SWOP[®] Off-Press Proof Application Data Sheet

MediaCompass™ Collaboration Suite Off-press Proofing System

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 press proof." See other explanations and recommendations as outlined on pages 47 and 53 of the 2001 edition of the SWOP[®] Specifications.

I. MANUFACTURER

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II. PRODUCT

MediaCompass[™] Collaboration Suite (including StudioStream[™] and ShareStream[™]).

III. INTRODUCTION

RR Donnelley's MediaCompass[™] Collaboration Suite (MediaCompass[™]) includes monitorbased proofing technology for viewing color-accurate representations of CMYK files on an LCD display. This technology is featured in multiple products, including ShareStream[™] and StudioStream[™] applications. An output profile based on the intended output condition determines the desired CMYK simulation. For SWOP, the output profile is based on a SWOP certified press sheet that has been verified to be consistent with ANSI/CGATS TR001.

IV. CONTROL GUIDE

SWOP specifications recommend that a control guide such as the GATF Proofing Guide be supplied on every off-press proof. As a minimum, this guide should contain solids of the primary process colors and two-color overprints, as well as a 25%, 50% and 75% tint in each of the process colors. MediaCompass[™] utilizes a standard control guide reference to confirm the system is rendering color according to the appropriate calibration.

V. SYSTEM COMPONENTS

The following components and processing procedures shall be used with MediaCompass™ in order to achieve conformance with this Application Data Sheet:

Hardware:

- Apple Macintosh PowerMac G4 or PowerBook G4 or greater
- Apple 20" Cinema Display
- GTI Sofv-1e Dimmable Viewing Box (for comparing to hard copy proofs only)
- GretagMacbeth Eye-One Spectrophotometer

Software:

- Mac OS X (v10.2.2 or greater)
- ICS basICColor Display v2.5
- GretagMacbeth MeasureTool
- Internet Explorer v5.2 or better
- RR Donnelley MediaCompass™ client software

Environment:

The MediaCompass[™] monitor-based proofing technology must be placed in a location in which viewing conditions conform to the appropriate parts of ISO 3664:2000 (Viewing Conditions – Graphic Technology and Photography) as suggested by SWOP. The primary requirement is to avoid contaminating the viewing area with stray light or reflections and to insure neutral viewing areas. This generally requires turning lights in the viewing room off so that ambient lighting is below 64 lux.

Viewing:

Users viewing proofs with the MediaCompass[™] display-based proofing technology should set up the system so that the display is directly in front of the viewer.

Software and Hardware Setup:

These steps must be followed in order to insure that MediaCompass[™] proofs conform to SWOP requirements:

- 1. Turn on the PowerMac and Apple 20" Cinema Display and allow components to warm up for 30 minutes.
- 2. After system warm-up, and prior to each session, the monitor must be checked for calibration.
 - 2.1. Launch the GretagMacbeth MeasureTool application to measure the color bars for correct values.
 - 2.2. Choose "Chart" from the "Measuring" palette
 - 2.3. Choose "RRD_MediaCompass.txt" from the test chart drop-down menu
 - 2.4. Follow the MeasureTool prompts and place the spectrophotometer over the patch in the application window to read the color patches automatically.
 - 2.5. Save the measurements as "ProofCalib.txt"
 - 2.6. Use the MeasureTool "Comparing..." function to compare the measurements with the supplied standard measurements ("RRD_MediaCompass_StdMeasure.txt"). If the average Delta-E value is less than 3, then the monitor is appropriately calibrated.
 - 2.6.1. Exact L*a*b*values for each of the standard patches is listed in the "Finished Proof Characteristics" section of this document.
- 3. If the measured values are not within 3 delta-E (average and maximum) of the standard reference values, the monitor must be recalibrated.
 - 3.1. Insure that the GretagMacbeth Eye-One is connected to a USB port on the back of the PowerMac (not through a USB hub).
 - 3.2. Launch the ICS basICColor Display software.
 - 3.3. Click D50 radio button and then click on radio button next to "x=" to load D50 chromaticities, select a Gamma of 2.2, and a luminance value of 250.

- 3.4. Click on the "Calibrate" button and follow the prompts, naming the profile as desired, and deselecting the "Use Gamut Compression" and "Full Screen" checkboxes.
 - 3.4.1. Insure calibration is accurate by clicking the basICColor "Measure" button and confirming that the "Y" value is within ±15 units of 250 and the white point is within ±30 of 5000K.
- 4. Launch Internet Explorer (version 5.2 or better).
- 5. Enter the address for the MediaCompass[™] server into the address bar.
- 6. Locate the desired image and open it using the MediaCompass interface. Click on the Annotate button to launch the viewing application.
- 7. Click on the Information tool to determine the profile information. This window should indicate:

Color Profile CMYK Printing Process USA Web Offset Proofing Condition RRD SWOP PROOF V9 If this information is not as shown above, close the image window and contact your RR Donnelley technical representative.

VI. FINISHING PROCEDURES

There are no finishing procedures required with the RR Donnelley MediaCompass™ product.

VII. FINISHED PROOF CHARACTERISTICS

For a properly calibrated system, the average and maximum delta-E of the measurements of the patches in the control guide compared to the proof characteristics listed below must be less than 3.

Color	Tone Value	L*	a*	b*
Cyan	100	72.88	-20.42	-51.66
Cyan	75	79.81	-16.86	-42.87
Cyan	50	90.02	-14.15	-30.01
Cyan	25	101.32	-8.93	-16.53
Magenta	100	57.09	70.09	-7.02
Magenta	75	67.27	54.84	-7.56
Magenta	50	79.27	38.29	-6.8
Magenta	25	95.34	19.17	-5.24
Yellow	100	109.41	-11.36	72.09
Yellow	75	110.28	-9.56	55.81
Yellow	50	111.76	-7.3	38.79
Yellow	25	113.9	-4.16	21.81
Black	100	30.8	0.09	0.78
Black	75	44.15	1.64	-1.92
Black	50	64	0.46	-2.95
Black	25	86.9	-0.19	-1.36

Red	100	56.46	60.39	39.1
Red	75	65.88	46.19	36.17
Red	50	77.91	30.42	27.77
Red	25	94.06	13.96	15.17
Green	100	65.6	-49.82	27.9
Green	75	74.69	-38.18	22.58
Green	50	85.67	-27.23	16.19
Green	25	99.25	-15.32	9.26
Blue	100	36.38	26.94	-44.77
Blue	75	47.52	22.78	-37.8
Blue	50	63.7	15.68	-28.21
Blue	25	84.79	11.47	-18.07
Paper White	N/A	115.28	0.33	0.7

VIII. SAMPLE PROOF

Sample MediaCompass[™] proofs, which conform to this Application Data Sheet, have been demonstrated to the SWOP Technical Committee for their inspection and verification.

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