Study2-A Front-End: Towards a realistic channel

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Front End Performance

Table 1: Study-2; Palmer; Maxwellian B_z periodic in drift and buncher; Be windows in the buncher

	λ	ϵ_T		ϵ_L		ϵ_6		N_0		N_1		N_2	
ST-2.		7.7	2.7	95.0	25.6	6.0	0.2	0.37	0.22			0.08	0.16
Palmer.	0.	9.5	6.5	72.4	62.5	6.6	2.7	0.51	0.42	0.20	0.24	0.08	0.12
D.&B.	0.5/0.75	9.6	6.7	69.3	65.7	6.5	3.0	0.47	0.39	0.17	0.21	0.08	0.11
Maxw.	0.5/0.75	10.0	6.9	81.8	70.6	8.2	3.4	0.41	0.33	0.14	0.16	0.06	0.08
+win.	0.5/0.75	9.9	7.4	93.9	93.8	9.2	5.3	0.27	0.21	0.08	0.08	0.04	0.03

The first value of ϵ_T is at 266 m and the second at 315.48 m; likewise with the other variables

N_0 total μ/p

N_1 within $\epsilon_T = 30$ mm-rad and $\epsilon_L = 150$ mm

N_2 within $\epsilon_T = 15$ mm-rad and $\epsilon_L = 150$ mm

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