



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.06

LampCAT:

Current(A): 0.0940

Lamp flux(lm): -1.0

Power (W): 11.01

Number of Lamps: 1

PF: 0.9756

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 700.83, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 63.65

Central intensity(cd): 250.545, Maximum intensity(cd): 255.978

Angle of maximum intensity: C=112.5 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=109.5

[C90/270]Total=113.5

Field angle(10%Imax): [C0/180]Total=156.7

[C90/270]Total=160.4

Maximum s/h(1/2): C0_180=1.24 C90_270=1.30

Maximum s/h(1/4): C0_180=1.36 C90_270=1.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.51%

Down flux rate of LUM(%): 99.49%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.659%

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	250.545	0.000	0	0.00%	0.00%
5.0	249.497	5.978	5.978	0.00%	0.85%
10.0	246.084	17.729	23.706	0.00%	3.38%
15.0	240.284	28.851	52.557	0.00%	7.50%
20.0	232.417	38.957	91.515	0.00%	13.06%
25.0	222.454	47.708	139.222	0.00%	19.87%
30.0	210.590	54.802	194.024	0.00%	27.68%
35.0	196.965	60.015	254.04	0.00%	36.25%
40.0	181.812	63.196	317.236	0.00%	45.27%
45.0	165.078	64.230	381.465	0.00%	54.43%
50.0	146.874	63.034	444.5	0.00%	63.42%
55.0	127.434	59.644	504.143	0.00%	71.94%
60.0	106.745	54.130	558.273	0.00%	79.66%
65.0	85.196	46.661	604.934	0.00%	86.32%
70.0	63.120	37.555	642.489	0.00%	91.68%
75.0	41.655	27.387	669.876	0.00%	95.58%
80.0	22.048	17.045	686.921	0.00%	98.02%
85.0	7.437	8.012	694.933	0.00%	99.16%
90.0	0.971	2.302	697.235	0.00%	99.49%
95.0	0.389	0.372	697.607	0.00%	99.54%
100.0	0.375	0.207	697.815	0.00%	99.57%
105.0	0.416	0.212	698.026	0.00%	99.60%
110.0	0.402	0.214	698.24	0.00%	99.63%
115.0	0.444	0.214	698.455	0.00%	99.66%
120.0	0.513	0.233	698.687	0.00%	99.69%
125.0	0.583	0.253	698.941	0.00%	99.73%
130.0	0.611	0.259	699.2	0.00%	99.77%
135.0	0.611	0.247	699.447	0.00%	99.80%
140.0	0.708	0.244	699.691	0.00%	99.84%
145.0	0.735	0.241	699.932	0.00%	99.87%
150.0	0.763	0.221	700.152	0.00%	99.90%
155.0	0.791	0.197	700.349	0.00%	99.93%
160.0	0.791	0.166	700.515	0.00%	99.96%
165.0	0.860	0.136	700.651	0.00%	99.97%
170.0	0.805	0.099	700.75	0.00%	99.99%
175.0	0.819	0.058	700.808	0.00%	100.00%
180.0	0.888	0.020	700.828	0.00%	100.00%

