

Technical Note 131

Diagnostics App Self Test

Introduction

Although the DeNovix DS-11 Series's propriety SmartPath™ technology enables accurate pathlength control and eliminates the need for routine recalibration, labs may choose to run the Diagnostics app to verify that the instrument is working within specifications. The Self Test option within the app is specifically designed to assess parameters other than pathlength calibration.

Diagnostics Self Test

The DS-11 Diagnostics Self Test is a simple, one-button procedure that returns results in under 20 seconds. Two spectral plots of the xenon flash lamp intensity. Shortly after this, a table that compares measured vs specified values for a panel of specifications will be displayed (Figure 1).

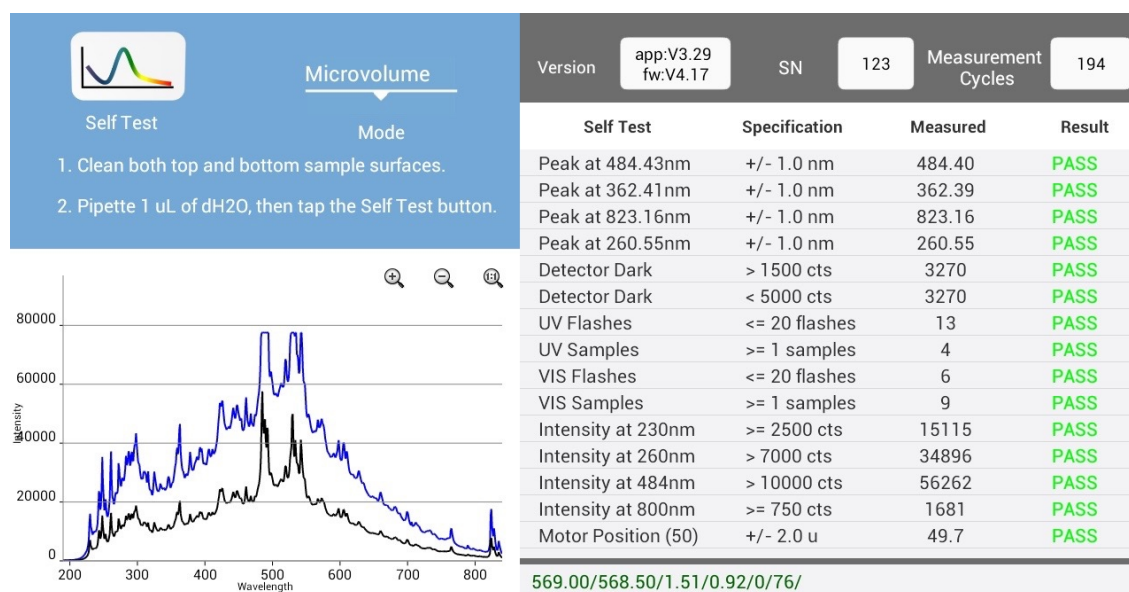


Figure 1: Example of Measured vs Specified Values

Tips

Ensure that both the upper and lower microvolume measurement surfaces are clean prior to starting the microvolume mode Self Test assessment. For DS-11+ models, remove cuvettes from the holder block and ensure that the light path is clear obstructions prior to starting the cuvette mode Self Test assessment.

Note: The sampling surface is located near the front of the instrument. The optical surface, which is at the back near the arm hinge base, should be cleaned if someone inadvertently pipettes samples onto this surface.

Troubleshooting

Ensure that the software is up to date. Refer to Technical Note 118 – Software Updates for more information.

The primary cause for failed **microvolume mode** Self Test results is dirty measurement surfaces.

- Clean the surfaces, then repeat the Self Test. Refer to the User guide or DeNovix Technical Note 110 – Sample Surface Cleaning for surface cleaning information.

The cuvette left in the cuvette block is primary cause for failed **cuvette mode** Self Test results.

- Remove cuvette from the cuvette block, then repeat the Self Test.

Lamp Reset

If a second attempt at the Self Test fails, then use the Lamp Reset option accessed from the Overflow menu to initiate a system re-optimization. The Overflow menu is represented by four vertical lines at the top right of the screen.

Software Update

Confirm lamp is activated during the microvolume mode Self Test by looking at a water sample pipetted onto the measurement surface. If no light is observed after the Measure button is pushed, the instrument operating software and firmware might be out of date. The DS-11 software should be fully updated (using the Home screen second page Updater App).

Summary

Contact [DeNovix Customer Support](#) if further help is required. Please include the serial number of your instrument when contacting Customer Support by email.

Outside of the US, please contact your local distributor for assistance.

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