

DHL-LP-LED

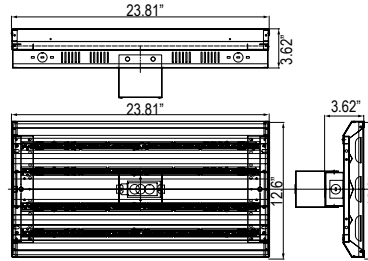
Low Profile LED Linear High/Low Bay



Job Information

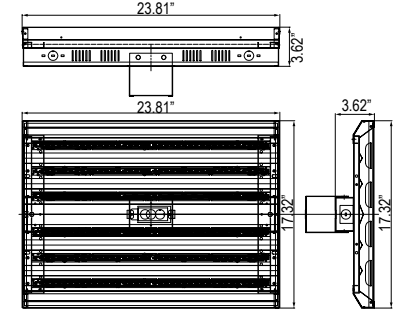
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|--------------|--|
| Type: | |
| Catalog #: | |
| Project: | |
| Comments: | |
| Prepared by: | |

2' 65W/90W Version



2' 135W Version

For 4' dimensions see pg 2



Description

The DHL-LP-LED is an innovative interior high bay lighting luminaire that delivers top-end performance packaged into a sleek form factor. This low-profile linear high bay/low bay luminaire offers commercial and industrial building owners an all-in-one solution for illuminating their facility while drastically reducing energy consumption to aid their bottom line. The DHL-LP-LED high bay luminaire features top-quality construction, a range of lumen packages, and various control options that make it a versatile solution for commercial and industrial building owners looking to upgrade to next-generation LED technology.

Ordering Information

Example: (DHL-LP-LED-4-178-50-UNV-F-DM-PT6)



| Series | Size | Wattage/Lumens | Color Temp. | Voltage | Lens | Dimming | Option | Mounting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|----------------|-----------------------------|---------|-------|---------|----------|----------|----------------------|----|-------------------------------------|-----|-------------------------|----------------------------|----|--|----|------------------------|-----|-------------------|---------------------------------|-----|-------------------|-----|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Slim Linear High Bay | 2' 2' | 65 | 65W/8100 ^{1,5,7} | 40 | 4000K | UNV | 120-277V | F | Frosted ² | DM | 0-10V Dimming Standard ² | CSC | Control Scope Connected | Occupancy Sensor (HBP-111) | MS | Motion Sensor w/Dimming (FSP-211) ⁶ | EM | Emergency ⁴ | PT6 | 6' Pre-Wired Cord | See accessories table on page 2 | | | | | | | | | | | | | | | | | |
| | | 90 | 90W/11600 ^{1,5} | 50 | 5000K | | | | | | | | | | | | | | | | | 347 | 347V ³ | 480 | 480V ³ | | | | | | | | | | | | | |
| | | 135 | 135W/17100 ^{1,3,5} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4' 4' | 178 | 178W/23250 ^{1,5} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 265 | 265W/34450 ^{1,5} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

¹ Delivered Lumens (4000K) - See Page 4 for full lumen chart
² Standard for this fixture.
³ 347V and 480V options utilize a step-down transformer, not available on 135W model currently
⁴ EM Pack not available with 347V or 480V options currently.
⁵ DLC Listed wattage (Please see additional information on Page 4)
⁶ Please specify mounting height for appropriate sensor coverage (see page 6)

