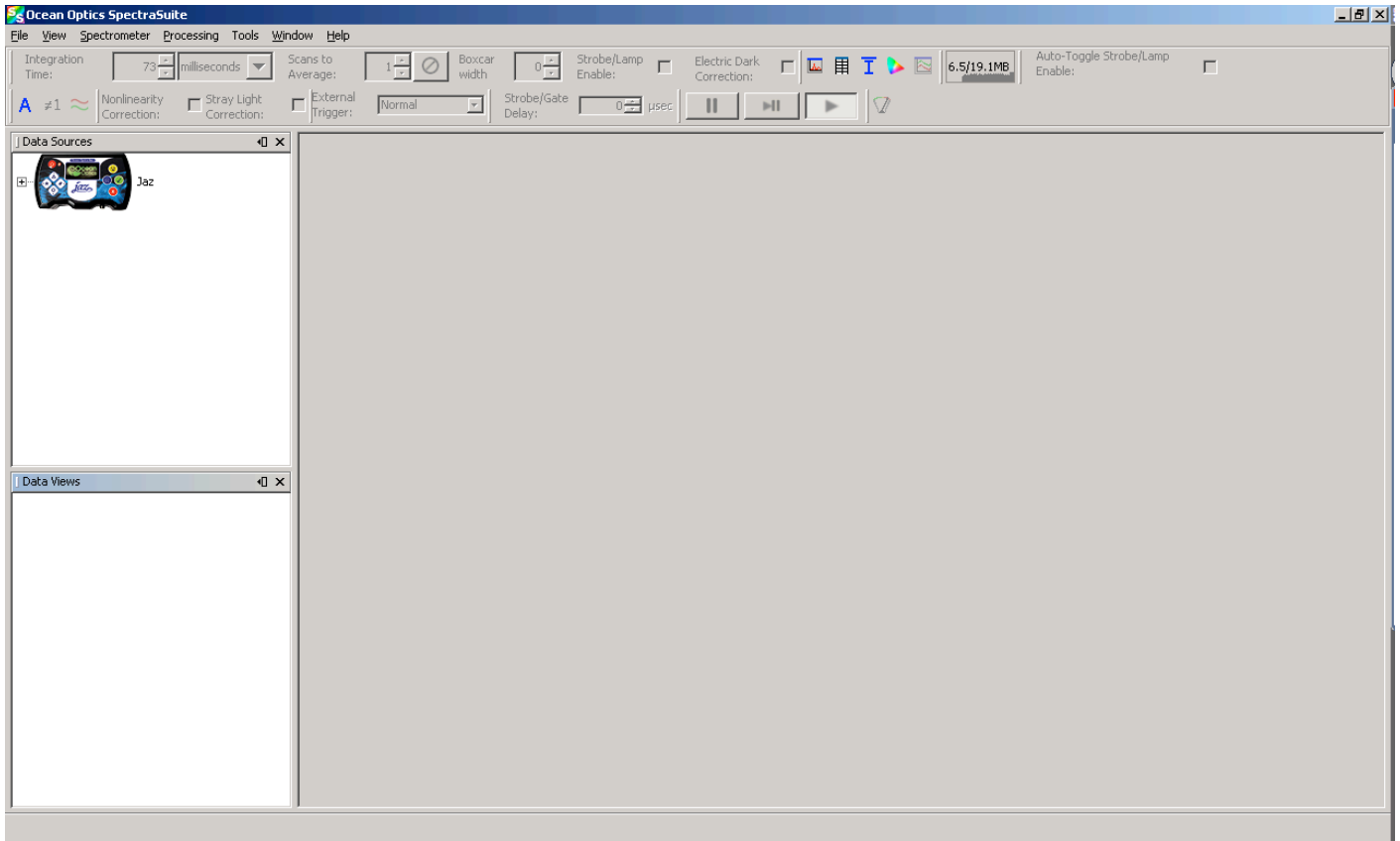
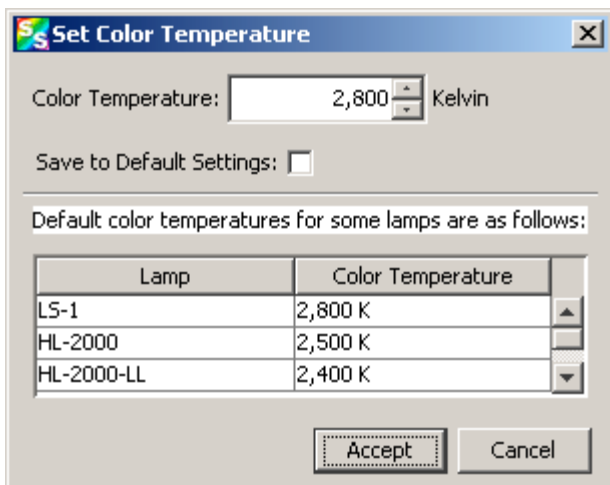


