HIGH BAY HOT SERIES

80°C HIGHBAY

Reliable. Durable. Efficient.

22.158 lumen models

RED SKY

SERIOUSLY SAFE LIGHTS™

PIONEERING INDUSTRIAL ILLUMINATION FOR HARSH & HAZARDOUS CONDITIONS

- A leading manufacturer of premium LED lights for demanding work conditions
- Headquartered in California, products assembled in the USA
- Servicing global clients across 4 continents in metal processing, oil & gas, marine, manufacturing
- Renowned for quality, dependability, client care and uncompromising safety standards

WHY CHOOSE RED SKY

SERIOUSLY SAFE LIGHTS

- Rigorously tested in our professional labs
- Surpassing industry certifications and safety protocols
- Crafted with highest grade components for maximum durability

FAST DELIVERY

- Majority of orders delivered within 14 days
- Same day shipping for products in stock
- Real-time order tracking for full transparency

TOP-NOTCH SERVICES

- Team of experts for seamless support
- Energy audit services, lighting simulation services
- Hassle-free return policy and management

SUSTAINABLE SOLUTIONS

- High luminous efficacy LEDs for energy savings
- Conscious product design
- Recyclable materials for products and packaging

HIGH BAY HOT SERIES

Introducing the High Bay Hot Series by Red Sky Lighting, the lighting solution designed to excel in high temperature environments. This series has been rigorously tested and verified by UL, demonstrating an impressive lumen maintenance of up to 95.9% after 10,000 hours of continuous operation at an ambient temperature of 176°F (80°C).

Moreover, the longevity of High Bay Hot Series goes above and beyond, maintaining at least 70% of its original lumen level after an astounding 47,000 to 50,000 hours of continuous use at 176°F (80°C) ambient temperatures. This translates to over 5 years of life with 24/7 operation or over 10 years with 12 hours of daily use, providing unparalleled reliability for our valued customers.

Not only does this lighting series excel in high heat conditions, but it is also built to withstand the harshest environments. Featuring a heavy-duty anodized aluminum housing, our fixtures offer excellent resistance to corrosion, ensuring long-lasting durability. The innovative vertical cooling fin design and driver compartment further enhance performance in extreme heat environments commonly found in industries such as die casting, metalworks, ironmaking, steel production, power generation facilities, and chemical plants.

At Red Sky Lighting, we have full confidence in the durability and longevity of our products. That's why we proudly offer a comprehensive five-year, no-compromise warranty that covers the entire system, including the LEDs, driver, housing, and gaskets. Trust in Red Sky Lighting to provide you with exceptional lighting solutions that deliver exceptional performance and peace of mind.

FEATURES

High-Temperature performance

Operating ambient temperature up to 176°F, with LED Life L70>130,000 hrs@176°F
Over 10,000 hours of operation at 176°F ambient temperature with only 4.1% lumen output depreciation

Rugged Construction

IP66/67
Heavy-duty anodized aluminum housing for anti-corrosion

RATINGS

UL 1598 Damp Locations
IP66/IP67
IK08
Salt Spray 720 hrs (ASTM B117)

CERTIFICATIONS

UL1598
UL8750
CSA C22.2 No. 250.0-08
CSA C22.2 No. 250.13-14
FCC Part 15, Subpart B

