

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	0.6591296	0.0959395	0.0281704	0.0917112	0.0915224
Loose Cra	0.3585554	0.1120727	0.0972328	0.0557329	0.0522120
Loose End	1.0212170	0.0283989	0.0134194	0.0110115	0.0250312
Loose (TOL) Bar	0.6232221	0.1266459	0.0330943	0.1222458	0.1219488
Loose (TOL) Cra	0.3430319	0.1233604	0.1082989	0.0590696	0.0498402
Loose (TOL) End	0.9996751	0.1462931	0.0460571	0.1308728	0.1388543
Loose (MOL) Bar	1.1039477	0.2355073	0.1515358	0.1802797	0.1795904
Loose (MOL) Cra	0.8288661	1.0764224	0.9141413	0.5683582	0.4984781
Loose (MOL) End	1.5123093	0.1385676	0.1039494	0.0592159	0.0916279
Medium Bar	0.9355018	0.1857449	0.1134906	0.1470413	0.1468843
Medium Cra	0.4378448	0.2566335	0.2281329	0.1175427	0.1053338
Medium End	1.3309548	0.1459856	0.1138641	0.0713015	0.0913610
Medium (TOL) Bar	0.9342837	0.2598461	0.1444956	0.2159657	0.2146923
Medium (TOL) Cra	0.4225788	0.2969595	0.2620002	0.1397891	0.1153164
Medium (TOL) End	1.2363938	0.2288305	0.1597742	0.1558695	0.1638163
Medium (MOL) Bar	1.1660893	0.3674423	0.2323247	0.2846739	0.2842215
Medium (MOL) Cra	0.9165672	1.7981632	1.5106900	0.9752984	0.8034493
Medium (MOL) End	1.7035473	0.3981464	0.3259315	0.2286686	0.2215631
Tight Bar	1.1300115	0.5262418	0.3177764	0.4189214	0.4194624
Tight Cra	0.4038552	0.7355053	0.6303794	0.3789328	0.3141965
Tight End	1.7032508	0.2165728	0.1891207	0.0599295	0.1055334
Tight (TOL) Bar	1.2309879	0.6010003	0.3630834	0.4781426	0.4789279
Tight (TOL) Cra	0.4187267	0.7616786	0.6532773	0.3916418	0.3242738
Tight (TOL) End	1.7583630	0.4154698	0.3305417	0.2329772	0.2517090
Tight (MOL) Bar	1.6812182	0.9567200	0.6373283	0.7108057	0.7135306
Tight (MOL) Cra	1.0501728	6.3791127	5.3580722	3.4618120	2.6979446
Tight (MOL) End	2.3662574	0.6553874	0.5733266	0.3175365	0.3157186

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	1.1116643	0.3171690	0.1381476	0.2842612	0.2855022
Loose Cra	0.5489015	0.3807119	0.3154557	0.2131418	0.2024998
Loose End	1.3880844	0.2158545	0.1222288	0.1647119	0.1779142
Loose (TOL) Bar	1.1302120	0.3494467	0.1496304	0.3145588	0.3157909
Loose (TOL) Cra	0.5397598	0.3825054	0.3187544	0.2114382	0.1999821
Loose (TOL) End	1.3965047	0.3256157	0.1852556	0.2677798	0.2677477
Loose (MOL) Bar	1.7507619	0.6959119	0.3405765	0.6014933	0.6068782
Loose (MOL) Cra	1.3784828	1.5928534	1.3583422	0.8319187	0.7463322
Loose (MOL) End	1.7574978	0.7217430	0.3989094	0.6014851	0.5829442
Medium Bar	1.6108547	0.8436128	0.4168722	0.7327750	0.7334168
Medium Cra	0.4745628	1.6546992	1.3911454	0.8959599	0.8190003
Medium End	1.9917504	1.0617663	0.6512166	0.8386088	0.8336172
Medium (TOL) Bar	1.6145251	0.8880251	0.4373134	0.7719617	0.7728814
Medium (TOL) Cra	0.4745628	1.6546992	1.3911454	0.8959599	0.8190003
Medium (TOL) End	1.9952100	1.3481648	0.8031112	1.0828486	1.0689917
Medium (MOL) Bar	2.6400355	1.4540746	0.8339072	1.1841029	1.1911893
Medium (MOL) Cra	1.4859637	4.4199443	3.6981215	2.4207035	2.1076808
Medium (MOL) End	3.2044701	2.3083390	1.5385697	1.7208232	1.6581164
Tight Bar	2.1141300	1.4156502	0.8098294	1.1605391	1.1611383
Tight Cra	0.2447497	2.8820239	2.4811511	1.4662713	1.2779533
Tight End	2.6725382	2.5916851	1.8989460	1.7637563	1.6997620
Tight (TOL) Bar	2.0894545	1.4728244	0.8361498	1.2124626	1.2120009
Tight (TOL) Cra	0.2447497	2.8820239	2.4811511	1.4662713	1.2779533
Tight (TOL) End	2.6479629	2.7915474	2.0009035	1.9465669	1.8699290
Tight (MOL) Bar	3.0129739	2.1168007	1.3360139	1.6366625	1.6419234
Tight (MOL) Cra	0.8658887	6.8426350	5.7554298	3.7009030	2.9739261
Tight (MOL) End	3.9907035	4.5236541	3.4600791	2.9139835	2.7233777