Project		Catalog #		Type	
Prepared by		Notes		Date	

Metalux

HB LED

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

Typical Applications

Industrial • Manufacturing

Interactive Menu

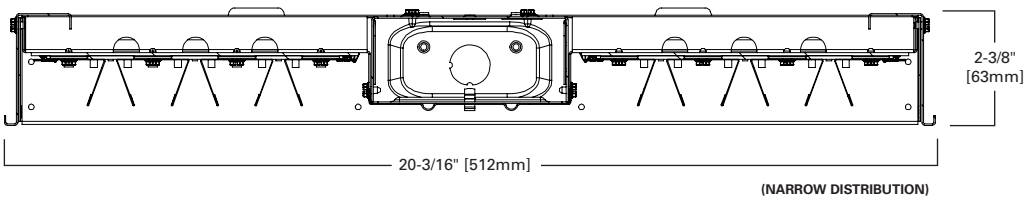
Product Certification

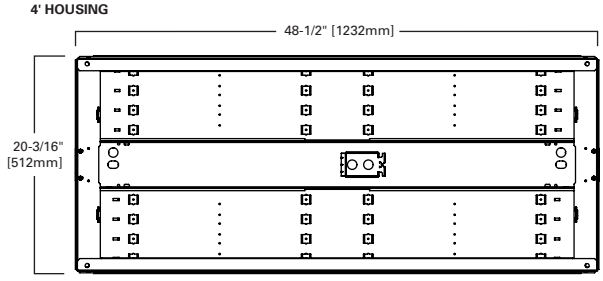
Product Features

Top Product Features

- Durable CRS and aluminum housing with white enamel finish
- High-Performance efficacy up to 180 lm/W
- LEDs available in 3500K, 4000K and 5000K at 80 CRI
- Rated for -40°C to 55°C ambient
- Lumen Maintenance – L89 @ 60,000 hours
- Options to meet Buy American and other domestic preference requirements

Dimensional and Mounting Details





Order Information

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

Domestic Preferences	Series	Lamp Type	LED Lumen Output	Distribution	Shielding	Voltage	CCT	Emergency
[Blank]=Standard **BAA**=Buy American Act **TAA**=Trade Agreements Act	**HBLED**=LED High Bay Linear	**LD5**=LED 5.0	**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 (3) **60SE**=60,000 Lumens	**N**=Narrow (Aisle) **W**=Wide (General)	**[Blank]**=None **A**=Prismatic Acrylic Lens & Door frame (4), (5), (6), (7) **CL**=Clear Acrylic Lens & Door frame (4), (6), (7) **A/WG**=Acrylic Lens, Wireguard and Door frame (4), (5), (6), (7) **CL/WG**=Clear Lens, Wireguard and Door frame (4), (6), (7) **AI**=Prismatic Acrylic Lens Insert (4), (5) **CLI**=Clear Acrylic Lens Insert (4) **FLI**=Frosted Lens Insert (4), (5) **POLY125/WG**=Polycarbonate Lens, Wireguard and Door frame (4), (6), (7) **POLY125**=Polycarbonate Lens and Door frame (4), (6), (7)	**120V**=120 Volt **277V**=277 Volt **347V**=347 Volt (9), (10) **480V**=480 Volt (9), (10) **UNV**=Universal Voltage 120-277 **UNC**=Universal Voltage 347/480 (9)	**70 CRI** **L735**=3500K **L740**=4000K **L750**=5000K **80 CRI** **L835**=3500K **L840**=4000K **L850**=5000K	**EL7W**=7-watt, 120V-277V emergency battery pack installed (12) **EL14W**=14-watt 120V-277V emergency battery pack installed (12) **ETRD**= 120-277V Emergency Transfer Relay with dimming control (11), (14)
Notes (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	**Notes** (2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.		**Notes** (3) For 48,000 lumen package, CD option requires three drivers.		**Notes** (4) Refer to ambient ratings chart for temperature requirements. (5) Not available with narrow distribution (6) Not available with 48SE or 60SE configurations. (7) Integrated sensor not compatible with door frame.	**Notes** (8) Voltage must be specified when ordered with plugs, GTR or emergency driver. (9) Not available with dual switching. (10) EM not available with 36SE, 44SE or 54SE configurations at 347V or 480V).		**Notes** (11) When using ETRD with fixtures 60K lumens and above, the fixture will not deliver full lumen output when in emergency mode (consult factory). (12) With integral test switch/indicator. 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. (13) EM options available in 0°C - 40°C ambient. (14) Used to transfer fixture to secondary power during outage. Must be used in conjunction with UL 1008 device (provided by others). ETRD option only requires one relay when used on a dimming fixture. A maximum of two devices can be used on one product.

