

Project		Catalog #		Type	
Prepared by		Notes		Date	



Fail-Safe FLD4C

Vandal Resistant / High Abuse
Sealed/Medical
4" Round Downlight
250 to 6000 Lumens

Typical Applications:

Healthcare • Behavioral Health • Public Spaces • Education • Restrooms • Patient Rooms • Food Service

Interactive Menu

- Order Information page 2
- Energy Data page 7
- Product Specifications page 8
- BioUp - Melanopic Lighting page 9
- Product Warranty

Top Product Features

- From 250 to 6000 lumens for design flexibility
- Wet location standard (under covered ceiling)
- NSF listed for easy cleaning and wipe-down
- Choice of 6 reflector finishes
- Glass, acrylic, or polycarbonate bottom lens available for additional protection. Ligature resistant.
- IK10 impact resistant rated with polycarbonate bottom lens
- BioUp available for a 30% Biological Impact boost, compared to traditional LED sources
- Vandal resistant/high abuse, open or enclosed; Ligature resistant
- Options to meet Buy American and other domestic preference requirements

Product Certification

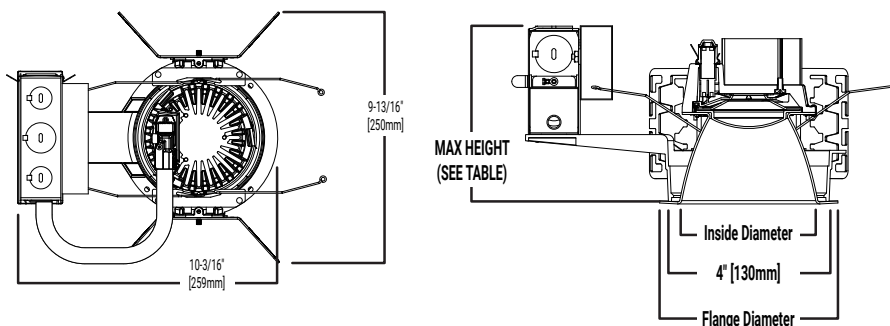


Product Features



LINEAR DISCONNECT
Designed to provide safe and convenient means of disconnecting power

Dimensional and Mounting Details



Below are SKUs that typically ship within 15 days.

4" Round

Housing	Module
FLD4C-10-D010	FEU4C-1020-90-30
FLD4CX-10-D010	FEU4C-1020-90-35
FLD4C-15-D010	FEU4C-1020-90-40
FLD4CX-15-D010	
FLD4C-30-D010	FEU4C-2540-90-30
FLD4CX-30-D010	FEU4C-2540-90-35
	FEU4C-2540-90-40





See page 6 for dimensional details.

additional product diagrams

1. HOUSING

SAMPLE: **FLD4CX-15-D010** (housing to accept enclosed reflector - 4 brackets - vandal or sealed/medical)
FLD4C-20-DE010 (housing to accept open reflector - no brackets - sealed/medical)
FLD4C-45-DE010-W2N-2765 (housing to accept open reflector - no brackets - sealed/medical)

Please see page 1
for a list of SKUs that
typically ship within
15 days.

Domestic Preferences ⁽¹⁾	Vandal/ High Abuse Housing		Sealed/Medical Housing		Lumens ⁽²⁾	Color Control
[Blank] =Standard BAA =Buy American Act TAA =Trade Agreements Act	Vandal Open FLD4CX =Housing, used with extended flange reflector FLD4CXCP =Housing, used with extended flange reflector, Chicago Plenum Vandal Enclosed FLD4CX =Housing, used with extended flange reflector FLD4CXCP =Housing, used with extended flange reflector, Chicago Plenum		Sealed/Medical Open FLD4C =Housing, used with standard flanged reflector FLD4CCP =Housing, used with standard flanged reflector, Chicago Plenum Sealed/Medical Enclosed FLD4CX =Housing, used with extended flange reflector FLD4CXCP =Housing, used with extended flange reflector, Chicago Plenum		02 =250 lumens 05 =500 lumens 08 =800 lumens 10 =1000 lumens 15 =1500 lumens 20 =2000 lumens 25 =2500 lumens 30 =3000 lumens 35 =3500 lumens 40 =4000 lumens 45 =4500 lumens ⁽³⁾ 50 =5000 lumens ⁽³⁾ 55 =5500 lumens ⁽³⁾ 60 =6000 lumens ⁽³⁾	D2W =Dim to warm Blank =all others
Notes (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. Offered with spun aluminum narrow (N), medium (M) and wide (W) trims.	 FLD4CX	 FLD4CX	 FLD4C	 FLD4CX	Notes (2) Nominal Lumens will vary depending on selected color, CRI, driver and reflector finish. Reference Multiplier tables . (3) Product is marked spacing. Reference table on page 7 for the spacing details.	
	VANDAL/HIGH ABUSE		SEALED/MEDICAL			

Driver	Fixture (Housing) Options	Accessories ⁽²⁵⁾
D010 =0-10V Dimming, 1% to 100%, 120V-277V, up to 6000 lumens, D2W=800-2500 lumens 1D010 =0-10V Dimming, 1% to 100%, 120V, 6000 lumens & above, D2W=3500-4500 lumens 2D010 =0-10V Dimming, 1% to 100%, 277V, 6000 lumens & above, D2W=3500-4500 lumens 3D010 =0-10V Dimming, 1% to 100%, 347V, dedicated drivers, D2W=800-2500 lumens, 3500 & above use step down transformer and dedicated driver. 1 driver: D2W=800-2500 lumens, 2 drivers: D2W=3500-4500 lumens DE010 =0-10V Dimming, 0% to 100%, 120V-277V, 500-6000 lumens, D2W=800-2500 lumens 1DE010 =0-10V Dimming, 0% to 100%, 120V, 6000 lumens & above, D2W=3500-4500 lumens 2DE010 =0-10V Dimming, 0% to 100%, 277V, 6000 lumens & above, D2W=3500-4500 lumens 3DE010 =0-10V Dimming, 0% to 100%, 347V, step down transformer, D2W=800-2500 & 3500-4500 lumens 1 driver: D2W=800-2500 lumens, 2 drivers: D2W=3500-4500 lumens D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V-277V, D2W=800-2500 lumens 1D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V, D2W=3500-4500 lumens 2D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 277V, D2W=3500-4500 lumens 3D5LT =Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 347V, step down transformer, D2W=800-2500 & 3500-4500 lumens 1 driver: D2W=800-2500 lumens, 2 drivers: D2W=3500-4500 lumens DLE =Lutron Ecosystem Dimming, 1% to 100%, 120V-277V, D2W=800-2500 lumens 1DLE =Lutron Ecosystem Dimming, 1% to 100%, 120V, D2W=3500-4500 lumens 2DLE =Lutron Ecosystem dimming 1% to 100%, 277V, D2W=3500-4500 lumens 3DLE =Lutron Ecosystem dimming 1% to 100%, 347V, step down transformer, D2W=800-2500 & 3500-4500 lumens 1 driver: D2W=800-2500 lumens, 2 drivers: D2W=3500-4500 lumens Tunable White DE010-W2N-2765 =Tunable white 2700-6500K, 0-10V Dimming, 0% to 100%, 120-277V, 1000 lumens 1DE010-W2N-2765 =Tunable white 2700-6500K, 120V, 0-10V Dimming, 0% to 100%, 1500-3500 lumens 2DE010-W2N-2765 =Tunable white 2700-6500K, 277V, 0-10V Dimming, 0% to 100%, 1500-3500 lumens 3DE010-W2N-2765 =Tunable white 2700-6500K, 347V with step down transformer, 0-10V Dimming, 0% to 100%, 1000-3500 lumens 1 driver: 1000-3500 lumens DE010-W2N-2050 =Tunable white 2000-5000K, 0-10V Dimming, 0% to 100%, 120-277V, 1000 lumens 1DE010-W2N-2050 =Tunable white 2000-5000K, 120V, 0-10V Dimming, 0% to 100%, 1500-3500 lumens 2DE010-W2N-2050 =Tunable white 2000-5000K, 277V, 0-10V Dimming, 0% to 100%, 1500-3500 lumens 3DE010-W2N-2050 =Tunable white 2000-5000K, 347V with step down transformer, 0-10V Dimming, 0% to 100%, 1000-3500 lumens 1 driver: 1000-3500 lumens D5LT-W2N-2765 =Tunable white 2700-6500K, 120V-277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 120-277V, 1000 lumens 1D5LT-W2N-2765 =Tunable white 2700-6500K, 120V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1500-3500 lumens 2D5LT-W2N-2765 =Tunable white 2700-6500K, 277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1500-3500 lumens 3D5LT-W2N-2765 =Tunable white 2000-5000K, 347V with step down transformer Fifth Light® (DALI T6) Dimming, 0% to 100%, 1000-3500 lumens 1 driver: 1000-3500 lumens D5LT-W2N-2050 =Tunable white 2000-5000K, 120V-277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 120-277V, 1000 lumens 1D5LT-W2N-2050 =Tunable white 2000-5000K, 120V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1500-3500 lumens 2D5LT-W2N-2050 =Tunable white 2000-5000K, 277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1500-3500 lumens 3D5LT-W2N-2050 =Tunable white 2000-5000K, 347V with step down transformer Fifth Light® (DALI T6) Dimming, 0% to 100%, 1000-3500 lumens 1 driver: 1000-3500 lumens BioUp Driver (see next page)	EMB0D =Bodine® Emergency Module with Remote Test Switch, 7 watt ⁽⁴⁾ EM7 =7W Emergency Module with Remote Test Switch ^{(4), (5), (6)} EM14 =14W Emergency Module with Remote Test Switch ^{(4), (5), (6)} IEMB0D =Bodine® Emergency Module with Integral Test Switch, 7 watt ^{(4), (5)} IEM7 =7W Emergency Module with Integral Test Switch ^{(4), (5)} IEM14 =14W Emergency Module with Integral Test Switch ^{(4), (5)} ETRD =Emergency Transfer Device ⁽³¹⁾	HB26 =C-channel Bar Hanger, 26" Long, Pair HB50 =C-channel Bar Hanger, 50" Long, Pair RM22 =Wood Joist Bar Hanger, 22" Long, Pair H347 =347 to 120V Step Down Transformer, 75VA H347200 =347 to 120V Step Down Transformer, 200VA
	Notes (4) Not available with Chicago Plenum. (5) ULus listed only. (6) Transfer time from normal to EM power > 1 second. (31) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others).	Notes (25) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

1. HOUSING (continued)

BioUp Driver	Fixture (Housing) Options	Accessories ⁽²⁵⁾
DE010B2750 =BioUp Tunable white 2700-5000K, 0-10V Dimming, 0% to 100%, 120-277V 800 lumens 1DE010B2750 = BioUp Tunable white 2700-5000K, 120V, 0-10V Dimming, 0% to 100%, 1000-2500 lumens 2DE010B2750 = BioUp Tunable white 2700-5000K, 277V, 0-10V Dimming, 0% to 100%, 1000-2500 lumens 3DE010B2750 = BioUp Tunable white 2700-5000K, 347V with step down transformer, 0-10V Dimming, 0% to 100%, 800-2500 lumens 1 driver: 800-2500 lumens	EMB00 =Bodine® Emergency Module with Remote Test Switch, 7 watt ⁽¹⁰⁾ EM7 =7W Emergency Module with Remote Test Switch ^{(4), (5), (6)} EM14 =14W Emergency Module with Remote Test Switch ^{(4), (5), (6)} IEMB00 =Bodine® Emergency Module with Integral Test Switch, 7 watt ^{(4), (5)} IEM7 =7W Emergency Module with Integral Test Switch ^{(4), (5)} IEM14 =14W Emergency Module with Integral Test Switch ^{(4), (5)} ETRD =Emergency Transfer Device ⁽³¹⁾	HB26 =C-channel Bar Hanger, 26" Long, Pair HB50 =C-channel Bar Hanger, 50" Long, Pair RM822 =Wood Joist Bar Hanger, 22" Long, Pair H347 =347 to 120V Step Down Transformer, 75VA H347200 =347 to 120V Step Down Transformer, 200VA
DE010B35, DE010B40, DE010B50 = BioUp Static White (choose 3500K, 4000K or 5000K), 0-10V Dimming, 0% to 100%, 120-277V 800 lumens 1DE010B35, 1DE010B40, 1DE010B50 = BioUp Static White (choose 3500K, 4000K or 5000K), 120V, 0-10V Dimming, 0% to 100%, 1000-2500 lumens 2DE010B35, DE010B40, DE010B50 = BioUp Static White (choose 3500K, 4000K or 5000K), 277V, 0-10V Dimming, 0% to 100%, 1000-2500 lumens 3DE010B35, 3DE010B40, 3DE010B50 = BioUp Static White (choose 3500K, 4000K or 5000K) 347V with step down transformer, 0-10V Dimming, 0% to 100%, 800-2500 lumens 1 driver: 800-2500 lumens		
D5LTB2750 =BioUp Tunable white 2700-5000K, 120V-277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 120-277V 800 lumens 1D5LTB2750 = BioUp Tunable white 2700-5000K, 120V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1000-2500 lumens 2D5LTB2750 = BioUp Tunable white 2700-5000K, 277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1000-2500 lumens 3D5LTB2750 = BioUp Tunable white 2700-5000K, 347V with step down transformer Fifth Light® (DALI T6) Dimming, 0% to 100%, 800-2500 lumens 1 driver: 800-2500 lumens		
D5LTB35, D5LTB40, D5LTB50 = BioUp Static White (choose 3500K, 4000K or 5000K), 120V-277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 120-277V 800 lumens 1D5LTB35, 1D5LTB40, 1D5LTB50 = BioUp Static White (choose 3500K, 4000K or 5000K), 120V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1000-2500 lumens 2D5LTB35, 2D5LTB40, 2D5LTB50 = BioUp Static White (choose 3500K, 4000K or 5000K), 277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1000-2500 lumens 3D5LTB35, 3D5LTB40, 3D5LTB50 = BioUp Static White (choose 3500K, 4000K or 5000K), 347V with step down transformer Fifth Light® (DALI T6) Dimming, 0% to 100%, 800-2500 lumens; 1 driver: 800-2500 lumens	Notes (4) Not available with Chicago Plenum. (5) ULus listed only. (6) Transfer time from normal to EM power > 1 second. (31) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others).	Notes (25) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.