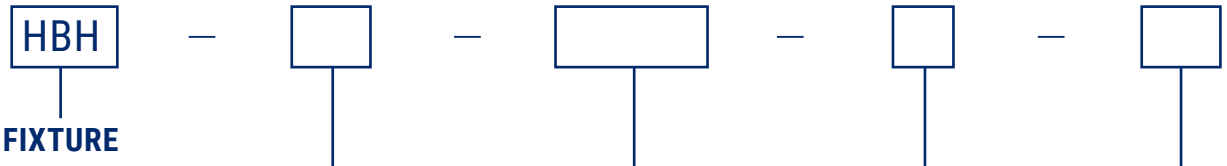
TECHNICAL PARAMETERS

Specification	HBH-150
Electrical Parameters	
Power	150W
Rated Input Current	1.389A@120VAC, 0.602A@277VAC, 0.480A@347VAC, 0.348A@480VAC
Voltage/Frequency	120-277V AC, 347-480V AC 50/60Hz
Power Factor	≥0.90
THD	<20%
L70	130,000 hrs@176°F
Supply Wire	L/N-FG 11KV, L-N 5.5KV@120-277V AC, 10KV/5KV@347-480V AC
Surge Protection	10KV
Warranty	Standard: 3 Years Extended: 5 Years
Optical Parameters	
Lumen Output*	22,158Lm
Lumen Efficacy*	150Lm/W
Available Beam Angle	60° /110°
Correlated Color Temperature (CCT)	5000K
Color Rendering Index (CRI)	Ra≥70
Mechanical Parameters	
Housing Material	Marine Grade Aluminium
Hardware	Stainless steel 316
Lens Material	Tempered glass
Mounting Options	Hook, Yoke, Twin
Product Weight	23.8lbs/10.8kg
Package Weight	25.9bs/11.8kg
Wiring	5ft 3x18 AWG STW 600V Power cord
Product Dimensions(L×W×H)	Φ10.2×22.6in (Φ260×573mm)
Package Dimensions(L×W×H)	25.7×12.2×12.4in (653×309×315mm)
Environmental Parameters	
Maximum Ambient Temperature	176°F (80°C)
Ambient Operating Humidity	10%～90% RH
EPA wind rating (FT2/m2)	1.410/0.131

* Value calculated based on 5000K 110°, varies to different spec.

ORDERING INFORMATION

EXAMPLE: HBH-150-120-277-5K-110



WATTAGE

150 - 150W

VOLTAGE

120 - 277

120-277V AC

347 - 480

347-480V AC

BEAM

110 - 110° (NEMA 6 - Wide)

60 - 60° (NEMA 4 - Medium)

CCT

5K - 5000K*

* For other CCT options, please contact your sales representative.

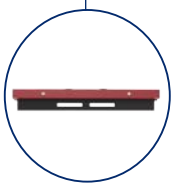
MOUNTING ACCESSORIES

Hook
(Standard)

Yoke

Twin

HBH-YOKE



HBH-TWIN

HBH-ALR60

Mounting Method	PN	Description	MPN Code
Yoke	HBH-YOKE	YOKE Mount, Stainless Steel	310010054
Twin	HBH-TWIN	Twin Mounting Kit	309050313
	HBH-ALR60	Aluminum Reflector, 60 Degrees	101050004

REPLACEMENT PARTS (ORDERED SEPARATELY)

Part Number	Description	MPN Code
HBH-150-120-277-Driver	Replacement Driver Kit for HBH-150-120-277 Fixtures	303010101
HBH-150-347-480-Driver	Replacement Driver Kit for HBH-150-347-480 Fixtures	303010102
CG011-A-01	Replacement Clear Glass Lens for HBH	303030028

LUMEN TABLE

Part Number	Wattage (W)	CCT	Beam	Lens	Lumen Output (Lm)	Efficiency
Voltage 120-277V AC						
HBH-150-120-277-5K-110	150	5000K	110°	Clear Glass		
HBH-150-120-277-5K-60	150	5000K	60°	Clear Glass	22,158	153
					19,970	138
Voltage 347-480V AC						
HBH-150-347-480-5K-110	150	5000K	110°	Clear Glass		
HBH-150-347-480-5K-60	150	5000K	60°	Clear Glass	22,388	158
					20,005	139

