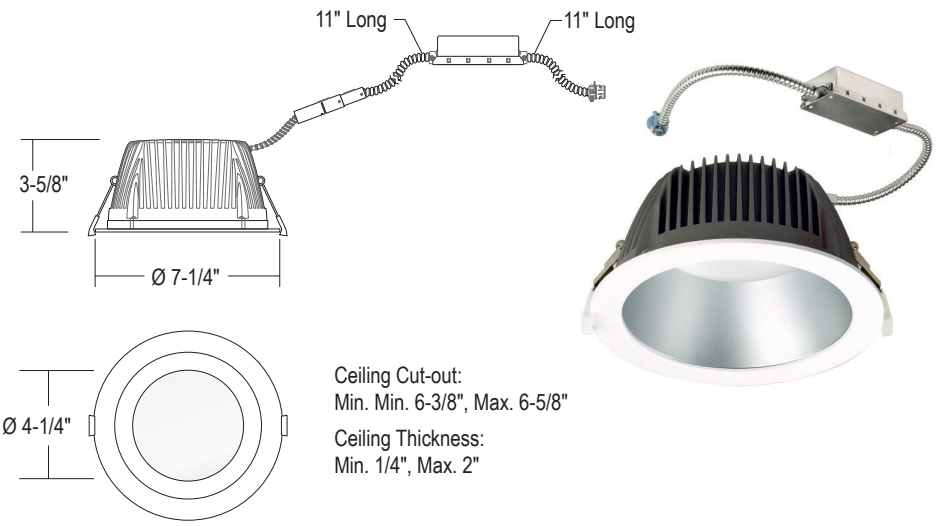
TYPE PROJECT

CATALOG#

CRTR6SHL : 6" C·SERIES

SUPER LOW GLARE, SHALLOW LED RETROFIT/REMODEL

1000LM - 1800LM (10W-20W)



Ceiling Cut-out:
Min. Min. 6-3/8", Max. 6-5/8"

Ceiling Thickness:
Min. 1/4", Max. 2"

Quickship | Damp Location | Wet | Intertek

US Assembled | Ambient Light | Downlight | Emergency Backup

120V | 277V | 347V

- Deeply recessed lens and 65.5° visual cutoff for reduced glare
- Shallow 3-5/8" depth for ceilings with minimal plenum air-space
- New junction box option for remodels without frames
- Non-conductive dead-front flanged option (-LENS) for wet locations
- 83 CRI

ORDERING : CRTR6SHL17SWUE-D10-TS30

CRTR6SHL
Fixture/Lumens | Insulation Contact | Reflector Finish | Dimming | CCT | Options | Junction Box

Insulation Contact

Non-IC	**Blank**
ICA Rated/ Airtight	**ICA**

Dimming[1]

0-10V Dimming	**UE-D10**
UniDim™ 0-10V ELV and Triac Dimming	**UE-DUN**
Lutron Hi-lume	**UE-DHL[2]**
120V ELV and Triac Dimming	**-DIN**
347V, 0-10V Dimming	**-347-D10**
Integral EM Backup	**UE-D10-EM**
Athena Wireless Node	**-AWN**
Athena Wireless Node Occupancy Sensor	**-AWN-OCC**

Options

None	**Blank**
Lens for wet locations w/ 60° Beam Spread	**-LENS60**
Lens for wet locations w/ 110° Beam Spread	**-LENS110**

Fixture/Lumens

1000lm (10W)	**CRTR6SHL10**
1300lm (14W)	**CRTR6SHL12**
1800lm (20W)	**CRTR6SHL17**

Reflector Finish

Satin Haze Reflector/ White Ring	**SW**
White Reflector/ White Ring	**WW**
All Black	**BB[2]**
All Satin Haze	**SS[2]**

CCT

3000K	**-TS30**
3500K	**-TS35**
4000K	**-TS40**
ColorSelect 3000K/3500K /4000K	**-TS354**

Junction Box

None	**Blank**
Junction Box	**-JB**
Junction Box (Chicago Plenum)	**-JB-CHP**

[1] All drivers are 120V/277V unless otherwise noted.
[2] Extended Lead Time. Consult Factory.

2024.05.16

SPECIFICATION

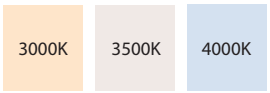
Application

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.

Retrofit Mounting

Designed for use with existing 4" Architectural, Incandescent, Fluorescent, and Metal Halide Housings like LITON Brand LV41, and LH400. Supplied with fl exible metal conduit for connection to existing electrical junction box. Uses existing frame-in-kits mounting method via heavy duty tension springs. Consult factory for special mounting methods.

Color Temperature (CCT)



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

Insulation Contact

CRTR6SHL10, CRTR6SHL12, and CRTR6SH1L7 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 refl ector prevents ugly dents during shipping & installation. Deeply mounted singular LED provides 50° visual cutoff . Available in Satin Haze Refl ector/White Finish, White Refl ector/ White Finish, All Black, and All Satin Haze.

Non-Conductive Dead-Front Flange

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

SPECIFICATION (Continued)

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.

