

PUBLICLY AVAILABLE SPECIFICATION

PRE-STANDARD



LED – Binning –
Part 1: General requirements and white grid



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LED – BINNING –**Part 1: General requirements and white grid****FOREWORD**

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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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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 definitions*¹

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/E) (or its equivalent in the x, y colour space according to ISO 11664-1 (CIE S 014-1/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

¹ To be published