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Second edition
2009-02-15

Paper and board — Measurement of specular gloss —

Part 1: 75° gloss with a converging beam, TAPPI method

Papiers et cartons — Mesurage du brillant spéculaire —

Partie 1: Brillant à 75° avec un faisceau convergent, méthode TAPPI



Reference number
ISO 8254-1:2009(E)

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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 8254-1 was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*.

This second edition cancels and replaces the first edition (ISO 8254-1:1999). It has been technically revised, in part to harmonize the wavelength specified in 5.2.1 with that specified in ISO 8254-2:2003 and ISO 8254-3:2004. The reference wavelength defining the high-gloss reference standard has been changed from 589,26 nm (sodium D line) to 587,56 nm (helium d line), but this change has a negligible effect on the measured specular gloss value.

ISO 8254 consists of the following parts, under the general title *Paper and board — Determination of specular gloss*:

- *Part 1: 75° gloss with a converging beam, TAPPI method*
- *Part 2: 75° gloss with a parallel beam, DIN method*
- *Part 3: 20° gloss with a converging beam, TAPPI method*

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Introduction

This part of ISO 8254 deals with the assessment of the “gloss” of a paper or board surface by determining an optical property called the “specular gloss” which is here defined in terms of a measurement made at 75° using a converging beam geometry, commonly known as the TAPPI method and described in TAPPI 480 om-92^[1]. Other parts of this International Standard deal with measurements made at 75° using a collimated beam geometry known as the DIN method, and with measurements made at 20°. Gloss results are greatly dependent on the angle of measurement and on the type of incident beam (converging or collimated), so conditions of measurement shall be carefully defined.

The definition of gloss (3.1) relates to a mode of visual perception, whereas the method described uses a physical measurement of mixed regular and diffuse reflection. The exact correlation between the visual perception and the scale established by the physical measurement is not known. However, this physical gloss scale has proved to be useful for a number of technical applications and consequently its standardization is justified.