

Project		Catalog #		Type	
Prepared by		Notes		Date	



# Metalux

## HB LED

Standard Efficacy 20" x 48" LED High Bay Efficiency Luminaire

### Typical Applications

Industrial • Manufacturing

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### Product Certification



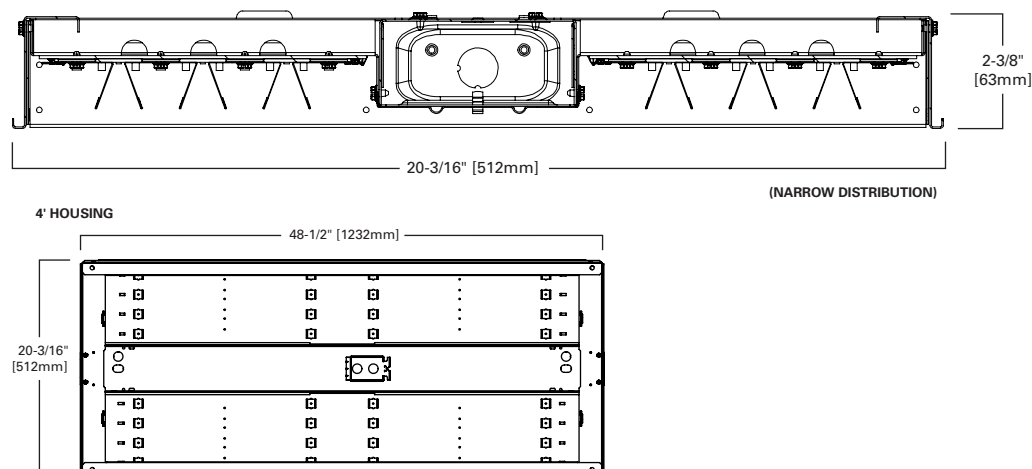
### Product Features



### Top Product Features

- Durable CRS and aluminum housing with white enamel finish
- High-Performance efficacy up to 170 lm/W
- LEDs available in 3500K, 4000K and 5000K at typical 85 CRI
- Rated for -20°C to 55°C ambient
- Lumen Maintenance – L84 @ 60,000 hours

### Dimensional and Mounting Details



## Order Information

SAMPLE ORDER NUMBER: **HBLED-LD5-18SE-W-UNV-L850-ED2-U** Includes V Hangers for rapid installation

