

Using Nominal Cuts: +/- 2 sigma in Time-of-Flight, -1 to +3 sigma in Energy

Polarization, Run 1:

$\lambda(\text{fit}) = 0.3117 \pm 0.0098$

$A_0(\text{fit}) = 43.90 \pm 0.12$

$S_{\text{theory}} = 0.51 \pm 0.5\% = 0.51 \pm 0.003$

$P_0 = A_0/S_{\text{theory}}$

$P_0 = 86.078 \pm 0.558$ <-- Error increased as result of addition of 1/2 % error on S_{theory}

Polarization, Run 2:

$\lambda(\text{fit}) = 0.3136 \pm 0.0098$

$A_0(\text{fit}) = 43.97 \pm 0.10$

$S_{\text{theory}} = 0.51 \pm 0.5\% = 0.51 \pm 0.003$

$P_0 = A_0/S_{\text{theory}}$

$P_0 = 86.216 \pm 0.544$

Target Ladder Position	Foil			Run 1		Run 2	
	Nominal Thickness (nm)	FESEM Thickness (nm)	d(FESEM Thickness) (nm)	Physics Asymmetry (%)	d(Asymmetry) (%)	Physics Asymmetry (%)	d(Asymmetry) (%)
15	1000	943.71	78.19	33.774	0.0801	33.817	0.0729
3	870	836.76	48.76	34.622	0.0782	34.828	0.0896
4	750	774.57	44.33	35.618	0.0817	35.703	0.0915
2	625	561.18	37.24	37.246	0.0840	37.075	0.0758
5	500	487.58	28.78	38.608	0.0825	38.602	0.0925
14	350	389.44	22.21	39.185	0.0897	39.083	0.0944
8	350	389.44	22.21	39.182	0.0829	39.264	0.0941
1	225	215.17	12.57	40.959	0.0722	40.928	0.0932
12	50	50.00	5.00	43.221	0.0887	43.311	0.1043
13	50	52.03	5.99	43.506	0.0872	43.310	0.1030
15-stability	1000	943.71	78.19	33.643	0.0614	33.859	0.0445

Run 1: P_0 = 86.078 +/- 0.558				
FESEM Thickness	Asymmetry	Uncertainty	Effective Sherman Function	Uncertainty
943.709	33.774	0.080	0.392	0.002
836.758	34.622	0.078	0.402	0.003
774.565	35.618	0.082	0.414	0.003
561.178	37.246	0.084	0.433	0.003
487.581	38.608	0.082	0.449	0.003
389.444	39.185	0.090	0.455	0.003
389.444	39.182	0.083	0.455	0.003
215.171	40.959	0.072	0.476	0.003
50.000	43.221	0.089	0.502	0.003
52.027	43.506	0.087	0.505	0.003
943.709	33.643	0.061	0.391	0.002

Run 2: P_0 = 86.216 +/- 0.544				
FESEM Thickness	Asymmetry	Uncertainty	Effective Sherman Function	Uncertainty
943.709	33.817	0.0729	0.392	0.002
836.758	34.828	0.0896	0.404	0.003
774.565	35.703	0.0915	0.414	0.003
561.178	37.075	0.0758	0.430	0.003
487.581	38.602	0.0925	0.448	0.003
389.444	39.083	0.0944	0.453	0.003
389.444	39.264	0.0941	0.455	0.003
215.171	40.928	0.0932	0.475	0.003
50.000	43.311	0.1043	0.502	0.003
52.027	43.310	0.1030	0.502	0.003
943.709	33.859	0.0445	0.393	0.002