

Australian Standard[®]

**Graphic technology—Process control
for the production of half-tone colour
separations, proof and production prints**

**Part 8: Validation print processes
working directly from digital data**

STANDARDS
Australia



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- Australian Paper Industry
 - Lithographic Institute of Australia, NSW
 - Printing Industries Association of Australia
 - TAFE NSW
-

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PREFACE

This Standard was prepared by the Standards Australia Committee EX-004, Graphic Technology.

The objective of this Standard is to specify the properties, and associated test methods, required for digital prints and printing processes to meet the criteria established for 'validation prints'.

This Standard is identical with, and has been reproduced from ISO 12647-8:2012, *Graphic technology—Process control for the production of half-tone colour separations, proof and production prints—Part 8: Validation print processes working directly from digital data*.

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12647 Graphic technology—Process control for the production of half-tone colour separations, proof and production prints	12647 Graphic technology—Process control for the production of half-tone colour separations, proof and production prints
12647-1 Part 1: Parameters and measurement methods	12647.1 Part 1: Parameters and measurement methods

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INTRODUCTION

This part of ISO 12647 specifies the properties, and associated test methods, required for digital prints and printing processes to meet the criteria established for “validation prints”.

In most printing workflows, there is a requirement for a visual representation of the expected appearance of the document being printed that can be used as part of the agreement between the customer and printer. Where this visual representation is produced such that its characteristics (colour fidelity, tone reproduction, registration, size, etc.) simulate those of the expected printing within tight tolerances, it is usually referred to as a “contract proof”. As the name implies, contract proofs are used as part of the contractual relationship between customer and printer and are used as a visual aim for the press operator during printing as well as the absolute reference against which the finished production is compared. Not unexpectedly, systems that can produce contract proofs are usually expensive and require careful operation and maintenance. ISO 12647-7 specifies the requirements for contract proofs and systems used to produce contract proofs directly from digital data.

Recently, other visualizations of the final printed product have found a place in the printing proofing workflow because designers and print buyers prefer not to go to the expense of using an ISO 12647-7 compliant contract proof any earlier in the process than necessary. In many situations, particularly in the work flow require a hardcopy visual reference of lesser quality than a contract proof. In the past, these prints varied widely in quality and were often referred to as design proofs, concept proofs, layout prints, etc. That quality level is here being referred to as a “validation print”.

Because data are exchanged electronically and visualizations of those data are produced at multiple sites, there is a requirement for defined requirements for validation prints to allow a degree of consistency throughout the workflow. One of the goals of having less stringent requirements, particularly on colour fidelity, is to allow the production of validation prints on less elaborate and less costly devices than are required for contract proofs. The requirements for validation prints and the systems used to produce validation prints are documented in this part of ISO 12647.

Validation prints are not intended to replace “contract proofs” for predicting colour on production printing devices. It is expected that the modification of the requirements for validation prints, along with the requirements for contract proofs, will continue in the future as industry requirements and imaging technologies develop.

AUSTRALIAN STANDARD

Graphic technology—Process control for the production of half-tone colour separations, proof and production prints**Part 8:****Validation print processes working directly from digital data****1 Scope**

This part of ISO 12647 specifies requirements that can be used for determining the conformance of systems that produce a hard-copy validation print, directly from digital data, which is intended to simulate the expected appearance of material printed in accordance with a characterized printing condition.

It is not intended for use in determining the conformance of production printing systems (digital or conventional) since many aspects of production printing are not covered in this part of ISO 12647.

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 reference document (including any amendments) applies.

ISO 3664:2009, *Graphic technology and photography — Viewing conditions*

ISO 8254-1, *Paper and board — Measurement of specular gloss — Part 1: 75 degree gloss with a converging beam, TAPPI method*

ISO 12639, *Graphic technology — Prepress digital data exchange — Tag image file format for image technology (TIFF/IT)*

ISO 12040, *Graphic technology — Prints and printing inks — Assessment of light fastness using filtered xenon arc light*

ISO 12640-1:1997, *Graphic technology — Prepress digital data exchange — Part 1: CMYK standard colour image data (CMYK/SCID)*

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

ISO 12647-1, *Graphic technology — Process control for the production of half-tone colour separations, proof and production prints — Part 1: Parameters and measurement methods*

ISO 13655:2009, *Graphic technology — Spectral measurement and colorimetric computation of graphic arts images*