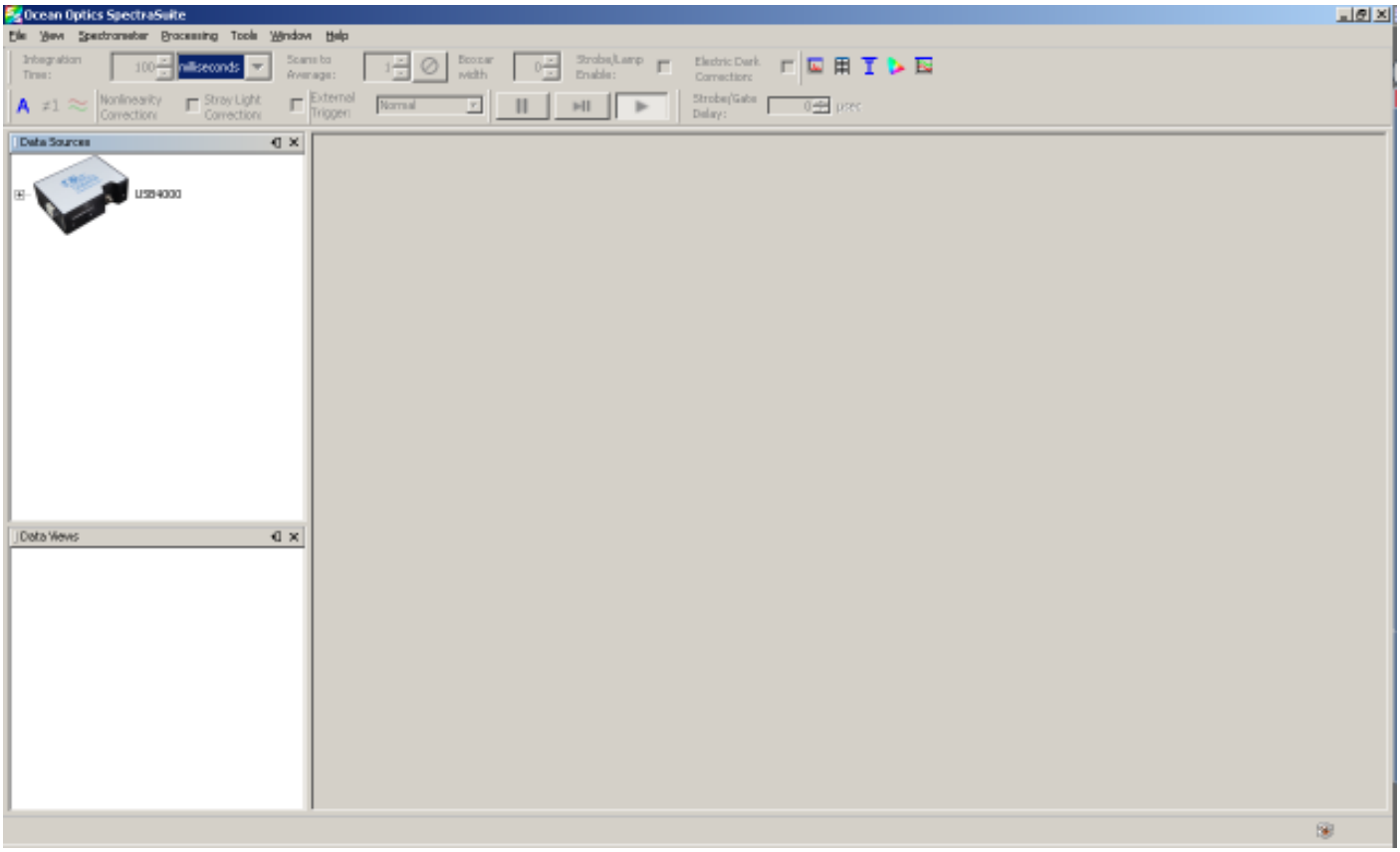
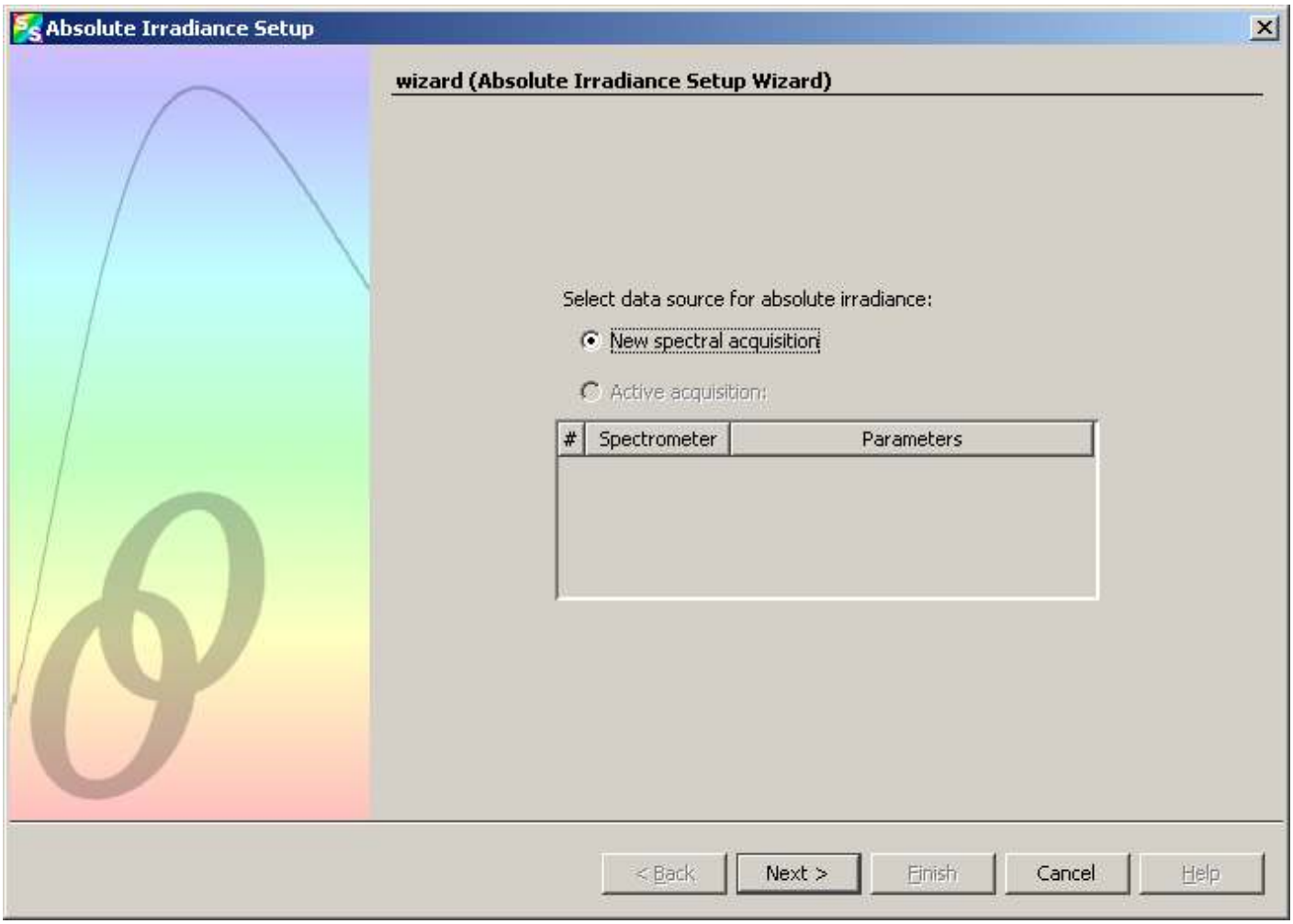
Absolute Irradiance Calibration & Measurement – Part 2: Measurement

