

Stimuli Luminance

You can measure the luminance values of your stimuli using the SpyderX Pro colorimeter which can be found in the storage cupboard in MF-B447. Follow the steps below to measure the luminance:

1. Open DisplayCAL on the stimulus monitor.
2. Plug the SpyderX Pro colorimeter in the participant monitor (you might have to unplug e.g. the keyboard to make space), and turn the light on in the experimental room on the same brightness as you would during the experiment.
3. Check whether DisplayCAL is using the correct ArgyllCMS. You do this by going to "?" and then "About...". You should see ArgyllCMS 3.5.0.

- If you do NOT see that, then go to "File" -> "Locate ArgyllCMS executables..." -> navigate to

```
C:\Program Files (x86)\DisplayCAL\Argyll_V3.5.0\bin
```

-> Press "Select Folder". Now it should be the correct one (check again)!

4. In DisplayCAL the SpyderX will already be selected. Check that the 'Mode' is on "LCD White LED" and that the correct 'Display' is selected (ROG XG258/PG258Q = Researcher, XG248Q = Participant).

- If you cannot select the participant display (XG248Q), then go to Display Settings -> press on the button next to "identify" on the top of your screen -> select "extend these displays"-> in DisplayCAL you should now be able to select the correct monitor.
5. Click on the button "Calibrate & profile" at the bottom of the screen.
 6. Press on "start measurement". It will ask you to put the light-tight cap on the instrument for self-calibration. Press "ok".
 7. You will now see the pop-up to place the instrument on the test window. Remove the light-tight cap and place the colorimeter (with the camera-side) on the grey box (you can enlarge it).
 8. Keep the colorimeter on the box (keep pressure against the screen during the measurement with a chinrest for example), click on "ok" and afterwards (after the pop-up left) click on "Start measurement".
 9. The box will turn white, and values will appear. You can now move the colorimeter to face the stimulus you want to measure. When the value for "Current" is stable click on "Stop measurement" to freeze the luminance values.

Revision #14

Created 2026-06-04 14:00:56 UTC by Admin

Updated 2026-06-08 14:11:13 UTC by Admin