APPENDIX A

COMPUTATIONAL EXPERIMENTS ON SHORTEST PATH ALGORITHMS

This appendix lists computational results of shortest path algorithms on networks generated by four generators: SPGRID, SPRAND, NETGEN, and SPACYC. The first 19 tables (from Table 35 to Table 53) are cases where the requested OD pairs have distinct $\frac{1}{4}|N|$ destinations. The second 19 tables (from Table 54 to Table 72) are cases where the requested OD pairs have distinct $\frac{1}{2}|N|$ destinations. The last 19 tables (from Table 73 to Table 91) are cases where the requested OD pairs have distinct |N| destinations.

Table 35: 25% SPGRID-SQ

Grid/deg										TWO Q			DIK R	
10x10/3	6.67	18.33	18.33	8.33	12.00	5.00	1.33	4.00	1.00	1.33	8.67	7.00	12.67	29.67
20x20/3	6.04	14.82	14.44	4.62	6.36	5.10	1.16	2.58	1.12	1.00	7.88	4.64	9.70	13.14
30x30/3	4.96	12.46	12.19	4.08	5.18	4.46	1.12	2.67	1.04	1.00	6.75	3.30	7.24	6.33
40x40/3	5.92	15.43	15.58	10.67	13.04	4.54	1.12	2.14	1.05	1.00	7.05	3.23	7.16	5.41
50x50/3	5.80	13.83	13.13	6.03	8.23	5.17	1.10	2.07	1.03	1.00	7.40	3.17	6.83	4.63
60x60/3	6.03	14.77	14.22	6.06	6.69	5.09	1.12	1.98	1.02	1.00	7.00	3.18	6.45	3.94
70x70/3	6.78	15.98	15.38	6.45	7.21	4.46	1.12	2.12	1.03	1.00	7.30	3.01	6.54	3.71
80x80/3	8.75	19.47	18.64	9.91	10.88	5.67	1.12	2.13	1.03	1.00	7.61	3.01	6.54	3.57
90x90/3											6.81	2.72	5.76	2.95
$100 \times 100/3$	13.06	23.99	22.35	11.04	11.64	4.71	1.14	2.25	1.04	1.00	7.69	3.05	6.48	3.29

Table 36: 25% SPGRID-WL

Grid/deg										TWO Q				
16x64/3	6.09	14.22	13.96	4.30	5.17	4.70	1.17	2.17	1.09	1.00	6.13	3.96	8.70	9.83
16x128/3	5.70	13.99	13.48	4.37	5.07	5.09	1.10	2.02	1.04	1.00	5.67	3.69	8.28	8.55
16x256/3	5.77	15.51	15.02	4.87	4.95	4.63	1.10	2.02	1.05	1.00	5.69	3.75	8.60	7.87
16x512/3	6.64	16.61	15.92	3.37	3.20	5.32	1.12	2.04	1.04	1.00	5.39	3.54	8.35	7.35
64x16/3	4.14	11.09	10.73	4.00	5.05	4.77	1.18	2.23	1.18	1.00	8.64	3.41	7.09	5.41
128x16/3	3.47	10.35	9.08	3.74	4.96	4.83	1.15	2.01	1.03	1.00	8.73	2.94	5.89	3.86
256x16/3	3.31	9.29	9.05	5.78	7.78	5.06	1.15	1.91	1.06	1.00	9.62	2.99	5.69	3.21
512x16/3	3.56	10.61	10.44	5.97	7.47	4.90	1.14	1.78	1.04	1.00	10.58	2.97	5.66	3.02

Table 37: 25% SPGRID-PH

Grid/deg										TWO Q				
16x32/5														
32x32/6														
64x32/7	6.29	10.01	10.23	16.85	20.43	1.70	3.23	2.38	11.46	5.49	1.97	3.59	2.42	1.00
128x32/8														
256x32/8	14.30	17.80	18.26	24.81	28.56	2.20	14.09	3.73	26.41	12.41	1.95	3.27	2.32	1.00

Table 38: 25% SPGRID-NH

Grid/deg										TWO Q				
16x32/5	8.81	17.89	18.40	15.64	22.10	2.50	1.00	1.24	1.03	1.00	4.55	2.07	4.28	3.59
32x32/6	8.61	16.01	16.35	24.31	30.60	2.05	1.05	1.00	1.10	1.09	3.52	1.49	2.81	1.95
64x32/7	11.33	18.05	18.48	30.55	36.96	1.98	1.17	1.00	1.22	1.22	3.20	1.23	2.19	1.37
128x32/8	16.43	22.87	23.29	34.11	40.37	1.84	1.20	1.00	1.22	1.21	3.03	1.06	1.86	1.14

Table 39: 25% SPRAND-S4 and SPRAND-S16

$ N /\mathbf{deg}$	SLU 1	$_{2}^{\mathbf{SLU}}$		DLU 21									DIK R	
128/4	8.00	14.00	12.00	10.00	12.00	3.00	1.00	2.00	1.00	1.00	5.00	4.00	8.00	9.00
256/4	18.00	27.00	28.33	22.00	26.67	4.00	1.33	1.33	1.00	1.00	6.67	6.00	9.67	4.33
512/4	20.95	28.45	28.75	27.00	31.45	3.60	1.25	1.00	1.30	1.25	4.70	3.85	6.35	2.85
1024/4	54.91	65.73	65.00	85.09	88.36	3.55	1.64	1.00	1.73	1.73	3.91	4.27	5.00	1.64
2048/4	163.80	178.74	177.65	191.89	197.60	3.09	1.86	1.00	2.02	2.02	3.02	4.03	3.54	1.05
128/16	23.00	27.00	27.50	35.00	38.50	3.50	1.00	1.00	1.50	1.50	3.00	2.00	4.00	3.50
256/16	46.17	52.58	51.17	48.08	52.33	2.75	1.17	1.00	1.17	1.17	2.33	2.25	3.08	2.00
512/16	157.28	169.79	166.79	109.04	117.11	3.17	1.43	1.00	1.57	1.57	2.51	2.53	3.02	1.53
1024/16	307.66	318.94	319.94	249.47	260.41	2.81	1.44	1.00	2.03	1.97	1.97	2.12	2.28	1.19
2048/16	574.87	592.39	575.73	453.32	463.43	2.85	1.68	1.23	3.00	2.77	1.72	1.93	1.91	1.00

Table 40: 25% SPRAND-D4 and SPRAND-D2

$ N /\mathbf{deg}$						GOR 1		THR ESH		TWO Q		DIK BD		
128/32	13.80	16.20	16.00	21.60	23.20	2.60	1.00	1.00	1.20	1.20	1.60	1.60	2.00	1.80
128/64	10.10	11.40	11.50	14.20	15.30	2.40	1.10	1.00	1.30	1.20	1.10	1.10	1.30	1.30
256/64	30.09	32.02	32.00	27.62	29.64	2.49	1.27	1.00	1.58	1.56	1.16	1.11	1.31	1.02
256/128	19.53	20.71	20.35	17.68	18.40	2.86	1.63	1.38	2.28	2.21	1.03	1.00	1.10	1.01
512/128	61.20	62.79	62.30	34.51	36.53	3.08	1.82	1.44	3.30	3.07	1.05	1.07	1.12	1.00
512/256	38.24	39.14	38.52	20.03	21.19	3.46	2.34	1.95	4.57	4.14	1.00	1.03	1.04	1.00
1024/256	68.65	70.66	69.41	45.40	46.22	3.87	3.13	2.61	7.90	6.74	1.00	1.10	1.06	1.04
1024/512	39.07	40.02	39.71	26.18	26.45	4.53	4.19	3.49	13.44	10.38	1.00	1.09	1.03	1.07
2048/512	46.66	47.75	47.09	31.02	31.37	4.18	4.92	3.75	16.59	12.22	1.00	1.07	1.00	1.09
2048/1024	23.78	24.73	24.27	16.31	16.60	4.90	7.31	5.24	29.81	19.41	1.01	1.06	1.00	1.14

Table 41: 25% SPRAND-LENS4

$ N /\mathbf{deg}$	[L, U]		$\frac{\text{SLU}}{2}$		DLU 21	DLU 22	GOR 1				TWO		DIK BD		DIK BA
256/4	[1, 1]		7.36			7.00					9.09	2.18	1.00		1.18
/-	[0, 10]					6.45								2.00	1.18
	$[0, 10^2]$					12.14								3.57	2.43
	$[0, 10^4]$	17.67	27.67	28.33	22.67	28.33	4.00	1.00	1.33	1.33	1.33	6.67	5.67	9.67	4.00
	$[0, 10^6]$	16.67	26.33	26.00	20.67	25.67	4.33	1.33	1.33	1.00	1.00	6.33	10.00	12.67	7.67
1024/4	[1, 1]	29.83	35.61	35.40	41.39	44.14	4.35	34.42	23.01	64.21	55.01	2.49	1.00	2.00	3.58
	[0, 10]	29.24	34.80	34.53	42.12	45.01	3.65	22.52	15.50	26.70	26.43	2.26	1.00	1.92	1.06
						51.74	3.62	5.01	3.34	6.87	5.07	2.64	1.62	2.61	1.00
	$[0, 10^4]$	55.66	66.42	65.50	80.10	86.15	3.66	1.78	1.00	1.79	1.79	4.01	4.19	5.08	1.59
	$[0, 10^6]$	68.49	81.94	81.08	99.50	105.95	3.59	1.19	1.10	1.02	1.00	4.74	4.92	7.41	1.81

 Table 42:
 25% SPRAND-LEND4

$ N /\mathbf{deg}$	[L, U]	SLU 1	$_{2}^{\mathbf{SLU}}$						THR ESH	PA PE	TWO Q		DIK BD		DIK BA
256/64	[1, 1]	19.57	20.71	20.71	18.14	19.29	3.00	8.14	7.29	36.14	23.14	1.00	1.14	1.00	1.57
	[0, 10]	19.43	20.71	20.43	17.86	18.71	2.57	4.14	3.57	16.86	10.71	1.00	1.14	1.14	1.14
	$[0, 10^2]$	22.67	24.33	23.50	21.00	22.33	2.17	2.00	1.67	6.50	4.50	1.00	1.17	1.17	1.17
	$[0, 10^4]$	33.25	35.00	34.50	29.75	31.75	2.75	1.50	1.00	1.75	1.75	1.25	1.25	1.50	1.25
	$[0, 10^6]$	27.20	28.80	28.00	25.00	26.20	2.40	1.00	1.00	1.40	1.60	1.00	1.40	1.20	1.00
1024/256	[1, 1]	49.31	50.60	50.13	32.22	32.69	5.15	38.06	37.77	341.06	226.39	1.00	1.27	1.01	18.06
	[0, 10]	45.75	47.08	46.00	31.41	31.76	4.35	20.48	17.04	229.44	125.74	1.00	1.28	1.01	4.41
	$[0, 10^2]$	51.96	53.09	52.10	35.77	36.03	4.07	9.12	7.39	86.20	42.96	1.00	1.28	1.02	1.53
	$[0, 10^4]$	63.82	65.89	65.39	44.12	44.82	3.81	3.12	2.60	8.38	7.00	1.00	1.11	1.06	1.07
	$[0, 10^6]$	78.79	80.67	79.93	54.62	55.69	3.74	1.96	2.08	2.88	2.84	1.06	1.19	1.15	1.00

