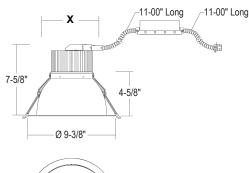


TYPE

CATALOG#

# CRTR8LC:8" C-SERIES

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







CRTR8LC

Ceiling Cut-Out **X:** Min. 7-3/4", Max. 8-5/8" Ceiling Thickness: Max. 2-1/4"



**PROJECT** 

















- 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: CRTR8LC10SW-B40-T27UE-D10-JB-CHP

Fixture/Lumens	Insula Cont		Reflector Finish	Beam Spread	ССТ	Driver Option	ns J-Box	_
	Insulation	Contact		Beam Spread	d		J-Box	
	Non-IC	Blank	_	20° Spot	-B20		None	Blank
	ICA Rated	ICA <sup>4</sup>		30° Narrow Flood	-B30		Junction Box	-JB
	Airtight			40° Flood	-B40		Junction Box	-JB-CHP
				60° Wide Flood	-B60		(Chicago Plenum)	o Plenum)
	7			75° Very Wide Flood	-B75			
Fixture/l	Lumens		Reflector Finisl	n				
1000lm (10W)	CRTR8LC10		Satin Haze Reflector/ White Ring	SW	ССТ		Driver Options <sup>1</sup>	
1500lm (15W)			3	1404/	2700K (90 CRI)	-T27	0-10V Dimming	UE-D10
2000lm (20W)	CRTR8LC20		White Reflector/ White Ring	ww	2700K (97 CRI)	-T27-C97	Integral EM Backup	UE-D10-EM
2800lm (30W)			All Black	ВВ	3000K (90 CRI)	-T30	120V ELV and	-DIN
4000lm (44W)	CRTR8LC32			CM <sub>3</sub>	3000K (97 CRI)	-T30-C97	Triac Dimming	
			Clear Specular Reflector/White Ring	CVV	3500K (90 CRI)	-T35	UniDim™ 0-10V ELV and	d UE-DUN
			All Satin Haze	SS	4000K (90 CRI)	-T40	Triac Dimming	
			All Sault Haze	33	5000K (80 CRI)	-T50	347V, 0-10V Dimming	-347-D10 <sup>2</sup>
							0-10V Dimming (1%)	UE-D10P1
							Lutron Hi-lume	UE-DHL
							DMX 0% Dimming	-DMX
							Athena Wireless Node	-AWN

- <sup>1</sup> All drivers are 120V/277V unless otherwise noted.
- <sup>2</sup>-347-D10 is not available for CRTR8LC10.
- <sup>3</sup> Clear finish reflector not recommended for placing close to vertical surfaces. Uneven striations may be visible.
- <sup>4</sup>ICA is only available for CRTR8LC10, CRTR8LC15, CRTR8LC20, and CRTR8LC26.

#### **COMPATABILITY**



VR800 Round Vandal Resistant Kit for 8"



-AWN-OCC

Athena Wireless Node Occupancy Sensor



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

#### **SPECIFICATION**

Α	b	p	li	ca	ti	o	n
	r	М.	••		•	•	

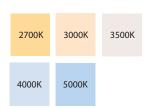
Architectural/Commercial-grade recessed (COB) Chip on Board Beam Control LED allows for concentrated high center beam candlepower. Twist and lock TIR beam control optic is designed for easy field replacement of 20°, 30°, 40°, 60°, and 75° beam spread options.

#### **Retrofit Mounting**

Designed for use with existing 8" 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**

(CRTR8LC10), (CRTR8LC15), (CRTR8LC20), and (CRTR8LC26) 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**

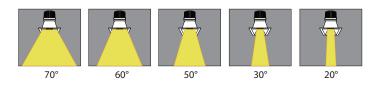
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

#### 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.





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

## SPECIFICATION (Continued)

#### Reflector

Field adjustable twist and lock reflector is easily removable to provide quick access to LED lamp array. Optional reflector (-EMA) features integral EM switch for 12W emergency backup (UE-D10-EM).

