

Fujifilm DE100 Printer / Color Management / Lightroom / Mac

Color Management Instructions for the DE100:

Adobe® Lightroom Classic on Apple macOS “Monterey”

These instructions explain how to use the correct color management for DE100 prints using macOS Monterey and a Fujifilm DE100 printer. It is based on the following software versions:

- macOS Monterey version 12.5
- Adobe Lightroom Classic version 11.4.1
- Fujifilm DE100 printer driver for Mac version 2.0.0 (English with additional patch ver. 2.0.2)



Introduction of new Fujifilm Glossy and Lustre Inkjet Papers

In late 2021, Fujifilm switched to new **Lustre** and **Glossy** papers for the DE100. The new paper types require a new set of ICC profiles because of differences in grey balance and density.

New material (2nd Generation)	EAN Code	Surface type
FRONTIER SL IJ PAPER GL 89MMX65M	70100151659	Glossy
FRONTIER SL IJ PAPER GL 102MMX65M	4013370195906	Glossy
FRONTIER SL IJ PAPER GL 127MMX65M	4013370195890	Glossy
FRONTIER SL IJ PAPER GL 152MMX65M	4013370196019	Glossy
FRONTIER SL IJ PAPER GL 203MMX65M	4013370196033	Glossy
FRONTIER SL IJ PAPER GL 210MMX65M	4013370196026	Glossy
FRONTIER SL IJ PAPER LU 89MMX65M	70100151668	Lustre
FRONTIER SL IJ PAPER LU 102MMX65M	4013370195845	Lustre
FRONTIER SL IJ PAPER LU 127MMX65M	4013370195852	Lustre
FRONTIER SL IJ PAPER LU 152MMX65M	4013370196040	Lustre
FRONTIER SL IJ PAPER LU 203MMX65M	4013370195876	Lustre
FRONTIER SL IJ PAPER LU 210MMX65M	4013370195883	Lustre

On the following pages, the previous paper types will be referred to as “Gen1”. The new paper types will be referred to as “Gen2”.

The file names of the ICC profiles are as follows:

DE100 Color conversion by Photoshop or Lightroom	
File Name	Paper Type
ICC Printer Output Profiles	
DE100 Glossy Gen1 verC.icc	Glossy Paper, Gen1 (Made in USA)
DE100 Glossy Gen2 verC.icc	Glossy Paper, Gen2 (Made in Germany)
DE100 Lustre Gen1 verC.icc	Lustre Paper, Gen1 (Made in USA)
DE100 Lustre Gen2 verC.icc	Lustre Paper, Gen2 (Made in Germany)
DE100 Pearl verC.icc	Pearl Paper
DE100 Silk verC.icc	Silk Paper

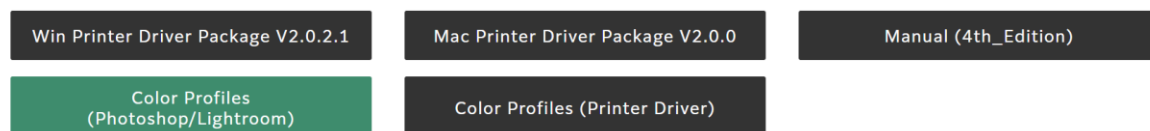
Downloading the new ICC Profiles

The new ICC printer profiles allow for more accurate color reproduction. The set can be downloaded below. (Ctrl + click on the link below in this PDF document).

<https://www.fujifilm.com/uk/en/business/photofinishing/downloads>

The download link contains ICC-profiles for the new and the previous generation of inkjet papers.

DE100

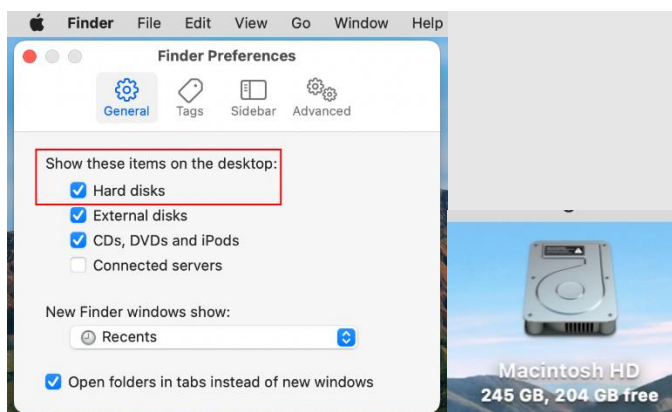


Installing the ICC-profiles

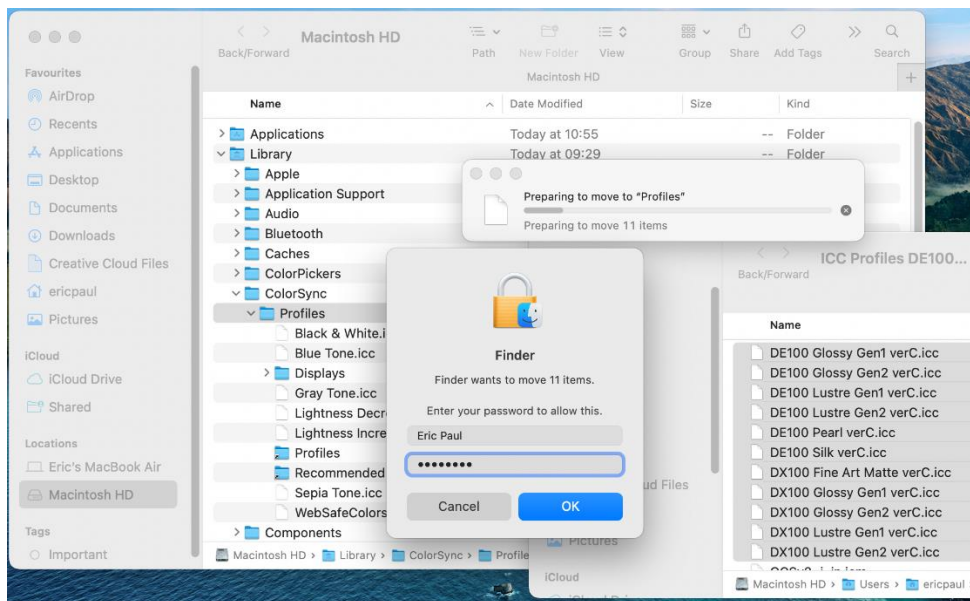
In macOS, the ICC-profiles are in this folder: [Macintosh-HD/Library/ColorSync/Profiles](#)

MacOS Monterey 12.5 allows the user to copy ICC-profiles into their folder. This was not possible with some of the older macOS versions.

