HL-LHC v1.6. E = 7.0 TeV. $CC = -190.0 \mu \text{rad}$. $N_b \simeq 1.13 \times 10^{11} \text{ ppb}$, $L_{1/5} = 5.05 \times 10^{34} \text{cm}^{-2} \text{s}^{-1}, L_2 = 1.93 \times 10^{30} \text{cm}^{-2} \text{s}^{-1}, L_8 = 1.98 \times 10^{33} \text{cm}^{-2} \text{s}^{-1}$ $PU_{1/5} = 132$, $\beta_{x=1}^* = 0.15$ m, $\beta_{y=1}^* = 0.15$ m, polarity $IP_{2/8} = 1/1$ $\Phi/2_{1(H)} = 250 \,\mu\text{rad}, \,\Phi/2_{5(V)} = 250 \,\mu\text{rad}, \,\Phi/2_{2,V} = -170 \,\mu\text{rad}, \,\Phi/2_{8,V} = 170 \,\mu\text{rad}$ $\sigma_z = 7.61$ cm, $\varepsilon_n = 2.5$ μ m, Q' = 15, $I_{MO} = 60.0$ A, $C^- = 0.001$ 25ns_2760b_2748_2492_2574_288bpi_13inj_800ns_bs200ns_converted.json. Bunch 149. 65.302 65.302 65.311 65.312 65.312 65.310 65.351 65.352 65.352 60.329 -8.0 $(5.0 \le 5.0 \le 5.0$ 60.319 -60.317 -- 5.0 60.315 -- 4.5 60.313 -60.311 -60.309 Horizontal tune Q_x

rertical tune Q_v