



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
www.bellingeel.com

Tel:0755-21038430

Address:Rm. 108, No.1 Building, Meibaohe industrial park, No.14 Shilongzi Road, Dalang street, Longhua district, Shenzhen, China

Client:

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.05

LampCAT:

Current(A): 0.1330

Lamp flux(lm): -1.0

Power (W): 15.89

Number of Lamps: 1

PF: 0.9923

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1003.50, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 63.15

Central intensity(cd): 358.245, Maximum intensity(cd): 366.326

Angle of maximum intensity: C=112.5 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=108.8

[C90/270]Total=113.6

Field angle(10%Imax): [C0/180]Total=157.2

[C90/270]Total=160.9

Maximum s/h(1/2): C0_180=1.27 C90_270=1.30

Maximum s/h(1/4): C0_180=1.39 C90_270=1.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.44%

Down flux rate of LUM(%): 99.56%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.371%

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	358.245	0.000	0	0.00%	0.00%
5.0	356.702	8.547	8.547	0.00%	0.85%
10.0	351.775	25.344	33.891	0.00%	3.38%
15.0	343.310	41.232	75.123	0.00%	7.49%
20.0	331.899	55.647	130.77	0.00%	13.03%
25.0	317.492	68.109	198.879	0.00%	19.82%
30.0	300.369	78.191	277.07	0.00%	27.61%
35.0	280.734	85.572	362.642	0.00%	36.14%
40.0	259.058	90.060	452.702	0.00%	45.11%
45.0	235.209	91.518	544.219	0.00%	54.23%
50.0	209.379	89.836	634.055	0.00%	63.18%
55.0	181.787	85.052	719.107	0.00%	71.66%
60.0	152.974	77.379	796.486	0.00%	79.37%
65.0	122.616	66.996	863.483	0.00%	86.05%
70.0	91.570	54.233	917.716	0.00%	91.45%
75.0	61.308	39.960	957.676	0.00%	95.43%
80.0	33.522	25.374	983.05	0.00%	97.96%
85.0	11.846	12.328	995.377	0.00%	99.19%
90.0	1.546	3.667	999.044	0.00%	99.56%
95.0	0.471	0.552	999.596	0.00%	99.61%
100.0	0.459	0.253	999.849	0.00%	99.64%
105.0	0.495	0.255	1000.104	0.00%	99.66%
110.0	0.507	0.262	1000.366	0.00%	99.69%
115.0	0.568	0.272	1000.638	0.00%	99.71%
120.0	0.628	0.291	1000.929	0.00%	99.74%
125.0	0.664	0.299	1001.227	0.00%	99.77%
130.0	0.712	0.299	1001.527	0.00%	99.80%
135.0	0.785	0.303	1001.829	0.00%	99.83%
140.0	0.809	0.295	1002.124	0.00%	99.86%
145.0	0.930	0.290	1002.415	0.00%	99.89%
150.0	0.930	0.274	1002.689	0.00%	99.92%
155.0	0.930	0.235	1002.924	0.00%	99.94%
160.0	1.026	0.205	1003.129	0.00%	99.96%
165.0	1.002	0.167	1003.296	0.00%	99.98%
170.0	0.942	0.115	1003.412	0.00%	99.99%
175.0	0.990	0.069	1003.481	0.00%	100.00%
180.0	1.012	0.024	1003.505	0.00%	100.00%

