



## **Axlen Lighting**

18809 Cox Avenue, Suite 130  
Saratoga, CA 95070

USA

e-mail : sales@axleninc.com

## Excellence in LED Lighting

### **Axlen LED Panels: Still the Best in Class and Best in Value**

Over four years ago, when Axlen introduced the first generation of our revolutionary edge lit LED e-Solis panel, we were pioneering a new approach to commercial, industrial, and office lighting. In order to make full use of the high efficiency of the latest mid-power LED chips, we designed a new luminaire architecture that specifically took advantage of their unique performance. At the time, this represented a major departure from the current LED lighting designs, which had focused on simply adding LEDs to existing form factors- Edison type fixtures, fluorescent tube architectures, high bay metal-halide type canopies, etc. Fast forward to today and it seems that LED panels are everywhere. How does an end user go about making an informed purchase decision? So, if the panels meet the necessary UL requirements and are listed on the DLC qualified products list....is the lowest priced panel good enough?

### **All LED Panels Are Not Created Equally**

As an end user, a key question to ask is what is the expected operational lifetime of the new LED lighting system. If you are only anticipating your new LED panels to operate for three years, then the low-priced panel might be the best investment, assuming you find the aesthetics and lighting distribution acceptable. However, in most cases, when making a decision about a new LED lighting installation, it is usually a long term investment. This is where the e-Solis remains the best in class and best in value. Apart from its elegance, proprietary design architecture and wide product offering, there are three key areas where e-Solis excels and simply outperforms the low-priced alternatives:

- Efficacy (or energy efficiency)
- Lumen maintenance (or lifetime)
- Ecosystem (smart lighting control)

### **e-Solis: Efficacy**

The efficacy or energy efficiency of a luminaire is a measure of the electrical power (in W) required to create a certain lighting level (in lumens, lm). As a reference, an old 60W incandescent light bulb has an output of about 800lm or an efficacy of 13lm/W. e-Solis panels have an efficacy up to 120lm/W, that is 33% higher than the typical low-priced panels.

Why should you care? The higher the efficacy, the less electricity it will take to light your facility. For long term operation, the amount of power required to illuminate the facility becomes the dominant cost driver. So efficacy is a big deal, don't compromise - the highest efficacy will give you the lowest cost of ownership.

### e-Solis: Lumen Maintenance

Lumen maintenance (or projected lifetime) is a measure of how long the LED chips will operate before the luminaire output is reduced to a certain lighting level (e.g., an L70 value represents the time it takes for the LED light output to be reduced to 70% of its initial level). e-Solis panels have lumen maintenance values that are 3-4 times longer than typical low-priced panels.

Why should you care? Again, it's all about your operational and maintenance costs. To maintain required lighting levels you'll be replacing low end panels years before you need to replace an e-Solis panel. Plus you'll need to start with more initial light output from these low-priced panels in anticipation of a faster degradation in the light output. So, Lumen Maintenance matters – the highest value will give you the lowest cost of ownership.

### e-Solis: Ecosystem

Lighting controls have become essential for any new lighting installation

Why? Well, we're all worried about our energy footprint. Low voltage LEDs lend themselves to dimming and repeated on/off control. In fact, unlike conventional light sources, LEDs will last even longer if dimmed. e-Solis is like no other edge lit LED panel - it's got a whole lighting control ecosystem specifically designed for it. CLEON is Axlen's plug and play, cost-effective, lighting control system- it requires no external power source, just the CLEON sensor and simple RJ11 cables to connect and you are ready to go. Task tuning, daylight harvesting, occupancy/motion sensing – it's all part of the e-Solis lighting control ecosystem. If you've invested in a new LED lighting system, then you want to fully capitalize on your potential energy savings- dim the lighting when the natural sunlight is high, turn them off when nobody is there. With e-Solis you have a lighting control ecosystem that's snap in and ready to go- you won't find this in the low-priced panels. e-Solis ecosystem means lowest cost of ownership.

### e-Solis: Lower Cost of Ownership

