

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	0.6393642	0.1045490	0.0283541	0.1006313	0.1005820
Loose Cra	0.3105604	0.1255802	0.1203697	0.0358007	0.0350959
Loose End	1.0353571	0.0312809	0.0143216	0.0172332	0.0278111
Loose (TOL) Bar	0.6160675	0.1329447	0.0334704	0.1285069	0.1286631
Loose (TOL) Cra	0.2742627	0.1398163	0.1319587	0.0462135	0.0452285
Loose (TOL) End	1.0527846	0.1519220	0.0472218	0.1298870	0.1443971
Loose (MOL) Bar	1.1502955	0.2865367	0.1543010	0.2388723	0.2414428
Loose (MOL) Cra	0.9923430	1.3151537	1.3011367	0.1915011	0.1860673
Loose (MOL) End	1.6729145	0.2245800	0.1110877	0.1085056	0.1951817
Medium Bar	0.9324400	0.2219472	0.1149834	0.1888754	0.1898408
Medium Cra	0.4667907	0.2930078	0.2833603	0.0745695	0.0678580
Medium End	1.3136846	0.1767645	0.1191316	0.1305890	0.1255558
Medium (TOL) Bar	0.9839496	0.2984764	0.1476126	0.2583707	0.2594202
Medium (TOL) Cra	0.4525313	0.3385688	0.3271047	0.0873587	0.0814958
Medium (TOL) End	1.1798240	0.2964768	0.1672330	0.2448097	0.2361444
Medium (MOL) Bar	1.1937198	0.4493836	0.2368970	0.3789698	0.3818712
Medium (MOL) Cra	1.2467802	2.1409036	2.1111481	0.3556994	0.3042411
Medium (MOL) End	1.5172798	0.6055998	0.3443320	0.4981834	0.4910576
Tight Bar	1.2795458	0.5920023	0.3285649	0.4882537	0.4924551
Tight Cra	0.5784147	0.8731026	0.8431075	0.2268877	0.2017282
Tight End	1.5338762	0.2912188	0.1893332	0.2212723	0.2058062
Tight (TOL) Bar	1.3527773	0.6859540	0.3794996	0.5660707	0.5714133
Tight (TOL) Cra	0.5988872	0.9035593	0.8725034	0.2348562	0.2088354
Tight (TOL) End	1.3189442	0.6207828	0.3227842	0.5302658	0.4879991
Tight (MOL) Bar	1.8610425	1.0858003	0.6584754	0.8544563	0.8633496
Tight (MOL) Cra	2.6546463	7.5011460	7.3635385	1.4302072	1.1564994
Tight (MOL) End	1.7608243	1.0264492	0.5714926	0.8526397	0.7967181

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	1.1555535	0.4336669	0.1449069	0.4087408	0.4084099
Loose Cra	0.8732196	0.5126596	0.4846473	0.1671434	0.1671389
Loose End	1.4880875	0.2117732	0.1264212	0.1695197	0.1698988
Loose (TOL) Bar	1.1774001	0.4760835	0.1571255	0.4494075	0.4488048
Loose (TOL) Cra	0.8447508	0.5182457	0.4889473	0.1717828	0.1706139
Loose (TOL) End	1.5394606	1.1257815	0.1919519	1.1092965	1.1033592
Loose (MOL) Bar	1.9258010	0.9283354	0.3541955	0.8578082	0.8581098
Loose (MOL) Cra	2.3403520	2.4141941	2.3400529	0.5937051	0.5148693
Loose (MOL) End	2.1369760	0.8861817	0.4275698	0.7762102	0.7155811
Medium Bar	1.6563710	1.1331084	0.4248593	1.0474636	1.0504425
Medium Cra	1.1470713	2.2724882	2.1631063	0.6965445	0.6956063
Medium End	2.1415296	1.0863152	0.6487655	0.8713118	0.8421775
Medium (TOL) Bar	1.6966612	1.1832184	0.4470933	1.0923802	1.0954970
Medium (TOL) Cra	1.1472412	2.2728039	2.1634137	0.6966199	0.6956815
Medium (TOL) End	2.0311058	1.4775696	0.7928089	1.2468626	1.1784236
Medium (MOL) Bar	2.9060138	1.8843616	0.8447189	1.6719563	1.6844195
Medium (MOL) Cra	3.0049075	7.1488167	6.9309105	1.7515879	1.7419456
Medium (MOL) End	2.8579694	2.6989547	1.4888201	2.2511711	1.9687632
Tight Bar	2.3014539	1.7469781	0.8130941	1.5462247	1.5425420
Tight Cra	2.8481907	4.5743091	4.5093865	0.6750370	0.7679439
Tight End	2.3513906	2.7963910	1.8927573	2.0584637	1.9665033
Tight (TOL) Bar	2.3456105	1.7848386	0.8411324	1.5742126	1.5702833
Tight (TOL) Cra	2.8491928	4.5759829	4.5110518	0.6751739	0.7681353
Tight (TOL) End	2.3722154	2.9998258	2.0006775	2.2352281	2.1425835
Tight (MOL) Bar	3.5994081	2.4050755	1.3238764	2.0079192	2.0038329
Tight (MOL) Cra	6.8832385	2.7006124	1.8688853	1.5678141	1.9495064
Tight (MOL) End	3.8667560	4.6122770	3.4404349	3.0718899	2.7875008