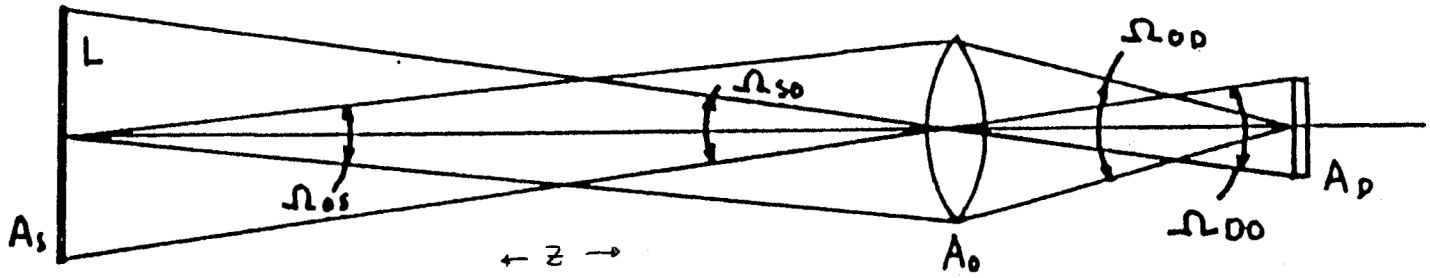

$$\Phi = L \cdot A_s \cdot \Omega_{os} = L \cdot A_o \cdot \Omega_{so} = L \cdot A_o \cdot \Omega_{do} = L \cdot A_d \cdot \Omega_{od}$$

- TWO SPECIAL CASES (OBJECT AT LARGE DISTANCE):

  POINT SOURCE: $\Phi_d = I \cdot \Omega_{os}$ EXTENDED SOURCE: $\Phi_d = \pi \cdot L \cdot A_d / [4 \cdot (F/\#)^2]$

$\Omega_{os} = \frac{A_o}{z^2}$ CONFIGURATION FACTORS

- USED IN THERMODYNAMICS (RADIANT HEAT TRANSMISSION) AND ILLUMINATING ENGINEERING

$$F_{12} = \frac{\text{total power reaching surface 2}}{\text{total power leaving surface 1}}$$

IF WE ASSUME LAMBERTIAN RADIATION FROM SURFACE, THEN

$$F = \Omega/\pi = T/\pi A$$

- DATA TABULATED IN HEAT TRANSFER AND ILLUMINATING ENGINEERING BOOKS:

  Siegel & Howell (1981), Sparrow & Cess (1978), Moon (1936), IR Handbook