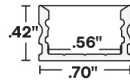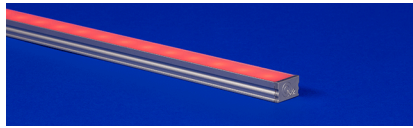# ESSENTIALS LALO-ENCAPSULATED (03) STATIC COLOR

## 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, Blue or Amber LEDs available
- FWC Q-Tran Red & Amber LED products are Florida Fish and Wildlife Conservation Commission certified, making them safe for turtles and other wildlife
- Optional plastic louver accessory available in white or black for added glare control

.42"  .56"  .70"

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCT | WATTS/FT | CCT | RATED | EFFICIENCY | LENS | WIRE INPUT/OUTPUT | CONNECTOR/WIRE IN | CONNECTOR/WIRE OUT | INPUT END CAP | OUTPUT END CAP | WIRE COLOR | WIRE TYPE | MOUNTING | FINISH | LENGTH (IN) | EXACT/OPTIMAL |
| LL3SC | 5.0 | | ENC | STD | | | | | | | | | | | | |

Sample Part Number: **LL3SC-5.0-G-ENC-STD-TL-P1-BW-BW-STD-STD-BK-CL2-SST-ST-48"-E**

### 1 PRODUCT
**LL3SC**

See following pages for compatible power supplies.

### 2 WATTS/FT
**5.0**   5.0W/ft

### 3 CCT
**A**   Amber
**B**   Blue
**G**   Green
**R**   Red

### 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
**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")
**BRL**   Barrel
**CON6**   Connector 6"
**CON24**   Connector 24"

**BW**   Bare Wire (Standard 24")
**BRL**   Barrel
**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")
**BRL**   Barrel
**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
**N/A**   For Barrel

### 13 WIRE TYPE
**CL2**   Class 2
**CL2P**   Plenum Rated
**N/A**   For Barrel

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.

## 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 LL3SC-5.0-**-ENC-STD

|  | Red | | Green | | Blue | | Amber | |
|---|---|---|---|---|---|---|---|---|
|  | LM/FT | WAVELENGTH | LM/FT | WAVELENGTH | LM/FT | WAVELENGTH | LM/FT | WAVELENGTH |
| CL | 61 | 633 | 332 | 517 | 86 | 466 | 55 | 597 |
| TL | 35 | 633 | 189 | 517 | 49 | 466 | 32 | 597 |

## 6 DIODE VISIBILITY

ENC/CL - Clear encapsulation

ENC/TL - Translucent encapsulation
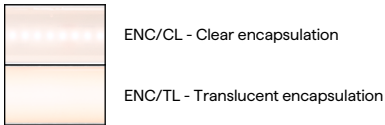
## TEMPERATURE RATINGS

|  | 5.0 W/FT | |
|---|---|---|
|  | Min | Max |
| Ambient Operating Temp - Surface | -4°F | 110°F |

## 7 WIRE INPUT/OUTPUT

SINGLE (Input only)

**S1**

**S2**

IN

IN

End Feed

Bottom Feed
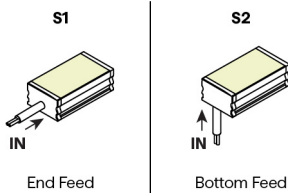
PASS THROUGH (Input/Output)

**P1**

**P2**

OUT

OUT

IN

IN

End Feed

Bottom Feed

## CONFIGURATION OPTIONS

**S1**

.08" width of end cap

.08" width of end cap

Single End Feed

**S1**

**P1**

.08" width of end cap

.08" width of end cap

Non-Continuous End Feed

.16" width of end caps

**S1**

**S2**

**P2**

Continuous Bottom Feed

**S1**

**S1**

.16" width of end caps

Continuous End to End Feed

**S2**

**P2**

No dim spot, clear endcaps

Continuous Bottom Feed

**S1**

**S1**

No dim spot, clear endcaps

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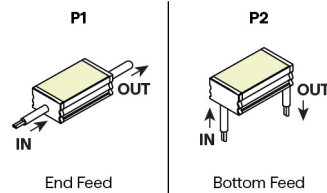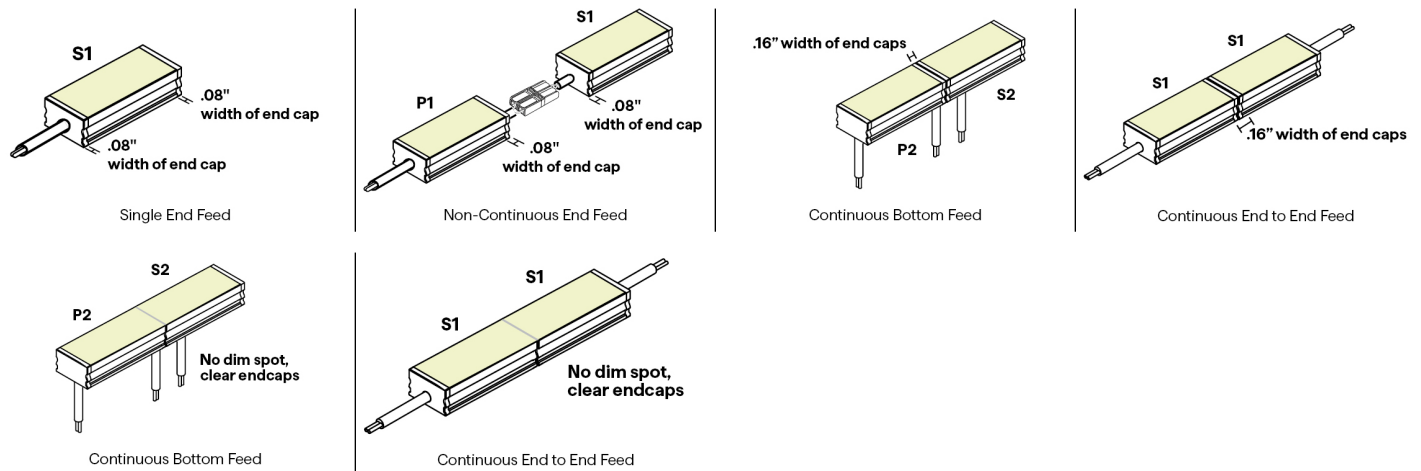
## 8 / 9 CONNECTOR/WIRE – IN/OUT

