



Shenzhen Belling Efficiency Testing Lab Co.,Ltd
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Client:

LumCAT:LL4G-5CCT(4000K)

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.05

LampCAT:

Current(A): 0.0880

Lamp flux(lm): -1.0

Power (W): 10.40

Number of Lamps: 1

PF: 0.9823

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1101.91, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 105.93

Central intensity(cd): 1683.398, Maximum intensity(cd): 1716.687

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

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$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1688.699	0.000	0	0.00%	0.00%
5.0	1579.611	39.072	39.072	0.00%	3.55%
10.0	1342.323	104.527	143.598	0.00%	13.03%
15.0	1094.890	144.574	288.172	0.00%	26.15%
20.0	871.355	162.046	450.218	0.00%	40.86%
25.0	659.319	160.539	610.758	0.00%	55.43%
30.0	436.611	138.691	749.449	0.00%	68.01%
35.0	246.151	100.541	849.99	0.00%	77.14%
40.0	139.157	64.286	914.276	0.00%	82.97%
45.0	100.453	44.366	958.642	0.00%	87.00%
50.0	74.545	35.361	994.003	0.00%	90.21%
55.0	55.093	28.188	1022.19	0.00%	92.77%
60.0	41.156	22.248	1044.438	0.00%	94.78%
65.0	31.665	17.703	1062.141	0.00%	96.39%
70.0	24.283	14.166	1076.307	0.00%	97.68%
75.0	17.400	10.895	1087.202	0.00%	98.67%
80.0	11.101	7.626	1094.829	0.00%	99.36%
85.0	5.401	4.484	1099.312	0.00%	99.76%
90.0	0.470	1.608	1100.92	0.00%	99.91%
95.0	0.014	0.133	1101.053	0.00%	99.92%
100.0	0.000	0.004	1101.057	0.00%	99.92%
105.0	0.029	0.008	1101.064	0.00%	99.92%
110.0	0.014	0.011	1101.075	0.00%	99.92%
115.0	0.014	0.007	1101.083	0.00%	99.93%
120.0	0.043	0.014	1101.096	0.00%	99.93%
125.0	0.014	0.013	1101.11	0.00%	99.93%
130.0	0.100	0.025	1101.134	0.00%	99.93%
135.0	0.114	0.043	1101.178	0.00%	99.93%
140.0	0.157	0.050	1101.228	0.00%	99.94%
145.0	0.200	0.059	1101.287	0.00%	99.94%
150.0	0.342	0.080	1101.367	0.00%	99.95%
155.0	0.513	0.108	1101.475	0.00%	99.96%
160.0	0.698	0.127	1101.602	0.00%	99.97%
165.0	0.755	0.120	1101.722	0.00%	99.98%
170.0	0.869	0.096	1101.818	0.00%	99.99%
175.0	0.983	0.066	1101.885	0.00%	100.00%
180.0	1.055	0.024	1101.909	0.00%	100.00%

