



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.07

LampCAT:

Current(A): 0.0670

Lamp flux(lm): -1.0

Power (W): 7.89

Number of Lamps: 1

PF: 0.9751

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 516.81, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 65.50

Central intensity(cd): 184.083, Maximum intensity(cd): 187.350

Angle of maximum intensity: C=112.5 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=109.4

[C90/270]Total=113.3

Field angle(10%Imax): [C0/180]Total=156.8

[C90/270]Total=160.8

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

Maximum s/h(1/4): C0_180=1.38 C90_270=1.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.70%

Down flux rate of LUM(%): 99.30%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.334%

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

Date:
Humidity(%): 58%

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	184.083	0.000	0	0.00%	0.00%
5.0	183.379	4.393	4.393	0.00%	0.85%
10.0	180.800	13.028	17.421	0.00%	3.37%
15.0	176.654	21.204	38.625	0.00%	7.47%
20.0	170.900	28.643	67.268	0.00%	13.02%
25.0	163.513	35.074	102.342	0.00%	19.80%
30.0	154.653	40.264	142.606	0.00%	27.59%
35.0	144.713	44.084	186.689	0.00%	36.12%
40.0	133.638	46.441	233.13	0.00%	45.11%
45.0	121.200	47.185	280.315	0.00%	54.24%
50.0	107.734	46.259	326.575	0.00%	63.19%
55.0	93.445	43.743	370.318	0.00%	71.65%
60.0	78.252	39.687	410.005	0.00%	79.33%
65.0	62.450	34.205	444.21	0.00%	85.95%
70.0	46.270	27.529	471.739	0.00%	91.28%
75.0	30.793	20.143	491.882	0.00%	95.18%
80.0	16.977	12.782	504.664	0.00%	97.65%
85.0	6.442	6.363	511.027	0.00%	98.88%
90.0	1.405	2.149	513.176	0.00%	99.30%
95.0	0.527	0.529	513.704	0.00%	99.40%
100.0	0.432	0.260	513.965	0.00%	99.45%
105.0	0.446	0.235	514.2	0.00%	99.50%
110.0	0.446	0.233	514.433	0.00%	99.54%
115.0	0.486	0.236	514.668	0.00%	99.59%
120.0	0.459	0.230	514.898	0.00%	99.63%
125.0	0.513	0.225	515.123	0.00%	99.67%
130.0	0.554	0.232	515.355	0.00%	99.72%
135.0	0.608	0.235	515.589	0.00%	99.76%
140.0	0.635	0.230	515.819	0.00%	99.81%
145.0	0.581	0.203	516.022	0.00%	99.85%
150.0	0.729	0.193	516.215	0.00%	99.89%
155.0	0.675	0.178	516.392	0.00%	99.92%
160.0	0.702	0.144	516.537	0.00%	99.95%
165.0	0.743	0.119	516.656	0.00%	99.97%
170.0	0.675	0.084	516.74	0.00%	99.99%
175.0	0.716	0.050	516.79	0.00%	100.00%
180.0	0.762	0.018	516.807	0.00%	100.00%

