SWOP® Application Data Sheet ColorBurst Systems (CSE, Inc.)

ColorBurst Rip Proofing System

Epson® 7600/9600
Ultrachrome™ Inks
Epson Proofing Paper SemiMatte, SO41658

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 must closely simulate a SWOP press proof".

1. Manufacturer: ColorBurst Systems (CSE, Inc.)
101 E. Holly Ave
Suite 1
Sterling, VA 20164
www.colorburstrip.com

2: Product: ColorBurst Rip (SE, Pro-I, Pro-II, ProLab) Proofing System
Epson Stylus Pro 9600/7600
Epson Ultrachrome™ Ink
Epson Proofing Paper SemiMatte, SO41658

3. Introduction

The ColorBurst Rip Proofing System with the Epson Stylus Pro 7600/9600 and Ultrachrome™ Ink is a non-halftone, direct digital color proofing system. This combination provides a continuous tone proof that meets the color requirements for SWOP Proofing.

The Following information is intended to assist producers and consumers in the use of the ColorBurst Rip Proofing System, the Epson Stylus Pro 7600/9600 and UltraChrome™ Inks in a SWOP® Proofing application. The proof must be made according to all of the following guidelines. A proof made according to the document was SWOP-Certified based on a visual comparison to a current certified press sheet.

4. Control Guide

SWOP Specifies that a control guide such as the GATF Proofing Bar or other suitable guides that meet these requirements be supplied on every off-press proof. As a minimum, this guide should contain solids of the primaries and two color overprints, as well as a 75%, 50%, and the 25% tint of each of the process colors. Any color bar should be checked for the accuracy of the original values. Use and interpretation of such a bar is the responsibility of the user.

In the calibrated workflow, all proofs must be printed with the ColorBurst Rip "Swop Color Control Bar"

5.System Components/Set Up Conditions

ColorBurst Rip (SE, Pro-I, Pro-II, ProLab) windows software version 7.20 or higher
Epson 7600/9600 with UltraChrome™ Inks from EPSON America
Epson Proofing Paper SemiMatte, SO41658

ColorBurst Calibrated Workflow*

*To ensure color quality and consistency, ColorBurst Systems specifies that the proof for Epson Stylus Pro 7600/9600 must be created in a workflow where calibration procedures are followed.

Select the Printer Setup ENV file – Epson Swop 76_96 720v Proofing.env

- Review the ColorBurst manual, Section 2 – Printer Setup Menu, for details on selecting a Printer Setup ENV file
- This ENV (Environment) file also contains Baseline Linearization values that this ICC Profile and ENV were made from. This is the correct Baseline Linearization data for this system and MUST be used.
- The measurements for this Baseline Linearization and ICC Profile were taken using the ColorBurst Rip – ColorCatch program and a X-Rite DTP41-UV spectrophotometer. The measurements were CIE L*a*b* with D50 Illumination and a UV cutoff filter.

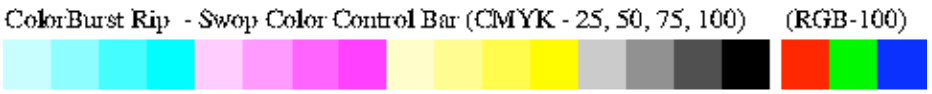
- The Reference Profile is the CSE Swop CGATS.ICC Profile. This profile is loaded with the ColorBurst - Epson Swop 76_96 720v Proofing ENV file.

Follow the ColorBurst Rip Re-Linearization procedure which consists of the following steps: (Complete details are supplied in the ColorBurst Rip - Re-Linearization PDF)

- Load the ColorBurst - Epson Swop 76_96 720v Proofing ENV file. Turn ICC and Linearization OFF. Print the ColorBurst Printer Linearization target.
- Measure the Linearization Target using a spectrophotometer with the ColorBurst – ColorCatch program.
- Load the new Printer Linearization data file – DO NOT SET and/or RESET THE EXISTING BASELINE VALUES: The ColorBurst Rip will automatically correct for variations of the printers based upon the information supplied by the new linearization target. This procedure creates an updated SWOP Linearization. Save this as a new Printer Setup ENV file.

1.Finished Proof Characteristics

All Certified proofs must display the ColorBurst Rip SWOP Color Control Bar



7. Finished Proof Characteristics

A properly made proof with the:

ColorBurst Rip
Epson Stylus Pro 9600/7600; EPSON UltraChrome™ Inks;
Epson Proofing Paper SemiMatte

Should have the following characteristics

Color	Density	TVI (Dot Gain 50%)	Print Contrast (At 75% Tone Value)	Color L*	Color C*	Color $h^0_{(a*b*)}$	(Delta E) CIELAB
Tolerance	+/-0.05	+/- 2.0	+/- 5.0	-	-	-	3.5
Cyan	1.24	19	29	56.85	56.02	225.71	
Magenta	1.42	17	38	47.42	69.77	356.31	
Yelllow	1.01	14	27	83.82	85.15	94.46	
Black	1.53	21	37	19.81	0.08	N/A	
Red	N/A	N/A	N/A	47.17	74.64	33.39	
Green	N/A	N/A	N/A	52.13	68.46	157	
Blue	N/A	N/A	N/A	28.33	47.81	291.85	

Substrate Density (+/- 0.02)

Cyan = 0.13 Magenta = 0.14 Yellow = 0.16

These measurements above were made using a calibrated X-Rite 530 Spectrodensitometer. Colormetric measurements were done under D50 illuminant, 2^0 observer, non-polarized per CGATS.5. All density measurements are Status T absolute and measured with black backer per CGATS.4. Tone Value Increase values (Total Dot Gain) were calculated using the Murray-Davies equation per CGATS.

8. Sample Proofs

ColorBurst Systems has supplied two proofs from the ColorBurst Rip Proofing System on an Epson 7600, which conform to this application Data Sheet to the SWOP Laboratory for certification and retention.