



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.  
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LumCAT: LSG3-40K

Luminaire:

Report No:

Voltage(V): 120.04

Test No:

Current(A): 0.0625

LampCAT:

Power (W): 7.4470

Lamp flux(lm): 620.5

PF: 0.9926

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

Lumens(lm): 620.48

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 83.32

Central intensity(cd): 994.142

Maximum intensity(cd): 1057.219

Angle of maximum intensity: C=315.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=45.4

[C90/270]Total=44.4

Field angle(10%Imax): [C0/180]Total=69.4

[C90/270]Total=68.4

Maximum s/h(1/2): C0\_180=0.80 C90\_270=0.66

Maximum s/h(1/4): C0\_180=1.15 C90\_270=0.64

Up flux rate of lamp(%): 0.80%

Down flux rate of lamp(%): 99.20%

Up flux rate of LUM(%): 0.80%

Down flux rate of LUM(%): 99.20%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 97.309%

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

Date:  
Humidity(%): 58%

Operator: Zac

## Zonal flux distribution table

Page: 2 Total:8

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	999.342	.000	.000	.000%	.000%
5.0	997.564	23.872	23.872	3.847%	3.847%
10.0	946.544	69.547	93.419	11.209%	15.056%
15.0	826.303	105.164	198.583	16.949%	32.005%
20.0	635.149	120.444	319.028	19.411%	51.416%
25.0	398.392	108.399	427.427	17.470%	68.886%
30.0	209.282	76.902	504.329	12.394%	81.280%
35.0	95.148	44.829	549.158	7.225%	88.505%
40.0	42.301	22.932	572.090	3.696%	92.201%
45.0	23.811	12.241	584.332	1.973%	94.174%
50.0	15.951	8.034	592.366	1.295%	95.469%
55.0	12.710	6.232	598.598	1.004%	96.473%
60.0	9.735	5.188	603.786	.836%	97.309%
65.0	6.893	4.042	607.828	.651%	97.961%
70.0	4.801	2.961	610.789	.477%	98.438%
75.0	2.709	1.963	612.752	.316%	98.754%
80.0	2.104	1.288	614.040	.208%	98.962%
85.0	1.318	.930	614.970	.150%	99.112%
90.0	.713	.556	615.526	.090%	99.201%
95.0	.580	.354	615.880	.057%	99.258%
100.0	.665	.338	616.218	.055%	99.313%
105.0	.653	.353	616.571	.057%	99.370%
110.0	.677	.348	616.918	.056%	99.426%
115.0	.677	.343	617.261	.055%	99.481%
120.0	.689	.332	617.593	.054%	99.534%
125.0	.738	.330	617.923	.053%	99.588%
130.0	.701	.313	618.236	.050%	99.638%
135.0	.798	.303	618.539	.049%	99.687%
140.0	.846	.304	618.843	.049%	99.736%
145.0	.943	.299	619.142	.048%	99.784%
150.0	1.016	.288	619.430	.046%	99.831%
155.0	1.125	.271	619.701	.044%	99.874%
160.0	1.306	.255	619.956	.041%	99.915%
165.0	1.391	.222	620.178	.036%	99.951%
170.0	1.403	.166	620.344	.027%	99.978%
175.0	1.463	.103	620.446	.017%	99.994%
180.0	1.500	.035	620.482	.006%	100.000%

