LEDHBR-PRM Premium Round LED High Bay, 14,000 – 32,000 Lumens (100–240W)

Project:	
Type:	

Shown with optional occupancy sensor

STANDARD

The LEDHBR-PRM is a premium round LED high bay luminaire. It is designed to illuminate a wide variety of settings including commercial, industrial and retail settings such as warehouses, manufacturing plants, sporting venues and big-box retailers. With a die cast aluminum housing and clear glass lens, the LEDHBR-PRM provides durability and high performance. High-efficacy, long-life LEDs provide both energy and maintenance cost savings compared to traditional, HID high bays.

FEATURES

- *Available in 4000k (neutral white) and 5000k (cool white) color temperatures.**
- *For models with 120-277V AC input voltage, long-life LEDs provide 141,000 hours of operation with at least 70% of initial lumen output (L_{70}). Models with 347-480V AC input voltage feature L_{70} performance of at least 205,000 hours.***
- *Provides a range of 13,812 to 34,704 lumens.**
- *Universal 120-277 & 347-480V AC voltage (50-60Hz) are standard.*
- *0-10vdc dimming drivers are standard.*
- *Watertight, compression-type electrical connectors.*
- *Mounting options include suspension from pre-installed mounting hook, yoke mounting, and attachment to electrical conduit.*
- *Optional, IP65 Merrytek occupancy/daylight sensor and junction box assembly provides a fully-wired luminaire & control package. To order, add the suffix "OS" to your luminaire catalog number (see example below).*
- *Power factor > 0.90.*
- *Total harmonic distortion < 20%.*
- *Color rendering index > 80.*
- *Die cast aluminum housing, painted black.*
- *Easy installation in new construction or retrofit.*

* *Contact factory for other color temperatures and lumen packages.*
** *L_{70} hours are IES TM-21-11 calculated hours.*

WARRANTY & LISTINGS

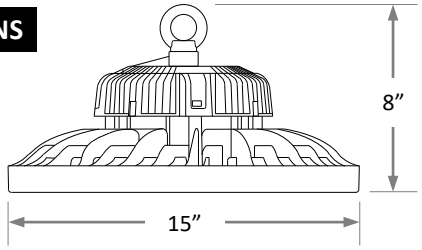
- *cULus listed for wet locations in ambient temperatures from:*
  - *14,000 & 21,000 lumen models: -40°C to 55°C (-40°F to 131°F).*
  - *27,000 & 32,000 lumen models: -40°C to 50°C (-40°F to 122°F).*

  Note: The minimum temperature for models with occupancy sensors is -25°C (-13°F).
- *DLC premium approved.*
- *IP65 rated for ingress protection.*
- *Flicker-free per IEEE1789-2015 (no observable adverse effects of flicker at 100% light output level).*
- *Complies with FCC Part 15, class B.*
- *Complies with EN61000-4-5, surge immunity protection:*
  - *120-277V models: 6kV.*
  - *347-480V models: 10kV.*
- *5-year warranty of all electronics and housing.*

MOUNTING OPTIONS

- *Suspension from pre-installed mounting hook (cast iron M10 eyebolt) with locking set screw is standard.*
- *Ceiling-mounted installation (using optional yoke mounting bracket, LEDHBRSN-YOKE-PRM) provides up to 100° of adjustability.*
- *Two ways to mount luminaire to electrical conduit:*
  - *Attach conduit (½" NPS) to optional yoke mounting bracket (LEDHBRSN-YOKE-PRM).*
  - *Optional pendant snap hook (LEDHBRSN-PSH-PRM-V2) attaches to electrical conduit (¾" NPS).*

DIMENSIONS



Weight: 10.6 – 12.4 lbs.

ORDERING INFORMATION

Example: LEDHBR-14-4K-PRM-BLK-UNV-OS + LEDHBRSN-PSH-PRM-V2 + MWAVEDHS-REM
Premium round highbay, 14,000 nominal lumens, 4000k, black housing, 120-277V, Merrytek occupancy & daylight sensor + pendant snap hook + Merrytek remote control

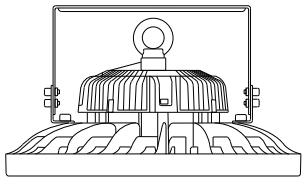
Model	Luminaire Watts	Luminaire Lumens	Lumens Per Watt	Color Temperature	Housing Color	Input Voltage	Sensor (Optional)
LEDHBR-14	100	13,961 13,950	140 140	4K-PRM = 4000k 5K-PRM = 5000k	BLK = Black	UNV = 120-277V	OS = Occupancy & Daylight Sensor (Factory-Installed)
LEDHBR-21	150	20,799 20,624	139 137	4K-PRM = 4000k 5K-PRM = 5000k			
LEDHBR-27	200	27,415 27,169	137 136	4K-PRM = 4000k 5K-PRM = 5000k			
LEDHBR-32	239	32,727 32,250	137 135	4K-PRM = 4000k 5K-PRM = 5000k			
LEDHBRS-14	102	13,812 13,892	135 136	4K-PRM = 4000k 5K-PRM = 5000k		UNC = 347-480V	Note: Occupancy sensors are not available on 347-480V models
LEDHBRS-21	151	21,127 21,357	140 141	4K-PRM = 4000k 5K-PRM = 5000k			
LEDHBRS-27	200	27,846 28,143	139 141	4K-PRM = 4000k 5K-PRM = 5000k			
LEDHBRS-32	243	34,107 34,704	140 143	4K-PRM = 4000k 5K-PRM = 5000k			

Accessories (Order Separately)

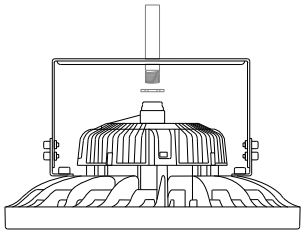
LEDHBRSN-PSH-PRM-V2	=	Pendant snap hook
LEDHBRSN-YOKE-PRM	=	Yoke mount bracket
LEDHBRSN-ALMREFL60-PRM	=	Reflector, 60°, Aluminum
LEDHBRSN-ALMREFL90WIDE-PRM	=	Reflector, 90°, Aluminum
LEDHBRSN-ACLREFL60-PRM	=	Reflector, 60°, Acrylic
LEDHBRSN-ACLREFL90-PRM	=	Reflector, 90°, Acrylic
MWAVEDHS-REM	=	Merrytek remote control (use with occupancy & daylight sensor)

LEDHBR-PRM Premium Round LED High Bay, 14,000 – 32,000 Lumens (100–240W)

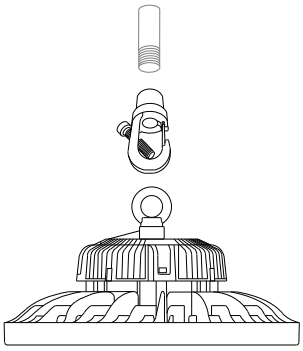
MOUNTING OPTIONS



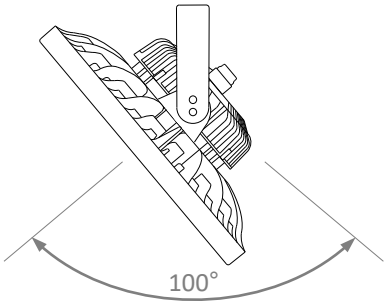
Ceiling-Mounted (LEDHBRSN-YOKE-PRM)



½" Conduit-Mounted (LEDHBRSN-YOKE-PRM)



¾" Conduit-Mounted (LEDHBRSN-PSH-PRM-V2)



