BS IEC 62906-5-6:2020

BSI Standards Publication

Laser displays

Part 5-6: Measuring methods for optical performance of projection screens

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee EPL/47, Semiconductors.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Laser displays –
Part 5-6: Measuring methods for optical performance of projection screens

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LASER DISPLAYS –

Part 5-6: Measuring methods for optical performance of projection screens

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International Standard IEC 62906-5-6 has been prepared by IEC technical committee 110: Electronic displays.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
10/1187/FDIS	110/1198/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

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A list of all parts in the IEC 62906 series, published under the general title *Laser displays*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
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LASER DISPLAYS –

Part 5-6: Measuring methods for optical performance of projection screens

1 Scope

This part of IEC 62906 specifies the standard measurement conditions and measuring methods for determining the optical performance of a projection screen in terms of its photometric characteristics, including screen gain and speckle contrast, from different viewing directions. These methods are only applied for the case in which the projection screen and a laser projector are integrated and used with a fixed configuration as a set to create a real image. Both front and rear projection screens, with a flat surface, are included. This document excludes projection screens which are classified as optically see-through screens, including head-up displays.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60050-845, *International Electrotechnical Vocabulary (IEV) – Part 845: Lighting* (available at www.electropedia.org)

IEC 60825-1, *Safety of laser products – Part 1: Equipment classification and requirements*

IEC 62906-1-2, *Laser display devices – Part 1-2: Terminology and letter symbols*

IEC 62906-5-2, *Laser display devices – Part 5-2: Optical measuring methods of speckle contrast*

IEC 62471-5, *Photobiological safety of lamps and lamp systems – Part 5: Image projectors*

CIE S 014-1, *Colorimetry – Part 1: Standard Colorimetric Observers*

3 Terms, definitions, and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-845, IEC 62906-1-2 and CIE S 014-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
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