

Mysteries of Photography #10: Are your Prints and your Digital Images showing as too dark in competitions?

At a recent camera club meeting, several digital images in the monthly competition showed as very dark. This was also the case with the judge when he reviewed them earlier on his calibrated monitor at home, with the club laptop and with the room projector. From what we could see of the images, the photographer was very competent but why were the images so dark?

One possible explanation was that the photographer had a (possibly new) computer with a screen that was running at extreme brightness levels (luminosity) – later confirmed in a personal email!

A generally accepted level of screen luminosity for photographic work is 100 to 120 candelas per square meter (cd/m^2). (Some people use “nits”, an ugly term that I refuse to use so let’s just use numbers and take the cd/m^2 for granted.) It is a safe guess that, with experienced judges, your images will be assessed using screens running at this sort of luminosity level.

The problem of excessive luminosity can arise because of product marketing. Come into a shop selling computers and you have one with a very bright high resolution screen and it is more likely to impress Joe Public and put money into the cash register. Instead of a luminosity of 100-120, I read that some computers now come out of the box set to a luminosity of 300-400!

Process your image on screen running at 300 or more and then have it judged on a screen set at 120 and it will likely appear to be a dark blob.

Well then, you say (with some justification), why should your images be held back by judges that don’t have your modern high luminosity screens? You are of course partially correct. It is only relatively recently that higher levels of screen luminosity were technically possible with consumer grade equipment.

However, colour reproduction is also intimately tied to the printed image. This includes not just competition prints but also books, magazines, printed advertising, etc.

To get a satisfactory printed image (one that comes out not looking far too dark), you need to match your screen brightness showing a pure white image (255,255,255) with the paper stock you are printing onto. Under typical ambient lighting conditions, adjust your screen brightness so the paper white and screen match. This is typically a luminosity of 80-100.

I use 100 as a reasonable compromise. I like to print my images and I found that with the calibrator’s default 120 my prints turned out a bit dark but came out as I wanted with my monitor set at 100. Also at this setting, I have not run into issues with my digital images for competitions standing out as too light or too dark.

Screen calibration is usually sold as the way to ensure colour accuracy of your images. I would like to suggest that it is equally important in adjusting monitor brightness, not just for printing but also for optimising judging of digital images.

I would like to propose that it should be mandated that any serious photographic competition must specify not just the colorspace capability of the monitors used for judging **but also the setting for the luminosity as well.**

I have yet to see any national or international competition that specifies the screen luminosity used in the judging of digital entries. This is a major oversight that should be rectified, in my opinion.

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