ULF15000 SP Series Area Lighting

ULF15000 SP Series

The OptoElectronix™ ULF15000 SP Series Area Lighting is designed as a retrofit kit for new or existing shoe-box. It consists of a set of highly reliable LEDs, thermal management system and a reliable power module. Input to the ULF15000 SP ranges from 100VAC to 277VAC 50/60Hz. Integrated electronics ensures constant current through the LEDs to ensure reliability and consistent light quality.

Features

- Sealed Construction
- Water-resistant
- Customizable Beam Angles
- Adaptable to most shoe-box lighting fixtures
- Uses high quality LEDs from reliable manufacturers

Key Applications

ULF15000 SP was designed specifically to retrofit into shoe-box luminary housing commonly used for HPS and Metal Halide lighting and optimized to deliver light directly to the working surface. Since shoe-boxes often varies in shape and sizes, the unique patented adjustable mounting adapts to the profile offering good thermal perfromance. It can be used in a wide variety of applications such as parking bays, flood lighting, factory lighting and warehouse. Mounting of fixture can be on a pole or wall mountings.
Simple installation procedures, can be done by electricians.

Thermal Management

ULF15000 SP have a purpose built-in heat sink for reliable operations. It is designed with use of thermal profile and simulation so that the LEDs would be operated significantly below the maximum specification limits, hence ensuring prolonged life-span.

Custom Options

The beam pattern of the ULF15000 SP can be customized per requirements.
Specifications below show the Type II and Type V beam patterns.

OptoElectronix is the leader in *The Art of LEDs* — the conception, design, and manufacture of cutting-edge, standard, highly efficient LED-based lighting.

www.optoelectronix.com   **OptoElectronix, Inc. San Jose, California, USA**
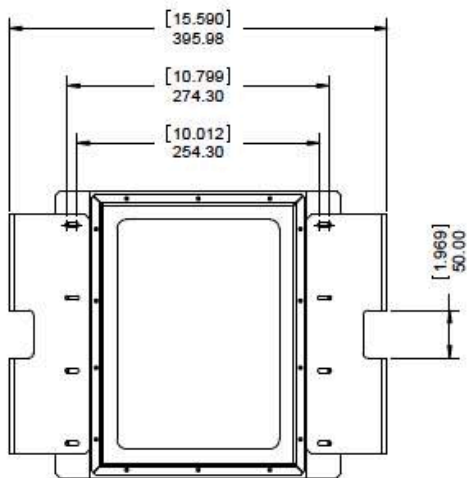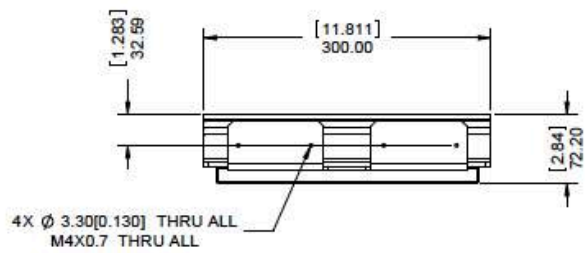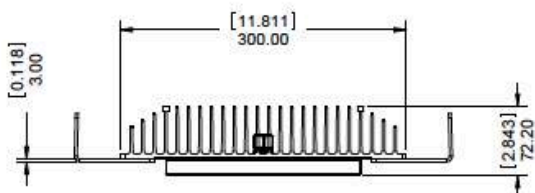
1

Certifications and Completed Tests

UL/CSA: Power supply is UL or CSA approved.

Ingress Protection Rating: IP66 – dust tight and protected against powerful water jets.

DLC Approval: To be qualified by models and fixtures used. Eligible for rebates from many utilities.
IESNA LM80-08: LEDs used comply with LM80-08 standards ensuring life-span.

Mechanicals

OptoElectronix is the leader in *The Art of LEDs* — the conception, design, and manufacture of cutting-edge, standard, highly efficient LED-based lighting.

www.optoelectronix.com   **OptoElectronix, Inc. San Jose, California, USA**

2

Assembly into a Shoe-box Luminaire Fixture
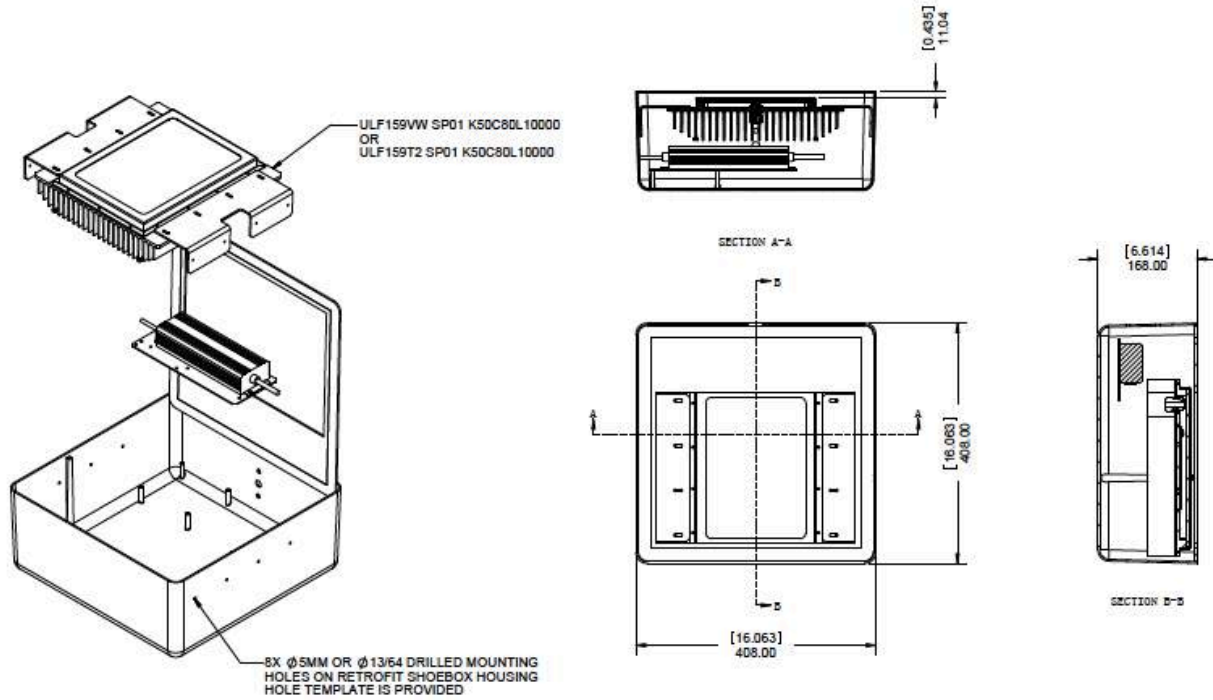
Product Specifications

ULF159VW SP01 K50C80L10000	Unit	Specifications
Input Voltage (nominal, AC 50/60Hz)	volts	120 to 277
Total Power	watts	110 to 130
Power Factor		≥0.9
Luminous Flux	lumens	10000
Color Temperature	^{o}K	5000
Color Rendering Index (CRI)		≥80
Beam Angle		Type V Beam Pattern

ULF159T2 SP02 K50C80L9000	Unit	Specifications
Input Voltage (nominal, AC 50/60Hz)	volts	120 to 277
Total Power	watts	110 to 130
Power Factor		≥0.9
Luminous Flux	lumens	9000
Color Temperature	^{o}K	5000
Color Rendering Index (CRI)		≥80
Beam Angle		Type II Beam Pattern

Typical Environmental Specifications	
Operating Temperature	-20°C to 50°C
Thermal Management	Self Cooled, no additional heat sinking required
Lumens Maintenance at L70*	>50,000 hours

*Warranty for 35,000 hours or 5 years, whichever comes first.

Operating Conditions:

A) Operating Voltage Ranges:

i. Product was designed to the Utilization Voltage Ranges specified in ANSI C84.1 ELECTRICAL POWER SYSTEMS AND EQUIPMENT – VOLTAGE RANGES (60 HERTZ) which specified Range A as the favorable working range while range B as the tolerable range.

Utilization Voltage Ranges per ANSI 84.1				
Nominal Service Voltage	Range B Minimum	Range A Minimum	Range A Maximum	Range B Maximum
120	104	108	126	127
277	204	249	291	293

ii. The ULF15000 SP Series is operable at voltages within the Range B minimum of 120V (ie 104V) and the Range B maximum of 277V (ie 293V).

OptoElectronix is the leader in *The Art of LEDs* — the conception, design, and manufacture of cutting-edge, standard, highly efficient LED-based lighting.

www.optoelectronix.com   OptoElectronix, Inc. San Jose, California, USA

4

iii. In instances sustained voltage levels fall outside Range B maximum of 277V voltage product may not operate satisfactorily, and protective devices may be needed.

B) Transients and Surge Immunity:

i. A 10KA Surge Protection Device (SPD) is included in the assembly. In installations where higher surges are expected from power switching, lightning etc, exceeding this specification it is recommended that appropriate SPDs be installed.

Light Distribution Type

A simplified light distribution pattern is presented below.

Type 1 is very lineal and intended for 1 or 2 lane roadways.

Type 2 is still lineal but wider in the front to accommodate 4 lane roadways, or wider drive lanes.

Type 3 (commonly known as a "Bat-Wing") is suitable for perimeters, often where other interior pole placements fill the site.

Type 4 (commonly known as a "Forward Throw" or Asymmetric) Is best along perimeters where spill light is a concern or there are no place to add poles within a site.

Type 5 – is available in a round or square pattern. Best suited for interior areas within a site or on the median of 4-6 lane roadways.

OptoElectronix is the leader in *The Art of LEDs* — the conception, design, and manufacture of cutting-edge, standard, highly efficient LED-based lighting.

www.optoelectronix.com   **OptoElectronix, Inc. San Jose, California, USA**

5