



IDEAlliance® Digital Press Certification Application Data Sheet

Xerox® iGen® 5 Press 150 PPM w/ Standard Gloss Dry Ink Xerox® EX-P 5 Print Server, Powered by Fiery®

Note: Certification is in accordance with IDEAlliance Digital Press Certification Program v2.2

The IDEAlliance Print Properties Digital Print Working Group has established a certification process for digital production presses (xerographic/inkjet). The following information is intended to assist printers and customers in understanding the printing conditions and how they were achieved and/or to replicate these results on a similar system.

I. Manufacturer

Press: Xerox Corporation

Digital Front End (DFE): Electronics For Imaging, Inc. (EFI)

II. Product Name

Press: Xerox® iGen® 5 Press at 150 PPM with Standard Gloss Dry Ink

Digital Front End (DFE): Xerox® EX-P 5 Print Server, Powered by Fiery® / FS200 Pro

III. Overview

The Xerox® iGen® 5 Press unites all the elements of the iGen family in a single, ultimately configurable platform. This new press design lets you choose the exact configuration you need to succeed. Choices include speed (90/120/150 PPM), number of colors (CMYK and/or CMYK + Extended Gamut), Dry Ink type (Standard Gloss or Matte), and feeding/finishing options.

Flexible and scalable Fiery® servers integrate into any print environment, deliver high performance, image with industry standard precision, and produce accurate color for all environments.

- Deliver professional color and consistency
- Color Profiler Suite option provides tools and features to match press standards and monitor colorimetric conformance
- Decreases set-up time, reduces errors, and cuts down on costly reprints dramatically
- Provides high return on investment with a flexible, scalable product line
- Integrates into all print environments as a result of its open platform technology
- Provides support for all industry standard variable data printing formats

IV. System Components and Printing Procedure

<u>Printer:</u>	Xerox® iGen® 5 150 PPM Press
<u>DFE:</u>	Xerox® EX-P 5 Print Server, Powered by Fiery®
<u>Software:</u>	Fiery® Command WorkStation Fiery® Color Profiler Suite 4.x X-Rite ColorPort
<u>Measurement:</u>	EFI ES-2000 Spectrophotometer X-Rite i1iSis XL
<u>Substrate:</u>	Xerox® Bold™ Coated Satin 140gsm (formerly Xerox® Digital Color Elite Silk 140gsm)
<u>Toner:</u>	Matte Dry Ink
<u>Ref. Condition:</u>	GRACoL Coated 2006

Warm-up Printer and Linearize

The press owner must service all due/overdue HFSIs (High Frequency Service Items) per the customer maintenance manual before continuing with this procedure.

The printer should be in a warmed-up state (print 50-100 medium area coverage pages) prior to linearization and characterization.

Perform the Engine Check routine through the iGen® 5 Press Color Maintenance Tool (CMT) user interface (UI).

- Color Maintenance > Expert > Verification and Recovery > Engine Check
- Mode > Best
- Stock > Xerox DC Elite Silk 100T! 18x12 SEF

For high quality image work, it is recommended that the Engine Check scores be no lower than 7. For IDEAlliance DPC, the highest Engine Check score of 10 is recommended for each separation. Tone Response Curve (TRC) Linearization must be performed through the iGen® 5 Press CMT UI if satisfactory scores are not achieved upon completion of the first Engine Check.

- Color Maintenance > Expert > Verification and Recovery > Engine TRC Linearization
- Mode > Best
- Stock > Xerox DC Elite Silk 100T! 18x12 SEF

Create an Output Profile

The following print properties are used to capture the printer's linearized state for creating an ICC profile. Any other settings should be set to the server's factory defaults with the exception of media tray settings. Print the IDEAlliance DPC Digital Press Form 1, bypassing color conversion.