Adjustable

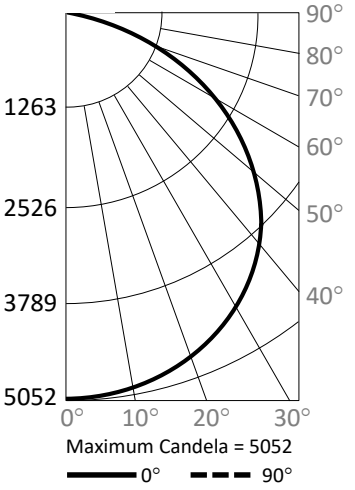
ELECTRICAL DATA

Model	Color Temp.	CRI [1]	Luminaire Lumens	Luminaire Watts	Lumens/ Watt	Input Voltage[2]	Input Current (A)			Power Factor	THD [3]	L_{70} Hours[4]
							120V	240V	277V			
LEDHBR14-4K-PRM-BLK-UNV	4000k	>80	13,961	100	140	120-277	0.83	0.42	0.36	>0.90	<20%	141,000
LEDHBR14-5K-PRM-BLK-UNV	5000k	>80	13,950	100	140	120-277	0.83	0.42	0.36	>0.90	<20%	141,000
LEDHBR21-4K-PRM-BLK-UNV	4000k	>80	20,799	150	139	120-277	1.25	0.63	0.54	>0.90	<20%	141,000
LEDHBR21-5K-PRM-BLK-UNV	5000k	>80	20,624	150	137	120-277	1.25	0.63	0.54	>0.90	<20%	141,000
LEDHBR27-4K-PRM-BLK-UNV	4000k	>80	27,415	200	137	120-277	1.67	0.83	0.72	>0.90	<20%	141,000
LEDHBR27-5K-PRM-BLK-UNV	5000k	>80	27,169	200	136	120-277	1.67	0.83	0.72	>0.90	<20%	141,000
LEDHBR32-4K-PRM-BLK-UNV	4000k	>80	32,727	239	137	120-277	1.99	1.00	0.86	>0.90	<20%	141,000
LEDHBR32-5K-PRM-BLK-UNV	5000k	>80	32,250	239	135	120-277	1.99	1.00	0.86	>0.90	<20%	141,000
							347V	480V				
LEDHBRS14-4K-PRM-BLK-UNC	4000k	>80	13,812	102	135	347-480	0.29	0.21		>0.90	<20%	238,000
LEDHBRS14-5K-PRM-BLK-UNC	5000k	>80	13,892	102	136	347-480	0.29	0.21		>0.90	<20%	238,000
LEDHBRS21-4K-PRM-BLK-UNC	4000k	>80	21,127	151	140	347-480	0.44	0.31		>0.90	<20%	230,000
LEDHBRS21-5K-PRM-BLK-UNC	5000k	>80	21,357	151	141	347-480	0.44	0.31		>0.90	<20%	230,000
LEDHBRS27-4K-PRM-BLK-UNC	4000k	>80	27,846	200	139	347-480	0.58	0.42		>0.90	<20%	215,000
LEDHBRS27-5K-PRM-BLK-UNC	5000k	>80	28,143	200	141	347-480	0.58	0.42		>0.90	<20%	215,000
LEDHBRS32-4K-PRM-BLK-UNC	4000k	>80	34,107	243	140	347-480	0.70	0.51		>0.90	<20%	205,000
LEDHBRS32-5K-PRM-BLK-UNC	5000k	>80	34,704	243	143	347-480	0.70	0.51		>0.90	<20%	205,000

[1] Color rendering index.
[2] All 50-60Hz.
[3] Total harmonic distortion.
[4] L_{70} refers to the number of hours at which lumen output declines to 70% of the initial level. L_{70} hours are IES TM-21-11 calculated hours.

PHOTOMETRIC DATA

LEDHBR14-4K-PRM-BLK-UNV (13,961 Lumens)



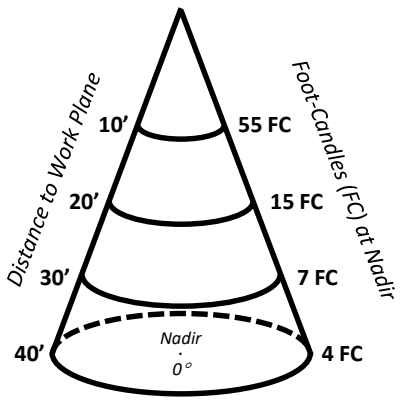
Candlepower Summary

	0°	90°
0°	5,052	5,052
10°	4,985	5,000
20°	4,781	4,772
30°	4,412	4,421
40°	3,886	3,886
50°	3,120	3,118
60°	2,086	2,115
70°	974	1,036
80°	132	179
90°	2	2

Zonal Lumen Summary

Zone	Lumens	% Fixture
0° – 10°	483	3.5%
0° – 20°	1,879	13.5%
0° – 30°	4,026	28.8%
0° – 40°	6,657	47.7%
0° – 50°	9,415	67.4%
0° – 60°	11,765	84.3%
0° – 70°	13,319	95.4%
0° – 80°	13,881	99.4%
0° – 90°	13,921	99.7%
90°– 180°	40	0.3%
0° – 180°	**13,961**	**100.0%**

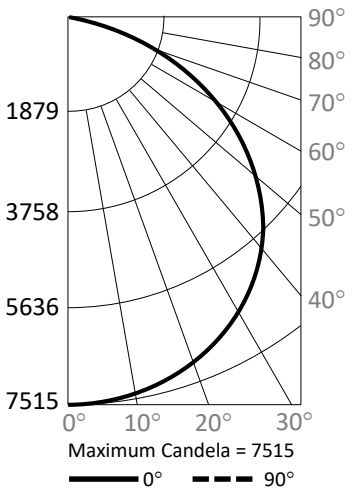
Cone of Light



LEDHBR-PRM Premium Round LED High Bay, 14,000 – 32,000 Lumens (100–240W)

PHOTOMETRIC DATA

LEDHBR21-4K-PRM-BLK-UNV (20,799 Lumens)



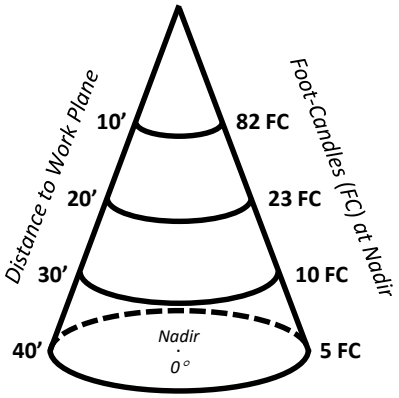
Candlepower Summary

	0°	90°
0°	7,515	7,515
10°	7,420	7,437
20°	7,113	7,103
30°	6,586	6,561
40°	5,780	5,768
50°	4,609	4,664
60°	3,111	3,142
70°	1,456	1,545
80°	204	270
90°	2	2

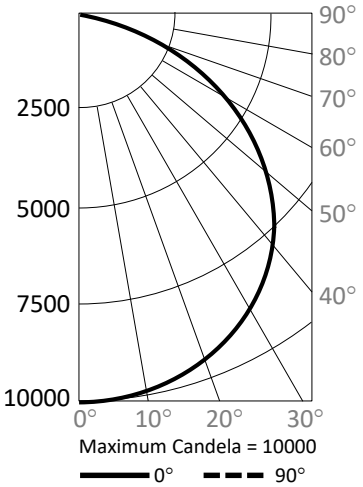
Zonal Lumen Summary

Zone	Lumens	% Fixture
0° – 10°	722	3.5%
0° – 20°	2,806	13.5%
0° – 30°	6,011	28.9%
0° – 40°	9,935	47.8%
0° – 50°	14,037	67.5%
0° – 60°	17,535	84.3%
0° – 70°	19,840	95.4%
0° – 80°	20,678	99.4%
0° – 90°	20,739	99.7%
90°– 180°	60	0.3%
0° – 180°	**20,799**	**100.0%**

Cone of Light



LEDHBR27-4K-PRM-BLK-UNV (27,415 Lumens)



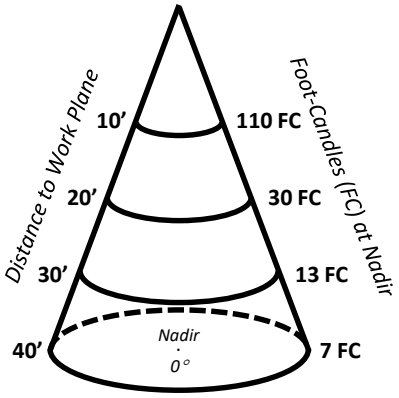
Candlepower Summary

	0°	90°
0°	10,000	10,000
10°	9,876	9,868
20°	9,470	9,450
30°	8,755	8,749
40°	7,713	7,708
50°	6,329	6,326
60°	4,327	4,341
70°	2,155	2,217
80°	380	447
90°	4	4

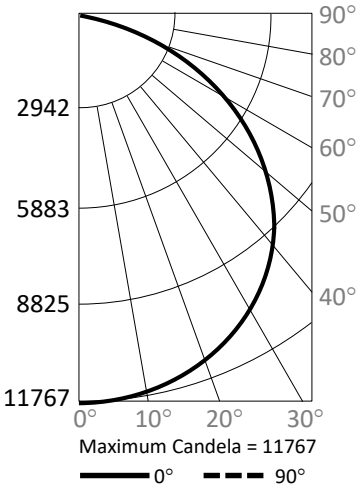
Zonal Lumen Summary

Zone	Lumens	% Fixture
0° – 10°	936	3.4%
0° – 20°	3,639	13.3%
0° – 30°	7,796	28.4%
0° – 40°	12,889	47.0%
0° – 50°	18,235	66.5%
0° – 60°	22,883	83.5%
0° – 70°	26,017	94.9%
0° – 80°	27,235	99.3%
0° – 90°	27,335	99.7%
90°– 180°	80	0.3%
0° – 180°	**27,415**	**100.0%**

Cone of Light



LEDHBR32-4K-PRM-BLK-UNV (32,727 Lumens)



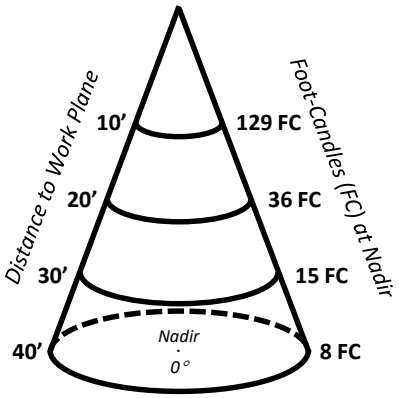
Candlepower Summary

	0°	90°
0°	11,767	11,767
10°	11,631	11,615
20°	11,153	11,131
30°	10,309	10,290
40°	9,088	9,053
50°	7,455	7,426
60°	5,104	5,112
70°	2,567	2,607
80°	449	520
90°	5	5

Zonal Lumen Summary

Zone	Lumens	% Fixture
0° – 10°	1,116	3.4%
0° – 20°	4,337	13.3%
0° – 30°	9,290	28.4%
0° – 40°	15,357	46.9%
0° – 50°	21,722	66.4%
0° – 60°	27,284	83.4%
0° – 70°	31,042	94.9%
0° – 80°	32,512	99.3%
0° – 90°	32,631	99.7%
90°– 180°	96	0.3%
0° – 180°	**32,727**	**100.0%**

