BLStudioGo UV

Biolight Luminescence Systems GmbH

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Goals

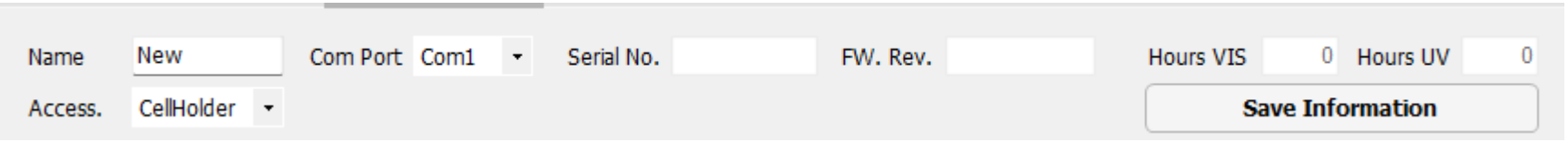
- Lightweight, responsive alternative to UVWinLab for LS365+
- Usable in Routine and Research
- No use of com components to avoid registry entries
- Flexible add-on apps, to quickly react to user demand, yet keep user interface clean
- File based storage of user data (optionally database support)
- Touch user interface for LS365+
- Comparable nomenclature to UVWinlab (method, task, ...)

Installation

- BLStudioGo setup comes with less than 15 MB size:
  Very quick and simple installation, low hardware requirements
- Completely based on .net:
  No Windows registry entries required,
  can be installed as standard user,
  installation portable between PCs,
  basically no involvement of IT required

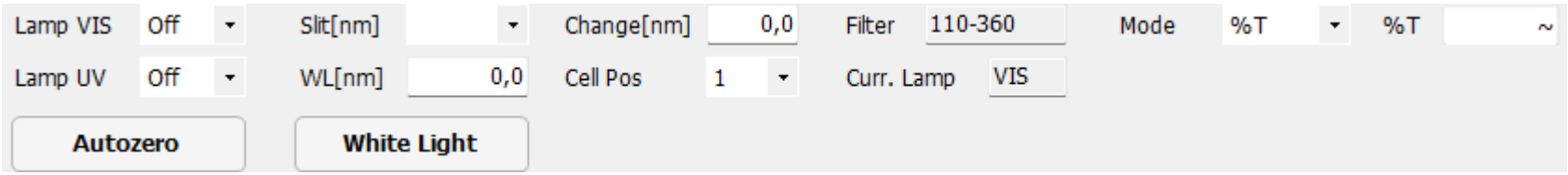
First start after installation

- When started the first time the manual control page is displayed: After selecting the comport the BLStudioGo connects to the spectrometer.
- The serial number, firmware revsion and lamp operating hours are loaded and displayed. Now a name for the spectrometer can be assigned.



Manual Control

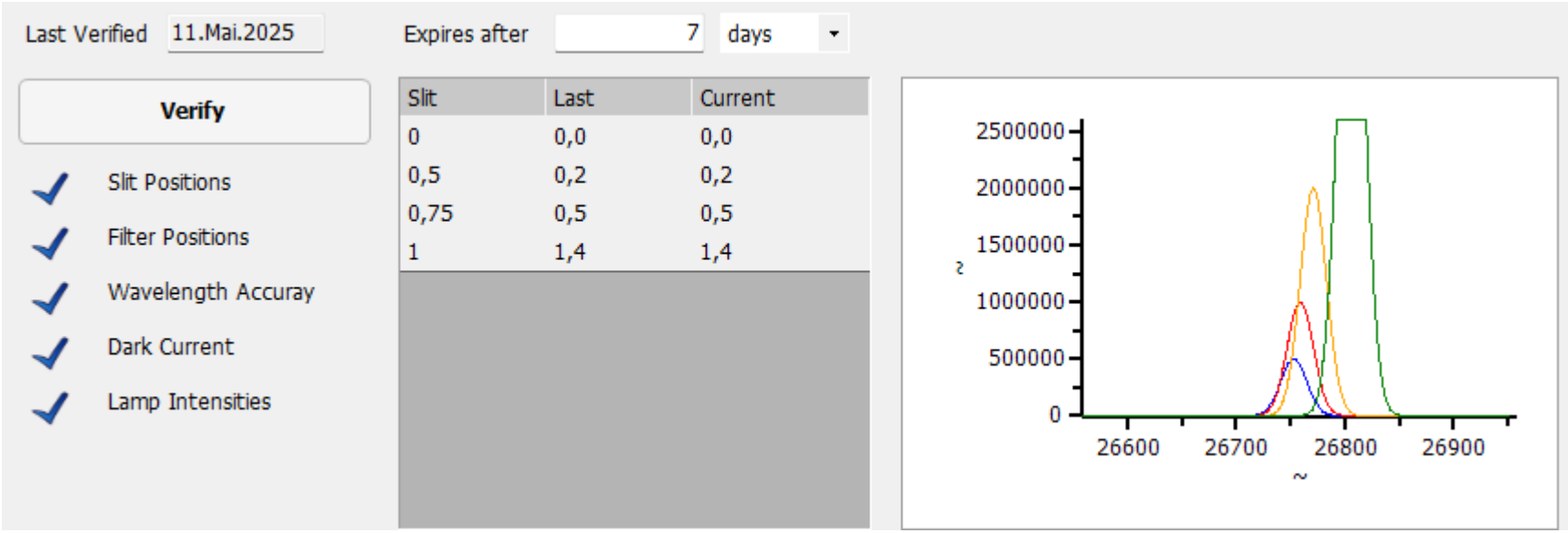
- On the same page all current device settings are displayed. The selected ordinate value is automatically measured and displayed every second.
- All settings can be changed manually, e.g., wavelength, slit, ordinate.
- For convenience it is possible to set white light or perform AZ with one click



- Please note that the manual settings are NOT part of the method

Verification

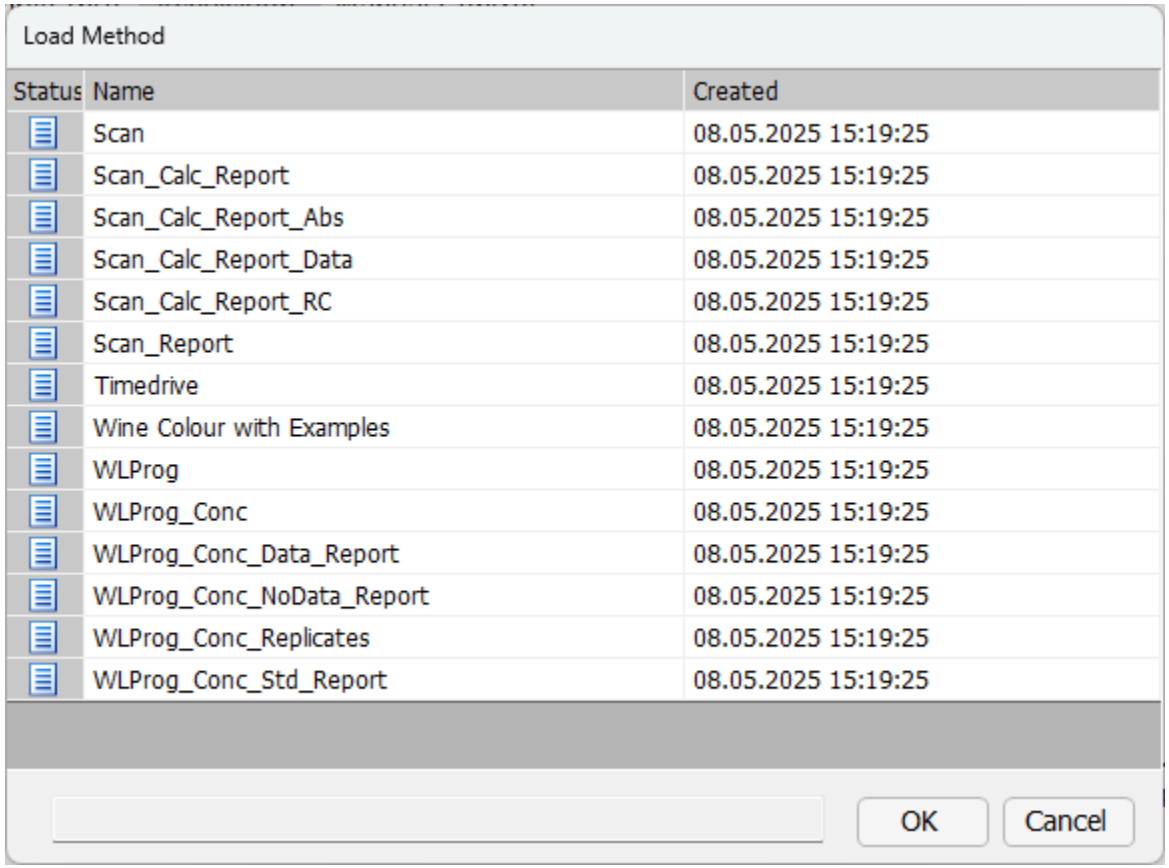
- In difference to UVWinlab a instrument performance verification is not required at each instrument start, making the startup much quicker and less prone to errors
- It can be performed whenever appropriate (e.g., after warm up of device)
- The verification process is visualized for better interpretation



- Results are stored under the device serial number for later use and review

First Measurement: Select a simple Scan

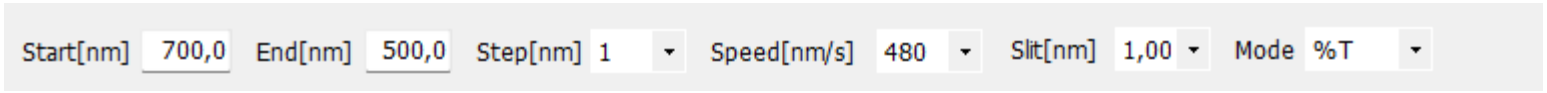
- Press Open Method button and select Scan from dialog



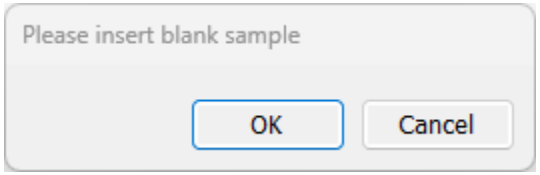
- Press OK

First Measurement: Start a simple Scan

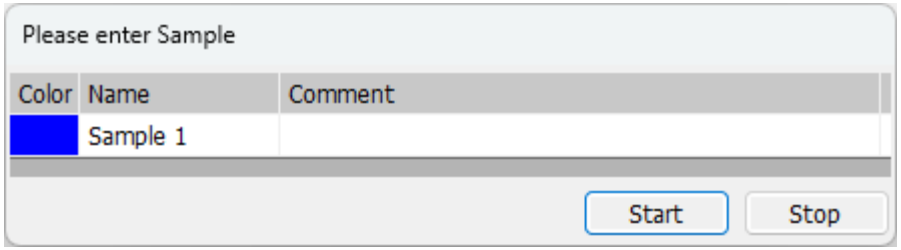
- On the Acquisition page select the desired scan parameters from the parameter panel



