



**Washington Laboratories, Ltd.**  
7560 LINDBERGH DRIVE  
GAITHERSBURG, MD 20879  
(301) 417 - 0220      FAX # (301) 417 - 9069

March 24, 2005

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

RE: Comments of March 16, 2005  
APPLICATION: Adtran, Inc. HDCTRC6420

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.

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: 8590-1

1) The block diagram and detailed frequency information on page 8 of the report suggests a frequency use of 5742 – 5833 MHz, while the 731, other information in the test report, and users manual states 5744 – 5831 MHz. Has the correct block diagram been provided. Please clarify or correct exhibits as necessary.

**R. The block diagram has been updated to reflect the correct frequency usage. Additionally the test report has been updated to remove the table on page 8 which contained out-of-date information. Please see exhibits “6420 Block Diagram Rev1.pdf” and “6420 Test Report Rev 1.pdf”.**

2) The addendum report states a low frequency of 5744 and high frequency of 5833. This appears to mix/match the information in 1) above. Please explain/correct as necessary.

*R. The addendum report has been updated to reflect the correct frequencies tested.*

3) It appears that the schematics include a file labeled with TX, but this appears to be the TX circuit. It appears that the final part of the TX circuit may not have been provided. Please review.

***R. A review of the schematics shows the Tx section is complete. This connects directly to the passive tuning diplexer.***

4) 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 separate 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. The Adtran 6420 is professionally installed as clearly described in the user guide. This requirement has never been requested before and we feel it is excessive for showing professional installation.***

5) Sweep time for spectral density must be > span / 3 kHz with RBW = 3 kHz, VBW > 3 kHz. It appears that the sweep time of only 100 seconds was used.

***R. The graphs submitted were run at five 300kHz span sweeps at 100 seconds for each sweep. This is indicated as a note on Figures 8 and 9, however the note was not added on Figures 6 and 7.***

6) Please update the test configuration photographs for both configurations tested.

***R. Test setup photos from the addendum report were extracted and included with the Test Setup Photos exhibit. Please see "6420 Test Setup Photos Rev 1.pdf".***

7) Please document the minimum RF cable lengths used during testing.

***R. The cable used during RE testing and supplied by the manufacturer is 330.3cm. A short coax cable was used during the conducted emissions testing and the cable loss was factored in for the measurements.***