

DESCRIPTION

FPanel LED panel series provide premium performance and pleasing aesthetics. It is optimized for shallow plenum grid ceilings but may be surface or suspension mounted. Developed with Eaton's latest generation of solid state components and electronic driver technologies, these panels are ideal for new construction. Its refined visual optics and integrated grid retention clips provide the features needed for speed and installation flexibility. LED FPanels are an excellent lighting solution for commercial office spaces, schools, healthcare and retail merchandising areas.

Catalog #		Type	
Project		Date	
Comments			
Prepared by			

SPECIFICATION FEATURES

Construction/Mounting

Narrow aluminum bezel is tightly held to code gauge steel back plate to protect the LEDs and optical area. Corners are seamless to provide a refined finish and maximize the light emitting surface. Integral grid locking clips and separate suspension clips are included on the panel to ensure installation flexibility in ceiling systems and to meet code when additional retention is required. Junction box is constructed of code gage galvanized steel with an easy access hinged door for high voltage and low voltage wiring access and includes trade size knockouts. The stock luminaire is less than 2 inches in depth making it an ideal choice for shallow plenums and low ceilings. May also be surface or suspension mounted using the optional kits. Options available to meet IP5X ratings as well as factory installed flexible cable.

Controls

The FPanel is standard with a 0-10V continuous dimming driver which dims to 10% and works with most standard 0-10V control/dimmers. Combine with energy-saving products like wall dimmers, Room Controller, occupancy and daylight sensors, and lighting relay panels. Or, go wireless with optional field installed controls for either WaveLinX or LumaWatt Pro.

Electrical

Long-Life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3500K, 4000K and 5000K with a minimum of 80 CRI and a 90 CRI option that is 3000K. Projected lumen maintenance based on TM21 is L73 > 60,000 hours. Electronic drivers are cULus recognized and available for 120-277V. Emergency battery pack options are available in 7 watts and 14 watts. These emergency battery packs can be factory installed as an option or field installed for remote mounting..

Optical Shielding

Light guide is constructed of acrylic with specialized features to optimize light extraction providing excellent efficiency. White frost front lens with smooth pattern provides uniform illumination as well as scratch and impact resistance.

Compliance

Indoor luminaires are cULus listed for 25°C ambient environments, IC rated for direct insulation contact, RoHS compliant, damp location listed, and comply with IESNA LM-79 and LM-80 standards. NEMA 410 Compliant. DesignLights Consortium® Qualified and classified for DLC Standard, refer to www.designlights.org for details. Can be used for State of California Title 24 high efficacy luminaire.

Warranty

Five year warranty.



