

HBZ-R1

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LED ROUND HIGHBAY FOR HAZARDOUS LOCATIONS



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DESCRIPTION

LED Round Highbay For Hazardous Locations /
120-277V Input (277-480V for 150W) /
C1D2 Groups A,B,C,D,T4A, T5 / IP66 Rated

APPLICATION

Power Plants/ Heavy Industrials/ Paper Mills/
Wastewater Treatment Plants/ Loading Docks/ Platforms/
Shipyards/ Chemical Processing Facilities/
Petrochemical Processing Facilities



PRODUCT FEATURES

- Durable, Explosion Proof Design, Ideal for Areas with Ignitable and Combustible Elements
- High Temperature Silicone Gasketing
- Stainless Steel Exposed Fasteners
- Customizable Offering With Flat, Sphere and Drop Lens, Multiple Optics Available
- Available With Yoke Mount and 3/4 NPT Pendant Mount (Pipe Not Provided)
- C1D2, Groups A, B, C, D
- -40°C (-40°F)~55°C (131°F) Operating Temperature
- 120-277V Input (277-480V for 150W)
- LED L70 Life Time>74,000 Hours, 5 Years Warranty Provided

PRODUCT SPECIFICATIONS

Model Number	Input Voltage	Flat Glass Lens			Flat Glass Lens+80°			Sphere Glass Lens			Drop Lens		
		Wattage (W)	Efficacy (LM/W)	Lumens (LM)	Wattage (W)	Efficacy (LM/W)	Lumens (LM)	Wattage (W)	Efficacy (LM/W)	Lumens (LM)	Wattage (W)	Efficacy (LM/W)	Lumens (LM)
HBZ-R1-30-40	120-277VAC	32.9	138.2	4,546	32.9	134.0	4,410	32.9	127.1	4,182	32.9	128.5	4,228
HBZ-R1-30-50		32.2	141.1	4,538	32.2	129.9	4,175	32.2	129.9	4,175	32.2	131.3	4,220
HBZ-R1-60-40	120-277VAC	59.8	137.0	8,355	60.3	132.0	7,954	60.5	123.1	7,450	60.4	128.4	7,750
HBZ-R1-60-50		57.9	140.0	8,275	58.0	135.9	7,876	58.4	126.1	7,356	59.1	132.6	7,835
HBZ-R1-100-40	120-277VAC	100.4	145.0	14,166	100.4	140.7	14,125	100.4	133.4	13,397	X	X	X
HBZ-R1-100-50		98.5	149.0	14,172	98.5	144.5	14,235	98.5	137.1	13,501	X	X	X
HBZ-R1-150-40	120-277VAC	149.1	145.0	21,551	153.2	141.4	21,667	148.8	134.3	19,984	X	X	X
HBZ-R1-150-50		144.7	149.0	21,579	147.3	145.9	21,496	144.3	139.0	20,059	X	X	X
HBZ-R1-150-40-V	277-480VAC	152.2	144.8	22,040	152.2	140.5	21,379	152.2	133.2	20,277	X	X	X
HBZ-R1-150-50-V		150.5	145.3	21,877	150.5	141.0	21,220	150.5	133.7	20,127	X	X	X

* Drop lens is only available for 30W and 60W

** Most data are based on in-house IES files

☆ Data for 30W, Flat Glass Lens are tested, others are extrapolated

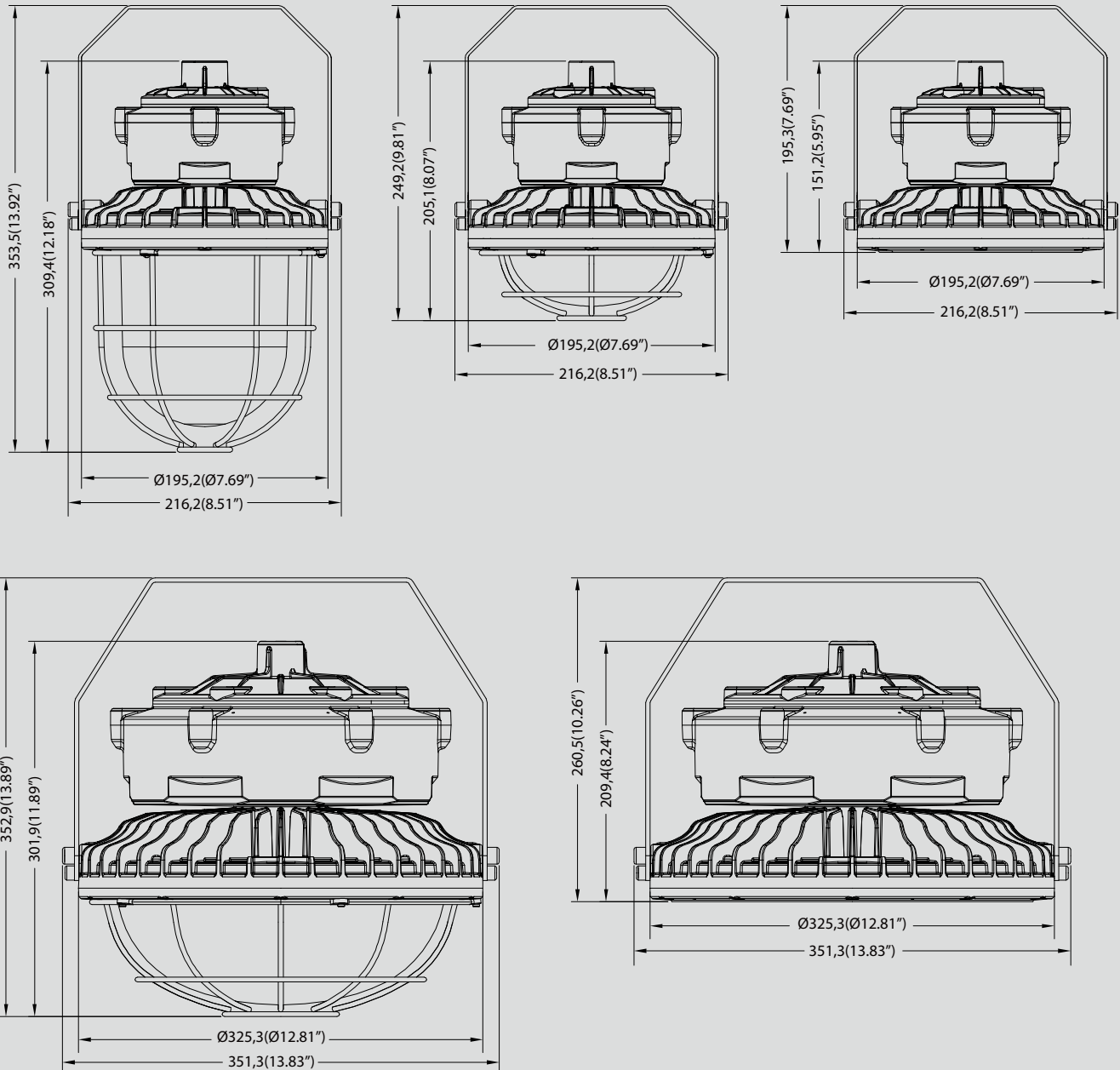
★ Data for 100W, Flat Glass Lens are tested, others are extrapolated

▲ Data for 150W, 277-480V, Flat Glass Lens+80° are tested, others are extrapolated

HBZ-R1

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DIMENSIONS



Model Number	Diameter	Flat Lens Height		Sphere Lens Height		Drop Lens Height		Weight w/o bracket
		w/o bracket	w/ bracket	w/o bracket	w/ bracket	w/o bracket	w/ bracket	
HBZ-R1-30	7.69"	5.95"	7.69"	8.07"	9.81"	12.18"	13.92"	8.6 lbs
HBZ-R1-60								8.6 lbs
HBZ-R1-100	13.83"	8.24"	10.26"	11.89"	13.89"	/	/	24.7 lbs
HBZ-R1-150								24.9 lbs

HBZ-R1

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PHYSICAL FEATURES

Installation

Designed for mounting with yoke mount or for pendant mounting to a 3/4-inch, NPT-threaded pipe

