



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.08

LampCAT:

Current(A): 0.1240

Lamp flux(lm): -1.0

Power (W): 14.24

Number of Lamps: 1

PF: 0.9519

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 983.90, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 69.07

Central intensity(cd): 365.486, Maximum intensity(cd): 371.750

Angle of maximum intensity: C=112.5 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=104.2

[C90/270]Total=110.7

Field angle(10%Imax): [C0/180]Total=156.6

[C90/270]Total=160.0

Maximum s/h(1/2): C0_180=1.22 C90_270=1.25

Maximum s/h(1/4): C0_180=1.33 C90_270=1.37

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.48%

Down flux rate of LUM(%): 99.52%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.827%

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

Date:
Humidity(%): 59%

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	365.486	0.000	0	0.00%	0.00%
5.0	363.586	8.716	8.716	0.00%	0.89%
10.0	357.579	25.798	34.514	0.00%	3.51%
15.0	347.629	41.832	76.347	0.00%	7.76%
20.0	334.159	56.189	132.536	0.00%	13.47%
25.0	317.620	68.360	200.895	0.00%	20.42%
30.0	298.633	77.987	278.882	0.00%	28.34%
35.0	277.132	84.785	363.668	0.00%	36.96%
40.0	253.871	88.594	452.262	0.00%	45.97%
45.0	228.969	89.402	541.663	0.00%	55.05%
50.0	202.533	87.191	628.855	0.00%	63.91%
55.0	175.197	82.131	710.986	0.00%	72.26%
60.0	146.829	74.435	785.421	0.00%	79.83%
65.0	117.614	64.287	849.708	0.00%	86.36%
70.0	88.108	52.090	901.798	0.00%	91.66%
75.0	58.880	38.420	940.218	0.00%	95.56%
80.0	31.755	24.251	964.47	0.00%	98.02%
85.0	10.585	11.505	975.975	0.00%	99.19%
90.0	1.072	3.192	979.166	0.00%	99.52%
95.0	0.556	0.446	979.612	0.00%	99.56%
100.0	0.503	0.288	979.9	0.00%	99.59%
105.0	0.490	0.266	980.165	0.00%	99.62%
110.0	0.543	0.270	980.435	0.00%	99.65%
115.0	0.543	0.275	980.71	0.00%	99.68%
120.0	0.715	0.306	981.015	0.00%	99.71%
125.0	0.728	0.333	981.349	0.00%	99.74%
130.0	0.834	0.340	981.688	0.00%	99.77%
135.0	0.900	0.350	982.038	0.00%	99.81%
140.0	0.979	0.348	982.386	0.00%	99.85%
145.0	0.953	0.322	982.709	0.00%	99.88%
150.0	1.006	0.288	982.997	0.00%	99.91%
155.0	1.046	0.260	983.257	0.00%	99.93%
160.0	1.125	0.228	983.485	0.00%	99.96%
165.0	1.099	0.183	983.668	0.00%	99.98%
170.0	1.072	0.129	983.797	0.00%	99.99%
175.0	1.125	0.079	983.875	0.00%	100.00%
180.0	1.134	0.027	983.902	0.00%	100.00%