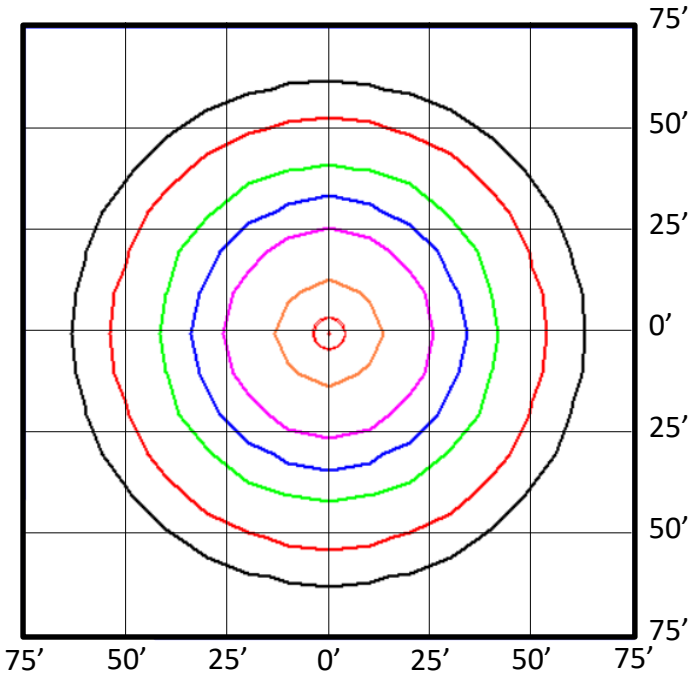
Cone of Light



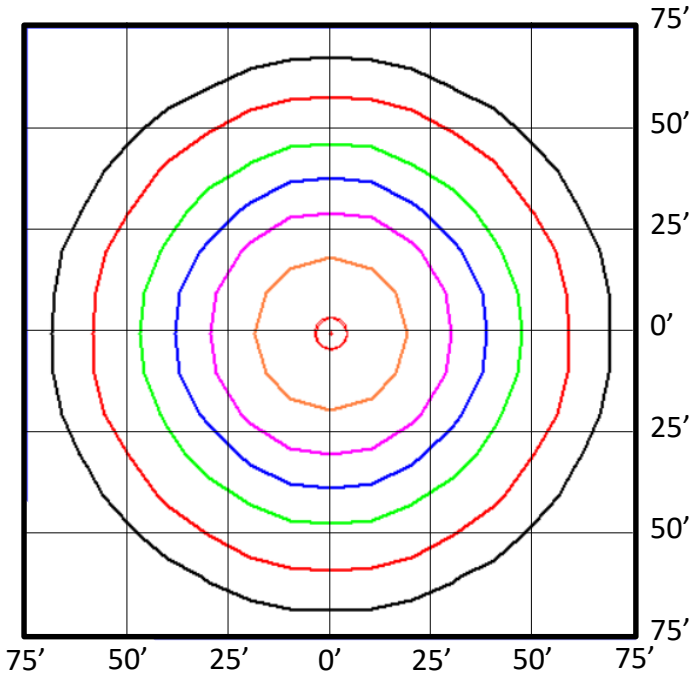
LEDHBR-PRM Premium Round LED High Bay, 14,000 – 32,000 Lumens (100–240W)