Number of Relays	Driver Type	Number of Drivers	Options	Integrated Sensor	Packaging	Accessories (order separately) (27)
1=1 relay per driver non-dimming only **2**=2 relays per driver for dimming applications	**CD**=0-10V Dimming Driver (15), (16) **5LTD**=DALI Driver (15), (16), (17)	**1**=1 Driver (12,000 and 15,000 lumen versions) **2**=2 Drivers (18,000, 24,000 and 30,000 lumen versions) **3**=3 Drivers (36,000 lumen CD option) (18) **4**=4 Drivers (48,000 and 60,000 lumen versions) (18)	**MP**=Modular Power Receptacle (used for all Cord or Cord and Plug options) (19)	**MS**=360° or 180° Motion Sensor Installed, (specify voltage) (20) **LWR**=Enlighted Wireless Sensor system (20) **OEFP010VMV**=Occupancy Sensor with Integrated Photocell **FSP-211/L7-U**=PIR Occupancy Sensor with integral 0-10V dimming (21), (22), (23) **ZLD1Z**=Leviton 120-277V PIR Occupancy Sensor with integral 0-10V Dimming (21), (22), (23), (24) **WLS4**=WaveLinx LITE Wireless Integrated Sensor, 15'–40' Mounting Height (25), (28) **WPS4**=Integrated Wavelinx PRO Wireless Sensor, 1200 sq ft. coverage (21), (22), (23)	**U**=Unit Pack **PALC**=Job Pack, in carton	**HBL-SPM**=Single Monopoint Hanger w/Hub **HBL-SPM-S**=Surface Mount Bracket **FH-1**=Fixture Hook **FL-1**=Fixture Loop **Y-TOGGLE-__-2PK**=(2) Y-Toggle Cable Kits (Specify 10 or 30 for length in feet) **HBAYC-CHAIN/SET/U**=(2) V-Hook Hangers, 36" Chain Sets w/S-Hooks **MPC3**=3' Modular Power Cord & Plug (Specify Voltage) **MC6**=6' Modular Power Cord **MPC6**=6' Modular Power Cord & Plug (Specify Voltage) **MMS**=360° or 180° Aisle Motion Sensor with Modular Power Receptacle (120-277V) **WG/HBL6-4FT-B**=Field Installable, Wireguard for HBLED (26) **SWPD3**=WPS4 WaveLinx Sensor (for field installation into WaveLinx enabled fixture)
	Notes (15) Lumen output will vary depending on dimming or fixed output drivers. Refer to IES files for delivered lumens. (16) Refer to ambient ratings chart for temperature requirements. (17) 5LTD available with 12, 18, 24, 36 lumen packages only.	**Notes** (18) For 48,000 lumen package, CD option requires three drivers.	**Notes** (19) Requires use of MC or MPC cord accessories, specify voltage for plugs (MP).	**Notes** (20) When ordering sensors, specify as UNV (for 120 or 277V), 347 or 480V. (21) Integrated sensor limited to 36,000 lumens. (22) Integrated sensor not compatible with door frame. (24) Configuration of basic and advanced features using the Leviton Smart Sensor App on any Bluetooth-enabled Android or iOS device. (25) EL20W-REM battery pack not available with 347/480V + SWPD, LWR, or WLS4 Sensors. (28) 30-36K lumen fixtures with SWPD, LWR, or WLS4 sensor are UNV only.		**Notes** (26) Not available with lens insert options AI, CLI and FLI or door frame options A, CL and POLY125. (27) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

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
- Constant power to LED system for controlled, predictable discharge
- Integrated test switch/indicator light installed on fixture
- Integral emergency transfer relay available for generator equipped power systems

LED and Light Engine
- 0-10V dimming driver standard

Integrated Control Options
- Integrated WaveLinx sensor options provide wireless individual fixture control and enable code compliance, increased energy savings, grouping of fixtures, and connection to WaveLinx control systems
- WaveLinx industrial sensors offer installation heights up to 40 feet and have coverage patterns up to 5000 square feet (see sensor specifications - field of view)

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

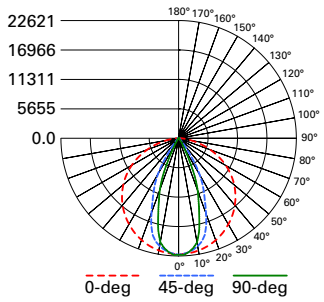
Frame/Shielding
- Optional door frame and lens assembly for added protection

Compliance
- cULus listed for damp locations -40°C to 55°C ambient environments
- Tested to IESNA LM-79 and LM-80
- Stated life tested to TM21 standards

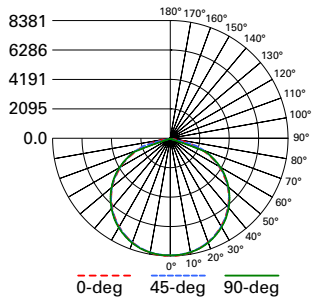
Warranty
- Five-year limited warranty standard

Photometric Data

View IES files



HBLED-LD5-24SE-N-UNV-L850
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.27 x mounting height, (⊥) 0.62 x mounting height
Lumens: 23985
Input Watts: 150W
Efficacy: 159.9 lm/W
Test Report: HBLED-LD5-24SE-N-UNV-L850.IES



HBLED-LD5-24SE-W-UNV-L850
Electronic Driver
Linear LED 5000K
Spacing criterion: (II) 1.3 x mounting height, (⊥) 1.31 x mounting height
Lumens: 24907
Input Watts: 150W
Efficacy: 166 lm/W
Test Report: HBLED-LD5-24SE-W-UNV-L850.IES

Energy and Performance Data

Catalog Number	5000K, 70CRI		
	Delivered Lumens	Watts	Efficacy (lm/W)
HBLED-LD5-12SE-W-UNV-L750	13104	75	175
HBLED-LD5-15SE-W-UNV-L750	16906	94	180
HBLED-LD5-18SE-W-UNV-L750	20097	114.8	175
HBLED-LD5-24SE-W-UNV-L750	26207	150	175
HBLED-LD5-30SE-W-UNV-L750	33637	190	177
HBLED-LD5-36SE-W-UNV-L750	39311	227.5	173
HBLED-LD5-48SE-W-UNV-L750	50716	285.5	178
HBLED-LD5-60SE-W-UNV-L750	63769	367	174

Catalog Number	5000K, 80CRI		
	Delivered Lumens	Watts	Efficacy (lm/W)
HBLED-LD5-12SE-W-UNV-L850	12453	75	166
HBLED-LD5-15SE-W-UNV-L850	16067	94	171
HBLED-LD5-18SE-W-UNV-L850	19100	114.8	166
HBLED-LD5-24SE-W-UNV-L850	24907	150	166
HBLED-LD5-30SE-W-UNV-L850	31969	190	168
HBLED-LD5-36SE-W-UNV-L850	37360	227.5	164
HBLED-LD5-48SE-W-UNV-L850	48200	285.5	169
HBLED-LD5-60SE-W-UNV-L850	60605	367	165

Ambient Ratings

Lumen Package	Ambient Rated	Drivers		Lensed		EM
		CD	5LTD	Inserts	Door frame	
HBLED-LD5-12SE	55°C	55°C	40°C	50°C	40°C	40°C
HBLED-LD5-15SE	55°C	55°C	40°C	50°C	40°C	40°C
HBLED-LD5-18SE	55°C	55°C	40°C	50°C	40°C	40°C
HBLED-LD5-24SE	55°C	55°C	40°C	50°C	40°C	40°C
HBLED-LD5-30SE	55°C	55°C	40°C	50°C	40°C	40°C
HBLED-LD5-36SE	55°C	55°C	40°C	40°C	40°C	40°C
HBLED-LD5-48SE	40°C	45°C	40°C	40°C	N/A	35°C
HBLED-LD5-60SE	40°C	45°C	40°C	35°C	N/A	35°C

Lumen Maintenance

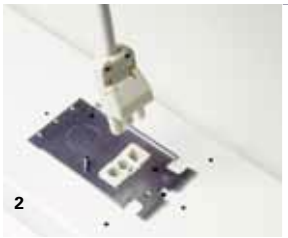
Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (hours)
55°C	> 89%	> 179,000

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.

