

Luminaires —

Part 102: Particular requirements —

Section 102.55 Specification for luminaires for hospitals and health care buildings

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- Association of Manufacturers Allied to the Electrical and Electronic Industry (BEAMA Ltd.)
- British Lighting Association for the Preparation of Standards (Britlaps)
- Chartered Institution of Building Services Engineers
- Consumer Standards Advisory Committee of BSI
- Decorative Lighting Association
- Department of Trade and Industry (Consumer Safety Unit, CS Division)
- Electrical Contractors' Association
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- Electricity Supply Industry in England and Wales
- Health and Safety Executive
- Institution of Public Lighting Engineers
- Lighting Industry Federation Ltd.
- Society of Glass Technology

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- Association of Consulting Scientists
- Association of Manufacturers of Domestic Electrical Appliances
- British Retailers' Association
- Chief and Assistant Chief Fire Officers' Association
- Department of Health and Social Security
- Electric Cable Makers' Confederation
- Engineering Equipment and Materials Users' Association
- Small Electrical Appliances Marketing Association

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Foreword

This British Standard has been prepared under the direction of the Electrical Illumination Standards Committee. It supersedes the requirements for electrical safety and mechanical construction of BS 3541:1962. The requirements for photometric performance given in BS 3541, which is withdrawn, are superseded by BS 4533-103.2.

This Section of BS 4533-102 makes reference to BS 4533-101:1981. The general lay-out and presentation follow the pattern of other Sections of Part 102, most of which are derived directly from sections of International Electrotechnical Commission (IEC) Publication 598-2.

During the drafting of this Section of BS 4533-102, due regard has been paid to the requirements given in BS 5724-1. The possibility is being examined of redrafting the requirements for luminaires used for medical purposes (e.g. operating theatre lights and medical inspection lamps) as individual Sections of BS 5724. If such requirements are redrafted, BS 4533 will be amended to exclude them from its scope. In the mean time, for the purposes of patient and operator safety the UK Health Departments may accept such “medical luminaires” complying either with this standard or with BS 5724-1.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

55.1 Scope

This Section of Part 102 of BS 4533 specifies requirements for luminaires for use with tungsten filament, tubular fluorescent and other discharge lamps on supply voltages not exceeding 1 000 V for use in clinical areas in which medical treatment, examination and medical care take place in hospitals and health care buildings. Luminaires for emergency lighting and luminaires for general illumination in non-clinical areas (e.g. offices) are not covered by this Section; for these luminaire types reference should be made to other Sections of Part 102 of this standard. This Section does not cover anaesthetic-proof luminaires, the special requirements for which are given in BS 5724-1.

NOTE 1 BS 4533-101:1981 is referred to hereinafter as "Part 101".

NOTE 2 The titles of the publications referred to in this standard are listed on the inside back cover.

55.2 General test requirements

The provisions of section 0 of Part 101 apply. The tests detailed in each section of Part 101 shall be carried out in the order listed in this Section of Part 102. Reference to other sections of Part 101 may be necessary in such instances. In addition to the test requirements of this Section of Part 102, luminaires having features covered by other Sections of Part 102, e.g. recessed luminaires with built-in transformers, shall also comply with the relevant provisions of those Sections.

55.3 Definitions

For the purposes of this Section of BS 4533-102, the definitions given in section 1 of Part 101 apply together with the following:

55.3.1

bedded area

an area where one or more patients' beds are in use

NOTE A ward will incorporate a bedded area or areas together with the associated services such as the nurses' station, toilets and utility rooms.

55.3.2

enclosed luminaire

a luminaire with main part and translucent cover constructed to minimize the entry of dust and other bodies

55.3.3

bedded area luminaire

a special luminaire for lighting in the area of patients

NOTE It may be surface-mounted (wall or ceiling), pendant or recessed.

55.3.4

bedhead luminaire

a special luminaire used by the patient

NOTE 1 It may be surface-mounted and it may have an adjustable arm.

NOTE 2 This luminaire type should not be regarded as a general examination luminaire or a hand-held inspection luminaire.

55.3.5

night light luminaire

a luminaire designed to give a low level of light at night in bedded areas and adjacent areas

55.3.6

hospital system luminaire

a luminaire for bedded areas so constructed that the main part, in addition to housing lamp(s), control-gear and components, has provision for attaching one or more additional luminaires, supply voltage outlets, medical gases, telephone, radio or light dimming devices

NOTE It may be surface-mounted, recessed or pendant with rigid support.

55.3.7

general examination luminaire

a totally enclosed adjustable luminaire using lamps rated not more than 24 V, for surface mounting (wall or ceiling) or for fixing to a mobile stand for medical examination and minor surgical purposes

NOTE See also Section 102.6 of this standard.

55.3.8

hand-held inspection luminaire

a totally enclosed luminaire for medical inspection purposes

55.3.9

rewirable hand-held inspection luminaire

a hand-held inspection luminaire so constructed that the flexible cable or cord can be replaced

55.3.10

non-rewirable hand-held inspection luminaire

a hand-held inspection luminaire so constructed that the flexible cable or cord cannot be separated from the luminaire without making it permanently useless

55.3.11

operating theatre table luminaire

a luminaire using lamps rated at not more than 24 V, and designed specifically to provide illumination for the performance of, for example, surgical and obstetrical procedures

NOTE See also Section 102.6 of this standard.