



Phosphor Information Leaflet

GENERAL

Name	Strontium magnesium disilicate europium
Chemical formula	$\text{Sr}_2\text{MgSi}_2\text{O}_7:\text{Eu}^{2+}$
Application areas	Near UV LEDs

OPTICAL PROPERTIES

Excitation maxima @	353 nm (3.5 eV)
Emission maximum @ 450 nm exc.	467 nm (2.7 eV)
Centroid wavelength	481 nm (2.6 eV)
Full width @ half emission maximum	51 nm
Lumen equivalent	151 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.133, 0.162
Band edge of host lattice	4.50 eV
Reflection @ 254 nm	30 %
Decay time $\tau_{1/e}$	-

PHYSICAL PROPERTIES

Body colour	Yellow
Density	3.7 g/cm ³
Refractive index (at λ)	
Mineral type	Melilite
Crystal system	Tetragonal
Space group (#)	P-42 ₁ m (113)

