

# VIA 4 SEAL

SURFACE PATTERN

DIRECT

SEALWERX SERIES

 Lumenwerx



The Via Seal Collection is engineered for environments where performance is critical. Designed to withstand the harshest conditions, Via Seal fixtures feature ingress protection ratings from IP44 to IP66 and an impact protection rating of IK08. These luminaires provide robust defense against dust, water, and physical damage, all while maintaining the visual continuity and design flexibility of the sleek Via product line.

#### IP RATINGS

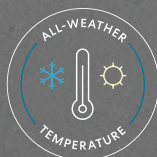
IP66  
IP65  
IP65EC  
IP54  
IP44

#### LIGHT SOURCE

Static White  
Full Spectrum Static White  
BIOS

#### UP TO

IK08



**SENSORS**  
For latest  
information  
on sensors,  
click [here](#).



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

## Order Guide

LUMINAIRE ID	DISTRIBUTION	ENVIRONMENT <sup>1</sup>	OPTIC	LIGHT SOURCE <sup>3</sup>	CRI	LUMEN PACKAGE
<b>V4SEALSPAT</b>	<b>D</b>					
<b>V4SEALSPAT</b> - Via 4" Seal Surface Pattern	<b>D</b> - Direct	<b>IP66</b> - IP66-Rated <b>IP65EC</b> - IP65-Rated Electrical Components <b>IP54</b> <sup>2</sup> - IP54-Rated <b>IP44</b> <sup>2</sup> - IP44-Rated  <sup>1</sup> See page 4 for more information on the features and installation details for each environment option. <sup>2</sup> Fixture must be installed with direct lens facing down.	<b>EPDO</b> - Environmentally Protected Direct Optic <b>ASDO</b> - Asymmetric Soft Direct Optic	<b>SW</b> - Static white <b>FS</b> - Full spectrum static white  <b>BIOSST</b> <sup>4</sup> - BIOS Biological Static <b>BIOSDY</b> <sup>4</sup> - BIOS Biological Dynamic <b>BIOSTU</b> <sup>4</sup> - BIOS Biological Tunable  <sup>3</sup> Chromawerx SOLA and DUO also available. Consult factory for RGBW. <sup>4</sup> See page 6 for details.	<b>80CRI</b> <sup>5</sup> - 80+ CRI <b>90CRI</b> <sup>5,6</sup> - 90+ CRI <b>95CRI</b> <sup>7</sup> - 95+ CRI  <sup>5</sup> Not available with full spectrum. <sup>6</sup> Not available with BIOS. <sup>7</sup> Only available with full spectrum.	<b>500LMF</b> - Low output 500 lm/ft <b>750LMF</b> <sup>8</sup> - Medium output 750 lm/ft <b>1000LMF</b> <sup>8,9</sup> - High output 1000 lm/ft  <sup>8</sup> Not available with BIOS. <sup>9</sup> Not available with full spectrum.

COLOR TEMP.	PATTERN LENGTH	CORNER TYPE <sup>12</sup>	VOLTAGE	DRIVER <sup>17</sup>
<b>27K</b> <sup>10</sup> - 2700K <b>30K</b> - 3000K <b>35K</b> - 3500K <b>40K</b> - 4000K <b>50K</b> <sup>10</sup> - 5000K  <sup>10</sup> Not available with BIOS.	<b>##FT##IN(##X##FT##IN-##X##FT##IN-...)</b> <sup>11</sup> -  ##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'  <sup>11</sup> Minimum 2'.	<b>#LEV2C(A##)</b> - 2-way leveled corner  <b>#INN2C(A90)</b> <sup>13,14</sup> - 2-way inner corner  <sup>12</sup> Specify quantity (#) and angle (A##) for each required corner type. If more than one option is specified, separate codes with a "+", e.g. 1LEV2C(A60)+2INN2C(A90). <sup>13</sup> Only available with 90°. <sup>14</sup> Only available with IP65EC environment option. <sup>15</sup> Minimum angle is 45°.	<b>120V</b> - 120V <b>277V</b> - 277V <b>UNV</b> - 120V-277V <b>347V</b> <sup>16</sup> - 347V  <sup>16</sup> Available with DI driver only.	<b>D1</b> - 1% 0-10V <b>ELV</b> <sup>18</sup> - ELV 120V <b>TRI</b> <sup>18</sup> - TRIAC 120V <b>DA</b> <sup>19</sup> - DALI <b>LDEI</b> <sup>19</sup> - Lutron Hi-lume 1% Eco <b>ELD1</b> - eldoLED 1% ECOdrive 0-10V <b>ELDO</b> - eldoLED 0.1% SOLOdrive 0-10V <b>LTD10</b> - Low-temperature 10% 0-10V  <sup>17</sup> See page 4 for driver temperature ranges. <sup>18</sup> Available with 120V only. <sup>19</sup> On-site commissioning is required.

ELECTRICAL	ELECTRICAL SECTIONS (optional) <sup>24,25</sup>	POWER FEED	MOUNTING	FINISH	OPTION
<b>1C</b> - 1 circuit <b>#MC</b> <sup>20</sup> - Multi circuit <b>EC</b> - Emergency-powered fixture <b>NL</b> - Night light fixture <b>DL</b> - Daylight fixture <b>GTD</b> <sup>21,22,23</sup> - Generator transfer device fixture  <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).	<b>#EC##</b> <sup>26</sup> - Emergency-powered section <b>#NL##</b> <sup>26</sup> - Night light section <b>#DL##</b> <sup>26</sup> - Daylight section <b>#GTD##</b> <sup>26,27,28,29</sup> - Generator transfer device section <b>#EMB</b> <sup>28,29,30,31</sup> - Emergency battery <b>NA</b> - None  <sup>24</sup> Specify with multi circuit (#MC) electrical option only. <sup>25</sup> Provide drawing or layout specifications. Consult factory for other configurations. Default section length is 4'. <sup>26</sup> Specify quantity (#), and section length in inches (##). <sup>27</sup> Minimum 4' section. <sup>28</sup> Not available with 347V. <sup>29</sup> Not available for environments where the ambient temperature falls below 0°C (32°F). <sup>30</sup> Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section. <sup>31</sup> Only available with IP54 and IP44.	<b>TF</b> - Top feed <b>EF</b> - End feed	<b>GSM</b> - Gasketed surface mount	<b>W</b> - Matte white <b>AL</b> - Aluminum <b>B</b> - Matte black <b>WA</b> - White antimicrobial Silverwerx <b>CF#</b> - Custom finish, specify RAL#	<b>CRF</b> - Corrosion- resistant finish <b>NA</b> - None

# VIA 4 SEAL

SURFACE PATTERN  
DIRECT

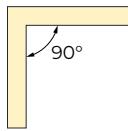


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## Pattern Layout

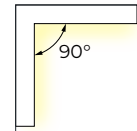
CORNER TYPES

### LEVELED CORNERS



1LEV2C(A90)

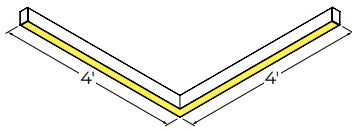
### INNER CORNER



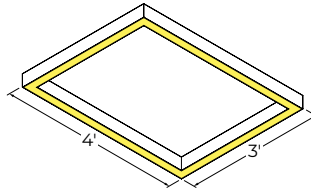
1INN2C(A90)

2-way

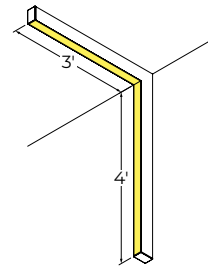
EXAMPLES



8FT(2X4FT)-1LEV2C(A90)

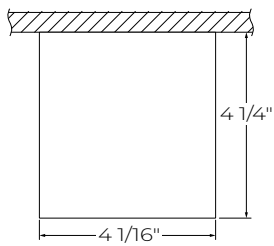


14FT(2X4FT-2X3FT)-4LEV2C(A90)



7FT(1X3FT-1X4FT)-1INN2C(A90)

