UV Reflectivity Test Station Meeting

Date: November 6, 2023 Time: 11:00 AM – 12:30 PM

Attendees: Peter Bonneau, Aaron Brown, Marco Contalbrigo, Brian Eng, Tyler Lemon, Bill Li, Matthew McEneaney, Marc McMullen, Anselm Vossen, Zhiwen Zhao, and Beni Zihlmann

1. Lower wavelength limit for test station will be 200 nm

1. Compact CCD spectrometer lower limit is ~197 nm wavelengths



System diagram of UV reflectivity test station



Detailed view of collimator-recollector assembly

2. <u>Test beam switch</u>

Tyler Lemon, Bill Li, Anselm Vossen, and Zhiwen Zhao

- 1. Test beam has to be routed to one leg, while being blocked to the other, for measurements
- 2. Possible options
 - Shutters to block light to leg not in use
 - Calibrated optical beam splitter to divide test beam into two equal beams
 - Mirror-based switcher
- 3. Chosen option depends on availability of UV-rated components and system repeatability of switching

3. <u>Procurements</u>

Tyler Lemon, Anselm Vossen, Zhiwen Zhao, and Beni Zihlmann

- 1. Tyler will compile parts list for one leg of test station and distribute to collaboration
 - One leg can be used to test functionality of optics
 - Components will be used to finalize test station design and setup
 - If leg works as expected, components will be procured for second leg for simultaneous reference and data acquisition
- 2. Bill will send vendor information that his organization is using so JLab can procure the same one
- 3. Beni will give approval and provide charge code for procurement requests

4. DSG-reflectivity mailing list set up to coordinate work

- 1. DSG staff and collaborators attending this meeting will be on the mailing list "dsg-reflectivity@jlab.org"
 - Tyler Lemon can add any additional members
- 2. Mailing list messages are archived