

INTERNATIONAL STANDARD

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Micrographics — Readers for transparent microforms — Measurement of characteristics

*Micrographie — Appareils de lecture de microformes — Mesurage des
caractéristiques*



Reference number
ISO 7565:1993(E)



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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.

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.

International Standard ISO 7565 was prepared by Technical Committee ISO/TC 171, *Micrographics and optical memories for document and image recording, storage and use*.

Annexes A and B of this International Standard are for information only.

Micrographics — Readers for transparent microforms — Measurement of characteristics

1 Scope

This International Standard specifies methods and instruments for measuring the characteristics for readers specified in ISO 6198. It applies to magnification, resolution, distortion, screen luminance, screen contrast and film gate temperatures.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5-1:1984, *Photography — Density measurements — Part 1: Terms, symbols and notations.*

ISO 5-2:1991, *Photography — Density measurements — Part 2: Geometric conditions for transmission density.*

ISO 5-3:1984, *Photography — Density measurements — Part 3: Spectral conditions.*

ISO 5-4:1983, *Photography — Density measurements — Part 4: Geometric conditions for reflection density.*

ISO 446:1991, *Micrographics — ISO character and ISO test chart No. 1 — Description and use.*

ISO 3334:1989, *Micrographics — ISO resolution test chart No. 2 — Description and use.*

ISO 6196-1:1980, *Micrographics — Vocabulary — Section 01: General terms.*

ISO 6196-2:1982, *Micrographics — Vocabulary — Section 02: Image positions and methods of recording.*

ISO 6196-3:1983, *Micrographics — Vocabulary — Part 03: Film processing.*

ISO 6196-4:1987, *Micrographics — Vocabulary — Part 04: Materials and packaging.*

ISO 6196-5:1987, *Micrographics — Vocabulary — Part 05: Quality of images, legibility, inspection.*

ISO 6196-6:1992, *Micrographics — Vocabulary — Part 06: Equipment.*

ISO 6196-7:1992, *Micrographics — Vocabulary — Part 7: Computer micrographics.*

ISO 6198:—¹⁾, *Micrographics — Readers for transparent microforms — Performance characteristics.*

CIE Publication No. 17.4:1987, *International lighting vocabulary.*

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 6196 apply.

4 Magnification

4.1 Apparatus

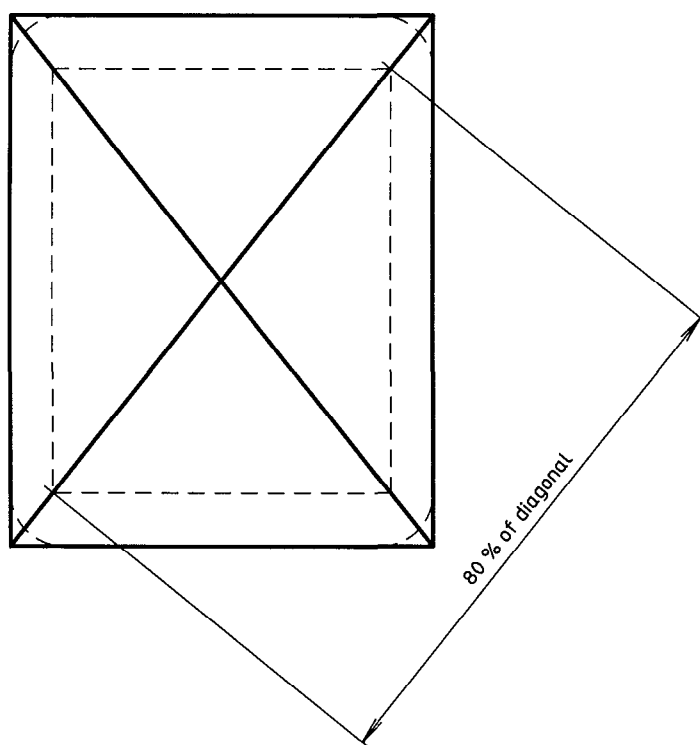
4.1.1 Magnification test target, consisting of a transparent stable material upon which is marked a graduated scale with an overall accuracy of $\pm 0,5\%$ and which, when projected on the screen, will cover at least 80 % of the reader screen width or height of

1) To be published.

the measurement area as shown in figure 1. The distance between graduations shall be not greater than 0,2 mm. The magnification test target may be included with other test objects within the image frame.

4.1.2 Graduated reference scale, of at least 200 mm in length, graduated in millimetres, having an overall accuracy of $\pm 0,5\%$, for measuring the image of the test target on the screen.

4.1.3 Magnifier, if necessary, having a magnification between $\times 3$ and $\times 12$, for comparing the image length on the screen with the divisions on the graduated reference scale. A hand-held magnifier may be used on rear-projection readers and a mounted telescope may be used on front-projection readers.



NOTE — Measurement area of the screen is defined as the central area formed by connecting the points of the diagonals that are located from the corners at a distance of 10 % of the screen diagonal lengths and is shown as the area within the dashed rectangle. If the corners of the screen are rounded, the length of the diagonal and the points from which readings are taken are calculated from the intersection of the extrapolated edges of the screen. The screen may be square or a vertical or horizontal rectangle.

Figure 1 — Measurement area of reader screen