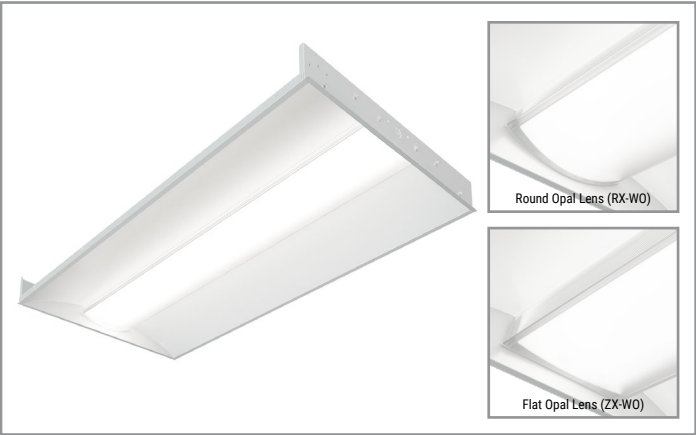


Project		Catalog #		Type	
Prepared by		Notes		Date	



# Corelite

## Class RX / ZX LED

2' x 4' Recessed  
3-1/4" Depth

### Interactive Menu

- Order Information [page 2](#)
- Photometric Data [page 4](#)
- Energy and Performance Data [page 4](#)
- VividTune™ Color Tuning Solutions [page 7](#)
- Product Warranty

### Product Certification



### Product Features

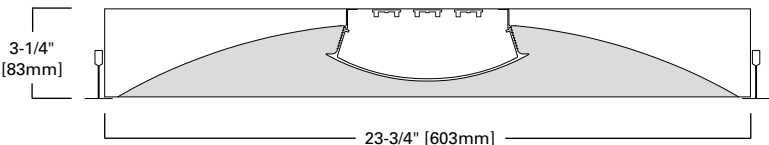


### Top Product Features

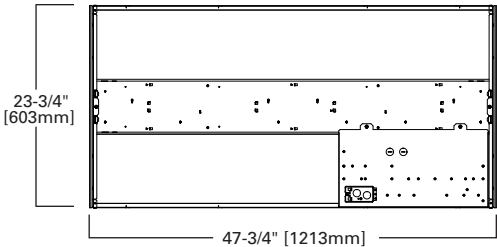
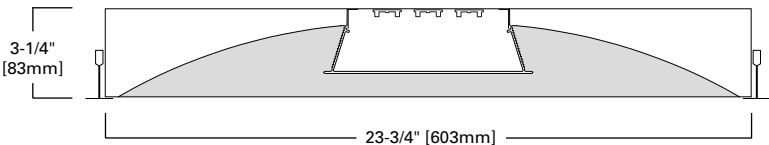
- Architectural quality design with Class R round (R) and flat (Z) lens variations
- Standard and High Performance lumen packages up to 143 lumens per watt
- Three CCT options: 3000K, 3500K and 4000K at 80+ or 90+ CRI
- VividTune CCT tuning options from 3000K–5000K or 2700K-6500K
- Integrated sensor systems - occupancy, daylight and IoT connectivity
- BioUP melanopic lighting options for 30% circadian boost and earn WELL Building Standard points
- Options to meet Buy American and other domestic preference requirements

### Dimensional and Mounting Details

Class RX Round lens



Class ZX Flat lens



[additional product diagrams](#)

