



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

June 19, 2006

RE: Mobile Access Networks

FCC ID: OJFMA850A

After a review of the submitted information, I have a few comments on the above referenced Application.

- 1) Per FCC request upon review of the test plan, please confirm that the approval is for four 802.11a/b/g access points with all TX boards installed (802.11b/g and 802.11a boards in the listed access point) in each and also confirm that 4 access points will always be used/installed.
- 2) Per FCC discussions, it is acceptable to label the 850A, however this considered a secondary label on the amplifier portion of the device. Labels must also be placed on the access points themselves and cover any existing FCC ID's on them. Please provide additional label exhibits as necessary.
- 3) Since the approval is a system, please provide appropriate internal and external photos of the access points being approved with the system as well.
- 4) Section 6.7 of the report should include both 2.4 and 5 GHz.
- 5) Please update the 731 for to show 2.4 GHz information as well (i.e. DTS device, 2412 – 2462, etc.).
- 6) FYI...Proper testing for the 26 dB test for the UNII portion of the device should be done 26 dB from the peak emission measured on the same plot, not the power used as a reference level.

Emission Bandwidth "B"MHz.

- * Use a RBW = 1% of the emission bandwidth.
- * Set the VBW > RBW
- * Use a peak detector.
- * Do not use the Max Hold function. Rather, use the view button to capture the emission.
- * Measure the widest width of the emission that is 26 dB down from the peak of the emission.

Note that this result affects the limit applied for power. However since the more stringent level is used/applied, retesting is not necessary. However for any future tests or additional testing of this device should be performed properly.

- 7) Section 7.2 does not appear to use the more restrictive bandwidths necessary for the calculation (smallest bandwidth). Note that this result affects the limit applied for power. Please correct as necessary.
- 8) Table 7.2.2 appears to reduced the limit another 1dB to the limit, despite the previous page already appearing to take this into consideration. Please review.
- 9) Table 7.5.5 appears to use 10 Hz for the average emissions although the plots appear to use otherwise. Note that 10 Hz is only allowed for a CW signal. If the signal was pulsed in nature as shown in the power measurements, then the VBW must be > 1/Ton time for the appropriate data rate being used. Previous test report appear to handle this properly. Please review.
- 10) Readings in plots from 30 – 1000 MHz in section 7.5 and 8.4 show many readings over the limit < 100 MHz, but no tabular data. Please explain.
- 11) In section 8.3 and 8.4, kindly label all appropriate plots where the 802.11a emissions appear as well. It appears only one plot is labeled for this.
- 12) FYI..Table 8.1.2 mentions DSS for all modulations listed. I believe some of these were OFDM.

- 13) Please verify the data in table 8.6.2. One data point appears odd.
- 14) Although a new report was provided, it does not appear the report covers all the expected tests. For instance, the FCC requires radiated and conducted for 802.11 b only (802.11a and licensed are off) per our test summary and comments previously provided. It does not appear that this has been provided, given the new report block diagram suggests radiated testing included all signals. It does appear that the new test report only provides test results for a composite set of inputs. (if previous results apply from the 850 for 802.11b/g only, please provide. However please note that the previous antenna is lower gain and therefore previous radiated results are not considered applicable). The following appears to summarize our understanding of what has been provided so far:

Configuration	Radiated	RF Conducted
802.11 b/g only TXing	Not Provided	Not Provided
802.11 b/g and a only TXing	Not Provided or possibly new report?	Not Provided or possibly new report
802.11 b/g, a, and licensed TXing	Provided originally	Provided originally – 2.4 GHz data
Additional Antenna Conducted Tests	Provided in new report	Provided in new report

Note: It may be possible to perform a subset of RF conducted testing if the worse case results from the combined test can be shown to be the same (i.e. worse case power is measured for the 802.11b/g test and is shown to be the same as the 802.11 b/g, a, and licensed test). However if differences are noted, full testing should be shown. Note 2.4 GHz conducted data did not appear in the original report. Radiated results for 802.11 b/g, a and licensed appear to cover the 2.4 GHz for this combination with the exception of the bandedge for 2.4835 GHz at a high channel may not be clear.

- 15) The manual was corrected for several items per discussions with Steve Blum, ATCB, and the FCC and there was several items discussed with FCC and Steve Blum regarding this. Please provide a copy of the latest manual. Please note that the manual will require careful review for consistency with the application (i.e.: professional installation, access points approved, antennas, and any other pertinent information, etc.).
- 16) Previously not all data sheets were provided for all antennas listed in the manual for the approval being performed. However the most current revised manual also has not been reviewed and it is uncertain how many/what antennas are being covered. Does the application include appropriate data sheets for all antennas being approved in this application.
- 17) While the device may not stay connected via RS-232 (from previous responses), it does appear the device may stay attached via Ethernet (implied from the manual). If this port is intended to only be connected to an access point, then it would not qualify as a PC peripheral. However if this port is intended to connect directly to a computer, it would be considered a PC peripheral under 15.3. Please review/comment as necessary on if this connection is expected to remain after configuration.



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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.

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