- Press the Run Method button  to start the data acquisition
- Insert a blank sample and press OK to perform a baseline correction

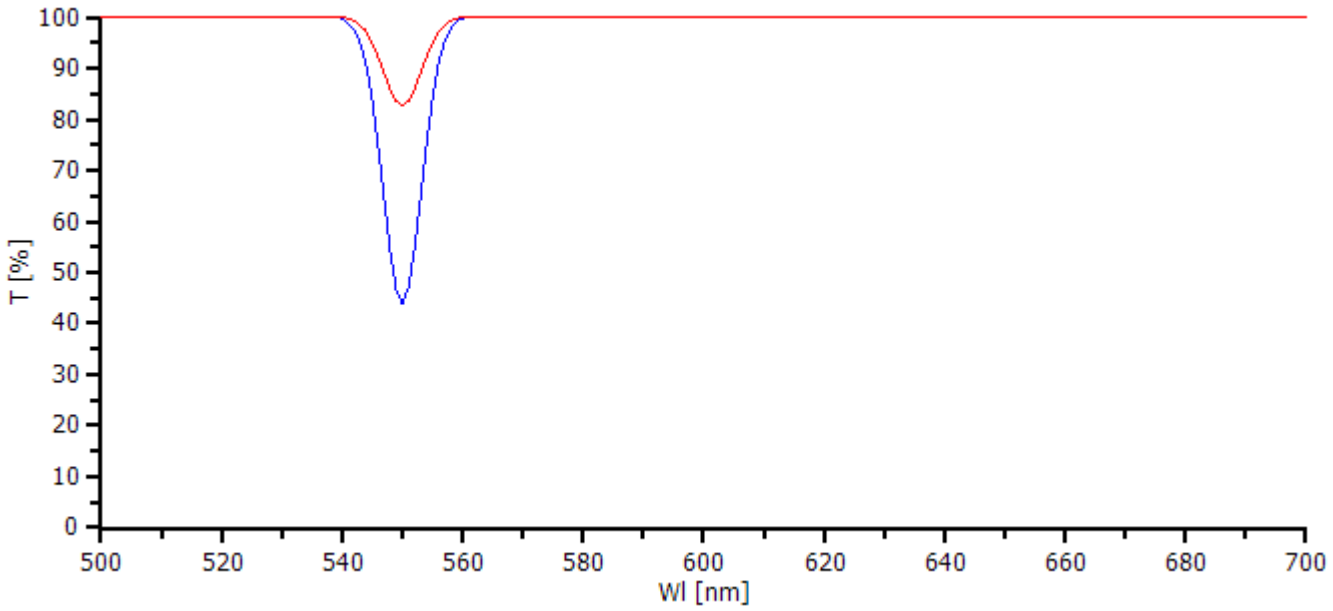


- Insert a sample, update the sample information like sample name and press Start to start the aquisition



First Measurement: Display data

- The measured data are then displayed graphically:

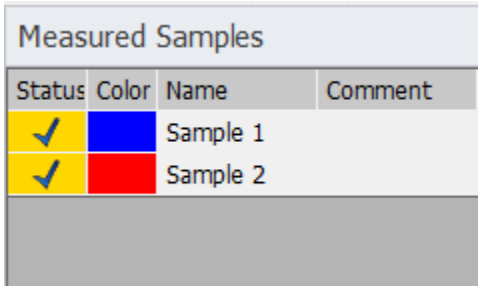


- The graph can be formatted via the Graph toolbar



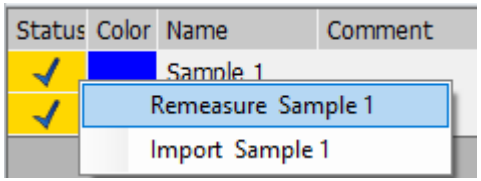
First Measurement: Select measurements remeasure data

- During the measurements the Samples panel is updated



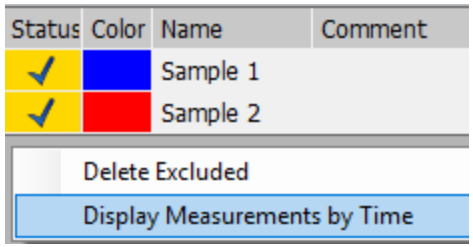
- Left click (ctrl click, shift click) on the status to display/hide measurements

- To remeasure a sample right click on the sample and select remeasure

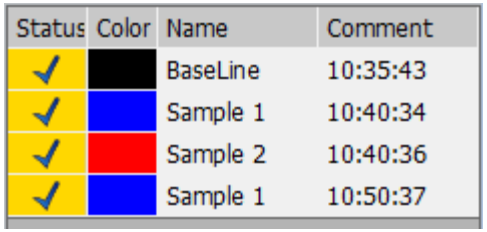


First Measurement: Display data in timely order

- To display all measurements including baseline corrections and re-measured samples right click on the Samples panel and select Display Measurements by time.



- All measurements are displayed in the order of the acquisition time



First Measurement: Update sample info

- Select the Sample Info page to pre-define or update sample info

Batch Info

Name	Comment

Sample Info

Number of Samples 2 Repeated measurements 1 Auto add Samples

Color	Name	Comment
	Sample 1	
	Sample 2	

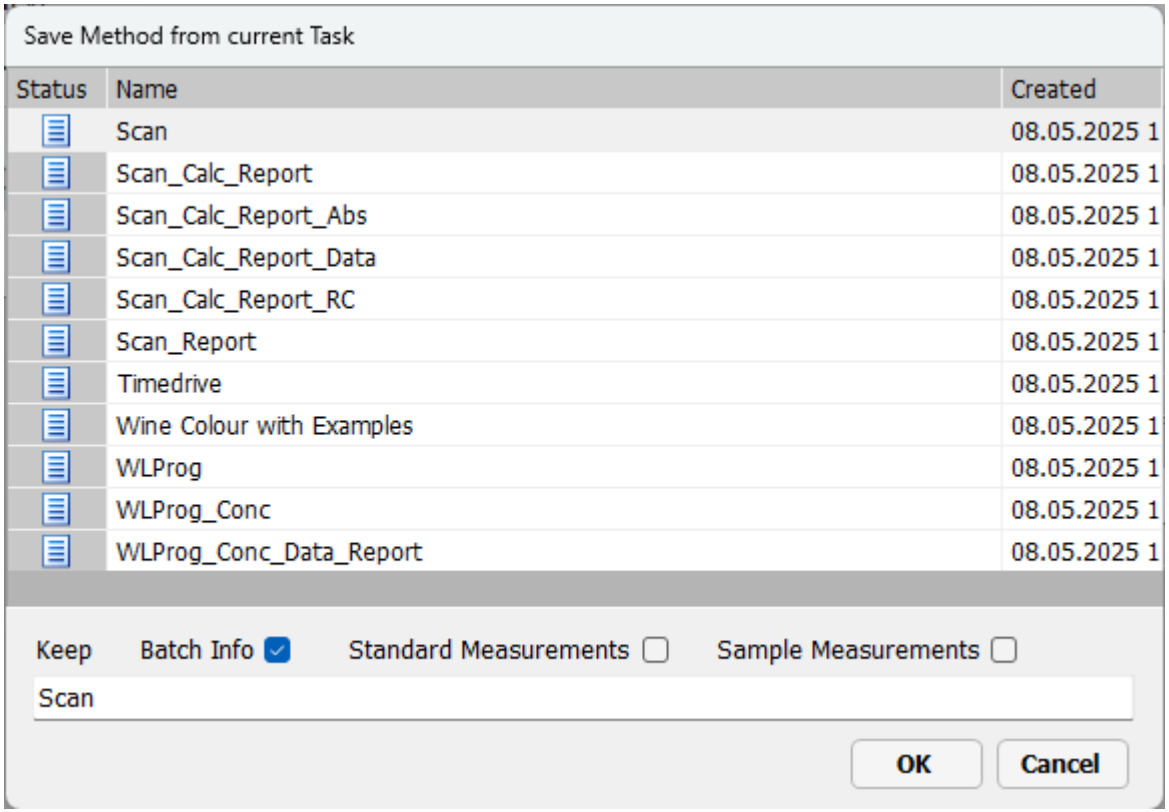
- Use the Sample Info toolbar to add and format columns



- Sample info can be stored to, or loaded from a file via the File menu

First Measurement: Save modified method

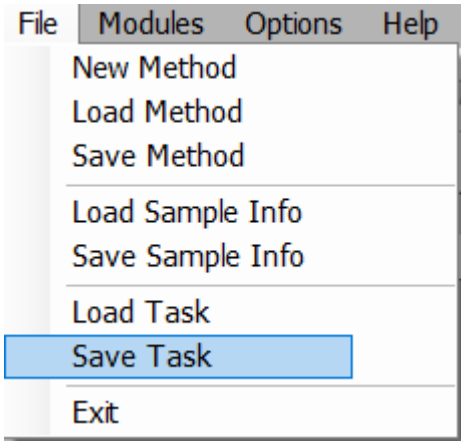
- To save the modified method press the Save Method button:



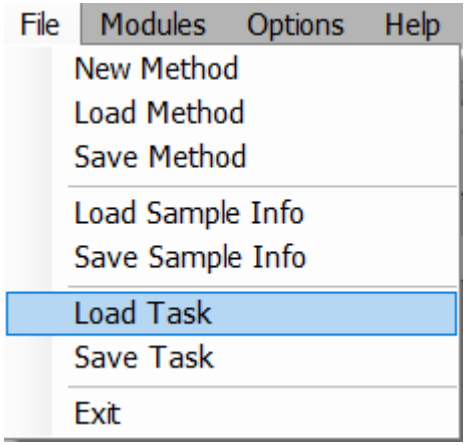
- It is possible to keep measurement data in the method

First Measurement: Load/Save Tasks

- To save the measured data use menu File/Save Task

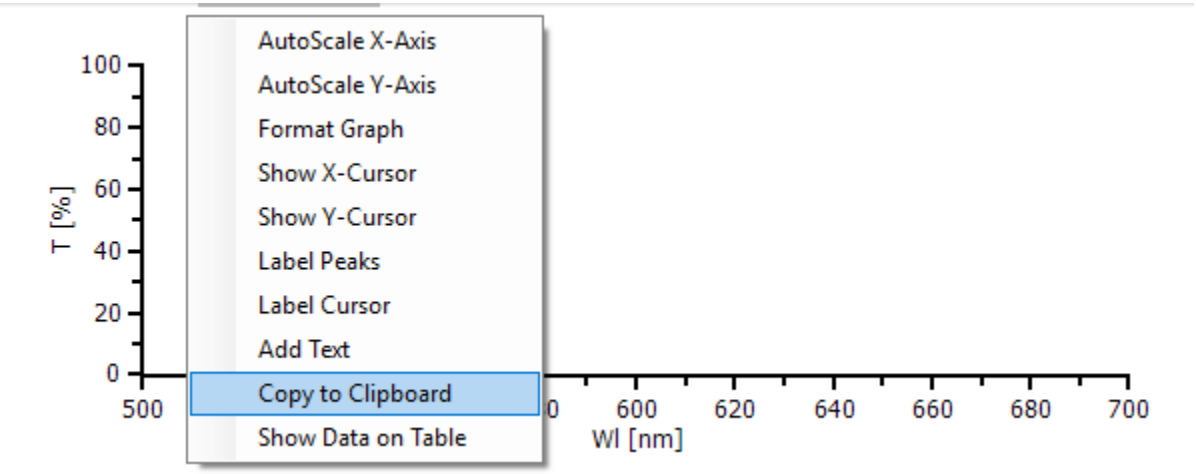


- It is possible to reload a task via menu File/Load Task

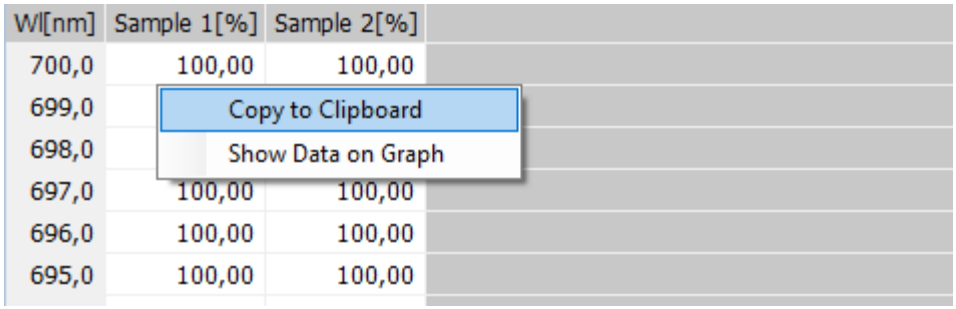


First Measurement: Export raw data

- To export raw data e.g. to Word or Excel right click on the graph, select



- or after selecting tabular data via 

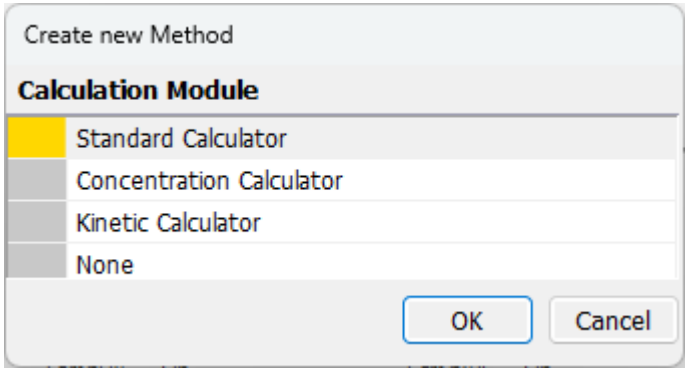


First Measurement: Append data to task

- It is possible to append data to an existing task. Just load the task and press the Run Method button
- If the acquisition method setup is modified (e.g., scan start/end entry, ordinate, slit..) pressing the start button automatically generates a new task.
- Modifying acquisition independent parameters like graph formatting or calculation parameters leave the task data valid.
- In particular it is possible to add a new calculation module to re-calculate data

Advanced Measurement: Adding a Calculator

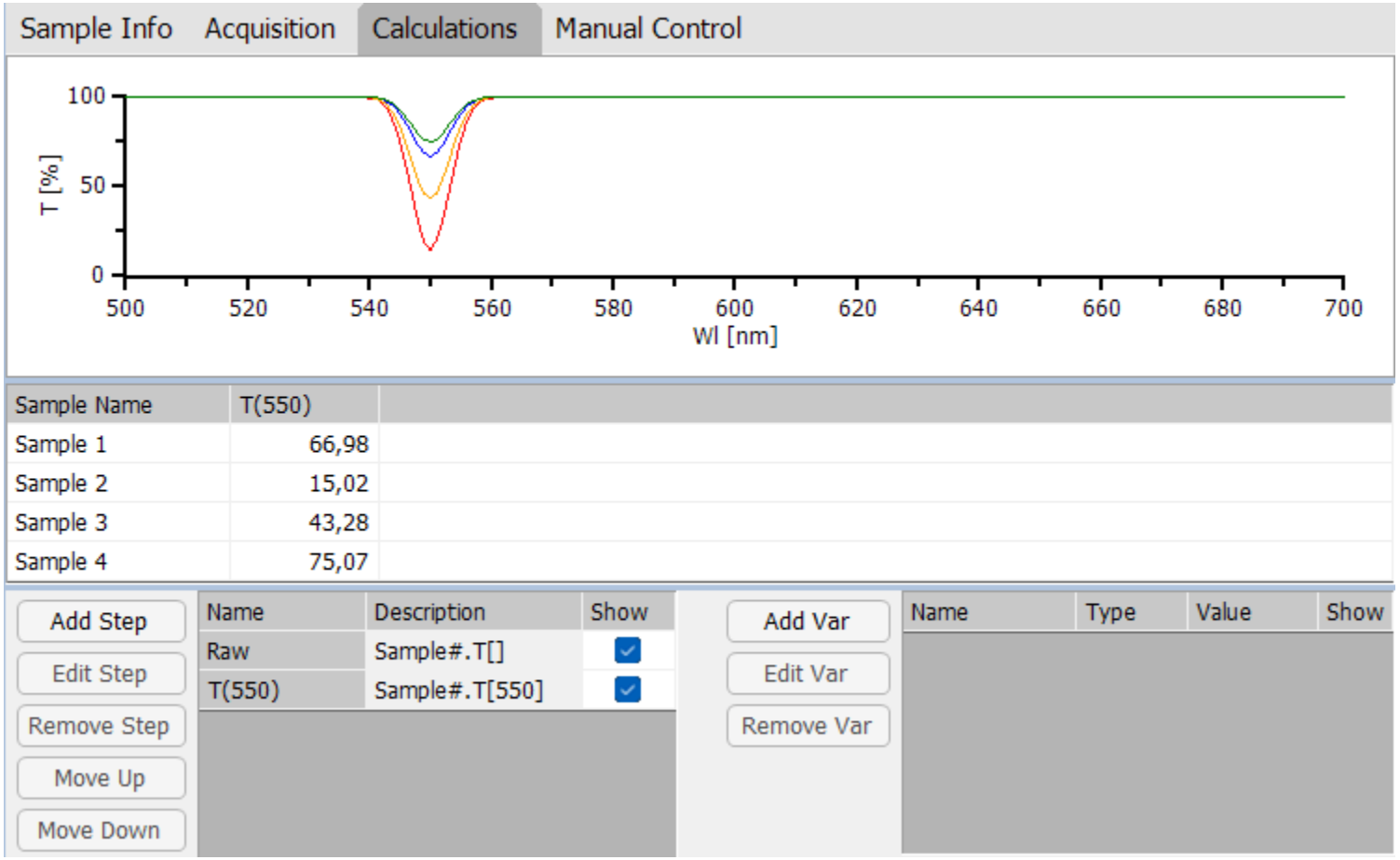
- A new Calculator can be added via menu Modules/New Calculation Module:



- It is possible to add a calculation to an existing method or task, without invalidating measured data.

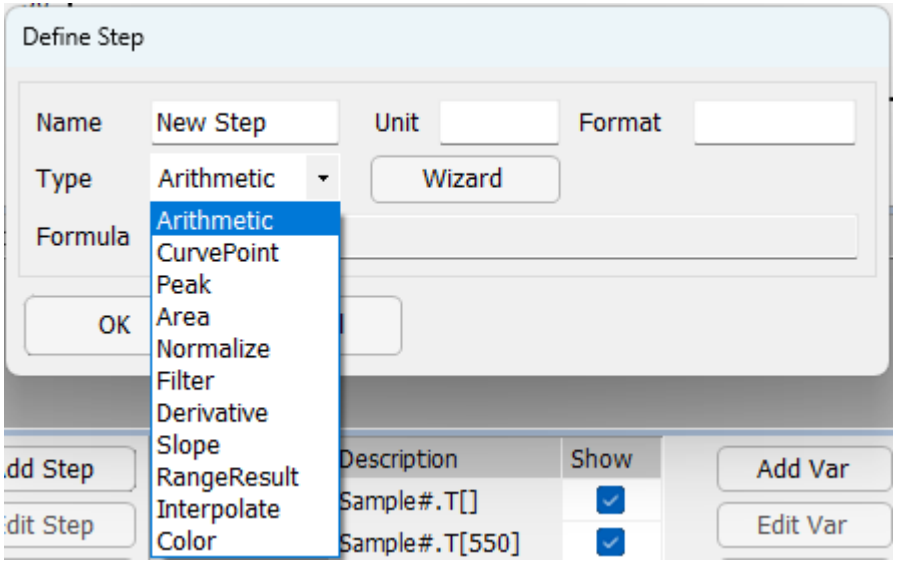
Advanced Measurement: Standard Calculator

- After a calculation module has been selected the new page Calculations is available



