Weighted by Observations - Optimal

					Original (all)				Modified (all)				Original (LM-only)				Modified (LM-only)			
#	$\|\mathcal{G}\|$	% Obs	$\|O\|$	$\|G^*\|$	Time	AR	Acc	$\|S\|$	Time	AR	Acc	$\|S\|$	Time	AR	Acc	$\|S\|$	Time	AR	Acc	$\|S\|$
BLOCKS (156)	20.3	10	1.25	8.0	4.168	0.44	86.1	7.53	4.287	0.44	86.1	7.42	4.033	0.42	91.7	9.89	4.08	0.43	83.3	7.44
		30	3.08	3.97	4.171	0.46	77.8	2.5	4.281	0.46	77.8	2.42	4.031	0.33	83.3	3.92	4.077	0.29	63.9	2.94
		50	4.42	2.5	4.166	0.59	88.9	3.03	4.284	0.58	86.1	3.0	4.03	0.46	80.6	3.17	4.075	0.36	58.3	2.61
		70	6.67	1.94	4.169	0.85	97.2	1.83	4.282	0.85	97.2	1.83	4.034	0.54	72.2	1.86	4.078	0.38	50.0	1.92
		100	8.83	1.83	4.166	0.92	100.0	1.67	4.281	0.92	100.0	1.67	4.027	0.58	75.0	2.0	4.087	0.53	75.0	2.42
DEPOTS (156)	8.0	10	1.0	4.17	1.727	0.69	72.2	3.81	1.771	0.71	69.4	3.64	1.671	0.55	94.4	6.39	1.686	0.85	97.2	5.03
		30	2.92	1.94	1.726	0.51	66.7	2.11	1.772	0.62	69.4	1.69	1.671	0.33	80.6	4.39	1.683	0.71	86.1	2.47
		50	4.83	1.14	1.727	0.68	77.8	1.64	1.769	0.77	83.3	1.42	1.671	0.46	83.3	2.94	1.688	0.75	88.9	2.0
		70	6.83	1.06	1.726	0.95	97.2	1.14	1.768	0.95	97.2	1.11	1.671	0.66	97.2	2.31	1.688	0.89	100.0	1.42
		100	9.5	1.0	1.723	1.0	100.0	1.0	1.768	1.0	100.0	1.0	1.67	0.94	100.0	1.17	1.683	1.0	100.0	1.0
DRIVERLOG (156)	6.7	10	1.75	2.36	1.304	0.54	75.0	2.64	1.327	0.56	72.2	2.39	1.287	0.54	100.0	4.67	1.301	0.49	91.7	3.81
		30	4.17	1.58	1.307	0.66	83.3	1.75	1.329	0.68	83.3	1.72	1.286	0.57	97.2	2.94	1.301	0.61	97.2	2.83
		50	6.33	1.22	1.306	0.69	97.2	1.61	1.328	0.73	97.2	1.53	1.288	0.53	94.4	2.61	1.303	0.54	94.4	2.58
		70	8.92	1.14	1.305	0.9	97.2	1.31	1.329	0.9	97.2	1.31	1.288	0.64	100.0	2.17	1.302	0.66	100.0	2.06
		100	12.17	1.08	1.306	0.96	100.0	1.17	1.329	0.96	100.0	1.17	1.288	0.71	100.0	1.75	1.306	0.71	100.0	1.75
PWR (156)	6.7	10	2.83	3.47	1.518	0.79	80.6	3.25	1.557	0.79	80.6	3.17	1.467	0.55	91.7	5.44	1.479	0.64	88.9	4.03
		30	6.92	1.89	1.516	0.8	86.1	1.89	1.554	0.8	86.1	1.92	1.467	0.42	88.9	3.83	1.482	0.54	86.1	2.83
		50	11.33	1.36	1.515	0.91	100.0	1.39	1.552	0.91	100.0	1.39	1.467	0.54	88.9	2.11	1.48	0.68	94.4	1.67
		70	16.08	1.19	1.513	0.9	100.0	1.25	1.552	0.9	100.0	1.22	1.468	0.68	77.8	1.33	1.482	0.69	80.6	1.36
		100	22.0	1.08	1.515	0.92	100.0	1.08	1.557	0.92	100.0	1.08	1.471	0.81	91.7	1.25	1.482	0.81	91.7	1.25
IPC-GRID (208)	7.5	10	1.63	2.71	1.692	0.87	93.8	2.67	1.782	0.87	93.8	2.67	1.596	0.92	100.0	3.1	1.6	0.93	100.0	2.98
		30	4.0	1.21	1.692	0.93	95.8	1.15	1.784	0.93	95.8	1.15	1.583	0.97	97.9	1.23	1.602	0.98	97.9	1.21
		50	6.19	1.13	1.691	0.96	97.9	1.08	1.783	0.96	97.9	1.08	1.588	0.97	97.9	1.1	1.604	0.98	97.9	1.08
		70	8.69	1.04	1.69	0.97	97.9	1.06	1.784	0.99	97.9	1.02	1.588	0.97	97.9	1.06	1.604	0.99	97.9	1.02
		100	11.88	1.0	1.692	1.0	100.0	1.0	1.78	1.0	100.0	1.0	1.586	1.0	100.0	1.0	1.603	1.0	100.0	1.0
FERRY (156)	6.7	10	2.25	3.58	1.153	0.88	100.0	4.25	1.173	0.88	100.0	4.25	1.145	0.88	100.0	4.25	1.157	0.88	100.0	4.25
		30	6.0	1.64	1.156	0.9	100.0	1.97	1.173	0.9	100.0	1.97	1.146	0.9	100.0	1.97	1.159	0.9	100.0	1.97
		50	9.67	1.22	1.154	0.98	100.0	1.28	1.177	0.98	100.0	1.28	1.144	0.98	100.0	1.28	1.159	0.98	100.0	1.28
		70	13.5	1.19	1.154	0.99	100.0	1.22	1.176	0.99	100.0	1.22	1.143	0.99	100.0	1.22	1.158	0.99	100.0	1.22
		100	18.83	1.17	1.155	1.0	100.0	1.17	1.173	1.0	100.0	1.17	1.148	1.0	100.0	1.17	1.161	1.0	100.0	1.17
LOGISTICS (156)	10.0	10	2.0	2.83	1.931	0.9	100.0	3.53	1.957	0.9	100.0	3.53	1.911	0.89	100.0	3.64	1.922	0.9	100.0	3.56
		30	5.75	1.19	1.932	0.92	100.0	1.47	1.954	0.92	100.0	1.47	1.908	0.92	100.0	1.44	1.923	0.92	100.0	1.44
		50	9.42	1.06	1.931	0.96	100.0	1.17	1.958	0.96	100.0	1.17	1.912	0.96	100.0	1.17	1.921	0.96	100.0	1.17
		70	13.25	1.03	1.933	0.99	100.0	1.06	1.958	0.99	100.0	1.06	1.911	1.0	100.0	1.03	1.925	1.0	100.0	1.03
		100	18.17	1.0	1.929	1.0	100.0	1.0	1.958	1.0	100.0	1.0	1.912	1.0	100.0	1.0	1.922	1.0	100.0	1.0
MICONIC (156)	6.0	10	2.0	2.53	1.212	0.89	100.0	2.97	1.237	0.89	100.0	2.97	1.195	0.8	100.0	3.39	1.209	0.89	100.0	2.97
		30	5.42	1.22	1.213	0.95	100.0	1.36	1.236	0.95	100.0	1.36	1.196	0.77	100.0	1.78	1.209	0.95	100.0	1.36
		50	8.42	1.06	1.21	0.97	100.0	1.11	1.236	0.97	100.0	1.11	1.196	0.9	100.0	1.28	1.208	0.97	100.0	1.11
		70	11.92	1.0	1.21	0.98	100.0	1.06	1.237	0.98	100.0	1.06	1.196	0.97	100.0	1.08	1.209	0.98	100.0	1.06
		100	16.33	1.0	1.213	1.0	100.0	1.0	1.235	1.0	100.0	1.0	1.197	1.0	100.0	1.0	1.21	1.0	100.0	1.0
ROVERS (156)	6.0	10	1.67	2.28	1.29	0.83	97.2	2.75	1.311	0.83	97.2	2.75	1.281	0.78	91.7	2.64	1.29	0.79	91.7	2.61
		30	3.67	1.31	1.291	0.94	100.0	1.44	1.312	0.97	100.0	1.39	1.283	0.91	100.0	1.53	1.293	0.95	100.0	1.44
		50	5.75	1.19	1.291	0.92	88.9	1.08	1.311	0.92	88.9	1.08	1.281	0.94	97.2	1.19	1.292	0.94	97.2	1.19
		70	8.17	1.0	1.292	0.99	100.0	1.03	1.311	0.99	100.0	1.03	1.281	0.99	100.0	1.03	1.29	0.99	100.0	1.03
		100	10.83	1.0	1.291	1.0	100.0	1.0	1.31	1.0	100.0	1.0	1.283	1.0	100.0	1.0	1.292	1.0	100.0	1.0
SATELLITE (156)	6.0	10	1.42	3.53	1.109	0.85	94.4	3.81	1.133	0.84	91.7	3.72	1.098	0.88	97.2	3.89	1.112	0.85	91.7	3.83
		30	3.42	2.39	1.108	0.86	91.7	2.44	1.131	0.87	88.9	2.36	1.098	0.81	97.2	2.97	1.112	0.82	94.4	2.78
		50	5.75	1.58	1.11	0.93	97.2	1.53	1.13	0.93	97.2	1.53	1.095	0.92	100.0	1.78	1.113	0.93	100.0	1.75
		70	8.08	1.31	1.11	0.94	100.0	1.28	1.13	0.96	100.0	1.22	1.095	0.97	100.0	1.39	1.112	0.99	100.0	1.33
		100	10.75	1.25	1.11	0.96	100.0	1.17	1.133	0.96	100.0	1.17	1.096	1.0	100.0	1.25	1.11	1.0	100.0	1.25
SOKOBAN (156)	8.7	10	2.33	2.11	3.09	0.39	52.8	2.08	3.313	0.38	47.2	2.19	2.472	0.38	88.9	5.58	2.506	0.33	66.7	3.83
		30	6.5	1.25	3.031	0.75	80.6	1.25	3.253	0.78	86.1	1.31	2.472	0.41	72.2	2.33	2.51	0.5	75.0	1.92
		50	10.33	1.22	2.985	0.92	100.0	1.19	3.2	0.91	100.0	1.17	2.472	0.53	83.3	1.78	2.512	0.62	86.1	1.64
		70	14.67	1.03	2.964	0.99	100.0	1.0	3.173	0.99	100.0	1.0	2.473	0.73	88.9	1.58	2.507	0.77	88.9	1.42
		100	20.17	1.0	2.95	1.0	100.0	1.0	3.165	1.0	100.0	1.0	2.473	0.85	91.7	1.25	2.512	0.86	91.7	1.17
ZENO (156)	6.0	10	1.75	2.36	1.399	0.67	77.8	2.42	1.429	0.7	77.8	2.33	1.367	0.72	100.0	3.56	1.383	0.75	94.4	3.31
		30	4.0	1.33	1.4	0.76	88.9	1.44	1.429	0.78	88.9	1.36	1.368	0.72	97.2	2.0	1.383	0.76	97.2	1.81
		50	6.17	1.03	1.402	0.9	94.4	1.08	1.428	0.9	94.4	1.08	1.369	0.83	100.0	1.44	1.384	0.85	97.2	1.36
		70	8.75	1.0	1.401	0.94	94.4	1.0	1.429	0.94	94.4	1.0	1.368	0.94	100.0	1.11	1.385	0.94	100.0	1.11
		100	12.0	1.0	1.395	1.0	100.0	1.0	1.431	1.0	100.0	1.0	1.368	0.96	100.0	1.08	1.385	0.96	100.0	1.08
Average					1.792	0.86	93.78	1.79	1.848	0.87	93.69	1.76	1.71	0.77	94.8	2.35	1.728	0.81	93.23	2.05

Table 1: Results for optimal dataset.

Weighted by Observations - Suboptimal

					Original (all)				Modified (all)				Original (LM-only)				Modified (LM-only)			
#	$\|\mathcal{G}\|$	% Obs	$\|O\|$	$\|G^*\|$	Time	AR	Acc	$\|S\|$	Time	AR	Acc	$\|S\|$	Time	AR	Acc	$\|S\|$	Time	AR	Acc	$\|S\|$
BLOCKS (156)	20.3	10	1.42	7.61	4.171	0.41	86.1	6.86	4.286	0.41	86.1	6.53	4.025	0.41	94.4	8.97	4.074	0.42	88.9	7.44
		30	3.83	3.58	4.163	0.49	77.8	3.17	4.282	0.48	75.0	2.78	4.027	0.44	80.6	4.03	4.074	0.31	52.8	2.61
		50	5.92	3.19	4.164	0.55	86.1	3.08	4.284	0.51	80.6	2.89	4.034	0.37	58.3	2.06	4.074	0.25	33.3	1.81
		70	8.5	2.53	4.165	0.71	91.7	2.06	4.281	0.68	88.9	2.08	4.033	0.45	77.8	2.25	4.08	0.28	44.4	2.06
		100	11.83	2.25	4.176	0.84	100.0	1.67	4.272	0.84	100.0	1.67	4.033	0.52	75.0	2.0	4.077	0.47	75.0	2.58
DEPOTS (150)	8.0	10	1.92	2.17	1.728	0.53	66.7	2.06	1.77	0.58	75.0	1.97	1.672	0.33	83.3	4.94	1.687	0.73	88.9	3.14
		30	4.5	1.83	1.724	0.5	69.4	2.36	1.773	0.62	72.2	1.89	1.668	0.37	72.2	3.25	1.69	0.66	86.1	2.17
		50	6.75	1.14	1.724	0.8	88.9	1.47	1.771	0.86	88.9	1.22	1.671	0.44	86.1	3.39	1.687	0.81	94.4	1.64
		70	9.75	1.14	1.723	0.96	100.0	1.11	1.77	0.97	100.0	1.08	1.673	0.71	97.2	2.33	1.687	0.88	100.0	1.5
		100	13.33	1.0	1.724	1.0	100.0	1.0	1.77	1.0	100.0	1.0	1.677	0.94	100.0	1.17	1.686	1.0	100.0	1.0
DRIVERLOG (150)	6.7	10	2.17	1.92	1.305	0.49	80.6	2.69	1.33	0.53	80.6	2.42	1.287	0.47	100.0	4.25	1.301	0.46	86.1	2.78
		30	5.58	1.31	1.305	0.67	91.7	1.72	1.329	0.67	88.9	1.64	1.289	0.55	100.0	2.58	1.3	0.57	91.7	2.06
		50	8.75	1.33	1.304	0.72	94.4	1.5	1.329	0.72	94.4	1.44	1.288	0.64	100.0	2.14	1.3	0.66	100.0	1.86
		70	12.33	1.31	1.305	0.85	94.4	1.28	1.328	0.85	94.4	1.28	1.289	0.72	97.2	1.81	1.302	0.75	100.0	1.75
		100	17.0	1.17	1.304	0.93	100.0	1.17	1.327	0.93	100.0	1.17	1.289	0.69	100.0	1.75	1.299	0.69	100.0	1.75
PWR (156)	6.7	10	3.25	2.89	1.519	0.75	86.1	2.67	1.556	0.8	88.9	2.75	1.468	0.5	91.7	4.89	1.48	0.61	83.3	3.72
		30	9.08	1.83	1.517	0.71	86.1	2.0	1.553	0.72	91.7	2.11	1.467	0.43	77.8	3.11	1.481	0.47	80.6	2.42
		50	14.5	1.53	1.514	0.84	94.4	1.5	1.555	0.84	91.7	1.44	1.466	0.51	72.2	1.86	1.48	0.63	86.1	1.69
		70	20.25	1.17	1.514	0.88	100.0	1.25	1.552	0.89	100.0	1.22	1.468	0.66	83.3	1.5	1.483	0.75	88.9	1.31
		100	28.33	1.08	1.513	0.92	100.0	1.08	1.553	0.92	100.0	1.08	1.471	0.81	91.7	1.25	1.486	0.81	91.7	1.25
IPC-GRID (208)	7.5	10	2.06	1.58	1.69	0.77	91.7	1.81	1.782	0.83	91.7	1.33	1.586	0.86	100.0	2.0	1.603	0.92	100.0	1.65
		30	5.56	1.4	1.69	0.82	93.8	1.13	1.782	0.88	97.9	1.08	1.587	0.88	100.0	1.21	1.603	0.9	100.0	1.13
		50	8.88	1.35	1.692	0.84	93.8	1.13	1.784	0.88	97.9	1.1	1.586	0.89	97.9	1.13	1.605	0.93	100.0	1.04
		70	12.56	1.31	1.69	0.89	100.0	1.1	1.779	0.92	100.0	1.04	1.586	0.91	100.0	1.06	1.606	0.93	100.0	1.02
		100	17.25	1.5	1.693	0.94	100.0	1.0	1.779	0.94	100.0	1.0	1.586	0.94	100.0	1.0	1.607	0.94	100.0	1.0
FERRY (156)	6.7	10	3.33	2.69	1.153	0.71	100.0	4.19	1.175	0.71	100.0	4.19	1.142	0.72	100.0	4.14	1.16	0.72	100.0	4.14
		30	8.75	1.42	1.154	0.88	100.0	1.69	1.176	0.88	100.0	1.67	1.144	0.89	100.0	1.67	1.158	0.92	100.0	1.56
		50	14.0	1.28	1.154	0.88	100.0	1.5	1.176	0.88	100.0	1.5	1.146	0.88	100.0	1.5	1.157	0.88	100.0	1.5
		70	19.67	1.28	1.155	0.96	100.0	1.25	1.177	0.96	100.0	1.25	1.146	0.96	100.0	1.25	1.159	0.96	100.0	1.25
		100	27.5	1.25	1.158	0.96	100.0	1.17	1.176	0.96	100.0	1.17	1.151	0.96	100.0	1.17	1.158	0.96	100.0	1.17
LOGISTICS (150)	10.0	10	2.67	2.0	1.929	0.88	100.0	2.44	1.957	0.92	100.0	2.19	1.911	0.81	100.0	3.0	1.921	0.89	100.0	2.5
		30	7.5	1.14	1.929	0.91	100.0	1.33	1.958	0.95	100.0	1.25	1.912	0.93	100.0	1.31	1.925	0.97	100.0	1.19
		50	11.92	1.06	1.933	0.88	97.2	1.25	1.959	0.88	97.2	1.25	1.912	0.94	100.0	1.19	1.923	0.97	100.0	1.11
		70	16.67	1.03	1.933	0.97	100.0	1.08	1.958	0.97	100.0	1.08	1.906	0.99	100.0	1.06	1.925	1.0	100.0	1.03
		100	23.17	1.0	1.934	1.0	100.0	1.0	1.962	1.0	100.0	1.0	1.909	1.0	100.0	1.0	1.931	1.0	100.0	1.0
MICONIC (156)	6.0	10	3.0	1.83	1.211	0.76	100.0	2.67	1.238	0.76	100.0	2.67	1.193	0.68	100.0	3.14	1.209	0.76	100.0	2.67
		30	7.67	1.25	1.211	0.89	100.0	1.47	1.238	0.89	100.0	1.47	1.196	0.77	100.0	1.78	1.21	0.89	100.0	1.47
		50	12.25	1.03	1.212	0.98	100.0	1.08	1.236	0.98	100.0	1.08	1.194	0.97	100.0	1.11	1.209	0.98	100.0	1.08
		70	17.33	1.0	1.212	0.99	100.0	1.03	1.238	0.99	100.0	1.03	1.196	0.99	100.0	1.03	1.209	0.99	100.0	1.03
		100	24.0	1.0	1.212	1.0	100.0	1.0	1.239	1.0	100.0	1.0	1.195	1.0	100.0	1.0	1.21	1.0	100.0	1.0