## Order Information

SAMPLE ORDER NUMBER: **RX-WO-50H835-UNV-24-T1-STD-SWPD1**

Domestic Preferences	Series	Shielding	Lumen Package		CRI / Color Temperature	Input Voltage
Domestic Preferences	Series	Shielding	Lumen Package (2x4 Nominal Values)		CRI / Color Temperature	Input Voltage
<b>[Blank]</b> =Standard <b>BAA</b> =Buy American Act <b>TAA</b> =Trade Agreements Act	<b>RX</b> =Class RX LED Recessed, Round Lens <b>ZX</b> =Class ZX LED Recessed, Flat Lens	<b>WO</b> =Opal Smooth Lens	<b>High Performance</b> <b>30H</b> =3000 Lumen, 22W <b>35H</b> =3500 Lumen, 26W <b>40H</b> =4000 Lumen, 29W <b>45H</b> =4500 Lumen, 34W <b>50H</b> =5000 Lumen, 36W <b>55H</b> =5500 Lumen, 41W <b>60H</b> =6000 Lumen, 42W <b>65H</b> =6500 Lumen, 46W <b>70H</b> =7000 Lumen, 50W <b>75H</b> =7500 Lumen, 53W	<b>Standard</b> <b>30L</b> =3000 Lumen, 22W <b>35L</b> =3500 Lumen, 27W <b>40L</b> =4000 Lumen, 31W <b>45L</b> =4500 Lumen, 35W <b>50L</b> =5000 Lumen, 39W <b>55L</b> =5500 Lumen, 43W <b>60L</b> =6000 Lumen, 44W <b>65L</b> =6500 Lumen, 49W <b>70L</b> =7000 Lumen, 51W <b>75L</b> =7500 Lumen, 55W	<b>830</b> =80CRI, 3000K <b>835</b> =80CRI, 3500K <b>840</b> =80CRI, 4000K <b>930</b> =90CRI, 3000K <b>935</b> =90CRI, 3500K <b>940</b> =90CRI, 4000K <b>83050</b> =80CRI 3000K-5000K White Tuning <b>93050</b> =90CRI 3000K-5000K White Tuning <b>82765</b> =80CRI 2700K-6500K White Tuning <b>92765</b> =90CRI 2700K-6500K White Tuning <b>B35</b> =BioUp Static 3500K <b>B40</b> =BioUp Static 4000K <b>B50</b> =BioUp Static 5000K <b>B2750</b> =BioUp White Tuning 2700K-5000K	<b>UNV</b> =Universal (120V-277V) <b>347</b> =347V <b>48V</b> =48V Low-voltage (Class 2)
<b>Notes</b> 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.	<b>Notes</b>	<b>Notes</b>	<b>Notes</b> Refer to performance table on Page 4 for more detail. BioUp not available with High Performance lumen packages and not available with 7500 lumen standard. BioUp W2D is not available with 55L, 60L, 65L, 70L and 75L.		<b>Notes</b> White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, CCT, 1 intensity. Vivid Tune is not DLC Qualified.  BioUp Static to be used with STD driver. BioUp white tuning provides correlated color temperatures (CCT) between 2700K (warm) to 5000K (cool). Must be used with W2A or W2D driver.	<b>Notes</b> 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
24=2'x4'	T1=Grid/Lay-in (Flush), Concealed T, and Slot Grid T9T=9/16" Grid Regular Trim	STD=Standard 0-10V (1%-100%) SLT=DALI (1%-100%) LV1=Low-voltage dimming driver (0-100%) STP=Step Dimming (Bi-Level, 50%) LH=Lutron HiLume 1% EcoSystems (LDE1) W2A=Tunable White, 2ch, 0-10V Intensity and CCT control W2D=Tunable White, DALI Type 8 (1%-100%)	[Blank]=No Sensor WLS (formerly WAB)=WaveLinX LITE Wireless Sensor, Occupancy w/ photocell, Independent & Networked <sup>(B)</sup> WPS (formerly WAA)=WaveLinX PRO Wireless Sensor, Occupancy w/ photocell, Networked <sup>(A)</sup> WLN=WaveLinX LITE Wireless Control Node, without sensor <sup>(B)</sup> WPN=WaveLinX PRO Wireless Control Node, without sensor <sup>(A)</sup>	[Blank]=No Emergency EL7W=7-watt 120V-277V Integral EM Battery EL14W=14-watt 120V-277V Integral EM Battery B10=10W Emergency Battery w/ Self-Test ETRD=Iota Emergency Transfer Relay with dimming control	[Blank]=None AR=Air Return CP=Chicago Plenum W6=3/8" Flex Installed, A3/8-4/18GDIM
Notes	Notes	Notes	Notes	Notes	Notes
EQ Grid Clips are recommended for all 9/16" ceiling systems. Four required per fixture. See Accessories for ordering details.	Two drivers are required for the following packages: 75L 347 STD, 75H 347 STD. 5LTHD driver not available with 75H lumen package. Consult DLVP system pages for additional details and compatibility.  W2A used with two (2) 10V dimming control channels - cct and intensity.  W2D for use with BioUP options only. White tuning CCT between 2700K and 5000K. Must be used with DALI controls; one address to control two channels - intensity and CCT. May only be used with B10 Emergency option.	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 - WPSD, WLSd. Sensors to be used with STD or W2A driver.  Integrated sensor 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.	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). 347V not available. B10 only available with W2D. ETRD not available with W2D.	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
- Tunable white options available with Cooper Lighting Solutions' VividTune
- BioUP melanopic lighting options available in static or tunable white

