



Shenzhen Belling Efficiency Testing Lab Co.,Ltd
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Client:

LumCAT:LL4G-5CCT(3000K)

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.04

LampCAT:

Current(A): 0.0880

Lamp flux(lm): -1.0

Power (W): 10.39

Number of Lamps: 1

PF: 0.9812

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 999.33, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 96.15

Central intensity(cd): 1526.689, Maximum intensity(cd): 1556.880

Angle of maximum intensity: C=90.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=41.7

[C90/270]Total=40.0

Field angle(10%Imax): [C0/180]Total=77.1

[C90/270]Total=75.1

Maximum s/h(1/2): C0_180=0.68 C90_270=0.68

Maximum s/h(1/4): C0_180=0.76 C90_270=0.74

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.09%

Down flux rate of LUM(%): 99.91%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.784%

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

Date:
Humidity(%): 58%

Operator: Jasper

Zonal flux distribution table

Appendix Page: 2 Total:8

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1531.497	0.000	0	0.00%	0.00%
5.0	1432.564	35.435	35.435	0.00%	3.55%
10.0	1217.366	94.796	130.231	0.00%	13.03%
15.0	992.966	131.115	261.346	0.00%	26.15%
20.0	790.240	146.961	408.307	0.00%	40.86%
25.0	597.943	145.595	553.902	0.00%	55.43%
30.0	395.966	125.780	679.682	0.00%	68.01%
35.0	223.237	91.182	770.864	0.00%	77.14%
40.0	126.203	58.301	829.165	0.00%	82.97%
45.0	91.101	40.236	869.401	0.00%	87.00%
50.0	67.606	32.069	901.47	0.00%	90.21%
55.0	49.964	25.564	927.034	0.00%	92.77%
60.0	37.325	20.177	947.21	0.00%	94.78%
65.0	28.717	16.055	963.265	0.00%	96.39%
70.0	22.022	12.848	976.113	0.00%	97.68%
75.0	15.780	9.881	985.994	0.00%	98.67%
80.0	10.068	6.916	992.91	0.00%	99.36%
85.0	4.898	4.067	996.977	0.00%	99.76%
90.0	0.427	1.458	998.435	0.00%	99.91%
95.0	0.013	0.120	998.555	0.00%	99.92%
100.0	0.000	0.004	998.558	0.00%	99.92%
105.0	0.026	0.007	998.565	0.00%	99.92%
110.0	0.013	0.010	998.575	0.00%	99.92%
115.0	0.013	0.007	998.582	0.00%	99.92%
120.0	0.039	0.013	998.595	0.00%	99.93%
125.0	0.013	0.012	998.607	0.00%	99.93%
130.0	0.091	0.023	998.629	0.00%	99.93%
135.0	0.103	0.039	998.668	0.00%	99.93%
140.0	0.142	0.045	998.714	0.00%	99.94%
145.0	0.181	0.054	998.768	0.00%	99.94%
150.0	0.310	0.072	998.84	0.00%	99.95%
155.0	0.465	0.098	998.938	0.00%	99.96%
160.0	0.633	0.115	999.053	0.00%	99.97%
165.0	0.685	0.109	999.162	0.00%	99.98%
170.0	0.788	0.087	999.249	0.00%	99.99%
175.0	0.892	0.060	999.31	0.00%	100.00%
180.0	0.956	0.022	999.332	0.00%	100.00%