Maximized Efficiency

130 LPW, ultra-high efficiency delivers superior performance over HID fixtures



Applications

Class I Division 2 rated for use in hazardous locations where flammable gases or liquids are present



Lens Protection

Wire guard included to protect the lens from impact

Multiple Lens

Flat lens, sphere lens and drop lens available for different applications

IP66 Rated

Dust tight, and protected against water jets from any direction

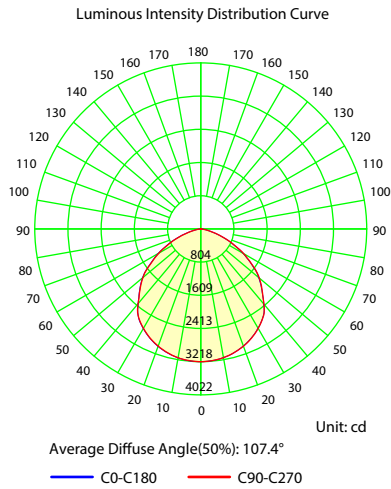
HBZ-R1

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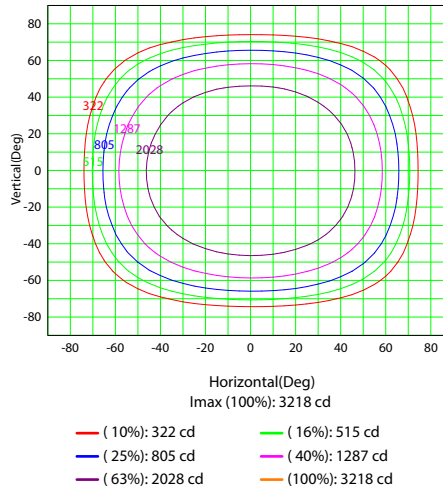
PHOTOMETRIC SPECIFICATIONS

HBZ-R1-60-40-C0 @120V,4000K, Flat Glass

POLAR CURVE



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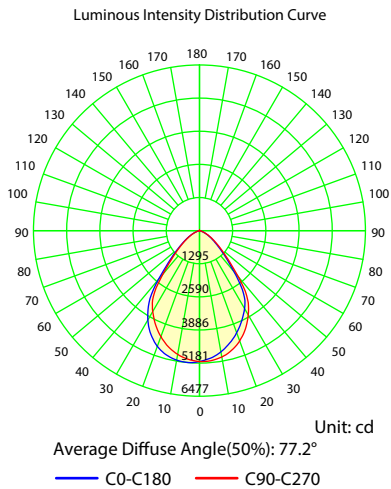


ZONAL LUMEN

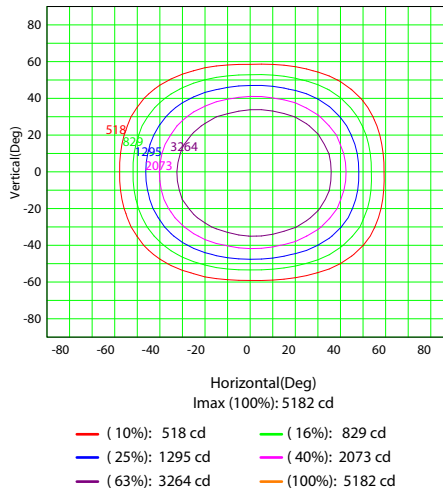
ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	4184	50.1
FL (0°-30°)	1263	15.1
FM (30°-60°)	2312	27.7
FH (60°-80°)	585	7.0
FVH (80°-90°)	24	0.3
BACK LIGHT	4151	49.7
BL (0°-30°)	1263	15.1
BM (30°-60°)	2295	27.5
BH (60°-80°)	570	6.8
BVH (80°-90°)	22	0.3
UP LIGHT	21	0.2
UL (90°-100°)	1	0.0
UH (100°-180°)	19	0.2
TRAPPED LIGHT	NA	NA

