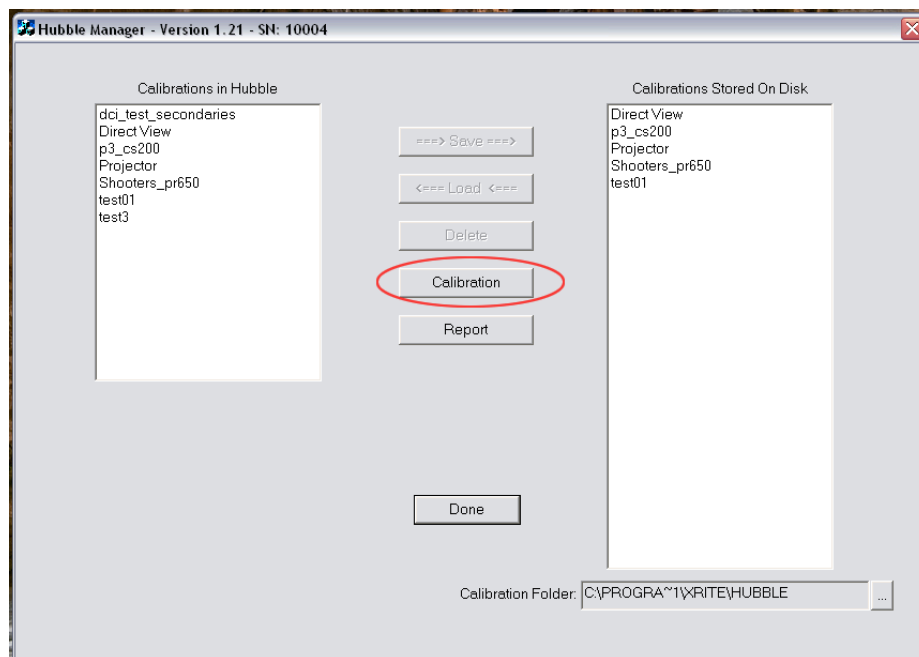


# Hubble Re-Calibration

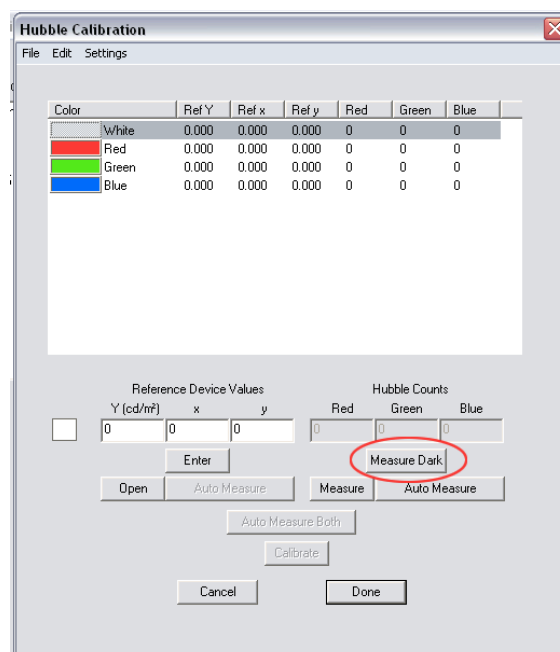
The procedure for calibrating the Hubble probe for a particular device is straightforward. Currently the Hubble software only runs on windows so a windows machine is needed also needed is a reference probe. One of the high-end spectroradiometers is required to obtain a good calibration. I would recommend using one of the Photo Research probes or the Konica-Minolta CS-1000.

Once you have a reference probe, the Hubble software is installed on the windows machine and the Hubble is connected via USB follow the following procedure to calibrate the Hubble for the new viewing device.

