

**Ergonomics of human-system interaction - Part  
305: Optical laboratory test methods for electronic  
visual displays**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 9241-305:2008 sisaldab Euroopa standardi EN ISO 9241-305:2008 ingliskeelset teksti.

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English Version

**Ergonomics of human-system interaction - Part 305: Optical  
laboratory test methods for electronic visual displays (ISO 9241-  
305:2008)**

Ergonomie de l'interaction homme-système - Partie 305:  
Méthodes d'essai de laboratoire optique pour écrans de  
visualisation électroniques (ISO 9241-305:2008)

Ergonomie der Mensch-System-Interaktion - Teil 305:  
Optische Laborprüfverfahren für elektronische optische  
Anzeigen (ISO 9241-305:2008)

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 9241-305:2008) has been prepared by Technical Committee ISO/TC 159 "Ergonomics" in collaboration with Technical Committee CEN/TC 122 "Ergonomics", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2009, and conflicting national standards shall be withdrawn at the latest by May 2009.

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### Endorsement notice

The text of ISO 9241-305:2008 has been approved by CEN as a EN ISO 9241-305:2008 without any modification.

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## Introduction

This part of ISO 9241 was prepared with the support of the flat panel display measurements (FPDM) task group of VESA (Video Electronics Standards Association, USA). Contributions from its FPDM standard <sup>[10]</sup> are identified in Annex C.

The methods specified in this part of ISO 9241 are provided to assist test laboratories (either suppliers' facilities or test institutes) in deciding whether a specific electronic display conforms to the other relevant parts of ISO 9241, insofar as such a decision can be made in a laboratory setting. This part of ISO 9241 does not specify how to select display adjustment parameters or software for making a test representative of intended actual use. That judgement has to be made by the test laboratory and described in the test report.

ISO 9241 was originally developed as a seventeen-part International Standard on the ergonomics requirements for office work with visual display terminals. As part of the standards review process, a major restructuring of ISO 9241 was agreed to broaden its scope, to incorporate other relevant standards and to make it more usable. The general title of the revised ISO 9241, "Ergonomics of human-system interaction", reflects these changes and aligns the standard with the overall title and scope of Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 4, *Ergonomics of human-system interaction*. The revised multipart standard is structured as series of standards numbered in the "hundreds": the 100 series deals with software interfaces, the 200 series with human centred design, the 300 series with visual displays, the 400 series with physical input devices, and so on.

See Annex A for an overview of the entire ISO 9241 series.

# Ergonomics of human-system interaction —

## Part 305:

# Optical laboratory test methods for electronic visual displays

## 1 Scope

This part of ISO 9241 establishes optical test and expert observation methods for use in predicting the performance of a display vis-à-vis the ergonomics requirements given in ISO 9241-303.

## 2 Normative references

The following referenced documents are indispensable for the application 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 9241-302, *Ergonomics of human-system interaction — Part 302: Terminology for electronic visual displays*

ISO 9241-303, *Ergonomics of human-system interaction — Part 303: Requirements for electronic visual displays*

ISO 9241-307, *Ergonomics of human-system interaction — Part 307: Analysis and compliance test methods for electronic visual displays*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9241-302 apply.

## 4 General

### 4.1 Measurements — Basic measurements and derived procedures

The collection of (optical) lab measurements necessary for the compliance evaluations given in this part of ISO 9241 are divided into *basic measurements* — identified by M and a measurement number — and *measurement procedures* — identified by P and a procedure number (and letter in the case of supplementary procedures) — briefly described below. Additional information, including decisions on developing the methods and their use for the definition of compliance procedures, can be found in Annex B.

#### 4.1.1 Basic measurements (or evaluation) — Method M

Basic measurements should describe a fundamental method in as simple a form as possible. Most of the essential measurement parameters (such as screen location, viewing direction, test pattern) are not specified. The specified result is a physical quantity or some other directly measured property, and does not involve any processing of the collected data. These results are usually not directly used in a compliance procedure of the sort specified in ISO 9241-307. Rather, in a compound measurement procedure (see 4.1.2), a basic measurement will be used to achieve sets or collections of data.