U.S. Department
of Transportation
**Federal Aviation
Administration**

**Transport Airplane Directorate
Aircraft Certification Service**

1601 Lind Avenue Southwest
Renton, Washington 98057-3356

MAY 22 2015

In Reply
Refer To: 130S-15-125

Mr. Dean Wilkinson
Chief Technical Officer
AeroLEDs LLC
8475 West Elisa Street
Boise, ID 83709

Dear Mr. Wilkinson:

Subject: Technical Standard Order (TSO) Authorization Application TSO-C30c – Aircraft Position Lights and TSO-C96a – Anti-collision Light Systems

This is in reply to your letter dated April 20, 2015, requesting TSO authorization for your wing mounted position and anti-collision lights. The statement of conformance to TSO-C30c and TSO-C96a and the submitted data are accepted. Effective the date of this letter, you are authorized to identify the following wing mounted position and anti-collision lights with the marking requirements defined in Title 14 Code of Federal Regulations (CFR) section (§) 21.616(d)(e), in TSO-C30c and TSO-C96a.

TSO No.	Model	Part Number (P/N)	Description
TSO-C30c and TSO-C96a	Pulsar	11-1100-()-()	Wing mounted position and anti-collision lights

The letter states the aforementioned part number meet the applicable requirements of aforementioned TSOs, and is in conformance with 14 CFR part 21, subpart O.

The Seattle Manufacturing Inspection District Office (MIDO), ANM-108S, reviewed and approved your revised Quality Manual (QM) Document Number 9000-0000 QMS-00, Revision H, dated April 15, 2015. The Seattle MIDO, ANM-108S, performed a MIDO audit at AeroLEDs, LLC on March 11, 2015, which resulted in three (3) non-compliances. All corrective actions associated with the non-compliances have been accepted by the Seattle MIDO via the Seattle MIDO memo dated April 15, 2015.

Your Quality Control Systems, as defined in your QM, currently on file at the Seattle Manufacturing Inspection District Office, is considered satisfactory for production of this article at: 8475 West Elisa Street, Boise, ID 83709.

The following design data, submitted with your letter, has been added to our TSO file:

Certification Documents			
Document No.	**Description**	**Rev.**	**Date**
0011-0001	Pulsar 11-1100 Drawing List	IR	8/11/2014
0011-0002	Pulsar 11-1100 TSO Accomplishment Summary	IR	8/11/2014
0011-0003	Pulsar TSO-C30C and TSO-C96a Qualification Test Report	IR	8/11/2014
0009-0004	Environmental Qualification Form	IR	8/11/2014
0011-0005	Pulsar Installation	A	4/28/2015
0009-0006	Materials Flammability Statement	IR	8/21/2014
0011-0007	Pulsar 01-1103 PCA Process Document	IR	8/11/2014
0011-0008	Pulsar 01-1103-L & -R PCA Functional Test	IR	8/11/2014
0011-0013	Pulsar Manufacturing Assembly Process	IR	8/11/2014
0011-0014	Pulsar Incoming QA Inspection Process	IR	8/11/2014
0011-0017	Pulsar Navigation Strobe (NS) Document List	IR	10/6/2014
00-8501	Grommet Drawing	A	11/13/2012
00-8539	Pulsar PCB header	IR	6/1/2012
00-9004	Inline Filter	IR	9/12/2014
00-9004-A	Inline Filter Assembly	IR	9/12/2014
01-1065-A-5	PCA-LED, White, Rebel ES	B	9/27/2014
01-1081	Heatsink-LED, Pulsar	A	6/4/2012
01-1087	Lens-Optical, Pulsar NS	A	11/13/2012
01-1101	Lens-Cover, Pulsar	A	8/8/2012
01-1102	Reflector, Pulsar	IR	10/3/2014
01-1103-L	PCA, Power, Pulsar, Red	B	9/22/2014
01-1103-R	PCA, Power, Pulsar, Green	B	9/22/2014
01-1104	Heatsink, Pulsar	A	1/28/2014
01-1109	Pulsar Shield	IR	10/3/2014
01-9022	Label, 11-1100-L Pulsar	IR	3/8/2012
01-9023	Label, 11-1100-R Pulsar	IR	3/8/2012
11-1100-L	Pulsar, Red	IR	10/3/2014
11-1100-R	Pulsar, Green	IR	10/3/2014

