Project:	
Type:	
Catalog #:	

STANDARD

UL CERTIFIED · **DLC LISTED PREMIUM** · **FC** · **DAMP** · **IC RATED FOR INSULATED CEILINGS** · **1kV Surge Protection**

FEATURES

- Field selectable 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}), and 44,000 hours with at least 90% of initial lumen output (L_{90}).**

- Selectable lumen outputs range from 2,700 to 4,000 nominal lumens.*

- Uniform illumination with no visible LED pixilation.

- Universal 120-277 AC voltage (50-60Hz) is standard.

- 0-10vdc dimming drivers are 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.

- Optional emergency drivers are available.

- 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.
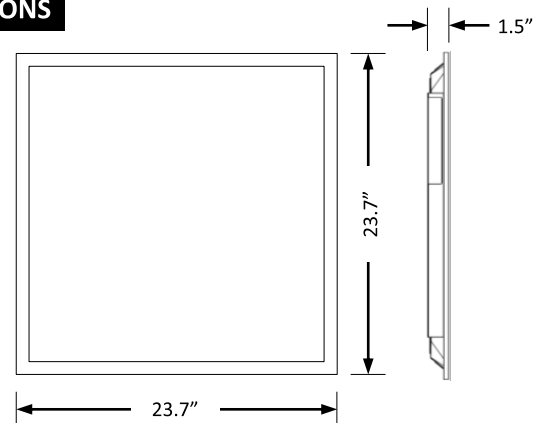**L_{70} hours are IES TM-21-11 calculated hours.

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).

- DLC premium approved.

- Flicker-free per IEEE1789-2015 (no observable adverse effects of flicker at 100% light output level).

- Complies with FCC Part 15, class B.

- Surge immunity protection = 1kV.

- 5-year warranty of all electronics and housing.

MOUNTING KITS

- Optional Surface Mount Kits (SMKT-22) and Flange Mounting Kits (FLANGEKIT22-ET) provide for installation on plaster or other hard ceilings.

- Optional Cable Mounting Kits (PNL-CMK) provide additional security, as well as suspended mounting.

DIMENSIONS

1.5"
23.7"
23.7"

Weight: 4 lbs.

ORDERING INFORMATION

Example: PNL-LED-2X2-CS

Series	Maximum Lumens	Lumen Output/ Color Temperature			DLC		Emergency Driver [1]		Accessories	
PNL-LED-2X2-CS	40L	LKFS*	**Selectable Lumens**	**Selectable CCT**	PRM	PREMIUM	EM5	650 lumens	DWS-010-T	0-10v dimmer, toggle switch
							EM10	1,300 lumens		
			2,700 lm	3500K			EM13	1,690 lumens	DWS-010-D	0-10v dimmer, decora switch
			3,600 lm	4000K			Blank	No emergency driver		
		*Field selectable	4,000 lm	5000K					IP710-DLZ	0-10v dimmer, button switch

ELECTRICAL DATA

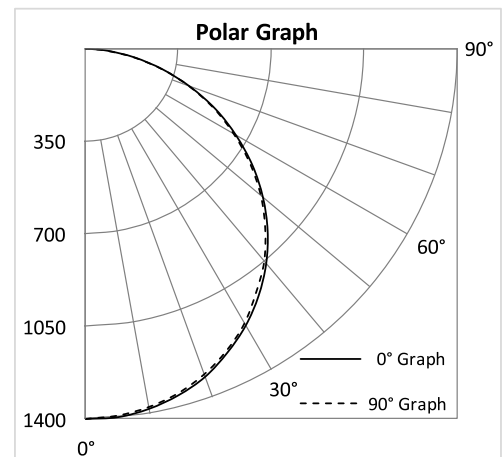| Series	Measurements	Low Lumens			Mid Lumens			High Lumens		
		3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
PNL-LED-2X2-CS	Lumens	2733	2802	2810	3632	3810	3743	4072	4290	4179
	Watts	20	19	20	28	27	28	32	32	32
	Efficacy	136	145	141	131	142	136	126	135	130
	Input Current (A)	120V = 0.17A	120V = 0.16A	120V = 0.17A	120V = 0.23A	120V = 0.23A	120V = 0.23A	120V = 0.27A	120V = 0.27A	120V = 0.27A
		240V = 0.08A	240V = 0.08A	240V = 0.08A	240V = 0.12A	240V = 0.11A	240V = 0.12A	240V = 0.13A	240V = 0.13A	240V = 0.13A
		277V = 0.07A	277V = 0.07A	277V = 0.07A	277V = 0.10A	277V = 0.10A	277V = 0.10A	277V = 0.12A	277V = 0.12A	277V = 0.12A

