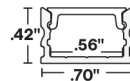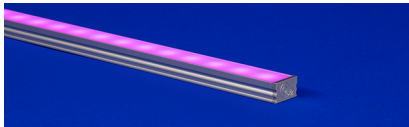# ESSENTIALS LALO-FLAT (01)
RGBW
24VDC Linear Fixtures - Surface & Recessed

.42" .56" .70"

- Shallow, low-profile fixture for surface or recessed installations
- Choose from diffused, polar, frosted, or clear lens options for varying diode visibility and beam angles
- Three mounting options
- 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 paired with a specifiable white LED allow for color changing applications
- Optional plastic louver accessory available in white or black for added glare control

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

Sample Part Number: LL1RGBW-6.0-30-DRY-STD-DF-P1-BW-BW-BK-CL2-SST-BK-48"-E

① PRODUCT

LL1RGBW

See following pages for compatible power supplies.

LL1RGBW

② WATTS/FT

6.0   6.0W/ft

4.0HE   4.0W/ft HE

③ CCT

| 27 | RGBW-2700K |
| 30 | RGBW-3000K |

27	RGBW-2700K
30	RGBW-3000K
35	RGBW-3500K
40	RGBW-4000K

④ RATED

DRY   IP20
DMP   IP54

DRY   IP20
DMP   IP54
WET   IP67

Can be suitable for exterior use, contact factory for more information

⑤ EFFICIENCY

STD   Standard

⑥ LENS

DF   Diffused
PR   Polar
FR   Frosted
CL   Clear

Clear Lens is not available for RGBW-HE. 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

⑦ WIRE INPUT/OUTPUT

S1   Single 1 (Input only) - End Feed
S2   Single 2 (Input only) - Bottom Feed

P1   Pass Through 1 (Input/output) - End Feed
P2   Pass Through 2 (Input/output) - Bottom Feed

For continuous mounting, consider bottom feed.

⑧ CONNECTOR/WIRE IN

BW   Bare Wire (Standard 24")
CON6   Connector 6"
CON24   Connector 24"

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)

⑨ CONNECTOR/WIRE OUT

CLS   Closed End (No 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)

⑩ WIRE COLOR

WH   White
BK   Black

⑪ WIRE TYPE

CL2   Class 2
CL2P   Plenum Rated

CL2P only available with bare wire leads (BW)

⑫ MOUNTING

SST   Stainless Steel
M4   Low Profile Magnet
MG   Magnet

⑬ FINISH

ST   Satin
BK   Black
CU   Custom

Custom finishes require a longer lead time, consult factory

⑭ LENGTH (IN)

Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".

⑮ EXACT/OPTIMAL

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 | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance | Compatible for use with QTL power supplies

ESSENTIALS LALO-FLAT (01) RGBW
24VDC Linear Fixtures - Surface & Recessed

1 PRODUCT - DIMENSIONS

Profile with flat lens

Profile with flat lens and stainless steel mounting clip

Profile with flat lens and magnet mounting clip

Profile with flat lens and low profile magnet

Profile with flat lens and plastic louver

Profile with flat lens, stainless steel mounting clip, and plastic louver

Profile with flat lens, magnet mounting clip, and plastic louver

Profile with flat lens, low profile magnet, and plastic louver

2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]
Tested with LL1RGBW-**-30-DRY-STD

| | 6.0 W/FT | | | | | | | | 4.0HE W/FT | | | | | | | |
| | Red | | Green | | Blue | | 3000K | | Red | | Green | | Blue | | 3000K | |
	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	CRI	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	CRI
CL	36	631	97	513	29	464	124	93	32	629	121	516	26	465	74	97
FR	36	631	97	513	29	464	123	93	31	629	120	516	26	465	74	97
PR	33	631	87	513	26	464	111	93	28	629	108	516	23	465	67	97
DF	29	631	78	513	24	464	100	93	25	629	97	516	21	465	60	97

