

Reflectivity measurement - Before and After Snow Cleaning

Equipment:	uscan reflectometer	
Mirror:	WHT Primary mirror	
Person:	Neil O'Mahony	
Date:	13/04/2007	
Lambda (micron):	0.67	
Incident angle (degree):	25	
BW (Bandwidth) limits:	1	0.1

Before

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
2	2.77E-03	1.32E-03	0.875	37.9	09:31:09	04-13-1907
3	1.90E-03	5.42E-04	0.884	33	09:31:24	04-13-1907
4	4.33E-03	2.54E-03	0.869	47.1	09:31:35	04-13-1907
5	6.79E-03	4.63E-03	0.851	59.3	09:31:55	04-13-1907
6	3.29E-03	1.68E-03	0.881	40.9	09:32:22	04-13-1907
7	4.31E-03	2.62E-03	0.899	46.1	09:32:36	04-13-1907
8	3.24E-03	1.81E-03	0.89	40.3	09:32:47	04-13-1907
9	3.62E-03	1.70E-03	0.871	43.4	09:33:05	04-13-1907
10	2.06E-03	8.92E-04	0.855	33.2	09:33:18	04-13-1907
11	3.68E-03	2.52E-03	0.864	43.3	09:33:38	04-13-1907
12	3.66E-03	2.39E-03	0.862	43.3	09:33:47	04-13-1907
13	2.55E-03	8.53E-04	0.874	37.5	09:33:57	04-13-1907
14	5.20E-03	2.47E-03	0.864	52.2	09:34:14	04-13-1907
15	4.97E-03	2.26E-03	0.863	51.2	09:34:26	04-13-1907
16	3.37E-03	1.47E-03	0.874	42	09:34:49	04-13-1907
17	3.38E-03	1.27E-03	0.873	42.6	09:35:00	04-13-1907
18	3.02E-03	1.56E-03	0.874	39.4	09:35:10	04-13-1907
19	4.76E-03	3.30E-03	0.866	49.3	09:35:21	04-13-1907
average	3.716E-03	1.989E-03	0.872	43.444		
standard dev	1.199E-03	9.802E-04	0.012	6.680		

After

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
1	3.56E-02	1.53E-02	0.723	150.2	11:00:27	04-13-1907
2	1.47E-03	3.36E-04	0.868	30.5	11:00:39	04-13-1907
3	1.48E-03	1.45E-04	0.868	45.2	11:00:51	04-13-1907
4	1.79E-03	3.86E-04	0.873	34.1	11:01:03	04-13-1907
5	1.97E-03	5.74E-04	0.868	33.8	11:01:12	04-13-1907
6	1.27E-03	3.17E-04	0.874	27.8	11:01:23	04-13-1907
7	1.26E-03	2.16E-04	0.87	30.7	11:01:35	04-13-1907
8	1.49E-03	2.61E-04	0.869	33.2	11:01:44	04-13-1907
9	1.65E-03	2.36E-04	0.866	38.1	11:01:52	04-13-1907
10	1.90E-03	2.28E-04	0.925	43.4	11:02:03	04-13-1907
11	1.66E-03	2.85E-04	0.882	35	11:02:19	04-13-1907
12	1.76E-03	3.13E-04	0.909	35.1	11:02:27	04-13-1907
13	1.96E-03	2.99E-04	0.881	39.9	11:02:34	04-13-1907
14	1.27E-03	1.69E-04	0.885	34.2	11:02:45	04-13-1907
15	1.50E-03	2.19E-04	0.883	35.6	11:02:57	04-13-1907
16	2.08E-03	2.73E-04	0.882	44.2	11:03:07	04-13-1907

17	1.71E-03	2.06E-04	0.88	42.1	11:03:19	04-13-1907
18	1.93E-03	2.36E-04	0.88	44.2	11:03:27	04-13-1907
19	1.94E-03	3.62E-04	0.9	36.5	11:03:37	04-13-1907
20	1.63E-03	3.33E-04	0.875	33.1	11:03:52	04-13-1907
average	3.363E-03	1.037E-03	0.873	42.345		
standard dev	7.587E-03	3.368E-03	0.038	25.877		

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 $\cos\theta$