

CYLINDER WALL
DIRECT/INDIRECT, DIRECT, INDIRECT





### Flair Cylinder Family (Refer to other spec sheets)





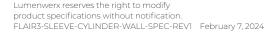


2"/3" 3" Diffuser Glow ring

3" Sleeve









## CYLINDER WALL DIRECT/INDIRECT, DIRECT, INDIRECT

Lumenwerx

Project:	
Туре:	

### Order Guide

LUMINAIRE ID	DISTRIBUTION	CYLINDER HEIGHT	CYLINDER FINISH	OPTIC	SLEEVE FINISH
FL3SLCYW					
FL3SLCYW - Flair 3" Sleeve Cylinder Wall	DI - Direct/Indirect D - Direct I - Indirect	6IN ¹ - 6" 8IN ¹ - 8" 12IN - 12"  ¹For Direct/Indirect fixture, available with remote driver only.	FTMW - Textured matte white FTMB - Textured matte black FCHP - Champagne CF# - Custom finish, specify RAL#	SLFH - Flush sleeve SL14 - 1/4" sleeve	FTMW - Textured matte white FTMB - Textured matte black FCP - Copper FBS - Brass

LIGHT SOURCE	DIRECT BEAM Specify NA for Indirect		INDIRECT BEAM Specify NA for Direct						
SW - Static white	Angle	Lambertian	Angle	Lambertian	2STP <sup>2</sup> - 2 Step MacAdam Ellipse				
FS - Full spectrum	Angle	Lambertian	Angle	Lambertian	3STP - 3 Step MacAdam Ellipse				
	<b>15DEG</b> - 15° Narrow spot <b>25DEG</b> - 25° Spot <b>35DEG</b> - 35° Narrow flood <b>50DEG</b> - 50° Wide flood	80DEG - 80° Lambertian	<b>15DEG</b> - 15° Narrow spot <b>25DEG</b> - 25° Spot <b>35DEG</b> - 35° Narrow flood <b>50DEG</b> - 50° Wide flood	80DEG - 80° Lambertian	NA - Not applicable  2 Not available with full spectrum.				
	NA - Not	applicable	NA - Not						
SOLA - Dim-to-warm single channel control 35K to 22K DUO - Tunable white 2-channel control 65K to 27K	<b>50DEG</b> - 50° Wide flood	80DEG - 80° Lambertian	<b>50DEG</b> - 50° Wide flood	80DEG - 80° Lambertian	<b>3STP</b> - 3 Step MacAdam Ellipse <b>NA</b> - Not applicable				
	NA - Not	applicable	NA - Not						

CRI	COLOR TEMP.	ACCESSORIES <sup>4</sup> Specify NA for 80°	VOLTAGE	DIRECT WATTAGE <sup>8</sup> Specify NA for Indirect	INDIRECT WATTAGE <sup>10</sup> Specify NA for Direct		
90CRI 3 - 90 CRI 95CRI - 95 CRI 80CRI 3 - 80 CRI 3 Not available with full spectrum.	27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K	At light element 5.6 (choose up to 2 options)  LSDL - Soft diffused lens, Solite LFDL - Frosted diffused lens LCL - Clear lens LS - Linear spread NA - None	120V - 120V 277V - 277V UNV - 120V-277V 347V ? - 347V <sup>7</sup> Available with RD1 driver only. Please consult factory.	10W - 10 W output, up to 1151 Im 14W - 14 W output, up to 1562 Im 20W 9 - 20 W output, up to 2145 Im NA - Not applicable  Bumen outputs are reduced with full spectrum, consult factory.  Not available for a DI fixture	10W - 10 W output, up to 1151 Im 14W - 14 W output, up to 1562 Im 20W n - 20 W output, up to 2145 Im NA - Not applicable  10 Lumen outputs are reduced with full spectrum, consult factory. 11 Not available for a Di fixture.		
<b>90CRI</b> - 90 CRI	SOLA - Dim-to-warm single channel control 35K to 22K DUO - Tunable white 2-channel control 65K to 27K	"For SOLA/DUO, one of the following lenses must be specified: LSDL or LFDL. "If two options are specified, separate codes with a "+", e.g. LSDL+LS. "LSDL, LFDL and LCL cannot be combined.		SOLA 12W - 12 W output, up to 725 lm DUO 11W - 11 W output, up to 525 lm NA - Not applicable	SOLA 12W - 12 W output, up to 725 lm  DUO 11W - 11 W output, up to 525 lm  NA - Not applicable		

