

SPECIFICATION

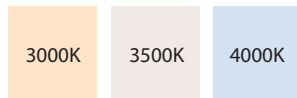
Application

Architectural/Commercial-grade recessed lensed LED downlight housing for new construction with Lumen/ColorSelect switches offer added flexibility for optimal light output and ambience in commercial and architectural spaces with medium to high ceilings.

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.

Color Temperature (CCT)



Available in 3000K, 3500K and 4000K in 84 CRI.

Insulation Contact

CH6QLS1320 set to 17W (1300lm) or 22W (1700lm) are inherently thermally protected for direct insulation contact without the need for an enclosure. (CH6QLS1320 2000lm (28W), CH6QLS2333, and CH6QLS2737) are Non-IC rated housings 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. 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.

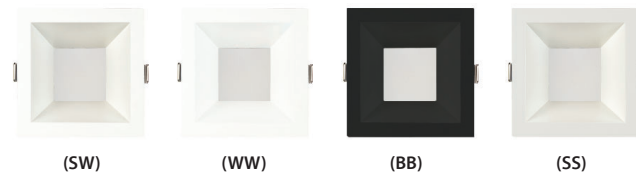
SPECIFICATION (Continued)

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 10W Emergency Battery (-EM).

Reflector Finish

1-piece, self-flanged, dual reflector LED design provides 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 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.

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. 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

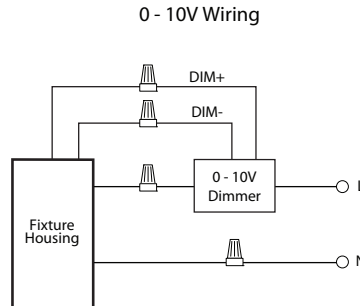
LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty. (+1KV). Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SPECIFICATION (Continued)

Dimming Options

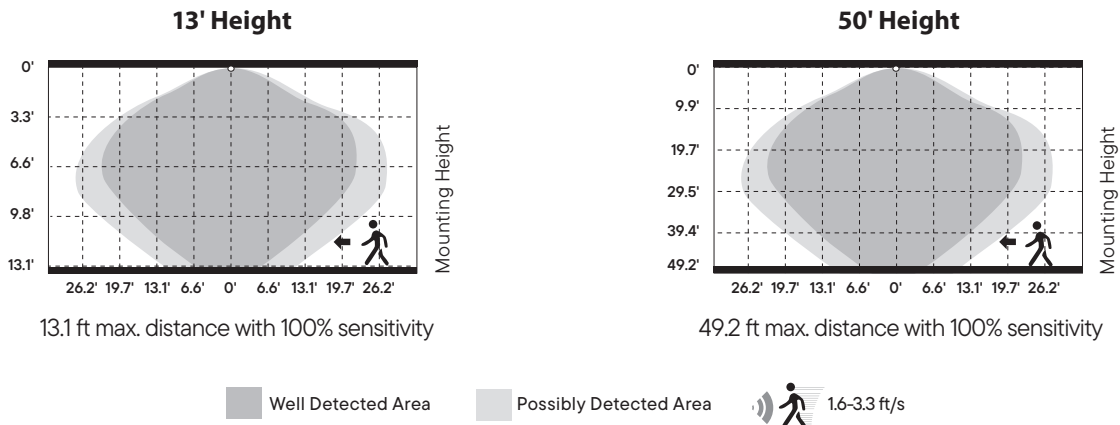
0-10V Driver 120V/277V (UE-D10):

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.



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



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).

SPECIFICATION (Continued)

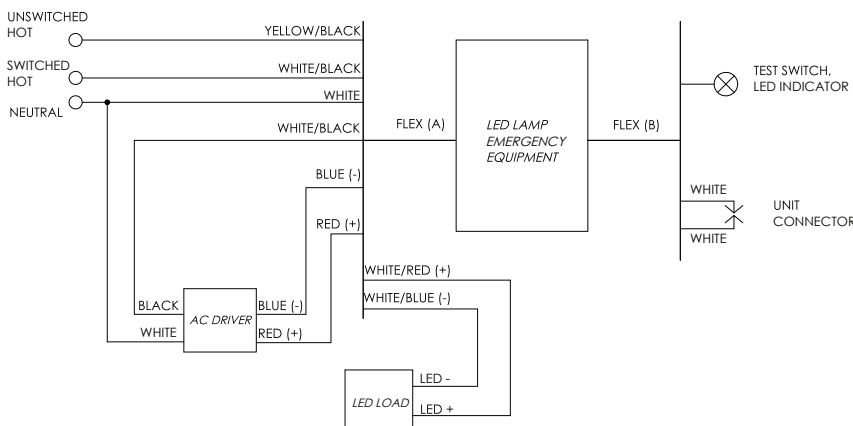
EMERGENCY BATTERY (-EM): 10W

- 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	CH6QLS1320/CR6QL22	Fixture/Trim	CH6QLS1320/CR6QL22	Fixture/Trim	CH6QLS1320/CR6QL22
Fixture Wattage:	17W (Drive Set Low)	Fixture Wattage:	22W (Drive Set Low)	Fixture Wattage:	28W (Drive Set Low)
Fixture Lumens:	1300	Fixture Lumens:	1700	Fixture Lumens:	2000
Multiplier:	0.59	Multiplier:	0.45	Multiplier:	0.36
EM Lumens:	770	EM Lumens:	770	EM Lumens:	720
Fixture/Trim	CH6QLS2333/CR6QL36	Fixture/Trim	CH6QLS2333/CR6QL36	Fixture/Trim	CH6QLS2333/CR6QL36
Fixture Wattage:	30W (Drive Set Low)	Fixture Wattage:	39W (Drive Set Low)	Fixture Wattage:	48W (Drive Set Low)
Fixture Lumens:	2300	Fixture Lumens:	2800	Fixture Lumens:	3300
Multiplier:	0.33	Multiplier:	0.26	Multiplier:	0.21
EM Lumens:	760	EM Lumens:	730	EM Lumens:	700
Fixture/Trim	CH6QLS2737/CR6QL40	Fixture/Trim	CH6QLS2737/CR6QL40	Fixture/Trim	CH6QLS2737/CR6QL40
Fixture Wattage:	35W (Drive Set Low)	Fixture Wattage:	45W (Drive Set Low)	Fixture Wattage:	55W (Drive Set Low)
Fixture Lumens:	2700	Fixture Lumens:	3200	Fixture Lumens:	3700
Multiplier:	0.29	Multiplier:	0.22	Multiplier:	0.18
EM Lumens:	780	EM Lumens:	700	EM Lumens:	670



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): 17W - 55W

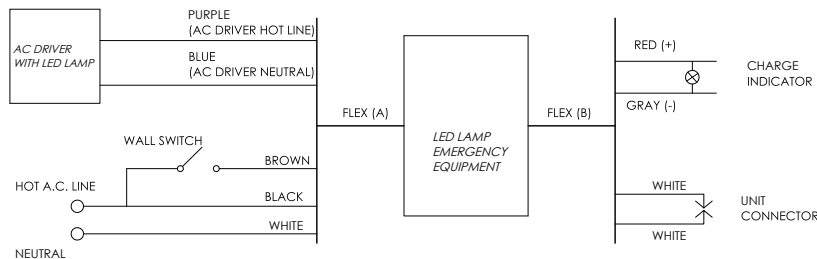
- Must be installed in Dry Locations
- Wattage package will determine if 17W - 55W battery gets sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

Not rated for outdoor mounting. Damp location rated.

-EMAC Lumen Data (Battery)

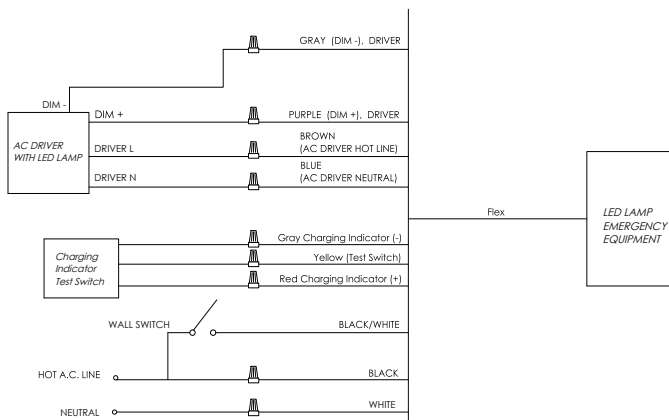
Fixture/Trim	CH6QLS1320/CR6QL22	Fixture/Trim	CH6QLS1320/CR6QL22	Fixture/Trim	CH6QLS1320/CR6QL22
Fixture Wattage:	17W (Drive Set Low)	Fixture Wattage:	22W (Drive Set Low)	Fixture Wattage:	28W (Drive Set Low)
Fixture Lumens:	1300	Fixture Lumens:	1700	Fixture Lumens:	2000
EM Lumens:	1300	EM Lumens:	1700	EM Lumens:	2000
Fixture/Trim	CH6QLS2333/CR6QL36	Fixture/Trim	CH6QLS2333/CR6QL36	Fixture/Trim	CH6QLS2333/CR6QL36
Fixture Wattage:	30W (Drive Set Low)	Fixture Wattage:	39W (Drive Set Low)	Fixture Wattage:	48W (Drive Set Low)
Fixture Lumens:	2300	Fixture Lumens:	2800	Fixture Lumens:	3300
EM Lumens:	2300	EM Lumens:	2800	EM Lumens:	3300
Fixture/Trim	CH6QLS2737/CR6QL40	Fixture/Trim	CH6QLS2737/CR6QL40	Fixture/Trim	CH6QLS2737/CR6QL40
Fixture Wattage:	35W (Drive Set Low)	Fixture Wattage:	45W (Drive Set Low)	Fixture Wattage:	55W (Drive Set Low)
Fixture Lumens:	2700	Fixture Lumens:	3200	Fixture Lumens:	3700
EM Lumens:	2700	EM Lumens:	3200	EM Lumens:	3700

<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

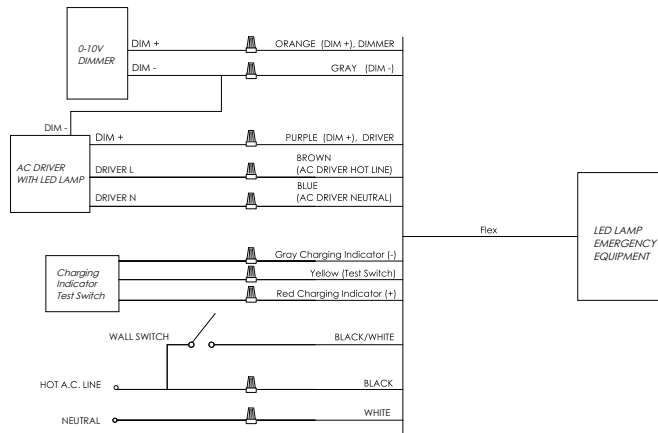


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	40W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

SPECIFICATION (Continued)

>40W LOAD

- 0-10V dimmable driver required



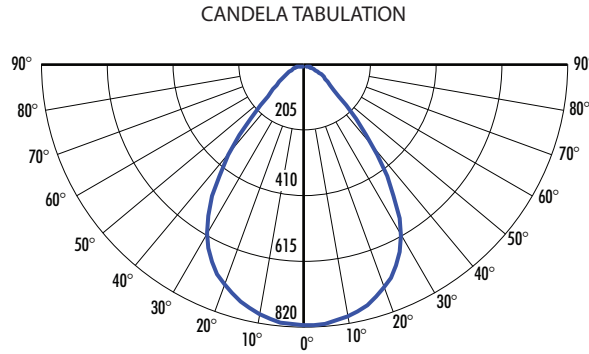
Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	49W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

