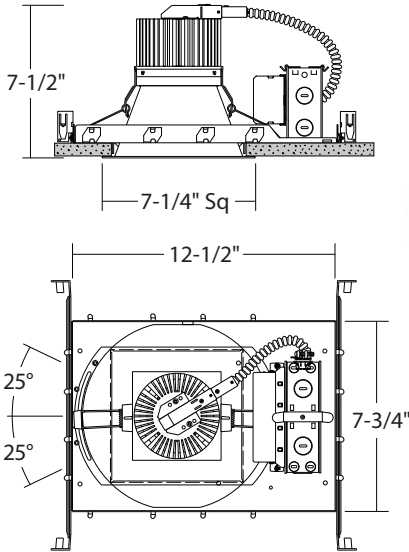
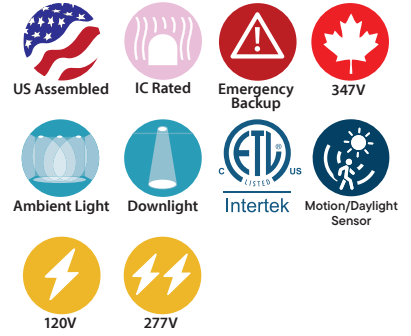


CH6QC : 6" C-SERIES

(COB) CHIP ON BOARD BEAM CONTROL SQUARE LED,
 NEW CONSTRUCTION 1000LM - 4000LM (10W-44W)



Ceiling Cut-Out: 6-3/8" Sq.
 Ceiling Thickness: 2-3/8" Max



- Heavy-duty seamless die-cast reflector
- Assorted dimming options
- COB LED design for concentrated high CBCP beam
- Multiple beam spreads for flexible beam control
- Twist and lock reflector for quick access to LED lamp array

ORDERING : CH6QC10UE-D10-EM/CR6QLC40SW-B30-T27

CH6QC

Housing	Insulation Contact	Control	Emergency Options	J-Box	Reflector Finish	Beam Spread	CCT
Insulation Contact Non-IC Blank IC Rated/ Airtight ICA³				J-Box None Blank Junction Box (Chicago Plenum) -CHP		Beam Spread 15° Spot -B15 30° Narrow Flood -B30 40° Flood -B40 60° Wide Flood -B60 80° Very Wide Flood -B80	CCT 2700K (90 CRI) -T27 2700K (97 CRI) -T27-C97 3000K (90 CRI) -T30 3000K (97 CRI) -T30-C97 3500K (90 CRI) -T35 4000K (90 CRI) -T40 5000K (80 CRI) -T50

Housing	Control ¹	Emergency Options	Reflector Finish
1000lm (10W) CH6QC10	0-10V Dimming	UE-D10	Satin Haze Reflector/ White Ring /CR6QLC40SW
1500lm (15W) CH6QC15	UniDim™ 0-10V, TRIAC/ELV Dimming	UE-DUN	White Reflector/ White Ring /CR6QLC40WW
2100lm (20W) CH6QC20	TRIAC/ELV Dimming (120V)	-DIN	All Black /CR6QLC40BB
2800lm (30W) CH6QC30	Lutron Hi-Lume	UE-DHL	All Satin Haze /CR6QLC40SS
4000lm (44W) CH6QC40	Lutron EcoSystem	UE-ECO	
	0-10V Dimming (347V)	-347-D10²	
	1%, 0-10V Dimming	UE-D10P1	
	DMX Dimming with input via XLR5 (120V/277V)	UE-DMXLR5	
	DMX Dimming with input via RJ45 (120V/277V)	UE-DMXRJ45	
	Athena Wireless Node (120V)	-AWN	
	Athena Wireless Node Occupancy Sensor (120V)	-AWN-OCC	
	UniSense - Remotely Mounted Motion/Photosensor (120V)	-SUN-RMT⁶	
	UniSense - Remotely Mounted Motion/Photosensor	-SUN-RMT-1227⁶	
	Casambi Wireless Dimming	-DCSM⁵	
	BubblyNet Wireless System	-DBNT⁵	
	Lutron Vive Wireless Dimming Module	-VIVE⁵	
		None Blank	
		10W Emergency Battery -EM	
		Full Power Emergency Inverter -EMAC⁴	
		Full Power Emergency Inverter (347V) -EMAC347⁴	
		GTD Device -GTD	

¹ All drivers are 120V/277V unless otherwise noted.

