



**Gardco EcoForm Gen-2** combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_

Notes: \_\_\_\_\_

### Ordering guide

**Example:** ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

| Prefix                             | Number of LEDs                 | Drive Current                                                                                      | LED Color - Generation                                                                                                                                            | Mounting                                                                                                                                                                                                                                                                                                             | Distribution                                                                                                                                                                                                                                                                                                                                                                           | Voltage                                                                                                                                                                          |
|------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ECF-S</b>                       |                                |                                                                                                    |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                  |
| ECF-S EcoForm site and area, small | <b>32L</b> 32 LEDs (2 modules) | <b>365</b> 365mA<br><b>530</b> 530mA<br><b>700</b> 700mA<br><b>1A</b> 1050mA<br><b>1.2A</b> 1200mA | <b>WW-G2</b> Warm White 3000K, 70 CRI Generation 2<br><b>NW-G2</b> Neutral White 4000K, 70 CRI Generation 2<br><b>CW-G2</b> Cool White 5000K, 70 CRI Generation 2 | <b>AR<sup>2</sup></b> Arm Mount (standard)<br><br>The following mounting kits must be ordered separately (See accessories)<br><b>SF<sup>3</sup></b> Slip Fitter Mount (fits to 2 3/8" O.D. tenon)<br><b>WS</b> Wall mount with surface conduit rear entry permitted<br><b>RAM<sup>2</sup></b> Retrofit arm mount kit | <b>Type 2</b><br><b>2</b> Type 2<br><b>2-90</b> Rotated left 90°<br><b>2-270</b> Rotated right 270°<br><br><b>Type 3</b><br><b>3</b> Type 3<br><b>3-90</b> Rotated left 90°<br><b>3-270</b> Rotated right 270°<br><br><b>Type 4</b><br><b>4</b> Type 4<br><b>4-90</b> Rotated left 90°<br><b>4-270</b> Rotated right 270°<br><br><b>Type 5</b><br><b>5</b> Type 5<br><b>5W</b> Type 5W | <b>120</b> 120V<br><b>208</b> 208V<br><b>240</b> 240V<br><b>277</b> 277V<br><b>347</b> 347V<br><b>480</b> 480V<br><b>UNV</b> 120-277V (50/60Hz)<br><b>HVU</b> 347-480V (50/60Hz) |
|                                    | <b>48L</b> 48 LEDs (3 modules) | <b>900</b> 900mA<br><b>1A</b> 1050mA<br><b>1.2A<sup>19</sup></b> 1200mA                            |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                      | <b>AFR</b> Auto Front Row<br><b>AFR-90</b> Auto Front Row, Rotated left 90°<br><b>AFR-270</b> Auto Front Row, Rotated right 270°<br><b>BLC</b> Back Light Control<br><b>BLC-90</b> Back Light Control rotated at 90°<br><b>BLC-270</b> Back Light Control rotated at 270°<br><b>LCL<sup>19</sup></b> LEED Corner Optic Left<br><b>RCL<sup>19</sup></b> LEED Corner Optic Right         |                                                                                                                                                                                  |
|                                    | <b>64L</b> 64 LEDs (4 modules) | <b>900</b> 900mA<br><b>1A<sup>19</sup></b> 1050mA                                                  |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                  |

| Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimming controls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Motion sensing lens                                                                                                                                                                                                                                                                      | Photo-sensing                                                                                                                                                                                                                               | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Luminaire                                                                                                                                                                                                                         | Finish                                                                                                                                                                                                                                                                                               |
| <b>DD<sup>4,18</sup></b> 0-10V External dimming (for controls by others)<br><b>DCC<sup>4,5,6,18</sup></b> Dual Circuit Control<br><b>FAWS<sup>4,5,18</sup></b> Field Adjustable Wattage Selector<br><b>SRDR<sup>4,5,6,8,17</sup></b> SR driver connected to Zhaga socket<br><br><b>DynaDimmer: Automatic Profile Dimming</b><br><b>CS50<sup>4,8</sup></b> Safety 50% Dimming, 7 hours<br><b>CM50<sup>4,8</sup></b> Median 50% Dimming, 8 hours<br><b>CS30<sup>4,8</sup></b> Safety 30% Dimming, 7 hours<br><b>CM30<sup>4,8</sup></b> Median 30% Dimming, 8 hours |                                                                                                                                                                                                                                                                                          | <b>PCB<sup>9,9</sup></b> Photocontrol Button<br><b>TLRD5<sup>10,17</sup></b> Twist Lock Receptacle 5 Pin<br><b>TLRD7<sup>10,17</sup></b> Twist Lock Receptacle 7 Pin<br><b>TLRPC<sup>9,10,11,17</sup></b> Twist Lock Receptacle w/Photocell | <b>Fusing</b><br><b>F1<sup>9</sup></b> Single (120, 277, 347VAC)<br><b>F2<sup>9</sup></b> Double (208, 240, 480VAC)<br><br><b>Pole Mount Fusing</b><br><b>FP1<sup>9</sup></b> Single (120, 277, 347VAC)<br><b>FP2<sup>9</sup></b> Double (208, 240, 480VAC)<br><b>FP3<sup>9</sup></b> Canadian Double Pull (208, 240, 480VAC)<br><br><b>Surge Protection (10kA standard)</b><br><b>SP2</b> Increased 20kA<br><br><b>BAC<sup>20,21</sup></b> Meets the requirements of the Buy American Act of 1933 (BAA) | <b>Square Pole Adapter</b> included in standard product<br><b>TB<sup>12</sup></b> Terminal Block<br><b>RPA<sup>13</sup></b> Round Pole Adapter (fits to 3"- 3.9" O.D. pole)<br><b>HIS<sup>14</sup></b> Internal House Side Shield | <b>Textured</b><br><b>BK</b> Black<br><b>WH</b> White<br><b>BZ</b> Bronze<br><b>DGY</b> Dark Gray<br><b>MGV</b> Medium Gray<br><br><b>Customer specified</b><br><b>RAL</b> Specify optional color or RAL (ex: RAL7024)<br><b>CC</b> Custom color (Must supply color chip for required factory quote) |
| <b>BL<sup>14,7,18</sup></b> Bi-level functionality                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>IMRI3<sup>15</sup></b> Integral with #3 lens<br><b>IMRI7<sup>15</sup></b> Integral with #7 lens                                                                                                                                                                                       |                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                      |
| <b>WIAP<sup>4,6,16</sup></b> Wireless Interact (includes SR driver and SR receptacle - do NOT select SRDR)                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>LB</b> Low (7'-15' mounting height) sensor, Black color housing<br><b>LW</b> Low (7'-15' mounting height) sensor, White color housing<br><b>HB</b> High (15'-40' mounting height) sensor, Black color housing<br><b>HW</b> High (15'-40' mounting height) sensor, White color housing |                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                      |

1. BL-IMRI3/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)  
2. Mounts to a 4" round pole with adapter included for square poles.  
3. Limited to a maximum of 45 degrees aiming above horizontal.  
4. Not available with other dimming control options.  
5. Not available with motion sensor.  
6. Not available with photocontrol.  
7. Must specify a motion sensor lens.  
8. Not available in 347 or 480V  
9. Must specify input voltage.  
10. TLRD5, TLRD7 and TLRPC receptacle pins 4 & 5 are capped off when ordered with any of the Dimming controls DD or FAWS or LLC.  
11. Not available in 480V. Order photocell separately with TLRD5/7.

12. Not available with DCC.  
13. Not available with SF and WS. RPAs provided with black finish standard.  
14. HIS not available with Type 5, 5W, BLC, BLC-90, BLC-270, LCL or RCL optics.  
15. Not available with DD, DCC, FAWS, SRDR, or WIAP dimming control options.  
16. WIAP must be combined with Motion sensing lens LB or LW or HB or HW.  
17. When ordering SRDR, controller (by others) to be used on socket must be SR compatible (See specifications for more details). Consult factory for lead time. All 7 pins in NEMA receptacle are connected to SR driver. SRDR not available with TLRD5 or TLRPC.  
18. 0-10V dimming driver standard.  
19. LCL and RCL not available with 48L-1.2A or 64L-1A.

20. Extended lead times apply. Contact factory for details  
21. Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.

# ECF-S EcoForm small

## Area luminaire

EcoForm Accessories<sup>21</sup> (ordered separately, field installed)

### Shielding Accessories

#### House Side Shield

| Standard optic orientation     |                                                    |
|--------------------------------|----------------------------------------------------|
| HIS-32-H <sup>20</sup>         | Internal House Side Shield for 32 LEDs (2 modules) |
| HIS-48-H <sup>20</sup>         | Internal House Side Shield for 48 LEDs (3 modules) |
| HIS-64-H <sup>20</sup>         | Internal House Side Shield for 64 LEDs (4 modules) |
| Optic at 90 or 270 orientation |                                                    |
| HIS-32-V <sup>20</sup>         | Internal House Side Shield for 32 LEDs (2 modules) |
| HIS-48-V <sup>20</sup>         | Internal House Side Shield for 48 LEDs (3 modules) |
| HIS-64-V <sup>20</sup>         | Internal House Side Shield for 64 LEDs (4 modules) |

#### Footnotes

20. Not available with Type 5 or 5W optics.  
21. Consult Signify to confirm whether specific accessories are BAA-compliant.

### Luminaire Accessories

|                |                                                      |
|----------------|------------------------------------------------------|
| ECF-BD-G2      | Bird deterrent                                       |
| ECF-RAM-G2-(F) | Retrofit Arm mount kit                               |
| ECF-SF-G2-(F)  | Slip Fitter Mount (fits to 2 3/8" O.D. tenon)        |
| ECF-WS-G2-(F)  | Wall mount with surface conduit rear entry permitted |

### Controls Accessories

|         |                                                                                                                                      |
|---------|--------------------------------------------------------------------------------------------------------------------------------------|
| IRT9015 | Handheld remote for grouping and configuration of Wireless Interact WIAP (at least 1 required per site or use the Interact Pro App). |
|---------|--------------------------------------------------------------------------------------------------------------------------------------|

### Pole Top Fitters

(F) = Specify finish

| PTF2 - Pole top fitter fits 23/8-21/2" OD x 4" depth tenon |                      |
|------------------------------------------------------------|----------------------|
| PTF2-1-90-(F)                                              | 1 luminaire at 90°   |
| PTF2-2-90-(F)                                              | 2 luminaires at 90°  |
| PTF2-2-180-(F)                                             | 2 luminaires at 180° |
| PTF2-3-90-(F)                                              | 3 luminaires at 90°  |
| PTF2-4-90-(F)                                              | 4 luminaires at 90°  |
| PTF2-3-120-(F)                                             | 3 luminaires at 120° |
| PTF3 - Pole top fitter fits 3-31/2" OD x 6" depth tenon    |                      |
| PTF3-1-90-(F)                                              | 1 luminaire at 90°   |
| PTF3-2-90-(F)                                              | 2 luminaires at 90°  |
| PTF3-2-180-(F)                                             | 2 luminaires at 180° |
| PTF3-3-90-(F)                                              | 3 luminaires at 90°  |
| PTF3-4-90-(F)                                              | 4 luminaires at 90°  |
| PTF3-3-120-(F)                                             | 3 luminaires at 120° |

Ready to Go configurations (when ordered with the "RS-" catalog code, the following configurations will ship in 2 weeks):

| Catalog Number                     | 12NC         | Catalog Number                     | 12NC         |
|------------------------------------|--------------|------------------------------------|--------------|
| RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BZ  | 912401466002 | RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BK  | 912401534560 |
| RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-MGY | 912401466003 | RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BZ  | 912401466016 |
| RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BK  | 912401534554 | RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-MGY | 912401466017 |
| RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BZ  | 912401466004 | RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BK  | 912401534561 |
| RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-MGY | 912401466005 | RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BZ  | 912401466018 |
| RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BK  | 912401534555 | RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-MGY | 912401466019 |
| RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BZ  | 912401466006 | RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BK  | 912401534562 |
| RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-MGY | 912401466007 | RS-ECF-RAM-G2-DGY                  | 912401466487 |
| RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BK  | 912401534556 | RS-ECF-RAM-G2-MGY                  | 912401466488 |
| RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BZ  | 912401466008 | RS-ECF-RAM-G2-WH                   | 912401466485 |
| RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-MGY | 912401466009 | RS-ECF-RAM-G2-BZ                   | 912401466486 |
| RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BK  | 912401534557 | RS-ECF-RAM-G2-BK                   | 912401466484 |
| RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BZ  | 912401466010 | RS-HIS-32-H                        | 912401466489 |
| RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-MGY | 912401466011 | RS-HIS-48-H                        | 912401466491 |
| RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BK  | 912401534558 | RS-HIS-64-H                        | 912401466493 |
| RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BZ  | 912401466012 |                                    |              |
| RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-MGY | 912401466013 |                                    |              |
| RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BK  | 912401534559 |                                    |              |
| RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BZ  | 912401466014 |                                    |              |
| RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-MGY | 912401466015 |                                    |              |

