Kodak Matchprint Inkjet Proofing Solution w/ **Epson Stylus PRO** 800 Printer for **GRACoL** Coated #1 Proofs

Off-Press Proof Application Data Sheet

The IDEAlliance Print Properties Working Group has established a certification process for off-press proofs as input material to publications. In accordance with this process: "The appearance of a hard copy or monitor proof used in this application must have the ability to closely match specific CGATS or other documented characterization data sets within outlined tolerances." See further explanations and recommendations outlined on www.swop.org or www.gracol.org.

The following information is intended to assist producers and consumers in the use of vendor specified proofing materials in an off-press proof application:

Certified - January 2007

I. Manufacturer

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

II. Product

Kodak Matchprint Inkjet Proofing Solution w/ **Epson Stylus PRO** 800 Printer

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 **GRACoL** Guidelines for production printing.

IV. Control Guide

IDEAlliance specifies a control guide such as an ADS Proofing Certification Strip be supplied on every off-press proof. As a minimum, this guide should contain solids for the primary process colors (YMCK), two-color overprints (RGB), and a three-color overprint (YMC), as well as a 25%, 50%, and 75% tint at 150 lines per inch at each of the primary process colors and 3-color gray patches. All control guides should be checked for accuracy of the original values. Use and interpretation of a control guide is the responsibility of the creator.

Example:

V. System Components

Hardware:

- **Epson Stylus PRO** 800 Inkjet Printer with **Epson UltraChrome** K3 ink in Photo Black mode
- **Kodak Matchprint** Pro Press White SM210P Media
- **X-Rite** DTP-41 Spectrophotometer with UV filter and white plaque DTP41-55 or **GretagMacbeth Spectroscan** Spectrophotometer with UV filter or **GretagMacbeth Eye-One** UV Cut Spectrophotometer.

Software:

- **Kodak** Proofing Software for **Matchprint** Inkjet Solution, v3.1 and above.

Setup and Protocol:

- Refer to the **Kodak** Proofing Software's On-Line Help for the following procedures:
- Download the **Epson x800: Matchprint Pro PressWhite SM210P installer** from the ecentral.creo.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 PressWhite SM210P 720x720 v1** media configuration.
- Create a hot folder in the Kodak Proofing Software using the **M8_PWSM210_7_GRCL_C1_6_1v1a.dvl** device link for color management.
- Alternatively, you can apply this device link in your Prinergy, Evo, or Brisque workflow and send proofs from your workflow to the Kodak Proofing Software.

VI. Finishing Procedures

None Required

VII. Finished Proof Characteristics

A proof with the color characteristics referenced in Appendix 1 is to be expected when measured from the ADS Proofing Certification Strip having been properly made to all the listed system components and finishing procedures.

Note: Three-color grays are comprised of Cyan, Magenta, Yellow: 75, 66, 66; 50, 40, 40; and 25, 19, 19 values.

All measurements for comparison to the **GRACoL** 2006 C1 data were made using a calibrated **X-Rite** DTP70 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 that conform to this Application Data Sheet and have been certified by the IDEAlliance certifying contractor.

Appendix 1

Characterization Data CIELab Values

*ADS Proofing Certification Strip for **GRACoL** 2006 Coated #1*

Patch ID	CIELab Data			Maximum Delta E(ab)
	L*	a*	b*	
Paper	95.00	-0.02	-1.96	3
Yellow Solid	88.94	-5.02	93.17	5
Yellow 75%	90.28	-4.69	69.03	-
Yellow 50%	91.66	-3.87	43.57	-
Yellow 25%	93.15	-2.14	20.33	-
Magenta Solid	47.93	74.11	-3.01	5
Magenta 75%	57.88	56.32	-5.35	-
Magenta 50%	70.24	35.30	-6.06	-
Magenta 25%	82.55	16.79	-4.98	-
Cyan Solid	54.96	-37.12	-50.00	5
Cyan 75%	64.50	-27.32	-39.44	-
Cyan 50%	74.69	-17.15	-27.45	-
Cyan 25%	84.68	-8.25	-15.29	-
Black Solid	14.95	0.19	-0.14	5
Black 75%	39.75	-0.57	-1.02	-
Black 50%	59.77	-0.53	-1.61	-
Black 25%	77.43	-0.40	-1.93	-
Red Solid	47.37	68.25	48.79	6
Green Solid	50.12	-68.43	25.00	6
Blue Solid	24.13	17.20	-46.14	6
3 Color 100%	23.00	0.17	-0.25	6
3 Color 75%	39.40	-0.54	-0.45	-
3 Color 50%	57.54	-0.12	-1.44	3
3 Color 25%	75.41	0.30	-1.36	-

Note: 3-color 25% and 75% CIELab values are calculations from the IT8/7.4 characterization data as these patches are not a subset of that data.

FOGRA Wedge Characterization Data CIELab Values for GRACoL 2006 Coated #1

Patch ID	CIELab Data		
	L*	a*	b*
Top 1-1	54.96	-37.12	-50.00
Top 1-2	66.60	-25.13	-37.01
Top 1-3	78.64	-13.52	-22.72
Top 1-4	47.93	74.11	-3.01
Top 1-5	60.35	51.93	-5.67
Top 1-6	75.10	27.61	-5.85
Top 1-7	88.94	-5.02	93.17
Top 1-8	90.56	-4.57	63.58
Top 1-9	92.21	-3.24	33.89
Top 1-10	53.40	36.61	28.63
Top 1-11	40.54	20.86	14.82
Top 1-12	31.57	36.90	22.52
Top 1-13	32.32	40.62	-2.26
Top 1-14	49.01	0.15	40.24
Top 1-15	33.50	-36.22	11.08
Top 1-16	35.04	-25.01	-20.60
Top 1-17	20.89	6.27	-23.50
Top 1-18	87.93	-0.20	-1.98
Top 1-19	80.88	-0.38	-1.99
Top 1-20	67.04	-0.47	-1.76
Top 1-21	52.32	-0.59	-1.47
Top 1-22	35.39	-0.56	-0.87
Top 1-23	14.95	0.19	-0.14

Patch ID	CIELab Data		
	L*	a*	b*
Bottom 2-1	24.13	17.20	-46.14
Bottom 2-2	40.84	17.09	-35.77
Bottom 2-3	61.97	10.77	-23.84
Bottom 2-4	47.37	68.25	48.79
Bottom 2-5	59.09	47.55	39.25
Bottom 2-6	73.54	24.66	23.99
Bottom 2-7	50.12	-68.43	25.00
Bottom 2-8	62.69	-41.44	20.96
Bottom 2-9	76.12	-20.37	11.54
Bottom 2-10	70.23	19.71	18.63
Bottom 2-11	70.88	22.91	72.40
Bottom 2-12	48.28	70.95	17.76
Bottom 2-13	37.89	52.56	-22.07
Bottom 2-14	72.70	-25.21	65.09
Bottom 2-15	52.53	-53.19	-19.34
Bottom 2-16	42.57	-16.27	-48.19
Bottom 2-17	95.00	-0.02	-1.96
Bottom 2-18	87.56	-0.34	-3.00
Bottom 2-19	80.65	-1.08	-3.55
Bottom 2-20	66.41	-2.16	-3.96
Bottom 2-21	52.3	-2.93	-3.25
Bottom 2-22	38.23	-4.77	-3.50
Bottom 2-23	26.57	-7.05	-4.13

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