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

Date:
Humidity(%): 58%

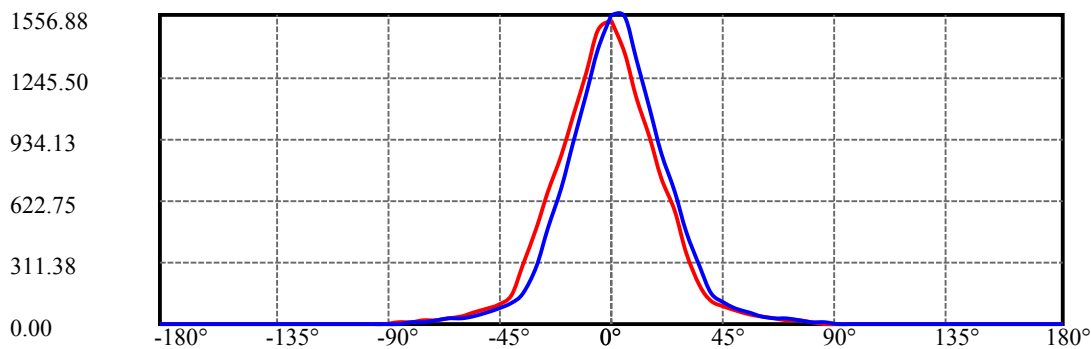
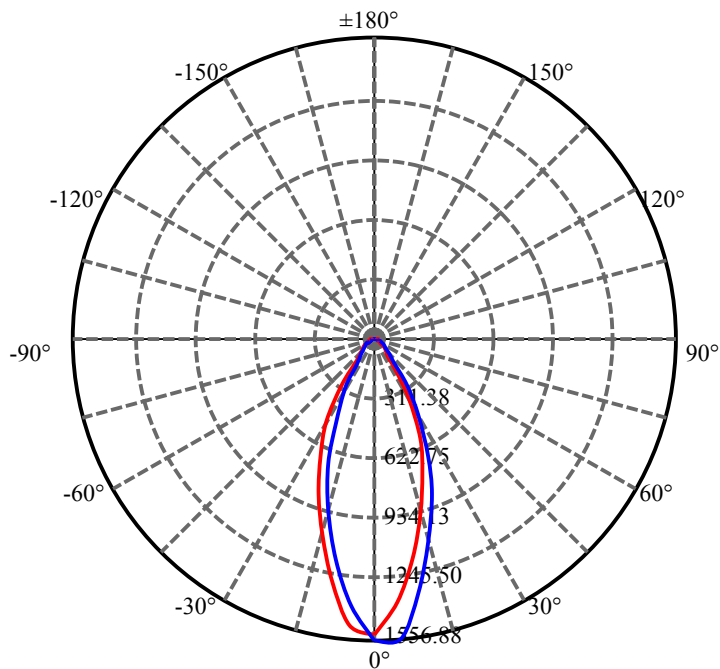
Operator: Jasper

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	679.68	N.A.	68.01%
0-40	829.17	N.A.	82.97%
0-60	947.21	N.A.	94.78%
0-90	998.43	N.A.	99.91%
0-120	998.59	N.A.	99.93%
0-180	999.33	N.A.	100.00%
60-90	51.22	N.A.	5.13%
90-120	0.16	N.A.	0.02%
90-130	0.19	N.A.	0.02%
90-150	0.41	N.A.	0.04%
90-180	0.87	N.A.	0.09%
0-37.45	799.47	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	130.23
10-20	278.08
20-30	271.37
30-40	149.48
40-50	72.30
50-60	45.74
60-70	28.90
70-80	16.80
80-90	5.52
90-100	0.12
100-110	0.02
110-120	0.02
120-130	0.03
130-140	0.08
140-150	0.13
150-160	0.21
160-170	0.20
170-180	0.06