# ECF-S EcoForm small

## Area lumineaire

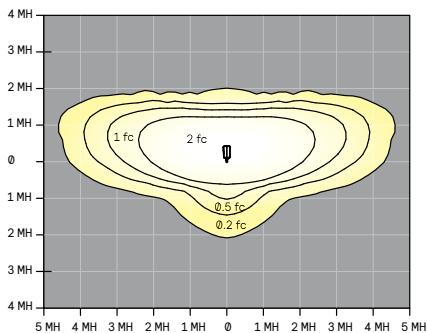
### Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours

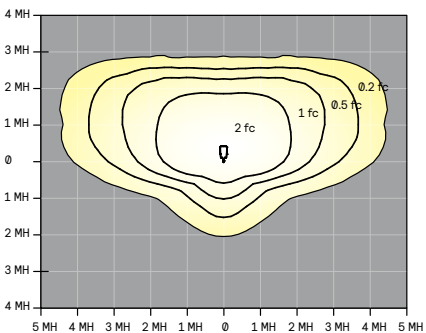
| Ambient Temperature °C | Driver mA     | Calculated L70 Hours | L70 per TM-21  | Lumen Maintenance % at 60,000 hrs |
|------------------------|---------------|----------------------|----------------|-----------------------------------|
| 25°C                   | up to 1200 mA | >100,000 hours       | >120,000 hours | >99%                              |

### Optical Distributions

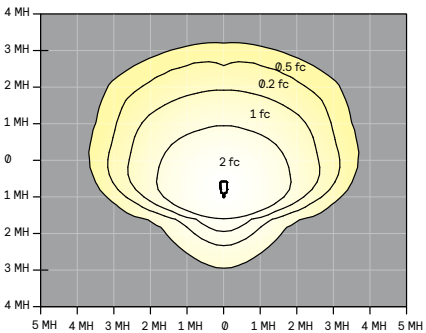
Based on configuration ECF-S-48L-1A-NW-G2 (159W) mounted at 20ft.



