

HL-LHC v1.6. E = 7.0 TeV. CC = 0.0  $\mu\text{rad}$ .  $N_b \simeq 1.89 \times 10^{11}$  ppb.

$L_{IP1} \simeq 6.44 \times 10^{34}$  cm $^{-2}$ s $^{-1}$ .  $PU_{IP1} \simeq 237$ .  $L_{IP5} \simeq 6.4 \times 10^{34}$  cm $^{-2}$ s $^{-1}$ .  $PU_{IP5} \simeq 235$ .

$L_{IP2} \simeq 1.03 \times 10^{28}$  cm $^{-2}$ s $^{-1}$ .  $PU_{IP2} \simeq 6.27 \times 10^{-5}$ .  $L_{IP8} \simeq 2.38 \times 10^{33}$  cm $^{-2}$ s $^{-1}$ .  $PU_{IP8} \simeq 9.08$ .

$\beta_{x,1}^* = 0.15$  m,  $\beta_{y,1}^* = 0.15$  m. polarity IP $_{2/8} = 1/1$ .  $\sigma_z = 7.61$  cm.

$\Phi/2_{1(H)} = 250$   $\mu\text{rad}$ .  $\Phi/2_{5(V)} = 250$   $\mu\text{rad}$ .  $\Phi/2_2 = -170$   $\mu\text{rad}$ .  $\Phi/2_{8,V} = 170$   $\mu\text{rad}$ .

$\varepsilon_n = 2.5$   $\mu\text{m}$ .  $Q' = 15$ .  $I_{OCT} = -60.0$  A.  $C^- = 0.001$ .

8b4e\_1972b\_1960\_1178\_1886\_224bpi\_12inj. Bunch 88.

