

GE
Lighting



**ROYAL ELECTRIC SUPPLY
COMPANY**

3233 W Hunting Park Avenue, Philadelphia PA 19132-1845
(800) 79-ROYAL (215) 221-1200 fax (215) 221-1201
advisors@royalelectric.com www.royalelectric.com

WE GET IT
24/7 Emergency Material Access

Albeo™ LED Luminaire

High Bay Lighting
(ABV-Series)



imagination at work

Product Features

Albeo continues to build on the groundbreaking ABH-Series high bay LED luminaire with its latest high bay, the ABV-Series. Utilizing a new form factor, the ABV-Series offers customers the best mixture of value and performance.

Applications

- Designed to meet recommended luminance and illuminance requirements for High bay and Low bay applications.



Housing

- Combination of steel and aluminum housing.
- ABV-Series' design accommodates 1 or 2 modules with 2 LED strips per module.

LED & Optical Assembly

- ABV-Series lens system enable LEDs to provide optimized illumination for open floor and racked aisles with photometric distributions of 55, 90 and 120 degrees.
- Utilizes high brightness LEDs, 70 CRI at 4000K & 5000K typical.
- LM-79, LM 80 tests and reports are performed in accordance to IESNA standards.

Ratings

- DLC Listed
- RoHs
-   UL 1598 Suitable for Damp Locations
- UL 8750 LED equipment in Lighting Products
- Temperature Rated at (-30°C to +55°C) (-22°F to 131°F). *E output temperature rated at (0°C to +40°C) (32°F to 104°F).
- Projected L70(10k) ≥ 100,000 Life Hours per IES TM-21. *E output projected L70(10K) ≥ 70,000 Life Hours per IES TM-21.

Mounting

- Chain or Cable mounting ready, threaded rod kit, ¾" pendant mount kit, and surface mount* optional.
 - Cord and plug options offered.
- * Temperature rating reduced by 5°C*

Finish

- Painted white finish

Controls

- Motion and Daylight sensor can be combined with the ABV-Series for additional energy savings.
- Wireless controls and emergency battery backup options available.

Electrical

- 120-277 volt, 347 and 480 volt available.
- System power factor is >90%* and THD <20%.*
- EMI: FCC CFR Title 47 Part 15, Class A.

** System power factor and THD is tested and specified at 120V input and maximum load conditions.*

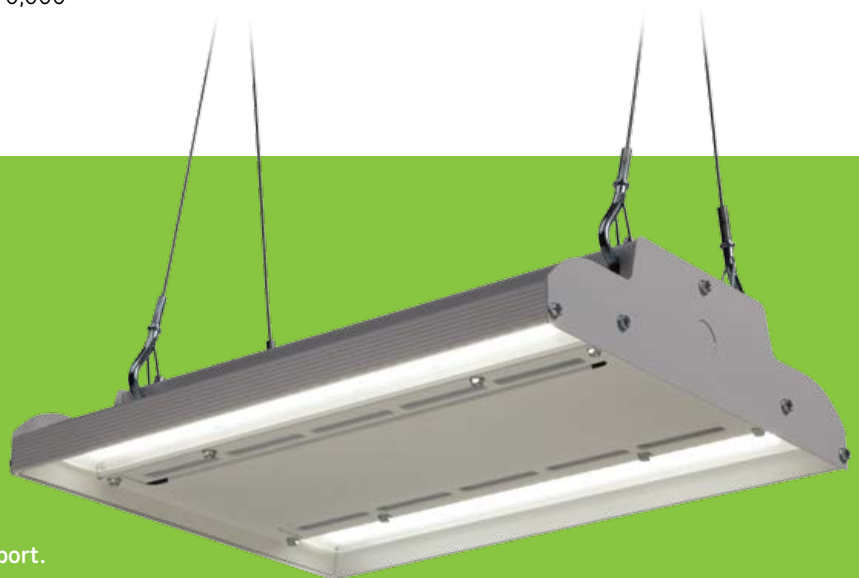
Warranty

- 5-year limited system warranty standard.

Industry Awards



Accepted for inclusion in the 2014 IES Progress Report.
Sponsored by the Illuminating Engineering Society.



