

Ratio to nominal

1.3

STAR

$p+p \rightarrow p' + \pi^+ \pi^- + p'$ $\sqrt{s} = 200$ GeV

π^+, π^- : $p_T > 0.2$ GeV
 $|\eta| < 0.7$

p' : $(p_x + 0.3 \text{ GeV})^2 + p_y^2 < 0.25 \text{ GeV}^2$
 $0.2 \text{ GeV} < |p_y| < 0.4 \text{ GeV}$
 $p_x > -0.2 \text{ GeV}$

1.2

1.1

1

0.9

0.5

1

1.5

2

2.5

3

3.5

$m(\pi^+ \pi^-)$ [GeV]

$\Delta\phi < 90^\circ$

$\Delta\epsilon_{\text{TPC}}$ (embed. stat.)
 $\Delta\epsilon_{\text{TPC}}$ (dead mat.)
 $\Delta\epsilon_{\text{TOF}}$
 $\Delta\epsilon_{\text{DM veto}}$
 $\Delta\epsilon_{\text{RP}}$
 $\Delta\epsilon_{\Delta z_0}$
 $\Delta\epsilon_{\text{veto}}$
 $\Delta\sigma(z_{\text{vtx}})$
 $\Delta\epsilon_{N_{\text{cltrs}}^{\text{TOF}}}$

$\Delta\epsilon_{\text{TPC}}$ (pile-up)
 $N^{\text{hits}}, d_0/\text{DCA}(R)$
 $\Delta\epsilon_{\text{RP}}$
 $\Delta\epsilon_{\text{RP}}$
 $\Delta\epsilon_{\text{vtx}}$
 $\Delta\langle z_{\text{vtx}} \rangle$
 $\Delta N_{\text{bkgd}}^{\text{non-excl}}$
 $\Delta\text{Luminosity}$

Total (w/o lumi.)
Total (w/ lumi.)