	PSO-GA	SPSO-GA
1	64.0	45.7
2	66.08	44.28
3	64.52	47.71
4	66.52	46.59
5	64.84	48.13
6	64.39	45.69
7	66.19	44.59
8	65.53	45.77
9	67.67	45.45
10	67.28	45.94
11	67.21	47.83
12	66.61	45.37
13	66.61	46.01
14	67.9	45.05
15	65.59	46.1
16	67.66	44.58
17	64.41	47.16
18	64.06	44.81
19	65.16	46.82
20	64.39	46.32
21	67.73	46.99
22	67.24	46.92
23	67.18	44.66
24	67.53	48.19
25	64.08	47.94
26	65.01	44.3
27	65.35	47.34
28	66.7	44.6
29	67.93	44.72
30	65.9	45.37
31	67.74	45.59
32	67.37	45.77
33	65.13	47.41
34	64.12	45.1
35	65.98	46.03
36	67.49	47.21
37	64.73	46.48
38	65.23	46.64
39	64.41	45.55
40	64.6	45.69
41	66.62	44.87
42	66.19	46.55

Average	66.05	45.92
50	64.03	46.42
49	67.64	46.34
48	67.26	44.43
47	64.26	45.24
46	68.0	44.79
45	67.73	44.91
44	66.05	44.26
43	67.03	45.76

	PSO-GA	SPSO-GA
1	134.32	87.35
2	135.09	86.54
3	135.84	89.52
4	134.65	88.47
5	135.78	90.04
6	135.49	88.84
7	134.53	85.65
8	133.23	89.27
9	133.89	88.2
10	135.1	88.53
11	133.85	87.09
12	133.9	86.89
13	133.3	89.07
14	134.77	88.52
15	133.2	86.93
16	135.5	85.93
17	135.5	85.72
18	134.54	89.03
19	134.39	88.87
20	133.75	85.87
21	136.26	87.45
22	134.37	86.29
23	134.09	89.24
24	135.0	85.68
25	133.59	87.38
26	134.32	88.73
27	134.58	89.16
28	134.58	89.55
29	135.78	88.15
30	134.37	87.79
31	133.24	86.04
32	135.12	89.1

33	133.55	89.88
34	133.38	89.24
35	133.93	87.02
36	133.95	85.93
37	135.98	87.2
38	134.95	87.99
39	136.0	85.65
40	133.77	89.3
41	135.44	88.18
42	133.49	89.3
43	134.37	85.23
44	134.82	88.36
45	133.69	90.15
46	134.4	89.7
47	133.22	89.23
48	133.3	85.73
49	134.76	90.02
50	135.31	88.53
Average	135.46	87.95

	PSO-GA	SPSO-GA
1	201.13	128.02
2	200.65	127.63
3	200.25	127.0
4	202.95	129.55
5	199.59	130.47
6	199.86	128.46
7	202.44	128.48
8	202.23	129.47
9	198.4	128.13
10	198.25	128.42
11	201.73	130.18
12	200.18	127.64
13	200.25	127.73
14	198.88	129.09
15	200.22	128.71
16	202.19	128.81
17	202.73	128.27
18	198.78	126.36
19	203.09	128.92
20	200.43	129.02
21	199.28	130.35
22	199.22	126.99

23	200.28	127.09
24	200.68	128.05
25	199.04	127.74
26	202.09	129.94
27	199.36	128.96
28	201.48	130.11
29	197.54	128.98
30	200.65	126.7
31	200.78	126.34
32	199.26	129.67
33	199.77	128.3
34	198.08	126.47
35	202.56	126.62
36	199.22	126.73
37	201.46	129.95
38	201.68	129.26
39	199.07	126.21
40	197.76	129.05
41	202.43	129.6
42	201.22	126.02
43	200.24	126.07
44	202.47	126.29
45	200.83	131.0
46	198.12	129.56
47	198.97	127.84
48	198.89	126.84
49	200.61	127.68
50	200.79	127.09
Average	200.36	128.23

	PSO-GA	SPSO-GA
1	265.75	169.81
2	265.19	166.75
3	264.5	169.06
4	262.59	167.63
5	264.52	163.77
6	265.18	168.71
7	263.96	163.32
8	264.34	167.18
9	262.72	166.24
10	261.89	166.16
11	263.72	167.1
12	262.4	167.43

Average	263.57	166.34
50	261.91	166.87
49	261.63	163.66
48	261.69	168.47
47	263.28	163.27
46	261.53	163.73
45	263.4	165.48
44	265.59	164.25
43	263.39	165.6
42	263.34	169.05
41	264.21	164.35
40	265.26	164.72
39	261.37	169.35
38	264.39	165.24
37	265.02	163.68
36	262.98	165.01
35	265.55	166.22
34	261.51	165.49
33	265.82	167.78
32	261.75	167.8
31	264.65	168.62
30	264.36	166.5
29	265.66	167.44
28	261.49	166.35
27	263.87	168.8
26	261.58	169.09
25	263.63	163.78
24	262.1	165.74
23	265.74	168.19
22	261.89	164.75
21	262.17	163.35
20	263.99	168.52
19	263.63	165.42
18	263.75	168.17
17	265.14	165.66
16	261.7	165.96
15	264.1	165.07
14	263.55	163.8
13	265.0	168.78

	PSO-GA	SPSO-GA
1	332.52	190.48
2	328.53	191.95

2	221.42	100.47
3	331.42	189.47
4	329.47	191.55
5	329.03	190.97
6	330.66	192.47
7	331.67	193.53
8	331.11	194.64
9	329.7	189.24
10	327.34	194.84
11	329.17	192.2
12	326.6	190.99
13	332.68	191.53
14	326.72	189.49
15	330.86	192.21
16	330.06	194.04
17	332.74	190.98
18	333.03	191.75
19	327.41	190.83
20	331.24	191.57
21	332.75	191.89
22	332.93	193.31
23	330.81	190.4
24	327.51	189.25
25	326.94	193.73
26	326.42	189.3
27	329.37	194.01
28	331.1	191.39
29	328.83	192.6
30	326.46	193.85
31	332.51	194.22
32	328.63	192.29
33	330.47	194.66
34	327.25	193.06
35	329.64	193.7
36	332.57	194.84
37	332.61	192.18
38	329.54	191.43
39	327.12	190.59
40	329.8	190.84
41	327.03	194.14
42	328.1	189.03
43	331.04	192.27
44	330.5	189.62
45	327.58	190.78
46	332.6	190.32
	22.0	170.52

Average	329.76	191.94	
50	326.38	192.39	
49	330.47	192.65	
48	328.3	190.46	
47	330.96	193.14	