Precision Approach Path Indicator Lighting (PAPI)

Certified to FAA AC 150/5345-28 (Current Edition)

*Provides the correct glide slope from over 10 miles away.*

**Benefits**

- Reliable photometric performance
- Stable housing results in fewer shut-downs for realignment reducing maintenance and increasing airfield utilization
- LED indicator identifies tilt switch circuit fault
- Quartz halogen average rated lamp life is 1000 hours
- No optical bench or special tools required for servicing
- Intuitive design of aiming device simplifies setting elevation and azimuth angles
- Interlock feature allows PAPI operation only in conjunction with runway lights (optional)
- Service indicator provides external signal of lamp out (optional)

**Options**

- 1=Runway Interlock (voltage only)
- 2=External Service Indicator
- 4=4-leg light units*

*Standard system has 3 legs per light unit*
Runway End Identification Light (L-849 REIL)

Certified to FAA AC 150/5345-51 (Current Edition)

Advanced design with lower cost of ownership and unmatched support

Benefits
- Low annual energy costs
- Five year flash lamp life expectancy
- High, medium and low intensity
- Master / Slave system operation
- Robust master control signal
- Field programmable flash rate and sequence timing
- Common timing board used in Master and Slave units
- Meets photometric beam requirements for MALSR, SSALR, and ALSF-I / II

Specifications

Current-Powered
- 2.8 to 6.6 amperes
- Operates directly from an L-830-10 isolation transformer
- No power adapter required
- True RMS current sensing
- Current sensing set-up required at the Master Unit Only

Voltage-Powered
- 120 VAC, 60 Hz | 240 V, 60 Hz | 230 V, 50 Hz
- Optional Current-Sensing Module for intensity control

Standard Options Available
- Co-mounted or Separate mounted flashhead
- Unidirectional or Omnidirectional
- 50 or 60 Hz
- Flash monitoring
- Elapsed time meter
- External master controller to replace controller in master unit

Applications
- REILS: Runway end identifier light system
- MALSR: Medium intensity approach lighting systems with runway alignment indicator lights
- ALSF-I: Approach Lighting System with Sequenced Flashing Lights (Cat. 1 runways)
- ALSF-II: Approach Lighting System with Sequenced Flashing Lights (Cat. 2 runways)
- SSALR: Simplified Short Approach Lighting System with Runway Alignment Indicator Lights

Airport Lighting Company · 104 Fairgrounds Drive · Manlius, NY 13104
(315) 682-6460 · Fax (315) 682-6469 · airportlightingcompany.com
05/13
### Photometric Data

<table>
<thead>
<tr>
<th>Model</th>
<th>Style</th>
<th>Type</th>
<th>FPM</th>
<th>Effective Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSUC</td>
<td>A</td>
<td>L-849I</td>
<td>120</td>
<td>15000 - -</td>
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<tr>
<td>PSUV</td>
<td>A</td>
<td>L-849V</td>
<td>120</td>
<td>15000 - -</td>
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<tr>
<td>PSOC</td>
<td>B</td>
<td>L-849I</td>
<td>60</td>
<td>5000 - -</td>
</tr>
<tr>
<td>PSOV</td>
<td>B</td>
<td>L-849V</td>
<td>60</td>
<td>5000 - -</td>
</tr>
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<td>PSUC</td>
<td>E</td>
<td>L-849I</td>
<td>120</td>
<td>15000 1500 300</td>
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<td>PSUV</td>
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<td>L-849V</td>
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<td>15000 1500 300</td>
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<tr>
<td>PSOC</td>
<td>F</td>
<td>L-849I</td>
<td>60</td>
<td>5000 1500 300</td>
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<td>PSOV</td>
<td>F</td>
<td>L-849V</td>
<td>60</td>
<td>5000 1500 300</td>
</tr>
</tbody>
</table>

