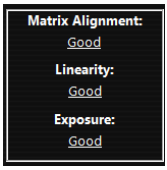
datacolor
CHROMACAL Color Calibration Slide for Brightfield Microscopy

EXPOSURE GUIDE for CHROMACAL CALIBRATION SLIDE

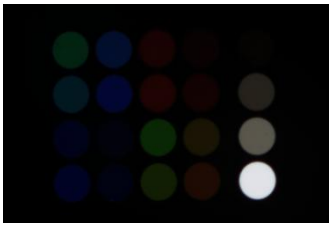


After opening your calibration slide image in the ChromaCal Image Calibration software, achieve a Matrix Alignment = "Good" before relying on the Exposue result.

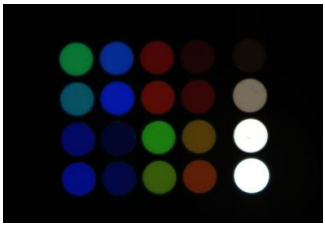
When the calibration slide image is exposed correctly, ***the brightest white circle should be slightly gray, and the two whitest circles should differ in intensity***. Note: a correctly-exposed image will appear dark and certain patches may not be visible. ***This is normal***.

Examples of proper and incorrect exposure of the calibration slide are below.

Proper Exposure



Incorrect Exposure



The Exposure result has one of three possibilities:

Exposure Result	Guidance on Exposure Result
"**Good**"	Your calibration slide image appears to fall within acceptable exposure parameters for optimal color calibration of your specimen images. *You can proceed with calibrating your specimen images.*
"**TBD**"	There is not enough information available to determine your calibration slide's exposure. Be sure the whitest circle is located in the lower right-hand portion, and that a grid square is located within this circle.
"**Over Exposed**" If you continue with this result, the color calibration will likely not be optimal and the calibrated images will likely be darker than your original images.	Your calibration slide image is overexposed. The whitest circle is much too bright and has clipped at least one of the color channels. If you continue, the color calibration will likely not be optimal and the calibrated specimen images will likely be darker than your original images. *Guidance to proper exposure:* During image capture of the calibration slide, adjust exposure on your camera until the brightest white circle in the matrix is slightly gray. When the calibration slide image is exposed correctly, the image will appear dark and certain patches may not be visible. This is normal. *You can determine the correct exposure in any of the following ways:* 1. If you are using auto-exposure, allow the camera to set exposure but only if the calibration slide image appears dark and the brightest white circle appears slightly gray. If the image is over-brightened, turn off auto-exposure and set exposure manually according to (2), (3) or (4) below; or 2. Acquire the calibration slide image at the same exposure as you used for specimen images taken with a non-oil immersion, "dry" lens; or 3. Use a histogram in your camera software to be certain that the brightest part of the histogram display is within the dynamic range of the camera as you reduce or increase your exposure; or 4. Set by eye; reduce exposure until the brightest white circle becomes slightly gray.

