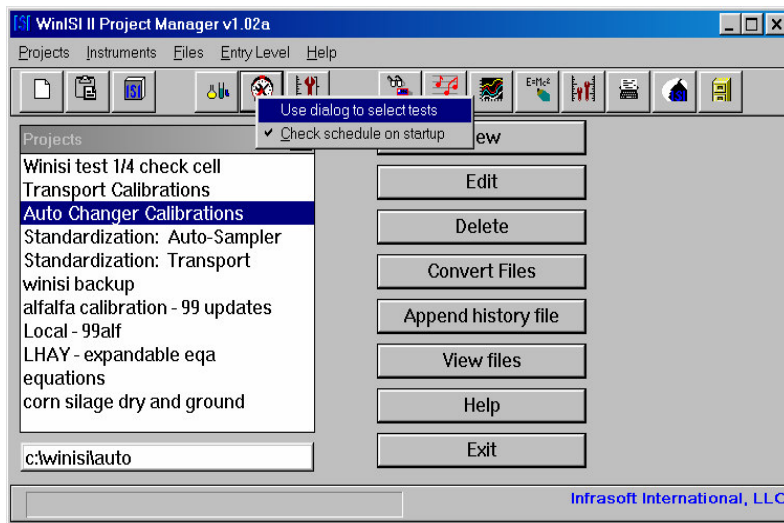


Setting Diagnostics in WinISI

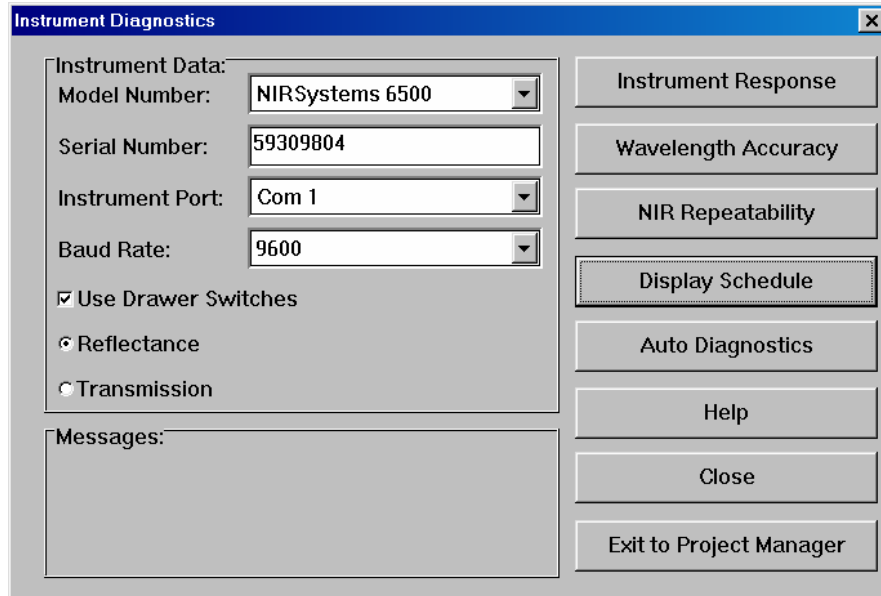
From the Project Manager window, select the project (i.e. the hard disk directory) where the diagnostics results will be stored. Normally they are stored in a project named WINISI under the c:\WINISI directory.

With the project highlighted, click on the diagnostic icon 

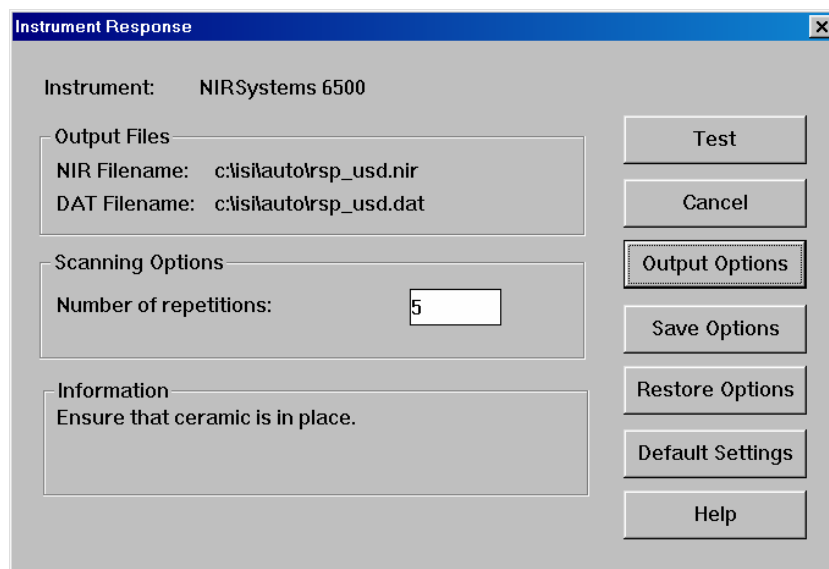


and then click on **Use dialog to select tests**. A message will appear that the instrument is connected, click on **OK**. If you get an error, make sure that the instrument is turned on and the cable is connected.

