



Phosphor Information Leaflet

GENERAL

Name	Lanthanum oxychloride terbium
Chemical formula	LaOCl:Tb ³⁺
Application areas	Projection TV screens

OPTICAL PROPERTIES

Excitation maxima @	241 nm (5.15 eV)
Emission maximum @ 241 nm exc.	485 nm (2.56 eV), 543 nm (2.29 eV), 583 nm (2.12 eV), 623 nm (1.99 eV)
Centroid wavelength	Lines
Full width @ half emission maximum	-
Lumen equivalent	446 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.344, 0.567
Band edge of host lattice	270 nm (4.6 eV)
Reflection @ 254 nm	20 %
Decay time 1/e	7 ms

PHYSICAL PROPERTIES

Body colour	White
Density	5.41 g/cm ³
Refractive index (n _D)	-
Mineral type	-
Crystal system	Tetragonal
Space group (#)	P4/nmm O2 (129)

