



Shenzhen Belling Efficiency Testing Lab Co.,Ltd  
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Client:

LumCAT:

Luminaire:MGGF16L30D1SN

Report No:

Ballast type:

Test No:

Voltage(V): 120.11

LampCAT:

Current(A): 0.2900

Lamp flux(lm): -1.0

Power (W): 34.43

Number of Lamps: 1

PF: 0.9901

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

Lumens(lm): 2257.93, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 65.58

Central intensity(cd): 474.857, Maximum intensity(cd): 923.563

Angle of maximum intensity: C=315.0  $\gamma=25.0$

Beam Angle(50%Imax): [C0/180]Total=96.7

[C90/270]Total=96.0

Field angle(10%Imax): [C0/180]Total=160.6

[C90/270]Total=159.4

Maximum s/h(1/2): C0\_180=1.75 C90\_270=1.59

Maximum s/h(1/4): C0\_180=1.62 C90\_270=1.57

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 6.17%

Down flux rate of LUM(%): 93.83%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 76.289%

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

Date:  
Humidity(%): 58%

Operator: Jasper

## 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	516.196	0.000	0	0.00%	0.00%
5.0	797.203	15.701	15.701	0.00%	0.70%
10.0	774.578	56.228	71.929	0.00%	3.19%
15.0	749.378	90.400	162.329	0.00%	7.19%
20.0	820.910	129.414	291.743	0.00%	12.92%
25.0	843.613	174.578	466.32	0.00%	20.65%
30.0	699.236	195.249	661.569	0.00%	29.30%
35.0	615.168	193.555	855.124	0.00%	37.87%
40.0	557.690	195.682	1050.807	0.00%	46.54%
45.0	497.123	195.307	1246.114	0.00%	55.19%
50.0	403.248	181.933	1428.047	0.00%	63.25%
55.0	327.546	158.899	1586.946	0.00%	70.28%
60.0	259.102	135.602	1722.548	0.00%	76.29%
65.0	204.198	112.629	1835.177	0.00%	81.28%
70.0	154.262	90.764	1925.941	0.00%	85.30%
75.0	115.651	70.551	1996.492	0.00%	88.42%
80.0	85.793	53.901	2050.393	0.00%	90.81%
85.0	60.104	39.643	2090.036	0.00%	92.56%
90.0	44.222	28.565	2118.601	0.00%	93.83%
95.0	41.648	23.512	2142.113	0.00%	94.87%
100.0	31.352	19.836	2161.949	0.00%	95.75%
105.0	25.895	15.318	2177.267	0.00%	96.43%
110.0	24.968	13.295	2190.561	0.00%	97.02%
115.0	23.269	12.214	2202.775	0.00%	97.56%
120.0	20.927	10.744	2213.519	0.00%	98.03%
125.0	18.404	9.091	2222.611	0.00%	98.44%
130.0	16.397	7.567	2230.178	0.00%	98.77%
135.0	14.724	6.288	2236.466	0.00%	99.05%
140.0	13.565	5.238	2241.704	0.00%	99.28%
145.0	12.664	4.376	2246.08	0.00%	99.48%
150.0	12.201	3.662	2249.741	0.00%	99.64%
155.0	11.789	3.036	2252.777	0.00%	99.77%
160.0	11.017	2.392	2255.169	0.00%	99.88%
165.0	8.572	1.614	2256.784	0.00%	99.95%
170.0	5.354	0.826	2257.61	0.00%	99.99%
175.0	2.420	0.278	2257.888	0.00%	100.00%
180.0	1.236	0.044	2257.931	0.00%	100.00%