Ordering Number Logic

High Bay (ABV1)



ABV1

V

W

PRODUCT ID	VOLTAGE (UL)	MODULE	LUMEN OUTPUT	LED COLOR TEMP	OPTICS BEAM	MOTION/DAYLIGHT SENSOR	CONTROL WIRING	MOUNTING	CORD	PLUG	FINISH	OPTIONS
A = Albeo B = Bay V = V-Series 1 = LED Generation	0 = 120/277 1 = 120* 2 = 208* 4 = 277* 5 = 480* D = 347*	1 = 1 module 2 = 2 modules	T = Standard Output V = Very High Output E = Elevated Output* NOTE: *1-module only	70 Plus CRI 47 = 4000K 57 = 5000K	1 = 120° 5 = 55° 9 = 90° D = 120° Diffused lens	N = None A = On/off aisle motion B = On/off 360 motion C = On/off cold temp aisle D = On/off cold temp 360 E = Daylight sensor F = Aisle motion/daylight G = 360 motion/daylight H = Pre-wired (no sensor) J = 0-10V Motion 360 K = 0-10V Motion aisle L = 0-10V Motion 360 cold M = 0-10V Motion aisle cold 4 = Wireless Enabled Motion Sensor* *Required for Wireless Enabled Fixture. Wireless not available with 347V-480V NOTE: Dimming sensors are not compatible with 480V options.	V = 0-10V	ST = Standard 22 = 1/2" Threaded rod mount kit SM = Surface Mount* Red and nuts not included 23 = 3/4" Pendant Mount Kit 3/4" conduit not included 41 = Y-Cable/Hook 5 ft. 42 = Y-Cable/Hook 10 ft. 43 = Y-Cable/Hook 15 ft. 44 = Y-Cable/Hook 20 ft. See Mounting & Accessories NOTE: *Temperature rating reduced by 5° C	K = Knock out access A = 6 ft. 18-3 cord B = 12 ft. 18-3 cord	N = None A = 15A straight plug B = 20A straight plug C = 15A twist lock plug D = 20A twist lock plug	W = White Powder Coat	EL1 = 120° Battery Backup EL5 = 50° Battery Backup

MODULE #	OUTPUT LEVEL	TYPICAL INITIAL LUMENS 70 CRI		TYPICAL SYSTEM WATTS		LPW (5000K)		MAXIMUM AMBIENT TEMPERATURE
		4000K	5000K	120V-277V	347V-480V	120V-277V	347V-480V	
1	T	9000	9170	67	72	137	127	55°C
1	V	12080	12310	95	102	130	121	55°C
1	E	17200	17200	153	150	112	114	40°C
2	T	18000	18340	134	144	137	127	55°C
2	V	24160	24620	190	204	130	121	55°C

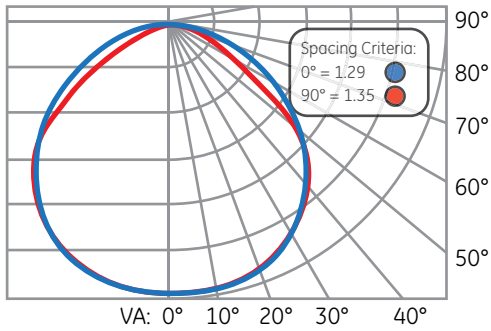
OPTICS BEAM	% OUTPUT
120° (1)	100%
55° (5)	93%
90° (9)	99%
120° Diffused (D)	99%

Note: Lumen data shown is for 120°(1) optic see table to the right for other light optic factors.

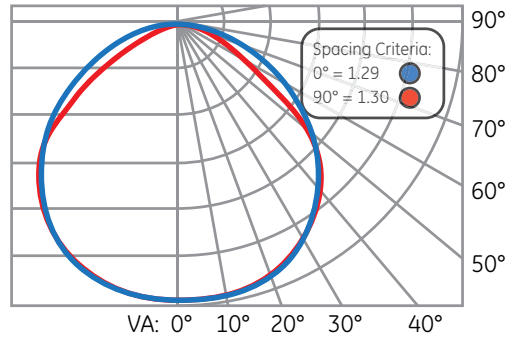
Photometrics

Optics for Common Applications

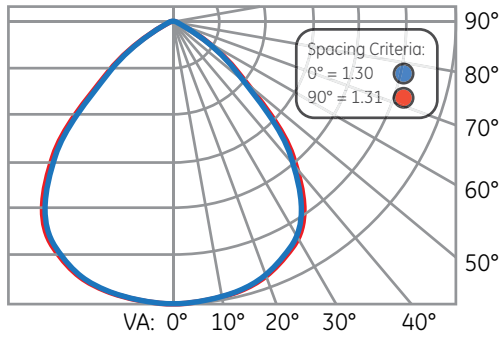
Polar Candela Distribution
120° Full Beam Angle