### Physical Specifications

FHUD-109 dimensions: 11.5H x 8.5W x 7D (292 x 216 x 178)  
Weight: 4.5 lbs. (2)  
PSUV-101 (Master): 8H x 16W x 14D (203 x 406 x 356)  
Weight: 52 lbs. (23.6 kg)  
PSUV-101 (Slave): 8H x 16W x 14D (203 x 406 x 356)  
Weight: 47 lbs. (21.3 kg)  
Co-Mounted: 19.5H x 16W x 14D (495 x 406 x 356)  
Weight: 56.5 lbs. (25.7 kg)

### Equipment Data

- Control: Remote, local, or automatic  
  - 2.8 to 6.6  
  - 5.2 Amps Min. required for High intensity  
- Power (Watts): 150 Average; 290 Peak  
- Flash Rate: 60 p/m  
- Intensity: High: 2500 to 7500  
  - Med: 750 to 2250  
  - Low: 150 to 450  
- Beam Spread: 30º Horizontal, 10º Vertical.

### Spare Components

- Description | Part Number  
- Flash Tube (PAR 56) | 55-00145  
- Relay, Mode Switching | 55-00193  
- Printed Circuit Board, Timing & Control | 255-20079  

### General Catalog Numbers

All units have co-mounted flash heads unless specified with Option 6

- 8 - 4 - 9 - Type  
- L  
- V 1 = 120VAC  
- V 2 = 240V, 60Hz  
- V 3 = 230V 50 Hz  
- I = 6.6A

### Options

- 1 - Elapsed time meter  
- 2 - Current sense module (voltage units only)  
- 3 - Baffles  
- 4 - Flash monitoring  
- 5 - Master control in separate cabinet  
- 6 - Separate mount flash head (specify quantity)  
- 7 - Red filters (omni only)  
- 8 - Light shields (specify degrees coverage)
Omni-Directional Lighting System
(L-859 ODALS)

Certified to FAA AC 150/5345-51 (Current Edition)

Superior quality design with low annual energy costs

Benefits

- Lower cost of ownership
- Five year flash lamp life expectancy
- High, medium and low intensity
- Master / Slave system operation
- Robust master control signal
- Field programmable flash rate and sequence timing
- Common timing board used in Master and Slave units

Specifications

Current-Powered

- 2.8 to 6.6 amperes
- Operates directly from an L-830-10 isolation transformer
- No power adapter required
- True RMS current sensing
- Current sensing set-up required at the Master Unit Only

Voltage-Powered

- 120 VAC, 60 Hz | 240 V, 60 Hz | 230 V, 50 Hz
- Optional Current-Sensing Module for intensity control

Standard Options Available

- Co-mounted or Separate mounted flashhead
- 50 or 60 Hz
- Flash monitoring
- Elapsed time meter
- External master controller to replace controller in master unit

Applications

Omni-directional approach light system (ODALS)

Runway end identifier light system (REILs)

Co-Mounted Unit:
FHOD-110 and power supply

Certified strobe systems since 2003.
### Photometric Data

<table>
<thead>
<tr>
<th>Model</th>
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<th>Effective Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>PSOC</td>
<td>F</td>
<td>L-859I</td>
<td>60</td>
<td>5000</td>
</tr>
<tr>
<td>PSOV</td>
<td>F</td>
<td>L-859V</td>
<td>60</td>
<td>5000</td>
</tr>
</tbody>
</table>

### Physical Specifications

- **Power supply dimensions**: 8H x 16W x 14D (203 x 406 x 356)
- **Weight**: 51 lbs. (23.2 kg)
- **FHOD-110 dimensions**: 15H x 13.5 Dia. (381 x 343)
- **Weight**: 8.4 lbs. (3.8 kg)
- **PSOV-101 (Slave)**: 8H x 16W x 14D (203 x 406 x 356)
- **Weight**: 47 lbs. (21.3 kg)
- **Co-mounted (FHOD-110 & PS)**: 23H x 16W x 14D (584 x 406 x 356)
- **Weight (co-mounted)**: 59.4 lbs. (27kg)

### Equipment Data

- **Control**: Remote, local, or automatic
- **Current (rms Amps)**: 2.8 to 6.6
  - 5.2 Amps min. required for High intensity
- **Power (Watts)**: 150 Average; 290 Peak
- **Flash Rate**: 60 p/m
- **Intensity**:
  - High: 2500 to 7500
  - Med: 750 to 2250
  - Low: 150 to 450
- **Beam Spread**: 360º Horizontal, 10º Vertical.

