Experimental Question 2: An Optical "Black Box"

ANSWER FORM

a. Expression for γ:

b. Choose the correct option (A, B, C or D):

c. The angle φ for the sample:

d. Choose the correct option (A, B, C or D):

e. The deflection angle δ_0 for perpendicular violet light:

f. The minimal deflection angle δ_{min} for violet light:

g. Expression for the refractive index n:

h. The refractive index n_v of the sample in violet light:

i. Table for deflection angles θ as a function of fringe number m:

j. The tooth spacing d:

k. The refractive index n_r of the sample in the laser's red light: