

## **NEPTUN Light Comments on ENERGY STAR Program Requirements for Residential Light Fixtures Draft 2 Eligibility Criteria – Version 4.0**

Regarding Section : "Table 1 – Indoor Fixtures" (Pages 5 and 6)

**Note:** *Only electronic ballasts may be used to meet requirements of this table.*

*Lamps (light sources) which are equipped with a mogul, medium or other screw bases, are not eligible to earn the ENERGY STAR.*

*EPA encourages use of new lamps (light sources), including ENERGY STAR CERTIFIED Self-Ballasted CFL's equipped with bases other than mogul, medium or other screw bases.*

### **Combined Lamp & Ballast Requirements:**

*System Efficacy Per Lamp watts*  $\geq 50$  LPW for all lamp types below 30 total listed lamp watts

*Ballasts Platform in Lumens Per Watt (LPW)*  $\geq 60$  LPW for all lamp types that are  $\leq 24$  inches in length or diameter and  $\geq 30$  total listed lamp watts  
 $\geq 60$  LPW for all ENERGY STAR CERTIFIED Self-Ballasted Compact Fluorescent Lamps;

### **Lamp Requirements:**

*Lamp Life* For lamps shipped with the fixtures, the average rated life of the lamp must be  $\geq 10,000$  hours, **except if the lamp is ENERGY STAR CERTIFIED Self-Ballasted Compact Fluorescent, it shall be at least 8,000 hours certified.**

*Lumen Maintenance* For lamps indicated on the fixture packaging or shipped with the fixtures, the lamps shall have at **least 90% of initial lumens at 1,000 hours and** at least 80% of initial lumens at 40% rated lamp life.

*Correlated Color Temperature* For lamps shipped with the fixtures, the lamps must have one of the following designated correlated color temperatures (CCT) : 2700K, **2850K**, 3000K, 3500K, 4100K, 5000K, 6500K

[The 2850K is very important designation, especially when ALL INEFFICIENT HALOGEN or INCANDESCENT REFLECTOR LAMPS are being replaced with DIRECTLY COMPATIBLE CFL MODELS, with exact color temperature of 2850K matching the halogen/incandescent color. In fact, many ES Certified CFL's are 2850K, The 2850K is the designer's choice in many upscale hotels.]

(Re: Pages 7 & 8)

### **Electronic Ballast Requirements:**

Noise *Class A sound rating for electronic ballasts within the fixture, not to exceed a measured level of 24 dBA (audible), when the ballast installed in the fixture and such fixture is installed as will be in its normal use (wall lamp, ceiling lamp, floor lamp) and the measurement is conducted from a distance not less than 3 feet from the fixture in any direction.*

End of Life Protection *All ballasts that operate lamps sized T5 and smaller must contain an End of Life Protection Circuit according to ANSI/UL requirements.*

Regarding Section : "Table 2A – Outdoor Fixtures" (Page 13 )

**Lamp Requirements:**

Lamp Life *For lamps shipped with the fixtures, the average rated life of the lamp must be  $\geq 10,000$  hours, **except if the lamp is ENERGY STAR CERTIFIED Self-Ballasted Compact Fluorescent, it shall be at least 8,000 hours certified.***

**Ballast Requirements:**

End Of Life Protection *All ballasts that operate lamps sized T5 and smaller must contain an End of Life Protection Circuit according to ANSI/UL requirements.*

Regarding Section : "Table 2B – Outdoor Fixtures" (Pages 15 and )

**Fixture Requirements:**

Motion Control ON/OFF Sensor *All outdoor fixtures with total rated power input above 150 Watts shall be equipped with Motion Control ON/OFF Sensor, either infrared, ultrasound, or other.*

- The Sensor must:*
- *automatically turn OFF the fixture within 15 minutes of being turned ON manually or automatically activated.*

[Please remove all other text, as it is being poorly written technically, and makes no sense in many instances. The indicator of functions of the Motion Control ON/OFF Sensor will not be understood by the consumer, therefore it should not be required. Any product which will not perform up to consumer satisfaction, will be naturally excluded from the market. Adding specific requirements which will benefit specific manufacturer will create monopoly and unjustly - exclude others, especially small business.]

Regarding Section : "Table 3 – Reference Standards and Required Documentation"

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*LAMP LIFE*

*Laboratory test results must be produced using the specific lamp that will operate in the fixture with specific ballast designed for such lamp (as a combination platform) or reference ballast.*

*If ENERGY STAR CERTIFIED Self-Ballasted Compact Fluorescent Lamp is used in the fixture, such lamp must be at least 8,000 Hours certified. In such case, any additional documentation is not required.*

[ The CFL's are certified by ENERGY STAR are excellent choices for ES fixtures, and should be promoted and encouraged strongly by EPA. We propose at least 8,000 hours certified CFL to be allowed as lamps in fixtures, as this is good compromise and assurance of consumer satisfaction and fairness for the industry. Only handful of CFL are 10,000 hours certified, but majority are 8,000 certified. We think, if it acceptable as a "CFL" it should be acceptable as the "CFL in the fixture".]

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*Lumen Maintenance*

*If ENERGY STAR CERTIFIED Self-Ballasted Compact Fluorescent Lamp is used in the fixture, such lamp must be at least 8,000 Hours certified. In such case, any additional documentation is not required.*

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*Correlated Color Temperature*

*If ENERGY STAR CERTIFIED Self-Ballasted Compact Fluorescent Lamp is used in the fixture, such lamp must be at least 8,000 Hours certified. In such case, any additional documentation is not required.*

[Please remove all of the specifics of the quality control procedures. Each manufacturer has it own procedures designed within ramification of internationally accepted standards, and EPA should not be in any business of imposing specifics procedures of quality of one manufacturer or small group of manufacturers on the entire industry. Especially, when CCT control within +/- 100 K is a relatively easy task in today's phosphors technology, and phosphors mixing technologies used by all lamp manufacturers. CCT control is rather trivial issue in comparison to LUMEN MAINTENANCE ISSUE which much more difficult and challenging. Imposing such complicated reporting and documentation will create unwanted limitation of conversion of Incandescent to Fluorescent – we are working so hard to increase. Inclusion of such requirements will be understood as clearly political and unhealthy for the industry OF ENERGY SAVING FIXTURES.]

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*Noise*

*Class A sound rating for electronic ballasts within the fixture, not to exceed a measured level of 24 dBA (audible), when the ballast installed in the fixture and such fixture is installed as will be in its normal use (wall lamp, ceiling lamp, floor lamp) and the measurement is conducted from a distance not less than 3 feet from the fixture in any direction.*

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*Lamp/Lampholder Compatibility*

*If ENERGY STAR CERTIFIED Self- Ballasted CFL*

*equipped with base other than mogul, medium or other screw base, is used as lamp in the fixture – drawings of such base should be provided along with proof of compliance with applicable UL safety standards.*

[End of Comments]