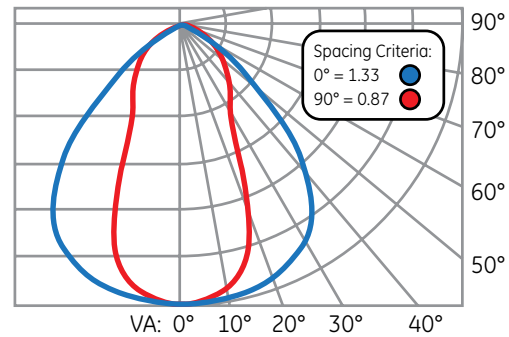
Polar Candela Distribution
120° Diffused Full Beam Angle



Polar Candela Distribution
90° Full Beam Angle



Polar Candela Distribution
55° Full Beam Angle

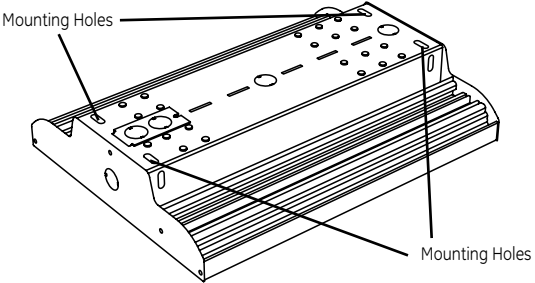
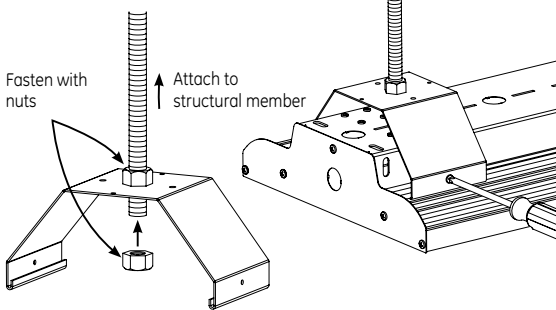
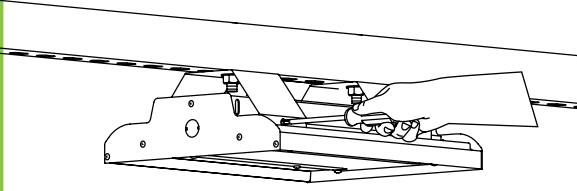
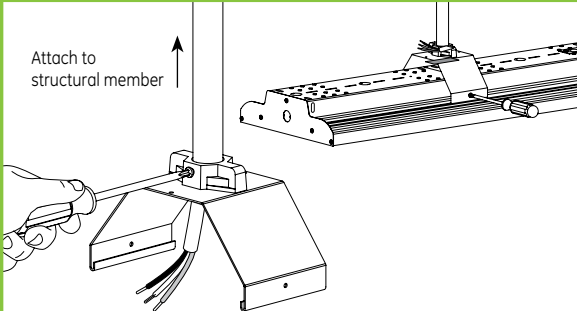
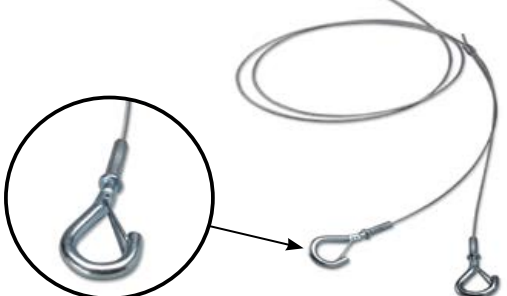


Lens selection by application

The Albeo™ ABV-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. Consult factory for specific project layouts.

LENS TYPE	MOUNTING HEIGHT	SPACE TYPE
120° Diffused	Below 20 Feet	Open Floor Plan
120° Standard	Any	Open Floor Plan
90°	Any	Open Floor Plan
55°	Any	Low or High Bay Racked Aisles

