

Nebraska Center for Excellence in Electronics
4740 Discovery Drive
Lincoln, NE 68521
Phone: 402-472-5880
Fax: 402-472-5881



NCEE Labs Response to ATCB Comments

FCC ID: UWVLS300RX

IC:6897A-LS300RX

ATCB comments are in black. NCEE responses are in **blue**.

1. Please note that IC requires 3 items on the label, (model, applicant, and Certification No. as Certified). The label does not appear to contain model and applicant for this application.

A new FCC label exhibit has been uploaded to the ATCB website with the specified changes.

2. Part of the previous response appears to mention that part of the response is to be held confidential. If so, please divide the exhibit into 2 separate exhibits, one containing confidential information, the other non-confidential information. Additionally, to appropriately hold confidential, please modify the confidentiality letter to include Technical Information/Operational Description.

Thank you for your comments.

3. Please provide an appropriate Block Diagram exhibit.

A Block Diagram exhibit has been uploaded to the ATCB website.

4. Please provide an appropriate Schematic exhibit

A Schematic exhibit has been uploaded to the ATCB website.

5. Kindly adjust the operational description to only discuss the device being certified. The operational description appears to discuss different uses for the boards contained in the device. Note this approval is for a whole device, and not just a board contained in the device.

A new Theory of operation exhibit has been uploaded to the ATCB website which describes only the device as a whole and has the excess information removed.

6. It still appears that the TX is a small daughter board. Top and bottom photographs of this small board should be provided.

A new internal photos exhibit has been uploaded to the ATCB website which includes more detailed photographs of the transmitter.

7. Users manual for the TX module mentions max power of +11dBm in one location, maximum of 14dBm in another. However report shows 9.3 dBm. FCC expects unit to be TXing at maximum power to be used. Please review.

The EUT was transmitting at maximum possible power. The users manual and Theory of Operation exhibits has been modified to represent correct maximum power specifications of 9.3dBm.

8. Users manual for the TX module mentions device is capable of 32 channels covering most of the 902-928 MHz band but device appears to be tested to only a single channel of 915 MHZ.. Generally for this the FCC requires testing of a low, middle and high channel. Please review.

The EUT operated on only 1 frequency. This is not adjustable by the user. This has been made clear in the report and theory of operation exhibits.

9. Users manual for TX module also mentions a LP mode which given the deviation, would likely not meet the required 6 dB bandwidth for a DTS device. Please review.

The EUT operates only in DTS mode. The users manual and theory of operation exhibits have been modified to reflect this.

10. Given the various channels, modes and possible power levels, please explain compliance to 15.15 for this device given the TX's various capabilities.

An amended test report titled R101906-31-01A, has been uploaded to ATCB. A note was added to section 2.6 to state the EUT's compliance to section 15.15 of the FCC regulations.

11. This device is considered portable and therefore radiated tests should have at least been investigated to determine worse case positioning for the x, y, and z axis for device positioning. The test report mentions maximization of the arrangement, but is not clear on the issue of 3 polarities. Please review.

An amended test report titled R101906-31-01A, has been uploaded to ATCB. Note "g" was added to section 4.2.2, "Radiated Emissions Test Setup" to state that the emissions were investigated in all possible EUT configurations

12. Test equipment does not appear to mention an amplifier. Was an amplifier used for testing?

An amended test report titled R101906-31-01A, has been uploaded to ATCB. A preamplifier was added to the list of test equipment used in section 3.0. This preamplifier was used during radiated emissions testing above 1GHz.

13. Testing appears to be dated more than a year old – page 5 of the test report. Is this correct?

An amended test report titled R101906-31-01A, has been uploaded to ATCB. EUT tested dates from section 2.1 were changed from “3, 9 10, Jan 2006” to “3, 9 10, Jan 2007” to reflect the correct days that the EUT was tested.

14. The test report cites the device was transmitting continuously. However peak to QP information at the fundamental suggests over a 30dB difference (see pages 12 vs. 14). This would normally not be expected for continuous TX. If the device was pulsed during TX, then average measurements should not have been made but instead calculated. Please review/explain.

The EUT was transmitting continuously. Page 12 refers to measurements below 1 GHz and page 14 refers to measurements above 1 GHz. The difference between average/quasi-peak and peak measurements was less than 20dB in all cases.