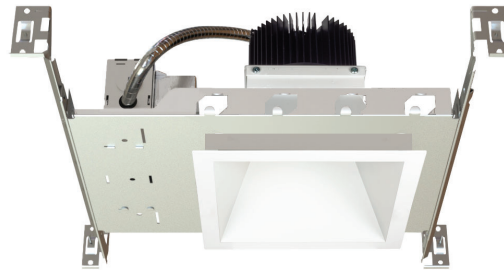
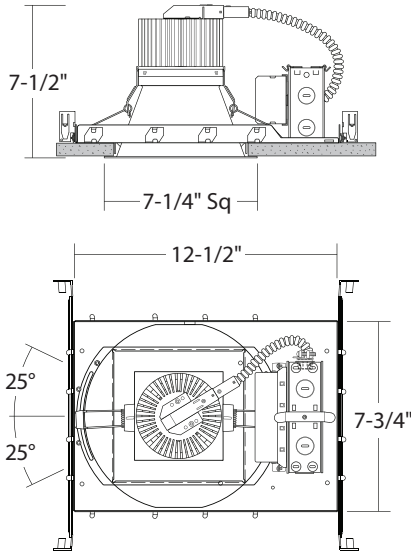


CH6QC : 6" C-SERIES

(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	Driver Options	Emergency Options	J-Box	Reflector Finish	Beam Spread	CCT		
Insulation Contact				J-Box			CCT		
Non-IC Blank				None Blank			2700K (90 CRI) -T27		
IC Rated/ ICA³				Junction Box (Chicago Plenum) -CHP			2700K (97 CRI) -T27-C97		
					Beam Spread		3000K (90 CRI) -T30		
					15° Spot -B15		3000K (97 CRI) -T30-C97		
					30° Narrow Flood -B30		3500K (90 CRI) -T35		
					40° Flood -B40		4000K (90 CRI) -T40		
					60° Wide Flood -B60		5000K (80 CRI) -T50		
					80° Very Wide Flood -B80				
Housing		Driver Options ¹		Emergency Options		Reflector Finish			
1000lm (10W)	CH6QC10	0-10V Dimming	UE-D10	None	Blank	Satin Haze Reflector/	/CR6QLC40SW		
1500lm (15W)	CH6QC15	UniDim™ 0-10V ELV and Triac Dimming	UE-DUN	Remote Location	-EM	White Ring	/CR6QLC40WW		
2100lm (20W)	CH6QC20	120V ELV and Triac Dimming	-DIN	Emergency Battery	-EMAC⁴	White Reflector/	/CR6QLC40BB		
2800lm (30W)	CH6QC30	Lutron Hi-lume	UE-DHL	Remote Location	-GTD	All Black	/CR6QLC40SS		
4000lm (44W)	CH6QC40	Lutron EcoSystem	UE-ECO	Emergency Inverter		All Satin Haze			
		347V, 0-10V Dimming	-347-D10²	Generator Transfer Device					
		0-10V Dimming (1%)	UE-D10P1						
		Athena Wireless Node	-AWN						
		Athena Wireless Node Occupancy Sensor	-AWN-OCC						

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.

⁴ Check wiring diagram.

SPECIFICATION

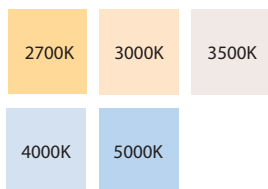
Application

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.

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. Non-IC rated housings must be kept 3" from loose-fill insulation.

Power Connection

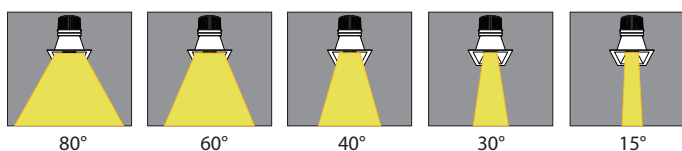
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

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 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.