Mounting & Accessories

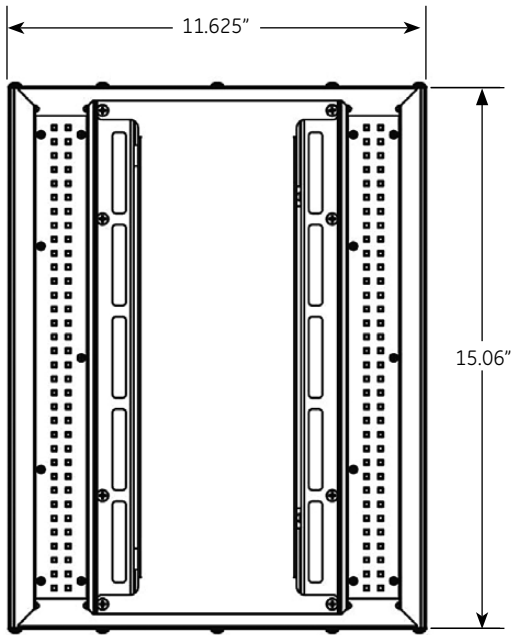
MOUNTING OPTIONS	IMAGE	ORDER LOGIC CODE
<p>Standard Chain/Cable Mount Available on all fixture configurations (chain not included). Y-Cable w/hook can be ordered as an accessory.</p>	 <p>Mounting Holes</p> <p>Mounting Holes</p>	<p>ST = Standard</p>
<p>Rod Mount (optional) Available on all fixture configurations. Attaches to 1/2" threaded rod (rod and nuts not included).</p>	 <p>Fasten with nuts</p> <p>Attach to structural member</p>	<p>22 = 1/2" Threaded Rod Kit</p>
<p>Surface Mount* (optional) Available on all fixture configurations. Attaches to structural member in ceiling. (Hardware not included.) <i>* Temperature rating reduced by 5°C</i></p>		<p>SM = Surface Mount</p>
<p>Pendant Mount (optional) Available on all fixture configurations. Attaches to 3/4" threaded conduit (conduit not included).</p>	 <p>Attach to structural member</p>	<p>23 = 3/4" Pendant Mount Kit</p>
<p>Y-Cable w/hook (optional) Use with Standard Mounting Option only. Order separately. Price adder per pair. 5 ft., 10 ft., 15 ft., 20 ft. lengths available.</p>		<p>41=Y-Cable-Hook-05ft-Pair 42=Y-Cable-Hook-10ft-Pair 43=Y-Cable-Hook-15ft-Pair 44=Y-Cable-Hook-20ft-Pair Max Load: 200 lbs. per pair</p>

Chain/cable mount is standard and included in price. Price adder for Y-Cable, Rod Mount, and Pendant Mount. Consult Sales for latest information. See "Installation Instructions" for mounting details.

Product Dimensions

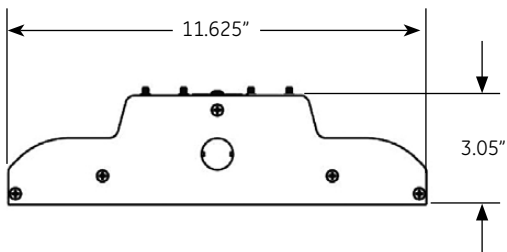
High Bay (ABV1)

1-Module

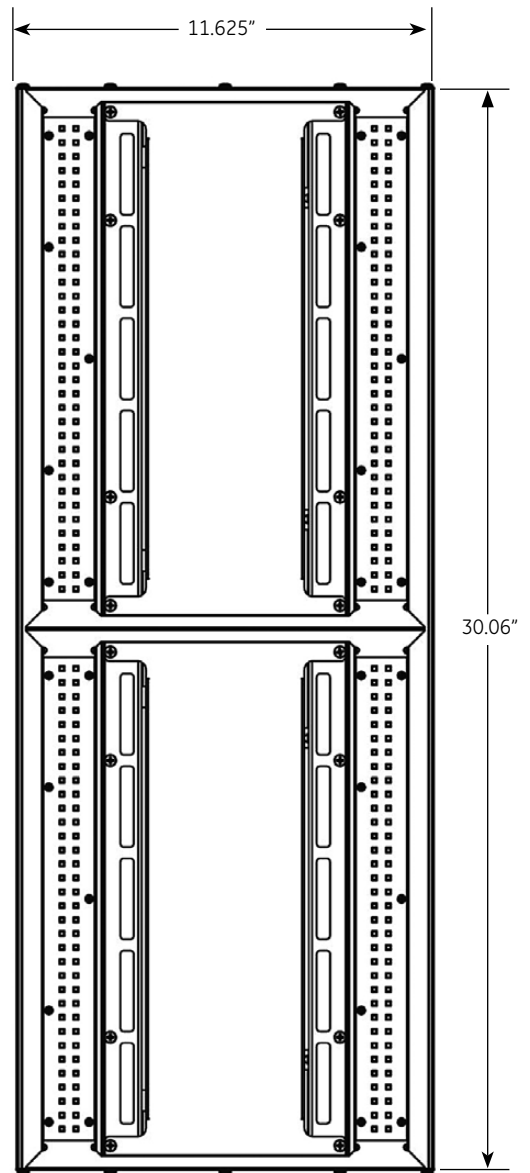


Max. Weight: 11 lbs.

Side View



2-Module



Max. Weight: 18 lbs.