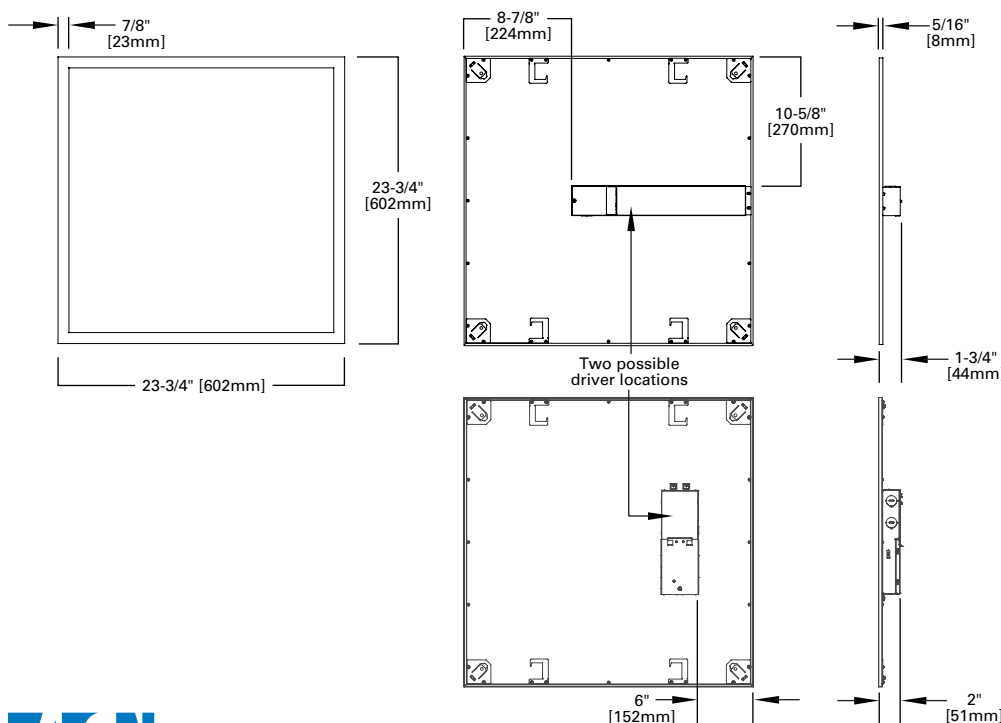
**22FP
LED**

2' X 2' LED PANEL

General Recessed LED Panel for use in Insulated Ceilings or Suspended/Surface Mount



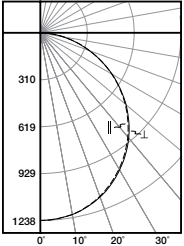
DIMENSIONS



LOAD DATA (STOCK PRODUCT)

Thd	14%
Power Factor	0.96
Weight	9.4 lbs.
Low Temp. Start	-20°C

PHOTOMETRICS



22FP3240C
 Electronic Driver
 Linear LED 4000K
 Spacing criterion:
 (||) 1.25 x mounting
 height, (⊥) 1.26 x
 mounting height
 Lumens: 3560.1
 Input Watts: 30.1W
 Efficacy: 118.3 lm/W
 Test Report:
 22FP3240C.IES

Candlepower			
Angle	Along	45°	Across ⊥
0	1238	1238	1238
5	1233	1230	1232
10	1217	1214	1218
15	1187	1187	1190
20	1148	1148	1153
25	1097	1097	1104
30	1038	1039	1045
35	971	973	980
40	898	900	907
45	816	821	826
50	731	735	739
55	639	644	644
60	544	547	548
65	446	448	446
70	348	349	346
75	348	349	346
80	161	156	154
85	75	71	70
90	0	0	0

Coefficients of Utilization

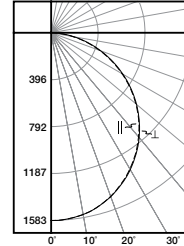
rc rw RCR	Effective floor cavity reflectance 20%																	
	80%			70%			50%			30%			10%			0%		
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30	0		
0	119	119	119	119	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	958.3	26.9
0-40	1567.3	44.0
0-60	2773.3	77.9
0-90	3560.1	100.0
0-180	3560.1	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3105	3124	3143
55	2998	3021	3021
65	2840	2853	2840
75	2620	2610	2589
85	2316	2192	2161



22FP4240C
 Electronic Driver
 Linear LED 4000K
 Spacing criterion:
 (||) 1.25 x mounting
 height, (⊥) 1.25 x
 mounting height
 Lumens: 4567.1
 Input Watts: 39.3W
 Efficacy: 116.2 lm/W
 Test Report:
 22FP4240C.IES

Candlepower			
Angle	Along	45°	Across ⊥
0	1582	1582	1582
5	1576	1576	1576
10	1556	1556	1556
15	1520	1521	1521
20	1469	1472	1472
25	1403	1408	1408
30	1329	1333	1336
35	1245	1250	1251
40	1149	1155	1157
45	1048	1053	1054
50	936	943	944
55	819	826	826
60	695	703	703
65	568	575	577
70	440	448	450
75	314	323	326
80	194	200	205
85	88	93	94
90	0	0	0

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance 20%																	
	80%			70%			50%			30%			10%			0%		
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30	0		
0	119	119	119	119	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	33	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	1226.4	26.9
0-40	2007.1	43.9
0-60	3555.3	77.8
0-90	4567.1	100.0
0-180	4567.1	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3988	4007	4011
55	3842	3875	3875
65	3617	3661	3674
75	3265	3358	3389
85	2717	2871	2902

ORDERING INFORMATION/PERFORMANCE

Catalog	UPC	CCT	CRI (Min)	Delivered Nominal Lumens	Watts	Efficacy (lm/W)	Input Current (A)	
							120V	277V
22FP4235C	080083833580	3500K	80	4641	38.9	119	.34	.15
22FP4240C	080083833603	4000K	80	4567	39.3	116		
22FP4250C	080083833627	5000K	80	4704	39.3	120		
22FP3235C	080083833528	3500K	80	3417	29.4	116	.26	.11
22FP3240C	080083833542	4000K	80	3560	30.0	119		
22FP3250C	080083833566	5000K	80	3667	29.5	124		
22FP3830C9 ⁽¹⁾	080083833801	3000K	90	3654	39.1	93	.34	.15
22FP2830C9 ⁽¹⁾	080083833788	3000K	90	2734	29.5	93	.26	.11

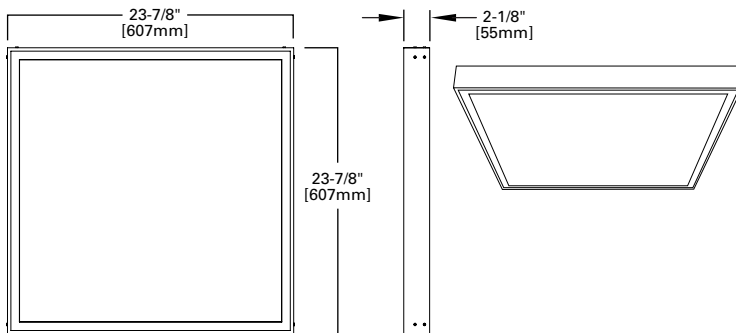
OPTIONS/ORDERING INFORMATION

<p>IP5X=IP5X rating Example catalog number=22FP3240C-IP5X</p>
<p>EL14W=EBPLED14W battery installed EL7W=EBPLED7W battery installed Example catalog number=22FP3240C-EL14W</p>
<p>A3/8-5D/18G=6' 3/8" flex with dimming leads installed Example catalog number=22FP3240C-A3/8-5D/18G</p>

ACCESSORIES/ORDERING INFORMATION

SURFACE MOUNT KIT ⁽³⁾

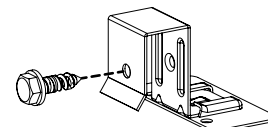
Catalog	UPC
FPSURF22	080083802722



CEILING RETENTION ⁽²⁾

Catalog	UPC
FPEQ	080083802685

Required by some local codes
 Order one set for each fixture
 (Four clips per kit)



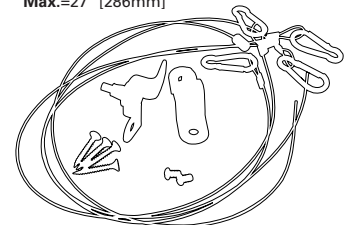
DRYWALL FRAME KIT

Catalog	UPC
DF-22W-U	662401232963

SUSPENSION KIT

Catalog	UPC
FPSUS2	080083802784

Mounting height from ceiling
Min.=7-1/4" [184mm]
Max.=27" [286mm]



Notes:

- ⁽¹⁾ May have extended lead-times.
- ⁽²⁾ Indicator/test switch to be installed separately. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7=700 lumens).
- ⁽³⁾ May not be used with EL7W or EL14W options

SHIPPING DATA

Size	Wt.	Pallet (30" x 56")
2' x 2'	12 lbs.	34