



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.00

LampCAT:

Current(A): 0.1340

Lamp flux(lm): -1.0

Power (W): 15.96

Number of Lamps: 1

PF: 0.9922

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 993.39, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 62.24

Central intensity(cd): 357.425, Maximum intensity(cd): 365.625

Angle of maximum intensity: C=270.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=107.3

[C90/270]Total=113.7

Field angle(10%Imax): [C0/180]Total=156.2

[C90/270]Total=161.3

Maximum s/h(1/2): C0_180=1.21 C90_270=1.28

Maximum s/h(1/4): C0_180=1.32 C90_270=1.40

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.53%

Down flux rate of LUM(%): 99.47%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.653%

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	357.425	0.000	0	0.00%	0.00%
5.0	355.901	8.528	8.528	0.00%	0.86%
10.0	350.736	25.279	33.806	0.00%	3.40%
15.0	342.235	41.107	74.913	0.00%	7.54%
20.0	330.605	55.451	130.364	0.00%	13.12%
25.0	315.980	67.815	198.179	0.00%	19.95%
30.0	298.700	77.788	275.967	0.00%	27.78%
35.0	278.857	85.049	361.016	0.00%	36.34%
40.0	257.004	89.404	450.421	0.00%	45.34%
45.0	233.167	90.759	541.18	0.00%	54.48%
50.0	207.504	89.044	630.224	0.00%	63.44%
55.0	180.329	84.328	714.552	0.00%	71.93%
60.0	151.577	76.719	791.271	0.00%	79.65%
65.0	121.472	66.379	857.65	0.00%	86.34%
70.0	90.789	53.746	911.395	0.00%	91.75%
75.0	59.974	39.407	950.802	0.00%	95.71%
80.0	30.776	24.282	975.084	0.00%	98.16%
85.0	8.068	10.555	985.639	0.00%	99.22%
90.0	0.972	2.475	988.115	0.00%	99.47%
95.0	0.670	0.450	988.564	0.00%	99.51%
100.0	0.605	0.346	988.911	0.00%	99.55%
105.0	0.644	0.334	989.245	0.00%	99.58%
110.0	0.605	0.326	989.571	0.00%	99.62%
115.0	0.684	0.326	989.897	0.00%	99.65%
120.0	0.723	0.342	990.239	0.00%	99.68%
125.0	0.867	0.368	990.607	0.00%	99.72%
130.0	0.933	0.391	990.998	0.00%	99.76%
135.0	0.946	0.380	991.378	0.00%	99.80%
140.0	1.012	0.363	991.741	0.00%	99.83%
145.0	1.064	0.346	992.087	0.00%	99.87%
150.0	1.170	0.329	992.416	0.00%	99.90%
155.0	1.157	0.294	992.71	0.00%	99.93%
160.0	1.170	0.244	992.954	0.00%	99.96%
165.0	1.130	0.190	993.144	0.00%	99.98%
170.0	1.156	0.136	993.28	0.00%	99.99%
175.0	1.170	0.083	993.363	0.00%	100.00%
180.0	1.224	0.029	993.391	0.00%	100.00%

