Round Opal Lens (RX-WO)

Flat Opal Lens (ZX-WO)

Corelite

Class RX / ZX LED

2' x 2' Recessed
3-$\frac{1}{4}$" Depth

Typical Applications
• Commerical Office Spaces • Schools • Hospitals • Retail Merchandising Areas

Interactive Menu

Product Certification

UL CERTIFIED SAFETY | Efficiency Standards T24 California Title 24 Non-Residential Compliant | RoHS COMPLIANT | IC RATED | SYSTEMS CERTIFIED

Product Features

Connected Systems | Bluetooth® | VividTune color tuning solutions | BAA COMPLIANT OPTIONS BUY AMERICAN ACT AVAILABLE

LINEAR DISCONNECT — Safe and convenient means of disconnecting power | MWS MODULAR WIRING SYSTEM CLICK HERE
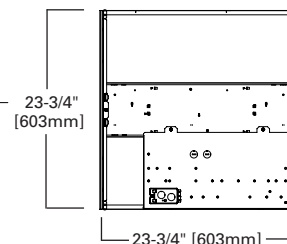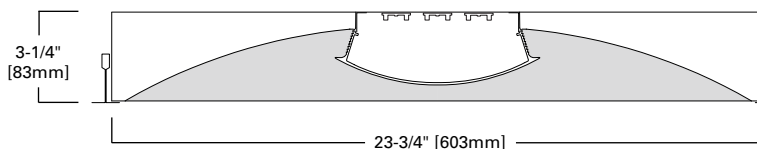
Top Product Features

- Architectural quality design with Class R round (R) and flat (Z) lens variations
- Standard and High Performance lumen packages up to 132 lumens per watt
- Three CCT options: 3000K, 3500K and 4000K at 80+ or 90+ CRI
- VividTune CCT tuning options from 3000K–5000K or 2700K-6500K
- Integrated sensor systems - occupancy, daylight and IoT connectivity
- Options to meet Buy American and other domestic preference requirements

Dimensional and Mounting Details

Class RX Round lens

3-1/4" [83mm]

23-3/4" [603mm]

23-3/4" [603mm]
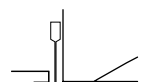
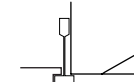23-3/4" [603mm]

Class ZX Flat lens

3-1/4" [83mm]

23-3/4" [603mm]
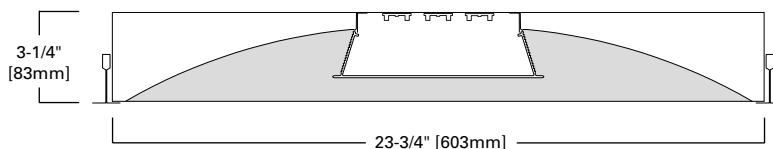
Grid/Lay-in Flush
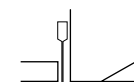
Concealed T

Slot Grid

9/16" Tegular*
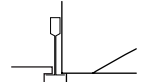
*Requires T9T ceiling type option

additional product diagrams

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Order Information

SAMPLE ORDER NUMBER: **RX-WO-34H835-UNV-22-T1-STD-SWPD1**

Domestic Preferences	Series	Shielding	Lumen Package		CRI	Color Temperature	Input Voltage

Domestic Preferences	Series	Shielding	Lumen Package (2x2 Nominal Values)		CRI	Color Temperature	Input Voltage
[Blank]=Standard **BAA**=Buy American Act **TAA**=Trade Agreements Act	**RX**=Class RX LED Recessed, Round Lens **ZX**=Class ZX LED Recessed, Flat Lens	**WO**=Opal Smooth Lens	**High Performance** **20H**=2000 Lumen, 15W **24H**=2400 Lumen, 18W **29H**=2900 Lumen, 21W **34H**=3400 Lumen, 25W **39H**=3900 Lumen, 29W **44H**=4400 Lumen, 33W	**Standard** **20L**=2000 Lumen, 16W **24L**=2400 Lumen, 19W **29L**=2900 Lumen, 22W **34L**=3400 Lumen, 26W **39L**=3900 Lumen, 30W **44L**=4400 Lumen, 35W	**8**=80+ CRI **9**=90+ CRI	**30**=3000K **35**=3500K **40**=4000K **3050**=Tunable White 3000K-5000K **2765**=Tunable White 2700K-6500K	**UNV**=Universal (120V-277V) **347**=347V **48V**=48V Low-voltage (Class 2)
Notes 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 DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	**Notes**	**Notes**	**Notes** Refer to performance table on Page 3 for more detail.			**Notes** White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). May be combined with Wavelinx (WAA) sensor control systems only. Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity. Vivid Tune is not DLC Qualified.	**Notes** 347V versions are not available with emergency or sensor options.

