



Shenzhen Belling Efficiency Testing Lab Co.,Ltd  
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Report No	:	Voltage	:	120.07 V
Test No	:	Current	:	0.125 A
LumCAT	:	Power	:	14.855 W
Luminaire	:	PF	:	0.9901
LampCAT	:	Ballast type	:	
Lamp flux	:	Width	:	0 mm
Number of Lamps	:	Length	:	0 mm
Phm Type	:	Height	:	0 mm

### Photometric Results

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Lumens(lm)	:	1255.92	Central intensity(cd)	:	3969.115
Efficiency(%)	:	100.00%	Maximum intensity(cd)	:	3974.594
Luminous Efficacy(lm/W)	:	84.55	Angle of maximum intensity	:	C=90.0 $\gamma$ =5.0
Beam Angle(50%Imax)	:	[C0/180]Total=32.7 [C90/270]Total=33.1			
Field angle(10%Imax)	:	[C0/180]Total=49.9 [C90/270]Total=51.0			
Maximum s/h(1/2)	:	C0_180=0.58 C90_270=0.61			
Maximum s/h(1/4)	:	C0_180=0.54 C90_270=0.57			
Up flux rate of lamp(%)	:	0.04%			
Down flux rate of lamp(%)	:	99.96%			
Up flux rate of LUM(%)	:	0.04%			
Down flux rate of LUM(%)	:	99.96%			
CIE Type	:	Direct lighting			
Output flux ratio in $\pi$ solid angle	:	99.164%			

