

Project		Catalog #		Type	
Prepared by		Notes		Date	



Fail-Safe

FUSL12 | LD4 LED

Confinement/Correctional Surface
12" Wide; 2' and 4' Lengths; 3 1/2" Deep

Typical Applications:

Confinement • Security • Inmate Cells • Psychiatric Wards • Secure Corridors

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Product Certification



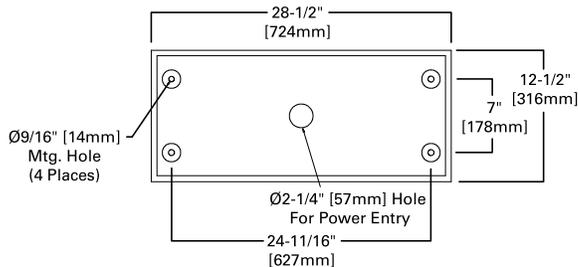
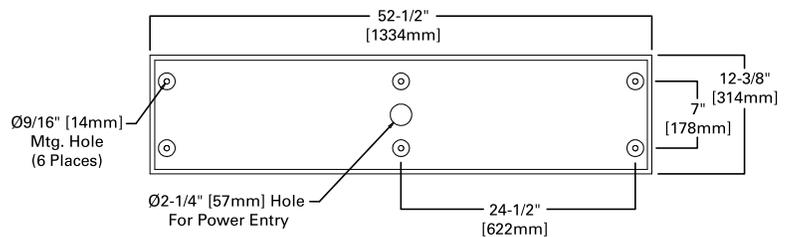
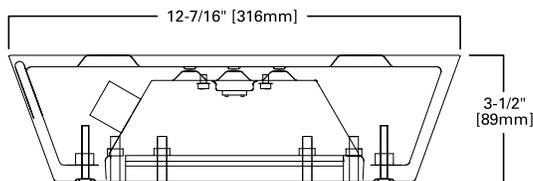
Product Features



Top Product Features

- Surface-mount for lower ceiling heights; Vandal resistant sloped sides/ends add aesthetic appeal
- Die-formed 12- to 18-gauge continuous welded one-piece doorless housing
- Backplate forms an irretrievable blade trap preventing contraband concealment
- Clear or prismatic acrylic, and polycarbonate or clear tempered glass lens; gasketing ensures no light leaks
- 3000K, 3500K, 4000K and 5000K CCT; 80 CRI minimum; Linear Nightlight optional
- Options to meet Buy American Act requirements

Dimensional and Mounting Details



Order Information

SAMPLE ORDER NUMBER: FUSL-X12-4-LD4-2STD-50-UNV-80/84-EDC1

Domestic Preferences	Product Family	Housing	Fixture Width	Length	LED	No. of LEDs	Illumination Level	Color Temperature	Voltage
Domestic Preferences ⁽⁵⁾	Product Family	Housing	Fixture Width	Length	LED	No. of LEDs	Illumination Level	Color Temperature	Voltage
[Blank] =Standard BAA =Buy American Act	FUSL	S=12 ga. (Ultimax) X=14 ga. (Maximum) D=16 ga. (Medium) N=18 ga. (Minimum)	12=12"	2=2' 4=4'	LD4=LED	1=(1) LED Module 2=(2) LED Modules 3=(3) LED Modules	STD=Standard LO=Low HI=High	30=3000K Kelvin 35=3500K Kelvin 40=4000K Kelvin 50=5000K Kelvin	120=120V 277=277V UNV=120V-277V
Notes (5) 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.									

