

Performance of LED luminaires



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Performance of LED luminaires



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Preface

This is the first edition of CSA C866, *Performance of LED luminaires*.

CSA acknowledges that the development of this Standard was made possible, in part, by the financial support of BC Hydro, Conserve Nova Scotia, Hydro-Québec, Manitoba Hydro, Natural Resources Canada, the Ontario Ministry of Energy, and the Ontario Power Authority.

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 LEDs, under the jurisdiction of the Technical Committee on Performance of Lighting Equipment and the Strategic Steering Committee on Performance, Energy Efficiency, and Renewables, and has been formally approved by the Technical Committee.

January 2012

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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 - (b) relevant clause, table, and/or figure number;
 - (c) wording of the proposed change; and
 - (d) rationale for the change.

C866-12

Performance of LED luminaires

1 Scope

1.1

This Standard specifies energy efficiency and performance requirements for LED luminaires of the directional and non-directional type used for general illumination, including those with a significant decorative function.

1.2

This Standard does not cover LED products

- (a) intended for indication, e.g., traffic lights and exit signs;
- (b) exclusively intended for decoration, e.g., holiday lights; and
- (c) intended for retrofitting into existing fixtures.

1.3

In CSA standards, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (nonmandatory) to define their application.

2 Reference publications

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

CSA (Canadian Standards Association)

C22.2 No. 9.0-96 (R2006)

General requirements for luminaires

C22.2 No. 12-1982 (R2008)

Portable luminaires

C22.2 No. 250.0-08

Luminaires

C22.2 No. 1993-09

Self-ballasted lamps and lamp adapters

ASTM International (American Society for Testing and Materials)

E283-04

Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen