

Response to TCB Findings

1. A letter from the applicant is needed to state that the RF circuitry of the previous application with FCC ID: RTP-55010016-1 has not changed. This is needed because the antenna conducted test data from that application is used as part of this application.

File attached. Please see "CN3300 Non-Modification" document.

2. Please clarify the difference between models CN3300 and CN330.

The CN330 and CN3300 do not differ in Radio or radio functionality. The only difference is the presence of a serial port in the CN3300 for diagnostic purposes. This connection is not normally used. The test sample provided was of a CN3300.

3. Please specify the label material.

Labels are produced using a UL Recognized permanent label system. They consist of a polyester laminate label with a permanent pressure sensitive adhesive.

4. Please clarify how this device complies with 15.407(c) requirement.

Per Colubris - The Attestation on file under Cert. # RTP-550-10016-1 still pertains and reads as follows;
"The Devices are either an IP bridge or router and only transmit if they have IP traffic to transmit, with the exception of some control frames. Also, at the physical level, the radio is half duplex with acknowledgement, which means that one end of the radio link must give the chance to the other end, at the minimum, to reply with acknowledgement frames. Finally, the 802.11 protocol requires that frames have a maximum length and that some silence period follows the transmission of a frame. "

5. It appears there is a power over ethernet option through the LAN port of the device. The report does not include AC line conducted emissions test data for this configuration. Please clarify.

Attached is the report from the original filing consisting of the single radio option. The system passes by significant margin and the addition of a second identical radio should not alter these results beyond measurement uncertainty.

6. Has the device shown compliance at 2.4835GHz restricted band-edge point for worst case 15.247 operation? Please clarify.

A new file is attached showing compliance using the 2dBi antenna.

Additional Question: Does the data supplied represent worst case combinations? In other words, both radios active and transmitting at 2.4G range (802.11b/g). Please clarify.

The emission was pretested with different combinations of dual radio channels and this was found not to affect the emission at the band edge. The band edge channel was then configured at different data rates and the worst case readings were recorded in the table.

7. CN3300 QuickStart guide mentions multiple antenna part numbers under "Configuration" section. Please clarify these multiple antenna options.

The 3 antennas are a-band, b/g-band and a/b/g band. The antennas are all of the same type. The antenna tested was the a/b/g-band model which has equal or higher gain than the others and is considered the worst case.

8. Under the "installation" section of the QuickStart guide shielded cables are mentioned for LAN and internet ports. The EUT configuration in the test report shows unshielded cables. Please clarify if testing has been conducted with unshielded cables for this device. If testing has only been conducted with unshielded cables, this statement must be removed. The use of ferrite is a requirement and not an option under this circumstance

Testing was performed with unshielded cables. This statement is a carryover from the original grant for the single radio module. Since none of the spurious emissions found were related to the radio board, the addition of a second board should not negatively impact these results. Additional testing was performed without the shielded cables (but with ferrite) as an alternative to the shielded cables.

9. Please clarify how the ferrite modification on DC power and ethernet cables will be ensured on the final devices. The QuickStart guide must include a warning about this requirement.

The required ferrite will be molded to the DC power cable of the provided power supply. A statement in the QuickStart guide instructs the user/installer as to the proper placement of the Ethernet ferrite. New file attached.

10. The QuickStart guide mentions professional installation. Is this required for compliance purposes or because of the complexity of the installation? Please clarify.

Per Colubris - This is specified due to complexity of equipment configuration.

11. 5.15 to 5.25 GHz indoor operation requirement must be included in the QuickStart guide.

Included. Revised document attached

12. How are different frequency and channel selections handled for different countries? Does the end-user select these? Please clarify.

Per Colubris - Frequency and Channel selection are under software control. Units intended to ship to the United States are pre-set to allow only operation in bands allowable in the US. It is not possible for the operator or the installer to access this configuration file.