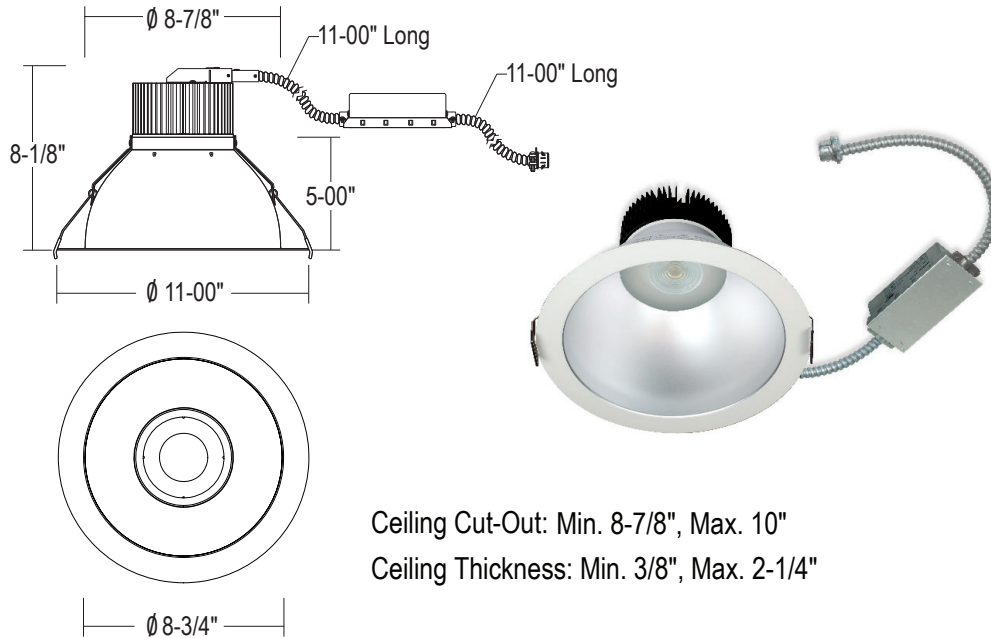


CRTR9LC : 9"/10" C·SERIES

(COB) CHIP ON BOARD BEAM CONTROL LED, RETROFIT/REMODEL
1000LM - 4000LM (10W-44W)



Ceiling Cut-Out: Min. 8-7/8", Max. 10"
Ceiling Thickness: Min. 3/8", Max. 2-1/4"



- Quick connector power adapter and twist-and-lock reflector for quick access and easy maintenance
- Heavy-duty springs and self-flanged reflector
- Several lumen packages with soft even illumination
- No visible screws or hardware

ORDERING : CRTR9LC10SW-B40-T27UE-D10-JB-CHP

CRTR9LC		Reflector Finish		Beam Spread		CCT		Driver Options		J-Box	
Fixture/Lumens	Insulation Contact	Reflector Finish		Beam Spread		CCT		Driver Options		J-Box	
	Non-IC	Blank		20° Spot	-B20					None	Blank
	ICA Rated	ICA ⁴		30° Narrow Flood	-B30					Junction Box	-JB
	Airtight			40° Flood	-B40					Junction Box	-JB-CHP
				60° Wide Flood	-B60					(Chicago Plenum)	
				75° Very Wide Flood	-B75						
Fixture/Lumens	Reflector Finish	CCT		Driver Options ¹							
1000lm (10W)	Satin Haze Reflector/ White Ring	SW		2700K (90 CRI)	-T27	0-10V Dimming		UE-D10			
1300lm (15W)	White Reflector/ White Ring	WW		2700K (97 CRI)	-T27-C97	Integral EM Backup		UE-D10-EM			
2000lm (20W)	All Black	BB		3000K (90 CRI)	-T30	120V ELV and Triac Dimming		-DIN			
2800lm (30W)	Clear Specular Reflector/White Ring	CW ³		3000K (97 CRI)	-T30-C97	UniDim™ 0-10V ELV and Triac Dimming		UE-DUN			
4000lm (44W)	All Satin Haze	SS		3500K (90 CRI)	-T35	347V, 0-10V Dimming		-347-D10 ²			
				4000K (90 CRI)	-T40	0-10V Dimming (1%)		UE-D10P1			
				5000K (80 CRI)	-T50	Lutron Hi-Lume		UE-DHL			
						DMX 0% Dimming		-DMX			
						Athena Wireless Node		-AWN			
						Athena Wireless Node Occupancy Sensor		-AWN-OCC			

¹ All drivers are 120V/277V unless otherwise noted.

