# NL2X2 2x2 Back-Lit LED Panel



Project:	
Туре:	
Catalog #:	

#### STANDARD



### FEATURES

- 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<sub>70</sub>).\*
- 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.

<sup>\*\*</sup>L<sub>70</sub> hours are IES TM-21-11 calculated hours.

Example: PNL2X2-40L-35K-EM20

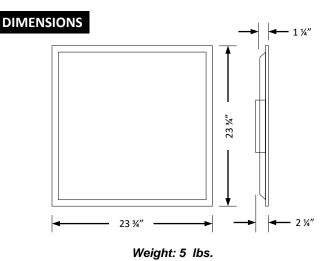
# ORDERING INFORMATION

## **WARRANTY & LISTINGS**

- cULus for damp locations and insulated ceilings (Type IC-rated). Suitable for ambient temperatures from -20°C to 40°C (-4°F to 104°F).
- UL listed for maximum of 4, 12 AWG through branch circuit conductor.
- DLC approved.
- Flicker-free per IEEE1789-2015 (no observable adverse effects of flicker at 100% light output level).
- Complies with RoHS (Restriction on Hazardous Substances) requirements.
- Complies with FCC Part 15, class B.
- Complies with EN61000-4-5, surge immunity protection (1kV).
- 5-year warranty of all electronics and housing.

#### **MOUNTING KITS**

- Optional Surface Mount Kits (LEDSMKT-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.



Series		ominal Imens		Color perature		Emergency Driver 12
PNL2X2	40L	4,000 lm	35K	3500K	EM8	800 lumens
	I	I	4K	4000k	EM12 EM16	1,200 lumens 1,600 lumens
			5K	5000k	EM20 EM24	2,000 lumens 2,400 lumens 800 lumens
					EC8 EC12 EC16	1,200 lumens 1,600 lumens
					EC10 EC20 EC24	2,000 lumens 2,400 lumens
					Blank	No emergency driver

<sup>1</sup> See list of emergency drivers (page 3).
<sup>2</sup> EC emergency drivers are California Energy Commission (CEC) listed.

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### **ELECTRICAL DATA**

Model	Color	CRI <sup>1</sup>	Luminaire	Luminaire	Lumens	Input					Power	THD <sup>3</sup>	L <sub>70</sub>
Model	Temperature	CKI	Lumens	Watts	Per Watt	Voltage <sup>2</sup>	age <sup>2</sup> 120V		277V	Factor	110	Hours <sup>4</sup>	
PNL2X2-40L-35K	3500К	> 80	4,259	36	118	120-277	0.30	0.15	0.13	> 90%	< 20%	144,000	
PNL2X2-40L-4K	4000K	> 80	4,354	36	121	120-277	0.30	0.15	0.13	> 90%	< 20%	144,000	
PNL2X2-40L-5K	5000K	> 80	4,449	36	123	120-277	0.30	0.15	0.13	> 90%	< 20%	144,000	

<sup>1</sup>Color rendering index.

<sup>2</sup> All 50-60Hz.

<sup>3</sup> Total harmonic distortion.

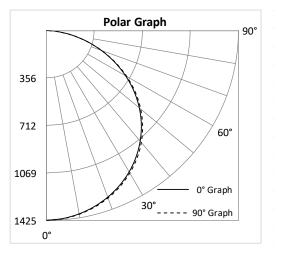
<sup>4</sup> L<sub>70</sub> refers to the number of hours at which lumen output declines to 70% of the initial level. L<sub>70</sub> hours are IES TM-21-11 calculated hours.

#### PHOTOMETRIC DATA

#### PNL2X2-40L-5K

Luminaire Data	
Description	2x2 Back Lit LED Panel - 40L 5K
Total Lumens	4,449
Input Wattage	36
Efficacy (Im/W)	123
Spacing Criterion (0-180°)	1.30
Spacing Criterion (90-270°)	1.30

Zonal Lumen Summary							
Zone	Lumens	%Fixt					
0-20°	525	11.8%					
0-30°	1,126	25.3%					
0-40°	1,870	42.0%					
20-50°	2,142	48.1%					
40-70°	2,122	47.7%					
0-60°	3,409	76.6%					
0-80°	4,341	97.6%					
0-90°	4,445	99.9%					
90-180°	4	0.1%					
0-180°	4,449	100.0%					



# **PNL2X2** 2x2 Back-Lit LED Panel



# COMPATIBLE EMERGENCY DRIVERS

Emergency Driver Part Number	EM8 / EC8		EM12 / EC12		EM16 / EC16		EM20 / EC20		EM24 / EC24		
Model	Watts	EM Lumens	Watts	EM Lumens	Watts	EM Lumens	Watts	EM Lumens	Watts	EM Lumens	Runtime
PNL2X2-40L-xK	5.0	590	7.8	920	10.7	1263	13.7	1617	17.0	2006	
PNL2X4-50L-xK	5.0	600	7.8	936	10.7	1284	13.7	1644	17.0	2040	
PNL1X4-40L-xK-PRM	5.0	640	7.8	998	10.7	1370	13.7	1754	17.0	2176	
PNL2X2-40L-xK-PRM	5.0	645	7.8	1006	10.7	1380	13.7	1767	17.0	2193	90 MINS.
PNL2X4-50L-xK-PRM	5.0	655	7.8	1022	10.7	1402	13.7	1795	17.0	2227	
PNL2X4-70L-xK-PRM	5.0	655	7.8	1022	10.7	1402	13.7	1795	17.0	2227	

## **Compatible Dimmers**

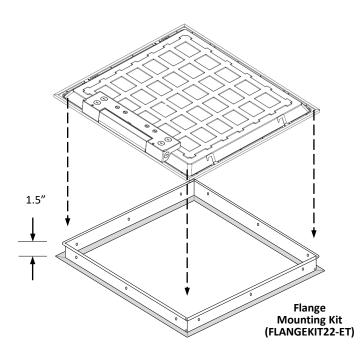
Manufacture	Model Number	Dimming Range	Load Switching Capacity
Lutron	DVSTV	10%-100%	450W
Leviton	IP710-LFZ	10%-100%	1200W
General Protecht	DMD-LED3-102	10%-100%	600W

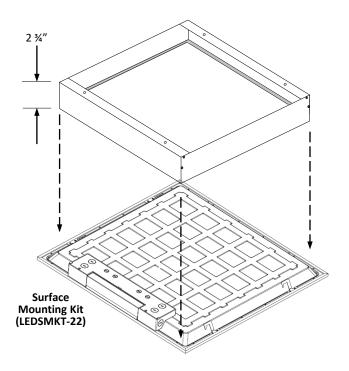
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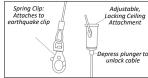
### **MOUNTING MEANS – ORDER SEPERATATLY**

- Optional surface mounting kits (LEDSMKT-22) mounts below the ceiling.
- Optional flange mounting kits provide for recessed installation on plaster or other hard ceilings. Attach Flange Mount Kit (FLANGEKIT22-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 (LEDPNL-CMK) 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).





Cable Mounting Kit (LEDPNL-CMK)



Cable Mount Kit:

- Spring Clip
- Adjustable, locking ceiling attachment