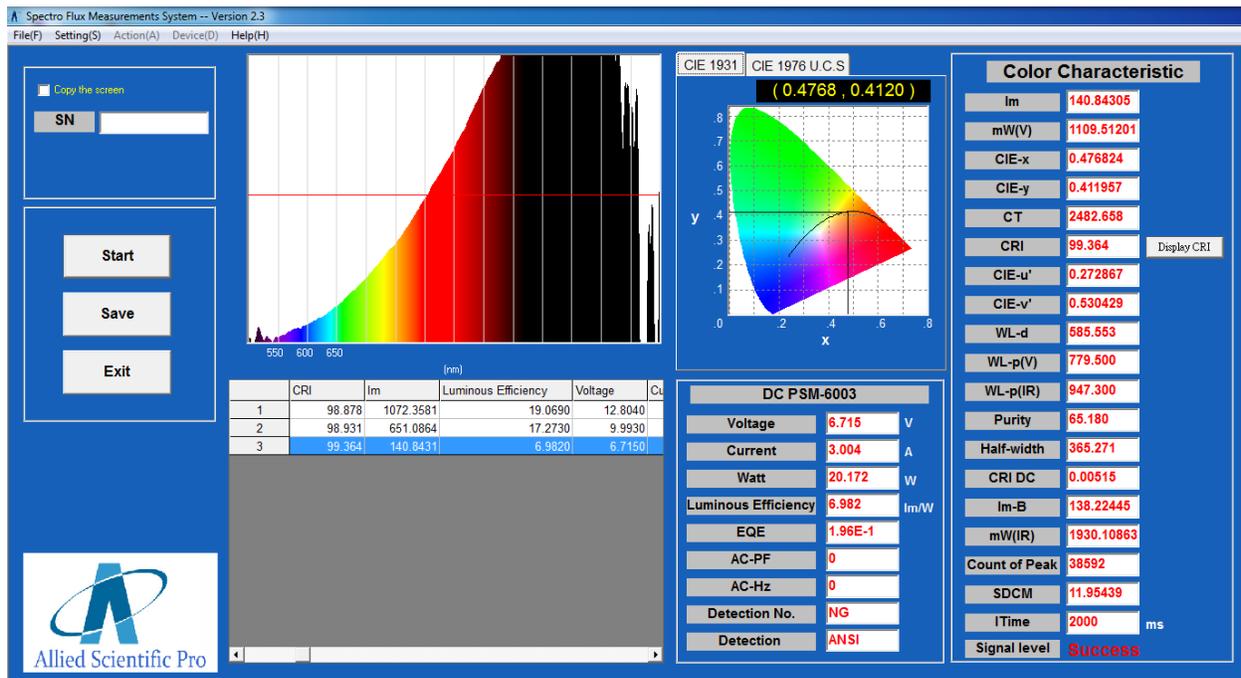


# ASP Spectro Flux Measurements System

## User Manual

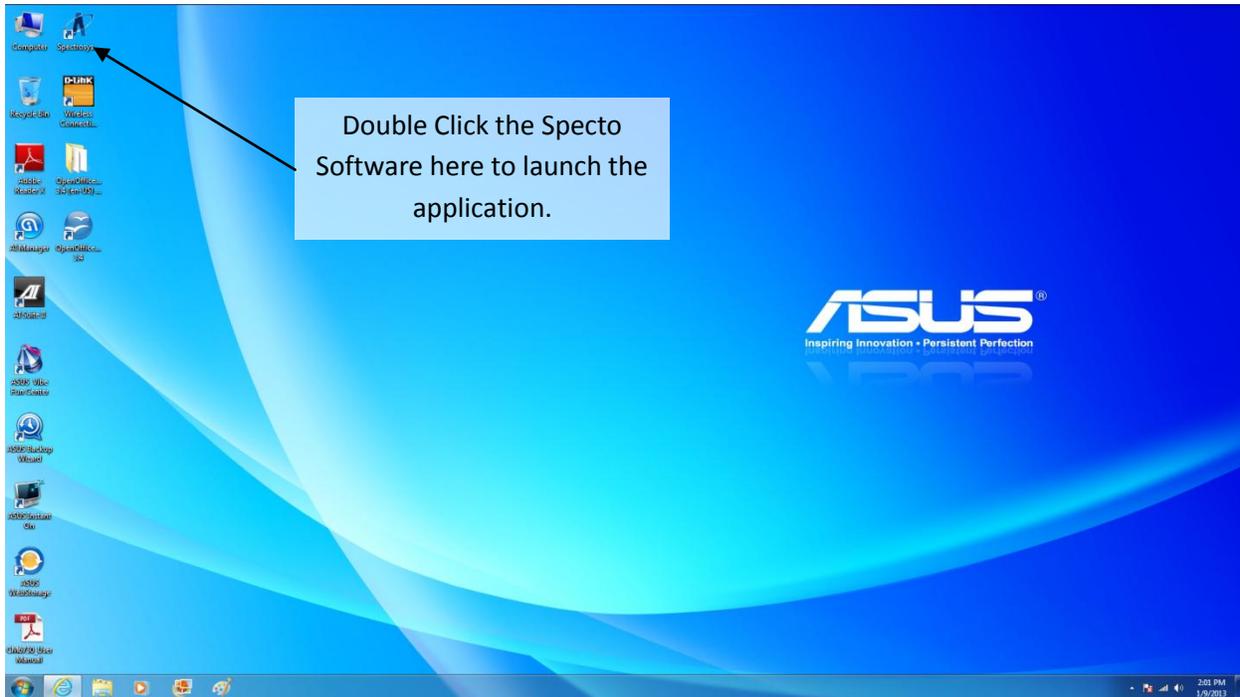


Allied Scientific Pro

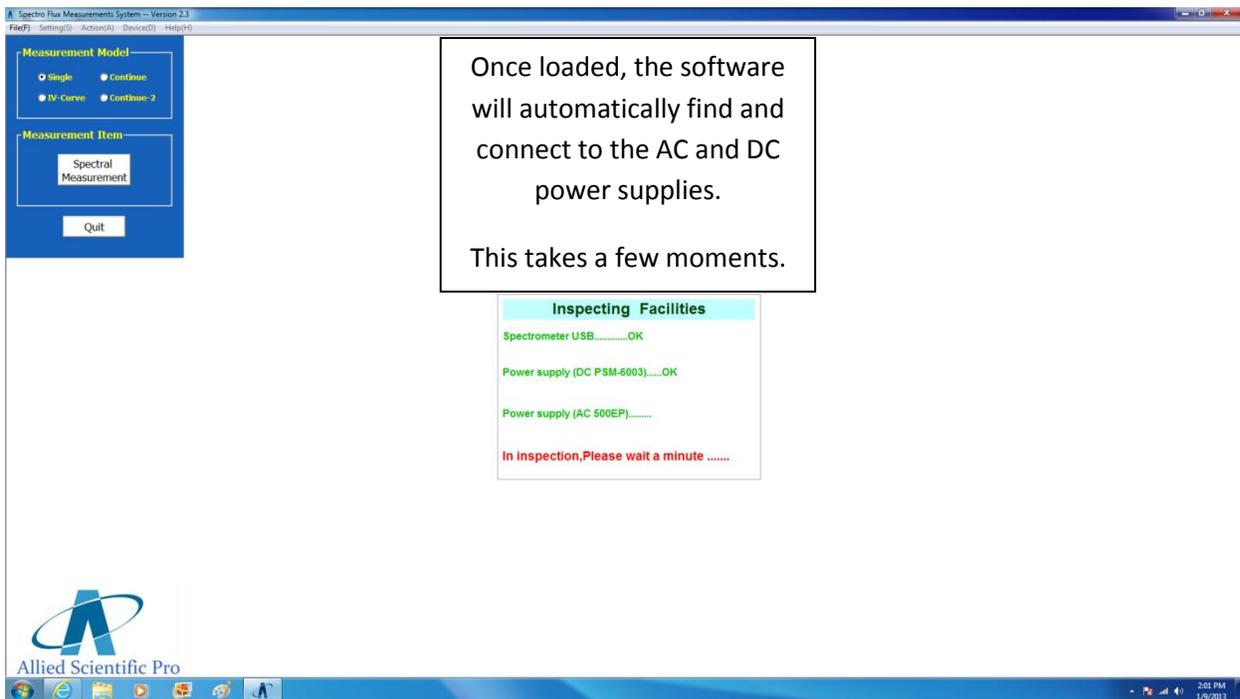
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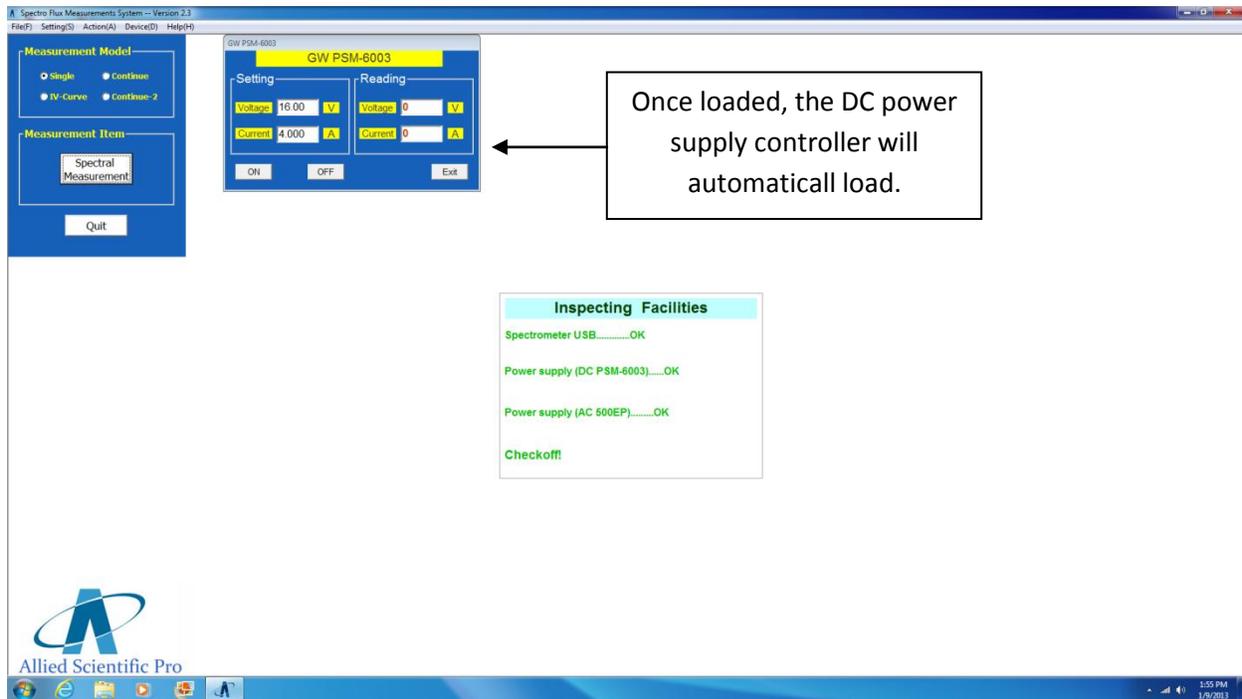
## 1.1 Operation (turning on)



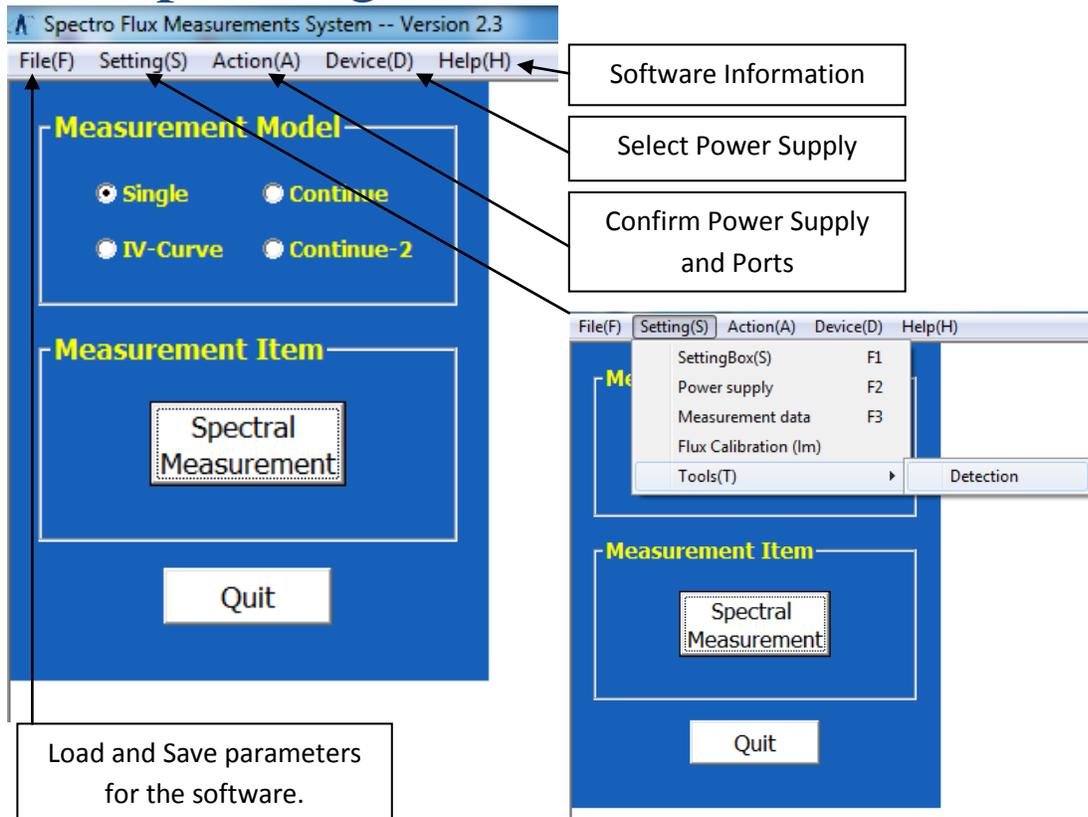
## 2.1 Checking



## 2.2 All OK Screen



## 2.3 Operating the Tool Bar



### 3.1 Operating the Aux. lamp

The screenshot shows the 'Spectro Flux Measurements System -- Version 2.3' window. On the left, the 'Measurement Model' section has 'Single' selected. The 'Measurement Item' section has 'Spectral Measurement' selected. The main window displays the 'GW PSM-6003' control panel with the following settings and readings:

| Setting          | Reading           |
|------------------|-------------------|
| Voltage: 16.00 V | Voltage: 11.199 V |
| Current: 4.000 A | Current: 4.004 A  |

Buttons for 'ON', 'OFF', and 'Exit' are visible at the bottom of the control panel. A text box on the right provides instructions: 'Please set appropriate IV settings for the lamp to be tested (e.g. Aux Lamp: 10V, 4A). Next press the ON button to start. After, please push the OFF switch before exiting.'

The 'Inspecting Facilities' window shows the following status:

- Spectrometer USB.....OK
- Power supply (DC PSM-6003).....OK
- Power supply (AC 500EP).....OK
- Checkoff!

The Allied Scientific Pro logo is visible in the bottom left corner of the software window.

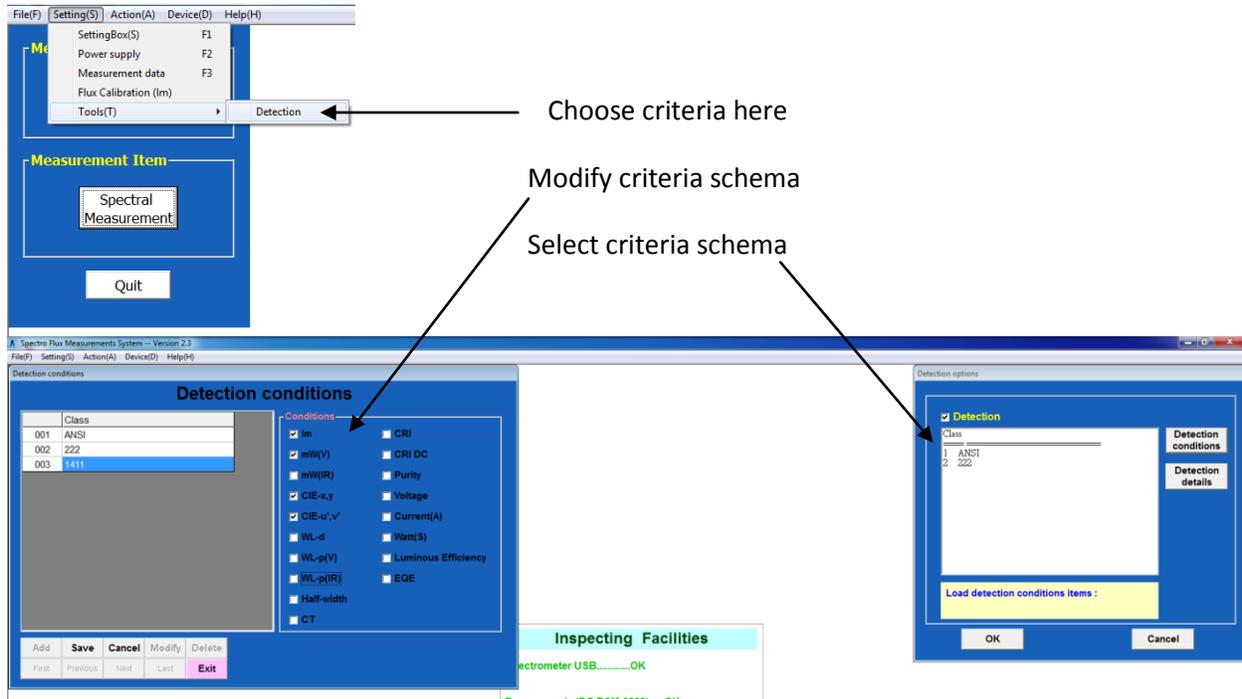
### 4.1 Operation Settings

The screenshot shows the 'Spectro Flux Measurements System -- Version 2.3' window with the 'Setting' dialog box open. The 'Setting' tab is selected, showing the following options:

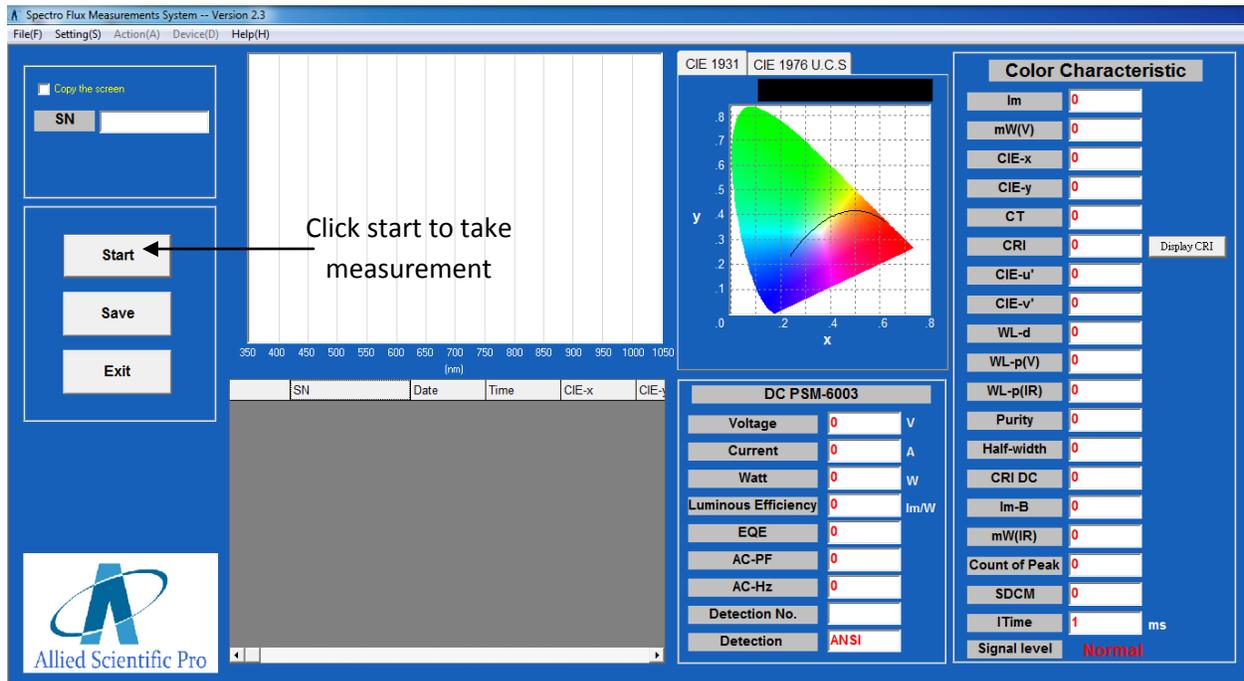
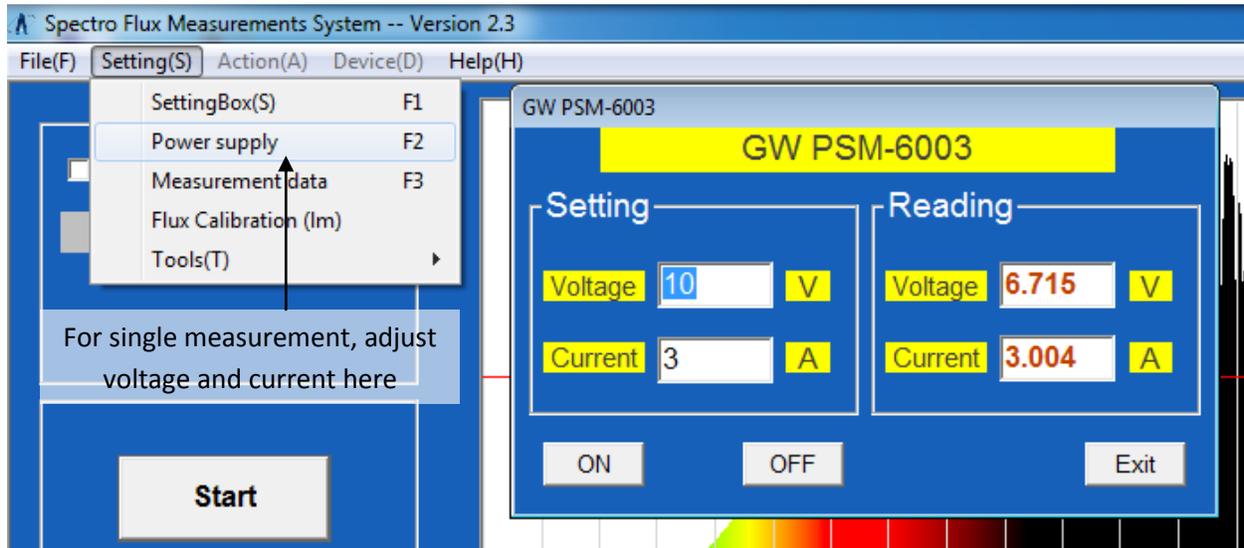
- Automatic power supply control
  - Assist lamp correction factor
- Measure Delay:
  - Start Scan after turning on power supply: 1 seconds.
- Integration Times (5 ms to 4095 ms):
  - Integration time limit [ms]: 4095

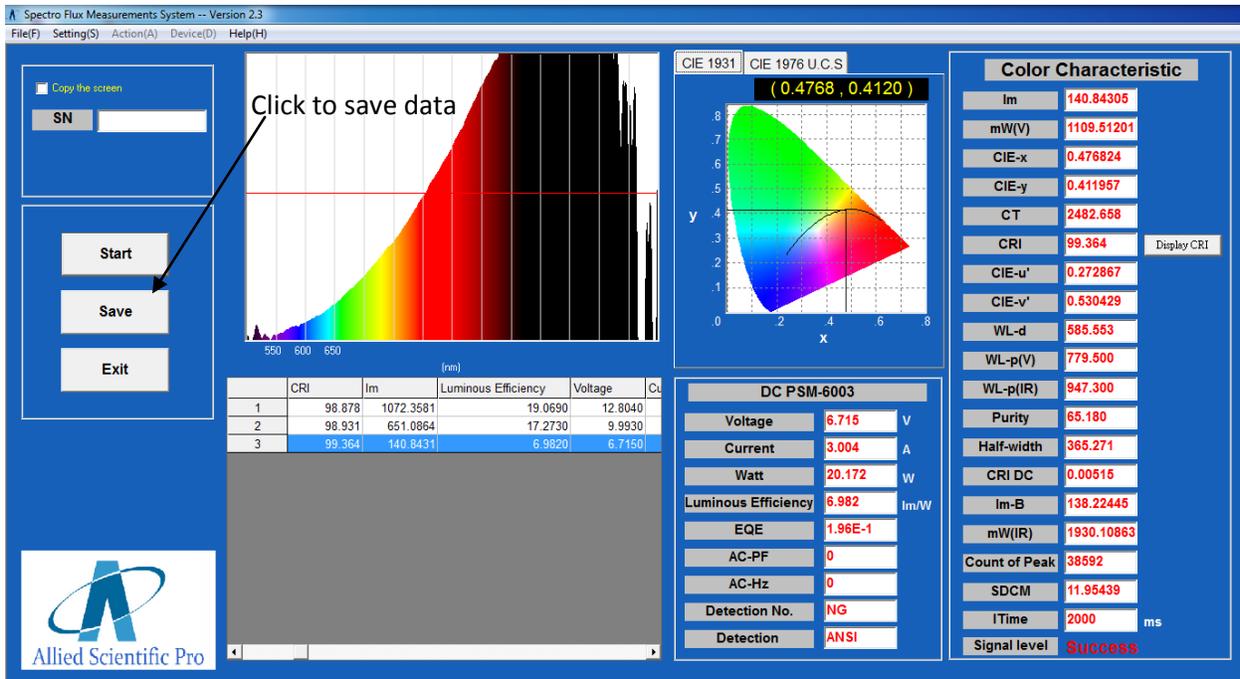
Callouts point to the '1 seconds' field with the text 'Set lamp warm up time' and to the '4095' field with the text 'Set maximum integration time'. The 'Facilities' window from the previous section is also visible in the bottom right corner.

