



Phosphor Information Leaflet

GENERAL

Name	Lanthanum phosphate cerium
Chemical formula	LaPO ₄ :Ce ³⁺
Application areas	Psoriasis and tanning Lamps

OPTICAL PROPERTIES

Excitation maxima @	275 nm (4.51 eV)
Emission maximum @ 254 nm exc.	317 nm (3.91 eV)
Centroid wavelength	328 nm (3.78 eV)
Full width @ half emission maximum	40 nm
Lumen equivalent	-
CIE1931 chromaticity coordinates (x, y)	-
Band edge of host lattice	150 nm (8.30 eV)
Reflection @ 254 nm	7 %
Decay time 1/e	17 ns

PHYSICAL PROPERTIES

Body colour	White
Density	5.08 g/cm ³
Refractive index (at λ)	n _α = 1,78, n _β = 1,78, n _γ = 1,84 (589 nm)
Mineral type	Monazite
Crystal system	Monoclinic
Space group (#)	P 1 21/n 1 (#14)

