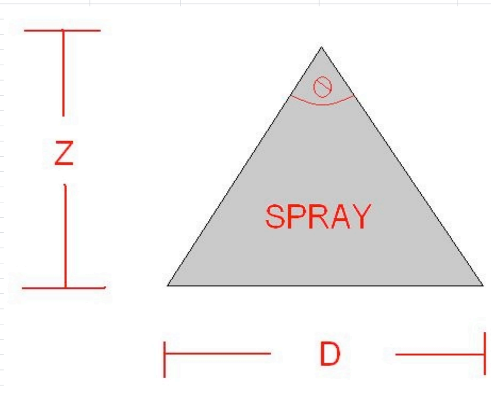
Wide Spray Shaper Specs

Note: Given data is to be used as a reference, actual data may vary



Z-MAX

6.2 (in)

157.48 (mm)

Diameter Calculation

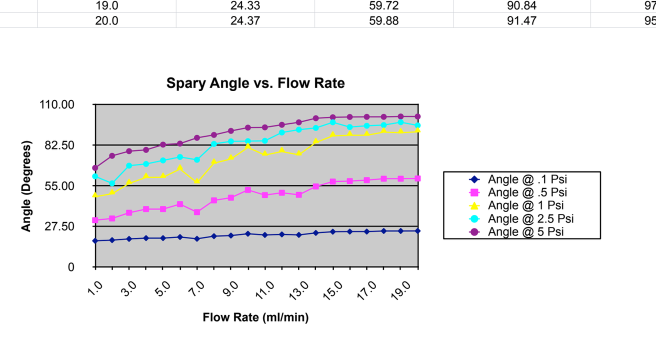
Steps:

1) Choose your Z Height between 0 and Z-MAX
2) Use the chart below to find the angle (According to your flow rate and pressure)
3) Plug into the formula below to find the diameter at your Z-height and spray angle

Enter Z-Height on line Below
0

Enter Angle in radians on line Below
0

Calculated Diameter
0.000

Flow Rate (ml/min)	Power (Watts)	Air Flow (PSI)	Air Flow (Pa)	Air Flow (Bar)	Spray Angle (Degrees)	Spray Angle (Radians)	Spray Diameter (in)	Spray Diameter (mm)	Z Height (in)	Z Height (mm)	Spray Volume (in^3)	Spray Volume (mm^3)	Spray Area (in^2)	Spray Area (mm^2)	Spray Density per minute % Water by Volume
1	4.1	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	50.63
1	4.1	0.1	689.29	0.01	17.68	0.31	0.42	10.67	1.35	34.29	0.06	1021.62	0.14	89.38	97.88
1	4.1	0.2	1378.57	0.01	21.39	0.37	0.51	12.95	1.35	34.29	0.09	1506.37	0.20	131.79	66.38
1	4.1	0.3	2067.86	0.02	24.65	0.43	0.59	14.99	1.35	34.29	0.12	2016.02	0.27	176.38	49.60
1	4.1	0.4	2757.15	0.03	28.27	0.49	0.68	17.27	1.35	34.29	0.16	2677.99	0.36	234.29	37.34
1	4.1	0.5	3446.44	0.03	31.64	0.55	0.77	19.43	1.35	34.29	0.21	3389.33	0.46	296.53	29.50
1	4.1	0.6	4135.72	0.04	34.95	0.61	0.85	21.59	1.35	34.29	0.26	4184.36	0.57	366.09	23.90
1	4.1	0.7	4825.01	0.05	38.20	0.67	0.94	23.75	1.35	34.29	0.31	5063.07	0.69	442.96	19.75
1	4.1	0.8	5514.30	0.06	41.40	0.72	1.02	25.92	1.35	34.29	0.37	6029.69	0.82	527.53	16.58
1	4.1	0.9	6203.58	0.06	44.54	0.78	1.11	28.09	1.35	34.29	0.43	7080.71	0.96	619.48	14.12
1	4.1	1.0	6892.87	0.07	47.53	0.83	1.19	30.20	1.35	34.29	0.50	8187.56	1.11	716.32	12.21
1	4.1	1.5	10339.31	0.10	51.76	0.90	1.31	33.27	1.35	34.29	0.61	9938.79	1.35	869.54	10.06
1	4.1	2.0	13785.74	0.14	55.15	0.96	1.41	35.81	1.35	34.29	0.70	11514.07	1.56	1007.36	8.69
1	4.1	2.5	17232.18	0.17	61.33	1.07	1.60	40.67	1.35	34.29	0.91	14844.77	2.01	1298.75	6.74
1	4.1	3.0	20678.61	0.21	62.92	1.10	1.65	41.96	1.35	34.29	0.96	15805.59	2.14	1382.82	6.33
1	4.1	3.5	24125.05	0.24	63.78	1.11	1.68	42.67	1.35	34.29	1.00	16345.92	2.22	1430.09	6.12
1	4.1	4.0	27571.48	0.28	65.06	1.14	1.72	43.74	1.35	34.29	1.05	17173.43	2.33	1502.49	5.82
1	4.1	4.5	31017.92	0.31	65.27	1.14	1.73	43.92	1.35	34.29	1.06	17313.33	2.35	1514.73	5.78
1	4.1	5.0	34464.35	0.34	67.03	1.17	1.79	45.42	1.35	34.29	1.13	18515.09	2.51	1619.87	5.40
2	5.3	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	98.73
2	5.3	0.1	689.29	0.01	18.14	0.32	0.43	10.95	1.35	34.29	0.07	1075.83	0.15	94.12	14.10
2	5.3	0.2	1378.57	0.01	21.88	0.38	0.52	13.26	1.35	34.29	0.10	1578.09	0.21	138.07	73.26
2	5.3	0.3	2067.86	0.02	25.58	0.45	0.61	15.57	1.35	34.29	0.13	2176.26	0.30	190.40	91.90
2	5.3	0.4	2757.15	0.03	29.23	0.51	0.70	17.88	1.35	34.29	0.18	2870.36	0.39	251.12	69.68
2	5.3	0.5	3446.44	0.03	32.81	0.57	0.80	20.19	1.35	34.29	0.22	3660.37	0.50	320.24	54.64
2	5.3	0.6	4135.72	0.04	36.33	0.63	0.89	22.50	1.35	34.29	0.28	4546.30	0.62	397.75	43.99
2	5.3	0.7	4825.01	0.05	39.79	0.69	0.98	24.82	1.35	34.29	0.34	5528.15	0.75	483.65	36.18
2	5.3	0.8	5514.30	0.06	43.16	0.75	1.07	27.13	1.35	34.29	0.40	6605.92	0.90	577.95	30.28
2	5.3	0.9	6203.58	0.06	46.46	0.81	1.16	29.44	1.35	34.29	0.47	7779.61	1.05	680.63	25.71
2	5.3	1.0	6892.87	0.07	49.54	0.86	1.25	31.65	1.35	34.29	0.55	8991.39	1.22	786.65	22.24
2	5.3	1.5	10339.31	0.10	51.39	0.90	1.30	32.99	1.35	34.29	0.60	9772.58	1.33	854.99	20.47
2	5.3	2.0	13785.74	0.14	53.60	0.94	1.36	34.65	1.35	34.29	0.66	10775.05	1.46	942.70	18.56
2	5.3	2.5	17232.18	0.17	56.57	0.99	1.45	36.91	1.35	34.29	0.75	12227.06	1.66	1069.73	16.36
2	5.3	3.0	20678.61	0.21	62.08	1.08	1.63	41.28	1.35	34.29	0.93	15293.17	2.07	1337.98	13.08
2	5.3	3.5	24125.05	0.24	67.38	1.18	1.80	45.72	1.35	34.29	1.15	18764.45	2.54	1641.68	10.66
2	5.3	4.0	27571.48	0.28	71.00	1.24	1.93	48.92	1.35	34.29	1.31	21483.41	2.91	1879.56	9.31
2	5.3	4.5	31017.92	0.31	71.93	1.26	1.96	49.76	1.35	34.29	1.36	22225.91	3.01	1944.52	9.00
2	5.3	5.0	34464.35	0.34	75.22	1.31	2.08	52.83	1.35	34.29	1.53	25056.33	3.40	2192.15	7.98
3	5.7	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	248.10
3	5.7	0.1	689.29	0.01	18.97	0.33	0.45	11.46	1.35	34.29	0.07	1178.00	0.16	103.06	54.67
3	5.7	0.2	1378.57	0.01	23.52	0.41	0.56	14.27	1.35	34.29	0.11	1829.21	0.25	160.04	35.99