## 5.1 & 5.2 Measurement Pass/Fail Criteria

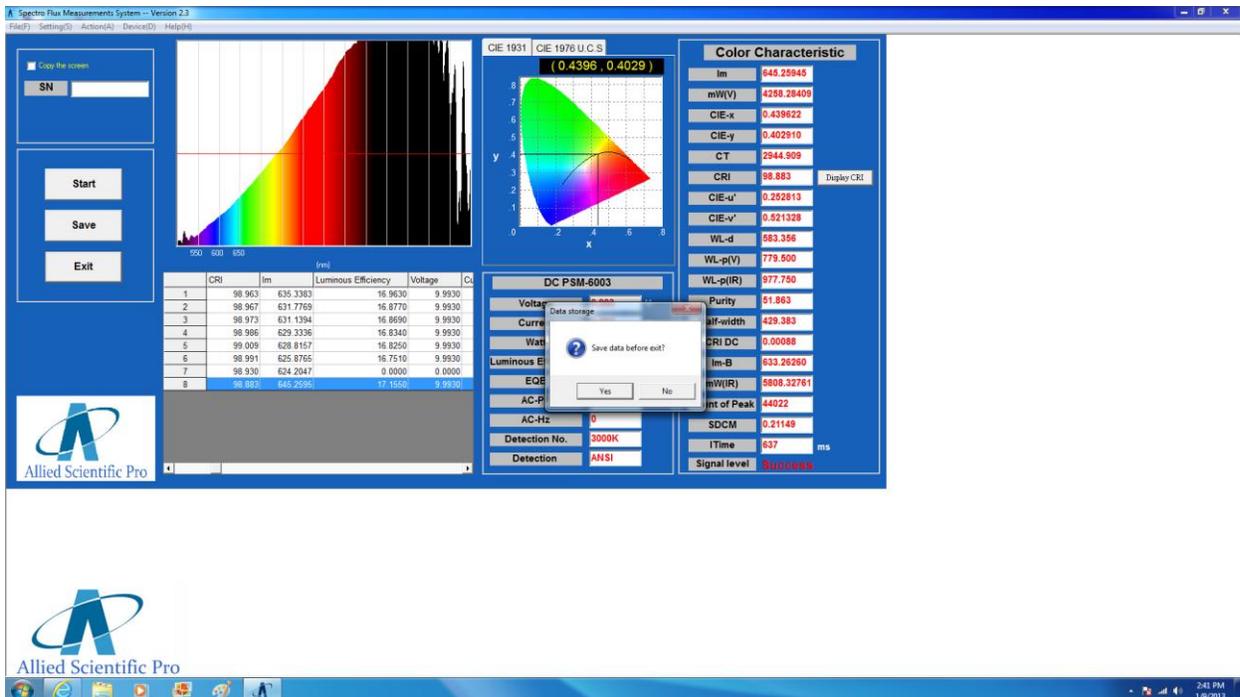


## 6.1 Making a Single Measurement

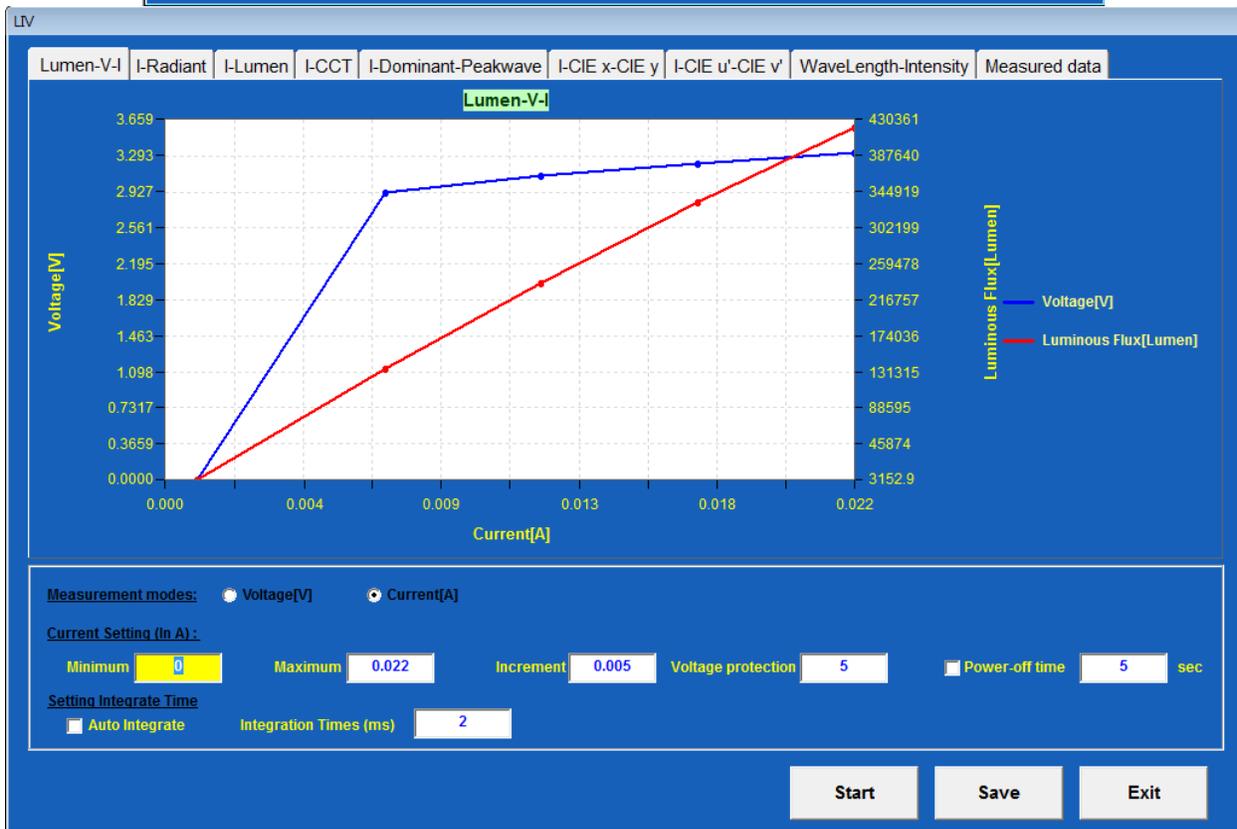
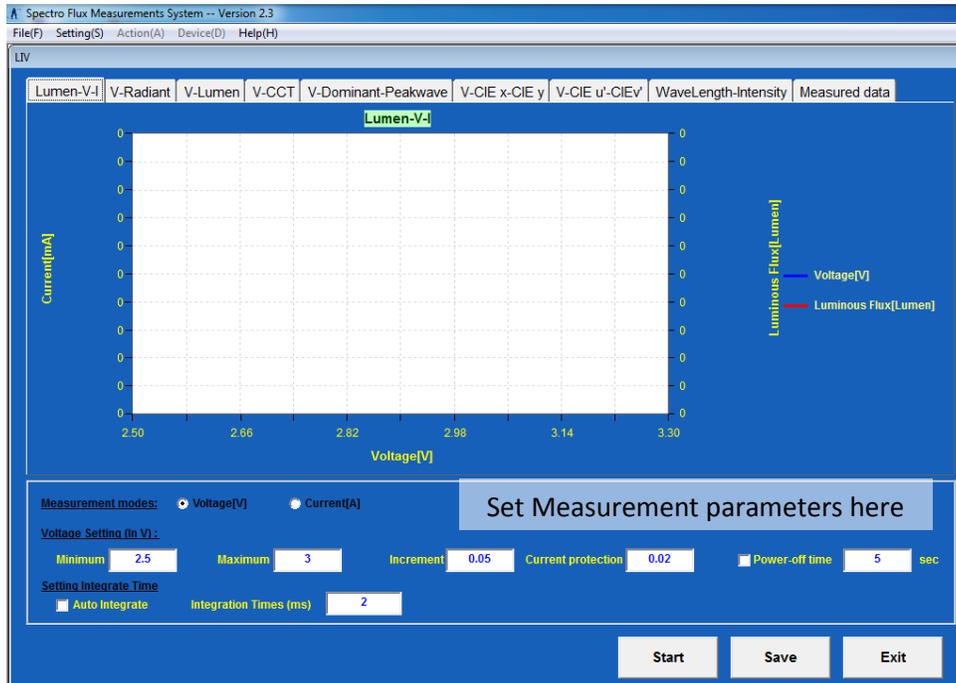


