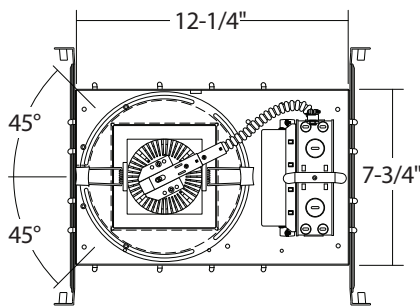
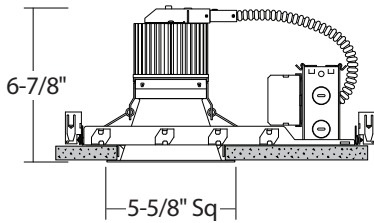


CH4QLS : 4" C-SERIES

SQUARE LUMEN/COLORSELECT NEW CONSTRUCTION
 1100LM - 1600LM (18W-28W)



Ceiling Cut-Out: 4-3/4"
 Ceiling Thickness: 2" Max



- LumenSelect switch with 1100lm, 1400lm, or 1600lm setting
- ColorSelect 3000K, 3500K, 4000K (84CRI) switch
- Twist and lock reflector for quick access to LED lamp array
- Heavy-duty seamless die-cast reflector
- Soft even lumen distribution
- No visible screws or hardware

ORDERING : CH4QLS1116UE-D10-EM/CR4QL22SW-EMA-TS354

CH4QLS1116	Insulation Contact	Control	Emergency Options	J-Box	Reflector	Reflector Finish	Reflector Options	ColorSelect
LumenSelect Housing ¹								
1100lm (18W) CH4QLS1116 [Options]			Reflector ¹		Reflector Finish		Reflector Options	ColorSelect
1400lm (22W)			/CR4QL22		Satin Haze Reflector/ White Finish SW	None Blank	Integral EM -EMA²	ColorSelect -TS354
1600lm (28W)					White Reflector/ White Finish WW		Switch	3000K, 3500K, 4000K (84 CRI)
					All Black BB			
					All Satin Haze SS			

Options

Insulation Contact	Control	Emergency Options	J-Box
Non-IC Blank	0-10V Dimming (120V/277V) UE-D10	None	None Blank
IC Rated/ Airtight ICA³	Athena Wireless Node (120V) -AWN	10W Emergency Battery -EM	Junction Box (Chicago Plenum) -CHP
	Athena Wireless Node Occupancy Sensor (120V) -AWN-OCC	Full Power Emergency Inverter -EMAC⁴	
	UniSense - Remotely Mounted Motion/Photosensor (120V) -SUN-RMT⁶	Full Power Emergency Inverter (347V) -EMAC347⁴	
	UniSense - Remotely Mounted Motion/Photosensor (120V/277V) -SUN-RMT-1227⁶	GTD Device -GTD	
	Casambi Wireless Dimming (120V/277V) -DCSM⁵		
	BubblyNet Wireless System (120V/277V) -DBNT⁵		
	Lutron Vive Wireless Dimming Module (120V/277V) -VIVE⁵		

¹ Housing must match corresponding Reflector in column to right.
² Only available for EM Housings.
³ ICA is only available on 1100lm (18W) and 1400lm (22W). (1600lm (28W) are Non-IC Rated.)
⁴ Check Wiring Diagrams.
⁵ Special Order.
⁶ (-SUN-RMT) Sensor sent with mounting clips for existing ceiling applications.

SPECIFICATION

Application

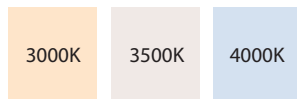
Architectural/Commercial-grade recessed lensed LED downlight housing for new construction with Lumen/ColorSelect switches offer added flexibility for optimal light output and ambience in commercial and architectural spaces with medium to high ceilings.

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

CH4QLS1116 set to 18W (1100lm) or 22W (1400lm) are inherently thermally protected for direct insulation contact without the need for an enclosure. 1600lm (28W) 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.

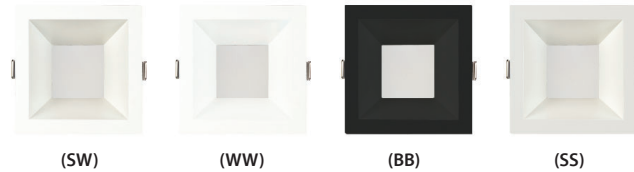
SPECIFICATION (Continued)

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

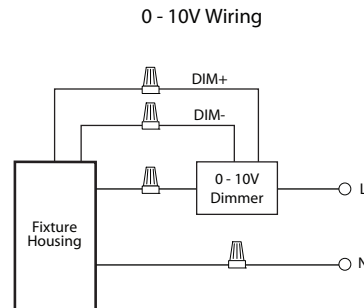
LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty. (+1KV). Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SPECIFICATION (Continued)

Dimming Options

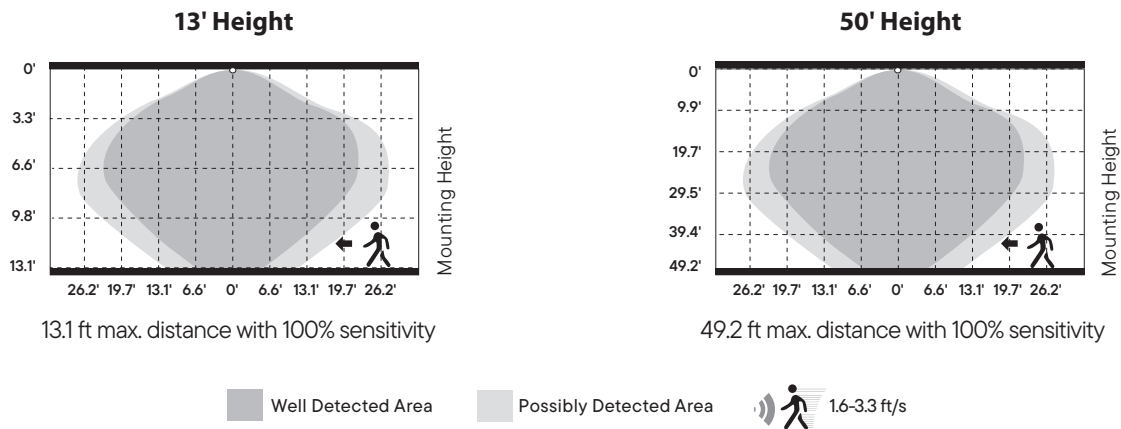
0-10V Driver 120V/277V (UE-D10):

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)

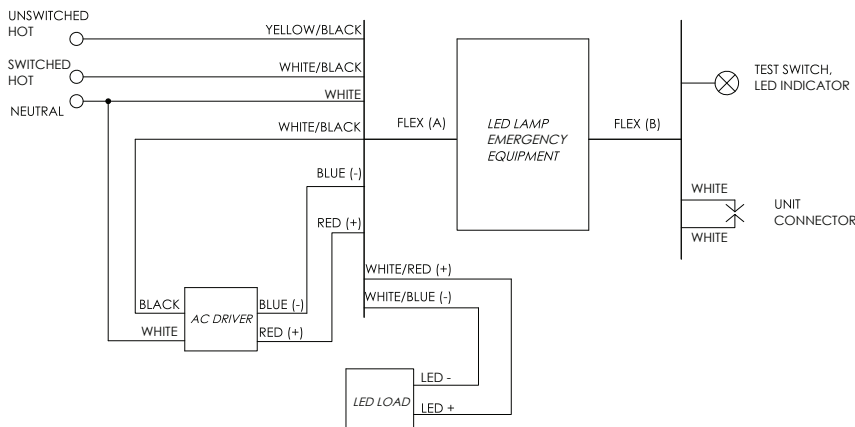
EMERGENCY BATTERY (-EM): 10W

- 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	CH4QLS1116/CR4QL22	Fixture/Trim	CH4QLS1116/CR4QL22	Fixture/Trim	CH4QLS1116/CR4QL22
Fixture Wattage:	18W (Drive Set Low)	Fixture Wattage:	22W (Drive Set Low)	Fixture Wattage:	28W (Drive Set Low)
Fixture Lumens:	1100	Fixture Lumens:	1400	Fixture Lumens:	1600
Multiplier:	0.56	Multiplier:	0.45	Multiplier:	0.36
EM Lumens:	620	EM Lumens:	630	EM Lumens:	580



Input Voltage:	120-277VAC/60Hz
Output Voltage:	10V
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): 28W Max

- Must be installed in Dry Locations
- 170 VDC output to AC DRIVER during EM mode

Not rated for outdoor mounting. Damp location rated.

