



Phosphor Information Leaflet

GENERAL

Name	Lutetium aluminium garnet holmium
Chemical formula	$\text{Lu}_3\text{Al}_5\text{O}_{12}:\text{Ho}^{3+}$
Application areas	Luminescent marker

OPTICAL PROPERTIES

Excitation maxima @	287 nm (4.32 eV), 364 nm (3.41 eV), 385 nm (3.22 eV), 417 nm (2.97 eV), 453 nm (2.74 eV)
Emission maximum @ 363 nm exc.	548 nm (2.26eV), 582 nm (2.13 eV), 667 nm (1.86 eV), 756 nm (1.64 eV)
Centroid wavelength	596 nm (2.08 eV)
Full width @ half emission maximum	Lines
Lumen equivalent	268 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.309, 0.474
Band edge of host lattice	160 nm (7.75 eV)
Reflection @ 366 nm	92 %

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)

