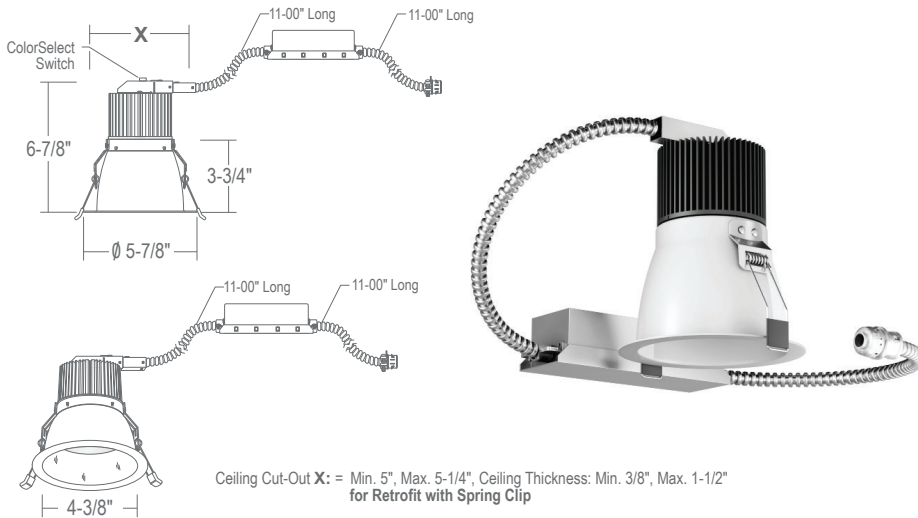


## CRTR4L-USA : 4" C-SERIES

LED DOWNLIGHT RETROFIT/REMODEL 1000LM - 3500LM (8W-30W)



### • Produced in USA

- New junction box option for remodels without frames
- Twist and lock reflector for quick access to LED lamp array
- Heavy-duty self-flanged reflector
- No visible screws or hardware

### ORDERING : CRTR4L-USA18SWUE-D10-T30

CRTR4L-USA		Insulation Contact	Reflector Finish	Control	Emergency Options	CCT	J-Box	Options
Fixture/Lumens	Insulation Contact	Reflector Finish	Control	Emergency Options	CCT	J-Box	Options	
1000lm (08W)	<b>CRTR4L-USA08</b>	Satin Haze Reflector/ White Ring	<b>SW</b>	None	None	<b>Blank</b>	None	<b>Blank</b>
1800lm (18W)	<b>CRTR4L-USA10</b>	White Reflector/ White Ring	<b>WW</b>	10W Emergency Battery		<b>-EM</b>	Junction Box	<b>-JB</b>
2300lm (22W)	<b>CRTR4L-USA17</b>	All Black	<b>BB</b>				Junction Box (Chicago Plenum)	<b>-JB-CHP</b>
2700lm (28W)	<b>CRTR4L-USA18</b>	Clear Specular Reflector/White Ring	<b>CW</b>					
3000lm (28W)	<b>CRTR4L-USA30</b>	All Satin Haze	<b>SS</b>					
3500lm (30W)	<b>CRTR4L-USA31</b>							
	Insulation Contact	Control <sup>1</sup>			CCT		Options	
Non-IC	<b>Blank</b>	Non-Dimming (120V)	<b>Blank</b>	2700K (84 CRI)	<b>-T27</b>	None	<b>Blank</b>	
ICA Rated/Airtight	<b>ICA<sup>2</sup></b>	TRIAC/ELV Dimming (120V)	<b>-DIN</b>	3000K (84 CRI)	<b>-T30</b>	4.5" Ceiling Thickness	<b>-CT4</b>	
		0-10V Dimming (120V/277V)	<b>UE-D10</b>	3500K (84 CRI)	<b>-T35</b>			
				4000K (84 CRI)	<b>-T40</b>			
				5000K (84 CRI)	<b>-T50</b>			

<sup>1</sup> All drivers are 120V/277V unless otherwise noted.  
<sup>2</sup> (ICA) is only available on CRTR4L-USA08, CRTR4L-USA10 and CRTR4L-USA17. (CRTR4L-USA18, CRTR4L-USA30 and CRTR4L-USA31 are Non-IC rated.)  
<sup>3</sup> (-347-D10) not available for CRTR4L-USA08.  
<sup>4</sup> UE-D10-EMA is not compatible with -EM or -EMAC or -GTD

### COMPATABILITY

**P-CR471**  
Wall Wash for 4"



**VR800**  
Outdoor Vandal Resistant  
Ceiling/Wall Kit



## SPECIFICATION

### Application

---

Architectural/Commercial-grade recessed lensed LED retrofit/remodel downlight for low to high ceilings with existing open style frame.

### Retrofit Mounting

---

Designed for use with existing 4" Architectural, Incandescent, Fluorescent, and Metal Halide Housings like LITON Brand LV41, and LH400. 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.

### Control

---

120V/277V AC 50/60Hz Electronic Direct Current Class 2. Input current 0.50 Amps at 115VAC. Power Factor > 0.90. Operating Temperature: -20°C to +50°C / -4°F to +131°F. Accessible from above or below ceiling.

Standard 0-10V works with most 5-wire, 0-10V dimmers. Factory qualified for use with Leviton IP710-DLZ.

(UE-DUN) Uni-Dim™ dimming option is a universal dimming system that works with most 120V, 3-wire ELV, 2-wire incandescent, and 120V/277V, 5-wire, 0-10V fluorescent dimmers.

(-DIN) dimming option smoothly dims down to 5% of initial light output with flicker-free performance. Works with standard 120V incandescent dimmers.

(UE-DHL) Lutron HiLume is a 3-wire driver that provides smooth, continuous 1% dimming for virtually any LED fixture.

(UE-ECO) Works with Lutron EcoSystem digital controls. Precision microprocessor control and integral thermal management deliver energy savings and extended product life.

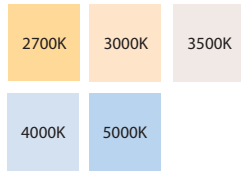
(-347-D10) is a 0-10V driver that takes 347V input.

(UE-D10P1) 0-10V dims down to 1% and works with most 120V/277V, 5-wire, 0-10V dimmers.

## SPECIFICATION (Continued)

### Color Temperature

---



Available in 2700K, 3000K, 3500K, 4000K and 5000K.

### Insulation Contact

---

(CRTR4L-USA08), (CRTR4L-USA10), and (CRTR4L-USA17) are inherently thermally protected for direct insulation contact without the need for an enclosure. (CRTR4L-USA18), (CRTR4L-USA30), and (CRTR4L-USA31) are Non-IC rated housing and must be kept 3" from loose-fill insulation.

### Power Connection

---

LED lamp array is replaceable via 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. IC Option thermally engineered to ensure stated L70 LED life without the need for external box. 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.

### 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

---

1-piece, self-flanged, dual reflector LED provides enables a clean trim finish without 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 and Clear Specular Reflector White Ring.

### 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.

**SPECIFICATION (Continued)****Airflow**

---

IC-Rated/Airtight (ICA) reflector design is designed to restrict air flow from room into plenums in compliance to the WSEC - Washington State Energy Code, (Less than 2.0 CFM -Cubic Feet per Minute).

**Certifications and Listings**

---

cETLus listed to UL1598 and UL8750. Suitable for dry, damp and wet locations.  
NYC approved: Calendar #41937.

**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.

**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.

**Energy Star Qualified Items**

---

/CR4L17\_-T30  
/CR4L17\_-T35  
/CR4L17\_-T40

**Emergency Options**

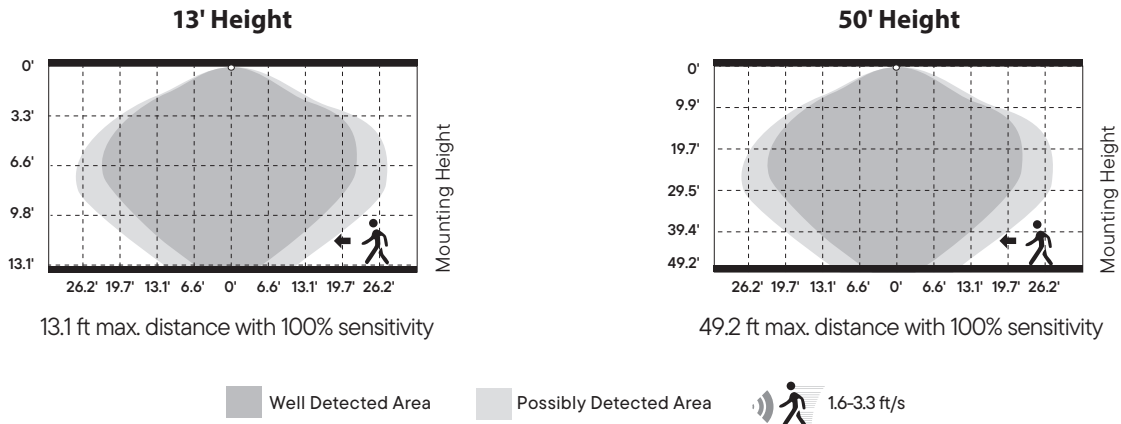
---

Emergency LED Battery Back-up available, remotely mounted adjacent to housing by installer. When AC power fails, in the event of a power failure, the device immediately switches to the emergency mode, and operates the existing fixture for 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).

## SPECIFICATION (Continued)

### 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



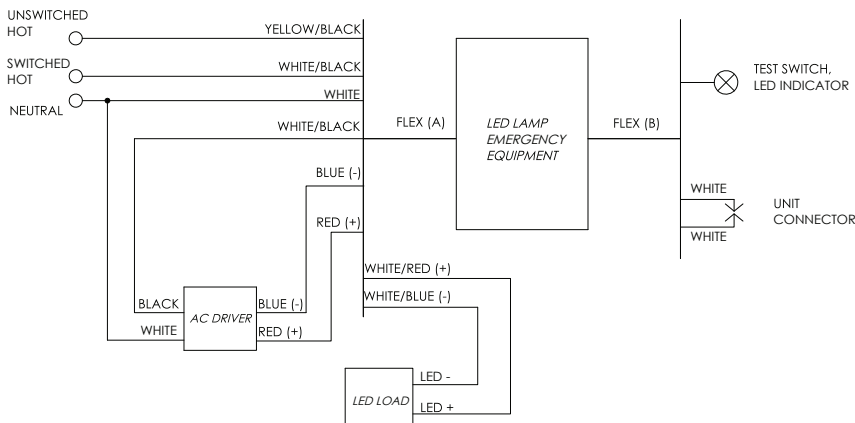
### EMERGENCY BATTERY (-EM): 10W

- 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	CRTR4L-USA08	Fixture/Trim	CRTR4L-USA10	Fixture/Trim	CRTR4L-USA17
Fixture Wattage:	8W	Fixture Wattage:	18W	Fixture Wattage:	22W
Fixture Lumens:	1000	Fixture Lumens:	1800	Fixture Lumens:	2300
Multiplier:	1.25	Multiplier:	0.56	Multiplier:	0.45
EM Lumens:	1250	EM Lumens:	1010	EM Lumens:	1040
Fixture/Trim	CRTR4L-USA18	Fixture/Trim	CRTR4L-USA30	Fixture/Trim	CRTR4L-USA31
Fixture Wattage:	28W	Fixture Wattage:	28W	Fixture Wattage:	30W
Fixture Lumens:	2700	Fixture Lumens:	3000	Fixture Lumens:	3500
Multiplier:	0.36	Multiplier:	0.36	Multiplier:	0.33
EM Lumens:	970	EM Lumens:	1080	EM Lumens:	1150



Input Voltage:	120-277VAC/60Hz
Output Voltage:	10W
Wattage:	10W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	No

## SPECIFICATION (Continued)

### FULL POWER EMERGENCY INVERTER (-EMAC or -EMAC347): 8W - 30W

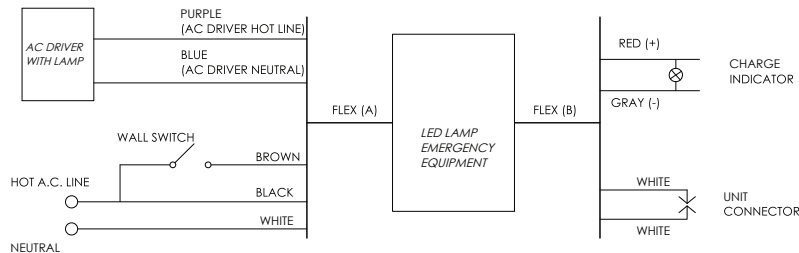
- Must be installed in Dry Locations
- Wattage package will determine battery sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

**Not rated for outdoor mounting. Damp location rated.**

#### -EMAC Lumen Data (Battery)

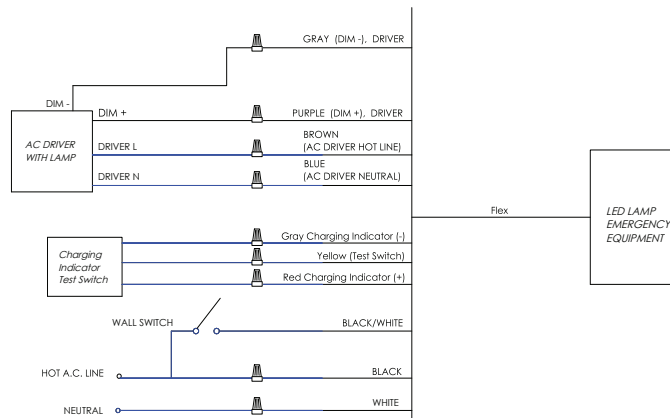
Fixture/Trim	CRTR4L-USA08	Fixture/Trim	CRTR4L-USA10	Fixture/Trim	CRTR4L-USA17
Fixture Wattage:	8W	Fixture Wattage:	18W	Fixture Wattage:	22W
Fixture Lumens:	1000	Fixture Lumens:	1800	Fixture Lumens:	2300
EM Lumens:	1000	EM Lumens:	1800	EM Lumens:	2300
Fixture/Trim	CRTR4L-USA18	Fixture/Trim	CRTR4L-USA30	Fixture/Trim	CRTR4L-USA31
Fixture Wattage:	28W	Fixture Wattage:	28W	Fixture Wattage:	30W
Fixture Lumens:	2700	Fixture Lumens:	3000	Fixture Lumens:	3500
EM Lumens:	2700	EM Lumens:	3000	EM Lumens:	3500

#### <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



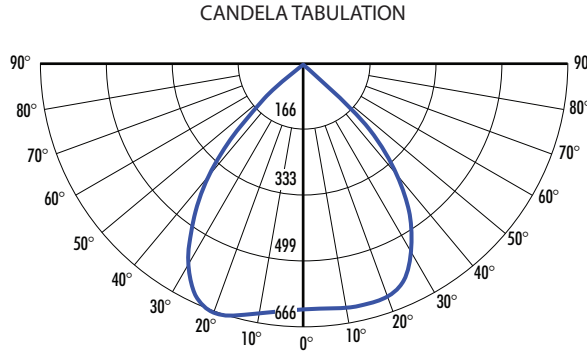
Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	30W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

## PHOTOMETRY

### CRTR4L-USA08CWUE-D10-T40 (1000lm, 8W, 4000K)

System Power: 11W  
 Test Date: 09/2023  
 Beam Angle 50%: 75.6°  
 Field Angle 10%: 102.4°  
 Color Temperature: 3916K  
 CRI: 83.9  
 Lumens Delivered: 1075  
 CBCP: 665.3  
 Power Factor: 0.99

