Project	Catalog #	Туре	
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

# Interactive Menu

- Order Information page 2
- Photometric Data page 3
- Control Solutions page 6
- Connected Systems page 6
- · Product Warranty

# **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** CURVED CURVED 4-11/16" 3-17/32 [120mm] [90mm] 4-11/16" [120mm] 22-15/16" [583mm] 23-3/4" [603mm] STRAIGHT 4-11/16" [120mm] 3-1/2" 23-3/4" [603mm] [89mm] 22-15/16" [584mm] **Ceiling Compatibility** · 23-3/4" [603mm] Ceiling Trim Grid/Lay-in Drywall Frame Type Type Standard Exposed Grid Concealed T Slot Grid G or T \*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 47-15/16" [1218mm] of NFPA 90A and Section 602.2.1.4 of ICC.

Metalux 24SR LED 2' x 4'

## **Order Information**

SAMPLE ORDER NUMBER: 24SR-LD2-48-C-UNV-L835-CD1-SVDP1-U

Rating	Series	Air	Lamp Type	Lumen Outputs	Reflector	Optics	Voltage
Rating	Series (2)	Air	Lamp Type	Lumen Outputs	Reflector	Optics	Voltage (7)
[Blank]=Standard ATW-SW4=Chicago Rated <sup>(1)</sup>	24SR-2' x 4' SkyRidge Series	<b>[Blank]</b> =Standard <b>A</b> =Air (Vented) <sup>(3)</sup>	LD2=LED 2.0	Stock Lumen Outputs 39=3900 Lumens 48=4800  MTO Lumen Outputs 29=2900 Lumens (4), (5) 34=3400 Lumens (4), (5) 45=4500 Lumens 53=5300 Lumens 59=5900 Lumens 64=6400 Lumens (6)	C=Curved (Standard) S=Straight	[Blank]=Standard	347V=347 Volt UNV=Universal Voltage 120-277V 48V=48 Volt Low-voltage (Class 2) (C) 120V=120 Volt (8) 277V=277 Volt (8)
Notes	Notes	Notes		Notes			Notes
(1) Chicago rated version does not allow for row mounting.	(2) DesignLights Consortium® Qualified and classified for DLC Standard, refer to www, designlights.org for details.	(3) Air version is vented but does not meet air handling require- ments. Air version is non-lC. Air version is not available with integrated sensor.		(4) 2900 and 3400 lumen packages are not available with Step-Dim driver. (5) 2900 and 3400 lumen packages are not available with SLTD – Dali option driver. (6) SLTHD option uses two drivers at 6400 lumens.			(7) Products also available in non-US voltages and frequencies for international markets. (8) 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
Emergency Options	CCT	Flex	Driver Type	Number of Drivers
EL7W=7-watt, 120V-277V emergency battery pack installed <sup>(9)</sup> EL14W=14-watt 120V-277V emergency battery pack installed <sup>(9)</sup> ELV7W=Low-voltage system, 7-watt emergency battery pack <sup>(1)</sup> ELV14W=Low-voltage system, 14-watt emergency battery pack <sup>(1)</sup> GTR2=Bodine Generator Transfer Relay <sup>(10)</sup> . <sup>(11)</sup> ETRD=lota Emergency Transfer Relay with dimming control <sup>(10)</sup>	L830=80CRI, 3000K L835=80CRI, 3500K L840=80CRI, 4000K L850=80CRI, 5000K	A3/8-4/18GDIM=3/8" Flex with 0-10V Dimming Leads Multiple other configurations available. See below for details. A3/8-5/18GDIM=Flex with 0-10V Dimming leads and Blue for alternate wiring. See below for details.	CD=0-10V Dimming Driver (1%-100% Dimming) WN=WaveLinx Wireless Fixture, No Sensor (A; (6), (6)) SLTD=Fifth Light DALI Driver (5%-100% Dimming) (13), (6) SLTHD=Fifth Light Dimming Driver (1%-100% Dimming) (14), (6) LV=DLVP Dimming Driver (0%-100% Dimming) (12) LV=DLVP Dimming Driver (50%-100% Dimming) (12) LH=Lutron HiLume (LDET series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming (7) L5=Lutron 5 Series (LDE5-Series) 5%-100% EcoSystem Driver (7) SR=Sensor-ready Dimming Driver (1%-100% Dimming)	1=1 Driver
Notes  (9) 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/Wx 7-700 lumens). IES-format photometry for luminaire under emergency operation available. (10) 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. (11) Must specify voltage as 120V or 277V when ordering GTR2 option. (IC) Consult Wave-Linx Low-Voltage or DLVP system pages for additional details and compatibility.		Flex options available for 0-10V dimming control, DALI dimming control, emergency and right light functions. 72-inch factory-installed and previred 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.  A3/8-4/18GDIM series notes: Factory installed dimming option 3/8" flexible metal conduit with 2-#18 power and ground wires and 2-#18 Listed jacketed 0-10V +/- control wires. Meets Ut. 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 1-C-30B), all applicable 05HA and HUD Requirements. Ut. 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-Handfing Space Installation per NEC@ 300.22(C).	Notes  (12) 2900 and 3400 lumen packages are not available with Step-Dim driver. (13) 2900 and 3400 lumen packages are not available with SLTD - Dali option driver. (14) SLTHO polino 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: (a) Consult WaveLinx system pages for additional details and compatibility. (C) Low-voltage System Dimming Ofter (08-100% Dimming). (E) Consult Hifth 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
Integrated Sensing Systems	SkyTrim (18)	Packaging	Accessories (order separately)
[Blank]=No Sensor WAA=WaveLinx Wireless Integrated Sensor (15), (A) WAB=WaveLinx Lite Wireless Integrated Sensor (16), (B) WLA=Low-voltage Integrated Sensor (17), (C) SVPD1=0-10V Stand-alone Integrated Sensor (16), (B)	TB=Tahitian Blue PG=Primary Green S0=Storaro Orange PL=Pearl BR=Belladonna Rose MR=Medium Red ST=Straw	U=Unit Pack PALC=Job Pack, in carton	T3A END E.Q. BRACKET PARTS BAG (Standard with fixture) DF-24W-U=2' x 4' Drywall Frame Kit SK-24-WT=2' x 4' Tall Surface Mount Kit ISHH-01=Programming Remote for Integrated Sensor (®) ISHH-02=Personal Control Remote for Integrated Sensor (®)
Notes	Notes		Notes
(15) WAA sensor to be used with CD or W2A driver. (16) WAB and SVPD1 sensor to be used with CD driver. (17) 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 DLYP system pages for additional details and compatibility. (D) Consult SVPD series system pages for additional details and compatibility.	(18) Fixtures using factory installed SkyTrim option are not DLC qualified.		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: (0) For use with SVPD sensor only. Consult SVPD series system pages for additional details and compatibility.



