



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.15

LampCAT:

Current(A): 2.4400

Lamp flux(lm): -1.0

Power (W): 292.76

Number of Lamps: 1

PF: 0.9986

Length(mm): 580

Width(mm): 260

Phm Type: C

Height(mm): 0

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### Photometric Results

Lumens(lm): 41114.59, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 140.44

Central intensity(cd): 14636.240, Maximum intensity(cd): 15006.840

Angle of maximum intensity: C=90.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=109.9

[C90/270]Total=111.3

Field angle(10%Imax): [C0/180]Total=159.4

[C90/270]Total=162.3

Maximum s/h(1/2): C0\_180=1.25 C90\_270=1.28

Maximum s/h(1/4): C0\_180=1.37 C90\_270=1.39

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.24%

Down flux rate of LUM(%): 99.76%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 78.936%

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

Date:  
Humidity(%): 58%

Operator: Sam

## 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	14636.240	0.000	0	0.00%	0.00%
5.0	14563.777	349.078	349.078	0.00%	0.85%
10.0	14350.442	1034.353	1383.43	0.00%	3.36%
15.0	14003.160	1681.917	3065.347	0.00%	7.46%
20.0	13526.827	2268.858	5334.205	0.00%	12.97%
25.0	12932.694	2775.115	8109.32	0.00%	19.72%
30.0	12234.463	3184.925	11294.245	0.00%	27.47%
35.0	11436.414	3485.702	14779.947	0.00%	35.95%
40.0	10543.686	3667.214	18447.161	0.00%	44.87%
45.0	9573.770	3724.910	22172.071	0.00%	53.93%
50.0	8525.200	3657.162	25829.233	0.00%	62.82%
55.0	7417.302	3466.431	29295.663	0.00%	71.25%
60.0	6247.018	3158.469	32454.133	0.00%	78.94%
65.0	5054.594	2747.443	35201.576	0.00%	85.62%
70.0	3846.524	2253.820	37455.396	0.00%	91.10%
75.0	2659.714	1700.626	39156.022	0.00%	95.24%
80.0	1537.846	1123.150	40279.172	0.00%	97.97%
85.0	569.374	572.582	40851.755	0.00%	99.36%
90.0	32.869	164.899	41016.653	0.00%	99.76%
95.0	8.795	11.408	41028.061	0.00%	99.79%
100.0	8.061	4.580	41032.642	0.00%	99.80%
105.0	8.612	4.461	41037.103	0.00%	99.81%
110.0	9.933	4.847	41041.95	0.00%	99.82%
115.0	11.609	5.454	41047.405	0.00%	99.84%
120.0	13.578	6.123	41053.528	0.00%	99.85%
125.0	15.315	6.679	41060.206	0.00%	99.87%
130.0	17.150	7.059	41067.265	0.00%	99.88%
135.0	18.581	7.220	41074.485	0.00%	99.90%
140.0	20.037	7.150	41081.636	0.00%	99.92%
145.0	21.272	6.892	41088.528	0.00%	99.94%
150.0	22.459	6.440	41094.967	0.00%	99.95%
155.0	23.389	5.802	41100.769	0.00%	99.97%
160.0	23.499	4.918	41105.687	0.00%	99.98%
165.0	23.328	3.859	41109.546	0.00%	99.99%
170.0	23.303	2.766	41112.312	0.00%	99.99%
175.0	23.866	1.687	41114	0.00%	100.00%
180.0	25.236	0.587	41114.587	0.00%	100.00%

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

Date:  
Humidity(%): 58%

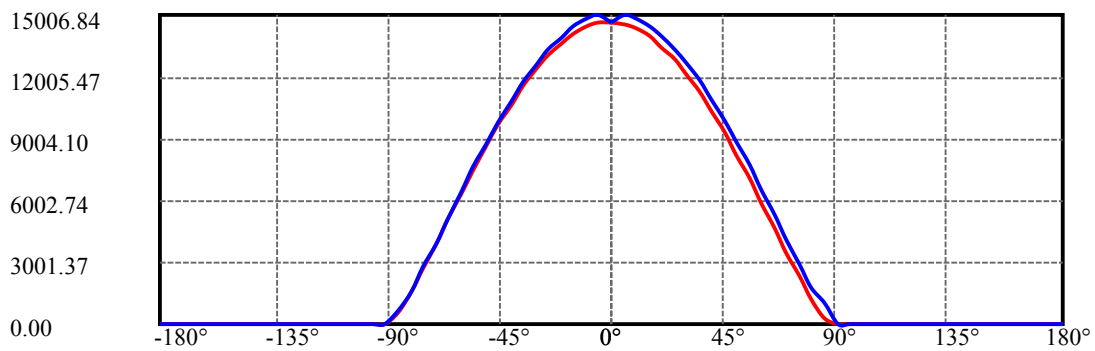
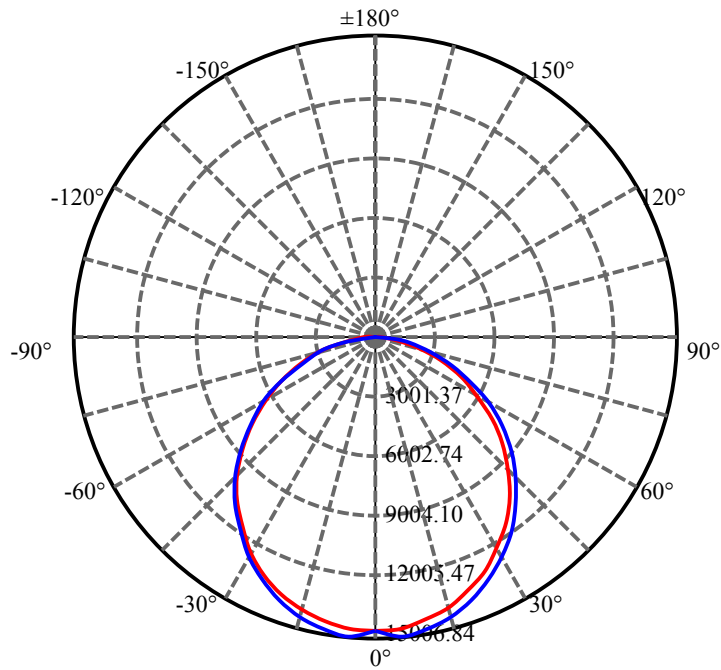
Operator: Sam

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	11294.24	N.A.	27.47%
0-40	18447.16	N.A.	44.87%
0-60	32454.13	N.A.	78.94%
0-90	41016.65	N.A.	99.76%
0-120	41053.53	N.A.	99.85%
0-180	41114.59	N.A.	100.00%
60-90	8562.52	N.A.	20.83%
90-120	36.87	N.A.	0.09%
90-130	50.61	N.A.	0.12%
90-150	78.31	N.A.	0.19%
90-180	97.35	N.A.	0.24%
0-60.80	32891.67	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	1383.43
10-20	3950.77
20-30	5960.04
30-40	7152.92
40-50	7382.07
50-60	6624.90
60-70	5001.26
70-80	2823.78
80-90	737.48
90-100	15.99
100-110	9.31
110-120	11.58
120-130	13.74
130-140	14.37
140-150	13.33
150-160	10.72
160-170	6.63
170-180	1.69

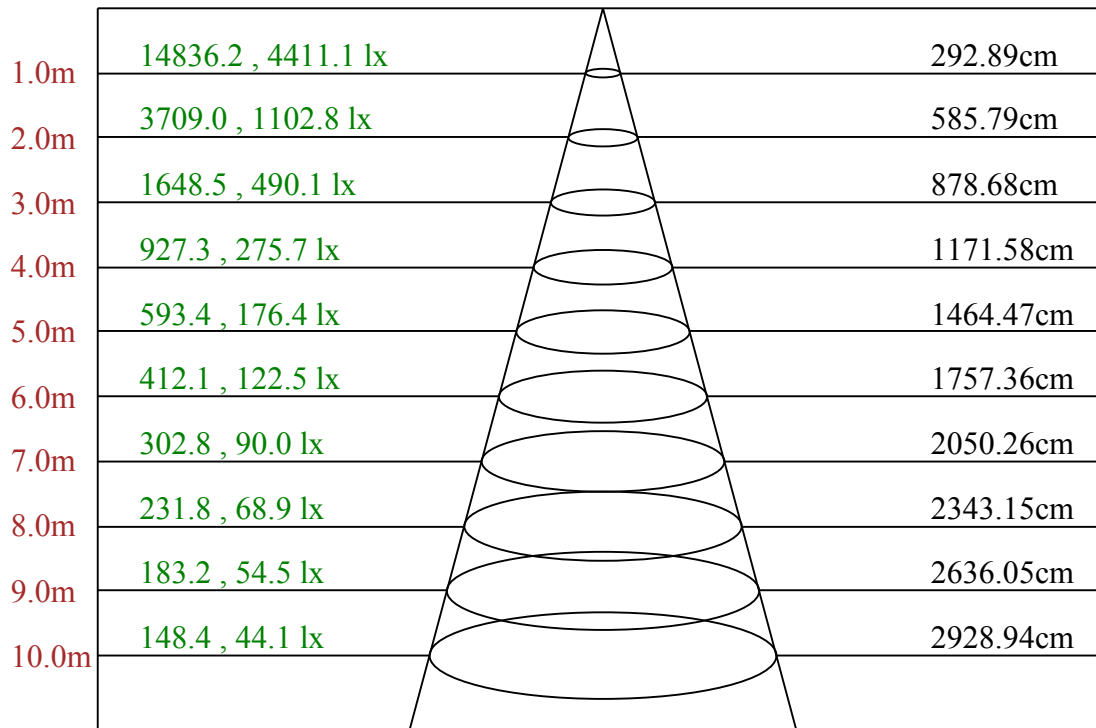


C0/C180: —

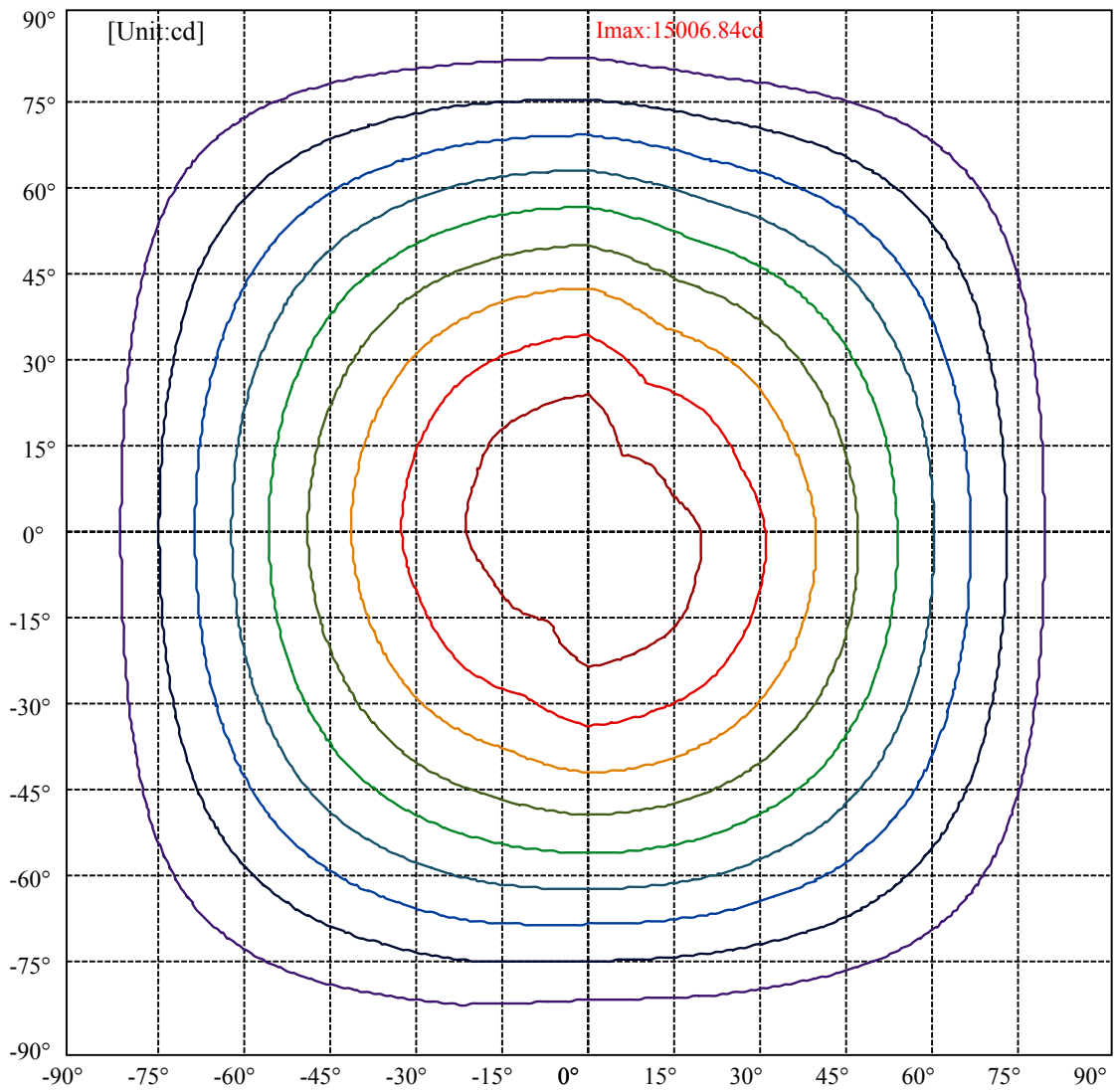
C90/C270: —

Field angle(10%Imax):C0/180Left:80.7 Right:78.7  
:C90/270Left:80.6 Right:81.7

Beam Angle(50%Imax):C0/180Left:55.8 Right:54.1  
:C90/270Left:55.4 Right:55.9



Max , Ave      Beam angle of C90 plane 111.35