Color Measurement with Relative Irradiance Processing

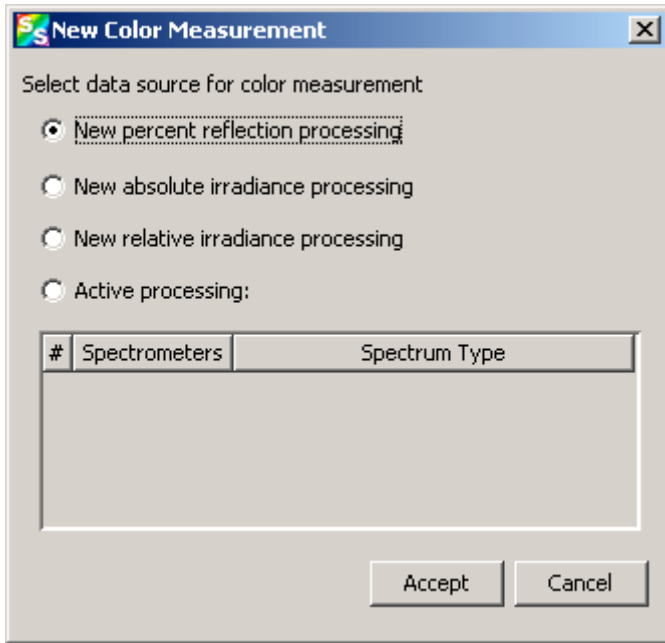
1. Open SpectraSuite and close any open tabs.



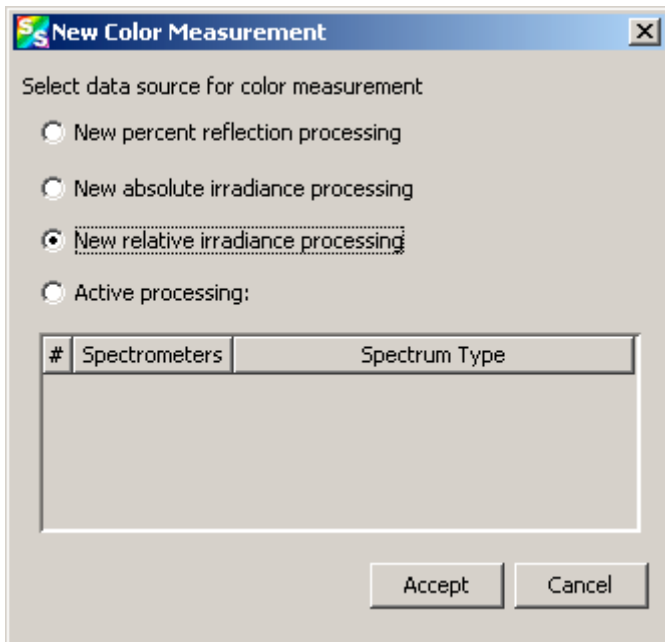
2. I am going to use an LS-1 tungsten halogen light source for my reference spectrum. This is a 2800K light source. In the Main Menu under Processing / Set Color Temperature, I am going to make sure that my color temperature is set to 2800K.



