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

October 31, 2003

RE: Listen Technologies Corporation

FCC ID: OMDMSF0001

After a review of the submitted information, I have a few comments on the above referenced Application.

1) We do not understand the information for the 72 and 216 MHz receivers given in section 8.3 and 8.4 of the report. Note that RX emissions are actually measurements of the fields strength and are NOT performed using the substitution method. The methods specified by ANSI C63.4 and part 15 should be used. The limits given in 15.109 do not appear to have been used. The data should be presented such that the results, correction factors, corrected results, and limits are given in the table. It appears that the measurements and possibly the ground floor shown at the higher frequencies exceed the limits of 15.109. Please correct/explain as necessary.
2) The data given on page 49 of 59 does not appear relevant to the Part 15 emissions. Emissions should be shown by correcting for the measurement system according to methods given in ANSI C63.4. Substitution methods are not applicable here since limits are given in field strength given at a particular distance.
3) Your previous response to item 7) does not appear to address the question completely. The EUT was expected to be tuned up following the maximum levels given in the alignment procedure (tune-up procedure) prior to testing. However the tune up procedure appears incomplete (levels are not filled in for various items). Please provide a tune up procedure that has all levels filled in. Also a confirmation that the device was tuned up prior to testing to the maximum levels per this procedure needs to be provided.
4) The calculations given in section 5.0 for the power appear to be EIRP, not ERP calculations. Typically, the ERP would include EIRP - 2.14 dB. Please comment/correct this section of the report.
5) Radiated power, spurious and Receiver emissions should have been performed with the receive antenna positioned both Horizontal and Vertical in attempt to obtain the worse case readings. However all data provided appears for one polarity only. Please confirm this was performed or provide additional data.
6) Compliance information still needs to be in the users manual. From the information provided in your last response, page 35 of the users manual should not be removed. Instead the phrase "computing device" should be adjusted to "digital device". Please provide a corrected Users Manual. Additionally, please adjust the shielded cables phrase to list exactly which cables need to be shielded, or if they were all unshielded, please remove this sentence from the compliance statements.
7) We are unsure of your response regarding previous question 20. Spurious emissions of the TX must meet the limit of -13 dBm which is done using a substitution method and this limit of -13 dBm is the limit at the TX port using a substitution method. All receiver/idle mode spurious emissions must meet Part 15 and done using the methods of ANSI C63.4 (see items 1 & 2 above) and should not be done using a substitution method.

--- Continued on Next Page ---

8) It is uncertain that the use of 4 kHz maximum modulation frequency is acceptable since the frequency response plot provided has such a slow rolloff (likely due to linear units ploted vs. log units for x axis). Note that 4 or 5 kHz is acceptable if the device only passes voice. However the aux input appears to be for multiple uses (theaters, TV, DVD, Music, etc), and uses of this device may also pass music. Devices that are capable of transmitting music are many times considered by the FCC to have a maximum modulation frequency as 15 kHz. To help determine the appropriate maximum frequency capable by this device, please provide the following information:
    a) Adjust the plot for audio deviation frequency to include units, a grid, and also to plot the frequency using a log axis. This will help to determine the proper rolloff frequency to use for this device.
    b) Please provide information regarding how the reference level is established for the frequency response plots. This is typically performed using a level of 20% of maximum deviation at 1 kHz.
    c) The results may change the reported necessary bandwidth calculation.

Timothy R. Johnson
Examining Engineer

mailto: tjohnson@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.