Make sure to have the Macintosh-HD Icon visible on the desktop by activating “Hard Disks” in the “Finder Preferences”.



Double click on the “Macintosh HD” icon and go to the following folder using the Finder:
[Macintosh-HD/Library/ColorSync/Profiles](#)

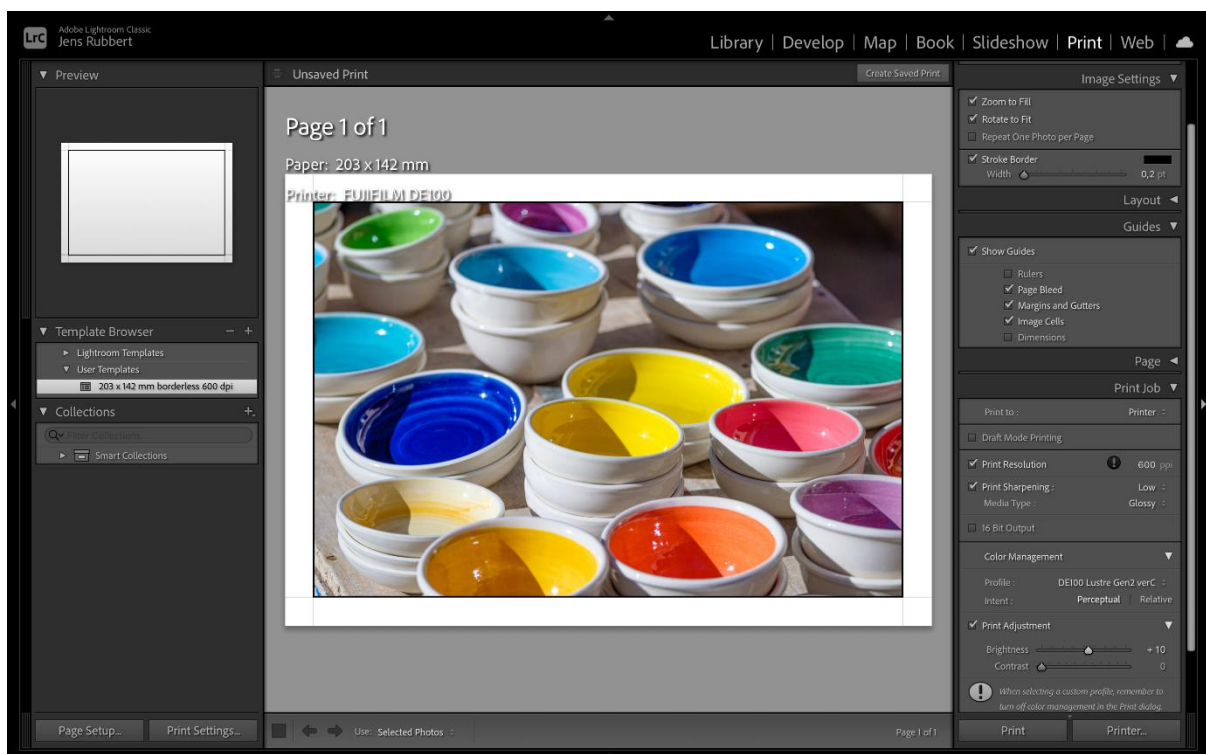


Copy and paste the new ICC-profiles for the DE100 into the “Profiles” folder. The admin password is required for this action.

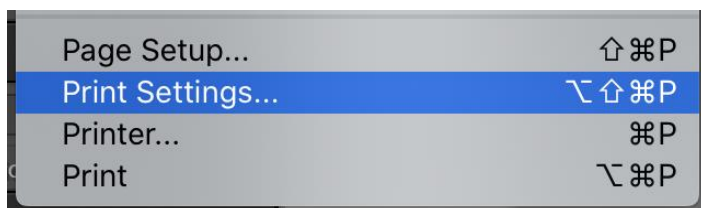
Adobe Lightroom and Photoshop now have full access to the new ICC profiles.

Configuring Lightroom

Open the “Print” window in Adobe Lightroom Classic.

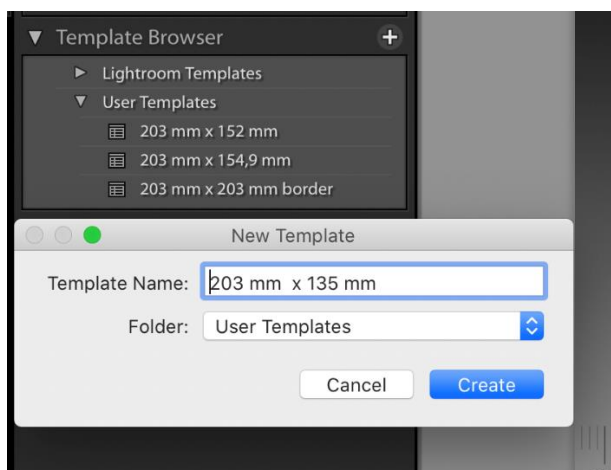


In Lightroom Classic, all print settings are saved in dedicated print templates. This allows printing multiple images with a single click using the predefined settings. These settings are accessible in the “Print Settings...” menu. This is especially useful for batch printing jobs.