3	5.7	0.3	2067.86	0.02	27.99	0.49	0.67	17.09	1.35	34.29	0.16	2623.14	0.36	229.50	85.63
3	5.7	0.4	2757.15	0.03	32.38	0.57	0.78	19.91	1.35	34.29	0.22	3559.78	0.48	311.44	84.27
3	5.7	0.5	3446.44	0.03	36.68	0.64	0.90	22.73	1.35	34.29	0.28	4639.13	0.63	405.87	67.47
3	5.7	0.6	4135.72	0.04	40.87	0.71	1.01	25.55	1.35	34.29	0.36	5861.20	0.79	512.79	51.18
3	5.7	0.7	4825.01	0.05	44.95	0.78	1.12	28.37	1.35	34.29	0.44	7225.99	0.98	632.19	41.52
3	5.7	0.8	5514.30	0.06	48.91	0.85	1.23	31.19	1.35	34.29	0.53	8733.48	1.18	764.08	34.35
3	5.7	0.9	6203.58	0.06	52.76	0.92	1.34	34.01	1.35	34.29	0.63	10383.69	1.41	908.46	28.89
3	5.7	1.0	6892.87	0.07	56.51	0.99	1.45	36.86	1.35	34.29	0.74	12193.42	1.65	1066.79	24.60
3	5.7	1.5	10339.31	0.10	58.11	1.01	1.50	38.10	1.35	34.29	0.80	13030.87	1.77	1140.06	23.02
3	5.7	2.0	13785.74	0.14	60.92	1.06	1.59	40.34	1.35	34.29	0.89	14604.67	1.98	1277.75	20.54
3	5.7	2.5	17232.18	0.17	68.55	1.20	1.84	46.74	1.35	34.29	1.20	19607.69	2.66	1715.46	15.30
3	5.7	3.0	20678.61	0.21	70.55	1.23	1.91	48.51	1.35	34.29	1.29	21127.96	2.87	1848.47	14.20
3	5.7	3.5	24125.05	0.24	70.58	1.23	1.91	48.54	1.35	34.29	1.29	21150.08	2.87	1850.40	14.18
3	5.7	4.0	27571.48	0.28	71.79	1.25	1.95	49.63	1.35	34.29	1.35	22112.60	3.00	1934.61	13.57
3	5.7	4.5	31017.92	0.31	73.58	1.28	2.02	51.28	1.35	34.29	1.44	23608.23	3.20	2065.46	12.71
3	5.7	5.0	34464.35	0.34	78.35	1.37	2.20	55.88	1.35	34.29	1.71	28030.84	3.80	2452.39	10.70
4	7.8	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	397.46
4	7.8	0.1	689.29	0.01	19.50	0.34	0.46	11.79	1.35	34.29	0.08	1246.89	0.17	109.09	120.80
4	7.8	0.2	1378.57	0.01	24.57	0.43	0.59	14.94	1.35	34.29	0.12	2002.37	0.27	175.19	0.24
4	7.8	0.3	2067.86	0.02	29.55	0.52	0.71	18.08	1.35	34.29	0.18	2935.96	0.40	256.86	63.76
4	7.8	0.4	2757.15	0.03	34.41	0.60	0.84	21.23	1.35	34.29	0.25	4047.65	0.55	354.13	98.82
4	7.8	0.5	3446.44	0.03	39.15	0.68	0.96	24.38	1.35	34.29	0.33	5337.44	0.72	466.97	74.94
4	7.8	0.6	4135.72	0.04	43.75	0.76	1.08	27.53	1.35	34.29	0.42	6805.33	0.92	595.39	58.78
4	7.8	0.7	4825.01	0.05	48.21	0.84	1.21	30.68	1.35	34.29	0.52	8451.32	1.15	739.40	47.33
4	7.8	0.8	5514.30	0.06	52.52	0.92	1.33	33.83	1.35	34.29	0.63	10275.41	1.39	898.99	38.93
4	7.8	0.9	6203.58	0.06	56.67	0.99	1.46	36.98	1.35	34.29	0.75	12277.60	1.66	1074.16	32.58
4	7.8	1.0	6892.87	0.07	60.61	1.06	1.58	40.08	1.35	34.29	0.88	14421.31	1.96	1261.71	27.74
4	7.8	1.5	10339.31	0.10	67.09	1.17	1.79	45.47	1.35	34.29	1.13	18556.53	2.52	1623.49	21.56
4	7.8	2.0	13785.74	0.14	68.61	1.20	1.84	46.79	1.35	34.29	1.20	19650.34	2.66	1719.19	20.36
4	7.8	2.5	17232.18	0.17	69.70	1.22	1.88	47.75	1.35	34.29	1.25	20469.46	2.78	1790.85	19.54
4	7.8	3.0	20678.61	0.21	70.27	1.23	1.90	48.26	1.35	34.29	1.28	20907.30	2.84	1829.16	19.13
4	7.8	3.5	24125.05	0.24	77.32	1.35	2.16	54.86	1.35	34.29	1.65	27020.80	3.66	2364.02	14.80
4	7.8	4.0	27571.48	0.28	78.04	1.36	2.19	55.58	1.35	34.29	1.69	27725.88	3.76	2425.71	14.43
4	7.8	4.5	31017.92	0.31	78.35	1.37	2.20	55.88	1.35	34.29	1.71	28030.84	3.80	2452.39	14.27
4	7.8	5.0	34464.35	0.34	79.23	1.38	2.24	56.77	1.35	34.29	1.77	28929.82	3.92	2531.04	13.83
5	8.1	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	546.83
5	8.1	0.1	689.29	0.01	19.50	0.34	0.46	11.79	1.35	34.29	0.08	1246.89	0.17	109.09	201.00
5	8.1	0.2	1378.57	0.01	24.57	0.43	0.59	14.94	1.35	34.29	0.12	2002.37	0.27	175.19	49.70
5	8.1	0.3	2067.86	0.02	29.55	0.52	0.71	18.08	1.35	34.29	0.18	2935.96	0.40	256.86	29.70
5	8.1	0.4	2757.15	0.03	34.41	0.60	0.84	21.23	1.35	34.29	0.25	4047.65	0.55	354.13	76.47
5	8.1	0.5	3446.44	0.03	39.15	0.68	0.96	24.38	1.35	34.29	0.33	5337.44	0.72	466.97	93.68
5	8.1	0.6	4135.72	0.04	43.75	0.76	1.08	27.53	1.35	34.29	0.42	6805.33	0.92	595.39	73.47
5	8.1	0.7	4825.01	0.05	48.21	0.84	1.21	30.68	1.35	34.29	0.52	8451.32	1.15	739.40	59.16
5	8.1	0.8	5514.30	0.06	52.52	0.92	1.33	33.83	1.35	34.29	0.63	10275.41	1.39	898.99	48.66
5	8.1	0.9	6203.58	0.06	56.67	0.99	1.46	36.98	1.35	34.29	0.75	12277.60	1.66	1074.16	40.72
5	8.1	1.0	6892.87	0.07	60.67	1.06	1.58	40.13	1.35	34.29	0.88	14457.89	1.96	1264.91	34.58
5	8.1	1.5	10339.31	0.10	62.24	1.09	1.63	41.40	1.35	34.29	0.94	15387.42	2.09	1346.23	32.49
5	8.1	2.0	13785.74	0.14	65.60	1.14	1.74	44.20	1.35	34.29	1.07	17534.33	2.38	1534.06	28.52
5	8.1	2.5	17232.18	0.17	72.09	1.26	1.97	49.91	1.35	34.29	1.36	22362.27	3.03	1956.45	22.36
5	8.1	3.0	20678.61	0.21	72.51	1.27	1.98	50.29	1.35	34.29	1.39	22704.98	3.08	1986.44	22.02
5	8.1	3.5	24125.05	0.24	76.28	1.33	2.12	53.85	1.35	34.29	1.59	26029.30	3.53	2277.28	19.21