Advanced Measurement: Calculation Steps

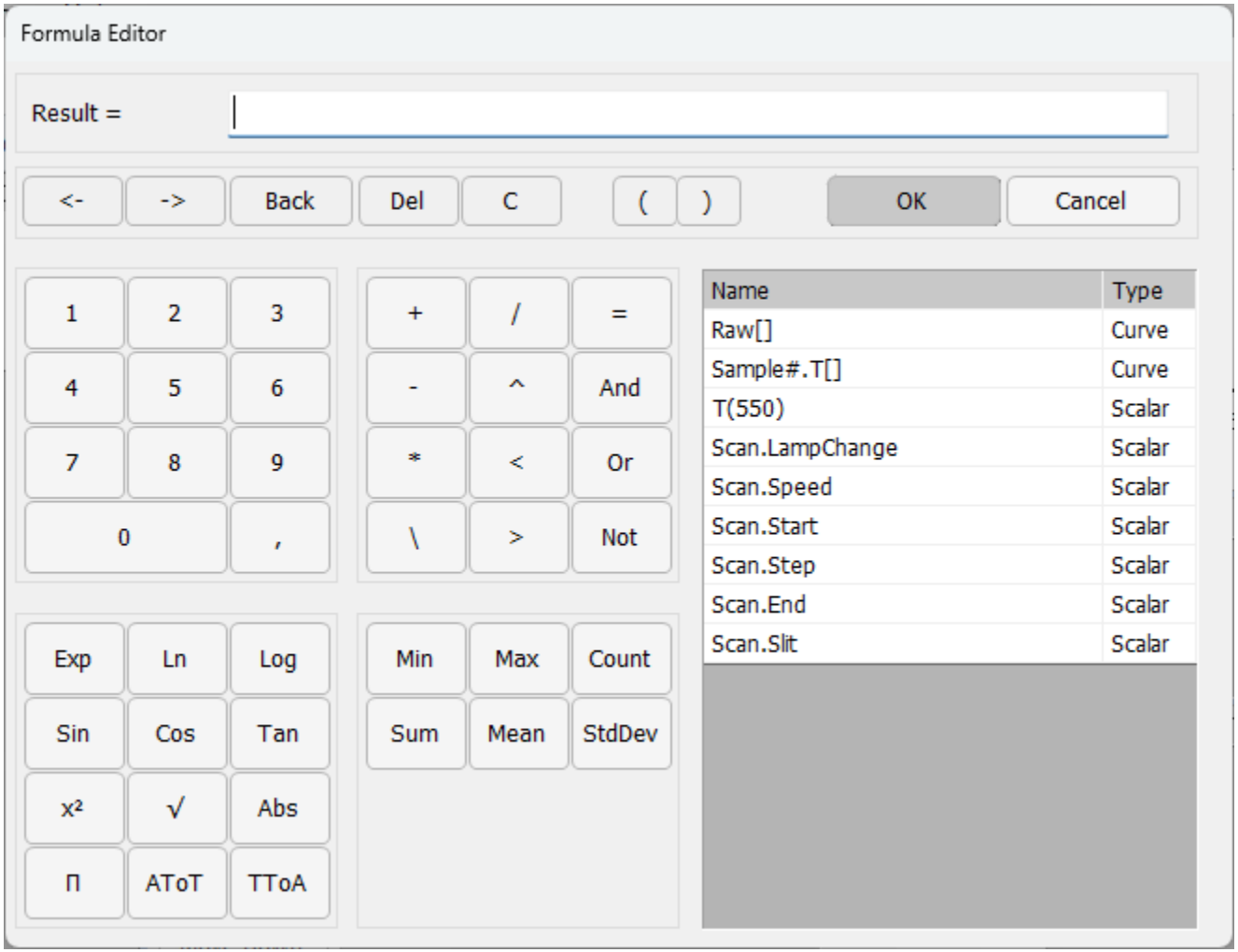
- A calculation method consists of a set of calculation steps. After pressing Add/Edit step the calculation type can be selected



- Pressing the Wizard button opens the corresponding dialog to define the step parameters.

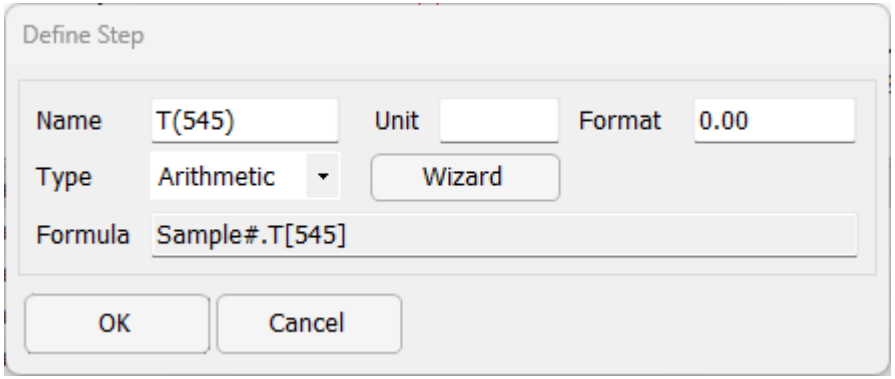
Advanced Measurement: Arithmetic Step 1

- After e.g. selecting Arithmetic the arithmetic dialog is displayed



Advanced Measurement: Arithmetic Step 2

- Use the buttons or type a formula manually e.g. Samples#.T[545], press ok, then enter a name and a format:

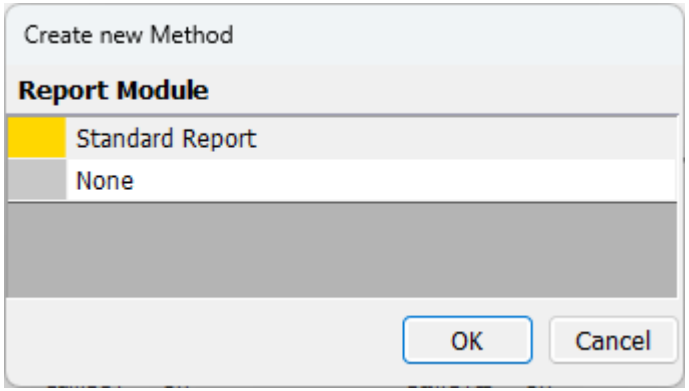


- A new column is added, the results are calculated automatically.

Sample Name	T(550)	T(545)
Sample 1	66,98	90,42
Sample 2	15,02	75,35
Sample 3	43,28	83,55
Sample 4	75,07	92,77

Advanced Measurement: Adding a Report

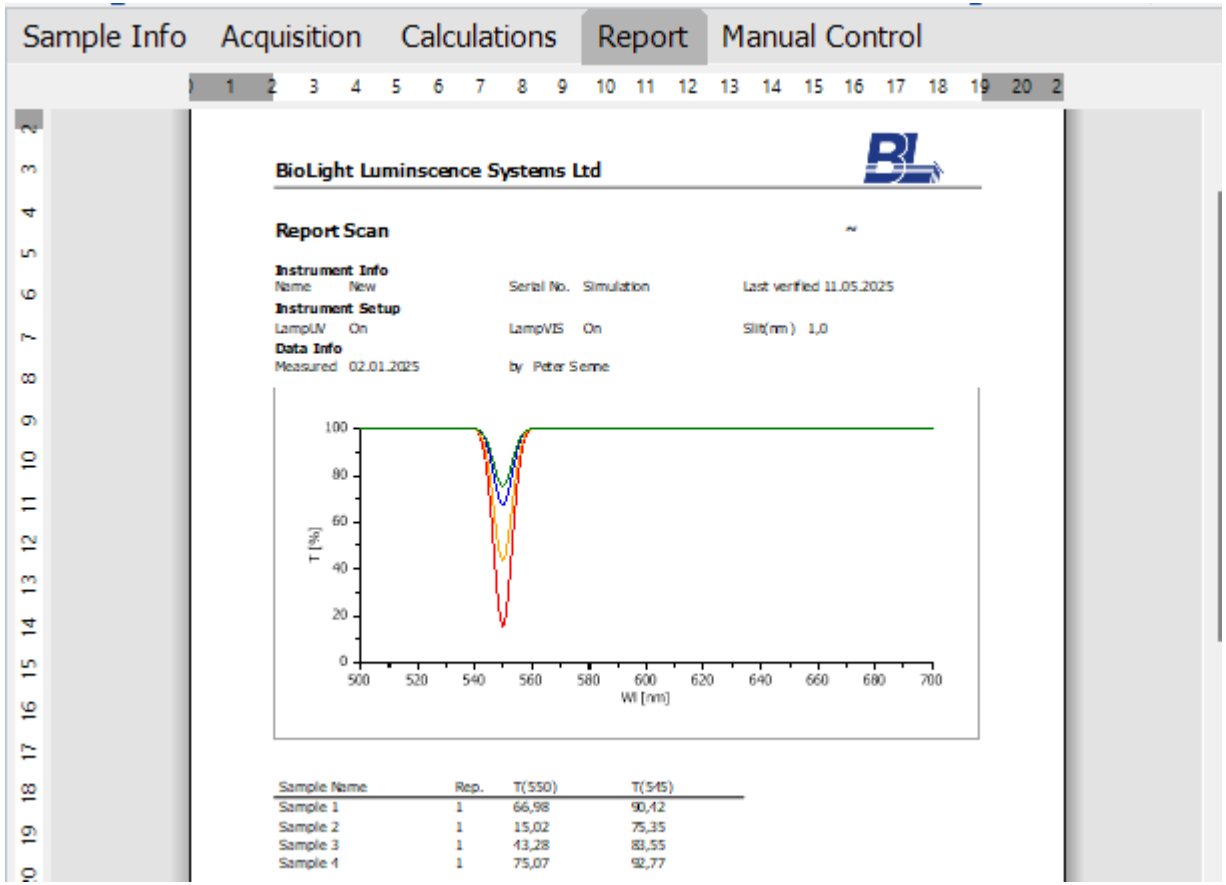
- A new report can be added via menu Modules/New Report Module:



- It is possible to add a report to an existing method or task, without invalidating measured data or calculations

