

# COOPER LIGHTING - SURE-LITES®

## DESCRIPTION

Versatile "mini-system" features electronic reliability, quality metal construction, surprising economy, optimum illumination and attractive compact appearance.

The popular choice for commercial, institutional and public facilities where moderate loads, economy, ease of installation, safety and reliability are important. Maximum emergency lighting efficiency is combined with low profile appearance.

## APPLICATION

The unit of choice for installations where the size and cost of emergency lighting must be kept to a minimum without sacrificing dependability or light output.

## 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

22 Gauge Die-Formed Steel

Knockout, Conduit or Cord Set

Universal J-Box Mounting Pattern

Keyhole Mounting Slots

White Finish

### Battery

Sealed Lead Calcium, Recombination (LM1, AA1)

Sealed Nickel Cadmium Battery (AA8)

Maintenance Free, Long Life

Full Recharge Time, 24 hrs. (max.)

Polarized Battery Terminals

Catalog #

Type

Project

Comments

Prepared by

Date



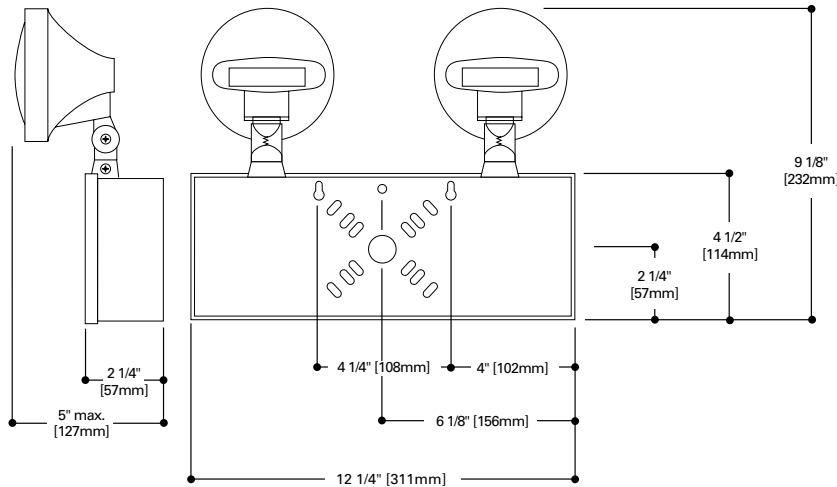
## AA SERIES

DOUBLE HEAD

METAL BODY

EMERGENCY LIGHT

Emergency Lighting



## ELECTRICAL RATINGS

Rated Wattage to 87 1/2% of Rated D.C. Voltage

### Lamp Information

Model	Battery	DC Voltage	1 1/2 Hours	2 Hours	3 Hours	4 Hours	Type	Wattage	Number
AA1	SLC <sup>3</sup>	6	18	15	10	8	Incandescent	9	29-84

## ORDERING INFORMATION

SAMPLE NUMBER: AA1V

**AA1**

Options (add as suffix)

Accessories (order separately)

Model  
AA1

A=Ammeter<sup>2</sup>  
SD=Self-Diagnostics  
TDM=Time Delay Monitor  
V=Voltmeter<sup>2</sup>  
Alternate Lamps<sup>1</sup>  
Other Finishes<sup>1</sup>  
Other Options<sup>1</sup>

1BRWH =Mounting Brackets  
(2) White  
1MSWH=Mounting Shelf, White  
VK1=Voltmeter  
WG1=Wire Guard  
CSK120=Cord Set (120VAC)  
CSK277=Cord Set (277VAC)  
VS1=Polycarbonate Vandal Shield  
VS1WP=Polycarbonate Vandal Shield - Weatherproof

### NOTES:

- (1) Consult your Cooper Lighting Representative.
- (2) Provision for one meter only.
- (3) SLC=Sealed Lead Calcium

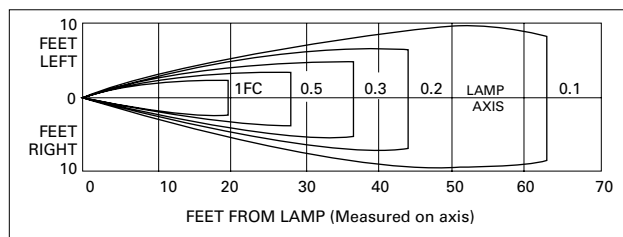
TOTALLY PREDICTABLE  
**RELIABILITY**

## ENERGY DATA

Input Current (Max.):  
120V= .12A  
277V= .05A

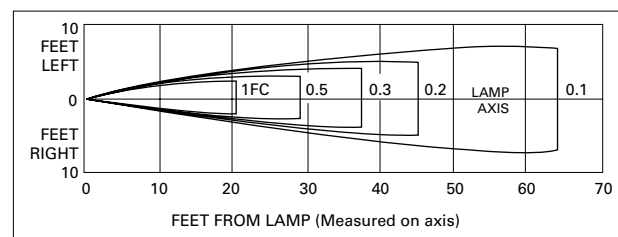
## PHOTOMETRICS

## Horizontal Distribution



Lamp No. 29-84  
Initial Lumens – 29-84 @ 132

## Vertical Distribution



Lamp No. 29-84

## TECHNICAL DATA

**Heads**

The lamp housing is constructed of flame-resistant and impact-resistant polycarbonate injection molded thermoplastic with matching finish. The 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.

**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**

The rugged 22 gauge die-formed steel housing is finished with white corrosion-resistant polyester powder coat paint. Cabinet has keyhole mounting slots and knockouts in rear and side for AC/DC wiring connections and has universal mounting pattern.

**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 combination Test Switch/Power Indicator Light allows for manual verification of proper operation of the transfer circuit and emergency lamps.

**Sealed Lead Calcium Battery**

The fully sealed, long life, maintenance free lead calcium battery is ideal for emergency lighting applications. These recombinant cycle batteries typically provide eight to ten years of life and may be operated in any position.

**Warranty**

All Sure-Lites' units are backed by a firm one year warranty against defect in material and workmanship (excluding lamps). Maintenance free, long life, sealed lead calcium batteries carry a five-year pro-rata warranty.