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

Date:
Humidity(%): 59%

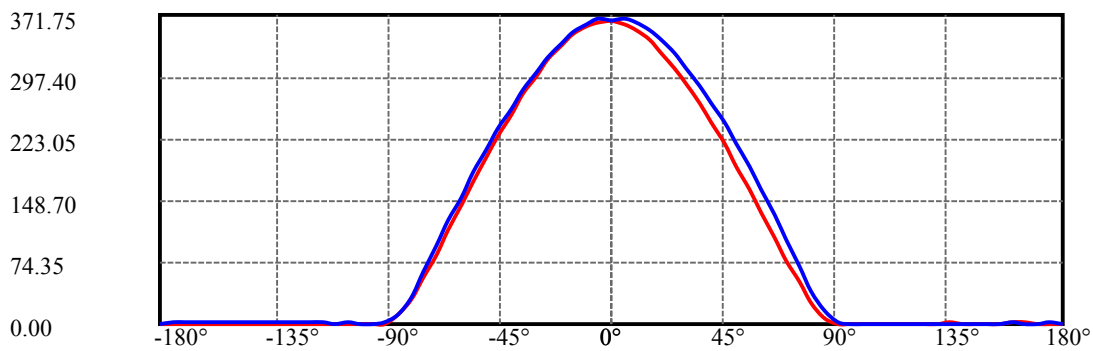
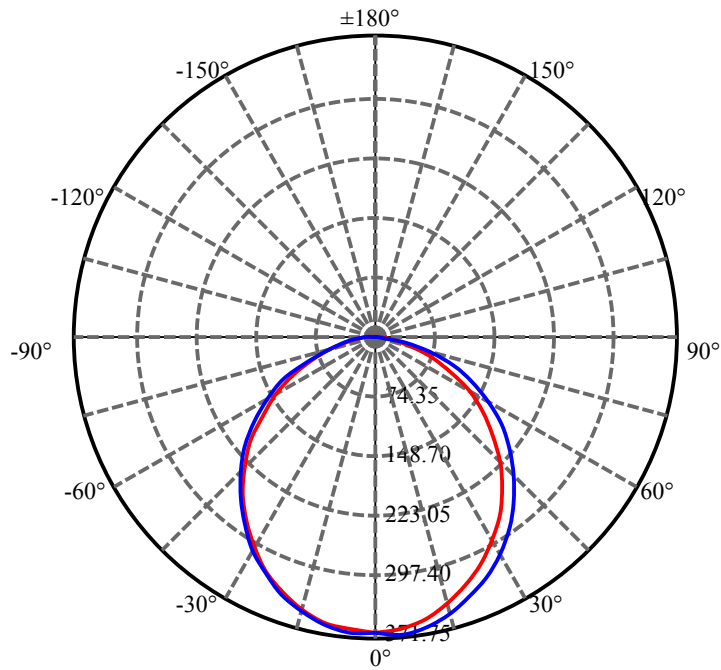
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	278.88	N.A.	28.34%
0-40	452.26	N.A.	45.97%
0-60	785.42	N.A.	79.83%
0-90	979.17	N.A.	99.52%
0-120	981.02	N.A.	99.71%
0-180	983.90	N.A.	100.00%
60-90	193.75	N.A.	19.69%
90-120	1.85	N.A.	0.19%
90-130	2.52	N.A.	0.26%
90-150	3.83	N.A.	0.39%
90-180	4.71	N.A.	0.48%
0-60.13	787.12	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	34.51
10-20	98.02
20-30	146.35
30-40	173.38
40-50	176.59
50-60	156.57
60-70	116.38
70-80	62.67
80-90	14.70
90-100	0.73
100-110	0.54
110-120	0.58
120-130	0.67
130-140	0.70
140-150	0.61
150-160	0.49
160-170	0.31
170-180	0.08



