I17FABRYLS **Fabry-Perot Transmission depending on wavelength.**

Normal incidence. Parameters: reflection coefficient, thickness D, refractive index.
All length in mm.
See for global definition.The finess $\pi g/2$ is $\lambda/\Delta\lambda$.

$\Delta = 2\pi/\lambda \;\; 2D\,(n2)\cos\theta 2$

$n2 := 1$

$$g1 := \frac{2\cdot r1}{1 - r1^2}$$

$$g2 := \frac{2\cdot r2}{1 - r2^2}$$

$$IT1(\lambda) := \frac{1}{1 + g1^2\cdot\sin\left(2\cdot\frac{\pi}{\lambda}\cdot D\cdot n2\right)^2}$$

$$IT2(\lambda) := \frac{1}{1 + g2^2\cdot\sin\left(2\cdot\frac{\pi}{\lambda}\cdot D\cdot n2\right)^2}$$

$$g3 := \frac{2\cdot r3}{1 - r3^2}$$

$$IT3(\lambda) := \frac{1}{1 + g3^2\cdot\sin\left(2\cdot\frac{\pi}{\lambda}\cdot D\cdot n2\right)^2}$$

$\lambda \equiv 0.0004, .000401 .. .0008$ $D \equiv .0025$

$r1 \equiv .7$ $r2 \equiv .9$ $r3 \equiv .97$