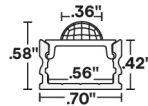
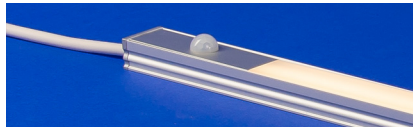




# ESSENTIALS LALO-FLAT- OCCUPANCY (01) SW

## 24VDC Linear Fixtures - Surface & Recessed



- 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



410.2 & 410.16  
Closet Rated  
up to 4.0W/ft



SW/SW-HE  
ONLY



SW, SW-HE  
ONLY



### INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1	2	3	4	5	6
PRODUCT	WATTS/ FT	CCT	RATED	EFFICIENCY	LENS
			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-BW-BK-CL2-SST-BK-48"-E**

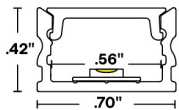
<div>1</div> <div>PRODUCT</div> <div>LL1SW-OC LL1SW-OC-USA</div> <div>Select USA option for BAA and BABA projects.</div> <div>See following pages for compatible power supplies.</div>	<div>2</div> <div>WATTS/FT</div> <div>1.5 1.5W/ft 3.0 3.0W/ft 4.0 4.0W/ft 5.0 5.0W/ft 1.5HE 1.5W/ft HE 3.0HE 3.0W/ft HE 6.0HE 6.0W/ft HE</div> <div>3.0HE+ 3.0W/ft HE+ 6.0HE+ 6.0W/ft HE+</div>	<div>3</div> <div>CCT</div> <div>20 2000K 22 2200K 24 2400K 27 2700K 30 3000K 35 3500K 40 4000K</div> <div>27 2700K 30 3000K 35 3500K 40 4000K</div>	<div>4</div> <div>RATED</div> <div>DRY IP20</div>	<div>5</div> <div>EFFICIENCY</div> <div>STD Standard</div>	<div>6</div> <div>LENS</div> <div>DF Diffused PR Polar FR Frosted CL Clear</div> <div>For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages</div>
<div>7</div> <div>WIRE INPUT/OUTPUT</div> <div>SINGLE (Input only) S1 End Feed S2 Bottom Feed</div> <div>PASS THROUGH (Input/output) P1 End Feed P2 Bottom Feed</div>	<div>8</div> <div>CONNECTOR/WIRE IN</div> <div>BW Bare Wire (Standard 24") BRL Barrel CON6 Connector 6" CON24 Connector 24"</div> <div>BW Bare Wire (Standard 24") BRL Barrel CON6 Connector 6" CON24 Connector 24"</div>	<div>9</div> <div>CONNECTOR/WIRE OUT</div> <div>CLS Closed End (No feed)</div> <div>BW Bare Wire (Standard 24") BRL Barrel CON6 Connector 6" CON24 Connector 24"</div>	<div>10</div> <div>WIRE COLOR</div> <div>WH White BK Black N/A For Barrel</div> <div>wet barrel only available in black</div>		
For continuous mounting, consider bottom feed.		BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)		BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	
<div>11</div> <div>WIRE TYPE</div> <div>CL2 Class 2 CL2P Plenum Rated N/A For Barrel</div> <div>CL2P only available with bare wire leads (BW)</div>	<div>12</div> <div>MOUNTING</div> <div>SST Stainless Steel M4 Low Profile Magnet MG Magnet</div>	<div>13</div> <div>FINISH</div> <div>ST Satin BK Black CU Custom</div> <div>Custom finishes require a longer lead time, consult factory</div>	<div>14</div> <div>LENGTH (IN)</div> <div>Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".</div>	<div>15</div> <div>EXACT/OPTIMAL</div> <div>O Optimal Illumination E Exact Specified Length</div> <div>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.</div>	



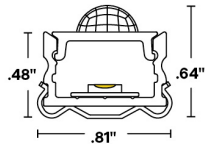
# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

24VDC Linear Fixtures - Surface & Recessed

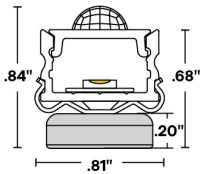
## 1 PRODUCT - DIMENSIONS



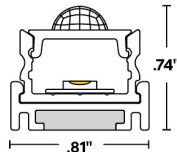
Profile with flat lens



Profile with flat lens, occupancy sensor and stainless steel mounting clip



Profile with flat lens, occupancy sensor, and magnet mounting clip



Profile with flat lens, occupancy sensor, and low profile magnet

## 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

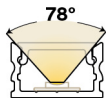
## 6 DIODE VISIBILITY

	SW	SW-HE	SW-HE+
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



Clear 78°



# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

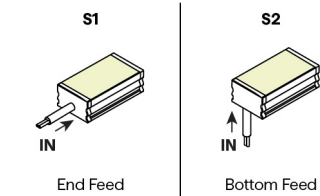
## 24VDC Linear Fixtures - Surface & Recessed

### TEMPERATURE RATINGS

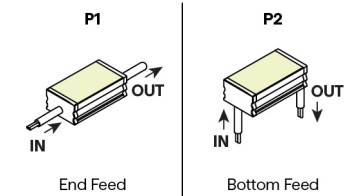
		1.5 W/FT		1.5 HE W/FT		3.0 W/FT		3.0 HE W/FT		3.0 HE+ W/FT		4.0 W/FT		5.0 W/FT		6.0 HE W/FT		6.0 HE+ W/FT	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	130°F	-4	135	-4°F	120°F	-4	125	-13	125	-4°F	115°F	-4°F	110°F	-4	110	-13	110

### 7 WIRE INPUT/OUTPUT

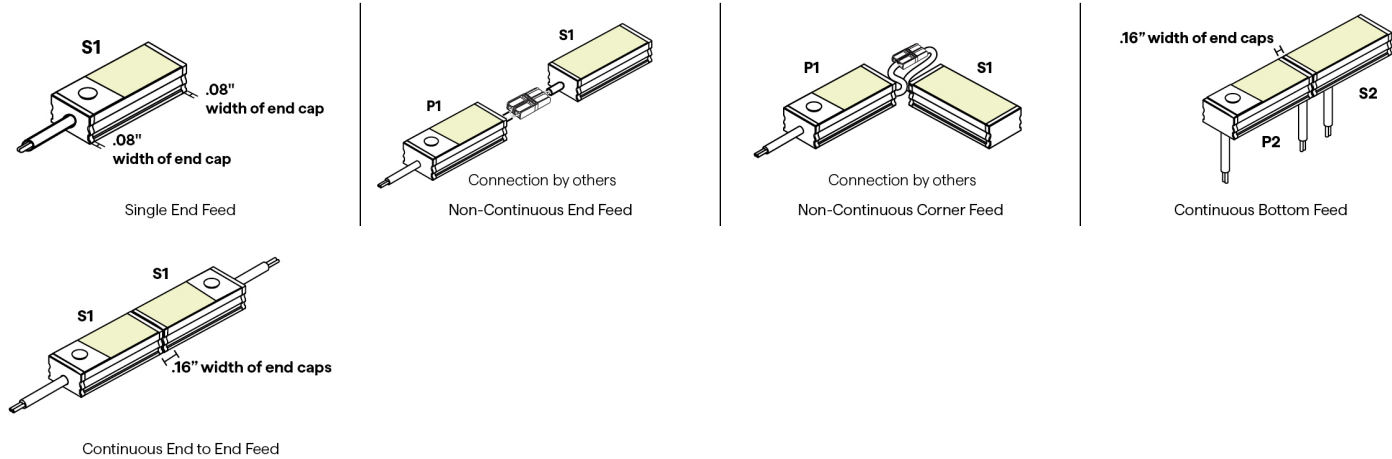
SINGLE (Input only)



PASS THROUGH (Input/Output)

