

## BayLine

### High Bay LED Luminaire



#### Key Features

- Energy-efficient LED replacement for conventional fluorescent or HID systems.
- Modular design accommodates multiple lumen packages up to 34,450L.
- Suspended or surface mounted. Multiple optical distributions available.
- Industry leading 10-Year warranty. <sup>2</sup>

#### Electrical

- 120-277VAC or 347-480VAC input.
- 0-10V dimming standard.
- Integrated emergency driver/battery back-up accessory available. <sup>6</sup>
- Integrated sensor options available.
- Operating temperature: -25°C to +45°C (-13°F to +113°F)

#### Mounting

- Suspension mount ready with additional hanging hardware (sold separately).
- Surface mounting kit available (sold separately).

#### Construction

- Housing is fabricated from aluminum for maximum durability.
- Low-profile body is designed to optimize thermal management.
- Finish is pre-painted white standard.

#### Optics

- Industry leading LEDs with 5000K CCT (minimum 70 CRI).
- Lumen Maintenance >200,000 hours (L70) <sup>3</sup>
- Lens optics are designed to output a specialized light distribution for optimal performance in specific applications.

#### Warranty

- Backed by National LED's industry leading 10-year warranty.

Project

Date

Catalog Number

Type

#### Product Performance Summary

Lumen Output	Up to 35,450 lumens
Efficacy	Up to 151 LPW
CRI	≥ 70 CRI
Available CCT	5000K <sup>1</sup>
Warranty	10-Year Warranty

#### Product Overview

National LED brings BayLine, a minimal sleek high bay option for commercial and retrofit applications. Its scalability, combined with multiple beam angle options, make BayLine the ideal choice for any lighting project. From narrow aisles to wide open areas, BayLine can light it all. Available in lumen packages ranging from 15,100 to 34,450 lumens with surface mount and suspended mounting capabilities.

#### Product Applications

- Warehouses
- Industrial Facilities
- Manufacturing Facilities
- Storage Facilities
- Large Open Areas
- Airport Hangars
- Gymnasiums
- Commercial Buildings

#### Product Certifications/Approvals

- UL Listed.
- Complies with UL 1598 and CSA 22.2
- Suitable for damp locations.
- DLC Premium Listed.
- RoHS compliant



#### Ordering Information

Example: **BLN1-1-UNVL-50-70-S-60-Y**

BLN1																	
Series		Variant		Input Voltage		CCT		CRI		Flux Level		Optics		Dimmable		Battery Backup	
	1	Standard	UNVL	120-277V	50	5000K	70	70 CRI	B	Basic	30	30°	N	No	Blank	None	
	2	Conduit Mount	UNVH	347-480V					S	Standard	60	60°	Y	Yes			
									M	Medium	90	90°	S0	LGSN Sensor <sup>4</sup>			
									H	High	120	120°	S1	LSXR-610-ADC <sup>5</sup>			
													S2	LSXR-650-ADC <sup>5</sup>			
													S3	LSXR-4PK-ADC <sup>5</sup>			
													S4	LSXR-610-ANL <sup>5</sup>			
													S5	LSXR-650-ANL <sup>5</sup>			
													S6	LSXR-4PK-ANL <sup>5</sup>			

1. 5000K CCT is the standard stocking item. 4000K with minimum 80 CRI is available as special order only.

