# LX2038 · 120/277V · BRIDGELUX 18MM · CONTROLTrack COMPATIBLE



# Elegant fixed downlight designed specifically for the most demanding architectural applications

- Designed for the Bridgelux 18mm LED module up to 13 Watts
- Extremely tight color consistency: 2 MacAdam Ellipses
- System efficiency up to 66 lumens/watt
- 60,000 hour life to 70% lumen output, L70 at 95°F max ambient
- Field interchangeable optics (15°-- 40°) modify the beam spread distribution
- Choice of color temperature
- Color Rendering Index (CRI) of 90
- Tested to LM79 and LM80 Protocols, TM-30 available
- 0-10V dimming allows for 2 zones of control on one circuit CONTROLTrack down to 0.1%, with convenient zone selection switch
- DMX compatible with dimming below 1%
- Lutron EcoSystem compatible with dimming to 0.1% (Lutron Hi-Lume Premier 0.1% EcoSystem LED Driver)
- Lutron EcoSystem features soft-on, fade to black, smooth flicker-free dimming from 0-100% (Meets IEEE 1789 for flicker)
- Accessory holder accepts up to two size-AAA LSI filters and accessories
- Optional Cross Baffle accessory holder available
- Sturdy die-cast aluminum housing
- No UV or IR emissions; no mercury or lead
- On/off safety switch (on CONTROLTrack fitting)
- Finishes: LSI Black, White, and Silver
- Fixture weight: 3 lbs
- All modules are field replaceable
- Fixed center stem
- Maximum stem length is 48"

## FIXTURE PART NUMBERS

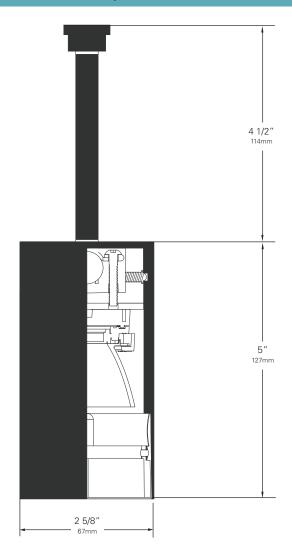
Please review the **ORDERING INFORMATION** section on the next page as well as the **MOUNTING OPTIONS** on page 3 to create a part number for each fixture that specifies the following:

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

# PART NUMBER LX2038 - - - - - - FINISH VOLTAGE DIMMING FITTING OPTIC COLOR TEMP LED RATING LED MODULE

Example Part Number: **LX2038-V1817-9030S1-CT2-10120W** is a fixture with a Bridgelux 18mm LED module, 1700 Lumen/90 CRI/13 Watt LED rating, 3000°K Color Temperature, 50mm 15° Optic, CT2 CONTROLTrack fitting with 0-10V compatible control gear, 120V and a White finish.

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

<b>Chromaticity Specifications</b>			
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**

☐ LX2038-V18 (Bridgelux 18mm)

## LED Rating (Lumens/CRI/Wattage)

 $\Box$  17-90 = 1700/90/13

## **Color Temperature**

□ 27= 2700K

□ 30= 3000K

□ 35= 3500K

□ 40= 4000K

#### **Optic**

 $\square$  S1 = 50mm/ 15°

 $\square$  S4 = 50mm/40°

## Fitting/Controls (Dimming)

 $\square$  CT2-10 = CONTROLTrack Fitting & 0-10V (0.1%)

☐ CT4-DX = CONTROLTrack Fitting & DMX (<1%)

☐ CT5-L3 = CONTROLTrack Fitting & Lutron EcoSystem (0.1% soft on/off)

## Voltage

 $\square$  120 = 120V  $\square$  230 = 220-240V  $\square$  277 = 277V

#### **Finish**

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

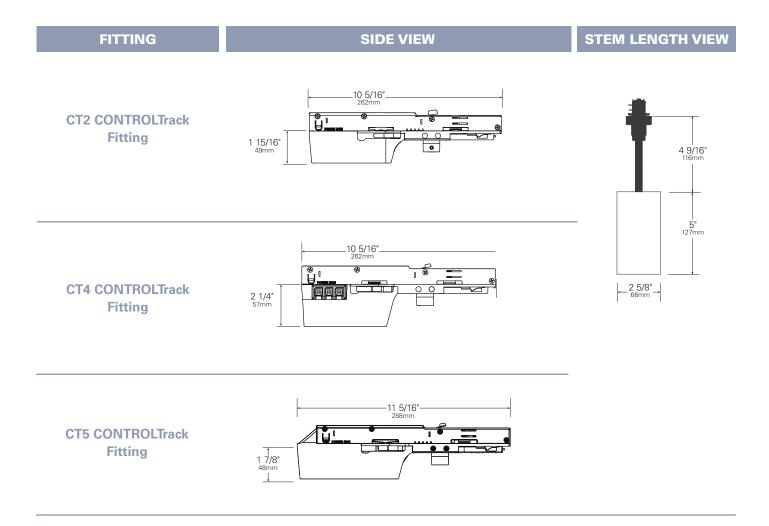
## **Example Part Number:**

LX2038-V18 17-90 30 S1 - CT2-10 120 W
FIXTURE MODEL LED COLOR OPTIC FITTING VOLTAGE FINISH

## Other Options (Consult Factory):

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

# LX2038 · MOUNTING OPTIONS



## LX2038 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 range of numbers that immediately follow the product series number. For example, in the part number LX2038-V1817-9027S1-CT2-10120B, the "V1817-9027" represents an LED module with an output of 1700 lumens, a CRI of 90, a power usage of 13 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 "\$1" in LX2038-V1817-9027S1-CT2-10120B is a 50mm diameter optic that has a 15-Degree beam.

