

illuminer™

High impact LED lighting that is low impact on resources.™

Solid-State Lighting Series

LED High Bay Datasheet

Illuminer LED High Bay lighting is typically used in industrial applications. They have a single, state-of-the-art, HP LED with a specialized lens and two reflector choices. Illuminer LED High Bay provides superior light distribution in low and high ceiling applications.

The appearance of Illuminer LED High Bay is similar to traditional High Bay lighting but saves more energy and has lower light depreciation rates thereby reducing both electricity and maintenance costs.

With a simple installation, Illuminer LED High Bay provide a great ecofriendly lighting solution for industrial applications.



Features :

- Solid State Lighting Technology
- Superior Quality Light
- Reduce CO₂ Emission
- Energy Saving(120W)
- Ecologically Friendly
- Long Life-Time
- IP65 for AL reflector

Copyright © 2011 Illuminer, Inc. All right reserved. The information in this document is subject to change without notice.

www.illuminerinc.com



High impact LED lighting that is low impact on resources.

Table of Contents

• Nomenclature.....	2
• Dimensions.....	3
• Absolute Maximum Ratings.....	4
• Specifications.....	4
• Illuminance Specifications.....	5
• Light Pattern.....	6
• Applications.....	7
• Environmentally Friendly.....	9
• Package Information.....	10

Nomenclature

The following table describes the available colors, and wattage.

I B F 1 W - 1 2 0 0

X1 X2 X3 X4 X5 X6 X7 X8

X1 Product		X2 Model		X3 Type		X4 Reflector		X5 Color	
Code	Type	Code	Type	Code	Type	Code	Type	Code	Type
I	illuminer	B	Bay	F	AI-FIN	0	No Cover	W	Cool White
						1	AL	H	Neutral White
						2	PC	X	Warm White

X6 Watt		X7 Field Angle		X8 Serial No.	
Code	Type	Code	Type	Code	Type
12	120W	0	90°		
		1	40°		
		2	60°		
		3	120°		
		4	140°		

Figure 1. High Bay nomenclature.

Dimensions

High Bay with AL Reflector (IP65)

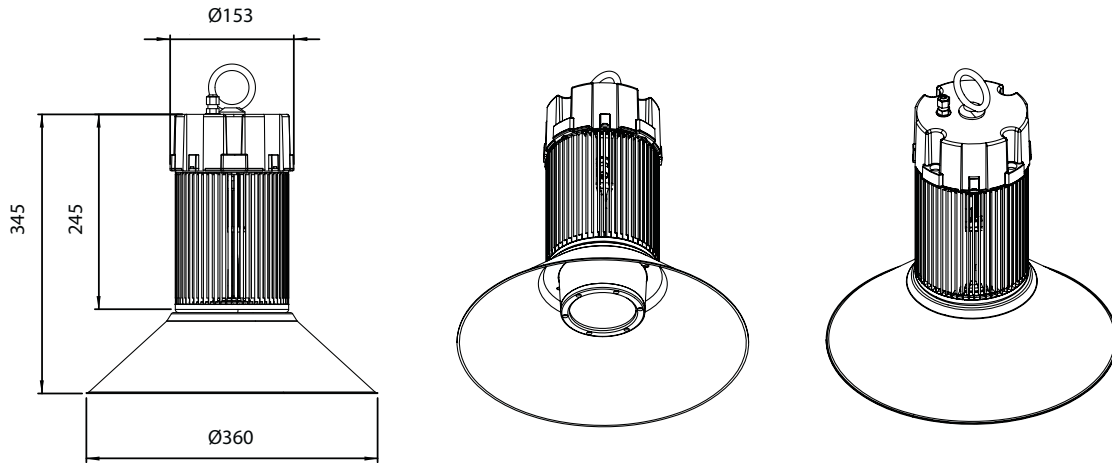


Figure 2. High Bay with AL reflector dimensions.

High Bay with AL Reflector

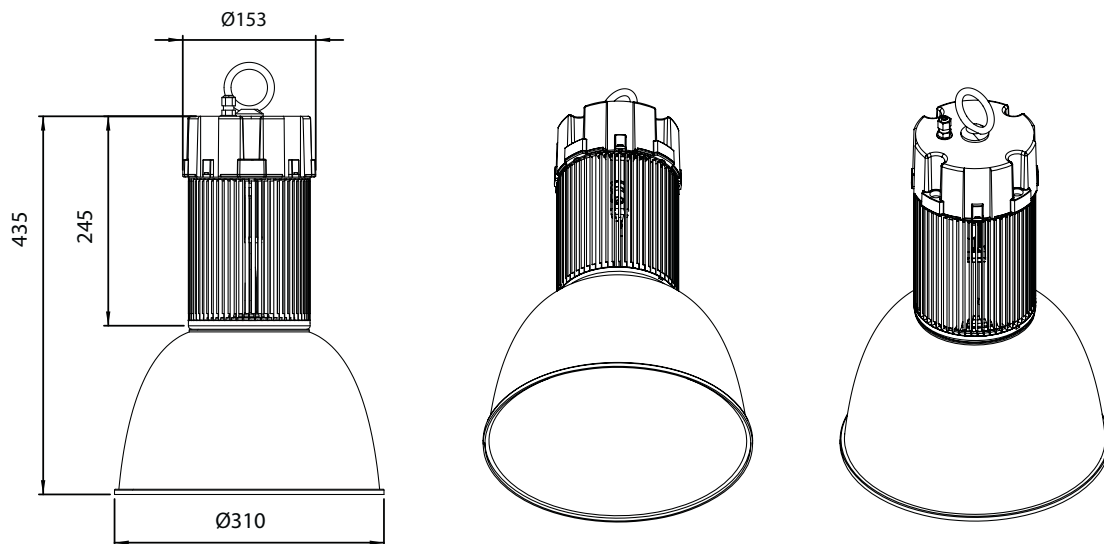


Figure 3. High Bay II with PC reflector dimensions.

Notes:

1. Unit : mm.
2. Tolerance : ± 5.0 mm.



High impact LED lighting that is low impact on resources.

Absolute Maximum Ratings

The following table shows electrical characteristics and operating temperature of High Bay.

Table 1. High Bay absolute maximum ratings.

Part No.	Symbol	Rating	Units
Al Reflector EDIS Temperature	T_{EDIS}	80	°C
PC Reflector Plastic Temperature	T_C	80	°C
Operating Temperature	T_{opr}	-30~40	°C
Storage Temperature	T_{stg}	-40~60	°C
AC Input Voltage	V	90~277	V
LED Life Time \leq 12 Hours/Day		50,000	hrs

Specifications

The following describes the choices of color temperature, angles and CRI of High Bay.

Table 2. High Bay specifications.

Part No.	Rating	Units
Power Consumption	120 ^{1,2}	W
Al Reflector Field Angle	40 / 60 / 90 / 120	Degree
PC Reflector Field Angle	140	Degree
Color Temperature	5300~6300 / 3800~4500 / 2800~3200	K
CRI	68 / 75 / 80	/
Weight (IBFxx-12xx)	3.3±0.2	kg
Weight (IBF2x-12xx)	2.5±0.2	kg

Notes:

1. Power consumption has 5% tolerance.
2. Thermal equilibrium at 50 degree C ambient.



High impact LED lighting that is low impact on resources.

Illuminance Specifications

High Bay with AL Reflector (IP65)

Luminous flux of 120W High Bay.

Table 3. Luminous flux of 120W High Bay.

