

source/process	signal	Drell-Yan	$W \rightarrow \tau\nu$	QCD	Top	dibosons	charge flips
Normalization uncertainty for $W \rightarrow \ell\nu$ ($\ell = \mu, e$)							
luminosity	2.5%	2.5%	2.5%	-	2.5%	2.5%	-
Drell-Yan cross section	-	3.8%	-	-	-	-	-
$t\bar{t}$, single t cross section	-	-	-	-	6%	-	-
dibosons cross section	-	-	-	-	-	16%	-
Normalization uncertainty for $W \rightarrow \mu\nu$							
QCD normalization vs η^ℓ	-	-	-	5%	-	-	-
QCD charge asymmetry vs η^ℓ	-	-	-	2%	-	-	-
QCD normalization vs p_T^ℓ	-	-	-	15–30%	-	-	-
lepton veto	-	2%	-	-	-	-	-
Normalization uncertainty for $W \rightarrow e\nu$							
QCD normalization vs η^ℓ	-	-	-	1–6%	-	-	-
QCD normalization vs p_T^ℓ	-	-	-	10–30%	-	-	-
charge flips normalization	-	-	-	-	-	-	30%
lepton veto	-	3%	-	-	-	-	-
Shape uncertainty for $W \rightarrow \ell\nu$ ($\ell = \mu, e$)							
lepton efficiency (syst.)	yes	yes	yes	-	-	-	-
lepton efficiency (stat.)	yes	yes	yes	-	-	-	-
level-1 trigger pre-firing	yes	yes	yes	-	-	-	-
60 PDF variations	yes	yes	yes	-	-	-	-
α_S	yes	yes	yes	-	-	-	-
μ_F (binned in p_T^W)	yes	-	yes	-	-	-	-
μ_R (binned in p_T^W)	yes	-	yes	-	-	-	-
μ_{F+R} (binned in p_T^W)	yes	-	yes	-	-	-	-
m_W	yes	-	-	-	-	-	-
μ_F	-	yes	-	-	-	-	-
μ_R	-	yes	-	-	-	-	-
μ_{F+R}	-	yes	-	-	-	-	-
e momentum scale (syst.)	yes	yes	yes	-	-	-	-
e momentum scale (stat.)	yes	yes	yes	-	-	-	-
μ momentum scale (syst.)	yes	yes	yes	-	-	-	-
μ momentum scale (stat.)	yes	yes	yes	-	-	-	-
lepton misidentification vs p_T^ℓ	-	-	-	yes	-	-	-
QED radiation	yes	-	-	-	-	-	-
simulation statistics	yes	yes	yes	-	yes	yes	yes