

Project		Catalog #		Type	
Prepared by		Notes		Date	



## Metalux

### 4WSL / 8WSL

4 ft. and 8 ft. Linear Wavestream LED  
Commercial Grade Linear

#### Typical Applications

Office • Education • Hospitality • Reception • Retail • Hallways

#### Interactive Menu

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#### Top Product Features

- 4 ft. and 8 ft. configuration
- Robust aluminum and steel housing measuring less than 3.2" in depth
- Wavestream technology with Accu-Aim optics
- High efficiencies ranging up to 124 IPW
- UNV, 0 to 10V dimmable driver (standard), with option step-dim & DALI

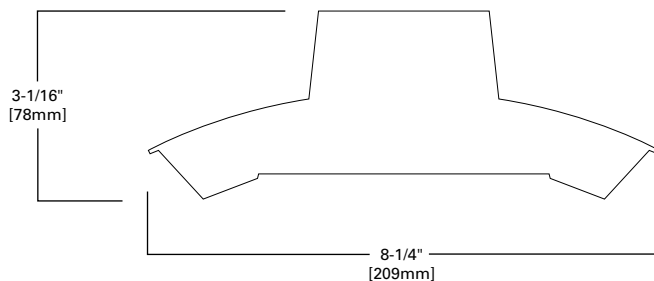
#### Product Certification



#### Product Features



#### Dimensional Details



[additional product diagrams](#)

## Order Information

SAMPLE ORDER NUMBER: **4WSL-LD2-80-SRC-UNV-L840-CD1-U**

Series	Revision	Lumen Output	Application	Uplight	Voltage	Emergency Options
Series <sup>(1)</sup>	Revision	Lumen Output	Application	Uplight	Voltage	Emergency Options
<b>4WSL</b> =4 ft. <b>8WSL</b> =8 ft.	<b>LD2</b> =LED 2.0	<b>4 ft.</b> 30=3000 35=3500 40=4000 45=4500 50=5000 55=5500 60=6000 65=6500 70=7000 75=7500 80=8000 <b>8 ft.</b> 60=6000 65=6500 70=7000 75=7500 80=8000 100=10000 110=11000 120=12000 130=13000 140=14000 150=15000 160=16000	<b>SRS</b> =Surface – Standalone <b>SRC</b> =Surface – Continuous Row <sup>(2)</sup> <b>SPS</b> =Suspended – Standalone <b>SPC</b> =Suspended – Continuous Row <sup>(2)</sup>	<b>[Blank]</b> =Downlight Only <b>UPL8</b> =8% Uplight <b>UPL15</b> =15% Uplight	<b>347</b> =347 Volt <sup>(3)</sup> <b>480</b> =480 Volt <b>UNV</b> =Universal Voltage 120-277 <b>48V</b> =48 Volt Low-voltage (Class 2) <sup>(3)</sup>	<b>EL7W</b> =7-watt, 120V-277V emergency battery pack installed <sup>(4)</sup> <b>EL14W</b> =14-watt, 120V-277V emergency battery pack installed <sup>(4)</sup> <b>ELV7W</b> =Low-voltage system, 7-watt emergency battery pack <sup>(5)</sup> <b>ELV14W</b> =Low-voltage system, 14-watt emergency battery pack <sup>(5)</sup> <b>GTR2</b> =Bodine Generator Transfer Relay <sup>(5)</sup> <b>ETRD</b> =Iota Emergency Transfer Relay with dimming control <sup>(5)</sup>
<b>Notes</b> (1) DesignLights Consortium® Qualified and classified for DLC Standard (all lumen packages), refer to <a href="http://www.designlights.org">www.designlights.org</a> for details.			<b>Notes</b> (2) Continuous row version comes with one end cap and one row trim finishing component.		<b>Notes</b> (3) 347V emergency option not available in 4 ft.  (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility. Available up to 8000 lumens only.	<b>Notes</b> (4) With integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7=700 lumens). IES-format photometry for luminaire under emergency operation available. (5) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR2 option includes 2 relays on fixtures with dimming drivers. ETRD option only requires one relay when used on a dimming fixture. Must specify voltage as 120V or 277V when ordering these devices.  (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility.