MULTIPLIERS  
 REFLECTOR FINISH  
**CW :** 1.00  
 SS : 0.90  
 SW : 0.88  
 WW : 0.66  
 CCT  
 2700K : 1.04  
 3000K : 1.01  
 3500K : 1.12  
**4000K : 1.00**



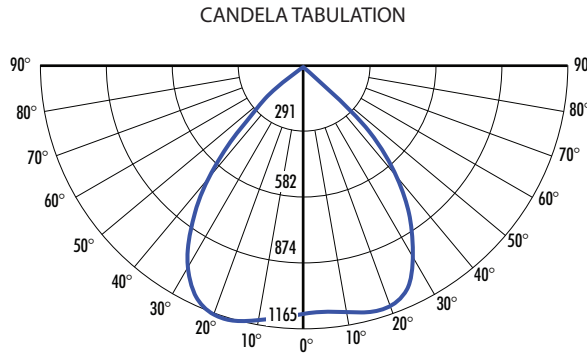
#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.41'	9.67
10.0'	15.51'	6.19
12.0'	18.62'	4.30
14.0'	21.72'	3.16
16.0'	24.82'	2.42

### CRTR4L-USA10CWUE-D10-T40 (1800lm, 18W, 4000K)

System Power: 18W  
 Test Date: 09/2023  
 Beam Angle 50%: 76.1°  
 Field Angle 10%: 103.4°  
 Color Temperature: 3866K  
 CRI: 82.6  
 Lumens Delivered: 1928  
 CBCP: 1164  
 Power Factor: 0.99

MULTIPLIERS  
 REFLECTOR FINISH  
**CW :** 1.00  
 SS : 0.90  
 SW : 0.88  
 WW : 0.66  
 CCT  
 2700K : 1.04  
 3000K : 1.01  
 3500K : 1.12  
**4000K : 1.00**



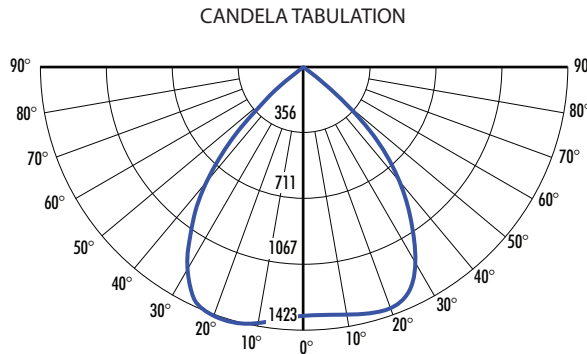
#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.52'	17.06
10.0'	15.65'	10.92
12.0'	18.78'	7.61
14.0'	21.92'	5.59
16.0'	25.05'	4.28

### CRTR4L-USA17CWUE-D10-T40 (2300lm, 22W, 4000K)

System Power: 22W  
 Test Date: 09/2023  
 Beam Angle 50%: 76.1°  
 Field Angle 10%: 103.5°  
 Color Temperature: 3873K  
 CRI: 82.4  
 Lumens Delivered: 2355  
 CBCP: 1421.3  
 Power Factor: 0.99

MULTIPLIERS  
 REFLECTOR FINISH  
**CW :** 1.00  
 SS : 0.90  
 SW : 0.88  
 WW : 0.66  
 CCT  
 2700K : 1.04  
 3000K : 1.01  
 3500K : 1.12  
**4000K : 1.00**



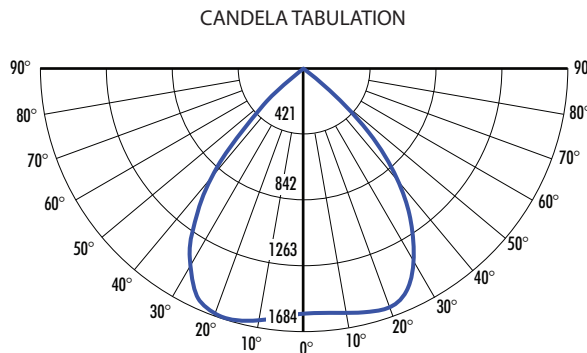
#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.52'	20.83
10.0'	15.65'	13.33
12.0'	18.78'	9.29
14.0'	21.92'	6.83
16.0'	25.05'	5.23

### CRTR4L-USA18CWUE-D10-T40 (2700lm, 28W, 4000K)

System Power: 28W  
 Test Date: 09/2023  
 Beam Angle 50%: 78.0°  
 Field Angle 10%: 104.7°  
 Color Temperature: 3889K  
 CRI: 82.3  
 Lumens Delivered: 2785  
 CBCP: 1682.6  
 Power Factor: 0.99

MULTIPLIERS  
 REFLECTOR FINISH  
**CW :** 1.00  
 SS : 0.90  
 SW : 0.88  
 WW : 0.66  
 CCT  
 2700K : 1.04  
 3000K : 1.01  
 3500K : 1.12  
**4000K : 1.00**



#### FOOTCANDLE DISTRIBUTION

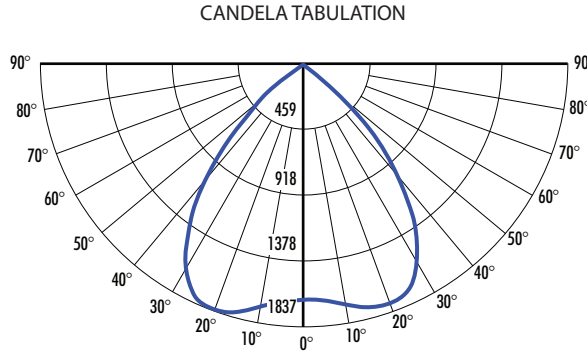
Height	Beam Diameter	FC
8.0'	12.96'	24.66
10.0'	16.20'	15.78
12.0'	19.43'	10.99
14.0'	22.67'	8.08
16.0'	25.91'	6.18

2024.01.23

## PHOTOMETRY (Continued)

### CRTR4L-USA30CWUE-D10-T40 (3000lm, 28W, 4000K)

System Power:	24W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	75.8°	<b>CW :</b> 1.00
Field Angle 10%:	103.1°	SS : 0.90
Color Temperature:	3956K	SW : 0.88
CRI:	13.06	WW : 0.66
Lumens Delivered:	3039	CCT
CBCP:	1833.7	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>

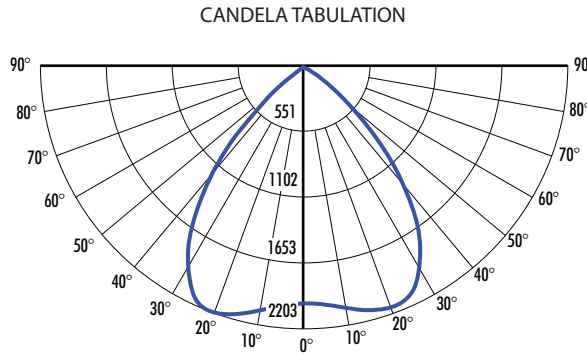


#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	11.77'	31.14
10.0'	14.72'	19.93
12.0'	17.66'	13.86
14.0'	20.61'	10.18
16.0'	23.55'	7.80

### CRTR4L-USA31CWUE-D10-T40 (3500lm, 30W, 4000K)

System Power:	30W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	72.7°	<b>CW :</b> 1.00
Field Angle 10%:	101.4°	SS : 0.90
Color Temperature:	3866K	SW : 0.88
CRI:	82.6	WW : 0.66
Lumens Delivered:	3656	CCT
CBCP:	2200	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>



#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.52'	17.06
10.0'	15.65'	10.92
12.0'	18.78'	7.61
14.0'	21.92'	5.59
16.0'	25.05'	4.28