



HDT Series Luminaires

Product Specifications



TCP's LED Direct Troffer Luminaires feature back-lit technology with a robust construction that still offers a slim, low profile with beautiful full-panel diffusion and superior uniformity.

These energy-efficient troffers use advanced LED technology to create a cost-effective solution to maximize energy savings and potentially qualify for utility rebates.

Applications: T-bar Grid Ceilings

Reasons to choose the LED Direct Troffer Luminaires from TCP

- Excellent color consistency and CRI enhance color of focal point while maintaining uniformity throughout lighting installation
- Mercury-free construction is great for all environments
- Long 50,000 hour rated life significantly reduces maintenance labor and material costs
- Slim, low-profile design and lightweight for easy handling
- Fits standard 1" and 9/16" T-bar grid ceilings
- Utilizes back-lit technology for full diffusion with excellent uniformity
- Superior energy efficiency compared to fluorescent alternatives, providing instant energy savings and potential rebate ability
- Battery backup is Title 20 Compliant

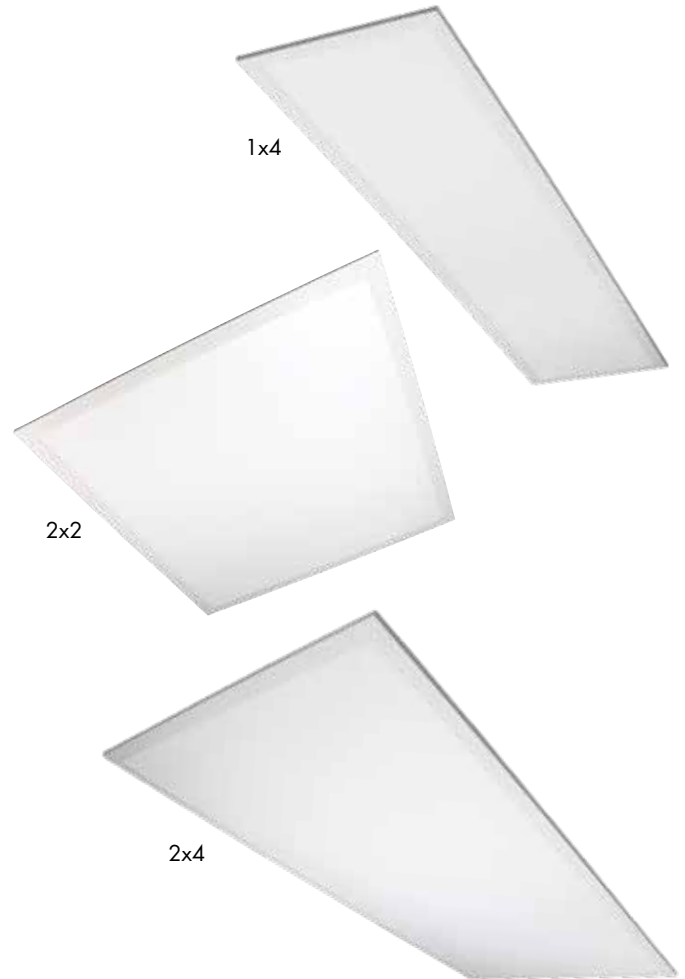
Ideal Applications

- Office
- Retail Stores
- Schools
- Hospitality
- Restaurants
- Healthcare



Specifications

| | |
|------------------------------------|--|
| Input Line Voltage | 120-277 VAC |
| Input Line Frequency (Hz) | 50/60Hz |
| Wattage (W) | |
| 1x4 | 23W/29W/38W |
| 2x2 | 23W/29W/38W |
| 2x4 | 23W/29W/38W |
| Lumens (L) | |
| 1x4 | 2900L/3650L/4800L |
| 2x2 | 2900L/3650L/4800L |
| 2x4 | 2900L/3650L/4800L |
| Lumens per Watt (LPW)..... | > 125LPW |
| 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, DLC 5.1 Premium |
| Controls..... | 0-10V dimming (standard) |



