AS/NZS 1680.3:2017

Australian/New Zealand Standard™

Interior and workplace lighting

Part 3: Measurement, calculation and presentation of photometric data

STANDARDS Australia

STANDARDS NEW ZEALAND
PAEREWA AOTEAROA

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee LG-001, Interior Lighting. It was approved on behalf of the Council of Standards Australia on 10 May 2017 and by the New Zealand Standards Approval Board on 7 June 2017.
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The following are represented on Committee LG-001:

Australian Building Codes Board
CIE Australia
Energy Efficiency and Conservation Authority of New Zealand
Engineers Australia
IES: The Lighting Society
Lighting Council Australia
Lighting Council New Zealand
Property Council of Australia
University of Sydney

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Australian/New Zealand Standard™

Interior and workplace lighting

Part 3: Measurement, calculation and presentation of photometric data

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee LG-001, Interior and Workplace Lighting, to supersede AS 1680.3—1991, *Interior lighting*, Part 3: *Measurement, calculation and presentation of photometric data*.

The objective of this Standard is to specify for the Australian and New Zealand lighting industries, laboratory conditions, procedures and instrumentation for making photometric measurements on luminaires for interior and workplace lighting, together with requirements for the derivation of certain photometric data needed for interior lighting calculations.

This edition is a minor revision from AS 1680.3—1991 to introduce the measurement of solid state lighting devices such as LED lamps, LED modules and LED luminaires. The main body of the Standard is substantially unchanged from AS 1680.3—1991 and the photometry of solid state lighting is covered in Appendix I. It is expected that a major revision of this whole document will occur within the next five years after the publication of relevant technical reports currently in development by the CIE.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A normative appendix is an integral part of a Standard, whereas an informative appendix is for information and guidance only.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for laboratory conditions, procedures and instrumentation for making photometric measurements on luminaires for interior and workplace lighting. It also specifies requirements for the derivation of certain photometric data needed for interior lighting calculations.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

NOTE: Related documents, which may be of interest in relation to this Standard, are listed in the Bibliography.

AS
60038 Standard voltages

AS ISO
1000 The international system of units (SI) and its application

AS/NZS
1680 Interior and workplace lighting
1680.1 Part 1: General principles and recommendations

3100 Approval and test specification—General requirements for electrical equipment

4782 Double-capped fluorescent lamps—Performance specifications
4782.1 Part 1: General (IEC 60081:2000 MOD)

60598 Luminaires
60598.1 Part 1: General requirements and tests (IEC 60598-1, Ed. 7.0 (2008) MOD)

60921 Ballasts for tubular fluorescent lamps—Performance requirements

IEC
60050 International electrotechnical vocabulary
60050-845 Chapter 845: Lighting

60051 Direct acting indicating analogue electrical measuring instruments and their accessories (series)
60051-2 Part 2: Special requirements for ammeters and voltmeters
60051-3 Part 3: Special requirements for wattmeters and varmeters

ISO
80000 Quantities and units
80000-7 Part 7: Light