

Curtis-Straus

October 11, 2000

Certification Department

Re: FCC Part 15 Certification for Zoom Telephonics (FCC ID: I28MD-TRCV-24GHZ)

We are submitting an application for modular approval of the Zebra Technologies model 2400 2.4GHz wireless transmitter. As per Public Notice DA 00-1407, the following steps have been taken to insure that I28MD-TRCV-24GHZ (referred to below as “the module”) meets the FCC requirements for a modular approval:

1. The module is completely shielded. Only the connectors are exposed. This has allowed the device to comply with Part 15 limits.
2. The TXDATA input is buffered on the module itself.
3. Input voltage variations on TXDATA will not effect the modulation or the transmitter output power. The module has it's own on-board 3-volt regulator. All RF circuitry operates from the 3 volts. Fluctuations in the 5-volt supply to the module will not effect the modulation or the transmitter output power.
4. The antenna connector used on the module has only one manufacturer and is not readily available. We have used the same connector on previous modular approvals and the FCC has considered it a non-standard connector. In addition, the module will only be used in devices with internal antennas of the type specified in the application. These internal antennas require complete disassembly of the unit to access and are not user serviceable or user replaceable. Therefore the antenna system meets the requirements of Section 15.203.
5. The worst case antenna/module combination was tested inside an unmodified Zebra Encore 3 printer (the Encore 3 printer was used as support equipment to allow for easy operation of the transmitter). The Encore 3 printer has an entirely plastic case which provides no shielding to the module, antenna or data cable. The only port on the module, other than the antenna port, is a data/power port that was attached to an 11cm cable. Emissions were maximized by rotating the unit in all three orthogonal axes. There was no maximization of the module's antenna because it is affixed to the module in such a way that it cannot be manipulated. AC line conducted emissions was not performed. This device is intended for use in battery power devices only. A statement in the users guide indicated that the approval is only valid in devices that are battery powered with no AC connection.
6. Each module will be labeled with the FCC ID# and warning message as shown on the AA15642-1 drawing which is included with this application. A sample label to be placed on

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the outside of the host unit is also provided. Instructions on host label content and placement are provided in the user's manual.

7. There are no special compliance requirements for 15.249.
8. There are no applicable RF exposure requirements for section 15.249.

Please feel free to contact me with any questions.

Best regards,



Michael Buchholz
EMC Manager