

Reflectivity measurement - reference mirror

Equipment:	uscan reflectometer		
Mirror:	reference mirror		
Person:	Tibor Agocs		
Date:	03/06/2008		
Lambda (micron):	0.67		
Incident angle (degree):	25		
BW (Bandwidth) limits:	1	0.1	

Reference mirror

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
19	2.34E-03	1.36E-03	0.915	33.7	08:49:29	06/03/1908
20	2.34E-03	1.36E-03	0.909	33.8	08:49:33	06/03/1908
21	2.33E-03	1.36E-03	0.87	34.5	08:49:38	06/03/1908
22	2.32E-03	1.37E-03	0.931	33.3	08:49:44	06/03/1908
23	2.34E-03	1.37E-03	0.927	33.5	08:49:49	06/03/1908
24	2.32E-03	1.37E-03	0.939	33.1	08:49:54	06/03/1908
25	1.98E-03	1.93E-03	0.894	31.3	08:50:11	06/03/1908
26	2.31E-03	2.20E-03	0.884	34	08:50:16	06/03/1908
27	2.38E-03	1.94E-03	0.876	34.6	08:50:21	06/03/1908
28	2.42E-03	1.75E-03	0.847	35.5	08:50:25	06/03/1908
29	2.11E-03	1.46E-03	0.828	33.6	08:50:30	06/03/1908
30	2.22E-03	1.56E-03	0.891	33.2	08:50:40	06/03/1908
31	4.16E-03	5.60E-03	0.909	45.5	08:52:43	06/03/1908
32	4.09E-03	5.01E-03	0.914	44.8	08:52:48	06/03/1908
33	4.13E-03	5.01E-03	0.912	45.1	08:52:53	06/03/1908
34	4.02E-03	4.56E-03	0.904	44.6	08:52:58	06/03/1908
35	4.32E-03	4.78E-03	0.896	46.4	08:53:03	06/03/1908
36	5.92E-03	3.81E-03	0.904	53.8	08:53:07	06/03/1908
37	7.24E-03	3.12E-03	0.905	60.6	08:53:12	06/03/1908
38	4.77E-03	2.72E-03	0.881	49.1	08:53:21	06/03/1908
39	4.75E-03	2.73E-03	0.893	48.7	08:53:26	06/03/1908
40	4.75E-03	2.73E-03	0.905	48.3	08:53:30	06/03/1908
41	4.76E-03	2.73E-03	0.916	48.1	08:53:35	06/03/1908
average	3.492E-03	2.688E-03	0.898	40.830		
corrected with *1.05			0.929			
standard dev	1.449E-03	1.416E-03	0.026	8.325		

Reflectivity values have to be corrected with a factor of 1.035 (this have to be applied for all the measurements that was taken on 03/06/2008)

Notes:

RMS - Root Mean Square surface roughness in Angstrom,
 BPDF - Bidirectional scatter distribution function, it is equal to the scattered power per unit solid angle