


# L Prize Competition Update

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## What is the L Prize?

- Created by Energy Independence and Security Act (EISA 2007) Sec. 655
- Two key lamp replacements:
  - 60W Incandescent
  - PAR-38 Halogen
- Future focus: 21<sup>st</sup> Century Lamp
- Cash prizes, federal purchasing, utility programs
- Technology competition to spur innovation and exceptional performance

The logo for L•PRIZE™ features the word "L•PRIZE" in a bold, sans-serif font. The letter "L" is green, and the dot of the "L" is a yellow circle. The word "PRIZE" is also green. A trademark symbol (TM) is located to the upper right of the word "PRIZE".

## LED Performance Continues to Improve

- *“Cree... has achieved industry-best reported R&D results of 161 lm/W for a white power LED.”*

November 2008

- *“[Philips Lumileds announces] ‘record breaking’ research results for their LEDs with values... [of] 140 lm/W”*

September 2008

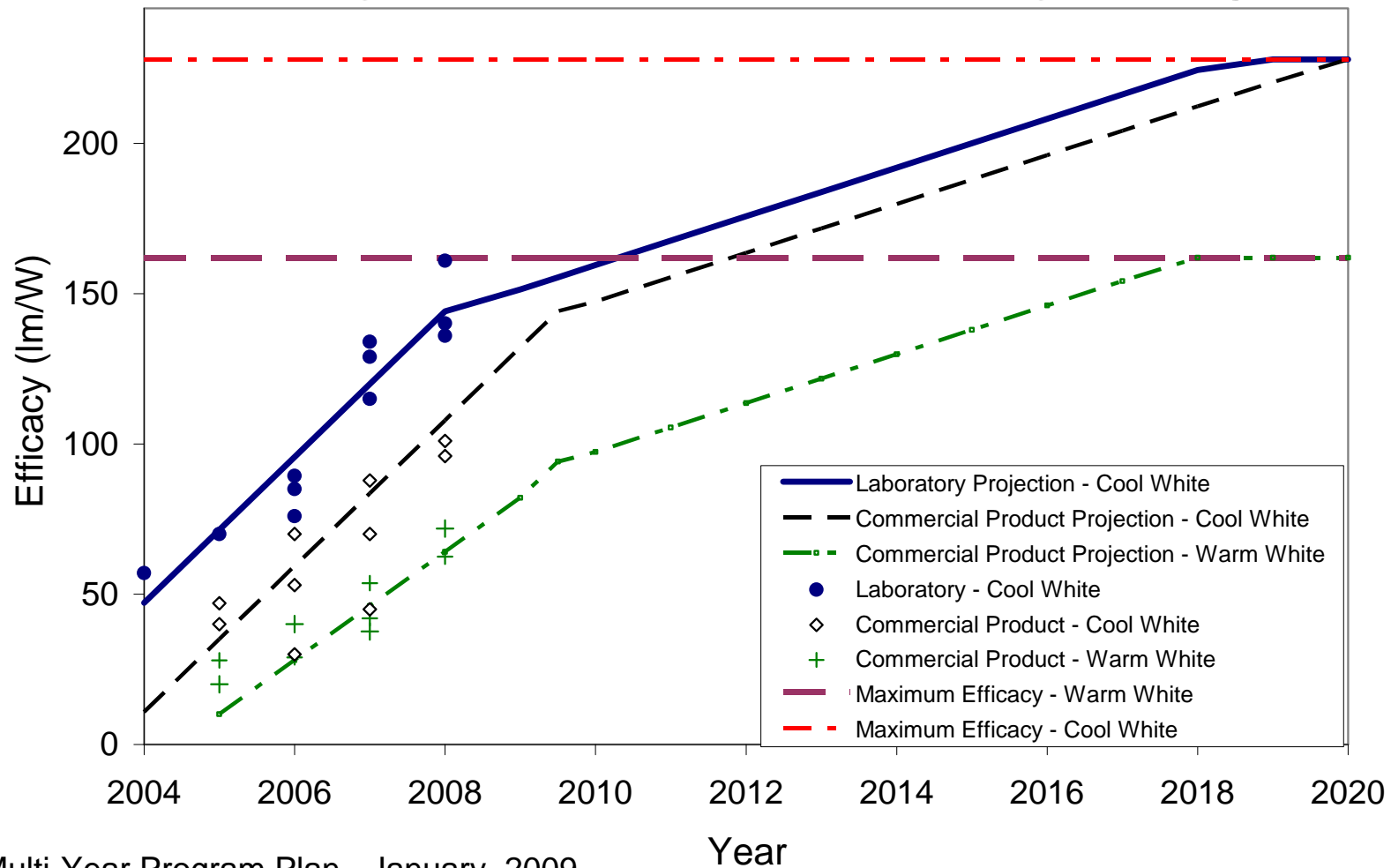
- *“World record in the OSRAM laboratory: quantum leap in the brightness and efficacy [136 lm/W] of white LEDs.”*

