UltaSpot LED 01 Flood
The Ultimate LED Spot Light

Features

- Standard 0-10V Dimming
- Optional Internal Glare Louvers
- Integral and Remote Driver Operation
- Modular Design to Replace up to 1000W HID Luminaires
- 40C Ambient Rating
- Marine Rated (UL1598A)
- Superior spill and glare control
- Designed and manufactured in Irving, Texas

<table>
<thead>
<tr>
<th>Product</th>
<th>MODULE</th>
<th>FINISH</th>
<th>DRIVE CURRENT</th>
<th>CCT</th>
<th>CRI</th>
<th>BEAM</th>
<th>Voltage</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>USLED = UltaSpot LED</td>
<td>C1 = 1 MOD</td>
<td>G = Gray Powder Coat, DB = Dark Bronze Powder Coat, C = Custom Powder Coat</td>
<td>52 = 525mA, 70 = 700mA, 01 = 1050mA</td>
<td>35 = 3500K, 40 = 4000K, 50 = 5000K</td>
<td>70 = 70, 80 = 80</td>
<td>N = Narrow, M = Medium, W = Wide, UW = Ultra Wide</td>
<td>1 = 120-277V, 2 = 347-480V</td>
<td>R = Remote Driver, F1 = 1 Hot Fuse, F2 = 2 Hot Fuse, FT = Factory Tune, DMX = DMX Integration, GC = Internal Glare Control, PA = 3 Pin Receptacle, PB = 5 Pin Receptacle, PC = 7 Pin Receptacle, FCV = Full Cutoff Visor</td>
</tr>
</tbody>
</table>

1. Remote Driver option requires separate driver enclosure to be ordered separate from luminaire. Various options are available for remote driver enclosure, contact factory for additional details.
2. FT option allows factory reduction in drive current to meet project specific need. Contact factory for more details.

SPECIFICATIONS AND DETAILS ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION, CONTACT CAROLINA HIGH MAST FOR UP TO DATE DETAILS.
CAROLINA HIGH MAST IS A DIVISION OF CHM INDUSTRIES, INC.
WWW.CAROLINAHIGHMAST.COM
*NOTE: The above outputs are available with standard driver output options. Drive current for each model can be tuned down further to 40% of optioned output with FT option. Contact CHM for additional details.
UltaSpot LED Specifications

General Description

The complete luminaire is ETL/cETL Listed in conformance to standards ANSI/UL1598, ANSI/UL1598A (Supplemental Requirements for Luminaires for Installation on Marine Vessels) and CSA C22.2 No. 250.0 with an ambient temperature of no less 40°C. The luminaire is designed to thermally isolate the driver from the LED housing by a minimum of 2.5”. The driver and optical housings shall be fabricated of duty cast aluminum with a minimum wall thickness of 3/16”. The fixture is designed to mount to the same provisions as legacy style HID luminaries with a ¾” through bolt. The complete luminaire assembly is IP65 rated.

Housing

To ensure long life of the drivers, the housing is thermally isolated from the LED housing. To increase cooling efficiency, the housing utilizes integrally cast cooling fins. The housing mounts to the support structure with a heavy gauge steel trunion. The trunion has methods to aim the fixture both horizontally and vertically and includes a position memory device to ensure the fixture is returned to the proper down angle upon service. Each LED module supports up to 300W of lighting capacity. The module is available for use in both integral driver and remote driver configuration.

The housings shall be constructed of 363F aluminum and shall be melted and manufactured in the USA.

Electrical System

The drivers accept the specified line voltage, to within +/- 10% without the aid of an integral step down transformer. The drivers include integral transient surge protection in accordance with IEEE C62.41 6kV/6kV. The LED drivers have a minimum power factor of 0.95 with a Total Harmonic Distortion no greater than 20% with inrush current conforming to NEMA 410. The drivers meet FCC part 15 (Class A) Non-Consumer Limits. Drivers come standard with 0-10V dimming leads as well as output tuning. The system includes a secondary surge protection system with supplementary coverage in accordance with IEEE C62.41.2 C High (10kA and 10kV). The secondary surge protection is capable of suppressing a maximum of (1) 20,000 A pulse or (120) 3,000A pulses (8x20 microsecond). The light emitting system is comprised of two (2) thermally isolated LED boards per module each with a dedicated driver to provide overall system redundancy and ease of troubleshooting.

Optic Assembly

Each LED is provided with a dedicated precision cast optical constructed of PMMA. The optical array is held in an optical tray to ensure precision location of each optic and provide superior vibration stability. Each optic tray includes integrally cast glare control ribs to provide reduction in view of optical flashed area in off axis viewing angles. The LEDs generate the specified color temperature with a tolerance of no more than +/-6.5% to ensure consistent color across the project. 70 CRI units are provided with a minimum single 5-step MacAdam Ellipse and 80 and 85 CRI units offer a minimum single 3-step MacAdam Ellipse. All CRI offerings are stated as minimum, typical CRI will be higher or equal to published minimum.

Serviceability

The system is designed to ensure easy and quick field service. Each LED board is replaceable in the field and utilize ‘poke-in’ style connector. Any (1) module can be completely removed from the system without adjusting the aiming angle or removing the complete luminaire. Drivers are widely available F-Can style 150W driver that are non-proprietary and field proven with approved replacement units available from at least two manufacturers. The LED boards are single circuit in design so that failure of one diode extinguishes the entire board (two boards per module). This provides a visible indication of trouble with failure originating from either driver or board, both of which are easily replaceable in the field.

Warranty

The entire product shall be covered by a minimum five (5) year limited fixture warranty. The warranty shall cover any failure in emission of light from the luminaire. This shall include any one (1) driver or any one (1) LED chip. Longer term warranties are available, contact CHM for additional details.