



DT Series Luminaires with Selectable CCT

Product Specifications



TCP's DT Series Luminaires feature backlit technology with a robust construction that still offers a slim, low-profile design 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 potential utility rebates where applicable.

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 and material costs
- Excellent color consistency and CRI enhance 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 backlit technology for full diffusion with excellent uniformity
- Slim, low-profile design and lightweight for easy handling
- Battery Backup is Title 20 Compliant

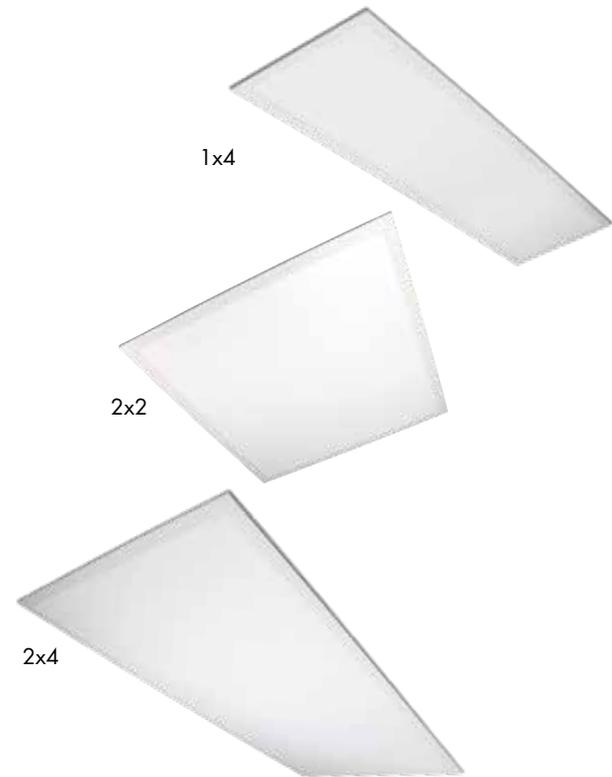
Ideal Applications

- 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	29W/39W/46W
Lumens (L)	
1x4	2600L/3200L/4200L
2x2	2600L/3200L/4200L
2x4	3300L/4400L/5100L
Lumens per Watt (LPW).....	>110 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)



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	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 - 2x4	—	5100	46	—
3 Lamp 32W T8 HBF	1.18	6960	93	50%
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

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 backlit 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

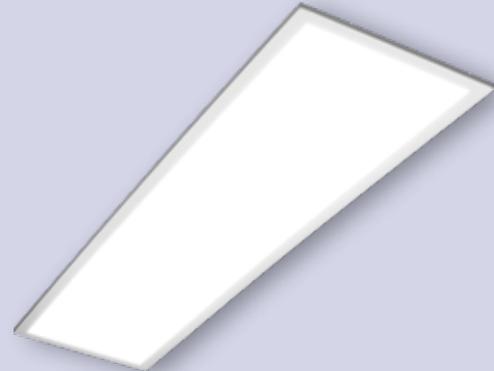
Electrical

- 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

- Backlit 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 Standard

Lumen Maintenance

L70 > 54000 hours

Warranty

Five year limited warranty against defects in manufacturing.

Catalog Ordering Matrix Example: DTF1UZD38CCT

FAMILY	LENS TYPE	SIZE	VOLTAGE	DIMMING	WATTAGE ^{1,2,3}	COLOR TEMPERATURE	OPTIONS	FRAME OPTIONS ⁵
DT = Direct Troffer	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	BLANK = None EB = Battery Backup ⁴ CP = Chicago Plenum IS = Integrated Microwave Sensor SM = SmartBox with Sensor NLS = Network Lighting PIR Sensor	BLANK = White Frame BLK = Black Frame
			H = 120-347V ⁶					

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%.
³23W and 29W are permanently fixed; 38W is adjustable to 29W or 23W.
⁴ILBCP07ATBTS – 7W battery backup, Title 20 compliant. Battery Backup will operate at highest CCT when activated.
⁵Special frame colors are special order only. Please work with supply chain for lead times.
⁶Not all options are available with 120-347V.

