



American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

March 25, 2003

RE: FCC ID: GMLRH-21

Attention: Nerina Walton / Alan Ewing

I have a few comments on this Application.

1. Please note that as of Feb 18, 2003 part 22.915 no longer exists. There is no 'phase' in period for this, so all devices must now meet the new rules. Please note that the file "2 Compatibility.pdf" refers to a non-existent rule part and should be removed or revised to the appropriate rule part. xxx
2. Please note that the photos on the last page of the internal photo exhibit is too dark and cannot clearly be viewed. Please provide photos that can easily be viewed. xxx
3. Please note that the SAR insert says the maximum SAR levels are 1.24w/kg for Head and 1.18 w/kg for body. However, page 4 of the SAR report says Head is 1.16 w/kg and Body is 0.6 w/kg maximum. Please make all documentation consistent. Please correct the SAR insert to reflect the measured values. xxx
4. On page 14 of the report you incorrectly list part 24 instead of part 22 for the OBW. Please provide occupied bandwidth data as required in 2.1049. xxx
5. Please also note that you have not shown compliance to the bandwidth/bandedge requirements of Part 22. Please show plots/data of the bandwidth requirements using the analyzer settings specified in Part 22.917(b). This applies to both reports.
6. In reference to item 5: You have used a resolution and video bandwidth of 300 Hz for out of band and band edge measurements on page 14. Please use the correct measurement procedure as specified in 22.917 for you analyzer settings. 22.917(b) states, "Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power." This means that for the 1 MHz area around the band edge you can go no lower than 1% of the emissions bandwidth, but for emissions greater than 1MHz away you must use at least 100kHz resolution and video bandwidths on the analyzer. This also means that in order to use less than a 100kHz Resolution and Video bandwidth you must show the occupied bandwidth measurements in order to calculate the smaller resolution BW.). This applies to both reports
7. You have stated that the necessary bandwidth for this device is 40kHz in your emissions designator. Please provide evidence of this assumption in the form of plots or data (i.e. that the device is compliant to this assumption).). This applies to both reports
8. Please note that while the new Part 22 rules do not have specific AMPS audio measurement requirements in that rule part, you are still responsible to show compliance to the general rules in Part 2 when audio modulation techniques are used. Please provide the required measurement results specified for audio modulation as specified in 47 CFR 2.1047. xxx

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.