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

Date:
Humidity(%): 58%

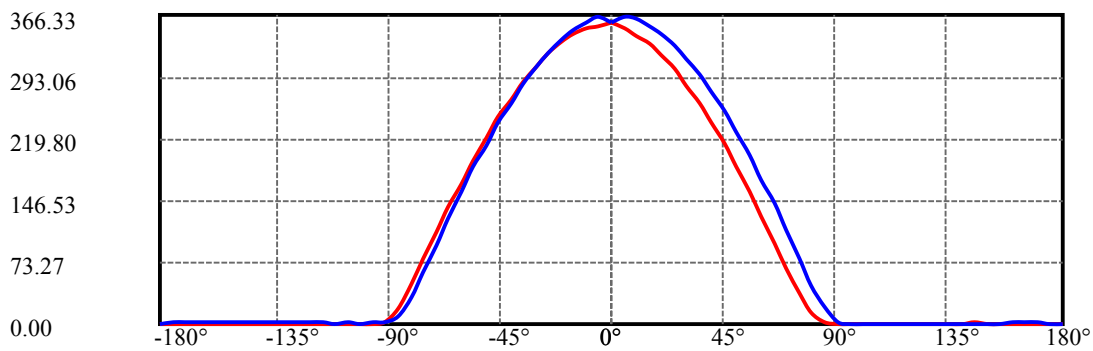
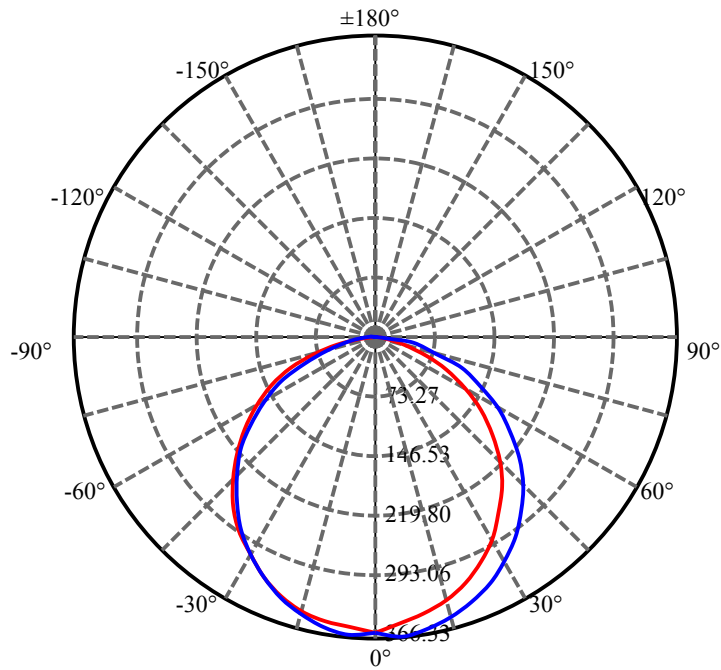
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	277.07	N.A.	27.61%
0-40	452.70	N.A.	45.11%
0-60	796.49	N.A.	79.37%
0-90	999.04	N.A.	99.56%
0-120	1000.93	N.A.	99.74%
0-180	1003.50	N.A.	100.00%
60-90	202.56	N.A.	20.19%
90-120	1.88	N.A.	0.19%
90-130	2.48	N.A.	0.25%
90-150	3.64	N.A.	0.36%
90-180	4.44	N.A.	0.44%
0-60.47	802.80	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	33.89
10-20	96.88
20-30	146.30
30-40	175.63
40-50	181.35
50-60	162.43
60-70	121.23
70-80	65.33
80-90	15.99
90-100	0.80
100-110	0.52
110-120	0.56
120-130	0.60
130-140	0.60
140-150	0.56
150-160	0.44
160-170	0.28
170-180	0.07

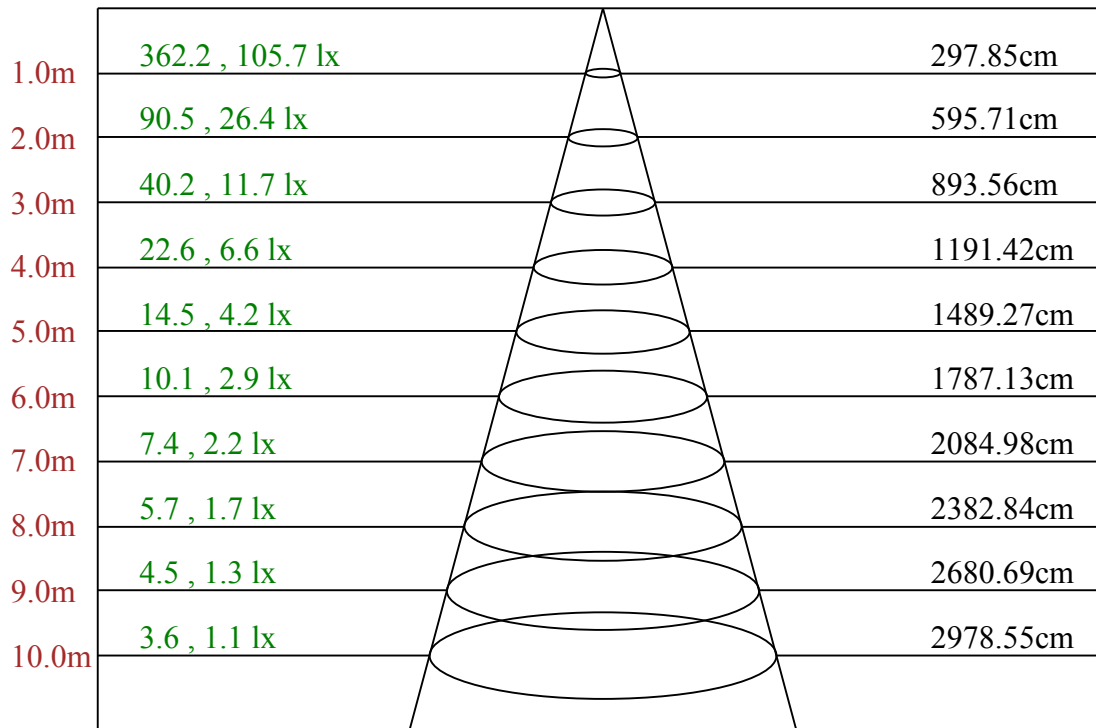


C0/C180: —

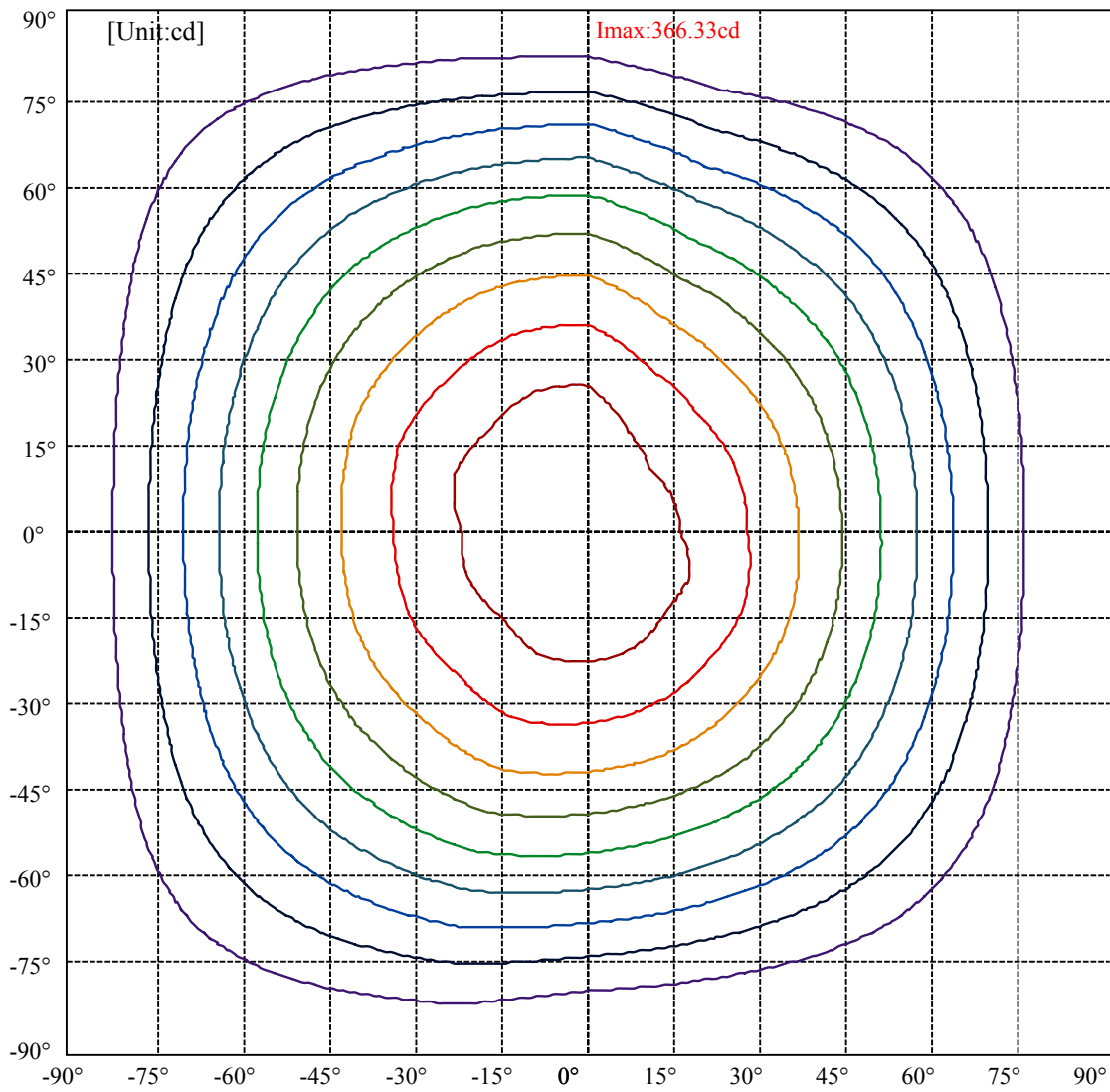
C90/C270: —

Field angle(10%Imax):C0/180Left:82.0 Right:75.2
 :C90/270Left:79.1 Right:81.8

Beam Angle(50%Imax):C0/180Left:57.7 Right:51.1
 :C90/270Left:55.5 Right:58.1



Max , Ave Beam angle of C112.5 plane 112.24

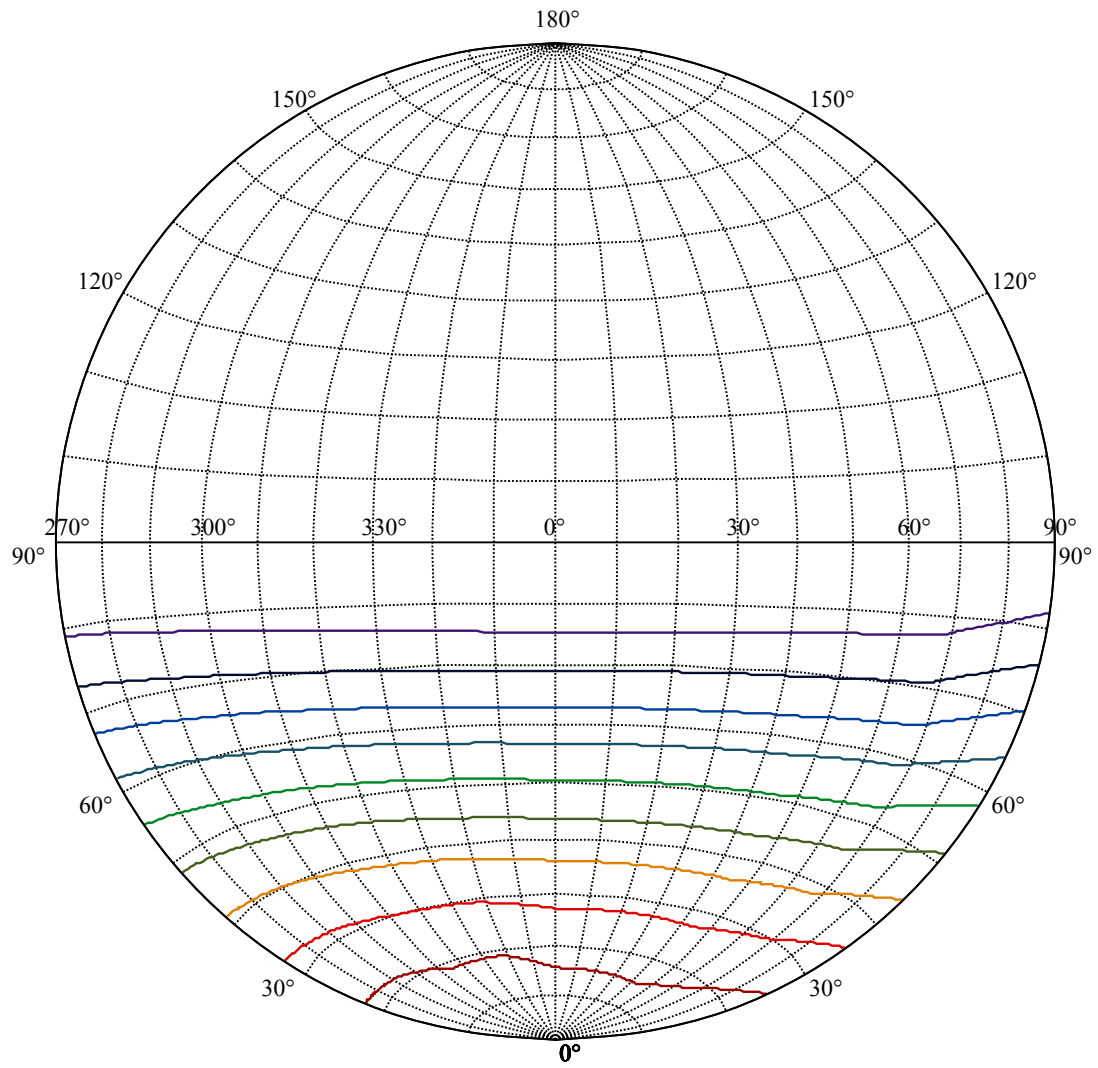


(10%Imax) 36.5984	—
(20%Imax) 73.1968	—
(30%Imax) 109.795	—
(40%Imax) 146.394	—
(50%Imax) 182.992	—
(60%Imax) 219.59	—
(70%Imax) 256.189	—
(80%Imax) 292.787	—
(90%Imax) 329.385	—

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

Date:
Humidity(%): 58%

Operator: Tester



House

[Unit:cd]

Road

- I_{max}:366.33**
- (10%I_{max}) 36.6292
- (20%I_{max}) 73.2583
- (30%I_{max}) 109.887
- (40%I_{max}) 146.517
- (50%I_{max}) 183.146
- (60%I_{max}) 219.775
- (70%I_{max}) 256.404
- (80%I_{max}) 293.033
- (90%I_{max}) 329.662

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	358.25	349.71	342.18	331.55	318.22	301.99	282.86	261.80	238.81
22.5	358.25	348.74	341.79	331.16	318.02	301.99	283.44	262.19	238.04
45.0	358.25	346.23	339.66	329.62	317.06	300.83	283.25	261.99	239.58
67.5	358.25	354.54	347.97	338.12	325.56	310.10	291.94	271.07	249.05
90.0	358.25	364.78	361.11	353.38	342.95	329.81	314.16	295.42	274.55
112.5	358.25	366.33	362.46	355.31	344.88	331.94	315.51	296.77	276.29
135.0	358.25	359.76	356.47	350.10	340.44	327.11	310.88	293.10	272.43
