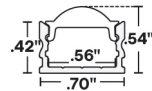
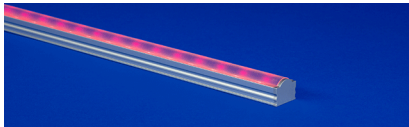




ESSENTIALS LALO-OPTICS (02)

STATIC COLOR

24VDC Linear Fixtures - Surface & Recessed



- Shallow, low-profile linear fixture for surface or recessed installations
- Produces a 17° beam angle
- Mounting options include stainless steel clips, magnets, and low-profile magnet mounts
- Features painted end caps to match extrusion finish
- Red, Green, Blue or Amber LEDs available
- Q-Tran Red & Amber LED products are Florida Fish and Wildlife Conservation Commission certified, making them safe for turtles and other wildlife
- Can be suitable for exterior use when specified as wet, contact factory for more information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PRODUCT	WATTS/FT	CCT	RATED	EFFICIENCY	LENS	EXTERNAL LOUVER	WIRE INPUT/ OUTPUT	CONNECTOR / WIRE IN	CONNECTOR / WIRE OUT	WIRE COLOR	WIRE TYPE	MOUNTING	FINISH	LENGTH (IN)	EXACT/ OPTIMAL
LL2SC	5.0			STD	17DEG										

Sample Part Number: LL2SC-5.0-GR-DRY-STD-17-P1-BW-BW-BK-CL2-SST-BK-48"-E

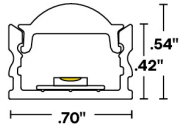
<div>1</div> <div>PRODUCT</div> <div>LL2SC</div> <div>See following pages for compatible power supplies.</div>	<div>2</div> <div>WATTS/FT</div> <div>5.05.0W/ft</div>	<div>3</div> <div>CCT</div> <div>A B G R</div> <div>Amber Blue Green Red</div>	<div>4</div> <div>RATED</div> <div>DRY DMP WET</div> <div>IP20 IP54 IP67</div> <div>Can be suitable for exterior use, contact factory for more information</div>	<div>5</div> <div>EFFICIENCY</div> <div>STD</div> <div>Standard</div>	<div>6</div> <div>LENS</div> <div>17DEG</div> <div>Optical 17°</div> <div>For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages</div>	<div>7</div> <div>EXTERNAL LOUVER</div> <div>L1-WH L1-BK N/A</div> <div>White Plastic Black Plastic No Louver</div> <div>Louvers are shipped separately and require field assembly</div>
<div>8</div> <div>WIRE INPUT/OUTPUT</div> <div>S1 S2</div> <div>Single 1 (Input only) - End Feed Single 2 (Input only) - Bottom Feed</div> <div>For continuous mounting, consider bottom feed.</div> <div>P1 P2</div> <div>Pass Through 1 (Input/output) - End Feed Pass Through 2 (Input/output) - Bottom Feed</div> <div>For continuous mounting, consider bottom feed.</div>	<div>9</div> <div>CONNECTOR/WIRE IN</div> <div>BW BRL CON6 CON24</div> <div>Bare Wire (Standard 24") Barrel Connector 6" Connector 24"</div> <div>Connector/Wire In not needed to specify product. Typical selection is BW. BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div> <div>BW BRL CON6 CON24</div> <div>Bare Wire (Standard 24") Barrel Connector 6" Connector 24"</div> <div>Connector/Wire In not needed to specify product. Typical selection is BW. BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div>	<div>10</div> <div>CONNECTOR/WIRE OUT</div> <div>CLS</div> <div>Closed End (No feed)</div> <div>BW BRL CON6 CON24</div> <div>Bare Wire (Standard 24") Barrel Connector 6" Connector 24"</div> <div>Connector/Wire Out not needed to specify product. Typical selection is CLS or BW. BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div>	<div>11</div> <div>WIRE COLOR</div> <div>WH BK N/A</div> <div>White Black For Barrel</div> <div>wet barrel only available in black</div>			
<div>12</div> <div>WIRE TYPE</div> <div>CL2 CL2P N/A</div> <div>Class 2 Plenum Rated For Barrel</div> <div>CL2P only available with bare wire leads (BW)</div>	<div>13</div> <div>MOUNTING</div> <div>SST M4 MG</div> <div>Stainless Steel Low Profile Magnet Magnet</div>	<div>14</div> <div>FINISH</div> <div>ST BK CU</div> <div>Satin Black Custom</div>	<div>15</div> <div>LENGTH (IN)</div> <div>Fixture length min 12", max 98.43" not including end caps. Tolerance +0 - 1/8". Consult factory for lengths under 12".</div>	<div>16</div> <div>EXACT/OPTIMAL</div> <div>O E</div> <div>Optimal Illumination Exact Specified Length</div> <div>Exact fixtures are the exact length specified +0 - 1/8". Optimal fixtures' length is rounded down with illumination end to end. See Exact/Optimal Fixture Length charts.</div>		



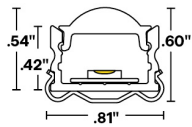
ESSENTIALS LALO-OPTICS (02) STATIC COLOR

24VDC Linear Fixtures - Surface & Recessed

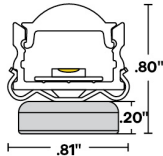
1 PRODUCT - DIMENSIONS



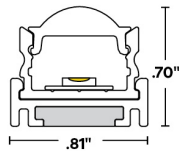
Profile with optical lens



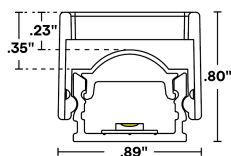
Profile with optical lens and stainless steel mounting clip



Profile with optical lens magnet mounting clip



Profile with optical lens and low profile magnet



Profile with optical lens and plastic louver

2 DELIVERED LUMENS

[Calculated L70 = 30000 hrs]
Tested with LL2SC-5.0-**-DRY-STD

	Red		Green		Blue		Amber	
	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH
17	90	633	485	517	126	466	81	597

6 DIODE VISIBILITY

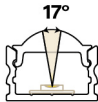


Optical lens

PHOTOMETRIC PERFORMANCE

Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.

17DEG



Optical 17°

TEMPERATURE RATINGS

		5.0 W/FT	
		Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	125°F
DMP	Ambient Operating Temp - Surface	-4°F	120°F
WET	Ambient Operating Temp - Surface	-4°F	120°F

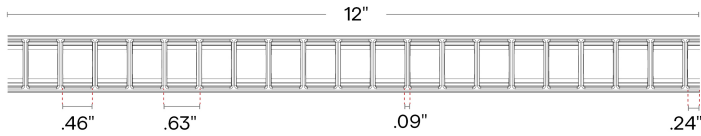


ESSENTIALS LALO-OPTICS (02) STATIC COLOR

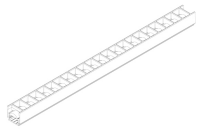
24VDC Linear Fixtures - Surface & Recessed

7 EXTERNAL LOUVER

PLASTIC



L1-XX



Lumen Multiplier

WH

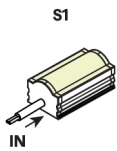
BK

0.72

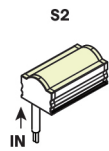
0.53

8 WIRE INPUT/OUTPUT

SINGLE (Input only)

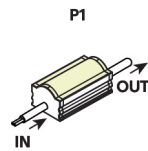


End Feed

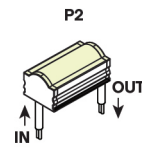


Bottom Feed

PASS THROUGH (Input/Output)

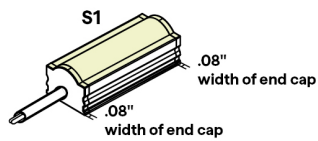


End Feed

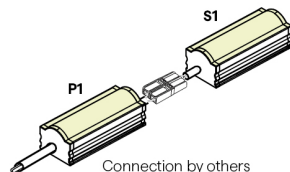


Bottom Feed

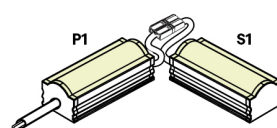
CONFIGURATION OPTIONS



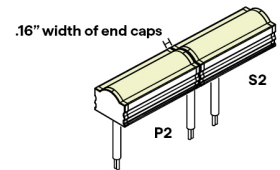
Single End Feed



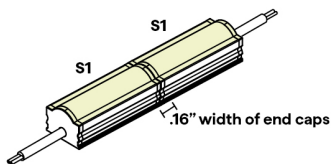
Connection by others
Non-Continuous End Feed



Connection by others
Non-Continuous Corner Feed



Continuous Bottom Feed



Continuous End to End Feed

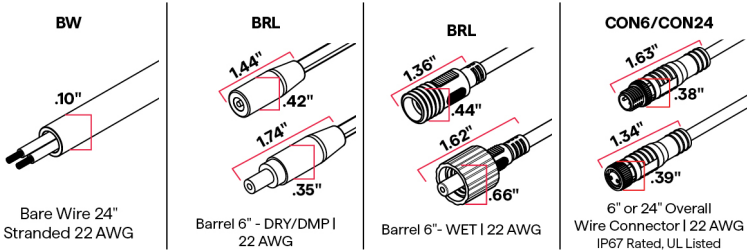


ESSENTIALS LALO-OPTICS (02) STATIC COLOR

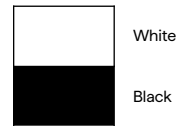
24VDC Linear Fixtures - Surface & Recessed

9 / 10 CONNECTOR/WIRE - IN/OUT

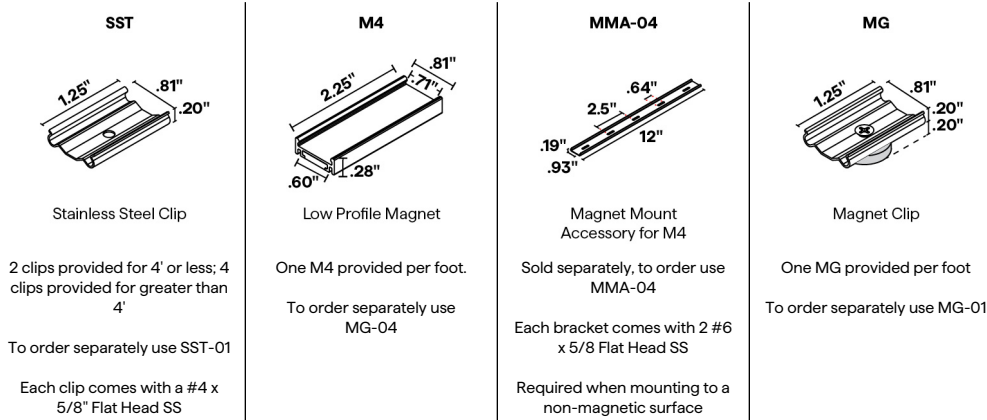
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



11 WIRE COLOR



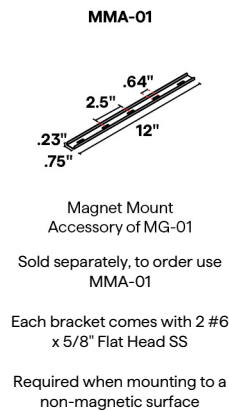
13 MOUNTING



14 FINISH



Custom color available





ESSENTIALS LALO-OPTICS (02) STATIC COLOR

24VDC Linear Fixtures - Surface & Recessed

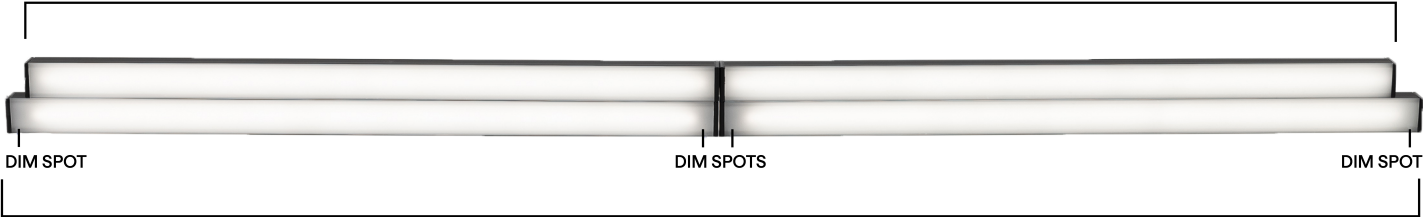
16 EXACT/OPTIMAL FIXTURE LENGTH

[E/O Length Calculator →](#)

[E/O Explained →](#)

Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture at the end of the run.

Optimal Fixtures



Exact Fixtures

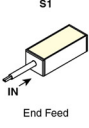
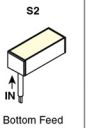
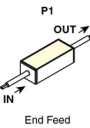
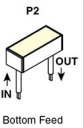
SC DRY, DMP LENGTHS BY INCH

Available in any length in between 12" and 98.43", chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 - 1/8". Consult factory for lengths under 12".

EXACT LENGTH

Requested Length	Potential dim spot on either end of fixture
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH: highlighted rows are closest to requested nominal length

Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	10.41"		10.66"	
13"	12.41"		12.66"	
14"	12.41"		12.66"	
15"	14.41"		14.66"	
16"	14.41"		14.66"	
17"	16.41"		16.66"	
18"	16.41"		16.66"	
19"	18.41"		18.66"	
20"	18.41"		18.66"	
21"	20.41"		20.66"	
22"	20.41"		20.66"	
23"	22.41"		22.66"	
24"	22.41"		22.66"	
36"	34.41"		34.66"	
48"	46.41"		46.66"	
60"	58.41"		58.66"	
72"	70.41"		70.66"	
84"	82.41"		82.66"	
96"	94.41"		94.66"	



ESSENTIALS LALO-OPTICS (02) STATIC COLOR

24VDC Linear Fixtures - Surface & Recessed

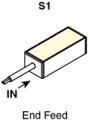
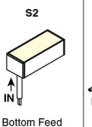
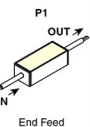
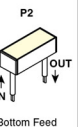
SC WET LENGTHS BY INCH

Available in any length in between 12" and 98.43", chart below shows example lengths. Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 - 1/8". Consult factory for lengths under 12".

