



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.07

LampCAT:

Current(A): 0.2250

Lamp flux(lm): -1.0

Power (W): 26.85

Number of Lamps: 1

PF: 0.9926

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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#### Photometric Results

Lumens(lm): 3013.37, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 112.23

Central intensity(cd): 1038.442, Maximum intensity(cd): 1039.088

Angle of maximum intensity: C=225.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=113.1

[C90/270]Total=112.9

Field angle(10%Imax): [C0/180]Total=163.1

[C90/270]Total=163.4

Maximum s/h(1/2): C0\_180=1.29 C90\_270=1.28

Maximum s/h(1/4): C0\_180=1.41 C90\_270=1.40

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.19%

Down flux rate of LUM(%): 99.81%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 77.826%

## 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	1038.442	0.000	0	0.00%	0.00%
5.0	1033.885	24.774	24.774	0.00%	0.82%
10.0	1020.257	73.483	98.257	0.00%	3.26%
15.0	997.686	119.703	217.96	0.00%	7.23%
20.0	966.496	161.876	379.836	0.00%	12.61%
25.0	927.114	198.605	578.441	0.00%	19.20%
30.0	879.798	228.666	807.107	0.00%	26.78%
35.0	824.846	251.021	1058.128	0.00%	35.11%
40.0	763.436	264.993	1323.121	0.00%	43.91%
45.0	695.361	270.108	1593.229	0.00%	52.87%
50.0	621.773	266.146	1859.375	0.00%	61.70%
55.0	543.849	253.445	2112.82	0.00%	70.11%
60.0	461.383	232.356	2345.177	0.00%	77.83%
65.0	376.677	203.734	2548.91	0.00%	84.59%
70.0	291.829	169.270	2718.181	0.00%	90.20%
75.0	208.276	130.719	2848.9	0.00%	94.54%
80.0	129.097	90.271	2939.172	0.00%	97.54%
85.0	56.466	50.422	2989.593	0.00%	99.21%
90.0	9.551	18.076	3007.669	0.00%	99.81%
95.0	0.181	2.665	3010.334	0.00%	99.90%
100.0	0.207	0.105	3010.44	0.00%	99.90%
105.0	0.207	0.111	3010.55	0.00%	99.91%
110.0	0.272	0.125	3010.676	0.00%	99.91%
115.0	0.362	0.161	3010.836	0.00%	99.92%
120.0	0.401	0.186	3011.022	0.00%	99.92%
125.0	0.530	0.215	3011.237	0.00%	99.93%
130.0	0.673	0.262	3011.499	0.00%	99.94%
135.0	0.776	0.293	3011.791	0.00%	99.95%
140.0	0.763	0.285	3012.076	0.00%	99.96%
145.0	0.828	0.265	3012.342	0.00%	99.97%
150.0	0.932	0.259	3012.601	0.00%	99.97%
155.0	0.932	0.236	3012.837	0.00%	99.98%
160.0	0.932	0.195	3013.032	0.00%	99.99%
165.0	0.867	0.148	3013.18	0.00%	99.99%
170.0	0.893	0.104	3013.285	0.00%	100.00%
175.0	0.893	0.064	3013.349	0.00%	100.00%
180.0	1.035	0.023	3013.372	0.00%	100.00%

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

Date:  
Humidity(%): 59%

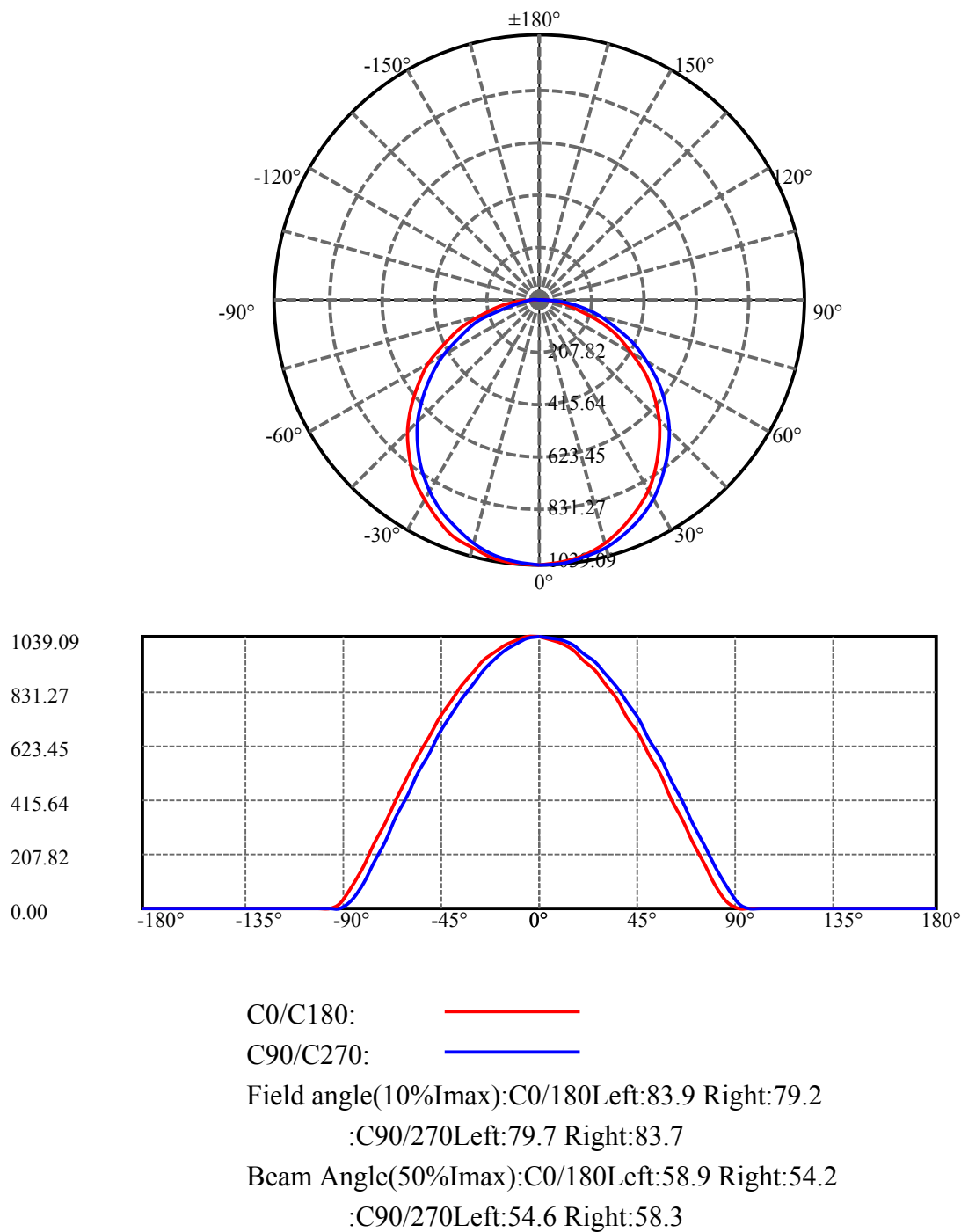
Operator: jarvis

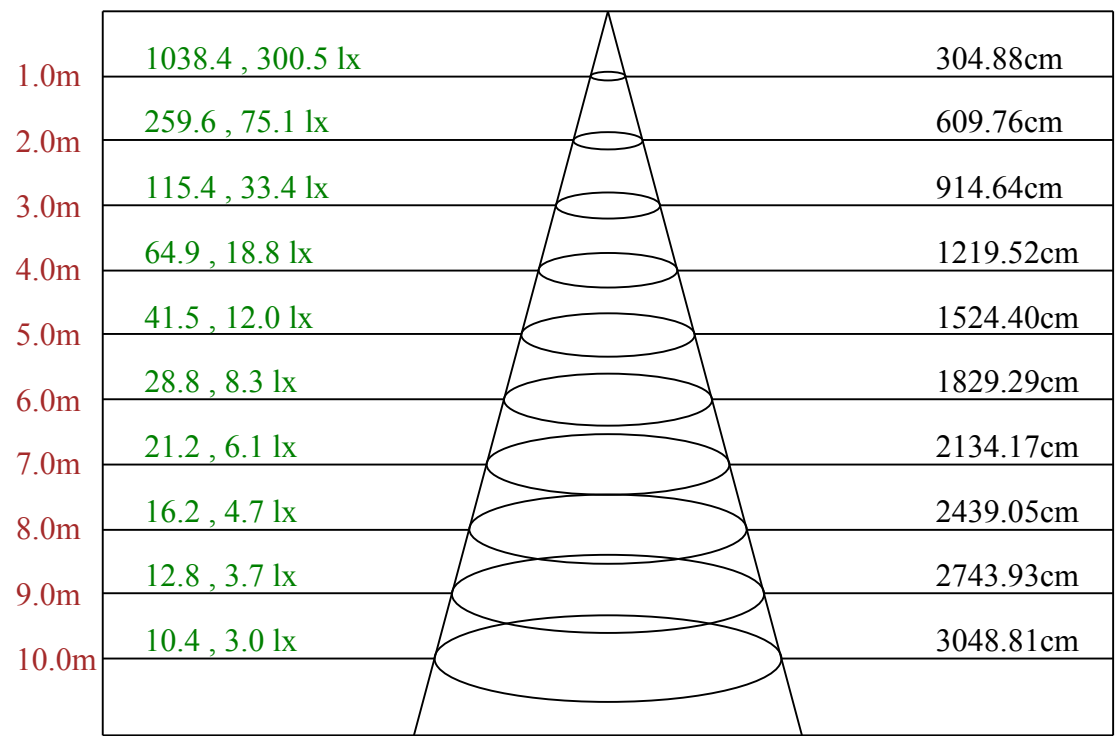
## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	807.11	N.A.	26.78%
0-40	1323.12	N.A.	43.91%
0-60	2345.18	N.A.	77.83%
0-90	3007.67	N.A.	99.81%
0-120	3011.02	N.A.	99.92%
0-180	3013.37	N.A.	100.00%
60-90	662.49	N.A.	21.99%
90-120	3.35	N.A.	0.11%
90-130	3.83	N.A.	0.13%
90-150	4.93	N.A.	0.16%
90-180	5.68	N.A.	0.19%
0-61.61	2410.70	N.A.	80.00%

