

INCITS/ISO/IEC 24711-2007[2008]
(ISO/IEC 24711:2007, IDT)

INCITS/ISO/IEC 24711-2007[2008]
(ISO/IEC 24711:2007, IDT)

American National Standard

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

Developed by



Where IT all begins



INCITS/ISO/IEC 24711-2007[2008]

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

Adopted by INCITS (InterNational Committee for Information Technology Standards) as an American National Standard.

Date of ANSI Approval: 12/18/2008

Published by American National Standards Institute,
25 West 43rd Street, New York, New York 10036

Copyright 2008 by Information Technology Industry Council (ITI).
All rights reserved.

These materials are subject to copyright claims of International Standardization Organization (ISO), International Electrotechnical Commission (IEC), American National Standards Institute (ANSI), and Information Technology Industry Council (ITI). Not for resale. No part of this publication may be reproduced in any form, including an electronic retrieval system, without the prior written permission of ITI. All requests pertaining to this standard should be submitted to ITI, 1250 Eye Street NW, Washington, DC 20005.
Printed in the United States of America

Second edition
2007-12-15

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

Reference number
ISO/IEC 24711:2007(E)



This is a preview of "INCITS/ISO/IEC 24711...". [Click here to purchase the full version from the ANSI store.](#)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

This is a preview of "INCITS/ISO/IEC 24711...". [Click here to purchase the full version from the ANSI store.](#)

Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
4 Test parameters and conditions	3
4.1 Set-up	3
4.2 Sample size	4
4.3 Print mode	4
4.4 Print environment	5
4.5 Paper	5
4.6 Maintenance	5
4.7 Test files	6
5 Test methodology.....	6
5.1 Testing procedure.....	6
5.2 Procedure for handling streaks.....	7
5.3 Procedure for handling a defective cartridge, printhead or printer	8
6 Determination of the declared yield value and declaration.....	9
6.1 Yield of primary cartridges	9
6.2 Yield of supplemental cartridges	10
6.3 Test data reporting	11
6.4 Declaration of the yield	12
Annex A (informative) Examples of fade.....	18
Annex B (informative) Examples of streaks	19
Annex C (normative) Testing reporting form	20
Annex D (informative) Process flowchart	24
Annex E (informative) Method for comparison of inkjet performance to ISO/IEC 19752.....	26

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.

This is a preview of "INCITS/ISO/IEC 24711...". [Click here to purchase the full version from the ANSI store.](#)

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.