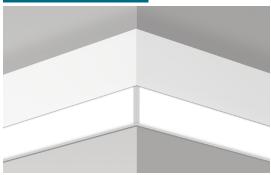
# VIA 4 SFAI

## WALL PATTERN DIRECT, DIRECT/INDIRECT

STATIC WHITE. BIOS ST/DY

#### **VIA WEATHER SERIES**



LEVO - Leveled outside corner

Project:

Type:

### **DESCRIPTION**

Sealed with silicone gaskets. Via Seal fixtures are intended for wet locations and can be pendant, surface, wall, or recessed mounted. They can act alone as discrete luminaires, or be arranged in continuous lines or patterns. Via 4 Seal is suitable for wet locations where temperatures are moderate and in which spaces are regularly wiped down and frequently in contact with debris and/or moisture. The fixture can be used to create continuous, unbroken lines of light. Via 4 Seal is also offered as Wet Listed certified by ETL (Electrical Testing Laboratories), in which case, it is able to withstand smaller particles of debris and light water infiltration. Via 4 Seal Wet Listed can also be used to create continuous lines of light, but with subtle breaks at 12-foot increments. See separate spec sheets for other available mountings.

For latest information on sensors. click here.



IMPORTANT: Fixture must be installed with direct lens facing down.

**IK05** 

Up to 117 lm/W performance

LUMENWERX





## Order Guide

LUMINAIRE ID	DISTRIBUTION	ENVIRONMENT <sup>2</sup>	DIRECT OPTIC	INDIRECT OPTIC Specify NA for Direct fixture	LIGHT SOURCE 6	CRI	DIR. LUM. PACK.
V4SEALWPAT				Specify NATOL Direct lixture			
V4SEALWPAT - Via 4" Seal Wall Pattern	D - Direct DI - Direct/ Indirect  'Not available with WETL option.	WET <sup>3</sup> - Wet Suitable (IP44) WETL <sup>3,4</sup> - Wet Listed (IP54) <sup>2</sup> See page 4 for more information on each environment option. <sup>3</sup> Suitable for outdoor environments only when installed under canopy. Not suitable for extreme weather environments. Consult factory for low temperature applications. <sup>4</sup> Can be slightly exposed to water. A minimal shadow line visible at every 12. Not available with Direct/Indirect.	EPDO - Environmentally Protected Direct Optic ASDO - Asymmetric Soft Direct Optic	EPIO - Environmentally Protected Indirect Optic ASIO <sup>5</sup> - Asymmetric Soft Indirect Optic WIO2 <sup>5</sup> - Widespread Indirect Optic NA - Not applicable <sup>5</sup> Not available with BIOS.	SW - Static white BIOSST - Static biologically- optimized lighting BIOSDY - Dynamic biologically- optimized lighting <sup>6</sup> Chromawerx Sola and Duo also available. Consult other spec sheet.	80 - 80 CRI 90 7 - 90 CRI <sup>7</sup> Not available with BIOS.	500 - Low output 500 lm/ft 750 <sup>8</sup> - Medium output 750 lm/ft 1000 <sup>8</sup> - High output 1000 lm/ft <sup>8</sup> Not available with BIOS.

	NOT	available with Direct/Indirect.				
INDIR. LUM. PACK. Specify NA for Direct fixture	COLOR TEMP.	PATTERN LENGTH	CORNER TYPE	CORNER DEGREE	VOLTAGE	DRIVER 14
500 - Low output 500 lm/ft 750 ° - Medium output 750 lm/ft 1000 ° - High output 1000 lm/ft NA - Not applicable ° Not available with BIOS.	27 10 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K 50 10 - 5000K	#FT#IN <sup>13, 12</sup> - Specify nominal length (#) in 1' and/or 1" increments  Standard nominal lengths: Continuous runs: lengths over 12' <sup>13</sup> Minimum 2' for Direct. Minimum 3' for Direct/Indirect. <sup>12</sup> With BIOSDY, specify in 2' increments only.	LEVI - Leveled inside corner LEVO - Leveled outside corner	90(#)- 90° corner, specify the number of corners (#)	120 - 120V 277 - 277V UNV - 120V-277V 347 <sup>13</sup> - 347V <sup>13</sup> Available with D1 only.	D1 - 1% 0-10V DA <sup>16</sup> - DALI LTEA2W <sup>16</sup> - Lutron 1% - 2 wire FP 120V LDE1 <sup>16</sup> - Lutron Hi-lume 1% Eco ELD1 - eldoLED 1% ECOdrive 0-10V ELD0 - eldoLED 0.1% SOLOdrive 0-10V LTD10 <sup>77</sup> - Low-temperature 10% 0-10V <sup>16</sup> POE (Power-over-Ethernet) compatible. Consult factory for details. <sup>16</sup> On-site commissioning is required. <sup>16</sup> Available with 120V only. <sup>16</sup> Suitable for temperatures down to -40°C/F.

ELECTRICAL	ELECTRICAL SECTIONS (optional)	POWERFEED	MODIVINO	FINISH	OPTIONS
1C - 1 circuit 2C <sup>18</sup> - 2 circuits #MC <sup>19</sup> - Multi circuit EC - Emergency-powered fixture NL - Night light fixture	#EC## <sup>25</sup> - Emergency-powered section #NL## <sup>25</sup> - Night light section #DL## <sup>25</sup> - Daylight section #GTD## <sup>25</sup> - Generator transfer device section #EMB <sup>27, 28, 29</sup> - Emergency battery	BF - Back feed TF - Top feed EF - End feed	DMB - Drywall mounting bracket MMB - Mullion mounting	W - Matte white AL - Aluminum WA - White antimicrobial Silverwerx	NATA - Natatorium finish CRF - Corrosion-
DL - Daylight fixture GTD <sup>20, 21, 22</sup> - Generator transfer device fixture	NA - None <sup>25</sup> Specify with multi circuit (#MC) electrical option only.		bracket	CF# - Custom finish, specify RAL#	resistant finish <b>NA</b> - None
<ul> <li>Navailable for Direct/Indirect only. Separate direct and indirect circuits.</li> <li>Specify total number of circuits (#), including any circuits required for electrical section options. Provide drawing or layout specifications. Minimum 4' section per circuit.</li> <li>Minimum 4' fixture.</li> <li>Not available with 347V.</li> <li>Yot available for environments where the ambient temperature falls below 0°C (32°F).</li> </ul>	24 Provide drawing or layout specifications. Consult factory for other configurations. Default section length is 4: 25 Specify quantity (#), and section length in inches (##). 26 Minimum 4' section. 27 Not available with 347V. 28 Not available for environments where the ambient temperature falls below 0°C (32°F). 28 Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section. For Direct/Indirect, minimum 8' fixture.				









## LUMENWERX

WALL PATTERN

DIRECT, DIRECT/INDIRECT

STATIC WHITE, BIOS ST/DY

#### VIA WEATHER SERIES

### Leveled corner

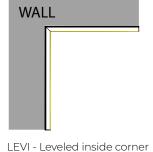


#### HOW TO SPECIFY A PATTERN?

Please follow these steps when specifying in order to be as precise as possible.

- (1) We require a drawing illustrating the pattern you are trying to achieve anything from a simple line drawing to elaborate architectural drawings will suffice.
- (2) Under PATTERN LENGTH, enter the overall length of your pattern either in feet or inches.
- (3) Under CORNER TYPE, please enter the type (or types) of corner you require.
- (4) Under CORNER DEGREE, please enter the angle in degrees, followed by the number of corners.

