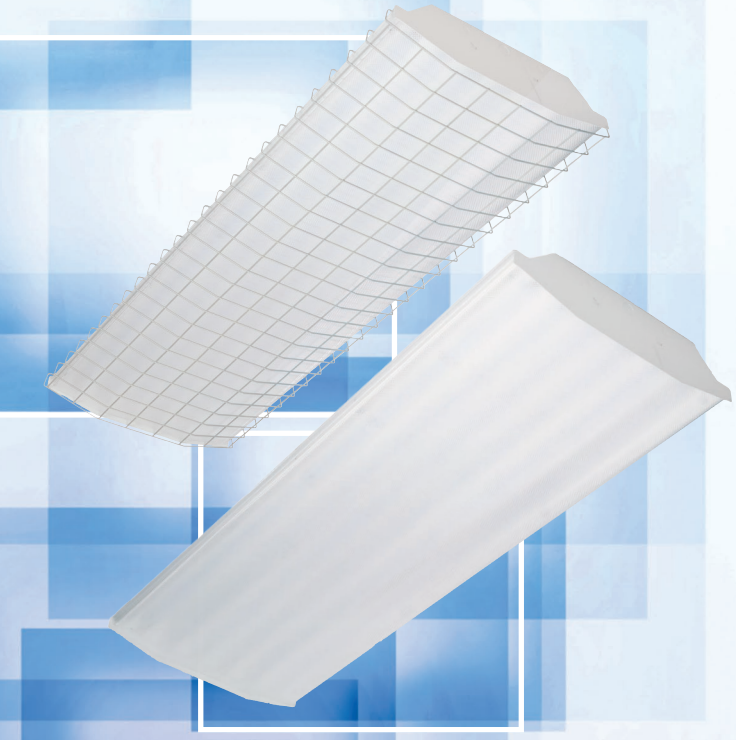
TCP

LED Technical Data



LED Sky Bay™

High efficiency LED Sky Bays™. Use anywhere you need exceptional light distribution for mounting heights up to 60 feet.

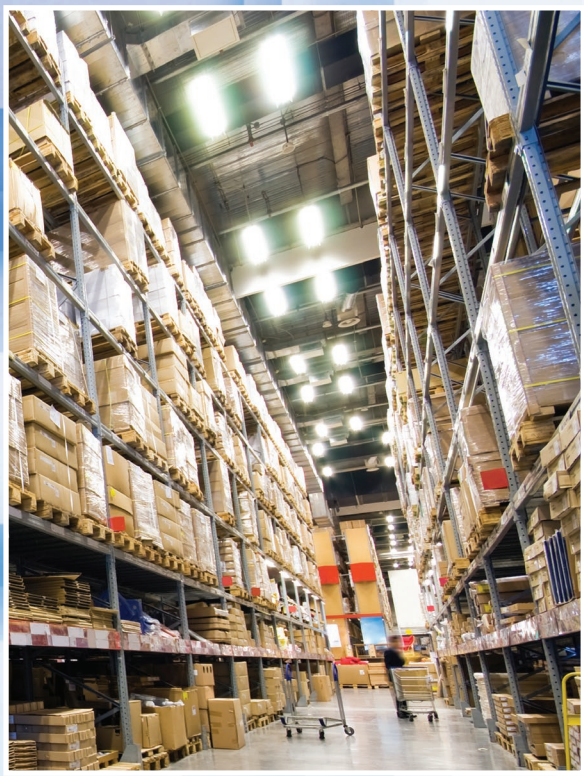
LIMITLESS OPTIONS for the following applications:

Warehouses

Commercial Facilities

Manufacturing Facilities

Aisles (Open and Stack)



Great Features/Benefits

- Energy-efficient – Up to 54% energy savings compared to HID
- 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

c UL us LISTED

DLC QPL LISTED

5 YEAR WARRANTY

NOTE: Due to fixture construction, TCP advises against pendant mounting.

