



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

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 119.98

LampCAT:

Current(A): 0.3170

Lamp flux(lm): 2659.0

Power (W): 37.63

Number of Lamps: 1

PF: 0.9906

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2658.79, Efficiency(%): 99.99% , Luminous Efficacy(lm/W): 70.66

Central intensity(cd): 841.170, Maximum intensity(cd): 847.783

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

Beam Angle(50%Imax): [C0/180]Total=107.7

[C90/270]Total=108.3

Field angle(10%Imax): [C0/180]Total=186.7

[C90/270]Total=187.1

Maximum s/h(1/2): C0_180=1.25 C90_270=1.26

Maximum s/h(1/4): C0_180=1.38 C90_270=1.39

Up flux rate of lamp(%): 6.69%

Down flux rate of lamp(%): 93.30%

Up flux rate of LUM(%): 6.69%

Down flux rate of LUM(%): 93.31%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 67.567%

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

Date:
Humidity(%): 59%

Operator: jarvis

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	841.170	0.000	0	0.00%	0.00%
5.0	821.451	19.876	19.876	0.75%	0.75%
10.0	809.713	58.352	78.228	2.19%	2.94%
15.0	775.144	94.013	172.241	3.54%	6.48%
20.0	751.514	125.818	298.059	4.73%	11.21%
25.0	716.662	153.985	452.043	5.79%	17.00%
30.0	676.996	176.369	628.412	6.63%	23.64%
35.0	631.513	192.687	821.099	7.25%	30.88%
40.0	580.547	202.223	1023.322	7.61%	38.49%
45.0	526.261	204.934	1228.257	7.71%	46.20%
50.0	467.547	200.813	1429.07	7.55%	53.75%
55.0	408.911	190.571	1619.641	7.17%	60.92%
60.0	356.092	176.828	1796.469	6.65%	67.57%
65.0	307.674	161.363	1957.832	6.07%	73.64%
70.0	259.488	143.609	2101.441	5.40%	79.04%
75.0	214.571	123.911	2225.352	4.66%	83.70%
80.0	174.185	104.020	2329.373	3.91%	87.61%
85.0	137.814	84.777	2414.15	3.19%	90.80%
90.0	105.638	66.659	2480.809	2.51%	93.31%
95.0	77.092	50.033	2530.842	1.88%	95.19%
100.0	53.205	35.405	2566.247	1.33%	96.52%
105.0	35.213	23.658	2589.905	0.89%	97.41%
110.0	23.913	15.454	2605.36	0.58%	97.99%
115.0	19.357	10.956	2616.316	0.41%	98.40%
120.0	17.272	8.904	2625.22	0.33%	98.74%
125.0	15.650	7.610	2632.83	0.29%	99.02%
130.0	13.359	6.308	2639.138	0.24%	99.26%
135.0	10.579	4.837	2643.975	0.18%	99.44%
140.0	9.575	3.732	2647.706	0.14%	99.58%
145.0	9.215	3.135	2650.841	0.12%	99.70%
150.0	8.340	2.585	2653.426	0.10%	99.80%
155.0	7.645	2.023	2655.449	0.08%	99.87%
160.0	6.770	1.512	2656.961	0.06%	99.93%
165.0	5.431	1.006	2657.967	0.04%	99.97%
170.0	3.810	0.548	2658.515	0.02%	99.99%
175.0	2.394	0.222	2658.737	0.01%	100.00%
180.0	1.922	0.052	2658.788	0.00%	100.00%

