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

August 14, 2003

RE: Hitachi Keiyo Engineering and Systems LTD

FCC ID: Q9Z-PC5NR3-J

I am missing responses to some of my questions from my July 19 request. Please review. There are also a couple new questions.

1.) Current interpretation of RF Pout measurement procedure for RF Exposure finds spectrum analyzers too inaccurate for Pout testing. Please provide more accurate power readings. The optimum way recognized by the Commission is to use the diode detector/signal generator substitution method as illustrated in a separate attachment. Be sure to check power across low, mid, and high channels ***at all applicable data rates.***
2.) The Test Report appears to make multiple references to "hopping enabled" (Bluetooth?) protocols and not exclusively 802.11b. As an example please see pp. 6, 7, 8, and 9. Other instances may have occurred within the report. Please review and correct.
3.) Peak and Average radiated values for the restricted band of 2483.5 to 2500MHz and 2310 to 2390MHz seem to be missing. Please provide this data. Also, please show enough "overlap" in your Plots 15 and 16 to confirm the transmitter was tuned to 2412 MHz for the lower edge restricted band measurement and 2462 MHz for the upper edge restricted band measurement.
4.) Please be sure the Manual specifies that this transmitter must not be co-located with any other transmitters or antennas.
5.) The 6dB BW plots are incorrect. All other 802.11b devices show a 6dB BW of approximately 10MHz. Please correct. FYI: For clarity may I suggest using 5dB/division for your display.
6.) It also appears when comparing Plot 10 with Plots 11&12 that two different data rates were used. Please be sure to show worst case data rate for the 6dB BW measurement.
7.) Spectral Power Density, plots 4, 5, and 6, use incorrect test receiver settings. Please see 15.247(d). Your span of 50MHz would require a sweep time of over 16,666 seconds. A more realistic value is to show a 3MHz span with a 1000 second sweep time.

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President and Examining Engineer

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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.