

FD2 PDS Status

DUNE FD2 PDS

Last update: December 2, 2022
Ryan Rivera

FNAL Hand Carry List for 04-Dec (Drew/Bill/Peter)

1. (1) Cold Box membrane flange assembly (potted by Drew on warm side, cables are already at CERN)
2. (4) HD-style cold cables for ProtoDUNE2
3. (1) DMEM v1.0 untested and hand populated at FNAL
4. (10) untested FC December Big Ball lens (we keep 30 at FNAL)
5. (5) untested FC Perforated housing (we keep 15 at FNAL)
6. (6) untested super sealed pigtail Perforated housing (we keep 3 of each power/fiber combination; we ordered 4 of each of 6 combinations)
7. (5) tested 500uW defocused FC (we keep 5 at FNAL)
8. (5) tested 200uW defocused FC (we keep 3 at FNAL, and send 2 on the DCEM v2.0)
9. (1) Fiber Scope (IR Viewer already at CERN)
10. (1) DCEM + Laser Adapter v2.0 tested by Alan, Alex, and Wei. Drew and Bill to add PoF.
11. (1) LBL bias cards tested by Mike Miller
12. (1?) repaired PoF tx box for Cold Box
13. (1?) new PoF tx box for ProtoDUNE2
14. (2) DCEM v1.2 untested and hand populated at FNAL (still populating today 02-Dec!)
15. (1) 50' black tubing to improve Cold Box fiber route
16. (1) kit for fiber handling

Cold Box install plan

- Cathode v4 XA: LBL on DCEM+Laser Adapter v2.0 "simp"
- Cathode v5 XA: INFN on DCEM+Laser Adapter v1.0+ "ARGON4"
- Membrane v1 XA (flat cathode table):
 - 4-flex Channel A: DMEM v1.0 "HD-style" with copper readout and copper SiPM bias
 - 4-flex Channel B: DCEM v2.0 "VD-style" with copper readout and PICO SiPM bias
- Membrane mini-XA: PICO or INFN if bias generation desired