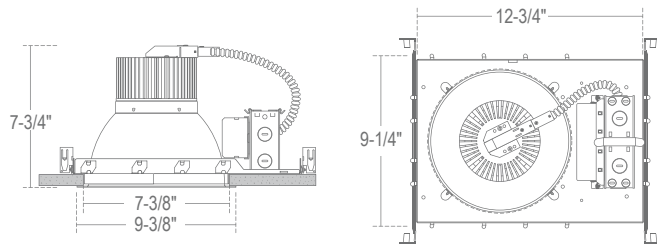


CH8 - 8" C-SERIES

LED DOWNLIGHT NEW CONSTRUCTION 300LM - 600LM (10W-22W) AMBER (TURTLE SAFE)



Ceiling Cut-out: 7-15/16"
Ceiling Thickness: 1" Max



SPECIFICATION

120/277V 10W LED

Application: Turtle Safe commercial-grade recessed LED downlight housing for medium to ceilings in commercial and architectural spaces. Lensed fixture.

Mounting: Housing suitable for new construction installations only, supplied with (2) 24" adjustable hanger bars with 90 degrees 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 with 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.

Control: 120V/277V AC 50/60HZ Electronic Direct Current Class 2 driver integrally mounted on large access Junction Box. Power Factor > 0.90. Operating Temperature: -20°C to +50°C / -4°F to +131°F. Accessible from above or below ceiling.

Dimming: Standard 0-10V dimming works with most 5-Wire 0-10V dimmers. Factory qualified for use with Leviton IP710-DLX and Lutron NTFTV-WH.

Emergency Options: Emergency LED Battery Back-up available, remotely mounted adjacent to housing by 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).

Junction Box: 16 gauge pre-wired galvanized steel double Junction Box, 64 cubic-inch for a maximum of (8) #12 AWG wires. Furnished with (10) 3/4", (2) 1" and (8) Romex knockouts. Strain clamps to install or remove covers for easy access and ground wire. Equipped with safety standard die-cast aluminum fitting for flex-conduit.

Insulation Contact: Non-IC rated housing must be kept 3" from insulation. IC rated option rated for direct insulation contact.

Caution: LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty. (+1KV)

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 the exposed integral aluminum heat sink to maximize heat rejection 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.

Trim: Frosted Polycarbonate Lens pre-installed on reflector unifies diode sources and protects diodes from dust and particles from front of aperture.

Airflow: Airtight 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).



COMPATIBILITY



VR800
OUTDOOR VANDAL RESISTANT CEILING /WALL KIT

Note: Wattage limitations on compatible items must be met.

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.

Safety Labels: ETL/cETL listed to UL1598 and UL8750. Suitable for dry, damp and wet locations. NYC approved: Calendar #41937.

Reflector Finish: Available in All Black.

Color Temperature: LED color temperature is verified as 585nm minimum and 595nm maximum.

Benefits:

- 590nm AMBER Turtle Safe
- Ready2Ship - Ships Same Day
- Heavy Duty Self-Flanged Reflector
- Soft Even Lumen Distribution
- 90CRI Standard
- No Visible Screws or Hardware

Turtle Safe Requirements:

LOW: The product is designed for low to medium ceiling heights and delivered lumen output is sufficient to produce enough footcandles to satisfy building codes but not overpower the environment with excessive lumen output.

SHIELDED: The trim is deeply recessed and provides a minimum of 50° of glare cutoff. The trim reflector color is black to limit reflections. The beam spread is tightly controlled.

LONG: LED color is verified as 585nm minimum and 595nm maximum.

2025.11.06

FEATURE:



ORDERING EXAMPLE : CH810UE-D10/CR8L22BBF-TAM

CH810	IC OPTION	CONTROL	EMERGENCY OPTIONS	REFLECTOR FINISH	REFLECTOR OPTION	COLOR TEMPERATURE	OPTIONS
CH810 :300lm (10W)	Blank :Non-IC	Blank :Non-Dimming (120V)	Blank :None	/CR8L22BBF :All Black	Blank :None	-TAM :590nm AMBER	Blank :None
CH818 :500lm (15W)	ICA :ICA Rated ³	UE-DUN :UniDim™ 0-10V, TRIAC/ELV Dimming (120V/277V)	EM :10W Emergency Battery		EMA :Integral EM-Switch ¹		CT4 :.4.5" Ceiling Thickness
CH828 :600lm (22W)		-DIN :TRIAC/ELV Dimming (120V)	EMAC :Full Power Emergency Inverter ²				
			EMAC347 :Full Power Emergency Inverter (347W) ²				
			GTD :GTD Device				

¹ Only available for EM Housings. ² Check wiring diagram. ³ (ICA) is only available on CH810 and CH818. (CH828 are Non-IC rated.)



CH8 - 8" C-SERIES

LED DOWNLIGHT NEW CONSTRUCTION 300LM - 600LM (10W-22W) AMBER (TURTLE SAFE)

FULL POWER EMERGENCY INVERTER (-EMAC or -EMAC347): 10W - 22W

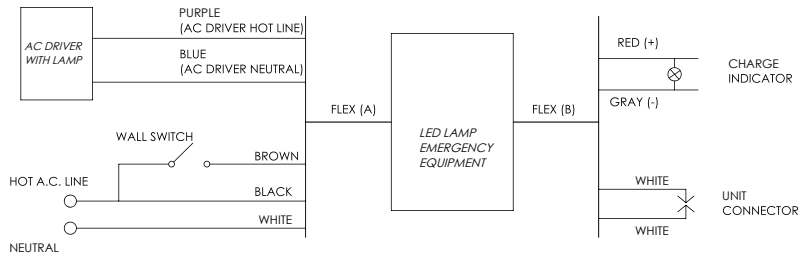
- Must be installed in Dry Locations
- Wattage package will determine battery sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

Not rated for outdoor mounting. Damp location rated.

-EMAC Lumen Data (Battery)

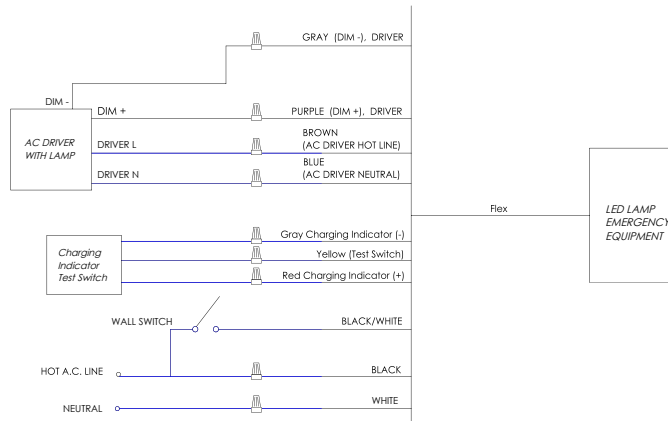
Fixture/Trim	CH810	Fixture/Trim	CH818	Fixture/Trim	CH828
Fixture Wattage:	10W	Fixture Wattage:	15W	Fixture Wattage:	22W
Fixture Lumens:	300	Fixture Lumens:	500	Fixture Lumens:	600
EM Lumens:	600	EM Lumens:	500	EM Lumens:	600

<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:	28W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

CH8 - 8" C-SERIES

LED DOWNLIGHT NEW CONSTRUCTION 300LM - 500LM (10W-22W) AMBER (TURTLE SAFE)

EMERGENCY BATTERY (-EM): 10W

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

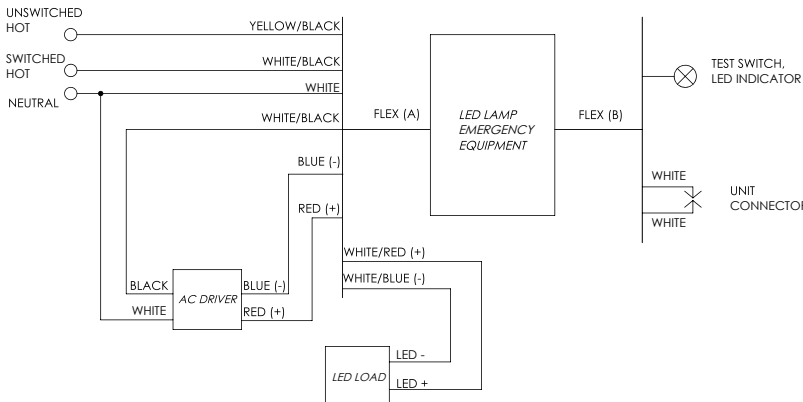
Not rated for outdoor mounting. Damp location rated.

-EM Lumen Data (Battery)

Fixture/Trim	CH810
Fixture Wattage:	10W
Fixture Lumens:	300
Multiplier:	1
EM Lumens:	300

Fixture/Trim	CH818
Fixture Wattage:	15W
Fixture Lumens:	500
Multiplier:	0.67
EM Lumens:	330

Fixture/Trim	CH828
Fixture Wattage:	22W
Fixture Lumens:	600
Multiplier:	0.45
EM Lumens:	270



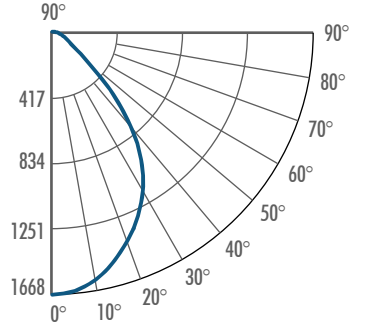
Input Voltage:	120-277VAC/60Hz
Output Voltage:	10W
Wattage:	10W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	No

LUMENS PACKAGE :	1000lm	1500lm	2200lm
SYSTEM POWER :	10W	18W	28W

CH828UE-D10/CR8L22SW-T40 (2200lm, 28W)

System Power	:31.7W	CCT Multipliers	
Test Date	:8/21/2019	4000K	1.00
Beam Angle 50%	:77.3°	3500K	0.94
Field Angle 10%	:112.5°	3000K	0.94
Color Temperature	:4273K	Lumen Multipliers	
CRI	:88.6	1000lm	0.39
R9 Value	:37.9	1500lm	0.59
Lumens Delivered	:2546lm		
CBCP	:1688cd		
Power Factor	:0.86		

CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8'	12.8'	26.1
10'	16.0'	16.7
12'	19.2'	11.6
14'	22.4'	8.5
16'	25.6'	6.5