Test Targets for Monitor and Print
By Rick Cloran, FPSA, MPSA. MNEC

It is difficult to judge how well your monitor or printer is doing based on the images we have in our files because we typically do not capture the full range of lights and darks or a full range of colors in a single image. Enter "test" images specifically constructed to provide those very qualities. This page has four test images all of which have sufficient resolution for you to print as well as view on your monitor. There are three color images in different sizes. There is also a black and white image.

The color images can be of some assistance even if you have not calibrated your monitor. Bring one up and study it closely. The Frontier and PDI images may be the most useful as they contain gray scales as well as colors. Check the gray scales to see if you can see all of the individual patches. Next look closely to see whether they seem to have any tone to them or if the white and grays are clean. If your monitor is off, the white and light grays in particular will look warm or cool (bluish). If everything is good to that point, check the different color patches to see if the colors appear true. (This is very subjective if you have not calibrated your monitor unless it is off significantly.) The Frontier image can be a help here. There should be detail but no color tone in the model's white tee shirts.

Checking the patches is still worthwhile even if you have a calibrated monitor. Things may have shifted since you calibrated. The greater benefit here may be your ability to print the test patch and compare the print to the monitor. The color targets are sized as follows: Frontier – 5 x 7; PDI – 7 x 10; Matrix – 12 x 16.

There are some basic considerations.

☐ Print on the whitest paper you have, something with a brightness rating of 95 or higher. (Don't expect a comparable print if you print on a fine art paper with a brightness rating of 90.)

☐ Look at the print under lighting that is comparable to your monitor, i.e., clean unfiltered daylight. This may not be your normal viewing conditions, but that is another matter. If you don't have a good light source check out the Ott-Lite offerings on Amazon. You can get a good one for $30.

☐ If you have and use icc profiles (that is you have Photoshop or your editing program manage the colors rather than letting the printer do it) make sure that you are using the correct one for the paper you chose.

☐ Disable High Speed printing, Finest Detail, and Edge Smoothing.

Check the print in the same order as the monitor. First check the grey scales to see if everything shows and then the whites and light grays for any tonation. Lastly, check the colors to see how they compare. If you have an issue it will typically be either that your print doesn't give the full gray scale range or that there is a constant shift to either magenta or cyan (blue) in everything.

The black and white test target is from Northlight images and is sized for European paper at just over 8 x 11. You may want to downsize it slightly to fit on a letter size sheet. The same basic considerations as shown above apply here. In addition

☐ If you have Photoshop or your editor control the colors, use a Perceptual rendering intent for the B&W target.
☐ Print quality should be set to 1440 dpi for matte papers and 2880 dpi for photo papers.
☐ If your printer driver has an advanced black and white feature be sure to use that.
o In most cases you will want to set the tone control to either Dark or Darker depending on the paper.
o Examples Epson Exhibition Fibre – Darker; Epson Ultrasmooth Fine Art – Dark; Illford Gold Fibre Silk – Dark; Red River Arctic Polar Luster – Darker.

Rick Cloran