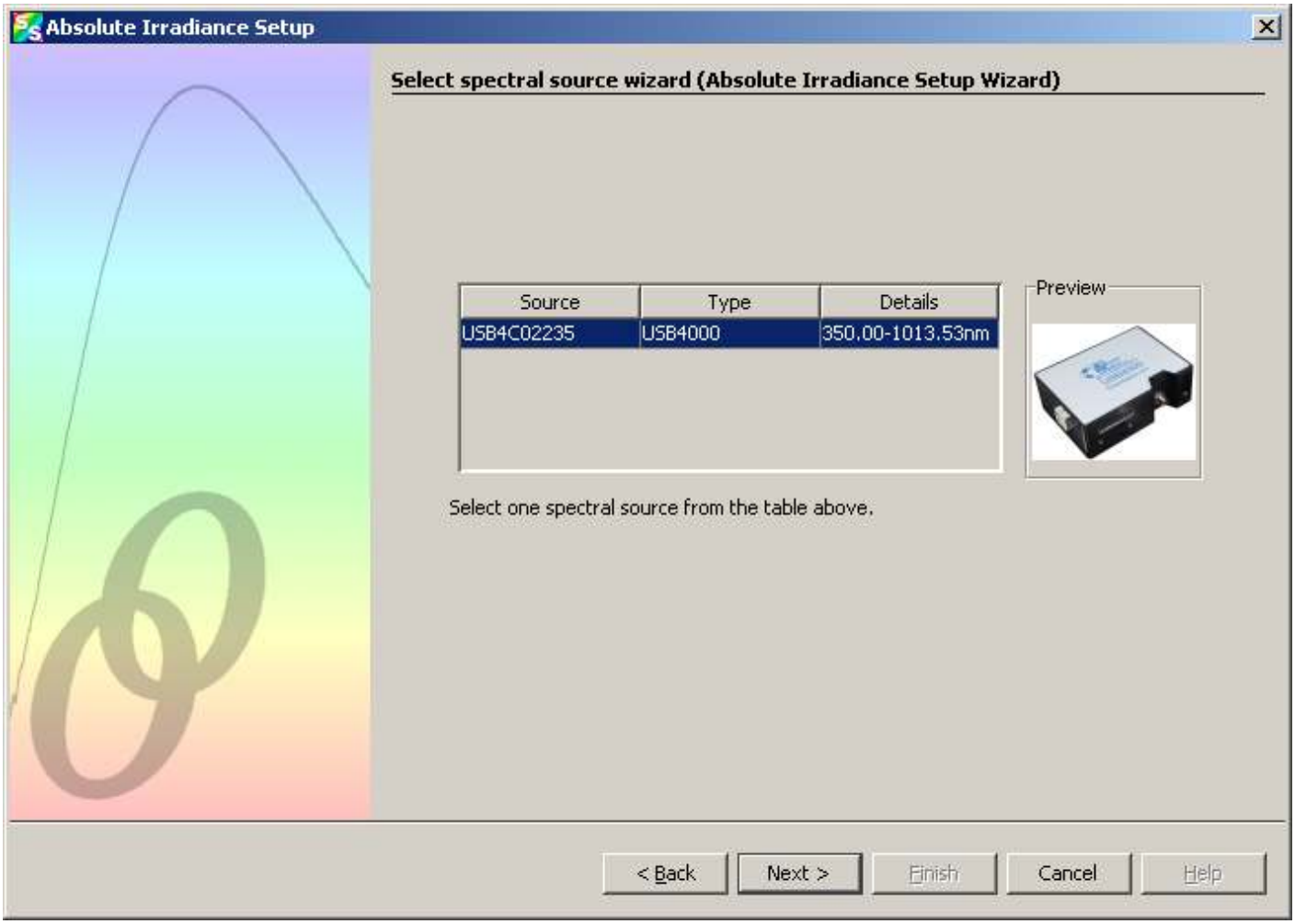
1. When you open SpectraSuite, close any open graphs so you start with a blank graph area. Go to the Main Menu under File / New / New Absolute Irradiance Measurement.



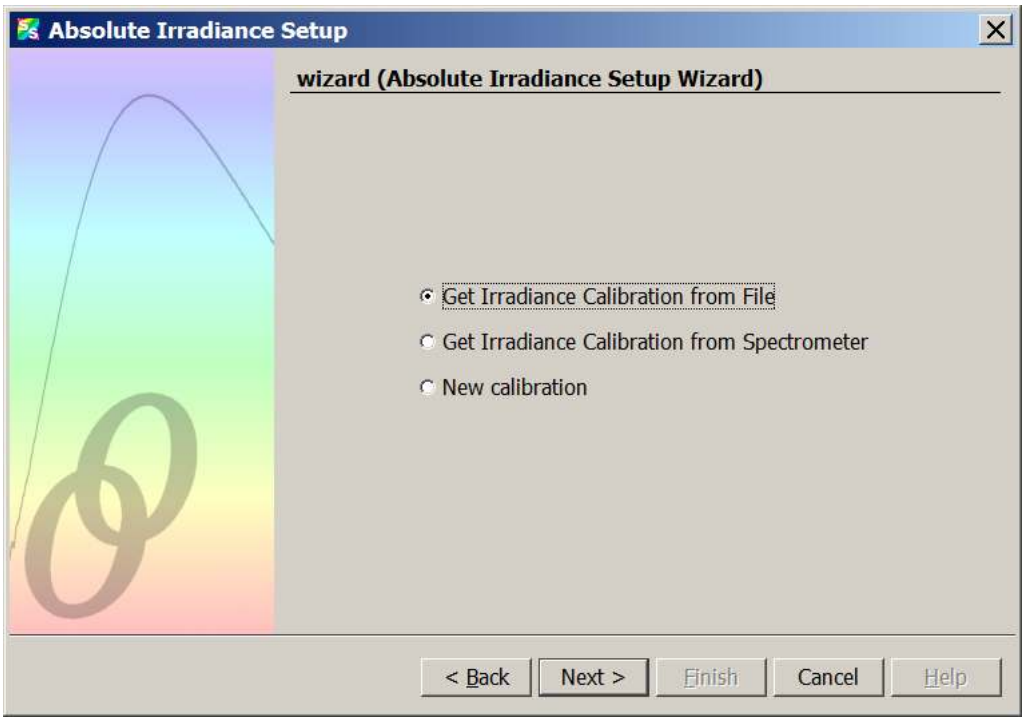
2. New spectral acquisition is selected. Click the “Next” button.



