

Derivatives for full-energy (12 GeV) electrons as a function of distance from Effective Field Boundary (EFB = pole root at full-energy exit edge)

x_0, x'_0 = horizontal position and angle at radiator

z_0, z'_0 = vertical position and angle at radiator

x, x' = horizontal position and angle at endplane

z, z' = vertical position and angle at endplane

Derivatives calculated using steps of 1 mm, 1 mr, 10 MeV

		No quad									
	dist	dx/dx_0	dx/dx'_0	dx'/dx_0	dx'/dx'_0	dz/dz_0	dz/dz'_0	dz'/dz_0	dz'/dz'_0	dx/dp	dx'/dp
	m	mm/mm	mm/mr	mr/mm	mr/mr	mm/mm	mm/mr	mr/mm	mr/mr	mm/MeV	mr/MeV
EFB+4m	4	1.00421	13.45318	-0.00063	0.98702	0.940729	13.18237	-0.00814	0.950964	0.140307	1.95E-05
EFB+6m	6	1.00293	15.45587	-0.00063	0.98702	0.924329	15.09817	-0.00814	0.950964	0.179944	1.95E-05
EFB+8m	8	1.0016	17.4585	-0.00063	0.98702	0.907929	17.01397	-0.00814	0.950964	0.21957	1.95E-05
EFB+10m	10	1.0003	19.4612	-0.00063	0.98702	0.891528	18.92977	-0.00814	0.950964	0.25919	1.95E-05

		With quad (-62.5 gauss/mm)									
	dist	dx/dx_0	dx/dx'_0	dx'/dx_0	dx'/dx'_0	dz/dz_0	dz/dz'_0	dz'/dz_0	dz'/dz'_0	dx/dp	dx'/dp
	m	mm/mm	mm/mr	mr/mm	mr/mr	mm/mm	mm/mr	mr/mm	mr/mr	mm/MeV	mr/MeV
EFB+4m	4	1.62164	14.1167	0.04888	1.0403	0.338384	12.53389	-0.05557	0.899686	0.140307	1.95E-05
EFB+6m	6	1.72082	16.22754	0.04888	1.0403	0.226429	14.34639	-0.05557	0.899686	0.179944	1.95E-05
EFB+8m	8	1.8199	18.3382	0.04888	1.0403	0.114475	16.15889	-0.05557	0.899686	0.21957	1.95E-05
EFB+10m	10	1.9191	20.449	0.04888	1.0403	0.00252	17.97138	-0.05557	0.899686	0.25919	1.95E-05