

Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FPL LED Flat Panel

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Available in 2x2, 2x4, and 1x4 configurations
- Uniform illumination with no visible LED pixilation
- Standard mounting includes recessed mounting in grid ceilings or suspended mounting using attached mounting clips. Optional surface mounting kit available.

Applications:

Suitable for most commercial and institutional applications

- Office
- Retail
- Classrooms
- Healthcare Facilities
- Some clean room applications (recess mount only)



Construction:

- Aluminum housing
- Acrylic lens with light guide panels for optimal light distribution and efficiency

Certifications:

- UL listed for US and Canada, suitable for damp locations (*HE models*)
- ETL listed for US and Canada, suitable for damp locations (*non-HE models*)
- IC-rated
- RoHS Compliant

Predicted L70 Lifetime:

- Up to over 100,000 hrs (calculated)
 - see *performance chart for L70 on specific models*
- (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -20°C to 50°C (*HE models*)
- -25°C to 45°C (*non-HE models*)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



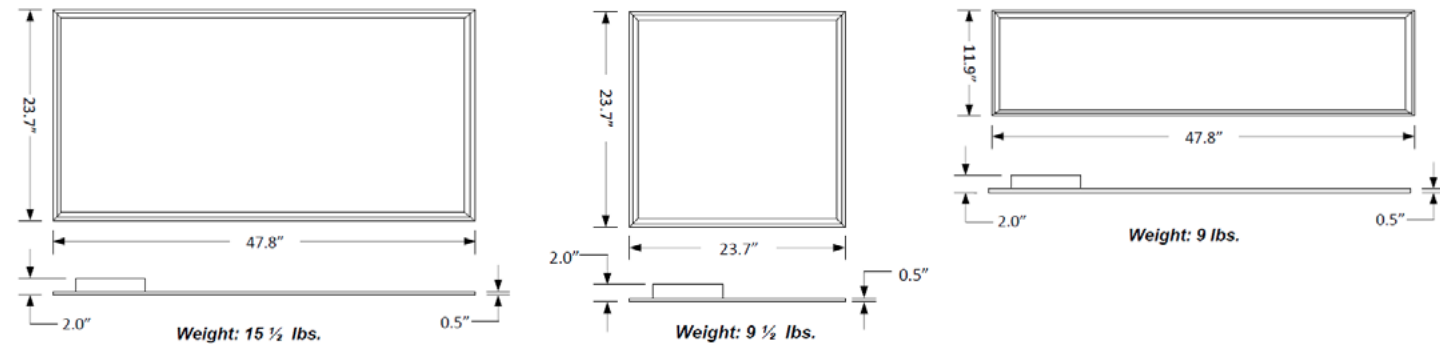
Ordering Guide:

example: FPL 24 MD HE UV FR 840-SM

Series	Size	Output	Voltage	Shielding	CRI/CCT	-	Mounting	Options
FPL			UV	FR		-		
FPL	22	LW HE	UV	FR	830 835 840 850	-	Blank SM FM CM	Blank EMBR EM
		MD						
	MD HE							
	24	MD MD HE HI						
	14	MD MD HE						

Size:	22	2'x2'	CRI/CCT:	830	80 CRI / 3000K
	24	2'x4'		835	80 CRI / 3500K
	14	1'x4'		840	80 CRI / 4000K
				850	80 CRI / 5000K
Lumen Output:	LW HE	Low-High Efficiency <i>(available in 2x2 only)</i>	Mounting:	Blank	Recessed or Suspended Mounting
	MD	Medium		SM	Surface Mount Kit
	MD HE	Medium-High Efficiency		FM	Flange Mount Kit
	HI	High <i>(available in 2x4 only)</i>		CM	Cable Mount Kit
Voltage:	UV	120-277V	Options:	Blank	None
Shielding:	FR	Frosted Acrylic Lens		EMB	Bracket for emergency battery back-up
				EM	7.8W Emergency Battery Back-up

Schematic:



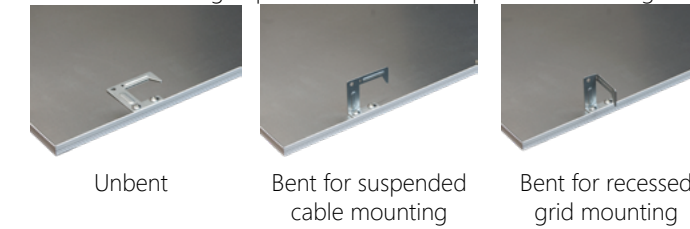
Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)	L70 * (hours)
FPL 22 LW HE UV FR xxx	22	2730	124	2754	125	2769	126	2799	127	> 100,000
FPL 22 MD UV FR xxx	40	4078	102	4134	103	4134	103	4480	112	56,000
FPL 22 MD HE UV FR xxx	32	4016	126	4079	127	4109	128	4170	130	> 100,000
FPL 24 MD UV FR xxx	47	4652	99	4652	99	4652	99	5062	108	63,000
FPL 24 MD HE UV FR xxx	35	4508	129	4590	131	4672	133	4836	138	> 100,000
FPL 24 HI UV FR xxx	68	6567	97	6645	98	6645	98	7325	108	63,000
FPL 14 MD UV FR xxx	40	4070	102	4149	104	4149	104	4600	115	56,000
FPL 14 MD HE UV FR xxx	32	4011	125	4051	127	4075	127	4122	129	> 100,000

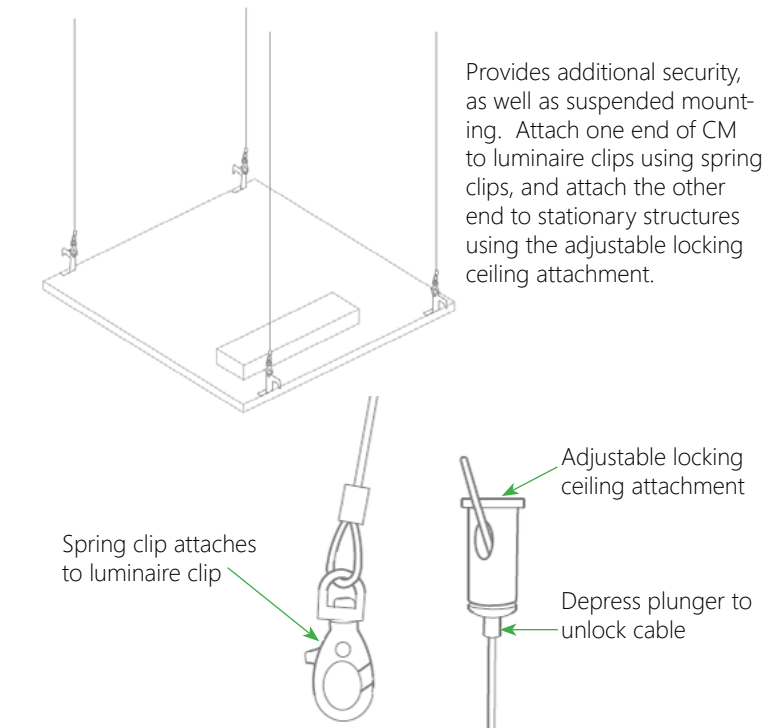
*Calculated hours based on IES TM-21-11

Mounting:

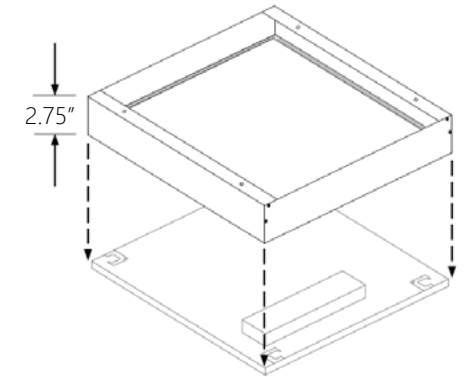
Standard Mounting Clips for recessed or suspension mounting



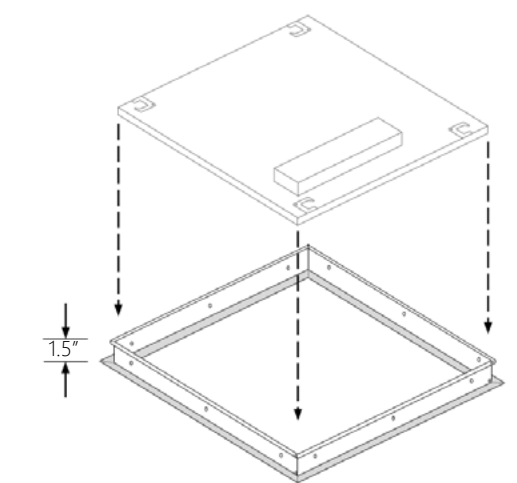
Optional **CM** cable mount kit



Optional **SM** surface mount kit



Optional **FM** flange mount kit



For installation in plaster or other hard ceiling surfaces. Attach FM to ceiling joists or other stationary structures and the panel is mounted flush to the ceiling.

Photometric Data:

FPL 24 MD HE UV FR 830

Luminaire Lumens: 4,495 lm

Luminaire Watts: 34.2W

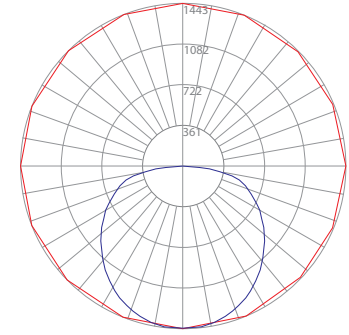
Efficacy: 131.4 LPW

Spacing Criterion (0-180): 1.26

Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1854	1897	1977
55	1764	1892	2075
65	1615	1975	2317
75	1326	2260	2853
85	730	1659	1717



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	527.44	11.70
0-30	1121.18	24.90
0-40	1840.80	41.00
0-60	3316.16	73.80
0-80	4356.84	96.90
0-90	4487.38	99.80
90-120	3.68	0.10
90-130	4.67	0.10
90-150	6.36	0.10
90-180	7.73	0.20
0-180	4495.11	100.00

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	108	102	98	93	105	100	96	92	96	92	89	92	89	86		
2	97	88	81	75	94	86	80	74	83	77	72	79	75	70		
3	88	77	68	61	86	75	67	61	72	65	60	69	64	59		
4	81	68	59	52	78	67	58	51	64	56	50	62	55	50		
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43		
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37		
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33		
8	59	45	36	30	57	44	36	30	43	35	30	41	35	30		
9	55	41	33	27	53	40	32	27	39	32	27	38	31	27		
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08