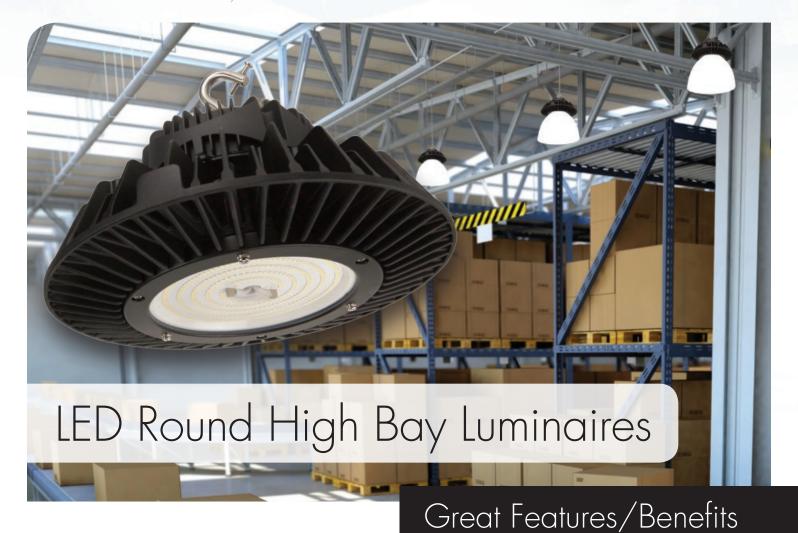
# Industra



TCP's easy-to-install LED Round High Bay Luminaires have a sleek, robust design that can be paired with optional reflectors to meet a variety of application needs.

Combining long life and outstanding efficacy up to 150 LPVV, TCP offers a cost effective solution to maximize energy and maintenance savings. These LED luminaires instantly deliver brilliant white light, eliminating long warm-up times experienced with HID fixtures.

Energy efficient design

delivers up to 150 LPW

- Smooth, uniform O-10V dimming
- Instant on
- Long life: 50,000 hours
- Heavy duty die-cast aluminum housing
- IP65 wet location rated

- Ideal for:
  - Warehouses & Distribution Centers
- Commercial Facilities
- Aisles (Open & Stock)
- Retailers
- Schools & Municipalities
- Field Houses & Gymnasiums
- Open Ceiling Designs









# LED Round High Bay Luminaires

# Features/Benefits

Up to 78% less energy than HID alternatives	Instant energy savings; potential rebate eligibility
Long 50,000 hour rated life	Significantly reduce maintenance labor and material costs
Hanging hook (standard) and pendant mount adapter	Easy to install
Mercury free	Great for all environments
IP65 Rated	UL approved for wet locations

# Specifications

Input Line Voltage	120-277VAC & 347-480VAC
Input Line Frequency (Hz)	50/60HZ
Wattage (W)	100W, 150W, 200W, 240W
Lumens (L)	15,000, 22,500, 30,000, 36,000
Lumens per Watt (LPW)	>140
Rated Life	50,000 hours
Minimum Starting Temperature	-30°C (-22°F)
Maximum Operating Temperature	50°C (122°F)
CRI	>80
Power Factor	>0.95
THD	<20%
Ratings	cULus wet location rated, IP65
Controls	0-10V dimming (standard)



# Replacement Comparison

ТҮРЕ	WATTAGE	ENERGY SAVINGS (%)
TCP LED Round High Bay – 15,000 Lumens	100W	-
250W Metal Halide	295W	64%
TCP LED Round High Bay – 22,500 Lumens	150W	_
400W Metal Halide	458W	67%
TCP LED Round High Bay – 30,000 Lumens	200W	_
400W Metal Halide	458W	56%
TCP LED Round High Bay – 36,000 Lumens	240W	_
1000W Metal Halide	1080W	78%













# LED Round High Bay Luminaires

#### LED TECHNICAL DATA

## **Applications**

The TCP LED Round High Bay is ideal for replacing traditional metal halide high bay systems. Benefits include high efficiency, excellent color rendering, long life, instant on, and improved uniformity.

Suggested mounting heights from 40' - 60' with primary applications including warehousing, commercial facilities, manufacturing facilities, open and stack aisle applications and gymnasiums.