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

Date:
Humidity(%): 58%

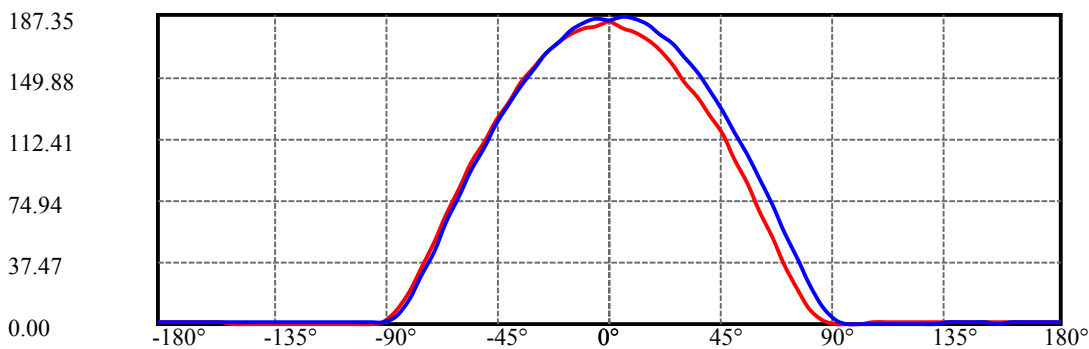
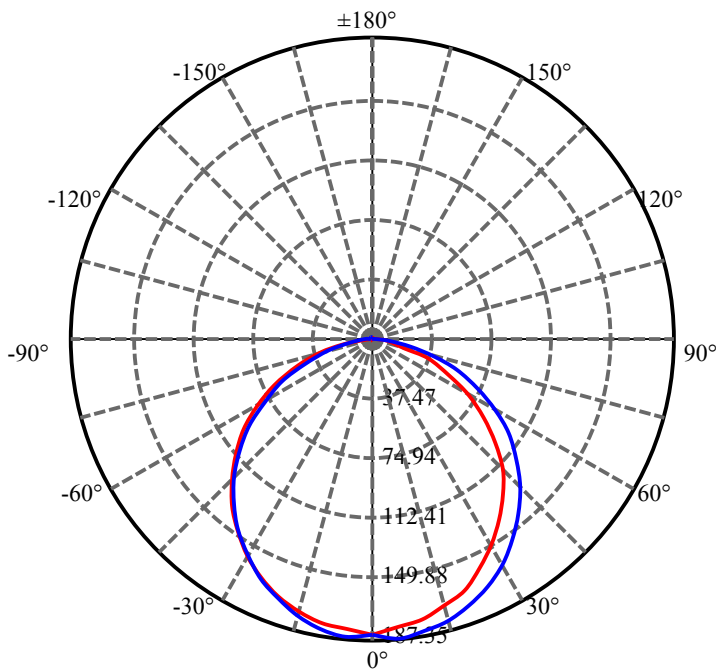
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	142.61	N.A.	27.59%
0-40	233.13	N.A.	45.11%
0-60	410.01	N.A.	79.33%
0-90	513.18	N.A.	99.30%
0-120	514.90	N.A.	99.63%
0-180	516.81	N.A.	100.00%
60-90	103.17	N.A.	19.96%
90-120	1.72	N.A.	0.33%
90-130	2.18	N.A.	0.42%
90-150	3.04	N.A.	0.59%
90-180	3.61	N.A.	0.70%
0-60.50	413.45	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	17.42
10-20	49.85
20-30	75.34
30-40	90.52
40-50	93.44
50-60	83.43
60-70	61.73
70-80	32.92
80-90	8.51
90-100	0.79
100-110	0.47
110-120	0.47
120-130	0.46
130-140	0.46
140-150	0.40
150-160	0.32
160-170	0.20
170-180	0.05

