Lumenwerx

DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS





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 Pendant is offered with Lambertian, asymmetric, widespread, wall wash, or low-glare optics.

Up to 153 lm/W performance





Lens Positions 1

DIRECT OPTICS



High-Efficiency Lambertian Optic



ARO2 Asymmetric Refractive Optic



WRO2 Wall Wash Refractive Optic



WDO Widespread Direct Optic



LGO Low-Glare Optic

INDIRECT OPTICS



WIO2 Widespread Indirect Optic



TIO 2 Translucent Indirect Optic

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WAI2 Widespread Asymmetric Indirect Optic



HLO³ High-Efficiency Lambertian Optic



ARO2³ Asymmetric Refractive Optic





¹Drop lens positions available with HLO direct lens only

²Available only with Direct/Indirect.

³Not available with Direct/Indirect.

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Lui	me	H	erx

Project:	
Туре:	

Order Guide

LUMINAIRE ID	DISTRIBUTION	DIRECT OPTIC Specify NA for Indirect fixture	LENS POSITION Specify NA for Indirect fixture	INDIRECT OPTIC Specify NA for Direct fixture	LIGHT SOURCE ⁶
VIA3P					
VIA3P - Via 3" Pendant	DI - Direct/ Indirect D - Direct I - Indirect	HLO - High-Efficiency Lambertian Optic ARO2 - Asymmetric Refractive Optic WRO2 - Wall Wash Refractive Optic WDO - Widespread Direct Optic LGO - Low-Glare Optic NA - Not applicable	FH¹-Flush 0.5D¹-0.5" drop 1.0D¹-1.0" drop NA¹-Not applicable ¹-For HLO, specify FH, 0.5D, or 1.0DFor ARO2, WRO2, WDO, and LGO, specify FHFor an Indirect fixture, specify NA.	WIO2 ² - Widespread Indirect Optic TIO ^{3,4} - Translucent Indirect Optic WAI2 ³ - Widespread Asymmetric Indirect Optic HLO ⁵ - High-Efficiency Lambertian Optic ARO2 ⁵ - Asymmetric Refractive Optic NA - Not applicable ² Not available with BIOSTU. ³ Not available with BIOS. ⁴ Available only with Direct/Indirect. ⁵ Not available with Direct/Indirect.	SW - Static white BIOSST 7.8 - BIOS Biological Static BIOSDY 7.8 - BIOS Biological Dynamic BIOSTU 7.8 - BIOS Biological Tunable Chromawerx SOLA, DUO, and QUADRO also available. Consult other spec sheets. 'Only available with low and medium lumen packages. See page 7 for details.

CRI	DIRECT LUMEN PACKAGE Specify NA for Indirect fixture	INDIRECT LUMEN PACKAGE Specify NA for Direct fixture	COLOR TEMP.	LUMINAIRE LENGTH	VOLTAGE
80CRI - 80 CRI 90CRI ⁹ - 90 CRI ⁹ Not available with BIOS.	350LMF ¹⁰ - Hypo output 350 lm/ft 500LMF - Low output 500 lm/ft 750LMF - Medium output 750 lm/ft 1000LMF - High output 1000 lm/ft 1200LMF ¹¹ - Hyper output 1200 lm/ft NA - Not applicable	350LMF - Hypo output 350 lm/ft 500LMF - Low output 500 lm/ft 750LMF - Medium output 750 lm/ft 1000LMF - High output 1000 lm/ft 1200LMF " - Hyper output 1200 lm/ft NA - Not applicable	27K ¹² - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K ¹² - 5000K	#FT#IN ¹³ - 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 14 - 347V 14 Available with D1 driver only.
	™ Fixture will be very bright. Use in suitable applications.		with BIOS.	¹³ Minimum 3' for Direct/Indirect.	

