



LED High Bay

High efficiency LED High Bays. Use anywhere you need exceptional light distribution for mounting heights up to 40 feet.

LIMITLESS OPTIONS for the following applications:

- Warehouses
- Commercial Facilities
- Manufacturing Facilities
- Aisles (Open and Stack)



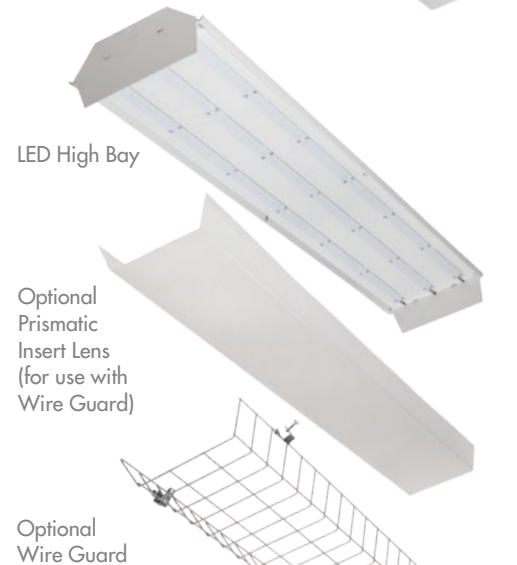
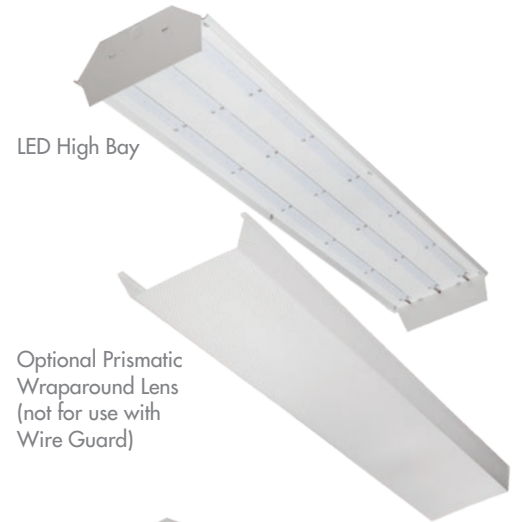
Great Features/Benefits

- Energy efficient – Up to 65% energy savings compared to HID
- Smooth, uniform dimming
- Instant on
- Long life: 50,000 hours
- Replaces traditional metal halide and linear fluorescent high bay systems
- Excellent color rendering
- Heavy duty 20 gauge housing is code grade steel

LED High Bay

Features/Benefits

Up to 65% less energy than HID alternatives.	Instant energy savings; potential rebate eligibility.
Long 50,000 hour rated life.	Minimizes replacements & maintenance costs.
Very low heat generation.	Less energy wasted as heat.
Excellent color consistency & CRI.	Enhances color of focal point while maintaining uniformity throughout lighting installation.
UL approved for damp location.	Can be used outdoors when protected from elements. Withstands humidity indoors/outdoors.



Specifications

Input Line Voltage	120-277 & 347-480 VAC
Input Power	104W
Input Line Frequency	50/60HZ
Luminaire Life (Rated)	50,000 hours
Controls	0-10V dimming (standard)
Minimum Starting Temperature	-30°C
Maximum Operating Temperature	50°C
CRI	83+
Power Factor	>0.9
THD	<20%

Warranty

Five year limited warranty against defects in manufacturing.

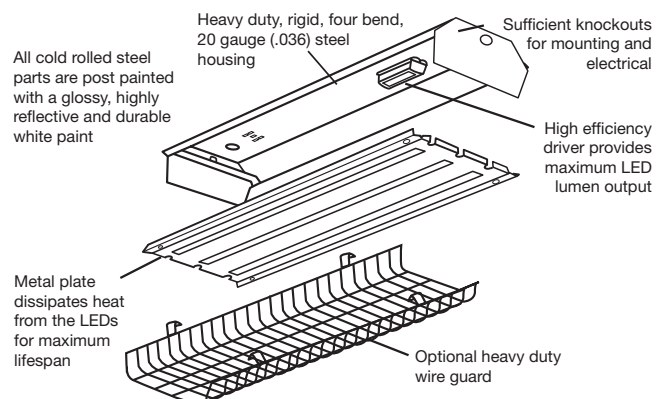
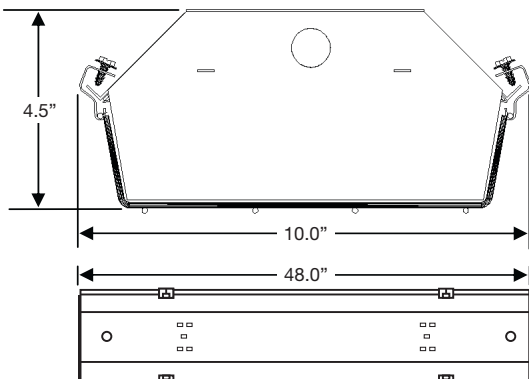
Replacement Comparison