Accessories (Ordered and Shipped Separately)

| OPTIONS | |
|-----------------------------|--|
| DHL-LP-WG-2-4L | 2' 4-Lamp Wire guard for DHL-LP High bay (65W,90W Housing) |
| DHL-LP-WG-2-6L | 2' 6-Lamp Wire guard for DHL-LP High bay (135W Housing) |
| DHL-LP-WG-4-4L | 4' 4-Lamp Wire guard for DHL-LP High bay (178W) |
| DHL-LP-WG-4-6L | 4' 6-Lamp Wire guard for DHL-LP High bay (265W) |
| MOUNTING | |
| DHL-LP-4L-SU | Surface Mount Kit For High-bay Flat Panel (2pc) Set (65W,90W,178W Housing) |
| DHL-LP-SU | Surface Mount Kit For High-bay Flat Panel (2pc) Set (135W,265W Housing) |
| DHL-LP-HOOK | V HOOK Mounting Kit High-bay Flat Panel (2 per) (65W,90W,178W Housing) |
| DHL-LP-HOOK-6L | V HOOK Mounting Kit High-bay Flat Panel (2 per) (135W,265W Housing) |
| DHL-LP-CHAIN | Mounting Chain For High-bay Flat Panel, 41" (Must Be ordered with V-HOOK) |
| DHL-LP-CHAIN-2M | Mounting Chain For High-bay Flat Panel, 78" (Must Be ordered with V-HOOK) |
| DHL-LP-CHAIN-3M | Mounting Chain For High-bay Flat Panel, 118" (Must Be ordered with V-HOOK) |
| DHL-LP-CENTER BOX | Mounting Center Box For High-bay Flat Panel 20 Gua. For Stem Use |
| S12 (Part#290125 & C545Wht) | 12" 3/8" IPS Stem Gloss White (5/8" OD) (Must be ordered with DHL-LP-CENTER BOX) |
| S18 (Part#290138 & C545Wht) | 18" 3/8" IPS Stem Gloss White (5/8" OD) (Must be ordered with DHL-LP-CENTER BOX) |
| S24 (Part#290182 & C545Wht) | 24" -3/8 IPS Stem Gloss White (5/8" OD) (Must be ordered with DHL-LP-CENTER BOX) |
| S36 (Part#290137 & C545Wht) | 36" 3/8" IPS Stem Gloss White (5/8" OD) (Must be ordered with DHL-LP-CENTER BOX) |
| S48 (Part#290126 & C545Wht) | 48" 3/8" IPS Stem Gloss White (5/8" OD) (Must be ordered with DHL-LP-CENTER BOX) |
| DEC4011003-6 | Universal Yoke and Toggle Aircraft Cable Suspension Kit 6' |
| DEC4011003-10 | Universal Yoke and Toggle Aircraft Cable Suspension Kit 10' |
| DEC4011003-15 | Universal Yoke and Toggle Aircraft Cable Suspension Kit 15' |

Features

Construction

Rugged and durable construction withstands warehouse environments with an IP54 rating. Luminaire features durable, matte white finish.

Optical System

Reflector systems features highly reflective coating, delivering adequate light for high ceiling applications. Diffuser lens reduces glare and improves occupant working conditions while maintaining high efficiencies.

Certifications

UL Listed, suitable for Dry and Damp locations (not Wet location)
 UL Class 2 Driver: SCP, OTP, OVP protection, FCC Part 15 Class B, UL8750 Class 2.
 DLC Premium Listed, refer to lumen chart on Page 4

Electrical

Luminaire utilizes high-efficacy LED packages running at low operating temperatures for extended fixture lifetime. Universal voltage (120-277V) for convenient installation, 347 & 480V Optional Comes equipped with luminaire quick-disconnect.

Installation / Mounting

Various mounting options available, including suspension, pendant, and surface mount. V-hook hangers and chain accessories available.

Controls / Dimming

Continuous dimming (0-10V) comes standard. Suitable for use with dimmers, sensors, daylight harvesting and other control strategies to achieve deeper energy-savings and code compliance.

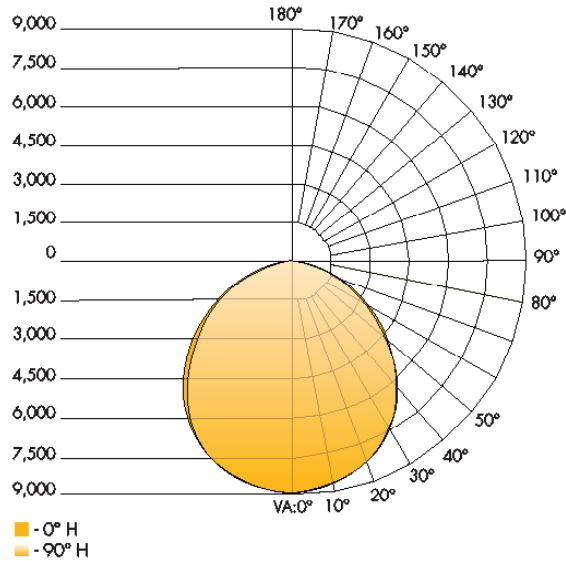
DHL-LP-LED

Low Profile LED Linear High/Low Bay

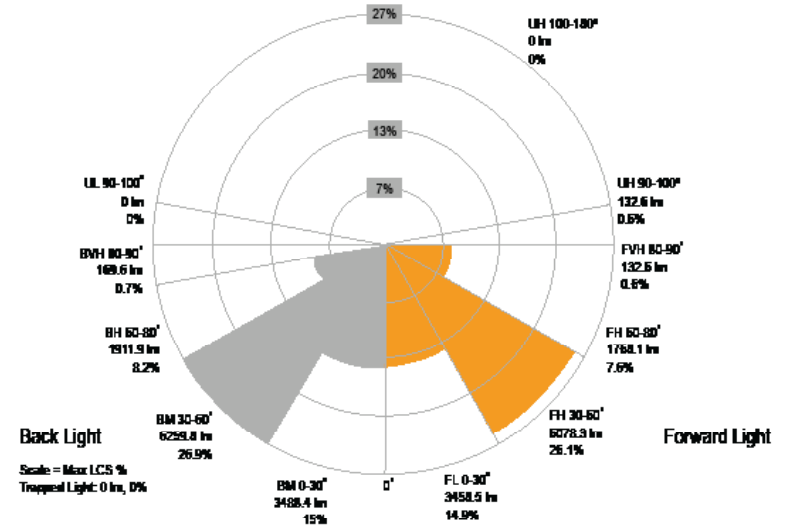
Photometric Data

4' 178W 4000K

Polar Candela Distribution



LCS Graph



Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance: 20%

| RCC %: | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | | 0 |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| RW %: | 70 | 50 | 30 | 0 | 70 | 50 | 30 | 0 | 50 | 30 | 20 | 10 | 50 | 30 | 20 | 10 | 50 | 30 | 20 | 10 | 0 |
| RCR: 0 | 1.19 | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.00 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1.02 | 1.00 | 1.00 |
| 1 | 1.09 | 1.05 | 1.01 | .97 | 1.07 | 1.03 | .99 | .86 | .98 | .95 | .93 | .95 | .92 | .90 | .91 | .89 | .87 | .87 | .87 | .85 | .85 |
| 2 | 1.00 | .92 | .86 | .80 | .97 | .90 | .84 | .73 | .87 | .82 | .77 | .84 | .79 | .76 | .81 | .77 | .74 | .74 | .74 | .72 | .72 |
| 3 | .91 | .81 | .74 | .67 | .89 | .80 | .73 | .63 | .77 | .71 | .66 | .74 | .69 | .64 | .72 | .67 | .63 | .63 | .63 | .61 | .61 |
| 4 | .84 | .72 | .64 | .57 | .82 | .71 | .63 | .54 | .69 | .62 | .56 | .66 | .60 | .56 | .64 | .59 | .55 | .55 | .55 | .53 | .53 |
| 5 | .77 | .65 | .56 | .50 | .75 | .64 | .56 | .48 | .62 | .54 | .49 | .60 | .53 | .48 | .58 | .52 | .48 | .48 | .48 | .46 | .46 |
| 6 | .72 | .59 | .50 | .44 | .70 | .58 | .49 | .42 | .56 | .48 | .43 | .54 | .48 | .43 | .53 | .47 | .42 | .42 | .42 | .40 | .40 |
| 7 | .66 | .53 | .45 | .39 | .65 | .52 | .44 | .38 | .51 | .44 | .38 | .49 | .43 | .38 | .48 | .42 | .38 | .38 | .38 | .36 | .36 |
| 8 | .62 | .49 | .40 | .35 | .60 | .48 | .40 | .34 | .47 | .39 | .34 | .45 | .39 | .34 | .44 | .38 | .34 | .34 | .34 | .32 | .32 |
| 9 | .58 | .45 | .37 | .31 | .56 | .44 | .36 | .30 | .43 | .36 | .31 | .42 | .35 | .31 | .41 | .35 | .31 | .31 | .31 | .29 | .29 |
| 10 | .54 | .41 | .33 | .28 | .53 | .41 | .33 | .28 | .40 | .33 | .28 | .39 | .32 | .28 | .38 | .32 | .28 | .28 | .28 | .26 | .26 |

