



Phosphor Information Leaflet

GENERAL

Name	Yttrium strontium tantalate niobium
Chemical formula	(Y,Sr)TaO ₄ :Nb ⁵⁺
Application areas	x-ray amplifier screens

OPTICAL PROPERTIES

Excitation maxima @	230 nm (5.4 eV)
Emission maximum @ 160 nm exc.	403 nm (3.1 eV)
Centroid wavelength	426 nm (2.9 eV)
Full width @ half emission maximum	85 nm
Lumen equivalent	63 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.160, 0.079
Band edge of host lattice	
Reflection @ 254 nm	40 %
Decay time $\tau_{1/e}$	

PHYSICAL PROPERTIES

Body colour	White
Density	7 g/cm ³
Refractive index (at λ)	
Mineral type	Fergusonite
Crystal system	Monoclinic
Space group (#)	<i>P12/c1</i> (13)

