Chris Harvey

From: Tom Cokenias [tom@tncokenias.org]
Sent: Monday, July 18, 2005 9:09 PM
To: Compliance Certification Services
Subject: Re: Trimble Navigation Ltd., FCC ID: JUP-ELIZABETH35, Assessment NO.: AN05T4825, Notice#1

Tom, I have reviewed the above referenced application and find that the following items need to be addressed before the review can be completed:

1. Please provide clearer External Photographs of both the Amplifier and Exciter, showing the external controls available on the chassis, a photograph that shows the back side of Exciter PC Board and complete internal photos of the Amplifier.

2. Please provide the following additional information:
a Users/Operators Manual
Installation Instructions
RF Exposure guidance/MPE Calculations
antenna guidance
tune-up procedure
FCC ID Label
letter of authorization from Trimble to Tom Cokenias
Schematic Diagram for the Thunderbolt 1 GPS Clock device (which is an integral part of this EUT for frequency generation/stability)

BOM (Parts list) of the Amplifier Chassis

ANS2

Manuals: The EUT will be used internally by Trimble Navigation at different Trimble locations around the country. As such, since the product would be controlled internally no formal user manual or installation instructions were contemplated. The document TRM-1 Low-band RF Power Amp.com is the document being used for installation and instructions. Given the product is sold and used only by Trimble personnel, it is hoped that this document along with block diagram and schematics will suffice as installation/instruction manual and tune up procedures

Antenna guidance: Antennas have not been specified for this product. It is expected that antennas will be vertical omni directional antennas with 0-1.5 dBi gain. In all cases the ERP will not exceed 600 watts EIRP

RF Exposure/MPE Calculations: This will be determined at time of licensing. Worst case ERP will not exceed 600 watts. MPE calculations for this value have been uploaded to the TCB

FCC Label: has been uploaded to TCB

Schematic Diagram for Thunderbolt: has benn uploaded to TCB website

BOM for amplifier chassis: has been uploaded to TCB website

3. The Emission Designators provided in the report have too many characters. It appears as though there are too many ë0ís. Additionally, please provide a justification/explanation for the selection of the Emission Designators listed for this EUT.

ANS 3 The correct emissions designators are

14K0F1D (9600 GMSK)

19K0G1D (20000 8PSK)

The modulations above did not seem to be covered by any of the formulas in paragraph 2.202g, so the bandwidth used was the occupied bandwidth

4. Please provide information as to the compliance with FCC 22.535 ERP requirements for this device (35-36MHz, maximum ERP of 600Watts) (or indicate if this is addressed at the time of licensing).

ANS4 This will be addressed at time of licensing

5. The report Spurious Emissions at Antenna Terminals states that measurements were performed from 1MHz to the 10th harmonic of the fundamental emission (approximately 360MHz), however the plot provided shows measurements from 2.921GHz to 9.6GHz (possibly wrong plot was inserted). Please update the report to show the data required.

ANS5 Test report with the correct plots has been uploaded to TCB website

6. The test setup diagram for field strength measurements has lost some formatting (it got jumbled). Please correct the formatting of this setup diagram.

ANS6 On my computer it looks good. I did some extra formatting, hopefully it will look ok on the TCB website (I uploaded it)

best regards

Tom

Best regards,
Chris Harvey
charvey-tcb@ccsemc.com

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. 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 e-mail address listed below the name of the sender.