



American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

October 31, 2007

RE: FCC ID: PHX-CPE25300_ATCB005574

Attention: Tim Blom

I have a few comments on this Application. Please note that further comments may arise in response to answers provided to the questions below.

1. Please provide the tune up procedure for the device.
2. Please note that the FCC has recently expressed concern that test labs are not testing products using approved test methods. Please note that the test report provided does not adequately address how the testing was performed. Also, while you mention TIA603, you state a much earlier version than what is accepted by the FCC. Please note that the FCC wants to see testing in accordance with TIA 603 C 2004. Please update the report reference to show the proper test methods and please provide specific indications for each test as to the procedure used to make measurements. Please note that a simple reference to TIA 603 is not sufficient to indicate just how the device was tested.
3. Please explain in what manner ANSI C63.4 was used in testing this device. Please note that TIA603 only states that the EUT setup is to follow ANSI C63.4.
4. Please note that part 27 specifically states that it is the peak power that is to be measured. Please note that while Part 27 says that measurements are to be PEAK power made using an analyzer that has been calibrated in terms of rms-equivalent voltage, this does not mean the measurement itself is RMS. Please note that the test report states that for power measurements the analyzer was set to RMS detector. The measurement is to be made with the analyzer in peak detector. Please explain and please correct as necessary to provide the proper Peak transmit power value.
5. Please note that BRS and EBS stations are subject to EIRP limits as well as peak transmit power limits. Please note that mobile stations in the BRS and EBS bands are limited to 2Watts EIRP. Please note that the max output power of the device is said to be 0.501W and the antenna gain is said to be 7.81dBi. This gives a rough calculated EIRP of 34.81dBm or 3.025W. This exceeds the limit for BRS/EBS mobile and other user devices under 27.50(h)(2). Please also note that in accordance with TIA603 the EIRP value must be measured and not calculated. Please explain and please correct/measure EIRP as necessary to comply with BRS/EBS rules.
6. Please note that the report states use of 27.53(l)(4) as the emissions limits for both conducted and radiated measurements. Please note that there is no 27.53(l)(4) paragraph and 27.53(l) does not apply to this type device. Do you mean 27.53(m)(4)? If so, please note that the limits beyond 5.5MHz removed from the band edges is $55 + 10 \log (P)$ dB not $43 - 10 \log P$. Please review the part 27 rule part and provide proper reference to the associated emissions limits. Please correct the report as necessary.
7. Please note that EIRP for licensed devices is not a reverse calculated field strength but is instead a measured EIRP value using the antenna substitution method as required by TIA603. Please provide proper measurement data using the accepted antenna substitution method as prescribed by TIA603 and as required by FCC.
8. Please adequately explain the modes of operation used during testing of the device.

Dennis Ward

<mailto:dward@AmericanTCB.com>

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination.

Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. 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 sender.