² -347-D10 is not available for CH6QC10.

³ ICA is only available for CH6QC10, CH6QC15, CH6QC20 and CH6QC30. (CH6QC40 are Non-IC rated.)

⁴ Check wiring diagram.

⁵ Special Order.

⁶ (-SUN-RMT) Sensor sent with mounting clips for existing ceiling applications.

SPECIFICATION

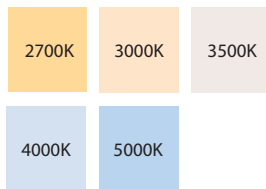
Application

Architectural/Commercial-grade recessed (COB) Chip on Board Beam Control LED downlight housing for new construction allows for concentrated high center beam candlepower. Twist and lock TIR beam control optic is designed for easy field replacement of multiple beam spread options. Designed for 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.

Color Temperature (CCT)



Available in 2700K, 3000K, 3500K, 4000K, 90 CRI; 5000K 80 CRI; 2700K and 3000K, 97 CRI. Binned with 2-step MacAdam Ellipses.

COLOR TEMP:	2700K	3000K	3500K	4000K	5000K
CRI:	90, 97	90, 97	90	90	80

Insulation Contact

(CH6QC10), (CH6QC15), (CH6QC20), and (CH6QC30) are inherently thermally protected for direct insulation contact without the need for an enclosure. (CH6QC40) are Non-IC rated housing and must be kept 3" from loose-fill insulation.

Power Connection

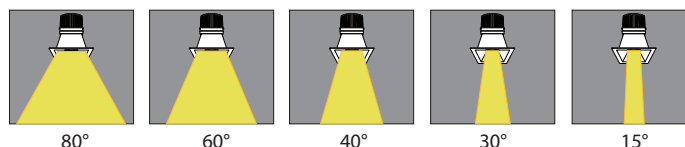
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

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.

Optics

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



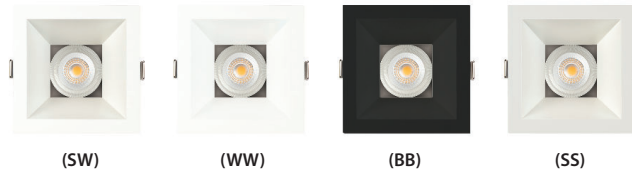
SPECIFICATION (Continued)

Reflector

Field adjustable twist and lock reflector is easily removable to provide quick access to LED lamp array.

Reflector Finish

The 1-piece, self-flanged, LED design provides a clean trim finish without a secondary trim ring. Heavy gauge aluminum reflector prevents ugly dents during shipping & installation. 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 are included to install or remove covers for an easily accessed ground wire. (-CHP) option is Chicago Plenum, air-tight Junction Box.

Certifications and Listings



cETLus listed to UL1598 and UL8750. Suitable for dry locations only. 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)

Control Options

ELV and TRIAC Driver 120V (-DIN):

