LX2084 • 120/277V • XICATO 9MM • 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 9mm LED module up to 50 Watts, enabling narrow beams
- Extremely tight color consistency (less than 2 MacAdam Ellipses)
- System efficiency up to 47 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 0.1%, with convenient zone selection switch
- DMX compatible with dimming below 1%
- Lutron EcoSystem compatible with dimming to 1% (Lutron Hi-Lume Premier 1% EcoSystem LED Driver)
- Lutron EcoSystem features soft-on, fade to black, smooth flicker-free dimming from 0-100% (Meets IEEE 1789 for flicker)
- Field interchangeable optics (10°- 60°) 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

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

LX2084 – ☐☐ – ☐☐☐ – ☐ – ☐☐☐

- COLOR
- VOLTAGE
- DIMMING
- FITTING
- OPTIC
- COLOR TEMP
- LED RATING
- LED MODULE
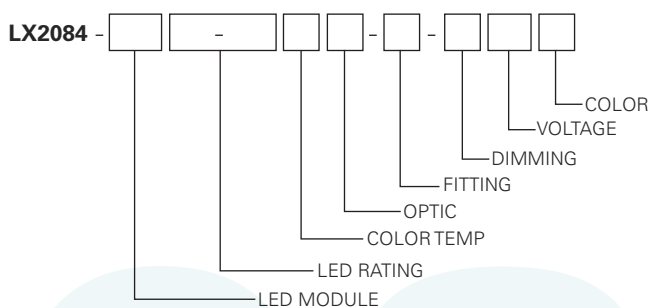
Example Part Number: **LX2084-TS920-9830K1-CT3-DX120W** is a fixture with a Xicato 9mm LED module, 2000 Lumen/98 CRI/50 Watt LED rating, 3000K Color Temperature, 111mm 10° Optic, CT3 CONTROLTrack fitting with DMX Address knobs and DMX compatible control gear, 120V and a White finish.

LX2084 • 120/277V • XICATO 9MM • CONTROLTrack COMPATIBLE

2 5/16″
59mm
(Stem only)

12 3/8″
314mm

5 3/4″
146mm
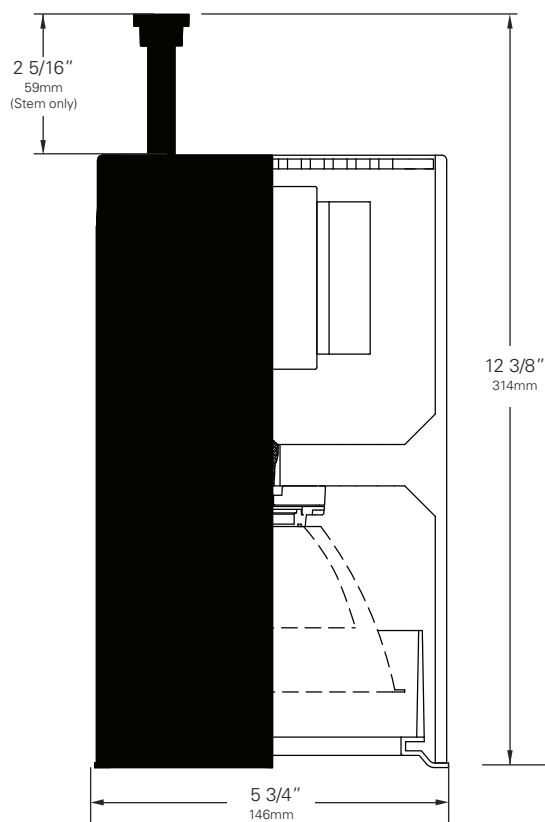
XTM 9MM ORDERING INFORMATION

Base Fixture Model
☐ LX2084-TS9 (XTM 9mm)

LED Rating (Lumens/CRI/Wattage)
☐ 20-83 = 2000/83/36   ☐ 20-98 = 2000/98/50

Color Temperature
☐ 27 = 2700K   ☐ 30 = 3000K
☐ 35 = 3500K   ☐ 40 = 4000K

Optic
☐ N1 = 70mm/ 10°   ☐ N2 = 70mm/ 24°
☐ N4 = 70mm/ 40°   ☐ N6 = 70mm/ 62°
☐ K1 = 111mm/ 10°   ☐ K2 = 111mm/ 20°
☐ K3 = 111mm/ 30°   ☐ K6 = 111mm/ 60°

Fitting/Controls (Dimming)
☐ CT1-10 = CONTROLTrack Fitting & 0-10V (0.1%)
☐ CT1-L3 = CONTROLTrack Fitting & Lutron EcoSystem
  (1% Soft On/Off)
☐ CT3-DX = CONTROLTrack Fitting & DMX (<1%)