Lens Type	Driver	Options	Accessories
Lens Type ^{(1), (2)}	Driver ⁽³⁾	Options	Accessories (Order Separately) ⁽⁶⁾
Fixture Side 80=0.125 Prismatic Acrylic 81=0.156 Prismatic Polycarbonate 82=0.187 Prismatic Polycarbonate Environmental Side 84=0.125 Clear Polycarbonate 85=0.187 Clear Polycarbonate 86=0.250 Clear Polycarbonate 87=0.375 Clear Polycarbonate 88=0.500 Clear Polycarbonate 94=0.187 Clear Tempered Glass 96=0.250 Clear Tempered Glass 97=0.375 Clear Tempered Glass	EDC1 =Electronic Driver, 1 Circuit, Non-Dimming EDC2 =Electronic Driver, 2 Circuits, Non-Dimming EDD1 =Electronic Driver, 1 Circuit, 0-10V Dimming 10% EDD2 =Electronic Driver, 2 Circuits, 0-10V Dimming 10% ED1D1 =Electronic Driver, 1 Circuit, 0-10V Dimming 1% ED1D2 =Electronic Driver, 2 Circuits, 0-10V Dimming 1%	LLNL =Linear LED Night Light LLNDL =Linear LED Dimmable Night Light AM =Antimicrobial Finish MW =Matte White Powder Coat White EL7W =Emergency Battery Pack, 7W Output EL10W =Emergency Battery Pack, 10W Output EL14W =Emergency Battery Pack, 14W Output WL =Wet Label ⁽⁴⁾ Stainless Steel Outer Housing SSN =Natural Brushed Finish SSP =Powder Coat Paint White Finish Fasteners SF3 =Allen-Head (center pin reject)	9306 =Allen-Head Wrench VRSD =T20 Center Pin Tamperproof TORX®-head screwdriver
Notes (1) Fixture Side and Environmental Side lenses not to exceed 0.625" total thickness. Fixture Side and Environmental Side lenses not to exceed 0.500" total thickness when specifying tempered glass. (2) Refer to Lens Ordering Guide for additional lens choices.	Notes (3) Dimming driver used. For EDC1 and EDC2, the purple and gray low voltage leads are not connected to the driver. For EDD1 and EDD2, purple and gray leads are connected to the driver and at same access point as fixture line voltage leads.	Notes (4) Wet Label is shipped with weep holes for drainage.	Notes (6) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

Product Specifications

Application

- Confinement/correctional luminaire suitable for use in:
 - Inmate cells
 - Psychiatric wards
 - Secure corridors
 - General population areas

Housing

- Die-formed 12-, 14-, 16 or 18-gauge CRS body construction
- 16-gauge back pan for the FMSC
- One-piece, seamless, doorless housing
- Continuous welded and ground ends
- Maximum impact resistance and prevention of unauthorized fixture penetration
- High gloss, electrostatically applied, White powder coat finish
- Average minimum reflectance 92%
- Optional Matte White powder coat finish and Matte White anti-microbial finish
- Optional stainless-steel Natural Brushed or stainless-steel Powder Coat Paint White finish

Fasteners and Hinge

- Stainless steel tamper-resistant T20 TORX® screws with center pin reject standard
- Allen head screws with center pin reject optional
- Concealed piano hinge leaves no exposed parts for weapon fabrication and facilitates easy maintenance

Backplate

- Die-formed CRS
- Forms an irretrievable blade trap to prevent contraband concealment

Lens and Lens Retention

- Choice of prismatic acrylic or prismatic polycarbonate on fixture side
- Clear polycarbonate or clear tempered glass on environmental side (see lens options)
- 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%, 1 or 2 circuits
- Non-dimming, 1 or 2 circuits available
- Dimming leads connected and presented at access point optional

Compliance

- cULus listed for damp locations.
- Wet location listed under covered ceiling optional

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

 [View IES files](#)

*CRI: 80; CCT: 4000				80/84 Shielding	
Fixture Size	# Modules	Level	Nominal Input Watts	Nominal Delivered Lumens	LPW
2'	1	LO	11.7	1244	106.3
	1	STD	16.65	1666	100.1
	1	HI	21.6	2044	94.6
	2	LO	23.4	2488	106.3
	2	STD	33.3	3332	100.1
	2	HI	43.2	4087	94.6
	3	LO	35.1	3733	106.4
	3	STD	49.95	4998	100.1
	3	HI	64.8	6131	94.6
4'	1	LO	23.4	2709	115.8
	1	STD	33.3	3628	108.9
	1	HI	43.2	4450	103
	2	LO	46.8	5418	115.8
	2	STD	66.6	7256	108.9
	2	HI	86.4	8900	103
	3	LO	70.2	8127	115.8
	3	STD	99.9	10884	108.9
	3	HI	129.6	13350	103

Nominal input wattage values include LED voltage, drive current, and typical driver efficiency. Refer to LM79 data/photometric files for exact delivered lumen values and input wattage. Values in table are nominal values only.

Lumen Calculator

CCT	Multiplier
2000	0.673
2700	0.893
3000	0.943
3500	0.99
4000	1
5000	1.017

Lens Multiplier Table

	Lens	Multiplier
Fixture Side	80	1
	81	0.95
	82	0.93
Environment Side	84	1
	85	0.981
	86	0.969
	87	0.938
	88	0.844
	94	1
	96	0.991
97	0.956	