



DATA SHEET

Albeo™ ABR1 LED

Heavy Industrial High Bay & Low Bay luminaire

Product Information

Albeo™ continues to build on groundbreaking high bay and low bay LED luminaires. The Albeo™ ABR1-Series expands the product offering to include an IP66 rated fixture for high temperature (up to 65°C) industrial environments. Utilising a sealed form factor, the ABR1-Series offers customers a rugged design with exceptional performance and high reliability.

Features & Benefits

- Wide range of lumen outputs from 14,900 – 46,000 lm covering various mounting height applications
- Multiple optics including aisle (55°), open area (90°) & wide (120°) beam allowing for flexible designs
- Quality white light with >Ra70 (4000K & 5000K) and >Ra80 (4000K) options
- Robust construction with die-cast aluminium housing and sealed optical compartment providing IP66 protection
- Long reliable lifetime of 75,000hrs @ L85B50 with operational ambient temperatures from -30°C up to 65°C
- High system efficacies of up to 139lm/w
- 1-10V dimming available allowing for further energy savings

Applications

- Industrial
- Warehouses
- Manufacturing facilities

Electrical

- Suitable for 220-240V 50/60Hz
- System power factor >0.9 and THD <20%
- Internal surge protection of 3kV/3KA

Mounting

- Suitable for chain/cable suspension mounting (sold separately)
- Rod suspension brackets for optional rod mounting (not supplied)

Specification Example

Description	Rated Power [W]	Rated Luminous Flux [lm]	Efficacy [lm/w]	CCT [K]	CRI [Ra]	Beam Angle [°]	Fixture Type	Control
ABR172T471NVSTANW1PK	125	17400	139	4000	>70	120	Single	1-10V
ABR172T475NVSTANW1PK	125	16200	130	4000	>70	55	Single	1-10V
ABR172T479NVSTANW1PK	125	17100	137	4000	>70	90	Single	1-10V
ABR172H471NVSTANW1PK	178	23000	129	4000	>70	120	Single	1-10V
ABR172H475NVSTANW1PK	178	21400	120	4000	>70	55	Single	1-10V
ABR172H479NVSTANW1PK	178	22600	127	4000	>70	90	Single	1-10V

Description	Rated Power [W]	Rated Luminous Flux [lm]	Efficacy [lm/w]	CCT [K]	CRI [Ra]	Beam Angle [°]	Fixture Type	Control
ABR172T481NVSTANW1PK	125	16100	129	4000	>80	120	Single	1-10V
ABR172T485NVSTANW1PK	125	14900	119	4000	>80	55	Single	1-10V
ABR172T489NVSTANW1PK	125	15900	127	4000	>80	90	Single	1-10V
ABR172H481NVSTANW1PK	178	21200	119	4000	>80	120	Single	1-10V
ABR172H485NVSTANW1PK	178	19700	111	4000	>80	55	Single	1-10V
ABR172H489NVSTANW1PK	178	20900	117	4000	>80	90	Single	1-10V
ABR172T571NVSTANW1PK	125	17400	139	5000	>70	120	Single	1-10V
ABR172T575NVSTANW1PK	125	16200	130	5000	>70	55	Single	1-10V
ABR172T579NVSTANW1PK	125	17100	137	5000	>70	90	Single	1-10V
ABR172H571NVSTANW1PK	178	23000	129	5000	>70	120	Single	1-10V
ABR172H575NVSTANW1PK	178	21400	120	5000	>70	55	Single	1-10V
ABR172H579NVSTANW1PK	178	22600	127	5000	>70	90	Single	1-10V
ABR174T471NVSTANW1PK	250	34800	139	4000	>80	120	Double	1-10V
ABR174T475NVSTANW1PK	250	32400	130	4000	>80	55	Double	1-10V
ABR174T479NVSTANW1PK	250	34200	137	4000	>80	90	Double	1-10V
ABR174H471NVSTANW1PK	356	46000	129	4000	>80	120	Double	1-10V
ABR174H475NVSTANW1PK	356	42800	120	4000	>80	55	Double	1-10V
ABR174H479NVSTANW1PK	356	45100	127	4000	>80	90	Double	1-10V
ABR174T481NVSTANW1PK	250	32100	128	4000	>70	120	Double	1-10V
ABR174T485NVSTANW1PK	250	29800	119	4000	>70	55	Double	1-10V
ABR174T489NVSTANW1PK	250	31700	127	4000	>70	90	Double	1-10V
ABR174H481NVSTANW1PK	356	42300	119	4000	>70	120	Double	1-10V
ABR174H485NVSTANW1PK	356	39300	110	4000	>70	55	Double	1-10V
ABR174H489NVSTANW1PK	356	41800	117	4000	>70	90	Double	1-10V
ABR174T571NVSTANW1PK	250	34800	139	5000	>70	120	Double	1-10V
ABR174T575NVSTANW1PK	250	32400	130	5000	>70	55	Double	1-10V
ABR174T579NVSTANW1PK	250	34200	137	5000	>70	90	Double	1-10V
ABR174H571NVSTANW1PK	356	46000	129	5000	>70	120	Double	1-10V
ABR174H575NVSTANW1PK	356	42800	120	5000	>70	55	Double	1-10V
ABR174H579NVSTANW1PK	356	45100	127	5000	>70	90	Double	1-10V

