

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 165 LPW, 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.

# Reasons to choose the LED Round High Bay Luminaires from TCP

- Energy efficient design delivers up to 165 LPW and uses up to 67% less energy than HID alternatives
- Smooth, uniform 0-10V dimming
- Instant on
- Long life: 50,000 hours

- Heavy duty die-cast aluminum housing
- IP65 wet location rated
- Standard hanging hook and optional pendant mount adapter available for easy installation
- Mercury free and environmentally friendly

## **Ideal Applications**

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















# LED Round High Bay Luminaires

# **Specifications**

Input Line Frequency (Hz)	120-277 VAC 50/60HZ 80W/100W/150W/200W 13200L/16500L/24750L/33000L
Lumens per Watt (LPW)	>165 LPW
Rated Life	50,000 hours
Minimum Starting Temperature	40°C (-22°F)
Maximum Operating Temperature	9 50°C (122°F)
CRI	>80
Power Factor	>0.95
THD	<20%
Surge Protection	4kV
Ratings	cULus wet location rated, IP65
	0-10V dimming (standard)



LED Round High Bay



LED Round High Bay with aluminum reflector



LED Round High Bay with acrylic refractor

# Replacement Strategy

ТҮРЕ	WATTAGE	ENERGY SAVINGS
TCP LED Round High Bay – 13,200 Lumens	80W	-
150W Metal Halide	150W	47%
TCP LED Round High Bay – 16,500 Lumens	100W	-
250W Metal Halide	295W	64%
TCP LED Round High Bay – 24,750 Lumens	150W	_
400W Metal Halide	458W	67%
TCP LED Round High Bay – 33,000 Lumens	200W	_
400W Metal Halide	458W	56%













# LED Round High Bay Luminaires

### **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 165 LPW

## **Optics**

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



#### Listings

\*Special order only

cUlus Listed – wet location rated IP65 Rated RoHS Compliant DLC 5.0 Premium NSF Rated\*

#### Warranty

Five year limited warranty against defects in manufacturing.

## Catalog Ordering Matrix Example: RHBUZDA350K

RHB		ZD		
FAMILY	VOLTAGE	CONTROLS/ DIMMING	LUMEN PACKAGE (POWER)12	COLOR TEMPERATURE
<b>RHB</b> Round High Bay	<b>U</b> – 120V-277V	<b>ZD</b> = 0-10V Dimming	<b>A1</b> – 13,200L (80W) <b>A2</b> – 16,500L (100W) <b>A3</b> – 24,750L (150W) <b>A4</b> – 33,000L (200W)	<b>40K</b> – 4000K <b>50K</b> – 5000K

Field Installed Accessories: Other reflector options available by special order. Contact manufacturer for more information.

Item Number	Description	Item Number	Description
RHBPMA34	3/4" PENDANT MOUNT ADAPTER	HBRRALUM90	90 DEGREE ALUMINUM REFLECTOR
<b>RHBPMJB34</b>	3/4" PENDANT MOUNT ADAPTER WITH JUNCTION BOX	HBRACREFL	ACRYLIC REFRACTOR
RHBSENSOR1	WET LOCATION RATED DAYLIGHT HARVESTING OCCUPANCY SENSOR 120V / 277V	HBRACLENS	ACRYLIC LENS FOR HBRACREFL
RHBSREM1	OPTIONAL INFRARED REMOTE CONTROLLER FOR PROGRAMMING RHBSENSOR 1	HBRHWG	WIRE GUARD OVER HIGH BAY FIXTURE LENS. NOT COMPATIBLE WITH HBRACREFL OR HBRRALUM90
RHBBRKT	ADJUSTABLE BRACKET		

<sup>1</sup> Approximate lumen output. Actual performance may vary based on CCT, options selected and end user application. 2 Actual wattage may differ by +/- 10%.













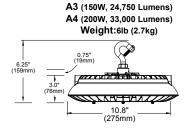


# LED Round High Bay Luminaires

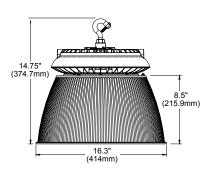
## Dimensions and Mounting Data

A1 (80W, 13,200 Lumens)

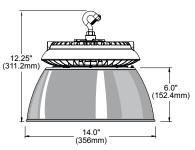
A2 (100W, 16,500 Lumens)



#### **Acrylic Refractor Installation**

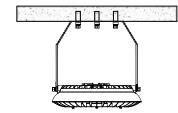


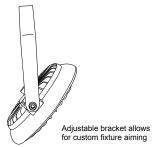
#### **Aluminum Reflector Installation**



#### Adjustable Bracket Installation



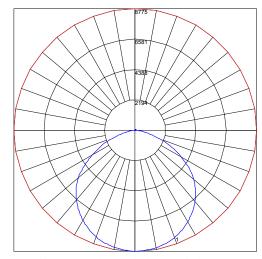




## Photometric Report

Based on photometric data for TCP Item #RHBUZDA350K

## **Polar Graph**



Maximum Candela = 8775.1 Located At Horizontal Angle = 90, Vertical Angle = 1 # 1 - Vertical Plane Through Horizontal Angles (90 - 270) [Through Max. Cd.]

# 2 - Horizontal Cone Through Vertical Angle (1) (Through Max. Cd.)

Specifications and dimensions subject to change without notice. For the most up-to-date specs and warranty information, please visit <u>www.tcpi.com</u>

## 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	102	102	102	99
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	81	97	90	85	80	87	82	78	83	79	76	80	77	74	72
3	91	81	74	67	89	80	72	67	77	71	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	54	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

### **Zonal Lumen Summary**

Zone	Lumens	%Luminaire	Zone	Lumens	${\rm \%Luminaire}$
0-20	3222.48	13.30	70-80	1097.17	4.50
0-30	6889.16	28.40	80-90	100.70	0.40
0-40	11369.14	46.90	90-110	16.60	0.10
0-60	20166.34	83.10	90-120	32.71	0.10
0-80	24025.00	99.00	90-130	53.37	0.20
0-90	24125.70	99.40	90-150	98.87	0.40
10-90	23296.61	96.00	90-180	134.41	0.60
20-40	8146.66	33.60	110-180	117.81	0.50
20-50	12849.64	53.00	0-180	24260.11	100.00
40-70	11558.69	47.60	Total Luminaire Efficiency = N		NIA º/
60-80	3858.66	15.90			1Cy = 14.A./6











