

NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
5000	5285	49.6 W
4000	4392	39 W
3000	3309	30 W
2000	2213	19 W

Based on 4000K, 85+ CRI. Actual wattage may vary +/- 5%

FEATURES

This fully luminous LED flat panel delivers exceptional performance and aesthetically pleasing optics, optimizing shallow plenum spaces. Perfect for new construction applications or retrofitting existing fluorescent troffer luminaires. It offers a range of dimming, lumen and CCT options. Perfect for either recessed or surface mounted installations, it's an ideal choice for commercial office space, retail merchandising, educational, and healthcare facilities.

LUMENS	2000, 3000, 4000, 5000
CCT	30K, 35K, 40K, 50K
CRI	85+
COLOR QUALITY	3 Step MacAdam Ellipse
SIZE	2'x4', 2'x2', 1'x4'
MOUNTING	Recessed
DIMMING & CONTROL	0-10V Flicker Free 1% Dimming Standard (DIM10), LUTH, LUTFTB, LUT2W, DIMST, ELDO10.1, ELDODMX.1, DALI.1
EMERGENCY	10W - Up to 1000L output (Bodine BSL310) 20W - Up to 2000L output (Bodine BSL20)
LIFETIME	L70 at 83,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21



MAINTENANCE

LED engines and drivers are removable and upgradable even after luminaire installation. Luminaire can be regularly and safely wiped down to ensure optimal performance.

OPTICAL SYSTEM

The proprietary optical system utilizes a unique combination of reflective and refractive optical components to achieve a uniform, aesthetically pleasing appearance. Use of a guide plate laser allows high density pixels to shine, creating an even illumination with no glare, while maintaining a high efficiency.

CONSTRUCTION

Body is constructed of heavy-duty 20-gauge cold rolled steel, post-painted and engineered for maximum strength and extended life. All corners interlock to prevent aesthetic damage to the luminaire, with sides and corners uniformly turned in and hemmed to remove sharp edges for safe handling and easy installation. Luminaire is supplied with multiple wiring entrances for easy daisy chain of luminaires, to add power packs, whips, or other accessories in the field, or for continuous row mounting.

FINISH

Post-painted with a 93% reflective white coat to improve luminaire efficacy, with all body components seamlessly interlocked for added structural strength.

MOUNTING

Luminaires accommodate lay-in ceilings, Slot T, and T-bar suspension systems for 5/8" and 3/8" ceiling thicknesses. Four corner tie points are standard for safety wire support when required, with built-in earthquake clips, standard. Luminaires may be available with flange kits, surface mounted kits, and other options.

OPTIONS

Luminaires can be shipped pre-installed with whips, modular wiring systems, daylight harvesting controls, occupancy sensors, and/or power packs for individual or room control applications.

DRIVER ELECTRICAL INFORMATION

Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120/277V input. Available in 347V., produce less than 20% THD, and have a power factor of .90 to 1.00.

DIMMING & DRIVER INFORMATION

DIM10 - Flicker Free 1% Dimming Standard (DIM10) 0-10V dimming on either MVOLT 120, 277 or 347V.

LUT2W - Lutron LTEA2W Hi-Lume 1%. 2-wire LED Driver Forward Phase Control, 1% dimming in 120V only. Available on all luminaires up to 40 watts.

LUTH - Lutron LDE1 Hi-Lume Eco System. 1% dimming with Soft in Fade to Black dimming technology.

ELD010.1 - EldoLED SoloDrive 0-10V. Dimming down to 0.1%. Available on all luminaires up to 100 watts.

DALI - DALI DT6, DT8 dimming down to 1%. Available on all luminaires up to 100 watts.

ELDODMX - EldoLED PowerDrive dimming down to 0.1%. Available on all luminaires up to 100 watts.

Please see EldoLED website for wiring diagrams and a list of compatible DMX and DALI control systems.

DIMST - Step Dimming

WARRANTY

Five-year warranty for parts and components. (Labor not included)

LISTINGS

c-UL-us - Listed for Feed Through Wiring.

Listed for DLC, California Title 24 compliant.

Example: 22-FPL1-LED-3000L-DIM10-MVOLT-30K-85

FIXTURE SIZE	SERIES	TYPE	LUMENS	DIMMING	VOLTAGE	CCT	CRI	EMERGENCY	OTHER OPTIONS
22 - 2' X 2'	FPL1 - LED Flat Panel	LED	2000L - 2000 lumens 3000L - 3000 lumens 4000L - 4000 lumens 5000L - 5000 lumens	DIM10 - 0-10V Dimming DIMST - Step Dimming LUTH - Lutron HiLume LUT2W - Lutron 2Wire LUTFB - Lutron Fade to Black ELD010.1 - EldoLED 0-10V ELDODALI - EldoLED DALI ELDODMX - EldoLED DMX	MVOLT 347* <small>*Consult factory for details</small>	30K 35K 40K 50K	85	0-EMG-LED-10W 0-EMG-LED-20W	22FK - 2'x2' Flange Kit FBF - Internal Fast Blow Fuse SBF - Internal Slow Blow Fuse RIS - Radio Interference Suppressor USA - Made in America Compliance FS-PPV2 - Fixture Sensor Power Pack FD-301 - Daylight Dimming Photosensor FS-305RC - Low Voltage Motion Sensor FS-355 - Line Voltage Motion Sensor LMFC-011 - Digital Lighting Manager

22-FPL1-LED-2000L-DIM10-MVOLT-40K-85

INPUT WATTS: **19.9**

LUMENS: **2123**

CRI: **85**

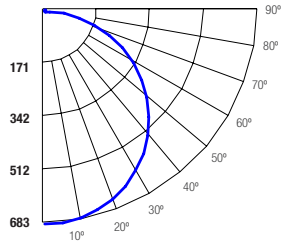
EFFICACY: **107**

CCT: **4000K**

TEST NO.: **EL101860**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	2.36 fc	56.8 ft
8.0	0.59 fc	113.6 ft
12.0	0.26 fc	170.3 ft
16.0	0.15 fc	227.1 ft
20.0	0.09 fc	283.9 ft
24.0	0.07 fc	340.7 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	250.71	N.A.	11.80
0-30	535.14	N.A.	25.20
0-40	882.74	N.A.	41.60
0-60	1591.37	N.A.	75.00
0-80	2036.24	N.A.	95.90
0-90	2100.89	N.A.	99.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	1816	1812	1814
55	1798	1790	1792
65	1762	1751	1751
75	1722	1705	1699
85	1872	1813	1770

Lumens Per Zone

Zone	Lumens
0-10	64.69
10-20	186.03
20-30	284.42
30-40	347.61
40-50	367.48
50-60	341.15
60-70	272.10
70-80	172.77
80-90	64.65

Candela Tabulation

Q		Q	
0	683.251	0	101
5	681.767	5	101
15	660.601	15	101
25	618.754	25	101
35	556.861	35	101
45	477.622	45	101
55	383.572	55	101
65	276.934	65	101
75	165.746	75	101
85	60.686	85	101
90	16.796	90	101

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

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	101	101	101	99		
1	108	103	98	94	105	100	96	92	96	92	89	89	92	89	86	88	86	83	81	81	81	81		
2	98	89	82	76	95	87	80	75	83	77	73	73	80	75	71	76	73	69	67	67	67	67		
3	89	78	69	62	86	76	68	62	73	66	60	60	70	64	59	67	62	58	56	56	56	56		
4	81	69	59	52	79	67	59	52	64	57	51	51	62	56	50	60	54	50	47	47	47	47		
5	74	61	52	45	72	60	51	45	58	50	44	44	55	49	43	53	48	43	41	41	41	41		
6	69	55	46	39	67	54	45	39	52	44	38	38	50	43	38	48	42	38	35	35	35	35		
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31	31	31	31	31		
8	59	45	37	31	57	45	36	30	43	36	30	42	35	30	40	34	30	28	28	28	28	28		
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25	25	25	25	25		
10	52	38	30	25	50	38	30	25	37	29	25	36	29	24	35	29	24	24	22	22	22	22		