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

Date:
Humidity(%): 59%

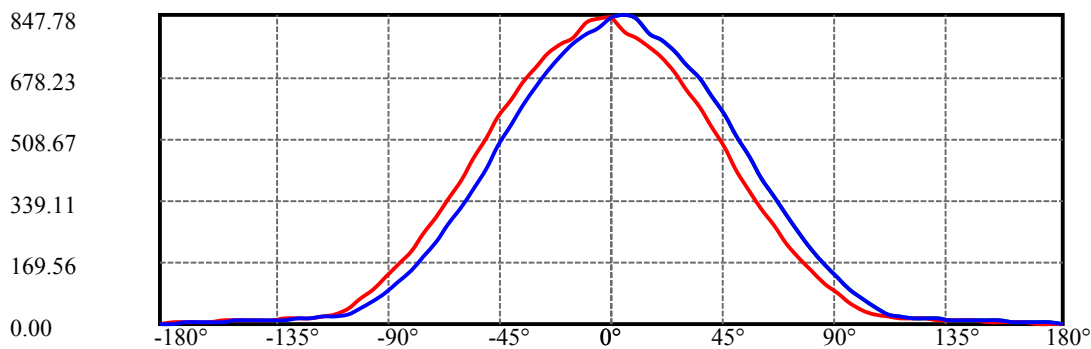
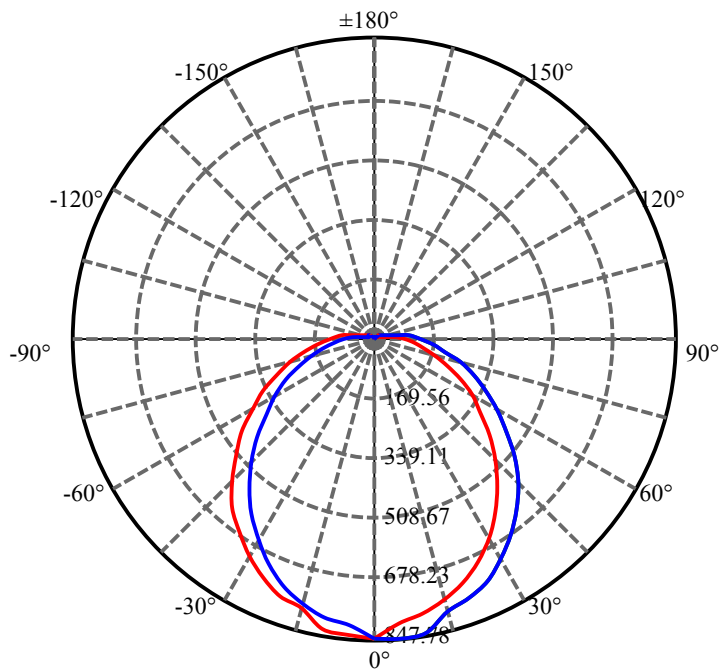
Operator: jarvis

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	628.41	23.63%	23.64%
0-40	1023.32	38.49%	38.49%
0-60	1796.47	67.56%	67.57%
0-90	2480.81	93.30%	93.31%
0-120	2625.22	98.73%	98.74%
0-180	2658.79	99.99%	100.00%
60-90	684.34	25.74%	25.74%
90-120	144.41	5.43%	5.43%
90-130	158.33	5.95%	5.95%
90-150	172.62	6.49%	6.49%
90-180	177.93	6.69%	6.69%
0-71.03	2127.03	79.99%	80.00%

ZONAL LUMEN SUMMARY

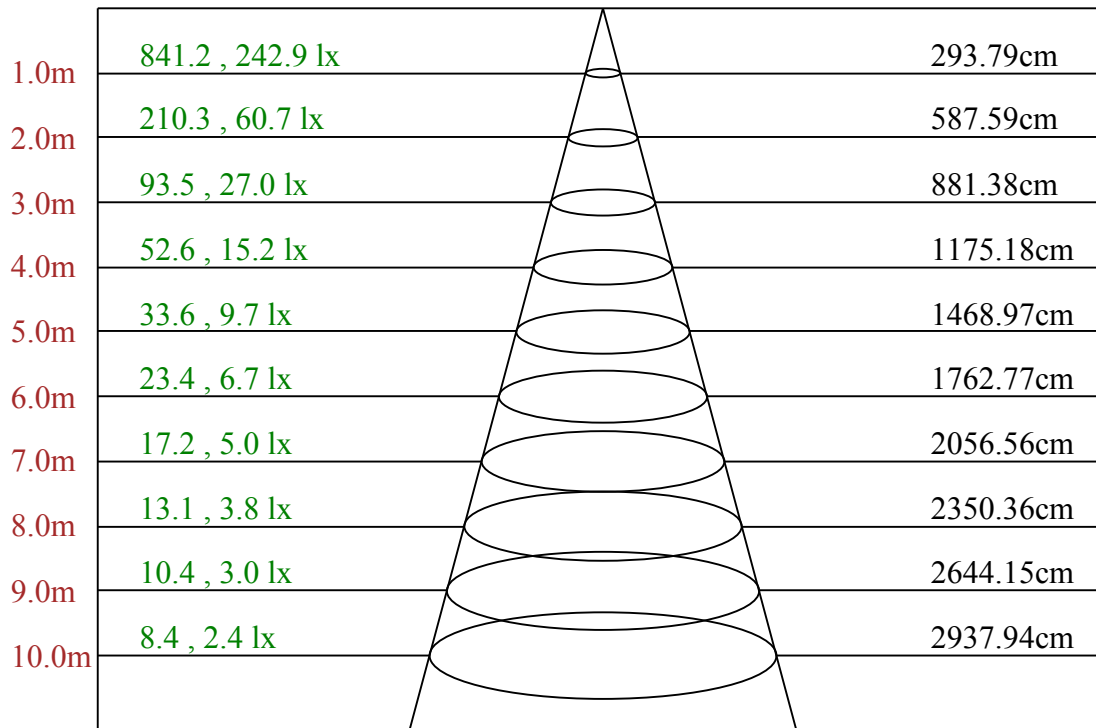
0-10	78.23
10-20	219.83
20-30	330.35
30-40	394.91
40-50	405.75
50-60	367.40
60-70	304.97
70-80	227.93
80-90	151.44
90-100	85.44
100-110	39.11
110-120	19.86
120-130	13.92
130-140	8.57
140-150	5.72
150-160	3.53
160-170	1.55
170-180	0.22



