

# **L**umenwerx

(50 KARRANT)

### SEALWERX SERIES





WALL PATTERN
DIRECT, DIRECT/INDIRECT

## SEALWERX SERIES

| 4 | _     |     |      |
|---|-------|-----|------|
|   | Lum   | anv | VOLV |
|   | Lalli |     | ACIV |

| Project: |   |  |  |
|----------|---|--|--|
|          |   |  |  |
|          | - |  |  |
| Type:    |   |  |  |

## Order Guide

| LUMINAIRE ID                                | DISTRIBUTION                                   | ENVIRONMENT <sup>1</sup>                                                                           |                                                         | DIRECT OPTIC                                                                                  | INDIRECT OPTIC Specify NA for Direct fixture                                                                | LIGHT SOURCE 4                                                                                                                                                                                         |
|---------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| V2SEALWPAT                                  |                                                |                                                                                                    |                                                         |                                                                                               |                                                                                                             |                                                                                                                                                                                                        |
| V2SEALWPAT -<br>Via 2" Seal Wall<br>Pattern | <b>D</b> - Direct <b>DI</b> - Direct/ Indirect | Direct: IP66 - IP66-Rated IP65EC - IP65-Rated Electrical Components IP44 <sup>2</sup> - IP44-Rated | Direct/Indirect: IP65 - IP65-Rated IP44 2 - IP44- Rated | EPDO -<br>Environmentally<br>Protected Direct Optic<br>ASDO - Asymmetric<br>Soft Direct Optic | PPIO - Environmentally Protected Indirect Optic ASIO 3 - Asymmetric Soft Indirect Optic NA - Not applicable | SW - Static white<br>FS - Full spectrum static white<br>BIOSST <sup>5</sup> - BIOS Biological Static<br>BIOSDY <sup>5</sup> - BIOS Biological Dynamic<br>BIOSTU <sup>5</sup> - BIOS Biological Tunable |
|                                             |                                                | installation details for each envir<br><sup>2</sup> Fixture must be installed with d               | onment option.                                          |                                                                                               | <sup>3</sup> Not available with BIOS.                                                                       | <sup>4</sup> Chromawerx SOLA and DUO also<br>available. Consult factory for RGBW.<br><sup>5</sup> See page 8 for details.                                                                              |

| CRI                                                                                                                                                                                    | DIR. LUM. PACK.                                                                                                                                                       | INDIR. LUM. PACK.<br>Specify NA for Direct fixture                                                                                                | COLOR TEMP.                                                                 | PATTERN LENGTH                                                                                                                                                                                                                                                                                 | CORNER TYPE <sup>13</sup>                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 80CRI 6 - 80 + CRI<br>90CRI 6 7 - 90 + CRI<br>95CRI 8 - 95 + CRI<br>6 Not available with full<br>spectrum.<br>7 Not available with<br>BIOS.<br>8 Only available with full<br>spectrum. | 350LMF - Low<br>output 350 lm/ft<br>500LMF - Medium<br>output 500 lm/ft<br>750LMF <sup>9</sup> - High<br>output 750 lm/ft<br><sup>9</sup> Not available with<br>BIOS. | 350LMF - Low output<br>350 lm/ft<br>500LMF - Medium<br>output 500 lm/ft<br>750LMF <sup>10</sup> - High output<br>750 lm/ft<br>NA - Not applicable | 27K " - 2700K<br>30K - 3000K<br>35K - 3500K<br>40K - 4000K<br>50K " - 5000K | ##FT##IN(#X#FT#IN-#X#FT#IN) 12 -  ##FT##IN: total nominal length of pattern in feet and/or inches  #X: quantity of each section #FT#IN: nominal length of each section in feet and/or inches  Continuous runs: lengths over 12'  12 · Minimum 2' for Direct. · Minimum 3' for Direct/Indirect. | #LEVI2C(A##) - 2-way leveled inside corner  #LEVO2C(A##) - 2-way leveled outside corner  "Specify quantity (#) for each required corner type. If more than one option is specified, separate codes with a "+", e.g. 1LEV2IC(A90)+2LEVO2C(A60).  "Minimum angle is 45°. |

| VOLTAGE                                                                    | DRIVER 16                                                                                                                                                                                   | ELECTRICAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ELECTRICAL SECTIONS (optional) 24, 25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                            |                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 120V - 120V<br>277V - 277V<br>UNV - 120V-277V<br>347V <sup>15</sup> - 347V | D1 - 1% 0-10V ELV <sup>17</sup> - ELV 120V TRI <sup>17</sup> - TRIAC 120V DA <sup>18</sup> - DALI LDE1 <sup>18</sup> - Lutron Hi-lume 1% Eco ELD1 - eldoLED 1% ECOdrive 0-10V               | IC - 1 circuit 2C <sup>19</sup> - 2 circuits #MC <sup>20</sup> - Multi circuit EC - Emergency-powered fixture NL - Night light fixture DL - Daylight fixture                                                                                                                                                                                                                                                                                                                                                                     | #EC## <sup>26</sup> - Emergency-powered section #NL## <sup>26</sup> - Night light section #DL## <sup>26</sup> - Daylight section #GTD## <sup>26</sup> , <sup>27</sup> , <sup>28</sup> , <sup>29</sup> - Generator transfer device section #EMB <sup>26</sup> , <sup>29</sup> , <sup>20</sup> , <sup>31</sup> - Emergency battery NA - None                                                                                                                                                                                                                          |
| driver only.                                                               | ELDO - eldoLED 0.1% SOLOdrive 0-10V<br>LTD10 - Low-temperature 10% 0-10V  16 See page 5 for driver temperature ranges.  77 Available with 120V only.  18 On-site commissioning is required. | GTD <sup>21, 22, 23</sup> - Generator transfer device fixture <sup>39</sup> Available for Direct/Indirect only. Separate direct and indirect circuits. <sup>20</sup> Specify total number of circuits (#), including any circuits required for electrical section options. Provide drawing or layout specifications. Minimum 4' section per circuit. <sup>21</sup> Minimum 4' fixture. <sup>22</sup> Not available with 347V. <sup>23</sup> Not available for environments where the ambient temperature falls below 0°C (32°F). | 24 Specify with multi circuit (#MC) electrical option only. 25 Provide drawing or layout specifications. Consult factory for other configurations. Default section length is 4'. 26 Specify quantity (#), and section length in inches (##). 27 Minimum 4' section. 28 Not available with 347V. 23 Not available for environments where the ambient temperature falls below 0°C (32°F). 30 Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section. For Direct/Indirect, minimum 8' fixture. 31 Only available with 1P44. |

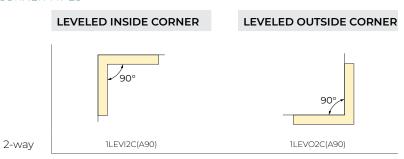
| POWER FEED                                    | MOUNTING                                                                  | FINISH                                                                                                              | OPTION                                           |
|-----------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
|                                               |                                                                           |                                                                                                                     |                                                  |
| <b>BF</b> - Back feed<br><b>EF</b> - End feed | HMB - Horizontal<br>mounting bracket<br>MMB - Mullion<br>mounting bracket | W - Matte white AL - Aluminum B - Matte black WA - White antimicrobial Silverwerx CF# - Custom finish, specify RAL# | CRF - Corrosion-resistant<br>finish<br>NA - None |



