



HIGH BAY LED POLESTAR GYMNASIUM APPLICATION

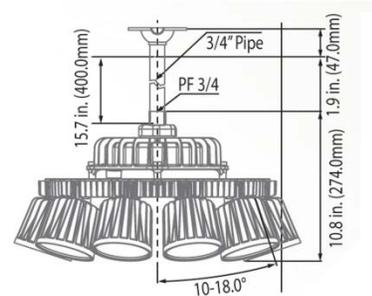
LLP-PS-MB-HB-160W

SPECIFICATIONS

Name	LED GYMNASIUM SERIES
Product Code	LLP-PS-MB-HB-160W
Equivalent Source	Up to 500W Metal Halide
L70 lumen depreciation design criteria =	High Bay: 50,000 hours Rating is based on open-air fixture application.
Housing	Die Cast Aluminum/ Tempered Glass Globe (3T)
Installation Type	S-Hook or Pendant Mount
Beam Spread	60°
Operating Temperature	-30°C to +60°C
IP Rating	IP65
Voltage	100VAC-277VAC
Weight	24.2 lb., 11.0Kg
Diameter (Chain)	Ø 20.9" (532.0mm)
Length (Chain)	10.8" (274.0mm)
Diameter (Pipe)	Ø 20.9" (532.0mm)
Length (Pipe)	10.9" (279.1mm)
Power Factor	≥0.98
Lumens/ Watt (lm/W)	98
Luminous Flux (lm)	15,680lm
Color Rendering Index (CRI)	CRI 80
Warranty	5-Year Warranty

BENEFITS

- Applied Narrow Multi Beam Forming Technology, maximizing the saving on energy.
- No glare.
- High Bay reliably produces clear, bright illumination that reduces operational and maintenance costs.
- Open rated for maximum air flow.
- Group up to 30 within a 100 meter range allowing you to simultaneously dim or increase the brightness of the lighting in your desired zones.
- Junction temperature of LED light source is kept below 149°F (65°C). (Theoretically, in order for LED to get life span over 50,000 hours the junction temperature should be below 176°F (80°C))
- Suitable for wet locations.
- 160 Watts – 70% more efficient than comparable 500 watt metal halide lamps.
- Maintenance free operation lasts up to 16 times longer than metal halide lighting.



Pipe Installation

ORDERING INFORMATION \ HIGH BAY LED POLESTAR SERIES

PRODUCT CODE: **LLP-PS-MB-HB-160W**

Family	Product	Wattage	Color (CCT)	Distribution	Voltage ⁴	Base
LLP	PS-MB-HB	160W	5000K-CW Cool White	ADJ Adjustable	100-277 Volt	H (S-HOOK) P (PENDANT Mount)



Prepared By:	Product Code:
Project:	Date:

Gymnasium Application

The LED Light and Power GYMNASIUM SERIES high bay lighting system will produce significantly better quality and quantity of light in your school gym. These LED fixtures have been manufactured implementing lens and reflector technologies that produce an excellent light pattern. In most situations our LED gym lighting will produce up to three times the quantity of light when compared to old technology lighting. The die-cast powder coated housing is extremely tough and can take a direct hit from a basketball and suffer zero damage. Other LED benefits include instant on to full brightness as opposed to the “warm up period” required for older technologies. Another benefit of LEDs is silent operation versus the buzz generated from HID or fluorescent ballasts.

Most high quality LEDs will maintain about 90% of their original brightness through 40,000 hours or more. Most HID lamps lose 50% of their original brightness less than halfway through the estimated relatively short life. Most 500 watt HID lamps have an estimated rated life equal to 16 to 20 thousand hours. Even though the utility bill is still charging for the 500 watt load from old technology, the customer is only receiving half the light after 8 to 10 thousand hours. Stated another way; would a customer be ok with half of the old HID lamps burning out half way through the estimated life of 16 to 20 thousand hours. High quality LEDs are extremely efficient, operate quietly and provide excellent quality of light.

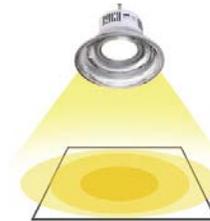
GYMNASIUM SERIES LED LIGHTING		
Note: The data in this box remains constant for each gymnasium package listed below		
	HID	LED
Total Connected Wattage (500 x 25) (160X25)	12,500	4,000
Estimated Annual Average Operating Costs (160 x 25) Kwh 19.4c	\$10,606	\$ 3,394

GYMNASIUM PACKAGE #1		
Package includes: LED Fixture + Head Nodes + Receiving Nodes + Light Lifters		
Quantity	Description	Price
25	160 watt LED Polestar Gymnasium series fixture	\$11,800.00
1	Head Nodes smart 3G	\$ 2,250.00
25	Node – IP address (receiving)	\$ 3,750.00
25	Light Lifters	\$10,000.00
1	On-site Supervision	\$ 1,200.00
TOTAL		\$29,000.00
5 year rent to own over 60 months		\$ 588.00
31 Pay back in months utilizing 100% load 38% Internal Rate of Return at 100% load		

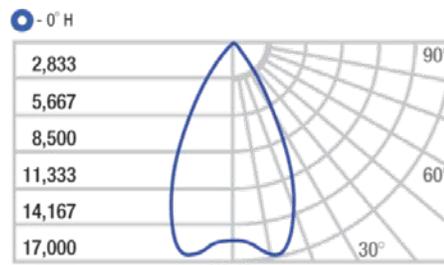
GYMNASIUM PACKAGE #2		
Package includes: LED Fixture only without controls		
Quantity	Description	Price
25	160 watt LED Polestar Gymnasium series fixture	\$11,800.00
TOTAL		\$11,800.00
5 year rent to own over 60 months		\$ 248.00
22 Pay back in months utilizing 100% load 53% Internal Rate of Return at 100% load		



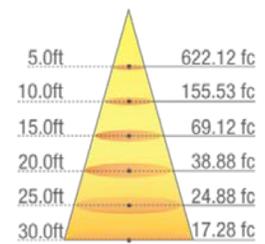
NMBF (Narrow Multi Beam Forming) Technology



Other Technology



[Beam Profile]

