

## LED L-849V STYLE A/E REIL SYSTEM - SAMPLE SPECIFICATION

*Note: Modify the items in italics according to your specific job requirements.*

### ITEM L-150 INSTALLATION OF LED L-849V {STYLE A} {STYLE E} REIL SYSTEM

#### DESCRIPTION

150-1.1 This item shall consist of furnishing and installing the LED L-849V {Style A} {Style E} REIL System in accordance with this specification and the applicable FAA Advisory Circular. The system shall be installed at the specified location and in accordance with the dimensions, design, and details shown in the plans.

This item shall include the furnishing of all equipment, materials and incidentals necessary to place the system in operation to the satisfaction of the Engineer.

#### EQUIPMENT AND MATERIALS

##### 150-2.1 LED L-849V {STYLE A} {STYLE E} REIL SYSTEM.

- a. EQUIPMENT CONFORMANCE REQUIREMENTS. The LED L-849V REIL System shall conform to the requirements of FAA Advisory Circular 150/5345-51 (current edition) "Specification for Discharge-Type Flashing Light Equipment" and FAA LED "Engineering Brief No. 67" (current edition). The LED L-849V REIL System shall be ETL certified. *{The system shall comply with ICAO Annex 14, Vol. I, Section 5.3.8.}* The LED L-849V REIL System shall be manufactured by Astronics DME or approved equal.
- b. EQUIPMENT SUPPLIED. The LED L-849V REIL System shall be supplied for the total quantity as shown on the plans. The manufacturer shall have a downloadable electronic version of the manual available on their web site.
- c. LIGHT SOURCE REQUIREMENTS. To insure reliability and reduced energy consumption of the LED L-849V REIL System, a maximum of twelve Light Emitting Diodes (LEDs) shall be used in each Identifier Unit Assembly (IUA) light source. The REIL IUAs shall have a flash rate of 120 flashes per minute  $\pm 10\%$ . Both REIL IUAs shall flash simultaneously with no more than a 20 millisecond difference between them.
- d. POWER REQUIREMENTS. The voltage-powered REIL shall operate from a power supply of 240V AC (3-wire with the center wire being neutral).

e. OTHER REQUIREMENTS.

The LED L-849 REIL System shall consist of the following classification: L-849V (voltage power source), *{Style A (unidirectional, high intensity, one brightness step)}* or *{Style E (unidirectional with three brightness steps)}*.

The control cabinet and each IUA of the REIL shall be NEMA 4X equivalent with a built-in thermostatic heater. The control cabinet assembly shall include a (120V AC) GFI maintenance outlet to allow for plug-in test equipment on the airfield. The control cabinet assembly shall include a keypad and display to allow the unit to be commanded into local operation. The unit shall support ground-to-ground and air-to-ground remote operations.

The LED L-849V REIL System must operate at temperatures from -40 to +131°F (-40 to +55°C).

### CONSTRUCTION METHODS

150-3.1 PLACING THE LED L-849V *{STYLE A}* *{STYLE E}* REIL SYSTEM. The contractor shall furnish and install each LED L-849V REIL System as specified in the applicable Advisory Circulars. The LED L-849V *{Style A}* *{Style E}* REIL System shall be mounted on a mounting device at the locations shown on the plans.

150-3.2 TESTING THE LED L-849V *{STYLE A}* *{STYLE E}* REIL SYSTEM. The LED L-849V REIL System shall be fully tested by continuous operation for not less than 24 hours as a completed system prior to acceptance.

*{If current sensing is used: With the REIL System in Remote Mode, the test shall include operating the constant current regulator in each step not less than 10 times at the beginning and end of the 24-hour test. The REIL System shall illuminate properly during each portion of the test. At the end of this test, the REIL System shall be checked for proper operation in Local Mode.}*

*{If current sensing is not used: The test shall include operating the REIL System in both Remote and Local Mode in each step not less than 10 times at the beginning and end of the 24-hour test. The REIL System shall illuminate properly during each portion of the test.}*

### METHOD OF MEASUREMENT

150-4.1 MEASUREMENT. The quantity of LED L-849V *{Style A}* *{Style E}* REIL Systems to be paid for under this item shall be for the total quantity of LED L-849V *{Style A}* *{Style E}* REIL Systems installed and accepted as completed systems, in place, ready for operation and accepted by the Engineer.

## **BASIS FOR PAYMENT**

150-5.1 PAYMENT. Payment will be made at the contract unit price for the completed total quantity of LED L-849V *{Style A}* *{Style E}* REIL Systems installed, in place by the Contractor, and accepted by the Engineer. This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

Item L-150-5.1      LED L-849V *{Style A}* *{Style E}* REIL System, in Place—per each

**END OF ITEM L-150**