

# HXB Series

LED High-Bay Luminaire

Rev. Date: V6 07/29/2024

## Product Description

The HXB Series LED High-Bay luminaire delivers 70,000 lumens with illumination performance to allow one-for-one replacement of 750W and 1000W HID luminaires. With exceptional rated lifetimes and operating temperatures, the HXB delivers industry-leading lumens per watt while reducing maintenance in the toughest environments.

**Applications:** Industrial, manufacturing, warehouse, retail, convention centers, and arenas

## Performance Summary

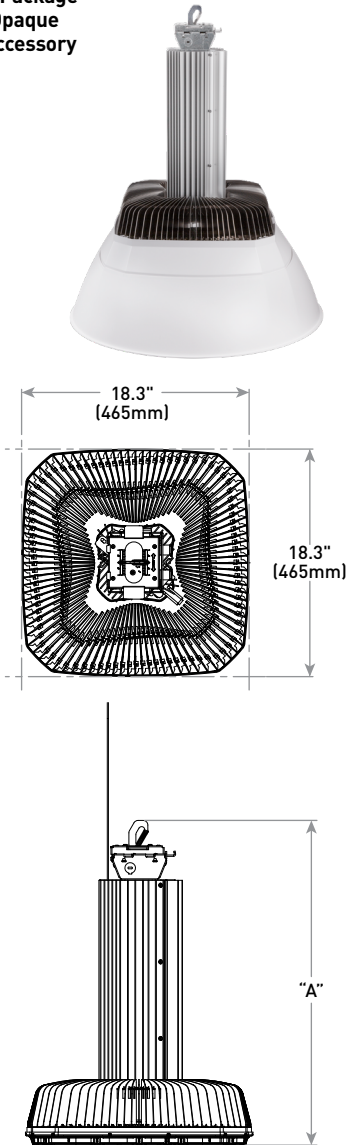
|  |
|--|
| <b>Initial Delivered Lumens:</b> 70,000  |
| <b>Efficacy:</b> Up to 144 LPW   |
| <b>CRI:</b> 70 or 80+  |
| <b>CCT:</b> 3500K, 4000K, or 5000K   |
| <b>Mounting:</b> Hook and cord or pendant  |
| <b>Input Voltage:</b> 120-277 VAC or 347-480 VAC (without step-down transformer)   |
| <b>Dimming:</b> 0-10V dimming to 10% (standard)  |
| <b>Operating Temperature Range:</b> -40°C to +60°C (-40°F - +140°F)  |
| <b>Lumen Maintenance:</b> $L_{70} \geq 100,000$ hours at +60°C (140°F)   |
| <b>Limited Warranty*:</b> 10 years for luminaire; up to 5 years for Synapse® accessories; 1 year for luminaire accessories |
| Assembled in the USA by Cree Lighting from US and imported parts   |

† See <https://www.creelighting.com/resources/warranties> for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

## Accessories

| Field-Installed  |   |   |
|--|---|---|
| <b>Anti-Spin Adaptor</b><br>HXB-AS<br>- Anti-spin accessory for hook and cord mounting configuration   | <b>Synapse® SimplySnap 10V Interface</b><br>DIM10-220F<br>- 120V-277V<br>- Requires other Synapse components to complete system<br>- Use to retro fit controls to existing HXB 10V projects<br>- Refer to <a href="#">DIM10-220F</a> spec sheet for details |   |
| Field-Installed NEMA® Plugs  |   |   |
| <b>AP-515P</b><br>- 15 amp 120V Straight Blade Plug  | <b>AP-L615P</b><br>- 15 amp 240V Twist Lock Plug  | <b>AP-L2420P</b><br>- 20 amp 347V Twist Lock Plug |
| <b>AP-L515P</b><br>- 15 amp 120V Twist Lock Plug   | <b>AP-L715P</b><br>- 15 amp 277V Twist Lock Plug  | <b>AP-L820P</b><br>- 20 amp 480V Twist Lock Plug  |
| Reflectors   |   |   |
| <b>Single Pack</b><br>HXB-GS30-OP: White Opaque Reflector<br>HXB-GS30-WH: Clear Translucent Reflector<br><br>- All reflectors are 30" (762mm) impact-resistant polycarbonate<br>- Single pack SKUs ship as one reflector per box<br><b>Note:</b> Not recommended for use in gymnasium applications | <b>Multi Packs</b><br>HXB-GS30-OP-MP: White Opaque Reflector<br>HXB-GS30-WH-MP: Clear Translucent Reflector<br><br>- Multi-pack SKUs require a minimum order of 4 pieces or more, and ship together in as few boxes as possible                             |   |

Shown w/Hook  
70L Lumen Package  
and White Opaque  
Reflector Accessory  
w/Uplight



| DIM "A"       | Weight           |
|---------------|------------------|
| 26.1" (664mm) | 60 lbs. (27.2kg) |

## Ordering Information

Example: HXB-C-UV-70L-M-35K-7-UL-SV

| HXB    | C      | UV  |                      |                          |  |                            |                                  | SV           |
|--------|--------|---|----------------------|--------------------------|--|----------------------------|----------------------------------|--------------|
| Family | Series | Mounting  | Lumen Package*       | Optic                    | CCT  | CRI                        | Voltage                          | Finish       |
| HXB    | C      | UV<br>Universal Mount: hook and cord with 6ft cord, adaptor plate for pendant | 70L<br>70,000 lumens | M<br>Medium optic; 1.45C | 35K<br>3500K<br>40K<br>4000K<br>50K<br>5000K | 7<br>70 CRI<br>8<br>80 CRI | UL<br>120-277V<br>UH<br>347-480V | SV<br>Silver |