Certification Documents			
Document No.	**Description**	**Rev.**	**Date**
96094-4	Test Report For Pulsar Navigation Strobe Position (NSP), 11-1180-C-R and Pulsar, 11-1100-R		9/25/2014
10120-6335	Blowing Dust 10095 Report		4/21/2010
	CTC 10095 Report		4/26/2010
	CTC 10243 explosive atmosphere Report		4/26/2010
	Fungus 10095 Report		4/26/2010
MR-31-10-336	MR_Test_Report_AeroLEDs Suntail Position & Strobe Light_DO-160E		5/7/2010

Your letter dated April 16, 2015, requesting deviations from the requirements of TSO-C30c and TSO-C96a to use a later version of RTCA/DO-160 for the Model Pulsar P/N 11-1100-()-() was reviewed by the Seattle Aircraft Certification Office (ACO). Approval was granted for the deviations to TSO-C30c and TSO-C96a via Seattle ACO Action Stamp Number AS/130S/15/559, dated April 28, 2015.

As required by the TSO, the following data must be furnished with each manufactured article:

> "One copy of the data and information specified in paragraph c(1)(i) through (viii) of this TSO, and instructions for periodic maintenance and calibration which are necessary for continued airworthiness must go to each person receiving for use one or more articles manufactured under this TSO."

This TSO authorization, issued under § 21.611, is effective until surrendered, withdrawn or otherwise terminated under the provisions of § 21.613. With notice, we may withdraw this TSO authorization if articles aren't in compliance with the applicable TSO performance standards per § 21.2.

This authorization pertains only to manufacturing operations at the above address. Without further FAA approval, we don't allow manufacturers to mark articles after they change their company's name, address, or ownership. You must notify the Seattle ACO and Seattle MIDO of name, address, or proposed ownership changes.

You must obtain FAA approval prior to making any changes to the location of your manufacturing facilities pursuant to § 21.609(b). This office must be notified at least 30 days in advance of any proposed facility relocation to preclude interruption while awaiting quality control approval of that facility. As required by § 21.616(f), you must also notify the FAA when you no longer manufacture a TSO approved article. Copies of the data must be sent to the FAA when you no longer manufacture a TSO approved article.

Per § 21.614, a holder of a TSOA may not transfer it. If you wish to transfer it, you must request a transfer from the FAA.

Any design change(s) to this TSO article must be forwarded to this office as outlined in § 21.619(a) with minor changes submittal intervals not to exceed six months. Notification of changes should be made prior to shipment.
As a recipient of this TSO authorization you are required to report any failure, malfunction, or defect in any product or part manufactured by you or your contracted suppliers, and which you have determined has resulted or could result in any of the occurrences listed in § 21.3(c).

Please note that technical data retained by the FAA may be subject to a Freedom of Information Act request. As such, this office will notify you of all such requests pertaining to your data and afford you the opportunity to defend the release of the data.

If you have any questions, please contact Ms. Thuan T. Nguyen with the Systems and Equipment Branch, at telephone number (425) 917-6458, at facsimile number (425) 917-6590, or by electronic mail at thuan.t.nguyen@faa.gov.

Sincerely,

for Ross Landes
Manager, Seattle Aircraft
Certification Office

Enclosure
Accepted Non-TSO functions

Accepted Non-Technical Standard Order (TSO) Functions

We accept, as valid data, the data supporting the non-TSO functions listed below. **This TSO authorization is not an approval for the non-TSO function(s) or for installation.** You must apply for a separate installation approval so we can determine if the data are applicable and sufficient to show compliance to the airworthiness regulations for the product(s) where the article is installed.

Part Number	Non-TSO Function	Description	Performance Standard	Documentation
11-1100-()-()	Synchronization function	Synchronization signal for synchronizing the anti-collision lights between multiple units	SAE AS8017B Sec 3.6.1	0011-0003 0011-0008

We accept the data supporting the non-TSO functions listed in the above table with the following conditions:

1. The non-TSO functions do not interfere with the article's compliance with TSO-C30c and TSO-C96a.

2. AeroLEDs controls the design and quality of the article, including the validity of the non-TSO function's data listed in the above table.

3. AeroLEDs evaluates design changes in accordance with Title 14 Code of Federal Regulations section 21.619 to ensure the article continues to comply with TSO-C30c and TSO-C96a.

4. AeroLEDs evaluates design changes to confirm the continued validity of the accepted non-TSO function's data. If the design change affects the accepted non-TSO function, you must obtain approval from the Federal Aviation Administration before incorporating the change into your approved design. If the design change does not affect the accepted non-TSO function, you must report it when you report other minor design changes.