

## radiant exitance, $M$

**Synonym:** radiant emittance

Radiant power,  $P$ , emitted at all wavelengths by an element of surface containing the source point under consideration divided by the area of the source. SI unit is  $\text{W m}^{-2}$ .

Notes:

1. Mathematical definition:  $M = dP/dS$ . If the radiant power  $P$  is constant over the surface area considered,  $M = P/S$ .
2. Equivalent to the integration of the radiant power leaving a source over the solid angle and over the whole wavelength range. Mathematical definition:  $M = \int_{\lambda} M_{\lambda} d\lambda$ ,  
where  $M_{\lambda}$  is the spectral radiant exitance at wavelength  $\lambda$ .
3. Same as spherical radiant exitance. Formerly called radiant emittance.

**Source:**

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 409