



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

LumCAT: LL4G-30K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.10

LampCAT:

Current(A): 0.1250

Lamp flux(lm): -1.0

Power (W): 14.79

Number of Lamps: 1

PF: 0.9865

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1225.61, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 82.86

Central intensity(cd): 1866.751, Maximum intensity(cd): 1966.486

Angle of maximum intensity: C=247.5 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=41.0

[C90/270]Total=40.3

Field angle(10%Imax): [C0/180]Total=75.7

[C90/270]Total=73.9

Maximum s/h(1/2): C0_180=0.70 C90_270=0.70

Maximum s/h(1/4): C0_180=0.74 C90_270=0.72

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.13%

Down flux rate of LUM(%): 99.87%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.318%

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

Date:
Humidity(%): 59%

Operator: jarvis

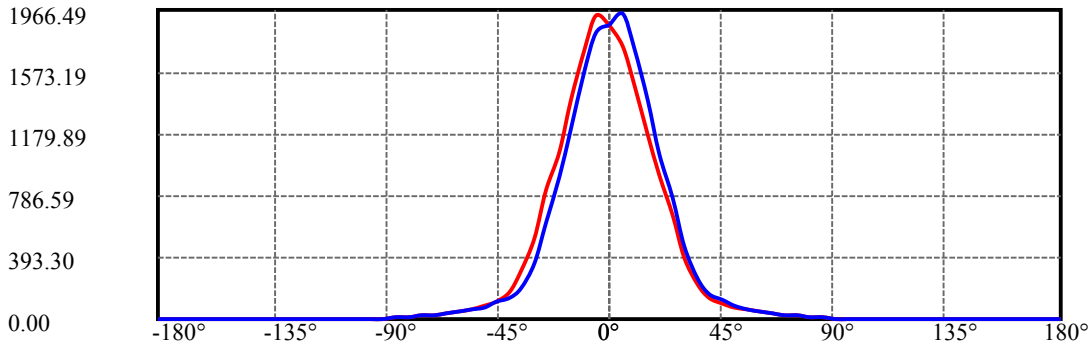
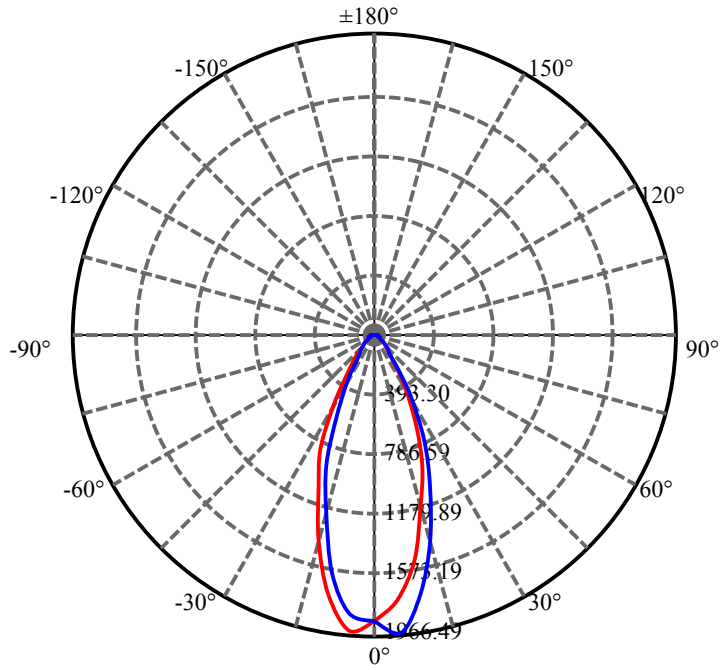
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1866.751	0.000	0	0.00%	0.00%
5.0	1848.114	44.410	44.41	0.00%	3.62%
10.0	1618.223	124.002	168.412	0.00%	13.74%
15.0	1291.817	172.622	341.034	0.00%	27.83%
20.0	987.732	187.867	528.9	0.00%	43.15%
25.0	711.032	178.169	707.069	0.00%	57.69%
30.0	429.268	144.306	851.375	0.00%	69.47%
35.0	242.837	98.972	950.347	0.00%	77.54%
40.0	150.036	65.548	1015.895	0.00%	82.89%
45.0	108.931	47.950	1063.845	0.00%	86.80%
50.0	78.716	37.917	1101.762	0.00%	89.89%
55.0	59.490	30.051	1131.812	0.00%	92.35%
