

# FP Series

FP22™ 596mm x 596mm LED Flat Panel

## Product Description

The fully luminous flat panel design of the FP Series transforms any space into a modern, visually comfortable environment with soft, balanced light. The remarkably thin 8.8mm depth of the FP Series flat panel easily accommodates narrow plenums or can be suspended for a more stylish look. The FP Series LED flat panels deliver up to 3,400 lumens of highly efficacious 100 lumens per watt light with great color quality. The enhanced optics enable the FP Series to meet the strict low glare requirements, delivering <19 UGR for an enhanced lighting experience.

**Applications:** Office, shops, education, petroleum

## Performance Summary

**Efficacy:** Up to 100 LPW

**Delivered Light Output:** 3,200-3,400 lumens

**Input Power:** 34 watts

**CRI:** > 80

**CCT:** 3000K, 4000K

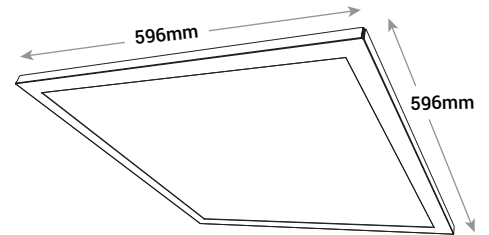
**Input Voltage:** 100-240 VAC

**Limited Warranty\*:** 3 years

**Lifetime:** 50,000 hours L<sub>70</sub> at 25°

**Mounting:** Recessed or Suspended

**Control:** Continuous dimming to 5% with DALI controls (contact ADLT) or non-dimmable



## Accessories

Field-Installed
<b>Suspension Kit</b> FPAC-1350-2 - Suspension Kit with canopy kit and cables

## Ordering Information

Example: FP22-32L-30K-23V-FD

Product	Lumen Output	CCT	Voltage	Control	Option
FP22	<b>32L</b> 34W, 3,200 lumens – 100 LPW	<b>30K*</b> 3000K	<b>23V</b> 100-240 VAC (Standard)	<b>Blank</b> Non-Dimmable <b>DALI</b> Contact ADLT	<b>FD</b> 80 CRI
	<b>34L</b> 34W, 3,400 lumens – 100 LPW	<b>40K**</b> 4000K			

\* Available only in 32L  
 \*\* Available only in 34L

\* See [www.cree.com/lighting/products/warranty](http://www.cree.com/lighting/products/warranty) for warranty terms

## Product Specifications

### CREE® LED TECHNOLOGY

Cree's total systems approach to product development is a comprehensive engineering philosophy that combines the most advanced LED sources, driver technologies, optics and forms. The result is highly-reliable luminaire solutions for both indoor and outdoor applications that reduce energy use, extend lifetimes, and maximize illumination performance and quality.

### CONSTRUCTION & MATERIALS

- Solid aluminum frame provides strength and uniformity
- Ultra-thin 8.8mm fixture height and design effectively target a broad range of plenum spaces and allow for easy installations
- Luminaire is finished with a soft matte white paint
- Provided t-bar clips and tabs for mounting support wires enable recessed or add suspension kit for suspended installation
- Frosted polycarbonate lens for non-pixelated appearance

### OPTICAL SYSTEM

- Edge-lit flat panel optics produce soft balanced low glare illumination
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces

### ELECTRICAL SYSTEM

- Integral, high-efficiency driver and power supply
- **Power Factor:** > 0.9
- **Input Power:** Stays constant over life
- **Input Voltage:** 100-240 VAC, 50/60Hz
- **Temperature Rating:** -15°-40°C (5°F - 104°F)
- **Total Harmonic Distortion:** < 20%
- **Control:** Continuous dimming to 5% with DALI or non-dimmable

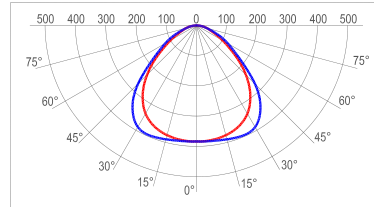
### REGULATORY & VOLUNTARY QUALIFICATIONS

- CE and RoHS compliant
- Ingress Protection: IP40
- Designed for Indoor use

## Photometry

### FP22-34L-40K-23V-FD BASED ON RESTL REPORT TEST #: PL05820-001

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a luminaire efficiency of 100%.



cd/klm  
— C0 - C180 — C90 - C270

### Average Luminance Table (cd/m<sup>2</sup>)

	Horizontal Angle		
	0°	45°	90°
45°	3,101	3,382	3,676
55°	2,263	2,536	2,579
65°	1,580	1,570	1,987
75°	1,363	1,238	1,305
85°	1,132	1,490	1,157

### Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	1,118	N/A	32.0%
0-40	1,849	N/A	52.9%
0-60	3,016	N/A	86.4%
0-90	3,493	N/A	100%

### Coefficients Of Utilization – Zonal Cavity Method

RCC %:	80			
RW %:	70	50	30	0
RCR: 0	119	119	119	119
1	110	106	102	98
2	101	93	87	82
3	93	83	76	70
4	85	74	66	60
5	79	67	58	52
6	73	60	52	46
7	68	55	47	41
8	63	50	42	37
9	59	46	38	33
10	55	43	35	30

Effective Floor Cavity Reflectance: 20%

## Application Reference

Open Space						
Spacing (m)	Initial Delivered Lumens	Lumens	Wattage	LPW	w/m <sup>2</sup>	Actual LUX
2.4 x 2.4	34L	3400	34	100	5.67	547.9
2.4 x 3.0	34L	3400	34	100	4.72	456.4
3.0 x 3.0	34L	3400	34	100	3.78	364.9
3.0 x 3.6	34L	3400	34	100	3.02	292.8

3m ceiling: 80/50/20 reflectances; 0.75m workplane, open room. LLF: 1.0 Initial Open Space: 15m x 12m x 3m