



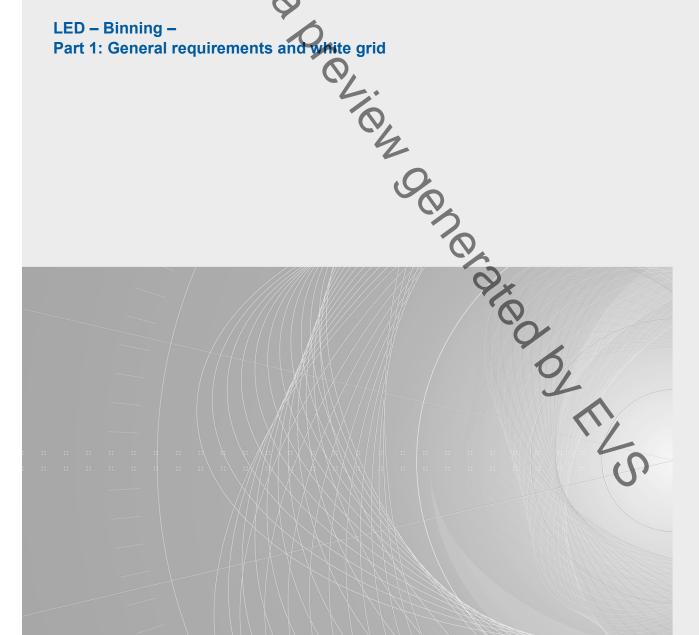
Edition 1.0 2011-03

# SPECIFIC. PRE-STANDARD PUBLICLY AVAILABLE SPECIFICATION



LED - Binning -

Part 1: General requirements and white grid





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### IEC/PAS 62707-1

Edition 1.0 2011-03

## PUBLICLY AVAILABLE SPECIFICATION

PRE-STANDARD

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LED - Binning -

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**INTERNATIONAL ELECTROTECHNICAL COMMISSION** 

ISBN 978-2-88912-402-2

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

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#### **FOREWORD**

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IEC-PAS 62707-1 has been processed by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document

Draft PAS	Report on voting
34A/1429/PAS	34A/1448/RVD

Following publication of this PAS, which is a pre-standard publication, the technical committee or subcommittee concerned may transform it into an International Standard.

This PAS shall remain valid for an initial maximum period of 3 years starting from the publication date. The validity may be extended for a single period up to a maximum of 3 years, at the end of which it shall be published as another type of normative document, or shall be withdrawn.

A list of all the parts in the IEC 62707 series, published under the general title LED-Binning can be found on the IEC website.

A bilingual version of this publication may be issued at a later date.

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One of the original and the or IMPORTANT - The colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

#### LED - BINNING -

#### Part 1: General requirements and white grid

#### 1 Scope

This PAS specifies general requirements, a grid and a corresponding code for the colour binning of white LEDs emitting incoherent, visible radiation.

Other parts of this series covering chromaticity of coloured LEDs, luminous flux/luminous intensity, colour rendering and forward voltage are in preparation or under consideration.

#### 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/TS 62504,\_\_\_ General lighting - LEDs and LED modules - Terms and definitions1

ISO 11664-1 (CIE S 014-1/E), Colorimetry - Part 1: CIE standard colorimetric observers

ISO 11664-5 (CIE S 014-5/E), Colorimetry – Part 5: CIE 1976 L\*u\*v\* Colour space and u', v' uniform chromaticity scale diagram

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC/TS 62504 and the following apply.

#### 3.1

#### bin

restricted range of LED performance characteristic used to delimit a subset of LEDs near a nominal LED performance as identified by chromaticity, photometric performance and forward voltage

(IEC/TS 62504: , 3.5)

#### 3.2

#### grid

entity specified by a set of grid points

#### 3.3

#### grid point

colour coordinate in the u', v' colour space according to ISO 11664-5 (CIE S 014-5/ $\dot{E}$ ) (or its equivalent in the x, y colour space according to ISO 11664-1 (CIE S 014-1/ $\dot{E}$ )) identified by two discrete indices, the first index p counting steps along the Planckian locus, and its extension beyond the high temperature boundary towards blue colours, and second index j along Judd isothermal lines

<sup>1</sup> To be published