

## Reflectivity measurement - before, after CO2 cleaning

Equipment:	uscan reflectometer		
Mirror:	INT Primary mirror		
Person:	Tibor Agocs, Neil O'Mahony		
Date:	20100405		
Lambda (micron):	0.67		
Incident angle (degree):	25		
BW (Bandwidth) limits:	1	0.1	

### INT mirror - before cleaning

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
7	1.31E-02	3.69E-03	0.803	90.8	10:40:16	04/05/2010
8	1.14E-02	4.31E-03	0.788	82.4	10:40:23	04/05/2010
9	5.04E-03	1.90E-03	0.823	53.6	10:40:30	04/05/2010
10	8.06E-03	2.71E-03	0.764	71.3	10:40:39	04/05/2010
11	4.63E-03	2.19E-03	0.826	50.4	10:40:46	04/05/2010
12	5.11E-03	2.75E-03	0.808	53.2	10:40:53	04/05/2010
13	5.00E-02	6.13E-03	0.674	257.5	10:41:02	04/05/2010
<b>average</b>	<b>1.391E-02</b>	<b>3.382E-03</b>	<b>0.784</b>	<b>94.171</b>		
<b>standard dev</b>	<b>1.627E-02</b>	<b>1.473E-03</b>	<b>0.053</b>	<b>73.700</b>		

### INT mirror - after cleaning

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
15	2.05E-03	3.61E-04	0.815	40.1	11:16:30	04/05/2010
16	6.69E-03	1.62E-03	0.829	65.9	11:16:38	04/05/2010
17	6.64E-03	1.60E-03	0.815	66.3	11:16:43	04/05/2010
18	6.57E-03	1.60E-03	0.819	65.6	11:16:47	04/05/2010
19	1.95E-03	4.52E-04	0.832	35.8	11:16:55	04/05/2010
20	1.95E-03	4.46E-04	0.844	35.7	11:16:59	04/05/2010
21	1.96E-03	4.34E-04	0.863	35.6	11:17:04	04/05/2010
22	6.90E-03	1.35E-03	0.793	72.3	11:17:14	04/05/2010
23	6.89E-03	1.35E-03	0.784	72.6	11:17:19	04/05/2010
24	6.90E-03	1.35E-03	0.78	72.8	11:17:24	04/05/2010
25	3.09E-03	6.01E-04	0.837	47.2	11:17:32	04/05/2010
26	3.10E-03	6.00E-04	0.839	47.2	11:17:36	04/05/2010
27	3.09E-03	6.03E-04	0.838	47.1	11:17:41	04/05/2010
<b>average</b>	<b>4.444E-03</b>	<b>9.521E-04</b>	<b>0.822</b>	<b>54.169</b>		
<b>standard dev</b>	<b>2.278E-03</b>	<b>5.216E-04</b>	<b>0.025</b>	<b>15.274</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