

# PL - LED Panel

## Product Specification Sheet

### Product Overview

The LED Panel is a high-efficiency solution designed to upgrade outdated fluorescent troffers into modern LED panels. Featuring an ultra-slim design, easy installation, and compatibility with existing fixtures, it provides enhanced brightness, uniform illumination, and significant energy savings.

Available in multiple wattages and color temperatures, the kit ensures a seamless transition to LED technology, reducing maintenance costs while improving visual comfort. Ideal for offices, schools, healthcare facilities, and commercial spaces, the LED Panel meets DLC and UL certification standards for superior performance and reliability.

### Key Features

- Aluminum frame with frosted polystyrene lens.
- High Brightness: Delivers up to 150 LPW for powerful, efficient lighting.
- Versatile Voltage: Compatible with AC120-277V or AC120-347V, providing flexibility for various applications.
- Durable Housing: Constructed with rugged galvanized rolled metal for improved cooling, light quality, and a longer lifespan.
- Dimmer Ready: 0-10V dimming capability for customizable light levels to suit your needs.
- Auxiliary Dimming: Includes a 12Vdc auxiliary dimming feature for added flexibility.
- Smart Control: Easy-to-install Bi-Level sensor with plug-and-play capability, allowing you to optimize energy use with automated lighting control.
- Flicker: Produces no greater than 30 percent flicker at 200 Hz or below when paired with control devices per CEC Title 24 JA10



### Technical Specification

#### ▪ Models and Wattage Options

- The LED Panel lighting consists of three performance packages for 1x4, 2x2 and 2x4 applications. Each offers multiple wattage options to suit different lighting needs. Each model provides flexibility in power consumption, allowing users to optimize energy usage while maintaining high performance.
- SE-PL-14-P0: 2250/2700/3000/4200 Lumens
- SE-PL-22-P1: 2250/2700/3750/4500 Lumens
- SE-PL-24-P2: 2500/3000/4000/5000 Lumens
- SE-PL-24-P3: 6000/7000/8000/10000 Lumens

#### ▪ High Efficiency and Performance

- Efficacy: Up to 150 lumens per watt (LPW) across all models, ensuring optimal energy efficiency.
- Correlated Color Temperature (CCT) Selectable: Available in 2700K, 3000K, 3500K, 4000K, and 5000K, providing different lighting tones suitable for various applications.
- Color Rendering Index (CRI): Ra 80, ensuring clear and accurate color representation.

#### ▪ Electrical and Operational Features

- Input Voltage: AC 120-277V or 120-347V
- Power Factor: >0.9
- Dimming Capability: 0-10V dimmable for adjustable brightness and energy savings.
- Driver Efficacy: >94%; Ensures stable power delivery with minimal flickering.

#### ▪ Durability and Environmental Adaptability

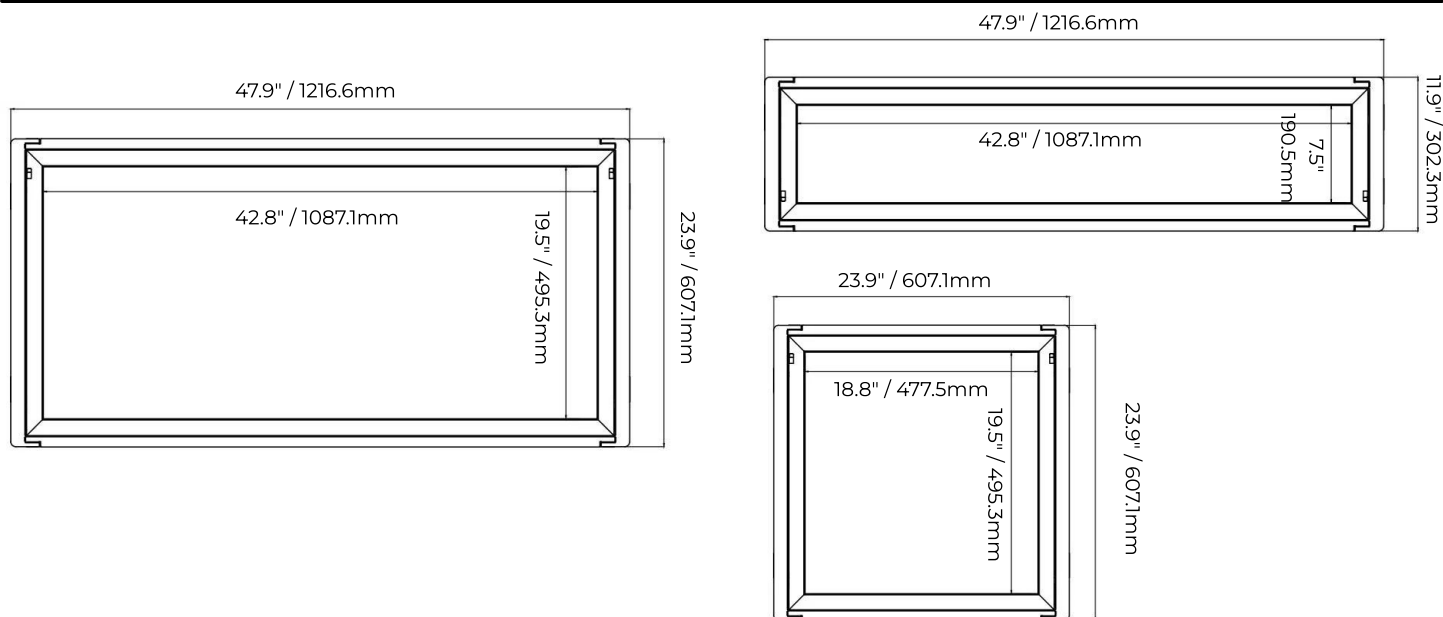
- Life Span: L70 over 100,000 hours, ensuring long-lasting performance with minimal maintenance.
- Working Temperature: Operates reliably in extreme temperatures ranging from -40°F to 113°F.
- Storage Temperature: Can be stored safely between -40°F and 176°F.
- Rated for damp locations, making it suitable for environments with moderate moisture exposure.