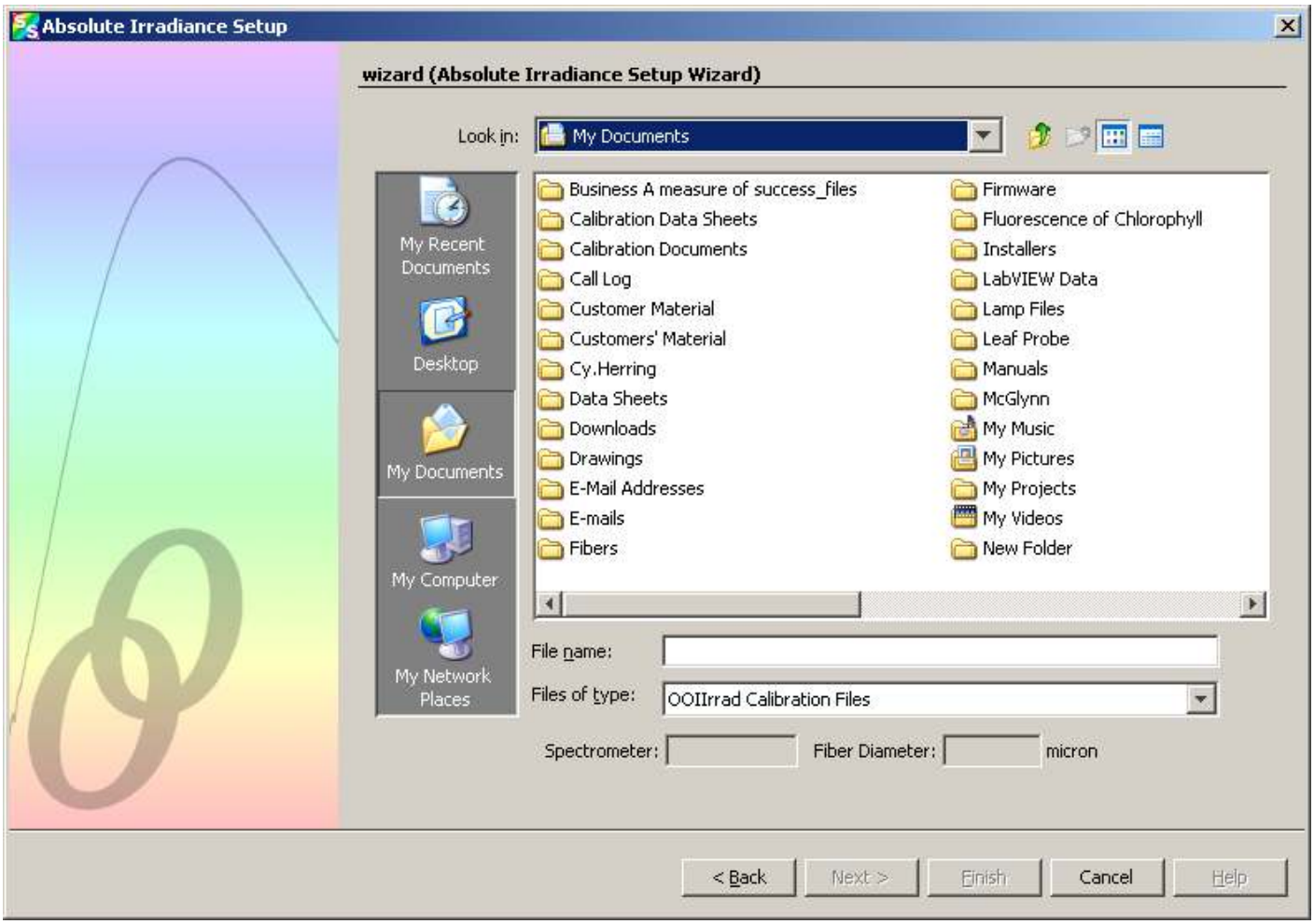
3. If you only have one spectrometer attached to your PC, it will be selected. If you have more than one spectrometer attached, select the spectrometer you wish to use. Click the “Next” button.



