



ORIS
COLOR TUNER™

ORIS Digital Proofing System™ for Canon W2200S/W6400/W8400 printers, using ORIS PearlPROOF™ Publication paper and CGS LLE ink

SWOP®¹ Off-Press Proof Application Data Sheet

I. Manufacturer

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II. Product

The ORIS Digital Proofing System™ consists of ORIS Color Tuner™ software, CGS LLE 6-color ink set and ORIS digital proofing paper together with the following ink jet printers:

Canon® imagePROGRAF™ W2200S, W6400 and W8400

III. Introduction

The Canon printers listed above in section (II) are non-half-tone, digital inkjet devices. They utilize Canon's Bubble Jet,™ six-chip head (C, M, Y, K, PC, PM) technology which, in combination with the specified paper and ink, allows them to achieve photo reproduction quality continuous tone proofs.

This document contains CGS ORIS operating procedures for conformance to the SWOP Application Data Sheet for this system per SWOP specifications. The SWOP Review Committee has approved the use of off-press proofs as input material to publications. *(Please see explanations and recommendations as outlined on pages 21 and 22 of the 2001 edition of the SWOP Specifications.)*

IV. Consumables

In order to closely simulate the appearance of a SWOP press proof, CGS specifies the use of the following:

- **CGS Media**

ORIS PearlPROOF™ Publication Semi-Matte (PSMP) paper, 185gm.

- **CGS Ink**

CGS LLE 6-color ink set for Canon W2200S/W6400/W8400

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V. System Set-Up

In order to ensure the quality and consistency, CGS specifies that a CGS ORIS Digital Proof must be run in a controlled and calibrated workflow. This workflow is described as follows:

- **Examination of device**

Using the Canon device control panel, check that the printer nozzles are printing smoothly and alignment is correct. Please refer to individual Canon manuals for the specific procedures.

- **Automatic Printer Calibration of device to Reference Printer Profile**

Using the ORIS™ Color Tuner™ software application, perform an Automatic Printer Calibration of the CANON® printer to the Reference Printer Profile reference file provided by CGS:

http://www.cgsusa.com/downloads/SWOP/ORIS_SWOP_W2200-W6400-W8400_LLE.zip

For detailed automatic printer calibration procedures using ORIS Color Tuner™ please refer to the *ORIS Color Tuner™ User's Guide*, Chapter 4-6 (Color Management).

VI. ORIS Digital Proof Control Strip

All proofs from the printer must print an ORIS Digital Proof Control Strip using ORIS Color Tuner™. The control strip (*figure 1*) must fall within the specified CGS ORIS Digital Proof tolerance, defined in the following section of this document.

The control strip (in TIFF or ORIS-specific DDP format) is available at the CGS web site:

http://www.cgsusa.com/downloads/target/ORIS_Certified_Proof_TR001.zip

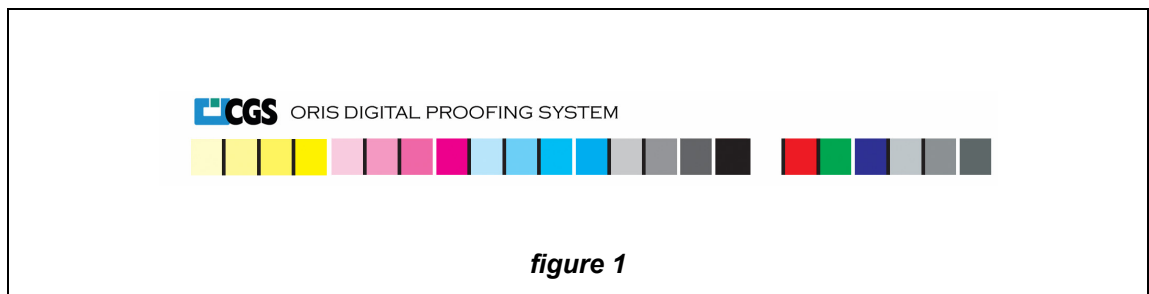


figure 1



VII. Final Proof Characteristics

All certified proofs must display the ORIS Digital Proof Control Strip. The control strip must be checked for color quality using the following expected color and image characteristics.

| Color | Density (± 0.05) | TVI Dot Gain @ 50% (± 3%) | Print Contrast @ 75% (± 5%) | L | Color C (Delta E* < 2.5) | h(ab) |
|----------------|-----------------------|-----------------------------------|-------------------------------------|-------|----------------------------------|--------|
| Cyan | 1.30 | 22.0% | 31.0% | 54.73 | 55.39 | 227.32 |
| Magenta | 1.39 | 22.0% | 34.0% | 46.65 | 68.40 | 357.62 |
| Yellow | 1.01 | 16.0% | 25.0% | 84.17 | 85.15 | 94.13 |
| Black | 1.60 | 23.0% | 38.0% | 18.68 | 2.09 | 63.68 |
| Red | NA | NA | NA | 46.34 | 75.46 | 34.79 |
| Green | NA | NA | NA | 47.91 | 64.12 | 156.89 |
| Blue | NA | NA | NA | 23.87 | 42.99 | 293.48 |
| Gray 25 | NA | NA | NA | 72.01 | -0.89 | 3.01 |
| Gray 50 | NA | NA | NA | 51.56 | -1.02 | 2.88 |
| Gray 75 | NA | NA | NA | 38.75 | -1.92 | 2.56 |

| Paper White Density Measurements (Tolerance ± 0.02) | | | |
|---|-------------------|-------------------|-----------------------|
| Dc 0.13 | Dm 0.12 | Dy 0.14 | Dk 0.17 |
| Paper White CIE LCh(ab) Measurements (Delta E* < 2.5) | | | |
| | L 89.13 | C 5.42 | h(ab) 83.94 |

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

The above CIE LCh(ab) measurements were made using a calibrated GretagMacbeth Spectrolino with GretagMacbeth KeyWizard software. All CIELCh values are in accordance with CGATS.5 Standard on Colorimetric Calculations.

The TVI values were calculated using the Murray-Davies equation, Print Contrast as absolute. All calculations are in accordance with the CGATS.4 Standard for densitometry.

The above density measurements were made using a calibrated GretagMacbeth Spectrolino with GretagMacbeth KeyWizard software with absolute Status-T response, no filter, D50 illuminant and a 2° observer and black backing. All density values are in accordance with CGATS. 4 Standard for densitometry.

VIII. Sample Proofs

CGS Publishing Technologies International has submitted two sets of proofs that conform to this application data sheet specification. These have been submitted to the SWOP Certification program for analysis. Copies of this document are on file with SWOP Inc., or can be downloaded via CGS' web site: www.cgsusa.com.