November 26, 2003



San Jose, CA, 95134 (408) 635 2000 www.airespace.com

- TO: Mr. Tim Johnson American Telecommunications Certification Body Inc. 6731 Whittier Ave, McLean, VA 22101
- RE: Airespace FCC ID: QTZWN1200BG

Tim,

Below are the replies to your inquiries regarding this application. If something is unclear, or if you have additional concerns, please contact me.

Best Regards,

David Waitt Consultant representing Airespace david@waitt.us

ATCB 1) The internal photographs appear to show that 2 cards are internally installed, instead of just one as specified by this application. Please correct.

Airespace) The incorrect set of photos was uploaded inadvertently. New photos have been uploaded to the ATCB site.

ATCB 2) Since this is a 802.11b/g version product only, please remove reference to the 5 GHz testing given on page 6.

Airespace) The reference has been deleted.

ATCB 3) Based on how information was presented in the report, the RF exposure calculations incorrectly take into consideration the RF switch. Please correct the RF exposure calculations **Airespace**) The calculation has been corrected.. The power level into the antenna was correct. However the antenna gain was 1 dB to low. This has been corrected. A revised calculation has been uploaded to the ATCB site

ATCB 4) The spectral density table appears to be incorrectly labeled as only 802.11b results appear to be shown. Please correct.

Airespace) The table has been corrected.

ATCB 5) Please provide a justification for the device as a Class A device. **Airespace**) A letter outlining Class A justification has been uploaded to the ATCB site

ATCB 6) The transmit band is incorrectly reported on page 23, please correct. **Airespace)** The error has been corrected.

ATCB 7) The conducted emissions state that they device was tested from 150 kHz to 30 MHz using the new EN55022 harmonized limits. However, the limits specified do not equate to any known limit. The results shown are only around 25-30 MHz. Please confirm the frequency range tested and the limits applied. Note that limits specified by 15.207 are equivalent to Class B limits. Also, the device must meet both Average and QP limits, while some emissions shown exceed the average limits. Please correct as necessary.

Airespace)

A more complete presentation of the AC line conducted emissions is contained in the report. The highest peak emissions were all within the narrow frequency range of 25 to 30 MHz.

ATCB 8) Given that the device may accept an AC adapter or POE power according to the users manual, the AC line conducted emissions should be checked to determine which method of supplying power is worse case. Only one set of data appears to be provided. Please provide further information regarding whether both modes of providing power were checked to ensure the worse case results are provided.

Airespace)

A more complete presentation of the AC line conducted emissions has been added to the report.

The Access point radio has been tested when powered by the AC adapter and the power over Ethernet from the Ethernet switch. This was, of course, necessary in order to verify Class A compliance of the Ethernet switch.

In general, the AC line conducted emissions results presented are worst case levels. This is due in part to the additional filtering that is incorporated into the power supply within the Ethernet switch.

ATCB 9) A justification for not requiring external antenna measurements was provided. However neither data sheets or technical information has been provided to compare these antennas, their types, gains, patterns, etc. and other specifications. Please provide. Alternatively, please provide test data for the external antennas. Note that the test report mentions that the unit was not tested with external antennas, however they are shown in the test photographs. Additionally, information regarding the external antenna should be included in the RF exposure exhibit. Please explain.

Airespace) The pictures and data sheets of the external antennas was inadvertently omitted. A document containing pictures and data sheets of the antennas has been uploaded to the ATCB site. Note that the external antennas were not tested for this application due to the fact that they are the same type of antenna ("patch"), and lower gain than the access point internal antenna. ONLY the external 3 dBi and 5 dBi versions of the external antennas are available for use with the access point and both of these antennas has lower gain then the internal antenna. Therefore the internal antenna represents the worst case scenario.

ATCB 10) Previous applications provided an attestation letter regarding the upgrade feature of this radio. Please provide a similar letter and/or upgrade manual for this application.

Airespace) A letter outlining the upgrade process will be uploaded to the ATCB site as soon as possible.

ATCB 11) The external photographs appear to show standard screws for the access door which contradicts the information given in previous upgrade manuals stating special Torx screws are used. Please comment. **Airespace)** The unit that was used for testing incorporated regular Phillips screws simply for ease of assembly / disassembly and the fact that Phillips screwdrivers are ubiquitous. Security Torx screws are used in the units that are sold to customers.

ATCB 12) Please provide additional close up photographs of the external antennas. **Airespace**) Additional pictures of the external antennas are included in the file "External_2_4GHz_ant_data_pix.pdf" that has been uploaded to the ATCB site.