Optimal

		h^{SEQ}_Ω				h^{LMC}_Ω				h^{PhO}_Ω				$h^{\text{SEQ}}_\Omega, h^{\text{LMC}}_\Omega$				$h^{\text{LMC}}_\Omega, h^{\text{PhO}}_\Omega$				$h^{\text{SEQ}}_\Omega, h^{\text{PhO}}_\Omega$				$h^{\text{SEQ}}_\Omega, h^{\text{LMC}}_\Omega, h^{\text{PhO}}_\Omega$			
#	%	Time	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	Time	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	Time	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	Time	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	Time	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	Time	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$	Time	AGR	ACC	$\lvert\Gamma^{\mathbf{h}}\rvert$
BLOCKS	10	4.051	**0.45**	0.89	8.03	4.033	0.42	0.92	9.89	4.133	0.44	0.92	8.17	4.065	**0.45**	0.89	8.03	4.124	0.41	0.83	6.83	4.181	0.44	0.86	7.53	4.894	0.44	0.86	7.53
	30	4.054	**0.43**	0.81	2.86	4.031	0.33	0.83	3.92	4.128	**0.43**	0.75	3.86	4.062	0.43	0.78	2.53	4.128	**0.47**	0.83	2.94	4.179	**0.47**	0.81	2.53	4.893	0.46	0.78	2.5
	50	4.051	**0.55**	0.89	3.22	4.03	0.46	0.81	3.17	4.127	0.44	0.69	3.03	4.064	0.55	0.89	3.28	4.119	0.58	0.81	2.72	4.173	**0.59**	0.89	3.03	4.891	**0.59**	0.89	3.03
	70	4.054	**0.75**	0.97	2.08	4.034	0.54	0.72	1.86	4.129	0.58	0.83	3.03	4.065	0.75	0.97	2.08	4.123	0.81	0.92	2.06	4.172	**0.85**	0.97	1.83	4.893	**0.85**	0.97	1.83
	100	4.045	**0.82**	1.0	1.92	4.027	0.58	0.75	2.0	4.121	0.62	0.92	3.42	4.07	0.82	1.0	1.92	4.13	0.88	0.92	1.92	4.171	**0.92**	1.0	1.67	4.891	**0.92**	1.0	1.67
DEPOTS	10	1.683	0.58	0.86	5.92	1.671	0.55	0.94	6.39	1.711	**0.59**	1.0	7.11	1.687	**0.68**	0.72	3.94	1.714	0.52	0.94	6.11	1.728	0.48	0.67	4.67	2.054	**0.69**	0.72	3.81
	30	1.682	**0.46**	0.89	3.89	1.671	0.33	0.81	4.39	1.709	0.31	0.97	6.31	1.688	**0.54**	0.75	2.08	1.714	0.24	0.56	3.56	1.73	0.47	0.83	3.33	2.053	0.51	0.67	2.11
	50	1.685	**0.64**	0.97	2.89	1.671	0.46	0.83	2.94	1.708	0.22	0.83	4.47	1.688	**0.69**	0.81	1.67	1.715	0.36	0.67	2.67	1.728	0.61	0.92	2.5	2.054	0.68	0.78	1.64
	70	1.683	**0.93**	1.0	1.39	1.671	0.66	0.97	2.31	1.706	0.16	0.69	4.5	1.688	**0.98**	1.0	1.11	1.713	0.52	0.89	2.42	1.726	0.91	0.94	1.31	2.052	0.95	0.97	1.14
	100	1.687	**0.94**	1.0	1.25	1.67	**0.94**	1.0	1.17	1.708	0.15	0.92	5.75	1.685	**1.0**	1.0	1.0	1.715	**1.0**	1.0	1.0	1.724	0.93	1.0	1.5	2.052	**1.0**	1.0	1.0
DRIVERLOG	10	1.294	0.53	0.75	3.5	1.287	**0.54**	1.0	4.67	1.296	0.49	0.92	4.11	1.297	0.54	0.75	2.64	1.298	**0.57**	1.0	4.44	1.303	0.53	0.75	3.5	1.542	0.54	0.75	2.64
	30	1.295	**0.64**	0.81	2.44	1.286	0.57	0.97	2.94	1.294	0.44	0.69	2.83	1.299	**0.66**	0.83	1.75	1.299	0.6	0.97	2.72	1.306	0.64	0.81	2.44	1.543	**0.66**	0.83	1.75
	50	1.296	**0.61**	0.97	2.36	1.288	0.53	0.94	2.61	1.295	0.4	0.81	3.06	1.297	**0.69**	0.97	1.61	1.3	0.57	0.94	2.31	1.304	0.61	0.97	2.36	1.542	**0.69**	0.97	1.61
	70	1.293	**0.75**	0.97	1.89	1.288	0.64	1.0	2.17	1.293	0.52	0.72	2.25	1.298	**0.9**	0.97	1.31	1.297	0.72	1.0	1.86	1.301	0.75	0.97	1.89	1.539	**0.9**	0.97	1.31
	100	1.296	**0.81**	1.0	1.42	1.288	0.71	1.0	1.75	1.296	0.55	0.75	2.17	1.295	**0.96**	1.0	1.17	1.299	0.76	1.0	1.58	1.307	0.81	1.0	1.42	1.546	**0.96**	1.0	1.17
DWR	10	1.479	**0.72**	0.75	3.03	1.467	0.55	0.92	5.44	1.496	0.45	0.72	4.81	1.48	**0.79**	0.81	3.25	1.498	0.55	0.92	5.44	1.515	0.72	0.75	3.03	1.814	**0.79**	0.81	3.25
	30	1.477	**0.72**	0.86	1.92	1.467	0.42	0.89	3.83	1.496	0.32	0.72	4.44	1.48	**0.8**	0.86	1.89	1.497	0.42	0.89	3.61	1.515	0.72	0.86	1.92	1.811	**0.8**	0.86	1.89
	50	1.478	**0.83**	0.86	1.33	1.467	0.54	0.89	2.11	1.495	0.28	0.72	3.67	1.48	**0.91**	1.0	1.39	1.502	0.56	0.86	1.89	1.513	0.83	0.86	1.33	1.812	**0.91**	1.0	1.39
	70	1.549	**0.9**	0.97	1.19	1.468	0.68	0.78	1.33	1.499	0.27	0.72	3.28	1.482	**0.9**	1.0	1.25	1.5	0.7	0.81	1.42	1.515	**0.9**	0.97	1.19	1.81	**0.9**	1.0	1.25
	100	1.576	**0.92**	1.0	1.08	1.471	0.81	0.92	1.25	1.493	0.38	0.75	1.75	1.482	**0.92**	1.0	1.08	1.502	0.81	0.92	1.25	1.508	**0.92**	1.0	1.08	1.81	**0.92**	1.0	1.08
IPC-GRID	10	1.591	0.65	0.79	3.29	1.596	**0.92**	1.0	3.1	1.673	0.4	0.98	7.06	1.597	0.87	0.94	2.67	1.68	**0.92**	1.0	3.1	1.691	0.68	0.73	2.44	2.018	0.87	0.94	2.67
	30	1.592	0.73	0.94	1.88	1.583	**0.97**	0.98	1.23	1.675	0.25	1.0	6.77	1.597	0.93	0.96	1.15	1.682	**0.97**	0.98	1.23	1.694	0.78	0.94	1.44	2.021	0.93	0.96	1.15
	50	1.592	0.83	0.94	1.31	1.588	**0.97**	0.98	1.1	1.676	0.27	0.92	6.27	1.596	0.96	0.98	1.08	1.679	**0.97**	0.98	1.1	1.692	0.9	0.94	1.06	2.018	0.96	0.98	1.08
	70	1.595	0.9	0.98	1.27	1.588	**0.97**	0.98	1.06	1.675	0.3	0.73	5.0	1.599	**0.97**	0.98	1.06	1.679	**0.97**	0.98	1.06	1.693	0.95	0.98	1.13	2.016	**0.97**	0.98	1.06
	100	1.597	**1.0**	1.0	1.0	1.586	**1.0**	1.0	1.0	1.676	0.23	0.44	3.38	1.597	**1.0**	1.0	1.0	1.68	**1.0**	1.0	1.0	1.694	**1.0**	1.0	1.0	2.017	**1.0**	1.0	1.0
FERRY	10	1.149	**0.88**	1.0	4.25	1.145	**0.88**	1.0	4.25	1.152	0.66	1.0	5.53	1.147	**0.88**	1.0	4.25	1.154	**0.88**	1.0	4.25	1.159	**0.88**	1.0	4.25	1.341	**0.88**	1.0	4.25
	30	1.147	**0.9**	1.0	1.97	1.146	**0.9**	1.0	1.97	1.152	0.39	1.0	4.5	1.149	**0.9**	1.0	1.97	1.157	**0.9**	1.0	1.97	1.16	**0.9**	1.0	1.97	1.343	**0.9**	1.0	1.97
	50	1.147	**0.98**	1.0	1.28	1.144	**0.98**	1.0	1.28	1.151	0.41	1.0	3.67	1.149	**0.98**	1.0	1.28	1.155	**0.98**	1.0	1.28	1.16	**0.98**	1.0	1.28	1.34	**0.98**	1.0	1.28