C0/C180: —

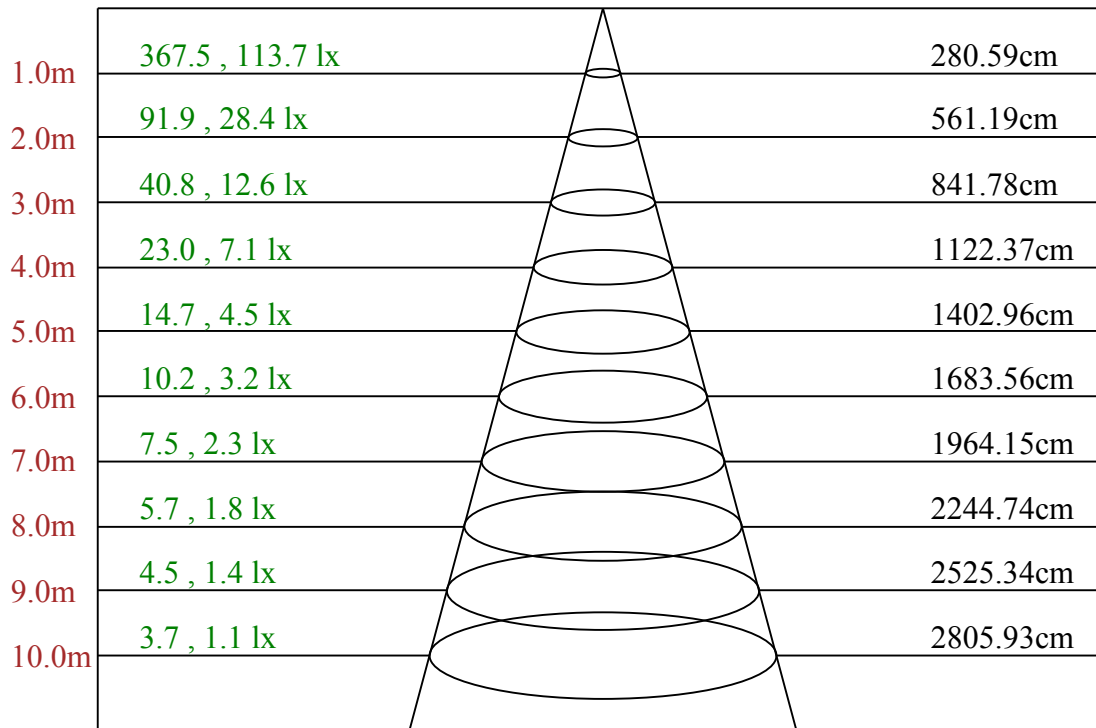
C90/C270: —

Field angle(10%Imax):C0/180Left:78.8 Right:77.8

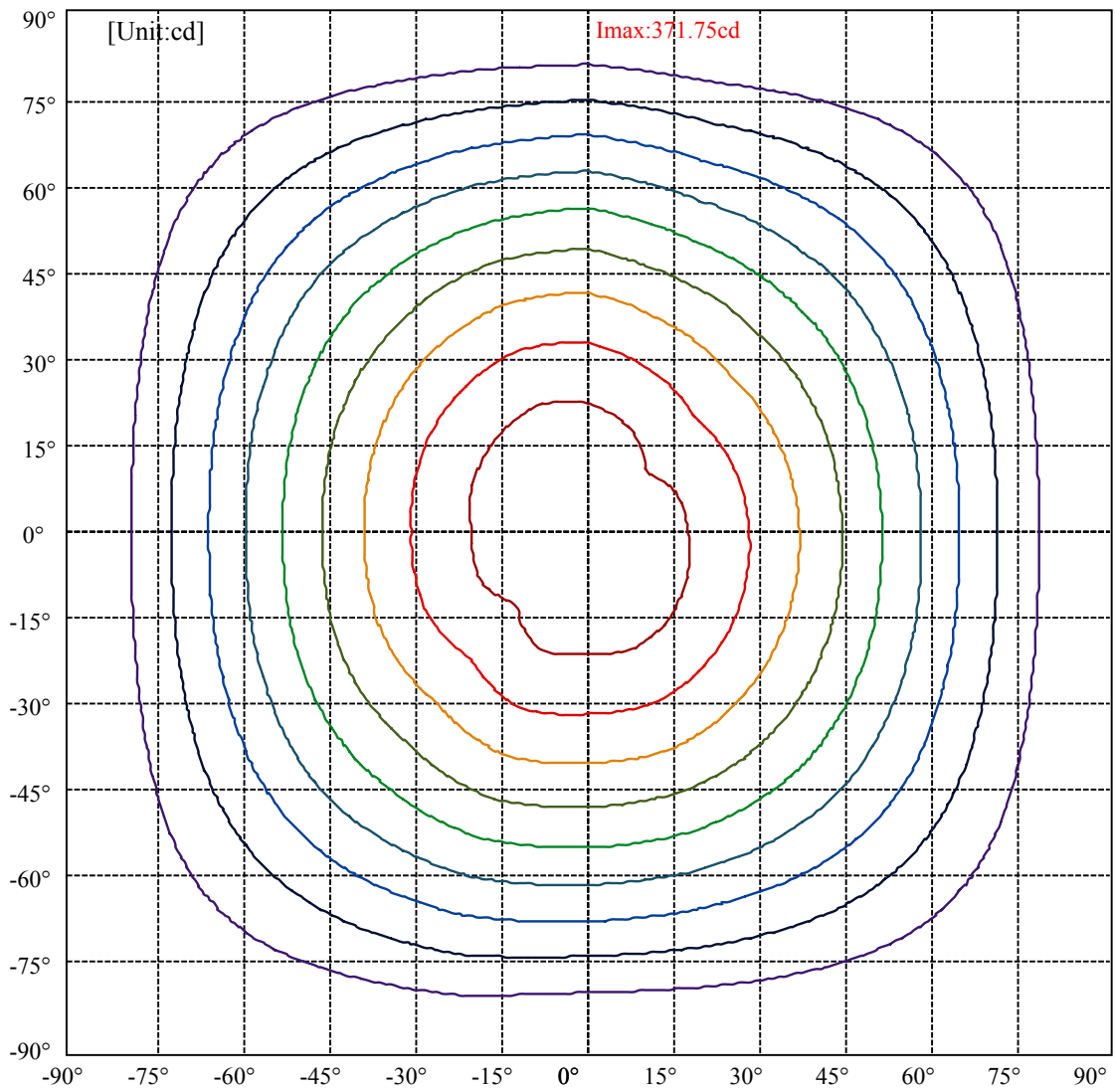
:C90/270Left:79.4 Right:80.6

Beam Angle(50%Imax):C0/180Left:53.1 Right:51.1

:C90/270Left:54.7 Right:56.0



Max , Ave Beam angle of C112.5 plane 109.04

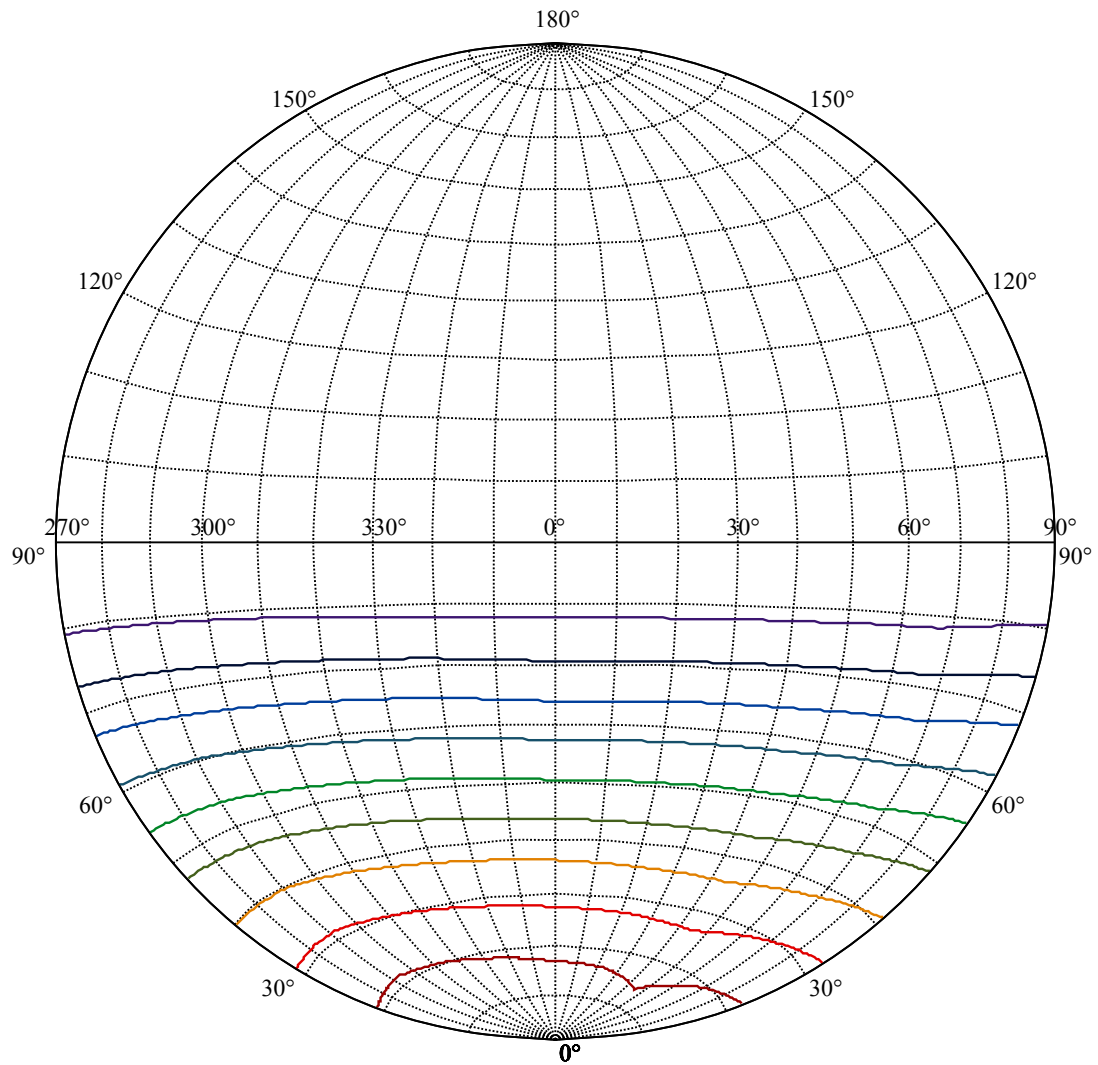


(10%Imax) 37.1224	—
(20%Imax) 74.2448	—
(30%Imax) 111.367	—
(40%Imax) 148.49	—
(50%Imax) 185.612	—
(60%Imax) 222.734	—
(70%Imax) 259.857	—
(80%Imax) 296.979	—
(90%Imax) 334.101	—

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

Date:
Humidity(%): 59%

Operator: Tester



House

[Unit:cd]

Road

Imax:371.75

(10%Imax) 37.1689	—
(20%Imax) 74.3378	—
(30%Imax) 111.507	—
(40%Imax) 148.676	—
(50%Imax) 185.844	—
(60%Imax) 223.013	—
(70%Imax) 260.182	—
(80%Imax) 297.351	—
(90%Imax) 334.52	—

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	365.49	360.32	352.49	340.63	325.39	307.39	288.34	266.53	242.61
22.5	365.49	358.41	350.58	338.94	324.12	306.33	286.01	263.57	240.71
45.0	365.49	349.73	342.96	332.37	318.82	302.95	284.11	263.36	240.49
67.5	365.49	363.07	356.08	345.92	331.74	314.80	295.75	274.37	250.66
90.0	365.49	367.73	362.22	353.54	340.84	325.39	307.60	287.07	265.05
112.5	365.49	371.75	366.46	357.35	344.86	329.20	310.36	289.40	265.90
135.0	365.49	369.00	363.92	355.03	341.69	325.60	306.76	284.11	260.39