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

Date:
Humidity(%): 58%

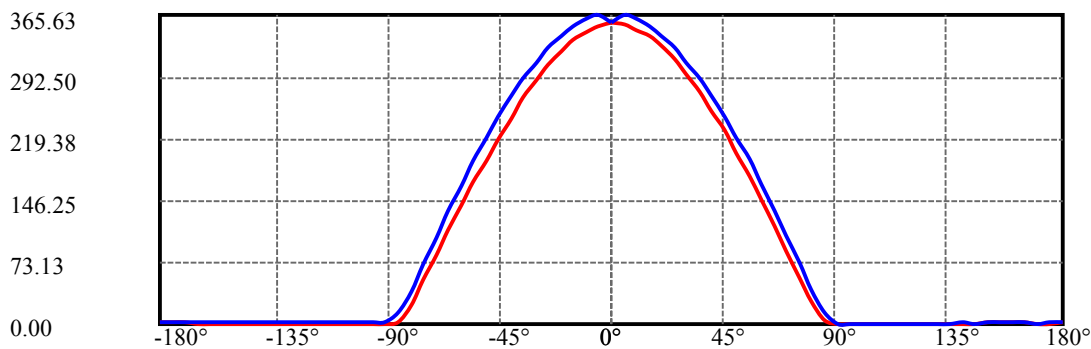
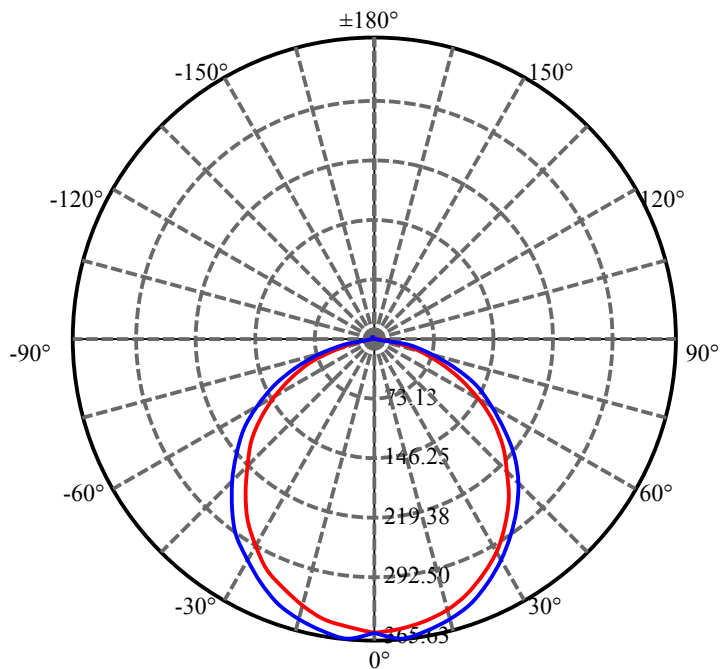
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	275.97	N.A.	27.78%
0-40	450.42	N.A.	45.34%
0-60	791.27	N.A.	79.65%
0-90	988.11	N.A.	99.47%
0-120	990.24	N.A.	99.68%
0-180	993.39	N.A.	100.00%
60-90	196.84	N.A.	19.82%
90-120	2.12	N.A.	0.21%
90-130	2.88	N.A.	0.29%
90-150	4.30	N.A.	0.43%
90-180	5.25	N.A.	0.53%
0-60.26	794.71	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	33.81
10-20	96.56
20-30	145.60
30-40	174.45
40-50	179.80
50-60	161.05
60-70	120.12
70-80	63.69
80-90	13.03
90-100	0.80
100-110	0.66
110-120	0.67
120-130	0.76
130-140	0.74
140-150	0.68
150-160	0.54
160-170	0.33
170-180	0.08

