

PROJECT:
TYPE:
CATALOG #:

High Lumen Back-Lit LED Flat Panel Light Lumen and Kelvin Field Selectable

FEATURES

- Emergency lighting with adjustable Emergency Lighting Control (ELC), powered from a Signtex low-voltage central battery system.
- Available with factory-installed UL Listed Emergency Lighting Control (ELC), for connection to a Signtex central battery, DC emergency power system.
- 5-CCT selectable 3000k (warm white), 3500k 4000k (neutral white), 5000k (cool white) and 6500k (daylight) color temperature*.
- 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).**
- Selectable lumen outputs range from 4000 to 9000
- Universal 120-277 AC voltage (50-60Hz) is standard.
- 0-10vdc dimming drivers are standard.
- Power factor > 0.90 , 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.

CODES

- 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

WARRANTY

- 5 year total customer satisfaction warranty.
For details see Signtex product catalog technical data section.

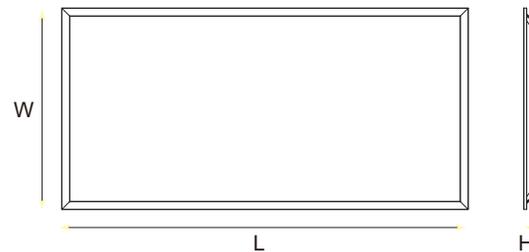
* Contact factory for other color temperatures and lumen packages.

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

emLITE
Series PHL
REV #: PHL.11.25.03



DIMENSIONS



Model #	L (in)	W (in)	H (in)	Weight (lbs)
PHL2X4-90L-SLSK	47.7	23.7	1.42	6.6
PHL2X4-90L-SLSK-EM	47.7	23.7	1.42	7.85

STANDARD



OPTIONS



FIXTURE ORDERING INFORMATION EXAMPLE: PHL2X4SLSKMOV-EM

SERIES	SIZE	SELECTABLE ¹		VOLTAGE	OPTIONS
		NOMINAL LUMENS	COLOR TEMP		
PHL	2x4 90L	SL	SK	MV 120-277VAC	ELCXXP6 ² Emergency Lighting Control **XX*= Varies with fixture size and power. See Options table for complete part number EM Emergency driver DWS Dimmer Switch see option table on page 2
		4,000lm 5,000lm 6,000lm 8,000lm 9,000lm	3000K 3500K 4000K 5000K 6500K		

¹ Nominal values, See Electrical data for specific values.

² See ELC Power details table, Page2,

EMERGENCY LIGHTING CONTROLS (ELC)

For use with Signtex Lighting DC Central Battery System

ELC5P6		ELC15P6	
EPR ¹ WATTS (MIN.)	EM LUMENS ²	EPR WATTS (MAX.) ³	EM LUMENS
5	650	15	1950

¹ EMERGENCY POWER RATING (FACTORY ADJUSTABLE)

² NOMINAL OUTPUT AT 5000K

³ MAX. EPR DEPENDS ON FIXTURE DRIVER MAX. OPERATING VOLTAGE

NOTE:

Emergency lumens are calculated based on efficacy in the MID-LUMEN range (5000K) from the Electrical Data Table. The value is adjustable through the EPR range shown above. For maximum efficiency, EPR should be set at the minimum level for compliance with NFPA Life Safety Code, based on photometric data for the fixture when installed.

To calculate lumen output within the EPR range given:

$$\text{Lumens} = \text{EPR (watts)} \times \text{Luminaire Efficacy (Lm/watt)}$$

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.
- PHL-CM = Cable Mount Kit for Back-lit Panel.
- PHL-JBEXT = Junction Box Extender for 2X2 Back-lit Panel.

Dimmer Wall Switch Option = DWS:

- DWS-010-T 0-10v dimmer, toggle switch
- DWS-010-D 0-10v dimmer, decora switch
- IP710-DLZ 0-10v dimmer, button switch

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

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
PHL2X4-90L-(-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

LUMEN TABLES

Series	Measurements	30W					40W					50W				
		3000K	3500K	4000K	5000K	6500K	3000K	3500K	4000K	5000K	6500K	3000K	3500K	4000K	5000K	6500K
PHL2X4-90L (-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
PHL2X4-90L (-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

PHOTOMETRIC DATA

PHL2X4-90L(-EM)

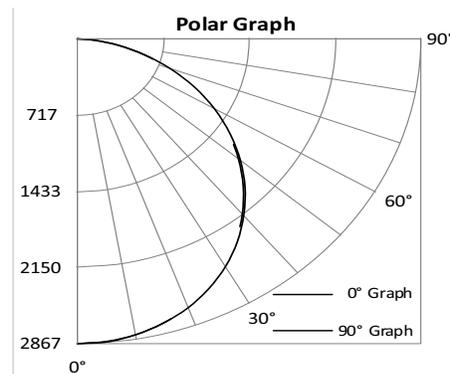
Luminaire Data

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

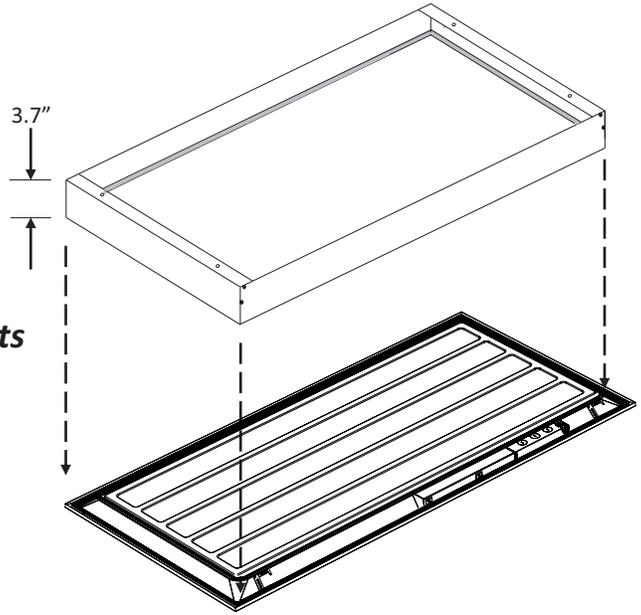
Zonal Lumen Summary

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%

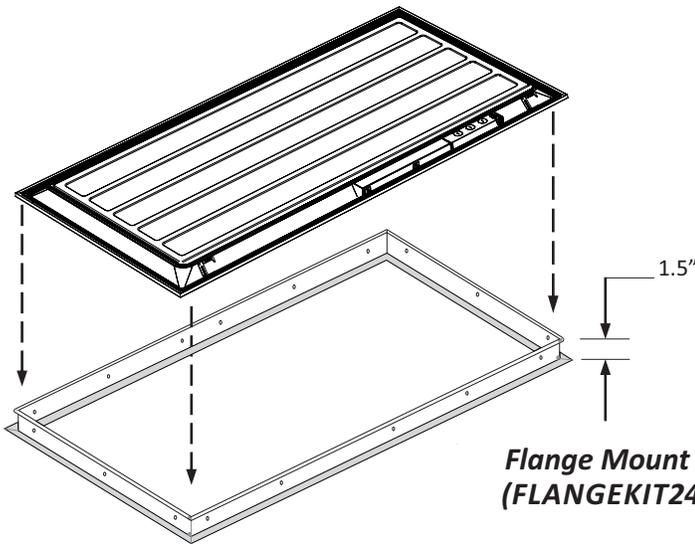


MOUNTING KITS (OPTION)

- 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 (PHL-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).



Surface Mounting Kits (SMKT-24)



Flange Mount Kit (FLANGEKIT24-ET)

Spring Clip:
 Attaches to earthquake clip

Cable Mount Kit (PHL-CM)



Adjustable,
 Locking Ceiling Attachment

Depress plunger to unlock cable



DISTRIBUTOR

Contact Signtex for layout assistance.
 Code compliant emergency lighting layouts provided!
 Specifications and dimensions subject to change without notice.