157.5	365.49	367.52	362.44	352.49	339.36	322.42	302.52	280.51	256.16
180.0	365.49	362.01	357.35	347.83	334.07	317.98	298.92	276.70	252.56
202.5	365.49	361.59	356.93	348.04	335.55	320.09	301.04	279.02	255.31
225.0	365.49	352.27	348.04	339.57	328.35	312.69	294.90	275.43	253.83
247.5	365.49	365.82	361.38	352.91	340.42	324.75	307.18	286.01	263.36
270.0	365.49	366.46	360.53	350.58	337.45	320.94	302.74	281.78	259.12
292.5	365.49	370.06	363.49	353.12	339.36	322.42	303.37	282.20	258.70
315.0	365.49	366.88	359.68	348.67	334.91	317.34	297.02	274.58	251.71
337.5	365.49	364.76	356.72	345.08	329.62	311.63	291.51	269.50	245.36
360.0	365.49	360.32	352.49	340.63	325.39	307.39	288.34	266.53	242.61
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	216.15	188.63	161.95	133.58	105.00	76.85	50.39	25.40	7.62
22.5	215.73	189.26	162.38	135.49	107.33	78.75	51.02	25.83	7.62
45.0	216.78	191.17	164.28	136.55	109.03	80.45	52.29	26.46	7.83
67.5	225.46	198.79	172.11	142.90	114.11	84.68	55.04	27.95	7.41
90.0	241.34	215.94	189.47	161.11	131.04	102.25	70.07	39.59	15.03
112.5	241.34	214.46	185.88	157.72	127.23	95.69	64.99	36.84	13.13
135.0	234.14	207.05	179.74	151.37	120.88	90.19	60.76	33.24	11.43
157.5	229.91	203.02	176.14	147.77	116.86	87.65	58.22	31.33	10.16
180.0	226.73	200.27	171.69	142.05	113.26	84.05	56.10	30.49	10.80
202.5	230.76	204.08	175.93	147.77	117.50	87.43	58.43	32.81	11.22
