



Phosphor Information Leaflet

GENERAL

Name	Lanthanum tungstate europium
Chemical formula	$\text{La}_2\text{W}_3\text{O}_{12}:\text{Eu}^{3+}$
Application areas	Security marking

OPTICAL PROPERTIES

Excitation maxima @	254 nm (4.88 eV), 394 nm (3.15 eV), 465 nm (2.67 eV), 536 nm (2.31 eV)
Emission maximum @ 465 nm exc.	591 nm (2.10 eV), 615 nm (2.02 eV), 700 nm (1.77 eV)
Centroid wavelength	628 nm (1.97 eV)
Full width @ half emission maximum	Line
Lumen equivalent	261 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.662, 0.337
Band edge of host lattice	4.0 eV
Reflection @ 465 nm	61 %
Decay time $\tau_{1/e}$	594 μs

PHYSICAL PROPERTIES

Body colour	White
Density	6.61 g/cm ³
Refractive index (at λ)	
Mineral type	
Crystal system	Monoclinic
Space group (#)	C 1 2/c 1 (#15)

