



Shenzhen Belling Efficiency Testing Laboratory Co., Ltd.
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LumCAT:

Luminaire:

Report No:

Test No:

LampCAT:

Lamp flux(lm): 1704.7

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 120.16

Current(A): 0.1022

Power (W): 11.9790

PF: 0.9759

Ballast type:

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 1704.68

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 142.31

Central intensity(cd): 582.559

Maximum intensity(cd): 589.032

Angle of maximum intensity: $C=157.5$ $\gamma=0.0$

Beam Angle(50%Imax): [C0/180]Total=113.9

[C90/270]Total=116.4

Field angle(10%Imax): [C0/180]Total=157.7

[C90/270]Total=160.2

Maximum s/h(1/2): C0_180=1.30 C90_270=1.26

Maximum s/h(1/4): C0_180=1.85 C90_270=1.39

Up flux rate of lamp(%): 0.19%

Down flux rate of lamp(%): 99.81%

Up flux rate of LUM(%): 0.19%

Down flux rate of LUM(%): 99.81%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 78.806%

Zonal flux distribution table

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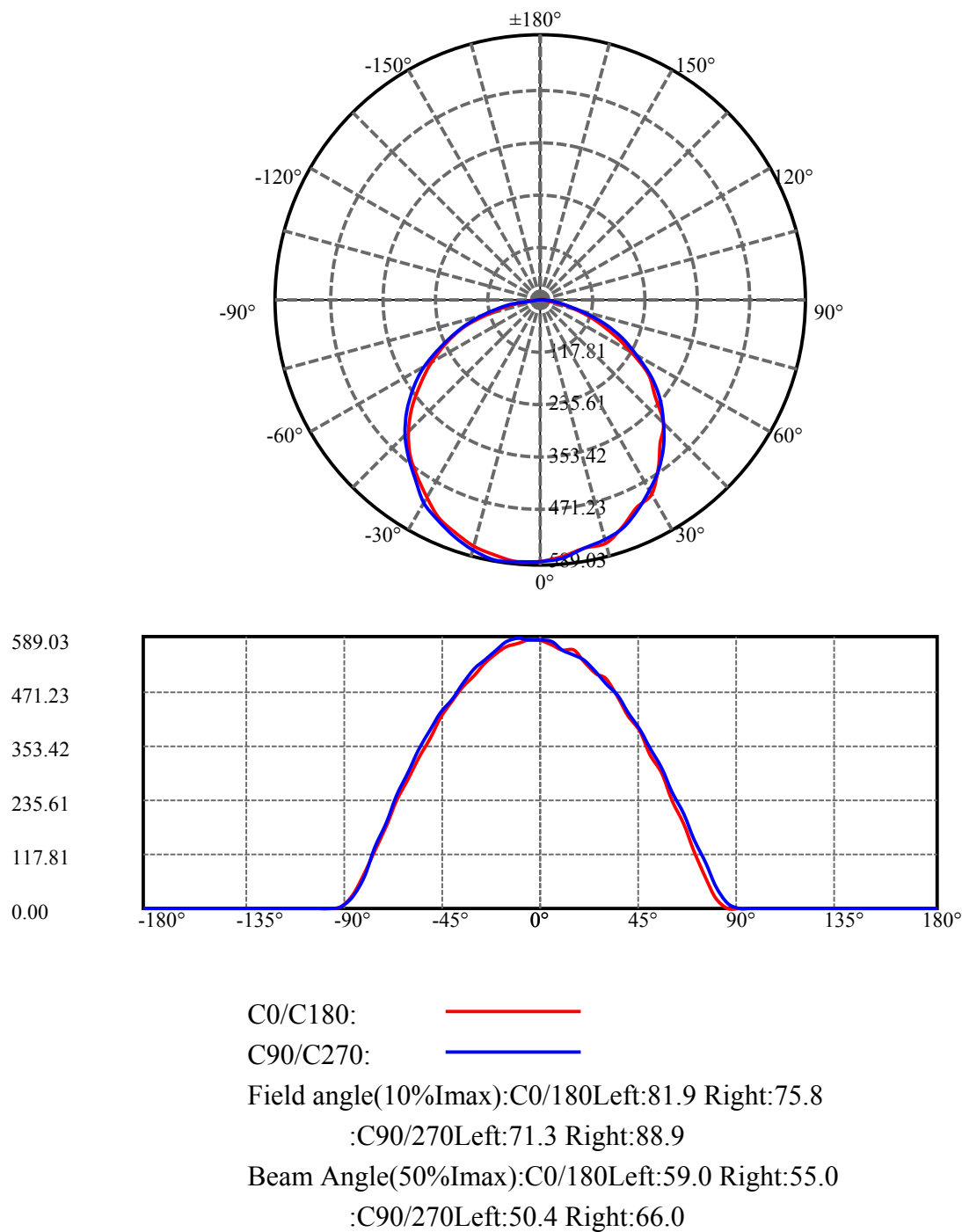
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	583.629	.000	.000	.000%	.000%
5.0	578.722	13.896	13.896	.815%	.815%
10.0	570.866	41.124	55.020	2.412%	3.228%
15.0	561.366	67.163	122.183	3.940%	7.168%
20.0	546.697	91.320	213.503	5.357%	12.525%
25.0	524.434	112.342	325.845	6.590%	19.115%
30.0	501.570	129.842	455.687	7.617%	26.732%
35.0	472.259	143.403	599.090	8.412%	35.144%
40.0	437.768	151.831	750.921	8.907%	44.051%
45.0	401.919	155.475	906.395	9.120%	53.171%
50.0	361.046	154.168	1060.563	9.044%	62.215%
55.0	316.988	147.427	1207.991	8.648%	70.863%
60.0	268.781	135.399	1343.390	7.943%	78.806%
65.0	217.520	118.221	1461.610	6.935%	85.741%
70.0	163.727	96.534	1558.145	5.663%	91.404%
75.0	109.217	71.343	1629.488	4.185%	95.589%
80.0	58.817	44.961	1674.449	2.638%	98.227%
85.0	19.197	21.198	1695.647	1.244%	99.470%
90.0	2.153	5.846	1701.493	.343%	99.813%
95.0	.222	.650	1702.143	.038%	99.851%
100.0	.196	.114	1702.257	.007%	99.858%
105.0	.222	.112	1702.369	.007%	99.864%
110.0	.222	.116	1702.485	.007%	99.871%
115.0	.235	.116	1702.600	.007%	99.878%
120.0	.352	.143	1702.743	.008%	99.886%
125.0	.431	.181	1702.924	.011%	99.897%
130.0	.457	.193	1703.117	.011%	99.908%
135.0	.535	.200	1703.318	.012%	99.920%
140.0	.639	.217	1703.535	.013%	99.933%
145.0	.692	.222	1703.757	.013%	99.946%
150.0	.822	.223	1703.980	.013%	99.959%
155.0	.796	.205	1704.185	.012%	99.971%
160.0	.848	.172	1704.357	.010%	99.981%
165.0	.835	.139	1704.496	.008%	99.989%
170.0	.848	.100	1704.596	.006%	99.995%
175.0	.835	.060	1704.656	.004%	99.999%
180.0	.861	.020	1704.676	.001%	100.000%

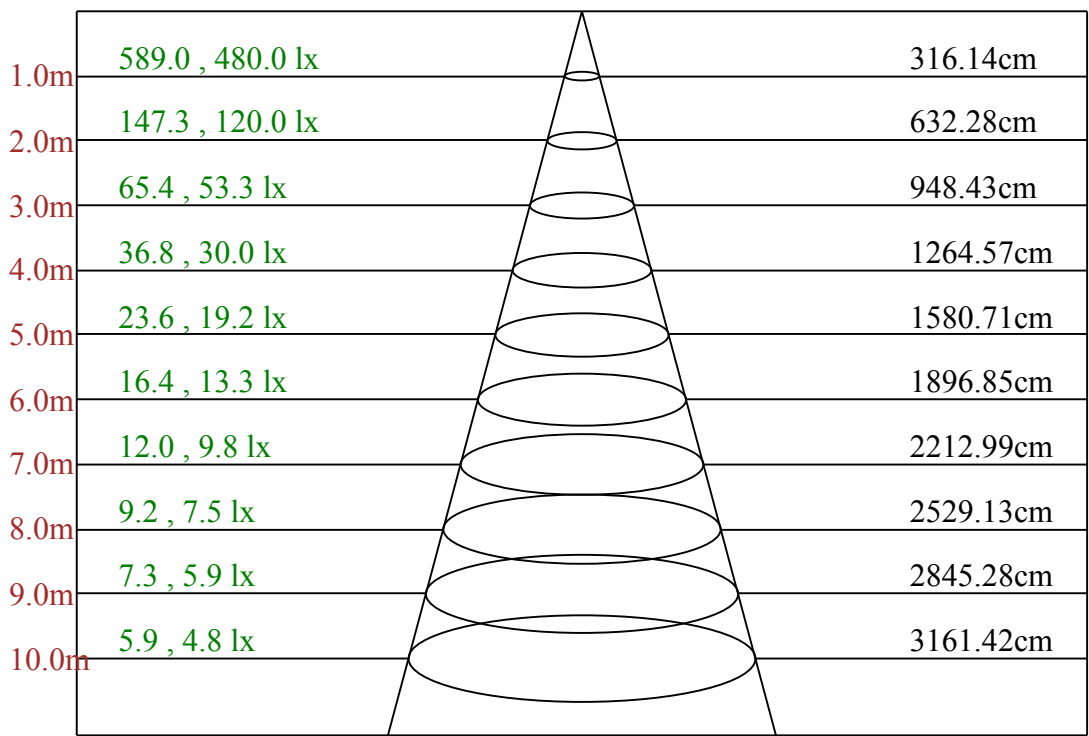
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	455.69	26.73%	26.73%
0-40	750.92	44.05%	44.05%
0-60	1343.39	78.81%	78.81%
0-90	1701.49	99.81%	99.81%
0-120	1702.74	99.89%	99.89%
0-180	1704.68	100.00%	100.00%
60-90	493.50	28.95%	28.95%
90-120	7.10	0.42%	0.42%
90-130	7.47	0.44%	0.44%
90-150	8.33	0.49%	0.49%
90-180	9.01	0.53%	0.53%
0-60.86	1363.74	80.00%	80.00%

