



IDEAlliance® Hard Copy Proof Application Data Sheet

Epson Stylus® Pro 7900/9900 Proofing Edition Printers using EFI® Colorproof™ XF 4 for Epson on Epson Standard Proofing Paper 240 for GRACoL Coated #1 proofs

The IDEAlliance Print Properties Working Group has established a certification process for hard copy proofs. In accordance with this process the appearance of a hard copy proof must have the ability to closely simulate specific CGATS or other documented characterization data sets within tolerances outlined in this document.

The following information is intended to assist producers and consumers in the use of vendor specified proofing materials in a hard copy proofing application.

I. Manufacturer

Epson America, Inc.
3840 Kilroy Airport Way
Long Beach, CA 90806



Certified on 05/19/2009

II. Product

Epson Stylus Pro 900 Series Proofing Editions / Custom developed EFI Colorproof XF version 4.0 RIP for Epson / Epson Stylus Pro 7900 or 9900 ink jet printer / Epson SpectroProofer 24UV / 44UV, Epson Standard Proofing Paper / Epson UltraChrome® HDR Ink Technology / GRACoL Coated 1

Please note: The Epson Stylus Pro 7900 and 9900 printers and SpectroProofer are identical other than their width (24" or 44").

III. Introduction

Developed jointly with EFI, the Epson Stylus Pro Series Proofing Editions are designed to maximize customer value while delivering the highest-quality color proofs available to the industry – both commercial and flexographic.

IV. Control Guide

IDEAlliance specifies that a Control Guide: the IDEAlliance ISO 12647-7 Digital Control Strip, or a similar target containing the same patches or a super-set thereof, be included on every hard copy proof. The control guide file should be checked for accuracy of the original CMYK percentage values, as listed in the Annex.



V. System Components and Manufacturing Procedures

Epson Stylus Pro 7900 or 9900 wide format ink jet printer

Epson UltraChrome HDR Ink Technology

Epson Standard Proofing Paper 240

EFI Colorproof XF version 4 RIP for Epson

Epson SpectroProofer™ Spectrophotometer with UV Cut Filter (Spectro24UV / Spectro44UV)

VI. Finishing Procedures

1. Install Epson Standard Proofing Paper 240 on the Epson Stylus Pro 7900/9900 printer
2. From the Epson Stylus Pro 7900/9900 LCD control panel complete automatic printhead alignments
3. Launch EFI Colorproof XF 4.0 for Epson.
Using the EFI Setup wizard, create a new workflow as follows:
 - Select the GRACoL_2006_Coated1v2 template
 - Output device: Epson Stylus Pro 7900/9900.
 - Establish/test the appropriate port connection (TCP/IP or USB) for your configuration
 - Select Epson Standard Proofing Paper 240 media and the 1440 calibration set.
4. Launch EFI Color Manager (F2) and choose Optimize Profile
 - Set Measuring device to SpectroProofer
 - Set Optimization chart to: IT8.7/4 Random target. Note, targets are optimized for 17", 24", 36", and 44" widths
 - Select the GRACoL_2006_Coated1v2 workflow created above
 - Set Paper White Setting: Default - Absolute Colorimetric
 - Set Optimization Method to: Create new L*a*b* correction profile (this generates a .3CC correction file)
 - Check the box to optimize automatically and set cycle count to 4
 - Select the best cycle (lowest average and MAX dE), save file and accept automatically apply to workflow
5. In EFI ColorProof XF System Manager, Verify Tab for the GRACoL_2006_Coated1v2 workflow set:
 - Control Strip 1: idealliance iso 12647-7 2007 epson spectroproofer.tif
 - Check the "Print with color management" dialog box
 - Check the "Verify" dialog box
 - Set Characterization Data to: Generated from Reference Profile
 - Set Delta E Format to: dE76
 - Following Job Verification, open Color Verifier and verify patch tolerance as specified in Annex

VII. Finished Proof Characteristics

A proof with the color characteristics referenced in the Annex is to be expected when measured from the IDEAlliance ISO 12647-7 Digital Color Strip 2008 having been properly made to all the listed system components and finishing procedures.

Epson used our optional in-line spectrophotometer (Epson SpectroProofer) to measure and verify all color patches. Epson SpectroProofer is based around the XRITE® ILS20UV. We used UV filter for all measurements.

VIII. Sample Proofs

Epson America, Inc. has supplied three (3) sets of hard copy proofs for retention that conform to this Application Data Sheet by an IDEAlliance certifying contractor.

Annex
Characterization Data Values Per Hard Copy Certification Process Version 19
IDEAlliance ISO 12647-7 Digital Control Strip 2008 for GRACoL 2006 Coated #1

SampleID	C	M	Y	K	L*	a*	b*	Max ΔE_{ab}
A1	100	0	0	60	30.05	-22.65	-28.82	
B1	100	100	0	60	15.18	8.84	-24.61	
A2	100	0	0	0	54.99	-37.12	-49.98	≤5
B2	100	100	0	0	24.13	17.21	-46.14	≤6
A3	70	0	0	0	66.68	-25.04	-36.91	
B3	70	70	0	0	40.98	17.06	-35.68	
A4	30	0	0	0	82.72	-9.92	-17.75	
B4	30	30	0	0	69.73	8.32	-19.16	
A5	0	100	0	60	26.45	41.59	-1.73	
B5	0	100	100	60	26.22	35.37	24.54	
A6	0	100	0	0	47.96	74.06	-3.03	≤5
B6	0	100	100	0	47.38	68.25	48.8	≤6
A7	0	70	0	0	60.46	51.74	-5.68	
B7	0	70	70	0	59.19	47.4	39.16	
A8	0	30	0	0	80.12	20.24	-5.33	
B8	0	30	30	0	78.72	17.78	18.08	
A9	0	0	100	60	48.52	-5.3	49.18	
B9	100	0	100	60	28.47	-39.37	12.04	
A10	0	0	100	0	88.94	-5.01	93.11	≤5
B10	100	0	100	0	50.12	-68.42	25	≤6
A11	0	0	70	0	90.58	-4.56	63.36	
B11	70	0	70	0	62.79	-41.27	20.92	
A12	0	0	30	0	92.85	-2.49	24.58	
B12	30	0	30	0	80.73	-14.64	8.19	
A13	100	0	40	0	52.53	-53.19	-19.34	
B13	100	40	0	0	42.57	-16.27	-48.19	
A14	40	100	0	0	37.89	52.56	-22.07	
B14	0	100	40	0	48.28	70.95	17.76	
A15	0	40	100	0	70.88	22.91	72.4	
B15	40	0	100	0	72.7	-25.21	65.09	
A16	0	40	70	40	50.87	15.13	32.94	
B16	10	40	40	0	70.17	19.63	18.54	
A17	0	70	40	40	42.23	33.3	13.26	
B17	20	70	70	0	53.49	36.46	28.55	
A18	40	70	0	40	34.66	22.98	-17.15	
B18	0	70	70	40	41.68	31.89	26.77	
A19	40	0	70	40	52.46	-18.03	25.99	
B19	70	0	40	40	45.46	-26.12	-3.74	
A20	70	40	0	40	36.61	-1.37	-26.56	
B20	0	0	0	0	95	-0.02	-1.96	≤3
A21	0	0	0	3	92.81	-0.07	-1.96	
B21	3.1	2.2	2.2	0	92.43	0.19	-2.06	
A22	0	0	0	10	87.79	-0.2	-1.98	
B22	10.2	7.4	7.4	0	86.74	0.31	-2.04	
A23	0	0	0	25	77.36	-0.4	-1.93	
B23	25	19	19	0	75.52	0.07	-1.5	
A24	0	0	0	50	59.92	-0.53	-1.61	
B24	50	40	40	0	57.69	-0.13	-1.46	≤3
A25	0	0	0	75	39.84	-0.57	-1.02	
B25	75	66	66	0	39.39	-0.3	-0.55	
A26	0	0	0	90	25.77	-0.22	-0.54	
B26	100	100	100	0	23	0.17	-0.25	
A27	0	0	0	100	14.93	0.21	-0.14	≤5
B27	80	70	70	100	8.46	0.34	0.44	

Note: CIE Lab values for 3-color 3%, 10%, 25% and 75% patches are interpolations of the IT8/7.4 characterization data.