

## Reflectivity measurement - WHT Primary, before and after CO2 cleaning

Equipment:	uscan reflectometer		
Mirror:	<b>WHT Primary mirror</b>		
Person:	Tibor Agocs & Neil O'Mahony		
Date:	26/02/2008		
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
9	1.13E-02	5.12E-03	0.834	78.4	10:25:53	02-26-2008
10	1.13E-02	5.11E-03	0.832	78.5	10:25:58	02-26-2008
11	1.13E-02	5.11E-03	0.83	78.8	10:26:03	02-26-2008
12	1.11E-02	5.47E-03	0.839	77.3	10:26:14	02-26-2008
13	1.10E-02	5.44E-03	0.849	76.5	10:26:19	02-26-2008
14	1.10E-02	5.44E-03	0.848	76.5	10:26:24	02-26-2008
15	1.02E-02	5.48E-03	0.838	73.6	10:26:32	02-26-2008
16	1.03E-02	5.49E-03	0.851	73.6	10:26:37	02-26-2008
17	1.03E-02	5.15E-03	0.847	73.8	10:26:41	02-26-2008
18	1.06E-02	5.28E-03	0.818	76.4	10:26:59	02-26-2008
19	1.20E-02	6.42E-03	0.77	83.5	10:27:04	02-26-2008
20	1.04E-02	5.33E-03	0.839	74.6	10:27:10	02-26-2008
21	1.07E-02	5.39E-03	0.798	77.6	10:27:21	02-26-2008
22	1.10E-02	5.55E-03	0.809	78.3	10:27:26	02-26-2008
23	1.12E-02	5.73E-03	0.827	77.9	10:27:31	02-26-2008
24	1.10E-02	4.90E-03	0.83	77.7	10:27:43	02-26-2008
25	1.09E-02	4.90E-03	0.83	77.5	10:27:48	02-26-2008
26	1.09E-02	4.89E-03	0.83	77.4	10:27:53	02-26-2008
27	9.86E-03	4.17E-03	0.825	74.1	10:28:02	02-26-2008
28	9.79E-03	4.07E-03	0.845	73.1	10:28:06	02-26-2008
29	9.79E-03	4.03E-03	0.832	73.7	10:28:11	02-26-2008
<b>average</b>	<b>1.076E-02</b>	<b>5.164E-03</b>	<b>0.830</b>	<b>76.610</b>		
<b>standard dev</b>	<b>5.770E-04</b>	<b>5.604E-04</b>	<b>0.019</b>	<b>2.498</b>		

### WHT Primary mirror after the CO2 cleaning

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
57	3.95E-03	1.01E-03	0.859	49.2	11:08:10	02-26-2008
58	3.97E-03	1.01E-03	0.861	49.2	11:08:14	02-26-2008
59	3.98E-03	1.02E-03	0.866	49.2	11:08:19	02-26-2008
60	7.30E-03	2.34E-03	0.851	64.7	11:08:26	02-26-2008
61	7.33E-03	2.34E-03	0.855	64.7	11:08:31	02-26-2008
62	7.33E-03	2.35E-03	0.856	64.7	11:08:35	02-26-2008
63	4.92E-03	1.47E-03	0.858	53.5	11:08:42	02-26-2008
64	4.92E-03	1.47E-03	0.859	53.4	11:08:47	02-26-2008
65	4.92E-03	1.47E-03	0.846	53.9	11:08:52	02-26-2008
66	6.26E-03	1.71E-03	0.846	61.7	11:09:08	02-26-2008
67	6.31E-03	1.71E-03	0.871	61	11:09:12	02-26-2008
68	6.32E-03	1.71E-03	0.864	61.4	11:09:17	02-26-2008

69	6.09E-03	1.67E-03	0.846	60.8	11:09:24	02-26-2008
70	6.18E-03	1.82E-03	0.883	59.2	11:09:29	02-26-2008
71	5.96E-03	1.67E-03	0.889	58.4	11:09:33	02-26-2008
72	4.48E-03	1.15E-03	0.862	52.3	11:09:43	02-26-2008
73	4.52E-03	1.15E-03	0.894	51.7	11:09:47	02-26-2008
74	4.50E-03	1.12E-03	0.9	51.6	11:09:52	02-26-2008
75	6.39E-03	1.80E-03	0.847	61.9	11:10:05	02-26-2008
76	6.43E-03	1.81E-03	0.86	61.6	11:10:09	02-26-2008
77	6.61E-03	1.91E-03	0.878	61.6	11:10:14	02-26-2008
78	4.66E-03	1.08E-03	0.869	54.2	11:10:27	02-26-2008
79	4.70E-03	1.08E-03	0.854	55.1	11:10:32	02-26-2008
80	4.71E-03	1.09E-03	0.858	54.9	11:10:37	02-26-2008
<b>average</b>	<b>5.531E-03</b>	<b>1.539E-03</b>	<b>0.864</b>	<b>57.079</b>		
<b>standard dev</b>	<b>1.118E-03</b>	<b>4.353E-04</b>	<b>0.015</b>	<b>5.256</b>		

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