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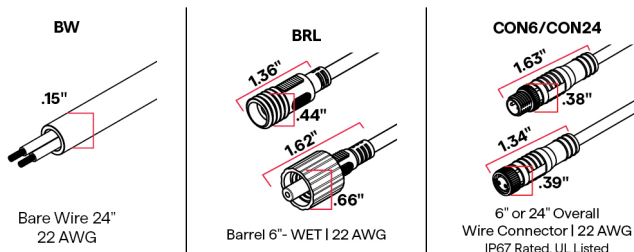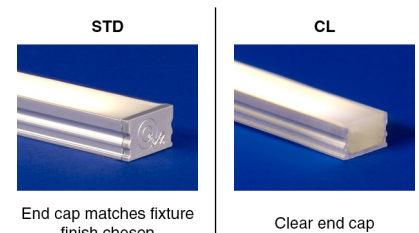
**BW**

.15"

Bare Wire 24"
22 AWG

**BRL**

1.36"

.44"

1.62"

.66"

Barrel 6"- WET | 22 AWG

**CON6/CON24**

1.63"

.38"

1.34"

.39"

6" or 24" Overall
Wire Connector | 22 AWG
IP67 Rated, UL Listed

## 10 / 11 END CAP – IN/OUT

**STD**

End cap matches fixture finish chosen

**CL**

Clear end cap

## EXTERNAL LOUVER ACCESSORY

**PLASTIC**



12"
.46"  .63"  .09"  .23"

**L1-XX**



.23"
.68"
.89"
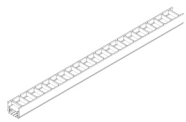
Lumen Multiplier

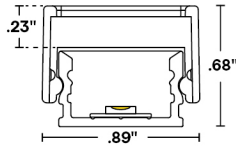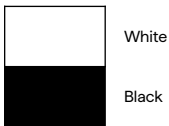| WH | BK |
|----|----|
| 0.71 | 0.48 |

Profile with plastic louver

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

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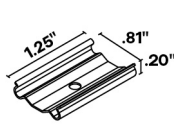
**12** WIRE COLOR
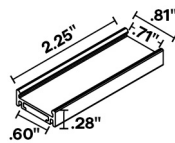
White

Black

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**14** 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
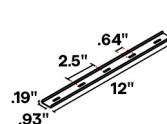
Each clip comes with a #4 x 5/8" Flat Head screw

**M4**



2.25"  .81"  .7"  .28"  .60"

Low Profile Magnet

One M4 provided per foot.

To order separately use MG-04
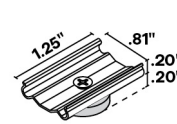
**MMA-04**



.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

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**15** FINISH

Satin

Black

Custom finishes require a longer lead time, consult factory

## 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.

Optimal Fixtures



DIM SPOT          DIM SPOTS          DIM SPOT

Exact Fixtures

## SC ENC 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" | 10.41" | | 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" | |

## 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<br>QTM-DC+CAP<br>iQ-PH+QD1 | QOM-DC+CAP<br>QOM-PH |
| 0.1% | QT-CAB-QZ-PH/0-10V<br>QT-CAB-eLED+0-10V<br>QT-CAB-eLED+0-10V-AWN<br>QT-CAB-eLED+DALI-DT6<br>QT-CAB-eLED+DALI-DT6-AWN<br>QTM-eLED+0-10V<br>QTM-eLED+0-10V-AWN<br>QTM-eLED+DALI-DT6<br>QTM-eLED+DALI-DT6-AWN<br>QZ-BOWTIE+DIMMER<br>QZ-DMX<br>QZ-PH/0-10V<br>QZ-STICK-PH/0-10V<br>QZLP | Q-SET-QZ-DMX<br>Q-SET-QZ-PH/0-10V<br>Q-SET-eLED+0-10V<br>QOM-eLED+0-10V<br>QOM-eLED+DALI-DT6<br>QOM-eLED+PS-DALI-DT6<br>QZ-DMX<br>QZ-PH/0-10V |
| 1% | QTM-eLED(E)<br>QZ-DALI-DT6 | Q-SET+QZ-DALI-DT6<br>QZ-DALI-DT6 |
| 10% | Non-Dim Power Supply with SW App Dongle | |

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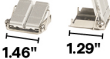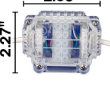
## COMPATIBLE MOUNTING ACCESSORIES

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

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

**HINGE - HMB-XL**
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

**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-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

## COMPATIBLE APPS

**NFC APP**



Q-NFC

Read and write
DMX addresses and
adjust voltage