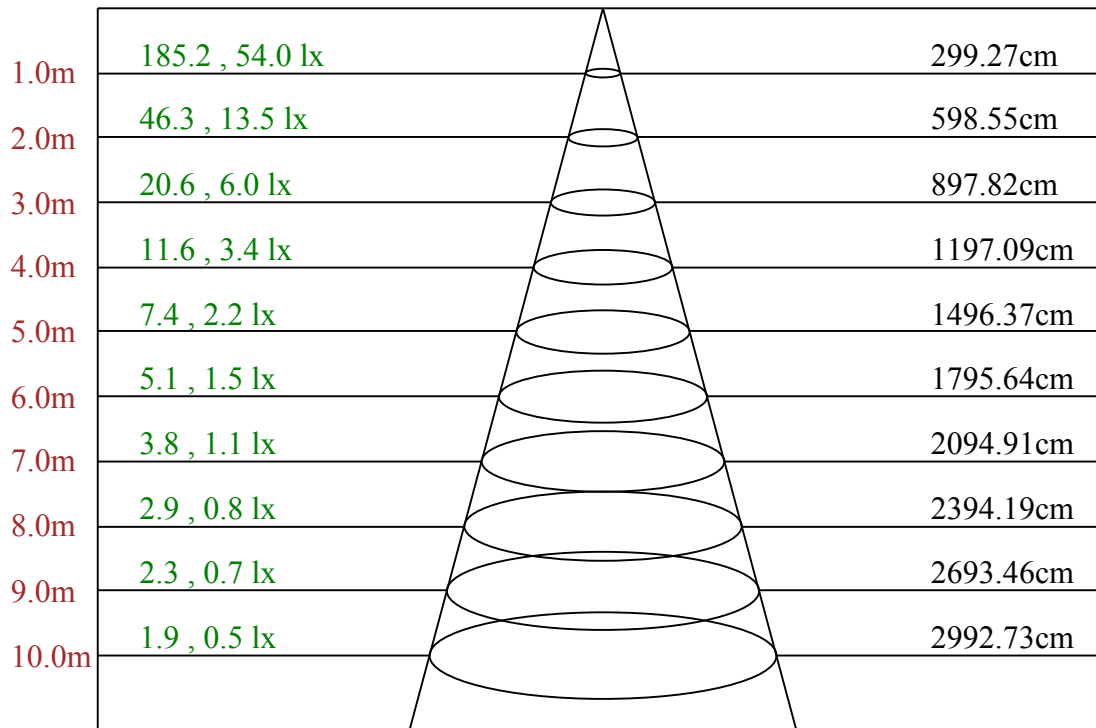


C0/C180: —

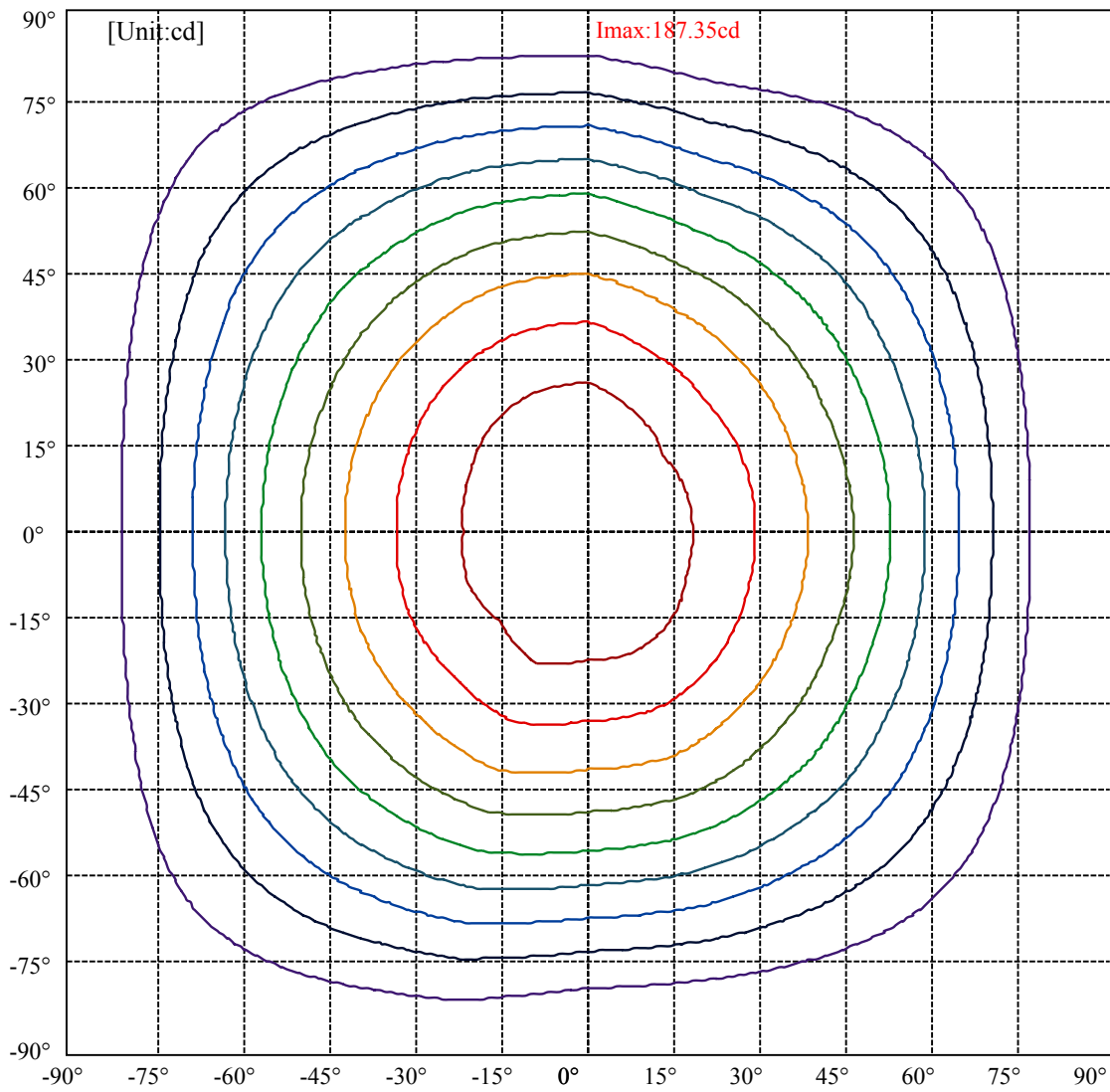
C90/C270: —

Field angle(10%Imax):C0/180Left:80.6 Right:76.2
 :C90/270Left:78.7 Right:82.1

Beam Angle(50%Imax):C0/180Left:56.8 Right:52.6
 :C90/270Left:55.0 Right:58.3



Max , Ave Beam angle of C112.5 plane 112.49

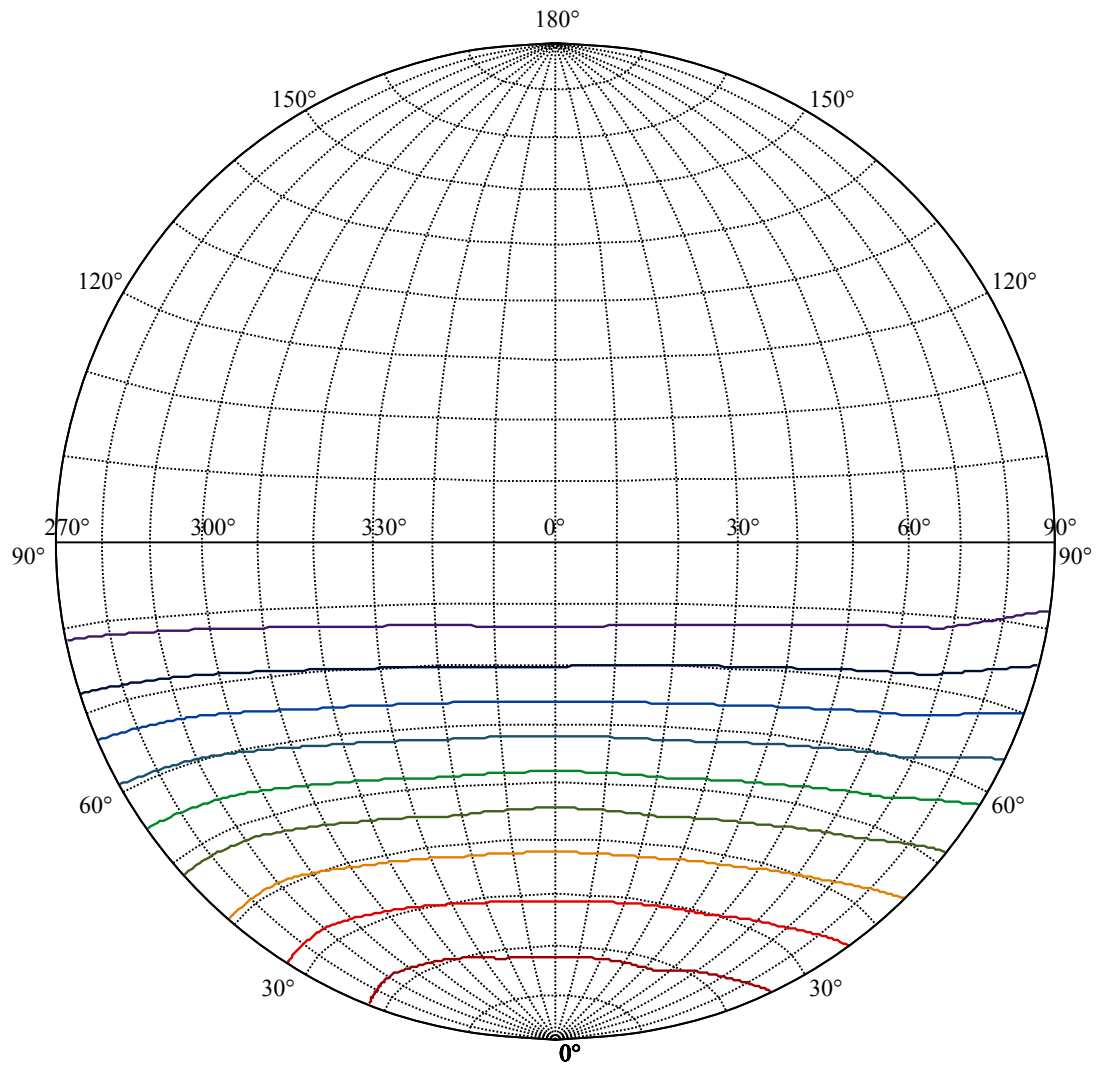


(10%Imax) 18.7159	—
(20%Imax) 37.4318	—
(30%Imax) 56.1477	—
(40%Imax) 74.8635	—
(50%Imax) 93.5794	—
(60%Imax) 112.295	—
(70%Imax) 131.011	—
(80%Imax) 149.727	—
(90%Imax) 168.443	—

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

Date:
Humidity(%): 58%

Operator: Tester












House

[Unit:cd]

Road

I_{max}:187.35

(10%I _{max}) 18.7331	
(20%I _{max}) 37.4662	
(30%I _{max}) 56.1992	
(40%I _{max}) 74.9323	
(50%I _{max}) 93.6654	
(60%I _{max}) 112.398	
(70%I _{max}) 131.132	
(80%I _{max}) 149.865	
(90%I _{max}) 168.598	

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	184.08	179.14	176.33	172.01	165.96	157.31	147.16	137.00	126.63
22.5	184.08	181.08	177.63	172.87	165.96	157.53	148.24	137.43	125.33
45.0	184.08	180.00	176.76	172.01	166.61	158.61	149.32	139.16	127.71
67.5	184.08	185.19	181.95	177.19	171.36	163.80	154.50	144.13	132.68
90.0	184.08	186.49	184.54	181.30	175.90	169.42	161.20	151.91	141.76
112.5	184.08	187.35	185.19	181.30	176.11	169.42	161.20	151.70	141.54
135.0	184.08	185.41	183.24	179.79	174.39	167.47	159.26	149.53	138.73
157.5	184.08	182.60	180.44	176.98	171.79	165.09	156.45	147.16	136.35
180.0	184.08	180.65	179.14	175.68	170.50	163.80	155.37	146.08	135.49
202.5	184.08	182.81	180.87	177.19	171.79	164.88	156.67	146.94	135.92
225.0	184.08	180.65	179.14	175.68	170.28	163.80	156.23	146.73	136.14
247.5	184.08	185.62	183.46	179.79	174.60	167.47	159.26	149.53	139.16
270.0	184.08	185.41	182.38	177.63	171.58	164.01	154.94	144.78	133.33
292.5	184.08	186.27	183.03	178.27	171.79	164.23	154.94	144.56	133.33
315.0	184.08	184.11	180.87	175.90	169.42	161.20	151.48	140.89	128.36
337.5	184.08	181.30	177.84	172.87	166.39	158.18	148.24	137.87	125.76
360.0	184.08	179.14	176.33	172.01	165.96	157.31	147.16	137.00	126.63
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	114.74	100.05	84.71	68.72	52.73	36.30	21.39	9.29	2.16
22.5	112.15	98.11	83.63	68.07	52.73	37.82	23.12	10.59	2.38
45.0	114.96	100.70	86.65	71.31	55.32	39.76	25.28	12.75	3.89
67.5	119.93	106.10	91.19	75.42	59.64	43.22	27.44	14.05	4.54
90.0	129.65	116.91	102.86	88.38	72.17	55.97	39.33	24.20	11.02
112.5	129.22	116.26	102.43	87.30	71.53	54.89	38.90	23.77	10.59
135.0	126.20	113.23	98.97	84.06	68.28	52.73	36.74	22.04	10.16
157.5	124.25	110.85	97.02	82.33	67.64	51.65	35.87	21.18	9.29
180.0	123.60	111.07	97.24	82.76	66.77	49.49	33.71	19.66	8.43
