



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

LumCAT: LL4G-50K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.10

LampCAT:

Current(A): 0.1230

Lamp flux(lm): -1.0

Power (W): 14.62

Number of Lamps: 1

PF: 0.9865

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1426.77, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 97.57

Central intensity(cd): 2173.137, Maximum intensity(cd): 2289.241

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

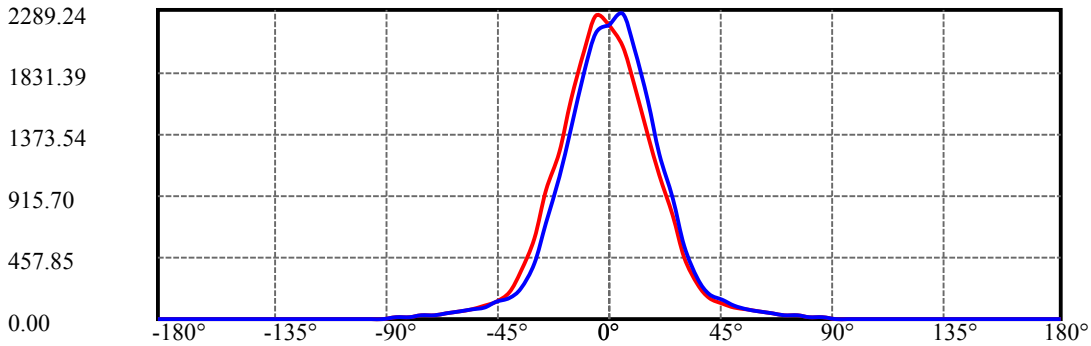
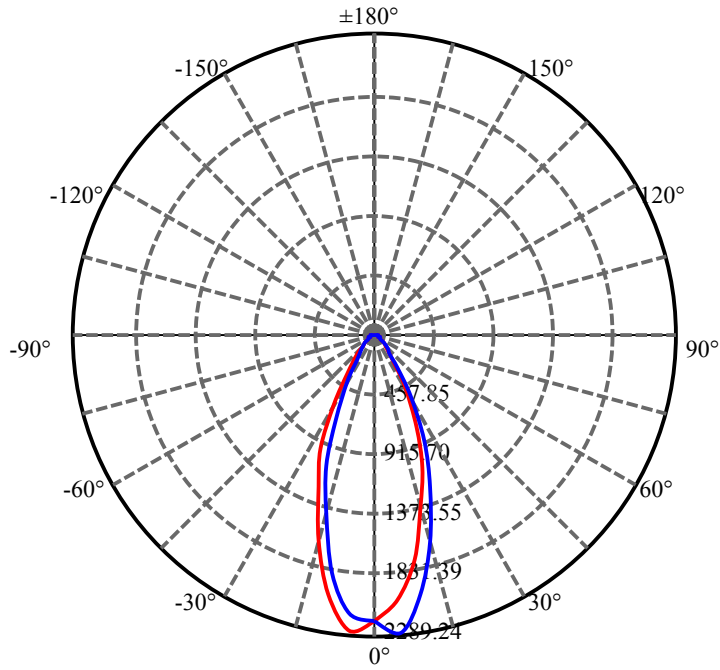
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2173.137	0.000	0	0.00%	0.00%
5.0	2151.440	51.699	51.699	0.00%	3.62%
10.0	1883.818	144.354	196.053	0.00%	13.74%
15.0	1503.839	200.954	397.006	0.00%	27.83%
20.0	1149.846	218.701	615.707	0.00%	43.15%
25.0	827.731	207.411	823.119	0.00%	57.69%
30.0	499.722	167.990	991.109	0.00%	69.47%
35.0	282.693	115.216	1106.325	0.00%	77.54%
40.0	174.661	76.306	1182.631	0.00%	82.89%
45.0	126.810	55.820	1238.451	0.00%	86.80%
50.0	91.636	44.140	1282.591	0.00%	89.90%
55.0	69.254	34.983	1317.574	0.00%	92.35%
60.0	52.394	28.119	1345.693	0.00%	94.32%
65.0	42.073	22.965	1368.658	0.00%	95.93%
70.0	33.411	19.113	1387.771	0.00%	97.27%
75.0	25.264	15.337	1403.107	0.00%	98.34%
80.0	17.104	11.337	1414.444	0.00%	99.14%
85.0	9.730	7.291	1421.735	0.00%	99.65%
90.0	1.660	3.119	1424.854	0.00%	99.87%
95.0	0.013	0.458	1425.312	0.00%	99.90%
100.0	0.013	0.007	1425.319	0.00%	99.90%
105.0	0.026	0.010	1425.329	0.00%	99.90%
110.0	0.026	0.013	1425.343	0.00%	99.90%
115.0	0.052	0.020	1425.362	0.00%	99.90%
120.0	0.039	0.022	1425.384	0.00%	99.90%
125.0	0.039	0.018	1425.402	0.00%	99.90%
130.0	0.116	0.034	1425.436	0.00%	99.91%
135.0	0.180	0.060	1425.496	0.00%	99.91%
140.0	0.245	0.079	1425.574	0.00%	99.92%
145.0	0.451	0.116	1425.69	0.00%	99.92%
150.0	0.644	0.161	1425.852	0.00%	99.94%
155.0	0.914	0.197	1426.049	0.00%	99.95%
160.0	1.120	0.213	1426.262	0.00%	99.96%
165.0	1.313	0.201	1426.462	0.00%	99.98%
170.0	1.441	0.163	1426.626	0.00%	99.99%
175.0	1.467	0.104	1426.73	0.00%	100.00%
180.0	1.538	0.036	1426.766	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	991.11	N.A.	69.47%
0-40	1182.63	N.A.	82.89%
0-60	1345.69	N.A.	94.32%
0-90	1424.85	N.A.	99.87%
0-120	1425.38	N.A.	99.90%
0-180	1426.77	N.A.	100.00%
60-90	79.16	N.A.	5.55%
90-120	0.53	N.A.	0.04%
90-130	0.58	N.A.	0.04%
90-150	1.00	N.A.	0.07%
90-180	1.88	N.A.	0.13%
0-37.30	1141.41	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	196.05
10-20	419.65
20-30	375.40
30-40	191.52
40-50	99.96
50-60	63.10
60-70	42.08
70-80	26.67
80-90	10.41
90-100	0.47
100-110	0.02
110-120	0.04
120-130	0.05
130-140	0.14
140-150	0.28
150-160	0.41
160-170	0.36
170-180	0.10



C0/C180: —

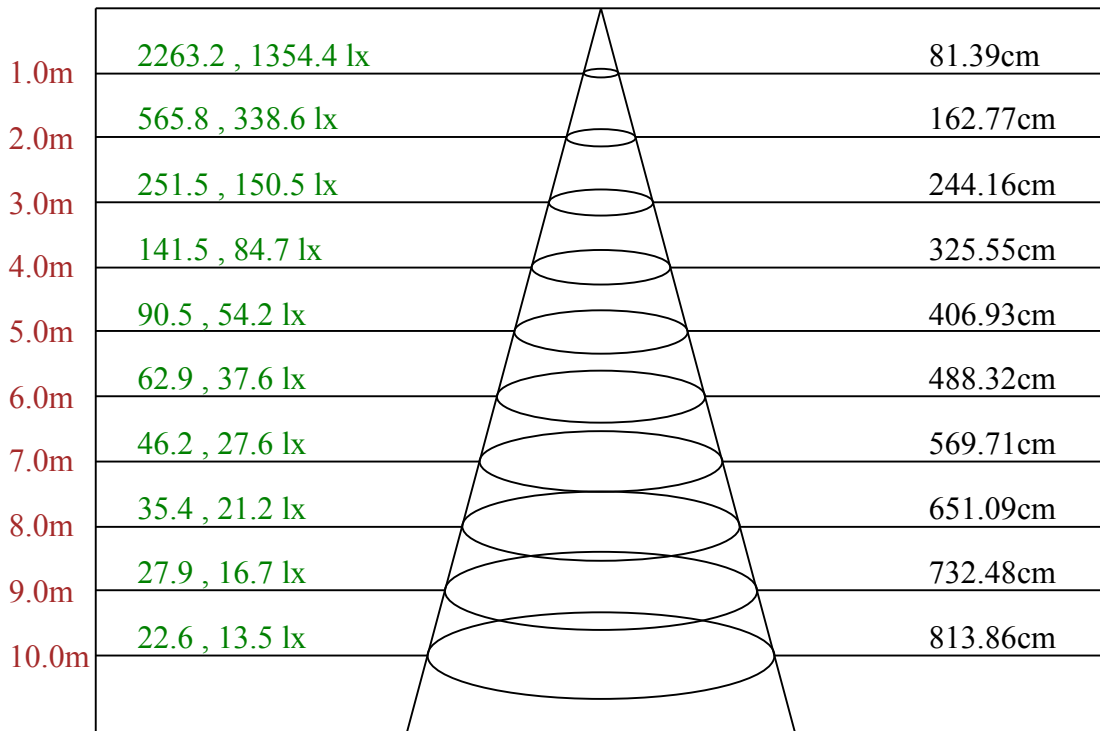
C90/C270: —

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

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	2173.14	2023.81	1735.10	1358.06	1072.45	772.62	460.44	256.99	161.03
22.5	2173.14	2001.98	1709.98	1335.20	1040.94	733.70	426.88	234.75	156.50
45.0	2173.14	1984.27	1677.65	1316.67	1015.20	677.69	379.72	218.90	151.77
67.5	2173.14	1962.44	1654.59	1268.48	973.40	638.77	352.95	205.51	147.44
90.0	2173.14	2263.29	2001.77	1623.91	1219.06	889.59	540.75	305.18	189.45
112.5	2173.14	2248.06	1978.71	1611.76	1215.15	898.65	544.67	305.38	186.15
135.0	2173.14	2240.23	1973.15	1603.73	1238.83	925.21	568.35	319.18	185.12
157.5	2173.14	2235.91	1963.88	1623.91	1240.07	925.00	597.59	340.80	189.66
180.0	2173.14	2250.73	1996.01	1617.73	1232.65	949.51	603.97	350.69	192.95
202.5	2173.14	2269.47	2021.54	1649.85	1256.95	939.83	597.79	342.45	195.63
225.0	2173.14	2280.80	2070.55	1693.92	1273.43	940.24	587.09	331.95	195.83
247.5	2173.14	2289.24	2098.35	1714.31	1270.75	943.13	576.79	328.24	198.72
270.0	2173.14	2118.33	1837.65	1410.36	1058.03	704.26	408.14	234.55	157.94
292.5	2173.14	2109.88	1831.89	1417.98	1081.92	739.67	423.38	238.25	160.41
315.0	2173.14	2085.17	1810.68	1419.01	1112.19	784.77	453.24	247.93	163.09
337.5	2173.14	2059.43	1779.58	1396.57	1096.54	781.06	473.83	262.35	162.89
360.0	2173.14	2023.81	1735.10	1358.06	1072.45	772.62	460.44	256.99	161.03
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	120.47	88.14	66.72	51.48	42.42	33.57	25.33	16.68	9.47
22.5	117.79	85.25	64.66	49.63	41.19	32.12	24.30	15.86	8.65
45.0	112.85	82.16	62.60	47.98	39.33	30.89	23.06	14.83	7.83
67.5	108.93	79.49	60.54	47.36	38.10	29.65	21.21	14.21	6.38
90.0	135.50	96.37	72.69	55.39	43.86	35.01	26.56	18.12	10.71
112.5	133.64	94.31	71.04	53.75	42.63	33.98	25.74	17.30	9.88
135.0	131.38	92.87	70.63	52.92	41.80	33.15	24.92	16.68	9.88
157.5	130.56	93.70	70.43	52.51	41.80	33.36	24.92	16.47	9.88
180.0	133.23	94.31	71.25	53.54	42.01	33.57	25.33	17.09	9.88
202.5	134.88	96.37	73.51	54.36	42.21	33.77	25.95	17.71	10.50