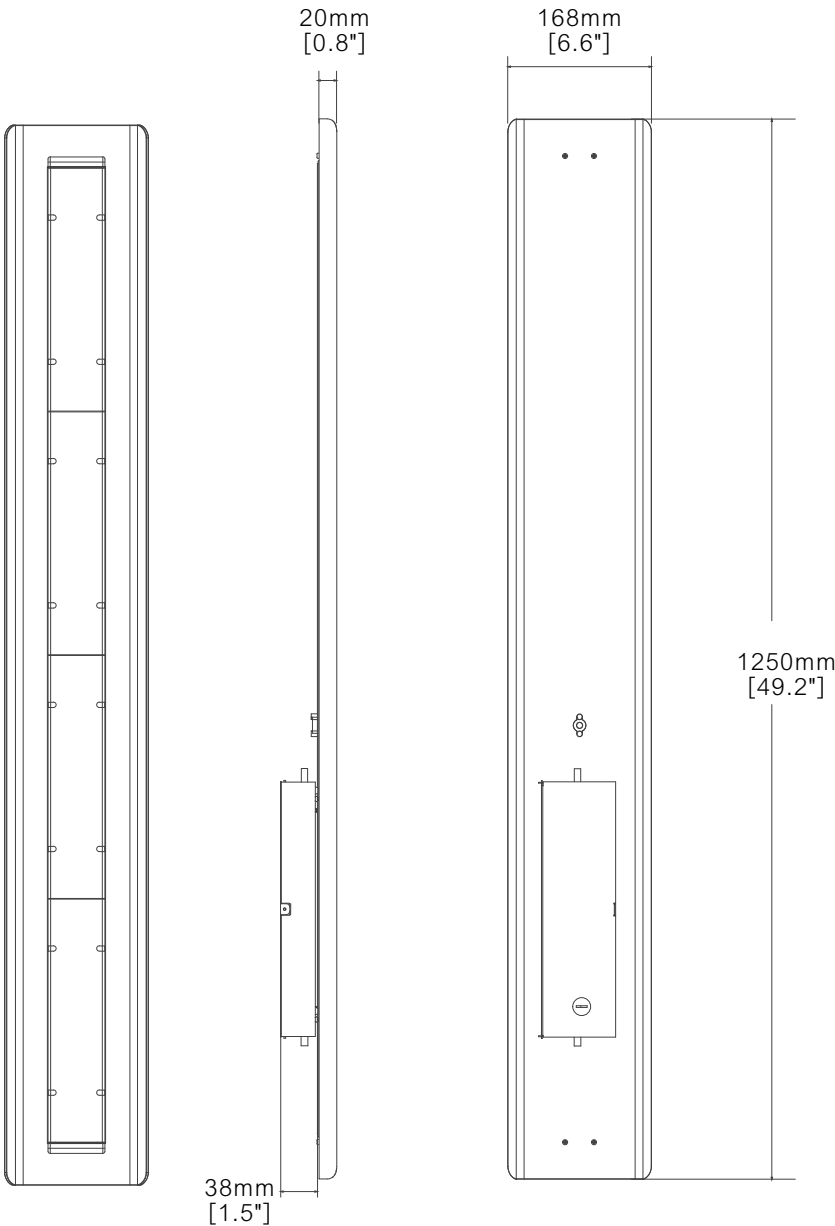
2. Operating conditions must be 30°C or below or controlled by a US LED-approved control device.

3. Product ‘Lifetimes’ refer only to the LED light engine, not the power source, and are based on the Illuminating Engineering Society’s TM21 Projected Lumen Maintenance methodology at a 25° C / 77° F ambient temperature. The lifetimes are solely meant to be a guide for expected LED degradation and not a warranty or predictive of their actual

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4. Only available with UNVL option and is a microwave sensor.  
5. Option is a passive infrared sensor.  
6. Battery backup only available with UNVL option.

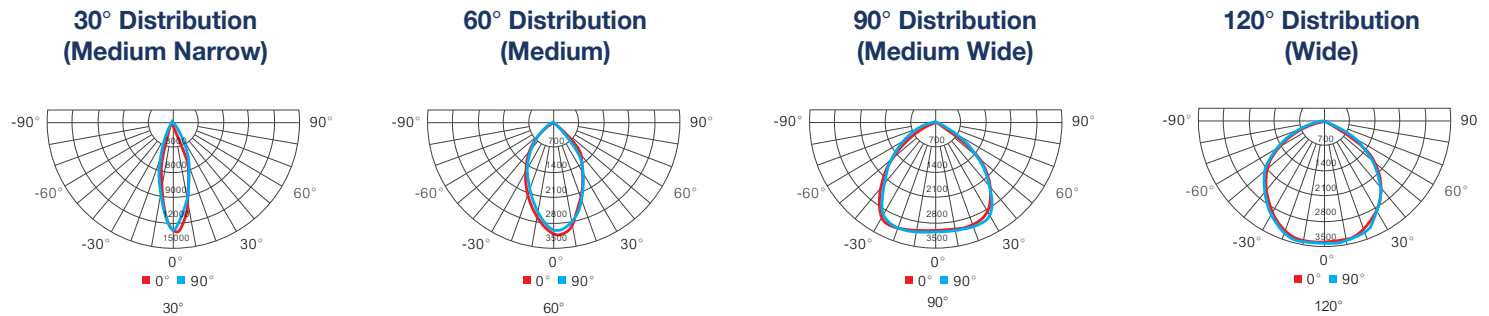
Dimensions

Net Weight (Varies By Options)
16.3 lbs (7.39kg) - 17.6 lbs. (7.98kg)



Optical Distributions

All photometric testing performed to IESNA LM-79 standards by a NVLAP® accredited testing facility. ISO footcandle plots below demonstrate the distribution patterns only. Visit [www.nationalled.com](http://www.nationalled.com) for download complete specifications, IES files, or to request a photometric layout.



Performance Data

Luminaire Photometric Data		Zonal Lumen Summary			
Model Number	BLN1-X-UNVX-50-70-B-120-X-X	Zone	Lumens	% Fixt	
Issue Date	08/06/2018	0-30	3975.87	26.30	
IESNA	LM-63-2002	0-40	6585.97	43.60	
Lamp	LED	0-60	11959.18	79.20	
Total Input Watts	100	0-90	15059.17	99.70	
Total Lumens	15,100	0-180	15099.92	100.00	
Efficacy	151 LPW				
Spacing Criterion	0°-180° = 1.24   90°-270° = 1.40				

Model	System Level Power	Delivered Lumens	Efficacy	CCT	L70 Calculate Life	L85 Calculate Life
BLN1-1-UNVX-50-70-B-XXX-X	101W	15,100L	151 LPW	5000K	> 200,000 Hours	> 200,000 Hours
BLN1-1-UNVX-50-70-S-XXX-X	151W	22,500L	149 LPW	5000K	> 200,000 Hours	> 200,000 Hours
BLN1-1-UNVX-50-70-M-XXX-X	205W	31,000L	151 LPW	5000K	> 200,000 Hours	> 200,000 Hours
BLN1-1-UNVX-50-70-H-XXX-X	242W	35,450L	147 LPW	5000K	> 200,000 Hours	> 200,000 Hours

### Accessories

#### LGSN Sensor - Microwave Motion Sensor

##### Overview

The LGSN sensor is an innovative and active motion detector with HF system 5.8GHz. Motion can be detected through plastic, glass and thin non-metal materials. The sensor supplies a simple energy-saving solution to use light only when and where you need it. It automatically switches on/off light based on motion and ambient light level.

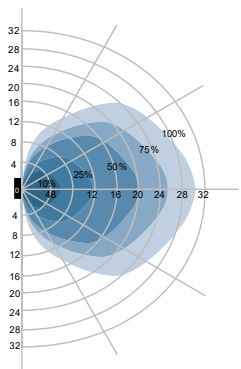
##### Key Features

- Automatic switching based on motion and light level.
- Zero-crossing point operation helps protect the sensor against in-rush current.
- Super compact size.
- Detection area, time delay, and daylight threshold can be precisely set.
- Wide detection area, ranges up to 16m in diameter.

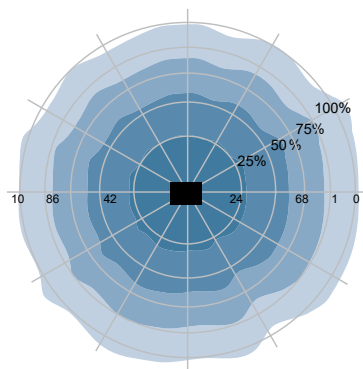


##### Specifications

Operating voltage	120~277Vac, 50Hz
Rated load	120V@400W;220-240V@800W;277V@1000W
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW
Power consumption	≤ 0.5W(standby)
Detection zone	Max.(D x H): 16m x 15m
Detection sensitivity	25% / 50% / 75% / 100%
Hold time	5s / 30s / 90s / 3min / 20min / 30min
Daylight sensor	5Lux/15Lux/30Lux/50Lux/100Lux/Disable
Mounting height	15m Max.
Motion detection	0.5~3m/s
Detection angle	150°(wall installation) 360°(ceiling installation)
Operating temperature	-20℃ ~60℃
IP rating	IP20



