

BHB-TS LED Specifications

Wildlife Certified

Garage - Ceiling - Commercial - Industrial - Indoor



The NEW Visionaire BOW High Bay LED Luminaire is designed to efficiently light any large interior space such as Factories, Aircraft Hangars, Warehouses, Distribution Centers, and many other large indoor spaces with mounting heights of up to 70'. It combines the innovative design of individual heat sinks with cutting edge LED technology; and makes an ideal replacement for conventional HID and fluorescent high bay systems. This series offers higher efficacy than others in the past and can be combined with options such as wireless controls and motion sensors for even increased energy savings and virtually no maintenance costs.

The 32 LED Light engines are die-cast aluminum with external heat radiating fins for maximum heat dissipation. This innovative design uses 2,4,6, or 8 light engines (64 to 256 LEDs) operating with 350, or 530 mA drivers. The externally mounted IP-67 Drivers operate cooler for long life and increased output. Improved thermal management of the Light Bars, allows for up to 65°C ambient temperature ratings and -40°C minimum operating temperature; and over 100,000 hours of life at L70.

Our sealed LED optics offer very uniform light distribution and are available in eight distribution patterns of Aisle Wide, Aisle Diffused, Symmetrical Narrow, Symmetrical Narrow Diffused, Symmetrical Medium, Symmetrical Medium Diffused, Symmetrical Wide and Symmetrical Wide Diffused. Our Turtle Safe and Wildlife Certified LEDs operates at 590nm.

Mounting options include chain or cable ready as standard; 1/2" threaded rod, and 3/4" conduit. Other options include Motion Sensors, Emergency battery pack and 10' & 15' cords.

A full five year limited warranty is included on the entire system, including the polyester powder coat finish. The NEW Bow High Bay Series makes an excellent choice for many different market applications.

Project Name:

Catalog Number:

Type:

Date:

Location:

The Wildlife Lighting Program was developed by the Department of the Interior's U.S. Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission to address light pollution issues in ecologically sensitive areas while ensuring human safety and security.



MODEL	OPTICS		LEDs	CURRENT	WAVELENGTH
BHB-2	AW Aisle Wide	SM Symmetrical Medium 90°	64LD	3 350mA	TS 590nm
BHB-4	AD Aisle Diffused	SMD Symmetrical Medium Diffused 90°	128LD	5 530mA	
BHB-6	SN Symmetrical Narrow 40°	SW Symmetrical Wide 120°	192LD		
BHB-8	SND Symmetrical Narrow Diffused 40°	SWD Symmetrical Wide Diffused 120°	256LD		

VOLTAGE	MOUNTING	FINISH	CONTROL OPTIONS	OPTIONS	MOUNTING ACCESSORIES
UNV 120-277V	CBM Cable Mount * Cable Ordered Separately Hardware Not Included	WH White	DIM 0-10v Dimming Driver	WG Wire Guard	YH5 Y-Cable With Hook 5' Height
8 347V		GY Grey	DTO Dim to Off Driver	10CD 10' Cord	YH10 Y-Cable With Hook 10' Height
5 480V	CPM 1/2" Mount * Threaded Rod and Nuts Not Included	ZFP Zinc-Free Primer Coat	D4i 4Di DALI Driver	15CD 15' Cord	YH15 Y-Cable With Hook 15' Height *To be ordered with CBM Mounting
	CDM 3/4" Conduit Mount *Conduit Not Included	CC Custom Color	WSP6-L2 WSP6-L3 WSP6-L7 8' Mounting Height 9-20' Mounting Height 21-40' Mounting Height	BBG Bird Spikes	
			WSC-8 WSC-20 WSC-40 8' Mounting Height 9-20' Mounting Height 21-40' Mounting Height *The WSC option will require (1) FSIR 100 remote for programming	BAA Buy America(n) Act Compliant	
			Z10 or Z18 Zhaga 4 Pin Receptacle	BABA Build America Buy American	
			VWC Visionaire Wireless Control		HK Hook *To be ordered with 3/4" CDM Mount
			EBPL Emergency Battery Pack		

Housing

The LED light engines are constructed of heavy-duty, die-cast aluminum, with external heat radiating fins.

The exposed driver(s) allow for easy access and allow for cooler operation and longer life.

Thermal Management

The BOW High Bay Series provides excellent overall thermal management by maximizing the fixture's heat sink capabilities. This enables the BOW High Bay Series to withstand higher ambient temperatures and drive currents without degrading LED life. The BOW High Bay Series has a low thermal resistance rating. The heat radiating fins create superior thermal management results.

The L70 test determines the point in an LEDs life when it reaches 70 percent of its initial output. The BOW High Bay Series LEDs have been determined to last a minimum of 100,000 hours in 25 °C environments when driven at 350 mA. See LED Data Chart for additional test results.

Optical System

The highest lumen output LEDs are utilized in the BHB Series. Distribution Types include Aisle Wide, Aisle Diffused, Symmetrical Narrow 40°, Symmetrical Narrow Diffused 40°, Symmetrical Medium 90°, Symmetrical Medium Diffused 90°, Symmetrical Wide 120° and Symmetrical Wide Diffused 120°. LED light assemblies come in multiples of 32 LEDs.

- LED Wavelength 590nm

Quali-Guard® Finish

- The finish is a Quali-Guard® textured, chemically pretreated through a multiple-stage washer, electrostatically applied, thermoset polyester powder coat finish, with a minimum of 3-5 mils thickness. Finish is oven-baked at 400° F to promote maximum adherence and finish hardness. All finishes are available in standard and custom colors.
- Finish is guaranteed for five (5) years.

Mounting

Available standard for:

- Cable Mount
- 1/2" Mount
- 3/4" Conduit

Electrical Assembly

The BOW High Bay Series is supplied with a choice of 350, 530 mA high-performance LED drivers that accept 120v thru 480v, 50 Hz to 60 Hz, input. Power factor of 90%.

Rated for -40 °C to +65 °C temperature operations.

10 kA surge protector supplied as standard.

5' Cord as standard.

- 0-10v Dimming Driver is standard.

Warranty

- Five (5) year Limited Warranty on electrical components, Five (5) year on finish. For full warranty information, please visit visionairelighting.com.

Options

- Wattstopper Plus
- Wattstopper FSP-211 Motion Sensor/Control
- Dimming Driver
- Dim To Off Driver
- 4Di DALI Driver
- Zhaga 4 Pin Receptacle
- Wireless Control
- Emergency Battery Pack
- Wire Guard
- Cord 10' / 15'
- Dimming Leads
- Bird Spikes
- BAA / BABA

Listings

- UL/cUL listed UL 1598 Suitable for damp locations
- UL 8750 LED equipment in Lighting Products
- Powder Coated Tough™
- IP-66 Rated
- Certified Wildlife Lighting



Photometric Optical Summary

AW	AD	SN	SND	SM	SMD	SW	SWD

Dimensions

Width:	BHB-2	40"
	BHB-4	40"
	BHB-6	40"
	BHB-8	40"

Depth:	BHB-2	6"
	BHB-4	11"
	BHB-6	15.5"
	BHB-8	20"

Height:	BHB-2	19"
	BHB-4	19"
	BHB-6	19"
	BHB-8	19"

