

## I18FABRYRDS

### Fabry-Perot Ring pattern in Transmission and Reflection depending on separation D of the planes.

Near normal incidence. Parameters: reflection coefficient, thickness d, refractive index and range of angles in Rad. All length in mm.

$$D \equiv 0,00001 \dots 001 \quad g := \frac{2 \cdot r}{1 - r^2}$$

$$IT(D) := \frac{1}{1 + g^2 \cdot \sin\left(2 \cdot \frac{\pi}{\lambda_1} \cdot D\right)^2}$$

$$IIT(D) := \frac{1}{1 + g^2 \cdot \sin\left(2 \cdot \frac{\pi}{\lambda_2} \cdot D\right)^2}$$

$$r \equiv .7 \quad \lambda_1 \equiv .0005 \quad \lambda_2 \equiv .0006$$

Graph for transmission depending on angle for fixed ratio of  $D/\lambda$



