



## **Illuminating Light for a Cooler Planet™**

### **Environment & Building Green**

Recent estimates show building creates 40% of the entire World's greenhouse gases. Investing in new technology such as LEDs for your business or school now may not only represent a progressive step toward human progress, but may soon become a government mandate. LEDs for commercial use can aid in the USGBC's LEED (Leadership in Energy and Environmental Design) points in four specific areas of impact in new construction or renovation certification.

iOS has LED products for new construction as well as retrofits, feel free to inquire about our products by emailing us at [info@ioslight.com](mailto:info@ioslight.com).

### **LEED Certification**

LED lights for businesses are a crucial component to any organization seeking LEED certification. While no single product in and of itself can certify a building as "green," LED commercial lighting fixtures offer tremendous advantages that contribute points toward LEED certification, from LEED New Construction, LEED Operations & Maintenance, LEED Commercial Interior and not limited too. LEED has 5 major areas that LEDs can aid a business to achieve LEED certification: energy and atmosphere, sustainable sites, indoor environmental quality, materials & resource and innovation and process design.

We at iOS encourage all businesses to invest in LED lighting now, assuring them that in the long run the money they save will both recover the procurement costs of the purchase and help recession proof their business by reducing overhead and accumulating a budget surplus.

### **LEED Certification (continued)**

Furthermore, earning points toward a LEED certification can also help recession proof a budget by preparing a business in advance for the inevitable changes that will very soon sweep the entire lighting industry as global concerns over energy consumption and climate change mounts. Below are some examples of the possible LEED points achievable.

#### **ENERGY AND ATMOSPHERE (1-10 Points)**

For every 1 million kWh in energy we save in the world, 777 metric tons of carbon dioxide will be eliminated from Earth's atmosphere. LEDs can make significant progress toward this goal. LED task lighting is more efficient than incandescent and HID lights, they dissipate less heat into space. The cooler temperature places less strain on the HVAC system and consequently cuts cooling costs. LED task lighting produces a much more uniform and directional form of illumination than do traditional lights. Because of this, lower levels of light can be utilized to





meet minimal lighting requirements, thus further driving power costs down.

#### SUSTAINABLE SITES (1 Point)

Light pollution is a problem that presents a growing concern to large and mid-sized cities that are experiencing increased urban sprawl and an influx of job seekers. Combined with the proper control system, iOS Commercial Lighting can equip businesses with full cutoff LED site and architectural area luminaries to earn light pollution credit.

#### INDOOR ENVIRONMENTAL QUALITY (1 Point)

Indoor lighting is always better when it is controllable and easy to set to desired levels. Because indoor LED business lights are fully dimmable, they can earn the 1-point credit for lighting control provided they are connected to the correct type of controller.

#### INNOVATION AND DESIGN QUALITY (1-4 Points)

LED lighting represents a revolutionary source of technology that is environmentally friendly and extremely high performance. Any business that integrates LED lighting into its scope of operations can potentially earn credit toward certification on the basis of progressive thinking and proactive change.

#### MATERIALS & RESOURCES (1-2 Points)

In LEED for Operations & Maintenance, sustainable purchasing in business utilizing LEDs reduces mercury in lamps aiding to establish and maintain a toxic material source reduction program as well as to reduce the amount of mercury brought onto the building site through purchases of the LED lamps. The project may be counted towards the plan compliance because LEDs do not contain mercury and also have energy efficiency better than their mercury-containing counterparts one is replacing.

#### **Additional Advantages & Benefits**

LED lighting for business saves money not only on power costs, as well as cooling costs, but also on disposal and maintenance costs. Because these luminaries can last over 50,000 hours, replacements are very infrequent in comparison to HID or, even worse, incandescent. Because the light bars in these luminaries contain no mercury, there is no toxic waste disposal fee, and many newer fixtures feature an aluminum die cast build that is completely recyclable. All of the iOS LED products are ROHS compliant as well as ETL/UL compliant.

For the true pioneers, LEDs provide the first truly viable light source through photovoltaic means. In the past, it simply was not possible to get enough solar power or wind power to light an incandescent or HID lamp. However, since LEDs require minimum voltage compared to other lamp types, solar &/or wind energy becomes a very real potential source of power that could truly change the world and end the energy crisis in the future.

