



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.03

LampCAT:

Current(A): 0.0430

Lamp flux(lm): -1.0

Power (W): 4.95

Number of Lamps: 1

PF: 0.9648

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 333.70, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 67.40

Central intensity(cd): 123.124, Maximum intensity(cd): 126.175

Angle of maximum intensity: C=90.0 $\gamma=5.0$

Beam Angle(50%Imax): [C0/180]Total=104.8

[C90/270]Total=109.2

Field angle(10%Imax): [C0/180]Total=157.0

[C90/270]Total=159.6

Maximum s/h(1/2): C0_180=1.16 C90_270=1.27

Maximum s/h(1/4): C0_180=1.30 C90_270=1.38

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 1.09%

Down flux rate of LUM(%): 98.91%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.280%

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

Date:
Humidity(%): 59%

Operator: Tester

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	123.124	0.000	0	0.00%	0.00%
5.0	122.708	2.939	2.939	0.00%	0.88%
10.0	120.631	8.705	11.644	0.00%	3.49%
15.0	117.310	14.114	25.758	0.00%	7.72%
20.0	112.745	18.960	44.718	0.00%	13.40%
25.0	107.148	23.063	67.781	0.00%	20.31%
30.0	100.678	26.300	94.081	0.00%	28.19%
35.0	93.334	28.570	122.651	0.00%	36.75%
40.0	85.409	29.822	152.473	0.00%	45.69%
45.0	77.033	30.077	182.55	0.00%	54.70%
50.0	68.102	29.327	211.877	0.00%	63.49%
55.0	59.012	27.639	239.516	0.00%	71.78%
60.0	49.340	25.045	264.561	0.00%	79.28%
65.0	39.496	21.596	286.157	0.00%	85.75%
70.0	29.718	17.525	303.682	0.00%	91.00%
75.0	19.940	12.980	316.662	0.00%	94.89%
80.0	10.757	8.214	324.876	0.00%	97.35%
85.0	3.797	3.955	328.831	0.00%	98.54%
90.0	0.662	1.221	330.051	0.00%	98.91%
95.0	0.516	0.322	330.374	0.00%	99.00%
100.0	0.463	0.266	330.64	0.00%	99.08%
105.0	0.450	0.244	330.884	0.00%	99.16%
110.0	0.450	0.235	331.119	0.00%	99.23%
115.0	0.490	0.238	331.357	0.00%	99.30%
120.0	0.569	0.257	331.615	0.00%	99.37%
125.0	0.622	0.275	331.89	0.00%	99.46%
130.0	0.635	0.273	332.163	0.00%	99.54%
135.0	0.609	0.251	332.415	0.00%	99.61%
140.0	0.635	0.230	332.645	0.00%	99.68%
145.0	0.688	0.221	332.866	0.00%	99.75%
150.0	0.728	0.208	333.074	0.00%	99.81%
155.0	0.715	0.183	333.257	0.00%	99.87%
160.0	0.781	0.157	333.413	0.00%	99.91%
165.0	0.754	0.127	333.54	0.00%	99.95%
170.0	0.754	0.089	333.629	0.00%	99.98%
175.0	0.781	0.055	333.684	0.00%	99.99%
180.0	0.722	0.018	333.702	0.00%	100.00%

