

Project		Catalog #		Type	
Prepared by		Notes		Date	



Fail-Safe



APR ArcMed Patient Room

Patient Room Recessed
Ambient / Exam / Reading / Night
Behavioral Health / Medical

Typical Applications

Medical • Behavioral Health • Patient Rooms • Exam Rooms

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Product Certification



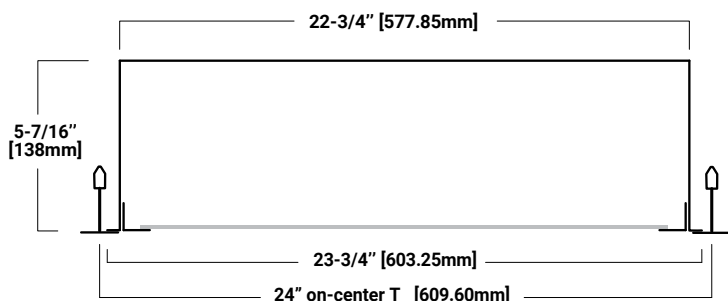
Product Feature



Top Product Features

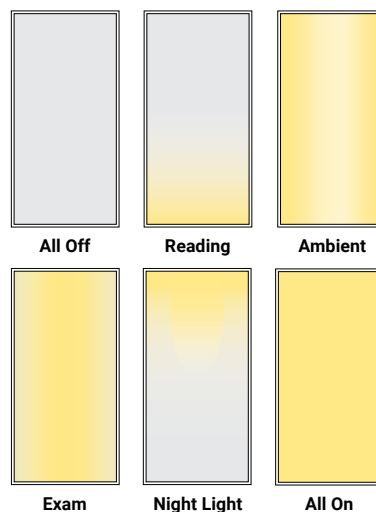
- Fully luminous frosted bottom lens with illumination above - enables functional illumination – ambient, exam, reading, nightlight – to suit the needs of the patient, medical professionals, and others in the space
- Easy and quick access to LEDs and electrical from room side, using an aesthetically pleasing, fastener-free door frame and lens
- Fully luminous frosted bottom lens for easy wipe down and cleaning. Anti-microbial matte white paint standard.
- BioUp melanopic lighting options enable circadian design for patient or staff care
- VividTune CCT tuning options from 3000K-5000K or 2700K-6500K
- Options to meet Build America, Buy America and Buy American domestic preference requirements
- 10-Day Quick Spec available

Dimensional and Mounting Details



2x2=23-3/4" x 23-3/4" (W x L)
2x4=23-3/4" x 47-3/4" (W x L)

additional product diagrams



* Choose from any combination of desired illumination scenarios based on the activities in the patient room. Mix or match to suit the need/desires. Details on page 3.



Order Information



SAMPLE: 24APR-49/L940-180/L940-120-HCD/CD-RL935-LVC3/AD/ED/R

SAMPLE: 24APR-58/L840-200/L840-UNV-HCD/CD-NL827

10 DAY QUICK SPEC SAMPLE: QS-24APR-67/L835-180/L835-UNV-HCD/HCD

Gray bar denotes available with 10-Day Quick Spec

Domestic Preferences ⁽¹⁾	Quick Spec ⁽²⁾	Fixture Size	Fixture Family	Mounting	Ambient Lumens	Ambient CCT	Exam Lumens ⁽⁶⁾	Exam CCT	Voltage
[Blank] =Standard BAA =Buy American Act BABA =Build America Buy America Act	QS =Quick Spec, ArcMed Patient Recessed ⁽²⁾	22 =2x2 24 =2x4	APR =ArcMed Patient Recessed	Recessed Grid, 9/16"- 1" T-Bar	2x2 22 =2200 30 =3000 34 =3400 ⁽⁵⁾ 38 =3800 ⁽⁵⁾ 2x4 49 =4900 58 =5800 67 =6700 ⁽⁵⁾ 85 =8500 ⁽⁵⁾ 	L830 =80CRI, 3000K L835 =80CRI, 3500K L840 =80CRI, 4000K L850 =80CRI, 5000K L930 =90CRI, 3000K L935 =90CRI, 3500K L940 =90CRI, 4000K L950 =90CRI, 5000K L82765 =White tuning 80 CRI, 2700K-6500K ^{(3), (4)} L83050 =White tuning 80 CRI, 3000K-5000K ^{(3), (4)} L92765 =White tuning 90 CRI, 2700K-6500K ^{(3), (4)} L93050 =White tuning 90 CRI, 3000K-5000K ^{(3), (4)} B35 =BioUp Static 3500K ⁽⁶⁾ B40 =BioUp Static 4000K ⁽⁶⁾ B50 =BioUp Static 5000K ⁽⁶⁾ B2750 =BioUp Tunable 2700K-5000K ⁽⁷⁾	2x2 62 =6200 71 =7100 80 =8000 ⁽⁵⁾ 89 =8900 ⁽⁵⁾ 2x4 140 =14000 160 =16000 180 =18000 ⁽⁹⁾ 200 =20000 ⁽⁹⁾ 	L830 =80CRI, 3000K L835 =80CRI, 3500K L840 =80CRI, 4000K L850 =80CRI, 5000K L930 =90CRI, 3000K L935 =90CRI, 3500K L940 =90CRI, 4000K L950 =90CRI, 5000K L82765 =White tuning 80 CRI, 2700K-6500K ^{(3), (4)} L83050 =White tuning 80 CRI, 3000K-5000K ^{(3), (4)} L92765 =White tuning 90 CRI, 2700K-6500K ^{(3), (4)} L93050 =White tuning 90 CRI, 3000K-5000K ^{(3), (4)}	120 =120 Volt 277 =277 Volt UNV =Universal Voltage 120-277
Notes (1) Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. Please refer to DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	Notes (2) 10 day ship from receipt of clean PO to ship date. 25 unit maximum per PO. QS only available with shaded options.			Notes For Hard Lid ceiling, use DFCL framing kit (see accessories). For a 1-1/2" T-grid ceiling application, ETO request can be submitted.	Notes (3) 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 10V dimming control channels, 1 color, 1 intensity. (4) Not available in all lumen outputs. (5) Requires thermal protectors (thermal protector detail, page 4). (6) BioUp Static to be used with HCD driver. (7) BioUp Tunable provides correlated color temperatures (CCT) between 2700K (warm) to 5000K (cool). Must be used with W2A (for two channel 0-10V Control) or W2D (for 2 channel Dali Control) driver. See BioUp page for more information.			Notes If ordering Options, such as Relays or Emergencies, please reference the notes as they may require specific voltage of 120 or 277.	

