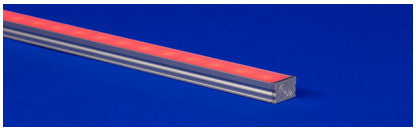
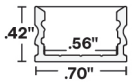
ESSENTIALS LALO-ENCAPSULATED (03) RGBW

24VDC Linear Fixtures - Surface & Recessed





- Shallow, low-profile fixture for surface or recessed installations
- Features high quality LED strips encapsulated in polyurethane in a rigid extrusion providing a robust fixture
- Encapsulation available in clear or translucent
- Suitable for indoor and outdoor locations (IK10)
- Three mounting options
- Features painted end caps to match extrusion finish or clear end caps to achieve seamless appearance of long runs
- Red, Green, and Blue LED paired with a specifiable white LED allow for color changing applications
- 21 diodes per 2" cutpoint allowing for minimal diode visibility
- Optional plastic louver accessory available in white or black for added glare control

INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1 PRODUCT	2 WATTS/ FT	3 CCT	4 RATED	5 EFFICIENCY	6 LENS
LL3RGBW			ENC	STD	

ADDITIONAL INFORMATION REQUIRED TO ORDER

7 WIRE INPUT/ OUTPUT	8 CONNECTOR / WIRE IN	9 CONNECTOR / WIRE OUT	10 INPUT END CAP	11 OUTPUT END CAP	12 WIRE COLOR	13 WIRE TYPE	14 MOUNTING	15 FINISH	16 LENGTH (IN)	17 EXACT/ OPTIMAL

Sample Part Number: **LL3RGBW-4.0HE-30-ENC-STD-TL-P1-BW-BW-STD-STD-BK-CL2-SST-ST-48"-E**

1 PRODUCT

LL3RGBW

See following pages for compatible power supplies.

2 WATTS/FT

6.0	6.0W/ft
4.0HE	4.0W/ft HE

3 CCT

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

4 RATED

ENC IP67

5 EFFICIENCY

STD Standard

6 LENS

CL	Clear
TL	Translucent

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

SINGLE (Input only)

S1	End Feed
S2	Bottom Feed

PASS THROUGH (Input/output)

P1	End Feed
P2	Bottom Feed

For continuous mounting, consider bottom feed

8 CONNECTOR/WIRE IN

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 INPUT END CAP

STD	Standard
CL	Clear

STD - End cap matches fixture finish chosen

Select CL for continuous runs

11 OUTPUT END CAP

STD	Standard
CL	Clear

STD - End cap matches fixture finish chosen

Select CL for continuous runs

12 WIRE COLOR

WH	White
BK	Black

13 WIRE TYPE

CL2	Class 2
CL2P	Plenum Rated

CL2P only available with bare wire leads (BW)

14 MOUNTING

SST	Stainless Steel
M4	Low Profile Magnet
MG	Magnet

15 FINISH

ST	Satin
BK	Black
CU	Custom

Custom finishes require a longer lead time, consult factory

16 LENGTH (IN)

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

17 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.

© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

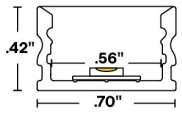
Specification subject to change. Rev-03-24-26

5 year warranty | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance | Compatible for use with QTL power supplies | IK10 rated

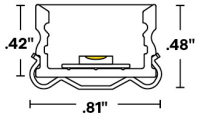
ESSENTIALS LALO-ENCAPSULATED (03) RGBW

24VDC Linear Fixtures - Surface & Recessed

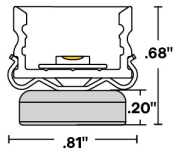
1 PRODUCT - DIMENSIONS



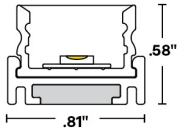
Profile



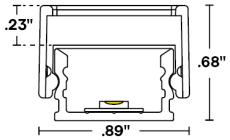
Profile with stainless steel mounting clip