Accessories:

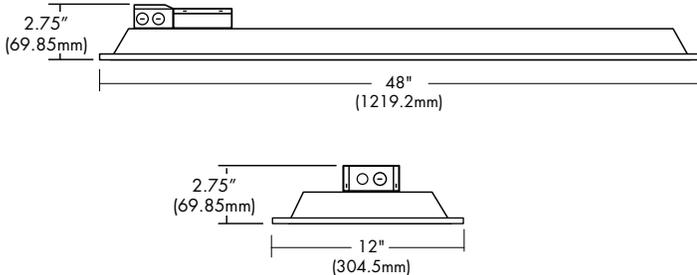
Item Number	Description
YHANGER6PK	Y FIT CABLE HANGER 6 PACK (HANGS 3 UNITS)
DTSK1	SURFACE MOUNT KIT FOR 1X4 PANELS
DTFLK1	RECESS MOUNT FLANGE KIT FOR 1X4 PANELS
ISREMOTE	REMOTE FOR INTEGRATED SENSOR
FPDRV2DD	REPLACEMENT DRIVER FOR 1X4 AND 2X2 PANELS

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

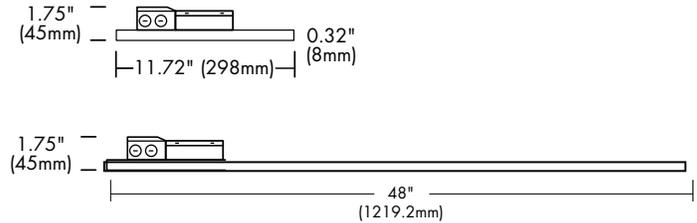


Dimensions and Mounting Data

DT Series Luminaire



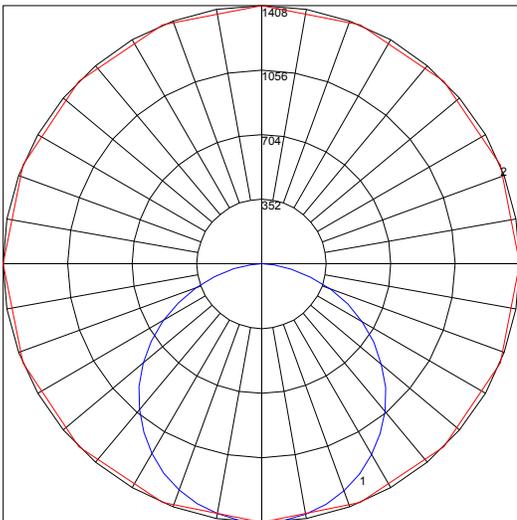
Edge-lit Flat Panel



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

Spacing Criterion (0-180): 1.28

Spacing Criterion (90-270): 1.28

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	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.%

Specifications and dimensions subject to change without notice.

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5 YEAR WARRANTY

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

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 backlit 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
- LED driver with integrated junction box
- System rated for long 50,000 hour life

Optics

- Backlit 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 Standard

Lumen Maintenance

L70 > 54000 hours

Warranty

Five year limited warranty against defects in manufacturing.

Catalog Ordering Matrix Example: DTF2UZD38CCT

FAMILY	LENS TYPE	SIZE	VOLTAGE	DIMMING	WATTAGE ^{1,2,3}	COLOR TEMPERATURE	OPTIONS	FRAME OPTIONS ⁵
DT = Direct Troffer	F = Frosted	2 = 2' x 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 Backup ⁴ CP = Chicago Plenum IS = Integrated Microwave Sensor SM = SmartBox with Sensor NLS = Network Lighting PIR Sensor	BLANK = White Frame BLK = Black Frame
			H = 120-347V ⁶			CCT ⁷ = 3000/4100/5000K Selectable		

¹ Approximate 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 to 29W or 23W.

⁴ ILBCP07ATBTS - 7W battery backup, Title 20 compliant. Battery Backup will operate at highest CCT when activated.

