

Manufactured by:  
AeroLEDs LLC  
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**Installation Guide:**  
**AeroLEDs Pulsar**  
**P/N 01-1100-( )-( ) Pulsar**

The first -( ) indicates the mounting location, with -L being the left (red) and -R being the right (green) mounting location.  
The second -( ) indicates minor changes

**LED Position and**  
**Anti-Collision Lights**

Distributed by AeroLEDs LLC:  
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**Light output exceeds TSO standards for position and anti-collision light, the experimental part number is identical in construction to the TSOA part number, but is not labeled as TSOA approved.**

**Operating Instructions:**

**Below current values are for each individual light:**

**Operational Voltage:** 14 & 28 Volt Systems  
**Position Input Current:** 0.4A at 14V, 0.2A at 28V  
**Strobe Average Current:** 0.8A at 14V, 0.4A at 28V  
**Strobe Peak Current:** 2.5A at 28V for 0.2 seconds  
5.0A at 14V for 0.2 seconds

**EQUIPMENT LIMITATIONS:**

**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 Pulsar LED navigation and anticollision light assembly is designed with 4 forward navigation LEDs, 2 rear position LEDs, and 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.

**INSTALLATION PROCEDURES:**

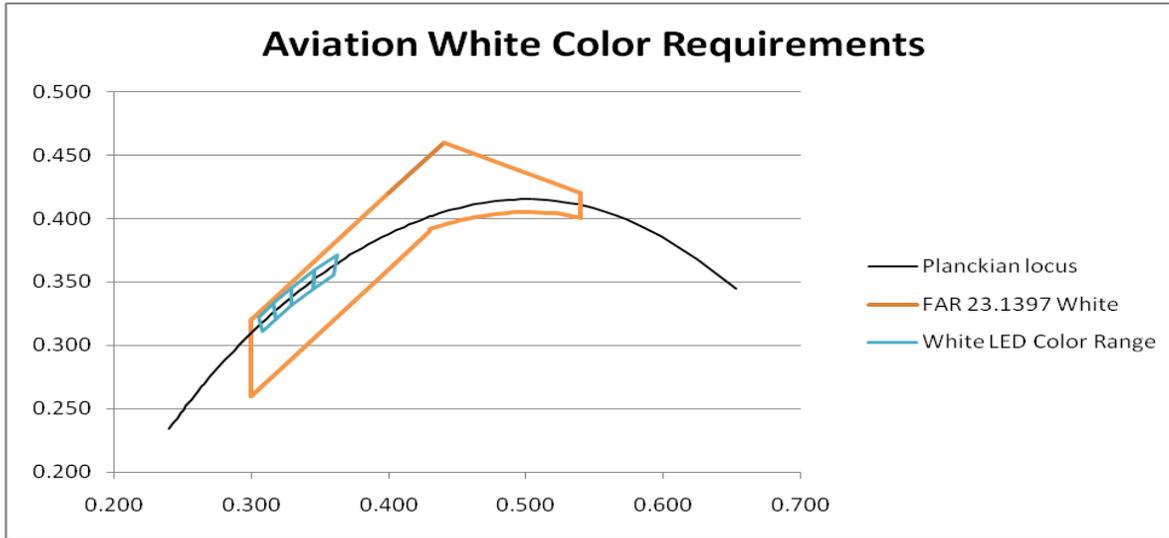
1. The installation procedure described in the following text is for a single light installation, but the procedure is identical for multiple light installations. Ensure that the proper part number, left (-L) or right (-R) is installed on the correct side of the aircraft.
2. Print out the installation template (the page 3 of this document), however be sure to set up the printer driver to NOT use Page Scaling so the printer will replicate the template to the proper 1:1 scale, otherwise the template will be too small. The proper scaling can be verified by placing the included Mounting Bracket over the printout to ensure a 1:1 fit.
3. By design, the Mounting Bracket locks into the product body.
4. Print the template as described above and confirm a 1:1 scaling of the printout.
5. Attach the template to the wingtip (mounting) position and mark the screw and wire hole locations.
6. Mount the bracket using three 6-32 100 degree countersunk screws. **Ensure that the mounting bracket 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.

7. Connect the red wire to switched power for the position lights, connect the yellow wire to switched power for the strobe lights, connect the black wire to the same structure ground used to ground the mount, and connect the green 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.

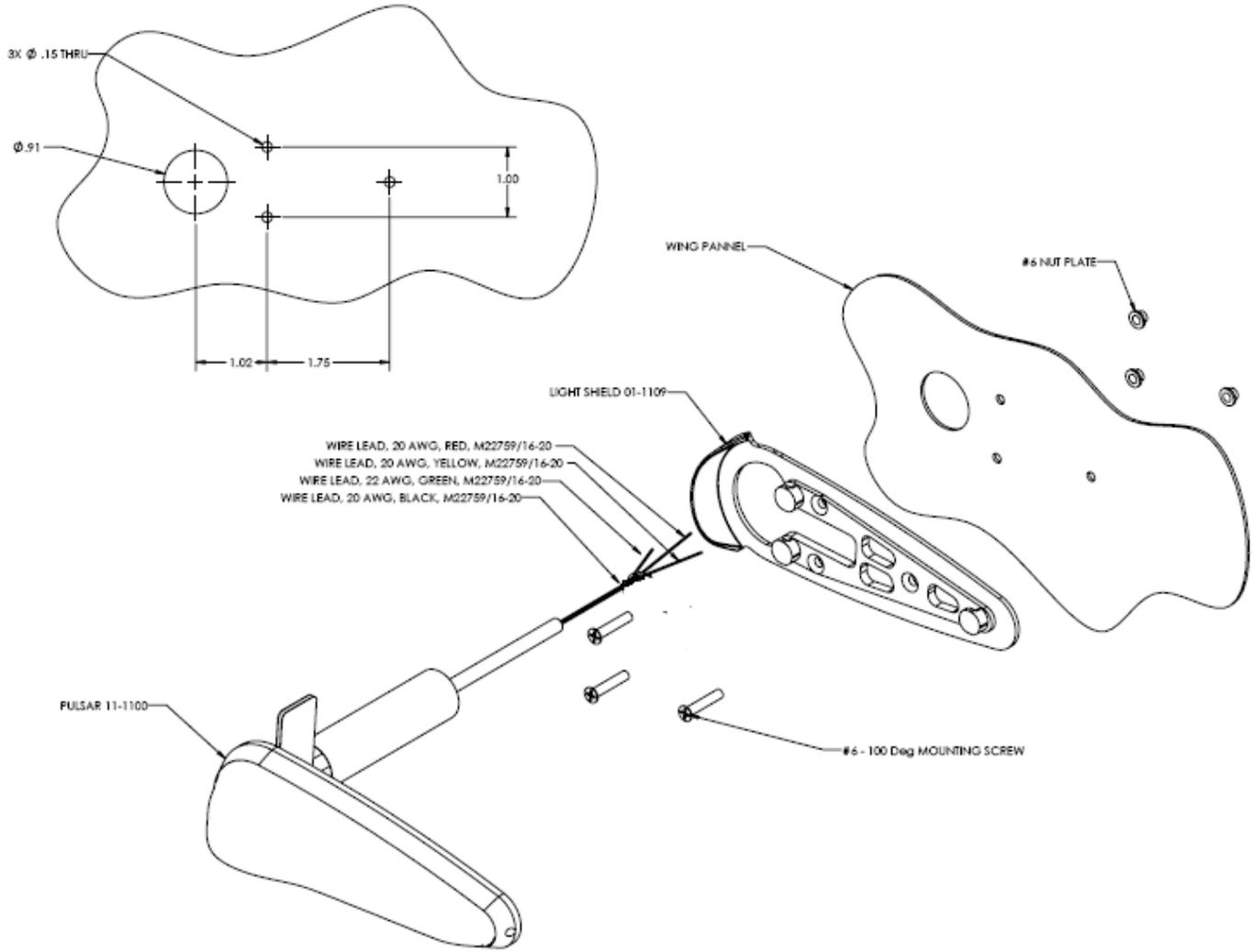
8. Attach the light to the mounting bracket and anchor in place with the 8-32 hex head set screw (provided) that inserts into the rear of the light.
9. Check all avionics systems for interference from this installation.
10. A flight check should be performed by a properly certified pilot.
11. Update aircraft records.

