

Sources of Systematical Uncertainties	Type	Value
General uncertainties		
Integrated luminosity	Normalization	2.7%
Photon related uncertainties		
Photon energy scale ($\frac{\Delta M(\gamma\gamma)}{M(\gamma\gamma)}$)	Shape	1.0%
Photon energy resolution ($\frac{\Delta\sigma_{\gamma\gamma}}{\sigma_{\gamma\gamma}}$)	Shape	1.0%
Diphoton pre-selection (with trigger uncertainties)	Normalization	2.0%
Photon Identification	Normalization	1.0%
Jet related uncertainties		
Jet energy scale ($\frac{\Delta M(jj)}{M(jj)}$)	Shape	2.0%
Jet energy resolution ($\frac{\Delta\sigma_{jj}}{\sigma_{jj}}$)	Shape	8.0%
Resonant specific uncertainties		
Mass window selection (with jet selection uncertainty)	Normalization	5.0%
b tagging efficiency (Low Mass, high purity)	Normalization	2.5%
b tagging efficiency (Low Mass, medium purity)	Normalization	1.0%
b tagging efficiency (High Mass)	Normalization	1.0%
Nonresonant specific uncertainties		
Jet Selection plus $\tilde{M}_X > 350$ GeV	Normalization	3.0%
b tagging efficiency (high purity)	Normalization	4.5%
b tagging efficiency (medium purity)	Normalization	1.0%