

Source	Typical variation	Correlated between years
Experimental		
Luminosity	1.3–2.5%	Partially
Pile-up	0.4% – 2.2%	✓
Lepton ID SFs	< 0.01%	✓
Photon ID SFs	3.5% – 4.7%	✓
Photon energy scale and resolution	0.2% – 1.1 %	✓
Photon pixel veto SFs	0.1% – 0.9%	✓
Jet energy scale and resolution	0.2 – 2.8%	Partially
L1 ECAL prefiring	0.1% - 1.9%	✓
Jet $\rightarrow$ $\gamma$ fake ratio	2%-20%	✓
e $\rightarrow$ $\gamma$ fake ratio	13%-45%	✓
Theoretical		
NLO electroweak corrections	2.7%	✓
PDF and $\alpha_S$	1.5%–1.7%	✓
Renormalization/factorization scale	6%–7.2%	✓