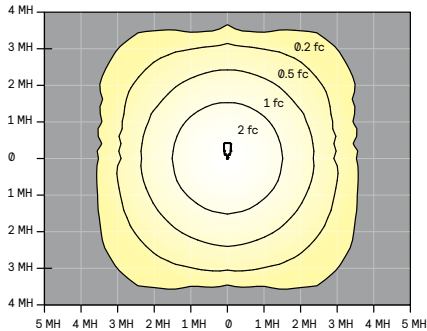
Type 2



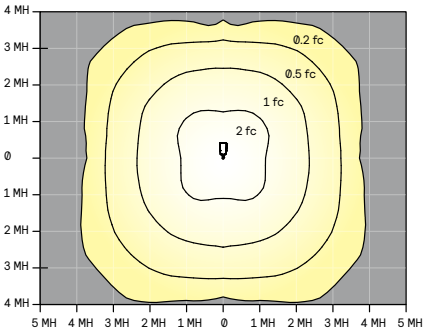
Type 3



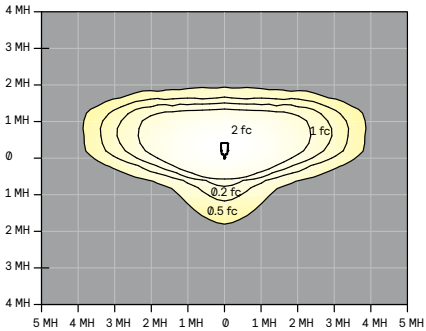
Type 4



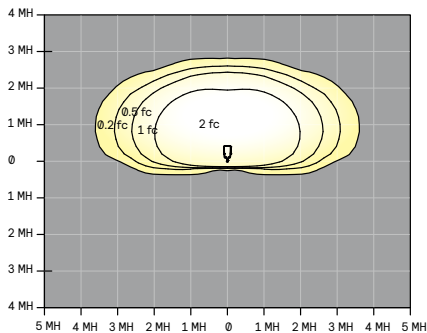
Type 5



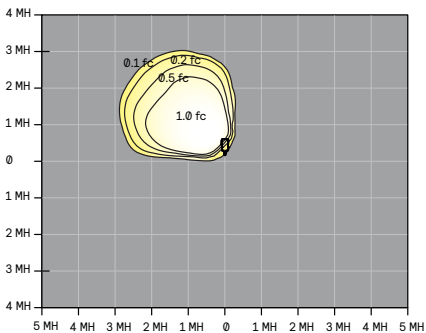
Type 5W



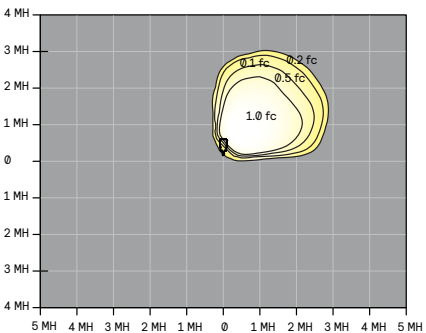
AFR



BLC



LCL



RCL

# ECF-S EcoForm small

## Area luminaire

### 3000K LED Wattage and Lumen Values

| Ordering Code          | Total LEDs | LED Current (mA) | Color Temp. | Average System Watts | Type 2       |            |                | Type 3       |            |                | Type 4       |            |                | Type 5       |            |                | Type 5W      |            |                |
|------------------------|------------|------------------|-------------|----------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
|                        |            |                  |             |                      | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) |
| ECF-S-32L-365-WW-G2-x  | 32         | 365              | 3000        | 40                   | 5,508        | B1-U0-G1   | 138            | 5,428        | B1-U0-G2   | 136            | 5,637        | B1-U0-G2   | 141            | 5,790        | B3-U0-G1   | 145            | 5,604        | B3-U0-G1   | 140            |
| ECF-S-32L-530-WW-G2-x  | 32         | 530              | 3000        | 56                   | 7,159        | B2-U0-G2   | 129            | 7,055        | B1-U0-G2   | 127            | 7,327        | B1-U0-G2   | 132            | 7,526        | B3-U0-G2   | 135            | 7,284        | B3-U0-G2   | 131            |
| ECF-S-32L-700-WW-G2-x  | 32         | 700              | 3000        | 73                   | 9,234        | B2-U0-G2   | 127            | 9,034        | B2-U0-G2   | 124            | 9,452        | B2-U0-G2   | 130            | 9,707        | B4-U0-G2   | 133            | 9,395        | B4-U0-G2   | 129            |
| ECF-S-32L-1A-WW-G2-x   | 32         | 1050             | 3000        | 106                  | 13,001       | B3-U0-G2   | 123            | 12,719       | B2-U0-G2   | 120            | 13,306       | B2-U0-G3   | 126            | 13,665       | B4-U0-G2   | 129            | 13,227       | B4-U0-G2   | 125            |
| ECF-S-32L-1.2A-WW-G2-x | 32         | 1200             | 3000        | 122                  | 14,421       | B3-U0-G3   | 119            | 14,108       | B2-U0-G3   | 116            | 14,760       | B2-U0-G3   | 121            | 15,158       | B4-U0-G2   | 125            | 14,671       | B4-U0-G2   | 121            |
| ECF-S-48L-900-WW-G2-x  | 48         | 900              | 3000        | 135                  | 17,115       | B3-U0-G3   | 127            | 16,744       | B3-U0-G3   | 124            | 17,518       | B2-U0-G3   | 130            | 17,990       | B4-U0-G2   | 133            | 17,413       | B5-U0-G3   | 129            |
| ECF-S-48L-1A-WW-G2-x   | 48         | 1050             | 3000        | 159                  | 19,381       | B3-U0-G3   | 122            | 18,960       | B3-U0-G3   | 119            | 19,836       | B3-U0-G4   | 125            | 20,372       | B5-U0-G3   | 128            | 19,717       | B5-U0-G3   | 124            |
| ECF-S-48L-1.2A-WW-G2-x | 48         | 1200             | 3000        | 183                  | 21,515       | B3-U0-G3   | 118            | 21,048       | B3-U0-G4   | 115            | 22,020       | B3-U0-G4   | 121            | 22,616       | B5-U0-G3   | 124            | 21,888       | B5-U0-G3   | 120            |
| ECF-S-64L-900-WW-G2-x  | 64         | 900              | 3000        | 178                  | 22,652       | B3-U0-G3   | 127            | 22,161       | B3-U0-G4   | 125            | 23,185       | B3-U0-G4   | 130            | 23,810       | B5-U0-G3   | 134            | 23,045       | B5-U0-G3   | 130            |
| ECF-S-64L-1A-WW-G2-x   | 64         | 1050             | 3000        | 206                  | 25,520       | B3-U0-G3   | 124            | 24,966       | B3-U0-G4   | 121            | 26,120       | B3-U0-G4   | 127            | 26,150       | B5-U0-G3   | 127            | 25,964       | B5-U0-G4   | 126            |

| Ordering Code          | Total LEDs | LED Current (mA) | Color Temp. | Average System Watts | Type AFR     |            |                | BLC          |            |                | LCL or RCL   |            |                |
|------------------------|------------|------------------|-------------|----------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
|                        |            |                  |             |                      | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) |
| ECF-S-32L-365-WW-G2-x  | 32         | 365              | 3000        | 40                   | 5,706        | B2-U0-G1   | 143            | 3,691        | B0-U0-G1   | 94             | 2,449        | B0-U0-G1   | 62             |
| ECF-S-32L-530-WW-G2-x  | 32         | 530              | 3000        | 56                   | 7,417        | B2-U0-G1   | 133            | 5,005        | B0-U0-G2   | 91             | 3,183        | B0-U0-G1   | 58             |
| ECF-S-32L-700-WW-G2-x  | 32         | 700              | 3000        | 73                   | 9,567        | B2-U0-G2   | 131            | 6,409        | B0-U0-G2   | 89             | 4,106        | B0-U0-G1   | 57             |
| ECF-S-32L-1A-WW-G2-x   | 32         | 1050             | 3000        | 106                  | 13,467       | B3-U0-G2   | 128            | 9,024        | B1-U0-G2   | 87             | 5,793        | B0-U0-G2   | 56             |
| ECF-S-32L-1.2A-WW-G2-x | 32         | 1200             | 3000        | 122                  | 14,939       | B3-U0-G2   | 123            | 10,010       | B1-U0-G2   | 84             | 6,426        | B0-U0-G2   | 54             |
| ECF-S-48L-900-WW-G2-x  | 48         | 900              | 3000        | 135                  | 17,731       | B3-U0-G2   | 131            | 11,880       | B1-U0-G2   | 89             | 7,626        | B0-U0-G2   | 57             |
| ECF-S-48L-1A-WW-G2-x   | 48         | 1050             | 3000        | 159                  | 20,076       | B3-U0-G2   | 127            | 13,453       | B1-U0-G2   | 86             | 8,636        | B0-U0-G2   | 55             |
| ECF-S-48L-1.2A-WW-G2-x | 48         | 1200             | 3000        | 183                  | 22,288       | B3-U0-G2   | 122            | 14,934       | B1-U0-G3   | 83             |              |            |                |
| ECF-S-64L-900-WW-G2-x  | 64         | 900              | 3000        | 178                  | 23,465       | B3-U0-G2   | 132            | 15,723       | B1-U0-G3   | 90             | 10,093       | B0-U0-G2   | 58             |
| ECF-S-64L-1A-WW-G2-x   | 64         | 1050             | 3000        | 206                  | 26,437       | B4-U0-G3   | 128            | 17,714       | B1-U0-G3   | 87             |              |            |                |