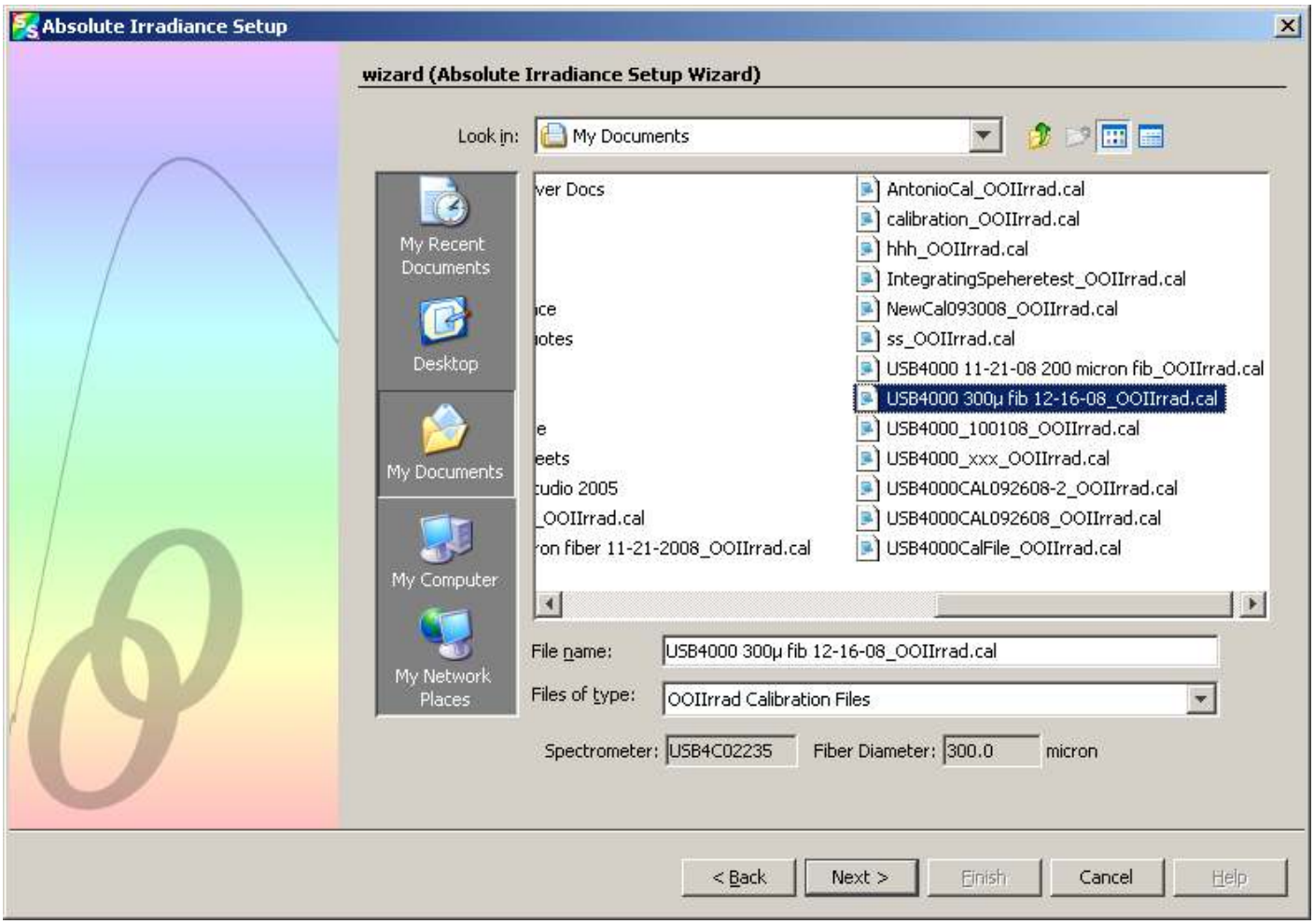
4. Select the “Get Irradiance Calibration from File” radio button. Click the “Next” button.



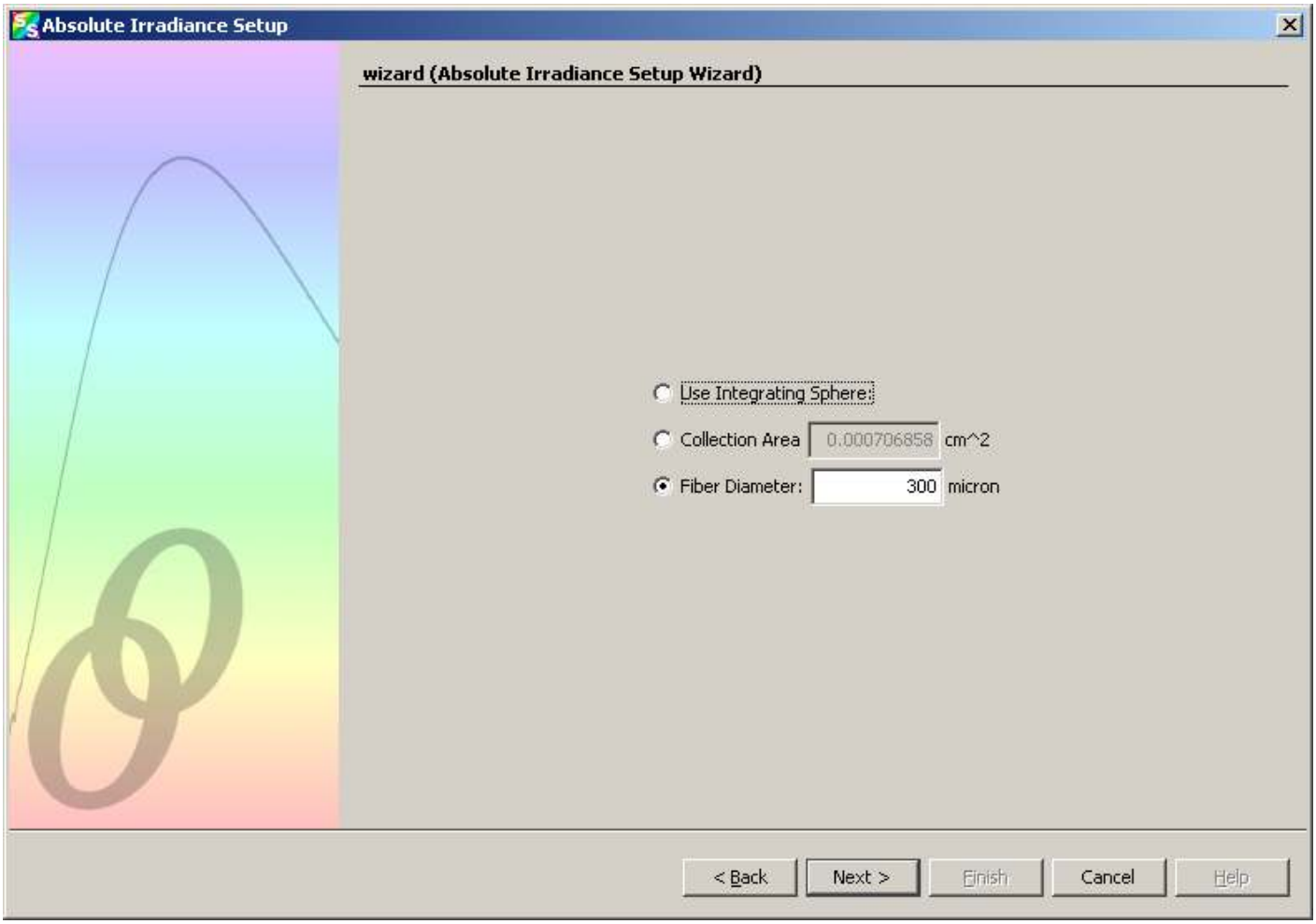
5. Browse for the calibration file that you saved previously



