| Project     | Catalog # | Туре |  |
|-------------|-----------|------|--|
| Prepared by | Notes     | Date |  |



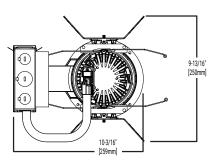
# Interactive Menu

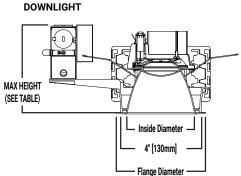
- Order Information page 2
- Energy Data page 7
- Product Specifications page 8
- BioUp Melanopic Lighting page 9
- Product Warranty

### **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

### **Dimensional and Mounting Details**





See page 6 for dimnsional details.

# 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

#### **Product Certification**













RESISTANT



#### Product Features













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 |
|                | FEU4C-1020-90-40 |
| FLD4C-15-D010  |                  |
| FLD4CX-15-D010 | FEU4C-2540-90-30 |
|                | FEU4C-2540-90-35 |
| FLD4C-30-D010  | FEU4C-2540-90-40 |
| FLD4CX-30-D010 |                  |





### 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 4 for a list of SKUs that typically ship within 15 days.



| Domestic Preferences (1)   | Vandal/ High Abuse Housing   |           | Sealed/M   | edical Housing   | Lumens (2)   | Color Control                       |
|--|--|-----------|--|--|--|-------------------------------------|
| [Blank]=Standard<br>BAA=Buy American Act<br>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 |           | reflector<br>FLD4CCP=Housing, us<br>reflector, Chicago Plen<br>Sealed/Medical Enclos<br>FLD4CX=Housing, user<br>reflector<br>FLD4CXCP=Housing, u | FLD4C=Housing, used with standard flanged reflector FLD4CCP=Housing, used with standard flanged reflector, Chicago Plenum 10=1000 lumens 15=1500 lumens 20=2000 lumens 20=2000 lumens 25=2500 lumens 30=3000 lumens 30=3 |  | D2W=Dim to warm<br>Blank=all others |
| Notes (1) Only product configurations with the buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <u>DOMESTIC PREFERENCES</u> website for more information. Components shipped separately may be separately analysed under domestic preference requirements. Offered with spun aluminum | Vandal Open  Vandal Enclosed  FLD4CX  Vandal Enclosed  |           | Sealed/Medical Open  FLD4C   | Sealed/Medical Enclosed  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. |                                     |
| narrow (N), medium (M) and wide (W) trims.   | VANDAL/H   | IGH ABUSE | SEALE  | D/MEDICAL  | spacing uerans.  |                                     |

| Driver   | Fixture (Housing) Options  | Accessories (25)   |
|--|--|--|
| D010=0-10V Dimming, 1% to 100%, 120V-277V, up to 6000 lumens, D2W=800-2500 lumens 10010=0-10V Dimming, 1% to 100%, 120V, 6000 lumens & above, D2W=3500-4500 lumens 20010=0-10V Dimming, 1% to 100%, 277V, 6000 lumens & above, D2W=3500-4500 lumens 30010=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  | EMBOD=Bodine® Emergency<br>Module with Remote Test Switch,<br>7 watt <sup>10)</sup><br>EM7=7W Emergency Module with<br>Remote Test Switch <sup>(6), (5), (6)</sup><br>EM14=14W Emergency Module  | HSA4=Slope Adapter for 6" (34)<br>Aperture Housings, Specify<br>Slope<br>HB26=C-channel Bar Hanger, 26"<br>Long, Pair<br>HB50=C-channel Bar Hanger, 50"  |
| 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   | with Remote Test Swifch (4).(5).(6) IEMBOD=Bodine® Emergency Module with Integral Test Switch, 7 watt (4).(5) IEM7=7W Emergency Module with Integral Test Switch (4).(5)   | Long, Pair<br>RMB22=Wood Joist Bar Hanger,<br>22* Long, Pair<br>H347=347 to 120V Step Down<br>Transformer, 75VA<br>H347200=347 to 120V Step  |
| D5LT=Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V-277V. D2W=800-2500 lumens   105LT=Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 120V. D2W=3500-4500 lumens   205LT=Fifth Light® (DALI T6) Logarithmic Dimming, 0% to 100%, 277V. D2W=3500-4500 lumens   305LT=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                                | IEM14=14W Emergency Module<br>with Integral Test Switch (4).(5)<br>ETRD=Emergency Transfer<br>Device (31)  | Down Transformer, 200VA  |
| 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  |  |  |
| DSLT-W2N-2765=Tunable white 2700-6500K, 120V-277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 120-277V, 1000 lumens 1DSLT-W2N-2765=Tunable white 2700-6500K, 120V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1500-3500 lumens 2DSLT-W2N-2765=Tunable white 2700-6500K, 277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1500-3500 lumens 3DSLT-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     |  |  |
| DSLT-W2N-2050=Tunable white 2000-5000K, 120V-277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 120-277V, 1000 lumens  1DSLT-W2N-2050=Tunable white 2000-5000K, 120V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1500-3500 lumens  2DSLT-W2N-2050=Tunable white 2000-5000K, 277V Fifth Light® (DALI T6) Dimming, 0% to 100%, 1500-3500 lumens  3DSLT-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 | No.  | Numer  |
| BioUp Driver (see next page)   | 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. (34) Not recommended for use with Wall Wash. |

## 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  | EMBOD=Bodine® Emergency<br>Module with Remote Test<br>Switch, 7 watt (18)<br>EM7=7W Emergency Module<br>with Remote Test Switch (4), (6), (6)<br>EM14=14W Emergency Module<br>with Remote Test Switch (4), (5), (6)                                    | HSA4=Slope Adapter for 6" (84)<br>Aperture Housings, Specify Slope<br>HB26=C-channel Bar Hanger, 26"<br>Long, Pair<br>HB50=C-channel Bar Hanger, 50"<br>Long, Pair<br>RMB22=Wood Joist Bar Hanger, |
| 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  | IEMBOD=Bodine® Emergency<br>Module with Integral Test Switch,<br>7 watt (4.5)<br>IEM7=7W Emergency Module<br>with Integral Test Switch (4.6)<br>IEM14=14W Emergency Module<br>with Integral Test Switch (4.6)<br>ETRD=Emergency Transfer<br>Device (3) | 22" Long, Pair<br>H347-347 to 120V Step Down<br>Transformer, 75VA<br>H347200=347 to 120V Step Down<br>Transformer, 200VA   |
| 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   | Device 449   |  |
| 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. (34) Not recommended for use with Wall Wash.   |



### 2. MODULE

SAMPLE: **FEU4C-1020-97-30** 

BAA-FEU4C-2540-90-35 FEU4C-1030-W2N-90-2765 FEU4C-2500B-9050



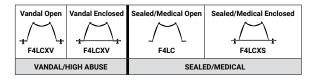
| Domestic Preferences (1)   | Power Module                            | Lumen Levels (2)   | CRI  | Co   | olor                           |  |
|--|---|--|--|--|--------------------------------|--|
| [Blank]=Standard<br>BAA=Buy American Act<br>TAA=Trade Agreements Act   | FEU4C=4-inch<br>Universal LED<br>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 DSLT, min 800 lumens with Lutron) 102e=1000, 1500, 2000 lumens 101SIC=1000, 1500 lumens IC Rated 2540=2500, 3000, 3500, 4000 lumens (for use with Lutron 3000-3500, D010, DSLT and DE010 3000-4000) 4560=4500, 5000, 5500 lumens (for use with D010, DSLT and DE010 4500-6000) (2)  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 (9) | 90=90 CRI Minimum<br>97=97 CRI Minimum   | 90 CRI<br>24=2400K<br>27=2700K<br>30=3000K<br>35=3500K<br>40=4000K<br>50=5000K | 97 CRI<br>27=2700K<br>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 (35) 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  |  |                                |  |
|  |   | <b>BioUp Tunable white 0820B</b> =800, 1000, 1500, 2000 lumens, 90 CRI (52) <b>2500B</b> =2500 lumens, 90 CRI (65)   | 9035= Static 3500K<br>9040=Static 4000K<br>9050=Static 5000K<br>902750=BioUp Tunable White 2700K-5000K |  |                                |  |
| (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.   | Not necessary to specify CRI and C<br>Tunable White.   |  | /arm and                       |  |

