



SureColor R-Series

Media Profiling: Epson Edge Print

The Epson Media profiling guide will describe how to create a CMYK media profile for the SureColor R5070/R5070L that will be used for Epson Edge print RIP software. It is critical to produce a good profile and choose the right mechanical setting to achieve the best results.

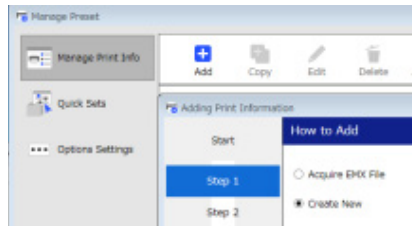
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Items needed

- PC running Windows 7 SP1 x64 or higher
- Epson Edge Print software
- X-Rite i1Profiler software
- Spectrophotometer supported by i1Profiler
- Epson IDF Chart Print Tool for SC-R5070/R5070L

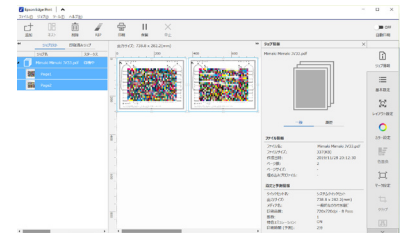
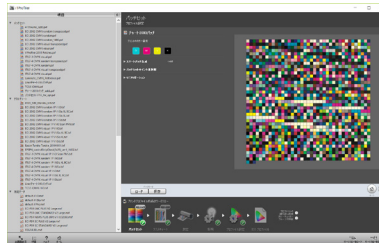
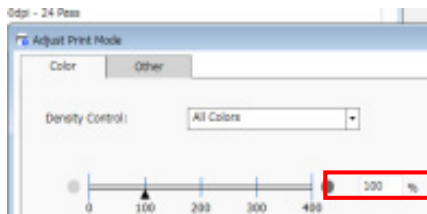
1. Workflow overview



1. Mechanical adjustment.

2. Add new print mode on Epson Edge Print.

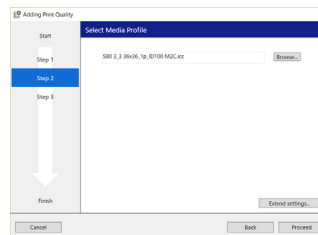
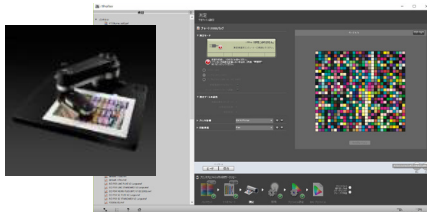
3. Print ink density factor chart from the IDF tool to find the maximum ink density.



4. Input ink density data into Epson Edge Print.

5. Create color chart using X-Rite i1Profiler software.

6. Print color chart data with the desired IDF (CMS off).



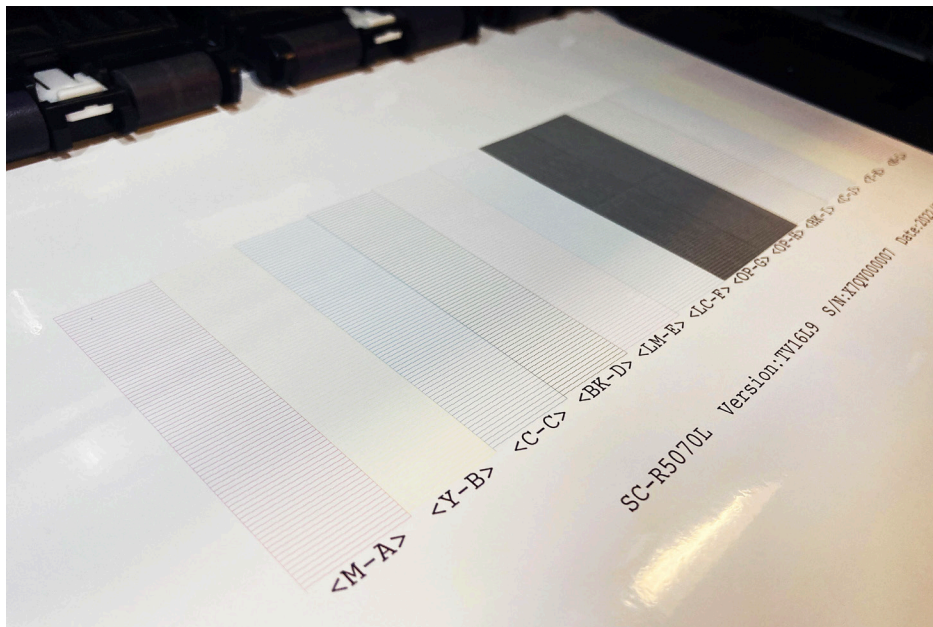
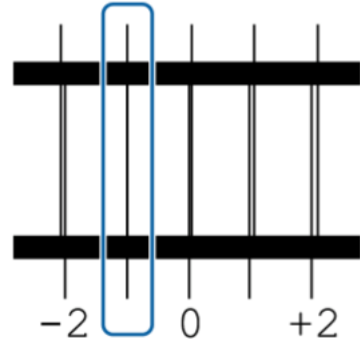
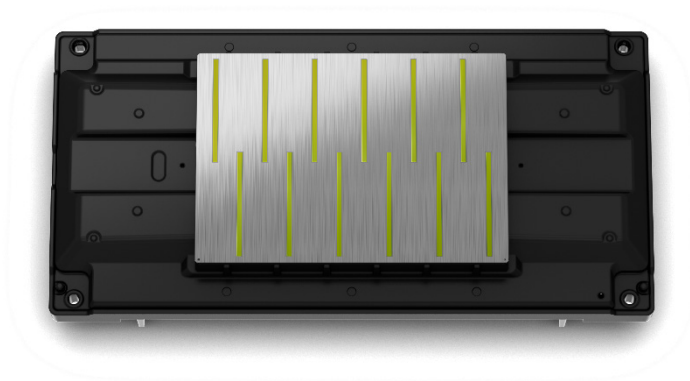
7. Measure the printed chart and create the media profile.

8. Import profile to created print mode.

*Please note: Epson Edge Print will only run on a PC running Windows 7 or higher

Mechanical adjustment

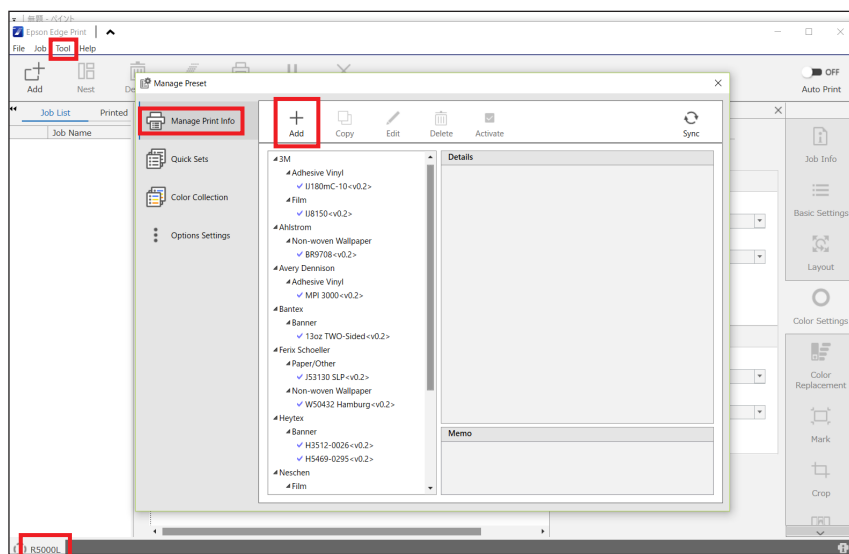
Before creating a media profile, ensure all the nozzles are firing at 100%. Perform mechanical adjustments such as uni-directional and bi-directional. When given the options, it is recommended to perform manual adjustments for a more precise alignment. Mechanical adjustments can affect the quality of the print profile.



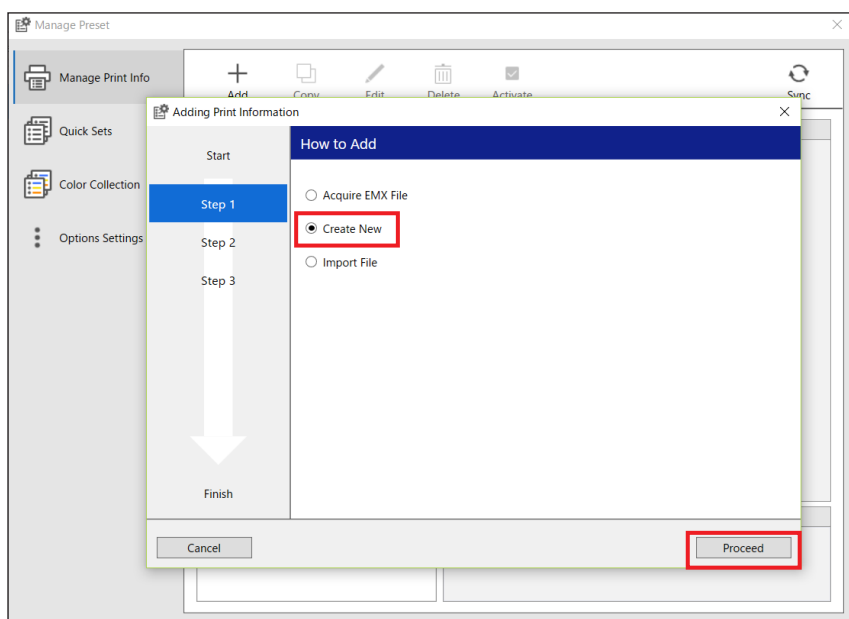
2. Creating new print mode in Epson Edge Print

Create the target print mode for the SC-R5070/R5070L Series on Epson Edge Print.

- Open the Epson Edge Print software and select the printer "R5070" or "R5070L"
- Click on "Tool" > Select "Manage Print Info" > Click on "Add".



Select "Create New" and click "Proceed".



2. Creating new print mode in Epson Edge Print

Enter a media name, choose a vendor from the drop-down menu, and click "Proceed".

The screenshot shows the 'Adding Print Information' dialog box with the 'Enter Basic Information' step selected. The 'Media Name' field contains 'Test' and the 'Vendor' dropdown menu is set to '4M'. The 'Proceed' button is highlighted with a red box.

Step	Action
Start	Start
Step 1	Step 1
Step 2	Enter Basic Information
Step 3	Step 3
Finish	Finish

Media Name:

Vendor:

Buttons: Cancel, Back, Proceed

Select a media type and click "Finish".

The screenshot shows the 'Adding Print Information' dialog box with the 'Select Media Type' step selected. The 'Adhesive Vinyl' media type is selected in the list. The 'Finish' button is highlighted with a red box.

Step	Action
Start	Start
Step 1	Step 1
Step 2	Step 2
Step 3	Select Media Type
Finish	Finish

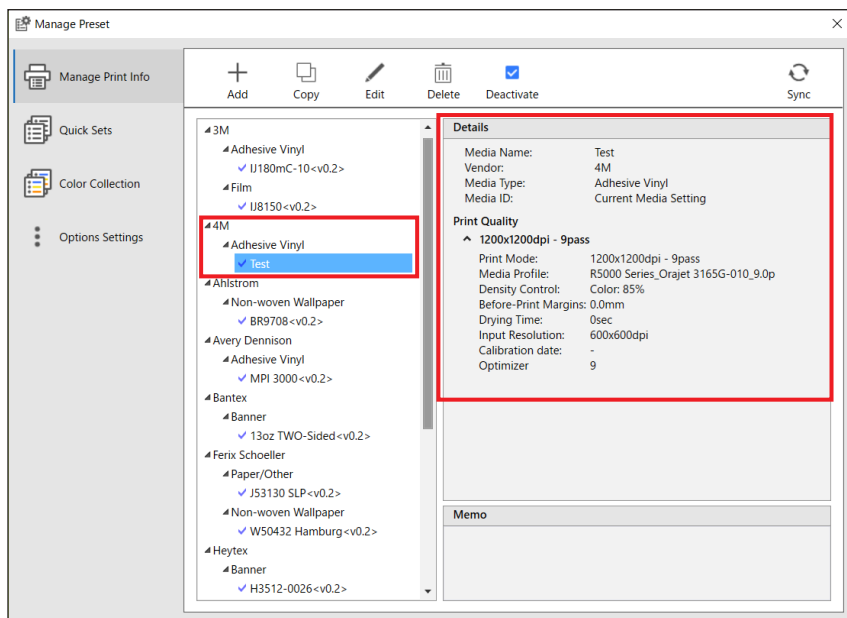
Media Type List:

- Adhesive Vinyl
- Banner
- Film
- Textile
- Paper/Other
- Non-woven Wallpaper

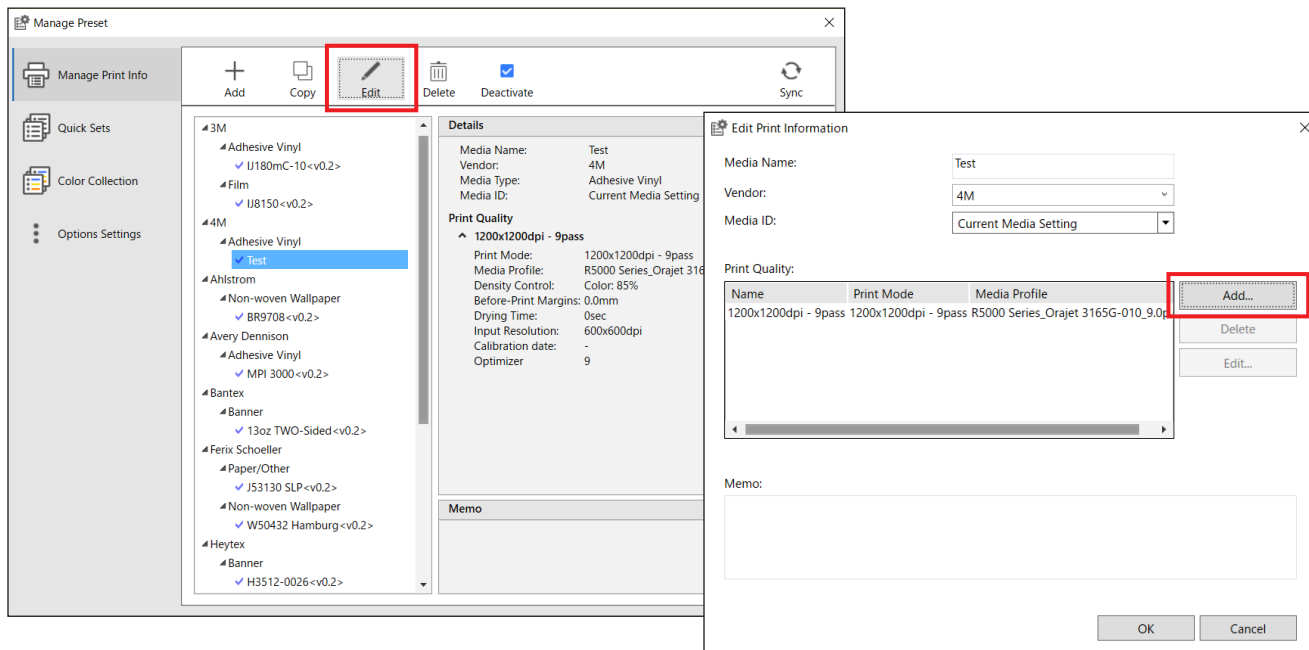
Buttons: Cancel, Back, Finish

2. Creating new print mode in Epson Edge Print

The new print mode will appear in the media list.

