

Reflectivity measurement - WHT Primary, before and after CO2

Equipment:	uscan reflectometer		
Mirror:	WHT Primary mirror		
Person:	Tibor Agocs		
Date:	28/7/2009		
Lambda (micron):	0.67		
Incident angle (degree):	25		
BW (Bandwidth) limits:	1	0.1	

WHT Primary mirror before CO2

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
31	9.88E-03	6.49E-03	0.787	74.5	11:00:48	07-28-2009
32	9.84E-03	6.50E-03	0.787	74.3	11:00:53	07-28-2009
33	9.86E-03	6.49E-03	0.796	74	11:00:57	07-28-2009
34	1.01E-02	5.89E-03	0.791	75.1	11:01:05	07-28-2009
35	9.95E-03	5.90E-03	0.789	74.8	11:01:09	07-28-2009
36	9.96E-03	5.90E-03	0.786	75	11:01:14	07-28-2009
37	1.54E-02	7.59E-03	0.763	95.5	11:01:21	07-28-2009
38	1.54E-02	7.57E-03	0.764	95.4	11:01:26	07-28-2009
39	1.54E-02	7.56E-03	0.764	95.3	11:01:30	07-28-2009
40	1.06E-02	6.78E-03	0.823	75.4	11:01:38	07-28-2009
41	1.06E-02	6.67E-03	0.783	77.5	11:01:42	07-28-2009
42	1.05E-02	5.63E-03	0.833	75	11:01:47	07-28-2009
43	9.04E-03	5.82E-03	0.854	68.4	11:01:51	07-28-2009
average	1.127E-02	6.522E-03	0.794	79.246		
standard dev	2.397E-03	7.002E-04	0.027	9.425		

WHT Primary mirror after CO2

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
44	4.92E-03	1.42E-03	0.819	55	11:21:08	07-28-2009
45	4.90E-03	1.42E-03	0.818	54.9	11:21:12	07-28-2009
46	4.90E-03	1.42E-03	0.819	54.8	11:21:17	07-28-2009
47	2.82E-03	6.28E-04	0.844	43.2	11:21:25	07-28-2009
48	2.82E-03	6.29E-04	0.847	43.1	11:21:30	07-28-2009
49	2.81E-03	6.31E-04	0.862	42.6	11:21:34	07-28-2009
50	2.61E-03	4.53E-04	0.846	44.8	11:21:43	07-28-2009
51	2.62E-03	4.50E-04	0.87	44.5	11:21:47	07-28-2009
52	2.60E-03	4.57E-04	0.866	43.9	11:21:52	07-28-2009
53	3.30E-03	6.93E-04	0.83	47.9	11:22:00	07-28-2009
54	3.30E-03	6.93E-04	0.833	47.8	11:22:05	07-28-2009
55	3.30E-03	6.95E-04	0.832	47.8	11:22:09	07-28-2009
average	3.408E-03	7.993E-04	0.841	47.525		
standard dev	9.411E-04	3.861E-04	0.018	4.822		

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