⁵ Special frame colors are special order only. Please work with supply chain for lead times.

⁶ Not all options are available with 120-347V.

⁷ Special order item, contact sales rep for lead time.

Accessories:

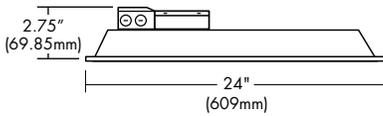
Item Number	Description
YHANGER6PK	Y FIT CABLE HANGER 6 PACK (HANGS 3 UNITS)
DTSK2	SURFACE MOUNT KIT FOR 2X2 PANELS
DTFLK2	RECESS MOUNT FLANGE KIT FOR 2X2 PANELS
ISREMOTE	REMOTE FOR INTEGRATED SENSOR
FPDRV2DD	REPLACEMENT DRIVER FOR 1X4 AND 2X2 PANELS

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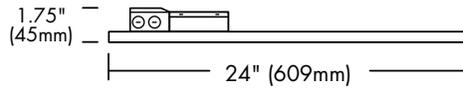


Dimensions and Mounting Data

DT Series Luminaire



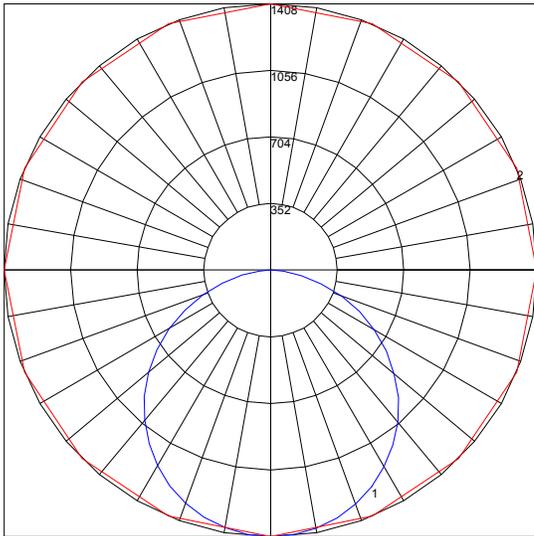
Edge-lit Flat Panel



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

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

Specifications and dimensions subject to change without notice.

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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
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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
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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.%



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

Applications

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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

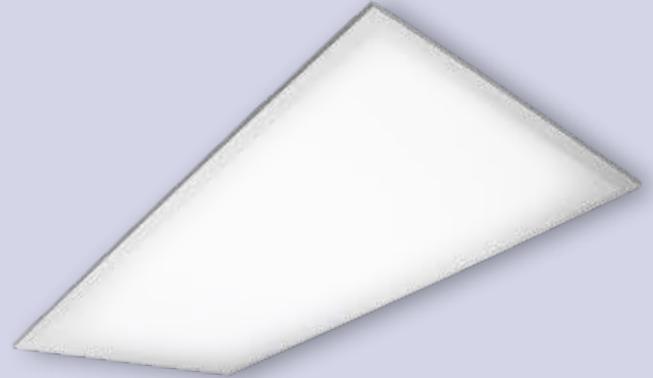
Electrical

- 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

- Backlit 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 Standard

Lumen Maintenance

L70 > 54000 hours

Warranty

Five year limited warranty against defects in manufacturing.

Catalog Ordering Matrix Example: DTF4UZD46CCT

FAMILY	LENS TYPE	SIZE	VOLTAGE	DIMMING	WATTAGE ^{1,2,3}	COLOR TEMPERATURE	OPTIONS	FRAME OPTIONS ⁵
DT = Direct Troffer	F = Frosted	4 = 2' x 4'	U = 120-277V	ZD = 0-10V Dimming	29 = 3300 Lumens 39 = 4400 Lumens 46 = 5100 Lumens (Wattage Selectable to 46/39/29W)	CCT = 3500/4100/5000K Selectable	BLANK = None EB = Battery Backup ⁴ CP = Chicago Plenum IS = Integrated Microwave Sensor SM = SmartBox with Sensor NLS = Network Lighting PIR Sensor	BLANK = White Frame BLK = Black Frame
			H = 120-347V ⁶			CCT2 ⁷ = 3000/4100/5000K Selectable		

¹ Approximate 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 29W and 39W are permanently fixed; 46W is adjustable to 29W or 39W.

