Study2-A Front-End: Towards a realistic channel

Friday Phone meeting
February 27, 2004

J. Gallardo

Brookhaven National Laboratory

Muon Collaboration

Front End Performance

Table 1: Study-2; Palmer; B_z periodic in drift and buncher: [1] R=0.32 [2] R=0.43; Maxwellian and 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.[1]	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
D.&B.[2]	0.5/0.75	9.7	6.6	76.3	63.0	7.3	2.7	0.45	0.37	0.17	0.20	0.08	0.11
Maxw.	0.5/0.75	9.8	6.6	68.1	60.2	6.7	2.7	0.44	0.36	0.17	0.20	0.07	0.10
+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

Muon Collaboration