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

Date:
Humidity(%): 58%

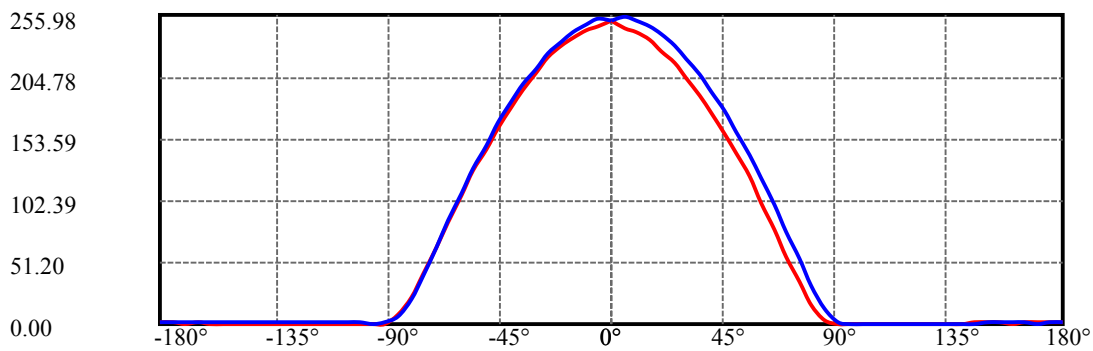
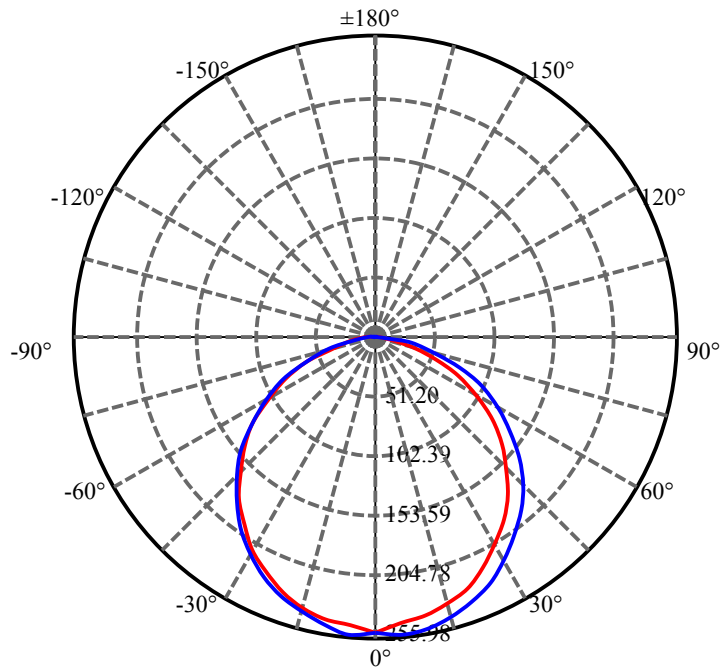
Operator: Tester

ZONAL LUMEN SUMMARY

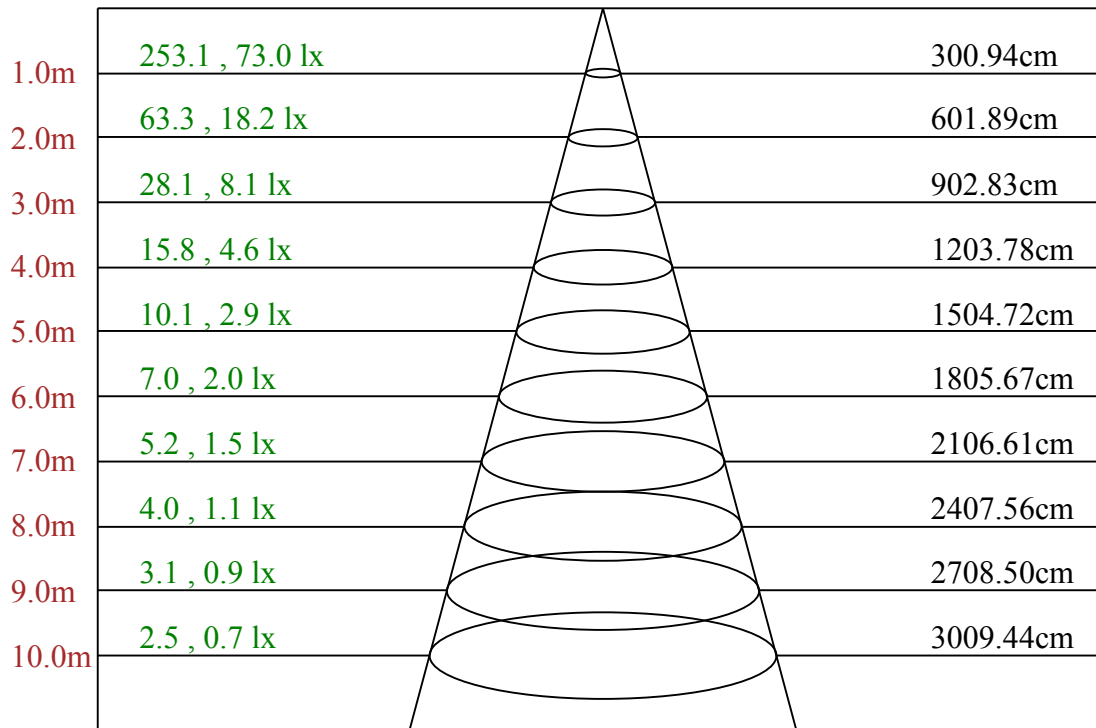
Zone	Lumens	%Lamp	%Fixt
0-30	194.02	N.A.	27.68%
0-40	317.24	N.A.	45.27%
0-60	558.27	N.A.	79.66%
0-90	697.24	N.A.	99.49%
0-120	698.69	N.A.	99.69%
0-180	700.83	N.A.	100.00%
60-90	138.96	N.A.	19.83%
90-120	1.45	N.A.	0.21%
90-130	1.97	N.A.	0.28%
90-150	2.92	N.A.	0.42%
90-180	3.57	N.A.	0.51%
0-60.26	560.66	N.A.	80.00%

