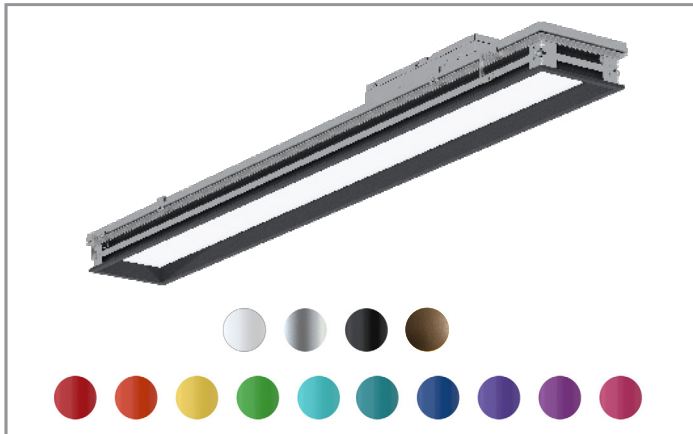


Project		Catalog #		Type	
Prepared by		Notes		Date	



### Interactive Menu

- Order Information page 2
- Photometric Data page 6
- Control Systems page 7
- Product Warranty

## Corelite

### R6R

#### Recessed Linear LED Specification Series

#### Typical Applications

- Office Spaces • Education • Healthcare
- Retail • Municipal

#### Product Certification



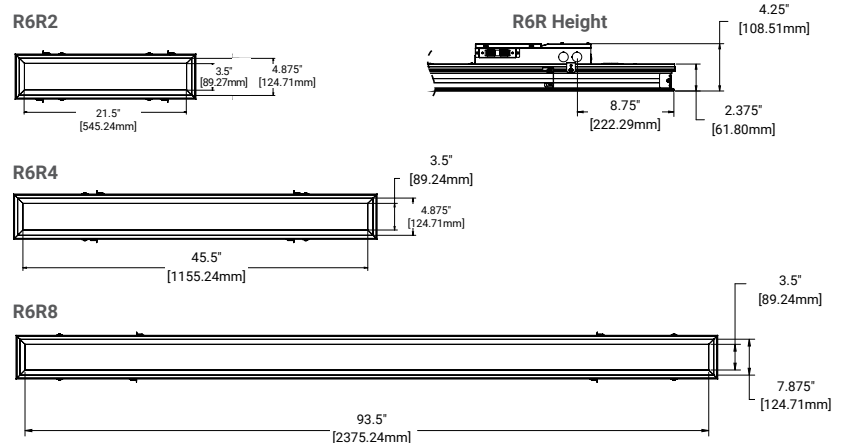
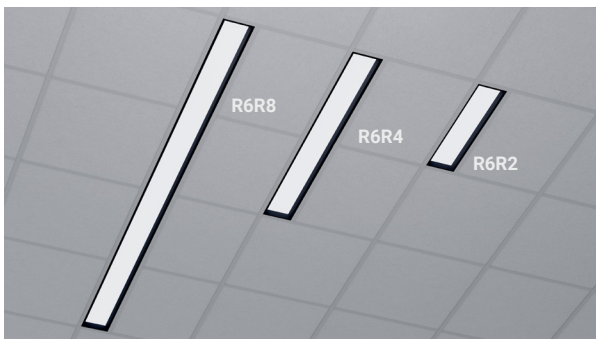
#### Product Features



### Top Product Features

- Soft bevel 2" regress frame available in 14 standard colors
- 4" aperture, 6" grid width providing sleek lines of light
- 2', 4', and 8' sizes available
- 1% Dimming Available
- Configured or Selectable Options Offered
- High performance efficacy up to 105 lm/W
- Integrated control available - WaveLinx Pro, WaveLinx Lite, Wavelinx CAT

### Dimensional and Mounting Details



Note: See pg 4 for complete dimension details

## Order Information

Some combinations are limited. Reference the online Product Configurator to confirm MTO (make-to-order) options.

SAMPLE ORDER NUMBER: R6R2-75D-840-UNV-STD-BZ

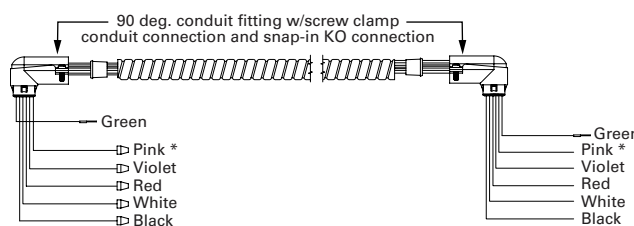
Series	Size	Lumen Output	CCT	Voltage	Ceiling	Driver/Dimming Options
R6R=R6 Regress Series	2=2' 4=4' 8=8'	SL1=Selectable Lumens 500, 750 and 1000 lumens per foot <sup>(1),(2)</sup> 50D=500 lms/ft. 75D=750 lms/ft. 100D=1000 lms/ft.	L8SCT3=80CRI, Selectable CCT 3000K, 3500K, 4000K <sup>(1),(2)</sup> 830=80 CRI, 3000K 835=80 CRI, 3500K 840=80 CRI, 4000K	UNV=120-277 347V=347 Volt <sup>(4)</sup>	[Blank]=15/16" & 9/16" Grid Lay-in (Flush), Concealed T, and Slot Grid	[Blank]=10% dimming with Lumen and CCT selection switches (10%-100%) STD=0-10V Driver (1%-100% Dimming) <sup>(5)</sup> SR=Sensor-ready Driver (1%-100% Dimming) <sup>(6)</sup> SLTD=DALI Driver (5%-100% Dimming) <sup>(6),(7)</sup> SLTHD=DALI Driver (1%-100% Dimming) <sup>(8)</sup> SD=Step Dimming Driver (50% or 100% Dimming) <sup>(9)</sup> LH=Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming <sup>(7)</sup>
Notes	Notes	Notes (1) Available with 0-10V (10% dimming) driver only. (2) Lumen selectable and CCT selectable only available together, with a standard 0-10V dimming (10%) driver	Notes (1) Available with 0-10V (10% dimming) driver only. (2) Lumen selectable and CCT selectable only available together, with a standard 0-10V dimming (10%) driver	Notes (4) Offered with UNV (Blank) and STD drivers only.	Notes	Notes (5) 2' unit only at 1000 lms/ft. (6) Not available on the 2' version. (7) 347V 1% dimming not available at 750 or 1000 lm/ft for the 8' version. (8) 1% DALI driver not available at 1000 lm/ft for 8' version. (9) Step dimming (SD) not available in 2' version and limited to 750 and 1000 lm/ft settings on the 4' version. (F) Consult Marketplace Options - Lutron system pages for additional details and compatibility. Compatible only with driver series shown. Requires field commissioning to operate or dim. Contact Lutron at www.lutron.com.

Sensor Options <sup>(10)</sup>	Emergency <sup>(14),(15)</sup>	Options	Finish
[Blank]=No Sensor WLS (formerly WAB)=WaveLinX LITE Wireless Sensor, Occupancy w/ photocell, Independent & Networked <sup>(12),(8)</sup> WPS (formerly WAA)=WaveLinX PRO Wireless Sensor, Occupancy w/ photocell, Networked <sup>(13),(A)</sup> WLN=WaveLinX LITE Wireless Control Node, without sensor <sup>(12),(8)</sup> WPN=WaveLinX PRO Wireless Control Node, without sensor <sup>(13),(A)</sup>	[Blank]=None EL7W=7-watt 120V-277V emergency battery pack <sup>(15)</sup> EL10W=10-watt 120V-277V emergency battery pack <sup>(15)</sup> EL14W=14-watt 120V-277V emergency battery pack <sup>(15)</sup> EL10WSD=10W emergency battery pack with self-diagnostic installed <sup>(15),(16)</sup> EL14WSD=14W emergency battery pack with self-diagnostic installed <sup>(15),(16)</sup> GTRD=Emergency Transfer Relay with dimming control	W6DIM = 3/8" Flex with 0-10V Dimming Leads Non-Dimming Flex W6 = A 3/8" Flex with Line and Common*	W = White S = Silver* B = Black*  RR = Real Red* OO = Oasis Orange* YY = Yippee Yellow* GG = Gracious Green* CC = Cyprus Cyan* TT = Totally Turquoise* BB = Biosphere Blue* PP = Perfect Purple* VV = Vacation Violet* MM = Magic Magenta* BZ = Bronze* C = Custom Color (RAL)**
Notes (10) Sensor and Nodes available with the 4' and 8' versions. (11) WPS sensor and WPN node to be used with STD driver. (12) WLS sensor and WLN node to be used with STD driver. (13) WPN/WLN node not available with SL1-L8SCT3. (A) Consult WaveLinX PRO system pages for additional details and compatibility. (B) Consult WaveLinX LITE system pages for additional details and compatibility.	Notes (13) In Emergency mode the fixture will default to 4000K regardless of the CCT setting. (14) Integrated Emergency is not available on the 2 foot length option, or with any alternate driver options. (15) Factory installed 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/W x 7=700 lumens). IES-format photometry for luminaire under emergency operation available. Battery option increases total height by 1 inch. (16) EL10WSD and EL14WSD not available with 347V.	Notes Flexible Metal Conduit Options. Most common options listed. Multiple flex options are available for use in 0-10V dimming control, DALI dimming control and/or emergency. Use online configurator to specify other options. This option is factory-installed and pre-wired to driver, fitted to luminaire junction box with 90° enclosed FMC connector. Not all options may be combined and installation ratings vary by type. Also available as an accessory for field installation for row mounting with 14Ga. wires. See notes in accessories section.  Notes: Factory installed dimming option 3/8" flexible metal conduit with 2-#18 power and ground wires and 2-#18 UL-listed jacketed 0-10V +/- control wires.	Notes *All colors: (B, S, RR, OO, YY, GG, CC, TT, BB, PP, VV, MM, BZ) refer to regression trim on R6R luminaire.  **C (Custom RAL Color) option only valid with aluminum regress options.

