

Object and event properties	Selection criteria
Lepton and τ_h pseudorapidity	$ \eta < 2.5$ for e, $ \eta < 2.4$ for μ , $ \eta < 2.3$ for τ_h
Dilepton invariant mass	$m_{\ell\ell} > 12 \text{ GeV}$ (all $\ell\ell$ pairs)
Four-lepton invariant mass	$m_{4\ell} > 140 \text{ GeV}$ (any two SFOS $\ell\ell$ pairs)
b jet veto	0 medium and ≤ 1 loose b-tagged small-radius jet