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

Date:  
Humidity(%): 58%

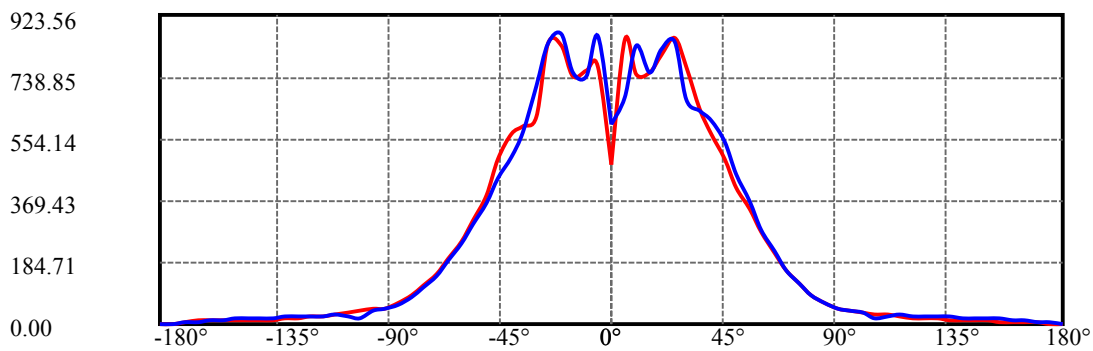
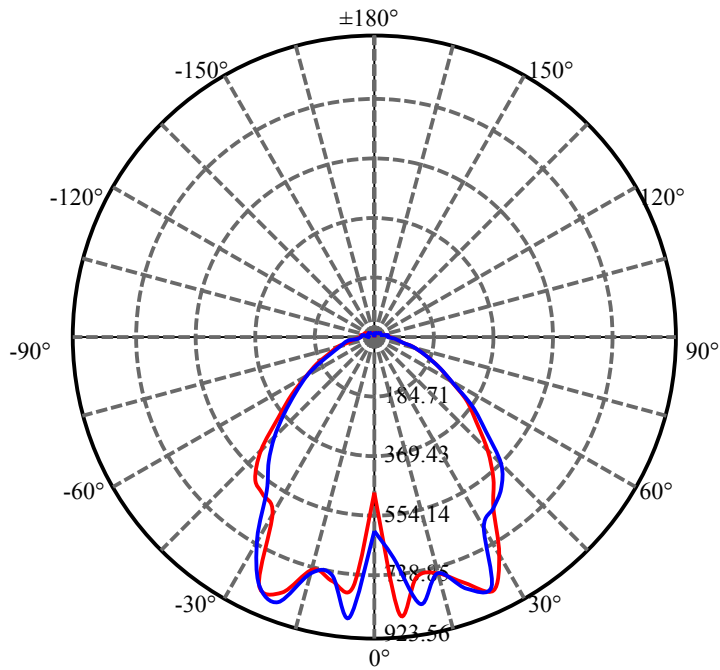
Operator: Jasper

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	661.57	N.A.	29.30%
0-40	1050.81	N.A.	46.54%
0-60	1722.55	N.A.	76.29%
0-90	2118.60	N.A.	93.83%
0-120	2213.52	N.A.	98.03%
0-180	2257.93	N.A.	100.00%
60-90	396.05	N.A.	17.54%
90-120	94.92	N.A.	4.20%
90-130	111.58	N.A.	4.94%
90-150	131.14	N.A.	5.81%
90-180	139.29	N.A.	6.17%
0-63.72	1806.35	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	71.93
10-20	219.81
20-30	369.83
30-40	389.24
40-50	377.24
50-60	294.50
60-70	203.39
70-80	124.45
80-90	68.21
90-100	43.35
100-110	28.61
110-120	22.96
120-130	16.66
130-140	11.53
140-150	8.04
150-160	5.43
160-170	2.44
170-180	0.28

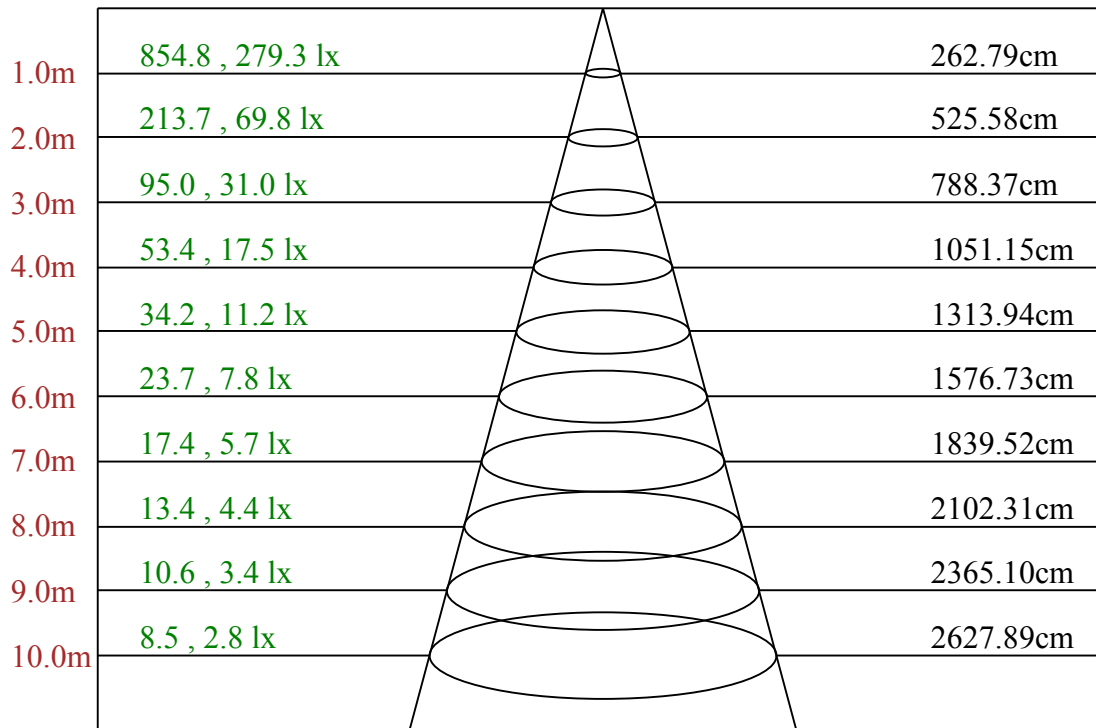


C0/C180: —

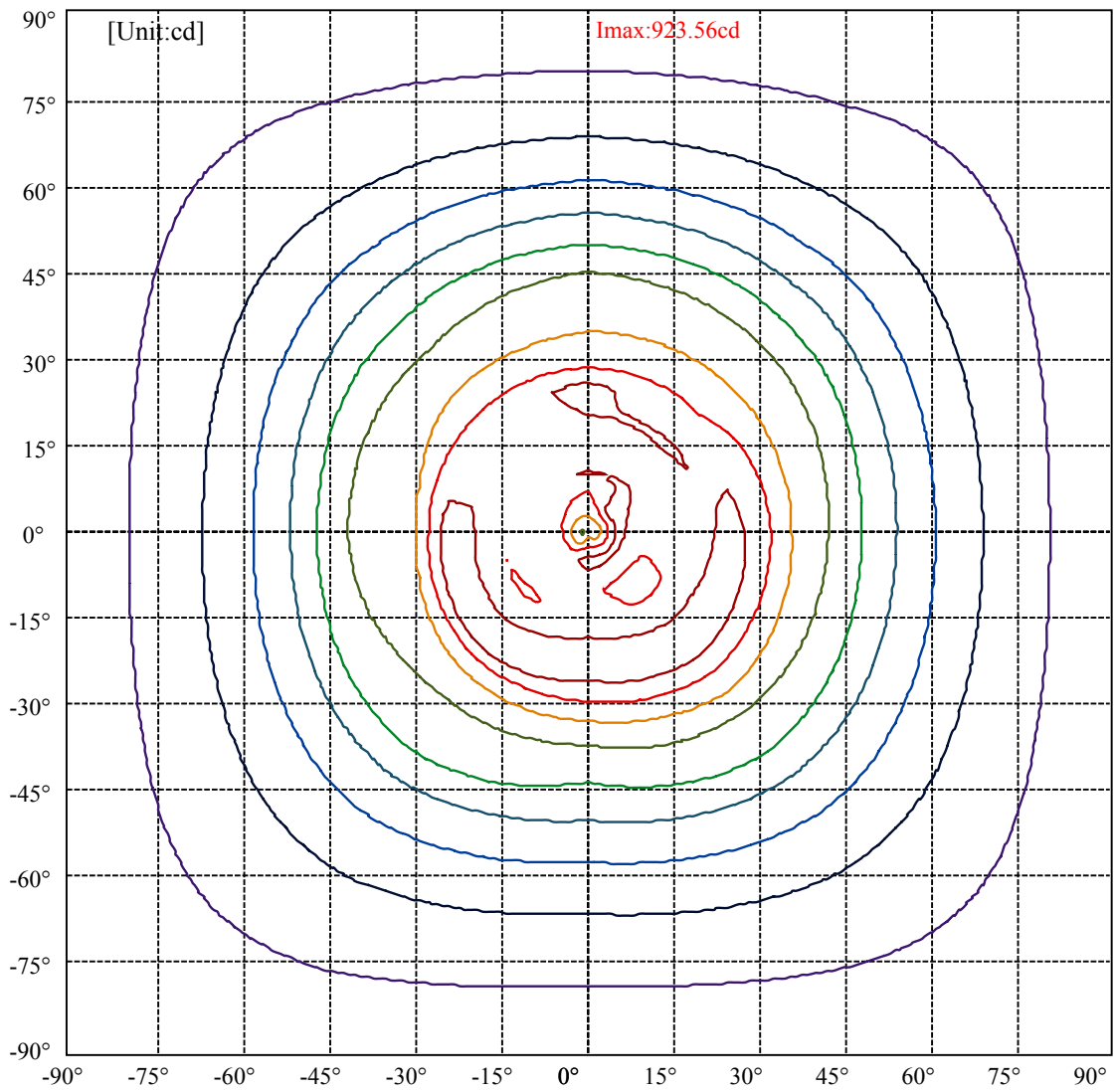
C90/C270: —

Field angle(10%Imax):C0/180Left:80.1 Right:80.5  
 :C90/270Left:79.1 Right:80.3

Beam Angle(50%Imax):C0/180Left:48.0 Right:48.7  
 :C90/270Left:45.1 Right:50.9



Max , Ave      Beam angle of C315 plane 105.45



(10%Imax) 91.4301	—
(20%Imax) 182.86	—
(30%Imax) 274.29	—
(40%Imax) 365.72	—
(50%Imax) 457.151	—
(60%Imax) 548.581	—
(70%Imax) 640.011	—
(80%Imax) 731.441	—
(90%Imax) 822.871	—

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

Date:  
Humidity(%): 58%

Operator: Jasper

## 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	474.86	848.40	747.91	751.21	802.89	857.26	770.15	640.63	568.96
45.0	463.33	864.67	826.99	786.01	833.37	758.62	702.20	630.33	593.47
90.0	595.32	677.90	829.25	748.94	822.46	844.49	669.25	636.71	608.09
135.0	531.28	727.11	815.25	775.92	795.07	781.68	671.93	612.21	557.02
180.0	474.86	766.44	758.41	737.20	832.55	837.69	622.30	591.41	569.79
225.0	463.33	782.51	766.86	721.14	811.75	909.35	671.31	574.11	512.54
270.0	595.32	863.23	738.64	751.82	864.05	836.25	712.29	573.49	501.63
315.0	531.28	847.37	713.32	722.79	805.16	923.56	774.48	662.45	550.02
360.0	474.86	848.40	747.91	751.21	802.89	857.26	770.15	640.63	568.96

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	494.42	405.26	342.66	272.85	212.92	163.30	120.26	88.34	62.19
45.0	513.57	420.49	333.39	258.43	199.54	147.03	109.55	80.93	55.81
90.0	545.70	446.23	364.69	281.70	217.66	161.24	119.23	87.93	63.01
135.0	492.36	407.73	327.62	251.23	197.27	148.68	111.61	83.81	59.31