## ZONAL LUMEN SUMMARY

0-10	98.26
10-20	281.58
20-30	427.27
30-40	516.01
40-50	536.25
50-60	485.80
60-70	373.00
70-80	220.99
80-90	68.50
90-100	2.77
100-110	0.24
110-120	0.35
120-130	0.48
130-140	0.58
140-150	0.52
150-160	0.43
160-170	0.25
170-180	0.06





Max , Ave      Beam angle of C225 plane 113.47

## Intensity data(cd)

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C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1038.44	1028.94	1011.75	985.46	950.46	907.18	856.24	797.23	731.59
22.5	1038.44	1030.39	1012.58	985.87	951.70	909.05	857.69	801.16	736.14
45.0	1038.44	1032.67	1015.28	989.18	954.19	912.77	861.63	803.65	740.90
67.5	1038.44	1032.05	1016.31	990.43	955.64	913.19	864.53	806.75	741.94
90.0	1038.44	1035.15	1023.97	1004.09	976.55	940.31	896.00	843.41	785.84
112.5	1038.44	1035.78	1025.42	1006.99	978.62	942.39	898.90	846.93	788.12
135.0	1038.44	1037.22	1027.49	1008.86	981.32	945.28	902.21	849.82	790.60
157.5	1038.44	1038.05	1028.94	1009.89	982.56	947.77	903.66	851.69	794.54
180.0	1038.44	1037.02	1027.91	1009.06	982.97	946.94	902.42	853.14	795.78
202.5	1038.44	1038.67	1028.73	1010.31	982.35	946.11	903.66	851.07	792.05
225.0	1038.44	1039.09	1029.56	1009.89	982.35	945.91	901.18	847.55	789.77
247.5	1038.44	1039.09	1028.32	1008.65	980.07	942.59	898.07	845.06	784.60
270.0	1038.44	1029.56	1012.58	986.91	952.33	911.32	859.97	803.03	740.28
292.5	1038.44	1028.94	1011.55	985.87	951.08	907.39	857.90	800.13	734.90
315.0	1038.44	1029.56	1012.17	986.28	950.88	908.01	856.66	799.71	734.07
337.5	1038.44	1029.98	1011.55	985.25	950.88	907.60	856.04	797.23	733.86
360.0	1038.44	1028.94	1011.75	985.46	950.46	907.18	856.24	797.23	731.59

