



# Digital Press Certification Application Data Sheet

# **Xerox<sup>®</sup> EX 80 Print Server Powered by Fiery<sup>®</sup>**

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 6750 Dumbarton Circle Fremont, CA 94555

#### **II. Product Name**

Xerox<sup>®</sup> EX 80 Print Server Powered by Fiery<sup>®</sup> / Xerox Versant 80 / EFI Laser Proof Paper XF130 Semimatt

#### 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 <sup>®</sup> EX 80 Print Server Powered by Fiery <sup>®</sup> |
|--------------|---|
| Software:    | Fiery Command WorkStation   |
|              | Fiery Color Profiler Suite 4.6                                      |
|              | X-Rite ColorPort  |
| Measurement: | EFI ES-2000 Spectrophotometer                                       |
|              | Eye-one iSis XL   |
| Printer:     | Xerox Versant 80  |
| Paper:       | EFI Laser Proofing Paper XF130 Semimatt                             |
|              |   |

#### Set up printer

The printer should first be in a warmed-up state before proceeding. It is recommended to create a custom paper setting for the certified media.

- Log on as "admin" at the printer control panel
- Tools: System Settings: Common Service Settings: Paper Tray Settings: Custom Paper Settings
- Select an empty Custom Type
- Change Settings: Name
  - Use a descriptive name for the media, (e.i. "EFI XF130 SM"), click Save
- Paper Type: Paper Weight: Change Settings
  - Set Matte Coated and 106-135 gsm
- It is also recommended to test and adjust the image transfer settings for the media • Adjust Image Transfer: Change Settings
  - Select Sample Number, Sample Printout, Select Loaded Tray, Press Start Note that only A3, A4, 11x17, and SRA3 paper size are allowed
  - Enter the numbers with the best transfers (smoothest and most solid)
  - Select Save, Save again, and Close
- Paper Tray Attributes: Change Settings: Paper Type and Paper Weight
  - Scroll down Paper Type, select saved custom paper name "EFI XF130 SM"
  - Confirm: Close: Admin (upper right corner): Logout

A Paper Catalog entry for the custom media will be created an the server ("EFI XF130 SM")

#### **Configure Server (Job Preset)**

From Command Workstation define a base preset for printing certification pressforms, this preset will also be used in the creation of calibration setting and for printing the output profile patches.

- Device Center: Workflows: Job Presets: New..
- Preset name: < descriptive name> "IDEAllianceDPC", Press Define...
- Job Info: Copies: 6 (or more)
- Media: Paper Catalog: EFI XF130 SM 12x18 White
- Color: Expert Settings...: Color Input: CMYK/Grayscale: Source: GRACoL2006 Coated1 (EFI)
- Color: Expert Settings...: Color Input: CMYK/Grayscale: Processing method: Full (output GCR)
- Color: Expert Settings ...: Color Input: CMYK/Grayscale: Paper Simulation: Off
- Color: Expert Settings...: Color Input: RGB/Lab: Source: sRGB(PC)
- Color: Expert Settings...: Gray & Black Processing: Gray: CMYK: Off
- Color: Expert Settings...: Gray & Black Processing: Black: Black text and graphics: Normal
- Color: Expert Settings...: Gray & Black Processing: Black: Black overprint (for pure black): Off

Note the preset will need to be edited to specify output profile after it is created.

• Image: Advanced: Printer screen node: Enhanced text

• Finishing: Delivery options: Output delivery: Face up – reverse order Click OK, and OK again to save the Job Settings Preset

# Calibrate

EFI ES-2000 Spectrophotometer is recommended for calibration.

- Device Center: General: Tools: Calibrate: Preferences to set the following Properties:
- Calibration method and patch layout: Measurement method: EFI ES-2000
- · Calibration method and patch layout: Patch layout: 51 Sorted Patches
- Fiery Color Profiler Suite Printer Profiler: Measurement method : X-Rite i1iSis XL
- Fiery Color Profiler Suite Printer Profiler: Settings : Measurement mode : M0 UV included
- Fiery Color Profiler Suite Printer Profiler: Patch layout : 1617 random (CGATS IT8.7/4)

Next, choose Calibrate: Manage calibration settings: Create New... to create a new calibration set. Use "Coated 120 gsm" as the basis for the printing properties.

Set Name ("XF130SM IDEAlliance DPC") and Recommend Paper for the new calibration set. Select the previously created Job Settings Preset, by clicking Properties.

• Presets: "IDEAllianceDPC"

Measure the last calibration sheet that is printed. Save the newly created calibration set, and (placeholder) output profile based off the "Coated 120 gsm" standard profile.

# Create an output profile

Create a printer profile with Fiery Color Profiler Suite. Start at Create Printer Profile: Print Patches. Connect to the Fiery with the Select Fiery Server pull down, click Next.

• Calibration setup: Use existing calibration settings: On

- Select the previously created calibration settings: "XF130SM IDEAlliance DPC"
- Skip calibration (use most recent calibration data): On (click Next) Profile Print Settings
- Select Instrument: X-Rite i1iSis XL
- Instrument: Settings: Measurement mode: M0 UV included
- Patch Layout: 1617 random (CGATS IT8.7/4)
- Number of Sets: 5 (Click Next, Save the profile print settings)

Print the patches, select the previously defined Job Settings Preset

• Presets: "IDEAllianceDPC"

Measure the last profiling patch page printed and save the measurements.

Apply settings: select "Generic CMYK" preset.

The following profile settings, were used for this certification:

- Gamut Mapping: Colorimetric Mapping: Closest dE (closest numerical match)
- Edit Black Controls: Maximum total ink: 260%
- Edit Black Controls: Black start: 10%
- Edit Black Controls: Black Generation: 70%
- Edit Black Controls: Maximum CMYK density ratio: 90%
- Profile optimization: Optimize colorimetric precision: disable

Save the new output profile to the Fiery. *Note: The newly crated output profile should be associated to the calibration set used for printing the profiling patches.* 

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. Re-create an ICC profile from new measurements if press service is preformed, or environmental conditions have changed significantly.

## Print the Digital Press Forms

Edit the previously created Job Settings Preset to include the newly created output profile. • From Command WorkStation: Device Center: Workflows select the preset ("IDEAllianceDPC") and click Edit...

- Click Job Properties: Define.
- Set Color: Expert Settings: Output to the newly created output profile.
- Press OK to save the edited settings.

For Digital Press Form 3 (Section 2.5), it is advised to recalibrate the engine using Fiery Calibrator prior to the 1-hour and 24-hour test prints.

For Digital Press Form 4 (Section 2.6), turn on Black overprint.

- Color: Expert Settings: Gray & Black Processing: Black: Black text and graphics: Pure Black On
- Color: Expert Settings: Gray & Black Processing: Black: Black overprint: Text/Graphics
- Image: Text/graphics quality: Best

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

#### 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.