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**Information technology — Automatic  
identification and data capture  
techniques — Bar code verifier  
conformance specification —**

**Part 1:  
Linear symbols**

*Technologies de l'information — Techniques d'identification  
automatique et de capture de données — Spécifications de conformité  
des vérificateurs de codes à barres —*

*Partie 1: Symboles linéaires*

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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.

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

ISO/IEC 15426-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

This second edition cancels and replaces the first edition (ISO/IEC 15426-1:2000), Clause 2 of which has been technically revised.

ISO/IEC 15426 consists of the following parts, under the general title *Information technology — Automatic identification and data capture techniques — Bar code verifier conformance specification*:

- *Part 1: Linear symbols*
- *Part 2: Two-dimensional symbols*

## Introduction

The technology of bar coding is based on the recognition of patterns encoded in dark and light elements of defined dimensions according to rules defining the translation of characters into such patterns, known as the symbology specification.

The bar code symbol, as a machine-readable data carrier, must be produced in such a way as to be reliably decoded at the point of use, if it is to fulfil its basic objective. Standard methodologies have been developed for measuring and assessing the quality of symbols for process control and quality assurance purposes during symbol production as well as afterwards.

Manufacturers of bar code equipment, the producers of bar code symbols and the users of bar code technology require publicly available standard conformance specifications for measuring equipment applying this methodology, to ensure the accuracy and consistency of performance of this equipment.

# Information technology — Automatic identification and data capture techniques — Bar code verifier conformance specification —

## Part 1: Linear symbols

### 1 Scope

This part of ISO/IEC 15426 defines test methods and minimum accuracy criteria for verifiers using the methodology of ISO/IEC 15416 for linear bar code symbols, and specifies reference calibration standards against which these should be tested. This part of ISO/IEC 15426 provides for testing of representative samples of the equipment.

NOTE ISO/IEC 15426-2 applies to verifiers for two dimensional bar code symbols.

### 2 Conformance

The instrument shall be considered to conform with this part of ISO/IEC 15426 if it performs the functions defined in 6.3 and if the results of measurements of primary reference test symbols carried out in accordance with Clause 8 demonstrate that the arithmetic means of the ten measurements of individual reported parameters are within the tolerances shown in Table 1 below.

Table 1 — Tolerances for measured parameter values

| Parameter    | Tolerance             |
|--------------|-----------------------|
| $R_{\max}$   | $\pm 5\%$ reflectance |
| $R_{\min}$   | $\pm 3\%$ reflectance |
| Decodability | $\pm 0,08$            |
| Defects      | $\pm 0,08$            |

NOTE The tolerances in Table 1 are additional to any tolerances stated by the supplier of the primary reference test symbols.

### 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 9001, *Quality management systems — Requirements*

ISO/IEC 15416, *Information technology — Automatic identification and data capture techniques — Bar code print quality test specification — Linear symbols*

ISO/IEC 19762 (all parts), *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary*