



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): 120.17

LampCAT:

Current(A): 1.9480

Lamp flux(lm): -1.0

Power (W): 233.77

Number of Lamps: 1

PF: 0.9986

Length(mm): 500

Width(mm): 260

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 32678.99, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 139.79

Central intensity(cd): 11536.110, Maximum intensity(cd): 11932.610

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=109.5

[C90/270]Total=110.9

Field angle(10%Imax): [C0/180]Total=159.1

[C90/270]Total=162.2

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(%): 0.25%

Down flux rate of LUM(%): 99.75%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 78.650%

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	11536.110	0.000	0	0.00%	0.00%
5.0	11480.229	275.154	275.154	0.00%	0.84%
10.0	11312.059	815.352	1090.506	0.00%	3.34%
15.0	11037.904	1325.785	2416.29	0.00%	7.39%
20.0	10665.175	1788.639	4204.929	0.00%	12.87%
25.0	10195.064	2187.854	6392.783	0.00%	19.56%
30.0	9645.695	2510.865	8903.648	0.00%	27.25%
35.0	9009.661	2747.132	11650.779	0.00%	35.65%
40.0	8314.748	2890.447	14541.226	0.00%	44.50%
45.0	7545.606	2936.673	17477.899	0.00%	53.48%
50.0	6717.850	2882.140	20360.039	0.00%	62.30%
55.0	5834.653	2729.332	23089.371	0.00%	70.66%
60.0	5468.448	2612.680	25702.051	0.00%	78.65%
65.0	3988.991	2299.121	28001.172	0.00%	85.69%
70.0	3034.345	1778.354	29779.526	0.00%	91.13%
75.0	2099.308	1341.854	31121.381	0.00%	95.23%
80.0	1217.673	887.532	32008.912	0.00%	97.95%
85.0	449.021	452.881	32461.793	0.00%	99.34%
90.0	41.295	134.252	32596.046	0.00%	99.75%
95.0	6.894	13.194	32609.24	0.00%	99.79%
100.0	6.497	3.638	32612.879	0.00%	99.80%
105.0	7.052	3.625	32616.504	0.00%	99.81%
110.0	8.018	3.939	32620.443	0.00%	99.82%
115.0	9.394	4.409	32624.852	0.00%	99.83%
120.0	10.889	4.931	32629.783	0.00%	99.85%
125.0	12.345	5.371	32635.154	0.00%	99.87%
130.0	13.774	5.679	32640.833	0.00%	99.88%
135.0	14.978	5.810	32646.642	0.00%	99.90%
140.0	16.050	5.745	32652.387	0.00%	99.92%
145.0	17.174	5.543	32657.931	0.00%	99.94%
150.0	18.140	5.200	32663.131	0.00%	99.95%
155.0	18.881	4.685	32667.816	0.00%	99.97%
160.0	19.000	3.973	32671.789	0.00%	99.98%
165.0	18.947	3.127	32674.917	0.00%	99.99%
170.0	18.855	2.242	32677.159	0.00%	99.99%
175.0	19.265	1.364	32678.523	0.00%	100.00%
180.0	20.199	0.472	32678.994	0.00%	100.00%

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

Date:
Humidity(%): 58%

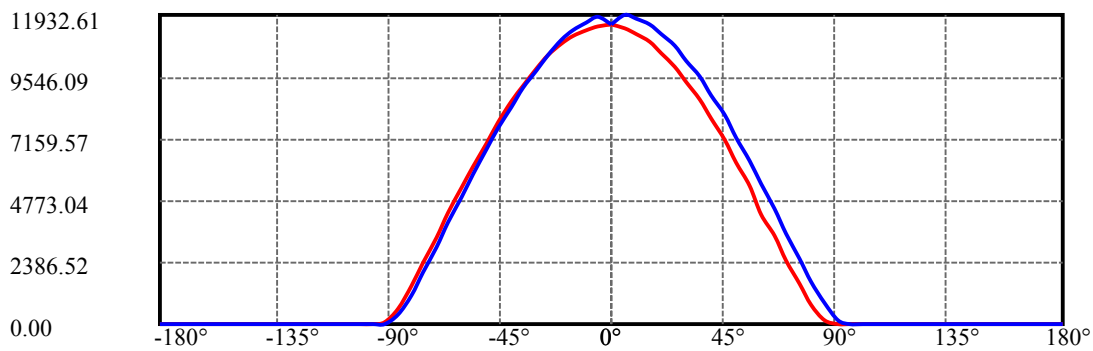
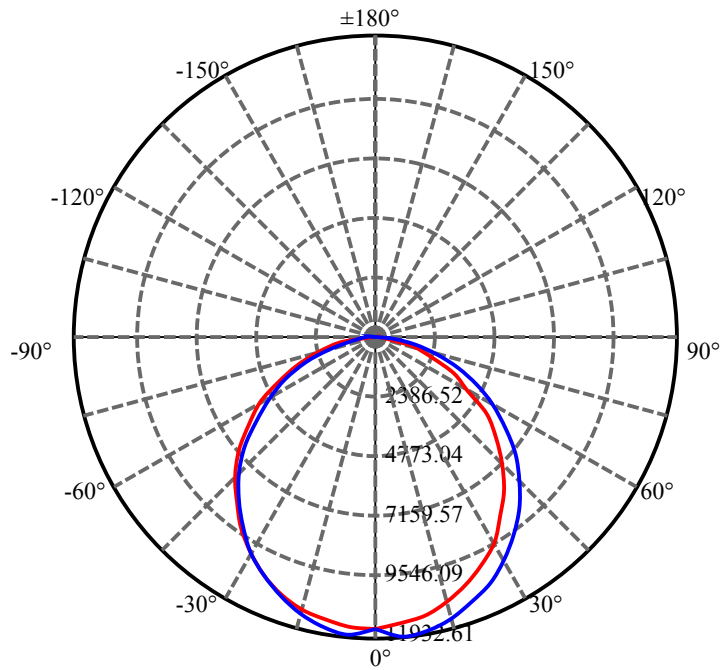
Operator: Sam

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	8903.65	N.A.	27.25%
0-40	14541.23	N.A.	44.50%
0-60	25702.05	N.A.	78.65%
0-90	32596.05	N.A.	99.75%
0-120	32629.78	N.A.	99.85%
0-180	32678.99	N.A.	100.00%
60-90	6893.99	N.A.	21.10%
90-120	33.74	N.A.	0.10%
90-130	44.79	N.A.	0.14%
90-150	67.09	N.A.	0.21%
90-180	82.48	N.A.	0.25%
0-60.96	26143.20	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	1090.51
10-20	3114.42
20-30	4698.72
30-40	5637.58
40-50	5818.81
50-60	5342.01
60-70	4077.48
70-80	2229.39
80-90	587.13
90-100	16.83
100-110	7.56
110-120	9.34
120-130	11.05
130-140	11.55
140-150	10.74
150-160	8.66
160-170	5.37
170-180	1.36

