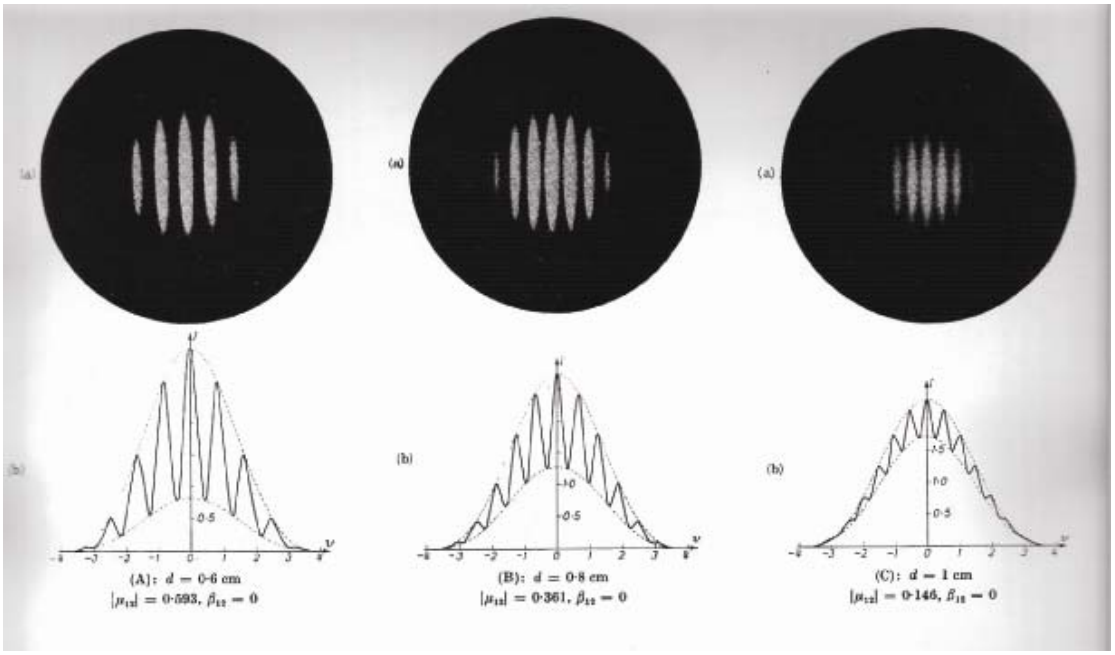

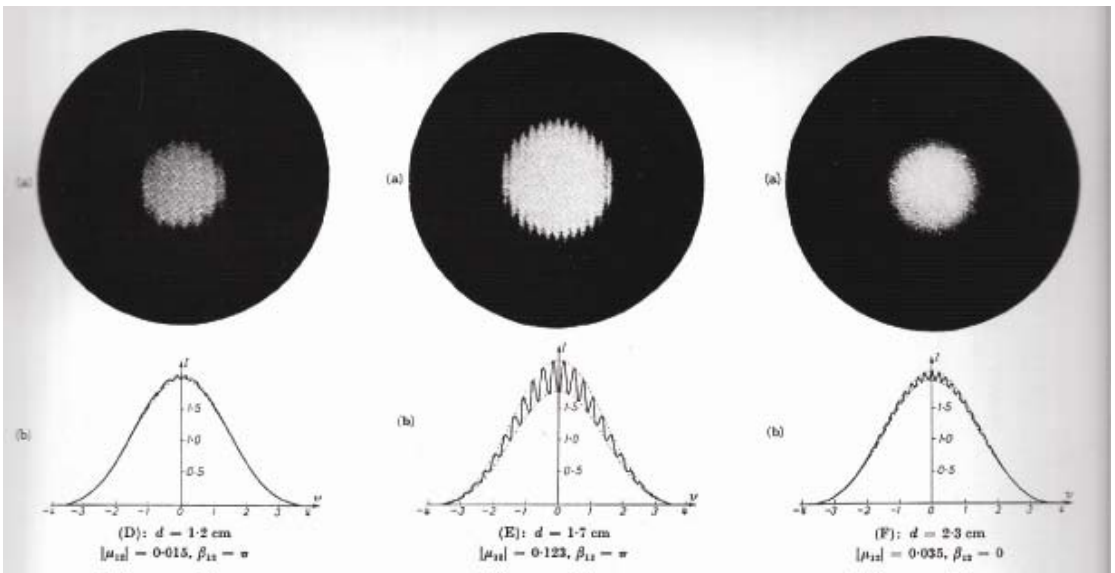

Fig. 10.6. Two-beam interference with partially coherent light.
(a) Observed patterns, (b) theoretical intensity curves. Focal length of lenses L_0, L_1, and L_2 of Diffractometer: $f_0 = 20$ cm, $f_1 = f_2 = R = 152$ cm. Diameter of $L_0 = 5$ cm. Distance from L_0 to σ_1: 40 cm. Separation of L_1 and L_2: 14 cm. Distance of mirror M from $L_2 = 85$ cm. Diameter $2\rho_1$ of pinhole σ_1: $0{\cdot}9 \times 10^{-4}$ cm. Diameter $2s$ of apertures at P_1 and P_2: 0·14 cm. Mean wavelength $\bar{\lambda} = 5790$ Å.
[After B. J. Thompson and E. Wolf, *J. Opt. Soc. Amer.*, **47** (1957), 895.]

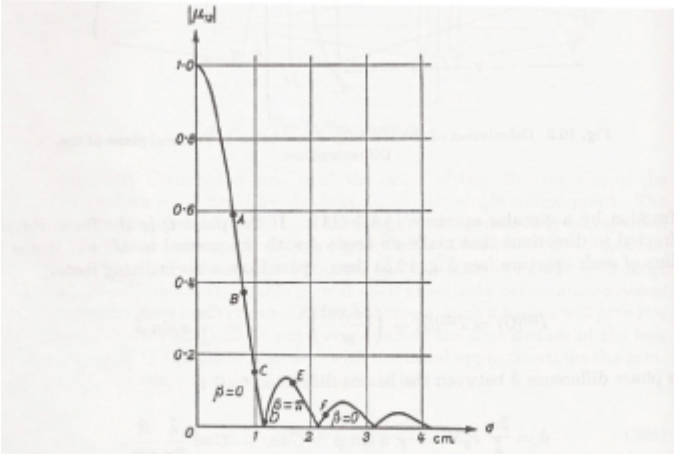

Fig. 10.7. Two-beam interference with partially coherent light. The degree of coherence as function of the separation d of the two illuminated apertures in the Diffractometer. ($\rho_1 = 0{\cdot}45 \times 10^{-2}$ cm, $R = 152$ cm, $\bar{\lambda} = 5790$ Å; incoherent illumination of σ_1 assumed.)