



Phosphor Information Leaflet

GENERAL

Name	Yttrium oxide sulfide europium
Chemical formula	$Y_2O_2S:Eu^{3+}$
Application areas	Cathode ray tubes

OPTICAL PROPERTIES

Excitation maxima @	264 nm (4.70 eV), 308 nm (4.03 eV)
Emission maximum @ 160 nm exc.	627 nm (1.98 eV), 707 nm (1.75 eV), 617 nm (2.01 eV), 596 nm (2.08 eV),
Centroid wavelength	-
Full width @ half emission maximum	Line
Lumen equivalent	197 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.651, 0.332
Band edge of host lattice	270 nm (4.6 eV)
Reflection @ 254 nm	4 %
Decay time 1/e	0.5 ms

PHYSICAL PROPERTIES

Body colour	White
Density	4.9 g/cm ³
Refractive index (at λ)	
Mineral type	
Crystal system	Trigonal
Space group (#)	P-3m1 (164)

