Digital Press Certification Application Data Sheet

Xerox® EX 150 Print Server Powered by Fiery® / Standard Gloss Dry Ink

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

Electronics for Imaging
303 Velocity Way
Foster City, CA 94404

II. Product Name

Xerox® EX 150 Print Server Powered by Fiery® / FS100 Pro / Xerox Digital Color Elite Silk 140gsm / Standard Gloss Dry Ink

Certified September 4, 2013

III. Overview

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 from anyone.
• Color Profiler Suite option provides tools and features to match press standards and monitor colorimetric conformance.
• Decreases set-up time, reduces errors, and costly reprints dramatically.
• Provides high return of investment with a flexible, scalable product line.
• Integrates into all print environments because of its open platform technology.
• Supports variable data printing.

IV. System Components and Printing Procedure

DFE: Xerox® EX 150 Print Server Powered by Fiery®
Software: Fiery Command WorkStation
                  Fiery Color Profiler Suite 4.1
                  X-Rite ColorPort
Measurement: EFI ES-2000 Spectrophotometer
                  Eye-one iSis XL
Printer: Xerox iGen 150 Press
Paper: Xerox Digital Color Elite Silk 140gsm
Toner: Standard Gloss Dry Ink

Warm-up printer and linearize
The printer should first be in a warmed-up state before proceeding with linearization and characterization. Using the Color Maintenance Tool (CMT), accessible through the iGen 150 Press's software GUI, check linearization.
• Color Maintenance : Expert : Verification and Recovery : Engine Check
• Mode : Best
• Stock : XeroxDCEliteS 100T ! 18x12SEF
For high quality image work, it is recommended that the Engine Check scores are no lower than 7. For the IDEAlliance DPC, the highest Engine Check scores of 10 are recommended for each separation. Tone Response Curve (TRC) Linearization should be preformed through the iGen 150 Press's software, until satisfactory scores are achieved.
• Color Maintenance : Expert : Verification and Recovery : Engine TRC Linearization
• Mode : Best
• Stock : XeroxDCEliteS 100T ! 18x12SEF

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 Digital Press Form 1 PDF 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: Digital Press Image Mode: 180 Dot
- Image: Image Quality : Best
- 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 ColorPort, using an Eye-one Sis XL, including UV measurements (M0 mode). Save the measurements in the CGATS format, conversion none (XRGA).

Note: While Fiery Color Profiler Suite recognizes this measurement file format, the line with "DEVCALSTD XRGA" 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. Skip to the "Convert Measurements to Profile" module. Select the Import settings option, and import the 180 Dot factory profile on the iGen 150 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 difficulties meeting the colorimetric tolerances of Section 2.2 are encountered, it is recommended that a press technician be consulted to ensure the press is performing in peak condition, increasing toner mass can increase the press's gamut. Re-create an ICC profile from new measurements if press service has been preformed.

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 150 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. Launch CPS and select Create Profile Printer Module. Select "Print Patches". Specify 1617 random (CGATS IT8.7/4) patch set. Select "Use Current Calibration", under Print Patches : Expert Settings. 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.