

b-tagged

Untagged

At least one photon and one jet passing the identification

Photon: $p_{\text{T}}^{\gamma} > 200 \text{ GeV}$, $|\eta^{\gamma}| < 1.44$

Jet: $p_{\text{T}}^{\text{J}} > 250 \text{ GeV}$, $|\eta^{\text{J}}| < 2.2$

$\Delta R(\gamma, \text{J}) > 1.1$

$p_{\text{T}}^{\gamma} / m_{\text{J}\gamma} > 0.35$

Signal region: $110 < m_{\text{J}}^{\text{SD}} < 140 \text{ GeV}$; Sideband region: $100 < m_{\text{J}}^{\text{SD}} < 110 \text{ GeV}$

Leading jet passes tight DBT requirement

The rest