
Definition of the $W\gamma\gamma$ fiducial region

$$p_{\text{T}}^{\gamma} > 25 \text{ GeV}, |\eta^{\gamma}| < 2.5$$

$$p_{\text{T}}^{\ell} > 25 \text{ GeV}, |\eta^{\ell}| < 2.4$$

One candidate lepton and two candidate photons

$$m_{\text{T}} > 40 \text{ GeV}$$

$$\Delta R(\gamma, \gamma) > 0.4 \text{ and } \Delta R(\gamma, \ell) > 0.4$$

Definition of the $Z\gamma\gamma$ fiducial region

$$p_{\text{T}}^{\gamma} > 15 \text{ GeV}, |\eta^{\gamma}| < 2.5$$

$$p_{\text{T}}^{\ell} > 10 \text{ GeV}, |\eta^{\ell}| < 2.4$$

Two oppositely charged candidate leptons and two candidate photons

$$\text{leading } p_{\text{T}}^{\ell} > 20 \text{ GeV}$$

$$m_{\ell\ell} > 40 \text{ GeV}$$

$$\Delta R(\gamma, \gamma) > 0.4, \Delta R(\gamma, \ell) > 0.4, \text{ and } \Delta R(\ell, \ell) > 0.4$$
