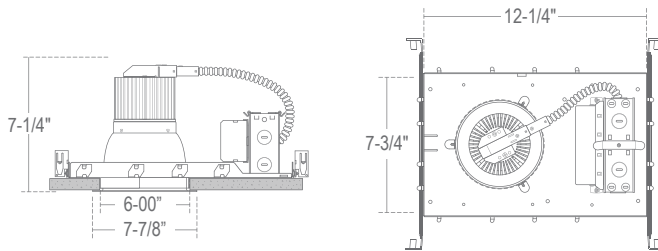
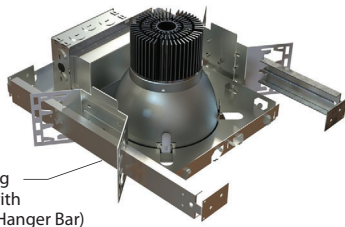


## CH6 : 6" C-SERIES

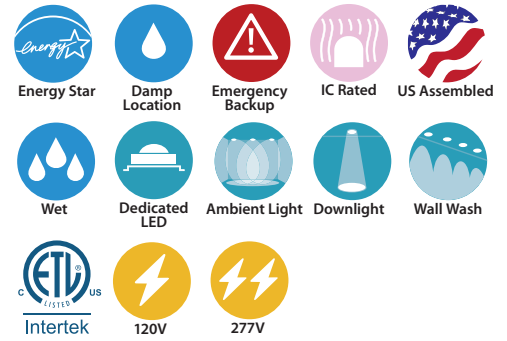
LED DOWNLIGHT NEW CONSTRUCTION 1000LM - 6000LM (8W-55W)



Ceiling Cut-out: 6-3/8"  
 Ceiling Thickness: 1" Max



(-BWNG) Batwing option shown with optional C260J Hanger Bar



- Twist and lock reflector for quick access to LED lamp array
- Heavy-duty self-flanged reflector
- Soft even lumen distribution
- No visible screws or hardware

### ORDERING : CH610ICAUE-D10-EM/CR6L17SW-EMA-T30

#### CH6xx

Housing	Insulation Contact	Driver Options	Emergency Options	J-Box	Mounting	Reflector	Reflector Finish	Reflector Options	CCT
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Housing <sup>1</sup>	Reflector <sup>1</sup>	Reflector Finish	Reflector Options	CCT
1000lm (8W) <b>CH608</b> [Options]	<b>/CR6L22</b>	Satin Haze Reflector/	<b>SW</b> None	2700K (84 CRI) <b>-T27<sup>9</sup></b>
1900lm (17W) <b>CH610</b> [Options]	<b>/CR6L22</b>	White Finish	Integral EM <b>-EMA<sup>3</sup></b>	3000K (84 CRI) <b>-T30</b>
2300lm (22W) <b>CH618</b> [Options]	<b>/CR6L22</b>	White Reflector/	Switch	3500K (84 CRI) <b>-T35</b>
2800lm (28W) <b>CH628</b> [Options]	<b>/CR6L22</b>	White Finish		4000K (84 CRI) <b>-T40</b>
3100lm (30W) <b>CH630</b> [Options]	<b>/CR6L36</b>	All Black	<b>BB</b>	5000K (84 CRI) <b>-T50<sup>10</sup></b>
3800lm (38W) <b>CH639</b> [Options]	<b>/CR6L36</b>	Clear Specular	<b>CW</b>	
4300lm (45W) <b>CH648</b> [Options]	<b>/CR6L36</b>	Reflector/White Finish		
4600lm (45W) <b>CH649</b> [Options]	<b>/CR6L40</b>	All Satin Haze	<b>SS</b>	
4900lm (55W) <b>CH650<sup>8</sup></b> [Options]	<b>/CR6L40</b>			
5400lm (45W) <b>CH655</b> [Options]	<b>/CR6L53</b>			
6000lm (50W) <b>CH660</b> [Options]	<b>/CR6L60</b>			

#### Options

Insulation Contact	Driver Options <sup>2</sup>	Emergency Options	J-Box	Mounting
Non-IC <b>Blank</b>	0-10V Dimming <b>UE-D10</b>	None <b>Blank</b>	None <b>Blank</b>	24" Adjustable <b>Blank</b>
IC Rated/Airtight <b>ICA<sup>5</sup></b>	UniDim™ 0-10V ELV and Triac Dimming <b>UE-DUN</b>	12W Emerg, Back-Up <b>-EM</b>	Junction Box (Chicago Plenum) <b>-CHP</b>	Architectural <b>-BWNG<sup>4</sup></b>
	120V ELV and Triac Dimming <b>-DIN</b>	Remote Location Emergency System <b>-EMAC<sup>7</sup></b>		C-Channel
	Lutron HighLume <b>UE-DHL</b>	GTD Device <b>-GTD</b>		
	Lutron EcoSystem <b>UE-ECO</b>			
	347V <b>-347<sup>6</sup></b>			
	0-10V Dimming (1%) <b>UE-D10P1</b>			

<sup>1</sup> Housing must match corresponding Reflector in column to right.

<sup>2</sup> All drivers are 120V/277V unless otherwise noted.

<sup>3</sup> Only available for EM Housings.

<sup>4</sup> (-BWNG) option does **NOT** include Hanger Bars. Hanger Bars ordered separately.

<sup>5</sup> (ICA) is only available for CH608, CH610 and CH618.

<sup>6</sup> (-347) not available for CH608.

<sup>7</sup> (-EMAC) Check Wiring Diagrams.

<sup>8</sup> CH650/CR6L40 only available with UE-D10, UE-D10P1 and -347 dimming options.

<sup>9</sup> (-T27) not available for CH660/CR6L60.

<sup>10</sup> (-T50) not available for CH655/CR6L53 and CH660/CR6L60.

### COMPATABILITY

#### VR800

Outdoor Vandal Resistant Ceiling/Wall Kit



#### P-CR672SW

Wall Wash for 6"



#### CR6-GSKT

6" Commercial Self-Adhesive Gasket



## SPECIFICATION

### Application

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Architectural/Commercial-grade recessed lensed LED downlight housing for medium to high ceilings in commercial and architectural spaces.

### 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. Optional galvanized aluminum Architectural C-Channel Batwing also available. (C260) & (C260J) hanger bars are **NOT included** with (-BWNG) option, and must be ordered separately.

### Driver

---

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.

(UE-D10) 0-10V dimming 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 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.

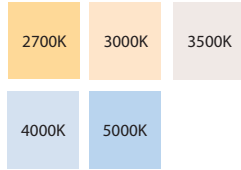
(-347) is a 0-10V driver that takes 347V input.

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

## SPECIFICATION (Continued)

### Color Temperature

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

### Insulation Contact

---

Non-IC rated housing must be kept 3" from loose-fill insulation. IC-Rated/Airtight (ICA) option is for direct insulation contact.

### 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 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 for both Non-IC and IC rated housings 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. Optional reflector (-EMA) features integral EM switch for 12W emergency backup (UE-D10-EM).

### Reflector Finish

---

1-piece, self-flanged, dual reflector 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 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

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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.

## SPECIFICATION (Continued)

### Airflow

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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

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cETLus listed. Suitable for dry, damp, and wet 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

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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, installations exceeding this temperature will result in reduced LED lamp life and a voided warranty.

### Energy Star Qualified Items

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/CR6L22\_-T30  
/CR6L22\_-T35  
/CR6L22\_-T40

/CR6L36\_-T30  
/CR6L36\_-T35  
/CR6L36\_-T40

### Emergency Options

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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)

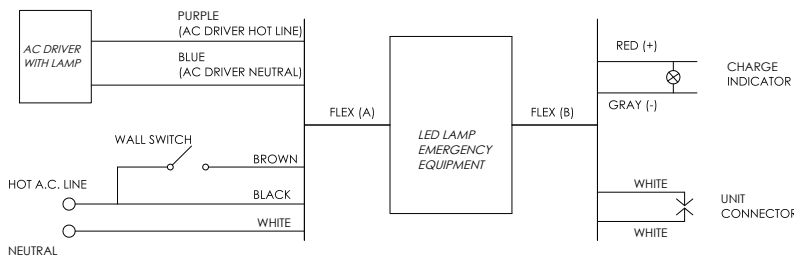
### Remote Emergency Back Up (-EMAC)

For installation away from the surface of the building in remote hidden location.

