



Shenzhen Belling Efficiency Testing Lab Co.,Ltd  
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Report No	:	Voltage	:	120.01 V
Test No	:	Current	:	0.1509 A
LumCAT	:	Power	:	17.881 W
Luminaire	:	PF	:	0.9876
LampCAT	:	Ballast type	:	
Lamp flux	:	Width	:	0 mm
Number of Lamps	:	Length	:	0 mm
Phm Type	:	Height	:	0 mm

### Photometric Results

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Lumens(lm)	:	1587.35	Central intensity(cd)	:	2864.673
Efficiency(%)	:	100.00%	Maximum intensity(cd)	:	2864.673
Luminous Efficacy(lm/W)	:	88.77	Angle of maximum intensity	:	C=0.0 $\gamma$ =0.0
Beam Angle(50%Imax)	:	[C0/180]Total=42.1 [C90/270]Total=42.1			
Field angle(10%Imax)	:	[C0/180]Total=71.4 [C90/270]Total=71.2			
Maximum s/h(1/2)	:	C0_180=0.61 C90_270=0.66			
Maximum s/h(1/4)	:	C0_180=0.66 C90_270=0.69			
Up flux rate of lamp(%)	:	0.03%			
Down flux rate of lamp(%)	:	99.97%			
Up flux rate of LUM(%)	:	0.03%			
Down flux rate of LUM(%)	:	99.97%			
CIE Type	:	Direct lighting			
Output flux ratio in $\pi$ solid angle	:	98.647%			

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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	2864.673	0.000	0	0.00%	0.00%
5.0	2687.862	66.379	66.379	4.18%	4.18%
10.0	2295.974	178.288	244.667	11.23%	15.41%
15.0	1888.727	248.234	492.9	15.64%	31.05%
20.0	1505.397	279.723	772.624	17.62%	48.67%
25.0	1082.332	271.405	1044.029	17.10%	65.77%
30.0	662.925	220.864	1264.892	13.91%	79.69%
35.0	312.302	143.609	1408.501	9.05%	88.73%
40.0	113.221	70.995	1479.496	4.47%	93.21%
45.0	67.999	33.554	1513.051	2.11%	95.32%
50.0	49.381	23.718	1536.769	1.49%	96.81%
55.0	30.548	17.379	1554.148	1.09%	97.91%
60.0	20.132	11.715	1565.863	0.74%	98.65%
65.0	13.746	8.236	1574.099	0.52%	99.17%
70.0	9.059	5.774	1579.873	0.36%	99.53%
75.0	5.487	3.802	1583.675	0.24%	99.77%
80.0	2.729	2.198	1585.873	0.14%	99.91%
85.0	0.514	0.881	1586.755	0.06%	99.96%
90.0	0.000	0.141	1586.895	0.01%	99.97%
95.0	0.000	0.000	1586.895	0.00%	99.97%
100.0	0.000	0.000	1586.895	0.00%	99.97%
105.0	0.000	0.000	1586.895	0.00%	99.97%
110.0	0.000	0.000	1586.895	0.00%	99.97%
115.0	0.000	0.000	1586.895	0.00%	99.97%
120.0	0.000	0.000	1586.895	0.00%	99.97%
125.0	0.000	0.000	1586.895	0.00%	99.97%
130.0	0.000	0.000	1586.895	0.00%	99.97%
135.0	0.000	0.000	1586.895	0.00%	99.97%
140.0	0.000	0.000	1586.895	0.00%	99.97%
145.0	0.000	0.000	1586.895	0.00%	99.97%
150.0	0.057	0.008	1586.904	0.00%	99.97%
155.0	0.300	0.045	1586.949	0.00%	99.98%
160.0	0.586	0.093	1587.042	0.01%	99.98%
165.0	0.800	0.114	1587.156	0.01%	99.99%
170.0	0.857	0.098	1587.255	0.01%	99.99%
175.0	0.986	0.066	1587.321	0.00%	100.00%
180.0	1.102	0.025	1587.345	0.00%	100.00%

