



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): 0.0940

Lamp flux(lm): -1.0

Power (W): 11.03

Number of Lamps: 0

PF: 0.9755

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 705.11, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 63.93

Central intensity(cd): 247.229, Maximum intensity(cd): 258.075

Angle of maximum intensity: C=90.0 $\gamma=0.0$

Beam Angle(50%Imax): [C0/180]Total=108.5

[C90/270]Total=114.0

Field angle(10%Imax): [C0/180]Total=156.4

[C90/270]Total=161.2

Maximum s/h(1/2): C0_180=1.24 C90_270=1.28

Maximum s/h(1/4): C0_180=1.36 C90_270=1.40

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.69%

Down flux rate of LUM(%): 99.31%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.425%

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	252.190	0.000	0	0.00%	0.00%
5.0	251.004	6.016	6.016	0.00%	0.85%
10.0	247.414	17.830	23.846	0.00%	3.38%
15.0	241.468	29.000	52.846	0.00%	7.49%
20.0	233.442	39.139	91.985	0.00%	13.05%
25.0	223.305	47.904	139.889	0.00%	19.84%
30.0	211.103	54.975	194.864	0.00%	27.64%
35.0	197.284	60.138	255.002	0.00%	36.16%
40.0	182.141	63.304	318.306	0.00%	45.14%
45.0	165.241	64.321	382.626	0.00%	54.26%
50.0	147.216	63.136	445.763	0.00%	63.22%
55.0	128.021	59.846	505.609	0.00%	71.71%
60.0	107.439	54.426	560.034	0.00%	79.42%
65.0	86.426	47.129	607.163	0.00%	86.11%
70.0	64.365	38.181	645.344	0.00%	91.52%
75.0	42.504	27.934	673.278	0.00%	95.48%
80.0	22.015	17.263	690.541	0.00%	97.93%
85.0	6.301	7.694	698.235	0.00%	99.02%
90.0	0.940	1.982	700.218	0.00%	99.31%
95.0	0.616	0.426	700.644	0.00%	99.37%
100.0	0.570	0.322	700.966	0.00%	99.41%
105.0	0.647	0.326	701.291	0.00%	99.46%
110.0	0.631	0.334	701.626	0.00%	99.51%
115.0	0.631	0.320	701.945	0.00%	99.55%
120.0	0.678	0.318	702.264	0.00%	99.60%
125.0	0.755	0.331	702.595	0.00%	99.64%
130.0	0.847	0.348	702.943	0.00%	99.69%
135.0	0.847	0.342	703.285	0.00%	99.74%
140.0	0.893	0.322	703.608	0.00%	99.79%
145.0	1.032	0.321	703.929	0.00%	99.83%
150.0	1.001	0.299	704.228	0.00%	99.87%
155.0	1.078	0.263	704.491	0.00%	99.91%
160.0	1.017	0.220	704.711	0.00%	99.94%
165.0	1.078	0.173	704.884	0.00%	99.97%
170.0	1.063	0.127	705.011	0.00%	99.99%
175.0	1.094	0.077	705.088	0.00%	100.00%
180.0	1.109	0.026	705.114	0.00%	100.00%

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

Date:
Humidity(%): 58%

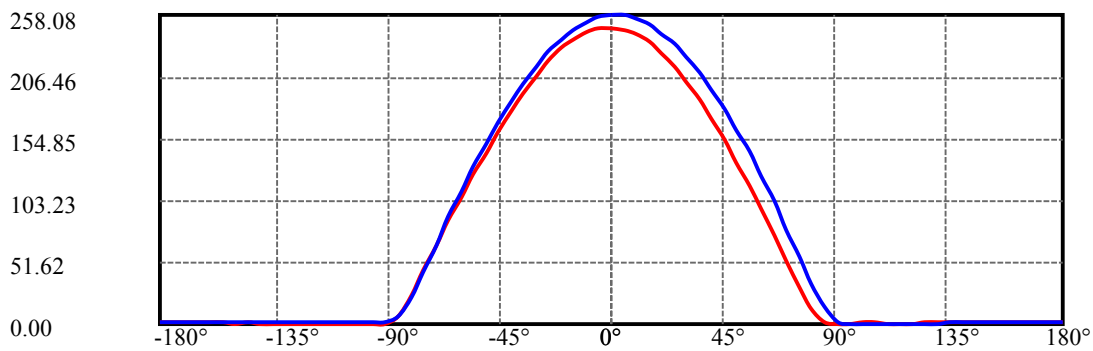
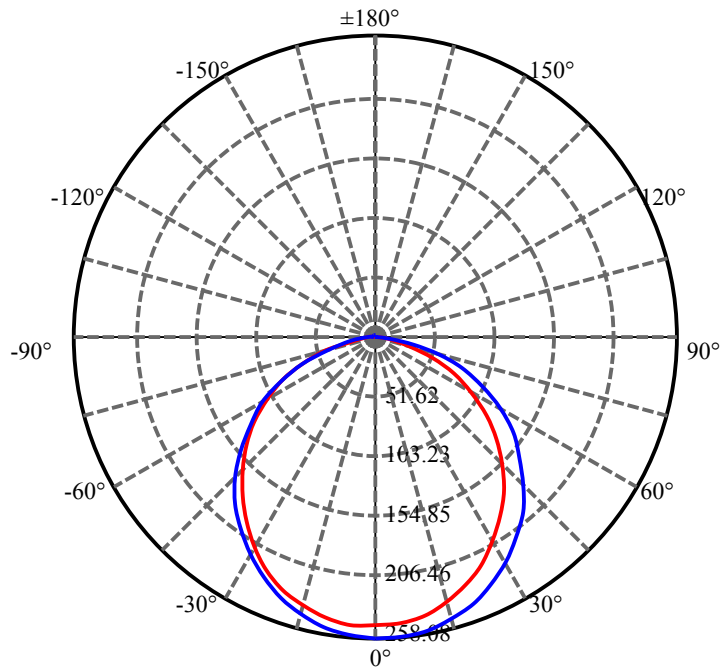
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	194.86	N.A.	27.64%
0-40	318.31	N.A.	45.14%
0-60	560.03	N.A.	79.42%
0-90	700.22	N.A.	99.31%
0-120	702.26	N.A.	99.60%
0-180	705.11	N.A.	100.00%
60-90	140.18	N.A.	19.88%
90-120	2.05	N.A.	0.29%
90-130	2.73	N.A.	0.39%
90-150	4.01	N.A.	0.57%
90-180	4.87	N.A.	0.69%
0-60.43	564.09	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	23.85
10-20	68.14
20-30	102.88
30-40	123.44
40-50	127.46
50-60	114.27
60-70	85.31
70-80	45.20
80-90	9.68
90-100	0.75
100-110	0.66
110-120	0.64
120-130	0.68
130-140	0.66
140-150	0.62
150-160	0.48
160-170	0.30
170-180	0.08

