



Phosphor Information Leaflet

GENERAL

Name	Lutetium aluminate garnet neodymium
Chemical formula	$\text{Lu}_3\text{Al}_5\text{O}_{12}:\text{Nd}^{3+}$
Application areas	Laser gain media

OPTICAL PROPERTIES

Excitation maxima @	254 nm (4.88 eV), 353 nm (3.51 eV), 530 nm (2.33 eV), 588 nm (2.11 eV), 748 nm (1.66 eV), 808 nm (1.53 eV)
Emission maximum @ 354 nm exc.	883 nm (1.40 eV), 940 (1.32 eV), 946 nm (1.31 eV)
Centroid wavelength	884 nm (1.40 eV)
Full width @ half emission maximum	Lines
Lumen equivalent	-
CIE1931 chromaticity coordinates (x, y)	-
Band edge of host lattice	160 nm (7.6 eV)
Reflection @ 354 nm	87 %

PHYSICAL PROPERTIES

Body colour	White
Density	6.70 g/cm ³
Refractive index (at λ)	1.84 (589.3 nm)
Mineral type	Garnet
Crystal system	Cubic
Space group (#)	I a -3 d (230)

