

HERE WITH YOU. HERE FOR YOU.

Buy better lighting in 5 steps.

The purchasing process for LEDs doesn't have to be overwhelming. All you have to do is follow these steps.

Identify a supplier. A semiconductor chip is an essential component of LED lamps. Chips from recognized suppliers, such as Nichia, OSRAM Opto, Samsung, Philips Lumileds, LG Innotek, Seoul Semiconductor or Cree, are typically an indication of quality.

2

Determine the warranty length. The longer the warranty, the more confident a manufacturer is in product life. A 5-year warranty is the minimum. Look for the maximum number of diode failures, acceptable color change, power supply requirements, dimmer use and type, and maximum LEDs per circuit allowed.

3

Confirm the testing standards. Manufacturers report lighting performance data that's been gathered using these industry-approved testing standards:

- Illuminating Engineering Society (IES)
 - LM-79 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products
 - LM-80 Measuring Lumen Maintenance of LED Light Sources

4 **Spot the quality certification.** Is the product certified for quality by either ENERGY STAR® or the DesignLights Consortium? The DOE LED Lighting Facts label displays important measures, such as light output and efficacy, that must be tested to industry standards.

5 **Consider temperature limits.** Typically, LED lighting will start to have significant lumen output degradation and reduced life when operating at 110°F ambient temperature. All manufacturers have designed its heat sink differently, so ask them for recommended ambient temperature range. From a cold temperature standpoint, LEDs operate better the colder it gets.

Ready to buy? Contact National Grid. We can help you choose the best lighting for your business. Call 1-800-787-1706, email energysavings@nationalgrid.com or visit ngrid.com/business.