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

Date:  
Humidity(%): 58%

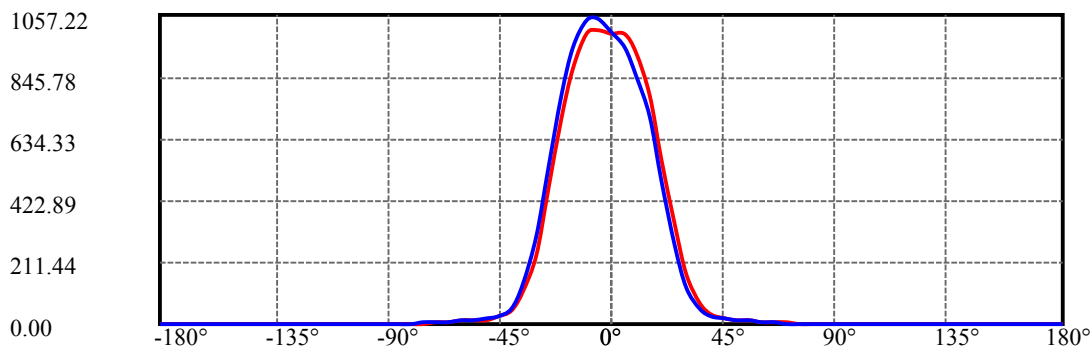
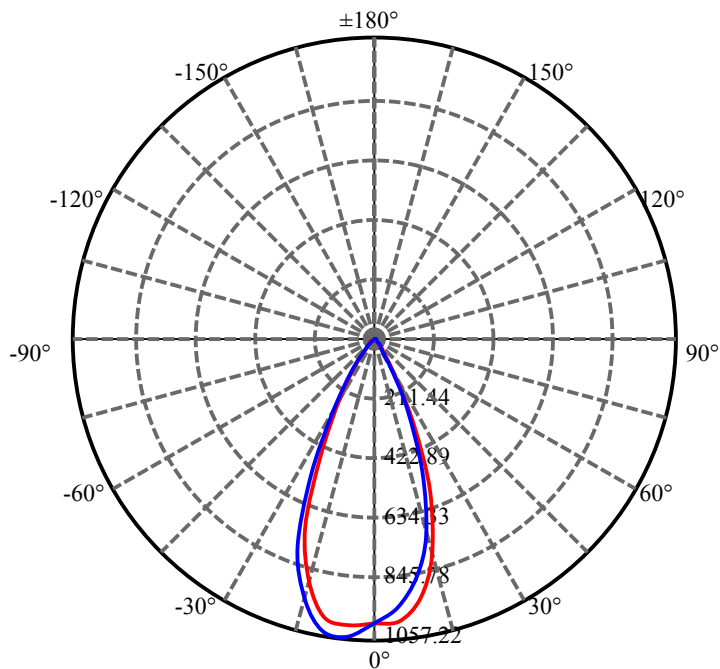
Operator: Zac

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	504.33	81.28%	81.28%
0-40	572.09	92.20%	92.20%
0-60	603.79	97.31%	97.31%
0-90	615.53	99.20%	99.20%
0-120	617.59	99.53%	99.53%
0-180	620.48	100.00%	100.00%
60-90	16.93	2.73%	2.73%
90-120	2.62	0.42%	0.42%
90-130	3.27	0.53%	0.53%
90-150	4.46	0.72%	0.72%
90-180	5.48	0.88%	0.88%
0-29.48	496.39	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	93.42
10-20	225.61
20-30	185.30
30-40	67.76
40-50	20.28
50-60	11.42
60-70	7.00
70-80	3.25
80-90	1.49
90-100	0.69
100-110	0.70
110-120	0.67
120-130	0.64
130-140	0.61
140-150	0.59
150-160	0.53
160-170	0.39
170-180	0.10