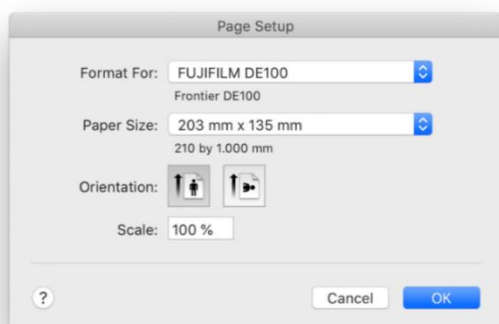
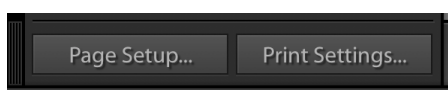


Creating a Print Template in Lightroom Classic

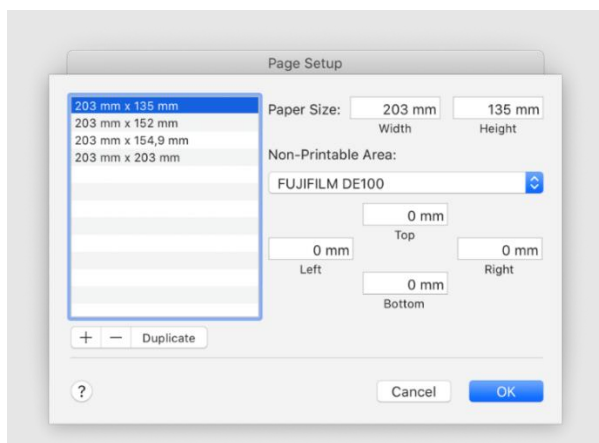
Click the “+” in the “Template Browser” to open the “New Template” window. Enter the name of the new template and click “Create”.



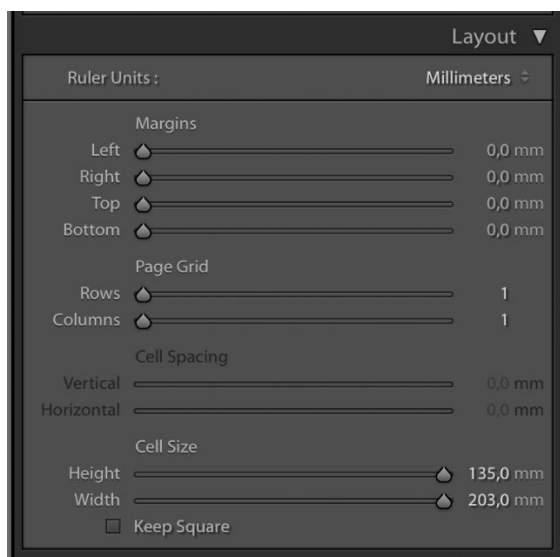
Click the “Page Setup” button to select the new template for the print size.



If the requested print size is not available, it can be created in the “Page Setup” Menu by clicking the “+” button.



Make sure you set the correct print size, margin width, and cell size (i.e., printed area) in the Layout menu.



Selecting the paper type

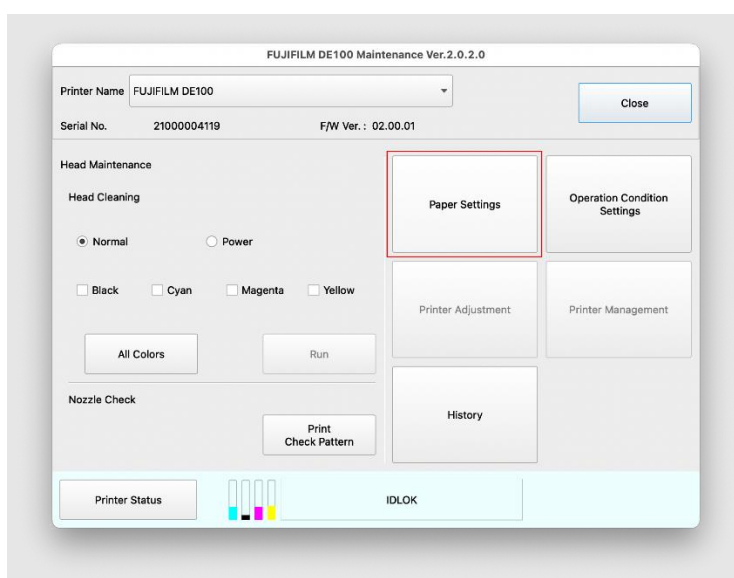
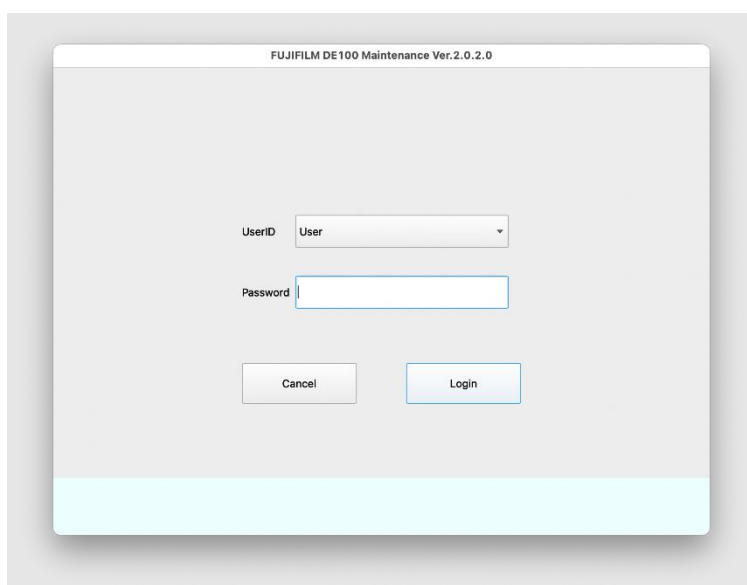
Important: The paper type must be set on two different menus:

- 1) DE100 Maintenance Tool
- 2) DE100 printer driver settings

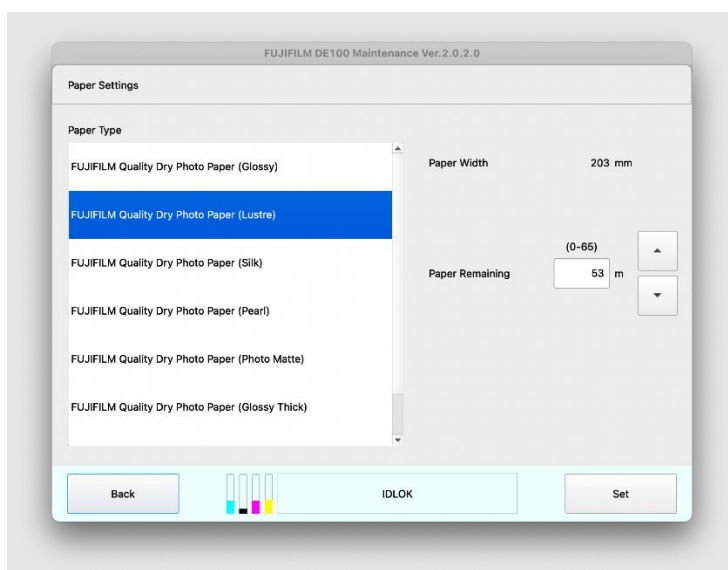
If you do not set the paper type in both places, you will receive a “paper mismatch” error.

Paper Type Setting in the DE100 Maintenance Tool

Open the DE100 Maintenance Tool and log in as “user”. Leave the password field blank. Click “Login” and then click on “Paper Settings” in the next window.



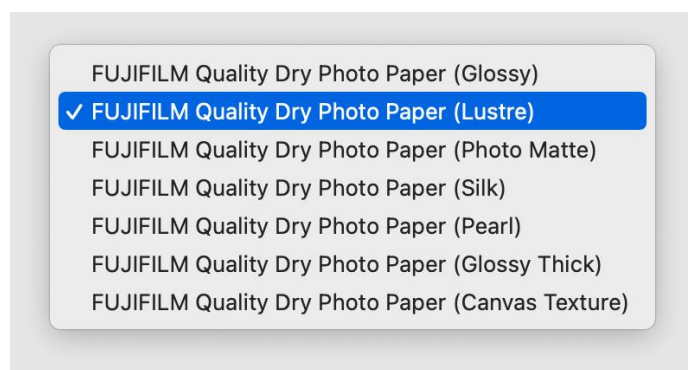
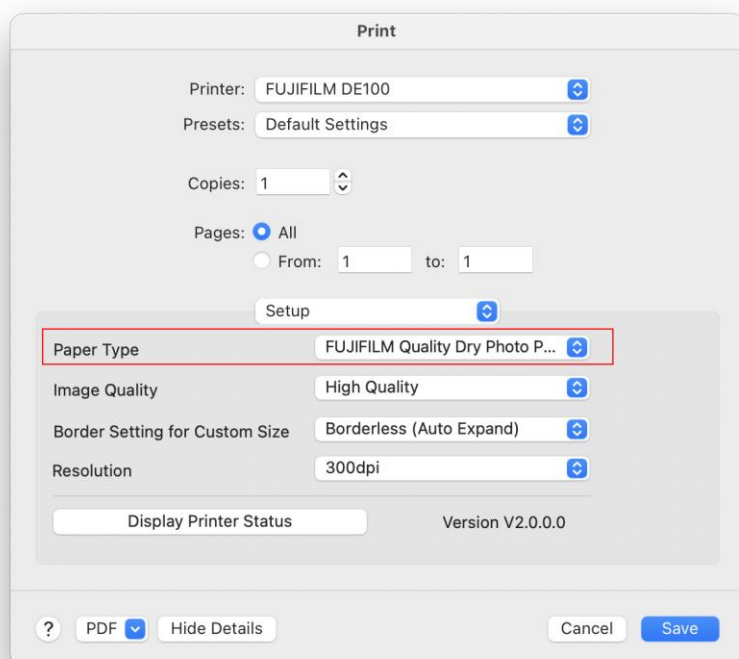
Select the paper type to be used once it is loaded, and then click “Set”. Close the Maintenance Tool.



Paper type setting in DE100 printer driver

Open the printer driver in Lightroom with the button “Print Settings” when creating the print template. Open the drop-down menu “Setup”.

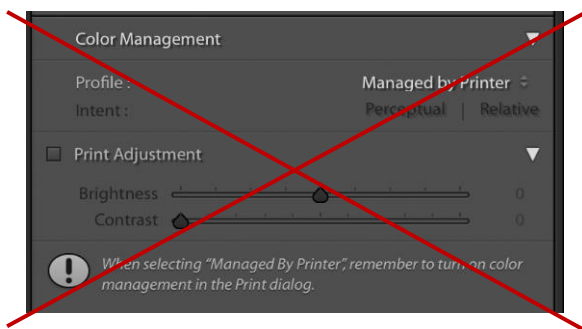
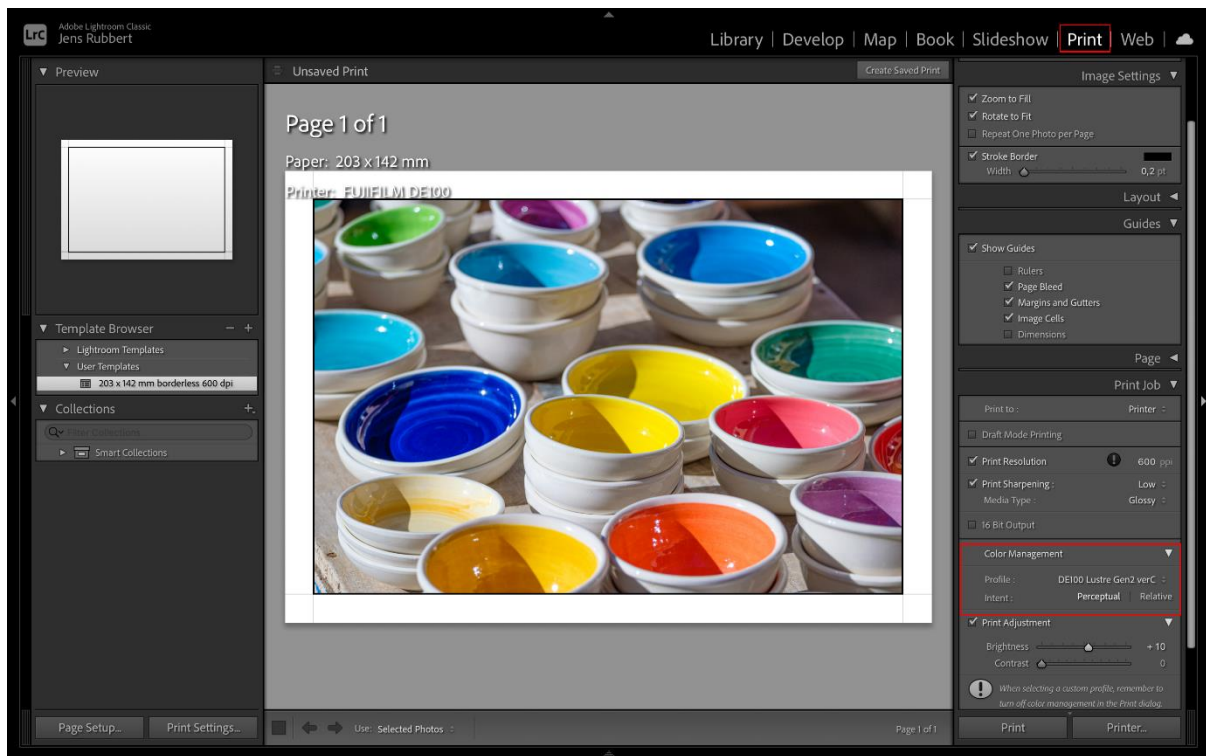
Then open the drop-down menu “Paper Type” and select the loaded paper type. This must be the same paper type chosen in the DE100 Maintenance Tool.



