# *What is new in ColorAnt 10?*

***Custom Chart***

- Create charts for generating custom spot color libraries
- Create linearization charts with patches for G7 standard
- Create charts with up to 15 Channels

***Export Chart***

- Create charts with more than 9 channels to support spot color libraries

***White/Black Correction*** and ***Edit Primaries***

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- The Report now contains OBA Information

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- New search function in the ***Text*** tab
- New ***Info*** tab shows many useful information about the selected file
- New gray filter for RGB data
- The patch location is now shown (if available)

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- New option for resetting the sample IDs of data sets

- ColorAnt can now be controlled via the command line
- Report ***Logo*** and ***Title*** can now be customized for all report types

***General Improvements***

- Better distribution of white patches in linearization charts
- Smaller increment for curves in ***Text*** format in the ***Tone Value*** tool

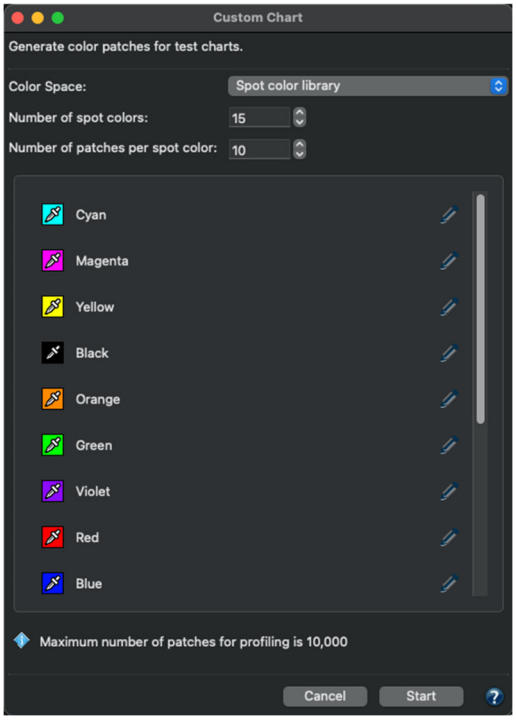
# Custom Chart

## Create charts for generating custom spot color libraries

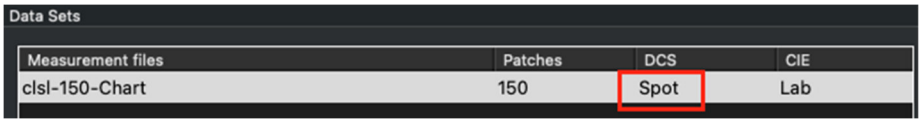
With the ***Custom Chart*** tool, it is now possible to create charts for custom spot color libraries with up to 15 spot colors.

Creating charts for spot color libraries is quick and easy:

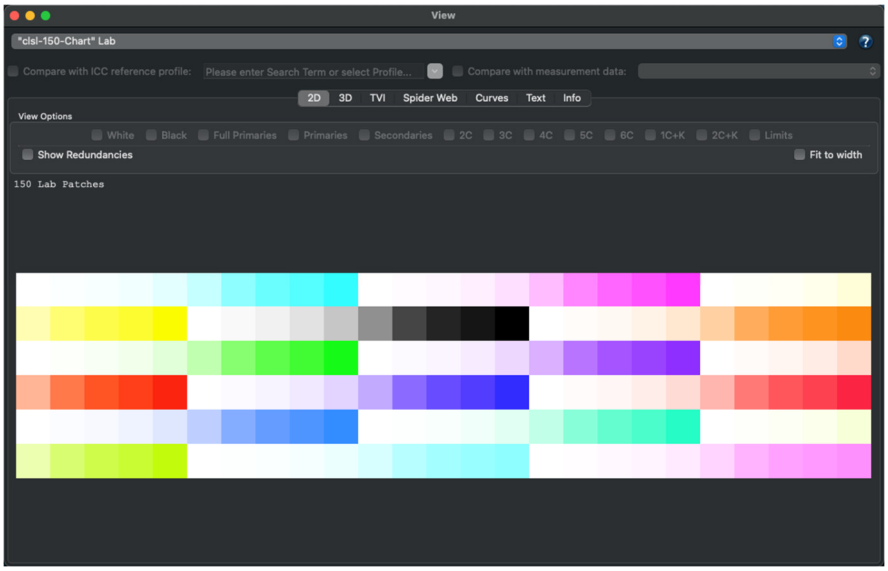
1. Open the ***Custom Chart*** tool and select the new option ***Spot color library*** under ***Color Space***
2. Specify the desired ***Number of spot colors*** for the library, and decide on the ***Number of patches per spot color***



3. This creates a custom chart for spot colors under ***Data Sets*** with the color model ***Spot*** (indicated in the ***DCS*** column)




4. Depending on the entered ***Number of patches per spot color***, corresponding gradients are generated for each color.