LED Specifications **BHB-TS**

BHB-2 W/EBPL



16LBS

BHB-4 W/Motion Sensor



30LBS

BHB-6



46LBS

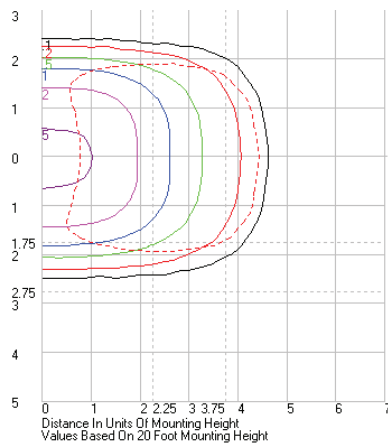
BHB-8



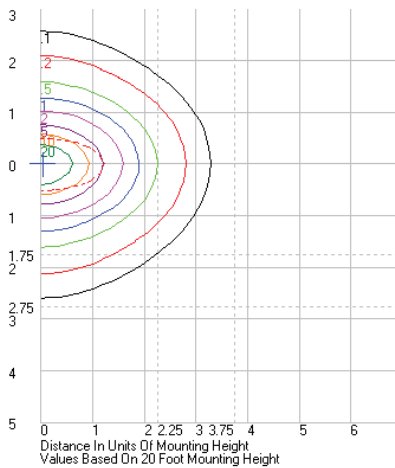
59LBS

Photometrics/ISO Line

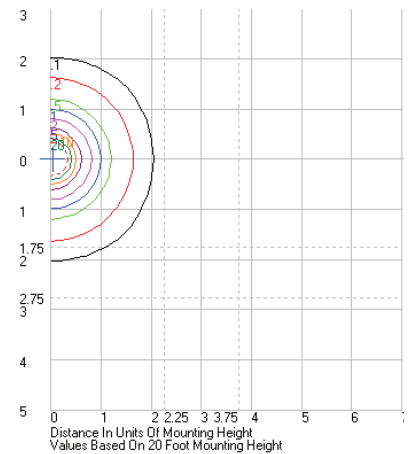
Aisle Wide



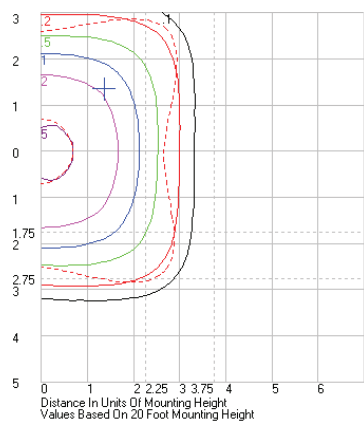
Aisle Diffused



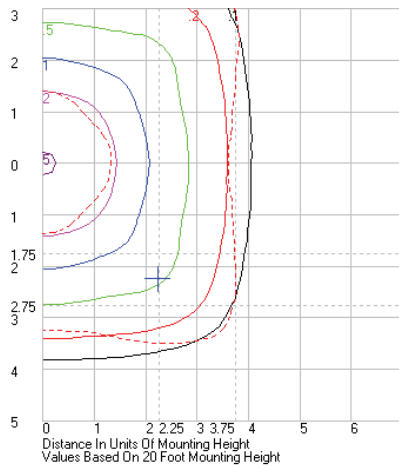
Symmetrical Narrow 40°



Symmetrical Medium 90°



Symmetrical Wide 120°



The BOW High Bay series optical lens system enables LEDs to provide precise illumination where needed. Lenses are designed for commercial & industrial applications where mounting height, fixture spacing & light levels help determine lens selection. The following table outlines lens options and suggested application.

Optic Application Guide		
	Mounting Height	Space Type
Aisle Wide	15-25'	Isle with storage racks
Aisle Diffused	26+	Isle with storage racks
Symmetrical Narrow 40°	41'+	Open Floor Space
Symmetrical Medium 90°	26'-40	Open Floor Space
Symmetrical Wide 120°	15-25'	Open Floor Space

Mounting Options

Cable Mount 	Cable Mount Available on with Bow High Bay configurations Y Cable / Hook to be ordered as a mounting accessory
1/2" Mount 	1/2" Mount Available on all Bow High Bay size configurations Attaches to 1/2" threaded rod (Rod and hardware not included)
3/4" Conduit Mount 	3/4" Conduit Mount Available on Bow High Bay configurations Attaches to 3/4" threaded conduit or hook (Conduit and hardware not included)

Mounting Accesories

Y-Cable / Hook 	Y-Cable / Hook Available on with Bow Highbay configurations Must order with Cable Mount option Available in 5', 10' and 15'
Hook  Image as reference	Hook Available on Bow Highbay configurations Must order 3/4" Conduit Mount with the Hook for a Mounting Accessory

WATTSTOPPER PLUS

FSP-600 Series

The FSP-600 series by Wattstopper PLUS is an integrated luminaire level lighting controller and sensor for indoor/outdoor lighting applications that require networked wireless control. The FSP-600 is designed to integrate directly into exterior, high bay, parking garage, and general site lighting solutions. It is a passive infrared (PIR) sensor and closed loop photosensor.

The FSP-600 series design intends to reduce installer labor time and make on-site start up easy for technicians.

Once commissioned and paired to a Wattstopper PLUS network, the devices can measure both motion and daylight contribution in order to automatically switch or dim lighting. It also provides the ability to communicate to other fixtures in the space without any front-end devices.

The Wattstopper PLUS FSP-600 series is available in a few different options including: internal, external straight nipple, and external drop nipple. Sensor lens options sold separately and should be ordered based on designed mounting height and desired finish.