5	8.1	4.0	27571.48	0.28	79.86	1.39	2.26	57.40	1.35	34.29	1.81	29580.64	4.01	2587.98	16.90
5	8.1	4.5	31017.92	0.31	81.10	1.42	2.31	58.67	1.35	34.29	1.89	30904.00	4.19	2703.76	16.18
5	8.1	5.0	34464.35	0.34	82.79	1.44	2.38	60.45	1.35	34.29	2.00	32805.35	4.45	2870.11	15.24
6	8.6	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	696.20
6	8.6	0.1	689.29	0.01	20.24	0.35	0.48	12.24	1.35	34.29	0.08	1345.50	0.18	117.72	245.93
6	8.6	0.2	1378.57	0.01	26.03	0.45	0.62	15.85	1.35	34.29	0.14	2255.07	0.31	197.29	66.07
6	8.6	0.3	2067.86	0.02	31.68	0.55	0.77	19.46	1.35	34.29	0.21	3398.19	0.46	297.30	23.44
6	8.6	0.4	2757.15	0.03	37.18	0.65	0.91	23.06	1.35	34.29	0.29	4774.88	0.65	417.75	74.34
6	8.6	0.5	3446.44	0.03	42.50	0.74	1.05	26.67	1.35	34.29	0.39	6385.12	0.87	558.63	93.97
6	8.6	0.6	4135.72	0.04	47.64	0.83	1.19	30.28	1.35	34.29	0.50	8228.93	1.12	719.94	72.91
6	8.6	0.7	4825.01	0.05	52.59	0.92	1.33	33.88	1.35	34.29	0.63	10306.29	1.40	901.69	58.22
6	8.6	0.8	5514.30	0.06	57.33	1.00	1.48	37.49	1.35	34.29	0.77	12617.21	1.71	1103.87	47.55
6	8.6	0.9	6203.58	0.06	61.87	1.08	1.62	41.10	1.35	34.29	0.93	15161.70	2.06	1326.48	39.57
6	8.6	1.0	6892.87	0.07	66.26	1.16	1.76	44.75	1.35	34.29	1.10	17980.53	2.44	1573.10	33.37
6	8.6	1.5	10339.31	0.10	69.98	1.22	1.89	48.01	1.35	34.29	1.26	20687.80	2.81	1809.96	29.00
6	8.6	2.0	13785.74	0.14	72.67	1.27	1.99	50.44	1.35	34.29	1.39	22842.79	3.10	1998.49	26.27
6	8.6	2.5	17232.18	0.17	74.42	1.30	2.05	52.07	1.35	34.29	1.49	24338.76	3.30	2129.38	24.65
6	8.6	3.0	20678.61	0.21	75.75	1.32	2.10	53.34	1.35	34.29	1.56	25540.50	3.46	2234.51	23.49
6	8.6	3.5	24125.05	0.24	79.11	1.38	2.23	56.64	1.35	34.29	1.76	28800.53	3.91	2519.73	20.83
6	8.6	4.0	27571.48	0.28	79.36	1.39	2.24	56.90	1.35	34.29	1.77	29059.41	3.94	2542.38	20.65
6	8.6	4.5	31017.92	0.31	81.46	1.42	2.33	59.06	1.35	34.29	1.91	31306.65	4.25	2738.99	19.17
6	8.6	5.0	34464.35	0.34	83.50	1.46	2.41	61.21	1.35	34.29	2.05	33637.59	4.56	2942.92	17.84
7	8.7	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	845.56
7	8.7	0.1	689.29	0.01	19.05	0.33	0.45	11.51	1.35	34.29	0.07	1188.47	0.16	103.98	388.99
7	8.7	0.2	1378.57	0.01	23.68	0.41	0.57	14.38	1.35	34.29	0.11	1855.34	0.25	162.32	177.29
7	8.7	0.3	2067.86	0.02	28.23	0.49	0.68	17.25	1.35	34.29	0.16	2670.12	0.36	233.61	62.16
7	8.7	0.4	2757.15	0.03	32.70	0.57	0.79	20.12	1.35	34.29	0.22	3632.80	0.49	317.83	7.31
7	8.7	0.5	3446.44	0.03	37.06	0.65	0.91	22.99	1.35	34.29	0.29	4743.38	0.64	414.99	52.43
7	8.7	0.6	4135.72	0.04	41.32	0.72	1.02	25.86	1.35	34.29	0.37	6001.87	0.81	525.10	83.37
7	8.7	0.7	4825.01	0.05	45.46	0.79	1.13	28.73	1.35	34.29	0.45	7408.26	1.00	648.14	94.49
7	8.7	0.8	5514.30	0.06	49.47	0.86	1.24	31.60	1.35	34.29	0.55	8962.55	1.22	784.12	78.10
7	8.7	0.9	6203.58	0.06	53.37	0.93	1.36	34.47	1.35	34.29	0.65	10664.74	1.45	933.05	65.64
7	8.7	1.0	6892.87	0.07	56.97	0.99	1.47	37.21	1.35	34.29	0.76	12429.85	1.69	1087.48	56.32
7	8.7	1.5	10339.31	0.10	66.49	1.16	1.77	44.96	1.35	34.29	1.11	18144.18	2.46	1587.42	38.58
7	8.7	2.0	13785.74	0.14	71.12	1.24	1.93	49.02	1.35	34.29	1.32	21572.74	2.93	1887.38	32.45
7	8.7	2.5	17232.18	0.17	72.51	1.27	1.98	50.29	1.35	34.29	1.39	22704.98	3.08	1986.44	30.83
7	8.7	3.0	20678.61	0.21	77.06	1.34	2.15	54.61	1.35	34.29	1.63	26771.19	3.63	2342.19	26.15
7	8.7	3.5	24125.05	0.24	78.60	1.37	2.21	56.13	1.35	34.29	1.73	28286.24	3.84	2474.74	24.75
7	8.7	4.0	27571.48	0.28	82.50	1.44	2.37	60.15	1.35	34.29	1.98	32475.37	4.40	2841.24	21.55
7	8.7	4.5	31017.92	0.31	84.21	1.47	2.44	61.98	1.35	34.29	2.10	34480.25	4.68	3016.64	20.30
7	8.7	5.0	34464.35	0.34	87.40	1.53	2.58	65.53	1.35	34.29	2.35	38550.51	5.23	3372.75	18.16
8	9	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	994.93
8	9	0.1	689.29	0.01	20.82	0.36	0.50	12.60	1.35	34.29	0.09	1424.80	0.19	124.65	361.48
8	9	0.2	1378.57	0.01	27.15	0.47	0.65	16.56	1.35	34.29	0.15	2461.99	0.33	215.40	124.94
8	9	0.3	2067.86	0.02	33.32	0.58	0.81	20.52	1.35	34.29	0.23	3781.06	0.51	330.80	11.58
8	9	0.4	2757.15	0.03	39.30	0.69	0.96	24.49	1.35	34.29	0.33	5382.01	0.73	470.87	51.36
8	9	0.5	3446.44	0.03	45.06	0.79	1.12	28.45	1.35	34.29	0.44	7264.85	0.99	635.60	89.88
8	9	0.6	4135.72	0.04	50.59	0.88	1.28	32.41	1.35	34.29	0.58	9429.57	1.28	824.98	84.84
8	9	0.7	4825.01	0.05	55.88	0.98	1.43	36.37	1.35	34.29	0.72	11876.18	1.61	1039.04	67.36
8	9	0.8	5514.30	0.06	60.92	1.06	1.59	40.34	1.35	34.29	0.89	14604.67	1.98	1277.75	54.78
8	9	0.9	6203.58	0.06	65.72	1.15	1.74	44.30	1.35	34.29	1.07	17615.04	2.39	1541.12	45.42
8	9	1.0	6892.87	0.07	70.27	1.23	1.90	48.26	1.35	34.29	1.28	20907.30	2.84	1829.16	38.26
8	9	1.5	10339.31	0.10	72.12	1.26	1.97	49.94	1.35	34.29	1.37	22385.03	3.04	1958.45	35.74
8	9	2.0	13785.74	0.14	77.96	1.36	2.19	55.50	1.35	34.29	1.69	27649.90	3.75	2419.06	28.93
8	9	2.5	17232.18	0.17	83.27	1.45	2.40	60.96	1.35	34.29	2.04	33359.02	4.52	2918.55	23.98
8	9	3.0	20678.61	0.21	84.44	1.47	2.45	62.23	1.35	34.29	2.12	34763.45	4.71	3041.42	23.01
8	9	3.5	24125.05	0.24	85.02	1.48	2.48	62.87	1.35	34.29	2.16	35476.53	4.81	3103.81	22.55
8	9	4.0	27571.48	0.28	86.73	1.51	2.55	64.77	1.35	34.29	2.30	37659.20	5.11	3294.77	21.24
8	9	4.5	31017.92	0.31	88.39	1.54	2.63	66.68	1.35	34.29	2.44	39907.02	5.41	3491.43	20.05
8	9	5.0	34464.35	0.34	89.36	1.56	2.67	67.82	1.35	34.29	2.52	41286.99	5.60	3612.16	19.38
9	9	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	1144.29
9	9	0.1	689.29	0.01	21.23	0.37	0.51	12.85	1.35	34.29	0.09	1482.83	0.20	129.73	406.95
9	9	0.2	1378.57	0.01	27.95	0.49	0.67	17.07	1.35	34.29	0.16	2615.35	0.35	228.81	144.12
9	9	0.3	2067.86	0.02	34.49	0.60	0.84	21.29	1.35	34.29	0.25	4067.04	0.55	355.82	21.29
9	9	0.4	2757.15	0.03	40.80	0.71	1.00	25.50	1.35	34.29	0.36	5837.92	0.79	510.75	45.84
9	9	0.5	3446.44	0.03	46.86	0.82	1.17	29.72	1.35	34.29	0.48	7927.98	1.08	693.61	86.48
9	9	0.6	4135.72	0.04	52.65	0.92	1.34	33.93	1.35	34.29	0.63	10337.22	1.40	904.39	87.06
9	9	0.7	4825.01	0.05	58.17	1.02	1.50	38.15	1.35	34.29	0.80	13065.64	1.77	1143.10	68.88
9	9	0.8	5514.30	0.06	63.41	1.11	1.67	42.37	1.35	34.29	0.98	16113.24	2.19	1409.73	55.85
9	9	0.9	6203.58	0.06	68.37	1.19	1.83	46.58	1.35	34.29	1.19	19480.02	2.64	1704.29	46.20
9	9	1.0	6892.87	0.07	73.06	1.28	2.00	50.80	1.35	34.29	1.41	23165.98	3.14	2026.77	38.85
9	9	1.5	10339.31	0.10	78.86	1.38	2.22	56.39	1.35	34.29	1.74	28542.81	3.87	2497.18	31.53
9	9	2.0	13785.74	0.14	83.74	1.46	2.42	61.47	1.35	34.29	2.07	33917.32	4.60	2967.39	26.54
9	9	2.5	17232.18	0.17	85.02	1.48	2.48	62.87	1.35	34.29	2.16	35476.53	4.81	3103.81	25.37
9	9	3.0	20678.61	0.21	85.37	1.49	2.49	63.25	1.35	34.29	2.19	35907.85	4.87	3141.54	25.06
9	9	3.5	24125.05	0.24	87.40	1.53	2.58	65.53	1.35	34.29	2.35	38550.51	5.23	3372.75	23.35
9	9	4.0	27571.48	0.28	89.14	1.56	2.66	67.56	1.35	34.29	2.50	40978.31	5.56	3585.15	21.96
9	9	4.5	31017.92	0.31	90.84	1.59	2.74	69.60	1.35	34.29	2.65	43480.23	5.90	3804.04	20.70
9	9	5.0	34464.35	0.34	92.08	1.61	2.80	71.12	1.35	34.29	2.77	45405.33	6.16	3972.47	19.82
10	9.3	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	
10	9.3	0.1	689.29	0.01	22.46	0.39	0.54	13.61	1.35	34.29	0.10	1663.87	0.23	145.57	401.01
10	9.3	0.2	1378.57	0.01	30.34	0.53	0.73	18.59	1.35	34.29	0.19	3103.22	0.42	271.50	122.25
10	9.3	0.3	2067.86	0.02	37.94	0.66	0.93	23.57	1.35	34.29	0.30	4987.54	0.68	436.36	0.50
10	9.3	0.4	2757.15	0.03	45.20	0.79	1.12	28.55	1.35	34.29	0.45	7316.84	0.99	640.14	63.33
10	9.3	0.5	3446.44	0.03	52.11	0.91	1.32	33.53	1.35	34.29	0.62	10091.10	1.37	882.86	99.10
10	9.3	0.6	4135.72	0.04	58.63	1.02	1.52	38.51	1.35	34.29	0.81	13310.34	1.80	1164.51	75.13
10	9.3	0.7	4825.01	0.05	64.76	1.13	1.71	43.48	1.35	34.29	1.04	16974.55	2.30	1485.09	58.91
10	9.3	0.8	5514.30	0.06	70.50	1.23	1.91	48.46	1.35	34.29	1.29	21083.73	2.86	1844.60	47.43
10	9.3	0.9	6203.58	0.06	75.86	1.32	2.10	53.44	1.35	34.29	1.56	25637.89	3.48	2243.03	39.00
10	9.3	1.0	6892.87	0.07	80.85	1.41	2.30	58.42	1.35	34.29	1.87	30637.01	4.15	2680.40	32.64
10	9.3	1.5	10339.31	0.10	81.46	1.42	2.33	59.06	1.35	34.29	1.91	31306.65	4.25	2738.99	31.94
10	9.3	2.0	13785.74	0.14	82.31	1.44	2.36	59.94	1.35	34.29	1.97	32256.31	4.37	2822.07	31.00
10	9.3	2.5	17232.18	0.17	85.14	1.49	2.48	62.99	1.35	34.29	2.17	35620.01	4.83	3116.36	28.07
10	9.3	3.0	20678.61	0.21	87.08	1.52	2.57	65.18	1.35	34.29	2.33	38133.27	5.17	3336.24	26.22
10	9.3	3.5	24125.05	0.24	90.00	1.57	2.70	68.58	1.35	34.29	2.58	42220.00	5.73	3693.79	23.69
10	9.3	4.0	27571.48	0.28	91.05	1.59	2.75	69.85	1.35	34.29	2.67	43798.19	5.94	3831.86	22.83
10	9.3	4.5	31017.92	0.31	92.08	1.61	2.80	71.12	1.35	34.29	2.77	45405.33	6.16	3972.47	22.02
10	9.3	5.0	34464.35	0.34	94.29	1.65	2.91	73.91	1.35	34.29	2.99	49042.96	6.65	4290.72	20.39
11	9.7	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	1443.02
11	9.7	0.1	689.29	0.01	21.64	0.38	0.52	13.11	1.35	34.29	0.09	1542.02	0.21	134.91	513.35
11	9.7	0.2	1378.57	0.01	28.75	0.50	0.69	17.58	1.35	34.29	0.17	2773.34	0.38	242.64	196.63
11	9.7	0.3	2067.86	0.02	35.64	0.62	0.87	22.05	1.35	34.29	0.27	4363.45	0.59	381.75	52.09
11	9.7	0.4	2757.15	0.03	42.28	0.74	1.04	26.52	1.35	34.29	0.39	6312.36	0.86	552.26	25.74
11	9.7	0.5	3446.44	0.03	48.63	0.85	1.22	30.99	1.35	34.29	0.53	8620.06	1.17	754.16	72.39
11	9.7	0.6	4135.72	0.04	54.68	0.95	1.40	35.46	1.35	34.29	0.69	11286.56	1.53	987.45	97.46
11	9.7	0.7	4825.01	0.05	60.42	1.05	1.57	39.93	1.35	34.29	0.87	14311.85	1.94	1252.13	76.86
11	9.7	0.8	5514.30	0.06	65.84	1.15	1.75	44.40	1.35	34.29	1.08	17695.94	2.40	1548.20	62.16
11	9.7	0.9	6203.58	0.06	70.95	1.24	1.92	48.87	1.35	34.29	1.31	21438.82	2.91	1875.66	51.31
11	9.7	1.0	6892.87	0.07	75.75	1.32	2.10	53.34	1.35	34.29	1.56	25540.50	3.46	2234.51	43.07
11	9.7	1.5	10339.31	0.10	78.86	1.38	2.22	56.39	1.35	34.29	1.74	28542.81	3.87	2497.18	38.54
11	9.7	2.0	13785.74	0.14	82.91	1.45	2.39	60.58	1.35	34.29	2.01	32943.33	4.47	2882.18	33.39
11	9.7	2.5	17232.18	0.17	85.37	1.49	2.49	63.25	1.35	34.29	2.19	35907.85	4.87	3141.54	30.63
11	9.7	3.0	20678.61	0.21	86.05	1.50	2.52	64.01	1.35	34.29	2.24	36778.31	4.99	3217.70	29.91
11	9.7	3.5	24125.05	0.24	91.67	1.60	2.78	70.61	1.35	34.29	2.73	44759.00	6.07	3915.92	24.58
11	9.7	4.0	27571.48	0.28	93.32	1.63	2.86	72.67	1.35	34.29	2.89	47405.25	6.43	4147.44	23.20
11	9.7	4.5	31017.92	0.31	93.70	1.64	2.88	73.15	1.35	34.29	2.93	48036.98	6.51	4202.71	22.90
11	9.7	5.0	34464.35	0.34	94.48	1.65	2.92	74.17	1.35	34.29	3.01	49380.61	6.70	4320.26	22.28
12	10.2	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	1592.39
12	10.2	0.1	689.29	0.01	22.01	0.38	0.53	13.34	1.35	34.29	0.10	1596.28	0.22	139.66	551.75
12	10.2	0.2	1378.57	0.01	29.47	0.51	0.71	18.03	1.35	34.29	0.18	2919.49	0.40	255.42	211.03
12	10.2	0.3	2067.86	0.02	36.68	0.64	0.90	22.73	1.35	34.29	0.28	4639.13	0.63	405.87	58.67
12	10.2	0.4	2757.15	0.03	43.60	0.76	1.08	27.43	1.35	34.29	0.41	6755.20	0.92	591.01	22.36
12	10.2	0.5	3446.44	0.03	50.21	0.88	1.27	32.13	1.35	34.29	0.57	9267.70	1.26	810.82	70.52
12	10.2	0.6	4135.72	0.04	56.47	0.99	1.45	36.83	1.35	34.29	0.74	12176.62	1.65	1065.32	98.55
12	10.2	0.7	4825.01	0.05	62.39	1.09	1.64	41.53	1.35	34.29	0.94	15481.97	2.10	1354.50	77.51
12	10.2	0.8	5514.30	0.06	67.97	1.19	1.82	46.23	1.35	34.29	1.17	19183.75	2.60	1678.37	62.55
12	10.2	0.9	6203.58	0.06	73.19	1.28	2.01	50.93	1.35	34.29	1.42	23281.96	3.16	2036.92	51.54
12	10.2	1.0	6892.87	0.07	78.09	1.36	2.19	55.63	1.35	34.29	1.70	27776.59	3.77	2430.15	43.20
12	10.2	1.5	10339.31	0.10	85.59	1.49	2.50	63.50	1.35	34.29	2.21	36196.85	4.91	3166.83	33.15
12	10.2	2.0	13785.74	0.14	88.06	1.54	2.61	66.29	1.35	34.29	2.41	39452.25	5.35	3451.64	30.42
12	10.2	2.5	17232.18	0.17	91.01	1.59	2.75	69.80	1.35	34.29	2.67	43734.50	5.93	3826.29	27.44
12	10.2	3.0	20678.61	0.21	92.90	1.62	2.84	72.14	1.35	34.29	2.85	46711.89	6.33	4086.78	25.69
12	10.2	3.5	24125.05	0.24	93.70	1.64	2.88	73.15	1.35	34.29	2.93	48036.98	6.51	4202.71	24.98
12	10.2	4.0	27571.48	0.28	94.29	1.65	2.91	73.91	1.35	34.29	2.99	49042.96	6.65	4290.72	24.47
12	10.2	4.5	31017.92	0.31	94.68	1.65	2.93	74.42	1.35	34.29	3.03	49719.41	6.74	4349.90	24.14
12	10.2	5.0	34464.35	0.34	96.22	1.68	3.01	76.45	1.35	34.29	3.20	52471.53	7.12	4590.69	22.87
13	10.5	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	1741.76
13	10.5	0.1	689.29	0.01	21.68	0.38	0.52	13.13	1.35	34.29	0.09	1548.00	0.21	135.43	639.79
13	10.5	0.2	1378.57	0.01	28.83	0.50	0.69	17.63	1.35	34.29	0.17	2789.39	0.38	244.04	266.05
13	10.5	0.3	2067.86	0.02	35.76	0.62	0.87	22.12	1.35	34.29	0.27	4393.67	0.60	384.40	95.88
13	10.5	0.4	2757.15	0.03	42.43	0.74	1.05	26.62	1.35	34.29	0.39	6360.82	0.86	556.50	4.38
13	10.5	0.5	3446.44	0.03	48.81	0.85	1.23	31.12	1.35	34.29	0.53	8690.86	1.18	760.36	50.42
13	10.5	0.6	4135.72	0.04	54.88	0.96	1.40	35.61	1.35	34.29	0.69	11383.79	1.54	995.96	85.80
13	10.5	0.7	4825.01	0.05	60.64	1.06	1.58	40.11	1.35	34.29	0.88	14439.59	1.96	1263.31	90.03
13	10.5	0.8	5514.30	0.06	66.08	1.15	1.76	44.60	1.35	34.29	1.09	17858.29	2.42	1562.40	72.80
13	10.5	0.9	6203.58	0.06	71.20	1.24	1.93	49.10	1.35	34.29	1.32	21639.86	2.93	1893.25	60.07
13	10.5	1.0	6892.87	0.07	75.88	1.32	2.11	53.47	1.35	34.29	1.57	25662.26	3.48	2245.17	50.66
13	10.5	1.5	10339.31	0.10	81.34	1.42	2.32	58.93	1.35	34.29	1.90	31172.15	4.23	2727.22	41.70
13	10.5	2.0	13785.74	0.14	91.26	1.59	2.76	70.10	1.35	34.29	2.69	44117.30	5.98	3859.78	29.47
13	10.5	2.5	17232.18	0.17	92.90	1.62	2.84	72.14	1.35	34.29	2.85	46711.89	6.33	4086.78	27.83
13	10.5	3.0	20678.61	0.21	94.09	1.64	2.90	73.66	1.35	34.29	2.97	48706.48	6.61	4261.28	26.69
13	10.5	3.5	24125.05	0.24	94.48	1.65	2.92	74.17	1.35	34.29	3.01	49380.61	6.70	4320.26	26.33
13	10.5	4.0	27571.48	0.28	95.45	1.67	2.97	75.44	1.35	34.29	3.12	51086.20	6.93	4469.48	25.45
13	10.5	4.5	31017.92	0.31	96.40	1.68	3.02	76.71	1.35	34.29	3.22	52820.76	7.16	4621.24	24.61
13	10.5	5.0	34464.35	0.34	97.89	1.71	3.10	78.74	1.35	34.29	3.40	55656.27	7.55	4869.32	23.36
14	11.1	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	1891.12
14	11.1	0.1	689.29	0.01	23.03	0.40	0.55	13.97	1.35	34.29	0.11	1751.93	0.24	153.27	599.12
14	11.1	0.2	1378.57	0.01	31.44	0.55	0.76	19.30	1.35	34.29	0.20	3345.17	0.45	292.67	218.51
14	11.1	0.3	2067.86	0.02	39.52	0.69	0.97	24.64	1.35	34.29	0.33	5449.22	0.74	476.75	56.92
14	11.1	0.4	2757.15	0.03	47.21	0.82	1.18	29.97	1.35	34.29	0.49	8064.08	1.09	705.52	26.39
14	11.1	0.5	3446.44	0.03	54.48	0.95	1.39	35.31	1.35	34.29	0.68	11189.75	1.52	978.98	74.89
14	11.1	0.6	4135.72	0.04	61.30	1.07	1.60	40.64	1.35	34.29	0.90	14826.23	2.01	1297.13	94.43
14	11.1	0.7	4825.01	0.05	67.67	1.18	1.81	45.97	1.35	34.29	1.16	18973.52	2.57	1659.98	73.79
14	11.1	0.8	5514.30	0.06	73.60	1.28	2.02	51.31	1.35	34.29	1.44	23631.62	3.20	2067.51	59.24
14	11.1	0.9	6203.58	0.06	79.11	1.38	2.23	56.64	1.35	34.29	1.76	28800.53	3.91	2519.73	48.61
14	11.1	1.0	6892.87	0.07	84.21	1.47	2.44	61.98	1.35	34.29	2.10	34480.25	4.68	3016.64	40.60
14	11.1	1.5	10339.31	0.10	89.68	1.57	2.69	68.20	1.35	34.29	2.55	41752.20	5.66	3652.86	33.53
14	11.1	2.0	13785.74	0.14	93.70	1.64	2.88	73.15	1.35	34.29	2.93	48036.98	6.51	4202.71	29.14
14	11.1	2.5	17232.18	0.17	94.09	1.64	2.90	73.66	1.35	34.29	2.97	48706.48	6.61	4261.28	28.74
14	11.1	3.0	20678.61	0.21	97.34	1.70	3.07	77.98	1.35	34.29	3.33	54584.27	7.40	4775.53	25.65
14	11.1	3.5	24125.05	0.24	99.24	1.73	3.18	80.65	1.35	34.29	3.56	58381.90	7.92	5107.78	23.98
14	11.1	4.0	27571.48	0.28	99.51	1.74	3.19	81.03	1.35	34.29	3.60	58934.84	7.99	5156.15	23.76
14	11.1	4.5	31017.92	0.31	99.86	1.74	3.21	81.53	1.35	34.29	3.64	59676.15	8.09	5221.01	23.46
14	11.1	5.0	34464.35	0.34	100.65	1.76	3.26	82.68	1.35	34.29	3.74	61361.04	8.32	5368.42	22.82
15	11.6	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	2040.49
15	11.6	0.1	689.29	0.01	23.84	0.42	0.57	14.48	1.35	34.29	0.11	1881.66	0.26	164.62	597.17
15	11.6	0.2	1378.57	0.01	33.01	0.58	0.80	20.32	1.35	34.29	0.23	3706.56	0.50	324.28	204.69
15	11.6	0.3	2067.86	0.02	41.76	0.73	1.03	26.16	1.35	34.29	0.37	6144.20	0.83	537.55	44.13
15	11.6	0.4	2757.15	0.03	50.03	0.87	1.26	32.00	1.35	34.29	0.56	9194.58	1.25	804.43	36.86
15	11.6	0.5	3446.44	0.03	57.78	1.01	1.49	37.85	1.35	34.29	0.78	12857.70	1.74	1124.91	83.34
15	11.6	0.6	4135.72	0.04	65.00	1.13	1.72	43.69	1.35	34.29	1.05	17133.56	2.32	1499.00	87.55
15	11.6	0.7	4825.01	0.05	71.68	1.25	1.95	49.53	1.35	34.29	1.34	22022.16	2.99	1926.70	68.11
15	11.6	0.8	5514.30	0.06	77.84	1.36	2.18	55.37	1.35	34.29	1.68	27523.50	3.73	2408.01	54.50
15	11.6	0.9	6203.58	0.06	83.50	1.46	2.41	61.21	1.35	34.29	2.05	33637.59	4.56	2942.92	44.59
15	11.6	1.0	6892.87	0.07	88.71	1.55	2.64	67.06	1.35	34.29	2.46	40364.41	5.47	3531.44	37.16
15	11.6	1.5	10339.31	0.10	91.67	1.60	2.78	70.61	1.35	34.29	2.73	44759.00	6.07	3915.92	33.51
15	11.6	2.0	13785.74	0.14	95.84	1.67	2.99	75.95	1.35	34.29	3.16	51776.55	7.02	4529.88	28.97
15	11.6	2.5	17232.18	0.17	97.89	1.71	3.10	78.74	1.35	34.29	3.40	55656.27	7.55	4869.32	26.95
15	11.6	3.0	20678.61	0.21	98.26	1.71	3.12	79.25	1.35	34.29	3.44	56376.74	7.65	4932.35	26.61
15	11.6	3.5	24125.05	0.24	99.72	1.74	3.20	81.33	1.35	34.29	3.62	59379.07	8.05	5195.02	25.26
15	11.6	4.0	27571.48	0.28	100.56	1.76	3.25	82.55	1.35	34.29	3.73	61172.67	8.30	5351.94	24.52
15	11.6	4.5	31017.92	0.31	100.74	1.76	3.26	82.80	1.35	34.29	3.76	61549.70	8.35	5384.93	24.37
15	11.6	5.0	34464.35	0.34	101.30	1.77	3.29	83.64	1.35	34.29	3.83	62802.10	8.52	5494.50	23.88
16	11.8	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	2189.85
16	11.8	0.1	689.29	0.01	23.92	0.42	0.57	14.53	1.35	34.29	0.12	1894.88	0.26	165.78	644.38
16	11.8	0.2	1378.57	0.01	33.16	0.58	0.80	20.42	1.35	34.29	0.23	3743.72	0.51	327.53	227.38
16	11.8	0.3	2067.86	0.02	41.98	0.73	1.04	26.31	1.35	34.29	0.38	6215.99	0.84	543.83	57.40
16	11.8	0.4	2757.15	0.03	50.31	0.88	1.27	32.21	1.35	34.29	0.57	9311.71	1.26	814.67	28.17
16	11.8	0.5	3446.44	0.03	58.11	1.01	1.50	38.10	1.35	34.29	0.80	13030.87	1.77	1140.06	77.21
