

|             |  |           |  |      |  |
|-------------|--|-----------|--|------|--|
| Project     |  | Catalog # |  | Type |  |
| Prepared by |  | Notes     |  | Date |  |



# Metalux

## SWLED

Surface and Wall LED

Typical Applications  
Commercial • Industrial

### Product Certification



### Product Features



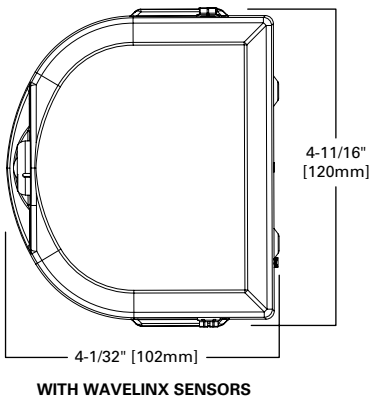
### Interactive Menu

- Order Information [page 2](#)
- Photometric Data [page 3](#)
- Control Solutions [page 5](#)
- Product Warranty

### Top Product Features

- Lumen packages up to 2000 lumens per foot for high mounting locations
- Excellent performance with lm/W, ranging up to 150 lm/W with LC lens
- 4ft. and 2ft. product configurations for mounting versatility
- Multiple sensor options for connected or control at multiple heights
- Standard 10% 0-10V driver with optional DALI, 1% and step dimming options
- Options to meet Buy American and other domestic preference requirements

### Dimensional and Mounting Details



[additional product diagrams](#)

## Order Information

SAMPLE ORDER NUMBER: **SWLED-40SL-LW-UNV-L840-CD1-WLS-U**

| Domestic Preferences  | Length   | Series  | Lumen Output   | Optic  | Voltage  | Emergency Options  |
|---|--|---|--|--|--|--|
| Domestic Preferences <sup>(1)</sup>   | Length   | Series <sup>(2)</sup>   | Lumen Output   | Optic  | Voltage  | Emergency Options <sup>(8), (10)</sup>   |
| <b>[Blank]</b> =Standard<br><b>BAA</b> =Buy American Act<br><b>TAA</b> =Trade Agreements Act  | <b>2</b> =2 ft. Length<br><b>4</b> =4 ft. Length | <b>SWLED</b> =LED Surface and Wall  | <b>LED Lumens</b> <sup>(3)</sup><br><b>8SL</b> =900 <sup>(4)</sup><br><b>16SL</b> =1600<br><b>20SL</b> =2000<br><b>24HL</b> =2400<br><b>28HL</b> =2800 <sup>(5)</sup><br><b>32SL</b> =3200<br><b>36SL</b> =3600<br><b>40SL</b> =4000<br><b>44HL</b> =4400<br><b>48HL</b> =4800<br><b>52HL</b> =5200<br><b>56HL</b> =5600<br><b>60HL</b> =6000<br><b>64HL</b> =6400<br><b>67HL</b> =6700<br><b>72HL</b> =7200<br><b>78HL</b> =7800<br><b>80HL</b> =8000 | <b>LC</b> =Clear Lens<br><b>LN</b> =Semi-Frost Lens- Narrow<br><b>LW</b> = Full Frost Lens- Wide | <b>UNV</b> =Universal Voltage 120-277V<br><b>347V</b> =347 Volt <sup>(6)</sup><br><b>UNC</b> =347V/480V <sup>(7)</sup>                               | <b>EL7W</b> =7-watt, 120V-277V Emergency Battery Pack Installed <sup>(9)</sup><br><b>EL14W</b> =14-watt 120V-277V Emergency Battery Pack Installed <sup>(9)</sup><br><b>ETRD</b> = 120-277V Emergency Transfer Relay with Dimming Control <sup>(11)</sup>  |
| <b>Notes</b><br>(1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <a href="#">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. |  | <b>Notes</b><br>(2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to <a href="#">www.designlights.org</a> for details. | <b>Notes</b><br>(3) Nominal lumen output see table for performance values. (4) 2 ft. model. (5) Integral options only available in 4ft model.  |  | <b>Notes</b><br>(6) 347V option – 60HL and above uses two drivers. (7) 347V listing in DLC is for standard 347V ONLY driver. No DLC listing for UNC. | <b>Notes</b><br>(8) Integral options only available in 4ft model. (9) With integral test switch/ indicator. 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. (10) Integral EL battery pack is rated for 35°C. (11) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). ETRD option requires one relay when used on a dimming fixture. |

