

LX2088 • 120/277V • XICATO 19MM • CONTROLTrack COMPATIBLE



Remote phosphor technology produces high quality, high output light with a consistent, even field for the most demanding applications of museum and retail accent lighting.

- Designed for the most versatile Xicato XTM 19mm LED module up to 46 Watts
- Extremely tight color consistency (less than 2 MacAdam Ellipses)
- System efficiency up to 87 lumens/watt
- Backed by Xicato's Five Year Color Consistency and Lumen Maintenance Warranty
- 50,000 hour life to 70% lumen output, L70 at 95°F max ambient
- Choice of color temperature
- Color Rendering Index (CRI) of either 98 (high) or 83+ (standard)
- Choice of lumen outputs (delivered lumens)
- Tested to LM79 and LM80 Protocols, TM-30 available
- 0-10V dimming allows for 2 zones of control on one circuit CONTROLTrack down to 10%
- DMX compatible with dimming below 1%
- Lutron Ecosystem compatible with dimming to 1% (soft on/off)
- Field interchangeable optics (10°- 40°) modify the beam spread distribution
- Integral polycarbonate accessory cartridge accepts up to three size-C LSI filters and accessories
- Finishes: LSI Black, White, and Silver
- Fixture weight: 8 lbs
- All modules are field replaceable
- Fixed center stem
- Maximum stem length is 12"

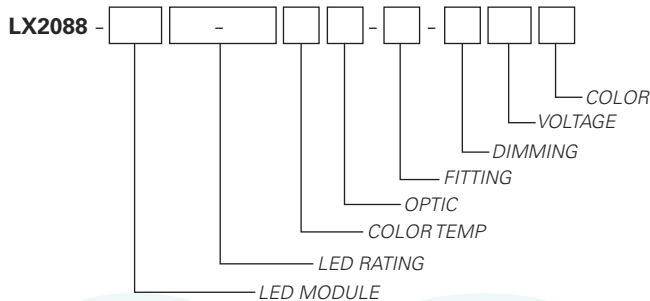


FIXTURE PART NUMBERS

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:

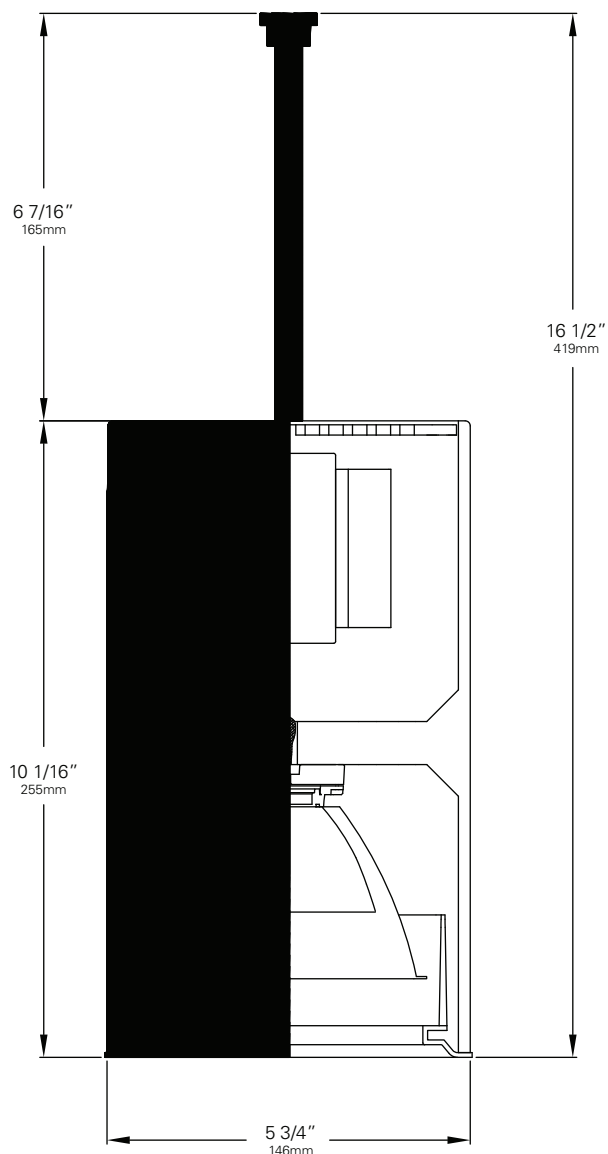
- LED Module
- LED Rating
- Color Temperature
- Optic - mm/beam spread
- Fitting/Controls (Dimming)
- Voltage
- Finish