- Media > Paper Catalog > XeroxDCEliteS 100T ! 18x12SEF
Note: Paper Catalog makes the following Media selections:
 - Media > Media Weight > 140-142 gsm
 - Media > Media Finish > Smooth
 - Media > Media Coating > Both sides coated
 - Media > Media Type > Plain
 - Media > Coating Type > Glossy
- Color > Expert Settings > Color Input > CMYK/Grayscale > **Bypass Conversion**

- Color > Expert Settings > Gray & Black Processing > Gray > CMYK > Off
- Color > Expert Settings > Gray & Black Processing > Black > Black text and graphics > Normal
- Color > Expert Settings > Output > *180 Dot profile*
- Image > Image Quality > Best
- Image> Digital Press Image Mode> 180 Dot
- Image> Digital Press Graphics Mode> 180 Dot
- Image> Digital Press Text Mode> 180 Dot

Next, measure the IT8.7/4 section of the press form with X-Rite ColorPort 2.0.5, using an i1iSis XL, UV-include (M0 mode). Save the measurements in the CGATS format, with conversion set to “none” (i.e. XRGGA).

Note: While Fiery Color Profiler Suite recognizes the CGATS measurement file format, the line with “DEVCALSTD XRGGA” present in certain measurement file headers should be commented out or deleted. This allows the ColorPort measurement file to conform to the CGATS file specification and be successfully read by Fiery Color Profiler Suite.

Create a printer profile with Fiery Color Profiler Suite 4.x:

- Skip to the “Convert Measurements to Profile” module.
- Select the Import Settings option, and import the 180 Dot factory profile on the iGen 5 server.
- Change the Colorimetric Mapping to “Closest dE (closest numerical match)”.
- Select “Optimize Colorimetric Precision”
- Save the new output profile to the server or as a local file to import later.
- Associate this output profile with the 180 Dot calibration set when importing into Command WorkStation.

If there are difficulties meeting the colorimetric tolerances outlined in Section 2.2, it is recommended that a press technician be consulted to ensure the press is performing at manufacturer expectations. If service of the press is required, create a new ICC profile using new measurement prints.

Print the Digital Press Forms

Use the following set of print properties as a baseline for printing the press forms. There are individual exceptions for some of the press forms that will be noted.

- Media > Paper Catalog > XeroxDCEliteS 100T! 18x12SEF
- Color > Expert Settings > Color Input > CMYK/Grayscale > GRACoL2006 Coated1 (EFI)
- Color > Expert Settings > Color Input > CMYK/Grayscale > Processing method > Full (Output GCR)
- Color > Expert Settings > Color Input > CMYK/Grayscale > Paper simulation > On
- Color > Expert Settings > Gray & Black Processing> Gray > CMYK > Off
- Color > Expert Settings > Gray & Black Processing > Black > Black text and graphics > Normal
- Color > Expert Settings > Output > [newly created output profile]
- Image > Digital Press Image Mode> 180 Dot
- Image > Image Quality > Best
- Image > Digital Press Graphics Mode > 180 Dot
- Image > Digital Press Text Mode > 180 Dot

For Digital Press Form 4 (Section 2.6) make these changes to the image options.

- Color > Expert Settings > Color Input > CMYK/Grayscale > Paper simulation > Off
- Color > Expert Settings > Gray & Black Processing > Black > Black text and graphics > Pure Black On

- Color > Expert Settings > Gray & Black Processing > Black > Black overprint (for pure black) > Text/Graphics
- Image> HD Text and Graphics> Medium

For Digital Press Form 6 (Section 2.8, 2.9, 2.10), turn off color processing:

- Color > Expert Settings > Color Input > CMYK/Grayscale > ColorWise OFF

For Digital Press Form 3 (Section 2.5), the repeatability test, it is recommended for best results to perform the Engine Check accessible through the iGen 5 Press's software, and verify scores of 10 for each separation. TRC Linearization should be performed if scores are too low.

V. Finishing Procedures (Optional)

VI. Additional Data (Optional)

Users can also achieve this match using Color Profiler Suite (CPS) with EFI ES-2000, in place of the i1iSis XL.

- Launch CPS and select Create Profile Printer Module.
- Select "Print Patches"
- Specify 1617 random (CGATS IT8.7/4) patch set
- Select Print Patches > Expert Settings > Use Current Calibration
- Set Print Properties as specified in the "Create an output profile" section above
- Measure patches with the EFI ES-2000 as directed by the Fiery Printer Profiler
- Import Settings from the server or use Generic CMYK and custom settings as necessary.

Device Linker "Match to a Standard" iterative profile enhancement can be used to refine color match precision if desired.