

spectral photon flux (photon irradiance), $E_{p\lambda}$

The photon irradiance E_p , at wavelength λ per unit wavelength interval. The SI unit is $\text{s}^{-1} \text{m}^{-3}$, but a commonly used unit is $\text{s}^{-1} \text{m}^{-2} \text{nm}^{-1}$. Alternatively, the term can be used with the amount of photons (mol or its equivalent einstein), the SI unit then being $\text{mol s}^{-1} \text{m}^{-3}$ and the common unit $\text{mol s}^{-1} \text{m}^{-2} \text{nm}^{-1}$.

Source:

PAC, 1996, 68, 2223 (*Glossary of terms used in photochemistry (IUPAC Recommendations 1996)*) on page 2275