

## spectral responsivity

The spectral output quantity of a system such as a photomultiplier, diode array, photoimaging device, or biological unit divided by the spectral irradiance  $s(\lambda) = \frac{dy(\lambda)}{dE(\lambda)}$ , simplified expression:  $s(\lambda) = \frac{Y_\lambda}{E_\lambda}$ , where  $Y_\lambda$  is the magnitude of the output signal for irradiation at wavelength  $\lambda$  and  $E_\lambda$  is the spectral irradiance of the parallel and perpendicular incident beam at the same wavelength.

**See also:** responsivity

**Source:**

PAC, 1996, 68, 2223 (*Glossary of terms used in photochemistry (IUPAC Recommendations 1996)*) on page 2276

PAC, 1995, 67, 1745 (*Nomenclature, symbols, units and their usage in spectrochemical analysis-XI. Detection of radiation (IUPAC Recommendations 1995)*) on page 1749