² -347-D10 is not available for CRTR9LC10.

³ Clear finish reflector not recommended for placing close to vertical surfaces. Uneven striations may be visible.

⁴ ICA is only available for CRTR9LC10, CRTR9LC13, CRTR9LC20, and CRTR9LC26.

SPECIFICATION

Application

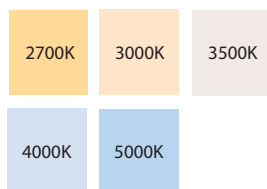
Architectural/Commercial-grade recessed (COB) Chip on Board Beam Control LED allows for concentrated high center beam candlepower. Twist and lock TIR beam control optic is designed for easy field replacement of 25°, 40°, 60°, and 90° beam spread options.

Retrofit Mounting

Designed for use with existing 9" Architectural, Incandescent, Fluorescent, and Metal Halide Housings. Supplied with flexible metal conduit for connection to existing electrical junction box. Uses existing frame-in-kits mounting method via clips. Consult factory for special mounting methods.

Use the -JB Junction box option for remodel applications that don't have an existing housing frame or an electrical junction box close by. The retaining spring clips option allows for mounting to wood or gypsum board ceilings without the need of a frame.

Color Temperature (CCT)



Available in 2700K, 3000K, 3500K, 4000K, 90 CRI; 5000K 80 CRI; 2700K and 3000K, 97 CRI.

COLOR TEMP:	2700K	3000K	3500K	4000K	5000K
CRI:	90, 97	90, 97	90	90	80

Insulation Contact

(CRTR9LC10), (CRTR9LC15), (CRTR9LC20), and (CRTR9LC26) are inherently thermally protected for direct insulation contact without the need for an enclosure. Non-IC rated housings must be kept 3" from loose-fill insulation.

Power Connection

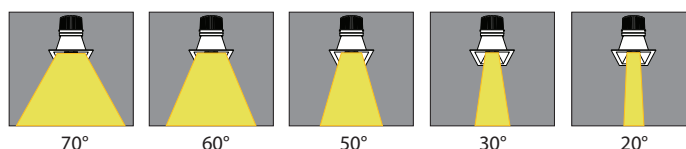
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

Thermal Management

Heat dissipation facilitated by a large exposed integral aluminum heat sink to maximize heat dissipation in an open-air environment. The recommended ambient temperature should be below 35°C to achieve a minimum L70 life of 50,000 hours according to the LM80 standard.

Optics

Multifaceted aluminum reflectors produces low glare illumination with multiple light control options.



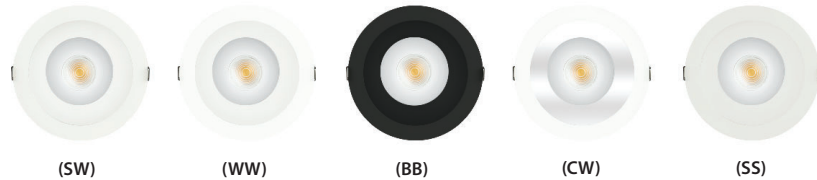
SPECIFICATION (Continued)

Reflector

Field adjustable twist and lock reflector is easily removable to provide quick access to LED lamp array. Frosted polycarbonate lens pre-installed on reflector unifies diode sources and protects diodes from dust and particles from front of aperture.

Reflector Finish

The 1-piece, self-flanged, LED design enables a clean trim finish without a secondary trim ring. Heavy gauge aluminum reflector prevents ugly dents during shipping & installation. Deeply mounted singular LED provides 50° visual cutoff. Available in Satin Haze Reflector/White Finish, White Reflector/White Finish, All Black, Clear Specular Reflector/White Finish, and All Satin Haze.



Junction Box

(-JB) option is 18-gauge pre-wired aluminum Junction Box, 18 cubic-inch for a maximum of (6) #12AWG wires. Furnished with (2) 1/2" knockouts. Strain clamps are included to install or remove covers for an easily accessed ground wire. (-JB-CHP) option is Chicago Plenum, air-tight Junction Box.

Certifications and Listings



cETLus listed. Suitable for dry, and damp, locations. NYC approved. Calendar #41937. Conforms to City of Chicago Environmental Air CCEA-200 with Section 18-27-300.22 and special requirements Section 14-20-210C-4. Assembled in USA.

Caution

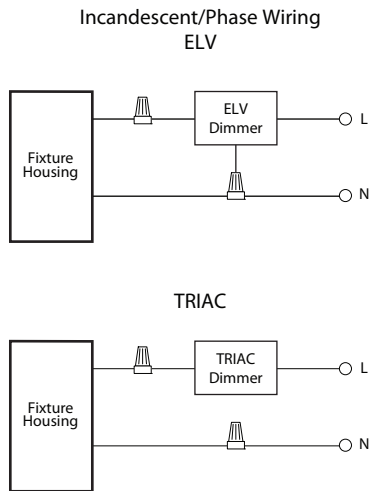
Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SPECIFICATION (Continued)

Dimming Options

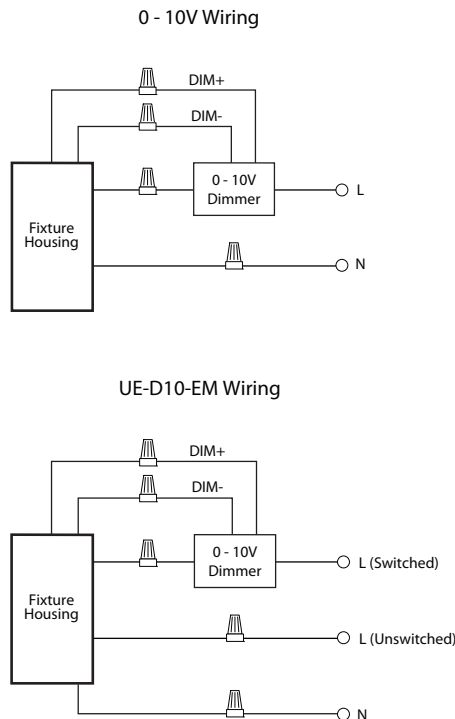
ELV and TRIAC Driver 120V (-DIN):

Compatible with electronic low voltage, and 2-Wire incandescent dimmers. Also known as leading edge, Reverse Phase, Forward Phase dimming. Allows smooth dimming down to 5% depending upon the dimmer's limitations.



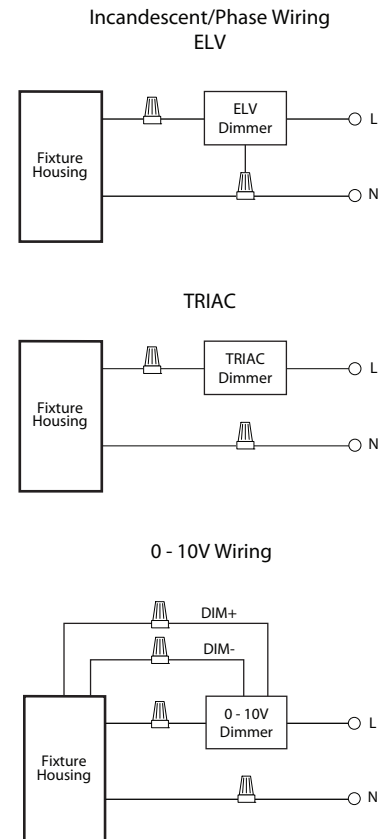
0-10V Driver 120V/277V (UE-D10):

Compatible with most existing 0-10V systems. Also known as fluorescent or 5-Wire dimming. Allows smooth dimming down to 5% depending upon the dimmer's limitations. Compatible with daylight harvesting controls.



UniDim™ Driver 120V/277V (UE-DUN):

All in one ELV and TRIAC phase dimming (120V only), and 0-10V dimming (120V/277V). Works with most 3-Wire ELV, 2-Wire incandescent and 120V/277V 5-Wire 0-10V fluorescent dimmers.



ATHENA WIRELESS NODE (-AWN, -AWN-OCC)



Radio frequency (RF) device for digital control of light fixtures in an Athena control system. Athena wireless processor or Clear Connect gateway-Type X is required to operate wireless node.

- Pre-Wired wireless node
- Installed on Junction Box outer wall
- 2.4 GHz
- cULus Listed (UL 916)
- UL 2043 Plenum Rated
- FCC compliant with the limits for a Class B digital device
- ANSI C1371.1 0-10V Electronic Off
- D4i certified
- IC (Industry Canada)
- Supports DALI-2 Type 8 tuneable-white color temperature Tc applications - IEC62386-209 ed.1

SPECIFICATION (Continued)

Warranty

Covered by a 5-Year Warranty to be free of defects in materials and craftsmanship.
Recommended for applications where ambient temperatures do not exceed 35°C, installations exceeding this temperature will result in reduced LED lamp life and a voided warranty.