16	11.8	0.6	4135.72	0.04	65.36	1.14	1.73	43.99	1.35	34.29	1.06	17373.47	2.36	1519.99	92.09
16	11.8	0.7	4825.01	0.05	72.06	1.26	1.96	49.89	1.35	34.29	1.36	22339.51	3.03	1954.46	71.62
16	11.8	0.8	5514.30	0.06	78.25	1.37	2.20	55.78	1.35	34.29	1.70	27929.00	3.79	2443.48	57.29
16	11.8	0.9	6203.58	0.06	83.93	1.46	2.43	61.67	1.35	34.29	2.08	34141.93	4.63	2987.05	46.86
16	11.8	1.0	6892.87	0.07	89.14	1.56	2.66	67.56	1.35	34.29	2.50	40978.31	5.56	3585.15	39.05
16	11.8	1.5	10339.31	0.10	89.79	1.57	2.69	68.33	1.35	34.29	2.56	41907.84	5.68	3666.48	38.18
16	11.8	2.0	13785.74	0.14	91.71	1.60	2.78	70.66	1.35	34.29	2.74	44823.42	6.08	3921.56	35.70
16	11.8	2.5	17232.18	0.17	94.68	1.65	2.93	74.42	1.35	34.29	3.03	49719.41	6.74	4349.90	32.18
16	11.8	3.0	20678.61	0.21	96.50	1.68	3.03	76.84	1.35	34.29	3.23	52995.81	7.19	4636.55	30.19
16	11.8	3.5	24125.05	0.24	99.60	1.74	3.20	81.15	1.35	34.29	3.61	59119.73	8.02	5172.33	27.06
16	11.8	4.0	27571.48	0.28	99.86	1.74	3.21	81.53	1.35	34.29	3.64	59676.15	8.09	5221.01	26.81
16	11.8	4.5	31017.92	0.31	101.34	1.77	3.30	83.69	1.35	34.29	3.84	62878.41	8.53	5501.17	25.45
16	11.8	5.0	34464.35	0.34	101.51	1.77	3.31	83.95	1.35	34.29	3.86	63260.65	8.58	5534.62	25.29
17	11.8	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	2339.22
17	11.8	0.1	689.29	0.01	23.92	0.42	0.57	14.53	1.35	34.29	0.12	1894.88	0.26	165.78	697.15
17	11.8	0.2	1378.57	0.01	33.40	0.58	0.81	20.57	1.35	34.29	0.23	3799.80	0.52	332.44	247.39
17	11.8	0.3	2067.86	0.02	42.13	0.74	1.04	26.42	1.35	34.29	0.38	6264.08	0.85	548.04	71.39
17	11.8	0.4	2757.15	0.03	51.11	0.89	1.29	32.79	1.35	34.29	0.59	9652.58	1.31	844.49	23.88
17	11.8	0.5	3446.44	0.03	58.76	1.03	1.52	38.61	1.35	34.29	0.82	13380.67	1.81	1170.66	72.95
17	11.8	0.6	4135.72	0.04	66.20	1.16	1.76	44.70	1.35	34.29	1.09	17939.74	2.43	1569.53	94.76
17	11.8	0.7	4825.01	0.05	72.78	1.27	1.99	50.55	1.35	34.29	1.40	22934.90	3.11	2006.55	74.12
17	11.8	0.8	5514.30	0.06	79.11	1.38	2.23	56.64	1.35	34.29	1.76	28800.53	3.91	2519.73	59.03
17	11.8	0.9	6203.58	0.06	80.70	1.41	2.29	58.27	1.35	34.29	1.86	30477.38	4.13	2666.44	55.78
17	11.8	1.0	6892.87	0.07	89.14	1.56	2.66	67.56	1.35	34.29	2.50	40978.31	5.56	3585.15	41.49
17	11.8	1.5	10339.31	0.10	92.49	1.61	2.82	71.63	1.35	34.29	2.81	46056.29	6.25	4029.42	36.91
17	11.8	2.0	13785.74	0.14	93.99	1.64	2.90	73.53	1.35	34.29	2.96	48538.67	6.58	4246.60	35.02
17	11.8	2.5	17232.18	0.17	95.55	1.67	2.98	75.57	1.35	34.29	3.13	51258.36	6.95	4484.55	33.17
17	11.8	3.0	20678.61	0.21	97.15	1.70	3.06	77.72	1.35	34.29	3.31	54229.25	7.35	4744.47	31.35
17	11.8	3.5	24125.05	0.24	98.62	1.72	3.14	79.76	1.35	34.29	3.48	57101.83	7.74	4995.79	29.77
17	11.8	4.0	27571.48	0.28	101.08	1.76	3.28	83.31	1.35	34.29	3.80	62307.23	8.45	5451.20	27.28
17	11.8	4.5	31017.92	0.31	101.42	1.77	3.30	83.82	1.35	34.29	3.85	63069.39	8.55	5517.88	26.95
17	11.8	5.0	34464.35	0.34	101.59	1.77	3.31	84.07	1.35	34.29	3.87	63452.21	8.60	5551.37	26.79
18	11.8	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	2488.59
18	11.8	0.1	689.29	0.01	24.33	0.42	0.58	14.78	1.35	34.29	0.12	1961.72	0.27	171.63	717.56
18	11.8	0.2	1378.57	0.01	33.94	0.59	0.82	20.93	1.35	34.29	0.24	3932.29	0.53	344.03	257.75
18	11.8	0.3	2067.86	0.02	43.09	0.75	1.07	27.08	1.35	34.29	0.40	6581.20	0.89	575.78	73.51
18	11.8	0.4	2757.15	0.03	51.70	0.90	1.31	33.22	1.35	34.29	0.60	9908.46	1.34	866.88	18.34
18	11.8	0.5	3446.44	0.03	59.72	1.04	1.55	39.37	1.35	34.29	0.85	13914.07	1.89	1217.33	70.63
18	11.8	0.6	4135.72	0.04	67.14	1.17	1.79	45.52	1.35	34.29	1.13	18598.02	2.52	1627.12	96.78
18	11.8	0.7	4825.01	0.05	73.98	1.29	2.03	51.66	1.35	34.29	1.46	23960.32	3.25	2096.27	75.12
18	11.8	0.8	5514.30	0.06	80.26	1.40	2.28	57.81	1.35	34.29	1.83	30000.97	4.07	2624.76	60.00
18	11.8	0.9	6203.58	0.06	86.00	1.50	2.52	63.96	1.35	34.29	2.24	36719.96	4.98	3212.59	49.02
18	11.8	1.0	6892.87	0.07	91.26	1.59	2.76	70.10	1.35	34.29	2.69	44117.30	5.98	3859.78	40.80
18	11.8	1.5	10339.31	0.10	93.50	1.63	2.87	72.90	1.35	34.29	2.91	47703.97	6.47	4173.58	37.73
18	11.8	2.0	13785.74	0.14	95.07	1.66	2.95	74.93	1.35	34.29	3.08	50400.49	6.83	4409.49	35.71
18	11.8	2.5	17232.18	0.17	96.03	1.68	3.00	76.20	1.35	34.29	3.18	52123.46	7.07	4560.23	34.53
18	11.8	3.0	20678.61	0.21	97.52	1.70	3.08	78.23	1.35	34.29	3.35	54940.44	7.45	4806.69	32.76
18	11.8	3.5	24125.05	0.24	98.62	1.72	3.14	79.76	1.35	34.29	3.48	57101.83	7.74	4995.79	31.52
18	11.8	4.0	27571.48	0.28	99.69	1.74	3.20	81.28	1.35	34.29	3.62	59304.92	8.04	5188.53	30.35
