



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.  
www.bellingeel.com

Tel:0755-21038430

Address:Rm. 108, No.1 Building, Meibaohe industrial park, No.14 Shilongzi Road, Dalang street, Longhua district, Shenzhen, China

---

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): 26.84

Number of Lamps: 1

PF: 0.9926

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

---

#### Photometric Results

Lumens(lm): 3010.94, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 112.18

Central intensity(cd): 1047.466, Maximum intensity(cd): 1067.993

Angle of maximum intensity: C=90.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=109.5

[C90/270]Total=112.7

Field angle(10%Imax): [C0/180]Total=161.3

[C90/270]Total=163.6

Maximum s/h(1/2): C0\_180=1.24 C90\_270=1.31

Maximum s/h(1/4): C0\_180=1.37 C90\_270=1.42

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.14%

Down flux rate of LUM(%): 99.86%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 78.259%

## Zonal flux distribution table

Appendix Page: 2 Total:7

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1047.466	0.000	0	0.00%	0.00%
5.0	1045.328	25.019	25.019	0.00%	0.83%
10.0	1032.139	74.318	99.336	0.00%	3.30%
15.0	1008.605	121.056	220.392	0.00%	7.32%
20.0	976.225	163.578	383.97	0.00%	12.75%
25.0	935.249	200.478	584.448	0.00%	19.41%
30.0	886.357	230.526	814.974	0.00%	27.07%
35.0	829.486	252.670	1067.644	0.00%	35.46%
40.0	766.600	266.295	1333.939	0.00%	44.30%
45.0	696.843	270.968	1604.907	0.00%	53.30%
50.0	621.926	266.477	1871.384	0.00%	62.15%
55.0	542.680	253.224	2124.608	0.00%	70.56%
60.0	459.772	231.714	2356.322	0.00%	78.26%
65.0	374.384	202.785	2559.106	0.00%	84.99%
70.0	288.719	167.902	2727.008	0.00%	90.57%
75.0	204.930	129.032	2856.04	0.00%	94.86%
80.0	124.061	88.029	2944.069	0.00%	97.78%
85.0	50.591	47.457	2991.526	0.00%	99.36%
90.0	4.656	15.127	3006.653	0.00%	99.86%
95.0	0.164	1.320	3007.973	0.00%	99.90%
100.0	0.176	0.092	3008.065	0.00%	99.90%
105.0	0.214	0.104	3008.169	0.00%	99.91%
110.0	0.302	0.135	3008.304	0.00%	99.91%
115.0	0.352	0.166	3008.47	0.00%	99.92%
120.0	0.453	0.196	3008.666	0.00%	99.92%
125.0	0.579	0.238	3008.904	0.00%	99.93%
130.0	0.566	0.249	3009.153	0.00%	99.94%
135.0	0.692	0.254	3009.407	0.00%	99.95%
140.0	0.730	0.263	3009.671	0.00%	99.96%
145.0	0.843	0.262	3009.933	0.00%	99.97%
150.0	0.919	0.259	3010.193	0.00%	99.98%
155.0	0.919	0.232	3010.425	0.00%	99.98%
160.0	0.881	0.189	3010.614	0.00%	99.99%
165.0	0.893	0.146	3010.76	0.00%	99.99%
170.0	0.818	0.102	3010.861	0.00%	100.00%
175.0	0.893	0.061	3010.923	0.00%	100.00%
180.0	0.912	0.022	3010.944	0.00%	100.00%

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

Date:  
Humidity(%): 59%

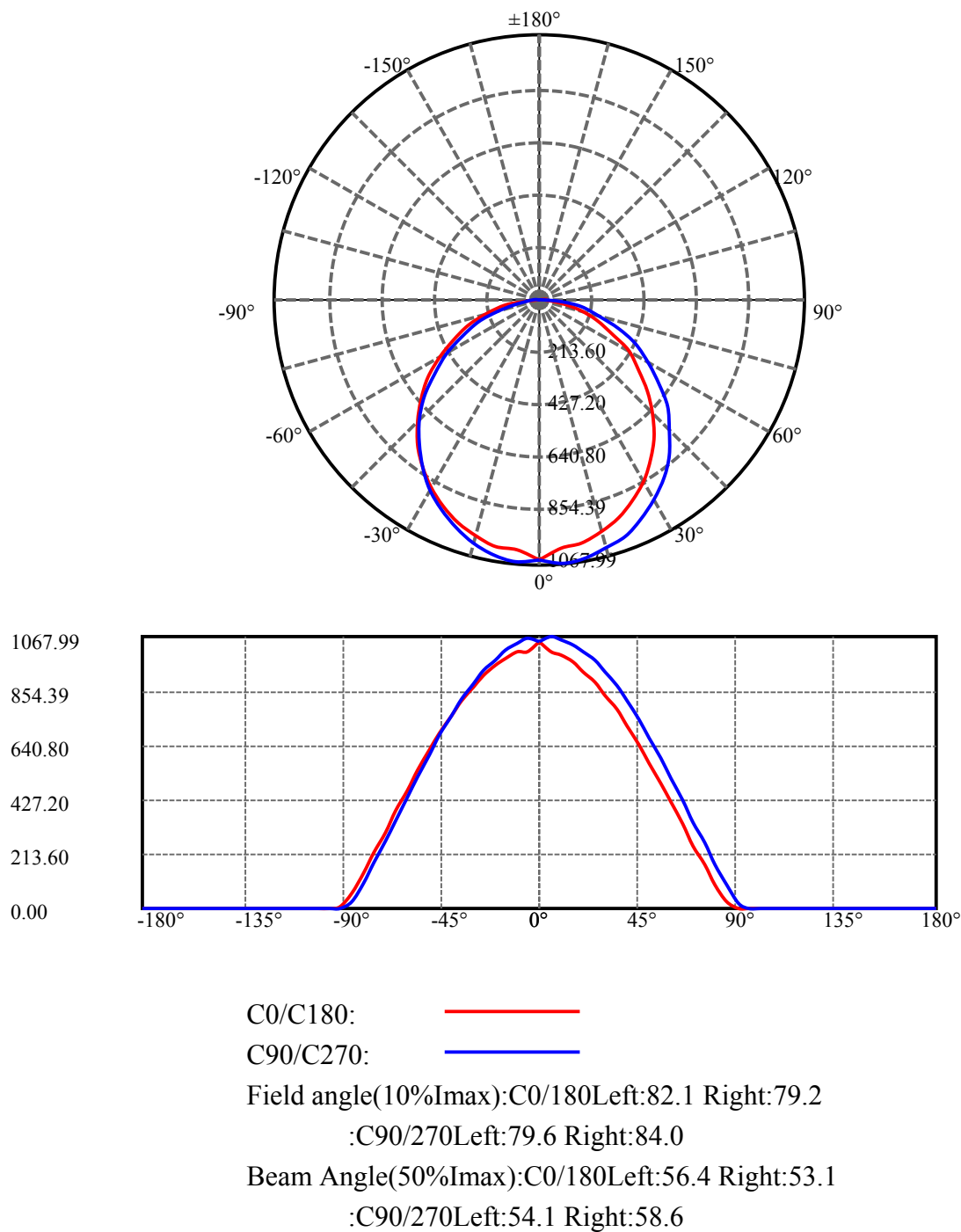
Operator: jarvis

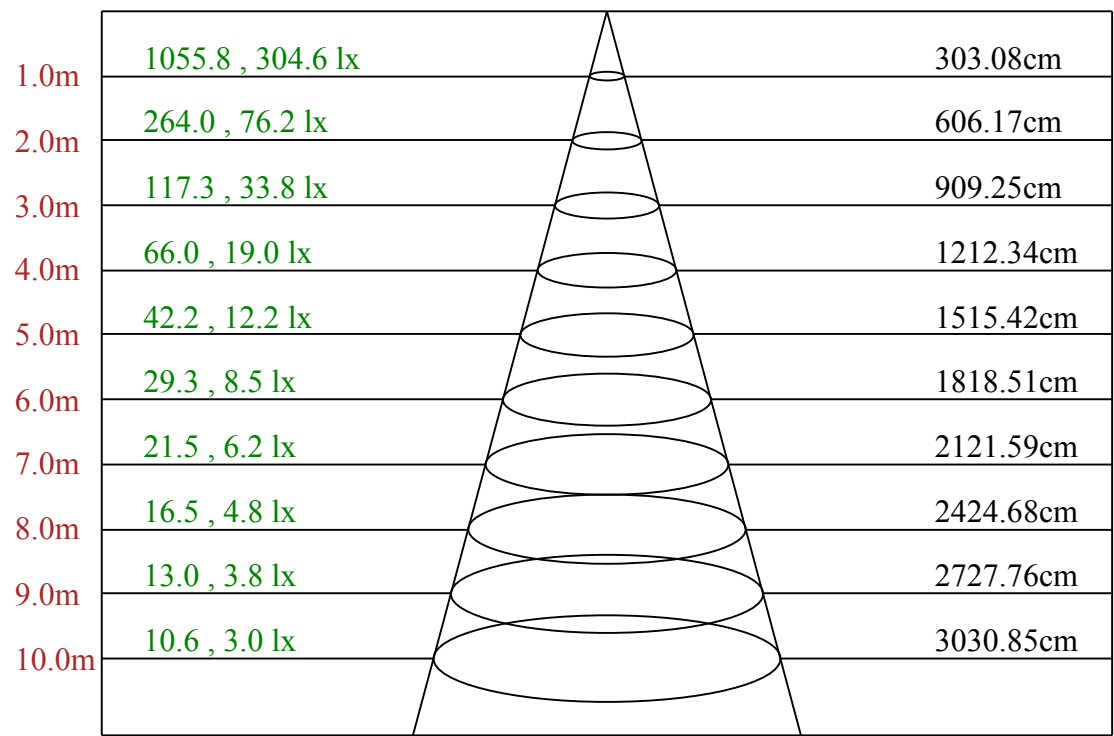
## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	814.97	N.A.	27.07%
0-40	1333.94	N.A.	44.30%
0-60	2356.32	N.A.	78.26%
0-90	3006.65	N.A.	99.86%
0-120	3008.67	N.A.	99.92%
0-180	3010.94	N.A.	100.00%
60-90	650.33	N.A.	21.60%
90-120	2.01	N.A.	0.07%
90-130	2.50	N.A.	0.08%
90-150	3.54	N.A.	0.12%
90-180	4.27	N.A.	0.14%
0-61.29	2408.76	N.A.	80.00%

