



Phosphor Information Leaflet

GENERAL

Name	Calcium phosphat europium manganese
Chemical formula	$\text{Ca}_2\text{P}_2\text{O}_7:\text{Eu}^{2+},\text{Mn}^{2+}$
Application areas	

OPTICAL PROPERTIES

Excitation maxima @ 435 nm	347 nm (3.57 eV), 387 nm (3.2 eV)
Emission maximum @ 350 nm exc.	574 nm (2.16 eV)
Centroid wavelength	558 nm (2.22 eV)
Full width @ half emission maximum	63 nm
Lumen equivalent	409 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.425; 0.425
Band edge of host lattice	5.42 eV
Reflection @ 435 nm	84 %
Decay time $\tau_{1/e}$	23 μs

PHYSICAL PROPERTIES

Body colour	white
Density	3.13 g/cm ³
Refractive index (n _D)	1.585
Mineral type	
Crystal system	tetragonal
Space group (#)	<i>P</i> 12 ₁ /n1 (14)