6. Select the appropriate calibration file. Click the “Next” button.

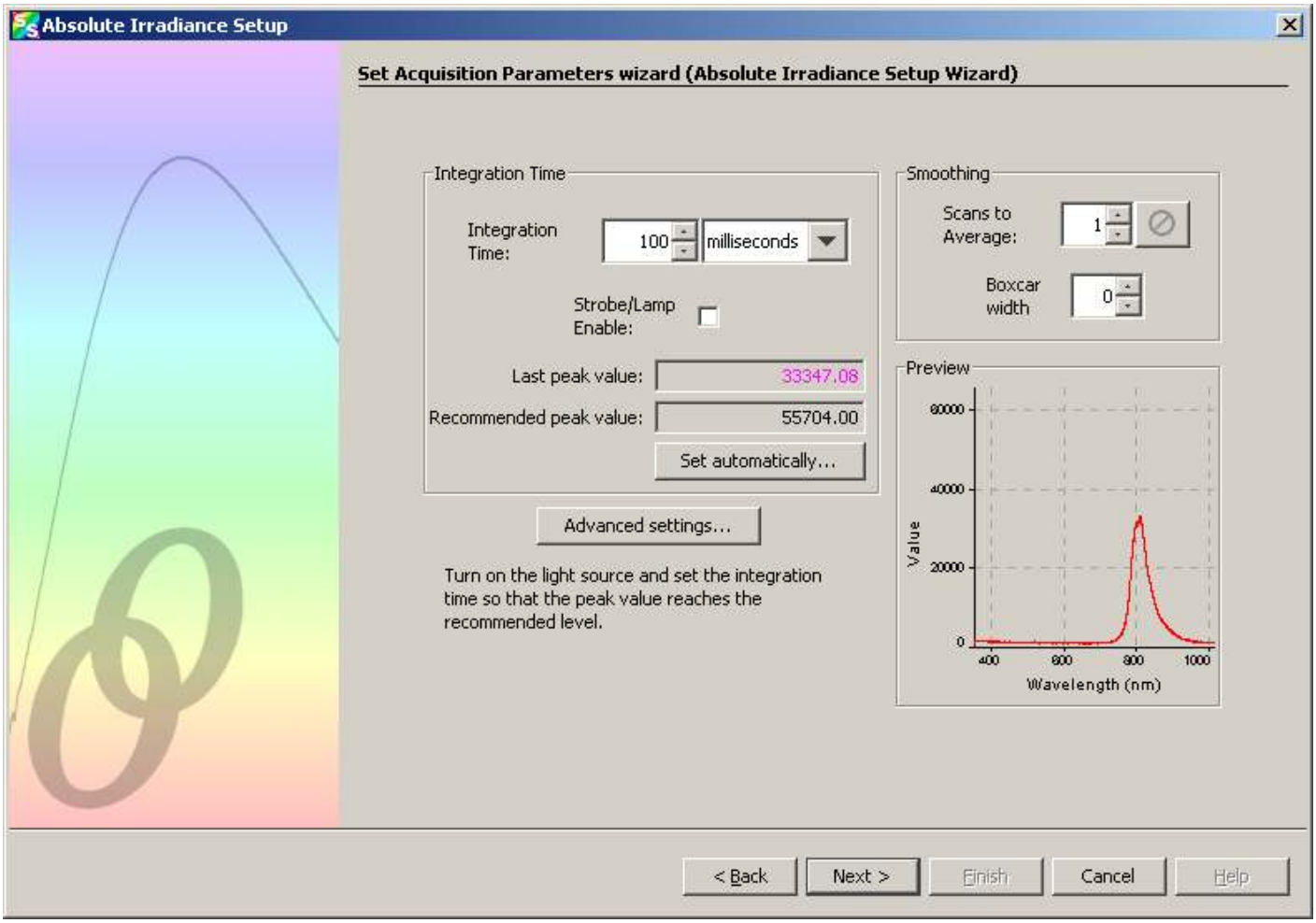


7. The Collection Area should already be populated with data from the calibration file. Click the “Next” button.

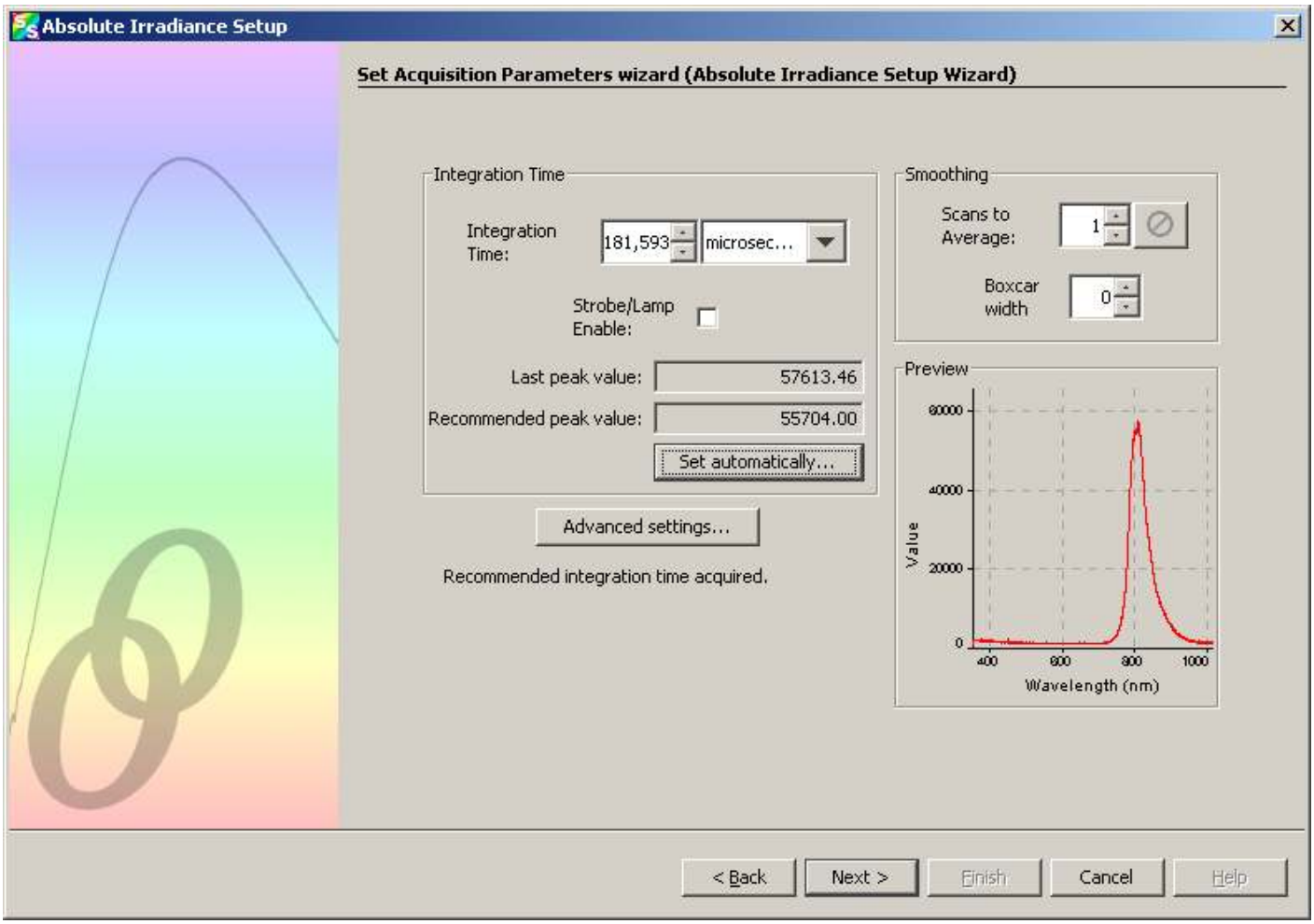


8. Click the “Advanced Settings” button and an “Advanced Settings” window will be displayed. Check the checkbox corresponding to “Nonlinearity Correction” and then click the “OK” button.

