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Identification cards — Optical memory cards — Holographic recording method —

Part 3:
Optical properties and characteristics

Cartes d'identification — Cartes à mémoire optique — Méthode d'enregistrement holographique —

Partie 3: Propriétés et caractéristiques optiques

Reference number
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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

ISO/IEC 11695-3 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

ISO/IEC 11695 consists of the following parts, under the general title *Identification cards — Optical memory cards — Holographic recording method*:

- *Part 1: Physical characteristics*
- *Part 2: Dimensions and location of accessible optical area*
- *Part 3: Optical properties and characteristics*

Introduction

ISO/IEC 11695 is one of a series of International Standards defining the parameters for optical memory cards and the use of such cards for the storage and interchange of digital data.

These International Standards recognize the existence of different methods for recording and reading information on optical memory cards, the characteristics of which are specific to the recording method employed. In general, these different recording methods will not be compatible with each other. Therefore, these International Standards are structured to accommodate the inclusion of existing and future recording methods in a consistent manner.

ISO/IEC 11695 is specific to optical memory cards using the holographic recording method. Characteristics which apply to other specific recording methods are found in separate International Standards.

This part of ISO/IEC 11695 defines the optical properties and characteristics and the extent of compliance with, addition to, and/or deviation from the relevant base document, ISO/IEC 11693.

The International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) draw attention to the fact that it is claimed that compliance with this document may involve the use of patents.

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Identification cards — Optical memory cards — Holographic recording method —

Part 3:
Optical properties and characteristics

1 Scope

This part of ISO/IEC 11695 specifies the optical properties and characteristics of optical memory cards using the holographic recording method.

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/IEC 11695-1, *Identification cards — Optical memory cards — Holographic recording method — Part 1: Physical characteristics*

ISO/IEC 11695-2, *Identification cards — Optical memory cards — Holographic recording method — Part 2: Dimensions and location of accessible optical area*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 11695-1, ISO/IEC 11695-2 and the following apply.

3.1
reflectivity
ratio of reflected light to the light incident at a specified wavelength measured at a normal incidence on the holographic memory card

NOTE Reflectivity is generally expressed as a percentage.

3.2
scattering
deviation of reflected radiation from the angle predicted by the law of reflection

NOTE Reflections that undergo scattering are called diffuse reflections. Diffuse reflections are measured by means of an integration sphere, while properly averaging over all angles of illumination and observation.

3.3
spatial resolution
ability of the storage material to distinguish and/or record physical details by electromagnetic means

NOTE The (spatial) resolution is typically expressed in line pairs per millimetre.