

Reflectivity measurement - before, after CO2 cleaning INT primary mirror

Equipment:	uscan reflectometer		
Mirror:	INT Primary mirror		
Person:	Tibor Agocs		
Date:	27/7/2009		
Lambda (micron):	0.67		
Incident angle (degree):	25		
BW (Bandwidth) limits:	1	0.1	

INT mirror - before CO2

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
7	1.47E-02	1.09E-02	0.771	91.6	08:55:59	07-27-2009
8	1.46E-02	1.09E-02	0.762	92	08:56:03	07-27-2009
9	1.46E-02	1.09E-02	0.762	92	08:56:08	07-27-2009
10	1.60E-02	1.30E-02	0.75	97.1	08:56:22	07-27-2009
11	1.60E-02	1.29E-02	0.748	97.1	08:56:26	07-27-2009
12	1.60E-02	1.29E-02	0.75	96.9	08:56:30	07-27-2009
13	1.64E-02	1.14E-02	0.752	98.1	08:56:50	07-27-2009
14	1.64E-02	1.13E-02	0.753	97.9	08:56:54	07-27-2009
15	1.63E-02	1.13E-02	0.753	97.8	08:56:59	07-27-2009
16	1.57E-02	1.15E-02	0.742	96.6	08:57:08	07-27-2009
17	1.57E-02	1.15E-02	0.745	96.4	08:57:13	07-27-2009
18	1.57E-02	1.15E-02	0.744	96.4	08:57:17	07-27-2009
average	1.568E-02	1.165E-02	0.753	95.825		
standard dev	6.678E-04	8.070E-04	0.008	2.453		

INT mirror - after CO2

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
19	5.96E-03	2.03E-03	0.805	59.6	09:21:23	07-27-2009
20	5.94E-03	2.03E-03	0.81	59.3	09:21:27	07-27-2009
21	5.94E-03	2.03E-03	0.81	59.3	09:21:32	07-27-2009
22	6.95E-03	2.31E-03	0.836	63.4	09:21:39	07-27-2009
23	6.97E-03	2.33E-03	0.836	63.4	09:21:43	07-27-2009
24	6.95E-03	2.32E-03	0.837	63.3	09:21:47	07-27-2009
25	6.45E-03	1.92E-03	0.812	62.9	09:22:00	07-27-2009
26	6.47E-03	1.93E-03	0.81	63.1	09:22:05	07-27-2009
27	6.47E-03	1.93E-03	0.808	63.2	09:22:09	07-27-2009
28	6.04E-03	2.19E-03	0.802	59.7	09:22:18	07-27-2009
29	6.03E-03	2.18E-03	0.804	59.6	09:22:22	07-27-2009
30	6.03E-03	2.18E-03	0.804	59.6	09:22:27	07-27-2009
average	6.350E-03	2.115E-03	0.815	61.367		
standard dev	4.174E-04	1.557E-04	0.014	1.940		

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