



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.04

LampCAT:

Current(A): 0.2250

Lamp flux(lm): -1.0

Power (W): 26.89

Number of Lamps: 1

PF: 0.9939

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 3018.94, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 112.25

Central intensity(cd): 1061.073, Maximum intensity(cd): 1061.073

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=113.0

[C90/270]Total=108.2

Field angle(10%Imax): [C0/180]Total=168.4

[C90/270]Total=158.6

Maximum s/h(1/2): C0_180=1.24 C90_270=1.24

Maximum s/h(1/4): C0_180=1.37 C90_270=1.36

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.11%

Down flux rate of LUM(%): 99.89%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 77.347%

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	1061.073	0.000	0	0.00%	0.00%
5.0	1055.621	25.304	25.304	0.00%	0.84%
10.0	1039.527	74.950	100.255	0.00%	3.32%
15.0	1012.984	121.754	222.008	0.00%	7.35%
20.0	976.707	163.979	385.987	0.00%	12.79%
25.0	931.728	200.160	586.146	0.00%	19.42%
30.0	879.755	229.245	815.391	0.00%	27.01%
35.0	819.805	250.272	1065.663	0.00%	35.30%
40.0	754.912	262.730	1328.392	0.00%	44.00%
45.0	685.029	266.617	1595.009	0.00%	52.83%
50.0	610.883	261.858	1856.867	0.00%	61.51%
55.0	535.249	249.207	2106.074	0.00%	69.76%
60.0	455.362	228.977	2335.051	0.00%	77.35%
65.0	375.816	202.061	2537.112	0.00%	84.04%
70.0	296.258	170.174	2707.286	0.00%	89.68%
75.0	219.125	134.713	2841.999	0.00%	94.14%
80.0	144.416	97.273	2939.272	0.00%	97.36%
85.0	66.416	57.288	2996.56	0.00%	99.26%
90.0	3.549	19.157	3015.717	0.00%	99.89%
95.0	0.082	0.994	3016.711	0.00%	99.93%
100.0	0.070	0.041	3016.752	0.00%	99.93%
105.0	0.094	0.044	3016.796	0.00%	99.93%
110.0	0.152	0.064	3016.86	0.00%	99.93%
115.0	0.199	0.089	3016.949	0.00%	99.93%
120.0	0.246	0.108	3017.058	0.00%	99.94%
125.0	0.351	0.138	3017.196	0.00%	99.94%
130.0	0.468	0.178	3017.374	0.00%	99.95%
135.0	0.609	0.218	3017.592	0.00%	99.96%
140.0	0.633	0.230	3017.821	0.00%	99.96%
145.0	0.691	0.221	3018.042	0.00%	99.97%
150.0	0.785	0.217	3018.26	0.00%	99.98%
155.0	0.797	0.200	3018.46	0.00%	99.98%
160.0	0.797	0.167	3018.627	0.00%	99.99%
165.0	0.797	0.131	3018.758	0.00%	99.99%
170.0	0.855	0.098	3018.856	0.00%	100.00%
175.0	0.820	0.060	3018.916	0.00%	100.00%
180.0	0.937	0.021	3018.937	0.00%	100.00%

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

Date:
Humidity(%): 59%

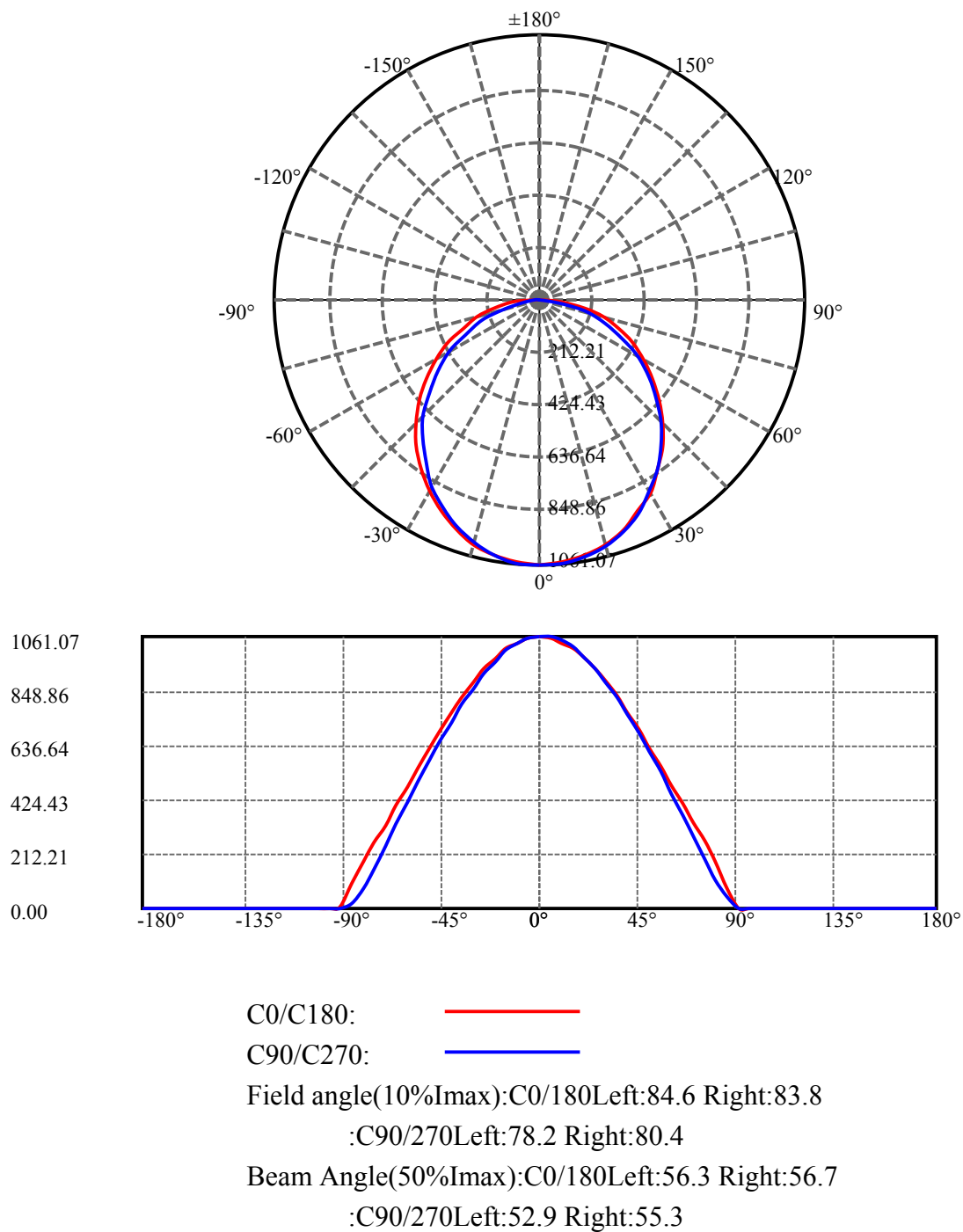
Operator: jarvis

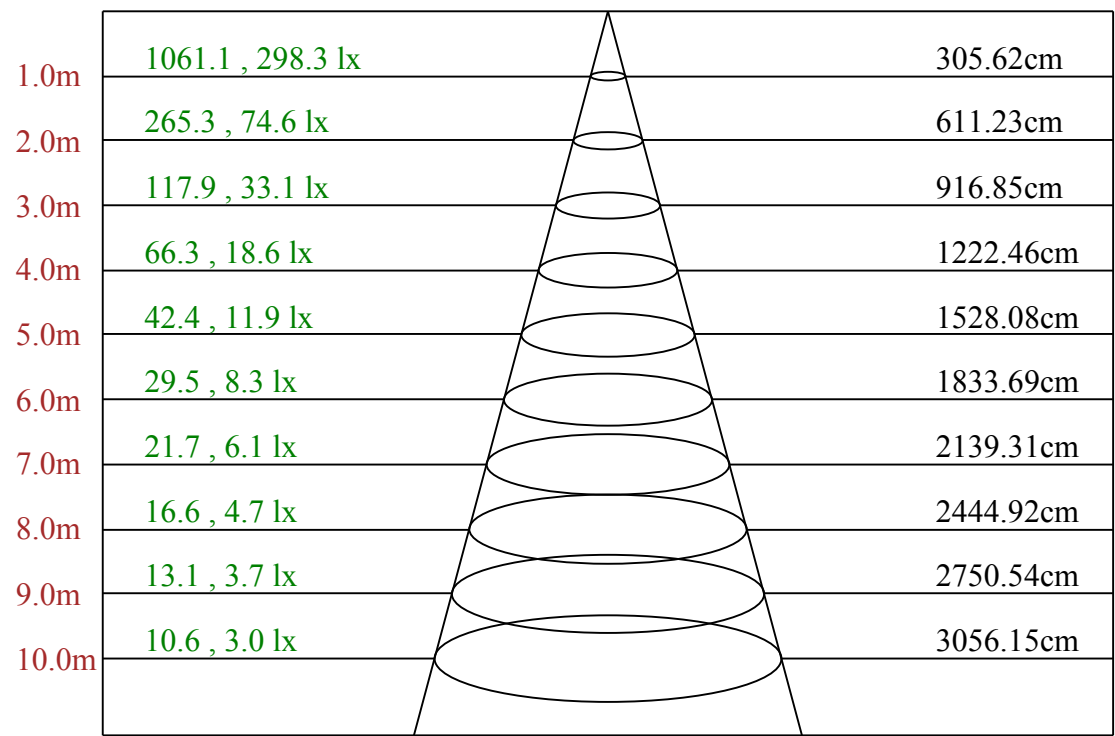
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	815.39	N.A.	27.01%
0-40	1328.39	N.A.	44.00%
0-60	2335.05	N.A.	77.35%
0-90	3015.72	N.A.	99.89%
0-120	3017.06	N.A.	99.94%
0-180	3018.94	N.A.	100.00%
60-90	680.67	N.A.	22.55%
90-120	1.34	N.A.	0.04%
90-130	1.66	N.A.	0.05%
90-150	2.54	N.A.	0.08%
90-180	3.20	N.A.	0.11%
0-61.98	2415.15	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	100.25
10-20	285.73
20-30	429.40
30-40	513.00
40-50	528.47
50-60	478.18
60-70	372.23
70-80	231.99
80-90	76.44
90-100	1.04
100-110	0.11
110-120	0.20
120-130	0.32
130-140	0.45
140-150	0.44
150-160	0.37
160-170	0.23
170-180	0.06





Max , Ave Beam angle of C0 plane 113.60

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	1061.07	1052.34	1037.91	1013.36	979.06	935.39	886.67	829.13	766.34
22.5	1061.07	1051.78	1036.60	1009.80	974.00	931.27	879.36	821.63	759.41
45.0	1061.07	1050.84	1033.23	1004.74	966.88	920.59	869.24	808.70	742.92
67.5	1061.07	1051.03	1030.60	999.87	959.57	911.03	853.87	792.58	724.18
90.0	1061.07	1060.40	1045.03	1019.54	982.44	936.89	883.11	825.01	758.85
112.5	1061.07	1058.53	1042.60	1016.36	979.44	934.08	881.98	821.63	754.73
135.0	1061.07	1060.03	1044.10	1018.04	980.94	936.89	884.23	824.07	759.60
157.5	1061.07	1057.03	1040.53	1014.86	980.56	936.89	884.98	827.63	763.16
180.0	1061.07	1051.97	1036.60	1011.86	976.81	933.52	883.85	826.32	762.78
202.5	1061.07	1053.28	1038.29	1012.80	978.13	935.58	884.60	826.32	762.60
225.0	1061.07	1054.22	1040.72	1016.17	981.31	937.64	885.17	827.82	768.78
247.5	1061.07	1058.15	1045.22	1020.29	986.56	941.95	890.04	830.25	764.47
270.0	1061.07	1055.34	1036.41	1005.11	965.01	916.47	858.93	794.83	725.49
292.5	1061.07	1056.65	1038.47	1010.17	971.57	923.21	877.86	808.14	740.11
315.0	1061.07	1060.21	1042.97	1016.73	981.12	935.77	882.73	822.19	758.66
337.5	1061.07	1058.15	1043.16	1018.04	983.93	940.45	889.48	830.63	766.53
360.0	1061.07	1052.34	1037.91	1013.36	979.06	935.39	886.67	829.13	766.34

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	699.25	627.66	556.06	481.10	407.44	335.66	266.51	186.10	81.15
22.5	691.19	618.66	543.88	467.23	393.20	318.42	245.14	166.61	70.28
45.0	670.01	600.29	523.27	443.80	363.40	285.81	207.84	134.00	49.10
67.5	651.27	574.62	497.78	415.88	332.48	247.95	167.93	92.02	27.55
90.0	687.82	611.35	536.20	450.74	365.46	280.75	193.98	111.70	44.23
112.5	683.51	609.67	530.01	447.92	369.77	282.81	199.79	122.38	59.04
135.0	689.69	614.54	539.57	459.36	378.21	298.37	223.78	152.56	80.59
157.5	693.81	621.10	546.32	469.29	393.57	318.42	245.89	176.92	91.46
180.0	694.56	625.03	550.25	473.98	400.70	326.10	256.39	187.23	99.52
202.5	695.69	622.22	548.01	470.79	393.57	317.67	247.20	178.61	96.33
225.0	692.32	618.66	546.51	463.48	382.14	301.18	225.46	153.31	85.09
247.5	695.13	620.16	541.82	462.73	379.33	293.87	209.16	129.69	65.03
270.0	654.83	577.05	496.65	412.13	328.73	242.14	153.49	78.53	21.74
292.5	673.39	591.86	519.14	432.93	346.72	264.63	185.36	109.83	44.98
315.0	687.82	613.60	536.20	458.98	378.39	298.93	222.65	152.56	67.66
337.5	700.19	627.66	552.32	475.48	399.95	327.42	255.45	178.61	78.90
360.0	699.25	627.66	556.06	481.10	407.44	335.66	266.51	186.10	81.15

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.38	0.19	0.19	0.19	0.19	0.38	0.19	0.38	0.56
22.5	0.19	0.38	0.19	0.19	0.19	0.38	0.19	0.19	0.56
45.0	0.19	0.00	0.00	0.19	0.38	0.38	0.38	0.38	0.38
67.5	0.00	0.00	0.00	0.00	0.38	0.38	0.75	0.38	0.56
90.0	2.62	0.00	0.00	0.00	0.00	0.00	0.19	0.38	0.56
112.5	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19
135.0	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19
157.5	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
180.0	7.12	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.38
202.5	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.38
225.0	12.18	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38
247.5	9.18	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.38
270.0	0.75	0.38	0.38	0.38	0.38	0.75	0.75	0.94	0.94
292.5	0.56	0.19	0.19	0.19	0.38	0.56	0.56	0.75	0.75
315.0	0.56	0.00	0.19	0.19	0.38	0.19	0.56	0.38	0.56
337.5	0.19	0.19	0.00	0.19	0.19	0.19	0.38	0.56	0.56
360.0	0.38	0.19	0.19	0.19	0.19	0.38	0.19	0.38	0.56

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	0.56	0.75	0.75	0.94	0.75	0.75	0.56	0.94	0.75
22.5	0.75	0.56	0.75	0.94	1.12	1.12	0.56	0.94	0.75
45.0	0.75	0.56	0.94	0.94	0.94	0.94	0.94	0.94	0.94
67.5	0.56	0.75	0.75	0.94	0.94	0.75	0.75	0.94	0.94
90.0	0.75	0.75	0.75	0.75	0.75	0.56	0.94	0.94	0.94
112.5	0.38	0.56	0.56	0.75	0.75	0.94	0.75	0.94	0.75
135.0	0.38	0.38	0.38	0.38	0.38	0.56	0.75	0.75	0.75
157.5	0.56	0.38	0.56	0.75	0.75	0.56	0.75	0.75	0.75
180.0	0.56	0.38	0.56	0.56	0.56	0.75	0.56	0.75	0.75
202.5	0.38	0.56	0.56	0.56	0.75	0.75	0.75	0.56	0.75
225.0	0.38	0.56	0.56	0.75	0.75	0.94	0.75	0.75	0.56
247.5	0.38	0.38	0.56	0.56	0.75	0.75	0.94	0.94	0.75
270.0	1.12	1.12	1.12	1.31	1.31	1.12	1.31	1.31	1.31
292.5	0.75	0.94	0.94	0.94	0.75	0.75	0.75	0.94	0.75
315.0	0.75	0.75	0.75	0.75	0.75	0.75	0.94	0.75	0.94
337.5	0.75	0.75	0.56	0.75	0.75	0.75	0.75	0.56	0.75
360.0	0.56	0.75	0.75	0.94	0.75	0.75	0.56	0.94	0.75
C/γ(°)	180.0								
0.0	0.94								
22.5	0.94								
45.0	0.94								
67.5	0.94								
90.0	0.94								
112.5	0.94								
135.0	0.94								
157.5	0.94								
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