PHOTOMETRIC DATA

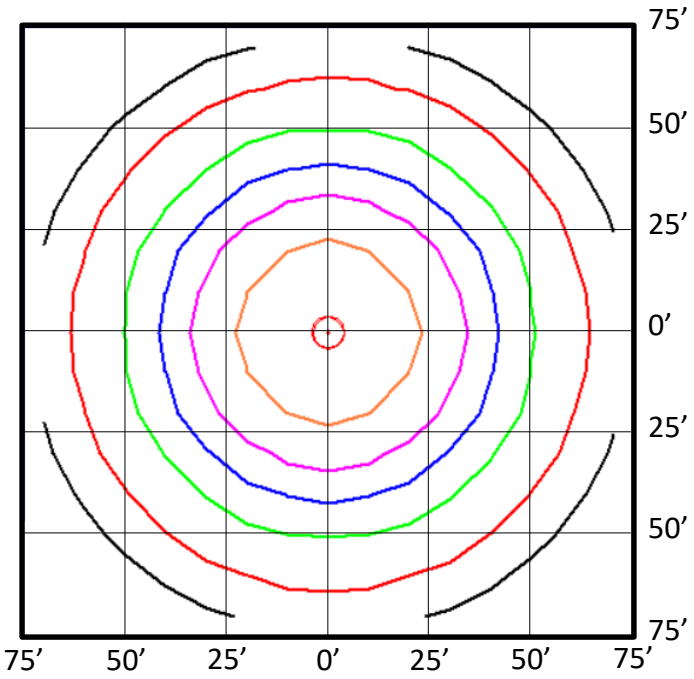
LEDHBR14-4K-PRM-BLK-UNV (13,961 Lumens)



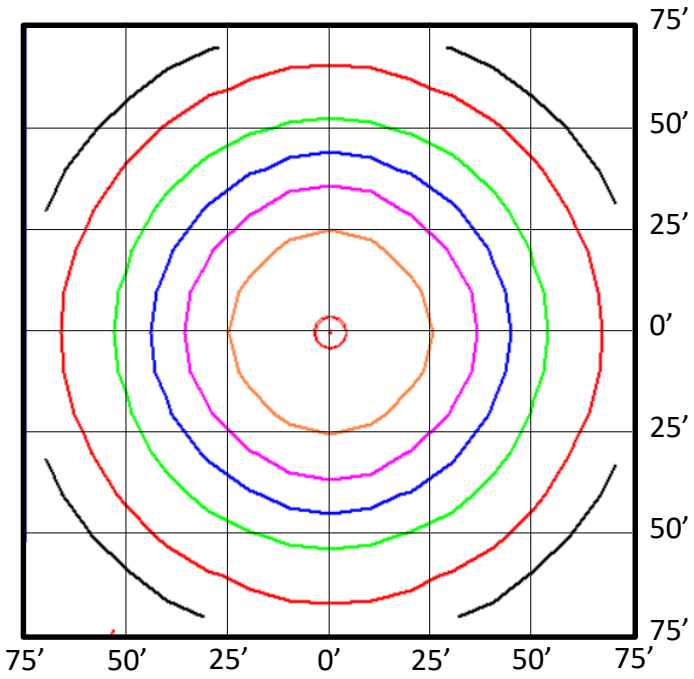
LEDHBR21-4K-PRM-BLK-UNV (20,799 Lumens)



LEDHBR27-4K-PRM-BLK-UNV (27,415 Lumens)



LEDHBR32-4K-PRM-BLK-UNV (32,727 Lumens)



Foot Candles
- 5.0
- 2.0
- 1.0
- 0.5
- 0.2
- 0.1

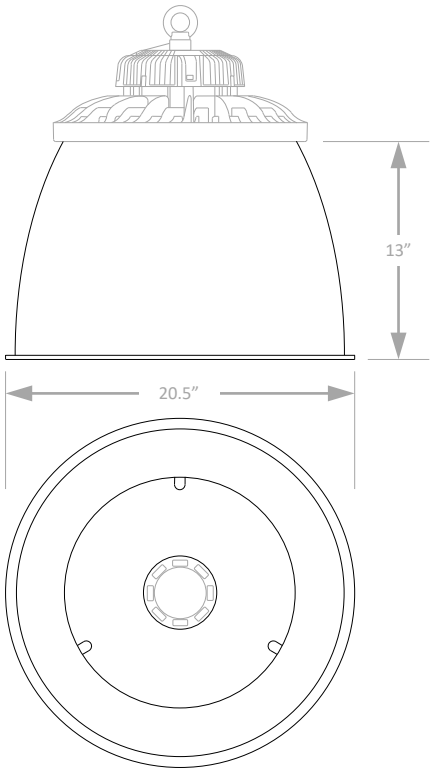
Notes:

- *Isofootcandle plots depict initial footcandles at grade.*
- *Gridlines represent units of mounting height of 25 feet.*

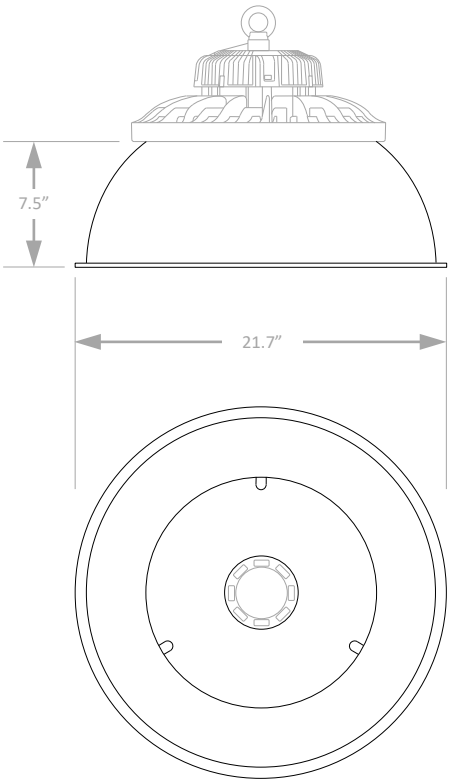
LEDHBR-PRM Premium Round LED High Bay, 14,000 – 32,000 Lumens (100–240W)

REFLECTORS

Aluminum

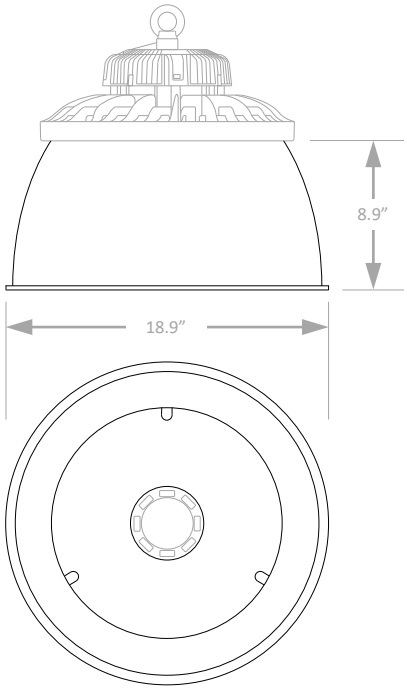


LEDHBRSN-ALMREFL60-PRM
Aluminum Reflector, 60° Beam Spread

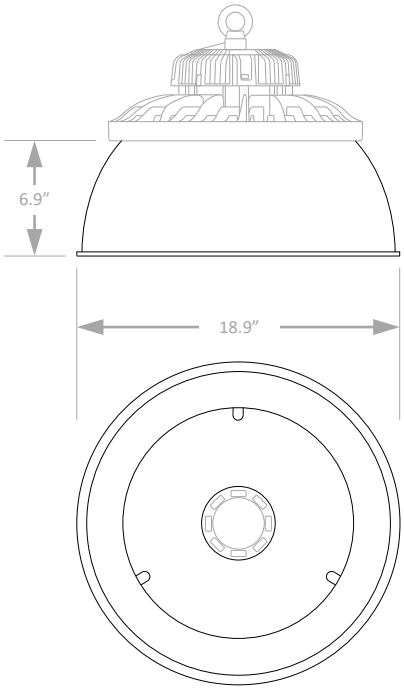


LEDHBRSN-ALMREFL90WIDE-PRM
Aluminum Reflector, 90° Beam Spread

Acrylic



LEDHBRSN-ACLREFL60-PRM
Acrylic Reflector, 60° Beam Spread



LEDHBRSN-ACLREFL90-PRM
Acrylic Reflector, 90° Beam Spread