Table 43: 25% SPRAND-PS4

$ N /\mathbf{deg}$	P	$\frac{\mathrm{SLU}}{1}$	$\frac{\mathrm{SLU}}{2}$		DLU 21	DLU 22	GOR 1		THR ESH		TWO Q		DIK BD		DIK BA
256/4	0	16.67	26.67	26.67	21.67	25.67	3.33	1.00	1.33	1.33	1.00	6.67	5.67	9.67	5.00
	10^{4}	17.67	27.33	27.33	23.00	28.33	4.00	1.00	1.33	1.33	1.00	6.67	5.33	9.33	5.33
	10^{5}	17.67	27.67	27.67	22.33	27.00	4.33	1.00	2.33	1.00	1.00	14.33	6.33	10.00	7.67
	10^{6}	16.67	27.00	26.67	20.00	25.67	4.00	1.00	3.67	1.00	1.00	25.33	10.00	11.67	8.67
1024/4	0	57.79	68.35	68.19	78.56	82.98	3.60	1.69	1.00	1.69	1.74	4.04	4.23	5.03	1.63
	10^{4}	58.36	69.02	68.55	82.31	87.43	3.64	1.65	1.00	1.66	1.68	4.06	3.74	4.71	1.68
	10^{5}	41.16	48.86	48.59	59.55	63.47	2.74	1.26	1.00	1.31	1.33	4.67	3.33	3.46	1.60
	10^{6}	34.21	40.93	40.33	50.09	53.18	2.27	1.01	1.99	1.00	1.04	11.67	3.57	4.50	2.89

Table 44: 25% SPRAND-PD4

$ N /\mathbf{deg}$	P	SLU 1	$\overset{\mathbf{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	DLU 22			THR ESH		TWO Q		DIK BD		DIK BA
256/64	0	33.50	36.25	35.25	31.00	34.00	3.00	1.25	1.25	1.75	1.75	1.25	1.25	1.50	1.00
	10^{4}	22.83	24.00	23.83	20.50	22.00	1.83	1.00	1.00	1.17	1.17	1.33	1.17	1.33	1.17
	-				24.20		-	1.00	2.00	1.40	1.40	3.20	2.20	2.20	2.20
	10^{6}	23.00	23.83	23.83	20.83	22.17	1.67	1.00	1.67	1.17	1.17	2.83	1.67	2.00	1.50
1024/256	0	70.18	71.82	70.78	46.31	47.16	3.75	3.03	2.49	7.49	6.49	1.00	1.10	1.06	1.06
	10^{4}	39.21	40.51	40.38	27.70	28.17	2.34	1.92	1.68	4.96	4.31	1.05	1.04	1.03	1.00
	10^{5}	20.47	20.94	20.66	14.22	14.45	1.21	1.00	1.62	2.64	2.21	2.15	1.82	1.79	1.76
	10^{6}	20.88	21.57	21.20	14.61	14.86	1.23	1.00	2.46	2.62	2.17	3.27	2.31	2.29	2.29

Table 45: 25% NETGEN-S4 and NETGEN-S16

$ N /\mathbf{deg}$										TWO Q			DIK R	
128/4	6.67	13.33	14.44	11.11	12.22	3.33	1.00	1.11	1.11	1.11	4.44	4.44	7.78	8.89
256/4	17.33	26.33	27.00	22.33	27.67	4.67	1.00	1.33	1.00	1.00	7.00	4.00	9.33	6.00
512/4	24.50	33.89	33.78	32.00	37.33	4.06	1.17	1.11	1.06	1.00	5.22	3.17	6.50	3.28
1024/4											4.78	2.44	5.33	2.11
2048/4	258.66	281.34	280.71	290.05	301.90	3.76	1.20	1.10	1.07	1.00	4.66	2.05	4.83	1.61
128/16	10.33	13.67	13.33	15.67	17.00	2.33	1.00	1.00	1.00	1.00	2.00	1.33	2.67	2.33
256/16	26.92	31.33	31.17	30.50	33.83	2.83	1.33	1.00	1.42	1.42	2.33	1.75	2.83	2.00
512/16	120.02	127.04	124.87	97.38	102.92	3.38	1.48	1.00	1.71	1.67	2.50	1.62	2.71	1.58
1024/16	275.44	290.68	293.08	236.52	242.84	3.32	1.64	1.00	1.84	1.84	2.36	1.36	2.44	1.32
2048/16	579.17	606.23	603.01	490.16	502.83	3.53	1.63	1.00	1.88	1.87	2.34	1.20	2.18	1.16

Table 46: 25% NETGEN-D4 and NETGEN-D2

$ N /\mathbf{deg}$						GOR 1		THR ESH		TWO Q			DIK R	
128/32	9.00	11.00	11.00	14.50	16.00	2.17	1.17	1.00	1.17	1.17	1.50	1.17	1.67	1.67
256/64	25.95	28.10	27.69	23.69	25.50	2.79	1.48	1.48	2.02	1.98	1.21	1.00	1.31	1.17
512/128	67.90	69.42	69.05	40.13	41.88	3.62	1.96	2.15	3.02	2.92	1.20	1.00	2.32	1.04
1024/256	75.30	77.38	75.59	51.39	52.45	4.05	2.39	2.69	4.05	4.01	1.08	1.00	1.10	1.03
2048/512	51.10	52.90	51.65	35.04	35.04	4.27	2.61	3.07	3.96	3.85	1.03	1.00	1.01	1.00
128/64	6.80	8.20	8.20	10.50	11.80	2.60	1.50	1.50	1.90	1.90	1.30	1.00	1.30	1.60
256/128	22.07	23.15	23.26	19.40	20.47	3.19	1.78	1.99	2.71	2.65	1.13	1.00	1.18	1.07
512/256	39.69	41.02	40.30	23.71	24.47	3.91	2.30	2.65	3.91	3.81	1.13	1.00	1.10	1.06
1024/512	39.41	40.72	40.41	27.26	27.99	4.18	2.50	2.89	4.56	4.34	1.00	1.02	1.06	1.02

 Table 47:
 25% NETGEN-LENS4

$ N /\mathbf{deg}$	[L, U]	SLU 1	$\mathbf{\overset{\mathbf{SLU}}{2}}$		DLU 21		GOR 1		THR ESH		TWO Q		DIK BD		DIK BA
256/4	[0, 10]	19.67	29.33	29.33	25.33							6.33	1.67	3.67	1.33
	$[0, 10^2]$	17.33	27.00	27.00	21.00	28.00	3.67	1.33	1.33	1.33	1.00	6.33	2.00	5.33	2.00
	$[0, 10^4]$	18.33	28.00	28.00	23.33	29.00	3.67	1.00	1.33	1.00	1.00	6.33	4.33	9.33	7.33
	$[0, 10^6]$	17.00	27.33	27.67	19.67	26.00	4.67	1.33	1.33	1.00	1.00	6.67	10.67	13.00	7.00
1024/4	[0, 10]	72.59	84.86	83.95	95.57	102.33	3.66	1.22	1.05	1.00	1.00	5.64	1.25	2.17	1.19
	$[0, 10^2]$	72.10	84.91	84.59	101.51	108.41	3.85	1.20	1.11	1.02	1.00	4.58	1.52	3.09	1.33
	$[0, 10^4]$	74.57	88.84	87.92	102.36	109.20	3.82	1.21	1.11	1.01	1.00	4.63	2.43	5.30	2.08
	$[0, 10^6]$	67.33	79.18	78.51	91.86	98.38	3.62	1.21	1.04	1.01	1.00	4.38	4.26	6.79	2.17

 Table 48: 25% NETGEN-LEND4

$ N /\mathbf{deg}$	[L, U]						GOR 1				TWO Q			DIK R	
256/64	[0, 10]	34.33	37.00	36.00	32.00	34.00	2.67	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.00
	$[0, 10^2]$														
	$[0, 10^4]$	25.75	28.25	27.50	24.50	26.00	3.00	1.50	1.50	2.00	2.00	1.25	1.00	1.50	1.00
	$[0, 10^6]$	21.20	22.60	22.60	20.00	21.20	2.40	1.20	1.20	1.80	1.60	1.00	1.60	1.20	1.00
1024/256	[0, 10]	77.94	80.32	79.12	53.52	54.51	2.21	1.02	1.14	1.04	1.03	1.00	1.00	1.03	1.00
	$[0, 10^2]$	74.75	77.34	77.04	52.76	53.41	3.75	2.34	2.74	2.86	2.86	1.06	1.00	1.05	1.02
	$[0, 10^4]$	75.77	78.45	77.10	51.38	52.61	4.04	2.44	2.62	4.04	3.89	1.09	1.00	1.09	1.02
	$[0, 10^6]$	74.98	77.14	76.79	52.11	53.03	3.96	2.31	2.57	3.83	3.78	1.05	1.13	1.16	1.00

Table 49: 25% SPACYC-PS4 and SPACYC-PS16

$ N /\mathbf{deg}$ $[L, U]$	ACC	SLU 1	$\frac{\mathrm{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	$\begin{array}{c} \overline{\mathrm{DLU}} \\ 22 \end{array}$	GOR 1	BFP	THR ESH		TWO		DIK BD		DIK BA
$\frac{128/4 [0, 10^4]}{128/4 [0, 10^4]}$	1.11	1.11	6.67	6.67	2.22			1.11	2.22	1.11	1.11	3.33	1.00		7.78
$256/4 [0, 10^4]$	1.00	2.50	10.50	10.50	4.50		2.50				2.50	5.50	2.00	4.50	6.00
$512/4 [0, 10^4]$	1.00	1.29	6.50	6.64	2.57	5.64	1.14	2.29	2.00°	2.00	2.14	3.29	1.00	2.57	2.29
$1024/4 \ [0, 10^4]$	1.00	2.00	10.75	11.00	5.50	10.00	1.75	4.00	3.003	3.75	4.00	5.00	1.75	3.50	2.50
$2048/4 [0, 10^4]$	1.04	1.22	7.37	7.52	4.00	6.96	1.30	3.11	2.07°	2.41	2.59	3.44	1.00	2.11	1.11
$128/16 [0, 10^4]$	1.00	3.33	5.56	6.67	1.11	4.44	2.22	2.22	3.33°	2.22	3.33	2.22	2.22	4.44	6.67
$256/16 \ [0, 10^4]$	1.00	1.14	3.86	4.14	2.86	4.14	1.00	2.00	1.71°	2.00	2.00	2.00	1.29	1.86	2.00
$512/16 \ [0, 10^4]$	1.00	1.52	4.63	4.89	3.81	6.04	1.19	2.56	1.89 2	2.63	2.67	2.22	1.15	1.78	1.74
$1024/16 \ [0, 10^4]$	1.09	1.45	5.09	5.18	6.18	7.82	1.27	3.18	2.18:	3.45	3.64	2.36	1.00	1.64	1.45
$2048/16 [0, 10^4]$	1.04	1.46	5.00	5.13	6.79	8.60	1.15	3.79	2.48 - 4	4.02	4.17	2.33	1.00	1.56	1.19

Table 50: 25% SPACYC-NS4 and SPACYC-NS16

$ N /\mathbf{deg}$	[L, U]	ACC	SLU 1	$\frac{\mathrm{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	DLU 22	$\frac{\text{GOR}}{1}$		THR ESH	PA PE	TWO Q	DIK H	DIK BD	DIK R	DIK BA
	$-10^4,0$	2.00	1.00	6.00	6.00	2.00	4.00	1.00	2.00	3.00	2.00	2.00	19.00	4.00	6.00	5.00
256/4	$-10^4, 0$	1.00	1.33	7.00	8.67	2.00	5.67	1.00	3.33	6.00	5.33	4.33	59.00	8.00	10.67	8.33
512/4 [$-10^4, 0$	1.00	1.20	5.93	6.20	2.40	5.07	1.13	5.33	10.40	7.13	7.40	98.67	13.53	16.40	13.87
1024/4 [$-10^4, 0$	1.00	1.33	7.17	7.33	3.83	6.67	1.17	13.33	23.00	16.50	21.17	238.0	30.33	36.67	30.67
2048/4 [$-10^4, 0$	1.00	1.31	7.65	7.85	4.27	7.38	1.31	29.19	47.19	72.35	51.46	543.2	58.50	69.31	59.54
128/16 [$[-10^4, 0]$	2.00	2.00	6.00	6.00	2.00	6.00	1.00	4.00	9.00	11.00	8.00	72.00	10.00	13.00	11.00
256/16 [$[-10^4, 0]$	1.00	1.43	3.86	4.14	2.57	4.29	1.00	5.00	10.71	18.86	11.14	162.7	11.71	13.71	12.14
512/16 [$-10^4, 0$	1.00	1.46	4.64	4.82	3.82	5.89	1.25	8.86	19.43	39.32	22.75	294.1	21.11	24.43	21.68
1024/16 [$[-10^4, 0]$	1.00	1.64	5.18	5.36	6.73	8.09	1.18	16.82	41.36	122.5	57.45	760.6	38.64	44.45	39.73
2048/16 [$[-10^4, 0]$	1.00	1.46	5.12	5.37	7.50	8.85	1.35	31.96	90.15	185.3	148.5	1518	81.35	92.13	83.60

