

VIA 4 SEAL

WALL

DIRECT, DIRECT/INDIRECT

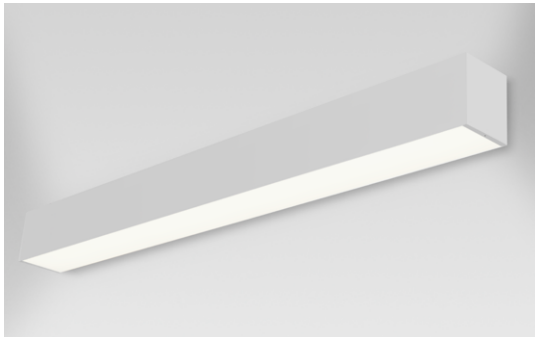
STATIC WHITE, BIOS



Project: _____

Type: _____

VIA WEATHER SERIES



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' increments. See separate spec sheets for patterns and other available mountings.

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

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

IK05



Up to 117 lm/W performance

Order Guide

LUMINAIRE ID	DISTRIBUTION	ENVIRONMENT ²	DIRECT OPTIC	INDIRECT OPTIC Specify NA for Direct fixture	LIGHT SOURCE ⁶
V4SEALW					
V4SEALW - Via 4 th Seal Wall	D - Direct DI ¹ - Direct/Indirect	WET ³ - Wet Suitable (IP44) WETL ^{3,4} - Wet Listed (IP54)	EPDO - Environmentally Protected Direct Optic ASDO - Asymmetric Soft Direct Optic	EPIO - Environmentally Protected Indirect Optic ASIO ⁵ - Asymmetric Soft Indirect Optic WIO2 ⁵ - Widespread Indirect Optic NA - Not applicable	SW - Static white BIOSST ⁷ - BIOS Biological Static BIOSDY ⁷ - BIOS Biological Dynamic BIOSTU ⁷ - BIOS Biological Tunable
	¹ Not available with WETL option.	² See page 3 for more information on each environment option. ³ Suitable for outdoor environments only when installed under canopy. Not suitable for extreme weather environments. Consult factory for low temperature applications. ⁴ Can be slightly exposed to water. A minimal shadow line visible at every 12'. Not available with Direct/Indirect.		⁵ Not available with BIOS.	⁶ Chromawerx SOLA and DUO also available. Consult other spec sheet. ⁷ See page 6 for details.

CRI	DIR. LUM. PACK.	INDIR. LUM. PACK. Specify NA for Direct fixture	COLOR TEMP.	LUMINAIRE LENGTH	VOLTAGE	DRIVER ¹⁴
80CRI - 80 CRI 90CRI ⁸ - 90 CRI	500LMF - Low output 500 lm/ft 750LMF ⁹ - Medium output 750 lm/ft 1000LMF ⁹ - High output 1000 lm/ft	500LMF - Low output 500 lm/ft 750LMF ¹⁰ - Medium output 750 lm/ft 1000LMF ¹⁰ - High output 1000 lm/ft NA - Not applicable	27K ¹¹ - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K ¹¹ - 5000K	#FT#IN ¹² - Specify nominal length (#) in 1' and/or 1" increments Standard nominal lengths: Single units: 2' to 12' Continuous runs: lengths over 12'	120V - 120V 277V - 277V UNV - 120V-277V 347V ¹³ - 347V	D1 - 1% 0-10V DA ¹⁵ - DALI LDEI ¹⁵ - Lutron Hi-lume 1% Eco ELDI - eldoLED 1% ECOdrive 0-10V ELDO - eldoLED 0.1% SOLOdrive 0-10V LTD10 ¹⁶ - Low-temperature 10% 0-10V
⁸ Not available with BIOS.	⁹ Not available with BIOS.	¹⁰ Not available with BIOS.	¹¹ Not available with BIOS.	¹² Minimum 3' for Direct/Indirect.	¹³ Available with DI driver only.	¹⁴ PoE (Power-over-Ethernet) compatible. Consult factory for details. ¹⁵ On-site commissioning is required. ¹⁶ Suitable for temperatures down to -40°C/F.

