

Very energy efficient » greater than 80 lumens/watt and still improving

Low-temperature-friendly » no issues starting in cold environments

Environmentally friendly » contains no mercury, lead or other heavy metals

Instant on » reaches full brightness in nanoseconds

What differentiates Ideal Lights from other LED retrofit suppliers?

Inherently rugged » no filament to break

Extremely long lifetime » 50,000 hours to 70% lumen maintenance

Directional » no wasted light; any pattern possible

High-quality light » no compromise between efficacy and CRI

Certification

CE approved - Like all suppliers of products in Europe, all of our products have undergone CE testing and are marked with the CE Logo.



ROHS Compliant - Restriction of Hazardous Substances. All of our LED products are free from hazardous materials as defined under ROHS regulations.

Many of our products have undergone further certification and testing.

Our LED Tubes are certified to the following standards:

EN 60598-1:2004+A1
EN 60598-2-1:1989
EN 55015:2006
EN 61000-3-2:2006
EN 61000-3-3:1995+A1+A2
EN 61547:1995+A1



Fully harmonic compliant to BS EN61000-3-2

Our range of LED Tubes have undergone EMC testing and are fully harmonic compliant. This testing standard is required to meet EC regulations with regards to optimal power usage and unwanted emissions with lighting fixtures drawing more than 25 watts in total.

BS EN 61000-3-2 deals with the limits of harmonic currents injected into the public supply system. It specifies limits of harmonic components of the input current which may be produced by equipment tested under specified conditions.



The vast majority, if not all, of our competitors LED products do not have this certification and hence are not compliant for multi-tube fixtures.

Burn in Testing and Evaluation

Product Evaluation

Products from many material and component suppliers have been tested and evaluated. Only products that have passed our strenuous testing and design criteria are used in our product range.

Our product range incorporates only the highest quality LEDs and driver circuitry. Our commercial high intensity range uses only CREE LEDs as they have been proven to be the most reliable and brightest LED components on the market to date.

Product Testing

All of our LED products have undergone extensive testing, to determine if they meet or exceed the performance levels claimed by our component and material suppliers and can satisfy in full our specification requirements for light output, reliability and longevity.

Our LED tubes and spots have undergone 1000 hours testing cycles to determine projected life-spans and lumen maintenance levels over the life-span of the product.

Thermal stress testing has been performed to determine life spans under various environmental conditions.

Custom Design and Modification

Where products fail to meet our demanding standards, we work with the supplier to introduce modifications to the design, material, component or manufacturing processes and build these improvements into our products to ensure they continue to deliver exceptional reliability and performance.

Quality Control Checks

We have worked with our suppliers to enhance quality control from production to delivery. We frequently perform checks on shipments to ensure the products are continue to meet our design and performance criteria.



In-House Capability

Product Design & Manufacture

Ideal Lights is more than just a supplier and importer of LED products. As well as many of our current product range being designed to our specification, we have an inhouse design team designing the next generation of Energy Saving Products.

Our design team has 10 years experience in electronic and thermal dynamic design - necessary skills to alleviate the two main design problems with LED Technology - driver reliability/compatibility and heat dissipation.

Current projects include a unique replacement series of T8 LED tubes that are compatible with existing emergency lighting systems

Like the majority of our product range, our future lamps are designed to be drop in replacements with the minimum, if not no, changes in wiring or fixtures.

Wide Product Range

Ideal Lights offers a unique wide product range from LED spots to LED Tubes - covering the majority of standard spot fittings and 2 to 6 foot T8/T12 Fluorescent Tube fittings.

Combined with our range of retrofit LED lamps we also stock a wide range of solid state LED fixtures such as LED high bay and flood lighting.

This makes Ideal Lights a one stop shop for all your energy saving lighting solutions.



Specifications and Standards

Ideal Lights believes strongly in setting industry-leading standards against which the vast range of LED products that have flooded the market place can be judged.

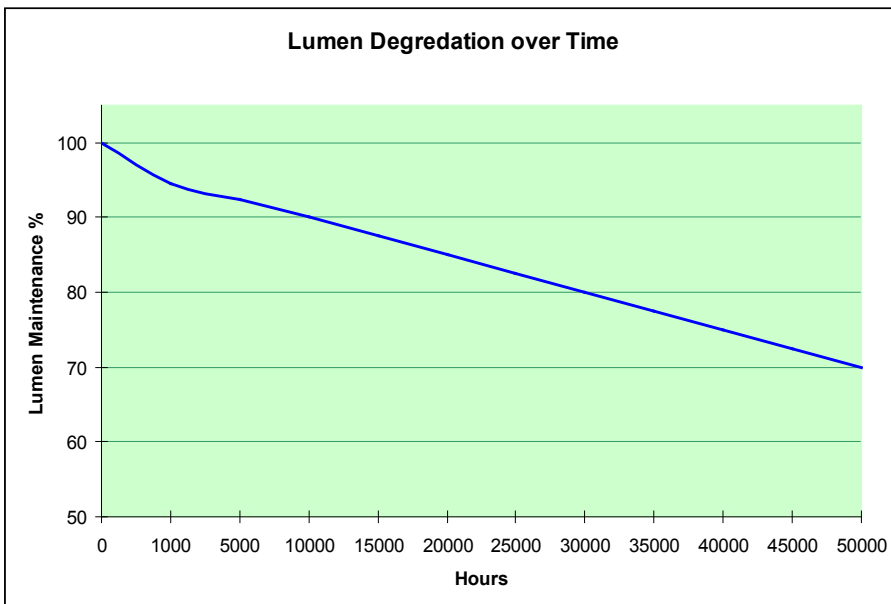
The great majority of LED products available to date are cheap foreign imports, which have had no standards or testing applied to them - where the only specifications that exist are from the manufacturers, whose specifications and performance claims are often unsubstantiated or exaggerated.

We have certified and verified our product range so that a valid specification sheet can be produced, based on real international performance data.

Lumen Maintenance

One aspect of LED lighting that is often overlooked is the lumen maintenance performance. Many LED designs result in a rapid degradation of light output over a short period of time. From products we have evaluated this has been as much as a 50% reduction of light in as little as 1000 hours of operation.

The majority of our LED products use CREE LED's because of their substantially extended life-span and lumen maintenance over their operational life. Other high quality LED's include Sharp and Seoul LED's.



Lumen Maintenance of our commercial grade range of High Intensity LED Spots.

After the initial lumen burn in time of 1000 hours, lumen levels drop fairly linearly across the life-span of the lamp.

CREE has accumulated operating data in excess of 20,000 hours. CREE has extrapolated LED lifetime according to the ASSIST method. Based on this method, CREE projects XLamp LEDs to maintain an average of 70% lumen maintenance after 50,000 hours, provided the LED junction temperature is maintained at or below 80°C.