## Dimensions



# VIA 4 SEAL

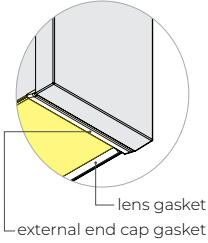
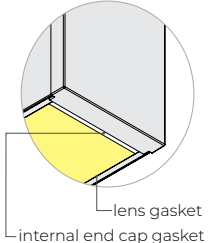
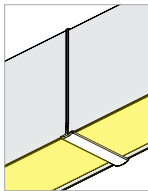
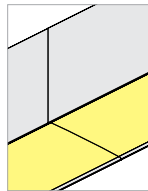
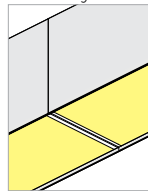
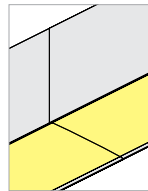
SURFACE PATTERN

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## Environment Options

Direct							
IP66		IP65EC <small>Electrical Components</small>		IP54		IP44	
Dust tight	High water resistance	Dust tight	Moderate water resistance	Dust protected	Water splash resistance	Particles larger than 1mm protected	Water splash resistance
OUTDOOR							
Directly exposed to the elements		Moderate exposure to the elements		Under canopy, slightly exposed		Under canopy, not exposed	
INDOOR							
Wipe down application Healthcare application Cleanroom application		Wipe down application Healthcare application					
							
External joiner gasket every 12'		Continuous line of light over 12'		Internal joiner gasket with soft shadow line every 12'		Continuous line of light over 12'	
							
<b>Driver:</b> in a sealed enclosure <b>Electrical connections:</b> water and dust proof							
<b>LED boards:</b> conformal coated for maximum protection							

## Ambient Temperature Range

based on driver selection

	LDE1	ELV / TRI	DA / ELD1 / ELD0	D1	LTD10
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				

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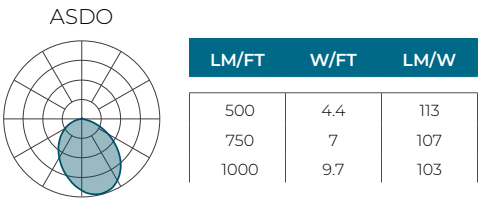
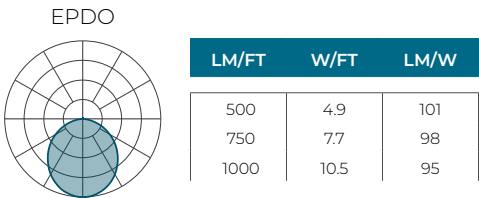
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## Photometrics