ELECTRICAL	ELECTRICAL SECTIONS (optional) ^{22,23}	POWER FEED	MOUNTING	FINISH	OPTION
1C - 1 circuit 2C ¹⁷ - 2 circuits #MC ¹⁸ - Multi circuit EC - Emergency-powered fixture NL - Night light fixture DL - Daylight fixture GTD ^{19,20,21} - Generator transfer device fixture	#EC## ²⁴ - Emergency-powered section #NL## ²⁴ - Night light section #DL## ²⁴ - Daylight section #GTD## ^{24,25,26,27} - Generator transfer device section #EMB ^{26,27,28} - Emergency battery NA - None	BF - Back feed EF - End feed	HMB - Horizontal mounting bracket MMB - Mullion mounting bracket	W - Matte white AL - Aluminum B - Matte black WA - White antimicrobial Silverwerx CF# - Custom finish, specify RAL#	CRF - Corrosion-resistant finish NA - None
¹⁷ Available for Direct/Indirect only. Separate direct and indirect circuits. ¹⁸ Specify total number of circuits (#), including any circuits required for electrical section options. Provide drawing or layout specifications. Minimum 4' section per circuit. ¹⁹ Minimum 4' fixture. ²⁰ Not available with 347V. ²¹ Not available for environments where the ambient temperature falls below 0°C (32°F).	²² Specify with multi circuit (#MC) electrical option only. ²³ Provide drawing or layout specifications. Consult factory for other configurations. Default section length is 4'. ²⁴ Specify quantity (#), and section length in inches (##). ²⁵ Minimum 4' section. ²⁶ Not available with 347V. ²⁷ 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.				



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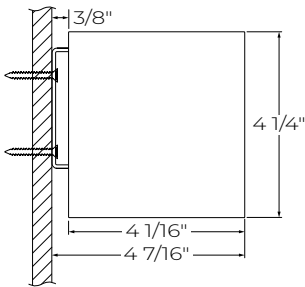
STATIC WHITE, BIOS

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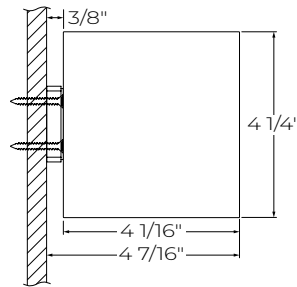


Dimensions

DIRECT

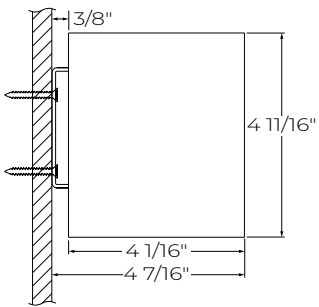


HMB - Horizontal mounting bracket

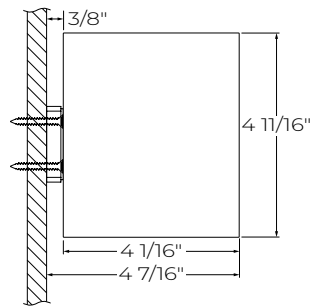


MMB - Mullion mounting bracket

DIRECT/INDIRECT



HMB - Horizontal mounting bracket



MMB - Mullion mounting bracket

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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	 Wet Suitable (IP44) (WET)	 Wet Listed (IP54) (WETL)
Direct distribution	●	●
Direct/Indirect distribution	●	X
Indoor application that requires wipe down	●	●
Healthcare application	●	●
Outdoor application with restrictions: under canopy only	●	●
Outdoor application with restrictions: under canopy, slightly exposed	X	●
Continuous line of light over 12'	●	X
Water and dust resistant	●	●
Water and dust protected	X	●
Not suitable for extreme weather applications	●	●
Damp listed	●	X
Wet listed	X	●

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Photometrics

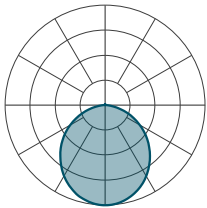
MULTIPLIER TABLE

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

Multiplier - CCT/CRI

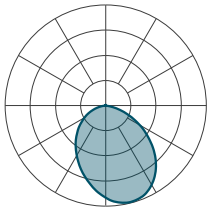
CCT	WATTS		LPW	
	80 CRI	90 CRI	80 CRI	90 CRI
2700K	1.06	1.27	0.94	0.79
3000K	1.02	1.23	0.98	0.81
3500K	1.00	1.19	1.00	0.84
4000K	1.00	1.18	1.00	0.85
5000K	0.95	1.12	1.05	0.89

DIRECT



EPDO - Delivered Lumens at 4000K 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 4000K 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

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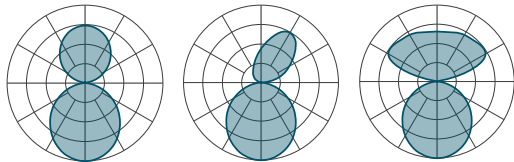
VIA WEATHER SERIES



Photometrics

DIRECT/INDIRECT - WITH EPDO

Delivered lumens at 4000K at 80 CRI for all optics.



