

Luxterior

by TCP



LED Flat Panel Luminaires

Great Features/Benefits

TCP's LED Flat Panel Luminaires feature a slim, low-profile design with full panel diffusion and superior uniformity.

These DLC Premium listed flat panels offer a cost effective solution to maximize savings and take advantage of utility rebates without sacrificing performance.

- Up to 58% less energy than fluorescent alternatives
- Long 50,000 hour rated life
- Excellent color consistency & CRI
- Mercury free
- Fits standard 1" and 9/16" T-bar grid ceilings
- Utilizes edge-lit technology
- Slim, low-profile design
- Ideal for:
 - Offices
 - Retail Stores
 - Schools
 - Hospitality
 - Restaurants
 - Healthcare



10 YEAR WARRANTY

we know light.™



Features/Benefits

Up to 58% less energy than fluorescent alternatives	Instant energy savings; potential rebate eligibility
Long 50,000 hour rated life	Significantly reduce maintenance labor & material costs
Excellent color consistency & CRI	Enhances color of focal point while maintaining uniformity throughout lighting installation
Mercury free	Great for all environments
Fits standard 1" and 9/16" T-bar grid ceilings	Easy installation and retrofit application
Utilizes edge-lit technology	Full diffusion with excellent uniformity
Slim, low-profile design	Lightweight for easy handling. Fit more per pallet to reduce shipping cost and storage space

Specifications

Input Line Voltage	120-277 VAC
Input Line Frequency (Hz)	50/60HZ
Wattage (W)	1x4 & 2x2 = 31W 2x4 = 40W
Lumens (L)	1x4 & 2x2 = 4000L 2x4 = 5200L
Lumens per Watt (LPW)	>125 LPW
Rated Life	50,000 hours
Minimum Starting Temperature	-20°C
Maximum Operating Temperature	40°C
CRI	>80
Power Factor	>0.9
THD	<20%
Ratings	cULus damp location rated, IC rated, IP20
Controls	0-10V dimming (standard)



10 YEAR WARRANTY

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

Replacement Strategy

SYSTEM	BALLAST FACTOR	LUMENS	INPUT WATTS*	LED ENERGY SAVINGS
TCP LED Flat Panel - 1x4		4000	31	
2 Lamp 28W T5	1.0	3968	64	52%
1 Lamp 54W T5HO	1.0	3395	61	49%
2 Lamp 32W T8 NBF	0.88	3827	54	43%
TCP LED Flat Panel - 2x2	—	4000	31	—
2 Lamp 34W T12 U-Bend	0.88	4420	74	58%
2 Lamp 32W T8 U-Bend	0.88	4275	58	47%
2 Lamp 24W T5HO	1.0	3145	54	43%
TCP LED Flat Panel - 2x4	—	5200	40	—
3 Lamp 32W T8 HBF	1.18	6960	93	57%
3 Lamp 32W T8 NBF	0.88	6681	89	55%
2 Lamp 32W T8 HBF	1.18	4658	65	38%
2 Lamp 28W T5	1.0	4675	63	37%
2 Lamp 32W T8 NBF	0.88	4468	59	32%

*Actual wattage may differ by +/- 5%, when operating between 120-277V +/- 10%.

NOTE: Charts show system lumens (delivered lumens), NOT straight lamp lumen output. This is calculated as follows:
System lumens = mean lumens x # lamps x ballast factor x luminaire efficiency factor

2x2 LED Flat Panel Luminaire

Applications

TCP LED Flat Panel luminaires are cost-effective, high-efficiency alternatives to traditional T5, T8 and T12 linear fluorescent troffers. Featuring a slim, low-profile design, our LED flat panels use edge-lit technology to deliver full panel diffusion and superior uniformity. Applications include offices, schools, retail locations, healthcare, hospitality and other T-grid and commercial ceilings.

