

This is a preview of "ISO 18944:2014". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2014-06-01

Imaging materials — Reflection colour photographic prints — Test print construction and measurement

*Matériaux pour l'image — Réflexion des impressions photographiques
en couleurs — Mesurage et construction d'une impression d'essai*



Reference number
ISO 18944:2014(E)

© ISO 2014

This is a preview of "ISO 18944:2014". [Click here to purchase the full version from the ANSI store.](#)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested 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 "ISO 18944:2014". [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 Requirements	3
5 Digital file preparation	3
5.1 Digital test file usage situations.....	3
5.2 Digital test file general requirements.....	4
5.3 Preparing the digital test file for an image print stability test.....	6
5.4 Preparing the digital test file for an image forming materials stability test.....	7
5.5 Target print uniformity.....	8
5.6 Test chamber condition uniformity.....	8
6 Generating the target prints	9
6.1 Digital print preparation.....	9
6.2 Source preparation for conventional silver gelatine photographic materials.....	9
6.3 Configuring the printing system and generating the target prints.....	9
6.4 Conditioning the prints after printing.....	10
7 Target print holding and measurement conditions	11
7.1 Measurement timing.....	11
7.2 Holding and measurement conditions.....	11
Annex A (normative) Required sRGB encoded patch values for image print stability test target and patch selection process	14
Annex B (informative) Method of interpolation for step wedge exposures	24
Annex C (informative) How to build the digital test file and print “image print stability” target print	25
Annex D (informative) How to build the digital test file and print “the image forming materials stability test” target print	27
Annex E (informative) Method to limit measurement error	28
Bibliography	31

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 42, *Photography*.

This second edition cancels and replaces the first edition (ISO 18944:2012), which has been technically revised.

This is a preview of "ISO 18944:2014". [Click here to purchase the full version from the ANSI store.](#)

Introduction

This International Standard is one of a series of International Standards prepared by ISO/TC 42 on the physical properties, stability and permanence of imaging materials.

This International Standard provides constraints on factors pertaining to target print preparation and resulting target print measurement which can cause a confounding test-process-induced variation in measured colour values and densities.

The requirements in this International Standard are intended to be used with test methods that produce test data to be shared publicly, with the aim that test results can be duplicated in an alternate test facility.

Topics addressed include:

- description of test types (image print stability test versus image forming materials stability test);
- digital file preparation;
- digital test file usage;
- addressing target print uniformity;
- managing test equipment non-uniformity;
- printing system configuration and control;
- test print conditioning;
- measurement timing and measurement conditions;
- required sRGB encoded patch set for image print stability test target and the corresponding patch selection process;
- informative guidance for test file construction and use;
- informative guidance on statistical approaches to minimize measurement error.