Power Consumption	Part No.	CCT	Field Angle	Flux (Typ.)
120W	IBF1W-121x	5300~6300K	40°	6500 lm
	IBF1H-121x	3800~4500K	40°	5300 lm
	IBF1X-121x	2800~3200K	40°	4500 lm
	IBF1W-122x	5300~6300K	60°	7300 lm
	IBF1H-122x	3800~4500K	60°	6000 lm
	IBF1X-122x	2800~3200K	60°	5200 lm
	IBF1W-120x	5300~6300K	90°	7600 lm
	IBF1H-120x	3800~4500K	90°	6200 lm
	IBF1X-120x	2800~3200K	90°	5400 lm
	IBF1W-123x	5300~6300K	120°	7300 lm
	IBF1H-123x	3800~4500K	120°	6000 lm
	IBF1X-123x	2800~3200K	120°	5200 lm

Lux with different distance for 120W High Bay.

Table 4. Lux with different distance for 120W High Bay.

Power Consumption	Part No.	Lux@ 4m (Typ.)	Lux@ 6m (Typ.)	Lux@ 8m (Typ.)	Lux@ 10m (Typ.)	Lux@12m (Typ.)
120W	IBF1W-121x	1200	530	290	185	125
	IBF1H-121x	950	420	230	145	100
	IBF1X-121x	850	360	205	125	90
	IBF1W-122x	730	310	175	110	75
	IBF1H-122x	580	253	135	85	60
	IBF1X-122x	500	210	125	75	55
	IBF1W-120x	600	260	145	95	65
	IBF1H-120x	480	210	115	65	50
	IBF1X-120x	420	180	100	660	45
	IBF1W-123x	340	145	80	50	35
	IBF1H-123x	270	120	65	40	26
	IBF1X-123x	230	95	55	35	23

High Bay with PC Reflector

Luminous flux of 120W High Bay.

Table 5. Luminous flux of 120W High Bay.

Power Consumption	Part No.	CCT	Field Angle	Flux (Min.)	Flux (Typ.)
120W	IBF2W-124x	5300~6300K	140°	6500 lm	7200 lm
	IBF2H-124x	3800~4500K	140°	5400 lm	5900 lm
	IBF2X-124x	2800~3200K	140°	4600 lm	5200 lm

Lux with different distance for 120W High Bay.

Table 6. Lux with different distance for 120W High Bay.

Power Consumption	Part No.	Lux@ 4m (Typ.)	Lux@ 6m (Typ.)	Lux@ 8m (Typ.)	Lux@ 10m (Typ.)
120W	IBF2W-124x	225	90	55	36
	IBF2H-124x	185	75	45	28
	IBF2X-124x	130	60	38	25

