



Phosphor Information Leaflet

GENERAL

Name	Yttrium vanadate europium
Chemical formula	$\text{YVO}_4:\text{Eu}^{3+}$
Application areas	High-pressure Hg lamps, CRTs, PDPs

OPTICAL PROPERTIES

Excitation maxima @	254 nm (4.88 eV)
Emission maximum @ 465 nm exc.	596 nm (2.09 eV), 620 nm (2.00 eV), 699 nm (1.77 eV)
Centroid wavelength	631 nm (1.97 eV)
Full width @ half emission maximum	Lines
Lumen equivalent	218 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.664, 0.323
Band edge of host lattice	4.2 eV
Reflection @ 254 nm	6 %

PHYSICAL PROPERTIES

Body colour	White
Density	4.25 g/cm ³
Refractive index (at λ)	1.958 (1064 nm)
Mineral type	Xenotime
Crystal system	Tetragonal
Space group (#)	I 41/a m d Z (#141)

