

Table 1: Scale Factors for Cut-Based  $\tau$  ID

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 1.0030022    | 0.0119247 | 0.0045557 | 0.0110254 | 0.0108052 |
| Loose Cra        | 0.9929621    | 0.0156875 | 0.0133986 | 0.0058113 | 0.0081655 |
| Loose End        | 0.9910116    | 0.0132589 | 0.0056443 | 0.0109427 | 0.0120034 |
| Loose (TOL) Bar  | 0.9227378    | 0.1529019 | 0.0120934 | 0.1523098 | 0.1524233 |
| Loose (TOL) Cra  | 0.7288131    | 0.0801342 | 0.0402619 | 0.0692860 | 0.0642569 |
| Loose (TOL) End  | 0.9430939    | 0.0896292 | 0.0203297 | 0.0776846 | 0.0872940 |
| Loose (MOL) Bar  | 1.4646773    | 0.0397605 | 0.0289348 | 0.0250912 | 0.0272719 |
| Loose (MOL) Cra  | 1.1804746    | 0.1727043 | 0.1252811 | 0.1188764 | 0.1125013 |
| Loose (MOL) End  | 1.2653988    | 0.1154417 | 0.0360121 | 0.0782546 | 0.1096816 |
| Medium Bar       | 1.0022236    | 0.0134275 | 0.0057365 | 0.0121425 | 0.0119770 |
| Medium Cra       | 0.9841135    | 0.0199849 | 0.0179817 | 0.0087270 | 0.0074509 |
| Medium End       | 0.9913257    | 0.0151822 | 0.0073290 | 0.0132988 | 0.0131211 |
| Medium (TOL) Bar | 0.9083808    | 0.1562046 | 0.0130129 | 0.1556570 | 0.1556621 |
| Medium (TOL) Cra | 0.6970582    | 0.0778293 | 0.0358723 | 0.0690700 | 0.0617802 |
| Medium (TOL) End | 0.9363584    | 0.1027633 | 0.0244074 | 0.0909196 | 0.0998231 |
| Medium (MOL) Bar | 1.4669266    | 0.0460239 | 0.0319631 | 0.0331152 | 0.0309168 |
| Medium (MOL) Cra | 1.1552097    | 0.1357696 | 0.1043580 | 0.0868502 | 0.0835672 |
| Medium (MOL) End | 1.3033332    | 0.1261562 | 0.0406589 | 0.0778083 | 0.1194249 |
| Tight Bar        | 0.9927394    | 0.0168582 | 0.0086496 | 0.0144715 | 0.0141647 |
| Tight Cra        | 0.9401314    | 0.0340338 | 0.0291461 | 0.0175769 | 0.0165863 |
| Tight End        | 0.9577838    | 0.0246981 | 0.0102236 | 0.0224834 | 0.0171794 |
| Tight (TOL) Bar  | 0.8975573    | 0.1715884 | 0.0161536 | 0.1707268 | 0.1708268 |
| Tight (TOL) Cra  | 0.5515186    | 0.1238176 | 0.0667492 | 0.1042855 | 0.0987570 |
| Tight (TOL) End  | 0.8863890    | 0.1248747 | 0.0610634 | 0.1061499 | 0.1089267 |
| Tight (MOL) Bar  | 1.4944199    | 0.0642417 | 0.0414087 | 0.0491164 | 0.0455297 |
| Tight (MOL) Cra  | 0.9079790    | 0.2654496 | 0.1577692 | 0.2134770 | 0.2134769 |
| Tight (MOL) End  | 1.2492339    | 0.1297728 | 0.0457022 | 0.0906474 | 0.1214596 |

Table 2: Scale Factors for LLH-Based  $\tau$  ID

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.9955715    | 0.0108995 | 0.0040841 | 0.0101107 | 0.0099330 |
| Loose Cra        | 1.0057053    | 0.0148559 | 0.0132867 | 0.0066145 | 0.0066529 |
| Loose End        | 0.9905180    | 0.0128101 | 0.0058044 | 0.0110038 | 0.0114237 |
| Loose (TOL) Bar  | 0.9219220    | 0.1477332 | 0.0117372 | 0.1471149 | 0.1472667 |
| Loose (TOL) Cra  | 0.7357421    | 0.0814487 | 0.0460999 | 0.0671470 | 0.0595268 |
| Loose (TOL) End  | 0.9423994    | 0.0952528 | 0.0343326 | 0.0823226 | 0.0888509 |
| Loose (MOL) Bar  | 1.4552408    | 0.0399412 | 0.0275031 | 0.0243253 | 0.0289651 |
| Loose (MOL) Cra  | 1.2013196    | 0.1528584 | 0.1234156 | 0.0901909 | 0.0803303 |
| Loose (MOL) End  | 1.2729136    | 0.1179029 | 0.0357240 | 0.0809653 | 0.1123606 |
| Medium Bar       | 0.9886877    | 0.0121161 | 0.0047965 | 0.0111298 | 0.0107134 |
| Medium Cra       | 1.0149791    | 0.0218151 | 0.0187962 | 0.0077434 | 0.0110780 |
| Medium End       | 0.9802761    | 0.0145120 | 0.0069022 | 0.0127674 | 0.0124780 |
| Medium (TOL) Bar | 0.9132545    | 0.1543278 | 0.0121462 | 0.1538054 | 0.1538495 |
| Medium (TOL) Cra | 0.7079651    | 0.0723242 | 0.0441360 | 0.0572974 | 0.0525373 |
| Medium (TOL) End | 0.9220672    | 0.0941461 | 0.0429593 | 0.0831052 | 0.0837740 |
| Medium (MOL) Bar | 1.4605580    | 0.0415222 | 0.0289933 | 0.0288046 | 0.0297245 |
| Medium (MOL) Cra | 1.1717448    | 0.1538024 | 0.1289068 | 0.0838949 | 0.0760013 |
| Medium (MOL) End | 1.2459338    | 0.1150282 | 0.0368398 | 0.0760147 | 0.1089699 |
| Tight Bar        | 0.9802437    | 0.0129305 | 0.0057804 | 0.0115690 | 0.0106798 |
| Tight Cra        | 1.0250598    | 0.0337994 | 0.0276654 | 0.0071658 | 0.0194209 |
| Tight End        | 0.9697822    | 0.0183929 | 0.0082458 | 0.0164451 | 0.0154398 |
| Tight (TOL) Bar  | 0.8987857    | 0.1575214 | 0.0127991 | 0.1569733 | 0.1570008 |
| Tight (TOL) Cra  | 0.6907265    | 0.0839064 | 0.0592632 | 0.0593994 | 0.0580919 |
| Tight (TOL) End  | 0.8498494    | 0.2120926 | 0.1617884 | 0.1371420 | 0.1045715 |
| Tight (MOL) Bar  | 1.4367699    | 0.0433601 | 0.0310393 | 0.0302783 | 0.0273234 |
| Tight (MOL) Cra  | 1.1817937    | 0.1641736 | 0.1525840 | 0.0603558 | 0.0605912 |
| Tight (MOL) End  | 1.2162373    | 0.1222849 | 0.0385078 | 0.0706159 | 0.1160640 |