6 DIODE VISIBILITY

DF - Diffused lens

PR - Polar lens

FR - Frosted lens

CL - Clear lens

PHOTOMETRIC PERFORMANCE

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

CL

78°

Clear 78°

TEMPERATURE RATINGS

		6.0 W/FT		4.0 HE W/FT	
		Min	Max	Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	115°F	-4°F	125°F
DMP	Ambient Operating Temp - Surface	-4°F	110°F	-4°F	120°F
WET	Ambient Operating Temp - Surface	**	**	-4°F	120°F

7 WIRE INPUT/OUTPUT

SINGLE (Input only)
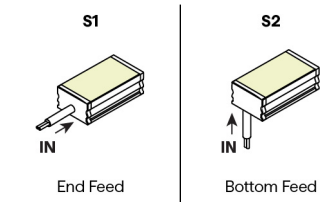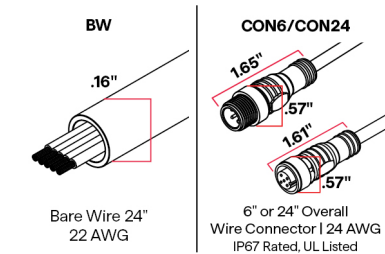
PASS THROUGH (Input/Output)

S1

S2

P1

P2

IN

IN

IN — OUT

IN — OUT

End Feed

Bottom Feed

End Feed

Bottom Feed

CONFIGURATION OPTIONS

S1

.08" width of end cap

.08" width of end cap

Single End Feed

P1

S1

Connection by others

Non-Continuous End Feed

P1

S1

Connection by others

Non-Continuous Corner Feed

.16" width of end caps

S2

P2

Continuous Bottom Feed

S1

S1

.16" width of end caps

Continuous End to End Feed
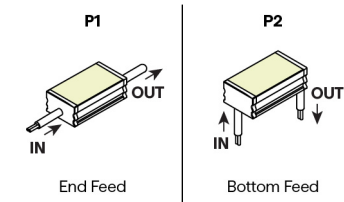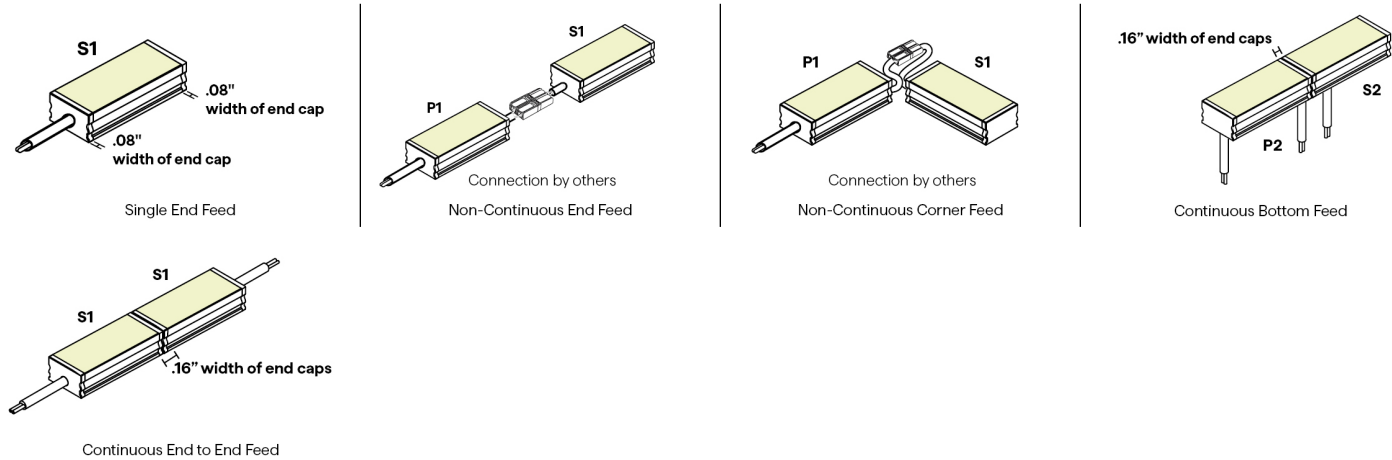
8 / 9 CONNECTOR/WIRE – IN/OUT

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

BW

.16"

Bare Wire 24"
22 AWG

CON6/CON24

1.65"

.57"

1.61"

.57"

6" or 24" Overall
Wire Connector | 24 AWG
IP67 Rated, UL Listed

10 WIRE COLOR

White

Black

Specification subject to change. Rev-01-13-26

EXTERNAL LOUVER ACCESSORY

PLASTIC

12"

.46" .63" .09" .23"

L1-XX

.23" .68" .89"
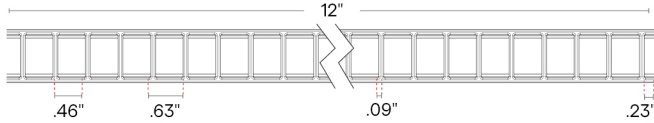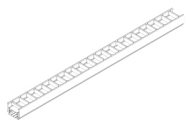
Lumen Multiplier

WH	BK
0.72	0.51
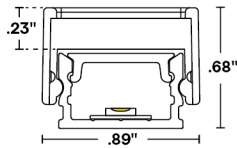
Profile with plastic louver

To order separately use
LALO-L1-FLAT-KIT-WH or
LALO-L1-FLAT-KIT-BK

12 MOUNTING

SST

1.25" .81" .20"
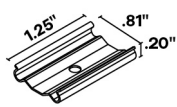
Stainless Steel Clip

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

To order separately use SST-01
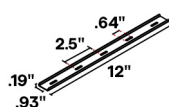
Each clip comes with a #4 x
5/8" Flat Head SS

M4

2.25" .81" .77" .60" .28"
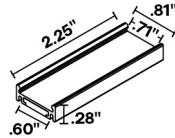
Low Profile Magnet

One M4 provided per foot.

To order separately use
MG-04

MMA-04

.64" 2.5" 12" .19" .93"

**Magnet Mount
Accessory for M4**

Sold separately, to order use
MMA-04

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

Required when mounting to a
non-magnetic surface

MG

1.25" .81" .20" .20"
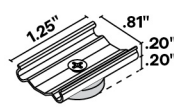
Magnet Clip

One MG provided per foot

To order separately use MG-01

MMA-01

.64" 2.5" 12" .23" .75"

**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 finishes require a longer
lead time, consult factory

14 EXACT/OPTIMAL FIXTURE LENGTH

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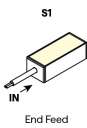
Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture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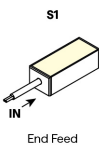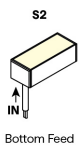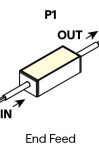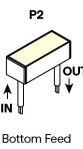
Optimal Fixtures

DIM SPOT   DIM SPOTS   DIM SPOT
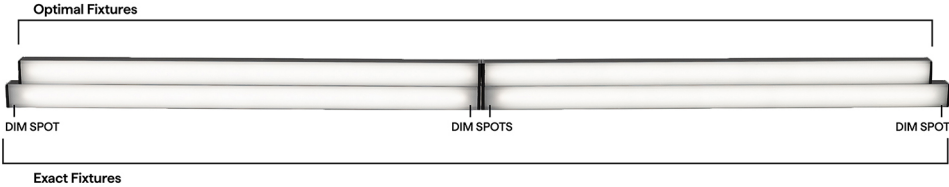
Exact Fixtures

RGBW-HE DRY DMP LENGTHS BY INCH

EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture (S1 / End Feed)
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

Requested Nominal Length	S1 & S2	P1 & P2
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"
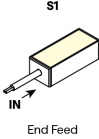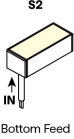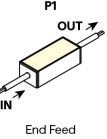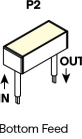
RGBW-HE WET LENGTHS BY INCH