July 2008



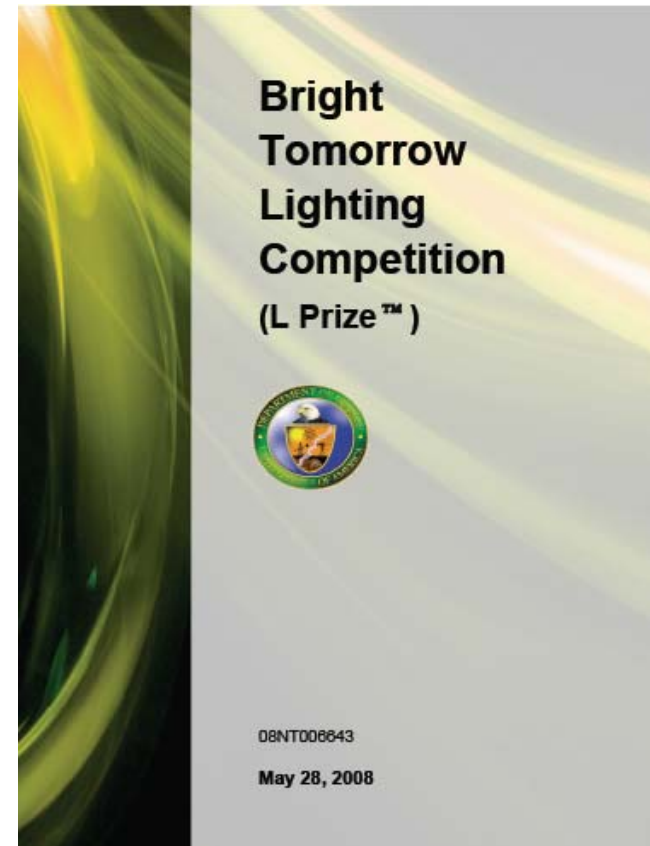
Cree Inc.

# January 2009 LED Efficacy Targets



## L Prize To Date

- 9 month development process
- Active Steering Committee
  - 4 California utilities
- Technical requirements and evaluation criteria
- Announced at Light Fair 2008
- Federal Register



# L Prize Competition Requirements

- Exceptional efficacy
- Long life
- Form factor identical to lamps they replace
- Additional details specified for
  - Quality
  - Performance
  - Mass manufacturing

## Competition Requirements

### 60W Incandescent Replacement Lamp

- *More than 90 lm/W*
- *Less than 10 watts*
- *More than 900 lumens*
- *More than 25,000 hour life*
- *More than 90 CRI*
- *Between 2700-3000 K CCT*

### PAR 38 Halogen Replacement Lamp

- *More than 123 lm/W*
- *Less than 11 watts*
- *More than 1,350 lumens*
- *More than 25,000 hour life*
- *More than 90 CRI*
- *Between 2700-3000 K CCT*

### 21st Century Lamp

- *To be defined in a future L Prize Program Announcement*

## L Prize Winners Will Save Energy

L Prize 60 W incandescent replacement will use 10 watts.

