

Uncertainty source	Background process	Background uncertainty (%)	Signal uncertainty (%)
Jet energy scale	$V\gamma$, rare EW	0–23	0–10
Normalization scale	$V\gamma$, jet $\rightarrow \ell$ misid.	20	—
Cross section	rare EW	50	4–37
Ident. and trigger efficiency	$V\gamma$, rare EW	1.3–6.5	1.3–6.5
$e \rightarrow \gamma$	$e \rightarrow \gamma$ misid.	8–51	—
Jet $\rightarrow \gamma$ shape	jet $\rightarrow \gamma$ misid.	8–56	—
Misid. lepton shape	jet $\rightarrow \ell$ misid.	0–42	—
ISR corrections	$V\gamma$	3–58	0–32
Integrated luminosity	rare EW	2.5	2.5
Pileup uncertainty	—	—	2–10
PDF, renormalization/factorization scales	—	—	0–10
Fast simulation p_T^{miss} modeling	—	—	0–31