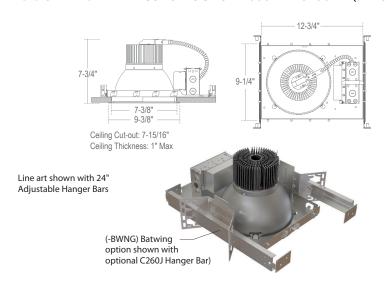
CATALOG#

## CH8:8"C-SERIES

## LED DOWNLIGHT NEW CONSTRUCTION 1000LM - 6200LM (9W-55W)

























- · Twist and lock reflector for quick access to LED lamp array
- · Heavy-duty self-flanged reflector
- · Soft even lumen distribution
- · No visible screws or hardware

## ORDERING: CH810ICAUE-D10-EM-CHP-BWNG/CR8L22SW-EMA-T30

CH8xx						/	<i></i>						
Housing	Insula		Oriver ptions	Emergency Options	J-Bo:	x Mounting <b>'</b>	Reflect		eflector Finish	Reflecto Options			
	Но	ousing <sup>1</sup>		Reflect	or <sup>1</sup>	Reflecto	r Finish		Re	flector C	ptions	CCT	
1000lm (9	W)	CH808	[Option	ns] /CR8L2	2	Satin Haze Ref	flector/	SW	None		Blank	2700K (84 CRI)	-T27°
2000lm (1	17W)	CH810	[Option	ns] <b>/CR8L2</b>	2	White Finish			Integ	ral EM	-EMA <sup>3</sup>	3000K (84 CRI)	-T30
2400lm (2	22W)	CH818	[Option	ns] /CR8L2		White Reflecto	or/	ww	Switc	h		3500K (84 CRI)	-T35
2900lm (2	28W)	CH828	[Option	ns] /CR8L2	_	White Finish						4000K (84 CRI)	-T40
3300lm (3	32W)	CH829	[Option	ns] /CR8L3	U	All Black		BB				5000K (84 CRI)	-T50 <sup>10</sup>
3800lm (3	35W)	CH838	[Option	ns] /CR8L3	•	Clear Specular Reflector/Whit		CW					
4100lm (3	39W)	CH839	[Option	ns] /CR8L3	6		ermism						
4800lm (4	18W)	CH848	[Option	ns] /CR8L3	6	All Satin Haze		SS					
5300lm (5	55W)	CH850 <sup>8</sup>	[Option	ns] /CR8L4	0								
5600lm (4	15W)	CH855	[Option	ns] /CR8L5	3								
6200lm (5	50W)	CH860	[Option	ns] /CR8L6	0								

Insulation Contact	Driver Op	otions <sup>2</sup>	Emergency Op	tions	J-Box		Mount	ing
Non-IC <b>Blank</b> ICA Rated <b>ICA</b> <sup>5</sup>	0-10V Dimming UniDim™ 0-10V ELV and Triac Dimming		Blank EM	None Junction Box (Chicago Plenum	Blank -CHP	24" Adjustable Architectural C-Channel	Blank -BWNG <sup>4</sup>	
	120V ELV and Triac Dimming	-DIN	Remote Locator Emergency System	-EMAC <sup>7</sup>				
	Lutron HighLume Lutron EcoSystem 347V 0-10V Dimming (1%)	UE-DHL UE-ECO -347 <sup>6</sup> UE-D10P1	GTD Device	-GTD				

- <sup>1</sup> Housing must match corresponding Reflector in column to right.

  2 All drivers are 120V/277V unless otherwise noted.
- <sup>3</sup> Only available for EM Housings.

**Options** 

- 4 (-BWNG) option does **NOT** include Hanger Bars. Hanger Bars ordered separately.
- <sup>5</sup> (ICA) is only available for CH808, CH810 and CH818.
- \* (ICA) is only available for CH808.

  7 (-EMAC) Check Wiring Diagrams.

  8 CH850/CR8L40 only available with UE-D10, UE-D10P1 and -347 dimming options.
- 9 (-T27) not available for CH860/CR8L60. <sup>9</sup>(-12/) not available for CH855/CR8L53 and CH860/CR8L60.

