DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS



Project:

Type:

DESCRIPTION

Our elegant, flexible Via family is composed of linear, pendant, surface, recessed, and wall mounted luminaires. Each lighting fixture can be installed as a discrete luminaire or in continuous runs or patterns. Via 3 Wall is offered with Lambertian, asymmetric, low-glare, or grazing reflector optics.

Up to 146 lm/W performance







DIRECT OPTICS

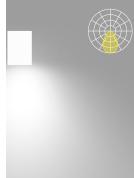


HLO High-Efficiency Lambertian Optic



ARO2 Asymmetric Refractive

Optic



LGO Low-Glare Optic



GRO Grazing Reflector Optic





TIO² Translucent Indirect Optic

²Available only with Direct/Indirect. ³Not available with Direct/Indirect.

¹Drop lens positions available with HLO direct lens only.



Widespread Asymmetric Indirect Optic

3737 Cote Vertu St-Laurent, Quebec, Canada H4R 2C9

T (514) 225-4304 F (514) 931 -4862

www.lumenwerx.com



HLO ³ High-Efficiency Lambertian Optic

Intertek



ARO2 ³ Asymmetric Refractive Optic





VIA 3 WALL DIRECT/INDIRECT, DIRECT, INDIRECT

STATIC WHITE, BIOS



Project:

Type:

Order Guide

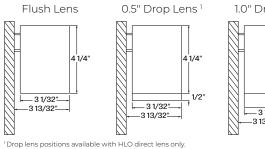
LUMINAIRE ID	DISTRIBUTION	DIRECT OPTIC Specify NA for Indirect fixture	LENS POSITION Specify NA for Indirect fixture	INDIRECT Specify NA fo	OPTIC or Direct fixture		LIGHT SOUR	CE ⁵	
/IA3W									
rla3W - Via 3" Vall	DI - Direct/ Indirect D - Direct I - Indirect	HLO - High-Efficiency Lambertian Optic ARO2 - Asymmetric Refractive Optic LGO - Low-Glare Optic GRO - Grazing Reflector Optic NA - Not applicable	FH - Flush 0.5D ¹ - 0.5" drop 1.0D ¹ - 1.0" drop NA - Not applicable ¹ Available with HLO direct lens only.	WAI2 ² - Wie Optic HLO ⁴ - Higl ARO2 ⁴ - Asy NA - Not ap ² Not available		ertian Optic	SW - Static white BIOSST ^{6,7} - BIOS Biological Static BIOSDY ^{6,7} - BIOS Biological Dynamic BIOSTU ^{6,7} - BIOS Biological Tunable ⁵ Chromawerx Sola, Duo and Quadro also available. Consult other spec sheets. ⁶ Only available with low and medium lumen packages. ⁷ See page 4 for details.		
CRI	DIRECT LUMEN Specify NA for Indire		INDIRECT LUMEN PACKAG Specify NA for Direct fixture	Έ	COLOR TEMP.	LUMINAIRE	LENGTH		VOLTAGE
30CRI - 80 CRI 50CRI [®] - 90 CRI Not available with BIOS.		tput 500 lm/ft n output 750 lm/ft output 1000 lm/ft yper output 1200 lm/ft le ndirect must not mdirect must not 500 lr	350LMF - Hypo output 350 lm 500LMF - Low output 500 lm/ 750LMF - Medium output 750 1000LMF ¹⁶ - High output 1000 1200LMF ¹⁶ , 15 - Hyper output 12 NA - Not applicable e will be very bright. Use in suitable a rect/Indirect, Direct must not exceed v/ft for GRO.	fft) Im/ft) Im/ft 200 Im/ft applications. d 1000 Im/ft,	27K ¹⁶ - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K ¹⁶ - 5000K ¹⁶ Not available with BIOS.	length (#) in increments Standard no Single units: Continuous	minal lengths:		120V - 120V 277V - 277V UNV - 120V-277 347V ¹⁸ - 347V ¹⁸ Available with DI driver only.
DRIVER ¹⁹		ELECTRICAL		ELECTRIC	CAL SECTIONS (o	ptional) ^{26, 27}		ΜΟΙ	JNTING
ELDO - eldoled C ELV ²¹ - ELV 120V (RI ²¹ - TRIAC 120)	% ECOdrive 0-10V 0.1% SOLOdrive 0-10' / hernet) compatible. details. ning is required.	DL - Daylight fixture GTD ^{24,25} - Generator tra ²² Available for Direct/Indirec circuits. ²³ Specify total number of ci	ansfer device fixture anoly. Separate direct and indirect rcuits (#), including any required ns. Provide drawing or layout	#NL## ²⁸ - #DL## ²⁸ - #CTD# ²² ²⁸ #EMB ^{30,31} NA - None ²⁶ Specify witt ²⁷ Provide dra configurati ²⁸ Specify qua ²⁹ Minimum 4 ²⁰ Not availab ³¹ Specify qua	h multi circuit (#MC) e awing or layout specifi ions. Default section le antity (#), and section l 4' section.	n ansfer device s ry lectrical option or cations. Consult fa ngth is 4'. ength in inches (i will be on the sam	nly. Ictory for other ##). e circuit. Each		- Drywall nting bracket
INISH		CONTROL 32						ΟΡΤΙ	ONS
bi-level dimming		— f sensors per fixture.	CONNECTED CONTROLS ³⁷ LU- Lutron AWNR - Lutron Athena Wireless Node RF Only AWNS - Lutron Athena Wireless Node Sensor EN - Enlighted ENC - Encelium WL - Cooper Wavelinx AN - Acuity nLight CA - Casambi LG - Legrand				9 - Fuse 120V 7 - Fuse 277V None		
			- None						
		³² Standalone and connected (³³ Available with D1 driver and ³⁴ ³⁴ Minimum 4' per zone. Provid		ed. ³⁵ Available with flush lens option only. ³⁶ Minimum 4' fixture. ³⁷ Consult factory for connected controls.					
/8	3737 Cote Vertu	u St-Laurent, Quebec, Cana T (514) 225-4304 F (51 www.lume		product © Lume	verx reserves the rig specifications with nwerx, ULC. All righ ALL-SPEC-REV3	nout notificatio			bios P

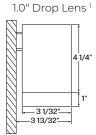
VIA 3 WALL DIRECT/INDIRECT, DIRECT, INDIRECT

STATIC WHITE, BIOS



Dimensions





Photometrics

Values calculated based on a 4ft fixture at 35K and 80 CRI for all optics.

Values calculated based on a 4ft fixture at 35K and 80 CRI for all optics.							
DIRECT OPTICS			INDIRECT OPTICS				
HLO (Flush Lens)	LM/FT	W/FT	LPW	TIO	LM/FT	W/FT	LPW
	350 500 750 1000 1200	2.8 4.1 6.3 8.6 10.6	125 123 119 116 113		350 500 750 1000 1200	2.7 4.0 6.3 8.8 10.9	127 124 119 114 110
ARO2	LM/FT	W/FT	LPW	WAI2	LM/FT	W/FT	LPW
	350 500 750 1000 1200	3.0 4.4 7.0 9.7 12.1	116 113 107 103 99		350 500 750 1000 1200	2.5 3.7 5.8 8.0 10.0	139 135 130 125 120
LGO	LM/FT	W/FT	LPW	HLO	LM/FT	W/FT	LPW
	350 500 750 1000 1200	3.2 4.7 7.3 10.2 12.5	108 106 102 98 96		350 500 750 1000 1200	2.8 4.1 6.3 8.6 10.6	125 123 119 116 113
GRO	LM/FT	W/FT	LPW	ARO2	LM/FT	W/FT	LPW
	350 500 750 1000	3.3 4.8 7.6 10.6	108 104 99 95		350 500 750 1000 1200	3.0 4.4 7.0 9.7 12.1	116 113 107 103 99

MULTIPLIER TABLES

Use these tables to get results for different color temperatures, CRI, and drop lenses, for all Direct and Indirect photometric tables.

Multiplier - CCT/CRI

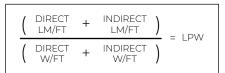
сст	WA	TTS	LPW		
(K)	CRI 80	CRI 90	CRI 80	CRI 90	
2700	1.05	1.27	0.95	0.79	
3000	1.02	1.23	0.98	0.81	
3500	1.00	1.19	1.00	0.84	
4000	1.00	1.19	1.00	0.84	
5000	0.96	1.12	1.04	0.89	

Multiplier - Drop Lens

DIRECT LENS	WATTS	LPW
Flush Lens	1.00	1.00
Drop Lens 0.5"	0.98	1.02
Drop Lens 1.0"	0.96	1.04

DIRECT/INDIRECT - LPW CALCULATION

For Direct/Indirect performance values, follow the formula.





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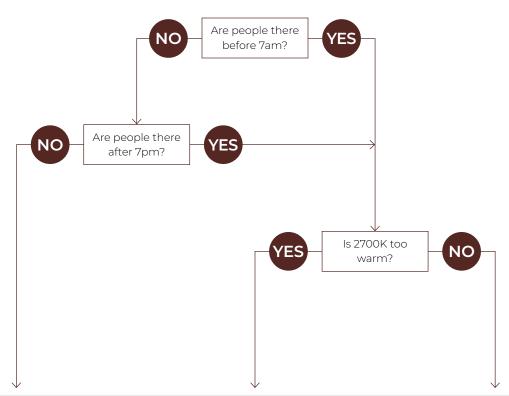






BIOS

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		
Proprogram (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Deptime Full BIOS SkyBlue ¹ /* (490m) Bio-Dimmingf ^M Bio-Dimmingf ^M Bio-Dimm	Daytime Full BIOS SkyBlue ?* (430mm) Bio-Dimming® BioS SkyBlue™Removed BIOS SkyBlue™Removed BIOS SkyBlue™Removed BIOS SkyBlue™Removed		





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VIA 3 WALL DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS



Technical Specifications

DIRECT OPTICS

High-Efficiency Lambertian Optic (HLO)

The High-Efficiency Lambertian Optic (HLO) uses matte white reflectors to distribute LED output across 0.075" acrylic shielding, providing up to 88% transmission and good obscuration. Available as a flush lens or as a drop lens, the HLO has a spacing criterion of 1.10.

Asymmetric Refractive Optic (ARO2)

The Asymmetric Refractive Optic (ARO2) uses a sophisticated reflector combined with a matte beam-shaping film to create a smooth, effective downward light component without shadows or hot spots. It provides directional Gaussian light distribution with peak intensity at 20° above nadir and a 55° Full Width at Half Maximum (FWHM) beam angle. Microstructure material applied to the snap-in lens provides the precise refractive power and visual comfort, while achieving a high luminous efficacy.

Low-Glare Optic (LGO)

The Low-Glare Optic (LGO) is designed to cut off high-angled light and control glare. The carefully crafted lens refracts light downward through its center from which it then disperses into a wide conical distribution that negates any illumination at about 40°. The LGO provides the visual comfort of a louver in a smooth acrylic lens.

Grazing Reflector Optic (GRO)

The Grazing Reflector Optic (GRO) is oriented to project light with maximum luminous intensity at 5° from nadir. This provides a tight beam to highlight and accentuate a wall with subtle vertical illumination.

INDIRECT OPTICS

Translucent Indirect Optic (TIO)

The Translucent Indirect Optic (TIO) is composed of a horizontal LED array that has a translucent lens to mask pixilation from the diodes. TIO has a 100° spread in the indirect that is ideal when the fixture is mounted farther away from the ceiling.

Widespread Asymmetric Indirect Optic (WAI2)

The Widespread Asymmetric Indirect Optic (WAI2) offers an upward grazing effect with a 45° forward throw. It softly highlights the ceiling in the up-light while distributing the required illumination of the rest of an interior space. For avoiding glare and enjoying visual comfort, WAI2 is an ideal solution.

High-Efficiency Lambertian Optic (HLO)

The High-Efficiency Lambertian Optic (HLO) uses matte white reflectors to distribute LED output across 0.075" acrylic shielding, providing up to 88% transmission and good obscuration. HLO has a spacing criterion of 1.10.

