HL-LHC v1.5. Flat optics. End of levelling.

 $N_b = 1.4 \times 10^{11} \text{ppb}, \ \beta_{v, \text{IP1}}^* = 7.5 \text{ cm}, \ \beta_{x, \text{IP1}}^* = 18 \text{ cm}, \ \Phi/2_{\text{IP1(H)/5(V)}} = 250 \ \mu\text{rad}$

CC ON, $\sigma_z = 7.61$ cm, $\Phi/2_{IP8, V} = 170$ µrad, $\varepsilon_n = 2.5$ µm, Q' = 15, $I_{MO} = 60$ A, $C^- = 10^{-3}$ - 9 60.325 -- 8 60.323 -60.321 Vertical tune Q_v 60.319 -60.317 -60.315 -60.313 -60.311 -60.309 -60.307 -60.305 Q.36 Q.36 Q.38 Q.31 Q.313 Q.315 Q.31 Q.319 Q.31 Q.312 Q.315

Horizontal tune Q_x