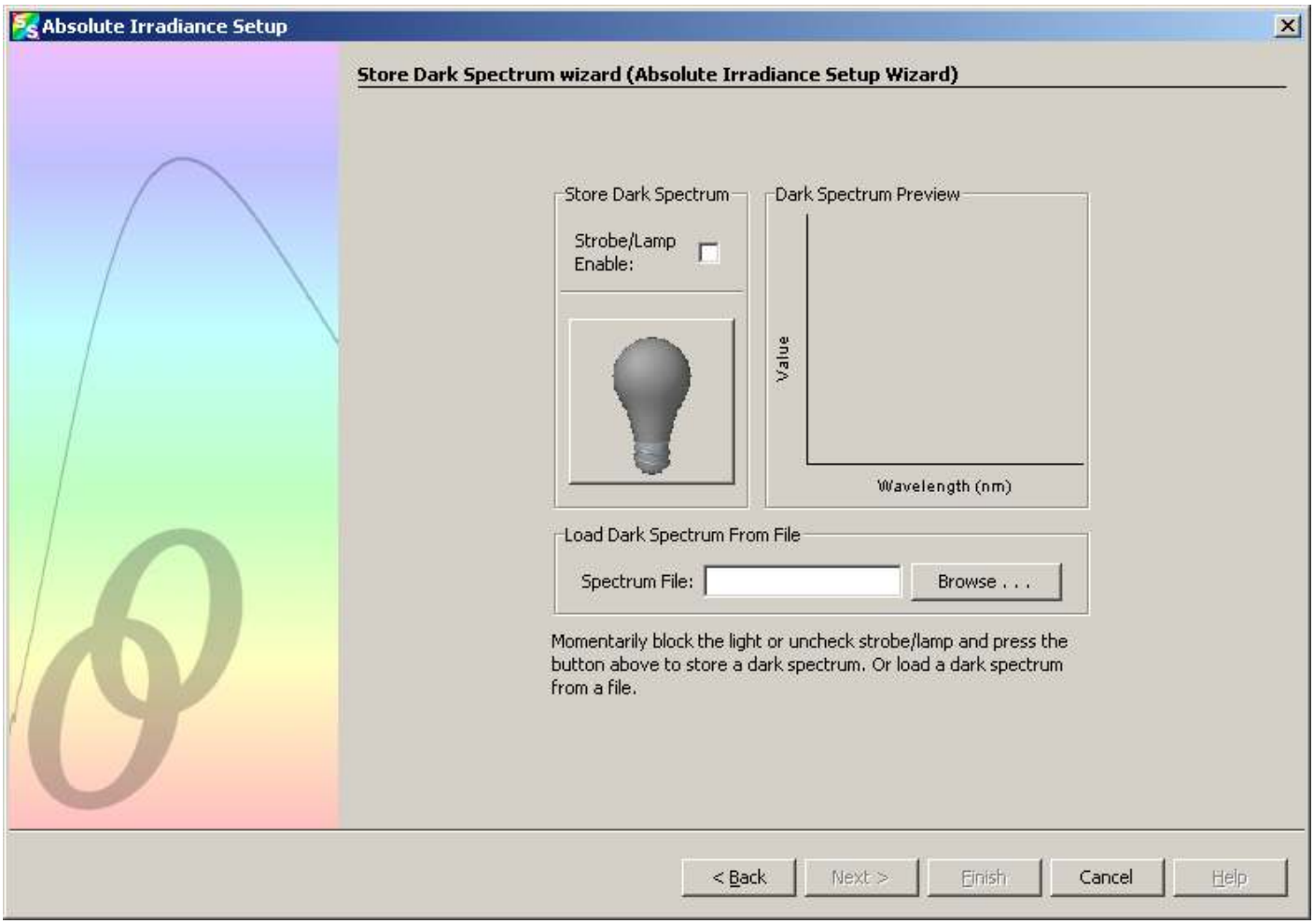
9. Acquisition Parameters.



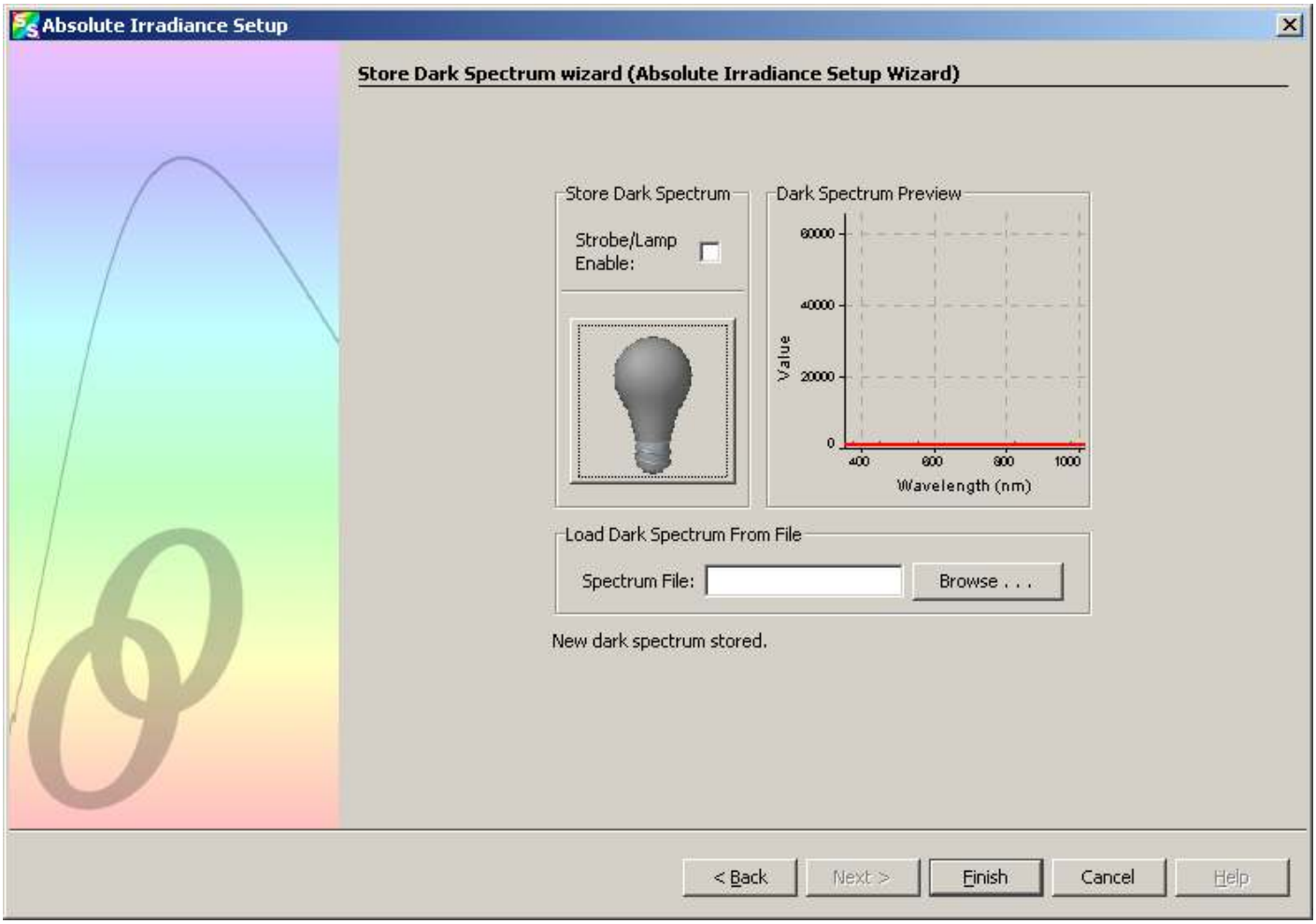
9. Adjust the integration time so that the “Last Peak Value” is close to the “Recommended Peak Value.”



