



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

February 14, 2003

RE: Airespace

FCC ID: QTZVAP1200

I have a few comments on the above referenced Application.

General Information

- 1) It does not appear that AC power line conducted emissions were supplied to show compliance with 15.207. Please provide this information. Please note that while the final device may be subjected to 15A Verification requirements, the limits of 15.207 for the TX portion of the device are equivalent to Class B. Any emissions that exceed the limits of 15.207, but meet 15.107 class A limits must be shown to not originate from the TX portion of the device.
- 2) Please verify that the device has been properly tested to for Part 15, Class A limits as previously mentioned.

UNII Specific Information

- 3) The UNII Block Diagram in the UNII test report shows a splitter that goes to 2 different internal antennas as well as FET switch. The photographs do not appear to show a splitter or switch. Are these in the device. Please explain or provide labeled photographs to show these components.
- 4) The "Report Organization and Results Summary" paragraph incorrectly references 15.247.
- 5) The list of measurement antennas given in the equipment list appears incomplete. Please review.
- 6) Please provide an attestation from the manufacturer regarding the reduction of power (both 802.11 A/B) being programmed and set in the final product such that the end user can not adjust the power above the set points determined.
- 7) Please explain if this device contains a "Turbo" mode of operation. If so, was this feature tested?
- 8) The power measurements were made using a power meter. The FCC has published acceptable procedures using a spectrum analyzer, but do not mention using a power meter. I believe that there has been some concern regarding the accuracy of power meters for measurement of wideband signal that are greater than 10 MHz. I have provided a copy of the FCC recently published notice for your review.
- 9) The setpoints appear to agree with the measured power when lowered to 10 dBm, but have a variation of 3 dB on the higher set points. Please explain.
- 10) In the 5.15-5.25 GHz band, the channel 36 power was measured at 16.9 dBm with a setpoint of +13 dBm and a limit of +17 dBm. However channel 48 has a setpoint of +14 dBm with a limit of +17 dBm, but appears not to be measured. Please provide power measurements for this channel (reference 15.407(b)(7)).
- 11) Please provide information regarding 15.407(c), (d), (e), & (g). Note that the "access door" and any information to the user on how to install the unit will be a concern for operation in the 5.15-5.25 due to the integral antenna requirement. Note that an antenna that attaches with a connector inside of the case is acceptable, provided that there is no need for the user to ever open the case.
- 12) Is the second paragraph in the procedure regarding the 5 GHz Out of Band Spurious Emissions correct. This appears to be referencing the 15.247 conducted test using a 100 kHz RBW. The plots for this test do show the expected 1 MHz RBW setting. Additionally, please add the limits to the tabular results.
- 13) The peak excursion procedure shows "?" for come of the VBW settings and also appears to be provided 2 different times (Trace 1/2, Trace A/B). Additionally the information regarding the integration is only necessary for the power measurement and therefore does not apply to this procedure. Please correct.

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- 14) The Note under the table of the 5 GHz Radiated Emissions in Restricted Bands states 15.205 and 15.209 limitations. Please note that the 15.205 references the limits of 15.209. However, this section does not appear to mention 15.407(b)(1-3). Additionally, please explain how the limit of 15.407 are taken into account in the data tables of this section. Note that the RBW appears to be met for the 5.15 and 5.35 bandedges, but it is not certain how the -17/-27 dBm/MHz requirements are shown.
- 15) The notes on table for Run 1b state power levels different than appear in the power level setting table earlier in the report. Please explain or correct.
- 16) FYI. Please note that for the Spectral Density Tests, the VBW is specified as $> \text{RBW}$, not $\geq \text{RBW}$.



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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.