DRIVER 15	ELECTRICAL	ELECTRICAL SECTIONS (optional) 22,23	MOUNTING ²⁸
D1 - 1% 0-10V DA ¹⁶ - DALI LDE1 ¹⁶ - Lutron Hi-lume 1% Eco ELD1 - eldoLED 1% ECOdrive 0-10V ELD0 - eldoLED 0.1% SOLOdrive 0-10V ELV ¹⁷ - ELV 120V TRI ¹⁷ - TRIAC 120V	1C - 1 circuit 2C ¹⁸ - 2 circuits #MC ¹⁹ - Multi circuit EC - Emergency-powered fixture NL - Night light fixture DL - Daylight fixture GTD ^{20,21} - Generator transfer device fixture	#EC## ²⁴ - Emergency-powered section #NL## ²⁴ - Night light section #DL## ²⁴ - Daylight section #GTD## ²⁴ , ²⁵ , ²⁶ - Generator transfer device section #EMB ²⁶ , ²⁷ - Emergency battery NA - None	ACS - Aircraft cable, standard STS - Stem, standard ACC() - Aircraft cable, custom STC() - Stem, custom
 Foe (Power-over-Ethernet) compatible. Consult factory for details. On-site commissioning is required. Available with 120V only. 	**Available for Direct/Indirect only. Separate direct and indirect circuits. **Specify total number of circuits (#), including any required for electrical section or COB options. Provide drawing or layout specifications. Minimum 4' section per circuit. **Dot available with 347V.	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 Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section. For Direct/Indirect, minimum 8' fixture.	²⁸ Standard canopies are black for black fixtures, and white for all other finishes. See page 3 for full details on standard and custom options.

FINISH	CONTROL 29		OPTIONS 36	MODULE (optional) 38
W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#	STANDALONE CONTROLS 30, 31, 32 Specify the quantity (#) of sensors per fixture. #OMS 33 - Onboard Occupancy #OMS## 34 - Onboard Occupancy with bi-level dimming #ODS - Onboard Daylight #OCS - Onboard Occupancy & Daylight	CONNECTED CONTROLS 35 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	FU120 - Fuse 120V FU277 - Fuse 277V CTB9 37 - T-bar caddy clip, 9/16" CTB15 37 - T-bar caddy clip, 15/16" CTG15 37 - Tegular caddy clip, 15/16" CST 37 - Screw slot caddy clip NA - None 36 Separate codes with a "+" if more than one is specified.	#COB20() - COB downlight 20° #COB30() - COB downlight 30° #COB40() - COB downlight 40° NA - None 36 See page 3 for ordering details.
	29 Standalone and connected control options car be combined	IA - None Sample Available with flush lens option only. Sample Fixture turns off when no occupancy.	³⁷ Available with aircraft cable only.	
	³⁰ Available with D1 driver and 1 circuit options on ³¹ Minimum 4' per zone. Provide control zone length	ly. ³⁴ Fixture dims to specified light level % (##).		







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Module

For a module, specify the options in the parentheses.

Example: 1COB20(SW-80CRI-600LM-27K)

MODULE (optional)				
MODULE 1, 2, 3, 4	LIGHT SOURCE	CRI	LUMEN PACKAGE 5	COLOR TEMP.
#COB20() - COB downlight 20°	SW - Static white	80CRI - 80 CRI	600LM - 600 lm	27K - 2700K
#COB30() - COB downlight 30°		90CRI - 90 CRI	1200LM - 1200 lm	30K - 3000K
#COB40() - COB downlight 40°		97CRI - 97 CRI	1800LM - 1800 lm	35K - 3500K
NA - None				40K - 4000K
			⁵ See page 6 for wattages.	50K - 5000K
¹ LED downlight available with Direct only.				
² Minimum 4' fixture and minimum 2' section per COB.				
Consult factory for other configurations.				
³ Specify quantity (#).				
46" blank per module.				

Pendant Mounting Code

Standard

For a standard mounting, please refer to the information below.

М			

ACS - Aircraft cable, standard

- •Ø 5" for power canopy
- •Ø 3" for non-power canopy
- · Canopies are black for black fixtures, and white for all other fixture finishes
- Power cord is black for black fixtures, and white for all other fixture finishes
- · Aircraft cable length is 36"

STS - Stem, standard

- Ø 5" for power canopy
- \cdot Ø 5" for non-power canopy
- Canopies are black for black fixtures, and white for all other fixture finishes
- •Stem finish is the same color as fixture
- Stem length is 18"
- · Stem is not field adjustable

Custom

Aircraft Cable

For a custom mounting, specify the options in the parentheses.

Example: ACC(3NPC-72IN-W-PCB-SLC)

MOUNTING	S				
ACC()					
	NON-POWER CANOPY SIZE	AIRCRAFT CABLE LENGTH	CANOPY FINISH	POWER CORD COLOR	OPTIONS
ACC	3NPC - Ø3" non-power canopy 5NPC - Ø5" non-power canopy	36IN - 36" 72IN - 72" 120IN - 120" #IN ¹ - Other lengths, specify in inches ¹Maximum length is 288". For longer lengths, please consult factory.	W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#	PCW - White PCB - Black	SEM - Seismic mounting SLC - Sloped ceiling for aircraft cable NA - None

Stem

For a custom mounting, specify the options in the parentheses.

Example: STC(5NPC-36IN-W-STW-SLS)

MOUNTING

STC()

	NON-POWER CANOPY SIZE	STEM LENGTH	CANOPY FINISH	STEM COLOR	OPTIONS
STC	5NPC - Ø 5" non-power canopy	18IN - 18" 36IN - 36" #IN ² - Specify length in inches ² Minimum length is 6", Maximum length is 72". Stem is not field adjustable.	W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#	STW - Matte white STAL - Aluminum STB - Matte black STCF# - Custom finish, specify RAL#	SLS - Sloped ceiling for stem NA - None

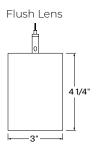


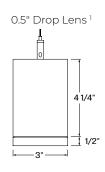


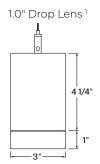


DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS

Dimensions







 $^{^{\}rm 1}{\rm Drop}$ lens positions available with HLO direct lens only.





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Photometrics

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

DIRECT OPTICS

HLO (Flush lens)



LM/FT	W/FT	LM/W
350	2.8	125
500	4.1	123
750	6.3	119
1000	8.6	116
1200	10.6	113

ARO2



LM/FT	W/FT	LM/W
350	3.0	116
500	4.4	113
750	7.0	107
1000	9.7	103
1200	12.1	99

WRO2



LM/FT	W/FT	LM/W
350	3.0	116
500	4.4	112
750	7.0	107
1000	9.8	102
1200	121	99

WDO



LM/FT	W/FT	LM/W
350	3.0	118
500	4.3	116
750	6.7	113
1000	9.2	109
1200	11.3	106

LGO



LM/FT	W/FT	LM/W
350	3.2	108
500	4.7	106
750	7.3	102
1000	10.2	98
1200	12.5	96

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	WATTS		LP	w
CCI	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

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

INDIRECT OPTICS

WIO2



LM/FT	W/FT	LM/W
350	2.4	146
500	3.5	142
750	5.5	137
1000	7.6	132
1200	9.4	128

TIO



LM/FT	W/FT	LM/W
350	2.7	127
500	4.0	124
750	6.3	119
1000	8.8	114
1200	10.9	110

WAI2



LM/FT	W/FT	LM/W
350	2.5	139
500	3.7	135
750	5.8	130
1000	8.0	125
1200	10.0	120

HLO



LM/FT	W/FT	LM/W
350	2.8	125
500	4.1	123
750	6.3	119
1000	8.6	116
1200	10.6	113

ARO2



LM/FT	W/FT	LM/W
350	3.0	116
500	4.4	113
750	7.0	107
1000	9.7	103
1200	12.1	99

DIRECT/INDIRECT - LPW CALCULATION

For Direct/Indirect performance values, follow the formula.

$$\frac{\left(\begin{array}{ccc} \text{DIRECT} \\ \text{LM/FT} \end{array} \right. + \left. \begin{array}{c} \text{INDIRECT} \\ \text{LM/FT} \end{array} \right)}{\left(\begin{array}{ccc} \text{DIRECT} \\ \text{W/FT} \end{array} \right. + \left. \begin{array}{c} \text{INDIRECT} \\ \text{W/FT} \end{array} \right)} = \text{LPW}$$







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COR

Use these tables to get results for different color temperatures and CRI for all COB photometric tables.

COB Multiplier - CCT/CRI

COB Wattage

сст	80 CRI	90 CRI
2700K	1.10	1.36
3000K	1.03	1.29
3500K	1.00	1.27
4000K	1.00	1.22
5000K	1.00	1.18

CRI 80 CRI						 90 CRI												
COB ANGLE		20°		30°		40°			20°			30°			40°			
Lumen	600	1200	1800	600	1200	1800	600	1200	1800	600	1200	1800	600	1200	1800	600	1200	1800
Wattage	5.8	11.7	18.1	6.0	11.9	18.3	6.4	12.6	19.4	7.3	14.8	22.9	7.7	15.0	23.2	8.2	16.1	24.7



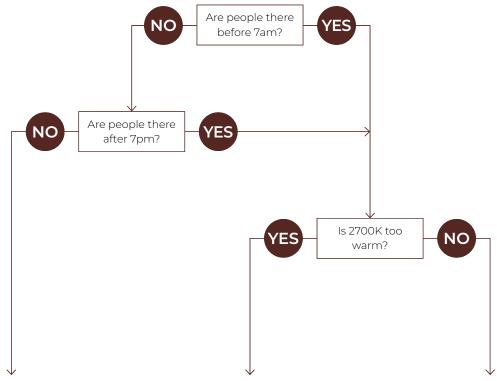




DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS

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			
300 400 500 500 500 500 500 500 700 140 710	Daytime	Daytime Ful BIOS SkyBlue™ (430nm) Bio-Dimming™ Bio-Dimming™ Evening BIOS SkyBlue™ Removed Wavelength red 65 756 746 786			





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.

Wall Wash Refractive Optic (WRO2)

The Wall Wash Refractive Optic (WRO2) delivers smooth vertical illumination with a gentle gradient and soft visual cut-off. Its exacting configuration creates a strong downward light component without shadows or hot spots and provides light distribution with peak intensity at 21° above nadir. Microstructure material applied to the snap-in lens provides the precise refractive power and visual comfort, while achieving a high luminous efficacy.

Widespread Direct Optic (WDO)

The Widespread Direct Optic (WDO) is designed to distribute light far and wide. As such, it has an excellent luminous efficacy, a light span that is 40% farther than that of our traditional HLO, and it maximizes spacing distance while still creating a sense of uniformity. The lens snaps into place and utilizes nano prismatic optics to mask the diodes that are actually emitting the light.

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.

INDIRECT OPTICS

Widespread Indirect Optic (WIO2)

The Widespread Indirect Optic (WIO2) is a horizontal LED array with a widespread indirect micro prismatic optic that 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.

Uniformity [max/min]

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

Mounting height	Spacing (Center to center)						
from ceiling	8'	10'	12'				
12"	5.5	10.0	9.0				
18"	6.5	6.0	6.0				
24"	2.5	4.0	4.5				

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)

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.





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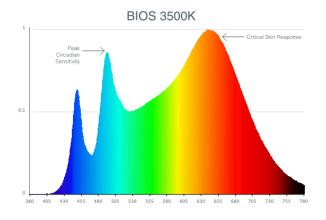
LIGHT SOURCE

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 SkyBlueTM 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 7 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 (120-277 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% 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 (#)

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.





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Lumenwerx

MOUNTING

Pendant fixtures can be mounted either with aircraft cable or with stem. See page 3 for details.

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 <u>here</u>.



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.

Three types are available:

OMS: An integral Passive InfraRed (PIR) sensor turns luminaires on and off automatically with field-adjustable time out period. No wall control is used. Coverage pattern for large motion has a 12' diameter with the sensor mounted 8' above the floor; for small motion, the pattern has an 8' diameter. Typically, one sensor is required for every 10' of a continuous luminaire run.

<u>ODS</u>: 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.

 $\underline{\text{OCS}}\!:\!$ Both an occupancy and a daylight sensor are installed in the luminaire.

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.

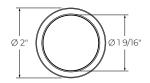
Complete control specifications, sensor/node/power pack layout, and narrative for the control system are required for Lumenwerx to create shop drawings and submittals.

СОВ

Fixtures with Chip On Board (COB) technology are able to provide a maximum output of 1800 lumens from a discrete 2" aperture on 8" centers. Standard CRI is 80, for 90 and 97 CRI with elevated R9 values, please consult factory. Standard 20°, 30° and 40° beam angles are available, as are custom angles prior factory approval. All our Chip On Board products have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 50,000 hours.



Chip On Board (COB)







Lumenwerx

DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS

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

Hanger: Chromed griplock securely attached in end caps and/or

joiners with stainless steel hardware

Aircraft cable suspension: Ø 1/16" stainless steel aircraft cable

Stem: Ø 1/2" threaded steel tube

WFIGHT

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

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.