PHOTOMETRY

CH6QLS1320UE-D10/CR6QL22WW-TS40_LOW (1300lm, 17W, 4000K)

System Power: 16W
Test Date: 02/2024
Beam Angle 50%: 76.9°
Field Angle 10%: 120.2°
Color Temperature: 3812K
CRI: 82.0
Lumens Delivered: 1321
CBCP: 820.39
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW :	0.00
SS :	0.00
SW :	0.00
WW :	0.00
CCT	
3000K :	1.01
3500K :	1.12
4000K :	1.00



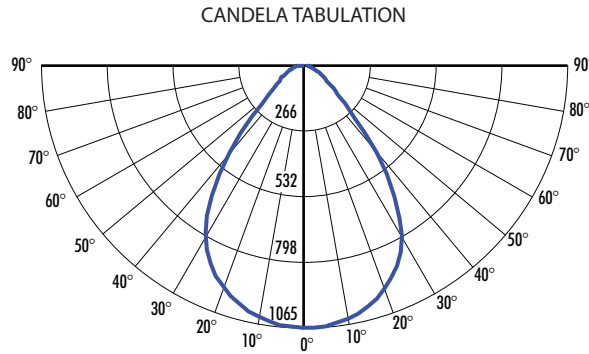
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.70'	12.82
10.0'	15.88'	8.20
12.0'	19.06'	5.70
14.0'	22.23'	4.19
16.0'	25.41'	3.20

CH6QLS1320UE-D10/CR6QL22WW-TS40_MID (1700lm, 22W, 4000K)

System Power: 22W
Test Date: 02/2024
Beam Angle 50%: 76.4°
Field Angle 10%: 119.3°
Color Temperature: 3810K
CRI: 81.6
Lumens Delivered: 1687
CBCP: 1064.64
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW :	0.00
SS :	0.00
SW :	0.00
WW :	0.00
CCT	
3000K :	1.01
3500K :	1.12
4000K :	1.00



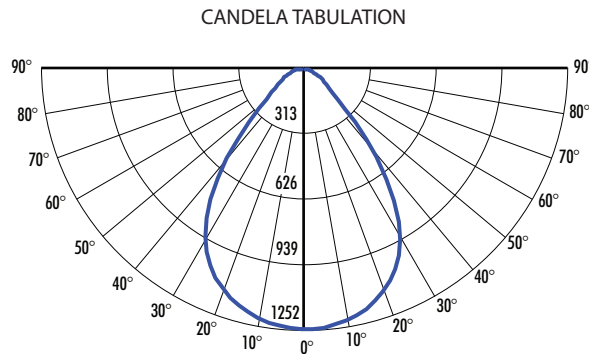
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.59'	16.64
10.0'	15.74'	10.65
12.0'	18.89'	7.39
14.0'	22.03'	5.43
16.0'	25.18'	4.16

CH6QLS1320UE-D10/CR6QL22WW-TS40_HIGH (2000lm, 28W, 4000K)

System Power: 27W
Test Date: 02/2024
Beam Angle 50%: 77.0°
Field Angle 10%: 120.5°
Color Temperature: 3821K
CRI: 81.5
Lumens Delivered: 2019
CBCP: 1251.08
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW :	0.00
SS :	0.00
SW :	0.00
WW :	0.00
CCT	
3000K :	1.01
3500K :	1.12
4000K :	1.00



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.73'	19.54
10.0'	15.91'	12.51
12.0'	19.09'	8.69
14.0'	22.27'	6.38
16.0'	25.45'	4.89

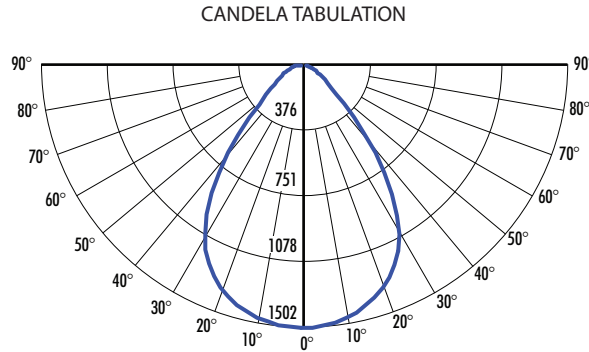
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PHOTOMETRY (Continued)