225.0	230.33	205.35	178.47	151.37	122.15	92.51	63.30	35.78	13.13
247.5	238.59	213.40	185.66	156.87	127.87	98.65	69.02	40.22	16.09
270.0	235.63	209.59	182.28	153.27	124.69	93.78	62.24	33.24	10.80
292.5	233.51	205.78	179.10	149.67	119.40	89.34	60.12	32.18	9.95
315.0	226.73	200.06	171.90	143.32	114.74	85.53	56.53	29.85	9.10
337.5	220.38	193.71	166.19	138.45	110.72	81.93	53.56	26.89	8.05
360.0	216.15	188.63	161.95	133.58	105.00	76.85	50.39	25.40	7.62
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.64	0.85	0.64	0.42	0.85	0.85	0.85	0.85	1.06
22.5	1.06	0.64	0.64	0.85	0.85	0.64	1.06	0.85	0.85
45.0	1.27	0.64	0.64	0.64	0.64	0.64	0.85	1.06	1.06
67.5	0.85	0.64	0.85	0.64	0.85	0.64	0.85	0.85	0.85
90.0	1.69	0.42	0.42	0.42	0.64	0.64	0.64	0.64	0.85
112.5	1.27	0.42	0.21	0.21	0.21	0.21	0.42	0.42	0.64
135.0	0.85	0.42	0.00	0.00	0.21	0.21	0.21	0.42	0.64
157.5	0.64	0.42	0.42	0.42	0.21	0.21	0.64	0.42	0.64
180.0	0.64	0.21	0.21	0.21	0.21	0.21	0.64	0.64	0.42
202.5	0.64	0.42	0.42	0.21	0.00	0.21	0.42	0.42	0.64
225.0	1.06	0.42	0.00	0.21	0.42	0.21	0.21	0.21	0.64
247.5	2.12	0.42	0.21	0.21	0.21	0.21	0.42	0.64	0.64
270.0	1.27	1.06	1.06	1.27	1.06	1.48	1.48	1.48	1.48
292.5	1.06	0.64	0.85	0.85	0.85	1.06	0.85	0.85	1.06
315.0	1.27	0.64	0.64	0.64	0.64	0.64	0.85	0.85	0.85
337.5	0.85	0.64	0.85	0.64	0.85	0.64	1.06	1.06	1.06
360.0	0.64	0.85	0.64	0.42	0.85	0.85	0.85	0.85	1.06