Table 3: Scale Factors for BDT-Based  $\tau$  ID

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 1.0004516    | 0.0107004 | 0.0052410 | 0.0093368 | 0.0092608 |
| Loose Cra        | 0.9916420    | 0.0167868 | 0.0146064 | 0.0082792 | 0.0072190 |
| Loose End        | 1.0003156    | 0.0134424 | 0.0073642 | 0.0110100 | 0.0112509 |
| Loose (TOL) Bar  | 0.9286365    | 0.1433352 | 0.0124510 | 0.1424635 | 0.1427938 |
| Loose (TOL) Cra  | 0.7158990    | 0.0903653 | 0.0387212 | 0.0816496 | 0.0693305 |
| Loose (TOL) End  | 0.9498710    | 0.0951814 | 0.0372145 | 0.0819426 | 0.0876048 |
| Loose (MOL) Bar  | 1.4559767    | 0.0406792 | 0.0289135 | 0.0216552 | 0.0286167 |
| Loose (MOL) Cra  | 1.2035296    | 0.1612867 | 0.1086597 | 0.1191914 | 0.0974785 |
| Loose (MOL) End  | 1.2898889    | 0.1225536 | 0.0377981 | 0.0773564 | 0.1165800 |
| Medium Bar       | 1.0321227    | 0.0130613 | 0.0083204 | 0.0090122 | 0.0100736 |
| Medium Cra       | 1.0079190    | 0.0240104 | 0.0205539 | 0.0124168 | 0.0106323 |
| Medium End       | 1.0553552    | 0.0229891 | 0.0124275 | 0.0193419 | 0.0123258 |
| Medium (TOL) Bar | 0.9688381    | 0.1349025 | 0.0155134 | 0.1334100 | 0.1340081 |
| Medium (TOL) Cra | 0.7221171    | 0.0835032 | 0.0395410 | 0.0735493 | 0.0638936 |
| Medium (TOL) End | 1.0193145    | 0.0815236 | 0.0225939 | 0.0696861 | 0.0783312 |
| Medium (MOL) Bar | 1.4803285    | 0.0476864 | 0.0347710 | 0.0223742 | 0.0326353 |
| Medium (MOL) Cra | 1.2545367    | 0.1327271 | 0.1065050 | 0.0792041 | 0.0724003 |
| Medium (MOL) End | 1.3783130    | 0.1454276 | 0.0476372 | 0.0859943 | 0.1374044 |
| Tight Bar        | 1.0891879    | 0.0193442 | 0.0124400 | 0.0122828 | 0.0148180 |
| Tight Cra        | 1.0490268    | 0.0356188 | 0.0302968 | 0.0187324 | 0.0145173 |
| Tight End        | 0.0141495    | 1.9577503 | 1.5953161 | 1.1347921 | 1.1239170 |
| Tight (TOL) Bar  | 1.0242525    | 0.1353757 | 0.0207828 | 0.1334972 | 0.1337713 |
| Tight (TOL) Cra  | 0.7632661    | 0.0849688 | 0.0459490 | 0.0714731 | 0.0598380 |
| Tight (TOL) End  | 0.0000000    | 1.0538447 | 0.0000000 | 1.0538448 | 1.0538448 |
| Tight (MOL) Bar  | 1.5445636    | 0.0615524 | 0.0458605 | 0.0302749 | 0.0410563 |
| Tight (MOL) Cra  | 1.3758003    | 0.2139642 | 0.1799355 | 0.1157757 | 0.0884509 |
| Tight (MOL) End  | 0.9303341    | 0.9201489 | 0.0636019 | 0.9179482 | 0.7053210 |

Table 4: Scale Factors for Cut-Based  $\tau$  ID + Loose Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.6275730    | 0.0823286 | 0.0155719 | 0.0808432 | 0.0807427 |
| Loose Cra        | 0.3732018    | 0.0478560 | 0.0427142 | 0.0215819 | 0.0209329 |
| Loose End        | 1.0095681    | 0.0268421 | 0.0126884 | 0.0154966 | 0.0236570 |
| Loose (TOL) Bar  | 0.5864155    | 0.1013484 | 0.0286391 | 0.0972187 | 0.0970283 |
| Loose (TOL) Cra  | 0.3581505    | 0.0473560 | 0.0445444 | 0.0160776 | 0.0115492 |
| Loose (TOL) End  | 0.9702216    | 0.1348206 | 0.0277179 | 0.1162043 | 0.1319409 |
| Loose (MOL) Bar  | 0.9744962    | 0.1290434 | 0.1254323 | 0.0303160 | 0.0260816 |
| Loose (MOL) Cra  | 0.8927664    | 0.2495485 | 0.2437254 | 0.0519944 | 0.0535962 |
| Loose (MOL) End  | 1.4070839    | 0.1255464 | 0.0542819 | 0.0370841 | 0.1132052 |
| Medium Bar       | 0.6292863    | 0.0824190 | 0.0163050 | 0.0807907 | 0.0805806 |
| Medium Cra       | 0.3733964    | 0.0453265 | 0.0448891 | 0.0062915 | 0.0049447 |
| Medium End       | 1.0116024    | 0.0266608 | 0.0130097 | 0.0178650 | 0.0232729 |
| Medium (TOL) Bar | 0.5891133    | 0.0977987 | 0.0172344 | 0.0962685 | 0.0960232 |
| Medium (TOL) Cra | 0.3568571    | 0.0483197 | 0.0466342 | 0.0126549 | 0.0081844 |
| Medium (TOL) End | 0.9705807    | 0.1423421 | 0.0284348 | 0.1225835 | 0.1394733 |
| Medium (MOL) Bar | 0.9949551    | 0.1087064 | 0.1064356 | 0.0221053 | 0.0050047 |
| Medium (MOL) Cra | 0.8891300    | 0.3027091 | 0.2626634 | 0.1324682 | 0.1504688 |
| Medium (MOL) End | 1.4256378    | 0.1374379 | 0.0566009 | 0.0353186 | 0.1252423 |
| Tight Bar        | 0.6381126    | 0.0890359 | 0.0196546 | 0.0868399 | 0.0864924 |
| Tight Cra        | 0.3380019    | 0.0571349 | 0.0554272 | 0.0111750 | 0.0138703 |
| Tight End        | 0.9817450    | 0.0292147 | 0.0147818 | 0.0158462 | 0.0252009 |
| Tight (TOL) Bar  | 0.5992437    | 0.1046541 | 0.0206727 | 0.1025926 | 0.1020926 |
| Tight (TOL) Cra  | 0.3125363    | 0.0582331 | 0.0566975 | 0.0132882 | 0.0058028 |
| Tight (TOL) End  | 0.9193919    | 0.1441773 | 0.0306729 | 0.1284597 | 0.1408772 |
| Tight (MOL) Bar  | 1.0501732    | 0.1279804 | 0.1201635 | 0.0440438 | 0.0367531 |
| Tight (MOL) Cra  | 1.0606978    | 0.4369959 | 0.4134046 | 0.1131193 | 0.1416414 |
| Tight (MOL) End  | 1.3485155    | 0.1429664 | 0.0613862 | 0.0729060 | 0.1291171 |

Table 5: Scale Factors for LLH-Based  $\tau$  ID + Loose Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.6320913    | 0.0778415 | 0.0151105 | 0.0763612 | 0.0763206 |
| Loose Cra        | 0.3627255    | 0.0420856 | 0.0417968 | 0.0049318 | 0.0047732 |
| Loose End        | 1.0095273    | 0.0252942 | 0.0125774 | 0.0160944 | 0.0219490 |
| Loose (TOL) Bar  | 0.5943556    | 0.1026912 | 0.0317730 | 0.0976527 | 0.0975061 |
| Loose (TOL) Cra  | 0.3468049    | 0.0455719 | 0.0435846 | 0.0133131 | 0.0113249 |
| Loose (TOL) End  | 0.9670890    | 0.1348068 | 0.0275219 | 0.1159470 | 0.1319678 |
| Loose (MOL) Bar  | 0.9926172    | 0.1170931 | 0.1138177 | 0.0275032 | 0.0263440 |
| Loose (MOL) Cra  | 0.9124382    | 0.3316691 | 0.2536380 | 0.2007540 | 0.2137107 |
| Loose (MOL) End  | 1.4117216    | 0.1332827 | 0.0541566 | 0.0422238 | 0.1217843 |
| Medium Bar       | 0.6299655    | 0.0826534 | 0.0155722 | 0.0811740 | 0.0810063 |
| Medium Cra       | 0.3513806    | 0.0453122 | 0.0445553 | 0.0077688 | 0.0082555 |
| Medium End       | 1.0012925    | 0.0247709 | 0.0131075 | 0.0165464 | 0.0210192 |
| Medium (TOL) Bar | 0.5931059    | 0.1045303 | 0.0166183 | 0.1032013 | 0.1029540 |
| Medium (TOL) Cra | 0.3279328    | 0.0556578 | 0.0548712 | 0.0093315 | 0.0090248 |
| Medium (TOL) End | 0.9512773    | 0.1357177 | 0.0280271 | 0.1175041 | 0.1327926 |
| Medium (MOL) Bar | 1.0085002    | 0.1168469 | 0.1146824 | 0.0223885 | 0.0085861 |
| Medium (MOL) Cra | 0.7889258    | 0.4222845 | 0.3429661 | 0.2029039 | 0.2463707 |
| Medium (MOL) End | 1.3788740    | 0.1349507 | 0.0551335 | 0.0404291 | 0.1231747 |
| Tight Bar        | 0.6228922    | 0.0838236 | 0.0162796 | 0.0822279 | 0.0820273 |
| Tight Cra        | 0.3437191    | 0.0538163 | 0.0501541 | 0.0194749 | 0.0195162 |
| Tight End        | 0.9926004    | 0.0276532 | 0.0138562 | 0.0182011 | 0.0239349 |
| Tight (TOL) Bar  | 0.5855208    | 0.1015598 | 0.0172809 | 0.1000793 | 0.0998483 |
| Tight (TOL) Cra  | 0.3209138    | 0.0525023 | 0.0512559 | 0.0113777 | 0.0107470 |
| Tight (TOL) End  | 0.9230896    | 0.3000986 | 0.2607148 | 0.1465779 | 0.1486171 |
| Tight (MOL) Bar  | 1.0054171    | 0.0641412 | 0.0566237 | 0.0301324 | 0.0223533 |
| Tight (MOL) Cra  | 0.7229048    | 0.3102993 | 0.2785482 | 0.1237934 | 0.1367359 |
| Tight (MOL) End  | 1.3848393    | 0.1469792 | 0.0580862 | 0.0408791 | 0.1350145 |

Table 6: Scale Factors for BDT-Based  $\tau$  ID + Loose Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.6373107    | 0.0832231 | 0.0312684 | 0.0771260 | 0.0771128 |
| Loose Cra        | 0.3623947    | 0.0452459 | 0.0423407 | 0.0159552 | 0.0115789 |
| Loose End        | 1.0257285    | 0.0260653 | 0.0138272 | 0.0149292 | 0.0220991 |
| Loose (TOL) Bar  | 0.6010593    | 0.1051893 | 0.0350409 | 0.0991817 | 0.0990925 |
| Loose (TOL) Cra  | 0.3444270    | 0.0477420 | 0.0439380 | 0.0186764 | 0.0056107 |
| Loose (TOL) End  | 0.9917961    | 0.1339275 | 0.0292868 | 0.1128364 | 0.1306864 |
| Loose (MOL) Bar  | 1.0004924    | 0.1255448 | 0.1212851 | 0.0311947 | 0.0324274 |
| Loose (MOL) Cra  | 0.8465232    | 0.2525992 | 0.2434403 | 0.0674042 | 0.0428918 |
| Loose (MOL) End  | 1.4377066    | 0.1373914 | 0.0570521 | 0.0409739 | 0.1249862 |
| Medium Bar       | 0.6470704    | 0.0689129 | 0.0202575 | 0.0655319 | 0.0658693 |
| Medium Cra       | 0.3582880    | 0.0527067 | 0.0474452 | 0.0229581 | 0.0203790 |
| Medium End       | 1.0380637    | 0.0704698 | 0.0188322 | 0.0679080 | 0.0592673 |
| Medium (TOL) Bar | 0.6134349    | 0.0939920 | 0.0218435 | 0.0911528 | 0.0914192 |
| Medium (TOL) Cra | 0.3406510    | 0.0863811 | 0.0833717 | 0.0226039 | 0.0126786 |
| Medium (TOL) End | 1.0097032    | 0.3444164 | 0.3116444 | 0.1466308 | 0.1369897 |
| Medium (MOL) Bar | 0.9296188    | 0.1177705 | 0.1164736 | 0.0128246 | 0.0174328 |
| Medium (MOL) Cra | 0.7431104    | 0.5152636 | 0.4960073 | 0.0878927 | 0.1395472 |
| Medium (MOL) End | 1.4843371    | 0.1495707 | 0.0691816 | 0.0488527 | 0.1326100 |
| Tight Bar        | 0.6595852    | 0.0909604 | 0.0332905 | 0.0845123 | 0.0846499 |
| Tight Cra        | 0.3103235    | 0.0608489 | 0.0544752 | 0.0271137 | 0.0028066 |
| Tight End        | 0.1343521    | 1.9027901 | 1.5854772 | 1.0520801 | 1.0440602 |
| Tight (TOL) Bar  | 0.6191738    | 0.1088742 | 0.0318818 | 0.1041023 | 0.1039678 |
| Tight (TOL) Cra  | 0.2729071    | 0.0648783 | 0.0539185 | 0.0360838 | 0.0024006 |
| Tight (TOL) End  | 0.0000000    | 1.0820689 | 0.0000000 | 1.0820690 | 1.0820690 |
| Tight (MOL) Bar  | 0.9232438    | 0.1124046 | 0.0980790 | 0.0411422 | 0.0549129 |
| Tight (MOL) Cra  | 0.8534665    | 0.4918075 | 0.3543125 | 0.2767422 | 0.3410827 |
| Tight (MOL) End  | 1.4847356    | 0.1483893 | 0.0884158 | 0.0539553 | 0.1191729 |

Table 7: Scale Factors for Cut-Based  $\tau$  ID + Medium Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.8140658    | 0.1190814 | 0.0974747 | 0.0684045 | 0.0683828 |
| Loose Cra        | 0.4607535    | 0.0778729 | 0.0756813 | 0.0144955 | 0.0183482 |
| Loose End        | 1.2262801    | 0.1206055 | 0.0543440 | 0.0627181 | 0.1076686 |
| Loose (TOL) Bar  | 0.7762645    | 0.1615834 | 0.1171624 | 0.1112756 | 0.1102144 |
| Loose (TOL) Cra  | 0.4531751    | 0.0862606 | 0.0811107 | 0.0293604 | 0.0247911 |
| Loose (TOL) End  | 1.0799094    | 0.1632816 | 0.0626568 | 0.1081692 | 0.1507817 |
| Loose (MOL) Bar  | 0.9342970    | 0.1976727 | 0.1903369 | 0.0533525 | 0.0515657 |
| Loose (MOL) Cra  | 1.0395295    | 0.3935278 | 0.3550436 | 0.1697301 | 0.1102631 |
| Loose (MOL) End  | 1.4165304    | 0.2151325 | 0.1075881 | 0.1301721 | 0.1862981 |
| Medium Bar       | 0.8047828    | 0.1058168 | 0.0845237 | 0.0636634 | 0.0631408 |
| Medium Cra       | 0.4567587    | 0.0951425 | 0.0794184 | 0.0322639 | 0.0523924 |
| Medium End       | 1.2676360    | 0.1332606 | 0.0583100 | 0.0735964 | 0.1198267 |
| Medium (TOL) Bar | 0.7747178    | 0.1449141 | 0.0969715 | 0.1076883 | 0.1062373 |
| Medium (TOL) Cra | 0.4387699    | 0.1032434 | 0.0840260 | 0.0596855 | 0.0599909 |
| Medium (TOL) End | 1.1159928    | 0.1804353 | 0.0684118 | 0.1186537 | 0.1669635 |
| Medium (MOL) Bar | 0.9432356    | 0.1555364 | 0.1521679 | 0.0321978 | 0.0166715 |
| Medium (MOL) Cra | 1.1400800    | 0.4720249 | 0.4149945 | 0.2249160 | 0.2214075 |
| Medium (MOL) End | 1.5229156    | 0.2434329 | 0.1230095 | 0.1060905 | 0.2100674 |
| Tight Bar        | 0.8487955    | 0.0975930 | 0.0577739 | 0.0786555 | 0.0774598 |
| Tight Cra        | 0.4441603    | 0.1342996 | 0.1032749 | 0.0234895 | 0.0858530 |
| Tight End        | 1.2619946    | 0.1533531 | 0.0671059 | 0.0868174 | 0.1378916 |
| Tight (TOL) Bar  | 0.8335753    | 0.1573086 | 0.0636364 | 0.1438631 | 0.1416522 |
| Tight (TOL) Cra  | 0.4138394    | 0.1305266 | 0.1082139 | 0.0504438 | 0.0729865 |
| Tight (TOL) End  | 1.0563556    | 0.1925650 | 0.0770036 | 0.1452487 | 0.1764988 |
| Tight (MOL) Bar  | 1.0283401    | 0.1762770 | 0.1690703 | 0.0498898 | 0.0407992 |
| Tight (MOL) Cra  | 1.6167958    | 0.8144020 | 0.7577313 | 0.2687227 | 0.2984863 |
| Tight (MOL) End  | 1.4589431    | 0.2960204 | 0.1416589 | 0.2251256 | 0.2599248 |

Table 8: Scale Factors for LLH-Based  $\tau$  ID + Medium Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.8265027    | 0.0990716 | 0.0863536 | 0.0474106 | 0.0485628 |
| Loose Cra        | 0.4665167    | 0.1519358 | 0.1368835 | 0.0595622 | 0.0659363 |
| Loose End        | 1.2329141    | 0.1260353 | 0.0545325 | 0.0619429 | 0.1136279 |
| Loose (TOL) Bar  | 0.8071519    | 0.1385644 | 0.0996358 | 0.0962961 | 0.0951985 |
| Loose (TOL) Cra  | 0.4585270    | 0.1759937 | 0.1494144 | 0.0930011 | 0.0929174 |
| Loose (TOL) End  | 1.0776271    | 0.1715893 | 0.0627004 | 0.1179263 | 0.1597238 |
| Loose (MOL) Bar  | 0.9643532    | 0.1632859 | 0.1534620 | 0.0545947 | 0.0557839 |
| Loose (MOL) Cra  | 1.2227889    | 0.9963405 | 0.8757388 | 0.4751590 | 0.4744211 |
| Loose (MOL) End  | 1.4323395    | 0.2378421 | 0.1086603 | 0.1583281 | 0.2115701 |
| Medium Bar       | 0.8307430    | 0.0706795 | 0.0418256 | 0.0569764 | 0.0563836 |
| Medium Cra       | 0.4171377    | 0.1132183 | 0.0988450 | 0.0469073 | 0.0552097 |
| Medium End       | 1.2311621    | 0.1275080 | 0.0569158 | 0.0641280 | 0.1141008 |
| Medium (TOL) Bar | 0.8097828    | 0.1140293 | 0.0466638 | 0.1040446 | 0.1019563 |
| Medium (TOL) Cra | 0.3997631    | 0.1346060 | 0.1054550 | 0.0821543 | 0.0836551 |
| Medium (TOL) End | 1.0464169    | 0.1573264 | 0.0642650 | 0.1021684 | 0.1436026 |
| Medium (MOL) Bar | 0.9751987    | 0.1527625 | 0.1482255 | 0.0369563 | 0.0228132 |
| Medium (MOL) Cra | 0.9519207    | 0.6769146 | 0.5746748 | 0.3494512 | 0.3577184 |
| Medium (MOL) End | 1.3675703    | 0.2171485 | 0.1117135 | 0.1239877 | 0.1862085 |
| Tight Bar        | 0.8163165    | 0.0830812 | 0.0452316 | 0.0696906 | 0.0693175 |
| Tight Cra        | 0.3892129    | 0.0933959 | 0.0903060 | 0.0030410 | 0.0238278 |
| Tight End        | 1.2565374    | 0.1391894 | 0.0616296 | 0.0786117 | 0.1248022 |
| Tight (TOL) Bar  | 0.7918752    | 0.1323680 | 0.0500289 | 0.1225502 | 0.1211385 |
| Tight (TOL) Cra  | 0.3650855    | 0.1063630 | 0.0952609 | 0.0439205 | 0.0473137 |
| Tight (TOL) End  | 1.0595749    | 0.1681868 | 0.0695825 | 0.1157521 | 0.1531182 |
| Tight (MOL) Bar  | 0.9722591    | 0.1344477 | 0.1302135 | 0.0334772 | 0.0205107 |
| Tight (MOL) Cra  | 0.9730406    | 0.5598705 | 0.4985919 | 0.2423890 | 0.2546787 |
| Tight (MOL) End  | 1.4416700    | 0.2494457 | 0.1252253 | 0.1310214 | 0.2157359 |

Table 9: Scale Factors for BDT-Based  $\tau$  ID + Medium Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.8405372    | 0.1041474 | 0.0913861 | 0.0494091 | 0.0499534 |
| Loose Cra        | 0.4564117    | 0.0881714 | 0.0764380 | 0.0366406 | 0.0439499 |
| Loose End        | 1.2531622    | 0.1311419 | 0.0570440 | 0.0588317 | 0.1180856 |
| Loose (TOL) Bar  | 0.8198748    | 0.1468819 | 0.1076432 | 0.0999366 | 0.0996934 |
| Loose (TOL) Cra  | 0.4472078    | 0.1224430 | 0.1029882 | 0.0662256 | 0.0588955 |
| Loose (TOL) End  | 1.1131857    | 0.1800819 | 0.0663075 | 0.1187054 | 0.1674304 |
| Loose (MOL) Bar  | 0.9887026    | 0.1783544 | 0.1675979 | 0.0571265 | 0.0610030 |
| Loose (MOL) Cra  | 1.2448568    | 0.6589223 | 0.5670520 | 0.3356052 | 0.2233606 |
| Loose (MOL) End  | 1.5068027    | 0.2510808 | 0.1163043 | 0.1524111 | 0.2225198 |
| Medium Bar       | 0.8131816    | 0.0709372 | 0.0469190 | 0.0502144 | 0.0532061 |
| Medium Cra       | 0.4669780    | 0.1721049 | 0.1529271 | 0.0384581 | 0.0789527 |
| Medium End       | 1.2613446    | 0.1579471 | 0.0665907 | 0.0684654 | 0.1432237 |
| Medium (TOL) Bar | 0.7978702    | 0.1070850 | 0.0528883 | 0.0923994 | 0.0931137 |
| Medium (TOL) Cra | 0.4447761    | 0.1794474 | 0.1628564 | 0.0725660 | 0.0753606 |
| Medium (TOL) End | 1.0546351    | 0.4282397 | 0.3836936 | 0.1899901 | 0.1901807 |
| Medium (MOL) Bar | 0.9310625    | 0.1612659 | 0.1591449 | 0.0242760 | 0.0260716 |
| Medium (MOL) Cra | 1.4408676    | 1.0589754 | 0.9760450 | 0.4078839 | 0.4108106 |
| Medium (MOL) End | 1.4313190    | 0.6524707 | 0.5945491 | 0.2509420 | 0.2687555 |
| Tight Bar        | 0.8137715    | 0.1066048 | 0.0599812 | 0.0831262 | 0.0881305 |
| Tight Cra        | 0.3307043    | 0.1171324 | 0.0924705 | 0.0606041 | 0.0718985 |
| Tight End        | 1.2722485    | 0.1673224 | 0.0858144 | 0.0961013 | 0.1436410 |
| Tight (TOL) Bar  | 0.7838870    | 0.1365397 | 0.0665593 | 0.1170438 | 0.1192184 |
| Tight (TOL) Cra  | 0.2962400    | 0.1156503 | 0.0943758 | 0.0668460 | 0.0362602 |
| Tight (TOL) End  | 1.1350353    | 0.1904176 | 0.0994686 | 0.1191455 | 0.1623729 |
| Tight (MOL) Bar  | 0.9026249    | 0.1636896 | 0.1435299 | 0.0676230 | 0.0786991 |
| Tight (MOL) Cra  | 1.5592525    | 0.9826105 | 0.7181202 | 0.6588933 | 0.6706914 |
| Tight (MOL) End  | 1.4399740    | 0.2845882 | 0.1661082 | 0.1466319 | 0.2310815 |

Table 10: Scale Factors for Cut-Based  $\tau$  ID + Tight Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.8308195    | 0.2913973 | 0.2616525 | 0.1277570 | 0.1282593 |
| Loose Cra        | 0.4616821    | 0.1430213 | 0.1349378 | 0.0474019 | 0.0335297 |
| Loose End        | 1.5059096    | 0.1478813 | 0.0793624 | 0.0590547 | 0.1247823 |
| Loose (TOL) Bar  | 0.8879314    | 0.3354620 | 0.2949216 | 0.1592869 | 0.1598630 |
| Loose (TOL) Cra  | 0.4804959    | 0.1494269 | 0.1405094 | 0.0508489 | 0.0370073 |
| Loose (TOL) End  | 1.3682504    | 0.2666175 | 0.1037990 | 0.1846443 | 0.2455825 |
| Loose (MOL) Bar  | 1.0985707    | 0.5574160 | 0.5374811 | 0.1462693 | 0.1477391 |
| Loose (MOL) Cra  | 1.5587474    | 0.9910377 | 0.9246673 | 0.3565758 | 0.0512293 |
| Loose (MOL) End  | 1.8641636    | 0.3208211 | 0.1669854 | 0.1761808 | 0.2739383 |
| Medium Bar       | 0.7880879    | 0.2122022 | 0.1938832 | 0.0861164 | 0.0862511 |
| Medium Cra       | 0.4533568    | 0.1549345 | 0.1385246 | 0.0683431 | 0.0693957 |
| Medium End       | 1.5371862    | 0.1690834 | 0.0823976 | 0.0687908 | 0.1476480 |
| Medium (TOL) Bar | 0.8459863    | 0.2467131 | 0.2169001 | 0.1174087 | 0.1175663 |
| Medium (TOL) Cra | 0.4711867    | 0.1619299 | 0.1440491 | 0.0729018 | 0.0739680 |
| Medium (TOL) End | 1.4023217    | 0.2863419 | 0.1088177 | 0.1747593 | 0.2648595 |
| Medium (MOL) Bar | 1.0265783    | 0.3846017 | 0.3744217 | 0.0870016 | 0.0879033 |
| Medium (MOL) Cra | 1.8876269    | 1.3212726 | 1.1311222 | 0.6658609 | 0.6828792 |
| Medium (MOL) End | 1.9291762    | 0.3400342 | 0.1783633 | 0.1002738 | 0.2894995 |
| Tight Bar        | 0.8807759    | 0.2449195 | 0.2174774 | 0.1101521 | 0.1126466 |
| Tight Cra        | 0.3362274    | 0.1934892 | 0.1520533 | 0.0711631 | 0.1196575 |
| Tight End        | 1.5303148    | 0.1840627 | 0.0927587 | 0.0728460 | 0.1589812 |
| Tight (TOL) Bar  | 0.9433159    | 0.2974392 | 0.2396400 | 0.1740867 | 0.1761899 |
| Tight (TOL) Cra  | 0.3466559    | 0.2001474 | 0.1568091 | 0.0750557 | 0.1243786 |
| Tight (TOL) End  | 1.3550054    | 0.2901122 | 0.1210847 | 0.1926746 | 0.2636354 |
| Tight (MOL) Bar  | 1.1746540    | 0.3989502 | 0.3811983 | 0.1027751 | 0.1176830 |
| Tight (MOL) Cra  | 1.2247680    | 1.3715271 | 1.2792433 | 0.4847018 | 0.4945941 |
| Tight (MOL) End  | 1.7987595    | 0.3564258 | 0.1978434 | 0.2206927 | 0.2964750 |

