
**Optics and optical instruments — Medical
endoscopes and endoscopic
accessories —**

Part 3:

Determination of field of view and direction of
view of endoscopes with optics

*Optique et instruments d'optique — Endoscopes médicaux et leurs
accessoires —*

*Partie 3: Détermination du champ d'observation et de la direction
d'observation des endoscopes optiques*



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 8600-3 was prepared by Technical Committee ISO/TC 172, *Optics and optical instruments*, Subcommittee SC 5, *Microscopes and endoscopes*.

ISO 8600 consists of the following parts, under the general title *Optics and optical instruments — Medical endoscopes and endoscopic accessories*:

- *Part 1: General requirements*
- *Part 2: Particular requirements for rigid bronchoscopes*
- *Part 3: Determination of field of view and direction of view of endoscopes with optics*
- *Part 4: Determination of maximum width of insertion portion*

© ISO 1997

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

Optics and optical instruments — Medical endoscopes and endoscopic accessories —

Part 3:

Determination of field of view and direction of view of endoscopes with optics

1 Scope

This part of ISO 8600 specifies requirements and recommends test methods for measuring the field of view and direction of view of endoscopes.

2 Requirements

2.1 Measuring accuracy (field of view)

The minimum accuracy of the test method used to measure the field of view shall be:

± 5 % of the reading for rigid endoscopes;

± 10 % of the reading for flexible endoscopes.

2.2 Measuring accuracy (direction of view)

The minimum accuracy of the test method used to measure the direction of view shall be:

± 3° for rigid endoscopes;

± 10° for flexible endoscopes.

3 Apparatus

3.1 Optical bench, or equivalent device, to support the optical endoscope being tested and allowing adjustment of the central axis of the field of view to the centre of the target to measure the field of view at a distance of 50 mm between the distal window surface of the endoscope and the centre of the graduated scale situated at right angles to the centreline.

3.2 Target holder and protractor, graduated in degrees (see figure 1).