

Product Specifications

TCP's DT Series 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 offer a cost-effective solution to maximize energy savings and take advantage of utility rebates while using the best LED technology.

Applications: T-bar Grid Ceilings

Reasons to choose the LED DT Series Luminaires from TCP

- Provides energy savings over fluorescent alternatives and potential rebate eligibility
- Long 50,000 hour rated life significantly reduces
 maintenance labor & material costs
- Excellent color consistency & CRI enhances color of focal point while maintaining uniformity throughout lighting installation
- Mercury free construction is great for all environments
- Fits standard 1" and 9/16" T-bar grid ceilings
- Utilizes back-lit technology for full diffusion with excellent uniformity
- Slim, low-profile design and lightweight for easy handling

Ideal Applications

- Office
- Retail Stores

- Schools
- Hospitality

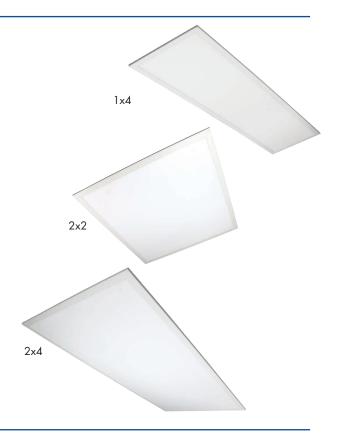
- Restaurants
- Healthcare





Specifications

Input Line Frequency (Hz)	
Wattage (W)	
Lumens (L)	
2x4	
Lumens per Watt (LPW)	
Rated Life	
	20°C
	<20%
	CUL damp location rated, IC rated, IP20, DLC Standard 5.0
Controls	



Replacement Strategy

SYSTEM	BALLAST FACTOR	LUMENS	INPUT WATTS*	LED ENERGY SAVINGS
TCP LED Direct Troffer - 2x2, 1x4	-	3200	29	_
2 Lamp 34W T12 U-Bend 2 Lamp 32W T8 U-Bend 2 Lamp 24W T5HO	0.88 0.88 1.0	4420 4275 3145	74 58 54	61% 50% 46%
TCP LED Direct Troffer - 2x4	_	5100	46	_
3 Lamp 32W T8 HBF 3 Lamp 32W T8 NBF 2 Lamp 32W T8 HBF 2 Lamp 28W T5 2 Lamp 32W T8 NBF	1.18 0.88 1.18 1.0 0.88	6960 6681 4658 4675 4468	93 89 65 63 59	50% 48% 29% 27% 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





Applications

TCP LED DT Series Luminaires are cost-effective, high-efficiency alternatives to traditional T5, T8 and T12 linear fluorescent troffers. Featuring a slim, low-profile design, our LED DT Series Luminaires 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



Warranty

Five year limited warranty against defects in manufacturing.

Catalog Ordering Matrix Example: DTF1UZD38CCT

DT	F	1	U	ZD		ССТ			
FAMILY	LENS TYPE	SIZE	VOLTAGE	DIMMING	WATTAGE ^{1,2,3}	COLOR TEMPERATURE	OPTIONS	CONTROL	FRAME OPTIONS⁴
DT = DT Series	F = Frosted	1 = 1' x 4'	U = 120-277V	ZD = 0-10V Dimming	23 = 2600 Lumens 29 = 3200 Lumens 38 = 4200 Lumens	CCT = 3500/4100/5000K Selectable		SM = SmartBox SBS = SmartBox with Sensor	BLANK = WHITE FRAME BLK = BLACK FRAME

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

² Actual wattage may differ by +/- 5%; when operating between 120-277V +/- 10%.
 ³ 23W and 29W are permanently fixed; 38W is adjustable

⁴ Special frame colors are special order only. Please work with supply chain for lead times.

Accessories:

Item Number Description							
YHANGER6PK Y FIT CABLE HANGER 6 PACK (HANGS 2 UNITS)							
DTSK1	SURFACE MOUNT KIT FOR DIRECT TROFFER 1X4						
DTFLK1	RECESS MOUNT FLANGE KIT FOR 1X4 TROFFERS AND PANELS						
DRVEXTCABLE	3FT DRIVER EXTENSION CABLE						

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



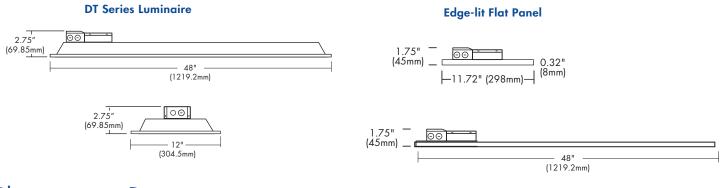
c(UL)US LISTED

YEAR

WARRANTY



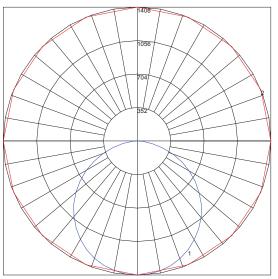
Dimensions and Mounting Data



Photometric Report

Based on photometric data for TCP Item # DTF1UZD38CCT (38W, 41K)

Polar Graph



Maximum Candela = 1407.6 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	3631	3602	3585			
55	3506	3474	3437			
65	3292	3239	3179			
75	2892	2795	2680			
85	2165	1983	1746			

Specifications and dimensions subject to change without notice.

Coefficients of Utilization – Zonal Cavity Method

Effe	ctive	Floo	r Ca	vity R	Reflect	ance	0.2	0										
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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-20	515.20	N.A.	12.70
0-30	1095.31	N.A.	27.10
0-40	1796.69	N.A.	44.40
0-60	3184.62	N.A.	78.70
0-80	3967.55	N.A.	98.10
0-90	4044.17	N.A.	100.00
10-90	3910.96	N.A.	96.70
20-40	1281.49	N.A.	31.70
20-50	2010.58	N.A.	49.70
40-70	1887.56	N.A.	46.70
60-80	782.93	N.A.	19.40
70-80	283.30	N.A.	7.00
80-90	76.63	N.A.	1.90
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	0.01	N.A.	0.00
90-180	0.76	N.A.	0.00
110-180	0.76	N.A.	0.00
0-180	4044.93	N.A.	100.00

Total Luminaire Efficiency = N.A.%





WARRANTY



Applications

TCP LED DT Series Luminaires are cost-effective, high-efficiency alternatives to traditional T5, T8 and T12 linear fluorescent troffers. Featuring a slim, low-profile design, our LED DT Series Luminaires 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



Warranty

Five year limited warranty against defects in manufacturing.

Catalog Ordering Matrix Example: DTF2UZD38CCT

DT	F	2	U	ZD		ССТ			
FAMILY	LENS TYPE	SIZE	VOLTAGE	DIMMING	WATTAGE ^{1,2,3}	COLOR TEMPERATURE	OPTIONS	CONTROL	FRAME OPTIONS ⁴
DT = DT Series	F = Frosted	2 = 2' × 2'	U = 120-277V	ZD = 0-10V Dimming	23 = 2600 Lumens 29 = 3200 Lumens 38 = 4200 Lumens (Wattage Selectable to 38W/29W/23W)	CCT = 3500/4100/5000K Selectable	BLANK = None EB = Battery Back-up	SM = SmartBox SBS = SmartBox with Sensor	BLANK = WHITE FRAME BLK = BLACK FRAME

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

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

³ 23W and 29W are permanently fixed; 38W is adjustable

⁴ Special frame colors are special order only. Please work with supply chain for lead times.

Accessories:

Item Number Description							
YHANGER6PK	Y FIT CABLE HANGER 6 PACK (HANGS 3 UNITS)						
DTSK2	SURFACE MOUNT KIT FOR DIRECT TROFFER 2X2						
DTFLK2	RECESS MOUNT FLANGE KIT FOR 2X2 TROFFERS AND PANELS						
DRVEXTCABLE	3FT DRIVER EXTENSION CABLE						

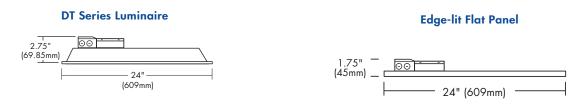
For the most up-to-date specs and warranty information, please visit www.tcpi.com

Spacing Criterion (0-180): 1.28 Spacing Criterion (90-270): 1.28





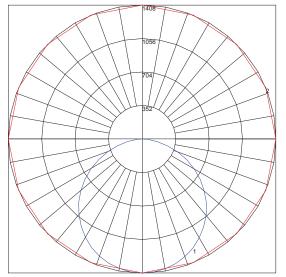
Dimensions and Mounting Data



Photometric Report

Based on photometric data for TCP Item # DTF2UZD38CCT (38W, 41K)

Polar Graph



Maximum Candela = 1407.6 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	3631	3602	3585
55	3506	3474	3437
65	3292	3239	3179
75	2892	2795	2680
85	2165	1983	1746

Coefficients of Utilization – Zonal Cavity Method

Ette	ctive Flo	oor	Cav	vity R	letlect	ance	0.20	0										
RC	8	30				70				50			30			10		0
RW	70 5	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119 11	19	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109 10)4 1	00	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99 9	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	69
3	90 7	79	71	64	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82 7	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76 6	53	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70 5	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65 5	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60 4	17	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29
9	56 Z	13	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53 3	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt		
0-20	515.20	N.A.	12.70		
0-30	1095.31	N.A.	27.10		
0-40	1796.69	N.A.	44.40		
0-60	3184.62	N.A.	78.70		
0-80	3967.55	N.A.	98.10		
0-90	4044.17	N.A.	100.00		
10-90	3910.96	N.A.	96.70		
20-40	1281.49	N.A.	31.70		
20-50	2010.58	N.A.	49.70		
40-70	1887.56	N.A.	46.70		
60-80	782.93	N.A.	19.40		
70-80	283.30	N.A.	7.00		
80-90	76.63	N.A.	1.90		
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	0.01	N.A.	0.00		
90-180	0.76	N.A.	0.00		
110-180	0.76	N.A.	0.00		
0-180	4044.93	N.A.	100.00		

Total Luminaire Efficiency = N.A.%



Specifications and dimensions subject to change without notice.