Table 51: 25% SPACYC-PD4 and SPACYC-PD2

N /deg $[L, U]$	ACC	$\frac{\mathrm{SLU}}{1}$	$\frac{\text{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	DLU 22		BFP	THR P ESH P	PA TWO PE Q		DIK BD		DIK BA
128/32 [0, 10 ⁴	2.00	2.50	5.00	5.50	5.00	6.00	1.00	3.00	2.50 3.0	00 3.00	2.50	2.00	2.50	4.50
$256/64 \ [0, 10^4]$	1.21	1.86	3.36	3.64	3.79	5.21	1.43	2.86	2.29 3.3	29 3.21	1.43	1.00	1.43	1.64
$512/128 [0, 10^4]$	1.52	1.95	3.33	3.47	6.01	7.51	1.48	3.52	$2.67\ 4.4$	45 4.58	1.25	1.00	1.16	1.22
$1024/256 [0, 10^4]$	1.73	3.74	4.88	4.96	12.44	13.05	1.66	4.22	$3.12\ 5.9$	95 5.93	1.12	1.00	1.07	1.04
$2048/512 [0, 10^4]$] 1.77	4.05	4.81	4.88	12.07	12.35	1.66	4.31	$3.26 \ 5.9$	99 5.89	1.06	1.00	1.04	1.04
$128/64 \ [0, 10^4]$] 1.00	1.33	2.33	2.33	3.33	3.33	1.33	1.67	$1.67\ 2.0$	00 2.00	1.33	1.33	1.33	2.33
$256/128 [0, 10^4]$] 1.57	1.57	2.78	2.91	3.43	4.74	1.48	3.17	$2.57\ 3.$	52 3.57	1.22	1.00	1.26	1.22
$512/256 [0, 10^4]$] 1.71	1.86	2.85	2.98	5.67	6.74	1.70	3.62	$3.02\ 4.$	71 4.56	1.16	1.00	1.11	1.11
$1024/512 [0, 10^4]$] 1.87	3.88	4.72	4.80	11.00	11.43	1.73	3.90	$3.37 \ 5.4$	55 5.44	1.06	1.00	1.04	1.08
$2048/1024 [0, 10^4]$] 1.79	2.88	3.36	3.41	8.76	8.92	1.69	4.00	$3.47\ 5.3$	38 5.19	1.02	1.00	1.02	1.05

Table 52: 25% SPACYC-ND4 and SPACYC-ND2

1371 / 1	[7 77]										PA				DIK	
$ N /\mathbf{deg}$	[L, U]							1				~	H			
	$[-10^4, 0]$	1.00	1.25	2.75	2.75	1.50	3.00	1.00	3.00	7.25	10.75	13.75	100.00	7.25	8.75	7.50
256/64																
512/128 [717.18			
1024/256 [
128/64 [$[-10^4, 0]$												55.25			
256/128 [. , ,		1.02	1.68	1.78	2.20	2.83	1.00	6.22	16.22	44.44	17.27	123.73	14.34	15.17	14.63
512/256 [1124.2			
1024/512 [$[-10^4, 0]$	1.00	1.96	2.46	2.55	5.91	5.68	1.01	23.18	74.65	848.39	244.2	3195.8	63.54	64.27	63.64

Table 53: 25% SPACYC-P2N128 and SPACYC-P2N1024

_	[L, U]	ACC	SLU	\mathbf{SLU}	SLU	$\overline{\mathrm{DLU}}$	$\overline{\text{DLU}}$	GOR	BFP	THR	PA	TWO	DIK	DIK	DIK	DIK
$ N /\mathbf{deg}$	×1000		1	2	3	21	22	1		ESH	\mathbf{PE}	Q	H	BD	R	$\mathbf{B}\mathbf{A}$
128/16	[0, 10]	1.54	2.54	7.46	7.62	4.69	8.31	1.85	1.08	1.23	1.00	1.00	3.08	2.38	4.62	6.69
	[-1, 9]	1.35	2.00	5.71	6.06	3.59	5.94	1.35	1.00	1.35	1.06	1.06	3.12	2.12	3.12	4.88
	[-2, 8]	1.00	1.36	3.92	4.16	2.44	3.88	1.00	1.00	1.44	1.28	1.16	3.96	2.04	2.52	4.24
	[-3, 7]	1.00	1.44	3.96	4.12	2.56	4.16	1.08	1.68	2.60	2.60	2.20	11.44	3.20	4.20	5.44
	[-4, 6]	1.00	1.65	4.30	4.57	2.78	4.43	1.04	2.57	4.35	4.61	5.30	22.52	5.61	6.70	7.52
	[-5, 5]	1.00	1.54	4.08	4.33	2.75	4.38	1.12	3.17	6.29	9.92	5.79	67.38	7.50	9.17	9.33
	[-6, 4]	1.00	1.64	4.55	4.59	2.95	4.86	1.23	4.23	9.82	11.27	9.55	77.18	11.41	13.91	14.18
	[-10, 0]	1.00	1.64	4.56	4.56	2.64	4.64	1.04	5.56	12.80	17.80	12.32	105.1	14.44	17.16	15.04
1024/16	[0, 10]	1.78	2.33	7.67	7.89	8.33	11.33	1.78	1.11	1.00	1.00	1.00	2.89	1.89	3.44	1.89
	[-1, 9]	1.50	2.10	7.00	7.20	7.60	10.10	1.70	1.20	1.00	1.10	1.10	2.90	1.60	2.80	2.10
	[-2, 8]	1.06	1.31	4.31	4.50	4.81	6.38	1.00	1.44	1.50	1.62	1.62	5.81	1.94	2.62	2.31
	[-3, 7]	1.00	1.40	4.60	4.80	5.20	6.67	1.20	3.80	5.87	7.53	6.53	43.93	7.53	9.00	8.07
	[-4, 6]	1.00	1.83	5.75	6.17	7.25	9.25	1.50	11.42	21.75	44.42	24.00	295.9	26.00	30.42	27.50
	[-5, 5]	1.00	1.62	5.38	5.69	6.62	8.62	1.31	20.69	53.08	82.77	73.38	448.0	62.23	71.62	64.15
	[-6, 4]	1.00	1.47	4.80	4.87	5.73	7.13	1.07	29.60	74.73	113.0	109.5	608.6	86.73	100.8	88.73
	[-10, 0]	1.00	1.62	5.46	5.54	6.15	7.85	1.38	42.69	104.5	190.9	104.9	1488	130.7	148.9	132.5

Table 54: 50% SPGRID-SQ

Grid/deg										TWO		DIK BD		
10x10/3	4.57	12.71	12.86	6.86	8.29	4.57	1.00	3.00	1.00	1.00	6.71	5.71	9.86	26.43
20x20/3	5.49	13.74	13.43	3.93	5.38	5.05	1.18	2.60	1.11	1.00	8.04	4.50	9.66	12.13
30x30/3	5.02	12.45	12.08	3.86	4.83	4.56	1.11	2.01	1.05	1.00	6.77	3.31	7.26	6.54
40x40/3	5.88	15.49	15.63	10.82	13.36	4.45	1.12	2.17	1.05	1.00	7.16	3.26	7.21	5.26
50x50/3	5.56	13.31	12.77	5.11	7.10	4.87	1.13	2.02	1.05	1.00	7.25	3.13	6.80	4.59
60x60/3	6.04	14.75	13.97	5.34	6.28	5.19	1.12	2.26	1.04	1.00	7.07	2.95	6.41	3.87
70x70/3	6.81	16.18	15.61	5.96	6.64	4.67	1.14	2.12	1.04	1.00	7.40	3.09	6.58	3.79
80x80/3	8.77	19.48	18.63	9.68	10.67	5.34	1.14	2.15	1.04	1.00	7.39	3.08	6.46	3.45
90x90/3	9.94	20.19	19.44	13.81	15.26	5.11	1.21	2.02	1.05	1.00	6.65	2.66	5.66	2.86
$100 \times 100/3$	12.66	23.08	21.83	7.93	8.96	4.81	1.14	2.21	1.02	1.00	7.76	3.03	6.50	3.19

Table 55: 50% SPGRID-WL

Grid/deg										TWO				
$\frac{76x64/3}{16x64/3}$														
16x128/3														
16x256/3	5.60	15.16	14.72	4.39	4.62	4.69	1.11	2.02	1.04	1.00	5.73	3.64	8.51	7.84
16x512/3											5.42	3.55	8.35	7.29
64x16/3	3.96	10.83	10.44	3.85	4.90	4.44	1.06	2.19	1.00	1.38	8.06	3.15	6.48	5.19
128x16/3	3.42	9.27	8.88	3.52	4.55	4.67	1.15	1.98	1.02	1.00	8.57	2.91	5.83	3.76
256x16/3	3.31	9.42	9.12	4.83	6.61	4.85	1.16	1.88	1.02	1.00	9.48	2.95	5.66	3.13
512x16/3	3.50	10.66	10.44	5.80	6.93	5.00	1.16	1.80	1.04	1.00	10.67	3.02	5.66	3.05

Table 56: 50% SPGRID-PH

Grid/deg										TWO Q				
16x32/5														
32x32/6	4.15	7.85	7.99	11.73	14.87	1.27	1.39	1.12	4.07	2.27	1.89	4.16	2.50	1.00
64x32/7	6.26	10.01	10.22	16.82	20.42	1.58	3.02	2.18	10.71	5.11	1.96	3.73	2.42	1.00
128x32/8	9.59	13.37	13.64	19.93	23.67	1.93	6.50	3.10	20.32	9.18	1.97	3.45	2.33	1.00
256x32/8	14.45	18.33	18.54	25.43	29.56	2.16	14.12	3.76	25.42	12.22	1.95	3.35	2.31	1.00

Table 57: 50% SPGRID-NH

Grid/deg										TWO Q				
$\frac{16x32/5}{16x32/5}$														
32x32/6	8.23	15.51	15.83	23.40	29.88	2.02	1.04	1.00	1.08	1.07	3.48	1.47	2.77	1.90
64x32/7	11.46	18.34	18.76	30.99	37.49	1.97	1.18	1.00	1.24	1.23	3.26	1.24	2.21	1.41
128x32/8	16.06	22.71	23.18	33.70	39.78	1.82	1.18	1.00	1.20	1.20	3.04	1.06	1.85	1.10