FSP-621



FSP-200 Series

The FSP-200 series sensors provide multi-level control based on motion and/or daylight contribution. They control 0-10 VDC LED drivers or dimming ballasts, as well as non-dimming ballasts and, with an FSP-Lx Lens, are rated for wet and cold locations. All control parameters are adjustable via a wireless configuration tool capable of storing and transmitting sensor profiles. The FSP-200 series is available in two different voltage configurations adding flexibility to your fixture design or project.

Typically, the sensor ramps lighting On to the selected High mode level when motion is detected and the ambient light level is below the hold off setpoint. After the sensor stops detecting movement and the time delay elapses, lights fade to the Low mode level. If there is no motion during the subsequent cut off time delay, the lights will turn Off. For dusk to dawn control, the integral photocell can switch the lights On and Off based on the ambient light level so that lighting remains on overnight even without motion detection.

Initial setup and subsequent sensor adjustments are made using a Wireless Handheld Configuration Tool (FSIR-100). This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cut off and more. The FSIR-100 is also used to initiate automatic calibration of the FSP-2x1B ambient light level setpoint. The setpoint is used to hold the controlled lighting off or at a low level when there is sufficient daylight. The wireless tool stores up to six sensor parameter profiles to speed configuration of multiple sensors.

FSP-211



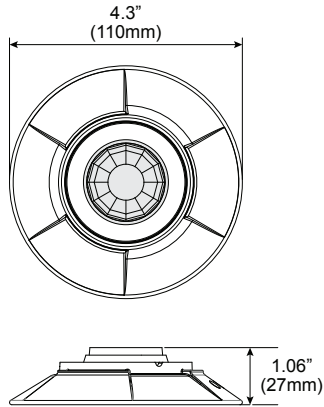
FSP-221



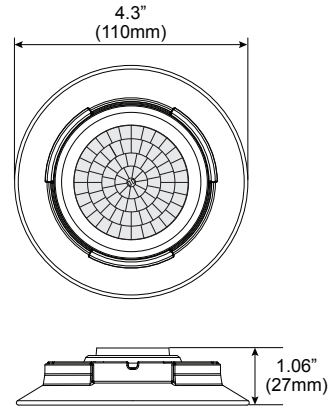
Lens with Shroud Dimensions

The FSP-Lx-S models include a shroud, which blocks high-angle light coming from the fixture, to improve photocell performance. With the shroud attached, the dimensions for all three lenses are identical

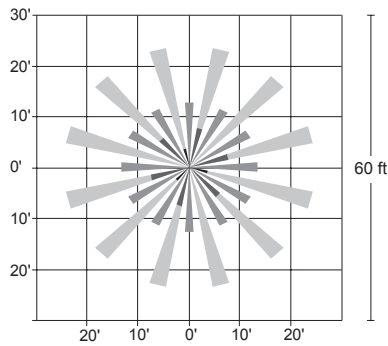
FSP-L2-S and FSP-L3-S



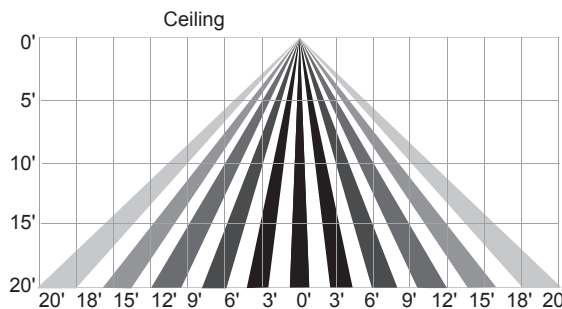
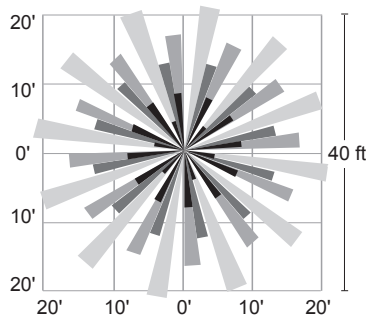
FSP-L7-S



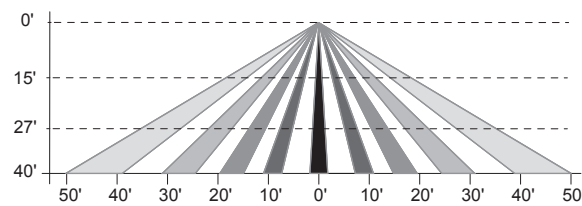
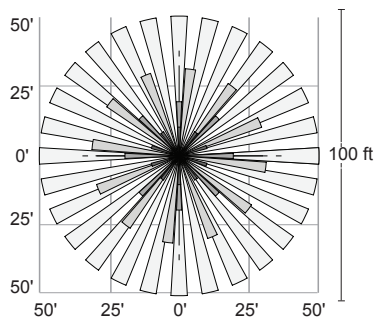
COVERAGE