Series	Lamp Type	LED Lumen Output	Distribution	Shielding	Voltage	CCT	Options <sup>(5)</sup>	Number of Relays
Series <sup>(18)</sup>	Lamp Type	LED Lumen Output	Distribution	Shielding	Voltage <sup>(1)</sup>	CCT	Emergency	Number of Relays
<b>HBLED=LED High Bay Linear</b>	<b>LD5=LED 5.0</b>	12SE=12,000 Lumens 15SE=15,000 Lumens 18SE=18,000 Lumens 24SE=24,000 Lumens 30SE=30,000 Lumens 36SE=36,000 Lumens 48SE=48,000 Lumens <sup>(19)</sup> 60SE=60,000 Lumens	<b>N=Narrow (Aisle)</b> <b>W=Wide (General)</b>	<b>[Blank]=None</b> <b>A=Prismatic Acrylic Lens &amp; Door frame</b> <sup>(8), (9), (11), (16)</sup> <b>CL=Clear Acrylic Lens &amp; Door frame</b> <sup>(8), (11), (16)</sup> <b>A/WG=Acrylic Lens, Wireguard and Door frame</b> <sup>(8), (9), (11), (16)</sup> <b>CL/WG=Clear Lens, Wireguard and Door frame</b> <sup>(8), (11), (16)</sup> <b>AI=Prismatic Acrylic Lens Insert</b> <sup>(8), (9)</sup> <b>CLI=Clear Acrylic Lens Insert</b> <sup>(8)</sup> <b>FLI=Frosted Lens Insert</b> <sup>(8), (9)</sup> <b>POLY125/WG=Polycarbonate Lens, Wireguard and Door frame</b> <sup>(8), (11), (16)</sup> <b>POLY125=Polycarbonate Lens and Door frame</b> <sup>(8), (11), (16)</sup>	<b>120V=120 Volt</b> <b>277V=277 Volt</b> <b>347V=347 Volt</b> <sup>(6), (10)</sup> <b>480V=480 Volt</b> <sup>(6), (10)</sup> <b>UNV=Universal Voltage 120-277</b> <b>UNC=Universal Voltage 347/480</b> <sup>(6)</sup>	<b>70 CRI</b> <b>L735=3500K</b> <b>L740=4000K</b> <b>L750=5000K</b>  <b>80 CRI</b> <b>L835=3500K</b> <b>L840=4000K</b> <b>L850=5000K</b>	<b>EL7W=7-watt, 120V-277V emergency battery pack installed</b> <sup>(4)</sup> <b>EL14W=14-watt 120V-277V emergency battery pack installed</b> <sup>(4)</sup> <b>GTR=Bodine Generator Transfer Device</b> <sup>(15)</sup> <b>ETRD=lota Emergency Transfer Relay with dimming control</b> <sup>(15)</sup>	<b>1=1 relay per driver non-dimming only</b> <b>2=2 relays per driver for dimming applications</b>
<b>Notes</b> <sup>(18)</sup> DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to <a href="http://www.designlights.org">www.designlights.org</a> for details.		<b>Notes</b> <sup>(19)</sup> For 48,000 lumen package, CD option requires three drivers, ED option requires four.		<b>Notes</b> <sup>(8)</sup> Refer to ambient ratings chart for temperature requirements. <sup>(9)</sup> Not available with narrow distribution <sup>(11)</sup> Not available with 48SE or 60SE configurations. <sup>(16)</sup> Integrated sensor not compatible with door frame.	<b>Notes</b> <sup>(1)</sup> Voltage must be specified when ordered with plugs or emergency driver. <sup>(6)</sup> Not available with dual switching. <sup>(10)</sup> EM not available with 36SE, 44SE or 54SE configurations at 347V or 480V.		<b>Notes</b> <sup>(4)</sup> With integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7=700 lumens). IES-format photometry for luminaire under emergency operation available. <sup>(5)</sup> EM options available in 0°C - 40°C ambient. <sup>(15)</sup> Used to transfer fixture to secondary power during outage. Must be used in conjunction with UL 1008 device (provided by others). These options require 2 relays on fixtures with dimming drivers. ETRD option only requires one relay when used on a dimming fixture. A maximum of two devices can be used on one product. 3 or 4 driver products cannot use GTR.	

Driver Type	Number of Drivers	Options	Motion Sensors	Packaging	Accessories
Driver Type	Number of Drivers	Options	Motion Sensors	Packaging	Accessories (order separately)
<b>CD=0-10V Dimming Driver</b> <sup>(7), (8)</sup> <b>ED=Electronic Fixed Output Driver</b> <sup>(7)</sup> <b>5LTD=Fifth Light DALI</b> <sup>(7), (8), (13)</sup>	<b>1=1 Driver (12,000 and 15,000 lumen versions)</b> <b>2=2 Drivers (18,000, 24,000 and 30,000 lumen versions)</b> <b>3=3 Drivers (36,000 and 8,000 lumen CD option)</b> <sup>(19)</sup> <b>4=4 Drivers (48,000 and 60,000 lumen versions)</b> <sup>(19)</sup>	<b>MP=Modular Power Receptacle (used for all Cord or Cord and Plug options)</b> <sup>(3)</sup>	<b>MS=360° or 180° Motion Sensor Installed, (specify voltage)</b> <sup>(2)</sup> <b>SVPD3=Integrated occupancy and daylight dimming sensor, 1200 sq. ft. coverage</b> <sup>(2), (14), (16), (17)</sup> <b>LWR=LumaWatt Wireless Sensor system</b> <sup>(2)</sup> <b>ZW-SWPD3=Integrated Wavelinx Wireless Sensor, 1200 sq ft. coverage</b> <b>ZW=WaveLinx Wireless Ready (does not include sensor)</b> <b>OEFP010VMV=Occupancy Sensor with Integrated Photocell</b> <b>FSP-211/L7-U=PIR Occupancy Sensor with integral 0-10V dimming</b>	<b>U=Unit Pack</b> <b>PALC=Job Pack, in carton</b>	<b>HBL-SPM=Single Monopoint Hanger w/Hub</b> <b>HBL-SPM-S=Surface Mount Bracket</b> <b>FH-1=Fixture Hook</b> <b>FL-1=Fixture Loop</b> <b>Y-TOGGLE=Y Mounting Toggle, #2 Cable</b> <sup>(8)</sup> (Specify 10' or 30', requires 2 per fixture) <b>HBAYC-CHAIN/SET/U=(2) V-Hook Hangers, 36" Chain Sets w/S-Hooks</b> <b>MPC3=3" Modular Power Cord &amp; Plug (Specify Voltage)</b> <b>MC6=6" Modular Power Cord</b> <b>MPC6=6" Modular Power Cord &amp; Plug (Specify Voltage)</b> <b>MMS=360° or 180° Aisle Motion Sensor with Modular Power Receptacle (120-277V)</b> <b>WG/HBL6-4FT-B=Field Installable, Wireguard for HBLED</b> <sup>(12)</sup> <b>ISHH-01=Programming Remote for Integrated Sensor</b> <b>ISHH-02=Personal Control Remote for Integrated Sensor</b> <b>SWPD3=WaveLinx Sensor (for field installation into WaveLinx enabled fixture)</b>
<b>Notes</b> <sup>(7)</sup> Lumen output will vary depending on dimming or fixed output drivers. Refer to IES files for delivered lumens. <sup>(8)</sup> Refer to ambient ratings chart for temperature requirements. <sup>(13)</sup> 5LTD available with 12, 18, 24, 36 lumen packages only.	<b>Notes</b> <sup>(19)</sup> For 48,000 lumen package, CD option requires three drivers, ED option requires four.	<b>Notes</b> <sup>(3)</sup> Requires use of MC or MPC cord accessories, specify voltage for plugs (MP).	<b>Notes</b> <sup>(2)</sup> When ordering sensors, specify as UNV (for 120 or 277V), 347 or 480V. <sup>(14)</sup> Integrated sensor limited to 36,000 lumens. <sup>(16)</sup> Integrated sensor not compatible with door frame. <sup>(17)</sup> Integral sensor works only with "CD" driver and is factory prewired to the driver for stand-alone control.		<b>Notes</b> <sup>(10)</sup> Not available with lens insert options AI, CLI and FLI or door frame options A, CL and POLY125. <sup>(12)</sup> Not available with lens insert options AI, CLI and FLI or doorframe options A, CL and POLY125.