### Spare Components

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Tube</td>
<td>55-00360</td>
</tr>
<tr>
<td>Relay, Mode Switching</td>
<td>55-00193</td>
</tr>
<tr>
<td>Printed Circuit Board, Timing &amp; Control</td>
<td>255-20079</td>
</tr>
<tr>
<td><strong>Current-Powered Only</strong></td>
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<tr>
<td>Printed Circuit Board, High Voltage Rectifier</td>
<td>255-20082</td>
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<tr>
<td>Printed Circuit Board, Current Sensing</td>
<td>255-20086</td>
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<tr>
<td>Power Transformer, High Voltage; 50/60 Hz</td>
<td>55-00005</td>
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<tr>
<td><strong>Voltage-Powered Only</strong></td>
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<tr>
<td>Power Transformer, Ferro Resonant 60Hz</td>
<td>255-20224</td>
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<tr>
<td>Power Transformer, 50Hz</td>
<td>55-00386</td>
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<tr>
<td>Printed Circuit Board, HV Rectifier</td>
<td>255-20081</td>
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</table>

### General Catalog Numbers

All units have co-mounted flash heads unless specified with Option 6

<table>
<thead>
<tr>
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<th>8</th>
<th>5</th>
<th>9</th>
<th>Type</th>
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<tbody>
<tr>
<td></td>
<td>V 1 = 120Vac</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>V 2 = 240V, 60Hz</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>V 3 = 230V 50 Hz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>6.6A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Styles

- F - Omni, three brightness steps

#### Options

1. - Elapsed time meter
2. - Current sense module (voltage units only)
3. - Baffles
4. - Flash monitoring
5. - Master control in separate cabinet
6. - Separate mount flash head (specify quantity)
7. - Red filters (omni only)
8. - Light shields (specify degrees coverage)
LED REIL – SAL 1030
Runway End Identification Light
(L-849 REIL)
Certified to FAA AC 150/5345-51 (Current Edition)
FAA Engineering Brief No. 67

Long LED Life Expectancy and Low Annual Energy Costs

**Benefits**

- Superior quality and unmatched technical support
- Low Power Draw - entire system draws less than 40 Watts
- Long LED Life
- Lower Shipping Costs - 32lbs per light head
- Nominal intensity - 22,000 effective candelas by Blondel-Rey measurement method
- Beam Coverage - 10° vertically, 30° horizontally
- Flash rate: two flashes per second
- Separation: Control unit can be mounted in excess of 500 feet from flash head
- Remote Control: Four-position selector switch or Series Lighting Circuit current sensing
- Meets photometric beam requirements for MALSR, SSALR, and ALSF-I / II
- Voltage-powered
- 120 VAC, 50 Hz or 60 Hz
- 230 VAC, 50Hz
- 240 VAC, 50 Hz or 60 Hz

**Standard Options Available**

- 50 or 60 Hz
- Flash monitoring
- Elapsed time meter
- Internal heater kit
- Error code LED display
### Photometrics Data

<table>
<thead>
<tr>
<th>Model</th>
<th>Style</th>
<th>Type</th>
<th>FPM</th>
<th>Effective Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAL 1030 A</td>
<td>L849V</td>
<td>120</td>
<td>15000</td>
<td>High, Med, Low</td>
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<tr>
<td>SAL 1030 C</td>
<td>L849V</td>
<td>120</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SAL 1030 E</td>
<td>L849V</td>
<td>120</td>
<td>15000</td>
<td>1500</td>
</tr>
</tbody>
</table>

### Physical Specifications

SAL-1030 dimensions:
- Head and Junction Box: 24.75"H x 14.25"W x 5.58"D
- Weight (Head & Junction Box): 32lbs.
- Master Control Unit: 6.5"H x 13.5"W x 12"D
- Weight (MCU): 10.5lbs.
- System Ship Weight: 74.5lbs

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