DIMMING 12			ELECTRICAL	MOUNTING TYPE	MOUNTING FINISH 19			
INTEGRAL	REMOTE 14		1C - 1 circuit	FLR - Flat round	FTMW - Textured matte			
D1 - 1% 0-10V ELV <sup>13</sup> - ELV 120V TRI <sup>15</sup> - TRIAC 120V <sup>12</sup> PoE (Power-over-Ethernet) compatible. Consult factory for details. <sup>13</sup> Available with 120V only.	RD1 - 1% 0-10V RELV 15 - ELV 120V RTR1 15 - TRIAC 120V  14 A remote driver box is provided, see page 4 for details. 15 Available with 120V only.	RLDE1 16 - Lutron Hi-lume 1% Eco RDA 16 - DALI RELD1 - eldoLED 1% ECOdrive 0-10V RELD0 - eldoLED 0.1% SOLOdrive 0-10V +EB 17 - Emergency battery  16 On-site commissioning is required. 17 For emergency battery, code will be like the following example: RD1+EB.	2C <sup>16</sup> - 2 circuits <sup>16</sup> Available with Direct/ Indirect only.	canopy, 4" octagonal junction box <b>DM</b> - Direct mount	white FTMB - Textured matte black FCHP - Champagne CF# - Custom finish specify RAL#  Direct mount finish matches cylinder finish.			
SOLA SD1 - Single 0-10V input SELV <sup>18</sup> - ELV 120V STRI <sup>18</sup> - TRIAC 120V	SOLA RSD1 - Single 0-10V input RSELV <sup>15</sup> - ELV 120V RSTRI <sup>15</sup> - TRIAC 120V	DUO RDMX 16 - DMX RDDA 16 - DALI DT6 RDDA8 16 - DALI DT8 RDD1 - Dual 0-10V input for CCT/intensity RPSQ0 16 - Lutron T-Series 1% tunable whit			·			

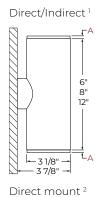


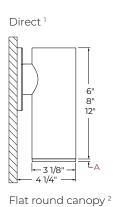
## **Lumenwerx**

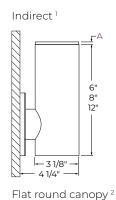
## CYLINDER WALL DIRECT/INDIRECT, DIRECT, INDIRECT

### **Dimensions**

### CYLINDER



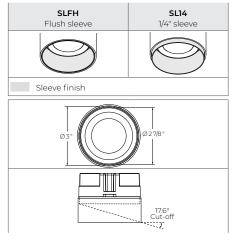




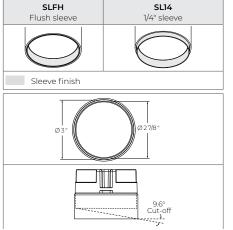
SLEEVE	А
Flush sleeve	NA
1/4" sleeve	1/4"

#### **OPTIC- SLEEVE**

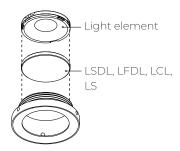
**Angle** - 15°, 25°, 35° and 50°







### Accessories





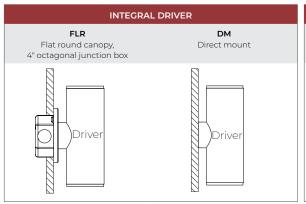
<sup>&</sup>lt;sup>1</sup>Certain restrictions apply. See page 2 for the height options available with integral and remote.

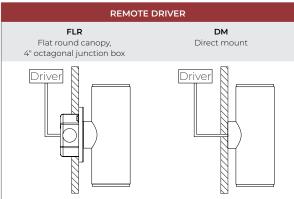
<sup>&</sup>lt;sup>2</sup>Flat round canopy and direct mount options are available with all Direct/Indirect, Direct and Indirect.



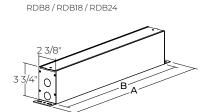
## CYLINDER WALL DIRECT/INDIRECT, DIRECT, INDIRECT

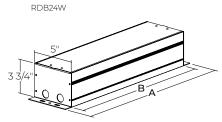
### Mounting





### REMOTE DRIVER BOX





	RDB8	RDB18	RDB24	RDB24W
Α	10"	20"	26"	26"
В	8"	18"	24"	24"
DRIVER	RD1 - 1% 0-10V RELV - ELV 120V RTRI - TRIAC 120V	RLDE1 - Lutron Hi-lume 1% Eco RDA - DALI RELD1 - eldoLED 1% ECOdrive 0-10V RELD0 - eldoLED 0.1% SOLOdrive 0-10V	Emergency battery (+EB) with the following driver options. RD1+EB - 1% 0-10V RELV+EB - ELV 120V RTR1+EB - TRIAC 120V	Emergency battery (+EB) with the following driver options. RLDE1+EB - Lutron Hi-lume 1% Eco RDA+EB - DALI RELD1+EB - eldoLED 1%
	SOLA RSD1 - Single 0-10V input RSELV - ELV 120V RSTRI - TRIAC 120V		RDMX - DMX RDDA - DALI DT6 RDDA8 - DALI DT8 RDD1 - Dual 0-10V input for CCT/intensity RPSQ0 - Lutron T-Series 1% tunable white	ECOdrive 0-10V  RELD0+EB - eldoLED 0.1%  SOLOdrive 0-10V