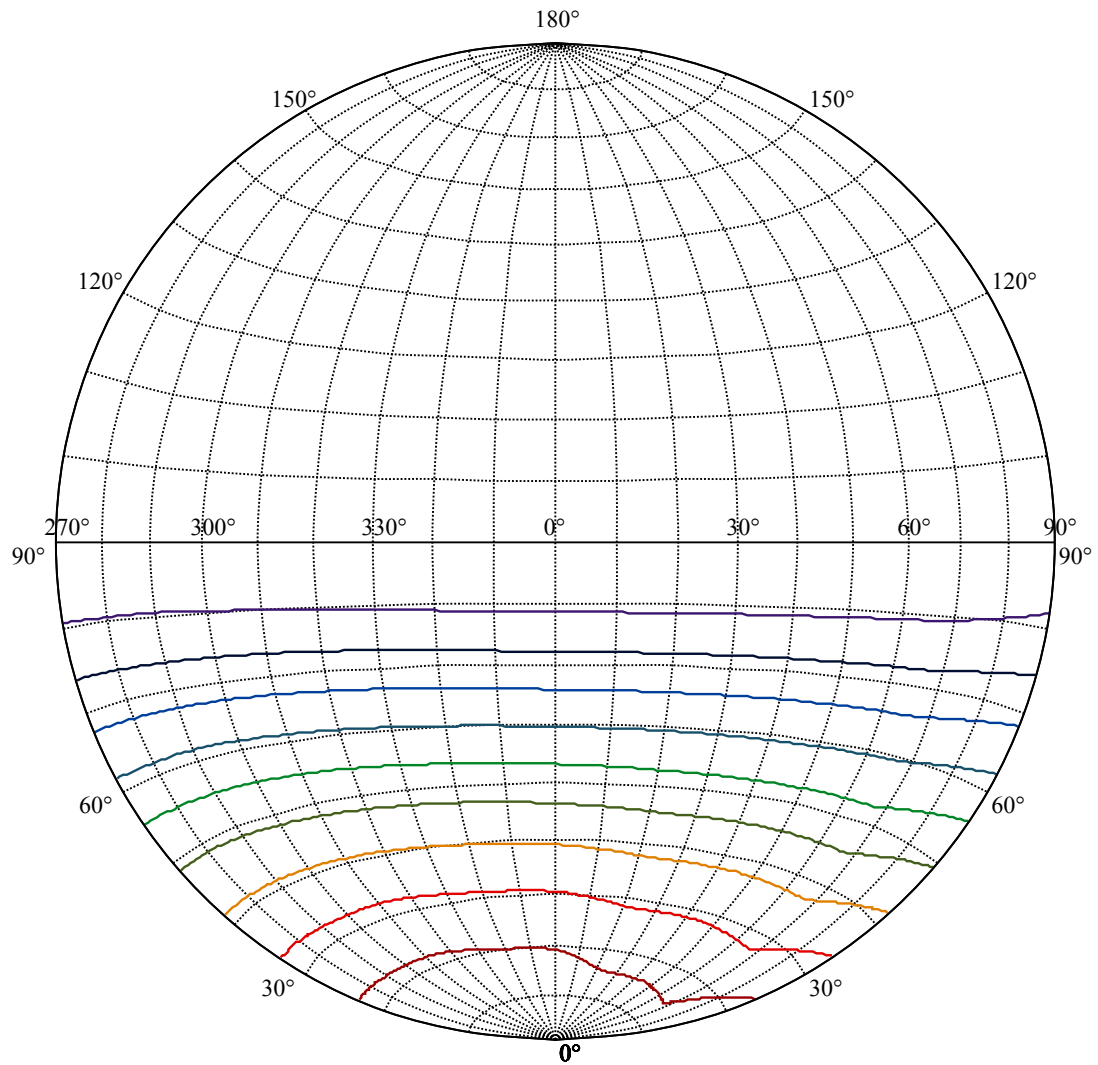


(10%I <sub>max</sub> ) 1500.68	—
(20%I <sub>max</sub> ) 3001.37	—
(30%I <sub>max</sub> ) 4502.05	—
(40%I <sub>max</sub> ) 6002.74	—
(50%I <sub>max</sub> ) 7503.42	—
(60%I <sub>max</sub> ) 9004.1	—
(70%I <sub>max</sub> ) 10504.8	—
(80%I <sub>max</sub> ) 12005.5	—
(90%I <sub>max</sub> ) 13506.2	—

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

Date:  
Humidity(%): 58%

Operator: Sam



House

[Unit:cd]

Road

**Imax:15006.84**

(10%Imax) 1500.68	—
(20%Imax) 3001.37	—
(30%Imax) 4502.05	—
(40%Imax) 6002.74	—
(50%Imax) 7503.42	—
(60%Imax) 9004.1	—
(70%Imax) 10504.8	—
(80%Imax) 12005.5	—
(90%Imax) 13506.2	—

## Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	14636.24	14548.85	14315.95	13953.86	13452.82	12836.30	12102.35	11294.03	10360.44
22.5	14636.24	14231.79	13932.33	13578.08	13082.91	12480.09	11765.71	10982.83	10096.22
45.0	14636.24	14198.51	13961.69	13587.87	13090.74	12501.62	11781.37	10971.09	10096.22
67.5	14636.24	14051.72	13812.95	13450.86	12957.65	12348.96	11638.50	10871.27	9998.36
90.0	14636.24	15006.84	14795.46	14435.33	13947.99	13335.39	12632.75	11808.77	10890.84
112.5	14636.24	14885.49	14678.03	14323.78	13856.00	13253.18	12540.76	11750.06	10849.74
135.0	14636.24	14860.05	14664.33	14321.82	13844.26	13241.44	12554.46	11740.27	10834.09
157.5	14636.24	14648.67	14452.95	14116.31	13664.20	13073.12	12372.45	11595.44	10699.04
180.0	14636.24	14595.83	14409.89	14081.08	13621.14	13039.85	12350.92	11540.63	10650.11
202.5	14636.24	14292.46	14118.27	13803.16	13374.53	12814.77	12143.45	11395.80	10538.55
225.0	14636.24	14265.06	14092.83	13779.67	13353.00	12799.12	12188.47	11417.33	10554.21
247.5	14636.24	14124.14	13961.69	13656.37	13225.79	12671.90	12033.85	11280.33	10440.69
270.0	14636.24	14993.14	14773.93	14409.89	13904.93	13286.46	12572.08	11740.27	10806.68
292.5	14636.24	14871.79	14652.58	14284.63	13783.59	13188.60	12456.61	11630.67	10744.05
315.0	14636.24	14830.69	14607.57	14249.40	13746.40	13127.92	12417.46	11585.65	10655.98
337.5	14636.24	14615.40	14376.62	14018.45	13523.28	12924.38	12200.21	11378.19	10483.75
360.0	14636.24	14548.85	14315.95	13953.86	13452.82	12836.30	12102.35	11294.03	10360.44
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	9323.13	8244.71	7105.62	5901.94	4698.26	3485.58	2286.79	1185.67	309.43
22.5	9129.36	8082.26	7009.72	5849.10	4663.03	3500.45	2298.34	1181.17	281.25
45.0	9125.45	8082.26	6972.53	5815.82	4672.82	3495.17	2328.29	1223.06	309.04
67.5	9060.86	8045.07	7001.89	5872.58	4706.09	3536.47	2418.71	1332.85	378.91
90.0	9896.59	8859.27	7706.48	6549.77	5316.74	4079.79	2862.41	1772.25	979.58
112.5	9869.19	8822.08	7737.79	6553.69	5326.52	4087.61	2911.34	1764.42	723.19
135.0	9873.10	8796.64	7651.68	6449.96	5258.02	4023.03	2807.61	1692.00	626.70
157.5	9718.48	8655.72	7555.77	6367.75	5146.46	3958.44	2750.85	1592.18	541.56
180.0	9708.70	8640.06	7500.97	6332.52	5160.16	3946.70	2731.27	1603.93	546.06
202.5	9593.22	8563.73	7495.10	6332.52	5130.80	3960.40	2772.38	1635.24	587.36
225.0	9634.32	8610.71	7526.42	6391.24	5254.11	4058.26	2870.24	1772.25	843.55
247.5	9561.91	8583.31	7534.25	6426.47	5310.87	4173.73	2999.41	1885.76	981.54
270.0	9800.68	8751.62	7602.75	6393.20	5162.12	3895.22	2763.96	1621.93	639.42
292.5	9749.80	8685.08	7557.73	6399.07	5173.86	3871.15	2726.77	1612.73	591.08
315.0	9648.02	8567.65	7454.00	6254.24	5023.16	3824.96	2604.25	1445.20	432.15
337.5	9487.53	8413.03	7264.15	6062.43	4870.50	3647.44	2422.82	1284.90	339.18
360.0	9323.13	8244.71	7105.62	5901.94	4698.26	3485.58	2286.79	1185.67	309.43
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	24.07	8.03	7.83	8.61	9.98	11.94	13.90	15.85	17.42
22.5	22.51	8.22	8.03	8.81	9.98	11.94	13.90	15.46	17.62
45.0	17.22	8.03	8.03	8.61	10.18	11.94	13.70	15.46	17.22
67.5	13.70	8.42	8.22	8.81	10.18	11.74	13.70	15.46	17.03
90.0	24.07	7.83	8.03	8.81	10.18	11.94	13.90	15.46	17.42
112.5	28.18	9.20	7.83	8.61	9.98	11.55	13.90	15.27	17.22
135.0	33.66	9.79	8.61	8.42	9.98	11.55	13.51	15.07	17.03
157.5	41.69	9.00	7.63	8.42	9.59	11.35	13.31	15.27	17.03
180.0	43.84	7.24	7.05	8.03	9.59	11.16	13.31	15.07	16.83
202.5	52.45	8.42	7.63	7.83	9.20	10.96	13.11	14.68	16.64
225.0	57.54	9.59	8.22	8.42	9.40	10.77	12.53	14.48	16.25
247.5	77.90	9.40	7.83	8.03	9.20	10.77	12.53	14.48	16.05
270.0	17.42	8.81	8.81	9.40	10.77	12.33	14.48	16.25	18.20
292.5	19.77	9.40	8.42	9.20	10.37	11.94	13.90	15.66	17.62
315.0	25.05	9.98	8.81	8.81	10.18	11.94	13.70	15.46	17.42
337.5	26.81	9.40	8.03	9.00	10.18	11.94	13.90	15.66	17.42
360.0	24.07	8.03	7.83	8.61	9.98	11.94	13.90	15.85	17.42

Equipment: GMS-3000  
Temperature(°C): 25Date:  
Humidity(%): 58%

Operator: Sam

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	18.99	20.55	22.12	22.90	23.88	23.88	23.68	23.68	24.47
22.5	18.99	20.16	21.33	22.70	23.49	23.29	23.29	23.49	24.47
45.0	18.59	19.96	20.94	22.31	22.90	22.90	22.90	23.10	24.07
67.5	18.40	19.77	20.75	21.92	22.70	22.70	22.70	22.90	24.07
90.0	18.79	20.36	21.53	22.90	23.88	23.88	24.07	23.49	23.88
112.5	18.59	20.16	21.33	22.51	23.49	23.49	23.29	23.49	23.88
135.0	18.40	19.77	20.94	22.31	23.49	23.68	23.29	23.29	23.49
157.5	18.40	19.96	21.33	22.51	23.49	23.29	23.10	23.29	23.29
180.0	18.40	19.77	21.14	22.31	23.29	23.49	22.90	22.90	22.90
202.5	18.01	19.57	20.94	22.12	23.10	23.10	23.10	22.70	22.90
225.0	17.81	19.18	20.75	21.73	22.70	23.10	22.70	22.51	22.90
247.5	17.62	19.18	20.36	21.33	22.51	22.51	22.70	22.70	22.51
270.0	19.57	20.94	22.31	23.49	24.27	24.86	24.47	24.66	25.25
292.5	18.99	20.55	21.53	22.70	23.68	23.88	23.68	23.68	24.66
315.0	18.99	20.36	21.53	22.70	23.68	24.07	23.68	23.49	24.66
337.5	18.79	20.36	21.53	22.90	23.68	23.88	23.68	23.49	24.47
360.0	18.99	20.55	22.12	22.90	23.88	23.88	23.68	23.68	24.47
C/γ(°)	180.0								
0.0	25.24								
22.5	25.24								
45.0	25.24								
67.5	25.24								
90.0	25.24								
112.5	25.24								
135.0	25.24								
157.5	25.24								
180.0	25.24								
202.5	25.24								
225.0	25.24								
247.5	25.24								
270.0	25.24								
292.5	25.24								
315.0	25.24								
337.5	25.24								
360.0	25.24								