## Flex Assembly (Conduit)

3/8" metal conduit with snap-in 90 degree fitting used for continuous runs from one electrical feed. See notes in accessories for more details.

Catalog	UPC	Description
90-5-14GDIM-6	080083909766	90 Degree connector, 5 wire with EM and Dimming, 6' length
90-5-14GDIM-9	080083909780	90 Degree connector, 5 wire with EM and Dimming, 9' length



\* Constructions built before Jan 2022 may have gray wire for 0-10 dimming control present. In these cases, the installer will label the gray building wire as a 0-10 dimming wire and connect to our product's pink 0-10V dimming control wire. Reference NFPA70 (2020 NEC), section 410.69.

## Product Specifications

### Construction

- Aluminum extruded frame, precision welded and ground for a seamless appearance
- Steel back plate, attached to the frame with multiple screws to ensure a tight fit
- 2" beveled extruded aluminum regress frame factory assembled and installed for easy field installation.

### Finish

- Fixture housing is high reflectance matte white finish
- 2" Extruded regress frame is factory assembled and installed
- Regress frame can be specified in 14 high quality powder coated options.
- Custom RAL colors available - contact factory for details

### Mounting

- Integral grid/EQ clips provided and include suspension / wire retention features
- Grid clip includes fold up hang points. Use FPSUS2 or other desired suspension methods for direct suspension
- T-grid brackets factory installed for quick, easy and secure attachment to T-grid
- Factory or field installed flexible conduit with dimming leads options available.
- Junction / wiring box includes multiple 7/8" knockouts for quick and easy electrical entry from a variety of directions.
- Drywall frame kits available for hard ceiling recessed installations. Drywall frame kits must be ordered separately as accessories.
- Surface/Suspension mount kits available - must be ordered separately as accessories.

### Optics

- Acrylic light guide with embossed optical control features optimizes light extraction
- Scratch and impact resistant diffuser provides uniformity and reduced glare at the aperture

### Controls

- Standard with 0-10V dimming driver (10% standard with no Driver selection, 1% optional with STD selection)
- Integrated WaveLinX options provide wireless individual fixture control and enable code compliance, increased energy savings, grouping of fixtures, and connection to WaveLinX control systems
- DALI 2.0, Lutron, and step-dimming available)

### Electrical

- Specify SL1 (Lumen Output) and L8SCT3 (CCT) to enable field selectable lumens and color approximately 500, 750 or 1000 lumens per foot AND 3000K, 3500K or 4000K CCT with easy access selector switch
- UNV 120 - 277V driver with 0-10V dimming to 10% standard
- 347V version available
- DALI 2.0, 1% dimming, Lutron and Step dimming versions available in fixed lumens and fixed colors in 3000K, 3500K or 4000K.

