



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

LumCAT: LL4G-27K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.05

LampCAT:

Current(A): 0.1230

Lamp flux(lm): -1.0

Power (W): 14.62

Number of Lamps: 1

PF: 0.9868

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

Lumens(lm): 1116.85, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 76.38

Central intensity(cd): 1740.215, Maximum intensity(cd): 1755.820

Angle of maximum intensity: C=180.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=41.2

[C90/270]Total=41.7

Field angle(10%Imax): [C0/180]Total=74.0

[C90/270]Total=74.1

Maximum s/h(1/2): C0\_180=0.71 C90\_270=0.70

Maximum s/h(1/4): C0\_180=0.74 C90\_270=0.73

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.12%

Down flux rate of LUM(%): 99.88%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 94.252%

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

Date:  
Humidity(%): 59%

Operator: jarvis

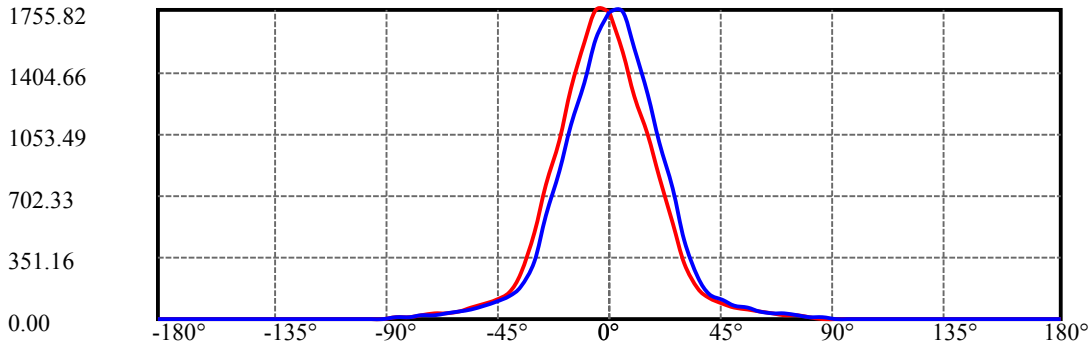
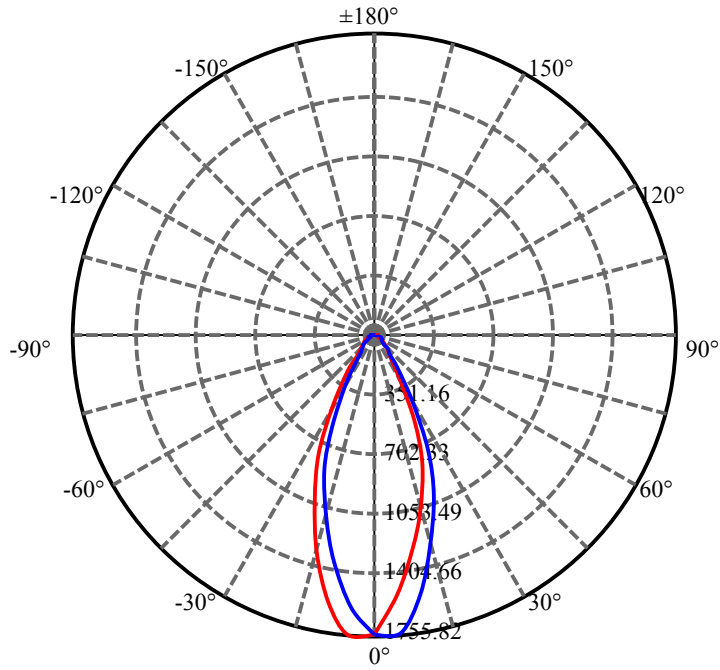
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1740.215	0.000	0	0.00%	0.00%
5.0	1641.390	40.426	40.426	0.00%	3.62%
10.0	1420.168	109.522	149.948	0.00%	13.43%
15.0	1172.729	153.809	303.757	0.00%	27.20%
20.0	906.479	171.356	475.113	0.00%	42.54%
25.0	654.503	163.718	638.831	0.00%	57.20%
30.0	398.729	133.287	772.118	0.00%	69.13%
35.0	216.950	90.663	862.781	0.00%	77.25%
40.0	136.288	58.935	921.716	0.00%	82.53%
45.0	100.676	43.876	965.592	0.00%	86.46%
50.0	74.933	35.484	1001.076	0.00%	89.63%
55.0	56.442	28.565	1029.641	0.00%	92.19%
60.0	43.129	23.016	1052.657	0.00%	94.25%
65.0	34.133	18.783	1071.44	0.00%	95.93%
70.0	26.759	15.418	1086.858	0.00%	97.31%
75.0	19.826	12.176	1099.034	0.00%	98.40%
80.0	12.861	8.746	1107.78	0.00%	99.19%
85.0	7.175	5.444	1113.224	0.00%	99.68%
90.0	0.971	2.231	1115.455	0.00%	99.88%
95.0	0.011	0.269	1115.724	0.00%	99.90%
100.0	0.011	0.006	1115.73	0.00%	99.90%
105.0	0.011	0.006	1115.736	0.00%	99.90%
110.0	0.011	0.006	1115.742	0.00%	99.90%
115.0	0.011	0.006	1115.747	0.00%	99.90%
120.0	0.044	0.013	1115.761	0.00%	99.90%
125.0	0.044	0.020	1115.781	0.00%	99.90%
130.0	0.088	0.029	1115.81	0.00%	99.91%
135.0	0.122	0.042	1115.852	0.00%	99.91%
140.0	0.177	0.055	1115.908	0.00%	99.92%
145.0	0.364	0.090	1115.998	0.00%	99.92%
150.0	0.464	0.122	1116.12	0.00%	99.93%
155.0	0.739	0.152	1116.272	0.00%	99.95%
160.0	0.883	0.170	1116.442	0.00%	99.96%
165.0	1.071	0.161	1116.603	0.00%	99.98%
170.0	1.148	0.132	1116.735	0.00%	99.99%
175.0	1.192	0.084	1116.819	0.00%	100.00%
180.0	1.319	0.030	1116.849	0.00%	100.00%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	772.12	N.A.	69.13%
0-40	921.72	N.A.	82.53%
0-60	1052.66	N.A.	94.25%
0-90	1115.46	N.A.	99.88%
0-120	1115.76	N.A.	99.90%
0-180	1116.85	N.A.	100.00%
60-90	62.80	N.A.	5.62%
90-120	0.31	N.A.	0.03%
90-130	0.36	N.A.	0.03%
90-150	0.66	N.A.	0.06%
90-180	1.36	N.A.	0.12%
0-37.60	893.48	N.A.	80.00%

## ZONAL LUMEN SUMMARY

0-10	149.95
10-20	325.16
20-30	297.01
30-40	149.60
40-50	79.36
50-60	51.58
60-70	34.20
70-80	20.92
80-90	7.67
90-100	0.28
100-110	0.01
110-120	0.02
120-130	0.05
130-140	0.10
140-150	0.21
150-160	0.32
160-170	0.29
170-180	0.08



C0/C180: —

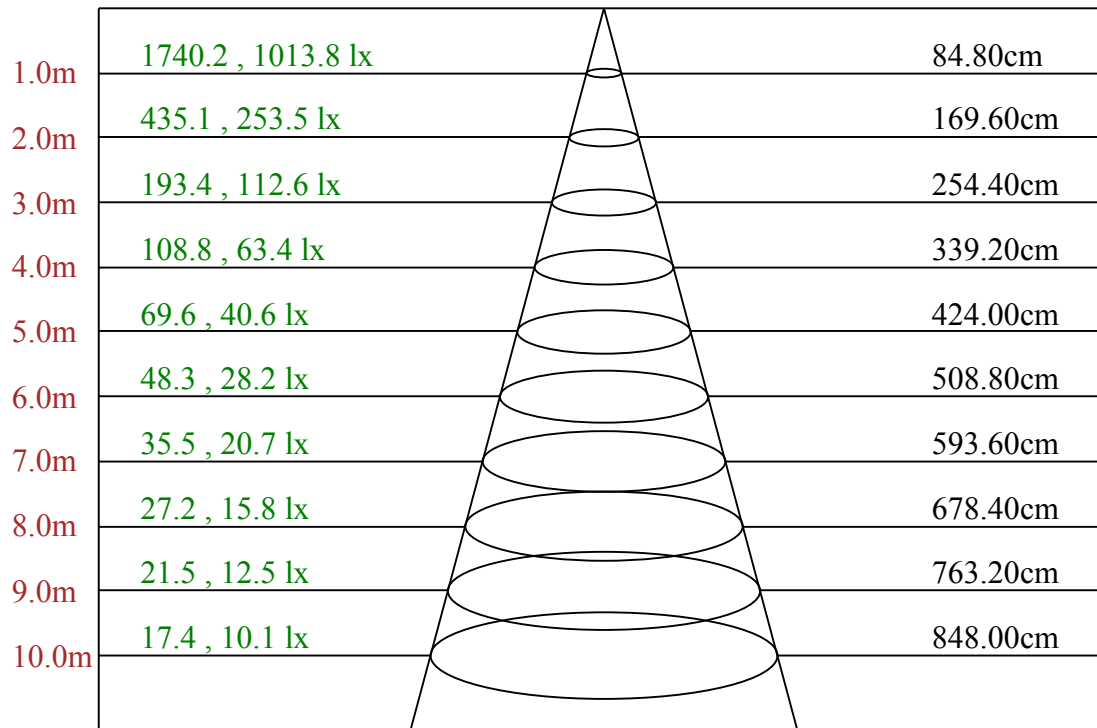
C90/C270: —

Field angle(10%Imax):C0/180Left:39.1 Right:34.9

:C90/270Left:35.7 Right:38.4

Beam Angle(50%Imax):C0/180Left:22.7 Right:18.5

:C90/270Left:19.3 Right:22.4



Max , Ave      Beam angle of C180 plane 45.95

## LL4G-27K-HO

Appendix Page: 6 Total:7

## Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1740.22	1514.02	1263.22	1049.15	802.23	550.54	316.69	173.45	117.81
22.5	1740.22	1508.72	1258.09	1036.61	788.10	528.99	291.96	163.55	115.69
45.0	1740.22	1507.84	1258.27	1029.90	779.44	523.16	289.49	163.02	114.10
67.5	1740.22	1505.19	1270.63	1039.96	779.62	526.52	296.73	166.91	113.92
90.0	1740.22	1744.16	1537.34	1271.52	998.46	739.17	452.33	237.03	146.25
112.5	1740.22	1739.39	1544.40	1281.41	1007.82	755.77	488.72	260.17	149.07
135.0	1740.22	1747.52	1551.64	1286.18	1011.70	770.61	506.38	277.83	156.49
157.5	1740.22	1755.29	1561.71	1288.83	1019.30	771.32	506.56	282.95	157.37
180.0	1740.22	1755.82	1574.25	1308.79	1018.06	760.01	490.49	264.41	155.43
202.5	1740.22	1754.05	1573.01	1297.66	1004.99	750.48	465.58	248.33	153.84
225.0	1740.22	1755.47	1558.53	1281.06	1002.52	726.81	452.51	244.45	153.49
247.5	1740.22	1745.22	1551.11	1279.29	989.63	721.16	453.92	246.21	153.13
270.0	1740.22	1592.80	1338.81	1099.66	835.43	589.40	330.46	181.92	126.11
292.5	1740.22	1559.94	1319.03	1092.60	830.13	589.57	345.48	186.69	123.99
315.0	1740.22	1544.23	1288.47	1068.58	826.42	587.98	350.07	189.87	122.93
337.5	1740.22	1532.57	1274.17	1052.50	809.82	580.56	342.30	184.40	120.99
360.0	1740.22	1514.02	1263.22	1049.15	802.23	550.54	316.69	173.45	117.81
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	89.02	66.06	50.69	39.39	31.26	24.37	17.66	10.95	5.30
22.5	86.72	64.64	49.46	38.50	31.09	24.02	17.31	10.60	5.12
45.0	85.84	63.59	48.75	38.15	30.91	24.02	16.96	10.42	5.12
67.5	85.66	63.94	49.46	38.33	30.91	24.02	16.96	10.42	4.95
90.0	107.56	80.19	60.41	46.45	36.74	28.79	21.90	14.66	8.66
112.5	108.27	81.25	60.76	46.10	36.39	28.61	21.55	14.13	8.48
135.0	109.68	81.95	61.29	46.45	36.39	28.26	21.55	14.31	8.48
157.5	111.45	82.66	62.00	46.63	36.39	28.61	21.90	14.48	8.66
180.0	112.33	83.72	62.17	46.45	36.21	28.97	21.73	14.31	8.83
202.5	114.10	84.07	62.00	46.63	36.39	28.79	21.73	14.66	9.01
225.0	113.57	83.72	62.00	46.81	36.21	28.79	22.08	14.84	8.83
247.5	112.69	84.25	62.53	46.45	36.39	28.97	22.43	14.84	9.01
270.0	95.55	71.18	53.52	41.51	33.21	25.96	18.55	12.36	6.71
292.5	94.14	70.65	53.52	41.33	33.03	25.61	18.55	11.83	6.01
315.0	92.90	69.24	52.99	40.98	32.68	25.26	18.55	11.66	6.01
337.5	91.32	67.82	51.57	39.92	31.97	25.08	17.84	11.30	5.65
360.0	89.02	66.06	50.69	39.39	31.26	24.37	17.66	10.95	5.30
C/ $\gamma$ (°)	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	0.18
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
90.0	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	1.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	1.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.18	0.18	0.18	0.18	0.18	0.18	0.53	0.35	0.35
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.18
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18

Equipment: GMS-3000  
Temperature(°C): 25Date:  
Humidity(%): 59%

Operator: jarvis

LL4G-27K-HO

Intensity data(cd)

Appendix Page: 7 Total:7

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.18	0.18	0.35	0.53	0.71	1.06	1.06	1.24	1.06
22.5	0.18	0.35	0.35	0.53	0.71	0.88	1.06	1.24	1.24
45.0	0.18	0.18	0.53	0.53	0.88	1.06	1.24	1.24	1.24
67.5	0.18	0.18	0.53	0.53	0.88	0.88	1.24	1.06	1.24
90.0	0.00	0.18	0.35	0.53	0.88	1.06	1.06	1.24	1.24
112.5	0.00	0.00	0.18	0.35	0.53	0.88	1.06	1.06	1.06
135.0	0.00	0.00	0.18	0.18	0.71	0.71	1.06	0.88	1.24
157.5	0.00	0.00	0.18	0.18	0.71	0.71	0.88	1.06	0.88
180.0	0.00	0.18	0.00	0.35	0.53	0.71	0.71	1.06	1.06
202.5	0.00	0.00	0.35	0.35	0.53	0.71	0.88	1.06	1.06
225.0	0.00	0.00	0.00	0.18	0.53	0.71	1.06	1.24	1.24
247.5	0.00	0.00	0.18	0.18	0.53	0.53	0.88	1.06	1.24
270.0	0.71	0.53	0.88	1.06	1.24	1.41	1.59	1.77	1.59
292.5	0.35	0.35	0.53	0.53	0.88	1.06	1.06	0.88	1.06
315.0	0.18	0.35	0.53	0.71	0.71	0.88	1.06	1.24	1.24
337.5	0.00	0.35	0.71	0.71	0.88	0.88	1.24	1.06	1.41
360.0	0.18	0.18	0.35	0.53	0.71	1.06	1.06	1.24	1.06

C/γ(°)	180.0
0.0	1.32
22.5	1.32
45.0	1.32
67.5	1.32
90.0	1.32
112.5	1.32
135.0	1.32
157.5	1.32
180.0	1.32
202.5	1.32
225.0	1.32
247.5	1.32
270.0	1.32
292.5	1.32
315.0	1.32
337.5	1.32
360.0	1.32