Construction

- Housing: metal back panel and wiring compartment
- Frame: aluminum, post-painted white
- IP20 rated
- IC rated for direct contact with insulation
- Designed for easy drop into T-bar grid ceilings

Electrical

- cULus damp location rated
- 0-10V dimming driver (standard)
- Easy-to-access wiring compartment on back of fixture
- System rated for long 50,000 hour life

Optics

- Innovative edgelit technology paired with acrylic light guide and thin frosted white polypropylene diffuser
- 120° beam angle
- Delivers full panel diffusion and excellent uniformity



Listings
 cULus Listed IC Rated RoHS Compliant DLC v4.2 Premium

Warranty
 Ten year limited warranty against defects in manufacturing.

Lumen Maintenance

Lumen Maintenance Factor (LMF)			
25,000 Hour Projected LMF ¹	50,000 Hour Projected LMF ¹	100,000 Hour Calculated LMF ²	Reported L ₇₀ ¹
96.89%	93.48%	87.02%	>60,000 Hours

¹ IESNA TM-21-11 projected value within 6X IESNA LM-80-08 total test duration of 10,000 hours.
² IESNA TM-21-11 calculated value exceeds 6X IESNA LM-80-08 total test duration of 10,000 hours.

Catalog Ordering Matrix Example: TCPFP2UZD4041K

TCP	FP	2	U	ZD	40		
BRAND	FAMILY	SIZE	VOLTAGE	CONTROLS/DIMMING	LUMEN PACKAGE (Power) ¹²	COLOR TEMPERATURE	OPTIONS
TCP	FP – Flat Panel	2 – 2' x 2'	U – 120V-277V	ZD – 0-10V Dimming	40 – 4000 Lumens (31W)	30K – 3000K 35K – 3500K 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%.

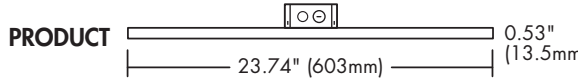
AVAILABLE ACCESSORIES (ordered separately)

- FPSK2 – 2x2 Surface Mount Kit
- YHANGER6PK – 10' Y-Fit steel cable with fasteners (6 pack covers two 1x4 or 2x4 panels or three 2x2 panels)

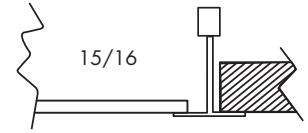
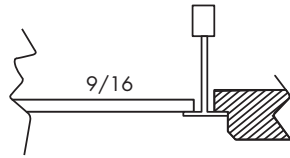
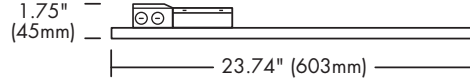
For the most up-to-date specs and warranty information, please visit www.tcp.com

2x2 LED Flat Panel Luminaire

Dimensions and Mounting Data



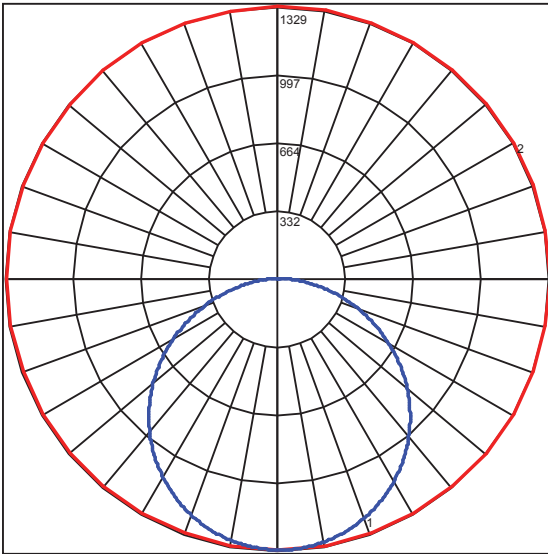
Length: 23.74" (603mm)
 Width: 23.74" (603mm)
 Depth: 0.53" (13.5mm)
 Weight: 9.7 lbs (4.4kg)



Photometric Report

Based on photometric data for
 TCP Item #TCPFP2UZD4050K

Polar Graph



Maximum Candela = 1328.8 Located At Horizontal Angle = 80, Vertical Angle = .5
 # 1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
 # 2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)

