



Shenzhen Belling Efficiency Testing Lab Co.,Ltd
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Client:

LumCAT:LL4G-5CCT(3500K)

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.03

LampCAT:

Current(A): 0.0870

Lamp flux(lm): -1.0

Power (W): 10.23

Number of Lamps: 1

PF: 0.9811

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1064.29, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 104.01

Central intensity(cd): 1625.926, Maximum intensity(cd): 1658.079

Angle of maximum intensity: C=90.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=41.7

[C90/270]Total=40.0

Field angle(10%Imax): [C0/180]Total=77.1

[C90/270]Total=75.1

Maximum s/h(1/2): C0_180=0.68 C90_270=0.68

Maximum s/h(1/4): C0_180=0.76 C90_270=0.74

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.09%

Down flux rate of LUM(%): 99.91%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.784%

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

Date:
Humidity(%): 58%

Operator: Jasper

Zonal flux distribution table

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$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1631.046	0.000	0	0.00%	0.00%
5.0	1525.682	37.738	37.738	0.00%	3.55%
10.0	1296.496	100.958	138.696	0.00%	13.03%
15.0	1057.510	139.638	278.334	0.00%	26.15%
20.0	841.606	156.514	434.848	0.00%	40.86%
25.0	636.810	155.059	589.906	0.00%	55.43%
30.0	421.705	133.956	723.862	0.00%	68.01%
35.0	237.747	97.109	820.971	0.00%	77.14%
40.0	134.406	62.091	883.062	0.00%	82.97%
45.0	97.023	42.851	925.913	0.00%	87.00%
50.0	72.000	34.154	960.067	0.00%	90.21%
55.0	53.212	27.225	987.292	0.00%	92.77%
60.0	39.751	21.488	1008.78	0.00%	94.78%
65.0	30.584	17.098	1025.878	0.00%	96.39%
70.0	23.454	13.683	1039.561	0.00%	97.68%
75.0	16.806	10.523	1050.084	0.00%	98.67%
80.0	10.722	7.366	1057.45	0.00%	99.36%
85.0	5.217	4.331	1061.781	0.00%	99.76%
90.0	0.454	1.553	1063.334	0.00%	99.91%
95.0	0.014	0.128	1063.462	0.00%	99.92%
100.0	0.000	0.004	1063.466	0.00%	99.92%
105.0	0.028	0.007	1063.473	0.00%	99.92%
110.0	0.014	0.011	1063.484	0.00%	99.92%
115.0	0.014	0.007	1063.491	0.00%	99.93%
120.0	0.041	0.013	1063.504	0.00%	99.93%
125.0	0.014	0.013	1063.517	0.00%	99.93%
130.0	0.096	0.024	1063.541	0.00%	99.93%
135.0	0.110	0.042	1063.583	0.00%	99.93%
140.0	0.151	0.048	1063.631	0.00%	99.94%
145.0	0.193	0.057	1063.688	0.00%	99.94%
150.0	0.330	0.077	1063.765	0.00%	99.95%
155.0	0.495	0.104	1063.87	0.00%	99.96%
160.0	0.675	0.123	1063.993	0.00%	99.97%
165.0	0.730	0.116	1064.108	0.00%	99.98%
170.0	0.840	0.093	1064.201	0.00%	99.99%
175.0	0.950	0.064	1064.265	0.00%	100.00%
180.0	1.019	0.024	1064.289	0.00%	100.00%

