



Phosphor Information Leaflet

GENERAL

Name	Sodium yttrium fluoride ytterbium erbium
Chemical formula	$\text{NaYF}_4:\text{Yb}^{3+},\text{Er}^{3+}$
Application areas	Up-conversion crystals

OPTICAL PROPERTIES

Excitation maxima @	980 nm (1.27 eV)
Emission maximum @ 980 nm exc.	541 nm (2.29 eV)
Centroid wavelength	579 nm (2.14 eV)
Full width @ half emission maximum	Lines
Lumen equivalent	430 lm/W
CIE1931 chromaticity coordinates (x, y)	0.280, 0.698
Band edge of host lattice	10 eV
Reflection	-

PHYSICAL PROPERTIES

Body colour	Pale Yellow
Density	6.4 g/cm ³
Refractive index (at λ)	1.4 (1060 nm)
Mineral type	-
Crystal system	Hexagonal
Space group (#)	-

