

photon flux, q_p , Φ_p

Number of photons (quanta of radiation, N_p) per time interval. SI unit is s^{-1} .

Notes:

1. Mathematical definition: $q_p = dN_p / dt$. If the number of photons is constant over the time interval, $q_p = N_p / t$.
2. This quantity can be used on a chemical amount basis by dividing the photon flux, number basis, q_p , by the Avogadro constant, the symbol then being $q_{n,p}$, the name 'photon flux, amount basis', SI unit is mol s^{-1} ; common unit is einstein s^{-1} .
3. Although the symbol recommended by CEI is Φ_p , the symbol q_p is preferred since Φ is reserved for quantum yield.

Source:

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 395