
**Ophthalmic optics — Chart displays
for visual acuity measurement —
Printed, projected and electronic**

*Optique ophtalmique — Dispositifs d'affichage de tableaux
d'optotypes destinés au mesurage de l'acuité visuelle — Tableaux
d'optotypes imprimés, projetés et affichés par des moyens
électroniques*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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The committee responsible for this document is ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

This second edition cancels and replaces the first edition (ISO 10938:1998), which has been technically revised.

Introduction

The purpose of this International Standard is to provide for standardization of certain characteristics of displays of optotypes used for measurement of visual acuity in general clinical practice. These characteristics include size specification, luminance, contrast, and resolution of the optotypes. It applies to displays intended for measurement of visual acuity over a limited, but clinically useful, range of acuities.

The principles of standardized visual acuity measurement, including the arrangement of optotypes on the display, are presented in standards adopted by the National Academy of Sciences in the United States of America and the Consilium Ophthalmologicum Universal as referenced in the Bibliography. This International Standard is not intended to address these principles, but they are included in an annex in ISO 8596.

Due to practical design considerations and physical limitations of most general-purpose clinical visual acuity measurement systems, the chart design features specified in the reference standards can usually be met for only a limited range of acuity presentations. Other chart display designs are often required for special clinic visual acuity measurements, such as for low-vision patients or for research purposes.

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