# ⑦Tip Biosystems

## PHOTOPETTE<sup>®</sup> SELF-TEST PROCEDURE

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#### OBJECTIVE

The purpose of this document is to highlight the correct procedure for proper execution of the Photopette® Self-Test function. Carried out correctly, the Self-Test examines device performance with respect to accuracy as well as to upper detection limit, and allows the user to verify reliability of the device.

#### MATERIALS AND APPARATUS

#### Instruments:

- Photopette<sup>®</sup> device
- CuveTip®

### SETUP

The Self-Test has to be carried out at the standard room temperature of 22°C (factory calibration temperature) to eliminate effects of temperature variation. The recommended setup is illustrated in Figure 1 and can be summarized in three basic steps:

- Verify that ambient temperature is within 22°C±1°C and that the Photopette<sup>®</sup> is placed on a table.
- Place a CuveTip<sup>®</sup> on the device (Figure 1(a)) and ensure that it is aligned properly as illustrated in Figure 2.
  *IMPORTANT*: Self-Test for Photopette<sup>®</sup> Bio should

only be performed using a UV-rated CuveTip<sup>®</sup>.

 Cover the CuveTip<sup>®</sup> cavity. For instance, by using the protective cap (Figure 1(b)). If the protective cap is not available, covering the CuveTip<sup>®</sup> by hand is also possible. Ensure that you are not touching the device.

#### PROCEDURE

After completing the above setup steps, launch the Photopette® App on your iOS or Android device and connect

to your Photopette<sup>®</sup>. The Self-Test function can be found under Settings  $\rightarrow$  Self-Test.

The interactive Self-Test function will carry out the following four tests:

#### PERFORMANCE TEST

For this first part of the Self-Test, no user interaction is required. The device will automatically perform a series of measurements to verify that accuracy and upper limit of detection are within specifications.

#### TRIGGER BUTTON TEST

Once the performance test has been completed, you will be prompted to press the trigger button located on top of the Photopette<sup>®</sup> device.

#### BUZZER TEST

If functional, the buzzer will sound next for a short period. A prompt will appear asking you to give feedback whether the buzzer was audible or not.

#### NOTIFICATION-LED TEST

For the notification-LED located on top of the Photopette<sup>®</sup>, each of the three RGB-colors will be tested individually. When turning the LED on, a prompt will appear asking for feedback whether the respective color is visible.

#### EVALUATION OF RESULTS

The Self-Test function will automatically perform an analysis of the results and will provide a brief report. In case of major problems being encountered during the test, the option to export and email an extended report to Tip Biosystems for further analysis and support is also given.

#### SUMMARY

The Photopette® App provides a convenient Self-Test feature to verify Photopette® device performance at your end. In cases where Photopette® is believed to be malfunctioning, the Self-Test saves you time by eliminating the requirement to send the device back to factory for analysis.

Interpretation of results is implemented in the software and you will receive a brief test report within seconds.



(b)

Figure 1: Illustration of the recommended Self-Test setup. (a) Place a CuveTip® on your Photopette® and check that it is in proper position. (b) Cover the cavity of the CuveTip® using the protective cap or your hand.



Figure 2: Illustration of CuveTip® placement. (a) Improper CuveTip® placement where the CuveTip® does not align well with the device. (b) Proper CuveTip® placement.