PART NUMBER



Example Part Number: **LX2088-T1930-9830K1-CT3-DX120W** is a fixture with a Xicato 19mm LED module, 3000 Lumen/98 CRI/34 Watt LED rating, 3000K Color Temperature, 111mm 10° Optic, CT3 CONTROLTrack fitting with DMX Address knobs and DMX compatible control gear, 120V and a White finish.

LX2088 • 120/277V • XICATO 19MM • CONTROLTrack COMPATIBLE



Color Temperature & Center Point Tolerance

Color Temp	Center Point	Tolerance
2700K	2700K	+/- 40K
3000K	2950K	+/- 50K
3500K	3420K	+/- 60K
4000K	4000K	+/- 70K

Chromaticity Specifications

LED	R _a -CRI	R _f -Fidelity	R _g -Gamut Area
T19-TS9 - 83	83	78	101
T19-TS9 - 98	98	96	103

XTM 19MM ORDERING INFORMATION

Base Fixture Model

LX2088-T19 (XTM 19mm)

LED Rating (Lumens/CRI/Wattage)

20-83 = 2000/83/17 20-98 = 2000/98/22
 30-83 = 3000/83/28 30-98 = 3000/98/34
 40-83 = 4000/83/38 50-83 = 5000/83/46

Color Temperature

27 = 2700K 30 = 3000K
 35 = 3500K 40 = 4000K

Optic

K1 = 111mm/ 10° W2 = 72mm/ 20°
 J3 = 111mm/ 30° W4 = 72mm/ 40°

Fitting/Controls (Dimming)

CT1-10 = CONTROLTrack Fitting & 0-10V (10%)
 CT1-L3 = CONTROLTrack Fitting & Lutron EcoSystem (1% Soft On/Off)
 CT3-DX = CONTROLTrack Fitting & DMX (<1%)
 5A-10 = Canopy Fitting & 0-10V (10%)

Voltage

120 = 120V 230 = 220-240V 277 = 277V

Finish

B = Black W = White S = Silver

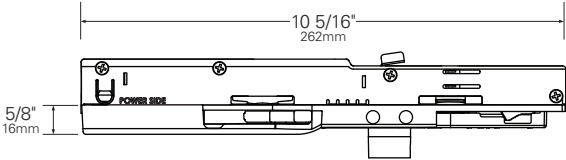
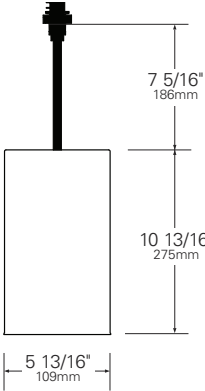
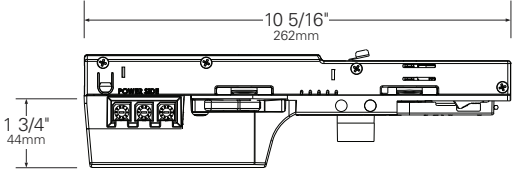
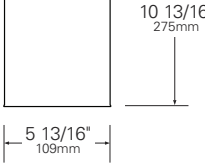
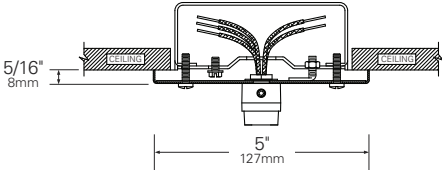
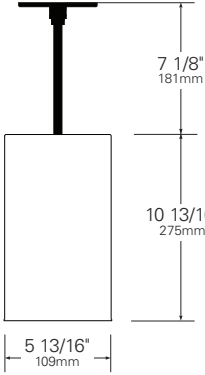
Example Part Number:

LX2088-T19 **30-98** **30** **K1-CT3-DX** **120** **W**
FXTURE MODEL LED RATING COLOR TEMP OPTIC FITTING/ DIMMING VOLTAGE FINISH

Other Options (Consult Factory):

- Custom Stems, specify length (4" - 12")
- Custom color, RAL palette

LX2088 • MOUNTING OPTIONS

FITTING	SIDE VIEW	STEM LENGTH VIEW
<p>CT1 CONTROLTrack Fitting</p>		
<p>CT3 CONTROLTrack Fitting</p>		
<p>5A Canopy Fitting with 0-10V Dimming</p>		

LX2088 • 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 LX2088-T1920-8327K1-CT3-DX120B, the “**T1920-8327**” represents an LED module with an output of 2000 lumens, a CRI of 83, a power usage of 17 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 “**K1**” in LX2088-T1920-8327K1-CT3-DX120B is a 111mm diameter optic that has a 10-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 Module	Optic (Reflector)			
Lumens/CRI/Wattage	K1	W2	J3	W4
2000/83/17	11,316	6,830	4,030	2,780
2000/98/22	11,316	6,830	4,030	2,780
3000/83/28	16,974	10,245	6,044	4,170
3000/98/34	16,974	10,245	6,044	4,170
4000/83/38	22,632	13,660	8,059	5,560
5000/83/46	28,290	17,075	10,074	6,950

Delivered Lumens				
LED Module	Optic (Reflector)			
Lumens/CRI/Wattage	K1	W2	J3	W4
2000/83/17	1,454	1,175	1,472	1,139
2000/98/22	1,454	1,175	1,472	1,139
3000/83/28	2,180	1,763	2,208	1,709
3000/98/34	2,180	1,763	2,208	1,709
4000/83/38	2,907	2,351	2,944	2,279
5000/83/46	3,634	2,938	3,680	2,848

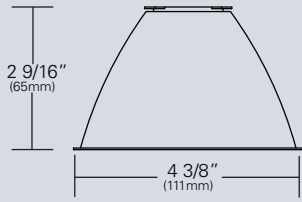
Efficacy = Lumens Per Watt				
LED Module	Optic (Reflector)			
Lumens/CRI/Wattage	K1	W2	J3	W4
2000/83/17	86	69	87	67
2000/98/22	66	53	67	52
3000/83/28	78	63	79	61
3000/98/34	64	52	65	50
4000/83/38	77	62	77	60
5000/83/46	79	64	80	62

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

LED Module Lumens/CRI/Wattage Letter Code	2000/83/17 20-83	2000/98/22 20-98	3000/83/28 30-83	3000/98/34 30-98	4000/83/38 40-83	5000/83/46 50-83
Nominal Fixture Power (+/- 20%), Watts	17	22	28	34	38	46
Maximum Inrush Current Amps	10	10	10	10	10	10
Minimum Power Factor	0.92	0.92	0.92	0.92	0.92	0.92

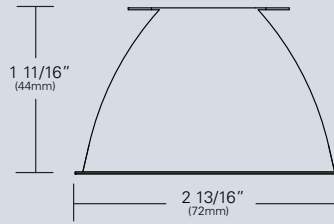
Inrush current is instantaneous current drawn by the LED only when fixture is initially powered on or instantaneously changed from full dim to full bright. For more details see Dimming Application Sheet, IS-0119.

LX2088 • OPTICS



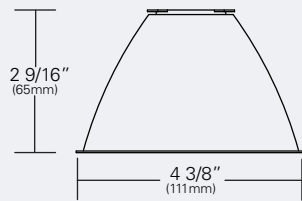
LX-K10-REF-CLR (K1)
(111mm/10°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.



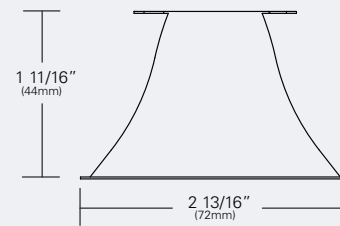
LX-W20-REF-CLR (W2)
(72mm/20°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.



LX-J30-REF-CLR (J3)
(111mm/30°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.



LX-W40-REF-CLR (W4)
(72mm/40°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.

LX2088 • PHOTOMETRIC DATA

LED RATING: 30-98

K1- 111mm DIA Optic
 Beam Spread (minimum) **10°**
 Center Beam Candlepower **16974**
 CRI **98**

W2- 72mm DIA Optic
 Beam Spread (minimum) **20°**
 Center Beam Candlepower **10245**
 CRI **98**

J3- 111mm DIA Optic
 Beam Spread (minimum) **30°**
 Center Beam Candlepower **6044**
 CRI **98**

W4- 72mm DIA Optic
 Beam Spread (minimum) **40°**
 Center Beam Candlepower **4170**
 CRI **98**

LED RATING: 50-83

K1- 111mm DIA Optic
 Beam Spread (minimum) **10°**
 Center Beam Candlepower **28290**
 CRI **83**

W2- 72mm DIA Optic
 Beam Spread (minimum) **20°**
 Center Beam Candlepower **17075**
 CRI **83**

J3- 111mm DIA Optic
 Beam Spread (minimum) **30°**
 Center Beam Candlepower **10074**
 CRI **83**

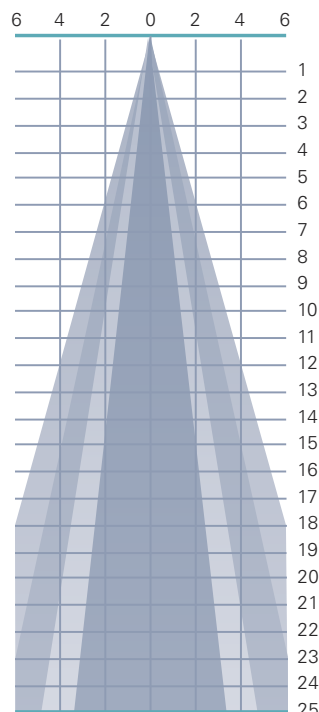
W4- 72mm DIA Optic
 Beam Spread (minimum) **40°**
 Center Beam Candlepower **6950**
 CRI **83**

LED RATING: 30-98

All Max. Footcandles at 0° Beam Axis

	W4 (40°)	J3 (30°)	W2 (20°)	K1 (10°)
4170	6044	10245	16974	
1043	1511	2561	4244	
463	672	1138	1886	
261	378	640	1061	
167	242	410	679	
116	168	285	472	
85	123	209	346	
65	94	160	265	
51	75	126	210	
42	60	102	170	
34	50	85	140	
29	42	71	118	
25	36	61	100	
21	31	52	87	
19	27	46	75	
16	24	40	66	
14	21	35	59	
13	19	32	52	
12	17	28	47	
10	15	26	42	
9	14	23	38	
9	12	21	35	
8	11	19	32	
7	10	18	29	
7	10	16	27	

All Distances in Feet



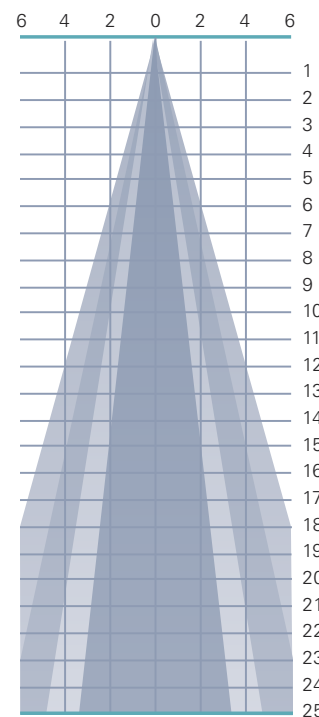
Photometric Data based on LED Rating: 30-98 (3000 Lumens/98CRI/34watts)

LED RATING: 50-83

All Max. Footcandles at 0° Beam Axis

	W4 (40°)	J3 (30°)	W2 (20°)	K1 (10°)
6950	10074	17075	28290	
1738	2519	4269	7073	
772	1119	1897	3143	
434	630	1067	1768	
278	403	683	1132	
193	280	474	786	
142	206	348	577	
109	157	267	442	
86	124	211	349	
70	101	171	283	
57	83	141	234	
48	70	119	196	
41	60	101	167	
35	51	87	144	
31	45	76	126	
27	39	67	111	
24	35	59	98	
21	31	53	87	
19	28	47	78	
17	25	43	71	
16	23	39	64	
14	21	35	58	
13	19	32	53	
12	17	30	49	
11	16	27	45	

All Distances in Feet



Photometric Data based on LED Rating: 50-83 (5000 Lumens/83CRI/46watts)

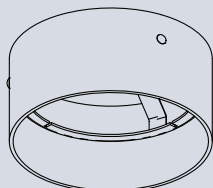
LX2088 • ENERGY STAR



Below are the LumeLEX 2088 fixture combinations that are Energy Star certified.

