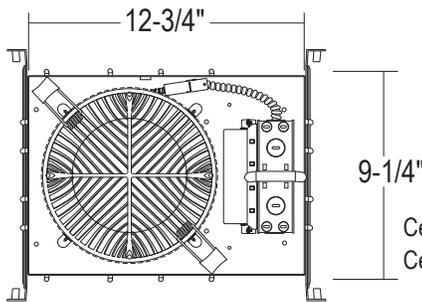
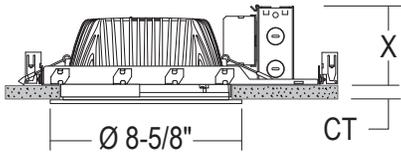


CH8SHL : 8" C-SERIES

SUPER LOW GLARE, SHALLOW LED NEW CONSTRUCTION
 1100LM - 3000LM (10W-30W)



Ceiling Thickness (CT) = 1-1/2" (Max.)
 Ceiling Cut-Out: 7-15/16"



- Deeply recessed lens and 67.5° visual cutoff for reduced glare
- Shallow 3-7/8" depth for ceilings with minimal plenum air-space
- Non-conductive dead-front flanged option (-LENS) for wet locations
- 83 CRI

ORDERING : CH8SHL10UE-D10/CR8SHL30SW-T30

CH8SHL	Insulation Contact	Driver Options	Emergency Options	J-Box	Reflector Finish	CCT	Options
Lumens	Insulation Contact			J-Box		CCT	
	Non-IC Blank			Standard Blank		3000K -T30	
	ICA Rated/Airtight ICA³			Junction Box (Chicago Plenum) -CHP		3500K -T35	
						4000K -T40	
Lumens							
1100lm (10W) CH8SHL10							
1500lm (14W) CH8SHL12							
2000lm (20W) CH8SHL17							
3000lm (30W) CH8SHL24							
Driver Options ¹		Emergency Options		Reflector Finish		Options	
0-10V Dimming UE-D10		None Blank		Satin Haze Reflector /CR8SHL30SW		None Blank	
UniDim™ 0-10V ELV and Triac Dimming UE-DUN		Remote Location -EM		/White Finish		Lens for wet locations w/ 60° Beam Spread -LENS60	
120V ELV and Triac Dimming -DIN		Emergency Battery		White Reflector /CR8SHL30WW		Lens for wet locations w/ 110° Beam Spread -LENS110	
Lutron Hi-lume UE-DHL		Remote Location Emergency Inverter -EMAC⁴		/White Finish			
Lutron EcoSystem UE-ECO		Generator Transfer Device -GTD		All Black /CR8SHL30BB²			
347V, 0-10V Dimming -347-D10²				All Satin Haze /CR8SHL30SS²			
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 Extended Lead Time. Consult Factory.
³ ICA is NOT available for CH8SHL24.
⁴ Check wiring diagram.

SPECIFICATION

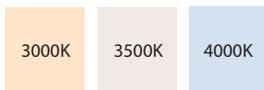
Application

Architectural/Commercial-grade super-low glare, shallow recessed lensed LED luminaire is for new construction projects where there is minimal plenum air-space in ceiling. Deeply recessed lens provides reduced glare and visual comfort.

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 3000K, 3500K, 4000K, 83 CRI.

Insulation Contact

CH8SHL10, CH8SHL12, and CH8SH1L7 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.

Reflector

Frosted polycarbonate lens pre-installed on reflector unifies diode sources and protects diodes from dust and particles from front of aperture.

Reflector Finish

1-piece, self-flanged 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, and All Satin Haze.

SPECIFICATION (Continued)**Non-Conductive Dead-Front Flange**

(-LENS60) and (-LENS110) options feature non-conductive dead-front flange for wet locations.

Junction Box

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).

Air Flow

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.

Certifications and Listings



cETLus listed. Suitable for dry and damp locations with wet location options available. 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.

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)

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.

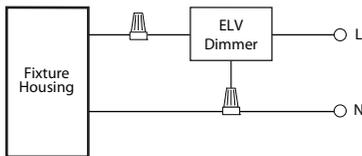
0-10V Driver 120V/277V (UE-D10):

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.

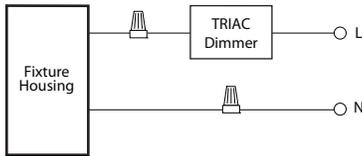
UniDim™ Driver 120V/277V (UE-DUN):

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.

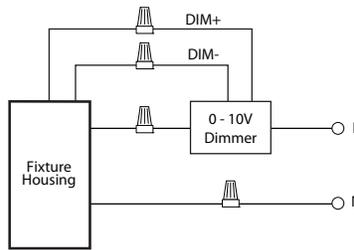
Incandescent/Phase Wiring
ELV



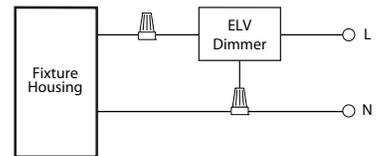
TRIAC



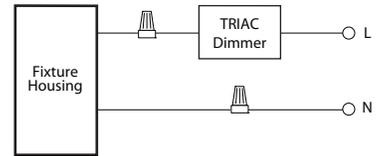
0 - 10V Wiring



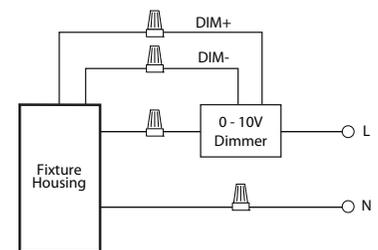
Incandescent/Phase Wiring
ELV



TRIAC



0 - 10V Wiring



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

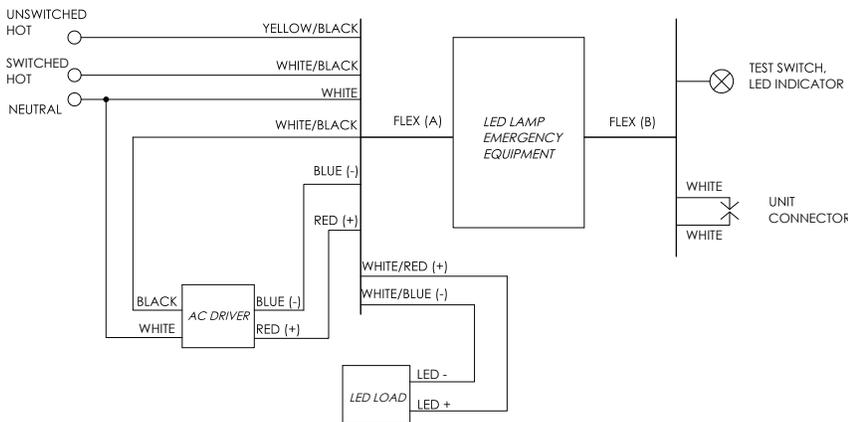
Emergency LED Battery Back-up available, remotely mounted adjacently by the installer. When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the 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)

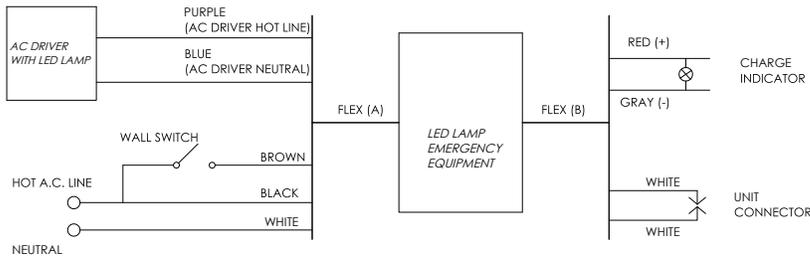
REMOTE LOCATION EMERGENCY INVERTER (-EMAC): 25W and 40W

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

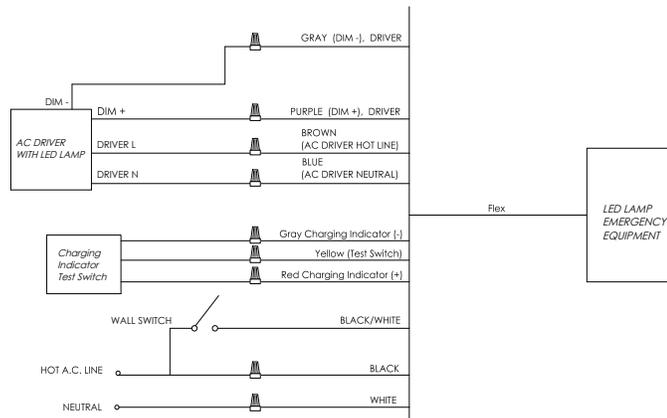
Not rated for outdoor mounting. Damp location rated.

<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

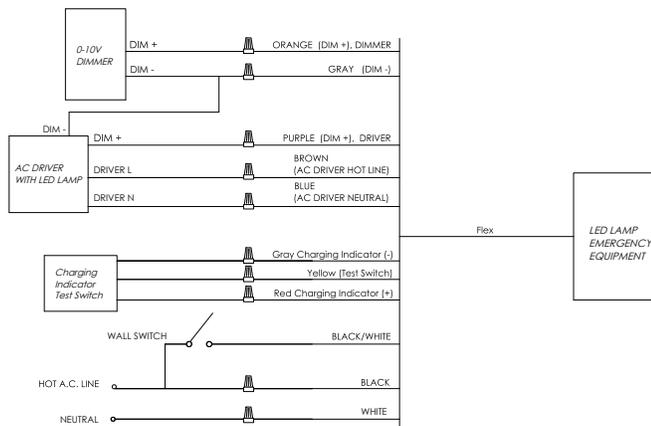
<40W LOAD



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

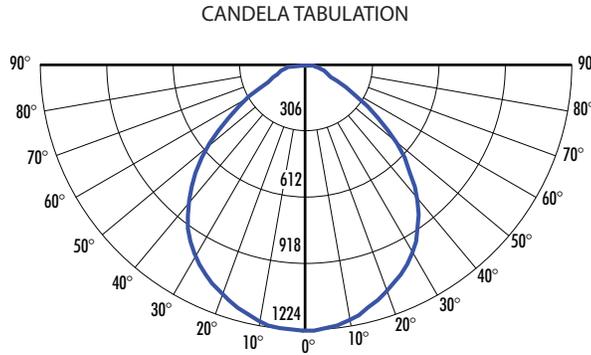


PHOTOMETRY

CH8SHL24UE-D10_CR8SHL30WW-T40 (3000lm, 30W, 4000K)

System Power: 29W
Test Date: 10/2023
Beam Angle 50%: 96.4°
Field Angle 10%: 144.5°
Color Temperature: 3997K
CRI: 83.3
Lumens Delivered: 2766
CBCP: 1224
Power Factor: 0.99

MULTIPLIERS	
CCT	
3000K:	0.93
3500K:	1.04
4000K:	1.00
Lumen Package	
1100lm:	0.40
1500lm:	0.54
2000lm:	0.75
3000lm:	1.00
Lens	
Blank:	1.00
LENS60:	1.09
LENS110:	1.12



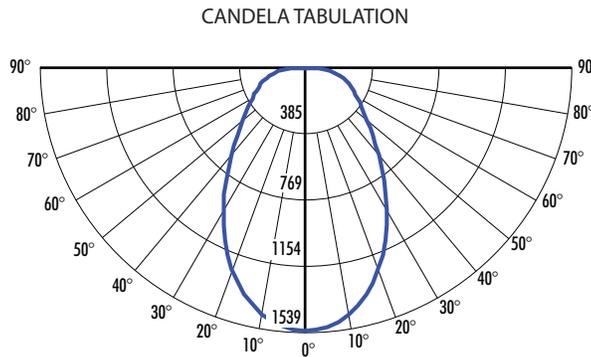
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
10.0'	22.37'	12.24
12.0'	26.84'	8.50
14.0'	31.32'	6.25
16.0'	35.79'	4.78
18.0'	40.26'	3.78
20.0'	44.74'	3.06

CH8SHL24UE-D10_CR8SHL30WW-T40-LENS60 (3000lm, 30W, 60°, 4000K)

System Power: 29W
Test Date: 10/2023
Beam Angle 50%: 72.6°
Field Angle 10%: 163.9°
Color Temperature: 4054K
CRI: 83.4
Lumens Delivered: 3020
CBCP: 1539
Power Factor: 0.99

MULTIPLIERS	
CCT	
3000K:	0.93
3500K:	1.04
4000K:	1.00
Lumen Package	
1100lm:	0.40
1500lm:	0.54
2000lm:	0.75
3000lm:	1.00
Lens	
Blank:	1.00
LENS60:	1.09
LENS110:	1.12



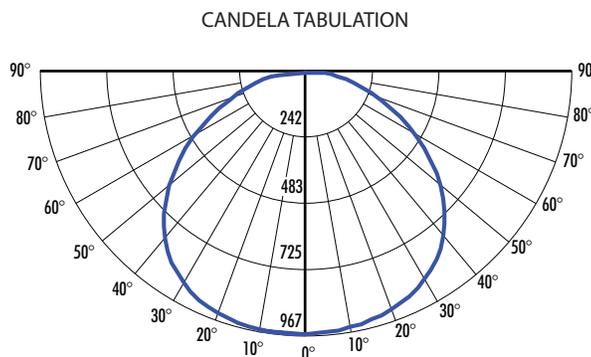
FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
10.0'	14.69'	15.39
12.0'	17.63'	10.69
14.0'	20.57'	7.85
16.0'	23.51'	6.01
18.0'	26.44'	4.75
20.0'	29.38'	3.85

CH8SHL24UE-D10_CR8SHL30WW-T40-LENS110 (3000lm, 30W, 110°, 4000K)

System Power: 29W
Test Date: 10/2023
Beam Angle 50%: 119.2°
Field Angle 10%: 170.1°
Color Temperature: 4058K
CRI: 83.3
Lumens Delivered: 3097
CBCP: 967
Power Factor: 0.99

MULTIPLIERS	
CCT	
3000K:	0.93
3500K:	1.04
4000K:	1.00
Lumen Package	
1100lm:	0.40
1500lm:	0.54
2000lm:	0.75
3000lm:	1.00
Lens	
Blank:	1.00
LENS60:	1.09
LENS110:	1.12



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
10.0'	34.09'	9.66
12.0'	40.91'	6.71
14.0'	47.72'	4.93
16.0'	54.54'	3.77
18.0'	61.36'	2.98
20.0'	68.18'	2.42

2023.10.17