180.0	494.01	384.87	307.65	244.22	195.83	149.71	115.11	86.28	60.95
225.0	498.33	392.08	322.48	258.85	208.81	159.59	120.47	90.40	64.04
270.0	433.26	361.81	295.91	240.11	189.86	146.21	110.37	81.13	54.78
315.0	505.33	407.52	325.98	265.43	211.69	158.35	118.61	87.52	60.75
360.0	494.42	405.26	342.66	272.85	212.92	163.30	120.26	88.34	62.19

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	44.69	42.42	34.80	29.86	26.36	22.86	19.97	17.71	16.27
45.0	42.01	42.42	30.27	26.56	23.68	21.21	19.15	17.09	14.62
90.0	43.66	40.36	32.33	16.47	21.00	26.56	24.92	23.06	21.21
135.0	43.45	43.66	34.39	25.95	23.89	22.03	19.36	15.65	13.18
180.0	44.07	44.27	38.51	33.98	29.24	24.92	21.62	18.53	15.86
225.0	46.33	43.04	35.21	28.62	24.71	22.03	19.36	15.86	13.80
270.0	43.86	37.48	16.89	21.62	28.01	25.53	23.68	22.03	20.80
315.0	45.72	39.54	28.42	24.09	22.86	21.00	19.36	17.30	15.44
360.0	44.69	42.42	34.80	29.86	26.36	22.86	19.97	17.71	16.27

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	14.21	11.94	10.30	9.06	7.83	7.83	6.59	4.94	2.27
45.0	13.18	11.74	10.50	9.88	9.68	9.47	8.03	4.94	1.85
90.0	20.18	18.95	17.71	16.27	14.83	13.18	10.50	6.59	3.30
135.0	11.94	12.36	13.18	13.39	14.00	12.56	9.47	5.56	2.88
180.0	12.56	11.53	9.88	10.30	11.53	11.94	9.68	5.77	2.47
225.0	12.36	11.74	12.15	12.77	12.56	11.74	8.86	5.77	2.27
270.0	19.77	18.95	17.50	15.86	14.21	11.94	8.03	4.53	2.27
315.0	13.59	11.33	10.09	10.09	9.68	9.47	7.41	4.74	2.06
360.0	14.21	11.94	10.30	9.06	7.83	7.83	6.59	4.94	2.27

C/γ(°)	180.0
0.0	1.03
45.0	1.24
90.0	1.65
135.0	1.03
180.0	1.03
225.0	1.24
270.0	1.65
315.0	1.03
360.0	1.03