

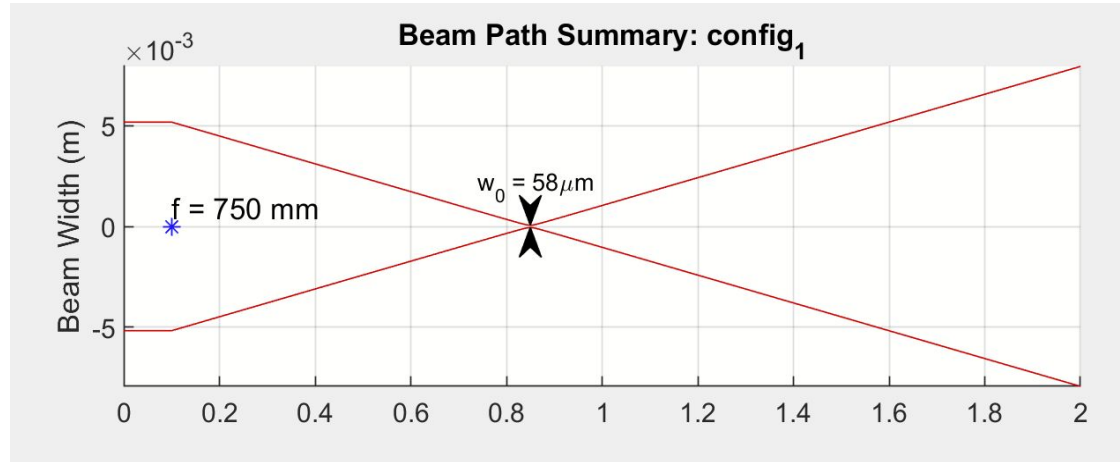


LDF Layout Concepts

J. Terrones

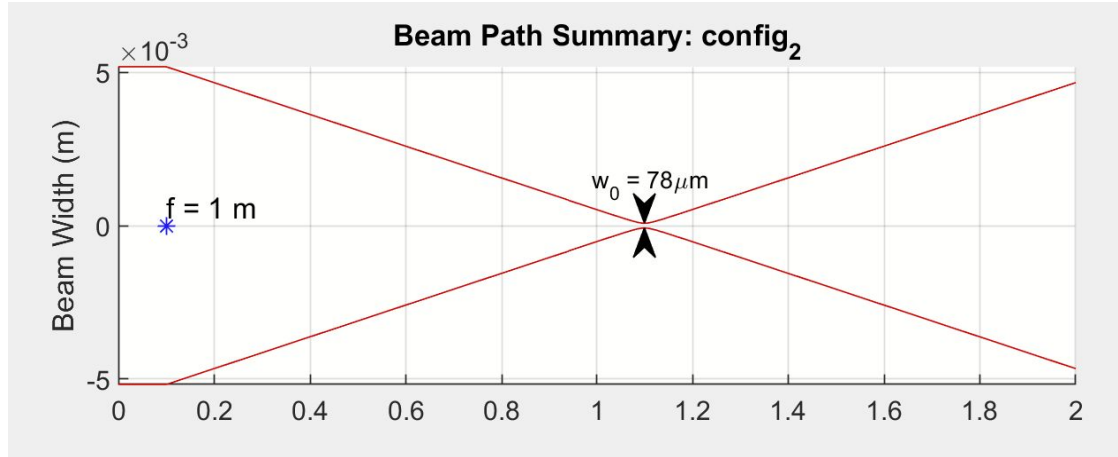


750 mm



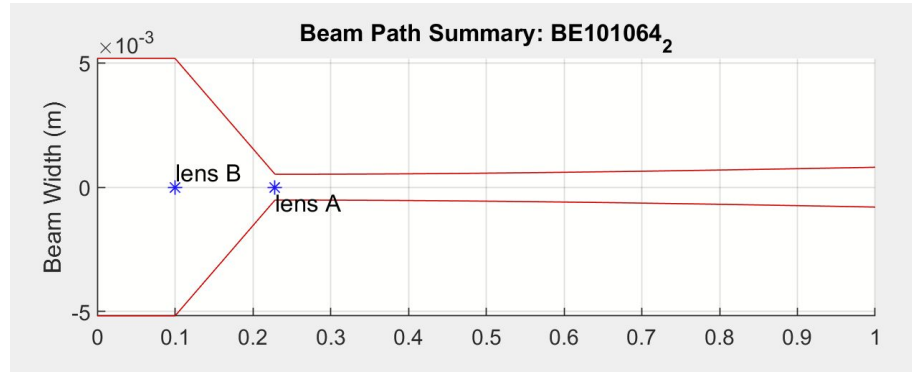
Optic	Offset [mm]	Beam Waist [μm]	Power Density [W/mm^2]	% Error
	0	58.34	18704.55	0.00
f = 750 mm	1	58.81	18406.78	1.59
	3	62.1	16508.09	11.74
	5	68.09	13731.36	26.59

1000 mm



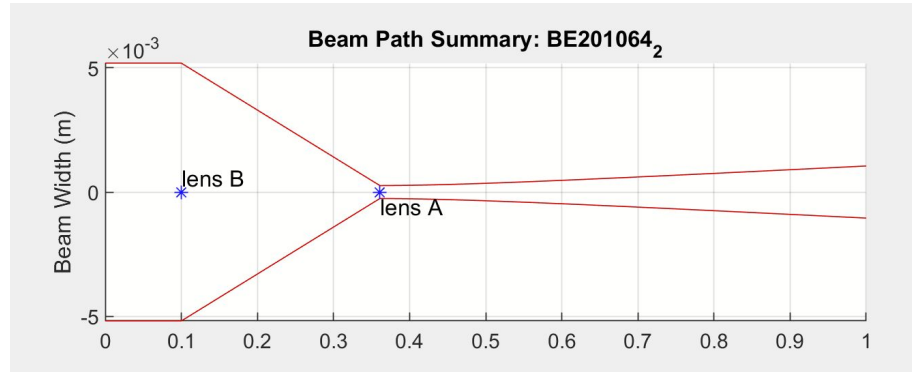
Optic	Offset [mm]	Beam Waist [μm]	Power Density [W/mm^2]	% Error
f = 1000 mm	0	77.78	10523.11	0.00
	1	78.02	10458.47	0.61
	3	79.52	10067.63	4.33
	5	82.31	9396.69	10.70

10X Beam Expander



Optic	Z Position (mm)	Beam Waist [mm]	Power Density [W/mm ²]	% Error
BE 10-1064	295 (-5)	0.5219	233.73	0.19
	297 (-3)	0.5221	233.55	0.11
	299 (-1)	0.5223	233.37	0.04
	300	0.5224	233.28	0.00
	301 (+1)	0.5225	233.19	0.04
	303 (+3)	0.5227	233.01	0.11
	305 (+5)	0.5229	232.83	0.19

20X Beam Expander



Optic	Z Position (mm)	Beam Waist [mm]	Power Density [W/mm ²]	% Error
BE 20-1064	395 (-5)	0.2694	877.17	1.64
	397 (-3)	0.2702	871.99	1.04
	399 (-1)	0.2711	866.21	0.37
	400	0.2716	863.02	0.00
	401 (+1)	0.2721	859.85	0.37
	403 (+3)	0.273	854.19	1.02
	405 (+5)	0.274	847.97	1.74