Wall mounting pattern (Unit: m)



Ceiling mounting pattern (Unit: m)

### Accessories

**LSXR-610-ADC - Passive Infrared Sensor | High/Low Mount 360° | Dimming/Switching Photocell**

**LSXR-650-ADC - Passive Infrared Sensor | High/Low Mount 360° & Aisleway | Dimming/Switching Photocell**

**LSXR-4PK-ADC - Passive Infrared Sensor | All Lenses | Dimming/Switching Photocell**

**LSXR-610-ANL - Passive Infrared Sensor | High/Low Mount 360° | Dimming/Switching Photocell With High/Low Occupancy Operation**

**LSXR-650-ANL - Passive Infrared Sensor | High/Low Mount 360° & Aisleway | Dimming/Switching Photocell With High/Low Occupancy Operation**

**LSXR-4PK-ANL - Passive Infrared Sensor | All Lenses | Dimming/Switching Photocell With High/Low Occupancy Operation**

### Overview

The LSXR Family of fixture mount occupancy sensors provides reliable and versatile solutions for commercial and industrial lighting control applications. All LSXR Family sensors utilize passive infrared (PIR) detection and feature interchangeable lenses, providing flexibility for multiple mounting height and coverage pattern requirements.

### Key Features

- Four interchangeable lenses
- 100% digital PIR detection - provides excellent RF immunity
- No PIR field calibration or sensitivity adjustments required
- Powers from single or two-phase line connections
- Photocell and 0-10 VDC dimming options
- Digital push-button programming - no tools or analog adjustments required
- Non-volatile settings memory
- Convenient test mode - quickens initial walk and/or photocell testing
- LampMaximizer® minimum on timer (15 min) enables usage of shorter occupancy time delays while protecting fluorescent lamp life
- Default 10 minute occupancy time delay

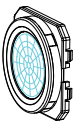


### Specifications

- Size (w/ Mounting Flange): 3.75" H x 2.50" W x 4.00" D (9.5 cm x 6.4 cm x 10.2 cm)
- Weight: 6 oz
- Mounting: 1/2" knockout (7/8" hole) on fixture
- Maximum Load: 800 W @ 120 VAC, 1200 W @ 277 VAC, 1000 W @ 208 VAC, 1200 W @ 240 VAC, 1500 W @ 347 VAC, 2160 W @ 480 VAC
- Motor Load: 1/4 HP
- Dimming Load: Sinks < 20 mA; (~ 40 LED drivers/ballasts @ 0.5 per) 0-10VDC dimmable ballasts or LED drivers only
- Temperature Rating: -20°C to 60°C for models with suffix LT
- -10°C to 60°C for all other models

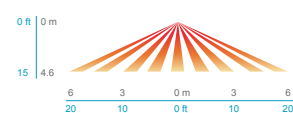


#### HIGH MOUNT 360° LENS (#6)

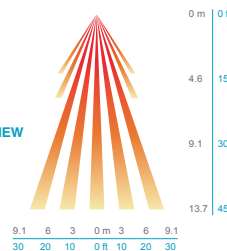


- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g. walking) up to a 35 ft (10.76 m) mounting height
- Excellent detection of extra large motion (e.g. forklifts) up to a 45 ft (13.72 m) mounting height
- Tested to NEMA WD 7-2011

#### LOW VIEW



#### HIGH VIEW

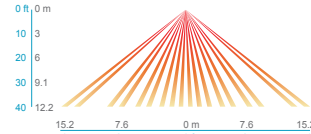


#### HIGH MOUNT AISLEWAY LENS (#50)

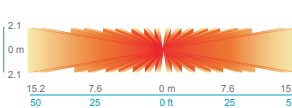


- Provides a bi-directional coverage pattern ideal for warehouse racking
- 1.2x mounting height equals approximate detection range in either direction
- Typical 40 ft (12.19 m) mounting detects 50 ft (15.24 m) in either direction
- Superior aisleway coverage compared to a masked 360° lens

#### SIDE VIEW



#### TOP VIEW



Accessories

BLD-AM20D-480800 - BillDa® Emergency LED Driver 20W Constant Output Power

Key Features

- Listed for field installations - UL 924 and CSA 22.2
- Selectable emergency power 10W, 15W & 20W.
- Universal input (100-277VAC).
- Output Class 2 compliant.
- High-temperature, maintenance-free, Ni-MH battery.
- Constant output power (auto-sensing output within in each range).
- Battery protections: over voltage protection, low voltage protection, over temperature protection & short circuit protection.
- RoHS compliant.

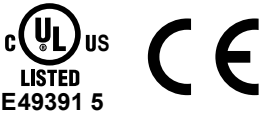
Model	Input Voltage	Input Power	Charging Time	Output Voltage	Output Power	Emergency Time
BLD-AM20D-480800	100-277V AC	5.5W	>24H	25-48VDC	20W	>1.5H



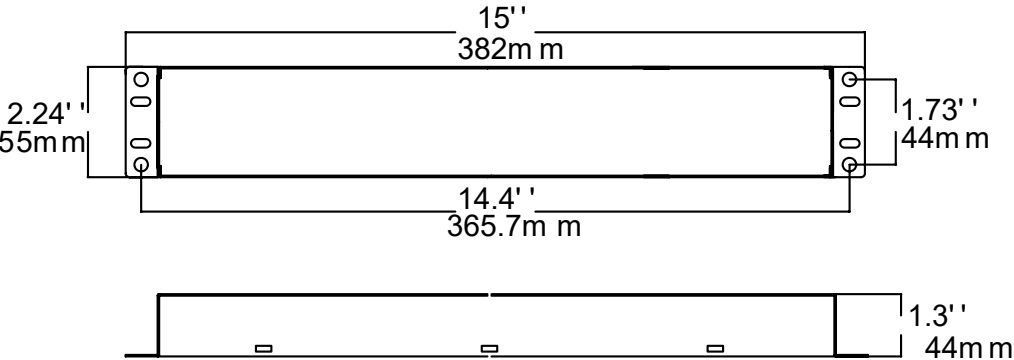
Specifications

- UL Listed**  
For field or factory installation
- Universal Input Voltage**  
100–277Vac, 50/60Hz
- AC Input Current**  
100mA max.
- AC Input Power Rating**  
5.5W max.
- Output Current and Voltage**  
416–800mA 25V–48V (Class 2)
- Output Power**  
20W max.
- Illumination Time**  
≥90 Minutes
- Full Warranty**  
5 Years

- Test Switch/Charging Indicator Light**  
Low Voltage, illuminated Test Switch
- Battery**  
High-Temperature, Miantenance-Free  
Ni-MH battery  
5 Years Life Expectancy
- Battery Charging Current**  
250mA
- Recharge Time**  
≥24Hours
- Temperature Rating (Ambient)**  
0°C to +50°C (32°F to 122°F)
- Dimensions**  
15"x2.17"x1.3" (382mmx55mmx32mm)  
2' (450mm) Flexible Conduit
- Weight**  
3.4 lbs(1.56kg)

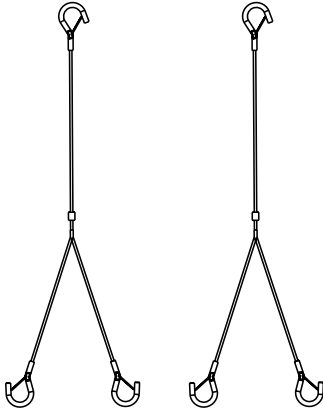


RoHS

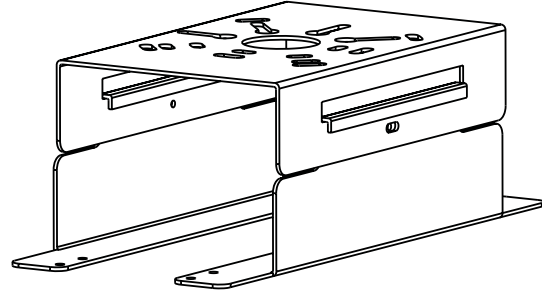


### Mounting

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**30184** 5 ft. Hanger Cable With  
Y-Snap Hooks (Sold Separately)



**BLN-SMB** Surface Mounting Kit  
Accessory (Sold Separately)

**30200** - 20 ft. Aircraft Cable Mounting Kit

**30202** - 10 ft. Aircraft Cable Mounting Kit  
(Sold Separately)