### **COMPATABILITY**

Round Vandal Resistant Kit for 8"



P-CR872SW Wall Wash for 8"







## CH8:8" **C**·S∈RIES LED DOWNLIGHT NEW CONSTRUCTION 1000LM - 6200LM (9W-55W)

## **SPECIFICATION**

Application	
	Architectural/Commercial-grade recessed lensed LED downlight housing for medium to high ceilings in commercial and architectural spaces.
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. Setscrews 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 <b>NOT included</b> with (-BWNG) option, and must be ordered separately.
Driver	
	120V/277V AC 50/60Hz Electronic Direct Current Class 2. Input current 0.50 Amps at 115VAC. Power Factor $>$ 0.90. Operating Temperature: $-20^{\circ}$ C to $+50^{\circ}$ C $/$ $-4^{\circ}$ F to $+131^{\circ}$ F. Accessible from above or below ceiling.
	(UE-D10) 0-10V dimming works with most 5-wire, 0-10V dimmers. Factory qualified for use with Leviton IP710-DLZ.
	(UE-DUN) Uni-Dim <sup>™</sup> dimming option is a universal dimming system that works with most 3-wire ELV, 2-wire incandescent and 120V/277V 5-wire 0-10V fluorescent dimmers.
	(-DIN) dimming option smoothly dims down to 5% of initial light output with flicker-free performance. Works with standard 120V incandescent dimmers.

(UE-ECO) Works with Lutron EcoSystem digital controls. Precision microprocessor control and integral thermal management deliver energy savings and extended product life.

(UE-DHL) Lutron HiLume is a 3-wire driver that that provides smooth, continuous 1% dimming

(-347) is a 0-10V driver that takes 347V input.

for virtually any LED fixture.

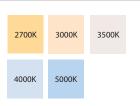
(UE-D10P1) 0-10V dims down to 1% and works with most 120V/277V, 5-wire, 0-10V dimmers.



## CH8:8"C-SERIES LED DOWNLIGHT NEW CONSTRUCTION 1000LM - 6200LM (9W-55W)

## SPECIFICATION (Continued)

#### **Color Temperature**



Available in 2700K, 3000K, 3500K, 4000K and 5000K.

#### **Insulation Contact**

Non-IC rated housing must be kept 3" from loose-fill insulation. IC-Rated/Airtight (ICA) option is for direct insulation contact.

#### **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. IC Option thermally engineered to ensure stated L70 LED life without the need for external box. The recommended ambient temperature should be below 35°C to achieve a minimum L70 life of 50,000 hours according to the LM80 standard.

#### 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 12W emergency backup (UE-D10-EM).

## **Reflector Finish**

1-piece, self-flanged, dual reflector LED design enables 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, Clear Specular Reflector White Finish, 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.



## CH8:8" **C**·S∈RIES LED DOWNLIGHT NEW CONSTRUCTION 1000LM - 6200LM (9W-55W)

## **SPECIFICATION** (Continued)

Airflow	
Airiiow	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.
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.
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.
Energy Star Qualified Items	
	/CR8L54SW-T30 /CR8L54SW-T35 /CR8L54SW-T40
Emergency Options	
	Emergency LED Battery Back-up available, remotely mounted adjacent to housing by installer. When AC power fails, in the event of a power failure, the device immediately switches to the emergency mode, and operates the existing fixture for 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).



# CH8:8"C-SERIES

LED DOWNLIGHT NEW CONSTRUCTION 1000LM - 6200LM (9W-55W)

## **SPECIFICATION (Continued)**

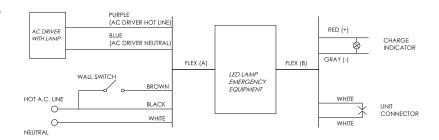
### Remote Emergency Back Up (-EMAC)

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

- Hidden Emergency Equipment
- Must be installed in Dry Locations

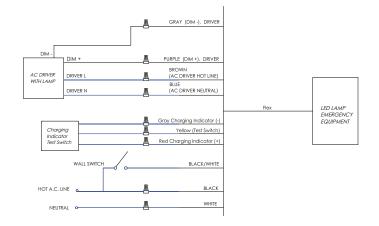
Not rated for outdoor mounting. Damp location rated.