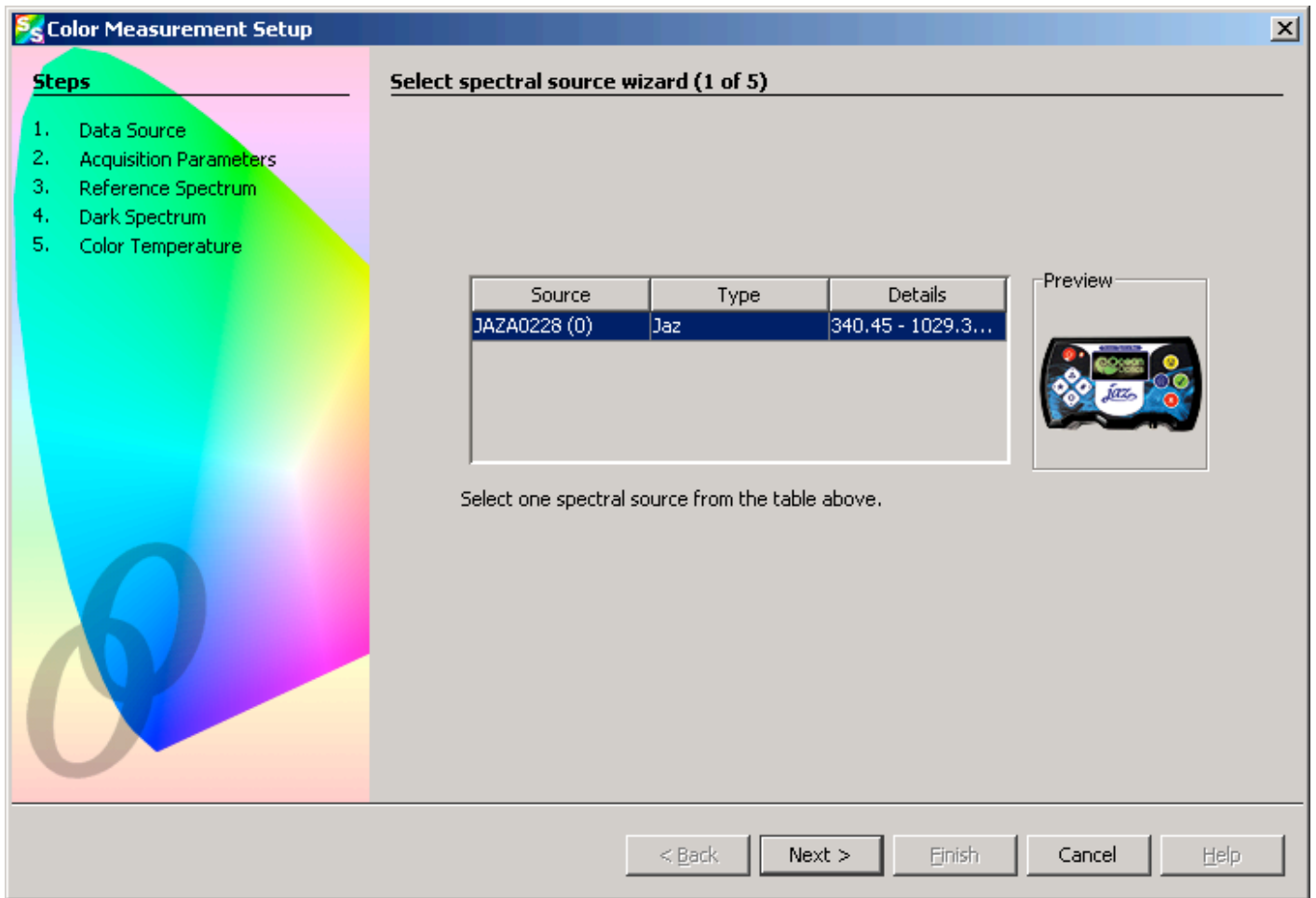
3. Click the “Color Measurement” button to start the Color Measurement Wizard.



4. Select the type of processing you would like to use. For this example, I will use Relative Irradiance. Click the “Accept” button.



5. Select the spectral source. If you only have one spectrometer connected to your PC, it will already be selected. Click the “Next” button.



- Set acquisition parameters. Ensure that you are using a light source that will work for your experiment. For relative irradiance, a blackbody light source with a known color temperature should be used. Here, I am using an LS-1 light source that has a color temperature of 2800K. Set the integration time so that the “Last peak value” is close the the “Recommended peak value.” Click the “Next” button.

Color Measurement Setup

Steps

1. Data Source
2. Acquisition Parameters
3. Reference Spectrum
4. Dark Spectrum
5. Color Temperature

Set Acquisition Parameters wizard (2 of 5)

Integration Time

Integration Time: 66,989 microsec...

Strobe/Lamp Enable:

Last peak value: 57649.04

Recommended peak value: 55704.00

Set automatically...

Advanced settings...

Recommended integration time acquired.

Smoothing

Scans to Average: 1

Boxcar width: 0

Preview

Value

Wavelength (nm)

< Back Next > Finish Cancel Help

7. Click the “yellow light bulb” button to store the reference spectrum. Click the “Next” button.

Color Measurement Setup


Steps

1. Data Source
2. Acquisition Parameters
3. Reference Spectrum
4. Dark Spectrum
5. Color Temperature

Store Reference Spectrum wizard (3 of 5)

Store Reference

Strobe/Lamp Enable:



Reference Spectrum Preview

Value

Wavelength (nm)

Load Reference Spectrum From File

Spectrum File:

New reference spectrum stored.

< Back Next > Finish Cancel Help

- Block the light path and click the “dark light bulb” icon to store the dark spectrum. Click the “Next” button.

Color Measurement Setup


Steps

1. Data Source
2. Acquisition Parameters
3. Reference Spectrum
4. Dark Spectrum
5. Color Temperature

Store Dark Spectrum wizard (4 of 5)

Store Dark Spectrum

Strobe/Lamp Enable:



Dark Spectrum Preview

Value

Wavelength (nm)

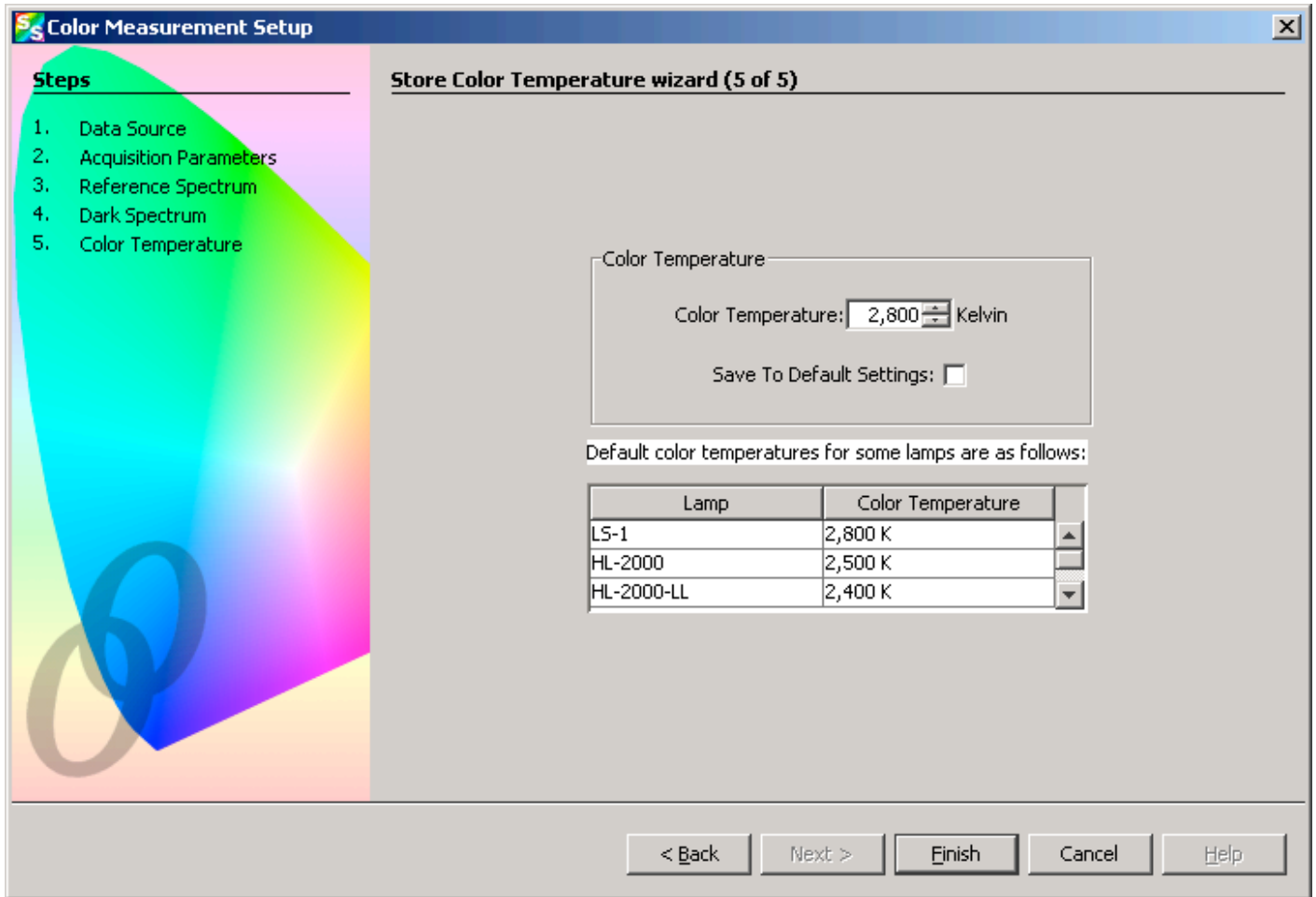
Load Dark Spectrum From File

Spectrum File:

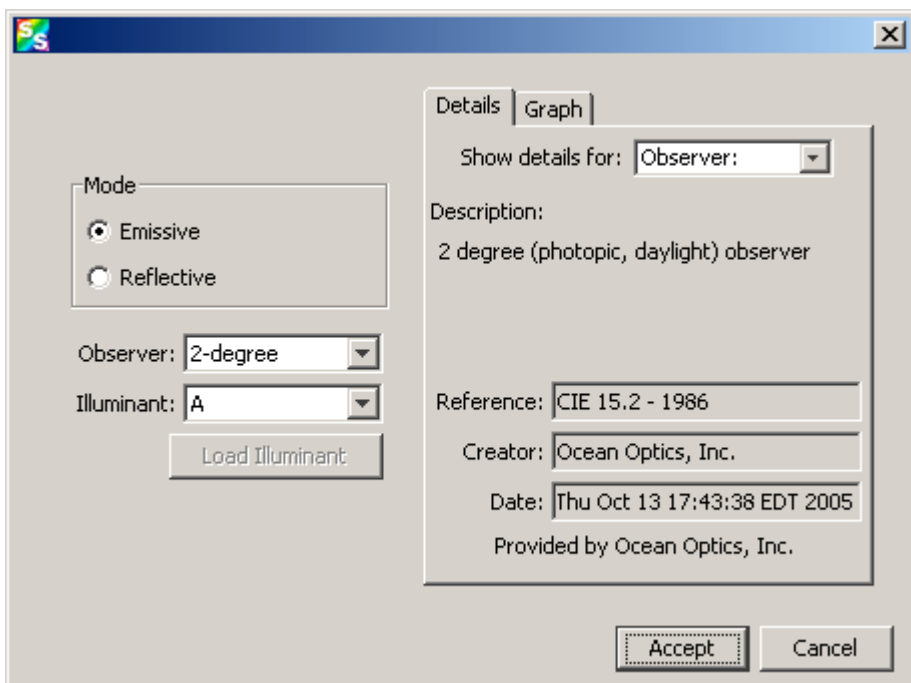
New dark spectrum stored.

< Back Next > Finish Cancel Help

9. Unblock the light path. Verify that the color temperature is set correctly. Click the “Finish” button.



10. Ensure that your color settings are set appropriately. Click the “Accept” button.



11. A “Color Values” table will open and will display the color values.