| CCT  | Driver Type   | Number of Drivers   | Integrated Control  | Packaging           |
|--|---|---|---|---------------------|
| CCT  | Driver Type   | Number of Drivers   | Integrated Control  | Packaging           |
| <b>L830</b> =3000K<br><b>L835</b> =3500K<br><b>L840</b> =4000K<br><b>L850</b> =5000K | <b>CD</b> =0-10V Driver (10% - 100% Dimming)<br><b>HCD</b> =0-10V Driver (1% - 100% Dimming)<br><b>SD</b> =Step-Dim Driver<br><b>SLTD</b> =DALI (1% - 100% Dimming) | <b>1</b> =1 Driver<br><b>2</b> =2 Drivers <sup>(12)</sup>           | <b>WLS (formerly WAB)</b> =WaveLinux LITE Wireless Sensor, Occupancy w/ photocell, Independent & Networked <sup>(13), (14), (B)</sup><br><b>WPS (formerly WAA)</b> =WaveLinux PRO Wireless Sensor, Occupancy w/ photocell, Networked <sup>(13), (14), (A)</sup>   | <b>U</b> =Unit Pack |
|  |   | <b>Notes</b><br>(12) 347V option – 60HL and above uses two drivers. | <b>Notes</b><br>(13) WaveLinux sensors suitable for wall mount applications. (14) WAA and WAB sensors to be used with CD or HCD driver.<br>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 WaveLinux PRO system pages for additional details and compatibility. (B) Consult WaveLinux LITE system pages for additional details and compatibility. |                     |

## Accessories

| Accessories (order separately) <sup>(15)</sup>  |
|---|
| <b>SCF</b> =Fixed Stem Set (Specify Length)<br><b>SCS</b> =Swivel Stem Set (Specify Length)<br><b>SCA</b> =Adjustable 48" Stem Set<br><b>A1B/Spacer-U</b> =Spacer 1-1/2" to 2-1/2" from ceiling (Use 2 Per Fixture)   |
| <b>Notes</b><br>(15) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.<br>Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. |

## Product Specifications

### Construction

- Die formed cold rolled steel housing
- Decorative white opaque injection molded end plates
- Reflector/channel wireway cover secured by fasteners for easy access
- Numerous channel KO's for easy installation

### Controls

- 0-10V dimming drivers to 10% standard, 1% optional
- WaveLinX integrated sensor options provide code compliance, increased energy savings, grouping of fixtures, and connection to WaveLinX control systems
- DALI 2.0, Lutron, and step-dimming available

### Electrical

- Long-life LED system with electrical driver for optimal performance
- Minimum 80 CRI
- TM21 rating up to L91 > 60,000hours

### Emergency Battery Pack Option

- Optional 120V-277V integral battery pack in 7w or 14w options
- 90 minute backup period
- Test switch/indicator button with laser pointer testing feature for ground testing
- EZ Key system prevents accidental discharge during construction
- Emergency/generator transfer relay with dimming control capability available

### Finish

- High reflective post painted finish (PAF)
- Treated in multistage iron phosphate pretreatment

### Shielding

- Three lens options available: LC (clear), LN (semi-frost with narrow distribution), and LW (full frost with wide distribution)
- Lens is held in place by removable injection molded white end caps

### Installation

- Surface mount
- Suspended mount

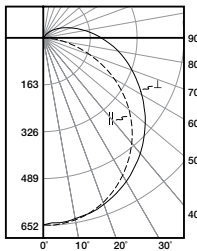
### Compliance

- cULus listed for up to 40C ambient environments
- Damp location listed for ceiling and wall mounting
- Comply with IESNA LM-79 and LM-80 testing standards
- Suitable for use in clothes closets
- Recommended for use in stairwells when installed to NEC 410.16 spacing requirements
- Can be used for State of California Title 24 high efficacy luminaire
- DesignLights Consortium Qualified and classified for both DLC Standard and DLC Premium

### Product Warranty

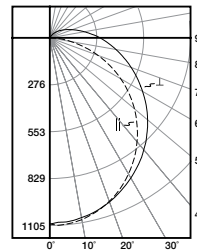
- 5-year limited warranty

## Photometric Data

[View IES files](#)


### 2SWLED-24HL-LW-UNV-L840-CD1-U

Electronic Driver  
 Linear LED 4000K  
 Spacing criterion: (II) 1.25 x mounting height,  
 (⊥) 1.32 x mounting height  
 Lumens: 2475  
 Input Watts: 24W  
 Efficacy: 103.1 lm/W  
 Test Report: 2SWLED-24HL-LW-UNV-L840-CD1-U-IES



### 4SWLED-40SL-LW-UNV-L840-CD1-U

Electronic Driver  
 Linear LED 4000K  
 Spacing criterion: (II) 1.25 x mounting height,  
 (⊥) 1.29 x mounting height  
 Lumens: 4015  
 Input Watts: 37.9W  
 Efficacy: 105.9 lm/W  
 Test Report: 4SWLED-40SL-LW-UNV-L840-CD1-U-IES