#### Construction

- Housing: durable and lightweight cast magnesium alloy
- Lens: tempered glass
- Finish: powder coated, post-painted black
- Easy-to-install with hanging hook (standard) or optional pendant mount adapter or pendant mount adapter with wiring box
- Sleek, stylish design

#### **Electrical**

- cULus wet location rated, IP65
- 0-10V dimming driver (standard)
- System rated for long 50,000 hour life
- Efficiently delivers up to 150 LPW

### **Optics**

- 120° beam angle (without reflectors)
- Optional reflectors available to minimize glare
- Multiple reflector options to fit a variety of applications and aesthetic needs



#### Listings

cULus Listed – wet location rated IP65 Rated RoHS Compliant

#### Warranty

Five year limited warranty against defects in manufacturing.

#### Catalog Ordering Matrix Example: HBRUZDA250K

HBR		ZD				
FAMILY	VOLTAGE	CONTROLS/DIMMING	LUMEN PACKAGE (Power) <sup>12</sup>	COLOR TEMPERATURE		
HBR Round High Bay	U – 120V - 277V H – 200V - 480V	<b>ZD</b> – 0-10V Dimming	<b>A2</b> – 15,000L (100W) <b>A3</b> – 22,500L (150W) <b>A4</b> – 30,000L (200W) <b>A5</b> – 36,000L (240W)	<b>40K</b> – 4000K <b>50K</b> – 5000K		

<sup>&</sup>lt;sup>1</sup> Approximate lumen output. Actual performance may vary based on CCT, options selected and end user application.

#### **AVAILABLE ACCESSORIES (ordered separately)**

HBRPMA34 – 3/4" Pendant mount adapter (100W & 150W models) HBRPMA34B - 34" Pendant mount adapter (200W & 240W models)

**HBRPMJB34** – 3/4" Pendant mount adapter with junction box (all models)

HBRSENSOR1 – Wet location rated daylight harvesting occupancy sensor 120V / 277V

HBRSENSOR3 - Wet location rated daylight harvesting occupancy

sensor 120V / 277V / 347V

HBRRALUM90 - 90 degree aluminum reflector

HBRACREFL - Acrylic refractor

HBRACLENS - Acrylic lens for HBRACREFL

\*\*Other reflector options available by special order. Contact manufacturer for more information.\*

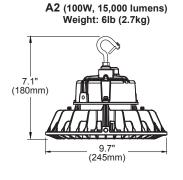
<sup>&</sup>lt;sup>2</sup> Actual wattage may differ by +/- 10%.

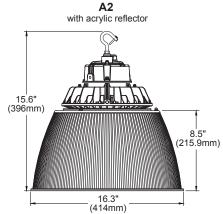


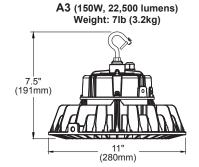
## LED TECHNICAL DATA

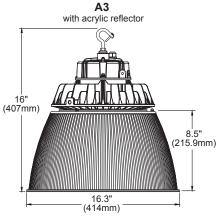


## Dimensions

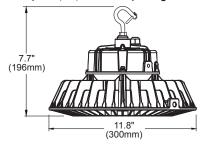


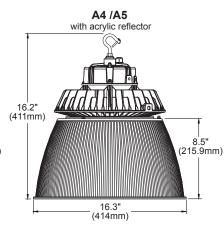












# Photometric Report

Based on photometric data for TCP Item #HBRUZDA450K

Polar Graph
105/19 17852 52/8 28/4

Maximum Candela = 10575.88 Located At Horizontal Angle = 90, Vertical Angle =
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
# 2 - Horizontal Cone Through Vertical Angle (1) (Through Max. Cd.)

## Zonal Lumen Summary

Zone	Lumens	%Luminaire
0-20	3875.51	13.30
0-30	8277.86	28.50
0-40	13641.48	46.90
0-60	24153.2	83.00
0-80	28776.13	98.90
0-90	28915.22	99.40
10-90	27917.84	96.00
20-40	9765.97	33.60
20-50	15373.02	52.80
40-70	13807.54	47.50
60-80	4622.93	15.90
70-80	1327.11	4.60
80-90	139.09	0.50
90-110	22.71	0.10
90-120	44.47	0.20
90-130	71.91	0.20
90-150	131.44	0.50
90-180	178.20	0.60
110-180	155.49	0.50
0-180	29093.42	100.00

Total Luminaire Efficiency = N.A.%

Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20																		
RC		80				70				50			30			10		0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	83	79	76	80	77	74	72
3	91	81	73	67	89	80	72	67	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	42	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

For the most up-to-date specs and warranty information, please visit <a href="www.tcpi.com">www.tcpi.com</a>

Specifications and dimensions subject to change without notice.