# INTERNATIONAL STANDARD

ISO 10940

> First edition 1998-05-01

## Ophthalmic instruments — Fundus cameras

Instruments ophtalmiques — Appareils photographiques du fond de l'œil



#### **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 10940 was prepared by Technical Committee ISO/TC 172, Optics and optical instruments, Subcommittee SC 7, Ophthalmic optics and instruments.

Annex A forms an integral part of this International Standard. Annexes B and C are for information only.

#### © ISO 1998

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

### Ophthalmic instruments — Fundus cameras

#### 1 Scope

This International Standard, together with ISO 15004, specifies requirements and test methods for fundus cameras operating exclusively for photography of the fundus of the human eye. This International Standard is based upon techniques involving the direct effects of an optical image on a photographic emulsion.

This International Standard is not applicable to the following types of fundus camera:

- those designed to produce simultaneous stereoscopic photography;
- those using infrared radiation as a source of illumination for the observing system.

This International Standard takes precedence over ISO 15004, if differences exist.

#### 2 Normative references

The following standards contain provisions which, though 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 15004:1997 Ophthalmic instruments - Fundamental requirements and test methods

IEC 60601-1:1988 Medical electrical equipment - Part 1: General requirements for safety

#### 3 Definitions

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

#### 3.1

#### resolving power of the fundus camera

minimum separation allowing recognition of two adjacent lines on the fundus, expressed in pairs per millimetre (lp/mm)

#### 3.2

#### field of view

#### photographic angular field of view

angle subtended at the exit pupil of the eye by the maximum dimension 2r

See figure 1.