

1. Scope of Project

This specification describes four order blocking filters and a clear blank which are to be used at wavelengths 320 - 900 nm in the Prime Focus Imaging Spectrograph on the Southern African Large Telescope (SALT).

2. Optical Materials

50% Transmission Point (nm)	Preferred Color Glass		
	Manufacturer	Glass	Thickness (mm)
Clear	Corning	Fused Silica HPFS 7980 2F	8
320	Schott	WG-320	2 + *
340 - 345	Hoya	UV-34	2.5 + *
380 - 385	Schott	GG-385	3 + *
455 - 460	Hoya	Y-46	2.5 + *

* Packing: Glue glass to Schott N-BaK 2 for total Optical Thickness = 8.0 ± 0.1 mm Fused Silica (633 nm)

3. Physical Properties

Size: 130 x 90 (+0, -0.2) mm

Clear Aperture: > 120 x 80 mm

Broadband AR coating both surfaces: 1% maximum reflectance from 50% point to 900 nm

4. Performance specifications

Front/Back parallelism: better than 1 arcmin

Surface figure @ 633 nm: 1/4 wave per 25 mm peak-to-peak

Scratch/ Dig: 40-30

220 grit edge finish

Edge Bevel 1-2 mm

Corner Bevel 3-4 mm

5. Documentation

Transmission curve