18	11.8	4.5	31017.92	0.31	100.82	1.76	3.27	82.93	1.35	34.29	3.77	61738.65	8.37	5401.46	29.16
18	11.8	5.0	34464.35	0.34	101.59	1.77	3.31	84.07	1.35	34.29	3.87	63452.21	8.60	5551.37	28.37
19	11.8	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	2637.95
19	11.8	0.1	689.29	0.01	24.33	0.42	0.58	14.78	1.35	34.29	0.12	1961.72	0.27	171.63	768.54
19	11.8	0.2	1378.57	0.01	33.94	0.59	0.82	20.93	1.35	34.29	0.24	3932.29	0.53	344.03	283.18
19	11.8	0.3	2067.86	0.02	43.09	0.75	1.07	27.08	1.35	34.29	0.40	6581.20	0.89	575.78	88.70
19	11.8	0.4	2757.15	0.03	51.70	0.90	1.31	33.22	1.35	34.29	0.60	9908.46	1.34	866.88	8.24
19	11.8	0.5	3446.44	0.03	59.72	1.04	1.55	39.37	1.35	34.29	0.85	13914.07	1.89	1217.33	63.45
19	11.8	0.6	4135.72	0.04	67.14	1.17	1.79	45.52	1.35	34.29	1.13	18598.02	2.52	1627.12	97.84
19	11.8	0.7	4825.01	0.05	73.98	1.29	2.03	51.66	1.35	34.29	1.46	23960.32	3.25	2096.27	79.30
19	11.8	0.8	5514.30	0.06	80.26	1.40	2.28	57.81	1.35	34.29	1.83	30000.97	4.07	2624.76	63.33
19	11.8	0.9	6203.58	0.06	86.00	1.50	2.52	63.96	1.35	34.29	2.24	36719.96	4.98	3212.59	51.74
19	11.8	1.0	6892.87	0.07	90.84	1.59	2.74	69.60	1.35	34.29	2.65	43480.23	5.90	3804.04	43.70
19	11.8	1.5	10339.31	0.10	93.50	1.63	2.87	72.90	1.35	34.29	2.91	47703.97	6.47	4173.58	39.83
19	11.8	2.0	13785.74	0.14	95.93	1.67	3.00	76.07	1.35	34.29	3.17	51949.86	7.04	4545.04	36.57
19	11.8	2.5	17232.18	0.17	97.96	1.71	3.10	78.84	1.35	34.29	3.41	55800.00	7.57	4881.89	34.05
19	11.8	3.0	20678.61	0.21	98.44	1.72	3.13	79.50	1.35	34.29	3.46	56738.70	7.69	4964.02	33.49
19	11.8	3.5	24125.05	0.24	100.04	1.75	3.22	81.79	1.35	34.29	3.66	60048.54	8.14	5253.59	31.64
19	11.8	4.0	27571.48	0.28	100.48	1.75	3.25	82.42	1.35	34.29	3.72	60984.59	8.27	5335.49	31.16
19	11.8	4.5	31017.92	0.31	101.59	1.77	3.31	84.07	1.35	34.29	3.87	63452.21	8.60	5551.37	29.94
19	11.8	5.0	34464.35	0.34	101.83	1.78	3.32	84.43	1.35	34.29	3.90	63990.10	8.68	5598.43	29.69
20	11.8	0	0.00	0.00	14.35	0.25	0.34	8.64	1.35	34.29	0.04	669.50	0.09	58.57	2787.32
20	11.8	0.1	689.29	0.01	24.37	0.43	0.58	14.81	1.35	34.29	0.12	1968.47	0.27	172.22	816.02
20	11.8	0.2	1378.57	0.01	34.02	0.59	0.83	20.98	1.35	34.29	0.24	3951.40	0.54	345.70	306.15
20	11.8	0.3	2067.86	0.02	43.20	0.75	1.07	27.15	1.35	34.29	0.40	6618.30	0.90	579.03	102.19
20	11.8	0.4	2757.15	0.03	51.83	0.90	1.31	33.32	1.35	34.29	0.61	9969.16	1.35	872.19	0.62
20	11.8	0.5	3446.44	0.03	59.88	1.05	1.56	39.50	1.35	34.29	0.85	14003.98	1.90	1225.20	57.18
20	11.8	0.6	4135.72	0.04	67.32	1.17	1.80	45.67	1.35	34.29	1.14	18722.77	2.54	1638.04	93.18
20	11.8	0.7	4825.01	0.05	74.17	1.29	2.04	51.84	1.35	34.29	1.47	24125.52	3.27	2110.72	82.90
20	11.8	0.8	5514.30	0.06	80.46	1.40	2.28	58.01	1.35	34.29	1.84	30212.24	4.10	2643.24	66.20
20	11.8	0.9	6203.58	0.06	86.21	1.50	2.53	64.19	1.35	34.29	2.26	36982.92	5.02	3235.60	54.08
20	11.8	1.0	6892.87	0.07	91.47	1.60	2.77	70.36	1.35	34.29	2.71	44437.57	6.03	3887.80	45.01
20	11.8	1.5	10339.31	0.10	92.29	1.61	2.81	71.37	1.35	34.29	2.79	45730.23	6.20	4000.89	43.73
20	11.8	2.0	13785.74	0.14	94.93	1.66	2.94	74.75	1.35	34.29	3.06	50161.59	6.80	4388.59	39.87
20	11.8	2.5	17232.18	0.17	95.78	1.67	2.99	75.87	1.35	34.29	3.15	51672.70	7.01	4520.80	38.71
20	11.8	3.0	20678.61	0.21	96.59	1.69	3.03	76.96	1.35	34.29	3.24	53171.14	7.21	4651.89	37.61
20	11.8	3.5	24125.05	0.24	98.15	1.71	3.11	79.10	1.35	34.29	3.43	56160.11	7.62	4913.40	35.61
20	11.8	4.0	27571.48	0.28	100.91	1.76	3.27	83.06	1.35	34.29	3.78	61927.88	8.40	5418.01	32.30
20	11.8	4.5	31017.92	0.31	101.46	1.77	3.30	83.87	1.35	34.29	3.85	63145.86	8.56	5524.57	31.67
20	11.8	5.0	34464.35	0.34	101.81	1.78	3.32	84.40	1.35	34.29	3.90	63951.60	8.67	5595.07	31.27

Flow Rate (ml/min)	Angle @ .1 Psi	Angle @ .5 Psi	Angle @ 1 Psi	Angle @ 2.5 Psi	Angle @ 5 Psi
1.0	17.68	31.64	47.53	61.33	67.03
2.0	18.14	32.81	49.54	56.57	75.22
3.0	18.97	36.68	56.51	68.55	78.35
4.0	19.50	39.15	60.61	69.70	79.23
5.0	19.50	39.15	60.67	72.09	82.79
6.0	20.24	42.50	66.26	74.42	83.50
7.0	19.05	37.06	56.97	72.51	87.40
8.0	20.82	45.06	70.27	83.27	89.36
9.0	21.23	46.86	73.06	85.02	92.08
10.0	22.46	52.11	80.85	85.14	94.29
11.0	21.64	48.63	75.75	85.37	94.48
12.0	22.01	50.21	78.09	91.01	96.22
13.0	21.68	48.81	75.88	92.90	97.89
14.0	23.03	54.48	84.21	94.09	100.65
15.0	23.84	57.78	88.71	97.89	101.30
16.0	23.92	58.11	89.14	94.68	101.51
17.0	23.92	58.76	89.14	95.55	101.59
18.0	24.33	59.72	91.26	96.03	101.59
19.0	24.33	59.72	90.84	97.96	101.83
20.0	24.37	59.88	91.47	95.78	101.81