Asymmetric Refractive Optic (ARO2)

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DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS

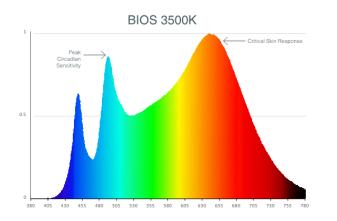


LIGHT SOURCE - STATIC WHITE

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. LEDs operate 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.

LIGHT SOURCE - 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 4 for details.

LUMINAIRE LENGTH

Via 3 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 or Indirect 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 offers joiner kits that 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.

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% Eco, eldoLED 1% ECOdrive 0-10V, eldoLED 0.1% SOLOdrive 0-10V, ELV, TRIAC, and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant.

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 (#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-powered 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.

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DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS



MOUNTING OPTIONS

Fixtures may be horizontally mounted to the wall 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 - Matte white, matte black or aluminum powder coating Custom finishes are also available.

CONTROLS

Lumenwerx offers several options for integrating occupancy and daylight harvesting controls in our luminaires. For latest information on sensors, click here.



STANDALONE CONTROLS

An integrated standalone sensor controls the luminaire in which it is installed. Depending on the length, more than one sensor may be necessary and may control the entire luminaire, or just a section of it. These controls operate independently. Unless otherwise agreed, sensor location, blank size, and functionality of the sensor within the luminaire are selected by Lumenwerx. See client drawings for details. Two types are available:

ODS: An integral, daylight harvesting sensor with closed-loop operation dims the luminaire in which it is installed in order to compensate for available daylight. The sensor measures the combination of daylight and luminaire light reflected from horizontal surfaces below the luminaire. Initial onsite calibration is required via the use of provided remote control.

OSS: An integral stairwell occupancy sensor uses ultrasonic sensing technology to turn light on when movement is detected. The sensor, located in the middle of the fixture, transmits sound waves in the stairwell. When motion is detected in the space, the luminaire turns on to full brightness. When the space is unoccupied, light levels are dimmed to 50%. Please consult factory for other sensor locations on the luminaire, as well as for other minimum light level options.

CONNECTED CONTROLS

With connected controls, sensors or nodes installed in the luminaire form part of a larger control system infrastructure from manufacturers such as: Lutron, Enlighted, Encelium, Cooper Wavelinx, Acuity nLight, Casambi, Legrand, and others. These connected controls allow for a scalable system providing features like occupancy and daylight control, manual control, scheduling and configuration of various zones and scenes. Energy reporting and system monitoring are also possible. Specific capabilities depend on the control system being used.

Lumenwerx installs the components (sensors, nodes, power packs, etc) which may be supplied to us by a third party, or procured directly by Lumenwerx, depending on the control system manufacturer.

Lumenwerx is solely responsible for the installation of specified components; the controls manufacturer is responsible for performance of the control system.

To indicate a Lumenwerx luminaire with connected controls, identify the specific onsite control system to be integrated into the luminaires using the ordering code. Due to the diversity of components, you must contact factory to assure complete compatibility with intended control system and to fully specify the luminaire.

Complete control specifications, sensor/node/power pack layout, and narrative for the control system are required for Lumenwerx to create shop drawings and submittals.

CONSTRUCTION

Housing - Extruded aluminum, up to 90% recycled content Interior brackets - Die-formed cold rolled sheet steel Joining system - Die-cast zinc Reflectors - Die-formed cold rolled steel, 95% reflective matte white painted Lens - Acrylic Drop lens - Extruded with glued end caps End caps - Die-cast aluminum

WEIGHT

Direct/Indirect	Direct or Indirect
4ft - 13.23 lbs - 6.0 kg	4ft - 11.12 lbs - 5.05 kg
8ft - 26.48 lbs - 12.0 kg	8ft - 22.25 lbs - 10.1 kg
12ft - 39.84 lbs - 18.0 kg	12ft - 33.48 lbs - 15.2 kg



DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS



CERTIFICATION

ETL - Rated for Indoor dry/damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0

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.



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