157.5	358.25	362.46	359.56	352.61	342.76	329.23	313.77	294.84	273.59
180.0	358.25	353.77	351.06	344.30	334.06	321.50	305.66	287.11	266.82
202.5	358.25	352.80	350.29	343.91	334.83	321.89	306.05	287.69	268.18
225.0	358.25	349.71	346.81	340.44	330.78	318.02	302.57	285.37	265.28
247.5	358.25	356.86	353.77	346.81	336.77	324.21	308.36	290.59	270.69
270.0	358.25	363.24	357.25	348.74	336.57	321.89	304.31	284.79	262.57
292.5	358.25	363.04	357.05	347.01	334.06	318.22	299.67	278.80	256.58
315.0	358.25	356.67	349.52	339.47	326.53	311.26	292.71	271.85	248.85
337.5	358.25	358.60	351.45	340.44	326.91	309.91	290.78	268.37	243.64
360.0	358.25	349.71	342.18	331.55	318.22	301.99	282.86	261.80	238.81
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	213.11	185.87	155.92	127.52	96.41	65.89	36.90	14.49	1.74
22.5	213.30	186.45	157.85	127.71	97.38	68.01	39.03	15.07	1.74
45.0	214.85	187.99	160.17	130.80	100.47	70.33	42.51	17.97	2.90
67.5	223.74	196.88	169.83	139.88	107.62	77.48	48.69	22.61	5.22
90.0	252.53	227.02	200.17	171.76	142.78	111.10	78.25	46.37	19.51
112.5	253.30	228.37	200.75	172.54	141.62	109.36	77.67	47.92	20.87
135.0	250.59	226.06	199.78	170.80	140.46	107.43	76.90	46.76	20.09
157.5	250.01	225.09	196.88	168.09	137.57	107.81	76.51	46.18	18.94
180.0	244.60	220.26	194.18	166.35	138.92	108.20	77.28	47.14	18.55
202.5	245.38	220.84	195.53	167.13	137.57	106.27	76.32	45.98	18.16
225.0	242.87	218.91	193.40	165.97	136.99	106.46	76.51	46.95	19.71
247.5	247.50	222.19	195.72	168.29	138.92	108.20	76.70	47.14	21.45
270.0	238.23	211.95	185.48	156.89	125.39	92.74	61.44	31.11	8.89
292.5	230.89	204.03	174.66	146.07	114.38	82.31	51.39	25.12	5.99
315.0	224.90	197.27	167.90	136.99	106.07	74.19	44.63	19.13	3.67
337.5	217.55	190.89	160.36	130.80	99.31	69.36	40.19	16.42	2.13
360.0	213.11	185.87	155.92	127.52	96.41	65.89	36.90	14.49	1.74
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.58	0.39	0.58	0.39	0.58	0.77	0.77	0.58	0.97
22.5	0.97	0.58	0.39	0.77	0.77	0.77	0.77	0.77	0.77
45.0	0.97	0.77	0.77	0.77	0.58	0.77	0.58	0.77	0.77
67.5	0.97	0.58	0.58	0.58	0.58	0.77	0.77	0.77	0.77
90.0	2.71	0.58	0.58	0.58	0.58	0.58	0.77	0.77	0.97
112.5	2.90	0.19	0.39	0.39	0.39	0.39	0.58	0.39	0.58
135.0	1.74	0.19	0.19	0.39	0.19	0.19	0.39	0.58	0.58
157.5	1.55	0.19	0.19	0.19	0.19	0.19	0.00	0.39	0.39
180.0	1.16	0.39	0.19	0.00	0.19	0.39	0.39	0.39	0.58
202.5	1.35	0.19	0.19	0.00	0.19	0.39	0.39	0.19	0.19
225.0	2.13	0.00	0.00	0.19	0.39	0.19	0.39	0.58	0.39
247.5	3.48	0.39	0.19	0.19	0.19	0.19	0.39	0.39	0.39
270.0	1.16	1.16	0.97	1.16	0.97	1.16	1.35	1.74	1.35
292.5	1.16	0.58	0.77	0.77	0.77	0.97	0.77	0.77	1.16
315.0	1.16	0.77	0.77	0.97	0.77	0.77	0.77	0.77	0.77
337.5	0.77	0.58	0.58	0.58	0.77	0.58	0.97	0.77	0.77
360.0	0.58	0.39	0.58	0.39	0.58	0.77	0.77	0.58	0.97

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	0.58	0.97	1.16	0.97	0.77	0.97	0.77	0.77	0.97
22.5	0.97	0.97	0.97	0.97	0.97	0.97	1.16	0.97	0.97
45.0	0.97	0.97	0.97	0.97	0.97	1.16	1.16	0.97	0.97
67.5	0.77	0.77	0.97	1.16	0.97	0.97	0.97	0.97	0.97
90.0	0.77	0.77	0.77	0.97	0.97	1.16	1.16	1.16	0.97
112.5	0.58	0.77	0.77	0.97	0.97	1.16	1.16	0.97	0.97
135.0	0.58	0.58	0.77	0.77	0.77	0.97	0.97	0.77	0.97
157.5	0.39	0.58	0.77	0.77	0.77	0.77	0.97	0.58	0.97
180.0	0.77	0.58	0.77	0.77	0.77	0.97	0.97	0.77	0.77
202.5	0.77	0.58	0.77	0.58	0.77	0.77	0.77	0.97	0.77
225.0	0.39	0.39	0.58	0.77	0.77	0.77	0.58	0.77	0.97
247.5	0.39	0.58	0.77	0.77	0.77	0.97	0.77	0.77	1.16
270.0	1.55	1.55	1.74	1.55	1.55	1.55	1.55	1.55	1.35
292.5	1.16	1.16	1.16	1.16	0.97	0.97	1.16	0.97	0.97
315.0	0.97	0.97	0.97	0.97	1.16	1.16	0.97	1.16	1.16
337.5	0.97	0.77	0.97	0.77	0.97	1.16	0.97	0.97	0.97
360.0	0.58	0.97	1.16	0.97	0.77	0.97	0.77	0.77	0.97
C/γ(°)	180.0								
0.0	1.01								
22.5	1.01								
45.0	1.01								
67.5	1.01								
90.0	1.01								
112.5	1.01								
135.0	1.01								
157.5	1.01								
180.0	1.01								
202.5	1.01								
225.0	1.01								
247.5	1.01								
270.0	1.01								
292.5	1.01								
315.0	1.01								
337.5	1.01								
360.0	1.01								