



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.01

LampCAT:

Current(A): 1.2210

Lamp flux(lm): -1.0

Power (W): 145.85

Number of Lamps: 1

PF: 0.9954

Length(mm): 390

Width(mm): 260

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 20521.70, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 140.70

Central intensity(cd): 7663.568, Maximum intensity(cd): 7850.987

Angle of maximum intensity: C=270.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=105.4

[C90/270]Total=106.8

Field angle(10%Imax): [C0/180]Total=157.1

[C90/270]Total=160.7

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

Maximum s/h(1/4): C0_180=1.34 C90_270=1.35

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 : 79.932%

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	7663.568	0.000	0	0.00%	0.00%
5.0	7622.349	182.739	182.739	0.00%	0.89%
10.0	7494.269	540.769	723.508	0.00%	3.53%
15.0	7287.197	876.827	1600.334	0.00%	7.80%
20.0	7006.427	1177.995	2778.33	0.00%	13.54%
25.0	6661.087	1433.470	4211.8	0.00%	20.52%
30.0	6255.280	1634.577	5846.376	0.00%	28.49%
35.0	5800.384	1775.281	7621.657	0.00%	37.14%
40.0	5306.191	1853.048	9474.705	0.00%	46.17%
45.0	4775.744	1866.752	11341.457	0.00%	55.27%
50.0	4199.847	1813.649	13155.107	0.00%	64.10%
55.0	3640.608	1704.776	14859.883	0.00%	72.41%
60.0	3036.925	1543.493	16403.376	0.00%	79.93%
65.0	2434.023	1329.998	17733.373	0.00%	86.41%
70.0	1830.591	1079.828	18813.201	0.00%	91.67%
75.0	1250.738	805.410	19618.611	0.00%	95.60%
80.0	706.187	523.619	20142.23	0.00%	98.15%
85.0	244.437	258.307	20400.537	0.00%	99.41%
90.0	10.704	69.860	20470.397	0.00%	99.75%
95.0	4.710	4.221	20474.618	0.00%	99.77%
100.0	4.432	2.484	20477.102	0.00%	99.78%
105.0	4.710	2.446	20479.548	0.00%	99.79%
110.0	5.438	2.653	20482.201	0.00%	99.81%
115.0	6.272	2.965	20485.166	0.00%	99.82%
120.0	7.198	3.274	20488.44	0.00%	99.84%
125.0	8.270	3.575	20492.016	0.00%	99.86%
130.0	9.156	3.789	20495.805	0.00%	99.87%
135.0	10.003	3.871	20499.676	0.00%	99.89%
140.0	10.929	3.876	20503.552	0.00%	99.91%
145.0	11.630	3.764	20507.316	0.00%	99.93%
150.0	12.332	3.529	20510.844	0.00%	99.95%
155.0	12.848	3.186	20514.031	0.00%	99.96%
160.0	13.007	2.712	20516.742	0.00%	99.98%
165.0	12.954	2.139	20518.882	0.00%	99.99%
170.0	13.020	1.541	20520.422	0.00%	99.99%
175.0	13.377	0.944	20521.367	0.00%	100.00%
180.0	14.122	0.329	20521.695	0.00%	100.00%

