

High Wattage, High Bay LED Fixture

eHID to LED Technology



Introduction

Metrolight introduces a high wattage, high bay LED fixture that is powered by SmartHID™ technology and is fully compatible with Metrolight's control system. Metrolight's technology provides a uniquely innovative solution that protects the customer's investment by bridging between eHID and LED. Today customers can implement Metrolight's eHID solution and enjoy its many benefits. As soon as LED lighting becomes more accessible, customers need only change the light source to Metrolight LED as the ballast (driver), fixture and control system remain intact.



Main Features of the LED Fixture*

- 150-400W fully programmable LED fixture
- 160 high efficiency LEDs
- eHID 2 LED technology
- SmartHID™ ballast/driver
- Stable wide dimming range 100%-10%
- Optimized heat dissipation
- Extended LED life > 60,000 hrs.
- Selection of photometrics and color temperature 3200-5700°K

Control Features & Benefits

- Optimize energy savings
- Automatic scheduling
- Intuitive, user friendly GUI
- Control light points separately or as groups
- Detailed fixture operating parameters
- Reduce maintenance costs
- Simple & quick installation
- Internet accessible

* Available for beta installations at selected sites.

specifications:

High Bay LED Fixture

150/250/400 Watt



Operating Specifications

Metrolight SmarthID™ Electronic LED Ballast technology enables the use of lower wattage LED solutions without sacrificing maintained light levels. Fully programmable, the LED ballasts incorporate unique control capabilities including 0-10V analog dimming and full digital control with real time feedback.

General Input Specifications	
Frequency	50/60Hz
Inrush current	<25A
Harmonics (at nominal conditions)	Fully complies with EN61000-3-2
Total Harmonic Distortion	<10% at 120V, <10% at 208V, <15% at 277V.
Input current protection	Fuse (Internal)
Continuous full range dimming	<ul style="list-style-type: none">• 100% - 10% of full power (standard configuration)• Analog dimming current draw 1.5mA per luminaire. Maximum number of fixtures = 1.5mA x sensor current
Dimming options	<ul style="list-style-type: none">• 0-10V Analog dimming by relay, ambient sensor, daylight sensor or any other compatible sensor• Bi level dimming by relay or dry contact closure• Digital dimming - with individual light point control and real-time feedback
Lumen maintenance L70	>60,000 hours

General Specifications	
Operating temperature range	-30°C to +65°C / -22°F to 149°F
Operating humidity	0 to 95% RH non-condensing

LED Power	Total Flux (Lm)	Typical CCT (°K)	Typical CRI	LED Current	Light Angle	Luminaire Efficacy
400W	39,600	4000/5000	80	0.86A	120°/45°	90
250W	27,000	4000/5000	80	0.54A	120°/45°	90
150W	17,800	4000/5000	80	0.32A	120°/45°	96

General Specifications Continued	
EMC	FCC Title 47 Part 18 C (non-consumer): EN55015:2006 EN61547; EN61000-3-2; EN61000-3-3
Regulatory Approvals	UL1598 EN60598 CE
Surge Protection	IEEE C62.41 Category C Low Between phase and neutral 6KV / 3KA Between line and ground 10KV / 1KA

Protections	
Self-protection mechanisms	In the event of a short circuit, or open circuit; If the LED fails to light; At the end of the LED's life; Input current protection by internal fuse; Advanced surge protection between phase and neutral and between line and ground; Advanced output protection against arcing or shorting to ground
Heat Management	If fixture temperature rises beyond maximum level, fixture will gradually reduce its output power to 10%, allowing the fixture to cool. When the ambient falls again, the fixture will return to full output power

Dimming Specifications	
Analog dimming (standard configuration)	10V or grey/purple wires separated - 100% power; 0V or grey/purple shorted together - 10% power. Dimming is continuous for dimming signal between 0 to 10V. (Dimming can be reversed or maximum dimming value can be set to any level from 10-99% by special configuration)
Analog dimming fade time (standard configuration)	Fade time from 10% to 100% power - 10 seconds Fade time from 100% to 10% power - 10 seconds (Dimming fade time can be individually modified to any value from 10 seconds to 30 minutes through configuration)
MADLI digital control	<p>Metrolight Addressable Digital Lighting Interface (MADLI) is intended for use with Metrolight's SmartHID™ electronic ballasts to control lighting networks. It enables two way communication between the LampID concentrator, a state-of-the-art, robust and reliable web-based controller, and the ballasts, providing ultimate controllability</p> <p>Each fixture is assigned a MADLI address between 1 and 1023. By using the digital control feature, each ballast can be individually turned on or off or dimmed. Ballasts can connect to control system by low voltage cabling, wireless or PLC. The ballasts also provide real time feedback on operational status, power consumption, lamp voltage, ballast temperature and other ballast and lamp parameters.</p>

Reconfiguration	
Configuration capability	Using Metrolight's SMART TOOL control software the fixture can be reprogrammed/ reconfigured to: #1. Any power from 150W - 400W #2. Change the ballast MADLI address #3. Any other variable which can be reconfigured as noted in this specification sheet

Input Specifications

Input values for power, voltage and current are dependent on the LED wattage.

Lamp Power, Voltage and Current Specifications

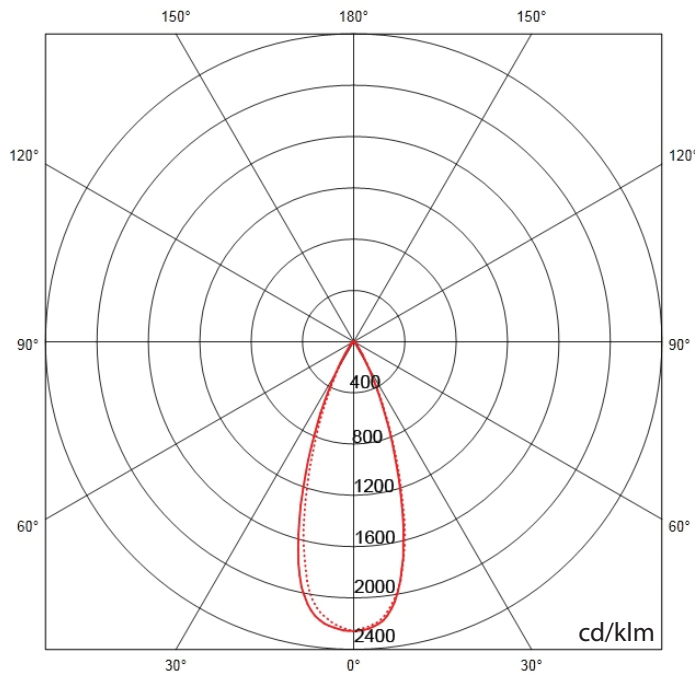
400W LED Power	
Input Power	426W
Input Voltage	200 - 277VAC (+10% to -15%)
Input Current	2.1A @ 208V, 1.98A @ 220V, 1.83A @ 240V, 1.58A @ 277V
Power Factor (at nominal conditions and full power)	>0.96

250W LED Power	
Input Power	269W
Input Voltage	120 - 277VAC (+10% to -15%)
Input Current	2.3A @ 120V, 1.26A @ 220V, 1.16A @ 240V, 1.0A @ 277V
Power Factor (at nominal conditions and full power)	>0.95

