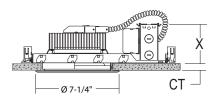
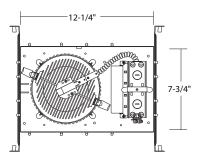
**TYPE** 

# CH6SHL:6"C·S∈RI

SUPER LOW GLARE - SHALLOW LED NEW CONSTRUCTION 1000LM-1800LM (10W-20W)



X = 3-7/16" (frame bottom to fixture top)





Ceiling Thickness (CT): 1-1/2" Max Ceiling Cut-Out: 6-1/2"

















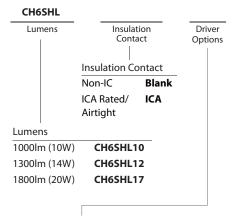


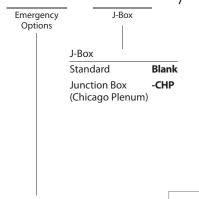




- Deeply recessed lens and 65.5° visual cutoff for reduced glare
- Shallow 3-5/8" depth for ceilings with minimal plenum air-space
- Non-conductive dead-front flanged option (-LENS) for wet locations
- 83 CRI

# ORDERING: CH6SHL10UE-D10/CR6SHL24SW-T30





Reflector Finish	CC	T -	Options
	ССТ		
	3000K	-TS30	
	3500K	-TS35	
	4000K	-TS40	
	ColorSelect 3000K/3500K /4000K	-TS354	

Driver Options <sup>1</sup>	
0-10V Dimming	UE-D10
UniDim <sup>™</sup> 0-10V ELV and Triac Dimming	UE-DUN
120V ELV and Triac Dimming	-DIN
Lutron Hi-lume	UE-DHL
Lutron EcoSystem	UE-ECO
347V, 0-10V Dimming	-347-D10 <sup>2</sup>
0-10V Dimming (1%)	UE-D10P1
Athena Wireless Node	-AWN
Athena Wireless Node	-AWN-OCC
Occupancy Sensor	

<b>Emergency Options</b>	
None	Blank
Remote Location Emergency Battery	-EM
Remote Location Emergency Inverter	-EMAC³
Generator Transfer Device	-GTD

•	Satin Haze Reflector /White Finish	/CR6SHL24SW
	White Reflector /White Finish	/CR6SHL24WW
	All Black	/CR6SHL24BB²
	Clear Specular Reflector /White Ring	/CR6SHL24SS <sup>2</sup>

Reflector Finish

None	Blank
Lens for wet locations w/ 60° Beam Spread	-LENS60
Lens for wet locations w/ 110° Beam Spread	-LENS11

- <sup>1</sup> All drivers are 120V/277V unless otherwise noted.
- <sup>2</sup> Extended Lead Time. Consult Factory.
- <sup>3</sup> Check wiring diagram.





# |CH6SHL:6"C·SERIES

SUPER LOW GLARE - SHALLOW LED NEW CONSTRUCTION 1000LM-1800LM (10W-20W)

# **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)	
3000K 3500K 4000K	Available in 3000K, 3500K, 4000K, 83 CRI, and ColorSelect 3000K, 3500K, 4000K.
Insulation Contact	
	CH6SHL10, CH6SHL12, and CH6SH1L7 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 refl ector unifi es diode sources and protects diodes from dust and particles from front of aperture.
Reflector Finish	
	1-piece, self-fl anged LED design enables a clean trim fi nish 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.



# CH6SHL: 6" C·SERIES

# SUPER LOW GLARE - SHALLOW LED NEW CONSTRUCTION 1000LM-1800LM (10W-20W)

## 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) refl ector design is designed to restrict air fl ow 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 wirless 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 lmits for a Class B digital device
- · ANSI C1371.1 0-10V Electronic Off
- D4i certified
- IC (Industry Canda)
- Supports DALI-2 Type 8 tuneable-white color temperature Tc applications IEC62386-209 ed.1



# CH6SHL:6"C·SERIES

SUPER LOW GLARE - SHALLOW LED NEW CONSTRUCTION 1000LM-1800LM (10W-20W)

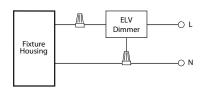
## SPECIFICATION (Continued)

## **Dimming Options**

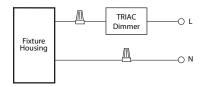
#### **ELV and TRIAC Driver 120V (-DIN):**

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.

#### Incandescent/Phase Wiring ELV



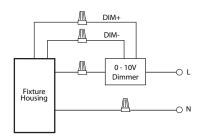
TRIAC



#### 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.

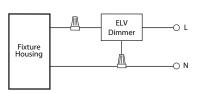
0 - 10V Wiring



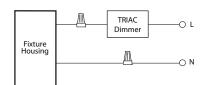
#### UniDim™ Driver 120V/277V (UE-DUN):

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.