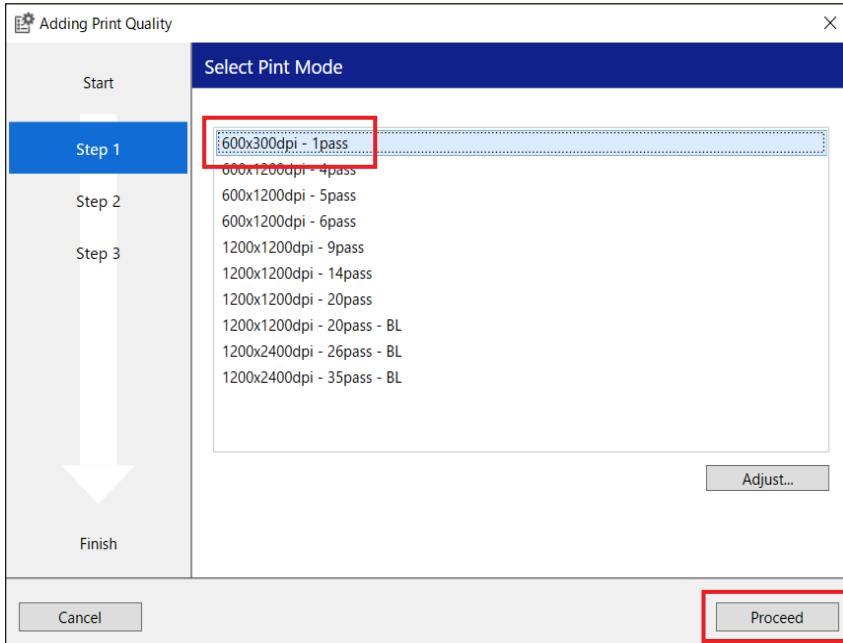


Click on "Edit" and then select "Add...".

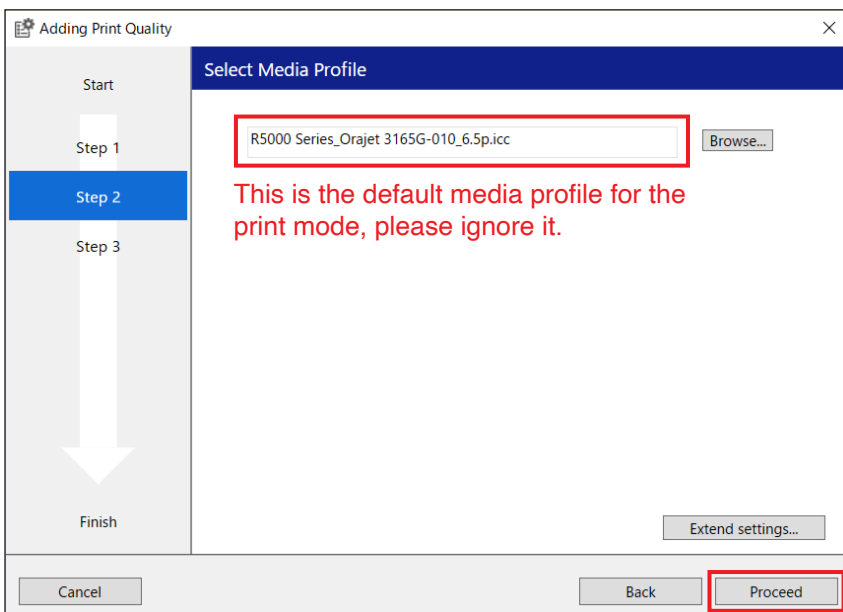


2. Creating new print mode in Epson Edge Print

Select a print mode you want to create the media profile for and click "Proceed".

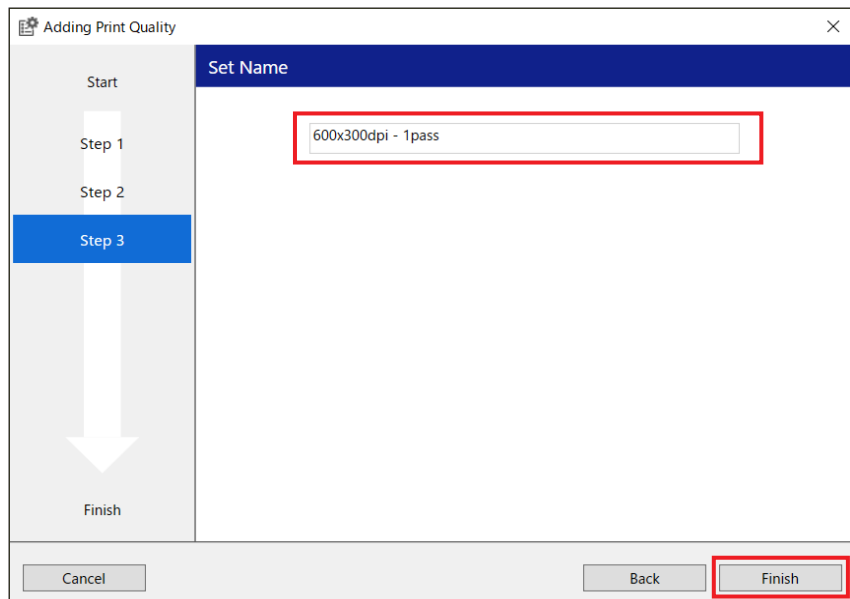


You can see the default media profile for this print mode, please ignore it and click "Proceed".
(After we have created the new media profile, we will import it here and discard the default profile.)

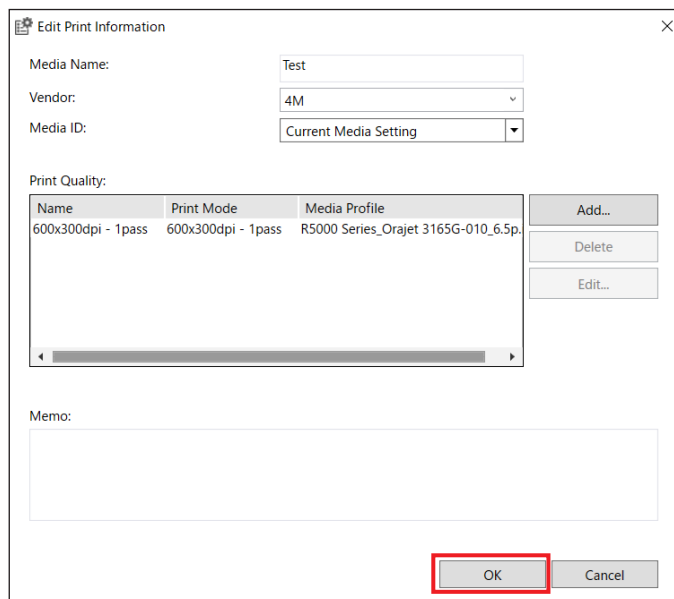
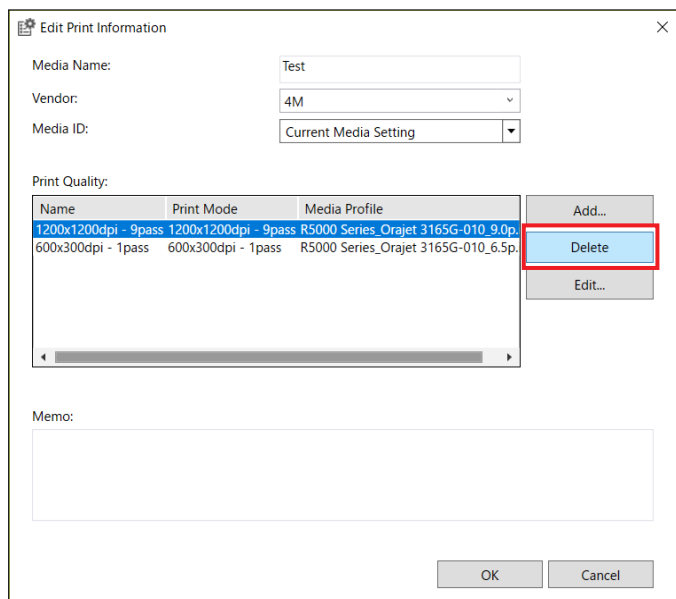


2. Creating new print mode in Epson Edge Print

Type in a name and click "Finish".

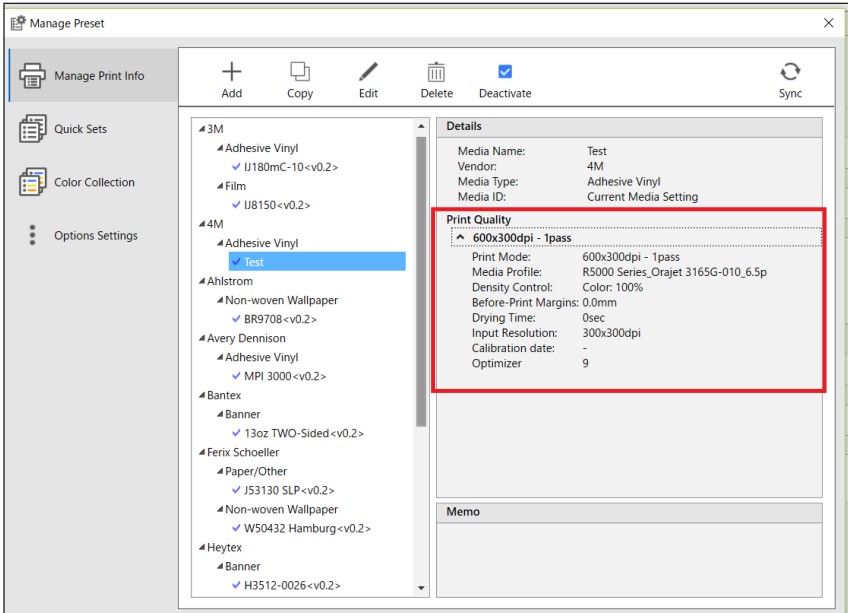


Select any unnecessary print quality (1200x1200dpi - 9pass), click "Delete", then select "OK".



2. Creating new print mode in Epson Edge Print

Your new print mode (600x300 - 1pass) has been created.



3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Installing the SC-R5070/R5070L driver on the computer.

Usually the driver gets installed when installing the Epson Edge Print (RIP) software. If you need to download the driver please use the following steps below.



The screenshot shows the Epson Edge Print download site on the left and a list of printer drivers on the right. The list includes various Epson printer models and their corresponding driver files, with download buttons for each.

Printer Model	Driver File Name	Size	Release Date	Action
SC-S80600L Series	EEP-SC-S80600L_V4.0.0.2.zip	96 MB	20th Oct. 2021	Download
SC-S80600 Series	EEP-SC-S80600_V4.0.2.zip	163 MB	20th Oct. 2021	Download
SC-S80600L Series	EEP-SC-S80600L_V4.0.2.zip	163 MB	20th Oct. 2021	Download
SC-P10000 Series	EEP-SC-P10000_V4.0.2.zip	131 MB	20th Oct. 2021	Download
SC-P20000 Series	EEP-SC-P20000_V4.0.2.zip	131 MB	20th Oct. 2021	Download
SC-V7000 Series	EEP-SC-V7000_V4.0.2.zip	143 MB	20th Oct. 2021	Download
SC-R5000 Series	EEP-SC-R5000_V4.0.2.zip	105 MB	20th Oct. 2021	Download
SC-R5000L Series	EEP-SC-R5000L_V4.0.2.zip	105 MB	20th Oct. 2021	Download
SC-F10000H Series FpFy	EEP-SC-F10000H FpFy_V4.1.0.zip	446 MB	20th Oct. 2021	Download
SC-F10000H Series LcLm	EEP-SC-F10000H LcLm_V4.0.2.zip	118 MB	20th Oct. 2021	Download
SC-T77000 Series	EEP-SC-T77000_V4.1.0.zip	103 MB	20th Oct. 2021	Download
SC-P85000 Series	EEP-SC-P85000_V4.1.0.zip	105 MB	20th Oct. 2021	Download

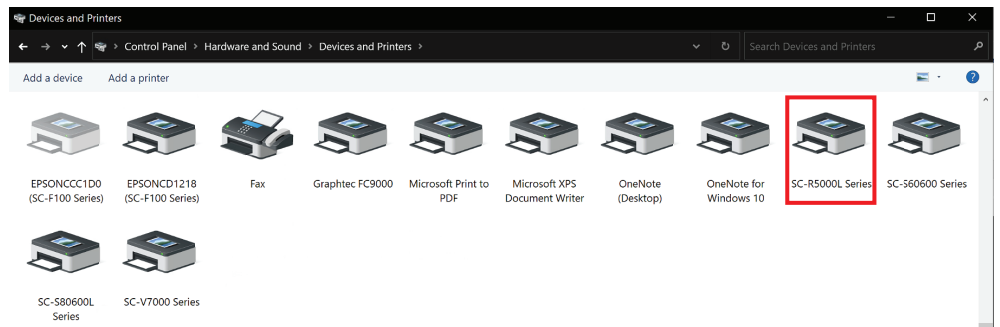
1. Go to:
<https://support.epson.net/eep>

2. Search through the list of printer drivers. download SC-R5000 Series.

3. Install the printer driver.



EPSON
SC-R5000
Series Comm
Driver



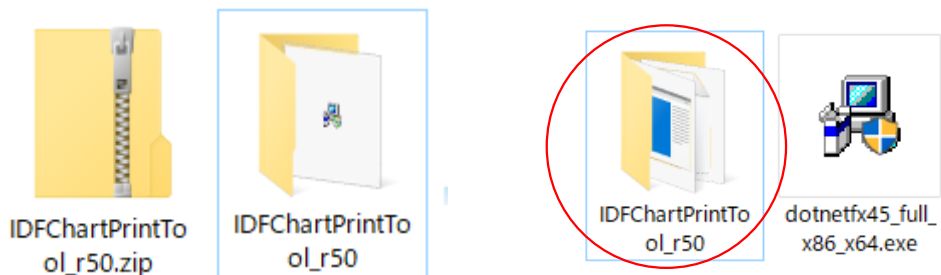
4. The printer driver is installed.

You can check if the driver is installed by going to:
Control Panel > Hardware and Sound > Devices and Printers

3. Choosing Ink Density with the Ink Density Factor (IDF) tool

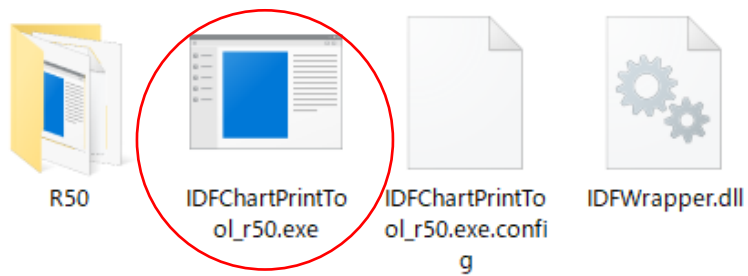
Starting the Epson IDF Chart Print Tool.

(The IDF Tool will be provided by Epson to authorized personnel)



1. Unzip the file.

2. After unzipping, you will see two files.
Open the folder "IDFChartPrinTool_r50".



3. Double-click on "IDFChartPrinTool_r50.exe"

3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Check "I accept terms in the License Agreement" and click on "Agree".

License Agreement

Epson IDF Chart Print Tool この PC に保存済み

Read the following License Agreement carefully.

SEIKO EPSON CORPORATION
SOFTWARE LICENSE AGREEMENT

IMPORTANT! READ THIS SOFTWARE LICENSE AGREEMENT CAREFULLY. The computer software product, fontware, typefaces and/or data, including any accompanying explanatory written materials (the "Software") should only be installed or used by the Licensee ("you") on the condition you agree with SEIKO EPSON CORPORATION ("EPSON") to the terms and conditions set forth in this Agreement. By installing or using the Software, you are representing to agree all the terms and conditions set forth in this Agreement. You should read this Agreement carefully before installing or using the Software. If you do not agree with the terms and conditions of this Agreement, you are not permitted to install or use the Software.

1. License. EPSON and its suppliers grant you a personal, nonexclusive, royalty-free, non-sublicensable limited license to install and use the Software on any single

I accept the terms in the License Agreement

Exit Agree

The Epson IDF Chart Print Tool will be displayed.

Epson IDF Chart Print Tool

Epson IDF Chart Print Tool

Operational Procedure
Set the Print Parameter Setting first, then set the Chart Parameter Setting.
Note that the setting ranges of controls in 2.Chart Parameter Setting may change depending on the setting in 1.Print Parameter Setting and a part of 2.Chart Parameter Setting.

1. Print Parameter Setting

1-1. Printer Name: EPSON SC-R5000L file

1-2. Ink Config: Color

1-3. Media Type: Vinyl

1-4. Print Mode: 600x300dpi - 1 Pass

Comment:

2. Chart Parameter Setting

2-1. Function Chart: Rough Chart (Serial) Print

2-2. Print Width(44 - 50(inch)): 44

2-3. IDF Start Value(0 - 100(*) - 400(%)): IDF Upper Limit(32 - 100(*) - 400(%)): 100

2-4. IDF Interval(2 - 25(%)):

2-6. IDF Value(Optimizer)(0 - 100(%)): 9

3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Set up the print parameters (1-4):

Epson IDF Chart Print Tool

Epson IDF Chart Print Tool

Operational Procedure
Set the Print Parameter Setting first, then set the Chart Parameter Setting.
Note that the setting ranges of controls in 2.Chart Parameter Setting may change depending on the setting in 1.Print Parameter Setting and a part of 2.Chart Parameter Setting.

1. Print Parameter Setting

1-1. Printer Name: EPSON SC-R5000 Series Comm Driver

1-2. Ink Config: Color

1-3. Media Type: Vinyl

1-4. Print Mode: 600x300dpi - 1 Pass

Comment:

1) Select "Printer Name":
EPSON SC-R50xxx

2) "Ink Config" is fixed

3) Select "Media Type"

4) Select "Print Mode"
(resolution and pass)

- 600x300dpi - 1 Pass
- 600x300dpi - 1 Pass
- 600x1200dpi - 4 Pass
- 600x1200dpi - 5 Pass
- 600x1200dpi - 6 Pass
- 1200x1200dpi - 9 Pass
- 1200x1200dpi - 14 Pass
- 1200x1200dpi - 20 Pass
- 1200x1200dpi - 20 Pass - BL
- 1200x2400dpi - 26 Pass - BL
- 1200x2400dpi - 35 Pass - BL

- Vinyl
- Vinyl
- Banner
- Film
- Paper/Other
- Wall Paper
- Canvas
- Textile

3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Set up the print parameters (1-5) and click "Print".

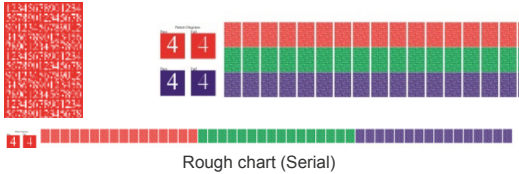
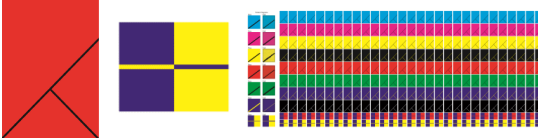
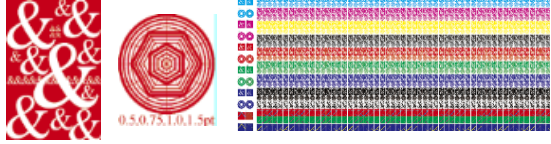
5) The recommended optimizer value is automatically assigned in the IDF tool based on your selected media type and print mode.

Please use the provided recommended settings:

Media	Pass	Optimizer
Vinyl	9Pass or less	9%
	14Pass or more	18%
Banner	9Pass or less	12%
	14Pass or more	24%
Film	9Pass or less	6%
	14Pass or more	12%
Paper	9Pass or less	12%
	14Pass or more	24%
Wall paper	9Pass or less	24%
	14Pass or more	48%
Fabric	9Pass or less	12%
	14Pass or more	24%

3. Choosing Ink Density with the Ink Density Factor (IDF) tool

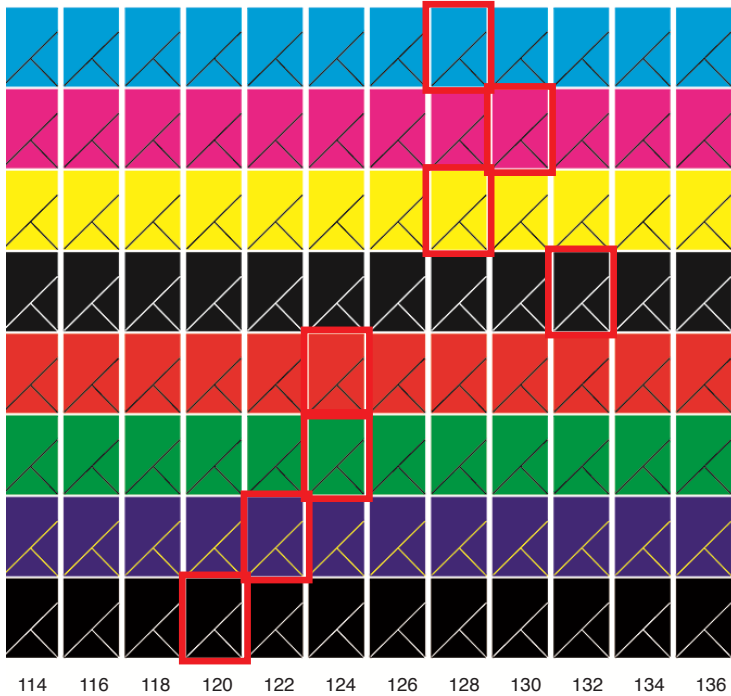
Function Charts:

Chart	Use	Image
<p>Rough Chart 25% interval is recommended.</p>	<p>If the maximum ink duty is unclear, use the Rough Chart IDF value.</p>	<p>R(M+Y), G(C+Y), B(C+M) theoretical increase per patch</p>  <p>Rough chart (Serial)</p>
<p>Detail Chart 2% interval is recommended.</p>	<p>If maximum ink duty is clear, use the Detail Chart value.</p>	<p>CMYK/RGB/Composite black theoretical increase per patch</p> 
<p>Text/Line Mixed Chart 2% interval is recommended.</p>	<p>For text/line mixed prints, use the Text/Line Mixed Chart value.</p>	

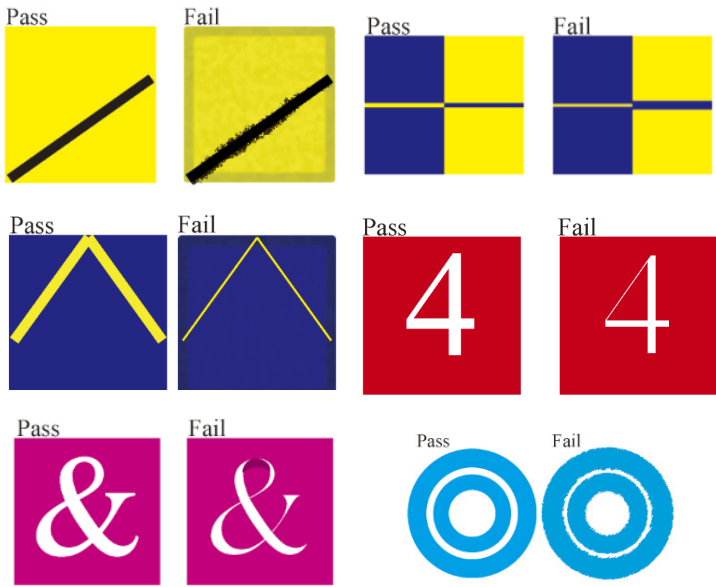
3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Visually inspect the printed samples. Find the maximum ink duty by looking for the highest ink limit that will pass the test below. Inspect the CMYK, RGB, and composite inks.

IDF Chart:



Test:



Check for over-inking, clumping, and bleeding

3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Caution

If ink duty is optimized based on the test on the previous page, the following issues may happen depending on your media. In this case, please adjust the IDF value or mechanical parameter settings.

Issues that can happen:

- Ink easily rubs off
- Prints do not dry
- Unevenness occurs vertically or diagonally
- Surface of print is wet, or marks of dried water appear on the surface

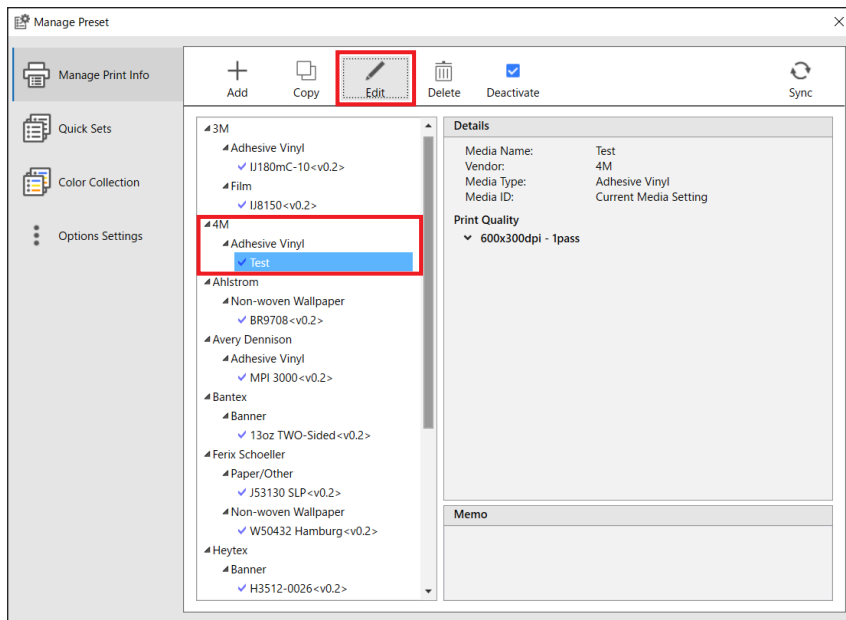
Please refer to the online manual for more details:

http://download2.ebz.epson.net/sec_cp_pubs/sc-r5000_series_sc-r5000l_series/online/en/contents/select.htm

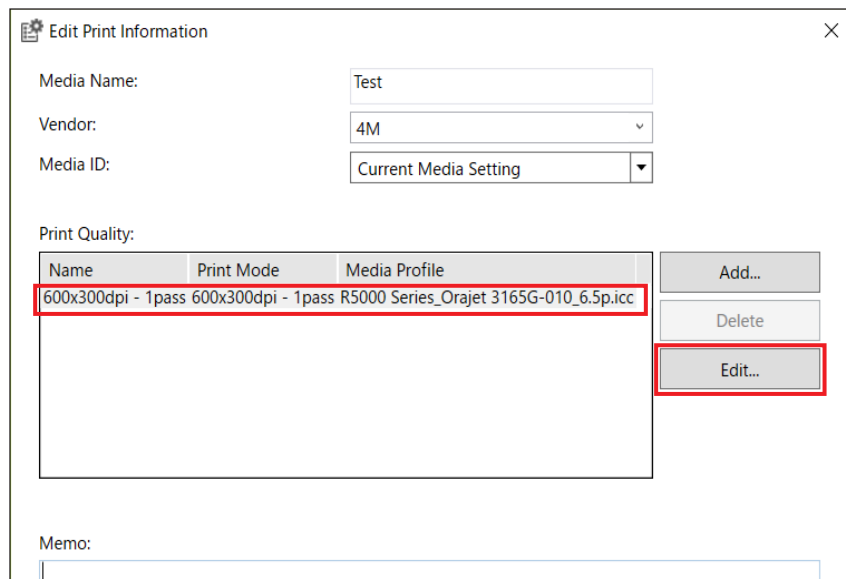
3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Input the selected IDF value to Epson Edge Print.

Select the print mode you created, then click "Edit".

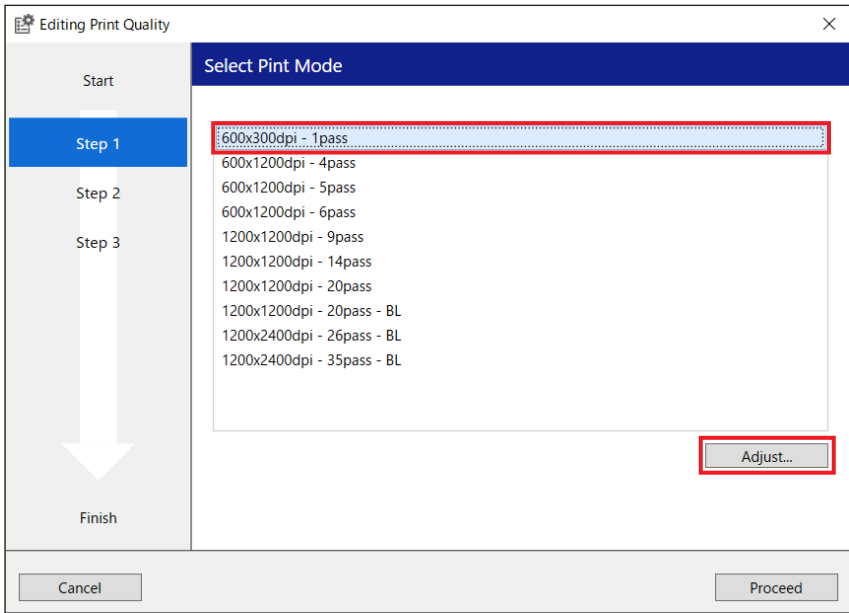


Select the target print quality you created, then click "Edit...".

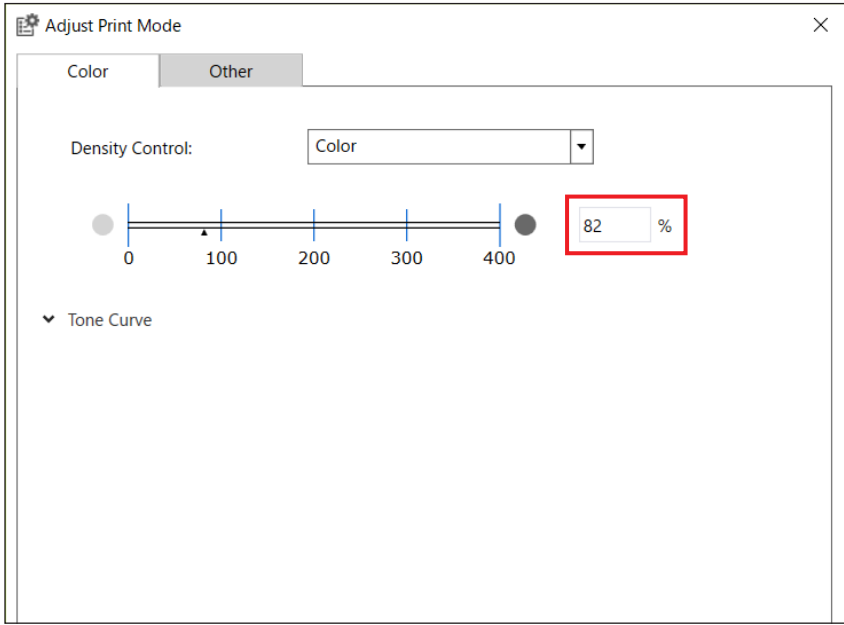


3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Select target print mode, then click "Adjust...".

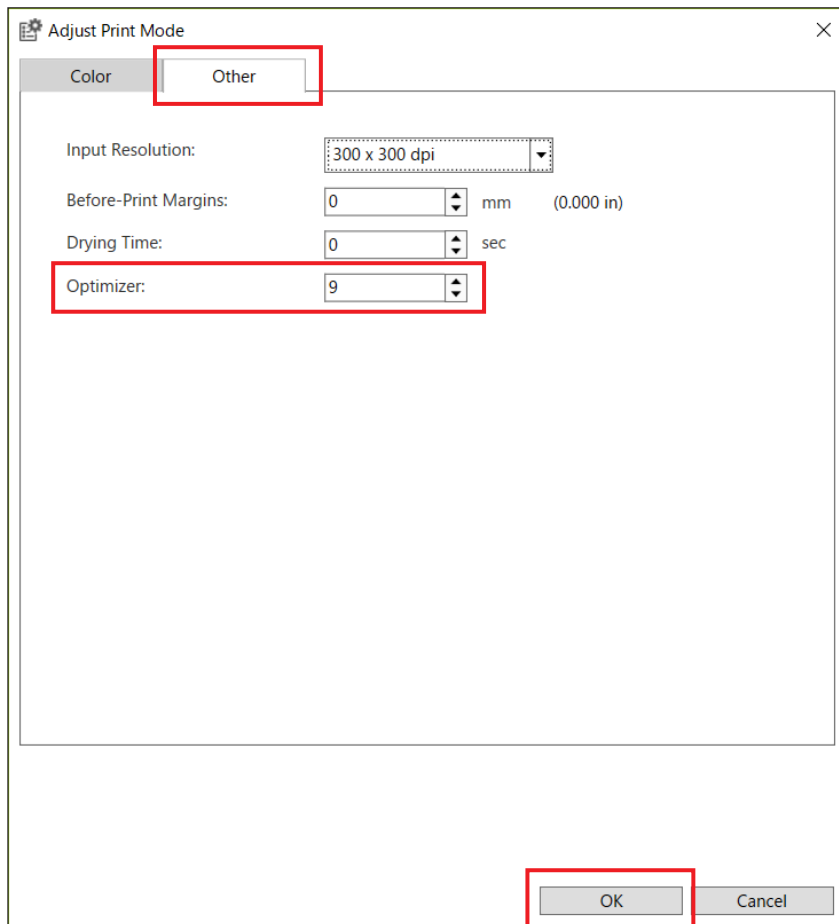


Input the selected IDF value to the color density.



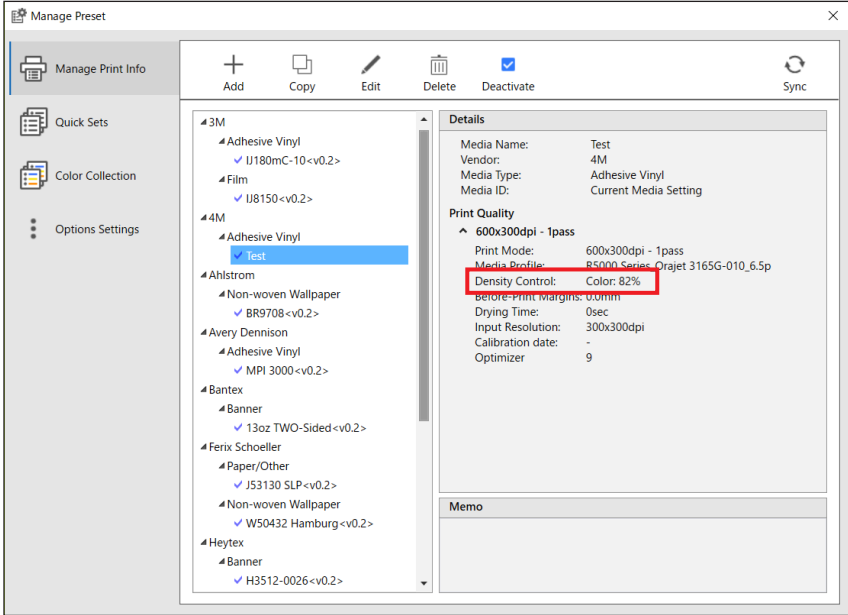
3. Choosing Ink Density with the Ink Density Factor (IDF) tool

Select the tab "Other". The value for Optimizer is automatically assigned to Epson Edge Print. Click "OK".



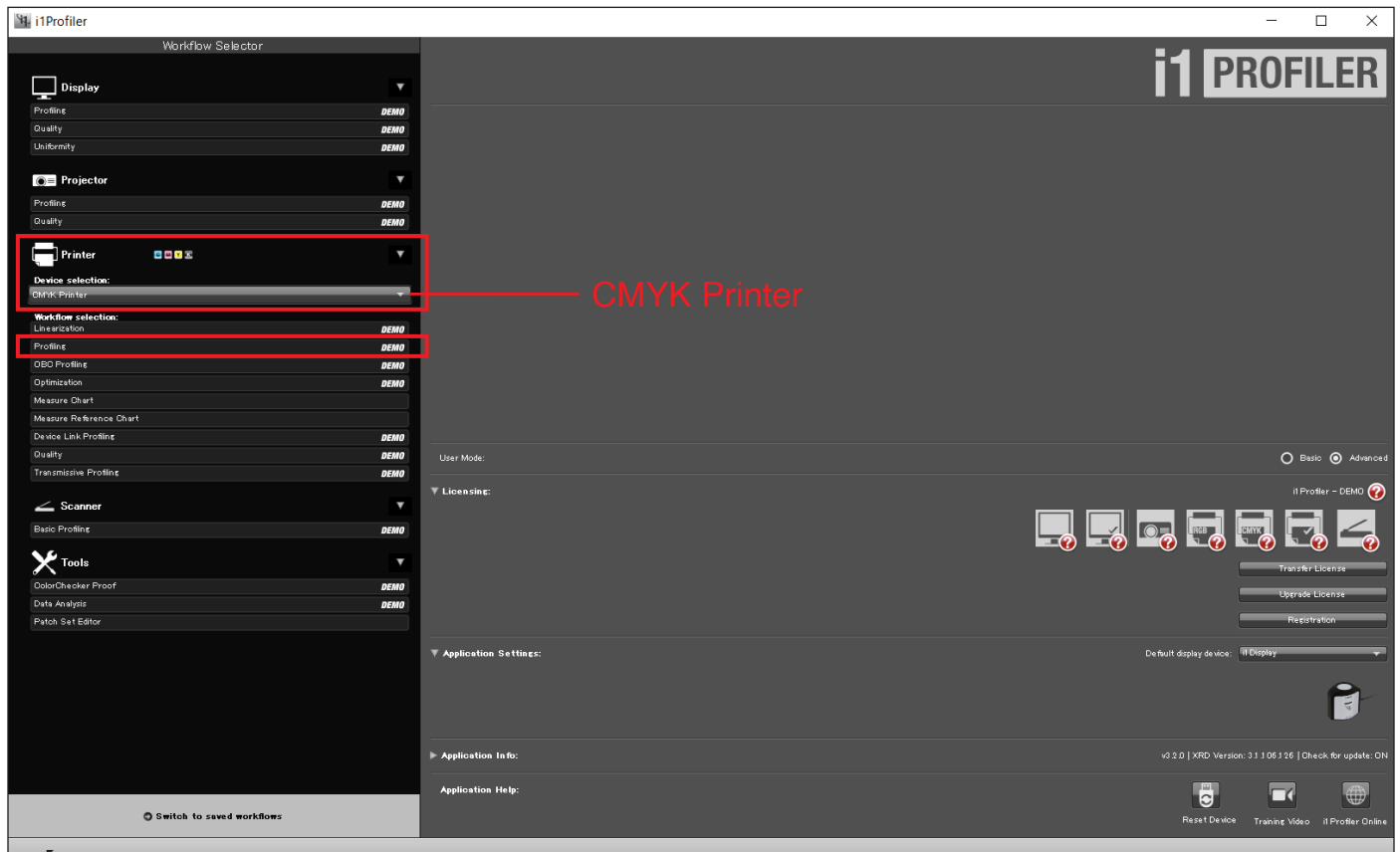
3. Choosing Ink Density with the Ink Density Factor (IDF) tool

The IDF has been updated.



