

Phosphor Information Leaflet

GENERAL

Name	Lanthanum borate thulium
Chemical formula	LaBO ₃ :Tm
Application areas	Blue pixel of PDPs

OPTICAL PROPERTIES

Excitation maxima @ 453 nm	196 nm (6.3 eV)
Emission maximum @ 160 nm exc.	349 nm (3.6 eV), 360 nm (3.4eV), 453 nm (2.7 eV)
Centroid wavelength	522 nm (2.4 eV)
Full width @ half emission maximum	11 nm
Lumen equivalent	45 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.168; 0.064
Band edge of host lattice	7 eV
Reflection @ 160 nm	-
Decay time $\tau_{1/e}$	-

PHYSICAL PROPERTIES

Body colour	white
Density	5.3 g/cm ³
Refractive index	
Mineral type	Aragonit
Crystal system	monoclinic
Space group (#)	Pnma