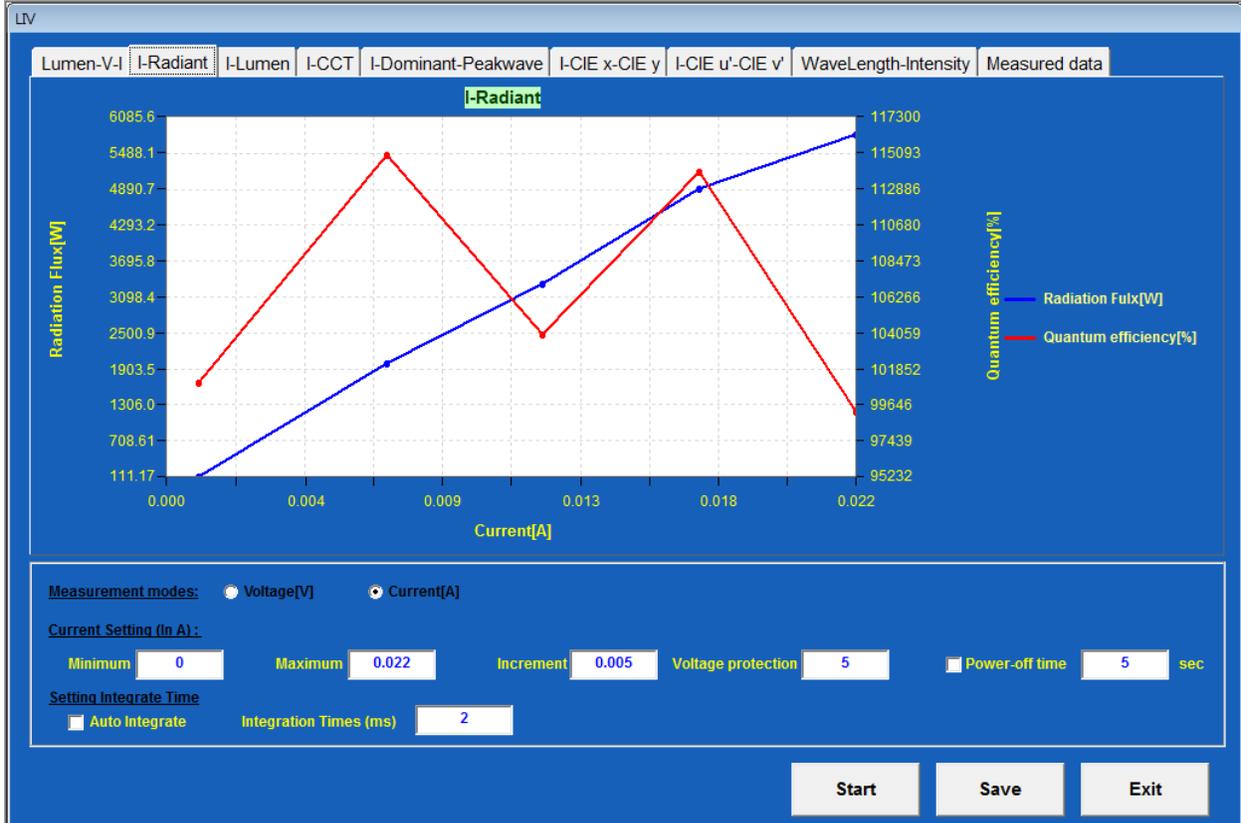
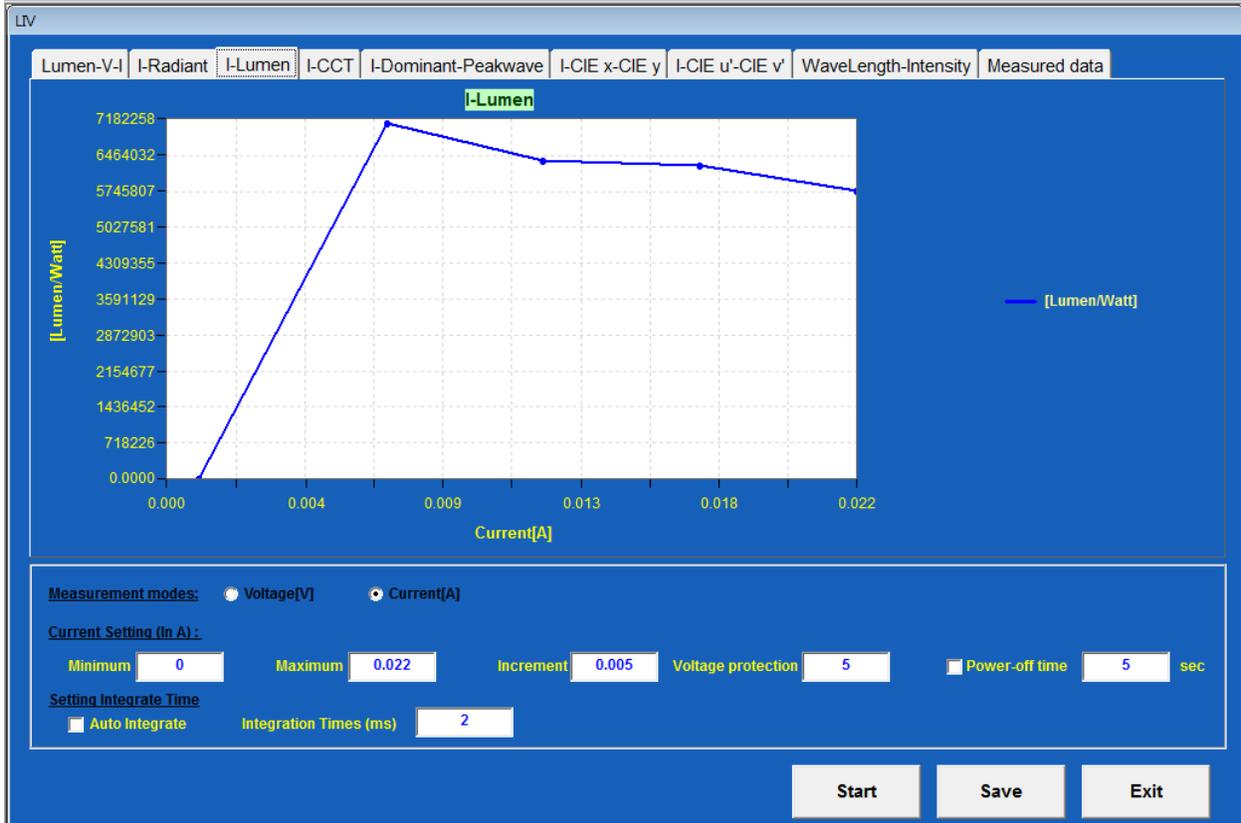