2. MODULE





SAMPLE: FEU4C-1020-97-30
BAA-FEU4C-2540-90-35
FEU4C-1030-W2N-90-2765
FEU4C-2500B-9050

Domestic Preferences ⁽¹⁾	Power Module	Lumen Levels ⁽²⁾	CRI	Color
[Blank] =Standard BAA =Buy American Act TAA =Trade Agreements Act	FEU4C =4-inch Universal LED Module	For use with one driver 0208IC =250, 500 and 800 lumens, IC Rated (for use with all drivers, min 500 lumens with DE010 and D5LT, min 800 lumens with Lutron) 1020 =1000, 1500, 2000 lumens 1015IC =1000, 1500 lumens IC Rated 2540 =2500, 3000, 3500, 4000 lumens (for use with Lutron 3000-3500, D010, D5LT and DE010 3000-4000) 4560 =4500, 5000, 5500 lumens (for use with D010, D5LT and DE010 4500-6000) ⁽³⁾ For use with two drivers 4060 =4000, 4500, 5000, 5500, 6000 lumens, (for use with Lutron 4000-6000, D010, DSLT, and DE010 to 6000 lumens) ⁽³⁾	90 =90 CRI Minimum 97 =97 CRI Minimum	90 CRI 24 =2400K 27 =2700K 30 =3000K 35 =3500K 40 =4000K 50 =5000K 97 CRI 27 =2700K 30 =3000K
		Dim 2 Warm 0825-90-30-D2W =800-2500 lumen, 90 CRI, Dim 2 Warm (1 driver and 1 LED) ⁽³²⁾ 3545-90-30-D2W =3500-4500 lumen, 90 CRI, Dim 2 Warm (2 drivers and LEDs) Tunable white 1030-W2N-90-2765 =1000, 1500, 2000, 2500, 3000 lumens, 90 CRI, tunable white ⁽³³⁾ 2700K-6500K 1030-W2N-90-2050 =1000, 1500, 2000, 2500, 3000 lumens, 90 CRI, tunable white ⁽³³⁾ 2000K-5000K 35-W2N-90-2765 =3500 lumens, 90 CRI, tunable white 2700K-6500K ⁽³⁾ 35-W2N-90-2050 =3500 lumens, 90 CRI, tunable white 2000K-5000K ⁽³⁾		
		BioUp Tunable White	CRI / Color	
		BioUp Tunable white 0820B =800, 1000, 1500, 2000 lumens, 90 CRI ⁽³²⁾ 2500B =2500 lumens, 90 CRI ⁽³⁵⁾	9035 = Static 3500K 9040 =Static 4000K 9050 =Static 5000K 902750 =BioUp Tunable White 2700K-5000K	
Notes (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analysed under domestic preference requirements. Offered with spun aluminum narrow (N), medium (M) and wide (W) trims.		Notes (32) IC rated for 800 lumens. (33) IC rated for 1000 lumens. (35) Product is marked spacing. Reference table on page 7 for the spacing details.	Notes Do not specify CRI or CCT with Dim 2 Warm. Dim 2 Warm is only available with 3000K and 90 CRI.	

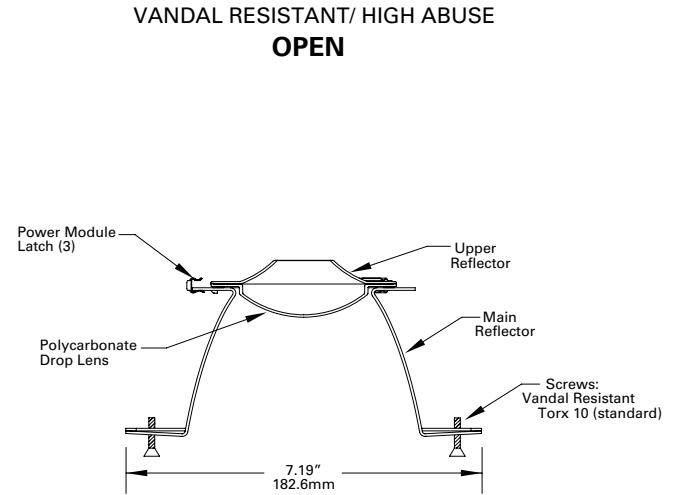
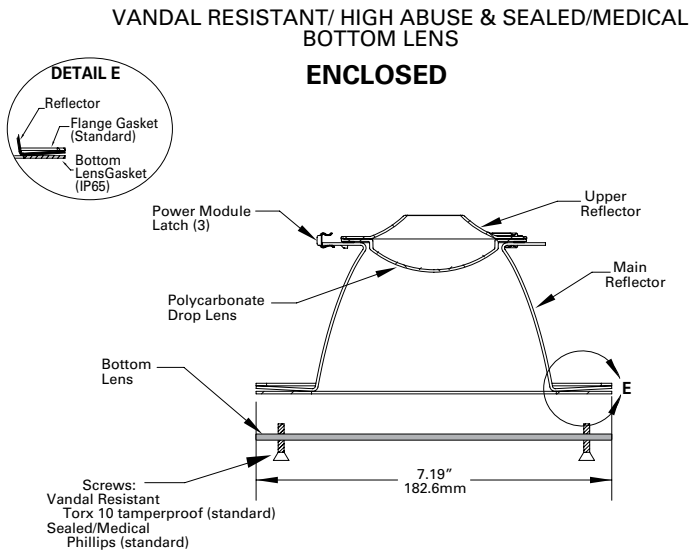
3. TRIM/REFLECTOR