⁴ ILBCP07ATBTS – 7W battery backup, Title 20 compliant. Battery Backup will operate at highest CCT when activated.

⁵ Special frame colors are special order only. Please work with supply chain for lead times.

⁶ Not all options are available with 120-347V.

⁷ Special order item, contact sales rep for lead time.

Accessories:

Item Number	Description
YHANGER6PK	Y FIT CABLE HANGER 6 PACK (HANGS 3 UNITS)
DTSK4	SURFACE MOUNT KIT FOR 2X4 PANELS
DTFLK4	RECESS MOUNT FLANGE KIT FOR 2X4 PANELS
ISREMOTE	REMOTE FOR INTEGRATED SENSOR
FPDRV1DD	REPLACEMENT DRIVER FOR 2X4 PANEL

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

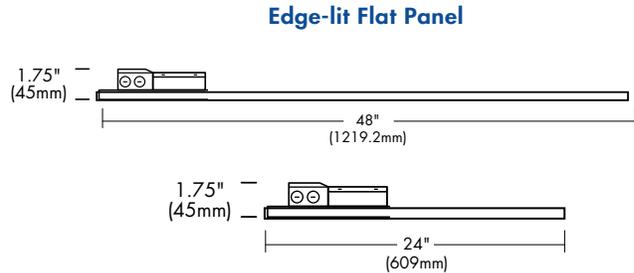
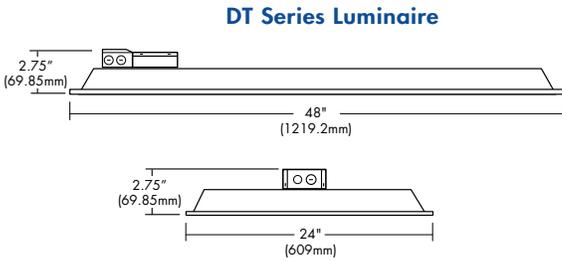


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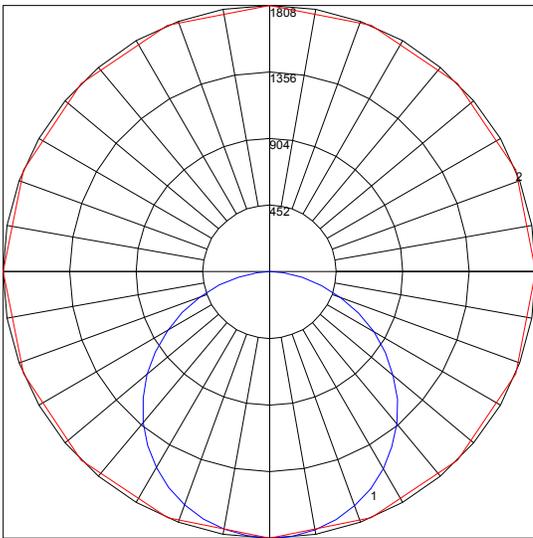
Dimensions and Mounting Data



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

Spacing Criterion (0-180): 1.28

Spacing Criterion (90-270): 1.28

Specifications and dimensions subject to change without notice.

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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	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	85	83	81	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	75	71	71	69	67	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	60	58	56	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	52	50	48	50
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	45	43	41	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	39	37	35	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	35	33	31	33
8	60	46	38	32	59	46	38	32	44	37	32	43	36	31	42	36	31	31	29	27	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	28	26	24	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	26	24	22	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.%



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

TECHNOLOGY CAST IN A BEAUTIFUL LIGHT

For over 30 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:

Date:

Model:

Project:

Rep:

Catalog Number:

Type:

Notes:



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

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