

PNL2X4-HL

2X4 Back-Lit LED panel High Lumen

Project:	
Type:	
Catalog #:	



STANDARDS



HOUSING

- Steel frame and housing backplate.
- Premium powder coated white housing.

ELECTRICAL

- Operating temperature (ambient): -20°C to 45°C (-4°F to 113°F) .
- Universal 120-277V AC voltage (50-60Hz) is standard.
- 0-10VDC dimming drivers are standard.
- Input transient surge protection =1kV.
- Optional Emergency drivers are available.
- Type IC-rated.
- PF > 0.9 ; THD < 20%.

OPTICAL SYSTEM

- PMMA (Polymethyl methacrylate) LED lenses for optimal light distribution, efficiency and longevity.
- 5 CCT selectable 3000k(warm white),3500k (warm white), 4000k(neutral white), 5000k (cool white) and 6500k (color temperatures*.
- 5 Lumen selectable, outputs range from 4,000 to 9,000 nominal lumens*.
- Long-life LEDs provide 169,000 hours of operation with at least 70% of initial lumen output (L70), and 51,000 hours with at least 90% of initial lumen output (L90)**.
- LED color maintenance <-0.0043 chromaticity shift ($\Delta u'v'$) over the initial 6,000 hours of operation.
- Color rendering index > 80.

* Default kelvin temperature 4000k and highest lumen output..

**L70 & L90 hours are IES TM-21-11 calculated hours.

MOUNTING

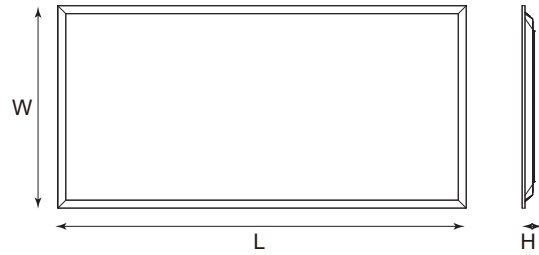
- Recessed mounting in grid ceilings is standard.
- Standard earthquake clips provide secure installation in grid ceilings.
- Optional Surface Mounting Kits (SMKT-24) and Flange Mounting Kits (FLANGEKIT24-ET) provide for installation on plaster or other hard ceilings.
- Optional Cable Mounting Kits (PNL-CMK) provide additional security, as well as suspended mounting.

CODE COMPLIANCE

- cULus listed for damp locations and insulated ceilings. Not exceeding 45°C (113°F).
- DLC premium listed.
- Complies with FCC part 15, class B.

WARRANTY

- 5 year warranty on all electronics and housing.



Model #	L (in)	W (in)	H (in)	Weight (lbs)
PNL2X4-98654L-5CCT-PRM	47.7	23.7	1.42	6.6
PNL2X4-98654L-5CCT-PRM-EM	47.7	23.7	1.42	7.85

ORDERING INFORMATION

Example: PNL2X4-98654L-5CCT-PRM

Series	Nominal Lumen Output (Selectable)		Kelvin Selectable	Emergency Driver
	98654L	9,000/ 8,000/ 6,000/ 5,000/ 4,000 lm		
PNL2X4	98654L	9,000/ 8,000/ 6,000/ 5,000/ 4,000 lm	5CCT-PRM 3000K/ 3500K/ 4000K/ 5000K/ 6500K	EM

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ACCESSORIES (ORDER SEPARATELY)

Mounting Option:

SMKT-24	=	Surface Mount Kit for 2X4 Back-lit Panel.
FLANGEKIT24-ET	=	Recessed Flange Mount Kit for 2X4 Back-lit Panel.
PNL-CM	=	Cable Mount Kit for Back-lit Panel.
PNL-JBEXT	=	Junction Box Extender for 2X2 Back-lit Panel.

