



**Fluorescent Lamp and Fixture Dimming Competition
2009 Entrant Guide**

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Organizing Sponsors

Lighting for Tomorrow is jointly sponsored and organized by the American Lighting Association (ALA), the Consortium for Energy Efficiency (CEE), and the U.S. Department of Energy (DOE), represented by Pacific Northwest National Laboratory (PNNL).

ALA is the only trade association uniting lighting manufacturers, showrooms/distributors, manufacturer representatives, component manufacturers, and industry-related companies dedicated to providing the public with quality residential lighting. ALA has over 1,200 corporate members across the U.S., Canada and the Caribbean.

CEE is a non-profit public benefits corporation, working in the US and Canada, that promotes the manufacture and purchase of energy-efficient products and services. CEE's goal is to induce lasting structural and behavioral changes in the marketplace, resulting in the increased adoption of energy-efficient technologies.

DOE's Building Technologies Program conducts research and development on technologies and practices for energy efficiency; partnering with states, industry, and manufacturers to improve the energy efficiency of new and existing buildings. PNNL is a DOE multi-program national laboratory that delivers breakthrough science and technology to meet key national needs.

Co-Sponsors

Lighting for Tomorrow is co-sponsored by energy efficiency program administrators such as electric utilities, nonprofit groups, and state energy offices that have a significant interest in promoting energy-efficient residential lighting. These sponsors have provided both financial and in-kind support to the competition. For the complete list of sponsors, visit the Lighting for Tomorrow web site at www.lightingfortomorrow.com.

Purpose

The purpose of Lighting for Tomorrow is to increase the market availability of energy-efficient residential lighting fixtures and to increase the marketing, promotion, and sales of such fixtures through primary distribution channels for the new construction and renovation markets. In 2009, the Dimming Lamp and Fixture Competition's specific objectives are the following:

- Overcome dimming as a remaining market barrier for fluorescent products.
- Stimulate the development of new, energy-efficient, dimming products that meet consumers' needs and expectations.

To meet these objectives, the Lighting for Tomorrow 2009 Competition is seeking dimming residential light fixtures and compact fluorescent lamps and systems (the term "CFLs" is used to represent all eligible fluorescent sources) that meet the requirements of the ENERGY STAR Residential Light Fixture or ENERGY STAR CFL program.

Timeline

2009 competition announced	International Lighting & Accessories Market – Dallas, TX	January 14-18, 2009
Intent-to-submit forms due	See www.lightingfortomorrow.com	March 27, 2009
All entries due (actual working products are required)	Entrants will receive the mailing address via email	April 24, 2009
Judging Session	CSA Atlanta, GA	May 14-15, 2009
Winners notified	Via phone and email	July 2009
Winners announced	American Lighting Association Annual Conference – Palos Verdes, CA	September 13-15, 2009

Awards

Winners will be announced during an award ceremony at the ALA Annual Conference and winning products will be promoted throughout the ensuing year in full color publications, the Lighting for Tomorrow website, articles and press releases, and a traveling trade-show exhibit that will appear at major lighting, builder, and energy-efficient products shows.

Judging Panel

The judging panel for the 2009 competition will consist of approximately 10 individuals, including lighting retailers, lighting designers, home builders, lighting researchers, energy efficiency program sponsors, and lighting and design media representatives.

Participants

The competition is open to both lamp and fixture manufacturers. Controls manufacturers are eligible to enter their dimmer products as long as they are submitted as part of a lamp or fixture.

Submission Categories

The submission categories for the 2009 Dimming Lamp and Fixture Competition include:

Dimming CFLs – this category is for the following types of dimming CFLs capable of meeting ENERGY STAR CFL Criteria version 4.0.

- Standard linear and cluster lamps including spiral CFLs
- A-line CFLs
- Globe CFLs
- Candelabra-based CFLs
- Reflector CFLs

Dimming Fixtures – this category is for dimming fixtures capable of meeting the ENERGY STAR Fixture Criteria version 4.1.