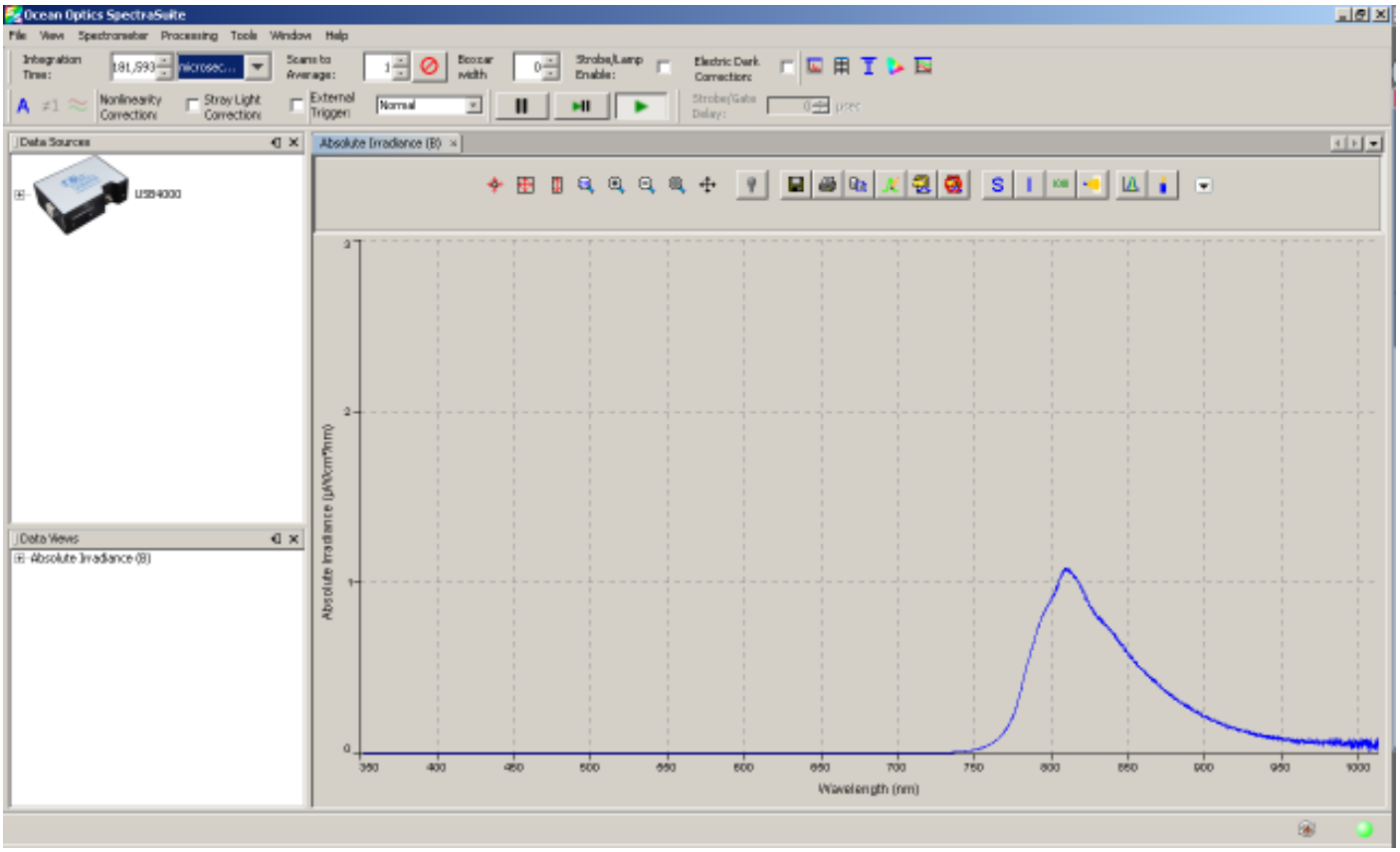
10. Dark Spectrum



11. Make sure no light is getting into the system and click the “dark light bulb” button. You should get a relatively flat line spectrum. Click the “Finish” button.