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	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	0	56	47	41	68	55	47	40	53	46	40	52	45	40	5	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-20	486.57	12.60	12.60
0-30	1035.38	26.70	26.70
0-40	1700.66	43.90	43.90
0-60	3026.56	78.10	78.10
0-80	3795.91	98.00	98.00
0-90	3871.53	99.90	99.90
10-90	3745.78	96.70	96.70
20-40	1214.09	31.30	31.30
20-50	1908.61	49.30	49.30
40-70	1811.28	46.80	46.80
60-80	769.35	19.90	19.90
70-80	283.97	7.30	7.30
80-90	75.62	2.00	2.00
90-110	0.51	0.00	0.00
90-120	0.82	0.00	0.00
90-130	1.19	0.00	0.00
90-150	2.05	0.10	0.10
90-180	2.66	0.10	0.10
110-180	2.15	0.10	0.10
0-180	3874.19	100.10	100.00

Total Luminaire Efficiency = 100.10%

Specifications and dimensions subject to change without notice.

2x4 LED Flat Panel Luminaire

Applications

TCP LED Flat Panel luminaires are cost-effective, high-efficiency alternatives to traditional T5, T8 and T12 linear fluorescent troffers. Featuring a slim, low-profile design, our LED flat panels use edge-lit technology to deliver full panel diffusion and superior uniformity. Applications include offices, schools, retail locations, healthcare, hospitality and other T-grid and commercial ceilings.

Construction

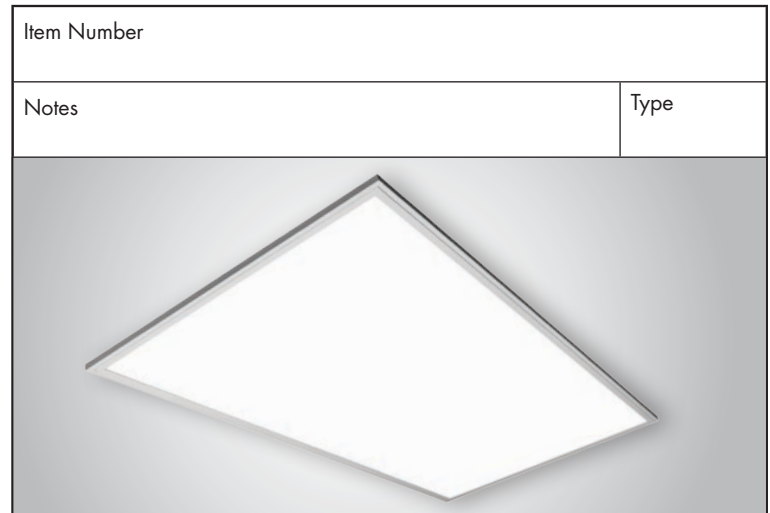
- Housing: metal back panel and wiring compartment
- Frame: aluminum, post-painted white
- IP20 rated
- IC rated for direct contact with insulation
- Designed for easy drop into T-bar grid ceilings

Electrical

- cULus damp location rated
- 0-10V dimming driver (standard)
- Easy-to-access wiring compartment on back of fixture
- System rated for long 50,000 hour life

Optics

- Innovative edgelit technology paired with acrylic light guide and thin frosted white polypropylene diffuser
- 120° beam angle
- Delivers full panel diffusion and excellent uniformity



Listings
 cULus Listed IC Rated RoHS Compliant DLC v4.2 Premium

Warranty
 Ten year limited warranty against defects in manufacturing.

Lumen Maintenance

Lumen Maintenance Factor (LMF)			
25,000 Hour Projected LMF ¹	50,000 Hour Projected LMF ¹	100,000 Hour Calculated LMF ²	Reported L ₇₀ ¹
96.89%	93.48%	87.02%	>60,000 Hours

¹ IESNA TM-21-11 projected value within 6X IESNA LM-80-08 total test duration of 10,000 hours.
² IESNA TM-21-11 calculated value exceeds 6X IESNA LM-80-08 total test duration of 10,000 hours.

