

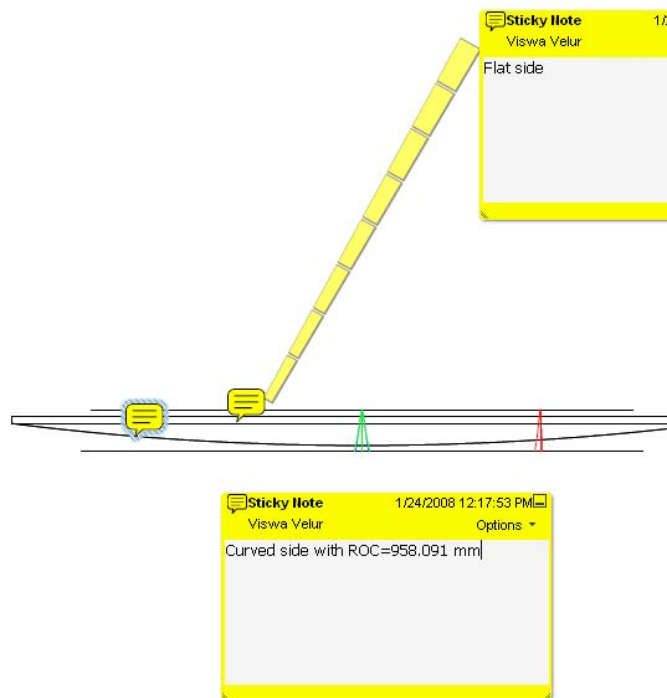
MOSAIC field-flattener specs:

Mechanical alignment issues:

1. Tilt tolerances when aligning = +/- 1 deg.
 2. De-centration = +/- 1 mm
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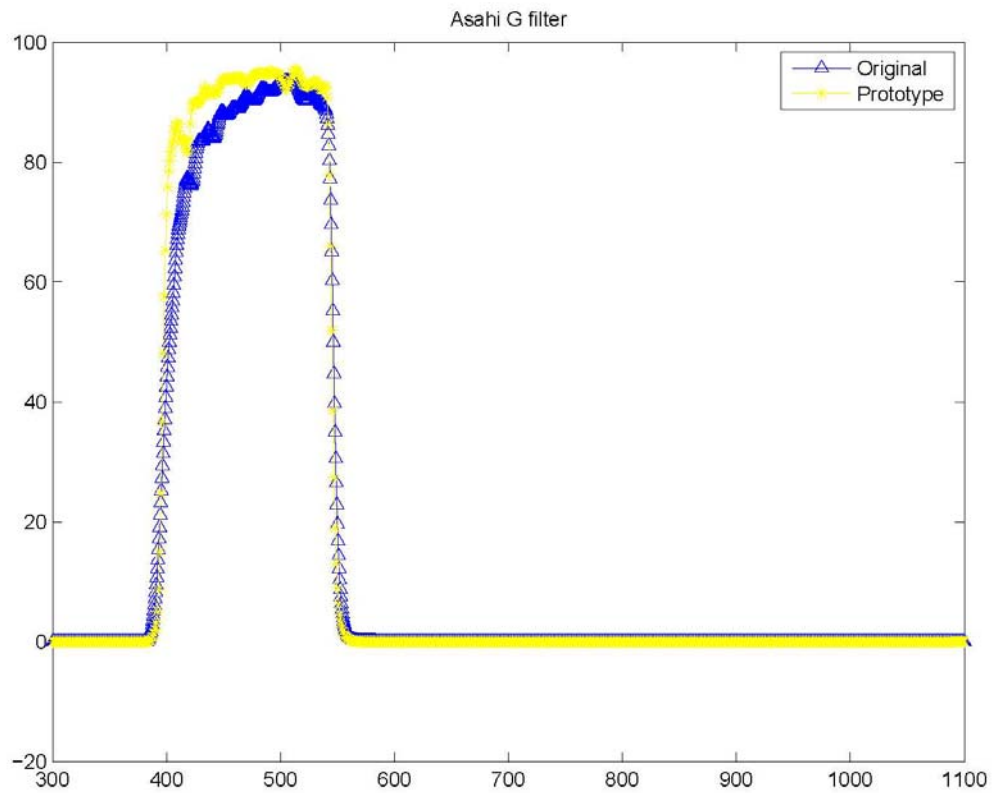
Optical properties for manufacturing the field-flattener

1. ROC1= 980 +/- 20 mm on side 1
2. ROC2 = infinity
3. Clear aperture size = 220 x 150 mm (we probably can accommodate one circular piece with dia. = 220mm if we need to)
4. Center thickness = 10 +/- 0.1 mm
5. Material: Grade-A fine annealed fused silica (striae free)
6. Surface Flatness (S1 & S2) = better than $\lambda/10$ over clear aperture.
7. AR coating = less than 0.5% per surface for each of the 2 surfaces from 0.40 – 0.75 μm
8. Surface Quality (S1 & S2) = 40-20 scratch-dig
9. Chamfer on lens circumference = 0.5 mm face width x 45° maximum



Filter specs:

1. Filter thickness = 5 mm (is 3 mm possible?) (+/- 0.1 mm tolerance)
2. F/# of the incoming beam at the filter = 2.4712
3. Filter clear aperture = 220 x 150 mm (+/- 0.1 mm tolerance)
4. Filter material = Grade A annealed fused silica (striae free)
5. Spectral response = same as prototype interference filter (see figure)
6. Surface Flatness (S1 & S2) = better than $\lambda/10$ over clear aperture.
7. AR coating = less than 0.5% per surface for each of the 2 surfaces from 0.40 – 0.75 μm
8. Surface Quality (S1 & S2) = 40-20 scratch-dig
9. Chamfer on lens circumference = 0.5 mm face width x 45° maximum



Deflection of simply supported disk of dia. = 235 mm when atm. pressure is acting on one facet (a rect. will have lesser deflection)