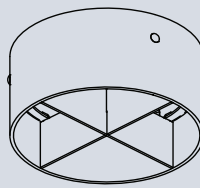
LED Module	LED Rating Lumens/CRI/Wattage	Color Temp	Optic mm/angle	Fitting	Dimming
<input checked="" type="checkbox"/> T19 XTM (19mm)	<input checked="" type="checkbox"/> 20-98 2000/98/22	<input checked="" type="checkbox"/> 27 2700K	<input checked="" type="checkbox"/> J3 111mm/30°	<input checked="" type="checkbox"/> 5A LSI Canopy	<input checked="" type="checkbox"/> 10 0-10V (10%) (5A fitting only)
	<input checked="" type="checkbox"/> 30-83 3000/83/28	<input checked="" type="checkbox"/> 30 3000K			
	<input checked="" type="checkbox"/> 30-98 3000/98/34	<input checked="" type="checkbox"/> 35 3500K			
		<input checked="" type="checkbox"/> 40 4000K			

LX2088 • ACCESSORIES



HOOD-EXT-LX84-NXB-X

Cylindrical metal hood controls spill light and glare. Does not include cross baffle. Specify finish.



HOOD-EXT-LX84-WXB-X

Cylindrical metal hood controls spill light and glare. Includes cross baffle. Specify finish.



SPREAD LENSES AND BEAM SOFTENER

No.	Description	% of Light Transmission
C990	Spread Lens/Clear	83 (5°X 50°)
C992	Spread Lens/Clear	85 (5°X 30°)
C995	Spread Lens/Clear	83 (50°X 50°)
C996	Spread Lens/Clear	86 (45°X 50°)
C998	Beam Softener/Clear	80 (45°X 45°)



1 LIGHT BLOCKING SCREENS C

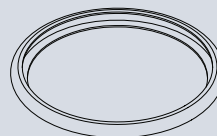
Stainless steel mesh screens used alone or in combinations will block from approximately 20% to 90% of the transmitted light without changing color temperature of the light.

No.	% of Light Blocked
C801S	20
C802S	30
C803S	40



LOUVER HEX C

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



BACKER RING CB

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

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

LX2088 • 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: C (121 mm diameter)	Spread Gel
GEL-L1-C	1° Spread Gel
GEL-L5-C	5° Spread Gel
GEL-L10-C	10° Spread Gel
GEL-L20-C	20° Spread Gel
GEL-L30-C	30° Spread Gel
GEL-L40-C	40° Spread Gel
GEL-L60-C	60° Spread Gel
GEL-L80-C	80° Spread Gel
GEL-L30B5-C	30° by 5° Spread Gel
GEL-L40B2-C	40° by 0.2° Spread Gel
GEL-L60B1-C	60° by 1° Spread Gel
GEL-L60B10-C	60° by 10° Spread Gel
GEL-L75B45-C	75° by 45° Spread Gel
GEL-L90B60-C	90° by 60° Spread Gel
GEL-R101-C	Beam Softener

