

## V-2000 Verification Kit, Cat. No.: V-0002

The CHEMetrics® V-2000 Multi-Analyte Photometer is factory calibrated. Each calibration employs one of four available LEDs as the light source. The LEDs 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® V-2000 Multi-Analyte photometer.

**NOTE:** Check the CHEMetrics website frequently to confirm that the most current program calibrations are being used.

### 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. A spectrophotometer that is certified using NIST traceable optical standards has been used to verify that each ampoule in this kit performs within the established acceptance criteria.

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

### Acceptance Criteria, Absorbance

Standard Ampoule ID	V-2000 Program #	Wavelength	Lower Limit	Upper Limit
#1 – Yellow	1	420		
#2 – Red	2	520		
#3 – Purple	3	580		
#4 – Blue	4	610		

Contact [technical@chemetrics.com](mailto:technical@chemetrics.com) for lot-specific acceptance criteria

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## Test Procedure

### To Set Zero

1. Install the 13-mm sample cell adapter into the V-2000 photometer.
2. Turn the photometer on by pressing the **power** key.
3. 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.
4. Place the light shield over the ampoule, and press the **zero** key. "Wait" is displayed, then the result is displayed as "0.000".

### To Obtain a Result for the Standard Ampoules

1. Press the **prgm** key, enter the appropriate program number specified in the Acceptance Criteria Table, then press the **yes** key. The photometer will display the program number and wavelength.
2. Tap the corresponding Standard Ampoule gently to cause the liquid to drain from the tip and then invert the ampoule to mix the contents.
3. Wipe the corresponding Standard Ampoule with a clean cloth. Then insert it, flat end first, into the sample cell compartment.
4. Place the light shield over the ampoule.
5. Press the **meas** key. The test result will appear in the display. **Note:** If necessary, press the **units** key to display the test result in Absorbance.
6. Confirm that the result falls within the Acceptance Criteria for the particular V-2000 program number being verified.
7. Repeat this procedure for each Standard Ampoule. If results are not within the acceptance criteria, clean the cell compartment and cell adapter, replace batteries and re-wipe the ampoules with a damp cloth, then repeat the test. If results are again outside the acceptance criteria, perform the photometer Self-Test according to the instructions in the V-2000 Operator's Manual, then contact [technical@chemetrics.com](mailto:technical@chemetrics.com) for further instructions.



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