SAMPLES: F4LC-M-2-H
F4LCXV-M-1-WMH-BL84

Base Trim	Distribution ⁽¹¹⁾	Flange	Reflector Finish	Trim Options ⁽²³⁾
Vandal Resistant F4LCXV =(open) F4LCXV =(enclosed) Sealed/Medical F4LC =(open) F4LCXS =(enclosed)	All Trims M =Medium (50° Beam), Spun Aluminum Sealed/Medical Open Only (F4LC Only) W =Wide, Spun Aluminum SW =Single Wall Wash (Sealed/Medical open only) ^{(10), (12)} N =Narrow, Spun Aluminum PS =Non-conductive, Shallow ^{(16), (17)}	1 =Self-flanged ⁽¹⁸⁾ 2 =White painted self flanged, (not available with MW reflector finish)	LI =Specular Clear ⁽²⁰⁾ H =Semi-Specular Clear ⁽²⁰⁾ WMH =Warm Haze ⁽²⁰⁾ MW =Matte White	E =Integral Emergency Test Switch Hole ⁽¹⁴⁾ FP =NSF listed, non-food/splash zone ⁽²³⁾ Bottom Lens (enclosed only) ^{(21), (22)} BL84 =Bottom lens, 0.125" clear polycarbonate BL85 =Bottom lens, 0.187" clear polycarbonate BL86 =Bottom lens, 0.250" clear polycarbonate BL89AM =Bottom lens, 0.125" smooth opal polycarbonate BL89BV =Bottom lens, 0.125" smooth clear acrylic BL89BW =Bottom lens, 0.125" smooth opal acrylic For IP65, refer to Compatability Chart on page 7
Notes Vandal resistant open and enclosed, same trim catalog logic. The words 'vandal, vandal resistant, and high abuse are used interchangeably.	Notes (10) Not available with Chicago Plenum. Not available for 6500-7000 lumens (11) Product is marked spacing and must be installed with the following minimum spacing. Center to center of adjacent luminaires: 36"; Center of luminaire to side of building member: 18" Minimum overhead: 1/2". (12) Not available on Vandal Resistant Open. (16) PS available in self-flanged MW finish only (17) Offered up to 2000 lumens	Notes (18) Flange is the same as the reflector.	Notes (20) Anodized or spun reflectors	Notes (14) Only available with medium bottom lens, and is required for all IEM housings. (21) For open style, do not specify Bottom Lens. For enclosed units, specify Bottom Lens. (22) Additional lens options for the BL (bottom lens) available, see Downlight Lens Guide on page 7. (23) NSF listing is only available with the Sealed/Medical Trim options, F4LC and F4LCXS using Phillips head screws.

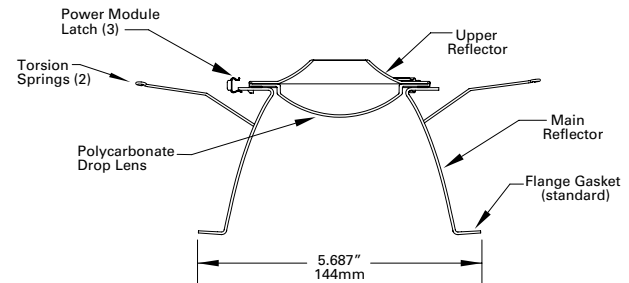
Vandal Open  F4LCXV	Vandal Enclosed  F4LCXV	Sealed/Medical Open  F4LC	Sealed/Medical Enclosed  F4LCXS
VANDAL/HIGH ABUSE		SEALED/MEDICAL	

Dimensional and Mounting Details

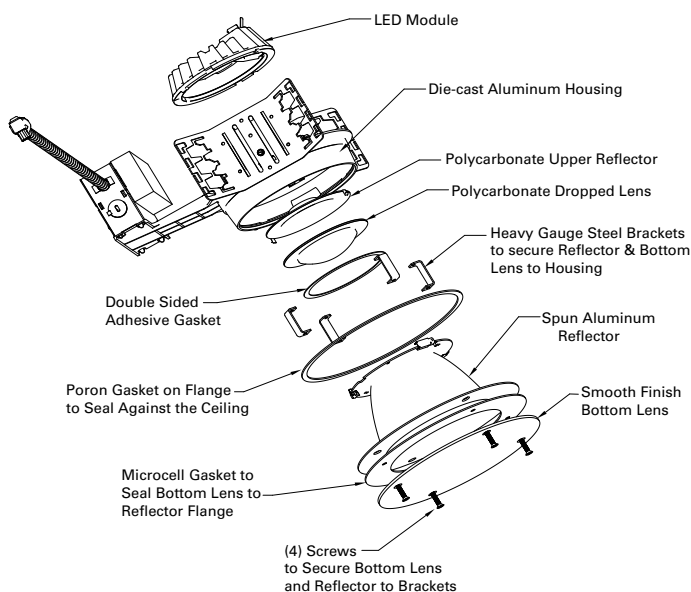


SEALED/MEDICAL

OPEN



ENCLOSED BOTTOM LENS



NOTE:

Sealed Medical Regress Lens has gasket on flange to seal against ceiling and is attached to housing with torsion springs.

Below are SKUs that typically ship within 15 days.

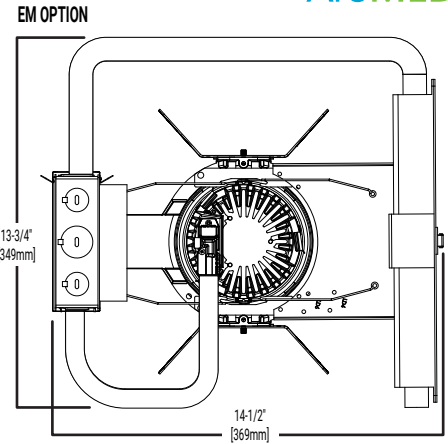
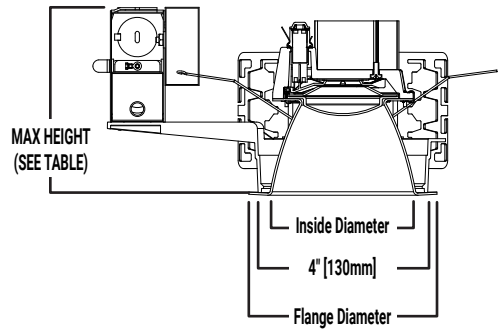
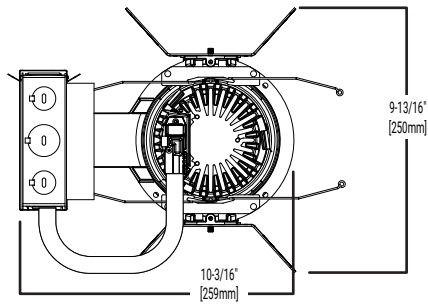
4" Round

