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Paints and varnishes — Lighting and procedure for visual assessments of coatings

Peintures et vernis — Éclairage et mode opératoire pour évaluations visuelles des revêtements

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Foreword

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This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 13076:2012), which has been technically revised. The main changes compared to the previous edition are as follows:

— addition of Clause 2 on normative references;

— addition of Clause 3 on terms and definitions;

— addition of a new light source, LED;

— addition of examples on the applications of this document in Table A.1;

— complete editorial revision.

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Paints and varnishes — Lighting and procedure for visual assessments of coatings

1 Scope

This document specifies the lighting and the procedure for the visual assessment of degraded areas, spots or other defects on or in coatings.

This document is not applicable to the visual comparison of colour, which can be assessed using ISO 3668.

NOTE See Annex A for examples of the possible applications of this document.

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.

ISO 4618, *Paints and varnishes — Terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4618 apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

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

4 Principle

The panel is visually assessed under specified conditions of illumination for degraded areas, spots or other defects.

5 Apparatus

5.1 Fluorescent lamp or dull LED (light-emitting diode), comprising a wide-angle light source with an aluminium-coated reflector positioned to reflect the light downwards (see Figure 1), a colour temperature of 6 500 K and a degree of colour rendering index (CRI) of 9 (corresponding to colour rendering class 1A, i.e. a CRI, R_a, of 90 to 100). This colour temperature is realized in the CIE standard illuminant D65, as described in CIE 15:2004.

NOTE 1 This colour temperature and colour rendering give the light colour 965.

NOTE 2 Physical relationship of luminance and luminous flux: 1 lx = 1 lm/m^2 and 1 lm = 1 cd · sr.

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