Zonal Lumen Summary

| Zone | Lumens | %Luminaire |
|--------|----------|------------|
| 0-30 | 6,946.7 | 29.9% |
| 0-40 | 11,326.6 | 48.7% |
| 0-60 | 19,282.3 | 82.9% |
| 60-90 | 3,982.3 | 17.1% |
| 70-100 | 1,543.1 | 6.6% |
| 90-120 | 0.000 | 0% |
| 0-90 | 23,264.5 | 100% |
| 90-180 | 0.000 | 0% |
| 0-180 | 23,264.5 | 100% |

Compatible Dimmers

| Brand | EASEIC | LEVITON |
|--------|---------|----------|
| Models | EID110U | AWSMT716 |

DHL-LP-LED

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Performance Data

| | |
|------------------------|---|
| CRI: | 84+ |
| CCT: | 4000K, 5000K |
| Warranty: | 10 yr. Warranty including Labor Allowance |
| Dimming: | 0-10V Dimming Standard |
| Operating Temperature: | -30°C to +52°C Ambient (-22°F to +125°F) |
| IP Rating: | IP54, suitable for Damp Locations |
| Lifetime Ratings: | 295,000 Hours (L70); 190,000 Hours (L80) |
| Harmonic Distortion: | <10% |
| Power Factor: | >0.95 |
| Sound Rating: | Class A (inaudible in a 24dB ambient environment) |
| Weight: | 2': 10lbs. (4.5kg.) 4': 20lbs (9.0kg.) |

Lumen Chart

| Lens Type | Form Factor | Nominal Wattage | System Wattage | DLC Premium | 5000K | | 4000K | | Recommended Light Source Comparison |
|-----------|-------------|-----------------|----------------|-------------|------------------|-----------------|------------------|-----------------|-------------------------------------|
| | | | | | Delivered Lumens | Efficacy (lm/W) | Delivered Lumens | Efficacy (lm/W) | |
| Frosted | 2' | 65 | 63 | YES | 8500 | 131 | 8100 | 129 | 175W MH |
| | | 90 | 88 | YES | 11700 | 133 | 11600 | 132 | 250W MH |
| | | 135 | 132 | YES | 17150 | 130 | 17100 | 130 | 400W MH, 4-54W T5HO |
| | 4' | 178 | 176 | YES | 23450 | 133 | 23250 | 132 | 6-lamp T5HO |
| | | 265 | 266 | YES | 34700 | 130 | 34450 | 130 | 1000W MH, 8-lamp T5HO |