Light Patterns

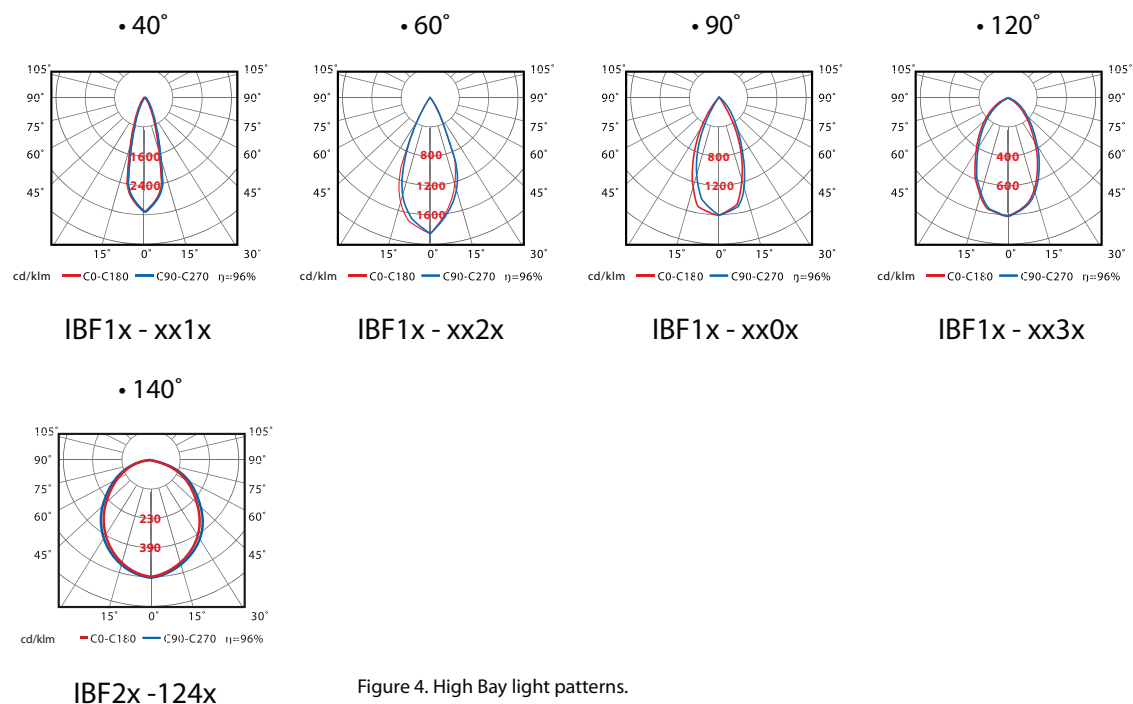


Figure 4. High Bay light patterns.

illuminer™

High impact LED lighting that is low impact on resources.

Applications

Illuminer High Bay can produce an intense light in a certain area. It can be easily installed and replace traditional High Bay lighting in warehouses, factories, gymnasiums, large outlets, etc.

