

| Source | $\frac{\mathcal{B}(\mathcal{B}'_f \rightarrow \chi_{\perp\infty} \phi)}{\mathcal{B}(\mathcal{B}'_f \rightarrow \mathcal{J}/\psi \phi)}$ | $\frac{\mathcal{B}(\mathcal{B}' \rightarrow \chi_{\perp\infty} \mathcal{K}^{*'})}{\mathcal{B}(\mathcal{B}' \rightarrow \mathcal{J}/\psi \mathcal{K}^{*'})}$ | $\frac{\mathcal{B}(\mathcal{B}' \rightarrow \chi_{\perp\in} \mathcal{K}^{*'})}{\mathcal{B}(\mathcal{B}' \rightarrow \chi_{\perp\infty} \mathcal{K}^{*'})}$ |
|------------------------------|---|---|--|
| Signal determination | 5 | 3 | 9 |
| Efficiencies from simulation | 3 | 3 | 3 |
| Photon reconstruction | 4 | 4 | — |
| Trigger | 1 | 1 | 1 |
| Sum in quadrature | 7 | 6 | 10 |