

I12MICHDL5. Michelson interferometer

Beamsplitter is assumed to be a plane parallel plate

Fringe pattern depending on D for wavelength $\lambda = .0005$, and depending on wavelength λ for D = .003. The angle $\theta = 0$.

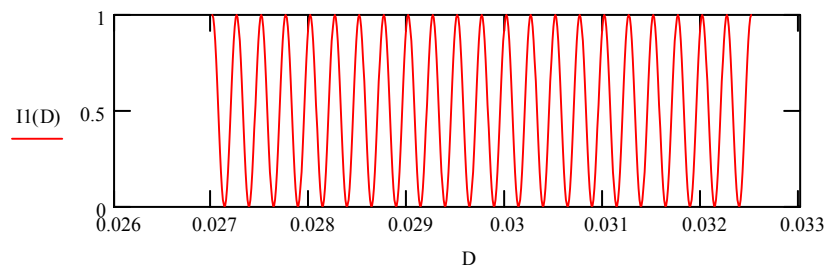
All length in mm.

1. Dependence on D

$$\theta := 0 \quad \lambda := .0005$$

$$D := 0.027, .02701 \dots .0325$$

$$I1(D) := \cos\left(\frac{2 \cdot \pi \cdot D \cdot \cos(\theta)}{\lambda}\right)^2$$



2. Dependence on λ

$$\lambda := .0004, .000401 \dots .0008$$

$$D := .003$$

$$I2(\lambda) := \cos\left(\frac{2 \cdot \pi \cdot D \cdot \cos(\theta)}{\lambda}\right)^2$$

