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**Luminaires — Part 2-23 : Particular
requirements — Extra low voltage
lighting systems for filament lamps**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japan Luminaires Association (JLA) / Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on IEC 60598-2-23:1996, *Luminaires—Part 2-23: Particular requirements—Extra low voltage lighting systems for filament lamps* and Amendment 1 (2000) for the purposes of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

JIS C 8105 consists of the following parts and sections under the general title *Luminaires*.

Part 1: General requirements for safety

Part 2: Particular requirements for safety—Section 1: Fixed general purpose luminaires

Part 2: Particular requirements for safety—Section 2: Recessed luminaires

Part 2: Particular requirements for safety—Section 3: Luminaires for road and street lighting

Part 2: Particular requirements for safety—Section 4: Portable general purpose luminaires

Part 2: Particular requirements for safety—Section 5: Floodlights

Part 2: Particular requirements for safety—Section 6: Luminaires with built-in transformers or converters for filament lamps

Part 2: Particular requirements for safety—Section 7: Portable luminaires for garden use

Part 2: Particular requirements for safety—Section 8: Handlamps

Part 2: Particular requirements for safety—Section 9: Photo and film luminaires (non-professional)

Part 2: Particular requirements for safety—Section 17: Luminaires for stage lighting, television, film, and photographic (outdoor and indoor)

Part 2: Particular requirements for safety—Section 19: Air-handling luminaires

Part 2: Particular requirements—Section 20: Lighting chains

Part 2: Particular requirements for safety—Section 22: Luminaires for emergency lighting

Part 2-23: Particular requirements—Extra low voltage lighting systems for filament lamps

Part 3: General requirements for performance

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Luminaires—Part 2-23 : Particular requirements— Extra low voltage lighting systems for filament lamps

Introduction This Japanese Industrial Standard has been prepared based on the first edition of IEC 60598-2-23, *Luminaires—Part 2-23 : Particular requirements—Extra low voltage lighting systems for filament lamps*, published in 1996, its amendment 1 (2000) and IEC 60598-2-23 Edition 1.1 with some modifications of the technical contents. This must be read in conjunction with JIS C 8105-1:2000.

Portions underlined with dots are the matters modified from the original International Standard. A list of modifications with the explanations is given in annex 1 (informative).

23.1 Scope This Japanese Industrial Standard specifies requirements for extra low voltage lighting systems for filament lamps intended for ordinary interior use on supply voltages not exceeding 1 000 V. The luminaires, being connected in parallel, are supplied via freely suspended continuous supporting conductors or profiles. The current in the output circuit of the system is limited to 25 A.

NOTE The International Standard corresponding to this Standard is as follows.

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21.

IEC 60598-2-23:1996, *Luminaires—Part 2-23 : Particular requirements—Extra low voltage lighting systems for filament lamps* and Amendment 1 (2000) (MOD)

23.2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. If the indication of the year of coming into effect or of publication is given to these referred standards, only the edition of indicated year constitutes the provision of this Standard but the revision and amendment made thereafter are not applied.

JIS C 0922:2002 *Protection of persons and equipment by enclosures for electrical apparatus—Probes for verification*

NOTE IEC 61032:1990 *Test probes to verify protection by enclosures* is identical with the said standard.

JIS C 8105-1:2000 *Luminaires—Part 1 : General requirements for safety*

NOTE IEC 60598-1:1996 *Luminaires—Part 1 : General requirements and tests* is equivalent to the said standard.

JIS C 8118-1:1999 *Ballasts for tubular fluorescent lamps—Part 1 : General and safety requirements*

NOTE IEC 60920:1990 *Ballasts for tubular fluorescent lamps. General and safety requirements* is equivalent to the said standard.

JIS C 8303:1993 *Plugs and receptacles for domestic and similar general use*

JIS C 8358:1994 *Appliance couplers for domestic and similar use*

JIS C 9742:2000 *Isolating transformers and safety isolating transformers—Requirements*

NOTE IEC 60742:1983 *Isolating transformers and safety isolating transformers—Requirements* is equivalent to the said standard.

IEC 60083:1975 *Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC.*

IEC 60320-1:2001 *Appliance couplers for household and similar general purposes—Part 1 : General requirements*

IEC 60320-2-2:1998 *Appliance couplers for household and similar general purposes—Part 2-2 : Interconnection couplers for household and similar equipment*

IEC 61046:1993 *D.C. or a.c. supplied electronic step-down convertors for filament lamps—General and safety requirements*

23.3 General test requirements The provisions of section 0 of JIS C 8105-1 apply. The tests described in each appropriate section of JIS C 8105-1 shall be carried out in the order listed in this Standard. Type tests shall be carried out on the complete extra low voltage lighting system as provided by the manufacturer.

23.4 Definitions For the purpose of this Standard, the definitions of section 1 of JIS C 8105-1 apply, together with the following definitions (see figure 1).

23.4.1 extra low voltage lighting system lighting system in kit form for filament lamps consisting of a transformer/converter, supporting conductors and luminaires, as well as all the necessary fixing devices and the electrical/mechanical connectors

23.4.2 supporting conductor conductive span wire or profile freely spanned or mounted between the main points of support, serving to supply the luminaires, and carrying the mass of the luminaires of the extra low voltage lighting system

23.4.3 main support device ensuring a sufficient mechanical connection of the supporting conductor(s) with the appropriate parts of the building in which the extra low voltage lighting system is to be used. Auxiliary supports may be necessary between the main supports

23.4.4 auxiliary support device along the supporting conductor to hold it in its intended position