Ambient Driver Type	Exam Driver Type	Reading Light Options ⁽⁶⁾	Night Light Options	Options
CD =10% Dimming HCD =1% Dimming SLTD =DALI 5% LH =Lutron 1% EcoSystem W2A =White Tuning, 2ch Analog 0-10V intensity and CCT control, 1% dimming ⁽⁹⁾ W2D =White Tuning, DALI Type 8, 1% dimming ⁽¹¹⁾	CD =10% Dimming HCD =1% Dimming SLTD =DALI 5% LH =Lutron 1% EcoSystem	RL827 =2700K RL830 =3000K ⁽¹²⁾ RL835 =3500K ⁽¹²⁾ RL840 =4000K ⁽¹²⁾ RL850 =5000K ⁽¹²⁾ 	NLA =Night Light, Amber NL827 =Night Light, 2700K NL830 =Night Light, 3000K ⁽¹³⁾ NL835 =Night Light, 3500K ⁽¹³⁾ NL840 =Night Light, 4000K ⁽¹³⁾ NL850 =Night Light, 5000K 	LVCP / <i>x/y</i> =Low Voltage Relay, Non-Dimming. Controls up to 2 circuits. ^{(14), (16)} LVCP ordering function callout (<i>x/y</i>): A =Ambient, E =Exam, R =Reading, N =Nightlight. Unused circuit leave blank. i.e. LVCP/A/E =(Relay controlling Ambient & Exam), i.e. LVCP/A =(Relay controlling Ambient only) LVCP3 / <i>x/y/z</i> =Low Voltage Relay. Controls up to 3 circuits, and up to 2 circuits dimmable. ^{(15), (16)} LVCP3 ordering function callout (<i>x/y/z</i>): A =Ambient, E =Exam, R =Reading, N =Nightlight. Provide a "D" with the function callout requiring dimming; up to 2 circuits can be dimmable. Unused circuit leave blank. i.e. LVCP3/AD/ED/R =(Relay controlling Ambient(Dimming)/ Exam(Dimming) & Reading(no-dimming)) i.e. LVCP3/AD/ED/RD =(Relay controlling Ambient(Dimming)/ Exam(no dimming) & Reading(Dimming)) EL7W =7W emergency battery pack ^{(16), (18)} EL10W =10W emergency battery pack ^{(16), (19)} EL14W =14W emergency battery pack ^{(16), (18)} ETRD =Emergency Transfer Relay connected to Exam Circuit ^{(16), (20)} GTR2 =Generator Transfer Relay connected to Exam Circuit ^{(16), (20)} CP125 = .125" Clear Poly Lens. CP125 requires screws to fasten door to housing. ⁽¹⁷⁾ CP250 = .250" Clear Poly Lens. CP250 requires screws to fasten door to housing. ⁽¹⁷⁾ TRS =Tamper-Resistant Screws, T20 TORX®, optional when ordering either the CP125 or CP250 lens options ⁽¹⁷⁾ GSK =Gasket applied to outside edge of flange for grid contact
Notes (9) White tuning provides correlated cct 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 10V dimming control channels, 1 cct, 1 intensity. (11) 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. For Emergency options ONLY EL10W can be used. (6) Requires thermal protectors (thermal protector detail, page 4).	Notes Dimmable standard. Reading light delivers approximately 1000 lumens delivered. (8) VividTune white tuning and BioUp static and dynamic options are not available with these options. (12) For 90cri, replace "8" with a "9" for RL930, RL935, RL940, RL950.	Notes Night light delivers approximately 500 lumens delivered. NLA, Amber night light is approximately 300 lumens delivered. (13) For 90cri, replace "8" with a "9" for NL930, NL935, NL940.	Notes (14) LVCP- low voltage relay up to 2 circuits, no-dimming. LVCP ordering function callouts (<i>x,y</i>) are A =Ambient, E =Exam, R =Reading, N =Nightlight. Unused circuits, leave function blank. i.e. LVCP/A/E =low volt relay, Ambient no dimming & Exam no dimming. (15) LVCP3- Low Voltage Relay can control up to 3 circuits, and up to 2 circuits can be dimmable. Use with CD or HCD driver options. LVCP3 ordering function callouts (<i>x,y,z</i>) are A =Ambient, E =Exam, R =Reading, N =Nightlight. Provide "D" with function callout that requires dimming capability. Unused circuits leave blank. (16) Must specify voltage, 120 or 277 in ordering logic. LVCP, LVCP3, ETRD, GTR2 require specific voltage and EL7W, EL10W, EL14W require thermal protectors. (17) CP125 & CP250 options require door screws, therefore will NOT be the standard fastener-free door design. Tamper-resistant, T20 TORX® screws is optional with CP125 and CP250 lens options. (18) Emergency battery pack is factory installed and incorporates a remote indicator/test switch. (19) 10W EM pack mounted on the back of the fixture, adding 1.25" to fixture depth. (20) 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.	