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

Date:
Humidity(%): 58%

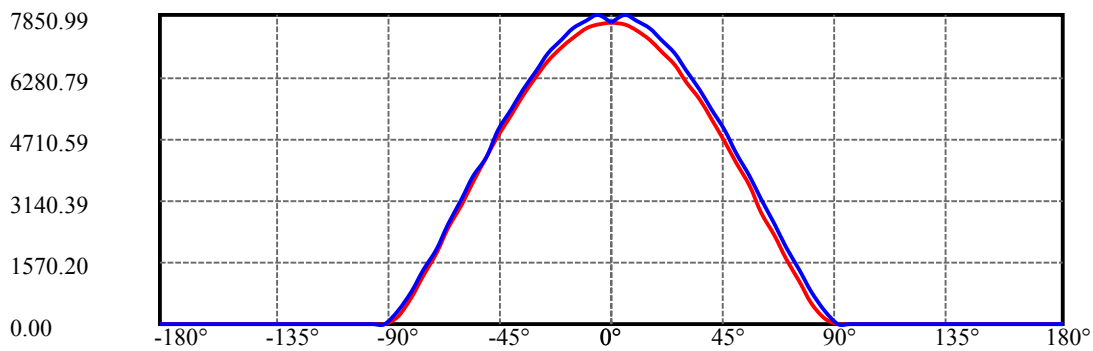
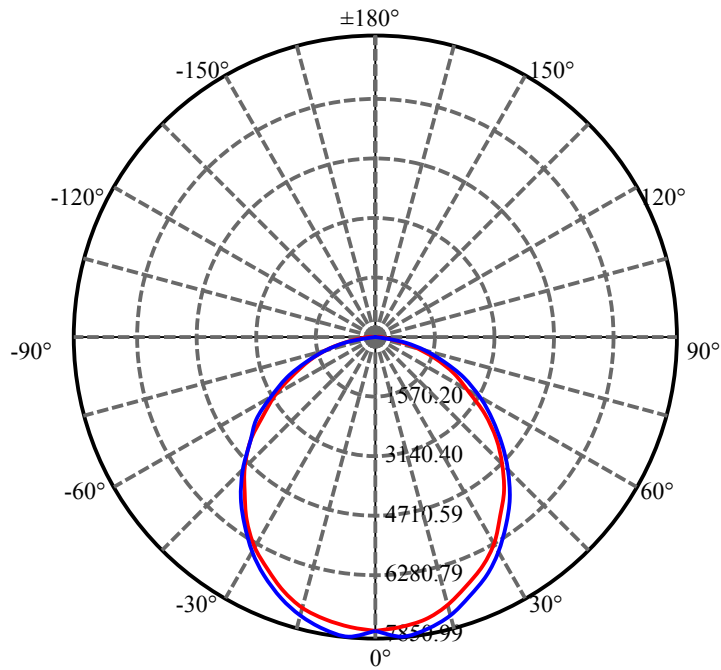
Operator: Sam

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	5846.38	N.A.	28.49%
0-40	9474.71	N.A.	46.17%
0-60	16403.38	N.A.	79.93%
0-90	20470.40	N.A.	99.75%
0-120	20488.44	N.A.	99.84%
0-180	20521.70	N.A.	100.00%
60-90	4067.02	N.A.	19.82%
90-120	18.04	N.A.	0.09%
90-130	25.41	N.A.	0.12%
90-150	40.45	N.A.	0.20%
90-180	50.97	N.A.	0.25%
0-60.05	16417.36	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	723.51
10-20	2054.82
20-30	3068.05
30-40	3628.33
40-50	3680.40
50-60	3248.27
60-70	2409.83
70-80	1329.03
80-90	328.17
90-100	6.70
100-110	5.10
110-120	6.24
120-130	7.36
130-140	7.75
140-150	7.29
150-160	5.90
160-170	3.68
170-180	0.94

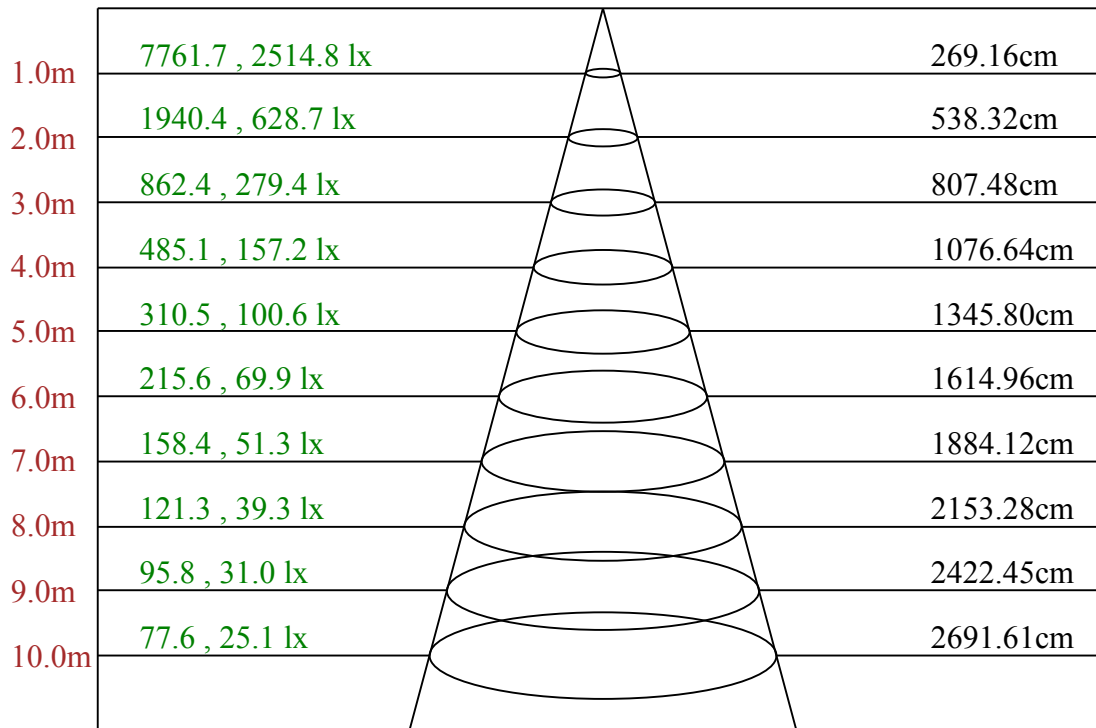


C0/C180: —

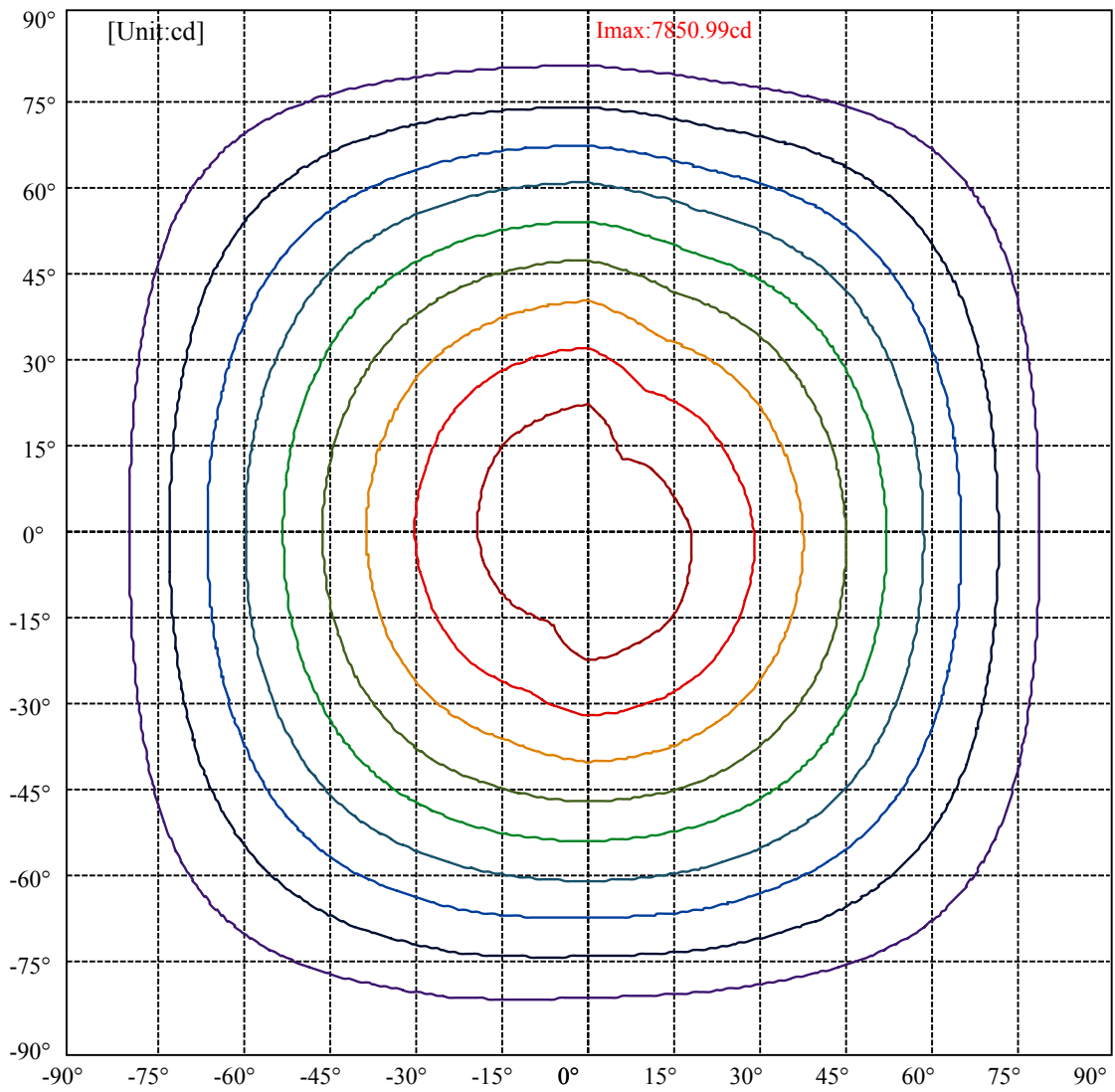
C90/C270: —

Field angle(10%Imax):C0/180Left:79.2 Right:77.9