Replacement Strategy

| SYSTEM | BALLAST FACTOR | LUMENS | INPUT WATTS* | LED ENERGY SAVINGS |
|-------------------------------|----------------|-------------|--------------|--------------------|
| TCP LED Direct Troffer | — | 3650 | 29 | — |
| 2 Lamp 34W T12 U-Bend | 0.88 | 4420 | 74 | 61% |
| 2 Lamp 32W T8 U-Bend | 0.88 | 4275 | 58 | 50% |
| 2 Lamp 24W T5HO | 1.0 | 3145 | 54 | 46% |
| TCP LED Direct Troffer | — | 4800 | 38 | — |
| 2 Lamp 32W T8 HBF | 1.18 | 4658 | 65 | 42% |
| 2 Lamp 28W T5 | 1.0 | 4675 | 63 | 40% |
| 2 Lamp 32W T8 NBF | 0.88 | 4468 | 59 | 36% |

*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:

$$\text{System lumens} = \text{mean lumens} \times \# \text{ lamps} \times \text{ballast factor} \times \text{luminaire efficiency factor}$$

Applications

TCP LED Direct Troffer Luminaires are cost-effective, high-efficiency alternatives to traditional T5, T8 and T12 linear fluorescent troffers. Featuring a slim, low-profile design, our LED Direct Troffers use back-lit technology to deliver full panel diffusion and superior uniformity that meets or exceeds the output from edge-lit panels. Applications include offices, schools, retail locations, healthcare, hospitality and other T-grid and commercial ceilings.

Construction

- 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

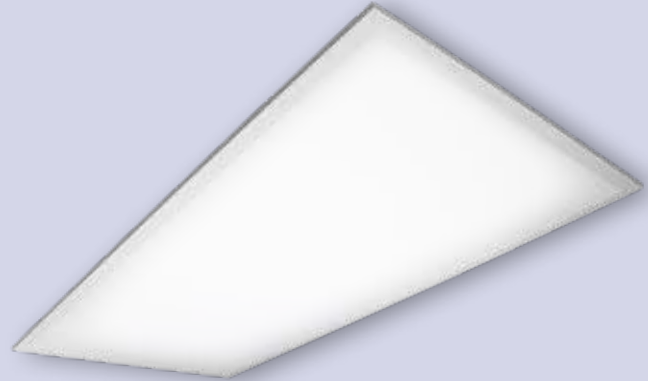
Electrical

- UL/cUL damp location rated
- 0-10V dimming driver (standard)
- LED driver with integrated junction box
- System rated for long 50,000 hour life

Optics

- Back-lit technology provides even, uniform lighting
- 120° beam angle
- Frosted diffuser for reduced glare and aesthetic appeal
- Meets or exceeds the look and performance of edge-lit panels

| | |
|-------------|------|
| Item Number | |
| Notes | Type |



Listings

UL/cUL Listed
IC Rated
RoHS Compliant
DLC 5.1 Premium

Lumen Maintenance

L90 > 46,000 hours

Warranty

Seven year limited warranty against defects in manufacturing.

Catalog Ordering Matrix Example: HDTF4UZD2941K

| FAMILY | LENS TYPE | SIZE | VOLTAGE | DIMMING | WATTAGE ^{1,2,3} | COLOR TEMPERATURE | OPTIONS | FRAME OPTIONS |
|-------------------------------|-----------------------------------|-------------|--------------------------------|--|--|--|--|--|
| HDT = Direct Back-Lit Troffer | F = Frosted P = Prismatic lens | 4 = 2' x 4' | U = 120V-277V H = 120V-347V | ZD = 0-10V Dimming 1D = Triac Dimming | 23 = 2900 Lumens 29 = 3650 Lumens 38 = 4800 Lumens | 27K = 2700K*** 30K = 3000K 35K = 3500K 41K = 4100K 50K = 5000K 65K = 6500K*** | BLANK = None EB = Battery Back-up ⁴ CP = Chicago Plenum | BLANK = White Frame BLK = Black Frame |

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

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

³29W and 38W are permanently fixed; 46W is adjustable to 38W or 29W.

⁴ILBCP07ATBTS - 7W battery backup, Title 20 compliant.

2700K and 6500K are special order. Please contact your TCP representative for lead times.

Accessories:

| Item Number | Description |
|-------------|---|
| YHANGER6PK | Y FIT CABLE HANGER 6 PACK (HANGS 3 UNITS) |
| DTSK4 | SURFACE MOUNT KIT FOR DIRECT 2X4 PANELS |
| DTFLK4 | RECESS MOUNT FLANGE KIT FOR 2X4 PANELS |
| DRVEXTCABLE | 3FT DRIVER EXTENSION CABLE |

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



7 YEAR WARRANTY