



# ESSENTIALS LALO-OPTICS (02)

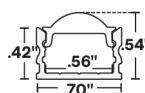
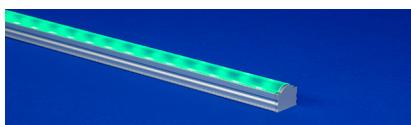
## RGB

24VDC Linear Fixtures - Surface & Recessed



5 YEAR  
WARRANTY

Declare.



- 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
- Can be suitable for exterior use when specified as wet, contact factory for more information
- Red, Green, and Blue LED allows for color changing applications
- Features 7 diodes per 2" cut point
- Optional plastic louver accessory available in white or black for added glare control

### INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1	2	3	4	5	6
PRODUCT	WATTS/ FT	CCT	RATED	EFFICIENCY	LENS
LL2RGB	6.0	RGB		STD	17DEG

### ADDITIONAL INFORMATION REQUIRED TO ORDER

7	8	9	10	11	12	13	14	15
WIRE INPUT/OUTPUT	CONNECTOR/WIRE IN	CONNECTOR/WIRE OUT	WIRE COLOR	WIRE TYPE	MOUNTING	FINISH	LENGTH (IN)	EXACT/OPTIMAL

Sample Part Number: LL2RGB-6.0-RGB-DRY-STD-17-P1-BW-BV-BK-CL2-SST-BK-48"-E

<b>1</b> <b>PRODUCT</b> LL2RGB See following pages for compatible power supplies.	<b>2</b> <b>WATTS/FT</b> 6.0 6.0W/ft	<b>3</b> <b>CCT</b> RGB	<b>4</b> <b>RATED</b> DRY IP20 DMP IP54 WET IP67 Can be suitable for exterior use, contact factory for more information	<b>5</b> <b>EFFICIENCY</b> STD Standard	<b>6</b> <b>LENS</b> 17DEG Optical 17° For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages. For optional snap-on louver ordering, see External Louver Accessory section on following pages
<b>7</b> <b>WIRE INPUT/OUTPUT</b> SINGLE (Input only) S1 End Feed S2 Bottom Feed For continuous mounting, consider bottom feed.	<b>8</b> <b>CONNECTOR/WIRE IN</b> BW Bare Wire (Standard 24") CON6 Connector 6" CON24 Connector 24" BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	<b>9</b> <b>CONNECTOR/WIRE OUT</b> CLS Closed End (No feed)	<b>10</b> <b>WIRE COLOR</b> WH White BK Black		
<b>PASS THROUGH (Input/output)</b> P1 End Feed P2 Bottom Feed For continuous mounting, consider bottom feed.	BW Bare Wire (Standard 24") CON6 Connector 6" CON24 Connector 24" BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	BW Bare Wire (Standard 24") CON6 Connector 6" CON24 Connector 24" BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)			
<b>11</b> <b>WIRE TYPE</b> CL2 Class 2 CL2P Plenum Rated CL2P only available with bare wire leads (BW)	<b>12</b> <b>MOUNTING</b> SST Stainless Steel M4 Low Profile Magnet MG Magnet	<b>13</b> <b>FINISH</b> ST Satin BK Black CU Custom	<b>14</b> <b>LENGTH (IN)</b> Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".	<b>15</b> <b>EXACT/OPTIMAL</b> O Optimal Illumination E Exact Specified Length Exact fixtures match the exact length you specify, but they may have dim spots at the ends. Optimal fixtures are slightly shorter than the length specified, but provide full illumination from end to end. See Exact/Optimal Fixture Length charts.	