#### **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

16-gauge pre-wired galvanized steel Junction Box, 26 cubic-inch for a maximum of (8) #12 AWG wires. Furnished with (7) 1/2" knockouts. Strain clamps are included to install or remove covers for an easily accessed ground wire. (-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

LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty. (+1KV). Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.



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

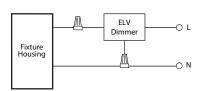
## SPECIFICATION (Continued)

#### **Dimming Options**

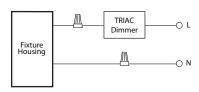
#### **ELV and TRIAC Driver 120V (-DIN):**

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.

## Incandescent/Phase Wiring ELV



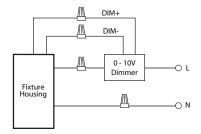
TRIAC



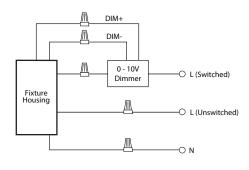
#### 0-10V Driver 120V/277V (UE-D10):

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.

#### 0 - 10V Wiring



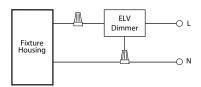
#### UE-D10-EM Wiring



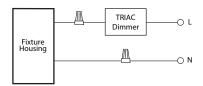
#### UniDim™ Driver 120V/277V (UE-DUN):

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.

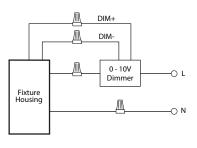
## Incandescent/Phase Wiring ELV



TRIAC



#### 0 - 10V Wiring



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

#### **\$LUTRON**

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 wirless 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 lmits for a Class B digital device
- ANSI C1371.1 0-10V Electronic Off
- · D4i certified
- IC (Industry Canda)
- Supports DALI-2 Type 8 tuneable-white color temperature Tc applications IEC62386-209 ed.1



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

### 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**

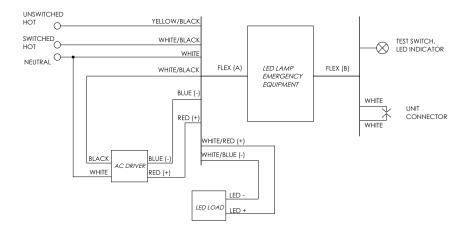
Emergency LED Battery Back-up available, remotely mounted adjacently by the installer. When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the 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.



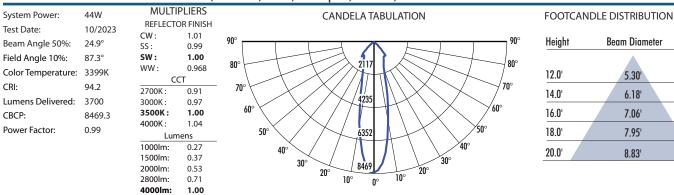
Input Voltage:	120-277VAC/60Hz
Output Voltage:	10W
Wattage:	10W
Switching Time:	<3s
Charging Time:	12h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	48°C
Maximum Lumens:	800lm
Self-Diagnostic:	Yes



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

### **PHOTOMETRY**

#### CRTR8LC32CW-B20-T35UE-D10 (4000lm, 40W, 20° Spot, 3500K)



### CRTR8LC32CW-B30-T35UE-D10 (4000lm, 40W, 30° Narrow Flood, 3500K)

System Power: Test Date:	43W 10/2023		PLIERS OR FINISH	CANDELA TABULATION	FOOTCAN	IDLE DISTRIBUTION	
Beam Angle 50%:	36.0°	CW: SS:	1.01 0.99	90°	Height	Beam Diameter	FC
Field Angle 10%:	91.7°	SW:	1.00	80°			
Color Temperature:	3378K	WW:	0.968 CT	80°	12.0'	7.80'	43.01
CRI:	94.3	2700K:	0.91	70°	14.0'	9.10′	31.60
Lumens Delivered:	3752	3000K:	0.97	3097	17.0	7.10	31.00
CBCP:	6194.1	3500K:	1.00	60°	16.0'	10.40'	24.20
Power Factor:	0.99	4000K : Lum	1.04 nens	50°	18.0'	11.70'	19.12
		1000lm:	0.27	40°	20.01	10.00	15.40
		1500lm:	0.37	30°	20.0'	13.00'	15.49
		2000lm:	0.53	200 6194			
		2800lm:	0.71	10° 0° 10°			
		4000lm:	1.00	-			