Table 11: Scale Factors for LLH-Based  $\tau$  ID + Tight Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.9102659    | 0.2225852 | 0.1918791 | 0.1047257 | 0.1128131 |
| Loose Cra        | 0.3658641    | 0.2826444 | 0.2724790 | 0.0744334 | 0.0751208 |
| Loose End        | 1.5222194    | 0.1662507 | 0.0798861 | 0.0573454 | 0.1457999 |
| Loose (TOL) Bar  | 0.9944997    | 0.2633655 | 0.2175563 | 0.1400595 | 0.1484276 |
| Loose (TOL) Cra  | 0.3802105    | 0.2938695 | 0.2829126 | 0.0787840 | 0.0794972 |
| Loose (TOL) End  | 1.3859426    | 0.2939493 | 0.1047707 | 0.2022898 | 0.2746442 |
| Loose (MOL) Bar  | 1.2737895    | 0.4073550 | 0.3757127 | 0.1278356 | 0.1574107 |
| Loose (MOL) Cra  | 0.6906030    | 3.0513695 | 2.9750154 | 0.6760633 | 0.6783358 |
| Loose (MOL) End  | 1.8959955    | 0.3604411 | 0.1690984 | 0.2131873 | 0.3183137 |
| Medium Bar       | 0.8877461    | 0.1931861 | 0.1666656 | 0.0969302 | 0.0976909 |
| Medium Cra       | 0.3747185    | 0.2154281 | 0.1869799 | 0.0957312 | 0.1069949 |
| Medium End       | 1.4956628    | 0.1679931 | 0.0822416 | 0.0586921 | 0.1464860 |
| Medium (TOL) Bar | 0.9575829    | 0.2300419 | 0.1857252 | 0.1346967 | 0.1357406 |
| Medium (TOL) Cra | 0.3881592    | 0.2236877 | 0.1937145 | 0.1003034 | 0.1118525 |
| Medium (TOL) End | 1.2916929    | 0.2639564 | 0.1043796 | 0.1585101 | 0.2424417 |
| Medium (MOL) Bar | 1.2245908    | 0.3194251 | 0.3117710 | 0.0612668 | 0.0695080 |
| Medium (MOL) Cra | 0.9901314    | 1.5512181 | 1.4746333 | 0.4747727 | 0.4813879 |
| Medium (MOL) End | 1.7520507    | 0.3211030 | 0.1692918 | 0.1398173 | 0.2728508 |
| Tight Bar        | 0.8478322    | 0.1499096 | 0.0832528 | 0.1238845 | 0.1246672 |
| Tight Cra        | 0.3977774    | 0.2028487 | 0.1643093 | 0.0859157 | 0.1189543 |
| Tight End        | 1.5380274    | 0.1820738 | 0.0888936 | 0.0714311 | 0.1588993 |
| Tight (TOL) Bar  | 0.8946044    | 0.1844827 | 0.0905345 | 0.1598333 | 0.1607407 |
| Tight (TOL) Cra  | 0.4089014    | 0.2086020 | 0.1689277 | 0.0884637 | 0.1223860 |
| Tight (TOL) End  | 1.3619663    | 0.2975289 | 0.1153176 | 0.1861416 | 0.2742725 |
| Tight (MOL) Bar  | 1.1525808    | 0.2092118 | 0.2052098 | 0.0208684 | 0.0407266 |
| Tight (MOL) Cra  | 1.4722072    | 1.1471201 | 1.0853791 | 0.3519279 | 0.3712640 |
| Tight (MOL) End  | 1.9002787    | 0.3672963 | 0.1936739 | 0.1337001 | 0.3120852 |

Table 12: Scale Factors for BDT-Based  $\tau$  ID + Tight Cut-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.8842460    | 0.2486909 | 0.2151112 | 0.1231636 | 0.1247977 |
| Loose Cra        | 0.3378183    | 0.1922326 | 0.1714021 | 0.0870337 | 0.0381321 |
| Loose End        | 1.5242854    | 0.1719627 | 0.0825035 | 0.0547926 | 0.1508790 |
| Loose (TOL) Bar  | 0.9451320    | 0.2895781 | 0.2417378 | 0.1576116 | 0.1594316 |
| Loose (TOL) Cra  | 0.3510524    | 0.1997085 | 0.1780086 | 0.0905347 | 0.0398511 |
| Loose (TOL) End  | 1.4104957    | 0.2998444 | 0.1092457 | 0.1892368 | 0.2792349 |
| Loose (MOL) Bar  | 1.2052827    | 0.4875224 | 0.4376842 | 0.2079843 | 0.2147342 |
| Loose (MOL) Cra  | 0.7876520    | 1.7327014 | 1.4455801 | 0.9552762 | 0.3244934 |
| Loose (MOL) End  | 1.9665302    | 0.3728578 | 0.1780375 | 0.1849132 | 0.3276061 |
| Medium Bar       | 0.9171966    | 0.1447746 | 0.0895484 | 0.1086091 | 0.1137577 |
| Medium Cra       | 0.3614402    | 0.2901904 | 0.2798308 | 0.0675214 | 0.0768461 |
| Medium End       | 1.5621241    | 0.2167966 | 0.0948904 | 0.0726844 | 0.1949276 |
| Medium (TOL) Bar | 0.9785451    | 0.1792551 | 0.0988843 | 0.1440640 | 0.1495137 |
| Medium (TOL) Cra | 0.3774714    | 0.3031314 | 0.2921428 | 0.0711686 | 0.0808789 |
| Medium (TOL) End | 1.4399820    | 0.3280981 | 0.1229771 | 0.1654771 | 0.3041794 |
| Medium (MOL) Bar | 1.2853295    | 0.3625106 | 0.3569746 | 0.0199508 | 0.0631131 |
| Medium (MOL) Cra | 0.9134817    | 3.2615652 | 3.1175495 | 0.9584849 | 0.8958727 |
| Medium (MOL) End | 1.9604786    | 0.4329562 | 0.2000808 | 0.1875136 | 0.3839516 |
| Tight Bar        | 0.8691243    | 0.2118173 | 0.1116828 | 0.1713566 | 0.1799824 |
| Tight Cra        | 0.1800528    | 0.1472528 | 0.1278829 | 0.0730032 | 0.0256897 |
| Tight End        | 1.5556480    | 0.2246917 | 0.1194002 | 0.1049751 | 0.1903420 |
| Tight (TOL) Bar  | 0.9317347    | 0.2462096 | 0.1228923 | 0.2038989 | 0.2133465 |
| Tight (TOL) Cra  | 0.1857625    | 0.1519927 | 0.1319513 | 0.0754372 | 0.0268405 |
| Tight (TOL) End  | 1.4300814    | 0.3036725 | 0.1499080 | 0.1553063 | 0.2640922 |
| Tight (MOL) Bar  | 1.1955317    | 0.2421435 | 0.1939298 | 0.0937102 | 0.1449994 |
| Tight (MOL) Cra  | 1.7778164    | 1.9721436 | 1.8178366 | 0.7512848 | 0.7647356 |
| Tight (MOL) End  | 1.7826452    | 0.4287204 | 0.2315637 | 0.2070722 | 0.3608041 |