TYPE	WATTAGE	ENERGY SAVINGS (%)
TCP LED High Bay	104W	—
250W Metal Halide	295W	65%
6 Lamp T8 HBF	220W	53%
4 Lamp T5 HO	249W	58%



5 YEAR WARRANTY

Dimensions and Mounting Data



Not all versions of this product are qualified on the DLC QPL. To view our DLC qualified products, please consult the DLC Qualified Products List at www.designlights.org/qpl.

Applications

The TCP LED High Bay's superior lumen package is ideal for replacing traditional metal halide and linear fluorescent low bay systems. Benefits include high efficiency, excellent color rendering, long life, instant on, and improved uniformity. Suggested mounting heights from 20' - 40' with primary applications including warehousing, commercial facilities, manufacturing facilities, open and stack aisle applications.

Construction

The full body assembly features TCP high efficiency drivers and high output LEDs. The LED High Bay's heavy duty 20 gauge housing and 8 gauge wire guard is code gauge steel and all components, excluding the wire guard, have a baked white enamel finish that is electrostatically applied and post painted with a glossy, highly reflective and durable white paint.

Electrical

TCP high efficiency drivers are Class 2 rated, cULus listed, and provide consistent power to ensure even lighting from the long life LEDs. Each driver is matched to a light engine to deliver 50,000 hours life. Our drivers are tightly secured by mounting bolts. 0-10V dimming comes standard.

Optics

The optional impact resistant acrylic diffuser comes in two styles. The prismatic insert lens is for use with the wire guard, while the prismatic wraparound lens is used on its own without the wire guard.



Installation Suspension by chain, cable, or hook with appropriate accessories.	Listings cULus Listed – damp location rated RoHS Compliant DLC v4.2 Standard
Warranty Five year limited warranty against defects in manufacturing.	

Lumen Maintenance

Lumen Maintenance Factor (LMF) ¹			
25,000 Hour Projected LMF ²	50,000 Hour Calculated LMF ³	100,000 Hour Calculated LMF ³	Reported L ₇₀ (hours) ²
93.87%	88.43%	78.47%	>36,000

¹ Lumen Maintenance calculated per TM-21-11 based on LM-80-08 data and in-situ luminaire testing.

² IESNA TM-21-11 projected value based on 6X IESNA LM-80-08 total test duration of 6,000 hours.

³ IESNA TM-21-11 calculated value exceeds 6X IESNA LM-80-08 total test duration of 6,000 hours.

Catalog Ordering Matrix Example: TCPHB4UNIZDL150K

TCP	HB4		ZD	L1		
BRAND	FAMILY	VOLTAGE	CONTROLS/DIMMING	LUMEN PACKAGE (Power) ¹²	COLOR TEMPERATURE	OPTIONS
TCP	HB4 – 4' LED High Bay	UNI – 120V-277V UHV – 347V-480V	ZD – 0-10V Dimming	L1 – 12,500 lumens (104W)	41K – 4100K 50K – 5000K	(see below)

¹ Approximate lumen output. Actual performance may vary based on CCT, options selected and end user application.

² Actual wattage may differ by +/- 10%.