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

Date:
Humidity(%): 59%

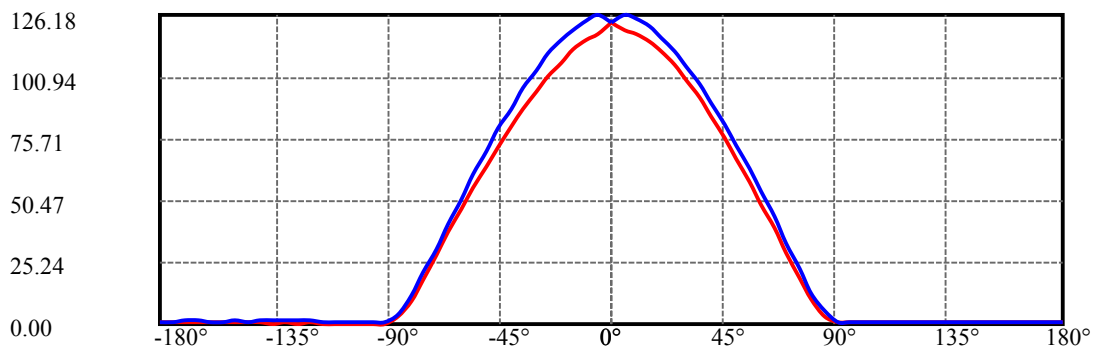
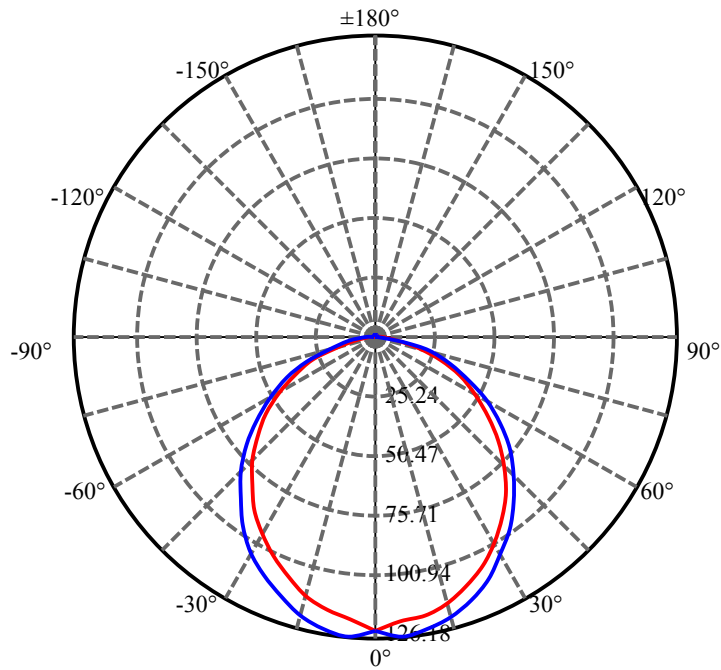
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	94.08	N.A.	28.19%
0-40	152.47	N.A.	45.69%
0-60	264.56	N.A.	79.28%
0-90	330.05	N.A.	98.91%
0-120	331.61	N.A.	99.37%
0-180	333.70	N.A.	100.00%
60-90	65.49	N.A.	19.63%
90-120	1.56	N.A.	0.47%
90-130	2.11	N.A.	0.63%
90-150	3.02	N.A.	0.91%
90-180	3.63	N.A.	1.09%
0-60.56	266.96	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	11.64
10-20	33.07
20-30	49.36
30-40	58.39
40-50	59.40
50-60	52.68
60-70	39.12
70-80	21.19
80-90	5.18
90-100	0.59
100-110	0.48
110-120	0.50
120-130	0.55
130-140	0.48
140-150	0.43
150-160	0.34
160-170	0.22
170-180	0.05