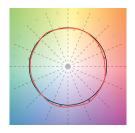


Angle Lambertian

# CYLINDER WALL DIRECT/INDIRECT, DIRECT, INDIRECT

### Color Quality

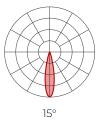
COLOR QUALITY	/ - 3500K
TM-30 Rf	90
TM-30 R <sub>g</sub>	100
CRI	90
R9	> 50

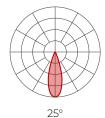


### **Photometrics**

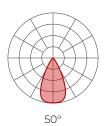
Values calculated based on 3500K, white sleeve, and LSDL lens option.

### DIRECT OPTIC - SLEEVE











### ■ Flush sleeve

### Delivered lumens

CRI			90 CRI					95 CRI			80 CRI				
BEAM	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°
10 W	983	1044	1039	932	896	756	803	799	717	689	1051	1116	1110	997	957
14 W	1335	1418	1410	1266	1216	1027	1090	1084	973	935	1427	1516	1507	1353	1300
20 W	1833	1947	1936	1738	1669	1410	1497	1489	1337	1284	1960	2081	2070	1858	1785

### Efficacy

CRI	90 CRI							95 CRI			80 CRI				
BEAM	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°
10 W	98	104	104	93	90	76	80	80	72	69	105	112	111	100	96
14 W	95	101	101	90	87	73	78	77	70	67	102	108	108	97	93
20 W	92	97	97	87	83	70	75	74	67	64	98	104	103	93	89





## CYLINDER WALL DIRECT/INDIRECT, DIRECT, INDIRECT

### ■ 1/4" sleeve

Angle Lambertian Delivered lumens CRI 90 CRI 95 CRI 80 CRI BEAM 15° 35° 50° 80° 25° 35° 50° 80° 15° 50° 80° 10 W 1014 780 1077 1071 961 828 823 739 711 1084 1151 1145 1028 988 924 14 W 1376 1462 1454 1305 1255 1058 1124 1118 1004 965 1471 1562 1554 1395 1341 20 W 1890 2007 1996 1792 1723 1453 1543 1535 1378 1325 2020 2145 2134 1916 1842

### Efficacy

CRI	90 CRI							95 CRI			80 CRI				
BEAM	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°
10 W	101	108	107	96	92	78	83	82	74	71	108	115	114	103	99
14 W	98	104	104	93	90	76	80	80	72	69	105	112	111	100	96
20 W	94	100	100	90	86	73	77	77	69	66	101	107	107	96	92

### **MULTIPLIERS**

Please follow the multiplier tables to ensure correct lumen value. Beams, CCT, sleeve finish and accessories will change the lumen value.

сст	
2700K	0.9
3000K	0.95
3500K	1
4000K	1.05

ACCESSORIES								
Soft diffused lens	1							
Frosted diffused lens	0.8							
Clear lens	1.1							
Linear spread	0.84							

SLEEVE FINISH						
Texture matted White	1					
Texture matted Black	0.99					
Copper	0.99					
Brass	0.99					

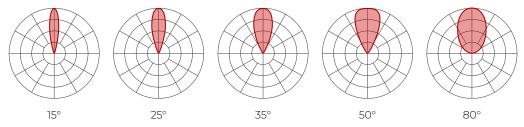
For SOLA and DUO, please consult factory.



## **Lumenwerx**

## CYLINDER WALL DIRECT/INDIRECT, DIRECT, INDIRECT

### INDIRECT OPTIC - SLEEVE



#### ■ Flush sleeve

Delivered lumens Angle Lambertian CRI 90 CRI 95 CRI 80 CRI BEAM 15° 25° 35° 50° 80° 159 25° 35° 50° 80° 15° 25° 35° 50° 80° 10 W 983 1039 932 717 997 14 W 1335 1418 1216 973 1427 1410 1266 1027 1090 1084 935 1516 1507 1353 1300 20 W 1833 1947 1738 1410 1497 1489 1337 1960 2070 1785

### Efficacy

CRI	90 CRI					95 CRI					80 CRI				
BEAM	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°
10 W	98	104	104	93	90	76	80	80	72	69	105	112	111	100	96
14 W	95	101	101	90	87	73	78	77	70	67	102	108	108	97	93
20 W	92	97	97	87	83	70	75	74	67	64	98	104	103	93	89