PHOTOMETRIC DATA

PNL-LED-2X2-CS
Luminaire Data

Description	Premium Back Lit Panel 2X2 40L 5K - LKFS
Total Lumens	4,179
Input Wattage	32
Efficacy (lm/W)	130
Spacing Criterion (0-180°)	1.3
Spacing Criterion (90-270°)	1.28

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20°	514	12.3%
0-30°	1,098	26.3%
0-40°	1,810	43.3%
20-50°	2,043	48.9%
40-70°	1,962	46.9%
0-60°	3,240	77.5%
0-80°	4,087	97.8%
0-90°	4,175	99.9%
90-180°	4	0.1%
0-180°	4,179	100.0%

Polar Graph

90°

350

700 — 60°

1050

1400

0°

—— 0° Graph
- - - - 90° Graph

30°

COMPATIBLE EMERGENCY DRIVERS*

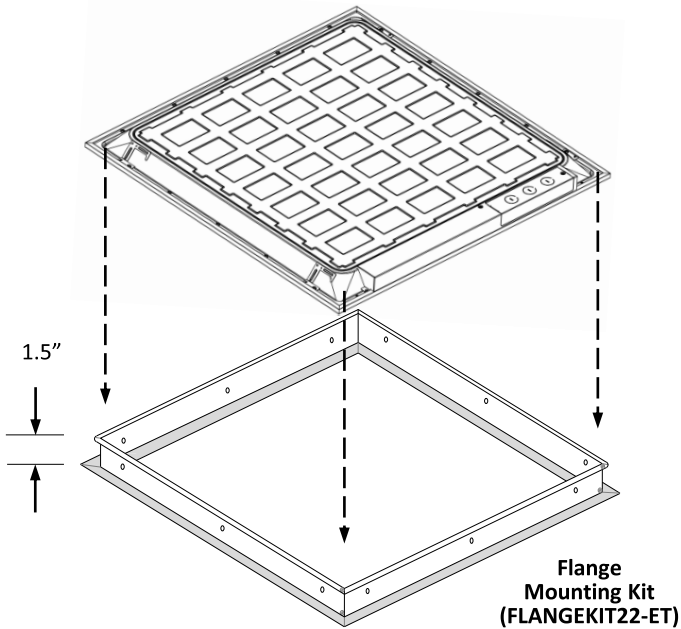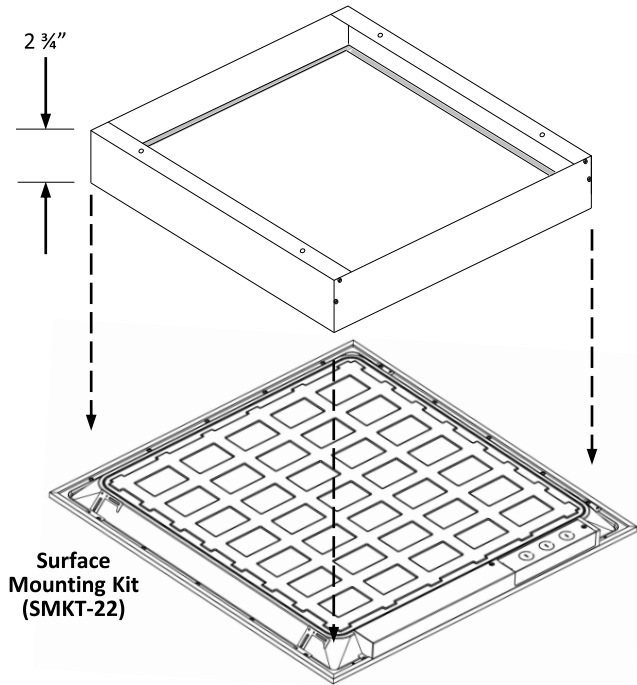| Emergency Driver Part Number	EM5		EM10		EM13		Runtime
Model	Watts	EM Lumens	Watts	EM Lumens	Watts	EM Lumens	
PNL-LED-2X2-CS	5	650	10	1300	13	1690	90 MINS.

* Suitable for ambient temperatures above 0°C (32°F).
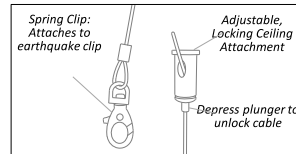
COMPATIBLE DIMMERS & CONTROLS

Manufacturer	Model Number	Dimming 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

MOUNTING MEANS – ORDER SEPARATELY

- *Optional surface mounting kits (SMKT-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 (PNL-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).*

2 ¾"

**Surface
Mounting Kit
(SMKT-22)**

1.5"

**Flange
Mounting Kit
(FLANGEKIT22-ET)**

**Cable
Mounting Kit
(PNL-CMK)**

Spring Clip:
Attaches to
earthquake clip

Adjustable,
Locking Ceiling
Attachment

Depress plunger to
unlock cable

Cable Mount Kit:
• *Spring Clip*
• *Adjustable, locking ceiling attachment*