

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

**This is to certify:****That the Low-Location Lighting Systems**

with type designation(s)  
**LimarLite LLK-30-C, LLK-40-D and LLK-50-E**

Issued to

**H. Marahrens GmbH Schiffs- und Sicherheitsbeschilderung  
Bremen, Germany**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2015/559,**

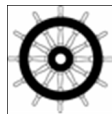
**Annex A.1, item No. A.1/3.40 and Annex B, Module B in the Directive; SOLAS 74 as amended,  
Regulation II-2/13 and FSS Code 11**

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2021-11-07**.

Issued at **Hamburg** on **2016-11-08**

DNV GL local station:  
**Bremerhaven**



for **DNV GL SE**

Approval Engineer:  
**Pavel Golyshov**

Notified Body  
No.: **0098**

.....  
**Sven Dudsus**  
**Head of Notified Body**

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

Job Id: **344.1-006048-1**  
Certificate No: **MEDB00001RR**

### **Product description**

"LimarLite LLK-30-C, LLK-40-D and LLK-50-E"  
Rigid PVC plates, photoluminescent.

### **Application/Limitation**

Approved for use as low-location lighting system, escape route signs and fire equipment location marking.

Extent of arrangement, placing, width and luminance of the photoluminescent strips based on the ambient light are to be in accordance with IMO Res. A.752 (18) or ISO 15370:2010 and is to be approved by the administration or competent authority in each case/project.

Photoluminescent strips having a width less than 75 mm shall only be used if the luminance is increased to compensate for the reduced width in accordance with Ch. 7.1 of IMO Res. A.752 (18) or Ch. 4.2.2 & Annex D of ISO 15370:2010.

Each product/system is to be supplied with its manual for installation, use and maintenance.

### **Type Examination documentation**

Test report NSF- 2006-09-14 issued by Germanischer Lloyd on 14<sup>th</sup> of September 2006 and related protocols.

Luminance Measurement report according to ISO15370 (2010) and ISO 16069 dated 26<sup>th</sup> of April 2013.

### **Tests carried out**

Tested according to IMO Resolution A.752(18) and ISO 15370 (2010) Annex A.

### **Marking of product**

The product or packing is to be marked with name and address of the manufacturer, type designation and the MED mark of conformity (see page 1).