

Reflectivity measurement - before, after washing INT primary mirror

Equipment:	uscan reflectometer		
Mirror:	INT Primary mirror		
Person:	Tibor Agocs		
Date:	20100119		
Lambda (micron):	0.67		
Incident angle (degree):	25		
BW (Bandwidth) limits:	1	0.1	

INT mirror - before washing

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
14	1.67E-02	6.36E-03	0.794	99.2	09:45:02	01-19-2010
15	1.66E-02	6.37E-03	0.791	99.2	09:45:10	01-19-2010
16	1.67E-02	6.37E-03	0.795	99	09:45:15	01-19-2010
17	1.24E-02	4.11E-03	0.809	86.2	09:45:22	01-19-2010
18	1.24E-02	4.12E-03	0.795	86.9	09:45:27	01-19-2010
19	1.24E-02	4.13E-03	0.808	86.2	09:45:31	01-19-2010
20	1.48E-02	5.75E-03	0.831	91.3	10:10:32	01-19-2010
21	1.48E-02	5.73E-03	0.83	91.3	10:10:37	01-19-2010
22	1.48E-02	5.71E-03	0.827	91.4	10:10:41	01-19-2010
23	1.03E-02	3.75E-03	0.796	78.3	10:10:48	01-19-2010
24	1.02E-02	3.74E-03	0.778	78.8	10:10:53	01-19-2010
25	1.02E-02	3.74E-03	0.744	80.6	10:10:57	01-19-2010
26	1.25E-02	4.80E-03	0.807	85.2	10:11:12	01-19-2010
27	1.26E-02	4.80E-03	0.81	85.4	10:11:16	01-19-2010
28	1.28E-02	4.89E-03	0.822	85.3	10:11:21	01-19-2010
29	2.15E-02	8.14E-03	0.75	116	10:11:29	01-19-2010
30	2.10E-02	8.09E-03	0.759	113.7	10:11:33	01-19-2010
31	2.10E-02	7.92E-03	0.795	111.2	10:11:38	01-19-2010
32	1.44E-02	4.67E-03	0.803	93.5	10:11:46	01-19-2010
33	1.91E-02	5.90E-03	0.77	110.5	10:11:51	01-19-2010
average	1.487E-02	5.454E-03	0.796	93.460		
standard dev	3.579E-03	1.434E-03	0.025	11.678		

INT mirror - after washing

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
34	1.21E-03	1.96E-04	0.84	31.4	11:33:15	01-19-1910
35	1.21E-03	1.96E-04	0.836	31.4	11:33:19	01-19-1910
36	1.21E-03	1.98E-04	0.835	31.4	11:33:23	01-19-1910
37	2.23E-03	3.69E-04	0.796	43.5	11:33:30	01-19-1910
38	2.24E-03	3.67E-04	0.793	43.8	11:33:34	01-19-1910
39	2.24E-03	3.66E-04	0.792	43.8	11:33:39	01-19-1910
40	1.56E-03	3.66E-04	0.844	31.8	11:33:51	01-19-1910
41	1.56E-03	3.66E-04	0.843	31.7	11:33:55	01-19-1910
42	1.55E-03	3.65E-04	0.843	31.7	11:33:59	01-19-1910
average	1.668E-03	3.096E-04	0.825	35.611		
standard dev	4.517E-04	8.477E-05	0.023	6.069		

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