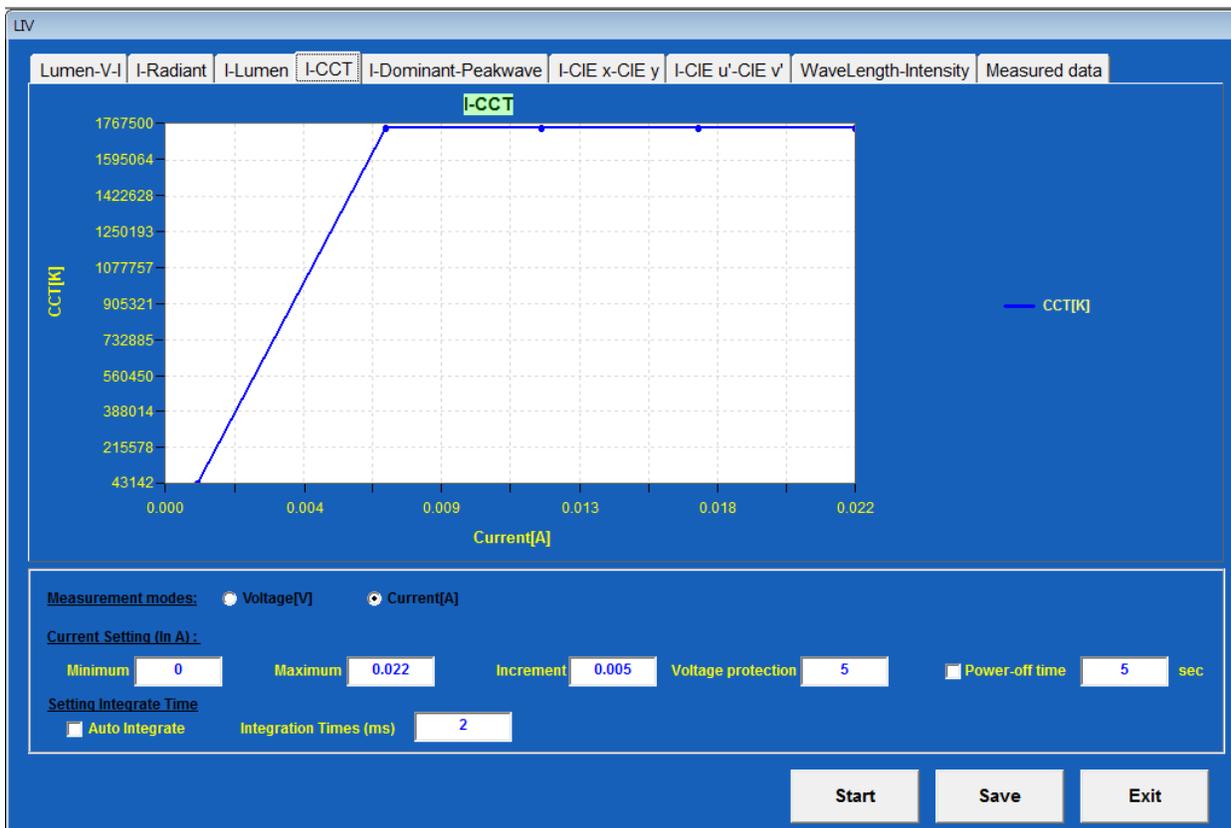
## 6.2 Making a Continuous Measurement



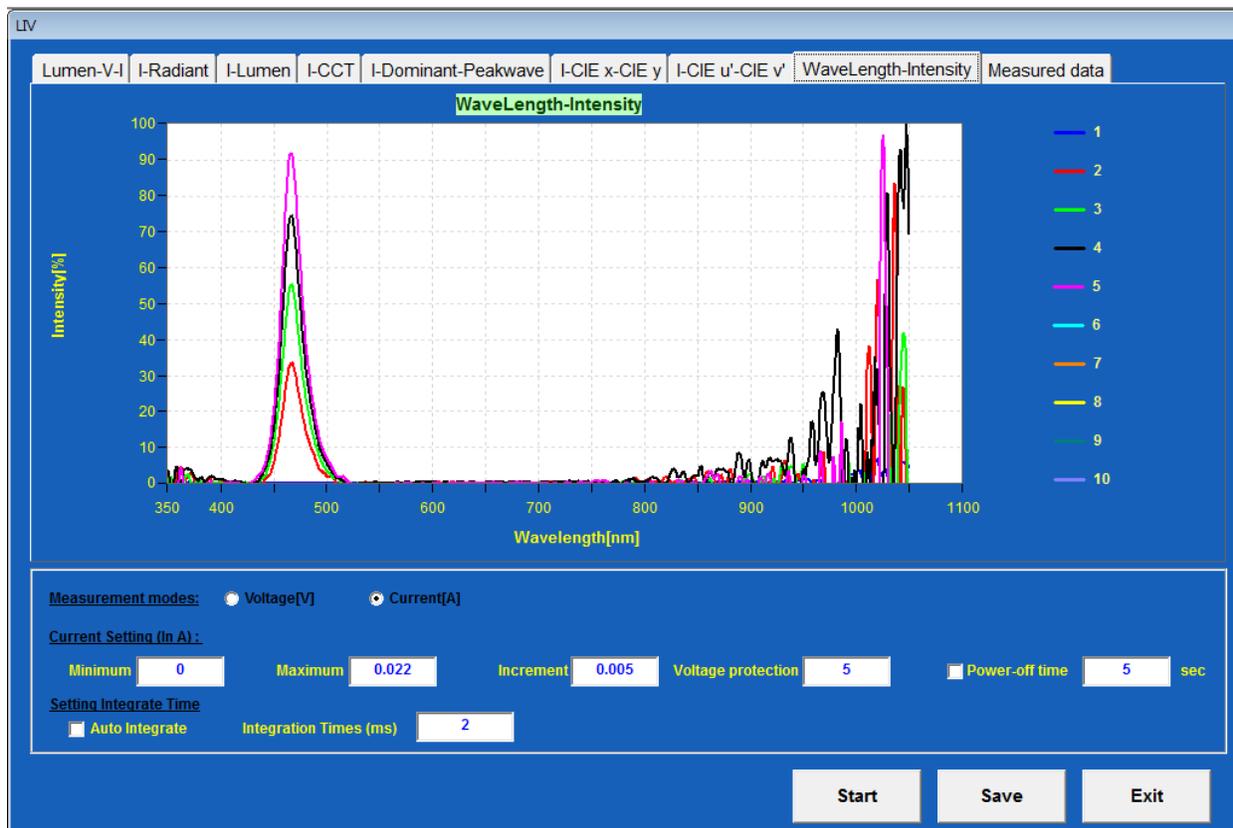
# 7.1 Measuring Electronic Properties











LV

Lumen-V-I | I-Radiant | I-Lumen | I-CCT | I-Dominant-Peakwave | I-CIE x-CIE y | I-CIE u'-CIE v' | **WaveLength-Intensity** | **Measured data**