LUMEN TABLES

Series	Measurements	30W					40W					50W				
		3000K	3500K	4000K	5000K	6500K	3000K	3500K	4000K	5000K	6500K	3000K	3500K	4000K	5000K	6500K
PNL2X4-98654L-5CCT-PRM (-EM)	Lumens	4,035	4,068	4,091	4,051	3,995	5,316	5,509	5,520	5,453	5,348	6,438	6,650	6,709	6,624	6,465
	Watts	28.5	27.9	27.7	28	28.2	38.4	38.8	37.9	38.6	38.8	48.4	47.9	47	48.4	48.8
	Efficacy	141.58	145.81	147.69	144.68	141.67	138.44	141.98	145.65	141.27	137.84	133.02	138.83	142.74	136.86	132.48

Series	Measurements	60W					72W				
		3000K	3500K	4000K	5000K	6500K	3000K	3500K	4000K	5000K	6500K
PNL2X4-98654L-5CCT-PRM (-EM)	Lumens	7,512	7,813	7,908	7,783	7,555	8,630	9,016	9,127	8,948	8,736
	Watts	58.4	57.7	56.9	58.6	59.2	70.1	68.4	67.4	69.5	71
	Efficacy	128.63	135.41	138.98	132.82	127.62	123.11	131.81	135.42	128.75	123.04

ELECTRICAL DATA

Series	CCT	Input Amps (A)														
		30W			40W			50W			60W			72W		
		120V	240V	277V	120V	240V	277V	120V	240V	277V	120V	240V	277V	120V	240V	277V
PNL2X4-98654L-5CCT-PRM (-EM)	3000K	0.24	0.12	0.10	0.32	0.16	0.14	0.40	0.20	0.17	0.49	0.24	0.21	0.58	0.29	0.25
	3500K	0.23	0.12	0.10	0.32	0.16	0.14	0.40	0.20	0.17	0.48	0.24	0.21	0.57	0.29	0.25
	4000K	0.23	0.12	0.10	0.32	0.16	0.14	0.39	0.20	0.17	0.47	0.24	0.21	0.56	0.28	0.24
	5000K	0.23	0.12	0.10	0.32	0.16	0.14	0.40	0.20	0.17	0.49	0.24	0.21	0.58	0.29	0.25
	6500K	0.24	0.12	0.10	0.32	0.16	0.14	0.41	0.20	0.18	0.49	0.25	0.21	0.59	0.30	0.26

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PHOTOMETRICS

PNL2X4-98654L-5CCT-PRM (-EM)

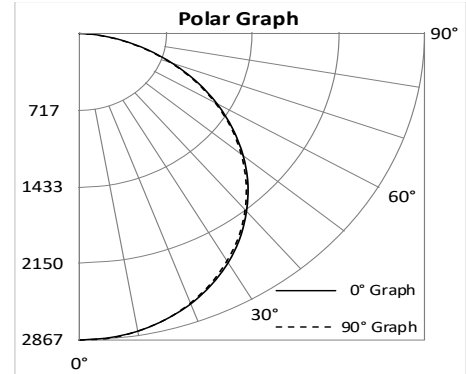
Luminaire Data

Description	High Lumen 2X4 Panel Lumen and Kelvin Select
Total Lumens	8,440
Input Wattage	68
Efficacy (lm/W)	123
Spacing Criterion (0-180°)	1.28
Spacing Criterion (90-270°)	1.28

Photometrics calculated
@3000k - highest lumen
setting

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20°	1,052	12.5%
0-30°	2,243	26.6%
0-40°	3,692	43.7%
20-50°	4,157	49.3%
40-70°	3,961	46.9%
0-60°	6,592	78.1%
0-80°	8,267	98.0%
0-90°	8,433	99.9%
90-180°	7	0.1%
0-180°	8,440	100.0%



COMPATIBLE DIMMERS AND CONTROLS

Manufacturer	Model Number	Dimmer Range	Load Switching Capacity
Best Lighting	DWS-010V-T	10%-100%	600W
Best Lighting	DWS-010V-D	10%-100%	600W
Leviton	IP710-LFZ	10%-100%	1200W
Lutron	DVSTV	10%-100%	450W

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MOUNTING MEANS - ORDER SEPARATELY

- Optional Surface Mounting Kit (SMKT-24) mounts below the ceilings.
- Optional flange mounting kits provide for recessed installation on plaster or other hard ceilings. Attached Flange Mount Kit (FLANGEKIT24-ET) to ceiling joists or other stationary structures, and the panel is mounted flush to the ceiling.
- Optional cable mounting kits provide additional security, as well as suspended mounting. Attach one end of the Cable Mount Kit (PNL-CM) to luminaire earthquake clips using spring clips, and attach the other end to stationary structures using the adjustable, locking ceiling attachment (see picture below right).

