

Table 1: Scale Factors for Cut-Based e-veto

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	1.0405773	0.4052284	0.3521129	0.1998442	0.2005660
Loose Cra	0.0580470	1.3051171	1.2944130	0.1668107	0.1601295
Loose End	0.9567946	0.0869833	0.0696491	0.0520172	0.0521081
Loose (TOL) Bar	1.1450308	0.5158637	0.4535131	0.2449728	0.2458483
Loose (TOL) Cra	0.0623040	1.3954514	1.3840944	0.1776724	0.1704681
Loose (TOL) End	1.1633775	0.4540885	0.3589210	0.2781587	0.2677295
Loose (MOL) Bar	3.1034029	1.9981980	1.7473601	0.9482354	0.9692927
Loose (MOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Loose (MOL) End	1.7873940	1.1768353	0.8484290	0.8155427	0.7958976
Medium Bar	2.7714847	1.7610411	1.5501458	0.8356519	0.8331248
Medium Cra	0.1845677	3.9936710	3.9608882	0.5106598	0.4889313
Medium End	1.4749057	1.2558073	0.8771813	0.8986686	0.8760382
Medium (TOL) Bar	3.6666245	2.3912293	2.1770485	0.9891601	0.9841539
Medium (TOL) Cra	0.2302464	4.8721298	4.8330883	0.6155537	0.5879874
Medium (TOL) End	0.9840793	2.5637854	1.4352904	2.1243675	2.0798436
Medium (MOL) Bar	5.6837647	4.1065835	3.6942165	1.7935421	1.7851129
Medium (MOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Medium (MOL) End	1.9777161	5.5682668	2.9757012	4.7064635	4.6029271
Tight Bar	5.8902439	4.2557231	3.9036473	1.6949092	1.6668053
Tight Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tight End	1.7817905	1.4764493	1.0791549	1.0076346	0.9791158
Tight (TOL) Bar	6.8349986	5.1574537	4.7278419	2.0607863	2.0057850
Tight (TOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tight (TOL) End	1.3194379	3.4961785	1.9706973	2.8878395	2.8264903
Tight (MOL) Bar	10.3389403	9.1455240	8.1970653	4.0557035	4.0038199
Tight (MOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tight (MOL) End	2.4289723	6.7129082	3.8548919	5.4957207	5.3508538

Table 2: Scale Factors for BDT-Based e-veto

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	2.7326979	2.1538574	1.2251025	1.7409098	1.7715039
Loose Cra	3.9493284	2.4520280	1.7780313	1.6671347	1.6885042
Loose End	1.7582478	0.8012263	0.5412517	0.5907709	0.5618889
Loose (TOL) Bar	2.8605370	2.4268650	1.3803224	1.9607241	1.9960922
Loose (TOL) Cra	3.9393279	2.4510812	1.7796542	1.6647179	1.6854169
Loose (TOL) End	2.0032733	1.6793964	1.0019517	1.3477630	1.2753821
Loose (MOL) Bar	6.1046706	4.4608444	2.9746497	3.2150074	3.3242431
Loose (MOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Loose (MOL) End	2.6337733	5.1240630	2.6832254	4.3653549	4.2138357
Medium Bar	5.8593578	3.9283468	2.7033097	2.6806624	2.8502676
Medium Cra	10.8627977	5.9539592	5.8358906	0.8329371	1.1798353
Medium End	2.3381920	3.9740667	2.4910862	3.0964005	2.9228390
Medium (TOL) Bar	6.1058139	4.2388965	2.9041826	2.9005115	3.0877124
Medium (TOL) Cra	10.8627977	5.9539592	5.8358906	0.8329371	1.1798353
Medium (TOL) End	1.8696279	5.5139228	3.2504003	4.4540143	4.2112932
Medium (MOL) Bar	13.0597142	9.1342878	7.3941131	4.8622072	5.3630500
Medium (MOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Medium (MOL) End	4.0491118	11.2113208	6.5221292	9.1189663	8.3885858
Tight Bar	7.2536012	5.0032199	4.3703936	2.4355429	2.4327897
Tight Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tight End	9.1187621	19.4438543	15.5511568	11.6715464	6.7462592
Tight (TOL) Bar	7.1721638	5.2445843	4.5445000	2.6178588	2.6148153
Tight (TOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tight (TOL) End	10.2863877	19.6995065	16.6317236	10.5572879	5.7453606
Tight (MOL) Bar	12.3944970	10.6689723	10.1620601	3.2489585	3.2495393
Tight (MOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tight (MOL) End	29.1597487	16.9342882	9.5804004	13.9637404	10.3289892