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Information technology — Office equipment — Method for the determination of ink cartridge yield for colour photo printing with inkjet printers and multi-function devices that contain inkjet printer components

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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 28, *Office equipment*.

This third edition cancels and replaces the second edition (ISO/IEC 29102:2015), which has been technically revised.

The main changes are as follows:

— the URL for test chart has been updated;

— the humidity requirement has been changed.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Introduction

The scope of this document is limited to evaluation of ink cartridge yield of ink-containing cartridges (i.e. integrated ink cartridges and ink cartridges without integrated print heads) for colour photo printing with colour inkjet printers. This document can be applied to colour inkjet printers having an interface to a computer as well as colour inkjet printers that cannot be connected to a computer. This document can also be applied to the inkjet printer component of any multifunctional device that has a digital input printing path, including multi-function devices that contain inkjet printer components. Both liquid and solid ink products can be tested using this document.

The cartridge yields of primary cartridges are determined by an end of life judgment, or signalled with either of two phenomena: fade, caused by depletion of ink in the cartridge, or automatic printing stop, caused by an ink out detection function. The cartridge yields of supplemental cartridges are estimated. It is envisioned that one of the uses of this document will be for the calculation of cost per page (CPP). While this document measures a portion of this cost, it is not used as the sole component of CPP calculation. Additional factors need to be considered for accurate CPP calculations.

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Information technology — Office equipment — Method for the determination of ink cartridge yield for colour photo printing with inkjet printers and multi-function devices that contain inkjet printer components

1 Scope

The purpose of this document is to provide a method to determine the ink cartridge yield of ink-containing cartridges (i.e. integrated ink cartridges and ink cartridges without integrated print heads) for colour photo printing with colour inkjet printers and multifunction devices that contain inkjet printer components. In the case where a cartridge set can be used in multiple printer models, only one yield test is performed as long as the difference between printer models does not impact yield.

NOTE A cartridge supplier can choose to use more than one market identifier for a single physical cartridge. In this case only one yield test is required as long as there are no differences in the cartridges other than market identifiers.

This document prescribes the following:

— the test method that manufacturers, test laboratories, etc. use to determine ink cartridge yield;

— the method for determination of declared cartridge yield values for photo printing from the test results; and

— the appropriate method of describing the cartridge yield for photo printing in documentation supplied to the consumer by the manufacturer.

This document is only intended for the determination of ink cartridge yield. No other claims can be made from this testing regarding quality, reliability, etc.

This document can be used to determine the yield of any cartridge that is used during the printing of the photo test file defined in ISO/IEC 29103.

This document is not for use with printers whose minimum printable size is equal to or greater than A3. This document is not intended to measure the yield of photo printing on paper size larger than 4" × 6", L or A6. In addition, this document is not for use with industrial printers or point of sale printers. It only applies to desktop printing systems.

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 24711, *Information technology — Office equipment — Method for the determination of ink cartridge yield for colour inkjet printers and multi-function devices that contain printer components*

ISO/IEC 29103, *Information technology — Office equipment — Colour photo test pages for measurement of ink cartridge yield for colour photo printing*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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