VIA 4 SFAI

SURFACE DIRECT

STATIC WHITE, BIOS ST/DY

VIA WEATHER SERIES



LUMENWERX



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 patterns and other available mountings.

For latest information on sensors,



IMPORTANT: Fixture must be installed with lens facing down.

IK05





Order Guide

LUMINAIRE ID	DISTRIBUTION	ENVIRONMENT ¹	OPTIC	LIGHT SOURCE 4	CRI
V4SEALS	D				
V4SEALS - Via 4" Seal Surface	D - Direct	WET ² - Wet Suitable (IP44) WETL ^{2,3} - Wet Listed (IP54) ¹ See page 2 for more information on each environment option. ² Suitable for outdoor environments only when installed under canopy. Not suitable for extreme weather environments. Consult factory for low temperature applications. ³ Can be slightly exposed to water. A minimal shadow line visible at every 12.	EPDO - Environmentally Protected Direct Optic ASDO - Asymmetric Soft Direct Optic	SW - Static white BIOSST - Static biologically- optimized lighting BIOSDY - Dynamic biologically- optimized lighting 4 Chromawerx Sola and Duo also available. Consult other spec sheet.	80 - 80 CRI 90 ⁵ - 90 CRI ⁵ Not available with BIOS.

LUMEN PACKAGE	COLOR TEMP.	LUMINAIRE LENGTH	VOLTAGE	DRIVER ¹⁰
500 - Low output 500 lm/ft	27 7 - 2700K	#FT#IN 8 - Specify nominal length (#) in 1'	120 - 120V	D1 - 1% 0-10V
750 6 - Medium output 750 lm/ft	30 - 3000K	and/or 1" increments	277 - 277∨	DA 11 - DALI
1000 ⁶ - High output 1000 lm/ft	35 - 3500K		UNV - 120V-277V	LTEA2W 12 - Lutron 1% - 2 wire FP 120V
	40 - 4000K	Standard nominal lengths:	347 ⁹ - 347V	LDE1 " - Lutron Hi-lume 1% Eco
⁶ Not available with BIOS.	50 7 - 5000K	Single units: 2' - 12'		ELD1 - eldoLED 1% ECOdrive 0-10V
		Continuous runs: lengths over 12'	⁹ Available with D1	ELDO - eldoLED 0.1% SOLOdrive 0-10V
	⁷ Not available with		only.	LTD10 13 - Low-temperature 10% 0-10V
	BIOS.	⁸ With BIOSDY, specify in 2' increments only.		
				¹⁰ PoE (Power-over-Ethernet) compatible. Consult factory for
				details.
				"On-site commissioning is required.
				¹² Available with 120V only.
				¹³ Suitable for temperatures down to -40°C/F.

ELECTRICAL	ELECTRICAL SECTIONS (optional) 18, 19	POWER FEED	MOUNTING	FINISH	OPTIONS
			GSM		
1C - 1 circuit #MC ¹⁶ - Multi circuit EC - Emergency-powered fixture NL - Night light fixture DL - Daylight fixture GTD ^{15, 16, 17} - Generator transfer device fixture	#EC## ²⁰ - Emergency-powered section #NL## ²⁰ - Night light section #DL## ²⁰ - Daylight section #GTD## ^{20, 21, 22, 23} - Generator transfer device section #EMB ^{22, 23, 24} - Emergency battery NA - None	TF - Top feed EF - End feed	GSM - Gasketed surface mount	W - Matte white AL - Aluminum WA - White antimicrobial Silverwerx	NATA - Natatorium finish CRF - Corrosion- resistant finish
 Specify total number of circuits (#), including any circuits required for electrical section options. Provide drawing or layout specifications. Minimum 4' section per circuit. Minimum 4' fixture. Not available with 347V. Not available for environments where the ambient temperature falls below 0°C (32°F). 	¹⁸ Specify with multi circuit (#MC) electrical option only. ¹⁹ Provide drawing or layout specifications. Consult factory for other configurations. Default section length is 4: ²⁰ Specify quantity (#), and section length in inches (##). ²¹ Minimum 4' section. ²² Not available with 347V. ²³ Not available for environments where the ambient temperature falls below 0°C (32°F). ²⁴ Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section.			CF# - Custom finish, specify RAL#	NA - None









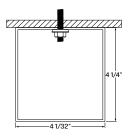




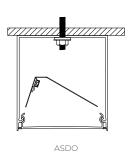
STATIC WHITE, BIOS ST/DY

VIA WEATHER SERIES

Section Views







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
Indoor application that requires wipe down
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
Wet listed

Wet Listed (IP54) (WETL)
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x
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STATIC WHITE, BIOS ST/DY

VIA WEATHER SERIES

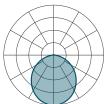
Photometrics

MULTIPLIER TABLE

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

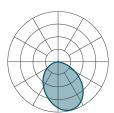
Multiplier - CCT/CRI

CCT (K)	WATTS		LPW	
	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



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	117
			113
750	3000	27.9	107
1000	4000	39	103









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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

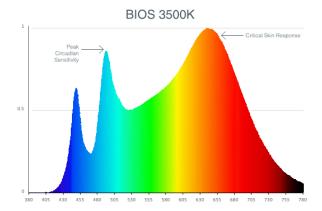
Custom linear array of mid-flux LEDs are cartridge-mounted with quick-connect wiring to facilitate service and thermal management. Available in 2700K, 3000K, 3500K, 4000K and 5000K with a minimum 80 CRI and an option for 90 CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. LEDs 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 deepred (near 660 nm) spectrum.

LUMENWERX





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 LO7 Electric Light Quality.

This fixture meets Features:

- Feature 54 or L03 when BIOS LED is selected
- Feature 55 or LO4 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











STATIC WHITE, BIOS ST/DY

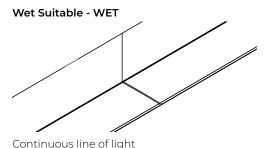
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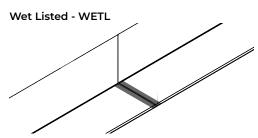
LUMINAIRE LENGTH

Via 4 Seal is available in standard lengths of 2' to 12'. Continuous runs are available for run lengths over 12'. Exact run length must be noted in the product code. The minimum length is 2' and can be ordered in 1' and/or 1" increments. 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.

JOINING SYSTEM

All individual sections are joined together onsite using the 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.





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 lowtemperature 10% 0-10V driver, suitable for temperatures down to -40°C/F is also available.

LUMENWERX

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 caseby-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).

LUMINAIRE MAINTENANCE

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











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MOUNTING OPTIONS

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

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

Mounting - Steel and neoprene sealing washer for 1/4" threaded studs

WEIGHT

Via 4 Seal 4ft - 15.0 lbs - 6.8 kg Via 4 Seal 8ft - 27.6 lbs - 12.5 kg Via 4 Seal 12ft - 40.1 lbs - 18.2 kg

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.