EXACT LENGTH
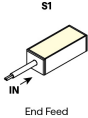
Requested Length	Potential dim spot on either end of a S1 fixture
	S1 — End Feed
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH
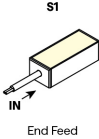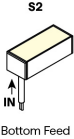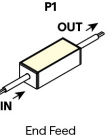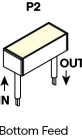
Requested Nominal Length	S1 & S2	P1 & P2
	S1 End Feed / S2 Bottom Feed	P1 End Feed / P2 Bottom Feed
12"	10.66"	11.06"
13"	12.66"	11.06"
14"	12.66"	13.06"
15"	14.66"	13.06"
16"	14.66"	15.06"
17"	16.66"	15.06"
18"	16.66"	17.06"
19"	18.66"	17.06"
20"	18.66"	19.06"
21"	20.66"	19.06"
22"	20.66"	21.06"
23"	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"

RGBW DRY DMP LENGTHS BY INCH

EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture
	S1 — End Feed
12"	2"
13"	0.5"
14"	1"
15"	1.5"
16"	2"
17"	0.5"
18"	1"
19"	1.5"
20"	2"
21"	0.5"
22"	1"
23"	1.5"
24"	2"
36"	2"
48"	2"
60"	2"
72"	2"
84"	2"
96"	2"

OPTIMAL LENGTH

Requested Nominal Length	S1 & S2	P1 & P2
	S1 End Feed / S2 Bottom Feed	P1 End Feed / P2 Bottom Feed
12"	8.51"	8.86"
13"	12.51"	12.86"
14"	12.51"	12.86"
15"	12.51"	12.86"
16"	12.51"	12.86"
17"	16.51"	16.86"
18"	16.51"	16.86"
19"	16.51"	16.86"
20"	16.51"	16.86"
21"	20.51"	20.86"
22"	20.51"	20.86"
23"	20.51"	20.86"
24"	20.51"	20.86"
36"	32.51"	32.86"
48"	44.51"	44.86"
60"	56.51"	56.86"
72"	68.51"	68.86"
84"	80.51"	80.86"
96"	92.51"	92.86"

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
	RGBW, RGBW-HE	RGBW, RGBW-HE
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 QZ-DALI-DT8
10%	Non-Dim Power Supply with RGBW App Dongle	

DIMMING PROTOCOL	INDOOR	OUTDOOR
	RGBW, RGBW-HE	RGBW, RGBW-HE
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 QZ-DALI-DT8
SCENE App Dimmed	Non-Dim Power Supply with RGBW App Dongle	

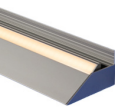## COMPATIBLE MOUNTING ACCESSORIES

HINGE - HMB-M
1.41" .71"
Adjustable mounting bracket - Medium

HINGE - HMB-L
1.46" 1.29"
Adjustable mounting bracket - Large

HINGE - HMB-XL
4" 1.46"
Adjustable mounting bracket - XLarge
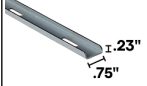
Q-PIVOT
.75" 1.03"
Small mounting accessory
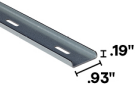
Q-ANGLE
2.23" 1.38"
Adjustable mounting accessory

QUOVA-STANDARD
QUOVA Knife Edge

VHB
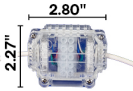Double sided mounting tape

NJ-MEDIUM
J Mounting Bracket

SD-L-MEDIUM
L Mounting Bracket

MMA-01
.23" .75"
Magnet Mount Accessory of MG-01

MMA-04
.19" .93"
Magnet Mount Accessory of MG-04

COMPATIBLE WIRING ACCESSORIES

Q-mini-J5
2.80" 2.27"
UL Listed, miniature junction box, DRY/DMP (WET rated with silicone)

ESSENTIALS LALO-FLAT (01) RGBW
24VDC Linear Fixtures - Surface & Recessed

COMPATIBLE CONTROL ACCESSORIES

SCENE APP DONGLE	iQ-DMX-STICK-GA2	iQ-DMX-STICK-DE3
1.36" 2.58" Wi-Fi or Bluetooth Connectivity	DMX controller for changing color & dimming	DMX controller for changing color & dimming