

FCL - Fidelux Compact Linear Series

Product Description

FCL Series LED luminaire is an energy-efficient, low maintenance alternative to traditional fluorescent in a variety of commercial, low bay lighting applications. The FCL-Series offers customers the best mix of value and performance.

Features & Benefits

- 3000K, 4000K, and 5000K color temperatures
- 0-10V dimming
- Ability to tether fixtures from end to end
- Motion sensors available
- Integrated wireless RF sensor - up to 80% savings
- Integral microwave high frequency invisible sensor provides clean look
- Factory set standard 5 minute delay with 20% step dimming (additional options available: 20%/50%, delay from 1 to 2 minutes)

Applications

- Commercial & industrial
- Manufacturing & light assembly
- Distribution & warehouse
- Retail & office
- Education & health
- Data centers

Mounting Options

- Surface Mount - standard mounting application
- Pendant Mount Kit (PK) includes 1/2" rigid connector with locknut & bushing. *1/2" rigid pipe & wire not included*
- Suspended Mount Kit (SK) includes 2-hooks and 2-3' aircraft cables, *power cord ordered separately*

Approval Listings

- UL, Damp Location,
- UL, Damp Location under covered ceiling, Indoor use only
- Most of our products are DLC listed, qualifying them for the highest rebates. Please check individual product specs for DLC status. Refer to DLC website by clicking this link: <https://www.designlights.org>



Performance Summary

Efficacy up to: 137 l/pw

CRI: 80 & 82 cri

CCT: 30K / 35K / 40K / 50K

Dimming: 0-10V

Operating Temp: -30° - +42°C

Input Voltage: 120-277vac

Operating Frequency: 50 / 60Hz

Power Factor: >0.99

Dimension: 7.20" x 48" x 3.85"



FCL Series Specification Summary

DATA SOURCE	DLC (Tested)	LM79	
Product Number	FCL4-30W	FCL4-40W	FCL4-50W
Efficacy l/pw @ 3000K	135 l/pw	125 l/pw	122 L/PW
Input Power: Watts @ 3000k	27.24	40	50
Lumens @ 3000K / 3500K	3671	4700	6140
Lumens @ 4000K	3671	4900	6140
Lumens @ 5000K	3700	5000	6100
Qualifications	UL, DLC 4.2	UL / NO DLC	UL / NO DLC
THD @ 120VAC	9.03%	9.03%	9.03%
CCT/Kelvin Temp Options	3000K / 4000K / 5000K		
Dimming	0-10vac		
Input Voltage Options	120-277vac		
CRI	80	80	82
Power Factor	>0.99		
L70 Lifespan	36,000+ Hours		
Operating Temperature	-30°c to +42°c		
Max Dimensions (in)	7.20" x 48" x 3.85"		
Total Weight	12 lbs		
Limited Warranty	5 years		

Notes

Values are nominal unless noted +/- 5%
Specifications change without notice

FCL Series Product Ordering Guide

Example: FCL4-30W-3800L-30K-UNV-D-EM15-PC3

Product	CCT/Color Temp	Voltage	Controls & Dimming	Emergency Backup	Power Cord
FCL4-30W	30K (3500 Kelvin)*	UNV (100-277vac) STD	D (0-10v Dimming) STD	Blank (No EM)	PC3 (3' power cord WH) STD
FCL4-40W No DLC	40K (4000 Kelvin)		MSSD (Microwave Sensor w/Preset Ambient Levels, Step-dim, Field Programmable)	EM8 (8w, 90min)	PC6 (6' power cord WH)*
FCL4-50W No DLC	50K (5000 Kelvin)		RC-MSSD (Remote Control for Field Programmer for MSSD)		PC10 (10' power cord WH)*

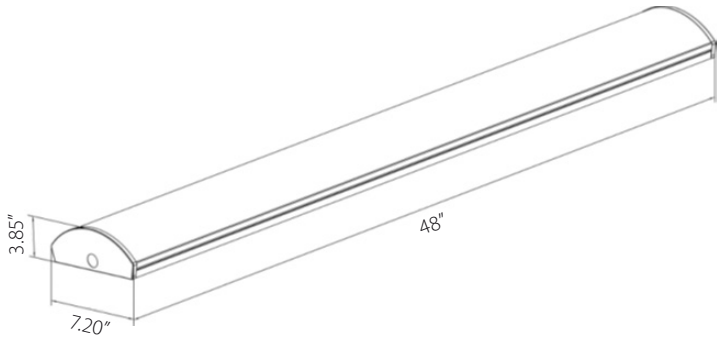
* = Possible longer lead Time & additional cost items

Factory Installed Options

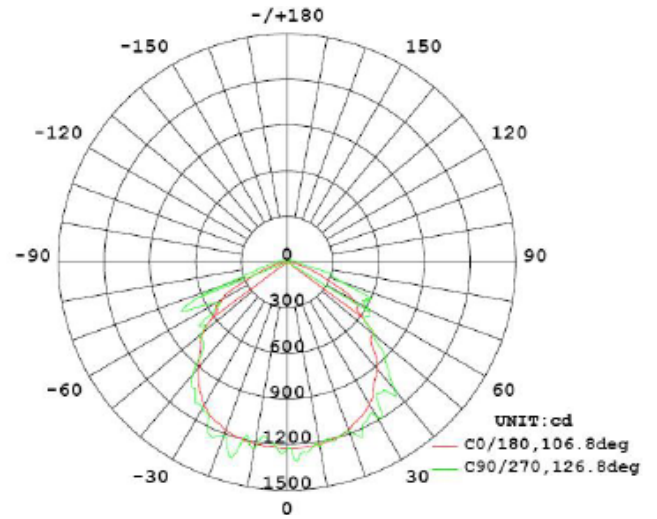
EM8	8 Watt - 90 Min. Emergency Pack Option
MSSD	Microwave sensor w/ Preset ambient levels & factory set 3 min delay with 20% step dim (Optional: 20% / 50%, delay from 1 to 20 min), Field adjustable
RC-MSSD	Remote Control for Field Programmer for MSSD
SUK	Suspension Cable kit (Includes 2 hooks 3ft suspension chain)Included in fixture

FCL Series Design Details & Photometry

FCL4



FCL4-30W



Photometry

FCL4-30W-50K-UNV-D

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 luminance as the source resulting in a luminaire efficiency of 100%.