EPDO - EPIO EPDO - ASIO EPDO - WIO2

LM/FT		NOMINAL LM/4FT		TOTAL LM/4FT	INPUT WATTS	LPW
D	I	D	I			

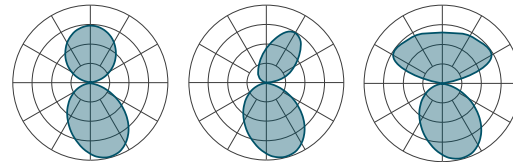
EPDO	EPIO					
500	500	2000	2000	4000	40.4	99
	750		3000	5000	52.4	95
	1000		4000	6000	65.5	92
750	500	3000	2000	5000	51.3	97
	750		3000	6000	63.3	95
	1000		4000	7000	76.4	92
1000	500	4000	2000	6000	62.9	95
	750		3000	7000	74.9	93
	1000		4000	8000	88.0	91

EPDO	ASIO					
500	500	2000	2000	4000	36.7	109
	750		3000	5000	46.3	108
	1000		4000	6000	56.6	106
750	500	3000	2000	5000	47.6	105
	750		3000	6000	57.2	105
	1000		4000	7000	67.5	104
1000	500	4000	2000	6000	59.2	101
	750		3000	7000	68.8	102
	1000		4000	8000	79.1	101

EPDO	WIO2					
500	500	2000	2000	4000	36.7	109
	750		3000	5000	46.3	108
	1000		4000	6000	56.6	106
750	500	3000	2000	5000	47.6	105
	750		3000	6000	57.2	105
	1000		4000	7000	67.5	104
1000	500	4000	2000	6000	59.2	101
	750		3000	7000	68.8	102
	1000		4000	8000	79.1	101

DIRECT/INDIRECT - WITH ASDO

Delivered lumens at 4000K at 80 CRI for all optics.



ASDO - EPIO ASDO - ASIO ASDO - WIO2

LM/FT		NOMINAL LM/4FT		TOTAL LM/4FT	INPUT WATTS	LPW
D	I	D	I			

ASDO	EPIO					
500	500	2000	2000	4000	38.3	104
	750		3000	5000	50.3	99
	1000		4000	6000	63.4	95
750	500	3000	2000	5000	48.5	103
	750		3000	6000	60.5	99
	1000		4000	7000	73.6	95
1000	500	4000	2000	6000	59.6	101
	750		3000	7000	71.6	98
	1000		4000	8000	84.7	94

ASDO	ASIO					
500	500	2000	2000	4000	34.6	116
	750		3000	5000	44.2	113
	1000		4000	6000	54.5	110
750	500	3000	2000	5000	44.8	112
	750		3000	6000	54.4	110
	1000		4000	7000	64.7	108
1000	500	4000	2000	6000	55.9	107
	750		3000	7000	65.5	107
	1000		4000	8000	75.8	106

ASDO	WIO2					
500	500	2000	2000	4000	34.3	117
	750		3000	5000	43.8	114
	1000		4000	6000	53.8	111
750	500	3000	2000	5000	44.5	112
	750		3000	6000	54.0	111
	1000		4000	7000	64.0	109
1000	500	4000	2000	6000	55.6	108
	750		3000	7000	65.1	108
	1000		4000	8000	75.1	106