Equipment: GMS-3000
Temperature($^{\circ}\text{C}$): 25

Date:
Humidity(%): 58%

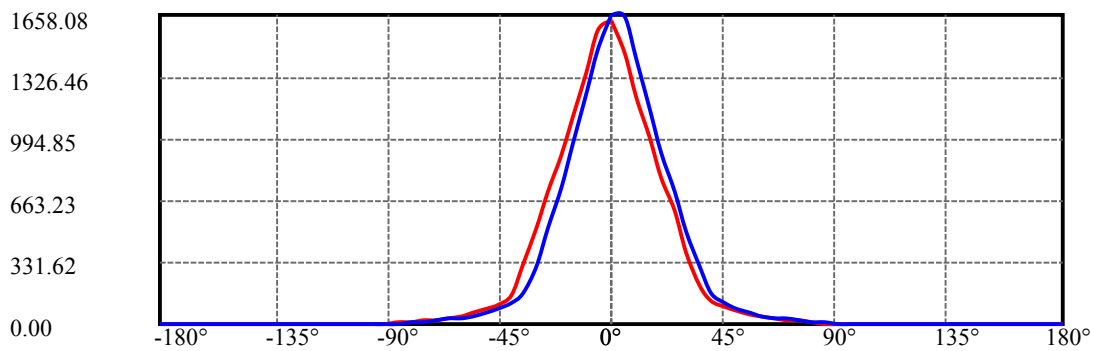
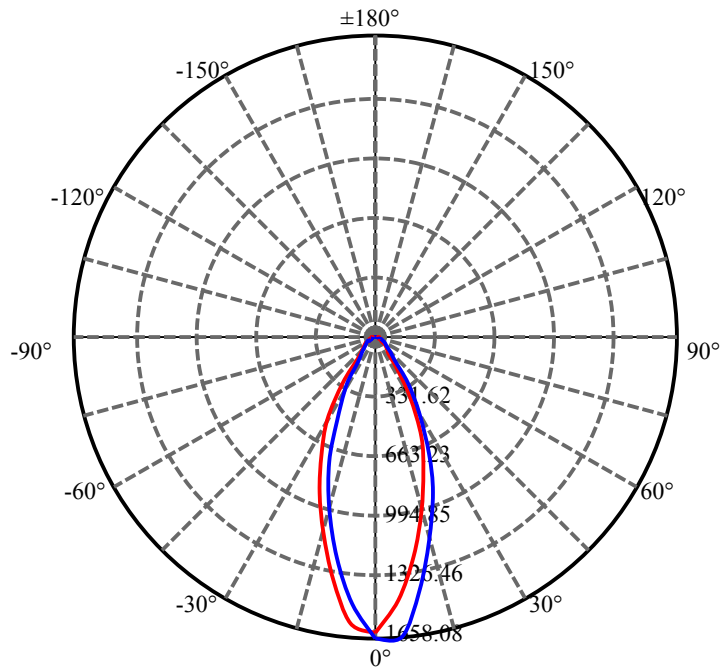
Operator: Jasper

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	723.86	N.A.	68.01%
0-40	883.06	N.A.	82.97%
0-60	1008.78	N.A.	94.78%
0-90	1063.33	N.A.	99.91%
0-120	1063.50	N.A.	99.93%
0-180	1064.29	N.A.	100.00%
60-90	54.55	N.A.	5.13%
90-120	0.17	N.A.	0.02%
90-130	0.21	N.A.	0.02%
90-150	0.43	N.A.	0.04%
90-180	0.93	N.A.	0.09%
0-37.45	851.43	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	138.70
10-20	296.15
20-30	289.01
30-40	159.20
40-50	77.00
50-60	48.71
60-70	30.78
70-80	17.89
80-90	5.88
90-100	0.13
100-110	0.02
110-120	0.02
120-130	0.04
130-140	0.09
140-150	0.13
150-160	0.23
160-170	0.21
170-180	0.06