### 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)<br>H=Semi-Specular Clear (20)<br>WMH=Warm Haze (20)<br>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, 0.125' clear polycarbonate BL86=Bottom lens, 0.125' clear polycarbonate BL89BW=Bottom lens, 0.125' mooth opal polycarbonate BL89BW=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: 35', 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<br>(18) Flange is the same as<br>the reflector.                                      | Notes<br>(20) Anodized or spun reflectors  | Notes  (14) Only available with medium bottom lens. Required with all IEMBOD, IEM7, IEM14 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.   |

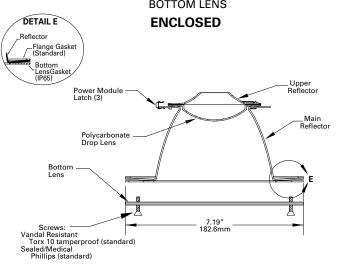




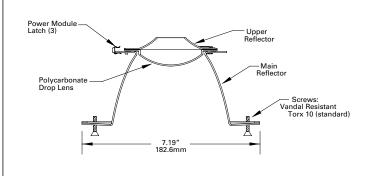
### **Dimensional and Mounting Details**



#### VANDAL RESISTANT/ HIGH ABUSE & SEALED/MEDICAL BOTTOM LENS

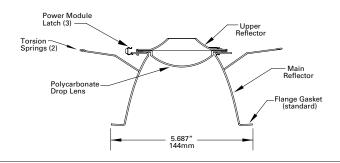


# VANDAL RESISTANT/ HIGH ABUSE **OPEN**

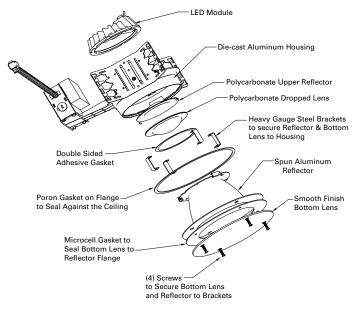


### SEALED/MEDICAL

#### **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.

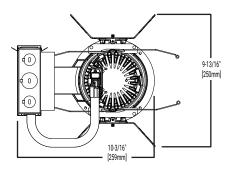
### 4" Round

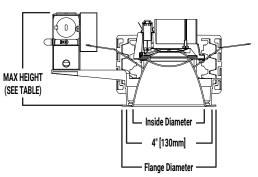
| Module           |
|------------------|
| FEU4C-1020-90-30 |
| FEU4C-1020-90-35 |
| FEU4C-1020-90-40 |
|                  |
| FEU4C-2540-90-30 |
| FEU4C-2540-90-35 |
| FEU4C-2540-90-40 |
|                  |
|                  |

