

## **L-861T LED TAXIWAY EDGE LIGHTS - SAMPLE SPECIFICATION**

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

### **ITEM L-150 INSTALLATION OF L-861T LED TAXIWAY LIGHTS**

#### **DESCRIPTION**

150-1.1 This item shall consist of furnishing and installing the L-861T LED taxiway lights in accordance with this specification and the applicable FAA Advisory Circular. The fixtures 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, services and incidentals necessary to place the lights in operation as completed units to the satisfaction of the Engineer.

#### **EQUIPMENT AND MATERIALS**

##### **150-2.1 L-861T LED TAXIWAY EDGE LIGHTS.**

- a. **EQUIPMENT CONFORMANCE REQUIREMENTS.** The L-861T LED taxiway edge lights shall conform to the requirements of FAA Advisory Circular 150/5345-46 (current edition) "Specification for Runway and Taxiway Light Fixtures" and FAA LED "Engineering Brief No. 67" (current edition). The L-861T LED taxiway edge lights shall be ETL certified. The L-861T LED taxiway edge lights shall be manufactured by Astronics DME or approved equal.
- b. **EQUIPMENT SUPPLIED.** The L-861T LED taxiway edge lights 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.** The L-861T LED fixture light source shall be a Light Emitting Diode (LED) assembly. The lifetime of the LED shall be a minimum of 50,000 hours at full intensity. To insure high daytime visibility, a blue outer-colored optical lens shall be used. For reliability, a single LED shall be used in the light source. For ease of lens replacement, a tool-less latch-style clamp band shall be used with no rubber-type materials that could be damaged by rodents, ants, etc.
- d. **POWER REQUIREMENTS.** The L-861T LED taxiway edge lights shall be designed to operate with a 10/15W, 6.6A (secondary) isolation transformer, and the L-861T LED fixture with a heater kit shall be designed to operate with a 20/25W, 6.6A (secondary) isolation transformer. The fixture load with the heater inactive shall be less than 15VA at the highest step of a 3- or 5-step circuit. The fixture shall meet the requirements of FAA Engineering Brief 67 (current edition) (2.13.1). The heater shall be designed to insure that the light emitting area remains unobscured and clearly visible in a manner similar to

existing incandescent fixtures. Activation of the heater shall be thermostatically controlled.

- e. OTHER REQUIREMENTS. The exterior color of the base shall be Aviation Yellow.

### **CONSTRUCTION METHODS**

150-3.1 PLACING THE L-861T LED TAXIWAY EDGE LIGHTS. The contractor shall furnish and install each L-861T LED taxiway edge fixture as specified in the proposal and shown in the plans. The L-861T LED taxiway edge lights shall be mounted on an industry standard 1.5-inch frangible coupling. The overall fixture height shall be 14 inches *{24 inches} {30 inches}*. The fixture shall then be mated to a standard FAA L-867 base at the locations shown on the plans.

150-3.2 TESTS. All L-861T LED taxiway edge lights shall be fully tested by continuous operation for not less than 24 hours as a completed system prior to acceptance. 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 fixtures shall illuminate properly during each portion of the test.

### **METHOD OF MEASUREMENT**

150-4.1 MEASUREMENT. The quantity of lights to be paid for under this item shall be for the total quantity of L-861T LED taxiway edge lights installed and accepted as completed units, 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 L-861T LED taxiway edge lights 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:

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|----------------|---|
| Item L-150-5.1 | L-861T LED Taxiway Edge Lights, in Place—per each |
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**END OF ITEM L-150**