ZONAL LUMEN SUMMARY

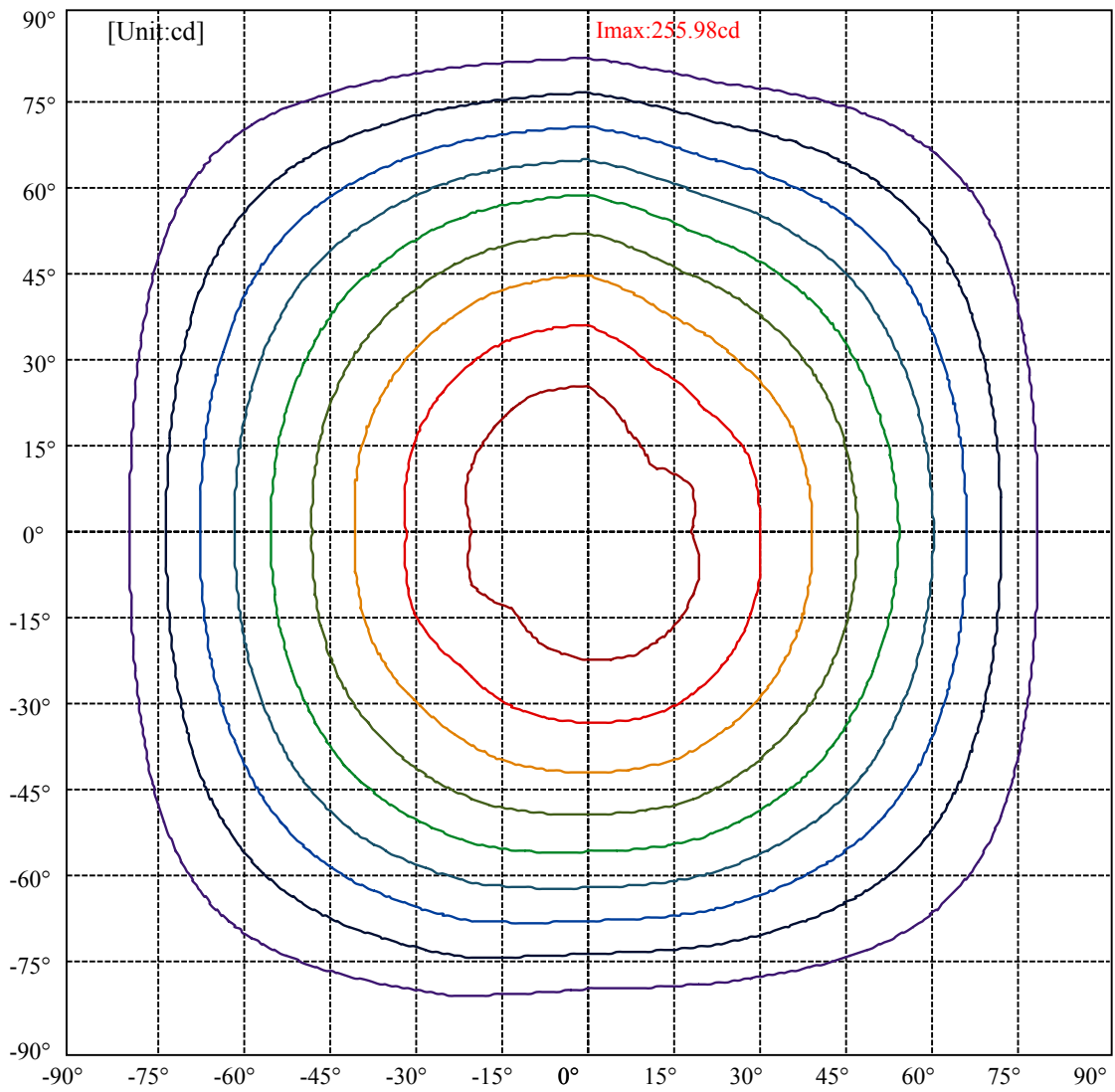
0-10	23.71
10-20	67.81
20-30	102.51
30-40	123.21
40-50	127.26
50-60	113.77
60-70	84.22
70-80	44.43
80-90	10.31
90-100	0.58
100-110	0.43
110-120	0.45
120-130	0.51
130-140	0.49
140-150	0.46
150-160	0.36
160-170	0.23
170-180	0.06



