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Second edition  
2009-06-01

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## Information technology — Automatic identification and data capture techniques — Bar code digital imaging and printing performance testing

*Technologies de l'information — Techniques automatiques d'identification et de capture des données — Test de performance de la numérisation digitale et l'impression des codes à barres*

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Reference number  
ISO/IEC 15419:2009(E)



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Published in Switzerland

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## Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms, definitions, and abbreviated terms</b> .....	<b>1</b>
<b>4 Bar code design software</b> .....	<b>3</b>
<b>4.1 General requirements</b> .....	<b>3</b>
<b>4.2 Considerations by software and imaging device categories</b> .....	<b>3</b>
<b>4.3 Test requirements</b> .....	<b>8</b>
<b>4.4 Conformance</b> .....	<b>8</b>
<b>4.5 Test report</b> .....	<b>9</b>
<b>5 Dedicated bar code printers</b> .....	<b>10</b>
<b>5.1 Data input requirements</b> .....	<b>10</b>
<b>5.2 Test requirements</b> .....	<b>10</b>
<b>5.3 Conformance</b> .....	<b>12</b>
<b>5.4 Test report</b> .....	<b>13</b>
<b>Annex A (normative) Sample test layout</b> .....	<b>14</b>
<b>Annex B (normative) General constructional and operational requirements</b> .....	<b>15</b>
<b>Annex C (informative) Maintenance and supplies</b> .....	<b>16</b>
<b>Annex D (informative) Classification of software categories</b> .....	<b>18</b>
<b>Annex E (informative) Classification of imaging categories</b> .....	<b>20</b>
<b>Annex F (informative) Programmer's examples</b> .....	<b>21</b>
<b>Annex G (informative) Functions of bar code production software</b> .....	<b>25</b>
<b>Bibliography</b> .....	<b>26</b>

## Foreword

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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.

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ISO/IEC 15419 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 15419:2001), which has been technically revised.

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## Introduction

Bar code technology 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.

Bar code digital imaging systems must be capable of reliably converting the information to be encoded into a bar code symbol meeting the symbology specification and application requirements if the technology is to fulfil its basic objective. Such systems comprise two major components, namely the hardware device which produces the physical image of the bar code symbol on paper, photographic film, printing plate, or other substrate, and the associated software which converts the input data into digital instructions used to drive the hardware device. Each component can take many forms and perform differing functions.

Manufacturers of bar code equipment, the producers of bar code symbols and the users of bar code technology therefore require publicly available standard test specifications for bar code digital imaging systems to ensure the accuracy and consistency of performance of these systems. This International Standard is intended to lay down general principles governing the bar code image generation function in each component, supplemented by more specific details applicable to certain major categories of software and hardware.