Table 58: 50% SPRAND-S4 and SPRAND-S16

$ N /\mathbf{deg}$	SLU 1									TWO Q				
128/4	15.00	25.00	23.00	15.00	18.00	5.00	2.00	3.00	2.00	1.00	9.00	8.00	14.00	18.00
256/4	13.83	23.33	24.00	15.00	19.33	4.17	1.00	1.50	1.17	1.17	6.83	5.67	9.67	5.17
512/4	17.78	26.29	26.66	24.02	28.83	3.63	1.24	1.00	1.17	1.24	4.61	5.07	6.27	2.32
1024/4	39.50	49.64	50.27	67.59	73.41	3.55	1.64	1.00	1.64	1.64	3.95	4.23	4.95	1.59
2048/4	124.34	138.07	138.06	160.98	165.03	3.04	1.85	1.00	2.10	2.04	2.96	3.89	3.43	1.00
128/16	12.80	16.80	17.20	16.80	20.60	2.40	1.00	1.00	1.00	1.00	2.20	2.20	3.20	3.20
256/16	29.00	34.83	34.57	30.61	34.96	3.04	1.30	1.00	1.35	1.30	2.57	2.30	3.22	2.04
512/16							1.41		-	-	2.48	2.51	3.04	1.61
1024/16	203.76	219.13	216.26	181.89	190.94	2.89	1.44	1.00	2.05	1.97	2.02	2.16	2.94	1.19
2048/16	362.50	386.97	380.05	317.39	325.64	2.89	1.74	1.26	3.13	2.89	1.79	1.97	1.96	1.00

Table 59: 50% SPRAND-D4 and SPRAND-D2

$ N /\mathbf{deg}$						GOR 1				TWO Q		DIK BD		
128/32	9.00	11.50	11.30	12.80	14.20	2.60	1.10	1.00	1.10	1.20	1.70	1.40	2.10	2.10
128/64	5.81	7.00	7.00	7.43	8.38	2.24	1.14	1.00	1.24	1.29	1.14	1.10	1.33	1.24
256/64	16.71	18.71	18.34	15.17	16.80	2.43	1.24	1.00	1.53	1.49	1.12	1.06	1.26	1.04
256/128	11.09	12.11	11.85	10.15	10.96	2.82	1.56	1.32	2.17	2.10	1.00	1.01	1.10	1.02
512/128	35.47	37.78	37.23	19.66	21.62	3.01	1.88	1.53	3.30	3.08	1.03	1.07	1.11	1.00
512/256	21.14	22.04	21.69	11.88	12.66	3.59	2.27	1.95	4.50	4.14	1.01	1.03	1.04	1.00
1024/256	37.85	39.98	39.68	27.80	28.63	3.72	3.10	2.56	8.02	6.70	1.00	1.09	1.05	1.04
1024/512	22.24	23.27	22.95	16.47	16.98	4.23	3.99	3.36	12.32	9.70	1.00	1.08	1.02	1.06
2048/512	26.71	27.56	26.55	18.91	19.42	4.10	4.84	3.70	16.60	12.28	1.01	1.08	1.00	1.09
2048/1024	13.77	14.39	14.19	10.03	10.24	4.95	7.34	5.32	30.17	19.73	1.01	1.06	1.00	1.15

Table 60: 50% SPRAND-LENS4

		SLU	SLU	SLU	DLU	DLU	GOR	BFP	THR	$\mathbf{P}\mathbf{A}$	TWO	DIK	DIK	DIK	DIK
$ N /\mathbf{deg}$	[L, U]	1	2	3	21	22	1		ESH	\mathbf{PE}	Q	Н	BD	\mathbf{R}	$\mathbf{B}\mathbf{A}$
256/4	[1, 1]	4.23	6.82	6.86	4.86	6.14	2.45	5.18	4.27	7.86	6.45	2.14	1.00	1.91	1.59
	[0, 10]	3.38	5.58	5.71	3.83	4.92	1.96	2.71	2.62	2.88	3.33	1.88	1.00	1.88	1.46
	$[0, 10^2]$	5.86	10.00	10.07	6.43	8.07	2.57	1.50	1.00	1.79	1.64	3.14	2.00	3.50	2.29
	$[0, 10^4]$											5.57	4.71	8.43	4.57
	$[0, 10^6]$	15.33	25.83	26.00	17.17	22.50	4.67	1.17	1.33	1.17	1.00	6.67	9.00	12.67	7.50
1024/4	[1, 1]	22.63	28.59	28.60	35.98	38.99	4.63	31.30	20.38	53.50	49.86	2.56	1.00	2.03	3.14
	[0, 10]	21.50	27.14	27.03	33.66	36.20	3.65	21.71	14.45	30.37	26.44	2.28	1.00	1.94	1.04
	$[0, 10^2]$	24.58	31.10	31.04	38.64	41.61	3.48	5.08	3.68	7.45	5.86	2.63	1.66	2.58	1.00
	$[0, 10^4]$	41.20	52.79	52.34	68.88	73.36	3.74	1.67	1.00	1.65	1.69	4.10	4.28	5.20	1.68
	$[0, 10^6]$	51.06	64.07	63.83	79.02	85.76	3.61	1.18	1.09	1.00	1.01	4.68	4.85	7.28	1.82

 Table 61:
 50%
 SPRAND-LEND4

$ N /\mathbf{deg}$	[L, U]	SLU 1			DLU 21					PA PE	TWO Q		DIK BD		
256/64	[1, 1]	11.85	13.23	13.08	11.00	12.00	3.31	8.38	7.62	38.69	24.62	1.00	1.15	1.15	1.77
	[0, 10]	12.00	13.38	13.31	11.15	12.08	2.77	4.54	3.77	20.38	11.92	1.00	1.08	1.08	1.38
	$[0, 10^2]$	11.85	13.46	13.38	10.77	12.00	2.15	2.00	1.77	5.69	4.15	1.00	1.00	1.00	1.23
	$[0, 10^4]$	16.78	18.44	18.56	15.67	17.11	2.56	1.22	1.00	1.56	1.44	1.22	1.11	1.33	1.11
	$[0, 10^6]$	16.89	18.67	18.44	15.44	17.22	2.67	1.22	1.22	1.56	1.56	1.22	1.78	1.44	1.00
1024/256	[1, 1]	27.50	29.18	28.84	20.23	20.76	5.25	39.58	38.77	348.38	232.20	1.00	1.29	1.01	18.44
	[0, 10]	27.09	28.22	27.90	20.07	20.59	4.29	20.55	17.05	220.60	120.29	1.00	1.32	1.02	4.42
	$[0, 10^2]$	29.47	31.34	31.02	21.82	22.33	3.86	8.61	6.96	78.44	40.10	1.01	1.23	1.00	1.44
	$[0, 10^4]$	38.12	40.27	40.00	28.71	29.39	3.80	3.33	2.70	8.42	7.00	1.00	1.08	1.04	1.03
	$[0, 10^6]$	44.04	45.64	45.08	32.51	33.32	3.65	1.87	2.02	2.74	2.71	1.05	1.18	1.12	1.00

Table 62: 50% SPRAND-PS4

$ N /\mathbf{deg}$	P	SLU 1					GOR 1				TWO Q		DIK BD		
256/4	0	15.00	24.50	25.33	17.83	22.17	4.67	1.17	1.33	1.17	1.00	6.67	5.67	9.83	4.67
	10^{4}	13.83	23.33	23.67	15.17	19.33	4.50	1.17	1.50	1.17	1.00	7.00	5.00	9.33	5.67
	10^{5}	14.83	24.17	24.67	15.83	21.00	4.50	1.17	2.33	1.17	1.00	14.83	5.83	9.83	7.33
	10^{6}	15.33	26.17	26.50	17.33	21.67	4.50	1.17	3.33	1.17	1.00	24.00	8.83	11.50	7.33
1024/4	0	42.78	53.33	53.26	67.20	72.35	3.65	1.68	1.00	1.70	1.70	4.04	4.20	5.06	1.66
	10^{4}	43.63	55.77	55.08	68.68	73.85	3.57	1.66	1.00	1.68	1.70	4.16	3.96	4.86	1.67
							2.64					4.64	3.33	3.45	1.55
	10^{6}	25.57	32.11	32.06	39.88	42.61	2.18	1.00	2.03	1.01	1.03	12.07	3.60	4.50	2.90

Table 63: 50% SPRAND-PD4

$ N /\mathbf{deg}$	P	SLU 1	$\overset{\mathbf{SLU}}{2}$						THR ESH		TWO Q		DIK BD		DIK BA
256/64	0	16.89	19.11	18.67	15.67	17.22	2.44	1.22	1.00	1.56	1.56	1.22	1.11	1.22	1.22
	10^{4}	14.36	15.64	15.55	12.73	14.27	2.00	1.09	1.00	1.27	1.27	1.45	1.09	1.36	1.18
	-				12.64			1.00	1.73	1.27	1.27	2.73	1.73	2.00	1.91
	10^{6}	13.73	15.45	15.27	12.73	13.82	2.00	1.00	1.82	1.27	1.18	3.18	2.00	2.09	1.91
1024/256							3.75	3.01	2.49	7.88	6.56	1.00	1.09	1.04	1.05
	10^{4}	23.37	24.45	24.26	17.18	17.67	2.27	1.83	1.61	4.80	4.01	1.05	1.04	1.02	1.00
	10^{5}	11.45	12.02	11.91	8.66	8.78	1.13	1.00	1.56	2.53	2.11	2.00	1.67	1.66	1.63
	10^{6}	12.12	12.66	12.50	9.10	9.34	1.21	1.00	2.14	2.52	2.12	2.84	2.00	2.02	1.99

Table 64: 50% NETGEN-S4 and NETGEN-S16

$ N /\mathbf{deg}$										TWO Q				
128/4	13.00	21.00	24.00	13.00	14.00	6.00	2.00	3.00	2.00	1.00	8.00	7.00	14.00	14.00
256/4	14.50	24.00	25.00	16.67	21.33	4.67	1.00	1.33	1.17	1.00	6.33	4.33	9.17	7.17
		27.19									5.03	2.97	6.30	3.27
1024/4	48.32	60.74	59.32	77.47	81.26	3.79	1.16	1.05	1.00	1.00	4.47	2.37	5.11	1.79
2048/4	166.42	194.21	192.00	214.20	221.45	3.79	1.25	1.07	1.00	1.01	4.58	2.00	4.71	1.52
128/16	9.60	13.20	13.80	13.00	15.40	2.60	1.00	1.00	1.20	1.20	2.40	2.00	3.20	3.00
256/16	18.87	23.87	23.61	20.91	24.52	3.09	1.39	1.00	1.39	1.43	2.43	1.83	2.91	2.17
512/16	82.71	93.73	90.68	67.17	73.68	3.47	1.53	1.00	1.71	1.71	2.58	1.66	2.82	1.64
1024/16	193.24	206.50	205.64	180.90	188.74	3.34	1.58	1.00	1.78	1.80	2.32	1.34	2.36	1.32
2048/16	363.44	386.25	378.62	337.20	348.86	3.58	1.65	1.00	1.95	1.95	2.42	1.24	2.24	1.17

Table 65: 50% NETGEN-D4 and NETGEN-D2

$ N /\mathbf{deg}$						GOR 1				$\mathop{\rm TWO}_{\mathbf{Q}}$		DIK BD		
128/32	6.08	8.08	8.08	7.67	8.92	2.17	1.08	1.00	1.33	1.33	1.42	1.25	1.67	1.75
256/64	15.66	17.80	17.49	14.47	16.18	2.75	1.48	1.47	1.94	1.92	1.24	1.00	1.31	1.16
512/128	40.84	43.27	42.84	23.86	25.58	3.59	1.96	2.17	3.11	3.03	1.20	1.00	1.19	1.06
1024/256	44.24	46.31	45.87	32.54	33.45	4.06	2.33	2.61	3.98	3.85	1.07	1.00	1.08	1.03
2048/512	30.73	31.95	31.62	22.52	23.08	4.32	2.66	3.05	4.04	3.93	1.04	1.00	1.04	1.01
128/64	4.43	5.62	5.62	5.76	6.62	2.38	1.24	1.29	1.57	1.48	1.10	1.00	1.29	1.29
256/128	12.37	13.65	13.54	10.80	11.87	3.20	1.76	1.93	2.59	2.50	1.12	1.00	1.18	1.07
512/256	23.10	24.45	24.21	13.51	14.36	3.94	2.29	2.61	3.86	3.68	1.12	1.00	1.10	1.05
1024/512	24.25	25.24	25.16	17.66	17.78	4.27	2.61	3.04	4.67	4.48	1.00	1.02	1.04	1.04