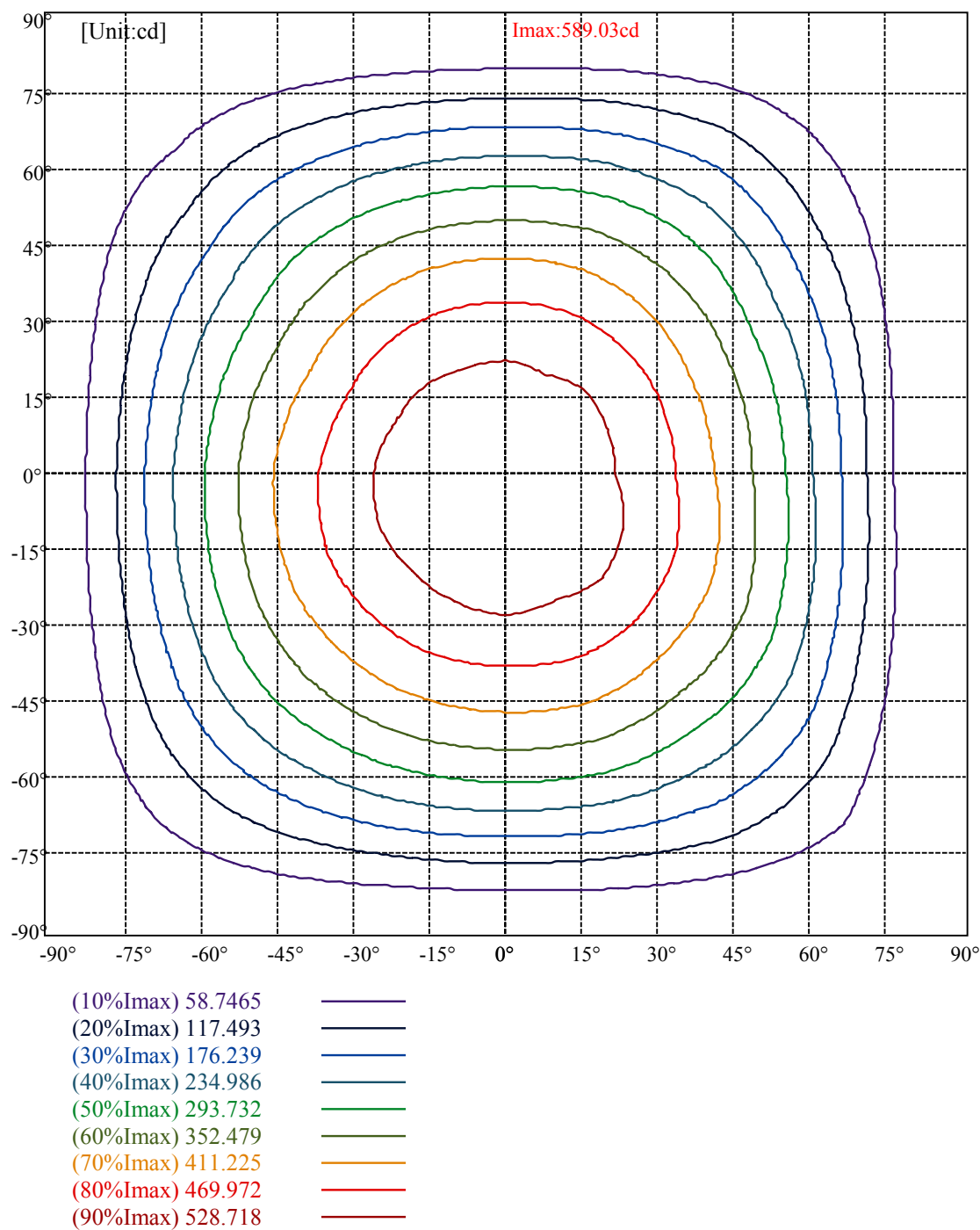
ZONAL LUMEN SUMMARY

0-10	55.02
10-20	158.48
20-30	242.18
30-40	295.23
40-50	309.64
50-60	282.83
60-70	214.76
70-80	116.30
80-90	27.04
90-100	0.76
100-110	0.23
110-120	0.26
120-130	0.37
130-140	0.42
140-150	0.44
150-160	0.38
160-170	0.24
170-180	0.06





Max , Ave Beam angle of C157.5plane115.26



Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	582.56	570.87	561.47	560.43	535.58	508.85	496.12	455.61	416.14
22.5	584.65	571.28	561.89	560.84	538.50	509.69	493.19	454.98	411.34
45.0	580.68	565.65	557.09	546.85	541.22	510.94	484.21	460.41	418.65
67.5	581.52	575.04	558.76	550.61	531.82	510.52	490.27	461.04	425.33
90.0	581.52	577.55	560.01	549.99	538.92	511.98	487.35	461.04	425.75
112.5	580.26	574.21	566.06	551.45	536.00	515.12	490.90	461.04	427.21
135.0	588.82	584.02	574.83	559.59	543.30	518.25	491.73	461.66	427.42
157.5	589.03	584.86	576.09	562.31	544.35	522.63	495.07	463.12	428.25
180.0	582.56	582.56	575.67	567.32	551.45	532.24	505.09	478.16	448.93
202.5	584.65	585.48	578.80	568.36	555.42	536.00	512.19	486.93	454.15
225.0	580.68	579.85	575.88	565.44	553.54	533.07	510.31	484.42	453.31
247.5	581.52	581.52	576.50	567.32	553.33	536.62	514.70	486.51	455.61
270.0	581.52	581.93	585.90	576.71	559.59	539.34	519.71	486.93	453.52
292.5	580.26	581.72	574.42	564.60	551.66	535.79	513.45	489.02	459.78
315.0	588.82	582.98	574.21	564.60	556.46	540.38	517.41	485.68	456.03
337.5	589.03	580.05	576.30	565.44	556.04	529.52	503.42	479.62	442.87
360.0	582.56	570.87	561.47	560.43	535.58	508.85	496.12	455.61	416.14
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	385.87	334.08	290.86	234.90	183.33	124.45	64.73	22.34	0.21
22.5	372.92	334.08	280.84	230.94	178.94	126.53	78.72	41.97	14.83
45.0	385.87	340.35	300.26	252.86	204.00	153.05	100.85	52.83	15.66
67.5	389.42	349.12	306.73	259.33	207.97	154.51	103.15	53.04	14.62
