

# Mirror Update

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## Recent Works:

- **3 coatings** since the results of **sample 37 (4 Cr, 17 Al)** (which displayed discrepancy in the reflectivity of DP460 and PT2712 epoxy samples)
- **Coating 38 (4 Cr, 17 Al)** aimed to use DP190, DP460, PT2712 epoxies all in one batch to finalize any concerns due to epoxy absorption
- **Coating 39 (4 Cr, 17 Al)** corroborate the peak reflectivity results with a newly installed QCM crystal to make sure data received was accurate
- **Coating 40 (4.125 Cr, 16.25 Al)** tested an additional recipe that had shown 90% reflectivity in the past
- The subsequent reflectivity results and images will potentially be shown late next week (TBD)

## Timeline and Upcoming:

- 5/22 Leaks fully resolved (coatings appear to be more stable than ever w.r.t pressure)
- 5/23 Installation of new QCM Crystal
- 5/28 - 5/29 SBU Produced Coatings + few older PT2 purdue pieces
- ...
- Awaiting Purdue Substrates to further curved substrate coating tests and analysis of any waviness during bonding
- Following the reflectivity results of recent coatings, re introduction of SiO<sub>2</sub> and calibration of coating recipe with dielectric protection will occur as well as potential ion source cleaning protocol developments.
  - These developments were halted for waviness+epoxy testing and solving leak issues during Ion Installation.