



CERTIFICATE NUMBER 18-HS1717053-PDA

EFFECTIVE DATE 14-Feb-2018

EXPIRATION DATE 13-Feb-2023

ABS TECHNICAL OFFICE Houston ESD - Piping

CERTIFICATE OF

## Product Design Assessment

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

**DIALIGHT CORPORATION**

located at

1501 RT. 34 SOUTH, FARMINGDALE, NJ  
UNITED STATES 07727

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** High Bay: HE, HC, HF, HW, HED, HCD, HFD, HWD, HEP, HEC and HEM Low Bay: LE, LC, LF, LW, LED, LCD, LFD, LWD, Floodlight: FLD, FS

This Product Design Assessment (PDA) Certificate remains valid until 13/Feb/2023 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to 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 standards. 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 ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

**DIALIGHT CORPORATION**

1501 RT. 34 SOUTH

FARMINGDALE NJ

United States 07727

Telephone: 732-751-5919

Fax: 732-751-3190

Email: asantamaria@dialight.com

Web: dialight.com

**Tier: 2 - PDA Issued****Product:** Lighting Fixtures**Model:** High Bay: HE, HC, HF, HW, HED, HCD, HFD, HWD, HEP, HEC and HEM

Low Bay: LE, LC, LF, LW, LED, LCD, LFD, LWD,

Floodlight: FLD, FS

**Intended Service:**

Marine &amp; Offshore Applications - Lighting for Hazardous and Non-Hazardous Areas

**Description:**

High Bay, Low Bay and Floodlight Luminaries

**Rating:**

1. Model HED, HCD, HFD, HWD, LED, LCD, LFD, LWD, FLD:

Temperature: T4 @ 65°C, T5 @ 50°C

Voltage: 100-277VAC, 200W max, 50/60Hz

120-250VDC, 200W max

Enclosure: IP66, IP67

Hazardous Locations: Class I, Division 2, Groups A-D,  
Class II, Division 1, Groups E- G,  
Class II, Division 2, Groups F-G  
Class III, Division 1 & 2

2. Model HEP, HEC and HEM:

Temperature: T4A @ 65°C, T5 @ 55°C

Voltage: 100 - 277 Vac, 50/60 Hz, 200W maximum

Enclosure: IP66, IP67

Hazardous Locations: Class I, Division 1 & 2, Groups C-D  
Class II, Division 1, Groups E-G  
Class II, Division 2, Groups F-G

3. Model HE, HC, HF, HW, LE, LC, LF, LW, FS:

Operating Temp: -40°F to +149°F (-40°C to +65°C):

Voltage: Standard Driver: 100-277VAC 50/60Hz, 120-250VDC, 200W Max,  
347-480VAC Step Down Transformer Driver: 347-480VAC, 60Hz, 230W Max

480VAC Passive Driver: 480VAC, 60Hz, 230W Max

347VAC Passive Driver: 347VAC 60Hz, 230W Max

Enclosure: NEMA 4X, IP66, IP67 (for all models except models with 347-480VAC Step Down Transformer)

**Service Restriction:**

Unit Certification is not required for this product. 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:**

Intertek Report No. 101617191CRT-002, Issued Date: 31-Aug-2017

Intertek Report No. 100110264CRT-001A, Issued Date: 31-Aug-2017

Intertek Report No. 101536020CRT-002, Issued Date: 5-Oct-2017

Intertek Report No. 102918973CRT-001, Issued Date: 3-Oct-2017

Intertek Listing Constructional Data Report, Report No. 102918973CRT-001, Issued Date: 21-Aug-2017

Intertek Test for compliance with IEC 60598-1, Ed: 8, Report No.102918973CRT-002T, Issued Date: 25-May-2017

Dialight ® LED High Bay Technical Specification Sheet - UL, Date: Jan 2018

**DIALIGHT CORPORATION**

1501 RT. 34 SOUTH

FARMINGDALE NJ

United States 07727

Telephone: 732-751-5919

Fax: 732-751-3190

Email: [asantamaria@dialight.com](mailto:asantamaria@dialight.com)Web: [dialight.com](http://dialight.com)**Tier: 2 - PDA Issued**

---

**Terms of Validity:**

This Product Design Assessment (PDA) Certificate 18-HS1717053-PDA, dated 14/Feb/2018 remains valid until 13/Feb/2023 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.

**STANDARDS****ABS Rules:**

Rules for Conditions of Classification, Part 1 - 2018 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2018 Steel Vessels 4-8-3/1.3, 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/Table 2, 4-8-4/1.3, 4-8-4/27.5

Rules for Conditions of Classification, Part 1 - 2018 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2018 Mobile Offshore Drilling Units 4-3-1/15, 4-3-3/3.1.1, 4-3-3/9.3

**National:**

CSA C22.2 No. 137, Electric Luminaires for Use in Hazardous Locations, 2018

CSA C22.2 No. 213, Nonincendive electrical equipment for use in Class I and II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations, 2017

CSA C22.2 No. 250, Luminaires, R2013

UL 844, Luminaries for Use in Hazardous (Classified) Locations, 13th Edition

UL 1598, Standard for Luminaires, Third Edition

UL 1598A, Standard for Supplemental Requirements for Luminaires for Installation on Marine Vessels, First Edition

**International:**

NA

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA