



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

June 25, 2008

RE: Accton Technology Corporation

FCC ID: HEDSMC2536WAG2

After a review of the submitted information, I have a few comments on the above referenced Application. Depending on your responses, kindly understand there may be additional comments.

- 1) Due to various concerns recently seen about proper authority being given to others for FCC and/or IC matters, the agency letter (and ideally confidentiality letters as well) should be signed by someone traceable to have the proper authority. For instance, the FCC site shows Barry Ma as the correct contact of authority for FCC matters. Therefore the agency letters should be signed by this contact or alternatively a letter showing who he has "deputized" (i.e. Ray Chen) to sign on his behalf may be provided as well.
- 2) According to recent information from the FCC, each UNII band (i.e. 5150-5250, 5250-5350, etc.), must be treated as a separate band and a low, middle, and high channel tested in November TCB Conference Call information:

[Reminder: 15.31\(m\) applies to each band the device operates under.](#)

[5.15-5.25 and 5.25-5.35 GHz bands have different rules so test 3 frequencies in each band.](#)

Complete data in each band according to this requirement does not appear to be provided (i.e. middle channel data).

- 3) The UNII report includes both UNII and 15.247 data. FCC has asked that a report for each type of device be generated where possible. Since 5 GHz data for 5745 – 5825 is being submitted as DTS then this data should either be a separate test report, or included in the 2.4 GHz DTS report since both 2.4 GHz band and 5745-5825 MHz are shown as DTS devices.
- 4) For power measurement of 802.11 b/g, it is uncertain which power sensor was used with the power meter. Not all sensors give peak power for the instrument used. Some are RMS/AVG. Please confirm use of the proper peak power sensor.
- 5) For UNII measurements, there are several power techniques given in the guidance notes. The methods cited should clearly identify which method was followed. Therefore it is uncertain which detectors and other factors were applied. It appears this was tested with actual transmission of data over air interface and possibly method 3. However peak excursion appears to use an average detector which would suggest that either power or peak excursion has been mis-measured). Please correct.
- 6) For -27 dBm/MHz EIRP limitation, it does not appear the results are shown to correct for the EIRP of the antenna. For instance, if the antenna is 2.0 dBi, then the limit becomes -27 dBm/MHz – 2.0 dBi = -29 dBm/MHz EIRP. Please review (current section 12.0 of UNII Report). Data as presented and given the antenna gain appears non-compliant.
- 7) Peak excursion, trace 2 does not seem to follow power measurement settings according to UNII Public Notice. See above concerns regarding power measurements as either power or peak excursion appear to deviate from required methods. Additionally, the settings during power (as cited above) could not be fully determined. Please review.
- 8) Kindly explain where information regarding 15.407(c) may be found.
- 9) Users manual appears to be missing information regarding 15.407(e).
- 10) [FYI....](#)Regarding the 731 Form:

- a) Please note that the type of device on page 2, Section III, 4(a) should be DTS for 2.4 GHz, and NII for 5150-5350 MHz.
- b) Note that the power output on the 731 for the UNII band 5150-5350 exceeds the requirements of 50 mW. Therefore the frequency and power should be divided by band.
- c) Frequencies for 5150-5350 MHz and 5725 – 5850 MHz should be listed as the lowest/highest tunable frequencies. Currently information for the grants would be as follows:

DTS:

2412 – 2462 MHz

5745 – 5825 MHz

NII

5180 – 5240 MHz

5260 - 5320 MHz

- 11) FYI....Please note that this device appears to also be subject to a DoC. Please note that the DoC portion of the testing is not currently allowed in China under FCC regulations. Care should be taken to ensure DoC testing and reports are properly done by labs allowed under FCC regulations given in Part 2.

DFS

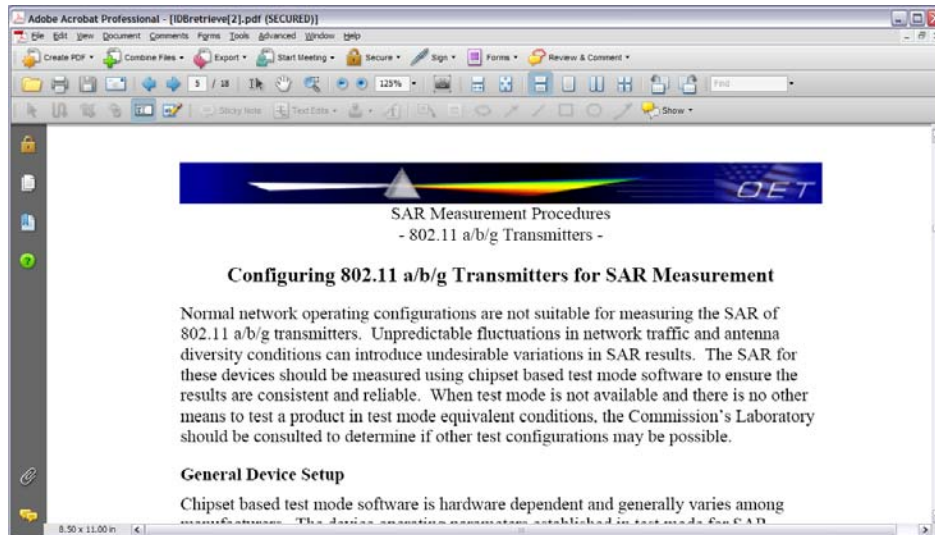
- 12) The report states this is a client without ad-hoc capability (5250-5350 MHz). Recent FCC KDB cites a separate cover letter attestation needs to be included (from the applicant). Please see: <http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=34859&switch=P>

Note: Users manual suggests unit is capable of ad-hoc modes. Note that these modes can not be allowed in the 5250 – 5350 MHz band. Please review (manual page 12).

- 13) Users manual shows that part of installation allows selection of region/country. Devices subject to DFS do not allow for this to occur as selection of alternative region will cause device to be non-compliant and not allowed under 15.15 of the rules unless application is submitted as a software defined radio (SDR) which may only be done in a filing directly with the FCC (page 11 of manual).

## SAR

- 14) It is uncertain how the device was manipulated to operate during testing for SAR. For EMC it appears actual communication was used with an access point. With proper consideration of settings, triggering, and detectors, while undesirable it is possible to test EMC in these conditions but techniques must be carefully evaluated. For SAR – the FCC has stated the following which typically requires a special test mode that puts the device into 100% modulated carrier mode.



And also page 9-10 of <http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=28238&switch=P> Currently the test report does not appear to provide adequate information on how device was manipulated for testing to ensure adequate results.

- 15) FYI...Please note that the FCC's currently released document KDB 447498 implies that for these types of devices with SAR > 1.2 W/kg that they desire to limit the approval to a dedicated host or possibly modified the device to be < 1.2 W/kg. For > 1.2 W/kg they also ask to contact the FCC for test and approval requirements. We have started contact with the FCC and explained that it is not the manufacturers intent to limit to a single host, but please note that due to maximum SAR levels exceeding 1.2 W/kg, it is likely the FCC may want further information or data (i.e. they may require testing in 3 typical hosts or have other concerns). We will let you know what the FCC responds with.
- 16) Due to SAR levels and KDB <http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=28238&switch=P> and KDB <http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=20676&switch=P> it appears that this device should have been tested at a low, middle, and high channel in the 5745 – 5825 MHz. The current testing does not appear to support a middle channel tested in this band.
- 17) It appears that test reduction was done for the 5180 – 5320 Bottom position. However results are > 0.8 W/kg which require appears to not allow for test reduction as given in <http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=20676&switch=P> (see section 1e).
- 18) It does not appear that information regarding section 2)b)ii) from KDB <http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=20676&switch=P> has been presented.
- 19) 5 GHz Validations appears to use 250 mW and normalize to 1 Watt. However values obtained at 250 mW appear equivalent to values obtained for the dipole calibration at 100 mW. Additionally target values for 5 GHz appear to be incorrect and should be around 80.4 and 78.2 mW/g.
- 20) Kindly explain how switching diversity was investigated as mentioned under KDB <http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=28238&switch=P>. Note this involves investigation of the different TX paths individually (i.e. not active switching but independent path tests).
- 21) While fluid parameters are required for center of the band, the FCC generally wants to see them reported for across the band. If this information is available, kindly provide.



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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.