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Automatic identification and data capture techniques — Bar code print quality test specification — Evolution of the grading and measurement of linear symbols in ISO/IEC 15416

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Foreword

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

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Automatic identification and data capture techniques — Bar code print quality test specification — Evolution of the grading and measurement of linear symbols in ISO/IEC 15416

1 Scope

This document explains the changes incorporated in ISO/IEC 15416:2016 compared to ISO/IEC 15416:2000 and highlights the impact of these changes for the users' benefit.

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/IEC 15416:2016, *Automatic identification and data capture techniques — Bar code print quality test specification — Linear symbols*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 15416:2016 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Historical background leading to ISO/IEC 15416:2016

ISO/IEC 15416 was first published in 2000 and has been used in many industries throughout the world. Based on a method first developed and published by ANSI in 1990 as X3.182-1990, the methodology for bar code grading has become a foundation of barcode quality in many industries including supply chain management, retail point of sale, warehousing, shipping and logistics, pharmaceutical labelling and many others.

Even with the widespread adoption of ISO/IEC 15416 as the basis of bar code quality measurement, some problems and opportunity for improvement were noticed by many users and members of ISO/IEC JTC1/SC31/WG1 which is responsible for ISO/IEC 15416. Chief among these was the tendency for grades to fluctuate under repeated trials. Accordingly, the revision of ISO/IEC 15416 in 2016 introduced several changes to the grading methodology with the intention of reducing grade variability

Another criticism of ISO/IEC 15416 grading is that scanning/reading technology has improved significantly since its introduction, resulting in a reduction in the correlation between quality grade and real-world scanning performance. Accordingly, the revision of ISO/IEC 15416 in 2016 tends to assign higher grades than before, as is described in this report.

These problems have been largely resolved by the publication of ISO/IEC 15416:2016. This document:

— explains the changes introduced in ISO/IEC 15416:2016;

— explains why these changes were introduced and how they reduce the problems outlined above;

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