Zonal Lumen Density												
Y	C0	C45	C90	C135	C180	C225	C270	C315	Y	Zone	Total	%Lums, Lamp
10	1217	1229	1234	1232	1216	1163	1242	1163	0-10	117.3	117.3	3.07, 3.07
20	1175	1176	1184	1180	1178	1233	1213	1234	10-20	341.3	458.6	12, 12
30	1079	1117	1167	1131	1088	1129	1109	1133	20-30	534.7	993.3	26, 26
40	917.7	1031	1119	1057	898.7	993.0	956.4	985.1	30-40	659.2	1652	43.3, 43.3
50	733.7	740.1	741.3	756.2	717.8	705.9	738.9	710.9	40-50	665.5	2318	60.8, 60.8
60	494.5	481.7	607.9	503.8	485.6	488.8	530.4	497.4	50-60	548.9	2867	75.2, 75.2
70	193.6	381.6	383.2	417.1	194.5	377	467.9	375.2	60-70	447.1	3314	86.9, 86.9
80	38.50	205.2	109.2	216	39.63	280.2	132.4	257.6	70-80	259.3	3573	93.7, 93.7
90	0.0511	94.94	65.44	100.5	0.0815	88.13	68.92	85.50	80-90	103.7	3677	95.4, 95.4
100	1.154	38.42	42.48	41.20	2.190	36.46	52.71	37.98	90-100	48.80	3726	97.7, 97.7
110	4.176	24.19	31.26	25.23	6.285	25.12	29.92	25.67	100-110	28.69	3755	98.4, 98.4
120	6.244	18.69	23.30	19.72	8.468	17.80	21.34	18.72	110-120	19.07	3774	98.9, 98.9
130	6.961	15.54	20.07	16.26	8.033	14.69	16.75	15.67	120-130	14.33	3788	99.3, 99.3
140	6.770	13.64	15.61	14.07	7.660	13.52	15.33	14.57	130-140	10.53	3798	99.6, 99.6
150	6.612	11.23	12.77	11.15	7.898	10.86	12.44	12.07	140-150	7.489	3806	99.9, 99.9
160	7.450	10.19	11.00	9.646	8.303	8.878	10.60	10.15	150-160	4.812	3811	99.9, 99.9
170	7.864	10.56	10.43	10.03	8.261	10.18	9.629	10.71	160-170	0.827	3814	100, 100
180	8.039	10.67	10.79	10.15	8.198	10.71	9.919	10.46	170-180	0.9790	3815	100, 100
DEG	Luminous Intensity: cd									Unit: 1m		

FCL Series Installation Instructions

For all FCL Compact Linear Series Product

WARNING:

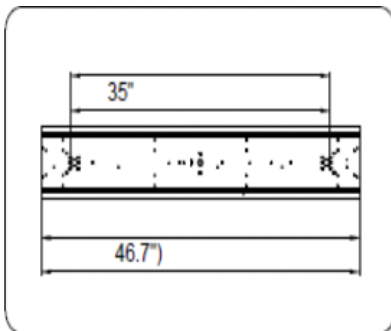
To avoid the risk of fire, or electric shock this product should be installed, inspected, and maintained by a qualified electrician only. Installation should be completed by an individual familiar with the construction and operation of the luminaire. Installation of luminaire must be in accordance with nation and local building and electrical codes.

Safety Warning: To avoid electric shock: Be certain electrical power is OFF before and during installation and maintenance. Luminaire must be supplied by a wiring system with an equipment grounding conductor. To avoid burning hands: Make sure lens and housing are cool when performing maintenance. To avoid product degradation: Make sure the wire supply voltage is the same as the luminaire supply. Use proper supply wiring as specified on the luminaire nameplate. Avoid use in environments containing sulfur, chlorine, or other halides, methyl acetate or ethyl acetate, cyanoacrylates, glycol ether, formaldehyde, or butadiene.

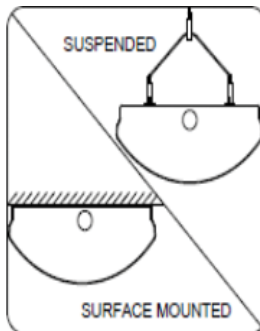
Notes: Instructions do not cover all details and all possible product configurations. Do not restrict luminaire ventilation. Ensure LED luminaire is not covered with material that will prevent convection or conduction cooling. Ensure LED luminaire has the correct polarity before installation. Avoid exposing wiring to metal edges and sharp objects.

Maintenance: Perform visual, electrical, and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However it is recommended that checks be made at least once a year. Electrically check to make sure that all connections are clean and tight. Mechanically check that all parts are properly assembled.

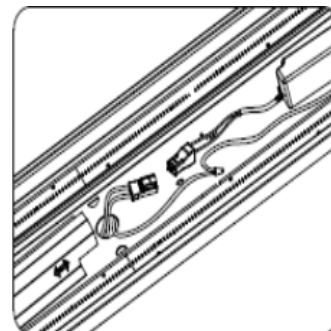
Installation Dimension



Installation



Electrical Connection



Exploded Views

