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**

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

*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