"Teresa White"
<twhite@lsr.com>
07/06/2006 05:06 PM

To Yunus Faziloglu/USA/VERITAS@VERITAS
cc "Aidi" <kzainal@lsr.com>, "Abtin Spantman" <aspantman@lsr.com>
bcc
Subject RE: CS01941 Advanced Tracking Technologies FCC ID:N3F-ATTI201 TCB Questions

Hi Yunus,

Please see below (and attached revised test report) for responses to balance of issues.

Enjoy your evening.

Regards,

Teresa

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From: yfaziloglu@curtis-straus.com [mailto:yfaziloglu@curtis-straus.com]
Sent: Wednesday, May 31, 2006 3:21 PM
To: Teresa White
Subject: CS01941 Advanced Tracking Technologies FCC ID:N3F-ATTI201 TCB Questions

Hi Teresa,

Please address the following issues for this application,

1. Operational description must specify the modulation type used by the module.
Response: The type of modulation used is FSK.

2. The following issues are related to the manual,

Response: Previously submitted to Curtis-Straus.

i) "OEM responsibilities" section (Pg 2 - line 5) shows the FCC ID by itself after "or" statement. The word "Contains" must be inserted before "FCC ID" to avoid any confusion.
ii) Pg 2 "Antenna Specifications" section mentions a 1/4 wave monopole antenna, while operational description mentions 1/2 wave dipole antenna. Please clarify/correct.
iii) 15.105(b) statement is required in the manual.

3. "Modular Approval Request" letter mentions reverse gender SMA style connector for justification of unique antenna connector. However the connector seen in the external photos looks like a standard SMA. Please clarify how the module meets 15.203 requirement.

Response: (i) new photos of correct EUT were previously submitted to Curtis-Straus. (ii) Verbiage added to product description of test report (page 6).

4. Radiated emissions readings on Pg11 of the report data table for frequencies between 874-944 MHz excluding the 902-928 fundamental band are considerably high. The plot on Pg 16 of the report showing the frequency span of 300-902 MHz is much lower. Please clarify this difference.

Response: The captures/plots used in the test report were of the wrong channel. Test report revised.

5. Please provide the peak readings at 1805.4, 1830.6 and 1854.4 MHz frequencies on Pg 12 data table? Please also specify the receiver system settings used for peak measurements (RBW, VBW) at those frequencies?

Response: Plots of 2nd harmonics that show average det. Value and peak det. Value have been added to the test report. Clerical error, more than one board revision was used. Included data from earlier revision in the test report by mistake. Peak Measurements were done using RBW=1 MHz/VBW=1 MHz. Average Measurements were done using RBW = 1 MHz/ VBW=10 Hz.

6. On section 13 of the report (conducted spurious emissions) the levels of 2nd harmonics are unusually high. Please measure the fundamental emissions with 100kHz RBW and 100kHz VBW for better comparison to the harmonics. Reduced BW at the fundamental may not provide the required 20dB clearance for channel 52 and others.

Response: Clerical error. Wrong data included in test report. Measurements were re-taken.

7. Please note that on section 15 of the report, 10 sec criteria applies instead of 20 sec, as the 20dB BW is wider than 250kHz.

Response: Re-tested for 10s occupancy and results included in test report.

8. Section 16 of the report (voltage variation) states that EUT is programmed to stop the transmission if input voltage exceeds 3.5VDC. However "Modular Approval Request" letter claims 3.6 VDC and it states that unit stopped transmission at 3.63VDC. Please clarify this difference. Has it been verified by test that the unit stopped transmitting below 2.8V and above 3.5V?

Response: (i) Previously responded (ii) Added verbiage in the test report (iii) Power cut off software tested and verified.

Note: In responding to issues 4 through 6, the EUT was re-tested in the 3 Meter Chamber for the frequency range 300 MHz – 5000 MHz; Harmonics up to the 5th were tested and documented for all 3 channels. Fundamental power levels were also tested for and documented for all 3 channels.

Best Regards,

Yunus Faziloglu

Curtis-Straus / Bureau Veritas  306206-Tx-TCB Rev 2.pdf