

OVERVIEW

The PNL Series utilizes back lighting technology to enable ultra-thin and ultra-light fixtures with uniform lighting effect. The optional factory-installed Sigtex Emergency Lighting Control option ensures full emergency code compliance at the lowest possible cost.

PROJECT:

TYPE:

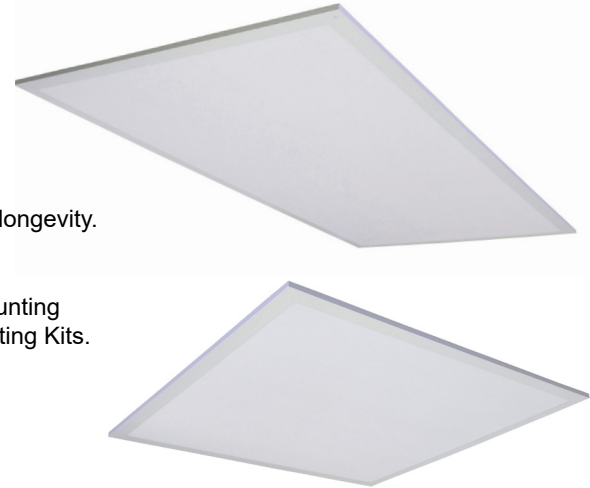
CATALOG #:

SPECIAL FEATURES

- **Emergency lighting from 1,024 Lm to 5,200 Lm with adjustable Emergency Lighting Control (ELC), powered from a Sigtex low-voltage central battery system. See Page 3 for details.**
- Available in 3500k (warm/neutral white), 4000k (neutral white) & 5000k (cool white) color temperatures*
- Long-life LEDs provide 144,000 hours of operation with at least 70% of initial lumen output (L_{70}). **
- Provides 4,259 to 4,449 luminaire lumens, and 118 to 123 lumens per watt*.
- Uniform illumination with no visible LED pixilation.
- Universal 120-277 AC voltage (50-60Hz) is standard.
- 0-10vdc dimming capability is standard.
- Power factor > 90.
- Total harmonic distortion < 20%.
- Color rendering index > 80.
- Aluminum frame and steel housing backplate.
- PMMA (polymethyl methacrylate) LED lenses for optimal light distribution, efficiency and longevity.
- Easy installation in new construction or retrofit.
- Standard earthquake clips provide secure installation in grid ceilings
- Standard mounting options include recessed mounting in grid ceilings, or suspended mounting using attached hanging brackets. For mounting in plaster or other hard ceiling, see Mounting Kits.

* Contact factory for other color temperatures and lumen packages.

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



MOUNTING OPTIONS

- Optional Surface Mount Kits (LEDSEMT-22) and Flange Mounting Kits (FLANGEKIT22-ET) provide for installation on plaster or other hard ceilings
- Optional Cable Mounting Kits (LEDPNL-CMK) provide additional security, as well as suspended mounting

WARRANTY & LISTINGS

- cULus listed for wet locations in ambient temperatures from -40°C to 40°C (-40°F to 104°F).
- IP65 rated for ingress protection.
- Complies with FCC Part 15, class A (3L & 4L).
- Complies with FCC Part 15, class B (7L, 8L, & 11L).
- Complies with IEC61000-4-5, surge immunity protection (2kV).
- Complies with RoHS (Restriction on Hazardous Substances) requirements.
- View Sigtex [Warranty](#) for further details



FIXTURE ORDERING INFORMATION *EXAMPLE: PNL-1x4-40L-MV-35K-ELC8P1*

PNL

SERIES	SIZE	LUMENS ²	VOLTAGE	COLOR TEMPERATURE	OPTIONS ¹
PNL	1x4 1"x4" 2x2 2"x2" 2x4 2"x4" 2x4 2"x4"	40L 4000Lm 50L 5000Lm 70L 7000Lm	MV 120-277VAC	35K 3500K 40K 4000K 50K 5000K	ELCPXX Emergency Lighting Control EMXX/ECXX Emergency Driver LEDSEMTXX Surface Mount Kit FLANGEKITXXX Flange Mount Kit CMYK Cable Mount Kit **"XX"= VARIES WITH FIXTURE SIZE AND POWER. SEE OPTIONS TABLE FOR COMPLETE PART NUMBER.

