C819-11

Performance of general service fluorescent lamps

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Preface

This is the second edition of CSA C819, *Performance of general service fluorescent lamps*.

The following revisions are included in this new edition:

(a) types of lamps covered by this Standard have been clarified;
(b) references and definitions have been updated;
(c) CRI exemption has been increased to 87 or greater;
(d) efficacy and CCT levels have been revised; and
(e) a normative Annex, "Uniform test method for measuring average lamp efficacy (LE), colour rendering index (CRI), and correlated colour temperature (CCT) of electric lamps", has been added.

CSA acknowledges that the development of this Standard was made possible, in part, by the financial support of Hydro Québec, BC Hydro, Manitoba Hydro, SaskPower, Ontario Ministry of Energy, Canadian Electricity Association, Ontario Power Authority, and Conserve Nova Scotia.

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

This Standard was prepared by the Subcommittee on Fluorescent 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.

January 2011

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.*

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(c) wording of the proposed change; and
(d) rationale for the change.

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Performance of general service fluorescent lamps

1 Scope

1.1
This Standard specifies performance requirements and related test procedures used to evaluate fluorescent lamps intended for general service applications.

1.2
This Standard includes performance requirements for lamp efficacy.

1.3
This Standard applies to
(a) any straight-shaped lamp, commonly referred to as 4-foot medium bipin lamps, with a medium bipin base of 1200 mm (48 in) nominal overall length and a rated wattage of 25 W or more;
(b) any U-shaped lamps, commonly referred to as 2-foot U-shape lamps, with a medium bipin base between 560 mm and 635 mm (22 and 25 in) nominal overall length and a rated wattage of 25 W or more;
(c) any rapid-start lamps, commonly referred to as 8-foot high-output lamps, with a recessed double-contact base of 2400 mm (96 in) nominal overall length;
(d) any instant-start lamp, commonly referred to as 8-foot slimline lamps, with a single-pin base of 2400 mm (96 in) nominal overall length and a rated wattage of 52 W or more;
(e) any straight-shaped lamp, commonly referred to as 4-foot miniature bipin standard output lamps, with a miniature bipin base between 1143 mm and 1200 mm (45 and 48 in) nominal overall length and a rated wattage of 26 W or more; and
(f) any straight-shaped lamp, commonly referred to as 4-foot miniature bipin high output lamps, with a miniature bipin base between 1143 mm and 1200 mm (45 and 48 in) nominal overall length and a rated wattage of 49 W or more.

1.4
This Standard does not apply to the following:
(a) fluorescent lamps designed to promote plant growth;
(b) fluorescent lamps specifically designed for cold temperature applications;
(c) coloured fluorescent lamps;
(d) fluorescent lamps designed to be impact-resistant;
(e) reflector or aperture lamps;
(f) fluorescent lamps designed for use in reprographic equipment;
(g) fluorescent lamps designed to produce radiation primarily in the ultraviolet region of the spectrum; and
(h) lamps with a CRI of 87 or greater.