Best® Colorproof™ & CANON® W7200/W7250 Proofing System
(CANON® BJ Commercial Proofing Paper)

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”.

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2. Product: Best® Colorproof™ & CANON® W7200/W7250
   Proofing System consisting of:
   - Best Colorproof™ RIP, Best Screenproof™ RIP, or either RIP with Premium option.
   - CANON® imagePROGRAF™ W7200/W7250 with CANON® Dye inks
   - CANON® BJ Commercial Proofing Paper
3. Introduction

The Best Colorproof™ (or Best Screenproof™, composite "Colorproof" mode) software combined with the Canon imagePROGRAF W7200/W7250 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 Best Colorproof with the Canon imagePROGRAF W7200/W7250 system in a SWOP proofing application. The Best Colorproof proof must be made according to all of the following guidelines. A proof made according to this 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 25% tint of each of the process colors. Any color bar should be checked for accuracy of the original values. Use and interpretation of such a bar is the responsibility of the user.

In following the Best Colorproof calibrated workflow below, all proofs must be printed with the Best Colorproof "Color Control Strip for SWOP".

5. System Components/Setup Conditions

- Best Colorproof (Screenproof) windows software version 4.6 or higher
- Canon imagePROGRAF W7200/W7250 with Canon Dye Inks
- Canon BJ Commercial Proofing Paper
- Best Colorproof Calibrated Workflow*  
  * To ensure color quality and consistency Best specifies that the Best Colorproof for Canon imagePROGRAF W7200/W7250 must be created in a workflow where calibration procedures are followed.


- Review the Best Colorproof manual sections (Editing datasets) and (Edit Settings) for details on selecting a profile.
- This profile also contains a connection to the base linearization file. This is the correct base linearization file for this system and must be used.
- The measurements for this Paper Profile were taken using a X-Rite DTP41UV spectrophotometer. The measurements were CIE L*a*b* with D50 illumination and a 2° observer, with UV cutoff filter.

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Select Best Colorproof SWOP Reference profile (available at http://www.bestcolor.com)

- Review the Best Colorproof manual section (Editing datasets) for details on selecting a profile.
- This Reference Profile was generated using information from the profiling target on the SWOP press proof supplied with the SWOP certification kit measured with a GretagMacbeth Spectrolino/Spectroscan spectrophotometer. The measurements were spectral with D50 illumination and a 2° observer, with polarizing filter.

Follow the Best Colorproof printer linearization procedure which consists of the following steps:

- Print the Best Colorproof Printer Linearization target(s) and follow the instructions in the manual (Standard or Premium).
- Measure the Target using a densitometer or spectrophotometer as prescribed in the manual.
- Create Printer Linerization: Best Colorproof automatically corrects for variations of the printers based on the measurement information supplied by the linearization target. This procedure creates an updated SWOP base linearization.

6. Finished Proof Characteristics
All certified proofs must display the Colorproof Control Strip

[Image of Colorproof Control Strip]
7. Finished Proof Characteristics

A properly made proof with:

Best Colorproof™ (Screenproof™)
CANON imagePROGRAF W7200/W7250
CANON Dye Inks
CANON BJ Commercial Proofing Paper

should have the following characteristics.

<table>
<thead>
<tr>
<th>Color</th>
<th>Density (Dot Gain 50%)</th>
<th>TVI (At 75% Tone Value)</th>
<th>Print Contrast</th>
<th>Color (Per CGATS.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(+/-0.05)</td>
<td>(+/- 2.0)</td>
<td>(+/- 4.0)</td>
<td>L*</td>
</tr>
<tr>
<td>Cyan</td>
<td>1.13</td>
<td>21.3</td>
<td>29.6</td>
<td>58.4</td>
</tr>
<tr>
<td>Magenta</td>
<td>1.27</td>
<td>22.6</td>
<td>30.2</td>
<td>50.2</td>
</tr>
<tr>
<td>Yellow</td>
<td>0.83 (1.16)</td>
<td>14.5 (19.0)</td>
<td>22.3 (26.2)</td>
<td>85.9</td>
</tr>
<tr>
<td>Black</td>
<td>1.48</td>
<td>21.3</td>
<td>34.7</td>
<td>21.3</td>
</tr>
<tr>
<td>Red</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>49.2</td>
</tr>
<tr>
<td>Green</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>53.8</td>
</tr>
<tr>
<td>Blue</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>27.7</td>
</tr>
</tbody>
</table>

Substrate Density (+/-0.02)

Cyan = 0.11 Magenta = 0.13 Yellow = 0.16 (0.18)

^ Numbers in parenthesis represent measurements with Status E Response. These are mentioned because spectral evaluation of the inks used in the inkjet devices show that matching density to Status T shifts the optical appearance of the proof.

^^ Numbers in parenthesis represent calculation using $\Delta E^*_{cmc}$.

Delta $E^*$ values represent within material color difference measured at target density.

These measurements above were made using a calibrated X-Rite 938 Spectrodensitometer. Colorimetric measurements were done under D50 Illuminant, 2° observer, non-polarized. Calculations for $\Delta E^*$ are in CIE $a^*b^*$ space (unless otherwise noted). $\Delta E^*_{cmc}$ calculations use $l:c = 2:1$ settings. All density measurements are Status T (unless otherwise noted) and colorimetric values are absolute. Measurements are made with a black backing. Tonal Value Increase values (dot gain) were calculated using the Murray-Davies equation. All measurements adhere to CGATS.4 and CGATS.5

8. Sample Proofs

Best has supplied two Best Colorproof proofs from the CANON imagePROGRAF W7200/W7250 to the SWOP Review Committee for certification and retention which conform to this Application Data Sheet.