



Measurements, Units

Measurement	Symbol	Unit	dimension	explanation
Luminous intensity	I_v	Candela	cd	Power of a 555nm (green) light source emitting in a particular direction with a radiant intensity of $\frac{1}{683}$ W/sr
Radiant Intensity	I_e		W/sr	
Luminance	L		cd/m^2	
Luminous flux	Φ	Lumen	lm $cd \cdot sr$	also called <i>luminous power</i>
Illuminance	E	Lux	lx lm/m^2	light <u>incident on</u> a surface
Luminous energy	Q		lm·s	
Luminous emitance	M	Lux	lx lm/m^2	light <u>emitted from</u> a surface
Luminous exposure	H		lx·s	
Luminous energy density	ω		$\frac{lm \cdot s}{m^3}$	
Luminous efficacy	η	Lumen per Watt	lm/W	ratio of luminous flux to radiant flux
Luminous efficiency	V		1	also called <i>luminous coefficient</i>