Kodak

IDEAlliance® **Hard Copy Proof Application Data Sheet**

Kodak Matchprint Inkjet Proofing Solution w/ Epson Stylus PRO X900 Printer on Kodak Matchprint Pro Coated SM240P Type 3, Media for SWOP Coated #3

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

Eastman Kodak Company
343 State Street
Rochester, NY 14650 U.S.A.

Certified on 8/31/2009

II. Product

Kodak Matchprint Inkjet Proofing Solution w/ **Epson Stylus PRO** X900 Printer on Kodak Matchprint Pro Coated SM240P, Type 3 Media

III. Introduction

Kodak Matchprint Inkjet Proofing Solution is based on software developed by Kodak, consisting of innovative screening and calibration technologies, and a certified process incorporating Color Confirmation. Using **Kodak** Proofing Software, customers will benefit from excellent color accuracy, enhanced image smoothness, quick calibration tools and direct connectivity to **Kodak** Unified Workflow Solutions. A proof made with a **Matchprint** Inkjet Proofing Solution, to these Application Data Sheet specifications, is intended to simulate the characteristics of a production press operating within the **SWOP** Guidelines for production printing.

IV. Control Guide

IDEAlliance specifies that a Control Guide: the IDEAlliance ISO 12647-7 Digital Control Strip 2008, 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.

*NOTE: The IDEAlliance ISO 12647-7 Digital Control Strip 2008 supercedes any previous ADS Proofing Certification Strip for conformance to this process. The control guide can be downloaded from the IDEAlliance.org web site. Practical production tolerances are discussed in the **Read Me** file included with the Control Guide.*

The rendered control guide shall adhere to the appropriate characterization data and tolerances shown in the Annex

V. System Components

Hardware and Softgoods:

- **Epson Stylus PRO** X900 Inkjet Printer with **Epson UltraChrome** HDR ink in Photo Black mode
- **Kodak Matchprint** Pro Coated SM240P Type 3, Media
- The following spectrophotometers can be used for calibration and verification: **GretagMacbeth Spectroscan**, **X-Rite Eye-One**, in-line Epson Spectrophotometer, or **X-Rite iO** table with an **Eye-One**.
- All instruments measure UV included. Refer to the On-Line User's Guide for further details on measurement preferences.

Software:

- **Kodak** Proofing Software for **Matchprint** Inkjet Solution, v4.0.

Setup and Protocol:

- Refer to the **Kodak** Proofing Software's On-Line Help for the following procedures:
- Download the **Epson** x900: **Matchprint** Pro Coated SM240P Type 3 installer from the ecentral.kodak.com website. Installers can be found in the Self Support > Downloads area.
- Install the installer using the **Kodak** Proofing Software's Proofer Administrator.
- Calibrate the **Matchprint** Pro Coated SM240P Type 3 720x1440 .v2 media configuration.
- Create a hot folder in the **Kodak** Proofing Software using the Mx9_T3240_7x14_C3_2v2_m_U.dvl device link and Mx9_ T3SM240P_7x14_2v2_U.icc profile for color management.
- Alternatively, you can apply this device link in your **Kodak Prinergy**, **Prinergy EVO**, or **Brisque** Workflow System and send proofs from your workflow to the **Kodak** Proofing Software.
- Refer to the Kodak User's Guide for proof color verification procedures.
- For questions or additional information, call the Kodak Response Center @ 1-800-472-2727.

VI. Finishing Procedures

None required.

VII. Finished Proof Characteristics

A proof that has been rendered utilizing the system components, process steps, and finishing procedures contained in the Application Data Sheet should exhibit the color characteristics referenced in the Annex when measured from the IDEAlliance ISO 12647-7 Digital Control Strip or similar target.

Visual evaluation of finished proofs should take place under standard D50 lighting, as specified in ISO 3664.

Proof Tolerances (Summary for IDEAlliance Hard Copy Proofing System Certification Process Version 16)

- Solid cyan, magenta, yellow, black shall be Delta Eab ≤5.0 from the characterization data set.
- Solid red green and blue shall be Delta Eab ≤6.0 from the characterization data set.
- The difference between the characterization data set white point and the proof white point (excluding fluorescence) shall be no different than; Delta L* +/-2.0, Delta a* +/-1.0, Delta b* +/-2.0 and have a maximum Delta Eab ≤3.0.
- The difference between the 50% CMY gray balance patch values and the characterization data set should be Delta Eab ≤3.0.

