



Hi-Light

High Integrity Emergency Lighting

In service and fully compliant with RSSB Ufton recommendations (to be mandated)

Designed & Manufactured in the United Kingdom by Marl International Limited

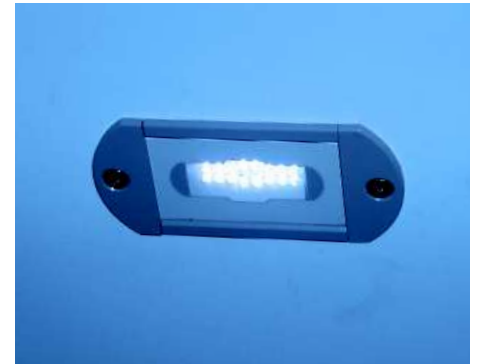
Recent events have highlighted the need for effective emergency lighting on rail passenger carriages. During and following an accident, lack of light inhibits orientation and will intensify anxiety. It is essential for trains to be equipped with emergency lighting that is durable and effective.

The Hi-Light range of highly ruggedised LED fittings illuminate only when power has been terminated at Stage 1 load shed, Stage 2 load shed or Catastrophic Loss.

The fittings are self contained, extremely robust LED light units that operate independently from existing lighting in rail passenger carriages and are currently in service, and fully compliant with the RSSB Ufton Report's recommendations that are soon to be mandated. Please visit www.martrail.com.

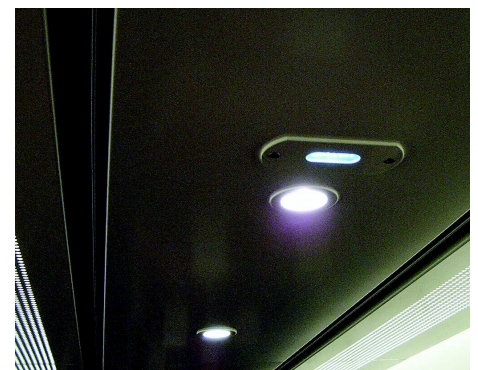
RSSB Ufton report concludes: *"Provision of high integrity emergency lighting which will function in a situation where the main lighting supply is lost, should be mandated for all new passenger vehicles and for those undergoing major internal refurbishment"*.

Hi-Light's comprise high intensity white LEDs that supply a defined pool of light in close proximity to doors and windows. They are designed to illuminate for a minimum period of 90 minutes and typically in excess of 180 minutes, offering essential assistance to passengers within the carriage.



FEATURES

- High intensity white LED light source
- Self-check battery monitor
- Compact - for retrofit and new build
- In service and fully compliant with the RSSB Ufton Report's mandatory requirements
- BR Cat No. 064/007511



BENEFITS

- High reliability
- Illuminates when power is lost
- Manufactured to accommodate any carriage specification
- AV/ST 9001 compliant



Units monitor their self contained rechargeable battery packs. A separate red LED flashes if the battery charge capacity drops below a pre-defined level and the units will recharge within 1 hour of power being restored.

The Hi-Light's are designed to withstand high levels of shock and vibration, fully complying with stringent EMC and vibration testing, and have recently been tested against the AV/ST9001 crash worthiness test, which confirmed that all requirements were met with Marl's Hi-Light LED technology.

Hi-Lights are currently installed on GNER Mk IV coaches and other passenger carrying vehicles.

Working closely with end users and established suppliers of rail equipment, Marl International has utilised its extensive technical knowledge and 30 years of design & manufacturing experience in the specialised field of LED technology, to provide a range of products designed to meet the exacting standards of the rail industry.

Workshops and demonstrations to the industry are frequently carried out to display the capabilities of our LED lighting solutions. In addition to the Hi-Light, other products developed include Low Location Marking Systems, Edgelit Gauge Illuminators and Reading and Spotlights. All these products focus on the benefits of using LED technology to improve reliability, reduce maintenance costs and increase user confidence, helping to sustain and advance rail safety.



The HSBC Rail Rollover Rig which demonstrates Marl LED Systems and Products.



Marl's Electronic Egress Lighting System (EELS)



A full size Desiro model resides at Marl Business Park. The lighting has been re-configured to display LED technologies to visiting clients from the rail industry and Government departments including the Ministry of Transport.



BS EN ISO 9001:2000
Approved Manufacturer
Certificate No: Q 05480

For further information please contact:

The Sales Department

Marl International Limited · Marl Business Park · Ulverston · Cumbria · LA12 9BN · England

Tel: +44 (0)1229 582430 · Fax: +44 (0)1229 585155 · Email: sales@marl.co.uk · www.marl.co.uk · www.marlrail.com