



LED Direct Back-Lit Flat Panel Luminaires

Great Features/Benefits

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

These DLC 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 back-lit technology
- Slim, low-profile design
- Ideal for:
 - Offices
 - Retail Stores
 - Schools
 - Hospitality
 - Restaurants
 - Healthcare



5 YEAR WARRANTY

LED Direct Back-Lit Flat Panel Luminaires

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 back-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 = 36W 2x4 = 50W
Lumens (L)	2x2 = 3600L 2x4 = 5000L
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	>0.9
THD	<20%
Ratings	UL/cUL damp location rated, DLC, IC rated
Controls	Non dimming



2x2



2x4



5 YEAR WARRANTY

To view our DLC qualified products, please consult the DLC Qualified Products List.

Replacement Strategy

SYSTEM	BALLAST FACTOR	LUMENS	INPUT WATTS*	LED ENERGY SAVINGS
TCP LED Flat Panel - 2x2	—	3600	36	—
2 Lamp 34W T12 U-Bend	0.88	4420	74	51%
2 Lamp 32W T8 U-Bend	0.88	4275	58	38%
2 Lamp 24W T5HO	1.0	3145	54	33%
TCP LED Flat Panel - 2x4	—	5000	50	—
3 Lamp 32W T8 HBF	1.18	6960	93	46%
3 Lamp 32W T8 NBF	0.88	6681	89	44%
2 Lamp 32W T8 HBF	1.18	4658	65	23%
2 Lamp 28W T5	1.0	4675	63	21%
2 Lamp 32W T8 NBF	0.88	4468	59	15%

*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

2x4 LED Direct Back-Lit Flat Panel Luminaire

LED TECHNICAL DATA

Applications

TCP LED Direct 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 back-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: low profile design
- Frame: white
- IC rated for direct contact with insulation
- Designed for easy drop into T-bar grid ceilings

Electrical

- UL/cUL damp location rated
- Access plate for easy wiring connections
- System rated for long 50,000 hour life

Optics

- Back-lit design provides excellent light distribution
- 120° beam angle
- Delivers full panel diffusion and excellent uniformity



Listings

UL/cUL Listed DLC v4.4 Standard IC Rated RoHS Compliant

Warranty

Five year limited warranty against defects in manufacturing.

Lumen Maintenance

Reported L ₉₀ ²	Reported L ₇₀ ²
>22,000 hours	>54,000 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: DFF4UZD5035K

DF	F	4	UZD	50	50K
FAMILY	LENS TYPE	SIZE	VOLTAGE	LUMEN PACKAGE (Power) ¹²	COLOR TEMPERATURE
DF – Direct Flat Panel	F – Frosted Lens	4 – 2' x 4'	UZD – 120V-277V (Non Dimming)	50 – 5000 Lumens	30K – 3000K 35K – 3500K 41K – 4100K 50K – 5000K

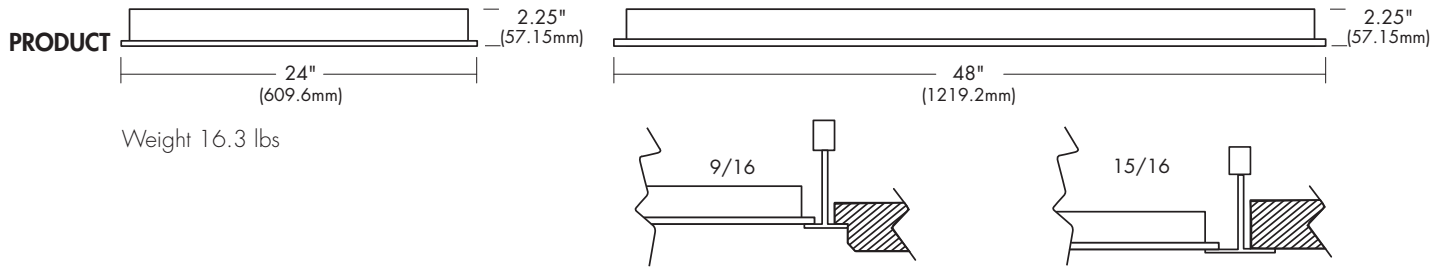
¹ Approximate lumen output. Actual performance may vary based on CCT, options selected and end user application.

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

2x4 LED Direct Back-Lit Flat Panel Luminaire

LED TECHNICAL DATA

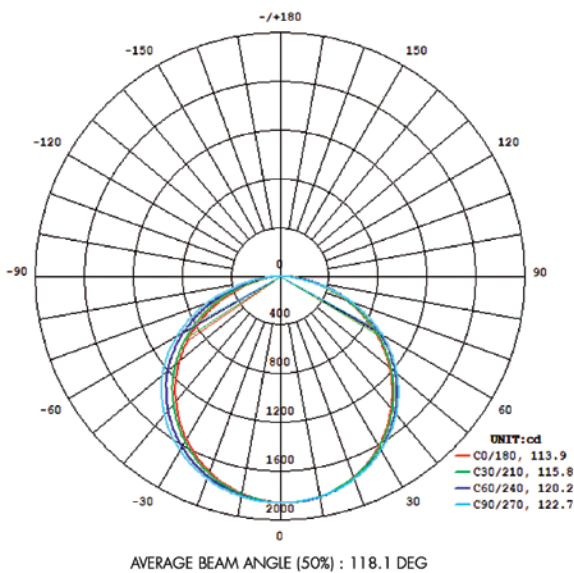
Dimensions and Mounting Data



Photometric Report

Based on photometric data for
TCP Item #DFF4UZD5035K

Light Distribution Curve



Isolux Plot