### Emergency Battery Options

- 20V-120V integral emergency battery pack comes in 7-watts, 10-watt, or 14-watts
- Self-diagnostic emergency battery available in 10 watt (NFPA 101® Life Safety Code®)
- Constant power to the LED system for controlled, predictable discharge
- Integrated test switch/indicator light visible from floor
- Min. 90-minute backup period for code compliance
- Integral emergency transfer relay available for generator equipped power systems

### Compliance

- ULus listed for 25C ambient environments
- IC rated for direct insulation contact
- RoHS compliant
- Damp location listed standard
- IP40 - ingress protection
- IESNA LM-79 and LM-80 compliant
- NEMA 410 compliant
- DesignLights Consortium qualified and classified for DLC Standard
- Can be used for State of California Title 24 high efficacy luminaire

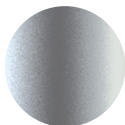
### Limited Warranty

- Five year limited warranty standard
- Ten year limited warranty available
- 

## Standard Finish Options



W - White



S - Silver



B - Black



BZ - Bronze



RR - Real Red  
RAL 3020  
Gloss



OO - Oasis Orange  
RAL 2004  
Gloss



YY - Yippee Yellow  
RAL 1018  
Gloss



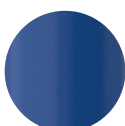
GG - Gracious Green  
RAL 6018  
Gloss



CC - Cyprus Cyan  
RAL 6027  
Gloss



TT - Totally Turquoise  
RAL 5018  
Gloss



BB - Bioshere Blue  
RAL 5017  
Gloss



PP - Perfect Purple  
RAL 4005  
Gloss



VV - Vacation Violet  
RAL 4008  
Gloss



MM - Magic Magenta  
RAL 4010  
Gloss

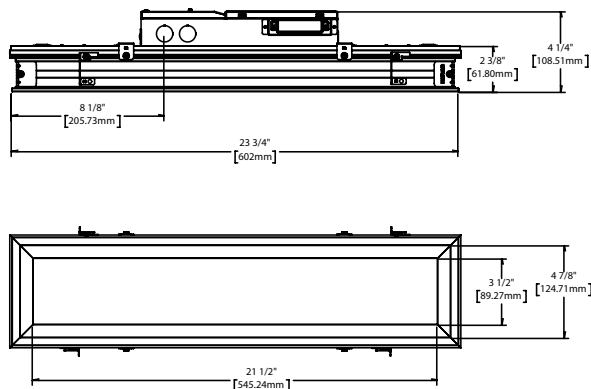
RAL & custom colors available



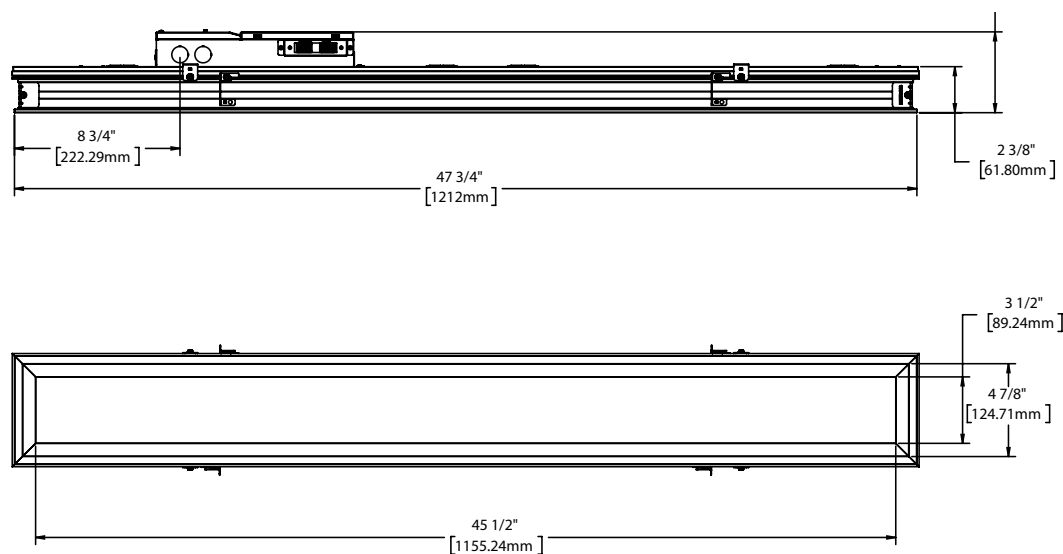
## Dimensional and Mounting Details

Fixture height with standard driver (no Controls, EM or Flex)

