

Preselection	1. Lepton $p_T > 30$ GeV 2. Lepton $p_T > 20$ GeV 3. Lepton $p_T < 10$ GeV (if present) Missing transverse momentum $p_T^{\text{miss}} > 30$ GeV Dilepton transverse momentum $p_{T,\text{ll}} > 30$ GeV Dilepton mass $m_{\text{ll}} > 20$ GeV	
High mass selection	Angle ϕ between leptons $\phi_{\text{ll}} > 2.0$ rad Deviation in ϕ and η between back-to-back leptons < 3.0 Angle ϕ between either lepton and MET $\phi_{l,\text{MET}} < 1.6$ rad Scalar sum of the transverse momenta $p_{T,\text{l1}} + p_{T,\text{l2}} + p_T^{\text{miss}} > 250$ GeV $m_{\text{ll}} > 140$ GeV	
Category	Opposite flavor	Same flavor
Signal region	Number of b-tagged jets $N_{\text{b-tag}} = 0$	
	Transverse mass $m_{T,\text{ll}+\text{MET}} > 60$ GeV	$m_{T,\text{ll}+\text{MET}} > 80$ GeV $20 \text{ GeV} < m_{\text{ll}} < 70 \text{ GeV}$ or $m_{\text{ll}} > 110$ GeV Transverse mass of leading Wboson $m_{T,\text{l1}+\text{MET}} > 60$ GeV $p_T^{\text{miss}} > 40$ GeV
Top control region	$N_{\text{b-tag}} \geq 1$	
	$m_{T,\text{ll}+\text{MET}} > 60$ GeV	$m_{T,\text{ll}+\text{MET}} > 80$ GeV $20 \text{ GeV} < m_{\text{ll}} < 70 \text{ GeV}$ or $m_{\text{ll}} > 110$ GeV $m_{T,\text{l1}+\text{MET}} > 60$ GeV, $p_T^{\text{miss}} > 40$ GeV
DY control region	$N_{\text{b-tag}} = 0$	
	$m_{T,\text{ll}+\text{MET}} < 60$ GeV $m_{\text{ll}} < 90$ GeV	No cut on $m_{T,\text{ll}+\text{MET}}$ $70 \text{ GeV} < m_{\text{ll}} < 110$ GeV $m_{T,\text{l1}+\text{MET}} > 60$ GeV, $p_T^{\text{miss}} > 40$ GeV