Size	Ceiling Type	Driver Type	Integrated Sensing Systems	Emergency Options	Options

Size	Ceiling Type	Driver Type	Integrated Sensing Systems	Emergency Options	Options
22=2'x2'	**T1**=15/16" Grid/Lay-in (Flush), Concealed T, and Slot Grid **T9T**=9/16" Grid Tegular Trim	**STD**=Standard 0-10V (1%-100%) **5LT**=DALI (1%-100%) **LV1**=Low-voltage dimming driver (0-100%) **STP**=Step Dimming (Bi-Level, 50%) **LH**=Lutron HiLume 1% EcoSystems (LDE1) **W2A**=White Tuning, 2ch, 0-10V Intensity and CCT control	**[Blank]**=No Sensor **WAA**=WaveLinx Wireless Integrated Sensor [A] **WAB**=WaveLinx Lite Wireless Integrated Sensor [B] **WLA**=Low-voltage Integrated Sensor [C] **SVPD1**=0-10V Stand-alone Integrated Sensor [D]	=No Emergency **EL7W**=7-watt 120V-277V Integral EM Battery **EL14W**=14-watt 120V-277V Integral EM Battery **ETRD**=Iota Emergency Transfer Relay with dimming control	=None **AR**=Air Return **CP**=Chicago Plenum **W6**=3/8" Flex Installed, A3/8-4/18GDIM
Notes	**Notes** EQ Grid Clips are recommended for all 9/16" ceiling systems. Four required per fixture. See Accessories for ordering details.	**Notes** LH driver option not available in 20H lumen package. Consult DLVP system pages for additional details and compatibility.	**Notes** Matching width lens endcap on other side of sensor endcap may be supplied for symmetrical appearance. Required for use with sensor and emergency combination. Add "D" to sensor ordering as shown - WAAD, WABD, SDVPD1. 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	**Notes** Battery option increases total height by 1 inch. ETRD used to bypass local control during outage; must be used in conjunction with UL 1008 device (provided by others); must specify voltage as 120V or 277V when ordering. 347V not available.	**Notes** See specification features for flexible metal conduit details.

Product Specifications

Construction
- 3-1/4" housing depth constructed of die-formed, code gauge cold rolled steel
- Full length die-formed stiffeners and unibody endplate for added strength
- Back reflector is 90% reflective matte white using electrostatically applied polyester powder coat paint for durability and luminous uniformity

Shielding
- Smooth opal acrylic lens with round (R) or flat (Z) profile
- Provides low-glare ambient illumination with evenly luminous side reflectors
- Lens secured to housing via injection molded ends for easy tool-free access

Mounting
- Endplates provided with Grid-Lock feature for safety
- Optional earthquake clips available
- Four auxiliary fixture end suspension points
- Consult local code for appropriate tie-wire recommendations
- See Accessories section for drywall frame kit and surface mount kit options

LED and Light Engine
- Standard version equipped with two light engines
- Available High Performance version provides optimal lens uniformity and increased luminous efficacy with increased light engine count

- LED's are available in 3000K, 3500K, 4000K
- Dynamic tunable white options available with Cooper Lighting Solutions' Vividtune
- CRI options of either ≥80CRI or ≥90CRI
- Lumen output will be affected - please refer to the lumen adjustment factor tables
- TM21 life at 60,000 hours up to L94 and calculated L70 exceeds 290,000 hrs
- Drivers available in 120-277V and 347V