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

Date:  
Humidity(%): 59%

Operator: jarvis

Zonal flux distribution table

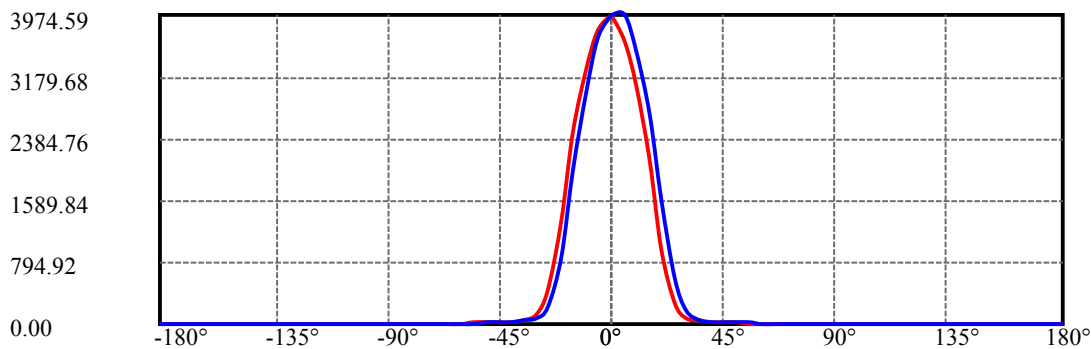
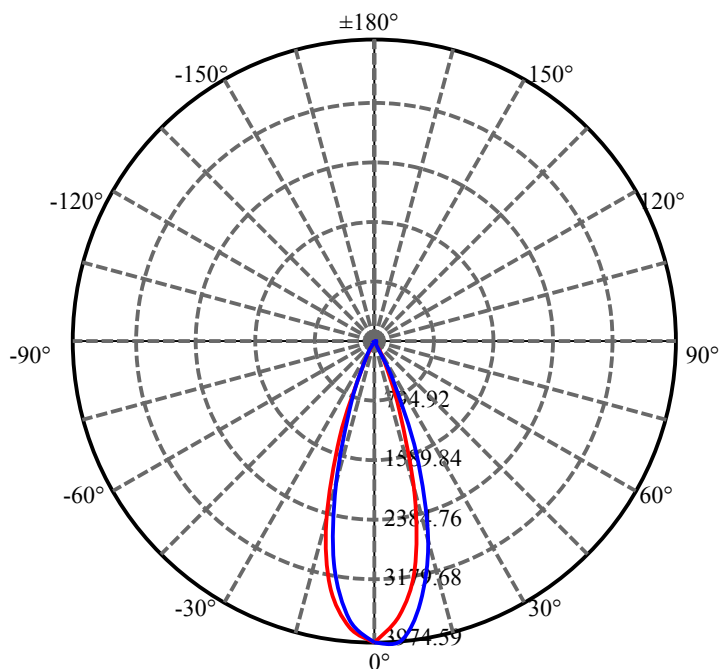
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3969.115	0.000	0	0.00%	0.00%
5.0	3733.989	92.088	92.088	7.33%	7.33%
10.0	3190.913	247.726	339.814	19.72%	27.06%
15.0	2289.727	325.108	664.922	25.89%	52.94%
20.0	1185.695	286.424	951.345	22.81%	75.75%
25.0	395.817	165.871	1117.217	13.21%	88.96%
30.0	111.470	64.198	1181.414	5.11%	94.07%
35.0	47.713	23.441	1204.855	1.87%	95.93%
40.0	29.242	12.839	1217.695	1.02%	96.96%
45.0	21.140	9.329	1227.023	0.74%	97.70%
50.0	15.574	7.419	1234.442	0.59%	98.29%
55.0	12.167	6.032	1240.474	0.48%	98.77%
60.0	9.215	4.942	1245.416	0.39%	99.16%
65.0	6.761	3.884	1249.3	0.31%	99.47%
70.0	4.614	2.880	1252.18	0.23%	99.70%
75.0	2.683	1.907	1254.087	0.15%	99.85%
80.0	1.167	1.030	1255.118	0.08%	99.94%
85.0	0.040	0.328	1255.446	0.03%	99.96%
90.0	0.000	0.011	1255.457	0.00%	99.96%
95.0	0.000	0.000	1255.457	0.00%	99.96%
100.0	0.000	0.000	1255.457	0.00%	99.96%
105.0	0.000	0.000	1255.457	0.00%	99.96%
110.0	0.000	0.000	1255.457	0.00%	99.96%
115.0	0.000	0.000	1255.457	0.00%	99.96%
120.0	0.000	0.000	1255.457	0.00%	99.96%
125.0	0.000	0.000	1255.457	0.00%	99.96%
130.0	0.000	0.000	1255.457	0.00%	99.96%
135.0	0.000	0.000	1255.457	0.00%	99.96%
140.0	0.000	0.000	1255.457	0.00%	99.96%
145.0	0.027	0.004	1255.461	0.00%	99.96%
150.0	0.067	0.014	1255.475	0.00%	99.96%
155.0	0.282	0.044	1255.519	0.00%	99.97%
160.0	0.577	0.090	1255.609	0.01%	99.98%
165.0	0.751	0.109	1255.719	0.01%	99.98%
170.0	0.952	0.101	1255.82	0.01%	99.99%
175.0	1.127	0.074	1255.894	0.01%	100.00%
180.0	1.060	0.026	1255.92	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1181.41	94.07%	94.07%
0-40	1217.69	96.96%	96.96%
0-60	1245.42	99.16%	99.16%
0-90	1255.46	99.96%	99.96%
0-120	1255.46	99.96%	99.96%
0-180	1255.92	100.00%	100.00%
60-90	10.04	0.80%	0.80%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.02	0.00%	0.00%
90-180	0.44	0.03%	0.03%
0-21.61	1004.74	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	339.81
10-20	611.53
20-30	230.07
30-40	36.28
40-50	16.75
50-60	10.97
60-70	6.76
70-80	2.94
80-90	0.34
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.02
150-160	0.13
160-170	0.21
170-180	0.07

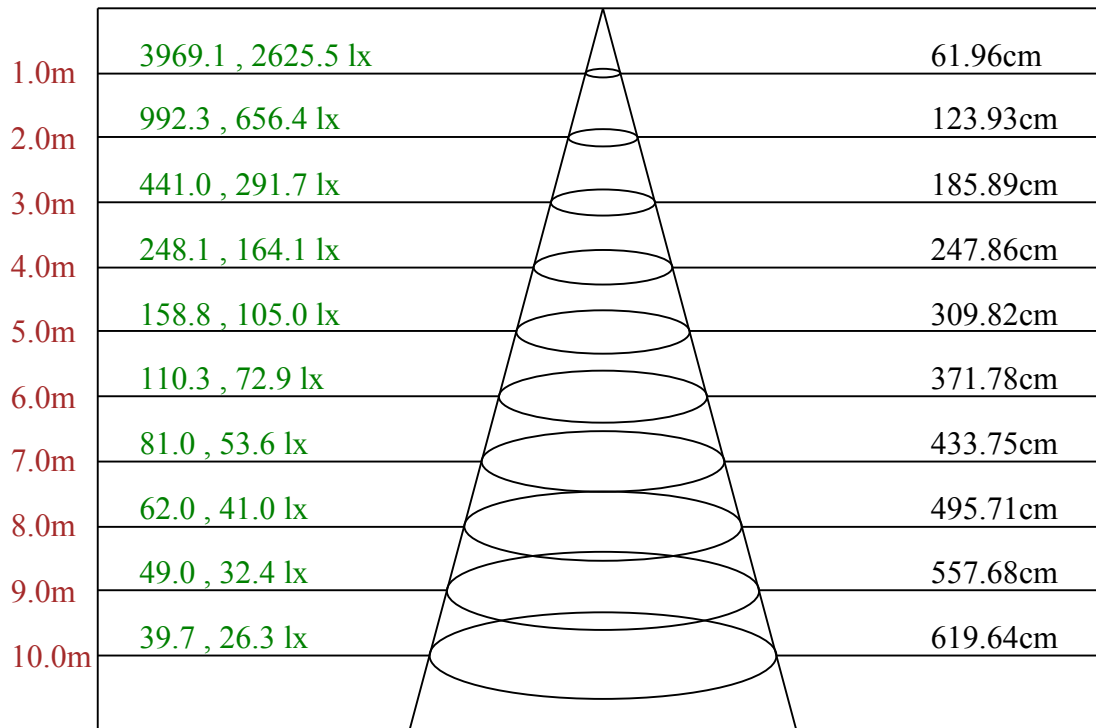


C0/C180: —

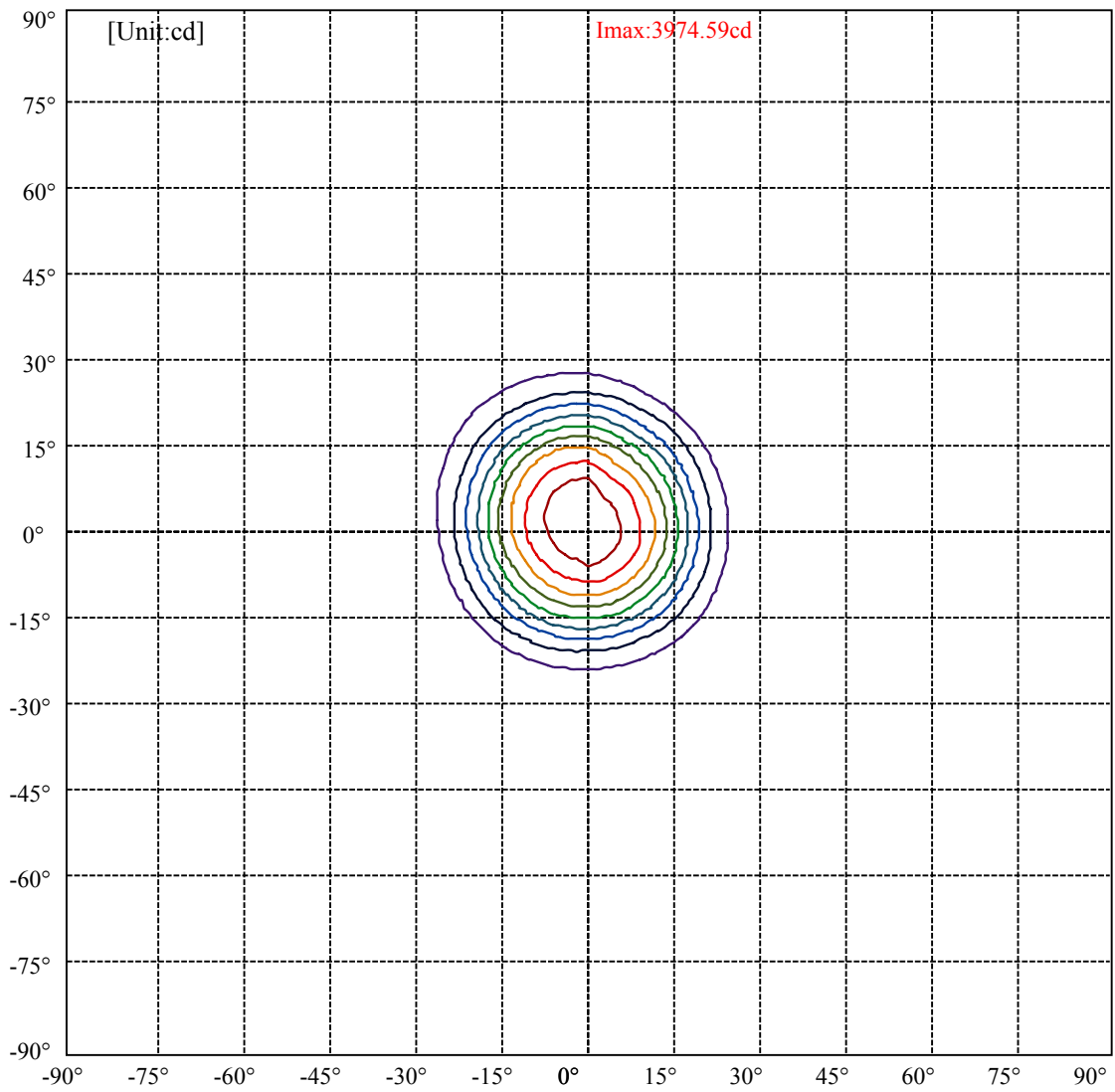
C90/C270: —

Field angle(10%I<sub>max</sub>):C0/180Left:25.8 Right:24.1  
 :C90/270Left:23.7 Right:27.3

Beam Angle(50%I<sub>max</sub>):C0/180Left:17.2 Right:15.5  
 :C90/270Left:14.9 Right:18.2



Max , Ave      Beam angle of C90 plane 34.43



(10%I <sub>max</sub> ) 397.459	—
(20%I <sub>max</sub> ) 794.919	—
(30%I <sub>max</sub> ) 1192.38	—
(40%I <sub>max</sub> ) 1589.84	—
(50%I <sub>max</sub> ) 1987.3	—
(60%I <sub>max</sub> ) 2384.76	—
(70%I <sub>max</sub> ) 2782.22	—
(80%I <sub>max</sub> ) 3179.68	—
(90%I <sub>max</sub> ) 3577.13	—

## Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	3969.12	3638.07	3071.68	2086.56	959.79	271.50	72.76	42.07	25.97
22.5	3969.12	3669.83	3088.85	2142.15	1019.03	307.55	77.69	42.28	27.04
45.0	3969.12	3699.23	3159.89	2256.33	1155.53	363.36	95.08	44.86	27.69
67.5	3969.12	3745.38	3214.83	2385.74	1306.41	446.84	119.76	49.58	28.97
90.0	3969.12	3974.59	3506.50	2702.31	1593.36	585.06	169.77	59.67	34.55
112.5	3969.12	3932.31	3517.45	2804.04	1678.13	675.20	221.28	66.75	37.34
135.0	3969.12	3903.34	3498.56	2767.56	1655.17	701.82	231.58	68.89	38.63
157.5	3969.12	3847.54	3406.27	2616.03	1534.55	576.69	166.76	56.45	34.34
180.0	3969.12	3776.93	3288.66	2475.67	1338.17	445.56	124.70	48.07	30.05
202.5	3969.12	3707.39	3155.38	2265.56	1160.25	384.17	91.22	41.85	27.90
225.0	3969.12	3651.59	3076.18	2144.08	1051.01	309.06	78.34	41.21	26.83
247.5	3969.12	3594.28	3018.24	2038.06	947.56	270.00	69.32	38.85	25.54
270.0	3969.12	3687.21	2990.76	1967.02	858.06	228.36	64.82	39.06	26.18
292.5	3969.12	3645.36	3001.28	1971.09	861.28	229.43	64.39	39.28	25.33
315.0	3969.12	3634.20	3009.01	1981.40	907.00	262.91	66.96	42.71	25.54
337.5	3969.12	3636.56	3051.07	2032.05	945.84	275.58	69.11	41.85	25.97
360.0	3969.12	3638.07	3071.68	2086.56	959.79	271.50	72.76	42.07	25.97
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	19.75	14.38	11.38	8.59	6.22	4.08	2.36	0.86	0.00
22.5	20.60	14.59	11.59	8.80	6.22	4.51	2.36	1.07	0.00
45.0	21.25	15.02	12.02	8.80	6.44	4.51	3.01	1.29	0.00
67.5	21.46	15.45	12.45	9.23	6.87	4.72	3.01	1.50	0.22
90.0	23.39	17.38	13.31	10.09	7.51	4.94	3.01	1.29	0.22
112.5	23.82	18.03	13.52	10.09	7.30	5.15	2.79	1.50	0.00
135.0	23.82	18.03	13.31	10.09	7.30	4.72	3.01	1.29	0.00
157.5	22.97	16.96	13.09	10.09	7.30	4.72	3.01	1.29	0.00
180.0	22.11	16.31	12.66	9.66	7.08	4.72	2.58	0.86	0.00
202.5	21.25	15.24	12.23	9.23	6.87	4.72	2.36	1.07	0.00
225.0	20.18	15.02	11.80	9.01	6.44	4.29	2.58	1.07	0.00
247.5	19.32	14.38	11.59	8.59	6.22	4.29	2.15	0.86	0.00
270.0	19.75	15.02	12.02	9.23	7.08	4.94	2.79	1.50	0.22
292.5	19.32	14.81	11.59	8.80	6.65	4.72	2.79	1.07	0.00
315.0	19.53	14.17	11.16	8.59	6.44	4.51	2.79	1.07	0.00
337.5	19.75	14.38	10.95	8.59	6.22	4.29	2.36	1.07	0.00
360.0	19.75	14.38	11.38	8.59	6.22	4.08	2.36	0.86	0.00
C/ $\gamma$ (°)	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	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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

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**Intensity data(cd)**

Appendix Page: 8 Total:8

<b>C/γ(°)</b>	<b>135.0</b>	<b>140.0</b>	<b>145.0</b>	<b>150.0</b>	<b>155.0</b>	<b>160.0</b>	<b>165.0</b>	<b>170.0</b>	<b>175.0</b>
0.0	0.00	0.00	0.00	0.22	0.43	0.86	0.64	0.86	1.29
22.5	0.00	0.00	0.00	0.00	0.22	0.64	0.86	0.86	1.29
45.0	0.00	0.00	0.00	0.00	0.22	0.64	0.64	1.07	1.07
67.5	0.00	0.00	0.00	0.00	0.00	0.64	0.86	1.07	1.07
90.0	0.00	0.00	0.00	0.00	0.22	0.43	0.64	1.07	1.07
112.5	0.00	0.00	0.00	0.00	0.22	0.22	0.86	1.07	1.07
135.0	0.00	0.00	0.00	0.00	0.00	0.43	0.43	0.86	1.07
157.5	0.00	0.00	0.00	0.00	0.22	0.64	0.43	0.64	1.07
180.0	0.00	0.00	0.00	0.00	0.22	0.22	0.43	0.86	1.07
202.5	0.00	0.00	0.00	0.00	0.22	0.43	0.64	0.64	0.86
225.0	0.00	0.00	0.00	0.00	0.22	0.43	0.86	0.86	1.07
247.5	0.00	0.00	0.00	0.00	0.00	0.43	0.64	0.64	1.07
270.0	0.00	0.00	0.22	0.64	0.86	1.29	1.29	1.50	1.72
292.5	0.00	0.00	0.00	0.22	0.64	0.64	1.07	1.07	1.07
315.0	0.00	0.00	0.22	0.00	0.64	0.64	0.86	1.07	1.07
337.5	0.00	0.00	0.00	0.00	0.22	0.64	0.86	1.07	1.07
360.0	0.00	0.00	0.00	0.22	0.43	0.86	0.64	0.86	1.29

<b>C/γ(°)</b>	<b>180.0</b>
0.0	1.06
22.5	1.06
45.0	1.06
67.5	1.06
90.0	1.06
112.5	1.06
135.0	1.06
157.5	1.06
180.0	1.06
202.5	1.06
225.0	1.06
247.5	1.06
270.0	1.06
292.5	1.06
315.0	1.06
337.5	1.06
360.0	1.06