

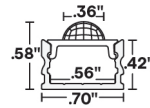
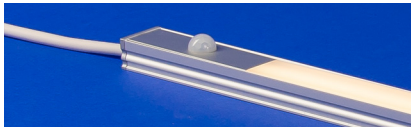


ESSENTIALS LALO-FLAT- OCCUPANCY (01) SW

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 |
| | | | 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>For continuous mounting, consider bottom feed.</div> <div>PASS THROUGH (Input/output) P1 End Feed P2 Bottom Feed</div> <div>For continuous mounting, consider 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: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</div> <div>BW Bare Wire (Standard 24") BRL Barrel CON6 Connector 6" CON24 Connector 24"</div> <div>BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</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>BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)</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> | | |
| <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> | |

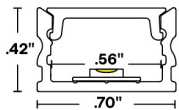
Motion: Auto on | No Motion: 30 second time out | Occupancy Sensor not programmable | Do not install with dimmer | 5 year warranty | Warranty only valid with QTL non-dimming power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance



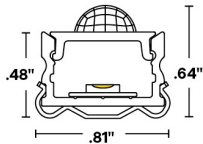
ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

24VDC Linear Fixtures - Surface & Recessed

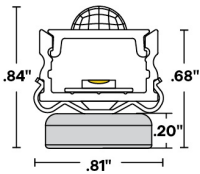
1 PRODUCT - DIMENSIONS



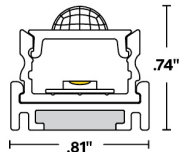
Profile with flat lens



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

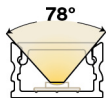
[Calculated L70 = 70000 hrs, L70 = 50000 for HE+]
Tested with LL1SW-**-30-DRY-STD

| | 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 |

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 |

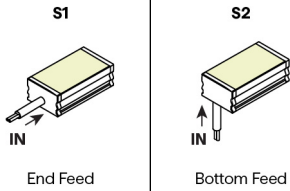


ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

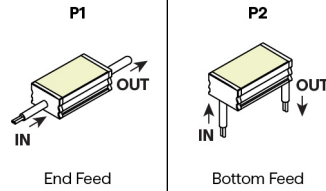
24VDC Linear Fixtures - Surface & Recessed

7 WIRE INPUT/OUTPUT

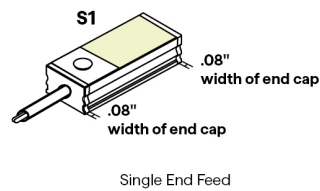
SINGLE (Input only)



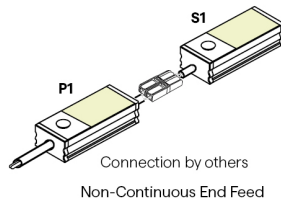
PASS THROUGH (Input/Output)



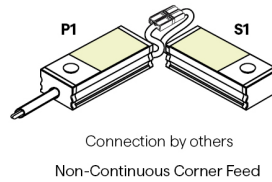
CONFIGURATION OPTIONS



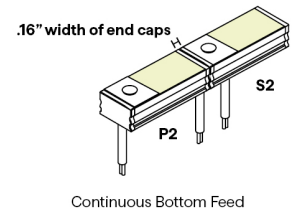
Single End Feed



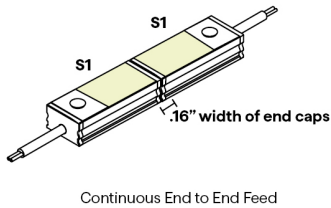
Non-Continuous End Feed



Non-Continuous Corner Feed



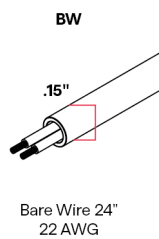
Continuous Bottom Feed



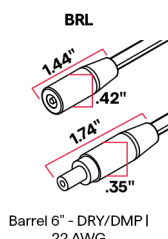
Continuous End to End Feed

8 / 9 CONNECTOR/WIRE - IN/OUT

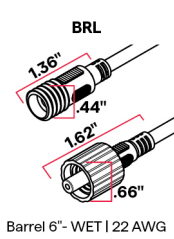
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



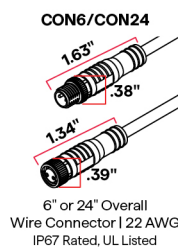
Bare Wire 24"
22 AWG



Barrel 6" - DRY/DMP |
22 AWG

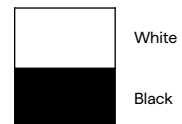


Barrel 6" - WET | 22 AWG



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

10 WIRE COLOR



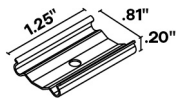


ESSENTIALS LALO-FLAT-OCCUPANCY (01) SW

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

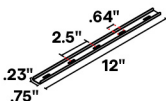


Magnet Clip

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

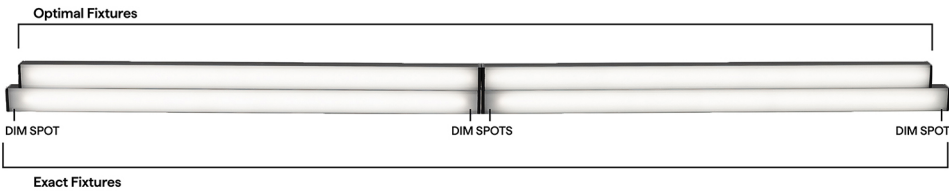
Custom finishes require a longer lead time, consult factory

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

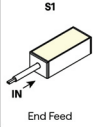
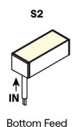
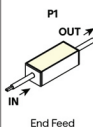
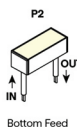
SW DRY, DMP LENGTHS BY INCH

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 | |
|--------------------------|---|---|---|---|
| |  |  |  |  |
| 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" | |

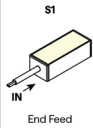
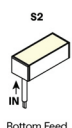
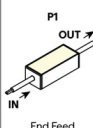
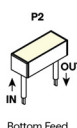
SW-HE, SW-HE+ DRY LENGTHS BY INCH

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 | |
|--------------------------|---|---|---|---|
| |  |  |  |  |
| 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


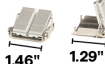



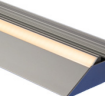


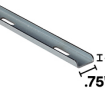

24VDC Linear Fixtures - Surface & Recessed

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 | HINGE - HMB-L | HINGE - HMB-XL | Q-PIVOT | Q-ANGLE | QUOVA-STANDARD | NJ-MEDIUM | SD-L-MEDIUM | MMA-01 | MMA-04 |
|--|---|--|--|---|---|--|---|--|--|
|  1.41" .71" |  1.46" 1.29" |  4" 1.46" |  .75" 1.03" |  2.23" 1.38" |  |  |  |  1.23" .75" |  1.19" .93" |
| Adjustable mounting bracket - Medium | Adjustable mounting bracket - Large | Adjustable mounting bracket - XLarge | Small mounting accessory | Adjustable mounting accessory | QUOVA Knife Edge | J Mounting Bracket | L Mounting Bracket | Magnet Mount Accessory of MG-01 | Magnet Mount Accessory of MG-04 |