### ■1/4" sleeve

Delivered lumens

CRI	90 CRI					95 CRI					80 CRI					
BEAM	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°	
10 W	1014	1077	1071	961	924	780	828	823	739	711	1084	1151	1145	1028	988	
14 W	1376	1462	1454	1305	1255	1058	1124	1118	1004	965	1471	1562	1554	1395	1341	
20 W	1890	2007	1996	1792	1723	145	1543	1535	1378	1325	2020	2145	2134	1916	1842	

### Efficacy

CRI	90 CRI					95 CRI				80 CRI					
BEAM	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°	15°	25°	35°	50°	80°
10 W	101	108	107	96	92	78	83	82	74	71	108	115	114	103	99
14 W	98	104	104	93	90	76	80	80	72	69	105	112	111	100	96
20 W	94	100	100	90	86	73	77	77	69	66	101	107	107	96	92

### MULTIPLIERS

Please follow the multiplier tables to ensure correct lumen value. Beams, CCT, sleeve finish and accessories will change the lumen value.

сст		ACCESSORIES		SLEEVE FINISH			
2700K	0.9	Soft diffused lens	1	Texture matted White	1		
3000K	0.95	Frosted diffused lens	0.8	Texture matted Black	0.99		
3500K	1	Clear lens	1.1	Copper	0.99		
4000K	1.05	Linear spread	0.84	Brass	0.99		

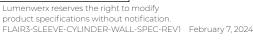
For SOLA and DUO, please consult factory.

### DIRECT/INDIRECT - EFFICACY CALCULATION

For Direct/Indirect performance values, follow the formula.







Angle Lambertian

### CYLINDER WALL DIRECT/INDIRECT, DIRECT, INDIRECT

## Lumenwerx

### Technical Specifications

#### **OPTIC**

XPoint™ Refraction Technology optics provide precise optical control in a remarkably compact form. Micro optical paths from the chip on board converge and then disperse in precise beam angles, resulting in a crisp and exacting light quality.

#### LIGHT SOURCE

#### Static white

Compact COB (Chip-On-Board) LED module, available in 2700K, 3000K, 3500K and 4000K with a choice of 80 CRI, 90 CRI, or 95 CRI, with elevated R9 value for 90 CRI and above. Color consistency is maintained to within 2 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.

### Full spectrum

The full spectrum LED option offers improved color particularly in the cyan region which helps increase Cyanosis Observation Index (COI) and assist in regulating circadian rhythms. The cyan region in full spectrum LED is richer at the 480 nm range.

### **Chromawerx SOLA**

Chromawerx SOLA is single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple analog control adjusts a specially populated LED array to emulate the effect of dimming a filament source.

### **Chromawerx DUO**

Chromawerx DUO offers a two-channel control system which uses analog or digital protocols for synchronous control of both cool (6500K) to warm (2700K) LED arrays - maintaining a CRI above 90. The range of color DUO offers is useful for entraining circadian rhythms, stimulating alertness, and compensating for jet lag among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures. When paired with DALI drivers (DDA/DDA8), color tuning follows a linear dimming curve.

### **BEAM ANGLES**



#### FL FCTRICAL

Unless otherwise specified, dimming down to 1%. At maximum driver load: efficiency>84%, PF>0.9, THD<20%.

Integral: 0-10V, ELV, TRIAC

Remote: 0-10V, ELV, TRIAC, Lutron Hi-Lume 1% 2-wire and 1% EcoSystem, DALI, eldoLED 0.1% SOLOdrive 0-10V, eldoLED 1% ECOdrive 0-10V, DMX, Lutron T-series (tunable white)

Emergency battery option: Remotely-installed, long-life, hightemperature, maintenance-free, Bodine Lithium-Ion battery pack with self-test functionality, test switch and charge indicator. IOTA and Fulham options available upon request. Minimum of 90 minutes operation, and recharge time of 24 hours. For fixtures less than 10 W, the battery provides 6 W of emergency light output. For fixtures 10 W and over, the battery provides 10 W.

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.

### CONSTRUCTION

Housing: Die-cast and extruded aluminum

Canopy: Flat and direct Arm: Machined aluminum

Finish: Textured matte white, black, and champagne. Custom

colors also available (provide RAL #).

Sleeve: Painted steel for textured matte white and black finishes,

copper for copper finish, and brass for brass finish.

Heat sink: Die-cast aluminum

### WEIGHT

Direct/Indirect	Direct or Indirect
<b>6"</b> : 2.2 lbs - 1 kg	<b>6"</b> : 2 lbs - 0.9 kg
<b>8"</b> : 2.4 lbs - 1.1 kg	<b>8"</b> : 2.2 lbs - 1 kg
<b>12"</b> : 2.9 lbs - 1.3 kg	<b>12"</b> : 2.4 lbs - 1.1 kg







8/9

## CYLINDER WALL DIRECT/INDIRECT, DIRECT, INDIRECT



### ACCESSORIES









Soft diffused lens. Solite

Solite diffused lens

Frosted Clear lens

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.