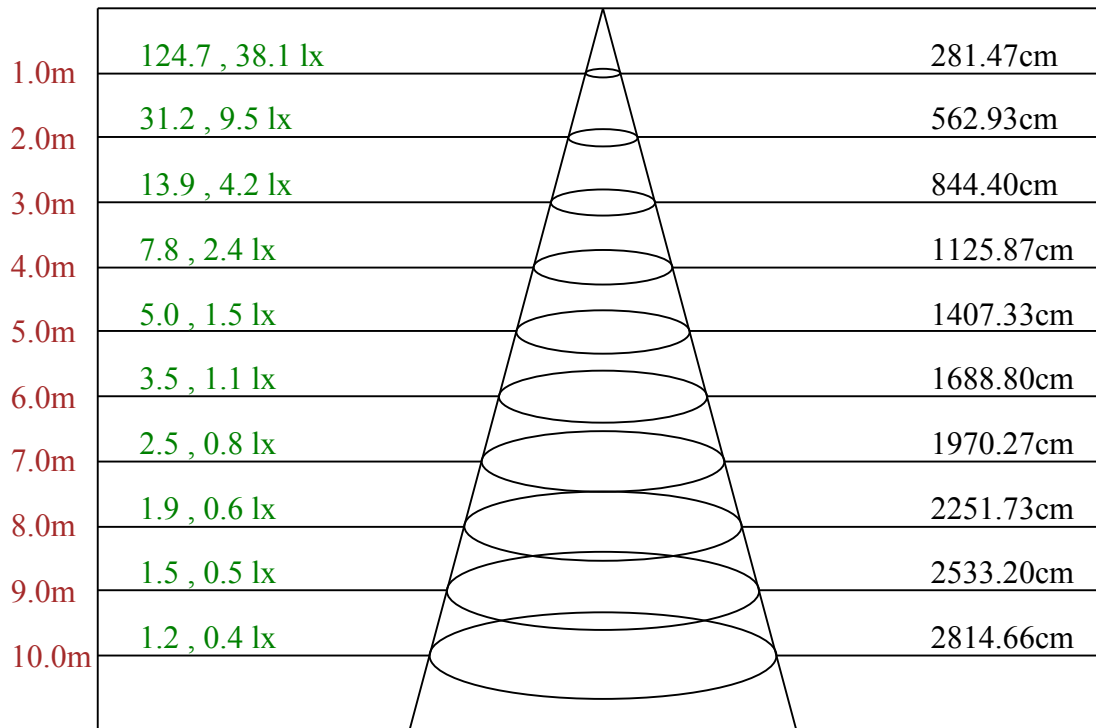


C0/C180: —

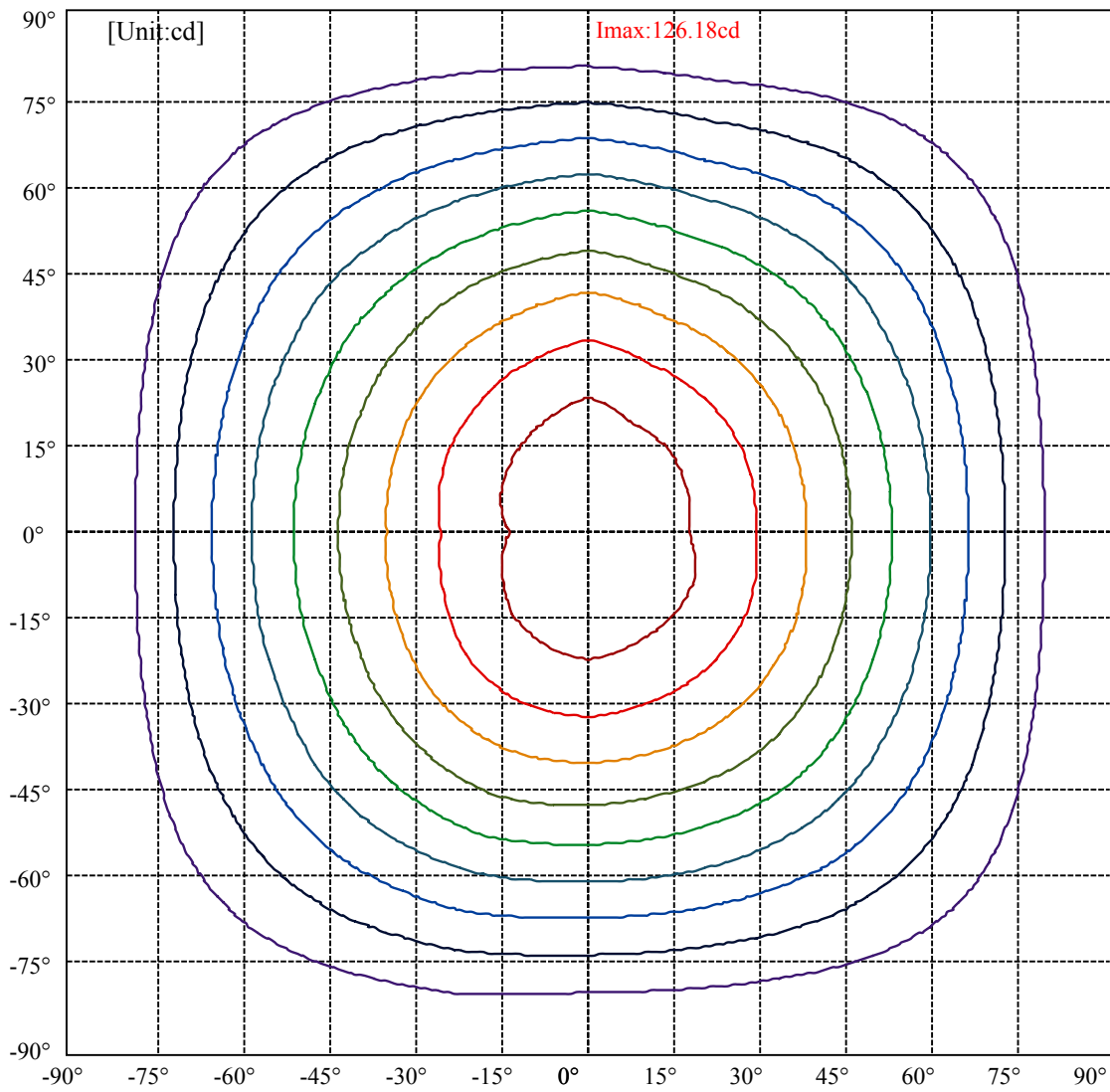
C90/C270: —

Field angle(10%Imax):C0/180Left:78.2 Right:78.8