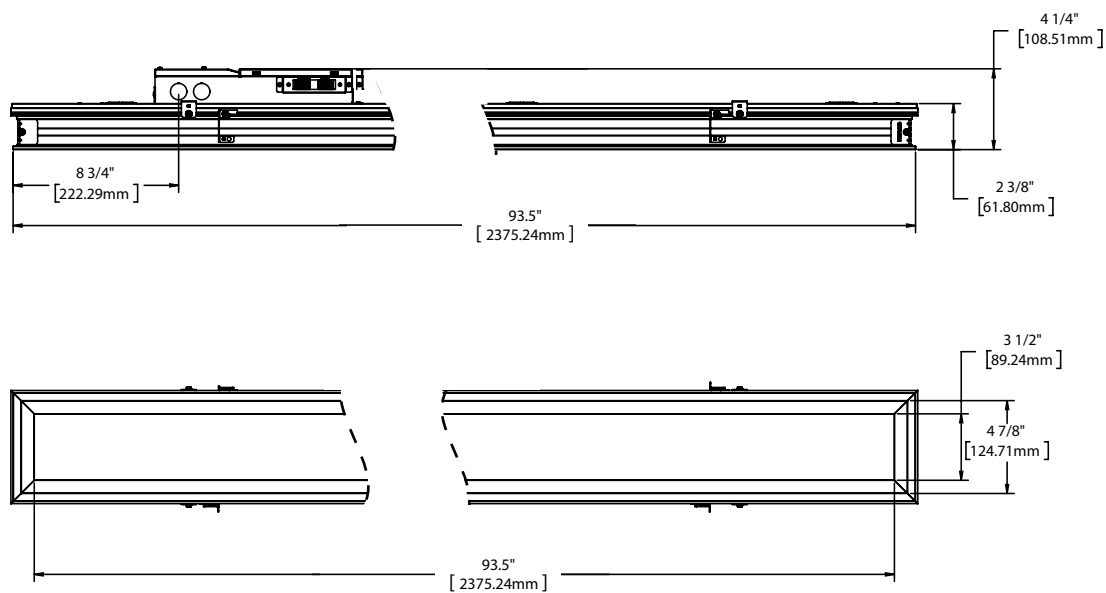
## R6R2



## R6R4



## R6R8



## Energy and Performance Data

## Electrical &amp; Optical Performance - R6R CRI - 80, CCT - 3500, Frame Color - White

Catalog No.	Size	CCT	Lumen Output			Wattage			Efficacy		
			Lumen Setting			Lumen Setting			Lumen Setting		
			Low (50D)	Medium (75D)	High (100D)	Low (50D)	Medium (75D)	High (100D)	Low (50D)	Medium (75D)	High (100D)
R6R2-SL1-830-UNV-STD-W 500, 750,1000 Lumens/ft 1000Lm 1500Lm 2000Lm	2FT	3000	976	1429	1686	11	16	19	89.5	88.8	86.9
		3500	1002	1463	1735	11	16	19	92.8	90.9	89.4
		4000	1015	1486	1749	11	16	19	94.0	92.9	90.1
R6R4-SL1-L8SCT3 500, 750,1000 Lumens/ft 2000Lm 3000Lm 4000Lm	4FT	3000	1873	2769	3485	18	28	36	102.3	100.3	96.5
		3500	1905	2818	3525	18	28	36	104.1	101.7	97.6
		4000	1923	2838	3566	18	28	36	105.6	103.2	99.3
R6R8-SL1-L8SCT3 500, 750,1000 Lumens/ft 4000Lm 6000Lm 8000Lm	8FT	3000	3998	5717	6743	42	62	75	95.9	92.1	90.1
		3500	4104	5853	6939	41	62	75	99.1	94.3	92.8
		4000	4158	5943	6995	41	62	75	100.4	95.7	93.5

## Lumen Adjustment Factors

CCT Multiplier	80 CRI
3000K	0.95
3500K	1.00
4000K	1.01

## Lumen Adjustment Factors

Black Regress Kit	0.77
-------------------	------

## Example of Lumen Adjustment Calculation

R6R4-75D-835-UNV-STD-W  
(80 CRI, 3500K with white regress)  
converting to R6R4-75D-830-UNV-STD-B  
(80 CRI, 3000K with black regress)

Lumen Adjustment Factors = 0.95 for CRI/  
CCT and 0.77 for regress color

Total Light Output =  
2,818 lm x 0.95 x 0.77 = 2,061 lm

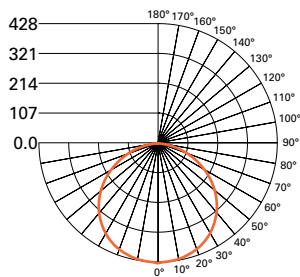
Efficacy = 73.6 lm/W

## Lumen Maintenance

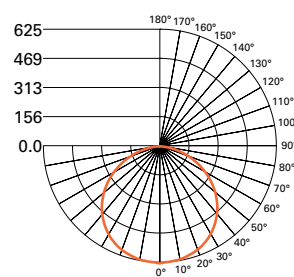
Size	Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours) <sup>(1)</sup>	Theoretical L70 (hours) <sup>(2)</sup>
2'	25°C	90%	200,000
4'	25°C	90%	200,000
8'	25°C	89%	175,000

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.

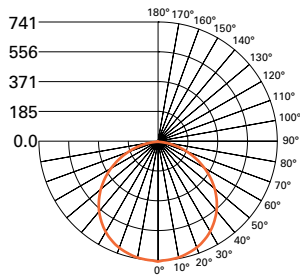
## Photometric Data

 View IES files
**R6R2-50D-835-UNV-STD-W**

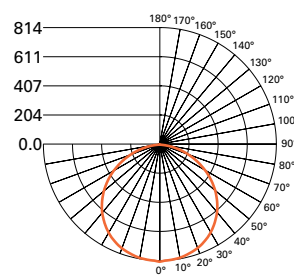
Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 1001.8  
Input Watts: 10.8 W  
Efficacy: 92.8 LPW  
Test Report: R6R2-50D-835-UNV-STD-W.IES

**R6R2-75D-835-UNV-STD-W**

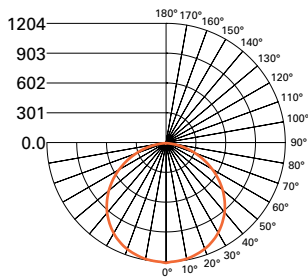
Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 1463.3  
Input Watts: 16.1W  
Efficacy: 90.9 LPW  
Test Report: R6R2-75D-835-UNV-STD-W.IES

**R6R2-100D-835-UNV-STD-W**

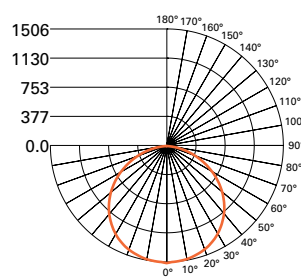
Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 1734.7  
Input Watts: 19.4 W  
Efficacy: 86.4 LPW  
Test Report: R6R2-100D-835-UNV-STD-W.IES

**R6R4-50D-835-UNV-STD-W**

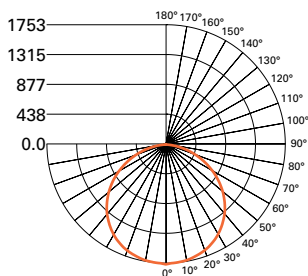
Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 1904.8  
Input Watts: 18.3W  
Efficacy: 104.1 LPW  
Test Report: R6R4-50D-835-UNV-STD-W.IES

**R6R4-75D-835-UNV-STD-W**

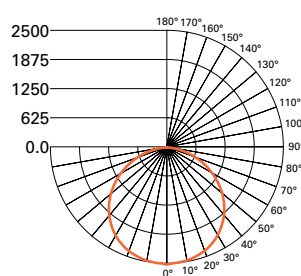
Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 2817.7  
Input Watts: 27.7 W  
Efficacy: 101.7 LPW  
Test Report: R6R4-75D-835-UNV-STD-W.IES

