

SWOP® Off-Press Proof Application Data Sheet

KODAK APPROVAL Digital Color Proofing System with D3333 Donor Set and Device Link Profile (DLP)

The SWOP Review Committee has approved the use of off-press proofs as input material to publications. SWOP specifications recommend that: "The appearance of an off-press proof used in this application must closely simulate a SWOP Certified Press Proof." See other explanations and recommendations as outlined on pages 21 and 47 of the 2001 edition of the SWOP specifications.

I. Manufacturer

Kodak, exclusively for Kodak Polychrome Graphics

Eastman Kodak Company
343 State Street
Rochester, NY 14650



Certified - February 2005

II. Product

KODAK APPROVAL Digital Color Proofing System with D3333 Donor Set and Device Link Profile (DPL).

III. Introduction

The KODAK APPROVAL Digital Color Proofing System with DLP is a digital color proofing system based on a unique, highly accurate laser transfer process. A four-color halftone image is created on a single intermediate sheet and transferred to a paper stock of the user's choice. This Application Data Sheet includes a device link to employ color management technology to further improve the visual simulation of the proof to a SWOP certified press sheet.

IV. Control Guide

SWOP specifies that a control guide such as a GATF/SWOP Proofing Bar be supplied on every off-press proof. As a minimum, this guide should contain solids for the primary process colors and two-color overprints, as well as a 25%, 50%, and 75% tint in 133-linescreen ruling of each of the process colors. A control guide containing these imaging characteristics must be present on every proof. All control guides should be checked for accuracy of the original values. Use and interpretation of a control guide is the responsibility of the user. Proofing procedures are described in the KODAK APPROVAL Digital Color Proofing System User Guide.

V. System Components

For a KODAK APPROVAL Proof with D3333 Donors and DLP to be considered a "SWOP" proof, the system front-end must be color management enabled and the DLP indicated below (under **Output Parameters**) must be installed and selected during the printing step. In addition, the following components must be used.

CAT Numbers /Description

| Materials | XP, NX 34 cm | XP4, NX 68 cm |
|----------------------|----------------|---------------|
| Cyan Donor – DC03 | 879-7169 | 193-9289 |
| Magenta Donor – DM03 | 855-0550 | 859-8567 |
| Yellow Donor – DY03 | 100-3474 | 842-9086 |
| Black Donor – DK03 | 812-8936 | 822-3547 |
| Intermediate – I01 | 816-0319 | 106-7560 |
| Pre-laminate – P02 | 832-3131 | 882-3791 |
| Paper Stock | Monterey Gloss | |
| Laminator | 800XL | |

Target Input Values

| Dot In | Cyan | Magenta | Yellow | Black |
|--------|-------|---------|--------|-------|
| 100 | 100.0 | 100.0 | 100.0 | 100.0 |
| 95 | 97.5 | 99.0 | 99.0 | 98.5 |
| 90 | 95.4 | 97.2 | 96.5 | 96.7 |
| 85 | 92.6 | 95.2 | 93.9 | 94.3 |
| 80 | 90.1 | 92.7 | 91.1 | 91.9 |
| 75 | 87.1 | 89.7 | 88.2 | 89.2 |
| 70 | 84.3 | 86.7 | 85.3 | 86.2 |
| 65 | 81.5 | 83.7 | 82.0 | 83.2 |
| 60 | 78.4 | 80.1 | 78.6 | 80.1 |
| 55 | 74.9 | 76.4 | 74.8 | 76.7 |
| 50 | 70.5 | 72.5 | 70.5 | 72.8 |
| 45 | 65.2 | 67.9 | 65.5 | 68.5 |
| 40 | 59.6 | 62.7 | 60.0 | 63.6 |
| 35 | 53.6 | 57.2 | 54.0 | 58.5 |
| 30 | 47.6 | 51.3 | 48.0 | 52.9 |
| 25 | 41.6 | 44.7 | 41.7 | 46.2 |
| 20 | 35.2 | 38.0 | 35.3 | 39.1 |
| 15 | 27.8 | 30.3 | 28.5 | 31.7 |
| 10 | 19.9 | 21.5 | 20.5 | 22.4 |
| 5 | 11.0 | 11.5 | 11.1 | 11.2 |
| 0 | 0.0 | 0.0 | 0.0 | 0.0 |

Output Parameters:

Line screen ruling: 133 lpi

Proofing sequence: KCMY

Screen Angles: Y=0, M=75, C=15, K=45

Device Link: Approval_ADS_2_05.icm is available on the KPGraphics.com website.