#### CRTR8LC32CW-B40-T35UE-D10 (4000lm, 40W, 40° Flood, 3500K)

System Power:	43W	MULTI	PLIERS OR FINISH	CANDELA TABULATION	FOOTCANDLE DISTRIBUTION		
Test Date:	10/2023	CW:					
Beam Angle 50%:	37.0°	SS:	1.01 0.99	90°	Height	Beam Diameter	FC
Field Angle 10%:	90.1°	SW:	1.00	80°			
Color Temperature:	3261K	WW:	0.968	80°	12.0'	8.03'	34.49
CRI:	93.8	2700K:	0.91	70°	14.0'	9.37'	25.34
Lumens Delivered:	3018	3000K:	0.97	2483			
CBCP:	4967.0	3500K:	1.00	60°	16.0'	10.71'	19.40
Power Factor:	0.99	4000K:	1.04	50°	18.0'	12.05'	15.33
rowei ractor.	0.55	Lum	nens	3/23	10.0	12.05	13.33
		1000lm:	0.27	40° / / \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	20.0'	13.38'	12.42
		1500lm:	0.37	200	20.0	13.30	12.72
		2000lm:	0.53	200 4967			
		2800lm:	0.71	10° 0° 10°			
		4000lm:	1.00	·			

### CRTR8LC32CW-B60-T35UE-D10 (4000lm, 40W, 60° Wide Flood, 3500K)

System Power:	43W	MULTII REFLECTO		CANDELA TABULATION	FOOTCAN	NDLE DISTRIBUTION	
Test Date:	10/2023	CW:	1.01				
Beam Angle 50%:	55.9°	SS:	0.99	90°	Height	Beam Diameter	FC
Field Angle 10%:	93.7°	SW:	1.00	80°			
Color Temperature:	3310K	WW:	0.968 T	80°	12.0'	12.73	27.63
CRI:	93.8	2700K:	0.91	70°	14.0'	14.86'	20.30
Lumens Delivered:	2104	3000K:	0.97	1989	17.0	14.00	
CBCP:	3978.1	3500K:	1.00	60°	16.0'	16.98'	15.54
Power Factor:	0.99	4000K:	1.04	50°	18.0'	19.10'	12.28
			nens		10.0	17.10	12.20
		1000lm:	0.27	40°	20.0'	21.22'	9.95
		1500lm:	0.37		20.0	21.22	7.75
		2000lm:	0.53	30° 20° 3978 30°			
		2800lm:	0.71	10° 0° 10° 20			
		4000lm:	1.00	·- V			

FC

58.81

43.21

33.08

26.14

21.17

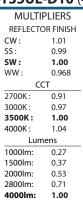


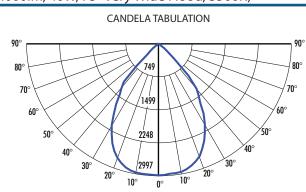
(COB) CHIP ON BOARD BEAM CONTROL LED, RETROFIT/REMODEL 1000LM - 4000LM (10W-44W)

## PHOTOMETRY (Continued)

## CRTR8LC32CW-B75-T35UE-D10 (4000lm, 40W, 75° Very Wide Flood, 3500K)

System Power:	43W
Test Date:	10/2023
Beam Angle 50%:	74.2°
Field Angle 10%:	96.2°
Color Temperature:	3351K
CRI:	94.0
Lumens Delivered:	3900
CBCP:	2997.3
Power Factor:	0.99





FOOTC	ANDLE DISTRIBUTION	
Height	Beam Diameter	FC
	<u> </u>	
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