

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	0.6579369	0.0950352	0.0286688	0.0906084	0.0905145
Loose Cra	0.3648811	0.1171481	0.0961190	0.0669694	0.0601531
Loose End	1.0212933	0.0263362	0.0134817	0.0104382	0.0226267
Loose (TOL) Bar	0.6211001	0.1249127	0.0337941	0.1202550	0.1200624
Loose (TOL) Cra	0.3515746	0.1277407	0.1070904	0.0696378	0.0548716
Loose (TOL) End	1.0095423	0.1450617	0.0457469	0.1297806	0.1376598
Loose (MOL) Bar	1.0922230	0.2632115	0.1549464	0.2123917	0.2127722
Loose (MOL) Cra	0.9478219	1.1084148	0.9097751	0.6331609	0.5232396
Loose (MOL) End	1.5135720	0.1501732	0.1038669	0.0819606	0.1084608
Medium Bar	0.9235132	0.2059004	0.1162889	0.1692530	0.1699176
Medium Cra	0.4555507	0.2638922	0.2263835	0.1356088	0.1166831
Medium End	1.3460921	0.1592432	0.1126222	0.0972569	0.1125823
Medium (TOL) Bar	0.9215653	0.2827145	0.1485499	0.2403581	0.2405423
Medium (TOL) Cra	0.4461268	0.3043995	0.2609219	0.1567767	0.1216773
Medium (TOL) End	1.2389272	0.2587425	0.1586812	0.2003747	0.2043723
Medium (MOL) Bar	1.1392325	0.4121301	0.2388118	0.3338510	0.3358874
Medium (MOL) Cra	1.0979288	1.8400677	1.4870861	1.0837087	0.8416676
Medium (MOL) End	1.7041963	0.4724120	0.3229819	0.3447548	0.3312068
Tight Bar	1.1004190	0.5854531	0.3261555	0.4842310	0.4861873
Tight Cra	0.4803138	0.7594386	0.6209038	0.4372934	0.3470529
Tight End	1.7183386	0.2240249	0.1842176	0.1080008	0.1274799
Tight (TOL) Bar	1.1976137	0.6629911	0.3723740	0.5460851	0.5485389
Tight (TOL) Cra	0.4978259	0.7857700	0.6431220	0.4514739	0.3574876
Tight (TOL) End	1.7485795	0.4529055	0.3222434	0.3182494	0.3145838
Tight (MOL) Bar	1.6047979	1.0713732	0.6502880	0.8448501	0.8514495
Tight (MOL) Cra	1.7765019	6.1388887	4.9352513	3.6509245	2.5843237
Tight (MOL) End	2.3497291	0.7470983	0.5593710	0.4952375	0.4806421

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	1.0971185	0.3958476	0.1429155	0.3689201	0.3691485
Loose Cra	0.6067892	0.3870468	0.3194958	0.2184670	0.2042117
Loose End	1.4115742	0.2293196	0.1192603	0.1882789	0.1958688
Loose (TOL) Bar	1.1143921	0.4351411	0.1550282	0.4064994	0.4065884
Loose (TOL) Cra	0.5984929	0.3895487	0.3227977	0.2180595	0.2028904
Loose (TOL) End	1.4635956	0.3621750	0.1833267	0.3123495	0.3118999
Loose (MOL) Bar	1.7141767	0.8997451	0.3517287	0.8269245	0.8281476
Loose (MOL) Cra	1.5304080	1.6641016	1.3919481	0.9119841	0.7889558
Loose (MOL) End	1.9145581	0.8059630	0.3986391	0.7004737	0.6802936
Medium Bar	1.5718106	1.0546708	0.4261013	0.9647633	0.9636130
Medium Cra	0.5737642	1.6913285	1.3810673	0.9763429	0.8217472
Medium End	2.0735029	1.1390850	0.6279130	0.9503894	0.9458903
Medium (TOL) Bar	1.5773410	1.1104449	0.4471685	1.0164292	1.0151720
Medium (TOL) Cra	0.5737642	1.6913285	1.3810673	0.9763429	0.8217472
Medium (TOL) End	2.1259963	1.4508805	0.7833209	1.2212546	1.2095754
Medium (MOL) Bar	2.5682993	1.8512925	0.8520912	1.6435403	1.6431757
Medium (MOL) Cra	1.9334003	4.6916173	3.7895983	2.7659027	2.0937779
Medium (MOL) End	3.5394742	2.4484576	1.5203663	1.9192268	1.8684985
Tight Bar	1.9156841	1.7471562	0.8130681	1.5464395	1.5412655
Tight Cra	0.4777781	3.0645788	2.5126137	1.7545416	1.3904320
Tight End	2.9268354	2.8202541	1.9162854	2.0692230	2.0150841
Tight (TOL) Bar	1.8876304	1.8157322	0.8388524	1.6103448	1.6039645
Tight (TOL) Cra	0.4777781	3.0645788	2.5126137	1.7545416	1.3904320
Tight (TOL) End	2.8845181	3.0587787	2.0208579	2.2961405	2.2323296
Tight (MOL) Bar	2.6752634	2.6556621	1.3373724	2.2943358	2.2861005
Tight (MOL) Cra	1.6081189	7.4983753	5.8943737	4.6348669	3.2223084
Tight (MOL) End	4.5183532	4.9610233	3.5997917	3.4136861	3.2529629