HL-LHC v1.6. E = 7.0 TeV. $N_b \simeq 2.2 \times 10^{11}$ ppb, $L_{1/5} = 2.48 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}, L_2 = 7.2 \times 10^{30} \text{ cm}^{-2} \text{ s}^{-1}, L_8 = 1.97 \times 10^{33} \text{ cm}^{-2} \text{ s}^{-1}$ $\beta_{x,1}^* = 1.1 \text{ m}, \beta_{x,1}^* = 1.1 \text{ m}, \text{ polarity IP}_{2/8} = 1/1$ $\Phi/2_{1(V)} = 250 \,\mu\text{rad}, \,\Phi/2_{5(H)} = 250 \,\mu\text{rad}, \,\Phi/2_{2,V} = -170 \,\mu\text{rad}, \,\Phi/2_{8,V} = 170 \,\mu\text{rad}$ $\sigma_z = 7.61 \text{ cm}, \ \varepsilon_n = 2.3 \ \mu\text{m}, \ Q' = 15, \ I_{MO} = -300.0 \ A, \ C^- = 0.001$ 25ns_2760b_2748_2492_2574_288bpi_13inj_800ns_bs200ns.json. Bunch 150. 65.302 65.302 65.311 65.312 65.312 65.310 65.351 65.352 65.352 60.327 - 440 4.0 4.0 4.0 4.0 4.1 4.1 4.3 4.0 4.2 4.3 4.1 4.0 4.4 4.3 4. 60.323 - 4.1 4.3 4.3 4.3 4.3 60.321 - 42 4.1 4.3 4.3 60.319 - 4.2 4.1 - 5.0 - 4.5

60.329 -

60.317 - 4.2

60.315 - ≤4.0

60.313 - 4.2

60.309 -

60.311 - 4.0

/ertical tune Q_v

Horizontal tune Q_x