

Subject: Absorption measurements on Rai's Deionizer samples

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Sample given to Kate - inserted in the system and present during deionization flow with N2. No "before" data, it was intended to look for particulate. It has been tested at JPL

LIGO T1400492: [1"](#) witness optic: Ionizer - I put this in 37 Lauritsen - in a blue plastic box.
Clean with FC and measure at high (normal) power

The absorption is very low (from different batch?), it's interesting to see there are relative high absorption zones.

Inserted in the system along with T1400637, but cleaned before absorption test

LIGO-T1400638: [1" OPTIC SAMPLE FOR IONIZING GAS MIXTURE #2](#) - you have this one
Clean and measure at high (normal) power

Both scans were carried out after FC cleaning, I think 0.1 ppm different may be caused by systematic error.

Inserted in the system along with T1400638, but not cleaned before first absorption test

LIGO-T1400637: [1" OPTIC SAMPLE FOR IONIZING GAS MIXTURE #1](#) - Kate has this one
Check absorption on lower half at high power (does it return exactly to pre exposure values?)

After FC cleaning, it can survive the laser beam of 18W.

— Attachments: —

t1400492_hrabs_111414_1.pdf

20.9 KB

t1400638_hrabs_111714_1.pdf

28.8 KB

