Hi Professor

This week I have some good news about the formic acid laser to tell you , after Jon realigned the optical path and make sure the co2 laser coaxial with the formic acid laser tube, the beam profile looks much better ,and the beam intensity can reach to 24 mV ,despite still below the 50 mW as provided by Robert .

As for detailed Experiment log, I have uploaded it on the UCDbox. There are each days testing and data analysis on the log for our group’s reference. With Jon’s help ,I measured the 3D beam profile and calculated the beam waist radius and position, checked the monitor program for new CO2 power supply .

There are still some problem need to solve .First ,the auto-peak search program fails to automatically adjust to find the peak position .I need to check the reason .Second ,I need to check if the beam structure like waist radius or shape will change at different range best cavity length shift ,like if the best position in the range (1-2 )mm and (2-3)mm will change the beam structure and how much it will influent the structure .I hope it won’t change much ,otherwise it will cause many issue in future waveguide installation. We will see it.

Have a good weekend !

Addition information :

