



Low Location Lighting

PHOTOLUMINESCENT (PL) SYSTEM

Full Pack Service

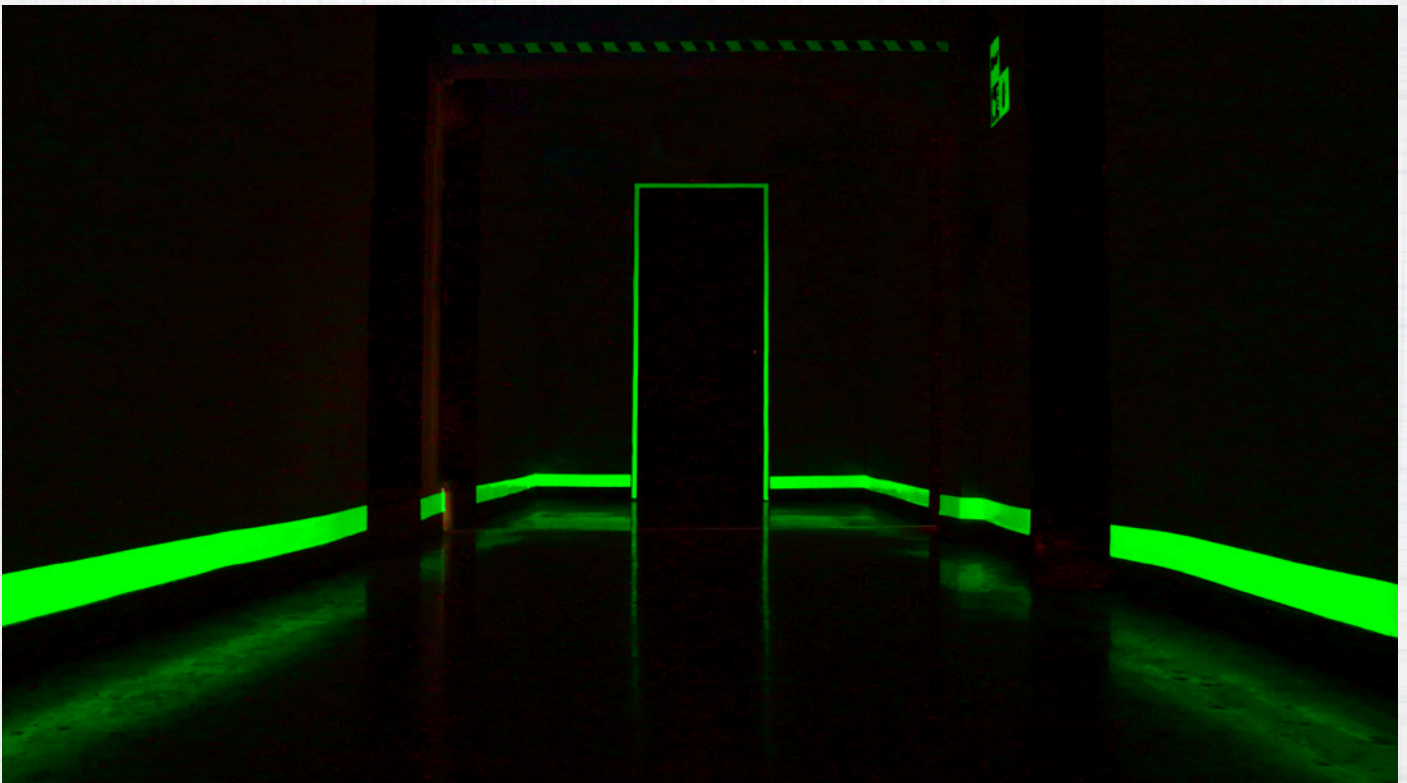
Study of vessel's plan

On board Inspection

On board Installation

Luminance Performance Measurement

Certification



Low Location Lighting

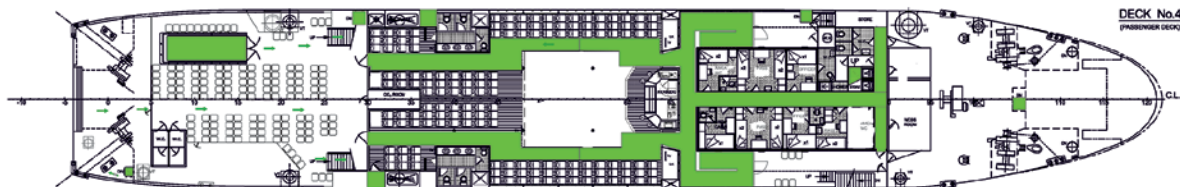
PHOTOLUMINESCENT (PL) SYSTEM



LALIZAS technical team provides the entire LLL System. Study of Vessel's Plan, on board Inspection, on board Installation, Luminance Performance Measurement & Certification.

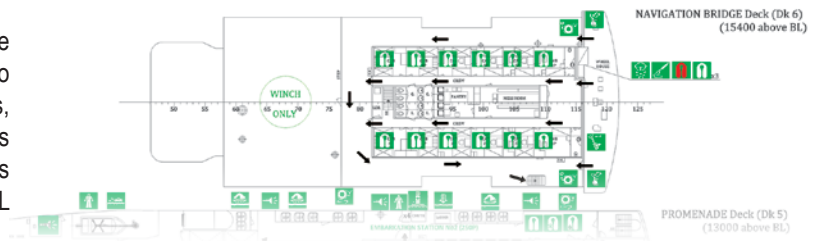
For the on board inspections we assign qualified technicians equipped with **Digital Photometer calibrated for testing** LLL system which must be compliant with **ISO 15370:2021, IMO A. 752(18), ISO 16069:2017 and DIN 67510.**

STUDY OF VESSEL'S PLAN



From the study of fire, safety and evacuation plan we provide you with the total meters of LLL your vessels need's, for every deck separately.

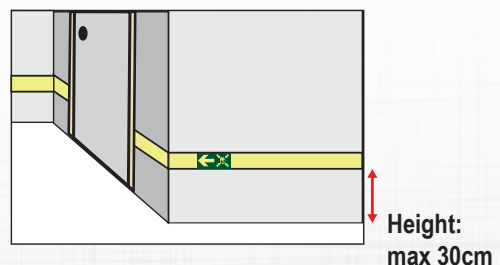
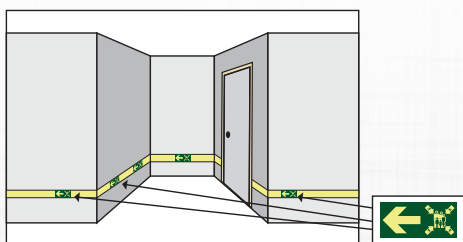
Positioning of the LLL system shall be arranged to enable persons to readily identify all escape routes and exits. To prevent escaping persons from having to cross LLL strips, lighting need not be installed along the door thresholds or across stairway landings. In way of local enlargements or recesses, the maximum interruption permitted in LLL systems shall not exceed 1 meter.



INSPECTION

Our Technicians inspect on board the condition of existing LLL systems. The LLL system shall be located either on the bulkhead within 300 mm of the deck, or on the deck within 150mm of the bulkhead.

The LLL shall be located on at least one side of the corridor, but in corridors more than 1 meters wide, LLL shall be located on both sides. Small individual recesses less than 2 meters long in the line of the corridor or with a combined total length less than 50% of the length of the corridor shall not be included when calculating the width of a corridor.



Inspection - LLL on board inspection
822391

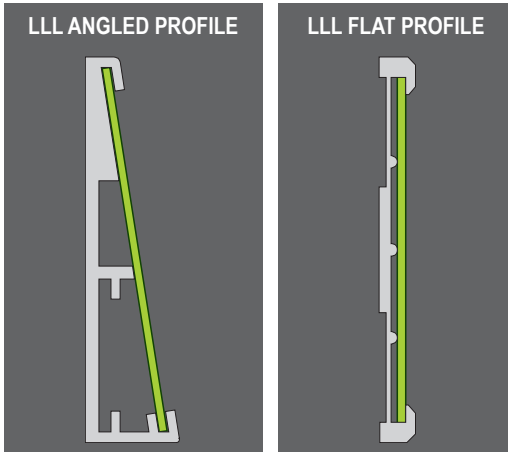
INSTALLATION

LALIZAS Technical team can install the complete PL LLL Systems, according to ISO 15370:2021. The LLL system installation on decks, shall be arranged in such a way that the LLL strips do not constitute a danger for the free circulation of the people.

In all corridors the visual effect of the LLL system shall be continuous, except where interrupted by intersections with other corridors, cabin doors or local enlargements or recesses, to provide a visible delineation along the escape routes.

