

Reflectivity measurement of reference mirror

Equipment:	uscan reflectometer		
Mirror:	reference mirror		
Person:	Tibor Agocs		
Date:	13/02/2008		
Lambda (micron):	0.67		
Incident angle (degree):	25		
BW (Bandwidth) limits:	1	0.1	

ref mirror - in the dome

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
21	4.57E-03	7.90E-04	0.951	56	15:11:37	02-13-2008
22	4.48E-03	7.63E-04	0.95	55.7	15:11:41	02-13-2008
23	4.51E-03	7.71E-04	0.949	55.9	15:11:46	02-13-2008
average	4.521E-03	7.745E-04	0.950	55.867		
standard dev	4.644E-05	1.424E-05	0.001	0.153		

ref mirror - in room temperature

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
24	1.36E-03	3.98E-04	0.928	27.1	15:13:34	02-13-2008
25	1.36E-03	4.00E-04	0.93	27	15:13:38	02-13-2008
26	2.42E-03	1.19E-03	0.939	34.1	15:16:48	02-13-2008
27	2.48E-03	1.21E-03	0.937	34.5	15:16:52	02-13-2008
28	2.51E-03	1.23E-03	0.941	34.7	15:16:57	02-13-2008
29	2.03E-03	9.71E-04	0.931	31.4	15:17:07	02-13-2008
30	2.06E-03	9.86E-04	0.931	31.6	15:17:11	02-13-2008
31	2.06E-03	9.93E-04	0.931	31.6	15:17:16	02-13-2008
average	2.035E-03	9.219E-04	0.934	31.500		
standard dev	4.618E-04	3.394E-04	0.005	3.062		

Notes:

RMS - Root Mean Square surface roughness in Angstrom,

BPDF - Bidirectional scatter distribution function, it is equal to the scattered power per unit solid angle