 Table 66:
 50% NETGEN-LENS4

$ N /\mathbf{deg}$	[L, U]	SLU 1	$\frac{\text{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	DLU 22	GOR 1	BFP	THR ESH	PA PE	TWO Q			DIK R	
256/4	[0, 10]	13.14	22.14	22.29	14.29	19.00	4.00	1.14	1.29	1.00	1.00	5.71	1.43	3.14	1.43
					16.83							6.83	2.33	5.50	1.83
	$[0, 10^4]$	14.83	25.00	25.33	17.50	22.50	4.33	1.00	1.33	1.00	1.00	6.67	4.33	9.33	6.67
	$[0, 10^6]$	14.83	25.00	24.50	15.83	21.00	3.83	1.17	1.50	1.17	1.00	6.67	10.67	12.50	8.33
1024/4	[0, 10]	54.87	67.82	67.49	82.24	87.44	3.69	1.19	1.06	1.01	1.00	4.38	1.27	2.19	1.20
	$[0, 10^2]$	67.37	80.91	80.89	102.75	109.62	3.74	1.18	1.06	1.00	1.01	4.52	1.50	3.03	1.27
					83.31							4.60	2.45	5.30	2.00
	$[0, 10^6]$	58.95	72.70	71.68	86.54	92.75	3.75	1.19	1.09	1.00	1.01	4.60	4.56	7.12	2.28

 Table 67:
 50% NETGEN-LEND4

$ N /\mathbf{deg}$ $[L, U]$	1	2	3	21	22	1		ESH	\mathbf{PE}		Н	BD	\mathbf{R}	$\mathbf{B}\mathbf{A}$
256/64 [0, 10]	16.86	19.14	19.00	16.14	18.14	2.29	1.14	1.14	1.14	1.00	1.29	1.00	1.14	1.00
$[0, 10^2]$	18.00	20.57	20.29	17.00	19.14	3.29	1.71	1.71	2.14	2.14	1.43	1.00	1.29	1.14
$[0, 10^4]$	15.12	17.12	16.88	14.25	15.62	3.00	1.50	1.50	1.88	1.88	1.25	1.00	1.38	1.25
$[0, 10^6]$	11.00	12.64	12.45	10.36	11.64	2.18	1.18	1.18	1.55	1.55	1.00	1.36	1.18	1.00
1024/256 [0, 10]	46.82	49.30	48.85	34.36	35.22	2.21	1.02	1.12	1.03	1.04	1.01	1.00	1.03	1.01
$[0, 10^2]$	45.03	47.16	46.79	33.38	34.25	3.77	2.36	2.72	2.85	2.78	1.06	1.00	1.04	1.01
$[0, 10^4]$	44.76	46.89	46.29	32.82	33.87	4.10	2.37	2.69	4.03	3.91	1.09	1.00	1.10	1.02
$[0, 10^6]$	41.81	43.94	43.57	31.92	32.64	3.81	2.29	2.56	3.83	3.76	1.02	1.08	1.12	1.00

Table 68: 50% SPACYC-PS4 and SPACYC-PS16

N /deg $[L, U]$	ACC	SLU 1	$\frac{\mathrm{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	$\frac{\mathrm{DLU}}{22}$		BFP	THR ESH		TWO	DIK H	DIK BD		DIK BA
$\frac{128/4 [0, 10^4]}{128}$	1.00	1.00	10.00		3.00	8.00	2.00	2.00			2.00		3.00		
$256/4 [0, 10^4]$	1.00			6.29		5.00		1.57	1.71			0.00		2.71	
$512/4 [0, 10^4]$	1.00	1.29	6.82	7.04	2.86	5.93	1.00		2.39	2.25	2.64	3.46	1.29	2.75	2.29
$1024/4 [0, 10^4]$	1.00	1.45	7.91	8.09	4.09	11.55	1.36	3.09	2.36	2.73	3.00	3.64	1.18	2.64	1.64
$2048/4 [0, 10^4]$	1.00	1.27	7.75	8.55	4.22	7.47	1.27	3.43	2.35	2.76	3.02	3.59	1.00	2.22	1.12
$128/16 [0, 10^4]$	1.00	1.25	3.25	3.50	2.50	3.25	1.00	1.50	1.25	1.50	1.50	1.75	1.00	1.50	3.00
$256/16 [0, 10^4]$	1.00	1.55	4.91	5.09	3.18	5.27	1.18	2.27	2.00	2.45	2.45	2.45	1.45	2.18	3.09
$512/16 [0, 10^4]$	1.00	1.53	4.73	4.89	3.84	6.13	1.07	2.82	2.22	2.82	3.04	2.25	1.07	1.84	1.73
$1024/16 [0, 10^4]$	1.00	1.64	5.36	5.50	6.50	8.36	1.41	3.36	2.32	3.68	3.64	2.36	1.18	1.82	1.36
$2048/16 [0, 10^4]$	1.07	1.44	5.02	5.21	6.94	8.65	1.16	3.79	2.45	4.08	4.18	2.37	1.00	1.56	1.17

Table 69: 50% SPACYC-NS4 and SPACYC-NS16

1271 / 2		ACC	SLU	~	$\overline{\mathbf{SLU}}$	DLU		GOR			PA	TWO	DIK	DIK	DIK	DIK
$ N /\mathbf{deg}$	[L, U]		1	2	3	21	22	1		ESH	\mathbf{PE}	Q	H	$^{\mathrm{BD}}$	R	BA
128/4 [$-10^4, 0$	1.00	2.22	8.89	11.11	3.33	6.67	2.22	3.33	6.67	4.44	3.33	33.33	10.00	12.22	8.89
256/4 [$-10^4, 0$	1.00	1.60	8.40	8.80	3.00	6.00	1.00	3.80	7.40	4.60	4.80	54.00	10.40	13.60	10.80
512/4 [$-10^4, 0$	1.00	1.37	7.04	7.22	2.96	6.15	1.04	7.07	13.81	12.52	11.59	129.7	18.07	21.93	18.44
1024/4 [$-10^4, 0$	1.00	1.50	8.60	8.90	4.70	8.20	1.20	12.70	22.80	21.70	18.70	248.5	28.60	34.30	29.10
2048/4 [$-10^4, 0$	1.00	1.33	8.29	8.50	4.65	8.00	1.21	24.81	39.08	52.46	32.71	648.2	50.58	60.17	51.44
128/16 [$-10^4, 0$	1.00	2.50	6.50	7.00	3.50	7.50	1.00	5.00	10.00	15.00	10.50	89.50	11.00	13.50	12.00
256/16 [$-10^4, 0$	1.00	2.00	6.00	6.44	4.11	6.44	1.67	7.33	15.89	19.22	17.56	280.8	16.78	20.00	17.56
512/16 [$-10^4, 0$	1.00	1.35	4.26	4.39	3.65	5.52	1.15	8.87	21.35	29.08	24.65	331.4	22.32	25.71	23.03
1024/16 [$-10^4, 0$	1.00	1.46	5.04	5.21	6.50	7.88	1.33	17.75	44.67	102.7	68.04	669.0	43.54	49.38	44.33
2048/16	$-10^4, 0$	1.00	1.37	4.83	4.97	6.96	8.20	1.21	32.22	88.21	225.3	155.9	1182	74.09	83.46	75.59

Table 70: 50% SPACYC-PD4 and SPACYC-PD2

$ N /\mathbf{deg}$ $[L,U]$	ACC	$\frac{\mathrm{SLU}}{1}$	$\overset{\mathbf{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	$\begin{array}{c} \mathrm{DLU} \\ 22 \end{array}$		BFP	THR ESH		TWO Q		DIK BD	DIK R	DIK BA
$128/32 [0, 10^4]$	1.00	1.50	3.75	4.00	3.00	4.75	1.25	2.00	2.00 2	2.00	2.25	2.00	1.50	2.00	3.75
$256/64 [0, 10^4]$	1.13	1.61	3.00	3.19	3.26	4.74	1.29	2.68	2.10°	2.87	3.00	1.35	1.00	1.26	1.55
$512/128 [0, 10^4]$	1.51	1.97	3.31	3.44	6.07	7.66	1.52	3.59	2.674	1.58	4.66	1.26	1.00	1.15	1.19
$128/64 [0, 10^4]$	1.00	1.12	2.62	2.75	2.12	3.62	1.12	2.00	1.75°	2.12	2.12	1.12	1.00	1.25	2.12
$256/128 [0, 10^4]$	1.43	1.55	2.62	2.81	3.32	4.68	1.43	3.04	$2.62\ 3$	3.51	3.40	1.21	1.00	1.17	1.26
$512/256 [0, 10^4]$	1.75	1.83	2.83	2.94	5.68	6.79	1.67	3.65	3.104	1.70	4.60	1.16	1.00	1.10	1.13
$1024/256 [0, 10^4]$	1.74	3.83	4.98	5.09	12.52	13.13	1.65	4.12	$3.15 \ 6$	6.06	5.84	1.16	1.00	1.10	1.07
$2048/512 [0, 10^4]$	1.75	3.98	4.71	4.78	11.91	12.24	1.65	4.31	$3.25 \ 6$	80.6	5.95	1.07	1.00	1.03	1.05
$1024/512 [0, 10^4]$	1.88	3.90	4.71	4.79	11.17	11.58	1.74	3.98	$3.35\ 5$	5.55	5.38	1.06	1.00	1.06	1.07
$2048/1024 [0, 10^4]$	1.79	2.87	3.37	3.42	8.72	8.88	1.69	4.04	$3.47\ 5$	5.33	5.16	1.02	1.00	1.02	1.05

Table 71: 50% SPACYC-ND4 and SPACYC-ND2

$ N /\mathbf{deg}$	[L, U]	ACC		$\frac{\mathbf{SLU}}{2}$		DLU 21				THR ESH					DIK E R	
128/32 [$[-10^4, 0]$	1.00	1.75	3.75	4.25	3.00	4.50	1.25	4.25	10.50	23.25	10.50	202.0	10.25	11.75 10	0.75
256/64 [$[-10^4, 0]$	1.00	1.24	2.34	2.51	2.71	3.59	1.07	5.85	15.15	38.02	17.10	207.5	13.02	$14.27\ 13$	3.39
512/128 [$[-10^4, 0]$	1.00	1.25	2.12	2.19	3.90	4.70	1.04	11.64	35.15	263.7	64.63	785.4	29.22	30.40 29	9.56
128/64 [$[-10^4, 0]$	1.00	1.00	1.91	2.00	2.00	2.45	1.09	3.09	7.91	19.00	8.18	122.5	6.91	7.73	7.18
256/128 [$[-10^4, 0]$	1.00	1.05	1.68	1.84	2.33	2.93	1.03	6.07	17.13	52.51	20.59	215.7	14.99	$15.93 \ 13$	5.39
512/256 [$[-10^4, 0]$	1.02	1.00	1.57	1.63	3.11	3.58	1.06	12.18	38.93	348.5	81.39	1644	33.30	$33.87 \ 33$	3.37
1024/256 [$[-10^4, 0]$	1.00	2.00	2.70	2.80	7.08	6.84	1.03	21.09	64.89	744.7	190.8	2611	53.89	55.0954	4.07