All measurements for certification comparison to the **SWOP** 2006 C3 data were made using a calibrated **X-Rite** iSis Spectrophotometer (D50, 2 degree observer, UV included, with white backup). All tolerances reflect normal systems variability and assume the use of a calibrated measurement device.

VIII. Sample Proofs

Kodak has supplied three (3) sets of hard copy proofs to the IDEAlliance Proof Certification Process for measurement and retention, and the system has been verified to conform to this Application Data Sheet

Annex
Characterization Data Values Per Hard Copy Certification Process Version 16
IDEAlliance ISO 12647-7 2009 Color Control Wedge for SWOP 2006 Coated #3

SampleID	C	M	Y	K	L*	a*	b*	Max
A1	100	0	0	60	31.96	-21.01	-26.32	
B1	100	100	0	60	15.57	11.12	-25.12	
A2	100	0	0	0	57.01	-37.23	-44.93	≤5.0
B2	100	100	0	0	26.85	18.1	-44.32	≤6.0
A3	70	0	0	0	66.13	-27.05	-33.43	
B3	70	70	0	0	40.96	16.18	-34.01	
A4	30	0	0	0	80.6	-11.73	-15.23	
B4	30	30	0	0	67.65	7.54	-17.07	
A5	0	100	0	60	25.8	40.75	-2.89	
B5	0	100	100	60	25.19	35	22.46	
A6	0	100	0	0	47.86	72.05	-3.12	≤5.0
B6	0	100	100	0	46.87	66.2	45.03	≤6.0
A7	0	70	0	0	59.04	51.45	-4.45	
B7	0	70	70	0	57.76	47.04	37.37	
A8	0	30	0	0	78.13	20.49	-3.14	
B8	0	30	30	0	77.05	17.93	18.32	
A9	0	0	100	60	47.67	-4.29	45.75	
B9	100	0	100	60	29.42	-36.88	12.46	
A10	0	0	100	0	87.97	-5.03	88.07	≤5.0
B10	100	0	100	0	52.12	-64.74	24.83	≤6.0
A11	0	0	70	0	89.29	-5.1	62.58	
B11	70	0	70	0	63.22	-41.12	21.01	
A12	0	0	30	0	91.25	-2.9	25.09	
B12	30	0	30	0	79.31	-15.61	8.86	
A13	100	0	40	0	54.86	-51.51	-16.56	
B13	100	40	0	0	44.63	-16.6	-44.14	
A14	40	100	0	0	38.04	51.19	-21.63	
B14	0	100	40	0	47.87	69.02	16.48	
A15	0	40	100	0	69.74	23.45	67.24	
B15	40	0	100	0	72.78	-24.61	60.84	
A16	0	40	70	40	49.56	15.84	31.46	
B16	10	40	40	0	68.5	19.94	18.61	
A17	0	70	40	40	40.95	33.29	12.02	
B17	20	70	70	0	52.19	36.34	27.23	
A18	40	70	0	40	34.07	22.6	-16.52	
B18	0	70	70	40	40.35	32.02	25.09	
A19	40	0	70	40	52.25	-17.94	25.76	
B19	70	0	40	40	45.99	-26.02	-2.95	
A20	70	40	0	40	36.95	-2.07	-25.02	
B20	0	0	0	0	92.5	0	0	≤3.0
A21	0	0	0	3	90.39	-0.06	-0.22	
B21	3.1	2.2	2.2	0	90.08	-0.02	-0.08	
A22	0	0	0	10	85.55	-0.19	-0.73	
B22	10.2	7.4	7.4	0	84.59	-0.04	-0.22	
A23	0	0	0	25	75.42	-0.38	-1.58	
B23	25	19	19	0	73.54	-0.15	-0.48	
A24	0	0	0	50	58.35	-0.51	-2.27	
B24	50	40	40	0	56.43	-0.49	-0.42	≤3.0
A25	0	0	0	75	39.36	-0.34	-1.8	
B25	75	66	66	0	39.8	-0.33	0.14	
A26	0	0	0	90	27.05	-0.14	-0.91	
B26	100	100	100	0	24.79	0.22	-0.52	
A27	0	0	0	100	18.04	0.01	-0.11	≤5.0
B27	80	70	70	100	8.91	-0.43	-0.21	

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