C0/C180: —
C90/C270: —
Field angle(10%I_{max}):C0/180Left:79.1 Right:77.6
:C90/270Left:78.8 Right:81.6
Beam Angle(50%I_{max}):C0/180Left:55.3 Right:54.2
:C90/270Left:55.3 Right:58.2



Max , Ave Beam angle of C112.5 plane 112.79

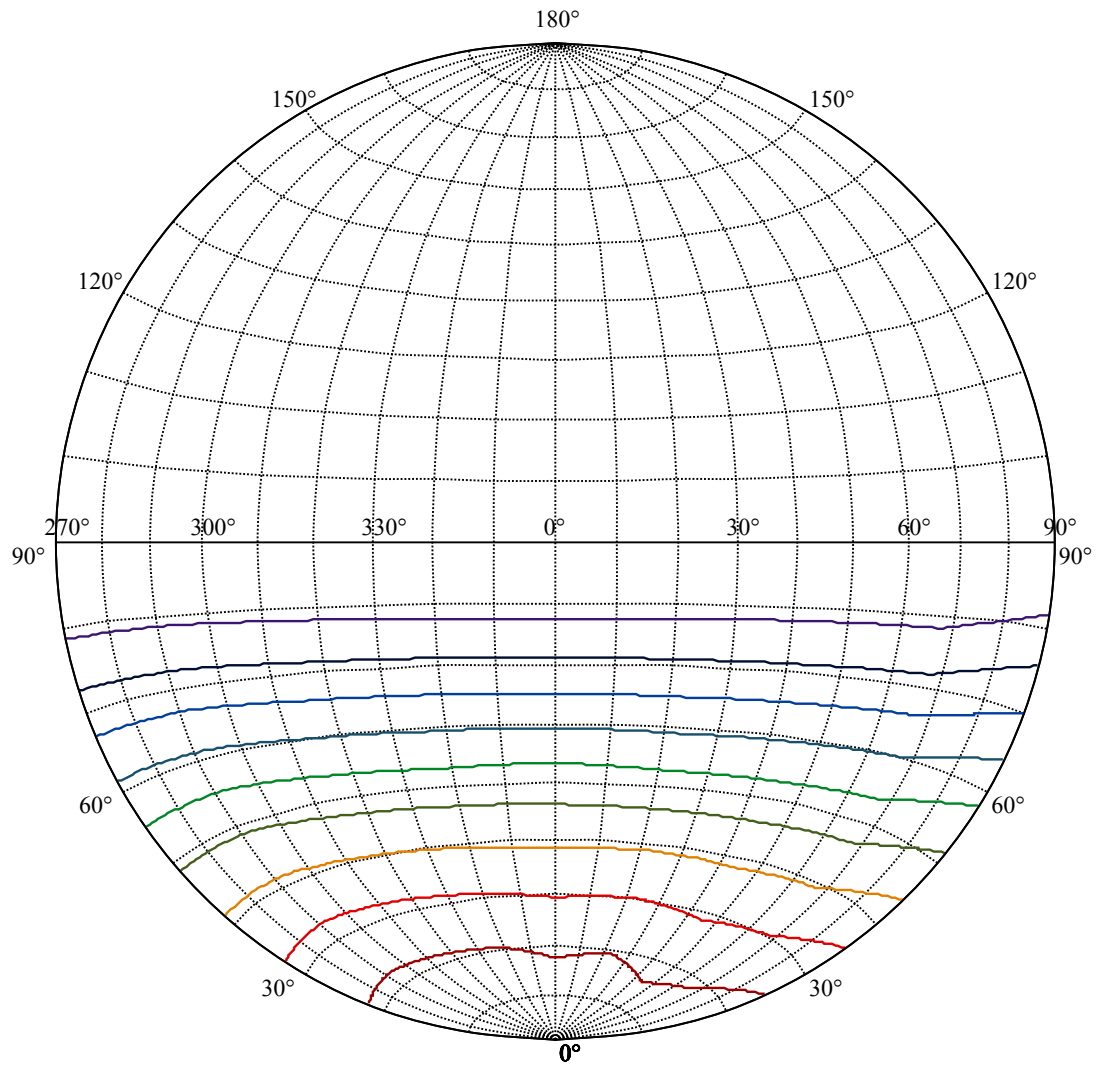


(10%Imax)	25.5703	—
(20%Imax)	51.1406	—
(30%Imax)	76.7109	—
(40%Imax)	102.281	—
(50%Imax)	127.852	—
(60%Imax)	153.422	—
(70%Imax)	178.992	—
(80%Imax)	204.562	—
(90%Imax)	230.133	—

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

Date:
Humidity(%): 58%

Operator: Tester



House

[Unit:cd]

Road

Imax:255.98

(10%Imax) 25.5939	—
(20%Imax) 51.1877	—
(30%Imax) 76.7816	—
(40%Imax) 102.375	—
(50%Imax) 127.969	—
(60%Imax) 153.563	—
(70%Imax) 179.157	—
(80%Imax) 204.751	—
(90%Imax) 230.345	—

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	250.55	244.66	240.88	234.67	226.45	216.24	203.36	189.60	174.72
22.5	250.55	248.87	244.66	238.22	229.34	218.24	205.36	191.60	175.61
45.0	250.55	241.33	237.33	231.11	223.12	213.35	201.59	188.49	174.28
67.5	250.55	245.77	241.99	235.55	227.78	217.79	205.80	192.26	176.94
90.0	250.55	254.20	251.09	246.43	239.77	230.00	219.12	206.03	192.04
112.5	250.55	255.98	253.09	247.99	240.44	230.89	219.12	206.03	190.93
135.0	250.55	253.31	250.65	245.32	237.55	227.78	216.46	202.92	187.15
157.5	250.55	251.76	248.65	243.10	235.11	225.78	213.35	199.59	184.27
180.0	250.55	245.77	243.10	237.55	230.22	220.23	208.25	194.26	179.61
202.5	250.55	250.21	247.32	241.99	234.22	224.23	212.46	198.48	182.71
225.0	250.55	242.21	239.55	234.67	227.78	218.68	208.25	195.37	181.16
247.5	250.55	247.10	244.21	238.88	231.78	222.68	211.58	198.70	184.27
270.0	250.55	252.87	248.65	242.21	234.44	224.01	212.24	198.70	183.82
292.5	250.55	254.65	250.65	244.21	235.55	225.34	213.80	200.03	184.05
315.0	250.55	252.43	248.65	242.44	233.56	223.34	211.13	196.92	180.27
337.5	250.55	250.87	246.88	240.22	231.56	220.68	207.58	192.48	177.16
360.0	250.55	244.66	240.88	234.67	226.45	216.24	203.36	189.60	174.72