|   | SN         | Date       | Time     | CIE-x  | CIE-y  | CT          | CRI       | Im          | Luminous Efficiency | Volt |
|---|------------|------------|----------|--------|--------|-------------|-----------|-------------|---------------------|------|
| 1 | 20130109_1 | 2013-01-09 | 10:10:39 | 0.4488 | 0.1345 | 44940.047   | -1697.340 | 3318.8501   | 0.0000              |      |
| 2 | 20130109_2 | 2013-01-09 | 10:10:42 | 0.1268 | 0.0630 | 1750000.000 | -53.006   | 135111.7902 | 7111146.8510        |      |
| 3 | 20130109_3 | 2013-01-09 | 10:10:44 | 0.1275 | 0.0649 | 1750000.000 | -80.395   | 236465.4433 | 6373731.6250        |      |
| 4 | 20130109_4 | 2013-01-09 | 10:10:47 | 0.1277 | 0.0661 | 1750000.000 | -47.270   | 333134.2777 | 6273715.2110        |      |
| 5 | 20130109_5 | 2013-01-09 | 10:10:49 | 0.1280 | 0.0664 | 1750000.000 | -65.919   | 421922.4902 | 5763968.4460        |      |

Measurement modes:  Voltage[V]  Current[A]

Current Setting (In A):

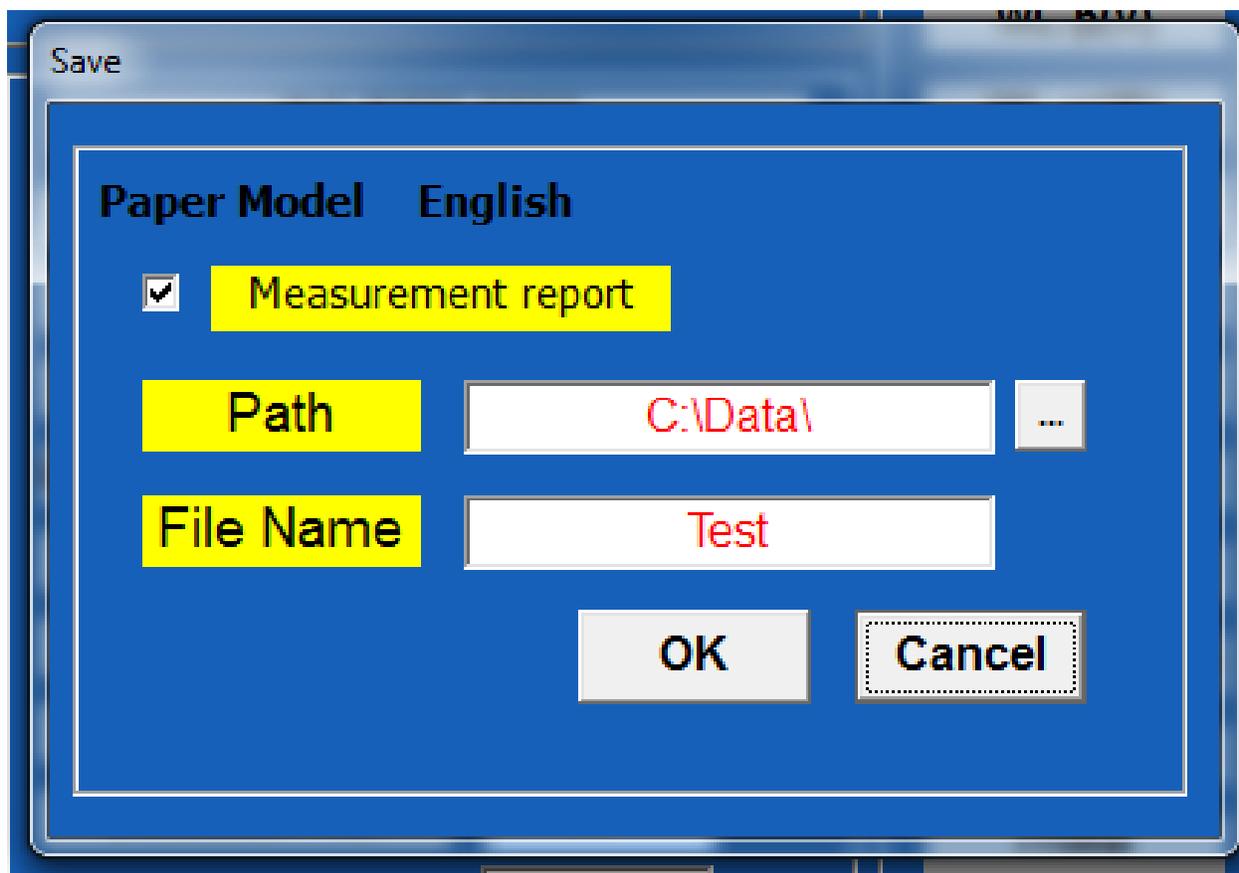
Minimum  Maximum  Increment  Voltage protection   Power-off time  sec

Setting Integrate Time

Auto Integrate Integration Times (ms)

Start Save Exit

## 8.1 Saving Data



## 9.1 Troubleshooting Detection Error

The screenshot shows the main software window with a sidebar on the left containing 'Measurement Model' (Single, Continues, IV Curve, Continues-2) and 'Measurement Item' (Spectral Measurement, Quit). A message box titled 'Inspecting Facilities' is displayed in the center, containing the text: 'Please check the option to cancel the detection, and restart the software!'. Below the message box, the 'Inspecting Facilities' status window is visible, showing 'Spectrometer USB.....OK', 'Power supply (DC PSM-6003).....OK', 'Power supply (AC 500EP).....OK', and 'Checkoff!'.

If you notice this error, please click:  
settings -> tools -> detection

The screenshot shows the same software window as above, but with the 'Detection options' dialog box open on the right. The dialog has a 'Detection' checkbox which is checked. Below it is a table with two rows: '1 ANSI' and '2 222'. To the right of the table are 'Detection conditions' and 'Detection details' buttons. At the bottom of the dialog are 'OK' and 'Cancel' buttons. The 'Inspecting Facilities' status window is also visible in the center, showing the same status as in the previous screenshot.

Uncheck "detection" box here.  
The problem should then be solved.