#### ▪ Warranty

- 5-year limited warranty, providing assurance of product reliability and support.

## Dimension

## LED Panel

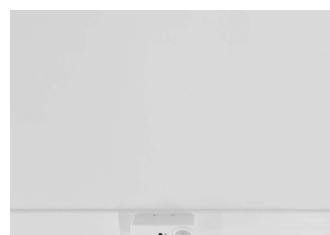


## Switch&Sensor

CCT Selectable  
Switch



Power Selectable  
Switch



Occupancy & Daylight Harvesting Sensor  
with mounting base  
Wireless Bluetooth Optional\*

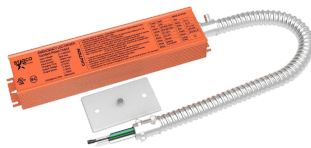
## Order Information

## LED Panel

Example: SE-PL-24-P2-CS-U-HE

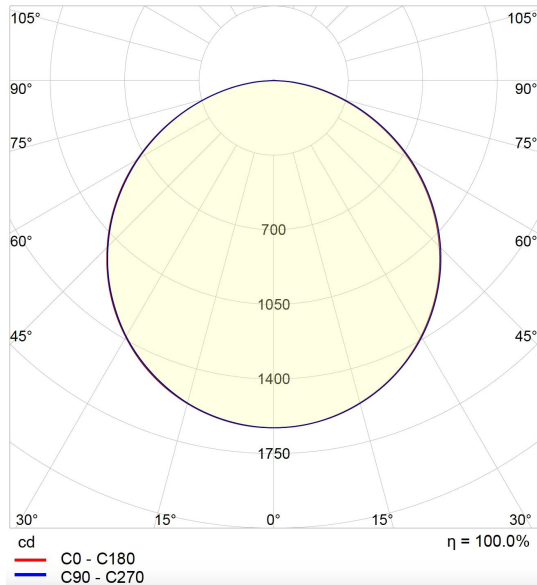
SE	PL					
Series	Type	Size	Performance Package	Color Temperature	Voltage	Efficacy
SE=Starconomy	PL=Panel	14=1x4	P0=15/18/20/28W	CS=2700/3000 /3500/4000/5000K	U=120-277V H=120-347V	HE=High Efficacy 150lm/w
		22=2x2	P1=15/18/25/30W			
		24=2x4	P2=17/20/26/34W P3=38/45/51/67W			
Options						
Blank=No Sensor M=Occ & Daylight Sensor S=Bluetooth Occ & Daylight Sensor						

