



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

September 1, 2004

RE: FCC ID: I28RFID-R110XI-02\_ATCB001643  
Attention: Arnie Rowe

I have a few comments on this Application. Please note that further comments may arise in response to answers provided to the questions below.

1. FYI – no action needed. Please note that as this is a device under the low power sections and operates at 13MHz, there is no need to provide MPE results as the device is categorically excluded.
2. Please note that there is a ferrite on what appears to be the antenna cable of the device (see internal photos). The cover letters state no modifications were performed so this appears to be a ferrite placed on the device prior to testing. However, other internal photos do not show this ferrite on the antenna cable (see internal photos on pages 4, 7, 10 and 11 of the disassembly of the main unit file name [10927 Zebra Internal Photos.pdf](#)). Please explain and please verify that the cable to which this ferrite is connected is part of the assembly process. Please note that this ferrite may also be on the grant notes if it is required for compliance.
3. Please provide a label on the product with the 2-condition statement as required by 15.19(a)(3). Please show where on the product this label will be placed. Alternately, please provide a reasonable explanation in accordance with 15.19(a)(5) that excludes this device from this requirement.
4. Please note that the antenna schematic shows J1 (con2) pins 1 and 2 go to the antenna. However, the main schematics indicate that the outputs go to pins 2 and 3 of CN2 (con2??). Please verify and/or explain the output connection to the antenna.
5. Please note that it is not clear from the photos how the antenna is a loop antenna as stated in the technical specs. Please explain.
6. Please explain why the full user manual has not been provided (i.e. is to file too large, etc?).
7. Please note that the device appears not in compliance to the FCC rules. Please note that section 15.209(c) states that "...However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency." Please note that as the limit for 15.225 is a QP limit, no QP reading of any spurious emission can exceed that of the fundamental. Please note that the corrected fundamental emissions at 13.56MHz is a QP reading of 27.4dBuV/m and the fundamental peak reading at 13.56MHz is 30.6dBuV/m. Please also note that spurious emissions readings shown on pages 48 and 50 of the test report show QP readings exceeding the fundamental. As such the device is non-compliant. Please note that the limit line on the plots of the fundamental clearly state 3 meters, and since the spurious radiated emissions data states testing was done at 3 meters, the indication is that the device is not compliant to 15.209(c). Please provide a test report showing compliance to the requirements of 15.209(c).
8. Please note that the technical specs for the device state that it operates at 68mW, but the measured field strength does not appear to agree with this statement. Please explain.

Dennis Ward  
<mailto:dward@AmericanTCB.com>

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.