Integrated Controls
- 0-10V dimming to 1% standard
- 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

Emergency Options
- Optional 120-277V emergency battery available in 7W or 14W
- 90-minute backup period for code compliance
- Test switch with laser pointer and testing from floor feature for ease of use
- EZ Key feature prevents accidental discharge during construction
- 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 14 = 1400 lumens)

- UL 924 emergency/generator transfer options available

Flexible Metal Conduit Options
- 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
- Default flex option is A3/8-4/18GDIM; 3/8" flexible metal conduit with 2-#18 power and ground wires and 2-#18 UL-listed jacketed 0-10V +/- control wires
- Not all options may be combined and installation rating vary by type
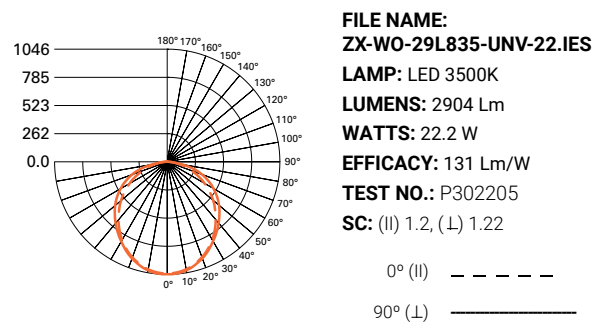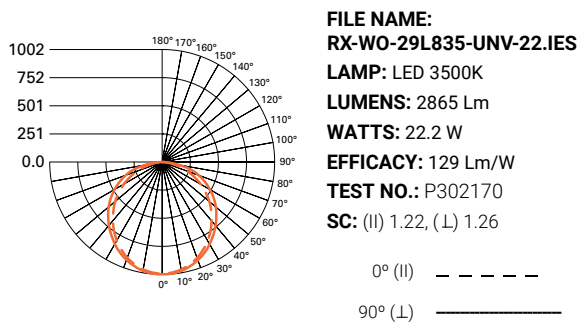
Weight
- 12.0 lbs.

Compliance
- IC rated for insulation contact
- cULus listed for damp locations
- RoHS compliant
- Tested to IESNA LM-79 and LM-80
- Stated life per TM21 standards
- Can be used for State of California Title 24 high efficacy luminaire

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

Photometric Data

FILE NAME: RX-WO-29L835-UNV-22.IES
LAMP: LED 3500K
LUMENS: 2865 Lm
WATTS: 22.2 W
EFFICACY: 129 Lm/W
TEST NO.: P302170
SC: (∥) 1.22, (⊥) 1.26

0° (∥) – – – –
90° (⊥) ——————

FILE NAME: ZX-WO-29L835-UNV-22.IES
LAMP: LED 3500K
LUMENS: 2904 Lm
WATTS: 22.2 W
EFFICACY: 131 Lm/W
TEST NO.: P302205
SC: (∥) 1.2, (⊥) 1.22

0° (∥) – – – –
90° (⊥) ——————

Note: Refer to IES files for more product data.

Energy and Performance Data

High Performance 2x2 – RX Light Level Outputs (3500K, 80 CRI)				
Series	Lumen Package	Delivered Lumens	Wattage	Efficacy (LPW)
RX-WO Round	20H	1894	14.9	127
	24H	2293	17.7	130
	29H	2749	21.1	130
	34H	3181	24.5	130
	39H	3732	28.9	129
	44H	4290	33.2	129
ZX-WO Flat	20H	1919	14.9	129
	24H	2324	17.7	131
	29H	2787	21.1	132
	34H	3224	24.5	132
	39H	3783	28.9	131
	44H	4348	33.2	131