PATTERN LENGTH	CORNER TYPE	CORNER DEGREE
#FT#IN 12 - Specify nominal length (#) in 1' and/or 1" increments	LEVI - Leveled inside corner LEVO - Leveled outside corner	90(#)- 90° corner, specify the number of corners (#)
Standard nominal lengths: Continuous runs: lengths over 12'		
<sup>1</sup> Minimum 2' for Direct. Minimum 3' for Direct/Indirect. <sup>2</sup> With <b>BIOSDY</b> , specify in 2' increments only.		





LEVO - Leveled outside corner











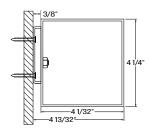
## LUMENWERX

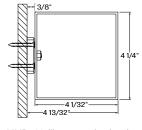
WALL PATTERN DIRECT, DIRECT/INDIRECT STATIC WHITE, BIOS ST/DY

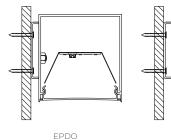
VIA WEATHER SERIES

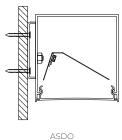
### Section Views

#### DIRECT





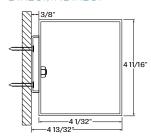


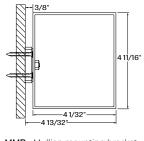


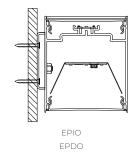
DMB - Drywall mounting bracket

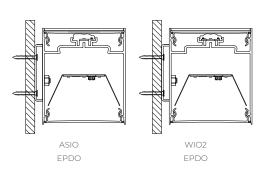
MMB - Mullion mounting bracket

#### DIRECT/INDIRECT



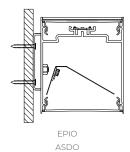




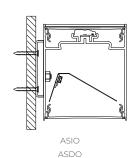


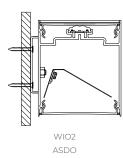
DMB - Drywall mounting bracket

MMB - Mullion mounting bracket



Intertek



















WALL PATTERN DIRECT, DIRECT/INDIRECT STATIC WHITE, BIOS ST/DY

### VIA WEATHER SERIES

## **Environment Options**

The Via Weather Series offers four levels of protective sealing: Level 1, Level 2, Level 3, and Level 4. Via 4 Seal is available with two environment options: Wet Suitable (WET) at Level 1, and Wet Listed (WETL) at Level 2. For other levels of protective sealing, please see Via Wet spec sheets for Level 3, and Via Splash spec sheets for Level 4.

FEATURES
Direct distribution
Direct/Indirect distribution
Indoor application that requires wipe down
Healthcare application
Outdoor application with restrictions: under canopy only
Outdoor application with restrictions: under canopy, slightly exposed
Continuous line of light over 12 ft
Water and dust resistant
Water and dust protected
Not suitable for extreme weather applications
Damp listed
Wat listed

Wet Suitable (IP44) (WET)	Wet Listed (IP54) (WETL)
•	•
•	x
•	•
•	•
•	•
х	•
•	x
•	•
x	•
•	•
•	x
x	•













WALL PATTERN DIRECT, DIRECT/INDIRECT STATIC WHITE, BIOS ST/DY

VIA WEATHER SERIES

## Photometrics

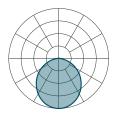
#### MULTIPLIER TABLE

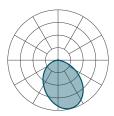
Please follow the multiplier table to ensure correct lumen value. CCT and CRI, will change the lumen output.

#### Multiplier - CCT/CRI

CCT (K)	WATTS		LF	PW .
	CRI 80	CRI 90	CRI 80	CRI 90
2700	1.06	1.27	0.94	0.79
3000	1.02	1.23	0.98	0.81
3500	1.00	1.19	1.00	0.84
4000	1.00	1.18	1.00	0.85
5000	0.95	1.12	1.05	0.89

