



Phosphor Information Leaflet

GENERAL

Name	Zinc cadmium sulfide silver
Chemical formula	(Zn,Cd)S:Ag ⁺ ,Cl ⁻
Application areas	Cathode ray tubes, Light emitting diodes

OPTICAL PROPERTIES

Excitation maxima @ 673 nm em.	468 nm (\pm 2.6 eV)
Emission maximum @ 450 nm exc.	673 nm (\pm 1.8 eV)
Centroid wavelength	686 nm (\pm 1.8 eV)
Full width @ half emission maximum	124 nm
Lumen equivalent	68 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.671, 0.328
Band edge of host lattice	2.6 eV
Reflection @ 254 nm	10 %
Decay time 1/e	< 0.1 ms

PHYSICAL PROPERTIES

Body colour	Orange
Density	4.7 g/cm ³
Refractive index (at λ)	2.53 (589 nm)
Mineral type	Greenockite
Crystal system	Hexagonal
Space group (#)	P63mc (186)

