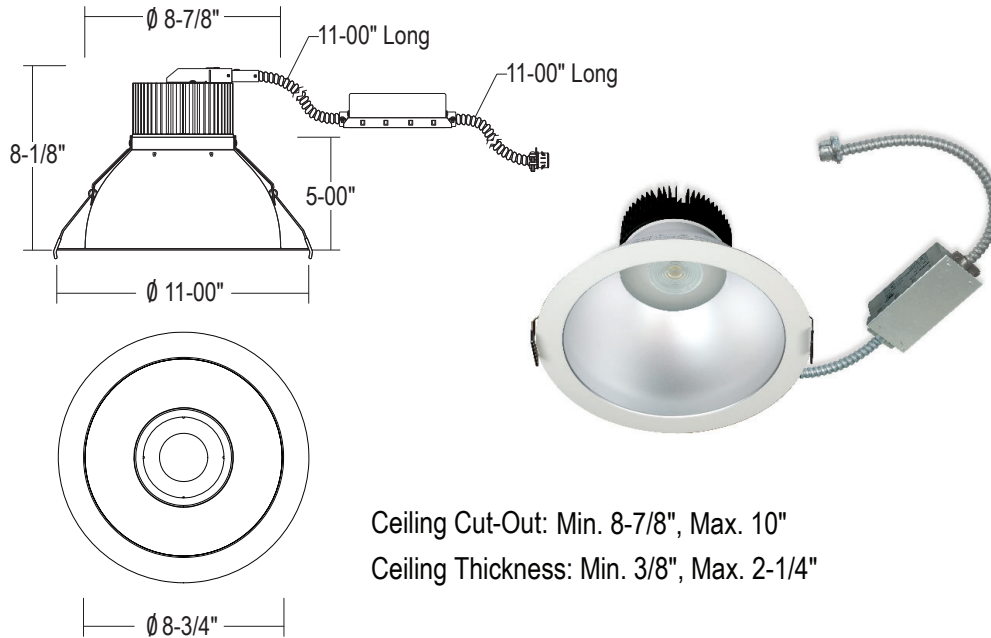


CRTR9LC - 9"/10" C-SERIES

(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										
	Insulation Contact									J-Box	
	Non-IC	Blank								None	Blank
	ICA Rated	ICA ⁶								Junction Box	-JB
	Airtight									Junction Box (Chicago Plenum)	-JB-CHP
Fixture/Lumens		Reflector Finish				CCT				Driver Options ¹	
1000lm (10W)	CRTR9LC10 ⁴	Satin Haze Reflector/ White Ring	SW			2700K (90 CRI)	-T27			0-10V Dimming	UE-D10
1300lm (15W)	CRTR9LC13 ⁴	White Reflector/ White Ring	WW			2700K (97 CRI)	-T27-C97			12W Emergency Backup	UE-D10-EM
2000lm (20W)	CRTR9LC20 ⁴	All Black	BB			3000K (90 CRI)	-T30			120V ELV and Triac Dimming	-DIN
2800lm (30W)	CRTR9LC26	Clear Specular Reflector/White Ring	CW ³			3000K (97 CRI)	-T30-C97			UniDim™ 0-10V ELV and Triac Dimming	UE-DUN
4000lm (44W)	CRTR9LC32	All Satin Haze	SS			3500K (90 CRI)	-T35			347V	-347 ²
						4000K (90 CRI)	-T40			0-10V Dimming (1%)	UE-D10P1
						5000K (80 CRI)	-T50			Lutron HighLume	UE-DHL
										DMX 0% Dimming	-DMX

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

² -347 is not available for CRTR9LC10.

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

⁴ CRTR9LC10, CRTR9LC15, and CRTR9LC20 are IC rated for direct insulation contact.

⁵ -B20, -B30, and -B75 are not compatible with CRTR9LC32.

⁶ ICA is only available for CRTR9LC10, and CRTR9LC13.

SPECIFICATION

Application

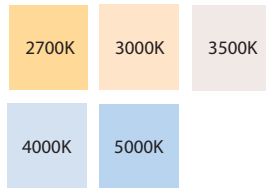
Architectural/Commercial-grade recessed (COB) Chip on Board Beam Control LED allows for concentrated high center beam candlepower. Twist and lock TIR beam control optic is designed for easy field replacement of 25°, 40°, 60°, and 90° beam spread options.

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), and (CRTR9LC20) are IC-Rated for direct insulation contact. Non-IC rated housings must be kept 3" from loose-fill insulation.

Power Connection

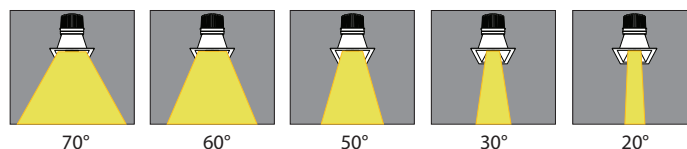
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

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.



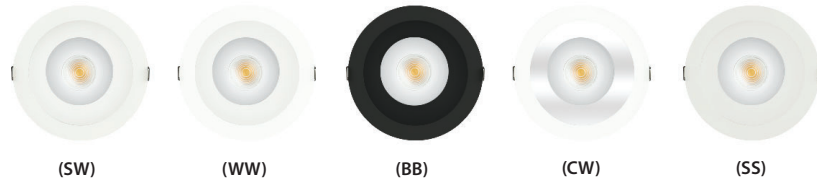
SPECIFICATION (Continued)

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

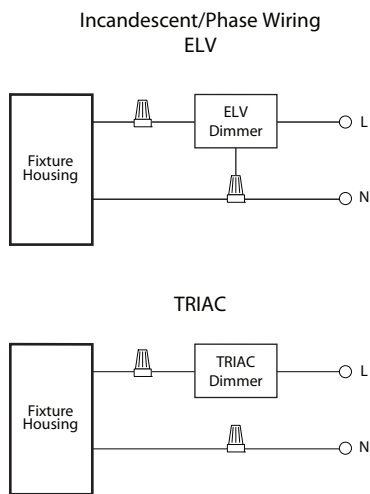
Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SPECIFICATION (Continued)

Dimming Options

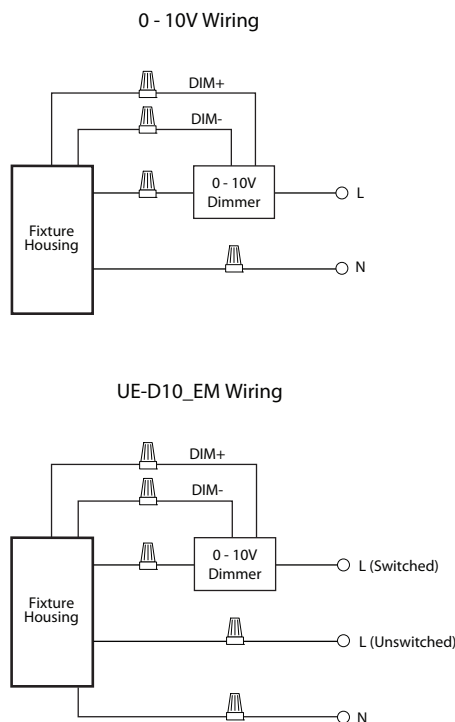
ELV and TRIAC Driver 120V (-DIN):

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.



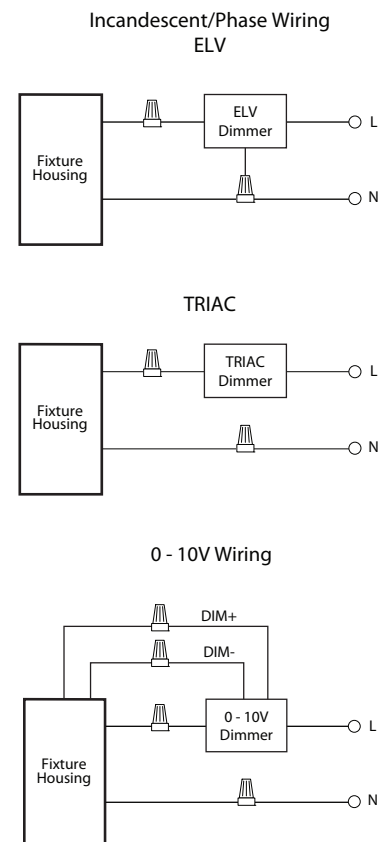
0-10V Driver 120V/277V (UE-D10):

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.



