

Monolithic Results

Instance Name	A*(GNN)			BFS			P5			
	Length.	Nodes	Time[ms]	Length.	Nodes	Time[ms]	Length.	Nodes	Time[ms]	search
Assemble.B10-pl.5	–	–	TO	–	–	TO	–	–	TO	-
Assemble.B2-pl.5	5	14	264	5	14	264	5	14	285	A*(GNN)
Assemble.B4-pl.5	5	14	275	5	14	332	5	14	330	A*(GNN)
Assemble.B6-pl.5	5	14	804	5	14	826	5	14	1127	A*(GNN)
Assemble.B8-pl.5	5	14	24655	5	14	25636	5	14	48340	A*(GNN)
Assemble.B9-pl.5	5	14	295842	5	14	296625	–	–	TO	-
Assemble.C-pl.5	5	14	124	5	14	237	5	14	238	A*(GNN)
CC.2.2.3-pl.3	3	9	111	4	11	108	3	9	181	A*(GNN)
CC.2.2.3-pl.5	5	17	272	5	9	134	5	77	684	A*(GNN)
CC.2.2.3-pl.7	7	163	2390	8	33837	214811	7	558	4358	A*(GNN)
CC.2.2.3-pl.8	8	1327	18235	8	247	2434	8	2539	27312	A*(GNN)
CC.2.2.4-pl.3	3	3	217	3	3	279	3	11	373	A*(GNN)
CC.2.2.4-pl.4	6	7	324	6	9	212	4	23	778	A*(GNN)
CC.2.2.4-pl.6	6	21	1251	7	26	296	6	363	9536	A*(GNN)
CC.2.2.4-pl.7	8	129	3989	8	498	4701	7	2084	45668	A*(GNN)
CC.2.3.4-pl.4	5	5	1995	6	10	1655	4	42	12130	A*(GNN)
CC.2.3.4-pl.5	10	132	20181	12	61	5848	5	127	45028	A*(GNN)
CC.2.3.4-pl.6	11	1269	65775	8	11	3383	6	675	124726	A*(GNN)
CC.3.2.3-pl.3	3	4	228	3	3	196	3	14	318	A*(GNN)
CC.3.2.3-pl.6	6	74	1201	6	113	1092	6	367	6443	A*(GNN)
CC.3.2.3-pl.7	8	185	3058	7	1835	24464	7	1548	26110	A*(GNN)
CC.3.3.3-pl.3	3	3	218	3	4	367	3	15	790	A*(GNN)
CC.3.3.3-pl.5	6	26	1975	7	22	534	5	253	8316	A*(GNN)
CC.3.3.3-pl.6	8	226	13395	–	–	TO	6	1942	73680	A*(GNN)
CC.3.3.3-pl.7	8	1476	59481	8	79	1255	7	11726	405444	A*(GNN)
Coin.in.the.Box-pl.2	2	2	52	2	2	50	2	2	109	A*(GNN)
Coin.in.the.Box-pl.5	5	77	425	5	77	552	5	78	728	A*(GNN)
Coin.in.the.Box-pl.7	7	1817	10395	7	1817	13110	7	1793	17758	A*(GNN)
SC.4.1-pl.5	5	17	125	5	17	99	5	17	93	A*(GNN)
SC.4.2-pl.5	5	15	132	5	15	99	5	30	184	A*(GNN)
SC.4.2-pl.8	8	339	1639	8	339	1316	8	184	923	A*(GNN)
SC.4.3-pl.6	6	21	162	6	21	113	6	21	93	A*(GNN)
SC.4.3-pl.8	8	59	186	8	59	156	8	59	177	A*(GNN)

SC_4.4-pl.5	5	17	125	5	17	87	5	17	91	A*(GNN)
SC_8.10-pl.8	8	542	5157	8	542	3841	8	485	4121	A*(GNN)
SC_8.10-pl.9	9	1660	17268	9	1660	14557	9	1772	16936	A*(GNN)
SC_8.10-pl.12	12	31662	199243	12	31662	203157	12	35063	281914	A*(GNN)
SC_9.11-pl.4	4	8	143	4	8	141	4	8	139	A*(GNN)
SC_9.11-pl.5	5	11	152	5	11	96	5	11	122	A*(GNN)
SC_9.11-pl.7	7	41	431	7	41	299	7	41	326	A*(GNN)
SC_9.11-pl.9	9	238	1895	9	238	2158	9	237	2041	A*(GNN)
SC_9.11-pl.10	10	663	6151	10	663	5467	10	657	6013	A*(GNN)
SC_9.11-pl.11	11	1262	15073	11	1262	10960	11	1272	12372	A*(GNN)
SC_10.8-pl.9	–	–	TO	–	–	TO	–	–	TO	-
SC_10.8-pl.14	14	93	481	14	93	378	14	93	572	A*(GNN)
SC_10.10-pl.2	2	6	280	2	6	173	2	6	311	A*(GNN)
SC_10.10-pl.3	3	10	239	3	10	248	3	10	347	A*(GNN)
SC_10.10-pl.9	9	10	188	9	10	120	9	10	117	A*(GNN)
SC_10.10-pl.9	9	886	20614	9	886	17444	9	1248	32644	A*(GNN)
SC_10.10-pl.10	10	15	191	10	15	158	10	15	161	A*(GNN)
SC_10.10-pl.13	13	15826	285398	13	15826	330014	13	17305	472785	A*(GNN)
SC_10.10-pl.14	–	–	TO	14	30967	582175	–	–	TO	-
SC_10.10-pl.17	17	946	7240	17	946	5175	17	942	7546	A*(GNN)
SC_10.10-pl.17	–	–	TO	–	–	TO	–	–	TO	-
avg± std (all)	7 ± 3	1228 ± 4886	21793 ± 62537	7 ± 3	2481 ± 7827	35557 ± 106042	7 ± 3	1711 ± 5628	34711 ± 94709	
iqm± iqr (all)	6 ± 4	66 ± 300	1758 ± 9389	6 ± 4	61 ± 447	1335 ± 5215	6 ± 3	156 ± 661	3908 ± 16651	
avg± std (comm)	7 ± 3	1274 ± 4981	16258 ± 49770	7 ± 3	1939 ± 6818	18730 ± 61527	7 ± 3	1706 ± 5687	33899 ± 95522	
iqm± iqr (comm)	7 ± 4	73 ± 376	1465 ± 6213	6 ± 3	63 ± 368	1126 ± 4650	6 ± 3	137 ± 648	3365 ± 13240	
Solved Instances		50/54 (92.59%)			50/54 (92.59%)			49/54 (90.74%)		

Table 1: Comparison of execution on the domain over the **Test** instances. The model used by A*(GNN) has been trained using the instances reported in the previous **Train** Table.