Color Temperature	Driver Type	Number of Drivers	Options
Color Temperature	Driver Type	Number of Drivers	Options
<b>L835</b> =80CRI, 3500K <b>L840</b> =80CRI, 4000K <b>L850</b> =80CRI, 5000K	<b>CD</b> =0-10V Dimming Driver (1%-100% Dimming) <b>SR</b> =Sensor-ready Dimming Driver (1%-100% Dimming) <b>SLTD</b> =Fifth Light DALI Driver (10%-100% Dimming) <sup>(5)</sup> <b>SLTHD</b> =Fifth Light Dimming Driver (1%-100% Dimming) <sup>(6),(5)</sup> <b>LV</b> =DLVP Dimming Driver (0%-100% Dimming) <sup>(5)</sup> <b>SD</b> =Step Dimming Driver (50% or 100% Dimming) <sup>(6)</sup> <b>LH</b> =Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming <sup>(7)</sup> <b>LS</b> =Lutron 5 Series (LDE5-Series) 5%-100% EcoSystem Driver <sup>(7)</sup>	<b>1</b> =1 Driver <b>2</b> =2 Drivers <sup>(7)</sup>	<b>XFMR</b> =Step Down Transformer <b>Flex</b> <sup>(8)</sup> Multiple Configurations Available <b>Wiring</b> <b>PI</b> =Plug-in Option <sup>(9)</sup> <b>CPI</b> =Crossover Plug-in Option <sup>(9)</sup>
	<b>Notes</b> (6) Two Drivers required for 5,500 to 10,000 lm and three drivers required for 11,000 to 16,000 lm.  Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (C) Low-voltage System Dimming Driver (0%-100% Dimming). (E) Consult Fifth Light system pages for additional details and compatibility. (F) Consult Marketplace Options - Lutron system pages for additional details and compatibility. Compatible only with driver series shown, and may require two or more drivers. Requires field commissioning to operate or dim. Contact Lutron at <a href="http://www.lutron.com">www.lutron.com</a> .	<b>Notes</b> (7) ISHH-01 and -02 remotes compatible with SVPD2 option only.	<b>Notes</b> (8) Flex does not include dimming leads. Control leads provided by others. For Surface mount versions only, Flex must be ordered as a separate accessory. (9) For more information on PI and CPI options, please refer to WSL FAQ Guide at <a href="http://www.cooperlighting.com">www.cooperlighting.com</a>

Integrated Sensing Systems	Packaging	Accessories
Integrated Sensing Systems	Packaging	Accessories (order separately)
<b>[Blank]</b> =No Sensor <b>WAA</b> =WaveLinx Wireless Integrated Sensor <sup>(10),(A)</sup> <b>WAB</b> =WaveLinx Lite Wireless Integrated Sensor <sup>(11),(B)</sup> <b>WLA</b> =Low-voltage Integrated Sensor <sup>(12),(C)</sup> <b>SVPD2</b> =0-10V Stand-alone Integrated Sensor <sup>(D)</sup>	<b>U</b> =Unit Pack	<b>CLC</b> =WSL-EXT-B=Channel Connector <b>EndFeed</b> =WSL-U=End Feed Conduit Connector <b>GRP-SNF-U</b> =Gripper Hanger <b>ISHH-01</b> =Programming Remote for Integrated Sensor <sup>(10)</sup> <b>ISHH-02</b> =Personal Control Remote for Integrated Sensor <sup>(10)</sup> <b>AYC</b> =Chain/Set=36" Chain Hanger <b>SCF</b> =Fixed Stem Set (Specify Length) <b>SCS</b> =Swivel Stem Set (Specify Length) <b>CCA</b> =Adjustable Cable Kit (Specify Length) <b>CCF</b> =Fixed Length Cable Kit (Specify Length) <b>EYE CHAIN SET/3FT</b> =Eye Bolt Chain (Use 1 set per fixture) <b>A1B/Spacer-U</b> =Spacer 1-1/2" to 2-1/2" from ceiling (Use 2 per fixture) <b>TOGGLE</b> =Single Toggle No. 2 (Specify Length) <b>Y-TOGGLE</b> =Y Toggle No. 2 (Specify Length) <sup>(11)</sup> <b>ATG-4-U</b> =Tong Hanger Kit (one for 4 ft, two for 8 ft)
<b>Notes</b> (10) WAA sensor to be used with CD or W2A driver. (11) WAB sensor to be used with CD driver. (12) WLA sensor to be used with LV driver.  Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (A) Consult WaveLinx system pages for additional details and compatibility. (B) WaveLinx Lite devices are not currently compatible with the WaveLinx Wireless Area Controller. Consult WaveLinx Lite system pages for additional details and compatibility. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility. (D) Consult SVPD series system pages for additional details and compatibility.		<b>Notes</b> (10) ISHH-01 and -02 remotes compatible with SVPD2 option only. (11) Y-Toggle would apply for stand alone and end of continuous row only.

## Product Specifications

### Applications

- Compatible with all types of mounting options whether stand alone or continuous row
- Flexibility provides options in a wide variety of applications

### Construction

- Low profile design - 3" in deep housing
- Housing combines both aluminum extruded frame and steel channel housing
- End plates are securely attached with positive capture details which offer both strength and rigidity while elimination of gaps
- Multiple suspension points are located in the channel which allow for aircraft cable, hanging chain and stem points
- Surface mounting can be achieved through either direct mount via channel or offset by easy-mount tong hanging accessories

### Controls

- 0-10V dimming drivers to 1% standard
- WaveLinX wireless sensor compatible for standalone, controlled, connected, and IoT capability
- SVPD sensor compatible for out-of-the-box functionality
- Low-voltage sensor and driver compatible for WaveLinX Low-Voltage and DLVP applications
- DALI 2.0, Lutron, and step-dimming available

### Electrical

- Long-life LED system with electrical driver for optimal performance
- LED's available in 3500K, 4000K or 5000K with a minimum CRI of 80. Consult factory for 3000K CCT.
- Projected life is 100,000 hours at 71% lumen output
- Electronic drivers available for 120-277V applications

### Emergency Battery Pack Option

- Optional 120V-277V integral emergency battery pack available in 7W
- 90-minute backup period for code compliance
- Test switch with laser pointer allows safe testing from floor
- Patented EZ Key prevents accidental discharge during construction
- Emergency/generated transfer option available (see ordering information for details)

### Driver Access

- Drivers can be accessed via plenum

### Finish

- Durable frame has high reflectance baked matte white enamel finish for luminous uniformity

### Mounting / Linear Run

- WSL has the ability to be either surface or suspended and offers both single or continuous row linear run installation flexibility

### Optic

- Precision formed optical assembly
- Positively retained high optical grade acrylic lenses
- WaveStream LED technology provides a directed optical distribution

### Compliance

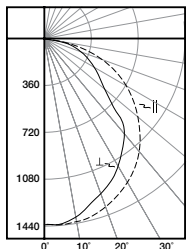
- Components are UL recognized
- cULus and CSA listed for 25° C ambient environments
- RoHS compliant
- Complies with IESNA LM-79
- LEDs compliant with LM-80 standards
- DesignLights Consortium® Qualified and classified for DLC Standard (refer to [www.designlights.org](http://www.designlights.org))

### Warranty

- Five year warranty standard.

