

XPS Argon Sputter Etch Rates of SiO₂

| Sample | Tox Initial (A) | Sputter Conditions | | | Tox Final (A) | | | | | Amt Etched (A) | Etch Rate (A/min) |
|--------|-----------------|--------------------|-------------|--------------------|---------------|------|------|------|----------|----------------|-------------------|
| | | Spot Size | Raster (mm) | Sputter Time (min) | 1 | 2 | 3 | Avg | St. Dev. | | |
| 1 | 2011 | 5kV Large | 0 | 5 | 1952 | 1955 | 1928 | 1945 | 15 | 66 | 13 |
| 2 | 1997 | 5kV Large | 0 | 10 | 1843 | 1815 | 1808 | 1822 | 19 | 175 | 18 |
| 3 | 1967 | 5kV Large | 0 | 15 | 1783 | 1757 | 1757 | 1766 | 15 | 201 | 13 |
| 4 | 1971 | 5kV Large | 0 | 20 | 1723 | 1747 | 1734 | 1735 | 12 | 236 | 12 |
| | | | | | | | | | | AVG: | 14 |

| | | | | | | | | | | | |
|---|------|---------|---|----|------|------|------|------|----|------|----|
| 5 | 1983 | 5kV Med | 2 | 5 | 1731 | 1701 | 1715 | 1716 | 15 | 267 | 53 |
| 6 | 1996 | 5kV Med | 2 | 8 | 1613 | 1614 | 1662 | 1630 | 28 | 366 | 46 |
| 7 | 1983 | 5kV Med | 2 | 12 | 1343 | 1383 | 1350 | 1359 | 21 | 624 | 52 |
| 8 | 2001 | 5kV Med | 2 | 15 | 1285 | 1234 | 1277 | 1265 | 27 | 736 | 49 |
| | | | | | | | | | | AVG: | 50 |