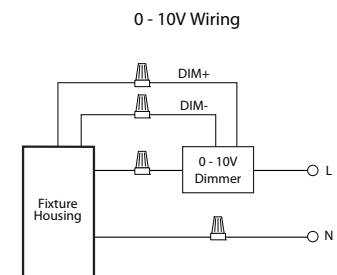
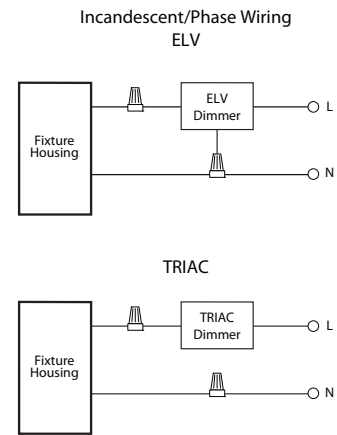
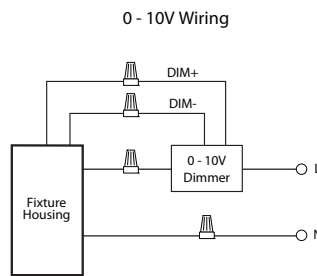
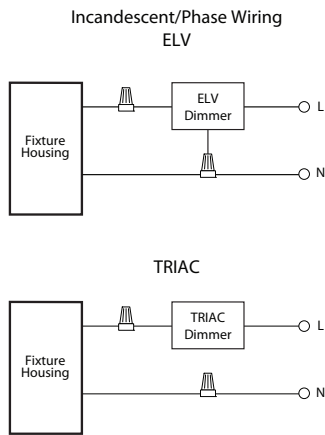
Compatible with electronic low voltage, and 2-Wire incandescent dimmers. Also known as leading edge, Reverse Phase, Forward Phase dimming. Allows smooth dimming down to 5% depending upon the dimmer's limitations.

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.

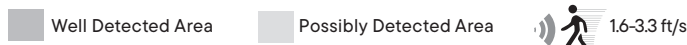
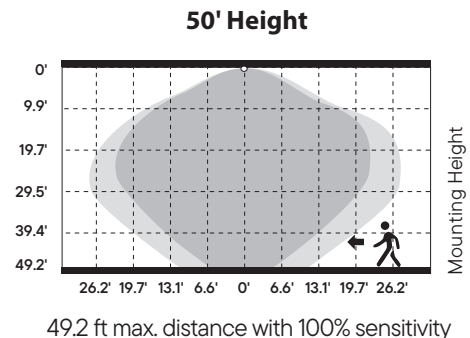
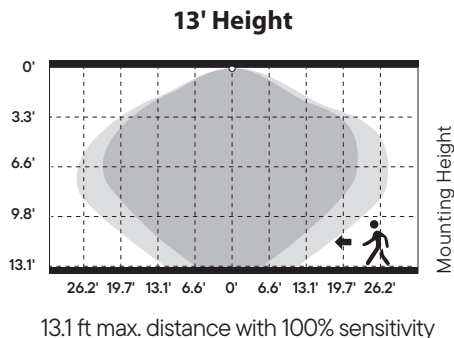
UniDim™ Driver 120V/277V (UE-DUN):

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)

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).

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)

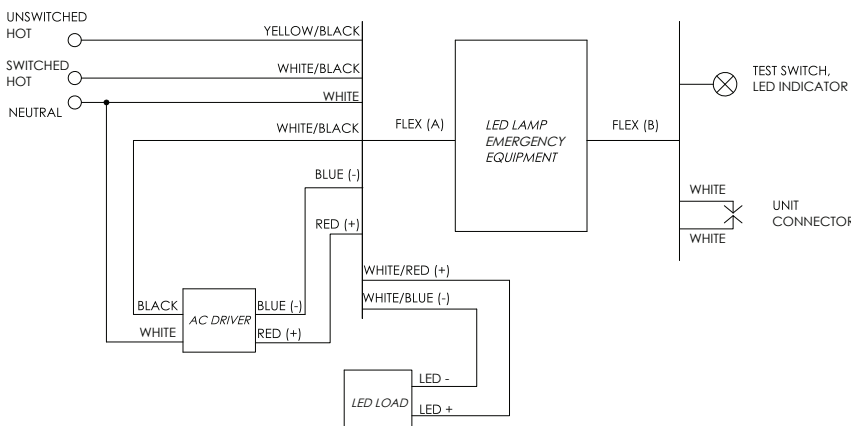
Fixture/Trim	CH6QC10/CR6QLC40
Fixture Wattage:	10W
Fixture Lumens:	1000
Multiplier:	1
EM Lumens:	1000

Fixture/Trim	CH6QC15/CR6QLC40
Fixture Wattage:	15W
Fixture Lumens:	1500
Multiplier:	0.67
EM Lumens:	1000

Fixture/Trim	CH6QC20/CR6QLC40
Fixture Wattage:	20W
Fixture Lumens:	2100
Multiplier:	0.5
EM Lumens:	1050

Fixture/Trim	CH6QC30/CR6QLC40
Fixture Wattage:	30W
Fixture Lumens:	2800
Multiplier:	0.33
EM Lumens:	920

Fixture/Trim	CH6QC40/CR6QLC40
Fixture Wattage:	44W
Fixture Lumens:	4000
Multiplier:	0.23
EM Lumens:	920



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): 10W - 44W

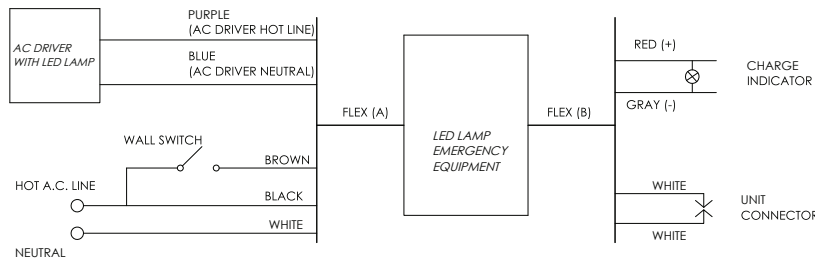
- Must be installed in Dry Locations
- Wattage package will determine battery sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

Not rated for outdoor mounting. Damp location rated.

-EMAC Lumen Data (Battery)

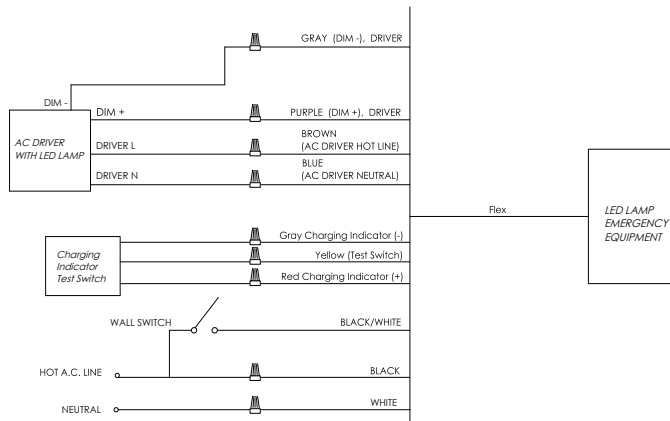
Fixture/Trim	CH6QC10/CR6QLC40	Fixture/Trim	CH6QC15/CR6QLC40	Fixture/Trim	CH6QC20/CR6QLC40
Fixture Wattage:	10W	Fixture Wattage:	15W	Fixture Wattage:	20W
Fixture Lumens:	1000	Fixture Lumens:	1500	Fixture Lumens:	2100
EM Lumens:	1000	EM Lumens:	1500	EM Lumens:	2100
Fixture/Trim	CH6QC30/CR6QLC40	Fixture/Trim	CH6QC40/CR6QLC40		
Fixture Wattage:	30W	Fixture Wattage:	44W		
Fixture Lumens:	2800	Fixture Lumens:	4000		
EM Lumens:	2800	EM Lumens:	4000		

<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

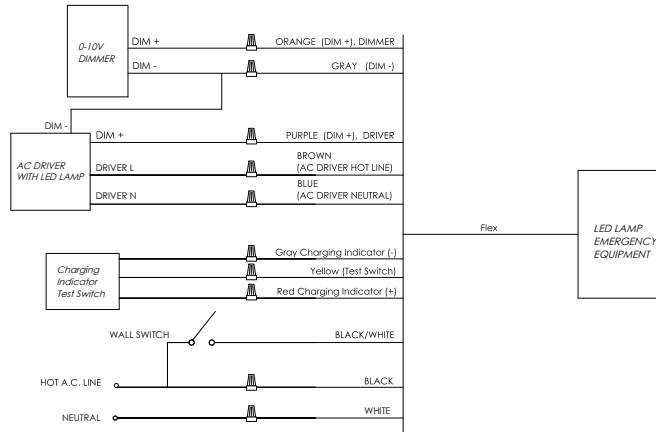


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	30W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

