

HL-LHC v1.6. E = 7.0 TeV. $N_b \simeq 2.3 \times 10^{11}$ ppb,

$L_{1/5} = 2.04 \times 10^{34} \text{cm}^{-2} \text{s}^{-1}$, $L_2 = 3.46 \times 10^{30} \text{cm}^{-2} \text{s}^{-1}$, $L_8 = 2 \times 10^{33} \text{cm}^{-2} \text{s}^{-1}$

$\beta_{x, \text{IP1}}^* = 1 \text{ m}$, $\beta_{y, \text{IP1}}^* = 1 \text{ m}$, polarity $\text{IP}_{2/8} = 1/1$

$\Phi/2_{\text{IP1(H)}} = 250 \mu\text{rad}$, $\Phi/2_{\text{IP5(V)}} = 250 \mu\text{rad}$, $\Phi/2_{\text{IP2, V}} = -170 \mu\text{rad}$, $\Phi/2_{\text{IP8, V}} = 170 \mu\text{rad}$

$\sigma_z = 7.61 \text{ cm}$, $\epsilon_n = 2.3 \mu\text{m}$, $Q' = 15$, $C^- = 0.001$

8b4e_1972b_1960_1178_1886_224bpi_12inj. Bunch 89.