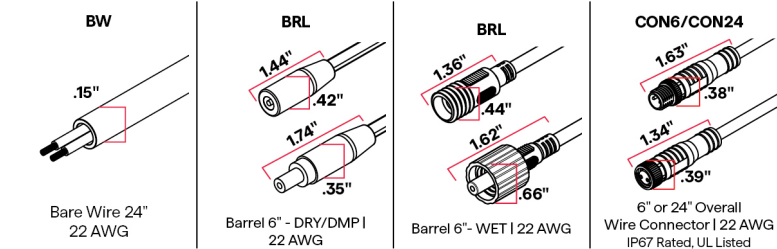


### CONFIGURATION OPTIONS

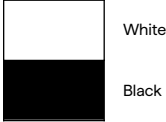


### 8 / 9 CONNECTOR/WIRE - IN/OUT

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



### 10 WIRE COLOR



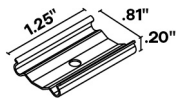


# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

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

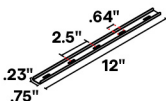


Magnet Clip

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

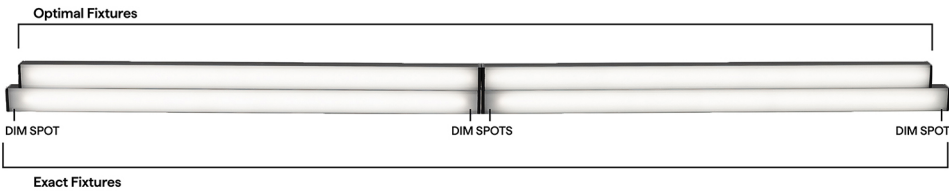
Custom finishes require a longer lead time, consult factory

## 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.





# ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

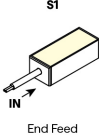
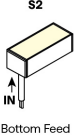
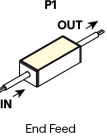
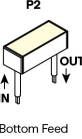
24VDC Linear Fixtures - Surface & Recessed

## SW DRY LENGTHS BY INCH

### EXACT LENGTH

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

### OPTIMAL LENGTH

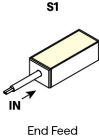
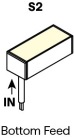
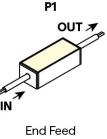
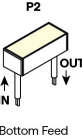
Requested Nominal Length	S1 & S2		P1 & P2	
				
12"	11.41"		11.66"	
13"	12.41"		12.66"	
14"	13.41"		13.66"	
15"	14.41"		14.66"	
16"	15.41"		15.66"	
17"	16.41"		16.66"	
18"	17.41"		17.66"	
19"	18.41"		18.66"	
20"	19.41"		19.66"	
21"	20.41"		20.66"	
22"	21.41"		21.66"	
23"	22.41"		22.66"	
24"	23.41"		23.66"	
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 DRY 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"	10.41"		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

**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**

1.23" .75"

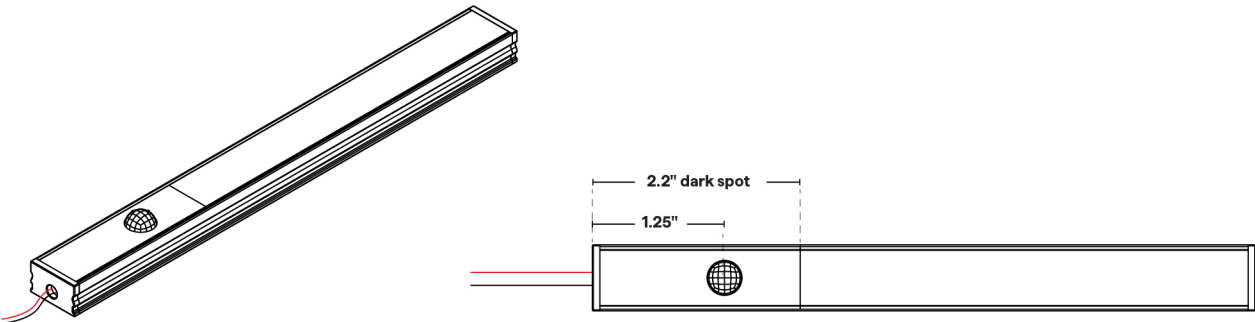
Magnet Mount Accessory of MG-01

**MMA-04**

1.19" .93"

Magnet Mount Accessory of MG-04

## OCCUPANCY SENSOR (OC)



- Motion based on/off functionality
- 30 sec. on/off time without motion
- 24VDC
- 3A max / 72W
- Use with non-dimming driver
- Detection Range: up to 10'

## COVERAGE AREA

