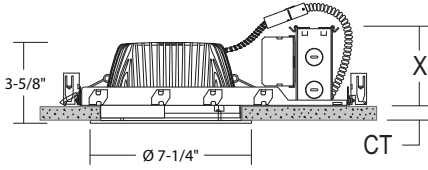
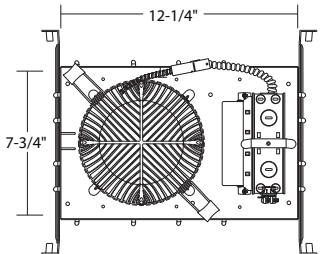


CH6SHLC : 6" C-SERIES

(COB) CHIP-ON-BOARD BEAM CONTROL SHALLOW LED NEW CONSTRUCTION
 1100LM - 3000LM (10W-30W)



X = 3-7/16" (frame bottom to fixture top)



Ceiling Thickness (CT) = 1/4" (Min.), 2" (Max.)
 Ceiling Cut-Out: 6-1/2"

- U.S. Assembled
- 120V
- 277V
- 347V
- ETL Intertek
- Emergency Backup
- Ambient Light
- Downlight
- Motion/Daylight Sensor

- 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 : CH6SHLC10UE-D10/CR6SHLC29SW-B15-T27

Wattage/Lumens	Housing Option	Control	Emergency Options	Junction Box	Reflector Finish	Beam Spread	Color Temperature
Wattage/Lumens	Control	Emergency Options	Reflector Finish				
1100lm (10W) CH6SHLC10	Non-Dimming (120V/277V)	UE	None	Blank	Haze Reflector/ White Ring	/CR6SHLC29SW	
1500lm (15W) CH6SHLC15	0-10V Dimming (120V/277V)	UE-D10	10W Emergency Battery	-EM³	White Reflector & Ring	/CR6SHLC29WW	
2000lm (20W) CH6SHLC20	1%, 0-10V Dimming (120V/277V)	UE-D10P1	Full Power Emergency Inverter	-EMAC³	All Black	/CR6SHLC29BB	
3000lm (30W) CH6SHLC30	TRIAC/ELV Dimming (120V)	-DIN	Full Power Emergency Inverter (347V)	-EMAC347³	All Satin	/CR6SHLC29SS	
Housing Option	0-10V Dimming (120V/277V)	UE-DUN	Generator Transfer Device	-GTD¹			
Non-IC	0-10V Dimming (347V)	-347-D10	Junction Box		Beam Spread		
ICA Rated	Lutron Hi-Lume (120V/277V)	UE-DHL¹	None	Blank	15° Spot	-B15	
	Lutron Ecosystem (120V/277V)	UE-ECO¹	4" Junction Box	-JB	25° Narrow Flood	-B25	
	DMX Dimming with input via RJ45 adapters (120V/277V)	UE-DMXRJ45¹	4" J-box (Chicago Plenum)	-JB-CHP	40° Flood	-B40	
	0-10V Dimming with 10W Integral Emergency Battery Backup (120V/277V)	UE-D10-EMA^{1,2,3}			60° Wide Flood	-B60	
	Athena Wireless Node (120V)	-AWN¹	Color Temperature				
	Athena Wireless Node Occupancy Sensor (120V)	-AWN-OCC¹	2700K (90 CRI) -T27				
	UniSense - Remotely Mounted Motion/Photosensor (120V)	-SUN-RMT^{1,4}	2700K (97 CRI) -T27-C97¹				
	UniSense - Remotely Mounted Motion/Photosensor (120V/277V)	-SUN-RMT-1227^{1,4}	3000K (90 CRI) -T30				
	BubblyNet Wireless System (120V/277V)	-DBNT^{1,4}	3000K (97 CRI) -T30-C97¹				
	Casambi Wireless Dimming (120V/277V)	-DCSM⁴	3500K (90 CRI) -T35				
			4000K (90CRI) -T40				
			5000K (80CRI) -T50¹				

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 CH6SHLC10 and CH6SHLC15.

2025.12.01

SPECIFICATION

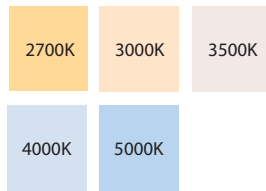
Application

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

Housing suitable for new construction installations only, supplied with (2) 24" adjustable hanger bars with 90° repositioning ability. Suitable for wood & metal joist support systems, and also drywall & T-bar ceilings. Hanger bars equipped with nail-less install 3/4" serrated barbed studs and captive nails, for faster and easier secure mounting in wood joists. Set-screws lock into position and prevent shifting after installation. Earthquake structural cable compatible for drop panel ceiling or any other mounting that requires direct support from structural ceilings.

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

CH6SHLC10 and CH6SHLC15 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.

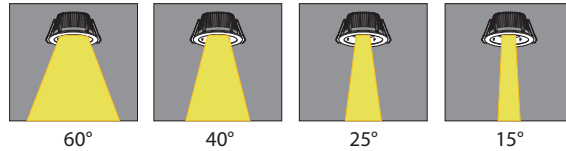
Thermal Management

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 galvanized steel Junction Box, 26 cubic-inch for a maximum of (8) #12 AWG wires. Furnished with (7) 1/2" knockouts. Strain clamps to install or remove covers for easy access and ground wire. (-CHP) option is Chicago Plenum, air-tight Junction Box.

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):

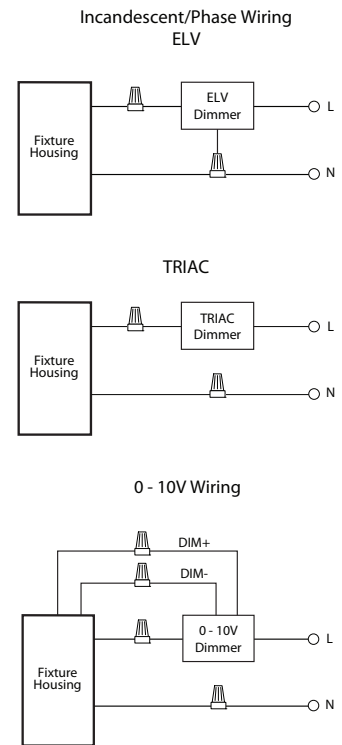
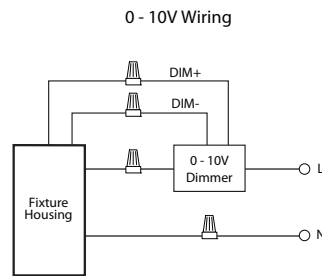
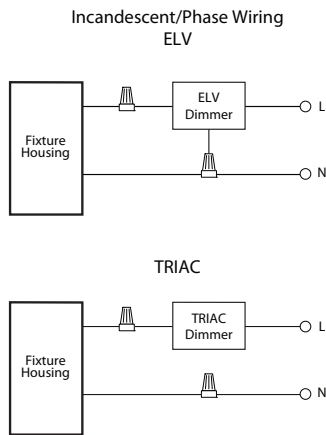
Compatible with electronic low voltage, and 2-Wire incandescent dimmers. Also known as leading edge, Reverse Phase, Forward Phase dimming. Allows smooth dimming down to 5% depending upon the dimmer's limitations.

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.

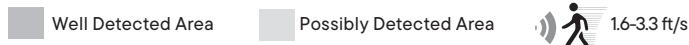
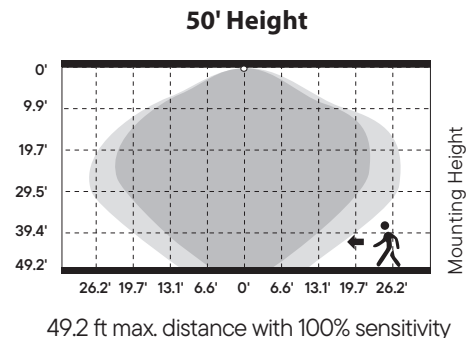
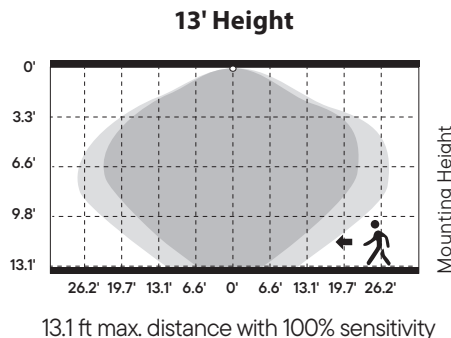
UniDim™ Driver 120V/277V (UE-DUN):

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)

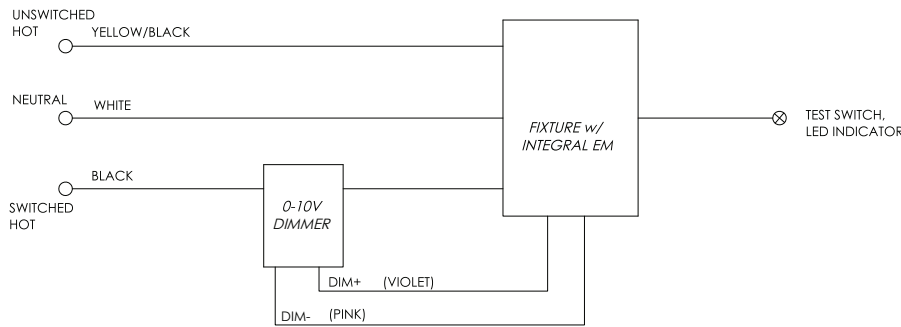
INTEGRAL EMERGENCY BATTERY BACKUP (UE-D10-EMA): 10W

- 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

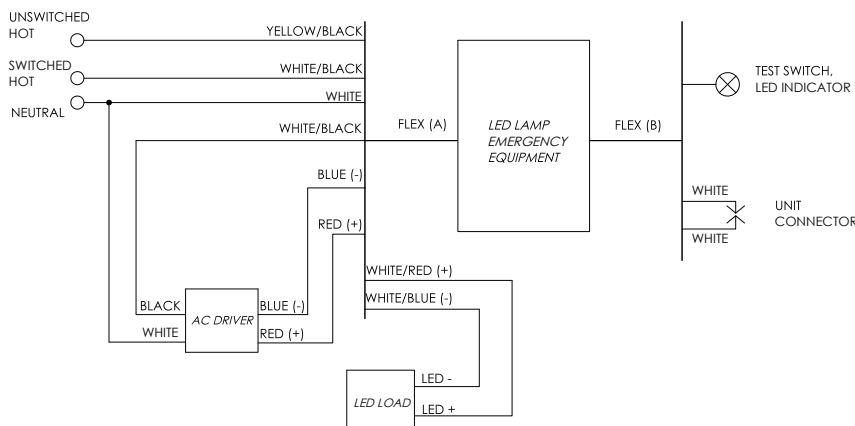
EMERGENCY BATTERY (-EM): 10W

- 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

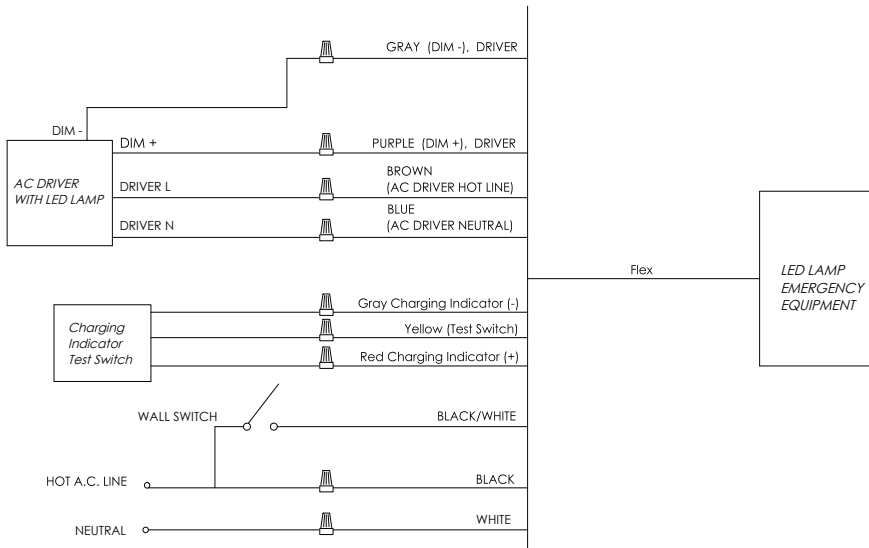
- Must be installed in Dry Locations
- Wattage package will determine battery sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

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

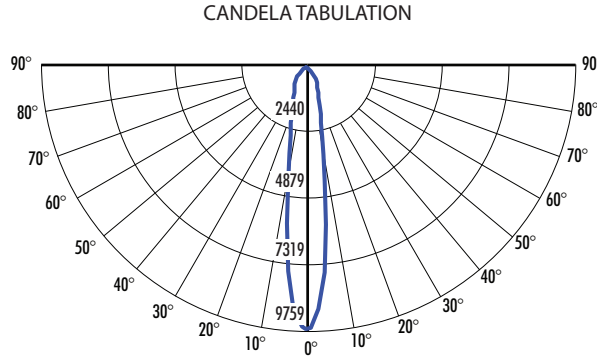


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	40W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

PHOTOMETRY

CH6SHLC30UE-D10 / CR6SHLC29WW-B15-T40 (3000lm, 20W, 15°, 4000K)

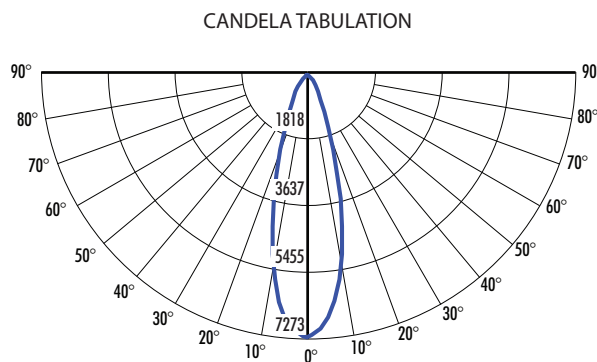
System Power:	28W	MULTIPLIERS	
Test Date:	06/2025	CCT	
Beam Angle 50%:	16.5°	2700K:	0.93
Field Angle 10%:	49.4°	3000K:	1.00
Color Temperature:	3810K	3500K:	1.03
CRI:	92.80	4000K:	1.08
Lumens Delivered:	2571	5000K:	1.11
CBCP:	9758	Trim Finish	
Power Factor:	0.99	SW:	1.00
		WW:	1.09
		Lumens	
		CRTR6SHLC10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

CH6SHLC30UE-D10 / CR6SHLC29WW-B30-T40 (3000lm, 20W, 30°, 4000K)

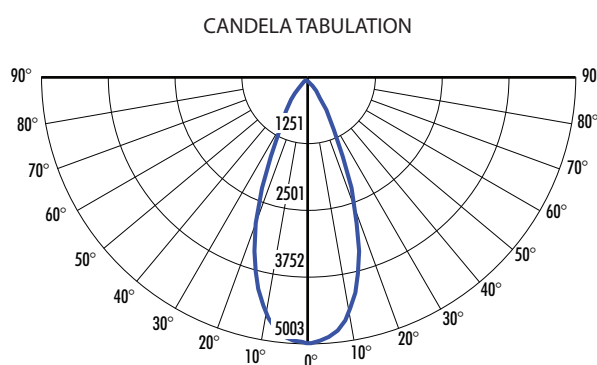
System Power:	28W	MULTIPLIERS	
Test Date:	06/2025	CCT	
Beam Angle 50%:	29.5°	2700K:	0.93
Field Angle 10%:	60.7°	3000K:	1.00
Color Temperature:	3810K	3500K:	1.03
CRI:	92.80	4000K:	1.08
Lumens Delivered:	2702	5000K:	1.11
CBCP:	7273	Trim Finish	
Power Factor:	0.99	SW:	1.00
		WW:	1.09
		Lumens	
		CRTR6SHLC10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

CH6SHLC30UE-D10 / CR6SHLC29WW-B40-T40 (3000lm, 20W, 40°, 4000K)

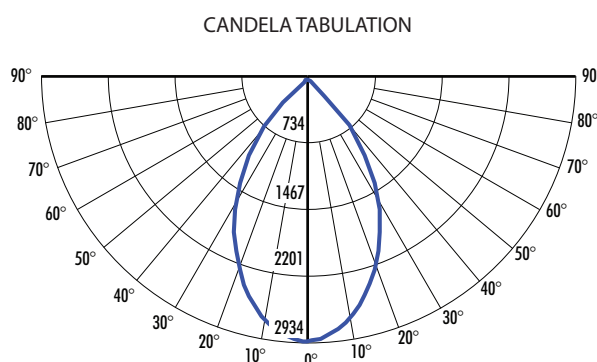
System Power:	28W	MULTIPLIERS	
Test Date:	06/2025	CCT	
Beam Angle 50%:	42.4°	2700K:	0.93
Field Angle 10%:	73.2°	3000K:	1.00
Color Temperature:	3810K	3500K:	1.03
CRI:	92.80	4000K:	1.08
Lumens Delivered:	2923	5000K:	1.11
CBCP:	5002	Trim Finish	
Power Factor:	0.99	SW:	1.00
		WW:	1.09
		Lumens	
		CRTR6SHLC10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

CH6SHLC30UE-D10 / CR6SHLC29WW-B60-T40 (3000lm, 20W, 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