

Reflectivity measurement

Equipment:	uscan reflectometer	
Mirror:	WHT Primary mirror - right & left side, telescope in AP3	
Person:	Juerg Rey, Tibor Agocs	
Date:	05/12/2006	
Lambda (micron):	0.67	
Incident angle (degree):	25	
BW (Bandwidth) limits:	1	0.1

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
right as seen from AP3						
16	7.02E-03	8.49E-04	0.815	88.4	11:21:52	12/05/1906
17	4.88E-03	8.63E-04	0.851	60.6	11:22:01	12/05/1906
18	5.07E-03	7.77E-04	0.779	68.3	11:22:10	12/05/1906
19	1.34E-02	2.61E-03	0.843	97.7	11:22:19	12/05/1906
20	6.03E-03	8.99E-04	0.859	71.7	11:22:34	12/05/1906
21	3.78E-03	6.77E-04	0.832	53.7	11:22:46	12/05/1906
average	6.690E-03	1.112E-03	0.830	73.400		
standard dev	3.452E-03	7.379E-04	0.029	16.711		

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
left as seen from AP3						
27	2.74E-03	4.04E-04	0.838	49.2	11:26:39	12/05/1906
28	2.18E-03	2.44E-04	0.852	50.4	11:26:47	12/05/1906
29	4.71E-03	7.43E-04	0.76	65.8	11:26:55	12/05/1906
30	5.00E-03	6.98E-04	0.852	67.5	11:27:07	12/05/1906
31	3.29E-03	4.67E-04	0.891	53.2	11:27:18	12/05/1906
32	2.61E-03	3.30E-04	0.814	52.6	11:27:29	12/05/1906
average	3.420E-03	4.811E-04	0.835	56.450		
standard dev	1.169E-03	2.006E-04	0.044	8.051		

Total average	5.055E-03	7.967E-04	8.322E-01	6.493E+01
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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 normalized by the incident power and $\cos\theta$