



CERTIFICATE NUMBER  
17-HS1673638-PDA

DATE  
10 Oct 2017

ABS TECHNICAL OFFICE  
Houston ESD - Ship Equipment

# CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of  
**DIALIGHT CORPORATION**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Lighting Fixtures**

Model: **ALx**

This Product Design Assessment (PDA) Certificate 17-HS1673638-PDA, dated 10/Oct/2017 remains valid until 09/Oct/2022 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Ting Jiang  
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standard. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

**DIALIGHT CORPORATION**

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**Tier: 2 - PDA Issued**

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**Product:** Lighting Fixtures**Model:** ALx**Intended Service:**

Marine and Offshore Application

**Description:**

Vigilant Series LED Area Light suitable for wet locations.

**Rating:**

Operating Voltage Standard: 100 - 277 VAC, 50/60 Hz

Power Consumption: 71 Watts;

Operating Temperature: -40°C to +65°C, 120-250VDC

Ingress protection: IP66, IP67; IPX9; NEMA 4X

Hazardous locations:

Class I, Division 1, Group B, C, D locations

Class I, Division 2, Group A, B, C, D locations

Class II, Division 1, Group E, F, G locations

Class II, Division 2, Group F, G locations

Class III, Division 1 &amp; 2 locations

See attached "pdf" for details.

**Service Restriction:**

1. Unit Certification is not required for this product.
2. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

**Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

**Notes/Drawing/Documentation:**

1. Product mapping
2. Certificate no. SE 87598, IEC System for Mutual Recognition of Test Certificates for Electrical Equipment CB Scheme, issued: 10 July 2017
3. Report no. 102797734CRT-001, Intertek, Listing constructional Data Report, issued; 6 April 2017
4. Report no. 102797734CRT-003, Intertek, Authorization to mark; 27 April 2017
5. Report no. 102797734CRT-004, Intertek Listing constructional Data Report 102797734CRT-004 issued on 7 April 2017

**Terms of Validity:**

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**STANDARDS**

**ABS Rules:**

Rules for Conditions of Classification, Part 1-1-4/7.7, 1-1-A3, 1-1-A4 which covers the following:

2017 Steel Vessels Rules 4-8-3/1.11, 3.1, 13.1 & Table 2, 4-8-4/1.5 & 27.5

2017 MODU Rules 4-3-1/15, 4-3-3/3.17 & 9.3

**National:**

NA

**International:**

UL 844, 13th Ed., June 20, 2012, "Standard for Luminaires for Use in Hazardous (Classified) Locations"

UL1598, 3rd Ed., Sept 17, 2008, "Luminaires"

UL1598A, 1st Ed., 2000, "Supplemental Requirements For Luminaires For Installation On Marine Vessels"

IEC 60079-0:2012, "Series Explosive Atmosphere Standards"

IEC 60079-18,:2009 "Explosive atmospheres - Part 18: Equipment protection by encapsulation 'm'"

CSA C22.2 No.137-M1981 (R2014) "Electric Luminaires for Use in Hazardous Locations"

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA