

# LIGHTING FACTS<sup>®</sup>

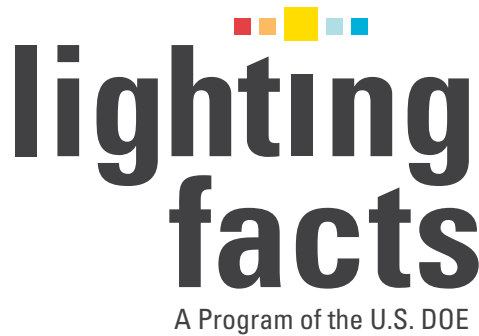
Bringing industry together to boost the LED market



## THE PROBLEM

The most promising lighting technology since CFLs, LEDs have the potential to cut U.S. lighting energy use by one-fourth. But by 2008, low light output, shorter-than-advertised lifetimes, and poor color quality were on their way to undermining the market. There was no mechanism to ensure that manufacturers accurately reported the characteristics of their products and no means for lighting buyers, utilities, lighting designers, or efficiency programs to verify product performance. For the LED lighting market to grow, consumers must have confidence that products perform as advertised. The U.S. Department of Energy (DOE) turned to D&R in 2008 to build a partner program that would help protect this rapidly evolving market.

## THE CHALLENGE



- **Devising a mechanism to convey complicated performance values clearly:** Correlated color temperatures (CCT), color rendering index (CRI), lumens—finding a way to communicate these LED concepts simply was essential to helping buyers choose the right products.
- **Recruiting reluctant partners:** How do you get manufacturers to buy into a program that assigns performance values to products that could function poorly—and makes those values available to the lighting world?
- **Keeping up with a rapidly changing industry:** The swift evolution of the LED market has been a tremendous challenge—for buyers, who must choose among hundreds of new product offerings, and for DOE, which must develop meaningful program policies and partner resources that keep pace with new developments.

## THE SOLUTION

■ **Creating the Lighting Facts label:** D&R developed a Lighting Facts label similar to a nutrition label that gives buyers information about product performance. Once DOE verifies that the product operates as claimed, participating manufacturers may use the label to disclose lumens, efficacy, watts, CCT, and CRI.

■ **Working with retailers to attract manufacturers:**

D&R began by recruiting manufacturers, but soon discovered that buyers had the greatest leverage. D&R shifted its focus to recruiting retailers, distributors, and utilities, who then went to their manufacturers to insist that they provide products that perform as advertised. In six months, manufacturer partnership applications skyrocketed.

**Light Output/Lumens**  
Measures light output. The higher the number, the more light is emitted.  
Reported as "Total Integrated Flux (Lumens)" on LM-79 test report.

**Watts**  
Measures energy required to light the product. The lower the wattage, the less energy used.  
Reported as "Input Power (Watts)" on LM-79 report.

**Lumens per Watt/Efficacy**  
Measures efficiency. The higher the number, the more efficient the product.  
Reported as "Efficacy" on LM-79 test report.

**IESNA LM-79-2008**  
Industry standardized test procedure that measures performance qualities of LED luminaires and integral lamps. It allows for a true comparison of luminaires regardless of the light source.

**Registration Number Model Number Type**

**Brand**

**Color Rendering Index (CRI)**  
Measures color accuracy.  
Color rendition is the effect of the lamp's light spectrum on the color appearance of objects.

**Correlated Color Temperature (CCT)**  
Measures light color.  
"Cool" colors have higher Kelvin temperatures (3600–5500 K); "warm" colors have lower color temperatures (2700–3500 K). Color temperatures higher than 6500 are outside of the defined region for white light, but may be appropriate for outdoor applications.

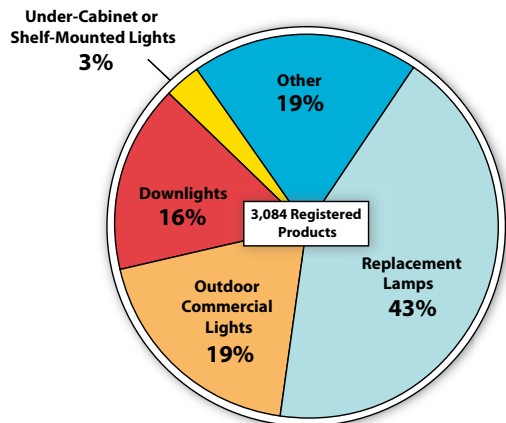
- **Tracking industry developments:** D&R's Lighting Facts Team closely follows product developments and adjusts its policies and procedures accordingly. Quick turnaround from problem to resolution makes the program responsive and gives it credibility in the industry. Lighting Facts also distills the relevant information for partners to keep them up to date.
- **Implementing a Quality Assurance Program:** Ensuring that labeled products continue to perform as claimed requires persistent oversight. In 2011, Lighting Facts unveiled its Quality Assurance Program, which aims to test the performance of 10% of the products on the approved product list each year. Manufacturers must update their labels on products that fail, or remove the label altogether.

**THE RESULTS**

Lighting Facts has given credibility to LEDs that perform as promised—and persuaded many manufacturers to improve the quality of LEDs that don't. Today, some of the largest retailers, distributors, utilities, and lighting designers in the nation demand the Lighting Facts label when choosing LED lighting products.

BY THE NUMBERS	
<b>Manufacturer Partners</b>	264
<b>Lighting Pro Partners</b>	206
<b>Retail and Distributor Partners</b>	209
<b>Approved Products</b>	3,084

Partner and product counts as of July 29, 2011



Lighting Facts Registered Products as of July 2011

"To revolutionize the way we light our homes and businesses, Cree must be able to earn the trust of lighting designers, engineers, architects, and customers. Cree's customers frequently ask the company to explain its technology and compare it to other products they have seen. The Lighting Facts label is a clear, straightforward, and trusted way to compare relevant data in a format that everyone can understand." – **Cree**

"...the Lighting Facts program has served as a great educational and awareness tool for customers. The label makes a quality statement and provides suppliers guidelines of THD's minimum expectations for the technology." – **The Home Depot**

Learn more about Lighting Facts at [www.lightingfacts.com](http://www.lightingfacts.com).

**DESIGNING A PARTNERSHIP PROGRAM? LET US HELP YOU.**



**For more information, contact:**

David Steiner, President  
 D&R International  
 1300 Spring Street  
 Silver Spring, MD 20910  
 301-588-9387  
 dsteiner@drintl.com