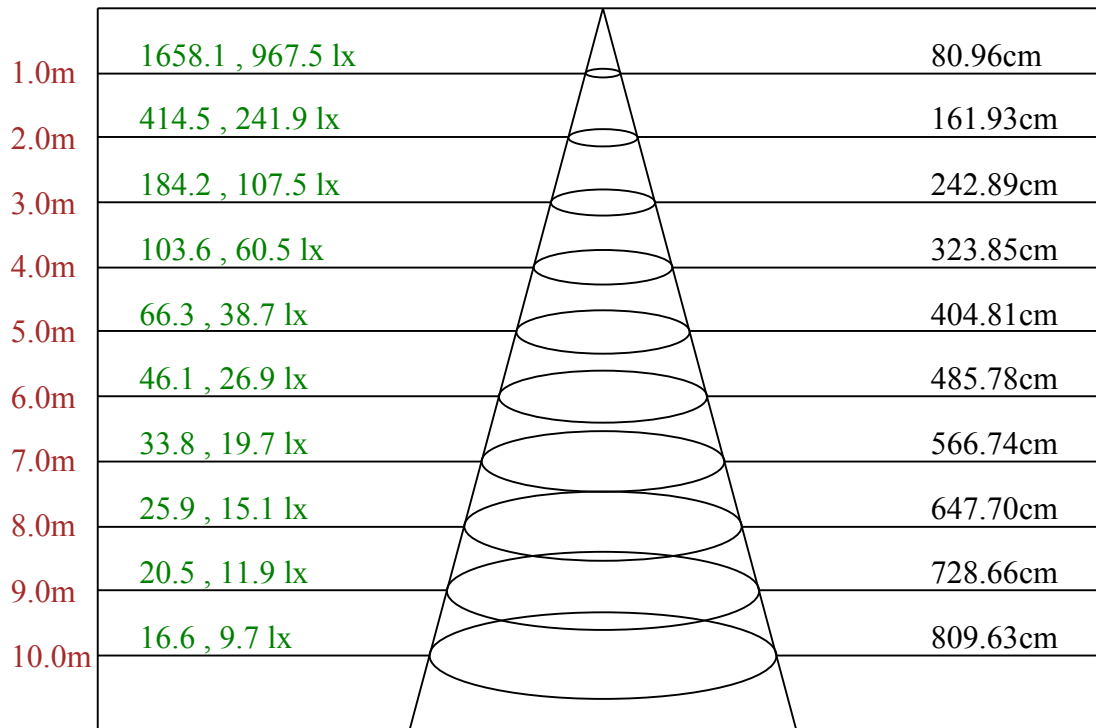


C0/C180: —

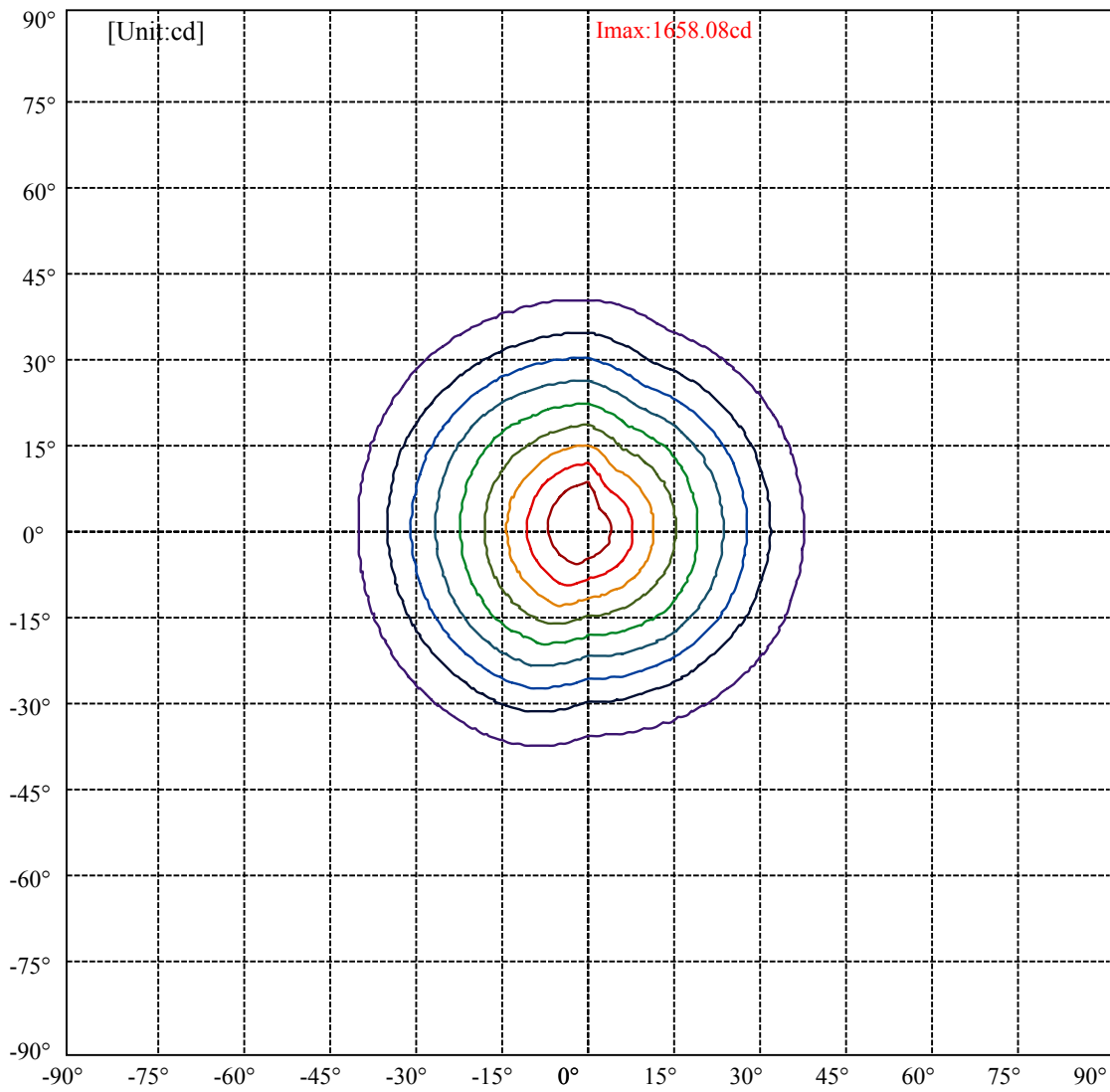
C90/C270: —

Field angle(10%Imax):C0/180Left:39.7 Right:37.4
:C90/270Left:35.1 Right:40.0

Beam Angle(50%Imax):C0/180Left:22.4 Right:19.3
:C90/270Left:17.9 Right:22.1



Max , Ave Beam angle of C90 plane 44.08



(10%Imax) 165.808	—
(20%Imax) 331.616	—
(30%Imax) 497.424	—
(40%Imax) 663.232	—
(50%Imax) 829.039	—
(60%Imax) 994.847	—
(70%Imax) 1160.66	—
(80%Imax) 1326.46	—
(90%Imax) 1492.27	—

Intensity data(cd)