**R6R4-100D-835-UNV-STD-W**

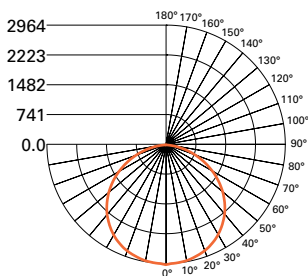
Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 3524.9  
Input Watts: 36.1W  
Efficacy: 97.6 LPW  
Test Report: R6R4-100D-835-UNV-STD-W.IES

**R6R8-50D-835-UNV-STD-W**

Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 4103.8  
Input Watts: 41.4 W  
Efficacy: 99.1 LPW  
Test Report: R6R8-50D-835-UNV-STD-W.IES

**R6R8-75D-835-UNV-STD-W**

Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 5853.2  
Input Watts: 62.1W  
Efficacy: 94.3 LPW  
Test Report: R6R8-75D-835-UNV-STD-W.IES

**R6R8-100D-835-UNV-STD-W**

Electronic Driver  
LED 3500K  
Spacing criterion: (II) 1.27 x mounting height, (⊥) 1.21 x mounting height  
Lumens: 6938.8  
Input Watts: 74.8 W  
Efficacy: 92.8 LPW  
Test Report: R6R8-100D-835-UNV-STD-W.IES

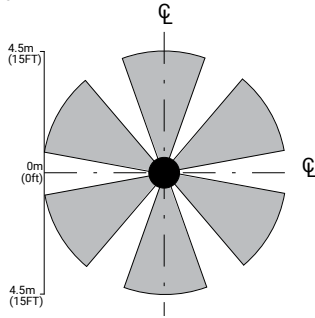
## Control Solutions

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

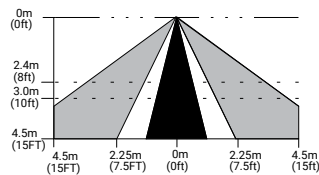


### Integrated Sensor Coverage Pattern

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.

The R6R Series with WaveLinx offers no-hassle lighting control with multiple luminaire level control solutions.

**WaveLinx PRO** is used for applications where spaces need to be connected to a lighting or building management system and to help building owners improve their operations, building environment, and tenants' experience by leveraging the data generated by the sensors. The WaveLinx PRO devices communicate with each other via the WaveLinx Area Controller which coordinates the data traffic between the devices, lighting apps and CORE platform. The WaveLinx Area Controller also hosts the time clock required if spaces need to be turned on/off at a specific time.

The WaveLinx PRO Sensor offers built-in occupancy and daylighting controls as well as luminaire level control including white tuning while the WaveLinx PRO Node offers luminaire level control and white tuning. If opting for the WaveLinx PRO Node option, a PRO Ceiling Sensor will most likely be needed within the space to control the lights based on occupancy and daylight levels.

**WaveLinx LITE** is used for single spaces where there is no need to manage the spaces remotely or exchange the sensor data with other sub-systems within the building or smart applications.

The WaveLinx LITE Sensor offers built-in occupancy and daylighting controls as well as luminaire level control.

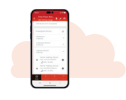


## Systems comparison chart

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
<b>Occupancy</b>	Yes	Yes	Yes	Yes	Yes
<b>Daylighting</b>	Yes	Yes	Yes	Yes	Yes
<b>Wallstations</b>	–	Yes	Yes	Yes	Yes
<b>Gateways</b>	–	–	–	1 WAC	300 WACs
<b>Devices (MAX)</b>	–	40 per Area (1120 per space)	40 per Area	200 per WAC2	32,500 per CORE Enterprise
<b>Software</b>	–	WaveLinx LITE Mobile App	WaveLinx CAT Mobile App	WaveLinx Mobile App	CORE
<b>Areas</b>	–	28 per Space	Unlimited	50 per WAC2	up to 3,000
<b>Zones</b>	–	16 per Area	16 per Area	16 per Area	up to 9,000
<b>Scheduling</b>	–	–	–	Local	Global
<b>VividTune™</b>	–	–	–	Yes	Yes
<b>Plug-Load Control</b>	–	Yes	Yes	Yes	Yes
<b>Low-Voltage Power</b>	–	–	Yes	Yes	Yes
<b>Integration</b>	–	–	–	–	BACnet, API
<b>Dashboards</b>	–	–	–	–	Energy, Occupancy
<b>Configuration</b>	–	Installer	Installer	Technician	Technician / IT