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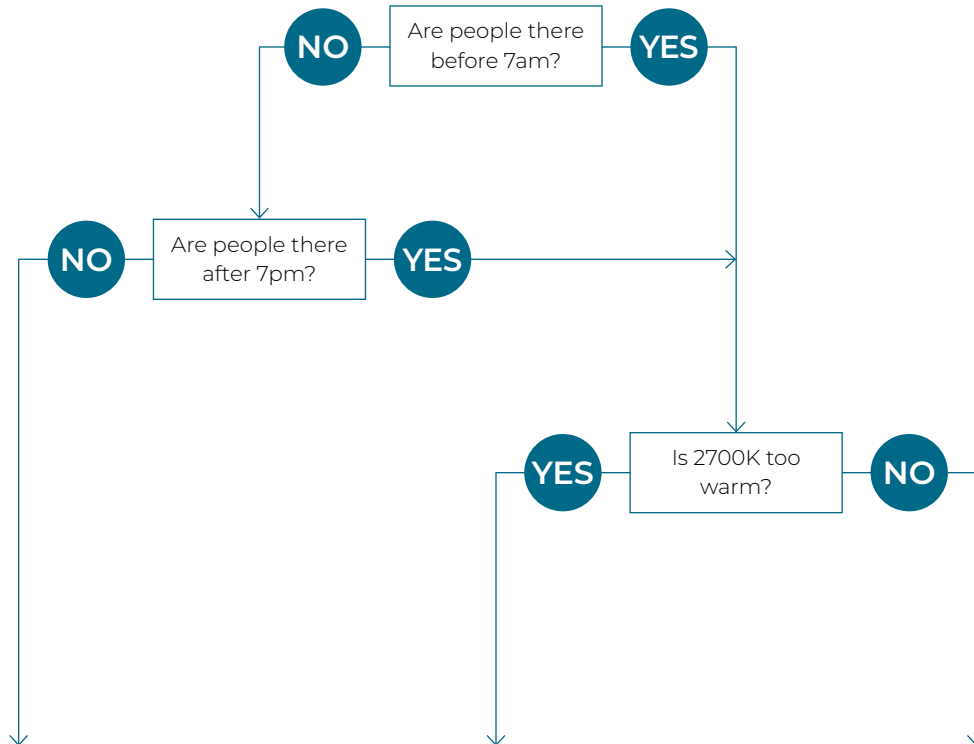
STATIC WHITE, BIOS

VIA WEATHER SERIES



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 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 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

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.

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

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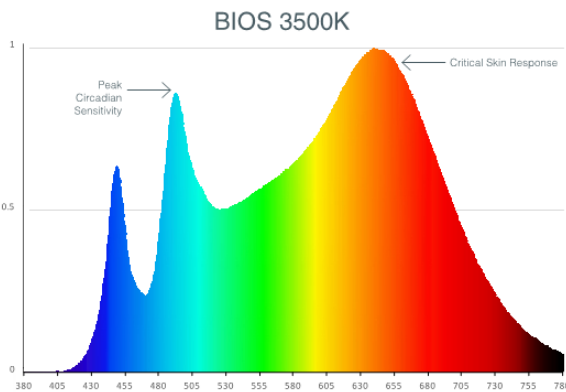
LIGHT SOURCE

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.

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

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' for Direct fixtures, and 3' for Direct/Indirect fixtures. Lengths 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.

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.



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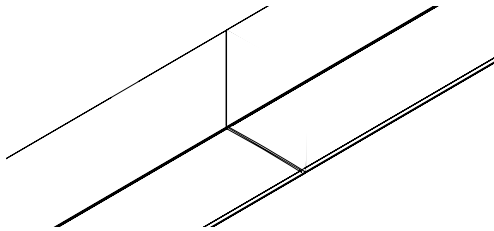
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JOINING SYSTEM

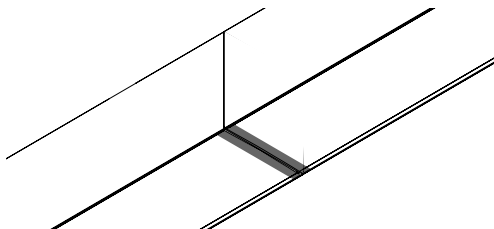
All individual sections are joined together onsite using the 1/4"-20 screws and nuts provided. With the Wet Suitable (WET) option, the junction between two adjacent sections creates a continuous line of light without shadows. With the Wet Listed (WETL) option, the junction between two adjacent sections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

Wet Suitable - WET



Continuous line of light

Wet Listed - WETL



Visible break in line of light

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 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.

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.

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CONSTRUCTION

Housing: Extruded aluminum, up to 90% recycled content

Interior brackets: Die-formed cold rolled sheet steel

Joining system (WETL): Steel joiners with closed-cell silicone foam joiner gasket

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

End cap: Die-cast aluminum

End cap gasket: 1/16" closed-cell silicone foam

Horizontal mounting bracket: Steel bracket with stainless steel PEM studs and sealing washers

Mullion mounting bracket: Die-cast aluminum

WEIGHT

Direct	Direct/Indirect
4': 15.0 lbs - 6.8 kg	4': 17.2 lbs - 7.8 kg
8': 27.6 lbs - 12.5 kg	8': 32.8 lbs - 14.9 kg
12': 40.1 lbs - 18.2 kg	12': 48.5 lbs - 22 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.