarding the probe including tip diameter, etc. Many times this information is included in the calibration information. Was the entire calibration information included?
- 12) Probe calibration does not appear to include linearity, axial and sperical isotropy, boundary effect error and calibration uncertainty. Please provide.
- 13) The following could not be confirmed:
 - a) Distance between the measurement point (distance + offset) at the probe sensor location (geometric center behind the probe tip) and the phantom surface is < 8.0 mm and maintained at a constant distance of +/- 1.0 mm during an area scan to determine peak SAR locations
 - b) Was Probe boundary effect compensation used? If not then the probe tip should be positioned at least half a probe tip diameter from the phantom surface during area and zoom scans.
- 14) FYI.....Both grants for FCC and IC are scheduled to be released 12/31/04.

Attachments: 2

A handwritten signature in black ink, appearing to read 'Timothy R. Johnson', is positioned above the printed name.

Timothy R. Johnson
Examining Engineer

[mailto: tjohnson@AmericanTCB.com](mailto:tjohnson@AmericanTCB.com)

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.