

WiPAL Fabry-Perot Spectrometer

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1 Introduction

Need to add a nice little introduction here about what we're doing etc...

2 Optical Layout

The optical layout for the WiPAL Fabry-Pérot spectrometer is shown above in Fig. 1. The main components of this setup are a pair of lenses (f_{t1} and f_{t2}) that form a telescope to bring light from the center of plasma to the étalon, another telescope formed by lenses f_3 and f_4 that focuses light through the étalon, and the camera sensor.

3 Basic Fabry-Pérot Theory

A Fabry-Pérot interferometer consists of a set of highly-reflective parallel plates, called an étalon.

4 Fabry-Pérot Spectroscopy

With basic theory of an étalon layed out let's look at how we can use this as a spectrometer.

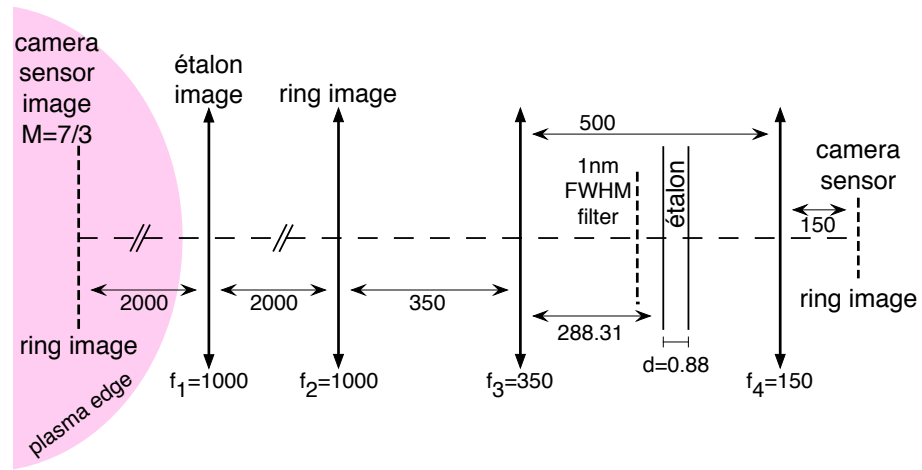


Figure 1: Optical schematic of Fabry-Pérot spectrometer used on WiPAL. All lengths are in units of millimeters.