



# REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 3163547

Date: October 30, 2008

REPORT NO. 3163547CRT-001

TEST OF ICAO LOW INTENSITY, TYPE A OBSTACLE LIGHT

RENDERED TO

PT TRICOMM AEROCITRA  
PALEM PERMAI ESTATE  
JL PALEM BOTOL NO. 2  
BANDUNG 40286  
INDONESIA

## INTRODUCTION

This report contains the results of examinations and tests of the above device to demonstrate compliance with the applicable requirements of International Civil Aviation Administration, Standards and Recommended Practices for Aerodromes, Annex 14, Volume 1, 4<sup>th</sup> Edition, dated July 2004.

## Summary

The following is a summary of the results of tests of the device performed in accordance with the following:

<u>Test</u>	<u>Requirement Paragraph</u>	<u>Remarks</u>
Photometric	Table 6-3	Complies
Chromaticity	Appendix 1, Figure A1-1	Complies

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EQUIPMENT LIST

<u>Equipment Used</u>	<u>Model Number</u>	<u>Control Number</u>	<u>Calibration Date</u>
Optronik Goniophotometer	SMS 10h	O109	10/13/09
Cole Parmer Thermometer	---	N859	11/13/08
Optronics Laboratories Spectral Radiometer	750D	E288	04/24/09

AUTHORIZATION

The testing performed was authorized by Signed Quote No. 500066048.

MATERIAL SUBMITTED

The client submitted one sample. The sample was received by Intertek on October 13, 2008 in undamaged condition, and tested after modification. The sample designation is H08017F.

MANUFACTURER

PT Tricomm Aerocitra  
Palem Permai Estate  
JL Palem Botol No. 2  
Bandung 40286  
Indonesia

DESCRIPTION OF DEVICE

Brand/Type: Solarens/OL-0311  
Input: 90-260VAC/12VDC  
Lamp: Luxeon III LED  
Mounting: 3/4" pipe

Manufacturer's Catalog Number: OL-0311 AC Version

(see picture page included in this report)

DATE OF TESTS

October 23, 2008



TEST, TEST METHODS AND RESULTS OF TESTS

Photometric Test

The light was tested while operating at 120 VAC. The device was rotated at 30° increments over 360° and a vertical distribution was taken. The vertical distribution was taken from -3 to +20 in 1° increments. The test distance is 25 meters.

Beam spread is the angle between the two directions in the plane in which the intensity is equal to 50 percent of the minimum specified peak beam intensity.

RESULTS OF TESTS

Photometric Distribution - Table 6-3; Low Intensity, type A obstacle light

Sample: H08017F

All intensity measurements are in candela

Test distance: 25 m

Input: 120VAC

Vertical Position (deg.)	Horizontal Position (deg.)											
	0	30	60	90	120	150	180	210	240	270	300	330
20U	2.1	1.9	1.9	1.7	1.7	1.8	1.7	1.8	1.5	1.5	1.7	1.6
19U	2.5	2.1	2.1	1.8	1.9	2.0	1.8	1.9	1.7	1.6	1.8	1.8
18U	3.0	2.5	2.4	1.9	2.0	2.2	1.9	2.0	1.9	1.8	1.9	2.2
17U	3.6	3.4	3.2	2.4	2.4	2.5	2.2	2.3	2.1	2.1	2.2	2.6
16U	5.9	7.6	5.3	3.5	3.3	3.1	2.9	2.7	2.5	2.9	2.9	4.0
15U	12.2	16.0	10.1	5.8	5.7	4.6	3.8	3.5	3.6	4.5	5.1	9.1
14U	17.0	19.7	16.6	10.2	9.8	8.4	5.7	5.8	6.0	7.1	10.2	16.7
13U	20.1	21.7	23.0	17.1	16.1	16.5	11.9	11.7	12.2	11.0	16.7	21.4
12U	26.6	31.2	31.1	24.5	23.1	22.6	20.4	20.2	19.8	15.4	21.4	23.1
11U	35.6	39.6	40.5	31.7	31.1	25.8	24.0	24.3	26.1	22.7	31.0	31.2
10U	40.7	42.7	44.8	37.9	39.7	34.0	31.8	30.3	37.0	31.0	42.3	40.2
9U	40.3	39.4	43.5	41.4	44.6	40.4	41.3	42.2	48.6	35.3	46.9	43.0
8U	35.4	34.1	40.5	39.3	44.7	41.2	46.9	46.1	51.8	33.5	46.3	41.5
7U	30.9	30.3	36.4	36.6	41.5	39.8	46.4	49.2	49.9	29.2	40.3	35.4
6U	30.6	29.4	34.6	34.8	37.4	35.9	39.0	39.8	40.5	24.3	32.9	31.2
5U	33.1	31.0	34.9	34.7	35.9	34.6	35.2	34.4	34.6	23.1	31.2	32.1
4U	33.5	29.7	33.4	34.2	35.3	34.7	36.8	33.6	34.1	24.6	32.8	34.0
3U	30.2	26.2	30.1	30.3	33.6	33.9	38.5	35.3	34.8	24.1	33.0	33.0
2U	25.7	22.2	25.4	23.5	30.4	31.7	37.8	34.4	33.6	20.2	30.8	29.0
1U	21.6	18.0	20.5	16.0	25.5	27.3	31.1	29.5	28.6	16.0	26.2	23.1
0	16.1	13.8	15.3	11.4	20.0	21.6	21.6	22.2	19.7	12.6	20.1	16.3
1D	11.6	10.1	11.5	8.6	15.1	14.4	13.2	13.4	12.8	8.8	13.4	11.3
2D	8.6	8.0	8.8	6.6	11.4	9.8	8.8	8.2	7.7	6.4	8.5	7.8
3D	6.8	6.6	6.9	5.3	8.8	6.8	6.0	5.7	5.5	5.1	6.1	5.4

NOTES: Intensity is above the 10 cd specified minimum at all required points.



TEST, TEST METHODS AND RESULTS OF TESTS

Chromaticity

The color of light emitted was measured at operating temperature and rated voltage. Chromaticity coordinates were calculated from a spectral distribution measured in 2nm increments.

Results

The color of light emitted does comply with the requirements of ICAO Annex 14, July 2004, Volume I, Appendix 1, Fig. A1-1.

Intertek Sample No.	Type	Color	Chromaticity Coordinates		
			x	y	z
H08017F	Low intensity, type A	Red	0.7041	0.2958	0.0001

In Charge of Tests:

Andrew Pease  
Electrical Engineer  
Lighting Division

Report Reviewed By:

Jeremy N. Downs, P.E.  
Engineering Team Leader  
Lighting Division

Attachment: One picture page

TEST OF ICAO LOW INTENSITY, TYPE A OBSTACLE LIGHT  
TESTED FOR PT TRICOMM AEROCITRA