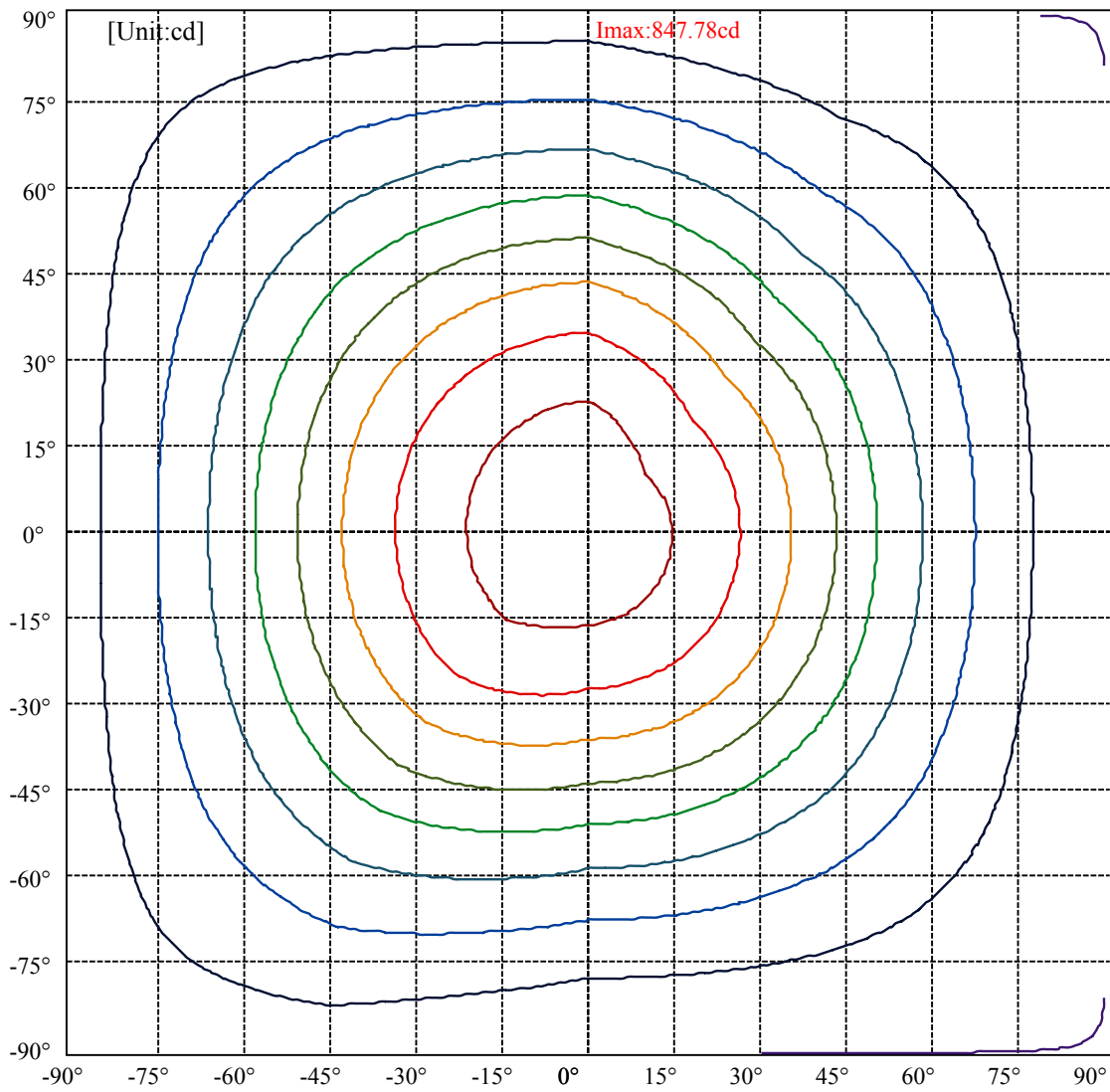
C90(Max): —
 C0/C180: —
 C90/C270: —

Field angle(10%Imax):C0/180Left:96.8 Right:89.9
 :C90/270Left:90.2 Right:96.9

Beam Angle(50%Imax):C0/180Left:57.7 Right:50.0
 :C90/270Left:50.4 Right:57.9