VI. Finishing Procedures

There are no additional steps required for finishing the proof.

VII. Finished Proof Characteristics

A properly made proof should have the following color characteristics:

| Color | Density Absolute | TVI @ 50% (Dot Gain) (± 2) | Print Contrast @ 75% Tone (± 5) | Color (per CGATS.5)* | | | | | Maximum ΔE_{ab}^* |
|-----------------|------------------|----------------------------|---------------------------------|----------------------|------|--------|-------|-------|---------------------------|
| | | | | L* | C* | h(ab)* | a* | b* | |
| Yellow | 0.97 (± 0.03) | 17 | 27 | 84.5 | 82.9 | 94.3 | -6.2 | 82.6 | 4 |
| Magenta | 1.40 (± 0.05) | 21 | 35 | 47.6 | 69.7 | 358.9 | 69.6 | -1.3 | 3 |
| Cyan | 1.30 (± 0.05) | 19 | 35 | 54.5 | 53.9 | 231.2 | -33.5 | -42.2 | 3 |
| Black | 1.65 (± 0.05) | 23 | 41 | 16.8 | 2.2 | 87.9 | 0.1 | 2.2 | 3 |
| Red (overprint) | n/a | n/a | n/a | 47.1 | 77.2 | 34.5 | 63.7 | 43.7 | 5 |
| Green (op) | n/a | n/a | n/a | 50.9 | 63.8 | 155.7 | -58.1 | 26.2 | 6 |
| Blue (op) | n/a | n/a | n/a | 23.3 | 47.9 | 296.3 | 21.2 | -42.9 | 4 |

*CIELCh values represent measurements at target density.

The following supplemental colorimetric data is supplied for reference only.

| Area | Filter/Channel Density (absolute) | | | CIE Lab Values | | |
|-----------------------|-----------------------------------|-----------|----------|----------------|------|-----|
| | Red (C) | Green (M) | Blue (Y) | L* | a* | b* |
| Background/ Substrate | 0.14 | 0.14 | 0.16 | 88.4 | -0.5 | 3.1 |
| Black 25% | 0.39 | 0.38 | 0.40 | 70.3 | -0.6 | 1.8 |
| Gray 25% | 0.37 | 0.37 | 0.38 | 71.0 | -0.1 | 0.2 |
| Black 50% | 0.67 | 0.66 | 0.67 | 53.8 | -0.7 | 1.2 |
| Gray 50% | 0.64 | 0.64 | 0.67 | 53.5 | -0.9 | 0.4 |
| Black 75% | 0.99 | 0.97 | 0.98 | 38.7 | -0.6 | 1.1 |
| Gray 75% | 0.90 | 0.93 | 0.96 | 39.5 | -0.3 | 0.8 |

*Three color grays made up of Cyan, Magenta, Yellow: 75, 63, 63; 50, 39, 39; and 25, 16, 16 values.

Note: All measurements were made using a calibrated X-Rite 528 spectrodensitometer (D50 illuminant, 2° observer, non-polarized). The density (Status T) and colorimetric values are absolute, base included, measured over a black backup. TVI's were calculated using the Murray-Davies equation (CGATS.4).

VIII. Sample Proofs

Kodak Polychrome Graphics has supplied two proofs that conform to this Application Data Sheet to SWOP for its analysis and retention.

CALL TOLL-FREE **1-877-KPGraphics** (1-877-574-7274) FOR ADDITIONAL INFORMATION

OR VISIT US ON THE WEB AT www.kpgraphics.com

© 2005 Kodak Polychrome Graphics. All rights reserved. Matchprint is a trademark of Kodak Polychrome Graphics. Kodak and Approval are trademarks of Eastman Kodak Company. SWOP is a registered trademark of SWOP, Inc. All trademarks and registered trademarks used herein are the property of their respective owners.

Kodak Polychrome
G R A P H I C S