60.0	45.007	24.154	1155.967	0.00%	94.32%
65.0	36.141	19.727	1175.694	0.00%	95.93%
70.0	28.700	16.418	1192.112	0.00%	97.27%
75.0	21.702	13.174	1205.287	0.00%	98.34%
80.0	14.693	9.738	1215.025	0.00%	99.14%
85.0	8.358	6.264	1221.288	0.00%	99.65%
90.0	1.426	2.679	1223.968	0.00%	99.87%
95.0	0.011	0.394	1224.361	0.00%	99.90%
100.0	0.011	0.006	1224.367	0.00%	99.90%
105.0	0.022	0.009	1224.376	0.00%	99.90%
110.0	0.022	0.012	1224.388	0.00%	99.90%
115.0	0.044	0.017	1224.404	0.00%	99.90%
120.0	0.033	0.019	1224.423	0.00%	99.90%
125.0	0.033	0.015	1224.438	0.00%	99.90%
130.0	0.100	0.029	1224.467	0.00%	99.91%
135.0	0.155	0.051	1224.519	0.00%	99.91%
140.0	0.210	0.068	1224.586	0.00%	99.92%
145.0	0.387	0.100	1224.686	0.00%	99.92%
150.0	0.553	0.138	1224.824	0.00%	99.94%
155.0	0.785	0.169	1224.994	0.00%	99.95%
160.0	0.962	0.183	1225.177	0.00%	99.96%
165.0	1.127	0.172	1225.349	0.00%	99.98%
170.0	1.238	0.140	1225.489	0.00%	99.99%
175.0	1.260	0.089	1225.579	0.00%	100.00%
180.0	1.321	0.031	1225.61	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	851.38	N.A.	69.47%
0-40	1015.90	N.A.	82.89%
0-60	1155.97	N.A.	94.32%
0-90	1223.97	N.A.	99.87%
0-120	1224.42	N.A.	99.90%
0-180	1225.61	N.A.	100.00%
60-90	68.00	N.A.	5.55%
90-120	0.46	N.A.	0.04%
90-130	0.50	N.A.	0.04%
90-150	0.86	N.A.	0.07%
90-180	1.61	N.A.	0.13%
0-37.30	980.49	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	168.41
10-20	360.49
20-30	322.47
30-40	164.52
40-50	85.87
50-60	54.20
60-70	36.15
70-80	22.91
80-90	8.94
90-100	0.40
100-110	0.02
110-120	0.04
120-130	0.04
130-140	0.12
140-150	0.24
150-160	0.35
160-170	0.31
170-180	0.09