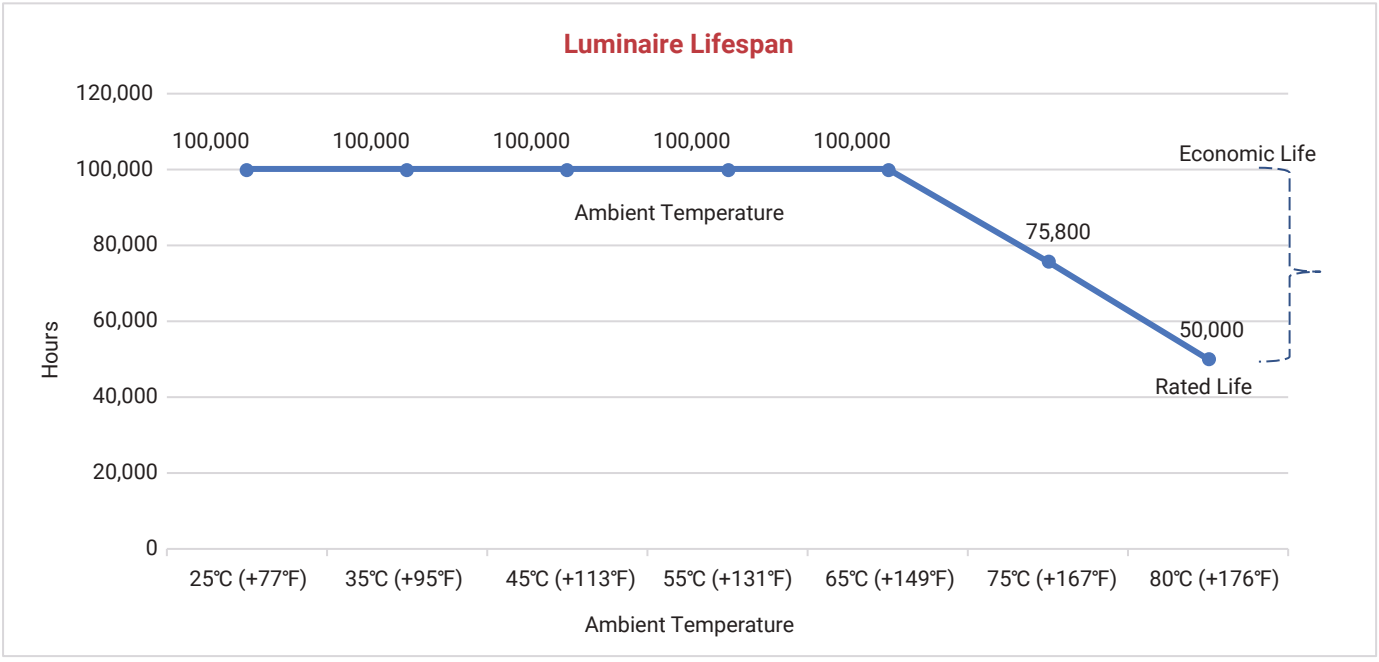
This table lists only selected lumen packages. For additional model parameters, please contact our sales team.
Note: LXX# = nominal lumens. Verify lumen package before ordering.

LUMEN MAINTENANCE

Hours / Ambient	0	15,000	30,000	45,000	60,000	75,000	90,000	100,000	150,000
25℃	100%	98%	97%	95%	94%	93%	92%	91%	88%
35℃	100%	97%	96%	95%	94%	93%	92%	91%	87%
45℃	100%	97%	96%	94%	93%	91%	90%	89%	85%
55℃	100%	97%	95%	93%	91%	90%	88%	87%	82%
65℃	100%	96%	94%	92%	89%	87%	85%	84%	78%
75℃	100%	95%	92%	89%	87%	84%	81%	80%	72%
80℃	100%	95%	91%	88%	85%	82%	79%	77%	68%

LUMINAIRE LIFESPAN

Ambient Temperature	Luminaire Lifespan (Hours)	Rated Service Life - Years (24/7 Operation)	Rated Service Life - Years (12/7 Operation)
25℃(+77℉)	100,000	11	23
35℃(+95℉)	100,000	11	23
45℃(+113℉)	100,000	11	23
55℃(+131℉)	100,000	11	23
65℃(+149℉)	100,000	11	23
75℃(+167℉)	75,800	9	17
80℃(+176℉)	50,000	6	11



Information shown for reference only and may vary by configuration.

A DIRECT RETROFIT FROM HID TO LED

The HBH series LED is easy to retrofit in the same configuration as your existing HID luminaires. For example, a 150-watt High Bay Hot (HBH-150) delivers virtually the same illumination as its equivalent 450 watt Metal Halide luminaire while providing 80% reduction in energy costs and up to 75,000 hours of continuous operation.

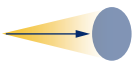
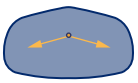
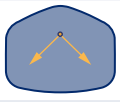
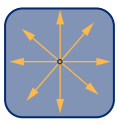
MODELS	Lumen Output (Lm)	MH Equivalent (W)	HPS Equivalent (W)
HBH-150	22,157	450	400

THE RIGHT BEAM PATTERN FOR YOUR APPLICATION

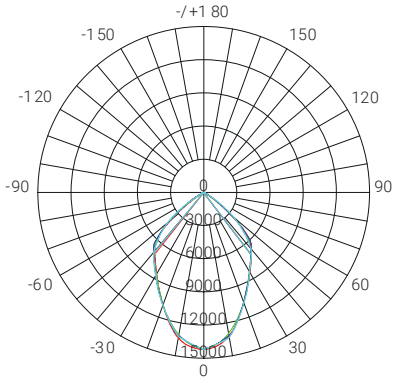
RSL optic package is engineered to deliver maximum footcandles efficiently where you need them, without wasted light or overspill.

RSL offers complimentary lighting design services for our products using industry-leading AGI32 software, tailored for projects of all sizes in harsh and hazardous locations. We assist you in determining the number of fixtures needed, the types of lights to use, their optimal placement, and how to maximize energy savings—all within budget.

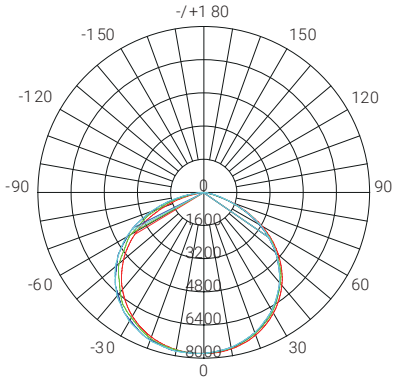
Simply fill out the form (https://dev.redskylighting.com/lighting-design) with a few key details, request a layout, and we'll bring your ideas to life within 2-5 business days.

Beam	NEMA/IESNA Type	Beam Description	Beam Projection Distance
30°	NEMA 3	Medium Narrow	
60°	NEMA 4	Medium	
90°	NEMA 5	Medium Wide	
120°	NEMA 6	Wide	
T1	Type I	Asymmetric distributions, well suited for narrow areas, such as Conveyor belts, Aisleways, Catwalks, Loading docks and Tunnels.	
T2	Type II	Asymmetric distributions, well suited for narrow areas, such as roadways, paths and driveways.	
T3	Type III	Asymmetric distributions, well suited for site / area perimeters, wide roadways, and open areas.	
T5	NEMA 7 Type V (Square)	Very Wide： symmetrical pattern with excellent uniformity for large, open areas.	

PHOTOMETRIC



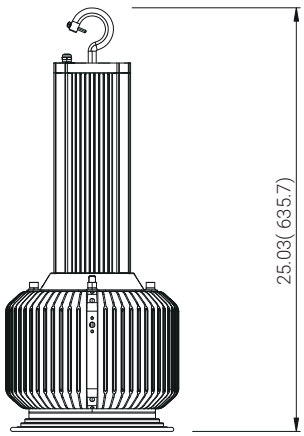
60°
NEMA 4 - Medium

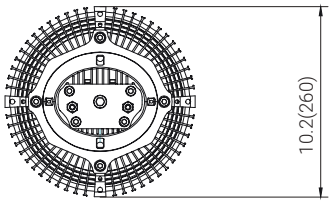


110°
NEMA 6 - Wide

DIMENSIONS

unit: in(mm)

