



# Phosphor Information Leaflet

## GENERAL

Name	Tripotassium bifluoride oxofluoro tungstate manganese
Chemical formula	$K_3HF_2WO_2F_4:Mn^{4+}$
Application areas	Warm-white LEDs

## OPTICAL PROPERTIES

Excitation maxima @ 643 nm em	296 nm (4.19 eV), 364 nm (3.41 eV), 473 nm (2.62 eV)
Emission maximum @ 296 nm exc.	610 nm (2.03 eV), 627 nm (1.98 eV)
Centroid wavelength	626 nm (1.75 eV)
Full width @ half emission maximum	Lines
Lumen equivalent	225 lm/W <sub>VIS</sub>
CIE1931 chromaticity coordinates (x, y)	0.688, 0.312
Band edge of host lattice	302 nm (4.1 eV)
Reflection @ 296 nm	8 %
Decay time $\tau_{1/e}$	4.2 ms (at 300 K), 8.1 ms (at 4 K)

## PHYSICAL PROPERTIES

Body colour	Yellowish white
Density	g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	-
Mineral type	-
Crystal system	
Space group (#)	