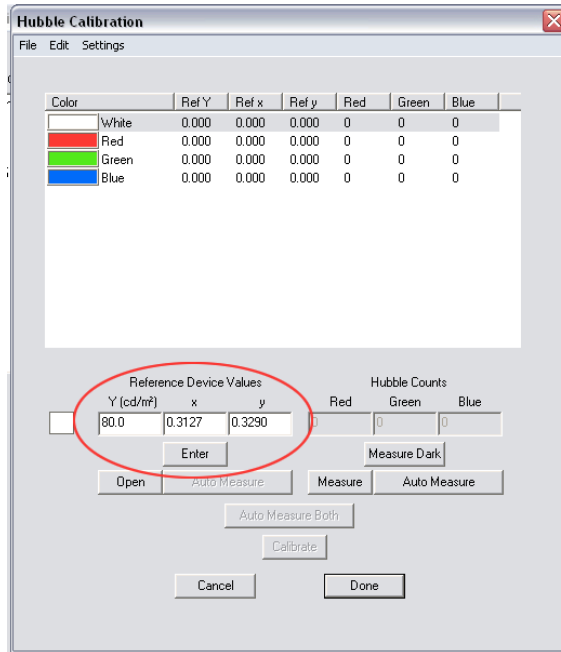
1. Run the 'Hubble Manager' application and click "Calibrate".



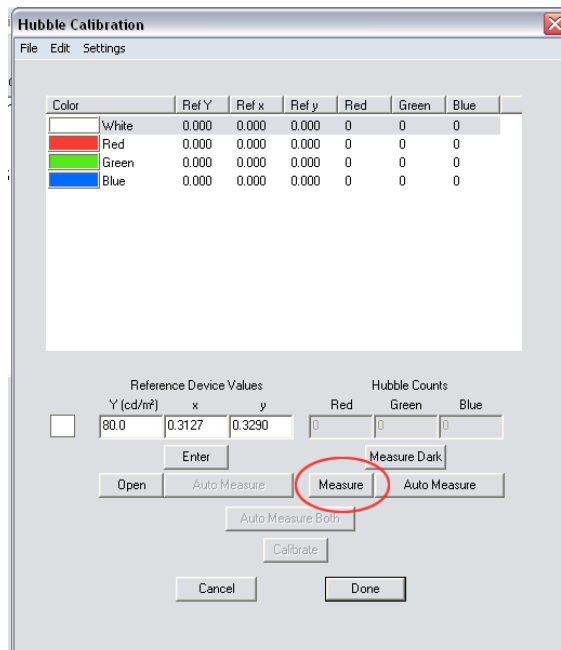
2. Ensure the cover is on the probe and click "Measure Dark".



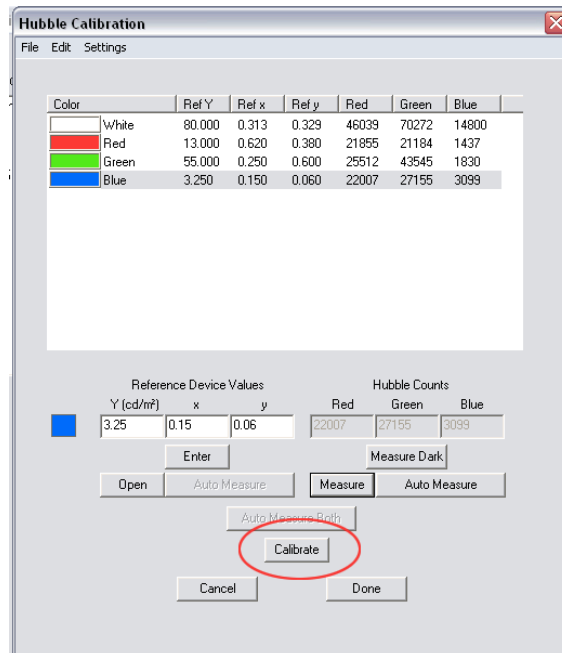
3. Display a white patch on the screen of the device that you want the Hubble to be calibrated to and measure the CIE (1931) xyY value from the screen with the reference probe and enter it in the "Reference Device Values" section on the left. Then click enter.