### Integrated Controls

- 0-10V dimming to 1% standard
- DALI 2.0, Lutron, and step-dimming available

### Emergency Options

- Optional 120-277V emergency battery available in 7W, 10W or 14W
- 90-minute backup period for code compliance
- 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

- 17.0 lbs.

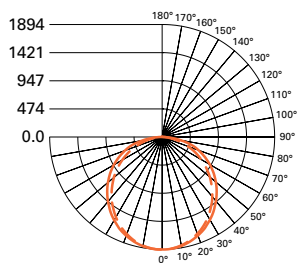
### Compliance

- 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

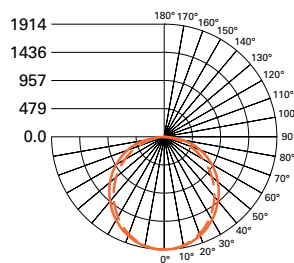
- Five year warranty standard. Optional ten year warranty available.

## Photometric Data

[View IES files](#)


**FILE NAME:**  
RX-WO-55H835-UNV-24.IES  
**LAMP:** LED 3500K  
**LUMENS:** 5514 Lm  
**WATTS:** 40.9 W  
**EFFICACY:** 135 Lm/W  
**TEST NO.:** P302247  
**SC:** (H) 1.22, (L) 1.28

0° (H) - - - - -  
90° (L) - - - - -



**FILE NAME:**  
ZX-WO-55H835-UNV-24.IES  
**LAMP:** LED 3500K  
**LUMENS:** 5571 Lm  
**WATTS:** 40.9W  
**EFFICACY:** 136 Lm/W  
**TEST NO.:** P302307  
**SC:** (H) 1.2, (L) 1.28

0° (H) - - - - -  
90° (L) - - - - -

Note: Refer to IES files for more product data.

## Energy and Performance Data

High Performance 2x4 – RX Light Level Outputs (3500K, 80 CRI)				
Series	Lumen Package	Delivered Lumens	Wattage	Efficacy (LPW)
RX-WO Round	30H	2855	21.6	132
	35H	3452	25.6	135
	40H	3908	29.2	134
	45H	4509	33.5	135
	50H	4966	36.3	137
	55H	5514	40.9	135
	60H	5815	41.5	140
	65H	6399	46.1	139
	70H	6892	49.9	138
	75H	7440	52.6	141
ZX-WO Flat	30H	2885	21.6	134
	35H	3488	25.6	136
	40H	3949	29.2	135
	45H	4556	33.5	136
	50H	5018	36.3	138
	55H	5571	40.9	136
	60H	5875	41.5	142
	65H	6466	46.1	140
	70H	6964	49.9	140
	75H	7518	52.6	143

Standard 2x4 – RX Light Level Outputs (3500K, 80 CRI)				
Series	Lumen Package	Delivered Lumens	Wattage	Efficacy (LPW)
RX-WO Round	30L	2857	22.3	128
	35L	3397	26.9	126
	40L	3821	30.6	125
	45L	4344	35.3	123
	50L	4761	38.6	123
	55L	5276	43.5	121
	60L	5699	44.1	129
	65L	6249	48.9	128
	70L	6654	51.0	130
	75L	7179	55.4	130
ZX-WO Flat	30L	2887	22.3	129
	35L	3433	26.9	128
	40L	3860	30.6	126
	45L	4390	35.3	124
	50L	4811	38.6	125
	55L	5331	43.5	123
	60L	5759	44.1	131
	65L	6314	48.9	129
	70L	6723	51.0	132
	75L	7254	55.4	131

## Standard Lumen Adjustment Factors

CCT	80 CRI	90 CRI	BioUp Static
2700K	-	-	-
3000K	0.981	0.806	-
3500K	1.000	0.836	0.912
4000K	1.021	0.853	0.899
5000K	-	-	0.879

## Example Calculation:

ZX / 55L / 3500K / 80 CRI

Lumen Output selected = 5331 lms

3500K / 90 CRI Desired

Lumen Adjustment Factor = 0.836

Adjusted Lumen Output = 5331 lms x 0.836 = 4590 lms

### Lumen Maintenance

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

### Color Data (3500K)

		80CRI	90CRI
TM-30-15	R <sub>t</sub>	82.4	90.8
	R <sub>g</sub>	95.2	99.5
CRI/CIE	R <sub>a</sub>	82.7	95.7
	R <sub>9</sub>	6.3	65.9

### Shielding Options

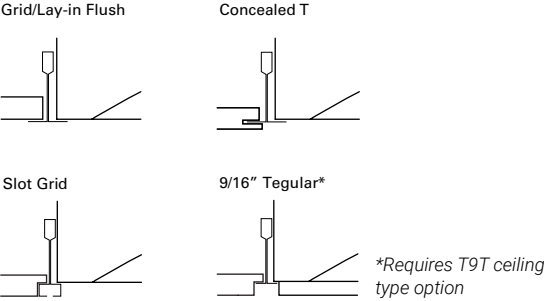


Round Opal Lens (RX-WO)



Flat Opal Lens (ZX-WO)

### Ceiling Compatibility



### Accessories (Ordered Separately)

- CZ2-EQCLIP-U = T-BAR Safety Earthquake Clip Kit (4 clips per bag kit)
- DF-24-W = 2' x 4' Drywall Frame Kit
- SK-24-WS = 2' x 4' Field Install Surface Mount Kit, Shallow

## Control Solutions

- WaveLinX LITE wireless
- WaveLinX PRO wireless
- WaveLinX CAT wired
- WaveLinX Wired



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



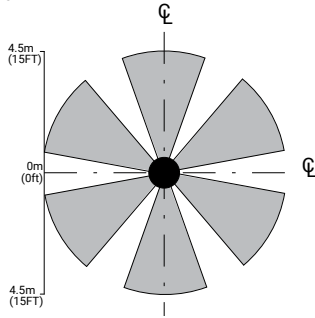
**WaveLinX PRO** is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinX PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinX CORE platform and other 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.



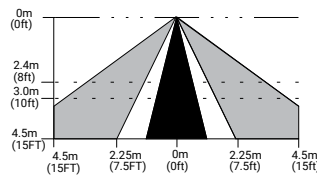
**WaveLinX LITE** is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse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

### Integrated Sensor Coverage Pattern

TOP VIEW:

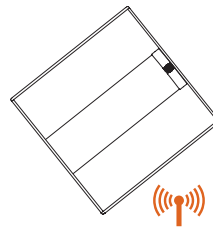


SIDE VIEW:

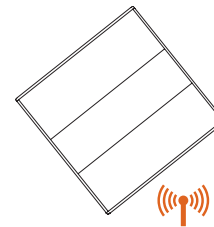


**Note:** Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

With Integrated WaveLinX Sensor



With Integrated WaveLinX Node



Add a hidden WaveLinX sensor node (WPN, WLN) to your space lighting design!

**Allows to:**

- Keeps luminaire aesthetics
- Connect fixtures without the real estate to include sensor option such as downlights
- Connect sealed fixtures without a standard sensor option such as products for clinical space.

