

Reflectivity measurement - WHT Primary, before and after CO2

Equipment:	uscan reflectometer		
Mirror:	WHT Primary mirror		
Person:	Tibor Agocs		
Date:	20100111		
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
2	3.99E-03	1.61E-03	0.853	46.6	10:20:32	1/11/2010
3	3.99E-03	1.60E-03	0.852	46.6	10:20:37	1/11/2010
4	3.99E-03	1.60E-03	0.853	46.6	10:20:42	1/11/2010
5	3.65E-03	1.20E-03	0.79	47.3	10:20:51	1/11/2010
6	3.64E-03	1.23E-03	0.849	45.5	10:20:55	1/11/2010
7	3.66E-03	1.23E-03	0.851	45.5	10:21:00	1/11/2010
8	4.36E-03	1.58E-03	0.839	49.6	10:21:12	1/11/2010
9	4.26E-03	1.55E-03	0.846	48.8	10:21:17	1/11/2010
10	4.25E-03	1.55E-03	0.842	48.8	10:21:21	1/11/2010
11	3.50E-03	9.51E-04	0.859	45.7	10:21:30	1/11/2010
12	3.49E-03	9.33E-04	0.848	46.1	10:21:34	1/11/2010
13	3.49E-03	9.32E-04	0.862	45.8	10:21:38	1/11/2010
14	3.86E-03	9.29E-04	0.84	49.8	10:21:56	1/11/2010
15	3.89E-03	9.20E-04	0.844	50	10:22:00	1/11/2010
16	3.88E-03	9.18E-04	0.841	50.1	10:22:04	1/11/2010
17	3.36E-03	1.17E-03	0.873	42.9	10:22:13	1/11/2010
18	3.15E-03	1.04E-03	0.861	42.1	10:22:17	1/11/2010
average	3.788E-03	1.232E-03	0.847	46.929		
standard dev	3.360E-04	2.881E-04	0.017	2.364		

WHT Primary mirror after CO2

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
19	3.26E-03	6.01E-04	0.877	48.2	10:49:24	1/11/2010
20	1.96E-03	2.86E-04	0.871	41	10:49:30	1/11/2010
21	1.97E-03	2.81E-04	0.865	41.7	10:49:35	1/11/2010
22	2.98E-03	7.11E-04	0.872	43	10:49:42	1/11/2010
23	2.98E-03	7.09E-04	0.869	43.1	10:49:47	1/11/2010
24	2.98E-03	7.11E-04	0.868	43.1	10:49:52	1/11/2010
25	3.01E-03	4.49E-04	0.757	53.9	10:50:03	1/11/2010
26	2.99E-03	4.33E-04	0.79	53.4	10:50:08	1/11/2010
27	2.80E-03	3.62E-04	0.831	53.3	10:50:12	1/11/2010
28	3.42E-03	9.10E-04	0.819	46.5	10:50:23	1/11/2010
29	3.46E-03	9.39E-04	0.821	46.6	10:50:28	1/11/2010
30	2.67E-03	7.72E-04	0.853	39.6	15:05:04	1/11/2010
31	2.93E-03	7.86E-04	0.832	42.6	15:05:13	1/11/2010
32	2.93E-03	7.85E-04	0.83	42.7	15:05:18	1/11/2010
33	2.53E-03	4.45E-04	0.838	44	15:05:57	1/11/2010
34	2.53E-03	4.44E-04	0.829	44.3	15:06:02	1/11/2010

35	2.53E-03	4.45E-04	0.825	44.4	15:06:06	1/11/2010
36	2.92E-03	5.64E-04	0.848	45.7	15:06:50	1/11/2010
37	2.92E-03	5.62E-04	0.844	45.8	15:06:55	1/11/2010
38	2.91E-03	5.62E-04	0.838	45.9	15:07:00	1/11/2010
average	2.833E-03	5.878E-04	0.839	45.440		
standard dev	3.898E-04	1.956E-04	0.030	4.052		

Notes:

RMS - Root Mean Square surface roughness in Angstrom,

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