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

22-FPL1-LED-3000L-DIM10-MVOLT-40K-85

INPUT WATTS: **30**

LUMENS: **3309**

CRI: **85**

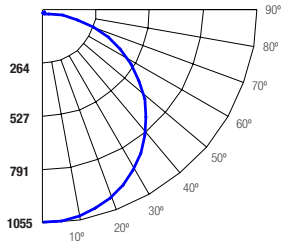
EFFICACY: **110**

CCT: **4000K**

TEST NO.: **EL101859**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	3.65 fc	57.1 ft
8.0	0.91 fc	114.2 ft
12.0	0.41 fc	171.2 ft
16.0	0.23 fc	228.3 ft
20.0	0.15 fc	285.4 ft
24.0	0.1 fc	342.5 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	387.15	N.A.	11.70
0-30	827.45	N.A.	25.00
0-40	1368.93	N.A.	41.40
0-60	2473.8	N.A.	74.80
0-80	3171.31	N.A.	95.80
0-90	3273.53	N.A.	98.90

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	2806	2804	2803
55	2775	2773	2773
65	2729	2724	2718
75	2700	2684	2672
85	2939	2874	2799

Lumens Per Zone

Zone	Lumens
0-10	99.86
10-20	287.29
20-30	440.30
30-40	541.48
40-50	572.81
50-60	532.06
60-70	425.60
70-80	271.91
80-90	102.22

Candela Tabulation

Q		Q	
0	1054.636	0	101
5	1052.348	5	101
15	1020.076	15	101
25	956.021	25	101
35	860.762	35	101
45	738.137	45	101
55	592.137	55	101
65	429.028	65	101
75	259.966	75	101
85	95.280	85	101
90	25.801	90	101

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

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	101	101	101	99		
1	108	102	98	94	105	100	96	92	96	92	89	89	91	89	86	88	85	83	81	81	81	81		
2	97	89	82	76	95	87	80	74	83	77	73	73	80	75	71	76	73	69	67	67	67	67		
3	89	78	69	62	86	76	68	62	73	66	60	60	70	64	59	67	62	58	56	56	56	56		
4	81	68	59	52	78	67	58	52	64	57	51	51	62	55	50	59	54	49	47	47	47	47		
5	74	61	52	45	72	60	51	45	57	50	44	44	55	49	43	53	47	43	41	41	41	41		
6	68	55	46	39	66	54	45	39	52	44	38	38	50	43	38	48	42	37	35	35	35	35		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31	31	31	31	31		
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28	28	28	28	28		
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25	25	25	25	25		
10	52	38	30	25	50	38	30	25	36	29	24	35	29	24	35	29	24	24	22	22	22	22		

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

22-FPL1-LED-4000L-DIM10-MVOLT-40K-85

INPUT WATTS: **39**

LUMENS: **4392**

CRI: **85**

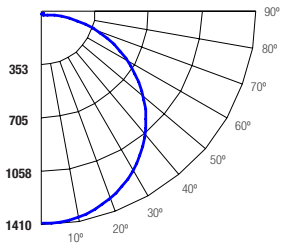
EFFICACY: **113**

CCT: **4000K**

TEST NO.: **EL101857**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	4.87 fc	57 ft
8.0	1.22 fc	114 ft
12.0	0.54 fc	171 ft
16.0	0.3 fc	228 ft
20.0	0.19 fc	285 ft
24.0	0.14 fc	342 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	516.46	N.A.	11.80
0-30	1102.49	N.A.	25.10
0-40	1818.83	N.A.	41.40
0-60	3286.59	N.A.	74.80
0-80	4213.79	N.A.	95.90
0-90	4348.25	N.A.	99.00

Luminance (Average candela/M²)

Angle in Degrees
