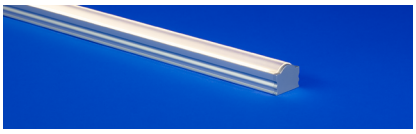
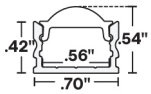
ESSENTIALS LALO-OPTICS (02) SW-IA

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
- Utilize DMX and SPI protocols to control nominal 1" segments of specifiable white LEDs
- 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
LL2IA	5.0		DRY	STD	17DEG									

Sample Part Number: **LL2IA-5.0-30-DRY-STD-17-P1-BW-BW-BK-CL2-SST-BK-48"-E**

1 PRODUCT

LL2IA

See following pages for compatible power supplies.

2 WATTS/FT

5.0 5.0W/ft

3 CCT

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

4 RATED

DRY IP20

5 EFFICIENCY

STD Standard

6 LENS

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

7 WIRE INPUT/OUTPUT

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

For continuous mounting, consider 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: 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)

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

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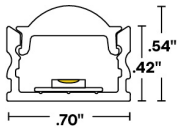
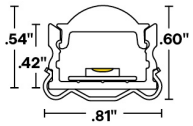
ESSENTIALS LALO-OPTICS (02) SW-IA

24VDC Linear Fixtures - Surface & Recessed

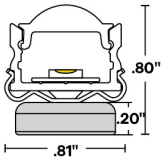
1 PRODUCT - DIMENSIONS



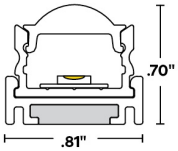
Profile with optical lens



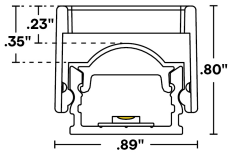
Profile with optical lens and stainless steel mounting clip



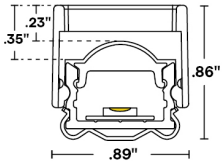
Profile with optical lens magnet mounting clip



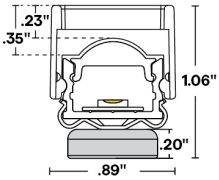
Profile with optical lens and low profile magnet



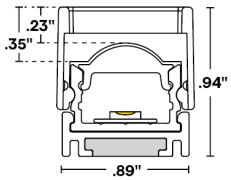
Profile with optical lens and plastic louver



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

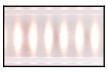


Profile with optical lens, magnet mounting clip, and plastic louver



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

6 DIODE VISIBILITY

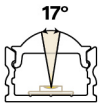


Optical lens

PHOTOMETRIC PERFORMANCE

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

17DEG

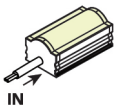


Optical 17°

7 WIRE INPUT/OUTPUT

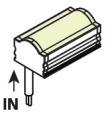
SINGLE (Input only)

S1



End Feed

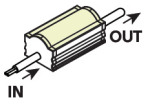
S2



Bottom Feed

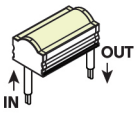
PASS THROUGH (Input/Output)

P1



End Feed

P2



Bottom Feed

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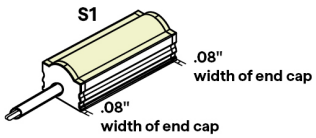
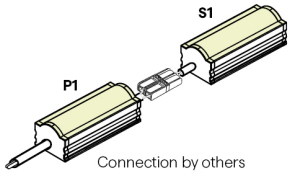
ESSENTIALS LALO-OPTICS (02) SW-IA

24VDC Linear Fixtures - Surface & Recessed

CONFIGURATION OPTIONS

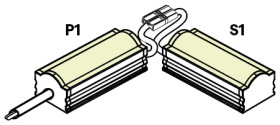


Single End Feed



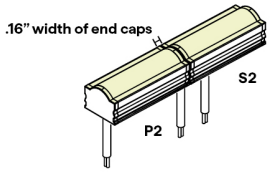
Connection by others

Non-Continuous End Feed

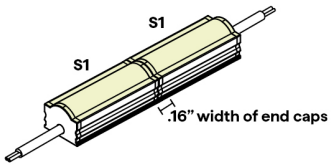


Connection by others

Non-Continuous Corner Feed



Continuous Bottom Feed

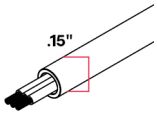


Continuous End to End Feed

8/9 CONNECTOR/WIRE – IN/OUT

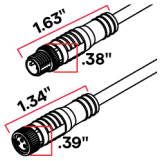
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out

BW



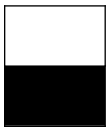
Bare Wire 24"
22 AWG

CON6/CON24



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

10 WIRE COLOR

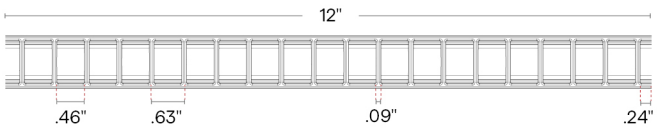


White

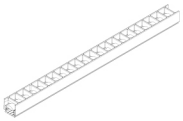
Black

EXTERNAL LOUVER ACCESSORY

PLASTIC

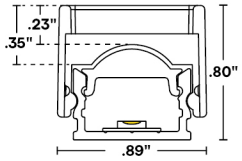


L1-XX



Lumen Multiplier

WH	BK
0.73	0.53



Profile with plastic louver

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

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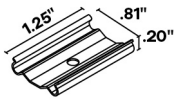
ESSENTIALS LALO-OPTICS (02) SW-IA

24VDC Linear Fixtures - Surface & Recessed

12 MOUNTING

SST



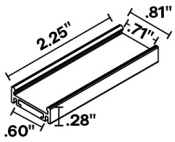
Stainless Steel Clip

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

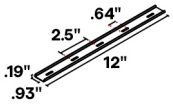


Low Profile Magnet

One M4 provided per foot.

