

PanOptics[™] Series

PANEL LED TROFFER - 2x2 & 2x4 FLUSH, SURFACE OR PENDANT

Overview

This PanOptics[™] LED Panel is a highly versatile luminaire designed to provide smooth light output. Available in 2x2 and 2x4 sizes and featuring smooth, shadow free back-lit illumination by way of the enhanced optics. The optics lens is also stabilized to resist yellowing. The driver offers 0-10V dimming capabilities and a power efficiency of >0.87. An ideal choice for general lighting applications such as office, healthcare, and commercial kitchens.



PRODUCT FEATURES

Electrical

- Input voltage: 100-277VAC, 50/60Hz. Long-life LEDs provide the fixture a rate life of 50,000 hours.
- Excellent luminaire efficacy provides significant energy savings: 105lm/w and 125lm/w for option.
- Isolated power supply for added safety.
- To ensure trouble-free operation, protection is provided against output overcurrent, output over-voltage, short circuit.

Optical

- Translucent white polystyrene face frame delivers soft and comfortable light.
- Specialized optics design keeps the light more uniform. 80 CRI minimum source provides good color rendering.
- CCT is 4000K.
- Lead free and eco-friendly, zero maintenance.

Models

- TF22-40-40-10
- 2x2 version; 4000K color temperature; 4000 lumens; 32 watts • TF24-40-63-10

2x4 version; 4000K color temperature; 6300 lumens; 50 watts

DIMENSION



* Extremely narrow frame, does not occupy the lit area.

Construction

- Compared with other edge lit panel brands, the PanOptics™ luminaire is more lightweight and without the light guide plate (LGP).
- The body is made of cold-rolled steel SPCC back and an aluminum frame.
- Manufactured with quality components and finishes.
- Junction box is attached to one side of the side of the luminaire.
- IP20, suitable for indoor applications.

Application

- LED recessed panels are perfect lighting solutions for indoor applications like offices, classrooms, showrooms, lobbies, reception areas, hospitals, commercial kitchens, and other general ambient lighting.
- Working temp: -20~40°C (-4~104°F). Storage temp: -30~60°C(-22~140°F).



Back-lit LED Flat Panel

INSTALLATION



Backlit Flat LED Panel Light :

- Please check the accessory bag before installation.
- Turn power off before installation or disassembly.
- Connect the wires correctly. If the dimming wire not needed, make it insulated in case of electricity.



* Please refer to Installation Manual of LED Panel Light for more information.

Cable-suspended







Backlit Flat LED Panel Light



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Common Attributes

Beam angle:	120°
Dimmable:	Optional (0-10V)
CRI:	>80
THD:	<20%
PF:	>0.9
Power efficiency:	87%
Output voltage:	36V
Certification:	DLC&ETL
Environment:	Indoor / Dry
Color:	White
Cover:	Frosted



Backlit Flat LED Panel Light

ENERGY SAVING SOLUTION

Estimated lighting costs using a standard 3 lamp T8 troffer

0	0 0			
Present wattage			85	W
× Annual operating	hours		4,380	hrs
		=	372,300	Watt-Hours
÷ 1,000		=	372,3	kWh per year
× kWh rate of \$0.10		=	\$37.23	per year
× 125 fixtures		9	64,653.75	annual energy cost per space
Estimated lightin	ig costs using	аT	F22 LED	Panel Light
Present wattage			32	W
× Annual operating	hours		4,380	hrs
		=	121,600	Watt-Hours
÷ 1,000		=	121,6	kWh per year
× kWh rate of \$0.10		=	\$12.16	per year
× 125 fixtures			\$1,520	annual energy cost per space
Total estimated an	nual savings	\$	3,133.75	

Based on 125 fixtures per space operating 4,380 hours a year. 125 fixtures is roughly equivalent to a 10,000 square foot space. kWh rates will vary.

PHOTOMETRY

Catalog No.	Coefficients Coefficients o	s of Ut f Utiliza	ilizat tion -	ion Zonal	Cavity	Method	d														
•			Coef.						Ef	fectiv	e Floo	r Cavity	Refl	ectanc	e RFC:	=0.20					
	RhoCC(%)	80			70				50			30			10			0			
5/MH:	MH: C0_a180=1.272 C90_270=1.26	C90_270=1.265	RhoW(%)	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Lamp Type:	LED		RCR	Coefficient of Utilization(%)																	
Rated Voltage: 120V	0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97		
	1	108	103	99	95	105	100	96	93	96	92	89	91	89	86	87	85	83	87		
			2	98	90	83	77	95	87	81	76	83	78	73	80	75	71	76	73	69	67
			3	89	78	70	64	86	77	69	63	73	67	61	70	65	60	67	63	59	56
		4	72	69	61	43	79	68	60	53	65	58	52	62	56	51	60	55	50	48	
Photometric values based on test performed in 5 compliance with LM-79. 6	5	75	62	53	54	73	61	52	46	58	51	45	56	49	44	54	48	43	41		
	6	69	56	47	46	67	55	46	40	52	45	39	51	44	39	49	43	38	36		
		7	64	50	42	40	62	49	41	35	48	40	35	46	39	34	44	38	34	32	
			8	60	46	37	32	58	45	37	31	44	36	31	42	35	31	41	35	30	28
			9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	38	32	27	25
			10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

C0 Space ISO Illuminance Curve



C Plane Distribution Diagram

<u>39 31 2</u>6

52

26 37 30 25 36 30 25





Savings calculations are based on energy costs using \$0.1 per kWh and 12 hours of daily operation.