	70	1.15	**0.99**	1.0	1.22	1.143	**0.99**	1.0	1.22	1.155	0.46	1.0	3.44	1.152	**0.99**	1.0	1.22	1.154	**0.99**	1.0	1.22	1.161	**0.99**	1.0	1.22	1.345	**0.99**	1.0	1.22
	100	1.146	**1.0**	1.0	1.17	1.148	**1.0**	1.0	1.17	1.157	0.47	1.0	3.33	1.147	**1.0**	1.0	1.17	1.155	**1.0**	1.0	1.17	1.157	**1.0**	1.0	1.17	1.341	**1.0**	1.0	1.17
LOGISTICS	10	1.915	0.85	1.0	3.89	1.911	**0.89**	1.0	3.64	1.918	0.71	0.97	4.0	1.924	**0.9**	1.0	3.56	1.919	0.86	1.0	3.67	1.931	0.73	0.97	3.75	2.27	**0.9**	1.0	3.53
	30	1.916	0.86	1.0	1.75	1.908	**0.92**	1.0	1.44	1.914	0.67	1.0	2.19	1.921	**0.92**	1.0	1.44	1.918	0.88	1.0	1.56	1.93	0.79	1.0	1.89	2.266	**0.92**	1.0	1.47
	50	1.915	0.93	1.0	1.25	1.912	**0.96**	1.0	1.17	1.915	0.72	1.0	1.69	1.921	**0.96**	1.0	1.17	1.919	0.91	1.0	1.28	1.932	0.92	1.0	1.28	2.273	**0.96**	1.0	1.17
	70	1.917	0.99	1.0	1.06	1.911	**1.0**	1.0	1.03	1.919	0.71	1.0	1.67	1.922	**1.0**	1.0	1.03	1.917	0.96	1.0	1.11	1.93	0.99	1.0	1.06	2.27	0.99	1.0	1.06
	100	1.921	**1.0**	1.0	1.0	1.912	**1.0**	1.0	1.0	1.917	0.69	1.0	1.67	1.918	**1.0**	1.0	1.0	1.917	**1.0**	1.0	1.0	1.93	**1.0**	1.0	1.0	2.269	**1.0**	1.0	1.0
MICONIC	10	1.2	0.73	1.0	3.78	1.195	**0.8**	1.0	3.39	1.203	0.62	1.0	4.19	1.204	**0.89**	1.0	2.97	1.205	0.8	1.0	3.39	1.213	0.73	1.0	3.78	1.437	**0.89**	1.0	2.97
	30	1.2	0.63	1.0	2.25	1.196	**0.77**	1.0	1.78	1.203	0.63	1.0	2.25	1.204	**0.95**	1.0	1.36	1.205	0.77	1.0	1.78	1.215	0.63	1.0	2.25	1.438	**0.95**	1.0	1.36
	50	1.199	0.81	1.0	1.5	1.196	**0.9**	1.0	1.28	1.205	0.81	1.0	1.5	1.204	**0.97**	1.0	1.11	1.204	0.9	1.0	1.28	1.216	0.81	1.0	1.5	1.436	**0.97**	1.0	1.11
	70	1.201	0.91	1.0	1.19	1.196	**0.97**	1.0	1.08	1.203	0.91	1.0	1.19	1.204	**0.98**	1.0	1.06	1.205	0.97	1.0	1.08	1.215	0.91	1.0	1.19	1.438	**0.98**	1.0	1.06
	100	1.199	**1.0**	1.0	1.0	1.197	**1.0**	1.0	1.0	1.206	**1.0**	1.0	1.0	1.204	**1.0**	1.0	1.0	1.208	**1.0**	1.0	1.0	1.216	**1.0**	1.0	1.0	1.438	**1.0**	1.0	1.0
ROVERS	10	1.281	0.61	1.0	4.44	1.281	**0.78**	0.92	2.64	1.287	0.67	1.0	4.08	1.284	**0.83**	0.97	2.75	1.287	0.78	0.92	2.64	1.289	0.63	0.94	3.86	1.555	**0.83**	0.97	2.75
	30	1.282	0.57	1.0	2.97	1.283	**0.91**	1.0	1.53	1.287	0.8	1.0	1.94	1.283	**0.94**	1.0	1.44	1.287	0.91	1.0	1.53	1.289	0.8	1.0	1.94	1.557	**0.94**	1.0	1.44
	50	1.284	0.78	1.0	1.83	1.281	**0.94**	0.97	1.19	1.286	0.91	1.0	1.42	1.284	0.92	0.89	1.08	1.288	**0.94**	0.97	1.19	1.294	0.93	1.0	1.36	1.557	0.92	0.89	1.08
	70	1.282	0.89	1.0	1.28	1.281	0.99	1.0	1.03	1.287	**1.0**	1.0	1.0	1.284	0.99	1.0	1.03	1.287	0.99	1.0	1.03	1.291	**1.0**	1.0	1.0	1.556	0.99	1.0	1.03
	100	1.283	**1.0**	1.0	1.0	1.283	**1.0**	1.0	1.0	1.285	**1.0**	1.0	1.0	1.288	**1.0**	1.0	1.0	1.29	**1.0**	1.0	1.0	1.289	**1.0**	1.0	1.0	1.557	**1.0**	1.0	1.0
SATELLITE	10	1.099	0.81	0.89	3.67	1.098	**0.88**	0.97	3.89	1.102	0.84	1.0	4.42	1.102	0.85	0.94	3.81	1.106	**0.88**	0.97	3.89	1.109	0.83	0.89	3.78	1.303	0.85	0.94	3.81
	30	1.1	0.8	0.92	2.28	1.098	**0.81**	0.97	2.97	1.107	0.78	1.0	3.28	1.101	**0.86**	0.92	2.44	1.106	0.81	0.97	2.97	1.109	0.82	0.94	2.39	1.304	**0.86**	0.92	2.44
	50	1.1	0.86	0.97	1.61	1.095	**0.92**	1.0	1.78	1.105	0.91	1.0	1.92	1.104	**0.93**	0.97	1.53	1.108	0.92	1.0	1.78	1.111	0.83	0.94	1.58	1.303	**0.93**	0.97	1.53
	70	1.101	0.89	1.0	1.42	1.095	**0.97**	1.0	1.39	1.105	**0.97**	1.0	1.39	1.105	0.94	1.0	1.28	1.105	**0.97**	1.0	1.39	1.11	0.86	1.0	1.36	1.305	0.94	1.0	1.28
	100	1.101	0.96	1.0	1.17	1.096	**1.0**	1.0	1.25	1.102	**1.0**	1.0	1.25	1.107	0.96	1.0	1.17	1.107	**1.0**	1.0	1.25	1.112	0.92	1.0	1.08	1.301	0.96	1.0	1.17
SOKOBAN	10	2.532	**0.38**	0.44	1.78	2.472	**0.38**	0.89	5.58	2.721	0.24	0.92	7.47	2.601	**0.39**	0.53	2.08	2.751	0.34	0.75	4.97	3.061	0.31	0.33	1.33	3.695	**0.39**	0.53	2.08
	30	2.533	**0.59**	0.72	1.39	2.472	0.41	0.72	2.33	2.72	0.14	0.64	4.83	2.58	**0.75**	0.81	1.25	2.739	0.38	0.67	2.22	3.006	0.59	0.67	1.31	3.634	**0.75**	0.81	1.25
	50	2.527	**0.82**	0.89	1.25	2.472	0.53	0.83	1.78	2.717	0.21	0.47	2.56	2.575	**0.92**	1.0	1.19	2.736	0.49	0.69	1.58	2.956	0.82	0.89	1.25	3.586	**0.92**	1.0	1.19
	70	2.527	**0.93**	1.0	1.11	2.473	0.73	0.89	1.58	2.709	0.21	0.31	1.69	2.57	**0.99**	1.0	1.0	2.728	0.62	0.81	1.58	2.933	0.93	1.0	1.14	3.565	**0.99**	1.0	1.0
	100	2.527	**0.96**	1.0	1.08	2.473	0.85	0.92	1.25	2.706	0.23	0.42	1.92	2.575	**1.0**	1.0	1.0	2.72	0.81	0.92	1.33	2.925	0.96	1.0	1.08	3.552	**1.0**	1.0	1.0
ZENO	10	1.379	0.65	0.78	2.31	1.367	**0.72**	1.0	3.56	1.378	0.6	0.92	3.58	1.385	0.67	0.78	2.42	1.383	0.68	0.89	2.92	1.398	**0.71**	0.86	2.44	1.69	0.67	0.78	2.42
	30	1.38	**0.84**	0.92	1.58	1.368	0.72	0.97	2.0	1.382	0.55	0.86	2.72	1.383	0.78	0.94	1.5	1.384	0.77	1.0	1.97	1.396	**0.83**	0.92	1.61	1.689	0.76	0.89	1.44
	50	1.379	**0.88**	0.97	1.22	1.369	0.83	1.0	1.44	1.379	0.57	0.83	2.11	1.383	**0.9**	0.94	1.08	1.383	0.83	0.97	1.39	1.397	0.89	1.0	1.25	1.688	**0.9**	0.94	1.08
	70	1.38	**0.94**	0.94	1.0	1.368	**0.94**	1.0	1.11	1.38	0.65	0.83	1.86	1.382	0.94	0.94	1.0	1.385	**0.98**	1.0	1.06	1.396	0.97	1.0	1.06	1.686	0.94	0.94	1.0
	100	1.381	**1.0**	1.0	1.0	1.368	0.96	1.0	1.08	1.381	0.66	0.83	1.75	1.381	**1.0**	1.0	1.0	1.384	**1.0**	1.0	1.0	1.4	**1.0**	1.0	1.0	1.683	**1.0**	1.0	1.0
AVG		1.724	**0.79**	0.94	2.11	1.71	0.77	0.95	2.35	1.755	0.54	0.87	3.41	1.729	**0.86**	0.94	1.81	1.759	0.78	0.94	2.2	1.791	0.8	0.93	1.98	2.127	**0.86**	0.94	1.79

Table 1: Results for each constraint set.

Sub-Optimal

		h_{Ω}^{SEQ}				h_{Ω}^{LMC}				h_{Ω}^{PhO}				$h_{\Omega}^{\text{SEQ}}, h_{\Omega}^{\text{LMC}}$				$h_{\Omega}^{\text{LMC}}, h_{\Omega}^{\text{PhO}}$				$h_{\Omega}^{\text{SEQ}}, h_{\Omega}^{\text{PhO}}$				$h_{\Omega}^{\text{SEQ}}, h_{\Omega}^{\text{LMC}}, h_{\Omega}^{\text{PhO}}$			
#	%	**Time**	**AGR**	**ACC**	$\|\Gamma^{\mathbf{h}}\|$	**Time**	**AGR**	**ACC**	$\|\Gamma^{\mathbf{h}}\|$	**Time**	**AGR**	**ACC**	$\|\Gamma^{\mathbf{h}}\|$	**Time**	**AGR**	**ACC**	$\|\Gamma^{\mathbf{h}}\|$	**Time**	**AGR**	**ACC**	$\|\Gamma^{\mathbf{h}}\|$	**Time**	**AGR**	**ACC**	$\|\Gamma^{\mathbf{h}}\|$	**Time**	**AGR**	**ACC**	$\|\Gamma^{\mathbf{h}}\|$
BLOCKS	10	4.049	**0.44**	0.94	8.25	4.025	0.41	0.94	8.97	4.135	0.39	0.97	8.64	4.06	**0.44**	0.94	8.31	4.123	0.39	0.94	6.92	4.173	0.41	0.86	6.83	4.891	0.41	0.86	6.86
	30	4.051	**0.5**	0.83	3.72	4.027	0.44	0.81	4.03	4.128	0.41	0.81	4.17	4.06	**0.5**	0.83	3.75	4.128	0.44	0.81	3.97	4.178	0.49	0.78	3.14	4.891	0.49	0.78	3.17
	50	4.05	0.5	0.86	3.22	4.034	0.37	0.58	2.06	4.129	**0.51**	0.83	3.5	4.063	0.5	0.86	3.25	4.126	**0.57**	0.81	2.72	4.178	0.55	0.86	3.08	4.898	0.55	0.86	3.08
	70	4.054	**0.64**	0.97	2.36	4.033	0.45	0.78	2.25	4.126	0.55	0.83	3.06	4.067	0.64	0.97	2.36	4.125	0.69	0.89	2.31	4.175	**0.71**	0.92	2.06	4.902	**0.71**	0.92	2.06
	100	4.059	**0.74**	1.0	1.92	4.033	0.52	0.75	2.0	4.124	0.58	0.92	3.5	4.064	0.74	1.0	1.92	4.123	0.79	0.92	1.92	4.176	**0.84**	1.0	1.67	4.904	**0.84**	1.0	1.67
DEPOTS	10	1.684	**0.35**	0.97	5.97	1.672	0.33	0.83	4.94	1.708	0.32	1.0	6.69	1.687	**0.52**	0.64	1.86	1.713	0.27	0.75	4.58	1.731	0.37	0.81	3.58	2.047	**0.53**	0.67	2.06
	30	1.685	**0.53**	0.92	4.14	1.668	0.37	0.72	3.25	1.71	0.27	0.69	4.33	1.686	**0.55**	0.75	2.28	1.714	0.27	0.58	2.97	1.727	0.51	0.81	3.56	2.05	0.5	0.69	2.36
	50	1.683	**0.71**	1.0	2.67	1.671	0.44	0.86	3.39	1.708	0.17	0.56	3.75	1.688	**0.78**	0.89	1.53	1.711	0.42	0.75	2.86	1.726	0.72	0.97	2.42	2.05	**0.8**	0.89	1.47
	70	1.687	**0.9**	1.0	1.5	1.673	0.71	0.97	2.33	1.709	0.19	0.69	4.0	1.689	**0.96**	1.0	1.11	1.714	0.73	0.92	1.94	1.726	0.89	1.0	1.75	2.048	**0.96**	1.0	1.11
	100	1.686	**0.94**	1.0	1.25	1.677	**0.94**	1.0	1.17	1.708	0.15	0.92	5.75	1.688	**1.0**	1.0	1.0	1.718	**1.0**	1.0	1.0	1.725	0.93	1.0	1.5	2.057	**1.0**	1.0	1.0
DRIVERLOG	10	1.291	**0.47**	0.89	3.92	1.287	**0.47**	1.0	4.25	1.295	0.41	0.89	3.78	1.296	**0.49**	0.81	2.69	1.299	0.47	1.0	4.17	1.304	0.47	0.89	3.92	1.539	**0.49**	0.81	2.69
	30	1.294	0.48	0.75	2.11	1.289	**0.55**	1.0	2.58	1.294	0.49	0.83	2.58	1.297	**0.67**	0.92	1.72	1.296	0.56	0.94	2.36	1.303	0.48	0.75	2.11	1.542	**0.67**	0.92	1.72