Air Flow

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).

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

US Assembled

Intertek

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) LUTRON

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

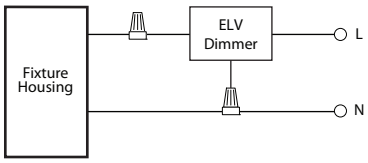
SPECIFICATION (Continued)

Dimming Options

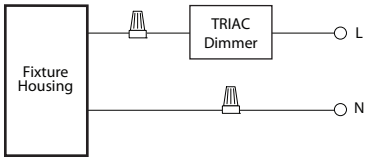
ELV and TRIAC Driver 120V (-DIN):

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



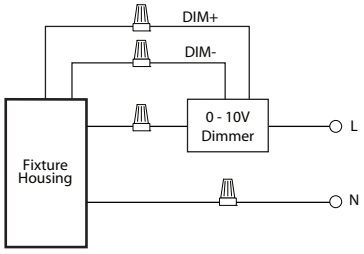
TRIAC



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.

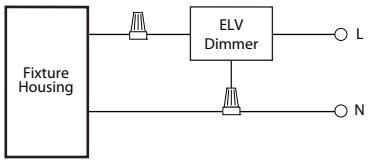
0 - 10V Wiring



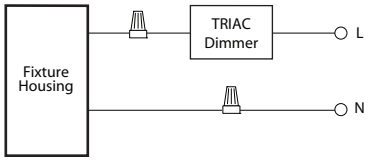
UniDim™ Driver 120V/277V (UE-DUN):

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.

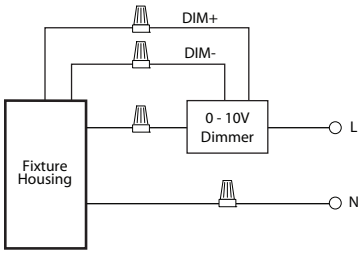
Incandescent/Phase Wiring
ELV



TRIAC



0 - 10V Wiring



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

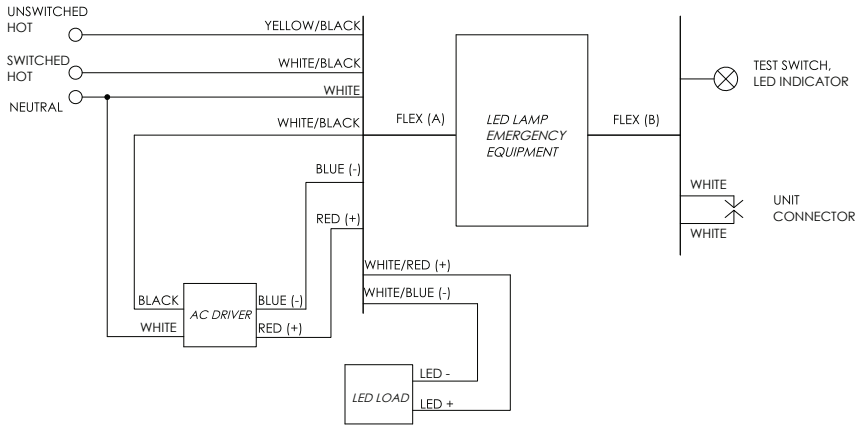
Emergency LED Battery Back-up available, remotely mounted adjacently by the installer. When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the driver to auxiliary generator power during the loss of normal AC power, (recommended for applications requiring individual circuit switching).

INTEGRAL EMERGENCY BATTERY (UE-D10-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:	<3s
Charging Time:	12h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	48°C
Maximum Lumens:	800lm
Self-Diagnostic:	Yes

SPECIFICATION (Continued)

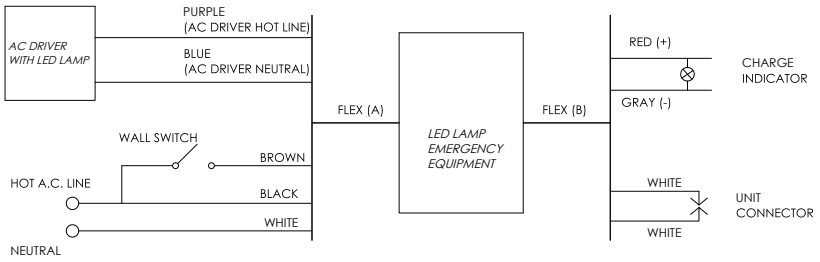
REMOTE LOCATION EMERGENCY INVERTER (-EMAC): 25W and 40W

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

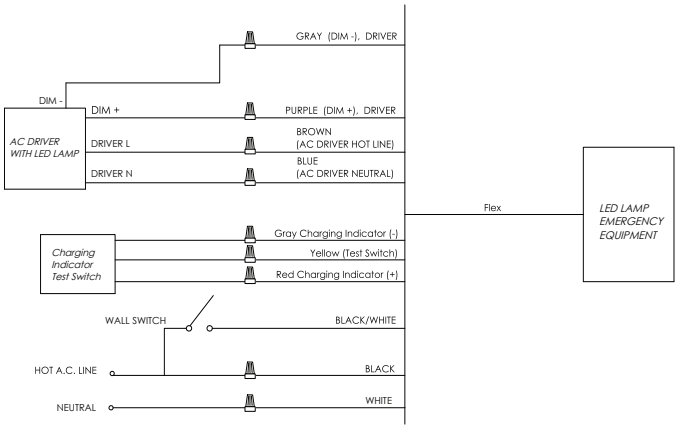
Not rated for outdoor mounting. Damp location rated.