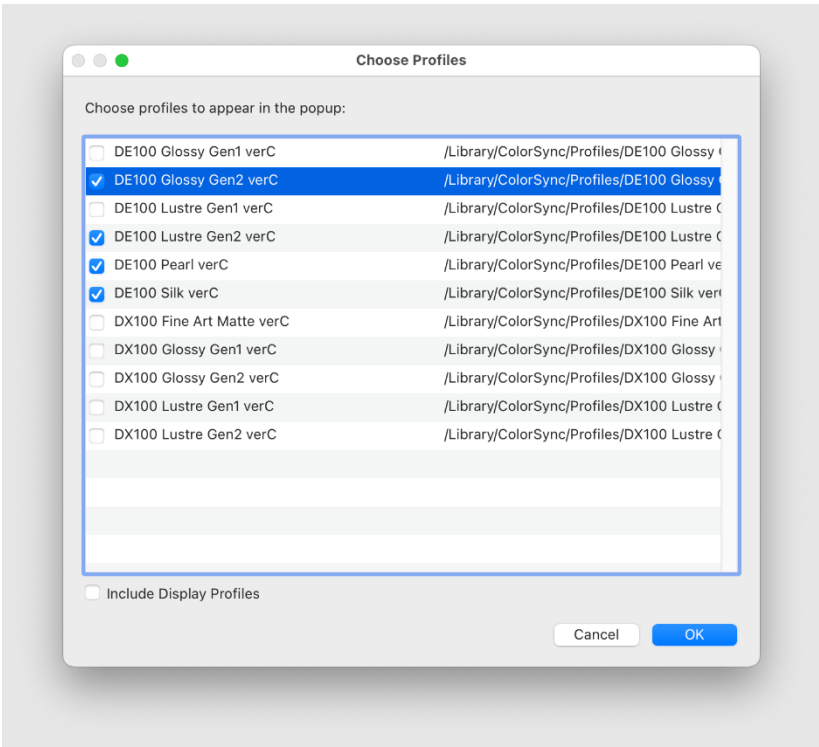
To see the selected paper type in the printer driver, the drop-down menu must be opened. Otherwise only the generic product name is visible, and not the surface type.

Print Color Management Settings in Lightroom Classic

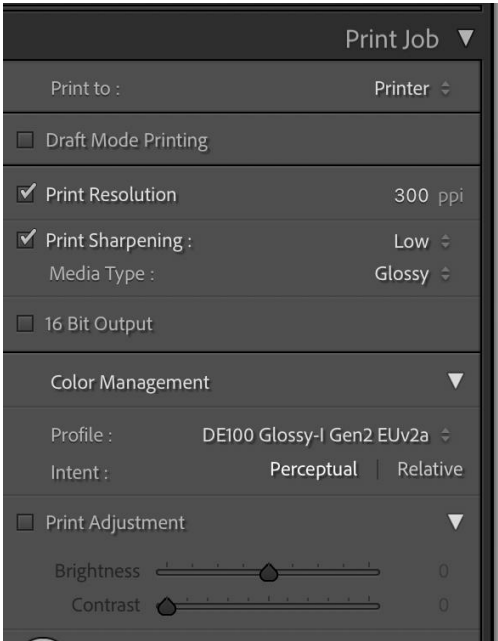
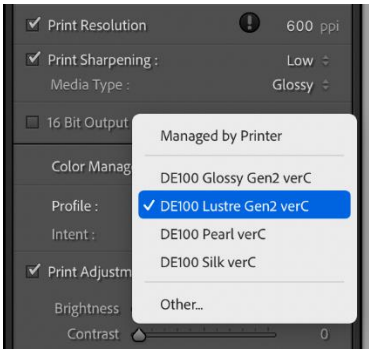
The default option in Lightroom print color management settings is “Managed by Printer”. This setting should **not** be used in a color consistent color management workflow.



Click "Managed by Printer" to open the ICC profile selection. Click "Other" and select the required ICC Profiles for the paper types to be used on the Fujifilm DE100 printer.



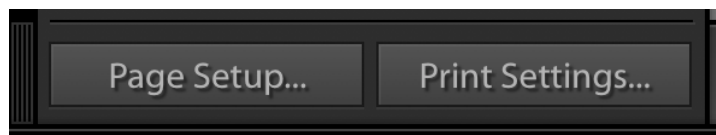
Select the profile for the specific Fujifilm paper type used for this print template.



