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InP Etch using Unaxis PM1 tool at 200 C (Targeting at a lower etch rate and a reasonable good etch profile)													
Sample	Pressure (mT)	Power (W)		Gas Flow-rate (SCCM)			Chuck Temp(C)	Etch Time (second)	Etch Rate (um/min)	Selectivity (InP/SiO_2)	Side-wall Roughness	Etched Surface Roughness	Side-wall Angle (°)
		Bias (Voltage)	ICP	Cl_2	N_2	H_2							
1721	2.5	150(354v)	200	3	45	0	200	300	0.138	6.9	smooth	smooth (MT)	82.1
1722	2.5	150(412v)	100	3	45	0	200	300	0.113	11.1	smooth	smooth(MT)	~85
1723	2.5	150(438v)	50	3	45	0	200	300	0.0964	15.1	smooth	smooth(MT)	~85
1724	2.5	150(443v)	0	3	45	0	200	300	0.11	19.7	very rough	grass	undercut

MT: Micro-trench

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Figure 1 Etch Profile of InP#1721.

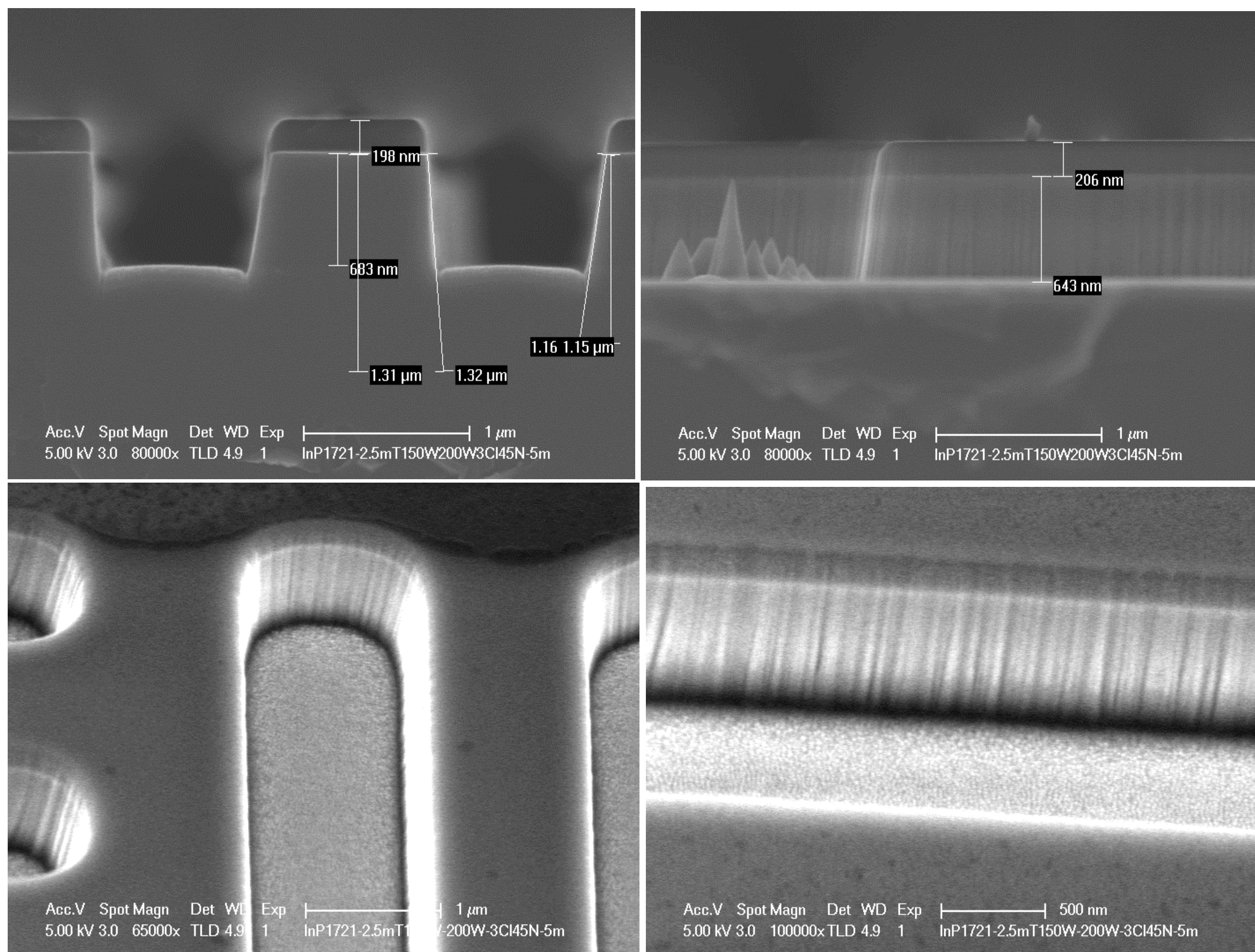

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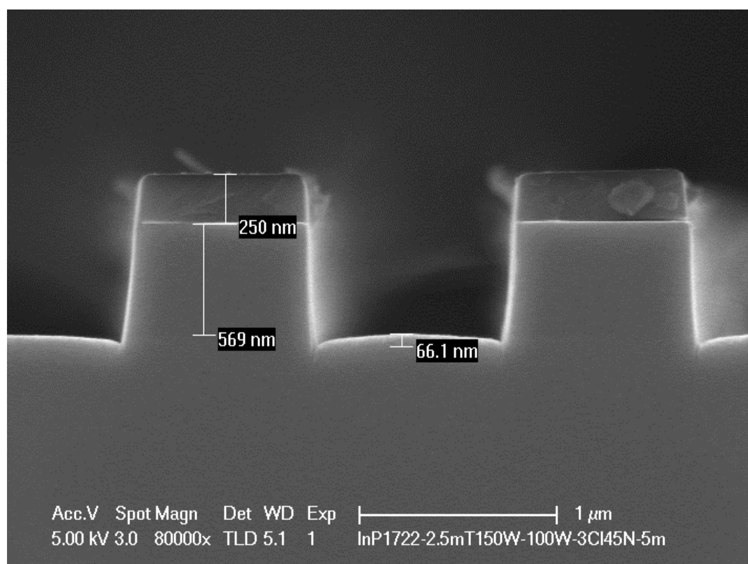
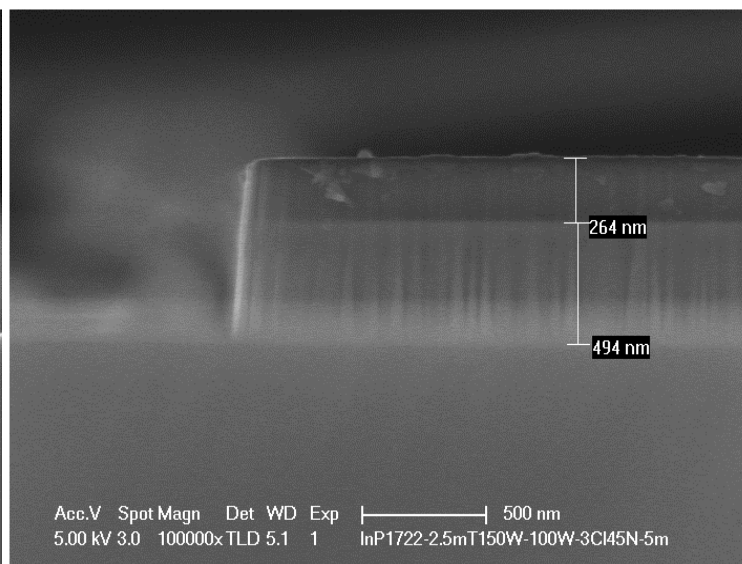
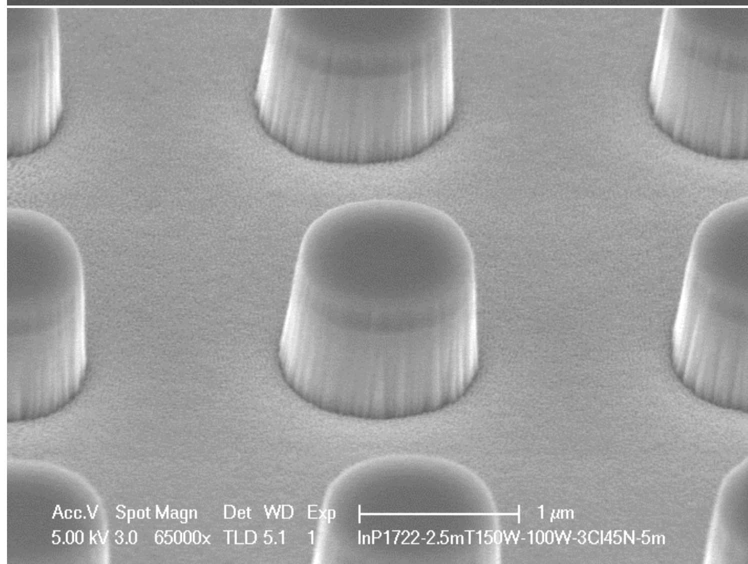
Figure 2 Etch Profile of InP#1722.