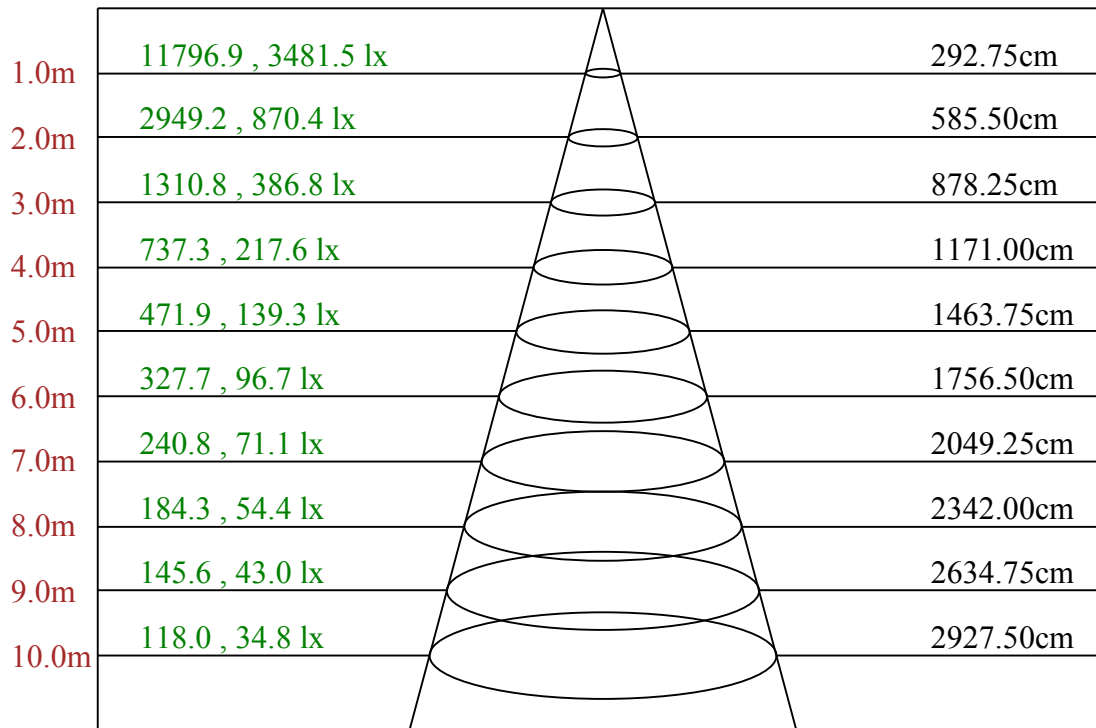


C0/C180: —

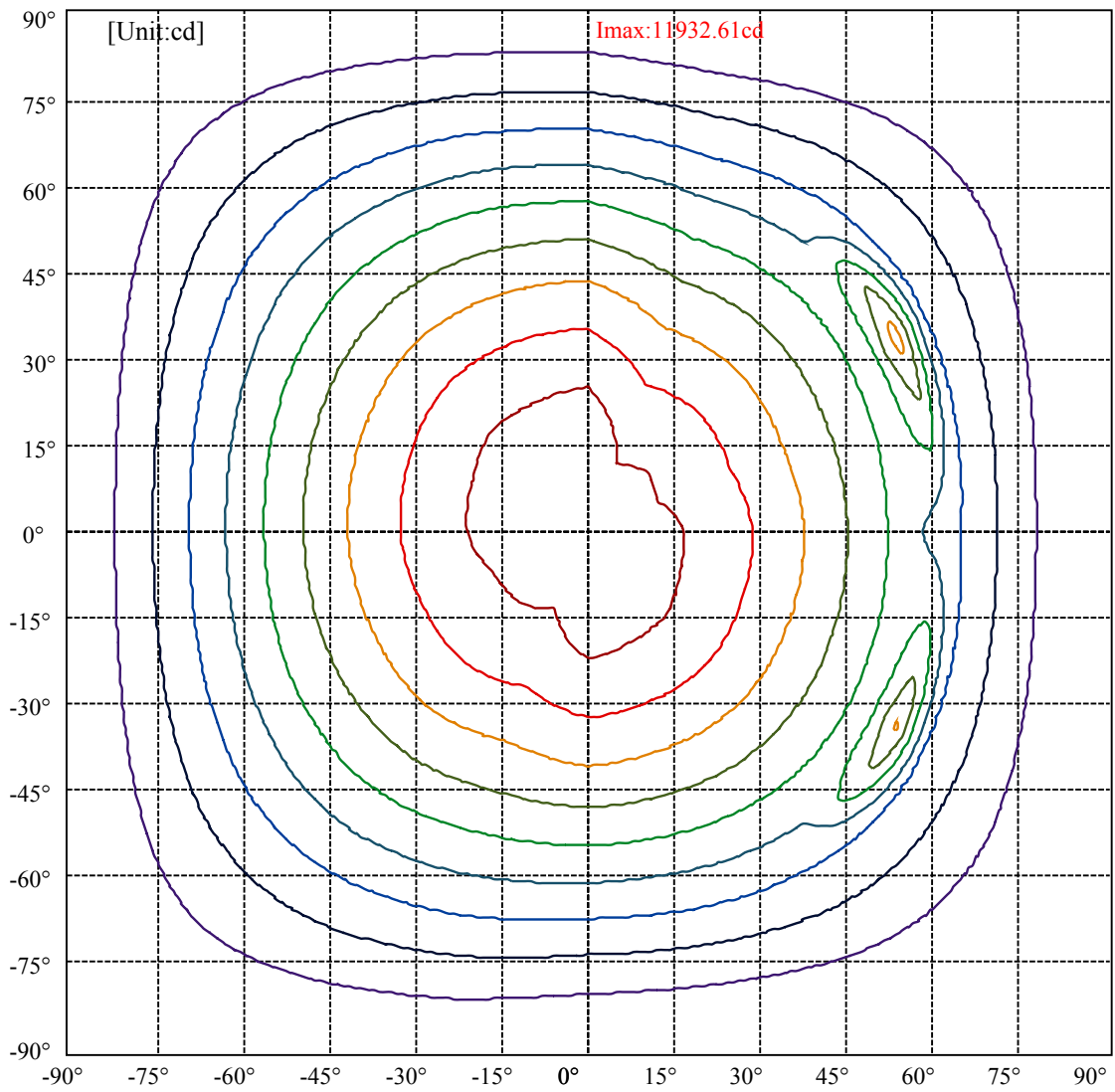
C90/C270: —

Field angle(10%Imax):C0/180Left:81.7 Right:77.4
:C90/270Left:79.6 Right:82.6

Beam Angle(50%Imax):C0/180Left:56.9 Right:52.6
:C90/270Left:54.1 Right:56.8