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

Date:  
Humidity(%): 59%

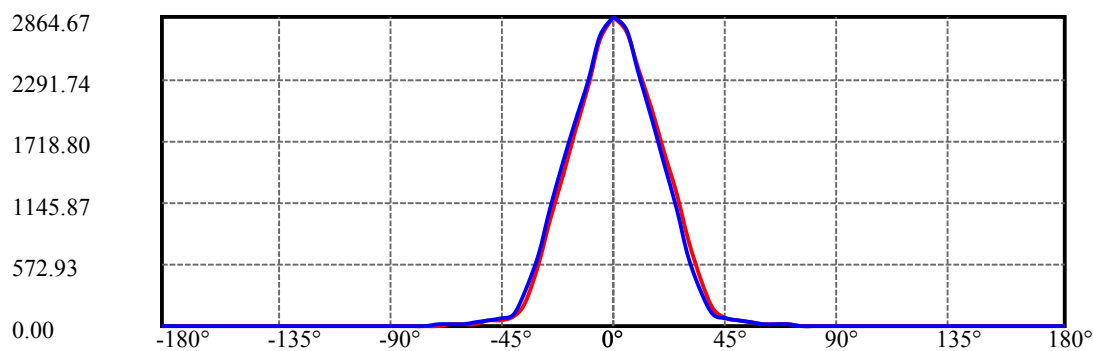
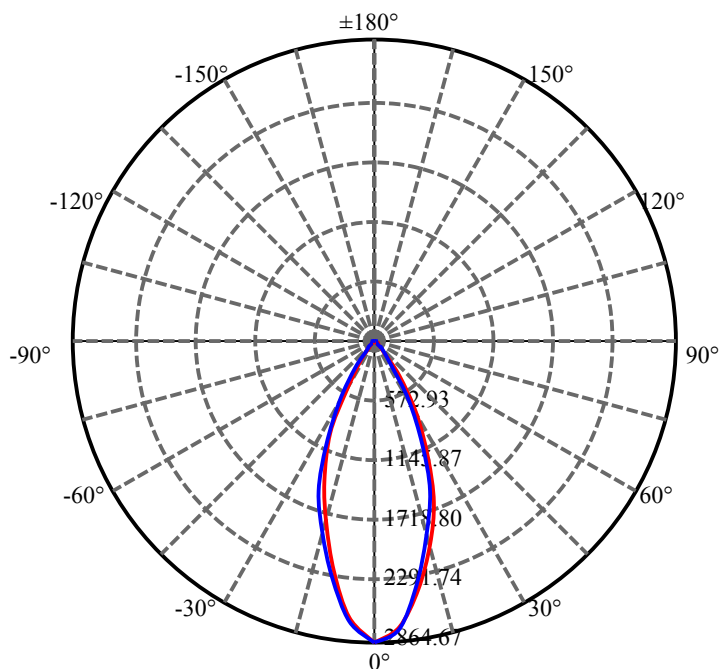
Operator: jarvis

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1264.89	79.69%	79.69%
0-40	1479.50	93.21%	93.21%
0-60	1565.86	98.65%	98.65%
0-90	1586.90	99.97%	99.97%
0-120	1586.90	99.97%	99.97%
0-180	1587.35	100.00%	100.00%
60-90	21.03	1.33%	1.33%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.01	0.00%	0.00%
90-180	0.43	0.03%	0.03%
0-30.17	1269.88	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	244.67
10-20	527.96
20-30	492.27
30-40	214.60
40-50	57.27
50-60	29.09
60-70	14.01
70-80	6.00
80-90	1.02
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.01
150-160	0.14
160-170	0.21
170-180	0.07