OPTIONS (Add to catalog number in order shown)

1 POWER CORDS

- 6C - 6' PCord 300V 16/3 SJTOOW NO PLUG
- 6C4 - 6' PCord 300V 18/4 SJTOW NO PLUG
- 6W - 6' WHIP PCord 600V 16/3 NO PLUG
- 10C - 10' PCord 277V SJTOOW NO PLUG
- 10C6 - 10' PCord 600V 15A 16/3 STOW NO PLUG
- 20C - 20' PCord 277V 20A 16/3 SJTOOW NO PLUG
- 20C4 - 20' PCord 300V 18/4 SJTOW NO PLUG

2 OCCUPANCY SENSORS

- TS1 - TCP Occupancy Sensor w/bracket and interchangeable lenses, 40' or less, 120V, 277V, or 347V.
- TS1C - TCP Cold Storage Occupancy Sensor w/bracket and interchangeable lenses, 40' or less, 120V, 277V, or 347V.
- TS4 - TCP Occupancy Sensor w/bracket and interchangeable lenses, 40' or less, 480V.
- TS4C - TCP Cold Storage Occupancy Sensor w/bracket and interchangeable lenses, 40' or less, 480V.
- LS1D - Leviton Occupancy Sensor w/ Daylight Harvesting – PIR, 40' or less, 120V/277V.
- LS3D - Leviton Occupancy Sensor w/ Daylight Harvesting – PIR, 40' or less, 347V.

3 WIRE GUARD / LENS

- WG - Wire Guard
- WGPIL - Wire Guard with Prismatic Insert Lens
- PWL - Prismatic Wrap Lens, not to be used with Wire Guard

4 SPECIAL MOUNTING

- HCB - Hub Connector Box - 3/4" Threaded Hub Mount

5 SPECIAL PACKAGING

- SP - Single Packed

6 EMERGENCY BACK-UP

- EB - Emergency Back-Up, maximum height 24' per UL924, 120V/277V.

AVAILABLE HANGING KITS (ordered separately)

- EZHANGER - 15' adjustable aircraft cable hanging kit

AVAILABLE ACCESSORIES (ordered separately)

- PCWG - Wire Guard kit complete with Wire Guard and hardware
- PCINSERTLENS - Prismatic Insert Lens, to be used with Wire Guard
- PCWRAPLENS - Prismatic Wrap Lens, not to be used with Wire Guard

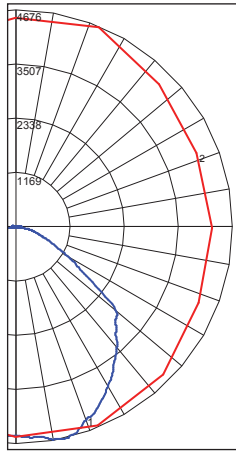
For the most up-to-date specs and warranty information, please visit www.tcp.com

Photometric Reports

TCP LED High Bay with Prismatic Wraparound Lens

LED High Bay Luminaire with lumen rating of 12,500 lumens and operating at 120-277 VAC and 104 watts.

TCPHB4UNIZDL150KPWL



Maximum Candela = 4675.56
Located At Horizontal Angle = 67.5, Vertical Angle = 13.5

1 - Vertical Plane Through Horizontal Angles (67.5 - 247.5) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (13.5) (Through Max. Cd.)

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0-20	1652.7	N.A.	14.20
0-30	3460.24	N.A.	29.70
0-40	5609.8	N.A.	48.20
0-60	9353.53	N.A.	80.30
0-80	10835.28	N.A.	93.00
0-90	11032.25	N.A.	94.70
10-90	10602.3	N.A.	91.00
20-40	3957.1	N.A.	34.00
20-50	6146.27	N.A.	52.80
40-70	4665.48	N.A.	40.10
60-80	1481.76	N.A.	12.70
70-80	560.00	N.A.	4.80
80-90	196.97	N.A.	1.70
90-110	378.74	N.A.	3.30
90-120	490.26	N.A.	4.20
90-130	552.60	N.A.	4.70
90-150	601.92	N.A.	5.20
90-180	615.40	N.A.	5.30
110-180	236.66	N.A.	2.00
0-180	11647.66	N.A.	100.00

Total Luminaire Efficiency = N.A. %

Photometric Report

Efficiency (total) N.A.
Spacing Criterion (0-180) 1.10
Spacing Criterion (90-270) 1.40

Average Luminance

(Candelas / Square Meter)