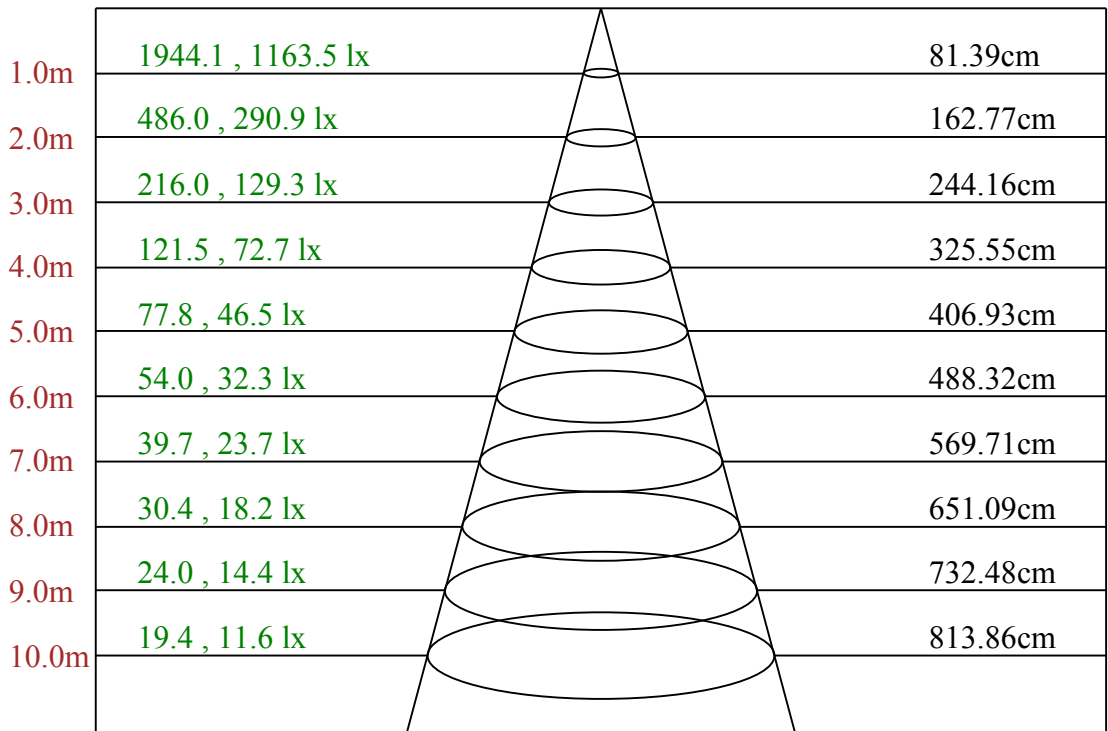


C0/C180: —

C90/C270: —

Field angle(10%Imax):C0/180Left:39.0 Right:36.7
:C90/270Left:35.5 Right:38.4

Beam Angle(50%Imax):C0/180Left:21.9 Right:19.1
:C90/270Left:19.0 Right:21.3



Max , Ave Beam angle of C247.5 plane 44.29

LL4G-30K-HO

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	1866.75	1738.48	1490.48	1166.59	921.24	663.69	395.53	220.76	138.33
22.5	1866.75	1719.73	1468.90	1146.96	894.18	630.26	366.69	201.66	134.44
45.0	1866.75	1704.51	1441.12	1131.04	872.07	582.15	326.19	188.03	130.37
67.5	1866.75	1685.76	1421.31	1089.64	836.16	548.71	303.19	176.54	126.65
90.0	1866.75	1944.20	1719.55	1394.96	1047.19	764.17	464.51	262.15	162.74
112.5	1866.75	1931.11	1699.74	1384.52	1043.83	771.95	467.87	262.33	159.91
135.0	1866.75	1924.39	1694.96	1377.62	1064.17	794.77	488.22	274.18	159.02
157.5	1866.75	1920.67	1687.00	1394.96	1065.23	794.59	513.34	292.75	162.92
180.0	1866.75	1933.41	1714.60	1389.65	1058.86	815.64	518.82	301.24	165.75
202.5	1866.75	1949.51	1736.53	1417.24	1079.74	807.33	513.51	294.17	168.05
225.0	1866.75	1959.23	1778.63	1455.10	1093.89	807.68	504.31	285.15	168.22
247.5	1866.75	1966.49	1802.51	1472.61	1091.59	810.16	495.47	281.96	170.70
270.0	1866.75	1819.67	1578.57	1211.52	908.86	604.96	350.60	201.48	135.68
292.5	1866.75	1812.42	1573.61	1218.07	929.38	635.39	363.69	204.66	137.80
315.0	1866.75	1791.19	1555.39	1218.95	955.38	674.13	389.34	212.98	140.10
337.5	1866.75	1769.08	1528.68	1199.67	941.94	670.94	407.02	225.36	139.92
360.0	1866.75	1738.48	1490.48	1166.59	921.24	663.69	395.53	220.76	138.33
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	103.48	75.71	57.31	44.22	36.44	28.83	21.76	14.33	8.14
22.5	101.18	73.23	55.54	42.63	35.38	27.60	20.87	13.62	7.43
45.0	96.94	70.58	53.78	41.22	33.79	26.53	19.81	12.74	6.72
67.5	93.58	68.28	52.01	40.69	32.73	25.47	18.22	12.21	5.48
90.0	116.39	82.79	62.44	47.58	37.68	30.07	22.82	15.57	9.20
112.5	114.80	81.02	61.03	46.17	36.62	29.19	22.11	14.86	8.49
135.0	112.86	79.78	60.67	45.46	35.91	28.48	21.40	14.33	8.49
157.5	112.15	80.49	60.50	45.11	35.91	28.66	21.40	14.15	8.49