Catalog Ordering Matrix Example: TCPFP4UZD5241K

TCP	FP	4	U	ZD	52		
BRAND	FAMILY	SIZE	VOLTAGE	CONTROLS/DIMMING	LUMEN PACKAGE (Power) ¹²	COLOR TEMPERATURE	OPTIONS
TCP	FP – Flat Panel	4 – 2' x 4'	U – 120V-277V	ZD – 0-10V Dimming	52 – 5200 Lumens (40W)	30K – 3000K 35K – 3500K 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%.

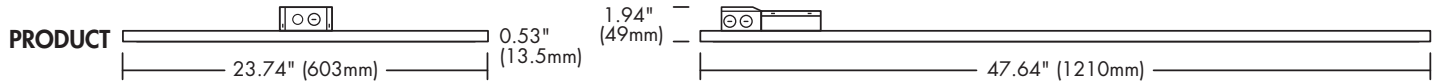
AVAILABLE ACCESSORIES (ordered separately)

- FPSK4** – 2x4 Surface Mount Kit
- YHANGER6PK** – 10' Y-Fit steel cable with fasteners (6 pack covers two 1x4 or 2x4 panels or three 2x2 panels)

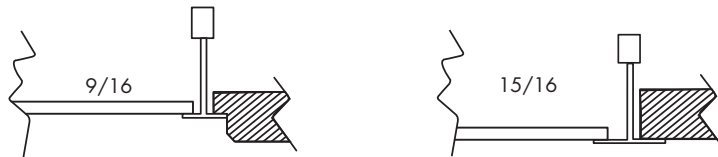
For the most up-to-date specs and warranty information, please visit www.tpci.com

2x4 LED Flat Panel Luminaire

Dimensions and Mounting Data



Length: 47.64" (1210mm)
 Width: 23.74" (603mm)
 Depth: 0.53" (13.5mm)
 Weight: 20.28 lbs (9.2kg)



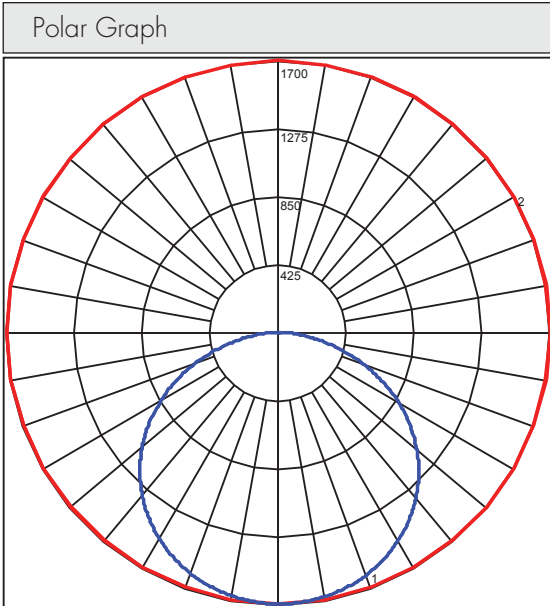
Photometric Report

Based on photometric data for
 TCP Item #TCPFP4UZD5250K

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	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83	83	83	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69	69	69	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58	58	58	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49	49	49	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42	42	42	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	44	39	37	37	37	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32	32	32	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29	29	29	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26	26	26	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23	23	23	23



Maximum Candela = 1699.55 Located At Horizontal Angle = 0, Vertical Angle = 1
 # 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
 # 2 - Horizontal Cone Through Vertical Angle (1) (Through Max. Cd.)