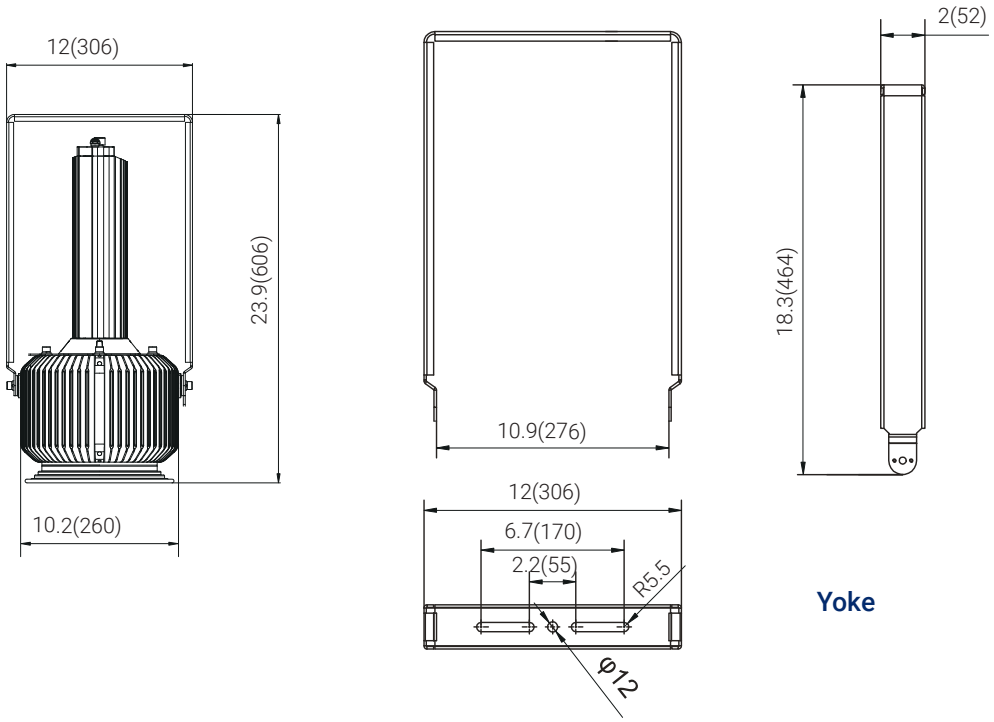




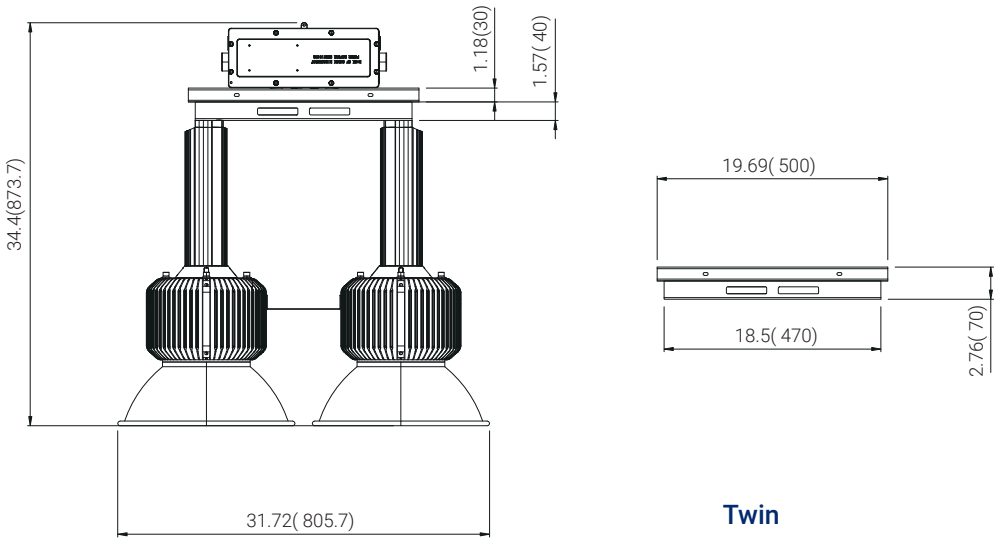
Hook

DIMENSIONS

unit: in(mm)