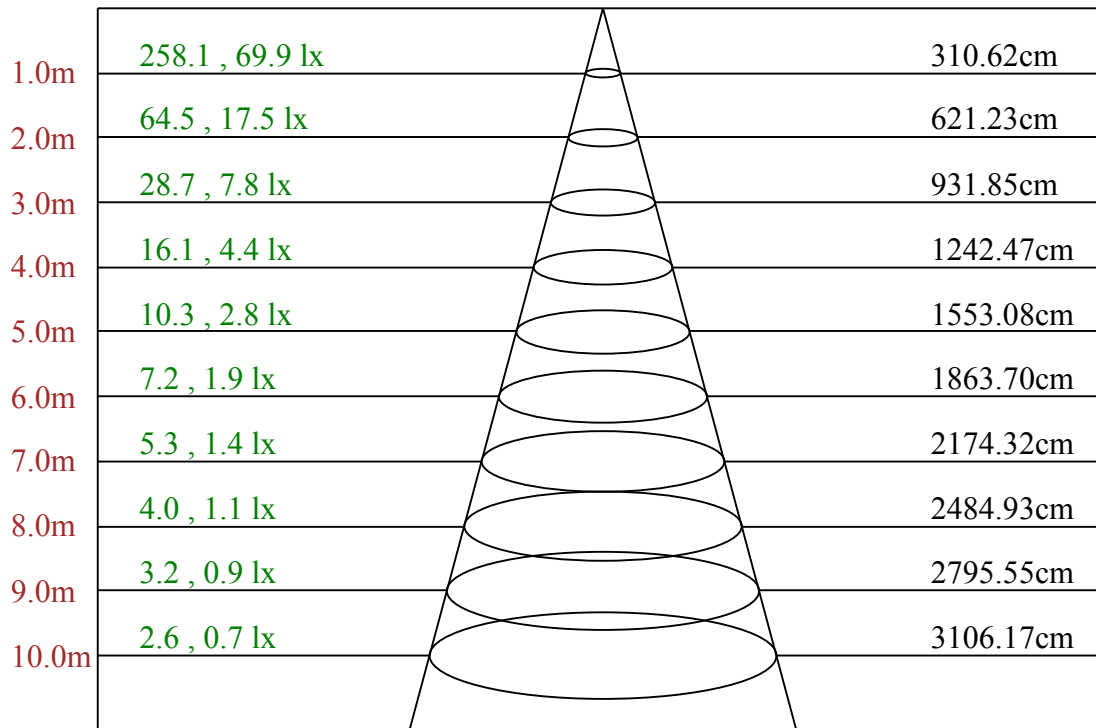


C0/C180: —

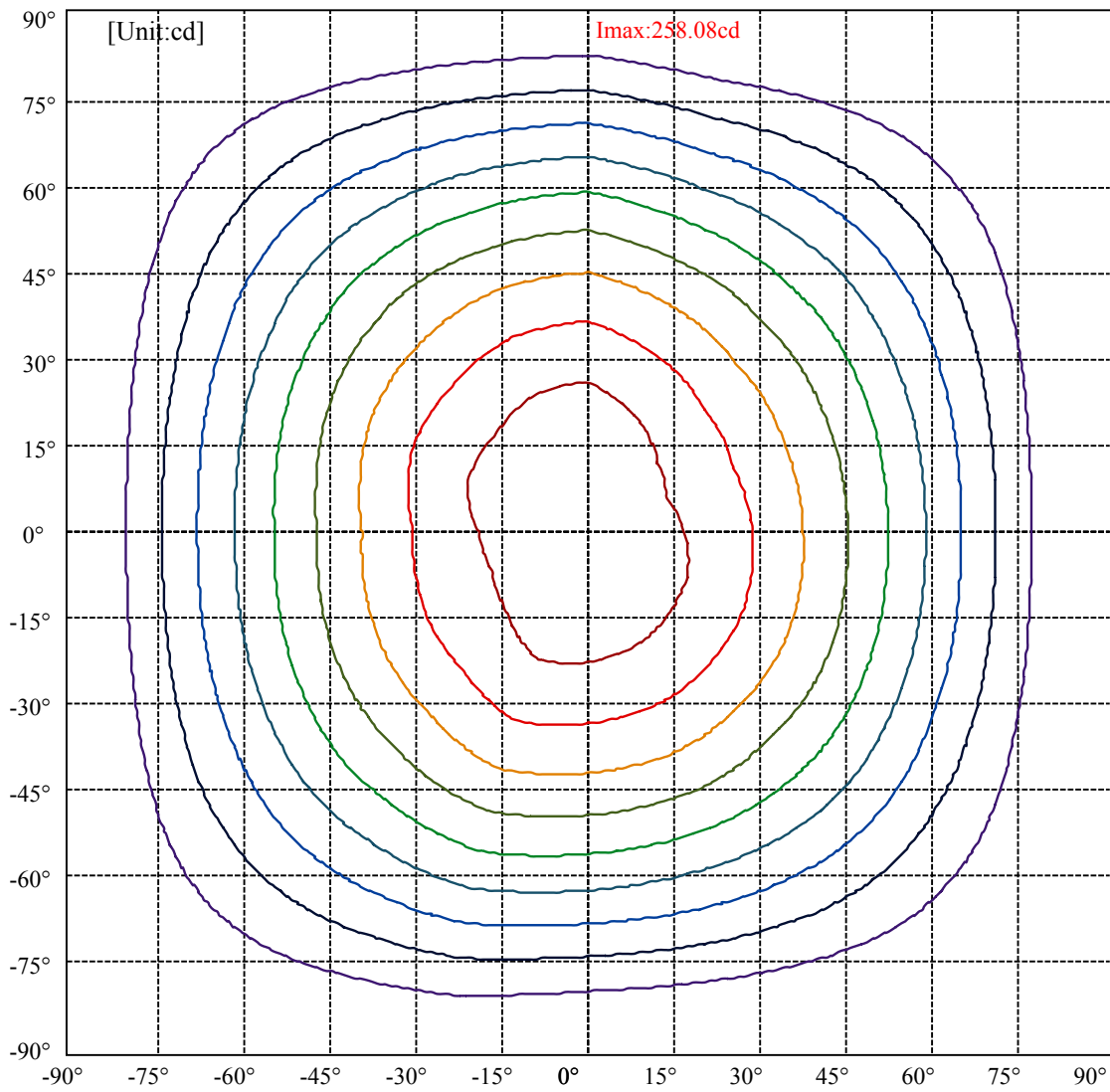
C90/C270: —

Field angle(10%Imax):C0/180Left:79.8 Right:76.6
 :C90/270Left:79.2 Right:82.0

Beam Angle(50%Imax):C0/180Left:55.5 Right:53.0
 :C90/270Left:55.5 Right:58.5



Max , Ave Beam angle of C90 plane 114.45

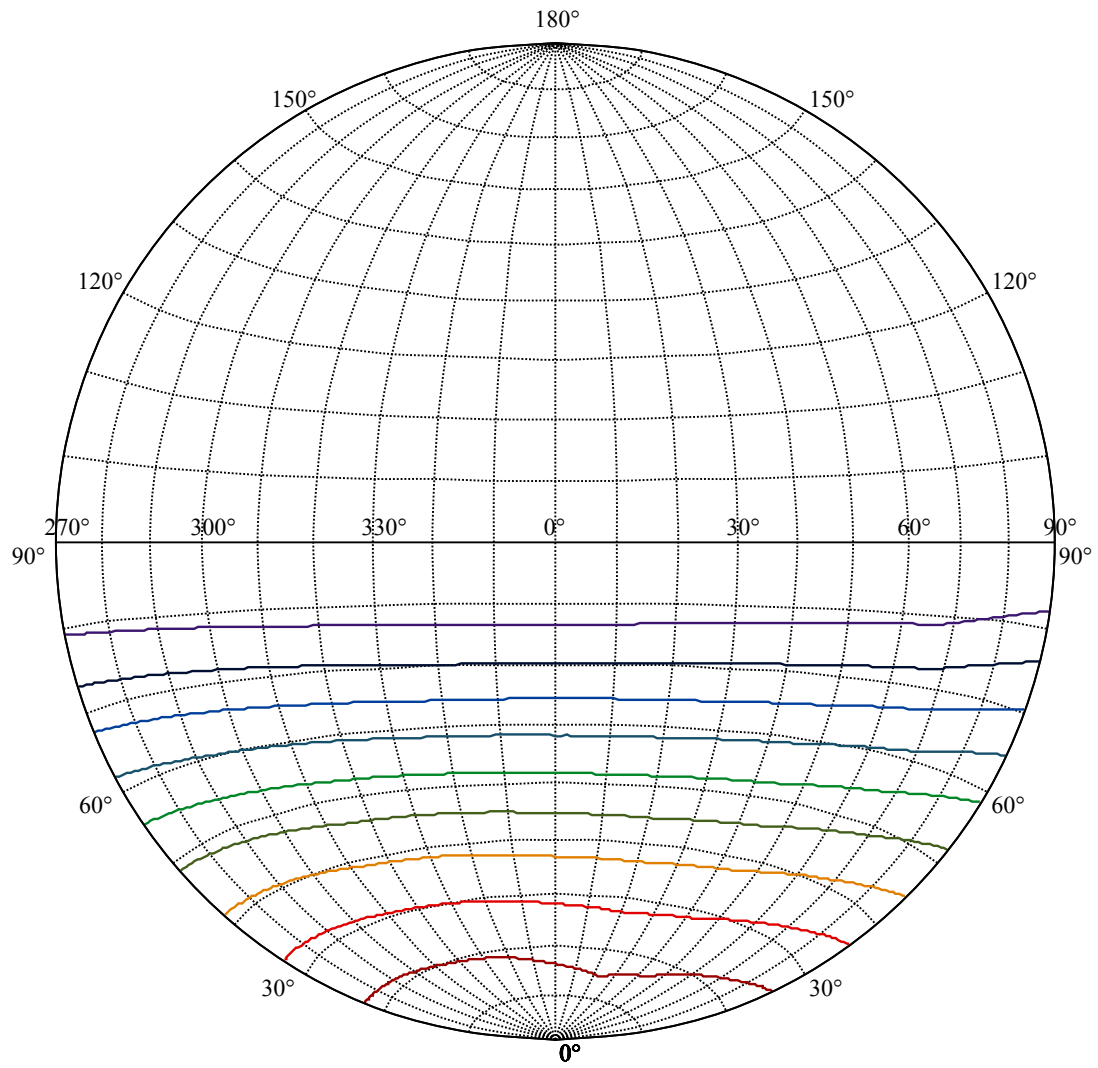


(10%Imax) 25.8075	—
(20%Imax) 51.615	—
(30%Imax) 77.4225	—
(40%Imax) 103.23	—
(50%Imax) 129.038	—
(60%Imax) 154.845	—
(70%Imax) 180.653	—
(80%Imax) 206.46	—
(90%Imax) 232.268	—

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

Date:
Humidity(%): 58%

Operator: Tester



House

[Unit:cd]

Road

I_{max}:258.08

(10%I _{max}) 25.8075	
(20%I _{max}) 51.615	
(30%I _{max}) 77.4225	
(40%I _{max}) 103.23	
(50%I _{max}) 129.038	
(60%I _{max}) 154.845	
(70%I _{max}) 180.653	
(80%I _{max}) 206.46	
(90%I _{max}) 232.268	

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	247.23	245.50	241.56	234.91	226.03	214.94	201.88	186.84	171.31
22.5	244.77	242.55	238.11	231.70	222.83	211.98	199.66	186.10	170.33
45.0	248.22	246.49	242.05	235.64	227.02	216.17	203.35	189.06	174.02
67.5	255.36	253.39	249.94	243.53	235.15	225.05	212.97	198.92	183.64
90.0	258.08	257.58	254.87	249.69	242.79	233.92	222.58	209.76	195.96
112.5	256.60	256.35	253.39	248.71	241.81	232.69	220.86	208.28	193.50
135.0	254.13	253.89	251.17	245.50	237.86	228.00	216.17	203.35	188.81
157.5	253.15	252.90	250.19	244.77	237.12	227.26	215.19	201.38	185.36
180.0	247.23	246.74	243.29	237.86	230.47	220.36	207.05	192.51	177.47
202.5	244.77	244.27	241.56	236.38	229.24	220.12	208.78	195.71	180.43
225.0	248.22	247.48	244.52	239.34	231.70	222.33	211.00	197.44	182.65
247.5	255.36	254.62	251.91	246.24	239.34	229.48	217.90	205.82	191.03
270.0	258.08	256.35	251.91	245.75	237.37	227.02	215.19	200.64	186.10
292.5	256.60	254.87	250.43	243.78	234.91	224.31	211.98	197.19	182.16
315.0	254.13	251.91	247.48	240.82	231.70	221.10	207.79	193.00	176.98
337.5	253.15	251.17	246.24	238.85	229.73	218.14	205.33	190.54	174.52
360.0	247.23	245.50	241.56	234.91	226.03	214.94	201.88	186.84	171.31
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	153.81	135.32	116.10	95.64	74.44	52.50	30.81	12.32	1.48
22.5	153.32	135.82	116.34	96.13	75.18	53.98	33.28	14.30	1.73
45.0	157.01	139.27	120.04	100.08	78.63	57.43	35.99	17.01	3.20
67.5	167.12	148.63	128.91	107.72	86.52	63.59	41.16	20.95	5.67
90.0	179.45	161.94	143.70	122.75	101.80	79.12	56.69	34.02	13.80
112.5	176.73	158.74	139.27	119.30	97.86	75.18	53.00	30.81	11.83
135.0	172.30	155.04	135.57	113.88	92.93	70.99	48.56	27.36	9.12
157.5	168.60	150.36	130.39	109.44	89.48	67.29	45.60	25.14	7.40
180.0	160.71	143.46	125.71	106.48	87.26	66.06	44.86	23.91	6.66
202.5	163.92	146.42	127.93	107.72	86.76	65.81	44.86	23.66	6.66
225.0	167.12	149.13	130.39	110.18	89.97	68.28	46.34	25.14	8.13
247.5	174.52	156.28	137.54	117.33	96.13	72.96	50.04	28.59	10.11
270.0	168.85	150.61	131.13	111.17	88.98	66.06	43.14	22.43	6.66
292.5	164.90	145.92	125.71	104.51	83.56	61.13	38.95	18.49	4.44
315.0	158.74	140.75	121.27	100.32	78.38	56.94	34.76	15.28	2.47
337.5	156.77	137.79	118.32	96.38	74.93	52.50	32.04	12.82	1.48
360.0	153.81	135.32	116.10	95.64	74.44	52.50	30.81	12.32	1.48
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.74	0.74	0.99	0.99	0.74	0.74	0.74	0.99	0.99
22.5	0.99	0.49	0.74	0.99	0.99	0.99	0.99	0.99	0.99
45.0	0.99	0.99	0.99	0.74	0.74	0.99	0.99	0.74	1.23
67.5	1.23	0.99	0.49	0.74	0.99	0.74	0.74	0.99	0.99
90.0	1.97	0.74	0.49	0.74	0.74	0.49	0.49	0.74	0.74
112.5	0.99	0.49	0.25	0.74	0.49	0.25	0.49	0.49	0.74
135.0	0.49	0.25	0.25	0.25	0.25	0.49	0.25	0.25	0.74
157.5	0.49	0.49	0.25	0.49	0.00	0.25	0.74	0.49	0.49
180.0	0.25	0.25	0.25	0.25	0.49	0.25	0.25	0.49	0.49
202.5	0.49	0.00	0.25	0.25	0.25	0.49	0.49	0.74	0.25
225.0	0.74	0.25	0.25	0.00	0.49	0.00	0.49	0.74	0.49
247.5	1.23	0.25	0.25	0.49	0.25	0.49	0.25	0.49	0.74
270.0	1.48	0.99	0.99	1.23	1.23	1.23	1.23	1.48	1.48
292.5	0.99	1.23	0.74	0.99	0.74	0.99	0.99	0.99	1.23
315.0	0.99	0.99	0.99	0.74	0.99	0.99	0.74	0.74	0.99
337.5	0.99	0.74	0.99	0.74	0.74	0.74	0.99	0.74	0.99
360.0	0.74	0.74	0.99	0.99	0.74	0.74	0.74	0.99	0.99

