Table 1: Number of evaluations needed to find a feasible solution (P: problem, std: standard deviation, SR: success rate and p_{kw}: p-values of the Kruskal-Wallis).

P	Method	Best	Median	Mean	std.	Worst	SR %	p_{kw}
dc1	0+4	28253	82327	234093.29	3.46E+5	1550761	93.33	
	1+3	16693	88343	88566.33	3.79E+4	159225	**100**	
	2+2	22345	**61383**	**72814.20**	**3.75E+4**	**157193**	**100**	1.06E-1
	3+1	**16497**	71383	81671.53	4.55E+4	233501	**100**	
	4+0	28657	92649	119078.60	8.71E+4	364825	**100**	
alu4	0+4	11155705	14958613	14958612.00	3.80E+6	**18761524**	6.66	
	1+3	4203609	15297191	15158191.00	8.42E+6	30138605	60	
	2+2	3992305	14487059	14510074.17	6.32E+6	29470237	80	5.34E-1
	3+1	**2590765**	11570917	**11644744.00**	**5.73E+6**	27562373	**93.33**	
	4+0	3701493	**11510149**	13280590.71	7.03E+6	29996993	**93.33**	
cm85a	0+4	115433	503249	934379.48	1.15E+6	4394297	96.67	
	1+3	**107997**	**371347**	**401950.60**	**1.72E+5**	1014825	**100**	
	2+2	115889	446549	459062.73	2.10E+5	**948757**	**100**	**2.56E-2**
	3+1	176281	502865	558468.20	3.20E+5	1506261	**100**	
	4+0	243657	550441	767037.53	4.91E+5	1744525	**100**	
sao2	0+4	**467189**	**2523281**	4918973.97	5.43E+6	21860889	96.67	
	1+3	712873	2532073	3946837.13	3.26E+6	13328633	**100**	
	2+2	993773	2990237	**3675683.40**	**2.08E+6**	**8728341**	**100**	9.27E-1
	3+1	734441	3197411	3758259.67	2.37E+6	10572997	**100**	
	4+0	792737	3070581	4642438.73	4.74E+6	24620861	**100**	
apla	0+4	**1035501**	4801839	5169961.93	3.06E+6	15967889	**100**	
	1+3	1996133	3700897	4019245.00	1.30E+6	7599141	**100**	
	2+2	1836513	**3166145**	**3546319.93**	**1.24E+6**	**6039625**	**100**	**7.47E-5**
	3+1	1485025	3510565	4101639.80	2.01E+6	8797297	**100**	
	4+0	2489093	5822959	6492839.40	3.33E+6	16292169	**100**	
f51m	0+4	-	-	-	-	-	0	
	1+3	387733	**1857245**	2859926.66	2.85E+6	14570501	96.67	
	2+2	869069	1987763	**2825418.60**	**2.49E+6**	13699465	**100**	2.24E-1
	3+1	**193389**	2208043	3257522.47	2.76E+6	12930885	**100**	
	4+0	436061	3292863	3911038.33	2.81E+6	**11605521**	**100**	
dc2	0+4	2916409	2916409	**2916409.00**	-	**2916409**	3.33	
	1+3	1950217	7370571	7904914.86	**3.42E+6**	17461133	93.33	
	2+2	1160297	6880624	6598408.26	4.01E+6	18816405	90	3.44E-1
	3+1	**974457**	6437425	6987364.86	3.99E+6	16015517	93.33	
	4+0	1146537	**5386677**	6625468.31	4.05E+6	18746289	**96.67**	
z4ml	0+4	37189	238629	474181.00	6.80E+5	2369953	30	
	1+3	**12013**	137857	200115.40	1.63E+5	546309	**100**	
	2+2	37177	169565	175415.33	**1.09E+5**	**463185**	**100**	**9.63E-2**
	3+1	48897	**103043**	**163045.40**	1.97E+5	1144701	**100**	
	4+0	21125	199311	211209.80	1.26E+5	482489	**100**	
C17	0+4	**249**	3063	3481.93	3.27E+3	17765	**100**	
	1+3	285	2713	3413.00	3.24E+3	14633	**100**	
	2+2	983	2827	3452.60	2.76E+3	15829	**100**	9.42E-1
	3+1	589	2617	**2951.67**	**1.93E+3**	**7645**	**100**	
	4+0	537	**2449**	3648.60	3.09E+3	15381	**100**	
cu	0+4	1018453	2825729	4349765.53	7.07E+6	41523213	**100**	
	1+3	**500149**	2391943	2480337.13	1.26E+6	5929661	**100**	
	2+2	669961	**1847761**	**2200875.13**	1.49E+6	8138929	**100**	**1.64E-5**
	3+1	773941	2736021	2680560.07	**1.14E+6**	**5308213**	**100**	
	4+0	1370421	3816927	5251121.80	3.50E+6	16369761	**100**	
inc	0+4	-	-	-	-	-	0	
	1+3	8246017	9898853	11369497.00	3.18E+6	16566629	30	
	2+2	7493445	**1091245**	**10438865.57**	**2.07E+6**	**13339189**	23.33	8.44E-1
	3+1	7174821	11863591	12108817.67	3.24E+6	16174581	20	
	4+0	**6928105**	11806739	11625455.00	2.64E+6	15434645	**26.66**	
6x6-adder	0+4	532717	2572245	2823850.80	1.82E+6	7667417	66.66	
	1+3	**198077**	**1080389**	**1423675.40**	**9.69E+5**	**4246033**	**100**	
	2+2	442901	1649199	1788680.73	1.16E+6	5548153	**100**	**2.16E-2**
	3+1	398513	1335817	1706742.73	1.21E+6	5284581	**100**	
	4+0	585785	1957119	2283253.00	1.61E+6	6887265	**100**	

Table 2: Number of gates and depth for the first and final solution, relative reduction and processing time.