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	1.27	1.06	1.06	1.06	1.06	1.27	1.27	1.06	1.06
22.5	1.06	0.85	1.27	1.06	1.06	1.06	0.85	1.06	1.27
45.0	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.27
67.5	0.85	1.06	1.06	0.85	1.06	1.06	1.06	1.06	0.85
90.0	0.85	1.06	0.85	1.06	1.06	1.27	1.06	1.06	1.27
112.5	0.85	0.85	0.64	1.06	0.85	1.06	1.06	0.85	1.06
135.0	0.64	0.85	0.85	0.85	0.85	0.85	0.85	1.27	0.85
157.5	0.64	0.64	0.64	1.06	0.85	0.85	1.06	1.06	1.06
180.0	0.85	0.85	0.85	0.85	1.06	1.06	0.85	1.06	1.06
202.5	0.85	1.06	0.85	0.85	0.85	1.06	1.06	0.85	0.85
225.0	0.64	0.64	0.64	0.64	1.06	1.06	1.06	0.85	1.06
247.5	0.64	1.06	0.85	0.85	0.64	1.06	1.06	0.85	0.85
270.0	1.48	1.48	1.48	1.69	1.69	1.69	1.91	1.91	2.12
292.5	1.06	1.06	1.06	1.06	1.27	1.06	1.06	1.06	1.27
315.0	0.85	1.06	1.06	1.06	1.06	1.27	1.06	1.06	1.06
337.5	0.85	1.06	1.06	1.06	1.27	1.27	1.27	1.06	1.06
360.0	1.27	1.06	1.06	1.06	1.06	1.27	1.27	1.06	1.06

C/γ(°)	180.0
0.0	1.13
22.5	1.13
45.0	1.13
67.5	1.13
90.0	1.13
112.5	1.13
135.0	1.13
157.5	1.13
180.0	1.13
202.5	1.13
225.0	1.13
247.5	1.13
270.0	1.13
292.5	1.13
315.0	1.13
337.5	1.13
360.0	1.13