CSA GROUP™

CSA C22.2 No. 250.13:20
National Standard of Canada

Light emitting diode (LED) equipment for lighting applications

Standards Council of Canada
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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 to judge its suitability for their particular purpose.

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Light emitting diode (LED) equipment for lighting applications

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① Preface

This is the fourth edition of CSA C22.2 No. 250.13, *Light emitting diode (LED) equipment for use in lighting applications*. It is one of a series of Standards issued by CSA Group under Part II of the *Canadian Electrical Code*. It supersedes the previous editions published in 2017, 2014, and 2012.

The Scope of this edition has been revised to clarify the types of LED controllers that are covered and to expand the requirements to include LED controllers supplied from a branch circuit.

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For general information on the standards of the *Canadian Electrical Code, Part II*, see the Preface of CAN/CSA-C22.2 No. 0, *General Requirements — Canadian Electrical Code, Part II*.

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

This Standard was prepared by the Integrated Committee on Lighting Products, under the jurisdiction of the Technical Committee on Consumer and Commercial Products and the Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Interpretations: The Strategic Steering Committee on Requirements for Electrical Safety has provided the following direction for the interpretation of standards under its jurisdiction: "The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product such as for new materials or construction, and when a relevant committee interpretation has not already been published, CSA Group's procedures for interpretation shall be followed to determine the intended safety principle."

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 Standard 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 Standard.*
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   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

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

CSA C22.2 No. 250.13:20
Light emitting diode (LED) equipment for lighting applications

1 Scope

1.1

1.1.1
The requirements specified in this Standard cover light-emitting diode (LED) equipment that is an integral part of a luminaire or other lighting equipment and that operates in the visible light spectrum between 400 and 700 nm. These requirements also cover the component parts of LED equipment, including LED controlgear, controllers, arrays, modules, and packages, as defined in this Standard.

1.1.2
LED controllers covered in this Standard are intended to be
a) integral to the luminaire; or
b) located remotely from the luminaire when the LED controller is supplied from and controls the luminaire using only Class 2 circuits.

1.1.3
These requirements do not cover the following LED controllers:
a) intended for installation inside a remote electrical outlet box containing Class 1 circuits;
b) light- or presence-sensitive plug-in locking–type photocontrols for use with area lighting covered by CSA C22.2 No. 284; or
c) solid-state dimming controls covered by CSA C22.2 No. 184.1.

1.2
These lighting products are intended for installation on branch circuits of 600 V nominal or less, in accordance with CSA C22.1, *Canadian Electrical Code, Part I*, and for connection to isolated (non–utility-connected) power sources, such as generators, batteries, fuel cells, solar cells, and the like.

1.3

1.3.1
LED equipment is utilized in lighting products that comply with the end-product standards listed in this Clause. The requirements specified in this Standard are intended to supplement those in other end-product standards.

1.3.2
LED luminaires comply with the following end-product standards:
a) CSA C22.2 No. 207;
b) CSA C22.2 No. 12;
c) CSA C22.2 No. 89;