

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	0.6308941	0.1000274	0.0280261	0.0960215	0.0960204
Loose Cra	0.3159950	0.1256845	0.1208458	0.0345388	0.0339156
Loose End	1.0392970	0.0321418	0.0147386	0.0168435	0.0285653
Loose (TOL) Bar	0.6054925	0.1263491	0.0329522	0.1217981	0.1219769
Loose (TOL) Cra	0.2791627	0.1395155	0.1320285	0.0450900	0.0442026
Loose (TOL) End	1.0479886	0.1516416	0.0455938	0.1290803	0.1446256
Loose (MOL) Bar	1.0977086	0.2646711	0.1514715	0.2146537	0.2170421
Loose (MOL) Cra	1.0508021	1.3385686	1.3271804	0.1703415	0.1742364
Loose (MOL) End	1.6658404	0.2166160	0.1110320	0.0819490	0.1859958
Medium Bar	0.8918413	0.1998554	0.1125671	0.1635520	0.1651391
Medium Cra	0.4718223	0.2907674	0.2822172	0.0699948	0.0632775
Medium End	1.3039379	0.1533691	0.1190475	0.0966944	0.0935453
Medium (TOL) Bar	0.9294961	0.2701186	0.1441219	0.2270037	0.2284579
Medium (TOL) Cra	0.4563655	0.3352054	0.3250897	0.0817279	0.0759633
Medium (TOL) End	1.1800505	0.2434142	0.1654423	0.1785482	0.1726057
Medium (MOL) Bar	1.1053069	0.4098530	0.2308724	0.3356409	0.3386407
Medium (MOL) Cra	1.3824228	2.2443207	2.2150953	0.3610106	0.3164613
Medium (MOL) End	1.4887021	0.4995452	0.3404655	0.3605400	0.3655528
Tight Bar	1.1669580	0.5439521	0.3228854	0.4325186	0.4377546
Tight Cra	0.6199467	0.8615672	0.8356882	0.2095795	0.1859215
Tight End	1.5167154	0.2544888	0.1912263	0.1679204	0.1562224
Tight (TOL) Bar	1.2233340	0.6292893	0.3726137	0.5005361	0.5071136
Tight (TOL) Cra	0.6422970	0.8928111	0.8658746	0.2176536	0.1932176
Tight (TOL) End	1.3074291	0.5163188	0.3248345	0.4013326	0.3618984
Tight (MOL) Bar	1.6279500	1.0227896	0.6482044	0.7806446	0.7911573
Tight (MOL) Cra	3.3335068	8.8093814	8.6314203	1.7617564	1.5465615
Tight (MOL) End	1.7108426	0.8538481	0.5710234	0.6348142	0.5878082

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

Selection	scale factor	total	stat	+syst	- syst
Loose Bar	1.0983589	0.3738737	0.1427455	0.3455509	0.3445776
Loose Cra	0.8241601	0.5107875	0.4861757	0.1566433	0.1565878
Loose End	1.4682216	0.1864148	0.1293483	0.1287350	0.1342374
Loose (TOL) Bar	1.1177881	0.4104626	0.1545513	0.3802546	0.3789075
Loose (TOL) Cra	0.7961398	0.5134721	0.4876960	0.1606434	0.1590059
Loose (TOL) End	1.5049777	0.7225498	0.1936883	0.6961058	0.6929059
Loose (MOL) Bar	1.7709990	0.8063399	0.3485189	0.7271305	0.7252112
Loose (MOL) Cra	1.9346085	2.3376968	2.2509032	0.6310794	0.5515191
Loose (MOL) End	2.0919386	0.6976395	0.4265972	0.5520108	0.5161212
Medium Bar	1.4611658	1.0126537	0.4231745	0.9187365	0.9199952
Medium Cra	0.9291983	2.2647272	2.1656233	0.6626200	0.6617402
Medium End	2.1004128	0.9228135	0.6735249	0.6308322	0.6226229
Medium (TOL) Bar	1.4944414	1.0536804	0.4445655	0.9538950	0.9553031
Medium (TOL) Cra	0.9293353	2.2650540	2.1659393	0.6627041	0.6618241
Medium (TOL) End	2.0086540	1.2326828	0.8190181	0.9212580	0.8813170
Medium (MOL) Bar	2.4871152	1.7063445	0.8369999	1.4769113	1.4869576
Medium (MOL) Cra	2.0507348	6.7046879	6.4516565	1.8245461	1.8177280
Medium (MOL) End	2.7093169	2.2400444	1.5213169	1.6442001	1.4188873
Tight Bar	2.0142690	1.6112375	0.8216183	1.3843575	1.3860123
Tight Cra	2.2360279	4.5685872	4.4936282	0.7494437	0.8241938
Tight End	2.1466508	2.3985634	1.8603363	1.5140197	1.4743252
Tight (TOL) Bar	2.0613577	1.6416901	0.8493369	1.4030199	1.4049105
Tight (TOL) Cra	2.2367800	4.5702228	4.4952420	0.7496792	0.8244610
Tight (TOL) End	2.1483991	2.5694316	1.9674217	1.6526437	1.6157985
Tight (MOL) Bar	3.1060343	2.2535251	1.3298103	1.8110638	1.8193351
Tight (MOL) Cra	4.6275867	13.6256559	13.5201383	1.4556365	1.6924418
Tight (MOL) End	3.3442206	3.9676232	3.2961090	2.2085516	2.0668030