Door which form part of the escape route (e.g., doors in stairways, main vertical zone boundaries in corridors), or doors leading to open decks shall be marked by LLL in accordance with International Standard.

The system includes **aluminum profile** of 6cm height, **photoluminescent rigid PVC stripes** of 5,5cm height, **plastic end caps** and can be combined with the appropriate signage.



Installation - LLL installation or replacement 822392

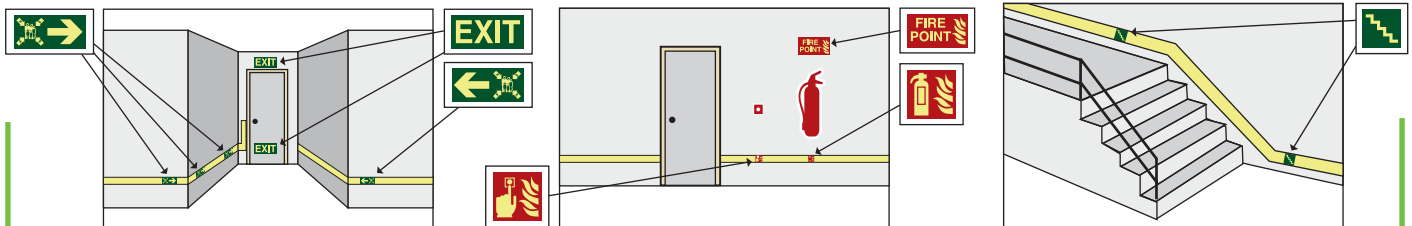
Aluminium Frame, Angled type 6cmx100cm
822395

Aluminium Frame, Flat type 6cmx100cm
822394

End Cap (right or left) for Aluminium Frame, Angled type
822399

End Cap for Aluminium Frame, Flat type
822398

Photoluminescent Stripes PVC rigid, 5,5cmx100cm
822396



Suitable for: Cruise Vessels, Passengers Vessels, Drilling Platforms, Mega Yachts, etc.

LUMINANCE PERFORMANCE & MEASUREMENT



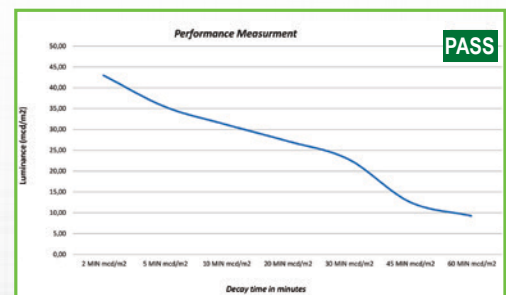
Photoluminescent systems shall be tested, with a certificated calibrated photometer from our specialized technician, at the place of use in accordance with ISO 16069:2017 and the measurements shall be recorder in accordance with annex C of ISO 15370:2021.

LALIZAS LLL system shall provide a luminance of at least 27,89mcd/m² measured 10 min after the removal of all external illuminating sources and shall continue to provide luminance values greater than 3,72mcd/m² for 60 min.

CERTIFICATION

After the measurement completion LALIZAS will provide you with the mandatory certificates of LLL systems.

The complete LLL systems should have their luminance tested at least once every five years. The measurement shall be repeated and recorded whenever the lighting system, wall, floor or ceiling decorations in the area are substantially changed in order to provide the vessel with a new Certification.

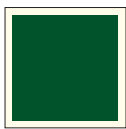


Luminance Performance Measurement Certificate according to ISO 15370:2021
822393

SIGNS CATEGORIES

Material
LALIZAS Code
Material (814100) IMPA code

81 - Photoluminescent, self-adhesive vinyl
 82 - Photoluminescent, rigid PVC
 83 - White, self-adhesive vinyl
 84 - White, rigid PVC
 85 - White, self-adhesive paper or laminated paper
 86 - Transparent vinyl
 88 - Coloured vinyl or coloured polyethylene



Safety Signs
 Photoluminescent
 The safe way / Where to go in an emergency



Fire Signs & Fire Control Symbols
 Photoluminescent
 Locates fire equipment or personnel



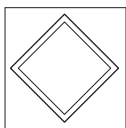
Prohibition Signs
 You must not / Do not / Stop



Mandatory Signs
 You must do / Carry out the action given by the sign



Warning Signs
 Caution / Risk of danger / Hazard ahead



Hazard Signs & Diamonds
 Potential Hazard within a designated area

