DT by TCP

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

c UL US LISTED DLC QPL LISTED 5 YEAR WARRANTY

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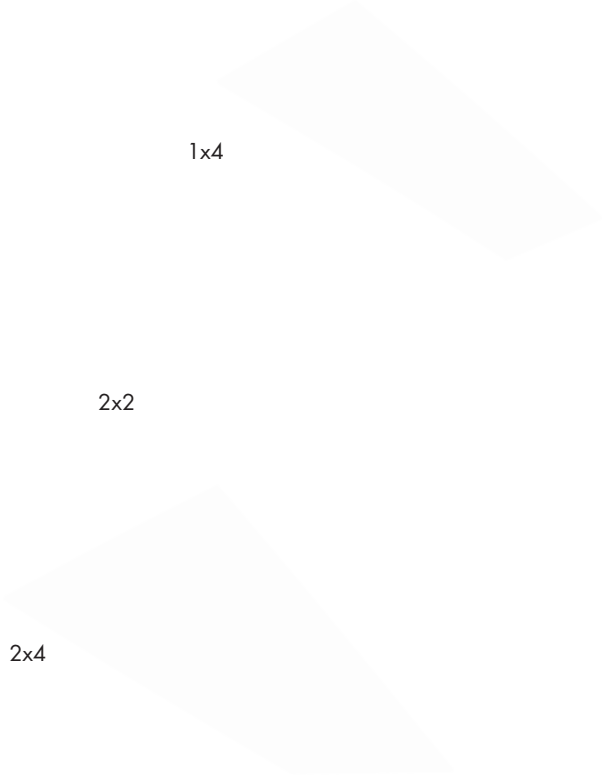
LED DT Series Luminaires with Selectable CCT

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

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1x4 LED DT Series Luminaires with Selectable CCT

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

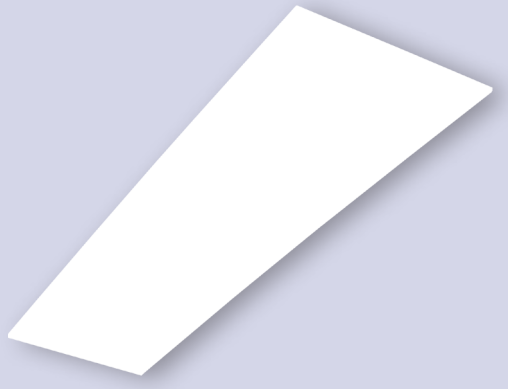
Electrical

- 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 **H** = 120-347V[6]	**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 **NLS** = Network Lighting PIR Sensor	**BLANK** = White Frame **BLK** = Black Frame

[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.

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

c UL US LISTED DLC QPL LISTED 5 YEAR WARRANTY

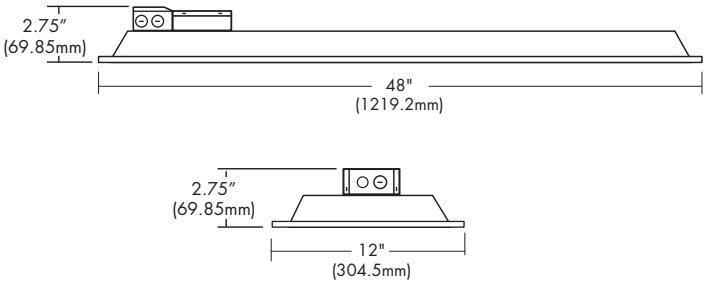
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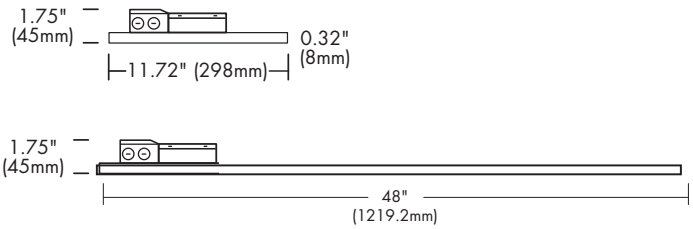
1x4 LED DT Series Luminaires with Selectable CCT

