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

October 26, 2005

RE: Radiotronix Inc.

FCC ID: Q7V-3F090003X

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

1) The non-colocation statement should also be added to the section regarding information to place into the integrators user manual. This information should be given to the user as well.
2) The RF exposure exhibit used 3 dBi, while information in the manual suggest 2 dBi for all antennas (section 8 of users manual). Your response cited that the antenna have a variation of 2.1 to 3 dBi. Please correct the users manual for this inconsistency.

Test Report issues

3) Output power is listed for LP mode as 0 dBm (test report section 2.0 & 2.3) with a possible +3 dBi antenna. The operational description mentions –3 dBm for power in LP mode, test report appears to show –2 dBm conducted. Note that far field equations would give about -1.5 dBm EIRP to meet the required 50,000 uV/m limit. The 0 dBm rating appears a little high given the limit and antenna gains. Please clarify these discrepancies. This shows about a theoretical value of over the limit by 3 dB. This along with item 6 below likely suggests the concern is that averaging was applied to the fundamental which is not allowed for 900 MHz under 15.249.
4) Section 2.0 mentions 14 dBm, while section 2.3 mentions 15 dBm. Please clarify. Note that The theory of operation suggests a typical of 11 dBm and maximum 14 dBm.
5) Some DTS tables mention a 6 dB averaging factor as applied to the second harmonic. It is uncertain what this is. The average duty factor plots do not fully support this and should be looked at again, likely using a diode detector and O-scope. Please call to discuss.
6) LP mode mentions a 6 dB averaging factor applied to both fundamental and second harmonics. It is uncertain what this is. However, please note that fundamental limits are PK/QP only. Please call to discuss.
7) The device appears to have a duty cycle associated with its carrier. In order for average measurements to be valid, the VBW must be > 1/Ton time per pulse. Estimations made would suggest average measurements must be made with VBW > 100 kHz for 2400 baud. However this is the slower data rate. Higher data rates may require higher VBW.
8) Bandedge measurements should be provided showing compliance to the > 20 dB FCC requirements. It is not certain if this information is currently provided in the report.
9) FYI….The test report will require a complete review once it has been resubmitted.

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Examining Engineer

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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.