Housing	Module
FLD4C-10-D010	FEU4C-1020-90-30
FLD4CX-10-D010	FEU4C-1020-90-35
FLD4C-15-D010	FEU4C-1020-90-40
FLD4CX-15-D010	
FLD4C-30-D010	FEU4C-2540-90-30
FLD4CX-30-D010	FEU4C-2540-90-35
	FEU4C-2540-90-40

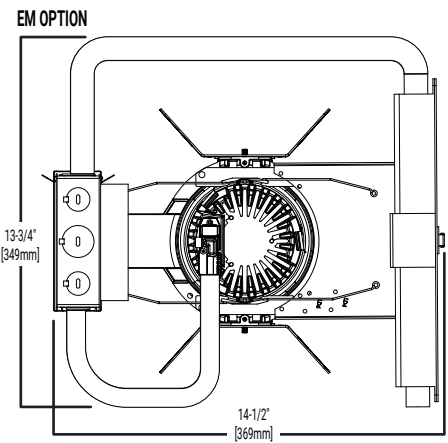
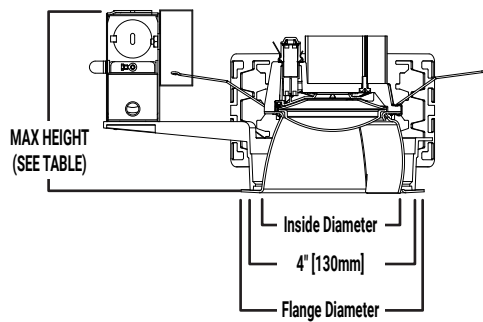
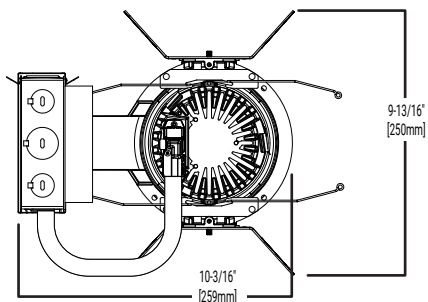
Dimensional and Mounting Details



DOWNLIGHT



WALL WASH



CATALOG #	Flange DIAMETER or WIDTH [IN]	INSIDE DIAMETER or WIDTH [IN]	MAX HEIGHT				
			250-2000 LUMENS (90/97CRI)	2500-4000 LUMENS (90/97CRI)	4500-6000 LUMENS (90/97CRI)	1000-1500IC LUMENS (90/97CRI)	2 LEDs 4500-6000 LUMENS (90/97CRI)
4LBN	5.67	4.24	5.6	5.6	5.6	6.1	8.1
4LBM	5.67	4.26	5.6	5.6	5.6	6.1	8.1
4LBW	5.67	4.27	5.6	5.6	5.6	5.7	7.7
4LBPS	5.67	4.23	5.6	5.6	5.6	5.6	6.5
4LBSWN	5.67	4.27	5.6	5.6	5.6	5.7	7.7

Energy and Performance Data



D010 DRIVER ENERGY DATA

Series	250 lumen		500 lumen		800 lumen		1000 lumen		1500 lumen		2000 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.029	0.017	0.061	0.032	0.085	0.041	0.084	0.042	0.135	0.063	0.189	0.084
Input Power (W)	3.45	3.87	7.33	7.78	10.15	10.52	10.04	10.43	16.17	16.56	22.58	22.63
In-rush (A)	2.1	8.5	3.7	8.5	3.6	8.3	3.6	8.4	2.3	9.5	2.1	9.7
Inrush duration (µs)	250	131	190	136	220	135	226	136	230	125	243	132
THDi (%)	7.21	16.92	7.82	10.78	5.57	9.63	7.78	9.24	4.75	9.93	8.03	7.44
PF	≥ 0.98	≥ 0.9	≥ 0.99	≥ 0.93	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.96

Series	2500 lumen		3000 lumen		3500 lumen		4000 lumen		4500 lumen		5000 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V	120V	277V
Input Current (A)	0.276	0.121	0.276	0.041	0.333	0.152	0.404	0.181	0.421	0.192	0.491	0.216
Input Power (W)	32.98	32.57	32	10.52	39.83	39.84	48.38	47.94	50.22	50.17	58.69	58.01
In-rush (A)	2.5	11.8	3.6	8.3	3.1	14.3	3.1	14.5	5.6	22.6	5.6	22.6
Inrush duration (µs)	215	111	220	135	200	94	197	95	215	120	213	135
THDi (%)	9.86	6.57	5.57	9.63	4.25	10.05	5.02	7.97	6.12	8.35	8.51	7.92
PF	≥ 0.99	≥ 0.97	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.94	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.95	≥ 0.99	≥ 0.96