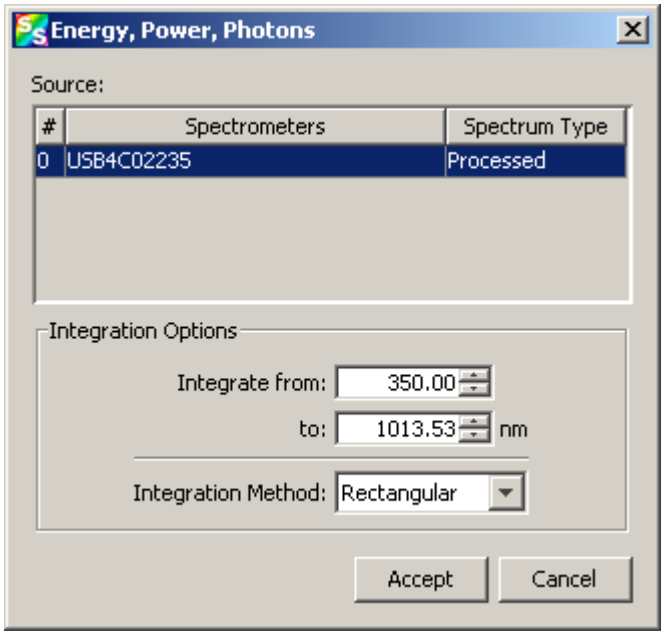


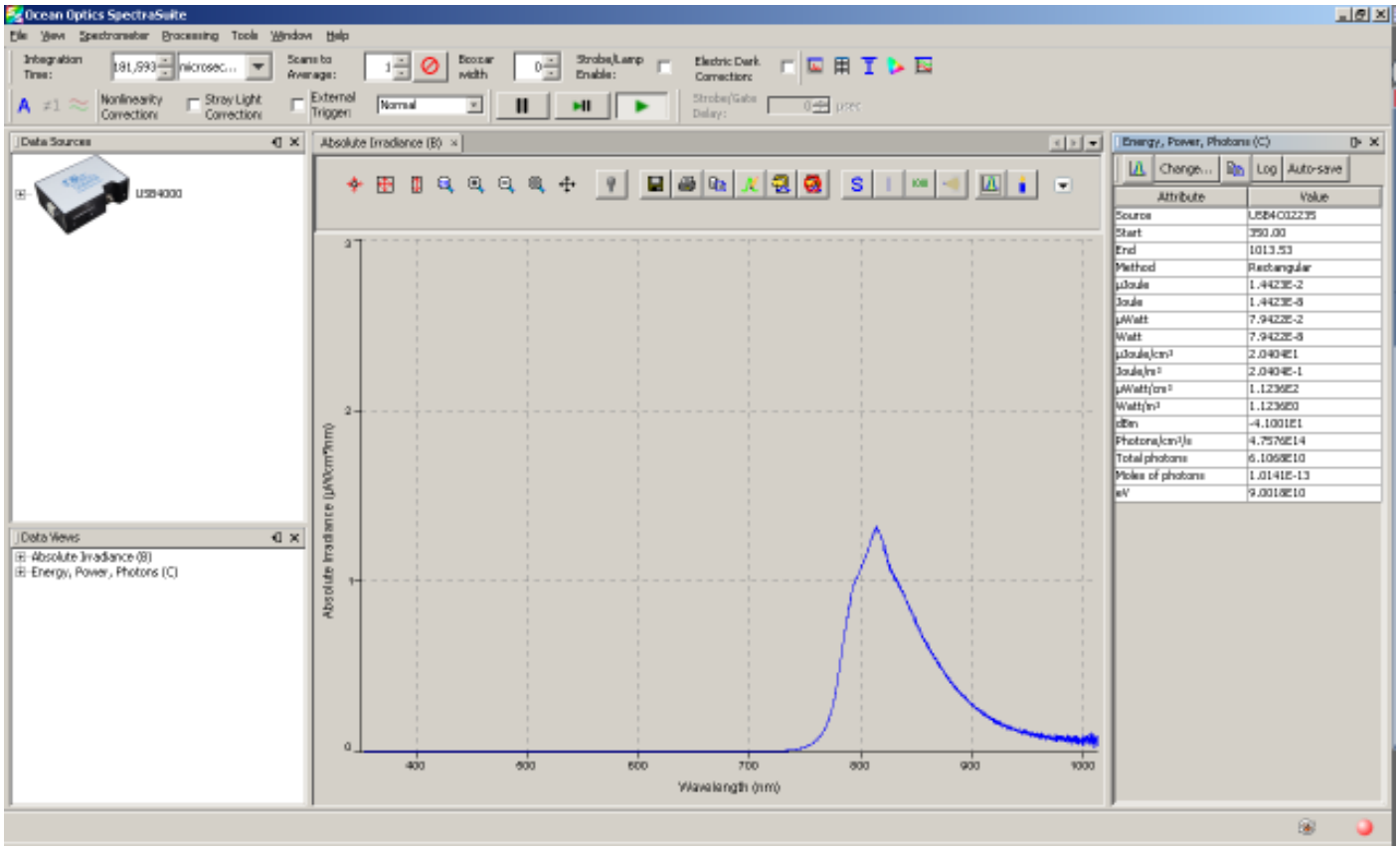
12. You are now measuring absolute irradiance.



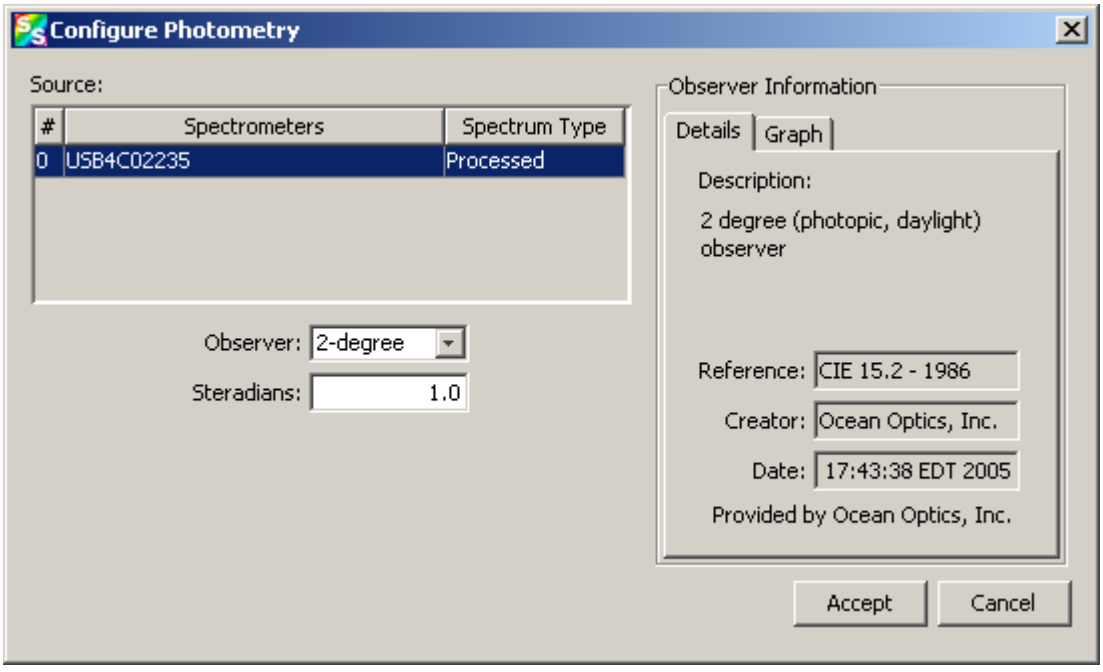
13. You can use two features once you have calibrated for absolute irradiance, New Energy, Power, Photons,"  and "New Photometry Measurement." 

14. New Energy Power Photons





14. New Photometry Measurement



Please note that the information in the pane at right is based on 1 Steradian.