P	Method	First Feasible		Final Solution		Reduction (%)		Time
		#Gates	Depth	#Gates	Depth	#Gates	Depth	(s)
dc1	0+4	51.93	12.86	29.64	9.93	42.92	22.78	50.16
	1+3	53.7	12.83	25.5	10	52.51	22.06	162.22
	2+2	50.9	**12.07**	24.5	10.27	51.87	14.91	45.52
	3+1	51.6	12.57	24.13	**9.33**	**53.24**	**25.78**	158.91
	4+0	**49.97**	12.2	**23.97**	9.6	52.03	21.31	**44.60**
alu4	0+4	239	19	129	**15**	**46.03**	**21.05**	**7385.55**
	1+3	187.05	19.5	118.29	17.47	36.76	10.41	41350.58
	2+2	185.33	20.04	112.5	16.67	39.3	16.82	19350.56
	3+1	167.43	19.11	110.56	16.37	33.97	14.34	31601.44
	4+0	**159.14**	**18.82**	**97.82**	16.5	38.53	12.33	15835.57
cm85a	0+4	119.59	18.07	31.79	12.38	73.42	31.48	**367.06**
	1+3	102.8	17.43	27.1	11.9	**73.64**	**31.73**	1192.04
	2+2	96.03	16.8	26.6	11.77	72.30	29.94	541.81
	3+1	83.97	16.07	27.5	11.83	67.25	26.38	1326.21
	4+0	**72.4**	**16.03**	**26.47**	**11.67**	63.44	27.20	604.35
sao2	0+4	139.34	19.38	70.83	15.45	49.17	20.28	2594.96
	1+3	141.03	18.73	67.03	15.63	52.47	16.55	6133.4
	2+2	**132**	18.73	**61.87**	**14.5**	53.13	**22.58**	**2245.28**
	3+1	141.23	**18.53**	65.33	14.9	53.74	19.59	5816.91
	4+0	139.13	18.8	64.1	14.8	**53.93**	21.28	2306.08
apla	0+4	254.07	22.07	90.5	16.87	**64.38**	23.56	3612.90
	1+3	234.73	21.26	85.8	16.87	63.45	20.65	9901.72
	2+2	232.53	**20.6**	85.87	17	63.07	17.48	3240.85
	3+1	224.77	20.9	83.1	**15.87**	63.03	**24.07**	9079.18
	4+0	**204.9**	21.27	**80.13**	17.2	60.89	19.13	**3050.23**
f51m	0+4	-	-	-	-	-	-	-
	1+3	53.9	12.48	39.34	12.24	27.01	1.92	493.85
	2+2	53.7	12.8	40.73	**12.1**	24.15	**5.47**	168.92
	3+1	49.37	**12.17**	36.33	12.17	26.41	0	483.82
	4+0	**48.13**	12.67	**34.47**	12.2	**28.38**	3.71	**155.90**
dc2	0+4	63	**10**	52	**9**	17.46	**10**	**123.95**
	1+3	64.04	14.43	53.86	14.04	15.90	2.70	1095.05
	2+2	64.88	14.19	52.22	13.30	19.51	6.27	354.53
	3+1	61.79	14.36	49.11	13.54	**20.52**	5.71	1016.44
	4+0	**59.86**	14	**48.97**	13.66	18.19	2.43	322.22
z4ml	0+4	46	11.67	29.11	10.22	36.72	12.43	**40.76**
	1+3	39.03	10.9	18.4	9.3	**52.86**	14.68	138.36
	2+2	**36**	**10.87**	18	**8.63**	50	**20.61**	47.88
	3+1	37.77	11.27	18.67	9.57	50.57	15.08	157.71
	4+0	36.77	11.3	**17.77**	9.27	51.67	17.96	54.73
C17	0+4	25.9	10.37	5.83	4.2	77.49	59.50	**13.79**
	1+3	24.97	9.9	4.57	3.77	81.70	61.92	43.16
	2+2	26.43	10.33	4.73	3.7	**82.10**	**64.18**	19.70
	3+1	25.4	10.03	4.63	3.87	81.77	61.42	50.51
	4+0	**24.23**	**9.27**	**4.53**	**3.57**	81.30	61.49	23.54
cu	0+4	203.6	18.4	43.43	11.17	**78.52**	39.29	**1052.14**
	1+3	167.9	18.23	38.97	10.79	76.79	40.81	2685.84
	2+2	146.07	17.33	39.1	10.17	73.23	41.32	1340.43
	3+1	146.9	17.9	**38.77**	**9.9**	73.61	**44.69**	3301.90
	4+0	**121**	**16.77**	**38.77**	10.23	67.96	39	1437.04
inc	0+4	-	-	-	-	-	-	-
	1+3	77.78	15.55	72.11	15	7.29	3.54	1894.71
	2+2	81.43	14.71	73.71	**14**	9.48	**4.83**	617.55
	3+1	77.83	**14.5**	**70.33**	14.17	**9.64**	2.28	2013.56
	4+0	**76.13**	15.38	71	15.13	6.74	1.63	**592.20**
6x6-adder	0+4	175.85	18.8	66.75	14.45	62.04	23.14	**1874.35**
	1+3	147.97	17.53	47.73	**12.77**	67.74	**27.15**	4777.24
	2+2	143.07	17.77	49.6	13.2	65.33	25.72	2517.86
	3+1	134.57	17.27	42.73	13.43	**68.25**	22.36	4850.2
	4+0	**116.07**	**16.93**	**42.23**	13.03	63.62	23.04	2441.37