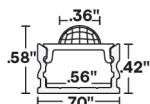
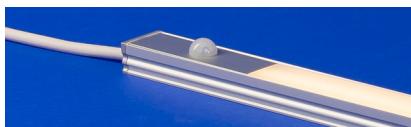




# ESSENTIALS LALO-FLAT- OCCUPANCY (01) SW

24VDC Linear Fixtures - Surface & Recessed



Declare.

- 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
- Flanged design merges light source with surface
- Built-in occupancy sensor
- Detects movement up to 10' away and switches off after no movement is detected for 30 seconds
- Mounting options include stainless steel clips, magnets, and low-profile magnet mounts
- Stainless steel mounting clips
- Features painted end caps to match extrusion finish
- Suitable for installation in the storage area of a clothes closet when specified with LEDs at 4.0 watts or less per foot per NEC regulations

## INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1	2	3	4	5	6
PRODUCT	WATTS/ FT	CCT	RATED	EFFICIENCY	LENS
LL1SW-OC	DRY	STD			

## 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: LL1SW-OC-5.0-30-DRY-STD-DF-P1-BW-BK-CL2-SST-BK-48"-E

<b>1</b> <b>PRODUCT</b>  LL1SW-OC LL1SW-OC-USA  Select USA option for BAA and BABA projects.  See following pages for compatible power supplies.	<b>2</b> <b>WATTS/FT</b>  1.5 1.5W/ft 3.0 3.0W/ft 4.0 4.0W/ft 5.0 5.0W/ft 1.5HE 1.5W/ft HE 3.0HE 3.0W/ft HE 6.0HE 6.0W/ft HE  3.0HE+ 3.0W/ft HE+ 6.0HE+ 6.0W/ft HE+	<b>3</b> <b>CCT</b>  20 2000K 22 2200K 24 2400K 27 2700K 30 3000K 35 3500K 40 4000K  27 2700K 30 3000K 35 3500K 40 4000K	<b>4</b> <b>RATED</b>  DRY IP20	<b>5</b> <b>EFFICIENCY</b>  STD Standard	<b>6</b> <b>LENS</b>  DF Diffused PR Polar FR Frosted CL Clear  For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance 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") 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)	<b>9</b> <b>CONNECTOR/WIRE OUT</b>  CLS Closed End (No feed)	<b>10</b> <b>WIRE COLOR</b>  WH White BK Black N/A For Barrel  wet barrel only available in black		
<b>11</b> <b>WIRE TYPE</b>  CL2 Class 2 CL2P Plenum Rated N/A For Barrel  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  Custom finishes require a longer lead time, consult factory	<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.	

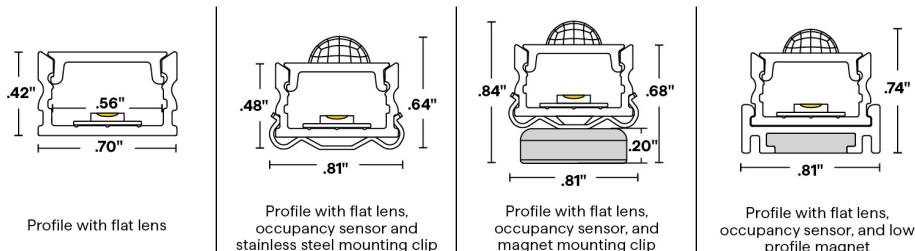
Motion: Auto on | No Motion: 30 second time out | Occupancy Sensor not programmable | Do not install with dimmer | 5 year warranty | Warranty only valid with QTL non-dimming power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance



# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

24VDC Linear Fixtures - Surface & Recessed

## 1 PRODUCT - DIMENSIONS



## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs, L70 = 50000 for HE+]

Tested with LL1SW-\*\*-30-DRY-STD

	1.5 W/FT		1.5HE W/FT		3.0 W/FT		3.0HE W/FT		3.0HE+ W/FT		4.0 W/FT		5.0 W/FT		6.0HE W/FT		6.0HE+ W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
CL	143	98	175	98	249	98	321	98	463	92	309	98	376	98	608	98	856	92
FR	142	98	174	98	248	98	320	98	461	92	308	98	375	98	606	98	853	92
PR	134	98	157	98	234	98	288	98	416	92	291	98	354	98	546	98	768	92
DF	120	98	141	98	210	98	259	98	373	92	261	98	318	98	490	98	690	92

## PHOTOMETRIC PERFORMANCE

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

CL



Clear 78°

## TEMPERATURE RATINGS

		1.5 W/FT		1.5 HE W/FT		3.0 W/FT		3.0 HE W/FT		3.0 HE+ W/FT		4.0 W/FT		5.0 W/FT		6.0 HE W/FT		6.0 HE+ W/FT	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	130°F	-4	135	-4°F	120°F	-4	125	-13	125	-4°F	115°F	-4°F	110°F	-4	110	-13	110

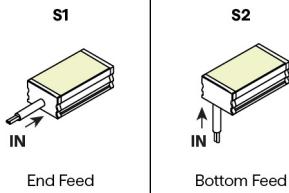


# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

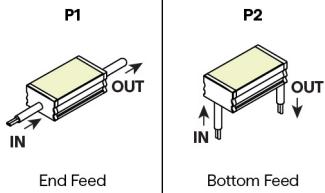
24VDC Linear Fixtures - Surface & Recessed

## 7 WIRE INPUT/OUTPUT

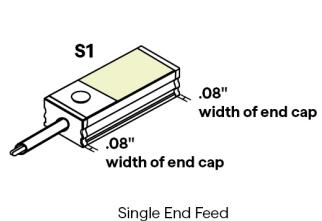
SINGLE (Input only)



