



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): 120.05

LampCAT:

Current(A): 0.0680

Lamp flux(lm): -1.0

Power (W): 7.92

Number of Lamps: 1

PF: 0.9750

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 503.57, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 63.58

Central intensity(cd): 179.548, Maximum intensity(cd): 183.969

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=108.5

[C90/270]Total=113.0

Field angle(10%Imax): [C0/180]Total=157.2

[C90/270]Total=160.5

Maximum s/h(1/2): C0_180=1.21 C90_270=1.31

Maximum s/h(1/4): C0_180=1.35 C90_270=1.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.72%

Down flux rate of LUM(%): 99.28%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 79.316%

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

Date:
Humidity(%): 58%

Operator: Tester

Zonal flux distribution table

Appendix Page: 2 Total:9

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	179.548	0.000	0	0.00%	0.00%
5.0	178.902	4.285	4.285	0.00%	0.85%
10.0	176.454	12.712	16.997	0.00%	3.38%
15.0	172.260	20.685	37.683	0.00%	7.48%
20.0	166.531	27.921	65.604	0.00%	13.03%
25.0	159.333	34.177	99.781	0.00%	19.81%
30.0	150.745	39.241	139.022	0.00%	27.61%
35.0	140.967	42.957	181.978	0.00%	36.14%
40.0	129.985	45.206	227.185	0.00%	45.11%
45.0	117.945	45.906	273.091	0.00%	54.23%
50.0	104.952	45.039	318.131	0.00%	63.17%
55.0	91.006	42.608	360.738	0.00%	71.64%
60.0	76.319	38.677	399.415	0.00%	79.32%
65.0	60.957	33.372	432.787	0.00%	85.94%
70.0	45.238	26.889	459.676	0.00%	91.28%
75.0	30.062	19.682	479.358	0.00%	95.19%
80.0	16.367	12.423	491.781	0.00%	97.66%
85.0	6.179	6.126	497.908	0.00%	98.88%
90.0	1.178	2.014	499.922	0.00%	99.28%
95.0	0.503	0.460	500.382	0.00%	99.37%
100.0	0.450	0.259	500.641	0.00%	99.42%
105.0	0.397	0.227	500.868	0.00%	99.46%
110.0	0.410	0.211	501.079	0.00%	99.50%
115.0	0.450	0.218	501.296	0.00%	99.55%
120.0	0.503	0.232	501.528	0.00%	99.59%
125.0	0.516	0.236	501.764	0.00%	99.64%
130.0	0.648	0.253	502.017	0.00%	99.69%
135.0	0.648	0.262	502.279	0.00%	99.74%
140.0	0.675	0.245	502.524	0.00%	99.79%
145.0	0.662	0.223	502.747	0.00%	99.84%
150.0	0.701	0.201	502.947	0.00%	99.88%
155.0	0.701	0.177	503.125	0.00%	99.91%
160.0	0.821	0.160	503.284	0.00%	99.94%
165.0	0.715	0.127	503.411	0.00%	99.97%
170.0	0.767	0.088	503.499	0.00%	99.99%
175.0	0.768	0.055	503.554	0.00%	100.00%
180.0	0.710	0.018	503.571	0.00%	100.00%

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

Date:
Humidity(%): 58%

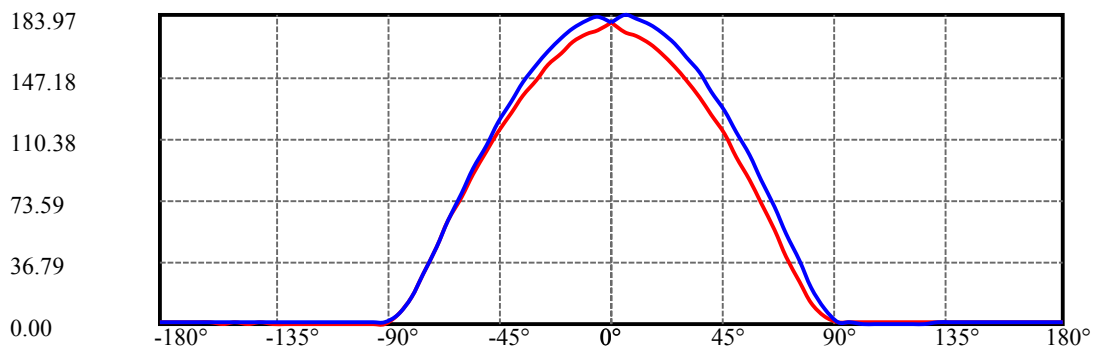
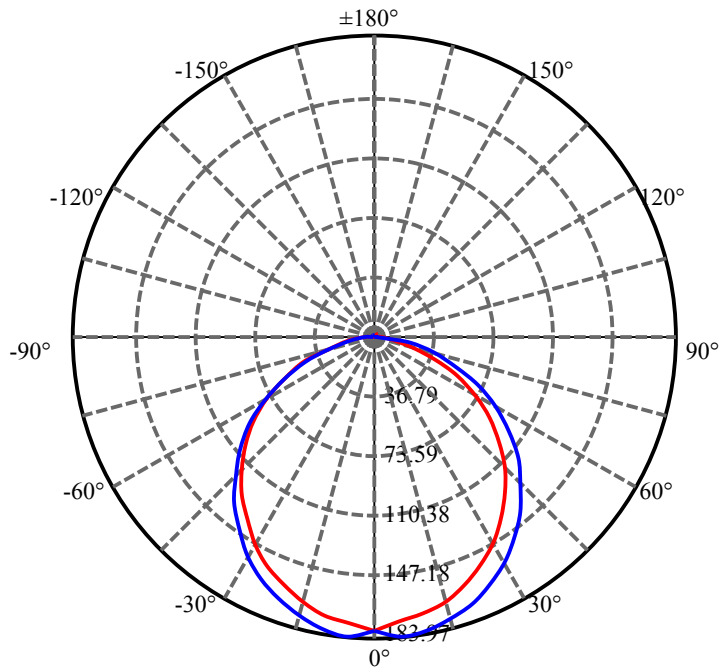
Operator: Tester

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	139.02	N.A.	27.61%
0-40	227.18	N.A.	45.11%
0-60	399.41	N.A.	79.32%
0-90	499.92	N.A.	99.28%
0-120	501.53	N.A.	99.59%
0-180	503.57	N.A.	100.00%
60-90	100.51	N.A.	19.96%
90-120	1.61	N.A.	0.32%
90-130	2.09	N.A.	0.42%
90-150	3.03	N.A.	0.60%
90-180	3.63	N.A.	0.72%
0-60.52	402.86	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	17.00
10-20	48.61
20-30	73.42
30-40	88.16
40-50	90.95
50-60	81.28
60-70	60.26
70-80	32.11
80-90	8.14
90-100	0.72
100-110	0.44
110-120	0.45
120-130	0.49
130-140	0.51
140-150	0.42
150-160	0.34
160-170	0.21
170-180	0.05

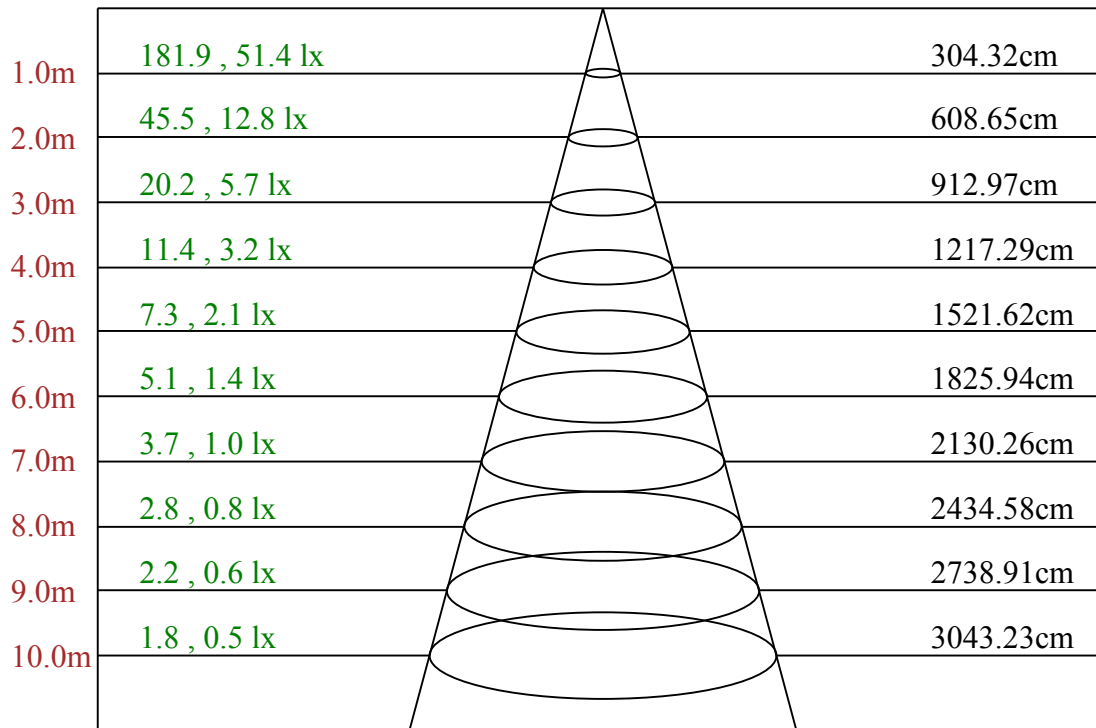


C0/C180: —

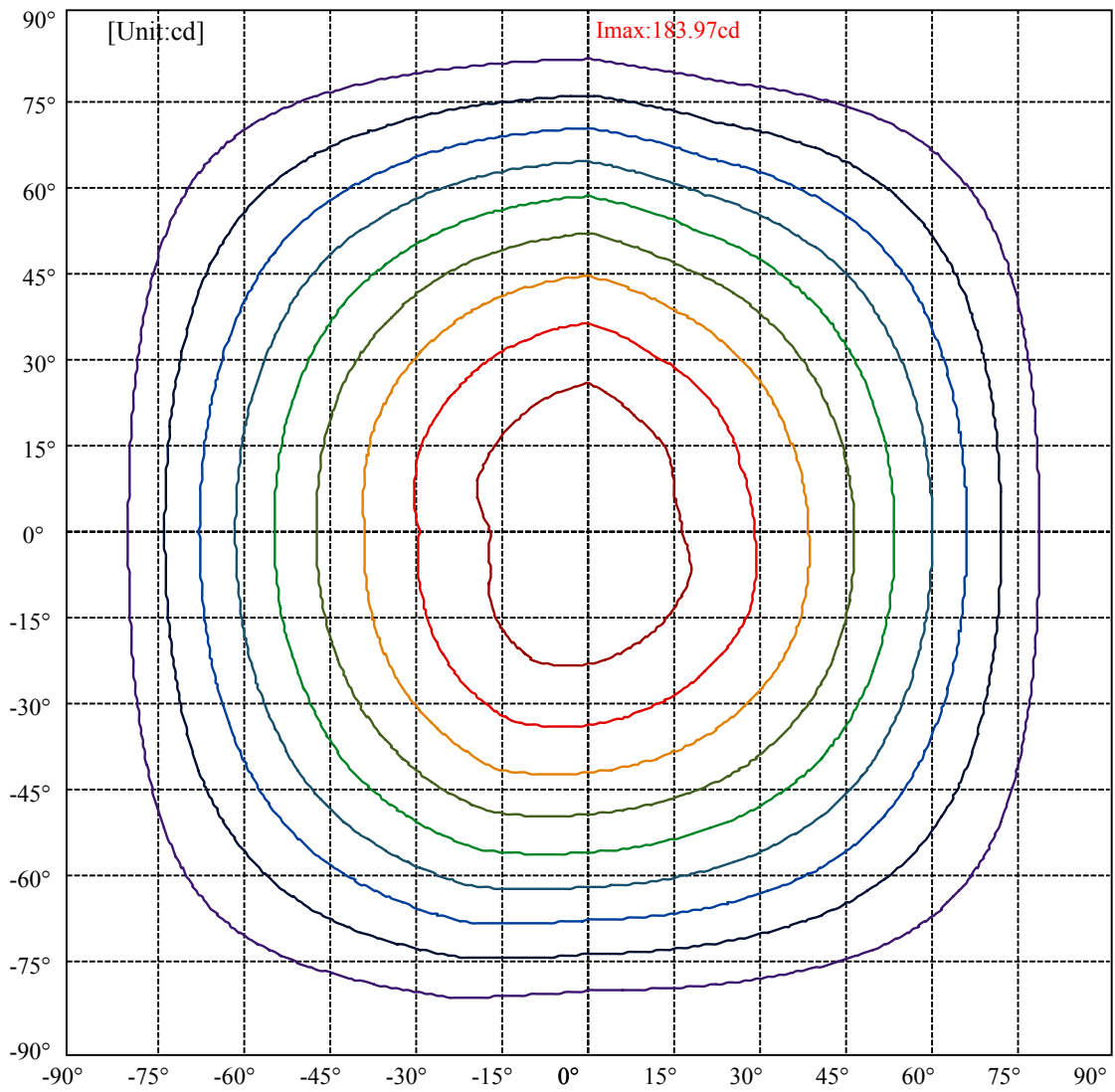
C90/C270: —

Field angle(10%Imax):C0/180Left:79.3 Right:77.9