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.

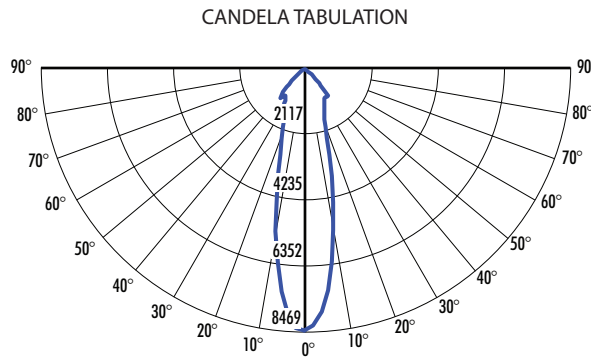
Emergency Options

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).

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

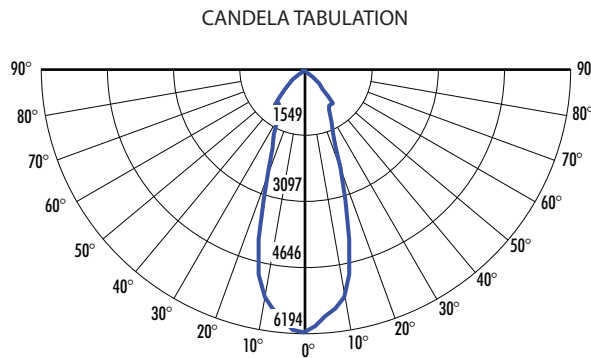


FOOTCANDLE DISTRIBUTION

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

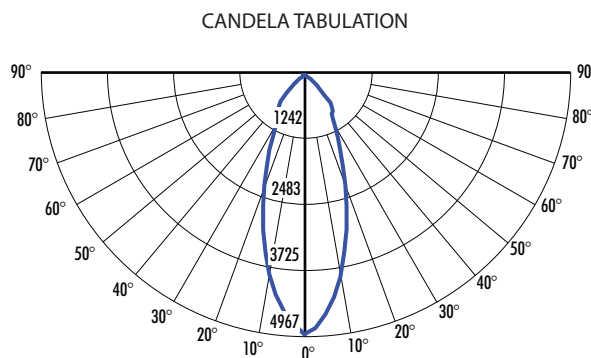


FOOTCANDLE DISTRIBUTION

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

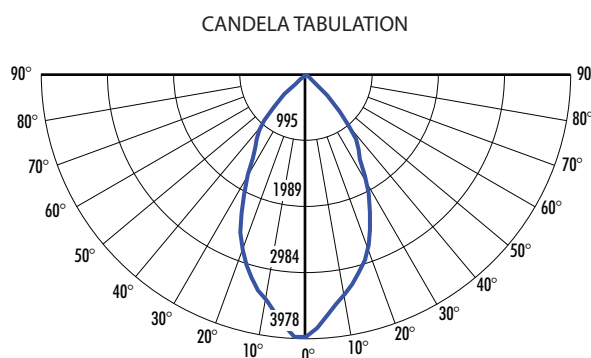


FOOTCANDLE DISTRIBUTION

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

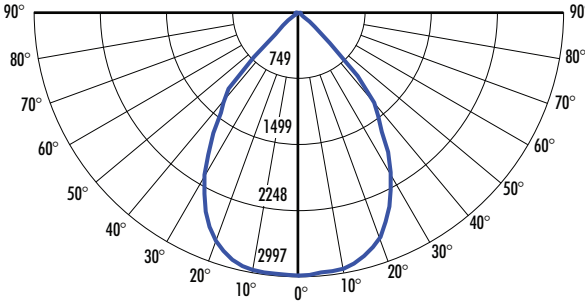


FOOTCANDLE DISTRIBUTION

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		<div>CANDELA TABULATION</div> 	<div>FOOTCANDLE DISTRIBUTION</div> <table><thead><tr><th>Height</th><th>Beam Diameter</th><th>FC</th></tr></thead><tbody><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></tbody></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																					
Test Date:	10/2023	REFLECTOR FINISH																					
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																				

2023.10.11