



## LED Wattage Selectable Flat Panel Luminaires

### Great Features/Benefits

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

It offers a cost effective solution to maximize savings and take advantage of utility rebates without sacrificing performance.

**APPLICATIONS:** Tbar Grid Ceilings

- Up to 51% less energy than fluorescent alternatives
- Long 50,000 hour rated life
- Excellent color consistency & CRI
- Mercury free
- Fits standard 1" and 9/16" Tbar grid ceilings
- Utilizes edge-lit technology
- Slim, low-profile design
- Ideal for:
  - Offices
  - Retail Stores
  - Schools
  - Hospitality
  - Restaurants
  - Healthcare



5 YEAR WARRANTY

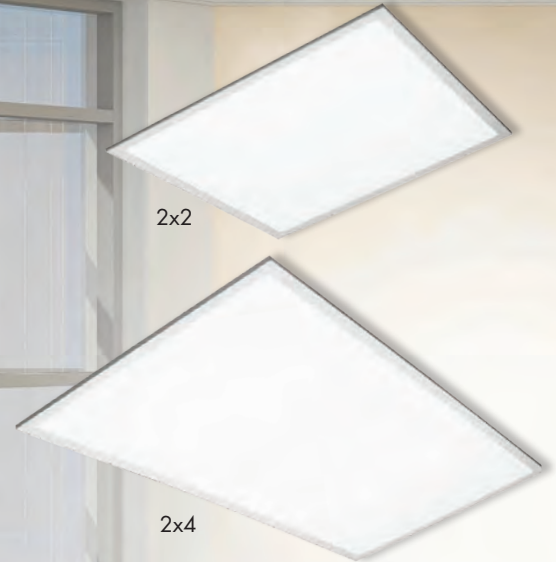


## Features/Benefits

Up to 51% 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)	2x2 - 23W/29W/38W Selectable 2x4 - 29W/39W/46W Selectable
Lumens (L)	2x2 - 2700L/3200L/4100L 2x4 - 3600L/4200L/5200L
Lumens per Watt (LPW)	100 LPW
Rated Life	50,000 hours
Minimum Starting Temperature	-20°C
Maximum Operating Temperature	40°C
CRI	>80
Power Factor	>90%
THD	<20%
Ratings	UL/cUL damp location rated, IC rated, IP20
Controls	0-10V dimming (standard)



5 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](http://www.designlights.org/gpl).

## Replacement Strategy

SYSTEM	BALLAST FACTOR	LUMENS	INPUT WATTS*	LED ENERGY SAVINGS
<b>TCP LED Flat Panel - 1x4</b>		<b>3800</b>	<b>38</b>	
2 Lamp 28W T5	1.0	3968	64	41%
1 Lamp 54W T5HO	1.0	3395	61	38%
2 Lamp 32W T8 NBF	0.88	3827	54	30%
<b>TCP LED Flat Panel - 2x2</b>	—	<b>4100</b>	<b>38</b>	—
2 Lamp 34W T12 U-Bend	0.88	4420	74	49%
2 Lamp 32W T8 U-Bend	0.88	4275	58	34%
2 Lamp 24W T5HO	1.0	3145	54	30%
<b>TCP LED Flat Panel - 2x4</b>	—	<b>5200</b>	<b>46</b>	—
3 Lamp 32W T8 HBF	1.18	6960	93	51%
3 Lamp 32W T8 NBF	0.88	6681	89	48%
2 Lamp 32W T8 HBF	1.18	4658	65	29%
2 Lamp 28W T5	1.0	4675	63	27%
2 Lamp 32W T8 NBF	0.88	4468	59	22%

\*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 Wattage Selectable 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 uses 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

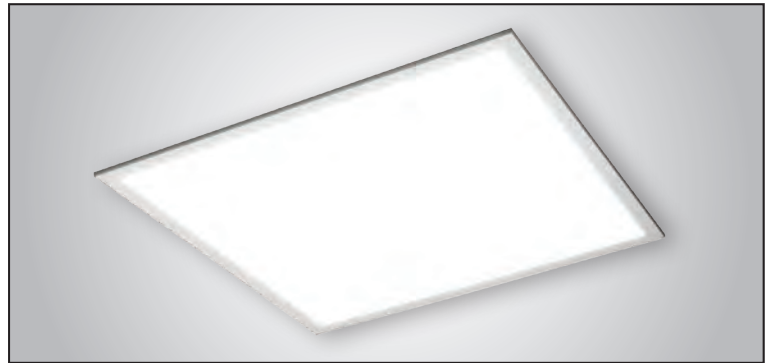
- Remote driver and junction box
- Rectangular white frame
- Lens: frosted white diffuser
- IP20 rated
- IC rated for direct contact with insulation
- Designed for easy drop into T-bar grid ceilings
- PMMA Light guide

### Electrical

- UL/cUL damp location rated
- 0-10V dimming driver (standard)
- Selectable wattage driver with quick connect to panel
- System rated for long 50,000 hour life

### Optics

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



#### Listings

UL/cUL Listed  
IC Rated

DLC v4.4 Standard  
RoHS Compliant

#### Lumen Maintenance

Reported L70 > 54000 hours

#### Warranty

Five year limited warranty against defects in manufacturing.