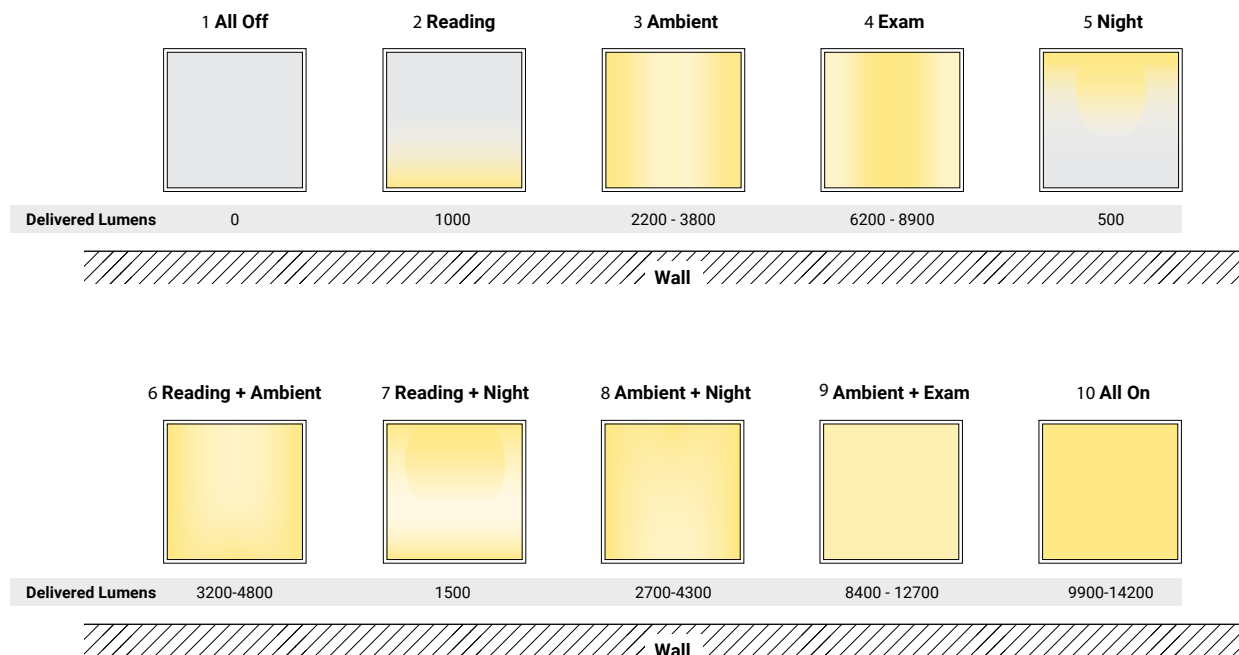
Accessories (order separately) ⁽²²⁾

DFCL-2448W-U=2'x4' gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 24.25"x48.25" ⁽²³⁾
DFCL-2424W-U=2'x2' gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 24.25"x24.25" ⁽²³⁾
DFVR/APR-2448W-U=2'x4' vandal resistant gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 24.25" x 48.25" ⁽²³⁾
DFVR/APR-2424W-U=2'x2' vandal resistant gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 24.25" x 24.25" ⁽²³⁾

