# COOPER LIGHTING - SURE-LITES®

#### DESCRIPTION

The RLM Series is a recessed system packaged in an attractive, flameresistant metal housing. The unit of choice for installations where a recessed product is desired and the size and cost of emergency lighting must be kept to a minimum without sacrificing dependability or light output. Full size thermoplastic heads with 180° adjustability permit unrestricted unit placement and easy beam positioning.

| Catalog #   | Туре |
|-------------|------|
| Project     |      |
| Comments    | Date |
| Prepared by |      |

#### SPECIFICATION FEATURES

#### Electronic

- Dual Voltage Input 120/277 VAC, 60 Hz
- Line-latching
- Solid-state Voltage Limited Charger
- Solid-state Switching
- Low-Voltage Disconnect
- Brownout Circuit
- Overload/Short Circuit Protection
- -Test Switch/Power Indicator Light

### **Housing Construction**

- 20-Gauge Die-Formed Steel
- Knockout, Conduit or Cord Set
- Hanger Bars, T-Bar Clips
- Single modular electrical connector
- White Finish

#### Battery

- Sealed Nickel Cadmium
- Maintenance-Free, Long-Life
- Full Recharge Time, 24 hrs. (max.)
- Color Coded Leadwires

## Code Compliance

- UL 924 Listed
- Life Safety NFPA 101
- NEC/OSHA
- Most State and Local Codes

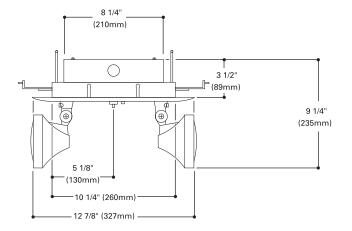
## Warranty

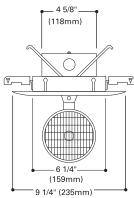
- Unit: 1-year
- Battery: 15-year pro-rata



# RLM SERIES

RECESSED HOUSING
SEALED NICKEL
CADMIUM BATTERY
TWO HIGH-IMPACT
THERMOPLASTIC HEADS
EMERGENCY LIGHTING



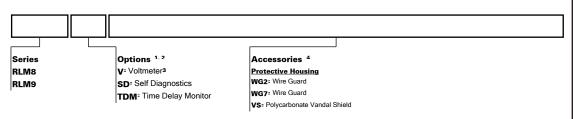


### **ELECTRICAL RATINGS**

|              | Rated Wattage to 87 1/2% of Rated D.C. Voltage |             |          |         | Lamp Information |                              |            |                |
|--------------|--|-------------|----------|---------|------------------|------------------------------|------------|----------------|
| Model        | DC Voltage                                     | 1 1/2 Hours | 2 Hours  | 3 Hours | 4 Hours          | Type                         | Wattage    | Number         |
| RLM8<br>RLM9 | 6  | 15<br>24    | 12<br>18 | 8<br>12 | 10               | Incandescent<br>Incandescent | 7.2<br>7.2 | 29-88<br>29-88 |



## ORDERING INFORMATION



Notes: 1 Add as a suffix. 2 Consult your Cooper Lighting Representative for alternate lamps and additional options. 3 Provisions for one meter only. 4 Order separately.



# ENERGY DATA

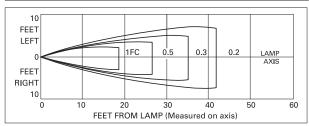
## RLM8

Input Current (Max.): 120V= .06A 277V= .03A

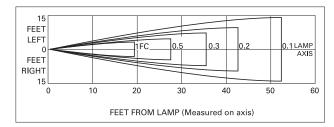
## RLM9

Input Current (Max.): 120V= .07A 277V= .04A

#### **Horizontal Distribution**

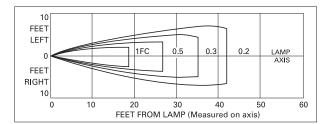


Lamp No. Z-4

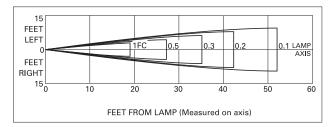


Lamp No. 29-88 Initial Lumens – 29-88 @ 101 Z-4 @ 48

#### Vertical Distribution



Lamp No. Z-4



Lamp No. 29-88

#### **TECHNICAL DATA**

#### Heads

The lamp housing is constructed of flame-resistant and impact-resistant injection molded thermoplastic with matching white finish. The three dimensional swivel assembly permits 80° aiming adjustment from vertical and approximately 358° rotation. The placement is secured with a lockable pivot mounted on a rotating base ring.

## Lamps

Designed specifically for emergency lighting applications, the PAR 36 sealed beam type design insures optimum glare-free trapezoidal light distribution along with horizontal and vertical adjustment by rotating the lens within the housing.

## **Housing Construction**

Corrosion resistant 20-gauge rough-in section/battery support installs easily and comes complete with hanger bars for installation in plaster or drywall and accessory T-bar clips for installation in suspended grid type ceilings. Attractively styled 20-gauge steel face plate is finished with a white polyester powder coat paint. Torsion springs and a single Molex connector make final installation quick and easy.

### Line-Latched

Sure-Lites' line-latched electronic circuitry makes installation easy and economical. A labor efficient AC-activated load switch prevents the lamps from turning on during installation to a non-energized AC circuit. Line-latching eliminates the need for a contractor's return to a job site to connect the batteries when the building's main power is permanently turned on

#### Solid-State Charger

Supplied with a 120/277 VAC, voltage regulated solid-state charger. Immediately upon restoration of AC current after a power failure, the charger provides a high charge rate. The charge circuit reacts to the condition of the battery and alters the rate of charge in order to maintain peak battery capacity and maximize battery life. Solid-state construction recharges the battery following a power failure in accordance with UL 924.

## 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 in Sure-Lites' units 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.

## Solid-State Transfer

The unit incorporates a solid-state switching transistor 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. Upon restoration of the AC power, the emergency lamps will switch off and the charger will automatically recharge the battery.

#### Low-Voltage Disconnect

When the battery's terminal voltage falls below 80% of the rated voltage, the low-voltage circuitry disconnects the lighting load. The disconnect remains in effect until normal utility power is restored, preventing deep battery discharge.

### Test Switch/Power Indicator Light

Conveniently located Test Switch allows for manual verification of proper operation of the transfer circuit and emergency lamps. 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 15 years. The sealed rechargeable nickel cadmium battery utilizes positive and negative sintered plate construction which 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. The nickel cadmium battery can be operated from 0°C to 50°C.

### Warranty

All Sure-Lites' units are backed by a firm oneyear warranty against defect in material and workmanship (excluding lamps). Rechargeable, long-life, sealed nickel cadmium batteries carry a fifteen-year pro-rata warranty.