<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

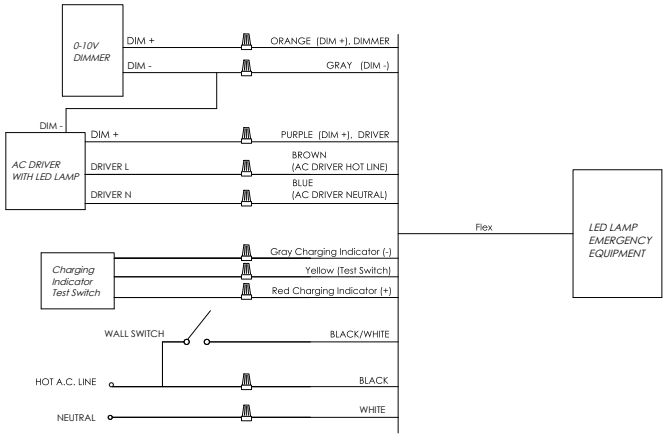
<40W LOAD



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

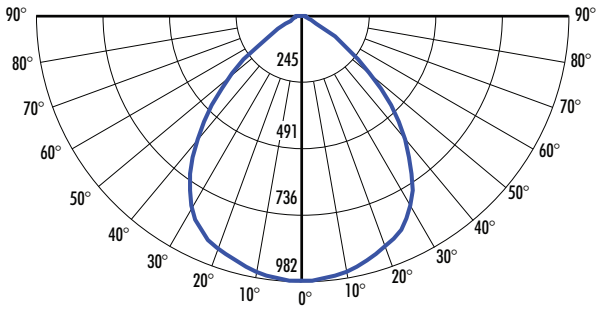
CRTR6SHL17SWUE-D10-TS40 (1800lm, 20W, 4000K)

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

MULTIPLIERS

CCT	
3000K:	0.94
3500K:	1.03
4000K:	**1.00**
Lumen Package	
1000lm:	0.54
1200lm:	0.72
1700lm:	**1.00**
Trim Color	
SW:	**1.00**
WW:	1.09
Lens	
Blank:	**1.00**
LENS60:	0.93
LENS110:	1.01

CANDELA TABULATION



FOOTCANDLE 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

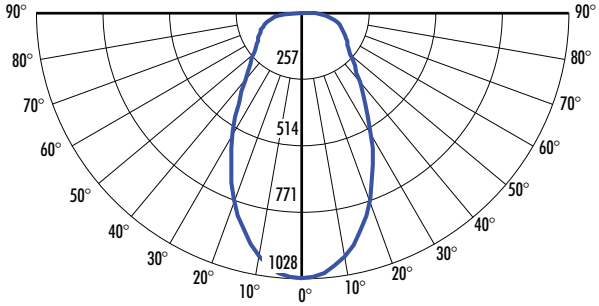
CRTR6SHL17SWUE-D10-TS40-LENS60 (1800lm, 20W, 60°, 4000K)

System Power:	20W
Test Date:	10/2023
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

MULTIPLIERS

CCT	
3000K:	0.94
3500K:	1.03
4000K:	**1.00**
Lumen Package	
1000lm:	0.54
1200lm:	0.72
1700lm:	**1.00**
Trim Color	
SW:	**1.00**
WW:	1.09
Lens	
Blank:	**1.00**
LENS60:	0.93
LENS110:	1.01

CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	9.58'	16.06
10.0'	11.97'	10.28
12.0'	14.36'	7.14
14.0'	16.76'	5.24
16.0'	19.15'	4.01

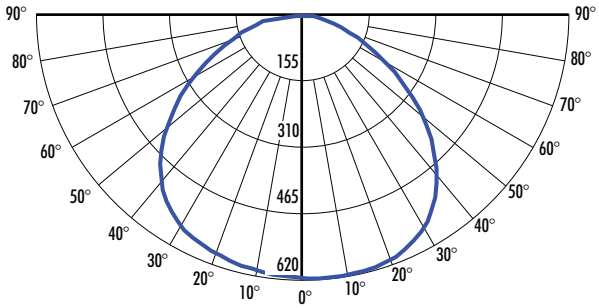
CRTR6SHL17SWUE-D10-TS40-LENS110 (1800lm, 20W, 110°, 4000K)

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 Package	
1000lm:	0.54
1200lm:	0.72
1700lm:	**1.00**
Trim Color	
SW:	**1.00**
WW:	1.09
Lens	
Blank:	**1.00**
LENS60:	0.93
LENS110:	1.01

CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	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

2023.10.17