



Phosphor Information Leaflet

GENERAL

Name	Yttrium phosphate europium
Chemical formula	YPO ₄ :Eu ³⁺
Application areas	

OPTICAL PROPERTIES

Excitation maxima @ 698 nm em.	143 nm (\pm 8.67 eV), 226 nm (\pm 5.48 eV)
Emission maximum @ 226 nm exc.	593 nm (\pm 2.09 eV), 619 nm (\pm 2.00 eV), 698 nm (\pm 1.78 eV)
Centroid wavelength	633 nm
Full width @ half emission maximum	Line
Lumen equivalent	184 lm/W _{opt}
CIE1931 chromaticity coordinates (x, y)	0.616, 0.356
Band edge of host lattice	155 nm (8.30 eV)
Reflection @ 254 nm	87%
Decay time 1/e	~ 1 ms

PHYSICAL PROPERTIES

Body colour	White
Density	4.17 g/cm ³
Refractive index (at λ)	1.66 (515 nm)
Mineral type	Xenotime
Crystal system	Tetragonal
Space group (#)	I 41/a m d Z (141)