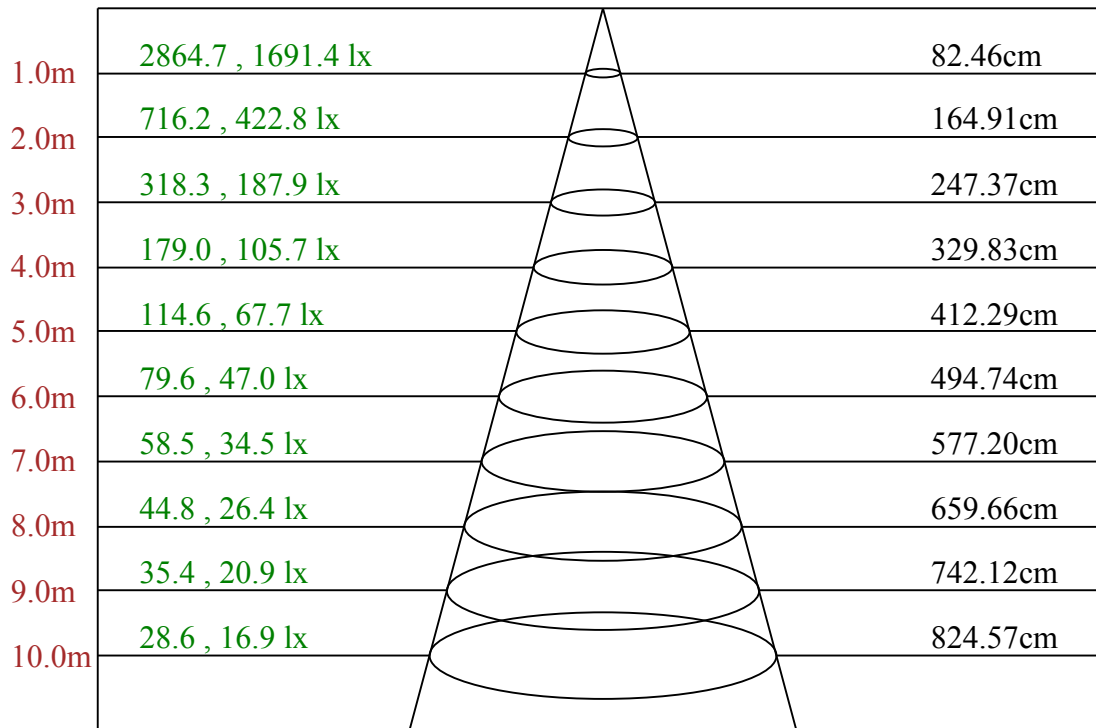


C0/C180: —

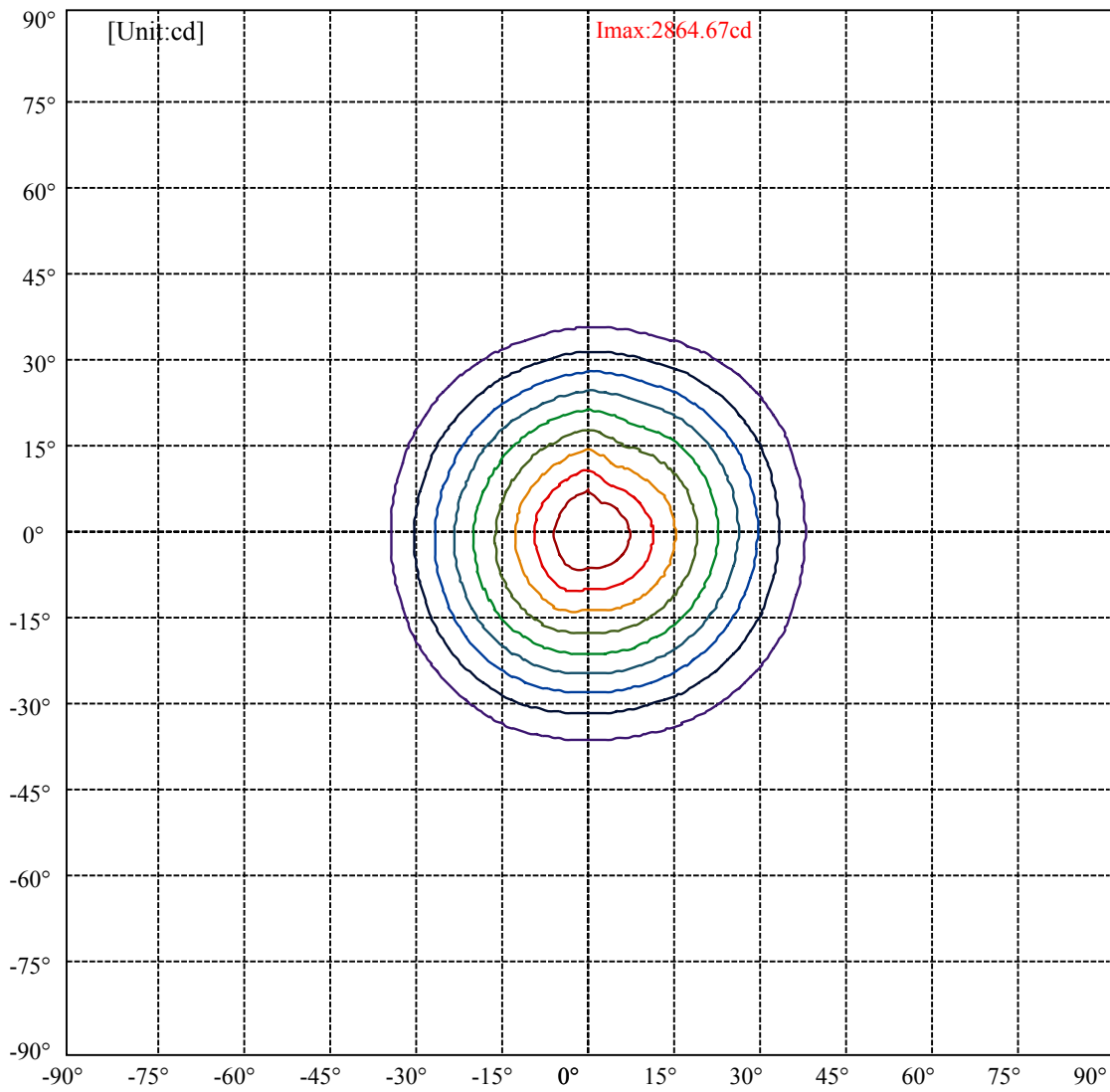
C90/C270: —

Field angle(10%Imax):C0/180Left:34.0 Right:37.4  
:C90/270Left:35.9 Right:35.3

Beam Angle(50%Imax):C0/180Left:19.7 Right:22.4  
:C90/270Left:21.1 Right:21.0



Max , Ave      Beam angle of C0 plane 44.81



(10%Imax) 286.467	—
(20%Imax) 572.935	—
(30%Imax) 859.402	—
(40%Imax) 1145.87	—
(50%Imax) 1432.34	—
(60%Imax) 1718.8	—
(70%Imax) 2005.27	—
(80%Imax) 2291.74	—
(90%Imax) 2578.21	—

## Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	2864.67	2725.77	2385.82	2009.52	1630.48	1224.00	793.75	407.62	154.77
22.5	2864.67	2698.34	2322.49	1968.60	1597.79	1202.74	782.09	415.16	142.88
45.0	2864.67	2672.27	2258.71	1872.35	1531.49	1149.93	732.94	366.24	120.02
67.5	2864.67	2615.35	2194.93	1788.22	1430.67	1065.80	654.07	304.51	99.22
90.0	2864.67	2743.60	2350.61	1925.39	1522.12	1082.72	647.89	298.11	101.51
112.5	2864.67	2693.76	2269.23	1824.34	1435.24	991.96	577.48	249.65	93.50
135.0	2864.67	2656.04	2220.53	1781.59	1383.80	939.38	545.25	232.50	90.07
157.5	2864.67	2627.47	2229.91	1765.82	1367.57	928.63	543.87	217.87	86.87
180.0	2864.67	2645.30	2225.79	1788.68	1412.38	974.58	564.91	213.98	88.47
202.5	2864.67	2660.84	2249.34	1838.52	1450.56	1020.99	594.63	242.79	91.45
225.0	2864.67	2702.45	2304.21	1882.41	1518.00	1077.46	658.87	286.45	99.90
247.5	2864.67	2737.43	2359.99	1951.22	1547.72	1118.61	693.39	331.95	110.19
270.0	2864.67	2678.90	2281.80	1889.96	1523.94	1093.92	653.61	322.80	111.11
292.5	2864.67	2699.48	2326.38	1940.48	1556.18	1120.67	679.44	338.81	125.05
315.0	2864.67	2713.88	2367.07	1978.89	1572.18	1139.64	722.88	361.44	141.97
337.5	2864.67	2734.91	2388.79	2013.64	1606.25	1186.28	761.74	406.93	154.54
360.0	2864.67	2725.77	2385.82	2009.52	1630.48	1224.00	793.75	407.62	154.77
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	74.07	53.50	36.12	22.18	15.55	10.52	6.63	3.43	1.14
22.5	71.56	51.90	34.75	21.95	15.09	10.06	6.17	3.66	1.14
45.0	68.81	49.84	32.01	21.26	14.40	9.83	5.72	3.20	0.91
67.5	65.16	47.78	29.72	19.89	14.17	9.15	5.49	2.97	0.46
90.0	68.58	49.61	29.95	20.35	13.72	9.15	5.26	2.74	0.23
112.5	64.47	47.32	28.35	19.43	12.80	8.46	5.03	2.29	0.23
135.0	62.41	46.18	26.52	18.52	12.35	8.00	4.57	2.06	0.00
157.5	61.96	45.04	25.83	17.83	12.35	7.77	4.34	1.83	0.00
180.0	61.73	44.81	25.38	17.83	11.43	7.32	4.57	1.60	0.00
202.5	62.41	45.95	26.52	18.06	12.35	7.77	4.34	1.83	0.00
225.0	65.38	48.24	27.66	18.52	12.57	8.23	4.80	2.29	0.00
247.5	69.27	49.61	30.18	19.43	13.26	8.46	5.26	2.52	0.23
270.0	70.87	51.21	31.09	20.80	14.63	9.60	6.40	3.20	1.14
292.5	72.70	52.12	32.92	21.49	14.86	10.06	5.94	3.20	0.69
315.0	74.30	53.50	35.21	21.95	15.09	10.06	6.40	3.43	1.14
337.5	74.30	53.50	36.58	22.63	15.32	10.52	6.86	3.43	0.91
360.0	74.07	53.50	36.12	22.18	15.55	10.52	6.63	3.43	1.14
C/ $\gamma$ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	0.00	0.00	0.00	0.23	0.23	0.69	0.91	0.91	0.91
22.5	0.00	0.00	0.00	0.00	0.46	0.69	0.69	0.91	1.14
45.0	0.00	0.00	0.00	0.23	0.46	0.69	0.91	1.14	1.14
67.5	0.00	0.00	0.00	0.00	0.46	0.69	0.91	1.14	1.14
90.0	0.00	0.00	0.00	0.00	0.23	0.46	0.91	0.91	0.91
112.5	0.00	0.00	0.00	0.00	0.23	0.69	0.69	0.91	0.91
135.0	0.00	0.00	0.00	0.00	0.23	0.69	0.91	0.69	0.91
157.5	0.00	0.00	0.00	0.00	0.46	0.46	0.69	0.69	0.91
180.0	0.00	0.00	0.00	0.00	0.23	0.23	0.69	0.69	0.69
202.5	0.00	0.00	0.00	0.00	0.23	0.46	0.46	0.69	0.69
225.0	0.00	0.00	0.00	0.00	0.00	0.69	0.69	0.91	1.14
247.5	0.00	0.00	0.00	0.00	0.46	0.69	0.69	0.69	0.91
270.0	0.00	0.00	0.00	0.23	0.23	0.91	1.37	1.14	1.37
292.5	0.00	0.00	0.00	0.00	0.23	0.46	0.91	0.91	0.91
315.0	0.00	0.00	0.00	0.00	0.23	0.46	0.69	0.69	0.91
337.5	0.00	0.00	0.00	0.23	0.46	0.46	0.69	0.69	1.14
360.0	0.00	0.00	0.00	0.23	0.23	0.69	0.91	0.91	0.91

C/γ(°)	180.0
0.0	1.10
22.5	1.10
45.0	1.10
67.5	1.10
90.0	1.10
112.5	1.10
135.0	1.10
157.5	1.10
180.0	1.10
202.5	1.10
225.0	1.10
247.5	1.10
270.0	1.10
292.5	1.10
315.0	1.10
337.5	1.10
360.0	1.10