Table 13: Scale Factors for Cut-Based  $\tau$  ID + Loose BDT-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.8517138    | 0.1676189 | 0.1294792 | 0.1037132 | 0.1064486 |
| Loose Cra        | 0.5441148    | 0.1172220 | 0.1151009 | 0.0221996 | 0.0221997 |
| Loose End        | 1.3590199    | 0.0970407 | 0.0643105 | 0.0484196 | 0.0726717 |
| Loose (TOL) Bar  | 0.8460311    | 0.1777233 | 0.1353516 | 0.1122610 | 0.1151768 |
| Loose (TOL) Cra  | 0.5453959    | 0.1174682 | 0.1153800 | 0.0220536 | 0.0220538 |
| Loose (TOL) End  | 1.3370235    | 0.1177688 | 0.0806102 | 0.0724466 | 0.0858579 |
| Loose (MOL) Bar  | 1.1216163    | 0.3272987 | 0.3042959 | 0.1073069 | 0.1205347 |
| Loose (MOL) Cra  | 1.0447907    | 0.4496319 | 0.4374622 | 0.1039033 | 0.0709298 |
| Loose (MOL) End  | 1.6314046    | 0.2360408 | 0.1390363 | 0.1907469 | 0.1771304 |
| Medium Bar       | 0.7689251    | 0.1522097 | 0.1258742 | 0.0851745 | 0.0855778 |
| Medium Cra       | 0.4224016    | 0.1166417 | 0.1142645 | 0.0226086 | 0.0234312 |
| Medium End       | 1.3408387    | 0.1009707 | 0.0737292 | 0.0131060 | 0.0689875 |
| Medium (TOL) Bar | 0.7488792    | 0.1575185 | 0.1287084 | 0.0902771 | 0.0908092 |
| Medium (TOL) Cra | 0.4236705    | 0.1169478 | 0.1146142 | 0.0224121 | 0.0232466 |
| Medium (TOL) End | 1.2976224    | 0.1358856 | 0.0957458 | 0.0513060 | 0.0964251 |
| Medium (MOL) Bar | 0.9269543    | 0.3065928 | 0.2913337 | 0.0919056 | 0.0955193 |
| Medium (MOL) Cra | 0.3645933    | 0.3746398 | 0.3676353 | 0.0659016 | 0.0721066 |
| Medium (MOL) End | 1.7139252    | 0.2814766 | 0.1799570 | 0.1448625 | 0.2164362 |
| Tight Bar        | 0.8662787    | 0.2065662 | 0.1583719 | 0.1310408 | 0.1326201 |
| Tight Cra        | 0.2721810    | 0.1634720 | 0.1227607 | 0.0747598 | 0.1079495 |
| Tight End        | 1.1888123    | 0.1295472 | 0.0951744 | 0.0443370 | 0.0878887 |
| Tight (TOL) Bar  | 0.8346271    | 0.2072151 | 0.1588662 | 0.1311083 | 0.1330405 |
| Tight (TOL) Cra  | 0.2721810    | 0.1634772 | 0.1227676 | 0.0747598 | 0.1079495 |
| Tight (TOL) End  | 1.1720611    | 0.1609276 | 0.1242667 | 0.1022525 | 0.0961673 |
| Tight (MOL) Bar  | 1.1404161    | 0.3449604 | 0.3287929 | 0.0824852 | 0.1043697 |
| Tight (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (MOL) End  | 1.6715849    | 0.3156705 | 0.2517926 | 0.1698823 | 0.1903903 |

Table 14: Scale Factors for LLH-Based  $\tau$  ID + Loose BDT-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.8600452    | 0.1530555 | 0.1128025 | 0.1010598 | 0.1034489 |
| Loose Cra        | 0.6210098    | 0.1399142 | 0.1288112 | 0.0479982 | 0.0546241 |
| Loose End        | 1.3887652    | 0.0931745 | 0.0655982 | 0.0476919 | 0.0661697 |
| Loose (TOL) Bar  | 0.8453793    | 0.1597350 | 0.1136882 | 0.1096813 | 0.1122066 |
| Loose (TOL) Cra  | 0.6210098    | 0.1398849 | 0.1288211 | 0.0478864 | 0.0545259 |
| Loose (TOL) End  | 1.3517840    | 0.1318157 | 0.0820898 | 0.0906131 | 0.1031348 |
| Loose (MOL) Bar  | 1.1462703    | 0.2886243 | 0.2418825 | 0.1430004 | 0.1574706 |
| Loose (MOL) Cra  | 1.4444605    | 0.6287916 | 0.5264066 | 0.3237549 | 0.3439114 |
| Loose (MOL) End  | 1.6951426    | 0.2697684 | 0.1420896 | 0.2293156 | 0.2201446 |
| Medium Bar       | 0.8528323    | 0.1611154 | 0.1150769 | 0.1119591 | 0.1127639 |
| Medium Cra       | 0.5734759    | 0.1695101 | 0.1555872 | 0.0490365 | 0.0672791 |
| Medium End       | 1.4145989    | 0.0950057 | 0.0848340 | 0.0406872 | 0.0427713 |
| Medium (TOL) Bar | 0.8417477    | 0.1703373 | 0.1170565 | 0.1227846 | 0.1237443 |
| Medium (TOL) Cra | 0.5734759    | 0.1695146 | 0.1555919 | 0.0490365 | 0.0672791 |
| Medium (TOL) End | 1.3456579    | 0.2478491 | 0.2320672 | 0.0870295 | 0.0647120 |
| Medium (MOL) Bar | 1.1702471    | 0.2454734 | 0.2345767 | 0.0587728 | 0.0723263 |
| Medium (MOL) Cra | 1.4685125    | 0.8340458 | 0.6792549 | 0.4693958 | 0.4839889 |
| Medium (MOL) End | 1.6091474    | 0.3607567 | 0.3286589 | 0.1487577 | 0.1333791 |
| Tight Bar        | 0.8115691    | 0.1527766 | 0.0801390 | 0.1293033 | 0.1300712 |
| Tight Cra        | 0.7029712    | 0.2544904 | 0.2160550 | 0.0693165 | 0.1344831 |
| Tight End        | 1.5032161    | 0.1329469 | 0.1201862 | 0.0260373 | 0.0568353 |
| Tight (TOL) Bar  | 0.8046854    | 0.1590569 | 0.0811040 | 0.1359557 | 0.1368260 |
| Tight (TOL) Cra  | 0.7029712    | 0.2545022 | 0.2160688 | 0.0693165 | 0.1344831 |
| Tight (TOL) End  | 1.3659413    | 0.1574992 | 0.1383771 | 0.0447138 | 0.0752189 |
| Tight (MOL) Bar  | 1.1294214    | 0.1687216 | 0.1621135 | 0.0281479 | 0.0467585 |
| Tight (MOL) Cra  | 2.0300266    | 1.2336497 | 1.0672137 | 0.5789350 | 0.6188270 |
| Tight (MOL) End  | 1.7055787    | 0.3145085 | 0.2274504 | 0.0433943 | 0.2172142 |

Table 15: Scale Factors for BDT-Based  $\tau$  ID + Loose BDT-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.8438681    | 0.1637400 | 0.1299585 | 0.0993599 | 0.0996073 |
| Loose Cra        | 0.4272702    | 0.1223458 | 0.1079954 | 0.0574943 | 0.0442522 |
| Loose End        | 1.4588843    | 0.2140469 | 0.1993173 | 0.0583558 | 0.0780311 |
| Loose (TOL) Bar  | 0.8266748    | 0.1739635 | 0.1335657 | 0.1111239 | 0.1114614 |
| Loose (TOL) Cra  | 0.4286381    | 0.1226894 | 0.1083543 | 0.0575510 | 0.0442282 |
| Loose (TOL) End  | 1.3741517    | 0.2847530 | 0.2660378 | 0.0975169 | 0.1015297 |
| Loose (MOL) Bar  | 1.0935429    | 0.3074322 | 0.2745002 | 0.1371329 | 0.1384354 |
| Loose (MOL) Cra  | 0.7769224    | 0.5109084 | 0.3949904 | 0.3240526 | 0.1582905 |
| Loose (MOL) End  | 1.7718711    | 0.4521591 | 0.4058549 | 0.1395332 | 0.1993236 |
| Medium Bar       | 0.8145730    | 0.1622248 | 0.1311610 | 0.0948887 | 0.0954661 |
| Medium Cra       | 0.5128885    | 0.1562101 | 0.1440163 | 0.0524987 | 0.0605065 |
| Medium End       | 1.4306716    | 0.1435287 | 0.0987403 | 0.0514746 | 0.1041681 |
| Medium (TOL) Bar | 0.7845696    | 0.1692117 | 0.1323442 | 0.1047803 | 0.1054408 |
| Medium (TOL) Cra | 0.5132984    | 0.1563723 | 0.1441472 | 0.0526074 | 0.0606129 |
| Medium (TOL) End | 1.2446182    | 0.7278563 | 0.7146470 | 0.1379935 | 0.1380381 |
| Medium (MOL) Bar | 1.0723279    | 0.2562898 | 0.2451666 | 0.0698407 | 0.0746855 |
| Medium (MOL) Cra | 1.2705245    | 0.8042654 | 0.7500944 | 0.1231159 | 0.2901747 |
| Medium (MOL) End | 1.6230101    | 0.9070316 | 0.8760285 | 0.1976119 | 0.2351184 |
| Tight Bar        | 0.8369221    | 0.1576372 | 0.1129652 | 0.0989762 | 0.1099473 |
| Tight Cra        | 0.3893881    | 0.1915325 | 0.1604487 | 0.1045993 | 0.0563905 |
| Tight End        | 1.5193816    | 0.1671956 | 0.1302791 | 0.0596647 | 0.1047941 |
| Tight (TOL) Bar  | 0.8107127    | 0.1679717 | 0.1142784 | 0.1120019 | 0.1231059 |
| Tight (TOL) Cra  | 0.3893881    | 0.1915325 | 0.1604487 | 0.1045993 | 0.0563905 |
| Tight (TOL) End  | 1.3031109    | 0.2046946 | 0.1579597 | 0.1006746 | 0.1301872 |
| Tight (MOL) Bar  | 0.9891778    | 0.2635708 | 0.2282615 | 0.0984711 | 0.1317814 |
| Tight (MOL) Cra  | 1.1488450    | 1.2901571 | 1.1692192 | 0.5375098 | 0.5453734 |
| Tight (MOL) End  | 1.6794621    | 0.3983961 | 0.2626259 | 0.1108912 | 0.2995785 |

Table 16: Scale Factors for Cut-Based  $\tau$  ID + Medium BDT-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.9833677    | 0.4661366 | 0.4045081 | 0.2261507 | 0.2316391 |
| Loose Cra        | 0.2136872    | 0.4007797 | 0.2146679 | 0.3384407 | 0.2869712 |
| Loose End        | 1.5655914    | 0.6642804 | 0.5173589 | 0.4166634 | 0.4088011 |
| Loose (TOL) Bar  | 0.9203956    | 0.4748691 | 0.4127997 | 0.2286904 | 0.2347280 |
| Loose (TOL) Cra  | 0.2136872    | 0.4007797 | 0.2146679 | 0.3384407 | 0.2869712 |
| Loose (TOL) End  | 1.3699016    | 0.7699594 | 0.6190630 | 0.4578196 | 0.4266061 |
| Loose (MOL) Bar  | 1.2806368    | 0.8849806 | 0.8122941 | 0.3391691 | 0.3512395 |
| Loose (MOL) Cra  | 1.1809610    | 1.9165018 | 1.2063848 | 1.4891660 | 1.1110548 |
| Loose (MOL) End  | 2.1116620    | 1.5397265 | 1.2708186 | 0.8693550 | 0.7414268 |
| Medium Bar       | 0.7289650    | 0.3999144 | 0.3345904 | 0.2190214 | 0.2190455 |
| Medium Cra       | 0.3444146    | 0.3599309 | 0.3470692 | 0.0912592 | 0.0953588 |
| Medium End       | 1.7859261    | 0.3708283 | 0.2394157 | 0.2677208 | 0.2831854 |
| Medium (TOL) Bar | 0.6808998    | 0.4069040 | 0.3386997 | 0.2254586 | 0.2255074 |
| Medium (TOL) Cra | 0.3444146    | 0.3599309 | 0.3470692 | 0.0912592 | 0.0953588 |
| Medium (TOL) End | 1.5205172    | 0.7408467 | 0.6602488 | 0.3340073 | 0.3360439 |
| Medium (MOL) Bar | 0.8646547    | 0.7604363 | 0.6572148 | 0.3825341 | 0.3825340 |
| Medium (MOL) Cra | 1.9407621    | 2.2065889 | 2.0089706 | 0.8993217 | 0.9127278 |
| Medium (MOL) End | 2.5461771    | 0.8120562 | 0.4966559 | 0.6017961 | 0.6424705 |
| Tight Bar        | 0.8220698    | 0.4512837 | 0.4344714 | 0.1088647 | 0.1220318 |
| Tight Cra        | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight End        | 1.3296696    | 0.4249614 | 0.2876473 | 0.3128120 | 0.2966550 |
| Tight (TOL) Bar  | 0.7831340    | 0.4516589 | 0.4358210 | 0.1038246 | 0.1185578 |
| Tight (TOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (TOL) End  | 1.3157961    | 0.4309057 | 0.3134512 | 0.2956827 | 0.2473652 |
| Tight (MOL) Bar  | 1.0160651    | 0.7871654 | 0.7750996 | 0.0671231 | 0.1372958 |
| Tight (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (MOL) End  | 2.6583937    | 1.0113714 | 0.7601267 | 0.6671429 | 0.6158492 |

Table 17: Scale Factors for LLH-Based  $\tau$  ID + Medium BDT-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 0.9806782    | 0.4014061 | 0.3063755 | 0.2521492 | 0.2593473 |
| Loose Cra        | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose End        | 1.5373716    | 0.8649661 | 0.7160656 | 0.4851975 | 0.4320838 |
| Loose (TOL) Bar  | 0.9338304    | 0.3994031 | 0.3011422 | 0.2544526 | 0.2623669 |
| Loose (TOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose (TOL) End  | 1.4354440    | 1.0013545 | 0.8256447 | 0.5665880 | 0.4694724 |
| Loose (MOL) Bar  | 1.2939158    | 0.7475299 | 0.5998423 | 0.4263295 | 0.4460835 |
| Loose (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose (MOL) End  | 2.3603702    | 2.2294911 | 1.9315254 | 1.1134813 | 0.7425955 |
| Medium Bar       | 1.0688994    | 0.3813128 | 0.3263243 | 0.1939750 | 0.1972614 |
| Medium Cra       | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium End       | 0.8401734    | 0.8169753 | 0.6762552 | 0.4583970 | 0.4341551 |
| Medium (TOL) Bar | 1.0340113    | 0.3805195 | 0.3261647 | 0.1921887 | 0.1959891 |
| Medium (TOL) Cra | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium (TOL) End | 0.7611091    | 0.9538333 | 0.7744109 | 0.5568536 | 0.5107806 |
| Medium (MOL) Bar | 1.4601491    | 0.6133187 | 0.5805570 | 0.1926071 | 0.1977714 |
| Medium (MOL) Cra | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium (MOL) End | 0.8505190    | 1.7266613 | 1.3719092 | 1.0484391 | 0.9839120 |
| Tight Bar        | 0.9155700    | 0.3105107 | 0.2361864 | 0.2015761 | 0.1986982 |
| Tight Cra        | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight End        | 1.2366029    | 0.4334732 | 0.3548253 | 0.0962923 | 0.2489945 |
| Tight (TOL) Bar  | 0.8880664    | 0.3044102 | 0.2347620 | 0.1937848 | 0.1908324 |
| Tight (TOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (TOL) End  | 0.9697082    | 0.4702441 | 0.3385441 | 0.1846463 | 0.3263702 |
| Tight (MOL) Bar  | 1.2202296    | 0.2671364 | 0.2070672 | 0.1687753 | 0.1667909 |
| Tight (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (MOL) End  | 1.4622948    | 0.8687599 | 0.5670887 | 0.2728714 | 0.6581446 |

Table 18: Scale Factors for BDT-Based  $\tau$  ID + Medium BDT-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 1.0653934    | 0.4410900 | 0.3645795 | 0.2437556 | 0.2482785 |
| Loose Cra        | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose End        | 1.6143735    | 0.7992585 | 0.7327859 | 0.3181305 | 0.3191224 |
| Loose (TOL) Bar  | 0.9939848    | 0.4451983 | 0.3642402 | 0.2532363 | 0.2559898 |
| Loose (TOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose (TOL) End  | 1.4930656    | 0.9393412 | 0.8610709 | 0.3753917 | 0.3752489 |
| Loose (MOL) Bar  | 1.3980188    | 0.8189443 | 0.7148314 | 0.3844648 | 0.3996073 |
| Loose (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose (MOL) End  | 2.3179263    | 1.9244643 | 1.8221103 | 0.6192555 | 0.6170721 |
| Medium Bar       | 1.0322389    | 0.3690957 | 0.3162689 | 0.1890484 | 0.1902780 |
| Medium Cra       | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium End       | 0.4480929    | 2.0029968 | 1.5272129 | 1.2960005 | 1.2887456 |
| Medium (TOL) Bar | 0.9676473    | 0.3669940 | 0.3116342 | 0.1924265 | 0.1938268 |
| Medium (TOL) Cra | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium (TOL) End | 0.1521406    | 2.1979084 | 1.6125592 | 1.4934706 | 1.4755370 |
| Medium (MOL) Bar | 1.4559328    | 0.6216733 | 0.5855106 | 0.1967248 | 0.2089385 |
| Medium (MOL) Cra | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium (MOL) End | 0.0000000    | 2.6791308 | 0.0000000 | 2.6791309 | 2.6753825 |
| Tight Bar        | 0.9162698    | 0.3755434 | 0.2713142 | 0.2559612 | 0.2596567 |
| Tight Cra        | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight End        | 1.8767498    | 0.5491467 | 0.4359054 | 0.2623470 | 0.3339891 |
| Tight (TOL) Bar  | 0.9142910    | 0.3862760 | 0.2750903 | 0.2673325 | 0.2711727 |
| Tight (TOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (TOL) End  | 1.8376913    | 0.6434017 | 0.4923123 | 0.2391854 | 0.4142396 |
| Tight (MOL) Bar  | 1.2292551    | 0.5511767 | 0.4585114 | 0.3044515 | 0.3058810 |
| Tight (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (MOL) End  | 3.0497131    | 1.2530848 | 0.9344561 | 0.2754252 | 0.8348733 |