LumeLEX® COLOR GELS

Size: C (121 mm diameter)	Gel Color	% of Light Transmission	Size: C (121 mm diameter)	Gel Color	% of Light Transmission
GEL-R2-C	Bastard Amber	78	GEL-R312-C	Canary	85
GEL-R7-C	Pale Yellow	96	GEL-R3204-C	Half Blue	52
GEL-R12-C	Straw	88	GEL-R331-C	Shell Pink	68
GEL-R13-C	Straw Tint	78	GEL-R383-C	Sapphire Blue	4
GEL-R14-C	Medium Straw	68	GEL-R397-C	Pale Grey	70
GEL-R21-C	Golden Amber	43	GEL-R2001-C	Storaro Red	12
GEL-R25-C	Orange Red	14	GEL-R2004-C	Storaro Green	15
GEL-R26-C	Light Red	12	GEL-R2009-C	Storaro Violet	3
GEL-R27-C	Medium Red	4	GEL-R3202-C	Full Blue	36
GEL-R57-C	Lavender	24	GEL-R3206-C	Third Blue	64
GEL-R62-C	Booster Blue	54	GEL-R3216-C	Eighth Blue (Boosts 3200K to 3300K)	81
GEL-R71-C	Sea Blue	30	GEL-R3318-C	Tough 1/8 Minusgreen	89
GEL-R72-C	Azure Blue	44	GEL-R3410-C	Roscocosun (1/8 CTO) (Reduces 5500K to 4900K)	92
GEL-R91-C	Primary Green	7	GEL-R3441-C	Full Straw (CTS)	50
GEL-R97-C	Light Grey	50	GEL-R3443-C	Quarter Straw (CTS)	81
GEL-R98-C	Medium Grey	25	GEL-R4330-C	CalColor 30 Cyan	63
GEL-R101-C	Light Frost	N/A	GEL-R4415-C	CalColor 15 Green	67
GEL-R104-C	Tough Silk	N/A	GEL-R4490-C	CalColor 90 Green	25
GEL-R119-C	Lt. Hamburg Frost	N/A	GEL-R4860-C	CalColor 60 Pink	46
GEL-R121-C	Blue Diffusion	N/A	GEL-R4890-C	CalColor 90 Pink	38
GEL-R305-C	Rose Gold	75	GEL-R4930-C	CalColor 30 Lavender	47

* Backer Ring CB required to hold gels when no other rimmed "C" accessories 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 nine stock diameters. All glass color filters are rimmed in a seamless aluminum ring and are slotted for heat expansion.



Size	Diameter	LSI Fixture Series	No.	Color	% of Light Transmission
AAA	2 3/8"	LumeLEX® 2020/2030/2031/2038, SSLCX16, SSL260, LumeLEX MAR-S	902	Medium Pink	36
			903	Deep Pink	37
			904	Flesh Pink	73
ZM	2 13/16"	LZ ZOOM	906	Pale Lavender	14
			907	Surprise Pink	19
AA	3"	LumeLEX® 2044, LumeLEX 2048	908	Lilac	21
			910	Warm Red	10
A	3 1/2"	LumeLEX® 2060, SSL230, SSLCX30, SSLGR30CL	911	Strawberry	6
			912	Ruby	4
B	4 1/4"	LumeLEX® MAR-L	913	Magenta	1
			914	Light Amethyst	25
C	4 3/4"	LumeLEX® 2084, LumeLEX® 2088, SSL238, SSLCX36, SSLCX38, SSLGR38CL	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	Leaf Brown	19
			954	Butter Pecan	3
			955	Toasted Almond	1

Notes:

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

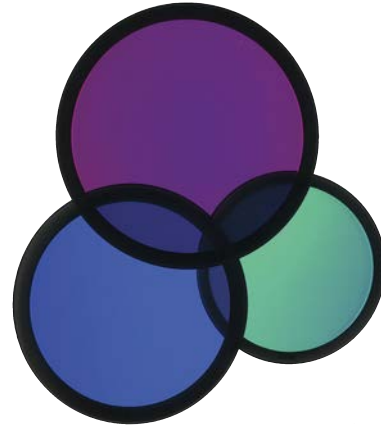
COLOR MEDIA

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	Technical Data	No.	Color	% of Light Transmission
AAA	2 3/8"	LumeLEX® 2020/2030/2031/2038, SSLCX16, SSL260, LumeLEX MAR-S	Dichroic color filters are created in a vacuum chamber by multi-layer vapor deposits of different minerals onto low expansion, chemically resistant Borosilicate glass.	2001	Light Pink	69
ZM	2 13/16"	LZ ZOOM	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.	2002	Medium Pink	43
AA	3"	LumeLEX® 2044, LumeLEX 2048	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.	2003	Hot Pink	11
A	3 1/2"	LumeLEX® 2060, SSL230, SSLCX30, SSLGR30CL	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.	2004	Pale Pink	55
B	4 1/4"	LumeLEX® MAR-L		2010	Deep Magenta	29
C	4 3/4"	LumeLEX® 2084, LumeLEX® 2088, SSL238, SSLCX36, SSLCX38, SSLGR38CL		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