



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

LumCAT: LL4G-3018K

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.07

LampCAT:

Current(A): 0.0910

Lamp flux(lm): -1.0

Power (W): 10.60

Number of Lamps: 0

PF: 0.9745

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 978.86, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 92.31

Central intensity(cd): 1473.873, Maximum intensity(cd): 1507.745

Angle of maximum intensity: C=90.0 $\gamma=0.0$

Beam Angle(50%Imax): [C0/180]Total=42.7

[C90/270]Total=40.5

Field angle(10%Imax): [C0/180]Total=76.8

[C90/270]Total=76.8

Maximum s/h(1/2): C0_180=0.69 C90_270=0.65

Maximum s/h(1/4): C0_180=0.75 C90_270=0.69

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.08%

Down flux rate of LUM(%): 99.92%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 93.977%

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

Date:
Humidity(%): 59%

Operator: Tester

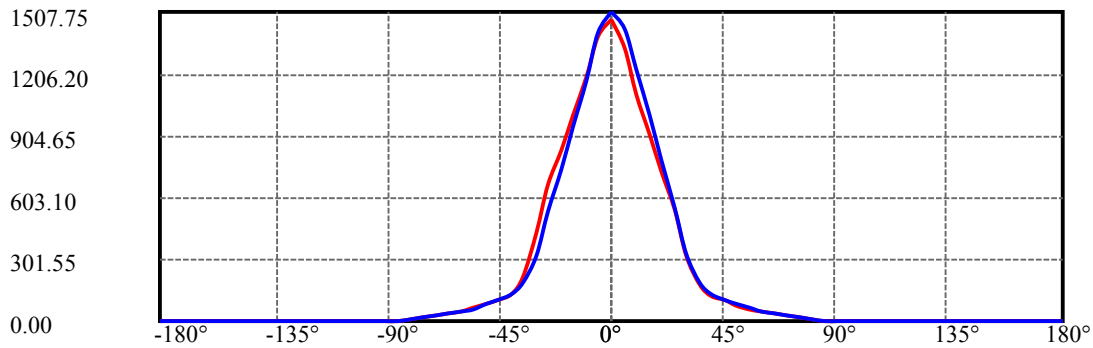
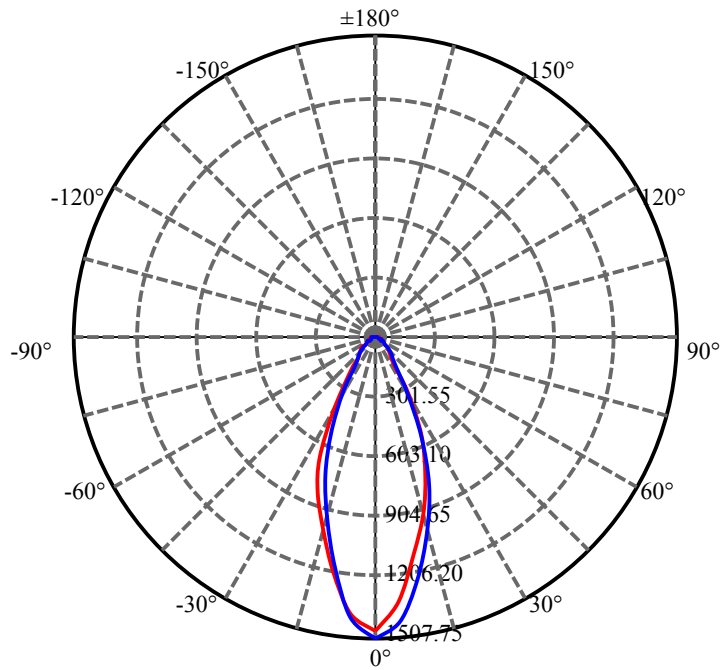
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1487.052	0.000	0	0.00%	0.00%
5.0	1386.069	34.347	34.347	0.00%	3.51%
10.0	1172.038	91.512	125.859	0.00%	12.86%
15.0	957.504	126.323	252.182	0.00%	25.76%
20.0	760.647	141.600	393.782	0.00%	40.23%
25.0	567.521	139.300	533.082	0.00%	54.46%
30.0	354.734	116.712	649.794	0.00%	66.38%
35.0	192.041	80.516	730.311	0.00%	74.61%
40.0	131.547	53.988	784.299	0.00%	80.12%
45.0	102.755	43.383	827.682	0.00%	84.56%
50.0	79.891	36.906	864.588	0.00%	88.33%
55.0	60.865	30.605	895.193	0.00%	91.45%
60.0	46.019	24.706	919.899	0.00%	93.98%
65.0	35.116	19.724	939.623	0.00%	95.99%
70.0	25.643	15.385	955.007	0.00%	97.56%
75.0	17.148	11.185	966.192	0.00%	98.71%
80.0	9.342	7.088	973.28	0.00%	99.43%
85.0	3.996	3.624	976.904	0.00%	99.80%
90.0	0.159	1.138	978.041	0.00%	99.92%
95.0	0.027	0.051	978.092	0.00%	99.92%
100.0	0.000	0.007	978.099	0.00%	99.92%
105.0	0.000	0.000	978.099	0.00%	99.92%
110.0	0.000	0.000	978.099	0.00%	99.92%
115.0	0.000	0.000	978.099	0.00%	99.92%
120.0	0.000	0.000	978.099	0.00%	99.92%
125.0	0.079	0.018	978.118	0.00%	99.92%
130.0	0.053	0.029	978.146	0.00%	99.93%
135.0	0.079	0.027	978.173	0.00%	99.93%
140.0	0.132	0.039	978.212	0.00%	99.93%
145.0	0.212	0.057	978.27	0.00%	99.94%
150.0	0.291	0.074	978.344	0.00%	99.95%
155.0	0.503	0.100	978.444	0.00%	99.96%
160.0	0.662	0.122	978.566	0.00%	99.97%
165.0	0.741	0.116	978.682	0.00%	99.98%
170.0	0.847	0.094	978.776	0.00%	99.99%
175.0	0.847	0.061	978.837	0.00%	100.00%
180.0	1.059	0.023	978.859	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	649.79	N.A.	66.38%
0-40	784.30	N.A.	80.12%
0-60	919.90	N.A.	93.98%
0-90	978.04	N.A.	99.92%
0-120	978.10	N.A.	99.92%
0-180	978.86	N.A.	100.00%
60-90	58.14	N.A.	5.94%
90-120	0.06	N.A.	0.01%
90-130	0.11	N.A.	0.01%
90-150	0.30	N.A.	0.03%
90-180	0.80	N.A.	0.08%
0-39.89	783.09	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	125.86
10-20	267.92
20-30	256.01
30-40	134.50
40-50	80.29
50-60	55.31
60-70	35.11
70-80	18.27
80-90	4.76
90-100	0.06
100-110	0.00
110-120	0.00
120-130	0.05
130-140	0.07
140-150	0.13
150-160	0.22
160-170	0.21
170-180	0.06

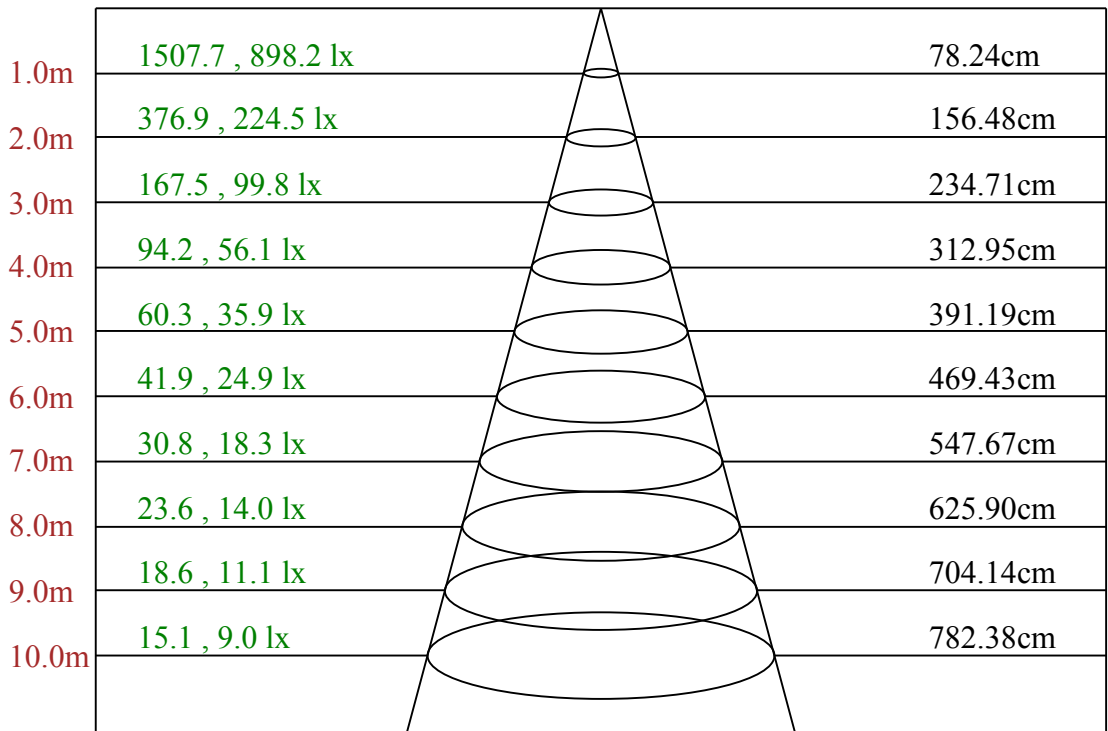


C0/C180: —

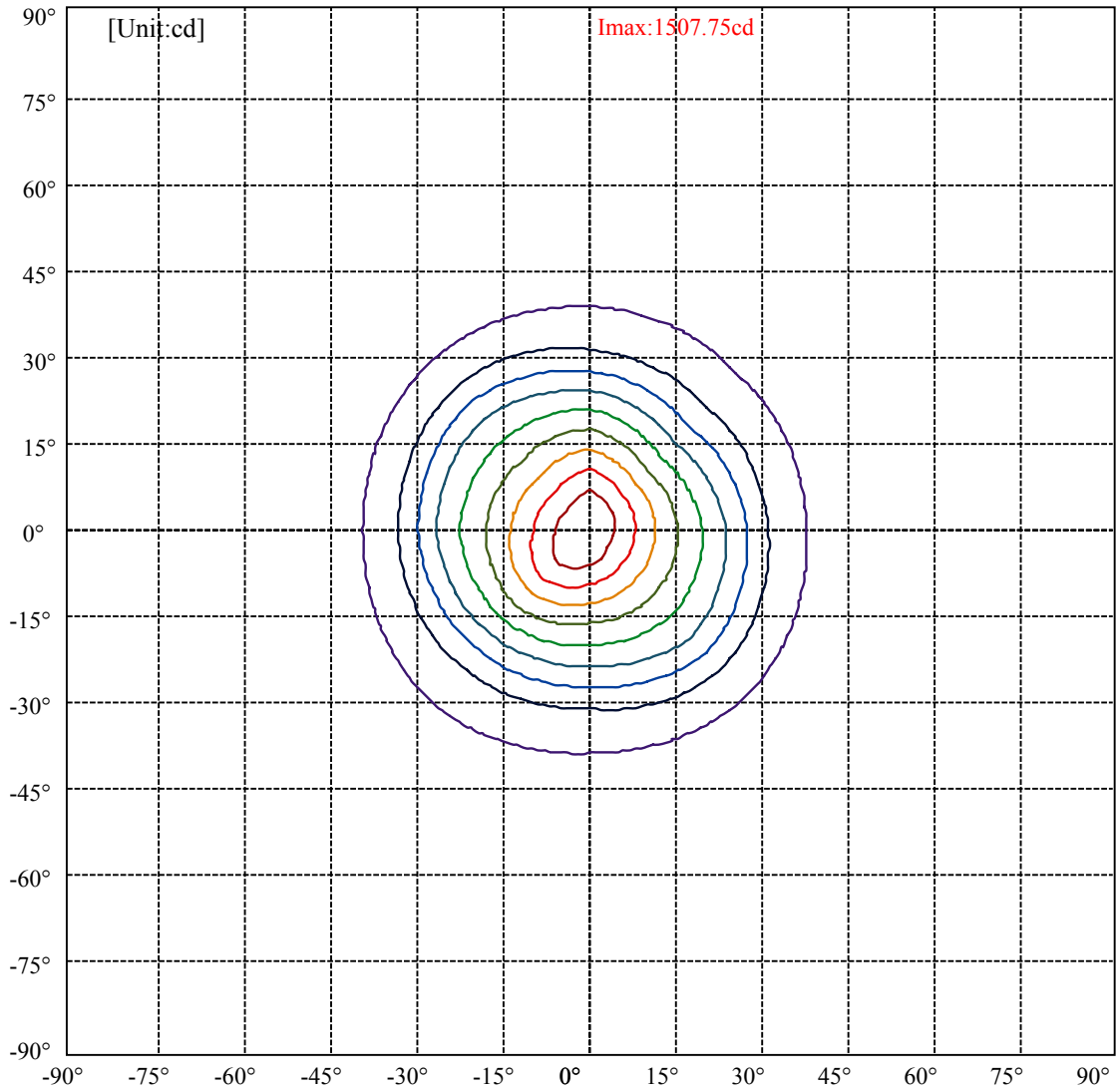
C90/C270: —

Field angle(10%Imax):C0/180Left:39.2 Right:37.6
:C90/270Left:38.3 Right:38.5

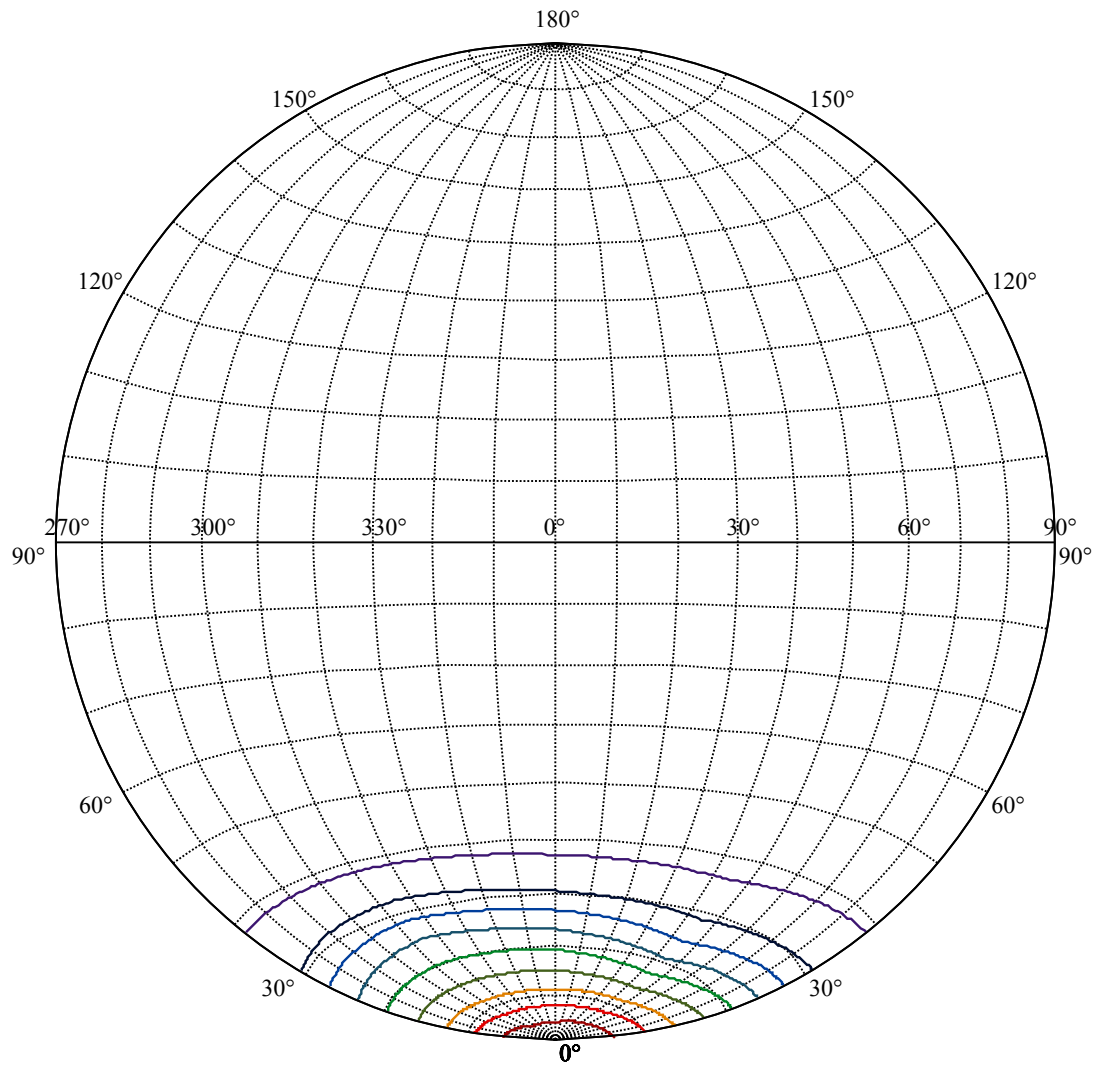
Beam Angle(50%Imax):C0/180Left:22.8 Right:19.9
:C90/270Left:19.7 Right:20.8



Max , Ave Beam angle of C90 plane 42.73



(10%Imax) 150.775	—
(20%Imax) 301.549	—
(30%Imax) 452.323	—
(40%Imax) 603.098	—
(50%Imax) 753.872	—
(60%Imax) 904.647	—
(70%Imax) 1055.42	—
(80%Imax) 1206.2	—
(90%Imax) 1356.97	—



House

[Unit:cd]

Road

Imax:1507.75

(10%Imax)	150.775	—
(20%Imax)	301.549	—
(30%Imax)	452.323	—
(40%Imax)	603.098	—
(50%Imax)	753.872	—
(60%Imax)	904.647	—
(70%Imax)	1055.42	—
(80%Imax)	1206.2	—
(90%Imax)	1356.97	—

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	1473.87	1332.24	1102.76	910.11	732.07	541.54	321.15	173.60	124.06
45.0	1500.34	1360.40	1121.81	865.65	631.09	423.19	258.28	159.41	120.04
90.0	1507.75	1427.72	1225.97	1004.74	790.92	554.45	330.26	189.69	134.01
135.0	1466.25	1363.15	1158.44	960.49	790.50	645.27	436.11	217.63	132.95
180.0	1473.87	1388.77	1192.73	1002.84	832.20	663.48	427.00	213.40	135.07
225.0	1500.34	1473.03	1287.58	1049.62	809.13	573.93	349.31	203.87	141.84
270.0	1507.75	1407.40	1173.26	943.35	740.75	531.59	318.40	183.55	134.22
315.0	1466.25	1335.84	1113.77	923.24	758.53	606.74	397.37	195.19	130.20
360.0	1473.87	1332.24	1102.76	910.11	732.07	541.54	321.15	173.60	124.06
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	98.44	77.48	59.49	45.30	34.08	24.35	16.30	8.68	3.60
45.0	93.36	72.40	55.68	42.55	33.03	24.35	16.09	8.47	2.96
90.0	105.00	81.29	62.24	47.42	36.84	27.95	19.27	11.22	4.23
135.0	103.31	81.29	62.45	47.42	35.78	26.46	18.00	9.95	3.81
180.0	105.85	82.14	62.45	46.79	35.57	25.62	16.94	9.53	3.81
225.0	108.60	82.99	62.45	46.79	35.35	25.83	17.57	9.53	4.23
270.0	104.58	80.02	60.12	45.30	34.93	25.19	16.51	8.68	4.66
315.0	102.89	81.51	62.03	46.58	35.35	25.40	16.51	8.68	4.66
360.0	98.44	77.48	59.49	45.30	34.08	24.35	16.30	8.68	3.60
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
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
90.0	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
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.42	0.21	0.00	0.00	0.00	0.00	0.00	0.42	0.21
315.0	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	0.21	0.21	0.42	0.42	0.64	0.85	0.64	0.85
45.0	0.00	0.21	0.42	0.42	0.64	0.64	0.64	1.06	0.64
90.0	0.00	0.21	0.00	0.42	0.42	0.85	0.64	0.85	0.64
135.0	0.00	0.00	0.00	0.42	0.42	0.64	0.64	0.64	1.06
180.0	0.00	0.00	0.00	0.21	0.42	0.21	0.64	0.85	0.64
225.0	0.00	0.00	0.00	0.00	0.21	0.64	0.64	1.06	0.64
270.0	0.42	0.42	0.64	0.21	0.85	1.06	1.27	1.06	1.48
315.0	0.21	0.00	0.42	0.21	0.64	0.64	0.64	0.64	0.85
360.0	0.00	0.21	0.21	0.42	0.42	0.64	0.85	0.64	0.85
C/γ(°)	180.0								
0.0	1.06								
45.0	0.85								
90.0	1.27								
135.0	1.06								
180.0	1.06								
225.0	0.85								
270.0	1.27								
315.0	1.06								
360.0	1.06								