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

Date:
Humidity(%): 58%

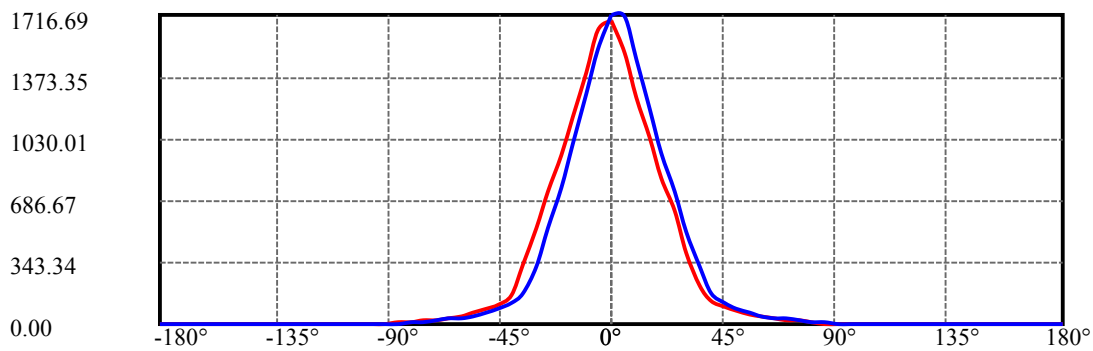
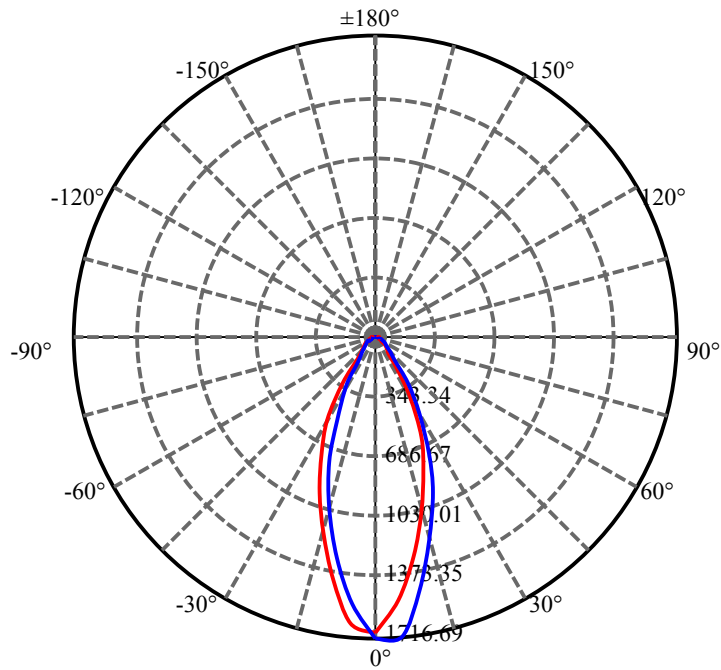
Operator: Jasper

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	749.45	N.A.	68.01%
0-40	914.28	N.A.	82.97%
0-60	1044.44	N.A.	94.78%
0-90	1100.92	N.A.	99.91%
0-120	1101.10	N.A.	99.93%
0-180	1101.91	N.A.	100.00%
60-90	56.48	N.A.	5.13%
90-120	0.18	N.A.	0.02%
90-130	0.21	N.A.	0.02%
90-150	0.45	N.A.	0.04%
90-180	0.96	N.A.	0.09%
0-37.45	881.53	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	143.60
10-20	306.62
20-30	299.23
30-40	164.83
40-50	79.73
50-60	50.44
60-70	31.87
70-80	18.52
80-90	6.09
90-100	0.14
100-110	0.02
110-120	0.02
120-130	0.04
130-140	0.09
140-150	0.14
150-160	0.24
160-170	0.22
170-180	0.07

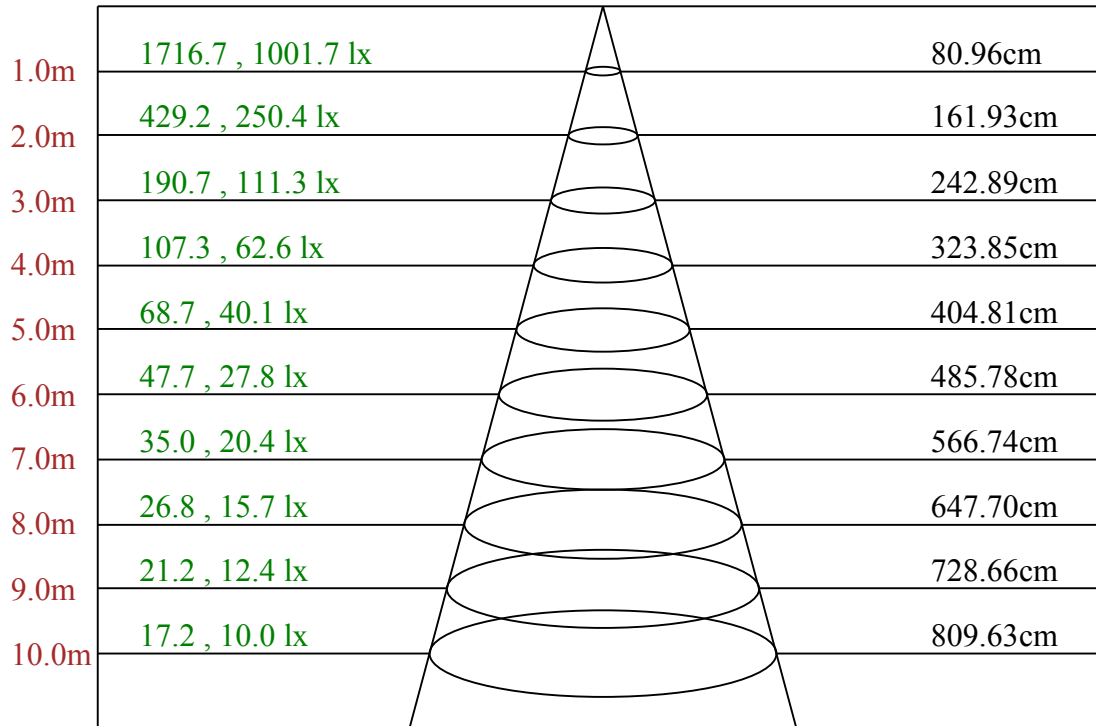


C0/C180: —

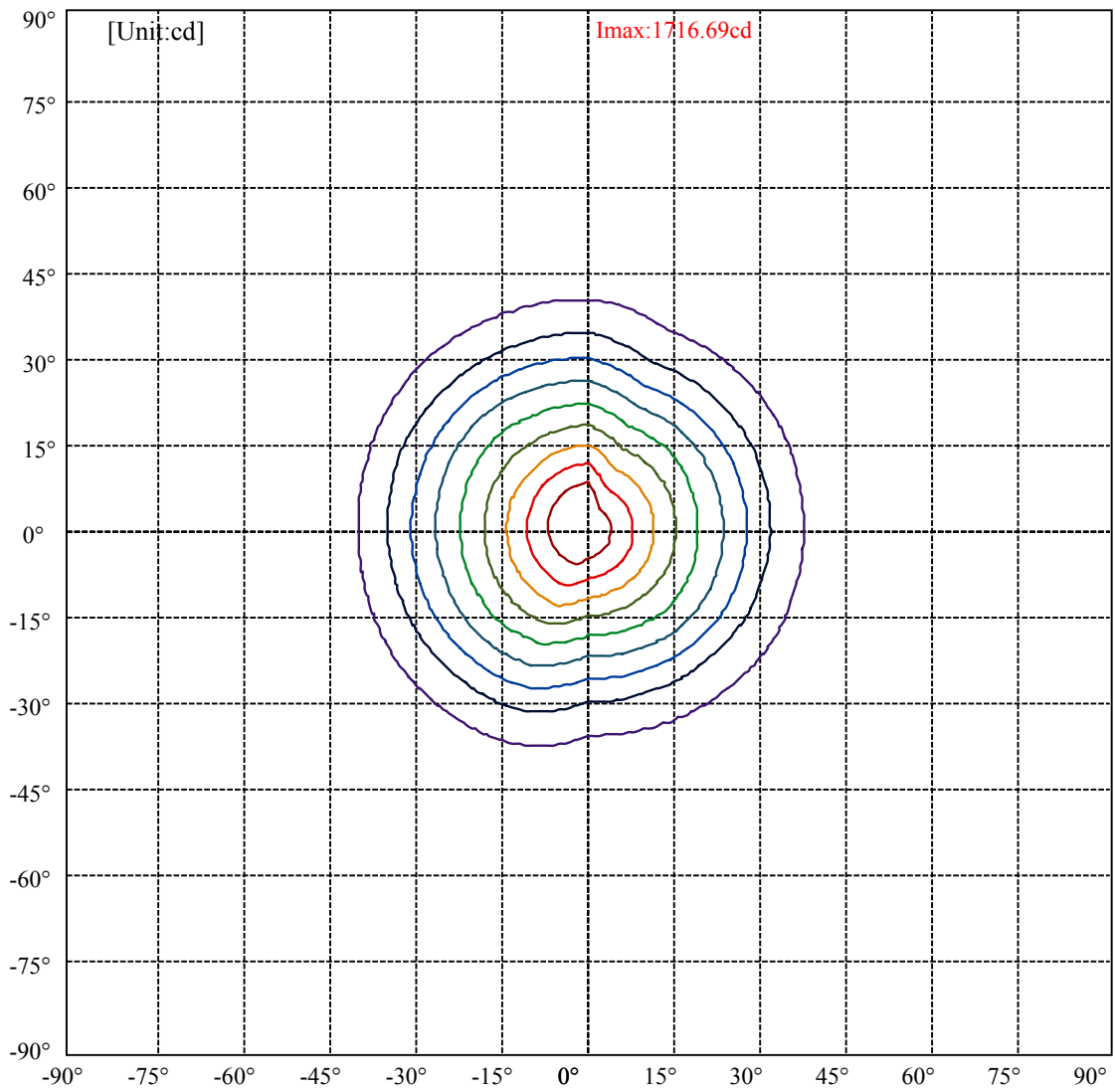
C90/C270: —

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) 171.669	—
(20%Imax) 343.337	—
(30%Imax) 515.006	—
(40%Imax) 686.675	—
(50%Imax) 858.344	—
(60%Imax) 1030.01	—
(70%Imax) 1201.68	—
(80%Imax) 1373.35	—
(90%Imax) 1545.02	—

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	1683.40	1501.45	1262.04	1031.97	808.75	624.29	396.74	210.00	122.90
22.5	1685.68	1512.39	1267.74	1046.11	823.80	624.06	402.44	208.40	125.41
45.0	1679.98	1518.55	1281.42	1055.00	838.17	609.70	390.35	201.33	125.41
67.5	1663.11	1528.12	1279.14	1049.07	831.55	598.07	377.59	203.61	125.86
90.0	1716.69	1709.39	1467.24	1195.23	946.93	731.00	510.06	319.67	171.01
112.5	1700.96	1685.68	1460.18	1180.64	942.14	735.79	518.50	308.27	165.99
135.0	1694.34	1671.09	1435.78	1163.54	951.71	763.83	528.98	305.99	164.85
157.5	1685.45	1652.16	1412.52	1164.68	951.71	755.63	534.23	334.26	164.85
180.0	1683.40	1635.97	1400.21	1152.36	937.12	736.93	537.42	326.28	159.38
202.5	1685.68	1614.54	1390.86	1148.71	938.26	725.30	517.81	292.08	148.89
225.0	1679.98	1599.03	1380.83	1149.17	923.67	707.74	483.61	260.16	142.51
247.5	1663.11	1584.67	1383.34	1138.68	891.06	681.52	458.76	249.67	139.09
270.0	1716.69	1527.67	1277.08	1001.88	755.85	528.30	318.07	173.06	115.60
292.5	1700.96	1512.62	1257.93	998.91	774.55	543.58	315.34	173.52	115.15
315.0	1694.34	1511.71	1260.44	1013.73	811.49	573.22	326.51	177.39	119.02
337.5	1685.45	1508.74	1260.44	1028.55	814.91	610.16	369.38	194.72	120.62