To order separately use MG-04

MMA-04



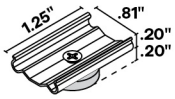
Magnet Mount Accessory for M4

Sold separately, to order use MMA-04

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

Required when mounting to a non-magnetic surface

MG

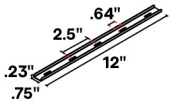


Magnet Clip

One MG provided per foot

To order separately use MG-01

MMA-01



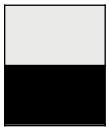
Magnet Mount Accessory of MG-01

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

13 FINISH



Satin

Black

Custom finishes require a longer lead time, consult factory

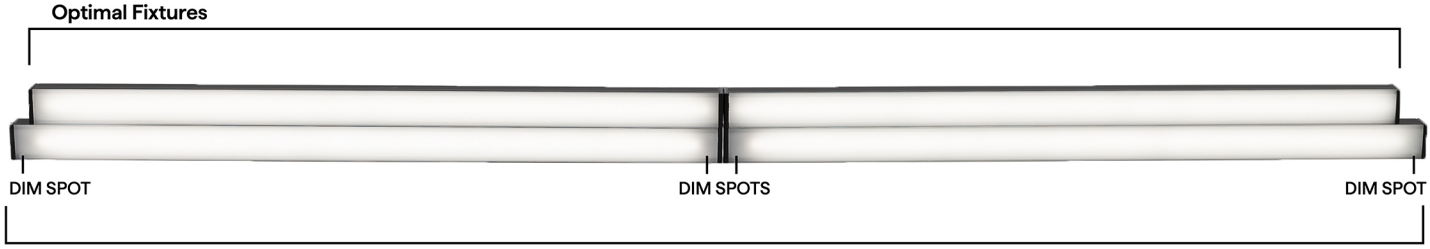
15 EXACT/OPTIMAL FIXTURE LENGTH

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

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ESSENTIALS LALO-OPTICS (02) SW-IA

24VDC Linear Fixtures - Surface & Recessed

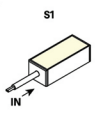
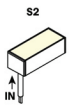
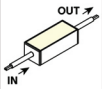
SW-IA DRY LENGTHS BY INCH

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"	.975"
13"	1.475"
14"	.3"-1.975"
15"	.8"
16"	1.3"
17"	1.8"
18"	.625"
19"	1.125"
20"	1.625"
21"	.45"
22"	.95"
23"	1.45"
24"	1.95"
36"	1.25"
48"	0.55"
60"	1.525"
72"	0.825"
84"	1.8"
96"	1.1"

OPTIMAL LENGTH: highlighted rows are closest to requested nominal length

Requested Nominal Length	S1 & S2		P1 & P2	
	 End Feed	 Bottom Feed	 End Feed	Bottom Feed
12"	10.46"		10.71"	
13"	10.46"		10.71"	
14"	13.81"		10.71"	
15"	13.81"		14.06"	
16"	13.81"		14.06"	
17"	13.81"		14.06"	
18"	17.16"		17.41"	
19"	17.16"		17.41"	
20"	17.16"		17.41"	
21"	20.51"		20.76"	
22"	20.51"		20.76"	
23"	20.51"		20.76"	
24"	23.86"		20.76"	
36"	33.91"		34.16"	
48"	47.31"		47.56"	
60"	57.36"		57.61"	
72"	70.76"		71.01"	
84"	80.81"		81.06"	
96"	94.21"		94.46"	

COMPATIBLE POWER SUPPLIES

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

DIM TO LEVEL	INDOOR
	SW-IA
1%	QT-CAB-eLED+IA QTM-eLED+IA

DIMMING PROTOCOL	INDOOR
	SW-IA
DMX	QT-CAB-eLED+IA QTM-eLED+IA

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ESSENTIALS LALO-OPTICS (02) SW-IA

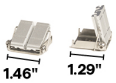
24VDC Linear Fixtures - Surface & Recessed

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

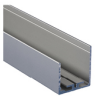
VHB

Double sided mounting tape

NU-GRAZER

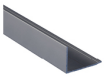
U Mounting Bracket

NJ-GRAZER



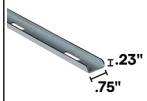
J Mounting Bracket

BL-GRAZER



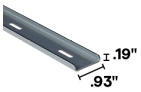
Backwards L Mounting Bracket

MMA-01



Magnet Mount Accessory of MG-01

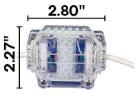
MMA-04



Magnet Mount Accessory of MG-04

COMPATIBLE WIRING ACCESSORIES

Q-mini-J5



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

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