CH6QLS2333UE-D10/CR6QL36WW-TS40_LOW (2300lm, 30W, 4000K)

System Power: 32W
Test Date: 02/2024
Beam Angle 50%: 76.1°
Field Angle 10%: 119.0°
Color Temperature: 3854K
CRI: 83.4
Lumens Delivered: 2365
CBCP: 1502
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW:	0.00
SS:	0.00
SW:	0.00
WW:	0.00
CCT	
3000K:	1.01
3500K:	1.12
4000K:	1.00



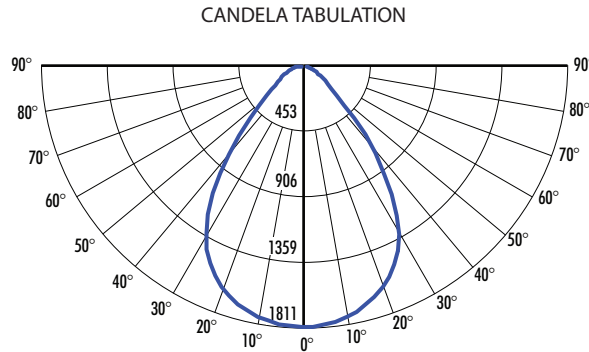
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.52'	22.45
10.0'	15.65'	14.37
12.0'	18.78'	9.98
14.0'	21.92'	7.33
16.0'	25.05'	5.61

CH6QLS2333UE-D10/CR6QL36WW-TS40_MID (2800lm, 39W, 4000K)

System Power: 40W
Test Date: 02/2024
Beam Angle 50%: 76.2°
Field Angle 10%: 119.1°
Color Temperature: 3859K
CRI: 83.2
Lumens Delivered: 2853
CBCP: 1811
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW:	0.00
SS:	0.00
SW:	0.00
WW:	0.00
CCT	
3000K:	1.01
3500K:	1.12
4000K:	1.00



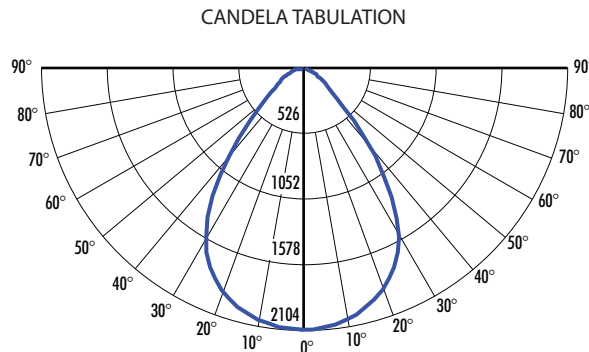
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.55'	26.06
10.0'	15.68'	16.68
12.0'	18.82'	11.58
14.0'	21.95'	8.51
16.0'	25.09'	6.51

CH6QLS2333UE-D10/CR6QL36WW-TS40_HIGH (3300lm, 48W, 4000K)

System Power: 49W
Test Date: 02/2024
Beam Angle 50%: 76.2°
Field Angle 10%: 119.1°
Color Temperature: 3870K
CRI: 83.0
Lumens Delivered: 3317
CBCP: 2104
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW:	0.00
SS:	0.00
SW:	0.00
WW:	0.00
CCT	
3000K:	1.01
3500K:	1.12
4000K:	1.00



FOOTCANDLE DISTRIBUTION

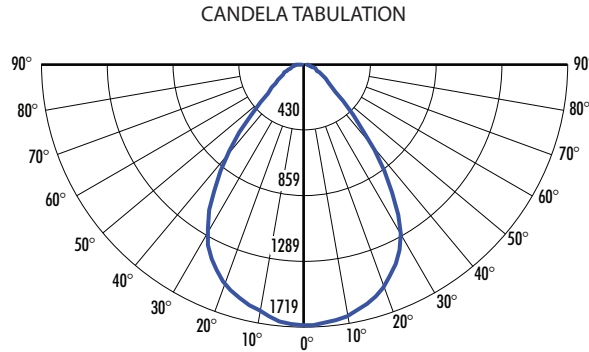
Height	Beam Diameter	FC
8.0'	12.55'	28.73
10.0'	15.68'	18.39
12.0'	18.82'	12.77
14.0'	21.95'	9.38
16.0'	25.09'	7.18