Max , Ave Beam angle of C90 plane 111.32

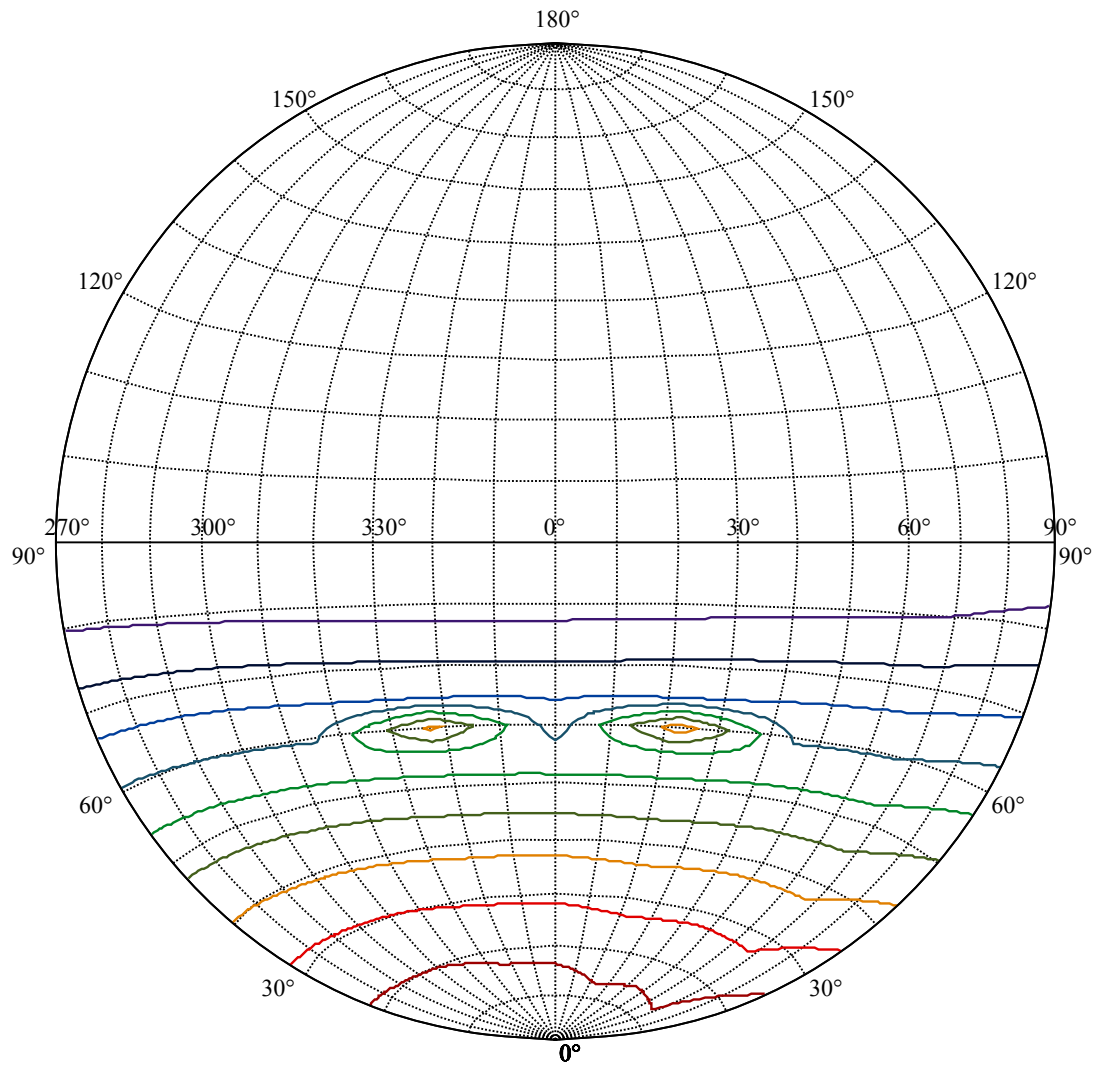


- (10% I_{max}) 1193.26
- (20% I_{max}) 2386.52
- (30% I_{max}) 3579.78
- (40% I_{max}) 4773.04
- (50% I_{max}) 5966.31
- (60% I_{max}) 7159.57
- (70% I_{max}) 8352.83
- (80% I_{max}) 9546.09
- (90% I_{max}) 10739.3

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

Date:
Humidity(%): 58%

Operator: Sam



House

[Unit:cd]

Road

I_{max}:11932.61

(10%I _{max}) 1193.26	—
(20%I _{max}) 2386.52	—
(30%I _{max}) 3579.78	—
(40%I _{max}) 4773.04	—
(50%I _{max}) 5966.31	—
(60%I _{max}) 7159.57	—
(70%I _{max}) 8352.83	—
(80%I _{max}) 9546.09	—
(90%I _{max}) 10739.3	—

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	11536.11	11399.12	11185.30	10863.51	10454.93	9951.08	9349.84	8670.28	7944.14
22.5	11536.11	11187.42	10929.14	10622.17	10230.52	9730.91	9161.43	8511.50	7821.35
45.0	11536.11	11183.18	11003.24	10708.97	10317.32	9832.52	9288.45	8651.22	7961.07
67.5	11536.11	11068.87	10888.92	10609.47	10245.34	9783.83	9224.94	8646.99	7965.31
90.0	11536.11	11932.61	11792.89	11538.84	11172.60	10725.91	10173.36	9534.02	8845.99
112.5	11536.11	11805.59	11676.45	11445.70	11092.15	10647.58	10128.91	9512.85	8818.47
135.0	11536.11	11754.78	11638.34	11407.59	11064.63	10636.99	10124.67	9489.57	8818.47
157.5	11536.11	11564.25	11443.58	11221.29	10886.80	10448.58	9936.26	9322.32	8636.40
180.0	11536.11	11488.04	11365.25	11138.73	10816.94	10376.60	9832.52	9220.70	8566.54
202.5	11536.11	11269.98	11151.43	10920.67	10588.30	10156.43	9654.69	9057.69	8390.83
225.0	11536.11	11240.34	11104.86	10869.87	10526.91	10090.80	9614.47	9006.88	8352.72
247.5	11536.11	11096.39	10954.55	10698.39	10359.66	9921.44	9400.65	8803.65	8136.79
270.0	11536.11	11860.63	11661.63	11341.96	10933.38	10397.77	9817.70	9138.14	8407.77
292.5	11536.11	11718.79	11511.32	11189.54	10766.13	10253.81	9667.40	8987.83	8246.87
315.0	11536.11	11659.51	11439.34	11111.21	10692.04	10173.36	9563.66	8879.86	8147.37
337.5	11536.11	11454.16	11246.70	10918.56	10495.15	9993.42	9392.18	8721.08	7975.89
360.0	11536.11	11399.12	11185.30	10863.51	10454.93	9951.08	9349.84	8670.28	7944.14
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	7103.68	6254.75	5335.96	4201.87	3426.19	2460.62	1550.51	734.82	134.01
22.5	7050.75	6214.53	5359.25	9057.69	3506.01	2580.23	1658.27	814.21	155.18
45.0	7192.59	6362.72	5492.62	4605.59	3674.73	2733.93	1813.02	959.86	222.50
67.5	7226.46	6424.11	5602.71	4719.91	3817.21	2922.34	2017.95	1159.50	388.47
90.0	8064.81	7207.41	6303.44	5391.00	4419.29	3449.69	2518.20	1620.58	789.86
112.5	8060.57	7234.93	6379.66	5448.16	4518.79	3547.08	2609.23	1660.81	823.52
135.0	8054.22	7222.23	6328.85	5420.64	4453.16	3479.33	2537.25	1605.76	738.84
157.5	7884.86	7093.09	6214.53	5293.62	4364.25	3392.53	2454.69	1497.80	669.83
180.0	7817.12	6997.83	6108.68	5225.88	4283.80	3326.91	2378.48	1453.34	592.34
202.5	7658.34	6883.51	6019.76	5113.67	4203.35	3250.69	2300.15	1423.70	581.34
225.0	7639.28	6815.76	5968.95	5100.97	4169.48	3223.17	2308.62	1404.65	580.91
247.5	7440.28	6661.22	5822.88	4980.30	4103.85	3187.18	2266.28	1396.18	606.95
270.0	7590.59	6714.15	5797.47	4870.22	3909.51	2933.99	1985.98	1130.92	363.71
292.5	7444.52	6612.53	5672.57	4753.78	3824.83	2847.61	1865.95	1004.53	257.64
315.0	7334.43	6464.34	5570.95	4641.58	3638.53	2689.68	1732.36	861.21	151.16
337.5	7167.19	6322.50	5376.19	4201.87	3426.19	2460.62	1550.51	734.82	134.01
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	10.16	6.35	6.56	7.20	8.26	9.53	11.01	12.70	14.18
22.5	10.59	6.35	6.14	6.99	8.26	9.53	10.80	12.70	13.76
45.0	11.43	6.99	6.56	6.99	8.05	9.74	11.22	12.70	13.76
67.5	10.16	6.77	6.35	7.20	8.05	9.53	11.22	12.70	13.97
90.0	113.05	6.35	6.35	7.20	8.26	9.53	11.22	12.49	14.18
112.5	96.54	7.20	6.35	6.99	8.05	9.32	10.80	12.07	13.76
135.0	95.90	8.05	6.56	6.77	7.62	8.89	10.16	11.64	13.34
157.5	83.62	6.99	6.56	6.77	7.62	8.47	9.95	11.43	12.91
180.0	67.11	6.14	6.14	6.56	7.20	8.68	9.95	11.43	12.70
202.5	58.22	6.35	5.93	6.35	6.77	8.68	9.95	11.01	12.70
225.0	40.65	6.99	6.14	6.56	7.41	8.68	10.16	11.64	13.13
247.5	27.52	6.56	6.14	6.56	7.62	9.10	10.59	12.07	13.55
270.0	7.62	6.99	7.41	7.83	9.10	10.59	12.49	13.76	15.24
292.5	9.53	7.41	6.99	7.83	9.10	10.37	11.86	13.55	15.03
315.0	9.74	7.62	6.99	7.83	8.68	9.95	11.64	13.13	14.18
337.5	8.89	7.20	6.77	7.20	8.26	9.74	11.22	12.49	13.97
360.0	10.16	6.35	6.56	7.20	8.26	9.53	11.01	12.70	14.18

