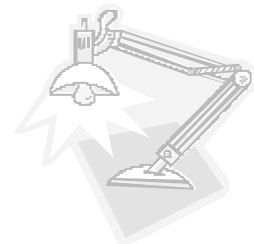
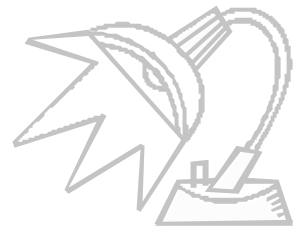


Electrical Products (Safety) Regulation



Guidelines for Safety of Luminaires

(September 2002 Edition)



Electricity Legislation
EMSD



Safety of Luminaires

The use of unsafe luminaires may lead to electric shocks or fire accidents. As a responsible supplier of luminaires, you should ensure that your products are safe and shall fully comply with the applicable safety requirements.

You are advised to carry out preliminary checking of your luminaires. The general safety guidelines are appended below:

Certificates of Safety Compliance

All luminaires shall be issued with valid certificates of safety compliance. A certificate or test report issued by a recognized certification body, or a declaration of conformity (DOC) issued by the product manufacturer substantiated by relevant certificates and/or test reports will be accepted as certificate of safety compliance. You should make sure that the following information should be provided in the DOC (as exemplified in the sample):

- The name and address of the manufacturer.
- The brand, model number and description of the luminaire.
- Details of applicable safety standard(s), including title, number, year of publication, applicable amendment number(s) and corresponding year of publication.
- The name/post/signature of the manufacturer's authorized person.
- The date of issue.
- Company seal if applicable.

Typical applicable safety standards for luminaires are as follows:

Type of Luminaires	Applicable Safety Standards
For fixed general purpose luminaires, such as ceiling lights, wall-mounted lights, etc.	<ul style="list-style-type: none">● IEC60598-2-1 in conjunction with IEC60598-1● EN60598-2-1 in conjunction with EN60598-1● GB7000.10 in conjunction with GB7000.1
For portable general purpose luminaires, such as table lamps, floor lamps, etc.	<ul style="list-style-type: none">● IEC60598-2-4 in conjunction with IEC60598-1● EN60598-2-4 in conjunction with EN60598-1● GB7000.11 in conjunction with GB7000.1

Sample of Declaration of Conformity

Declaration of Conformity

Ref. No. DOC-0123

We ABC Lighting Manufacturing Company Limited
(name of manufacturer)

of 8/F, DEF Industrial Building, GHI Road, Hong Kong.
(address)

declare under our sole responsibility that product

SAFE Model No. 456-N Ceiling Light

(name, type or model, lot, batch or serial number, possibly sources and

to which this declaration relates is in conformity with the technical requirements of the following standard(s):

IEC60598-1:1999

Luminaires - Part 1: General requirements and tests

IEC60598-2-1:1979 + A1:1987

Luminaires - Part 2: Particular requirements. Section One: Fixed general purpose luminaires

Mr. Chan Tai Man

(name of authorized officer)

Product Manager

(title of authorized officer)

1 December 2001

(date of issue)

ψ

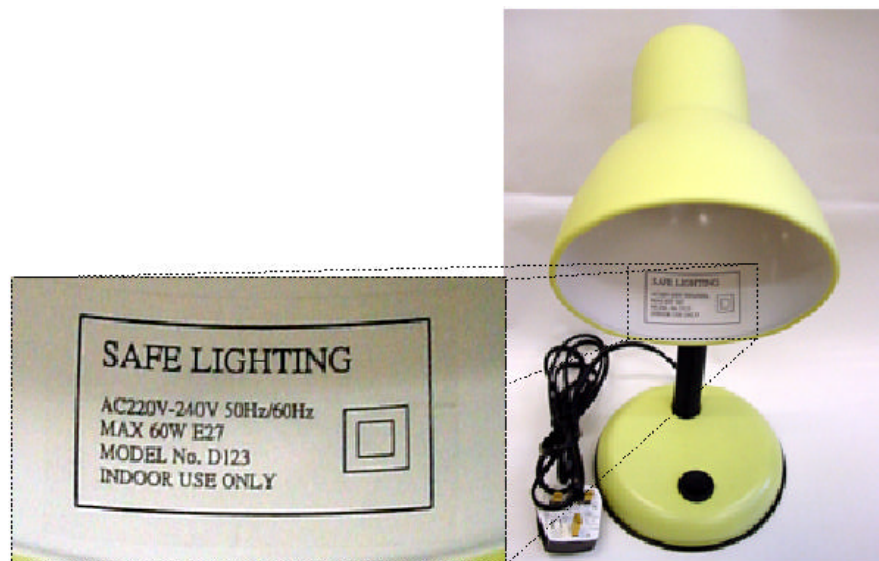
(signature)



(company seal)

Markings

Luminaires that conform to the safety standard should bear proper markings of rated voltage, rated frequency, rated power, number and type of lamp bulbs, model number, mark of origin (manufacturer's name/trade mark), symbol for suitability or non-suitability for direct mounting on combustible surfaces, symbol for minimum distance from lighted objects, and symbol for Class II lighting where applicable.



