

Table 5
Detailed computational results on 65 instances.

Instance	Z_{ob}	GA			SA			Ant-Cover + ls				
		Z_{min}	Z_{max}	Z_{avg}	Z_{min}	Z_{max}	Z_{avg}	Z_{min}	Z_{max}	Z_{avg}	$T_{avg,S}$ (s)	$T_{avg,T}$ (s)
4.1	429	429	432	429.7	–	–	–	429	429	429.0	0.04	1.74
4.2	512	512	512	512.0	–	–	–	512	512	512.0	0.07	2.26
4.3	516	516	516	516.0	–	–	–	516	516	516.0	0.15	2.31
4.4	494	494	502	494.8	–	–	–	494	494	494.0	0.63	2.12
4.5	512	512	512	512.0	–	–	–	512	512	512.0	0.07	2.17
4.6	560	560	560	560.0	–	–	–	560	560	560.0	0.14	2.41
4.7	430	430	432	430.2	–	–	–	430	430	430.0	0.04	1.87
4.8	492	492	493	492.1	–	–	–	492	492	492.0	0.05	2.17
4.9	641	641	650	643.1	–	–	–	641	641	641.0	0.38	2.38
4.10	514	514	514	514.0	–	–	–	514	514	514.0	0.06	1.90
5.1	253	253	253	253.0	–	–	–	253	253	253.0	0.31	2.29
5.2	302	302	305	303.5	–	–	–	302	302	302.0	0.89	2.42
5.3	226	228	228	228.0	–	–	–	226	226	226.0	0.08	2.17
5.4	242	242	243	242.1	–	–	–	242	242	242.0	0.06	2.28
5.5	211	211	211	211.0	–	–	–	211	211	211.0	0.05	1.70
5.6	213	213	213	213.0	–	–	–	213	213	213.0	0.04	1.97
5.7	293	293	293	293.0	–	–	–	293	293	293.0	0.06	2.22
5.8	288	288	289	288.8	–	–	–	288	288	288.0	0.05	2.43
5.9	279	279	279	279.0	–	–	–	279	279	279.0	0.10	2.30
5.10	265	265	265	265.0	–	–	–	265	265	265.0	0.05	2.14
6.1	138	138	138	138.0	–	–	–	138	138	138.0	0.37	2.75
6.2	146	146	147	146.2	–	–	–	146	146	146.0	0.08	3.06
6.3	145	145	145	145.0	–	–	–	145	145	145.0	0.22	3.00
6.4	131	131	131	131.0	–	–	–	131	131	131.0	0.04	2.70
6.5	161	161	164	161.3	–	–	–	161	161	161.0	0.29	3.02
A.1	253	253	254	253.2	–	–	–	253	253	253.0	1.35	4.04
A.2	252	252	252	252.0	–	–	–	252	252	252.0	1.27	4.23
A.3	232	232	233	232.5	–	–	–	232	233	232.8	1.03	4.14
A.4	234	234	234	234.0	–	–	–	234	234	234.0	0.22	4.13
A.5	236	236	236	236.0	–	–	–	236	236	236.0	0.79	4.13
B.1	69	69	69	69.0	–	–	–	69	69	69.0	0.19	6.11
B.2	76	76	76	76.0	–	–	–	76	76	76.0	0.20	6.42
B.3	80	80	80	80.0	–	–	–	80	80	80.0	0.12	6.72
B.4	79	79	79	79.0	–	–	–	79	79	79.0	0.22	6.63
B.5	72	72	72	72.0	–	–	–	72	72	72.0	0.09	6.20
C.1	227	227	229	227.2	–	–	–	227	227	227.0	0.90	6.10
C.2	219	219	221	220.0	–	–	–	219	219	219.0	0.65	6.35
C.3	243	243	251	246.4	–	–	–	243	243	243.0	3.26	6.36
C.4	219	219	220	219.1	–	–	–	219	219	219.0	0.67	6.11
C.5	215	215	216	215.1	–	–	–	215	215	215.0	0.59	6.23
D.1	60	60	60	60.0	–	–	–	60	60	60.0	0.73	9.85
D.2	66	66	66	66.0	–	–	–	66	66	66.0	0.54	10.32
D.3	72	72	73	72.2	–	–	–	72	72	72.0	1.49	10.47
D.4	62	62	62	62.0	–	–	–	62	62	62.0	1.58	10.35
D.5	61	61	61	61.0	–	–	–	61	61	61.0	0.71	9.72
NRE.1	29	29	29	29.0	29	29	29.0	29	29	29.0	0.38	21.12
NRE.2	30	30	31	30.6	30	30	30.0	30	30	30.0	3.14	23.49
NRE.3	27	27	28	27.7	27	27	27.0	27	27	27.0	3.39	21.50
NRE.4	28	28	28	28.0	28	28	28.0	28	28	28.0	2.53	23.27
NRE.5	28	28	28	28.0	28	28	28.0	28	28	28.0	0.47	23.72
NRF.1	14	14	14	14.0	14	14	14.0	14	14	14.0	0.95	30.13
NRF.2	15	15	15	15.0	15	15	15.0	15	15	15.0	0.69	28.23
NRF.3	14	14	14	14.0	14	14	14.0	14	14	14.0	1.37	30.70
NRF.4	14	14	14	14.0	14	14	14.0	14	14	14.0	1.52	28.94
NRF.5	13	13	14	13.7	13	14	13.7	13	14	13.5	6.03	27.13
NRG.1	176	176	179	177.7	176	178	176.6	176	176	176.0	13.06	31.16
NRG.2	154	155	158	156.3	155	156	155.3	154	156	155.1	17.99	29.03
NRG.3	166	166	169	167.9	166	170	167.6	166	169	167.3	21.07	30.24
NRG.4	168	168	172	170.3	168	174	170.7	168	170	168.9	18.09	29.73
NRG.5	168	168	174	169.4	168	170	168.4	168	169	168.1	14.62	30.85
NRH.1	63	64	64	64.0	64	64	64.0	64	64	64.0	38.65	71.47
NRH.2	63	64	64	64.0	63	64	63.7	63	64	63.9	30.15	71.04
NRH.3	59	59	60	59.1	59	61	59.4	59	61	59.4	35.30	69.66
NRH.4	58	58	60	58.9	58	59	58.9	58	59	58.7	29.89	70.38
NRH.5	55	55	56	55.1	55	55	55.0	55	55	55.0	17.40	68.23