### 4000K LED Wattage and Lumen Values

| Ordering Code          | Total LEDs | LED Current (mA) | Color Temp. | Average System Watts | Type 2       |            |                | Type 3       |            |                | Type 4       |            |                | Type 5       |            |                | Type 5W      |            |                |
|------------------------|------------|------------------|-------------|----------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
|                        |            |                  |             |                      | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) |
| ECF-S-32L-365-NW-G2-x  | 32         | 365              | 4000        | 40                   | 5,798        | B1-U0-G1   | 145            | 5,713        | B1-U0-G2   | 143            | 5,934        | B1-U0-G2   | 148            | 6,094        | B3-U0-G1   | 152            | 5,898        | B3-U0-G2   | 147            |
| ECF-S-32L-530-NW-G2-x  | 32         | 530              | 4000        | 56                   | 7,536        | B2-U0-G2   | 135            | 7,426        | B1-U0-G2   | 133            | 7,713        | B1-U0-G2   | 138            | 7,922        | B3-U0-G2   | 142            | 7,667        | B3-U0-G2   | 138            |
| ECF-S-32L-700-NW-G2-x  | 32         | 700              | 4000        | 73                   | 9,720        | B2-U0-G2   | 133            | 9,509        | B2-U0-G2   | 130            | 9,949        | B2-U0-G2   | 136            | 10,218       | B4-U0-G2   | 140            | 9,889        | B4-U0-G2   | 136            |
| ECF-S-32L-1A-NW-G2-x   | 32         | 1050             | 4000        | 106                  | 13,685       | B3-U0-G2   | 130            | 13,388       | B2-U0-G3   | 127            | 14,006       | B2-U0-G3   | 133            | 14,384       | B4-U0-G2   | 136            | 13,923       | B4-U0-G2   | 132            |
| ECF-S-32L-1.2A-NW-G2-x | 32         | 1200             | 4000        | 122                  | 15,180       | B3-U0-G3   | 125            | 14,851       | B2-U0-G3   | 122            | 15,537       | B2-U0-G3   | 128            | 15,956       | B4-U0-G2   | 131            | 15,443       | B4-U0-G2   | 127            |
| ECF-S-48L-900-NW-G2-x  | 48         | 900              | 4000        | 135                  | 18,016       | B3-U0-G3   | 133            | 17,625       | B3-U0-G3   | 130            | 18,440       | B3-U0-G3   | 136            | 18,937       | B4-U0-G3   | 140            | 18,329       | B5-U0-G3   | 136            |
| ECF-S-48L-1A-NW-G2-x   | 48         | 1050             | 4000        | 159                  | 20,401       | B3-U0-G3   | 129            | 19,958       | B3-U0-G4   | 126            | 20,880       | B3-U0-G4   | 132            | 21,444       | B5-U0-G3   | 135            | 20,755       | B5-U0-G3   | 131            |
| ECF-S-48L-1.2A-NW-G2-x | 48         | 1200             | 4000        | 183                  | 22,647       | B3-U0-G3   | 124            | 22,156       | B3-U0-G4   | 121            | 23,179       | B3-U0-G4   | 127            | 23,806       | B5-U0-G3   | 130            | 23,040       | B5-U0-G3   | 126            |
| ECF-S-64L-900-NW-G2-x  | 64         | 900              | 4000        | 178                  | 23,844       | B3-U0-G3   | 134            | 23,327       | B3-U0-G4   | 131            | 24,405       | B3-U0-G4   | 137            | 25,063       | B5-U0-G3   | 141            | 24,258       | B5-U0-G4   | 136            |
| ECF-S-64L-1A-NW-G2-x   | 64         | 1050             | 4000        | 206                  | 26,863       | B3-U0-G3   | 130            | 26,280       | B3-U0-G4   | 128            | 27,495       | B3-U0-G4   | 134            | 27,526       | B5-U0-G3   | 134            | 27,330       | B5-U0-G4   | 133            |

| Ordering Code          | Total LEDs | LED Current (mA) | Color Temp. | Average System Watts | Type AFR     |            |                | BLC          |            |                | LCL or RCL   |            |                |
|------------------------|------------|------------------|-------------|----------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
|                        |            |                  |             |                      | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) |
| ECF-S-32L-365-NW-G2-x  | 32         | 365              | 4000        | 40                   | 6,006        | B2-U0-G1   | 150            | 3,991        | B0-U0-G1   | 101            | 2,633        | B0-U0-G1   | 67             |
| ECF-S-32L-530-NW-G2-x  | 32         | 530              | 4000        | 56                   | 7,807        | B2-U0-G1   | 140            | 5,412        | B0-U0-G2   | 99             | 3,423        | B0-U0-G1   | 62             |
| ECF-S-32L-700-NW-G2-x  | 32         | 700              | 4000        | 73                   | 10,070       | B2-U0-G2   | 138            | 6,930        | B0-U0-G2   | 96             | 4,415        | B0-U0-G1   | 61             |
| ECF-S-32L-1A-NW-G2-x   | 32         | 1050             | 4000        | 106                  | 14,176       | B3-U0-G2   | 134            | 9,756        | B1-U0-G2   | 94             | 6,229        | B0-U0-G2   | 60             |
| ECF-S-32L-1.2A-NW-G2-x | 32         | 1200             | 4000        | 122                  | 15,725       | B3-U0-G2   | 129            | 10,822       | B1-U0-G2   | 90             | 6,910        | B0-U0-G2   | 58             |
| ECF-S-48L-900-NW-G2-x  | 48         | 900              | 4000        | 135                  | 18664        | B3-U0-G2   | 138            | 12,843       | B1-U0-G2   | 96             | 8,200        | B0-U0-G2   | 62             |
| ECF-S-48L-1A-NW-G2-x   | 48         | 1050             | 4000        | 159                  | 21,133       | B3-U0-G2   | 133            | 14,544       | B1-U0-G3   | 93             | 9,286        | B0-U0-G2   | 59             |
| ECF-S-48L-1.2A-NW-G2-x | 48         | 1200             | 4000        | 183                  | 23,461       | B3-U0-G2   | 128            | 16,145       | B1-U0-G3   | 90             |              |            |                |
| ECF-S-64L-900-NW-G2-x  | 64         | 900              | 4000        | 178                  | 24,700       | B3-U0-G2   | 139            | 16,998       | B1-U0-G3   | 97             | 10,853       | B0-U0-G2   | 62             |
| ECF-S-64L-1A-NW-G2-x   | 64         | 1050             | 4000        | 206                  | 27,828       | B4-U0-G3   | 135            | 19,150       | B1-U0-G3   | 94             |              |            |                |

# ECF-S EcoForm small

## Area luminaire

### 5000K LED Wattage and Lumen Values

| Ordering Code          | Total LEDs | LED Current (mA) | Color Temp. | Average System Watts | Type 2       |            |                | Type 3       |            |                | Type 4       |            |                | Type 5       |            |                | Type 5W      |            |                |
|------------------------|------------|------------------|-------------|----------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
|                        |            |                  |             |                      | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) |
| ECF-S-32L-365-CW-G2-x  | 32         | 365              | 5000        | 40                   | 5,798        | B1-U0-G1   | 145            | 5,713        | B1-U0-G2   | 143            | 5,934        | B1-U0-G2   | 148            | 6,094        | B3-U0-G1   | 152            | 5,898        | B3-U0-G2   | 147            |
| ECF-S-32L-530-CW-G2-x  | 32         | 530              | 5000        | 56                   | 7,536        | B2-U0-G2   | 135            | 7,426        | B1-U0-G2   | 133            | 7,713        | B1-U0-G2   | 138            | 7,922        | B3-U0-G2   | 142            | 7,667        | B3-U0-G2   | 138            |
| ECF-S-32L-700-CW-G2-x  | 32         | 700              | 5000        | 73                   | 9,720        | B2-U0-G2   | 133            | 9,509        | B2-U0-G2   | 130            | 9,949        | B2-U0-G2   | 136            | 10,218       | B4-U0-G2   | 140            | 9,889        | B4-U0-G2   | 136            |
| ECF-S-32L-1A-CW-G2-x   | 32         | 1050             | 5000        | 106                  | 13,685       | B3-U0-G2   | 130            | 13,388       | B2-U0-G3   | 127            | 14,006       | B2-U0-G3   | 133            | 14,384       | B4-U0-G2   | 136            | 13,923       | B4-U0-G2   | 132            |
| ECF-S-32L-1.2A-CW-G2-x | 32         | 1200             | 5000        | 122                  | 15,180       | B3-U0-G3   | 125            | 14,851       | B2-U0-G3   | 122            | 15,537       | B2-U0-G3   | 128            | 15,956       | B4-U0-G2   | 131            | 15,443       | B4-U0-G2   | 127            |
| ECF-S-48L-900-CW-G2-x  | 48         | 900              | 5000        | 135                  | 18,016       | B3-U0-G3   | 133            | 17,625       | B3-U0-G3   | 130            | 18,440       | B3-U0-G3   | 136            | 18,937       | B4-U0-G3   | 140            | 18,329       | B5-U0-G3   | 136            |
| ECF-S-48L-1A-CW-G2-x   | 48         | 1050             | 5000        | 159                  | 20,401       | B3-U0-G3   | 129            | 19,958       | B3-U0-G4   | 126            | 20,880       | B3-U0-G4   | 132            | 21,444       | B5-U0-G3   | 135            | 20,755       | B5-U0-G3   | 131            |
| ECF-S-48L-1.2A-CW-G2-x | 48         | 1200             | 5000        | 183                  | 22,647       | B3-U0-G3   | 124            | 22,156       | B3-U0-G4   | 121            | 23,179       | B3-U0-G4   | 127            | 23,806       | B5-U0-G3   | 130            | 23,040       | B5-U0-G3   | 126            |
| ECF-S-64L-900-CW-G2-x  | 64         | 900              | 5000        | 178                  | 23,844       | B3-U0-G3   | 134            | 23,327       | B3-U0-G4   | 131            | 24,405       | B3-U0-G4   | 137            | 25063        | B5-U0-G3   | 141            | 24258        | B5-U0-G4   | 136            |
| ECF-S-64L-1A-CW-G2-x   | 64         | 1050             | 5000        | 206                  | 26,863       | B3-U0-G3   | 130            | 26,280       | B3-U0-G4   | 128            | 27,495       | B3-U0-G4   | 134            | 27526        | B5-U0-G3   | 134            | 27330        | B5-U0-G4   | 133            |

| Ordering Code          | Total LEDs | LED Current (mA) | Color Temp. | Average System Watts | Type AFR     |            |                | BLC          |            |                | LCL or RCL   |            |                |
|------------------------|------------|------------------|-------------|----------------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
|                        |            |                  |             |                      | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) | Lumen Output | BUG Rating | Efficacy (LPW) |
| ECF-S-32L-365-CW-G2-x  | 32         | 365              | 5000        | 40                   | 6,006        | B2-U0-G1   | 150            | 3,991        | B0-U0-G1   | 101            | 2,633        | B0-U0-G1   | 67             |
| ECF-S-32L-530-CW-G2-x  | 32         | 530              | 5000        | 56                   | 7,807        | B2-U0-G1   | 140            | 5,412        | B0-U0-G2   | 99             | 3,423        | B0-U0-G1   | 62             |
| ECF-S-32L-700-CW-G2-x  | 32         | 700              | 5000        | 73                   | 10,070       | B2-U0-G2   | 138            | 6,930        | B0-U0-G2   | 96             | 4,415        | B0-U0-G1   | 61             |
| ECF-S-32L-1A-CW-G2-x   | 32         | 1050             | 5000        | 106                  | 14,176       | B3-U0-G2   | 134            | 9,756        | B1-U0-G2   | 94             | 6,229        | B0-U0-G2   | 60             |
| ECF-S-32L-1.2A-CW-G2-x | 32         | 1200             | 5000        | 122                  | 15,725       | B3-U0-G2   | 129            | 10,822       | B1-U0-G2   | 90             | 6,910        | B0-U0-G2   | 58             |
| ECF-S-48L-900-CW-G2-x  | 48         | 900              | 5000        | 135                  | 18,664       | B3-U0-G2   | 138            | 12,843       | B1-U0-G2   | 96             | 8,200        | B0-U0-G2   | 62             |
| ECF-S-48L-1A-CW-G2-x   | 48         | 1050             | 5000        | 159                  | 21,133       | B3-U0-G2   | 133            | 14,544       | B1-U0-G3   | 93             | 9,286        | B0-U0-G2   | 59             |
| ECF-S-48L-1.2A-CW-G2-x | 48         | 1200             | 5000        | 183                  | 23,461       | B3-U0-G2   | 128            | 16,145       | B1-U0-G3   | 90             |              |            |                |
| ECF-S-64L-900-CW-G2-x  | 64         | 900              | 5000        | 178                  | 24,700       | B3-U0-G2   | 139            | 16,998       | B1-U0-G3   | 97             | 10,853       | B0-U0-G2   | 62             |
| ECF-S-64L-1A-CW-G2-x   | 64         | 1050             | 5000        | 206                  | 27,828       | B4-U0-G3   | 135            | 19,150       | B1-U0-G3   | 94             |              |            |                |

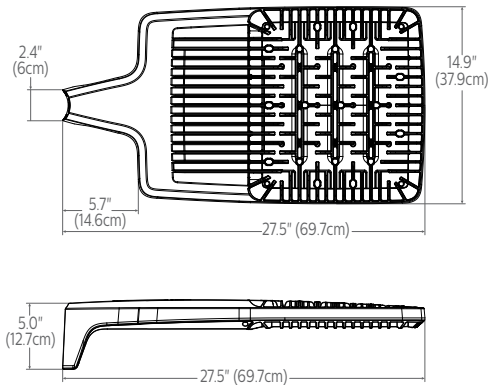
# ECF-S EcoForm small

## Area lumineuse

### Dimensions

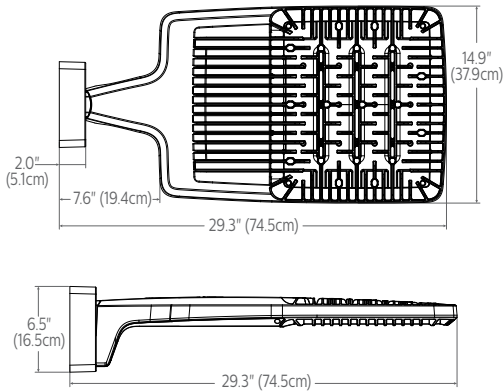
#### Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)



