



Phosphor Information Leaflet

GENERAL

Name	Strontium phosphat chloride europium manganese
Chemical formula	$\text{Sr}_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+},\text{Mn}^{2+}$
Application areas	

OPTICAL PROPERTIES

Excitation maxima @ 579 nm	302 nm (4.11 eV), 346 nm (3.58 eV), 401 nm (3.09 eV)
Emission maximum @ 400 nm exc.	478 nm (2.59 eV)
Centroid wavelength	589 nm (2.11 eV)
Full width @ half emission maximum	103 nm
Lumen equivalent	395 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.441, 0.443
Band edge of host lattice	5.08 eV
Reflection @ 579 nm	89 %
Decay time $\tau_{1/e}$	13 ms

PHYSICAL PROPERTIES

Body colour	White
Density	4.15 g/cm ³
Refractive index	
Mineral type	Haloapatite
Crystal system	Hexagonal
Space group (#)	$P6_3/m$ (176)

