

# COOPER LIGHTING - SURE-LITES®

## DESCRIPTION

The XR Series is an efficient, rugged, commercial grade emergency light. The XR Series, in 6V and 12V models, has the extra capacity to power remote heads for added application flexibility.

Catalog #		Type
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

### Code Compliance

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

### Head/Lamp Data

- Two Heads Standard
- Top Mounted - Side mounting Optional
- Glare-Free Lens
- Fully Adjustable
- Remote Capability
- High Impact -Thermoplastic
- Matches Housing Finish

### Warranty

- Unit: 1-year
- Battery: 5-year pro-rata

### Mounting Requirement

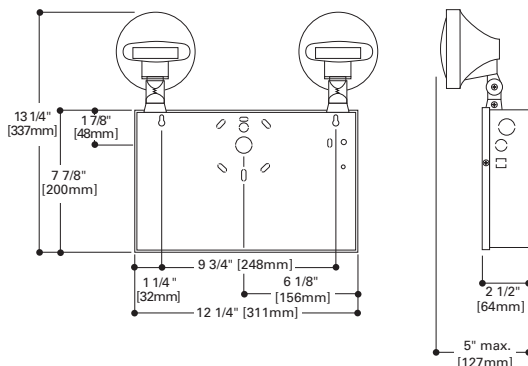
- Mount only on a vertical plane (i.e. wall mount, etc.)

### Battery

- Sealed Lead Calcium, Recombination
- Maintenance-free, Long-life
- Full Recharge Time, 24 hrs. (max.)
- Polarized Battery Terminals

### Housing Construction

- 22-Gauge Die Formed Steel
- Knockout, Conduit or Cord Set
- Universal J-Box Mounting Pattern
- Keyhole Mounting Slots
- White Finish



## ELECTRICAL RATINGS

Model	Battery	Rated Wattage to 87 1/2% of rated D.C. Voltage					Lamp Information		
		DC Voltage	1 1/2 hours	2 hours	3 hours	4 hours	Type	Wattage	Number
XR12206347 (2)	SLC	12	36	30	-	-	Incandescent	9	29-86
XR12208347 (2)	SLC	12	54	48	-	-	Incandescent	9	29-86
XR12206	SLC	12	36	30	20	16	Incandescent	9	29-86
XR12208	SLC	12	54	48	36	28	Incandescent	9	29-86

SLC=Sealed Lead Calcium Battery



## XR SERIES

REMOTE CAPACITY  
DOUBLE HEAD, METAL BODY  
12-VOLT  
SEALED LEAD CALCIUM BATTERY  
EMERGENCY LIGHTING

TOTALLY PREDICTABLE  
**RELIABILITY**

## ORDERING INFORMATION

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### Series <sup>1</sup>

- XR12206
- XR12206347
- XR12208
- XR12208347

### Options <sup>2, 3</sup>

- MH- Metal Heads
- V- Voltmeter
- SD- Self Diagnostics<sup>4</sup>
- TDM- Time Delay Monitor

### Accessories <sup>5</sup>

- Mounting Kit
- 1MSWH: Mounting Shelf, White
- 1BRWH: Mounting Brackets (2) White
- Protective Housing
- WG1- Wire Guard
- VS2: Polycarbonate Vandal Shield
- VS2WP: Polycarbonate Vandal Shield - Weatherproof
- VK1: Voltmeter

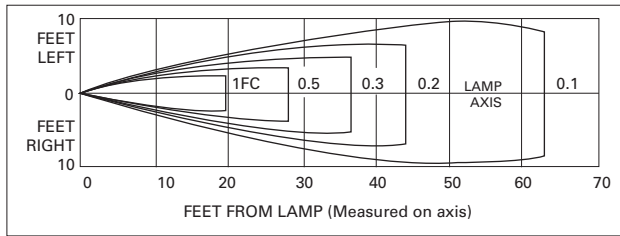
- Notes: 1 347 = 120/347V.  
2 Alternate Lamps, Finishes and Options available. Consult your Cooper Lighting Representative.  
3 0,1,3, and 4 Heads also available. Specify after catalog number (i.e., HR-12117379).  
4 SD available on XR15, XR16, XR20, XR21 only.  
5 Order separately.

## ENERGY DATA

XR12206, XR12208  
Input Current (Max.):  
120V= .30A  
277V= .13A

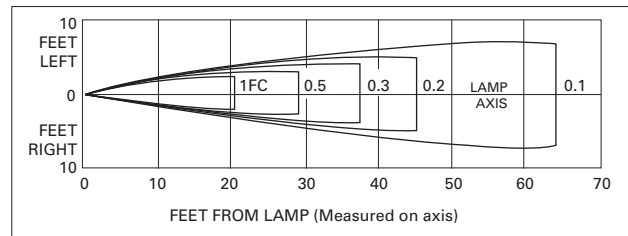
## PHOTOMETRICS

## Horizontal Distribution



Lamp No. 29-86  
Initial Lumens – 29-86 @ 138

## Vertical Distribution



Lamp No. 29-86

## TECHNICAL DATA

**Heads**

The lamp housing is constructed of flame- and impact-resistant 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 light distribution along with horizontal and vertical adjustment by rotating the lens within the housing. Tungsten halogen lamps (XR5, XR9) maximize light output with lower wattage.

**Housing**

The rugged 22-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 top, 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.