

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

September 25, 2017

Dear ENERGY STAR[®] Lighting Partner or other Interested Stakeholder:

The Environmental Protection Agency (EPA) is proposing minor modifications to the ENERGY STAR Start Time Test Method, applicable under the ENERGY STAR lamp and luminaire specifications. These clarifications do not impact currently certified products.

EPA has determined that the ENERGY STAR Start Time Test Method, developed in 2010 for fluorescent products and carried over to solid state lighting (SSL) products, would benefit from minor clarifications and updates to ensure it does not hinder efficient, high performing SSL products with consumer-driven features from earning the ENERGY STAR. Many SSL products with advanced features achieve continuous illumination within 750 milliseconds of application of electrical power, consistent with the ENERGY STAR requirement for start time. However, there is no measureable “initial plateau,” as defined in the current test method, for these products. For example, some SSL products have been designed to slowly fade on rather than go to full brightness immediately, a consumer-friendly feature that allows the eyes to adjust from the dark to a lighted space. Some SSL products have integrated controls such as motion sensors that provide energy-saving benefits but have unreliable and unrepeatable impacts on the way the products turn on. (Note: the sensors are not the focus for the ENERGY STAR start time requirement, but rather the capability of the control gear to kick start the light.)

To address these issues, following review from the NEMA Light Source and Luminaires technical committees, the ENERGY STAR Start Time Test Method will be changed as follows:

Definitions

(New) **Device Under Test (DUT)**: the integrated or externally ballasted compact fluorescent lamp (CFL), or solid state lighting (SSL) lamp, light engine or luminaire which is undergoing the start time test.

(Revised) **Start Time**: The time between the application of power to the DUT¹ and:

- For fluorescent DUTs, the point where light output reaches 98% of the initial plateau.
- For solid-state lighting DUTs, the point where the light source is continuously illuminated, and the light output is either constant or increasing.

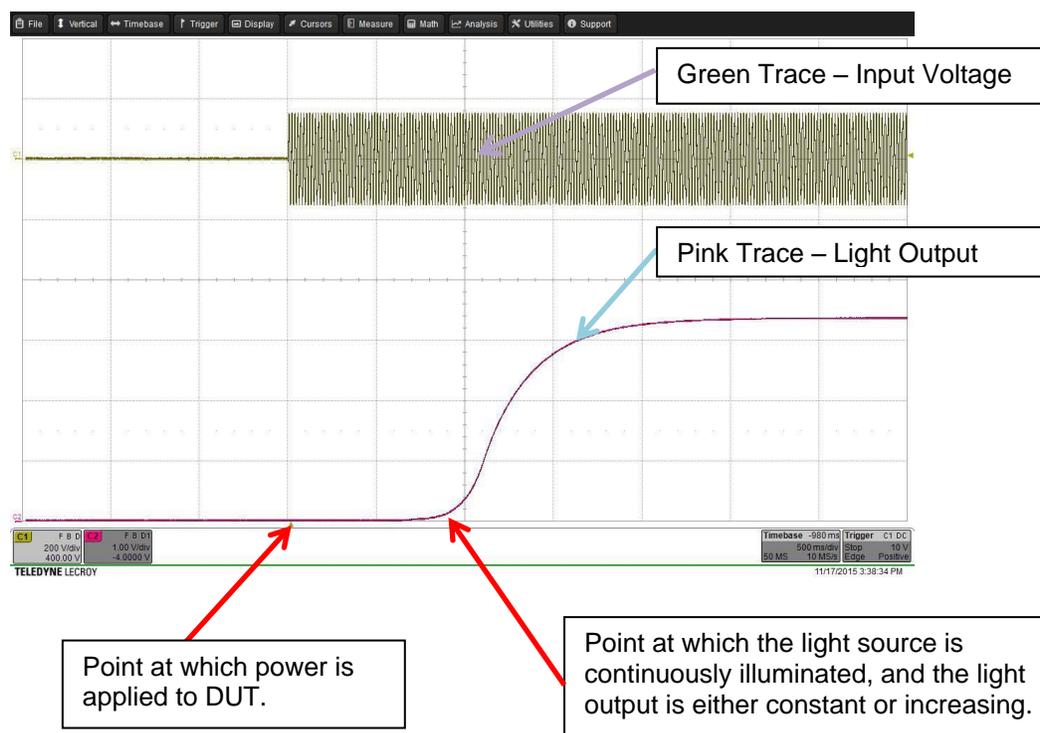
¹ DUTs with integral controls (e.g., motion sensors, photosensors, wireless control, standby mode, or connected functionality) may have these sensors disabled or bypassed for this testing.

Test Report

- A. (revised) DUT and ballast/driver (if applicable) Manufacturer name(s) and product identification.
- D. (revised) DUT base orientation (if applicable).
- J. (new) Indicate whether any sensors were disabled or bypassed for this testing and detail methodology as applicable.

Example 2 – SSL Source

The image associated with Example 2 has been changed to better identify the point where the light source is continuously illuminated, and the light output is either constant or increasing



If you have any concerns about these clarifications, please contact me **by October 5, 2017** at (202) 343-9042 or Jantz-Sell.Taylor@epa.gov or Daniel Rogers, ICF, at (908) 233-0554 or lighting@energystar.gov. Absent concerns, EPA will adopt this amended test method for use on Oct 6.

Thank you for your continued support of ENERGY STAR.

Sincerely,

Taylor Jantz-Sell
ENERGY STAR Lighting Program Manager
U.S. Environmental Protection Agency