Order Code Logic

Fixture Name	Voltage	Fixture Type	Output	LED Colour Code	Optic	Sensor	Control	Mounting	Cord	Plug	Finish	Packing
ABR1: Albeo HighBay	7: 220- 240V	2: Single 4: Double	T: Standard	47: 4000K >Ra70	1: 120°	N: No	V: 1-10V	ST: Standard	A: 6ft (1.8m)	N: None	W: White	1PK: 1pc/box
			H: High Output	48: 4000K >Ra80	5: 55° 9: 90°							
				57: 5000K >Ra70								

*Order code specific to EU region only

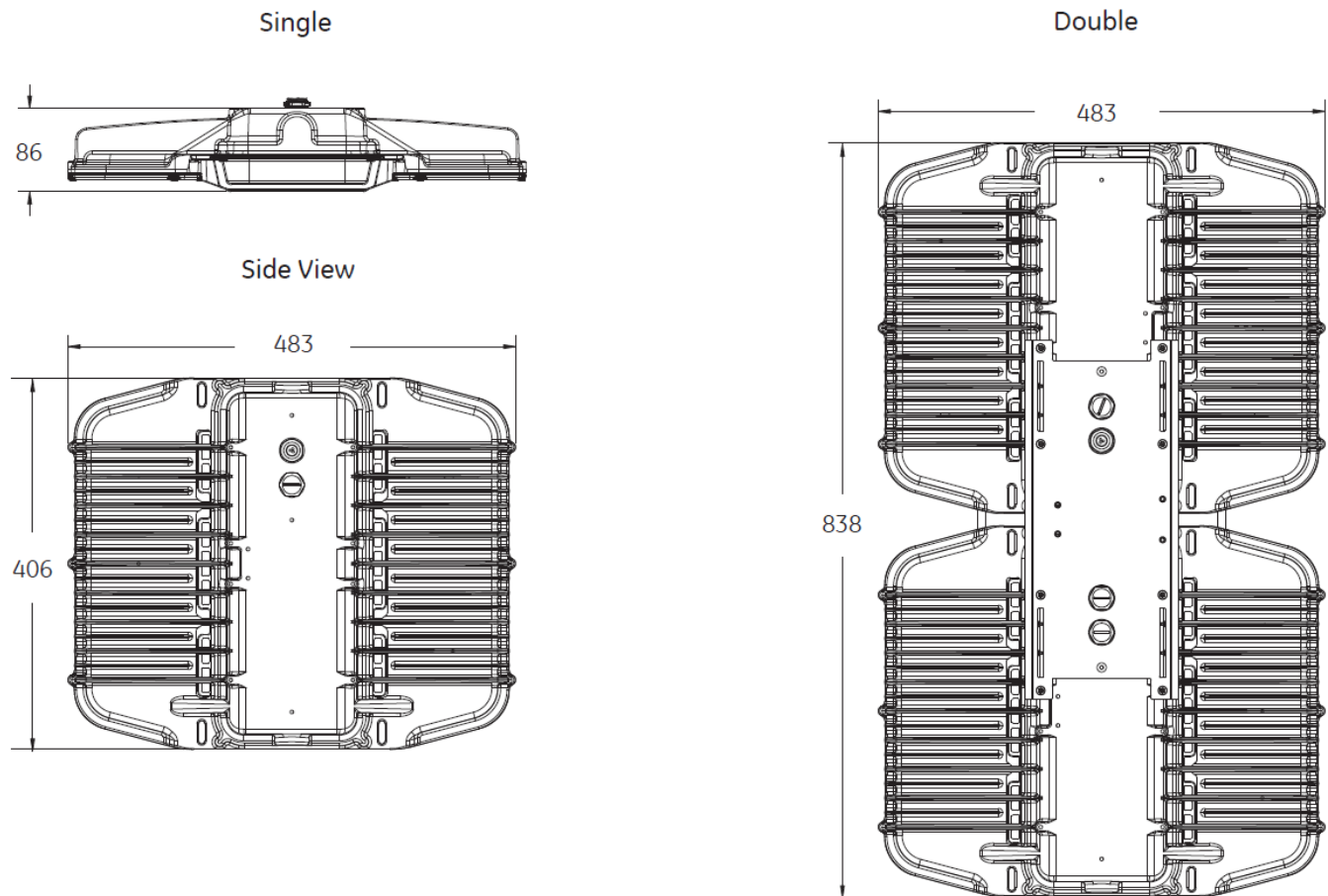
Example:

ABR172H481NVSTANW1PK

ABR1 Albeo LED Highbay generation 1 single fixture, 21,200lm output, 4000K neutral white >Ra80, wide beam 120° distribution, 1-10V driver, white finish



Dimensions [mm]



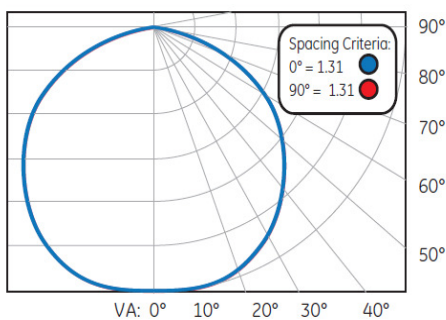
Lens selection by application

The Albeo™ ABR1-series optical reflector system enables LEDs to provide precise illumination where needed. Reflectors are designed for commercial & industrial applications where mounting height, fixture spacing & light levels help determine reflector selection. The following table outlines optics options and suggested application

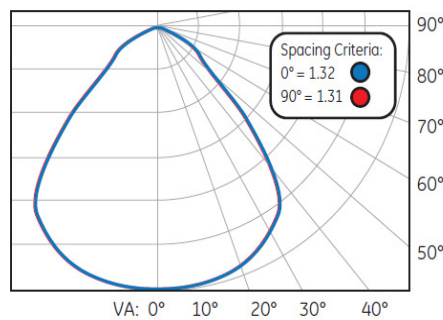
Optic Beam	Mounting Height	Space Type
120° (wide)	Any	Open floor plan
90° (area)	Any	Open floor plan
55° (aisle)	Any	Low or High Bay Racked Aisles

Photometric distributions

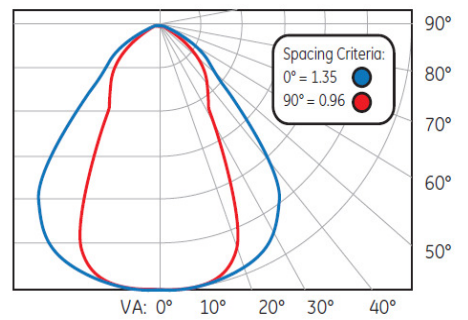
Polar Candela Distribution 90° (Area) Full Beam Angle



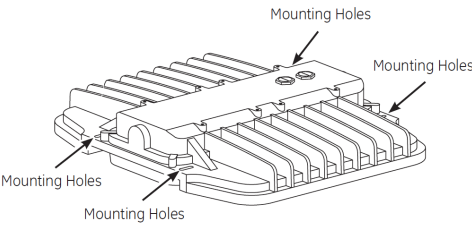
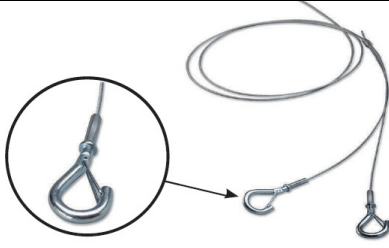
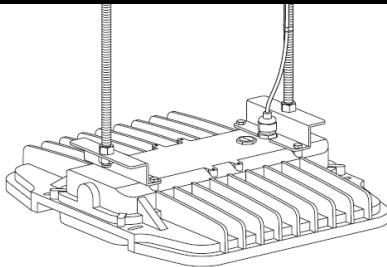
Polar Candela Distribution 120° (Wide) Full Beam Angle



Polar Candela Distribution 55° (Aisle) Full Beam Angle



Mounting Options

Mounting Options	Image	Order Logic/SKU
<p>Standard Chain/Cable Mount Available on all fixture configurations (chain not included). Y-Cable w/ hook can be ordered as an accessory (see below)</p>		<p>ST: Standard</p>
<p>Y-Cable w/hook (optional) Use with Standard Mounting Option only. Order separately. 1.5m, 3m, 4.5m, 6m lengths available.</p>		<p>YCABLEHOOK05FTPAIR: 5 FT GRIPPLE PAIR (1.5M) YCABLEHOOK10FTPAIR: 10 FT GRIPPLE PAIR (3M) YCABLEHOOK15FTPAIR: 15 FT GRIPPLE PAIR (4.5M) YCABLEHOOK20FTPAIR: 20 FT GRIPPLE PAIR (6M)</p>
<p>Rod suspension bracket (optional) 2 per luminaire (rod and fixing nuts not supplied)</p>		<p>95016685: ABR1_ROD MOUNT KIT</p>

Technical Summary

Input voltage / Frequency	220-240V 50/60Hz
Body Size	406mm x 490mm x 86mm: Single 826mm x 490mm x 86mm: Double
Beam angles	Aisle (55°), Area (55°), Wide (120°)
Colour Temperatures	4000K & 5000K
Efficacy	Up to 139lm/W
System Wattage	125W – 356W
CRI	>Ra70: 4000K & 5000K >Ra80: 4000K
Lifetime @ L85B50	75,000hrs
Operating Ambient Temperature	-30°C to 65°C
IP Rating	IP66
IK	08
Class	I
Controls	1-10V
Finish	White
Weight	9.5 kg: Single 20.4 kg: Double