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Preface

This is the fourth edition of CSA C862, *Performance of incandescent reflector lamps*. It supersedes the previous editions, published in 2001, 1997, and 1995.

This Standard specifies performance requirements for floodlight and spotlight reflector lamps used in general lighting applications, including requirements for efficacy, wattage, rated life, and centre beam intensity.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This edition incorporates the following changes:

- (a) [Clause 1.3](#) of the Scope includes items not covered in the previous edition of the Standard and thus establishes a better definition of general service incandescent reflector lamps.
- (b) [Clause 1.4](#) has been modified in its exclusions.
- (c) In [Clause 2](#), IES publication LM-58 has been added to the reference publications. (It should be noted that IES and IESNA are now synonymous.)
- (d) [Clause 3](#) adds new definitions and clarifies some existing definitions.
- (e) [Clause 7.2](#) has been revised to reflect products on the Canadian market.
- (f) [Table 1](#) has been revised to include BPAR lamps.

This Standard is intended to be used as a reference document for regulatory authorities requiring verification of the performance of energy efficient products. Harmonization with relevant international Standards was a key factor in its development.

CSA acknowledges that the development of this Standard was made possible, in part, by the financial support of BC Hydro, Manitoba Hydro, Hydro Québec, Natural Resources Canada (NRCan), and the Ontario Ministry of Energy and Infrastructure.

This Standard was prepared by the Subcommittee on Performance of Incandescent Reflector Lamps under the jurisdiction of the Technical Committee on Lighting and the Strategic Steering Committee on Performance, Energy Efficiency, and Renewables, and has been formally approved by the Technical Committee. It will be submitted to the Standards Council of Canada for approval as a National Standard of Canada.

November 2009

Notes:

- (1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.
- (2) Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.
- (3) This publication was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.
- (4) CSA Standards are subject to periodic review, and suggestions for their improvement will be referred to the appropriate committee.
- (5) All enquiries regarding this Standard, including requests for interpretation, should be addressed to Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6.
Requests for interpretation should
 - (a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;
 - (b) provide an explanation of circumstances surrounding the actual field condition; and
 - (c) be phrased where possible to permit a specific “yes” or “no” answer.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are published in CSA’s periodical Info Update, which is available on the CSA Web site at www.csa.ca.

C862-09

Performance of incandescent reflector lamps

1 Scope

1.1

This Standard describes testing procedures and states the performance requirements for general service incandescent and tungsten halogen reflector lamps.

1.2

This Standard includes performance requirements for

- (a) wattage;
- (b) lamp efficacy;
- (c) rated luminous flux;
- (d) centre beam intensity; and
- (e) rated life.

1.3

This Standard applies to incandescent and tungsten halogen reflector lamps designed for general lighting use that have

- (a) a rated wattage from 40 W up to and including 205 W;
- (b) an operating capability between 110 and 130 V;
- (c) an E26/24 single contact, or E26/50×39 skirted, medium screw base; and
- (d) a bulb diameter > 57 mm.

1.4

This Standard does not apply to any of the following:

- (a) coloured lamps;
- (b) lamps that
 - (i) are of rough (or vibration) service type and are specifically marked and marketed as rough (or vibration) service lamps;
 - (ii) have a lens containing at least 5% neodymium oxide;
 - (iii) have a coating or other containment system to retain glass fragments if the lamp is shattered and are specifically marked and marketed as impact-resistant lamps; or
 - (iv) contain a filter that suppresses yellow and green portions of the spectrum and are specifically marked and marketed for plant growth use;
- (c) infrared heat lamps;
- (d) lamps used in mines or in airfield, aircraft, automotive, marine, aquarium, terrarium, or vivarium applications;
- (e) a bulb shape designated as BR as described in NEMA/ANSI C79.1 with
 - (i) a diameter of 95.25 mm (BR 30) and a rated power of ≤ 50 W;
 - (ii) a diameter of 95.25 mm (BR 30) and a rated power of 65 W;
 - (iii) a diameter of 127 mm (BR 40) and a rated power of ≤ 50 W; or
 - (iv) a diameter of 127 mm (BR 40) and a rated power of 65 W;
- (f) a bulb shape designated as ER as described in NEMA/ANSI C79.1 with
 - (i) a diameter of 95.25 mm (ER 30) and a rated power of ≤ 50 W;