

We discussed the fact that light of wavelength comparable to or larger than the width of a slit spreads out in all forward directions upon passing through the slit. Note that the central bright maximum is twice as wide as the secondary maxima. The pattern consists of a broad, intense central band (called the central maximum), flanked by a series of narrower, less intense additional bands (called side maxima or secondary maxima) and a series of intervening dark bands (or minima). We can deduce some important features of this phenomenon by examining waves coming from various portions of the slit, as shown in Figure 2. A diffraction pattern consisting of light and dark areas is observed, somewhat similar to the interference patterns discussed earlier. Figure 2