



Shenzhen Belling Efficiency Testing Lab Co.,Ltd
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Client:

LumCAT:LL4G-5CCT(5000K)

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.07

LampCAT:

Current(A): 0.0900

Lamp flux(lm): -1.0

Power (W): 10.67

Number of Lamps: 1

PF: 0.9822

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1140.18, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 106.86

Central intensity(cd): 1741.868, Maximum intensity(cd): 1776.314

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	1747.354	0.000	0	0.00%	0.00%
5.0	1634.476	40.429	40.429	0.00%	3.55%
10.0	1388.947	108.157	148.586	0.00%	13.03%
15.0	1132.919	149.595	298.182	0.00%	26.15%
20.0	901.620	167.675	465.856	0.00%	40.86%
25.0	682.220	166.116	631.972	0.00%	55.43%
30.0	451.776	143.508	775.48	0.00%	68.01%
35.0	254.701	104.034	879.513	0.00%	77.14%
40.0	143.991	66.519	946.032	0.00%	82.97%
45.0	103.942	45.907	991.939	0.00%	87.00%
50.0	77.134	36.589	1028.528	0.00%	90.21%
55.0	57.006	29.167	1057.694	0.00%	92.77%
60.0	42.585	23.020	1080.715	0.00%	94.78%
65.0	32.765	18.318	1099.032	0.00%	96.39%
70.0	25.127	14.658	1113.691	0.00%	97.68%
75.0	18.005	11.274	1124.965	0.00%	98.67%
80.0	11.487	7.891	1132.856	0.00%	99.36%
85.0	5.589	4.640	1137.496	0.00%	99.76%
90.0	0.487	1.663	1139.159	0.00%	99.91%
95.0	0.015	0.137	1139.296	0.00%	99.92%
100.0	0.000	0.004	1139.3	0.00%	99.92%
105.0	0.030	0.008	1139.308	0.00%	99.92%
110.0	0.015	0.012	1139.32	0.00%	99.92%
115.0	0.015	0.007	1139.327	0.00%	99.92%
120.0	0.044	0.014	1139.342	0.00%	99.93%
125.0	0.015	0.014	1139.355	0.00%	99.93%
130.0	0.103	0.026	1139.381	0.00%	99.93%
135.0	0.118	0.045	1139.426	0.00%	99.93%
140.0	0.162	0.052	1139.478	0.00%	99.94%
145.0	0.207	0.062	1139.539	0.00%	99.94%
150.0	0.354	0.083	1139.622	0.00%	99.95%
155.0	0.531	0.112	1139.734	0.00%	99.96%
160.0	0.723	0.131	1139.865	0.00%	99.97%
165.0	0.782	0.124	1139.989	0.00%	99.98%
170.0	0.900	0.100	1140.089	0.00%	99.99%
175.0	1.018	0.069	1140.157	0.00%	100.00%
180.0	1.092	0.025	1140.183	0.00%	100.00%

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

Date:
Humidity(%): 58%

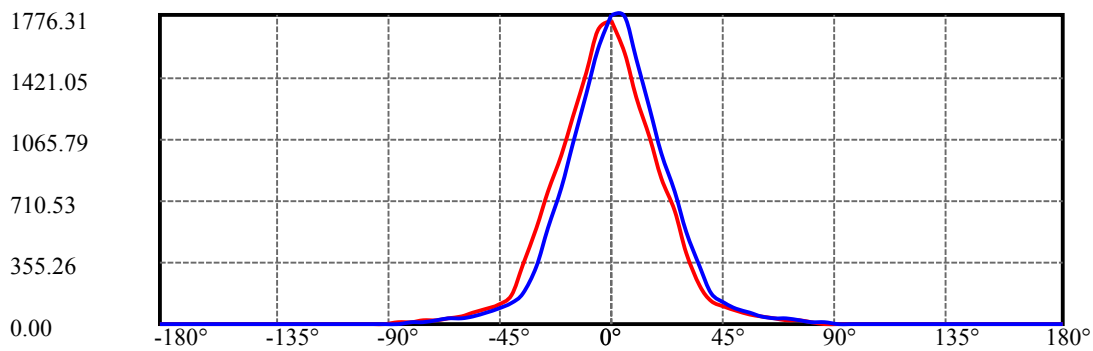
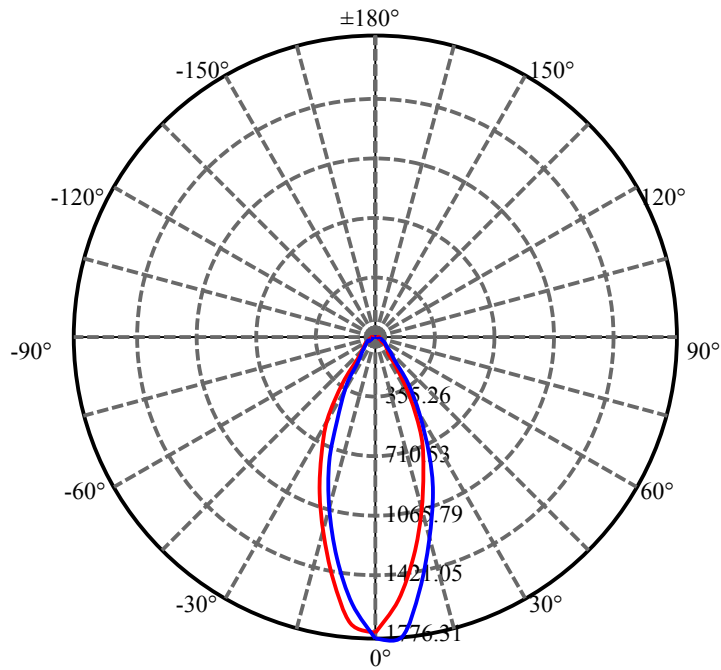
Operator: Jasper

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	775.48	N.A.	68.01%
0-40	946.03	N.A.	82.97%
0-60	1080.71	N.A.	94.78%
0-90	1139.16	N.A.	99.91%
0-120	1139.34	N.A.	99.93%
0-180	1140.18	N.A.	100.00%
60-90	58.44	N.A.	5.13%
90-120	0.18	N.A.	0.02%
90-130	0.22	N.A.	0.02%
90-150	0.46	N.A.	0.04%
90-180	1.00	N.A.	0.09%
0-37.45	912.15	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	148.59
10-20	317.27
20-30	309.62
30-40	170.55
40-50	82.50
50-60	52.19
60-70	32.98
70-80	19.16
80-90	6.30
90-100	0.14
100-110	0.02
110-120	0.02
120-130	0.04
130-140	0.10
140-150	0.14
150-160	0.24
160-170	0.22
170-180	0.07