Emergency Options

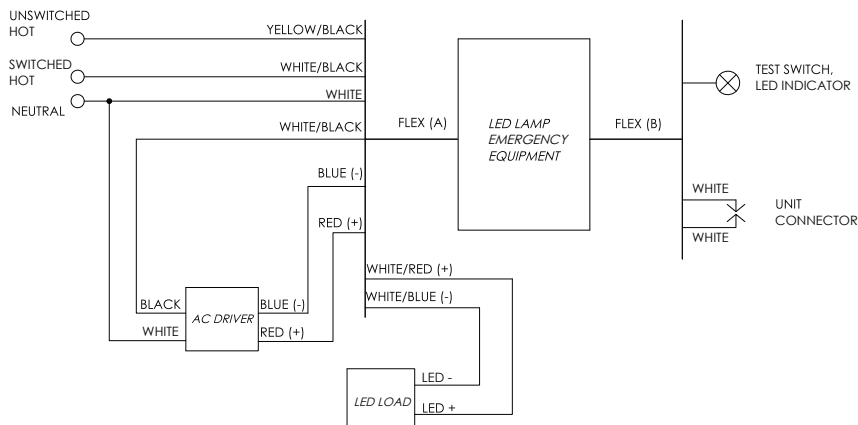
Emergency LED Battery Back-up available, remotely mounted adjacently by the installer.
When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the driver to auxiliary generator power during the loss of normal AC power, (recommended for applications requiring individual circuit switching).

INTEGRAL EMERGENCY BATTERY (UE-D10-EM): 10W

For installation away from the surface of the building in remote hidden location.

- Hidden Emergency Equipment
- Must be installed in Dry Locations
- 10W constant output to LED lamp

Not rated for outdoor mounting. Damp location rated.

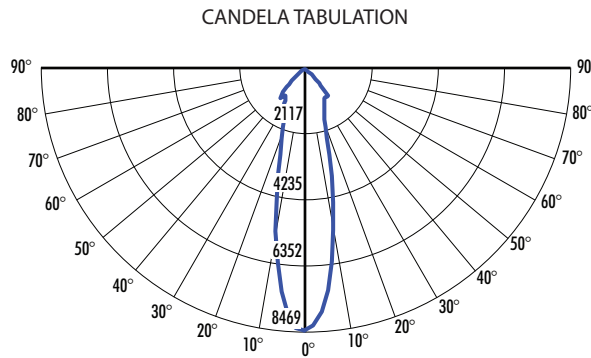


Input Voltage:	120-277VAC/60Hz
Output Voltage:	10W
Wattage:	10W
Switching Time:	<3s
Charging Time:	12h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	48°C
Maximum Lumens:	800lm
Self-Diagnostic:	Yes

PHOTOMETRY

CRTR9LC32CW-B20-T35UE-D10 (4000lm, 40W, 20° Spot, 3500K)

System Power:	44W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	24.9°	CW : 1.01
Field Angle 10%:	87.3°	SS : 0.99
Color Temperature:	3399K	SW : 1.00
CRI:	94.2	WW : 0.968
Lumens Delivered:	3700	CCT
CBCP:	8469.3	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00

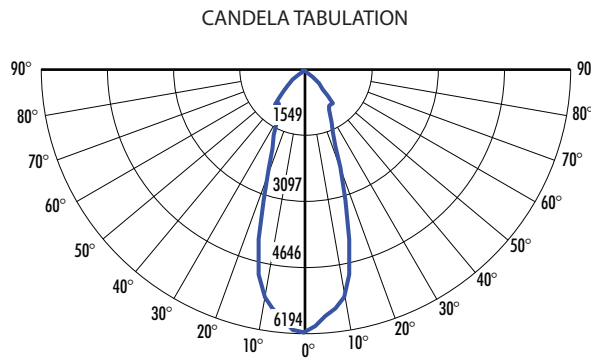


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
12.0'	5.30'	58.81
14.0'	6.18'	43.21
16.0'	7.06'	33.08
18.0'	7.95'	26.14
20.0'	8.83'	21.17

CRTR9LC32CW-B30-T35UE-D10 (4000lm, 40W, 30° Narrow Flood, 3500K)

System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	36.0°	CW : 1.01
Field Angle 10%:	91.7°	SS : 0.99
Color Temperature:	3378K	SW : 1.00
CRI:	94.3	WW : 0.968
Lumens Delivered:	3752	CCT
CBCP:	6194.1	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00

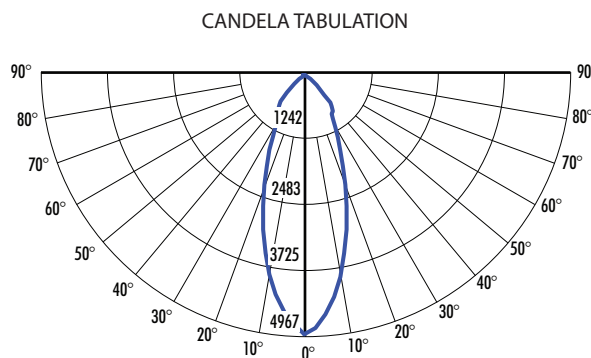


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
12.0'	7.80'	43.01
14.0'	9.10'	31.60
16.0'	10.40'	24.20
18.0'	11.70'	19.12
20.0'	13.00'	15.49

CRTR9LC32CW-B40-T35UE-D10 (4000lm, 40W, 40° Flood, 3500K)

System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	37.0°	CW : 1.01
Field Angle 10%:	90.1°	SS : 0.99
Color Temperature:	3261K	SW : 1.00
CRI:	93.8	WW : 0.968
Lumens Delivered:	3018	CCT
CBCP:	4967.0	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00

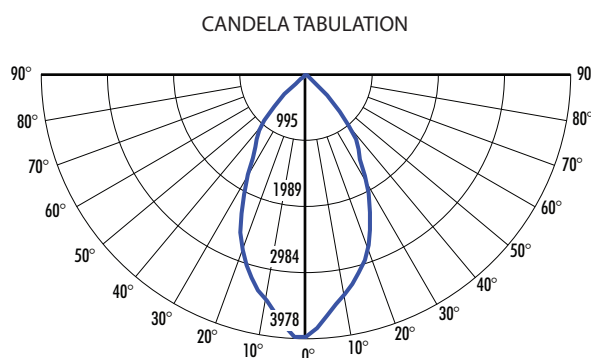


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
12.0'	8.03'	34.49
14.0'	9.37'	25.34
16.0'	10.71'	19.40
18.0'	12.05'	15.33
20.0'	13.38'	12.42

CRTR9LC32CW-B60-T35UE-D10 (4000lm, 40W, 60° Wide Flood, 3500K)

System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	55.9°	CW : 1.01
Field Angle 10%:	93.7°	SS : 0.99
Color Temperature:	3310K	SW : 1.00
CRI:	93.8	WW : 0.968
Lumens Delivered:	2104	CCT
CBCP:	3978.1	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
12.0'	12.73'	27.63
14.0'	14.86'	20.30
16.0'	16.98'	15.54
18.0'	19.10'	12.28
20.0'	21.22'	9.95

PHOTOMETRY (Continued)

CRTR9LC32CW-B75-T35UE-D10 (4000lm, 40W, 75° Very Wide Flood, 3500K)

System Power:	43W	MULTIPLIERS	CANDELA TABULATION		FOOTCANDLE DISTRIBUTION																		
Test Date:	10/2023	REFLECTOR FINISH			<table><tr><th>Height</th><th>Beam Diameter</th><th>FC</th></tr><tr><td>12.0'</td><td>18.15'</td><td>20.81</td></tr><tr><td>14.0'</td><td>21.18'</td><td>15.29</td></tr><tr><td>16.0'</td><td>24.20'</td><td>11.71</td></tr><tr><td>18.0'</td><td>27.23'</td><td>9.25</td></tr><tr><td>20.0'</td><td>30.25'</td><td>7.49</td></tr></table>	Height	Beam Diameter	FC	12.0'	18.15'	20.81	14.0'	21.18'	15.29	16.0'	24.20'	11.71	18.0'	27.23'	9.25	20.0'	30.25'	7.49
Height	Beam Diameter	FC																					
12.0'	18.15'	20.81																					
14.0'	21.18'	15.29																					
16.0'	24.20'	11.71																					
18.0'	27.23'	9.25																					
20.0'	30.25'	7.49																					
Beam Angle 50%:	74.2°	CW : 1.01																					
Field Angle 10%:	96.2°	SS : 0.99																					
Color Temperature:	3351K	SW : 1.00																					
CRI:	94.0	WW : 0.968																					
Lumens Delivered:	3900	CCT																					
CBCP:	2997.3	2700K : 0.91																					
Power Factor:	0.99	3000K : 0.97																					
		3500K : 1.00																					
		4000K : 1.04																					
		Lumens																					
		1000lm: 0.27																					
		1500lm: 0.37																					
		2000lm: 0.53																					
		2800lm: 0.71																					
		4000lm: 1.00																					