



Phosphor Information Leaflet

GENERAL

Name	Calcium tungstate
Chemical formula	CaWO ₄
Application areas	Scintillator

OPTICAL PROPERTIES

Excitation maxima @ 615 nm em.	250 nm (4.96 eV)
Emission maximum @ 465 nm exc.	425 nm (2.92 eV)
Centroid wavelength	442 nm (2.81 eV)
Full width @ half emission maximum	117 nm
Lumen equivalent	99 lm/W _{VIS}
CIE1931 chromaticity coordinates (x, y)	0.173, 0.143
Band edge of host lattice	3.8 eV
Reflection @ 254 nm	13%
Decay time $\tau_{1/e}$	10 μ s (Exc. 262 nm, Em. 425 nm)

PHYSICAL PROPERTIES

Body colour	White
Density	6.1 g/cm ³
Refractive index (at λ 589 nm)	1.92
Mineral type	Scheelite
Crystal system	Tetragonal
Space group (#)	I4 ₁ /a (88)