Standard 2x2 – RX Light Level Outputs (3500K, 80 CRI)				
Series	Lumen Package	Delivered Lumens	Wattage	Efficacy (LPW)
RX-WO Round	20L	1991	16.0	124
	24L	2353	19.2	123
	29L	2865	22.2	129
	34L	3297	25.8	128
	39L	3827	30.3	126
	44L	4348	35.0	124
ZX-WO Flat	20L	2018	16.0	126
	24L	2385	19.2	124
	29L	2904	22.2	131
	34L	3342	25.8	130
	39L	3879	30.3	128
	44L	4407	35.0	126

Lumen Adjustment Factors

CCT	80 CRI	90 CRI
3000K	0.981	0.806
3500K	1.000	0.836
4000K	1.021	0.853

Example Calculation:
ZX / 29L / 3500K / 80 CRI
Lumen Output selected = 2904 lms

3500K / 90 CRI Desired
Lumen Adjustment Factor = 0.836

Adjusted Lumen Output =
2904 lms x 0.836 = 2428 lms

Color Data (3500K)

		80CRI	90CRI
TM-30-15	R_f	82.4	90.8
	R_g	95.2	99.5
CRI/CIE	R_a	82.7	95.7
	R_9	6.3	65.9

Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25°C	>94%	290,000

Accessories (Ordered Separately)

CZ2-EQCLIP-U PK = "CZ2" Earthquake Clip Kit (4 clips per bag kit)
DF-22-W-U = 2' x 2' Drywall Frame Kit
SMK-22-W = 4" Tall Surface Mount Kit, 2' x 2'

Shielding Options

Round Opal Lens (RX-WO)

Flat Opal Lens (ZX-WO)

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📍 Control Systems

- WaveLinx Wireless
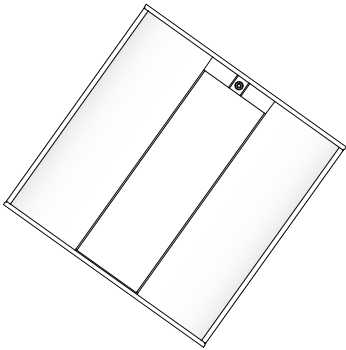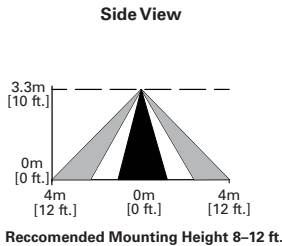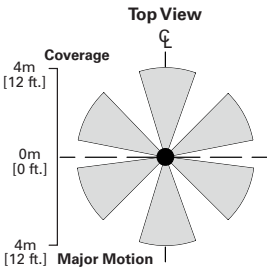- WaveLinx Wired
- WaveLinx Lite
- DVLP
- Vividtune

Connected Systems CLICK HERE

The Class RX with Integrated Sensor technology provides automatic energy savings without sacrificing performance. The Class RX 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 energyand cost savings, while enabling buildings to become smartbuildings.

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

Coverage
4m [12 ft.]
0m [0 ft.]
4m [12 ft.] Major Motion

Side View

3.3m [10 ft.]
0m [0 ft.]
4m [12 ft.]   0m [0 ft.]   4m [12 ft.]

Reccomended Mounting Height 8–12 ft.

Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.
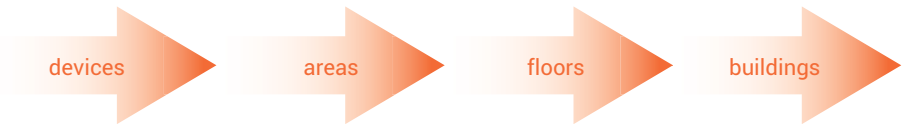
	Standalone	**Controlled** WaveLinx Lite	**Connected** WaveLinx Wireless	**Enterprise** Trellix
Occupancy	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes
Gateways	–	–	1 WAC	300 WACs
Devices	–	50 per Area (1400 per site)	150 per WAC	45,000 per Core Enterprise
Software	–	WaveLinx Lite Mobile App	WaveLinx Mobile 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