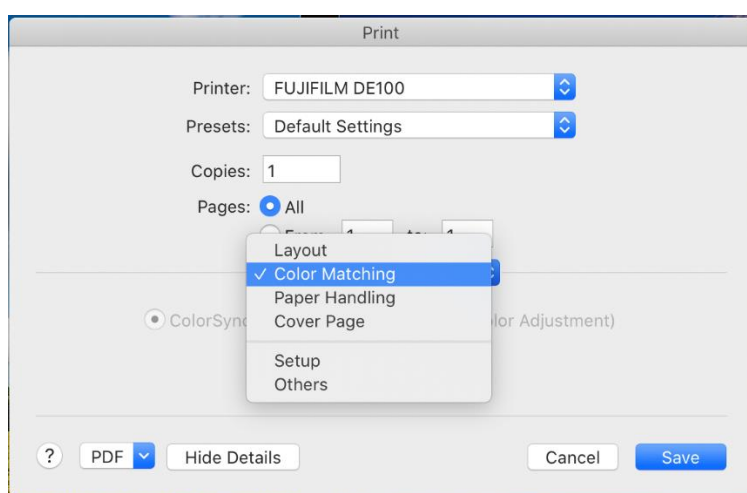
Choose “Perceptual” for Intent. The ICC-profiles for the DE100 are optimized for the perceptual color rendering intent.

Recommended Color Management Settings in the DE 100 Printer Driver for Mac

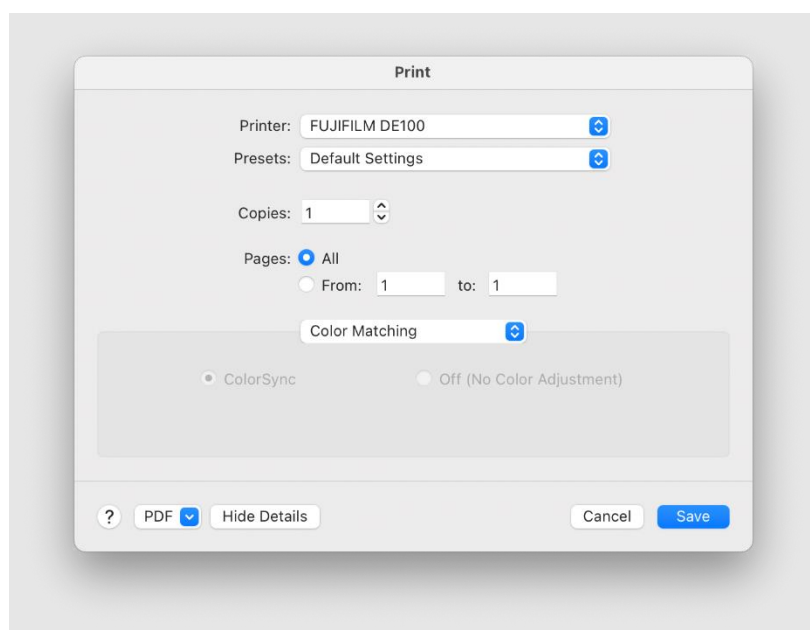
Open the printer driver by clicking “Print Settings” in Lightroom.



Select the “Color Matching” menu from the dropdown in the printer driver menu.



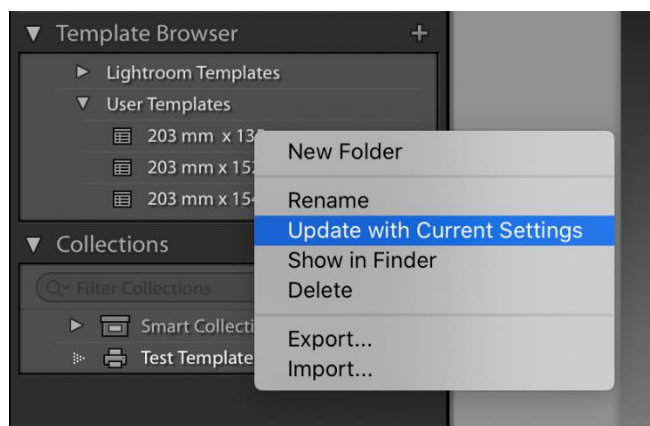
When you have manually selected an ICC-profile in Lightroom, the Color Matching menu will look like this. This setting is OK.



“ColorSync and “Off (No Color Adjustment)” are greyed out when an ICC profile is selected in the Lightroom print job.

If the ColorSync function is de-activated (greyed out), then no color conversion will be performed by the printer driver. The color conversion will be done by Lightroom only. **This is the recommended setting** for a consistent color management print workflow.

Important: When all settings for this print template are correct, right-click (or hold Ctrl and left-click) on the name of this template. Click on “Update with Current Settings” to ensure that the updated settings are applied to future print jobs using this template.



Now you can start printing with the correct color management performed by Lightroom.

All print-related settings are now saved in this specific print template.

Printing in Adobe Lightroom Classic

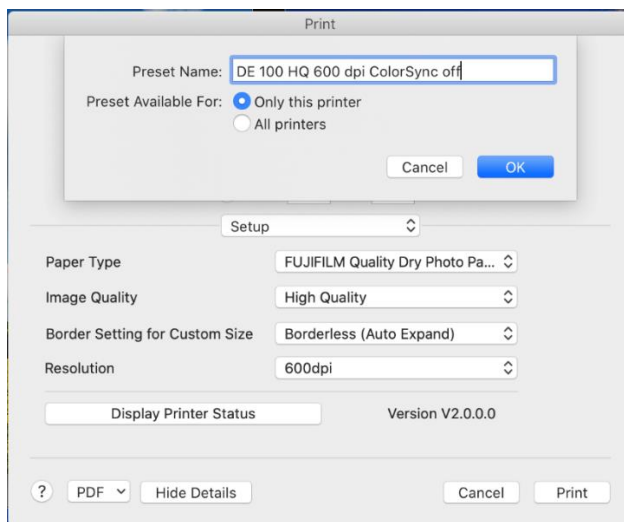
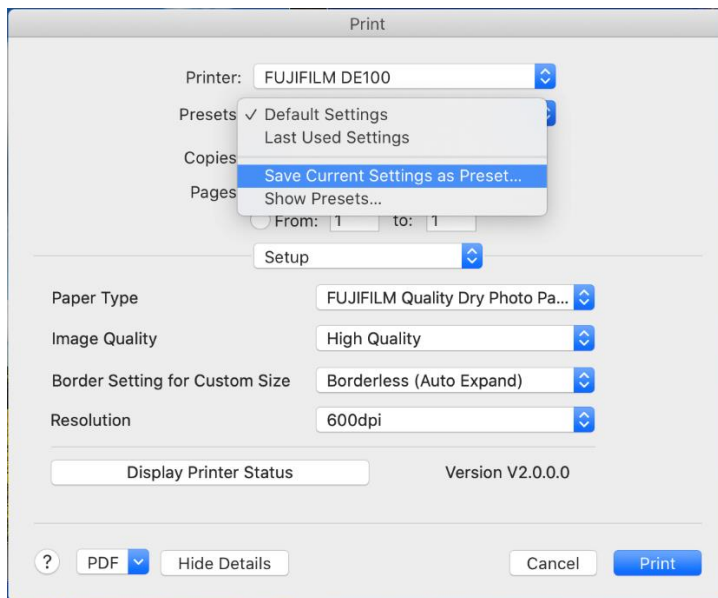
There are two different print options in Lightroom Classic:



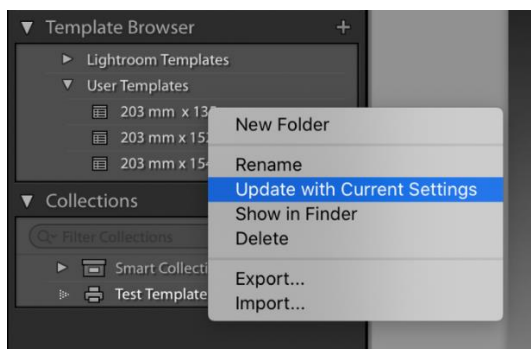
1) **“Print”** allows you to directly print with only one click. All settings of the current template will be used.

2) **“Printer...”** allows you to modify the printer driver's settings if required for the next print. This button opens the printer driver menu.

Caution: Any modification of the printer driver settings will only be applied to this particular print job. To modify the settings for all future prints, the changes must be saved as a new preset in the printer driver.

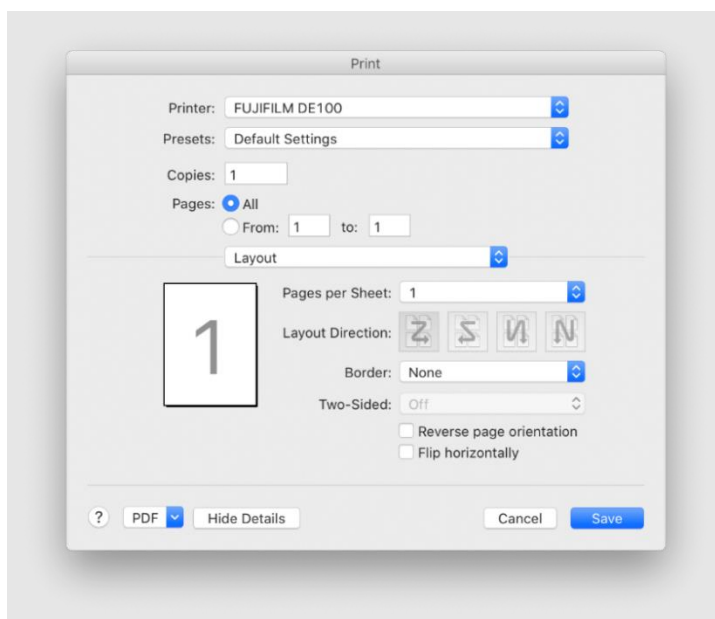


To permanently apply the new settings to the chosen print template, you must right-click the print template and choose “Update with Current Settings”.

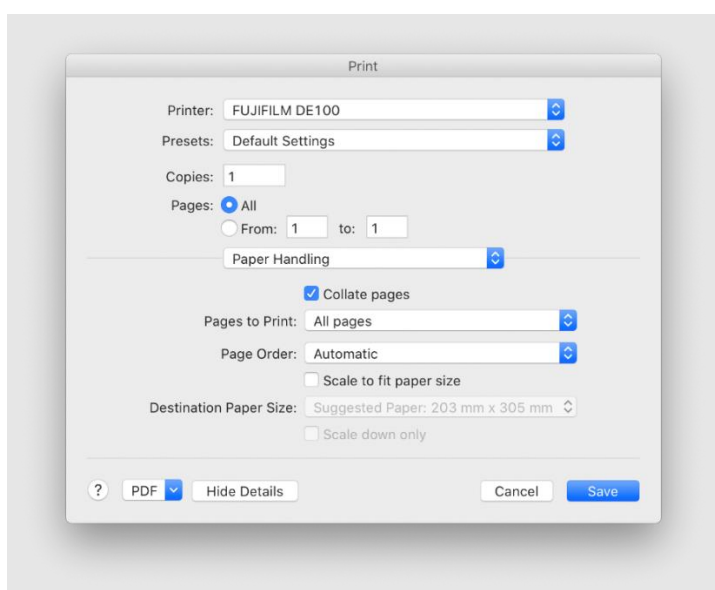


For your reference, here are the recommended settings for the other menus of the DE100 printer driver for best print results:

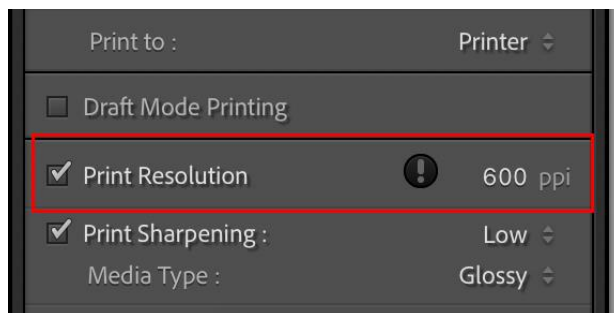
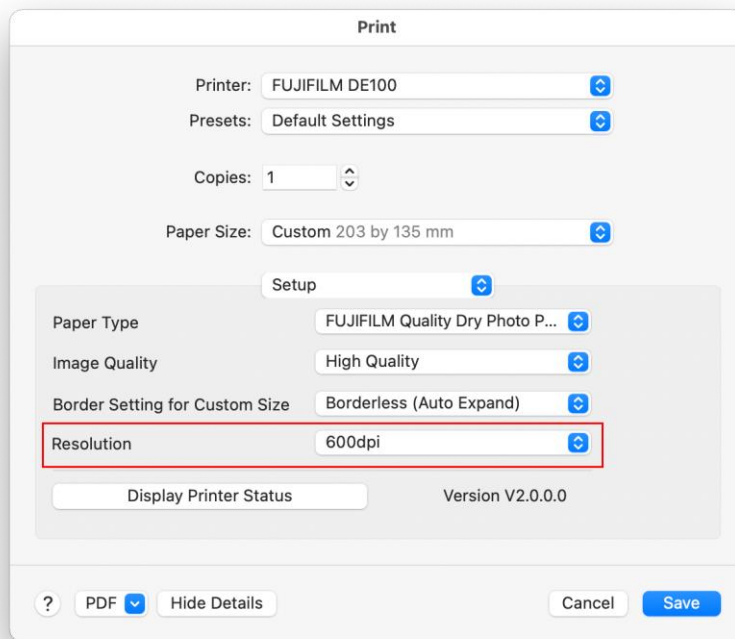
“Default Settings” Menu



“Paper Handling” Menu



“Setup” Menu



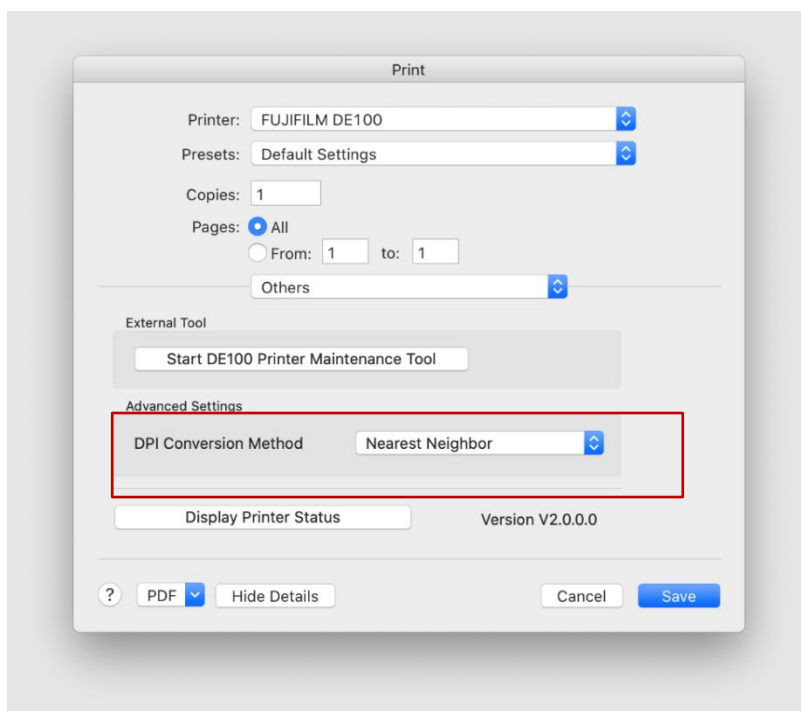
The “High Quality” setting is recommended for professional prints. The DE100 printer can print with extremely high real resolutions up to 1200 dpi.

For general photos, 300 dpi strikes a good compromise between good resolution and reasonable file sizes.

When images with very high resolution or fine graphic and text elements are printed, 600 dpi – 1200 dpi is recommended to ensure extremely sharp prints.

Make sure to match the resolution settings both in the printer driver and in the Lightroom “Print Job” menu.

“Others” Menu



The “Nearest Neighbor” resizing method is recommended for the best visual sharpness.

Additionally, the DE100 Maintenance Tool can be started, and the printer status can be displayed directly from the “Others” printer menu.

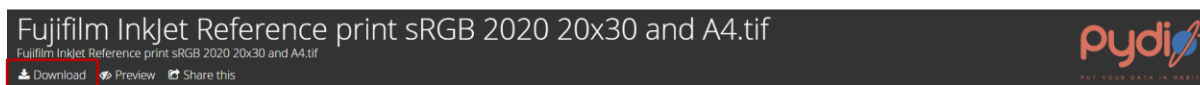


After setting the proper color management settings, it is good to check the color reproduction of a print. A useful Fujifilm test image file can be downloaded here (12,8 MB) (Ctrl + click on the link):

<https://share1.fujifilm.eu/data/public/72784f1024bf8634de7c7363bf2380c3.php>



Just click on “Download” as highlighted below.



General Recommendations for a Consistent Color Workflow

It is important to control the display and the viewing light conditions for print inspection in order to achieve a consistent color reproduction.

- The display of the Mac computer should be calibrated and ICC profiled, using a spectrophotometer and profiling software.
- The white point of the display should be set at 5500 K – 6500 K, depending on the surrounding light conditions. A neutral grey should appear neutral to the user’s eye.
- The brightness of the display should be set between 100 cd/m² and 180 cd/m² to match the brightness of the illumination in the room.
- To check the color reproduction of any print, the illumination should be similar to daylight. It should have a color temperature of 4000 K – 5000 K. The Color Rendering Index (CRI or Ra) must be CRI > 90. (Good LEDs can have CRI > 95, which is very good.)
Otherwise, the printed colors may look poor, or the grey balance might not appear neutral due to insufficient light color quality.
Using fluorescent tubes or LED lights with a CRI of less than 90 is not recommended.
- Daylight is not consistent over the course of the day as both the intensity and color temperature of the light show a huge variation over time. Therefore, a stable standard light is preferred when judging printed colors.