

# FLAIR 3" DIFFUSER

CYLINDER SURFACE

DIRECT

 Lumenwerx



6" Height



8" Height



12" Height

The Flair Cylinder family is a series of pendant, surface, and wall mounted decorative luminaires featuring refined proportions, attention to detail, and minimalist versatility. It consists of the Flair Sleeve, Flair Diffuser, and Flair Glow Ring. The Flair Diffuser is available in 2" or 3" diameters, while the Flair Sleeve and Flair Glow Ring are available in 3" diameters only.

## Optic - Diffuser



Fully frosted  
1/4" diffuser



Fully frosted  
3/4" diffuser



Partially frosted  
3/4" diffuser

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



2" / 3"  
Diffuser  
Pendant/Surface/Wall



3"  
Glow ring  
Pendant/Surface/Wall



3"  
Sleeve  
Pendant/Surface/Wall

[www.lumenwerx.com](http://www.lumenwerx.com)  
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FLAIR3-DIFFUSER-CYLINDER-SURFACE-SPEC-REV2 July 29, 2024



# FLAIR 3" DIFFUSER

CYLINDER SURFACE  
DIRECT



Project: \_\_\_\_\_  
 \_\_\_\_\_  
 Type: \_\_\_\_\_  
 \_\_\_\_\_

## Order Guide

LUMINAIRE ID	DISTRIBUTION	CYLINDER HEIGHT	CYLINDER FINISH	OPTIC	LIGHT SOURCE
<b>FL3DFCYS</b>	<b>D</b>				
<b>FL3DFCYS</b> - Flair 3" Diffuser Cylinder Surface	<b>D</b> - Direct	<b>6IN</b> <sup>1</sup> - 6" <b>8IN</b> - 8" <b>12IN</b> - 12" <b>CH#IN</b> <sup>2</sup> - Custom height  <sup>1</sup> Not available with DMNC/DMRM canopy options when specified with integral drivers. <sup>2</sup> Specify height (#) in 1" increments only. Up to maximum 36". For minimum heights, see page 4.	<b>FTMW</b> - Textured matte white <b>FTMB</b> - Textured matte black <b>FCHP</b> - Champagne <b>CF#</b> - Custom finish, specify RAL#	<b>FF14</b> - Fully frosted 1/4" diffuser <b>FF34</b> - Fully frosted 3/4" diffuser <b>PF34</b> - Partially frosted 3/4" diffuser	<b>SW</b> - Static white <b>FS</b> - Full spectrum  <b>SOLA</b> - Dim-to-warm single channel control 35K to 22K <b>DUO</b> - Tunable white 2-channel control 65K to 27K

COLOR QUALITY	CRI	COLOR TEMP.	VOLTAGE	WATTAGE <sup>6</sup>
<b>2STP</b> <sup>3</sup> - 2 Step MacAdam Ellipse <b>3STP</b> - 3 Step MacAdam Ellipse  <sup>3</sup> Not available with full spectrum.	<b>90CRI</b> <sup>4</sup> - 90 CRI <b>95CRI</b> - 95 CRI <b>80CRI</b> <sup>4</sup> - 80 CRI  <sup>4</sup> Not available with full spectrum.	<b>27K</b> - 2700K <b>30K</b> - 3000K <b>35K</b> - 3500K <b>40K</b> - 4000K	<b>120V</b> - 120V <b>277V</b> - 277V <b>UNV</b> - 120V-277V <b>347V</b> <sup>5</sup> - 347V  <sup>5</sup> Available with RD1 driver only. Please consult factory.	<b>10W</b> - 10 W output, up to 742 lm <b>14W</b> - 14 W output, up to 1007 lm <b>20W</b> - 20 W output, up to 1383 lm  <sup>6</sup> Lumen outputs are reduced with full spectrum, consult factory.
<b>3STP</b> - 3 Step MacAdam Ellipse	<b>90CRI</b> - 90 CRI	<b>SOLA</b> - Dim-to-warm single channel control 35K to 22K <b>DUO</b> - Tunable white 2-channel control 65K to 27K		<b>SOLA</b> <b>12W</b> - 12 W output, up to 615 lm  <b>DUO</b> <b>11W</b> - 11 W output, up to 450 lm

DIMMING <sup>7</sup>		CANOPY TYPE <sup>13</sup>	CANOPY FINISH Specify NA for DM
<b>INTEGRAL</b>  <b>D1</b> - 1% 0-10V <b>ELV</b> <sup>8</sup> - ELV 120V <b>TRI</b> <sup>8</sup> - TRIAC 120V  <sup>7</sup> PoE (Power-over-Ethernet) compatible. Consult factory for details. <sup>8</sup> Available with 120V only.	<b>REMOTE</b> <sup>9</sup>  <b>RD1</b> - 1% 0-10V <b>RELV</b> <sup>10</sup> - ELV 120V <b>RTRI</b> <sup>10</sup> - TRIAC 120V <b>RLDE1</b> <sup>11</sup> - Lutron Hi-lume 1% Eco <b>RDA</b> <sup>11</sup> - DALI <b>RELD1</b> - eldoLED 1% ECOdrive 0-10V <b>RELD0</b> - eldoLED 0.1% SOLOdrive 0-10V <b>+EB</b> <sup>12</sup> - Emergency battery  <sup>9</sup> A remote driver box is provided, see page 4 for details. <sup>10</sup> Available with 120V only. <sup>11</sup> On-site commissioning is required. <sup>12</sup> For emergency battery, code will be like the following example: RD1+EB.	<b>FLR</b> <sup>14</sup> - Flat round canopy, 4" octagonal junction box <b>CDR</b> <sup>14</sup> - Conduit feed, round canopy <b>DMNC</b> <sup>15</sup> - Direct mount, new construction <b>DMRM</b> <sup>15,16</sup> - Direct mount, remodel  <sup>13</sup> See page 4 for details. <sup>14</sup> 6" long cylinders require a j-box for integral drivers. See page 4 for details. <sup>15</sup> 6" long cylinders require a remote driver. <sup>16</sup> Single wiring entry only. No daisy chain connections allowed.	<b>FTMW</b> - Textured matte white <b>FTMB</b> - Textured matte black <b>FCHP</b> - Champagne <b>CF#</b> - Custom finish, specify RAL# <b>NA</b> - None
<b>SOLA</b> <b>SD1</b> - Single 0-10V input <b>SELV</b> <sup>8</sup> - ELV 120V <b>STRI</b> <sup>8</sup> - TRIAC 120V	<b>SOLA</b> <b>RSD1</b> - Single 0-10V input <b>RSELV</b> <sup>10</sup> - ELV 120V <b>RSTRI</b> <sup>10</sup> - TRIAC 120V	<b>DUO</b> <b>RDMX</b> <sup>11</sup> - DMX <b>RDDA</b> <sup>11</sup> - DALI DT6 <b>RDDA8</b> <sup>11</sup> - DALI DT8 <b>RDD1</b> - Dual 0-10V input for CCT/intensity <b>RLD2</b> <sup>11</sup> - Lutron DALI-2 digital	



# FLAIR 3" DIFFUSER

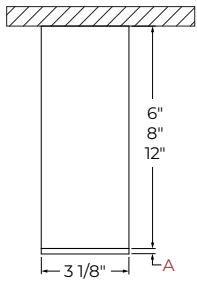
CYLINDER SURFACE

DIRECT



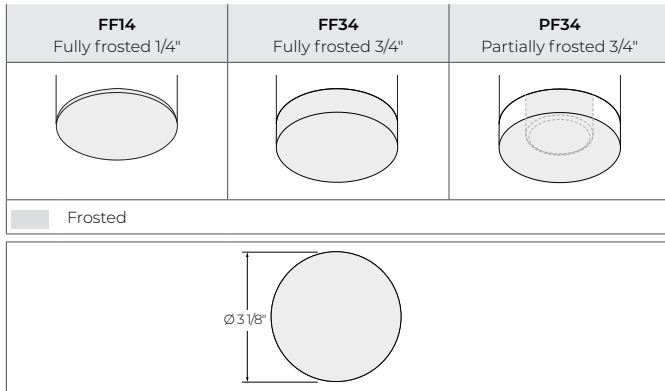
## Dimensions

### CYLINDER



DIFFUSER	A
Fully frosted 1/4"	1/4"
Fully frosted 3/4"	3/4"
Partially frosted 3/4"	3/4"

### OPTIC - DIFFUSER



# FLAIR 3" DIFFUSER

## CYLINDER SURFACE

### DIRECT



## Mounting

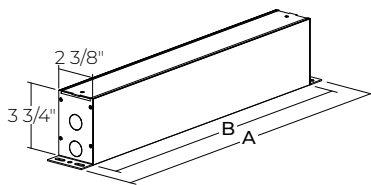
### CANOPY

Order code	INTEGRAL DRIVER				REMOTE DRIVER			
	FLR Flat round canopy, 4" octagonal junction box	CDR Conduit feed, round canopy	DMNC Direct mount, new construction	DMRM* Direct mount, remodel	FLR Flat round canopy, 4" octagonal junction box	CDR Conduit feed, round canopy	DMNC Direct mount, new construction	DMRM* Direct mount, remodel
Canopy type								
Canopy size	Ø 4 1/2" Height 3/8"	Ø 5 1/2" Height 1 15/16"	NA		Ø 4 1/2" Height 3/8"	Ø 5 1/2" Height 1 15/16"	NA	
Min. height	6" (Driver in junction box) 8" (Driver in cylinder)		8"		6"			

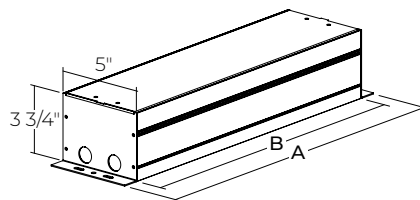
\*Single wiring entry only. No daisy chain connections allowed.

