



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

LumCAT: LRG3-50K

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.00

LampCAT:

Current(A): 0.0620

Lamp flux(lm): -1.0

Power (W): 7.20

Number of Lamps: 1

PF: 0.9628

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

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Lumens(lm): 661.24, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 91.83

Central intensity(cd): 973.198, Maximum intensity(cd): 1061.885

Angle of maximum intensity: C=135.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=46.2

[C90/270]Total=46.4

Field angle(10%Imax): [C0/180]Total=69.4

[C90/270]Total=69.0

Maximum s/h(1/2): C0\_180=0.80 C90\_270=0.83

Maximum s/h(1/4): C0\_180=0.73 C90\_270=0.75

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.10%

Down flux rate of LUM(%): 99.90%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.132%

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

Date:  
Humidity(%): 59%

Operator: jarvis

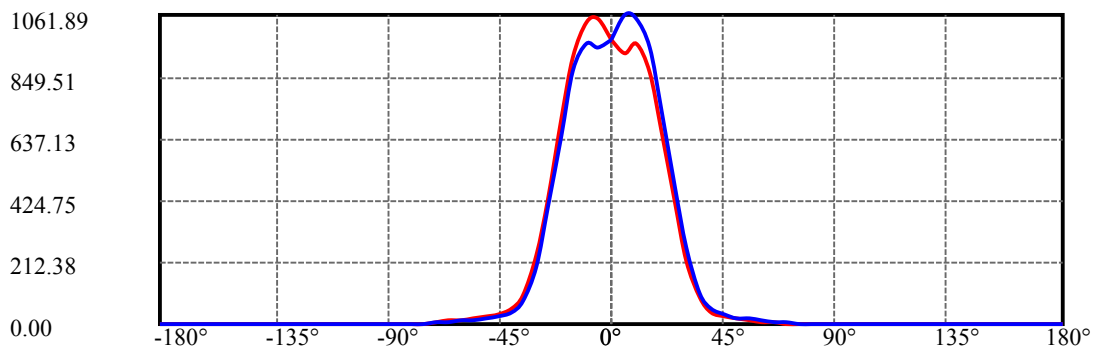
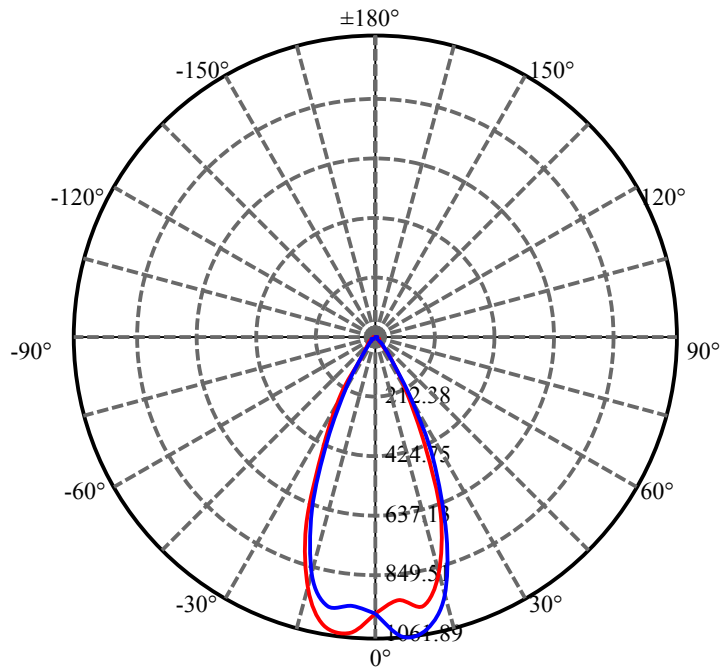
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	973.198	0.000	0	0.00%	0.00%
5.0	996.034	23.542	23.542	0.00%	3.56%
10.0	999.878	71.400	94.942	0.00%	14.36%
15.0	894.229	112.357	207.299	0.00%	31.35%
20.0	688.168	130.412	337.711	0.00%	51.07%
25.0	433.757	117.669	455.38	0.00%	68.87%
30.0	226.741	83.587	538.966	0.00%	81.51%
35.0	96.455	47.593	586.559	0.00%	88.71%