360.0	1683.40	1501.45	1262.04	1031.97	808.75	624.29	396.74	210.00	122.90
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	92.80	69.77	51.99	39.67	31.01	24.17	17.10	10.49	3.88
22.5	93.71	70.00	51.99	39.67	30.78	24.17	17.33	10.72	4.33
45.0	93.26	70.68	52.21	39.22	31.01	23.94	17.10	10.72	4.79
67.5	93.48	69.54	52.21	39.22	30.55	23.94	17.33	10.72	5.02
90.0	116.06	84.82	63.16	46.74	35.80	28.27	21.43	14.37	8.44
112.5	115.15	84.36	61.56	45.83	35.11	27.36	20.07	13.45	7.98
135.0	114.46	83.22	60.88	45.15	34.43	26.22	19.38	12.77	7.30
157.5	112.64	82.31	60.88	44.69	33.75	25.08	18.24	12.09	7.30
180.0	107.62	80.94	60.20	43.55	33.29	24.40	17.79	11.63	6.84
202.5	105.11	78.44	58.37	42.41	31.92	23.49	17.33	11.17	6.38
225.0	104.66	77.07	57.23	41.95	31.24	23.71	16.87	11.17	5.93
247.5	102.15	76.16	55.86	41.27	31.24	23.94	17.10	11.17	6.16
270.0	87.56	65.21	47.65	36.03	28.05	21.43	14.37	8.89	2.74
292.5	87.78	64.53	47.88	36.48	28.27	21.89	15.05	8.89	2.74
315.0	89.38	66.81	48.79	37.85	29.41	22.80	15.51	9.58	3.19
337.5	91.43	68.86	50.62	38.76	30.78	23.71	16.42	9.80	3.42
360.0	92.80	69.77	51.99	39.67	31.01	24.17	17.10	10.49	3.88
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	0.23
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
90.0	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	2.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.68	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	0.23	0.23	0.00	0.46	0.23	0.23	0.46	0.23	0.46
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.23	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)

