HL-LHC v1.6. E = 7.0 TeV. CC = 0.0 μ rad. N_b $\simeq 2.2 \times 10^{11}$ ppb, $L_{1/5} = 0 \text{cm}^{-2} \text{s}^{-1}, L_2 = 0 \text{cm}^{-2} \text{s}^{-1}, L_8 = 0 \text{cm}^{-2} \text{s}^{-1}$ $PU_{1/5} = 0$, $\beta_{x,1}^* = 1.1$ m, $\beta_{y,1}^* = 1.1$ m, polarity $IP_{2/8} = 1/1$ $\Phi/2_{1(H)} = 250 \mu rad, \Phi/2_{5(V)} = 250 \mu rad, \Phi/2_{2,V} = -170 \mu rad, \Phi/2_{8,V} = 170 \mu rad$ $\sigma_z = 7.61$ cm, $\varepsilon_n = 2.3$ µm, Q' = 15, $I_{MO} = -300.0$ A, $C^- = 0.001$ 25ns_2760b_2748_2492_2574_288bpi_13inj_800ns_bs200ns.json. Bunch 150. 6306307530631163126316316316326326336636 8.0 ≥8.0 ≥8.0 ≥8.0 ≥8.0 ≥8.0 ≥8.0 ≥8.0 ≥8.0 $60.315 - 28.0 \ge 8.0 \ge 8.0 \ge 8.0 \ge 8.0 \ge 8.0 \ge 8.0$ - 4.5 $60.313 - \ge 8.0 \ge 8.0 \ge 8.0 \ge 8.0 \ge 8.0$ ≥8.0 ≥8.0 ≥8.0 ≥8.0 60.311 - ≥8.0 ≥8.0 ≥8.0 60.309 -Horizontal tune Q_x

ertical tune Q_v