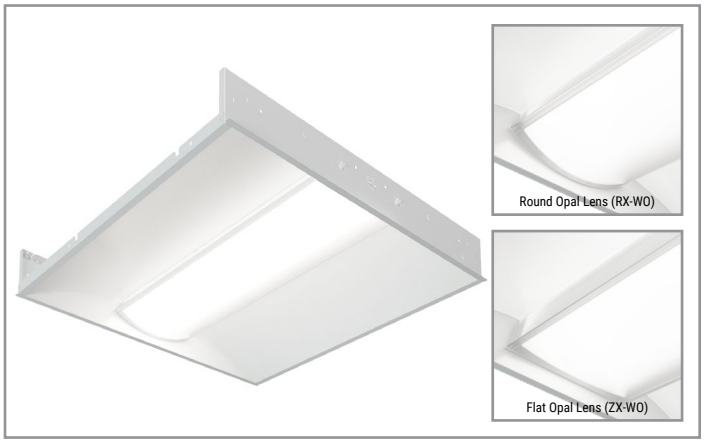
Project		Catalog #		Type	
Prepared by		Notes		Date	



Corelite

Class RX / ZX LED

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

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

Interactive Menu

- Order Information page 2
- Photometric Data page 4
- Energy and Performance Data page 4
- Control Systems page 5
- VividTune™ Color Tuning Solutions page 6
- Product Warranty

Product Certification

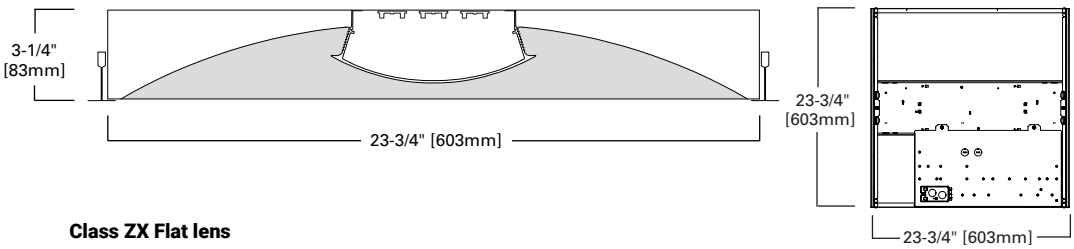
Product Features

Top Product Features

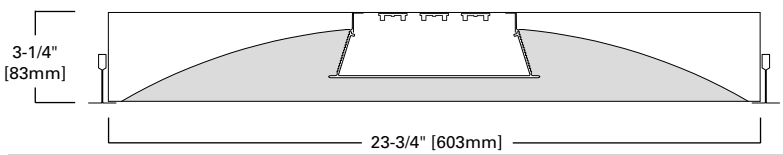
- Architectural quality design with Class R round (R) and flat (Z) lens variations
- Standard and High Performance lumen packages up to 132 lumens per watt
- Three CCT options: 3000K, 3500K and 4000K at 80+ or 90+ CRI
- Integrated sensor systems - occupancy, daylight and IoT connectivity
- VividTune CCT tuning options from 3000K–5000K or 2700K-6500K
- BioUp melanopic lighting options for 30% circadian boost and earn WELL Building Standard points
- Options to meet Buy American and other domestic preference requirements

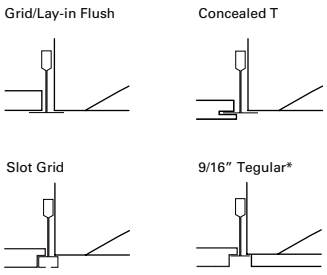
Dimensional and Mounting Details

Class RX Round lens



Class ZX Flat lens





Requires T9T ceiling type option

additional product diagrams

Order Information

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

Domestic Preferences	Series	Shielding	Lumen Package	Color Temperature	Input Voltage

Domestic Preferences	Series	Shielding	Lumen Package (2x2 Nominal Values)		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	**830**=80CRI, 3000K **835**=80CRI, 3500K **840**=80CRI, 4000K **930**=90CRI, 3000K **935**=90CRI, 3500K **940**=90CRI, 4000K **83050**=80CRI 3000K-5000K White Tuning **93050**=90CRI 3000K-5000K White Tuning **82765**=80CRI 2700K-6500K White Tuning **92765**=90CRI 2700K-6500K White Tuning **B35**=BioUp Static 3500K **B40**=BioUp Static 4000K **B50**=BioUp Static 5000K **B2750**=BioUp Tunable White 2700K-5000K	**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 4 for more detail. BioUp not available with High Performance lumen packages.		**Notes** 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.	**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**=Grid/Lay-in (Flush), Concealed T, and Slot Grid **T9T**=9/16" Grid Tegular Trim	**STD**=Standard 0-10V (1%-100%) **SR**=Sensor-ready for LWIPD1 (1%-100%) **5LT**=Fifth Light 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 [B] **WPS (formerly WAA)**=WaveLinx PRO Wireless Sensor, Occupancy w/ photocell, Networked [A] **WLN**=WaveLinx LITE Wireless Control Node, without sensor [B] **WPN**=WaveLinx PRO Wireless Control Node, without sensor [A]	**[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** 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. 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.	**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 - 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.	**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). 347V not available. B10 only available with W2D. ETRD not available with W2D.	**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
- 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
- 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, 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

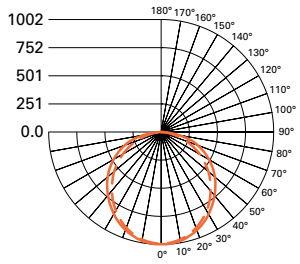
Weight
- 12.0 lbs.

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.

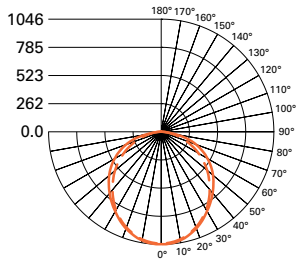
Photometric Data

View IES files



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: (II) 1.22, (⊥) 1.26

0° (II) – – – – –
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: (II) 1.2, (⊥) 1.22

0° (II) – – – – –
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

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 / 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

Shielding Options

Round Opal Lens (RX-WO)

Flat Opal Lens (ZX-WO)

Accessories (Ordered Separately)

CZ2-EQCLIP-U = T-BAR Safety Earthquake Clip Kit (4 clips per bag kit)
DF-22-W = 2' x 2' Drywall Frame Kit
SK-22-WT = 2' x 2' Field Install Surface Mount Kit, Tall

Control Solutions

- WaveLinx LITE wireless
- WaveLinx PRO wireless
- WaveLinx CAT wired
- WaveLinx Wired

WaveLinx Digital Lighting Control Solutions

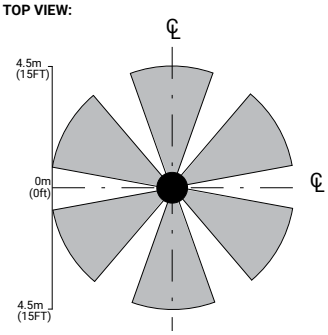
The Class RX with WaveLinx offers no-hassle lighting control with multiple luminaire level control solutions.

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.

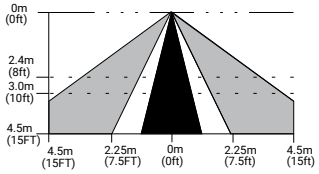
WaveLinx LITE is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse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

Integrated Sensor Coverage Pattern

TOP VIEW:

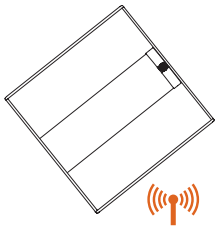


SIDE VIEW:

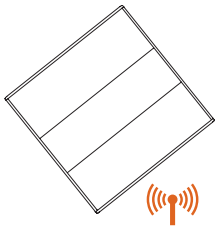


***Note**: Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.*

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 realestate 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

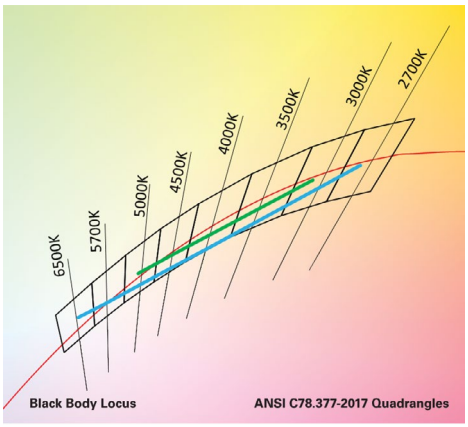
Enterprise WaveLinx CORE

	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

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.



