

Project		Catalog #		Type	
Prepared by		Notes		Date	



# Metalux

## SkyRidge 22SR LED

2' x 2' Specification Grade Troffer LED Module

### Typical Applications

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

### Interactive Menu

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### Product Certification



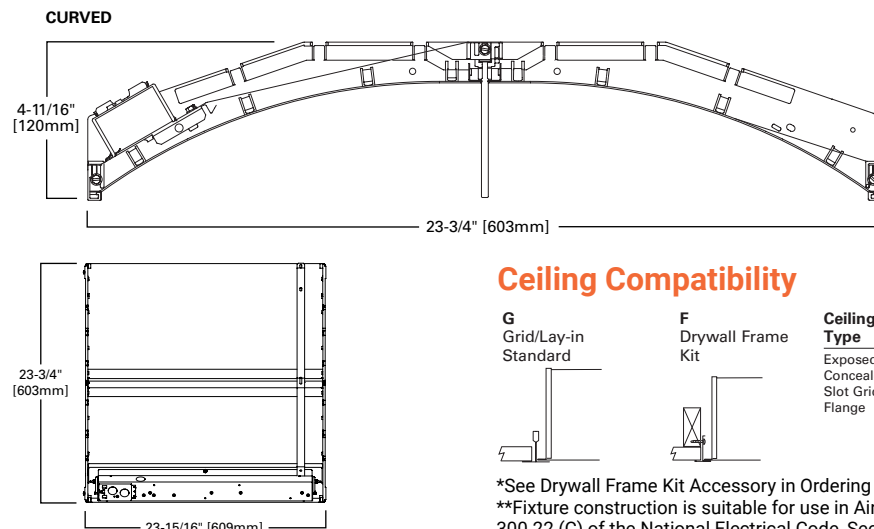
### Product Features



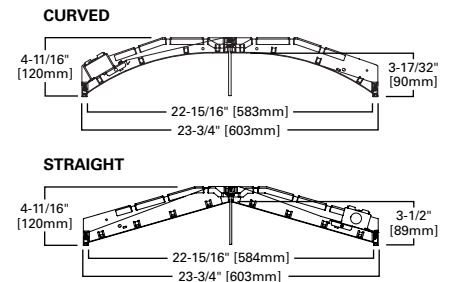
### Top Product Features

- 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

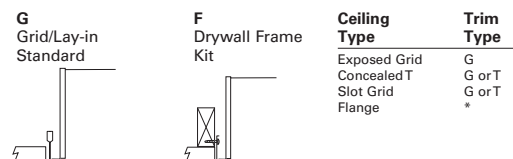
### Dimensional and Mounting Details



### Lamp Configurations



### Ceiling Compatibility



\*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: **22SR-LD2-29-C-UNV-L835-CD1-SVPD1-U**

Rating	Series	Air	Lamp Type	Lumen Outputs	Reflector	Optics	Voltage
[Blank]=Standard ATW-SW4= Chicago Rated <sup>(1)</sup>	22SR=2' x 2' SkyRidge Series	[Blank]=Standard A=Air (Vented) <sup>(3)</sup>	LD2=LED 2.0	<b>Stock Lumen Outputs</b> 20=2000 Lumens <sup>(4)</sup> 29=2900 Lumens <sup>(4)</sup> <b>MTO Lumen Outputs</b> 25=2500 Lumens <sup>(4)</sup>	C=Curved (Standard) S=Straight	[Blank]=Standard	<b>347V=347 Volt</b> <b>UNV=Universal Voltage 120-277V</b> <b>48V=48 Volt Low-voltage (Class 2) <sup>(9)</sup></b> <b>120V=120 Volt <sup>(9)</sup></b> <b>277V=277 Volt <sup>(9)</sup></b>
<b>Notes</b> (1) Chicago rated version does not allow for row mounting.	<b>Notes</b> (2) DesignLights Consortium® Qualified and classified for DLC Standard, refer to www.designlights.org for details.	<b>Notes</b> (3) 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> (4) Not compatible with WN driver.			<b>Notes</b> (5) 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 DLVP system pages for additional details and compatibility.