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

DIRECT



## MULTIPLIERS

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

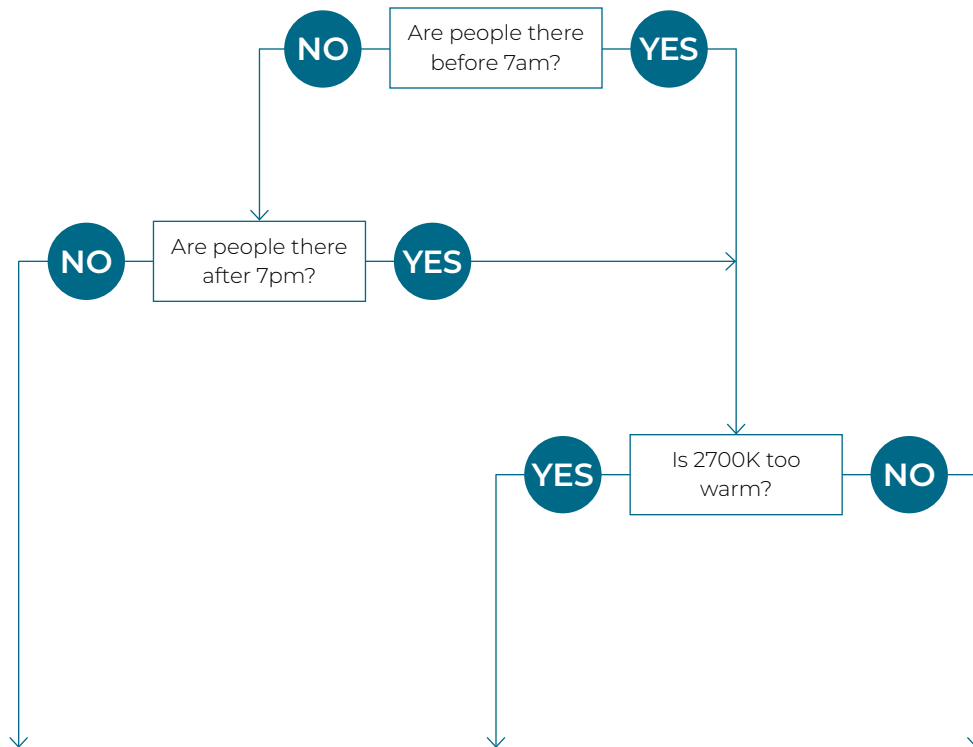
Multiplier - CCT/CRI

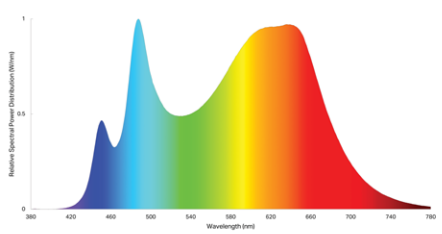
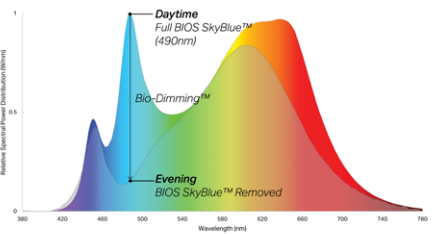
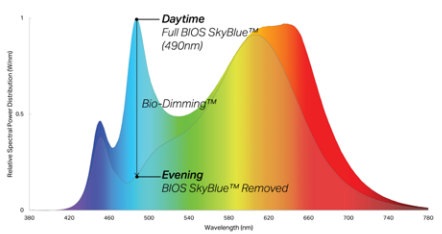
CCT	WATTS		LPW	
	80+ CRI	90+ CRI	80+ CRI	90+ CRI
2700K	1.05	1.27	0.95	0.79
3000K	1.02	1.23	0.98	0.81
3500K	1.00	1.19	1.00	0.84
4000K	1.00	1.19	1.00	0.84
5000K	0.96	1.12	1.04	0.89



## 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 BIOSST	Biological Dynamic BIOSDY	Biological Tunable BIOSSTU
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 overnight, after 7pm and before 7am, and where people do not sleep (CCT color shift in the evening is preferred)
E.g. offices, medical/dental offices	E.g. hospitals	E.g. offices, shiftwork
		

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## Technical Specifications

### 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.

### LIGHT SOURCE

#### Static white

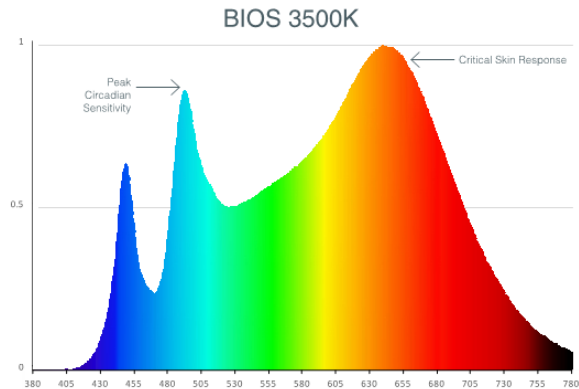
Custom linear array of mid-flux LEDs are cartridge-mounted with quick-connect wiring to facilitate service and thermal management. Available in 2700K, 3000K, 3500K, 4000K, and 5000K with a minimum 80+ CRI and an option for 90+ CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. 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 6 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 L03 when BIOS LED is selected
- Feature 55 or L04 meets WELL glare category (c-d) (not applicable with 1000 lm/ft)
- 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](mailto:well@lumenwerx.com)



# VIA 4 SEAL

## SURFACE PATTERN

### DIRECT

#### SEALWERX SERIES

#### PATTERN LENGTH

Via 4 Seal can be ordered in 1' and/or 1" increments. Continuous runs are available for run lengths over 12'. The minimum length is 2'. 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.

#### TEMPERATURE VARIATION PROTECTION

The integrated 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.



#### 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 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 can be mounted directly to hard surface ceilings only. Hardware supplied by others. Long runs require a minimum of 6" from the vertical wall.

#### FINISH

**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

**Mounting:** Sealing washer for 1/4" threaded rods



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## CERTIFICATIONS

**ETL:** IP44-Rated environment option is rated for dry/damp locations. IP66-Rated, IP65-Rated Electrical Components, and IP54-Rated 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.