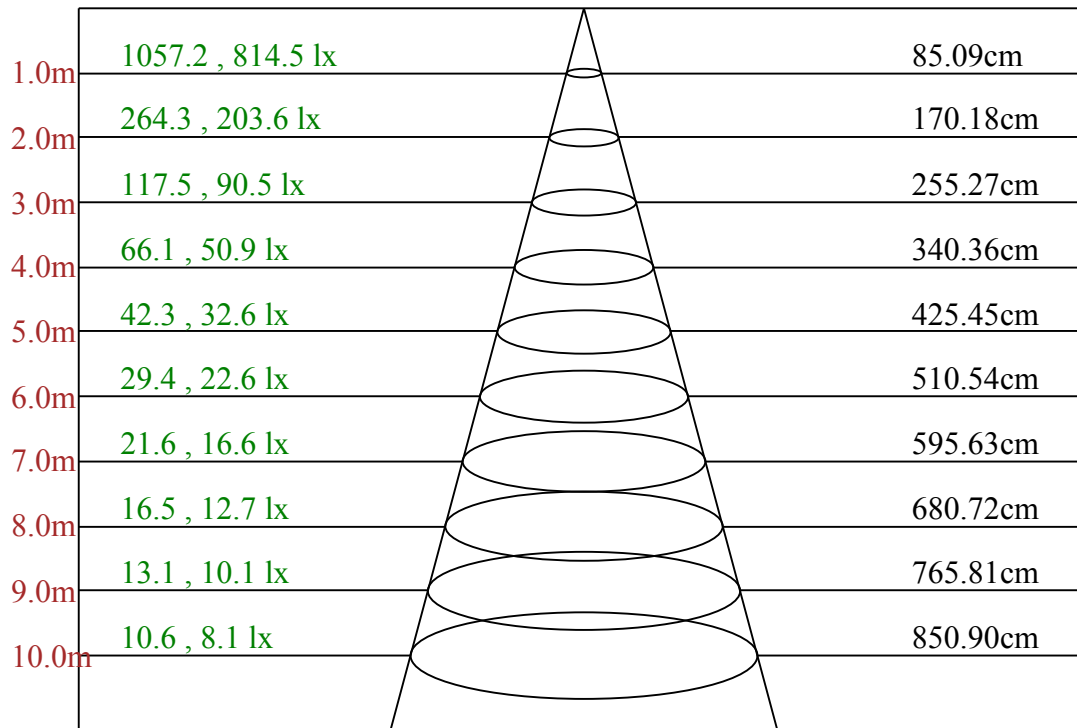


C0/C180: —

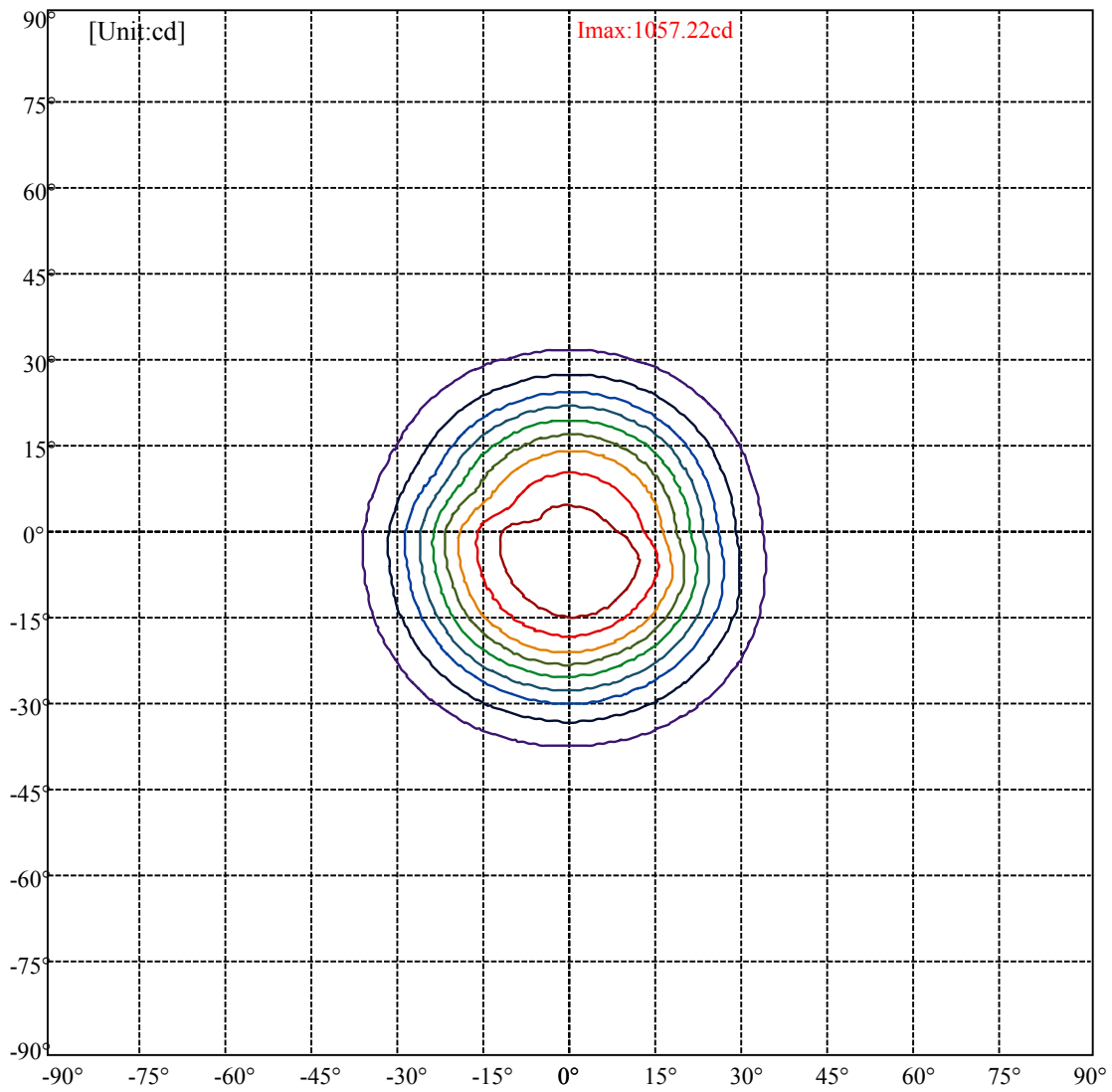
C90/C270: —

Field angle(10%Imax):C0/180Left:30.9 Right:38.5  
 :C90/270Left:32.1 Right:36.3

Beam Angle(50%Imax):C0/180Left:19.0 Right:26.4  
 :C90/270Left:20.1 Right:24.3



Max , Ave      Beam angle of C315plane46.02



(10%Imax) 105.693	—
(20%Imax) 211.385	—
(30%Imax) 317.078	—
(40%Imax) 422.771	—
(50%Imax) 528.463	—
(60%Imax) 634.156	—
(70%Imax) 739.848	—
(80%Imax) 845.541	—
(90%Imax) 951.234	—

## Intensity data(cd)

Page: 7 Total:8

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	994.14	993.17	926.42	784.59	567.50	339.19	168.14	71.98	34.63
22.5	991.43	967.63	892.75	758.86	544.09	317.90	149.18	64.63	32.12
45.0	990.47	954.28	867.21	732.35	522.03	298.55	136.80	58.43	30.57
67.5	996.66	947.12	853.48	717.26	498.23	283.27	127.51	54.56	28.25
90.0	998.59	946.74	850.19	708.75	492.23	270.88	123.25	52.63	27.48
112.5	1004.20	949.25	851.93	705.65	499.01	276.50	127.70	57.66	29.22
135.0	1008.07	956.03	861.02	716.29	511.97	297.00	142.99	64.43	31.54
157.5	1011.17	961.06	870.12	733.32	542.35	317.71	160.40	67.14	33.67
180.0	994.14	1007.30	989.11	875.15	702.36	451.60	237.60	112.03	48.57
202.5	991.43	1011.75	1002.08	901.07	734.87	489.91	270.11	127.51	53.60
225.0	990.47	1019.49	1015.43	919.84	764.09	522.61	290.43	134.09	56.69
247.5	996.66	1033.42	1023.75	933.58	782.08	531.90	296.04	137.38	57.85
270.0	998.59	1046.00	1036.71	946.54	782.66	527.06	301.65	139.31	55.53
292.5	1004.20	1056.45	1045.42	945.00	764.86	507.13	291.39	135.44	55.92
315.0	1008.07	1057.22	1034.77	929.13	743.19	487.98	272.82	130.61	53.98
337.5	1011.17	1054.12	1024.33	913.46	710.88	455.08	252.50	114.55	47.21
360.0	994.14	993.17	926.42	784.59	567.50	339.19	168.14	71.98	34.63
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	21.28	15.87	12.19	8.71	6.19	4.06	2.13	1.35	0.58
22.5	20.90	14.90	12.00	8.51	6.19	3.68	2.32	1.74	0.97
45.0	19.74	14.13	11.61	8.13	6.00	3.87	1.94	1.74	0.97
67.5	18.19	13.54	11.03	7.74	5.61	3.68	2.13	1.55	0.97
90.0	16.64	12.96	10.06	7.16	5.42	3.10	2.13	1.35	0.77
112.5	17.80	12.96	10.84	7.93	5.61	4.06	2.13	1.74	0.97
135.0	18.38	12.77	11.03	8.13	5.81	4.06	1.94	1.74	0.97
157.5	18.58	12.96	11.22	8.13	5.81	4.26	2.13	1.35	0.97
180.0	25.15	16.25	12.77	10.26	6.77	5.03	2.71	2.13	1.35
202.5	28.44	16.83	13.16	10.45	7.55	5.61	3.10	2.32	1.74
225.0	30.77	18.38	13.93	11.42	7.93	5.81	3.29	2.32	1.94
247.5	30.77	18.58	14.51	11.42	8.13	6.00	3.48	2.90	1.94
270.0	29.41	18.77	14.71	11.80	8.13	6.00	3.68	2.90	1.74
292.5	29.80	18.96	14.90	11.80	8.32	5.81	3.68	2.90	1.94
315.0	28.25	18.77	15.09	12.58	8.71	6.19	3.48	2.90	1.74
337.5	26.90	18.58	14.32	11.61	8.13	5.61	3.10	2.71	1.55
360.0	21.28	15.87	12.19	8.71	6.19	4.06	2.13	1.35	0.58
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.19	0.00	0.19	0.19	0.19	0.00	0.00	0.00	0.19
22.5	0.77	0.19	0.58	0.58	0.39	0.58	0.58	0.39	0.39
45.0	0.39	0.58	0.58	0.58	0.58	0.58	0.58	0.77	0.58
67.5	0.58	0.39	0.58	0.39	0.39	0.58	0.77	0.58	0.58
90.0	0.58	0.39	0.58	0.77	0.77	0.58	0.58	0.77	0.77
112.5	0.58	0.58	0.58	0.39	0.58	0.58	0.58	0.58	0.77
135.0	0.39	0.58	0.58	0.77	0.58	0.58	0.58	0.77	0.77
157.5	0.39	0.58	0.58	0.39	0.77	0.58	0.77	0.58	0.58
180.0	0.58	0.58	0.58	0.77	0.77	0.77	0.77	0.97	0.77
202.5	0.77	0.77	0.97	0.77	0.77	0.77	0.77	0.77	0.77
225.0	1.16	0.77	0.58	0.97	0.77	0.77	0.97	1.16	0.97
247.5	0.97	0.77	0.77	0.97	0.77	0.97	0.97	0.97	0.77
270.0	0.97	0.77	0.77	0.77	0.77	0.97	0.77	0.77	0.97
292.5	1.16	0.77	0.97	0.77	0.97	0.77	0.58	0.77	0.77
315.0	0.97	0.77	0.97	0.58	0.77	0.97	0.77	0.97	0.77
337.5	0.97	0.77	0.77	0.77	0.97	0.77	0.97	0.97	0.77
360.0	0.19	0.00	0.19	0.19	0.19	0.00	0.00	0.00	0.19