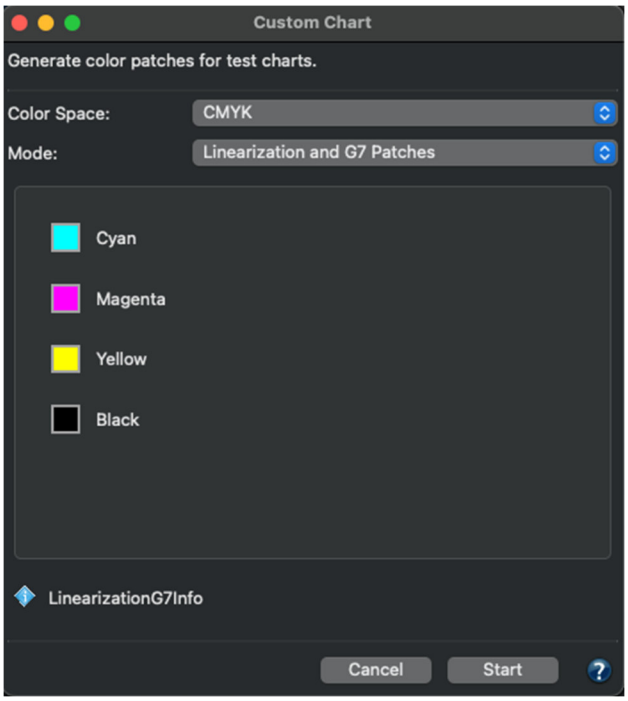



5. The created chart can then be exported using the ***Export Chart*** tool (see below) and subsequently measured to generate the custom spot color library.

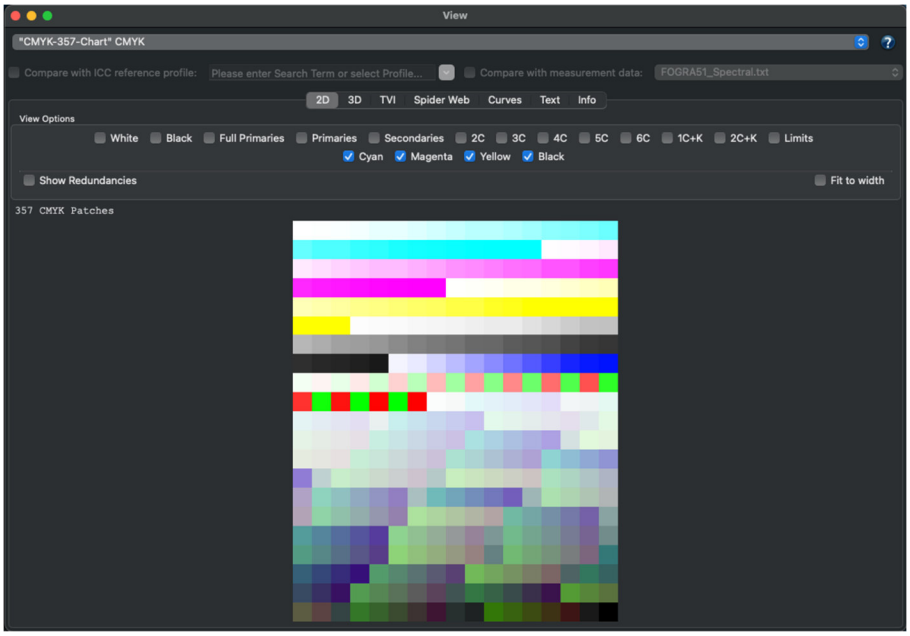
***Note***: In this way, charts for custom spot color libraries of up to 15 spot colors can be created. If larger spot color libraries are required, several small libraries can be created and then combined using ColorAnt's ***Link*** tool with the ***Merge by channel name*** checkbox enabled.

