INTERNATIONAL STANDARD

ISO 18926

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Imaging materials — Information stored on magneto-optical (MO) discs — Method for estimating the life expectancy based on the effects of temperature and relative humidity

Matériaux pour l'image — Information stockée sur disques opto-magnétiques (MO) — Méthode d'estimation de l'espérance de vie basée sur les effets de la température et de l'humidité relative

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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.

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

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 18926 was prepared by Technical Committee ISO/TC 42, *Photography*.

Introduction

This International Standard is one of a series of standards dealing with the physical properties and stability of imaging materials. To facilitate identification of these International Standards, they are assigned a number within the block from 18900 – 18999 (see Annex A).

Imaging materials — Information stored on magneto-optical (MO) discs — Method for estimating the life expectancy based on the effects of temperature and relative humidity

1 Scope

This International Standard specifies a test method for estimating the life expectancy (LE) of information stored on rewritable and write-once magneto-optical media. Only the effects of temperature and relative humidity on the media are considered.

2 Purpose and assumptions

2.1 Purpose

The purpose of this International Standard is to establish a methodology for estimating the life expectancy of information stored on magneto-optical discs. This methodology provides a technically and statistically sound procedure for obtaining and evaluating accelerated test data.

2.2 Assumptions

The validity of the procedure defined by this International Standard relies on five assumptions:

— the failure mechanisms acting at the usage conditions are the same as those at the accelerated conditions;

— the linearity of the byte error rate (BER) estimated over the accelerated and design conditions is valid;

— all failure mechanisms have been accounted for and appropriately modelled;

— failure caused by reversible effects such as surface dust is not included;

— failure from repairable parts such as external cartridge components is not included.

3 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 10089:1991, *Information technology — 130 mm rewritable optical disk cartridge for information interchange*

ISO/IEC 10090:1992, *Information technology — 90 mm optical disk cartridges, rewritable and read only, for data interchange*

ISO/IEC 11560:1992, *Information technology — Information interchange on 130 mm optical disk cartridges using the magneto-optical effect, for write once, read multiple functionality*

ISO/IEC 13549:1993, *Information technology — Data interchange on 130 mm optical disk cartridges — Capacity: 1,3 gigabytes per cartridge*