ROVERS (156)	6.0	10	1.83	2.39	1.29	0.83	88.9	2.89	1.311	0.83	88.9	2.89	1.281	0.79	94.4	3.14	1.294	0.84	97.2	3.06
		30	4.5	1.39	1.29	0.88	88.9	1.39	1.311	0.91	88.9	1.33	1.28	0.86	100.0	1.61	1.291	0.89	100.0	1.5
		50	7.17	1.11	1.291	0.93	94.4	1.14	1.311	0.99	97.2	1.08	1.282	0.99	100.0	1.08	1.294	0.99	100.0	1.08
		70	10.0	1.06	1.292	0.94	94.4	1.08	1.313	0.97	97.2	1.08	1.282	0.98	100.0	1.11	1.293	0.98	100.0	1.11
		100	13.67	1.0	1.292	1.0	100.0	1.0	1.312	1.0	100.0	1.0	1.282	1.0	100.0	1.0	1.294	1.0	100.0	1.0
SATELLITE (156)	6.0	10	2.0	3.25	1.108	0.9	97.2	3.44	1.128	0.88	97.2	3.39	1.098	0.8	97.2	4.03	1.111	0.85	97.2	3.61
		30	4.33	1.78	1.109	0.8	94.4	2.22	1.129	0.81	91.7	2.03	1.097	0.74	97.2	2.69	1.112	0.8	94.4	2.28
		50	6.75	1.36	1.109	0.92	94.4	1.42	1.131	0.92	94.4	1.42	1.097	0.83	100.0	1.83	1.11	0.87	100.0	1.69
		70	9.42	1.33	1.111	0.94	100.0	1.36	1.13	0.94	100.0	1.36	1.097	0.92	100.0	1.56	1.111	0.95	100.0	1.47
		100	12.75	1.25	1.112	0.96	100.0	1.17	1.132	0.96	100.0	1.17	1.099	1.0	100.0	1.25	1.113	1.0	100.0	1.25
SOKOBAN (150)	8.7	10	3.33	1.83	3.1	0.52	61.1	1.78	3.317	0.52	63.9	1.92	2.473	0.3	69.4	4.36	2.511	0.27	63.9	3.42
		30	8.67	1.28	3.025	0.77	83.3	1.08	3.238	0.77	83.3	1.08	2.473	0.43	75.0	2.81	2.51	0.55	80.6	1.69
		50	13.75	1.33	2.991	0.79	91.7	1.17	3.206	0.81	91.7	1.14	2.473	0.51	75.0	1.94	2.509	0.56	75.0	1.56
		70	19.33	1.36	2.971	0.8	97.2	1.03	3.183	0.8	97.2	1.03	2.474	0.58	80.6	1.53	2.507	0.61	80.6	1.42
		100	27.0	1.33	2.951	0.83	100.0	1.0	3.165	0.83	100.0	1.0	2.483	0.73	91.7	1.25	2.511	0.74	91.7	1.17
ZENO (156)	6.0	10	2.0	1.78	1.397	0.64	83.3	2.53	1.415	0.64	80.6	2.19	1.366	0.59	97.2	3.58	1.382	0.63	97.2	2.81
		30	5.42	1.14	1.4	0.73	83.3	1.47	1.43	0.77	83.3	1.33	1.368	0.76	97.2	1.69	1.383	0.86	100.0	1.44
		50	8.25	1.06	1.397	0.87	91.7	1.11	1.431	0.92	94.4	1.06	1.369	0.86	97.2	1.31	1.386	0.9	97.2	1.22
		70	11.75	1.0	1.398	0.94	94.4	1.0	1.427	0.97	97.2	1.0	1.368	0.94	100.0	1.11	1.383	0.94	100.0	1.14
		100	16.17	1.0	1.4	1.0	100.0	1.0	1.427	1.0	100.0	1.0	1.371	0.96	100.0	1.08	1.385	0.96	100.0	1.08
Average					1.792	0.82	93.49	1.71	1.848	0.84	93.82	1.64	1.71	0.74	93.48	2.19	1.728	0.78	92.45	1.85

Table 2: Results for sub-optimal dataset.