EXACT LENGTH

Requested Length	Potential dim spot on either end of fixture
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH: highlighted rows are closest to requested nominal length

Requested Nominal Length	S1 & S2		P1 & P2	
				
12"		10.61"		10.76"
13"		12.61"		12.76"
14"		12.61"		12.76"
15"		14.61"		14.76"
16"		14.61"		14.76"
17"		16.61"		16.76"
18"		16.61"		16.76"
19"		18.61"		18.76"
20"		18.61"		18.76"
21"		20.61"		20.76"
22"		20.61"		20.76"
23"		22.61"		22.76"
24"		22.61"		22.76"
36"		34.61"		34.76"
48"		46.61"		46.76"
60"		58.61"		58.76"
72"		70.61"		70.76"
84"		82.61"		82.76"
96"		94.61"		94.76"

COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

DIM TO LEVEL	INDOOR	OUTDOOR
	SC	SC
Dim to Black	Q6M-DC+CAP QTM-DC+CAP iQ-PH iQ-PH+QD1	QOM-DC+CAP QOM-PH
0.1%	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-BOWTIE+DIMMER QZ-DMX QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	Q-SET-QZ-DMX Q-SET-QZ-PH/0-10V Q-SET-eLED+0-10V QOM-eLED+0-10V QZ-DMX QZ-PH/0-10V
1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED(E) QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6	Q-SET+QZ-DALI-DT6 QOM-eLED+DALI-DT6 QOM-eLED+PS-DALI-DT6
10%	Non-Dim Power Supply with SW App Dongle	



ESSENTIALS LALO-OPTICS (02) STATIC COLOR

24VDC Linear Fixtures - Surface & Recessed

DIMMING PROTOCOL	INDOOR	OUTDOOR
	SC	SC
Non-Dim	QT-CAB-eLED-ND QTM-eLED-ND QZ-ND	Q-SET-QZ-ND Q-SET-eLED-ND QOM-eLED-ND QZ-ND iQ-ND-50-65
Phase	Q6M-DC+CAP QT-CAB-QZ-PH/0-10V QTM-DC+CAP QTM-eLED(E) QZ-BOWTIE+DIMMER QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP iQ-PH iQ-PH+QD1	Q-SET-QZ-PH/0-10V QOM-DC+CAP QOM-PH QZ-PH/0-10V
0-10V	QT-CAB-QZ-PH/0-10V QT-CAB-eLED+0-10V QT-CAB-eLED+0-10V-AWN QTM-eLED+0-10V QTM-eLED+0-10V-AWN QZ-PH/0-10V QZ-STICK-PH/0-10V QZLP	Q-SET-QZ-PH/0-10V Q-SET-eLED+0-10V QOM-eLED+0-10V QZ-PH/0-10V
Lutron Athena	QT-CAB-eLED+0-10V-AWN QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+0-10V-AWN QTM-eLED+DALI-DT6-AWN	
ECO System	QTM-eLED(E)	
DMX	QZ-DMX	Q-SET-QZ-DMX QZ-DMX
DALI-2: DT6	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT6-AWN QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT6-AWN QZ-DALI-DT6	Q-SET+QZ-DALI-DT6 QOM-eLED+DALI-DT6
SCENE App Dimmed	Non-Dim Power Supply with SW App Dongle	

COMPATIBLE MOUNTING ACCESSORIES

HINGE - HMB-M

1.41" .71"

Adjustable mounting bracket - Medium

HINGE - HMB-L

1.46" 1.29"

Adjustable mounting bracket - Large

HINGE - HMB-XL

1.46" 4"

Adjustable mounting bracket - XLarge

Q-PIVOT

.75" 1.03"

Small mounting accessory

Q-ANGLE

2.23" 1.38"

Adjustable mounting accessory

NU-GRAZER

U Mounting Bracket

NJ-GRAZER

J Mounting Bracket

BL-GRAZER

Backwards L Mounting Bracket

COMPATIBLE WIRING ACCESSORIES

Q-mini-J

2" 1.25"

UL Listed miniature junction box, DRY/DMP (WET rated with silicone)

Q-mini-J5

2.80" 2.27"

UL Listed miniature junction box, DRY/DMP (WET rated with silicone)

BARREL-EXT

8ft barrel cable extender DRY ONLY

BARREL FOUR-FER

Splits lead from one to four LED Barrel connector fixtures, DRY/DMP

CON120-EXT

10ft Con cable extender DRY/DMP/WET

CON FOUR-FER

Splits lead from one to four LED Con connectors DRY/DMP/WET

CON M - BARREL F

Male con to barrel cable adaptor DRY/DMP