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Optics and optical instruments — Focimeters

Optique et instruments d'optique — Frontofocomètres



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Foreword

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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 8598 was prepared by Technical Committee ISO/TC 172, *Optics and optical instruments*, Subcommittee SC 7, *Ophthalmic, endoscopic, metrological instruments and test methods*.

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Optics and optical instruments — Focimeters

1 Scope

This International Standard specifies requirements for continuously indicating focimeters and digitally rounding focimeters with which the vertex powers and prismatic powers of spherical and astigmatic lenses, including lenses mounted in frames and contact lenses, can be measured and with which lenses can be orientated and marked.

NOTE 1 For the measurement of vertex powers of contact lenses, see ISO 9337:—¹⁾, *Optics and optical instruments — Contact lenses — Determination of back vertex power*.

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 7944:—²⁾, *Optics and optical instruments — Reference wavelengths*.

ISO 8429:1986, *Optics and optical instruments — Ophthalmology — Graduated dial scale*.

ISO 9342:—¹⁾, *Optics and optical instruments — Test lenses for the calibration of focimeters*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 focimeter: Instrument that is used to measure vertex powers and prismatic effects of spectacle and contact lenses, to orientate and mark uncut lenses, and to verify the correct mounting of lenses in spectacles frames.

3.2 continuously indicating focimeter: Focimeter with a continuous scale.

3.3 digitally rounding focimeter: Focimeter which displays measured values rounded to the nearest incremental value.

3.4 lens support: Aperture on the instrument against which the lens or the contact lens is placed for measurement.

NOTE 2 The focimeter measures the vertex power relative to the surface placed against the lens support.

3.5 adjusting rail: Movable rail or bar used as the reference axis for spectacles during measurement, which is aligned perpendicularly to the optical axis of the focimeter and parallel to the axis direction 0° to 180°.

NOTE 3 Also called the lens table or frame rest.

3.6 principal meridians: The two meridians of an astigmatic power lens (see 3.10) containing the optical axis; one of the meridians has maximum refractive

1) To be published.

2) To be published. (Revision of ISO 7944:1984)