

Project		Catalog #		Type	
Prepared by		Notes		Date	



Fail-Safe

FWL | FWLDL | LD4 LED

Medical/Confinement/Vandal Resistant Wall- or Ceiling-Mount LED Up/down and Downlight only; 18", 2' and 4' Lengths

Typical Applications

Schools • Mental Health Facilities • Stairwells • Corridors • Detention Centers
• Public Transportation Areas

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Product Certification



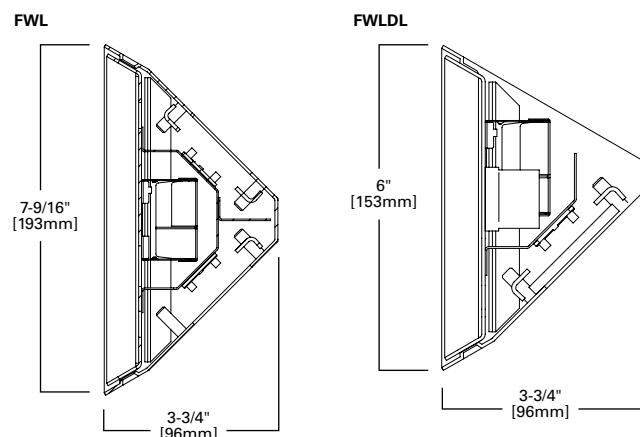
Product Features



Top Product Features

- FWL for up/down, FWLDL for downlight only
- Available in 18", 2', and 4' lengths
- Polycarbonate or glass sheilding up to 0.25" thick
- Stainless steel housing available
- 14 gauge and 16 gauge steel
- Options to meet Buy American Act requirements

Dimensional and Mounting Details



additional product diagrams

Order Information

SAMPLE ORDER NUMBER: **FWL-D-2-LD4-UNV-STD/STD-35-80/86-EDC2-GW** or **FWLDL-D-4-LD4-UNV-STD-35-80/89CW/84-EDC1**

Domestic Preferences	Series	Material	Length	LED	Voltage	Up Light Level (FWL only)	Down Light Level	Color Temperature
Domestic Preferences ⁽⁴⁾	Series	Material	Length	LED	Voltage	Up Light Level (FWL only)	Down Light Level	Color Temperature
[Blank] =Standard BAA =Buy American Act	FWL =Wall or Ceiling FWLDL =Wall or Ceiling, Dowlight Only	D =16GA CRS X =14GA CRS	18 =18" 2 =2' ⁽²⁾ 4 =4'	LD4 =LED, Version 4.0	UNV =120V-277V	STD =Standard Output LO =Low Output HI =High Output	STD =Standard Output LO =Low Output HI =High Output	30 =3000K 35 =3500K 40 =4000K 50 =5000K
Notes (4) Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC.PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.			Notes (2) FWLDL 2' available with STD or HI settings only.					

Inner/Center/Outer Lens	Driver	Circuits	Options
Inner/Center/Outer Lens ⁽³⁾	Driver	Circuits	Options
Inner Lens ⁽³⁾ 80 =0.125" Pattern 12 Acrylic Center Lens (optional) ⁽³⁾ 89CW =Highly Transmissive Diffuse Lens, for optimal Pixellation Management, 0.02" thick Outer Lens ⁽³⁾ 84 =0.125" Clear Polycarbonate 85 =0.187" Clear Polycarbonate 86 =0.25" Clear Polycarbonate	EDC =Electronic Driver, Non-Dimming EDD =Electronic Driver, 0-10V Dimming 10% ED1D =Electronic Driver, 0-10V Dimming 1%	1 =1 Circuit 2 =2 Circuits ⁽¹⁾	GW =Gloss White Paint AMA =Antimicrobial Matte White Paint, All Parts AMH =Antimicrobial Matte White Paint, Outer Housing Only SHP =Stainless Steel Housing, Powder Coat Painted White SHN =Stainless Steel Housing, Brushed NTP =Non-tamper Proof Fasteners (Phillips-head screws) 90 =90CRI
Notes (3) Specified as "Inner / Center (optional) / Outer" Example logic: 80/89CW/84.	Notes (1) Two circuits not available on FWLDL.		

