

Section 7—Transmitted Illumination

Digital Imaging Workflow for Treatment Documentation

Conservation Division, Preservation Directorate, Library of Congress

TRANSMITTED ILLUMINATION

Section 7—Transmitted Illumination

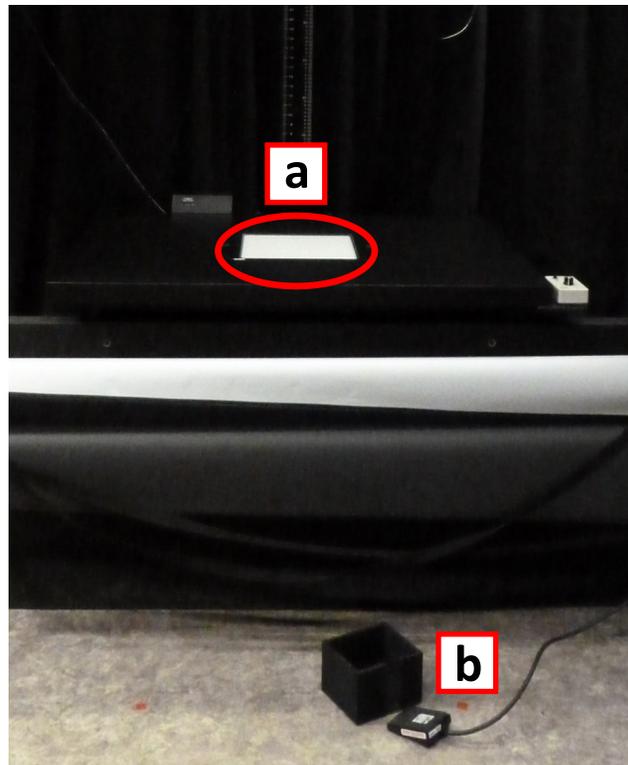


Figure 7.01

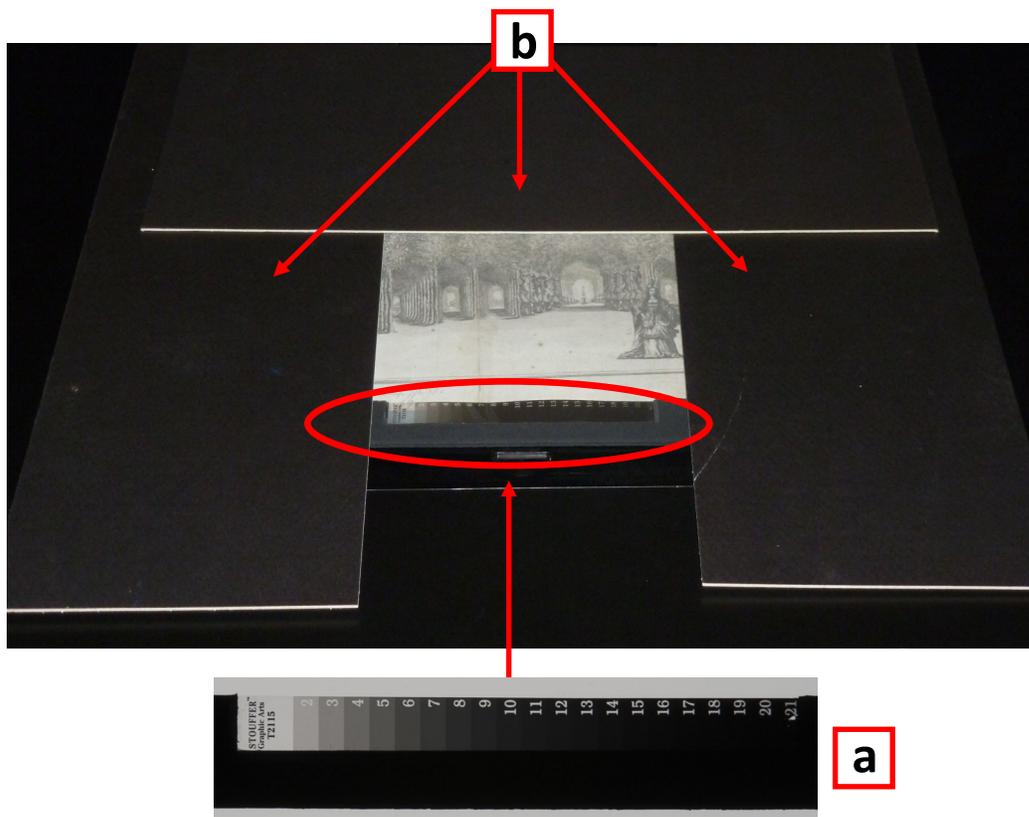


Figure 7.02

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Capture

Set Up

1. Remove the mat board that covers the base of the copystand to reveal the transmitted light box (fig. 7.01a). Remove the foot pedal from its box, located on the floor to the right of the copystand, and use it to turn on the light source (fig. 7.01b).
2. Position your object on the light box and place the transmitted target along any edge of the object (fig 7.02a). Identification labels will be visible using transmitted light, but somewhat low in contrast.
3. Mask areas around the object and target with black mat board strips located in the studio cabinet (fig. 7.02b). A thin margin of light may be left in order to document the edges of the object.
4. Turn off the overhead light.

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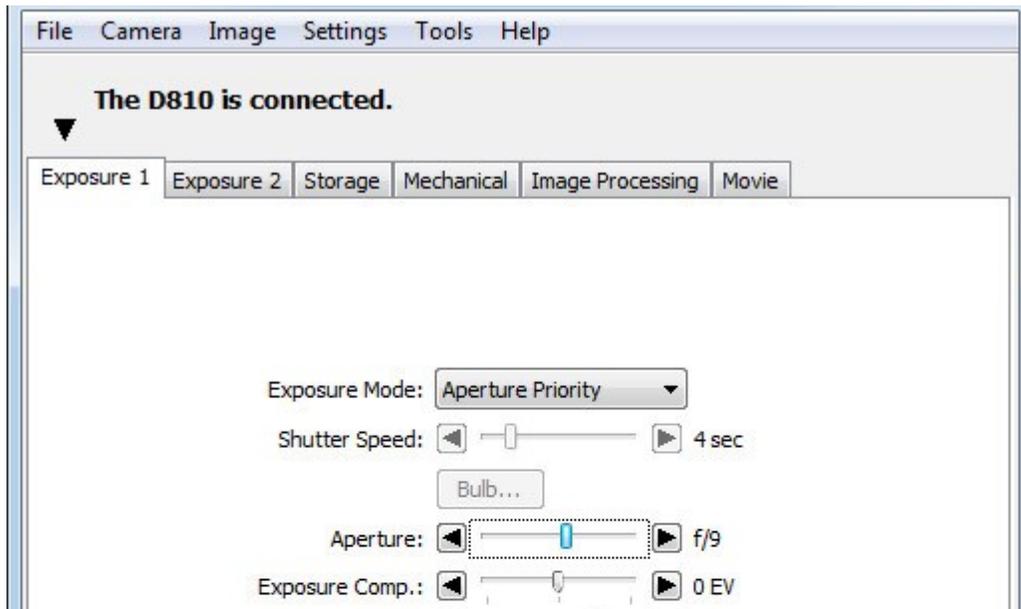


Figure 7.03

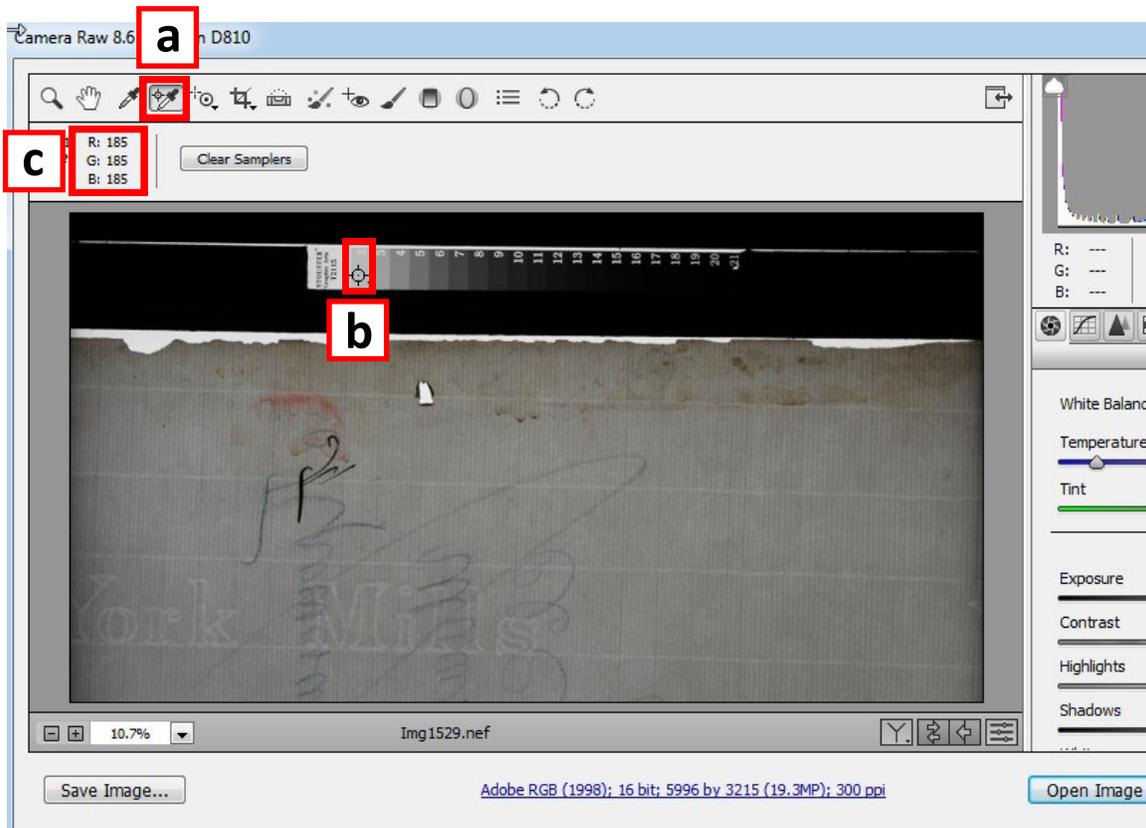


Figure 7.04

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Image Capture

1. In **Camera Control Pro** under the *Exposure 1* tab, select the following (fig. 7.03):
 - Exposure Mode: Aperture Priority
 - Aperture: f/9
 - Exposure Comp.: 0
2. Settings under the *Exposure 2* (including auto white balance), *Storage*, and *Image Processing* tabs are the same as with normal illumination (page 2.13).
3. Press *AF and Shoot*.

Preview Images

1. In **Bridge**, open the image in **Camera Raw**.
2. Select the *Color Sampler Tool* (fig. 7.04a) and click on Step #2 of the transmitted light target (fig. 7.04b).
3. Exposure level is based on what best illustrates the feature(s) you wish to highlight in transmitted illumination. Make note of the RGB values (fig. 7.04c) of Step #2 of the transmitted light target to replicate for during and after treatment capture. If necessary, adjust *Exposure Comp.* in the *Exposure 1* tab of **Camera Control Pro** and reshoot. Reevaluate in **Camera Raw**.

Finish

Finish the photography session as done with normal illumination (Section 2). In addition, **turn off the transmitted light source**, replace the mat board on the copystand base, and replace the foot pedal in its box.

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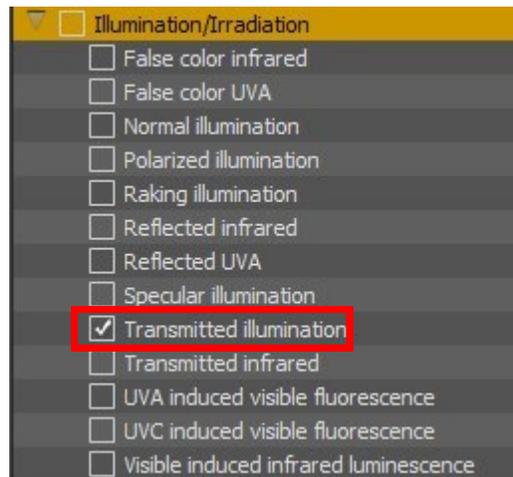


Figure 7.05

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Metadata

Add metadata as you would for normal illumination except when applying *Keywords* (Section 3). Select *Transmitted illumination* under Illumination/Irradiation (fig. 7.05).

Image Processing

Adjust Image Files

1. In **Bridge**, open the image in **Camera Raw**.
2. Sharpening, straightening, cropping and confirming workflow procedures are the same as with normal illumination images (Section 4).
3. Use Step #2 of the transmitted light target (fig. 7.04b) to white balance.
4. Click *Done* to save your adjustments.

Rename and Save

Follow the instructions in Section 4 for renaming and to create .dng archive files and .tiff derivative files.