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	15.24	15.88	17.36	17.78	18.42	18.84	18.63	18.84	19.48
22.5	14.82	16.09	16.94	17.57	18.63	18.84	18.63	18.63	19.48
45.0	15.03	15.88	16.94	18.21	18.84	18.84	19.05	19.05	19.48
67.5	15.03	16.09	17.15	18.42	19.05	19.05	19.05	18.84	19.27
90.0	15.45	16.72	17.78	18.84	19.69	19.69	19.69	19.48	19.48
112.5	15.24	16.09	17.36	18.63	19.48	19.48	19.27	19.27	19.48
135.0	14.61	15.67	16.94	18.00	18.84	18.84	19.05	19.05	19.27
157.5	14.18	15.24	16.51	17.36	18.21	18.63	18.63	18.42	18.84
180.0	13.97	15.24	16.51	17.36	18.21	18.21	18.42	18.00	18.63
202.5	13.97	15.24	16.09	16.94	18.00	18.00	18.00	18.21	18.21
225.0	14.18	15.45	16.30	17.15	18.42	18.63	18.21	18.21	18.42
247.5	14.61	15.67	16.94	17.78	18.42	18.84	18.63	18.42	18.42
270.0	16.51	17.57	18.84	19.90	20.32	20.54	20.11	19.90	20.32
292.5	16.09	17.36	18.42	19.27	19.69	19.69	19.69	19.48	19.90
315.0	15.45	16.51	17.57	18.63	19.27	19.05	19.27	18.84	19.90
337.5	15.24	16.09	17.15	18.42	18.63	18.84	18.84	19.05	19.69
360.0	15.24	15.88	17.36	17.78	18.42	18.84	18.63	18.84	19.48
C/γ(°)	180.0								
0.0	20.20								
22.5	20.20								
45.0	20.20								
67.5	20.20								
90.0	20.20								
112.5	20.20								
135.0	20.20								
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