



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

Luminaire:

Report No:

Test No:

LampCAT:

Lamp flux(lm): 2229.5

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 120.01

Current(A): 0.1367

Power (W): 16.2270

PF: 0.9894

Ballast type:

Width(mm): 0

Height(mm): 0

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### Photometric Results

Lumens(lm): 2229.48

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 137.39

Central intensity(cd): 781.419

Maximum intensity(cd): 781.419

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

Beam Angle(50%Imax): [C0/180]Total=112.3

[C90/270]Total=112.6

Field angle(10%Imax): [C0/180]Total=160.6

[C90/270]Total=158.9

Maximum s/h(1/2): C0\_180=1.32 C90\_270=1.28

Maximum s/h(1/4): C0\_180=1.88 C90\_270=1.40

Up flux rate of lamp(%): 0.59%

Down flux rate of lamp(%): 99.41%

Up flux rate of LUM(%): 0.59%

Down flux rate of LUM(%): 99.41%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 79.860%

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Equipment: GMS-3000  
Temperature(°C): 25

Date:  
Humidity(%): 58%

Operator: Zac

## 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	770.722	.000	.000	.000%	.000%
5.0	768.006	18.395	18.395	.825%	.825%
10.0	760.984	54.697	73.092	2.453%	3.278%
15.0	747.631	89.490	162.582	4.014%	7.292%
20.0	729.148	121.707	284.289	5.459%	12.751%
25.0	703.195	150.226	434.515	6.738%	19.490%
30.0	672.438	174.088	608.603	7.808%	27.298%
35.0	633.933	192.372	800.975	8.629%	35.927%
40.0	588.635	203.976	1004.951	9.149%	45.076%
45.0	536.558	208.339	1213.290	9.345%	54.420%
50.0	474.743	204.348	1417.638	9.166%	63.586%
55.0	406.403	191.591	1609.229	8.594%	72.180%
60.0	334.388	171.232	1780.461	7.680%	79.860%
65.0	260.918	144.720	1925.181	6.491%	86.351%
70.0	189.970	114.168	2039.348	5.121%	91.472%
75.0	127.500	82.981	2122.330	3.722%	95.194%
80.0	72.148	53.420	2175.750	2.396%	97.590%
85.0	31.641	28.202	2203.952	1.265%	98.855%
90.0	13.256	12.293	2216.245	.551%	99.406%
95.0	4.463	4.851	2221.097	.218%	99.624%
100.0	2.377	1.859	2222.956	.083%	99.707%
105.0	2.850	1.399	2224.354	.063%	99.770%
110.0	1.564	1.154	2225.508	.052%	99.822%
115.0	.909	.626	2226.135	.028%	99.850%
120.0	.703	.392	2226.527	.018%	99.868%
125.0	.715	.328	2226.854	.015%	99.882%
130.0	.776	.324	2227.179	.015%	99.897%
135.0	.873	.333	2227.512	.015%	99.912%
140.0	.982	.343	2227.855	.015%	99.927%
145.0	1.043	.338	2228.193	.015%	99.942%
150.0	1.091	.314	2228.508	.014%	99.956%
155.0	1.128	.281	2228.788	.013%	99.969%
160.0	1.152	.239	2229.027	.011%	99.980%
165.0	1.213	.195	2229.222	.009%	99.988%
170.0	1.152	.140	2229.362	.006%	99.995%
175.0	1.213	.085	2229.447	.004%	99.999%
180.0	1.237	.029	2229.476	.001%	100.000%

Equipment: GMS-3000  
Temperature( $^{\circ}\text{C}$ ): 25

Date:  
Humidity(%): 58%

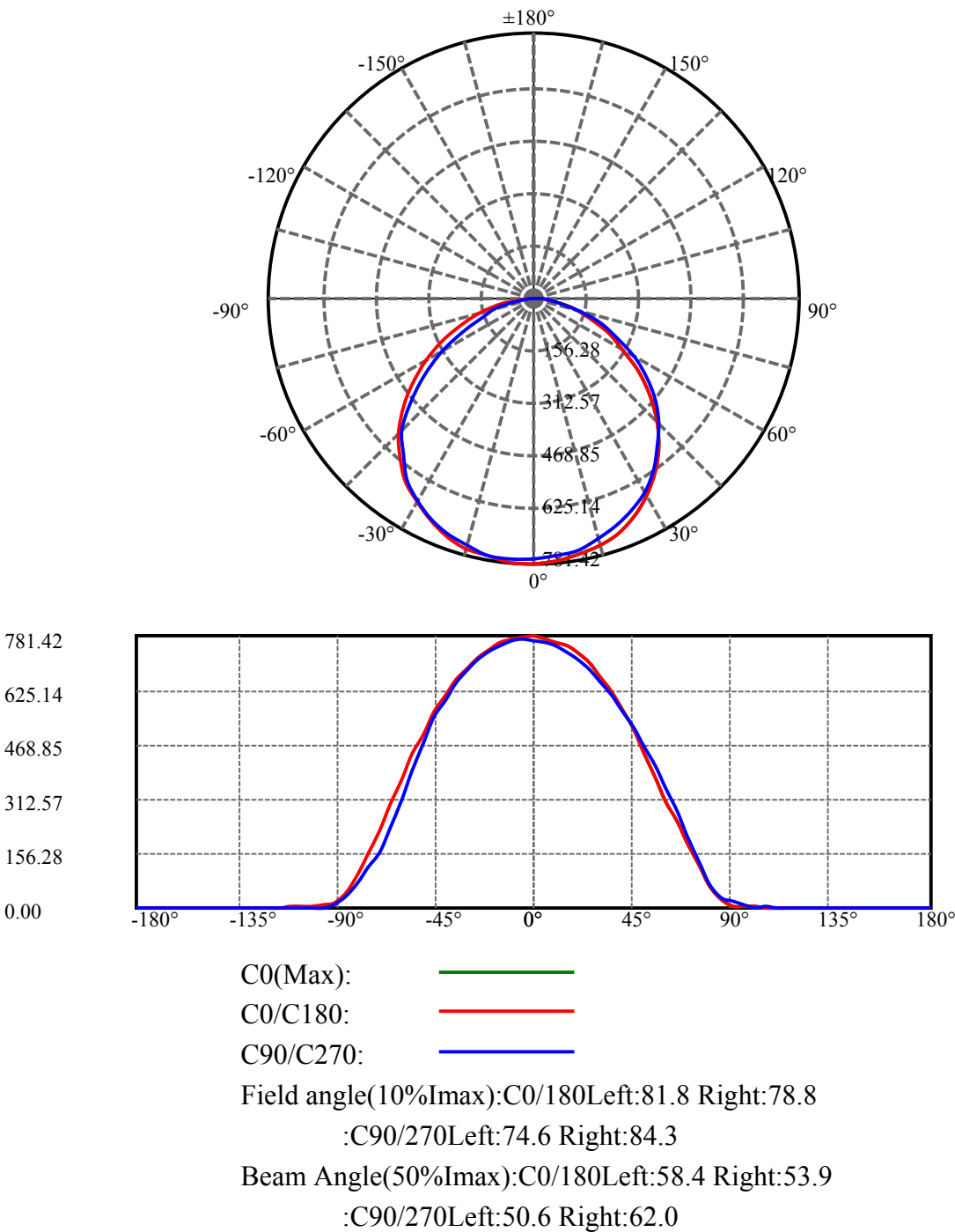
Operator: Zac

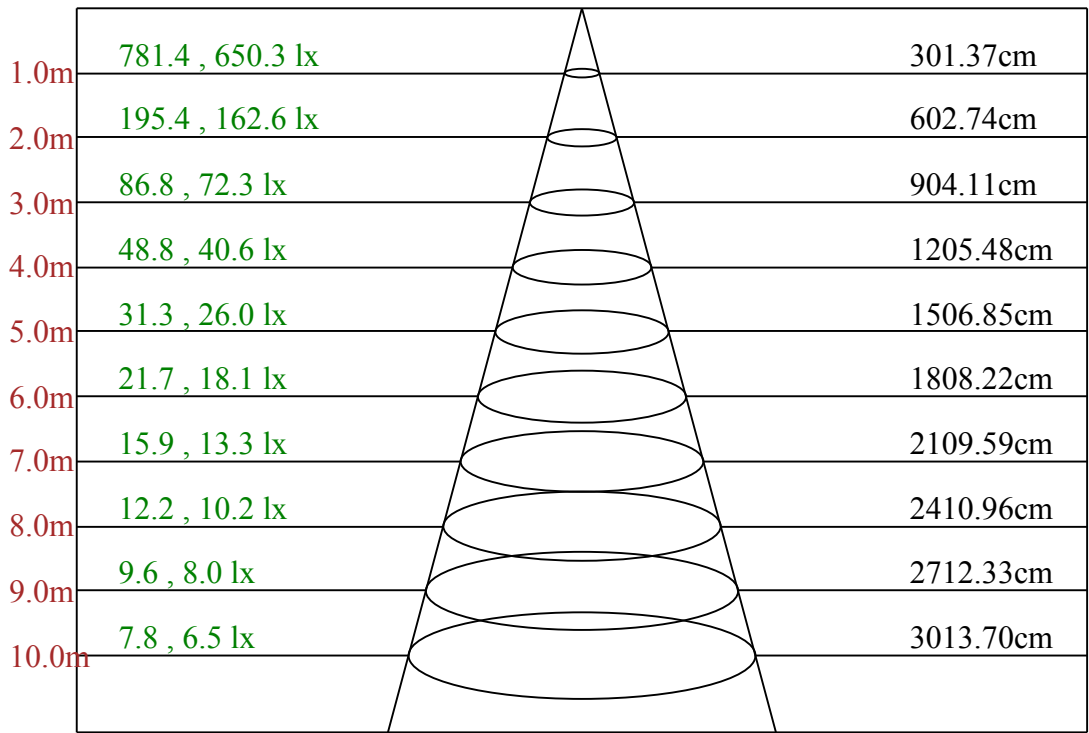
## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	608.60	27.30%	27.30%
0-40	1004.95	45.08%	45.08%
0-60	1780.46	79.86%	79.86%
0-90	2216.25	99.41%	99.41%
0-120	2226.53	99.87%	99.87%
0-180	2229.48	100.00%	100.00%
60-90	607.02	27.23%	27.23%
90-120	22.57	1.01%	1.01%
90-130	23.23	1.04%	1.04%
90-150	24.56	1.10%	1.10%
90-180	25.49	1.14%	1.14%
0-60.11	1783.58	80.00%	80.00%

