Hi Professor

This week the main progress is that the FIR auto-adjust program is completed and tested, and it is working perfectly. The problem still is the donut beam profile of FIR when without focus lens in front of the output window, we have excluded the formic acid gas pressure influence, the cavity influence. the next step is going to replace the CO2 lens with a longer focal length lens. Calvin suggest to do that since the longer focal length keeps the CO2 laser beam more tightly focused within the FIR laser tube, with more power in the center.

On Friday Jon and I will replace the focus lens and realignment the optical path. Hope after swapping the focus lens and realigning the optical path, the beam shape will improve.

Best regards

Xinhang

Hi Professor,

This week, the main progress is that the FIR auto-adjust program has been completed and tested, and it is working perfectly. The remaining issue is still the donut-shaped beam profile of the FIR laser when there is no focus lens in front of the output window. We have excluded the influence of formic acid gas pressure and cavity shift. the next step is going to replace the CO2 lens with a longer focal length lens. Calvin suggest to do that since the longer focal length keeps the CO2 laser beam more tightly focused within the FIR laser tube, with more power in the center.

On Friday, Jon and I will replace the focus lens and realign the optical path. We hope that after swapping the focus lens and realigning the optical path, the beam shape will improve.