



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

April 20, 2004

RE: FCC ID: B5D-AP200MW_ATCB001263
Attention: Roger Cox / Doug Kramer

I have a few comments on this Application. Please note that these comments are in addition to those comments contained in file "4-13-04 B5D-AP200MW_ATCB Comments.pdf"

1. Please note that the plotted radiated data shown in red in appendix B does not specify if it is a QP or an averaged reading. As there are both QP and average limits involved (depending on the frequency) please clearly identify what the reading are (i.e. QP or Average).
2. Please note that in the radiated emissions table for the transmitter you show readings for frequencies outside the restricted bands as over the limit. Please note that the readings outside the restricted bands only need to be 20dB below the fundamental. Please compare the readings to the correct limits.
3. Please note that the table on page 62 of the report is listed as being the "calculated restricted band values of the antenna and the coax cable combinations listed in appendix G." What does this mean? It appears as if you have calculated compliance of the restricted bands by subtracting the gain of the EUT antenna. Please note that this is not allowed. Restricted band compliance for part 15 devices is strictly a radiated field strength measurement as stated in 15.209a and 15.247c. Please explain the chart on page 62 of the report.
4. Please note that you do not appear to have provided a proper peak conducted or EIRP power for this device. Please note that it is stated to be a 200mw conducted power device. Please note that page 6 states the device is only 109mw (20.4dBm) while the 731 states 178mW. Page 6 of the report states that you derived power measurements from plots in appendix F. Please note that none of the plots show the proper resolution or video bandwidths for peak power measurements required by 15.247. Please note that for power measurements using an analyzer the res BW must be wider than the band width of the device or a bandwidth correction factor must be applied. The video BW must be greater than the Res BW. Alternately a peak power meter can be used. Please note that you do not appear to have used the correct resolution and video bandwidths nor does it appear that you have included a resolution bandwidth correction factor in the peak power measurements. The resolution bandwidth correction factor is $10\log(\text{EUT } 6\text{dB BW}/\text{res BW})$. Please re-measure the peak conducted power of this device using the proper resolution bandwidth (including any bandwidth correction factor as needed) and the proper video bandwidth (which would be greater than the resolution bandwidth).

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.