

Selection	Description
Trigger	Single-muon $p_T > 24/27/24$ GeV
	Single-electron $p_T > 27/32/32$ GeV
	Dimuon $p_T > 17$ (8) GeV
	Dielectron $p_T > 23$ (12) GeV
Sign and flavor of leptons	$e^+e^-$ , $\mu^+\mu^-$
Loose lepton count	=2
Tight lepton count	=2
Leading lepton $p_T$	$p_T > 19$ (25) GeV muon (electron)
Subleading lepton $p_T$	$p_T > 12$ (18) GeV muon (electron)
Z window	$86 < m_{\ell\ell} < 96$ GeV
AK8 jet threshold	$p_T > 250$ GeV
AK8 jet count	$\geq 2$
$H \rightarrow b\bar{b}$ candidate	max $X \rightarrow b\bar{b}$ score AK8 jet
	$X \rightarrow b\bar{b}$ score $> 0.2$
Boosted $V \rightarrow qq$ candidate	Other AK8 jet
	$X \rightarrow qq$ score $> 0.6$
AK4 jet count for VBS	$\geq 2$
VBS jet candidates	max $ \Delta\eta_{jj} $
	$m_{jj} > 200$ GeV, $ \Delta\eta_{jj}  > 2$
AK4 jet for b tagging criteria	$p_T > 20$ GeV, $ \eta  < 2.5$
Medium b tagged jet count	=0
Event kinematics	$S_T > 500$ GeV
	$M_{VVH} > 500$ GeV