## Product Specifications

### Construction

- Constructed of channel and end plates with stiffening brackets and side rails
- Side rails are standard on all HBLED products

### Emergency Battery Options

- Optional 120-277V emergency battery available in 7W or 14W
- 90-minute backup period for code compliance
- Test switch with laser pointer and testing from floor feature for ease of use
- EZ Key feature prevents accidental discharge during construction
- Generator transfer options available

### LED and Light Engine

- Drivers available in 120-277V and 347V
- Optional 0-10V dimming driver is available

### Integrated Control Options

- Integral occupancy sensor available with coverage from 600 sqft up to 1250 sqft
- Maximum mounting height of 30'
- Provides occupancy and closed loop daylight harvesting

### Finish

- Multistage, iron phosphate pretreatment
- Multistage cleaning cycle

### Mounting

- Designed for suspension mounting
- Optional wire hook and chain set available
- Single monopoint mounting is available with SPM tong hanger

### Frame/Shielding

- Optional door frame and lens assembly for added protection

### Compliance

- IC rated for insulation contact
- cULus listed for damp locations -40°C to 55°C ambient environments
- RoHS compliant
- Tested to IESNA LM-79 and LM-80
- Stated life tested to TM21 standards

### Warranty

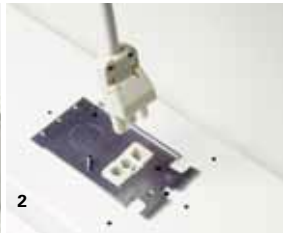
- Five-year warranty standard.

## Modular F-Bay Power Supply Option

Cooper Lighting's F-Bay Modular Power Supply option is available for use with all F-Bay products. The modular power supply allows external fixture access for safe and easy servicing. There is no need to remove lamps or reflectors to disconnect fixture power with F-Bay Modular Power Supply. Access to the individual fixture's power supply allows servicing without turning off all the fixtures, disrupting occupants. F-Bay Modular Power Supply is a time saver in installation – **simply plug & power.**



1. Modular Power Supply Receptacle supplied mounted into fixture Access Plate
2. Modular Power Cord & Plugs in 120, 277, 347, & 480V configurations for easy plug & power into existing supply



No internal fixture access required for installation or disconnecting power

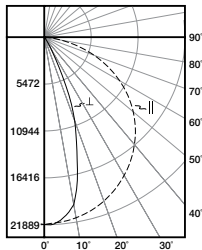


Modular Motion Sensor Option supplied with Mounting Box and Modular Power Supply Receptacle