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	0.99	0.99	1.23	1.23	1.23	0.99	1.23	0.99	0.99
22.5	0.99	0.99	1.23	0.99	1.23	0.99	1.23	1.23	0.99
45.0	0.99	0.99	1.23	0.99	1.23	1.23	0.99	0.99	1.23
67.5	0.74	0.99	0.99	0.99	0.99	0.99	1.23	0.74	0.99
90.0	0.99	0.99	0.99	0.99	1.23	1.23	0.99	1.23	1.23
112.5	0.74	0.74	0.74	0.74	0.99	0.74	0.99	1.23	0.99
135.0	0.49	0.49	0.99	0.99	0.99	0.99	1.23	0.99	1.23
157.5	0.74	0.74	0.74	0.74	0.99	0.99	0.74	0.99	1.23
180.0	0.49	0.49	1.23	0.74	0.99	0.99	0.99	0.99	1.23
202.5	0.74	0.49	0.74	0.99	0.74	0.99	0.99	1.23	0.99
225.0	0.49	0.74	0.74	0.99	0.74	0.74	1.23	0.74	0.74
247.5	0.49	0.49	0.99	0.74	0.99	0.74	0.99	0.74	0.99
270.0	1.48	1.48	1.73	1.73	1.73	1.48	1.73	1.73	1.48
292.5	1.23	1.23	0.99	0.99	1.23	1.23	0.99	0.99	0.99
315.0	0.99	1.23	0.99	0.99	0.99	0.99	0.99	0.99	1.23
337.5	0.99	1.23	0.99	1.23	0.99	0.99	0.74	1.23	0.99
360.0	0.99	0.99	1.23	1.23	1.23	0.99	1.23	0.99	0.99

C/γ(°)	180.0
0.0	0.99
22.5	0.99
45.0	1.23
67.5	0.99
90.0	1.48
112.5	0.99
135.0	0.99
157.5	1.23
180.0	0.99
202.5	0.99
225.0	1.23
247.5	0.99
270.0	1.48
292.5	0.99
315.0	0.99
337.5	1.23
360.0	0.99