 :C90/270Left:79.4 Right:80.2

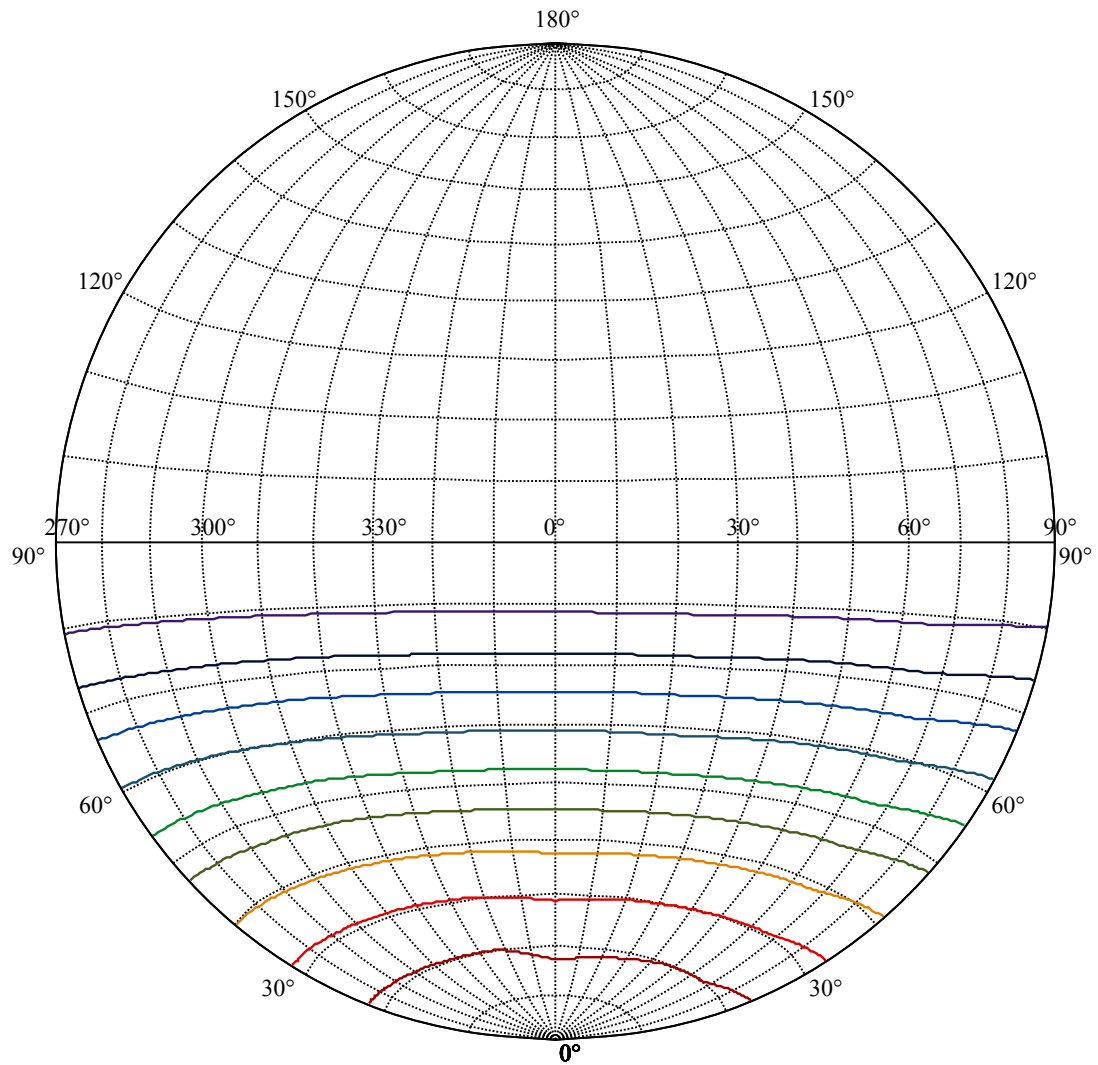
Beam Angle(50%Imax):C0/180Left:51.6 Right:53.2
 :C90/270Left:53.9 Right:55.3



Max , Ave Beam angle of C90 plane 109.21



(10%Imax) 12.6175	—
(20%Imax) 25.235	—
(30%Imax) 37.8525	—
(40%Imax) 50.47	—
(50%Imax) 63.0875	—
(60%Imax) 75.705	—
(70%Imax) 88.3225	—
(80%Imax) 100.94	—
(90%Imax) 113.558	—



House

[Unit:cd]

Road

I_{max}:126.18

(10%I _{max}) 12.6175	—
(20%I _{max}) 25.235	—
(30%I _{max}) 37.8525	—
(40%I _{max}) 50.47	—
(50%I _{max}) 63.0875	—
(60%I _{max}) 75.705	—
(70%I _{max}) 88.3225	—
(80%I _{max}) 100.94	—
(90%I _{max}) 113.558	—

Intensity data(cd)

C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	123.12	119.61	118.34	115.59	111.14	105.64	99.50	92.51	84.47
22.5	123.12	121.31	119.82	116.65	112.20	106.91	100.56	93.15	85.10
45.0	123.12	123.00	121.09	117.92	113.26	107.97	100.98	93.57	85.74
67.5	123.12	123.63	121.31	118.34	113.68	108.18	101.83	94.42	86.59
90.0	123.12	126.18	124.27	121.52	117.07	111.57	105.22	98.02	90.40
112.5	123.12	123.85	121.31	117.92	113.90	107.97	101.83	94.21	86.59
135.0	123.12	122.36	119.82	116.44	111.78	105.43	98.87	91.67	83.62
157.5	123.12	121.73	118.98	114.95	109.66	103.73	97.17	89.34	81.08
180.0	123.12	118.55	116.23	112.41	106.91	101.41	95.05	87.86	80.45
202.5	123.12	120.67	118.13	114.53	109.45	103.52	96.75	89.55	81.51
225.0	123.12	122.79	120.88	117.28	112.63	106.91	100.56	93.15	85.10
247.5	123.12	123.63	121.94	118.55	114.32	109.24	102.89	95.90	87.86
270.0	123.12	126.18	123.85	120.25	115.80	110.30	103.73	96.11	88.07
292.5	123.12	124.06	121.73	118.55	114.53	109.03	102.46	95.27	87.22
315.0	123.12	123.00	121.09	118.13	113.90	108.60	102.04	94.63	86.80
337.5	123.12	122.79	121.31	117.92	113.68	107.97	101.41	94.00	85.95
360.0	123.12	119.61	118.34	115.59	111.14	105.64	99.50	92.51	84.47
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	76.21	67.32	58.22	48.69	38.95	28.79	18.84	10.16	3.39
22.5	76.64	67.32	58.01	47.85	38.53	28.37	18.84	9.74	3.60
45.0	76.85	67.96	58.64	49.12	38.95	29.22	19.27	10.16	3.60
67.5	77.70	68.59	59.28	49.54	39.17	29.22	19.48	10.16	3.39
90.0	81.72	73.04	63.72	53.77	43.61	33.24	23.08	12.91	5.50
112.5	78.33	69.23	60.12	50.39	40.65	30.70	21.17	12.07	4.45
135.0	75.15	66.48	57.37	48.06	38.11	29.00	19.90	10.16	3.18
157.5	73.04	64.36	56.10	46.58	37.05	27.73	18.42	9.32	2.96
180.0	72.40	64.36	55.68	46.79	37.47	27.95	17.78	9.10	2.75
202.5	73.46	64.57	55.89	46.58	37.26	27.95	18.84	9.74	2.96
225.0	76.85	67.75	58.85	49.54	39.59	30.06	20.54	11.22	3.81
247.5	80.24	71.34	62.03	51.87	42.13	32.39	22.23	13.34	5.50
270.0	79.60	70.50	60.97	51.23	40.86	30.91	21.17	11.43	4.02
292.5	78.54	69.44	60.55	50.81	40.44	30.49	20.54	11.22	4.02
315.0	78.54	69.44	60.12	49.96	40.01	30.27	19.90	10.80	4.02
337.5	77.27	67.96	58.64	48.69	39.17	29.22	19.05	10.59	3.60
360.0	76.21	67.32	58.22	48.69	38.95	28.79	18.84	10.16	3.39
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.85	0.42	0.64	0.64	0.64	0.64	0.85	0.85	0.85
22.5	0.85	0.64	0.85	0.64	0.64	0.64	0.85	0.64	0.85
45.0	0.85	0.64	0.42	0.64	0.64	0.64	0.64	0.64	0.64
67.5	0.85	0.64	0.64	0.85	0.64	0.85	0.85	0.85	0.85
90.0	0.85	0.64	0.42	0.42	0.42	0.42	0.64	0.64	0.64
112.5	0.64	0.64	0.21	0.21	0.21	0.21	0.21	0.42	0.64
135.0	0.42	0.21	0.21	0.00	0.00	0.42	0.42	0.21	0.21
157.5	0.21	0.00	0.21	0.00	0.21	0.21	0.21	0.64	0.21
180.0	0.21	0.21	0.21	0.21	0.21	0.21	0.42	0.21	0.42
202.5	0.42	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.42
225.0	0.42	0.21	0.00	0.21	0.21	0.21	0.00	0.42	0.42
247.5	0.42	0.42	0.42	0.21	0.21	0.21	0.42	0.42	0.21
270.0	1.06	1.06	1.06	1.06	0.85	0.85	1.27	1.27	1.27
292.5	0.85	0.85	0.64	0.85	0.85	0.85	0.85	1.06	1.06
315.0	0.85	0.85	0.64	0.42	0.64	0.64	0.64	0.85	0.64
337.5	0.85	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.85
360.0	0.85	0.42	0.64	0.64	0.64	0.64	0.85	0.85	0.85

Intensity data(cd)

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.64	0.85	0.85	0.85	0.85	1.06	0.85	0.85	0.64
22.5	0.64	0.64	0.64	0.85	0.85	0.85	0.64	0.85	0.85
45.0	0.64	0.64	0.85	0.64	0.85	0.85	0.64	0.64	0.64
67.5	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
90.0	0.64	0.64	0.64	0.85	0.64	1.06	0.64	0.64	0.64
112.5	0.42	0.42	0.42	0.42	0.64	0.64	0.64	0.64	0.85
135.0	0.21	0.21	0.64	0.85	0.42	0.85	0.64	0.64	0.85
157.5	0.42	0.64	0.42	0.42	0.85	0.42	0.85	0.64	0.64
180.0	0.21	0.42	0.64	0.42	0.42	0.42	0.64	0.85	0.85
202.5	0.42	0.42	0.42	0.64	0.64	0.64	0.64	0.64	0.85
225.0	0.42	0.42	0.64	0.64	0.42	0.64	0.42	0.64	0.85
247.5	0.21	0.21	0.64	0.64	0.64	0.64	0.64	0.42	0.64
270.0	1.27	1.27	1.06	1.27	1.06	1.06	1.27	1.27	1.06
292.5	0.85	0.85	1.06	0.64	0.64	0.85	0.85	0.85	0.85
315.0	0.85	0.85	0.64	0.85	0.85	0.85	0.85	0.85	0.85
337.5	1.06	0.85	0.64	0.85	0.85	0.85	1.06	0.85	0.64
360.0	0.64	0.85	0.85	0.85	0.85	1.06	0.85	0.85	0.64

C/γ(°)	180.0
0.0	0.72
22.5	0.72
45.0	0.72
67.5	0.72
90.0	0.72
112.5	0.72
135.0	0.72
157.5	0.72
180.0	0.72
202.5	0.72
225.0	0.72
247.5	0.72
270.0	0.72
292.5	0.72
315.0	0.72
337.5	0.72
360.0	0.72