



IDEAlliance® Digital Press Certification Application Data Sheet

EFI Fiery E-41 and E-81 for Ricoh Pro C901/C901S

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



Certified: September 19, 2011

II. Product Name

Ricoh Pro C901S / EFI Fiery E-41 or E-81 / System 9R2 / EFI Laser Proof Paper XF130 Semimatt
Ricoh Pro C901 / EFI Fiery E-41 or E-81 / System 9R2 / 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:	EFI Fiery E-81
Software:	Fiery Command WorkStation Fiery Color Profiler Suite X-Rite ColorPort
Measurement:	EFI ES-1000 Spectrophotometer Eye-one iSis XL
Printer:	Ricoh Pro C901S
Paper:	EFI Laser Proof Paper XF130 Semimatt 130 gsm

Create a new calibration set and higher density calibration target

In order to accurately calibrate the printer, a new calibration set should be created. Choose manage calibration sets in Fiery Calibrator. Name the Recommended Paper as EFI Laser Proof Paper XF130 Semimatt and set the Halftone Mode to 175 Line + Fine Text. Save with a new calibration set name and select the Fiery Pro C901-C901S Coated-Glossy v1RF as the output profile. A new calibration set and output profile will be created, "Fiery Pro C901-C901S Coated-Glossy v1RF (<new calibration set name>)".

Go to Command Work Station : Device Center : Resources : Profiles : Output Profiles and select the newly created profile, "Fiery Pro C901-C901S Coated-Glossy v1RF (<new calibration set name>)". Click the Edit : Color Editor... button. Edit the % Density / D-Max: values to C = 1.70, M = 1.60, Y = 1.04, K = 1.80. Save this as a new Output profile, "<new calibration set name> higher target".

In Command Work Station : Device Center : Color Setup Color Management, set the higher target profile as the default output profile. This is to insure that the new calibration target will be associated to the EFI Laser Proof Paper XF130 Semimatt output profile when it is created and uploaded to the Fiery later in the procedure.

Warm-up printer and calibrate

To help insure that the printer is in a stable and reproducible state, begin by calibrating with Fiery Calibrator. EFI Spectrometer ES-1000 is the recommended measurement method. Select the newly created calibration set and print the measurement page on EFI Laser Proof Paper XF130 Semimatt.

Create an output profile

Print the Digital Press Form 1 PDF bypassing color conversion. The following print properties are used to capture the printer's calibrated 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.

- Media : Paper Type : Coated-Glossy
- Media : Paper Weight : Paper Weight 4 (105.1 - 163.0 gsm)
- 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 : (<new calibration set name>) higher target
- Image : Resolution : 1200 dpi
- Image : Halftone Mode : 175 Line + Fine Text

Next measure the IT8.7/4 section of the press form into ColorPort, using the i1iSis XL, including UV data. Save the measurements in the CGATS format, conversion none.

Note: While Fiery Color Profiler Suite recognizes this format, the line with "DEVCALSTD XRGB" 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. Import settings from your Fiery server by following the instructions, and select the Fiery Pro C901-C901S Coated-Glossy v1RF

profile to import settings. Generic or custom settings can also be used as needed. It is important to insure that the “Include ColorWise calibration goal” is Off. Save the new output profile to the server, or as a local file to import later.

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 Type : Coated-Glossy
- Media : Paper Weight : Paper Weight 4 (105.1 - 163.0 gsm)
- 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 XF130 profile>
- Image : Resolution : 1200 dpi
- Image : Halftone Mode : 175 Line + Fine Text

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

- 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
- Image : Image Smoothing : On
- Image : Image Quality : Best
- Image : Text/Graphics Quality : Best

For Digital Press Form 5 (Section 2.7) make these changes to the image options.

- Image : Image Smoothing : On
- Image : Image Quality : Best
- 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

For Digital Press Form 3 (Section 2.5), the repeatability test, it is recommended for best results to perform calibration prior to making these prints. Always use the same device as the initial Fiery Calibration.

V. Finishing Procedures

For large piles of paper such as the 1000 sheet press run uniformity test, optionally set Collate to Off under Print Properties : Finishing, for a better aligned stack of press sheets.

VI. Additional Data (Optional)

Users can also achieve this match using Color Profiler Suite (CPS) with EFI ES-1000. 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-1000 as directed by the Fiery Printer Profiler. Import Settings from “Fiery Pro C901-C901S Coated-Glossy v1RF” or use generic CMYK or custom settings as necessary.

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