

PECULIARITIES OF MULTIBEAM  
INTERFERENCE IN A REAL CAVITY

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Characteristics of multibeam interference in an arbitrarily filled cavity with plane mirrors are analyzed in the case of finite diffusion light scattering on internal nonuniformities. The formula which determines the angular radii of interference rings observed in the far field of such a cavity is received as well. It is shown that sharpness of these rings is independent of the density of mirrors or active medium excitation level and is determined just by cavity's angular aperture. The possibility to apply this phenomenon to optical matching of independent cavities is discussed.