	50	1.294	0.61	0.94	2.22	1.288	**0.64**	1.0	2.14	1.296	0.54	0.78	2.28	1.297	**0.72**	0.94	1.5	1.301	0.64	1.0	1.94	1.304	0.61	0.94	2.22	1.542	**0.72**	0.94	1.5
	70	1.294	0.71	0.92	1.67	1.289	**0.72**	0.97	1.81	1.297	0.59	0.75	2.22	1.299	**0.85**	0.94	1.28	1.3	0.74	0.94	1.61	1.304	0.71	0.92	1.67	1.544	**0.85**	0.94	1.28
	100	1.294	**0.79**	1.0	1.42	1.289	0.69	1.0	1.75	1.295	0.58	0.75	2.17	1.297	**0.93**	1.0	1.17	1.302	0.75	1.0	1.58	1.306	0.79	1.0	1.42	1.543	**0.93**	1.0	1.17
DWR	10	1.476	**0.76**	0.86	2.78	1.468	0.5	0.92	4.89	1.496	0.44	0.75	4.53	1.482	0.75	0.86	2.67	1.5	0.5	0.92	4.89	1.514	**0.76**	0.86	2.78	1.813	0.75	0.86	2.67
	30	1.478	**0.69**	0.86	2.28	1.467	0.43	0.78	3.11	1.497	0.39	0.81	3.64	1.485	**0.71**	0.86	2.0	1.5	0.44	0.83	3.17	1.515	0.69	0.86	2.28	1.815	**0.71**	0.86	2.0
	50	1.48	**0.82**	0.92	1.53	1.466	0.51	0.72	1.86	1.497	0.4	0.78	2.64	1.483	**0.84**	0.94	1.5	1.498	0.51	0.81	2.06	1.513	0.82	0.92	1.53	1.814	**0.84**	0.94	1.5
	70	1.481	**0.89**	0.97	1.22	1.468	0.66	0.83	1.5	1.498	0.36	0.72	2.0	1.483	0.88	1.0	1.25	1.5	0.67	0.83	1.42	1.514	**0.89**	0.97	1.22	1.81	0.88	1.0	1.25
	100	1.482	**0.92**	1.0	1.08	1.471	0.81	0.92	1.25	1.498	0.38	0.75	1.75	1.484	**0.92**	1.0	1.08	1.5	0.81	0.92	1.25	1.516	**0.92**	1.0	1.08	1.813	**0.92**	1.0	1.08
IPC-GRID	10	1.593	0.6	0.92	3.1	1.586	**0.86**	1.0	2.0	1.677	0.25	1.0	7.23	1.595	0.76	0.9	1.79	1.682	**0.86**	1.0	2.0	1.693	0.63	0.81	1.92	2.017	0.77	0.92	1.81
	30	1.593	0.69	0.85	1.77	1.587	**0.88**	1.0	1.21	1.674	0.23	0.9	6.67	1.595	0.82	0.94	1.13	1.684	**0.88**	1.0	1.21	1.691	0.71	0.85	1.31	2.017	0.82	0.94	1.13
	50	1.593	0.81	1.0	1.31	1.586	**0.89**	0.98	1.13	1.675	0.29	0.73	5.21	1.599	0.84	0.94	1.13	1.68	**0.89**	0.98	1.13	1.694	0.87	0.96	1.04	2.016	0.84	0.94	1.13
	70	1.596	0.87	0.98	1.1	1.586	**0.91**	1.0	1.06	1.676	0.08	0.21	3.54	1.598	0.89	1.0	1.1	1.68	**0.91**	1.0	1.06	1.691	0.89	0.98	1.02	2.015	0.89	1.0	1.1
	100	1.601	**0.94**	1.0	1.0	1.586	**0.94**	1.0	1.0	1.674	0.05	0.0	1.94	1.6	**0.94**	1.0	1.0	1.681	**0.94**	1.0	1.0	1.691	**0.94**	1.0	1.0	2.017	**0.94**	1.0	1.0
FERRY	10	1.148	0.71	1.0	4.19	1.142	**0.72**	1.0	4.14	1.153	0.5	1.0	5.44	1.149	0.71	1.0	4.19	1.154	**0.72**	1.0	4.14	1.157	0.71	1.0	4.19	1.339	0.71	1.0	4.19
	30	1.149	0.88	1.0	1.69	1.144	**0.89**	1.0	1.67	1.155	0.39	1.0	3.97	1.15	0.88	1.0	1.69	1.152	**0.89**	1.0	1.67	1.158	0.88	1.0	1.69	1.342	0.88	1.0	1.69
	50	1.149	**0.88**	1.0	1.5	1.146	**0.88**	1.0	1.5	1.153	0.44	1.0	3.69	1.151	**0.88**	1.0	1.5	1.153	**0.88**	1.0	1.5	1.157	**0.88**	1.0	1.5	1.341	**0.88**	1.0	1.5
	70	1.151	**0.96**	1.0	1.25	1.146	**0.96**	1.0	1.25	1.153	0.5	1.0	3.44	1.15	**0.96**	1.0	1.25	1.156	**0.96**	1.0	1.25	1.157	**0.96**	1.0	1.25	1.344	**0.96**	1.0	1.25
	100	1.153	**0.96**	1.0	1.17	1.151	**0.96**	1.0	1.17	1.155	0.51	1.0	3.33	1.153	**0.96**	1.0	1.17	1.158	**0.96**	1.0	1.17	1.162	**0.96**	1.0	1.17	1.341	**0.96**	1.0	1.17
LOGISTICS	10	1.918	0.8	1.0	3.06	1.911	**0.81**	1.0	3.0	1.913	0.78	1.0	2.97	1.919	0.83	1.0	2.81	1.915	**0.84**	1.0	2.67	1.928	0.82	1.0	2.81	2.268	**0.88**	1.0	2.44
	30	1.919	0.85	1.0	1.5	1.912	**0.93**	1.0	1.31	1.916	0.7	1.0	1.94	1.92	**0.9**	1.0	1.36	1.918	0.88	1.0	1.42	1.932	0.83	1.0	1.53	2.269	0.91	1.0	1.33
	50	1.918	0.87	1.0	1.33	1.912	**0.94**	1.0	1.19	1.915	0.7	1.0	1.72	1.923	**0.93**	1.0	1.22	1.915	0.91	1.0	1.25	1.932	0.87	1.0	1.33	2.268	0.88	0.97	1.25
	70	1.918	0.96	1.0	1.11	1.906	**0.99**	1.0	1.06	1.917	0.71	1.0	1.67	1.921	**0.99**	1.0	1.06	1.918	**0.99**	1.0	1.06	1.934	0.96	1.0	1.11	2.27	0.97	1.0	1.08
	100	1.916	**1.0**	1.0	1.0	1.909	**1.0**	1.0	1.0	1.924	0.69	1.0	1.67	1.921	**1.0**	1.0	1.0	1.923	**1.0**	1.0	1.0	1.93	**1.0**	1.0	1.0	2.263	**1.0**	1.0	1.0
MICONIC	10	1.199	0.54	1.0	3.94	1.193	**0.68**	1.0	3.14	1.203	0.51	1.0	4.03	1.204	**0.76**	1.0	2.67	1.206	0.68	1.0	3.14	1.216	0.54	1.0	3.94	1.438	**0.76**	1.0	2.67
	30	1.2	0.6	1.0	2.42	1.196	**0.77**	1.0	1.78	1.203	0.6	1.0	2.42	1.205	**0.89**	1.0	1.47	1.204	0.77	1.0	1.78	1.214	0.6	1.0	2.42	1.438	**0.89**	1.0	1.47
	50	1.2	0.88	1.0	1.31	1.194	**0.97**	1.0	1.11	1.204	0.88	1.0	1.31	1.205	**0.98**	1.0	1.08	1.204	0.97	1.0	1.11	1.216	0.88	1.0	1.31	1.439	**0.98**	1.0	1.08
	70	1.201	0.94	1.0	1.11	1.196	**0.99**	1.0	1.03	1.203	0.94	1.0	1.11	1.206	**0.99**	1.0	1.03	1.206	**0.99**	1.0	1.03	1.216	0.94	1.0	1.11	1.438	**0.99**	1.0	1.03
	100	1.198	**1.0**	1.0	1.0	1.195	**1.0**	1.0	1.0	1.203	**1.0**	1.0	1.0	1.206	**1.0**	1.0	1.0	1.207	**1.0**	1.0	1.0	1.215	**1.0**	1.0	1.0	1.442	**1.0**	1.0	1.0
ROVERS	10	1.282	0.59	1.0	4.67	1.281	**0.79**	0.94	3.14	1.288	0.66	1.0	4.28	1.286	**0.83**	0.89	2.89	1.287	0.79	0.94	3.14	1.29	0.65	0.97	4.11	1.557	**0.83**	0.89	2.89
	30	1.282	0.62	1.0	2.81	1.28	**0.86**	1.0	1.61	1.287	0.74	1.0	2.25	1.286	**0.88**	0.89	1.39	1.289	0.86	1.0	1.61	1.29	0.76	1.0	2.19	1.554	**0.88**	0.89	1.39
	50	1.283	0.72	1.0	1.86	1.282	**0.99**	1.0	1.08	1.287	0.94	1.0	1.28	1.284	0.93	0.94	1.14	1.288	**0.99**	1.0	1.08	1.29	0.94	1.0	1.28	1.555	0.93	0.94	1.14
	70	1.283	0.88	1.0	1.33	1.282	**0.98**	1.0	1.11	1.288	0.93	1.0	1.25	1.285	0.94	0.94	1.08	1.287	**0.98**	1.0	1.11	1.291	0.93	1.0	1.25	1.558	0.94	0.94	1.08
	100	1.282	**1.0**	1.0	1.0	1.282	**1.0**	1.0	1.0	1.289	**1.0**	1.0	1.0	1.285	**1.0**	1.0	1.0	1.291	**1.0**	1.0	1.0	1.291	**1.0**	1.0	1.0	1.56	**1.0**	1.0	1.0