- Hidden Emergency Equipment
- Must be installed in Dry Locations

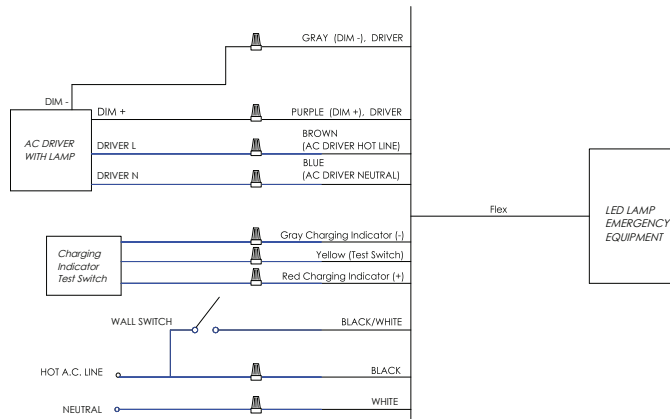
**Not rated for outdoor mounting. Damp location rated.**

#### <25W LOAD



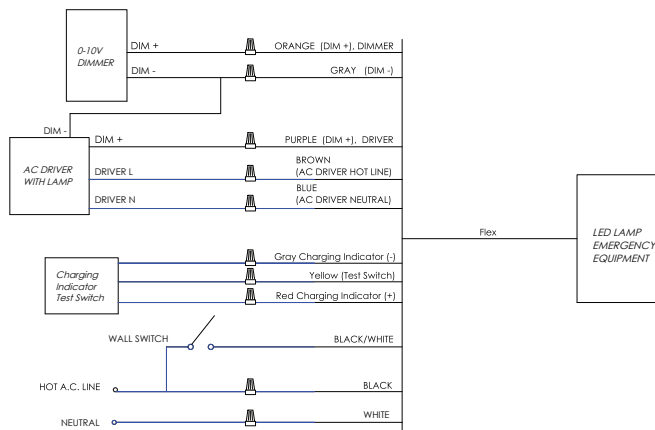
Input Voltage:	120-277VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	25W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Maximum Lumens:	2200lm

#### <40W LOAD



Input Voltage:	120-277VAC/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
Maximum Lumens:	3500lm

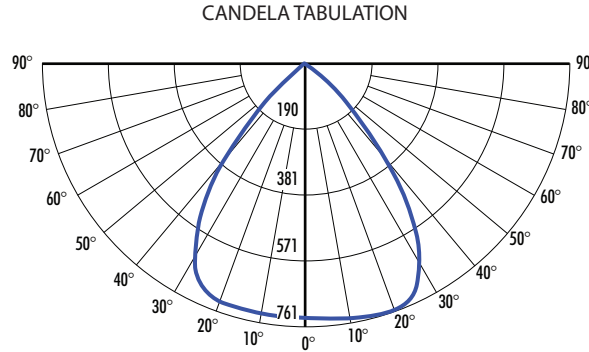
#### >40W LOAD



## PHOTOMETRY

### CH608UE-D10\_CR6L22CW-T40 (1000lm, 8W, 4000K)

System Power:	11W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	79.6°	<b>CW :</b> 1.00
Field Angle 10%:	104.2°	SS : 0.90
Color Temperature:	3787K	SW : 0.88
CRI:	83	WW : 0.66
Lumens Delivered:	1168	CCT
CBCP:	761.2	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>

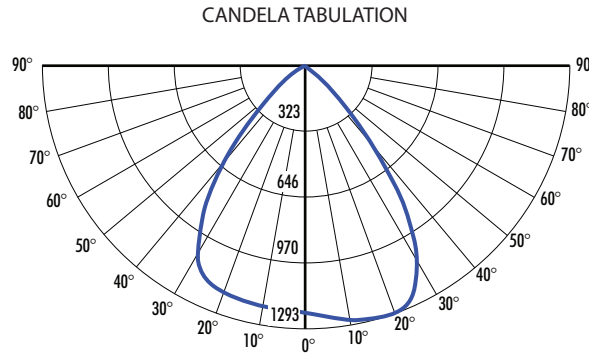


#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	13.33'	11.58
10.0'	16.66'	7.41
12.0'	20.00'	5.15
14.0'	23.33'	3.78
16.0'	26.66'	2.89

### CH610UE-D10\_CR6L22CW-T40 (1900lm, 17W, 4000K)

System Power:	17W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	78.0°	<b>CW :</b> 1.00
Field Angle 10%:	102.3°	SS : 0.90
Color Temperature:	3893K	SW : 0.88
CRI:	82.6	WW : 0.66
Lumens Delivered:	1873	CCT
CBCP:	1292.5	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>

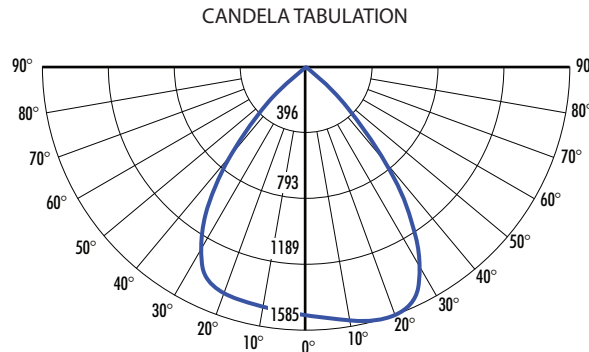


#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.96'	18.92
10.0'	16.20'	12.11
12.0'	19.43'	8.44
14.0'	22.67'	6.20
16.0'	25.91'	4.75

### CH618UE-D10\_CR6L22CW-T40 (2300lm, 22W, 4000K)

System Power:	22W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	78.1°	<b>CW :</b> 1.00
Field Angle 10%:	102.8°	SS : 0.90
Color Temperature:	3899K	SW : 0.88
CRI:	82.4	WW : 0.66
Lumens Delivered:	2313	CCT
CBCP:	1584.7	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>

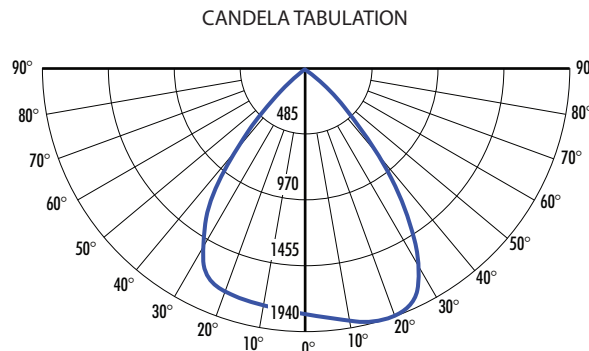


#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.97'	20.29
10.0'	16.22'	14.90
12.0'	19.47'	10.38
14.0'	22.71'	7.63
16.0'	25.96'	5.84

### CH628UE-D10\_CR6L22CW-T40 (2800lm, 28W, 4000K)

System Power:	28W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	77.8°	<b>CW :</b> 1.00
Field Angle 10%:	102.6°	SS : 0.90
Color Temperature:	3903K	SW : 0.88
CRI:	82.2	WW : 0.66
Lumens Delivered:	2803	CCT
CBCP:	1939.6	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>



#### FOOTCANDLE DISTRIBUTION

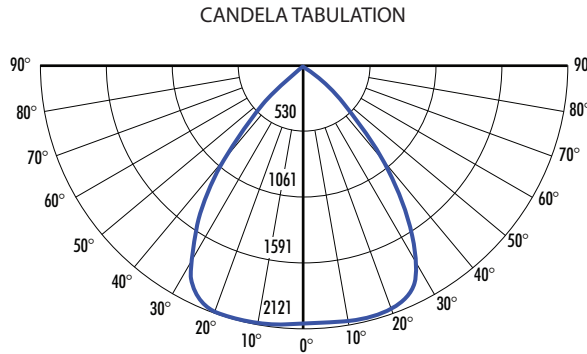
Height	Beam Diameter	FC
8.0'	12.91'	28.19
10.0'	16.14'	18.04
12.0'	19.37'	12.61
14.0'	22.59'	9.27
16.0'	25.82'	7.09

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## PHOTOMETRY (Continued)