90.0	387.54	346.20	302.35	253.28	203.17	150.13	97.09	47.40	12.53
112.5	387.75	345.99	300.26	252.03	201.29	148.04	96.05	46.56	11.48
135.0	387.96	346.61	302.35	253.07	199.62	147.83	96.68	47.61	12.32
157.5	390.46	347.87	302.14	253.07	202.33	148.46	95.84	46.56	12.74
180.0	413.01	371.25	325.94	282.09	232.40	179.99	126.12	76.42	28.82
202.5	419.48	377.72	335.75	289.40	237.62	182.49	127.37	74.33	27.98
225.0	417.40	379.19	336.17	286.90	235.74	182.91	125.70	72.87	26.94
247.5	419.90	382.53	339.72	292.53	242.21	185.00	125.28	69.95	23.60
270.0	422.62	386.91	342.85	297.13	245.55	186.25	130.29	70.78	24.64
292.5	427.42	387.33	345.36	297.54	244.93	189.38	128.83	74.96	26.10
315.0	415.52	375.01	331.58	284.81	234.90	186.25	133.01	72.87	27.56
337.5	407.58	372.50	328.66	280.63	226.34	174.35	117.77	70.58	27.14
360.0	385.87	334.08	290.86	234.90	183.33	124.45	64.73	22.34	0.21
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.00	0.00	0.21	0.00	0.00	0.21	0.21	0.21
22.5	0.42	0.21	0.00	0.21	0.42	0.42	0.42	0.63	0.84
45.0	0.84	0.21	0.21	0.42	0.42	0.42	0.42	0.63	0.84
67.5	1.25	0.21	0.21	0.42	0.63	0.63	1.04	0.84	0.84
90.0	1.46	0.42	0.63	0.63	0.63	0.84	0.84	0.84	0.84
112.5	1.67	0.84	0.84	0.42	0.42	0.42	0.63	1.04	1.04
135.0	2.51	0.21	0.42	0.84	0.42	0.63	0.63	0.63	0.63
157.5	3.13	0.21	0.21	0.42	0.42	0.21	0.42	0.84	0.42
180.0	3.97	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	3.34	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.21
225.0	2.71	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.00
247.5	2.30	0.00	0.42	0.00	0.00	0.00	0.00	0.21	0.42
270.0	2.09	0.00	0.21	0.00	0.00	0.21	0.21	0.21	0.21
292.5	3.13	0.00	0.00	0.00	0.21	0.00	0.21	0.21	0.21
315.0	3.13	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.21
337.5	2.51	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.42
360.0	0.00	0.00	0.00	0.21	0.00	0.00	0.21	0.21	0.21

Intensity data(cd)									Page: 8 Total:8
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.42	0.42	0.84	0.84	0.63	0.63	0.63	0.42	0.42
22.5	0.63	0.63	0.84	1.04	0.84	0.84	0.84	0.84	0.84
45.0	0.84	0.84	1.04	0.84	1.04	1.04	0.84	0.84	1.04
67.5	0.84	1.04	0.84	1.04	1.04	1.04	1.04	1.25	0.63
90.0	0.84	0.84	1.04	1.04	0.84	1.04	1.04	0.84	0.84
112.5	1.04	0.84	1.04	0.84	1.04	1.04	0.84	1.04	0.84
135.0	0.84	0.84	0.63	0.84	0.84	0.84	1.04	1.04	1.25
157.5	0.63	0.84	0.84	1.04	1.04	1.04	0.84	0.84	1.04
180.0	0.21	0.42	0.21	0.63	0.42	0.63	0.63	0.84	0.84
202.5	0.21	0.21	0.42	0.63	0.63	0.63	0.63	0.84	0.63
225.0	0.21	0.63	0.42	0.84	0.63	0.84	0.63	0.84	0.84
247.5	0.42	0.63	0.63	0.84	0.63	0.63	1.04	1.04	0.84
270.0	0.42	0.42	0.42	0.63	0.84	0.84	0.84	0.84	0.84
292.5	0.21	0.42	0.63	0.63	0.84	0.84	0.84	0.63	0.84
315.0	0.21	0.63	0.63	0.63	0.84	0.84	0.84	0.84	0.84
337.5	0.63	0.63	0.63	0.84	0.63	0.84	0.84	0.63	0.84
360.0	0.42	0.42	0.84	0.84	0.63	0.63	0.63	0.42	0.42
C/γ(°)	180.0								
0.0	0.63								
22.5	0.84								
45.0	0.84								
67.5	0.84								
90.0	0.84								
112.5	0.84								
135.0	1.04								
157.5	1.04								
180.0	0.63								
202.5	0.84								
225.0	0.84								
247.5	0.84								
270.0	0.84								
292.5	0.84								
315.0	1.04								
337.5	1.04								
360.0	0.63								