Emergency Options	CCT	Flex	Driver Type	Number of Drivers
<b>EL7W=7-watt, 120V-277V emergency battery pack installed <sup>(6)</sup></b> <b>EL14W=14-watt 120V-277V emergency battery pack installed <sup>(6)</sup></b> <b>ELV7W=7-watt, DLVP-compatible low voltage emergency battery pack installed <sup>(6)</sup></b> <b>ELV14W=14-watt DLVP-compatible low voltage emergency battery pack installed <sup>(6)</sup></b> <b>GTR2=Bodine Generator Transfer Relay <sup>(7),(9)</sup></b> <b>ETRD=Iota Emergency Transfer Relay with dimming control <sup>(7)</sup></b>	<b>L830=80CRI, 3000K</b> <b>L835=80CRI, 3500K</b> <b>L840=80CRI, 4000K</b> <b>L850=80CRI, 5000K</b>	<b>A3/8-4/18GDIM=3/8" Flex with 0-10V Dimming Leads</b> Multiple other configurations available. See below for details. <b>A3/8-5/18GDIM=Flex with 0-10V Dimming leads and Blue for alternate wiring.</b> See below for details.	<b>CD=0-10V Dimming Driver (1%-100% Dimming)</b> <b>WN=WaveLinX Wireless Fixture, No Sensor <sup>(A),(G),(H)</sup></b> <b>5LTD=Fifth Light DALI Driver (5%-100% Dimming) <sup>(E)</sup></b> <b>5LTHD=Fifth Light Dimming Driver (1%-100% Dimming) <sup>(E)</sup></b> <b>LV1=DLVP Dimming Driver (0%-100% Dimming) <sup>(C)</sup></b> <b>SD=Step Dimming Driver (50%-100% Dimming)</b> <b>LH=Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming <sup>(7)</sup></b> <b>L5=Lutron 5 Series (LDE5-Series) 5%-100% EcoSystem Driver <sup>(7)</sup></b> <b>SR=Sensor-ready Dimming Driver (1%-100% Dimming)</b>	1=1 Driver
<b>Notes</b> (6) 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. (7) 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. (9) Must specify voltage as 120V or 277V when ordering GTR2 option. (C) Consult 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>A3/8-4/18GDIM 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> 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. (C) Consult DLVP system pages for additional details and compatibility. (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 www.lutron.com. (G) Not compatible with GTR, ETRD, or integrated sensor options. (H) Available with UNV voltage only.	

Integrated Sensing Systems	SkyTrim	Packaging	Accessories
<b>[Blank]=No Sensor</b> <b>WAA=WaveLinX Wireless Integrated Sensor <sup>(A)</sup></b> <b>WAB=WaveLinX Lite Wireless Integrated Sensor <sup>(B)</sup></b> <b>SLVPD1=Low-voltage Integrated Sensor <sup>(C)</sup></b> <b>SVPD1=0-10V Stand-alone Integrated Sensor <sup>(D)</sup></b>	<b>TB=Tahtitian Blue</b> <b>PG=Primary Green</b> <b>SO=Storaro Orange</b> <b>PL=Pearl</b> <b>BR=Belladonna Rose</b> <b>MR=Medium Red</b> <b>ST=Straw</b>	<b>U=Unit Pack</b> <b>PALC=Job Pack, in carton</b>	<b>T3A END E.Q. BRACKET PARTS BAG (Standard with fixture)</b> <b>DF-22W-U=2' x 2' Drywall Frame Kit</b> <b>SK-22-WT=2' x 2' Tall Surface Mount Kit</b> <b>ISHH-01=Programming Remote for Integrated Sensor <sup>(D)</sup></b> <b>ISHH-02=Personal Control Remote for Integrated Sensor <sup>(D)</sup></b>
<b>Notes</b> 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 DLVP system pages for additional details and compatibility. (D) Consult SVPD series system pages for additional details and compatibility.	<b>Notes</b> (8) Fixtures using factory installed SkyTrim option are not DLC qualified.		<b>Notes</b> 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: (D) For use with SVPD sensor only. Consult SVPD series system pages for additional details and compatibility.

## 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 fixture for sensor-less wireless control
- WaveLinX wireless sensor compatible for standalone, controlled, connected, and IoT capability
- SVPD sensor compatible for standalone functionality
- Low-voltage sensor and driver compatible for 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

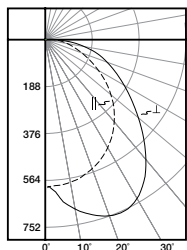
- Components are UL recognized
- cULus listed for 25° C ambient indoor environments
- RoHS compliant
- Complies with IESNA LM-79
- LEDs compliant with LM-80 standards
- DesignLights Consortium® Qualified and classified for DLC Standard (refer to www.designlights.org)

### Warranty

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

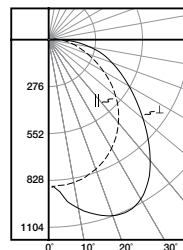
## Photometric Data

[View IES files](#)



### 22SR-LD2-20-CUNV-L835-CD1-U

Electronic Driver  
 Linear LED 3500K  
 Spacing criterion: (||) 1.22 x mounting height,  
 (⊥) 1.6 x mounting height  
 Lumens: 2107  
 Input Watts: 15.4W  
 Efficacy: 136.8 lm/W  
 Test Report: 22SR-LD2-20-CUNV-L835-CD1-U.IES



### 22SR-LD2-29-CUNV-L835-CD1-U

Electronic Driver  
 Linear LED 3500K  
 Spacing criterion: (||) 1.22 x mounting height,  
 (⊥) 1.6 x mounting height  
 Lumens: 3095  
 Input Watts: 23.4W  
 Efficacy: 132.3 lm/W  
 Test Report: 22SR-LD2-29-CUNV-L835-CD1-U.IES

## Energy and Performance Data by Catalog Number

Stock or MTO	Catalog Logic (Curved)	Delivered Lumens	Watts	Efficacy (LPW)
MTO	22SR-LD2-20-C-UNV-L830-CD1-U	2044	15.4	133
Stock	22SR-LD2-20-C-UNV-L835-CD1-U	2107	15.4	137
Stock	22SR-LD2-20-C-UNV-L840-CD1-U	2149	15.4	140
MTO	22SR-LD2-20-C-UNV-L850-CD1-U	2339	15.4	152
MTO	22SR-LD2-25-C-UNV-L830-CD1-U	2571	19.6	131
MTO	22SR-LD2-25-C-UNV-L835-CD1-U	2651	19.6	135
MTO	22SR-LD2-25-C-UNV-L840-CD1-U	2705	19.6	138
MTO	22SR-LD2-25-C-UNV-L850-CD1-U	2943	19.6	150
MTO	22SR-LD2-29-C-UNV-L830-CD1-U	3003	23.4	128
Stock	22SR-LD2-29-C-UNV-L835-CD1-U	3095	23.4	132
Stock	22SR-LD2-29-C-UNV-L840-CD1-U	3157	23.4	135
MTO	22SR-LD2-29-C-UNV-L850-CD1-U	3436	23.4	147

Stock or MTO	Catalog Logic (Straight)	Delivered Lumens	Watts	Efficacy (LPW)
MTO	22SR-LD2-20-S-UNV-L830-CD1-U	2081	15.4	135
MTO	22SR-LD2-20-S-UNV-L835-CD1-U	2145	15.4	139
MTO	22SR-LD2-20-S-UNV-L840-CD1-U	2188	15.4	142
MTO	22SR-LD2-20-S-UNV-L850-CD1-U	2381	15.4	155
MTO	22SR-LD2-25-S-UNV-L830-CD1-U	2619	19.6	134
MTO	22SR-LD2-25-S-UNV-L835-CD1-U	2700	19.6	138
MTO	22SR-LD2-25-S-UNV-L840-CD1-U	2753	19.6	140
MTO	22SR-LD2-25-S-UNV-L850-CD1-U	2996	19.6	153
MTO	22SR-LD2-29-S-UNV-L830-CD1-U	3057	23.4	131
MTO	22SR-LD2-29-S-UNV-L835-CD1-U	3151	23.4	135
MTO	22SR-LD2-29-S-UNV-L840-CD1-U	3214	23.4	137
MTO	22SR-LD2-29-S-UNV-L850-CD1-U	3498	23.4	149

### Lumen Maintenance

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.

### Shipping Data

Catalog No.	Wt.
22SR-LD2-20	12 lbs.
22SR-LD2-29	12 lbs.

### SkyTrim Field Installation Kits

Color Choice	Kit Catalog Number	Kit Quantity
Tahitian Blue	STK-2-TB-10PK	10
Primary Green	STK-2-PG-10PK	10
Storaro Orange	STK-2-SO-10PK	10
Belladonna Rose	STK-2-BR-10PK	10
Medium Red	STK-2-MR-10PK	10
Pearl	STK-2-PL-10PK	10
Straw	STK-2-ST-10PK	10

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

## Control Systems

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



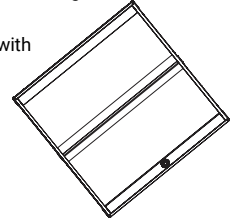
Connected Systems  
[CLICK HERE](#)

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

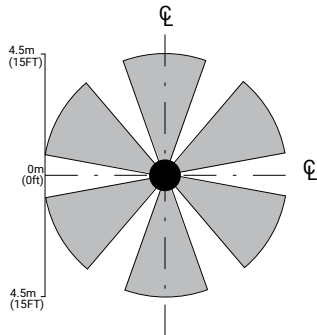
For standalone and controlled applications, the WaveLinx Lite integral sensor provides out-of-the-box functionality with no gateways required and factory startup is not needed.

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.

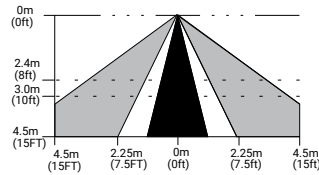
The WaveLinx Wireless Connected Lighting System combined with Trellix provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems to deliver actionable insights through the aggregation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



TOP VIEW:



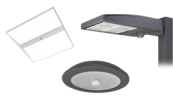
SIDE VIEW:



**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.

## 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
Integration	-	-	-	BACnet, API
Dashboards	-	-	-	Energy, Occupancy
Configuration	-	Installer	Technician	Technician / IT

## SCALABILITY

devices

areas

floors

buildings