

Reflectivity measurement - reference mirror

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

Reference mirror

| No# | BSDF - 0°,0° detector position | BSDF - 50°,180° detector position | reflectivity | rms (Ångstrom) | time | date |
|---------------------|---|--|--------------|-------------------|----------|------------|
| 1 | 1.33E-03 | 7.83E-04 | 0.864 | 26.2 | 09:42:38 | 01-19-2010 |
| 2 | 1.37E-03 | 7.91E-04 | 0.855 | 26.7 | 09:42:42 | 01-19-2010 |
| 3 | 1.37E-03 | 7.92E-04 | 0.859 | 26.6 | 09:42:47 | 01-19-2010 |
| 4 | 5.13E-03 | 2.79E-03 | 0.883 | 50.9 | 09:42:53 | 01-19-2010 |
| 5 | 5.17E-03 | 2.81E-03 | 0.884 | 51.1 | 09:42:57 | 01-19-2010 |
| 6 | 5.19E-03 | 2.80E-03 | 0.891 | 51 | 09:43:02 | 01-19-2010 |
| average | 3.261E-03 | 1.794E-03 | 0.873 | 38.750 | | |
| standard dev | 2.086E-03 | 1.101E-03 | 0.015 | 13.420 | | |

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