

# REPORT 3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. G100797928 Date: July 30, 2012 Revision Date: May 13, 2013

REPORT NO. 100797928CRT-001

### TEST OF A703 / A704 SOLAR OBSTRUCTION LIGHT

RENDERED TO
Carmanah Technologies Corporation
250 Bay Street
Victoria BC V9A 3K5

Revision Note (5/13/13): Report revised to change client address and fix model No. from OL32A to OL32. Revision Note (4/29/13): Report revised to add model numbers OL10A and OL32. New models not tested, client states the battery packs are different but there are no optical or firmware differences from A703 / A704 to OL10A / OL32.

#### INTRODUCTION

This report contains the results of examinations and tests of the above device to demonstrate compliance with the applicable requirements of:

- U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular, Specification for Obstruction Lighting Equipment, AC No. 150/5345-43F dated 9/12/2006.
- U.S. Department of Transportation, Federal Aviation Administration, Memorandum, Light Sources Other Than Incandescent and Xenon For Airport and Obstruction Lighting Fixtures. Engineering Brief No. 67D dated 3/6/2012

International Civil Aviation Organization (ICAO), Aerodromes, Annex 14, Volume 1, Fifth Edition, dated July 2009

#### Summary

The following is a summary of the results of tests of the device performed in accordance with the following portions of AC No. 150/5345-43F and portions of ICAO Annex 14.

| Test (AC 150/5345-43F) | Requirement Paragraph | Test Method       | <u>Remarks</u> |
|------------------------|-----------------------|-------------------|----------------|
| Photometric            | 3.4.1.2               | 4.2.1             | Complies       |
| Chromaticity           | 3.3.3                 | 2.1.2             | Complies       |
| Angular Irradiance     | NA                    | NA                | NA             |
| Test (ICAO Annex 14)   | Requirement Paragraph | Test Method       | <u>Remarks</u> |
| Photometric – Type A   | Table 6-3             | 6.3.24            | Complies       |
| Chromaticity – Type A  | Appendix 1 Sec. 2.1.1 | Appendix 1 Sec. 2 | Complies       |
| Photometric – Type B   | Table 6-3             | 6.3.24            | Complies       |
| Chromaticity – Type B  | Appendix 1 Sec. 2.1.1 | Appendix 1 Sec. 2 | Complies       |



Intertek 3933 U.S. Rte. 11 Cortland, NY 13045 Phone: 607-753-6711 Fax: 607-758-6637

## **Letter of Attestation**

On the basis of the tests undertaken, the sample(s) of the below product have been found to comply with the essential requirements of the referenced portions of the specifications at the time the tests were carried out.

Manufacturer Name & Address : Carmanah Technologies Corporation

250 Bay Street

Victoria BC V9A 3K5

Product(s) Tested : Low Intensity Type A and Type B (fixed obstacle)

Ratings and principal characteristics: Battery operated, Programmable, LED module (Red)

Model(s) : A703 / A704 & OL10A / OL32

Brand name : Carmanah Technologies Inc.

Relevant : International Civil Aviation Organization (ICAO).

Standard(s)/Specification(s)

Aerodromes, Annex 14, Volume 1, Fifth Edition, dated July

2009

Photometric - Table 6-3

Chromaticity - Appendix 1 Sec. 2.1.1

Verification Issuing Office Name &

**Address** 

Intertek Cortland - Lighting

3933 US Route 11 Cortland, NY 13045

**Date of Test(s)** : July 17, 2012 through July 20, 2012

Verification/Report Number(s) : 100797928CRT-001 dated May 13, 2013

Signature

Name: Jeremy N. Downs P.E. Position: Staff Engineer

Original Issue Date: May 13, 2013 Re-evaluation Due Date: May 13, 2016

NOTE: This verification is part of the full test report(s) and should be read in conjunction with it.

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