SPECIFICATION (Continued)

>40W LOAD

- 0-10V dimmable driver required

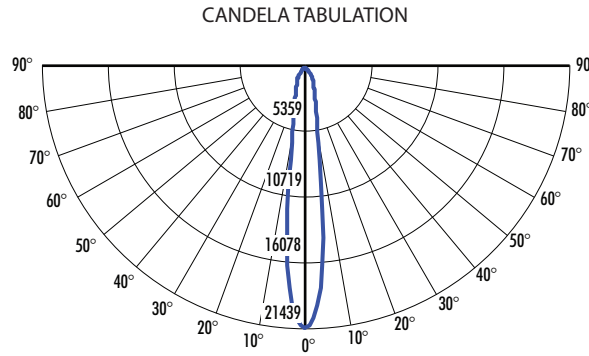


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	44W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

PHOTOMETRY

CH6QC40UE-D10_CR6QLC40WW-B15-T40 (4000lm, 40W, 15°, 4000K)

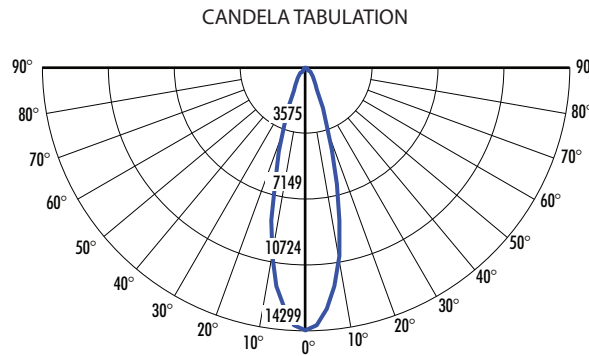
System Power:	44W	MULTIPLIERS	
Test Date:	01/2024	CCT	
Beam Angle 50%:	15.1°	2700K :	0.87
Field Angle 10%:	42.3°	3000K :	0.92
Color Temperature:	3881K	3500K :	0.96
CRI:	90	4000K :	1.00
Lumens Delivered:	4174	Lumens	
CBCP:	21439	1000lm:	0.27
Power Factor:	0.99	1500lm:	0.38
		2100lm:	0.53
		2800lm:	0.70
		4000lm:	1.00



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	2.12'	334.17
10.0'	2.65'	213.87
12.0'	3.18'	148.52
14.0'	3.71'	109.12
16.0'	4.24'	83.54

CH6QC40UE-D10_CR6QLC40WW-B30-T40 (4000lm, 40W, 30°, 4000K)

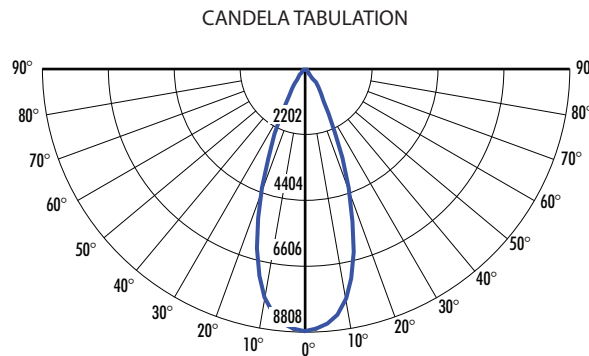
System Power:	44W	MULTIPLIERS	
Test Date:	01/2024	CCT	
Beam Angle 50%:	28.5°	2700K :	0.87
Field Angle 10%:	54.8°	3000K :	0.92
Color Temperature:	3938K	3500K :	0.96
CRI:	90	4000K :	1.00
Lumens Delivered:	4632	Lumens	
CBCP:	14299	1000lm:	0.27
Power Factor:	0.99	1500lm:	0.38
		2100lm:	0.53
		2800lm:	0.70
		4000lm:	1.00



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	4.06'	222.90
10.0'	5.08'	142.65
12.0'	6.09'	99.07
14.0'	7.11'	72.78
16.0'	8.13'	55.72

CH6QC40UE-D10_CR6QLC40WW-B40-T40 (4000lm, 40W, 40°, 4000K)

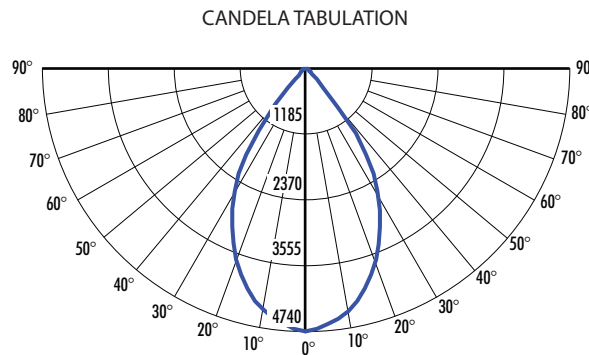
System Power:	44W	MULTIPLIERS	
Test Date:	01/2024	CCT	
Beam Angle 50%:	39.2°	2700K :	0.87
Field Angle 10%:	67.6°	3000K :	0.92
Color Temperature:	3948K	3500K :	0.96
CRI:	90	4000K :	1.00
Lumens Delivered:	4541	Lumens	
CBCP:	8808	1000lm:	0.27
Power Factor:	0.99	1500lm:	0.38
		2100lm:	0.53
		2800lm:	0.70
		4000lm:	1.00



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	5.70'	137.31
10.0'	7.12'	87.88
12.0'	8.55'	61.02
14.0'	9.97'	44.83
16.0'	11.39'	34.33

CH6QC40UE-D10_CR6QLC40WW-B60-T40 (4000lm, 40W, 60°, 4000K)

System Power:	44W	MULTIPLIERS	
Test Date:	01/2024	CCT	
Beam Angle 50%:	63.0°	2700K :	0.87
Field Angle 10%:	85.0°	3000K :	0.92
Color Temperature:	3987K	3500K :	0.96
CRI:	90	4000K :	1.00
Lumens Delivered:	4655	Lumens	
CBCP:	4739.8	1000lm:	0.27
Power Factor:	0.99	1500lm:	0.38
		2100lm:	0.53
		2800lm:	0.70
		4000lm:	1.00



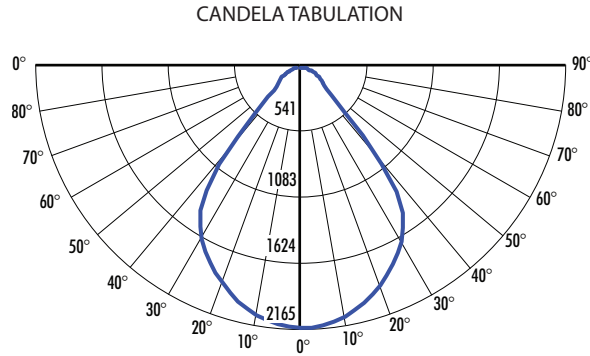
FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	9.80'	75.13
10.0'	12.26'	48.08
12.0'	14.71'	33.39
14.0'	17.16'	24.53
16.0'	19.61'	18.78

2024.02.02

PHOTOMETRY (Continued)

CH6QC40UE-D10_CR6QLC40WW-B80-T40 (4000lm, 40W, 80°, 4000K)

System Power:	44W	MULTIPLIERS
Test Date:	02/2024	CCT
Beam Angle 50%:	79.1°	2700K : 0.87
Field Angle 10%:	113.6°	3000K : 0.92
Color Temperature:	3748K	3500K : 0.96
CRI:	90	4000K : 1.00
Lumens Delivered:	3417	Lumens
CBCP:	2166	1000lm: 0.27
Power Factor:	0.99	1500lm: 0.38
		2100lm: 0.53
		2800lm: 0.70
		4000lm: 1.00



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	13.21'	33.84
10.0'	16.52'	22.66
12.0'	19.82'	15.04
14.0'	23.12'	11.05
16.0'	26.43'	8.46