Dimensions and Mounting Data

DT Series Luminaire



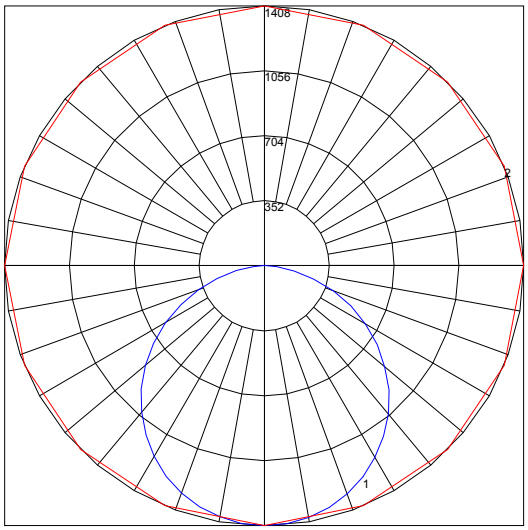
Edge-lit Flat Panel



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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DLC QPL LISTED

5 YEAR WARRANTY

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2x2 LED DT Series Luminaires with Selectable CCT

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

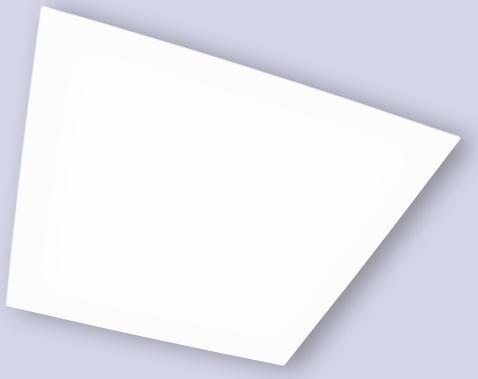
Electrical

- 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 **H** = 120-347V[6]	**ZD** = 0-10V Dimming	**23** = 2600 Lumens **29** = 3200 Lumens **38** = 4200 Lumens (Wattage Selectable to 38W/29W/23W)	**CCT** = 3500/4100/5000K Selectable **CCT2**[7] = 3000/3500/4100K Selectable	**BLANK** = None **EB** = Battery Backup[4] **CP** = Chicago Plenum **IS** = Integrated Microwave Sensor **NLS** = Network Lighting PIR Sensor	**BLANK** = White Frame **BLK** = Black Frame

[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

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

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DLC QPL LISTED

5 YEAR WARRANTY

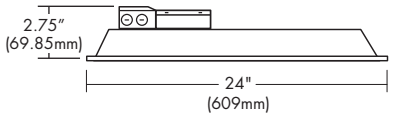
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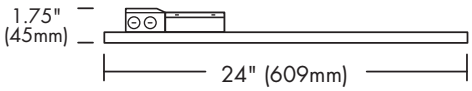
2x2 LED DT Series Luminaires with Selectable CCT

Dimensions and Mounting Data

DT Series Luminaire



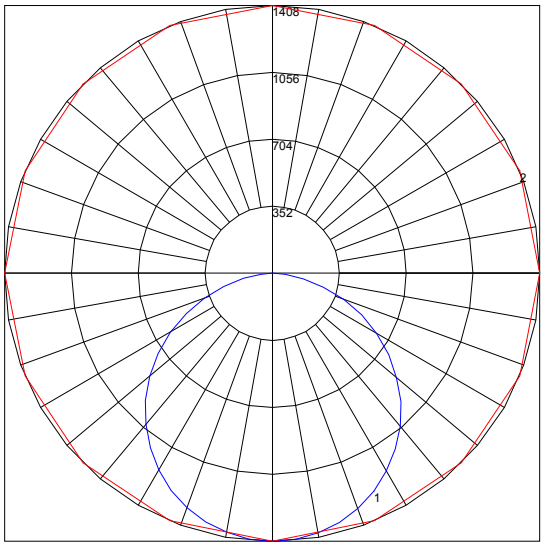
Edge-lit Flat Panel



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
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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
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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
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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
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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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DLC QPL LISTED

5 YEAR WARRANTY

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2x4 LED DT Series Luminaires with Selectable CCT

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

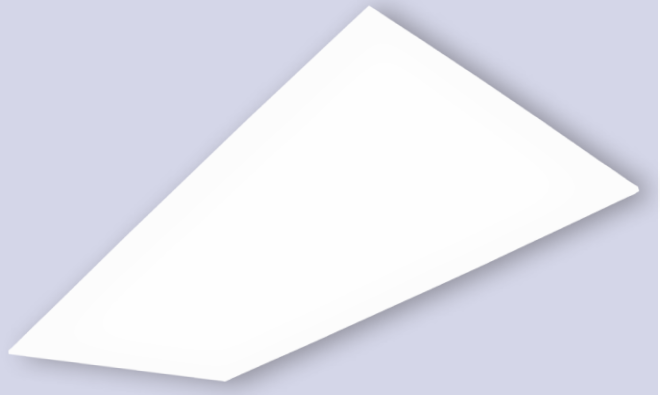
Electrical

- 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 **H** = 120-347V[6]	**ZD** = 0-10V Dimming	**29** = 3300 Lumens **39** = 4400 Lumens **46** = 5100 Lumens (Wattage Selectable to 46/39/29W)	**CCT** = 3500/4100/5000K Selectable **CCT2**[7] = 3000/3500/4100K Selectable	**BLANK** = None **EB** = Battery Backup[4] **CP** = Chicago Plenum **IS** = Integrated Microwave Sensor **NLS** = Network Lighting PIR Sensor	**BLANK** = White Frame **BLK** = Black Frame

[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

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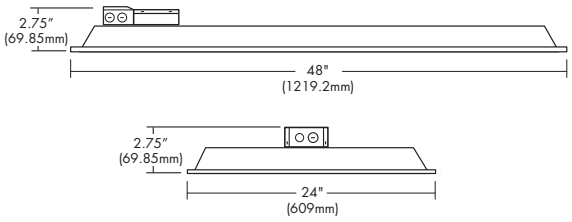
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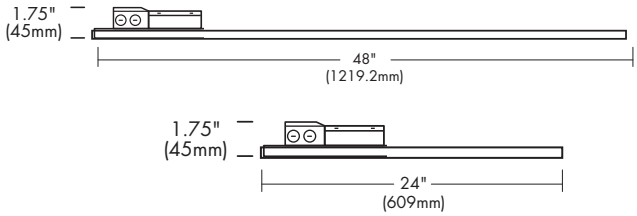
2x4 LED DT Series Luminaires with Selectable CCT

Dimensions and Mounting Data

DT Series Luminaire



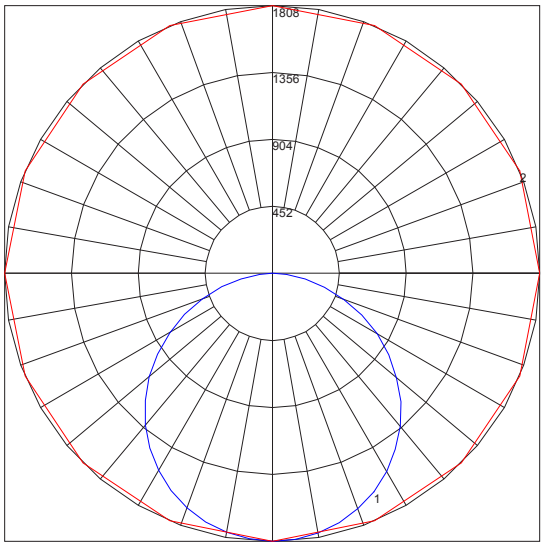
Edge-lit Flat Panel



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

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.%

Specifications and dimensions subject to change without notice.

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5 YEAR WARRANTY

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