

DCC: T1300740-v1

PRM-02 ROC Tolerances

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		Average Files			Random check of individual files			Effect of ROC-TS uncertainty			Effect of Gap		Effect of Zernike Terms	
		0 deg (arrow up)	90 deg (arrow right)	225 deg	11m_PRM-02- 0_006	11m_PRM-02- 90_061	11m_PRM-02- 225_047	0 deg ROC_TS ave	0 deg ROC_TS max	0 deg ROC_TS min	+2 mm	-2 mm	Z[3]max=0.002778	Z[3]min=0.001839
Radius of curvature of TS	m	-11.4933	-11.4933	-11.4933	-11.4933	-11.4933	-11.4933	-11.49330	-11.50580	-11.48080	-11.49330	-11.49330	-11.4933	-11.4933
Gap between TS and part to be measured	m	0.48962	0.48962	0.48962	0.48962	0.48962	0.48962	0.48962	0.48962	0.48962	0.49162	0.48762	0.48962	0.48962
Zernike power coefficient	nm	2.42	2.08	2.50	1.89	1.91	2.58	2.51	2.51	2.51	2.51	2.51	2.956	1.957
Part measured aperture	mm	30.324	30.324	30.324	30.324	30.324	30.324	30	30	30	30.324	30.324	30.324	30.324
Wavefront "sag" at part plus power	mm	-0.010441	-0.0104417	-0.01044089	-0.010442101	-0.010442065	-0.010440722	-0.01021883	-0.010207229	-0.01023046	-0.010442757	-0.01043896	-0.010439969	-0.010441967
Part radius	m	-11.0088	-11.0081	-11.0089	-11.0077	-11.0077	-11.0091	-11.0091	-11.0216	-10.9966	-11.0070	-11.0110	-11.0099	-11.0078
		-11.0086			-11.0082			Diff. (mm):	-12.5	12.5	2.1	-1.9	-0.8	1.3

Specified Radius m -11.00
(+/-0.11 -10.89
-11.11

-15.2 mm
15.9

Comments:
-Measured on Sep 5-6, 2011 at CIT by R. Martin and G. Billingsley with the Wyko interferometer
- Wave and small central features are from the Test Sphere (C1203095-v1)

One indication that ROC of PRM-02 is significantly different than PRM-01 (measured one after another on Sep 5, 2011), is that the Gap had to be changed from 50.5 cm (PRM-01) to 48.5 cm (PRM-02).