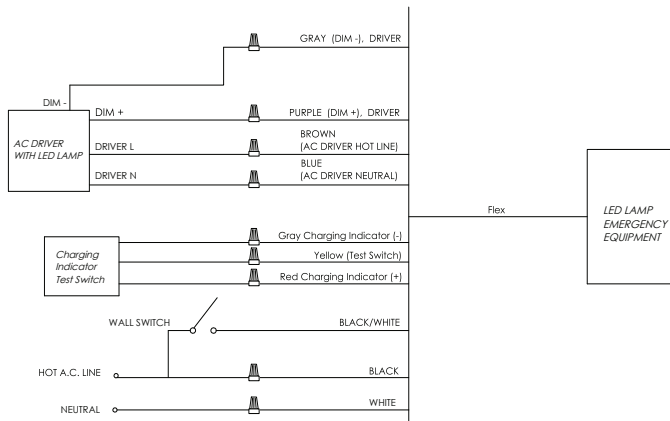
-EMAC Lumen Data (Battery)

Fixture/Trim	CH4QLS1116/CR4QL22
Fixture Wattage:	18W (Drive Set Low)
Fixture Lumens:	1100
EM Lumens:	1100

Fixture/Trim	CH4QLS1116/CR4QL22
Fixture Wattage:	22W (Drive Set Low)
Fixture Lumens:	1400
EM Lumens:	1400

Fixture/Trim	CH4QLS1116/CR4QL22
Fixture Wattage:	28W (Drive Set Low)
Fixture Lumens:	1600
EM Lumens:	1600

<40W LOAD



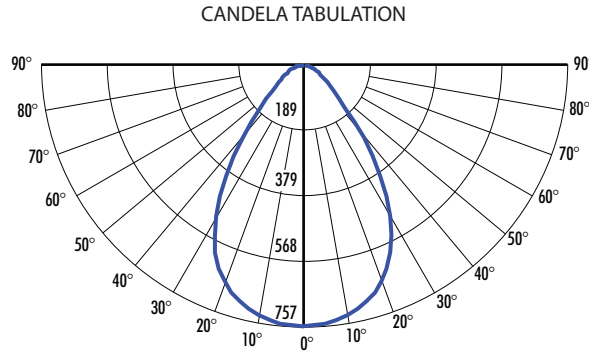
Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	28W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

PHOTOMETRY

CH4QLS1116UE-D10/CR4QL22WW-TS40_LOW (1100lm, 17W, 4000K)

System Power: 17.5W
Test Date: 02/2024
Beam Angle 50%: 71°
Field Angle 10%: 115.7°
Color Temperature: 3777K
CRI: 82.4
Lumens Delivered: 1098
CBCP: 757.14
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



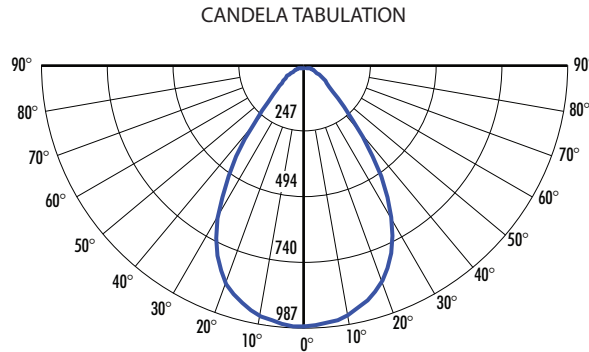
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	11.41'	11.83
10.0'	14.27'	7.57
12.0'	17.12'	5.26
14.0'	19.97'	3.86
16.0'	22.83'	2.96

CH4QLS1116UE-D10/CR4QL22WW-TS40_MID (1400lm, 22W, 4000K)

System Power: 18W
Test Date: 02/2024
Beam Angle 50%: 84.2°
Field Angle 10%: 108.0°
Color Temperature: 3866K
CRI: 82.6
Lumens Delivered: 1928
CBCP: 1164
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



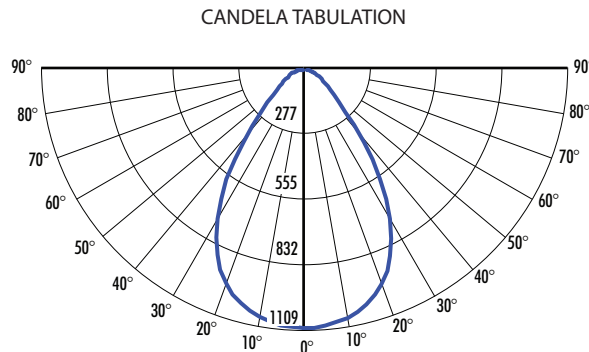
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	11.37'	15.43
10.0'	14.21'	9.87
12.0'	17.06'	6.86
14.0'	19.90'	5.04
16.0'	22.74'	3.86

CH4QLS1116UE-D10/CR4QL22WW-TS40_HIGH (1600lm, 28W, 4000K)

System Power: 22W
Test Date: 02/2024
Beam Angle 50%: 84.3°
Field Angle 10%: 107.9°
Color Temperature: 3873K
CRI: 82.4
Lumens Delivered: 2355
CBCP: 1421.3
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'	11.43'	17.33
10.0'	14.29'	11.09
12.0'	17.15'	7.70
14.0'	20.01'	5.66
16.0'	22.87'	4.33

2024.02.01