Measuring Emissive-Flash Specimens

Step 1 **Start SpectraShop.**

Step 2 **Click the *Measure Specimens* button.**

Step 3 **Select the i1Pro as the *Instrument*.**

The i1Pro is the only instrument currently supported with the ability to measure flash sources.

Step 4 **Click the *Connect* button.**

When the connection is made the serial number of the instrument is displayed and the button's title is changed to *Disconnect*.

Step 5 **Select the Specimen Type to measure.**

For this tutorial select *Emissive-Flash*.

Step 6 **Place the i1Pro on its calibration plate.**

Step 7 **Click the *Calibrate* button.**

When the calibration is completed successfully the *Measure Monitor Specimens* and the *Measure Monitor* windows will appear.

Step 8 **Attach the ambient filter and its protective cap to the instrument.**

Step 9 **Remove the black cap from the filter.**

Carefully pry the black cap off, leaving the filter attached to the i1Pro.

Step 10 **Enter the *Specimen Information*.**

By default the *Auto Id* is active which will automatically generate Identifier 1 for each measured specimen. *Auto Id* is a very time saving feature if the specimens have a sequential naming system. Turn this off to manually enter each *Identifier 1*.

Step 11 **Select the measurement parameters.**

Selecting more than one *Measurement/specimen* will average the specified number of measurements. As each intermediate measurement is made a high pitched tone is sounded. A low pitched tone is produced to signify the last measurement for the specimen.

Step 12 **Measure the specimens.**

The flash measurements can only be made with the button on the i1Pro.

Click the i1Pro's measure button and hold it down. The program will beep to signal the start of the scan for the flash. Then trigger the flash. After the flash has finished, release the i1Pro's measure button. The measurement tone will sound to signify the flash measurement has been made.

Step 13 **Disconnect the instrument when finished.**

When all the specimens have been measured the *Disconnect* button in the *Instrument Connection* window may be clicked to prevent accidentally measuring additional specimens.

As each specimen's data is sent to the collection window, the specimen is selected in the specimen list, causing the spectrum, a simulated color patch, the metadata and the associated colorimetric values to be displayed. This gives visual authentication that the specimen was measured correctly.

Step 14 *Optional:* **Convert the colorimetry to relative values.**

The colorimetric values which depend on having a reference white point (i.e. CIELAB 1976, CIELUV 1976, CIECAM02 and CIE 1964 UCS) are not

initially displayed because the white point is unknown. If one of the measurements is to serve as a reference white for the other measurements, then these relative values can be calculated as follows.

When all the measurements have been made, click on the *Collection Inspector* icon in the upper-right corner of the collection window.

Click on the *Colorimetry properties* button in the Inspector.

Drop the white measurement here

Drag the measurement of the monitor's white to the *Reference Specimen* field in the *Relative Spectral Reference* area of the Inspector.

The CIELAB 1976, CIELUV 1976, CIECAM02 and CIE 1964 UCS values will now be calculated relative to the monitor's white and displayed.
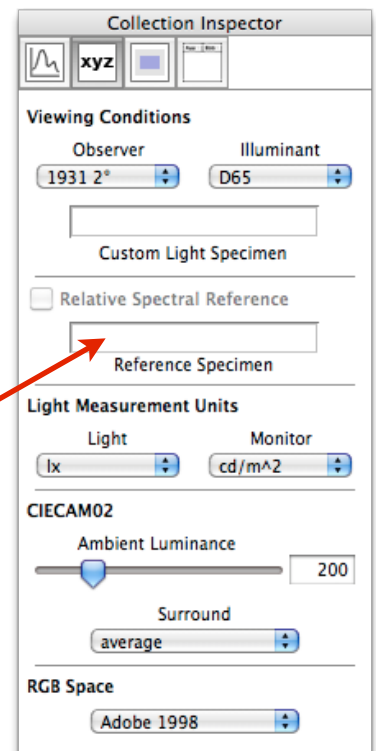
Important Note

When making relative light measurements of white light sources, each source would be its own white reference, thus the L* value will always be 100 and the a* and b* values will always be 0. Correspondingly, the u* and v* values will also be 0.