#### DIRECT





#### EPDO - Delivered Lumens at 40K at 80 CRI

LUMENS PER FOOT	TOTAL LUMENS PER 4FT	INPUT WATTS	LPW
500	2000	19.8	101
750	3000	30.7	98
1000	4000	42.3	95

#### ASDO - Delivered Lumens at 40K at 80 CRI

LUMENS PER FOOT	TOTAL LUMENS PER 4FT	INPUT WATTS	LPW
500	2000	17.7	113
750	3000	27.9	107
1000	4000	39	103











WALL PATTERN DIRECT, DIRECT/INDIRECT STATIC WHITE, BIOS ST/DY

### VIA WEATHER SERIES

## Photometrics

#### DIRECT/INDIRECT - WITH EPDO

Delivered lumens at 40K at 80 CRI for all optics.







EPDO - EPIO

EPDO - ASIO

EPDO - WIO2

#### DIRECT/INDIRECT - WITH ASDO

Delivered lumens at 40K at 80 CRI for all optics.







ASDO - EPIO

ASDO - ASIO

ASDO - WIO2

LM	/FT	NOMINAL LM/4FT		TOTAL LM/4FT	INPUT WATTS	LPW
D	1.0	D	1	LIVI/4F I	WAITS	
EPDO	EPIO					
	500		2000	4000	40.4	99
500	750	2000	3000	5000	52.4	95
	1000		4000	6000	65.5	92
	500		2000	5000	51.3	97
750	750	3000	3000	6000	63.3	95
	1000		4000	7000	76.4	92
	500		2000	6000	62.9	95
1000	750	4000	3000	7000	74.9	93
	1000		4000	8000	88.0	91
EPDO	ASIO					
	500		2000	4000	36.7	109
500	750	2000	3000	5000	46.3	108
	1000		4000	6000	56.6	106
	500		2000	5000	47.6	105
750	750	3000	3000	6000	57.2	105
	1000		4000	7000	67.5	104
	500		2000	6000	59.2	101
1000	750	4000	3000	7000	68.8	102
	1000		4000	8000	79.1	101
EPDO	WIO2					
	500		2000	4000	36.4	110
500	750	2000	3000	5000	45.9	109
	1000		4000	6000	55.9	107
	500		2000	5000	47.3	106
750	750	3000	3000	6000	56.8	106
	1000		4000	7000	66.8	105
	500		2000	6000	58.9	102
1000	750	4000	3000	7000	68.4	102
	1000		4000	8000	78.4	102

LM,	LM/FT		IINAL ⁄4FT	TOTAL LM/4FT	INPUT	LPW
D	- 1	D	1.0	LIMI/4F1	WATTS	
ASDO	EPIO					
	500		2000	4000	38.3	104
500	750	2000	3000	5000	50.3	99
	1000		4000	6000	63.4	95
	500		2000	5000	48.5	103
750	750	3000	3000	6000	60.5	99
	1000		4000	7000	73.6	95
	500		2000	6000	59.6	101
1000	750	4000	3000	7000	71.6	98
	1000		4000	8000	84.7	94
ASDO	ASIO					
	500		2000	4000	34.6	116
500	750	2000	3000	5000	44.2	113
	1000		4000	6000	54.5	110
	500		2000	5000	44.8	112
750	750	3000	3000	6000	54.4	110
	1000		4000	7000	64.7	108
	500		2000	6000	55.9	107
1000	750	4000	3000	7000	65.5	107
	1000		4000	8000	75.8	106
ASDO	WIO2					
	500		2000	4000	34.3	117
500	750	2000	3000	5000	43.8	114
	1000		4000	6000	53.8	111
	500		2000	5000	44.5	112
750	750	3000	3000	6000	54.0	111
	1000		4000	7000	64.0	109
	500		2000	6000	55.6	108
1000	750	4000	3000	7000	65.1	108
	1000		4000	8000	75.1	106









WALL PATTERN DIRECT, DIRECT/INDIRECT STATIC WHITE. BIOS ST/DY

### VIA WEATHER 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

## \_UMENWERX

#### **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.

#### Widespread Indirect Optic (WIO2)

The Widespread 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 offers an impressive 160° spread. WIO2 creates an even illumination for smooth brightness on the ceiling that can achieve uniformity ratios of up to 2:1. The WIO2 suits moderate climate environments.