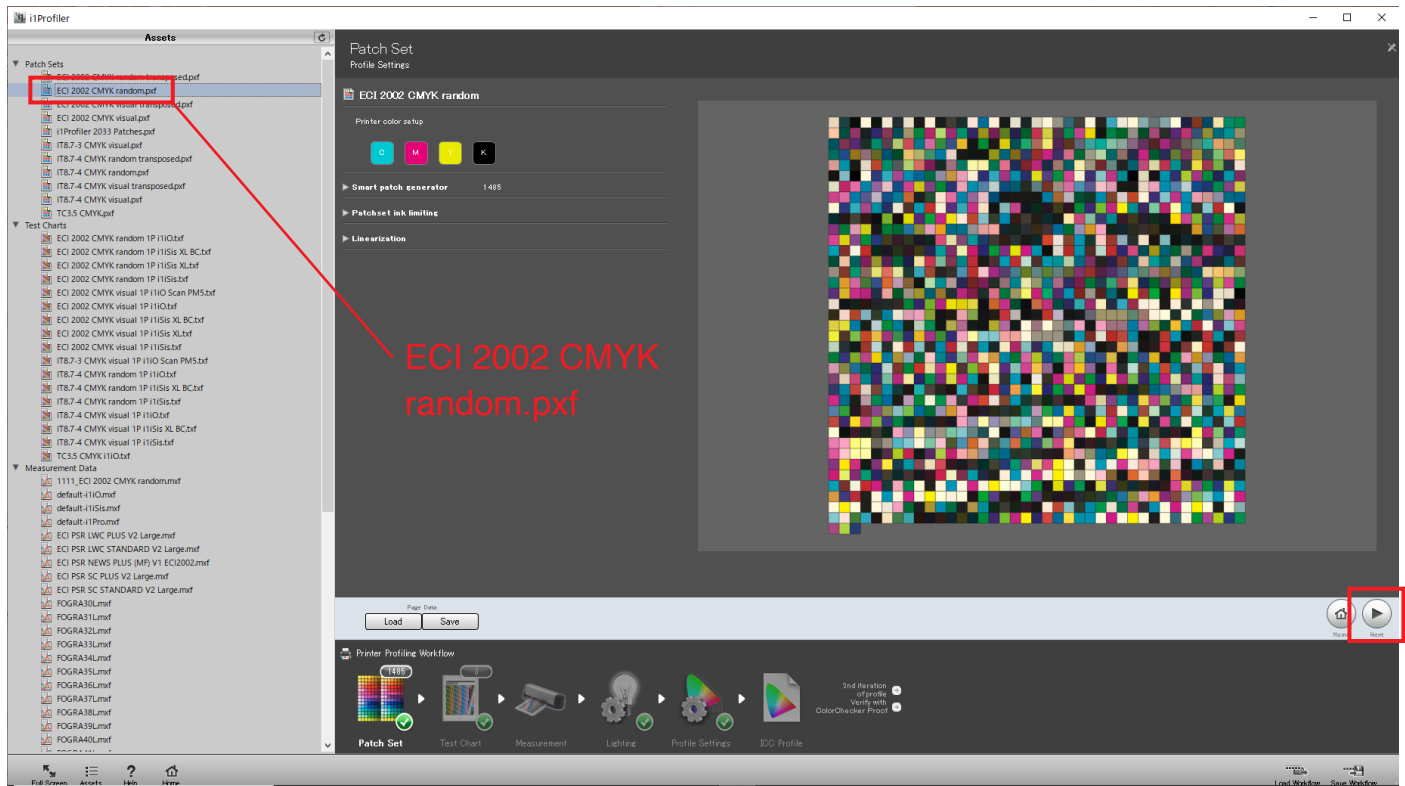
4. Creating media profile with X-Rite i1Profiler

- Start the i1Profiler software
- Click on the menu "Printer"
- Select "CMYK Printer"
- Click on "Profiling"



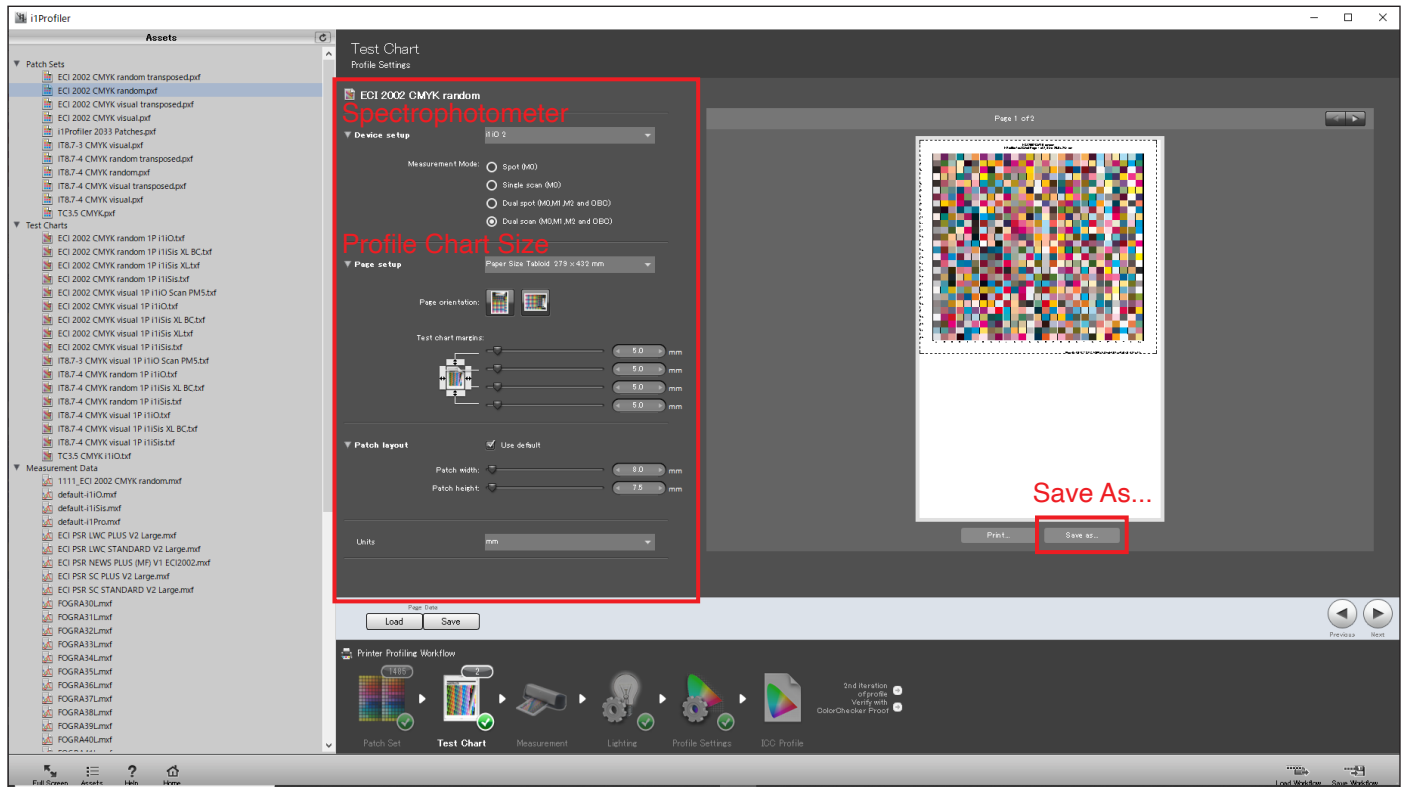
4. Creating media profile with X-Rite i1Profiler

- Select "ECI 2002 CMYK random.pxf".
- Click "Next".



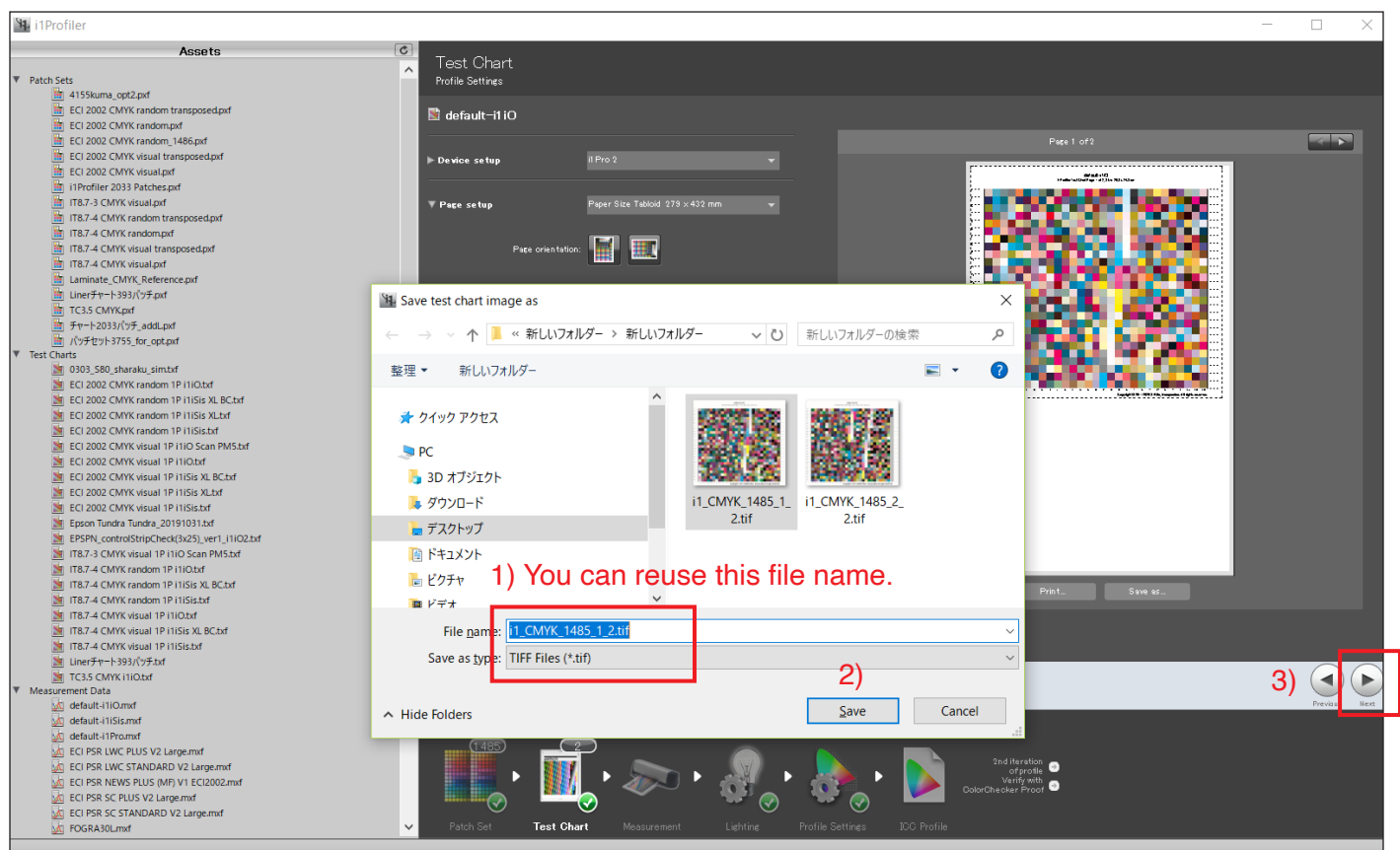
4. Creating media profile with X-Rite i1Profiler

- Select your spectrophotometer model.
- Choose the appropriate profile chart size for your spectrophotometer.
- Click on "Save as..."



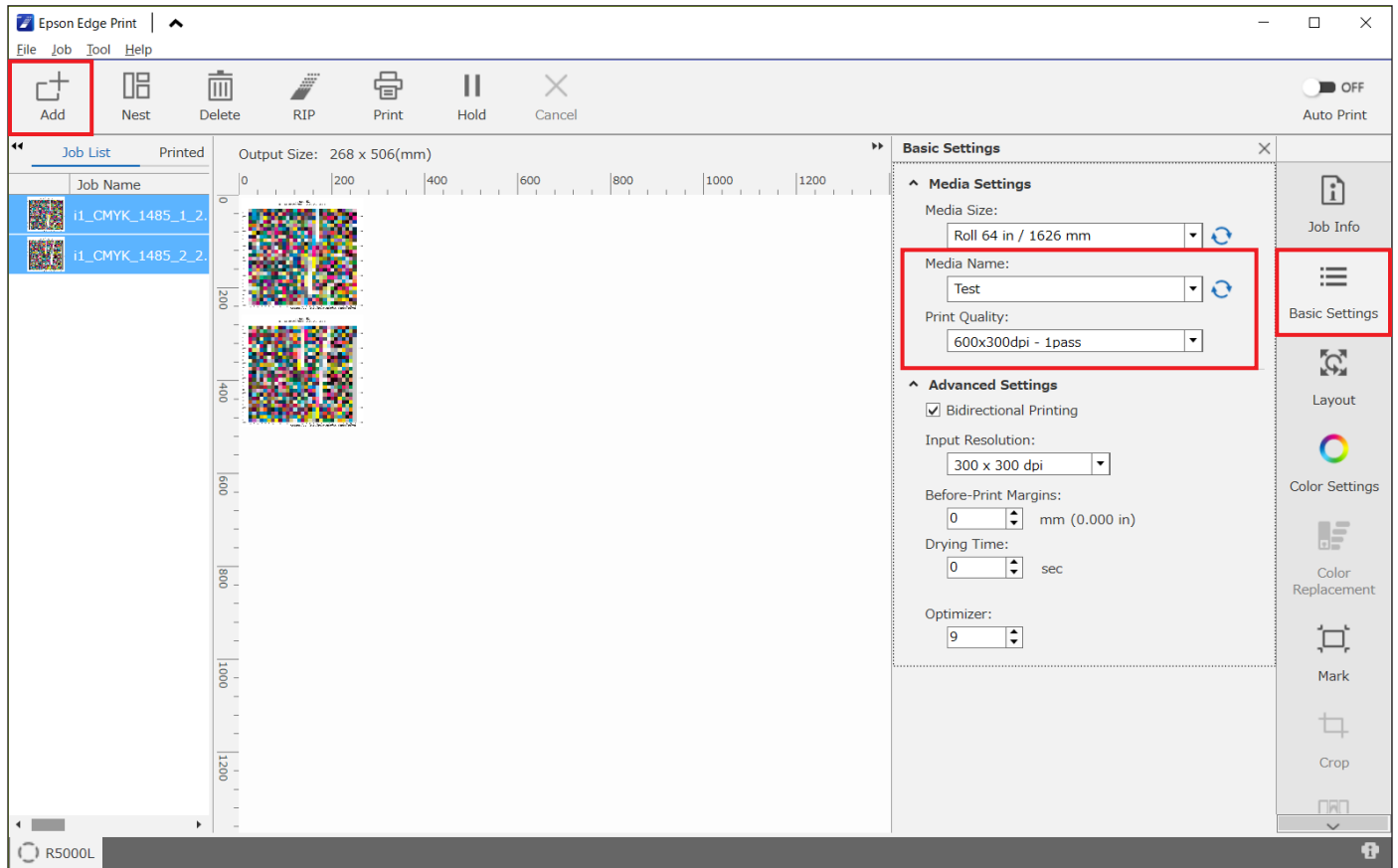
4. Creating media profile with X-Rite i1Profiler

- 1) Type in a file name and save the profile chart as tiff file.
Two tiff files will be created, depending on the chart size.
- 2) Click on "Save".
- 3) Click on "Next".



