

TrueDot Color Digital Proofing System for SWOP Coated #3

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.

NOTE: It is important for the industry to understand that performing certification on any one display with any one monitor proofing system does not necessarily guarantee the same result on a different display of the same model of monitor. IDEAlliance notes that each monitor of a particular brand and model is unique. That is, for any given brand of monitor, while our experience in certification shows that while most displays pass the ISO criteria, an individual monitor may fail the ISO criteria due to manufacturing issues or may fail at some point in the future as a result of use. IDEAlliance therefore recommends that in addition to calibrating each monitor routinely, users should also verify the uniformity of the display over time as well. The monitor proofing systems vendors have agreed to provide a monitor uniformity test with their system and over the next 12 months will implement software to automate that process for users.

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

I. Manufacturer

United Systems of America Inc.
1617 Gamut Lane
Proofsville, MN 10000

II. Product

United Systems of America Inc. TrueDot Color Digital Proofing System

III. Introduction

The TrueDot Color Digital Proofing System is a direct print color linked process combining LCD color-accurate real time on screen viewing and manipulation incorporated with the industries only laser induced dot drop flow technology printer that produces a dot-for-dot reproduction to the source file set-up. Using the same digital image file supplied for plating, the TrueDot Color Digital Proofing System will display a profile dependent image on an LCD monitor for final viewing and then output a TrueDot Color Digital proof on any press stock. The result is a high-end ink jet dot -for-dot proof is an exact print simulation to the printed sheet.

IV. Control Guide

Specifications require that a control guide such as the ISO 12647-7 Control Strip 2007 shown below be supplied on every off-press proof. As a minimum, any guide used 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 in stated resolution for 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 such a control guide is the responsibility of the creator.



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V. System Components

For a TrueDot Digital Proof to be considered a "SWOP" proof, the following components must be used:

- TrueDot Color Digital Color Printer with VistaChrome inks
- Any #3 Coated 80# stock that conforms to the specified white point reference such as Fortune Gloss.
- SpectraView 30" LCD Display
- Macintosh or PC with compatible operating system software
- United Systems of America TrueDot software Version 1.1.1.1.1.2
- Any calibrated spectrophotometer with or without UV filter

VI. Finishing Procedures

There are no additional finishing steps needed in order for the TrueDot Digital Proof to match any printed page as gloss, semi-matte, or matte finishes are specified in the process and applied to the proof during the printing. Proofs can be viewed immediately and will remain color accurate for two years when stored properly.

VII. Finished Proof Characterization Data for SWOP 2006 Coated #3

A proof made to the SWOP 2006 Coated #3 characterization data should be compare numerically to the characterization data set CIE Lab values having been properly made to all the listed system components and finishing procedures listed in Section V. The data should be verified using a Mac-Rite calibrated spectrophotometer without UV filter. See Appendix 1.

VIII. Sample Proofs

United Systems of America Inc. has supplied three (3) sets of hard copy proofs for retention or has had their monitor system verified that it conforms to this Application Data Sheet by an IDEAlliance certifying contractor.

IX. Additional Proof Data

No additional proof data is needed for making or verifying a TrueDot Digital Proof.

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Appendix 1 Characterization Data CIELab Values

IDEAlliance ISO 12647-7 Control Strip 2007 for SWOP 2006 Coated #3

Patch ID	CIELab Data			Maximum
	L*	a*	b*	ΔE (ab)
A1	31.96	-21.01	-26.32	-
A2	56.99	-37.23	-44.95	5
A3	66.07	-27.13	-33.53	-
A4	80.52	-11.80	-15.33	-
A5	25.80	40.75	-2.90	-
A6	47.84	72.08	-3.11	5
A7	58.95	51.61	-4.46	-
A8	78.03	20.64	-3.18	-
A9	47.67	-4.29	45.76	-
A10	87.97	-5.03	88.10	5
A11	89.28	-5.09	62.78	-
A12	91.24	-2.93	25.28	-
A13	54.86	-51.51	-16.56	-
A14	38.04	51.19	-21.63	-
A15	69.74	23.44	67.23	-
A16	49.55	15.84	31.56	-
A17	40.89	33.29	12.00	-
A18	34.01	22.69	-16.52	-
A19	52.24	-17.96	25.88	-
A20	36.91	-2.13	-25.08	-
A21	90.46	-0.06	-0.21	-
A22	85.69	-0.18	-0.70	-
A23	75.49	-0.39	-1.61	-
A24	58.21	-0.51	-2.27	-
A25	39.28	-0.34	-1.80	-
A26	26.88	-0.14	-0.89	-

Patch ID	CIELab Data			Maximum
	L*	a*	b*	ΔE (ab)
B1	15.57	11.13	-25.12	-
B2	26.85	18.10	-44.32	6
B3	40.85	16.19	-34.08	-
B4	67.49	7.60	-17.17	-
B5	25.19	35.01	22.46	-
B6	46.86	66.21	45.03	6
B7	57.68	47.17	37.42	-
B8	77.94	18.06	18.43	-
B9	29.42	-36.88	12.46	-
B10	52.12	-64.75	24.83	6
B11	63.15	-41.26	21.06	-
B12	79.23	-15.72	8.94	-
B13	44.63	-16.62	-44.13	-
B14	47.87	69.02	16.49	-
B15	72.78	-24.61	60.84	-
B16	68.56	20.02	18.67	-
B17	52.11	36.50	27.30	-
B18	40.29	32.11	25.13	-
B19	45.95	-26.09	-3.01	-
B20	92.50	0.00	0.00	3
B21	90.08	-0.02	-0.08	-
B22	84.59	-0.04	-0.22	-
B23	73.54	-0.15	-0.48	-
B24	56.29	-0.48	-0.41	3
B25	39.80	-0.33	0.14	-
B26	24.79	0.22	-0.52	-

Note: Color measurements comparing measured proof data to this reference data requires the use of a calibrated spectrophotometer.