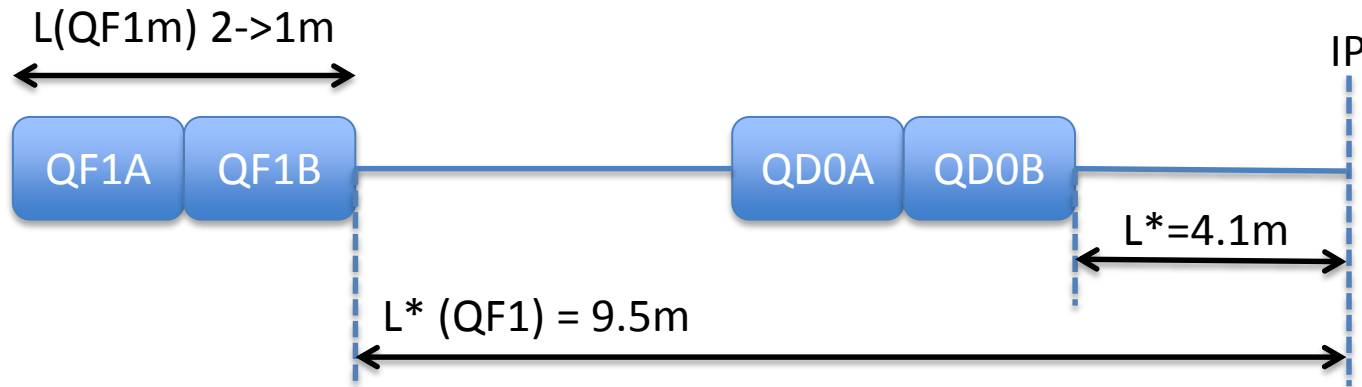


Summary of IR Optics for Single L^* CR



- In general: better performance for shorter L^* if free to set both QF1 and QD0 positions.
- QF1 position fixed by push-pull constraints to $\sim > 9m$
 - Better FFS performance for longer L^* (smaller QF1-QD0 distance)
 - Optimal $L^* \sim 4m$. Choose 4.1m to ensure room with ILD design for BPM d/s QD0 for “IPBPM”
- For $L^* = 4.1m$ considered QF1 position @ 9.5 or 9.1m
 - For expected tolerances, negligible tuning performance improvement for 9.1m. Improvements @ 9.1m become a little more pronounced for degraded parameters (e.g. larger than design ϵ_x)
 - Collimation depth optimal @ 9.5m
 - No compelling reason to change from 9.5- \rightarrow 9.1m, recommend keeping 9.5m distance.

Preparation of New Optics Decks

- Have decks for baseline parameters (250, 350, 500 GeV). With various changes from 'TDR' lattices for BDS.
- Now in process of releasing new complete TDR decks (See M. Woodley talk Thursday).
 - After CR2 approval -> need merge changes used for shown simulation studies into official deck.
 - Includes some changes required for tuning (e.g. introduction of skew-sextupole magnets).
- After FD design is finalized, need to also update extraction line optics based on FD fields and QDEX1 position.