4. Creating media profile with X-Rite i1Profiler

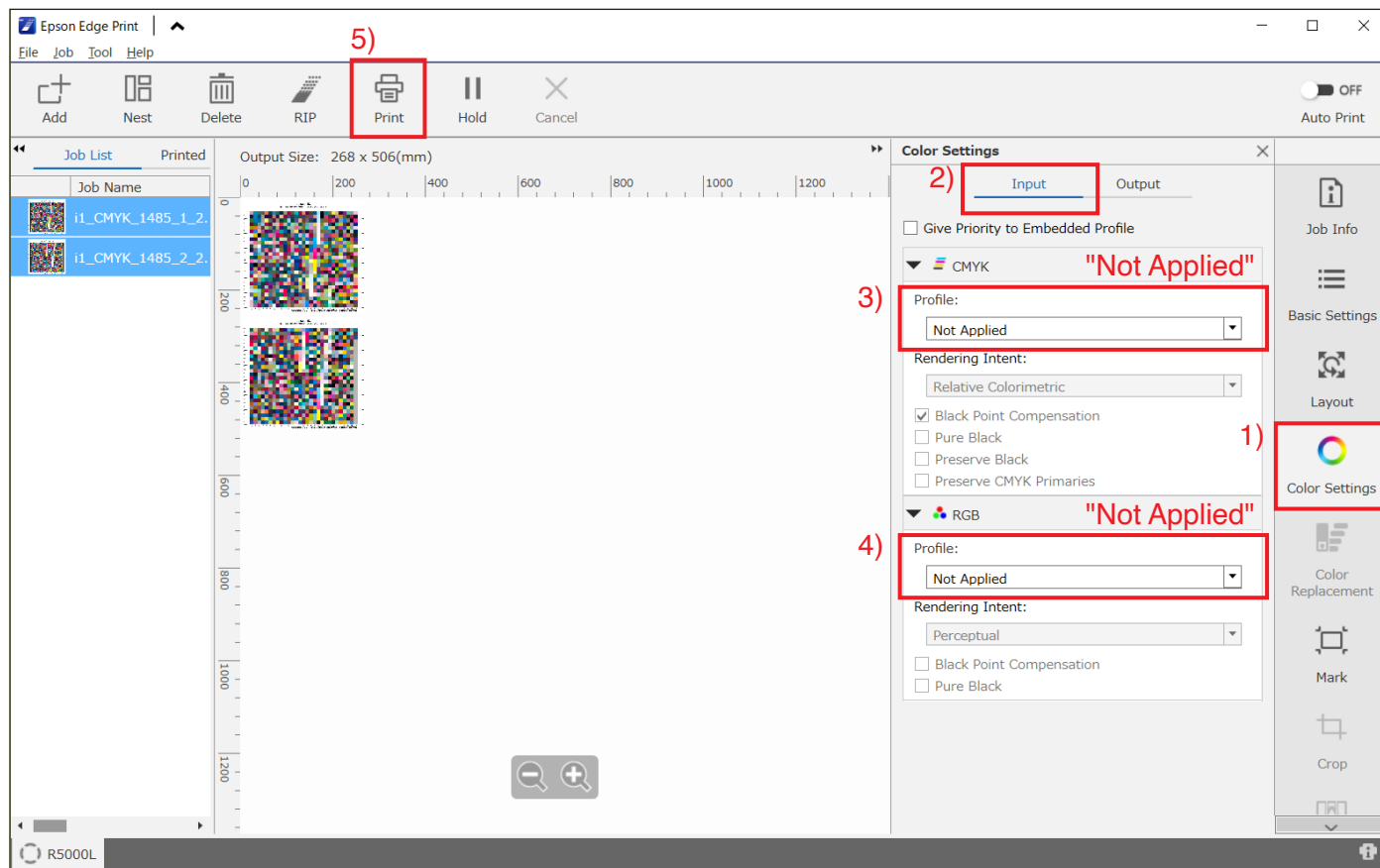
- Click on "Add" and add the profile chart tiff file(s) to the Epson Edge Print software.
- Click on "Basic Settings" and select your newly created print mode.



4. Creating media profile with X-Rite i1Profiler

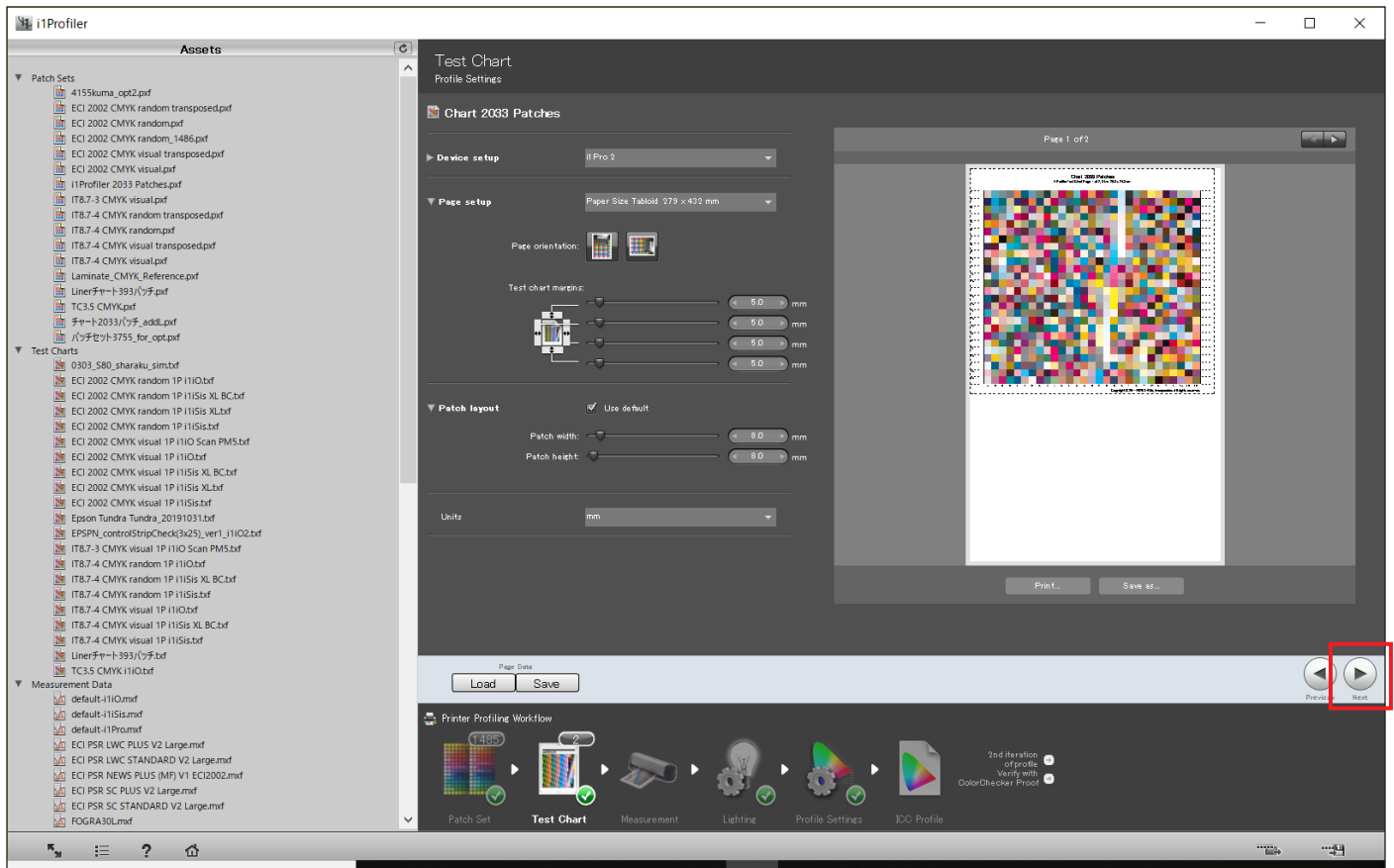
Important

- 1) Click on "Color Settings"
- 2) Select the tab "Input"
- 3) Confirm the profile "Not Applied" is selected for CMYK
- 4) Confirm the profile "Not Applied" is selected for RGB
- 5) Click on "Print" (print out all profile charts)



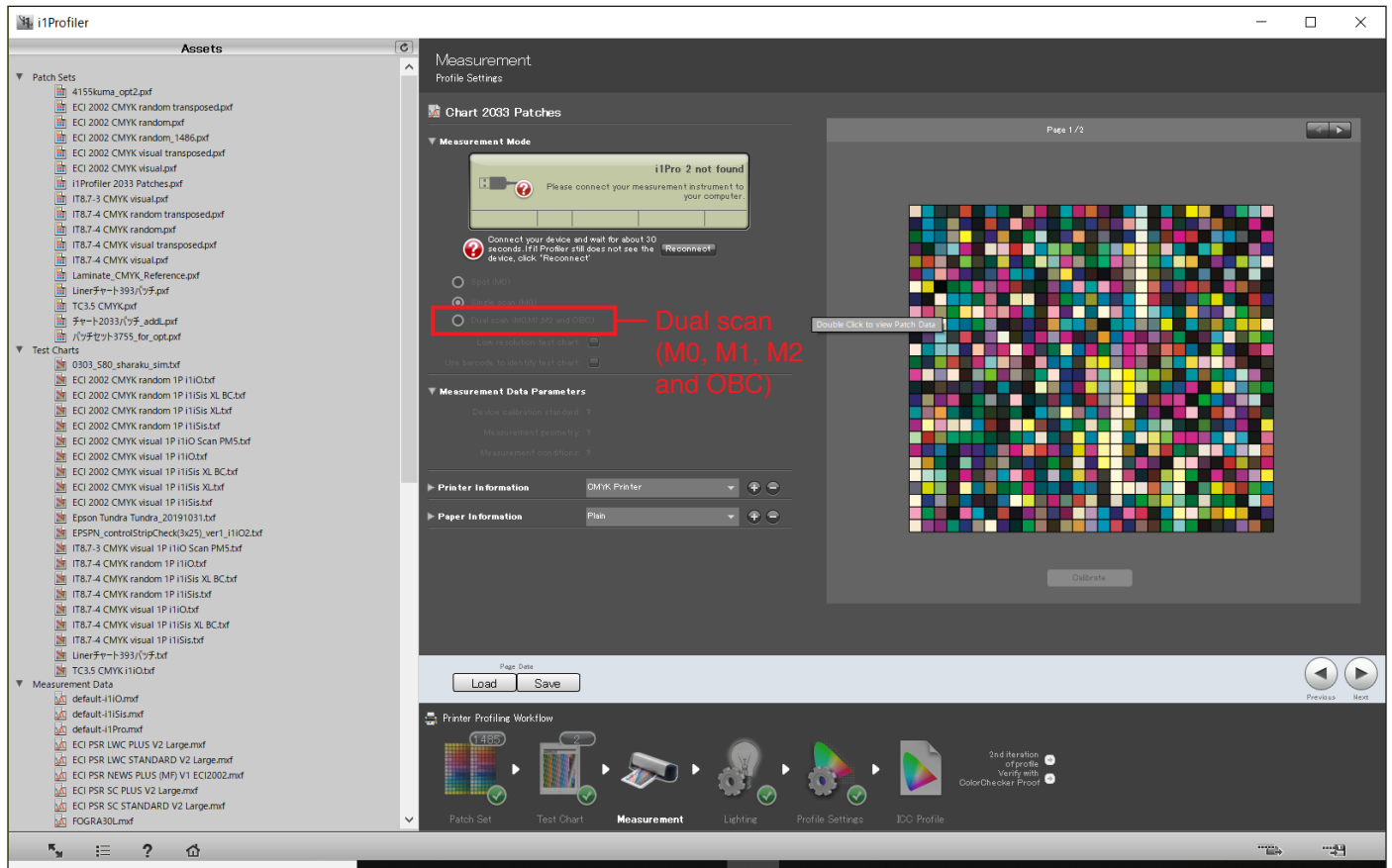
4. Creating media profile with X-Rite i1Profiler

After printing the profile chart(s) switch back to the i1Profiler software and click "Next".



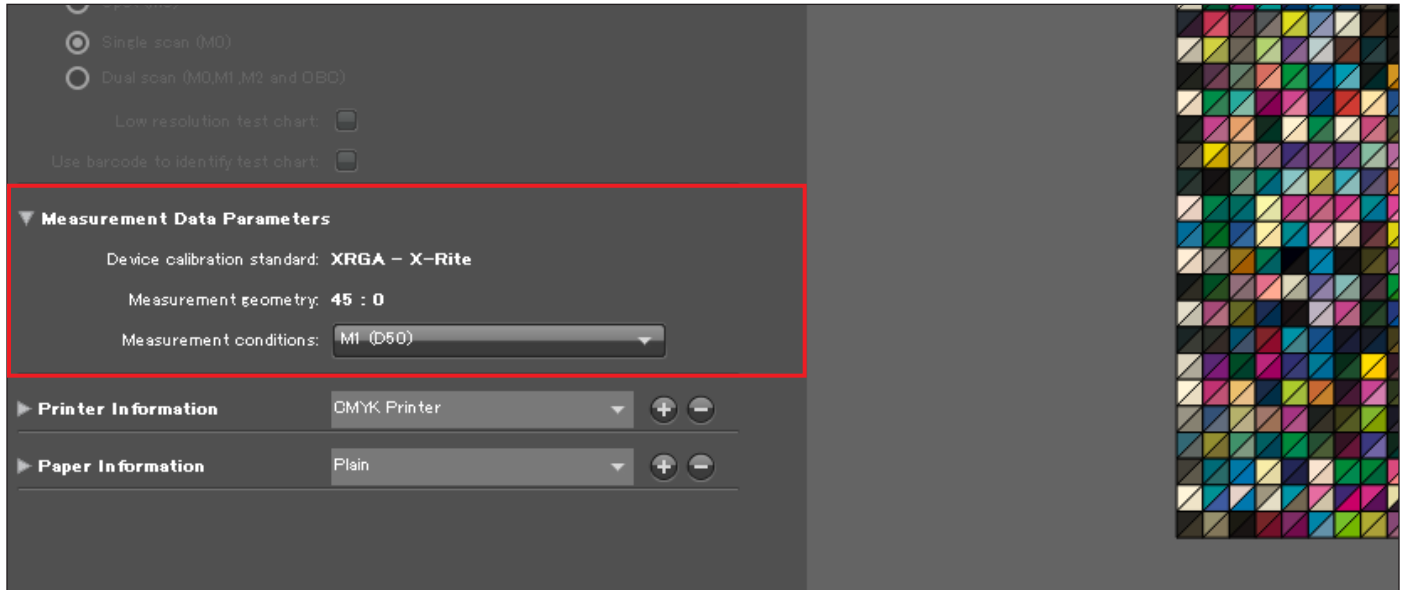
4. Creating media profile with X-Rite i1Profiler

- Prepare the printed profile charts for measurement.
- Select "Dual scan (M0, M1 ,M2 and OBC)" as the measurement mode.
- We will use the measurement result of M1 at a later stage.



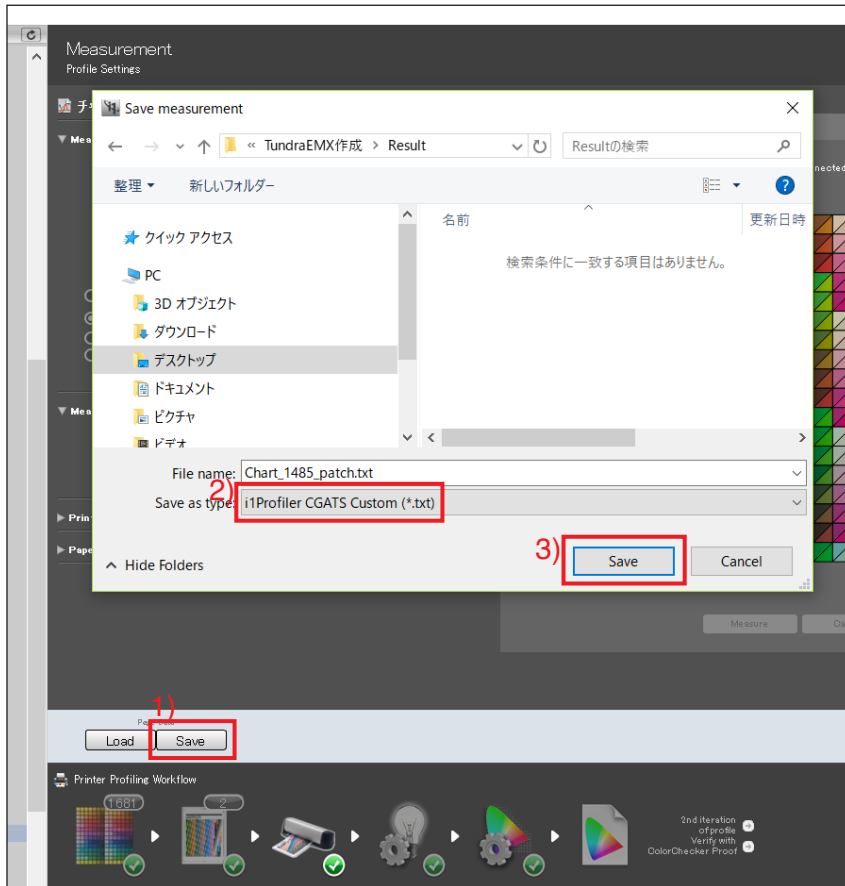
4. Creating media profile with X-Rite i1Profiler

- After measuring, the "Measurement Data Parameters" become selectable.
- Select "M1 (D50)" as the measurement condition.



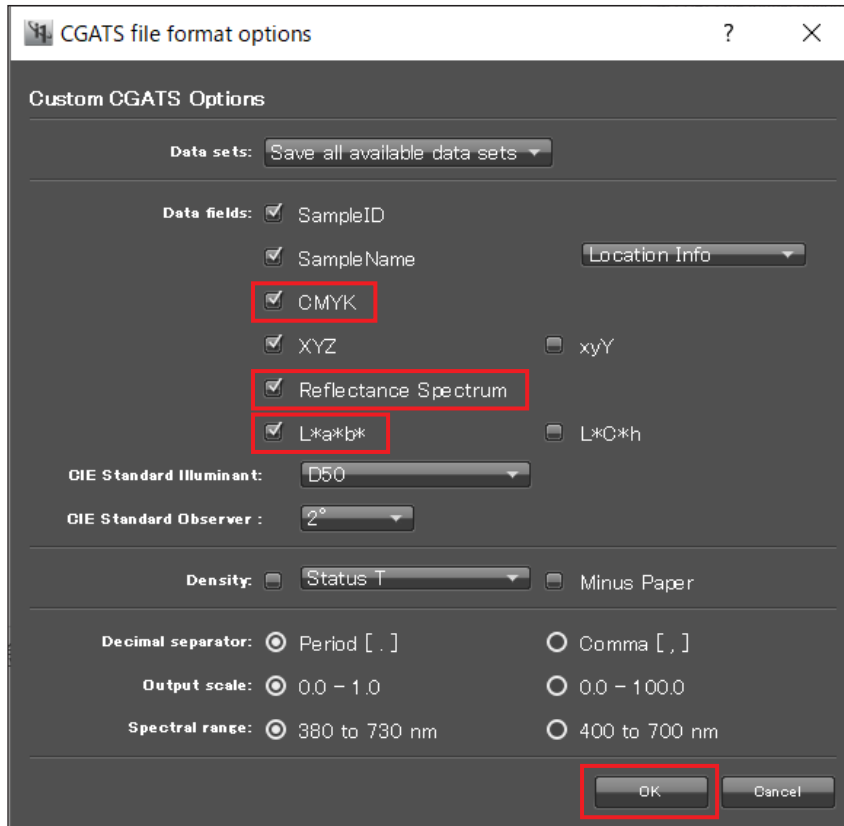
4. Creating media profile with X-Rite i1Profiler

- 1) Click on "Save".
- 2) Confirm that for "Save as type" the file type "i1Profiler CGATS CUSTOM (*.txt)" is selected.
- 3) Click on "Save".



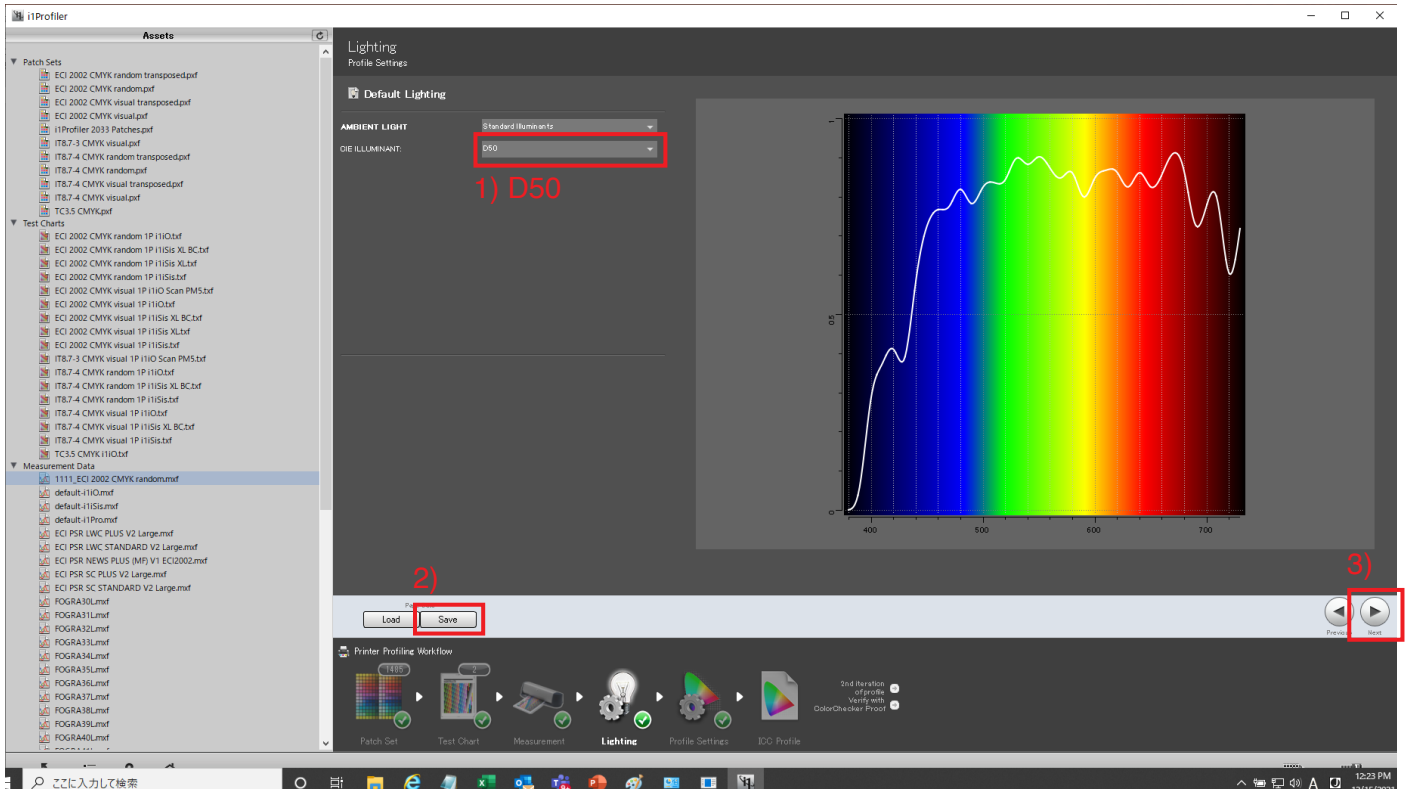
4. Creating media profile with X-Rite i1Profiler

- 1) Make sure “CMYK”, “Reflectance Spectrum”, and “L*a*b*” are checked.
- 2) Click on "OK".



4. Creating media profile with X-Rite i1Profiler

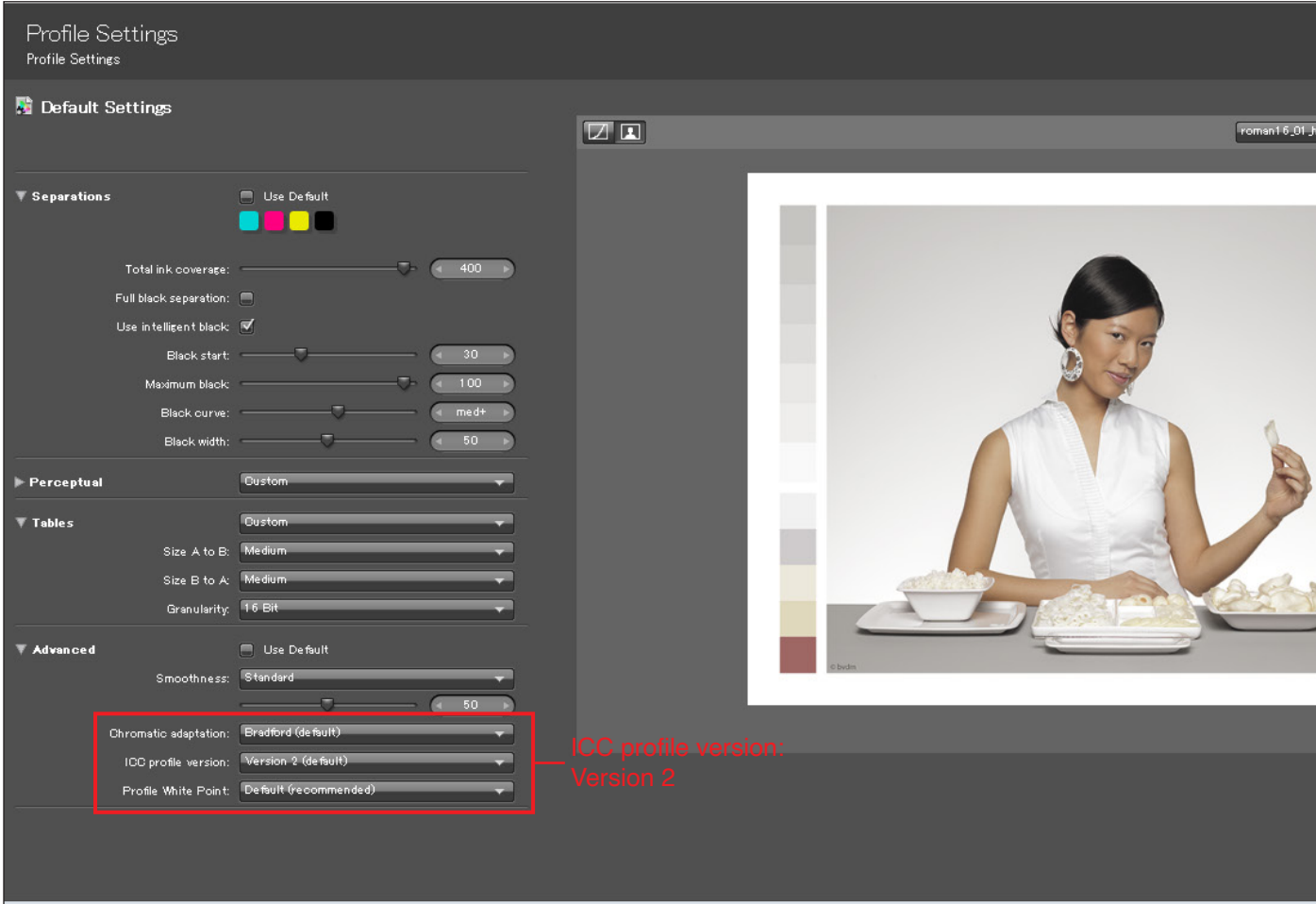
- 1) Select "D50" as lighting.
- 2) Click on "Save".
- 3) Click on "Next".



4. Creating media profile with X-Rite i1Profiler

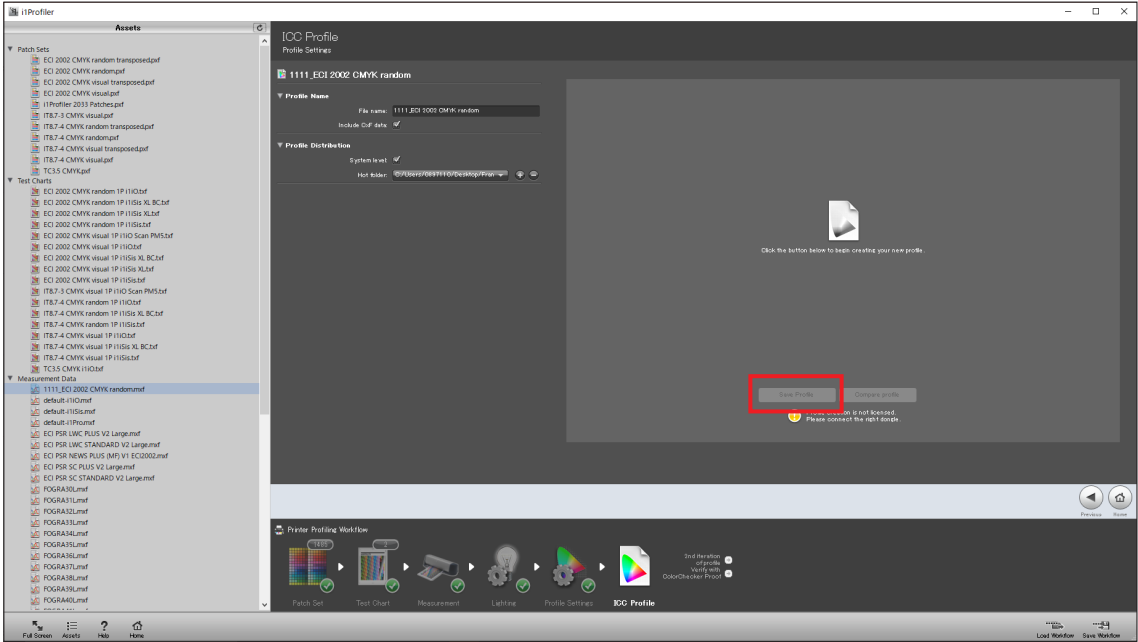
Important

Select ICC profile version "Version 2", (Epson Edge Print cannot import "Version 4").