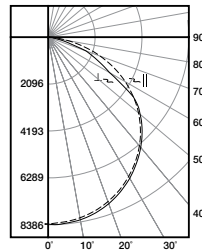
### Code Compliance

- UL/cUL Certified for Make/Break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Allows for addition of Occupancy Sensor without hard connections
- Receptacles complete with insulating/dust cap

## Photometric Data

 View IES files
**HBLED-LD5-24SE-N-UNV-L850-ED2-U**

Electronic Drive  
 Linear LED 5000K  
 Spacing criterion: (II) 1.27 x mounting height,  
 (⊥) 0.62 x mounting height  
 Lumens: 23224  
 Input Watts: 154W  
 Efficacy: 150.8 lm/W  
 Test Report:  
 HBLED-LD5-24SE-N-UNV-L850-ED2-U. IES

**HBLED-LD5-24SE-W-UNV-L850-ED2-U**

Electronic Driver  
 Linear LED 5000K  
 Spacing criterion: (II) 1.28 x mounting height,  
 (⊥) 1.29 x mounting height  
 Lumens: 24116  
 Input Watts: 154W  
 Efficacy: 156.6 lm/W  
 Test Report:  
 HBLED-LD5-24SE-W-UNV-L850-ED2-U. IES

## Energy and Performance Data

Catalog Number	5000K, 70CRI		
	Delivered Lumens	Watts	Efficacy (lm/W)
HBLED-LD5-12SE-W-UNV-L750	12,629	77	165
HBLED-LD5-15SE-W-UNV-L750	16,342	95	172
HBLED-LD5-18SE-W-UNV-L750	19,587	122	161
HBLED-LD5-24SE-W-UNV-L750	24,953	154	162
HBLED-LD5-30SE-W-UNV-L750	32,291	193	167
HBLED-LD5-36SE-W-UNV-L750	37,307	232	161
HBLED-LD5-48SE-W-UNV-L750	51,058	299	171
HBLED-LD5-60SE-W-UNV-L750	62,380	386	162

Catalog Number	5000K, 80CRI		
	Delivered Lumens	Watts	Efficacy (lm/W)
HBLED-LD5-12SE-W-UNV-L850	12,206	77	159
HBLED-LD5-15SE-W-UNV-L850	15,794	95	166
HBLED-LD5-18SE-W-UNV-L850	18,930	122	155
HBLED-LD5-24SE-W-UNV-L850	24,116	154	157
HBLED-LD5-30SE-W-UNV-L850	31,209	193	162
HBLED-LD5-36SE-W-UNV-L850	36,057	232	155
HBLED-LD5-48SE-W-UNV-L850	49,346	299	165
HBLED-LD5-60SE-W-UNV-L850	60,289	386	156

## Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (hours)
55°C	> 84%	> 142,000

## Shipping Data

Catalog No.	Wt.
HBLED-LD5-12SE	19 lbs.
HBLED-LD5-15SE	19 lbs.
HBLED-LD5-18SE	22 lbs.
HBLED-LD5-24SE	22 lbs.
HBLED-LD5-30SE	22 lbs.
HBLED-LD5-36SE	26 lbs.
HBLED-LD5-48SE	26 lbs.
HBLED-LD5-60SE	26 lbs.

## Ambient Ratings

Lumen Package	Ambient Rated	Drivers			Lensed		EM
		ED	CD	SLTD	Inserts	Door frame	
HBLED-LD5-12SE	55°C	55°C	50°C	40°C	50°C	40°C	40°C
HBLED-LD5-15SE	55°C	55°C	50°C	40°C	50°C	40°C	40°C
HBLED-LD5-18SE	55°C	55°C	50°C	40°C	50°C	40°C	40°C
HBLED-LD5-24SE	55°C	55°C	50°C	40°C	50°C	40°C	40°C
HBLED-LD5-30SE	55°C	55°C	40°C	40°C	50°C	40°C	40°C
HBLED-LD5-36SE	55°C	55°C	40°C	40°C	40°C	40°C	40°C
HBLED-LD5-48SE	40°C	40°C	40°C	40°C	40°C	N/A	35°C
HBLED-LD5-60SE	40°C	40°C	35°C	40°C	35°C	N/A	35°C

## Integrated Sensor

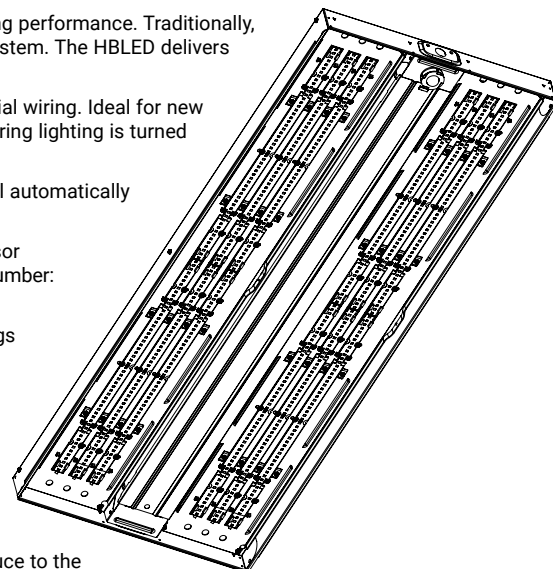
The HBLED with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally, these types of energy savings required coordination between the luminaire and a lighting control system. The HBLED delivers superior lighting with integrated occupancy and daylighting controls.

Capture the benefits of traditional lighting controls, without complicated coverage planning or special wiring. Ideal for new construction or retrofit, the HBLED delivers automatic ON to an energy saving light level, while ensuring lighting is turned OFF when the space is unoccupied.

The integral daylight sensor reduces the need for special daylight zone planning. Each luminaire will automatically adjust the light level based on reflected light beneath the sensor in a closed loop method.

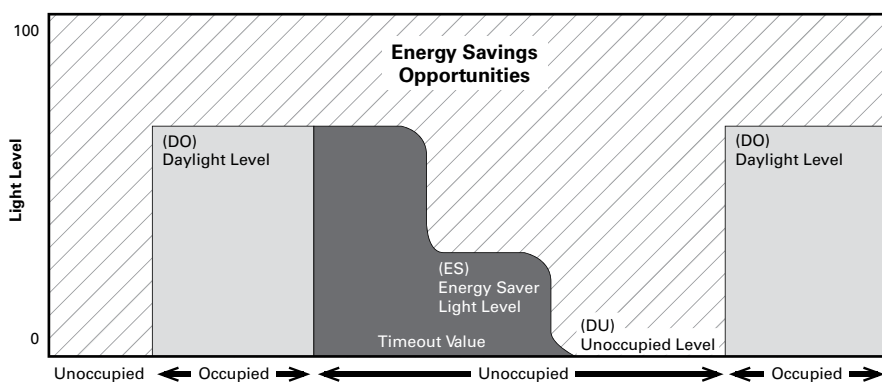
Occupied daylight light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH-01). The integrated sensor personal remote (Catalog Number: ISHH-02) provides code compliant manual raise, lower, ON, OFF control.

The HBLED with Integrated Sensor is easy to install with no special wiring and ensures energy savings out-of-the-box with default control settings.



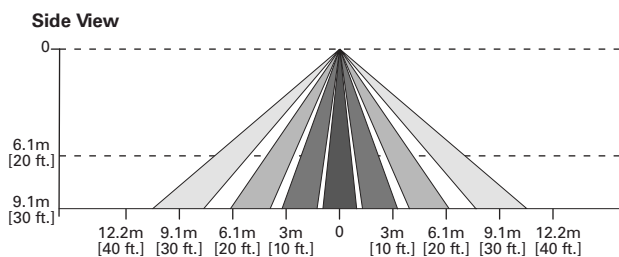
### How it works:

- As the user enters the space controlled by the integral sensor, the lighting turns ON to
- Lighting will remain at that the daylight level until the space is unoccupied. This will start
- If the space remains unoccupied for half of the timeout period, the lighting will automatically reduce to the Energy Saver light level. This adjustable light level is typically half of the occupied daylight level.
- At the end of the timeout period the lighting will go to the unoccupied light level. This adjustable light level uses the OFF default setting.



Default daylight harvesting set using 36,000 lumen unit at 30 ft. mounting height, 20 ft. spacing for 50 footcandles.

### SVPD3 Coverage Pattern



### Optional Remote Controls



ISHH-01 Remote



ISHH-02 Remote

### Control Systems

- WaveLinx
- DLVP
- Enlighted
- iLumin Plus
- VividTune



Connected Systems  
[CLICK HERE](#)