### CH630UE-D10\_CR6L36CW-T40 (3100lm, 30W, 4000K)

System Power:	30W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	78.5°	<b>CW :</b> 1.00
Field Angle 10%:	103.0°	SS : 0.90
Color Temperature:	3902K	SW : 0.88
CRI:	82.1	WW : 0.66
Lumens Delivered:	3182	CCT
CBCP:	2121.3	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>

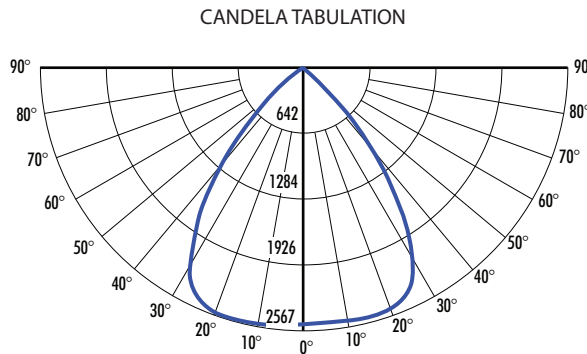


#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	13.07'	32.63
10.0'	16.34'	20.88
12.0'	19.61'	14.50
14.0'	22.88'	10.66
16.0'	26.14'	8.16

### CH639UE-D10\_CR6L36CW-T40 (3800lm, 38W, 4000K)

System Power:	39W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	78.5°	<b>CW :</b> 1.00
Field Angle 10%:	103.1°	SS : 0.90
Color Temperature:	3916K	SW : 0.88
CRI:	82.0	WW : 0.66
Lumens Delivered:	3850	CCT
CBCP:	2567.4	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>

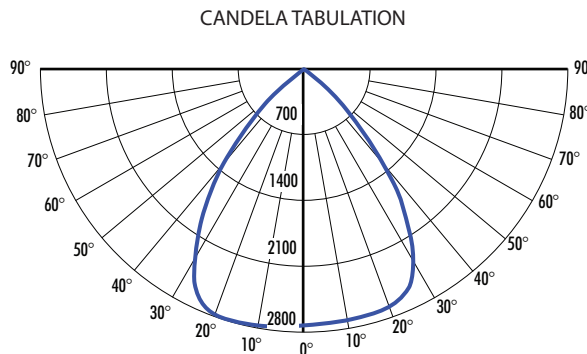


#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	13.07'	39.51
10.0'	16.34'	25.29
12.0'	19.61'	17.56
14.0'	22.88'	12.90
16.0'	26.14'	9.88

### CH648UE-D10\_CR6L36CW-T40 (4300lm, 45W, 4000K)

System Power:	45W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	78.5°	<b>CW :</b> 1.00
Field Angle 10%:	103.2°	SS : 0.90
Color Temperature:	3976K	SW : 0.88
CRI:	83.5	WW : 0.66
Lumens Delivered:	4181	CCT
CBCP:	2800.2	2700K : 1.04
Power Factor:	0.99	3000K : 1.01
		3500K : 1.12
		<b>4000K : 1.00</b>

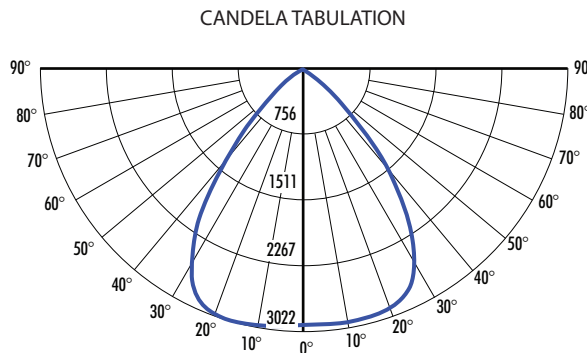


#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	13.07'	42.78
10.0'	16.34'	27.38
12.0'	19.61'	19.01
14.0'	22.88'	13.97
16.0'	26.14'	10.70