### 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	
WLN		X			
WPS		X	X	X	X
WPN		X			X

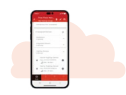
**Note:** WaveLinX utilizes scenes to allow users to change an area's fixtures Correlated Color Temperature (CCT) and intensity using commissioned manual wireless wallstation scene control. To enable CCT adjustments through WaveLinX, include WPS or WPN devices in addition to VividTune or BioUp technologies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



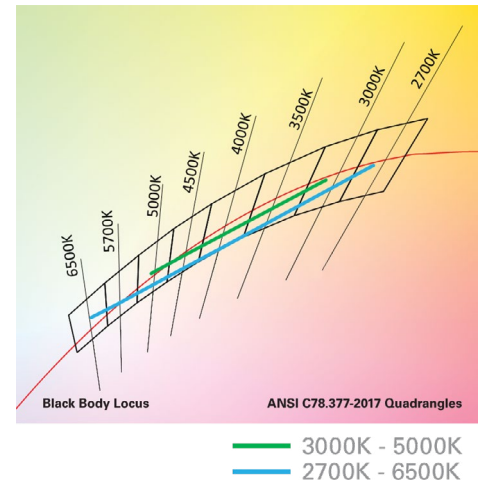
**Enterprise WaveLinX CORE**

	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



### 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.



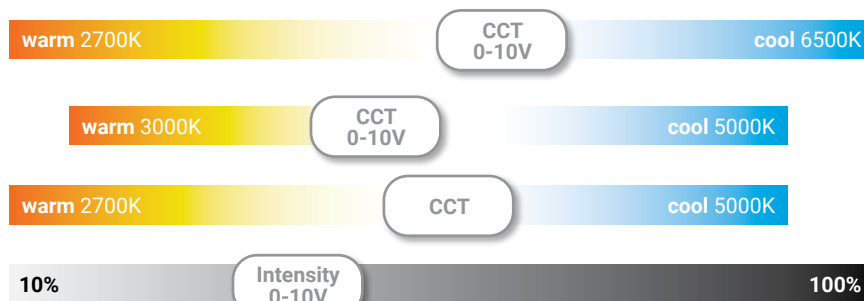
### Energy and Performance Data

Tunable White - Lumen Adjustment Factors						
CCT	VividTune 3000K-5000K		VividTune 2700K-6500K		BioUp Tunable White 2700K-5000K	
	80 CRI	90 CRI	80 CRI	90 CRI	CRI	Lumen Adjustment
2700K	-	-	0.903	0.771	95	0.938
3000K	0.929	0.765	0.928	0.801	94	0.929
3500K	0.983	0.836	0.961	0.842	90	0.912
4000K	1.033	0.903	0.981	0.868	87	0.899
4500K	1.042	0.918	0.999	0.891	85	0.890
5000K	1.042	0.918	1.013	0.909	84	0.879
6500K	-	-	1.028	0.933	-	-

2'x 4' Class RX LED - Example of Approximate Lumen Calculation				
	Standard Catalog #	VividTune 80 CRI Catalog #	VividTune 90 CRI Catalog #	BioUp Tunable White
CCT Setting	RX-WO-55H835-UNV-24-STD	RX-WO-55H83050-UNV-24-W2A	RX-WO-55H93050-UNV-24-W2A	RX-WO-39LB2750-UNV-24-W2A
2700K	-	4979	4251	5172
3000K	-	4985	4102	5123
3500K	5514	5271	4483	5029
4000K	-	5536	4841	4957
4500K	-	5591	4924	4907
5000K	-	5591	4924	4847
6500K	-	5668	5145	-

### Controlling VividTune and BioUp Tunable White

From wall dimmers to wireless controls, tunable white luminaires are compatible with industry standard 0-10V and DALI controls. One channel to control intensity (brightness) and a second channel to adjust CCT.