HBZ-R1-60-40-C8 @120V,4000K, Flat Glass+80°

POLAR CURVE



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ZONAL LUMEN

ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	4031	50.7
FL (0°-30°)	1890	23.8
FM (30°-60°)	1952	24.5
FH (60°-80°)	187	2.3
FVH (80°-90°)	3	0.0
BACK LIGHT	3919	49.3
BL (0°-30°)	1850	23.3
BM (30°-60°)	1890	23.8
BH (60°-80°)	177	2.2
BVH (80°-90°)	2	0.0
UP LIGHT	4	0.0
UL (90°-100°)	0	0.0
UH (100°-180°)	4	0.0
TRAPPED LIGHT	NA	NA

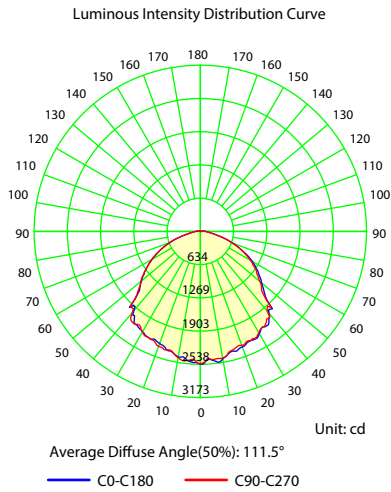
HBZ-R1

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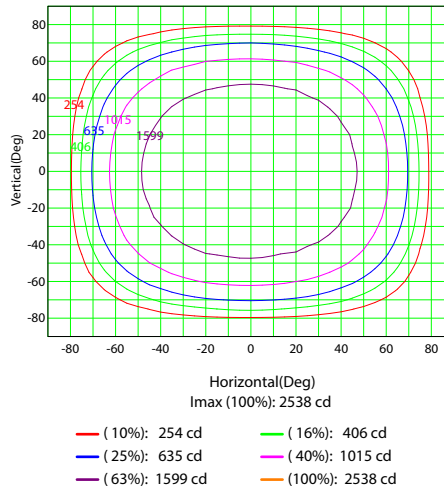
PHOTOMETRIC SPECIFICATIONS

HBZ-R1-60-40-S0 @120V,4000,Sphere Lens

POLAR CURVE



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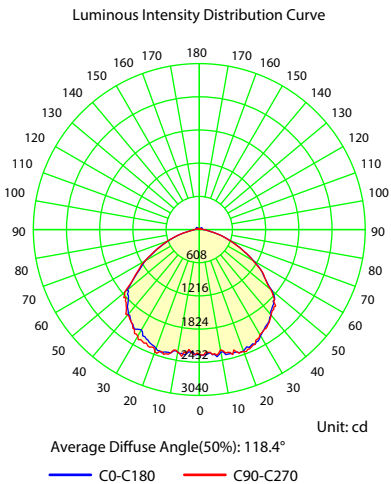


ZONAL LUMEN

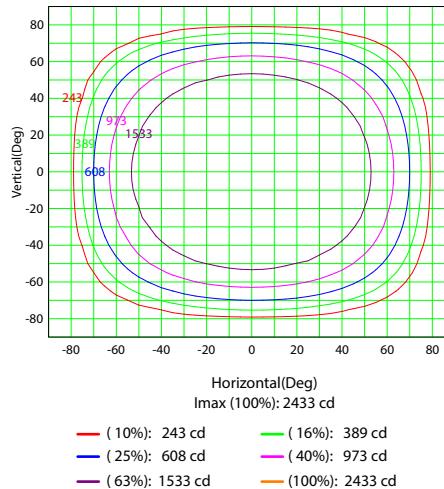
ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	3668	49.2
FL (0°-30°)	977	13.1
FM (30°-60°)	1943	26.1
FH (60°-80°)	663	8.9
FVH (80°-90°)	85	1.1
BACK LIGHT	3630	48.7
BL (0°-30°)	977	13.1
BM (30°-60°)	1934	26.0
BH (60°-80°)	637	8.6
BVH (80°-90°)	82	1.1
UP LIGHT	152	2.0
UL (90°-100°)	88	1.2
UH (100°-180°)	64	0.9
TRAPPED LIGHT	NA	NA