## Catalog Ordering Matrix Example: FP2UZDB141K

Item Number	Lumens/ Selectable Wattages		
FP2UZDB130K	2700L	3200L	4000L
	23W	29W	38W
FP2UZDB135K	2700L	3200L	4100L
	23W	29W	38W
FP2UZDB141K	2700L	3200L	4100L
	23W	29W	38W
FP2UZDB150K	2700L	3200L	4350L
	23W	29W	38W

\*\*\*THESE ITEMS SHIP IN CONTRACTOR FRIENDLY BULK QUANTITIES (LED PANEL AND DRIVERS SHIP SEPARATELY.)\*\*\*

#### Accessories:

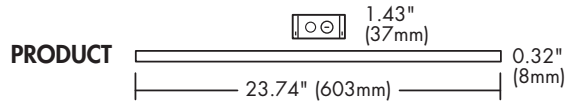
Item Number	Description
FPSK2	2X2 FLAT PANEL SUR MOUNT KIT (WHITE)
YHANGER6PK	Y FIT CABLE HANGER 6 PACK

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

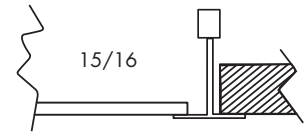
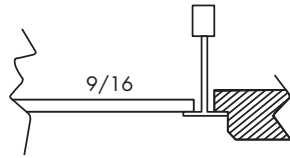
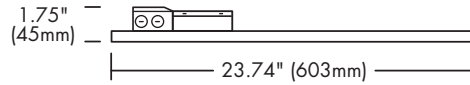
<sup>2</sup> Actual wattage may differ by +/- 5%; when operating between 120-277V +/- 10%.

# 2x2 LED Wattage Selectable Flat Panel Luminaire

## Dimensions and Mounting Data



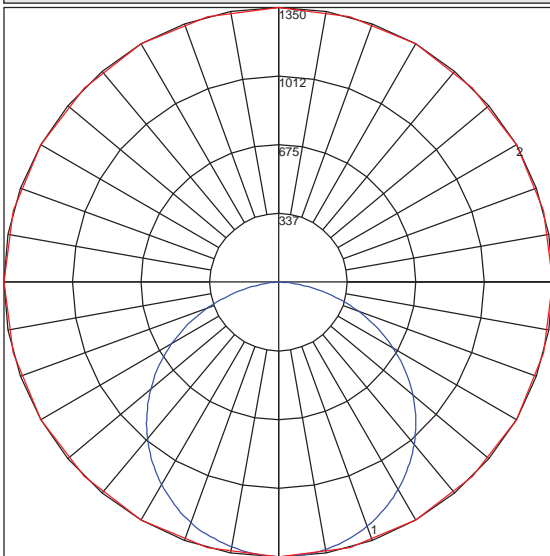
Length: 23.74" (603mm)  
Width: 23.74" (603mm)  
Depth: 0.32" (8mm)  
Weight: 6.61 lbs (3kg)



## Photometric Report

Based on photometric data for  
TCP Item # FP2UZDB130K (38W)

### Polar Graph



Maximum Candela = 1293.063 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

### Average Luminance candelas/square meter (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4012	4020	3971
55	3948	3949	3884
65	3800	3781	3686
75	3357	3297	3137
85	2229	2043	1750

### 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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	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	40	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	52	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

### Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-20	495.50	N.A.	12.40
0-30	1058.64	N.A.	26.40
0-40	1745.99	N.A.	43.60
0-60	3133.88	N.A.	78.30
0-80	3935.6	N.A.	98.30
0-90	4002.83	N.A.	100.00
10-90	3875.11	N.A.	96.80
20-40	1250.5	N.A.	31.20
20-50	1974.25	N.A.	49.30
40-70	1900.73	N.A.	47.50
60-80	801.72	N.A.	20.00
70-80	288.87	N.A.	7.20
80-90	67.23	N.A.	1.70
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4002.83	N.A.	100.00

Total Luminaire Efficiency = N.A.%

Specifications and dimensions subject to change without notice.