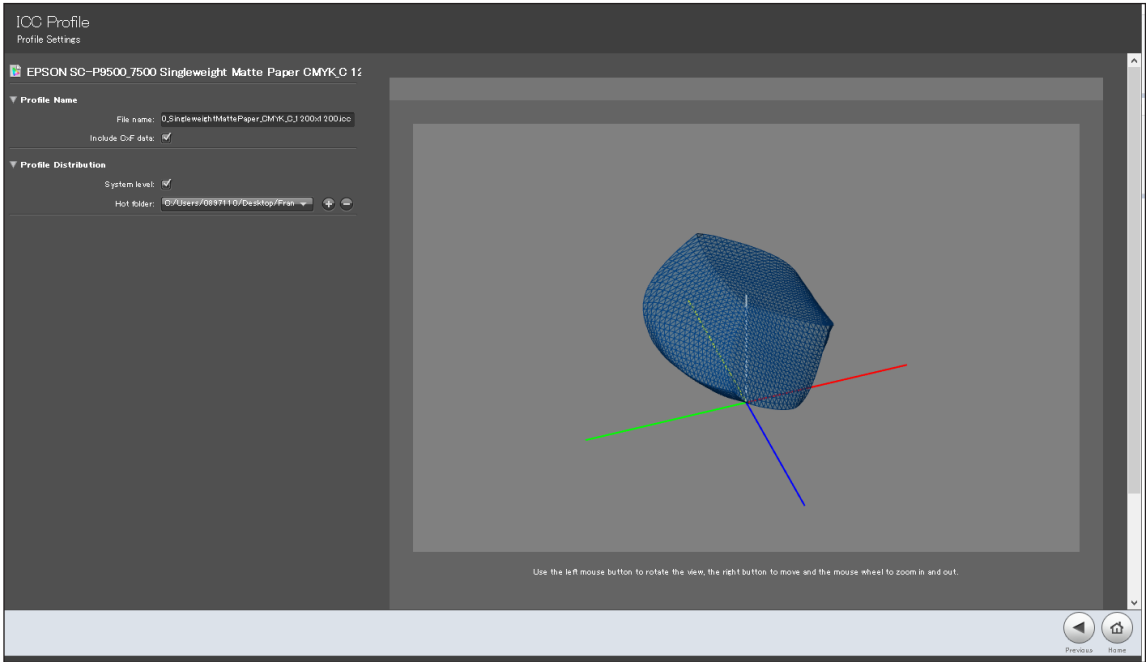


4. Creating media profile with X-Rite i1Profiler

Click on "Save Profile" to create the color profile.



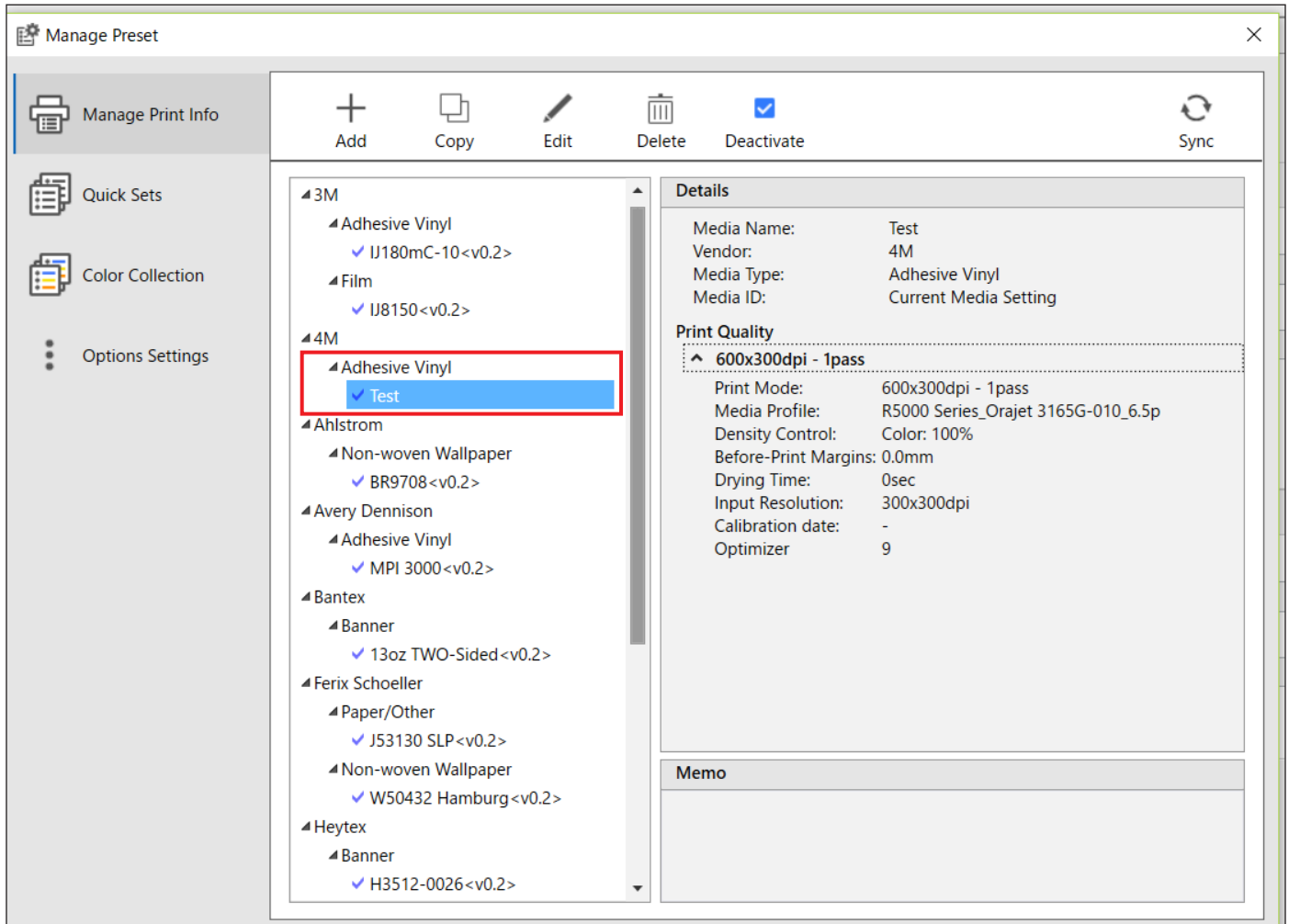
The color profile has been created.



R50_Vinyl_600x30_0_1pass.icc

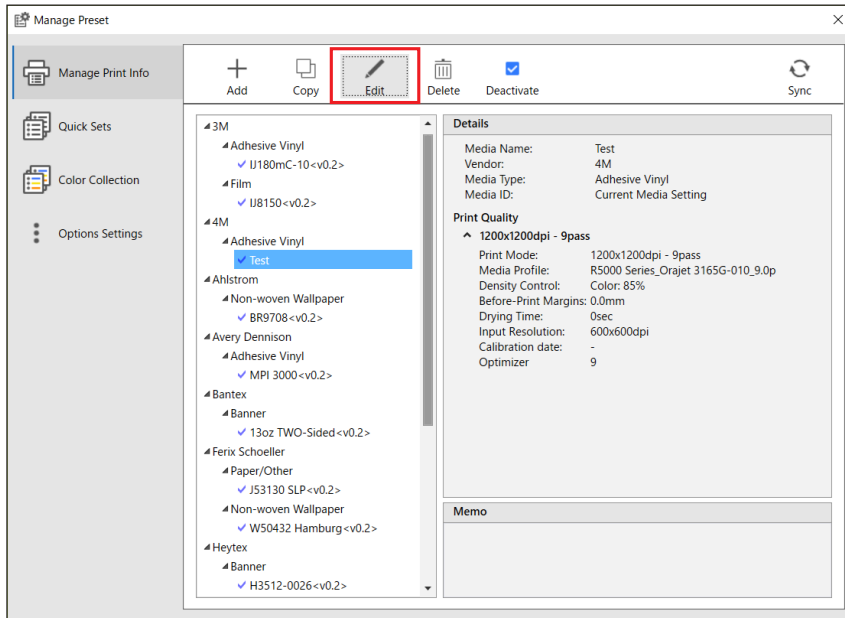
5. Importing media profile to Epson Edge Print

Import created profile to print mode which you created.
Tool > Manage print info > select print mode you created.

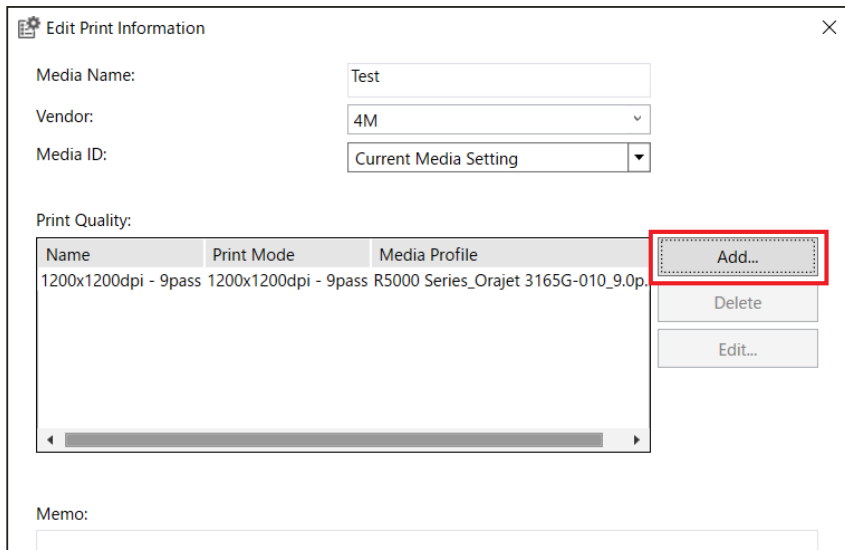


5. Importing media profile to Epson Edge Print

- Open the Epson Edge Print software and select the printer "R5070" or "R5070L"
- Click on "Tool" and select "Manage Print Info"
- Select your print mode and click on "Edit".

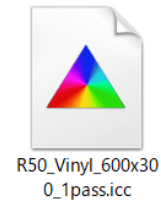
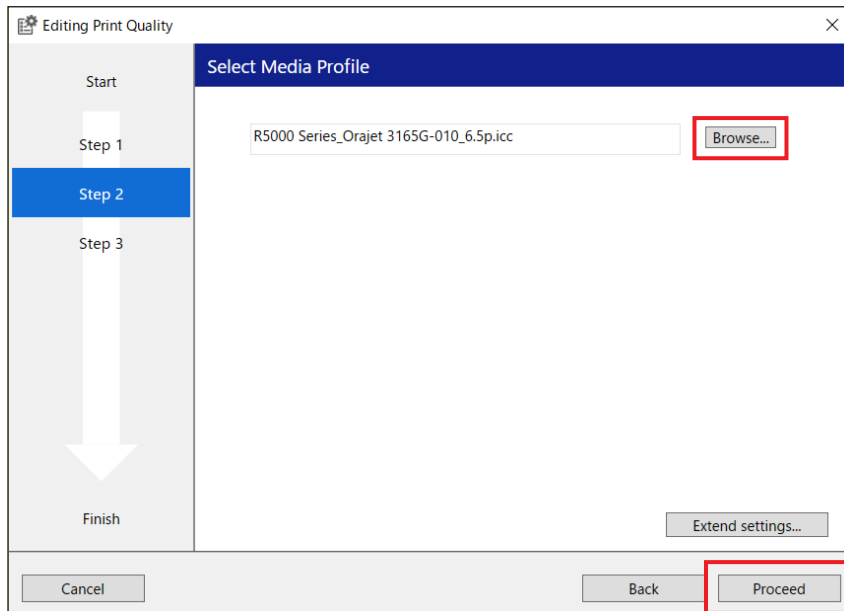


- Click on "Add...".

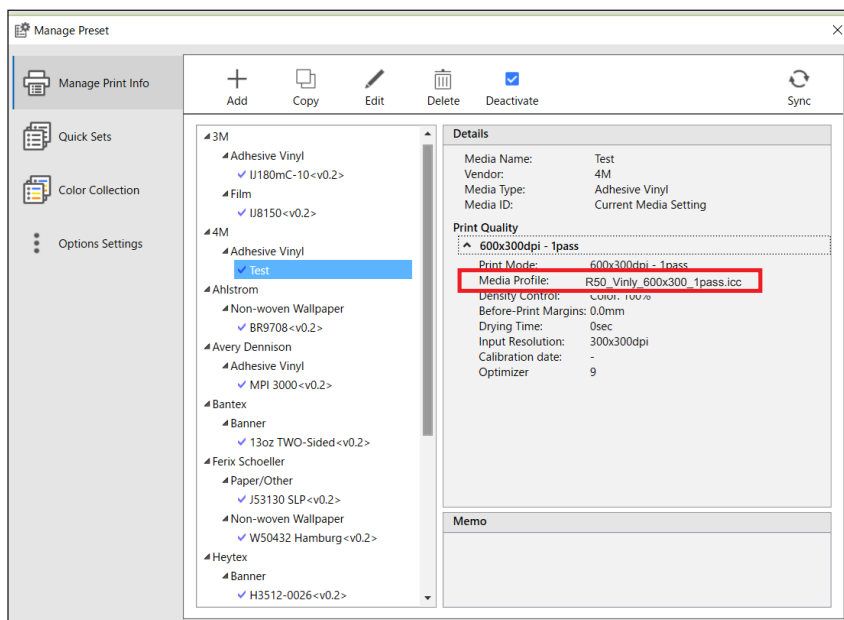


5. Importing media profile to Epson Edge Print

- Click on "Browse..."
- Select your newly created ICC color profile file.
- Click on "Proceed".



Your ICC color profile has successfully been imported to your print mode.





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