



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.05

LampCAT:

Current(A): 0.0950

Lamp flux(lm): -1.0

Power (W): 11.14

Number of Lamps: 1

PF: 0.9755

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 703.81, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 63.18

Central intensity(cd): 251.164, Maximum intensity(cd): 256.357

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=107.9

[C90/270]Total=113.9

Field angle(10%Imax): [C0/180]Total=157.3

[C90/270]Total=160.3

Maximum s/h(1/2): C0_180=1.24 C90_270=1.31

Maximum s/h(1/4): C0_180=1.37 C90_270=1.42

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.55%

Down flux rate of LUM(%): 99.45%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.529%

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

Date:
Humidity(%): 58%

Operator: Tester

Zonal flux distribution table

Appendix Page: 2 Total:9

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	251.164	0.000	0	0.00%	0.00%
5.0	250.169	5.993	5.993	0.00%	0.85%
10.0	246.775	17.777	23.771	0.00%	3.38%
15.0	240.978	28.933	52.704	0.00%	7.49%
20.0	233.225	39.081	91.785	0.00%	13.04%
25.0	223.195	47.870	139.655	0.00%	19.84%
30.0	211.280	54.983	194.638	0.00%	27.65%
35.0	197.520	60.199	254.836	0.00%	36.21%
40.0	182.224	63.358	318.194	0.00%	45.21%
45.0	165.420	64.369	382.563	0.00%	54.36%
50.0	147.149	63.159	445.722	0.00%	63.33%
55.0	127.746	59.771	505.493	0.00%	71.82%
60.0	106.918	54.242	559.735	0.00%	79.53%
65.0	85.336	46.737	606.472	0.00%	86.17%
70.0	63.517	37.690	644.163	0.00%	91.53%
75.0	42.005	27.582	671.745	0.00%	95.44%
80.0	22.602	17.287	689.031	0.00%	97.90%
85.0	8.046	8.328	697.359	0.00%	99.08%
90.0	1.341	2.570	699.93	0.00%	99.45%
95.0	0.391	0.474	700.404	0.00%	99.52%
100.0	0.405	0.216	700.62	0.00%	99.55%
105.0	0.405	0.217	700.837	0.00%	99.58%
110.0	0.517	0.241	701.079	0.00%	99.61%
115.0	0.503	0.258	701.337	0.00%	99.65%
120.0	0.559	0.258	701.595	0.00%	99.69%
125.0	0.587	0.265	701.86	0.00%	99.72%
130.0	0.587	0.255	702.115	0.00%	99.76%
135.0	0.727	0.265	702.381	0.00%	99.80%
140.0	0.727	0.269	702.65	0.00%	99.84%
145.0	0.755	0.247	702.897	0.00%	99.87%
150.0	0.768	0.224	703.121	0.00%	99.90%
155.0	0.796	0.198	703.319	0.00%	99.93%
160.0	0.866	0.174	703.494	0.00%	99.96%
165.0	0.769	0.135	703.628	0.00%	99.97%
170.0	0.880	0.098	703.726	0.00%	99.99%
175.0	0.852	0.062	703.788	0.00%	100.00%
180.0	0.960	0.022	703.81	0.00%	100.00%

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

Date:
Humidity(%): 58%

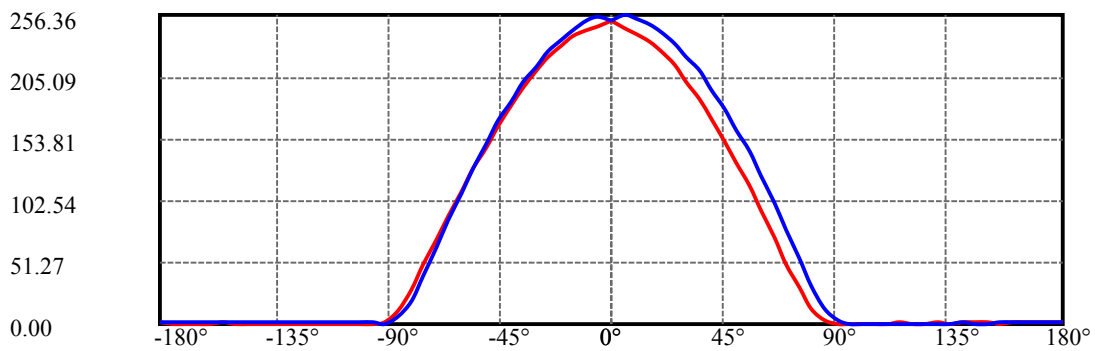
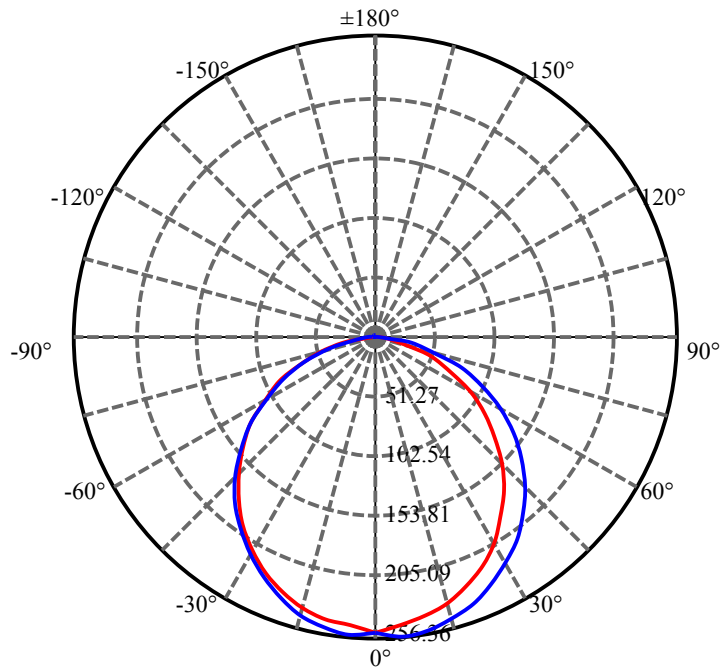
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	194.64	N.A.	27.65%
0-40	318.19	N.A.	45.21%
0-60	559.74	N.A.	79.53%
0-90	699.93	N.A.	99.45%
0-120	701.60	N.A.	99.69%
0-180	703.81	N.A.	100.00%
60-90	140.19	N.A.	19.92%
90-120	1.67	N.A.	0.24%
90-130	2.19	N.A.	0.31%
90-150	3.19	N.A.	0.45%
90-180	3.86	N.A.	0.55%
0-60.35	563.05	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	23.77
10-20	68.01
20-30	102.85
30-40	123.56
40-50	127.53
50-60	114.01
60-70	84.43
70-80	44.87
80-90	10.90
90-100	0.69
100-110	0.46
110-120	0.52
120-130	0.52
130-140	0.53
140-150	0.47
150-160	0.37
160-170	0.23
170-180	0.06

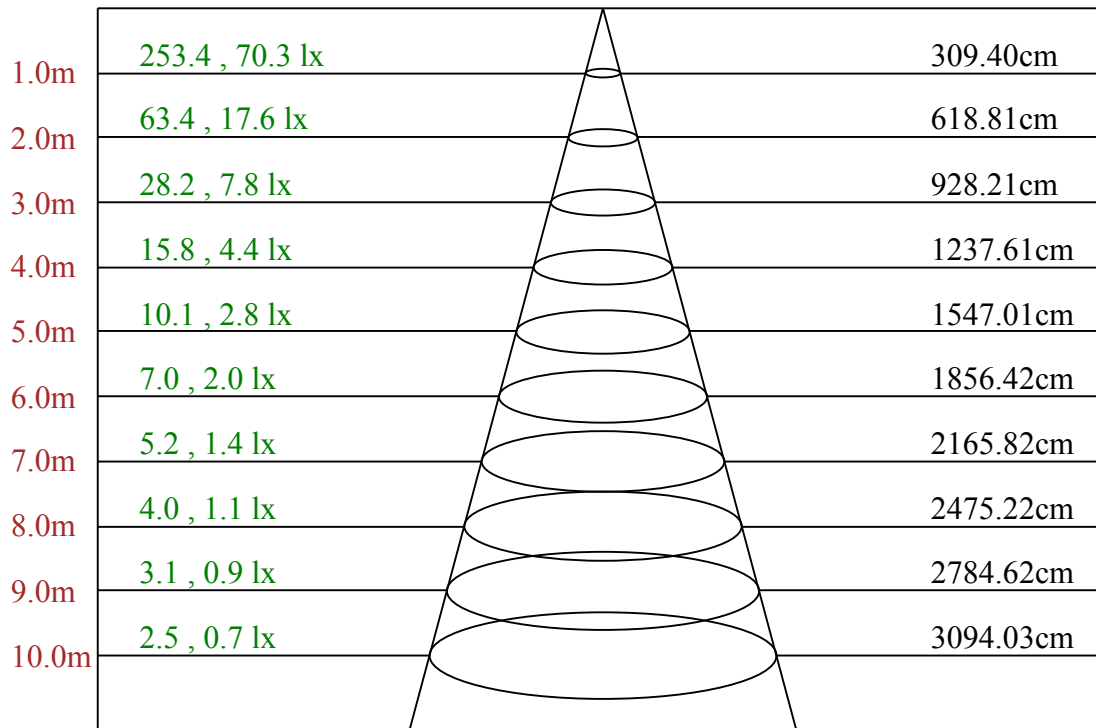


C0/C180: —

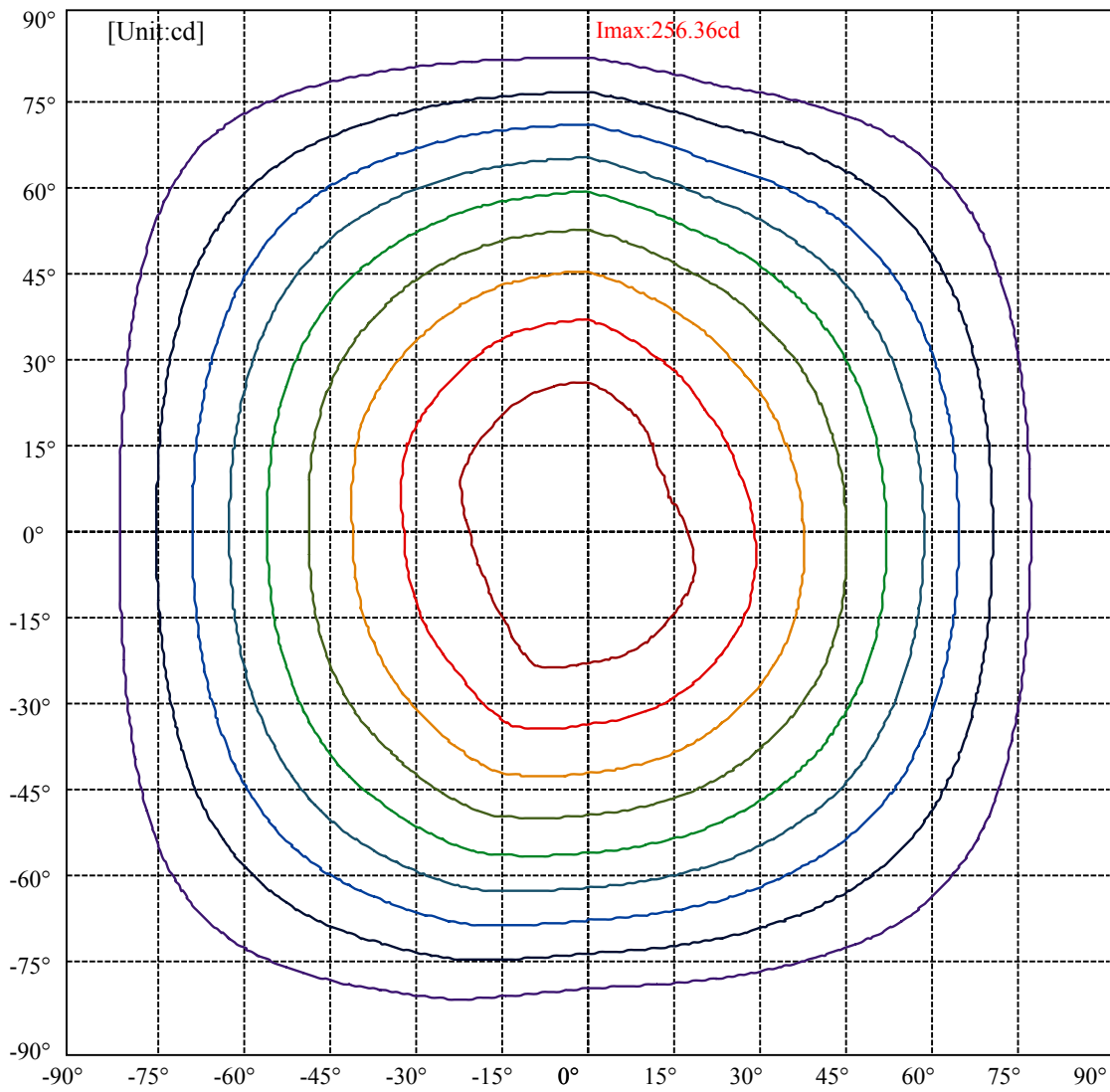
C90/C270: —

Field angle(10%Imax):C0/180Left:80.9 Right:76.4
 :C90/270Left:78.6 Right:81.7

Beam Angle(50%Imax):C0/180Left:55.9 Right:52.0
 :C90/270Left:55.3 Right:58.6



Max , Ave Beam angle of C90 plane 114.24

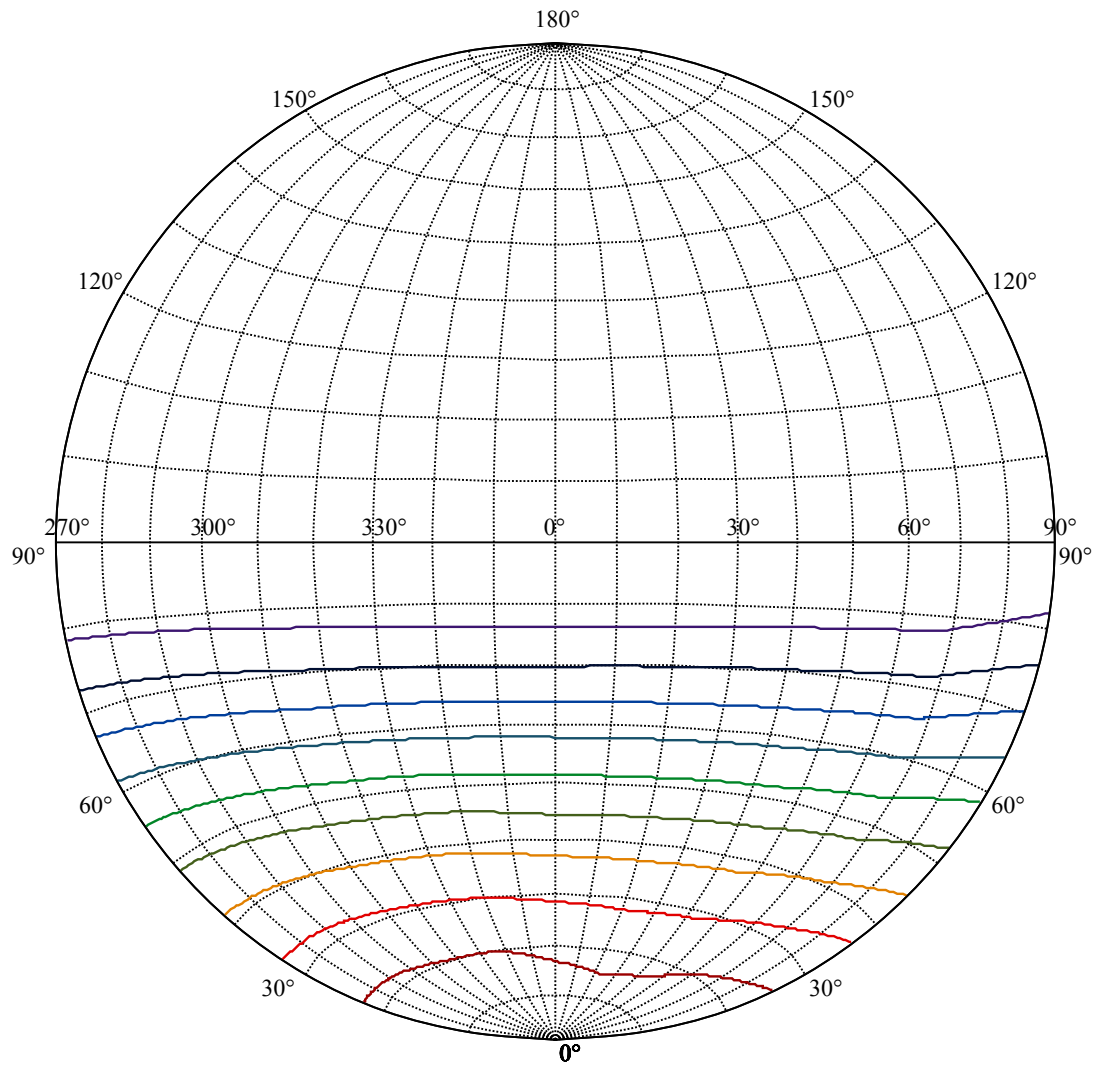


(10%I _{max}) 25.6357	—
(20%I _{max}) 51.2714	—
(30%I _{max}) 76.9071	—
(40%I _{max}) 102.543	—
(50%I _{max}) 128.178	—
(60%I _{max}) 153.814	—
(70%I _{max}) 179.45	—
(80%I _{max}) 205.086	—
(90%I _{max}) 230.721	—

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

Date:
Humidity(%): 58%

Operator: Tester



House

[Unit:cd]

Road

Imax:256.36

(10%Imax) 25.6357	—
(20%Imax) 51.2714	—
(30%Imax) 76.9071	—
(40%Imax) 102.543	—
(50%Imax) 128.178	—
(60%Imax) 153.814	—
(70%Imax) 179.45	—
(80%Imax) 205.086	—
(90%Imax) 230.721	—

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	251.16	245.18	240.94	234.23	225.51	214.79	201.38	186.40	169.64
22.5	251.16	242.05	237.81	230.88	222.61	212.10	199.36	185.28	169.86
45.0	251.16	244.74	240.49	233.56	225.07	214.56	201.82	187.74	172.10
67.5	251.16	252.78	248.76	242.50	234.01	223.28	211.43	196.91	181.04
90.0	251.16	256.36	253.45	248.54	242.05	232.44	221.49	209.42	194.89
112.5	251.16	255.24	253.01	248.09	240.94	232.00	221.27	208.53	194.00
135.0	251.16	252.56	250.32	245.41	238.25	229.31	217.24	203.83	189.31
157.5	251.16	252.78	250.10	245.18	238.03	228.42	216.35	202.94	187.97
180.0	251.16	246.30	243.17	238.48	231.33	221.27	209.87	195.57	181.04
202.5	251.16	243.84	241.38	236.91	229.98	220.60	209.87	196.91	182.38
225.0	251.16	246.30	243.62	238.48	231.77	222.39	211.43	198.69	184.84
247.5	251.16	254.12	251.44	246.75	239.60	230.43	220.37	207.19	192.21
270.0	251.16	254.79	250.99	244.29	236.02	225.96	213.67	200.04	184.61
292.5	251.16	253.68	249.65	242.95	234.68	223.73	211.43	197.35	181.04
315.0	251.16	250.99	246.75	240.04	231.33	220.82	207.86	193.11	176.34
337.5	251.16	250.99	246.52	239.37	230.43	219.03	205.62	190.42	174.33
360.0	251.16	245.18	240.94	234.23	225.51	214.79	201.38	186.40	169.64
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	151.76	133.21	114.21	93.42	71.74	49.62	29.95	12.29	2.46
22.5	152.65	133.88	114.43	94.10	72.42	51.18	30.62	13.86	2.68
45.0	155.33	136.56	116.89	95.88	74.87	53.42	32.86	15.20	3.80
67.5	163.16	144.83	124.27	102.36	79.79	58.11	36.21	17.66	4.92
90.0	179.03	161.15	143.04	122.26	100.13	77.56	54.76	32.18	13.19
112.5	177.46	160.03	140.81	119.35	97.45	75.54	52.75	31.07	13.41
135.0	173.66	156.01	136.56	115.10	94.54	71.52	48.95	29.28	12.07
157.5	171.43	152.88	133.43	113.32	91.64	69.73	48.72	28.61	11.40
180.0	164.50	146.62	128.96	109.52	89.62	69.73	48.72	28.16	10.95
202.5	166.96	150.19	130.97	111.08	90.52	69.29	47.38	27.94	11.40
225.0	168.74	151.31	132.76	113.09	92.31	70.63	48.72	28.83	11.85
247.5	175.45	157.57	138.13	117.56	95.88	73.09	51.41	30.40	12.74
270.0	168.07	149.30	129.41	108.40	85.60	63.48	40.45	19.89	6.26
292.5	163.38	144.83	124.27	102.59	80.46	58.78	36.88	17.88	4.92
315.0	158.69	139.02	119.35	97.67	75.10	53.64	33.08	14.98	3.80
337.5	156.45	137.01	116.45	94.99	73.31	50.96	30.62	13.41	2.91
360.0	151.76	133.21	114.21	93.42	71.74	49.62	29.95	12.29	2.46
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.67	0.45	0.67	0.45	0.67	0.89	0.67	0.67	1.12
22.5	0.89	0.67	0.45	0.67	0.67	0.67	0.67	0.89	0.67
45.0	1.12	0.67	0.67	0.45	0.67	0.45	0.89	0.89	0.67
67.5	0.89	0.45	0.67	0.67	0.67	0.67	0.89	0.67	0.67
90.0	2.68	0.45	0.45	0.45	0.67	0.45	0.67	0.67	0.45
112.5	2.46	0.22	0.22	0.00	0.22	0.45	0.22	0.22	0.45
135.0	1.57	0.00	0.22	0.22	0.22	0.22	0.22	0.22	0.22
157.5	1.34	0.22	0.00	0.22	0.45	0.00	0.22	0.22	0.22
180.0	1.12	0.00	0.00	0.00	0.22	0.22	0.22	0.45	0.22
202.5	1.34	0.22	0.22	0.00	0.00	0.22	0.22	0.22	0.22
225.0	1.79	0.22	0.00	0.22	0.22	0.22	0.00	0.22	0.22
247.5	2.01	0.00	0.00	0.00	0.22	0.00	0.22	0.22	0.22
270.0	0.67	0.89	1.12	0.89	1.12	1.12	1.34	1.12	1.57
292.5	0.89	0.67	0.67	0.89	0.89	0.89	1.12	1.12	0.89
315.0	1.12	0.67	0.67	0.67	0.67	0.89	0.67	0.89	0.89
337.5	0.89	0.45	0.45	0.67	0.67	0.67	0.67	0.67	0.67
360.0	0.67	0.45	0.67	0.45	0.67	0.89	0.67	0.67	1.12

