

T1300744-v1

PR2-04 ROC Tolerances
 R. Martin and G. Billingsley
 5-Sep-13

		Random Check of Individual Files										Average Files				5m PR2-04-0 AveALL					
		5m_PR2-04-0_188	5m_PR2-04-0_303	5m_PR2-04-0_620	5m_PR2-04-90_006	5m_PR2-04-90_020	5m_PR2-04-180_056	5m_PR2-04-180_083	5m_PR2-04-270_014	5m_PR2-04-270_069	5m_PR2-04-0_AveALL	5m_PR2-04-90_AveALLGood	5m_PR2-04-180_AveALL	5m_PR2-04-270_AveALL	Effect of Zernike Z[3]		Effect of ROC-TS tol.		Effect of Gap		
															Z[3]max=-0.018101	Z[3]min=-0.019496	ROC-TS min	ROC-TS max	+2mm	-2mm	
Radius of curvature of TS	m	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99624	-4.99451	-4.99798	-4.99624	-4.99624	
Gap between TS and part to be measured	m	0.44862	0.44862	0.44862	0.44762	0.44762	0.44762	0.44762	0.44762	0.44762	0.44862	0.44762	0.44762	0.44862	0.44862	0.44862	0.44862	0.45062	0.44662		
Zernike power coefficient	nm	-20.57	-20.45	-19.75	-22.82	-22.18	-21.90	-22.39	-24.47	-24.45	-19.92	-22.51	-22.07	-24.60	-19.26	-20.74	-19.92	-19.92	-19.92	-19.92	
Part measured aperture	mm	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9		
Wavefront "sag" at part plus power	mm	-0.04380057	-0.04380034	-0.043798919	-0.04379544	-0.04379417	-0.04379361	-0.04379458	-0.04379875	-0.04379871	-0.04379926	-0.043794821	-0.04379395	-0.043799	-0.043797947	-0.043800915	-0.04381591	-0.04378252	-0.04381851	-0.04378	
Part radius	m	-4.5433	-4.5434	-4.5435	-4.5439	-4.5440	-4.5441	-4.5440	-4.5435	-4.5435	-4.5435	-4.5439	-4.5440	-4.5435	-4.5436	-4.5433	-4.5418	-4.5452	-4.5415	-4.5455	
		-4.5434			-4.5439		-4.5440		-4.5435			-4.5437			-0.14	0.17	1.73	-1.74	2.00	-2.00	
											Z[3]max=-0.018101	-0.022139	-0.020206								
											Z[3]min=-0.019496	-0.020835	-0.021237								
											(...x1664nm)										
											0.001395	-0.001304	0.001031								

Specified Radius	m	-4.56
	(+/-0.02)	-4.54
		-4.58

Meas. ROC (m)
-4.5437 +/- 3.9 mm

Comments:
 -Measured on Sep 1-2, 2011 at CIT by R. Martin and G. Billingsley with the Wyko interferometer