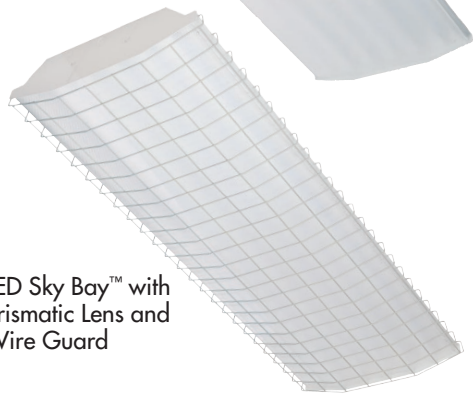
LED Sky Bay™

Features/Benefits

Up to 54% less energy than HID alternatives.	Instant energy savings.
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.

LED Sky Bay™

LED Sky Bay™ with Prismatic Wraparound Lens



LED Sky Bay™ with Prismatic Lens and Wire Guard

Specifications

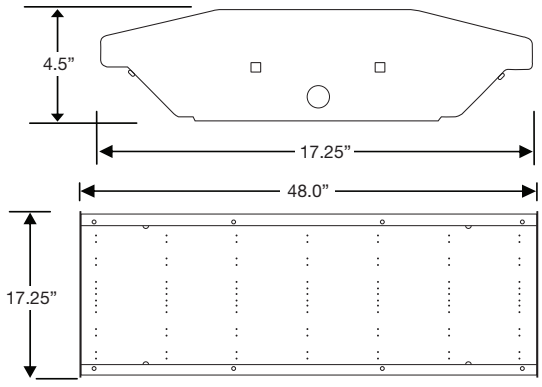
Input Line Voltage	120-277/347/480 VAC
Input Power	210W-250W for 120-277V (225W-270W for 347V & 480V)
Input Line Frequency	50/60HZ
Luminaire Life (Rated)	50,000 hours
Minimum Starting Temperature	-30°C
Maximum Operating Temperature	50°C
CRI	83
Power Factor	>90%
THD	<20%

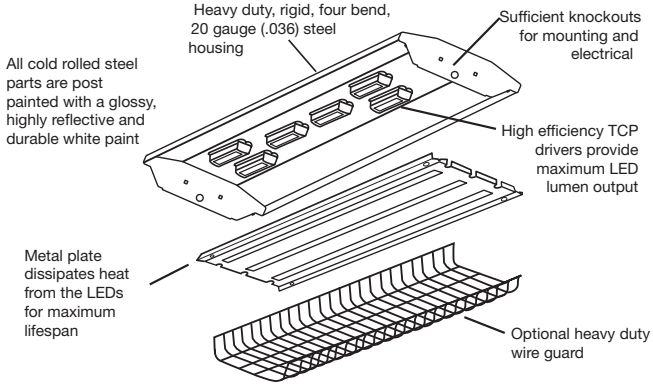
Replacement Comparison

TYPE	WATTAGE	ENERGY SAVINGS (%)
TCP LED Sky Bay - 20,000L	**210W**	—
400W Metal Halide	458W	54%
6 Lamp T5HO	351W	40%
8 Lamp T8 HBF	293W	28%
TCP LED Sky Bay - 24,000L	**250W**	—
8 Lamp T5HO	482W	48%
400W Metal Halide	458W	45%
10 Lamp T8 HBF	366W	32%

c UL us LISTED DLC QPL LISTED 5 YEAR WARRANTY

Dimensions and Mounting Data





LED Sky Bay™

Applications

The TCP LED Sky Bay's superior lumen package is ideal for replacing traditional metal halide and linear fluorescent high bay systems. Benefits include high efficiency, excellent color rendering, long life, instant on, and improved uniformity. Suggested mounting heights from 30'–60' 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 Sky 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, UL/cUL 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.

Optics

The optional impact resistant acrylic diffuser comes in one style. The prismatic wraparound lens is designed to be used with the wire guard or on its own without the wire guard.

Catalog Number	
Notes	Type

Installation

Suspension by chain, cable, or hook with appropriate accessories.

Warranty

Five year limited warranty against defects in manufacturing.