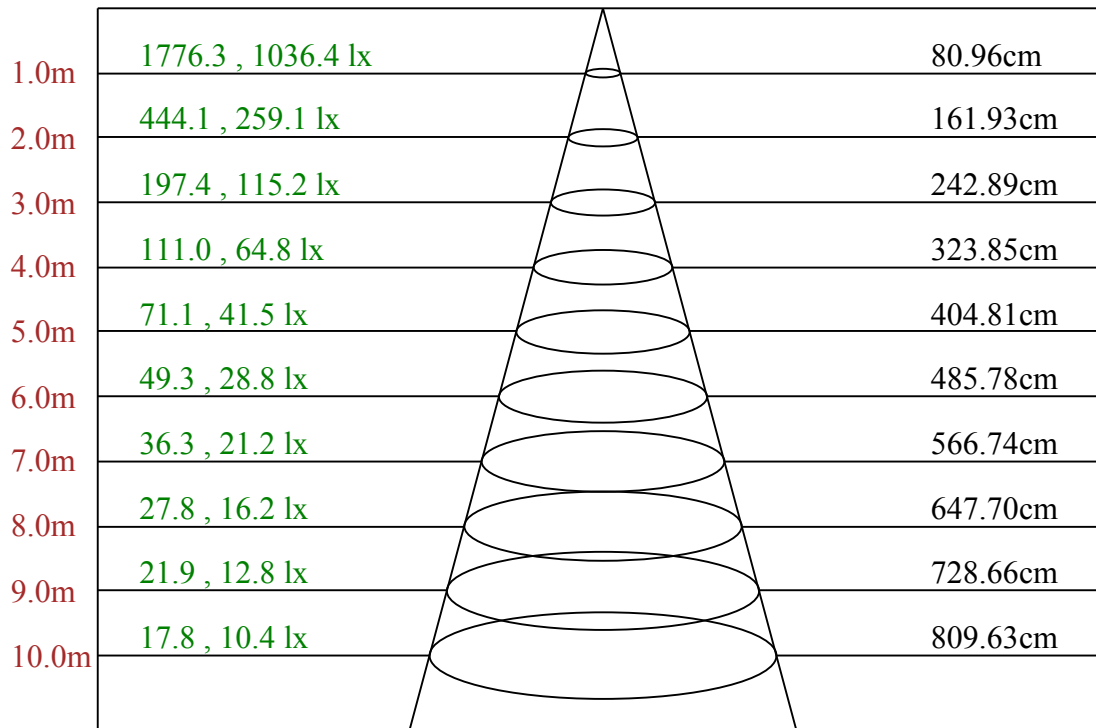


C0/C180: —

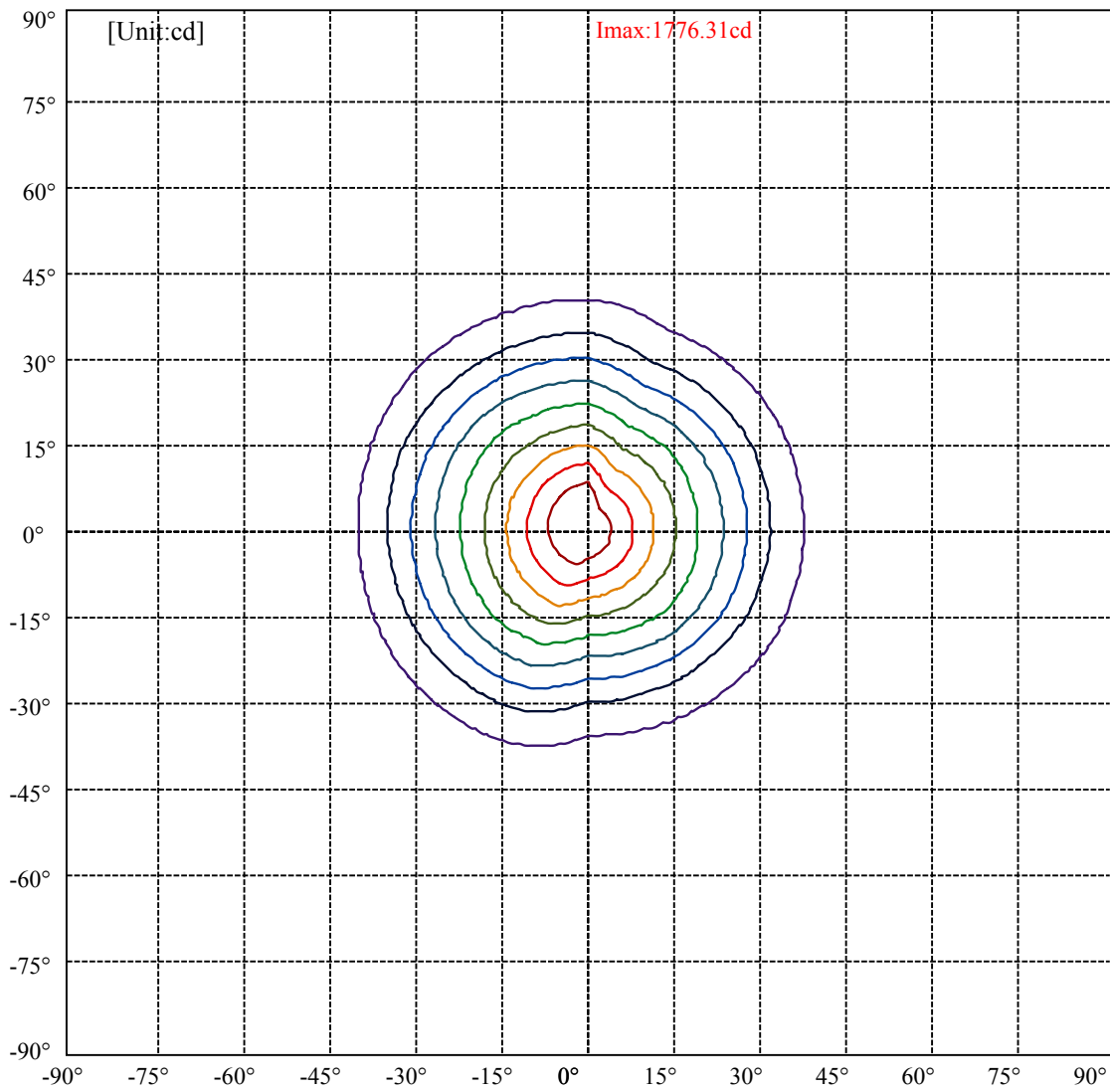
C90/C270: —

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) 177.631	—
(20%Imax) 355.263	—
(30%Imax) 532.894	—
(40%Imax) 710.526	—
(50%Imax) 888.157	—
(60%Imax) 1065.79	—
(70%Imax) 1243.42	—
(80%Imax) 1421.05	—
(90%Imax) 1598.68	—

Intensity data(cd)

C/ γ ($^{\circ}$)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1741.87	1553.60	1305.87	1067.82	836.84	645.98	410.52	217.29	127.17
22.5	1744.23	1564.92	1311.77	1082.45	852.41	645.74	416.42	215.64	129.76
45.0	1738.33	1571.29	1325.92	1091.65	867.28	630.88	403.91	208.33	129.76
67.5	1720.87	1581.20	1323.57	1085.51	860.44	618.84	390.70	210.69	130.23
90.0	1776.31	1768.76	1518.21	1236.74	979.82	756.39	527.78	330.77	176.95
112.5	1760.04	1744.23	1510.89	1221.64	974.86	761.35	536.50	318.98	171.76
135.0	1753.19	1729.13	1485.65	1203.95	984.77	790.36	547.36	316.62	170.58
157.5	1743.99	1709.55	1461.58	1205.13	984.77	781.87	552.78	345.87	170.58
180.0	1741.87	1692.80	1448.84	1192.39	969.67	762.52	556.09	337.62	164.92
202.5	1744.23	1670.62	1439.17	1188.61	970.85	750.49	535.80	302.23	154.06
225.0	1738.33	1654.57	1428.79	1189.09	955.75	732.33	500.41	269.20	147.46
247.5	1720.87	1639.71	1431.39	1178.23	922.01	705.19	474.69	258.34	143.92
270.0	1776.31	1580.73	1321.44	1036.68	782.11	546.65	329.12	179.07	119.62
292.5	1760.04	1565.16	1301.62	1033.61	801.45	562.46	326.29	179.54	119.14
315.0	1753.19	1564.21	1304.22	1048.94	839.67	593.13	337.85	183.55	123.16
337.5	1743.99	1561.15	1304.22	1064.28	843.21	631.35	382.21	201.48	124.81
