

Performance

WHAT IS AccuRay® OPTIC DESIGN LUMINAIRE?

In simple words, we have taken edge lighting to the next innovative level in our fixtures. Our newly designed AccuRay® optic luminaires carry 98% efficiency in LED-to-optics coupling mechanism. AccuRay® optics are engineered with embedded micro dot optical matrix which control the light beam in the shape designed. The technology is limitless in creating whatever optical distribution desired. For maximum uniformity and glare-free performance, a high performance reflector and diffuser further guide and extract the light with superb control.

WHAT IS THE BRAND FOR THE DRIVER?

The driver currently provided is from OSRAM; however, we continually evaluate our components to provide our customers best in class performance.

Specifications: Input voltage (120/277V & 347V), Tunable drive for optimized output (50W & 85W), Dimming Control 0-10V, Regulatory Listings UL, CE, FCC B

WHAT ARE THE PERFORMANCE CHARACTERISTICS OF THE DRIVER?

All LED drivers used in our LED ambient products are highly efficient, have a minimum power factor of >0.92, THD less than 20% and have MTBF > 100,000h at full load and 25C ambient conditions.

HOW LOW WILL THE 0-10V DIMMER OPERATE?

Recommendation is 10% however we can also supply a version to operate as low as 1% within acceptable performance expectations. Please be aware that as you move to lower levels there is risk for irregularities to occur in dimming performance.

WHAT IS THE STATUS OF 347 VOLT?

Contact factory for dedicated 347V LED driver options.

WHO IS THE LED PARTNER?

We are using Samsung LEDs in this particular product. However, our philosophy is not to approve long-term partnerships as we continually evaluate our components to provide our customers best in class performance. We understand the value of having the flexibility to develop relationships based on providing innovative LED solutions.

HOW ABOUT LUMEN MAINTENANCE?

LED gradually produces less light as it ages. After much discussion among industry professionals, the Illuminating Engineering Society of North America [IESNA] has established guidelines for this rating. The Standard is called LM-80. This standard establishes a definition of lifetime when 70% of the initial lumens are maintained (L70=XXh). As with device mortality, the lumen maintenance calculation is considered in the predicted lifetime of 60,000 hours. Due to test guidelines by TM21 standards, manufacturers can only predict 6X actual lab tested hours (i.e. if lab tests 10,000, then predictions cannot exceed 60,000h) and thus the lifetime changes as LEDs get better and more efficacious. This particular product has lifetime of L80@60,000h by TM21 (80% of lumen output is maintained after 60,000h of operation).

HOW LONG IS 60,000 HOURS?

This depends upon how many hours per day the fixture operates.

HOURS OF OPERATION	YEARS
24 per day	6.8
12 per day	13.7
10 per day	16.4
8 per day	20.5

HOW DOES LED PHOTOMETRY COMPARE TO LINEAR FLUORESCENT?

LED luminaires are tested using absolute photometry vs relative photometry, which is the standard for all other light sources. Therefore, LED lumen ratings cannot be treated equally to linear fluorescent lumen ratings. A better approach is to compare FC levels in different applications.

WHY IS ABSOLUTE PHOTOMETRY USED FOR LED LUMINAIRES?

LED's produce more or less light depending on thermal management, optical efficiencies, and the way the LED's are electrically operated. The nature of LED technology makes it highly dependent on the integration within the luminaire. To account for this fundamental difference, the Illuminating Engineering Society of North America [IESNA] recommends using absolute photometry instead of the relative photometry model used for traditional sources. Absolute photometry measures very precisely the actual lumens emitted from a distinct luminaire versus relative photometry which can be adjusted to account for various lamp lumens.

Production

WHERE ARE ALL THE METALUMEN PRODUCTS, INCLUDING LED PRODUCTS, PRODUCED?

Guelph, Ontario, Canada.

WHAT IS THE LEAD-TIME FOR STANDARD PRODUCTS?

6-8 weeks

WHAT QUALITY ASSURANCE MEASURES DO WE OFFER TO ENSURE RELIABLE AND CONSISTENT PERFORMANCE?

Metalumen runs Photometric, thermal, CCT, electrical and quality testing on all luminaires to ensure they meet their stated performance over the lifetime of the product. All components are further evaluated and qualified through 100% end-of-line testing.

WHAT STANDARDS AND COMPLIANCE LISTINGS APPLY?

Modules are UL/CSA & RoHS recognized and compliant components. Luminaires are UL/QPS listed for 25°C ambient environments, and LED modules comply with IESNA LM-79 and LM-80 standards.

General

WHERE CAN I FIND MORE INFORMATION ON METALUMEN LED PRODUCTS?

Please visit www.metalumen.com

WHAT OTHER SALES TOOLS ARE AVAILABLE FOR OUR LED PRODUCTS?

Please visit www.metalumen.com or the Agent website at http://www.metalumen.com/Agent_Portal for additional information such as: training, photometry, spec sheets, warranties and more.

WHAT IS THE WARRANTY FOR THE COMPONENTS?

Five years for the entire luminaire, including the driver, LED boards and the fixture. All warranties are supported and serviced by Metalumen. Terms and conditions apply.

WHO DO WE CONTACT IF THERE IS A FIXTURE ISSUE?

Metalumen handles all warranty service and replacement issues for the LED boards and drivers. Please contact our Sales department for assistance.

WHAT LISTING DO WE OFFER?

cULus, CSA, or QPS listing to meet U.S. and Canadian standards, MRI safe for non-ferrous and electromagnetic interference-free compliance apply to specific luminaires. We are also listed with DLC and continue to have our products added to the DLC's QPL.