



Agilent Purification System, LAB EXERCISE

LAB TITLE

Getting familiar with the Agilent G9309A UV/vis detectors.

Lab Objectives

The purpose of this LAB is to familiarize yourself with the Agilent G9309A detectors repair procedures and diagnostics. These detectors are also known as 325 UV/vis detectors.

The LAB is divided into two parts:

- 1) Module Repair Procedures for the G9309A samplers
- 2) G9309 Sampler Diagnostics

1) Modular repair procedures for G9309 samplers

IMPORTANT: *Use the Service Manual and any other instructions in this LAB*

- a) Using LCVerify, determine the IP details of the detector:

IP address:.....

Subnetmask:.....

Gateway:.....

- b) Run a wavescan and save the BLV file to the desktop.
(use the Service How To if unsure)
- c) Un-plumb and un-stack your detector. **Beware of leaking solvents!!!**
- d) Using proper anti-static precautions (in your tool box), open your detector and practice removing the following assemblies:
- i) Flow cell door, flow cell and fittings
 - ii) Optics module
 - iii) Power supply
 - iv) CPU board
 - v) Cooling fan
- e) Reinstall all assemblies into the unit.
- f) Perform **all necessary** calibrations and list which calibrations you ran:
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- g) Re-stack and configure the detector correctly.
- h) Make detector operational, warm-up lamp, prime flow cell and flush with water.
(plumbing, wiring, communicate with OpenLAB)



2)G933xA diagnostics

a) Run a flow cell ratio test and enter the value in the firmware using LCVerify

b) Run another wavescan, save the BLV to the desktop and compare the two wavescans. Are there any differences? Describe here:

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c) What markers are of great importance when reviewing the wavescan, and why are they?

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d) Run a Noise Test using a tolerance of 10 μ AU.

e) Run a Linearity Test setting a tolerance of 2% at 265nm.

f) Enter the detector diagnostics state and review the Input/ Output diagnostics.