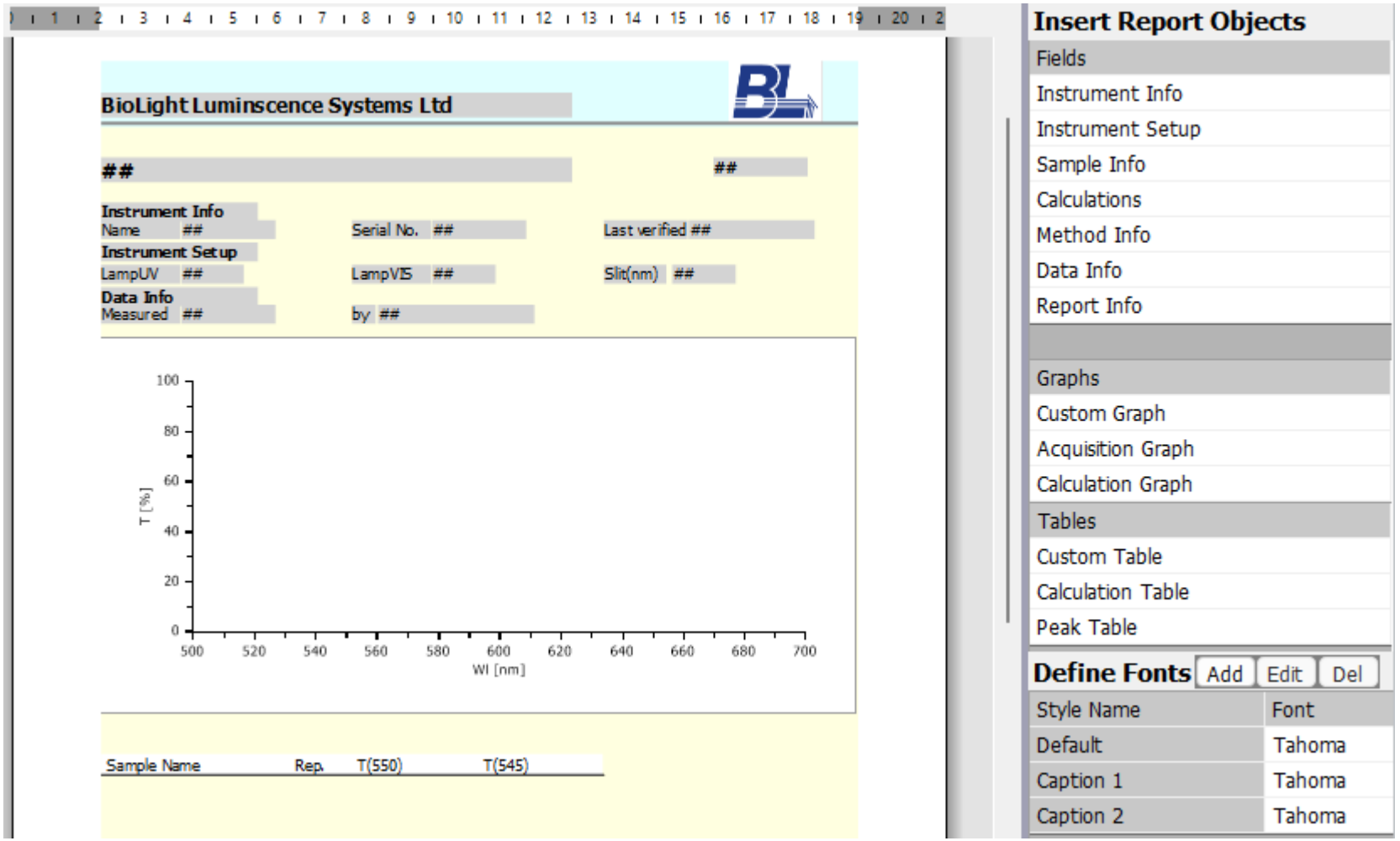
Advanced Measurement: Standard Report

- After a report module has been selected, BLStudioGo automatically creates a default report, which is available on the new Report page:



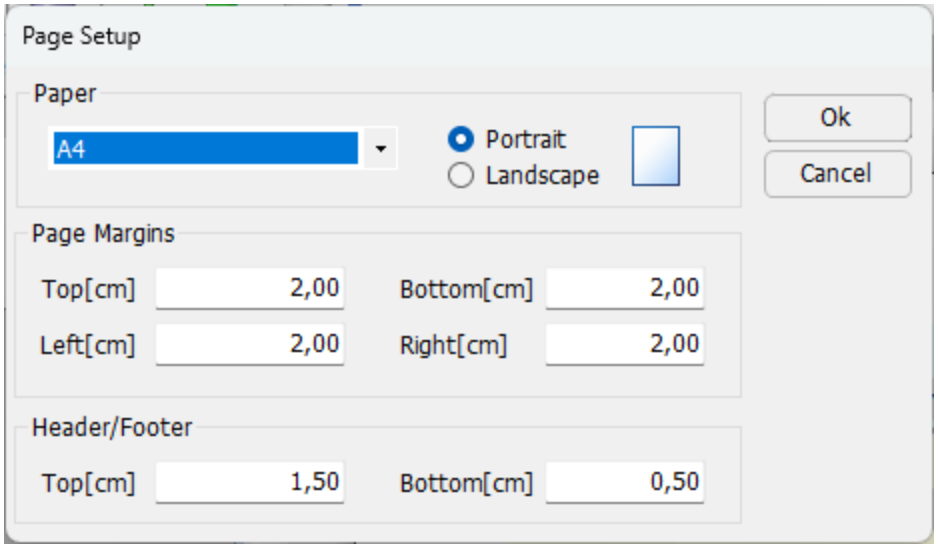
Advanced Measurement: Report Templates

- To modify the report click on the To Template button  :



Advanced Measurement: Format the report

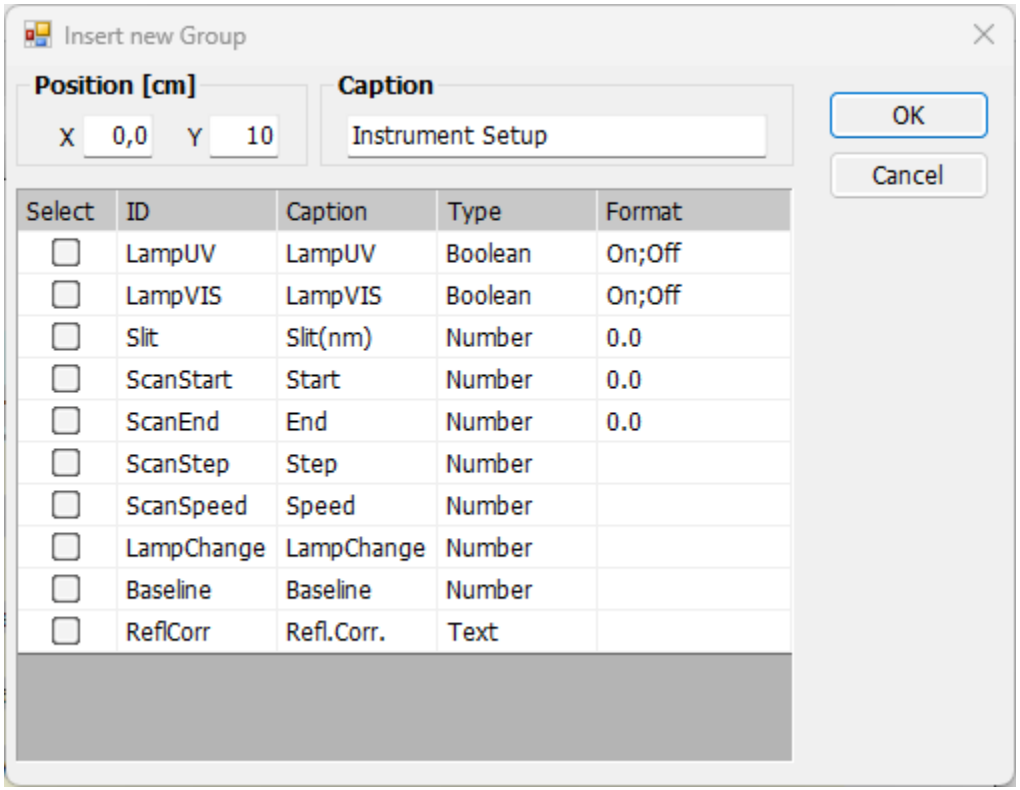
- The report size can be formatted via the Format button in the Report toolbar 



- It is also possible to save  or load  templates

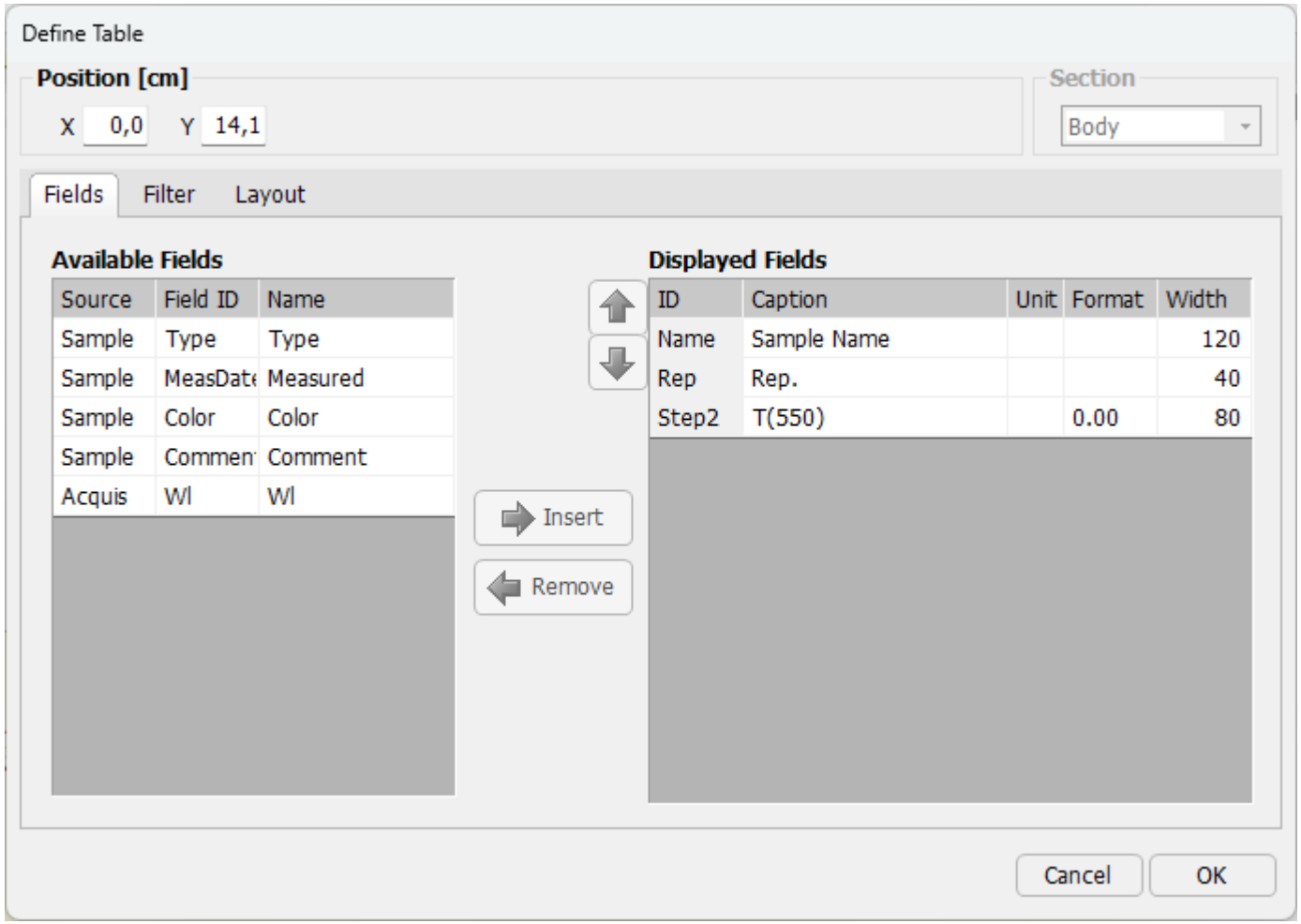
Advanced Measurement: Add Report Objects

- A new report object (graph, table, textfield, picture, line …) can be inserted by selecting it from the report objects table



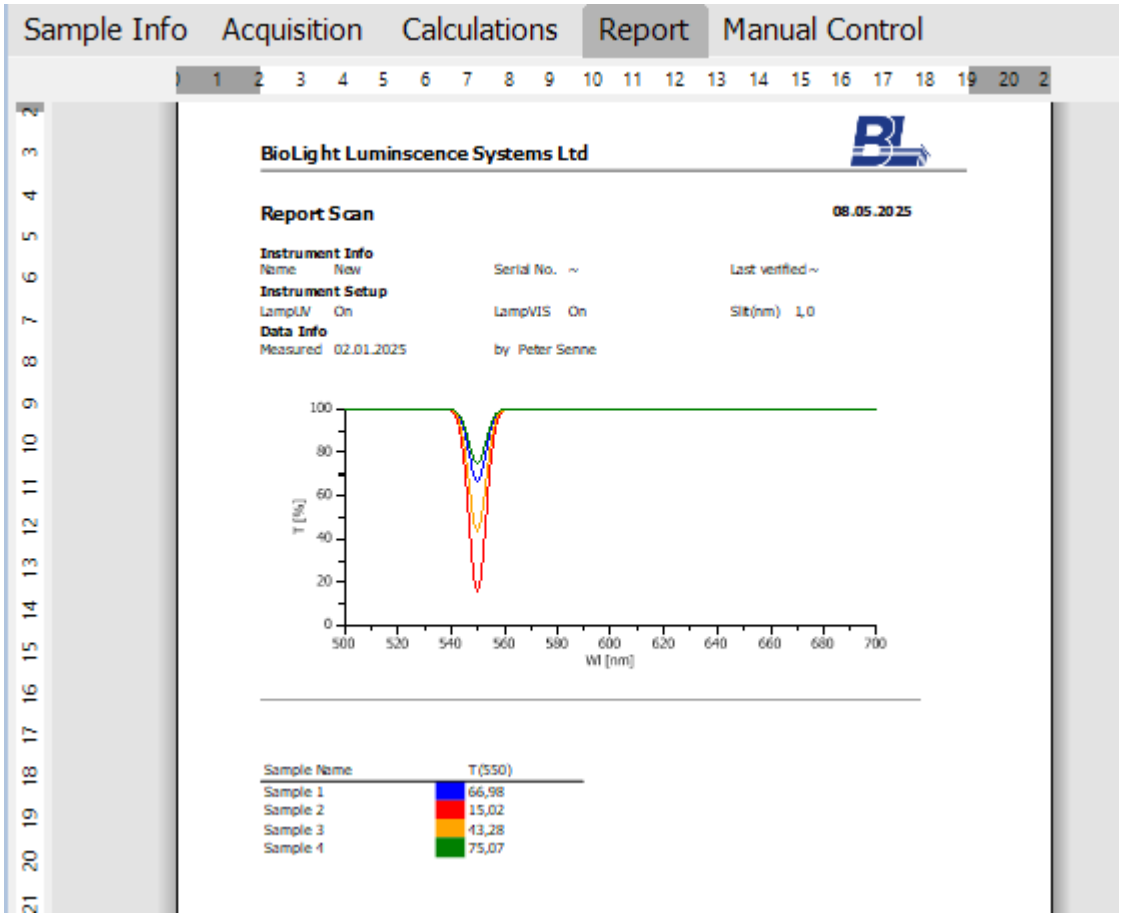
Advanced Measurement: Edit Report Objects

- To edit a report object right click on it (e.g. table):



Advanced Measurement: Final Report

- Going back to via the To Report button automatically applies all changes and creates the new report:



BLStudioGo UV: Currently available Modules

- Acquisition modules:
  Wavelength program
  Timedrive
  Scan

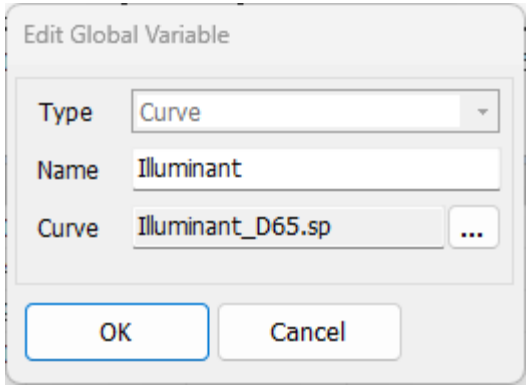
- Calculators
  Standard calculator
  Concentration calculator

- Reports
  Standard report

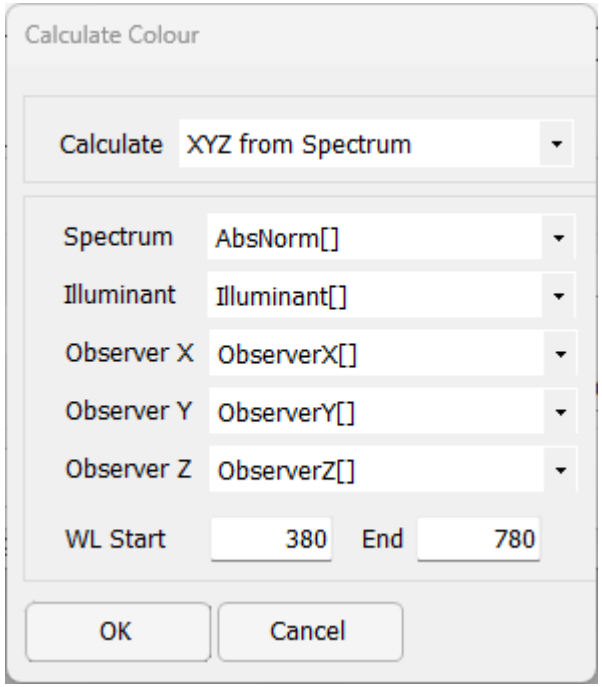
- All modules can be combined to a method

BLStudioGo UV Example: Wine Color Method

- Load external standard spectra for calculations

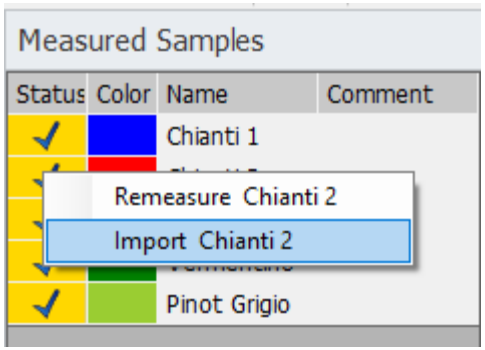


- Use color dialog for complex calculations



BLStudioGo UV Example: Import existing spectra

- Right click on a sample in the Measure Samples panel to import existing spectra as measurements.

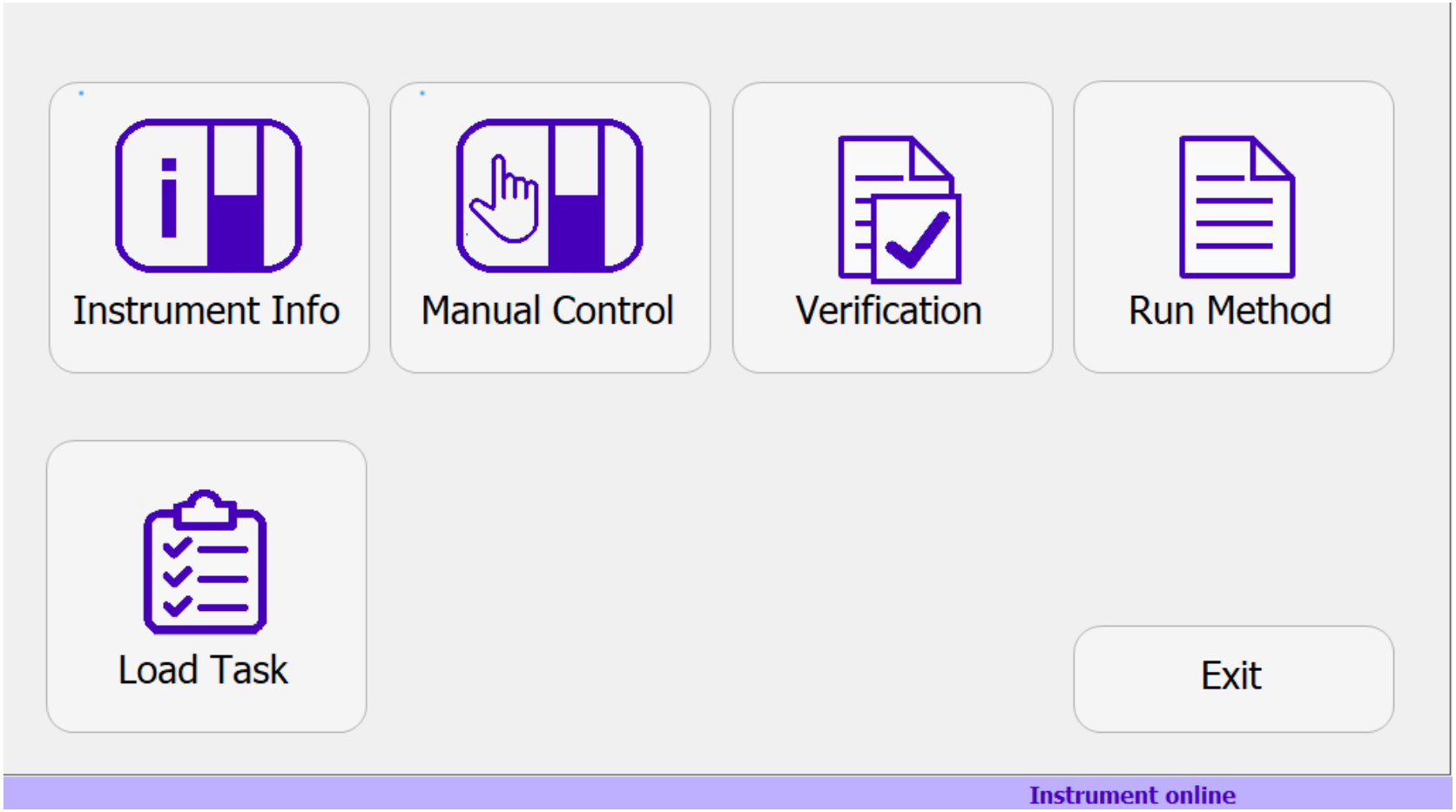


- This can be useful to verify calculations or display expected results for new measurements.

BLStudioGo UV Routine

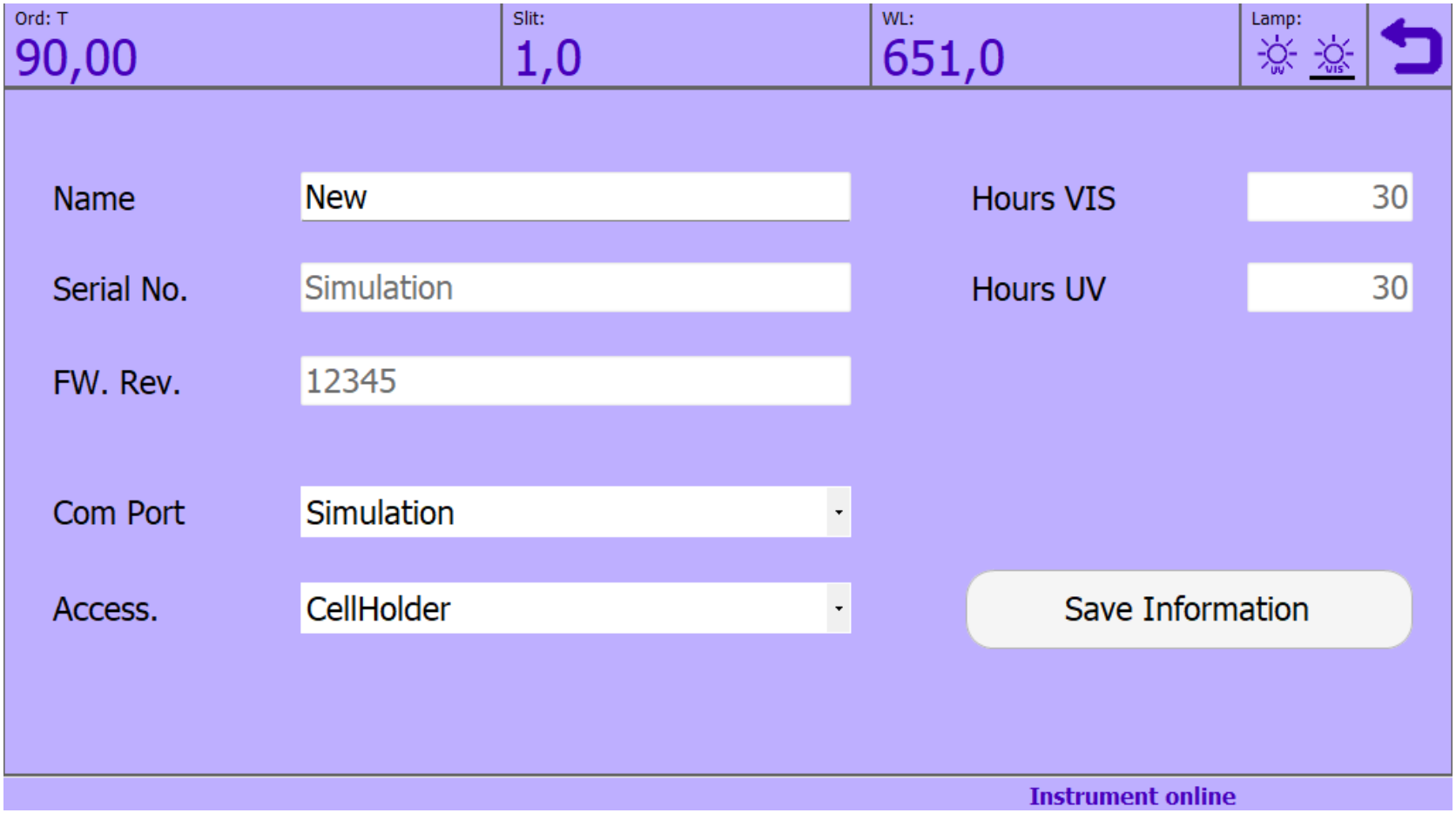
- BLStudioGo offers a simplified user interface for routine measurements
- It is especially useful in combination with the L365+ touch screen.
- The BLStudioGo Routine is just a different user interface of BLStudioGo Development. It uses exactly the same code: Only one exe file exist.
- It is possible to change between the views: E.g., to firstly develop methods and later on use them in routine measurments

- Click on the routine desktop icon to start the routine view.



