



Phosphor Information Leaflet

GENERAL

Name	Lanthanum scandate chromium
Chemical formula	LaScO ₃ :Cr ³⁺
Application areas	Laser gain media

OPTICAL PROPERTIES

Excitation maxima @ 780 nm em.	467 nm (2.66 eV); 662 nm (1.87 eV)
Emission maximum @ 470 nm exc.	745 nm (1.66 eV)
Centroid wavelength	760 nm
Full width @ half emission maximum	78 nm
Lumen equivalent	1 lm/W
CIE1931 chromaticity coordinates (x, y)	0.685; 0.314
Band edge of host lattice	5.8 eV
Reflection @ 470 nm	63 %
Decay time $\tau_{1/e}$	

PHYSICAL PROPERTIES

Body colour	pale pink
Density	5.75 g/cm ³
Refractive index (at λ)	
Mineral type	perovskite
Crystal system	orthohombric
Space group (#)	<i>Pnma</i> (62)