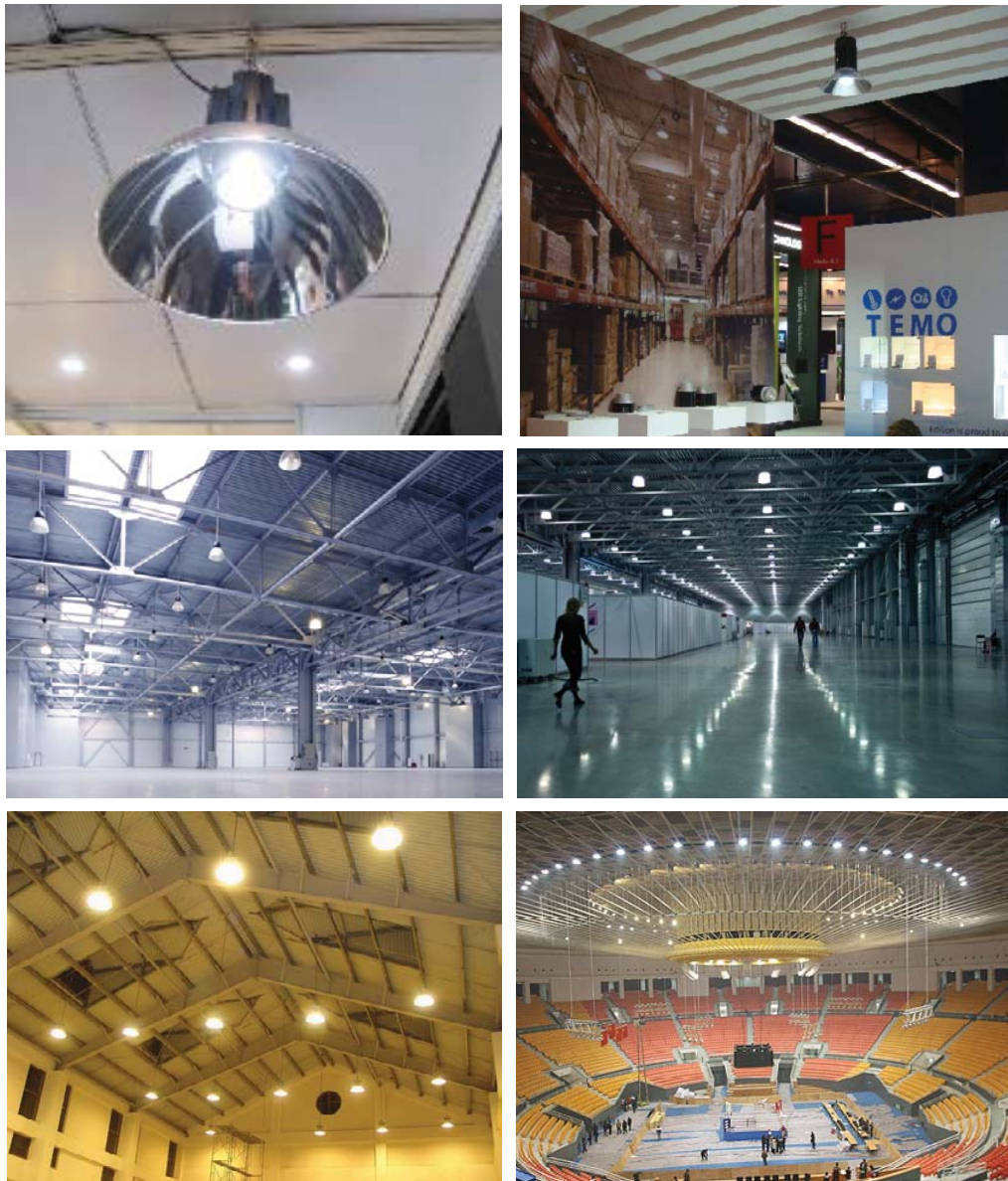
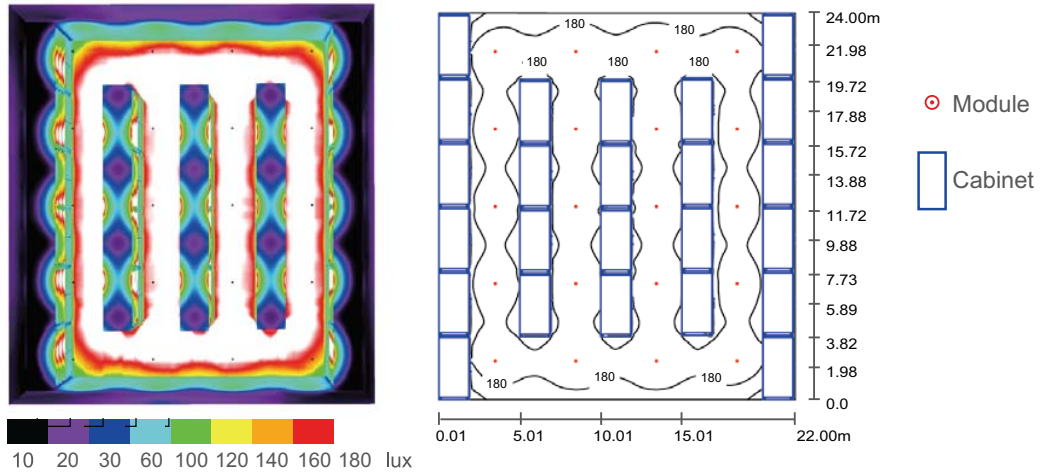


Figure 5. High Bay application.

illuminer™

High impact LED lighting that is low impact on resources.

120W High Bay Application.



Height of Room: 8.000 m, Mounting Height: 6.400 m,
Light loss factor: 0.80, Values in Lux, Scale 1:309

No. of module: 20
Flux per module: 7,600lm
Total Power: 2,400W
Area: 528m² / 5,683ft²
LPD: 4.55 W/m² / 0.42 W/ft²
Workplan height: 0.85m

Surface	ρ [%]	E_{av} [lux]	E_{min} [lux]	E_{max} [lux]
Workplane(0.85m)	/	1703	.392	17
Floor(0m)	20	112	6.13	200
Ceiling(8m)	70	21	13.68	29
Walls	50	24	3.77	83

Figure 6. High Bay light plan example: warehouse application.