## Photometric Data

 [View IES files](#)



### 4WSL-LD2-40-UNV-L840- CD1-U

Electronic Driver  
 Linear LED 4000K  
 Spacing criterion: (H) 1.3 x mounting height,  
 (L) 1.2 x mounting height  
 Lumens: 4010  
 Input Watts: 35.1W  
 Efficacy: 114 lm/W  
 Test Report: 4WSL-LD2-40-UNV-L840-CD1-U.IES

## Energy and Performance Data by Catalog Number

MTO	Length	Catalog Number**	Product Description	Delivered Lumens	Input Watts	Efficacy (lm/W)
MTO	4 ft.	4WSL-LD2-30-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 3000 lm	3023	24.9	121
MTO	4 ft.	4WSL-LD2-35-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 3500 lm	3544	30.6	116
MTO	4 ft.	4WSL-LD2-40-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 4000 lm	4010	35.1	114
MTO	4 ft.	4WSL-LD2-45-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 4500 lm	4502	39.9	113
MTO	4 ft.	4WSL-LD2-50-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 5000 lm	4988	44.8	111
MTO	4 ft.	4WSL-LD2-55-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 5500 lm	5541	49.9	111
MTO	4 ft.	4WSL-LD2-60-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 6000 lm	5988	56.2	107
MTO	4 ft.	4WSL-LD2-65-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 6500 lm	6591	61.9	106
MTO	4 ft.	4WSL-LD2-70-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 7000 lm	7005	68.7	102
MTO	4 ft.	4WSL-LD2-75-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 7500 lm	7623	73.9	103
MTO	4 ft.	4WSL-LD2-80-SXX-UNV-L8XX-CD1-U	4 ft. Wavestream Linear, 8000 lm	7806	76	103
MTO	8 ft.	8WSL-LD2-60-SXX-UNV-L8XX-CD1-U	8 ft. Wavestream Linear, 6000 lm	6128	53.5	115
MTO	8 ft.	8WSL-LD2-65-SXX-UNV-L8XX-CD1-U	8 ft. Wavestream Linear, 6500 lm	6536	57.6	113
MTO	8 ft.	8WSL-LD2-70-SXX-UNV-L8XX-CD1-U	8 ft. Wavestream Linear, 7000 lm	6934	63.6	109
MTO	8 ft.	8WSL-LD2-75-SXX-UNV-L8XX-CD1-U	8 ft. Wavestream Linear, 7500 lm	7468	67.2	111
MTO	8 ft.	8WSL-LD2-80-SXX-UNV-L8XX-CD1-U	8 ft. Wavestream Linear, 8000 lm	8072	73.1	110
MTO	8 ft.	8WSL-LD2-90-SXX-UNV-L8XX-CD2-U	8 ft. Wavestream Linear, 9000 lm	9004	80.6	112
MTO	8 ft.	8WSL-LD2-100-SXX-UNV-L8XX-CD2-U	8 ft. Wavestream Linear, 10000 lm	9976	90.6	110
MTO	8 ft.	8WSL-LD2-110-SXX-UNV-L8XX-CD2-U	8 ft. Wavestream Linear, 11000 lm	11082	98.9	112
MTO	8 ft.	8WSL-LD2-120-SXX-UNV-L8XX-CD2-U	8 ft. Wavestream Linear, 12000 lm	11976	113.5	106
MTO	8 ft.	8WSL-LD2-130-SXX-UNV-L8XX-CD2-U	8 ft. Wavestream Linear, 13000 lm	13182	124.7	106
MTO	8 ft.	8WSL-LD2-140-SXX-UNV-L8XX-CD2-U	8 ft. Wavestream Linear, 14000 lm	14010	136.6	103
MTO	8 ft.	8WSL-LD2-150-SXX-UNV-L8XX-CD2-U	8 ft. Wavestream Linear, 15000 lm	15246	148.7	103
MTO	8 ft.	8WSL-LD2-160-SXX-UNV-L8XX-CD2-U	8 ft. Wavestream Linear, 16000 lm	15612	152.9	102

\* Available in 3500K, 4000K and 5000K

\*\* Shown with solid top reflector. Available with uplight UPL8 (8%) and UPL15 (15%).

SXX denotes mounting option. See ordering information.

Stock	Length	Catalog Number **	Product Description	Delivered Lumens	Input Watts	Efficacy (lm/W)
Stock	4 ft.	4WSL-LD2-40-SRS-UNV-L835-CD1-U	4 ft. Wavestream Linear, 4000 lm, 3500K	4010	35.1	114
Stock	4 ft.	4WSL-LD2-40-SRS-UNV-L840-CD1-U	4 ft. Wavestream Linear, 4000 lm, 4000K	4010	35.1	114
Stock	8 ft.	8WSL-LD2-80-SRS-UNV-L835-CD1-U	8 ft. Wavestream Linear, 8000 lm, 3500K	8072	73.1	110
Stock	8 ft.	8WSL-LD2-80-SRS-UNV-L840-CD1-U	8 ft. Wavestream Linear, 8000 lm, 4000K	8072	73.1	110

\*\* Shown with solid top reflector. Available with uplight UPL8 (8%) and UPL15 (15%).

## Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (100,000 hours)	Theoretical L70 (Hours)
25°C	> 71.6%	> 105,000

## Shipping Data

Catalog No.	Wt.*
4WSL	12 lbs.
8WSL	24 lbs.

\* Standard fixture

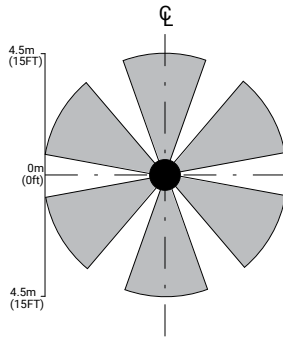
## Control Systems

- WaveLinx Wireless
- WaveLinx Wired
- WaveLinx Lite
- DLVP
- VividTune

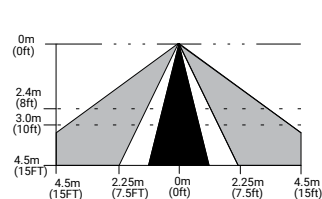


Connected Systems  
CLICK HERE

TOP VIEW:



SIDE VIEW:



**Note:** Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

The WSL with Integrated Sensor technology provides automatic energy savings without sacrificing performance. The WSL delivers superior lighting with integrated occupancy and daylighting controls.

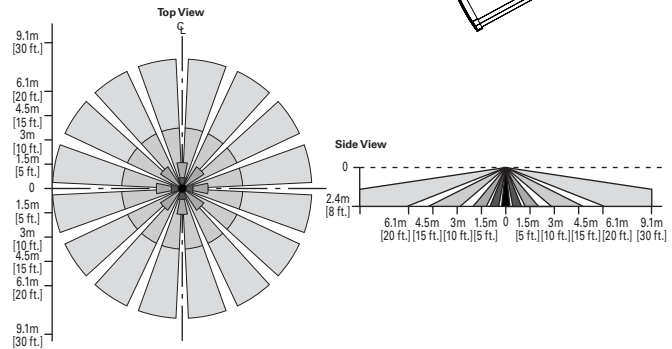
For standalone and controlled applications, the WaveLinx Lite integral sensor provides out-of-the-box functionality with no gateways required and factory startup is not needed.

When more connectivity is required, the WaveLinx Wireless sensor meets modern code and utility requirements, delivers energy and cost savings, while enabling buildings to become smart buildings.

The WaveLinx Wireless Connected Lighting System combined with Trellix provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems to deliver actionable insights through the aggregation of valuable data.

### Sensor Details

SVPD2 Coverage Pattern



Optional Remote Controls



ISHH-01 Programming Remote



ISHH-02 Personal Control Remote

## Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.



Standalone



Controlled  
WaveLinx Lite



Connected  
WaveLinx Wireless



Enterprise  
Trellix

	Standalone	Controlled WaveLinx Lite	Connected WaveLinx Wireless	Enterprise Trellix
Occupancy	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes
Gateways	–	–	1 WAC	300 WACs
Devices	–	50 per Area (1400 per site)	150 per WAC	45,000 per Core Enterprise
Software	–	WaveLinx Lite Mobile App	WaveLinx Mobile App	Trellix Core
Areas	–	28 per Site	16 per WAC	up to 4,800
Zones	–	16 per Area	16 per Area	up to 76,800
Scheduling	–	–	Local	Global
VividTune™	–	–	Yes	Yes
Plug-Load Control	–	–	Yes	Yes
Low-Voltage Power	–	–	Yes	Yes
Integration	–	–	–	BACnet, API
Dashboards	–	–	–	Energy, Occupancy
Configuration	–	Installer	Technician	Technician / IT