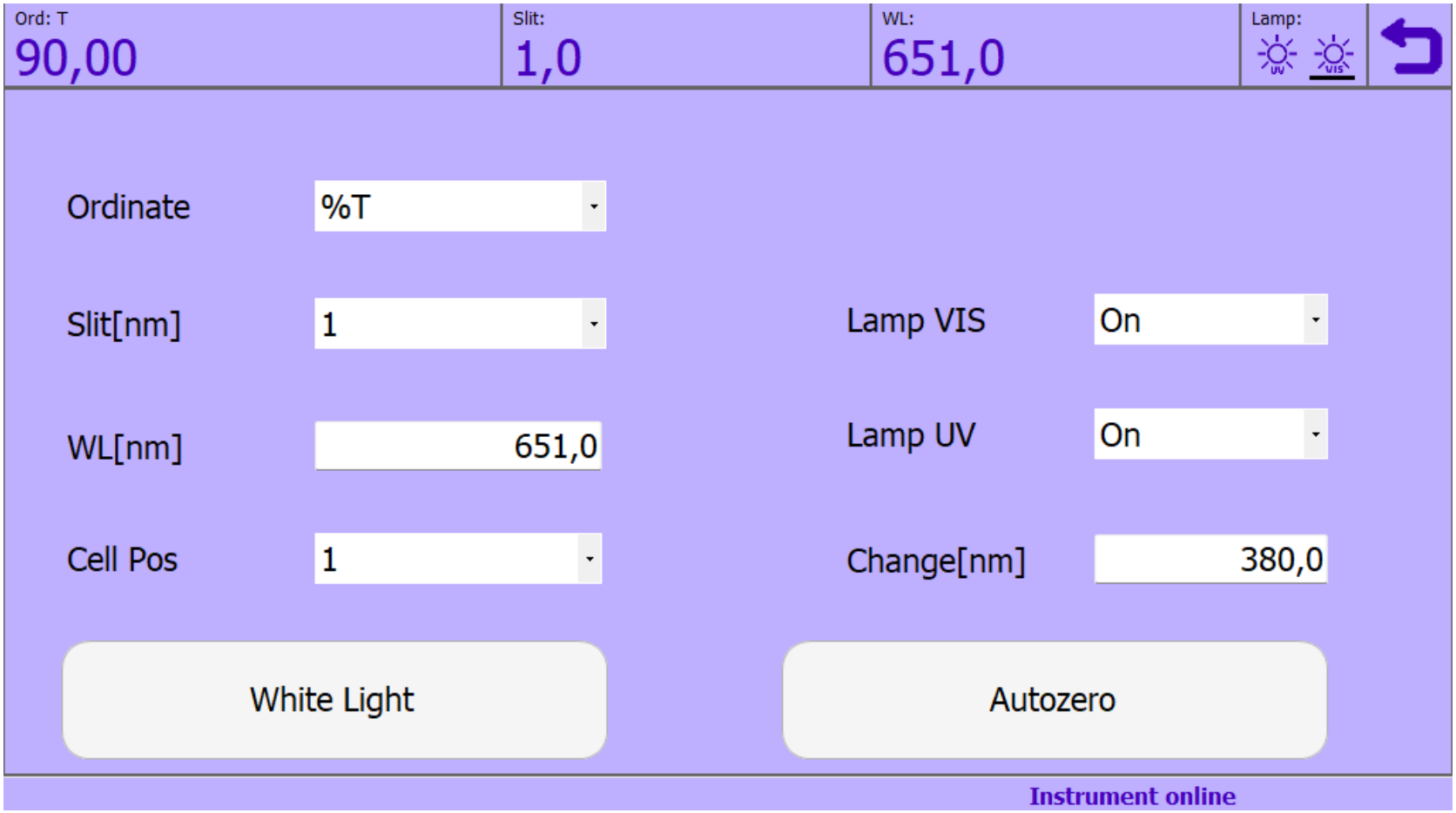
BLStudioGo UV Routine: Instrument info

- Comport and external accessories can be set here

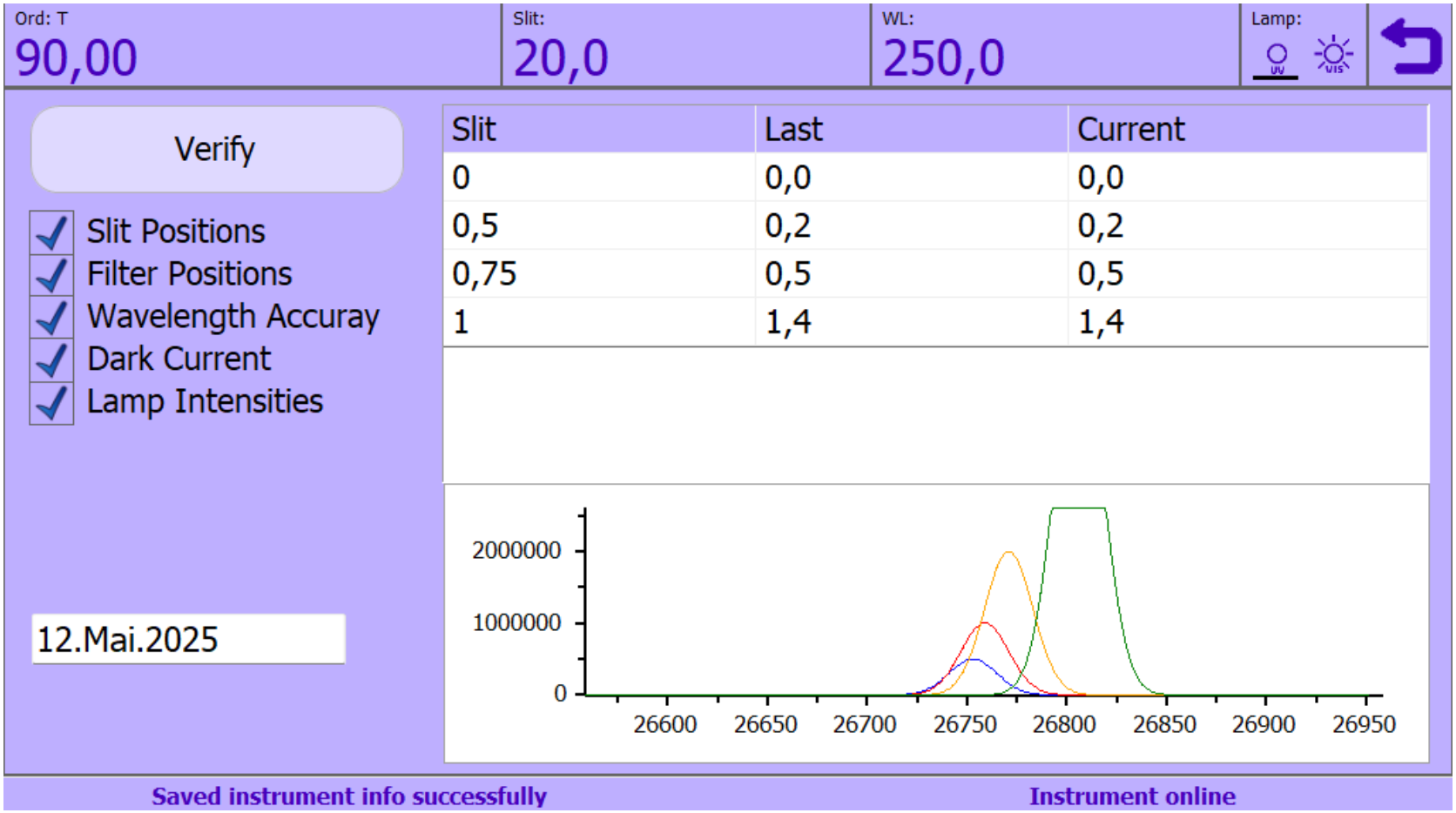


BLStudioGo UV Routine: Manual Control

- Allows to manually set intrument parameters

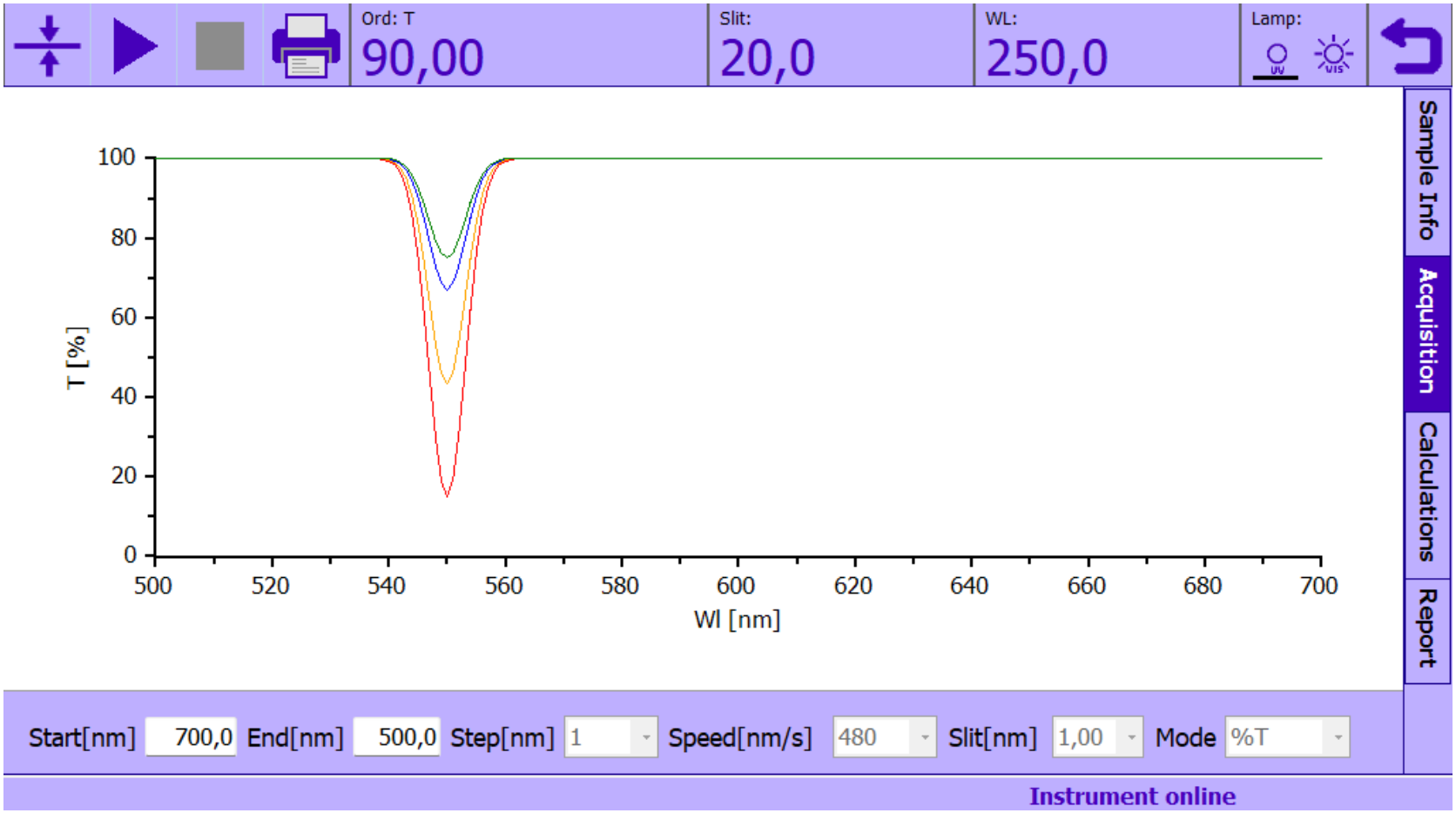


- Run IPV with one button click. Click on positions to view details



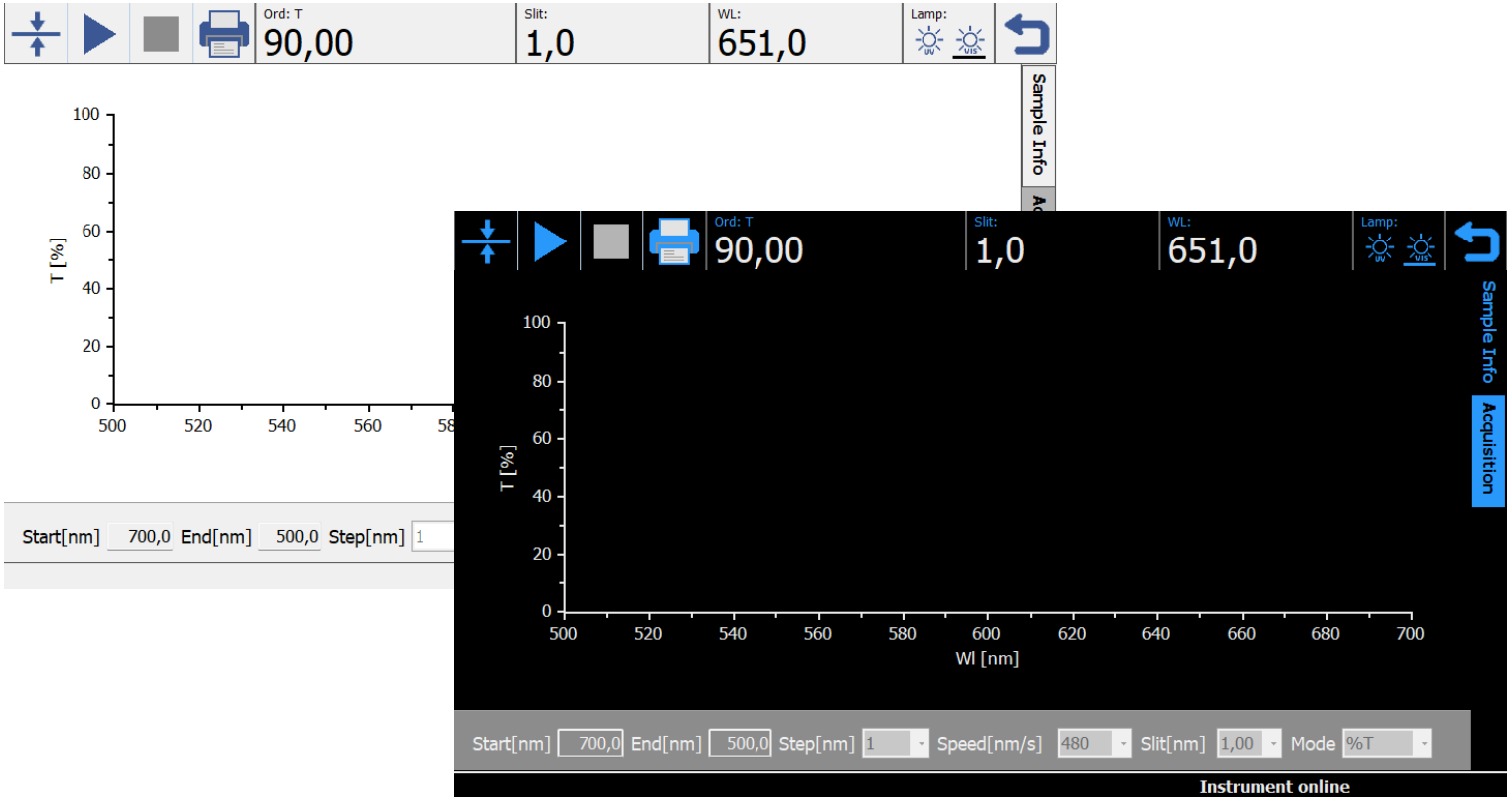
BLStudioGo UV Routine: Acquisition

- Run predefined methods, change acquisition parameters



BLStudioGo UV Routine: Themes

- Use customizable color schemes



BLStudioGo UV Routine: Next Steps

- Support additional accessories
  Sipper
  Autosampler
  Peltier

- Instruments
  Lambda 25 - 45 series

- Modules
  Kinetic calculator
  Temperature scan

- Framework
  User management