Product Criteria

- Products submitted to LFT for consideration must be compatible with a wall box dimmer (standard, electronic, or magnetic) or have on-board dimming controls.
- The competition is open to designs with primary applicability in the residential sector, or in residential-style applications such as hospitality and assisted living environments.
- Fixtures and CFLs intended for indoor applications may participate.
- The competition is intended to highlight the best dimming products that are available for purchase in 2009. As such, products introduced (or planned for introduction) to the market between January 1, 2009 and January 31, 2010 are eligible to participate in the competition.
- Entrants must submit prototypes or production-quality fixtures or CFLs that include either a dimmer or be fully compatible with a “wall box” or other standard dimmer. Shipping instructions will be sent to entrants after they have completed an Intent-to-Submit form.
 - A prototype is defined as a fully functional representative sample of the fixture or CFL or dimming system that will serve as the basis for evaluation, demonstration, and further development.
 - A production fixture or CFL is defined as a fixture or CFL with the same composition and materials as fixtures and CFLs currently in production.

- Proposed fixtures must be suitable for sale by lighting showrooms and other retailers that service the residential new construction and major renovation markets.
- Submittals must be accompanied by suggested retail price range information.

Technical Requirements

- All entrants must dim down to 20% of full light output.
- Dimming fixtures must be designed and produced consistent with the eligibility criteria of the ENERGY STAR program. Please refer to the ENERGY STAR Residential Light Fixtures Eligibility Criteria, version 4.1. www.energystar.gov.
- Dimming CFLs must be designed and produced consistent with the eligibility criteria of the ENERGY STAR program. Please refer to the ENERGY STAR Criteria for CFLs, version 4.0. www.energystar.gov.

Required Documents

An online Intent-to-Submit form must be submitted to competition organizers by March 27, 2009. A Final Submission form must be submitted online, with the following documentation (submitted via email):

- Product photo.
- Other product specification sheets, if available.

Entries (operating samples) should be sent to the judging location by April 24, 2009 with a printed and signed version of the final submission form. Any proprietary information should be marked as such. Entries arriving without a completed submission form will not be considered.

Evaluation Procedure

Evaluation of LFT entries will take place in the following stages:

Initial screening

LFT organizers will screen entries by reviewing each submittal to verify that all products entered fall within the scope of the competition. Fixtures will also be evaluated to make sure all parts necessary to mount the fixture in its intended application are included and that the fixture functions properly. CFLs will be installed in fixtures to confirm functionality.

In-person judging

The judging panel will meet in-person to evaluate the entries (see evaluation criteria). Fixtures and CFLs will be installed and connected to power.

Evaluation Criteria

Judges will score each entry according to the following criteria:

- Color constancy – Evaluation of this criterion will be based on the judging panel's subjective evaluation of the color appearance of the installed fixture or CFL as it dims. Judges will look for no perceptible color shift toward cooler colors (warm color shift OK).
- Percent dimming – Evaluation of this criterion will be based on illuminance measurements at different settings. Judges will award bonus points for products that can dim down to levels below 20% of full output..
- Dimming smoothness – Evaluation of this criterion will be based on the judging panel's subjective evaluation of dimming continuously from 100% light output to at least 20% of full output. Judges will look for smooth transitions, no flicker at lower levels.
- Start conditions – Evaluation of this criterion will be based on the product's ability to start at the lowest dimming setting. Manufacturer data on rated start temperature must be provided.
- Reliability – Evaluation of this criterion will be based on the product's rated life and manufacturer's warranty. Judges will look for products with the same long life as normal CFLs and fixtures.

The judging panel may award bonus points for entries exhibiting desirable characteristics. Bonus points will be available for the attributes listed below; additional bonus points may be identified by the judges.

- Extended dimming range (see above). Evaluation of this criterion will be based on the manufacturer data, onsite illuminance measurements, as well as the judging panel's evaluation.
- Ease of operation
- Simple installation or simple to retrofit to existing products
- Features that in the opinion of the judges go beyond the usual residential consumer needs and expectations.

ENERGY STAR Qualification of Winners

All fixture and lamp entries that are selected as winners are required to become ENERGY STAR qualified within one year of award. If winners fail to become qualified, they will be removed from the Lighting for Tomorrow website.