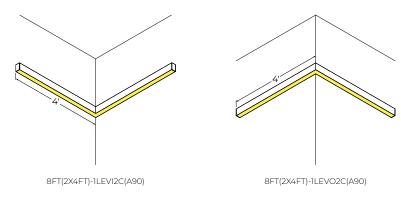


## Pattern Layout

#### CORNER TYPES



#### **EXAMPLES**

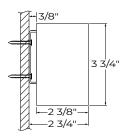


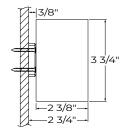




## **Dimensions**

#### DIRECT

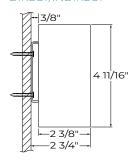


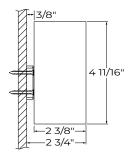


**HMB** - Horizontal mounting bracket

**MMB** - Mullion mounting bracket

#### DIRECT/INDIRECT





**HMB** - Horizontal mounting bracket

**MMB** - Mullion mounting bracket





## **Environment Options**

|                                                                            | Direct                                                      |               |                                 |                                              |                               |  |
|----------------------------------------------------------------------------|-------------------------------------------------------------|---------------|---------------------------------|----------------------------------------------|-------------------------------|--|
| IP6                                                                        | 6                                                           |               | <b>5EC</b> Components           | IP44                                         |                               |  |
| Dust tight                                                                 | High water<br>resistance                                    | Dust tight    | Moderate<br>water<br>resistance | Particles<br>larger<br>than 1mm<br>protected | Water<br>splash<br>resistance |  |
|                                                                            |                                                             | OUTE          | DOOR                            |                                              |                               |  |
|                                                                            | posed to the<br>nents                                       |               | exposure to<br>ements           |                                              | canopy,<br>posed              |  |
|                                                                            |                                                             | IND           | OOR                             |                                              |                               |  |
|                                                                            | application                                                 |               |                                 | application                                  |                               |  |
| Healthcare application Healthcare application                              |                                                             |               |                                 | application                                  |                               |  |
|                                                                            | lens gasket external end cap gasket internal end cap gasket |               |                                 |                                              |                               |  |
| External joiner gasket every 12'  Continuous line of light over 12'        |                                                             |               |                                 |                                              |                               |  |
| Driver: in a sealed enclosure Electrical connections: water and dust proof |                                                             |               |                                 |                                              |                               |  |
| LED boards<br>protection                                                   | s: conformal c                                              | coated for ma | aximum                          |                                              |                               |  |

| Di                                                                  | rect/I                     | ndirect                                      |                                            |
|---------------------------------------------------------------------|----------------------------|----------------------------------------------|--------------------------------------------|
| IP65                                                                |                            | IP4                                          | 4                                          |
| wa                                                                  | oderate<br>ter<br>sistance | Particles<br>larger<br>than 1mm<br>protected | Water<br>splash<br>resistance              |
|                                                                     | OUTE                       | OOR                                          |                                            |
| Moderate expo<br>the eleme                                          |                            |                                              | canopy,<br>posed                           |
|                                                                     | IND                        | OOR                                          |                                            |
| Wipe down app<br>Healthcare app<br>Cleanroom app                    | lication                   | Wipe down<br>Healthcare                      |                                            |
| external end ca                                                     | s gasket<br>p gasket       | internal end                                 | —weep hole<br>-lens gasket<br>d cap gasket |
| External joiner<br>every 12                                         |                            |                                              | ous line of<br>over 12'                    |
| Driver: in a seal<br>enclosure<br>Electrical conn<br>water and dust | ections:                   |                                              |                                            |
| LED boards: co<br>coated for maxi<br>protection                     |                            |                                              |                                            |

| Ambient Temperature Range  based on driver selection |              |                |                  |                 |                 |  |
|------------------------------------------------------|--------------|----------------|------------------|-----------------|-----------------|--|
|                                                      | LDE1         | ELV / TRI      | DA / ELD1 / ELD0 | DI              | RLTD10          |  |
| Minimum temperature:                                 | 0 °C / 32 °F | -10 °C / 14 °F | -20 °C / -4 °F   | -30 °C / -22 °F | -40 °C / -40 °F |  |
| Maximum temperature:                                 |              |                | 40 °C / 104 °F   |                 |                 |  |







DIRECT, DIRECT/INDIRECT

## SEALWERX SERIES

## Photometrics

Values calculated based on a 4' fixture at 3500K and 80+ CRI for all optics.

#### DIRECT



| LM/FT | W/FT | LM/W |
|-------|------|------|
| 350   | 3.5  | 99   |
| 500   | 5.2  | 97   |
| 750   | 8.2  | 92   |



| LM/FT | W/FT | LM/W |
|-------|------|------|
| 350   | 4.3  | 82   |
| 500   | 6.3  | 79   |
| 750   | 10.0 | 75   |

#### MULTIPLIERS

Use this table to get results for different color temperatures and CRI for all photometric tables.

Multiplier - CCT/CRI

| ССТ   | WATTS           |      | LP      | w       |
|-------|-----------------|------|---------|---------|
|       | 80+ CRI 90+ CRI |      | 80+ CRI | 90+ CRI |
|       |                 |      |         |         |
| 2700K | 1.05            | 1.27 | 0.95    | 0.79    |
| 3000K | 1.02            | 1.23 | 0.98    | 0.81    |
| 3500K | 1.00            | 1.19 | 1.00    | 0.84    |
| 4000K | 1.00            | 1.19 | 1.00    | 0.84    |
| 5000K | 0.96            | 1.12 | 1.04    | 0.89    |





DIRECT, DIRECT/INDIRECT

## SEALWERX SERIES

## Photometrics

Values calculated based on a 4' fixture at 3500K and 80+ CRI for all optics.

#### DIRECT/INDIRECT



EPDO - EPIO



**Lumenwerx** 

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|----|----|--------|---|----|-----|
|    |    |        |   |    |     |

| LM/FT |      | TOTAL W/FT |      | LM/W |
|-------|------|------------|------|------|
| D     | - 1  | LM/FT      |      |      |
| EPDO  | EPIO |            |      |      |
|       | 350  | 700        | 7.0  | 100  |
| 350   | 500  | 850        | 8.7  | 98   |
|       | 750  | 1100       | 11.7 | 94   |
|       | 350  | 850        | 8.7  | 98   |
| 500   | 500  | 1000       | 10.3 | 97   |
|       | 750  | 1250       | 13.3 | 94   |
|       | 350  | 1100       | 11.7 | 94   |
| 750   | 500  | 1250       | 13.3 | 94   |
|       | 750  | 1500       | 16.3 | 92   |

| LM/FT |      | TOTAL W/FT |      | LM/W |
|-------|------|------------|------|------|
| D     | 1    | LM/FT      |      |      |
| EPDO  | ASIO |            |      |      |
|       | 350  | 700        | 6.9  | 102  |
| 350   | 500  | 850        | 8.5  | 100  |
|       | 750  | 1100       | 11.3 | 97   |
|       | 350  | 850        | 8.5  | 100  |
| 500   | 500  | 1000       | 10.1 | 99   |
|       | 750  | 1250       | 13.0 | 96   |
|       | 350  | 1100       | 11.6 | 95   |
| 750   | 500  | 1250       | 13.2 | 95   |
|       | 750  | 1500       | 16.0 | 94   |





| ASDO | - EPIO |  |
|------|--------|--|
|      |        |  |

| LM/FT |      | TOTAL |      |    |
|-------|------|-------|------|----|
| D     | 1.0  | LM/FT |      |    |
| ASDO  | EPIO |       |      |    |
|       | 350  | 700   | 7.8  | 90 |
| 350   | 500  | 850   | 9.4  | 90 |
|       | 750  | 1100  | 12.4 | 89 |
|       | 350  | 850   | 9.8  | 87 |
| 500   | 500  | 1000  | 11.5 | 87 |
|       | 750  | 1250  | 14.5 | 86 |
|       | 350  | 1100  | 13.6 | 81 |
| 750   | 500  | 1250  | 15.2 | 82 |
|       | 750  | 1500  | 18.1 | 83 |

ASDO - ASIO

| LM/FT |      | TOTAL | W/FT | LM/W |
|-------|------|-------|------|------|
| D     | 1    | LM/FT |      |      |
| ASDO  | ASIO |       |      |      |
|       | 350  | 700   | 7.6  | 92   |
| 350   | 500  | 850   | 9.2  | 92   |
|       | 750  | 1100  | 12.1 | 91   |
|       | 350  | 850   | 9.7  | 88   |
| 500   | 500  | 1000  | 11.2 | 89   |
|       | 750  | 1250  | 14.2 | 88   |
|       | 350  | 1100  | 13.4 | 82   |
| 750   | 500  | 1250  | 15.1 | 83   |
|       | 750  | 1500  | 17.9 | 84   |

#### MULTIPLIERS

Use this table to get results for different color temperatures and CRI for all photometric tables.