360.0	1741.87	1553.60	1305.87	1067.82	836.84	645.98	410.52	217.29	127.17
C/ γ ($^{\circ}$)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	96.02	72.19	53.79	41.05	32.09	25.01	17.70	10.85	4.01
22.5	96.97	72.43	53.79	41.05	31.85	25.01	17.93	11.09	4.48
45.0	96.50	73.14	54.03	40.58	32.09	24.77	17.70	11.09	4.96
67.5	96.73	71.96	54.03	40.58	31.62	24.77	17.93	11.09	5.19
90.0	120.09	87.77	65.35	48.37	37.04	29.26	22.18	14.86	8.73
112.5	119.14	87.29	63.70	47.42	36.33	28.31	20.76	13.92	8.26
135.0	118.44	86.11	62.99	46.71	35.63	27.13	20.05	13.21	7.55
157.5	116.55	85.17	62.99	46.24	34.92	25.95	18.87	12.50	7.55
180.0	111.36	83.76	62.29	45.06	34.45	25.24	18.40	12.03	7.08
202.5	108.76	81.16	60.40	43.88	33.03	24.30	17.93	11.56	6.61
225.0	108.29	79.74	59.22	43.41	32.32	24.54	17.46	11.56	6.13
247.5	105.70	78.80	57.80	42.70	32.32	24.77	17.70	11.56	6.37
270.0	90.60	67.48	49.31	37.28	29.02	22.18	14.86	9.20	2.83
292.5	90.83	66.77	49.55	37.75	29.26	22.65	15.57	9.20	2.83
315.0	92.48	69.13	50.49	39.16	30.44	23.59	16.04	9.91	3.30
337.5	94.61	71.25	52.38	40.11	31.85	24.54	16.99	10.15	3.54
360.0	96.02	72.19	53.79	41.05	32.09	25.01	17.70	10.85	4.01
C/ γ ($^{\circ}$)	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	0.24
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
90.0	2.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.71	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	0.24	0.24	0.00	0.47	0.24	0.24	0.47	0.24	0.47
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.24	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)

