



# Phosphor Information Leaflet

## GENERAL

Name	Calcium sulfide europium
Chemical formula	CaS:Eu <sup>2+</sup>
Application areas	Light emitting diodes, cathode ray tubes, EL light sources

## OPTICAL PROPERTIES

Excitation maxima @ 655 nm	460 nm ( $\pm$ 2.7 eV), 565 nm ( $\pm$ 2.2 eV)
Emission maximum @ 264 nm exc.	655 nm ( $\pm$ 1.9 eV)
Centroid wavelength	661 nm ( $\pm$ 1.9 eV)
Full width @ half emission maximum	63 nm
Lumen equivalent	84 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.699, 0.300
Band edge of host lattice	214 nm (5.8 eV)
Reflection @ 254 nm	6 %
Decay time 1/e	1 ms

## PHYSICAL PROPERTIES

Body colour	pink
Density	2.8 g/cm <sup>3</sup>
Refractive index (at 589 nm)	2.137
Mineral type	Halite
Crystal system	Cubic
Space group (#)	Fm-3m (225)