Projected LED Maintenance

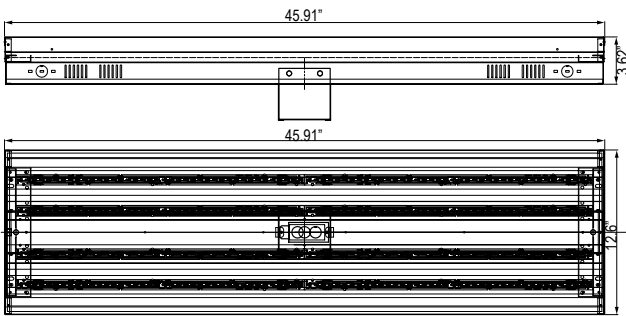
| Operating Hours | 0 | 50,000 | 100,000 | 150,000 | 200,000 |
|--------------------------|---|--------|---------|---------|---------|
| Lumen Maintenance Factor | 1 | 0.96 | 0.90 | 0.84 | 0.79 |

25°C Ambient Interior Temp

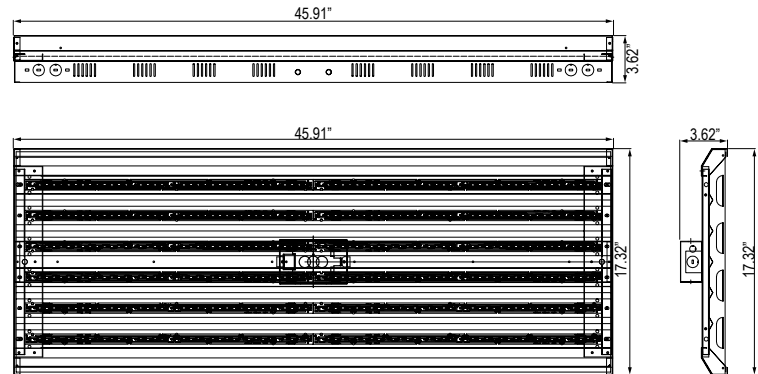
Wire Guard



4' Dimensions



4' 178W Version



4' 265W Version

Occupancy Sensor

The HBP-100 series occupancy sensors are designed for automatic lighting control in high or low bay applications. All models contain a passive infrared (PIR) sensor and a lens engineered to provide reliable coverage from a wide range of mounting heights.

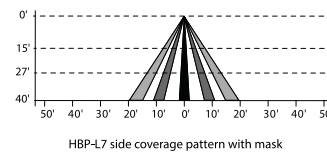
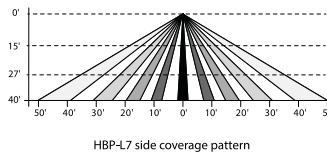
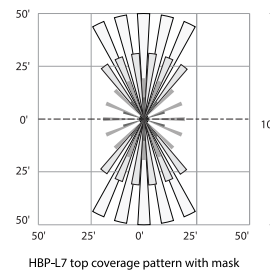
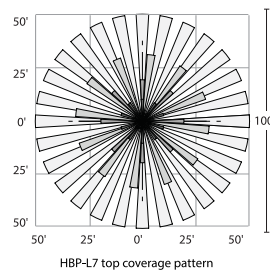
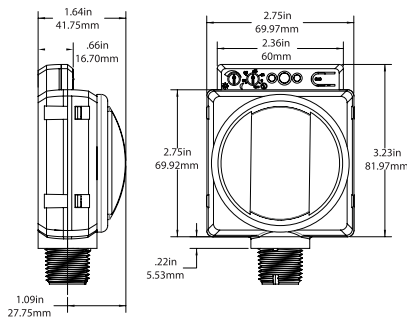
Sensitivity and time delay adjustments are set using trimpots conveniently located on the sensor module. The HBP-111 can also be adjusted remotely using a handheld configuration tool (FSIR-100).

Both models include a hold-off daylighting light level feature to prevent lighting from turning on when occupancy is detected when there is sufficient ambient light available.

The HBP-111 includes extra features that can be enabled or disabled via the FSIR-100. Features include burn-in mode, walkthrough mode, visual alert and occupancy mode.



