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**From:** Edmond Daniels <edaniels@cordelia.com>  
**Sent:** Friday, January 30, 2015 11:06 PM  
**To:** lighting@energystar.gov  
**Subject:** Luminaires V2.0 Draft 1 Altair Lighting Comments

**Categories:** PD

Comments with regards to granting Energy Star certification on luminaires using Energy Star rated lamps without luminaire testing.

To use the luminaire example mentioned in the January 21<sup>st</sup>, 2015 presentation with a solid state light engine source, the non-directional surface-mounted downlight would be required to have the source tested at three different temperatures (LM-82) to determine the source lumen output and a luminaire in-situ test to determine the L70 lumen maintenance hours. If the same luminaire uses an Omni-directional, <10 watt Energy Star rated lamp, the lamp itself can qualify for Energy Star L70 at 25,000 if tested in an ambient as low as 20 C. Obviously the actual ambient inside a luminaire can be significantly higher than 20 C. So first, Energy Star rated lamps should be subjected to the same LM-82 and in-situ test requirements as light engines, but then, if a lamp barely makes L70 at 25,000 hours, it will most likely not get L70 at 25,000 in the luminaire. Second, the luminaire Certification Body will not have the actual lumen maintenance test report of the lamp, so how does a CB determine if a luminaire will deliver L70 at the minimum of 25,000 hours?

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