

CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

23-2352579-PDA 13-Feb-2023 12-Feb-2028 Houston ESD - Offshore Equipment

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, VE, VC, VF, VW, KE, KC, KF, KW, VED, VCD, VFD, VWD, KED, KCD,

KFD, KWD, HED, HCD, HFD, HWD, HEP, HEC and HEM

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

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Endorsements:

Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 12/Feb/2028 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

Sohail A. Mohammed

Sohail Ahmed Mohammed, 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: 732-919-3119

Fax: 732-751-3190

Email: jsingh@dialight.com

Web: dialight.com
Tier: 2 - PDA Issued

Product: Lighting Fixtures

Model: High Bay: HE, HC, HF, HW, VE, VC, VF, VW, KE, KC, KF, KW, VED, VCD, VFD, VWD,

KED, KCD, KFD, KWD, HED, HCD, HFD, HWD, HEP, HEC and HEM

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

Floodlight: FLD, FS, FSD

Endorsements:

Intended Service:

Marine & 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, FSD, VED, VCD, VFD, VWD, KED, KCD, KFD, KWD:

Temperature: T4 @ 65°C, T5 @ 50°C

Voltage: Standard Drivers: 100-277VAC 50/60Hz, 120-250VDC, 250W max

347-480VAC 50/60Hz, 250W max

480VAC Passive Driver: 480VAC, 60Hz, 230W Max 347VAC Passive Driver: 347VAC, 60Hz, 230W Max

347-480VAC Step Down Transformer Driver: 347-480VAC, 60Hz, 230W 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, VE, VC, VF, VW, KE, KC, KF, KW:

Operating Temp: -40° F to $+149^{\circ}$ F (-40° C to $+65^{\circ}$ C):

Voltage: Standard Driver: 100-277VAC 50/60Hz, 120-250VDC, 250W Max, 347-480VAC 50/60Hz, 250W 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.

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Comments:

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

Notes/Drawing/Documentation:

Dialight Technical Specification Sheet, November 2022

Dialight Ultra Efficient Technical Specification Sheet, November 2022

Intertek Listing Constructional Data Report 102918973CRT-001, Issuance Date: 3-Nov-2022, Pages: 48

Intertek Authorization to Mark for Report 102918973CRT-001, Issuance Date: 3-Nov-2022, Pages: 2

Intertek Listing Constructional Data Report 101617191CRT-002, Issuance Date: 13-Dec-2022, Pages: 41

Intertek Authorization to Mark for Report 101617191CRT-002, Issuance Date: 20-Dec-2022, Pages: 2

Intertek Listing Constructional Data Report 100110264CRT-001A, Issuance Date: 13-Dec-2022, Pages: 28

Intertek Authorization to Mark for Report 100110264CRT-001A, Issuance Date: 20-Dec-2022, Pages: 2

Intertek Listing Constructional Data Report 101536020CRT-002, Issuance Date: 5-Dec-2022, Pages: 65 Intertek Authorization to Mark for Report 101536020CRT-002, Issuance Date: 8-Dec-2022, Pages: 4

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:

2023 Marine Vessel Rules: 4-8-3/1.3, 1.11, 3.1, 13.1 & Table 2, 4-8-4/1.5 & 27.5

2023 Mobile Offshore Units Rules: 4-3-1/15, 4-3-3/3.17 & 9.3

National:

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

CSA C22.2 No. 250, Luminaires, R2013

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

UL 1598, Standard for Luminaires, 5th Edition

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

International:

NA

Government:

NA

EUMED:

NA

Electronically published by ABS Houston. Reference T2352579, dated 13-FEB-2023.

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OTHERS:

NA