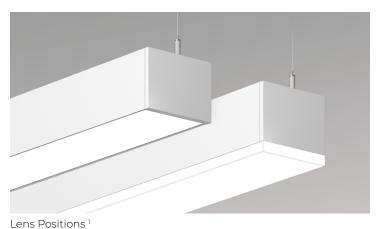
Lumenwerx

DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS



Project:

Туре:



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

Up to 153 lm/W performance

SENSORS For latest information on sensors, click <u>here</u>.



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#### **DIRECT OPTICS**



HLO High-Efficiency Lambertian Optic



ARO2 Asymmetric Refractive Optic



WRO2 Wall Wash Refractive Optic



WDO Widespread Direct Optic



LGO Low-Glare Optic

#### INDIRECT OPTICS



WIO2 <sup>2</sup> Widespread Indirect Optic



TIO <sup>2</sup> Translucent Indirect Optic



WAI2 <sup>2</sup> Widespread Asymmetric Indirect Optic



HLO <sup>3</sup> High-Efficiency Lambertian Optic



ARO2 <sup>3</sup> Asymmetric Refractive Optic





<sup>&</sup>lt;sup>1</sup>Drop lens position available with HLO direct lens only.

<sup>&</sup>lt;sup>2</sup>Available only with Direct/Indirect.

<sup>&</sup>lt;sup>3</sup>Not available with Direct/Indirect.

DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS



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
VIA5P					
VIA5P - Via 5" 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	FH - Flush 1.0D <sup>1</sup> - 1.0" drop NA - Not applicable  1Available with HLO direct lens only.	WIO2 <sup>2,3</sup> - Widespread Indirect Optic TIO <sup>2,4</sup> - Translucent Indirect Optic WAI2 <sup>2,4</sup> - Widespread Asymmetric Indirect Optic HLO <sup>5</sup> - High-Efficiency Lambertian Optic ARO2 <sup>5</sup> - Asymmetric Refractive Optic NA - Not applicable <sup>2</sup> Available only with Direct/Indirect.	SW - Static white  BIOSST 7.8 - BIOS Biological Static BIOSDY 7.8 - BIOS Biological Dynamic BIOSTU 7.8 - BIOS Biological Tunable  6 Chromawerx Sola, Duo and Quadro also available. Consult other spec sheets.  7 Only available with low and medium lumen packages.  8 See page 7 for details.
		NA - Not applicable		<ul> <li>Not available with BIOSTU.</li> <li>Not available with BIOS.</li> <li>Not available with Direct/Indirect.</li> </ul>	

CRI	DIRECT LUMEN PACKAGE Specify NA for Indirect fixture	INDIRECT LUMEN PACKAGE Specify NA for Direct fixture	COLOR TEMP.	LUMINAIRE LENGTH	VOLTAGE
90CRI - 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 - Ultra high output 1200 lm/ft 1200LMF 12.13.14 - Hyper output 1200 lm/ft 1X00LMF 12.13.14 - Hyper output 1500 lm/ft NA - Not applicable  10 Minimum 3' fixture. 11 For Direct/Indirect, indirect must not exceed 750 ln 12 Available with HLO only. 13 For Direct/Indirect, indirect must not exceed 500 ln	<sup>15</sup> For Direct/Indirect, Direct must not exceed	27K <sup>16</sup> - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K <sup>16</sup> - 5000K	#FT#IN ** - 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 <sup>18</sup> - 347V <sup>18</sup> Available with D1 driver only.

DRIVER 19	ELECTRICAL	ELECTRICAL SECTIONS (optional) 26, 27	MOUNTING 32
D1 - 1% 0-10V  DA <sup>20</sup> - DAL1  LDE1 <sup>20</sup> - Lutron Hi-lume 1% Eco  ELD1 - eldoLED 1% ECOdrive 0-10V  ELD0 - eldoLED 0.1% SOLOdrive 0-10V  ELV <sup>21</sup> - ELV 120V  TRI <sup>21</sup> - TRIAC 120V	1C - 1 circuit 2C <sup>22</sup> - 2 circuits #MC <sup>23</sup> - Multi circuit EC - Emergency-powered fixture NL - Night light fixture DL - Daylight fixture GTD <sup>24,25</sup> - Generator transfer device fixture	#EC## <sup>28</sup> - Emergency-powered section #NL## <sup>28</sup> - Night light section #DL## <sup>28</sup> - Daylight section #GTD## <sup>28</sup> , <sup>29</sup> , <sup>30</sup> - Generator transfer device section #EMB <sup>30</sup> , <sup>31</sup> - Emergency battery NA - None	ACS - Aircraft cable, standard STS - Stem, standard ACC() - Aircraft cable, custom STC() - Stem, custom
<sup>19</sup> PoE (Power-over-Ethernet) compatible. Consult factory for details. <sup>20</sup> On-site commissioning is required. <sup>21</sup> Available with 120V only.	<ul> <li>Available for Direct/Indirect only. Separate direct and indirect circuits.</li> <li>Specify total number of circuits (#), including any required for electrical section or COB options. Provide drawing or layout specifications. Minimum 4' section per circuit.</li> <li>Minimum 4' fixture.</li> <li>Not available with 347V.</li> </ul>	26 Specify with multi circuit (#MC) electrical option only.  27 Provide drawing or layout specifications. Consult factory for other configurations. Default section length is 4'.  28 Specify quantity (#), and section length in inches (##).  29 Minimum 4' section.  30 Not available with 347V.  31 Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section. For Direct/Indirect, minimum 8' fixture.	<sup>™</sup> See page 3 for ordering details.

FINISH	CONTROL 33		OPTIONS	MODULE (optional) 41, 42
W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#	STANDALONE CONTROLS 34, 35, 36 Specify the quantity (#) of sensors per fixture.  #OMS 37 - Onboard Occupancy #OMS## 38 - Onboard Occupancy with bi-level dimming  #ODS - Onboard Daylight  #OCS - Onboard Occupancy & Daylight	CONNECTED CONTROLS 39  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  A - None	FU120 - Fuse 120V FU277 - Fuse 277V CTB9 40 - T-bar caddy clip, 9/16" CTB15 40 - T-bar caddy clip, 15/16" CTG15 40 - Tegular caddy clip, 15/16" CST 40 - Screw slot caddy clip NA - None	#COB20() - COB downlight 20° #COB30() - COB downlight 30° #COB40() - COB downlight 40° NA - None  4 See page 3 for ordering details. 42 If more than one option is specified, separate codes with a "+", e.g. 1COB20(_)+1COB30(_).
	35 Standalone and connected control options car combined. 34 Available with D1 driver and 1 circuit options on 35 Minimum 4' per zone. Provide control zone len	unot be 36 Available with flush lens option only. 37 Fixture turns off when no occupancy. ly. 38 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)

MODULES (optional)				
MODULES 1, 2, 3, 4, 5	LIGHT SOURCE	CRI	LUMEN PACKAGE 6	COLOR TEMP.
#COB20() - COB downlight 20°	SW - Static white	80CRI - 80 CRI	<b>600LM</b> - 600 lm	<b>27K</b> - 2700K
#COB30() - COB downlight 30°		90CRI - 90 CRI	1200LM - 1200 lm	<b>30K</b> - 3000K
#COB40() - COB downlight 40°		<b>97CRI</b> - 97 CRI	1800LM - 1800 lm	<b>35K</b> - 3500K
NA - None				<b>40K</b> - 4000K
			<sup>6</sup> See page 6 for wattages.	<b>50K</b> - 5000K
LED downlight available with Direct only.				
Minimum 4' fixture and minimum 2' section per COB.				
Consult factory for other configurations.				
Specify quantity (#).				
6" Blank per module.				
If more than one option is specified, separate codes with a "+", e.g. ICOB20()+ICOB30().				

### Pendant Mounting Code

#### Standard

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

MOUNTING					
ACS - Aircraft cable, standard	STS - Stem, standard				
Ø5" for power canopy Ø3" for non-power Canopies are white Power cord is white for all fixture finishes (except black fixture is black power cord) Aircraft cable length is 36"	Ø5" for power canopy Ø5" for non-power Canopies are white 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)

MOUNTIN	G				
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  1 Maximum 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

MOUNTING

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

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

STC()					
	NON-POWER CANOPY SIZE	STEM LENGTH	CANOPY FINISH	STEM COLOR	OPTIONS
STC	5NPC - Ø5" non-power canopy	<b>18IN</b> - 18"	<b>W</b> - Matte white	STW - Matte white	SLS - Sloped ceiling for stem
		36IN - 36"	AL - Aluminum	STAL - Aluminum	NA - None
		#IN 2 - Specify length in inches	<b>B</b> - Matte black	STB - Matte black	
			CF# - Custom finish,	STCF# - Custom finish,	
		<sup>2</sup> Minimum length is 6". Maximum length is 72". Stem is not field adjustable.	specify RAL#	specify RAL#	

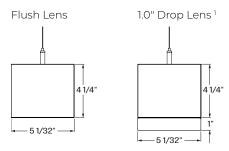






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### **Dimensions**



<sup>&</sup>lt;sup>1</sup>Drop lens position available with HLO direct lens only.







DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS

### Photometrics

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

#### **DIRECT OPTICS**

HLO (Flush Lens)



LM/FT	W/FT	LPW
350	2.7	132
500	3.9	129
750	6.0	126
1000	8.2	122
1200	10.1	119
1500	13.0	116



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



LM/FT	W/FT	LPW
350	3.0	116
500	4.4	112
750	7.0	107
1000	9.8	102
1200	12.1	99



LM/FT	W/FT	LPW
350	2.6	134
500	3.8	132
750	5.8	129
1000	8.0	125
1200	9.8	122



LM/FT	W/FT	LPW
350	3.0	119
500	4.3	116
750	6.6	113
1000	9.1	110
1200	11.2	107

**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	LF	w
(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	1.00 1.19		0.84
5000	0.96	112	104	0.89

#### Multiplier - Drop Lens

DIRECT LENS	WATTS	LPW
Flush Lens	1.00	1.00
Drop Lens 1.0"	0.88	1.12

#### INDIRECT OPTICS

WIO2



LM/FT	W/FT	LPW
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	LPW
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	LPW
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	LPW
350	2.7	132
500	3.9	129
750	6.0	126
1000	8.2	122
1200	10.1	119
1500	13.0	116

ARO2



LM/FT	W/FT	LPW
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.

(	DIRECT LM/FT	+	INDIRECT LM/FT	)	= I PW
(	DIRECT W/FT	+	INDIRECT W/FT	)	- LF VV







DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS

#### COR

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

COB Multiplier - CCT/CRI

COB Wattage

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

CRI 80													CRI 90					
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



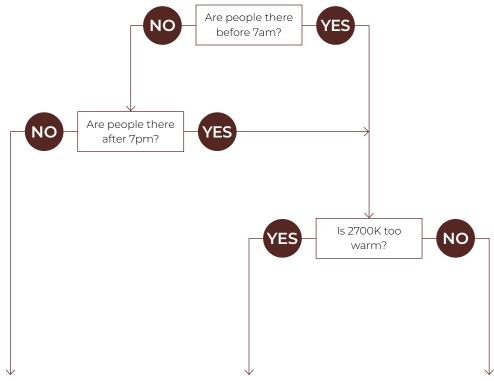




DIRECT/INDIRECT, DIRECT, INDIRECT STATIC WHITE, BIOS

### 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 overnigh 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	
1 (early controlled to the con	Daytime Full BIOS SkyBlue™ (490nm)  Bio_Dimming™  Bio_Dimming™  Evening BIOS SkyBlue™ Removed  StyBlue™ Removed  Washington 190 160 160 160 160 160 160 160 160 160 16	Deytime Full BIOS SkyBlue™ (490nm)  Bio Dimming™  Evening BIOS SkyBlue™ Removed  Sto Sto Sto Sto Sto Sto Sto No	





Lumenwerx

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 1.22.

#### 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 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 1.22.

#### 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 high luminous efficacy.





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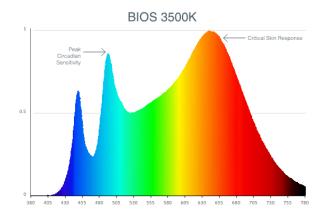
#### LIGHT SOURCE - STATIC WHITE

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. 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

nm) spectrum.

BIOS SkyBlue<sup>TM</sup> 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



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 5 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 (#)

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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#### MOUNTING OPTIONS

Fixtures can be pendant-mounted, using aircraft cables, or stem-

Unless otherwise specified, Lumenwerx provides the following hardware:

Standard aircraft cable option (ACS) - Canopies are white, Ø5" for power canopy, Ø3" for non-power. Power cord is black for black fixtures, and white for all other fixture finishes. Aircraft cable

Standard stem option (STS) - Canopies are white, Ø5" for both power and non-power. Stem finish is the same color as fixture. Stem length is 18". Stem is not field adjustable

Caddy clips, if required specify under OPTIONS For all other options, see the mounting code on page 3.

#### 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.

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.

**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.

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.

Fixtures with Chip On Board (COB) technology are able to provide a maximum ouput of 1800 lumens from a discrete 50 mm aperture on 8 inch 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)









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** - Stainless steel Ø1/16" aircraft cable **Stem** - 0.5" diameter threaded steel tube matte white or aluminum powder coating. Custom finishes are also available.

#### WEIGHT

Direct/Indirect	Direct or Indirect
<b>4ft</b> - 14 lbs - 6.35 kg	<b>4ft</b> - 11.78 lbs - 5.35 kg
<b>8ft</b> - 26 lbs - 11.79 kg	<b>8ft</b> - 23.79 lbs - 10.8 kg
<b>12ft</b> - 40 lbs - 18.14 kg	<b>12ft</b> - 35.24 lbs - 16 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 of 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.