COOPER Lighting Solutions
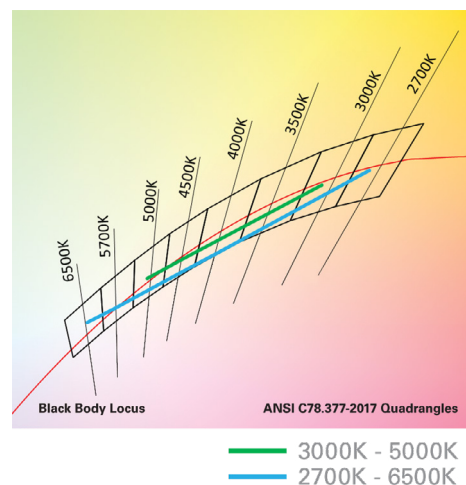a signify business

VividTune™
color tuning solutions

Class RX with VividTune Tunable White

VividTune tunable white luminaires from Cooper Lighting Solutions deliver high-quality light in a broad range of continuously variable color temperatures and intensities. Create a dynamic environment by adjusting the ambient light warmer or cooler to influence mood, support the task at hand, or create a dramatic ambience. The ability to control correlated color temperature and intensity separately using simple controls is the next evolution of LED lighting for the commercial, educational, healthcare and hospitality space. The unparalleled flexibility and number of available lighting environments enable users to find the right light with tunable white.
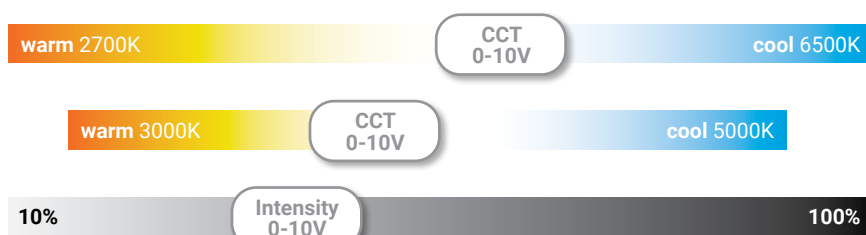

Black Body Locus   ANSI C78.377-2017 Quadrangles

— 3000K - 5000K
— 2700K - 6500K

Energy and Performance Data

CCT	3000K-5000K		2700K-6500K	
	80 CRI	**90 CRI**	**80 CRI**	**90 CRI**
2700K	-	-	0.868	0.741
3000K	0.894	0.736	0.893	0.771
3500K	0.946	0.804	0.924	0.809
4000K	0.993	0.868	0.944	0.835
4500K	1.002	0.883	0.961	0.857
5000K	1.002	0.883	0.974	0.874
6500K	-	-	0.988	0.897

Title: Tunable White - Lumen Adjustment Factors

2'x 2' Class RX LED - Example of Approximate Lumen Calculation			
	Standard Catalog #	**VividTune 80 CRI Catalog #**	**VividTune 90 CRI Catalog #**
CCT Setting	**RX-WO-39H835-UNV-22-STD**	**RX-WO-39H83050-UNV-22-W2A**	**RX-WO-39H93050-UNV-22-W2A**
3000K	-	3336	2747
3500K	3732	3530	3001
4000K	-	3706	3239
4500K	-	3739	3295
5000K	-	3739	3295

Controlling VividTune Tunable White

VividTune luminaires make tunable white more accessible by using simple and familiar controls. From wall dimmers to wireless controls, VividTune tunable white luminaires are compatible with industry standard 0-10V dimming controls. A single 0-10V dimming input is used to control intensity (brightness) while a second 0-10V dimming input is used to adjust CCT.

warm 2700K   CCT 0-10V   **cool** 6500K

warm 3000K   CCT 0-10V   **cool** 5000K

10%   Intensity 0-10V   100%

Example of Lumen Adjustment Calculation

RX-WO-39H83050-UNV-STD-22
at 80 CRI tuned to 3500K

*Adjusted Lumen =
published lm x adjusted lm factor*

Adjusted Lumen = 3732 x 0.946

Adjusted Lumen = 3530

* Lumen adjustment factors are for reference and may be different for each product selected. Refer to IES files for actual performance data on each.

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