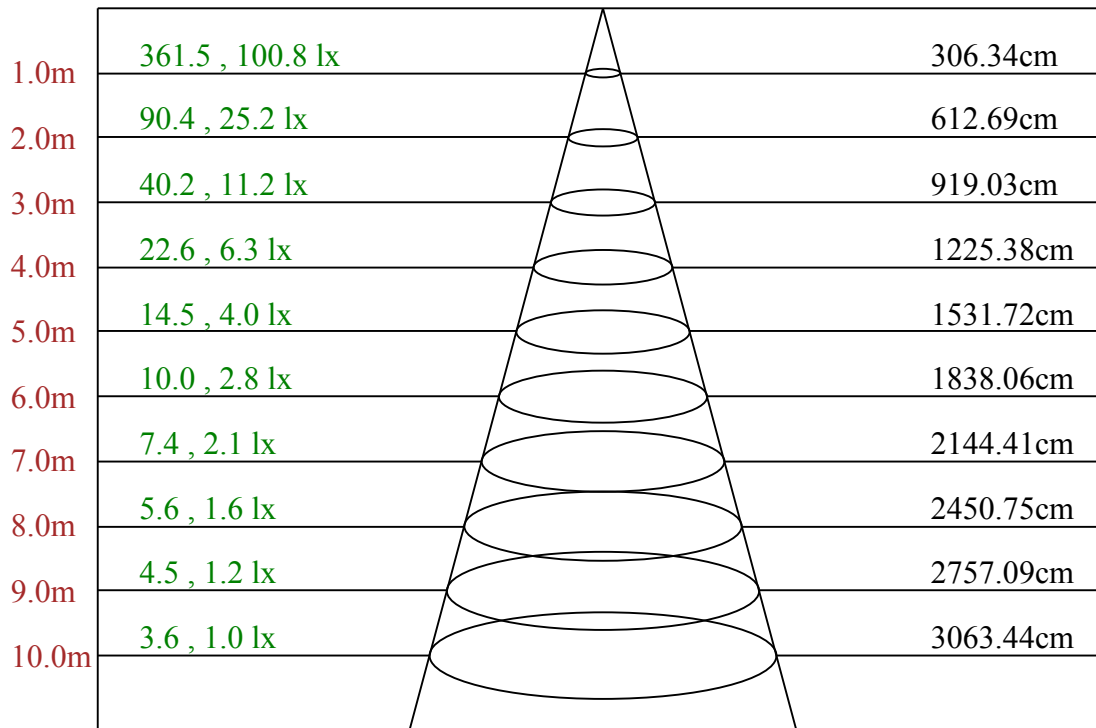


C0/C180: —

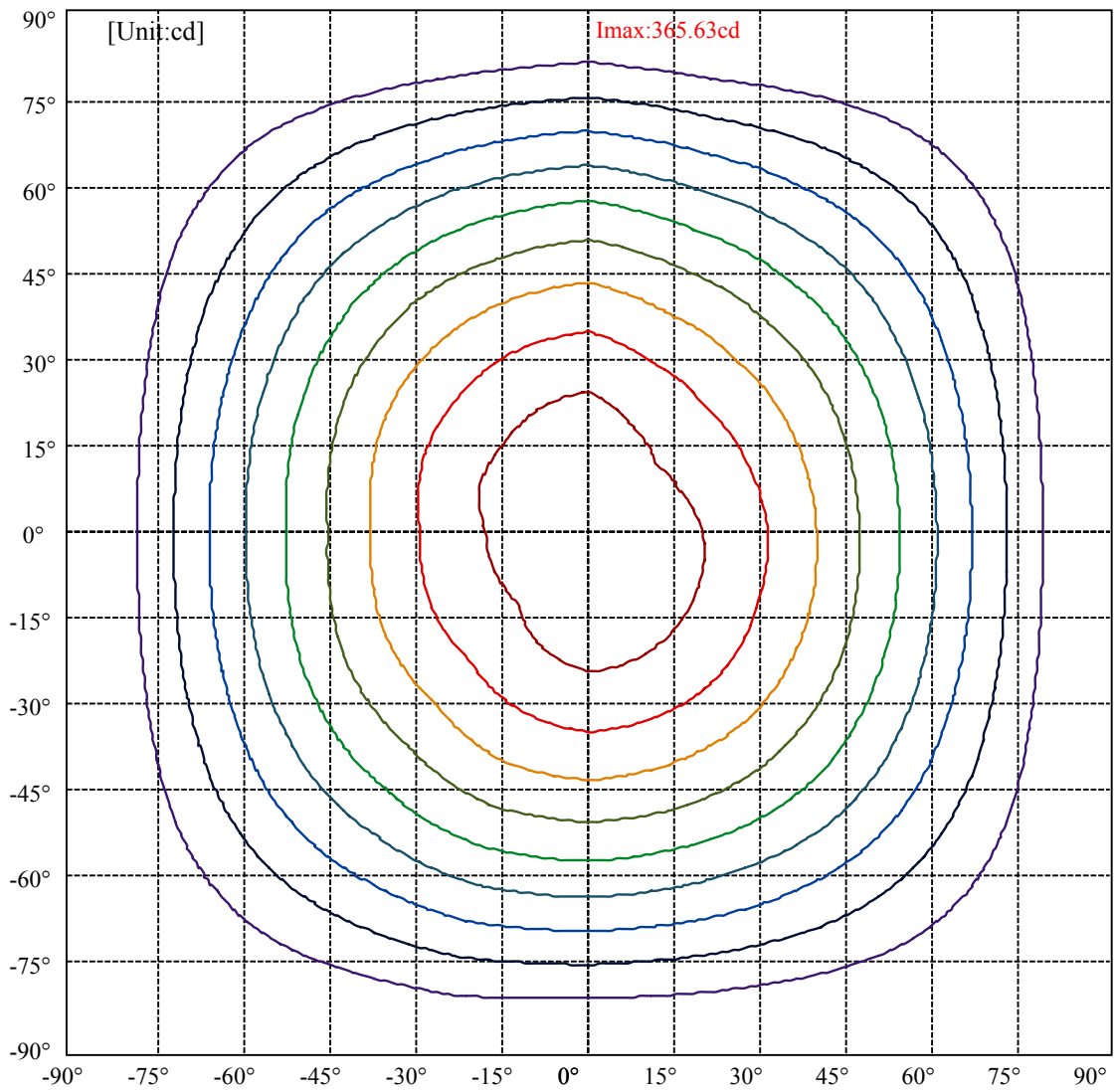
C90/C270: —

Field angle(10%Imax):C0/180Left:77.8 Right:78.4
 :C90/270Left:80.4 Right:80.9

Beam Angle(50%Imax):C0/180Left:52.9 Right:54.4
 :C90/270Left:56.7 Right:57.0



Max , Ave Beam angle of C270 plane 113.72

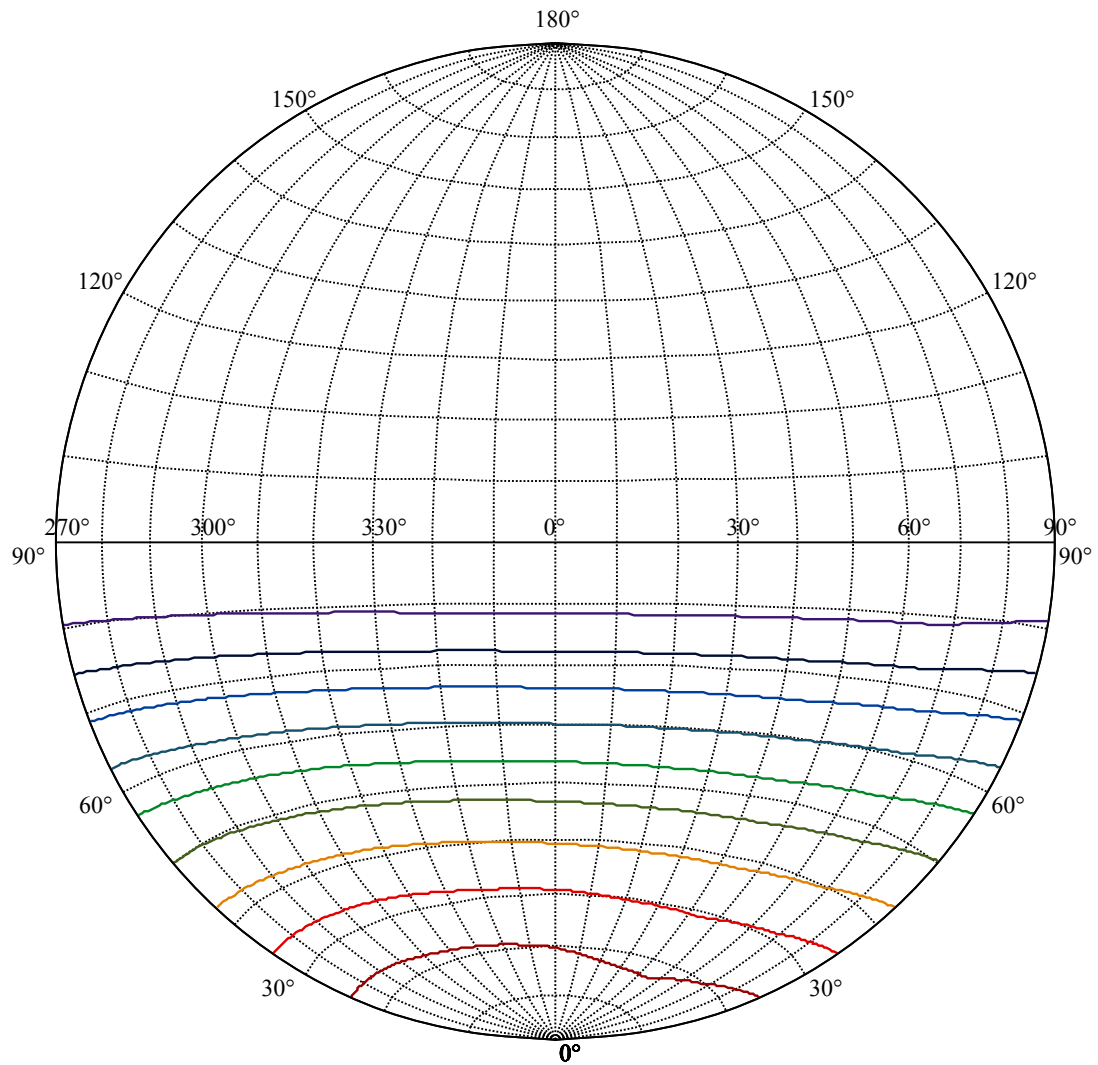


(10%Imax) 36.5625	—
(20%Imax) 73.125	—
(30%Imax) 109.688	—
(40%Imax) 146.25	—
(50%Imax) 182.813	—
(60%Imax) 219.375	—
(70%Imax) 255.938	—
(80%Imax) 292.5	—
(90%Imax) 329.063	—

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

Date:
Humidity(%): 58%

Operator: Tester



House

[Unit:cd]

Road

I_{max}:365.63

(10%I _{max}) 36.5625	—
(20%I _{max}) 73.125	—
(30%I _{max}) 109.688	—
(40%I _{max}) 146.25	—
(50%I _{max}) 182.813	—
(60%I _{max}) 219.375	—
(70%I _{max}) 255.938	—
(80%I _{max}) 292.5	—
(90%I _{max}) 329.063	—

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	357.43	353.22	348.38	339.76	328.41	313.90	296.24	275.64	252.93
22.5	357.43	347.75	342.71	334.51	323.15	308.86	290.99	271.85	249.57
45.0	357.43	346.70	341.45	332.41	321.26	306.54	289.30	269.54	248.52
67.5	357.43	354.69	349.02	340.40	328.41	313.90	296.45	276.90	253.98
90.0	357.43	365.42	360.58	352.38	341.03	326.73	309.70	290.15	269.33
112.5	357.43	362.68	357.43	348.81	337.24	322.52	305.91	285.73	263.65
135.0	357.43	358.69	352.80	343.97	331.56	316.22	299.61	279.84	258.19
