

**Information technology - Automatic
identification and data capture
techniques - Bar code print quality test
specification - Linear symbols**

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and data capture techniques - Bar code print quality
test specification - Linear symbols

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO/IEC 15416:2002 sisaldab Euroopa standardi EN ISO/IEC 15416:2001 ingliskeelset teksti. Käesolev dokument on jõustatud 19.06.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO/IEC 15416:2002 consists of the English text of the European standard EN ISO/IEC 15416:2001. This document is endorsed on 19.06.2002 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This standard specifies the methodology for the measurement of specific attributes of bar code symbols; defines a method for evaluating these measurements and deriving an overall assessment of symbol quality; gives information on possible causes of deviation from optimum grades to assist users in taking appropriate corrective action.	Scope: This standard specifies the methodology for the measurement of specific attributes of bar code symbols; defines a method for evaluating these measurements and deriving an overall assessment of symbol quality; gives information on possible causes of deviation from optimum grades to assist users in taking appropriate corrective action.
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ICS 01.080.50, 35.040

Võtmesõnad:

English version

Information technology

Automatic identification and data capture techniques

Bar code print quality test specification – Linear symbols

(ISO/IEC 15416 : 2000)

Technologies de l'information – Techniques d'identification automatique et de capture des données – Spécifications pour essai de qualité d'impression des codes à barres – Symboles linéaires (ISO/IEC 15416 : 2000)

Informationstechnik – Verfahren der automatischen Identifikation und Datenerfassung – Testspezifikationen für Strichcodedruckqualität – Lineare Symbole (ISO/IEC 15416 : 2000)

This European Standard was approved by CEN on 2001-10-20.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO/IEC 15416 : 2000 Information technology – Automatic identification and data capture techniques – Bar code print quality test specification – Linear symbols,

which was prepared by ISO/IEC/JTC 1 'Information technology' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 225 'Bar coding', the Secretariat of which is held by NEN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 2002 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO/IEC 15416 : 2000 was approved by CEN as a European Standard without any modification.

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ISO/IEC 15416:2001 is a preview generated by EVS

Introduction

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

The bar code symbol 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 as a machine readable data carrier.

Manufacturers of bar code equipment and the producers and users of bar code symbols therefore require publicly available standard test specifications for the objective assessment of the quality of bar code symbols, to which they can refer when developing equipment and application standards or determining the quality of the symbols. Such test specifications form the basis for the development of measuring equipment for process control and quality assurance purposes during symbol production as well as afterwards.

The performance of measuring equipment is the subject of a separate International Standard, ISO/IEC 15426.

This International Standard is intended to be substantially equivalent in technical content to EN 1635 and ANSI standards X3.182 - 1990 and ANSI/UCC5 on which it has been based. It should be read in conjunction with the symbology specification applicable to the bar code symbol being tested, which provides symbology-specific detail necessary for its application.

There are currently many methods of assessing bar code quality at different stages of symbol production. The methodology provided in this specification is not intended as a replacement for any current process control methods but gives essential additional quality information. This methodology provides a basis for grading the quality of bar code symbols in relation to their expected performance when read and therefore gives symbol producers and their trading partners a universally standardized means for communicating about the quality of bar code symbols after they have been printed. It also provides symbol producers with information enabling them to adjust their production process.

Alternative methods of quality assessment may be agreed between parties or as part of an application specification.

1 Scope

This International Standard

- specifies the methodology for the measurement of specific attributes of bar code symbols;
- defines a method for evaluating these measurements and deriving an overall assessment of symbol quality;
- gives information on possible causes of deviation from optimum grades to assist users in taking appropriate corrective action.

This International Standard applies to those symbologies for which a reference decode algorithm has been defined, and which are intended to be read using linear scanning methods, but its methodology can be applied partially or wholly to other symbologies.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 7724-2:1984, *Paints and varnishes — Colorimetry — Part 2: Colour measurement*.

EN 1556:1998, *Bar coding — Terminology*.

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in EN 1556 and the following apply.

3.1

bar

A dark element corresponding to a region of a scan reflectance profile below the global threshold.

3.2

bar reflectance

The lowest reflectance value of an individual bar element in the scan reflectance profile of that element.