## Create linearization charts with patches for G7 standard

The new chart generation mode ***Linearization and G7 Patches*** in the ***Custom Chart*** tool now enables the creation of test charts needed for the calibration of printing devices to comply with the G7 grayscale definition.




By using this mode, the usual linearization ramps are created, with the patches needed specifically for the G7 method added.



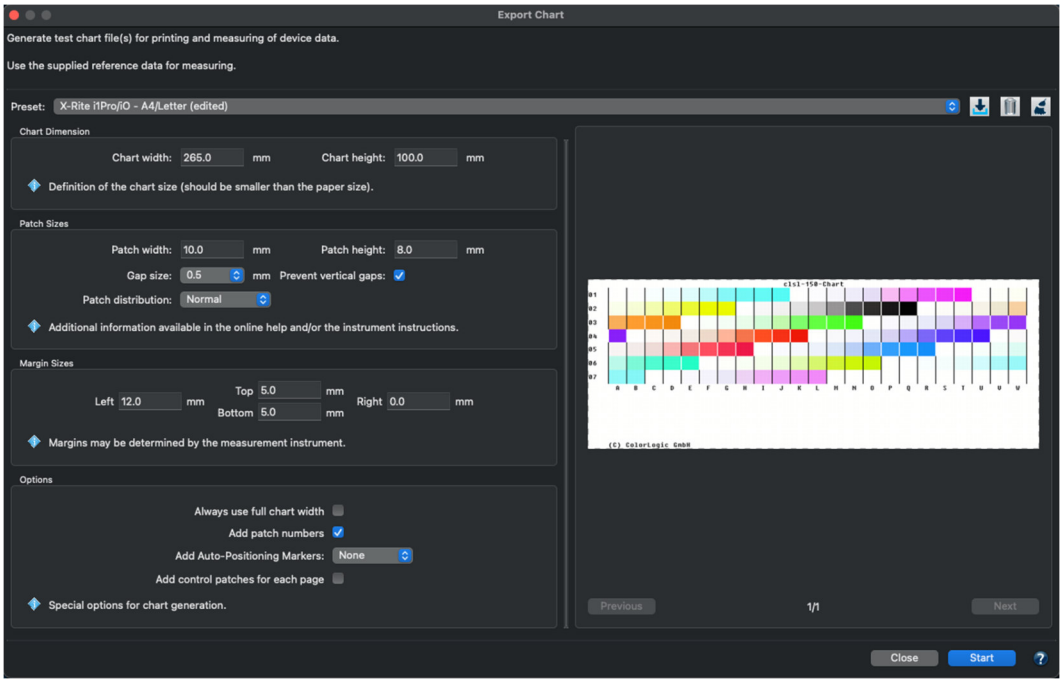
## Create charts with up to 15 Channels

With ColorLogic CoPrA it is already possible to create profiles from charts with up to 15 channels. With ColorAnt 10 it is now possible to create such charts. ***Note***: In general, we do not recommend creating profiles with more than 9 channels, as this does not currently provide any significant benefit.

# Export Chart

## Create charts with more than 9 channels to support spot color libraries

The ***Export Chart*** tool allows the creation of test charts based on device color values (e.g., RGB, CMYK, 7 Color, etc.). Until now, the generated charts were limited to 9 channels. However, now it is possible to export charts with more than 9 channels, which allows the creation of spot color libraries.




Additionally, the ***Export Chart*** tool can now also create reference files from PDFs that contain spot colors. This implies that files containing ***NoSpace/Lab*** information can now be exported as well.

# White/Black Correction and Edit Primaries

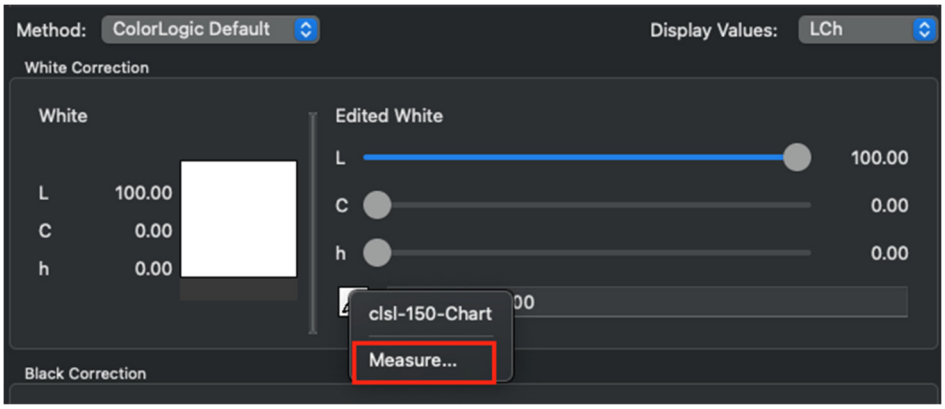
## New option for direct measurement of the white point

Changes in paper white affect the entire color space. Major changes in paper white also have a strong effect on the primary colors.

In ColorAnt 10 there is now the possibility to (re-)measure the white point directly and to correct the white point in the selected data set with this newly obtained data. This can be done using either the ***White/Black Correction*** or the ***Edit Primaries*** tool.

This new direct measurement option offers another straightforward way to adjust the white point:

1. ***Load*** the measurement data to be corrected and open the ***White/Black Correction*** (or the ***Edit Primaries*** tool).
2. Click on the eyedropper icon and select the new option ***Measure***.




3. The ***Measure Tool*** opens with the preselected chart for measuring the paper white with a single patch.
4. After the measurement, the new white point data is transmitted back to the ***White/Black Correction*** tool (or the ***Edit Primaries*** tool) and is applied to the entire measurement data keeping the print characteristic intact. ***Note***: The white point measurement is also listed under ***Data Sets***.

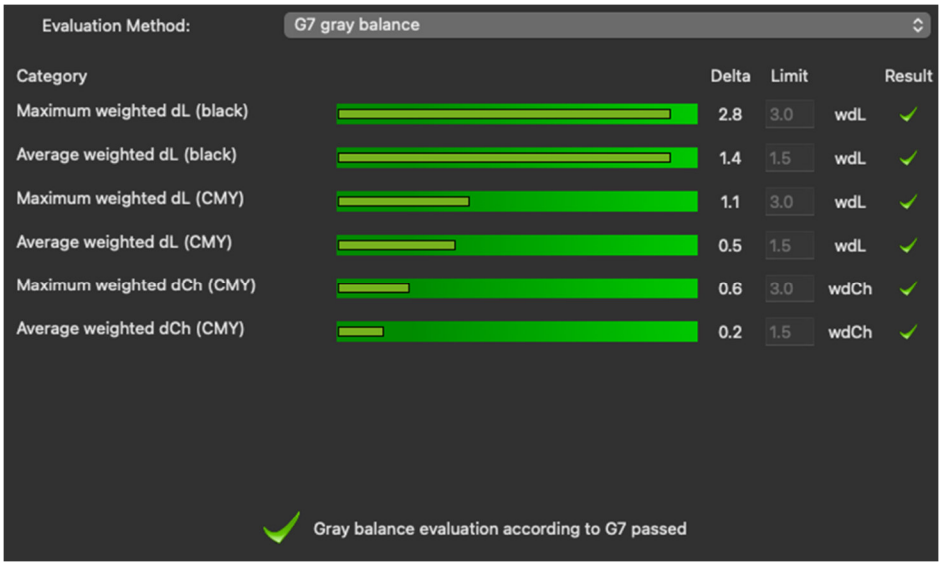
# Evaluate

## New G7 Evaluation Method

The ***Evaluate*** tool can be used to check whether the measurement data fulfills certain requirements, for example, requirements for a contract proof or a validation print.

Now there is a new ***Evaluation Method*** in the ***Evaluate*** tool, which allows the measurement data to be checked for G7 conformity. G7 is an internationally recognized method for calibrating printing presses and proofing systems, and this year, ColorAnt was awarded the G7 System Certificate by the IDEAlliance.

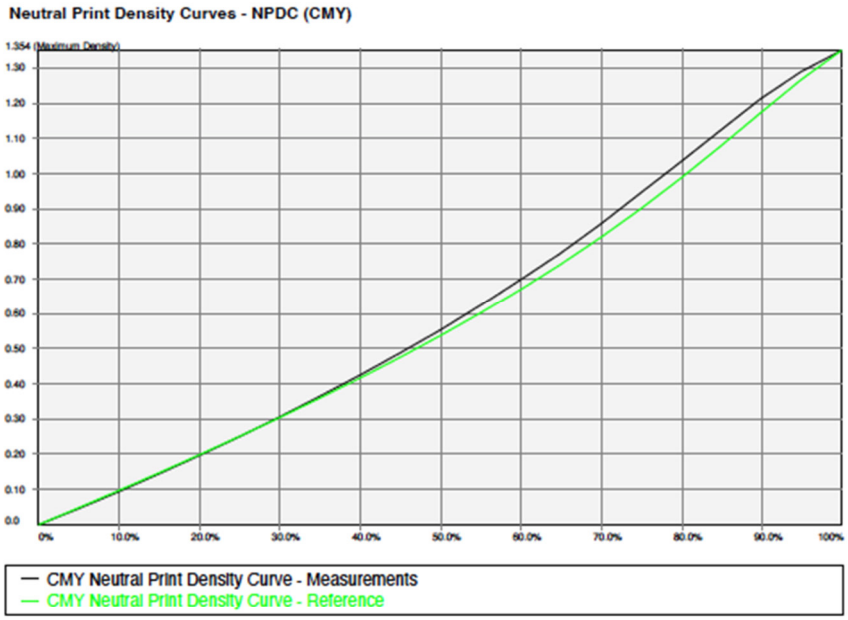
The new ***Evaluation Method*** "***G7 gray balance***" checks the measurement data for G7 conformity to ensure accurate and consistent color reproduction.




# Report

## More information available in the G7 report pages

The report now has new areas for ***Weighted avg/max*** before (measurement data) and after (after correction / expected data) for CMY and K. This makes it easier to see whether a limit has been exceeded (indicated by red values) or not (green values).




| | Delta | Limit |
|---|---|---|
| Weighted ΔL (avg) | 0.52 | 1.50 |
| Weighted ΔL (max) | 1.14 | 3.00 |
| Weighted ΔCh (avg) | 0.23 | 1.50 |
| Weighted ΔCh (max) | 0.57 | 3.00 |

After applying a tone value correction with the 'G7® Gray Balance' method

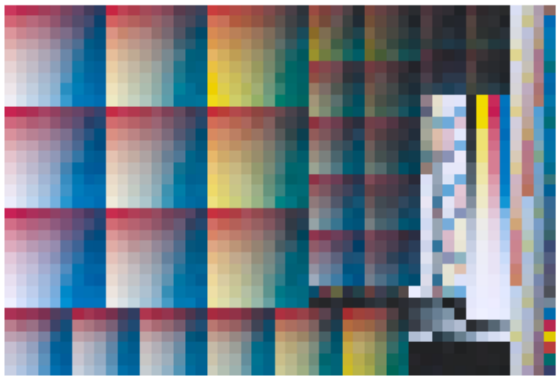
| | Delta | Limit |
|---|---|---|
| Weighted ΔL (avg) | 0.05 | 1.50 |
| Weighted ΔL (max) | 0.13 | 3.00 |
| Weighted ΔCh (avg) | 0.11 | 1.50 |
| Weighted ΔCh (max) | 0.45 | 3.00 |

## The Report now contains OBA Information

The extended section ***Brightener*** in the ***Report*** gives some useful information about the detected OBA in the file, for example the ***Estimated Brightener*** and how a brightener correction would affect the paper white. This is based on a predictive model, that focuses exclusively on the b-value.

**2. General**

**Patches**



**Brightener**
Brightener detected based on spectral analysis.
Estimated brightener: 9.24 (moderate)
Brightener correction would change paper white by DeltaE-2000 8.13.

# Color Editor

## More information in the Spot Color Report

The ***Spot Color Report*** now shows the custom dE00 limit defined by the user.

| | |
|---|---|
| Reference profile: | ISO Coated v2 (ECI) (CMYK) |
| Average dE00: | 1.5 |
| Maximum dE00: | 6.2 (1267) |
| Median: | 1.4 |
| dE00 < 1.0: | 17.9% |
| dE00 < 2.5: | 92.0% |
| dE00 < 3.0: | 95.4% |

| Name | Reference (Lab) | |
|---|---|---|
| 171 | 48.12 73.47 4.61 | 0. |
| 170 | 52.90 63.96 3.39 | 0. |
| 169 | 59.71 51.18 3.25 | 0. |

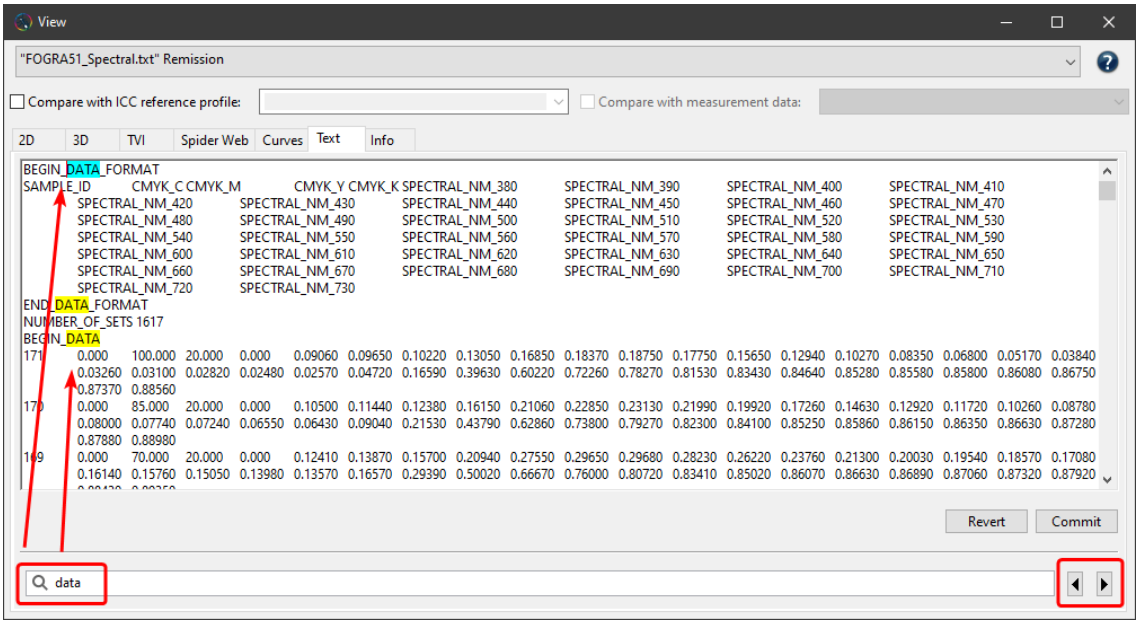
Additionally, the report now has a new information column (which you may already know from ZePrA's spot color report) that indicates, among other things, whether a color is out of gamut.

| | | | | | | |
|---|---|---|---|---|---|---|
| 950 | 34.72 54.79 -5.39 | 41.4 100.0 42.5 | 36.72 49.24 -4.02 | 2.4 | 6.1 | |
| 949 | 44.14 37.55 -7.50 | 39.1 78.7 32.4 | 44.16 37.41 -7.45 | 0.1 | 0.1 | |
| 948 | 55.49 19.69 -7.37 | 36.6 54.5 27.1 | 55.50 19.60 -7.40 | 0.1 | 0.1 | |
| 947 | 62.52 9.75 -6.42 | 35.1 39.7 25.2 | 62.46 9.73 -6.44 | 0.1 | 0.1 | |
| 946 | 69.76 0.49 -4.90 | 33.3 24.4 23.8 | 69.73 0.58 -4.90 | 0.1 | 0.1 | |
| 1405 | 27.49 -18.64 -25.44 | 100.0 68.5 53.1 | 31.79 -13.25 -19.70 | 4.9 | 9.0 | out of gamut |
| 1399 | 12.62 0.12 4.12 | 96.0 96.9 100.0 | 24.22 -0.01 -0.19 | 8.8 | 12.4 | out of gamut |
| 897 | 32.17 40.58 9.35 | 53.8 100.0 80.6 | 33.07 37.47 9.78 | 1.4 | 3.3 | |
| 896 | 40.75 22.13 15.28 | 52.1 74.8 79.5 | 40.72 22.22 15.91 | 0.4 | 0.6 | |
| 895 | 51.18 2.00 22.70 | 51.2 48.2 76.8 | 51.12 2.01 22.81 | 0.1 | 0.1 | |
| 894 | 57.87 -9.56 27.24 | 50.5 30.8 75.3 | 57.89 -9.55 27.16 | 0.0 | 0.1 | |
| 893 | 61.14 -14.96 29.58 | 50.2 22.3 75.2 | 61.13 -14.92 29.71 | 0.1 | 0.1 | |
| 892 | 64.39 -20.27 32.26 | 50.0 13.6 75.3 | 64.41 -20.32 32.41 | 0.1 | 0.2 | |
| 1055 | 30.81 40.60 23.75 | 53.0 97.5 100.0 | 33.75 35.73 18.46 | 3.6 | 7.8 | out of gamut |

