



# Phosphor Information Leaflet

## GENERAL

Name	Strontium calcium silicate europium
Chemical formula	$(\text{Sr,Ca})_2\text{SiO}_4:\text{Eu}^{2+}$
Application areas	Light emitting diodes

## OPTICAL PROPERTIES

Excitation maxima @	160 - 430 nm ( $\approx 2.9 - 7.8$ eV)
Emission maximum @ 254 nm exc.	576 nm ( $\approx 2.2$ eV)
Centroid wavelength	580 nm ( $\approx 2.1$ eV)
Full width @ half emission maximum	100 nm
Lumen equivalent	429 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.455, 0.494
Band edge of host lattice	
Reflection @ 254 nm	9 %
Decay time $\tau_{1/e}$	$\sim 1$ $\mu\text{s}$

## PHYSICAL PROPERTIES

Body colour	Yellow
Density	4 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	
Mineral type	-
Crystal system	Orthorhombic
Space group (#)	Pna2 <sub>1</sub> (62)