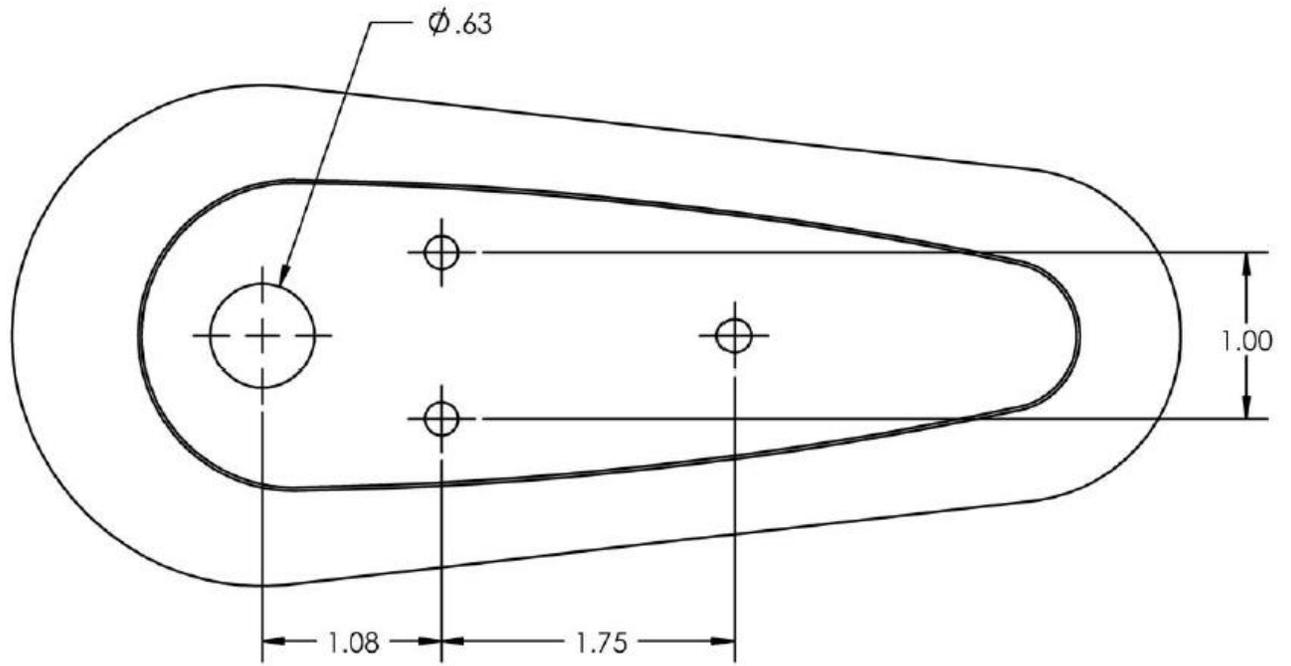


Red Position Light Chromaticity (typical):  $x=0.695, y=0.303$

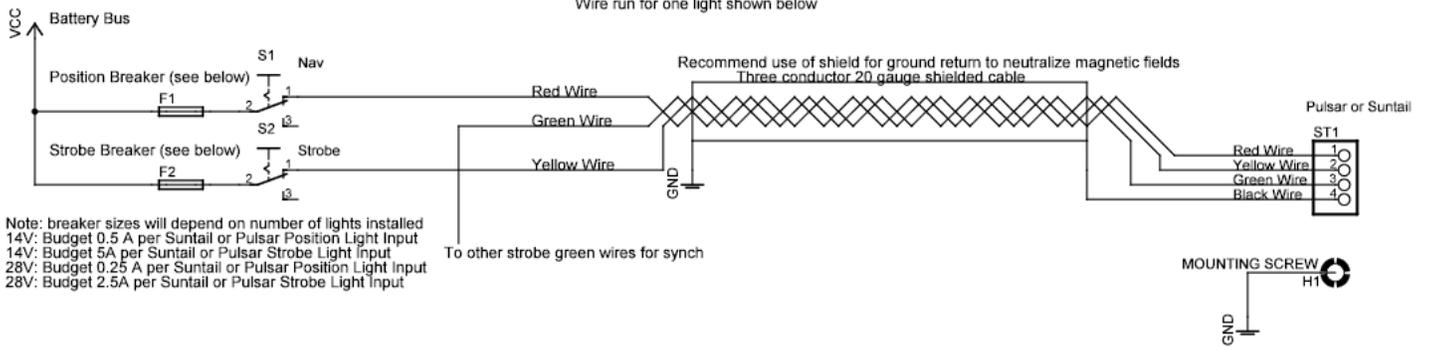
Green Position Light Chromaticity (typical):  $x=0.081, y=0.469$

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 11-1180-0-0, 11-1100-0 and Suntail 11-1160 Lights  
Wire run for one light shown below



Note: breaker sizes will depend on number of lights installed  
 14V: Budget 0.5 A per Suntail or Pulsar Position Light Input  
 14V: Budget 5A per Suntail or Pulsar Strobe Light Input  
 28V: Budget 0.25 A per Suntail or Pulsar Position Light Input  
 28V: Budget 2.5A per Suntail or Pulsar Strobe Light Input