Sure-Lites

DESCRIPTION

The Sure-Lites SELD series provides a NEMA 4X and UL924 code compliant emergency lighting solution for extreme commercial and industrial environments. The rugged die cast aluminum housing and UV stabilized polycarbonate lens are designed to withstand harsh environmental conditions. The fixture is wet location listed with a temperature rating of -30°C to 50°C (-22° to 122°F), is IP66 listed and has a Hazardous location class 1 division 2 option. Two 300 lumen LED heads provide up to 58 feet of emergency egress coverage. Labor saving self diagnostics with a photocell testing capability are standard and perform required monthly and yearly testing. Tamper proof screws are included to make the fixture vandal resistant.

Catalog #		**Type**	
Project			
Comments		**Date**	
Prepared by			

SPECIFICATION FEATURES

Electrical
- Universal Voltage Input 120 through 277 VAC, 50 to 60Hz
- Nickel cadmium battery delivers 90 minute run time
- Battery fully recharges within 24 Hours
- Low voltage disconnect
- Brownout circuit protection
- Test switch / power indicator light
- Self Diagnostics standard
- Photocell test switch (requires LASER accessory for activation)

Housing Construction
- Die cast aluminum housing available in white, black or silver
- High-impact resistant, UV stabilized vandal resistant polycarbonate lens
- Universal knock out pattern on back plate for wall mount
- Top and side mount threaded conduit entry points.

Code Compliance
- UL 924, outdoor wet location listed (suitable for wet and damp locations)
- UL 50, NEMA 4X
- UL 844 Hazardous locations (Class 1, Division 2, Groups A,B,C,D) with "HAZ" option
- T-code = T3C (HAZ option only)
- IP66 Ingress protection
- NSF, National Sanitation Foundation / Splash Zone (for food processing)
- Temperature rated for -30°C to 50°C (-22°F to 122°F)
- Life Safety NFPA 10, NEC, OSHA
- Cleanroom Class 100/ISO 5 Clean Rooms
- Most State and Local Codes
- NYC Compliant
- City of Chicago Compliant
- CEC Compliant

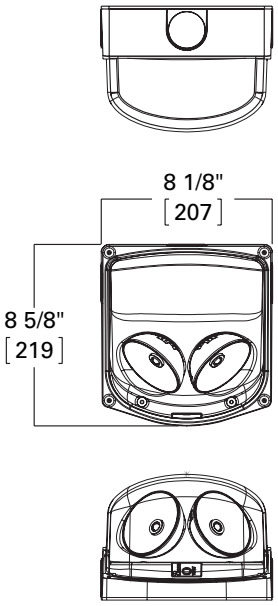
Head/Lamp Data
- Two long life 300 lumen LED lamps
- Fully Adjustable Heads

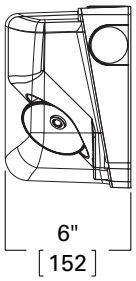
Warranty
- Fixture: 5-Year
- Battery: 7-year Pro-rated



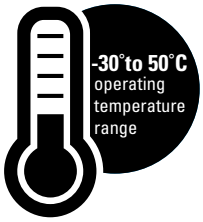
SELD SERIES

NEMA 4X
OPTL: CLASS 1 DIV 2 HAZARDOUS LOCATION
SEALED NICKEL CADMIUM BATTERY
LED LAMPS
VANDAL PROOF SELF-DIAGNOSTIC SYSTEM
EMERGENCY LIGHTING

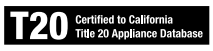












CATALOG LOGIC

Series	Housing	Wet Location	Egress Coverage	Color	SD	Hazardous Location
SEL	D = Die Cast	W = Wet Location (-30°C to 50°C)	60 = 58 feet	_= Silver BK = Black WH = White	SD = Self Diagnostics (Standard)	_= not Hazardous HAZ = Hazardous

ENERGY INFORMATION

	Watts	Amps	Power Factor
120 VAC	5W	0.05 A	0.5
277 VAC			

		0.1fc minimum		1fc minimum	
	Output Lumens	**7.5 foot height**	**20 foot height**	7.5 foot height	20 foot height
SELD60	**309**	60	52	24	30

TECHNICAL DATA

Lamps
The SELD Series has two 300 Lumen adjustable heads. Each head consumes 4.1 Watts.

Housing
Die cast aluminum with a powder coat painted finish. Universal pattern knockouts are in the back of the housing for direct mounting to the junction box. Top and side mount threaded conduit entry points provided. UV stable, polycarbonate shield provides vandal-proof protection. Silicone gasketing provides a water-tight, dust-tight NEMA 4X enclosure.

EZ Hang Installation
The hands-free EZ Hang feature reduces installation time and effort. This Patented capability allows the installer to first mount the back plate and then hang the fixture from the plate to enable hands-free connection of power to the fixture. This helps ensure electrician safety when installing on a ladder. (see below for installation)

Electronics
SELD features universal voltage input 120 through 277 VAC and a nickel cadmium battery. All battery and electrical components are enclosed within the housing.

Photocell Test Switch
Allows verification of proper operation of the transfer circuit and emergency lamps with a laser pointer (laser is sold as an accessory). The emergency lamps will test for 30 seconds when activated.

Solid-State Charger
Supplied with a 120 through 277 VAC universal input, voltage regulated, solid-state charger, the battery is recharged immediately upon restoration of AC current after a power failure. The charge circuit reacts to the condition of the battery in order to maintain peak battery capacity and maximize battery life. Solidstate construction recharges the battery following a power failure in accordance with UL 924.

Solid-State Transfer
The SELD Emergency Light incorporates solid-state switching which eliminates corroded and pitted contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC voltage and automatically energizes the lamps using DC power. Upon restoration of AC power, the DC power will be disconnected and the charger will automatically recharge the battery.