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

Finish
☐ B = Black   ☐ W = White   ☐ S = Silver

Example Part Number:

LX2084-TS9	20-98	30	K1–	CT3-DX	120	W
FIXTURE MODEL	LED RATING	COLOR TEMP	OPTIC	FITTING/ DIMMING	VOLTAGE	FINISH

Other Options (Consult Factory):
• Custom Stems, specify length (4″- 6″)
• Custom color, RAL palette
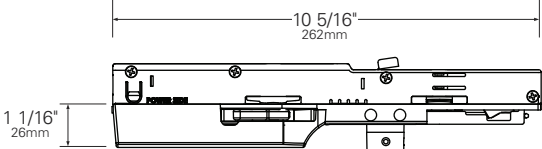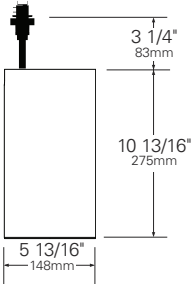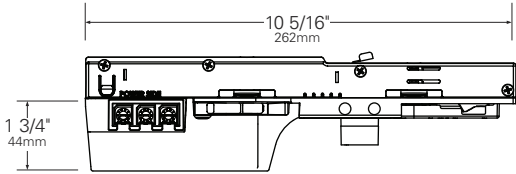
Color Temperature & Center Point Tolerance

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

LX2084 • MOUNTING OPTIONS

FITTING	SIDE VIEW	STEM LENGTH VIEW
CT1 CONTROLTrack Fitting	10 5/16" / 262mm · 1 1/16" / 26mm	3 1/4" / 83mm · 10 13/16" / 275mm · 5 13/16" / 148mm
CT3 CONTROLTrack Fitting	10 5/16" / 262mm · 1 3/4" / 44mm	

LX2084 • 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 LX2084-TS920-8327N1-CT3-DX120B, the "**TS920-8327**" represents an LED module with an output of 2000 lumens, a CRI of 83, a power usage of 36 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 "**N1**" in LX2084-TS920-8327N1-CT3-DX120B is a 70mm 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	N1	N2	N4	N6	K1	K2	K3	K6
2000/83/36	24460	5300	3160	1920	41980	9620	4580	1760
2000/98/50	24460	5300	3160	1920	41980	9620	4580	1760

Delivered Lumens

LED Module	Optic (Reflector)							
Lumens/CRI/ Wattage	N1	N2	N4	N6	K1	K2	K3	K6
2000/83/36	1560	1460	1540	1480	1640	1680	1680	1680
2000/98/50	1560	1460	1540	1480	1640	1680	1680	1680

Efficacy = Lumens Per Watt

LED Module	Optic (Reflector)							
Lumens/CRI/ Wattage	N1	N2	N4	N6	K1	K2	K3	K6
2000/83/36	43	41	43	41	46	47	47	47
2000/98/50	31	29	31	30	33	34	34	34

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

| LED Module Lumens/CRI/Wattage SKU Code	2000/83/36 20-83	2000/98/50 20-98
Nominal Fixture Power (+/- 20%), Watts	36	50
Maximum Inrush Current, Amps	10	10
Minimum Power Factor	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.
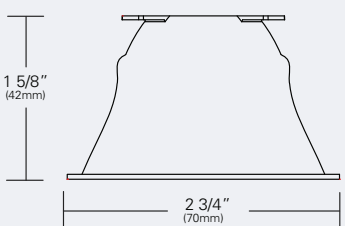
LX2084 · OPTICS
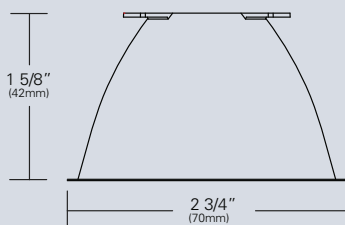
LX-N10-REF-CLR (N1)
(70mm/10°)
Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.
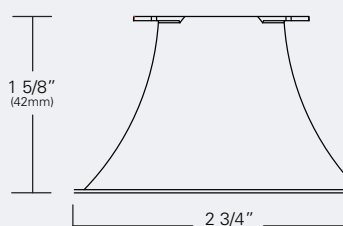
1 5/8″ (42mm)
2 3/4″ (70mm)
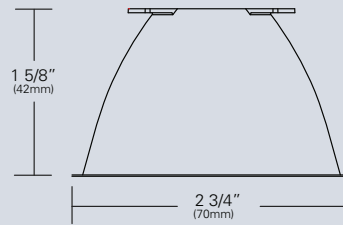
LX-N20-REF-CLR (N2)
(70mm/20°)
Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.

1 5/8″ (42mm)
2 3/4″ (70mm)

LX-N40-REF-CLR (N4)
(70mm/40°)
Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.

1 5/8″ (42mm)
2 3/4″ (70mm)

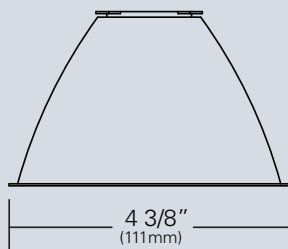**LX-N60-REF-CLR (N6)**
(70mm/62°)
Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.

1 5/8″ (42mm)
2 3/4″ (70mm)

LX-K10-REF-CLR (K1)
(111mm/10°)
Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.

4 3/8″ (111mm)

LX-K20-REF-CLR (K2)
(111mm/20°)
Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish

4 3/8″ (111mm)

LX-K30-REF-CLR (K3)
(111mm/30°)
Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish
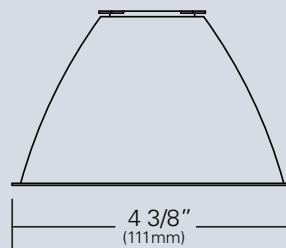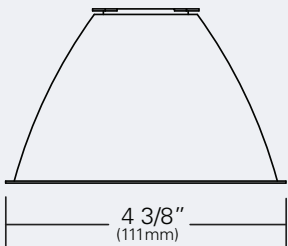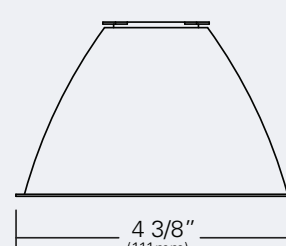
4 3/8″ (111mm)

LX-K60-REF-CLR (K6)
(111mm/60°)
Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.

4 3/8″ (111mm)

LX2084 • PHOTOMETRIC DATA

LED RATING: 20-83

N1- 70mm DIA Optic
Beam Spread (minimum) **10°**
Center Beam Candlepower **24460**
CRI **83**

N2- 70mm DIA Optic
Beam Spread (minimum) **20°**
Center Beam Candlepower **5300**
CRI **83**

N4- 70mm DIA Optic
Beam Spread (minimum) **40°**
Center Beam Candlepower **3160**
CRI **83**

N6- 70mm DIA Optic
Beam Spread (minimum) **62°**
Center Beam Candlepower **1920**
CRI **83**

LED RATING: 20-83

K1- 111mm DIA Optic
Beam Spread (minimum) **10°**
Center Beam Candlepower **41980**
CRI **83**

K2- 111mm DIA Optic
(FR: Field Reducer)
Beam Spread (minimum) **20°**
Center Beam Candlepower **9620**
CRI **83**

K3- 111mm DIA Optic
Beam Spread (minimum) **30°**
Center Beam Candlepower **4580**
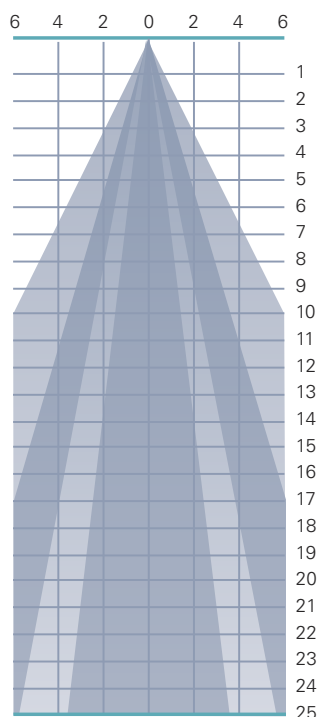CRI **83**

K6- 111mm DIA Optic
Beam Spread (minimum) **60°**
Center Beam Candlepower **1760**
CRI **83**

LED RATING: 20-83

All Distances in Feet

All Max. Footcandles at 0° Beam Axis

N6 62°	N4 40°	N2 20°	N1 10°	Distance
1920	3160	5300	24460	1
480	790	1325	6115	2
213	351	589	2718	3
120	198	331	1529	4
77	126	212	978	5
53	88	147	679	6
39	64	108	499	7
30	49	83	382	8
24	39	65	302	9
19	32	53	245	10
16	26	44	202	11
13	22	37	170	12
11	19	31	145	13
10	16	27	125	14
9	14	24	109	15
8	12	21	96	16
7	11	18	85	17
6	10	16	75	18
5	9	15	68	19
5	8	13	61	20
4	7	12	55	21
4	7	11	51	22
4	6	10	46	23
3	5	9	42	24
3	5	8	39	25