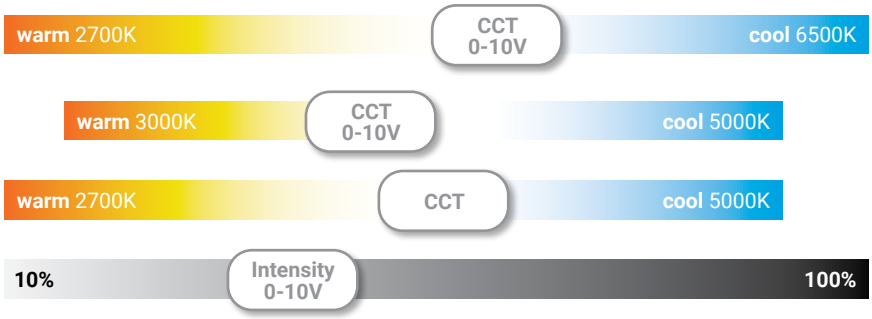
Energy and Performance Data

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 2' 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-39H835-UNV-22-STD	RX-WO-39H83050-UNV-22-W2A	RX-WO-39H93050-UNV-22-W2A	RX-WO-39LB2750-UNV-24-W2A
2700K		3370	2877	3501
3000K	-	3336	2747	3467
3500K	3732	3530	3001	3404
4000K	-	3706	3239	3355
4500K	-	3739	3295	3321
5000K	-	3739	3295	3280
6500K		3836	3482	-

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

Adjusted Lumen =
published lm x adjusted lm factor

Adjusted Lumen = 3732 x 0.946

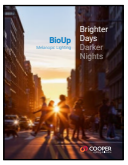
Adjusted Lumen = 3530

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

Proven Research. Industry Recognized.

BioUp
Melanopic Lighting

See better | Feel better | Function better



See BioUp brochure for more details

ANSI/IES RP-46-23

Illuminating Engineering Society

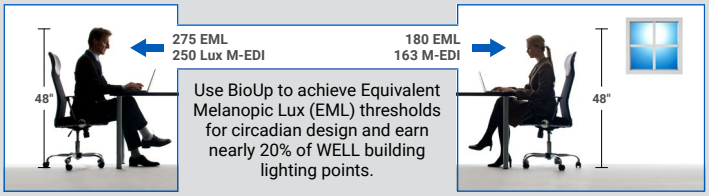
RECOMMENDED PRACTICE:
SUPPORTING THE PHYSIOLOGICAL AND BEHAVIORAL EFFECTS OF LIGHTING IN INTERIOR DAYTIME ENVIRONMENTS
AN AMERICAN NATIONAL STANDARD

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

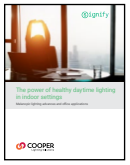
INTERNATIONAL WELL BUILDING INSTITUTE™

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



Use BioUp to achieve Equivalent Melanopic Lux (EML) thresholds for circadian design and earn nearly 20% of WELL building lighting points.

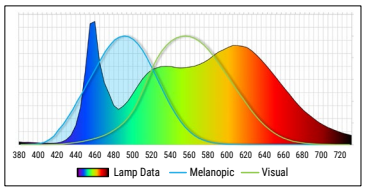
MDER, M-EDI and **EML** are key metrics used to quantify non-visual performance of indoor lighting systems.



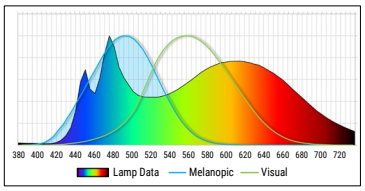
See BioUp white paper for more details

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

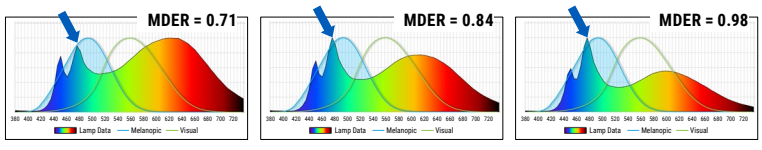
CCT	LED MDER ~83 CRI	BioUp Static		BioUp Dynamic	
		MDER	CRI	MDER	CRI
2700K	0.44	–	–	0.43	95
3000K	0.49	–	–	0.54	94
3500K	0.56	0.71	90	0.71	90
4000K	0.64	0.84	87	0.82	87
5000K	0.77	0.98	84	0.98	84

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.

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



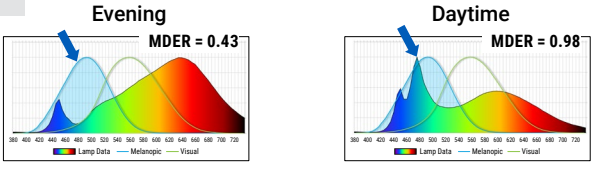
3500K or 4000K or 5000K

Cyan light component always present

› no CCT control needed

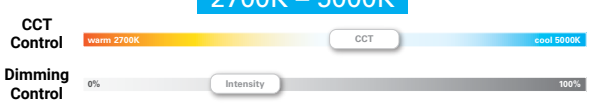
Dynamic - (Tunable)

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



Warmer CCT **Without** Cyan content ⟷ Cooler Light **With** Cyan content

2700K – 5000K



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

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