INTERNATIONAL STANDARD

ISO 18927

Third edition
2013-03-01

Imaging materials — Recordable compact disc systems — Method for estimating the life expectancy based on the effects of temperature and relative humidity

Matériaux pour image — Systèmes de CD enregistrables — Méthode d'estimation de l'espérance de vie basée sur les effets de la température et de l'humidité relative

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Contents

Page

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 18927 was prepared by Technical Committee ISO/TC 42, *Photography*.

This third edition cancels and replaces the second edition (ISO 18927:2008), of which it constitutes a minor revision.

The following change has been made to the second edition:

— An update of the bibliographical references.

Imaging materials — Recordable compact disc systems — 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 of information stored on recordable compact disc systems. Only the effects of temperature and relative humidity on the media are considered.

This International Standard does not cover the effects of light, air pollution, or time-dependent flow phenomena.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 10149[1]), *Information technology — Data interchange on read-only 120 mm optical data disks* (CD-ROM)

IEC 60908, *Audio recording — Compact disc digital audio system*

Experimental statistics, U.S. National Bureau of Standards Handbook 91, 1963

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
baseline
condition representing the disc at time of manufacture

Note 1 to entry: This is customarily the initial parameter measurement taken prior to any application of stress. The designation is usually $t = 0$ for a stress time equal to zero hours.

3.2
block error rate
BLER
ratio of erroneous blocks to total blocks measured at the input of the first (C1) decoder (before any error correction is applied)

Note 1 to entry: The more commonly reported value for BLER is the number of erroneous blocks per second measured at the input of the C1-decoder during playback at the standard (1X) data rate.

[IEC 60908]

3.2.1
maximum block error rate
max BLER
maximum BLER measured anywhere on a disc

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1) Equivalent to ECMA 130.