## LX2048 · 120/277V · LED · BRIDGELUX 18MM



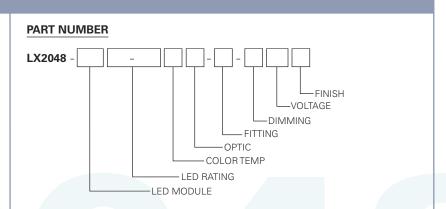
### Elegant fixed downlight designed specifically for the most demanding architecture applications.

- Designed for the Bridgelux 18mm LED module up to 23 Watts
- Extremely tight color consistency: 2 MacAdam Ellipses
- System efficiency up to 101 lumens/watt
- 60,000 hour life to 70% lumen output, L70 at 95°F max ambient
- Choice of color temperature
- Color Rendering Index (CRI) of 90
- Color Fidelity (R<sub>f</sub>) 89
- Gamut Area Index (R<sub>a</sub>) 103
- Tested to LM79 and LM80 Protocols, TM-30 available
- Hidden integral electronic driver compatible with various dimmers down to 0.1%
- Field interchangeable optics (15°-60°) modify the beam spread distribution
- Integral black polycarbonate accessory cartridge accepts up to two size-AA LSI filters and accessories
- Integral dimmer with built-in potentiometer also available down to 0.1%
- Finishes: LSI Black, White, and Silver
- Fixture weight: 3.5 lbs
- All modules are field replaceable
- Fixed center stem
- Maximum stem length is 48"

### **FIXTURE PART NUMBERS**

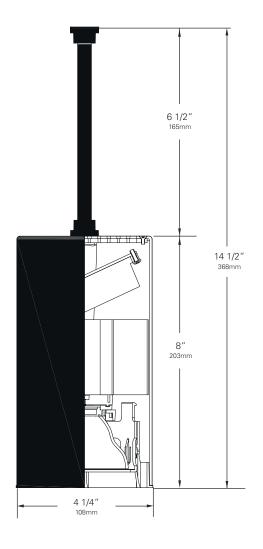
Please review the **ORDERING INFORMATION** section on the next page as well as the **MOUNTING OPTIONS** on page 3 to create a part number for each fixture that specifies the following:

- LED Module
- LED Rating
- Color Temperature
- Optic (mm/beam spread)
- Fitting/Controls (Dimming)
- Voltage
- Finish



Example Part Number: **LX2048-V1828-9030M2-00-TE120W** is a fixture with a Bridgelux 18mm LED module, 2800 Lumen/90 CRI/23 Watt LED rating, 3000°K Color Temperature, 70mm 20° Optic, 00 Track fitting with Trailing Edge group dimming capability, 120V and a White finish.

## LX2048 · 120/277V · LED · BRIDGELUX 18MM



Chromaticity Specifications						
ColorTemp	Center Point	Tolerance				
2700K	2722K	+/- 48K				
3000K	3051K	+/- 56K				
3500K	3476K	+/- 72K				
4000K	3988K	+/- 93K				

Chromaticity Specifications						
LED	R <sub>a</sub> -CRI	R <sub>f</sub> -Fidelity	R <sub>g</sub> -Gamut Area			
V18	92	89	103			

### **BRIDGELUX 18MM ORDERING INFORMATION Base Fixture Model** ☐ LX2048-V18 (Bridgelux 18mm) LED Rating (Lumens/CRI/Wattage) $\square$ 28-90 = 2800/90/23 **Color Temperature** □ 27= 2700K □ 30= 3000K □ 35= 3500K □ 40= 4000K **Optic** ☐ WR = 72mm/ 15° Field Reducer ☐ M2 = 70mm/ 20° Narrow Field Angle ☐ M4 = 70mm/35° Narrow Field Angle ☐ M6 = 70mm/ 60° Wide Field Angle ☐ M8 = 70mm/ 40° Wide Field Angle ☐ M9 = 70mm/ 20° Wide Field Angle Fitting/Controls (Dimming) □ 00-TE = Track Fitting & Trailing Edge (5%) □ 0D-ED = Track Fitting with Integral Dimmer (0.1%) □ 00EF-TE = Security/Worklight Track Fitting & Trailing Edge (5%) ☐ 5A-TE = Canopy Fitting & Trailing Edge (5%) ☐ 5B-ED = Canopy Fitting & Integral Dimmer (0.1%)

