# **COOPER LIGHTING SOLUTIONS - SURE-LITES®**

#### DESCRIPTION

Perfect for commercial or architectural applications where the aesthetics of a fully recessed unit are essential. The slim profile of the RG Series is ideal for low ceilings and blends inconspicuously with existing recessed installations. The gimbal mounted lamp provides directional aiming (optional white gimbal ring offers the perfect blend for suspended ceilings). The RG Series combines a high output sealed beam type lamp, sealed lead calcium battery and full feature Sure-Lites electronics.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

#### SPECIFICATION FEATURES

# Electronic

- Dual Voltage Input
- 120/277 VAC, 60Hz
- 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-Stamped Steel
- Polycarbonate Lens Included
- Hanger Bars accommodate
- 24" spans
- Hanger Bars can be rotated 90° on Plaster Frame
- Conduit Knockouts, four 1/2" and two 3/4"
- Prewired Plaster Frame
- -Trim Ring, with Integral
- Test Switch, held in place with Torsion Springs

#### Battery - Sealed Lead Calcium

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

## Code Compliance

- IC Rated
- 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

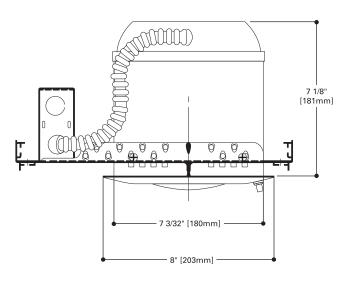
- Adjustable Aiming Angle 30°
- Glare-Free Lens
- Fully Adjustable, accommodates
- different ceiling thicknesses
- Matching Remote also available
- Standard White Trim Ring
- w/Black Gimbal Ring
- Fixture illuminates upon loss of
- AC power only (normally off)





#### RECESSED GIMBAL EMERGENCY LIGHTING

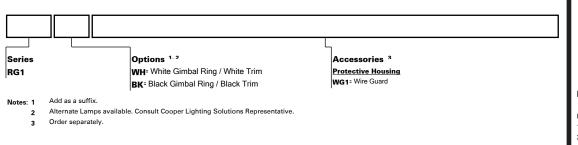
TOTALLY PREDICTABLE RELIABILITY.



#### ELECTRICAL RATINGS



### ORDERING INFORMATION





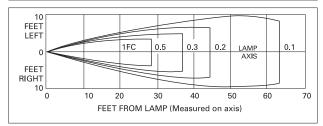
Input Current (Max.): 120V= .12A 277V= .05A

0.1

70

#### PHOTOMETRICS

# **Horizontal Distribution**



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

#### TECHNICAL DATA

#### Lamps

Designed specifically for emergency lighting applications, the PAR 36 sealed beam type design insures optimum glarefree trapezoidal light distribution along with horizontal and vertical adjustment by rotating the lens within the gimbal ring. Lamps illuminate upon loss of AC power only (fixture is normally off).

#### Housing

The rugged 20-gauge diestamped cold rolled steel housing is finished with an attractive white corrosionresistant polyester powder coat paint. The housing adjusts in the plaster frame 1-38" to accommodate different ceiling thickness. The IC Rated housing is engineered for use in insulated ceilings and is completely prewired. The junction box is not rated for through wiring. Gimbal trim ring is finished with a white baked acrylic enamel and provides up to 40° vertical adjustment and can rotate 358°. Polarized molex connectors simplify wiring connections between trim ring and housing.

### 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 charge 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.

Vertical Distribution

1FC

20

05

30

FEET FROM LAMP (Measured on axis)

0.3

40

0.2

50

LAMP AXIS

60

10

٥

10

Lamp No. 29-84

0

10

FEET

LEF1

FEET

RIGHT

#### **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 lamp 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 oneyear warranty against defect in material and workmanship (excluding lamps). Maintenancefree, long-life, sealed lead calcium batteries carry a five-year pro-rata warranty.

