

Project		Catalog #		Type	
Prepared by		Notes		Date	



# Metalux

## SkyRidge 24SR LED

2' x 4' Specification Grade Troffer LED Module

### Typical Applications

- Commercial Office Spaces • Schools • Hospitals • Retail
- Other Indoor Ambient Applications

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### Product Certification



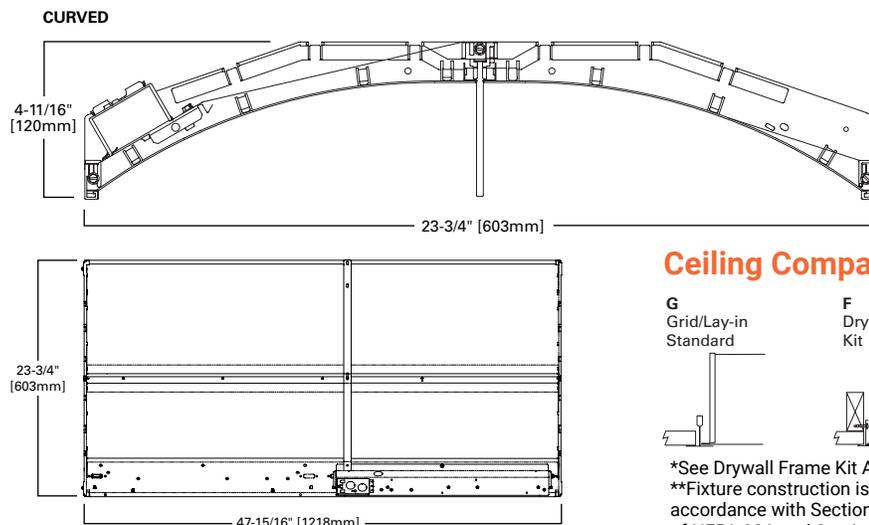
### Product Features



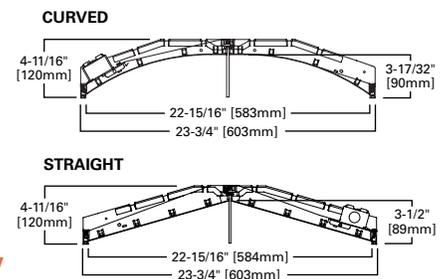
### Top Product Features

- Available in 1' x 2', 1' x 4', 2' x 2' and 2' x 4' recessed versions
- Leverages our patented WaveStream Technology with AccuAim™ optics
- Advanced optical control with optimal illumination
- High performance efficacy up to 146 lumens per watt
- Over 60% energy savings when compared to a fluorescent troffers
- Options to meet Buy American and other domestic preference requirements

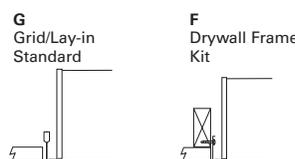
### Dimensional and Mounting Details



### Lamp Configurations



### Ceiling Compatibility



Ceiling Type	Trim Type
Exposed Grid	G
Concealed T	G or T
Slot Grid	G or T
Flange	*

\*See Drywall Frame Kit Accessory in Ordering Information section.  
 \*\*Fixture construction is suitable for use in Air-handling and plenum rated spaces in accordance with Section 300.22 (C) of the National Electrical Code, Section 4.3.11.2.6.5 of NFPA 90A and Section 602.2.1.4 of ICC.

## Order Information

SAMPLE ORDER NUMBER: **24SR-LD2-48-C-UNV-L835-CD1-WPN-U**

Domestic Preferences	Rating	Series	Air	Lamp Type	Lumen Outputs	Reflector	Optics	Voltage
<b>[Blank]</b> =Standard <b>BAA</b> =Buy American Act <b>TAA</b> =Trade Agreements Act	<b>[Blank]</b> =Standard <b>ATW-SW4</b> =Chicago Rated <sup>(2)</sup>	<b>24SR</b> =2' x 4' SkyRidge Series	<b>[Blank]</b> =Standard <b>A</b> =Air (Vented) <sup>(4)</sup>	<b>LD2</b> =LED 2.0	<b>Stock Lumen Outputs</b> 39=3900 Lumens 48=4800 <b>MTO Lumen Outputs</b> 29=2900 Lumens <sup>(5),(6)</sup> 34=3400 Lumens <sup>(5),(6)</sup> 45=4500 Lumens 53=5300 Lumens 59=5900 Lumens 64=6400 Lumens <sup>(7)</sup>	<b>C</b> =Curved (Standard) <b>S</b> =Straight	<b>[Blank]</b> =Standard	<b>347V</b> =347 Volt <b>UNV</b> =Universal Voltage 120-277V <b>48V</b> =48 Volt Low-voltage (Class 2) <sup>(8)</sup> <b>120V</b> =120 Volt <sup>(9)</sup> <b>277V</b> =277 Volt <sup>(9)</sup>
<b>Notes</b> (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> (2) Chicago rated version does not allow for row mounting.	<b>Notes</b> (3) DesignLights Consortium® Qualified and classified for DLC Standard, refer to <a href="#">www.designlights.org</a> for details.	<b>Notes</b> (4) Air version is vented but does not meet air handling requirements. Air version is non-IC. Air version is not available with integrated sensor.	<b>Notes</b> (5) 2900 and 3400 lumen packages are not available with Step-Dim driver. (6) 2900 and 3400 lumen packages are not available with 5LTD -Dali option driver. (7) 5LTHD option uses two drivers at 6400 lumens.	<b>Notes</b> (8) Products also available in non-US voltages and frequencies for international markets. (9) Must specify voltage as 120V or 277V when ordering GTR2 option. (C) Consult WaveLinX Low-Voltage or DLVP system pages for additional details and compatibility.			

Emergency Options	CCT	Flex	Driver Type	Number of Drivers
<b>EL7W</b> =7-watt, 120V-277V emergency battery pack installed <sup>(10)</sup> <b>EL14W</b> =14-watt 120V-277V emergency battery pack installed <sup>(10)</sup> <b>ELV7W</b> =Low-voltage system, 7-watt emergency battery pack <sup>(10)</sup> <b>ELV14W</b> =Low-voltage system, 14-watt emergency battery pack <sup>(10)</sup> <b>GTR2</b> =Bodine Generator Transfer Relay <sup>(11),(12)</sup> <b>ETRD</b> =Iota Emergency Transfer Relay with dimming control <sup>(11)</sup>	<b>L830</b> =80CRI, 3000K <b>L835</b> =80CRI, 3500K <b>L840</b> =80CRI, 4000K <b>L850</b> =80CRI, 5000K	<b>A3/8-4/18GDM</b> =3/8" Flex with 0-10V Dimming Leads Multiple other configurations available. See below for details. <b>A3/8-5/18GDM</b> =Flex with 0-10V Dimming leads and Blue for alternate wiring. See below for details.	<b>CD</b> =0-10V Driver (1%-100% Dimming) <b>5LTD</b> =DALI Driver (5%-100% Dimming) <sup>(14)</sup> <b>5LTHD</b> =DALI Driver (1%-100% Dimming) <sup>(15)</sup> <b>LV</b> =Low-voltage System Driver (0%-100% Dimming) <sup>(C)</sup> <b>SD</b> =Step Dimming Driver (50%-100% Dimming) <sup>(13)</sup> <b>LH</b> =Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming <sup>(F)</sup> <b>SR</b> =Sensor-ready Driver (1%-100% Dimming)	1=1 Driver
<b>Notes</b> (10) 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. (11) 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. (12) Must specify voltage as 120V or 277V when ordering GTR2 option. (C) Consult WaveLinX Low-Voltage or DLVP system pages for additional details and compatibility.		<b>Flexible Metal Conduit Options</b> Flex options available for 0-10V dimming control, DALI dimming control, emergency and night light functions. 72-inch factory-installed and pre-wired to driver, fitted to luminaire housing access plate with 90° enclosed FMC connector. Not all options may be combined and installation ratings vary by type. <b>A3/8-4/18GDM series notes:</b> Factory installed dimming option 3/8" flexible metal conduit with 2-#18 power and ground wires and 2-#18 UL-listed jacketed 0-10V +/- control wires. Meets UL 66, 83, 1479, 1569, 1581, 2556; NEC® 250.118, 300.22(C), 392, 396, 330, 501, 502, 503, 530, 504, 505, 518, 520, 530, 645, 72; Federal Specification A-A-59544 (formerly J-C-30B); all applicable OSHA and HUD Requirements. UL Classified 1-, 2-, and 3-hour through penetration with applicable fire stop product (not included). May be surface mounted, fished and/or embedded in plaster. Cable tray and approved raceway rated, install per NEC®; Environmental Air-Handling Space Installation per NEC® 300.22(C).	<b>Notes</b> (13) 2900 and 3400 lumen packages are not available with Step-Dim (SD) driver. (14) 2900 and 3400 lumen packages are not available with DALI (5LTD) driver. (15) DALI (5LTHD) option uses two drivers at 6400 lumens. 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). (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="#">www.lutron.com</a>	

Integrated Sensing Systems	SkyTrim	Packaging	Accessories
<b>[Blank]</b> =No Sensor <b>WAA</b> =WaveLinX PRO Wireless Integrated Sensor <sup>(16),(A)</sup> <b>WPN</b> =WaveLinX PRO Wireless Node without Sensor <sup>(16),(A)</sup> <b>WAB</b> =WaveLinX LITE Wireless Integrated Sensor <sup>(17),(B)</sup> <b>WLA</b> =Low-voltage Integrated Sensor <sup>(18),(C)</sup>	<b>TB</b> =Tahitian Blue <b>PG</b> =Primary Green <b>SO</b> =Storaro Orange <b>PL</b> =Pearl <b>BR</b> =Belladonna Rose <b>MR</b> =Medium Red <b>ST</b> =Straw	<b>U</b> =Unit Pack <b>PALC</b> =Job Pack, in carton	<b>T3A END E.Q. BRACKET PARTS BAG</b> (Standard with fixture) <b>DF-24W-U</b> =2' x 4' Drywall Frame Kit <b>SK-24-WT</b> =2' x 4' Tall Surface Mount Kit
<b>Notes</b> (16) WAA sensor and WPN node to be used with CD or W2A driver. Consult factory for WPN with tunable white W2A driver. (17) WAB sensor to be used with CD driver. (18) 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 PRO 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.	<b>Notes</b> (19) Fixtures using factory installed SkyTrim option are not DLC qualified.		<b>Notes</b> (20) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories.

## Product Specifications

### Construction

- Shallow 4.75" deep housing extruded aluminum frame
- Injected molded composite end plates
- End plates screws for strength, rigidity and gap eliminations
- End plates accessory grid-lock feature adds safety and convenience
- Four auxiliary fixture end suspension points
- Large access plate for supply connection

### Controls

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

### Electrical

- LED's available in 3000K, 3500K, 4000K or 5000K with a minimum CRI of 80
- Color accuracy  $\leq 3$ -Step MacAdam ellipse (SDCM)
- Projected life is 100,000 hours at 92% 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

- High reflectance baked matte white enamel finish for luminous uniformity

### Optics

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

### SkyTrim Accessory

- A luminous decorative accent that can be mounted directly on the light guide of a SkyRidge fixture either at the factory or in the field
- Designed for an array of interior applications
- Ideal for spaces where color is necessary to provide visual cues, emphasize brand identity, directional awareness or simply as an artistic expression

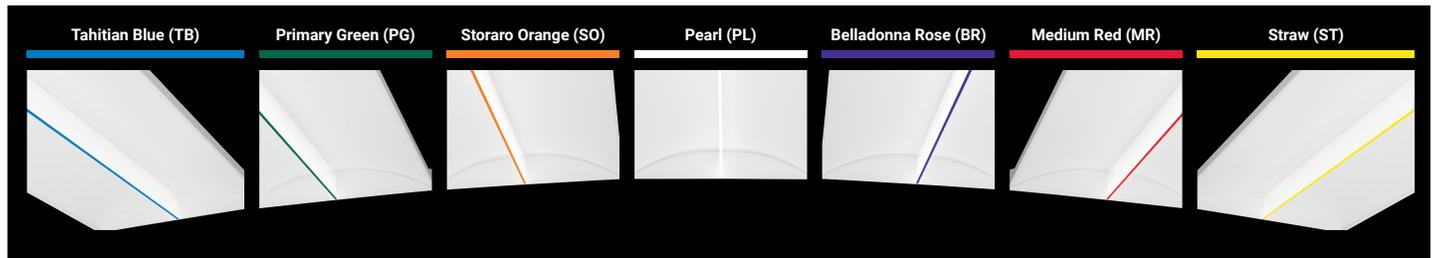
### Compliance

- Components are UL recognized
- cULus listed for 25° C ambient indoor 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)

### Warranty

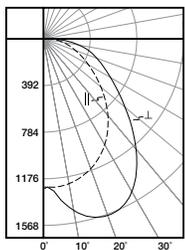
- Five-year warranty. Optional ten year warranty available.

## SkyTrim Options

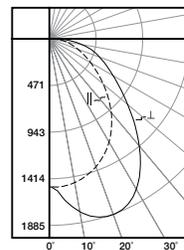


## Photometric Data

[View IES files](#)



**24SR-LD2-39-CUNV-L835-CD1-U**  
 Electronic Driver  
 Linear LED 3500K  
 Spacing criterion: (II) 1.18 x mounting height,  
 (⊥) 1.52 x mounting height  
 Lumens: 4197  
 Input Watts: 31.9W  
 Efficacy: 131.6 lm/W  
 Test Report: 24SR-LD2-39-CUNV-L835-CD1-U.IES



**24SR-LD2-48-CUNV-L835-CD1-U**  
 Electronic Driver  
 Linear LED 3500K  
 Spacing criterion: (II) 1.18 x mounting height,  
 (⊥) 1.52 x mounting height  
 Lumens: 5045  
 Input Watts: 38.2W  
 Efficacy: 132.1 lm/W  
 Test Report: 24SR-LD2-48-C-UNV-L835-CD1-U.IES

## Energy and Performance Data by Catalog Number

Stock or MTO	Catalog Logic (Curved)	Delivered Lumens	Watts	Efficacy (LPW)
MTO	24SR-LD2-29-C-UNV-L830-CD1-U	2982	22.7	131
MTO	24SR-LD2-29-C-UNV-L835-CD1-U	3074	22.7	135
MTO	24SR-LD2-29-C-UNV-L840-CD1-U	3136	22.7	138
MTO	24SR-LD2-29-C-UNV-L850-CD1-U	3413	22.7	150
MTO	24SR-LD2-34-C-UNV-L830-CD1-U	3528	27.2	130
MTO	24SR-LD2-34-C-UNV-L835-CD1-U	3637	27.2	134
MTO	24SR-LD2-34-C-UNV-L840-CD1-U	3710	27.2	136
MTO	24SR-LD2-34-C-UNV-L850-CD1-U	4037	27.2	148
MTO	24SR-LD2-39-C-UNV-L830-CD1-U	4071	31.9	128
Stock	24SR-LD2-39-C-UNV-L835-CD1-U	4197	31.9	132
Stock	24SR-LD2-39-C-UNV-L840-CD1-U	4281	31.9	134
MTO	24SR-LD2-39-C-UNV-L850-CD1-U	4659	31.9	146
MTO	24SR-LD2-45-C-UNV-L830-CD1-U	4596	36.7	125
MTO	24SR-LD2-45-C-UNV-L835-CD1-U	4738	36.7	129
MTO	24SR-LD2-45-C-UNV-L840-CD1-U	4832	36.7	132
MTO	24SR-LD2-45-C-UNV-L850-CD1-U	5258	36.7	143
MTO	24SR-LD2-48-C-UNV-L830-CD1-U	4894	38.2	128
Stock	24SR-LD2-48-C-UNV-L835-CD1-U	5045	38.2	132
Stock	24SR-LD2-48-C-UNV-L840-CD1-U	5146	38.2	135
MTO	24SR-LD2-48-C-UNV-L850-CD1-U	5601	38.2	147
MTO	24SR-LD2-53-C-UNV-L830-CD1-U	5416	43.1	126
MTO	24SR-LD2-53-C-UNV-L835-CD1-U	5584	43.1	130
MTO	24SR-LD2-53-C-UNV-L840-CD1-U	5695	43.1	132
MTO	24SR-LD2-53-C-UNV-L850-CD1-U	6198	43.1	144
MTO	24SR-LD2-59-C-UNV-L830-CD1-U	6026	50.2	120
MTO	24SR-LD2-59-C-UNV-L835-CD1-U	6213	50.2	124
MTO	24SR-LD2-59-C-UNV-L840-CD1-U	6337	50.2	126
MTO	24SR-LD2-59-C-UNV-L850-CD1-U	6896	50.2	137
MTO	24SR-LD2-64-C-UNV-L830-CD1-U	6598	55.5	119
MTO	24SR-LD2-64-C-UNV-L835-CD1-U	6802	55.5	123
MTO	24SR-LD2-64-C-UNV-L840-CD1-U	6938	55.5	125
MTO	24SR-LD2-64-C-UNV-L850-CD1-U	7551	55.5	136

## Energy and Performance Data by Catalog Number

Stock or MTO	Catalog Logic (Straight)	Delivered Lumens	Watts	Efficacy (LPW)
MTO	24SR-LD2-29-S-UNV-L830-CD1-U	2952	22.7	130
MTO	24SR-LD2-29-S-UNV-L835-CD1-U	3043	22.7	134
MTO	24SR-LD2-29-S-UNV-L840-CD1-U	3104	22.7	137
MTO	24SR-LD2-29-S-UNV-L850-CD1-U	3377	22.7	149
MTO	24SR-LD2-34-S-UNV-L830-CD1-U	3491	27.2	128
MTO	24SR-LD2-34-S-UNV-L835-CD1-U	3599	27.2	132
MTO	24SR-LD2-34-S-UNV-L840-CD1-U	3672	27.2	135
MTO	24SR-LD2-34-S-UNV-L850-CD1-U	3995	27.2	147
MTO	24SR-LD2-39-S-UNV-L830-CD1-U	4029	31.9	126
MTO	24SR-LD2-39-S-UNV-L835-CD1-U	4154	31.9	130
MTO	24SR-LD2-39-S-UNV-L840-CD1-U	4237	31.9	133
MTO	24SR-LD2-39-S-UNV-L850-CD1-U	4611	31.9	145
MTO	24SR-LD2-45-S-UNV-L830-CD1-U	4548	36.7	124
MTO	24SR-LD2-45-S-UNV-L835-CD1-U	4688	36.7	128
MTO	24SR-LD2-45-S-UNV-L840-CD1-U	4783	36.7	130
MTO	24SR-LD2-45-S-UNV-L850-CD1-U	5205	36.7	142
MTO	24SR-LD2-48-S-UNV-L830-CD1-U	4844	38.2	127
MTO	24SR-LD2-48-S-UNV-L835-CD1-U	4993	38.2	131
MTO	24SR-LD2-48-S-UNV-L840-CD1-U	5093	38.2	133
MTO	24SR-LD2-48-S-UNV-L850-CD1-U	5542	38.2	145
MTO	24SR-LD2-53-S-UNV-L830-CD1-U	5360	43.1	124
MTO	24SR-LD2-53-S-UNV-L835-CD1-U	5526	43.1	128
MTO	24SR-LD2-53-S-UNV-L840-CD1-U	5636	43.1	131
MTO	24SR-LD2-53-S-UNV-L850-CD1-U	6134	43.1	142
MTO	24SR-LD2-59-S-UNV-L830-CD1-U	5964	50.2	119
MTO	24SR-LD2-59-S-UNV-L835-CD1-U	6149	50.2	122
MTO	24SR-LD2-59-S-UNV-L840-CD1-U	6272	50.2	125
MTO	24SR-LD2-59-S-UNV-L850-CD1-U	6825	50.2	136
MTO	24SR-LD2-64-S-UNV-L830-CD1-U	6530	55.5	118
MTO	24SR-LD2-64-S-UNV-L835-CD1-U	6732	55.5	121
MTO	24SR-LD2-64-S-UNV-L840-CD1-U	6866	55.5	124
MTO	24SR-LD2-64-S-UNV-L850-CD1-U	7472	55.5	135

### Shielding

Lumen Adjustment Factors						
TB	PG	SO	PL	BR	MR	ST
0.683	0.572	0.684	0.935	0.575	0.565	0.885

**Note:** Average values shown. Refer to IES-format photometry for exact performance data.

### Lumen Maintenance (Non-IC Data)

Ambient Temperature	TM-21 Lumen Maintenance (100,000 hours) <sup>(1)</sup>	Theoretical L70 (Hours) <sup>(2)</sup>
25°C	> 92%	> 448,000

**Notes:** (1) Supported by IES TM-21 standards. (2) Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IES TM-21 and LM-80.

### SkyTrim Field Installation Kits

Color Choice	Kit Catalog Number	Kit Quantity
Tahitian Blue	STK-4-TB-10PK	10
Primary Green	STK-4-PG-10PK	10
Storaro Orange	STK-4-SO-10PK	10
Belladonna Rose	STK-4-BR-10PK	10
Medium Red	STK-4-MR-10PK	10
Pearl	STK-4-PL-10PK	10
Straw	STK-4-ST-10PK	10

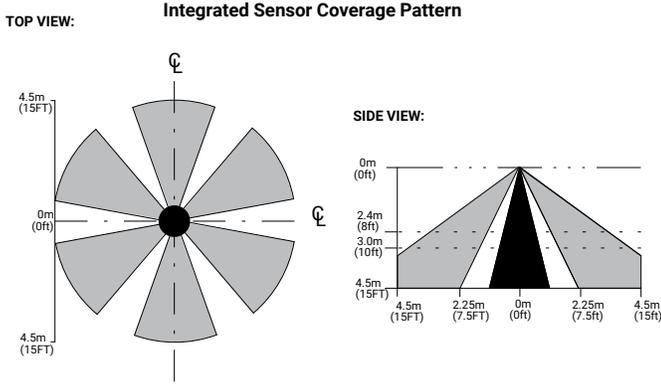
**Note:** Chosen color will be matched on acrylic but will appear lighter once applied to lit light guide.

### Shipping Data

Catalog No.	Wt.
24SR-LD2-39	24 lbs.
24SR-LD2-48	24 lbs.

## Control Systems

- WaveLinX PRO Wireless
- WaveLinX LITE Wireless
- WaveLinX Wired



**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.

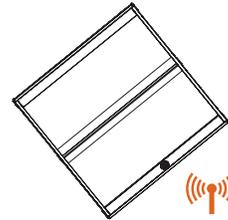
The SkyRidge with WaveLinX offers no-hassle lighting control with multiple luminaire level control solutions.

**WaveLinX PRO** is used for applications where spaces need to be connected to a lighting or building management system and to help building owners improve their operations, building environment, and tenants' experience by leveraging the data generated by the sensors. The WaveLinX PRO devices communicate with each other via the WaveLinX Area Controller which coordinates the data traffic between the devices, lighting apps and CORE platform. The WaveLinX Area Controller also hosts the time clock required if spaces need to be turned on/off at a specific time.

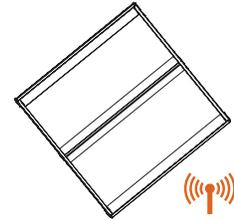
The WaveLinX PRO Sensor offers built-in occupancy and daylighting controls as well as luminaire level control including white tuning while the WaveLinX PRO Node offers luminaire level control and white tuning. If opting for the WaveLinX PRO Node option, a PRO Ceiling Sensor will most likely be needed within the space to control the lights based on occupancy and daylight levels.

**WaveLinX LITE** is used for single spaces where there is no need to manage the spaces remotely or exchange the sensor data with other sub-systems within the building or smart applications.

The WaveLinX LITE Sensor offers built-in occupancy and daylighting controls as well as luminaire level control.



With Integrated WaveLinX Sensor



With Integrated WaveLinX Node

## 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



Networked Spaces WaveLinX PRO



Enterprise WaveLinX CORE

	Luminaire with standalone sensor	Standalone Spaces WaveLinX LITE	Networked Spaces WaveLinX PRO	Enterprise WaveLinX CORE
<b>Occupancy</b>	Yes	Yes	Yes	Yes
<b>Daylighting</b>	Yes	Yes	Yes	Yes
<b>Wallstations</b>	-	Yes	Yes	Yes
<b>Gateways</b>	-	-	1 WAC	300 WACs
<b>Devices (MAX)</b>	-	50 per Area (1400 per site)	200 per WAC2	32,500 per CORE Enterprise
<b>Software</b>	-	WaveLinX LITE Mobile App	WaveLinX Mobile App	CORE
<b>Areas</b>	-	28 per Site	50 per WAC2	up to 3,000
<b>Zones</b>	-	16 per Area	16 per Area	up to 9,000
<b>Scheduling</b>	-	-	Local	Global
<b>VividTune™</b>	-	-	Yes	Yes
<b>Plug-Load Control</b>	-	-	Yes	Yes
<b>Low-Voltage Power</b>	-	-	Yes	Yes
<b>Integration</b>	-	-	-	BACnet, API
<b>Dashboards</b>	-	-	-	Energy, Occupancy
<b>Configuration</b>	-	Installer	Technician	Technician / IT

## SCALABILITY

