

Ozone SAM Verification Kit, Cat. No.: I-7433

The CHEMetrics® I-2022 SAM Photometer is factory calibrated and uses a 610 nm LED as a light source. The calibration cannot change or be adjusted and the LED should not change under normal use conditions. However, it is good quality protocol to routinely verify the performance of any LED photometer. Tracking verification kit readings at user-defined intervals (e.g. weekly, monthly) will verify the stability of the photometer's performance. This verification kit is used to verify the performance of the CHEMetrics® I-2022 Ozone SAM photometer.

Conformance Certification

CHEMetrics certifies that this Verification Kit has been manufactured and evaluated in accordance with strict Quality Control (QC) and Quality Assurance (QA) protocols and performs within the specifications listed below. The acceptance criteria (in mAbs) are established by reading each ampoule in a spectrophotometer that has been certified using optical standards traceable to NIST standards.

Lot #: **Insp. Date:** **Exp. Date:**

Acceptance Criteria for Standard Ampoules, mAbs

Standard Ampoule ID	Acceptance Criteria, mAbs
1	
2	

Contact technical@chemetrics.com for lot-specific acceptance criteria

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June 23, Rev. 5

Test Procedure

To Set the I-2022 SAM to the mAbs Mode and to Set Zero

1. Press the Zero/Test key and hold. Press the Power key. Three decimal points will appear in the display. Release the Power key and then release the Zero/Test key. The display will temporarily show "AbS" followed by "A610".
2. Wipe the Zero Ampoule supplied in the Verification Kit (contains colorless liquid) with a clean cloth. Then insert it, flat end first, into the sample cell compartment (with mild downward pressure), making sure that the ampoule is fully seated.
3. Place the light shield over the ampoule.
4. Press the Zero/Test key. After approximately 8 seconds, the display will show "0.0.0".

To Obtain a Result for the Standard Ampoules

1. Tap the Standard Ampoule gently to cause the liquid to drain from the tip and then invert the ampoule to mix the contents.
2. Wipe the Standard Ampoule with a clean cloth. Then insert it, flat end first, into the sample cell compartment (with mild downward pressure), making sure that it is fully seated.
3. Place the light shield over the ampoule.
4. Press the Zero/Test key. The display flashes for approximately 3 seconds, then "A610" will appear in the display followed by the test result in mAbs. Record the result.
5. Repeat the test with the second Standard Ampoule.
6. Confirm that the results fall within the acceptance criteria provided. If results are not within the acceptance criteria, clean the cell compartment and cell adapter and re-wipe the ampoules with a damp cloth, then repeat the test. If results are again outside the acceptance criteria, contact technical@chemetrics.com for further instructions.
7. Power the instrument off by pressing the Power key.
Note: The SAM will return to direct read (ppm) mode when the SAM powers off and then on again.