



## Phosphor Information Leaflet

### GENERAL

Name	Strontium aluminate europium
Chemical formula	$\text{Sr}_4\text{Al}_{14}\text{O}_{25}:\text{Eu}^{2+}$
Application areas	Fluorescent lamps with high CRI, Near UV LEDs

### OPTICAL PROPERTIES

Excitation maxima @	170 nm ( $\Delta 7.3 \text{ eV}$ ), 400 nm ( $\Delta 3.1 \text{ eV}$ )
Emission maximum @ 254 nm exc.	490 nm ( $\Delta 2.5 \text{ eV}$ )
Centroid wavelength	500 nm ( $\Delta 2.5 \text{ eV}$ )
Full width @ half emission maximum	61 nm
Lumen equivalent	$275 \text{ lm/W}_{\text{opt}}$
CIE1931 chromaticity coordinates (x, y)	0.142, 0.381
Band edge of host lattice	197 nm ( $\Delta 6.3 \text{ eV}$ )
Reflection @ 254 nm	17 %

### PHYSICAL PROPERTIES

Body colour	Greenish
Density	$3.66 \text{ g/cm}^3$
Refractive index (at $\lambda$ )	-
Mineral type	-
Crystal system	Orthorhombic
Space group (#)	P m m a (41)