Intensity data(cd)

Appendix Page: 9 Total:9

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.67	0.89	1.12	0.89	0.67	0.89	0.89	0.89	0.89
22.5	0.67	0.89	0.67	0.89	0.67	0.89	0.67	0.89	0.67
45.0	0.89	0.67	1.12	0.89	0.67	0.89	1.12	0.89	0.89
67.5	0.67	0.67	0.67	1.12	0.89	0.67	0.67	0.67	0.67
90.0	0.67	0.89	0.45	0.67	1.12	0.89	0.89	1.12	1.12
112.5	0.45	0.67	0.67	0.67	0.67	0.67	0.67	0.89	0.67
135.0	0.67	0.45	0.67	0.45	0.67	0.67	0.45	0.67	0.67
157.5	0.67	0.45	0.67	0.67	0.45	0.67	0.45	0.89	0.89
180.0	0.67	0.45	0.45	0.45	0.89	0.67	0.67	0.67	0.67
202.5	0.45	0.45	0.67	0.45	0.89	0.67	0.89	0.89	0.89
225.0	0.45	0.67	0.45	0.45	0.89	0.89	0.67	0.89	0.89
247.5	0.45	0.45	0.45	0.67	0.45	0.89	0.67	0.67	0.67
270.0	1.34	1.34	1.34	1.34	1.12	1.34	1.34	1.34	1.34
292.5	1.12	1.12	0.89	0.89	0.89	1.12	0.67	0.89	1.12
315.0	0.89	0.67	0.89	0.89	0.89	1.12	0.67	0.89	0.89
337.5	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.67
360.0	0.67	0.89	1.12	0.89	0.67	0.89	0.89	0.89	0.89
C/γ(°)	180.0								
0.0	0.96								
22.5	0.96								
45.0	0.96								
67.5	0.96								
90.0	0.96								
112.5	0.96								
135.0	0.96								
157.5	0.96								
180.0	0.96								
202.5	0.96								
225.0	0.96								
247.5	0.96								
270.0	0.96								
292.5	0.96								
315.0	0.96								
337.5	0.96								
360.0	0.96								