Typical markings for luminaires are as follows:

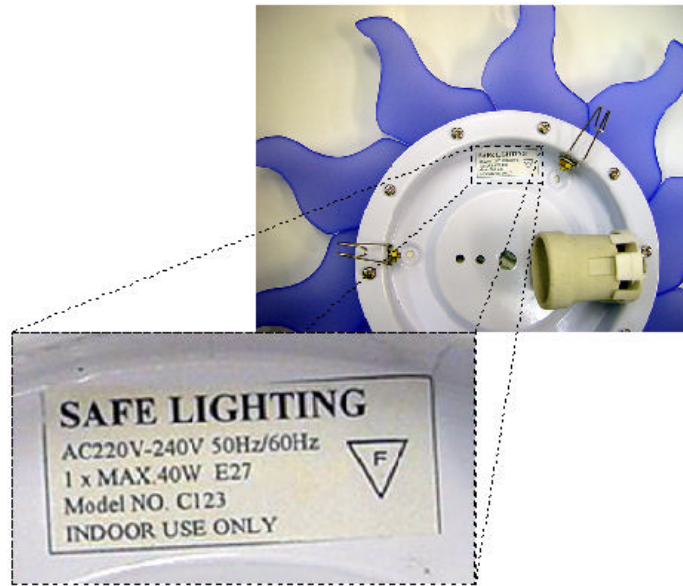
Rated voltage ...V

Rated frequency ...Hz

Maximum rated power and
the number of lamp bulbs
 $n \times \text{MAX} \dots \text{W}$,
 n being the number of lamp bulbs

Symbol for Class II lighting





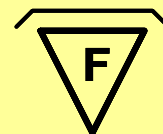
Symbol for suitability for direct mounting on combustible surface



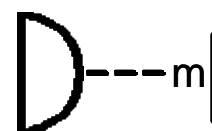
Symbol for non-suitability for direct mounting on combustible surface



Symbol for suitability for mounting in/on combustible surface when thermally insulating material is used to separate the luminaire from the surface



Symbol for minimum distance from lighted objects, if applicable, for luminaires which might otherwise overheat the lighted objects due to for example the applied lamp type, the shape of the reflector, the adjustability of the mounting means or the location of mounting as indicated in the installation instructions

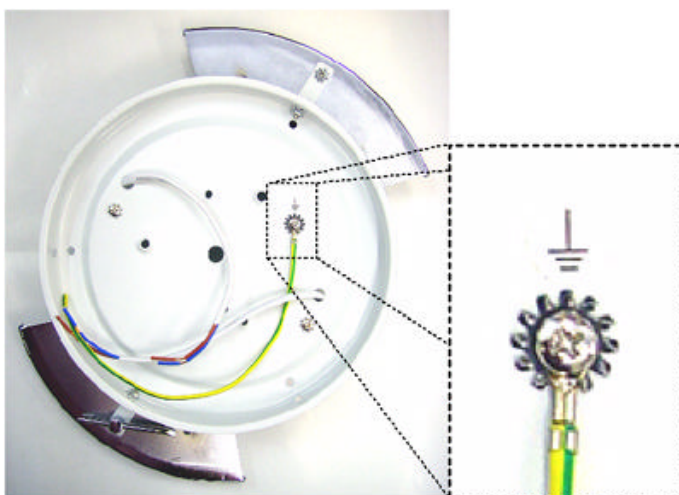
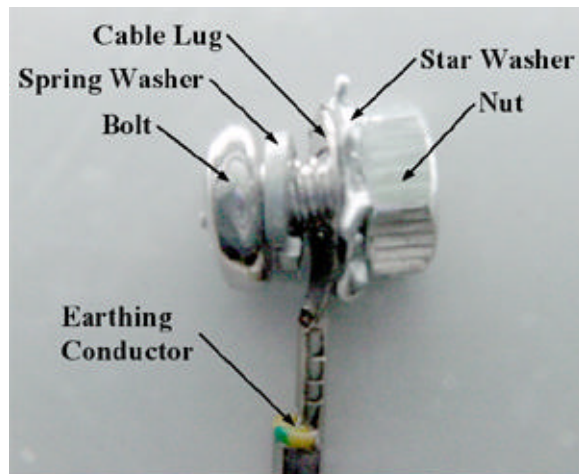


Additional Information

All details which are necessary to ensure proper installation, use and maintenance should be given either on the luminaire or in the manufacturer's instruction provided with the luminaire. These will include information regarding installing away from combustible surface (wall paper, wooden false ceiling), allowing sufficient room for heat dissipation (particularly luminaire fitted with tungsten halogen lamp), and adopting proper anchorage to support the weight of the luminaire.

Effective Earthing Connection

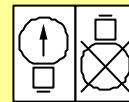
You should ensure that the earthing terminal shall be properly connected and locked in position. Star and spring washers should be used to ensure effective earthing. The spring washer is to lock against loosening and the star washer is to remove the paint coating on the metal surface for reliable earthing continuity.



You should not modify the luminaire such as by the addition of a lampholder. The added lamp could significantly heat up both the luminaire and the surrounding area, leading to potential fire hazard.

You should advise your customer the maximum power of replacement lamp bulbs as hazard may arise if the luminaires operate beyond their designed limit. Please also note that some 60W candle and round bulbs have the limitation on cap-up operating position. That means the lamps should not be operated with the lamp cap at the upper position. It may lead to overheating if such lamp bulb is installed in the wrong operating position. You can look for the appropriate symbol on the package of lamp bulb. You should advise your customer to observe the operating limitation of such lamp bulbs.

Symbol for lamp bulbs with cap-up operating position limitation



If you also provide installation service for luminaire, your company should be a registered electrical contractor (REC), and employ registered electrical worker (REW) to carry out the work. Improper installation greatly increases the potential risk of electric shock and the whole luminaire tumbling down.

Enquiries

Enquiries about the Electrical Products (Safety) Regulation should be addressed to:

Electricity Legislation Division
Electrical and Mechanical Services Department (EMSD)
The Government of the Hong Kong Special Administrative Region
98 Caroline Hill Road, Causeway Bay, Hong Kong
Tel : (852) 1823
Fax : (852) 2895 4929
Email: info@emsd.gov.hk
Homepage: <http://www.emsd.gov.hk>