

PSL optical layout changes for eLigo

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LHO

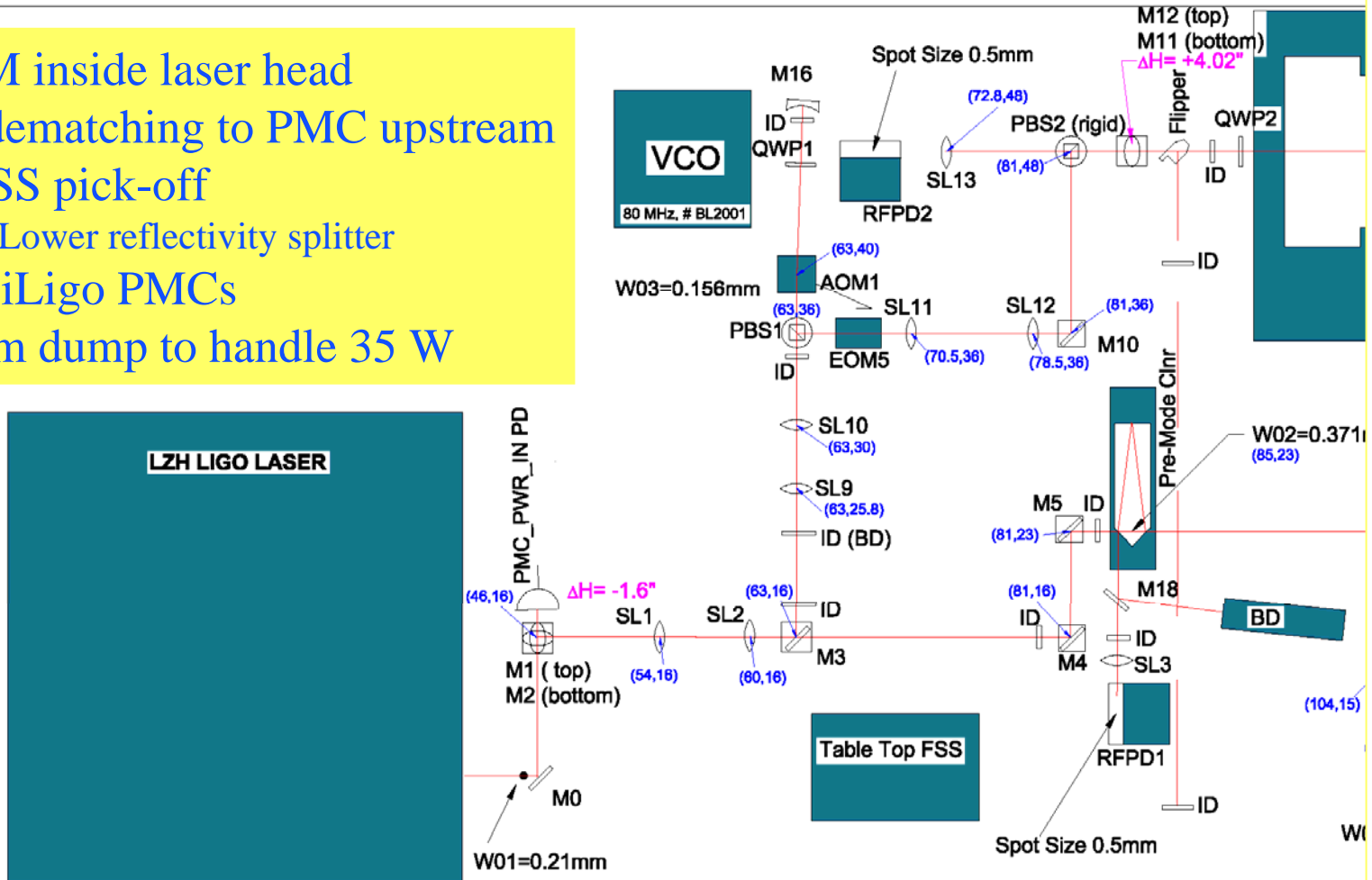
- Main path optics superpolished with custom AR coating

