Temperature testing is underway, using procedure and apparatus described in the standard UL 1598. The objective of this pilot temperature testing is to verify the industry roundtable’s assertion that some ENERGY STAR luminaires are being operated near or above recommended temperatures.

To identify products for pilot temperature testing, LRC consulted the original 2.0 version of the ENERGY STAR list, and then eventually the new 3.1 version as new products were added. From each manufacturer, LRC selected one sample of a compact fluorescent ceiling-mounted or recessed luminaire. Electronic ballasts were chosen over magnetic, whenever possible. As of mid-June, LRC has acquired twenty-one ceiling-mounted samples, and seven recessed downlights. As more luminaires are added to the list of participating luminaires, more samples will be acquired and tested. At a maximum we would like to be able to test up to 40 luminaires, if they become listed before the next roundtable, in the Fall 2002. (Specific date will be established in the coming weeks.)

For each luminaire sample, LRC is also measuring temperature in ambient, non-enclosed conditions, to better understand the role of enclosure on temperature. In the luminaires tested thus far, most ballasts are operating at 40ºC - 60ºC in open air.

LRC has already identified multiple luminaires with enclosed temperatures very near or well above the recommended temperatures from the ballast manufacturer. In one case, the operating temperature was so high that the ballasts’ thermal shutoff device was activated, causing the luminaire to shut off repeatedly.

LRC will complete testing of ceiling-mounted luminaires, then will test recessed downlight luminaires.

Construction is underway for the apparatus for stress testing. Preliminary results will be presented at the industry roundtable in the Fall of 2002.