HL-LHC v1.6. E = 7.0 TeV. $N_b \simeq 2.3 \times 10^{11}$ ppb, $L_{1/5} = 2.04 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}, L_2 = 3.46 \times 10^{30} \text{ cm}^{-2} \text{ s}^{-1}, L_8 = 2 \times 10^{33} \text{ cm}^{-2} \text{ s}^{-1}$ $\beta_{x,1}^* = 1 \text{ m}, \, \beta_{y,1}^* = 1 \text{ m}, \, \text{polarity IP}_{2/8} = 1/1$ $\Phi/2_{1(H)} = 250 \ \mu rad, \ \Phi/2_{5(V)} = 250 \ \mu rad, \ \Phi/2_{2,\,V} = -170 \ \mu rad, \ \Phi/2_{8.\,V} = 170 \ \mu rad$ $\sigma_z = 7.61 \text{ cm}, \ \varepsilon_n = 2.3 \ \mu\text{m}, \ Q' = 15, \ C^- = 0.001$ 8b4e 1972b 1960_1178_1886_224bpi_12inj. Bunch 89. - 7.0 62.315 -62.313 -- 5.0 62.311 -62.309 -

Q_xwith (

Octupoles Intensity (A)