

T1300745-v1

SRM-05 ROC Tolerances

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3-Sep-13

Checked indiv files, gaps, recalculated average for each rotation, recalculated ROC

		Individual Files										Average Files		Effect of Gap		Effect of Zernike uncertainty		Effect of ROC-TC tolerance			
		06m_SRM-05_0_010	06m_SRM-05_0_042	06m_SRM-05_0_063	06m_SRM-05_0_070	06m_SRM-05_225_013	06m_SRM-05_225_043	06m_SRM-05_225_075	06m_SRM-05_225_091	06m_SRM-05_225_013	06m_SRM-05_225_043	06m_SRM-05_225_075	06m_SRM-05_225_091	0 deg (arrow up)	225 deg (arrow right)	+2 mm	-2 mm	Zmin=+0.001893	Zmax=+0.00499	ROC-x (max)	ROC-y (min)
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	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.49886	-6.50207	-6.49564
Gap between TS and part to be measured	m	0.86262	0.86262	0.86262	0.86262	0.86262	0.86262	0.86262	0.86262	0.86262	0.86262	0.86262	0.86262	0.86262	0.86462	0.86062	0.86262	0.86262	0.86262	0.86262	0.86262
Zernike power coefficient	nm	5.12	4.26	2.86	4.27	2.62	3.80	4.18	3.95	3.44	3.51	3.44	3.44	3.44	3.44	3.44	3.44	2.01	5.31	3.44	3.44
Part measured aperture	mm	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324	30.324
Wavefront "sag" at part plus power	mm	-0.020383338	-0.020385064	-0.02038787	-0.020385034	-0.020388349	-0.020385976	-0.020385229	-0.020385672	-0.0203867	-0.0203866	-0.0203867	-0.0203866	-0.0203867	-0.0203866	-0.020393939	-0.020379466	-0.020389554	-0.020382963	-0.020375092	-0.020398358
Part radius	m	-5.6391	-5.6386	-5.6378	-5.6386	-5.6377	-5.6383	-5.6385	-5.6384	-5.6381	-5.6382	-5.6381	-5.6382	-5.6361	-5.6401	-5.6361	-5.6401	-5.6374	-5.6392	-5.6414	-5.6349
Specified Radius	m	-5.69	-5.63	-5.75																	
	(+/-0.03)																				
																Cumulative Tolerance:		-6.2 mm		6.0	

SRM-05
 - Measured on 6-Sep-2011 at CIT with Wyko interferometer by R. Martin and G. Billingsley
 - Measured Gap = 85.8 cm (+ 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. Data at 90 deg were lost when the old computer died
 - Transmission Sphere Data File - C1203092
 - Related Surface Figure report - E1200570