Intensity data(cd)

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.19	0.39	0.39	0.39	0.39	0.77	0.97	0.77	0.97
22.5	0.58	0.77	0.77	0.97	1.16	1.35	1.55	1.35	1.35
45.0	0.97	0.77	0.97	1.16	1.16	1.35	1.55	1.55	1.55
67.5	0.77	0.77	0.97	0.97	0.97	1.35	1.55	1.55	1.55
90.0	0.97	0.77	0.97	0.97	0.97	1.55	1.35	1.35	1.35
112.5	0.97	0.97	0.97	1.16	1.16	1.55	1.35	1.55	1.55
135.0	0.58	0.97	0.97	1.16	1.16	1.35	1.35	1.35	1.55
157.5	0.77	0.77	0.97	0.97	1.35	1.35	1.35	1.35	1.55
180.0	0.77	0.97	0.77	0.97	1.16	1.16	1.35	1.35	1.55
202.5	0.77	0.77	1.16	0.77	1.16	1.35	1.35	1.35	1.55
225.0	1.16	0.97	1.16	1.16	1.35	1.35	1.35	1.55	1.55
247.5	0.97	0.77	0.97	1.16	1.35	1.16	1.55	1.55	1.55
270.0	0.77	0.97	0.97	1.16	1.35	1.55	1.16	1.35	1.55
292.5	0.77	0.97	0.97	0.97	0.97	1.16	1.35	1.55	1.55
315.0	0.77	0.97	0.97	1.16	1.16	1.16	1.55	1.55	1.35
337.5	0.97	0.97	1.16	1.16	1.16	1.35	1.55	1.35	1.35
360.0	0.19	0.39	0.39	0.39	0.39	0.77	0.97	0.77	0.97

C/γ(°)	180.0
0.0	0.97
22.5	1.55
45.0	1.55
67.5	1.74
90.0	1.55
112.5	1.55
135.0	1.55
157.5	1.55
180.0	0.97
202.5	1.55
225.0	1.55
247.5	1.74
270.0	1.55
292.5	1.55
315.0	1.55
337.5	1.55
360.0	0.97