## SCALABILITY

devices

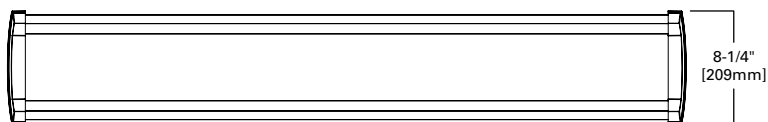
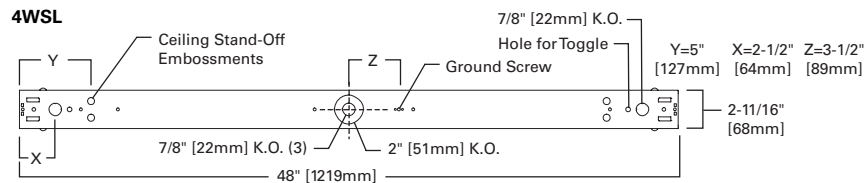
areas

floors

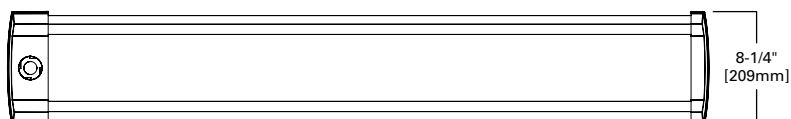
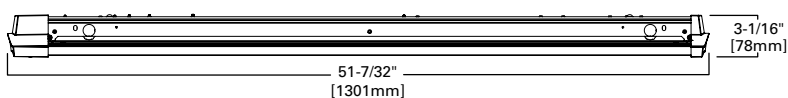
buildings

## Dimensional and Mounting Details

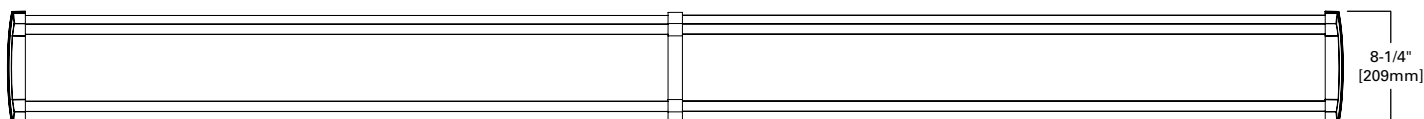
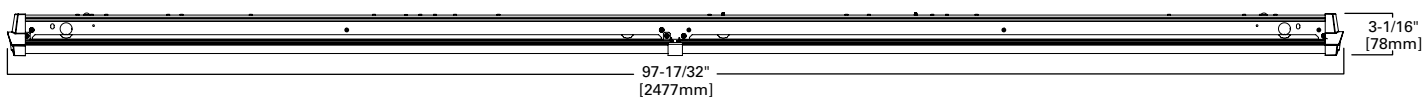
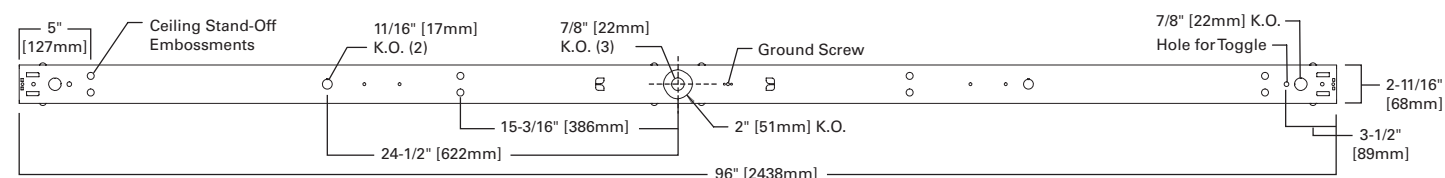
### 4WSL



### 4WSL WITH SENSOR



### 8WSL



### 8WSL WITH SENSOR