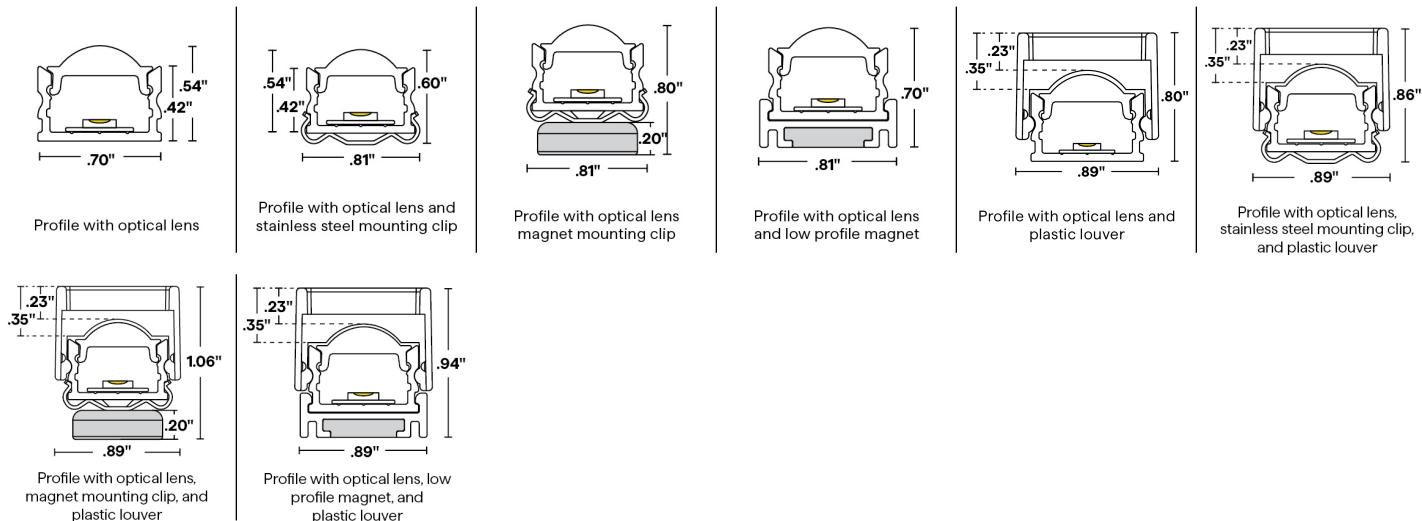
5 year warranty | Warranty only valid with QTL power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance



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## 1 PRODUCT - DIMENSIONS



## 2 DELIVERED LUMENS

[Calculated L70 = 55000 hrs]  
Tested with LL2RGB-6.0-RGB-DRY-STD

	Red		Green		Blue		All	
	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	
17	86	633	174	523	49	469	280	

## 6 DIODE VISIBILITY

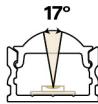


Optical lens

## 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

		6.0 W/FT	
		Min	Max
DRY	Ambient Operating Temp - Surface	-13°F	105°F
DMP	Ambient Operating Temp - Surface	-13°F	-100°F
WET	Ambient Operating Temp - Surface	-13°F	-100°F

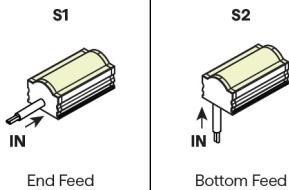


## ESSENTIALS LALO-OPTICS (02) RGB

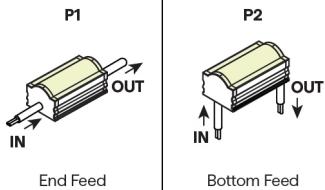
24VDC Linear Fixtures - Surface & Recessed

### 7 WIRE INPUT/OUTPUT

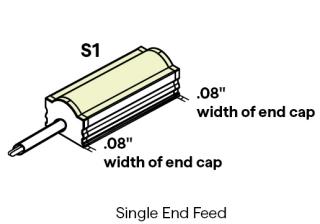
SINGLE (Input only)



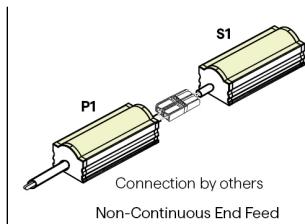
PASS THROUGH (Input/Output)



