

Process	$\sigma_c(\text{data})[\text{GeV}]$	$\sigma_c(\text{MC})[\text{GeV}]$	$\sigma_{\text{PU}}(\text{data})[\text{GeV}]$	$R_r = \sigma_{\text{PU}}(\text{data})/\sigma_{\text{PU}}(\text{MC})$
u_{\parallel} component				
$Z \rightarrow \mu^+ \mu^-$	13.9 ± 0.07	11.9 ± 1.53	3.82 ± 0.01	0.95 ± 0.04
$Z \rightarrow e^+ e^-$	14.6 ± 0.09	12.0 ± 1.09	3.80 ± 0.02	0.95 ± 0.03
γ +jets	12.2 ± 0.10	10.2 ± 1.98	3.97 ± 0.02	0.97 ± 0.05
u_{\perp} component				
$Z \rightarrow \mu^+ \mu^-$	10.3 ± 0.08	8.58 ± 2.20	3.87 ± 0.01	0.97 ± 0.04
$Z \rightarrow e^+ e^-$	10.7 ± 0.10	8.71 ± 1.76	3.89 ± 0.01	0.96 ± 0.03
γ +jets	9.04 ± 0.11	6.93 ± 2.70	3.94 ± 0.01	0.97 ± 0.04