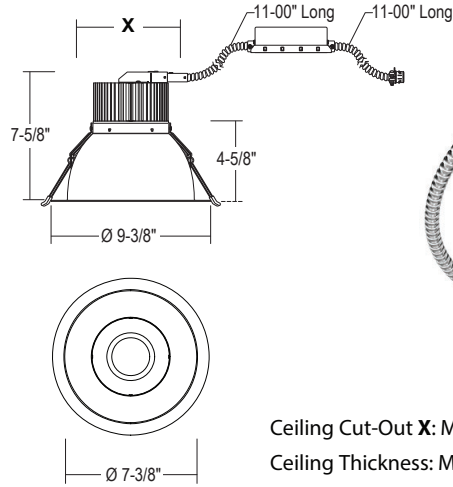
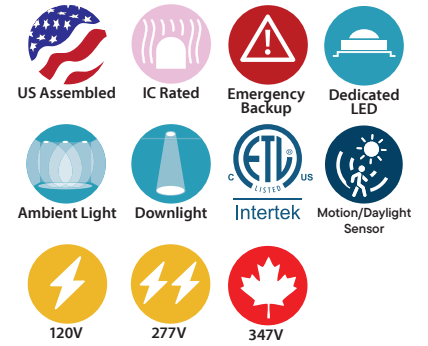


CRTR8LC : 8" C-SERIES

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



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



- Heavy-duty seamless die-cast reflector
- Assortment of dimming options
- COB LED design for concentrated high CBCP beam
- Multiple beam spreads for flexible beam control
- Twist and lock reflector for quick access to LED lamp array

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

CRTR8LC		Insulation Contact	Reflector Finish	Beam Spread	CCT	Control	Emergency Options	J-Box	Options
Fixture/Lumens									
1000lm (10W)	CRTR8LC10			-B20		UE-D10	None		Blank
1500lm (15W)	CRTR8LC15			-B30		UE-DUN	10W Emergency Battery		-EM
2000lm (20W)	CRTR8LC20			-B40		-DIN	Full Power Emergency Inverter		-EMAC⁶
2800lm (30W)	CRTR8LC26			-B60		UE-DHL	Full Power Emergency Inverter (347V)		-EMAC347⁶
4000lm (44W)	CRTR8LC32			-B75		-347-D10²	GTD Device		-GTD
Insulation Contact									
Non-IC	Blank								
ICA Rated	ICA⁴								
Airtight									
Reflector Finish									
Satin Haze Reflector/ White Ring	SW								
White Reflector/ White Ring	WW								
All Black	BB								
Clear Specular Reflector/White Ring	CW³								
All Satin Haze	SS								
Beam Spread									
20° Spot									
30° Narrow Flood									
40° Flood									
60° Wide Flood									
75° Very Wide Flood									
CCT									
2700K (90 CRI)									
3000K (90 CRI)									
3500K (90 CRI)									
4000K (90 CRI)									
5000K (80 CRI)									
Control ¹									
0-10V Dimming									
UniDim™ 0-10V, TRIAC/ELV Dimming									
TRIAC/ELV Dimming (120V)									
Lutron Hi-Lume									
0-10V Dimming (347V)									
1%, 0-10V Dimming									
0-10V Dimming with 10W Integral Emergency Battery Backup									
0%, DMX Dimming									
DMX Dimming with input via XLR5									
DMX Dimming with input via RJ45									
Athena Wireless Node (120V)									
Athena Wireless Node Occupancy Sensor (120V)									
UniSense - Remotely Mounted Motion/Photosensor (120V)									
UniSense - Remotely Mounted Motion/Photosensor									
Casambi Wireless Dimming									
BubblyNet Wireless System									
Lutron Vive Wireless Dimming Module									
Emergency Options									
None									
10W Emergency Battery									
Full Power Emergency Inverter									
Full Power Emergency Inverter (347V)									
GTD Device									
J-Box									
None									
Junction Box									
Junction Box (Chicago Plenum)									
Options									
None									
4.5" Ceiling Thickness									

¹ All drivers are 120V/277V unless otherwise noted.
² -347-D10 is not available for CRTR8LC10.
³ Clear finish reflector not recommended for placing close to vertical surfaces. Uneven striations may be visible.
⁴ (ICA) is only available for CRTR8LC10, CRTR8LC15, CRTR8LC20, and CRTR8LC26. (CRTR8LC32 are Non-IC rated.)
⁵ UE-D10-EM is not compatible with -EM or -EMAC or -EMAC347 or -GTD.
⁶ Check Wiring Diagrams.
⁷ Special Order.
⁸ (-SUN-RMT) sensor sent with mounting clips for existing ceiling applications.

COMPATABILITY



VR800
 Outdoor Vandal Resistant
 Ceiling/Wall Kit



P-CR872SW
 Wall Wash for 8"

SPECIFICATION

Application

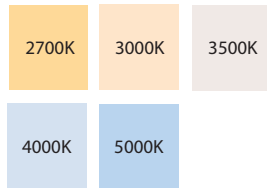
Architectural/Commercial-grade recessed (COB) Chip on Board Beam Control LED allows for concentrated high center beam candlepower. Twist and lock TIR beam control optic is designed for easy field replacement of 20°, 30°, 40°, 60°, and 75° beam spread options.

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. (CRTR8LC32) are Non-IC rated housings and must be kept 3" from loose-fill insulation.

Power Connection

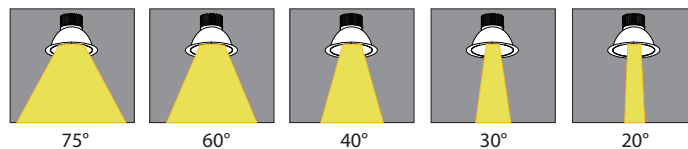
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

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 (95°F) 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.



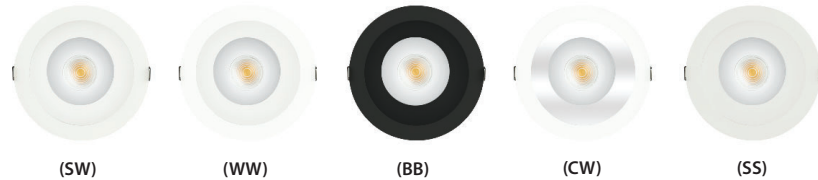
SPECIFICATION (Continued)

Reflector

Field adjustable twist and lock reflector is easily removable to provide quick access to LED lamp array. Optional reflector (-EMA) features integral EM switch for 10W emergency backup (UE-D10-EM).

Reflector Finish

The 1-piece, self-flanged, LED design provides 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 aluminum Junction Box. 7 cubic-inch for a maximum of (4) #12 AWG wires. (2) 1/2" knock-outs. Remove covers for easy access and ground wire.

Certifications and Listings



cETLus listed to UL1598 and UL8750. Suitable for dry locations only. 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.

SPECIFICATION (Continued)

Control 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.

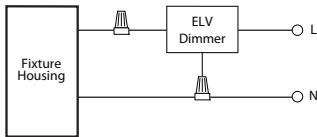
0-10V Driver 120V/277V (UE-D10):

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.

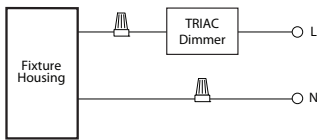
UniDim™ Driver 120V/277V (UE-DUN):

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.

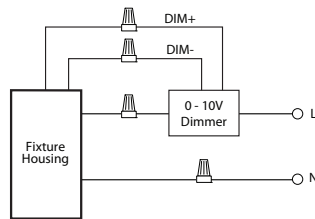
Incandescent/Phase Wiring
ELV



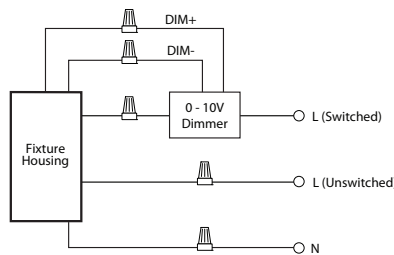
TRIAC



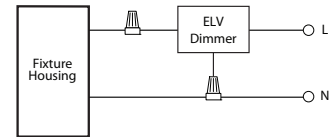
0 - 10V Wiring



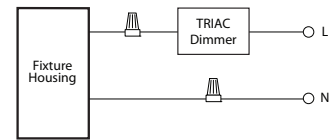
UE-D10-EM Wiring



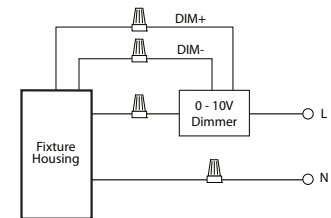
Incandescent/Phase Wiring
ELV



TRIAC



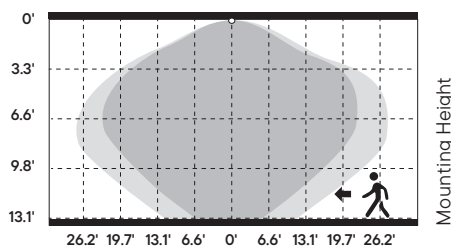
0 - 10V Wiring



Unisense™ PROGRAMMABLE MOTION + DAYLIGHT (-SUN-RMT, -SUN-RMT-1227)

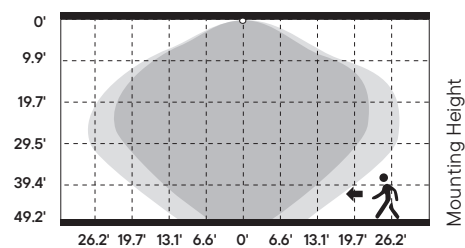
- Microwave and PIR (Passive Infrared) sensors depending on option
- Daylight harvesting
- Dusk/dawn sensing capabilities
- Motion Sensor

13' Height



13.1 ft max. distance with 100% sensitivity

50' Height



49.2 ft max. distance with 100% sensitivity



Possibly Detected Area



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 (95°F), 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).

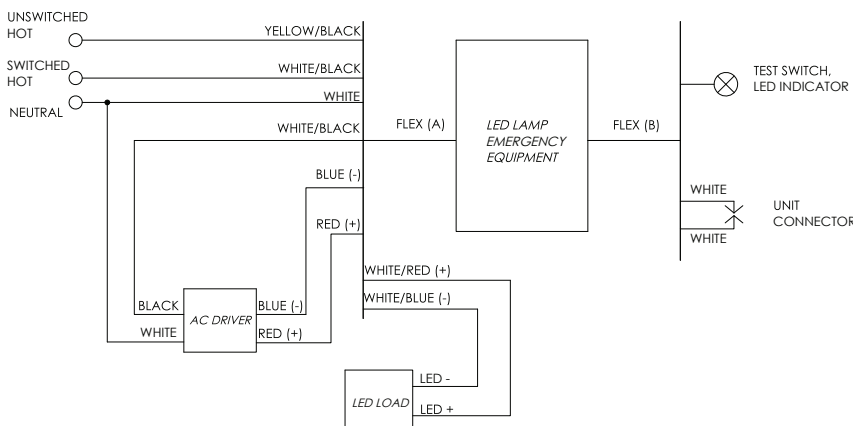
EMERGENCY BATTERY (UE-D10-EM): 10W

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

Not rated for outdoor mounting. Damp location rated.

-EM Lumen Data (Battery)

Fixture/Trim	CRTR8LC10	Fixture/Trim	CRTR8LC15	Fixture/Trim	CRTR8LC20
Fixture Wattage:	10W	Fixture Wattage:	15W	Fixture Wattage:	20W
Fixture Lumens:	1000	Fixture Lumens:	1500	Fixture Lumens:	2000
Multiplier:	1	Multiplier:	0.67	Multiplier:	0.5
EM Lumens:	1000	EM Lumens:	1000	EM Lumens:	1000
Fixture/Trim	CRTR8LC26	Fixture/Trim	CRTR8LC32		
Fixture Wattage:	30W	Fixture Wattage:	44W		
Fixture Lumens:	2800	Fixture Lumens:	4000		
Multiplier:	0.33	Multiplier:	0.26		
EM Lumens:	920	EM Lumens:	1040		



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
Self-Diagnostic:	Yes

SPECIFICATION (Continued)

FULL POWER EMERGENCY INVERTER (-EMAC or -EMAC347): 10W - 44W

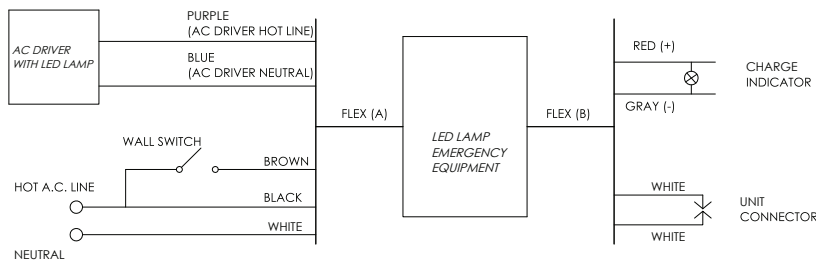
- Must be installed in Dry Locations
- Wattage package will determine battery sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

Not rated for outdoor mounting. Damp location rated.

-EMAC Lumen Data (Battery)

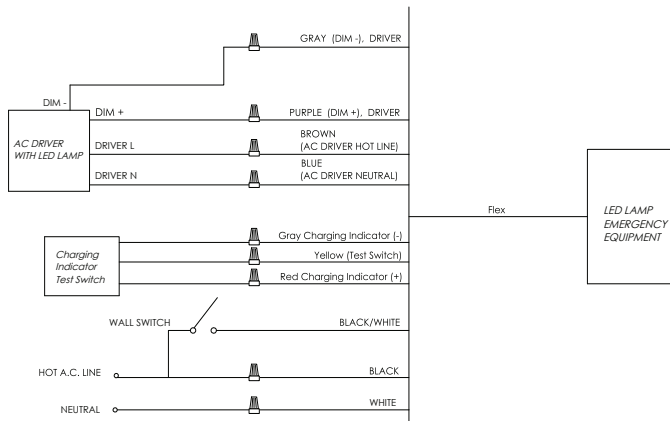
Fixture/Trim	CRTR8LC10	Fixture/Trim	CRTR8LC15	Fixture/Trim	CRTR8LC20
Fixture Wattage:	10W	Fixture Wattage:	15W	Fixture Wattage:	20W
Fixture Lumens:	1000	Fixture Lumens:	1500	Fixture Lumens:	2000
EM Lumens:	1000	EM Lumens:	1500	EM Lumens:	2000
Fixture/Trim	CRTR8LC26	Fixture/Trim	CRTR8LC32		
Fixture Wattage:	30W	Fixture Wattage:	44W		
Fixture Lumens:	2800	Fixture Lumens:	4000		
EM Lumens:	2800	EM Lumens:	4000		

<25W LOAD



Input Voltage:	120-277VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	25W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	No

<40W LOAD

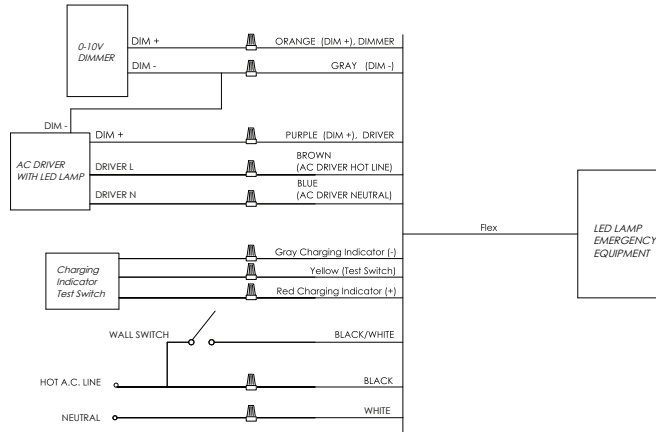


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	40W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

SPECIFICATION (Continued)

>40W LOAD

- 0-10V dimmable driver required

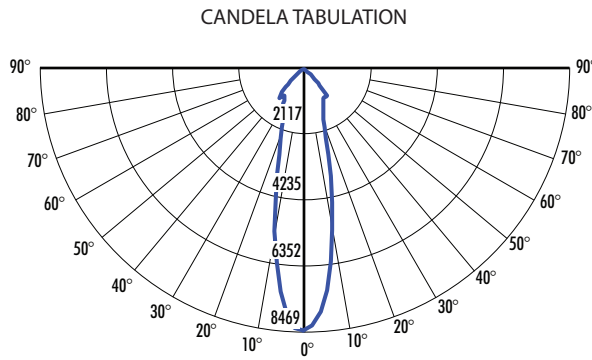


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	44W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

