Improve performance with Agilent LC detector lamps ACHIEVE BETTER RESULTS

The Measure of Confidence





Agilent Technologies

DISCOVER LONG LASTING PERFORMANCE

Non-standard LC lamps can result in inconsistent light intensity, noisy baselines, system downtime, and higher costs. To ensure LC system accuracy, reproducibility, and reliability, turn to **Agilent Certified Deuterium Lamps** – built to exacting ISO 9001 standards. Agilent lamps are different because they deliver:

- Optimum performance through correct operating voltage, consistent light intensity, and proper alignment
- 50% longer life for more than 2,000 hours of use
- Higher signal-to-noise ratio with a much narrower aperture that provides increased light intensity and decreased noise
- Higher sensitivity extending detection capabilities at trace levels



How to install

- 1. Turn the Deuterium lamp OFF in the User Interface.
- 2. The lamp is accessible from the front of the detector and is located on the left side.
- 3. Remove the front cover and unscrew the protecting plate if one is in place. The lamp is now visible.
- 4. Warning: If the detector has been in use the lamp may be hot.
- 5. Disconnect the connector and open the two screws located on the lamp. The lamp can now be removed.
- 6. Install a new lamp in the detector. A pin on the lamp helps to position the lamp correctly. *Caution:* Do not touch the glass bulb. Any deposit in the lightpath can affect the performance of the lamp.
- 7. Use the two screws on the lamp to fix it on the chassis.
- 8. Reset the lamp counter in the User Interface.
- 9. Turn the lamp ON and wait 10 minutes to warm-up.
- 10. Perform the lamp tests using the Agilent Lab Advisor Software.

How to test

 With: "Intensity test" and "Wavelength verification and calibration" on the Agilent Lab Advisor Software.

Intensity test measures the intensity of the lamp over the full wavelength range to evaluate the intensity spectrum. The shape of the intensity spectrum is primarily dependent on the lamp, grating, and diode array characteristics. Therefore, intensity spectra will differ slightly between instruments.

Wavelength verification and calibration of the detector is done using the zero-order position and the alpha, beta emission line of the deuterium lamp.

 When: Each time a lamp is replaced; after detector maintenance; when lamp does not ignite; or generally when noise or drift exceeds application limits. The typical lifetime for a lamp is 2,000 hours and we recommend testing the lamp at least every 3 months.

Note: If test fails, ensure the detector has been properly optimized. If the problem persists, the lamp needs to be replaced. Ensure long-lasting, trouble-free chromatographic performance by always choosing Agilent lamps for consistent operation and long-term value. Order the right Agilent lamp for the detector you are using to provide the best performance at the best price. Begin by identifying the type and model of Agilent detector you are using in the chart below, then find the corresponding Agilent LC lamp part number.

Diode Array Detector/Multiple Wavelength Detector		
Detector	Lamp P/N	Lamp Description
G1315A/B G1365A/B	5182-1530	Long-life Deuterium lamp
G4212A/B	5190-0917	Long-life HiS Deuterium lamp (8-pin) with RFID tag
G1315C/D G1365C/D	2140-0820	Long-life Deuterium lamp with RFID tag
G1315A/B/C/D G1365A/B/C/D	G1103-60001	Tungsten lamp

Variable Wavelength Detector			
Detector	Lamp P/N	Lamp Description	
G1314D/E/F	G1314-60101	Long-life Deuterium lamp with RFID tag	
G1314A/B/C 1120 Infinity LC 1220 Infinity LC	G1314-60100	Long-life Deuterium lamp	

To order, visit agilent.com/chem/lamps

Find your local Agilent Sales Representative or Agilent Authorized Distributor at agilent.com/chem/contactus

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