180.0	114.45	81.02	61.20	45.99	36.09	28.83	21.76	14.68	8.49
202.5	115.86	82.79	63.15	46.70	36.26	29.01	22.29	15.21	9.02
225.0	117.46	84.91	64.39	47.23	37.15	29.89	23.00	16.10	9.73
247.5	121.17	86.50	65.27	48.82	38.21	30.96	23.88	17.34	10.44
270.0	104.37	77.48	58.02	44.40	36.09	28.48	21.76	14.86	8.31
292.5	105.78	78.19	58.73	44.22	36.44	28.66	21.93	14.86	8.49
315.0	106.84	78.72	58.90	44.93	36.62	29.19	22.11	15.21	8.49
337.5	105.60	78.01	58.90	44.75	36.97	29.36	22.11	15.04	8.31
360.0	103.48	75.71	57.31	44.22	36.44	28.83	21.76	14.33	8.14
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	0.18
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	0.00	0.18
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	1.06	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	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	4.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	4.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.35	0.18	0.18	0.35	0.35	0.53	0.35	0.53	0.53
292.5	0.53	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.35
315.0	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18

LL4G-30K-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	0.71	0.88	0.88	1.06	1.24	1.24
22.5	0.35	0.35	0.53	0.88	0.71	1.06	1.24	1.24	1.24
45.0	0.18	0.35	0.53	0.71	0.71	1.06	1.06	1.24	1.42
67.5	0.35	0.53	0.53	0.53	0.88	1.06	1.06	1.06	1.24
90.0	0.00	0.35	0.35	0.53	0.71	1.06	1.24	1.42	1.42
112.5	0.00	0.00	0.18	0.35	0.71	0.88	1.06	1.24	1.06
135.0	0.00	0.00	0.18	0.53	0.71	0.88	0.88	0.88	1.06
157.5	0.00	0.00	0.35	0.18	0.71	0.88	1.06	1.24	1.24
180.0	0.00	0.00	0.35	0.35	0.71	0.88	1.24	1.24	1.06
202.5	0.00	0.00	0.18	0.18	0.71	0.71	1.24	1.24	1.24
225.0	0.00	0.00	0.00	0.35	0.71	0.88	0.88	1.06	1.24
247.5	0.00	0.00	0.18	0.53	0.71	0.88	0.88	1.06	1.24
270.0	0.71	0.71	0.88	1.06	1.24	1.42	1.77	1.59	1.77
292.5	0.35	0.35	0.53	0.88	0.71	1.06	1.06	1.24	1.42
315.0	0.18	0.18	0.53	0.53	0.88	0.88	1.06	1.42	1.24
337.5	0.18	0.35	0.53	0.53	0.88	0.88	1.24	1.42	1.06
360.0	0.18	0.18	0.35	0.71	0.88	0.88	1.06	1.24	1.24

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