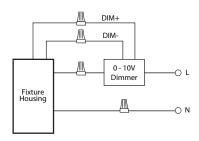
#### Incandescent/Phase Wiring ELV



#### TRIAC



### 0 - 10V Wiring





# CH6SHL:6"C·SERIES

SUPER LOW GLARE - SHALLOW LED NEW CONSTRUCTION 1000LM-1800LM (10W-20W)

# 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**

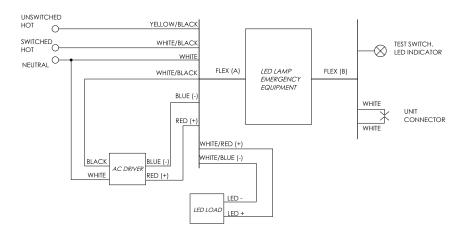
Emergency LED Battery Back-up available, remotely mounted adjacently by the installer. When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the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



# |CH6SHL:6"C·SERIES

SUPER LOW GLARE - SHALLOW LED NEW CONSTRUCTION 1000LM-1800LM (10W-20W)

# SPECIFICATION (Continued)

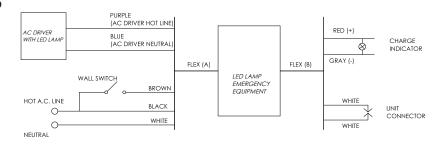
## REMOTE LOCATION EMERGENCY INVERTER (-EMAC): 25W and 40W

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

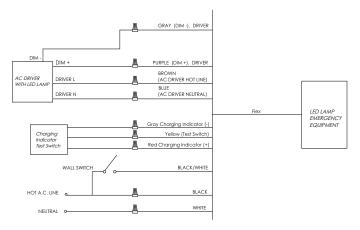
## Not rated for outdoor mounting. Damp location rated.

### <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

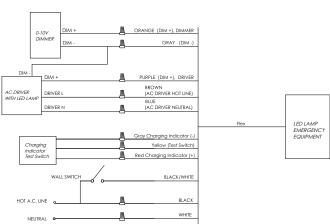
## <40W LOAD



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





# CH6SHL:6"C·SERIES

SUPER LOW GLARE - SHALLOW LED NEW CONSTRUCTION 1000LM-1800LM (10W-20W)

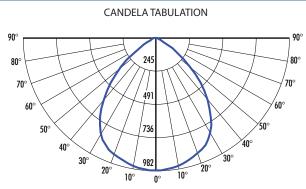
## **PHOTOMETRY**

## CH6SHL17UE-D10\_CR6SHL24SW-TS40 (1800lm, 20W, 4000K)

System Power:	20W
Test Date:	10/2023
Beam Angle 50%:	88.3°
Field Angle 10%:	123.1°
Color Temperature:	3957K
CRI:	83.0
Lumens Delivered:	1832
CBCP:	982
Power Factor:	1.00



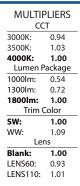
IENS110: 1.01

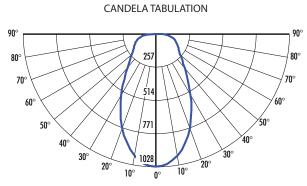


FOOTCAN	DLE DISTRIBUTION	
Height	Beam Diameter	FC
8.0'	15.53	15.34
10.0'	19.42'	9.82
12.0'	23.30'	6.82
14.0'	27.18'	5.01
16.0'	31.06'	3.83

## CH6SHL17UE-D10\_CR6SHL24SW-TS40-LENS60 (1800lm, 20W, 60°, 4000K)

System Power:	20W
Test Date:	10/202
Beam Angle 50%:	61.8°
Field Angle 10%:	160.7°
Color Temperature:	4072K
CRI:	83.0
Lumens Delivered:	1712
CBCP:	1028
Power Factor:	1.00





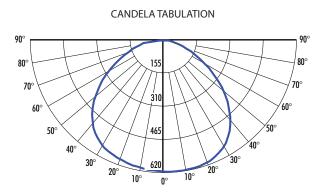
Beam Diameter	FC
<u> </u>	
9.58'	16.06
11.97′	10.28
14.36'	7.14
16.76'	5.24
19.15'	4.01
	9.58' 11.97' 14.36' 16.76'

**FOOTCANDLE DISTRIBUTION** 

## CH6SHL17UE-D10\_CR6SHL24SW-TS40-LENS110 (1800lm, 20W, 110°, 4000K)

System Power:	20W
Test Date:	10/2023
Beam Angle 50%:	113.5°
Field Angle 10%:	162.4°
Color Temperature:	4072K
CRI:	82.9
Lumens Delivered:	1846
CBCP:	620
Power Factor:	1.00

MULTIPLIERS CCT			
3000K:	0.94		
3500K:	1.03		
4000K:	1.00		
Lumen P	ackage		
1000lm:	0.54		
1300lm:	0.72		
1800lm:	1.00		
Trim Color			
SW:	1.00		
WW:	1.09		
Lens			
Blank:	1.00		
LENS60:	0.93		
LENS110	1.01		



FOOT	CANDLE DISTRIBUTION	
Heigh	Beam Diameter	FC
8.0'	24.40'	9.60
10.0'	30.51'	6.14
12.0'	36.61'	4.27
14.0'	42.71'	3.13
16.0'	48.81'	2.40