Yoke



Twin

HAZARDOUS LOCATION LIGHTING BASICS

Atmosphere Groups

Substance	Hazard Class	Division Groups	Zone Groups
Acetylene	Class I Flammable Gases	Group A	IIC
Hydrogen		Group B	IIC
Ethylene		Group C	IIB
Propane		Group D	IIA
Methane		Group D	IIA[2]
Combustible Metal Dusts	Class II Combustible Dusts	Group E[1]	IIIC[3]
Combustible Carbonaceous Dust		Group F	IIIB[3]
Combustible Dusts not in Group E or F (Flour, Grain, Wood, Plastics, Chemicals)		Group G	IIIB[3]
Combustible Fibers and Flyings	Class III Fibers and Flyings	Not Applicable	IIIA[3]

Note 1: Group E is applicable to Class II, Division 1 only.

Note 2: Methane is a Group IIA Gas for non-mining applications.

Note 3: Group IIIA, IIIB and IIIC have not been adopted by the Canadian Electrical Code.

Temperature Classification

Max. Surface Temperatures	NEC®500 CEC®	NEC®500/IEC-Group II
450°C(842°F)	T1	T1
300°C(572°F)	T2	
280°C(536°F)	T2A	T2
260°C(500°F)	T2B	
230°C(446°F)	T2C	
215°C(419°F)	T2D	
200°C(392°F)	T3	T3
180°C(256°F)	T3A	
165°C(329°F)	T3B	
160°C(320°F)	T3C	
135°C(275°F)	T4	T4
120°C(248°F)	T4A	
100°C(212°F)	T5	T5
85°C(185°F)	T6	T6

Classification of Divisions and Zones

Hazard Level	Division Scheme	Zone Scheme	Definitions
Continuous Hazard	Division 1	Zone 0 / Zone 20	A place in which an explosive atmosphere is continually present
Intermittent Hazard		Zone 1 / Zone 21	A place in which an explosive atmosphere is likely to occur in normal operation
Hazard Under Abnormal Conditions	Division 2	Zone 2 / Zone 22	A place in which an explosive atmosphere is not likely to occur in normal operation, but may occur for short periods

IP Codes

1st No.	Solid Objects
0	No protection
1	Objects greater than 50mm
2	Objects greater than 12.5mm
3	Objects greater than 2.5mm
4	Objects greater than 1mm
5	Dust protected
6	Dust proof

2nd No.	Liquids
0	No protection
1	Vertically dripping
2	Dripping up to 15°
3	Limited spraying
4	Splashing from all directions
5	Hosing jets from all directions
6	Strong hosing jets from all directions
7	Temporary immersion
8	Continuous immersion
9	Steam-jet cleaning

IK Ratings

IK Code	Level of Protection Achieved
IK00	Not protected
IK01	Protected against 0.14 joules impact
IK02	Protected against 0.2 joules impact
IK03	Protected against 0.35 joules impact
IK04	Protected against 0.5 joules impact
IK05	Protected against 0.7 joules impact
IK06	Protected against 1 joules impact
IK07	Protected against 2 joules impact
IK08	Protected against 5 joules impact
IK09	Protected against 10 joules impact
IK10	Protected against 20 joules impact

RED SKY
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Disclaimer

All product information is subject to change without notice.
Please contact Red Sky Lighting or your sales representative for the most up-to-date specifications.

Rev.05 01/26