

Table 1 Some photometric and radiometric nomenclature (physics, astronomy and biology)

Photometric nomenclature (Philips Lighting)			Radiometric nomenclature								
			Physics nomenclature			Astronomical nomenclature (Schlyter)			Biological nomenclature (Berthold Technologies)		
Terminology	Unit	Symbol	Terminology	Unit	Symbol	Terminology	Unit	Symbol	Terminology	Unit	Symbol
luminous flux	lumens	lm	radiant flux spectral flux	Watt Watt per steradian per square metre per nanometre	W W/sr/m ² /nm						
illuminance	lumens per square metre	lm/m ²	Irradiance Radiant flux received by a surface per unit area Spectral irradiance Irradiance per unit wavelength	watt per square metre watt per square metre per nanometre	W/m ² W/m ² /nm				Quantum flux (Photon flux) μ Einstein	Number of photons in μmol per second per unit area per nanometre	μE Photons/sec/m ² /nm
luminous intensity	lumens per steradian = candela	cd	radiant intensity Spectral intensity	watt per steradian watt per steradian per metre	W/sr W/sr/m	luminosity	the intrinsic brightness of a celestial object				
luminance	lumens per steradian per square metre or candela per square metre	cd/m ²	Radiance Spectral radiance	watt per steradian per square metre watt per steradian per square metre per nanometre	W/sr·m ² W/sr·m ² /nm	absolute magnitude apparent magnitude “surface brightness”	a measure of the actual (intrinsic) brightness at a standard distance of exactly 10 parsecs (32.6 light years) from the observer. brightness of object as measured from telescope, satellite or instrument 1S10vis The intensity (surface brightness) corresponding to one star of 10 th (visual) magnitude per square degree of the sky.	M m m/arcsec ²	Spectral photon radiance	Number of photons in μmol per second per unit area per nanometre per steradian	Photons/sec/m ² /nm/sr