

ESCAPE HATCH LIGHTING

SURVIVOLITETM emergency egress lighting

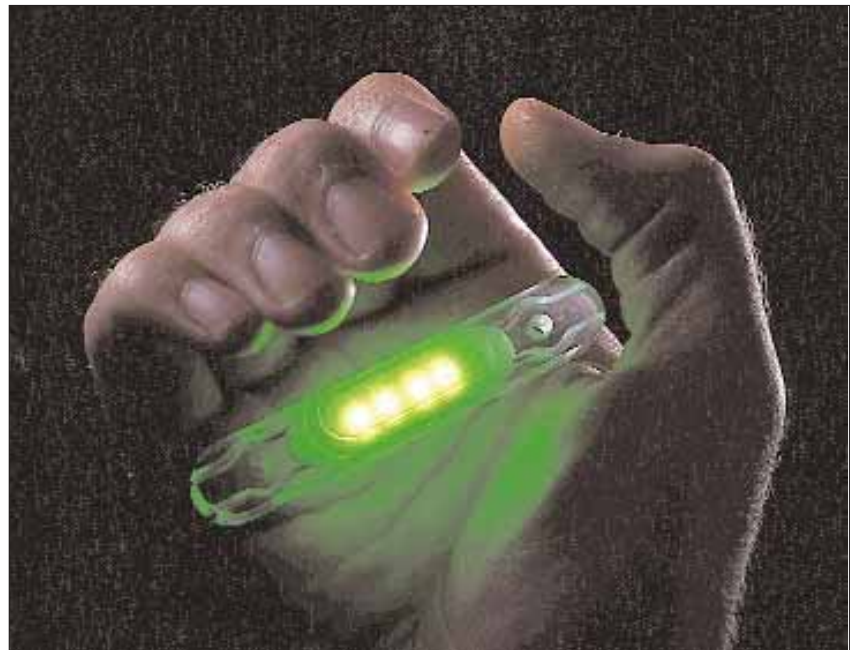
Features

- High brightness lighting emitting diodes (LEDs)
- Visible through dense smoke and turbid water
- Meets MIL-L-85676 AS
- $\pm 65^\circ$ viewing angle
- Penetration range of 4 metres through a specific optical density of 1.7 per metre
- Dominant wavelength 525nm
- Meets STANAG 3870 requirements of 10 cd/m and a 120° viewing angle in both air and water

Survivolite penetrates the most adverse conditions of turbid water and dense smoke. LEDs provide the only technological solution that meets all the requirements to provide visual guidance to an escape hatch from any location inside the fuselage of a crashed or ditched aircraft. The high intensity beamed point-sources minimise absorption and scatter and maximise optical penetration.

Helicopter ditching conditions

Water rushing into an aircraft cabin carries escaping hydraulic fluid, oil, fuel and the accumulated grime of years of service. This adds to the



attenuation through sea water alone and may appear very black and optically dense. Refraction of light and the myopic effect on the human eye caused by the water pressure places serious constraints on the design of the emergency egress lighting system, which only high brightness LEDs will satisfy.

Oxley Survivolite light modules are designed to replace existing Beta lights, which are totally ineffective in these conditions.

It would be a tragedy for crew or passengers to survive a helicopter ditching and then perish through the inability to escape from the immersed aircraft.

Dense smoke

The physics of adverse optical conditions is much the same for dense smoke and turbid water. Attenuation may be considered to be the same making the LED technology appropriate to all aircraft escape lighting.

Applications

Helicopters

Transport and passenger aircraft

Ships

Industrial installations

Public buildings

System installation

Escape hatches are often on aircraft doors, where aircraft power is unavailable. Oxley offers a complete self-powered system:

- High brightness light modules in polycarbonate housing
- **Water activated switch (operates in fresh and saline water)**
- Primary battery

The detailed installation and location of components will depend on the aircraft type and escape hatch operation.

A water switch variant is available which makes the escape lights flash. It may be desirable to identify the jettison handle only in this way.

Light module specification

Current consumption @ 28°C:
100 mA (maximum)

Luminous intensity at 80 mA:
500 mcd (typical)

Operating temperature:
-30°C to +80°C

Intensity per metre @ 80 mA:
25 cd/m



For further information and to order please contact Oxley Avionics with your specific requirements

www.oxleygroup.com

Company Approvals: BS EN 9001:1994 and QAS/34/61 REG No. FM 01759

CECC Approval No. M/0022, BS 9000

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