

DIRC Optical Box alignment/fiducialization strawman

1. Install and align bar boxes so they are normal to beamline in roll, pitch and yaw.
2. Set up optical box on steady surface and level box in roll, pitch and yaw using the bar box attach flange as the datum.
3. Install a black flange simulating the size and location of the bar box flange.
4. Mark wall with expected location of laser spots at each of five location
5. Install laser fixture on glass surface of box. The fixture should have 5 positions (four corners and center).
6. Set up laser in center position on wall. Adjust angle of laser and note changes of spot location.
7. Set up laser in the other four positions and adjust laser angle until the light no longer makes it out of the optical box flange.
8. Fiducialize outer surface of box to bar box attach flange position.
9. Fiducialize Bar box to bar box flange.
10. Install optical box and align to bar box.

