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

1 Scope

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

It is not applicable to the visual comparison of colour, which may be assessed using ISO 3668.

2 Principle

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

3 Apparatus

3.1 Fluorescent lamp, 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 of 9 (corresponding to colour rendering class 1A, i.e. a colour rendering index, R_a , of 90 to 100).

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

4 Procedure for visual assessment

4.1 General

Either natural or artificial daylight may be used for routine assessments. Precisely controlled artificial lighting shall be used for arbitration purposes, however, since the properties of natural daylight are not constant and evaluations in natural daylight can be influenced by the surroundings.

4.2 Assessment in natural daylight

Diffuse daylight, such as that which falls from a partly cloudy sky on a north-facing test panel (south-facing in the southern hemisphere), should preferably be used. The areas to be assessed, and the areas surrounding them, shall be uniformly illuminated with an illuminance which shall be not less than 2 000 lx. Direct sunlight shall be avoided.

4.3 Assessment under artificial lighting

Assess the coating under a fluorescent lamp as specified in 3.1. Hold the test panel at a distance from the lamp such that the illuminance at the surface of the coating is not less than 750 lx (see Figure 1).

The illuminance shall be measured after setting up the fluorescent lamp.

The panel being assessed may be inclined in any direction. Degraded areas and spots can best be identified when examined at the light/dark boundary produced by the lamp.

Assessments made for arbitration purposes shall always be carried out under artificial light.