

Response to TCB findings

Hi Mike, We have identified the following issues after our review of the application:

1. This application is not activated in response to fire, security or safety of life issues and cannot claim the 15.231 (a) (4) exemption in order to operate continuously. It merely detects a condition which might result in water intrusion. Please examine the rules and submit a response to this issue. The device does not currently comply with the rules.

The product software has been modified to operate during an alarm condition without the necessity of the 15.231(a)(4) exemption. The following transmission scheme has been verified through testing at Curtis-Straus:

1) At the initial detection of a fault, three alarm signals are sent. From the start of the first signal to the end of the third signal is 4.6s which satisfies the requirement that the transmission ends within 5sec.

2) 15min after the initial alarm, the sensor checks to determine if the fault condition still exists. If it does, another 4.6s alarm transmission is sent. If the fault no longer exists, no further transmissions are made.

3) Step 2 is repeated at 30min, 45min and 1hr after the initial alarm, but only if the fault condition is detected. If at any point the fault condition ceases, the sequence is halted and no further alarms are sent. Also, at the conclusion of the alarm transmission at the 1hr mark, no further transmissions will occur regardless of the fault condition.

4) At any point a manual reset can be implemented which will reset the sensor to step 1.

2. Please supply a discussion of the actual on-time of the transmitter. While the bit pattern has been somewhat related, it is unclear what the actual maximum on-time of the transmitter is in the worst case 100ms period. Plots of the actual transmitter pulse train should be presented to document compliance.

Ans: Please see attached files: Bits.pdf and Transformat.pdf

3. Page 4 of the test report indicates that data was acquired at 10 meters, while the data table indicates 3 meters. Which is correct?

Ans: All testing was done at 3 m.

4. For information. All emissions falling within the restricted bands of 15.205 must meet the general limits.

Noted

5. Please supply a users manual.

Ans: Please see attached files: instructions sWIAR1.pdf and instructions sWIAR2.pdf

6. The form 731 indicates a request for confidentiality. However no formal letter justifying the request for confidentiality was supplied. This letter should also state what is to be classified as confidential.

Ans: Please see attached letter-of-con.pdf

7. Please supply details of the antenna connector so compliance with 15.203 can be determined.

Ans: Reverse Sex SMA Type

8. Please confirm a fresh battery was used during the testing.

Ans: A fresh battery was used when we started the testing first day. Battery voltage was checked before testing every day afterwards to confirm battery charge.

Best regards Barry C. Quinlan
Certification Manager
Curtis-Straus TCB

--

Mairaj Hussain
EMC Engineer

Curtis-Straus LLC
One Stop Laboratory for NEBS, EMC,
Product Safety, and Telecom Testing.
527 Great Road
Littleton, MA 01460 USA
Voice 978-486-8880 ext 275 Fax 978-486-8828
email: mhussain@curtis-straus.com
WWW.CURTIS-STRAUS.COM