Multiplier - CCT/CRI

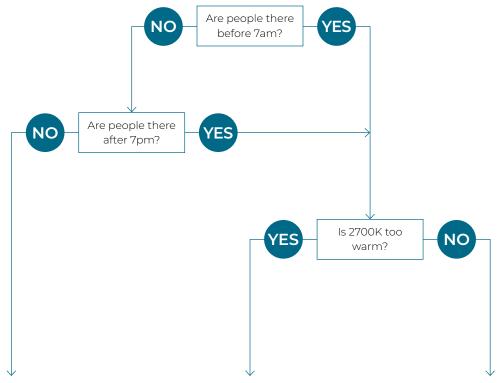
| ССТ   | WATTS   |         | LPW     |         |
|-------|---------|---------|---------|---------|
|       | 80+ CRI | 90+ CRI | 80+ CRI | 90+ CRI |
|       |         |         |         |         |
| 2700K | 1.05    | 1.27    | 0.95    | 0.79    |
| 3000K | 1.02    | 1.23    | 0.98    | 0.81    |
| 3500K | 1.00    | 1.19    | 1.00    | 0.84    |
| 4000K | 1.00    | 1.19    | 1.00    | 0.84    |
| 5000K | 0.96    | 1.12    | 1.04    | 0.89    |





## BIOS

Three BIOS Circadian LED solutions are offered – Biological Static, Biological Dynamic, and Biological Tunable. Use the decision tree below to identify when and where to use BIOS Wellness LED Lighting Solutions.



| Biological Static<br>BIOSST                                   | Biological Dynamic<br>BIOSDY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Biological Tunable<br>BIOSTU                                                                                     |  |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|
| No CCT change when dimmed                                     | 500K shift when dimmed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Dims to 2700K                                                                                                    |  |
| Daytime solution                                              | Daytime + evening solution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Daytime + evening solution                                                                                       |  |
| Spaces in operation during daytime hours, between 7am and 7pm | Spaces in operation overnight, after 7pm and before 7am, and when CCT color shift in the evening is not preferred  Suitable for spaces in operation of after 7pm and before 7am, and we people do not sleep (CCT color sleep) (CCT color sleep) (CCT color sleep)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                  |  |
| E.g. offices, medical/dental offices                          | E.g. hospitals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | E.g. offices, shiftwork                                                                                          |  |
| 1                                                             | Daytime   Full BIOS SkyBlue   Management   Full BIOS SkyBlue | Daytime Full BIOS SkyBlue (490nm)  Bio-Dimming™  Evening BiOS SkyBlue™ Removed  Wavelength herd  Wavelength herd |  |



## **Lumenwerx**

### SEALWERX SERIES

## **Technical Specifications**

#### **DIRECT OPTICS**

#### **Environmentally Protected Direct Optic (EPDO)**

The Environmentally Protected Direct Optic creates a seal that blocks debris and moisture, and withstands UV distortion and moderate impact. This extruded snap-in lens has a gasket to ensure proper sealing. The lens is 1/16" thick and made of frosted polycarbonate. Internally, white, side kicking reflectors guide the light through the lens. The EPDO suits moderate climate environments.

#### Asymmetric Soft Direct Optic (ASDO)

The Asymmetric Soft Direct Optic creates a seal that blocks debris and moisture, and withstands UV distortion and moderate impact. This extruded snap-in lens has a gasket to ensure proper sealing. The lens is 1/16" thick and made of frosted polycarbonate. Internally, white, side kicking reflectors specifically angled to guide the light through the lens to create a nice asymmetric distribution. The ASDO suits moderate climate environments.