Click on **Instrument Response**.

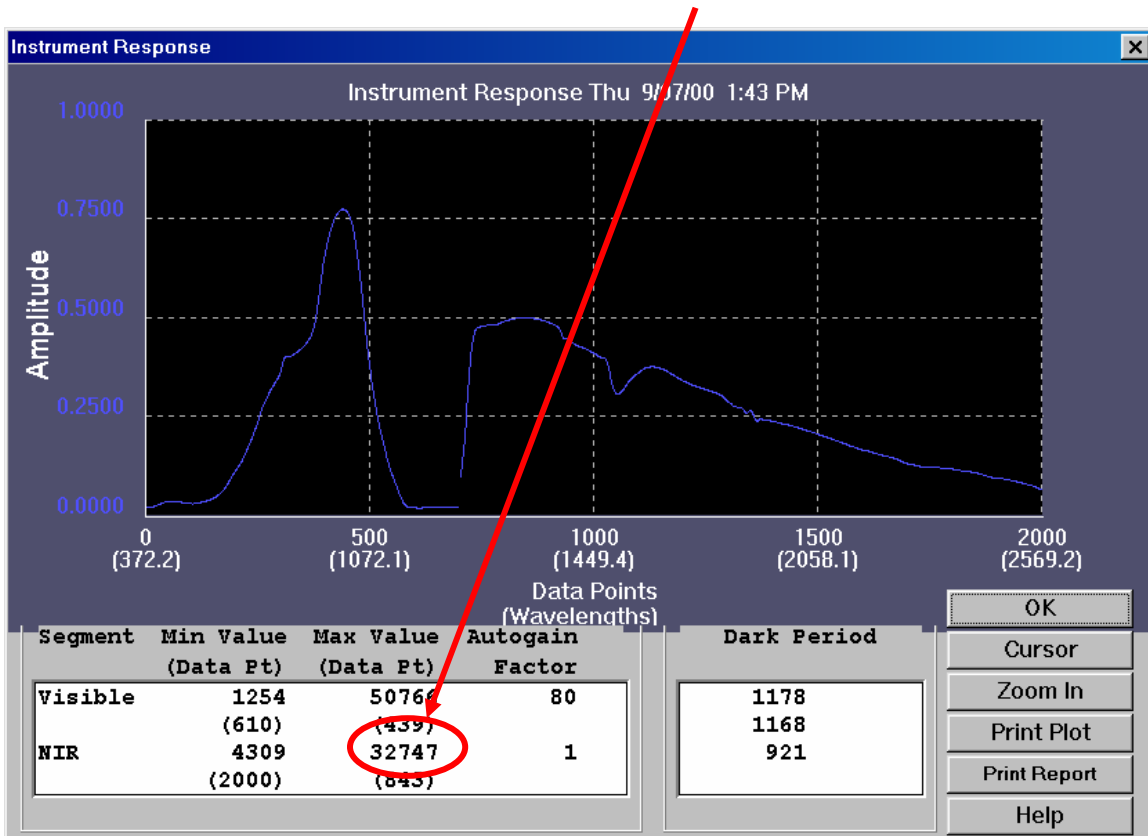


Set the number of repetitions to 5.



Click on **Test**

The result for a NIRSystem 6500 should look like the following picture. For a NIRSystem 5000 and 4500 it will only show the NIR portion of the spectra.



The Value of the NIR MAX in this example is 32747

Click **OK** and go back to the main Diagnostic menu:

Instrument Diagnostics [X]

Instrument Data:
Model Number: NIRSystems 6500
Serial Number: 59309804
Instrument Port: Com 1
Baud Rate: 9600

Use Drawer Switches
 Reflectance
 Transmission

Messages:

Instrument Response
Wavelength Accuracy
NIR Repeatability
Display Schedule
Auto Diagnostics
Help
Close
Exit to Project Manager

Click on **Wavelength Accuracy**. The following window will appear:

The screenshot shows the 'Wavelength Accuracy' dialog box. It has several sections: 'Instrument' with 'Test', 'Cancel', 'Output Options', 'Save Options', 'Restore Options', 'Default Settings', and 'Help' buttons; 'Output Files' with 'NIR Filename: c:\isa\auto\accusdaa.nir' and 'DAT Filename: c:\isa\auto\accusdaa.dat'; 'Instrument Options' with 'Spectral Region' set to 'Near Infrared' and buttons for 'Edit Reference Wavelengths' and 'Edit K and Phi Values'; 'Information' with the text 'Ensure that ceramic is in place.'; and 'Scanning Options' with input fields for 'Number of reference scans to average before sample: 16', 'Number of sample scans to average: 32', 'Number of reference scans to average after sample: 16', and 'Number of repetitions: 5'. The 'Number of repetitions' field is circled in red, and a red arrow points to it from the left.