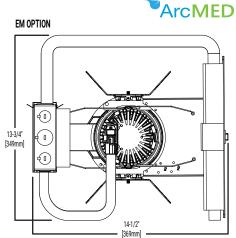


### **Dimensional and Mounting Details**

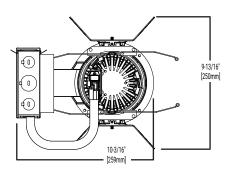
### **DOWNLIGHT**

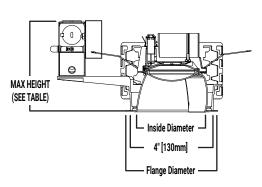


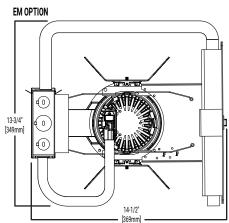




### **WALL WASH**







|           |                                  |                                  | MAX HEIGHT                    |                                |                                |                                  |  |  |  |  |  |  |
|-----------|----------------------------------|----------------------------------|-------------------------------|--------------------------------|--------------------------------|----------------------------------|--|--|--|--|--|--|
| CATALOG # | Flange DIAMETER<br>or WIDTH [IN] | INSIDE DIAMETER<br>or WIDTH [IN] | 250-2000 LUMENS<br>(90/97CRI) | 2500-4000 LUMENS<br>(90/97CRI) | 4500-6000 LUMENS<br>(90/97CRI) | 1000-1500IC<br>LUMENS (90/97CRI) | 2 LEDs<br>4500-6000 LUMENS<br>(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 I  | umen  | 500 l  | umen   | 800 I  | umen   | 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   |
| 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 |  |

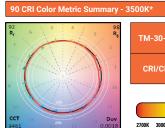
Minimum starting temperature -30°C (-22°F)\*

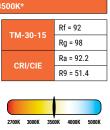
(Nominal input 120-277VAC & 100% of rated output power)

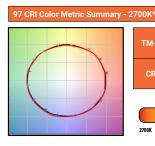
Sound Rating: Class A standards

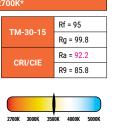
Notes: Emergency Battery packs are rated for a minimum starting temperature of 0°C.

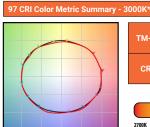
#### COLOR METRICS - TM-30-15 & CRI/CIE













### **Marked Spacing**

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





<sup>\*</sup> Color values are based on haze reflector, other finishes and field results may vary.

### **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.

#### Drive

- 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.

#### l ancac

- 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     | $\mathcal{L}$     | ***                        | **                          | *                          |  |
| Description | Open              | Enclosed<br>Bottom<br>Lens | Open                        | Enclosed<br>Bottom<br>Lens |  |
| Housing     | FLD4C<br>FLD4BCP  | FLD4CX,<br>FLD4CXCP        | FLD4CX,<br>FLD4CXCP         | FLD4CX,<br>FLD4CXCP        |  |
| NSF         | Available         | Available                  | Not Available               | Not Available              |  |
| IP          | IP65<br>Available | *IP65<br>Available         | IP65<br>Available           | *IP65<br>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: F4LCXVM1LI/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 inpenetrable seal between the ceiling and luminaire.



# Proven Research. Industry Recognized.











See BioUp brochure for more details



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):



275 EML 250 Lux M-EDI

Use BioUp to achieve Equivalent Melanopic Lux (EML) thresholds for circadian design and earn nearly 20% of WELL building lighting points



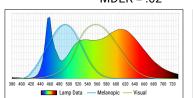
MDER, M-EDI and EML are key metrics used to quantify nonvisual performance of indoor lighting systems.



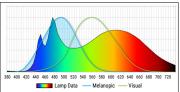
See BioUp white paper for more details

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

|       | LED MDER<br>~83 CRI | BioUp Static |     | BioUp Dynamic |     |
|-------|---------------------|--------------|-----|---------------|-----|
| CCT   |                     | 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.

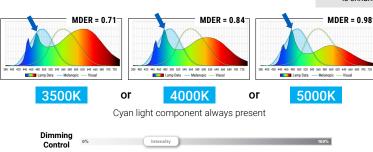
### Static (non-tunable)

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

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

### Dynamic - (Tunable)

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



no CCT control needed

Evening **Daytime** MDER = 0.43 MDER = 0.98 Cooler Light With Warmer CCT Without Cvan content Cvan content 2700K - 5000K ССТ Dimmina

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

subject to change without notice