

Ratio to nominal

STAR

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

K^+, K^- :

$p_T > 0.3$ GeV

$|\eta| < 0.7$

$\min(p_T^+, p_T^-) < 0.7$ GeV

p' : $(p_x + 0.3 \text{ GeV})^2 + p_y^2 < 0.25 \text{ GeV}^2$

$0.2 \text{ GeV} < |p_y| < 0.4 \text{ GeV}$

$p_x > -0.2 \text{ GeV}$

$\Delta\phi > 90^\circ$

1

1.5

2

$m(K^+ K^-)$ [GeV]

$\Delta\epsilon_{\text{TPC}}$ (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.)