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C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1625.93	1450.19	1218.95	996.74	781.14	602.98	383.19	202.83	118.70
22.5	1628.13	1460.76	1224.45	1010.40	795.68	602.76	388.70	201.29	121.12
45.0	1622.62	1466.70	1237.67	1018.98	809.55	588.88	377.03	194.46	121.12
67.5	1606.33	1475.95	1235.47	1013.26	803.16	577.65	364.69	196.66	121.57
90.0	1658.08	1651.03	1417.15	1154.42	914.60	706.04	492.65	308.76	165.17
112.5	1642.88	1628.13	1410.33	1140.33	909.97	710.67	500.79	297.75	160.32
135.0	1636.50	1614.03	1386.76	1123.81	919.22	737.76	510.92	295.54	159.22
157.5	1627.91	1595.76	1364.30	1124.91	919.22	729.83	515.99	322.85	159.22
180.0	1625.93	1580.12	1352.41	1113.02	905.13	711.77	519.07	315.14	153.94
202.5	1628.13	1559.42	1343.38	1109.50	906.23	700.54	500.13	282.11	143.81
225.0	1622.62	1544.44	1333.69	1109.94	892.13	683.58	467.10	251.28	137.64
247.5	1606.33	1530.57	1336.11	1099.81	860.64	658.25	443.09	241.15	134.34
270.0	1658.08	1475.51	1233.48	967.67	730.05	510.26	307.22	167.15	111.65
292.5	1642.88	1460.98	1214.99	964.81	748.11	525.02	304.57	167.59	111.21
315.0	1636.50	1460.10	1217.41	979.12	783.78	553.65	315.36	171.34	114.96
337.5	1627.91	1457.23	1217.41	993.44	787.09	589.32	356.77	188.07	116.50
360.0	1625.93	1450.19	1218.95	996.74	781.14	602.98	383.19	202.83	118.70
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	89.63	67.39	50.21	38.32	29.95	23.34	16.52	10.13	3.74
22.5	90.51	67.61	50.21	38.32	29.73	23.34	16.74	10.35	4.18
45.0	90.07	68.27	50.43	37.88	29.95	23.12	16.52	10.35	4.63
67.5	90.29	67.17	50.43	37.88	29.51	23.12	16.74	10.35	4.85
90.0	112.10	81.92	61.00	45.15	34.58	27.31	20.70	13.87	8.15
112.5	111.21	81.48	59.46	44.27	33.92	26.43	19.38	12.99	7.71
135.0	110.55	80.38	58.80	43.61	33.25	25.33	18.72	12.33	7.05
157.5	108.79	79.50	58.80	43.16	32.59	24.23	17.62	11.67	7.05
180.0	103.95	78.18	58.14	42.06	32.15	23.56	17.18	11.23	6.61
202.5	101.52	75.76	56.38	40.96	30.83	22.68	16.74	10.79	6.17
225.0	101.08	74.44	55.28	40.52	30.17	22.90	16.30	10.79	5.73
247.5	98.66	73.56	53.96	39.86	30.17	23.12	16.52	10.79	5.95
270.0	84.57	62.99	46.03	34.80	27.09	20.70	13.87	8.59	2.64
292.5	84.79	62.32	46.25	35.24	27.31	21.14	14.54	8.59	2.64
315.0	86.33	64.53	47.13	36.56	28.41	22.02	14.98	9.25	3.08
337.5	88.31	66.51	48.89	37.44	29.73	22.90	15.86	9.47	3.30
360.0	89.63	67.39	50.21	38.32	29.95	23.34	16.52	10.13	3.74
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	0.22
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
90.0	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	1.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.66	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	0.22	0.22	0.00	0.44	0.22	0.22	0.44	0.22	0.44
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Equipment: GMS-3000
Temperature(°C): 25Date:
Humidity(%): 58%

Operator: Jasper

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	0.00	0.22	0.44	0.44	0.66	0.66	0.66	0.88	0.88
22.5	0.22	0.22	0.22	0.44	0.44	0.66	0.88	0.88	1.10
45.0	0.00	0.00	0.22	0.44	0.44	0.66	0.66	0.88	0.88
67.5	0.22	0.22	0.22	0.44	0.66	0.66	0.88	0.88	1.10
90.0	0.00	0.00	0.00	0.66	0.66	0.66	0.88	0.88	0.88
112.5	0.00	0.00	0.00	0.22	0.44	0.66	0.66	0.88	0.88
135.0	0.00	0.00	0.00	0.00	0.44	0.66	0.44	0.66	0.66
157.5	0.00	0.00	0.00	0.00	0.44	0.22	0.66	0.66	1.10
180.0	0.00	0.00	0.00	0.22	0.22	0.66	0.66	0.66	0.88
202.5	0.00	0.00	0.22	0.00	0.22	0.44	0.66	0.66	0.66
225.0	0.00	0.00	0.00	0.22	0.22	0.44	0.44	0.66	0.66
247.5	0.00	0.00	0.00	0.00	0.22	0.44	0.44	0.88	0.88
270.0	0.66	0.66	0.88	1.10	0.88	1.32	1.54	1.32	1.54
292.5	0.22	0.22	0.22	0.44	0.66	0.66	0.66	0.88	1.10
315.0	0.22	0.44	0.44	0.22	0.66	0.88	0.88	0.88	1.10
337.5	0.22	0.44	0.22	0.44	0.66	1.10	0.66	0.88	0.88
360.0	0.00	0.22	0.44	0.44	0.66	0.66	0.66	0.88	0.88

C/γ(°)	180.0
0.0	0.88
22.5	0.88
45.0	1.10
67.5	0.88
90.0	1.32
112.5	1.10
135.0	0.88
157.5	1.10
180.0	0.88
202.5	0.88
225.0	1.10
247.5	0.88
270.0	1.32
292.5	1.10
315.0	0.88
337.5	1.10
360.0	0.88