Savings compared to:

- 60W incandescent – 83%
- 2014 EISA – 43W incandescent – 76%

L Prize PAR38 halogen replacement will use less than 11 watts.

Savings compared to:

- 90W PAR38 halogen – 87%
- 70W PAR38 halogen IR – 84%

## What do Manufacturers Have to Submit?

- Intent to submit
  - 30 days notice
- 2000 lamp samples
  - Continuous production run
- Manufacturing capability plan
- 250,000 unit capacity in first year
- US-based LED chip production



## Rigorous Product Evaluation

- **Performance and long term lumen maintenance testing** conducted by independent laboratories
- **Field assessments** in collaboration with utilities and other partners
- **Stress testing** under extreme conditions

***Purpose:***

***Detect and address product weaknesses before market introduction***  
***Avoid problems with long-term market acceptance***

## Program Partners – Key to L Prize Success

- New technologies are expensive
  - Low volumes, high development costs
- Program partners represent significant demand
  - Drive sales up, prices down

## Current Partners - West



## Current Partners - Central

**DTE Energy®**



**ComEd®**

An Exelon Company

**WECC**  
wisconsin energy  
conservation corporation



**MEEA**  
Midwest Energy Efficiency Alliance

# Current Partners - East

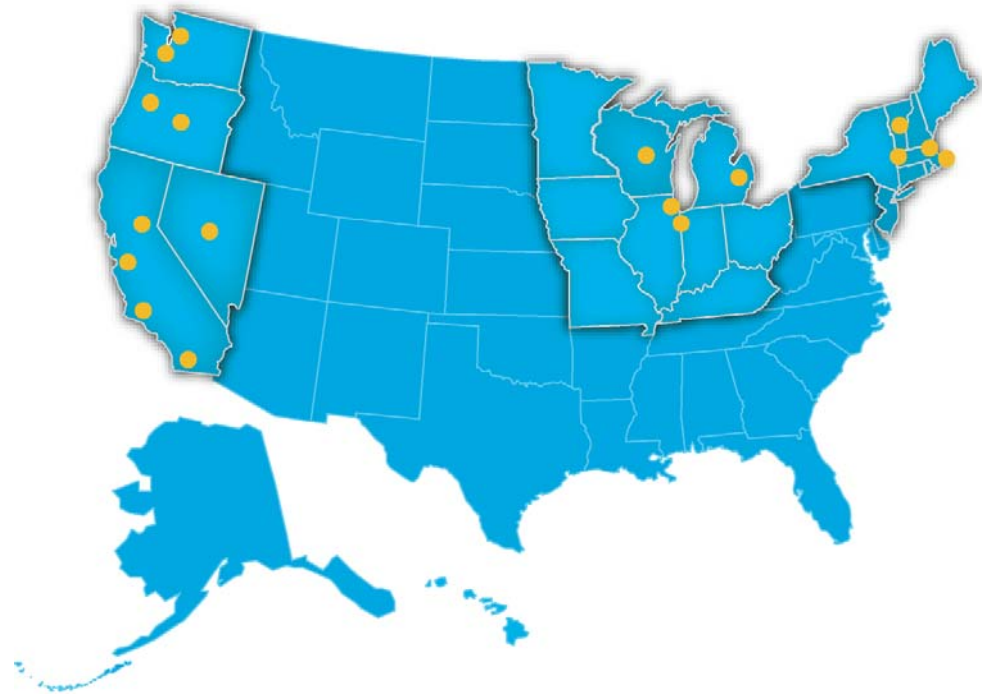


Northeast Energy Efficiency Partnerships, Inc.



## How Will Partners Promote Winners?

- Potential to reach 100 million consumers
- Targeted product incentives
- Collaborative marketing and promotion
- Partnerships with local, regional, national retailers
- Demonstrations and promotions



## Why Compete?

- Be recognized as “best of the best”
- Immediate market potential for sales
- Program partner promotions, incentives, marketing
- Intense media spotlight
- Automatic ENERGY STAR<sup>®</sup> qualification
- Cash prize – first winner, each category



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For more information, see [www.lightingprize.org](http://www.lightingprize.org)