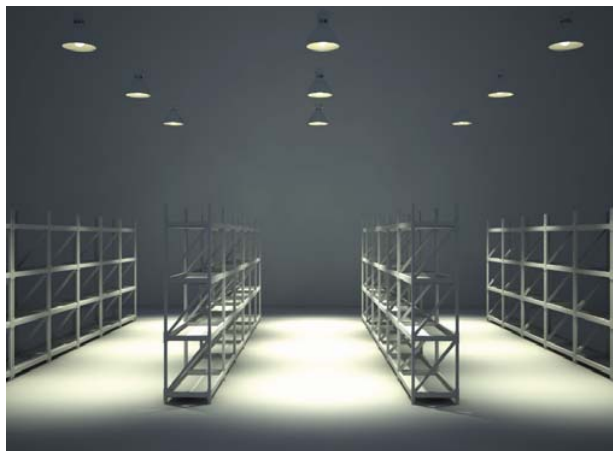


Figure 7. High Bay light plan example: warehouse simulation picture.

Environmentally Friendly

120W High Bay VS 400W Mercury Vapor Lamp

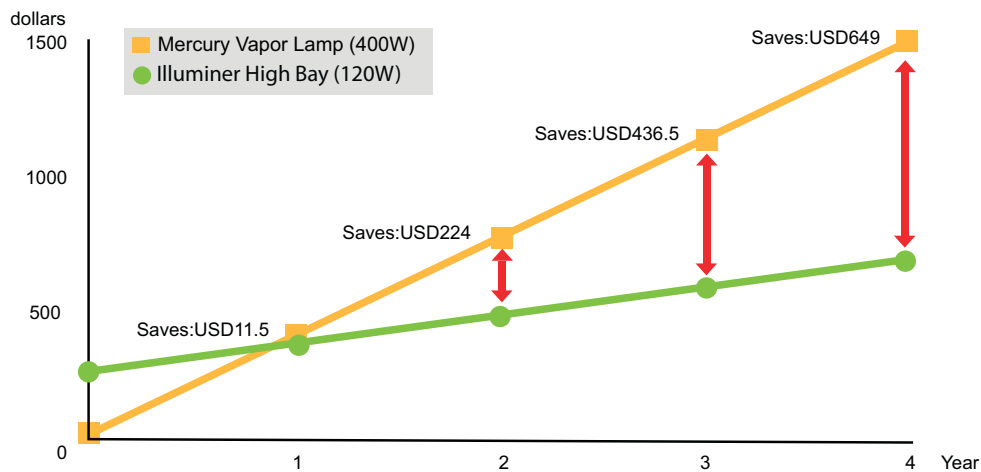
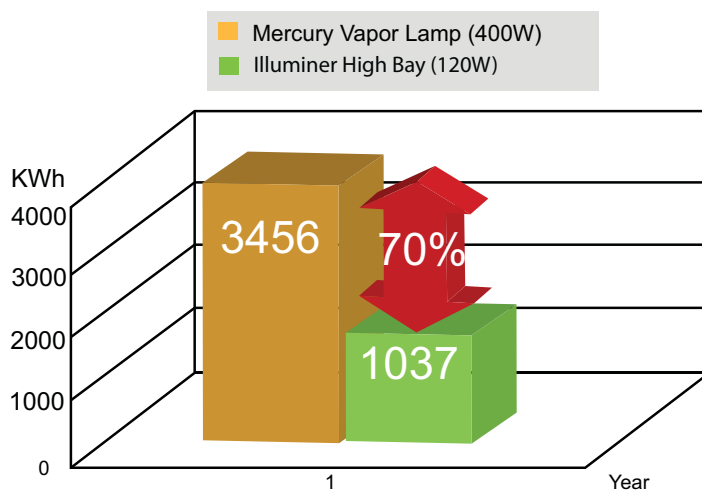
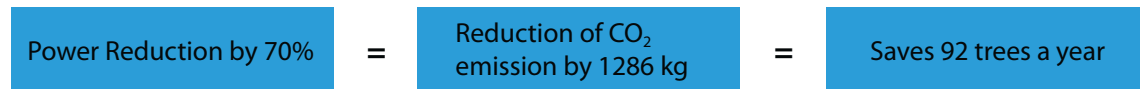
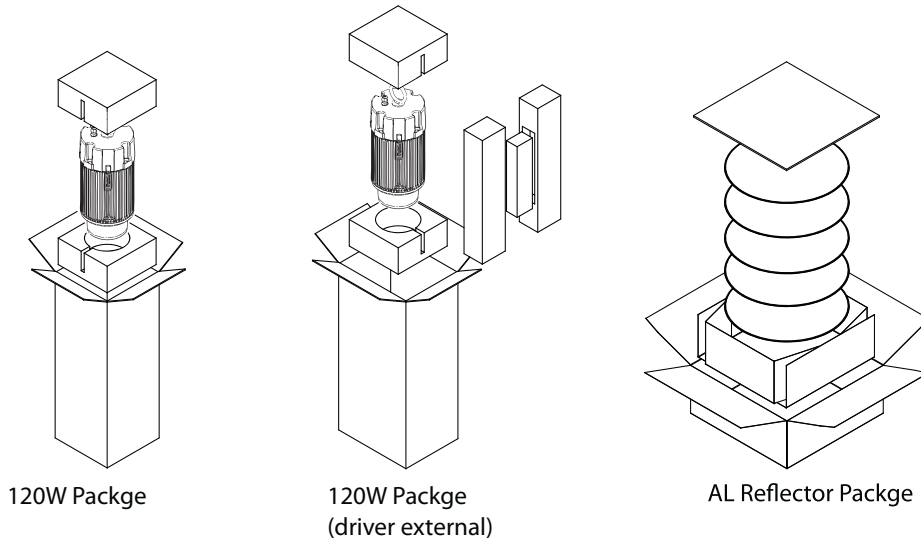


Figure 8. 120W High Bay VS 400W Mercury Vapor Lamp.

Note: Calculation based on 24 hours of daily operation.

Package Information

High Bay with AL Reflector (IP65)



Notes:

1. 50W Package: 170mm (width)*170mm (length)*315mm (height)
2. 120W heatsink length version: 170mm (width)*170mm (length)*405mm (height)
3. 120W heatsink length version (driver external): 170mm(width)*220mm (length)*405mm (height)
4. AL Reflector Package: 220mm (width)*170mm (length)*460mm (height)
(Reflector Package contains 5 pcs 14" reflectors)

High Bay with PC Reflector

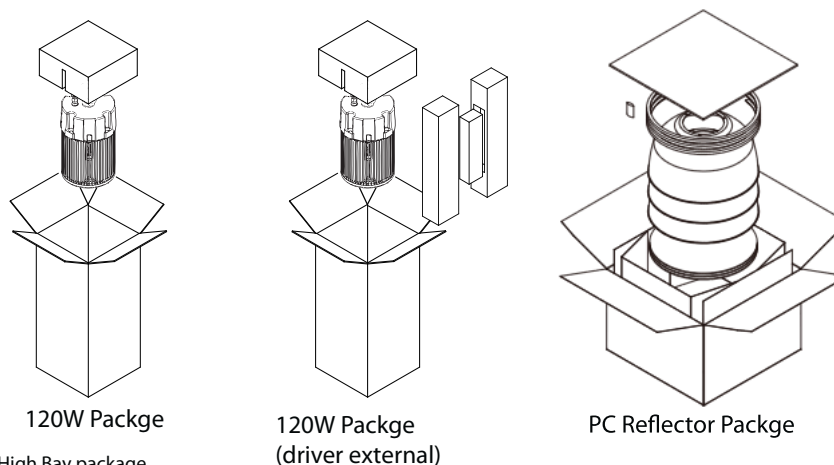


Figure 9. High Bay package.

Notes:

1. 120W heatsink length version: 170mm (width)*170mm (length)*405mm (height)
2. 120W heatsink length version (driver external): 170mm (width)*220mm (length)*405mm (height)
3. PC Reflector Package: 220mm (width)*170mm (length)*460mm (height)
(Reflector Package contains 3 pcs 12" PC reflectors, 3 pcs 12" iron rings, and accessories)