

Australian/New Zealand Standard™

**International lamp coding  
system (ILCOS)**



AS/NZS IEC 61231:2020

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee EL-041, Lamps and Related Equipment. It was approved on behalf of the Council of Standards Australia on 8 July 2020 and by the New Zealand Standards Approval Board on 1 July 2020.

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- Australian Industry Group
- Better Regulation Division
- CHOICE
- Consumer Electronics Suppliers Association
- Consumers Federation of Australia
- Department of Industry, Science, Energy and Resources
- Electrical Compliance Testing Association of Australia
- Electrical Regulatory Authorities Council
- Energy Efficiency & Conservation Authority of New Zealand
- IES: The Lighting Society
- Joint Accreditation System of Australia & New Zealand
- Joint Accreditation System of Australia and New Zealand, New Zealand
- Lighting Council Australia
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## **International lamp coding system (ILCOS)**

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## Preface

This document was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment to supersede AS/NZS 61231:2001, *International lamp coding system (ILCOS)*.

The objective of this document is to provide the rules for the international lamp coding system and covers all lamp categories, excluding vehicle lamps. Coding for the main lamp types is specified and, for the others, will follow by amendments to this standard as appropriate.

This document is identical with, and has been reproduced from, IEC 61231:2010+AMD1:2013 CSV, *International lamp coding system (ILCOS)*.

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## NOTES

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## INTERNATIONAL LAMP CODING SYSTEM (ILCOS)

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**The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience. A vertical line in the margin shows where the base publication has been modified by amendment 1. Additions and deletions are displayed in red, with deletions being struck through.**

International Standard IEC 61231 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this base publication and its amendment will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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- amended.

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## INTRODUCTION

The lamp industry strives continuously to meet customers' needs. Its innovative power has led to a tremendous variety of different light sources. To enable customers and experts to find their way within the diversity of products, a general system for the coding of lamps has been developed.

The code does not replace specific markings used by individual manufacturers on their lamps or in their catalogues, but it is promoted for cross-referencing purposes and, in due course, to replace national and regional lamp coding systems which already exist.

NOTE The code does not give all the technical characteristics necessary to specify a lamp fully. For this the relevant lamp standard and/or the manufacturer's literature have to be consulted.

## INTRODUCTION TO THE AMENDMENT

This proposal serves:

- a) the implementation of the low frequency square wave operation in ILCOS (International Lamp Coding System):

ILCOS L – wattage – lamp voltage range/starting device/ <b>current wave form and frequency</b> – lamp cap – dimensions
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- b) the implementation of lamps for use in high-pressure mercury equipment under 5.7.1.2. In order to distinguish this, other lamps are listed as normal lamps under 5.7.1.1.
- c) further editorial changes as being presented with PRESCO(RTK)198 and agreed by PRESCO.

## INTERNATIONAL LAMP CODING SYSTEM (ILCOS)

### 1 Scope and object

This International Standard gives the rules for the international lamp coding system and covers all lamp categories, excluding vehicle lamps. Coding for the main lamp types is specified and, for the others, will follow by amendments to this standard as appropriate.

The object of the international lamp coding system is

- to improve communication about the different types of lamps;
- to help in discussions concerning interchangeability and compatibility of products;
- to create a closer relationship between international standards and manufacturers' literature (for example the code could be given in future in the relevant parts of a standard);
- to enable correct replacements of lamps;
- to be used as a complementary marking on the luminaire;
- to replace national and regional coding systems.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60357, *Tungsten halogen lamps (non-vehicle) – Performance specifications*

IEC 60432-1, *Incandescent lamps – Safety specifications – Part 1: Tungsten filament lamps for domestic and similar general lighting purposes*

IEC 60432-2, *Incandescent lamps – Safety specifications – Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes*

IEC 60838-2-2, *Miscellaneous lampholders – Part 2-2: Particular requirements – Connectors for LED-modules*

IEC/TR 60887, *Glass bulb designation system for lamps*

IEC 61167, *Metal halide lamps*

~~GIE publication 29.2, *Guide on interior lighting*~~

IEC/TR 62732, *Three-digit code for designation of colour rendering and correlated colour temperature*

### 3 Principles

The international lamp coding system has been developed on the basis of the following principles.

- It should be manufacturer-independent concerning its content and its wording.