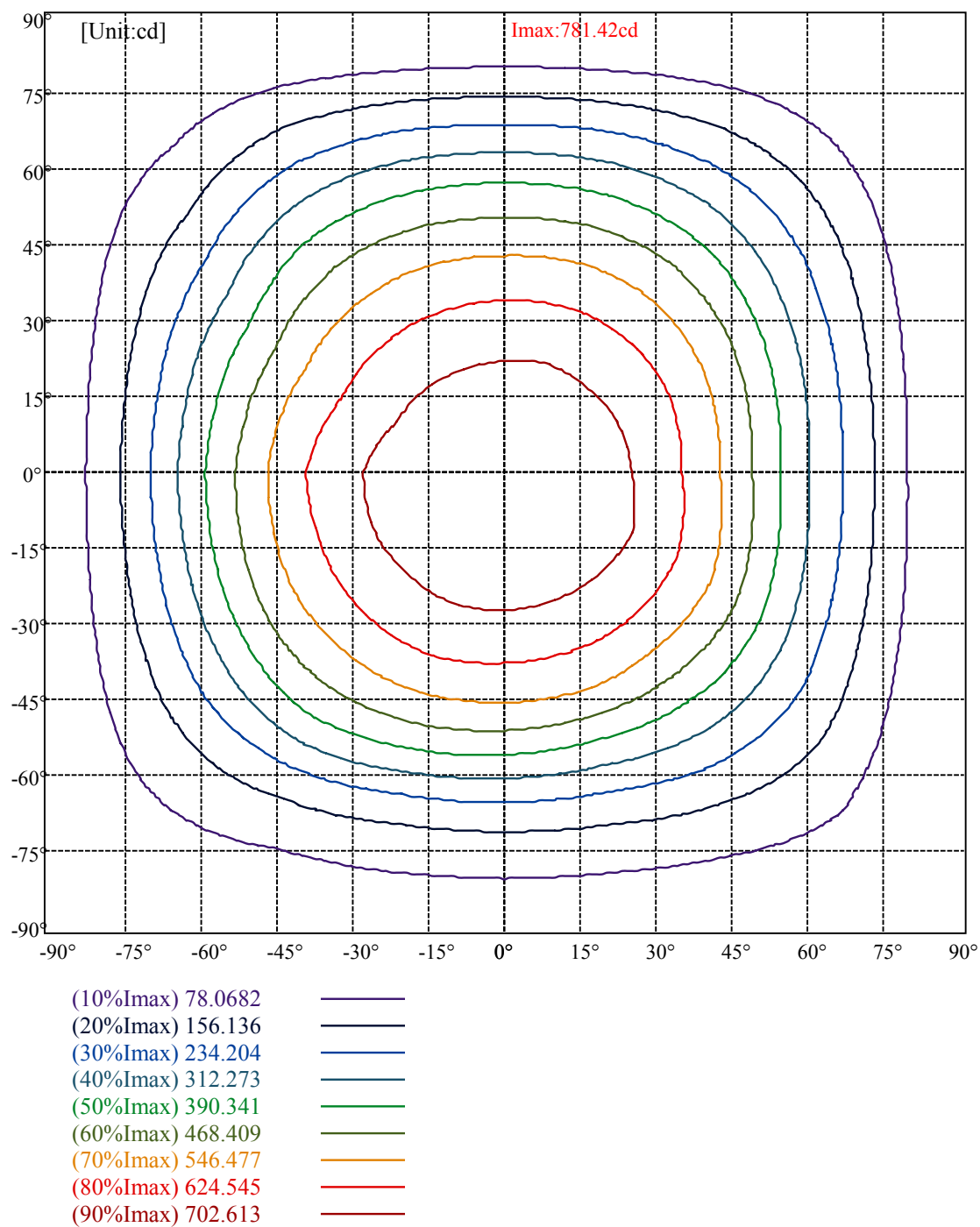
## ZONAL LUMEN SUMMARY

0-10	73.09
10-20	211.20
20-30	324.31
30-40	396.35
40-50	412.69
50-60	362.82
60-70	258.89
70-80	136.40
80-90	40.50
90-100	6.71
100-110	2.55
110-120	1.02
120-130	0.65
130-140	0.68
140-150	0.65
150-160	0.52
160-170	0.34
170-180	0.08





Max , Ave      Beam angle of C0plane112.59



## Intensity data(cd)

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C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	781.42	773.66	762.79	753.48	734.27	702.25	665.19	621.72	572.43
22.5	775.79	768.03	754.84	747.07	730.00	696.23	667.13	626.38	576.51
45.0	772.11	766.28	756.39	744.55	720.10	688.28	661.50	621.91	578.45
67.5	769.58	766.67	757.75	736.79	715.64	691.96	654.13	619.00	574.37
90.0	767.64	760.66	751.54	734.07	711.18	684.79	652.38	612.99	568.75
112.5	764.34	759.10	749.79	728.45	710.01	684.59	651.41	612.21	569.91
135.0	765.51	762.99	754.06	736.01	713.89	686.53	654.90	613.96	571.85
157.5	769.39	765.90	758.91	741.45	719.52	693.32	661.31	620.75	578.84
180.0	781.42	777.73	769.78	760.46	744.94	716.80	688.47	655.68	613.96
202.5	775.79	773.66	766.87	758.91	742.22	717.19	690.41	655.29	606.97
225.0	772.11	770.94	765.70	756.97	743.39	715.06	684.59	649.47	608.53
247.5	769.58	771.72	769.00	755.22	737.95	716.03	688.28	652.96	608.72
270.0	767.64	769.97	766.48	751.34	735.82	714.47	684.01	647.53	598.05
292.5	764.34	762.79	762.21	754.25	735.04	712.73	684.01	644.04	597.46
315.0	765.51	768.22	764.15	753.48	737.37	715.06	681.49	645.98	593.78
337.5	769.39	769.78	765.51	749.60	735.04	715.83	689.83	643.07	599.60
360.0	781.42	773.66	762.79	753.48	734.27	702.25	665.19	621.72	572.43
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	512.28	447.47	374.90	306.01	247.99	184.34	122.05	64.04	22.32
22.5	524.70	463.96	394.69	324.44	261.38	197.15	130.40	68.11	23.87
45.0	528.77	472.11	407.11	339.77	273.02	202.20	134.47	70.05	27.55
