PD ISO/PAS 15339-2:2015

BSI Standards Publication

Graphic technology — Printing from digital data across multiple technologies

Part 2: Characterized reference printing conditions, CRPC1–CRPC7

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National foreword

This Published Document is the UK implementation of ISO/PAS 15339-2:2015.

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A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Graphic technology — Printing from digital data across multiple technologies —

Part 2: Characterized reference printing conditions, CRPC1–CRPC7

Technologie graphique — Impression à partir de données numériques via des technologies multiples —

Partie 2: Conditions d'impression de référence caractérisées, CRPC1–CRPC7

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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 130, *Graphic technology*.

ISO/PAS 15339 consists of the following parts, under the general title *Graphic technology — Printing from digital data across multiple technologies*:

— *Part 1: Principles* [Publicly Available Specification]

— *Part 2: Characterized reference printing conditions, CRPC1–CRPC7* [Publicly Available Specification]

Introduction

ISO/PAS 15339 is based on the premise that in the printing and publishing industries, electronic data are the intermediary for content storage and exchange throughout production including copy preparation, job assembly, proofing, and process printing. It further assumes that data preparation can be largely process-independent and that the choice of the printing process or processes to be used for final production will be based primarily on run-length requirements and the substrates to be used. There are various tools in place to both define the relationship of digital data to printed colour for specific instances of printing and to manipulate data such that similar results can be obtained between and among different printing processes (see ISO/TS 10128). These specific instances of printing are typically described by colour characterization data, which is the relationship between CMYK input data and colour measured on the printed sheet. Where such a set of colour characterization data are used as a reference it is referred to as a characterized reference printing condition (CRPC).

ISO/PAS 15339-1 describes the principles involved in developing and working with CRPCs.

This part of ISO/PAS 15339 defines a set of CRPCs associated with the initial publication of ISO/PAS 15339. It is intended that if changes in, or additions to, these data sets are needed in the future, they will be documented in additional parts of ISO/PAS 15339 so that changes in the data sets are possible without losing traceability to earlier data sets.

Not all printing processes that can achieve the same colour gamut are subject to the same limitations. Offset, gravure, flexography, electrophotographic, ink-jet, etc. each have limitations that may have to be considered in the final data preparation. These typically include limitations of total ink coverage, and minimum and maximum printable dot sizes. Should general guidance be needed, additional parts of ISO/PAS 15339 can be prepared to assist in the communication or standardization of the handling of such limitations.

Graphic technology — Printing from digital data across multiple technologies —

Part 2: Characterized reference printing conditions, CRPC1–CRPC7

1 Scope

This part of ISO/PAS 15339 specifies a limited number of characterized reference printing conditions that span the expected range of colour gamuts used for the production of printed materials from digital data, regardless of the printing process used. Their use is described in ISO/PAS 15339-1.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12642-2, *Graphic technology — Input data for characterization of 4-colour process printing — Part 2: Expanded data set*

ISO 13655, *Graphic technology — Spectral measurement and colorimetric computation for graphic arts images*

ISO/PAS 15339-1, *Graphic technology — Printing from digital data across multiple technologies — Part 1: Principles*

ISO 28178, *Graphic technology — Exchange format for colour and process control data using XML or ASCII text*

CGATS TR015:2013, *Graphic technology — Methodology for Establishing Printing Aims Based on a Shared Near-neutral Gray-scale*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/PAS 15339-1 apply.

4 Requirements

As defined in ISO/PAS 15339-1, unless otherwise agreed between sender and receiver, the characterized reference printing condition (CRPC) used for data preparation and data exchange shall be one of the data sets defined in this or subsequent parts of ISO/PAS 15339.

The characterization data associated with the characterized reference printing conditions identified in this part of ISO/PAS 15339 are presented as data files “ISO15339-CRPC1.txt” to “ISO15339-CRPC7.txt” (see Clause 5).