



Elliott Laboratories Inc.  
www.elliottlabs.com

684 West Maude Avenue  
Sunnyvale, CA 94085-3518

408-245-7800 Phone  
408-245-3499 Fax

Attn: Dennis Ward  
American TCB

Ref: FCC ID: R8KUGWN2USHN33 (ATCB002681)

Here are our responses to the questions raised in your document dated 8/14/2005

1. Please note that only the Schematics have been requested to be confidential. Please also note that cover letters (i.e. the confidentiality request letter itself) are not confidential material. Please note that the operational description and block diagram have been uploaded as confidential but are not included in the confidentiality letter. If the operational description and the block diagram are desired to be held confidential, please so include in the request for confidentiality.

*The request for confidentiality is limited to the schematics. The operational description and block diagram do not need to be held confidential.*

2. Please provide the required separate MPE report. Please make sure that the highest gain antenna used is included in the calculations.

*The MPE report has been uploaded, our apologies for not uploading that with the other documents..*

3. FYI - Please note that the FCC generally wants to see a statement similar to **“Contains FCC ID: R8KUGWN2USHN33”**. Please consider changing the phrase, **“Module FCC ID: R8KUGWN2USHN33”** to the suggested notice.

*Unigen have been informed of the suggested changes to text and will be incorporating it into their documentation.*

4. Please note that the PPSD plot for the 2479MHz channel shows the center frequency as 2478.850MHz. The peak signal of the frequency shift shown on the bandwidth plot appears to be 350kHz from the center frequency. This would put the peak at 2479.150MHz, which is off the plot shown on the PPSD. As the PPSD shown on the plots is about 7dBm, it is not possible to tell if the device is compliant as it appears that the Spectral Density at the peak of the transmission has not apparently been shown and is potentially 3 to 5dB higher than that measured. Please either use a span of sufficient width to include the side lobes of the transmission, or please center the plot so as to include the max peak of the signal (i.e. if you used a 1.5MHz span centered on the stated channel, this would show the PPSD of the entire signal).

*The maximum sweep time of the analyzer used is 100 seconds, therefore the span is limited to 300kHz for this measurement. The measurements have been re-taken to show a 3khz sweep across the entire signal (multiple sweeps in a 2Mhz span) to determine the frequency with the highest PSD. A second sweep was made using a sweep time of 1s per 3kHz, with a 300khz span centered on the frequency noted in the first scan. The PPSD is higher than originally reported but still complies.*

*he plots are on pages 16 – 18 of the revised test data in Appendix B of the test report. The summary page in the report has also been updated.*

5. Please note that the FCC has stated that the PPSD shall be measured at a time rate of span/3kHz. As the span shown in the plots is 500kHz, this would mean that a sweep time of 166 seconds should have been used and not a sweep time of 100 seconds as shown on the plots. Please note that as the sweep time used is almost half that required, the results may not comply with the required 8dBm. Please perform PPSD at the required time in relation to span as stated by the FCC.

*Refer to the response to issue (4).*

In addition, the 99% bandwidth reported on the Industry Canada form is incorrect. The forms have been updated and uploaded to the TCB website to reflect a 99% (26dB) bandwidth of 2.125 MHz.



Elliott Laboratories Inc.  
www.elliottlabs.com

684 West Maude Avenue  
Sunnyvale, CA 94085-3518

408-245-7800 Phone  
408-245-3499 Fax

To support the responses, the following documents have been uploaded:

- ❑ MPE Calculation.pdf
- ❑ R60312 Revised.pdf
- ❑ ATCB-Appendix I and II-rev2.doc

I hope this answers your questions.

Regards

  
Mark Briggs