



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

July 19, 2002

RE: Tel-Tron Technologies Corporation.

FCC ID: QE2WECA

After a review of the submitted information, I have a few comments on the above referenced Application.

- 1) The higher resolution schematic provided is not the same circuitry as the one previously provided. Please explain why these schematics are different. Note that the schematic submitted should match the EUT as it was tested.
- 2) Please provide information on what type of information is transmitted (i.e. data stream) during the normal & supervisory modes? Will the duty cycle for both normal and supervisory modes be the same?
- 3) The operational description provides information that the device transmits in both normal mode (by pulling), or supervisory mode. Please provide a detailed explanation of the supervisory mode, its transmission characteristics, and how it meets 15.231 (a)(3).
- 4) Please provide a plot that show compliance with 15.231 (a)(2). For instance, show its transmission over a 30 second period after it first transmits.
- 5) Please supply further supporting information for the 25% duty cycle. From the 2 plots provided, without knowing the encoding methods used, it may be assumed the device could theoretically transmit a worse case encoding of all wide pulses (600 us). This would yield a duty cycle of about $0.600 * 13 = 7.8$ ms per 26 msec (30% duty cycle) as estimated from the plots provided.
- 6) The test report (Certificate of Compliance Page, Fundamental Data Sheet) uses the peak/QP limits specified by 15.231(e). It does not appear that the device is designed to meet 15.231(e) timing requirements (normal transmission 5 seconds, supervisory transmission 1 second). It appears that this device should fall under 15.231(a). Please explain which section of the rules this device is intended to operate under.

--- The following comments assume that the limits applied are under 15.231 (b) ---

- 7) FYI, The limits for 1560, 2496, & 2808 fall in restricted bands. Based upon how the results are presented, this limit should have been $(20 \log 500) + 12 \text{ dB duty cycle} + 9.5 \text{ dB 3to1 meter conversion} = 75.5 \text{ dBuV/m}$.
- 8) FYI, There appears to be a typo in the limits give above the 3rd Harmonic in section 2.2 of the test report.

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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.