

Oxford 82-Ar/O2 BARC etch DOE

Total flow: 50 sccm

Factors:

O2%: 5-15%

RIE: 30-50W

Pressure: 10-20mT

Level settings:

O2(sccm): 2.5, 5.0, 7.5

RIE: 30, 40, 50W

Pressure: 10, 20, 30mT

Run	Power	Pressure	O2	BARC ER	S(PR)
1	30	10	2.5	34	1.6
2	30	15	5.0	38	1.2
3	30	20	7.5	38	2.5
4	40	10	5.0	59	1.1
5	40	15	7.5	55	2.1
6	40	20	2.5	47	1.1
7	50	10	7.5	59	0.8
8	50	15	2.5	56	1.2
9	50	20	5.0	59	0.9

Optimized condition: Ar=42.5, O2=7.5, 40W, 15mT, ER=55nm/min, S(PR)=2.1