 :C90/270Left:79.1 Right:81.4

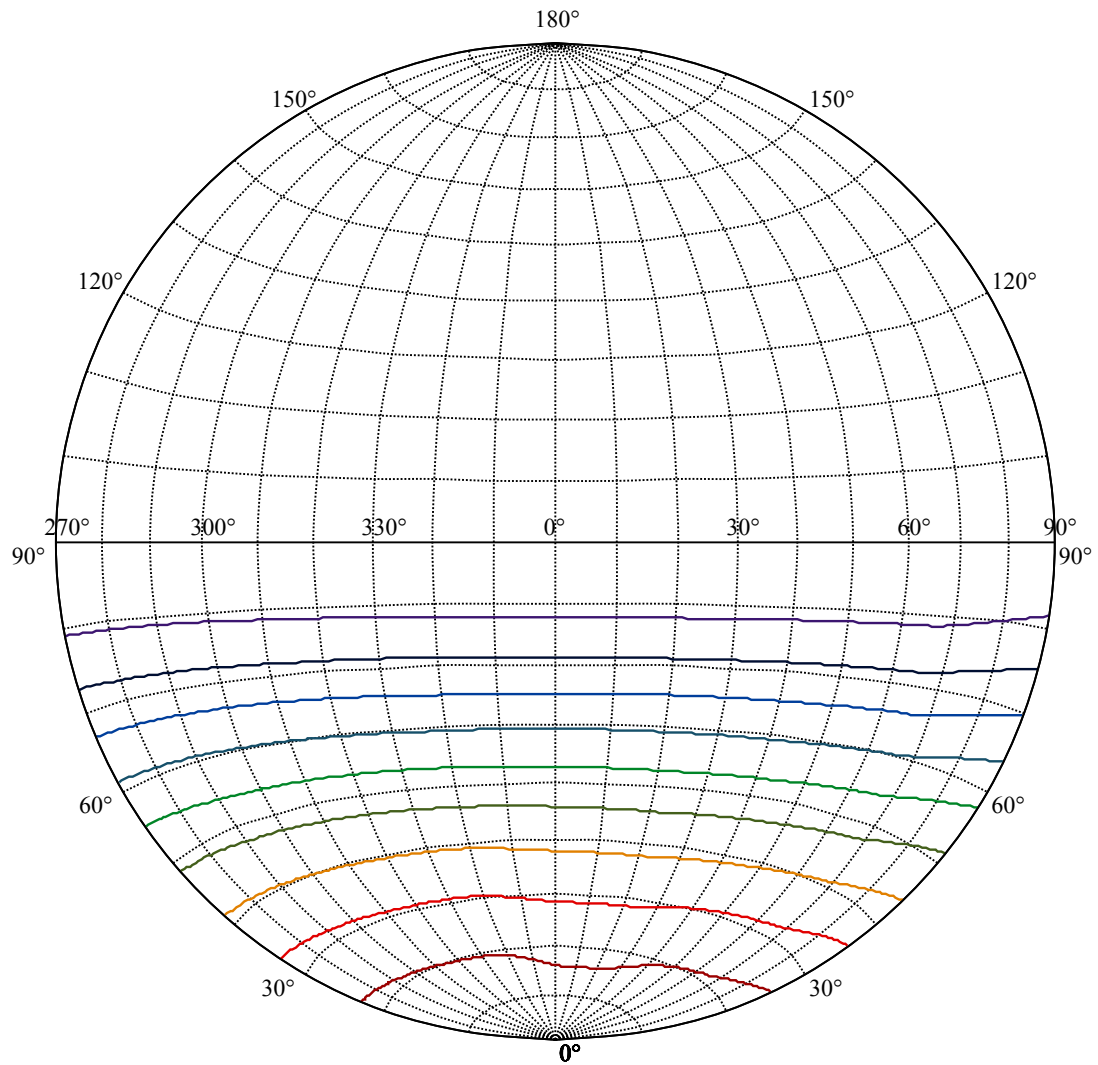
Beam Angle(50%Imax):C0/180Left:54.9 Right:53.6
 :C90/270Left:55.2 Right:57.8