HBZ-R1-60-40-U0 @120V,4000K,Drop Lens

POLAR CURVE



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ZONAL LUMEN

ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	3720	48.0
FL (0°-30°)	971	12.5
FM (30°-60°)	2043	26.4
FH (60°-80°)	635	8.2
FVH (80°-90°)	70	0.9
BACK LIGHT	3717	48.0
BL (0°-30°)	975	12.6
BM (30°-60°)	2035	26.3
BH (60°-80°)	637	8.2
BVH (80°-90°)	70	0.9
UP LIGHT	313	4.0
UL (90°-100°)	75	1.0
UH (100°-180°)	238	3.1
TRAPPED LIGHT	NA	NA

HBZ-R1

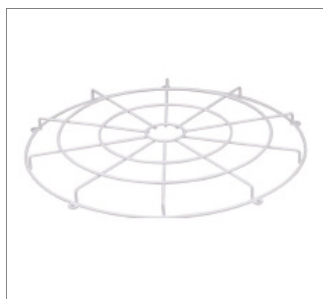
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ADDITIONAL ACCESSORIES (SOLD SEPARATELY)

ATG CODE	MODEL NUMBER	DESCRIPTION
YM1	YM-HBZR1-01	Yoke Mount for HBZ-R1, 30W,60W
YM2	YM-HBZR1-02	Yoke Mount for HBZ-R1, 100W,150W
SW1	SW-HBZR1-01	Sphere Wire Guard for HBZ-R1, 30W,60W
SW2	SW-HBZR1-02	Sphere Wire Guard for HBZ-R1, 100W,150W
FW1	FW-HBZR1-01	Flat Wire Guard for HBZ-R1, 30W,60W
FW2	FW-HBZR1-02	Flat Wire Guard for HBZ-R1, 100W,150W



SW-HBZR1-01&02



FW-HBZR1-01&02



YM-HBZR1-01&02

ORDER FORMAT

Family	Series	Finish	Wattage	CCT	Input	Lens&Options	NPT
HBZ	R1						
		Blank= Grey Y= Yellow	30= 30W 60= 60W 100= 100W 150= 150W	40= 4000K 50= 5000K	Blank= 100-277Vac V= 277-480Vac*	C0= Flat Clear Lens, No Extra Optics C6= Flat Clear Lens, 60° Beam Spread C7= Flat Clear Lens, 70° Beam Spread C8= Flat Clear Lens, 80° Beam Spread C9= Flat Clear Lens, 90° Beam Spread S0= Sphere Stripped Lens, No Extra Optics U0= Drop Lens, No Extra Optics**	Blank= No NPT N= 3/4 NPT☆

* Only 150W model is available with 277-480Vac input

** Only 30W and 60W models are available with drop lens

☆ 3/4 NPT pipe is not provided

HBZ-R1

LED ROUND HIGHBAY FOR HAZARDOUS LOCATIONS

LISTINGS**UL 844**

Standard for Luminaires for Use in Hazardous (Classified) Locations

UL 1598

Standard for Luminaires

UL Listed for Wet Locations**IP66 Rating**

No ingress of dust, complete protection against contact (dust tight); no ingress of water projected in powerful jets from any direction.

DesignLights Consortium 5.1 Standard**Class I, Division 2, Groups A, B, C, D**

Class I: A hazardous location in which flammable gases or vapors may be present in the air in sufficient quantities to be explosive or ignitable, such as petroleum refineries, aircraft hangars, dry cleaning plants, utility gas plants or storage areas for liquified petroleum or natural gas, and spray finishing areas.

Division 2: Abnormal condition, where ignitable concentrations of flammable gases, vapors or liquids are not likely to exist under normal operating conditions. Class I locations are broken into four groups by the Code: A, B, C and D.

Group A: The only substance in Group A is acetylene because it is a gas with extremely high explosion pressures.

Group B: This group includes hydrogen and other materials with similar characteristics.

Group C&D: The most usual Class I groups. They comprise the greatest percentage of all Class I hazardous locations. Found in Group C is ethylene. Found in Group D are many of the most common flammable substances such as butane, gasoline, natural gas and propane.