Applications

TCP LED DT Series Luminaires are cost-effective, high-efficiency alternatives to traditional T5, T8 and T12 linear fluorescent troffers. Featuring a slim, low-profile design, our LED DT Series Luminaires 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



Warranty

Five year limited warranty against defects in manufacturing.

Catalog Ordering Matrix Example: DTF4UZD46CCT

DT	F	4	U	ZD		CCT			
FAMILY	LENS TYPE	SIZE	VOLTAGE	DIMMING	WATTAGE ^{1,2,3}	COLOR TEMPERATURE	OPTIONS	CONTROL	FRAME OPTIONS⁴
DT = DT Series		4 = 2' × 4'	U = 120-277V	ZD = 0-10V Dimming	29 = 3300 Lumens 39 = 4400 Lumens 46 = 5100 Lumens (Wattage Selectable to 46W/39W/29W)	CCT = 3500/4100/5000K Selectable	BLANK = None EB = Battery Back-up	SM = SmartBox SBS = SmartBox with Sensor	BLANK = WHITE FRAME BLK = BLACK FRAME

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

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

³ 23W, 29W and 38W are permanently fixed; 46W is adjustable

⁴ Special frame colors are special order only. Please work with supply chain for lead times.

Accessories:

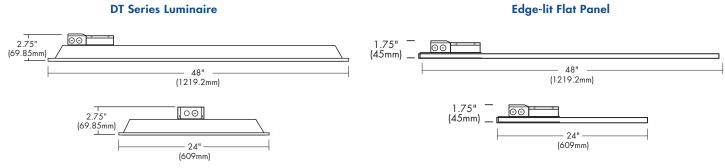
Item Number	Description
YHANGER6PK	Y FIT CABLE HANGER 6 PACK (HANGS 2 UNITS)
DTSK4	SURFACE MOUNT KIT FOR DIRECT TROFFER 2X4
DTFLK4	RECESS MOUNT FLANGE KIT FOR 2X4 TROFFERS AND PANELS
DRVEXTCABLE	3FT DRIVER EXTENSION CABLE

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





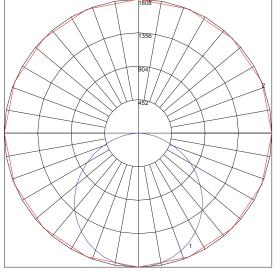
Dimensions and Mounting Data



Photometric Report

Based on photometric data for TCP Item # DTF4UZD46CCT (46W, 41K)

Polar Graph



Maximum Candela = 1808.2 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	2333	2317	2318
55	2254	2237	2229
65	2125	2092	2083
75	1904	1866	1822
85	1499	1470	1394

Specifications and dimensions subject to change without notice.

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	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69
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	58	52	62	56	52	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	46	38	32	59	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt		
0-20	661.93	N.A.	12.70		
0-30	1407.56	N.A.	26.90		
0-40	2309.2	N.A.	44.20		
0-60	4094.49	N.A.	78.40		
0-80	5115.44	N.A.	97.90		
0-90	5222.48	N.A.	100.00		
10-90	5051.35	N.A.	96.70		
20-40	1647.27	N.A.	31.50		
20-50	2584.72	N.A.	49.50		
40-70	2431.84	N.A.	46.60		
60-80	1020.95	N.A.	19.50		
70-80	374.40	N.A.	7.20		
80-90	107.04	N.A.	2.00		
90-110	0.62	N.A.	0.00		
90-120	0.62	N.A.	0.00		
90-130	0.62	N.A.	0.00		
90-150	0.67	N.A.	0.00		
90-180	1.55	N.A.	0.00		
110-180	0.94	N.A.	0.00		
0-180	5224.04	N.A.	100.00		

Total Luminaire Efficiency = N.A.%



TECHNOLOGY CAST IN A BEAUTIFUL LIGHT

For over 20 years, TCP has been designing, developing and delivering energy-efficient lighting into the market. Thanks to our cutting-edge technology and manufacturing expertise, we have shipped billions of high quality lighting products. With TCP, you can count on a lighting product that is designed to meet the needs of the market - that transforms your surroundings and envelopes you in warmth - lighting that generates beauty with every flip of the switch.

Sales:	Catalog Number:
Date:	Туре:
Model:	Notes:
Project:	TCD
Rep:	we know light."

For more information on the quality and care TCP can deliver, call us at 800.324.1496 or visit tcpi.com