ELECTRICAL DATA

MODEL	COLOR TEMP.	CRI ¹	LUMINAIRE LUMENS	LUMINAIRE WATTS	LUMENS/ WATT	INPUT VOLTAGE ²	INPUT CURRENT (A)			POWER FACTOR	THD ³	144,000 L ₇₀ HOURS ⁴
							120V	240V	277V			
PNL-1x3-40L-35K	3500K	>80	4,124	32	128	120-277	0.27	0.13	0.12	> 90%	< 20%	144,000
PNL-1x3-40L-4K	4000K	>80	4,147	32	129	120-277	0.27	0.13	0.12	> 90%	< 20%	144,000
PNL-1x3-40L-5K	5000K	>80	4,169	32	129	120-277	0.27	0.13	0.12	> 90%	< 20%	144,000
PNL-2x2-40L-35K	3500K	>80	4,259	36	118	120-277	0.30	0.15	0.13	> 90%	< 20%	144,000
PNL-2x2-40L-4K	4000K	>80	4,354	36	121	120-277	0.30	0.15	0.13	> 90%	< 20%	144,000
PNL-2x2-40L-5K	5000K	>80	4,449	36	123	120-277	0.30	0.15	0.13	> 90%	< 20%	144,000
PNL-2x4-50L-35K	3500K	>80	5,240	44	120	120-277	0.37	0.18	0.16	> 90%	< 20%	144,000
PNL-2x4-50L-4K	4000K	>80	5,282	44	121	120-277	0.37	0.18	0.16	> 90%	< 20%	144,000
PNL-2x4-50L-5K	5000K	>80	5,323	44	122	120-277	0.37	0.18	0.16	> 90%	< 20%	144,000

¹ Color rendering index.

² All 50-60Hz.

³ Total harmonic distortion.

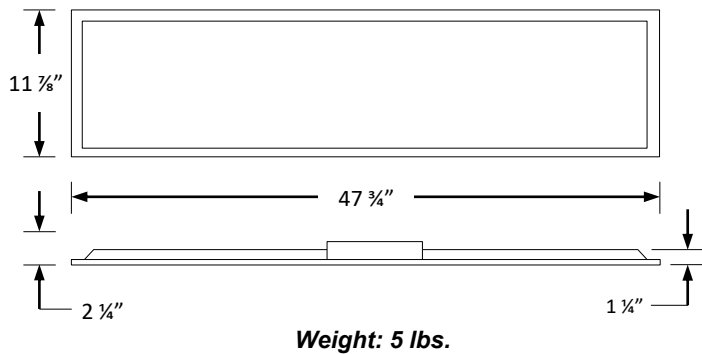
⁴ L₇₀ refers to the number of hours at which lumen output declines to 70% of the initial level. L₇₀ hours are IES TM-21-11 calculated hours.

PHOTOMETRIC DATA

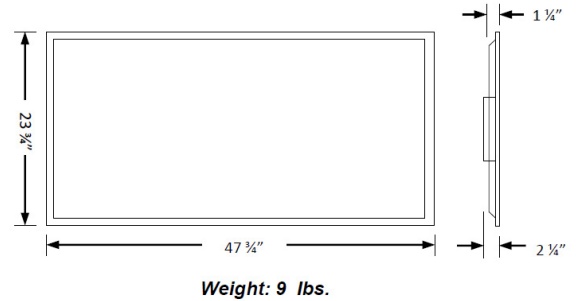
- [IES Files and Zonal Lumen Summaries and Polar Diagrams](#)

DIMENSIONS

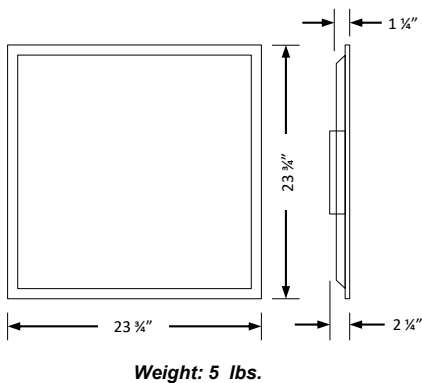
1x4



2x4



2x2



OPTIONS

EMERGENCY LIGHTING CONTROLS (ELC) *For use with Central Battery Systems (purchased separately)*

MODEL	OPTION CODE				
	ELC8P1	ELC10P1	ELC14P1	ELC20P4	ELC40P4
	EM Lumens ¹	EM Lumens	EM Lumens ²	EM Lumens	EM Lumens ²
PNL1X4	1024	1280	1800	-	-
PNL2X2	1024	1280	1800	-	-
PNL2X4-50L	1024	1280	1800	2600	5200
PNL2X4-70L	1024	1280	1800	2600	5200

¹ Minimum ² Maximum

Note: Lumen output is factory adjustable. Contact factory for specific values.

Learn more about ELC's on our website, www.signtexinc.com.