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-20	624.83	12.20	12.20
0-30	1336.01	26.10	26.10
0-40	2207.36	43.10	43.10
0-60	3977.41	77.60	77.60
0-80	5017.46	97.90	97.90
0-90	5121.74	99.90	99.90
10-90	4960.75	96.80	96.80
20-40	1582.53	30.90	30.90
20-50	2503.82	48.90	48.90
40-70	2427.68	47.40	47.40
60-80	1040.05	20.30	20.30
70-80	382.42	7.50	7.50
80-90	104.28	2.00	2.00
90-110	0.79	0.00	0.00
90-120	1.15	0.00	0.00
90-130	1.56	0.00	0.00
90-150	2.45	0.00	0.00
90-180	3.07	0.10	0.10
110-180	2.28	0.00	0.00
0-180	5124.82	100.10	100.00

Total Luminaire Efficiency = 100.10%

Specifications and dimensions subject to change without notice.

1x4 LED Flat Panel Luminaire

Applications

TCP LED Flat Panel luminaires are cost-effective, high-efficiency alternatives to traditional T5, T8 and T12 linear fluorescent troffers. Featuring a slim, low-profile design, our LED flat panels use edge-lit technology to deliver full panel diffusion and superior uniformity. Applications include offices, schools, retail locations, healthcare, hospitality and other T-grid and commercial ceilings.

Construction

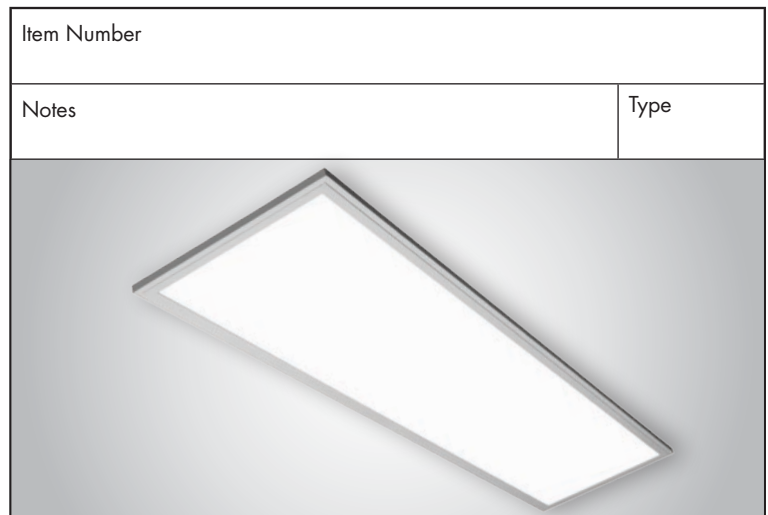
- Housing: metal back panel and wiring compartment
- Frame: aluminum, post-painted white
- IP20 rated
- IC rated for direct contact with insulation
- Designed for easy drop into T-bar grid ceilings

Electrical

- cULus damp location rated
- 0-10V dimming driver (standard)
- Easy-to-access wiring compartment on back of fixture
- System rated for long 50,000 hour life

Optics

- Innovative edgelit technology paired with acrylic light guide and thin frosted white polypropylene diffuser
- 120° beam angle
- Delivers full panel diffusion and excellent uniformity



Listings

cULus Listed IC Rated RoHS Compliant DLC v4.2 Premium

Warranty

Ten year limited warranty against defects in manufacturing.

Lumen Maintenance

Lumen Maintenance Factor (LMF)			
25,000 Hour Projected LMF ¹	50,000 Hour Projected LMF ¹	100,000 Hour Calculated LMF ²	Reported L ₇₀ ¹
96.89%	93.48%	87.02%	>60,000 Hours

¹ IESNA TM-21-11 projected value within 6X IESNA LM-80-08 total test duration of 10,000 hours.

² IESNA TM-21-11 calculated value exceeds 6X IESNA LM-80-08 total test duration of 10,000 hours.

Catalog Ordering Matrix

Example: TCPFP1UZD4041K

TCP	FP	1	U	ZD	40		
BRAND	FAMILY	SIZE	VOLTAGE	CONTROLS/DIMMING	LUMEN PACKAGE (Power) ¹²	COLOR TEMPERATURE	OPTIONS
TCP	FP – Flat Panel	1 – 1' x 4'	U – 120V-277V	ZD – 0-10V Dimming	40 – 4000 Lumens (31W)	30K – 3000K 35K – 3500K 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%.