Series	5500 lumen		6000 lumen	
Input Voltage 120-277VAC	120V	277V	120V	277V
Input Current (A)	0.526	0.231	0.542	0.256
Input Power (W)	62.97	61.97	64.88	65.7
In-rush (A)	5.1	23.1	6.2	27.5
Inrush duration (µs)	217	138	188	101
THDi (%)	9.42	7.16	4.33	11.86
PF	≥ 0.99	≥ 0.96	≥ 0.99	≥ 0.93

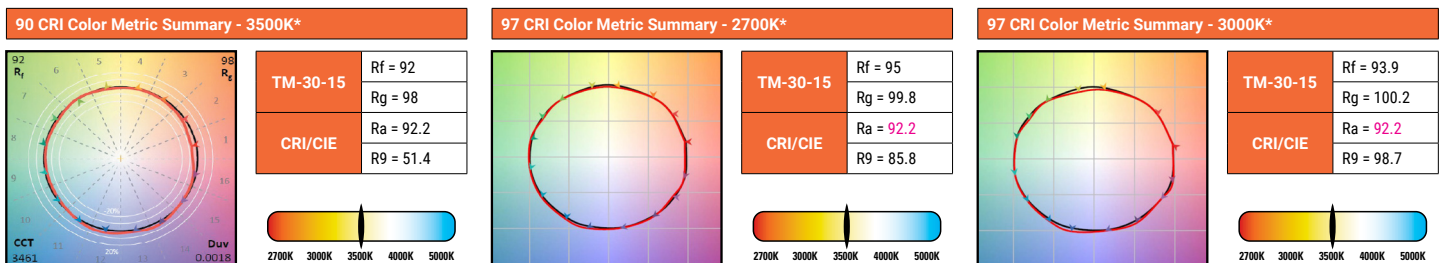
Minimum starting temperature -30°C (-22°F)*
(Nominal input 120-277VAC & 100% of rated output power)

Sound Rating: Class A standards

Notes:

Emergency Battery packs are rated for a minimum starting temperature of 0°C.

COLOR METRICS - TM-30-15 & CRI/CIE



* Color values are based on haze reflector, other finishes and field results may vary.

Marked Spacing

4-inch Marked spacing for 90 and 97 CRI			
4000	36	36	0.5
4000-6000 (Lutron)	36	36	8

[View IES files](#)



Product Specifications

Lower Shielding Reflector

- Self-flanged, spun .050" thick aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source brightness.

Trim Retention

- For sealed/medical and vandal resistant/high abuse bottom lens, the lower reflector is retained with (4) counter sunk, philips head screws, holding the flange tightly to the housing.
- Open sealed/medical reflector uses torsion springs.
- Vandal Resistant versions utilize the Torx T10 #6 screw with center pin reject.

LED

- High brightness LED's combined with a high reflectance upper reflector and convex lens for even distribution with no pixilation.
- Rated for 50,000 hours at 70% lumen maintenance.
- Auto resetting, thermally protected, LED's turn off when safe operating temperatures exceeded.
- Color variation within 3-step MacAdam ellipses.
- Disconnect allows for toolless replacement of LED engine from below ceiling.
- Available 90, 97 CRI.

Driver

- Combination 120-277V 0-10V or 120V trailing edge phase cut driver provides flicker free dimming from 100% to 10%.
- Optional for 1000- 4000 lumens, 1% 0-10V, Fifth Light, or Lutron® Ecosystem.
- Driver can be serviced from above or through the aperture.

Lenses

- All versions include a nonremovable upper lens, 0.060" thick frosted polycarbonate.
- Bottom lens is smooth acrylic or polycarbonate up to 0.250" thick.
- Bottom polycarbonate lens IK10 impact resistant rated

Code Compliance

- cULus listed for wet locations under covered ceiling standard.
- Non-IC rated insulation must be kept 3" from top and sides of housing.
- IP65 available
- NSF/ANSI 2 certified for Splash/NonFood Zone. Typical rating for lighting equipment not subjected to direct food contact. This listing is only applicable with Sealed/Medical Open or Sealed/Medical Enclosed using Phillips head screws.
- FCC CFR Title 47 Part 15 Class B at 120VAC and Class A at 277VAC

Warranty

- 5 year limited warranty

Downlight Lens Guide

Downlight Lens Guide				
Lens	Description	BTR Bottom Trim (BTR) (Total Maximum Lens Thickness is .375")	BL Bottom Lens (BL) (Single Smooth Acrylic or Polycarbonate Lens Only)	Open
80	Acrylic, Prismatic Pattern 12, 0.125"		N/A	N/A
89AG	Acrylic, Prismatic Pattern 19, 0.156"		N/A	N/A
89BV	Acrylic, Smooth, Clear 0.125"			N/A
89BW	Acrylic, Smooth, Opal 0.125"			N/A
94	Glass, Tempered, Smooth, Clear, 0.187"		N/A	N/A
89AH	Polycarbonate, Prismatic Pattern 12, 0.125"		N/A	N/A
82	Polycarbonate, Prismatic Pattern 12, 0.187"		N/A	N/A
84	Polycarbonate, Smooth, Clear 0.125"		IK10	N/A
85	Polycarbonate, Smooth, Clear 0.187"		IK10	N/A
86	Polycarbonate, Smooth, Clear 0.250"		IK10	N/A
87	Polycarbonate, Smooth, Clear 0.375"		IK10	N/A
89AM	Polycarbonate, Smooth, Opal 0.125"		IK10	N/A

Compatibility Chart

	Sealed/Medical		Vandal Resistant/High Abuse	
Diagram				
Description	Open	Enclosed Bottom Lens	Open	Enclosed Bottom Lens
Housing	FLD4C FLD4BCP	FLD4CX, FLD4CXCP	FLD4CX, FLD4CXCP	FLD4CX, FLD4CXCP
NSF	Available	Available	Not Available	Not Available
IP	IP65 Available	*IP65 Available	IP65 Available	*IP65 Available

IP65 ratings are from the room-side only on all applications.

