

*Quad Tone RIP*



**DATA-TOOL**

**Utility for  
Quad Tone RIP  
on  
Mac OS X**

Copyright © 2020  
Roy Harrington

Version 2.0 - May 2020

# DATA-TOOL FEATURES

## Extraction and Display of Patch Measurements

### **Extracts LAB data from:**

- 1) columnar text files -- tab or comma separated
- 2) single-line list of values
- 3) QTR created ICC profiles
- 4) curve descriptor files with LINEARIZE=

### **Displays LAB data as:**

- 1) a table with step, lab, A and B values
- 2) a graph showing above values
- 3) A & B have 2 possible scales 10 to -10 or 100 to -100

### **Smoothing of data with 3 levels:**

- 1) gentle smoothing -- best for 21 step data
- 2) medium smoothing -- if needed
- 3) most smoothing -- best for 51 step data

### **Aid to determine relative weight of inks:**

This can be used for partitioning of QTR driver profiles to get the relative density of dark and light inks.

## Export Data for other uses

### **Export Text data:**

- 1) columnar file -- tab(.txt) or comma(.csv) separated
- 2) create grayscale ICC profile
- 3) create RGB ICC profile
- 4) provide the LINEARIZE= line for curve creation  
for both positives and negatives
- 5) or a QTR CURVE= line of linearization coordinates

## Reading in Data

There are several ways to read in data for display.

1) You can Open files via the Open command or Drag-and-drop a .txt or .csv file onto the application icon. This will read in the file and extract the columns of data. The program can handle quite a few formats for the data as long as its basically rows of readings and columns with similar data. It will recognize column headings if there are any. Some file formats can have too much other info that throws off the extraction, so you should always look at the results to see if they make sense.

2) The curve descriptor files .txt or .qidf can also be used when they have an existing LINEARIZE= line. This allows you to see what linearization correction was used and gives you the opportunity to Smooth the data to redo the profile.

3) ICC profiles that have been created in the past also have the original data stored within the .icc profile. This data can be extracted as well.

## Smoothing Data

There are multiple levels for smoothing a set of data. Simply select one of the numbers in the smooth bar -- 0, 1, 2, 3 -- for various amounts of smoothing. Use a minimal amount that does the job, too much flattens more than you may need.

## Relative Weight Determination

This is a special feature to make relative weight easy to visualize and measure. First read the darker ink in showing its graph. Second read the lighter ink in showing its graph on a new window. If you drag the second window on top of the first window it will snap into registration i.e. aligned. Now you can click on the Transparent button to allow you to see through to the under layer. Now drag the weight slider until the graphs line up. The weight value now shows the relative percentage weight of lighter ink. You can go more levels for at least a third ink, and maybe a fourth. If more levels are desired take the last one you did, turn off transparent and slide weight back to 100. Multiply subsequent values by the actual value of the new base.

## Exporting Data

There are several ways to export data for usage elsewhere.

1) The LINEARIZE= values are shown at the bottom of window. You can either click the Copy button or select the data itself and then paste it into the curve descriptor you are linearizing. The Negative checkbox will reverse the values so they can be used for Digital Negative linearizing -- measurements are from the positive print from alternative process. Alternative is a set of CURVE= (x,y) coordinates that can be used in a curve descriptor.

2) Under the File menu there's an Export Data... command that allows you to write out a text file. The options allow .txt - tab separated columnar format or .csv - comma separated values format.

3) Under the File menu there's an Export ICC... command that allows you to create and write out ICC profiles. ICC format can be selected as Grayscale or RGB.

## System Requirements

**Data-Tool** runs on many versions of the Mac:

Mac OSX version 10.6 Snow Leopard through 10.15 Catalina.