225.0	136.73	98.84	74.96	54.98	43.24	34.80	26.77	18.74	11.33
247.5	141.06	100.70	75.99	56.84	44.48	36.04	27.80	20.18	12.15
270.0	121.49	90.19	67.54	51.69	42.01	33.15	25.33	17.30	9.68
292.5	123.14	91.02	68.37	51.48	42.42	33.36	25.53	17.30	9.88
315.0	124.38	91.64	68.57	52.30	42.63	33.98	25.74	17.71	9.88
337.5	122.94	90.81	68.57	52.10	43.04	34.18	25.74	17.50	9.68
360.0	120.47	88.14	66.72	51.48	42.42	33.57	25.33	16.68	9.47
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	0.21
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	0.00
90.0	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	2.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	4.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	4.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	5.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.41	0.21	0.21	0.41	0.41	0.62	0.41	0.62	0.62
292.5	0.62	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.41
315.0	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21

LL4G-50K-HO

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	0.21	0.21	0.41	0.82	1.03	1.03	1.24	1.44	1.44
22.5	0.41	0.41	0.62	1.03	0.82	1.24	1.44	1.44	1.44
45.0	0.21	0.41	0.62	0.82	0.82	1.24	1.24	1.44	1.65
67.5	0.41	0.62	0.62	0.62	1.03	1.24	1.24	1.24	1.44
90.0	0.00	0.41	0.41	0.62	0.82	1.24	1.44	1.65	1.65
112.5	0.00	0.00	0.21	0.41	0.82	1.03	1.24	1.44	1.24
135.0	0.00	0.00	0.21	0.62	0.82	1.03	1.03	1.03	1.24
157.5	0.00	0.00	0.41	0.21	0.82	1.03	1.24	1.44	1.44
180.0	0.00	0.00	0.41	0.41	0.82	1.03	1.44	1.44	1.24
202.5	0.00	0.00	0.21	0.21	0.82	0.82	1.44	1.44	1.44
225.0	0.00	0.00	0.00	0.41	0.82	1.03	1.03	1.24	1.44
247.5	0.00	0.00	0.21	0.62	0.82	1.03	1.03	1.24	1.44
270.0	0.82	0.82	1.03	1.24	1.44	1.65	2.06	1.85	2.06
292.5	0.41	0.41	0.62	1.03	0.82	1.24	1.24	1.44	1.65
315.0	0.21	0.21	0.62	0.62	1.03	1.03	1.24	1.65	1.44
337.5	0.21	0.41	0.62	0.62	1.03	1.03	1.44	1.65	1.24
360.0	0.21	0.21	0.41	0.82	1.03	1.03	1.24	1.44	1.44

C/γ(°)	180.0
0.0	1.54
22.5	1.54
45.0	1.54
67.5	1.54
90.0	1.54
112.5	1.54
135.0	1.54
157.5	1.54
180.0	1.54
202.5	1.54
225.0	1.54
247.5	1.54
270.0	1.54
292.5	1.54
315.0	1.54
337.5	1.54
360.0	1.54