

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	0.5630935	0.5066355	0.4029839	0.3032200	0.3070565
Loose Cra	0.6521659	0.8776957	0.7209321	0.5006065	0.3533712
Loose End	1.0310673	0.0854897	0.0799429	0.0302937	0.0291260
Loose (TOL) Bar	0.4528502	0.6917772	0.5285599	0.4434091	0.4462962
Loose (TOL) Cra	0.7295409	0.9176257	0.7982264	0.4526277	0.2202724
Loose (TOL) End	1.2973575	0.3547134	0.2992534	0.1768977	0.1904447
Loose (MOL) Bar	0.4052622	2.7114769	2.0231193	1.7955124	1.8052966
Loose (MOL) Cra	9.5415540	8.0618140	6.7182013	4.4563008	2.4831229
Loose (MOL) End	1.6003729	0.9058016	0.6243836	0.6411236	0.6562178
Medium Bar	0.1788888	2.3164842	1.7061406	1.5566574	1.5669025
Medium Cra	1.4749281	2.1945795	1.9243354	1.0550417	0.7655694
Medium End	1.7456897	1.0223424	0.6728604	0.7370955	0.7697032
Medium (TOL) Bar	0.0096368	3.2144457	2.3732916	2.1679612	2.1679826
Medium (TOL) Cra	2.0561050	2.6565697	2.4536923	1.0182127	0.2529091
Medium (TOL) End	1.3570464	1.9116771	1.0838756	1.5747137	1.5732865
Medium (MOL) Bar	0.0000000	2.8099628	0.0000000	2.8099629	2.8099629
Medium (MOL) Cra	9.4912498	7.9413808	6.8311892	4.0497388	1.6613090
Medium (MOL) End	1.8866522	3.7614030	2.0543814	3.1508205	3.0738446
Tight Bar	0.0000000	3.0666133	0.0000000	3.0666134	3.0666134
Tight Cra	4.6506355	4.7232561	3.7758902	2.8375697	2.1894456
Tight End	2.0011673	1.1577117	0.8132006	0.7879587	0.8240154
Tight (TOL) Bar	0.0000000	3.3236039	0.0000000	3.3236040	3.3236040
Tight (TOL) Cra	4.7282223	4.7749608	3.8300937	2.8514266	2.1886009
Tight (TOL) End	1.6353796	2.4911426	1.4818577	2.0024708	1.9832990
Tight (MOL) Bar	0.0000000	4.2321949	0.0000000	4.2321950	4.2321950
Tight (MOL) Cra	9.5866028	9.2362610	7.4750884	5.4250873	3.9824692
Tight (MOL) End	2.1661544	4.4991392	2.6118781	3.6633792	3.5247398

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	0.2331750	3.5099622	1.6012589	3.1234284	3.0987258
Loose Cra	3.1931568	1.8035827	1.3340075	1.1876180	1.2138100
Loose End	1.6611601	0.6431226	0.4902867	0.4047554	0.4162040
Loose (TOL) Bar	0.1366998	3.9649336	1.7939532	3.5358777	3.4988484
Loose (TOL) Cra	3.1931568	1.7551990	1.3352375	1.1112904	1.1392386
Loose (TOL) End	2.3488913	1.1638663	0.8887566	0.7172086	0.7514631
Loose (MOL) Bar	0.0000000	6.7401742	0.0000000	6.7401743	6.6827702
Loose (MOL) Cra	23.5562476	18.7164332	15.5009113	10.4893575	8.2374661
Loose (MOL) End	4.4996902	2.6849956	2.2095638	1.4457443	1.5254605
Medium Bar	0.0000000	6.2086219	0.0000000	6.2086220	6.1618651
Medium Cra	3.5318716	5.0271082	2.6083515	4.2974783	2.0528771
Medium End	2.6670867	2.9592506	2.3017428	1.8310866	1.8598776
Medium (TOL) Bar	0.0000000	6.5524278	0.0000000	6.5524279	6.5018656
Medium (TOL) Cra	3.5318716	5.0271082	2.6083515	4.2974783	2.0528771
Medium (TOL) End	3.2907160	4.0391137	3.2223490	2.3916723	2.4353453
Medium (MOL) Bar	0.0000000	11.2857622	0.0000000	11.2857623	11.2130507
Medium (MOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Medium (MOL) End	7.5905427	7.8438333	6.9483418	3.4280014	3.6395422
Tight Bar	0.0000000	5.3729625	0.0000000	5.3729626	5.3729626
Tight Cra	16.8540244	23.9983029	13.8913024	19.5691150	7.6394135
Tight End	13.2717909	29.7818779	28.9961565	2.2165791	6.7958196
Tight (TOL) Bar	0.0000000	5.4848463	0.0000000	5.4848464	5.4848464
Tight (TOL) Cra	16.8540244	23.9983029	13.8913024	19.5691150	7.6394135
Tight (TOL) End	13.6631612	9.2142995	4.2758744	2.2002496	8.1621207
Tight (MOL) Bar	0.0000000	8.2109107	0.0000000	8.2109108	8.2109108
Tight (MOL) Cra	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tight (MOL) End	33.9992689	22.5314625	11.7033212	19.2535471	17.6736631