### CH649UE-D10\_CR6L40CW-T40 (4600lm, 45W, 4000K)

System Power:	47W	MULTIPLIERS
Test Date:	09/2023	REFLECTOR FINISH
Beam Angle 50%:	79.4°	<b>CW :</b> 1.00
Field Angle 10%:	104.7°	SS : 0.90
Color Temperature:	3908K	SW : 0.88
CRI:	83.5	WW : 0.66
Lumens Delivered:	4622	CCT
CBCP:	3022.2	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'	13.28'	46.03
10.0'	16.60'	29.46
12.0'	19.93'	20.46
14.0'	23.25'	15.03
16.0'	26.57'	11.51

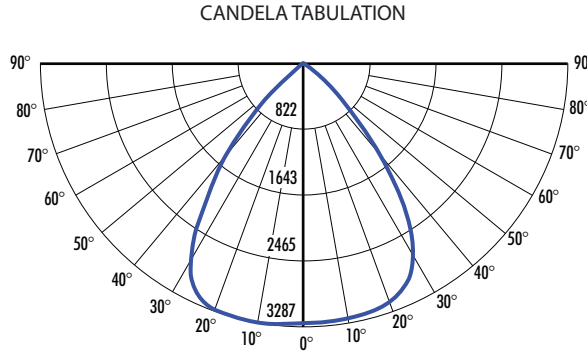
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## PHOTOMETRY (Continued)

### CH650UE-D10\_CR6L40CW-T40 (4900lm, 55W, 4000K)

System Power: 53W  
 Test Date: 09/2023  
 Beam Angle 50%: 78.6°  
 Field Angle 10%: 103.4°  
 Color Temperature: 3929K  
 CRI: 82.2  
 Lumens Delivered: 4918  
 CBCP: 3286.5  
 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**



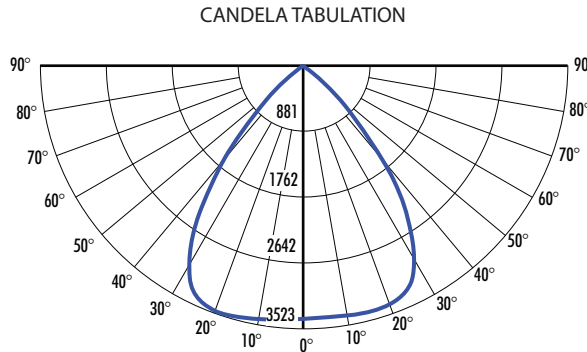
#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	13.10'	50.57
10.0'	16.37'	32.36
12.0'	19.64'	22.47
14.0'	22.92'	16.51
16.0'	26.19'	12.64

### CH655UE-D10\_CR6L53CW-T40 (5400lm, 45W, 4000K)

System Power: 43W  
 Test Date: 09/2023  
 Beam Angle 50%: 79.5°  
 Field Angle 10%: 104.5°  
 Color Temperature: 3885K  
 CRI: 83.2  
 Lumens Delivered: 5408  
 CBCP: 3523.1  
 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**



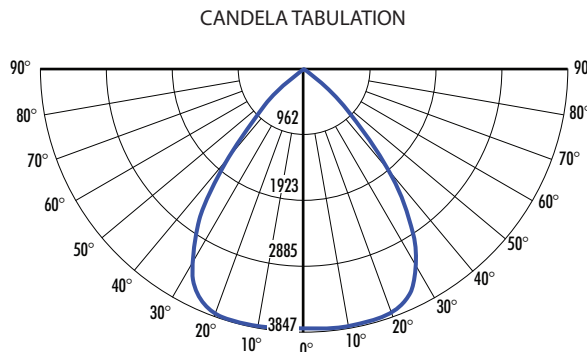
#### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	13.31'	53.26
10.0'	16.63'	34.08
12.0'	19.96'	23.67
14.0'	23.29'	17.39
16.0'	26.61'	13.31

### CH660UE-D10\_CR6L60CW-T40 (6000lm, 50W, 4000K)

System Power: 48W  
 Test Date: 09/2023  
 Beam Angle 50%: 79.4°  
 Field Angle 10%: 104.5°  
 Color Temperature: 4041K  
 CRI: 83.7  
 Lumens Delivered: 5896  
 CBCP: 3846.3  
 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'	13.28'	59.65
10.0'	16.60'	38.18
12.0'	19.93'	26.51
14.0'	23.25'	19.48
16.0'	26.57'	14.91

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