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	157.85	141.42	122.11	99.90	77.48	55.73	34.86	16.21	3.77
22.5	157.85	138.53	119.44	98.35	77.04	55.73	35.97	17.10	4.22
45.0	157.85	139.87	120.11	99.90	78.59	56.84	36.19	18.65	5.11
67.5	160.74	141.64	123.22	102.57	81.48	59.28	38.19	19.09	5.77
90.0	176.50	158.74	139.64	120.11	98.13	75.93	53.95	31.30	13.10
112.5	174.72	156.07	137.65	116.56	94.58	71.71	49.51	28.20	11.32
135.0	169.62	150.97	130.99	110.12	88.80	66.38	44.40	24.64	9.55
157.5	166.95	147.86	127.66	107.90	86.36	63.72	42.18	23.53	8.21
180.0	162.29	144.75	126.55	106.12	85.03	62.83	41.07	21.54	7.55
202.5	165.62	147.86	127.66	106.57	84.81	63.94	42.40	23.09	7.99
225.0	166.06	149.19	130.10	109.90	89.03	66.60	44.85	24.87	10.21
247.5	168.06	151.19	132.54	112.12	91.47	70.38	48.84	28.20	11.32
270.0	166.95	148.53	128.32	108.12	85.70	63.27	40.18	20.65	5.99
292.5	167.84	148.97	128.77	107.45	85.70	62.61	40.18	20.20	6.22
315.0	162.51	143.86	123.88	102.35	80.37	58.39	37.30	18.65	4.44
337.5	159.85	140.53	120.33	99.90	78.59	56.61	36.41	16.87	4.22
360.0	157.85	141.42	122.11	99.90	77.48	55.73	34.86	16.21	3.77
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.67	0.44	0.67	0.67	0.67	0.67	0.67	0.67	0.67
22.5	0.67	0.44	0.44	0.44	0.67	0.67	0.67	0.89	0.89
45.0	0.89	0.22	0.44	0.67	0.67	0.44	0.67	0.89	0.67
67.5	0.67	0.44	0.44	0.44	0.44	0.44	0.67	0.67	0.89
90.0	2.22	0.22	0.44	0.44	0.22	0.22	0.44	0.44	0.67
112.5	1.78	0.44	0.22	0.00	0.00	0.22	0.00	0.44	0.44
135.0	0.89	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.44
157.5	0.89	0.00	0.00	0.00	0.22	0.22	0.44	0.44	0.44
180.0	0.67	0.00	0.22	0.22	0.22	0.22	0.22	0.44	0.44
202.5	0.89	0.22	0.00	0.22	0.22	0.22	0.22	0.44	0.44
225.0	1.11	0.44	0.22	0.44	0.22	0.22	0.22	0.22	0.44
247.5	1.55	0.44	0.22	0.22	0.00	0.22	0.22	0.44	0.22
270.0	0.89	0.67	0.89	0.89	0.89	0.89	0.89	0.89	1.11
292.5	0.44	0.67	0.44	0.67	0.67	0.67	0.89	0.89	0.67
315.0	0.67	0.67	0.44	0.67	0.67	0.89	0.89	0.67	0.67
337.5	0.67	0.67	0.67	0.44	0.44	0.67	0.89	0.67	0.67
360.0	0.67	0.44	0.67	0.67	0.67	0.67	0.67	0.67	0.67