67.5	526.06	471.14	411.57	346.95	279.81	206.85	131.56	68.69	28.33
90.0	519.65	464.74	409.82	346.37	277.29	203.94	132.34	67.92	27.75
112.5	522.18	468.81	409.05	348.51	279.81	207.24	133.70	67.72	29.69
135.0	524.12	469.40	411.18	346.18	276.32	207.05	137.19	71.41	28.91
157.5	525.67	463.19	399.54	329.10	260.99	188.03	124.58	68.11	26.39
180.0	561.76	499.28	439.51	368.30	295.92	222.18	157.37	96.63	45.02
202.5	560.21	502.38	437.38	356.46	279.43	202.20	132.53	79.36	38.62
225.0	553.42	496.17	429.42	357.63	255.95	171.92	105.37	64.04	31.63
247.5	552.83	488.99	409.82	321.34	229.56	157.95	112.16	70.05	32.41
270.0	547.60	477.16	395.27	309.70	227.03	158.92	117.40	73.54	35.32
292.5	544.68	466.29	381.30	302.52	223.15	158.92	112.55	70.44	33.18
315.0	537.50	467.26	390.42	318.62	246.24	173.86	120.11	70.83	34.93
337.5	543.52	477.55	401.48	328.32	260.80	196.76	136.22	83.44	40.36
360.0	512.28	447.47	374.90	306.01	247.99	184.34	122.05	64.04	22.32
C/ $\gamma$ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	6.02	2.91	3.69	1.94	0.78	0.78	0.58	0.78	0.78
22.5	9.90	4.66	0.78	0.58	0.78	0.78	0.78	0.78	0.97
45.0	15.72	0.39	7.76	2.72	0.58	0.78	0.78	0.78	0.78
67.5	18.43	6.21	1.16	5.05	1.36	0.78	0.58	0.97	1.16
90.0	18.05	9.70	0.39	5.05	2.33	0.78	0.78	0.97	0.97
112.5	19.79	8.93	0.78	8.34	4.08	1.36	0.97	0.78	0.97
135.0	18.82	2.52	8.15	6.60	1.75	0.78	0.78	0.78	0.97
157.5	14.94	5.24	3.49	1.16	1.94	1.55	0.78	0.97	0.97
180.0	15.52	7.37	6.02	6.60	4.46	2.33	0.78	0.58	0.58
202.5	14.36	6.02	2.33	0.39	1.36	0.97	1.16	0.97	0.78
225.0	11.26	6.02	0.58	3.69	1.55	0.78	0.39	0.58	0.58
247.5	9.70	3.69	0.78	0.97	1.94	1.16	0.78	0.39	0.58
270.0	7.76	0.97	0.39	0.39	0.78	0.58	0.58	0.78	0.58
292.5	8.73	1.94	0.19	0.58	0.58	0.19	0.58	0.39	0.39
315.0	10.28	3.69	0.39	1.36	0.58	0.58	0.39	0.58	0.58
337.5	12.81	1.16	1.16	0.19	0.19	0.39	0.58	0.39	0.78
360.0	6.02	2.91	3.69	1.94	0.78	0.78	0.58	0.78	0.78

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.78	0.97	0.97	1.16	0.97	0.97	0.97	0.97	0.97
22.5	0.97	1.16	1.36	1.36	1.36	1.16	1.36	1.36	1.36
45.0	0.97	0.97	1.16	1.16	1.16	1.36	1.36	1.36	1.36
67.5	0.97	1.16	1.16	0.97	0.97	1.36	1.36	1.36	1.16
90.0	0.97	1.16	1.16	1.36	1.16	1.16	1.16	1.16	1.16
112.5	0.97	1.16	1.36	0.97	0.97	1.36	1.36	0.97	1.36
135.0	0.97	0.97	1.16	1.16	1.16	1.16	1.16	1.16	1.36
157.5	0.97	1.16	1.16	1.16	1.36	1.36	1.36	1.16	1.16
180.0	0.78	0.78	0.78	0.97	1.16	1.16	1.16	1.16	1.16
202.5	0.58	0.97	0.97	0.97	1.16	1.16	0.97	1.16	1.16
225.0	0.97	0.97	0.97	0.97	1.16	1.16	1.36	1.16	1.16
247.5	0.78	0.97	0.78	1.16	1.16	1.16	1.16	1.16	1.16
270.0	0.78	0.97	0.78	1.16	0.97	0.97	0.97	0.97	0.97
292.5	0.78	0.78	0.97	0.97	0.97	1.16	1.16	1.16	1.16
315.0	0.78	0.78	0.97	0.97	1.16	0.78	1.16	0.97	1.36
337.5	0.97	0.78	0.97	0.97	1.16	0.97	1.36	1.16	1.36
360.0	0.78	0.97	0.97	1.16	0.97	0.97	0.97	0.97	0.97

C/γ(°)	180.0
0.0	1.16
22.5	1.36
45.0	1.16
67.5	1.36
90.0	1.16
112.5	1.36
135.0	1.16
157.5	1.16
180.0	1.16
202.5	1.36
225.0	1.16
247.5	1.36
270.0	1.16
292.5	1.36
315.0	1.16
337.5	1.16
360.0	1.16