Table 72: 50% SPACYC-P2N128 and SPACYC-P2N1024

	[L, U]	ACC	$\overline{\text{SLU}}$	$\overline{\text{SLU}}$	$\overline{\text{SLU}}$	$\overline{\mathbf{DLU}}$	DLU	GOR	BFP	THR	PA	TWO	DIK	DIK	DIK	DIK
$ N /\mathbf{deg}$	×1000		1	2	3	21	22	1		ESH	\mathbf{PE}	Q	Н	BD	\mathbf{R}	$\mathbf{B}\mathbf{A}$
128/16	[0, 10]	1.70	2.80	7.60	7.95	4.70	7.75	1.95	1.05	1.45	1.00	1.00	3.10	2.75	4.95	8.00
	[-1, 9]	1.58	2.38	6.42	6.67	3.67	6.38	1.88	1.08	1.38	1.12	1.00	3.08	2.12	3.62	6.38
	[-2, 8]	1.00	1.61	4.33	4.44	2.67	4.31	1.11	1.00	1.39	1.06	1.03	3.36	1.97	2.78	5.53
	[-3, 7]	1.00	1.41	3.73	3.93	2.37	3.95	1.15	1.22	1.71	1.54	1.41	5.49	2.44	3.10	5.17
	[-4, 6]	1.00	1.51	3.97	4.21	2.38	3.90	1.18	2.23	3.79	3.59	3.05	17.87	4.79	5.77	7.28
	[-5, 5]	1.00	1.54	4.19	4.43	2.65	4.35	1.19	3.03	5.51	5.51	4.38	36.65	6.62	8.30	9.38
	[-6, 4]	1.00	1.66	4.43	4.69	2.80	4.49	1.20	4.37	8.63	9.71	7.54	45.60	10.26	12.49	13.37
	[-10, 0]	1.00	1.53	4.13	4.26	2.61	4.03	1.18	5.71	12.03	15.18	10.76	87.18	14.32	17.37	16.37
1024/16	[0, 10]	1.72	2.33	7.89	8.00	8.72	11.67	1.56	1.06	1.06	1.00	1.06	3.00	1.89	3.56	2.28
	[-1, 9]	1.36	1.95	6.45	6.68	7.09	9.41	1.45	1.14	1.00	1.14	1.14	2.82	1.45	2.59	1.77
	[-2, 8]	1.00	1.34	4.44	4.59	4.97	6.47	1.06	1.53	1.66	1.81	1.72	6.59	2.16	2.91	2.69
	[-3, 7]	1.00	1.57	5.14	5.25	5.79	7.61	1.18	4.18	6.68	8.21	6.64	41.39	8.07	10.07	8.75
	[-4, 6]	1.12	1.77	5.69	5.73	6.46	8.04	1.00	10.92	23.08	32.73	23.19	161.7	28.15	31.92	28.62
	[-5, 5]	1.00	1.67	5.33	5.59	6.52	8.26	1.22	22.70	48.74	72.70	55.59	419.4	57.96	66.48	60.07
	[-6, 4]	1.00	1.50	4.77	5.00	5.73	7.40	1.17	27.53	66.10	110.3	84.73	617.2	76.73	87.87	79.80
	[-10, 0]	1.00	1.56	5.33	5.52	6.19	7.78	1.22	43.04	106.8	211.1	121.3	2267	129.2	147.8	132.2

Table 73: 100% SPGRID-SQ

Grid/deg										TWO Q			DIK R	
$\frac{10x10/3}{}$	5.67	15.92	16.00	5.83	10.00	4.50	1.42	3.67	1.17	1.00	8.25	6.58	11.83	31.75
20x20/3	5.55	13.97	13.71	3.80	5.24	4.95	1.18	2.56	1.06	1.00	8.13	4.54	9.63	12.69
30x30/3	4.94	12.51	12.21	3.74	4.73	4.56	1.13	2.02	1.05	1.00	6.83	3.30	7.21	6.61
40x40/3	5.87	16.23	15.63	10.67	13.25	4.58	1.11	2.15	1.05	1.00	7.25	3.27	7.20	5.32
50x50/3	5.65	13.43	12.82	4.45	6.02	5.15	1.14	2.02	1.03	1.00	7.10	3.12	6.83	4.54
60x60/3	5.99	14.65	14.10	4.86	5.58	4.97	1.12	1.94	1.03	1.00	6.90	2.90	6.35	3.80
70x70/3	6.73	16.09	15.43	5.50	6.14	4.81	1.14	2.12	1.04	1.00	7.38	3.03	6.61	3.72
80x80/3	8.81	19.94	18.51	9.44	10.44	5.53	1.15	2.10	1.04	1.00	7.52	2.96	6.57	3.49
90x90/3	9.48	19.46	18.55	14.10	14.64	5.07	1.20	1.97	1.02	1.00	6.58	2.59	5.61	2.87
$100 \times 100/3$	12.08	22.39	21.10	8.71	9.01	4.72	1.14	2.26	1.04	1.00	7.79	3.05	6.54	3.24

Table 74: 100% SPGRID-WL

Grid/deg										TWO Q				
16x64/3	5.56	13.58	13.07	3.42	4.20	4.40	1.12	2.05	1.02	1.00	6.01	3.76	8.34	9.33
16x128/3	5.62	14.08	14.05	3.35	3.80	5.26	1.11	1.98	1.16	1.00	5.72	3.63	8.25	8.04
16x256/3	5.67	15.47	15.04	4.36	4.59	4.89	1.11	2.05	1.04	1.00	5.78	3.72	8.60	7.96
16x512/3	7.00	17.12	16.48	3.68	3.43	5.36	1.12	2.01	1.04	1.00	5.50	3.58	8.39	7.24
64x16/3	3.95	10.42	10.25	3.36	4.37	6.09	1.14	2.25	1.04	1.00	8.60	3.24	6.71	5.48
128x16/3	3.38	9.29	8.88	3.22	4.08	4.76	1.15	2.00	1.03	1.00	8.51	2.92	5.79	3.70
256x16/3	3.39	9.70	9.36	4.46	5.87	4.97	1.16	1.92	1.04	1.00	9.73	3.01	5.75	3.28
512x16/3	3.35	10.02	9.76	4.49	5.60	5.03	1.16	1.78	1.03	1.00	10.99	3.08	5.68	3.08

Table 75: 100% SPGRID-PH

Grid											TWO Q				
16:	x32/5	5.52	11.76	12.04	9.27	13.76	1.93	1.15	1.00	1.95	1.50	3.19	6.40	4.58	2.02
32:	x32/6	3.97	7.50	7.69	11.37	14.46	1.39	1.44	1.19	4.20	2.46	1.84	4.06	2.44	1.00
											5.12				
128:	x32/8	9.54	13.27	13.56	19.90	23.48	1.79	6.49	3.03	21.13	9.76	1.95	3.46	2.36	1.00
256	x32/8	14.31	18.16	18.33	25.41	28.80	2.29	13.78	3.68	25.86	12.06	1.94	3.30	2.31	1.00

Table 76: 100% SPGRID-NH

										TWO				
$\frac{\text{Grid}}{\text{deg}}$	1	2	3	21	22	1		ESH	PE	Q	н	BD	К	ВА
16x32/5	7.97	16.99	17.48	13.55	19.98	2.54	1.02	1.22	1.02	1.00	4.50	2.12	4.20	3.58
32x32/6	8.42	15.66	15.98	23.41	30.08	2.13	1.07	1.00	1.10	1.10	3.50	1.45	2.73	1.91
64x32/7	10.80	17.46	17.86	29.46	35.69	1.94	1.17	1.00	1.23	1.22	3.17	1.21	2.17	1.35
128x32/8	16.15	22.69	23.01	34.92	40.37	1.83	1.18	1.00	1.20	1.20	3.00	1.04	1.83	1.11

Table 77: 100% SPRAND-S4 and SPRAND-S16

$ N /\mathbf{deg}$	$_{1}^{\mathrm{SLU}}$			DLU 21						TWO Q			DIK R	
128/4	8.33	15.33	16.00	6.67	10.00	3.67	1.00	1.67	1.00	1.00	6.00	4.67	9.33	11.33
256/4	12.77	22.00	22.69	13.54	17.54	4.15	1.08	1.31	1.08	1.00	6.15	5.15	9.08	4.46
512/4	13.91	22.06	22.32	17.91	21.86	3.56	1.25	1.00	1.23	1.23	4.65	5.07	6.33	2.28
1024/4									1.71	1.74	4.14	4.29	5.17	1.86
2048/4	100.32	116.10	114.46	135.51	141.57	3.10	1.88	1.00	2.18	2.10	3.09	4.00	3.55	1.05
128/16											2.67	2.33	3.67	3.67
256/16	21.20	27.38	27.22	21.29	25.49	3.02	1.31	1.00	1.36	1.36	2.58	2.31	3.29	2.20
512/16	76.60	87.97	80.42	52.28	59.71	3.22	1.43	1.00	1.67	1.65	2.53	2.51	3.08	1.62
1024/16	140.01	152.01	152.90	132.95	139.23	2.88	1.44	1.00	1.96	1.94	1.98	2.03	2.31	1.19
2048/16	243.73	259.72	258.62	242.47	250.13	2.82	1.66	1.21	2.91	2.71	1.72	1.90	1.91	1.00

Table 78: 100% SPRAND-D4 and SPRAND-D2

$ N /\mathbf{deg}$										TWO Q		DIK BD		
128/32	6.89	9.47	9.74	8.26	9.95	2.63	1.11	1.00	1.21	1.16	1.74	1.53	2.26	2.00
128/64	4.17	5.34	5.24	4.73	5.66	2.37	1.15	1.00	1.32	1.29	1.15	1.02	1.37	1.37
256/64	10.64	12.58	12.42	9.55	11.10	2.48	1.25	1.00	1.58	1.55	1.14	1.07	1.30	1.04
256/128	6.98	8.06	8.07	5.97	6.83	2.79	1.53	1.31	2.14	2.10	1.03	1.00	1.14	1.03
512/128	23.52	25.69	25.69	13.29	14.10	3.01	1.84	1.50	3.15	2.99	1.05	1.07	1.13	1.00
512/256	13.78	14.75	14.66	7.58	8.30	3.47	2.29	1.95	4.76	4.22	1.01	1.03	1.04	1.00
1024/256	26.85	28.61	28.18	20.93	21.53	3.81	3.13	2.56	8.48	6.76	1.00	1.09	1.04	1.03
1024/512	13.81	15.08	14.92	11.31	11.50	4.43	4.24	3.45	13.07	10.18	1.00	1.11	1.04	1.08
2048/512	16.31	17.39	16.97	13.29	13.51	3.94	4.95	3.72	17.29	13.01	1.01	1.07	1.00	1.09
2048/1024	9.18	9.65	9.61	7.42	7.42	5.25	8.03	5.61	31.10	20.28	1.03	1.07	1.00	1.14

Table 79: 100% SPRAND-LENS4

-		SLU	SLU	SLU	DLU	DLU	GOR	BFP	THR.	PA	TWO	DIK	DIK	DIK	DIK
$ N /\mathbf{deg}$	[L, U]	1	2				1			$\overrightarrow{\mathbf{PE}}$	T '' Q		BD		BA
256/4	[1, 1]	3.64	6.52	6.55	3.50	4.76	2.74	5.19	4.48	9.02	7.83	2.24	1.00	2.00	1.67
	[0, 10]										3.25	2.09	1.00	2.05	1.41
	$[0, 10^2]$	5.57	9.57	9.87	5.77	7.43	2.43	1.37	1.00	1.67	1.50	2.90	1.93	3.30	
	$[0, 10^4]$	12.46	21.92	22.00	12.46	16.31	3.92	1.08	1.31	1.00	1.00	6.15	5.31	9.00	4.00
	$[0, 10^6]$	12.31	21.00	21.46	12.38	16.15	4.23	1.08	1.31	1.08	1.00	6.23	9.08	11.62	6.23
1024/4	[1, 1]	18.16	24.14	24.17	30.27	32.95	4.43	34.86	22.71	53.96	65.31	2.52	1.00	2.00	3.69
	[0, 10]	17.13	22.77	22.69	28.88	30.86	3.59	21.40	14.09	26.51	26.75	2.20	1.00	1.88	1.04
	$[0, 10^2]$	19.70	26.31	26.28	33.31	35.75	3.50	4.63	3.11	6.57	5.44	2.60	1.60	2.55	1.00
	$[0, 10^4]$	35.72	47.20	46.93	61.46	65.95	3.72	1.71	1.00	1.74	1.74	4.11	4.28	5.13	1.67
	$[0, 10^6]$	42.92	56.79	56.65	72.57	78.18	3.58	1.17	1.10	1.00	1.00	4.72	4.93	7.38	1.86

Table 80: 100% SPRAND-LEND4

$ N /\mathbf{deg}$	[L, U]	SLU 1			DLU 21					PA PE	TWO Q		DIK BD		
256/64	[1, 1]	6.96	8.21	8.14	6.29	7.29	3.14	7.68	7.43	36.68	23.82	1.00	1.07	1.07	1.64
	[0, 10]	7.04	8.32	8.29	6.32	7.29	2.64	4.54	3.64	17.71	11.61	1.00	1.11	1.07	1.18
	$[0, 10^2]$	7.88	9.24	9.20	7.08	8.16	2.40	2.16	1.88	6.00	4.60	1.00	1.08	1.08	1.16
	$[0, 10^4]$	10.72	12.72	12.78	9.72	11.11	2.50	1.28	1.00	1.67	1.61	1.11	1.06	1.33	1.06
	$[0, 10^6]$	9.14	10.90	10.67	8.29	9.67	2.14	1.10	1.05	1.38	1.33	1.00	1.52	1.24	1.00
1024/256	[1, 1]	17.76	19.19	18.98	14.06	14.49	5.21	40.43	38.78	357.35	239.22	1.00	1.29	1.02	18.35
	[0, 10]	17.38	18.73	18.58	14.10	14.43	4.35	20.26	17.01	222.59	122.42	1.00	1.29	1.01	4.25
	$[0, 10^2]$	19.69	21.08	20.88	15.25	15.73	4.06	9.57	7.37	83.21	41.99	1.00	1.27	1.02	1.51
	$[0, 10^4]$	25.20	26.86	26.89	20.03	20.62	3.89	3.16	2.58	8.03	6.79	1.00	1.10	1.04	1.05
	$[0, 10^6]$	29.12	31.43	30.74	23.26	24.16	3.80	1.96	2.08	2.81	2.82	1.07	1.21	1.15	1.00

Table 81: 100% SPRAND-PS4

$ N /\mathbf{deg}$	Р	$\frac{\mathrm{SLU}}{1}$	$\overset{\mathbf{SLU}}{2}$						THR ESH		TWO Q		DIK BD		DIK BA
256/4	0	11.85	21.08	21.00	11.00	15.38	3.92	1.08	1.31	1.00	1.00	6.08	5.38	9.08	5.08
	10^{4}	12.69	22.15	22.85	13.38	17.31	4.23	1.08	1.31	1.00	1.00	6.38	4.46	8.46	5.38
	10^{5}	12.54	21.92	22.38	12.23	16.38	4.00	1.08	2.15	1.08	1.00	12.85	5.46	8.92	6.92
	10^{6}	13.08	23.00	23.17	13.33	17.50	4.42	1.08	3.50	1.00	1.08	24.92	8.00	11.33	7.92
1024/4	0	34.80	45.83	45.86	61.31	61.96	3.63	1.72	1.00	1.77	1.78	4.04	4.23	5.08	1.66
	10^{4}	35.03	46.26	45.97	57.61	62.45	3.63	1.66	1.00	1.72	1.73	4.11	3.90	4.77	1.69
	10^{5}	28.36	37.07	36.95	48.31	51.55	2.79	1.27	1.00	1.29	1.30	4.66	3.36	3.49	1.59
	10^{6}	21.45	28.26	28.23	36.19	38.56	2.14	1.00	1.96	1.00	1.01	11.42	3.54	4.42	2.84

Table 82: 100% SPRAND-PD4

$ N /\mathbf{deg}$		SLU 1					GOR 1				TWO Q		DIK BD		DIK BA
256/64	0	10.72	12.67	12.56	9.61	11.11	2.50	1.22	1.00	1.50	1.50	1.17	1.11	1.33	1.00
			10.00		7.65	8.78	2.00	1.00	1.00	1.26	1.22				
	10^{5}	8.77	10.36	10.27	7.82	8.91	2.05	1.00	1.82	1.32	1.27	2.95	1.95	2.09	1.91
	10^{6}	8.77	10.23	10.18	7.95	9.18	2.09	1.00	1.91	1.27	1.23	3.27	2.14	2.18	2.00
1024/256	0	25.00	27.04	26.82	19.97	21.84	3.89	3.21	2.64	8.54	7.13	1.00	1.09	1.05	1.04
	10^{4}	15.35	16.51	16.41	12.69	12.29	2.29	1.85	1.61	5.01	4.10	1.05	1.03	1.01	1.00
	10^{5}	7.92	8.55	8.49	6.31	6.53	1.24	1.00	1.63	2.57	2.15	2.12	1.76	1.74	1.72
	10^{6}	7.67	8.32	8.26	6.23	6.42	1.20	1.00	2.14	2.69	2.22	2.89	2.05	2.04	2.02

Table 83: 100% NETGEN-S4 and NETGEN-S16

$ N /\mathbf{deg}$										TWO Q			DIK R	
128/4	12.50	24.00	24.50	11.00	13.50	6.00	1.50	2.50	2.00	1.00	8.50	6.50	14.00	17.50
256/4	12.42	22.08	22.25	11.17	15.00	4.67	1.08	1.42	1.08	1.00	6.50	4.25	9.33	7.75
512/4	17.21	26.94	27.17	22.93	27.38	4.11	1.13	1.14	1.00	1.01	5.15	3.13	6.56	3.54
1024/4	49.29	63.71	62.79	82.68	88.45	3.58	1.18	1.05	1.00	1.00	4.50	2.34	5.11	1.97
2048/4	149.55	172.20	167.88	190.08	201.69	3.79	1.20	1.08	1.00	1.01	4.62	2.02	4.75	1.54
128/16	8.44	12.44	12.56	8.89	11.78	3.00	1.33	1.00	1.44	1.33	2.78	2.33	3.44	3.56
256/16	14.44	19.25	19.42	15.58	18.85	2.94	1.38	1.00	1.48	1.48	2.40	1.75	2.81	2.04
512/16	53.09	63.26	63.15	45.51	52.70	3.53	1.55	1.00	1.76	1.74	2.57	1.67	2.82	1.69
1024/16	130.49	138.54	139.15	125.44	132.02	3.38	1.62	1.00	1.85	1.83	2.35	1.36	2.39	1.30
2048/16	263.59	290.99	288.43	278.51	288.71	3.59	1.66	1.00	1.92	1.93	2.43	1.24	2.24	1.17

Table 84: 100% NETGEN-D4 and NETGEN-D2

$ N /\mathbf{deg}$						GOR 1				$\mathop{\rm TWO}_{\mathbf{Q}}$			DIK R	
128/32	4.57	6.39	6.48	5.30	6.39	2.17	1.09	1.00	1.30	1.30	1.43	1.30	1.78	1.70
256/64	9.95	11.99	11.84	9.03	10.44	2.74	1.47	1.45	1.95	1.95	1.25	1.00	1.33	1.11
512/128	26.02	28.35	28.15	15.07	16.66	3.60	1.98	2.16	3.02	2.96	1.20	1.00	1.19	1.08
1024/256											1.07	1.00	1.07	1.02
2048/512	19.42	20.25	20.27	15.96	16.31	4.31	2.62	3.02	3.92	3.80	1.05	1.04	1.04	1.00
128/64	2.98	4.02	4.05	3.37	4.05	2.37	1.30	1.33	1.65	1.63	1.09	1.00	1.26	1.33
256/128	7.92	9.26	9.28	6.69	7.66	3.33	1.84	2.08	2.79	2.70	1.16	1.00	1.21	1.14
512/256	14.59	17.17	15.92	8.66	9.54	3.96	2.30	2.62	3.87	3.72	1.12	1.00	1.10	1.03
1024/512	13.47	14.58	14.76	10.97	11.40	4.14	2.50	2.92	4.49	4.30	1.00	1.00	1.04	1.02

Table 85: 100% NETGEN-LENS4

$ N /\mathbf{deg}$	[L, U]	SLU 1	$\frac{\mathrm{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	DLU 22	GOR 1	BFP	THR ESH	PA PE	TWO Q	DIK H	DIK BD	DIK R	
256/4	[0, 10]	13.17	22.67	23.42	11.33	16.50	4.33	1.17	1.42	1.00	1.08	6.42	1.83	3.58	1.67
	$[0, 10^2]$	12.50	22.25	22.58	11.00	15.42	4.25	1.08	1.42	1.08	1.00	6.42	2.42	5.67	2.08
	$[0, 10^4]$	12.92	22.50	22.83	12.08	16.33	4.50	1.17	1.42	1.08	1.00	6.42	4.33	9.33	7.08
	$[0, 10^6]$	13.82	24.82	25.00	13.64	18.55	4.55	1.27	1.55	1.00	1.18	7.27	11.09	13.73	8.91
1024/4	[0, 10]	41.72	54.82	55.00	70.94	76.31	3.66	1.20	1.07	1.00	1.01	4.40	1.27	2.21	1.20
	$[0, 10^2]$	39.40	52.07	52.25	62.98	68.22	3.68	1.20	1.04	1.01	1.00	4.40	1.46	2.93	1.24
	$[0, 10^4]$	43.67	57.15	56.94	68.91	76.35	3.70	1.19	1.07	1.00	1.01	4.46	2.39	5.14	2.00
	$[0, 10^6]$	42.30	55.59	55.63	65.38	70.22	3.72	1.19	1.08	1.00	1.00	4.55	4.45	7.03	2.21

Table 86: 100% NETGEN-LEND4

$ N /\mathbf{deg}$	[L, U]	SLU 1	$\overset{\mathbf{SLU}}{\overset{2}{2}}$	$\frac{\mathrm{SLU}}{3}$	DLU 21	DLU 22	GOR 1	BFP	THR ESH	PA PE	TWO Q			DIK R	
256/64	[0, 10]	12.29	14.86	14.79	11.29	13.14	2.43	1.14	1.29	1.14	1.14	1.29	1.00	1.07	1.00
	$[0, 10^2]$	10.87	13.07	12.87	10.07	11.47	3.20	1.80	1.80	2.33	2.20	1.33	1.00	1.13	1.00
	$[0, 10^4]$	10.00	12.07	12.13	8.93	10.47	3.07	1.73	1.73	2.33	2.27	1.40	1.07	1.40	1.00
	$[0, 10^6]$	8.10	9.70	9.80	7.30	8.55	2.25	1.30	1.30	1.75	1.70	1.00	1.55	1.30	1.05
1024/256	[0, 10]	30.56	32.76	32.49	24.12	24.93	2.21	1.03	1.13	1.05	1.05	1.00	1.00	1.04	1.00
	$[0, 10^2]$	28.89	31.53	31.29	23.33	24.05	3.84	2.40	2.79	2.93	2.88	1.06	1.00	1.04	1.01
	$[0, 10^4]$	28.62	30.48	30.14	22.55	23.43	4.02	2.28	2.59	3.86	3.78	1.08	1.00	1.09	1.04
	$[0, 10^6]$	27.97	30.20	29.78	22.81	23.29	3.84	2.19	2.52	3.78	3.71	1.06	1.11	1.16	1.00

Table 87: 100% SPACYC-PS4 and SPACYC-PS16

$ N /\mathbf{deg}$ $[L, U]$	ACC	$rac{\mathbf{SLU}}{1}$	$\frac{\mathbf{SLU}}{2}$	$\frac{\mathbf{SLU}}{3}$	$\begin{array}{c} \mathbf{DLU} \\ 21 \end{array}$	$\begin{array}{c} \mathbf{DLU} \\ 22 \end{array}$		BFP	THR ESH		TWO Q	DIK H	DIK BD		DIK BA
$128/4 [0, 10^4]$	1.00	1.33	6.67	6.67	2.00	4.67	2.00	1.33	2.33	1.00	1.33	3.00	2.33	3.67	7.33
$256/4 [0, 10^4]$	1.00	1.21	6.14	6.43	2.14	5.00	1.43	1.57	1.71	1.50	1.50	3.00	1.29	2.79	3.43
$512/4 [0, 10^4]$	1.00	1.33	7.00	7.16	2.79	5.91	1.35	2.61	2.21	2.33	2.53	3.53	1.26	2.82	2.33
$1024/4 \ [0, 10^4]$	1.00	1.32	7.20	7.40	3.76	6.80	1.12	2.84	2.08	2.40	2.60	3.16	1.08	2.36	1.60
$2048/4 [0, 10^4]$	1.00	1.28	7.78	8.08	4.25	7.45	1.26	3.45	2.30	2.72	3.00	3.53	1.05	2.25	1.17
$128/16 [0, 10^4]$	1.00	1.60	5.00	5.20	2.80	5.40	1.40	2.20	2.00	2.40	2.40	2.60	2.00	2.60	5.00
$256/16 \ [0, 10^4]$	1.00	1.58	4.83	5.04	3.04	5.29	1.21	2.42	2.08	2.58	2.67	2.33	1.38	2.21	2.71
$512/16 \ [0, 10^4]$	1.00	1.41	4.44	4.57	3.52	5.71	1.11	2.66	1.93	2.76	2.96	2.12	1.07	1.71	1.53
$1024/16 \ [0, 10^4]$	1.00	1.44	4.68	4.84	5.60	7.30	1.14	3.02	2.00	3.30	3.38	2.16	1.00	1.60	1.30
$2048/16 [0, 10^4]$	1.09	1.43	5.06	5.20	6.82	8.73	1.17	3.69	2.41	3.97	4.16	2.33	1.00	1.56	1.15

Table 88: 100% SPACYC-NS4 and SPACYC-NS16

$ N /\mathbf{deg}$	[L, U]	ACC	$_{1}^{\mathrm{SLU}}$	$\frac{\mathbf{SLU}}{2}$		DLU 21	DLU 22	GOR 1		THR ESH	PA PE	TWO Q	DIK H	DIK BD	DIK R	DIK BA
128/4 [$[-10^4, 0]$	1.00	1.00	6.00	5.67	2.67	4.00	1.33	2.33	4.67	2.33	3.00	35.33	5.33	7.33	5.67
256/4 [$-10^4, 0$	1.00	1.55	8.00	8.09	2.82	6.27	1.55	3.45	6.91	5.00	5.64	62.55	9.64	12.55	9.82
512/4 [$[-10^4, 0]$	1.00	1.39	7.41	7.61	2.94	6.20	1.26	7.91	14.30	12.26	10.89	83.15	18.93	22.87	19.31
1024/4 [$[-10^4, 0]$	1.00	1.45	8.23	8.41	4.50	7.77	1.41	12.59	21.14	22.64	20.50	327.77	27.55	33.36	28.18
2048/4 [$[-10^4, 0]$	1.00	1.41	8.47	8.75	4.67	8.19	1.29	27.19	44.07	62.52	43.85	842.48	55.19	65.66	56.04
128/16 [$[-10^4, 0]$	1.00	1.67	4.33	4.50	3.00	4.50	1.17	4.00	8.83	9.67	8.50	78.50	9.50	11.17	9.83
256/16 [$[-10^4, 0]$	1.00	1.46	4.18	4.43	2.79	4.68	1.07	5.82	12.14	19.39	13.43	215.89	13.29	15.75	13.82
512/16 [$[-10^4, 0]$	1.00	1.47	4.63	4.72	3.84	5.93	1.31	7.98	20.49	38.71	26.52	442.92	20.57	23.79	21.20
1024/16 [$[-10^4, 0]$	1.00	1.43	4.73	4.84	5.84	7.37	1.10	16.88	45.86	119.8	69.61	1242.4	42.27	48.12	43.20
2048/16 [$[-10^4, 0]$	1.00	1.35	4.82	4.94	6.84	8.18	1.14	30.53	82.70	179.0	129.8	1755.7	73.36	83.11	75.13

Table 89: 100% SPACYC-PD4 and SPACYC-PD2

$ N /\mathbf{deg}$ $[L,U]$	ACC	$\frac{\mathrm{SLU}}{1}$	$\frac{\mathrm{SLU}}{2}$	$\frac{\mathrm{SLU}}{3}$	$\begin{array}{c} \rm DLU \\ 21 \end{array}$	$\frac{\mathrm{DLU}}{22}$		BFP	THR PA			DIK BD	DIK R	DIK BA
128/32 [0, 10 ⁴]	1.00	1.67	3.56	3.67	2.78	4.00	1.11	2.11	2.11 2.00	2.33	1.67	1.22	1.89	2.89
$256/64 [0, 10^4]$	1.16	1.49	2.94	3.12	3.25	4.70	1.15	2.58	$1.99\ 3.03$	3 2.99	1.27	1.00	1.24	1.49
$512/128 [0, 10^4]$	1.54	1.94	3.30	3.44	6.00	7.65	1.53	3.51	$2.69\ 4.58$	4.56	1.27	1.00	1.15	1.17
$1024/256 [0, 10^4]$	1.77	3.85	5.03	5.15	12.69	13.29	1.68	4.19	3.12 5.96	5.90	1.15	1.00	1.09	1.07
$2048/512 [0, 10^4]$	1.75	3.95	4.70	4.76	11.88	12.21	1.65	4.30	3.23 5.9	7 5.85	1.07	1.00	1.03	1.05
$128/64 \ [0, 10^4]$	1.12	1.31	2.44	2.50	2.38	3.38	1.00	1.94	1.81 2.06	5 2.12	1.19	1.12	1.31	2.12
$256/128 [0, 10^4]$	1.50	1.50	2.63	2.72	3.37	4.58	1.40	2.94	$2.47 \ 3.3$	7 3.37	1.19	1.00	1.17	1.29
$512/256 [0, 10^4]$	1.75	1.81	2.80	2.93	5.58	6.81	1.66	3.81	3.13 5.00	4.84	1.17	1.00	1.09	1.11
$1024/512 [0, 10^4]$	1.88	3.88	4.70	4.77	11.11	11.54	1.74	3.86	$3.34 \ 5.51$	1 - 5.40	1.06	1.00	1.05	1.09
$2048/1024 [0, 10^4]$	1.78	2.85	3.32	3.36	8.67	8.83	1.69	4.09	3.51 5.32	5.11	1.02	1.00	1.01	1.05

Table 90: 100% SPACYC-ND4 and SPACYC-ND2

1221 (2		ACC											DIK			
$ N /\mathbf{deg}$	[L, U]		1	2	3	21	22	1		ESH	PE	Q	H	BD	R	BA
128/32 [$[-10^4, 0]$	1.00	1.18	3.00	3.00	2.27	3.64	1.00	3.36	7.55	11.00	7.27	70.82	7.36	8.73	7.82
256/64 [$[-10^4, 0]$												341.90			
512/128 [$[-10^4, 0]$												616.51			
1024/256 [$[-10^4, 0]$												5269			
128/64 [$[-10^4, 0]$												78.62			
256/128 [$[-10^4, 0]$												231.81			
512/256 [$[-10^4, 0]$	1.00	1.02	1.58	1.61	2.99	3.52	1.02	11.70	37.64	166.4	76.76	613.97	30.51	31.27	30.73
1024/512 [$[-10^4, 0]$	1.00	1.95	2.43	2.48	5.78	5.99	1.03	22.09	74.89	761.8	206.6	4031	66.13	66.85	66.17

Table 91: 100% SPACYC-P2N128 and SPACYC-P2N1024

	[L, U]	ACC	$\overline{\mathbf{SLU}}$	\mathbf{SLU}	$\overline{\text{SLU}}$	$\overline{\mathrm{DLU}}$	$\overline{\mathrm{DLU}}$	GOR	BFP	THR	PA	TWO	DIK	DIK	DIK	DIK
$ N /\mathbf{deg}$	×1000		1	2	3	21	22	1		ESH	\mathbf{PE}	Q	Н	BD	R	$\mathbf{B}\mathbf{A}$
128/16	[0, 10]	1.90	2.78	7.73	8.10	4.71	7.71	2.10	1.05	1.37	1.00	1.00	3.02	2.95	4.90	7.66
	[-1, 9]	1.39	2.27	6.20	6.51	3.63	6.35	1.78	1.00	1.27	1.00	1.02	2.96	2.20	3.53	6.22
	[-2, 8]	1.00	1.51	4.17	4.34	2.56	4.14	2.90	1.00	1.34	1.08	1.09	3.86	2.00	2.61	5.35
	[-3, 7]	1.00	1.48	4.01	4.19	2.46	4.11	1.09	1.70	2.41	1.95	1.94	9.78	3.29	4.03	6.08
	[-4, 6]	1.00	1.53	4.10	4.31	2.54	4.19	1.05	2.47	3.90	3.56	3.28	13.37	5.12	6.38	7.85
	[-5, 5]	1.00	1.51	4.06	4.24	2.57	4.16	1.09	3.05	5.38	4.43	4.72	34.03	6.78	8.41	9.53
	[-6, 4]	1.00	1.48	4.11	4.27	2.62	4.15	1.16	3.99	7.80	7.34	6.85	43.59	9.27	11.34	12.03
	[-10, 0]	1.00	1.64	4.49	4.67	2.83	4.58	1.18	6.04	12.72	14.60	11.99	92.69	15.28	18.31	15.89
1024/16	[0, 10]	1.71	2.34	7.79	8.03	8.71	11.50	1.66	1.08	1.05	1.05	1.00	2.89	1.84	3.47	2.00
	[-1, 9]	1.38	1.98	6.60	6.76	7.80	9.73	1.49	1.13	1.00	1.13	1.13	2.84	1.53	2.62	1.73
	[-2, 8]	1.00	1.43	4.68	4.86	5.25	6.97	1.14	1.38	1.46	1.70	1.67	5.57	1.86	2.63	2.37
	[-3, 7]	1.00	1.61	4.70	4.81	5.25	6.91	1.11	3.69	5.67	6.55	6.17	30.73	7.33	8.67	7.84
	[-4, 6]	1.00	1.54	5.12	5.24	5.88	7.73	1.20	10.07	19.15	38.80	20.66	129.2	23.03	26.75	23.95
	[-5, 5]	1.00	1.53	5.20	5.25	6.53	7.90	1.27	20.66	49.14	88.80	55.68	542.2	54.08	62.07	55.54
	[-6, 4]	1.00	1.40	4.47	4.65	6.03	7.07	1.06	27.40	72.26	121.1	101.7	667.5	82.01	93.62	84.31
	[-10, 0]	1.00	1.42	4.71	4.78	5.78	7.37	1.06	37.97	94.51	167.4	91.68	814.4	114.8	131.1	117.9