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 Rating Optic (Reflector)			
Lumens/CRI/Wattage	<b>S</b> 1	S4	
1700/90/13	2,450		

Delivered Lumens*			
LED Rating	Optic (Reflector)		
Lumens/CRI/Wattage	<b>S1</b>	S4	
1700/90/13	533	853	

Efficiency = Lumens Per Watt*			
LED Rating	Optic (Reflector)		
Lumens/CRI/Wattage	<b>S1</b>	S4	
1700/90/13	41	66	

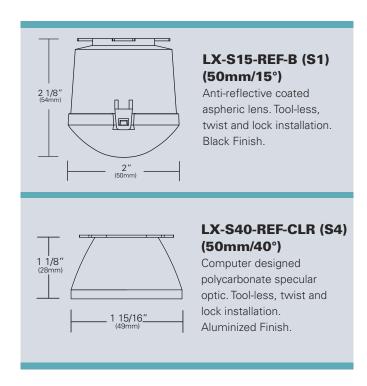
Absolute range of values are +/- 10% of typical value, and are for all color temperatures

LED Rating Lumens/CRI/Wattage SKU Code	1700/90/13 17-90
Nominal Fixture Power (+/- 20%), Watts	13
Maximum Inrush Current Amps	10
Minimum Power Factor	0.90

Inrush current is instantaneous current drawn by the LED only when fixture is initially powered on or instantaneously changed from full dim to full bright. For more details see Dimming Application Sheet, IS-0119.

<sup>\*</sup>Preliminary Data

# LX2038 · OPTICS



# LX2038 · PHOTOMETRIC DATA

## LED RATING: 17-90\* S1-50mm DIA Optic

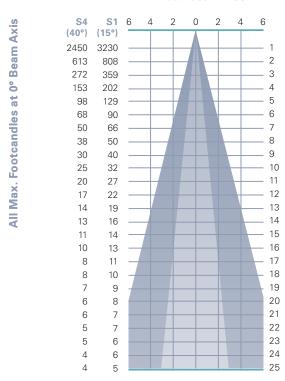
Beam Spread (minimum)	15°
Center Beam Candlepower	3230
CRI	90

## S4-50mm DIA Optic

Beam Spread (minimum)	40°
Center Beam Candlepower	2450
CRI	90

\*Preliminary Data

#### **All Distances in Feet**



Photometric Data based on LED Rating: 17-90 (1700 Lumens90CRI/13watts)

# LX2038 · ACCESSORIES



# SPREAD LENSES AND BEAM SOFTENER

No.	Description	% of Light Transmission
AAA990	Spread Lens/Clear	83 (5°X 50°)
AAA992	Spread Lens/Clear	85 (5°X 30°)
AAA995	Spread Lens/Clear	83 (50°X 50°)
AAA996	Spread Lens/Clear	86 (45°X 50°)
AAA998	Beam Softener/Clear	80 (45°X 45°)



## **'LIGHT BLOCKING SCREENS AAA**

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	<b>Blocked</b>
AAA801S			20	
AAA802S			30	
V V V 6U3C			40	



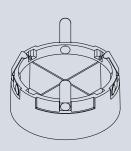
## **LOUVER HEX AAAB**

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



#### **BACKER RING AAAB**

Aluminum ring to hold thin film gels when no other size AAA accessories are being used. Black finish.



# CROSS BAFFLE LX2030B

Controls spill light and glare. Capable of holding up to (2) additional AAA-size accessories Black finish. Figures vary based upon LED module/optic being used and relationship of screen(s) to LED module/optic and to each other.

# LX2038 · 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: AAA	
(60 mm diameter)	Spread Gel
GEL-L1-AAA	1° Spread Gel
GEL-L5-AAA	5° Spread Gel
GEL-L10-AAA	10° Spread Gel
GEL-L20-AAA	20° Spread Gel
GEL-L30-AAA	30° Spread Gel
GEL-L40-AAA	40° Spread Gel
GEL-L60-AAA	60° Spread Gel
GEL-L80-AAA	80° Spread Gel
GEL-L30X5-AAA	30° by 5° Spread Gel
GEL-L40X1-AAA	40° by 1° Spread Gel
GEL-L60X1-AAA	60° by 1° Spread Gel
GEL-L60X10-AAA	60° by 10° Spread Gel
GEL-L75X45-AAA	75° by 45° Spread Gel
GEL-L80X50-AAA	80° by 50° Spread Gel
GEL-R101-AAA	Beam Softener

#### **LumeLEX® COLOR GELS**

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

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

LSI ROSCO GEL CCT CONVERSION CHART FROM 3000K					
Type	ROSCO#	ROSCO Description	Resulting CCT		
Amber Filters Lower CCT	3420	Double CTO	1531		
	3407	Sun CTO	1999		
	3401	Sun 85	2154		
	3411	Sun 3/4 CTO	2154		
	3408	Sun 1/2 CTO	2414		
	3409	Sun 1/4 CTO	2664		
	3410	Sun 1/8 CTO	2830		
	3114	UV Filter	2930		
Blue Filters Raise CCT	3220	Double Blue	N/A		
	3202	Full Blue	4942		
	3203	Three-Quarter Blue	4286		
	3204	Half Blue	3769		
	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	Grey	56
937	Light Blue Green	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
953 954	Leaf Brown Butter Pecan	19 3
954 955	Toasted Almond	1
<b>300</b>	ioastea Almona	1

## Notes:

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

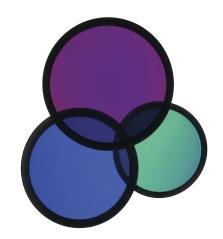
# **COLOR MEDIA**

## **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 <sup>®</sup> 2044, LumeLEX 2048
Α	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.

No.	Color	% of Light 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