

American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

July 12, 2005

RE: FCC ID: QMNRH-55 ATCB002593

Attention: Andreas Gillmeier

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

- 1. Please note that the test report states that the backlight was off during testing. Please note that the manual or other labeling or documentation provided to the user must list this limitation. Please provide the statement that is to be in the manual addressing this issue.
- 2. Please provide evidence that any necessary labeling and manual statements have been incorporated.
- 3. FYI Please note that the device has an extendable antenna. Please note that the FCC has stated that only the extended antenna position needs to be tested.
- 4. Please note that the report does not provide sufficient information about the HAC measurement and measurement system. Please explain/confirm/provide evidence to the following:
 - a. Does the system use manual or robotic controlled movement? Report using manual movement of the probe must be sent to the FCC for evaluation.
 - b. If robotic, a description of the HAC scanning measurement system in sufficient detail to establish that C63.19 recommendations are followed. This description should include information on step size, locations relative to the measurement grid, and peak location determination.
 - c. Was measurement system validation performed? Has the required verification been done on the system prior to actual testing to insure that measurement data is accurate?
 - d. Were field contour plots taken (these are required to be submitted with the test report)? This is needed to insure that smaller step sizes are not needed. Please note that grid overlays are a requirement.
 - e. Please note that the FCC has stated that "Duplication of the information in C63.19 is not acceptable. Confirm valid values (according to actual system and test configurations) are used." Please provide the measurement uncertainty data.
 - f. What probe was used and does it meet the dimensional constraints of the measurement element vs frequency of measurement? Has the probe been properly calibrated? Please provide a sufficiently "comprehensive probe calibration certificate containing calibration date, all relevant probe factors, all modulation related factors, and probe measurement errors e.g. linearity, isotropy, and modulation."
 - g. On page 7 of the report you show the same channel (777), but there are 2 different modulation factors (i.e. 1.00 and 2.56). The reading with the 2.56 modulation factor has an asterisks next to it, but no note seems to be related to this asterisks. Please explain and please justify the modulation factors used (i.e. how was the probe modulation factor determined?). Please provide sufficient information on how the modulation factor was established (please note
 - h. How was the measurement plane established?
 - i. Was the probe rotated for the maximum reading at the final measurement location? Please provide evidence.
 - j. Please provide an explanation of how the raw measurement values both in the measurement electronics and the post measurement in the computer are processed.
 - k. Was the interference of reflective objects less the -20dB of the intended signal? How was this determined (i.e. were all reflective objects moved more than 2 wavelengths away from the EUT or were measurements used to determine reflectivity of the measurement area?)

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I. Please note that the FCC has stated that a "Zero span spectrum analyzer plot" needs to be provided to confirm proper handling of CDMA mode. Please provide.

Dennis Ward

mailto:dward@AmericanTCB.com

Dennis Ward

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.