#### **INDIRECT OPTICS**

#### **Environmentally Protected Indirect Optic (EPIO)**

The Environmentally Protected Indirect Optic creates a seal that blocks debris and moisture, and withstands UV distortion and moderate impact. The lens is 1/16" thick and made of frosted polycarbonate. This extruded snap-in lens has a gasket to ensure proper sealing. The EPIO suits moderate climate environments.

#### Asymmetric Soft Indirect Optic (ASIO)

The Asymmetric Soft Indirect Optic creates a seal that blocks debris and moisture, and withstands UV distortion and moderate impact. The lens is 1/16" thick and made of clear polycarbonate. This extruded snap-in lens has a gasket to ensure proper sealing. The total internal reflection and surface scattering optic is specifically angled to guide the light through the lens to create a nice asymmetric distribution. The ASIO suits moderate climate environments.

#### LIGHT SOURCE

#### Static white

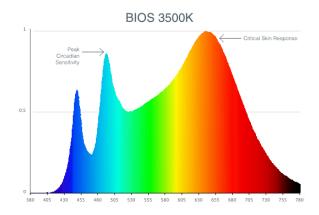
Custom linear array of mid-flux LEDs are cartridge-mounted with quick-connect wiring to facilitate service and thermal management. Available in 2700K, 3000K, 3500K, 4000K, and 5000K with a minimum 80+ CRI and an option for 90+ CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

#### Full spectrum static white

The full spectrum LED option offers improved color particularly in the cyan region which helps increase Cyanosis Observation Index (COI) and assist in regulating circadian rhythms. The cyan region in full spectrum LED is richer at the 480 nm range.

#### BIOS

BIOS SkyBlue™ Technology is designed to provide the specific circadian stimulus to improve overall sleep quality, recovery during the night, and overall feelings of well-being. The non-visual light signals that stimulate our circadian system have peak intensity in the "sky blue" region. As the diagram below illustrates, BIOS SkyBlue technology shifts the peak LED spectral intensity (490 nm) to align better with the peak response of circadian stimulus. Also note the enhanced deep-red (near 660 nm) spectrum.



Three BIOS solutions are offered: BIOS Biological Static (BIOSST), BIOS Biological Dynamic (BIOSDY), and BIOS Biological Tunable (BIOSTU). See page 8 for details.





#### WELL BUILDING STANDARD



WELL for Light: The WELL building standard focuses on light quality in several features. There are three categories that are fully attributed to the construction and features of a luminaire. In WELL V1, it's Feature 54 Circadian Lighting, Feature 55 Glare Control, and Feature 58 Color Quality. In WELL V2, it's Feature L03 Circadian Lighting, Feature L04 Glare Control, and Feature L07 Electric Light Quality.

This fixture meets Features:

- Feature 54 or LO3 when BIOS LED is selected
- Feature 58 or L07 when 90+ CRI is selected

All LED drivers used at Lumenwerx are deemed to have a low risk level of flicker, of 5% or less below 90Hz operational as defined by IEEE standard 1789-2015 LED.



**WELL for Mind**: This luminaire meets WELL for mind as it is a human centric luminaire offering quality light, excellent color, and smooth optics. If any of these features are incorporated in a luminaire, it can improve the ability to focus, concentrate, and persist longer on a given task. This fixture harmoniously operates in a space to assist the mind.

For more information, please contact well@lumenwerx.com

#### PATTERN LENGTH

Via 2 Seal can be ordered in 1' and/or 1" increments. Continuous runs are available for run lengths over 12'. The minimum length is 2' for Direct fixtures, and 3' for Direct/Indirect fixtures. All individual sections are joined together onsite using the joiner kits provided. Lumenwerx joiner kits are extremely simple to work with in the field and result in a fixture that appears virtually seamless with no light leak at any connection.

#### WEEP HOLES

The Direct/Indirect fixtures, with the IP44-Rated option, feature a weep hole situated in the end cap. Water and moisture that enters the fixture will be expelled through this hole.





#### TEMPERATURE VARIATION PROTECTION

The intergrated pressure equalization and moisture control GORE® protective vent allows air to flow while blocking water, dust, and contaminants. It reduces internal condensation, supports thermal stability, and preserves the fixture's sealed performance over time.



Location may vary.

#### **ELECTRICAL**

Factory-set, adjustable output current LED driver with universal (120-277 VAC) input. Dimmable from 100% to 1% with 0-10V dimming control. Rated life (90% survivorship) of 50,000 hours at 50°C max. ambient (and 70°C max. case) temperature. At maximum driver load: Efficiency>84%, PF>0.9, THD<20%. Other specifiable options include Lutron Hi-Lume 1% Ecosystem, eldoLED 1% ECOdrive 0-10V, eldoLED 0.1% SOLOdrive 0-10V, and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant. An optional low-temperature 10% 0-10V driver, suitable for temperatures down to -40°C/F is also available.

#### PoE

Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, DUO (tunable white), QUADRO (RGBW), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

#### **ELECTRICAL SECTION OPTIONS**

Electrical section options are available for fixtures specified as multi circuit (#MC). With MC, specify the total number of circuits (#), including any circuits required for optional electrical sections. A drawing is required to specify the layout. Please consult factory for custom configurations.





DIRECT, DIRECT/INDIRECT



#### **Electrical sections**

Options include emergency-powered light (#EC##), night light (#NL##), daylight (#DL##), and generator transfer device (#GTD##) sections. Specify the quantity (#), as well as the section length in inches (##).

Example 1: A 32' Direct fixture with two 8' emergency light sections on a second circuit.

Code: 2MC-2EC96

Example 2: A 16' Direct/Indirect fixture with separate circuits for direct and indirect, and with one 4' night light section on the direct side on a third circuit.

Code: 3MC-1NL48

Example 3: A 24' Direct fixture with one 4' generator transfer device section.

Code: 1MC-1GTD48

#### **Battery**

Each emergency battery (#EMB) powers a 4' section. All batteries will be on the same circuit. Specify the number of batteries (#) required.

Factory installed long life, high temperature, maintenance-free Lithium-Ion battery pack with self-test functionality, test switch and charge indicator. Minimum of 90 minutes operation, up to 1000 lumens per 4' (25°C) emergency lighting output and recharge time of 24 hours. Suited for ambient temperatures of 0°C (32°F) to 55°C (131°F).

#### **Generator Transfer Device (GTD)**

A UL924 listed shunt relay that can bypass both line voltage (120-277V) and 0-10V dimming signal. Suited for ambient temperatures of 0°C (32°F) to 60°C (140°F).

#### MOUNTING

Fixtures may be horizontally mounted to either a wall or a mullion using a bracket. For long runs, a minimum of 6" from adjacent wall is required.

Interior: 95%, reflective matte powder coated white paint Exterior: Powder-coat paint in matte white, matte black, or aluminum. Custom finishes are also available. Optional antimicrobial finish



#### CONSTRUCTION

Housing: Extruded aluminum, up to 90% recycled content Interior brackets: Die-formed cold rolled sheet steel

Gaskets: closed-cell silicone foam

Reflectors: Die-formed cold rolled sheet steel, 95% reflective

matte white painted

End cap: Die-cast aluminum

Horizontal mounting bracket: Steel bracket with stainless steel

PEM studs and sealing washers

Mullion mounting bracket: Die-cast aluminum

#### **CERTIFICATIONS**

ETL: IP44-Rated environment option is rated for dry/damp locations. IP66-Rated, IP65-Rated, and IP65-Rated Electrical Components environment options are ETL Wet Listed. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0. During the installation of Wet Listed fixtures, the contractor is responsible for properly sealing all mounting and electrical connection points.

IK08: Impact resistance rated to IK08

#### WARRANTY

Lumenwerx provides a five-year limited warranty on electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.