Listings

UL/cUL Listed – damp location rated

Design Lights Consortium (DLC) Qualified Products List

RoHS Compliant

Lumen Maintenance

Lumen Maintenance Factor (LMF)			
36,000 hours[1]	**50,000 hours**[2]	**100,000 hours**[2]	**L_{70} (hours)**[2]
92.62%	90.21%	82.1%	185,000

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

Catalog Ordering Matrix

Example: TCPSB4UNI2041K

TCP	SB4					
BRAND	**FAMILY**	**VOLTAGE**	**CONTROLS/DIMMING**	**LUMEN PACKAGE (Power)**[1][2]	**COLOR TEMPERATURE**	**OPTIONS**
TCP	**SB4** – 4' LED Sky Bay	**UNI** – 120V-277V **347** – 347V **480** – 480V	**(blank)** – Non Dimming	**20** – 20,000 Lumens (210W) **24** – 24,000 Lumens (250W)	**41K** – 4100K **50K** – 5000K	(see below)

[1] Approximate lumen output. Actual performance may vary based on CCT, options selected and end user application.
[2] 20,000L: 210W for 120-277V and 225W for 347V & 480V. 24,000L: 250W for 120-277V and 270W for 347V & 480V. Actual performance may vary based on options selected and end user application.

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.

3 WIRE GUARD / LENS

- **WG** - Wire Guard
- **PWL** - Prismatic Lens

4 SPECIAL PACKAGING

- **SP** - Single Packed

AVAILABLE HANGING KITS (ordered separately)

- **EZHANGER** - 15' adjustable aircraft cable hanging kit*

AVAILABLE ACCESSORIES (ordered separately)

- **FWGL** - Wire Guard kit complete with Wire Guard and hardware (for use with lens)
- **ELITELENS** - Acrylic Lens

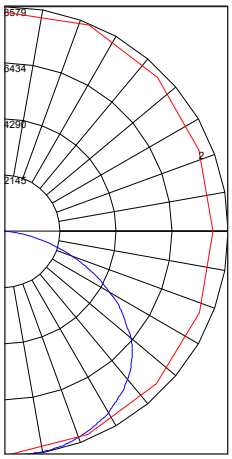
* Due to fixture construction, TCP advises against pendant mounting.

LED Sky Bay™

Photometric Reports

Luminous Intensity Distribution Diagram

TCPSB4UNI2441K



Maximum Candela = 8579.16
Located At
Horizontal Angle = 270,
Vertical Angle = 20.5

1 - Vertical Plane Through Horizontal Angles (270 - 90) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (20.5) (Through Max. Cd.)

Zonal Lumen Summary

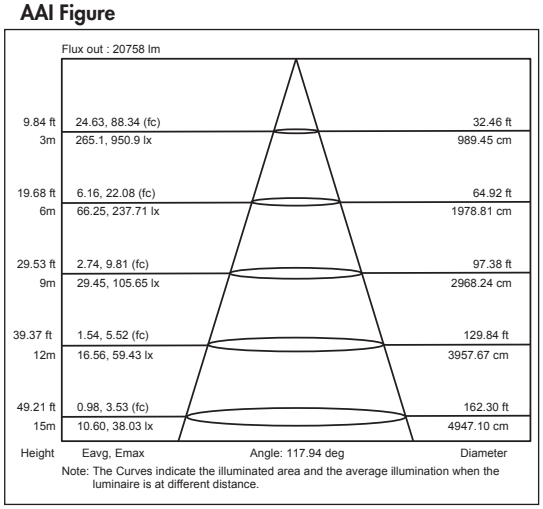
Zone	Lumens	% Lamp	% Fixture
0-30	6876.7	N.A.	25.60
0-40	11525.64	N.A.	42.90
0-60	21186.89	N.A.	78.80
0-90	26829.11	N.A.	99.80
90-120	26.65	N.A.	0.10
90-130	34.96	N.A.	0.10
90-150	48.14	N.A.	0.20
90-180	55.71	N.A.	0.20
0-180	26884.83	N.A.	100.00

Total Luminaire Efficiency = N.A.%

Average Luminance
(Candelas / Square Meter)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15325	16495	17547
55	15095	16491	17373
65	14376	15743	15982
75	10229	13227	12701
85	191	1530	5260

AAI Figure



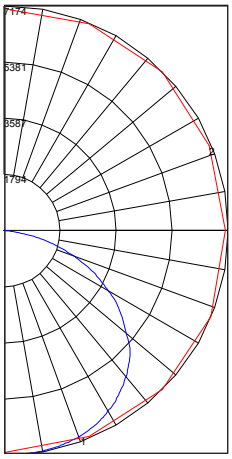
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