### Example of Lumen Adjustment Calculation

RX-WO-55H83050-UNV-STD-24  
at 80 CRI tuned to 3500K

Adjusted Lumen =  
published lm x adjusted lm factor

Adjusted Lumen = 5514 x 0.956

Adjusted Lumen = 5271

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



# Proven Research. Industry Recognized.

## BioUp

Melanopic Lighting



See better



Feel better



Function better



See [BioUp brochure](#) for more details



ANSI/IES RP-46-23

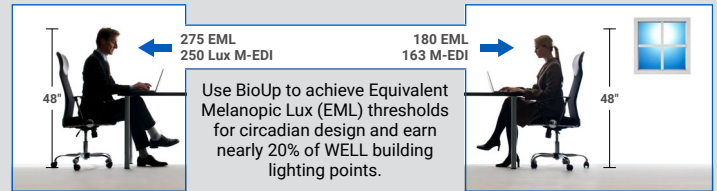
**RECOMMENDED PRACTICE:**  
SUPPORTING THE PHYSIOLOGICAL  
AND BEHAVIORAL EFFECTS  
OF LIGHTING IN INTERIOR  
DAYTIME ENVIRONMENTS  
AN AMERICAN NATIONAL STANDARD

ANSI/IES RP-46-23  
/ TM18 published  
March 2024 based  
on over 40 years of  
research.

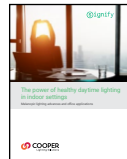
"...circadian clock synchronization is paramount to the body's efficient and appropriate functioning." – TM18



BioUp solutions maximize WELL points for Circadian Lighting Design (L03):



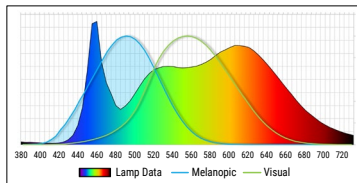
**MDER, M-EDI** and **EML** are key metrics used to quantify non-visual performance of indoor lighting systems.



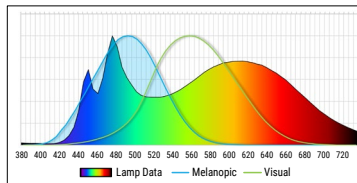
See [BioUp white paper](#) for more details

**MDER** - Melanopic Daylight Efficacy Ratio (MDER) measures the amount of light stimulating to the melanopsin receptors.

**Standard 4000K LED**  
MDER = .62



**BioUp 4000K LED**  
MDER = .82



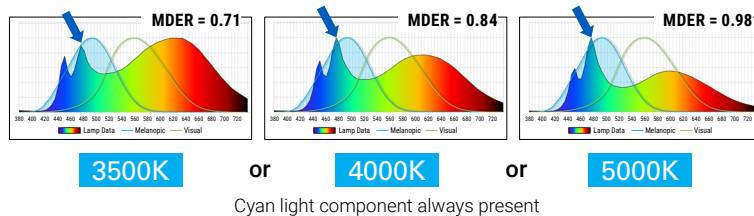
## 30% boost Biological impact compared to traditional LED sources

CCT	LED MDER ~83 CRI	BioUp Static		BioUp Dynamic	
		MDER	CRI	MDER	CRI
2700K	0.44	—	—	0.43	95
3000K	0.49	—	—	0.54	94
3500K	0.56	0.71	90	0.71	90
4000K	0.64	0.84	87	0.82	87
5000K	0.77	0.98	84	0.98	84

BioUp enhances the LED spectrum with cyan light at 475nm increasing the biological impact of the light to enhance our circadian rhythm which regulates our sleep/wake cycle, daytime engagement, and mood – **all without distorting visual color impression.**

### Static (non-tunable)

Static BioUp is used when simple Melanopic Lighting is desired at all times.



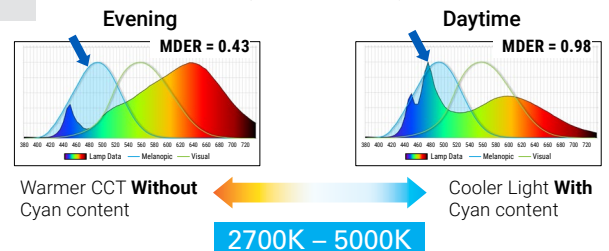
Dimming Control 0% Intensity 100%

> no CCT control needed

Arrow in graph shows BioUp spectrum boost is at 475nm where non-visual biological response is enhanced.

### Dynamic - (Tunable)

Dynamic BioUp is used when Melanopic Lighting is desired to adjust during the day.



CCT Control warm 2700K CCT cool 5000K

Dimming Control 0% Intensity 100%

> Control with Wavelinx, 2ch 0-10V, or DALI