PHOTOMETRY

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

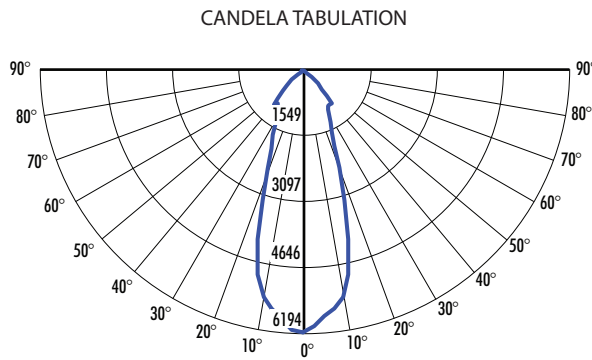
System Power:	44W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	24.9°	CW : 1.01
Field Angle 10%:	87.3°	SS : 0.99
Color Temperature:	3399K	SW : 1.00
CRI:	94.2	WW : 0.968
Lumens Delivered:	3700	CCT
CBCP:	8469.3	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04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

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

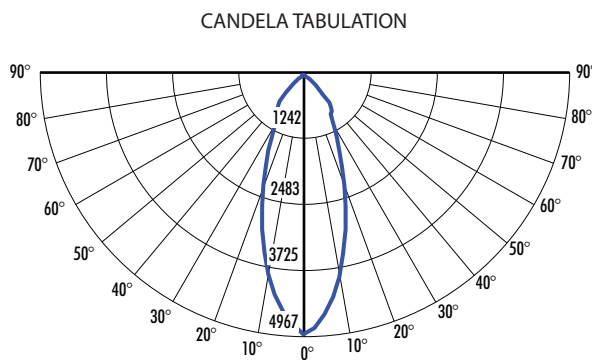
System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	36.0°	CW : 1.01
Field Angle 10%:	91.7°	SS : 0.99
Color Temperature:	3378K	SW : 1.00
CRI:	94.3	WW : 0.968
Lumens Delivered:	3752	CCT
CBCP:	6194.1	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04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

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

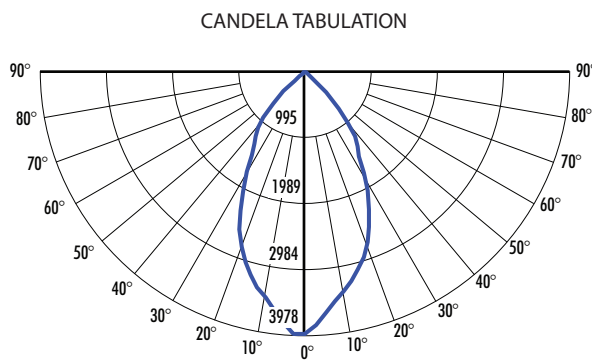
System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	37.0°	CW : 1.01
Field Angle 10%:	90.1°	SS : 0.99
Color Temperature:	3261K	SW : 1.00
CRI:	93.8	WW : 0.968
Lumens Delivered:	3018	CCT
CBCP:	4967.0	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04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

CRTR8LC32CW-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



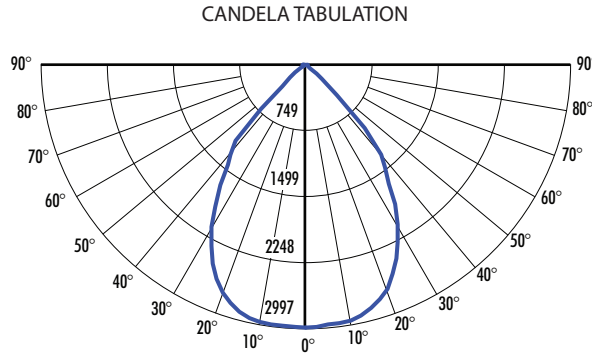
FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
12.0'	12.73'	27.63
14.0'	14.86'	20.30
16.0'	16.98'	15.54
18.0'	19.10'	12.28
20.0'	21.22'	9.95

2023.10.11

PHOTOMETRY (Continued)

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

System Power:	43W	MULTIPLIERS
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



FOOTCANDLE DISTRIBUTION

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