**photon fluence**, $H_{p,o}$, $F_{p,o}$

Amount of photons (quanta of radiation) incident on a small sphere from all directions, divided by the cross-sectional area of that sphere and integrated over time. Photons per surface area (quanta m$^{-2}$). SI unit is m$^{-2}$.

Notes:
1. Mathematical definition: $H_{p,o} = F_{p,o} = \frac{dN_p}{dS} = \int_{t} E_{p,o} dt$ with $E_{p,o}$ the photon fluence rate, integrated over the duration of the irradiation, $t$. If $E_{p,o}$ is constant over the time interval, $H_{p,o} = F_{p,o} = E_{p,o} t$
2. This quantity can be used on a chemical amount basis by dividing $H_{p,o}$ by the Avogadro constant, the symbol then being $H_{n,p,o}$, the name 'photon fluence, amount basis', SI unit is mol m$^{-2}$; common unit is einstein m$^{-2}$.

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