## Accessories

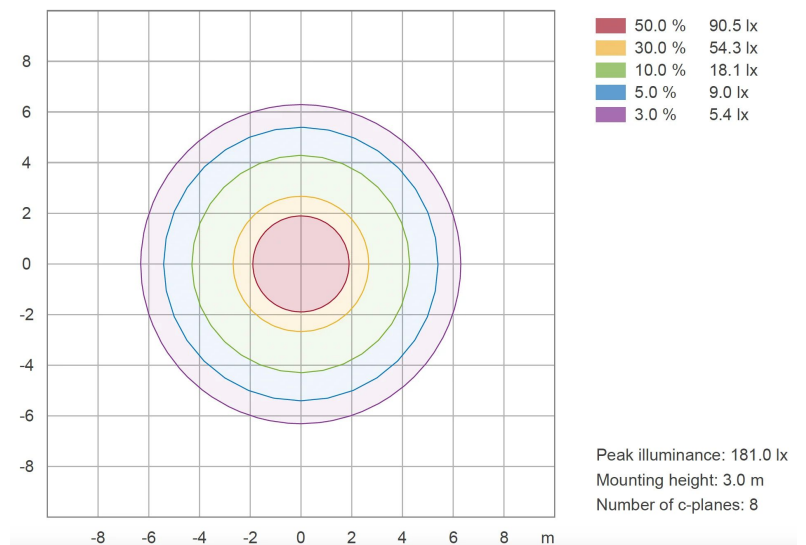
EMD-10 EMD-20 EMD-30		<b>10W Emergency LED Battery Backup</b> <b>20W Emergency LED Battery Backup</b> <b>30W Emergency LED Battery Backup</b>
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SE-PL-P1(30W)

Polar Light Distribution

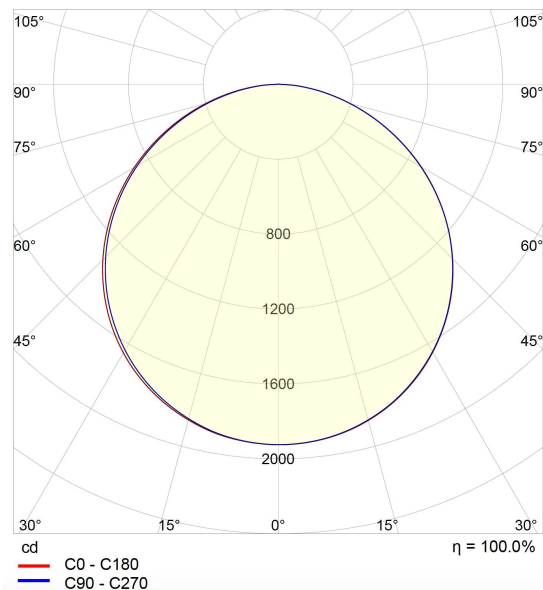


Iso-illuminance Diagram

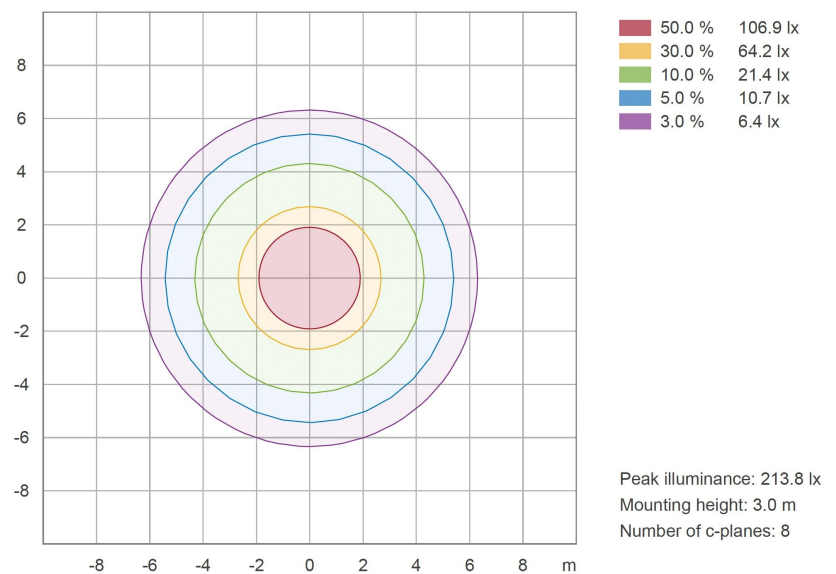


SE-PL-P2(34W)

Polar Light Distribution



Iso-illuminance Diagram



## Performance Table

## LED Panel

Performance Package	Wattage	CCT	Lumen Output	Efficacy
P0 (1X4)	15	2700K	2070	138
		3000K	2100	140
		3500K	2130	142
		4000K	2250	150
		5000K	2250	150
	18	2700K	2484	138
		3000K	2520	140
		3500K	2556	142
		4000K	2700	150
		5000K	2700	150
	20	2700K	2760	138
		3000K	2800	140
		3500K	2840	142
		4000K	3000	150
		5000K	3000	150
	28	2700K	3864	138
		3000K	3920	140
		3500K	3976	142
		4000K	4200	150
		5000K	4200	150
P1 (2X2)	15	2700K	2070	138
		3000K	2100	140
		3500K	2130	142
		4000K	2250	150
		5000K	2250	150
	18	2700K	2484	138
		3000K	2520	140
		3500K	2556	142
		4000K	2700	150
		5000K	2700	150
	25	2700K	3450	138
		3000K	3500	140
		3500K	3550	142
		4000K	3750	150
		5000K	3750	150
	30	2700K	4140	138
		3000K	4200	140
		3500K	4260	142
		4000K	4500	150
		5000K	4500	150

## Performance Table

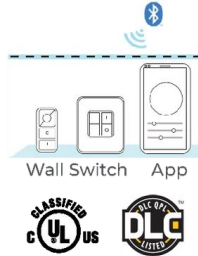
## LED Panel

Performance Package	Wattage	CCT	Lumen Output	Efficacy
P2 (2X4)	17	2700K	2465	145
		3000K	2516	148
		3500K	2550	150
		4000K	2635	155
		5000K	2635	155
	20	2700K	2840	142
		3000K	2920	146
		3500K	2980	149
		4000K	3100	155
		5000K	3100	155
	26	2700K	3692	142
		3000K	3796	146
		3500K	3848	148
		4000K	4030	155
		5000K	4030	155
	34	2700K	4760	140
		3000K	4964	146
		3500K	5100	150
		4000K	5202	153
		5000K	5236	154
P3 (2X4)	38	2700K	5244	138
		3000K	5320	140
		3500K	5396	142
		4000K	5700	150
		5000K	5700	150
	45	2700K	6210	138
		3000K	6300	140
		3500K	6390	142
		4000K	6750	150
		5000K	6750	150
	51	2700K	7038	138
		3000K	7140	140
		3500K	7242	142
		4000K	7650	150
		5000K	7650	150
	67	2700K	9246	138
		3000K	9380	140
		3500K	9514	142
		4000K	10050	150
		5000K	10050	150

## Wireless Control

## LED Panel

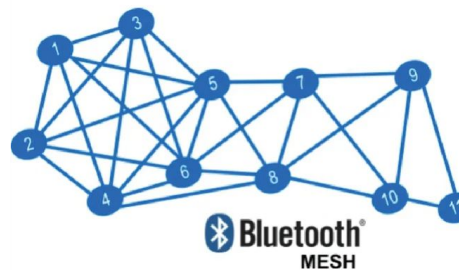
### Bluetooth Mesh Wireless Motion&Daylight Sensor



#### Features

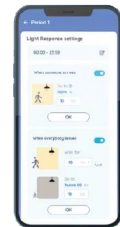
- 2 channels 0-10V
- 12-24VDC powered
- PIR motion sensing
- Ambient daylight sensing
- Output: 15mA @0-10VDC
- Dimming range: 0-100%
- Working temperature: -20 to 50°C (-4 to 122°F)
- BLE5.2 based non-flooding intelligent communication
- Available with either an audio jack or a Zhaga Book 18 connector
- IP65 rated for outdoor applications

Our lights feature integrated Bluetooth Mesh wireless sensors, enabling seamless wireless control for enhanced efficiency and flexibility. This technology allows for real-time monitoring, automated adjustments, and energy savings without the need for additional wiring, making installation and operation simple and cost-effective.



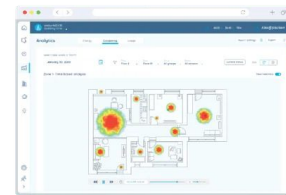
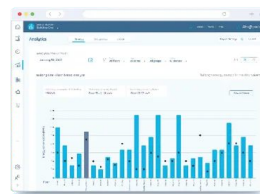
#### Mobile App

- For commission, configuration and controlling lighting networks including device replacement feature that makes commission easier.
- Setting up schedules, scenes and animations for individual devices or groups or zones
- Always get the latest features and improvements using OTA updates for devices
- Safe and reliable communication with AES 128-bit encryption and ensure safety using 4-digit code



#### Desktop App

- Track power usage and access reports.
- Occupancy pattern and device usage
- Emergency testing report



#### BMS Intergration

- Starco Control ecosystem leverages the Niagara framework to intergrate with any of the 120+ BMS protocols.
- Very simple to connect as plugging the two systems into a common Ethernet network.
- All data can be shared and BMS can monitor and control the lighting system.
- Adding OpendADR gateway, the customer can take advantage of any current or future utility demand response programs including peak pricing, capacity bidding and direct load control