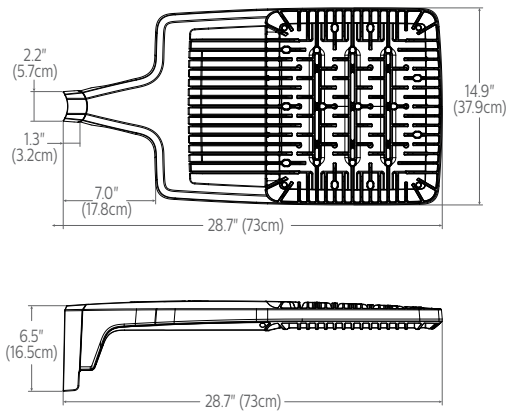
#### Wall (WS)

Weight: 27 Lbs. (12. 2Kg)EPA: 0.27ft² (.025m²)



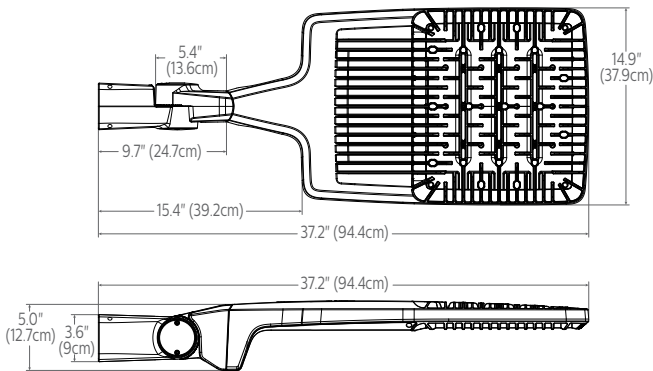
#### Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

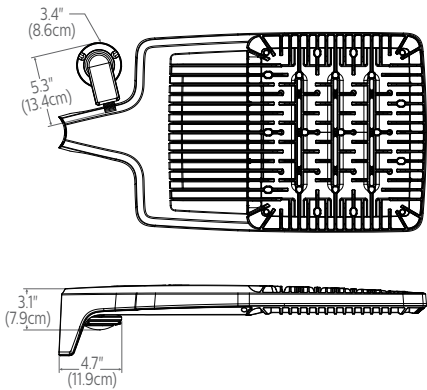


#### Slip fitter (SF)

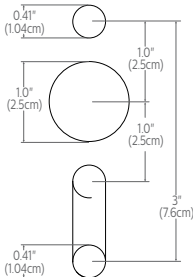
Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft² (.031m²)



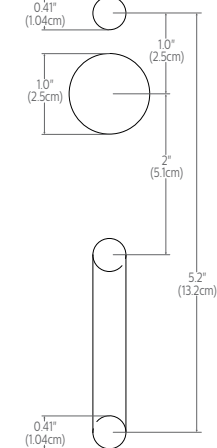
#### Outboard IMR-HVU sensor



#### Standard Arm (AR) drill pattern



#### Retrofit Arm (RAM) drill pattern



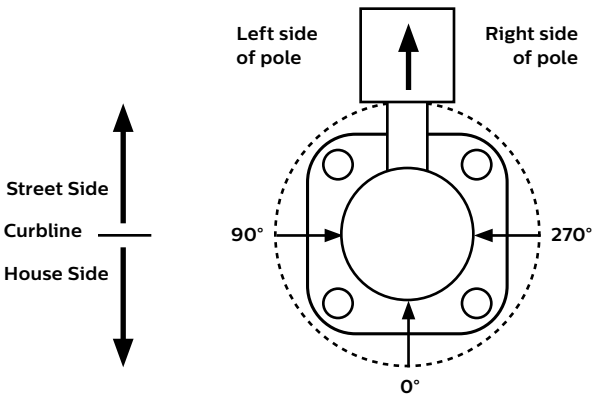
# ECF-S EcoForm small

## Area luminaire

### Optical Orientation Information

#### Standard Optic Position

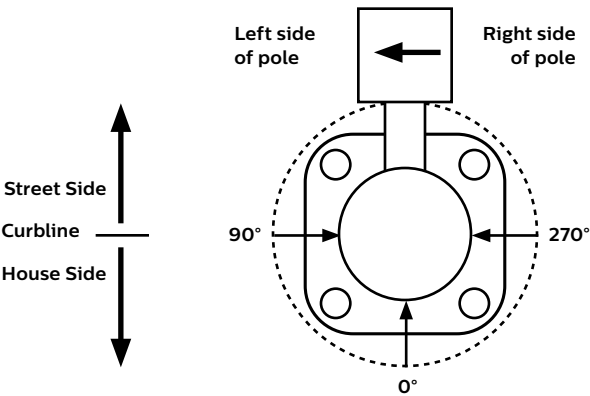
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

#### Optic Rotated Left (90°) Optic Position

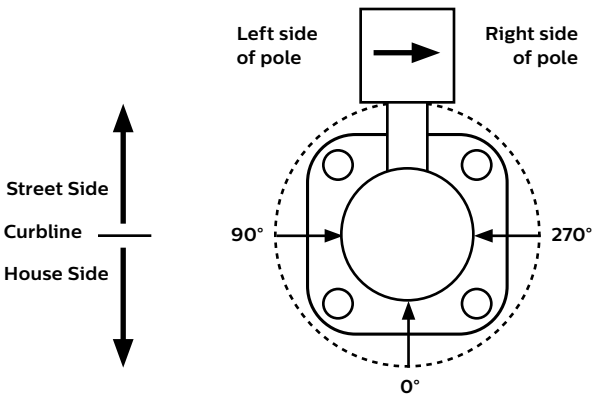
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

#### Optic Rotated Right (270°) Optic Position

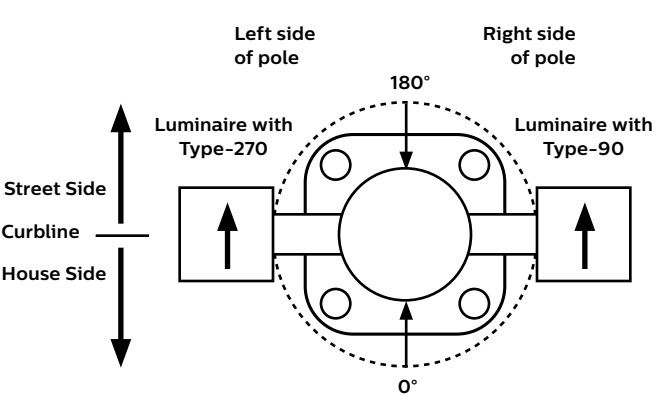
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

#### Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

# ECF-S EcoForm small

## Area luminaire

### Specifications

#### Housing

One-piece die cast aluminum housing with integral arm and separate, self-retained hinged, one-piece die cast door frame. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

#### Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2018. Testing includes vibration in three axes, all performed on the same luminaire.

#### Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 2, 3, and 4 modules or 32, 48, and 64 LEDs. Module is RoHS compliant. Color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

#### Energy saving benefits

System efficacy up to 152 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

#### Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions, including a dedicated BLC, LCL, and RCL optics to provide the best backlight control possible for those stringent requirements around property lines. Types 2, 3, 4, AFR, and BLC when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

#### Mounting

Standard luminaire arm mounts to 4" O.D. round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles. EcoForm features a retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately. Also optional are slipfitter and wall mounting accessories. Note that only fixed mounts (AR, RAM, WS) are required to meet IDA compliance. SF mounting will not meet IDA.

#### Control options

**0-10V dimming (DD):** Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

**Dual Circuit Control (DCC):** Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of separate modules controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

**Sensor Ready Zhaga Socket Connector (SRDR):** Product equipped with Sensor Ready drivers connected to 4-pin Zhaga Book 18 compliant receptacle designed for sensor and other control system applications. Receptacle is rated IP66 assembly in a compact design that provides a sealed electrical interface and rated UV resistance, mounted on underside of the luminaire, protective dust cap included. When a controller not provided by Signify is used with Sensor Ready Zhaga socket connector, the controller must be certified to work with the Xitanium SR LED drivers as part of the SR certified program. SRDR can be used with NEMA 7-pin twist lock receptacle, which is mounted on top of the luminaire.

**Automatic Profile Dimming (CS/CM/CE/CA):** Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM – 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM – 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1 or 2 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

**Field Adjustable Wattage Selector (FAWS):** Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

| FAWS Position | Percent of Typical Lumen Output |
|---------------|---------------------------------|
| 1             | 25%                             |
| 2             | 50%                             |
| 3             | 55%                             |
| 4             | 65%                             |
| 5             | 75%                             |
| 6             | 80%                             |
| 7             | 85%                             |
| 8             | 90%                             |
| 9             | 95%                             |
| 10            | 100%                            |

**Note:** Typical value accuracy +/- 5%

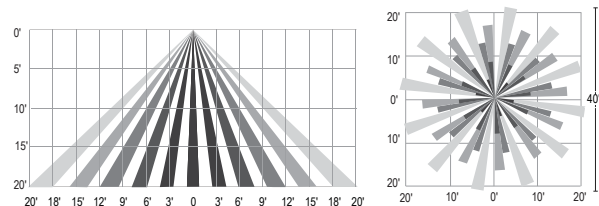
#### Motion response options

**Bi-Level Infrared Motion Response (BL-IMRI):** Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

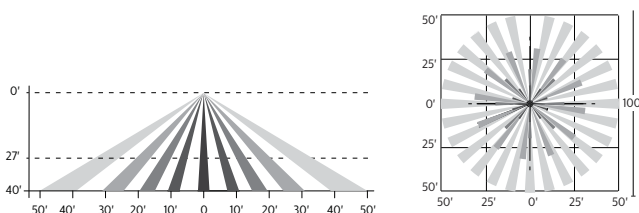
**Infrared Motion Response with Other Controls:** When used in combination with other controls (Automatic Dimming Profile), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

**Infrared Motion Response Lenses (IMRI3/IMRI7):** Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. Lens #7 is designed for higher mounting heights up to 40' with larger coverage areas up to 100' diameter coverage area. See charts for approximate detection patterns:

IMRI3 Luminaire or remote mount controller with #3 lens



IMRI7 Luminaire or remote mount controller with #7 lens



# ECF-S EcoForm small

## Area luminaire

### Specifications

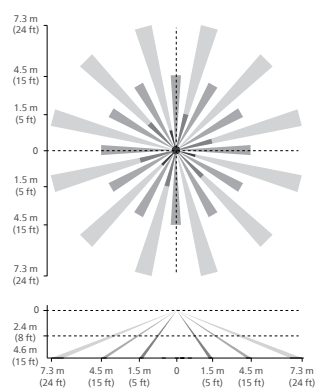
#### Control options

**Outdoor Interact (WIAP):** Connected sensor with integral occupancy and daylight sensing, supports wireless mesh connectivity. Sensor works in the standalone mode when configured without a gateway. When used with a gateway you are able to access additional functionalities such as energy monitoring, scheduling and BMS integration. Interact offers an App, a portal and a broad portfolio of Interact-ready Indoor and Outdoor luminaires, lamps and retrofit kits all working on the same system. The App provides flexibility to choose between a standalone or gateway mode. Setup with the gateway requires wired Internet access to the gateway. WIAP includes SR driver and SR receptacle. Daylight harvesting supported through dimming - activated via the Interact App. Sensors IP66 rated.

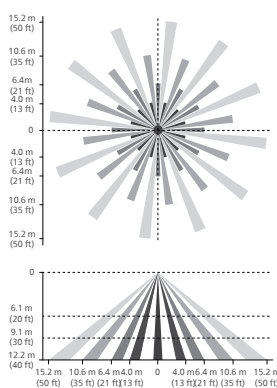
For more information on Interact Pro visit:

[www.interact-lighting.com/interactproscalablesystem](http://www.interact-lighting.com/interactproscalablesystem)

#### LB or LW low sensor



#### HB or HW high sensor



**Note:** The beam patterns shown are intended solely as a general guide and are not to scale. Sensing capabilities and coverage area depend on many factors including the size, speed and direction of travel of persons and vehicles; sensor mounting height; environmental and site conditions; etc.

#### Electrical

**Twist-Lock Receptacle (TLRD5/TLRD7/ TLRPC):** Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering 7-pin Twist-lock receptacle (TLRD7), all 7 pins are wired to respective pins with the Sensor Ready (SR) driver, and photocell or shorting cap is not included. When ordering a twist-lock receptacle with a photocell (TLRPC), the receptacle used is a 5-pin receptacle, so pins 6 and 7 are not available (no SR driver). 0-10V dimming leads (pins 4 and 5) are connected if not ordered with any other dimming option.

**Driver:** Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. All drivers are 0-10V dimming to 10% power standard, except when using Sensor Ready (SR) drivers, which uses DALI protocol (options CS50/CM50/CS30/CM30, SRDR, and TR7). Drivers are RoHS and FCC Title 47 CFR Part 15 compliant.

**Button Photocontrol (PCB):** Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

**Surge protection (SP1/SP2):** Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA. 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

#### Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most EcoForm configurations are qualified under Premium and Standard DesignLights Consortium® categories. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

• Declare label certified, ID SGY-0015 ([View full Declare label](#))

#### Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

#### Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: [signify.com](#)

#### Warranty

EcoForm luminaires feature a 5-year limited warranty. See [signify.com/warranties](http://signify.com/warranties) for complete details and exclusions.