

Channel	SS dilepton	Trilepton	$\gamma\gamma$ hadronic	$\gamma\gamma$ leptonic	b jet + lepton
Integrated luminosity	2.6	2.6	2.6	2.6	2.6
Pileup	1.0	1.0	0.3	0.8	0.2–3.0
Higgs boson branching fraction	5.0	5.0	5.0	5.0	5.0
$t\bar{t}$ cross section	7.5	7.5	7.5	7.5	7.5
Jet energy scale	0.5	0.6	1.2	1.0	5.2–15
Jet energy resolution	0.8	2.2	2.7	0.4	2.2–7.8
Signal PDF	6.0	6.0	5.9	5.2	<1–9.0
Top quark $p_T$ correction	—	—	1.4	3.2	0.8–4.3
$E_T^{\text{miss}}$	4.0	4.0	—	—	0.2–2.5
Trigger efficiency	1.0–2.0	—	1.0	1.0	<0.1–0.4
Identification and isolation					
- muon	1.0–2.0	1.0–3.0	—	0.3	0.01–0.04
- electron	2.0–4.0	2.0–6.0	—	0.3	<0.1–0.2
$t\bar{t}W$ normalization	11.0	11.0	—	—	—
$t\bar{t}Z$ normalization	13.0	13.0	—	—	—
WZ normalization	15.0	15.0	—	—	—
Lepton misidentification					
- electron	40.0	40.0	—	—	—
- muon	30.0	30.0	—	—	—
Charge misidentification	20.0	—	—	—	—
Photon identification efficiency	—	—	5.2	5.2	—
Corrections per photon					
- energy scale	—	—	0.1	0.1	—
- energy resolution	—	—	0.1	0.1	—
- material mismodeling	—	—	0.3	0.3	—
- nonlinearity	—	—	0.1	0.1	—
Jet identification efficiency	—	—	2.0	2.0	—
b jet identification efficiency	—	—	2.9	3.5	—
Higgs boson background					
- cross section scale factors	—	—	9.3	9.3	—
- PDF	—	—	8.1	8.1	—
b jet CSV distribution					
- purity	—	—	—	—	1.0–3.4
- statistical precision	—	—	—	—	1.0–24
$t\bar{t}$ + heavy flavor jets	—	—	—	—	0.3–1.0
Modeling W decay daughters	—	—	—	—	1.6–2.7
Generator parameters					
- QCD scale	—	—	—	—	1.0–4.9
- matching parton-jet threshold	—	—	—	—	1.3–9.4
- top quark mass	—	—	—	—	0.8–4.1