Product Specifications

Application

- Confinement, vandal resistant, healthcare and educational luminaire suitable for use in:
 - Mental health facilities
 - Psychiatric wards
 - Public transportation areas
 - Detention centers
 - Stairwells
 - Corridors
 - Schools

Housing and Backpan

- Clamshell Design; Die-formed 14 or 16-gauge CRS body construction
- One-piece, seamless, doorless housing
- Continuous welded and ground ends
- Maximum impact resistance and prevention of unauthorized fixture penetration
- Dedicated up/down illumination chambers
- Dedicated backpan mounts with multi-point mounting
- Housing attached to the backpan with tamper resistant screws
- Stainless steel safety cables secure housing to backpan
- Electrostatically applied, Matte White powder coat finish; High gloss available; Custom colors available (supply RAL number, paint chips, or paint manufacturer catalog number)

Fasteners

- Stainless steel tamper-resistant T20 TORX® screws with center pin reject standard
- Allen head screws with center pin reject optional

Lens and Lens Retention

- Choice of prismatic acrylic, clear polycarbonate or prismatic tempered glass
- Lens secured by thru-studs
- Vertically adjustable internal CRS hold-downs

LEDs

- Available in 3000K, 3500K, 4000K and 5000K; 80 CRI minimum
- Choice of Standard, Low or High illumination levels
- Projected life is 50,000 hours at 70% lumen maintenance

Electrical

- Electronic driver 120-277V, dimming driver standard
- 0-10V dimming down to 1% or 10%
- Non-dimming available

Compliance

- cULus listed for damp locations

Warranty

- Five year limited warranty on LEDs and Electrical, consult website for details.
www.cooperlighting.com/legal

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Nominal Input Watts/Delivered Lumens (3500K)

FWL			
Length	Output Level	Nominal Input Watts	Nominal Delivered Lumens
18"	Low	21.2	1200
	Standard	26.6	1500
	High	29.8	1675
24"	Low	31.8	1800
	Standard	42.5	2400
	High	52.9	3000
48"	Low	63.4	3600
	Standard	85.0	4825
	High	105.8	6025

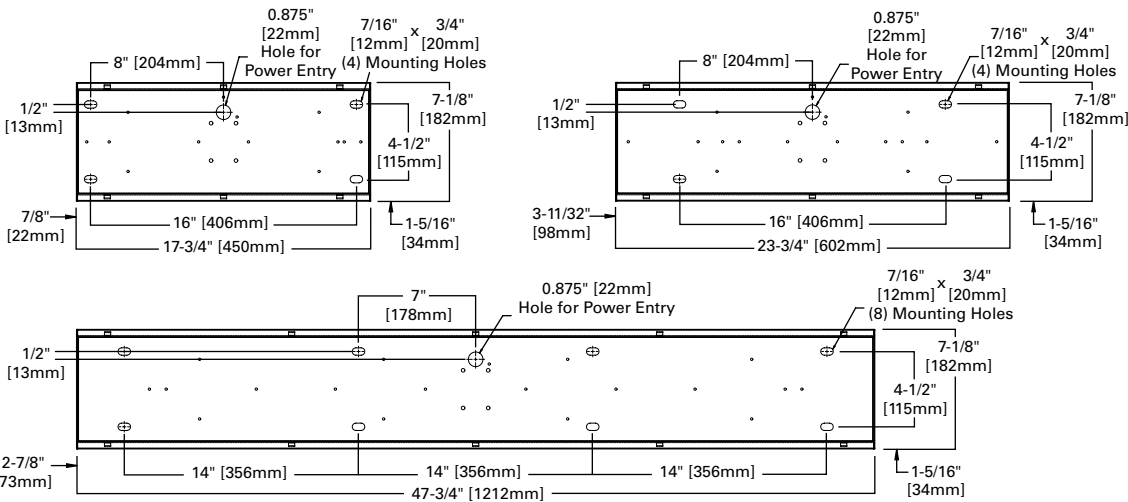
FWLDL			
Length	Output Level	Nominal Input Watts	Nominal Delivered Lumens
18"	Low	10.6	600
	Standard	13.3	750
	High	15.9	900
24"	Low	15.9	900
	Standard	21.3	1200
	High	26.5	1500
48"	Low	31.8	1800
	Standard	42.5	2400
	High	52.9	3000

* Lens tested was "86" 0.25" clear polycarbonate

* Nominal input wattage values include LED voltage, drive current and typical driver efficiency. Refer to LM 79 data/photometric files for exact delivered lumen values and input wattage. Values in table are nominal values only.

Dimensional and Mounting Details

FWL MOUNTING DIMENSIONS



FWLDL MOUNTING DIMENSIONS

