

| Selection | | SR | | W CR (WR) | | $t\bar{t}$ CR (TR1) | |
|--------------------------|---|---|------|-----------|------|---------------------|------|
| | | HP | LP | HP | LP | HP | LP |
| $W \rightarrow \ell \nu$ | Num of Tight leptons | 1 | | | | | |
| | Num of Loose leptons | 0 | | | | | |
| | $E_{\text{T}}^{\text{miss}}$ | $> 100 \text{ GeV}$ | | | | | |
| | $p_{\text{T}}(\ell \nu)$ | $> 200 \text{ GeV}$ | | | | | |
| $W/Z \rightarrow J$ | Num of large- R jets | ≥ 1 | | | | | |
| | D_2 cut | pass | fail | pass | fail | pass | fail |
| | W/Z mass window cut | pass | pass | fail | fail | pass | pass |
| | Numb. of associated VR track jets b -tagged | For $Z \rightarrow J$: ≤ 1 ($= 2$) for untagged (tagged) category | | | | | |
| Topology cut | $\min(p_{\text{T},\ell\nu}, p_{\text{T},J}) / m_{WV}$ | $> 0.35(0.25)$ for DY/ggF (VBF) category | | | | | |
| Top-quark veto | Num of b -tagged jets outside of large-R jet | 0 | | | | ≥ 1 | |
| Pass VBF selection | | no (yes) for DY/ggF (VBF) category | | | | | |