



Advanced Method for Using the Barbieri Spectrophotometer with Onyx Graphics RIP Software

This technical note was prepared by Perry Schwartz of VistaLogics Visit VistaLogics.com for more information.

All Onyx Graphics programs, Trademarks, Copyrights, and Intellectual Property are owned Onyx Graphics, Inc.

All Barbieri spectrophotometers and software are products of BARBIERI electronic snc/OHG which owns all Trademarks, Copyrights, and Intellectual Property.

This technical note addresses three problems that may occur when using Barbieri Spectrophotometers with Onyx Graphics software.

- In some cases, errors or problems can occur resulting in the loss of data or measurements when using Barbieri Spectrophotometers with Onyx Graphics software.
- Advanced Barbieri settings are not available when using Onyx.
- The SpectroPad and its disconnected measurement mode is not fully supported in Onyx.

The resources and methods for bypassing the use of the internal Onyx patch reading process in favor of using Barbieri Gateway software directly are discussed in the following sections.

There are three places within the Onyx Media Manager where this method can be applied:

1. ink restrictions
2. calibrations
3. profiling.

One or more Barbieri targets are provided for each of these. The targets are to be read in Barbieri Gateway – Chart Measurement. The readings must be imported in Onyx Media Manager. The procedures for doing this are described in the following sections.

Section I: Download the Onyx Custom Targets for Barbieri Gateway

The Onyx Targets for Barbieri Gateway need to be downloaded for your Barbieri:

- [Onyx Targets for the Barbieri SpectroLFP](#)
- [Onyx Targets for the Barbieri Spectropad](#)

Just download the targets you need for your Barbieri instrument. The download is a zip file containing the targets listed in Table I. After the targets are unzipped, you will find three folders:

1. Previews
2. References
3. Targets

The files in each of these folders must be copied and placed into the respective Barbieri Gateway folders. These folders are found in the following location:

Documents\Barbieri\Gateway\Chart

Table I: Barbieri Targets for Onyx Graphics Software			
Purpose		Targets	
		SpectroLFP	SpectroPad
Ink Restrictions		Onyx LFP Ink Lim 33	Onyx LFP Ink Lim 33
Linearization		Onyx LFP Lin 40	Onyx LFP Lin 40
Profiling			
Fixed Target	Standard	Onyx ICC LFP Std F	Onyx ICC SPD Std F
	Extreme	Onyx ICC LFP Extrm F	Onyx ICC SPD Extrm F
	Ultimate	Onyx ICC LFP Ultra F	Onyx ICC SPD Ultra F
Random Target	Standard	Onyx ICC LFP Std	Onyx ICC SPD Std
	Extreme	Onyx ICC LFP Extreme	Onyx ICC SPD Extreme
	Ultimate	Onyx ICC LFP Ultra	Onyx ICC SPD Ultra



Advanced Method for Using the Barbieri Spectrophotometer with Onyx Graphics RIP Software

Section 2: Using the Onyx Custom Targets in Barbieri Gateway

Open Barbieri Gateway and go to Chart Measurement. If you have already loaded these targets, they will appear as one of your selections.

IMPORTANT: The first time you use a new target in Barbieri Gateway, you must add a *New Job* in Chart Measurement. You must be in the Advanced Mode in Chart Measurement to see the green *New Job* button.

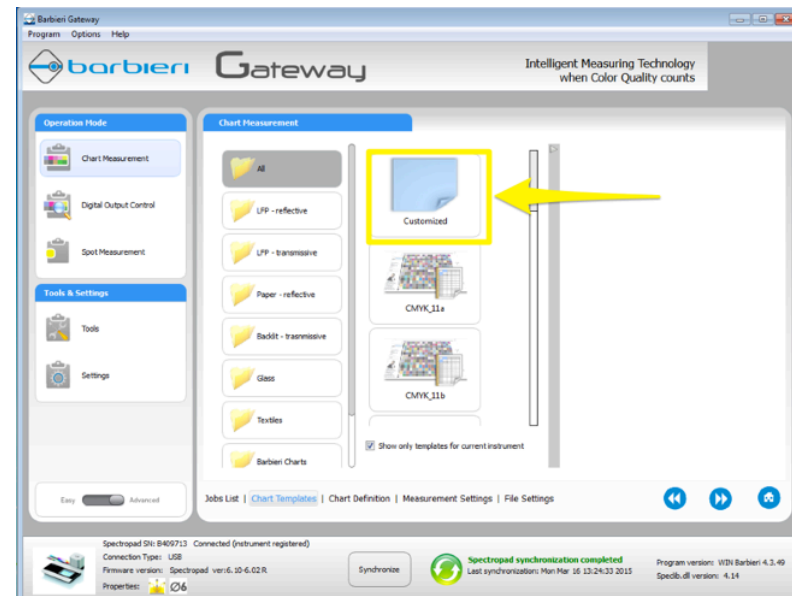
Add the Onyx job by pressing *New Job* button.



The next Barbieri Gateway screen will appear. If you are in advanced mode, you will see a *Customized* as a chart selection.

Click on the *Customized* chart icon to bring up the next screen.

Repeat this process for every Onyx Chart you want to use.



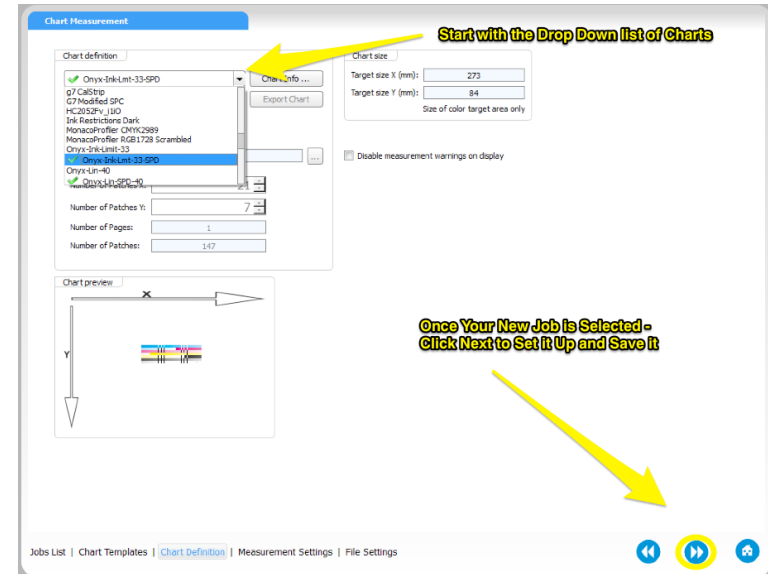


Advanced Method for Using the Barbieri Spectrophotometer with Onyx Graphics RIP Software

On this Chart Measurement screen, start with the drop down list of charts. Onyx chart should appear as one of your choices.

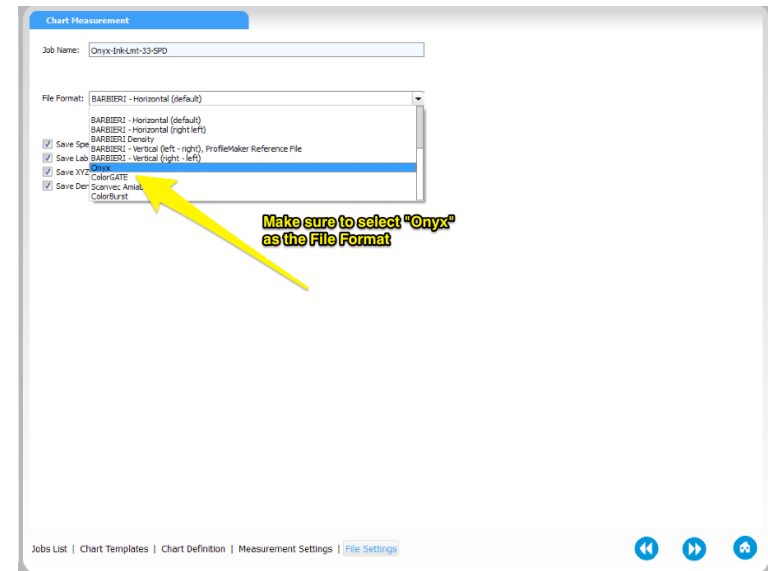
If the Onyx charts do not appear, be sure that you downloaded the Onyx Barbieri targets and put the files into the appropriate folders.

Use the right arrow button at the bottom of the screen to go to through the next pages where you can customize the target settings.



IMPORTANT: Make sure you select Onyx as the file format for saving the measurements.

You can accept the assigned name of the job or change it to suit your requirements. Then click the next arrow to save the job.