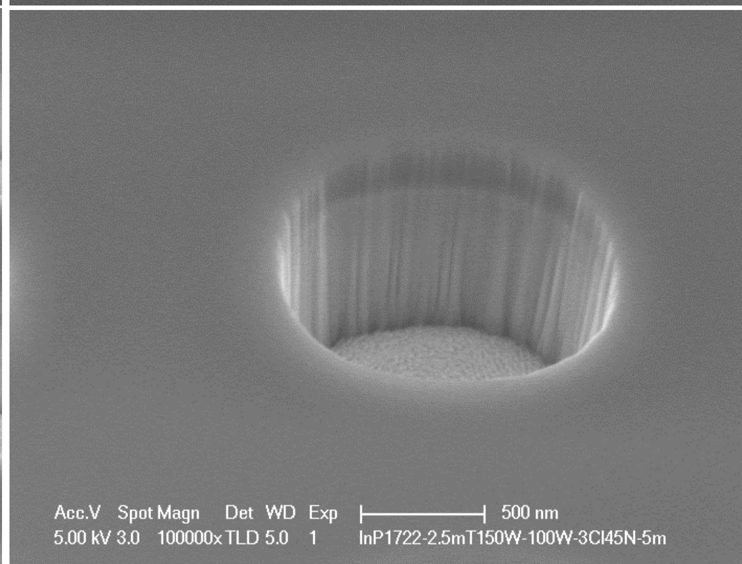


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Figure 3 Etch Profile of InP#1723.

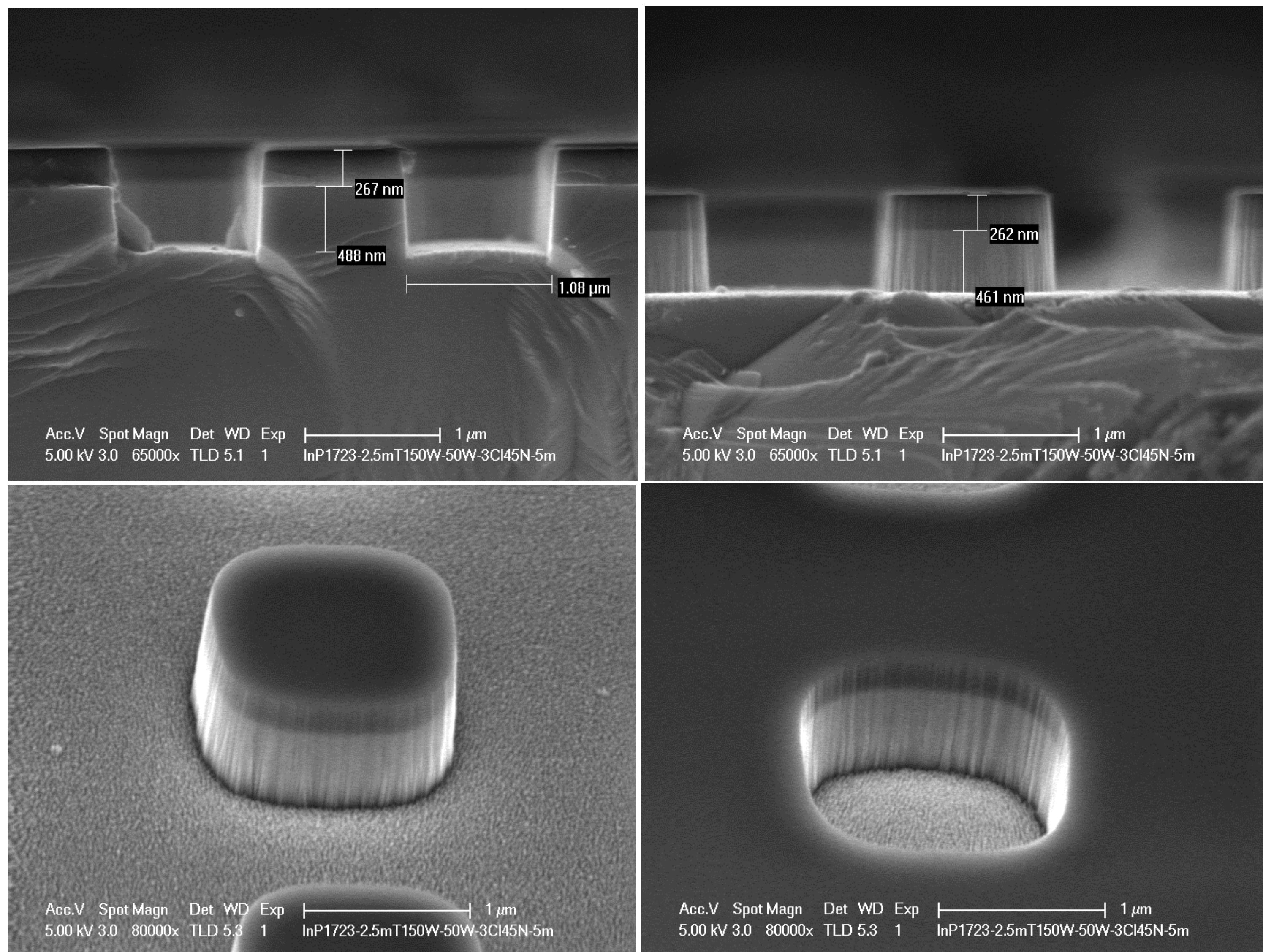

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Figure 4 Etch Profile of InP#1724.