Reflectivity measurement - WHT Primary, before and after CO2 cleaning

Equipment:	uscan reflectometer	
Mirror:	**WHT Primary mirror**	
Person:	Neil O'Mahony, Tibor Agocs	
Date:	16/09/2008	
Lambda (micron):	0.67	
Incident angle (degree):	25	
BW (Bandwidth) limits:	1	0.1

WHT Primary mirror before the CO2 cleaning

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
8	7.99E-03	2.72E-03	0.796	69.5	08:48:53	09-16-2008
9	7.96E-03	2.72E-03	0.803	69	08:48:58	09-16-2008
10	7.97E-03	2.71E-03	0.837	67.6	08:49:02	09-16-2008
11	1.25E-02	5.00E-03	0.778	86.5	08:49:10	09-16-2008
12	1.29E-02	5.23E-03	0.789	87.1	08:49:14	09-16-2008
13	1.47E-02	5.83E-03	0.791	92.8	08:49:19	09-16-2008
14	8.99E-03	2.93E-03	0.839	72.1	08:49:29	09-16-2008
15	8.96E-03	2.93E-03	0.824	72.6	08:49:33	09-16-2008
16	8.89E-03	3.02E-03	0.808	72.7	08:49:38	09-16-2008
17	9.48E-03	3.11E-03	0.844	73.8	08:49:46	09-16-2008
18	9.42E-03	3.16E-03	0.849	73.1	08:49:50	09-16-2008
19	9.40E-03	3.16E-03	0.857	72.7	08:49:55	09-16-2008
20	5.62E-03	2.01E-03	0.8	57.7	08:50:05	09-16-2008
21	5.78E-03	2.02E-03	0.8	58.7	08:50:10	09-16-2008
22	5.78E-03	2.02E-03	0.8	58.7	08:50:14	09-16-2008
23	7.84E-03	3.04E-03	0.848	65.7	08:50:23	09-16-2008
24	7.81E-03	2.95E-03	0.86	65.3	08:50:27	09-16-2008
average	**8.942E-03**	**3.209E-03**	**0.819**	**71.506**		
standard dev	**2.481E-03**	**1.102E-03**	**0.027**	**9.843**		

WHT Primary mirror after the CO2 cleaning

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
26	9.05E-03	2.85E-03	0.787	75.1	09:22:10	09-16-2008
27	9.05E-03	2.87E-03	0.783	75.2	09:22:14	09-16-2008
28	9.05E-03	2.84E-03	0.795	74.8	09:22:19	09-16-2008
29	7.51E-03	2.48E-03	0.834	66	09:22:28	09-16-2008
30	7.53E-03	2.49E-03	0.847	65.6	09:22:32	09-16-2008
31	7.55E-03	2.48E-03	0.853	65.5	09:22:37	09-16-2008
32	9.02E-03	3.17E-03	0.828	72	09:22:47	09-16-2008
33	9.00E-03	3.17E-03	0.83	71.9	09:22:52	09-16-2008
34	9.02E-03	3.18E-03	0.834	71.8	09:22:56	09-16-2008
35	9.81E-03	3.05E-03	0.832	76.2	09:23:06	09-16-2008
36	9.85E-03	3.07E-03	0.841	75.9	09:23:11	09-16-2008
37	9.85E-03	3.08E-03	0.845	75.7	09:23:15	09-16-2008
38	7.72E-03	2.73E-03	0.826	66.7	09:23:27	09-16-2008
39	7.76E-03	2.73E-03	0.821	67.1	09:23:32	09-16-2008
40	7.76E-03	2.73E-03	0.804	67.8	09:23:36	09-16-2008
41	9.57E-03	3.09E-03	0.869	73.2	09:23:45	09-16-2008

42	9.60E-03	3.11E-03	0.87	73.2	09:23:50	09-16-2008
average	**8.747E-03**	**2.887E-03**	**0.829**	**71.394**		
standard dev	**8.962E-04**	**2.498E-04**	**0.025**	**4.030**		

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