Max , Ave Beam angle of C90 plane 113.37



(10%I _{max}) 18.3969	—
(20%I _{max}) 36.7938	—
(30%I _{max}) 55.1907	—
(40%I _{max}) 73.5876	—
(50%I _{max}) 91.9845	—
(60%I _{max}) 110.381	—
(70%I _{max}) 128.778	—
(80%I _{max}) 147.175	—
(90%I _{max}) 165.572	—



House

[Unit:cd]

Road

I_{max}:183.97	
(10%I _{max}) 18.3969	—
(20%I _{max}) 36.7938	—
(30%I _{max}) 55.1907	—
(40%I _{max}) 73.5876	—
(50%I _{max}) 91.9845	—
(60%I _{max}) 110.381	—
(70%I _{max}) 128.778	—
(80%I _{max}) 147.175	—
(90%I _{max}) 165.572	—

Intensity data(cd)

Appendix Page: 8 Total:9

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	179.55	174.23	171.48	166.82	161.11	153.48	144.59	135.07	124.48
22.5	179.55	173.81	171.27	166.82	160.68	153.27	144.59	134.85	123.85
45.0	179.55	178.47	175.50	170.84	164.71	156.87	148.19	138.03	125.96
67.5	179.55	180.79	178.25	173.60	167.67	160.26	151.37	141.42	130.20
90.0	179.55	183.97	182.06	178.47	173.38	166.40	158.78	149.25	138.67
112.5	179.55	181.43	179.52	175.71	170.42	163.86	155.39	145.86	135.28
135.0	179.55	179.52	177.20	173.60	168.30	160.89	152.64	143.11	132.31
157.5	179.55	178.68	176.14	172.33	166.82	159.62	150.94	140.99	129.77
180.0	179.55	175.08	172.54	167.88	161.32	154.33	145.65	135.70	125.54
202.5	179.55	174.66	172.54	168.73	163.86	157.08	148.62	138.88	128.29
225.0	179.55	179.31	177.41	173.81	168.30	161.32	152.85	143.53	132.53
247.5	179.55	181.85	179.95	176.14	171.06	164.49	156.45	146.92	136.34
270.0	179.55	182.91	180.37	175.93	169.79	162.38	153.91	143.96	132.31
292.5	179.55	180.79	177.62	173.38	167.25	159.62	150.73	140.78	129.56
315.0	179.55	178.89	175.93	171.27	165.34	158.14	148.83	138.88	127.66
337.5	179.55	178.04	175.50	170.84	164.49	157.30	148.40	138.24	127.02
360.0	179.55	174.23	171.48	166.82	161.11	153.48	144.59	135.07	124.48
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	112.63	99.92	85.74	71.56	55.89	40.22	25.19	12.70	4.23
22.5	111.99	99.08	85.74	71.13	56.10	40.44	25.62	12.70	4.23
45.0	114.11	100.56	87.01	71.77	56.74	41.49	26.46	13.55	4.66
67.5	117.50	103.95	89.97	74.31	58.85	42.76	27.95	14.40	4.66
90.0	126.60	114.32	100.35	85.32	70.07	53.77	37.26	22.02	9.53
112.5	123.42	110.51	96.33	81.93	66.69	50.39	34.30	20.11	8.47
135.0	119.82	106.91	92.73	78.12	62.45	46.58	31.76	18.00	6.99
157.5	117.28	105.00	90.40	75.79	60.55	45.52	30.70	16.72	6.35
180.0	114.53	102.46	89.55	75.79	61.18	45.94	30.27	16.09	5.93
202.5	116.44	103.52	89.76	76.00	60.55	45.09	30.70	17.36	6.35
225.0	120.25	107.12	93.57	78.54	63.30	47.42	32.81	18.42	7.83
247.5	124.90	111.57	97.38	82.78	67.11	51.66	35.57	20.96	9.32
270.0	120.04	106.70	92.73	77.48	61.39	45.30	30.06	15.88	5.50
292.5	117.50	103.95	89.55	75.37	59.91	44.03	28.79	15.45	5.29
315.0	115.80	102.46	88.28	73.46	58.43	42.13	27.10	14.18	5.08
337.5	114.32	101.19	87.01	71.77	56.10	41.07	26.46	13.34	4.45
360.0	112.63	99.92	85.74	71.56	55.89	40.22	25.19	12.70	4.23
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.85	0.64	0.64	0.64	0.64	0.64	0.64	0.85	0.85
22.5	1.27	0.64	0.64	0.64	0.85	0.64	0.64	0.85	0.85
45.0	1.27	0.85	0.64	0.64	0.64	0.64	0.42	0.64	0.85
67.5	1.48	0.64	0.64	0.64	0.64	0.64	0.85	0.64	0.85
90.0	1.69	0.64	0.21	0.21	0.42	0.21	0.21	0.21	0.64
112.5	1.69	0.21	0.42	0.21	0.00	0.42	0.42	0.21	0.42
135.0	0.85	0.21	0.21	0.00	0.21	0.21	0.21	0.21	0.42
157.5	0.85	0.42	0.21	0.21	0.00	0.21	0.42	0.21	0.42
180.0	0.42	0.42	0.21	0.00	0.21	0.21	0.21	0.42	0.42
202.5	0.85	0.21	0.00	0.00	0.00	0.21	0.42	0.21	0.42
225.0	1.27	0.00	0.00	0.21	0.21	0.21	0.21	0.42	0.42
247.5	1.91	0.00	0.00	0.00	0.00	0.21	0.21	0.21	0.42
270.0	1.06	0.85	1.06	1.06	0.85	1.06	1.06	1.06	1.06
292.5	1.06	0.64	0.85	0.85	0.85	0.64	0.85	0.85	0.64
315.0	1.27	1.06	0.42	0.42	0.64	0.42	0.42	0.42	0.85
337.5	1.06	0.64	1.06	0.64	0.42	0.64	0.85	0.85	0.85
360.0	0.85	0.64	0.64	0.64	0.64	0.64	0.64	0.85	0.85

