



Phosphor Information Leaflet

GENERAL

Name	Yttrium aluminium garnet holmium
Chemical formula	$Y_3Al_5O_{12}:Ho^{3+}$
Application areas	Luminescent marker

OPTICAL PROPERTIES

Excitation maxima @	287 nm (4.32 eV), 363 nm (3.42eV), 386 nm (3.21 eV), 417 nm (2.97 eV), 452 nm (2.74 eV)
Emission maximum @ 363 nm exc.	548 nm (2.26 eV), 667 nm (1.86 eV), 761 nm (1.63 eV)
Centroid wavelength	597 nm (2.08 eV)
Full width @ half emission maximum	Lines
Lumen equivalent	265 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.279, 0.463
Band edge of host lattice	170 nm (7.29 eV)
Reflection @ 365 nm	89 %

PHYSICAL PROPERTIES

Body colour	White
Density	4.56 g/cm ³
Refractive index (at λ)	1.80 (589.3 nm)
Mineral type	Garnet
Crystal system	Cubic
Space group (#)	I a -3 d (230)

