28 October 2010

TO: Mr. Alex Baker – U.S. Environmental Protection Agency

RE: ITL Comments – Energy Star Program Requirements for Luminaires, Version 1.0, Draft 2

Dear Mr. Baker,

Independent Testing Laboratories, Inc. (ITL) respectfully submits the following comments regarding the second draft of the Energy Star Program Requirements for Luminaires, Version 1.0.

1. **Page 2 note, 2nd paragraph** – in regards to having a separate specification for pole-mounted luminaires – as we interpret this section, it seems to go against the purpose of having a consolidated, comprehensive document covering all luminaire types. It seems a more relevant approach would be to keep the pole-mounted roadway options with this document and use addendums where needed.

2. **Page 10, supplemental testing guidance column, fluorescent and HID** – in regards to lamp-ballast sample sizes – it seems prudent to add additional verbiage specifying that the 3 lamp-ballast combination requirement applies to each of the lamp-ballast combinations offered in any given luminaire model.

3. **Page 10, source minimum light output column, solid state: LED light engine** – in regards to LED light engine light output measurements – it is our assumption that the requirement to test the LED light engine “in situ” simply means that the light engine will be placed within the fixture it was supplied with – in which case the light output measurement will in effect be an absolute lumen output test of the luminaire. If the “in situ” refers to a UL 1598 apparatus or an apparatus that will be later defined by the upcoming LED light engine IES LM-xx-1x, how will the light output measurement be facilitated within an integrating sphere or on a goniophotometer system, particularly give the size of some of the existing “in situ” test apparatus for luminaires?

4. **Page 10 to page 15, photometric performance requirements, all types** – in regards to photometric performance for specified luminaire types - for non-directional residential luminaires the performance evaluations are based on source photometry and the performance evaluations for directional residential luminaires and directional commercial luminaires are based on luminaire photometry – it would seem that these first three sections specifying luminaire performance should require luminaire performance criteria for all with a separate section defining source requirements, if needed.
5. **Page 16-17, light source life requirements and lumen maintenance, all types except LED** – in regards to light source life claims and lumen maintenance requirements – it is our interpretation that for standard light sources (HID, fluorescent, halogen), with historical life ratings and lumen maintenance data, that lamp manufacturer data will suffice and that life ratings or lumen maintenance data will not need to be verified by Energy Star / EPA approved laboratory testing the luminaire. Please clarify this section.

6. **Page 17 and page 19, Energy Star requirements column, bottom** – in regards to required photographs – we recommend adding the requirement to photograph all luminaire housing “intrusions” for thermocouple placement as specified in paragraph 4 on page 19.

7. **Page 20, Energy Star requirements column, solid state** – in regards to the upper residential CCT limit – it appears there might be a typo of 4000k instead of 4100k.

Thank you for your consideration of these comments. Please contact ITL Senior Lighting Engineer Mr. Courtney Stout at (303) 442-1255 with any questions.