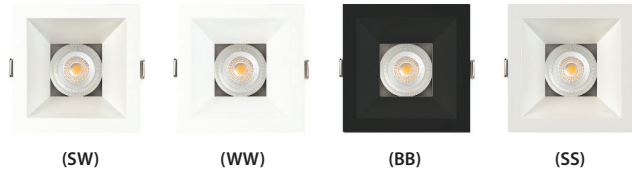
SPECIFICATION (Continued)

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 enables 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.
NYC approved: Calendar #41937.

Caution

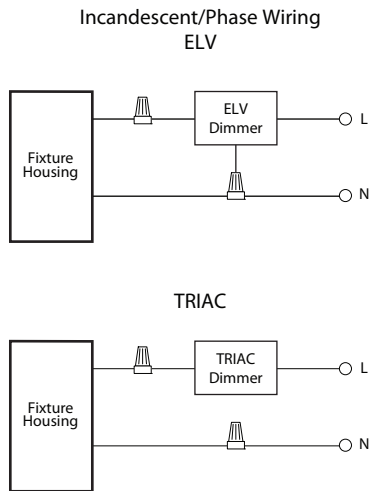
LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty. (+1KV). Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SPECIFICATION (Continued)

Dimming Options

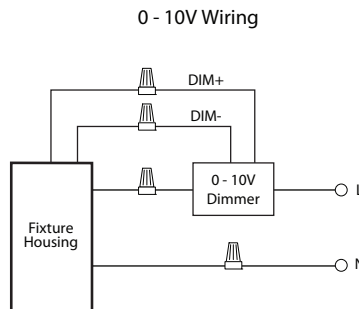
ELV and TRIAC Driver 120V (-DIN):

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.



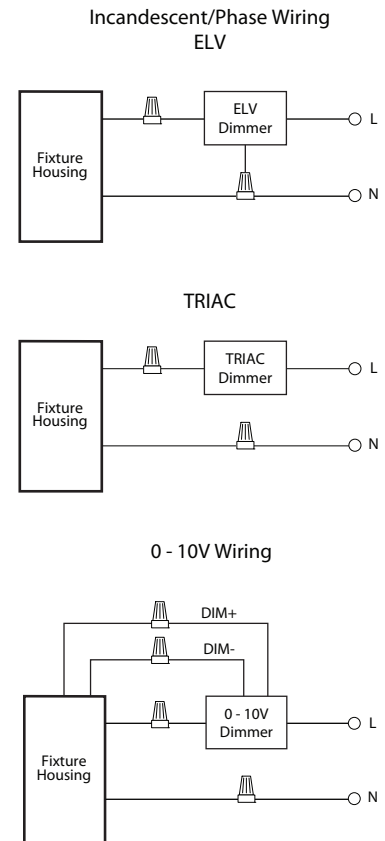
0-10V Driver 120V/277V (UE-D10):

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.



ATHENA WIRELESS NODE (-AWN, -AWN-OCC)



Radio frequency (RF) device for digital control of light fixtures in an Athena control system. Athena wireless processor or Clear Connect gateway-Type X is required to operate wireless node.

- Pre-Wired wireless node
- Installed on Junction Box outer wall
- 2.4 GHz
- cULus Listed (UL 916)
- UL 2043 Plenum Rated
- FCC compliant with the limits for a Class B digital device
- ANSI C1371.1 0-10V Electronic Off
- D4i certified
- IC (Industry Canada)
- Supports DALI-2 Type 8 tuneable-white color temperature Tc applications - IEC62386-209 ed.1

