



# American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

September 13, 2004

RE: FCC ID: R2I-ETSTX1\_ATCB001687

Attention: Bill Parry

I have a few comments on this Application. Please note that further comments may arise in response to answers provided to the questions below.

1. Please note that while you have provided a list of frequencies, you have not provided a pseudo-random hopping list to show how the device hops pseudo-randomly. Please provide a pseudo-random hopping list.
2. Please explain why the file RF Exp\_H8NWLL3014.pdf has been provided in the application packet. This file is MPE for a WLAN operating in the 2412 to 2462 range and the device in question operates as a FHSS in the 902-928MHz range.
3. Please note that the antenna terminal conducted emissions for intentional radiators listed on page 7 of the test report states conducted emissions was only done from 450kHz to 30MHz. Please correct as needed.
4. Please note that on page 8 of the test report you state that the occupied bandwidth is over 12MHz. Please note that the occupied bandwidth is of a single channel frequency that is modulated and is not the width of the entire hopping range. Please provide the correct bandwidth information for the hopping channels. Please measure the OBW of the low middle and high channels individually.
5. Please note that as this device operates over a greater than 10MHz range, you must provide peak power measurements of at least the low mid and high channels with the device hopping stopped. Please also note that the tabular maximum reported on page 21 of 905.5MHz does not agree with the plotted maximum value shown on the plot on page 23 at 908.24MHz. Please provide the peak power values for the low mid and high channels for this device as required by 15.31m.
6. Please note that you have not provided the analyzer settings for measurements made. Please provide the resolution bandwidth, video bandwidth, span etc used in the analyzer for all measurements.
7. Please note that the values listed in the tables in section 4.2 and 4.3 do not have the measurement units labeled. Thus it is not possible to determine what the values mean (i.e. are the levels dBuV, uV, dBm, etc????). While it is assumed that these levels are dBuV/m for the failing unit mentioned in items below, please provide the units of measurements in all of the tables and in any sample formulas.
8. Please provide a sample formula explaining how you derived at the "Factored Values" in your report.
9. Please note that emissions in the restricted band frequencies 1300-1427 MHz must meet the 54dBuV/m limits for averaged readings and the 74dBuV/m maximum for peak readings. Please note that on page 19 of the test report you show a corrected averaged signal level at 1357.5105MHz of 62.97dBuV/m. This is a failing reading as it is above the maximum allowable level of 54dBuV/m average. Please correct and resubmit the application when it is compliant to the part 15 requirements.
10. Please note that emissions in the restricted band frequencies of 2200-2300 MHz must meet the 54dBuV/m limits for averaged readings and the 74dBuV/m maximum for peak readings. Please note that on page 19 of the report you show a corrected averaged signal level at 2262.5221 MHz of 64.22dBuV/m. This is a failing reading as it is above the maximum allowable average level 54dBuV/m. Please correct and resubmit the application when it is compliant to the part 15 requirements. Please correct and resubmit the application when it is compliant to the part 15 requirements.
11. Please note that the device also fails for the above reasons in the restricted frequency bands of 7.25-7.75GHz, 8.025-8.5GHz and 9.0-9.2GHz (i.e. see data on page 19 of your report for readings at 7692.57MHz, 8145.07MHz and 9050.0813MHz). Please correct and resubmit the application when it is compliant to the part 15 requirements.

12. Please note that you have not identified the columns for table 3 on page 20. Because of the nondescript columns of the data, it is not possible to determine compliance based on the information in the table.
13. Please provide test data showing compliance to the specified dwell time and channel occupancy requirements of 15.247.



Dennis Ward  
<mailto:dward@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.