202.5	123.82	110.85	97.02	82.55	66.99	50.78	35.44	20.75	8.43
225.0	124.25	111.94	98.11	83.20	67.85	51.86	36.09	21.39	9.08
247.5	127.06	113.66	99.83	85.14	69.15	52.73	36.74	22.47	9.51
270.0	121.23	107.40	93.35	77.58	61.37	44.52	28.96	14.91	4.32
292.5	120.15	106.32	91.41	75.63	59.43	42.57	26.80	13.18	3.67
315.0	115.61	101.99	86.65	71.09	54.67	39.11	23.99	11.45	3.24
337.5	112.37	98.32	84.06	68.50	52.94	36.95	22.91	9.94	2.38
360.0	114.74	100.05	84.71	68.72	52.73	36.30	21.39	9.29	2.16
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.43	0.22	0.43	0.65	0.86	0.65	0.86	0.65	0.86
22.5	0.86	0.43	0.65	0.43	0.43	0.43	0.65	0.65	0.65
45.0	1.08	0.43	0.65	0.65	0.65	0.86	0.65	0.86	0.65
67.5	0.86	0.43	0.65	0.65	0.43	0.86	0.65	0.65	0.86
90.0	2.38	0.43	0.22	0.43	0.43	0.22	0.43	0.43	0.43
112.5	2.38	0.65	0.22	0.22	0.43	0.22	0.00	0.22	0.43
135.0	2.16	0.43	0.00	0.43	0.22	0.43	0.43	0.00	0.43
157.5	1.73	0.43	0.43	0.22	0.43	0.22	0.43	0.43	0.43
180.0	1.30	0.22	0.22	0.22	0.00	0.22	0.22	0.43	0.22
202.5	1.73	0.43	0.43	0.43	0.22	0.43	0.00	0.43	0.22
225.0	1.73	0.65	0.22	0.00	0.22	0.43	0.22	0.22	0.22
247.5	2.16	0.86	0.43	0.00	0.00	0.00	0.22	0.43	0.43
270.0	1.30	0.86	0.86	0.65	0.86	0.86	1.08	0.86	0.86
292.5	0.86	0.65	0.65	0.65	0.65	0.86	0.65	0.65	0.86
315.0	0.86	0.65	0.43	0.86	0.65	0.65	0.43	0.65	0.65
337.5	0.65	0.65	0.43	0.65	0.65	0.43	0.43	0.65	0.65
360.0	0.43	0.22	0.43	0.65	0.86	0.65	0.86	0.65	0.86

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	0.86	1.08	0.65	0.86	0.86	0.65	0.65	0.65	0.65
22.5	0.43	0.43	0.65	0.86	0.86	0.86	0.86	0.65	0.65
45.0	0.86	0.65	0.43	0.65	0.86	0.86	0.86	0.43	0.65
67.5	0.86	0.86	0.65	0.65	0.65	0.65	0.65	0.65	0.65
90.0	0.65	0.65	0.65	0.86	0.43	0.86	0.65	0.86	0.86
112.5	0.43	0.43	0.22	0.65	0.43	0.65	0.65	0.86	0.65
135.0	0.43	0.43	0.65	0.65	0.43	0.65	0.65	0.65	0.65
157.5	0.22	0.43	0.43	0.43	0.65	0.65	0.65	0.43	0.65
180.0	0.43	0.43	0.43	0.43	0.65	0.65	0.65	0.65	0.65
202.5	0.43	0.22	0.43	0.86	0.65	0.43	0.65	0.65	0.65
225.0	0.65	0.65	0.43	0.65	0.43	0.65	0.65	0.65	0.65
247.5	0.43	0.43	0.43	0.86	0.65	0.65	0.86	0.65	0.86
270.0	1.08	1.08	1.08	1.08	0.86	0.86	0.86	1.08	1.08
292.5	0.65	0.86	0.65	0.65	0.86	0.86	0.65	0.65	0.65
315.0	0.65	0.65	0.86	0.65	0.86	0.65	0.86	0.65	0.86
337.5	0.65	0.86	0.65	0.86	0.65	0.65	1.08	0.65	0.65
360.0	0.86	1.08	0.65	0.86	0.86	0.65	0.65	0.65	0.65

C/γ(°)	180.0
0.0	0.76
22.5	0.76
45.0	0.76
67.5	0.76
90.0	0.76
112.5	0.76
135.0	0.76
157.5	0.76
180.0	0.76
202.5	0.76
225.0	0.76
247.5	0.76
270.0	0.76
292.5	0.76
315.0	0.76
337.5	0.76
360.0	0.76