

American TCB

5/2/2005

RE: FCC ID: PPD-D1470U\_ATCB002384

Attention: Dennis Ward

Please find our responses to your comments on this Application below:

1. Please note that the IC number on the product is not in accordance with RSP100. The number should appear as IC: 4104U-D1470U and not Canada: 4104U-D1470U. Please note that RSP100 also states "A radio equipment that is issued a TAC or a Certificate but is not properly labeled is not considered certified." This could be a problem and you should consider labeling the product as specified in RSP100.

Noted, a revised label diagram has been uploaded.

2. Please include the name of the technical contact person on the 731 or please verify that Mark Briggs is the technical contact person.

Correct, M. Briggs is the technical contact.

3. The external photos show a USB cable connected to the device. However, it is not clear from the documentation if this USB cable is provided with the device. Please verify if a cable of sufficient length to provide the required 20cm separation is supplied with the device.

The interface cabling description in the test data includes the footnote "The ferrite on the USB cable is molded onto the cable and the cable is provided with the EUT." The interface cabling description details that the cable is 1m long, more than adequate to provide the 20cm separation.

Please refer to page 29 of 118 in the pdf report document.

4. Please note that while page 2 of the manual states that the manufacturer is not responsible for unauthorized modification or unauthorized use of incorrect cables, the statement is not in compliance with 15.21 as it does not address the specific requirement of the FCC that says the manufacturer is responsible to inform the user that such unauthorized modifications may void the users authority to use the device. Please provide a manual that clearly meets the requirements of 15.21.

An addendum to the manual should have been uploaded with the application. It appears that this was not done, and the document has now been uploaded. The following statement has been added to the text you reference above: *Unauthorized modifications made to the wireless network device could void the operator's right to use the device*

5. Please note that the conducted emissions plots on pages 36 to 39 of the report indicate a starting frequency of 200kHz. Tabular data has the lowest listed frequency of 180kHz. As there are a number of plots with signals at the beginning of the plotted data, please verify that the conducted emissions actually begin at 250 kHz and not 200 kHz or 180kHz.

The plot actually starts at 150kHz and the graphical table has not been set with the correct resolution (i.e. only 1 significant digit after the decimal place) to correctly reflect the frequency range displayed. Similarly, the RSS 210 plots actually started at 0.45 kHz.

All three conducted plots have been updated with the correct start frequency.

6. Please note that on page 49 of the report the upper frequency is 5725MHz. Please also note that there is a signal at that band edge frequency that is more than 10 to 15 dB higher than the frequency where the marker is located. Please explain why the highest level signal was not selected as required.

The plot on the previous page (48) shows a close-up of the spectrum from 5700MHz to 5850 MHz showing that the signal is more than 20dB below the fundamental signal level at a frequency of 5735 MHz. The signal shown on the plot you reference is the actual fundamental signal appearing on the edge of the plot because of the large span used to generate the plot.

7. Please note that in the plots on page 80 of the report you state that plot 0 had 20dB attenuation while you state that plot 1 had 30dB attenuation. As there is only a 10dB separation between the two plots the indication would be that there was not Peak Excursion taking place at this frequency. This is unlikely. Please explain and retest if needed.

The two curves are plotted in the correct place on the graphs – the analyzer attenuation of 20dB in plot 0 and 30dB in plot 1 is accounted for in the data. The peak excursion is plotted below the two plots and shows a peak excursion of 10.9dB.

8. Please note that on pages 87 through 90 you state that the measurements are antenna conducted measurements. The report then shows a red line that is apparently at -27dB. However, the amplitude is listed as dBuV/m. Please note that the limit is not -27dBuV/m but is -27dBm EIRP. Since the -27dBm limit is apparently what is being compared, it is assumed that the amplitude units should be in dBm. Please correct the plots to represent the actual measurement values and units.

The plots are actually in dBm and the amplitude axis is incorrectly marked. The plots have been updated.

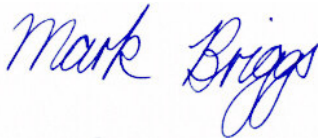
9. Please note that in the item above the limit for -27dBm is EIRP and not a conducted limit. If conducted measurements are taken for the purpose of compliance to this limit, they must be corrected by the antenna gain of the system in order to provide ERIP values. As the gain of the antenna at this frequency range is 4dB, it is expected that the data in the comparison table would include this antenna gain. While the device may still be compliant, correct data showing actual measurement requirements should be provided. Please correct as necessary.

The antenna gain at the frequencies shown in the plots is not known, since they are all more than 50 MHz from the allocated frequency bands. I have added a note to the the data that states: *“The data in the above table assumes an antenna gain of 0dBm eirp at the frequencies noted. As the margins are all greater than 15dB, and all radiated spurious emissions measurements showed all spurious emissions below the limit the device meets the out of band spurious emissions requirements of FCC Part 15, RSS 210 and LP0002”*.

The following files have been uploaded to the TCB website to support the responses above:

- R59543 rev 2.pdf
- Users guide addendum.pdf
- Label rev 2.pdf

Regards,



Mark Briggs  
Principal Engineer