C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	661.80	587.67	507.12	421.60	332.77	252.63	168.76	92.35	23.61
22.5	665.32	588.71	510.85	426.15	340.22	254.49	174.56	97.12	27.13
45.0	669.46	593.47	512.50	428.85	343.53	261.12	178.50	100.84	31.68
67.5	671.33	597.82	515.61	434.85	349.75	267.54	184.92	106.85	34.79
90.0	719.99	647.31	575.04	490.76	407.10	321.79	240.20	159.65	84.07
112.5	722.27	650.41	575.87	495.32	411.25	328.83	243.72	162.14	88.42
135.0	727.44	656.00	582.08	498.22	417.04	330.90	245.59	165.87	89.46
157.5	729.10	657.45	581.25	501.94	417.04	330.69	247.66	165.04	88.63
180.0	730.14	658.28	583.53	501.53	415.80	331.52	245.59	162.76	86.56
202.5	726.41	657.25	579.80	498.42	418.49	329.25	243.10	163.17	85.94
225.0	723.92	651.66	574.83	495.94	410.83	324.69	244.55	159.65	82.83
247.5	718.13	648.34	570.69	488.28	407.10	321.17	235.65	154.06	77.86
270.0	670.09	594.09	513.54	432.16	346.64	261.12	174.56	99.60	30.23
292.5	665.74	589.53	508.78	424.71	341.46	255.53	172.49	94.84	26.51
315.0	662.63	585.39	506.50	421.81	335.66	249.52	166.90	91.94	22.57
337.5	662.01	584.98	503.60	421.60	332.14	248.49	165.66	89.66	23.19
360.0	661.80	587.67	507.12	421.60	332.77	252.63	168.76	92.35	23.61

C/ $\gamma$ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.21	0.00	0.21	0.21	0.21	0.41	0.62	0.83	0.83
22.5	0.21	0.41	0.41	0.62	0.62	0.62	0.62	0.83	0.83
45.0	0.00	0.41	0.62	0.62	0.83	1.04	0.83	0.83	1.24
67.5	0.41	0.41	0.41	0.62	0.83	0.83	0.83	0.62	0.83
90.0	17.60	0.00	0.41	0.00	0.00	0.41	0.41	0.83	1.04
112.5	20.09	0.00	0.00	0.00	0.41	0.41	0.41	0.62	0.62
135.0	21.54	0.00	0.00	0.00	0.00	0.00	0.41	0.41	0.83
157.5	21.54	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.41
180.0	21.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
202.5	19.05	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.21
225.0	15.74	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.21
247.5	13.05	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.41
270.0	0.62	0.83	0.62	0.62	0.62	0.83	0.62	0.83	1.04
292.5	0.62	0.41	0.21	0.41	0.21	0.41	0.62	0.62	0.83
315.0	0.21	0.41	0.21	0.00	0.41	0.41	0.41	0.41	0.41
337.5	0.21	0.00	0.21	0.21	0.21	0.41	0.41	0.62	0.62
360.0	0.21	0.00	0.21	0.21	0.21	0.41	0.62	0.83	0.83

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	1.04	0.83	1.04	1.04	1.24	1.04	0.83	0.62	0.83
22.5	1.04	1.24	1.04	1.24	0.83	1.04	0.62	1.04	0.83
45.0	1.04	0.83	1.04	1.24	1.04	1.04	0.83	1.04	1.04
67.5	0.83	1.04	1.04	1.04	0.83	0.83	0.83	0.83	1.04
90.0	0.83	0.83	0.83	1.24	1.24	1.24	1.24	1.04	1.04
112.5	0.83	0.83	1.04	1.04	1.24	1.04	1.04	0.83	0.83
135.0	0.62	0.83	0.83	0.62	0.83	1.04	1.04	0.83	0.83
157.5	0.62	0.62	0.83	0.62	0.62	1.04	0.83	0.62	0.62
180.0	0.41	0.41	0.62	0.83	0.83	0.83	0.62	1.04	0.83
202.5	0.41	0.41	0.41	0.62	0.62	0.62	0.62	0.83	0.62
225.0	0.41	0.62	0.62	0.62	0.83	0.83	0.62	0.62	0.83
247.5	0.62	0.41	0.41	0.83	0.83	0.62	1.04	0.83	0.83
270.0	1.24	1.24	1.04	1.45	1.24	1.24	1.24	1.45	1.45
292.5	1.04	0.83	0.83	0.83	0.62	1.04	0.83	0.83	0.83
315.0	0.62	0.83	0.83	0.83	1.04	0.83	1.04	0.83	1.04
337.5	0.83	0.41	0.83	0.83	1.04	0.62	0.62	1.04	0.83
360.0	1.04	0.83	1.04	1.04	1.24	1.04	0.83	0.62	0.83
C/γ(°)	180.0								
0.0	1.04								
22.5	1.04								
45.0	1.04								
67.5	1.04								
90.0	1.04								
112.5	1.04								
135.0	1.04								
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