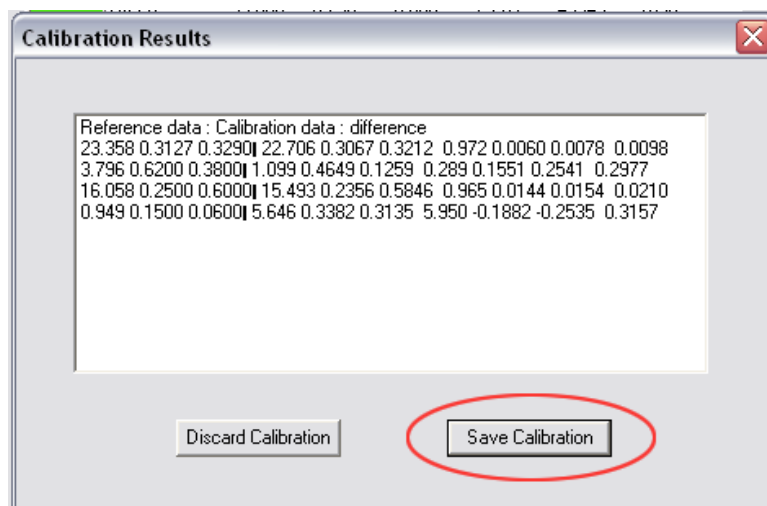
4. Ensure the cover is off the Hubble and it is aimed at the same part of the screen as the reference probe. Then click "Measure". The Hubble will take a reading and then move the focus to the next patch.



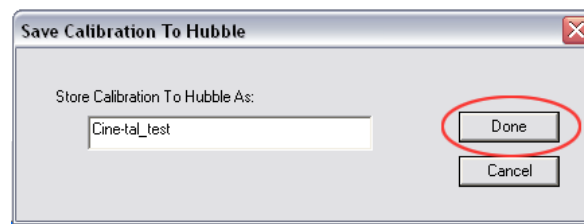
5. Display a red patch on the display device and repeat the above procedure; steps 3-4
6. Repeat again for green and blue.
7. When all the data has been collected click “Calibrate”.



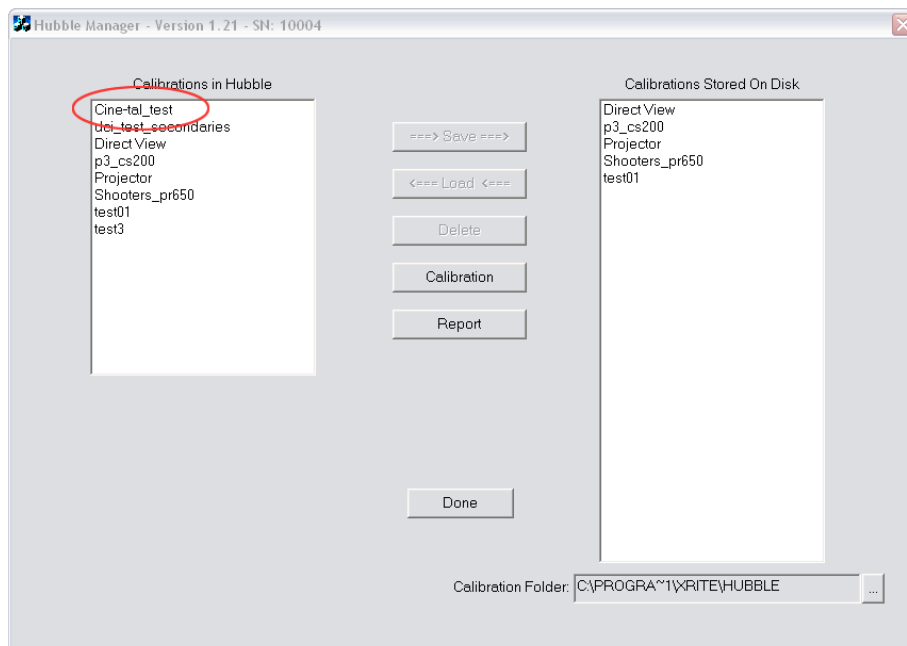
8. Then click “Save Calibration” when prompted.



9. Next name the calibration and click “Done”.



10. The custom calibration can now be seen in the Hubble manager in the “Calibrations in Hubble” list.



11. To back it up to the local hard drive click on the calibration name in the list and click "Save".

