



Department for
Business, Energy
& Industrial Strategy



Energy Technology List

Guidance Note 10: Lighting
Energy Technology List (ETL)
Issue 3
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1 INTRODUCTION

The ETL covers the following types of products:

- Lighting Controls: <https://www.gov.uk/government/publications/lighting-controls-criteria-for-etl-inclusion>
- Efficient White Lighting Units (EWLUs): <https://www.gov.uk/government/publications/efficient-white-lighting-units-criteria-for-etl-inclusion>
- White LED Lighting Modules for Backlit Illuminated Signs (Illuminated Signs): <https://www.gov.uk/government/publications/white-led-lighting-modules-for-backlit-illuminated-signs-criteria-for-etl-inclusion>

Lighting Controls and Efficient White Lighting Units are ‘unlisted’ technology categories on the Energy Technology List (ETL), i.e. products in these technology categories are not individually listed in the same way as other eligible technology categories on the ETL (e.g. electric motors). This is because there are so many permutations of eligible lighting products that it is impractical to list them all. White LED Lighting Modules for Backlit Illuminated Signs is a listed technology category.

If a purchaser wishes to be sure that a particular lighting unit is compliant with the ETL criteria, they should ask the product manufacturer for a letter stating that the product meets the ETL criteria for that technology and for supporting information (e.g. technical data sheet).

2 ELIGIBLE LIGHTING UNITS

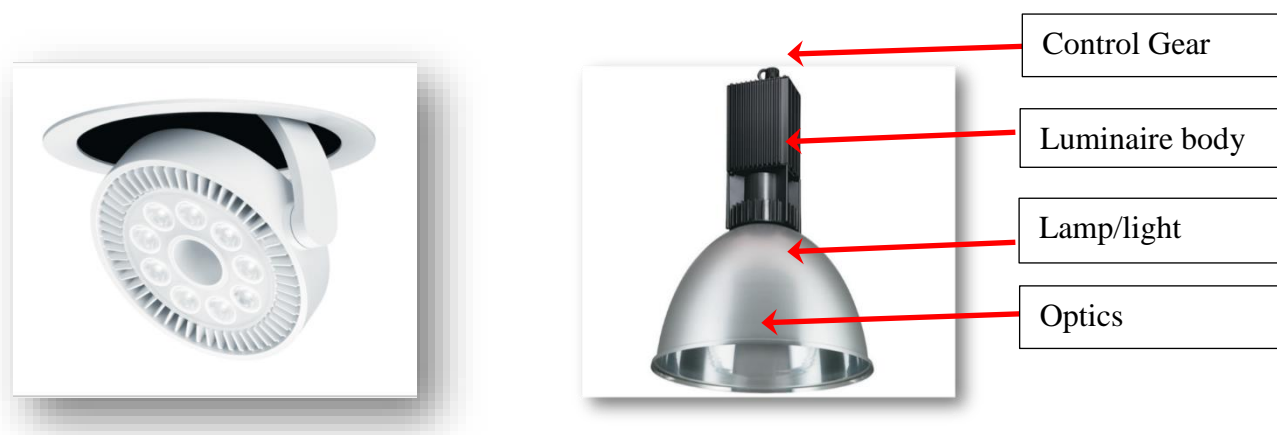
2.1 ETL compliant lighting units

Compliant lighting technologies are those that provide white light illumination and meet or exceed the requirements presented in the Efficient White Lighting Units or White LED Lighting Modules for Backlit Illuminated Signs ETL criteria.

The complete lighting technologies are clearly defined in the criteria:

- **Efficient White Lighting Units:** Products that consist of a light fitting, one or more light sources and associated control gear that have been assembled into either a single packaged unit or a luminaire with remote control gear. The luminaire can also include an optical system that reflects and/or focuses the product’s light output onto the item(s) or task(s) being illuminated.
- **White LED Lighting Modules for Backlit Illuminated Signs:** Products which provide white light by means of solid state lighting to illuminate signage e.g. internally illuminated box signage and built up letters that spell out company names, logos or other messages and pictures. Products comprise white LED modules and are driven by integrated electronic control gear.

Example 1 - Efficient White Lighting Units



Only complete lighting units can meet ETL criteria because products have to be tested as an integrated whole.

For unlisted technology categories, lighting manufacturers and/or suppliers need to be able to provide customers with robust evidence that shows their lighting products have been tested to the relevant standards presented in the ETL criteria.

2.2 ETL non-compliant lighting technologies and replacement lamps (retrofit)

Due to the significant differences in underlying technologies used to create illumination, white LED technology cannot be combined with components designed for other lamp types within the Efficient White Lighting Unit technology category. For example, an LED lamp combined with a luminaire and control gear designed for a linear fluorescent lamp would not be a permissible ETL solution.

Lighting technologies such as retrofit LED lamps or retrofit T5 fluorescent lamp adapters are re-lamping technologies and therefore do not meet ETL criteria.

Within the White LED Modules for Backlit Illuminated Signs technology category, products that are used for road traffic signs, safety signs or fire safety signs, trackside railway signs or airside airport signs are not covered by the ETL.

2.3 Efficient White Lighting Units – Colour Rendering Index (CRI) requirement

The criteria for Efficient White Lighting Units state that products incorporating white LED, fluorescent and compact fluorescent lamps, and all light sources used in amenity, accent and display lighting fittings shall have a colour rendering index that is at least Ra 80. All other light sources shall have a colour rendering index of at least Ra 40.

Previous criteria for directional lamps, LED lamps, and related equipment required that the products should comply with the CRI requirements as defined in *Commission Regulation (EU) No 1194/2012 of 12 December 2012 Implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to eco-design requirements for directional lamps, light emitting diode lamps and related equipment*. This previously allowed for products designed for use in certain settings such as warehouse to have a CRI as low as Ra 65.

This requirement for ETL compliance has now been replaced by the updated criteria above. Therefore LED lighting solutions designed for warehouses/factories are now required to have a CRI of Ra 80, equivalent to other LED lighting products.

Non-LED/non-fluorescent products which are not designed for amenity, accent or display lighting, (for example mercury vapour lamps) can still be ETL compliant with a CRI above Ra 40.

3 OTHER TYPES OF LIGHTING

Emergency Lighting: lighting units used exclusively as emergency lighting are not supported by the ETL. However, combined emergency/general lighting are eligible. A combined emergency lighting is defined as a luminaire containing two or more light sources, at least one of which is energised from the emergency supply and the remainder are energised from the normal supply.

Plasma lighting and similar emerging technologies: These are judged to be compliant under Efficient White Lighting Units so long as they meet the criteria.

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