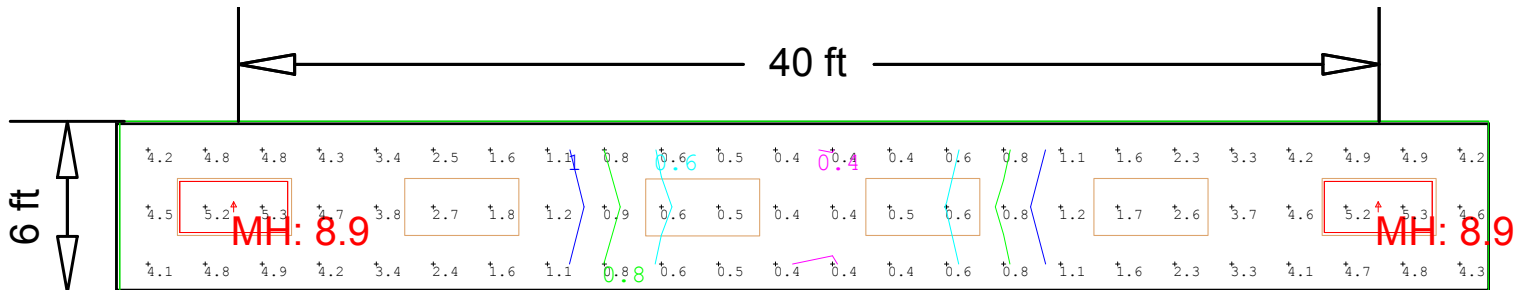
Emergency Lighting with ELC

The following Point-to-Point sample shows typical performance in the medium power range for both fixture and ELC, based on IES files and using a light loss factor (LLF) calculated as follows:

LIGHT LOSS FACTOR = ELC Emergency Power (Watts)*/ Fixture Normal Power (Watts)

LLF = $\frac{\text{ELC Emergency Power* (Watts)}}{\text{Fixture Normal Power (Watts)}}$ *Power value and ELC Type are given in the OPTION CODE above.
Example: ELC10P1 = 10 Watts Emergency Power for 90 mins: Package Type P1

The calculation is based on illumination values given in NFPA 101 and NEC 70, which stipulate an initial minimum average of 1 Fc at floor level, a minimum of 0.1 Fc at any point, and a uniformity ratio no higher than 40:1. NOTE, values are allowed to decrease 40% after 90 minutes, but ELC is a constant power device so emergency illumination does NOT decrease.



MODEL	ELC OPTION #	ELC POWER	EMERGENCY LUMENS	LLF	MOUNT HEIGHT	AVG. LUMENS ON PATHWAY	MAX/MIN UNIFORMITY
PNL2X4-50L	ELC8P1	8 Watts	1077	0.20	9 FT.	2.47 Fc	13.25

EMERGENCY DRIVERS - INTEGRAL

MODEL	OPTION CODE ¹²				
	EM8/EC8	EM12/EC12	EM16/EC16	EM20/EC20	EM24/EC24
	LUMENS	LUMENS	LUMENS	LUMENS	LUMENS
PNL2X2-40L	590	920	1263	1617	2006
PNL2X4-50L	600	936	1284	1644	2040
PNL1X4-40L	640	998	1370	1754	2176
PNL2X2-40L	645	1006	1380	1767	2193
PNL2X4-50L	655	1022	1402	1795	2227
PNL2X4-70L	655	1022	1402	1795	2227

¹ Emergency drivers available for 120/277VAC only. ² EC Drivers are California Emergency Commission (CEC) Listed. ³ Remote mount only.

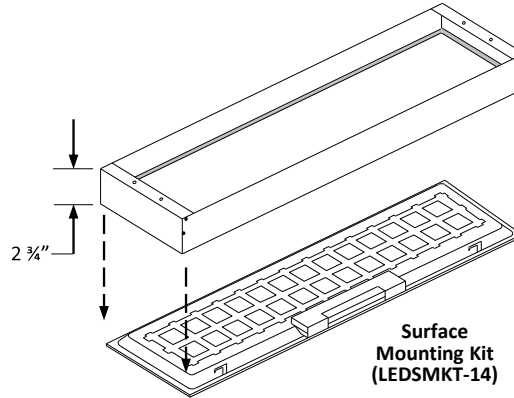
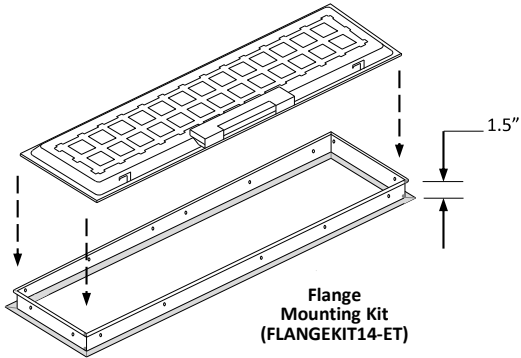
COMPATIBLE DIMMERS

MANUFACTURE	MODEL NO.	DIMMING RANGE	LOAD SWITCHING CAPACITY
Lutron	DVSTV	10% - 100%	450W
Leviton	IP710-LFZ	10% - 100%	120W
General Protecht	DMD-LED3-102	10% - 100%	600W

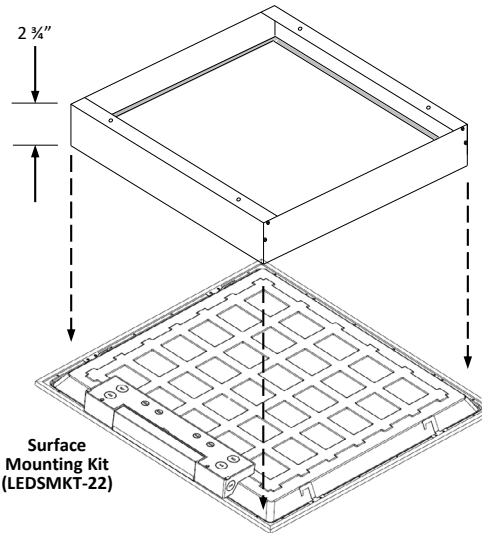
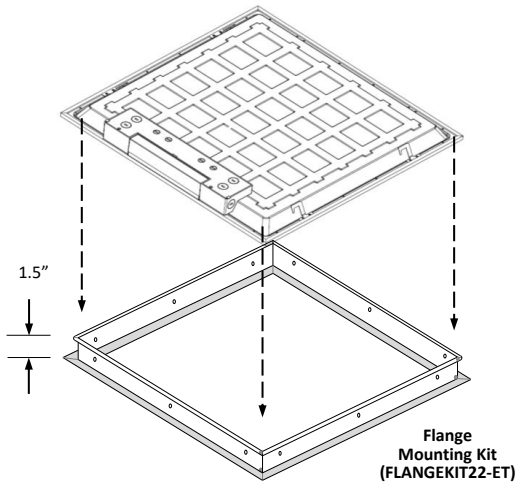
DIMENSIONS & MOUNTING

- Optional surface mounting kits allow direct mount below any flat surface.
- Optional flange mounting kits provide for recessed installation on plaster or other hard ceilings. Attach Flange Mount Kit 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 to luminaire earthquake clips using spring clips, and attach the other end to stationary structures using the adjustable, locking ceiling attachment.

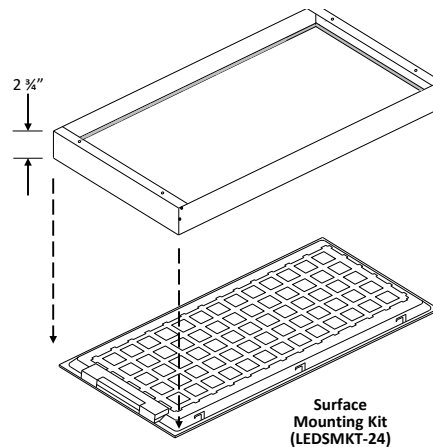
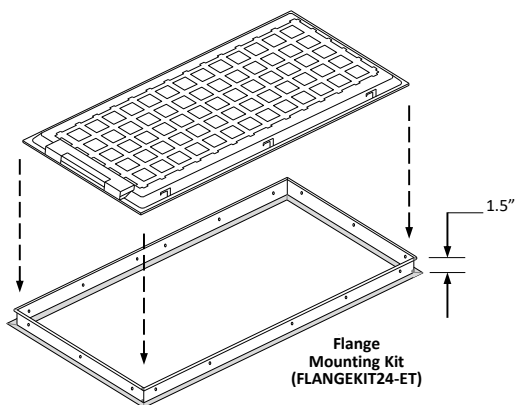
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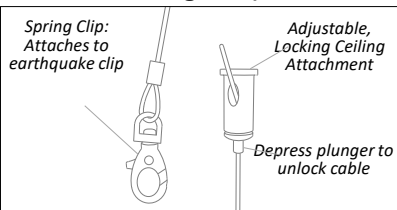
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2x4



Cable Mounting Kit (LEDPNL-CMK)



Cable Mount Kit:

- Spring Clip
- Adjustable, locking ceiling attachment