 :C90/270Left:80.3 Right:80.4

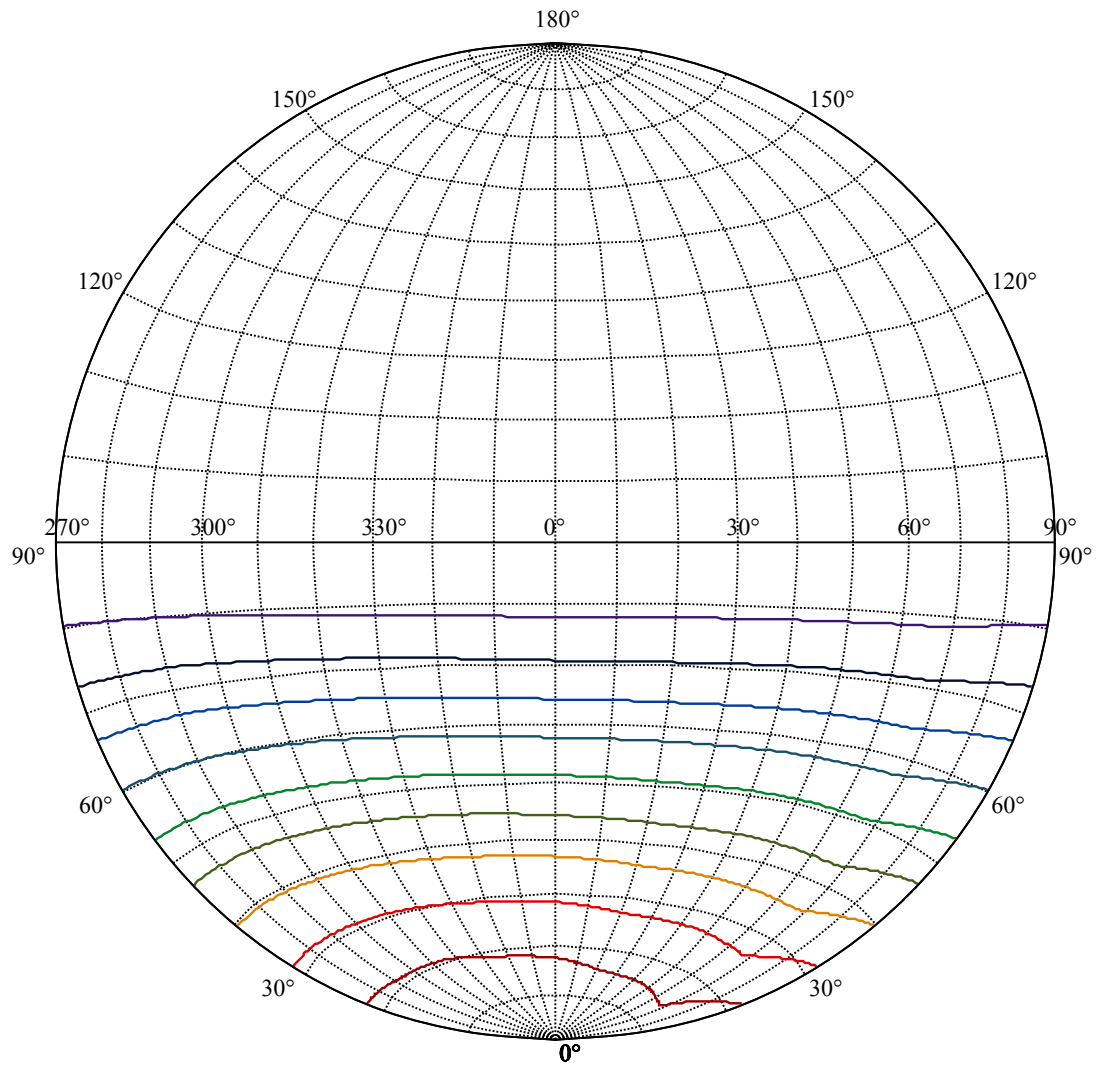
Beam Angle(50%Imax):C0/180Left:53.3 Right:52.1
 :C90/270Left:53.3 Right:53.5