# View

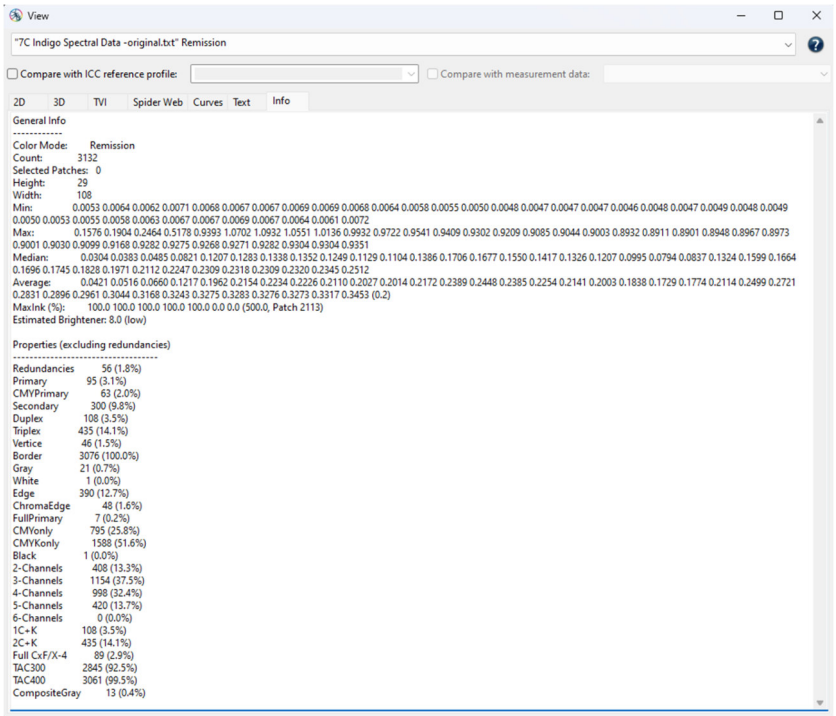
## New search function in the Text tab

It is now possible to search for text in the ***Text*** tab. Just type in what you are looking for and press the enter key. All found locations will be highlighted. Using the arrow buttons next to the search mask, you can move back and forth between them.




## New *Info* tab shows many useful information about the selected file

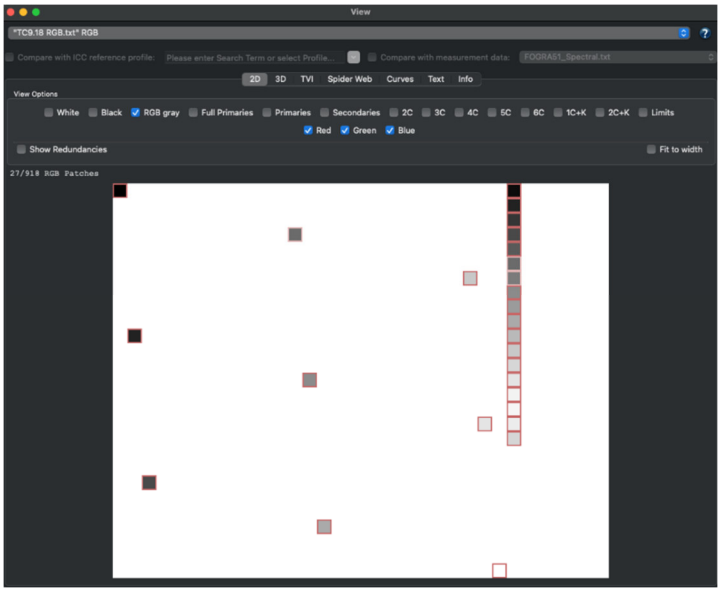
The new ***Info*** tab shows a number of general useful information about the selected file, including OBA.



