

---

---

**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*

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO/IEC 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

Foreword.....	iv
Introduction .....	v
1 Scope .....	1
2 Conformance .....	1
3 Normative references .....	1
4 Terms and definitions.....	2
5 Symbols and abbreviations .....	2
6 Functional requirements .....	2
6.1 General requirements .....	2
6.2 Reflectance calibration.....	2
6.3 Mandatory functions.....	2
6.4 Optional functions .....	3
7 General constructional and operational requirements.....	3
7.1 Installation, operation and maintenance .....	3
7.2 Power supply .....	3
7.3 Temperature .....	3
7.4 Humidity.....	4
7.5 Ambient light immunity.....	4
8 Test requirements.....	4
8.1 Test methods.....	4
8.2 Test environment .....	5
8.3 Primary reference test symbols .....	5
8.4 Test report .....	5
9 Certification and labelling.....	6
10 Equipment specification .....	6
Annex A (normative) Primary reference test symbols .....	7
Annex B (normative) Verification requirements for primary reference test symbols .....	9
Bibliography .....	10

## 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*