## ZONAL LUMEN SUMMARY

0-10	99.34
10-20	284.63
20-30	431.00
30-40	518.96
40-50	537.45
50-60	484.94
60-70	370.69
70-80	217.06
80-90	62.58
90-100	1.41
100-110	0.24
110-120	0.36
120-130	0.49
130-140	0.52
140-150	0.52
150-160	0.42
160-170	0.25
170-180	0.06





Max , Ave      Beam angle of C90 plane 113.16

## Intensity data(cd)

Appendix Page: 6 Total:7

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1047.47	1006.78	993.69	967.52	931.27	890.40	838.04	779.85	716.43
22.5	1047.47	1030.14	1014.03	985.24	952.21	907.51	855.56	796.97	734.14
45.0	1047.47	1055.11	1038.19	1011.41	975.97	933.69	881.74	822.74	756.50
67.5	1047.47	1053.70	1038.19	1012.62	977.58	933.89	884.16	825.36	759.52
90.0	1047.47	1067.99	1057.72	1037.99	1010.20	972.35	927.04	873.08	813.28
112.5	1047.47	1066.58	1056.31	1036.58	1006.98	968.32	921.81	868.65	809.25
135.0	1047.47	1062.76	1051.48	1030.94	1001.55	962.28	916.77	862.61	800.59
157.5	1047.47	1033.36	1022.08	1000.74	972.55	936.91	887.98	834.82	776.23
180.0	1047.47	1010.41	1006.18	984.83	955.84	918.59	872.28	818.31	759.31
202.5	1047.47	1029.53	1021.88	1004.97	974.36	936.91	893.62	838.85	776.63
225.0	1047.47	1058.53	1045.04	1024.90	994.90	955.64	908.72	852.54	792.34
247.5	1047.47	1056.31	1043.63	1022.08	991.48	951.41	905.50	849.72	787.10
270.0	1047.47	1059.33	1041.62	1013.63	978.19	933.69	881.13	820.33	754.68
292.5	1047.47	1057.93	1040.00	1011.21	974.77	929.46	878.52	817.51	750.05
315.0	1047.47	1053.29	1036.38	1010.00	972.95	927.85	874.69	815.90	748.44
337.5	1047.47	1023.49	1007.79	983.02	948.79	905.10	854.15	794.55	731.12
360.0	1047.47	1006.78	993.69	967.52	931.27	890.40	838.04	779.85	716.43
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	644.94	570.85	493.73	414.79	330.22	247.27	169.54	92.02	23.76
22.5	661.46	585.75	510.64	429.09	343.31	257.53	177.60	98.46	27.59
45.0	686.83	609.91	528.16	443.19	359.62	272.44	187.46	106.72	34.43
67.5	688.03	613.73	532.99	446.21	362.64	279.48	195.11	114.37	38.66
90.0	745.02	671.12	593.60	510.44	424.86	339.29	256.13	171.56	91.21
112.5	738.78	664.27	587.96	504.60	418.62	334.65	247.47	163.30	86.99
135.0	734.35	662.66	581.32	497.75	414.19	326.00	238.20	156.86	78.13
157.5	710.79	637.09	562.59	479.83	394.86	309.69	226.93	144.98	68.06
180.0	693.07	622.19	546.68	465.94	381.97	301.63	216.86	136.32	61.41
202.5	708.77	638.30	558.16	478.62	391.84	305.86	220.69	138.53	64.43
225.0	723.27	647.76	566.82	485.07	397.68	308.68	224.11	142.16	65.44
247.5	718.84	646.76	567.82	483.86	398.08	310.69	226.93	143.37	67.86
270.0	680.99	601.45	518.29	434.73	348.15	262.17	177.60	100.68	27.79
292.5	678.57	600.04	516.48	430.10	345.12	258.34	173.57	94.24	26.38
315.0	675.15	596.01	515.27	429.29	341.50	254.51	171.96	90.21	23.36
337.5	660.65	582.93	502.38	422.85	337.47	251.29	168.74	91.21	23.96
360.0	644.94	570.85	493.73	414.79	330.22	247.27	169.54	92.02	23.76
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.20	0.00	0.00	0.00	0.20	0.20	0.20	0.40	0.40
22.5	0.20	0.20	0.20	0.20	0.00	0.60	0.40	0.60	0.60
45.0	0.40	0.40	0.60	0.60	0.40	0.60	0.60	0.81	0.81
67.5	0.40	0.40	0.20	0.81	0.60	0.60	0.81	0.81	0.81
90.0	19.73	0.20	0.20	0.40	0.40	0.40	0.81	0.81	0.81
112.5	15.10	0.00	0.00	0.20	0.40	0.40	0.40	0.60	0.40
135.0	9.26	0.00	0.00	0.00	0.40	0.20	0.40	0.20	0.40
157.5	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
180.0	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
202.5	4.63	0.00	0.00	0.00	0.00	0.00	0.20	0.40	0.20
225.0	5.24	0.00	0.20	0.00	0.00	0.40	0.20	0.40	0.40
247.5	6.04	0.00	0.00	0.00	0.00	0.20	0.20	0.60	0.40
270.0	0.81	0.60	0.60	0.60	1.01	0.81	1.01	1.01	1.21
292.5	0.81	0.20	0.40	0.40	0.60	0.60	0.81	0.81	0.81
315.0	0.60	0.40	0.20	0.20	0.60	0.40	0.60	0.81	0.81
337.5	0.60	0.20	0.20	0.00	0.20	0.20	0.60	0.60	0.60
360.0	0.20	0.00	0.00	0.00	0.20	0.20	0.20	0.40	0.40

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

Date:  
Humidity(%): 59%

Operator: jarvis

Intensity data(cd)									Appendix Page: 7 Total:7
C/ $\gamma$ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.40	0.40	0.60	0.81	0.81	0.81	0.60	0.60	0.81
22.5	0.60	0.81	0.81	1.01	0.81	0.81	0.81	0.60	0.81
45.0	0.81	0.81	1.01	1.01	1.01	0.81	1.01	0.81	0.81
67.5	1.01	1.01	1.01	1.21	1.01	1.01	1.21	1.01	1.01
90.0	0.81	0.81	0.81	1.01	1.21	1.01	1.01	1.01	1.01
112.5	0.81	0.81	0.81	0.81	0.81	0.81	1.01	0.81	1.01
135.0	0.60	0.60	0.81	1.21	1.01	0.81	0.81	0.81	1.01
157.5	0.40	0.60	0.60	0.60	0.60	0.81	0.60	0.81	0.60
180.0	0.60	0.40	0.60	0.60	0.60	0.81	0.81	0.81	0.60
202.5	0.40	0.40	0.60	0.60	0.81	0.81	0.60	0.60	0.81
225.0	0.60	0.40	1.01	1.01	0.81	0.81	0.81	0.60	1.01
247.5	0.40	0.60	0.60	0.81	0.81	0.81	1.01	1.01	0.60
270.0	1.41	1.41	1.41	1.41	1.61	1.41	1.61	1.41	1.41
292.5	0.81	1.01	1.01	1.01	1.21	1.01	0.81	0.81	1.01
315.0	0.81	0.81	0.81	0.81	0.81	1.01	0.81	0.81	1.01
337.5	0.60	0.81	1.01	0.81	0.81	0.60	0.81	0.60	0.81
360.0	0.40	0.40	0.60	0.81	0.81	0.81	0.60	0.60	0.81
C/ $\gamma$ (°)	180.0								
0.0	0.91								
22.5	0.91								
45.0	0.91								
67.5	0.91								
90.0	0.91								
112.5	0.91								
135.0	0.91								
157.5	0.91								
180.0	0.91								
202.5	0.91								
225.0	0.91								
247.5	0.91								
270.0	0.91								
292.5	0.91								
315.0	0.91								
337.5	0.91								
360.0	0.91								