HL-LHC v1.6. E = 7.0 TeV. $N_b \simeq 2.3 \times 10^{11}$ ppb, $L_{1/5} = 2.09 \times 10^{34} \text{cm}^{-2} \text{s}^{-1}, L_2 = 1.61 \times 10^{30} \text{cm}^{-2} \text{s}^{-1}, L_8 = 1.66 \times 10^{33} \text{cm}^{-2} \text{s}^{-1}$ $PU_{1/5} = 77$, $\beta_{v, 1}^* = 0.7$ m, $\beta_{x, 1}^* = 2.8$ m, polarity $IP_{2/8} = 1/1$ $\Phi/2_{1(H)} = 250 \mu rad, \ \Phi/2_{5(V)} = 250 \mu rad, \ \Phi/2_{2, V} = -170 \mu rad, \ \Phi/2_{8, V} = 170 \mu rad$ $\sigma_z = 7.61 \text{ cm}, \ \varepsilon_n = 2.3 \ \mu\text{m}, \ Q' = 15, \ C^- = 0.001$ 8b4e 1972b 1960_1178_1886_224bpi_12inj. Bunch 89. 62.323 -- 7.0 62.321 -62.319 -- 5.0 62.309 -

Octupoles Intensity (A)

Qxwith