Metalux 24SR LED 2' x 4'

# **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
- · WaveLinx wireless sensor compatible for standalone, controlled, connected, and IoT capability
- SVPD sensor compatible for standalone functionality
- 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 ≤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

· High reflectance baked matte white enamel finish for luminous uniformity

- · 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

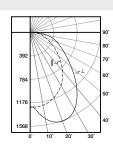
- · Components are UL recognized
- cULus listed for 25° C ambient indoor environments
- · RoHS compliant
- · Complies with IESNA LM-79
- · LEDs compliant with LM-80 standards
- DesignLights Consortium® Qualified and classified for DLC Standard (refer to www.designlights.org)

### Warranty

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

### Photometric Data





### 24SR-LD2-39-CUNV-L835-CD1-U

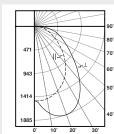
**Electronic Driver** Linear LED 3500K

Spacing criterion: (II) 1.18 x mounting height, ( $\perp$ ) 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, ( $\perp$ ) 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

Metalux 24SR LED 2' x 4'

# **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
МТО	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
МТО	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
МТО	24SR-LD2-59-C-UNV-L850-CD1-U	6896	50.2	137
МТО	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
МТО	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



Metalux 24SR LED 2' x 4'

# **Energy and Performance Data by Catalog Number**

Stock or MTO	Catalog Logic (Straight)	Delivered Lumens	Watts	Efficacy (LPW)
МТО	24SR-LD2-29-S-UNV-L830-CD1-U	2952	22.7	130
МТО	24SR-LD2-29-S-UNV-L835-CD1-U	3043	22.7	134
МТО	24SR-LD2-29-S-UNV-L840-CD1-U	3104	22.7	137
МТО	24SR-LD2-29-S-UNV-L850-CD1-U	3377	22.7	149
МТО	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
МТО	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
МТО	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

### Lumen Maintenance (Non-IC Data)

Ambient Temperature	TM-21 Lumen Maintenance (100,000 hours) (1)	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.	
24SR-LD2-39	24 lbs.	
24SR-LD2-48	24 lbs.	

## **SkyTrim Field Installation Kits**

Kit Catalog Number	Kit Quantity
STK-4-TB-10PK	10
STK-4-PG-10PK	10
STK-4-SO-10PK	10
STK-4-BR-10PK	10
STK-4-MR-10PK	10
STK-4-PL-10PK	10
STK-4-ST-10PK	10
	STK-4-TB-10PK STK-4-PG-10PK STK-4-SO-10PK STK-4-BR-10PK STK-4-MR-10PK STK-4-PL-10PK

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



Metalux 24SR LED 2' x 4'

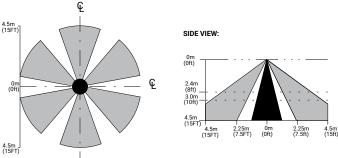


# **← Control Systems**

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



TOP VIEW:



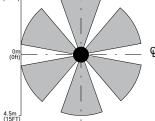
Note: Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

The 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



# 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	<b>Controlled</b> WaveLinx Lite	<b>Connected</b> WaveLinx Wireless	<b>Enterprise</b> 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 Contro	ol –	-	Yes	Yes	
Low-Voltage Pow	rer –	-	Yes	Yes	
Integration	-	-	-	BACnet, API	
Dashboards	-	-	-	Energy, Occupancy	
Configuration	-	Installer	Technician	Technician / IT	

# **SCALABILITY**