## New gray filter for RGB data

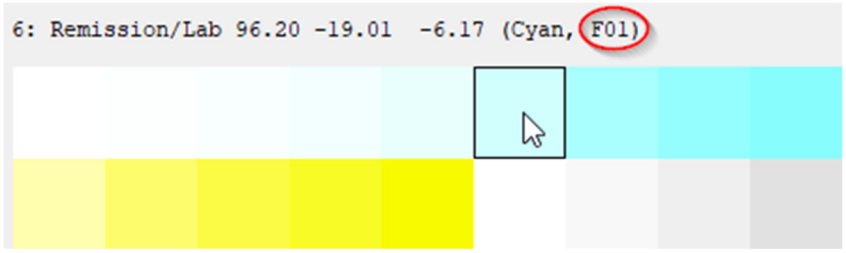
The ***View*** and ***Compare*** windows offer a variety of filters to facilitate the evaluation of the measurement data. Using these ***View Options***, colors can be selectively displayed in ***2D*** and ***3D*** view. All other color patches are then hidden. This helps to find selected colors in the layout of the test chart immediately.

The new ***RGB Gray*** filter now offers this functionality for RGB data as well.




## The patch location is now shown (if available)

The patch location (SAMPLE_LOC) is now shown (if available) in the patch information, when moving the mouse pointer over a patch.

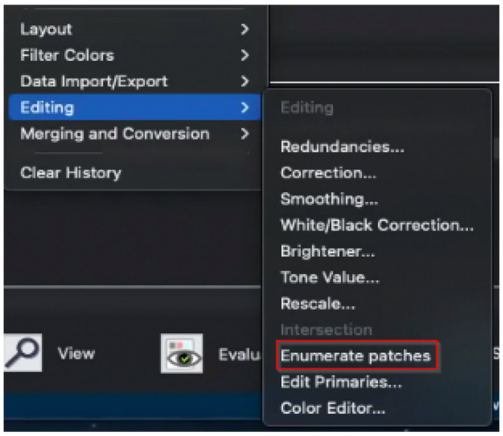


# General Additions

## New option for resetting the sample IDs of data sets

Sometimes IDs of patches get mixed up, for example, when merging several files, resulting in different types of IDs.

The ***Enumerate patches*** function (in the context menu under ***Editing***) will create new consistent IDs for all patches.



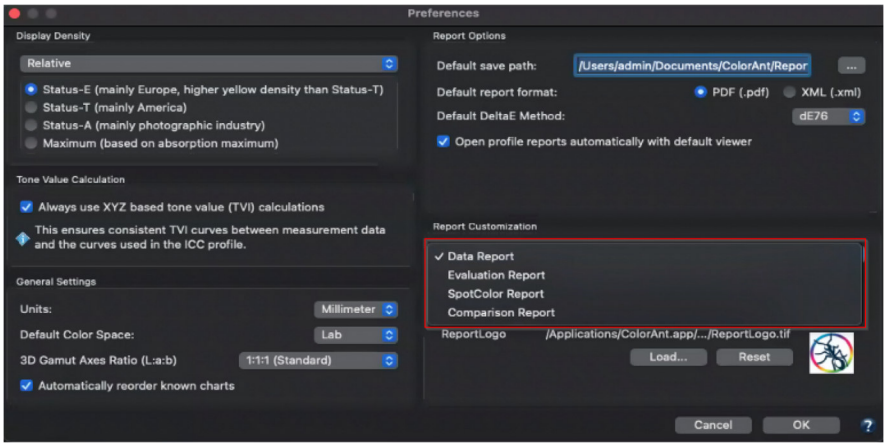

## ColorAnt can now be controlled via the command line

ColorAnt now provides a command line interface for integration into other workflows. The document ***ColorAntCLI.pdf*** provides an overview of the available commands. It is intended for developers, scripters and experts and describes the usage of the command line interface of ColorAnt.

***Note***: The new CLI functionality is part of the new ColorAnt XL package.

## Report Logo and Title can now be customized for all report types

It is now possible to set an individual ***Report Titel*** and ***Report Logo*** for each of the four available reports in ColorAnt:



# General Improvements

## Better distribution of white patches in linearization charts in the *Custom Chart* tool

The distribution of white patches has been optimized. Previously, each patch for each channel was inserted at the end of the chart. Now it is placed at the beginning of each channel ramp.

## Smaller increment for curves in *Text* format in the *Tone Value* tool

Previously, the curves that were saved in ***Text*** format had 2% increments. Now the step size has been reduced to 1% in order to preserve more details.