#### <25W LOAD



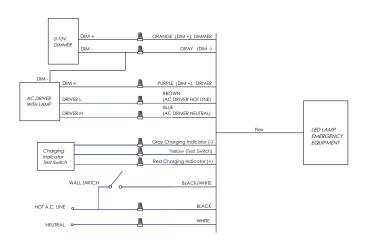
Input Voltage:	120-277VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	25W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Maximum Lumens:	2200lm

#### <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

#### >40W LOAD





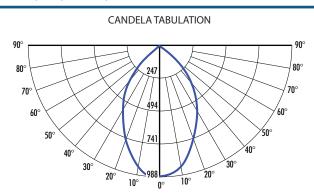
# CH8:8"C-SERIES

LED DOWNLIGHT NEW CONSTRUCTION 1000LM - 6200LM (9W-55W)

## **PHOTOMETRY**

### CH808UE-D10\_CR8L22CW-T40 (1000lm, 9W, 4000K)

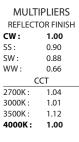
		MILLE	DI IEDC		
System Power:	11W		MULTIPLIERS		
Test Date:	09/2023	REFLECTOR FINIS			
Poam Anglo F00/.	67.4°	CW:	1.00		
Beam Angle 50%:	07.4	SS:	0.90		
Field Angle 10%:	102.6°	SW:	0.88		
Color Temperature:	3866K	WW:	0.66		
•		CCT			
CRI:	82.9	2700K:	1.04		
Lumens Delivered:	1150	3000K:	1.01		
CBCP:	988.4	3500K:	1.12		
		4000K:	1.00		
Power Factor:	0.99				

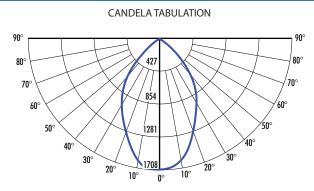


ANDLE DISTRIBUTION	
Beam Diameter	FC
16.01	6.82
18.67'	5.01
21.34'	3.84
24.01'	3.03
26.68'	2.46
	16.01' 18.67' 21.34' 24.01'

## CH810UE-D10\_CR8L22CW-T40 (2000lm, 17W, 4000K)

c . D	47144	MU
System Power:	17W	
Test Date:	09/2023	REFL
Beam Angle 50%:	67.8°	CW: SS:
Field Angle 10%:	102.8°	SW:
Color Temperature:	3889K	WW:
CRI:	82.5	2700k
Lumens Delivered:	1998	3000k
CBCP:	1707.1	3500k
Power Factor:	0.99	4000

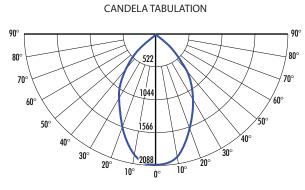




Height	Beam Diameter	FC
12.0'	16.13'	11.84
14.0'	18.82'	8.70
16.0'	21.50'	6.66
18.0'	24.19'	5.26
20.0'	26.89'	4.26

## CH818UE-D10\_CR8L22CW-T40 (2400lm, 22W, 4000K)

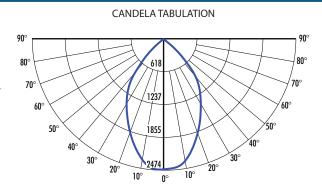
System Power:	22W	MULTIPLIERS		
Test Date:	09/2023		OR FINISH	
Beam Angle 50%:	67.8°	CW: SS:	<b>1.00</b> 0.90	
Field Angle 10%:	102.9°	SW:	0.88	
Color Temperature:	3902K	WW:	0.66	
CRI:	82.4	ССТ		
		2700K:	1.04	
Lumens Delivered:	2445	3000K:	1.01	
CBCP:	2086.1	3500K:	1.12	
Power Factor:	0.99	4000K:	1.00	