Max , Ave Beam angle of C270 plane 106.77



(10%I _{max}) 785.099	—
(20%I _{max}) 1570.2	—
(30%I _{max}) 2355.3	—
(40%I _{max}) 3140.39	—
(50%I _{max}) 3925.49	—
(60%I _{max}) 4710.59	—
(70%I _{max}) 5495.69	—
(80%I _{max}) 6280.79	—
(90%I _{max}) 7065.89	—



House

[Unit:cd]

Road

I_{max}:7850.99

(10%I _{max}) 785.099	—
(20%I _{max}) 1570.2	—
(30%I _{max}) 2355.3	—
(40%I _{max}) 3140.39	—
(50%I _{max}) 3925.49	—
(60%I _{max}) 4710.59	—
(70%I _{max}) 5495.69	—
(80%I _{max}) 6280.79	—
(90%I _{max}) 7065.89	—

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	7663.57	7586.36	7448.75	7222.23	6936.43	6574.42	6161.60	5693.74	5200.47
22.5	7663.57	7505.91	7332.32	7107.91	6822.11	6462.22	6045.17	5600.59	5100.97
45.0	7663.57	7455.10	7315.38	7090.98	6798.83	6451.63	6038.81	5581.54	5081.92
67.5	7663.57	7376.77	7232.82	7008.41	6724.73	6375.42	5966.84	5530.73	5039.58
90.0	7663.57	7848.87	7719.73	7503.80	7205.30	6858.10	6438.93	5964.72	5467.22
112.5	7663.57	7753.60	7626.58	7425.47	7139.67	6792.47	6394.47	5924.50	5420.64
135.0	7663.57	7740.90	7613.88	7406.41	7120.61	6777.66	6362.72	5896.97	5405.82
157.5	7663.57	7647.75	7524.97	7325.97	7042.28	6690.86	6278.04	5833.46	5331.73
180.0	7663.57	7601.18	7486.86	7287.86	7012.65	6678.16	6267.45	5805.94	5312.67
202.5	7663.57	7546.14	7436.05	7249.75	6985.12	6648.52	6252.63	5820.76	5333.84
225.0	7663.57	7501.68	7393.71	7213.76	6957.60	6629.46	6271.69	5835.58	5367.72
247.5	7663.57	7425.47	7323.85	7150.25	6898.33	6591.36	6218.76	5793.24	5323.26
270.0	7663.57	7850.99	7719.73	7505.91	7224.35	6862.34	6438.93	5962.60	5460.87
292.5	7663.57	7751.49	7632.93	7423.35	7137.55	6788.24	6390.24	5932.96	5422.76
315.0	7663.57	7732.43	7601.18	7387.36	7105.79	6750.13	6330.96	5863.10	5367.72
337.5	7663.57	7632.93	7499.56	7285.74	6991.48	6646.40	6227.23	5765.72	5261.87
360.0	7663.57	7586.36	7448.75	7222.23	6936.43	6574.42	6161.60	5693.74	5200.47
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	4641.58	4086.28	3492.67	2851.84	2260.77	1644.29	1057.24	555.08	153.06
22.5	4569.60	4020.87	3450.54	2851.00	2243.84	1640.06	1084.34	564.40	136.13
45.0	4573.83	4027.85	3449.48	2854.81	2278.55	1691.08	1115.25	585.78	147.13
67.5	4520.91	3984.03	3432.54	2853.33	2265.22	1685.36	1140.65	625.16	172.54
90.0	4914.67	4338.84	3741.84	3157.54	2537.25	1931.79	1366.54	820.56	335.13
112.5	4880.80	4313.44	3741.84	3136.37	2522.44	1931.79	1339.02	787.75	304.64
135.0	4861.75	4309.20	3701.62	3104.62	2486.45	1874.63	1298.80	740.32	242.82
157.5	4791.89	4220.29	3648.69	3038.99	2425.05	1830.17	1235.28	680.20	220.38
180.0	4794.00	4224.52	3629.64	3026.29	2427.17	1815.35	1231.05	676.81	217.00
202.5	4810.94	4249.93	3680.45	3072.86	2456.81	1859.81	1262.81	711.11	259.76
225.0	4851.16	4307.09	3739.73	3144.84	2556.31	1946.60	1368.66	801.29	319.04
247.5	4827.88	4292.27	3750.31	3159.66	2588.06	2020.70	1444.87	891.06	392.50
270.0	4914.67	4221.56	3771.48	3156.27	2541.91	1916.33	1359.55	813.78	338.51
292.5	4895.62	4212.24	3750.95	3145.05	2544.45	1934.75	1334.15	766.58	278.39
315.0	4823.64	4212.67	3692.73	3076.67	2455.75	1836.10	1242.91	677.45	218.90
337.5	4738.96	4176.47	3575.23	2960.66	2354.34	1730.67	1130.70	601.66	175.08
360.0	4641.58	4086.28	3492.67	2851.84	2260.77	1644.29	1057.24	555.08	153.06
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	5.93	4.66	4.66	4.66	5.72	6.35	7.20	8.26	9.10
22.5	5.50	4.45	4.45	4.87	5.29	6.14	7.41	8.47	9.10
45.0	5.93	4.66	4.66	5.08	5.93	6.56	7.62	8.47	9.53
67.5	5.93	4.66	4.66	5.08	5.72	6.77	7.62	8.68	9.53
90.0	9.53	3.81	4.45	4.45	5.50	6.56	7.41	8.68	9.53
112.5	8.26	4.66	4.02	4.66	5.50	6.35	7.41	8.68	9.32
135.0	7.83	5.08	4.45	4.66	5.29	6.35	7.41	8.47	9.32
157.5	8.05	4.87	4.66	4.87	5.50	6.14	6.99	8.26	9.32
180.0	7.41	4.23	4.23	4.45	5.08	5.93	6.99	7.83	8.89
202.5	11.43	4.02	4.02	4.45	5.08	5.93	6.56	7.83	8.68
225.0	20.96	4.66	4.23	4.45	5.08	5.93	6.77	7.62	8.68
247.5	40.86	4.66	4.02	4.45	5.29	5.93	6.99	7.62	8.89
270.0	9.32	4.45	4.45	4.66	5.50	6.35	7.62	8.47	9.32
292.5	8.89	5.29	4.45	4.87	5.50	6.56	7.20	8.47	9.32
315.0	8.26	5.72	4.87	4.87	5.50	6.35	6.99	8.26	9.10
337.5	7.20	5.50	4.66	4.87	5.50	6.14	6.99	8.26	8.89
360.0	5.93	4.66	4.66	4.66	5.72	6.35	7.20	8.26	9.10

