International Standard

ISO/IEC 24789-2

Identification cards — Card service life —

Part 2: Methods of evaluation

Cartes d'identification — Durée de vie des cartes —

Partie 2: Méthodes d'évaluation

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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.

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 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 or www.iec.ch/members_experts/refdocs).

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and security devices for personal identification*.

This second edition cancels and replaces the first edition (ISO/IEC 24789-2:2011), which has been technically revised.

The main changes are as follows:

— all methods have been revised to bring them to the latest technical status;

— additional details are defined in the method ICM adhesion;

— plasticizer changed from DOP to DOTP;

— temperature humidity cycling method is replaced by temperature and exposure with humidity variation;

— temperature and humidity aging followed by peel strength is deleted;

— ID-card static bending stress method is added;

— temperature and humidity induced dye migration method is added to the informative Annex A;

— mechanical life cycle sequence for contactless cards is added to the informative Annex A.

A list of all parts in the ISO/IEC 24789 series can be found on the ISO and IEC websites.

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 and www.iec.ch/national-committees.

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Introduction

This document provides methods of evaluation of identification (ID) card service life. These methods of evaluation complement the application profiles and requirements defined in ISO/IEC 24789-1 which are intended to be used by card issuers, card manufacturers and card component suppliers to represent the comparative rigour of various ID card service life applications. They provide a means for ranking and comparing the main factors affecting ID card service life in a manner that is amenable to evaluation using the methods defined or referenced in this document.

NOTE For the convenience of certain users, non-SI equivalents are given for some quantity values where these are in common use in the ID card industry. These equivalents appear in parenthesis and are for information only.

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Identification cards — Card service life —

Part 2: Methods of evaluation

1 Scope

This document provides methods of evaluation for ID-1 identification card service life for the applications provided in ISO/IEC 24789-1.

The listed evaluation methods represent available tests, not mandatory tests. The selection of mandatory tests is listed in ISO/IEC 24789-1.

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 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 3664, *Graphic technology and photography — Viewing conditions*

ISO 4892-1, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance*

ISO 4892-2:2013, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps*

ISO/IEC 7811-2, *Identification cards — Recording technique — Part 2: Magnetic stripe: Low coercivity*

ISO/IEC 7811-6, *Identification cards — Recording technique — Part 6: Magnetic stripe: High coercivity*

ISO/IEC 7811-8, *Identification cards — Recording technique — Part 8: Magnetic stripe — Coercivity of 51,7 kA/m (650 Oe)*

ISO 9370, *Plastics — Instrumental determination of radiant exposure in weathering tests — General guidance and basic test method*

ISO/IEC 10373-1, *Cards and security devices for personal identification — Test methods — Part 1: General characteristics*

ISO/IEC 10373-2, *Identification cards — Test methods — Part 2: Cards with magnetic stripes*

ISO 13655, *Graphic technology — Spectral measurement and colorimetric computation for graphic arts images*

ISO/IEC 14443-1, *Cards and security devices for personal identification — Contactless proximity objects — Part 1: Physical characteristics*

ISO/IEC 24789-1[1)], *Identification cards — Card service life — Part 1: Application profiles and requirements*

IEC 60068-2-78, *Environmental testing — Part 2-78: Tests — Test Cab: Damp heat, steady state*

IEC 60454-2, *Pressure-sensitive adhesive tapes for electrical purposes — Part 2: Methods of test*

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