

HL-LHC v1.6. E = 7.0 TeV. CC = -96.6  $\mu$ rad. N<sub>b</sub>  $\simeq$  2.2  $\times$  10<sup>11</sup> ppb,

L<sub>1/5</sub> = 5.08  $\times$  10<sup>34</sup> cm<sup>-2</sup> s<sup>-1</sup>, L<sub>2</sub> = 7.24  $\times$  10<sup>30</sup> cm<sup>-2</sup> s<sup>-1</sup>, L<sub>8</sub> = 1.97  $\times$  10<sup>33</sup> cm<sup>-2</sup> s<sup>-1</sup>

$\beta_{x,1}^* = 0.58$  m,  $\beta_{y,1}^* = 0.58$  m, polarity IP<sub>2/8</sub> = 1/1

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

$\sigma_z = 7.61$  cm,  $\epsilon_n = 2.3$   $\mu$ m, Q' = 15, I<sub>MO</sub> = -60.0 A, C<sup>-</sup> = 0.001

25ns\_2760b\_2748\_2492\_2574\_288bpi\_13inj\_800ns\_bs200ns.json. Bunch 150.

