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INTERNATIONAL STANDARD

colour inside

Laser display devices –
Part 5-4: Optical measuring methods of colour speckle

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IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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FOREWORD

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International Standard IEC 62906-5-4 has been prepared by IEC technical committee TC 110: Electronic display devices.

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

FDIS	Report on voting
110/926/FDIS	110/938/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.

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

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- withdrawn,
- replaced by a revised edition, or
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LASER DISPLAY DEVICES –

Part 5-4: Optical measuring methods of colour speckle

1 Scope

This part of IEC 62906 specifies the fundamental colour speckle distribution in CIE colour systems and the measuring methods of the colour speckle of laser display devices (LDDs).

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

IEC 62906-5-2:2016, *Laser display devices – Part 5-2: Optical measuring methods of speckle contrast*

CIE publication 15:2004, *Colorimetry*

3 Terms, definitions, letter symbols and abbreviated terms

For the purposes of this document, the following terms and definitions given in IEC 62906-1-2 and the following apply.

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

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1 Fundamental terms

3.1.1
colour speckle distribution
colour distribution in a specified colour space of the speckle patterns which are generated by colour mixing of monochromatic screen speckles

3.1.2
photometric speckle distribution
distribution of photometric variables such as illuminance, luminance or luminous flux of a colour speckle pattern which are generated by colour mixing of monochromatic screen speckles

3.2 Terms related to colour speckle distribution

3.2.1
colour speckle variance
variance for either of the chromaticity coordinates of colour speckle distribution data, used as one of the metrics of colour speckle distribution