



## Consolite Technology Data Sheet

**Material Ref: CTL-C020**

**Function: Glass Filter, NVG Compatible, Colour LCD, LED Backlight**

The filter glass is of absorption type and achieves the NVIS radiance requirements of MIL-STD-3009 (Class B) and DO-275 when used with an LED backlit LCD.

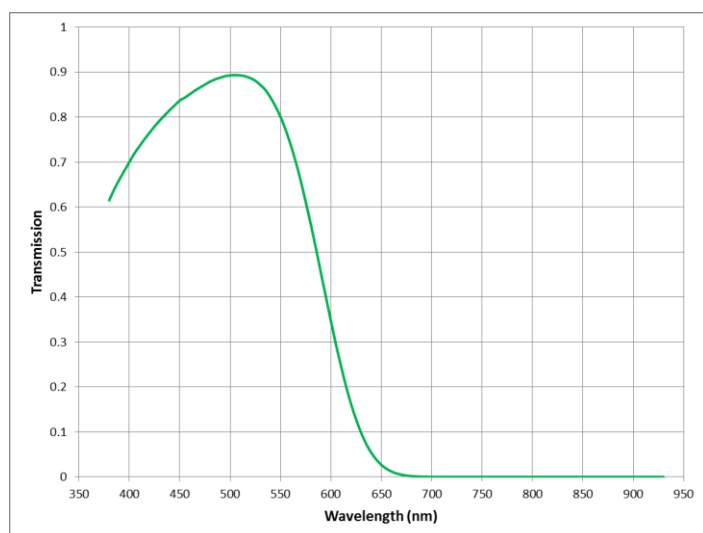
The material can work at thicknesses down to 1mm for use in thin strip form for edge illuminating LEDs, or at up to 2mm for use in sheet form across the front of an LCD. In the latter case an anti-reflection coating can be provided on one or both faces to minimise reflections and to optimise transmission.

Performance figures are quoted for a typical full colour LCD cockpit display, measured in white and red areas, each dimmed as close to 0.5fL as possible, for an uncoated filter at both thicknesses. Exact figures may vary.

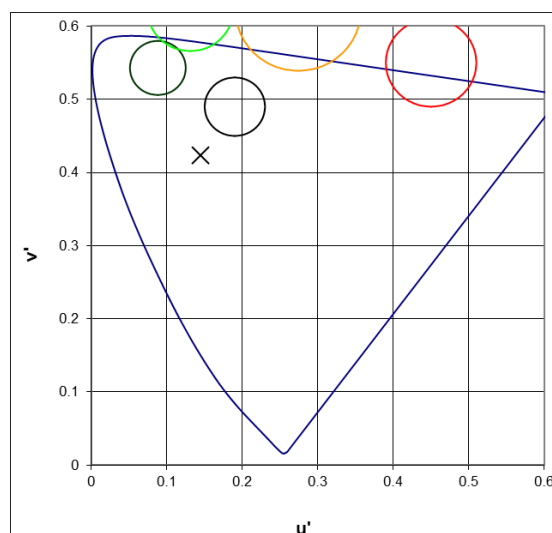
### Typical performance

		NR <sub>B</sub> @ 0.5fL	Chromaticity		Photopic transmission
			u'	v'	
1mm	White	1.9E-9	.165	.458	78%
	Red	7.7E-9	.342	.494	58%
2mm	White	3.3E-10	.148	.452	68%
	Red	1.9E-9	.308	.480	40%

**Spectral Transmission at 2mm**



**Chromaticity Coordinates, White (CIE 1976)**



### Mechanical Properties

Density $\rho$ [g/cm <sup>3</sup> ]	2.74	Transformation temperature T <sub>g</sub> [°C]	322
Chemical resistance	FR class 0 SR class 5.1 AR class 3.0	Thermal expansion	$\alpha_{-30/+70^\circ\text{C}}$ [10 <sup>-6</sup> /K] 11.6 $\alpha_{20/200^\circ\text{C}}$ [10 <sup>-6</sup> /K] 13.1