



Washington Laboratories, Ltd.

7560 LINDBERGH DRIVE
GAITHERSBURG, MD 20879
(301) 417 – 0220 FAX # (301) 417 - 9069

August 11, 2006

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

RE: Comments of August 2, 2006
APPLICATION: HDCTRC6120L2X Adtran, Inc.

Dear Mr. Johnson:

Below are the comments that you have provided regarding the application for certification referenced above. Our responses to those comments are in ***bold italic***. Many responses refer you to additional exhibit(s) which has been uploaded to the application folder at the ATCB website.

Please note that some of the changes requested, particularly to the User's Manual are burdensome and frustrating to the Applicant. Adtran has had many systems approved and has a clear understanding of the requirements for professional installation. Hence, modifications of the manuals on a case-by-case base are burdensome and have created difficulties with this client/laboratory relationship.

While the client appreciates the information conveyed, specific wording that conveys the same meaning—while meeting the requirements—must be given latitude when reviewing documentation. We hereby request that AmericanTCB consider the history and existing documentation when reviewing these applications, lest both companies lose a long-time client.

Obviously, if new information is requested due to FCC policy or interpretations, it would be appreciated if a citation of said new requirement is included in the response.

Thank you for your attention. Please feel free to contact us for any additional information that you may require.

Regards,
Gregory M. Snyder
Chief EMC Engineer, Wireless/Telco Services Manager
Brian J. Dettling
Documentation Specialist

WLL Project: 9258-9259

1) 731 Form Cites 2417 – 2464 MHz, while the block diagram, IC form, test report, and manual appear to cite 2419 – 2465 MHz. Please review/correct.

R. The 731 form lists the correct frequency: 2419 – 2465 MHz

2) This device appears to incorporate a standard N antenna connection. To meet the requirements of 15.203 using a standard connector, this device must be limited to Professional Installation only. This requires a cover letter requesting and justifying how the applicant ensures professional installation to be provided. The letter should address the following 3 items:

a) Marketing
example:

- The device cannot be sold retail, to the general public or by mail order. It must be sold to dealers or have strict marketing control.

b) Requires professional installation;
examples:

- installation must be controlled.
- installed by licensed professionals (EUT sold to dealer who hire installers)
- installation requires special training (special programming, access to keypad, field strength measurements made) What is unique, sophisticated, complex, or specialized about your equipment which REQUIRES it to be installed by a professional installer?

c) Application
example:

-The intended use is generally not for the general public. It is generally for industry/commercial use.

R. Please cite where a letter is required to meet the professional installation requirements of 15.203. The Adtran 6120 is professionally-installed as clearly described in the user guide. This has always been the case for the Adtran systems. See additional cover letter.

3) Generally the manual should include cautions against co-location as part of the RF exposure information as well. Please review.

R. Acknowledged. Future revisions of the manual will include this verbiage.

4) The manual cites 4.6 meters RF exposure distance, while it appears that the safe distance is actually around 1.6 meters. Please explain.

R. This has become the standard information that Adtran includes in their manuals. They prefer to list the further distance to maintain a certain clearance around the antenna.

5) The manual mentions firmware updates. Please note that Section 15.15(b) prohibits adjustments of any control by the user that will cause operation of a device in violation of the regulations. Accordingly, any proposal to allow the end user to choose extended channels on frequencies outside of an allowable frequency band in the USA is not acceptable or upgrade the firmware to be able to do this is not allowed. For example, a WLAN device operating according to Section 15.247 on channels 1-11 between 2.4 - 2.483.5 GHz must not have any user controls or software to allow the device to operate on channels 12 and 13 which are outside of the allowed USA band. For instance, the user should not be able to select alternative countries which would allow different channel plans outside of the allowed USA band or adjust the firmware to do so. Please explain how this device is compliant to this requirement.

R. Firmware updates do not allow the end user to change frequency range or change parameters that would cause the radio to operate outside of the USA allowed band or other settings as approved under this certification. See additional cover letter.

6) For installations requiring power reduction, please explain compliance to 15.15 (i.e. user should not have capability of adjusting power above levels needed at installation).

R. This is only performed by the professional installation personnel and not by the end user. The end user of the system does not have this capability.

7) Regarding PSD, the span on plots show about 1.5 MHz and the sweep does not meet with span / 3 kHz. other plots show a span of 1 MHz. Please review.

R. The graphs submitted were run at five 300 kHz span sweeps at 100 seconds for each sweep for the total 1.5MHz span. The 100sec sweep time shown on the graph indicates the setting for the last 300kHz sweep. The spans were set at 1.5MHz as indicated, however, the data collection software does not provide enough significant digits to display the 200kHz/division resolution.

8) For IC, the label must contain 3 items in compliance to RSS-GEN. It appears the model number listed on the IC form (and how the device will be listed) does not match information on the label. Please review/correct.

R. The Label document has been revised to upgrade the listed model number.

9) It appears that this device may be subject to CS-03 as well. While CS-03 is done under declaration, if required for this device, it must be done at the same time as the RF submittal. Please review/explain and provide appropriate information if necessary.

R. These are used for private networks only and are not marketed to and not connected to public networks.

10) Since the transmitter device uses detachable antennas, it does appear that the users manual contains the information specified by RSS-GEN 7.1.4, issue 1?

R. The device is professionally installed and the antenna information and restrictions are included in the manual. Page 20 of the manual states the maximum allowable gain for the dish antenna.