
**Information technology — Office
equipment — Method for measuring
digital copying productivity**

*Technologie de l'information — Équipements de bureau — Méthode de
mesure de la productivité d'un photocopieur numérique*

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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 24735 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 24735:2009), which has been technically revised. It also incorporates the Technical Corrigendum ISO/IEC 24735:2009/Cor.1:2009.

Introduction

Many digital copying devices produce copied pages at a different rate than their nominal speed when running with different modes (simplex, duplex, copying quality modes), different substrate weight and collating and/or finishing options. The degree to which a reduction in productivity is experienced depends significantly on other parameters of the job stream. The most dominant of the parameters of the job stream are: the number of original pages in a set to be printed, whether output pages are single-sided or double-sided, image quality modes selected, B&W and colour reproduction job stream, number of print sets to be produced, substrate size used, run length and finishing options. The existing International Standard (ISO/IEC 14545) only addresses the productivity issues for light-lens B&W copying device/duplicators and does not take into account these important machine and job related factors for digital copying devices.

Information technology — Office equipment — Method for measuring digital copying productivity

1 Scope

This International Standard specifies a method for measuring the “productivity” of digital copying devices and multifunctional devices with various copying modes. It is applicable to digital copying devices and multifunctional devices equipped with automatic document feeder and collating function. This International Standard is intended to be used for black and white (B&W) as well as colour digital copying devices and multifunctional devices of any underlying marking technology. It allows comparison of the throughput copying rates for a machine operated in various available operating modes (simplex, duplex, size of substrates, 2-up, etc) and various available digital image processing configurations. This International Standard includes test files, test setup procedures, test procedures, and reporting requirements for digital copying productivity measurements.

This International Standard is not intended to be used for devices which are not able to copy on a media size of A4/8.5"x11", devices that do not have an automatic document feeder (ADF), or devices which are not able to collate multiple copies of original prints from a test set.

This International Standard is not intended to replace manufacturer's rated speeds.

2 Normative references

The following referenced documents are indispensable for the application 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 2470-1:2009, *Paper, board and pulps — Measurement of diffuse blue reflectance factor — Part 1: Indoor daylight conditions (ISO brightness)*

ISO 536:1995, *Paper and board — Determination of grammage*

3 Terms and definitions

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

3.1

duplex copying

use of a copying device to make a number of copies with the copying being done on both sides of the sheet

NOTE An equivalent term is “two-sided copying” and referred to as 1:2 mode or 2:2 mode.

3.2

effective throughput

EFTP

average speed at which a device produces pages measured from the initiation of the job through the complete exit of the last page of the last test set