Max , Ave Beam angle of C90 plane 111.51

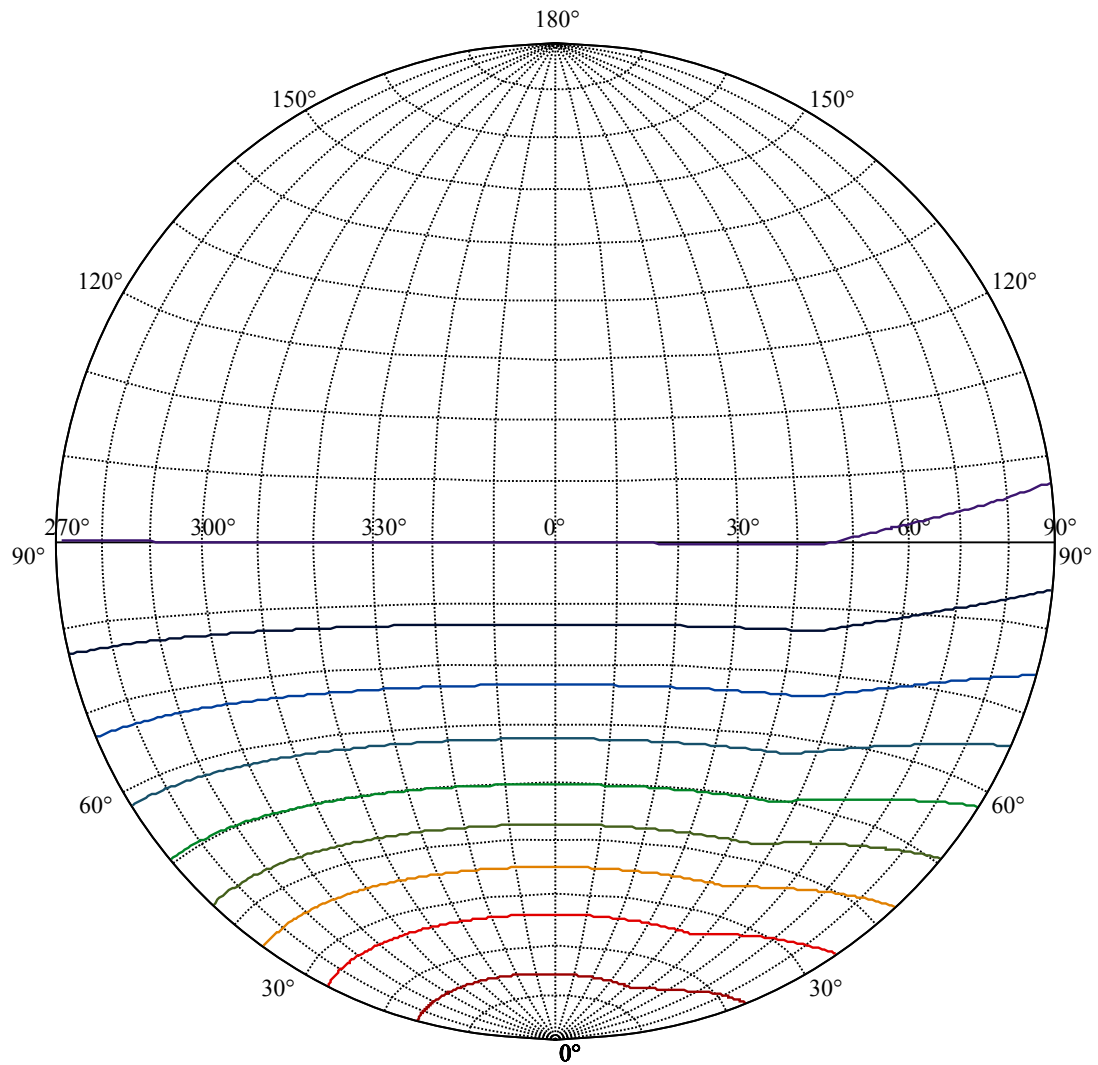


(10%Imax) 84.7783	—
(20%Imax) 169.557	—
(30%Imax) 254.335	—
(40%Imax) 339.113	—
(50%Imax) 423.892	—
(60%Imax) 508.67	—
(70%Imax) 593.448	—
(80%Imax) 678.226	—
(90%Imax) 763.005	—