Energy and Performance Data

| Lens Type       | Lumen Type | Length | Catalog Number                | Nominal Lumens | Wattage | lm/W with LW Lens | Approx. lm/W with LC/LN Lens |
|-----------------|------------|--------|-------------------------------|----------------|---------|-------------------|------------------------------|
| Full Frost (LW) | Standard   | 2 ft.  | 2SWLED-8SL-LW-UNV-L840-CD1-U  | 914            | 9.0     | 102               | 120                          |
| Full Frost (LW) | Standard   | 2 ft.  | 2SWLED-16SL-LW-UNV-L840-CD1-U | 1597           | 15.9    | 100               | 118                          |
| Full Frost (LW) | Standard   | 2 ft.  | 2SWLED-20SL-LW-UNV-L840-CD1-U | 1987           | 20.6    | 96                | 115                          |
| Full Frost (LW) | High       | 2 ft.  | 2SWLED-24HL-LW-UNV-L840-CD1-U | 2475           | 24      | 103               | 133                          |
| Full Frost (LW) | High       | 2 ft.  | 2SWLED-28HL-LW-UNV-L840-CD1-U | 2813           | 27.9    | 101               | 130                          |
| Full Frost (LW) | Standard   | 4 ft.  | 4SWLED-16SL-LW-UNV-L840-CD1-U | 1626           | 14.3    | 114               | 148                          |
| Full Frost (LW) | Standard   | 4 ft.  | 4SWLED-20SL-LW-UNV-L840-CD1-U | 1983           | 17.6    | 113               | 146                          |
| Full Frost (LW) | Standard   | 4 ft.  | 4SWLED-28SL-LW-UNV-L840-CD1-U | 2841           | 24.8    | 115               | 148                          |
| Full Frost (LW) | Standard   | 4 ft.  | 4SWLED-32SL-LW-UNV-L840-CD1-U | 3217           | 28.6    | 112               | 145                          |
| Full Frost (LW) | Standard   | 4 ft.  | 4SWLED-36SL-LW-UNV-L840-CD1-U | 3573           | 32.8    | 109               | 141                          |
| Full Frost (LW) | Standard   | 4 ft.  | 4SWLED-40SL-LW-UNV-L840-CD1-U | 4015           | 37.9    | 106               | 137                          |
| Full Frost (LW) | Standard   | 4 ft.  | 4SWLED-44HL-LW-UNV-L840-CD1-U | 4436           | 39.7    | 106               | 145                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-48HL-LW-UNV-L840-CD1-U | 4899           | 44.6    | 110               | 143                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-52HL-LW-UNV-L840-CD1-U | 5175           | 47.7    | 108               | 140                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-56HL-LW-UNV-L840-CD1-U | 5623           | 52.9    | 106               | 137                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-60HL-LW-UNV-L840-CD1-U | 5977           | 53.7    | 111               | 144                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-64HL-LW-UNV-L840-CD1-U | 6369           | 58.2    | 109               | 141                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-67HL-LW-UNV-L840-CD1-U | 6708           | 61.9    | 108               | 140                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-72HL-LW-UNV-L840-CD1-U | 7201           | 67.7    | 106               | 137                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-78HL-LW-UNV-L840-CD1-U | 7832           | 75.4    | 104               | 135                          |
| Full Frost (LW) | High       | 4 ft.  | 4SWLED-80HL-LW-UNV-L840-CD1-U | 8060           | 78.4    | 103               | 133                          |

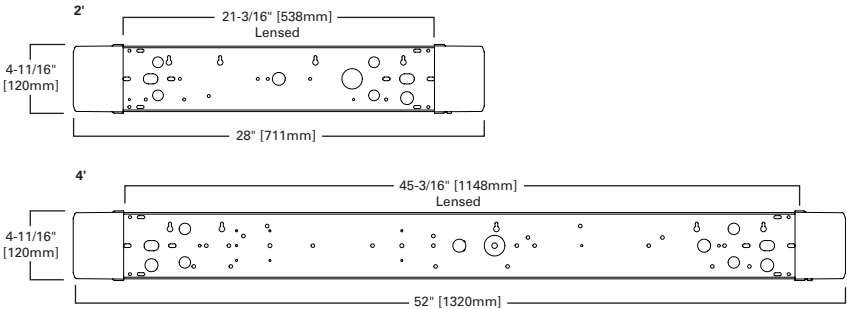
CCT Table

| Approximate Color Temperature Multiplier |      |
|--|------|
| 5000K                                    | 1.03 |
| 4000K                                    | 1.00 |
| 3500K                                    | 0.98 |