FSP-L2 top and side coverage patterns



FSP-L3 top and side coverage patterns



FSP-L7 top and side coverage patterns

LUMENS TS											
BOW HIGH BAY OPTICAL NAME											
MODEL	# LEDs	Current (mA)	AW	SM	SW	SN	AD	SND	SMD	SWD	WATTS
BHB-2	64LD	350	4705	4941	4532	4941	4526	4664	4375	3981	53
		530	5941	6240	5722	6239	5715	5889	5525	5027	84
BHB-4	128LD	350	9351	9821	9007	9821	8995	9270	8696	7913	107
		530	12037	12642	11594	12641	11579	11933	11194	10186	167
BHB-6	192LD	350	13357	14029	12865	14028	12849	13241	12421	11303	160
		530	16846	17694	16226	17692	16206	16700	15666	14256	252
BHB-8	256LD	350	17063	17921	16434	17920	16414	16915	15868	14439	212
		530	21804	22901	21001	22899	20975	21615	20277	18451	335

EFFICACY (LM/W)											
BOW HIGH BAY OPTICAL NAME											
MODEL	# LEDs	Current (mA)	AW	SM	SW	SN	AD	SND	SMD	SWD	WATTS
BHB-2	64LD	350	88	93	85	93	85	88	82	75	53
		530	70	74	68	74	68	70	66	60	84
BHB-4	128LD	350	87	91	84	91	84	86	81	74	107
		530	72	76	70	76	69	72	67	61	167
BHB-6	192LD	350	84	88	80	88	80	83	78	71	160
		530	67	70	64	70	64	66	62	57	252
BHB-8	256LD	350	81	85	78	85	78	80	75	68	212
		530	65	68	63	68	63	65	61	55	335

BUG TS																										
BOW HIGH BAY OPTICAL NAME																										
MODEL	# LEDs	Current (mA)	AW			SM			SW			SN			AD			SND			SMD			SWD		
			B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G
BHB-2	64LD	350	3	0	3	2	0	1	2	0	1	3	0	1	2	0	1	3	0	1	2	0	1	2	0	1
		530	3	0	3	3	0	1	3	0	2	3	0	1	3	0	1	3	0	1	2	0	1	2	0	1
BHB-4	128LD	350	3	0	3	3	0	2	3	0	2	4	0	1	3	0	2	4	0	1	3	0	1	2	0	1
		530	4	0	4	4	0	2	3	0	3	4	0	1	3	0	2	4	0	1	3	0	2	3	0	2
BHB-6	192LD	350	4	0	4	4	0	2	4	0	3	4	0	1	3	0	2	4	0	1	3	0	2	3	0	2
		530	4	0	4	4	0	2	4	0	3	5	0	1	4	0	3	4	0	1	3	0	2	3	0	2
BHB-8	256LD	350	4	0	4	4	0	2	4	0	3	5	0	1	4	0	3	4	0	1	3	0	2	3	0	2
		530	5	0	5	4	0	2	4	0	3	5	0	1	4	0	3	5	0	2	4	0	2	4	0	2

BHB-2 - ELECTRICAL LOAD (A)							
Ordering Nomenclature	System Watts	120	208	240	277	347	480
BHB-2-64LD-3	53	0.44	0.25	0.22	0.19	0.15	0.11
BHB-2-64LD-5	84	0.70	0.40	0.35	0.30	0.24	0.18
BHB-4-128LD-3	107	0.89	0.51	0.45	0.39	0.31	0.22
BHB-4-128LD-5	167	1.39	0.80	0.70	0.60	0.48	0.35
BHB-6-192LD-3	160	1.33	0.77	0.67	0.58	0.46	0.33
BHB-6-192LD-5	252	2.10	1.21	1.05	0.91	0.73	0.53
BHB-8-256LD-3	212	1.77	1.02	0.88	0.77	0.61	0.44
BHB-8-256LD-5	335	2.79	1.61	1.40	1.21	0.97	0.70
ELECTRICAL LOAD DATA IS ESTIMATED							