FOOTCAN	DLE DISTRIBUTION	
Height	Beam Diameter	FC
12.0'	16.13	14.47
14.0'	18.82'	10.63
16.0'	21.50'	8.14
18.0'	24.19'	6.43
20.0'	26.88'	5.21

## CH828UE-D10\_CR8L22CW-T40 (2900lm, 28W, 4000K)

System Power:	28W		PLIERS	
Test Date:	09/2023	REFLECTOR FINISH		
Beam Angle 50%:	67.8°	CW: SS:	<b>1.00</b> 0.90	
Field Angle 10%:	102.9°	SW:	0.88	
Color Temperature:	3917K	WW:	0.66	
CRI:	82.2	CCT		
		2700K:	1.04	
Lumens Delivered:	2897	3000K:	1.01	
CBCP:	2471.7	3500K:	1.12	
Power Factor:	0.99	4000K:	1.00	

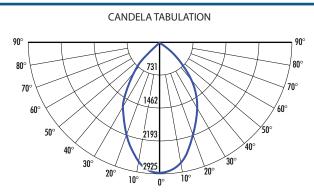


CANDLE DISTRIBUTION	
Beam Diameter	FC
16.13'	17.15
18.82'	12.60
21.50'	9.65
24.19'	7.62
26.89'	6.17
	Beam Diameter  16.13¹  18.82¹  21.50¹  24.19¹

## PHOTOMETRY (Continued)

## CH829UE-D10\_CR8L36CW-T40 (3300lm, 32W, 4000K)

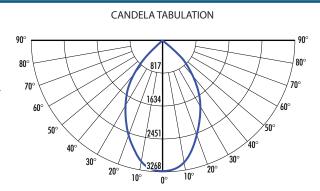
		MULTI	PLIFRS	
System Power:	31W			
Test Date:	09/2023	REFLECTO		
Danie Anala 500/	67.5°	CW:	1.00	
Beam Angle 50%:	07.5	SS:	0.90	
Field Angle 10%:	102.4°	SW:	0.88	
Color Temperature:	3911K	WW:	0.66	
•	22.4	CCT		
CRI:	82.4	2700K:	1.04	
Lumens Delivered:	3361	3000K:	1.01	
CBCP:	2922	3500K:	1.12	
Power Factor:	0.99	4000K:	1.00	



FOOTCAN	IDLE DISTRIBUTION	
Height	Beam Diameter	FC
12.0'	16.04¹	20.28
14.0'	18.71'	14.90
16.0'	21.38'	11.41
18.0'	24.05'	9.01
20.0'	26.73'	7.30

## CH838UE-D10\_CR8L36CW-T40 (3800lm, 35W, 4000K)

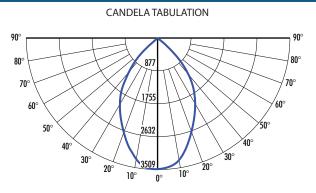
System Power:	36W	MULTIPLIER		
Test Date:	09/2023		OR FINISH	
Beam Angle 50%:	68.2°	CW:	1.00 0.90	
Field Angle 10%:	103.0°	SW:	0.88	
Color Temperature:	3924K	WW:	0.66	
CRI:	82.4	C	CT	
		2700K:	1.04	
Lumens Delivered:	3852	3000K:	1.01	
CBCP:	3265.4	3500K:	1.12	
Power Factor:	0.99	4000K:	1.00	



FOOTCAN	IDLE DISTRIBUTION	
Height	Beam Diameter	FC
12.0'	16.25	22.66
14.0'	18.96'	16.65
16.0'	21.67'	12.75
18.0'	24.37'	10.07
20.0'	27.08'	8.16

