



Phosphor Information Leaflet

GENERAL

Name	Strontium sulfide europium
Chemical formula	SrS:Eu ²⁺
Application areas	Light emitting diodes, cathode ray tubes, EL Light sources

OPTICAL PROPERTIES

Excitation maxima @ 655 nm	284 nm ($\Delta 4.4$ eV), 443 nm ($\Delta 2.8$ eV), 502 nm ($\Delta 2.5$ eV),
Emission maximum @ 443 nm exc.	615 nm ($\Delta 2.01$ eV)
Centroid wavelength	627 nm ($\Delta 1.97$ eV)
Full width @ half emission maximum	71 nm
Lumen equivalent	260 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.628, 0.371
Band edge of host lattice	258 nm (4.8 eV)
Reflection @ 254 nm	13 %
Decay time 1/e	1 ms

PHYSICAL PROPERTIES

Body colour	orange
Density	3.7 g/cm ³
Refractive index (at 589 nm)	2.107
Mineral type	Halite
Crystal system	Cubic
Space group (#)	Fm-3m (225)