Intensity data(cd)

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C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.67	0.67	0.89	0.89	0.89	0.67	0.89	0.89	0.89
22.5	0.89	0.89	0.67	0.67	0.67	0.89	1.11	1.11	0.67
45.0	0.67	0.67	0.89	0.67	0.89	0.89	0.89	1.11	0.89
67.5	0.44	0.89	0.89	0.89	0.89	0.44	0.89	0.67	0.67
90.0	0.67	0.67	0.67	0.89	0.89	0.89	0.89	0.67	1.11
112.5	0.44	0.67	0.44	0.67	0.67	0.89	0.89	0.89	0.89
135.0	0.44	0.44	0.67	0.67	0.44	0.67	0.67	0.89	0.67
157.5	0.44	0.44	0.67	0.67	0.67	0.44	0.67	0.67	0.89
180.0	0.44	0.67	0.67	0.44	0.44	0.67	0.89	0.67	0.89
202.5	0.22	0.67	0.67	0.67	0.67	0.67	0.89	0.67	0.44
225.0	0.22	0.44	0.44	0.44	0.89	0.67	0.89	0.67	0.89
247.5	0.44	0.67	0.44	0.67	0.44	0.89	0.67	0.67	0.67
270.0	1.11	1.11	1.11	1.11	1.33	1.11	1.11	1.11	1.11
292.5	0.89	0.67	0.89	0.89	0.89	1.11	0.89	0.89	0.89
315.0	0.89	0.89	0.89	0.89	0.89	0.89	0.67	0.67	0.89
337.5	0.89	0.89	0.89	1.11	1.11	0.89	0.89	0.67	0.67
360.0	0.67	0.67	0.89	0.89	0.89	0.67	0.89	0.89	0.89

C/γ(°)	180.0
0.0	0.89
22.5	0.89
45.0	0.89
67.5	0.89
90.0	0.89
112.5	0.89
135.0	0.89
157.5	0.89
180.0	0.89
202.5	0.89
225.0	0.89
247.5	0.89
270.0	0.89
292.5	0.89
315.0	0.89
337.5	0.89
360.0	0.89