

T1300746-v1

SR2-03 ROC Tolerances
 R. Martin and G. Billingsley
 3-Sep-13

		Random Check of Individual Files						Average of all good files at each rotation			6m SR2-03, from Ave. All. 0deg						
		6m_SR2-03-0 010	6m_SR2-03-0 017	6m_SR2-03-0 095	6m_SR2-03-90 022	6m_SR2-03-90 070	6m_SR2-03-225 012	6m_SR2-03-225 260	0 deg (arrow up)	90 deg (arrow right)	225 deg	Effect of Zernike Z[3]		Effect of ROC-TS tol.		Effect of Gap	
												Z[3]max=0.001204	Z[3]min=-0.003489	ROC-TS min	ROC-TS max	+1mm	-1mm
Radius of curvature of TS	m	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49564	-6.50207	-6.49886	-6.49886
Gap between TS and part to be measured	m	0.07442	0.07442	0.07442	0.07462	0.07462	0.07462	0.07442	0.07462	0.07462	0.07442	0.07442	0.07442	0.07442	0.07442	0.07342	0.07542
Zernike power coefficient	nm	0.32	-1.53	0.09	-0.04	0.17	-0.98	0.75	-1.10	0.40	0.05	1.28	-3.71	-1.10	-1.10	-1.10	-1.10
Part measured aperture	mm	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274	50.274
Wavefront "sag" at part plus power	mm	-0.04917632	-0.049180013	-0.049176772	-0.049178559	-0.049178148	-0.049180444	-0.049176992	-0.049179	-0.04917768	-0.04917838	-0.049174391	-0.049184378	-0.04920381	-0.049154586	-0.049171	-0.049187
Part radius	m	-6.4245	-6.4240	-6.4245	-6.4242	-6.4243	-6.4240	-6.4244	-6.4242	-6.4243	-6.4243	-6.4248	-6.4235	-6.4209	-6.4274	-6.4252	-6.4232
		-6.4243		-6.4243		-6.4242		-6.4242		-6.4243		-0.62	0.68	3.22	-3.21	-1.00	1.00
		-6.4243						-4.8		4.9		Difference (mm)					

Specified Radius	m	-6.43
	(+/-0.03)	-6.40
		-6.46

Meas. ROC (m)	-6.4243	+/-	4.9 mm
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- SR2-03
- Measured on 8-Sep-2011 at CIT with Wyko interferometer by R. Martin and G. Billingsley
 - Measured Gap = 70 mm (+ 4.62 mm)
 - The optic was measured at 0 deg (arrow up), 90 deg (arrow right) and arrow at 225 deg cw, all when looking at the HR side of the optic
 - Transmission Sphere Data File - C1203092
 - Related Surface Figure report - E1200548