Low-Voltage Disconnect
When the battery's terminal voltage falls below a set level the low-voltage circuitry disconnects the lighting load. The disconnect remains in effect until normal utility power is restored, preventing deep battery discharge.

Overload and Short Circuit Protection
The solid-state overload monitoring device in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short circuit is removed. This overload current protective feature eliminates the need for fuses or circuit breakers for the DC load.

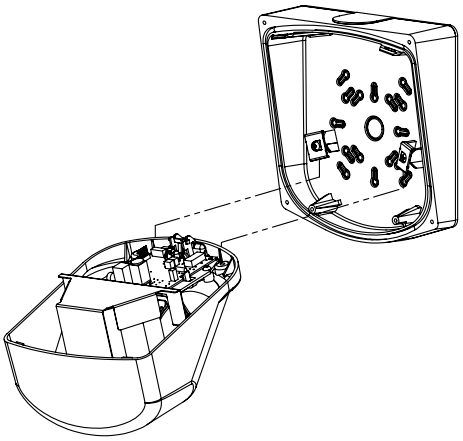
Brownout Circuit
The brownout circuit on Sure-Lites exits monitors the flow of AC current to the unit and activates the emergency lighting system when a predetermined reduction of AC power occurs. This dip in voltage will cause most ballasted fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

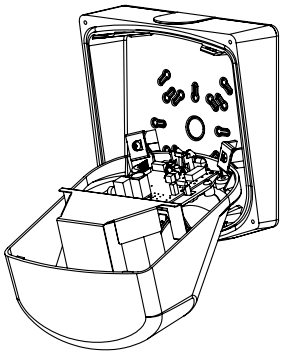
Test Switch/Power Indicator Light
A test switch located on the inside cover of the unit permits the activation of the emergency circuit for a complete operational systems check. The Power Indicator Light provides visual assurance that the AC power is on.

Sealed Nickel Cadmium Battery
Sure-Lites sealed nickel cadmium batteries are maintenance-free with a life expectancy of 10 years. The sealed, rechargeable nickel cadmium battery offers high discharge rates and stable performance over a wide range of temperatures. The specially designed resealable vent automatically controls cell pressure, assuring safety and reliability. This battery is best suited for harsh ambient temperatures because the electrolyte is not active in the electrochemical process.

Warranty
This Sure-Lites SELD Emergency Light is backed by a firm, five (5) year warranty against defects in material and workmanship. Maintenance-free, long-life, sealed nickel cadmium batteries carry a seven-year, pro-rata warranty.

EZ HANG INSTALLATION







Laser tester
Part Number = LASER
(sold separately)

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

Specifications and dimensions subject to change without notice.

SELF DIAGNOSTIC TESTING OPERATIONS

The Sure-Lites Eagle Eye Self Diagnostics is continuously monitoring your emergency fixture, and will signal any failure through the 3 color indicator LED.

Initial Operation:
When the unit is first powered up it will go into a 24 hour fast charge and the indicator LED will pulse green. Once the unit has fully charged it will perform a self calibration. After self calibration, the LED will change to steady green indicating the unit is fully charged and float charging the battery to maintain readiness.

Automatic Testing:
The unit will perform a battery capacity, lamp/LED, and charge circuit test every 30 days for 30 seconds. During this time, the indicator LED will change to a steady yellow. It will perform a full battery capacity (90 minute) test once per year. During this time, the indicator LED will change to a blinking yellow.

Manual Testing:
- 10 Second "Installation" test – Press and release the test button once during fast charge (blinking green) to initiate a 10 second quick test. The sign will switch to emergency mode for 10 seconds allowing the installer to verify proper installation of the unit, and the LED indicator will turn solid yellow.
- 30 Second Test - Press and release the test button once during float charge (steady green). The indicator LED will turn steady yellow to indicate the unit is performing a 30 second test of the batteries and lamps/LEDs.
- 90 Minute Test - Press and release the test button a second time during a 30 second test (steady yellow) to change to a 90 minute test. During this test, the LED indicator will change to blinking yellow, and the circuit will perform a full battery capacity, charge circuit, and LED test.
- Canceling Test – Press and release the test button during the 90 minute test (flashing yellow) to return the fixture to its original state (fast charge or float charge)

Laser Test:
The SLED products are equipped with a Laser Test function that allows the unit to be manually tested without the need to physically press the test button. Shining a laser pointer in the hole marked "LASER TEST" on the bottom of the unit has the same effect as a press and release of the test button.

Clearing Failure Codes:
- A battery failure (LED two blink red) can be cleared by replacing the battery. Disconnecting the battery and AC power, or performing a full 90 minute discharge will reset the error code, however, it will return if the battery is faulty
- Charge Circuit (LED three blink red) and lamp/LED failure (LED four blink red) will clear when the unit successfully passes a manual or automatic 30 second test.

Indicators:
- LED Off - No power to unit, emergency mode.
- LED Steady Green - Unit is fully charged and is float charging the battery to maintain readiness.
- LED Green Pulse - Unit is in a 24 hour fast charge of the battery.
- LED Two Blink Red - Battery has failed a capacity test, or the battery is disconnected. See "Clearing Failure Codes" above.
- LED Three Blink Red - Battery charge circuit has failed. See "Clearing Failure Codes" above.
- LED Four Blink Red - Lamps have burned out, or on an EXIT/Combo, 50% or more of the LEDs have failed. See "Clearing Failure Codes" above.
- LED Steady Yellow - 30 second test or 10 second quick test (Fast Charge only).
- LED Blinking Yellow - 90 minute test.

Maintenance:
None required. Replace the batteries as needed according to ambient conditions. However, we recommend that the equipment be tested regularly in accordance with local codes.