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

Operator: Tester

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	0.85	0.64	0.64	0.64	0.64	0.85	1.06	0.64	0.85
22.5	0.85	0.85	1.06	0.85	0.64	0.85	0.85	0.85	0.85
45.0	1.06	0.85	0.64	0.85	0.64	0.85	0.85	0.85	0.64
67.5	0.64	0.85	0.85	0.85	0.85	0.85	0.64	0.85	0.85
90.0	0.64	0.64	0.64	0.64	0.85	1.06	0.64	0.85	0.85
112.5	0.42	0.42	0.64	0.85	0.42	0.64	0.64	0.85	0.85
135.0	0.64	0.21	0.42	0.42	0.64	0.85	0.64	0.64	0.85
157.5	0.42	0.85	0.64	0.64	0.64	0.64	0.64	0.64	0.64
180.0	0.42	0.64	0.42	0.64	0.42	0.85	0.64	0.64	0.64
202.5	0.42	0.42	0.42	0.64	0.64	0.85	0.64	0.64	0.64
225.0	0.21	0.64	0.42	0.64	0.42	0.64	0.42	0.64	0.64
247.5	0.42	0.42	0.42	0.42	0.64	0.64	0.42	0.64	0.64
270.0	1.06	1.06	1.06	1.06	1.06	1.06	0.85	1.27	1.06
292.5	0.85	0.85	0.85	0.64	1.06	0.85	0.85	0.85	0.64
315.0	0.64	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
337.5	0.85	0.64	0.64	0.64	0.85	0.85	0.85	0.64	0.85
360.0	0.85	0.64	0.64	0.64	0.64	0.85	1.06	0.64	0.85

C/γ(°)	180.0
0.0	0.71
22.5	0.71
45.0	0.71
67.5	0.71
90.0	0.71
112.5	0.71
135.0	0.71
157.5	0.71
180.0	0.71
202.5	0.71
225.0	0.71
247.5	0.71
270.0	0.71
292.5	0.71
315.0	0.71
337.5	0.71
360.0	0.71