Sure-Lites

DESCRIPTION

A real workhorse in emergency lighting systems, these durable, reliable units are unparalleled in both performance and freedom from maintenance. The HR Series provides a low cost, solid-state lighting system ideal for industrial, commercial or multi-housing environments. High capacity makes the HR Series ideal for installations where a large number of heads/exits will be remotely operated.

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
- Isolation Transformer

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

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

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

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

Head/Lamp Data
- Two Heads Standard
- Top Mounted
- Glare-Free Lens
- Fully Adjustable
- Remote Capability
- High Impact - Thermoplastic
- Matches Housing Finish

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

HR SERIES

ULTRA HIGH CAPACITY
HIGH CAPACITY

210-360 WATTS
(ULTRA HIGH CAPACITY)

87-117 WATTS
(HIGH CAPACITY)

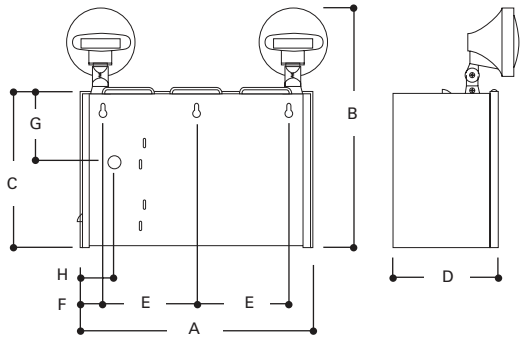
12 VOLT

SEALED LEAD CALCIUM BATTERY

EMERGENCY LIGHTING

TOTALLY PREDICTABLE RELIABILITY

DIMENSIONS



	High Capacity	Ultra High Capacity
A	12 1/4" (311mm)	17" (432mm)
B	13 1/4" (337mm)	16 7/8" (429mm)
C	7 7/8" (200mm)	11 1/2" (292mm)
D	4 1/4" (108mm)	8" (203mm)
E	4 3/4" (121mm)	6" (152mm)
F	1 3/8" (35mm)	2" (51mm)
G	----------	5 3/4" (146mm)
H	----------	2 1/2" (64mm)

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
HR12117 *	**SLC**	**12**	**117**	**87**	**58**	**43**	**Incandescent**	**9**	**29-86**
HR12117347 [1]	**SLC**	**12**	**117**	**87**	**—**	**—**	**Incandescent**	**9**	**29-86**
HR12210 *	**SLC**	**12**	**210**	**157**	**105**	**78**	**Incandescent**	**9**	**29-86**
HR12360 *	**SLC**	**12**	**360**	**270**	**180**	**135**	**Incandescent**	**9**	**29-86**

*Batteries may be shipped separately. SLC=Sealed Lead Calcium

ORDERING INFORMATION

Sample Number: HR12210

Series
HR12117
HR12210
HR12360

Options [1, 2]
347 =347V
MH=Metal Heads
A=Ammeter
V=Voltmeter
TDM =Time Delay Monitor

Accessories [3]

Cord Set
CSK120 =Cord Set (120 VAC)
CSK277 =Cord Set (277 VAC)

Mounting Kit
2MSWH =Mounting Shelf (High Capacity)
3MSWH =Mounting Shelf (Ultra-High Capacity)
3BRWH =Mounting Brackets

Protective Housing
WG3 =Wire Guard (Ultra High Capacity)
WG7 =Wire Guard (High Capacity)
VS2 =Polycarbonate Vandal Shield
VS2WP =Weatherproof Polycarbonate Vandal Shield
VK1 =Voltmeter

Notes:
1. Add as a suffix.
2. 0,1,3, and 4 Heads also available. Specify after catalog number (i.e., HR-12117379).
3. Order separately.

ENERGY DATA

HR12117
Input Current (Max.):
120V= .26A
277V= .13A

HR12117347
Input Current (Max.):
120V= .25A
347V= .60A

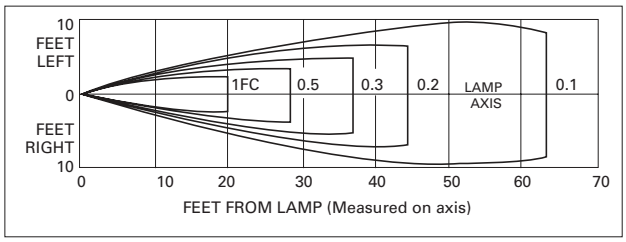
HR12210
Input Current (Max.):
120V= 1.02A
277V= .47A

HR12360
Input Current (Max.):
120V= 1.17A
277V= .54A

EATON
Powering Business Worldwide

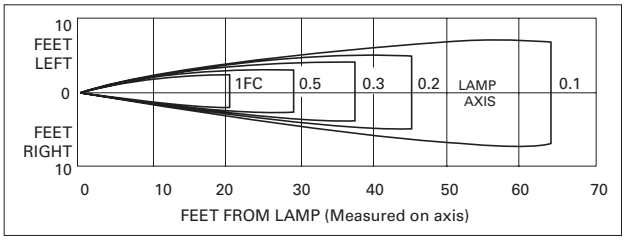
PHOTOMETRICS

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 trapezoidal light distribution along with horizontal and vertical adjustment by rotating the lens within the housing.

Housing
The rugged 18-gauge die-formed steel housing is finished with an attractive white corrosion-resistant polyester powder coat paint. Cabinet has keyhole mounting slots, universal mounting pattern, and knockouts in rear and side for AC/DC wiring connections and accessory cord set. Up to three lighting heads can be mounted on the cabinet.

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 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.