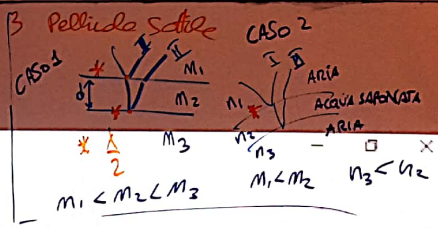
1 RIFL. $\hat{\imath} = \hat{r}$

1 RIFR $n_1 \operatorname{sen}\theta_1 = n_2 \operatorname{sen}\theta_2$

2 YOUNG $\frac{x}{d} = \frac{y}{L}$ $\quad \lambda = d \operatorname{sen}\theta$

4 RETICOLO $\lambda = d \operatorname{sen}\theta$

3 Pellicola Sottile



Senza nome - Blocco note di Windows

File Modifica Formato Visualizza ?

$\lambda = 410\ nm = 410 \cdot 10^{-9}\ m$

13500 fenditure/pollice

$d = \frac{1}{\frac{13500\ fend.}{2,54 \cdot 10^{-2}\ m}} = 1,88 \cdot 10^{-6}\ m$

1 pollice = 2,54 cm

$= 2,54 \cdot 10^{-2}\ m$

$d = \frac{\lambda}{n}$ $\quad n = \frac{d}{\lambda}$

$n = \left(\frac{1,88 \cdot 10^{-6}}{410 \cdot 10^{-9}}\right) = 4,8$

$n = 2 \cdot \left(\frac{1,88 \cdot 10^{-6}}{410 \cdot 10^{-9}}\right) = 9,17$

$K = 1$ $\quad \theta_1 = \sin^{-1}\left(K \frac{\lambda}{d}\right) = 12,59°$

$K = 2$ $\quad \theta_2 = \sin^{-1}\left(K \frac{\lambda}{d}\right) = 25,86°$

$K = 3$ $\quad \theta_3 = \sin^{-1}\left(\frac{3 \cdot 410 \cdot 10^{-9}}{1,88 \cdot 10^{-6}}\right) = 40,86$

$K = 4$ $\quad \theta_4 = \sin^{-1}\left(\frac{4\lambda}{d}\right) = 60,7°$

$K = 5$ $\quad \theta_5 = \sin^{-1}(5\lambda) = \text{ERROR}$