

January 15, 2008

RE: Wanco Inc.

FCC ID: UQXWRDR192

The following is in response to the comments made on the above referenced application.

1) Due to various concerns recently seen about proper authority being given to others for FCC and/or IC matters, the agency letter and confidentiality letters should be signed by someone traceable to have the proper authority. For instance, the FCC site shows Michael Wanasz as the correct contact of authority for FCC matters. Therefore the agency letters should be signed by this contact or alternatively a letter showing who he has “deputized” (i.e. Matthew Wanasz) to sign on his behalf may be provided as well. Additionally, please see attached information FCC released on this matter recently.

The proper authority’s name is Matthew Wanasz. The FCC database has been updated.

2) Top and bottom of one of the small daughter boards does not appear to have been provided (i.e. – only top can be seen in one view). Please provide

The only small board photographed on a single side is the power supply board which is a purchased component, not assembled by this manufacturer. An additional photograph has now been provided showing the unused backside of this board.

3) Schematics appear to be missing the main required portion (i.e. transceiver – DF100) as required by Part 2 of the rules. Please provide.

The DF100 Transceiver is an OEM microwave component, and its manufacturer does not utilize schematics other than the block diagram provided. The DF100 is listed in the parts list as a single module. This was deemed acceptable in both of the previous applications.

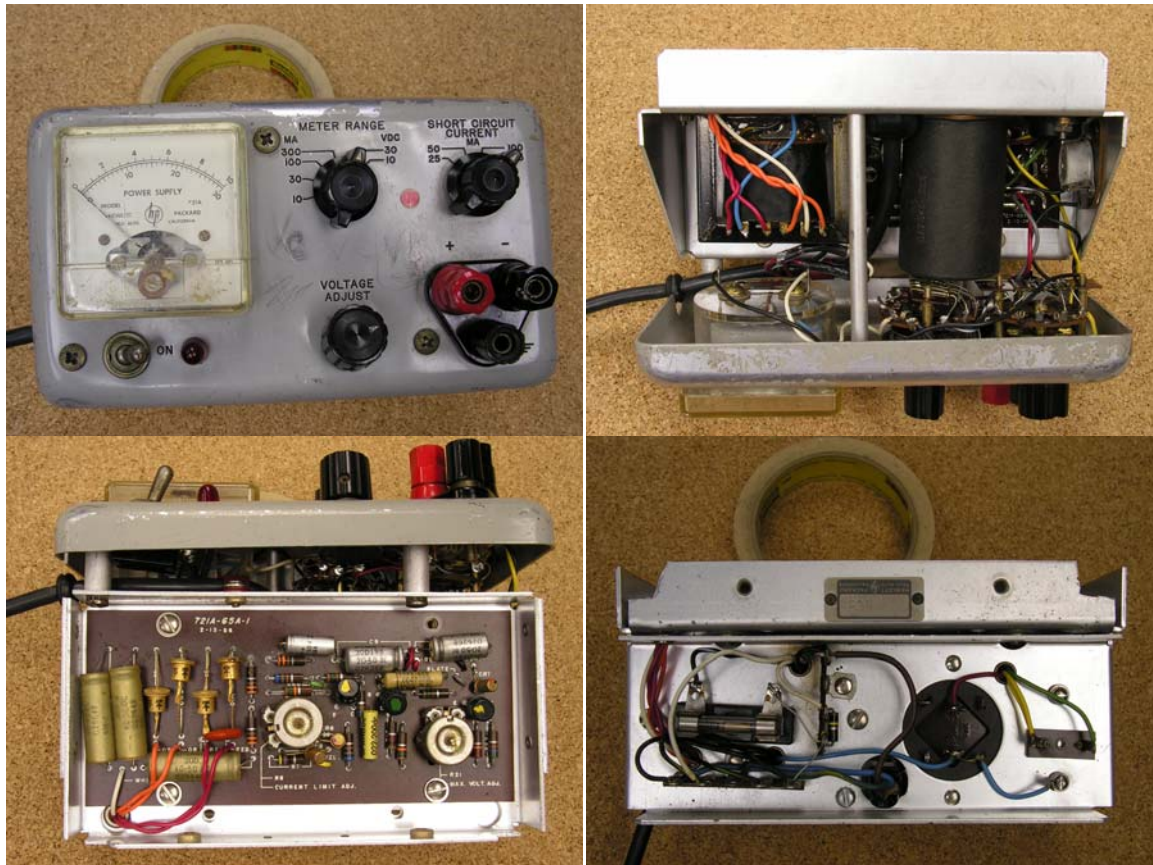
4) This device appears to incorporate a standard RS232 Connector. Please explain compliance as a PC peripheral device as if this is designed to connect to a computer – especially Class B, then Certification or DoC as a PC peripheral would seem to apply if for Class B use. Note that the users manual does make reference of connection to a computer. It may be suggested that the users manual provide better guidance as to what is allowed or not allowed in this respect.