## CH839UE-D10\_CR8L36CW-T40 (4100lm, 39W, 4000K)

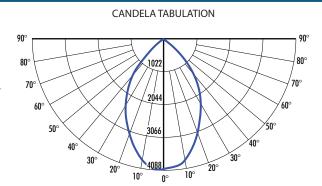
		MALIT	חוודת	
System Power:	39W	MULTIPLIERS		
Test Date:	09/2023	REFLECTO	OR FINISH	
Beam Angle 50%:	68.2°	CW:	1.00 0.90	
Field Angle 10%:	103.1°	SW:	0.88	
Color Temperature:	3920K	WW:	0.66	
CRI:	82.3	CCT		
CKI:	02.3	2700K:	1.04	
Lumens Delivered:	4137	3000K:	1.01	
CBCP:	3506.4	3500K:	1.12	
Power Factor:	0.99	4000K:	1.00	



FOOTCANE	OLE DISTRIBUTION	
Height	Beam Diameter	FC
12.0'	16.25'	24.34
14.0'	18.96'	17.88
16.0'	21.67'	13.69
18.0'	24.37'	10.82
20.0'	27.08'	8.76

## CH848UE-D10\_CR8L36CW-T40 (4800lm, 48W, 4000K)

System Power:	48W	MUITI	PLIERS	
,		REFLECTOR FINISH		
Test Date:	09/2023	CW: 1.00		
Beam Angle 50%:	68.2°	SS:	0.90	
Field Angle 10%:	103.0°	SW:	0.88	
Color Temperature:	3938K	WW:	0.66	
CRI:	82.2	CCT		
		2700K:	1.04	
Lumens Delivered:	4818	3000K:	1.01	
CBCP:	4084	3500K:	1.12	
Power Factor:	0.99	4000K:	1.00	



ANDLE DISTRIBUTION	
Beam Diameter	FC
16.25	28.34
18.96'	20.82
21.67'	15.94
24.37'	12.59
27.08'	10.20
	16.25° 18.96° 21.67° 24.37°



# CH8:8"C-SERIES

LED DOWNLIGHT NEW CONSTRUCTION 1000LM - 6200LM (9W-55W)

## PHOTOMETRY (Continued)

## CH850UE-D10\_CR8L40CW-T40 (5300lm, 55W, 4000K)

System Power:	53W	MULTIPLIERS	CANDELA TABULATION	FOOTCAN	DLE DISTRIBUTION	
Beam Angle 50%: Field Angle 10%: Color Temperature: CRI: Lumens Delivered: CBCP:	09/2023 67.9° 102.6° 3929K 83.5 5300 4540.4 0.99	REFLECTOR FINISH CW: 1.00 SS: 0.90 SW: 0.88 WW: 0.66 CCT 2700K: 1.04 3000K: 1.01 3500K: 1.12 4000K: 1.00	90° 80° 70° 60° 40° 30° 20° 40° 30° 20° 10° 20° 30° 20° 20° 30° 20° 30°	Height  12.0' 14.0' 16.0' 18.0' 20.0'	16.16' 18.85' 21.54' 24.24' 26.93'	31.33 23.17 17.74 14.01 11.35

## CH855UE-D10\_CR8L53CW-T40 (5600lm, 45W, 4000K)

System Power:	42W	MULTIPLIERS	CANDELA TABULATION	FOOTCA	NDLE DISTRIBUTION	
Test Date: Beam Angle 50%: Field Angle 10%:	09/2023 68.9° 103.6°	REFLECTOR FINISH <b>CW:</b> 1.00  SS: 0.90  SW: 0.88	90°	Height	Beam Diameter	FC
Color Temperature:		WW: 0.66		12.0'	16.46	32.42
CRI:	83.4	CCT 2700K: 1.04	70°	14.0'	19.21'	23.82
Lumens Delivered:	5610	3000K: 1.01	60°	16.0'	21.95'	18.24
CBCP:	4672.3	3500K: 1.12	50°			
Power Factor:	0.99	4000K: 1.00	350/	18.0'	24.70'	14.41
			40° 30° 40°	20.0'	27.44'	11.67
			20° 10° 0° 10° 20°			

## CH860UE-D10\_CR8L60CW-T40 (6200lm, 50W, 4000K)

System Power: 49W MULTIPLIERS CANDELA TABULATION FOUTCH	ANDLE DISTRIBUTION	
Test Date: 09/2023	16.28' 18.99' 21.71' 24.42' 27.13'	36.12 26.54 20.32 16.05