

Channel	Event selection		
	Overall	CR	SR
1ℓ	1 tight ℓ	—	—
	$p_T(\ell) > 55 \text{ GeV}$	—	—
	0 other loose ℓ , $p_T > 10 \text{ GeV}$	—	—
	$p_T^{\text{miss}} > 50 \text{ GeV}$	—	—
	≥ 3 large-radius jets	—	—
	—	max MLP not VLQ	max MLP is VLQ
	—	2 VLQ candidates	
$SS\ 2\ell$	2 tight SS ℓ	—	—
	$p_T(\ell) > 40 \text{ GeV}, 30 \text{ GeV}$	—	—
	≥ 4 small-radius jets	—	—
	$M(\ell\ell) > 20 \text{ GeV}$	—	—
	$M(ee)$ outside 76–106 GeV	—	—
	—	$H_T^{\text{lep}} < 1000 \text{ GeV}$	$H_T^{\text{lep}} > 1000 \text{ GeV}$
3ℓ	$p_T(\ell) > 30 \text{ GeV}$	—	—
	$M(\text{OSSF } \ell\ell) > 20 \text{ GeV}$	—	—
	$p_T^{\text{miss}} > 20 \text{ GeV}$	—	—
	≥ 1 b-tagged jet	—	—
	$p_T(\text{b jet}) > 45 \text{ GeV}$	—	—
	—	3 loose ℓ	≥ 3 tight ℓ GeV
—	2 small-radius jets	≥ 3 small-radius jets	