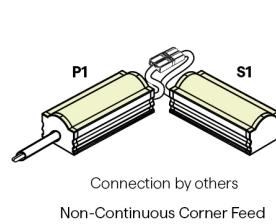
### CONFIGURATION OPTIONS



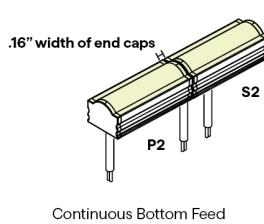
Single End Feed



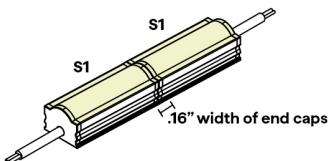
Non-Continuous End Feed



Non-Continuous Corner Feed



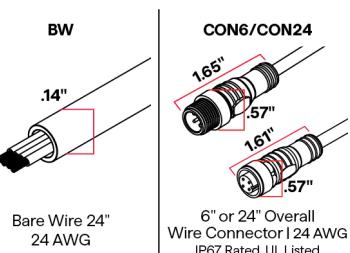
Continuous Bottom Feed



Continuous End to End Feed

### 8 / 9 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



### 10 WIRE COLOR



White

Black

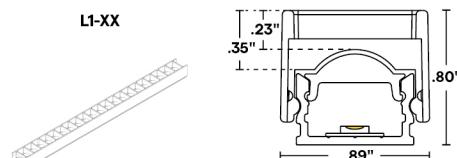
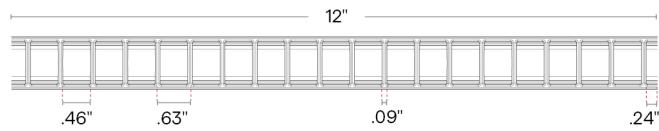


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24VDC Linear Fixtures - Surface & Recessed

### EXTERNAL LOUVER ACCESSORY

#### PLASTIC



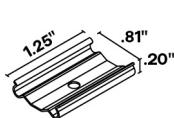
Lumen Multiplier  
WH BK

Profile with plastic louver  
To order separately use  
LALO-L1-OPTICS-KIT-WH or  
LALO-L1-OPTICS-KIT-BK

0.73 0.53

### 12 MOUNTING

#### SST



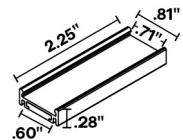
Stainless Steel Clip

2 clips provided for 4' or less; 4  
clips provided for greater than  
4'

To order separately use SST-01

Each clip comes with a #4 x  
5/8" Flat Head SS

#### M4

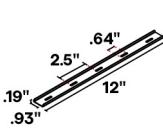


Low Profile Magnet

One M4 provided per foot.

To order separately use  
MG-04

#### MMA-04

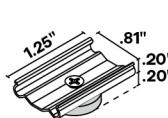


Magnet Mount  
Accessory for M4

Sold separately, to order use  
MMA-04

Each bracket comes with 2 #6  
x 5/8" Flat Head SS

#### MG



Magnet Clip

One MG provided per foot

To order separately use MG-01

#### MMA-01



Magnet Mount  
Accessory of MG-01

Sold separately, to order use  
MMA-01

Each bracket comes with 2 #6  
x 5/8" Flat Head SS

Required when mounting to a  
non-magnetic surface

### 13 FINISH



Satin

Black

Custom color available



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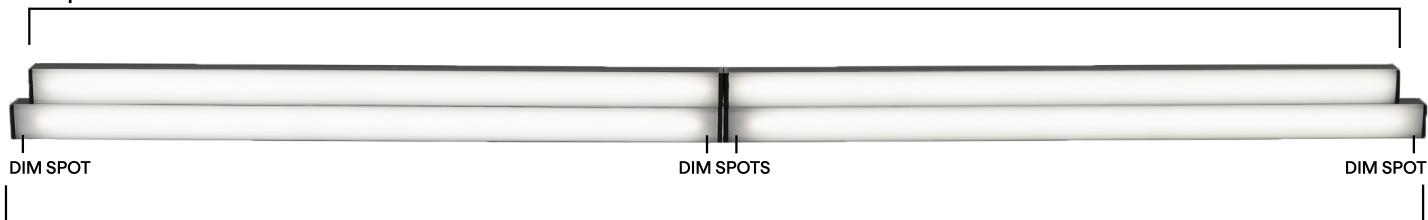
### 15 EXACT/OPTIMAL FIXTURE LENGTH

