



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

August 9, 2004

RE: FCC ID: ROG466837HO553R24_ATCB001573

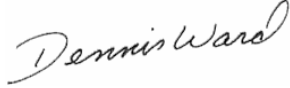
Attention: Paul Siegerist

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 provide the technical contact information on the 731 form.
2. Please report the actual measured conducted power on the 731 form. (The max conducted power stated on page 63 of the report is 22.2dBm (165mW - it is this power that is to be reported on the 731 and on the grant).
3. Please note that this is not an NII device as it operates in the 2.4GHz frequency range. Please provide a 731 with the correct equipment code.
4. Please note that the report provided appears to still be in the 'draft' form as it contains editorial comments etc. Please provide a completed test report or alternately, please explain why the editorial comments are in the report.
5. Please note that the tabular radiated test data on pages 39 through 54 of the test report have amb listed for all readings. Please clarify if all the readings are ambients or if this is an error in the report.
6. Please note that the data in the above tables appears to be averaged data compared to the 54dB limit. However, please note that devices such as this in the part 15.247 rules also requires that the peak readings are to meet the 20dB over the average limits (i.e. peak readings must be under 74dB in the restricted bands. Please show evidence that the peak readings for radiated emissions meet this 74dB limit where applicable.
7. Please correlate that antennae listed in the test report with those listed in the antenna certification listing. Please note that it is not clear which antenna is being used during testing on some of the data sheets. Please clearly identify the antenna(s) tested.
8. Please note that your comment in the rf exposure document about the device not requiring rf exposure information is not correct. Please note that as this is a part 15 device operating with high gain antennae and are not licensed devices an MPE report must be provided. Please provide a separate MPE report clearly showing the safe rf exposure distance. Please make sure that the highest gain antenna of each type is included in the MPE report.
9. Please note that as this is a part 15.247 device it manditorily falls into the uncontrolled general population rf exposure environment. Please note that the rf exposure limit for such devices is $1\text{mw}/\text{cm}^2$. Please note that your manual states a 20 cm separation must be maintained. Pelase note that this is only true for antennae less than 15 dBi gain. For antennae abouve this gain a greater distance must be maintained. Please also note that the manual uses 370mw as the power in the calculations. Please note that the measured conducted power of this device is only 168mW (22.2dBm). Please make documentation consistent.
10. Please provide information in the manual as to how the reduction in power per 15.247(b)(4)(i) is to be made when using high gain antenna (i.e. with 22.2dBm an antenna with a gain in excess of 15 dBi would need to consider this rule part).
11. Please note that the manual appears to only address the antenna installation aspect of the system and does not describe the transmitter. Please also note that the operational description does not adequately describe this transmitter. What is it? How does it meet the definition of a spread spectrum device? Please provide evidence as to the nature and operational description of this device and how it works. Please show evidence as to how it meets the definition of a spread spectrum device.
12. Please provide a manual with all of the appropriate FCC statements including the non-modification statement and the information to the user as required for part 15 devices.
13. Please note that it is not clear as to what type device this is. Is it an 802.11 WLAN type device? IF it is, please explain why the lowest 2412MHz and the highest 2462MHz frequencies were not

tested. If this device does operate on these frequencies, please show compliance of the band edges using these lowest and highest frequencies. Please provide evidence as to the lowest and highest channels available for this device.

14. Please provide the required separate test setup photos as required by the FCC.
15. Please provide separate internal photos. Please also make sure that all shielding is removed and photos of all components and all sides of all boards are provided.



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.