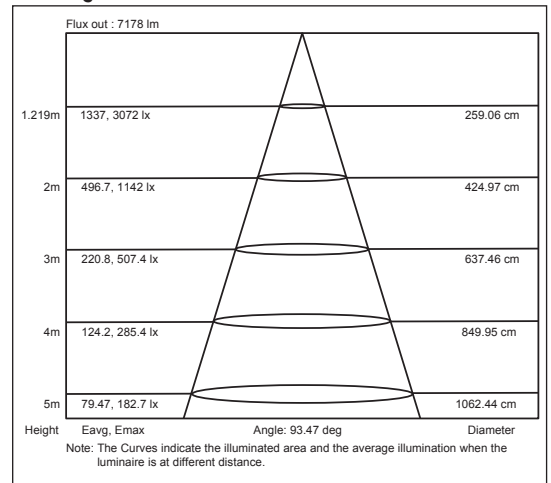
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10387	11209	12885
55	6741	7466	10273
65	6444	5653	5711
75	6325	7466	3958
85	7734	5849	3762

Coefficient of Utilization Table

Effective Floor Cavity Reflectance = 20%

RC RW	70				50				30				10				0			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	0	
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	95	95	
1	108	104	100	96	105	101	98	94	96	93	90	91	89	87	87	85	83	81	81	
2	99	92	85	80	96	89	84	79	85	80	76	81	77	74	77	74	71	69	69	
3	91	81	74	68	88	79	72	67	76	70	65	72	67	63	69	65	61	59	59	
4	84	73	64	58	81	71	63	57	68	61	56	65	59	55	62	57	53	51	51	
5	77	65	57	50	75	64	56	50	61	54	49	59	53	48	56	51	47	45	45	
6	72	59	50	44	69	58	50	44	55	48	43	53	47	42	51	46	42	40	40	
7	66	54	45	39	64	53	45	39	51	44	38	49	42	38	47	41	37	35	35	
8	62	49	41	35	60	48	40	35	46	39	34	45	39	34	43	38	33	32	32	
9	58	45	37	32	56	44	37	32	43	36	31	41	35	31	40	34	30	29	29	
10	54	42	34	29	53	41	34	29	40	33	28	38	32	28	37	32	28	26	26	

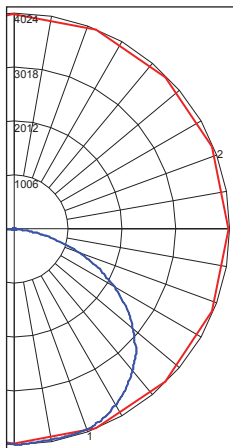
AAI Figure



TCP LED High Bay

LED High Bay Luminaire with lumen rating of 12,500 lumens and operating at 120-277 VAC and 104 watts.

TCPHB4UNIZDL150K



Maximum Candela = 4024.49
Located At Horizontal Angle = 67.5, Vertical Angle = 1.5

1 - Vertical Plane Through Horizontal Angles (67.5 - 247.5) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (1.5) (Through Max. Cd.)

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0-20	1489.03	N.A.	11.90
0-30	3218.34	N.A.	25.70
0-40	5382.52	N.A.	43.00
0-60	9863.86	N.A.	78.80
0-80	12377.05	N.A.	98.90
0-90	12472.91	N.A.	99.70
10-90	12092.04	N.A.	96.60
20-40	3893.49	N.A.	31.10
20-50	6219.75	N.A.	49.70
40-70	6138.02	N.A.	49.00
60-80	2513.21	N.A.	20.10
70-80	856.52	N.A.	6.80
80-90	95.84	N.A.	0.80
90-110	17.58	N.A.	0.10
90-120	23.79	N.A.	0.20
90-130	28.94	N.A.	0.20
90-150	37.68	N.A.	0.30
90-180	42.96	N.A.	0.30
110-180	25.38	N.A.	0.20
0-180	12515.87	N.A.	100.00

Total Luminaire Efficiency = N.A. %

Photometric Report

Efficiency (total) N.A.
Spacing Criterion (0-180) 1.30
Spacing Criterion (90-270) 1.38

Average Luminance

(Candelas / Square Meter)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10837	11270	12294
55	10727	11314	12043
65	10321	11071	11096
75	6883	9720	9064
85	55	521	4098

Coefficient of Utilization Table

Effective Floor Cavity Reflectance = 20%

RC RW	70				50				30				10				0			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	0	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84	84	
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70	70	
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58	58	
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49	49	
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42	42	
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37	37	
7	64	51	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32	32	
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29	29	
9	56	42	34	28	54	41	34	28	40	33	28	39	33	28	38	32	28	26	26	
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23	23	

AAI Figure

