



1 TYPE EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 06ATEX4372X** Issue: **6**

4 Equipment: L810 Obstruction Light

5 Applicant: **Dialight Corporation**

6 Address: 1501 Route 34 South

Farmingdale

New Jersey 07727

USA

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 CSA Group Netherlands B.V. certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 3 equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012+A11:2013

EN 60079-15:2010

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.
- 11 This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:

 $\langle \epsilon_x \rangle$

II 30

Ex nA IIC T4 Gc (Ta = -55°C to +55°C)

Project Number 1304 Signed:

Title: Director of Operations

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SCHEDULE

TYPE EXAMINATION CERTIFICATE

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13 **DESCRIPTION OF EQUIPMENT**

The L810 Obstruction Light comprises an aluminium base with an upper well glass. Illumination is achieved by means of eight arrays of two LEDs that are fitted inside around the circumference of a reflector. Internally, there is an encapsulated power supply. The equipment is to be terminated using individual integral wires and protected using conduit. The Obstruction Lights have two supply options:

- i. 120 VAC
- ii. 230 VAC

L810 Coding, 860-9 \odot 0 \odot -00 \odot where: \odot = Colour Coding **R**,**B**,**G**,**Y** or **W**

② = Voltage Rating, 1 for 120VAC, 2 for 230VAC

3 = Module, **1** for Single, **2** for Dual

Variation 1 - This variation introduced the following change:

i. The use of an alternative type of LED in the equipment was approved.

Variation 2 - This variation introduced the following change:

- i. The rationalisation of all the certification drawings, this includes the recognition of some minor drawing modifications.
- ii. The marking was corrected top include the EPL.

Variation 3 - This variation introduced the following change:

i. The recognition of minor drawing modifications; these amendments are administrative or involve changes to the design that do not affect the aspects of the product that are relevant to explosion safety, i.e. the material temperature limits are now detailed in '°C' in addition to '°F' and new tolerances were introduced.

Variation 4 - This variation introduced the following changes:

- Following reassessment against the latest edition of the standards, EN 60079-0:2004 and EN 60079-15:2005 were replaced by EN 60079-0:2012+A11:2013 and EN 60079-15:2010.
- ii. An alternate white LED was introduced which has the same characteristics as the previously assessed version.
- iii. An alternate green LED was introduced which has the same characteristics as the previously assessed version.
- iv. The change of an internal screw length that does not contribute to compliance. The screw has been lengthened from 6-32x1/4" to 6-32X3/8".

Variation 5 - This variation introduced the following changes:

- i. Change of adhesive epoxy applied on LED PCB ASSEMBLY to solder paste.
- i. Minor drawings amendments, none of which affects compliance with the standards listed.

14 **DESCRIPTIVE DOCUMENTS**

14.1 **Drawings**

Refer to Certificate Annexe.

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14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment		
0	9 August 2007	R52A15219A	The release of the prime certificate.		
1	12 August 2011	R23469A/00	The introduction of Variation 1.		
2	18 December 2012	R28031A/00	The introduction of Variation 2.		
3	21 August 2014	R70007713A	The introduction of Variation 3.		
4	02 June 2016	R70046186A	This Issue covers the following changes:		
			 Type Examination Certificate in accordance with 94/9/EC updated to Type Examination Certificate in accordance with Directive 2014/34/EU. (In accordance with Article 41 of Directive 2014/34/EU, Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such Type Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.) The introduction of Variation 4. 		
5	07 December 2018	R70202441A	The introduction of Variation 5.		
6	15 October 2019	1304	 Transfer of certificate Sira 06ATEX4372X from Sira Certification Service to CSA Group Netherlands B.V 		

15 SPECIFIC CONDITIONS OF USE

- 15.1 The enclosure of the Obstruction Light uses non-conducting parts that could generate an ignition-capable level of electrostatic charges under certain extreme conditions, however, because this equipment is used as a warning light to mark any obstacle that may provide a hazard to aircraft navigation, in practice the risk of electrostatic hazard caused by the equipment has been assessed as being low, nevertheless, cleaning of the equipment shall only be done with a damp cloth. As aluminium is used at the accessible surface of this equipment, ignition sources due to impact and friction sparks could occur, this shall be taken into account when the Obstruction Light is being considered for the application.
- 15.2 As aluminium is used at the accessible surface of this equipment, ignition sources due to impact and friction sparks could occur, this shall be taken into account when the Obstruction Light is being considered for the application.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed reports listed in Section 14.2.

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Certificate Annexe



Certificate Number: Sira 06ATEX4372X
Equipment: L810 Obstruction Light
Applicant: Dialight Corporation

Issues 0 to 1. The drawings listed with these Issues were rationalised and have been superseded by those detailed in Issue 2.

Issue 2

Drawing no:	Sheets	Rev	Date (Sira Stamp)	Description
860-9xxxEX	1 to 4	K	14-Dec-12	Assembly drawing & parts list - top section
860-9xxx-001EX	1 to 2	G	04-Dec-12	Assembly drawing – Complete Single type
860-9xxx-002EX	1 to 2	F	04-Dec-12	Assembly drawing – Complete Dual type
1200-860-0002-EXX	1 to 2	Α	27-Nov-12	Base, Lens
3600-860-0002-EX	1 of 1	Α	27-Nov-12	Gasket (Wire Housing)
3600-860-0004-EX	1 of 1	Α	27-Nov-12	Gasket – Lens Lip
3900-860-0301-EX	1 of 1	Α	27-Nov-12	Wire Housing, Bi-Directional
5800-860-0001-EXX	1 of 1	Α	27-Nov-12	Locking Ring
6400-860-0001-EX	1 of 1	Α	27-Nov-12	Shield [Wire Cage]
6200-860-0001-EX	1 of 1	В	13-Dec-12	Seal, Plug
8500-860-000X-EX	1 of 1	Α	27-Nov-12	Spacer, PCB
1500-860-0030-EX	1 of 1	Α	05-Dec-12	Main Power PCB Artwork (Gerber)
1500-860-0029-EX	1 of 1	Α	05-Dec-12	Top PCB Artwork (Gerber)
1500-860-0028-EX	1 of 1	Α	05-Dec-12	LED PCB Artwork (Gerber)
8800-860-0076-EXX	1 of 1	Α	07-Dec-12	Bracket Assembly
8800-860-XXXX-EX	1 of 1	Α	05-Dec-12	LED PCB Assembly (Red)
900006015XXEX	1 of 1	Α	05-Dec-12	Wire types
8800-860-0063EX	1 of 1	Α	06-Dec-12	Wire Assembly - Ground
9099-919-0401-EX	1 of 1	Α	27-Nov-12	Potting Resin
9099-919-0402-EX	1 of 1	Α	27-Nov-12	Potting Hardener
9111-710-XXXX-EX	1 of 1	В	10 Jan 13	ATEX Certification Label

Issue 3

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
3600-860-0004-EX	1 of 1	В	06 Aug 14	Gasket – Lens Lip

Issue 4

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
860-9xxxEX	1 to 5	N	19 Apr 16	Obstruction [ATEX ZONE 2] construction

Issue 5

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
8800-860-0076-EXX	1 of 1	С	7 Nov 18	BRACKET ASSEMBLY
8800-860-XXXX-EX	1 of 1	В	7 Nov 18	LED PCB ASSEMBLY
3600-860-0004-EX	1 of 1	В	7 Nov 18	GASKET, LENS LIP
860-9XXX-EX	1 to 5	Р	7 Nov 18	OBSTRUCTION [ATEX, ZONE2]
860-9XXX-001-EX	1 to 2	Н	7 Nov 18	CONSTRUCTION [SINGLE]- ATEX ZONE2

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