

Source	EW $W_{\gamma jj}$	QCD $W_{\gamma jj}$	VV	$t\bar{t}\gamma$	QCD $Z\gamma$	Single top	Mis-ID photon	Mis-ID lepton	Double fake	$e \rightarrow \gamma$
Jet energy scale	0.9-6.9	11-28	6.4-38	3.7-16	12-78	3.3-18	—	—	—	11-28
Jet energy resolution	0.7-2.2	0.7-4.1	6.9-21	1.3-4.9	6.5-15	2.9-7.1	—	—	—	0.7-4.1
Luminosity	2.5	2.5	2.5	2.5	2.5	2.5	—	—	—	2.5
Mis-ID photon	—	—	—	—	—	—	12-22	—	12.1-22	—
Mis-ID lepton	—	—	—	—	—	—	—	30	30	—
μ_R/μ_F scales	1.5-11	6.1-20	—	—	—	—	—	—	—	—
PDF	3.2-5.6	1-2	—	—	—	—	—	—	—	—
Interference	1.8-2.8	—	—	—	—	—	—	—	—	—
Cross section of $t\bar{t}\gamma$	—	—	—	10	—	—	—	—	—	—
Cross section of VV	—	—	10	—	—	—	—	—	—	—
Pileup modeling	0-0.6	0.3-1.4	4.8-13	2.6-3.9	6.2-19	1.0-3.9	—	—	—	0.3-1.4
Statistics	7-11	6-36	45-100	13-56	16-100	17-55	7-36	43-72	30-100	54-100
L1 prefiring correction	1.7-2.4	0.8-1.6	0.5-1.6	1.4-2.5	0.6-3.6	1.0-2.1	—	—	—	1.1-2.8
b-tagging veto	0.3	0.3	0.3	0.8	0.3	0.8	—	—	—	0.3
Muon ID/ISO	0.3	0.3	0.3	0.3	0.3	0.3	—	—	—	0.3
Muon trigger	0.3	0.2	0.2	0.2	0.1	0.1	—	—	—	0.2
Electron reconstruction	0.5	0.6	0.5	0.6	0.6	0.5	—	—	—	0.5
Electron ID/ISO	1.3	1.3	1.3	1.3	1.3	1.3	—	—	—	1.3
Electron trigger	2.5	2.5	2.5	2.5	2.5	2.5	—	—	—	2.5
Photon ID	1.2	1.2	1.1	1.2	1.3	1.2	—	—	—	1.2