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

Date:
Humidity(%): 59%

Operator: jarvis



House

[Unit:cd]

Road

Imax:847.78

(10%Imax) 84.7783	—
(20%Imax) 169.557	—
(30%Imax) 254.335	—
(40%Imax) 339.113	—
(50%Imax) 423.892	—
(60%Imax) 508.67	—
(70%Imax) 593.448	—
(80%Imax) 678.226	—
(90%Imax) 763.005	—

Intensity data(cd)

C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	841.17	800.01	785.80	759.85	730.00	688.81	643.92	593.88	540.34
45.0	841.17	797.33	783.95	758.00	727.52	686.55	643.30	593.06	537.66
90.0	841.17	847.78	837.90	794.45	777.77	748.32	713.32	672.54	624.98
135.0	841.17	841.19	831.93	787.86	771.18	743.38	707.34	666.78	619.42
180.0	841.17	837.28	827.81	784.57	768.09	740.70	703.84	663.48	617.77
225.0	841.17	835.22	825.13	782.71	766.03	737.20	702.81	662.87	615.50
270.0	841.17	809.48	795.69	769.74	738.64	696.84	653.19	601.91	546.31
315.0	841.17	803.30	789.51	763.97	732.88	691.49	648.24	597.59	542.40
360.0	841.17	800.01	785.80	759.85	730.00	688.81	643.92	593.88	540.34

C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	482.48	420.70	362.22	317.53	270.58	221.16	181.01	145.18	112.64
45.0	481.86	420.49	361.81	315.47	268.73	219.72	180.59	143.94	110.37
90.0	572.47	515.42	457.56	399.28	347.80	299.82	249.37	204.69	165.36
135.0	569.17	512.34	453.44	393.72	344.71	298.18	246.90	203.66	163.50
180.0	566.08	509.25	452.21	393.11	342.86	294.68	246.49	202.42	162.06
225.0	564.23	509.25	450.97	391.25	342.45	295.09	245.46	201.19	162.27
270.0	489.48	428.94	367.78	321.24	273.05	225.07	184.10	146.82	113.67
315.0	484.33	423.99	365.31	317.12	271.20	222.19	182.65	145.59	112.64
360.0	482.48	420.70	362.22	317.53	270.58	221.16	181.01	145.18	112.64

C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	83.81	58.48	39.13	25.53	19.97	17.71	16.27	14.42	12.15
45.0	82.99	59.51	39.13	25.53	19.77	17.30	16.06	14.42	12.36
90.0	128.50	95.34	67.34	45.10	28.01	21.00	18.12	16.89	14.62
135.0	126.64	94.31	67.13	44.69	27.59	21.00	17.92	16.47	14.21
180.0	126.85	94.11	66.72	44.07	27.39	20.80	17.92	16.27	14.21
225.0	126.23	93.70	65.90	43.66	27.39	20.59	17.92	16.68	14.00
270.0	85.87	60.95	40.36	26.98	20.80	18.53	17.09	15.24	12.97
315.0	84.22	60.34	39.95	26.15	20.39	17.92	16.89	14.83	12.36
360.0	83.81	58.48	39.13	25.53	19.97	17.71	16.27	14.42	12.15

C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	8.65	9.27	8.44	7.83	7.21	5.97	4.12	2.47	1.44
45.0	8.65	9.27	8.44	7.83	7.21	5.77	4.12	2.27	1.44
90.0	12.36	9.88	10.09	8.86	8.03	7.83	6.80	4.94	3.09
135.0	12.15	9.88	9.68	8.86	8.03	7.41	6.59	4.94	3.09
180.0	11.94	9.68	9.68	8.44	8.03	7.21	6.59	4.74	3.09
225.0	12.15	9.68	9.47	8.44	7.62	7.41	6.38	4.74	2.88
270.0	9.68	9.68	9.47	8.65	7.83	6.59	4.74	3.50	2.27
315.0	9.06	9.27	8.44	7.83	7.21	5.97	4.12	2.88	1.85
360.0	8.65	9.27	8.44	7.83	7.21	5.97	4.12	2.47	1.44

C/ γ (°)	180.0
0.0	1.92
45.0	1.92
90.0	1.92
135.0	1.92
180.0	1.92
225.0	1.92
270.0	1.92
315.0	1.92
360.0	1.92