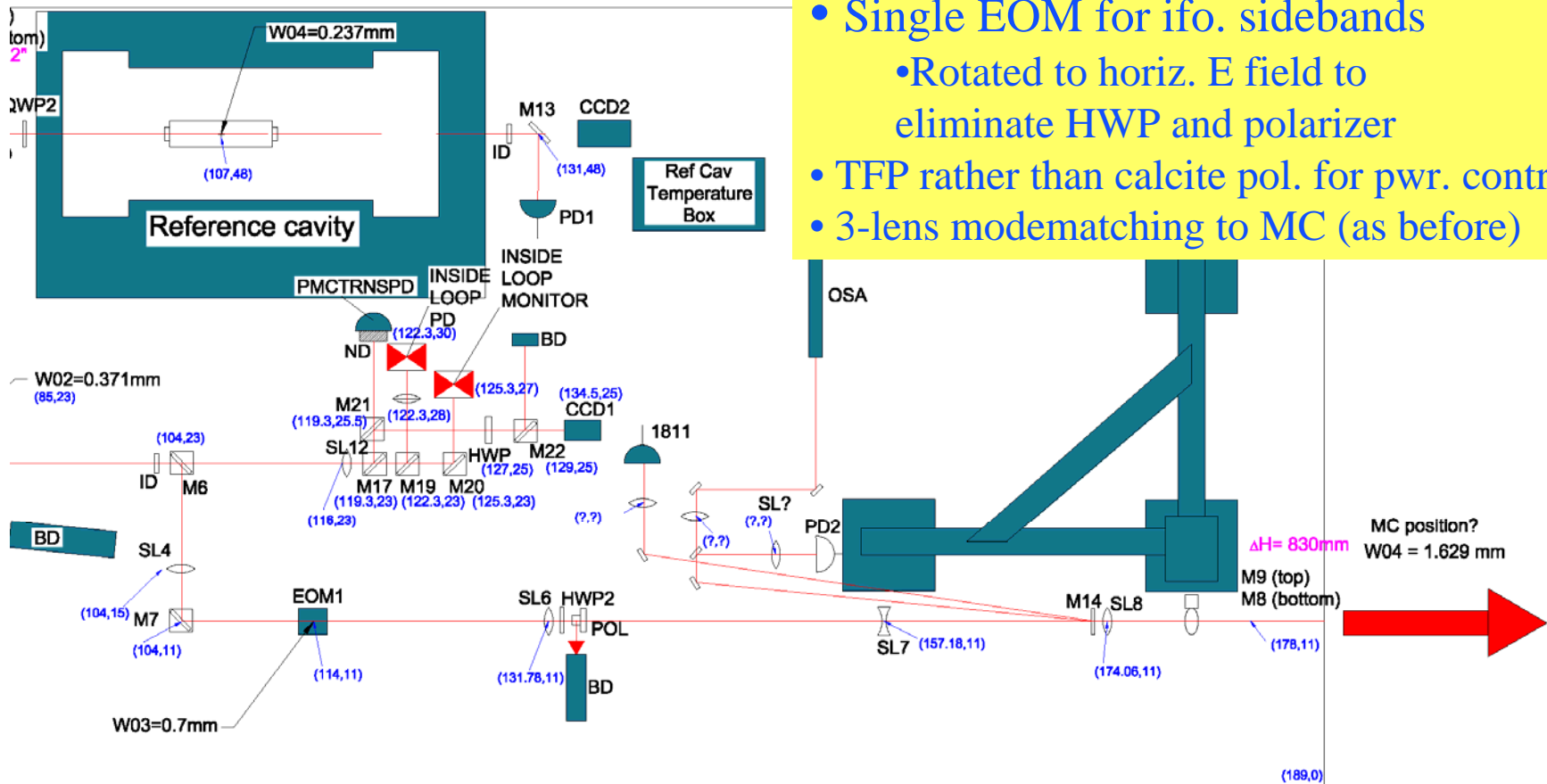
http://lhocds.ligo-wa.caltech.edu:8000/mLIGO/Pre-Stabilized_Laser

(0.56)

- EOM inside laser head
- Modematching to PMC upstream of FSS pick-off
 - Lower reflectivity splitter
- Use iLigo PMCs
- Beam dump to handle 35 W

(0.0)





- Single EOM for ifo. sidebands
 - Rotated to horiz. E field to eliminate HWP and polarizer
- TFP rather than calcite pol. for pwr. control
- 3-lens modematching to MC (as before)

- Identify/procure modematching lenses and other optics for AR coating at REO
- Identify/procure 35-W beam dumps for PMC reflected path and power adjustment polarizer
- Procure thin film polarizers (with help from Volker Q. – UF)
- Test PMC at 35 W (with Rana/Peter K. at Caltech)
 - » Amber Bullington to help/advise?
- Modify power adjustment rotation stage for smoother motion.