

Reflectivity measurement

Equipment:	uscan reflectometer	
Mirror:	WHT Primary mirror - right side as seen from AP3	
Person:	Juerg Rey, Tibor Agocs	
Date:	28/11/2006	
Lambda (micron):	0.67	
Incident angle (degree):	25	
BW (Bandwidth) limits:	1	0.1

RIGHT HALF OF THE MIRROR - BEFORE

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
6	1.37E-02	5.24E-03	0.798	89.8	11:16:44	11-28-1906
7	1.43E-02	5.71E-03	0.728	95.6	11:16:54	11-28-1906
8	1.37E-02	5.10E-03	0.766	91.7	11:17:04	11-28-1906
9	1.05E-02	3.71E-03	0.824	78.1	11:17:18	11-28-1906
10	1.24E-02	4.11E-03	0.837	84.5	11:17:28	11-28-1906
11	1.11E-02	4.56E-03	0.844	78.1	11:17:36	11-28-1906
12	9.28E-03	3.15E-03	0.832	73.2	11:18:09	11-28-1906
13	9.89E-03	3.71E-03	0.818	75.4	11:18:17	11-28-1906
14	9.69E-03	3.68E-03	0.782	76.2	11:18:26	11-28-1906
15	9.81E-03	3.93E-03	0.854	73	11:19:19	11-28-1906
average	1.145E-02	4.289E-03	0.808	81.560		
standard dev	1.917E-03	8.266E-04	0.040	8.235		

RIGHT HALF OF THE MIRROR - AFTER

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
1	7.36E-03	1.37E-03	0.857	72.9	13:53:50	11-28-1906
2	6.05E-03	1.03E-03	0.845	68.7	13:53:59	11-28-1906
3	6.44E-03	1.05E-03	0.852	71.7	13:54:09	11-28-1906
4	4.71E-03	8.05E-04	0.873	59.5	13:54:59	11-28-1906
7	4.63E-03	7.27E-04	0.818	63	13:55:55	11-28-1906
8	5.14E-03	9.77E-04	0.87	60.1	13:56:02	11-28-1906
10	8.27E-03	1.63E-03	0.788	79.2	13:56:20	11-28-1906
11	9.63E-03	1.79E-03	0.827	84.9	13:56:26	11-28-1906
12	7.58E-03	1.56E-03	0.843	72.4	13:56:33	11-28-1906
13	8.29E-03	1.65E-03	0.828	77.1	13:58:07	11-28-1906
14	8.03E-03	1.78E-03	0.815	74.3	13:58:16	11-28-1906
15	1.40E-02	2.66E-03	0.808	102.9	13:58:23	11-28-1906
16	1.25E-02	2.54E-03	0.855	92.4	13:58:31	11-28-1906
17	9.14E-03	2.06E-03	0.857	77	13:58:39	11-28-1906
average	7.978E-03	1.546E-03	0.838	75.436		
standard dev	2.731E-03	6.019E-04	0.025	11.997		

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 normalized by the incident power and $\cos\theta$