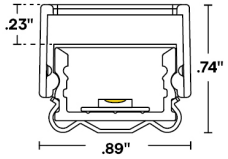
Profile with magnet mounting clip



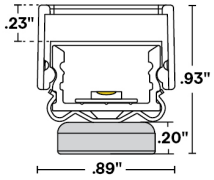
Profile with low profile magnet



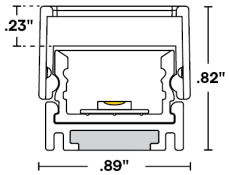
Profile with plastic louver



Profile with stainless steel mounting clip and plastic louver



Profile with magnet mounting clip and plastic louver



Profile with low profile magnet and plastic louver

2 DELIVERED LUMENS

[Calculated L70 = 40000 hrs]
Tested with LL3RGBW-**-30-ENC-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	27	631	73	513	22	464	93	93	24	629	90	516	19	465	55	97
TL	15	631	41	513	12	464	53	93	13	629	51	516	11	465	32	97

6 DIODE VISIBILITY



ENC/CL - Clear encapsulation

ENC/TL - Translucent encapsulation

TEMPERATURE RATINGS

	6.0 W/FT		4.0 HE W/FT	
	Min	Max	Min	Max
Ambient Operating Temp - Surface	-4°F	100°F	-4°F	110°F

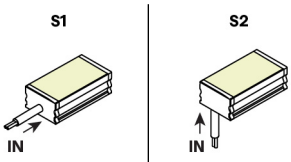
© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTLlighting | www.QTLlighting

ESSENTIALS LALO-ENCAPSULATED (03) RGBW

24VDC Linear Fixtures - Surface & Recessed

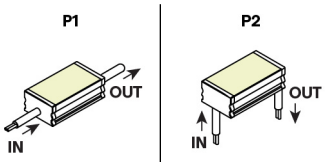
7 WIRE INPUT/OUTPUT

SINGLE (Input only)



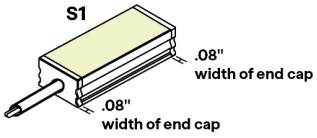
End Feed | Bottom Feed

PASS THROUGH (Input/Output)

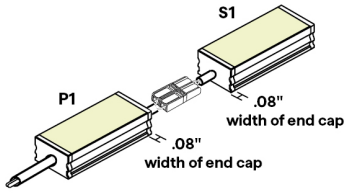


End Feed | Bottom Feed

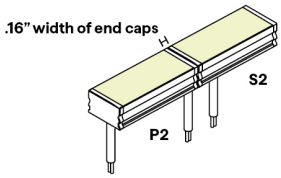
CONFIGURATION OPTIONS



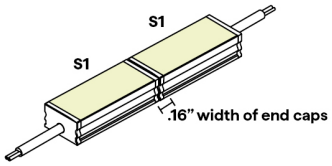
Single End Feed



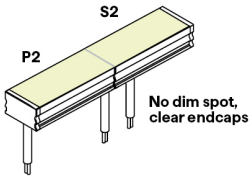
Non-Continuous End Feed



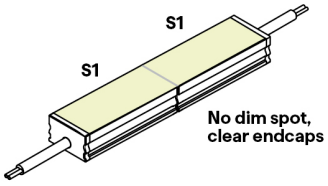
Continuous Bottom Feed



Continuous End to End Feed



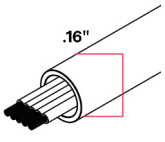
Continuous Bottom Feed



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



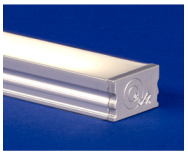
Bare Wire 24"
22 AWG



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

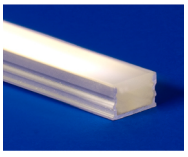
10/11 END CAP – IN/OUT

STD



End cap matches fixture finish chosen

CL



Clear end cap

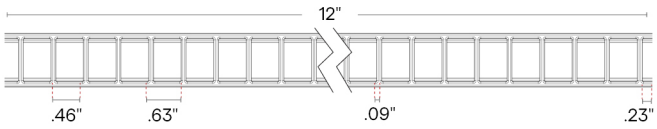
© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

ESSENTIALS LALO-ENCAPSULATED (03) RGBW

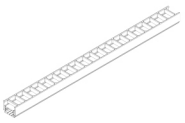
24VDC Linear Fixtures - Surface & Recessed

EXTERNAL LOUVER ACCESSORY

PLASTIC

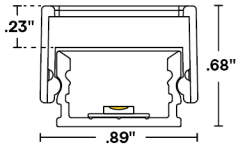


L1-XX



Lumen Multiplier

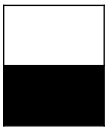
WH	BK
0.71	0.48



Profile with plastic louver

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

12 WIRE COLOR

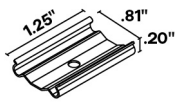


White

Black

14 MOUNTING

SST



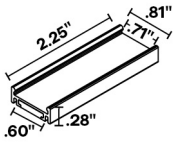
Stainless Steel Clip

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 screw

M4

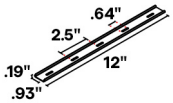


Low Profile Magnet

One M4 provided per foot.

To order separately use MG-04

MMA-04



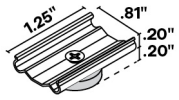
Magnet Mount Accessory for M4

Sold separately, to order use MMA-04

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

Required when mounting to a non-magnetic surface

MG

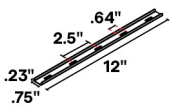


Magnet Clip

One MG provided per foot

To order separately use MG-01

MMA-01



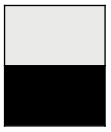
Magnet Mount Accessory of MG-01

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

15 FINISH



Satin

Black

Custom finishes require a longer lead time, consult factory

© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

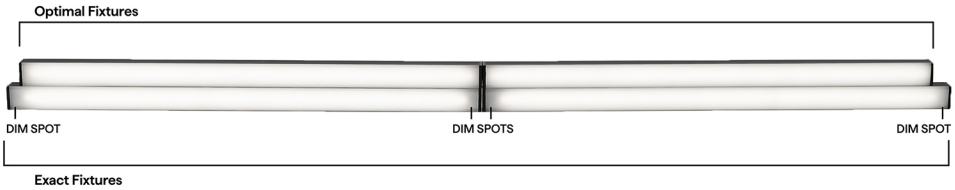
ESSENTIALS LALO-ENCAPSULATED (03) RGBW

24VDC Linear Fixtures - Surface & Recessed

17 EXACT/OPTIMAL FIXTURE LENGTH

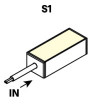
E/O Length Calculator → E/O Explained →

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.

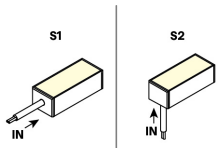
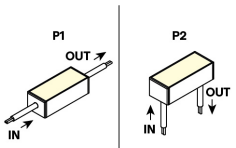


RGB ENC LENGTHS BY INCH

EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 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

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"	

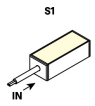
© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTLlighting | www.QTLlighting

ESSENTIALS LALO-ENCAPSULATED (03) RGBW

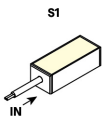
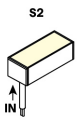
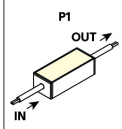
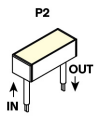
24VDC Linear Fixtures - Surface & Recessed

RGBW ENC LENGTHS BY INCH

EXACT LENGTH

Requested Length	Potential dim spot on either end of a S1 fixture
	 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	
	 End Feed	 Bottom Feed	 End Feed	 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	

© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

ESSENTIALS LALO-ENCAPSULATED (03) RGBW

24VDC Linear Fixtures - Surface & Recessed

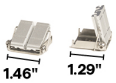
COMPATIBLE MOUNTING ACCESSORIES

HINGE - HMB-M



Adjustable mounting bracket - Medium

HINGE - HMB-L



Adjustable mounting bracket - Large

HINGE - HMB-XL



Adjustable mounting bracket - XLarge

Q-PIVOT



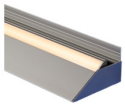
Small mounting accessory

Q-ANGLE



Adjustable mounting accessory

QUOVA-STANDARD



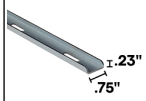
QUOVA Knife Edge

SD-L-MEDIUM



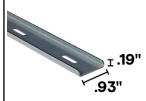
L Mounting Bracket

MMA-01



Magnet Mount Accessory of MG-01

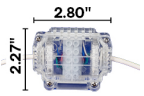
MMA-04



Magnet Mount Accessory of MG-04

COMPATIBLE WIRING ACCESSORIES

Q-mini-J5



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

COMPATIBLE CONTROL ACCESSORIES

SCENE APP DONGLE



Wi-Fi or Bluetooth Connectivity

COMPATIBLE APPS

NFC APP



Read and write DMX addresses and adjust voltage

© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting