International Standard

ISO 16900-11

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Respiratory protective devices — Methods of test and test equipment —

Part 11: Determination of field of vision

Appareils de protection respiratoire — Méthodes d'essai et équipement d'essai —

Partie 11: Détermination du champ de vision

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Foreword

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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 document 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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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 94, *Personal safety — Personal protective equipment*, Subcommittee SC 15, *Respiratory protective devices*.

This second edition cancels and replaces the first edition (ISO 16900-11:2013), which has been technically revised.

The main changes are as follows:

— equipment for RPD headforms specified to use illuminated eyes;

— mounting the RPD in 8.3 more specified;

— Figure 1 changed to use headforms according to ISO 16900-5;

— in Table 1 the total visual field score (VFS) and the number of critical dots were added;

— application of uncertainty of measurement former Annex A was deleted;

— figures revised where appropriate.

A list of all parts in the ISO 16900 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document is intended as a supplement to the respiratory protective devices (RPD) performance standards. Test methods are specified for complete devices or parts of devices. If deviations from the test method given in this document are necessary, these deviations will be specified in the performance standards.

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Respiratory protective devices — Methods of test and test equipment —

Part 11: Determination of field of vision

1 Scope

This document specifies the laboratory test method for determining the field of vision for a respiratory protective device (RPD).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16972, *Respiratory protective devices — Vocabulary and graphical symbols*

ISO 16900-5:2016/Amd 1:2018, *Respiratory protective devices — Methods of test and test equipment — Part 5: Breathing machine, metabolic simulator, RPD headforms and torso, tools and verification tools — Amendment 1: RPD headforms front and side view*

ISO 17420-3, *Respiratory protective devices — Performance requirements — Part 3: Thread connection*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16972 and the following apply.

ISO and IEC maintain terminology databases for use in standardisation at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
apertometer
extended hemispherical dome for measuring the angular area of the field of vision (peripheral isopter) of an RPD when mounted on a headform

3.2
peripheral isopter
field of vision while wearing an RPD

Note 1 to entry: The peripheral isopter is indicated by the lighted area.

Note 2 to entry: The peripheral isopter is measured by a solid line connecting the points.

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