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

Control Solutions

- WaveLinx LITE wireless
- WaveLinx PRO wireless
- WaveLinx CAT wired
- WaveLinx Wired

WaveLinx Digital Lighting Control Solutions

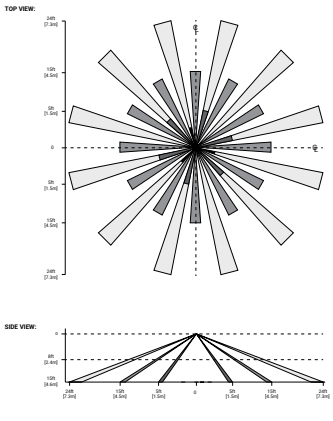
The HBLED with WaveLinx offers no-hassle lighting control with multiple luminaire level control solutions.

WaveLinx PRO is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinx PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinx CORE platform and other building systems, so building owners can improve operations, spaces environment, and tenants' experience. WaveLinx PRO offers a rich portfolio of wireless devices, WaveLinx PRO-enabled luminaires, and an intuitive WaveLinx mobile app for office, education, warehouse, and parking garage applications.

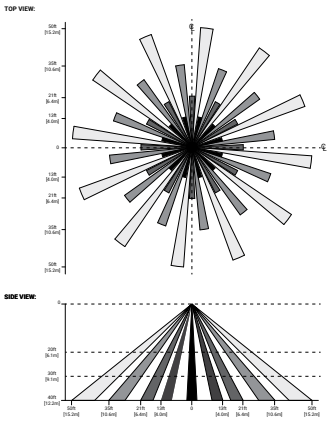
WaveLinx LITE is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse and parking garages using the secure, simple mobile app.

Integrated Sensor Coverage Pattern

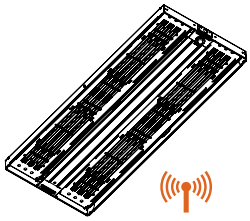
WaveLinx PRO/LITE Sensor – WLS2 and WPS2



WaveLinx PRO/LITE Sensor – WLS4 and WPS4



With Integrated WaveLinx Sensor



Integrated Controls Options					
Option	**Out of the Box Functionality**	**Luminaire Level Lighting Control (LLLC)**	**Automatic Dimming Photocell**	**Occupancy Sensing**	**CCT Control**
WLS	X	X	X	X	
WPS		X	X	X	

Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.

Luminaire with standalone sensor

Standalone Spaces WaveLinx LITE

Standalone Spaces WaveLinx CAT

Networked Spaces WaveLinx PRO

Enterprise WaveLinx CORE

Occupancy	Yes	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes	Yes
Wallstations	–	Yes	Yes	Yes	Yes
Gateways	–	–	–	1 WAC	300 WACs
Devices (MAX)	–	40 per Area (1120 per space)	40 per Area	200 per WAC2	32,500 per CORE Enterprise
Software	–	WaveLinx LITE Mobile App	WaveLinx CAT Mobile App	WaveLinx Mobile App	CORE
Areas	–	28 per Space	Unlimited	50 per WAC2	up to 3,000
Zones	–	16 per Area	16 per Area	16 per Area	up to 9,000
Scheduling	–	–	–	Local	Global
VividTune™	–	–	–	Yes	Yes
Plug-Load Control	–	Yes	Yes	Yes	Yes
Low-Voltage Power	–	–	Yes	Yes	Yes
Integration	–	–	–	–	BACnet, API
Dashboards	–	–	–	–	Energy, Occupancy
Configuration	–	Installer	Installer	Technician	Technician / IT

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