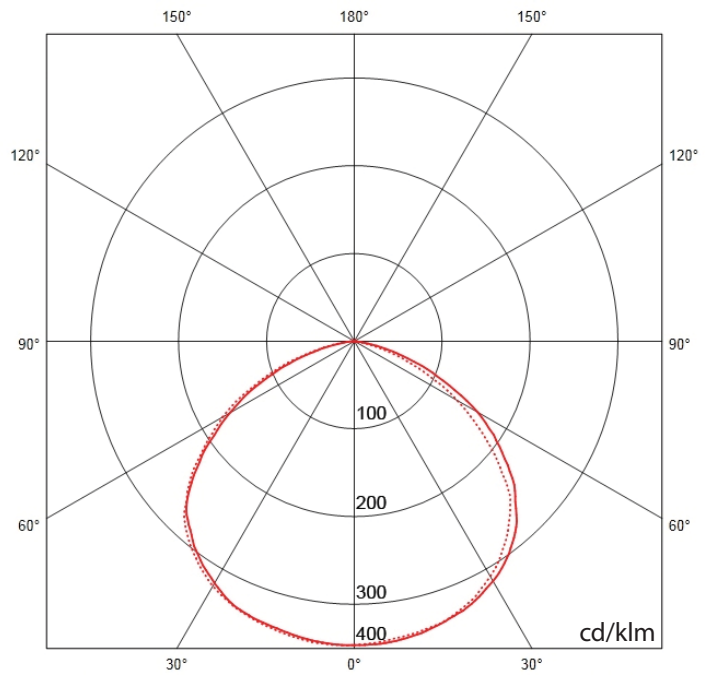
150W LED Power	
Input Power	165W
Input Voltage	120 - 277VAC (+10% to -15%)
Input Current	1.4A @ 120V, 0.76A @ 220V, 0.7A @ 240V, 0.6A @ 277V
Power Factor (at nominal conditions and full power)	>0.92

Photometric Specifications

Metrolight With Lens (45°)

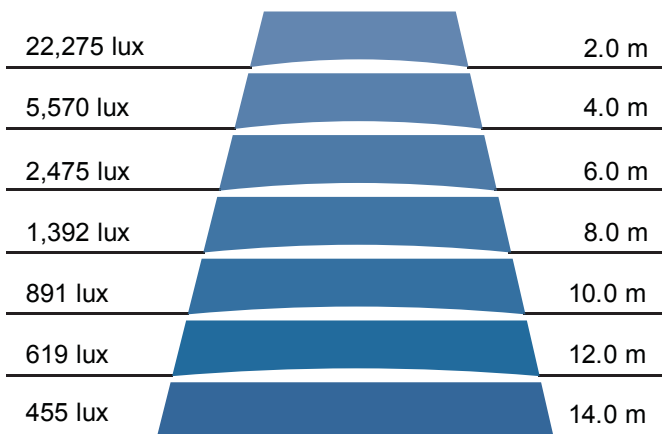


Metrolight Without Lens (120°)

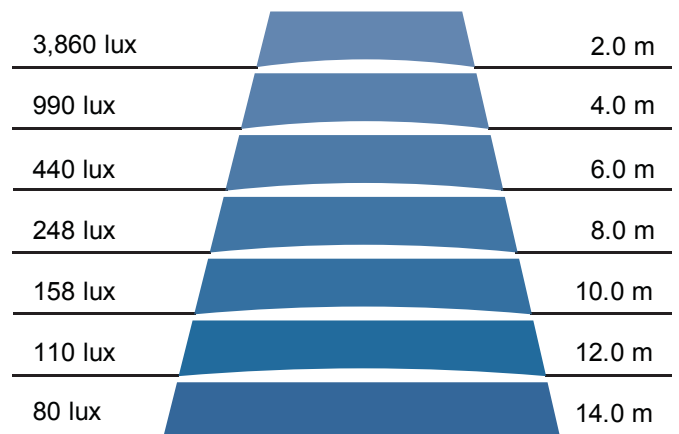


Dimensional Drawings (mm)

400W / 45°

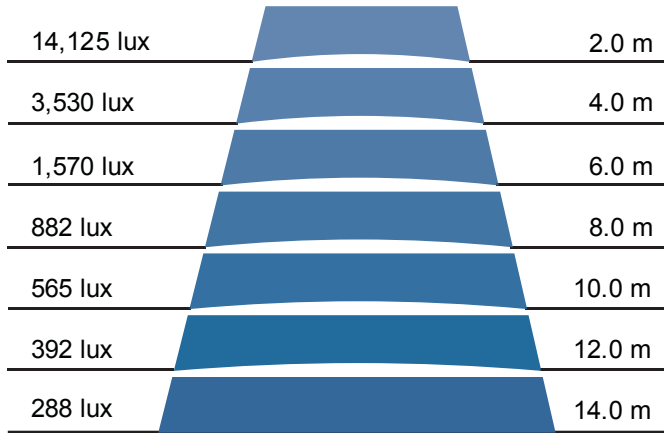


400W / 120°

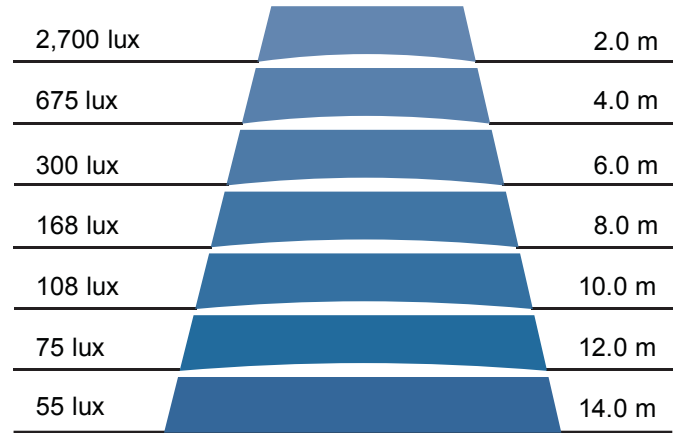


Dimensional Drawings (mm)

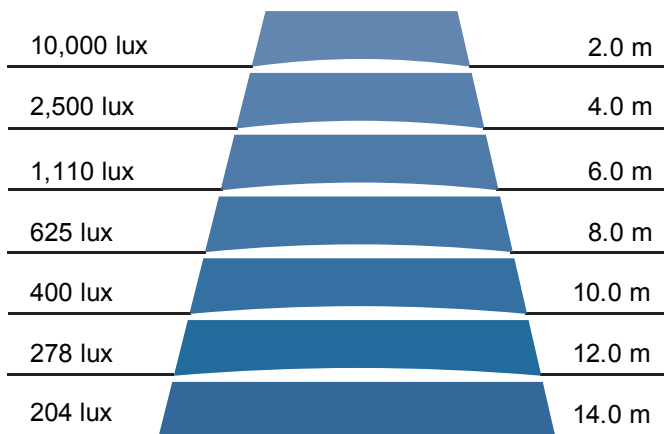
250W / 45°



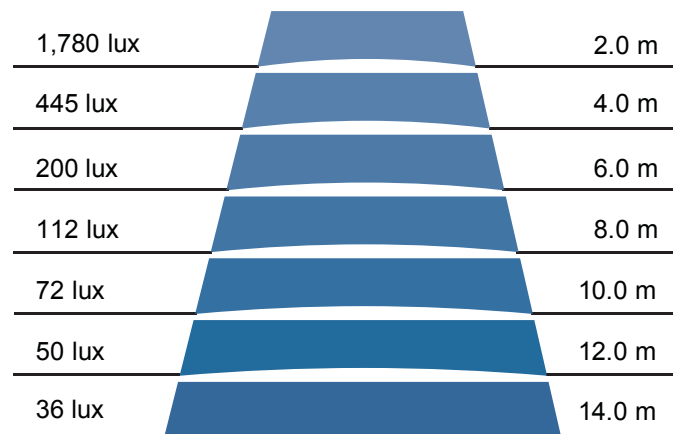
250W / 120°



150W / 45°



150W / 120°



About Metrolight

Metrolight provides proven energy-efficient eHID and LED solutions for high-power lighting. Metrolight's ballasts and managed lighting solutions are used in retail, industrial, commercial and municipal installations to reduce energy consumption and carbon emission by 70%. Pioneering lighting energy solutions since 1996, Metrolight operates worldwide with over 750,000 systems deployed and over 8 billion hours in operation. For more information, please visit our website at www.metrolight.com