\* Lumen Package codes identify approximate light output only. Actual lumen output levels vary depending on CCT and reflector/lens selection. Refer to Delivered Lumens & Electrical Data and Reflector Illumination Performance tables for specific lumen values



Website: [creelighting.com](https://www.creelighting.com)  
US: (800) 236-6800 Canada: (800) 473-1234

**CREE**  **LIGHTING®**

Product Specifications

CONSTRUCTION & MATERIALS

- Aluminum bonded zipper fin heatsink
- IP65 rated optics
- Mounting choices of pendant or hook and cord
- Pendant mount has provision to accept ¾ IP pendant (by others)
- Hook mount is provided with factory installed spring lock hook for mounting and factory installed 6' (1.8m) 16/3 AWG white power cord
- Factory calibrated to hang straight; alignment required for pendant mount
- Includes 39" (991mm) tether to secure luminaire to building structure
- Not intended for use in environments containing airborne corrosive agents such as chemical solvents, cleaners, or cutting fluids


OPTICAL SYSTEM

- Fresnel lenslet optics for medium (1.4SC) lighting applications

ELECTRICAL SYSTEM

- Input Voltage:** 120-277V or 347-480V 50/60Hz
- Power Factor:** > 0.9 at full load
- Total Harmonic Distortion:** < 20% at full load
- Transient Protection:** ANSI C136.2 6kV/3kA surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Designed with 0-10V dimming capabilities to 10%
- 10V Source Current:** 0.30mA
- Operating Temperature Range:** -40°C - +60°C [-40°F - +140°F]

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for damp locations
- Fittings used for mounting shall be suitable for the maximum weight to be supported
- Customer supplied J-boxes (outlet boxes) used for mounting shall be listed and marked for the maximum weight to be supported
- Requires minimum 90°C supply conductors
- Designed for downlight applications only
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- RoHS compliant. Consult factory for additional details
- Assembled in the USA by Cree Lighting from US and imported parts
- Some configurations meet requirements of BAA and/or BABA. Consult factory when needed for a project: [www.creelighting.com/BAA-BABA](http://www.creelighting.com/BAA-BABA)
-  **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

| HXB Series Ambient Adjusted Lumen Maintenance <sup>1</sup> |             |                                  |                                  |                                   |                                    |
|--|-------------|----------------------------------|----------------------------------|-----------------------------------|------------------------------------|
| Ambient  | Initial LMF | 25K hr Reported <sup>2</sup> LMF | 50K hr Reported <sup>2</sup> LMF | 75K hr Estimated <sup>3</sup> LMF | 100K hr Estimated <sup>3</sup> LMF |
| 25°C (77°F)  | 1.00        | 0.95                             | 0.94                             | 0.94                              | 0.93                               |
| 30°C (86°F)  | 0.99        | 0.94                             | 0.93                             | 0.93                              | 0.92                               |
| 35°C (95°F)  | 0.98        | 0.93                             | 0.92                             | 0.92                              | 0.91                               |
| 40°C (104°F)   | 0.97        | 0.92                             | 0.91                             | 0.91                              | 0.90                               |
| 45°C (113°F)   | 0.96        | 0.91                             | 0.90                             | 0.90                              | 0.89                               |
| 50°C (122°F)   | 0.95        | 0.90                             | 0.89                             | 0.89                              | 0.88                               |
| 55°C (135°F)   | 0.94        | 0.89                             | 0.89                             | 0.88                              | 0.87                               |
| 60°C (140°F)   | 0.93        | 0.88                             | 0.88                             | 0.87                              | 0.86                               |

<sup>1</sup> Lumen maintenance values at 25 °C (77 °F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors.  
<sup>2</sup> In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.  
<sup>3</sup> Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

| Reflector Illumination Performance |              |                  |
|------------------------------------|--------------|------------------|
| Reflector                          | % of Uplight | Lumen Multiplier |
| HXB-GS30-WH Clear Translucent      | 0.3%         | 0.96             |
| HXB-GS30-OP White Opaque           | 2.1%         | 0.96             |

Reference <http://lighting.cree.com/products/indoor/high-bay-low-bay/hxb-series> for detailed photometric data. IES files include reflector multipliers  
**Note:** Not recommended for use in gymnasium applications



| Reflector Weights |                  |
|-------------------|------------------|
| Single Pack       | 10 lbs. (4.5kg)  |
| Multi Pack        | 35 lbs. (15.9kg) |

| Delivered Lumens & Electrical Data* |       |                    |        |              |                            |                   |      |      |      |      |      |
|-------------------------------------|-------|--------------------|--------|--------------|----------------------------|-------------------|------|------|------|------|------|
| Lumen Package                       | CCT   | Delivered Lumens** |        | System Watts | Efficacy<br>(LPW @ 70 CRI) | Total Current (A) |      |      |      |      |      |
|                                     |       | 70 CRI             | 80 CRI | 120-480V     |                            | 120V              | 208V | 240V | 277V | 347V | 480V |
| 70L                                 | 3500K | 66,600             | 62,300 | 485          | 137                        | 4.13              | 2.42 | 2.09 | 1.81 | 1.40 | 1.02 |
|                                     | 4000K | 70,000             | 64,200 |              | 144                        |                   |      |      |      |      |      |
|                                     | 5000K | 70,000             | 66,200 |              | 144                        |                   |      |      |      |      |      |

\* Data provided at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/-10%. Actual production yield may vary between -10 and +10% of initial delivered lumens  
\*\* Initial delivered lumen values based on luminaire without reflector. Refer to reflector Illumination Performance table for lumen multipliers when using reflector accessory