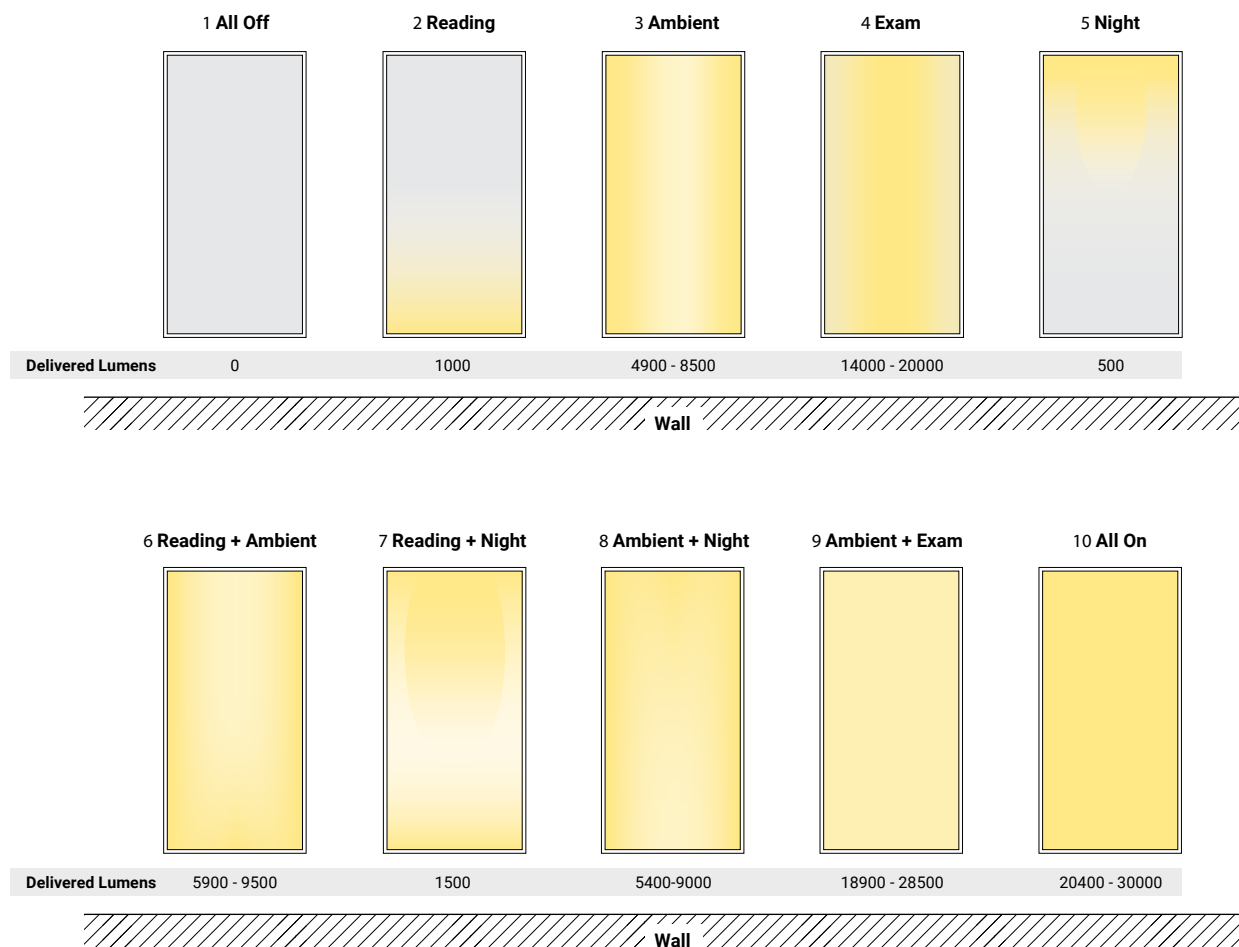
Notes

(22) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. (23) For Anti-microbial, matte white finish, replace "W" with "AMW", ie .DFVR/APR-2448AMW-U

Compartment Configurations – 2x2



Compartment Configurations – 2x4



Energy and Performance Data (4000K)

[View IES files](#)

Function	Size	Output Level	Nominal Lumens	Wattage	Efficacy
Ambient	2x2	22	2200	21W	105
		30	3000	30W	100
		34	3400	35W	97
		38	3765	39W	97
	2x4	49	4900	43W	114
		58	5800	52W	112
		67	6740	60W	112
		85	8500	78W	109
Exam	2x2	62	6160	51W	121
		71	7135	60W	119
		80	8060	69W	117
		89	8940	78W	115
	2x4	140	13800	104W	133
		160	16000	121W	132
		180	18100	139W	130
		200	20100	157W	128
Reading	2x2		1000	15W	67
	2x4		1000	15W	67
Night	2x2		500	6W	83
	2x4		500	6W	83

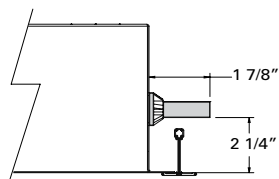
Notes: All lumen levels are based on 80 CRI, 4000K

CRI/CCT Multipliers

L830	0.943
L835	1
L840	1
L850	1.015
L930	0.815
L935	0.861
L940	0.868
L950	0.868

Thermal Protector Detail

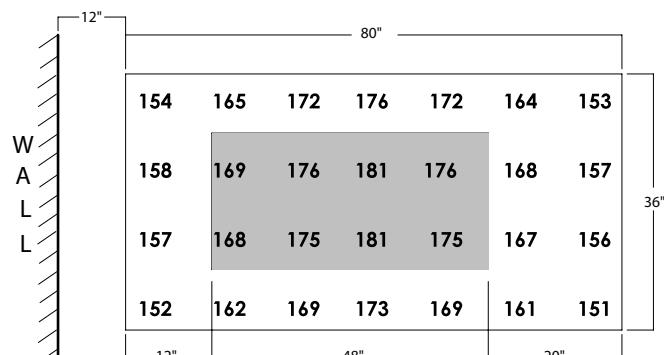
Factory wired on the side of fixture.
Customer must remove split bushing
and insert TP in housing in the field.



Typical Application: Patient Room Luminaire Placement - Directly Over the Bed

APR - FOOT CANDLE CHART

BED 36" X 80"



CATALOG NUMBER: 24APR-X-181/L840

- 18,100 DELIVERED LUMENS- EXAM ONLY ILLUMINATED
- CEILING HEIGHT - 9'
- REFLECTANCES - 80/50/20
- 36" AFF - AVG FC= 157 MAX=181 MIN= 123
- 30" AFF - AVG FC= 139 MAX= 157 MIN= 113

AFF= ABOVE FINISHED FLOOR

Product Specifications

Application

- Designed for use in healthcare facilities where exam and ambient illumination is required:
 - Patient Rooms, Exam Rooms, Behavioral Health

Mounting

- Designed for standard grid sizes from 9/16" to 1" T-grid
- Drywall Kits available for use in hard ceilings

Housing

- 20-ga steel housing construction
- Standard housing finish antimicrobial matte white

Door

- 20-ga steel door, using multiple torsion components to secure door to housing. Tamper screws, optional.
- Standard door finish antimicrobial matte white

Lens

- 0.080" diffuse opal acrylic lens standard
- 0.125" or 0.250" clear, polycarbonate lens optional- on bottom of the 0.080" opal acrylic lens

LEDs

- Available in 3000K, 3500K, 4000K and 5000K; 80 and 90 CRI
- Ambient and Exam TM21 life at 60,000 hours up to L82 and calculated L70 exceeds 110,000 hours
- Efficacies exceeding 130 LPW

Electrical

- Electronic driver 120-277V standard 0-10V dimming, 10% & 1% dimming available
- DALI and Lutron drivers available
- LVCP Low voltage controller, non-dimming, 2 load
- LVC3 Low voltage controller, dimmable, 3 load/2dim

Compliances

- cULus Damp Location

BABA Domestic Preference Compliance

- This Cooper product is manufactured in the US and meets the BABA cost of components rule. To verify a configured product with specific accessories and options meets BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Our BABA designation is based on the minimum compliance requirement for BABA. Individual Government Agencies may have more stringent compliance standards. Please refer to the [DOMESTIC PREFERENCES](#) website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Warranty

- Five year limited warranty on LEDs and Electrical, consult website for details. www.cooperlighting.com/legal
- 10 year warranty available

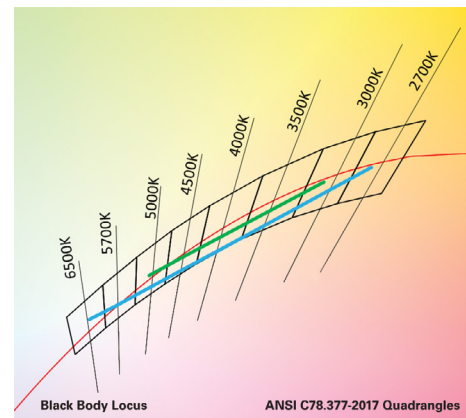
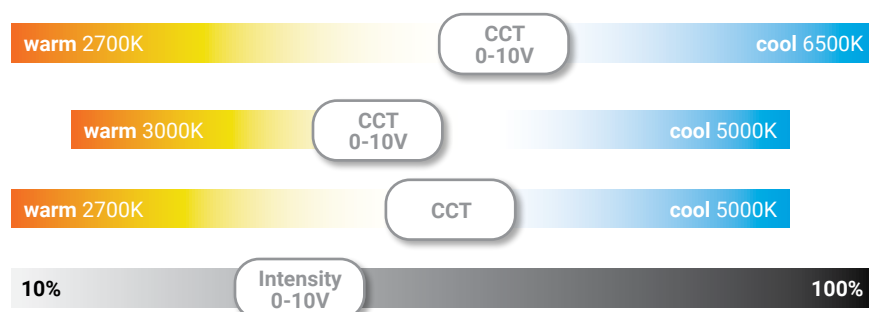


APR with VividTune Tunable White

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.

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.



Proven Research. Industry Recognized.

BioUp

Melanopic Lighting



See better



Feel better



Function better



See [BioUp brochure](#) for more details



ANSI/IES RP-46-23

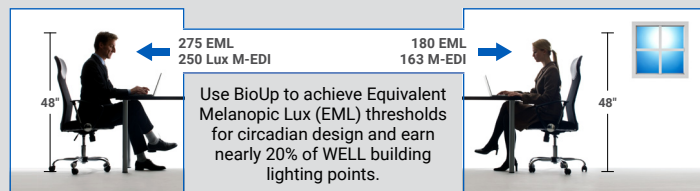
RECOMMENDED PRACTICE:
SUPPORTING THE PHYSIOLOGICAL
AND BEHAVIORAL EFFECTS
OF LIGHTING IN INTERIOR
DAYTIME ENVIRONMENTS
AN AMERICAN NATIONAL STANDARD

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

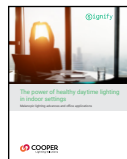
"...circadian clock synchronization is paramount to the body's efficient and appropriate functioning." – TM18



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.

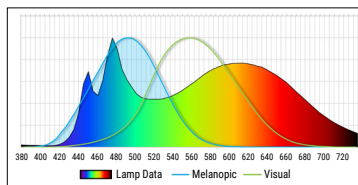
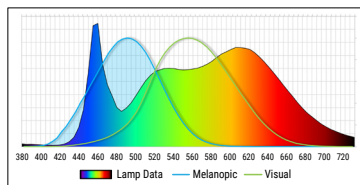


See [BioUp white paper](#) for more details

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

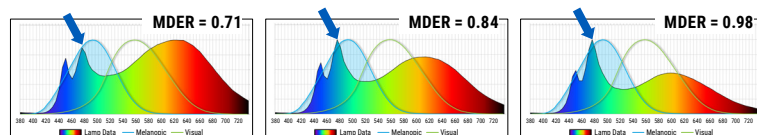
CCT	LED MDER ~83 CRI	BioUp Static		BioUp Dynamic	
		MDER	CRI	MDER	CRI
2700K	0.44	–	–	0.43	95
3000K	0.49	–	–	0.54	94
3500K	0.56	0.71	90	0.71	90
4000K	0.64	0.84	87	0.82	87
5000K	0.77	0.98	84	0.98	84

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.

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



3500K or **4000K** or **5000K**

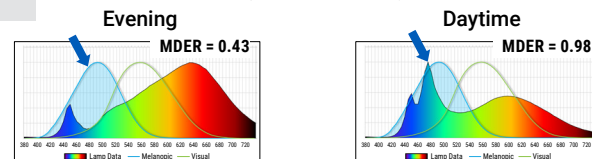
Cyan light component always present



> 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