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

Date:
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	9.95	11.22	11.86	12.49	12.91	13.13	13.34	13.34	13.76
22.5	10.16	11.01	11.64	12.07	12.70	13.13	12.91	13.34	13.76
45.0	10.16	10.80	11.86	12.49	12.91	13.13	12.91	13.13	13.34
67.5	10.16	11.43	12.07	12.70	12.91	13.13	13.13	12.91	13.55
90.0	10.37	11.22	12.07	12.70	13.34	13.34	13.34	13.34	13.34
112.5	10.37	11.01	11.86	12.70	13.55	13.34	13.13	13.34	13.13
135.0	10.16	11.22	11.86	12.70	12.91	13.13	13.13	12.91	13.34
157.5	9.95	10.80	11.43	12.07	12.70	12.70	12.70	12.91	12.91
180.0	9.53	10.59	11.22	11.86	12.49	12.91	12.49	12.70	13.13
202.5	9.53	10.59	11.22	11.64	12.28	12.49	12.49	12.70	12.91
225.0	9.53	10.59	11.22	12.07	12.49	12.70	12.49	12.70	12.91
247.5	9.74	10.59	11.01	12.07	12.70	12.70	12.91	12.70	12.70
270.0	10.16	11.22	12.07	12.70	13.13	13.13	13.34	13.13	13.76
292.5	10.16	11.01	11.86	12.49	13.13	13.13	13.13	13.13	13.97
315.0	9.95	10.80	11.22	12.28	12.70	13.13	13.13	13.13	13.55
337.5	10.16	10.80	11.64	12.28	12.70	12.91	12.70	12.91	13.97
360.0	9.95	11.22	11.86	12.49	12.91	13.13	13.34	13.34	13.76
C/γ(°)	180.0								
0.0	14.12								
22.5	14.12								
45.0	14.12								
67.5	14.12								
90.0	14.12								
112.5	14.12								
135.0	14.12								
157.5	14.12								
180.0	14.12								
202.5	14.12								
225.0	14.12								
247.5	14.12								
270.0	14.12								
292.5	14.12								
315.0	14.12								
337.5	14.12								
360.0	14.12								