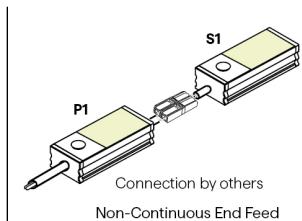
PASS THROUGH (Input/Output)



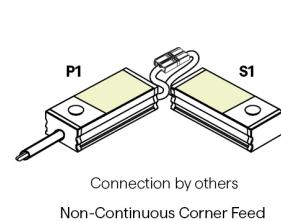
## CONFIGURATION OPTIONS



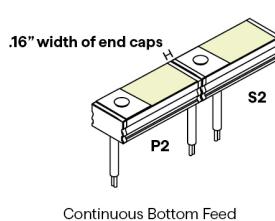
Single End Feed



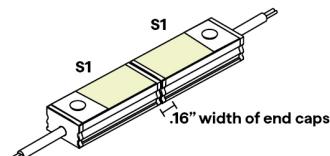
Connection by others  
Non-Continuous End Feed



Connection by others  
Non-Continuous Corner Feed



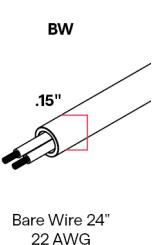
Continuous Bottom Feed



Continuous End to End Feed

## 8 / 9 CONNECTOR/WIRE – IN/OUT

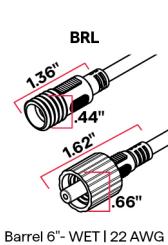
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



Bare Wire 24"  
22 AWG



Barrel 6" - DRY/DMP |  
22 AWG



Barrel 6" - WET | 22 AWG



CON6/CON24  
6" or 24" Overall  
Wire Connector | 22 AWG  
IP67 Rated, UL Listed

## 10 WIRE COLOR



White

Black



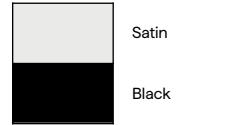
# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

24VDC Linear Fixtures - Surface & Recessed

## 12 MOUNTING

SST	M4	MMA-04	MG
Satin Steel Clip	Low Profile Magnet	Magnet Mount Accessory for M4	Magnet 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	One M4 provided per foot. To order separately use MG-04	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	One MG provided per foot To order separately use MG-01

## 13 FINISH



Custom finishes require a longer lead time, consult factory

Custom finishes require a longer lead time, consult factory

### MMA-01

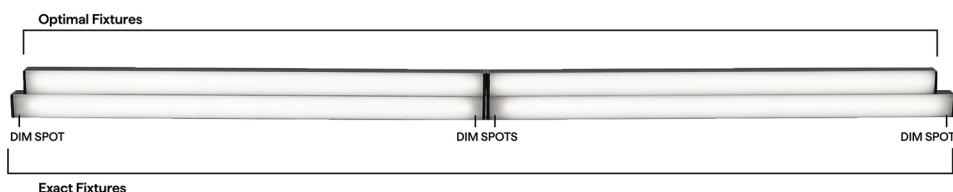
Magnet Mount Accessory of MG-01
Sold separately, to order use MMA-01
Each bracket comes with 2 #6 x 5/8" Flat Head SS
Required when mounting to a non-magnetic surface

## 15 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.





# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

24VDC Linear Fixtures - Surface & Recessed

## SW 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"	.5"
13"	.5"
14"	.5"
15"	.5"
16"	.5"
17"	.5"
18"	.5"
19"	.5"
20"	.5"
21"	.5"
22"	.5"
23"	.5"
24"	.5"
36"	.5"
48"	.5"
60"	.5"
72"	.5"
84"	.5"
96"	.5"

### OPTIMAL LENGTH

Requested Nominal Length	S1 & S2		P1 & P2	
	S1 End Feed	S2 Bottom Feed	P1 End Feed	P2 Bottom Feed
12"	11.41"		11.66"	
13"	12.41"		12.66"	
14"	13.41"		13.66"	
15"	14.41"		14.66"	
16"	15.41"		15.66"	
17"	16.41"		16.66"	
18"	17.41"		17.66"	
19"	18.41"		18.66"	
20"	19.41"		19.66"	
21"	20.41"		20.66"	
22"	21.41"		21.66"	
23"	22.41"		22.66"	
24"	23.41"		23.66"	
36"	35.41"		35.66"	
48"	47.41"		47.66"	
60"	59.41"		59.66"	
72"	71.41"		71.66"	
84"	83.41"		83.66"	
96"	95.41"		95.66"	

## SW-HE, SW-HE+ 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"	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"	10.41"		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"	



# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

24VDC Linear Fixtures - Surface & Recessed

## COMPATIBLE POWER SUPPLIES

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

DIMMING PROTOCOL	INDOOR	
	SW24/1.5-4.0	SW24/5.0, SW-HE, SW-HE+
Non-Dim	QTM-eLED-ND QZ-ND	QTM-eLED-ND QZ-ND

## COMPATIBLE MOUNTING ACCESSORIES

 1.41" x .71" x .15" Adjustable mounting bracket - Medium	 1.46" x 1.29" x .15" Adjustable mounting bracket - Large	 1.46" x 4" x .15" Adjustable mounting bracket - XLarge	 .75" x 1.03" x .15" Small mounting accessory	 1.38" x 2.23" x .15" Adjustable mounting accessory	 QUOVA Knife Edge	 J Mounting Bracket	 L Mounting Bracket	 .23" x .75" x .15" Magnet Mount Accessory of MG-01	 .19" x .93" x .15" Magnet Mount Accessory of MG-04
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