

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	0.6441015	0.0922599	0.0282731	0.0878216	0.0877009
Loose Cra	0.3449733	0.1086172	0.0937099	0.0549208	0.0532046
Loose End	1.0249703	0.0325591	0.0145652	0.0115857	0.0291217
Loose (TOL) Bar	0.6079537	0.1198578	0.0329754	0.1152332	0.1150666
Loose (TOL) Cra	0.3304493	0.1169123	0.1045164	0.0523918	0.0460074
Loose (TOL) End	0.9847013	0.1547287	0.0460648	0.1391812	0.1477132
Loose (MOL) Bar	1.0590916	0.2128431	0.1505932	0.1504125	0.1499271
Loose (MOL) Cra	0.7978504	1.0297601	0.9324092	0.4370573	0.4074412
Loose (MOL) End	1.4769674	0.1412717	0.1063379	0.0600041	0.0930055
Medium Bar	0.8857633	0.1653547	0.1125688	0.1211222	0.1208353
Medium Cra	0.4409371	0.2423078	0.2219751	0.0971608	0.0914311
Medium End	1.2814567	0.1520601	0.1179113	0.0760364	0.0960173
Medium (TOL) Bar	0.8705719	0.2298244	0.1420938	0.1806343	0.1795527
Medium (TOL) Cra	0.4216279	0.2763123	0.2546434	0.1072628	0.0906071
Medium (TOL) End	1.1707420	0.2304714	0.1628158	0.1483850	0.1631204
Medium (MOL) Bar	1.0894497	0.3303112	0.2290067	0.2380369	0.2372844
Medium (MOL) Cra	0.9274224	1.7274640	1.5449817	0.7727638	0.6790189
Medium (MOL) End	1.6167262	0.4059379	0.3357863	0.2275757	0.2281080
Tight Bar	1.0296184	0.4824171	0.3134444	0.3667138	0.3660252
Tight Cra	0.3890815	0.6822040	0.6152798	0.2946748	0.2548723
Tight End	1.6630538	0.2262195	0.2014508	0.0651468	0.1029220
Tight (TOL) Bar	1.1099007	0.5508655	0.3577416	0.4188960	0.4181845
Tight (TOL) Cra	0.4040882	0.7076186	0.6386751	0.3046611	0.2631103
Tight (TOL) End	1.6652524	0.4277567	0.3455822	0.2313791	0.2520889
Tight (MOL) Bar	1.5039747	0.9035668	0.6336872	0.6441069	0.6425360
Tight (MOL) Cra	0.7800819	6.0200617	5.4066144	2.6475771	2.2308081
Tight (MOL) End	2.2206925	0.6925885	0.5966125	0.3452108	0.3517564

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	1.0375158	0.2710686	0.1385593	0.2324311	0.2329800
Loose Cra	0.4875015	0.3792517	0.3255073	0.1946201	0.1848809
Loose End	1.3701634	0.2277860	0.1328643	0.1667618	0.1850234
Loose (TOL) Bar	1.0487965	0.2994271	0.1497971	0.2587743	0.2592635
Loose (TOL) Cra	0.4936831	0.3798672	0.3300561	0.1880483	0.1778075
Loose (TOL) End	1.3462498	0.3298575	0.1976528	0.2638298	0.2640822
Loose (MOL) Bar	1.5628652	0.5973528	0.3376456	0.4909064	0.4927737
Loose (MOL) Cra	1.0229649	1.5653509	1.3960719	0.7080304	0.6577225
Loose (MOL) End	1.6068420	0.7228830	0.4223064	0.5867004	0.5764965
Medium Bar	1.4553668	0.7359987	0.4280936	0.5978677	0.5986904
Medium Cra	0.4053472	1.6519135	1.4721854	0.7493255	0.6892339
Medium End	1.6975433	1.1308353	0.6977252	0.8899260	0.8889744
Medium (TOL) Bar	1.4500774	0.7762587	0.4487946	0.6321786	0.6333728
Medium (TOL) Cra	0.4053472	1.6519135	1.4721854	0.7493255	0.6892339
Medium (TOL) End	1.7201159	1.3884745	0.8491255	1.0985661	1.0956460
Medium (MOL) Bar	2.2398085	1.3174646	0.8461575	1.0068753	1.0098172
Medium (MOL) Cra	1.1892222	4.2664018	3.8347866	1.8699188	1.6800097
Medium (MOL) End	2.7609799	2.3947913	1.6300882	1.7543768	1.7293645
Tight Bar	1.9230209	1.2899237	0.8502817	0.9682757	0.9700126
Tight Cra	0.1770833	2.9310820	2.6796198	1.1878045	1.0134739
Tight End	2.0468551	2.8183685	2.0504579	1.9336039	1.9234015
Tight (TOL) Bar	1.8941438	1.3413140	0.8771200	1.0142299	1.0147827
Tight (TOL) Cra	0.1770833	2.9310820	2.6796198	1.1878045	1.0134739
Tight (TOL) End	2.0434400	2.9831197	2.1445755	2.0735958	2.0568714
Tight (MOL) Bar	2.6059477	1.9603476	1.3756337	1.3943126	1.3966371
Tight (MOL) Cra	0.5180489	6.3177352	5.7666779	2.5805436	2.1024606
Tight (MOL) End	2.9862476	4.7579424	3.6192525	3.0885316	3.0369615