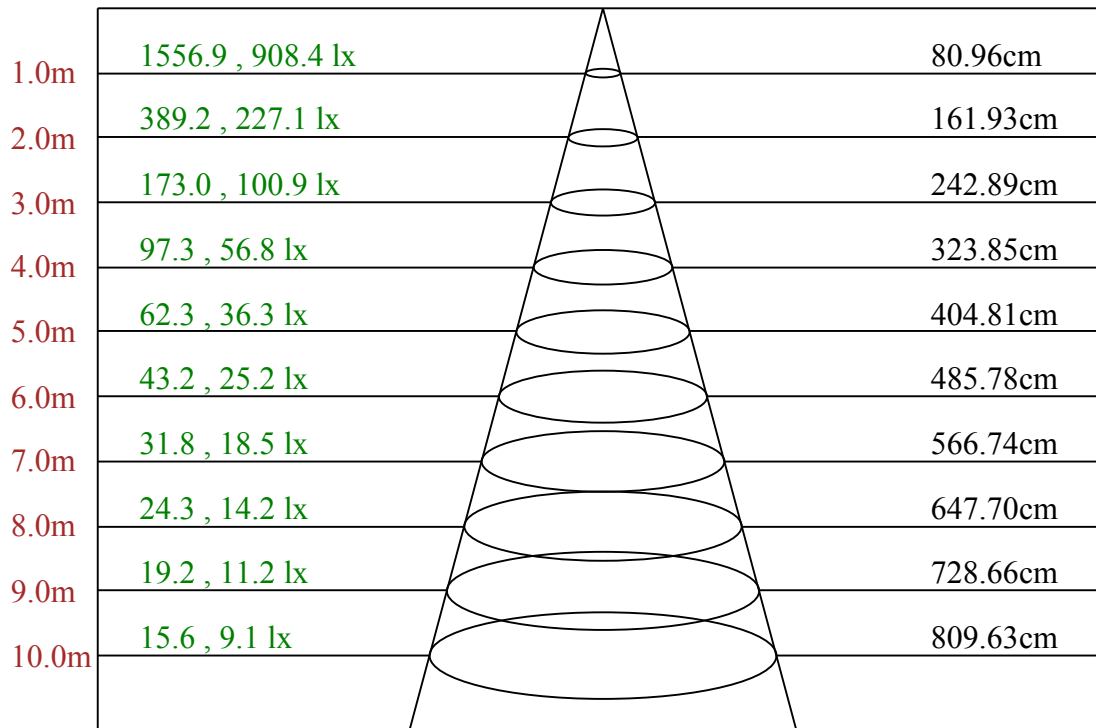


C0/C180: —

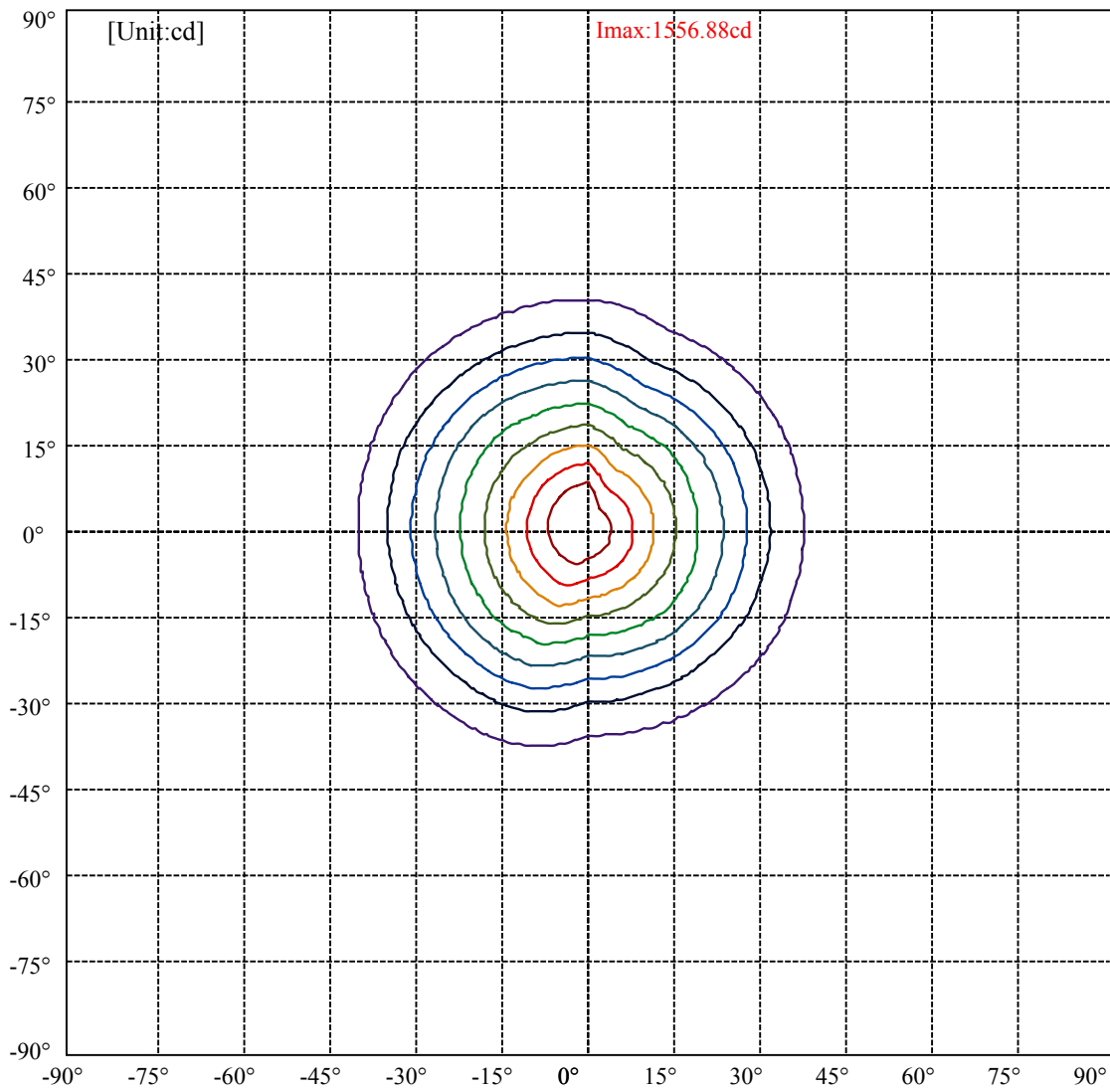
C90/C270: —

Field angle(10%Imax):C0/180Left:39.7 Right:37.4
:C90/270Left:35.1 Right:40.0

Beam Angle(50%Imax):C0/180Left:22.4 Right:19.3
:C90/270Left:17.9 Right:22.1



Max , Ave Beam angle of C90 plane 44.08



(10%Imax) 155.688	—
(20%Imax) 311.376	—
(30%Imax) 467.064	—
(40%Imax) 622.752	—
(50%Imax) 778.44	—
(60%Imax) 934.128	—
(70%Imax) 1089.82	—
(80%Imax) 1245.5	—
(90%Imax) 1401.19	—

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	1526.69	1361.68	1144.55	935.91	733.46	566.18	359.81	190.45	111.46
22.5	1528.76	1371.60	1149.72	948.73	747.11	565.97	364.97	189.00	113.73
45.0	1523.59	1377.18	1162.13	956.79	760.14	552.94	354.02	182.59	113.73
67.5	1508.29	1385.87	1160.06	951.42	754.14	542.40	342.44	184.66	114.15
90.0	1556.88	1550.26	1330.66	1083.96	858.78	662.95	462.58	289.91	155.09
112.5	1542.61	1528.76	1324.25	1070.73	854.43	667.29	470.23	279.57	150.54
135.0	1536.62	1515.52	1302.12	1055.22	863.12	692.73	479.74	277.51	149.51
157.5	1528.55	1498.36	1281.03	1056.26	863.12	685.28	484.50	303.15	149.51
180.0	1526.69	1483.68	1269.86	1045.09	849.88	668.33	487.39	295.91	144.54
202.5	1528.76	1464.24	1261.39	1041.78	850.92	657.78	469.61	264.89	135.03
225.0	1523.59	1450.18	1252.29	1042.19	837.68	641.86	438.59	235.94	129.24
247.5	1508.29	1437.15	1254.56	1032.68	808.11	618.08	416.05	226.43	126.14
270.0	1556.88	1385.46	1158.20	908.61	685.49	479.12	288.46	156.95	104.84
292.5	1542.61	1371.81	1140.83	905.92	702.45	492.97	285.98	157.36	104.43
315.0	1536.62	1370.98	1143.10	919.36	735.95	519.86	296.12	160.88	107.94
337.5	1528.55	1368.29	1143.10	932.80	739.05	553.36	334.99	176.59	109.39
360.0	1526.69	1361.68	1144.55	935.91	733.46	566.18	359.81	190.45	111.46
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	84.16	63.28	47.15	35.98	28.12	21.92	15.51	9.51	3.52
22.5	84.99	63.48	47.15	35.98	27.92	21.92	15.72	9.72	3.93
45.0	84.58	64.10	47.35	35.57	28.12	21.71	15.51	9.72	4.34
67.5	84.78	63.07	47.35	35.57	27.71	21.71	15.72	9.72	4.55
90.0	105.25	76.92	57.28	42.39	32.47	25.64	19.44	13.03	7.65
112.5	104.43	76.51	55.83	41.56	31.85	24.81	18.20	12.20	7.24
135.0	103.81	75.48	55.21	40.94	31.22	23.78	17.58	11.58	6.62
157.5	102.15	74.65	55.21	40.53	30.60	22.75	16.54	10.96	6.62
180.0	97.60	73.41	54.59	39.50	30.19	22.13	16.13	10.55	6.20
202.5	95.33	71.13	52.94	38.46	28.95	21.30	15.72	10.13	5.79
225.0	94.91	69.89	51.90	38.05	28.33	21.51	15.30	10.13	5.38
247.5	92.64	69.07	50.66	37.43	28.33	21.71	15.51	10.13	5.58
270.0	79.41	59.14	43.22	32.67	25.43	19.44	13.03	8.07	2.48
292.5	79.61	58.52	43.43	33.09	25.64	19.85	13.65	8.07	2.48
315.0	81.06	60.59	44.25	34.33	26.68	20.68	14.06	8.69	2.90
337.5	82.92	62.45	45.91	35.15	27.92	21.51	14.89	8.89	3.10
360.0	84.16	63.28	47.15	35.98	28.12	21.92	15.51	9.51	3.52
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
90.0	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	1.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.21	0.21	0.00	0.41	0.21	0.21	0.41	0.21	0.41
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Intensity data(cd)

Appendix Page: 8 Total:8

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	0.21	0.41	0.41	0.62	0.62	0.62	0.83	0.83
22.5	0.21	0.21	0.21	0.41	0.41	0.62	0.83	0.83	1.03
45.0	0.00	0.00	0.21	0.41	0.41	0.62	0.62	0.83	0.83
67.5	0.21	0.21	0.21	0.41	0.62	0.62	0.83	0.83	1.03
90.0	0.00	0.00	0.00	0.62	0.62	0.62	0.83	0.83	0.83
112.5	0.00	0.00	0.00	0.21	0.41	0.62	0.62	0.83	0.83
135.0	0.00	0.00	0.00	0.00	0.41	0.62	0.41	0.62	0.62
157.5	0.00	0.00	0.00	0.00	0.41	0.21	0.62	0.62	1.03
180.0	0.00	0.00	0.00	0.21	0.21	0.62	0.62	0.62	0.83
202.5	0.00	0.00	0.21	0.00	0.21	0.41	0.62	0.62	0.62
225.0	0.00	0.00	0.00	0.21	0.21	0.41	0.41	0.62	0.62
247.5	0.00	0.00	0.00	0.00	0.21	0.41	0.41	0.83	0.83
270.0	0.62	0.62	0.83	1.03	0.83	1.24	1.45	1.24	1.45
292.5	0.21	0.21	0.21	0.41	0.62	0.62	0.62	0.83	1.03
315.0	0.21	0.41	0.41	0.21	0.62	0.83	0.83	0.83	1.03
337.5	0.21	0.41	0.21	0.41	0.62	1.03	0.62	0.83	0.83
360.0	0.00	0.21	0.41	0.41	0.62	0.62	0.62	0.83	0.83
C/γ(°)	180.0								
0.0	0.83								
22.5	0.83								
45.0	1.03								
67.5	0.83								
90.0	1.24								
112.5	1.03								
135.0	0.83								
157.5	1.03								
180.0	0.83								
202.5	0.83								
225.0	1.03								
247.5	0.83								
270.0	1.24								
292.5	1.03								
315.0	0.83								
337.5	1.03								
360.0	0.83								