## **Voltage**□ 120 = 120V □ 230 = 220-240V □ 277 = 277V

### Finish

 $\square$  B = Black  $\square$  W = White  $\square$  S = Silver

 $\Box$  5B-10 = Canopy Fitting & 0-10V (0.1%)

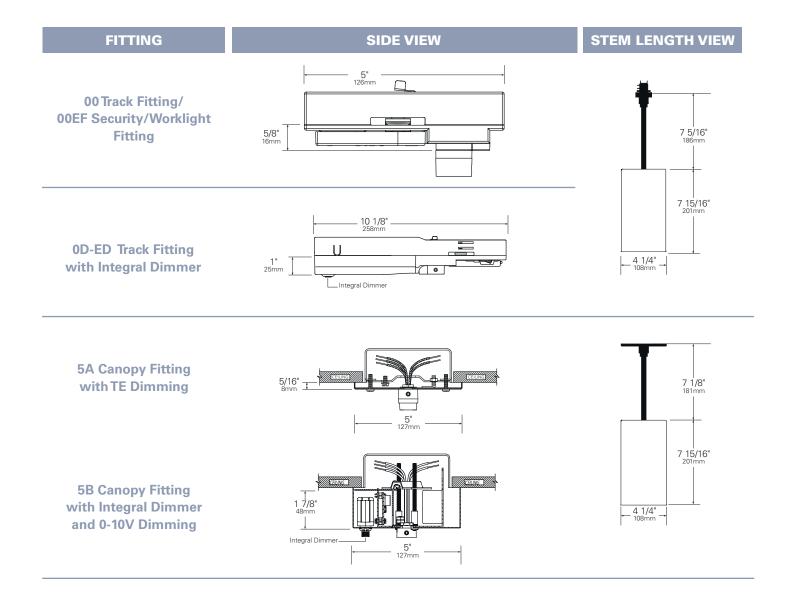
### **Example Part Number:**

•						
LX2048-V18	28-90	30	M2 -	- 00-TE	120	W
FIXTURE MODEL	LED BATING	COLOR	OPTIC	FITTING/	VOLTAGE	FINISH

### Other Options (Consult Factory):

- Custom Stems, specify length (4"- 48")
- Custom color, RAL palette

## LX2048 · MOUNTING OPTIONS



### LX2048 · PERFORMANCE

The performance characteristics of the LumeLEX family of products can be customized based on the LED module and the optic (reflector) selected.

Each available LED module is defined by four characteristics – the color rendering index (CRI), the correlated color temperature (CCT), the power that it uses (watts), and its "available lumens." Note that available lumens is a theoretical value that represents the light output of the module on its own – no fixture or optic attached.

In the LSI part number, the LED module is specified with a letter and a number that immediately follow the product series number. For example, in the part number LX2048-V1828-9027M2-00-TE120B, the "V1828-9027" represents an LED module with an output of 2800 lumens, a CRI of 90, a power usage of 23 watts and a color temperature of 2700K.

The available optics (reflectors) are characterized by size, beam angle, and in some cases the characteristics of the field angle (narrow or wide). The optic is specified by the two characters that follow the LED designation in the part number. For example, the "M2" in LX2048-V1828-9027M2--00-TE120B is a 70mm diameter optic that has a 20-Degree beam with a narrow field.

Additional parameters, such as Center Beam Candle Power (CBCP), Delivered Lumens, and Efficiency (Lumens per Watt) are all shown in a table that is organized by LED module and optic combination.