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C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	0.23	0.46	0.46	0.68	0.68	0.68	0.91	0.91
22.5	0.23	0.23	0.23	0.46	0.46	0.68	0.91	0.91	1.14
45.0	0.00	0.00	0.23	0.46	0.46	0.68	0.68	0.91	0.91
67.5	0.23	0.23	0.23	0.46	0.68	0.68	0.91	0.91	1.14
90.0	0.00	0.00	0.00	0.68	0.68	0.68	0.91	0.91	0.91
112.5	0.00	0.00	0.00	0.23	0.46	0.68	0.68	0.91	0.91
135.0	0.00	0.00	0.00	0.00	0.46	0.68	0.46	0.68	0.68
157.5	0.00	0.00	0.00	0.00	0.46	0.23	0.68	0.68	1.14
180.0	0.00	0.00	0.00	0.23	0.23	0.68	0.68	0.68	0.91
202.5	0.00	0.00	0.23	0.00	0.23	0.46	0.68	0.68	0.68
225.0	0.00	0.00	0.00	0.23	0.23	0.46	0.46	0.68	0.68
247.5	0.00	0.00	0.00	0.00	0.23	0.46	0.46	0.91	0.91
270.0	0.68	0.68	0.91	1.14	0.91	1.37	1.60	1.37	1.60
292.5	0.23	0.23	0.23	0.46	0.68	0.68	0.68	0.91	1.14
315.0	0.23	0.46	0.46	0.23	0.68	0.91	0.91	0.91	1.14
337.5	0.23	0.46	0.23	0.46	0.68	1.14	0.68	0.91	0.91
360.0	0.00	0.23	0.46	0.46	0.68	0.68	0.68	0.91	0.91
C/γ(°)	180.0								
0.0	0.91								
22.5	0.91								
45.0	1.14								
67.5	0.91								
90.0	1.37								
112.5	1.14								
135.0	0.91								
157.5	1.14								
180.0	0.91								
202.5	0.91								
225.0	1.14								
247.5	0.91								
270.0	1.37								
292.5	1.14								
315.0	0.91								
337.5	1.14								
360.0	0.91								