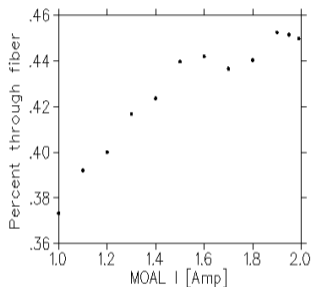


Laser status Nov 17

MOAL power for 25 mW seed agrees with test sheet 350 mW at 1.99 Amp. Need to install the power interlock to go higher.



Fiber coupling is, after considerable horizontal walking, 45% at 300 mW into fiber. 52% from manufacturer. Manufacturer believes the mode will stay similar at higher power. Might tweak coupling lens focus.

Ti:Sapph power only 400 mW on startup at 15 W pumping → 600 mW after full cleaning. Has been 1.1 W for years.

Was 800 mW in August.

From side view, pump laser's mode looks bad— two parallel beams are visible after pump focus mirror towards Ti:Sapph crystal. With Ar+ laser, this could happen via a cleanable spot on the in-cavity Brewster window. The output window of the 532 nm doubled Nd:Vanadate Sprout looks clean by eye. The cavity would require shipping to company.

Tests of the pump mirror mode proceeding. Must lower the intensity to a viewable expanded spot without distorting the profile. If pump mode is bad, I'll tell Lighthouse and we'll go from there.

If pump mode is good? No idea. In principle two of eight optics (which look fine by eye)