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

Emergency Options

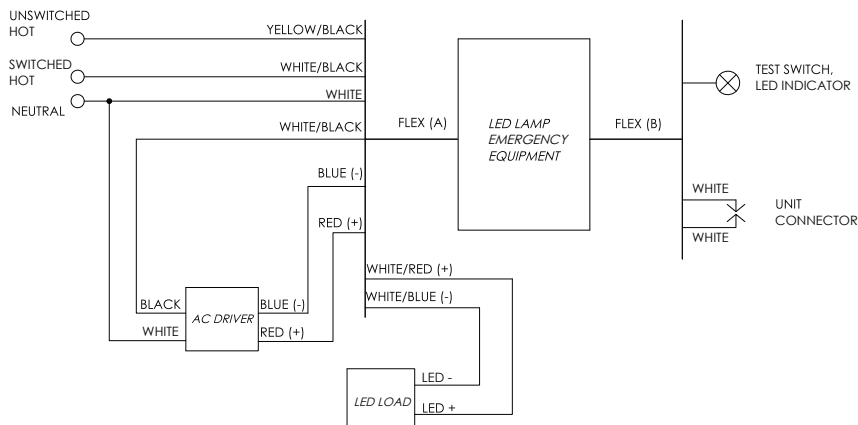
Emergency LED Battery Back-up available, remotely mounted adjacently by the installer.
When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the driver to auxiliary generator power during the loss of normal AC power, (recommended for applications requiring individual circuit switching).

REMOTE EMERGENCY BATTERY (-EM): 10W

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

- Hidden Emergency Equipment
- Must be installed in Dry Locations
- 10W constant output to LED lamp

Not rated for outdoor mounting. Damp location rated.



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
Maximum Lumens:	800lm
Self-Diagnostic:	No

SPECIFICATION (Continued)

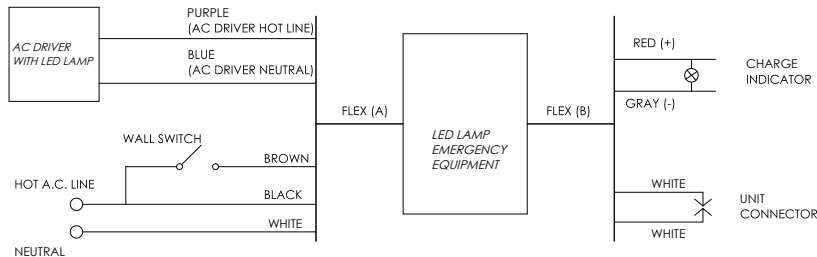
REMOTE LOCATION EMERGENCY INVERTER (-EMAC): 25W and 40W

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

- Hidden Emergency Equipment
- Must be installed in Dry Locations
- Wattage package will determine if 25W or 40W battery gets sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

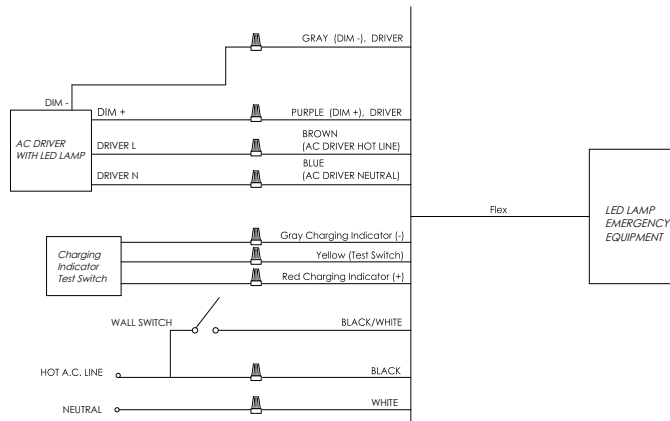
Not rated for outdoor mounting. Damp location rated.

<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
Self-Diagnostic:	No

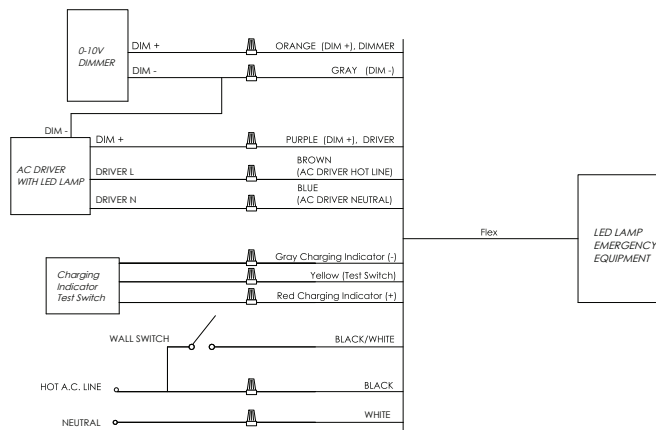
<40W LOAD



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
Self-Diagnostic:	Yes

>40W LOAD

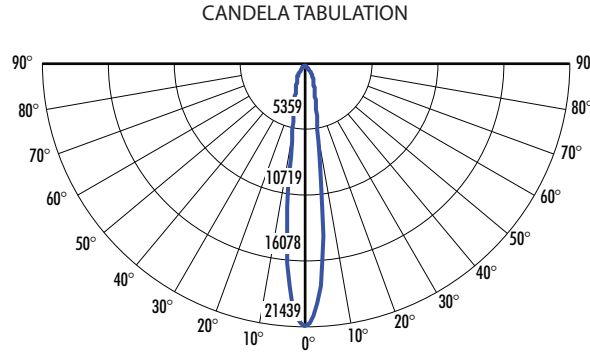
- 0-10V dimmable driver required



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

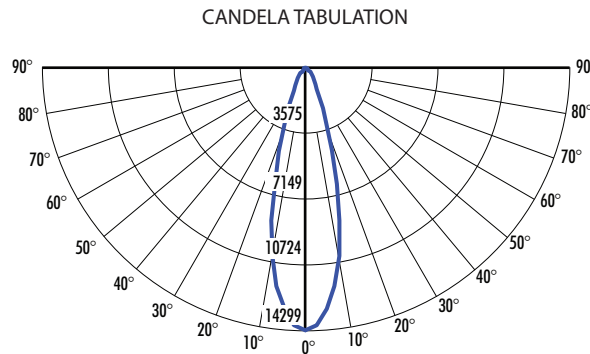


FOOTCANDLE DISTRIBUTION

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

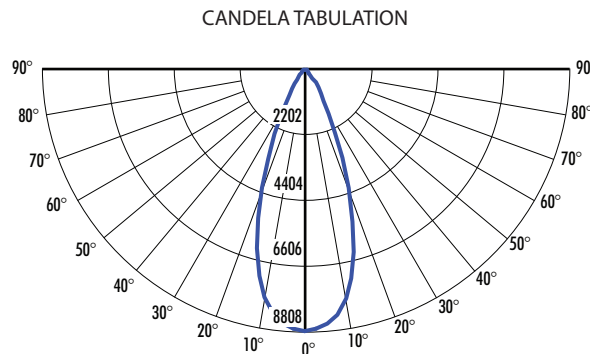


FOOTCANDLE DISTRIBUTION

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

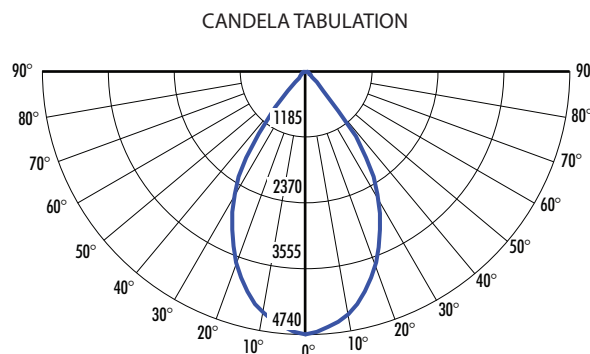


FOOTCANDLE DISTRIBUTION

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

LITON[®]

CH6QC : 6" C-SERIES

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

PHOTOMETRY (Continued)

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