SATELLITE	10	1.097	0.79	0.92	3.56	1.098	**0.8**	0.97	4.03	1.105	0.78	1.0	4.44	1.103	**0.9**	0.97	3.44	1.105	0.8	0.97	4.03	1.109	0.77	0.94	3.89	1.303	**0.9**	0.97	3.44
	30	1.099	0.67	0.81	2.11	1.097	**0.74**	0.97	2.69	1.106	0.7	1.0	3.06	1.103	**0.8**	0.94	2.22	1.106	0.74	0.97	2.69	1.11	0.68	0.86	2.33	1.304	**0.8**	0.94	2.22
	50	1.099	**0.84**	0.94	1.5	1.097	0.83	1.0	1.83	1.105	0.78	1.0	2.14	1.1	**0.92**	0.94	1.42	1.107	0.83	1.0	1.83	1.11	0.86	1.0	1.69	1.304	**0.92**	0.94	1.42
	70	1.103	0.87	0.97	1.44	1.097	**0.92**	1.0	1.56	1.105	0.9	1.0	1.67	1.104	**0.94**	1.0	1.36	1.106	0.92	1.0	1.56	1.108	0.85	0.97	1.42	1.304	**0.94**	1.0	1.36
	100	1.101	0.96	1.0	1.17	1.099	**1.0**	1.0	1.25	1.107	**1.0**	1.0	1.25	1.103	0.96	1.0	1.17	1.106	**1.0**	1.0	1.25	1.113	0.92	1.0	1.08	1.303	0.96	1.0	1.17
SOKOBAN	10	2.532	**0.38**	0.47	1.94	2.473	0.3	0.69	4.36	2.719	0.24	0.92	6.58	2.596	**0.52**	0.61	1.78	2.744	0.25	0.58	3.67	3.073	0.36	0.39	1.44	3.703	**0.52**	0.61	1.78
	30	2.531	**0.72**	0.75	1.19	2.473	0.43	0.75	2.81	2.718	0.14	0.33	2.17	2.578	**0.77**	0.83	1.08	2.739	0.37	0.64	2.44	2.992	0.68	0.72	1.11	3.627	**0.77**	0.83	1.08
	50	2.529	**0.77**	0.81	1.25	2.473	0.51	0.75	1.94	2.718	0.17	0.17	1.25	2.574	**0.79**	0.92	1.17	2.737	0.41	0.61	1.78	2.962	**0.79**	0.81	1.17	3.594	**0.79**	0.92	1.17
	70	2.526	**0.85**	1.0	1.17	2.474	0.58	0.81	1.53	2.713	0.17	0.19	1.53	2.574	0.8	0.97	1.03	2.734	0.51	0.83	1.92	2.943	**0.85**	1.0	1.19	3.572	0.8	0.97	1.03
	100	2.53	**0.88**	1.0	1.08	2.483	0.73	0.92	1.25	2.704	0.22	0.42	1.92	2.575	0.83	1.0	1.0	2.718	0.72	0.92	1.33	2.923	**0.88**	1.0	1.08	3.557	0.83	1.0	1.0
ZENO	10	1.381	**0.68**	0.86	2.39	1.366	0.59	0.97	3.58	1.379	0.55	0.97	3.31	1.381	0.65	0.83	2.58	1.383	0.58	0.92	3.03	1.396	**0.7**	0.89	2.44	1.688	0.64	0.83	2.53
	30	1.379	**0.76**	0.92	1.47	1.368	**0.76**	0.97	1.69	1.38	0.55	0.83	2.33	1.381	0.72	0.83	1.53	1.387	0.77	0.97	1.64	1.398	**0.78**	0.92	1.39	1.688	0.73	0.83	1.47
	50	1.381	0.85	0.92	1.19	1.369	**0.86**	0.97	1.31	1.383	0.67	0.86	2.0	1.382	0.87	0.92	1.11	1.384	0.87	1.0	1.36	1.398	**0.88**	0.97	1.25	1.688	0.87	0.92	1.11
	70	1.379	**0.94**	0.97	1.06	1.368	**0.94**	1.0	1.11	1.382	0.64	0.86	1.97	1.384	0.94	0.94	1.0	1.385	**0.99**	1.0	1.03	1.396	0.96	1.0	1.08	1.687	0.94	0.94	1.0
	100	1.379	**1.0**	1.0	1.0	1.371	0.96	1.0	1.08	1.383	0.66	0.83	1.75	1.384	**1.0**	1.0	1.0	1.384	**1.0**	1.0	1.0	1.398	**1.0**	1.0	1.0	1.689	**1.0**	1.0	1.0
AVG		1.722	**0.76**	0.94	2.1	1.71	0.74	0.93	2.19	1.756	0.52	0.84	3.11	1.73	**0.82**	0.94	1.75	1.759	0.75	0.93	2.1	1.791	0.78	0.94	1.95	2.127	**0.82**	0.93	1.71

Table 2: Results for each constraint set.