#### Uniformity [max/min]

Based on 18' continuous runs, in a 20' x 40' room, 10' wall height

Mounting height from	Spacing (Center to center)				
ceiling	8'	10'	12'		
24"	3.0	5.5	8.0		
36"	2.0	3.0	4.5		
48"	2.0	2.0	3.5		







# VIA 4 SFAI

LUMENWERX

WALL PATTERN DIRECT, DIRECT/INDIRECT

STATIC WHITE. BIOS ST/DY VIA WEATHER SERIES

## LIGHT SOURCE

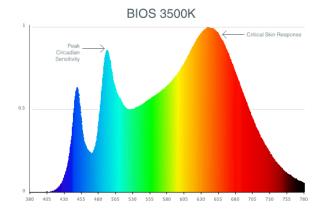
Custom linear array of mid-flux LEDs are cartridge-mounted with quick-connect wiring to facilitate service and thermal management. Available in 2700K, 3000K, 3500K, 4000K and 5000K with a minimum 80 CRI and an option for 90 CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. LEDs operated at reduced drive current to optimize efficacy and lumen maintenance.

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.



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.





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 LO4 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

#### 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' 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 Wet Suitable (WET) option feature a weep hole situated in the end cap. Water and moisture that enters the fixture will be expelled through this hole.













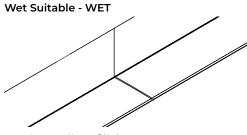
WALL PATTERN
DIRECT, DIRECT/INDIRECT

STATIC WHITE, BIOS ST/DY

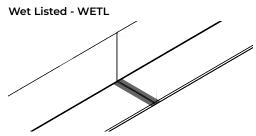
#### VIA WEATHER SERIES

#### JOINING SYSTEM

All individual sections are joined together onsite using the  $\frac{1}{4}$ "-20 screws and nuts provided. With the Wet Suitable (WET) option, the junction between two adjacent sections creates a continuous line of light without shadows. With the Wet Listed (WETL) option, the junction between two adjacent sections is sealed with a silicone gasket, creating a slight visible break in the line of light every 12 ft.



Continuous line of light



Visible break in line of light

#### ELECTRICAL

Factory-set, adjustable output current LED driver with universal (120-277VAC) 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% (specify 2-wire, or Ecosystem Dim-to-Off), 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), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

## LUMENWERX

#### **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 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

#### Batterv

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-lon 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).

#### LUMINAIRE MAINTENANCE

LED arrays and drivers are accessible through the optical chamber and easily replaced.











## LUMENWERX

WALL PATTERN DIRECT, DIRECT/INDIRECT STATIC WHITE. BIOS ST/DY

#### VIA WEATHER SERIES

#### MOUNTING OPTIONS

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

#### FINISH

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

#### CONSTRUCTION

Housing - Extruded aluminum (0.095" nominal) up to 90% recycled content

Interior brackets - Die-formed cold rolled sheet steel 18 gauge thick

Joining system (WETL) - 16 gauge steel joiners and closed-cell silicone foam joiner gasket

Reflectors - Cold rolled steel 0.024" thick precisely die-formed, 95% reflective matte white painted

End cap - Die-cast aluminum (0.100" nominal) End cap gasket - 1/16" closed-cell silicone foam

Drywall mounting bracket - 1/16" thick steel bracket with

stainless steel PEM studs and sealing washers Mullion mounting bracket - Die-cast aluminum

#### **CERTIFICATIONS**

ETL - WET environment option is rated for dry/damp locations. WETL environment option is ETL Wet Listed. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0. During the installation of WETL fixtures, the contractor is responsible for properly sealing all mounting and electrical connection points.

IK05 - Impact resistance rated to IK05.

#### 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.