[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

### RGB 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	
	S1 End Feed	S2 Bottom Feed	P1 End Feed	P2 Bottom Feed
12"	10.51"		10.86"	
13"	12.51"		12.86"	
14"	12.51"		12.86"	
15"	14.51"		14.86"	
16"	14.51"		14.86"	
17"	16.51"		16.86"	
18"	16.51"		16.86"	
19"	18.51"		18.86"	
20"	18.51"		18.86"	
21"	20.51"		20.86"	
22"	20.51"		20.86"	
23"	22.51"		22.86"	
24"	22.51"		22.86"	
36"	34.51"		34.86"	
48"	46.51"		46.86"	
60"	58.51"		58.86"	
72"	70.51"		70.86"	
84"	82.51"		82.86"	
96"	94.51"		94.86"	



# ESSENTIALS LALO-OPTICS (02) RGB

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## RGB 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	
	S1 End Feed	S2 Bottom Feed	P1 End Feed	P2 Bottom Feed
12"	10.66"		11.06"	
13"	12.66"		11.06"	
14"	12.66"		13.06"	
15"	14.66"		13.06"	
16"	14.66"		15.06"	
17"	16.66"		15.06"	
18"	16.66"		17.06"	
19"	18.66"		17.06"	
20"	18.66"		19.06"	
21"	20.66"		19.06"	
22"	20.66"		21.06"	
23"	22.66"		21.06"	
24"	22.66"		23.06"	
36"	34.66"		35.06"	
48"	46.66"		47.06"	
60"	58.66"		59.06"	
72"	70.66"		71.06"	
84"	82.66"		83.06"	
96"	94.66"		95.06"	

## COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has  $\pm 5\%$  tolerance.

DIM TO LEVEL	INDOOR	OUTDOOR
	RGB	RGB
0.1%	QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DMX QTM-eLED+DALI-DT8 QTM-eLED+DMX QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DALI-DT8 QOM-eLED+DMX QOM-eLED+PS-DALI-DT8 QZ-DMX
1%	QZ-DALI-DT8	Q-SET+QZ-DALI-DT8
10%	Non-Dim Power Supply with RGB App Dongle	

DIMMING PROTOCOL	INDOOR	OUTDOOR
	RGB	RGB
DMX	QTM-eLED+DMX QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DMX QZ-DMX
DALI-2: DT8	QT-CAB-eLED+DALI-DT8 QTM-eLED+DALI-DT8 QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QOM-eLED+DALI-DT8
SCENE App Dimmed	Non-Dim Power Supply with RGB App Dongle	



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### COMPATIBLE MOUNTING ACCESSORIES

<b>HINGE - HMB-M</b> 1.41" 0.71"	<b>HINGE - HMB-L</b> 1.46" 1.29"	<b>HINGE - HMB-XL</b> 1.46" 4"	<b>Q-PIVOT</b> 0.75" 1.03"	<b>Q-ANGLE</b> 1.38" 2.23"	<b>VHB</b> Double sided mounting tape	<b>NU-GRAZER</b> U Mounting Bracket	<b>NJ-GRAZER</b> J Mounting Bracket	<b>BL-GRAZER</b> Backwards L Mounting Bracket
Adjustable mounting bracket - Medium	Adjustable mounting bracket - Large	Adjustable mounting bracket - XLarge	Small mounting accessory	Adjustable mounting accessory				

### COMPATIBLE WIRING ACCESSORIES



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

### COMPATIBLE CONTROL ACCESSORIES

<b>SCENE APP DONGLE</b> 1.36" 2.58" Wi-Fi or Bluetooth Connectivity	<b>IQ-DMX-STICK-QA2</b> 	<b>IQ-DMX-STICK-DE3</b> 
DMX controller for changing color & dimming	DMX controller for changing color & dimming	