40.0	47.059	23.944	610.503	0.00%	92.33%
45.0	28.694	14.026	624.53	0.00%	94.45%
50.0	20.377	9.915	634.445	0.00%	95.95%
55.0	16.061	7.923	642.368	0.00%	97.15%
60.0	12.127	6.516	648.883	0.00%	98.13%
65.0	8.059	4.907	653.79	0.00%	98.87%
70.0	4.810	3.258	657.049	0.00%	99.37%
75.0	2.248	1.845	658.894	0.00%	99.65%
80.0	1.371	0.968	659.862	0.00%	99.79%
85.0	0.596	0.534	660.397	0.00%	99.87%
90.0	0.011	0.166	660.563	0.00%	99.90%
95.0	0.011	0.006	660.569	0.00%	99.90%
100.0	0.000	0.003	660.572	0.00%	99.90%
105.0	0.011	0.003	660.575	0.00%	99.90%
110.0	0.011	0.006	660.581	0.00%	99.90%
115.0	0.011	0.006	660.586	0.00%	99.90%
120.0	0.023	0.008	660.595	0.00%	99.90%
125.0	0.045	0.016	660.61	0.00%	99.91%
130.0	0.034	0.017	660.627	0.00%	99.91%
135.0	0.067	0.020	660.648	0.00%	99.91%
140.0	0.079	0.027	660.675	0.00%	99.92%
145.0	0.146	0.038	660.712	0.00%	99.92%
150.0	0.292	0.065	660.777	0.00%	99.93%
155.0	0.461	0.095	660.872	0.00%	99.94%
160.0	0.562	0.107	660.98	0.00%	99.96%
165.0	0.674	0.102	661.081	0.00%	99.98%
170.0	0.730	0.083	661.165	0.00%	99.99%
175.0	0.742	0.053	661.217	0.00%	100.00%
180.0	0.846	0.019	661.236	0.00%	100.00%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	538.97	N.A.	81.51%
0-40	610.50	N.A.	92.33%
0-60	648.88	N.A.	98.13%
0-90	660.56	N.A.	99.90%
0-120	660.59	N.A.	99.90%
0-180	661.24	N.A.	100.00%
60-90	11.68	N.A.	1.77%
90-120	0.03	N.A.	0.00%
90-130	0.06	N.A.	0.01%
90-150	0.21	N.A.	0.03%
90-180	0.65	N.A.	0.10%
0-29.40	528.99	N.A.	80.00%

## ZONAL LUMEN SUMMARY

0-10	94.94
10-20	242.77
20-30	201.26
30-40	71.54
40-50	23.94
50-60	14.44
60-70	8.17
70-80	2.81
80-90	0.70
90-100	0.01
100-110	0.01
110-120	0.01
120-130	0.03
130-140	0.05
140-150	0.10
150-160	0.20
160-170	0.19
170-180	0.05

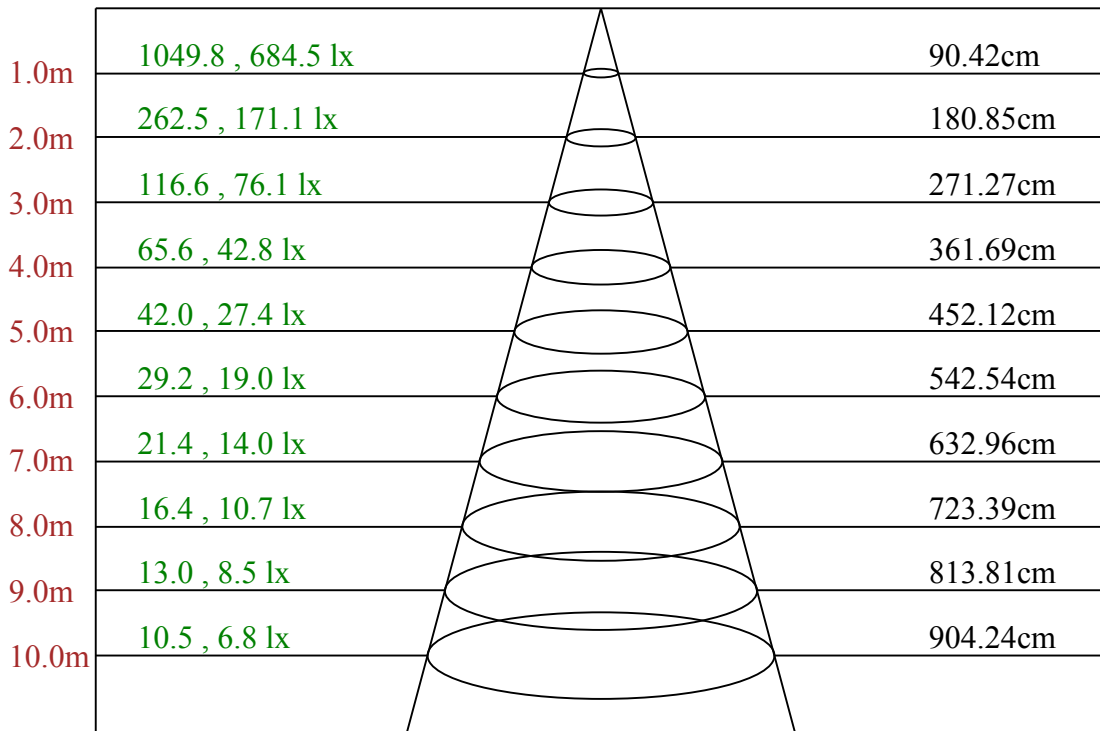


C0/C180: —

C90/C270: —

Field angle(10%Imax):C0/180Left:34.8 Right:34.6  
:C90/270Left:34.0 Right:35.0

Beam Angle(50%Imax):C0/180Left:23.3 Right:22.9  
:C90/270Left:22.4 Right:24.0



Max , Ave      Beam angle of C135 plane 48.66

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	973.20	928.81	961.00	863.00	663.93	422.06	219.03	94.77	42.44
22.5	973.20	946.98	958.84	863.00	654.57	428.35	222.45	95.13	42.08
45.0	973.20	958.30	975.21	862.10	664.11	434.65	221.73	96.57	43.16
67.5	973.20	973.41	985.82	856.52	677.05	432.31	213.10	94.59	43.70
90.0	973.20	1059.01	1046.06	948.41	739.27	473.85	260.75	106.28	51.61
112.5	973.20	1060.81	1049.66	939.60	721.65	465.58	249.06	100.70	51.79
135.0	973.20	1061.89	1044.44	929.71	711.40	451.55	243.31	103.58	54.49
157.5	973.20	1056.31	1039.77	927.55	706.01	436.80	245.11	103.76	55.03
180.0	973.20	1046.78	1032.21	919.28	706.72	426.19	237.37	99.98	53.59
202.5	973.20	1037.61	1024.12	912.09	708.88	432.49	229.10	99.98	51.43
225.0	973.20	1032.03	1018.55	916.40	718.23	436.26	228.56	102.32	49.63
247.5	973.20	1030.24	1022.68	916.22	725.25	450.47	233.60	100.52	47.65
270.0	973.20	948.59	964.24	869.47	648.10	402.64	200.87	82.18	42.08
292.5	973.20	942.84	956.69	863.18	651.52	408.21	198.71	81.64	40.46
315.0	973.20	932.59	955.25	861.02	655.65	415.40	207.70	87.22	41.72
337.5	973.20	920.36	963.52	860.12	658.35	423.32	217.41	94.05	42.08
360.0	973.20	928.81	961.00	863.00	663.93	422.06	219.03	94.77	42.44
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	23.56	16.54	13.49	9.71	6.11	3.06	1.62	0.90	0.36
22.5	23.92	17.08	13.67	9.89	6.11	3.24	1.44	0.90	0.18
45.0	24.82	17.80	14.03	10.43	6.29	3.78	1.62	1.26	0.54
67.5	27.51	18.52	14.75	11.15	6.83	3.96	1.80	1.08	0.72
90.0	31.29	21.76	17.08	13.13	9.17	5.58	2.52	1.44	0.90
112.5	32.91	22.66	17.44	14.03	9.71	5.93	2.70	1.62	0.72
135.0	33.27	23.92	18.52	14.57	10.25	6.29	3.24	1.62	0.90
157.5	34.71	24.28	19.06	14.93	10.61	6.65	3.24	1.80	0.90
180.0	33.63	24.64	18.70	14.57	10.43	6.65	3.24	1.98	0.72
202.5	32.55	23.74	18.34	14.21	9.89	6.11	2.88	1.80	0.90
225.0	32.01	22.84	17.44	13.49	8.99	5.75	2.34	1.62	0.90
247.5	31.47	21.76	16.36	12.59	8.09	5.22	2.16	1.26	0.54
270.0	26.26	19.42	15.65	11.33	7.37	4.32	2.16	1.62	0.54
292.5	24.10	17.62	14.75	10.43	6.65	3.78	1.98	1.26	0.36
315.0	23.56	17.08	13.85	9.89	6.29	3.24	1.62	1.08	0.18
337.5	23.56	16.36	13.85	9.71	6.11	3.42	1.44	0.72	0.18
360.0	23.56	16.54	13.49	9.71	6.11	3.06	1.62	0.90	0.36
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	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	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	0.18	0.18	0.00	0.18	0.18	0.18	0.36	0.36	0.36
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00

LRG3-50K

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	0.00	0.18	0.18	0.36	0.54	0.72	0.90	0.72	0.72
22.5	0.00	0.18	0.18	0.36	0.54	0.54	0.54	0.54	0.72
45.0	0.00	0.00	0.18	0.36	0.72	0.72	0.54	0.72	0.54
67.5	0.18	0.18	0.18	0.18	0.54	0.54	0.72	0.72	0.72
90.0	0.00	0.00	0.00	0.18	0.36	0.54	0.72	0.90	0.72
112.5	0.00	0.00	0.00	0.18	0.54	0.36	0.54	0.54	0.72
135.0	0.00	0.00	0.18	0.18	0.36	0.18	0.54	0.72	0.54
157.5	0.00	0.00	0.00	0.18	0.18	0.72	0.54	0.72	0.72
180.0	0.00	0.00	0.00	0.18	0.36	0.54	0.36	0.54	0.54
202.5	0.00	0.00	0.00	0.18	0.18	0.36	0.72	0.72	0.90
225.0	0.00	0.00	0.18	0.18	0.18	0.18	0.54	0.72	0.72
247.5	0.00	0.00	0.00	0.18	0.36	0.54	0.72	0.54	0.72
270.0	0.54	0.54	0.72	0.90	0.90	1.08	1.08	1.26	1.26
292.5	0.18	0.18	0.18	0.36	0.72	0.54	0.72	0.72	0.72
315.0	0.00	0.00	0.18	0.54	0.54	0.72	0.90	0.72	0.72
337.5	0.18	0.00	0.18	0.18	0.36	0.72	0.72	0.90	0.90
360.0	0.00	0.18	0.18	0.36	0.54	0.72	0.90	0.72	0.72

C/γ(°)	180.0
0.0	0.85
22.5	0.85
45.0	0.85
67.5	0.85
90.0	0.85
112.5	0.85
135.0	0.85
157.5	0.85
180.0	0.85
202.5	0.85
225.0	0.85
247.5	0.85
270.0	0.85
292.5	0.85
315.0	0.85
337.5	0.85
360.0	0.85