PHOTOMETRY (Continued)

CH6QLS2737UE-D10/CR6QL40WW-TS40_LOW (2700lm, 35W, 4000K)

System Power: 35W
Test Date: 02/2024
Beam Angle 50%: 75.9°
Field Angle 10%: 119.1°
Color Temperature: 3798K
CRI: 83.1
Lumens Delivered: 2704
CBCP: 1718.7
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW:	0.00
SS:	0.00
SW:	0.00
WW:	0.00
CCT	
3000K:	1.01
3500K:	1.12
4000K:	1.00



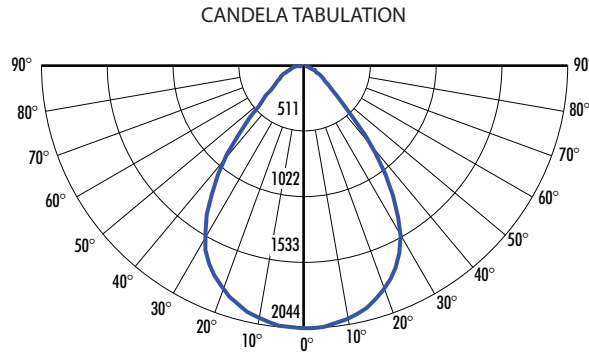
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.48'	26.85
10.0'	15.60'	17.19
12.0'	18.72'	11.94
14.0'	21.84'	8.77
16.0'	24.96'	6.71

CH6QLS2737UE-D10/CR6QL40WW-TS40_MID (3200lm, 45W, 4000K)

System Power: 45W
Test Date: 02/2024
Beam Angle 50%: 76.3°
Field Angle 10%: 119.7°
Color Temperature: 3815K
CRI: 82.9
Lumens Delivered: 3255
CBCP: 2043.57
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW:	0.00
SS:	0.00
SW:	0.00
WW:	0.00
CCT	
3000K:	1.01
3500K:	1.12
4000K:	1.00



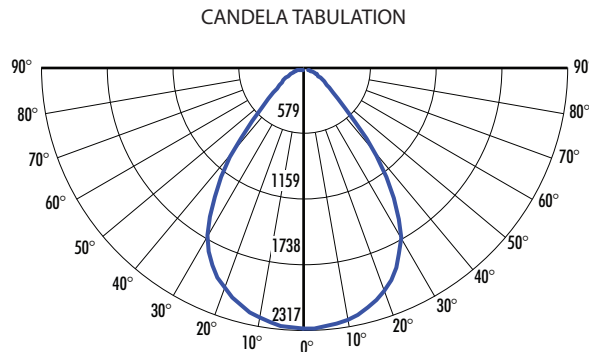
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.57'	31.93
10.0'	15.71'	20.44
12.0'	18.85'	14.19
14.0'	21.99'	10.43
16.0'	25.14'	7.98

CH6QLS2737UE-D10/CR6QL40WW-TS40_HIGH (3700lm, 53W, 4000K)

System Power: 54W
Test Date: 02/2024
Beam Angle 50%: 76.3°
Field Angle 10%: 119.6°
Color Temperature: 3830K
CRI: 82.7
Lumens Delivered: 3690
CBCP: 2317.26
Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW:	0.00
SS:	0.00
SW:	0.00
WW:	0.00
CCT	
3000K:	1.01
3500K:	1.12
4000K:	1.00



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	12.57'	36.21
10.0'	15.71'	23.17
12.0'	18.85'	16.09
14.0'	21.99'	11.82
16.0'	25.14'	9.05