November 26, 2004

RE: Ortech
FCC ID: SFU1008552

The following is in response to the comments made on the above referenced Application.

1) The label exhibit does not actually appear to be a label. Additionally, from the external photographs it appears that the FCC ID may be in the plastic mold or imprinted, not on a label. Please clarify the label exhibit for this issues.

A new exhibit has been provided by the manufacturer.

2) The key appears to be fully inserted into foam. It appears that the entire antenna is encased in the foam. We have seen where some materials placed directly around or on the device/antenna can de-tune the circuitry. For this device, was it checked with and without the foam to ensure similar results. Note it would have been preferable to only insert the metal portion into the foam and leave the TX board above the foam area.

Extensive testing has been undertaken by this laboratory to verify that the foam supports used during testing have no measurable impact on DUT emissions over the frequency range in question. The dielectric constant for this material is on the order of 1.05.

3) The correction factor applied is based upon duty factor and also does not appear to match the data.. Note that duty cycle must take into consideration a worse case TX during 100 msec maximum, not complete period. Further detail is necessary as to the period/duty factor of one word, the TX on time for both small and large bits, etc. This information must be looked at over 100 msec as well. Please correct. Note this will affect the calculations utilizing duty cycle as well.

Note that the DUT encoding is MANCHESTER (as stated in section 6.1), and thus the formulation used to calculate the worst case duty factor is correct.

4) The limit for 630 MHz appears incorrect. Shouldn't this be 55.6 dBuV/m?

Yes, this is a typographical error. We have uploaded an updated test report.

IC considerations:

5) Please adjust the RSP form to match any changes due to item 3 above.

The RSP form has been updated.

6) 1260 MHz falls in a restricted band in Canada.

The test report data table has been updated to reflect the Canadian restricted band limit.