FCC ID: I28RFID-R110XI-02_ATCB001643

Item 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 place on the device prior to testing. However, other internal photos do not to 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.

The picture on page 4 showing what looks like ferrite is not a ferrite. This is a hole in the chassis where the red leads are exiting to another place in the Printer.

Item 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.

As stated in 15.19(a)(5), it is impracticable for Zebra to place the statement on the label because of the cost of changing their labeling process. The 2 part statement is placed inside the User's Manual.

Item4:
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.

The outputs of the Antenna J1, Pins 1 and 2 (con1) go to the two pin connector CN1, CN1-1 and CN1-2, not CN2 the 10 pin connector used for the communications going to the printer as shown on Sheet 2 of the schematics.

Item 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.

The antenna is buried within the PCB and cannot be seen. See the enclosed pdf documentation.

Item 6:
Please explain why the full user manual has not been provided (i.e. is to file too large, etc?).

The file size of the user's manual is 3.3 megs which is to large to be submit as one exhibit. It can be broken down to 2 parts, but the FCC only wants to see in the Table of Contents where the required materials is located and the actual pages.

Item 7:
Please note that the device appears not in compliant 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).

See test reports 10927 and 10928 showing the updated test data taken on September 7, 2004 with the harmonics being lower then the fundamental, as stated in 15.209(c).

Item 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.

The 68 mW answer was indicating the power going to the antenna. This answer is wrong. The new data taken on September 7th yields a field strength measurement of 34.9 dBuV at 3 meters.

Far Field = 370 ohms / 4π = 29.46

34.9 dBuV = .055 V/m
.055 V/m * 3 meters = .165
$.165^2$ = .027225
.027225 / 29.46 = .924 mW