

FCC ID: POIS750100

Reply to TCB findings

----- Original Message -----

From: [Curtis-Straus TCB](#)

To: [Ruby Dulmage](#)

Sent: June 13, 2002 5:00 PM

Subject: Novra FCC ID: POIS750100

Hi Ruby,

We have the following issues after our review of the application:

1. Please supply a block diagram as one was not supplied.

Attached.

2. The 15.21 statement is not in the manual.

Added to the attached manual.

3. The device was tested with the antenna in port terminated in a highly shielded coax cable and 75 ohm termination. In actual use this would be terminated into an antenna which is inherently unshielded. Please provide an engineering justification for testing without the antenna or provide radiated emissions test data for the device with an antenna attached.

The S75 Receiver does not directly connect to a radiating element but it connects to a down-converter (10.7-12.75GHz down to 950-2150MHz).

Hypothetically, if the receiver were to radiate the full LO power, the radiated field strength at 3m would still be well within the limit. The following is the calculation supporting that claim:

$$E^2/(Z_0) = P_t \cdot G_t / (4 \cdot \pi \cdot R^2)$$

where E = electric field (V/m)

P_t = LO power (W) ---> -77dBm (measured at 950 and 960 MHz at the output of the receiver)

Z_0 = impedance of free space = $120 \cdot \pi$

G_t = gain taken to be 1

R = distance from the radiating element = 3m

P_t = -77dBm = 2×10^{-11} W

E = 8.16 micro volts ---> Limit = 500 micro volts at 3m at 960MHz.

4. The FCC do not regulate receivers capable of tuning above 960MHz therefore testing should be conducted with the local oscillator set to the appropriate frequency for tuning to the 950-960MHz band. Please supply revised test data. The grant will only quote the 950 to 960 MHz band.

Depending on approval of answer to question 3 above, test data may be OK as submitted. Please advise. TCB – Existing data acceptable.

5. CXX is not the correct equipment code. HID would be more appropriate.

The S75 is not a TV receiver as it's output is Ethernet traffic. Other choices from the list that has been provided in form 731 are CYY or JBP. I'm not sure if JBP is available as a code anymore. Please advise. TCB – FCC advise that CXX is acceptable.

Best regards

Barry C. Quinlan
Certification Manager
Curtis-Straus TCB