

Manufactured under TSO by:  
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**Installation Guide:**  
**AeroLEDs Suntain**  
**P/N 11-1160-( )**  
**LED Position and**  
**Anti-Collision Light**

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*The conditions and tests required for TSO approval of this article are minimum performance standards. It is the responsibility of those installing this article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standards. TSO articles must have separate approval for installation in aircraft. The article may be installed only if performed under 14 CFR part 43 or the applicable airworthiness requirements.*

**TSO C-30c Type III approved**  
**TSO C-96a Class II approved (Aircraft 100L to 100R rear arc)**  
**And TSO-C96a Class III approved (90L to 90R rear arc)**

Deviations: Tested to DO-160E instead of DO-160B as called out in TSO-C-30c and TSO C-96a

#### Operating Instructions:

**Operational Voltage:** 14 & 28 Volt Systems  
**Position Input Current:** 0.4A at 14V, 0.2A at 28V  
**Strobe Average Current:** 0.4A at 14V, 0.2A at 28V  
**Strobe Peak Current:** 3.3A at 14V for 0.19 seconds

#### EQUIPMENT LIMITATIONS:

##### All Aircraft:

This light is designed to be mounted on the exterior of the aircraft in non-enclosed locations for proper cooling. For installations that are enclosed by clear covers, contact AeroLEDs engineering for technical assistance to ensure adequate cooling is provided for compliance with the TSO requirements.

##### Aircraft for which type certificate was applied for after April 1, 1957 to August 11, 1971:

The anti-collision system must produce a minimum of 100 effective candelas in Aviation Red or White, 360° around the vertical axis, 30° above and below the horizontal plane.

##### Aircraft for which type certificate was applied for after August 11, 1971:

The anti-collision system must produce a minimum of 400 effective candelas in Aviation Red or White, 360° around the vertical axis, 30° above and below the horizontal plane.

##### Rotorcraft for which type certificate was applied for after February 5, 1976:

The anti-collision system must produce a minimum of 150 effective candelas in Aviation Red, 360° around the vertical axis, 30° above and below the horizontal plane.

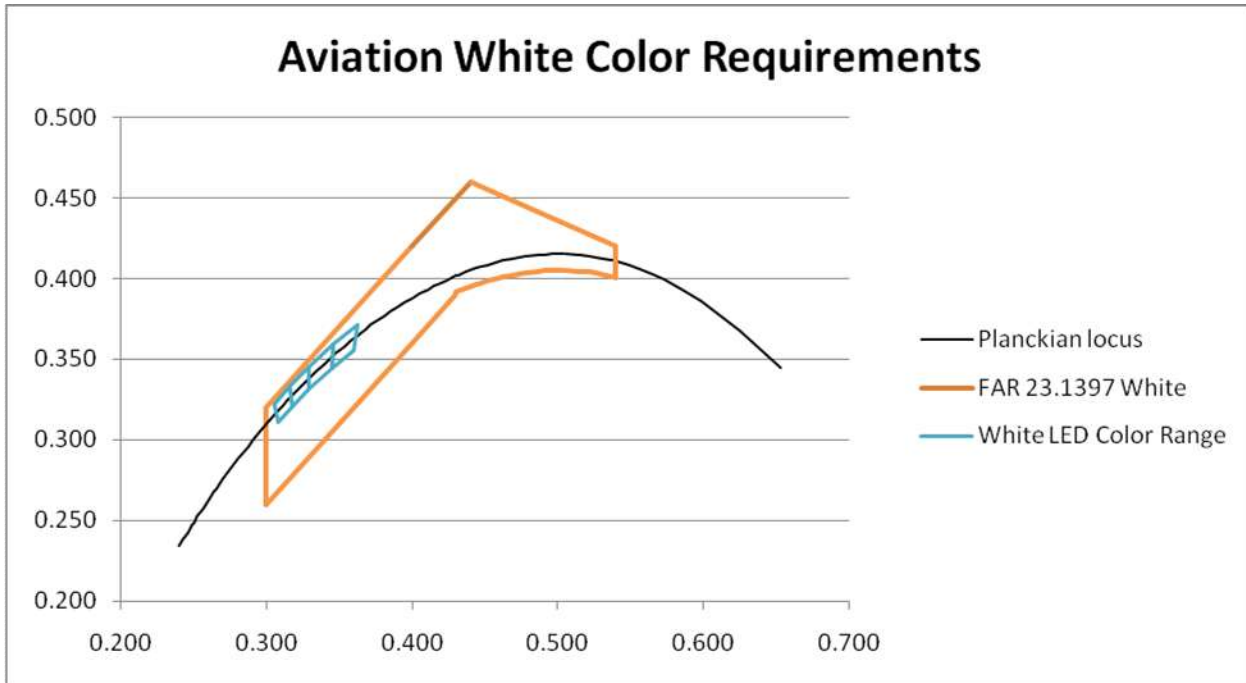
#### CONTINUED AIRWORTHINESS:

The Suntain LED rear position and anticollision light assembly is designed with 18 LEDs mounted beneath the anti-collision lens. Should any one LED fail, the unit must be repaired or replaced. View LEDs with welding goggles for eye safety. Note: only 6 LEDs are used for the position light mode, and 12 are used for the strobe.

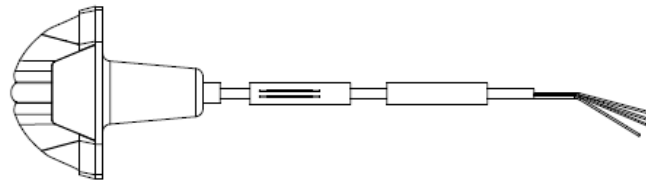
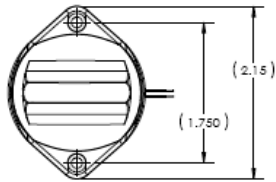
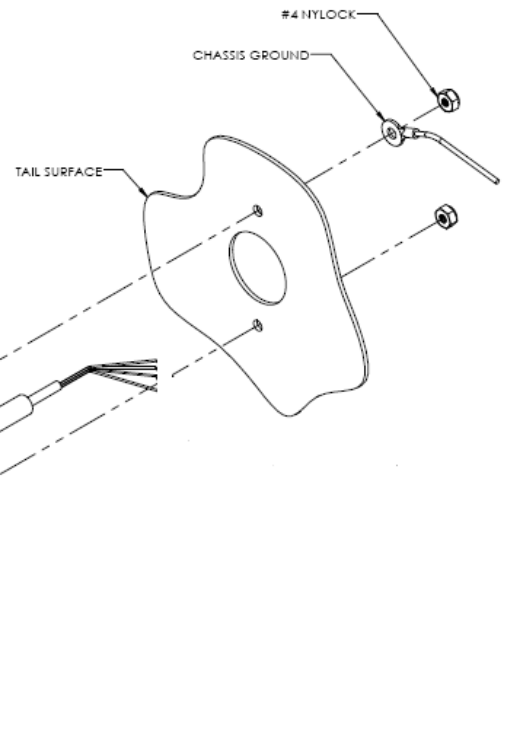
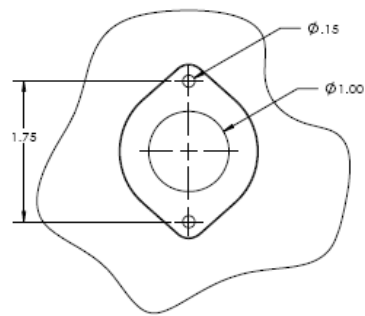
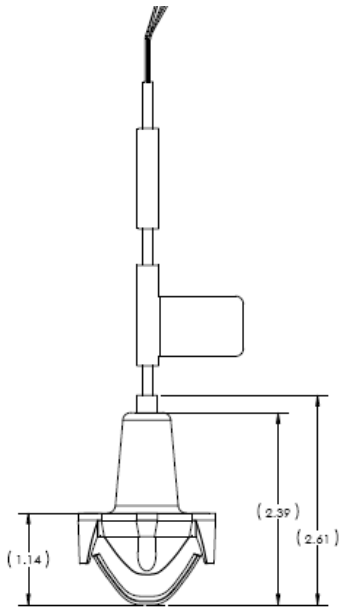
#### INSTALLATION PROCEDURES:

1. The installation procedure described in the following text is for a single light installation, but the procedure is identical for multiple light installations.
2. Mount the light to the tail mounting location using two 4-40 100 degree countersunk screws. **Ensure that the body of the light is grounded to structure via the mounting screws.** If necessary, route a ground strap from one mounting screw to structure ground or terminate the ground shield from the shielded wire bundle to a mounting screw. Proper chassis ground is required for protection from direct lightning effects.
3. Connect the red 20 gauge wire to switched power for the position lights, connect the yellow 20 gauge wire to switched power for the strobe lights, connect the black 20 gauge wire to same structure ground used for the mounting screw, and connect the green 22 gauge wire to the synchronization wire from the other installed light(s). It is recommended that the attached wiring diagram be followed for minimum RFI. **WARNING: Do not connect the strobe power wire to a Xenon strobe power pack. This can damage the light and voids the warranty.**
4. Check all avionics systems for interference from this installation.

5. A flight check should be performed by a properly certified pilot.
6. Update aircraft records, if necessary complete Form 337 and obtain FAA field approval for installation, or install per approved STC.



DO-160E Section	Compliance Level
4	F2
5	F2
6	C
8	U
9	H
10	S
11	F
12	D
14	S
15	A
16	Z
17	A
18	Z
19	ZC
20	RR
21	M
22	A2E2



Recommended Wiring for Pulsar 11-1180-()-(), 11-1100-()-() and Suntail 11-1160 Lights  
Wire run for one light shown below