Photometric Data based on LED Rating: 20-83 (2000 Lumens/83CRI/36watts)

LED RATING: 20-83

All Distances in Feet
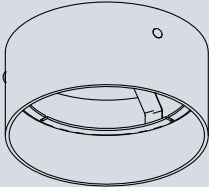
All Max. Footcandles at 0° Beam Axis

K6 60°	K3 30°	K2 20°	K1 10°	Distance
1760	4580	9620	41980	1
440	1145	2405	10495	2
196	509	1069	4664	3
110	286	601	2624	4
70	183	385	1679	5
49	127	267	1166	6
36	93	196	857	7
28	72	150	656	8
22	57	119	518	9
18	46	96	420	10
15	38	80	347	11
12	32	67	292	12
10	27	57	248	13
9	23	49	214	14
8	20	43	187	15
7	18	38	164	16
6	16	33	145	17
5	14	30	130	18
5	13	27	116	19
4	11	24	105	20
4	10	22	95	21
4	9	20	87	22
3	9	18	79	23
3	8	17	73	24
3	7	15	67	25

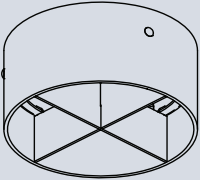Photometric Data based on LED Rating: 20-83 (2000 Lumens/83CRI/36watts)

LX2084 · ACCESSORIES

HOOD-EXT-LX84-NXB-X

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

Specify finish as follows:
HOOD-EXT-LX84-NXB-B (BLACK)
HOOD-EXT-LX84-NXB-W (WHITE)
HOOD-EXT-LX84-NXB-S (SILVER)

HOOD-EXT-LX84-WXB-X

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

Specify finish as follows:
HOOD-EXT-LX84-WXB-B (BLACK)
HOOD-EXT-LX84-WXB-W (WHITE)
HOOD-EXT-LX84-WXB-S (SILVER)

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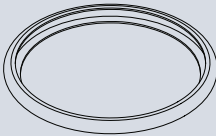
Stainless steel mesh screens used alone or in combinations will block from approximately 20% to 90% of the transmitted light without changing color temperature of the light.

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

LOUVER HEX CB

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

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.

LX2084 • 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–L30X5–C	30° by 5° Spread Gel
GEL–L40X1–C	40° by 1° Spread Gel
GEL–L60X1–C	60° by 1° Spread Gel
GEL–L60X10–C	60° by 10° Spread Gel
GEL–L75X45–C	75° by 45° Spread Gel
GEL–L90X60–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–R331–C	Shell Pink	68
GEL–R12–C	Straw	88	GEL–R383–C	Sapphire Blue	4
GEL–R13–C	Straw Tint	78	GEL–R397–C	Pale Grey	70
GEL–R14–C	Medium Straw	68	GEL–R2001–C	Storaro Red	12
GEL–R21–C	Golden Amber	43	GEL–R2004–C	Storaro Green	15
GEL–R25–C	Orange Red	14	GEL–R2009–C	Storaro Violet	3
GEL–R26–C	Light Red	12	GEL–R3202–C	Full Blue	36
GEL–R27–C	Medium Red	4	GEL–R3204–C	Half Blue	52
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	Roscosun (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" 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® 2020/2030/2031/2038, SSLCX16, SSL260
AA	3"	LumeLEX® 2044, LumeLEX 2048
A	3 1/2"	LumeLEX® 2060, SSL230, SSLCX30, SSLGR30CL
C	4 3/4"	LumeLEX® 2084, LumeLEX® 2088, SSL238, SSLCX36, SSLCX38, SSLGR38CL

No.	Color	[1]% 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	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.
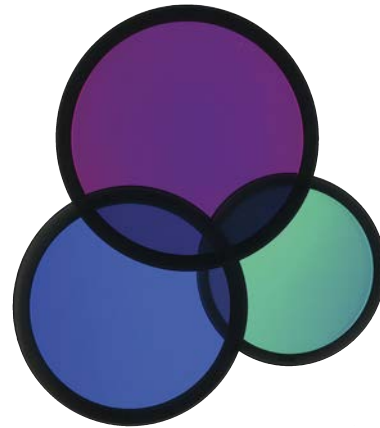
COLOR MEDIA

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
AAA	2 3/8″	LumeLEX® 2020/2030/2031/2038, SSLCX16, SSL260
AA	3″	LumeLEX® 2044, LumeLEX 2048
A	3 1/2″	LumeLEX® 2060, SSL230, SSLCX30, SSLGR30CL
C	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