

# Z Analysis Event Efficiency Table

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## Relative Efficiency and Error

| Selection                                 | Rel. Efficiency | Binomial Error |
|---|-----------------|----------------|
| Pass trigger                              | 1               | 0              |
| Good GRL                                  | 1               | 0              |
| Good vertex                               | 0.997292        | 7.20563e-14    |
| Two good leptons                          | 0.000604267     | 1.38799e-12    |
| Leptons have opposite charge              | 0.534595        | 1.56749e-09    |
| Leptons have the same flavour             | 0.540199        | 2.9144e-09     |
| $ m_{\ell\bar{\ell}} - PDG m_Z  < 20 GeV$ | 0.407964        | 6.12187e-09    |

## Absolute Efficiency and Error

| Selection                                 | Abs. Efficiency | Binomial Error |
|---|-----------------|----------------|
| Pass trigger                              | 1               | 0              |
| Good GRL                                  | 1               | 0              |
| Good vertex                               | 0.997292        | 7.20563e-14    |
| Two good leptons                          | 0.000602631     | 1.38611e-12    |
| Leptons have opposite charge              | 0.000322164     | 5.63955e-11    |
| Leptons have the same flavour             | 0.000174032     | 7.71373e-11    |
| $ m_{\ell\bar{\ell}} - PDG m_Z  < 20 GeV$ | 7.0999e-05      | 1.04957e-10    |