### REMOTE DRIVER BOX

RDB8 / RDB18 / RDB24



RDB24W



	RDB8	RDB18	RDB24	RDB24W
<b>A</b>	10"	20"	26"	26"
<b>B</b>	8"	18"	24"	24"
<b>DRIVER</b>	<b>RDI</b> - 1% 0-10V <b>RELV</b> - ELV 120V <b>RTRI</b> - TRIAC 120V  <b>SOLA</b> <b>RSDI</b> - Single 0-10V input <b>RSELV</b> - ELV 120V <b>RSTRI</b> - TRIAC 120V	<b>RLDEI</b> - Lutron Hi-lume 1% Eco <b>RDA</b> - DALI <b>RELD1</b> - eldoLED 1% ECOdrive 0-10V <b>RELD0</b> - eldoLED 0.1% SOLOdrive 0-10V	Emergency battery (+EB) with the following driver options. <b>RDI+EB</b> - 1% 0-10V <b>RELV+EB</b> - ELV 120V <b>RTRI+EB</b> - TRIAC 120V  <b>DUO</b> <b>RDMX</b> - DMX <b>RDDA</b> - DALI DT6 <b>RDDA8</b> - DALI DT8 <b>RDD1</b> - Dual 0-10V input for CCT/intensity <b>RLD2</b> - Lutron DALI-2 digital	Emergency battery (+EB) with the following driver options. <b>RLDEI+EB</b> - Lutron Hi-lume 1% Eco <b>RDA+EB</b> - DALI <b>RELD1+EB</b> - eldoLED 1% ECOdrive 0-10V <b>RELD0+EB</b> - eldoLED 0.1% SOLOdrive 0-10V

# FLAIR 3" DIFFUSER

CYLINDER SURFACE

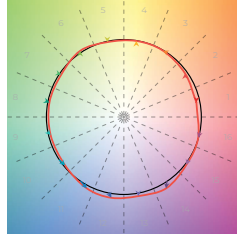
DIRECT



## Color Quality

### COLOR QUALITY - 3500K

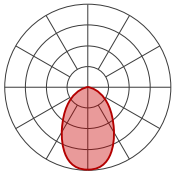
TM-30 R <sub>r</sub>	90
TM-30 R <sub>g</sub>	100
CRI	90
R9	> 50



## Photometrics

Values calculated based on 3500K.

### Fully frosted 1/4"



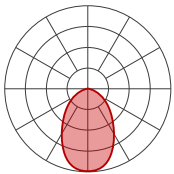
### Delivered lumens

CRI	90 CRI	95 CRI	80 CRI
10 W	664	510	709
14 W	901	693	963
20 W	1237	951	1322

### Efficacy

CRI	90 CRI	95 CRI	80 CRI
10 W	66	51	71
14 W	64	49	69
20 W	62	48	66

### Fully frosted 3/4"



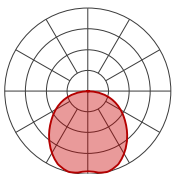
### Delivered lumens

CRI	90 CRI	95 CRI	80 CRI
10 W	694	534	742
14 W	942	725	1007
20 W	1294	995	1383

### Efficacy

CRI	90 CRI	95 CRI	80 CRI
10 W	69	53	74
14 W	67	52	72
20 W	65	50	69

### Partially frosted 3/4"



### Delivered lumens

CRI	90 CRI	95 CRI	80 CRI
10 W	660	507	705
14 W	896	689	957
20 W	1230	946	1315

### Efficacy

CRI	90 CRI	95 CRI	80 CRI
10 W	66	51	71
14 W	64	49	68
20 W	61	47	66

## MULTIPLIERS

Please follow the multiplier table to ensure correct lumen value.

### CCT

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

For SOLA and DUO, please consult factory.

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## Technical Specifications

### 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.

### ELECTRICAL

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 DALI-2 digital

**Emergency battery option:** Remotely-installed, long-life, high-temperature, 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.

### 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.

### CONSTRUCTION

**Housing:** Die-cast and extruded aluminum

**Canopy:** Flat, conduit feed, and direct

**Finish:** Textured matte white, black, and champagne. Custom colors also available (provide RAL #).

**Diffuser:** Acrylic

**Heat sink:** Die-cast aluminum

### WEIGHT

**6":** 2 lbs - 0.9 kg

**8":** 2.2 lbs - 1 kg

**12":** 2.4 lbs - 1.1 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.