This device is sold only as a commercial, non-residential product and is thus subject only to Class A verification. (However, the device meets the Class B limits as required for its receiver portion. )

5) AC powerline emissions do not appear to show proper bundling of the EUT or power source cable

between table top and LISN. Please see test photos and ANSI 63.4

It would appear the bundle came undone during testing. New photographs and data have been provided. In response to verbal comments, the following photographs show how the HP721A power supply used during this testing does not include any EMI filtering, and that the data provided properly demonstrates that little conducted current is generated by the DUT.



6) There appears to be a gap in measurement instrumentation for spectrum analyzers between 26 – 40 GHz. What was used to evaluate this band. Please review.

Our apologies. The test report has been updated to show the Ka band harmonic mixer used during testing.

7) The users manual page 1 mentions Class A, while page 2 mentions Class B. Please explain. Note that class B may affect approval of the device as a PC peripheral.

Typographical Error. The User's Manual has been modified to reflect Class A, rather than Class B.

8) Given the nature of this design, it is uncertain how this device can assure compliance with

15.245 (b)(1)(iii). Please explain. Note that it would be expected that specific information should be provided in the manual for this.

As stated in 15.245(b)(1)(iii), "Field disturbance sensors designed to be used in motor vehicles or aircraft must include features to prevent continuous operation UNLESS their emissions in the restricted bands, other than the second and third harmonics from devices operating in the 24075-24175 MHz band, fully comply with the limits given in § 15.209." In this case, all emissions other than the second and third harmonic meet the 15.209 restricted band limits. This is stated on page 3 of the test report.

9) Part of the test report mentions 15.249. Please explain.

Typographical error. This has been corrected.

10) Shouldn't the limit at 96 GHz be specified as 15.209 (see 15.205(d)(8))? Please review.

Emissions limits have been clarified to show 15.209 compliance.

11) Table 6.2 appears odd given the fundamental frequency appears to not be present. Was this skipped (i.e. 24075 – 24175 MHz)? Please update table as necessary.

As that portion of the table is reporting Spurious emissions, the fundamental emission was not included there (Fundamental is not Spurious). Spurious emissions in the 24.075-24.175 GHz band were verified to meet the Class B limit, and the typographical error in the table has been corrected reflecting this. The plots just outside of the operating band were provided only to indicate compliance at the band edges, a value ensured by the narrow bandwidth of the transmitted signal. (Power levels in these plots correspond with the reported value in the Pr column in the spurious emissions table).

12) Spurious Emissions from 18-26 GHz appear over the 15.209 levels. While the one level that appears reported is only required to be 50 dB down, there are other restricted bands falling in 18 – 26 GHz that may be of concern. Please review.

As stated above, this was a typographical error in the data table. The emissions meet the Class B limit.

13) For IC it is uncertain if the RX emissions are covered by the results obtained. Results appear to be only for 50 dB down or for Class A emissions. For example 18-26 GHz appears above the 54 dBuV/m requirement.

As stated above, this was a typographical error. The emissions meet the Class B limit.

14) Occupied bandwidth for IC generally requires VBW to be  $3 * RBW$ . Please review as current report suggests  $VBW = 1/3 RBW$ .

$VBW \geq 3 \cdot RBW$  is only relevant when measuring the bandwidth of a modulated signal. For a CW signal, VBW has little effect in obtaining an accurate emission bandwidth. However, we have included a new bandwidth measurement to satisfy IC's request .