Advanced Method for Using the Barbieri Spectrophotometer with Onyx Graphics RIP Software

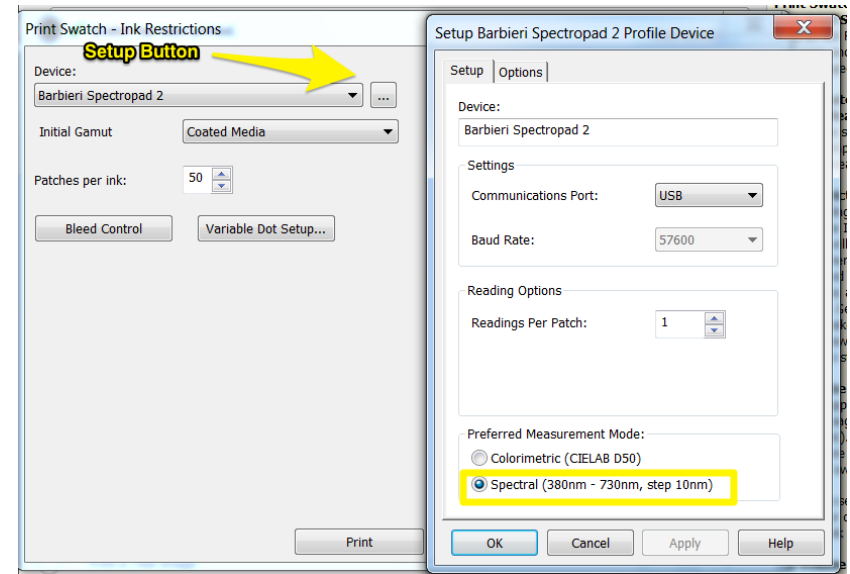
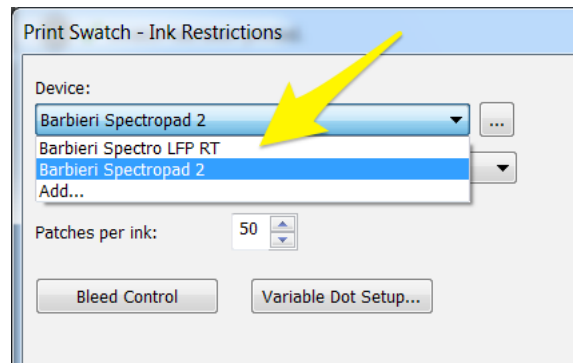
Section 3: Setting Up the Barbieri Device in Onyx Media Manager

This step applies to printing any patch set in Onyx Media Manager. Before you print a patch set, select the Barbieri device you are using. If the device does not appear, click “Add” in the drop down list.

Once the measurement device is selected it will appear in all other Media Manager print dialogs until it is changed.

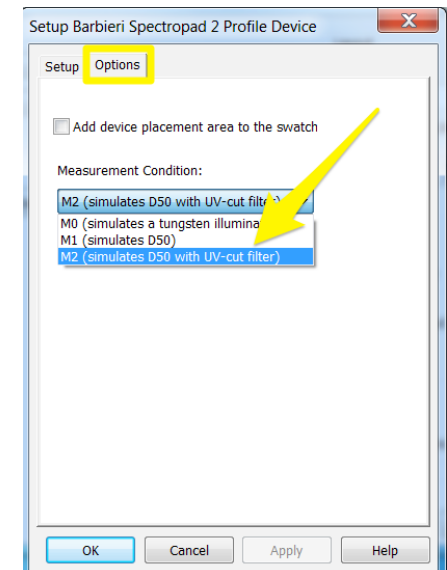
After the measurement device is selected, click the setup button.

On the Setup tab, set the Preferred Measurement Mode. The Spectral Mode is recommended.



Set the measurement conditions on the options tab.

Note: You will need to setup the Barbieri device once. Once set, the device setting will remain the same until it is changed.





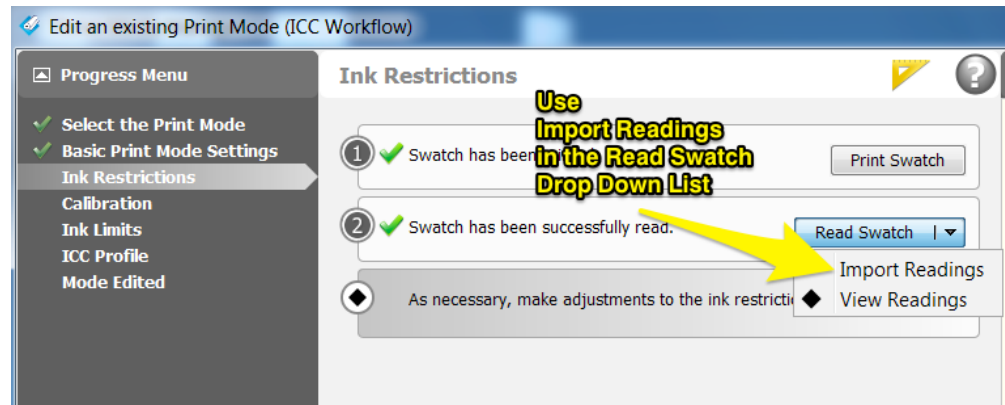
Advanced Method for Using the Barbieri Spectrophotometer with Onyx Graphics RIP Software

Section 4: Importing Readings from Barbieri Gateway into Onyx Media Manager

The *Read Swatch* button becomes active after you use the *Print Swatch* button.

Click on the *Import Readings* in the *Read Swatch* drop down list. Then select your measurement file.

If Onyx is set to use spectral data as recommended, choose the measurement file ending with “.Spec” as a suffix.



IMPORTANT:

When you read a patch set in Barbieri Gateway using the SpectroLFP, the readings are saved in a folder. This folder is usually:

Documents\Barbieri\Gateway\Chart\Measurements.

If you are using a SpectroPad, measurements are placed on a subfolder under:
Documents\Barbieri\Gateway\Chart\Spectropad-B123456\Measurements
where “B123456” would be the actual serial number of your device.

If you set up your chart correctly and Onyx is set to use spectral data, then look for a file ending in “.Spec.”

For example, if you were using a chart named: “Onyx LFP Ink Lim 33”
the measurement may be named:

“Onyx LFP Ink Lim 33-2015031516190000.Spec”



Advanced Method for Using the Barbieri Spectrophotometer with Onyx Graphics RIP Software

Section 4: Ink Restrictions Target in Onyx Media Manager

Print the ink restrictions swatch from Onyx Media Manager.

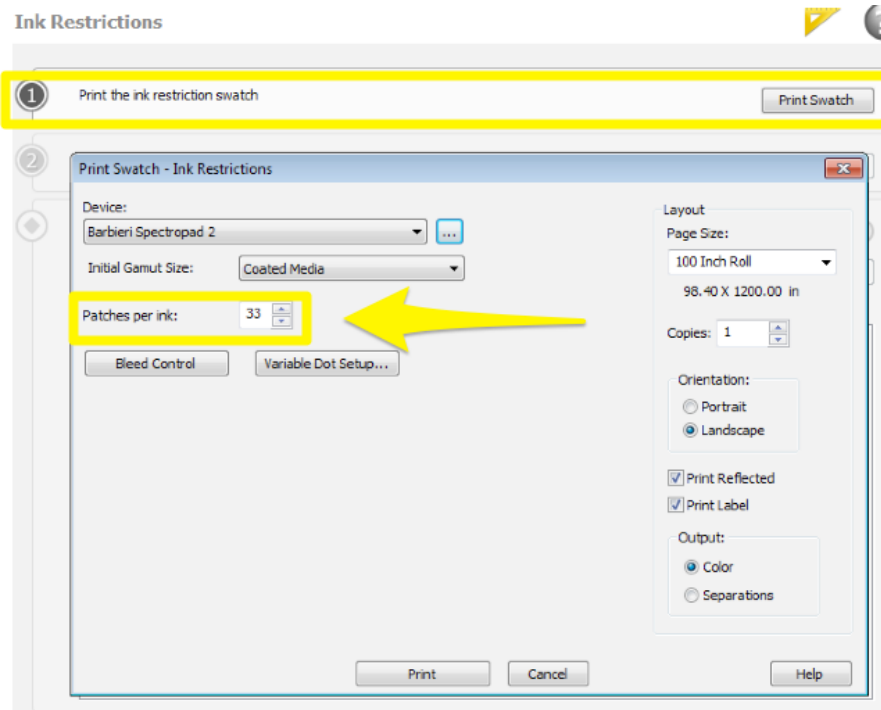
IMPORTANT: Set *Patches per ink* to 33.

The *Read Swatch* button becomes active after you use the *Print Swatch* button.

The *Read Swatch* button becomes active after you use the *Print Swatch* button.

Click on the *Import Readings* in the *Read Swatch* drop down list. Then select your measurement file.

If Onyx is set the use spectral data as recommended, choose the measurement file ending with “.Spec” as a suffix.



The screenshot shows the 'View Readings - Ink Restrictions' dialog box. A yellow box highlights the table of patch readings.

Patch	Expected	Measured	L*	a*	b*
A1			30.0956	11.9351	-56.0950
A2			30.7889	11.1068	-56.3451
A3			31.2624	10.6942	-57.3018
A4			31.6662	10.0036	-57.6813
A5			32.7124	9.0605	-57.6137
A6			33.4678	8.0427	-58.0746
A7			34.2012	7.0402	-58.1643
A8			34.9770	5.7568	-58.5247
A9			36.4135	4.1123	-58.3760
A10			37.5397	2.5673	-58.3550
A11			38.9528	0.6758	-58.0296
A12			39.8054	-0.3867	-57.7402
A13			40.7885	-1.4594	-57.3657
A14			41.5301	-2.4697	-57.0526
A15			42.0251	-3.2538	-56.6803
A16			42.5001	-3.9134	-56.3156
A17			42.8738	-4.2066	-55.8968
A18			44.3782	-5.6513	-55.9219
A19			46.1239	-7.1899	-55.1113
A20			47.0070	-8.1084	-54.5299
A21			48.1617	-9.1105	-53.7227

Paper : L*: 89.8807, a*: 1.0500, b*: 1.0500

The Expected and Measured patch will roughly match each other in color but will not be exact. The ink restriction swatches for each color channel go from dark to light, so check to see if the L* values get bigger as you go down the list.



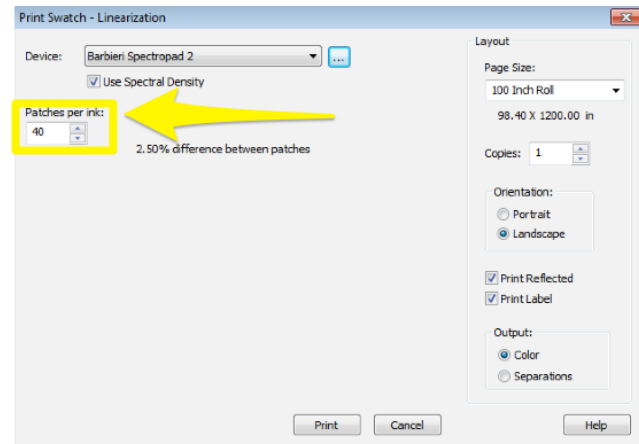
Advanced Method for Using the Barbieri Spectrophotometer with Onyx Graphics RIP Software

Section 5: Linearization Calibration in Onyx Media Manager

Print the Linearization swatch from Onyx Media Manager.

IMPORTANT: Set *Patches per ink* to 40.

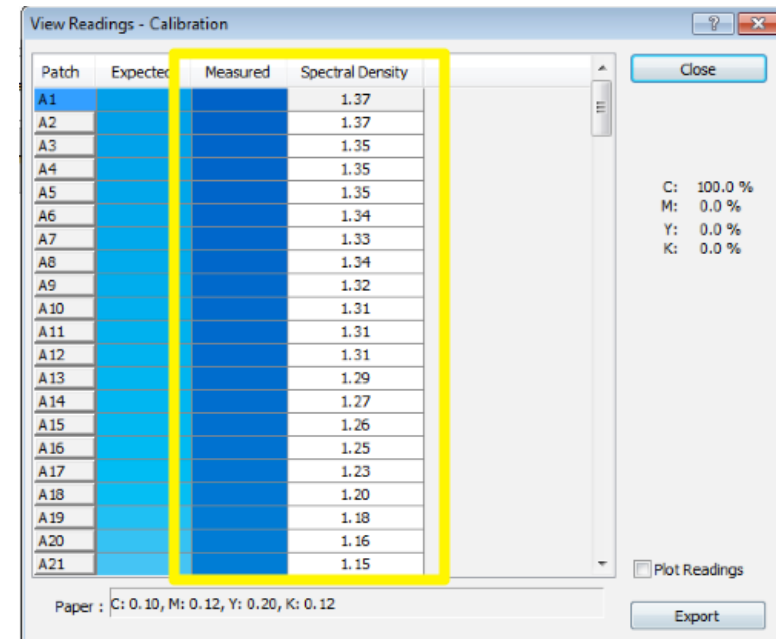
The *Read Swatch* button becomes active after you use the *Print Swatch* button.



The *Read Swatch* button becomes active after you use the *Print Swatch* button.

Click on the *Import Readings* in the *Read Swatch* drop down list. Then select your measurement file.

If Onyx is set the use spectral data as recommended, choose the measurement file ending with “.Spec” as a suffix.



The Expected and Measured patch will roughly match each other in color but will not be exact. The ink restriction swatches for each color channel go from dark to light, so check to see if the L* values get bigger as you go down the list.



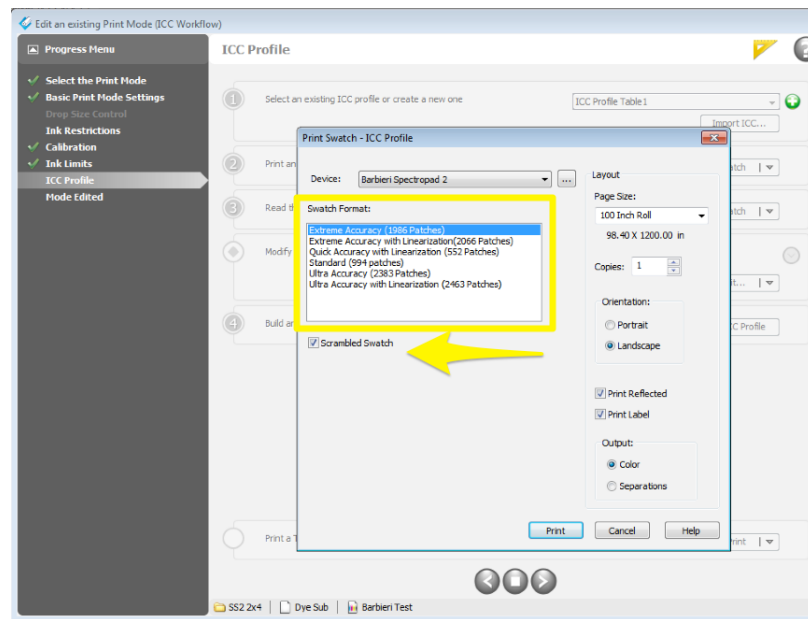
Advanced Method for Using the Barbieri Spectrophotometer with Onyx Graphics RIP Software

Section 5: ICC Profile Patch Sets in Onyx Media Manager

The final patch set in used in creating a new Onyx print mode is *ICC Profile*. This step requires that the ICC Profile swatches be chosen and printed using the *Print Swatch – ICC Profile* dialog.

Select the Extreme, Standard, or Ultra Accuracy patch sets only.

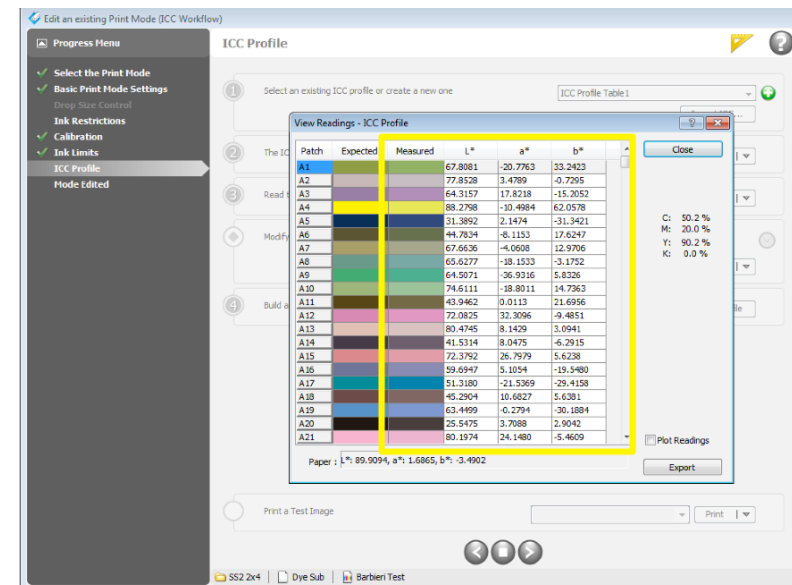
IMPORTANT: Do not select the patch sets that are identified as “with Linearization.” There are no corresponding patches for these in the current Barbieri chart sets.



The *Read Swatch* button becomes active after you use the *Print Swatch* button.

Click on the *Import Readings* in the *Read Swatch* drop down list. Then select your measurement file.

If Onyx is set the use spectral data as recommended, choose the measurement file ending with “.Spec” as a suffix.



The Expected and Measured patch will roughly match each other in color but will not be exact. If you see mismatches in base colors, then there is probably an error. You may have set up your job incorrectly.