

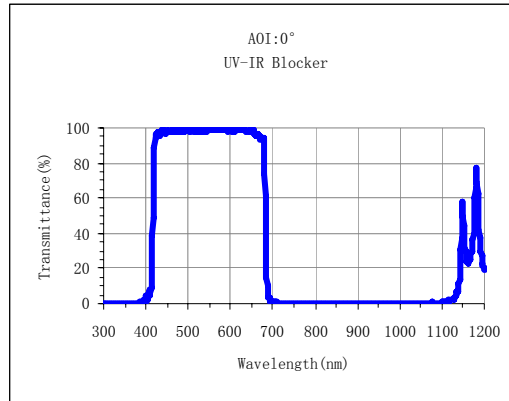


## **Light Engine Projection Optics Catalog 2006**

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High Quality, Economic Solution**

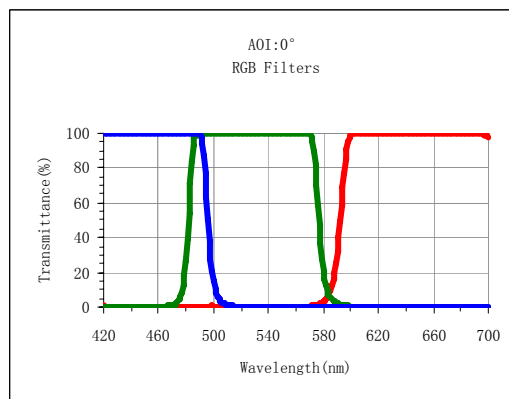
# Light Engine Projection Optics

## A. UV-IR Blocking Filters



Specifications	
Substrate	UV grade fused silica, BK7, or required
Surface Figure	$< \lambda/5$ @ 633nm
Surface Quality	40-20
Chamfer	0.25mm at 45° typical
Coating Technology	Electron beam evaporation, dielectric multilayers
Incident Angle	0°
Clear Aperture	> 85% of dimension
Dimension	To be Customized
Optical Performance	Tave>95% @ 420-680nm, Tabs<1% @ 300-390nm, Tabs<1% @ 720-1000nm, Tabs<3% @ 1000-1100nm

## B. Dichroic Mirrors



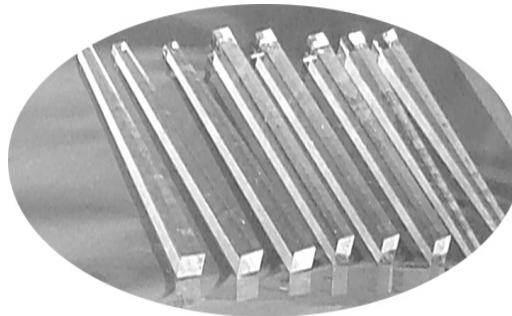
**Note: Other color mirrors including Red mirror, Green mirror, Blue mirror, Cyan Mirror, and Yellow mirror at 45 degree of AOI, or other color filters are also available upon request.**



Specifications	
Substrate	UV grade fused silica, BK7, BF33, or required
Surface Figure	$< \lambda/5$ @ 633nm
Surface Quality	S/D=40/20
Chamfer	0.25mm at 45° typical
Coating Technology	Electron beam evaporation, dielectric multilayers
Incident Angle	0°
Clear Aperture	> 85% dimension
Dimension	To be Customized
Optical Performance	<p><b>Red Filter</b> Tave&lt;0.8% @400-565nm, T=50% @603+/-5nm Tmin&gt;96% @ 616-700nm</p> <p><b>Green Filter</b> Tave&lt;0.8% @400-475nm &amp; 595-700nm, T=50% @497+/-5nm and 566+/-5nm, Tmin&gt;96% @508-556nm</p> <p><b>Blue Filter</b> Tave&gt;95%, Tmin&gt;93% @400-511nm, T=50% @519+/-5nm, Tave&lt;0.8% @550-700nm</p>

## C. Light Pipes

Light pipes, including the straight and tapered pipes, are the most widely used method to homogenize the illumination light. Amerina provides custom designed light pipe to fit any system etandue.



Specifications	
Material	UV grade fused silica or BK7
End Dimension Tolerance	+/-0.1mm
Length Dimension Tolerance	+/-0.25mm
Surface Figure	$< 2\lambda$ @ 633nm for all surfaces
Surface Quality	S/D=60/40 for all surfaces
Chamfer	No chamfer allowed, sharp edge
Chips	<0.05mm
Coating Technology	Electron beam evaporation, dielectric multilayers
Ends AR Coatings	AR<0.5% @420-680nm
Clear Aperture	100% Ends
Dimension	To be Customized