AVAILABLE ACCESSORIES (ordered separately)

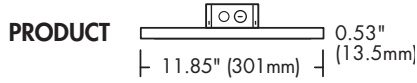
FPSK1 – 1x4 Surface Mount Kit

YHANGER6PK – 10' Y-Fit steel cable with fasteners (6 pack covers two 1x4 or 2x4 panels or three 2x2 panels)

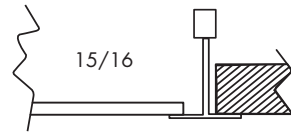
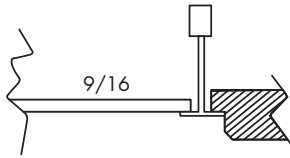
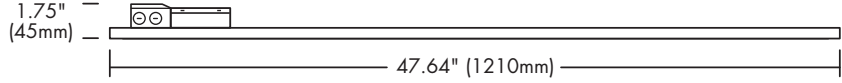
For the most up-to-date specs and warranty information, please visit www.tcpi.com

1x4 LED Flat Panel Luminaire

Dimensions and Mounting Data



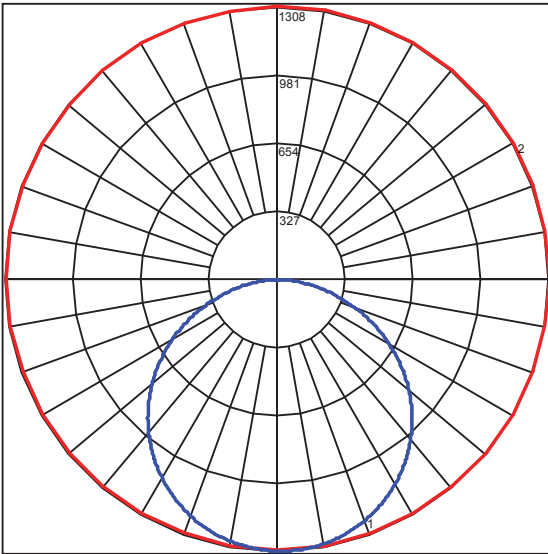
Length: 47.64" (1210mm)
 Width: 11.85" (301mm)
 Depth: 0.53" (13.5mm)
 Weight: 11.02 lbs (5kg)



Photometric Report

Based on photometric data for
 TCP Item #TCPFP1UZD4050K

Polar Graph



Maximum Candela = 1307.65 Located At Horizontal Angle = 50, Vertical Angle = 2
 # 1 - Vertical Plane Through Horizontal Angles [50 - 230] (Through Max. Cd.)
 # 2 - Horizontal Cone Through Vertical Angle [2] (Through Max. Cd.)

Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	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	100
1	108	103	99	95	106	101	97	93	97	94	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37
7	64	50	41	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	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-20	479.82	12.30	12.30
0-30	1023.95	26.20	26.20
0-40	1687.89	43.10	43.10
0-60	3028.39	77.40	77.40
0-80	3824.88	97.70	97.70
0-90	3911.9	99.90	99.90
10-90	3788.12	96.80	96.80
20-40	1208.07	30.90	30.90
20-50	1906.91	48.70	48.70
40-70	1839.43	47.00	47.00
60-80	796.48	20.30	20.30
70-80	297.56	7.60	7.60
80-90	87.02	2.20	2.20
90-110	0.66	0.00	0.00
90-120	0.96	0.00	0.00
90-130	1.30	0.00	0.00
90-150	2.09	0.10	0.10
90-180	2.68	0.10	0.10
110-180	2.02	0.10	0.10
0-180	3914.57	100.10	100.00

Total Luminaire Efficiency = 100.10%

Specifications and dimensions subject to change without notice.