Table 19: Scale Factors for Cut-Based  $\tau$  ID + Tight BDT-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 1.0696711    | 0.9252233 | 0.8444388 | 0.3682815 | 0.3781024 |
| Loose Cra        | 0.5403471    | 1.0590960 | 0.5462082 | 0.9073815 | 0.7859903 |
| Loose End        | 1.9041113    | 1.9260091 | 1.7372029 | 0.8316474 | 0.7794305 |
| Loose (TOL) Bar  | 0.9613525    | 0.9393110 | 0.8526520 | 0.3838387 | 0.3940683 |
| Loose (TOL) Cra  | 0.5403471    | 1.0590960 | 0.5462082 | 0.9073815 | 0.7859903 |
| Loose (TOL) End  | 1.6900624    | 2.0682079 | 1.8420551 | 0.9403814 | 0.8611726 |
| Loose (MOL) Bar  | 1.0700657    | 1.5430990 | 1.4142010 | 0.6055025 | 0.6174061 |
| Loose (MOL) Cra  | 1.9407580    | 3.7599233 | 2.0200821 | 3.1711657 | 2.7211236 |
| Loose (MOL) End  | 2.6847923    | 4.5471680 | 4.0977726 | 1.9710395 | 1.5505343 |
| Medium Bar       | 0.7039984    | 0.7485648 | 0.6664404 | 0.3392725 | 0.3408908 |
| Medium Cra       | 0.8739239    | 0.9219311 | 0.8912668 | 0.2250974 | 0.2357978 |
| Medium End       | 2.4521805    | 1.8238286 | 1.7877328 | 0.3548340 | 0.3610577 |
| Medium (TOL) Bar | 0.6344331    | 0.7651498 | 0.6727195 | 0.3629418 | 0.3645585 |
| Medium (TOL) Cra | 0.8739239    | 0.9219311 | 0.8912668 | 0.2250974 | 0.2357978 |
| Medium (TOL) End | 2.3004485    | 1.9745858 | 1.9060478 | 0.5148350 | 0.5157239 |
| Medium (MOL) Bar | 0.4903177    | 1.2326965 | 1.0590469 | 0.6280125 | 0.6308412 |
| Medium (MOL) Cra | 3.3328496    | 3.7391073 | 3.6000143 | 0.9742152 | 1.0103568 |
| Medium (MOL) End | 3.4729509    | 4.8369901 | 4.7223257 | 1.0469546 | 0.9637137 |
| Tight Bar        | 0.8486207    | 0.7728182 | 0.7607260 | 0.1073931 | 0.1361765 |
| Tight Cra        | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight End        | 1.6208202    | 1.0812232 | 0.6382694 | 0.8727290 | 0.7843975 |
| Tight (TOL) Bar  | 0.7444561    | 0.7694258 | 0.7584032 | 0.0955684 | 0.1297720 |
| Tight (TOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (TOL) End  | 1.4815371    | 1.1279710 | 0.6289143 | 0.9363684 | 0.8522598 |
| Tight (MOL) Bar  | 0.6522231    | 1.0708039 | 1.0525456 | 0.1376655 | 0.1968981 |
| Tight (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (MOL) End  | 3.0305745    | 2.7410947 | 1.6045660 | 2.2223790 | 1.9497338 |

Table 20: Scale Factors for LLH-Based  $\tau$  ID + Tight BDT-Based e-veto

| Selection        | scale factor | total     | stat      | +syst     | - syst    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| Loose Bar        | 1.1551520    | 0.7296689 | 0.5719396 | 0.4236859 | 0.4531026 |
| Loose Cra        | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose End        | 1.1249432    | 3.9062451 | 3.3207898 | 2.0569654 | 1.8072673 |
| Loose (TOL) Bar  | 1.0491950    | 0.7266169 | 0.5520498 | 0.4424077 | 0.4724546 |
| Loose (TOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose (TOL) End  | 0.9029793    | 3.8404669 | 3.2406120 | 2.0609755 | 1.8208840 |
| Loose (MOL) Bar  | 1.2760864    | 1.1791439 | 0.9277150 | 0.6720763 | 0.7278223 |
| Loose (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Loose (MOL) End  | 0.8670007    | 9.6474581 | 7.8653427 | 5.5865762 | 5.0603112 |
| Medium Bar       | 1.0321403    | 0.6501046 | 0.5653169 | 0.3031463 | 0.3210187 |
| Medium Cra       | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium End       | 0.0000000    | 2.5258142 | 0.0000000 | 2.5258143 | 2.4257547 |
| Medium (TOL) Bar | 0.9769256    | 0.6542070 | 0.5605120 | 0.3186657 | 0.3373622 |
| Medium (TOL) Cra | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium (TOL) End | 0.0000000    | 2.1042815 | 0.0000000 | 2.1042816 | 2.0548198 |
| Medium (MOL) Bar | 1.2669837    | 0.9323749 | 0.8438908 | 0.3827352 | 0.3964485 |
| Medium (MOL) Cra | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Medium (MOL) End | 0.0000000    | 2.4669080 | 0.0000000 | 2.4669081 | 2.4669081 |
| Tight Bar        | 0.8629671    | 0.4684569 | 0.4165030 | 0.2144230 | 0.2109893 |
| Tight Cra        | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight End        | 2.1993282    | 1.4199009 | 1.1346462 | 0.8536375 | 0.3593928 |
| Tight (TOL) Bar  | 0.7756801    | 0.4659724 | 0.4032786 | 0.2334453 | 0.2305709 |
| Tight (TOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (TOL) End  | 1.1188027    | 1.0888614 | 0.8056526 | 0.7324911 | 0.2270236 |
| Tight (MOL) Bar  | 0.8591483    | 0.6095253 | 0.5291395 | 0.3025437 | 0.3025224 |
| Tight (MOL) Cra  | 0.0000000    | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tight (MOL) End  | 1.4137961    | 2.1925149 | 1.4407490 | 1.6526840 | 0.1626669 |

Table 21: Scale Factors for BDT-Based  $\tau$  ID + Tight BDT-Based e-veto

| Selection        | scale factor | total      | stat       | +syst     | - syst    |
|------------------|--------------|------------|------------|-----------|-----------|
| Loose Bar        | 1.2093011    | 0.7847460  | 0.6568316  | 0.4249102 | 0.4294166 |
| Loose Cra        | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Loose End        | 0.5919951    | 4.2048263  | 3.3129645  | 2.5893688 | 2.4797896 |
| Loose (TOL) Bar  | 1.0751420    | 0.7885221  | 0.6424873  | 0.4555672 | 0.4571404 |
| Loose (TOL) Cra  | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Loose (TOL) End  | 0.4157230    | 4.2692908  | 3.3266764  | 2.6758304 | 2.5728977 |
| Loose (MOL) Bar  | 1.3025024    | 1.2807203  | 1.0714448  | 0.6919200 | 0.7016059 |
| Loose (MOL) Cra  | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Loose (MOL) End  | 0.0000000    | 6.1920498  | 0.0000000  | 6.1920499 | 6.0529245 |
| Medium Bar       | 1.1870608    | 0.6006708  | 0.5245111  | 0.2926577 | 0.2927349 |
| Medium Cra       | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Medium End       | 0.0000000    | 2.3666446  | 0.0000000  | 2.3666447 | 2.3666447 |
| Medium (TOL) Bar | 1.1300972    | 0.6070507  | 0.5195762  | 0.3137997 | 0.3139288 |
| Medium (TOL) Cra | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Medium (TOL) End | 0.0000000    | 1.8677193  | 0.0000000  | 1.8677194 | 1.8677194 |
| Medium (MOL) Bar | 1.5661906    | 0.4828303  | 0.2977408  | 0.3765370 | 0.3800995 |
| Medium (MOL) Cra | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Medium (MOL) End | 0.0000000    | 3.9072554  | 0.0000000  | 3.9072555 | 3.9072555 |
| Tight Bar        | 1.0567321    | 0.6497043  | 0.4862098  | 0.4142571 | 0.4309477 |
| Tight Cra        | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Tight End        | 1.6518256    | 7.2584185  | 7.0348010  | 1.7877961 | 1.3888341 |
| Tight (TOL) Bar  | 1.0815878    | 0.6619917  | 0.4979211  | 0.4191377 | 0.4362428 |
| Tight (TOL) Cra  | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Tight (TOL) End  | 0.8948009    | 5.6079386  | 5.3703456  | 1.6150431 | 1.1693200 |
| Tight (MOL) Bar  | 1.3033675    | 0.6119948  | 0.3369354  | 0.5059395 | 0.5108937 |
| Tight (MOL) Cra  | 0.0000000    | 0.0000000  | 0.0000000  | 0.0000000 | 0.0000000 |
| Tight (MOL) End  | 2.1470265    | 18.6121081 | 16.6330479 | 8.3517835 | 4.3334793 |