CBCP = Center Beam Candle Power*						
LED Module		Optic (Reflector)				
Lumens/CRI/Wattage	M2 WR M4 M6 M8 M9					
2800/90/23	6,748	5,796	5,376	2,576	3,948	6,916

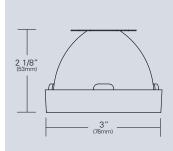
Delivered Lumens*						
LED Module		Optic (Reflector)				
Lumens/CRI/Wattage	M2 WR M4 M6 M8 M9					
2800/90/23	1,092	616	1,624	2,016	2,324	2,324

Efficiency = Lumens Per Watt*						
LED Module		Optic (Reflector)				
Lumens/CRI/Wattage	M2	WR	M4	M6	M8	M9
2800/90/23	47	27	71	88	101	101

\*Preliminary Data

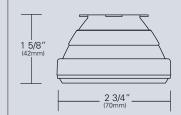
LED Mpdule	
Lumens/CRI/Wattage SKU Code	2800/90/23 28-90
Nominal Fixture Power (+/- 20%), Watts	23
Maximum Inrush Current Amps	10
Minimum Power Factor	0.92

## LX2048 OPTICS



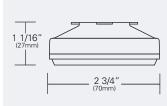
## LX-WRD-REF-CLR (WR) (72mm/15°)

Field reducer. Proprietary field reducing baffle (black) with aluminized reflector. Tool-less, twist and lock installation.
Aluminized finish.



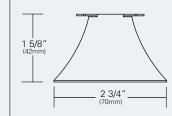
### LX-M20-REF-B (M2) (70mm/20°) (Narrow Field Angle)

Computer designed polycarbonate lens. Tool-less, twist and lock installation.
Black finish.



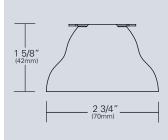
### LX-M40-REF-B (M4) (70mm/35°) (Narrow Field Angle)

Computer designed polycarbonate specular optic. Tool-less, twist and lock installation.
Black finish.



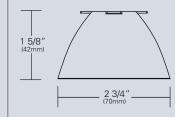
### LX-M60-REF-CLR (M6) (70mm/60°) (Wide Field Angle)

Computer designed polycarbonate specular optic. Tool-less, twist and lock installation. Aluminized finish.



### LX-M80-REF-CLR (M8) (70mm/40°) (Wide Field Angle)

Computer designed polycarbonate specular optic. Tool-less, twist and lock installation. Aluminized finish.



### LX-M90-REF-CLR (M9) (70mm/20°) (Wide Field Angle)

Computer designed polycarbonate specular optic. Tool-less, twist and lock installation. Aluminized finish.

# LX2048 · PHOTOMETRIC DATA

RAT		

WR- 72mm DIA Optic (FR: Field Reducer) Beam Spread (minimum) Center Beam Candlepower CRI	15° 5796 90
M2- 70mm DIA Optic (NFA: Narrow Field Angle) Beam Spread (minimum) Center Beam Candlepower CRI	20° 6748 90
M4- 70mm DIA Optic (NFA: Narrow Field Angle) Beam Spread (minimum) Center Beam Candlepower CRI	35° 5376 90
M6- 70mm DIA Optic (WFA: Wide Field Angle) Beam Spread (minimum) Center Beam Candlepower CRI	60° 2576 90
M8-70mm DIA Optic (WFA: Wide Field Angle) Beam Spread (minimum) Center Beam Candlepower CRI	40° 3948 90
M9- 70mm DIA Optic (WFA: Wide Field Angle) Beam Spread (minimum) Center Beam Candlepower CRI	20° 6916 90

<sup>\*</sup>Preliminary Data

LED RATING: 28-90

	M6 (60°)	M8 (40°)	M4 (35°)	M9 (20°)	M2 (20°)	WR (15°)	All Distances in Feet 6 4 2 0 2 4 6
All Max. Footcandles at 0° Beam Axis							6 4 2 0 2 4 6 1 2 3 4 5 6 6 7 7 8 9 9 10 11 12 13 14 15 16 16 17 18
4							18
	6 6	10 9	13 12	17 16	17 15	14 13	20
	5	8	11	14	14	12	21
	5 4	7 7	10 9	13 12	13 12	11 10	23
	4	6	9	11	11	9	24 25

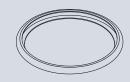
Photometric Data based on LED Rating: 28-90 (2800 Lumens/90CRI/23watts) \*WFA Optics not represented in graph

### LX2048 · ACCESSORIES



## SPREAD LENSES AND BEAM SOFTENER

No.	Description	Transmission
AA990	Spread Lens/Clear	83 (5°X 50°)
AA992	Spread Lens/Clear	85 (5°X 30°)
AA995	Spread Lens/Clear	83 (50°X 50°)
AA996	Spread Lens/Clear	86 (45°X 50°)
AA998	Beam Softener/Clear	80 (45°X 45°)



#### **BACKER RING AAB**

Aluminum ring to hold gel when no other size AA accessories are being used. Black finish.





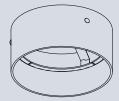
Stainless steel mesh screens used alone or in combinations will block from approximately 20% to 90% of the transmitted light without changing color temperature of the light.

No.	% of Light Blocked
AA801S	20
<b>AA802S</b>	30
AA803S	40



#### **LOUVER HEX AAB**

1/8" thick Hexcell black metal louver used for thin profile. Black finish.

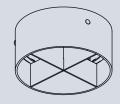


### **HOOD-EXT-LX44-NXB-X**

Externally mounted cylindrical metal hood controls spill light and glare.

Does not include cross baffle.

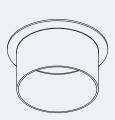
Specify finish as follows: HOOD-EXT-LX44-NXB-B (BLACK) HOOD-EXT-LX44-NXB-W (WHITE) HOOD-EXT-LX44-NXB-S (SILVER)



### **HOOD-EXT-LX44-WXB-X**

Externally mounted cylindrical metal hood controls spill light and glare. Includes cross baffle.

Specify finish as follows: HOOD-EXT-LX44-WXB-B (BLACK) HOOD-EXT-LX44-WXB-W (WHITE) HOOD-EXT-LX44-WXB-S (SILVER)



### **HOOD AAX**

Internally mounted cylindrical metal hood controls spill light and glare.

Specify finish as follows: HOOD AAB (BLACK) HOOD AAW (WHITE) HOOD AAS (SILVER)

<sup>1.</sup> Figures vary based upon LED Module/Optic being used and relationship of screen(s) to LED Module/Optic and to each other.

## LX2048 · GELS

As the foremost innovator in accent lighting, LSI offers a complete range of pre-cut Gels to modify the spread and color of light for the LumeLEX LED Series.



#### **LumeLEX® SPREAD GELS**

Size: AA	
(76 mm diameter)	Spread Gel
GEL-L1-AA	1° Spread Gel
GEL-L5-AA	5° Spread Gel
GEL-L10-AA	10° Spread Gel
GEL-L20-AA	20° Spread Gel
GEL-L30-AA	30° Spread Gel
GEL-L40-AA	40° Spread Gel
GEL-L60-AA	60° Spread Gel
GEL-L80-AA	80° Spread Gel
GEL-L30X5-AA	30° by 5° Spread Gel
GEL-L40X1-AA	40° by 1° Spread Gel
GEL-L60X1-AA	60° by 1° Spread Gel
GEL-L60X10-AA	60° by 10° Spread Gel
GEL-L75X45-AA	75° by 45° Spread Gel
GEL-L80X50-AA	80° by 50° Spread Gel
GEL-R101-AA	Beam Softener

### LumeLEX® COLOR GELS

Size: AA		% of Light	Size: AA		% of Light
(76 mm diameter)	Gel Color	Transmission	(76 mm diameter)	Gel Color	Transmission
GEL-R2-AA	Bastard Amber	78	GEL-R312-AA	Canary	85
GEL-R7-AA	Pale Yellow	96	GEL-R331-AA	Shell Pink	68
GEL-R12-AA	Straw	88	GEL-R383-AA	Sapphire Blue	4
GEL-R13-AA	Straw Tint	78	GEL-R397-AA	Pale Grey	70
GEL-R14-AA	Medium Straw	68	GEL-R2001-AA	Storaro Red	12
GEL-R21-AA	Golden Amber	43	GEL-R2004-AA	Storaro Green	15
GEL-R25-AA	Orange Red	14	GEL-R2009-AA	Storaro Violet	3
GEL-R26-AA	Light Red	12	GEL-R3202-AA	Full Blue	36
GEL-R27-AA	Medium Red	4	GEL-R3204-AA	Half Blue	52
GEL-R57-AA	Lavender	24	GEL-R3206-AA	Third Blue	64
GEL-R62-AA	Booster Blue	54	GEL-R3216-AA	Eighth Blue (Boosts 3200K to 3300K)	81
GEL-R71-AA	Sea Blue	30	GEL-R3318-AA	Tough 1/8 Minusgreen	89
GEL-R72-AA	Azure Blue	44	GEL-R3410-AA	Roscosun (1/8 CTO) (Reduces 5500K to 4900K)	92
GEL-R91-AA	Primary Green	7	GEL-R3441-AA	Full Straw (CTS)	50
GEL-R97-AA	Light Grey	50	GEL-R3443-AA	Quarter Straw (CTS)	81
GEL-R98-AA	Medium Grey	25	GEL-R4330-AA	CalColor 30 Cyan	63
GEL-R101-AA	Light Frost	N/A	GEL-R4415-AA	CalColor 15 Green	67
GEL-R104-AA	Tough Silk	N/A	GEL-R4490-AA	CalColor 90 Green	25
GEL-R119-AA	Lt. Hamburg Frost	N/A	GEL-R4860-AA	CalColor 60 Pink	46
GEL-R121-AA	Blue Diffusion	N/A	GEL-R4890-AA	CalColor 90 Pink	38
GEL-R305-AA	Rose Gold	75	GEL-R4930-AA	CalColor 30 Lavender	47

<sup>\*</sup> Backer Ring AAB required to hold gels when no other rimmed "AA" accesories are used.

LSI ROSCO GEL CCT CONVERSION CHART FROM 3000K			
Туре	ROSCO#	ROSCO Description	Resulting CCT
	3420	Double CTO	1531
S	3407	Sun CTO	1999
CF	3401	Sun 85	2154
正ら	3411	Sun 3/4 CTO	2154
bei	3408	Sun 1/2 CTO	2414
Amber Filters Lower CCT	3409	Sun 1/4 CTO	2664
	3410	Sun 1/8 CTO	2830
	3114	UV Filter	2930
	3220	Double Blue	N/A
ν_	3202	Full Blue	4942
Filters e CCT	3203	Three-Quarter Blue	4286
ue Fi aise (	3204	Half Blue	3769
Blue Rais	3206	Third Blue	3517
	3208	Quarter Blue	3297
	3216	Eighth Blue	3112

# **COLOR MEDIA**

### **COLOR FILTERS**

As the foremost innovator in accent lighting, LSI offers a complete range of permanent fade-free glass color filters, which are available in four stock diameters. All glass color filters are rimmed in a seamless aluminum ring and are slotted for heat expansion.



Size	Diameter	LSI Fixture Series
AAA	2 3/8"	LumeLEX <sup>®</sup> 2020/2030/2031/2038, SSLCX16, SSL260
AA	3"	LumeLEX® 2044, LumeLEX 2048
А	3 1/2"	LumeLEX® 2060, SSL230, SSLCX30, SSLGR30CL
С	4 3/4"	LumeLEX® 2084, LumeLEX® 2088, SSL238, SSLCX36, SSLCX38, SSLGR38CL

No.	Color	<sup>1</sup> % of Light Transmission
902	Medium Pink	36
903	Deep Pink	37
904	Flesh Pink	73
906	Pale Lavender	14
907	Surprise Pink	19
908	Lilac	21
910	Warm Red	10
911	Strawberry	6
912	Ruby	4
913	Magenta	1
914	Light Amethyst	25
915	Medium Amethyst	16
916	Deep Amethyst	4
917	Olive	18
918	Light Green	68
920	Medium Green	25
921	Deep Green	7
922	Silver green	65
923	Yellow Green	49
924	Emerald Green	12
925	Light Turquoise	68
926	Medium Turquoise	40
927	Deep Turquoise	17
928	Light Blue	34
930	Medium Blue	3
932	Daylight	59
933	Gene Moore Blue	18
936 937	Grey Light Blue Green	56 17
939	Light Amber	68
940	Medium Amber	48
941	Deep Amber	43
942	Straw	78
943	Gold	87
944	Canary Yellow	84
945	Lemon	81
946	Pumpkin	32
947	Tangerine	20
948	Orange	23
949	Pink Gold	54
950	Bronze	48
951	Brass	11
952	Autumn Tan	11
953	Leaf Brown	19
954	Butter Pecan	3
955	Toasted Almond	1

### Notes:

Values given are approximate due to slight variations in glass color and thickness.

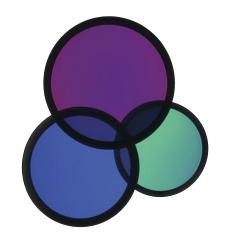
## **COLOR MEDIA**

### **DICHROIC COLOR FILTERS**

In addition to our complete line of glass color filters, LSI now offers dichroic glass color filters that achieve purer, more saturated, richer color by selective wavelength transmission. Since these filters reflect rather than absorb the unwanted color wavelengths, a higher intensity of colored light can be obtained with fewer or lower wattage fixtures. In addition, this selective transmission allows for very accurate color matching from filter to filter.

All standard LSI filter sizes are available in a wide palette of well chosen dichroic colors that can be used with all LSI fixtures that accept accessories.

LSI dichroic glass color filters have the added benefit of being rimmed for extra durability to allow for frequent usage without fear of breakage or edge chipping.



Size	Diameter	LSI Fixture Series
AAA	2 3/8"	LumeLEX* 2020/2030/2031/2038, SSLCX16, SSL260
AA	3"	LumeLEX® 2044, LumeLEX 2048
А	3 1/2"	LumeLEX* 2060, SSL230, SSLCX30, SSLGR30CL
С	4 3/4"	LumeLEX® 2084, LumeLEX® 2088, SSL238, SSLCX36, SSLCX38, SSLGR38CL

#### **Technical Data**

Dichroic color filters are created in a vacuum chamber by multi-layer vapor deposits of different minerals onto low expansion, chemically resistant Borosilicate glass.

Deposits are made in alternating layers of varying microscopic thickness which allow very narrow color wavelengths to be selectively transmitted and all other wavelengths to be reflected.

LSI does not recommend using dichroic color filters with lamps or fixtures that have beam spreads greater than 40° because a secondary color aura is created by the wide angular transmitted wavelengths that are different than the desired color wavelength.

Since there is mainly transmission and reflection of the color wavelengths by the dichroic filter and very little absorption, the dichroic filter can be used with many high temperature lights that normally would not accept color filters.

		% of Light
No.	Color	Transmission
2001	Light Pink	69
2002	Medium Pink	43
2003	Hot Pink	11
2004	Pale Pink	55
2010	Deep Magenta	29
2011	Lavender	24
2012	Vivid Magenta	31
2013	Lavender Accent	48
2014	Lilac	37
2015	Purple Fusion	12
2020	Sky Blue	39
2021	Sea Blue	39
2022	Cyan	33
2023	Light Blue Green	30
2024	Primary Blue	24
2025	Medium Red Blue	15
2026	Deep Purple	16
2027	Peacock Blue	53
2028	Mediterranean Blue	20
2029	Boost Blue	51
2040	Light Yellow Green	64
2041	Fern Green	47
2042	Turquoise	35
2043	Primary Green	31
2044	Industrial Green	64
2050	Yellow	80
2051	Amber	71
2052	Amber Blush	38
2053	Bastard Amber	71
2054	Goldenrod	63
2055	Bright Straw	56
2060	Medium Orange	51
2061	Orange	44
2070	Flame Red	27
2071	Primary Red	25