

| Label | N_ℓ | N_{OSSF} | M_{OSSF} | N_b | p_T^{miss} | Variable | Binning scheme | | |
|-------------------------------|----------|-------------------|------------------------|-------|---------------------------------------|---------------------------|----------------|--------|--|
| Signal model: type-III seesaw | | | | | | | | | |
| 3L below-Z | 3 | 1 | $< 76 \text{ GeV}$ | – | – | $L_T + p_T^{\text{miss}}$ | 0 – 1200 GeV | 6 bins | |
| 3L on-Z | 3 | 1 | $76 - 106 \text{ GeV}$ | – | $> 100 \text{ GeV}$ | M_T | 0 – 700 GeV | 7 bins | |
| 3L above-Z | 3 | 1 | $> 106 \text{ GeV}$ | – | – | $L_T + p_T^{\text{miss}}$ | 0 – 1600 GeV | 8 bins | |
| 3L OSSF0 | 3 | 0 | – | – | – | $L_T + p_T^{\text{miss}}$ | 0 – 1200 GeV | 6 bins | |
| 4L OSSF1 | ≥ 4 | 1 | – | – | – | $L_T + p_T^{\text{miss}}$ | 0 – 1000 GeV | 5 bins | |
| 4L OSSF2 | ≥ 4 | 2 | – | – | $> 100 \text{ GeV}$ if double on-Z | $L_T + p_T^{\text{miss}}$ | 0 – 1200 GeV | 6 bins | |

| Signal model: $t\bar{t}\phi$ | | | | | | | S_T (GeV) | | | |
|------------------------------|----------|----------|-------|----------|---|-------------------------|---------------|-----------|---------|---------|
| | | | | | | | 0 – 400 | 400 – 800 | > 800 | |
| 3L($\ell\ell$)* 0B | 3 | 1 | off-Z | 0 | – | M_{OSSF}^{20} | 12 – 77 GeV | 13 bins | 13 bins | 5 bins |
| | | | | | | M_{OSSF}^{300} | 106 – 356 GeV | 10 bins | 10 bins | 10 bins |
| 3L($\ell\ell$)* 1B | 3 | 1 | off-Z | ≥ 1 | – | M_{OSSF}^{20} | 12 – 77 GeV | 13 bins | 13 bins | 5 bins |
| | | | | | | M_{OSSF}^{300} | 106 – 356 GeV | 10 bins | 10 bins | 10 bins |
| 4L($\ell\ell$)* 0B | ≥ 4 | ≥ 1 | off-Z | 0 | – | M_{OSSF}^{20} | 12 – 77 GeV | 3 bins | 2 bins | |
| | | | | | | M_{OSSF}^{300} | 106 – 356 GeV | 3 bins | 2 bins | |
| | | | | | | | 0 – 400 | | > 400 | |
| 4L($\ell\ell$)* 1B | ≥ 4 | ≥ 1 | off-Z | ≥ 1 | – | M_{OSSF}^{20} | 12 – 77 GeV | 3 bins | | |
| | | | | | | M_{OSSF}^{300} | 106 – 356 GeV | 3 bins | | |

* $\ell = e$ or μ

inclusive