Shipping Data

| Catalog No. | Wt.     |
|-------------|---------|
| 2SWLED      | 6 lbs.  |
| 4SWLED      | 12 lbs. |

Dimensional and Mounting Details



## Control Solutions

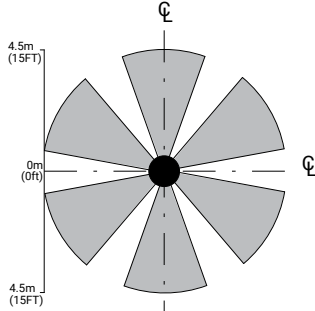
- WaveLinx LITE wireless
- WaveLinx PRO wireless
- WaveLinx CAT wired
- WaveLinx Wired



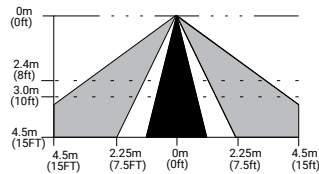
## Integrated Sensor Coverage Pattern

WaveLinx PRO/LITE Sensor – WLS and WPS

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 SWLED with WaveLinx offers no-hassle lighting control with multiple luminaire level control solutions.

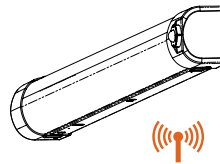


**WaveLinx PRO** is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinx PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinx CORE platform and other building systems, so building owners can improve operations, spaces environment, and tenants' experience. WaveLinx PRO offers a rich portfolio of wireless devices, WaveLinx PRO-enabled luminaires, and an intuitive WaveLinx mobile app for office, education, warehouse, and parking garage applications.



**WaveLinx LITE** is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse and parking garages using the secure, simple mobile app.

With Integrated WaveLinx Sensor



### Integrated Controls Options

| Option | Out of the Box Functionality | Luminaire Level Lighting Control (LLLC) | Automatic Dimming Photocell | Occupancy Sensing | CCT Control |
|--------|------------------------------|---|-----------------------------|-------------------|-------------|
| WLS    | X                            | X                                       | X                           | X                 |             |
| WPS    |                              | X                                       | X                           | X                 | X           |

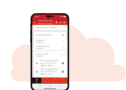
**Note:** WaveLinx utilizes scenes to allow users to change an area's fixtures Correlated Color Temperature (CCT) and intensity using commissioned manual wireless wallstation scene control. To enable CCT adjustments through WaveLinx, include WPS device in addition to VividTune or BioUp technologies for integrated fixture control.

## Systems comparison chart

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



**Luminaire with standalone sensor**



**Standalone Spaces WaveLinx LITE**



**Standalone Spaces WaveLinx CAT**



**Networked Spaces WaveLinx PRO**



**Enterprise WaveLinx CORE**

|                   | Luminaire with standalone sensor | Standalone Spaces WaveLinx LITE | Standalone Spaces WaveLinx CAT | Networked Spaces WaveLinx PRO | Enterprise WaveLinx CORE   |
|-------------------|----------------------------------|---------------------------------|--------------------------------|-------------------------------|----------------------------|
| Occupancy         | Yes                              | Yes                             | Yes                            | Yes                           | Yes                        |
| Daylighting       | Yes                              | Yes                             | Yes                            | Yes                           | Yes                        |
| Wallstations      | –                                | Yes                             | Yes                            | Yes                           | Yes                        |
| Gateways          | –                                | –                               | –                              | 1 WAC                         | 300 WACs                   |
| Devices (MAX)     | –                                | 40 per Area (1120 per space)    | 40 per Area                    | 200 per WAC2                  | 32,500 per CORE Enterprise |
| Software          | –                                | WaveLinx LITE Mobile App        | WaveLinx CAT Mobile App        | WaveLinx Mobile App           | CORE                       |
| Areas             | –                                | 28 per Space                    | Unlimited                      | 50 per WAC2                   | up to 3,000                |
| Zones             | –                                | 16 per Area                     | 16 per Area                    | 16 per Area                   | up to 9,000                |
| Scheduling        | –                                | –                               | –                              | Local                         | Global                     |
| VividTune™        | –                                | –                               | –                              | Yes                           | Yes                        |
| Plug-Load Control | –                                | Yes                             | Yes                            | Yes                           | Yes                        |
| Low-Voltage Power | –                                | –                               | Yes                            | Yes                           | Yes                        |
| Integration       | –                                | –                               | –                              | –                             | BACnet, API                |
| Dashboards        | –                                | –                               | –                              | –                             | Energy, Occupancy          |
| Configuration     | –                                | Installer                       | Installer                      | Technician                    | Technician / IT            |