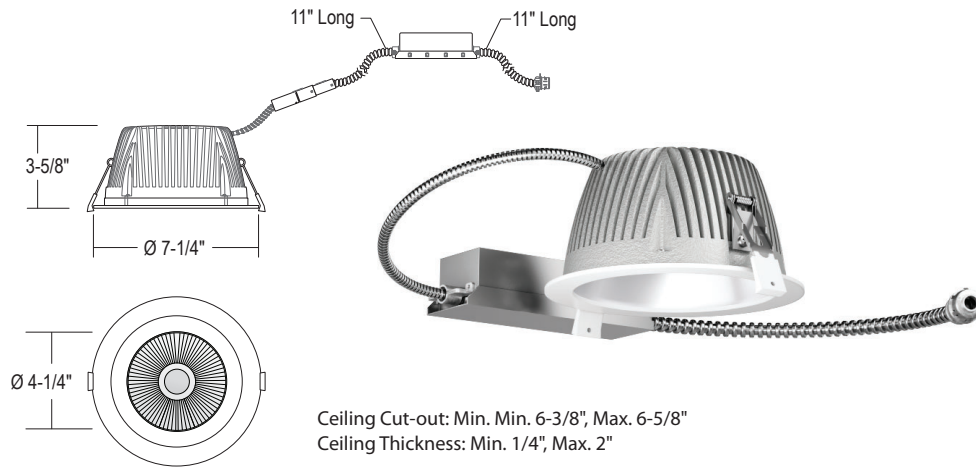
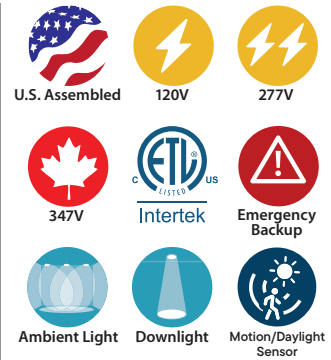


CRTR6SHLC : 6" C-SERIES

(COB) CHIP-ON-BOARD BEAM CONTROL SHALLOW LED RETROFIT/REMODEL
 1100LM - 3000LM (10W-30W)



Ceiling Cut-out: Min. 6-3/8", Max. 6-5/8"
 Ceiling Thickness: Min. 1/4", Max. 2"



- Shallow 3-5/8" depth for ceilings with minimal plenum air-space
- Junction box option for remodels without frames
- Multiple beam spreads for flexible beam control
- COB LED design for concentrated high CBCP beam
- Assortment of dimming options

ORDERING : CRTR6SHLC10SW-B15-T27UE-D10

Lumens	Insulation Contact	Reflector Finish	Beam Spread	Color Temperature	Control	Emergency Options	Junction Box
Lumens		Beam Spread		Control		Emergency Options	
1100lm (10W)	CRTR6SHLC10	15° Spot	-B15	Non-Dimming (120V/277V)	UE	None	Blank
1500lm (15W)	CRTR6SHLC15	25° Narrow Flood	-B25	0-10V Dimming (120V/277V)	UE-D10	10W Emergency Battery	-EM³
2000lm (20W)	CRTR6SHLC20	40° Flood	-B40	1%, 0-10V Dimming (120V/277V)	UE-D10P1	Full Power Emergency Inverter	-EMAC³
3000lm (30W)	CRTR6SHLC30	60° Wide Flood	-B60	TRIAC/ELV Dimming (120V)	-DIN	Full Power Emergency Inverter (347V)	-EMAC347³
Insulation Contact		Color Temperature		0-10V Dimming (120V/277V)		Generator Transfer Device -GTD¹	
Non-IC	Blank	2700K (90 CRI)	-T27	0-10V Dimming (347V)	-347-D10	Junction Box	
ICA Rated	ICA⁵	2700K (97 CRI)	-T27-C97¹	Lutron Hi-Lume (120V/277V)	UE-DHL¹	None	Blank
Reflector Finish		3000K (90 CRI)	-T30	Lutron Ecosystem (120V/277V)	UE-ECO¹	4" Junction Box	-JB
Haze Reflector/White Ring	SW	3000K (97 CRI)	-T30-C97¹	DMX Dimming with input via RJ45 adapters (120V/277V)	UE-DMXRJ45¹	4" J-box (Chicago Plenum)	-JB-CHP
White Reflector & Ring	WW	3500K (90 CRI)	-T35	0-10V Dimming with 10W Integral Emergency Battery Backup (120V/277V)	UE-D10-EMA^{1,2,3}		
All Black	BB	4000K (90CRI)	-T40	Athena Wireless Node (120V)	-AWN¹		
All Satin	SS	5000K (80CRI)	-T50¹	Athena Wireless Node Occupancy Sensor (120V)	-AWN-OCC¹		
				UniSense - Remotely Mounted Motion/Photosensor (120V)	-SUN-RMT^{1,4}		
				UniSense - Remotely Mounted Motion/Photosensor (120V/277V)	-SUN-RMT-1227^{1,4}		
				BubblyNet Wireless System (120V/277V)	-DBNT^{1,4}		
				Casambi Wireless Dimming (120V/277V)	-DCSM¹		

2025.12.01

¹ Special order. Minimum Order. Extended lead time may apply. Consult Factory.
² UE-D10-EMA is not compatible with -EM or -EMAC or -EMAC347 or -GTD.
³ Review EM Wiring Diagrams on pages 5-6.
⁴ (-SUN-RMT) sensor to be sent with mounting clips for existing ceiling applications.
⁵ (ICA) is only available for CRTR6SHLC10 and CRTR6SHLC15.

SPECIFICATION

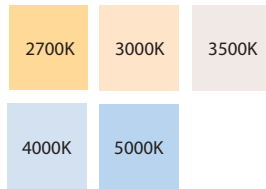
Application

Architectural/Commercial-grade shallow recessed LED luminaire is for new construction projects where there is minimal plenum air-space in ceiling. (COB) Chip on Board Beam Control LED allows for concentrated high center beam candlepower. TIR beam control optic is designed for field replacement of 15°, 25°, 40°, and 60° beam spread options.

Mounting

Designed for use with existing 6" 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 heavy duty tension springs. 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

CRTR6SHL10 and CRTR6SHL15 are inherently thermally protected for direct insulation contact without the need for an enclosure. Can order with 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.

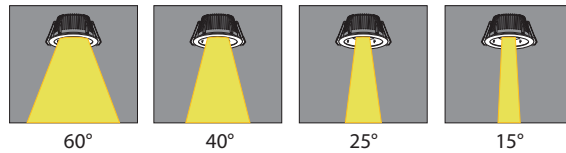
Thermal Management

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.

SPECIFICATION (Continued)

Optics

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



Reflector Finish

1-piece, self-flanged LED design enables a clean trim finish without secondary trim ring. Heavy gauge aluminum reflector prevents ugly dents during shipping & installation. Deeply mounted singular LED provides 25° visual cutoff. Available in Satin Haze Reflector/White Finish, White Reflector/ White Finish, All Black, 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

Certifications and Listings: ETL / cETL Listed to UL1598 and UL8750 standards.
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.

Warranty

Covered by a 5-Year Warranty to be free of defects in materials and craftsmanship. Fixture should not be installed in applications with ambient temperature above 50°C/122°F. Doing so will result in reduced lamp life and voided warranty.

SPECIFICATION (Continued)

Control Options

ELV and TRIAC Driver 120V (-DIN):

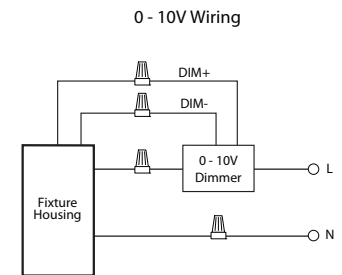
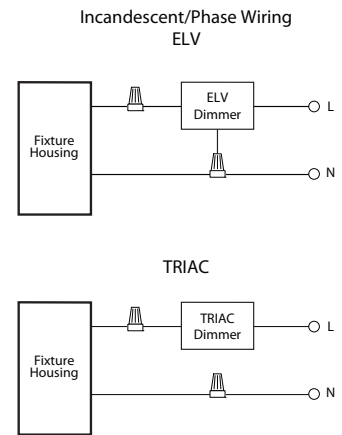
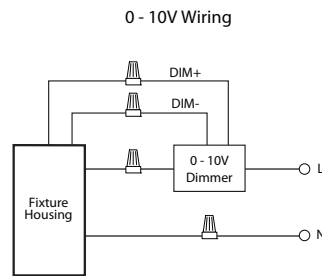
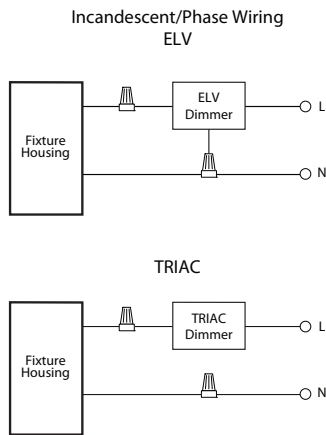
Compatible with electronic low voltage, and 2-Wire incandescent dimmers. Also known as leading edge, Reverse Phase, Forward Phase dimming. Allows smooth dimming down to 5% depending upon the dimmer's limitations.

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.

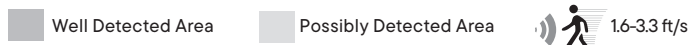
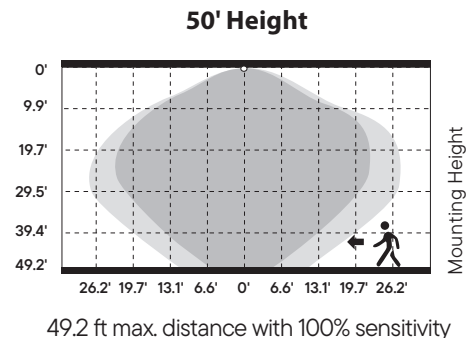
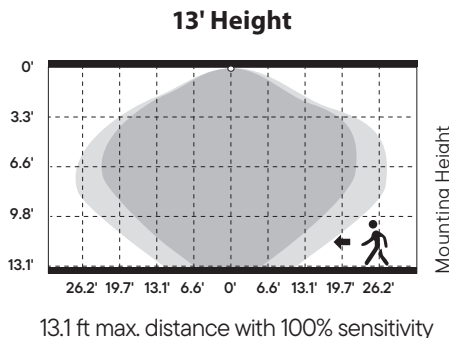
UniDim™ Driver 120V/277V (UE-DUN):

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.



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



SPECIFICATION (Continued)

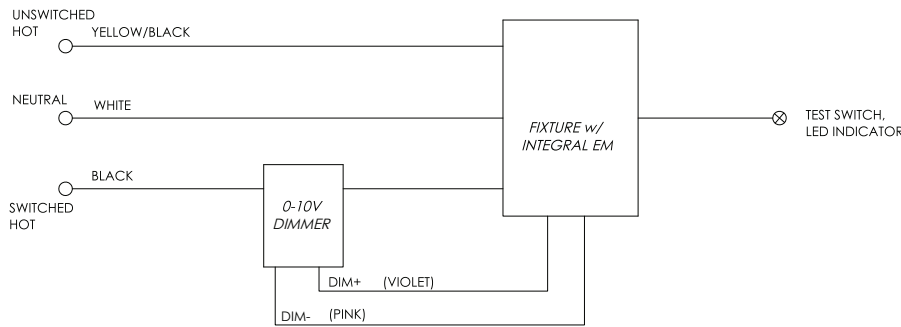
INTEGRAL EMERGENCY BATTERY BACKUP (UE-D10-EMA): 10W

- 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	CRTR6SHLC10	Fixture/Trim	CRTR6SHLC15	Fixture/Trim	CRTR6SHLC20	Fixture/Trim	CRTR6SHLC30
Fixture Wattage:	10W	Fixture Wattage:	15W	Fixture Wattage:	20W	Fixture Wattage:	30W
Fixture Lumens:	1100	Fixture Lumens:	1500	Fixture Lumens:	2000	Fixture Lumens:	3000
Multiplier:	1	Multiplier:	0.67	Multiplier:	0.50	Multiplier:	0.33
EM Lumens:	1000	EM Lumens:	1000	EM Lumens:	1000	EM Lumens:	1000



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

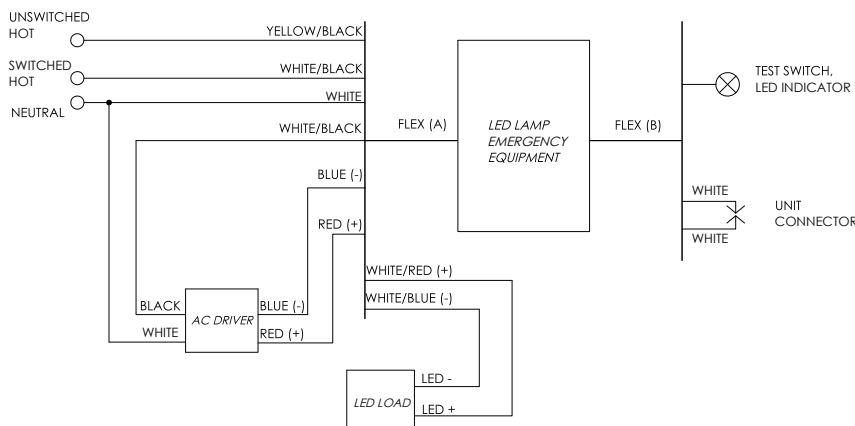
EMERGENCY BATTERY (-EM): 10W

- 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	CRTR6SHLC10	Fixture/Trim	CRTR6SHLC15	Fixture/Trim	CRTR6SHLC20	Fixture/Trim	CRTR6SHLC30
Fixture Wattage:	10W	Fixture Wattage:	15W	Fixture Wattage:	20W	Fixture Wattage:	30W
Fixture Lumens:	1100	Fixture Lumens:	1500	Fixture Lumens:	2000	Fixture Lumens:	3000
Multiplier:	1	Multiplier:	0.67	Multiplier:	0.50	Multiplier:	0.33
EM Lumens:	1000	EM Lumens:	1000	EM Lumens:	1000	EM Lumens:	1000



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): 30W Emergency Battery

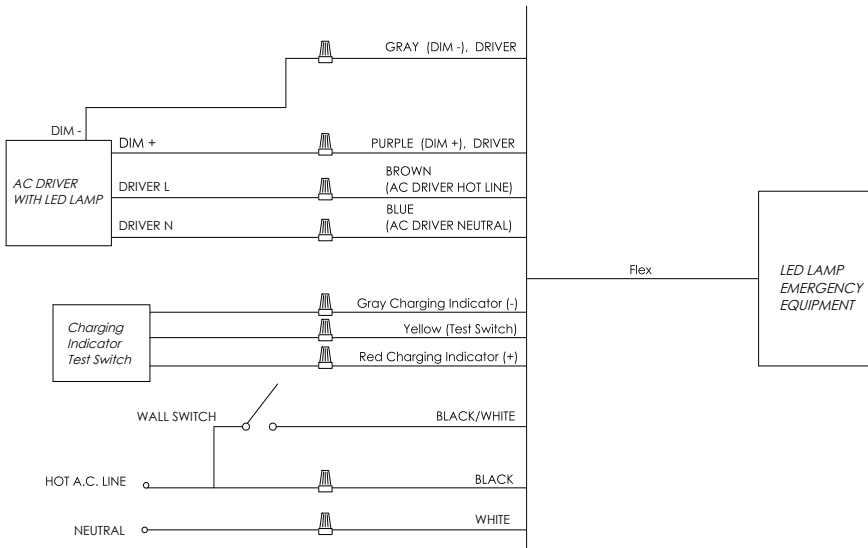
- Must be installed in Dry Locations
- Wattage package will determine battery sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

Not rated for outdoor mounting. Damp location rated.

-EM Lumen Data (Battery)

Fixture/Trim	CRTR6SHLC10	Fixture/Trim	CRTR6SHLC15	Fixture/Trim	CRTR6SHLC20	Fixture/Trim	CRTR6SHLC30
Fixture Wattage:	10W	Fixture Wattage:	15W	Fixture Wattage:	20W	Fixture Wattage:	30W
Fixture Lumens:	1100	Fixture Lumens:	1500	Fixture Lumens:	2000	Fixture Lumens:	3000
EM Lumens:	1000	EM Lumens:	1000	EM Lumens:	1000	EM Lumens:	1000

<40W LOAD

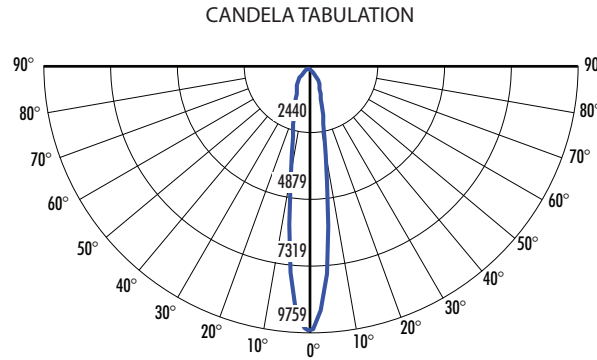


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	40W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

PHOTOMETRY

CRTR6SHLC30WW-B15-T40UE-D10 (3000lm, 30W, 15°, 4000K)

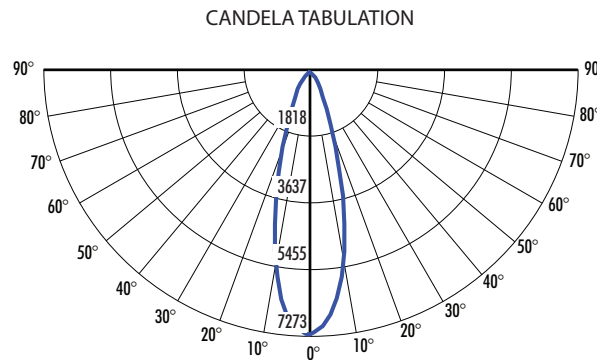
System Power:	28W	MULTIPLIERS	
Test Date:	06/2025	CCT	
Beam Angle 50%:	16.5°	2700K:	0.93
Field Angle 10%:	49.4°	3000K:	1.00
Color Temperature:	3810K	3500K:	1.03
CRI:	92.80	4000K:	1.08
Lumens Delivered:	2571	5000K:	1.11
CBCP:	9758	Trim Finish	
Power Factor:	0.99	SW:	1.00
		WW:	1.09
		Lumens	
		CRTR6SHLC10	0.35
		CRTR6SHLC15	0.48
		CRTR6SHLC20	0.65
		CRTR6SHLC30	1.00



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	2.32'	152.47
10.0'	2.90'	97.58
12.0'	3.48'	64.76
14.0'	4.06'	49.78
16.0'	4.64'	38.12

CRTR6SHLC30WW-B30-T40UE-D10 (3000lm, 30W, 30°, 4000K)

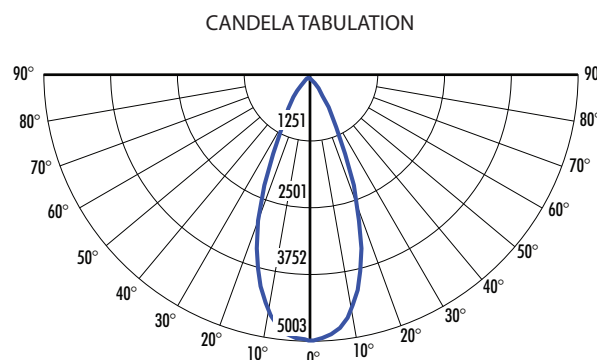
System Power:	28W	MULTIPLIERS	
Test Date:	06/2025	CCT	
Beam Angle 50%:	29.5°	2700K:	0.93
Field Angle 10%:	60.7°	3000K:	1.00
Color Temperature:	3810K	3500K:	1.03
CRI:	92.80	4000K:	1.08
Lumens Delivered:	2702	5000K:	1.11
CBCP:	7273	Trim Finish	
Power Factor:	0.99	SW:	1.00
		WW:	1.09
		Lumens	
		CRTR6SHLC10	0.35
		CRTR6SHLC15	0.48
		CRTR6SHLC20	0.65
		CRTR6SHLC30	1.00



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	4.21'	113.64
10.0'	5.26'	72.73
12.0'	6.32'	50.51
14.0'	7.37'	37.11
16.0'	8.42'	28.41

CRTR6SHLC30WW-B40-T40UE-D10 (3000lm, 30W, 40°, 4000K)

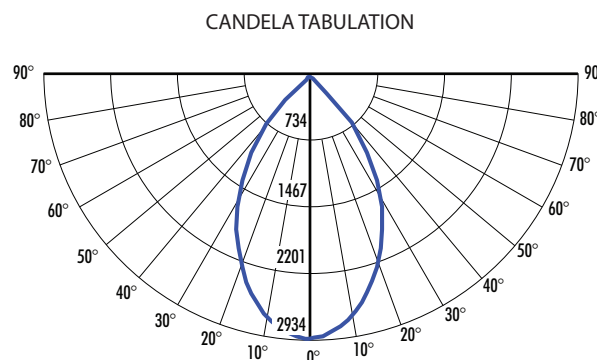
System Power:	28W	MULTIPLIERS	
Test Date:	06/2025	CCT	
Beam Angle 50%:	42.4°	2700K:	0.93
Field Angle 10%:	73.2°	3000K:	1.00
Color Temperature:	3810K	3500K:	1.03
CRI:	92.80	4000K:	1.08
Lumens Delivered:	2923	5000K:	1.11
CBCP:	5002	Trim Finish	
Power Factor:	0.99	SW:	1.00
		WW:	1.09
		Lumens	
		CRTR6SHLC10	0.35
		CRTR6SHLC15	0.48
		CRTR6SHLC20	0.65
		CRTR6SHLC30	1.00



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	6.21'	76.16
10.0'	7.75'	50.02
12.0'	9.30'	34.74
14.0'	10.86'	25.52
16.0'	12.41'	19.54

CRTR6SHLC30WW-B60-T40UE-D10 (3000lm, 30W, 60°, 4000K)

System Power:	28W	MULTIPLIERS	
Test Date:	06/2025	CCT	
Beam Angle 50%:	63.8°	2700K:	0.93
Field Angle 10%:	96.6°	3000K:	1.00
Color Temperature:	3810K	3500K:	1.03
CRI:	92.80	4000K:	1.08
Lumens Delivered:	3116	5000K:	1.11
CBCP:	2934	Trim Finish	
Power Factor:	0.99	SW:	1.00
		WW:	1.09
		Lumens	
		CRTR6SHLC10	0.35
		CRTR6SHLC15	0.48
		CRTR6SHLC20	0.65
		CRTR6SHLC30	1.00



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	9.96'	45.84
10.0'	12.45'	29.34
12.0'	14.94'	20.38
14.0'	17.43'	14.97
16.0'	19.92'	11.46

2025.06.01