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	0.24	0.47	0.47	0.71	0.71	0.71	0.94	0.94
22.5	0.24	0.24	0.24	0.47	0.47	0.71	0.94	0.94	1.18
45.0	0.00	0.00	0.24	0.47	0.47	0.71	0.71	0.94	0.94
67.5	0.24	0.24	0.24	0.47	0.71	0.71	0.94	0.94	1.18
90.0	0.00	0.00	0.00	0.71	0.71	0.71	0.94	0.94	0.94
112.5	0.00	0.00	0.00	0.24	0.47	0.71	0.71	0.94	0.94
135.0	0.00	0.00	0.00	0.00	0.47	0.71	0.47	0.71	0.71
157.5	0.00	0.00	0.00	0.00	0.47	0.24	0.71	0.71	1.18
180.0	0.00	0.00	0.00	0.24	0.24	0.71	0.71	0.71	0.94
202.5	0.00	0.00	0.24	0.00	0.24	0.47	0.71	0.71	0.71
225.0	0.00	0.00	0.00	0.24	0.24	0.47	0.47	0.71	0.71
247.5	0.00	0.00	0.00	0.00	0.24	0.47	0.47	0.94	0.94
270.0	0.71	0.71	0.94	1.18	0.94	1.42	1.65	1.42	1.65
292.5	0.24	0.24	0.24	0.47	0.71	0.71	0.71	0.94	1.18
315.0	0.24	0.47	0.47	0.24	0.71	0.94	0.94	0.94	1.18
337.5	0.24	0.47	0.24	0.47	0.71	1.18	0.71	0.94	0.94
360.0	0.00	0.24	0.47	0.47	0.71	0.71	0.71	0.94	0.94

C/γ(°)	180.0
0.0	0.94
22.5	0.94
45.0	1.18
67.5	0.94
90.0	1.42
112.5	1.18
135.0	0.94
157.5	1.18
180.0	0.94
202.5	0.94
225.0	1.18
247.5	0.94
270.0	1.42
292.5	1.18
315.0	0.94
337.5	1.18
360.0	0.94