#### DESCRIPTION

The Sure-Lites Emergency Light SELM series is designed to reduce egress system cost and maintenance as well as improve reliability. Key features include long life LED's, proprietary adjustable accuLED optics, a nickel cadmium battery and a rugged sheet metal housing. SELM is available with two or three 300 lumen heads that create up to 80 feet of emergency egress coverage. The Patented external battery disconnect and EZ Hang features reduce installation time and cost. The self-diagnostic capability automatically performs NFPA required testing. This product is City of Chicago compliant and New York City compliant.

Catalog #	Туре
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Project	
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#### SPECIFICATION FEATURES

#### **ELECTRICAL**

- Dual Voltage Input 120/277 VAC, 60Hz
- EZ Key external battery disconnect
- Brownout circuit
- Low-voltage disconnect
- Overload / Short Circuit protection
- 4.8V Battery back-up
- Minimum 90 minute runtime
- LED source with 300 lumens of output
- Self-diagnostics standard with Laser test capability
- -Test Switch/Power Indicator Light

#### HOUSING CONSTRUCTION

- 20 gauge sheet metal housing
- White finish
- Universal J-box mounting pattern
- Keyhole mounting slots
- Knockouts for conduit entry

#### **RATTERY**

- Sealed Nickel Cadmium
- Full Recharge Time, 24 hours (max.)
- 0° to 40°C (32° to 104°F)

#### WARRANTY

- Five-year fixture warranty
- Prorated seven-year battery warranty

#### CODE COMPLIANCE

- UL924 Listed
- Damp Location
- Life Safety NFPA 101
- NEC/OSHA
- Most State & Local Codes
- City of Chicago Compliant
- NYC Compliant
- California Energy Code Compliant



SELM60R4SD



SELM80SD

## SELM Emergency Light

LED Emergency Light

Metal Housing

Adjustable Optic

SELM

Remote Capacity

City of Chicago Compliant

New York City Compliant









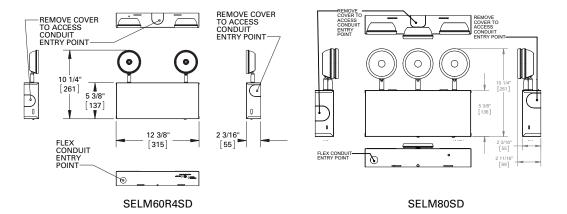
## ENERGY DATA

	Input Power	Current
120V	1.7W	.25A
277V	1.6W	.21A

#### HOW TO SPECIFIY

Sure-Lites LED emergency light with nickel cadmium battery, EZ Key external battery disconnect, EZ Hang installation, adjustable optics, 300 Lumens/per head, up to 80 feet of emergency egress coverage, sheet metal housing with self-diagnostics, and four watts of remote capacity.

## DIMENSIONS



#### ORDERING INFORMATION

#### SAMPLE NUMBER: SELM60R4SD

Series	Housing	Spacing	Remote Capacity	Self-Diagnostics
SEL= LED Emergency Light	M=Sheet Metal	<b>60</b> =60 Feet	R4=4 Watts	SD=Self-Diagnostics (Standard)

#### SAMPLE NUMBER: SELM80SD

Series	Housing	Spacing	Self-Diagnostics
SEL= LED Emergency Light	M=Sheet Metal	<b>80</b> =80 feet	SD=Self-Diagnostics (Standard)

#### SAMPLE NUMBER: SELMR13SD

Series	Housing	Spacing	Remote Capacity	Self-Diagnostics
SEL= LED Emergency Light	M=Sheet Metal	NA	<b>R13</b> =13 Watts	SD=Self-Diagnostics (Standard)



Emergency Egress Coverage; fixture spacing						
Catalog Number Output Lumens 0.1fc minimum 1fc minimum						
		7.5 foot height	20 foot height	7.5 foot height	20 foot height	
SELM60	2x309	60 feet	52 feet	24 feet	30 feet	
SELM80	3x309	80 feet	60 feet	35 feet	36 feet	

#### TECHNICAL DATA

#### **LED Heads**

All metal formed aluminum lampheads. The die cast metal three dimensional swivel assembly permits approximate aiming adjustment from 80° vertical and 358° rotation. The placement is secured with a lockable pivot mounted on a rotating base ring.

#### Housing

The rugged 20-gauge die-formed cold rolled steel housing is finished with white corrosion resistant polyester powder coat paint. Cabinet has keyhole mounting slots and knockouts in rear and side for wiring connections and has universal mounting pattern.

#### SELMR13SD

The SELM series also features a headless version with 13 watts of remote capacity. This enables maximum design flexibility for indoor and outdoor egress.

#### EZ Key - External Power Disconnect

Prevents the battery from cycling during the construction phase and ensures battery is not drained from power cycling.

### Test Switch/Power Indicator Light

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



EZ Key



EZ Hang

#### Battery

No maintenance nickel cadmium battery provides a minimum of 90 minutes of emergency power when A/C power is lost.

#### Low-Voltage Disconnect

The low-voltage circuitry disconnects the lighting load to protect the battery after run times in excess of the 90-minute UL limit. The disconnect remains in effect until normal utility power is restored preventing deep battery discharge.

## **Self-Diagnostics**

The self-diagnostic software will automatically perform all tests required by UL924, and NFPA101. The system indicates the status of the emergency light at all times using the LED indicator. A 90 minute battery power (emergency mode) simulation test will occur once every 12 months. A 30 second battery power simulation test will occur every 30 days.

The Solid-State microprocessor based system has the ability to accurately detect and warn of system failures, plus it incorporates all of the standard electronic features that sets Sure-Lites apart from its competition. Self diagnostic software automatically performs all testing required by the NFPA 101 Life Safety Code and systematically calibrates itself in the field, reducing installation labor and eliminating manual calibration errors.



Laser tester
Part Number = LASER
(sold separately)

#### **Brownout Circuit**

The brownout circuit on the SELM series emergency light monitors the flow of AC current to the unit and activates the emergency light heads when a predetermined reduction of AC power occurs.

#### Warranty

The SELM series is backed by a five-year warranty on the fixtures.

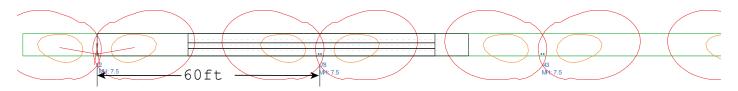
#### REMOTE CAPACITY

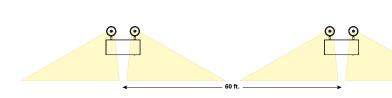
SEL Series Remotes							
	Single Head Remotes			Double Head Remo	tes		
	SRP/SRM13 SRP/SRM25 SRP/SRM30			SRP25D/SRM25D	SRP50D/SRM50D	SRP60D/SRM60D	
Watts Consumed		1.25	2.5	4.1	2.5		8.2
Catalog number	Remote Watts Available	# of SRP/SRM13 remotes fixture will power	# of SRP/SRM25 remotes fixture will power	# of SRP/SRM30 remotes fixture will power	# of SRP25D/ SRM25D remotes fixture will power	# of SRP50D/ SRM50D remotes fixture will power	# of SRP60D/ SRM60D remotes fixture will power
Catalog number SELM60R4SD		remotes fixture	remotes fixture	remotes fixture will	SRM25D remotes	SRM50D remotes	SRM60D remotes



#### **PHOTOMETRY**

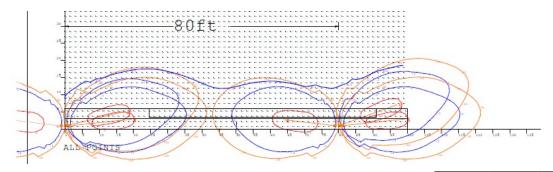
## SELM60R4SD

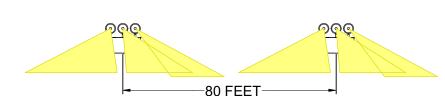




Х	Y	Z	Orient	Tilt
-0.25	0.5	7.5	170	57
0.25	0.5	7.5	10	57
120.25	0.5	7.5	10	57
119.75	0.5	7.5	170	57
59.75	0.5	7.5	170	57
60.25	0.5	7.5	10	57
180.25	0.5	7.5	10	57
179.75	0.5	7.5	170	57

#### SELM80SD





Х	Y	Z	Orient	Tilt
-0.8	0.8	7.5	173.35	63.7
0	0.8	7.5	13.69	67.5
0.8	0.8	7.5	6.14	68.1
79.2	0.8	7.5	173.35	63.7
80	8.0	7.5	13.69	67.5
80.8	0.8	7.5	6.14	68.1



<sup>\*\*\*</sup>The "Rule of Thumb" spacing guidelines are designed to achieve 1 foot-candle average and 0.1 foot-candle minimum with a 40:1 maximum/minimum ratio. The corridor used is 100 feet long, 9 foot ceiling with a 6 foot wide walkway and 3 foot path of egress. The reflectances are 80% ceiling, 50% walls and 20% floors. The fixture mounting height is 7.5 feet. Cooper Lighting Solutions assumes no responsibility for local requirements or specific project variables. This is a guideline to be used as a design aid, not as guarantee of any code compliance.

#### **SELF-DIAGNOSTIC TESTING OPERATION**

The Sure-Lites 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

## 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
- 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 SEL SD products are equipped with a LaserTest 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 "LASERTEST" 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.

#### SELF-DIAGNOSTIC TESTING OPERATIONS

#### 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.