- Indoor use only
- Operating Temperature: 32°F to 158°F (0°C to 70°C)
- Operating Humidity: 5% to 95%, non-condensing
- Line voltage for direct connection to load 120, 277, 347V, 60Hz or 230V, single phase 50Hz operation
- Power consumption: 0.2W
- Adjustable hold-off daylighting level
- Flexible mounting option
- Snap-in mounting hardware
- UL and cUL listed
- Easy mounting using knockout at end of remove high bay luminaire
- Weight 6.4oz (181g)
- Adjustable time delay and sensitivity



DHL-LP-LED

Low Profile LED Linear High/Low Bay

Step Dimming & Bi-Level

FSP-211B-D

The FSP-2x1B is a family of passive infrared (PIR) outdoor sensors that raise or lower the electric lighting level to high, low or off based on motion and/ or daylight contribution. Typically, once the sensor stops detecting movement and the time delay elapses, lights will first fade to low mode, and eventually switch off. When motion is detected, the sensor ramps the light level to high mode unless the daylight contribution is sufficient.

The integral photocell can also switch the lights on and off for dusk to dawn control, so that lighting remains on overnight even without motion detection.

The sensors control 0-10VDC or nondimming LED drivers or ballasts. The low voltage FSP-201B may be used with dim-to-off drivers or ballasts.

Initial setup and subsequent sensor adjustments are made using a Wireless Handheld Configuration Tool (FSIR-100). This tool enables adjustment of sensor parameters including high/low mode, sensitivity, time delay, cut off and more.

The FSIR-100 can read current parameter settings, and stores up to six sensor parameter profiles to speed commissioning of multiple sensors.

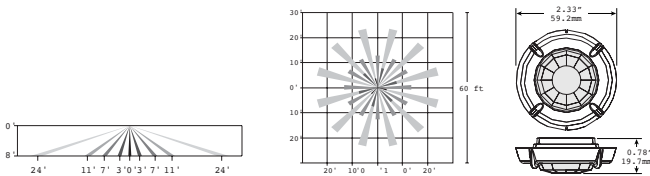
The FSP-2x1B family is available in three configurations for mounting inside a fixture, to the outside of a fixture or enclosure via a 1/2" knockout, or to a pole.



Coverage & Dimensions

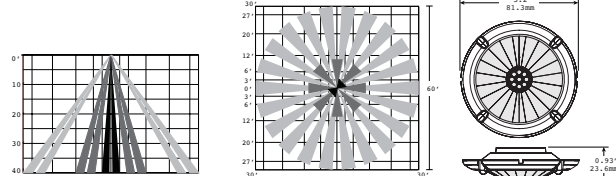
The FS-Lx lenses work with FSP-211 motion sensors to provide multi-level lighting control based on motion and the ambient light level. Four lens choices provide flexibility for varying mounting heights.

FSP-L2



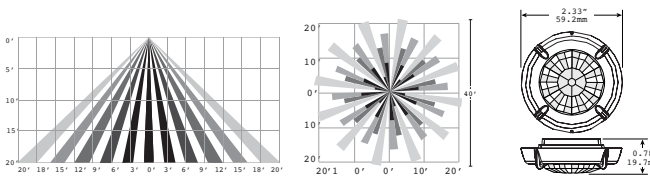
360° lens, maximum coverage 48' diameter from 8' height

FSP-L4



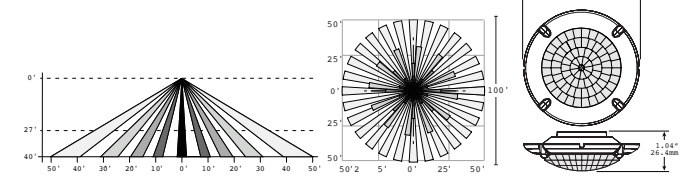
360° lens, maximum coverage 60' diameter from 40' height

FSP-L3*



360° lens, maximum coverage 40' diameter from 20' height

FSP-L7



360° lens, maximum coverage 100' diameter from 40' height

*When a Motion Sensor (MS) option is ordered, the default lens type shipped with luminaire is FSP-L3. If another lens type is desired (L2, L4, or L7), it will ship separately to be changed out by the installer.