157.5	357.43	357.22	351.54	342.50	329.88	314.53	296.03	275.01	252.72
180.0	357.43	351.75	345.44	335.56	323.15	307.39	288.46	267.44	243.47
202.5	357.43	347.75	342.92	334.72	322.94	308.44	291.62	272.06	250.20
225.0	357.43	347.12	342.29	334.09	322.73	308.44	291.62	272.48	251.04
247.5	357.43	355.95	351.12	343.76	332.83	319.16	302.76	284.05	263.44
270.0	357.43	365.63	360.58	352.38	341.03	326.52	309.70	290.57	269.12
292.5	357.43	363.31	358.69	350.28	338.71	324.42	307.18	287.62	264.92
315.0	357.43	358.90	354.27	346.49	334.93	320.84	304.23	284.47	263.02
337.5	357.43	357.64	352.59	343.76	332.41	317.27	299.40	278.37	257.98
360.0	357.43	353.22	348.38	339.76	328.41	313.90	296.24	275.64	252.93
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	228.33	203.10	175.56	146.76	116.27	85.99	55.30	26.70	5.47
22.5	226.02	200.37	173.46	145.07	115.01	84.94	55.51	26.49	5.26
45.0	224.97	199.95	172.83	145.07	114.38	85.15	55.09	27.96	6.10
67.5	231.49	206.05	178.50	150.12	120.68	89.15	58.45	29.23	7.99
90.0	245.99	220.55	194.27	165.26	134.98	103.44	71.91	41.42	13.88
112.5	239.48	213.40	186.07	157.06	125.31	95.66	63.08	33.01	8.83
135.0	234.64	207.94	179.13	148.65	118.79	86.62	55.51	26.49	5.68
157.5	227.70	201.00	172.20	143.18	112.27	81.58	51.09	23.97	3.57
180.0	218.45	193.22	168.20	140.66	111.22	81.16	51.72	23.34	3.15
202.5	225.60	200.58	173.04	144.23	114.17	85.57	54.03	25.65	5.05
225.0	228.54	203.52	178.08	148.86	120.68	90.41	60.34	31.54	8.83
247.5	240.53	215.93	189.86	161.26	132.04	101.13	70.22	40.16	14.09
270.0	245.36	219.29	192.38	164.42	134.14	102.39	70.43	38.69	13.46
292.5	241.79	216.14	188.17	158.32	129.72	97.98	66.44	36.16	12.19
315.0	238.63	211.93	184.60	155.38	124.05	92.93	62.23	32.59	9.04
337.5	233.17	207.10	178.92	150.96	119.84	88.52	58.24	29.01	6.52
360.0	228.33	203.10	175.56	146.76	116.27	85.99	55.30	26.70	5.47
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.84	0.63	0.63	0.84	0.84	0.63	0.84	0.84	1.05
22.5	0.84	0.84	0.84	0.84	0.63	0.84	0.63	1.05	1.05
45.0	1.05	0.84	0.84	0.63	0.63	0.84	0.84	1.05	1.26
67.5	1.26	0.63	0.42	0.84	0.84	0.84	1.05	0.84	0.84
90.0	1.05	0.84	0.63	0.63	0.63	0.63	0.63	1.05	0.84
112.5	1.05	0.42	0.42	0.42	0.42	0.42	0.63	0.63	0.84
135.0	0.84	0.21	0.21	0.42	0.42	0.42	0.42	0.63	0.63
157.5	0.42	0.42	0.42	0.42	0.42	0.63	0.42	0.63	0.63
180.0	0.42	0.42	0.42	0.63	0.42	0.21	0.42	0.63	0.63
202.5	0.63	0.21	0.21	0.21	0.21	0.42	0.42	0.63	0.42
225.0	1.05	0.42	0.42	0.21	0.21	0.42	0.42	0.63	0.84
247.5	1.05	0.63	0.42	0.42	0.21	0.42	0.42	0.63	0.63
270.0	1.47	1.26	1.26	1.26	1.47	1.26	1.47	1.68	1.68
292.5	1.47	0.84	0.84	1.05	0.84	1.26	1.26	1.05	1.26
315.0	1.05	1.05	0.84	0.63	0.63	0.84	0.84	0.84	1.26
337.5	1.05	1.05	0.84	0.84	0.84	0.84	0.84	1.05	1.05
360.0	0.84	0.63	0.63	0.84	0.84	0.63	0.84	0.84	1.05

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	1.05	1.05	1.05	1.26	1.26	1.26	1.26	1.05	1.05
22.5	1.05	0.84	1.05	1.26	1.26	1.26	1.26	1.05	1.26
45.0	1.05	1.05	1.05	1.26	1.26	1.05	1.05	1.05	1.05
67.5	0.84	0.84	1.05	1.05	1.05	1.05	1.05	1.26	1.05
90.0	0.84	1.26	1.05	1.26	1.26	1.26	1.26	1.05	1.26
112.5	1.05	0.84	1.05	1.26	1.05	1.26	1.05	0.84	1.05
135.0	0.84	0.84	0.84	1.05	0.84	1.05	1.05	1.05	1.26
157.5	0.63	0.84	1.05	0.84	1.05	0.84	1.05	1.05	0.84
180.0	0.63	0.84	0.84	1.05	0.84	1.05	1.05	1.26	1.26
202.5	0.63	0.84	0.84	1.05	0.84	1.05	1.05	1.05	0.84
225.0	0.84	1.05	0.84	1.05	0.84	0.84	1.05	1.05	1.05
247.5	0.63	0.84	0.63	0.84	1.05	1.05	1.05	1.05	1.26
270.0	1.68	1.68	1.89	1.89	2.10	2.10	1.89	2.10	1.89
292.5	1.26	1.47	1.26	1.05	1.26	1.26	1.05	1.26	1.26
315.0	1.05	0.84	1.26	1.26	1.26	1.26	1.05	1.26	1.05
337.5	1.05	1.05	1.26	1.26	1.26	1.05	0.84	1.05	1.26
360.0	1.05	1.05	1.05	1.26	1.26	1.26	1.26	1.05	1.05
C/γ(°)	180.0								
0.0	1.22								
22.5	1.22								
45.0	1.22								
67.5	1.22								
90.0	1.22								
112.5	1.22								
135.0	1.22								
157.5	1.22								
180.0	1.22								
202.5	1.22								
225.0	1.22								
247.5	1.22								
270.0	1.22								
292.5	1.22								
315.0	1.22								
337.5	1.22								
360.0	1.22								