Coefficient of Utilization Table Effective Floor Cavity Reflectance = 20%

RC / RW	80 70 30 10	70 50 30 10	50 30 10	30 30 10	10 30 10	0 0
0	119 119 119 119	116 116 116 116	111 111 111	106 106 106	102 102 102	100
1	109 104 100 96	106 102 98 95	98 94 92	94 91 89	90 88 86	84
2	99 91 84 78	96 89 82 77	85 80 75	82 77 73	79 75 72	70
3	90 79 71 64	87 78 70 64	75 68 63	72 66 61	69 64 60	58
4	82 70 61 54	80 69 60 54	66 59 53	64 57 52	61 56 51	49
5	75 62 53 46	73 61 52 46	59 51 46	57 50 45	55 49 44	42
6	69 56 47 40	67 55 46 40	53 45 40	51 44 39	50 44 39	37
7	64 50 42 35	62 50 41 35	48 40 35	47 40 35	45 39 34	32
8	60 46 37 31	58 45 37 31	44 36 31	43 36 31	41 35 31	29
9	56 42 34 28	54 41 33 28	40 33 28	39 32 28	38 32 27	26
10	52 39 31 25	51 38 30 25	37 30 25	36 30 25	35 29 25	23

Luminous Intensity Distribution Diagram

TCPSB4UNI2041K



Maximum Candela = 7174.12
Located At
Horizontal Angle = 315,
Vertical Angle = 4

1 - Vertical Plane Through Horizontal Angles (315 - 135) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (4) (Through Max. Cd.)

Zonal Lumen Summary

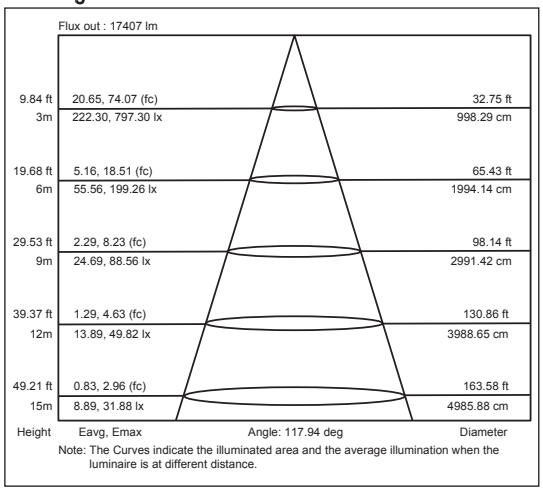
Zone	Lumens	% Lamp	% Fixture
0-30	5753.95	N.A.	25.50
0-40	9650.1	N.A.	42.80
0-60	17766.98	N.A.	78.90
0-90	22479.78	N.A.	99.80
90-120	21.07	N.A.	0.10
90-130	27.42	N.A.	0.10
90-150	38.52	N.A.	0.20
90-180	44.99	N.A.	0.20
0-180	22524.77	N.A.	100.00

Total Luminaire Efficiency = N.A.%

Average Luminance
(Candelas / Square Meter)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9678	10055	11409
55	9553	10028	11206
65	9149	9714	10335
75	6210	6490	8182
85	129	375	3359

AAI Figure



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RC / RW	80 70 30 10	70 50 30 10	50 30 10	30 30 10	10 30 10	0 0
0	119 119 119 119	116 116 116 116	111 111 111	106 106 106	102 102 102	100
1	109 104 100 96	106 102 98 95	98 94 92	94 91 89	90 88 86	84
2	99 91 84 78	96 89 82 77	85 80 75	82 77 73	79 75 72	70
3	90 79 71 64	87 78 70 64	75 68 63	72 66 61	69 64 60	58
4	82 70 61 54	80 69 60 54	66 59 53	64 57 52	61 56 51	49
5	75 62 53 46	73 61 52 46	59 51 46	57 50 45	55 49 44	42
6	69 56 47 40	67 55 46 40	53 45 40	51 44 39	50 44 39	37
7	64 50 42 35	62 50 41 35	48 40 35	47 40 35	45 39 34	32
8	60 46 37 31	58 45 37 31	44 36 31	43 36 31	41 35 31	29
9	56 42 34 28	54 41 33 28	40 33 28	39 32 28	38 32 27	26
10	52 39 31 25	51 38 30 25	37 30 25	36 30 25	35 29 25	23