

Barry Quinlan

From: "Chris Gustaf" <chris@trangosys.com>
To: <certification@curtis-straus.com>
Sent: Tuesday, June 26, 2001 12:53 PM
Attach: MTX2500-MP fcc Certification Rev A.doc; Power Supply variation Test.doc; M-MTX2500_A.pdf; MTX2500 Module Label.pdf
Subject: MTX2500-MP Application Follow Up

Hello Barry-

Below are the answers to your questions from your email of June 18. We have had the lab redo the testing using averaging. They have provided a new report, which is attached along with all the other items you requested. Let me know if you have any questions.

Chris

1. The product has a power supply specification of 6-13.8VDC, yet testing was only performed with a 9VDC battery. Please provide data responsive to 15.31(e) for the power supply range.

Attached is data showing that at 5.1 and 15.87 Volts input the peak fundamental level does not change. The power was measured conducted using an HP E4418A Power meter cal date 12/28/00.

2. The peak data provided for the field strength of the second harmonic fails the average limit. Please provide average data.

Andrew Pace at Acme Testing States:

I have retaken both peak and average data for the harmonics of the three channel's fundamentals in the restricted bands. (See rev A report attached)

3. For the third through tenth harmonic, please provide data or, if the emission is below the measuring instrument noise floor, please provide a calculation of the level of the noise floor expressed as a field strength. We want to verify that the measuring instrumentation has sufficient resolution to see emissions which exceed the limit.

Andrew Pace at Acme Testing States:

I have recorded the noise floor level relative to the limit line for all of the harmonics in the restricted bands. (See rev A report attached)

4. Please confirm that the transmitter was rotated through three orthogonal axes to maximize emissions.

Andrew Pace at Acme Testing States:

Every spurious signal was maximized according to ANSI C63.4. However, the maximum strength of each signal occurred while two of the orthogonal axes were held stable in one position. That is, the EUT was rotated on a turntable for signal maximization. Hand-manipulation of the test jig in the other two orthogonal axes did not increase signal strength in any case, so data for those axes has not been included. Please see test setup photographs.(see revised report -Rev A)

6/27/2001

5. The test equipment listed in the test report appears to be inadequate to measure the frequency range required for this device. Was additional equipment used that is not listed? What is the frequency range of the HP8566B? What is the frequency range of the EMCO 3115? Did the test lab make any engineering judgments about the need to measure the higher harmonics based on the level of the lower harmonics?

Andrew Pace at Acme Testing States:

The test equipment used has a maximum upper range of 18GHz, with the DRG horn antenna as the limiting factor. Based on the small amplitude of the lesser harmonics and on engineering judgment, it was deemed unnecessary to investigate above 18GHz.

6. For the module the words "FCC ID" and the ID shall be on a single line as required by 2.925(a)(1). Also "OF MODULE" should be removed. Please confirm whether the ID is a label or will be etched on the PCB.

The ID will be etched on the PCB and changed to "FCC ID: NCYMTX2500-MP"

Attached is the engineering drawing showing the change.

7. The manual does not contain the 15.19(a)(3) statement.

Manual will be updated to contain this statement. Revised manual attached.

8. Please complete the attached Curtis-Straus certification agreement and fax/email back to me.

I am faxing the certification agreement to you.

<<MTX2500-MP fcc Certification Rev A.doc>> <<Power Supply variation Test.doc>>

<<M-MTX2500_A.pdf>> <<MTX2500 Module Label.pdf>>