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Method for the determination of ink cartridge yield for colour inkjet printers and multi-function devices that contain printer components

*Méthode pour la détermination du rendement de cartouche d'encre pour
les imprimantes couleur à jet d'encre et pour les dispositifs
multifonctionnels qui peuvent contenir des composants d'imprimantes*

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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 24711 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 28, *Office equipment*.

This second edition cancels and replaces the first edition (ISO/IEC 24711:2006), of which it constitutes a minor revision.

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Introduction

The purpose of this International Standard is to provide a process for determining the ink cartridge yield for a given colour inkjet printer model (i.e. integrated ink cartridges and ink cartridges without integrated printheads) using a standard consumer type test suite. Ink cartridge yields determined on one printer model and cartridge configuration are not applicable to another printer model or cartridge configuration even if the ink jet cartridges used in testing are the same. This test page suite is not focused on printing of photographs, but is intended to be a sampling of typical business consumer pages.

This International Standard prescribes the following:

- the test method that manufacturers, test labs, etc. use to determine ink cartridge yield;
- the method for determination of declared yield values from the test results; and
- the appropriate method of describing the yield of cartridges in documentation supplied to the consumer by the manufacturer.

The cartridge yield is determined by an end of life judgement, 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. It is envisioned that one of the uses of this International Standard will be for the calculation of cost per page (CPP). While this International Standard measures a portion of this cost, it is not used as the sole component of CPP calculation. Additional factors are considered for CPP calculations.