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Optical Radiation:

Deviation angle of ray beam after refraction (transmission) and diffraction:

$$\varsigma = \alpha + \arcsin \left[ \sin(\varpi) \sqrt{\eta^2 - \sin^2(\alpha)} - \cos(\varpi) \sin(\alpha) \right] - \varpi = \alpha + \alpha_2 - \varpi \quad (1)$$

where  $\varpi = \beta + \beta_2 = \text{const.}$

Minimal aberration (minimal projection error):

$$\varsigma = \varsigma_{min} \iff$$

$$\begin{aligned} \varsigma_{min} &\iff \\ \frac{d}{d\alpha} \varsigma &= 0 \wedge \\ \varsigma_{min} &= 2\alpha - \varpi = 2(\alpha - \beta) \end{aligned} \quad (2)$$