



Phosphor Information Leaflet

GENERAL

Name	Lutetium phosphat europium
Chemical formula	$\text{LuPO}_4:\text{Eu}^{3+}$
Application areas	Optical marker

OPTICAL PROPERTIES

Excitation maxima @ 593 nm em.	395 nm (3.1 eV) 592 nm (2.1 eV); 619.8 nm (2.0 eV); 697.8 nm (1.8 eV)
Emission maximum @ 395.5 nm exc.	655 nm
Centroid wavelength	Lines
Full width @ half emission maximum	178 lm/W
Lumen equivalent	0.647; 0.353
CIE1931 chromaticity coordinates (x, y)	138 nm (9.0 eV)
Band edge of host lattice	27%
Reflection @ 260 nm	

PHYSICAL PROPERTIES

Body colour	white
Density	6.53 g/cm ³
Refractive index (at λ)	1.68 (520.8 nm)
Mineral type	Xenotime
Crystal system	tetragonal
Space group (#)	$I4_1/a m d Z$ (141)