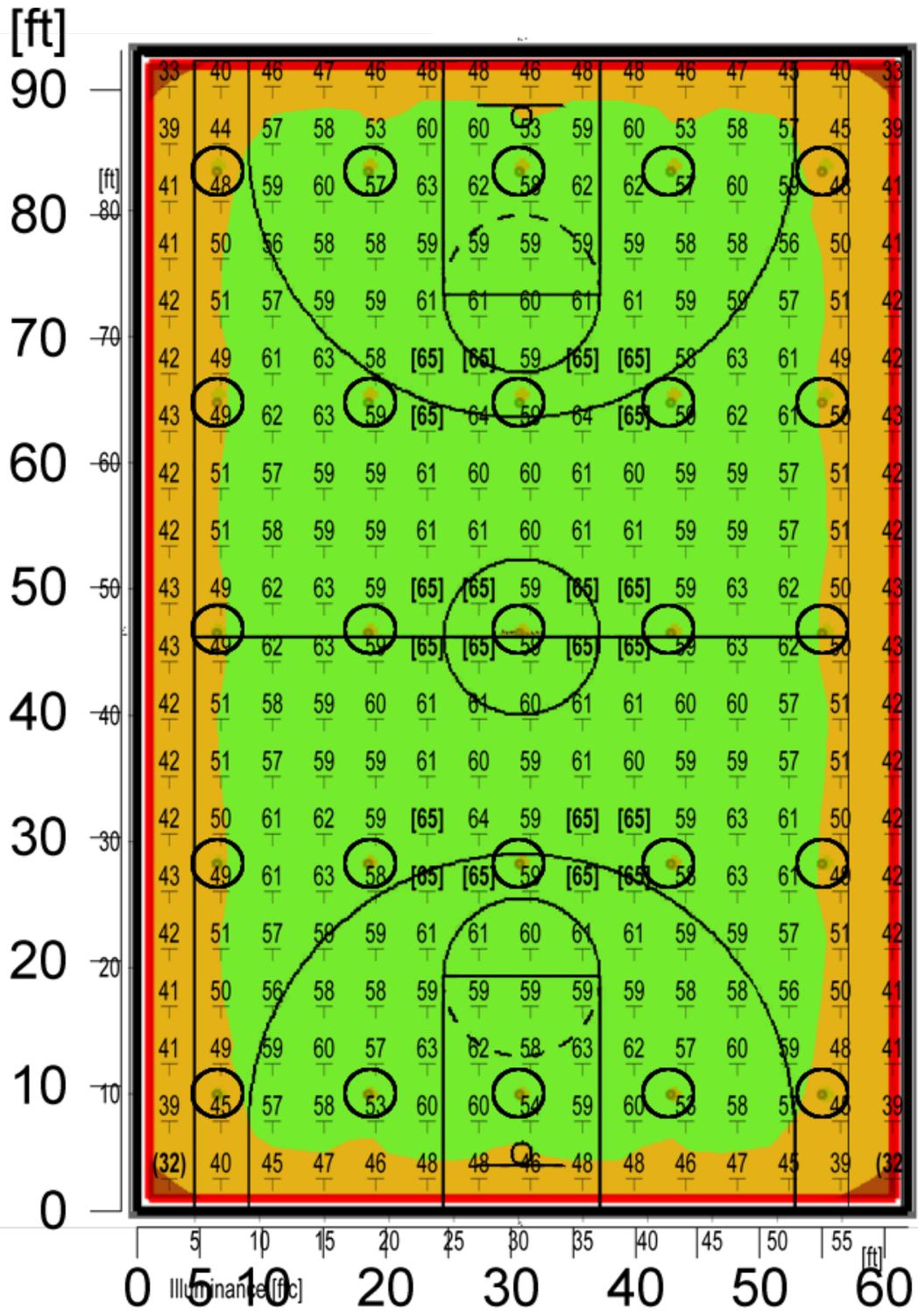


[Illumination]

Caution:

- Turn power off before inspection, installation, or removal.
- Suitable for wet locations.
- Do not open – no user serviceable parts in the inside.

Gymnasium Application



LIGHT LIFTER GYMNASIUM APPLICATION LLP-RRL-CSI-12

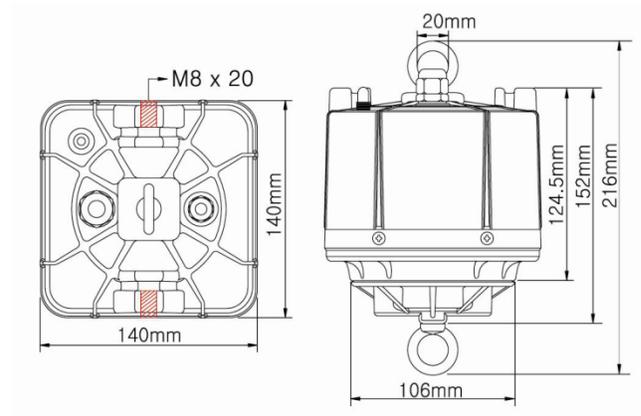


BENEFITS

- Eliminates the need to bring lifts, scaffolding and ladders to service high bay light fixtures.
- Reduces maintenance costs.
- Reduces risks associated with maintenance personnel being on tall ladders, scaffolding or lifts.
- Allows routine maintenance to be performed by multiple employees.
- Designed for very various loads.
- The remote controlled lighting lifter prevents electrical shock during changing & cleaning as the electricity is automatically cut off during maintenance
- Reduces risk of injury.

SPECIFICATIONS

Product Code	LLP-RRL-CSI-12
Housing	Die Cast Aluminum/ Tempered Glass Globe (3T)
Installation Type	Cable Connection
Unit Net Weight	6.83lbs. (3.1kgs)
Loading Weight	6.61-26.46lbs. (3-12Kgs)
Lowering Height	49.21' (15M)
Number of Wire	1
Wire O.D. (SUS304 7x19)	1.4MM
Lamp Circuits Capacity	16A
Number of Contacts	2
IP Rating	54
Type of Motor	DC
Warranty	3-Year Warranty



ORDERING INFORMATION \ LIGHT LIFTER

PRODUCT CODE: LLP-RRL-CSI-12

Family	Product	Size
LLP	RRL-CSI	12