IP requirement called out with (/65) at the end of the Trim ordering logic. Example: F4LCXVMTLI/65

* The sealed medical with bottom lens option is the IP65 compliant open reflector - with an attached bottom lens. During the IP65 test, no dust entered into the reflector from the bottom lens, but a miniscule amount of water did enter (on top of the bottom lens). However, no water can penetrate the upper reflector, and enter into the electrical - and there remains an impenetrable seal between the ceiling and luminaire.

Proven Research. Industry Recognized.

BioUp

Melanopic Lighting



See better



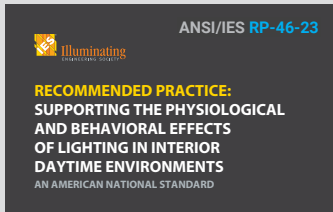
Feel better



Function better



See [BioUp brochure](#) for more details



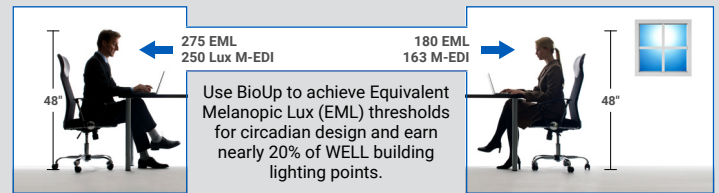
ANSI/IES RP-46-23

ANSI/IES RP-46-23 / TM18 published March 2024 based on over 40 years of research.

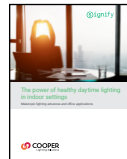
"...circadian clock synchronization is paramount to the body's efficient and appropriate functioning." – TM18



BioUp solutions maximize WELL points for Circadian Lighting Design (L03):



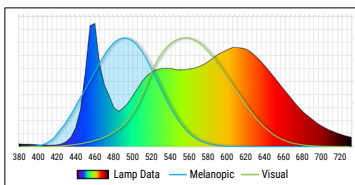
MDER, M-EDI and **EML** are key metrics used to quantify non-visual performance of indoor lighting systems.



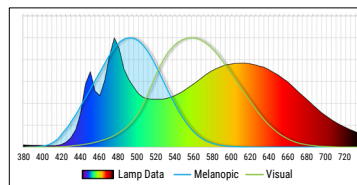
See [BioUp white paper](#) for more details

MDER - Melanopic Daylight Efficacy Ratio (MDER) measures the amount of light stimulating to the melanopsin receptors.

Standard 4000K LED
MDER = .62



BioUp 4000K LED
MDER = .82



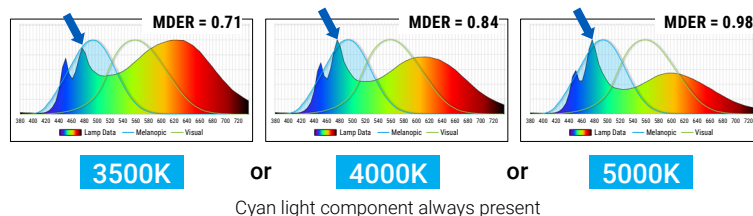
30% boost Biological impact compared to traditional LED sources

CCT	LED MDER ~83 CRI	BioUp Static		BioUp Dynamic	
		MDER	CRI	MDER	CRI
2700K	0.44	—	—	0.43	95
3000K	0.49	—	—	0.54	94
3500K	0.56	0.71	90	0.71	90
4000K	0.64	0.84	87	0.82	87
5000K	0.77	0.98	84	0.98	84

BioUp enhances the LED spectrum with cyan light at 475nm increasing the biological impact of the light to enhance our circadian rhythm which regulates our sleep/wake cycle, daytime engagement, and mood – **all without distorting visual color impression.**

Static (non-tunable)

Static BioUp is used when simple Melanopic Lighting is desired at all times.



Dimming Control

0%

Intensity

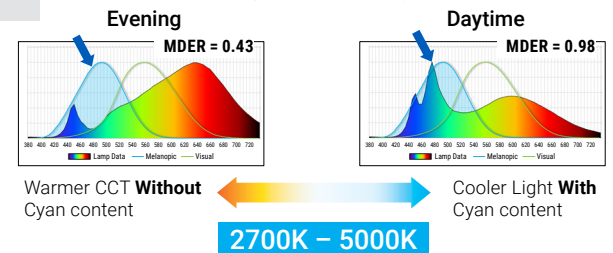
100%

> no CCT control needed

Arrow in graph shows BioUp spectrum boost is at 475nm where non-visual biological response is enhanced.

Dynamic - (Tunable)

Dynamic BioUp is used when Melanopic Lighting is desired to adjust during the day.



Warmer CCT Without Cyan content

Cooler Light With Cyan content

2700K – 5000K

CCT Control

0%

Intensity

100%

Dimming Control

> Control with Wavelinx, 2ch 0-10V, or DALI