
**Information technology —
Office equipment — Method
for the determination of toner
cartridge yield for monochromatic
electrophotographic printers and
multi-function devices that contain
printer components**

*Technologies de l'information — Méthode pour la détermination
du rendement des cartouches de toner pour les imprimantes
électrophotographiques monochromatiques et pour les dispositifs
multifonctionnels qui contiennent 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/IEC JTC 1, *Information technology, SC 28, Office equipment*.

This second edition cancels and replaces the first edition (ISO/IEC 19752:2004), which has been technically revised.

It also incorporates the Technical Corrigendum ISO/IEC 19752:2004/Cor 1:2012.

Introduction

The purpose of this document is to provide a process for determining the page yield for toner cartridges for monochromatic print systems using a standard office consumer type test page. In the case where a cartridge 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 1 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 use to determine cartridge yield;
- the method for determination of declared yield values from the test results;
- the appropriate method of describing the yield of cartridges in documentation supplied to the consumer by the manufacturer.

The end of life is judged with either of the two phenomena, “image fade” caused by toner depletion of the cartridge in the printing system or “automatic printing stop” by the toner out detection function.

NOTE 2 A comparison of yield for two printing systems is shown in [Annex E](#).

Information technology — Office equipment — Method for the determination of toner cartridge yield for monochromatic electrophotographic printers and multi-function devices that contain printer components

1 Scope

This document is limited to the evaluation of toner cartridge page yield for toner containing cartridges (i.e. all-in-one toner cartridges and toner cartridges without a photoconductor) for monochrome electrophotographic print systems. This document could also be applied to the printer component of any multifunctional device that has a digital input-printing path (i.e. multi-function devices that contain printer components).

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

NOTE 1 Application of this document for yield measurement of toner replenishment systems (i.e. toner cartridge- and bottle-type systems where the toner reservoir is internal to the printing system and not user-replaceable) requires some procedural modifications specifically noted herein. This document is intended for equipment used in the office space and does not apply to production volume or large format printing machines where the major cost of ownership is not caused by the consumable yield measured in this document.

NOTE 2 An all-in-one cartridge is a cartridge that includes at least a toner containment part, a photoreceptor part and a developer part (see ISO/IEC 29142-1).

2 Normative references

There are no normative references in this document.