Set the number of repetitions to 5.

Click on **Test**. The following window will appear:

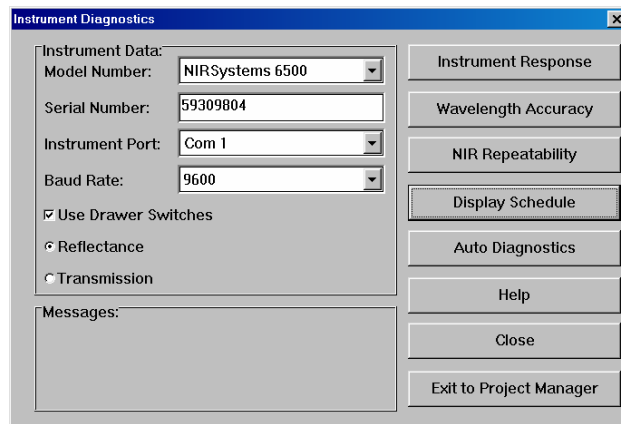
The screenshot shows the 'Wavelength Accuracy - NIR Region' results window. It contains three tables and several buttons. The first table is 'Wavelength Accuracy Results' with 5 rows of scan data. The second table is a summary of peak data. The third table, 'Actual Values', is circled in red and shows the following data:

	Actual Values	Suggested Values
K	3305.71	3305.65
PHI	0.32298	0.32297
Error	0.186	0.165

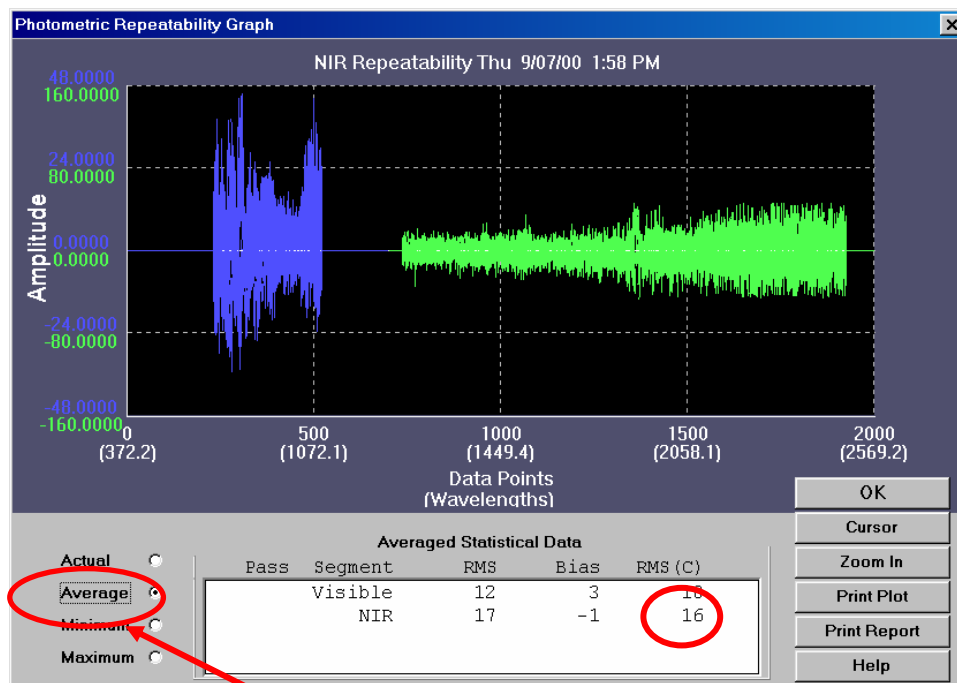
Buttons on the right include 'OK', 'Help', 'Print Report', and 'Accept Settings'.

In the bottom window you will find the results of: K, Phi and NIR Wave Error.

Click **OK** and go back to the main Diagnostic menu.



Now click on **NIR repeatability**.



At the end of the test, select the average option. The Rep value to include in your weekly report, from this example would be 16.

