



Shenzhen Belling Efficiency Testing Lab Co.,Ltd
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Report No	:	Voltage	:	120 V
Test No	:	Current	:	0.1512 A
LumCAT	:	Power	:	17.913 W
Luminaire	:	PF	:	0.9872
LampCAT	:	Ballast type	:	
Lamp flux	:	Width	:	0 mm
Number of Lamps	:	Length	:	0 mm
Phm Type	:	Height	:	0 mm

Photometric Results

Lumens(lm)	:	1675.15	Central intensity(cd)	:	3105.520
Efficiency(%)	:	100.00%	Maximum intensity(cd)	:	3105.520
Luminous Efficacy(lm/W)	:	93.52	Angle of maximum intensity	:	C=0.0 γ =0.0
Beam Angle(50%Imax)	:	[C0/180]Total=42.2 [C90/270]Total=41.7			
Field angle(10%Imax)	:	[C0/180]Total=71.0 [C90/270]Total=69.8			
Maximum s/h(1/2)	:	C0_180=0.64 C90_270=0.69			
Maximum s/h(1/4)	:	C0_180=0.68 C90_270=0.70			
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 π solid angle	:	98.889%			

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	3105.520	0.000	0	0.00%	0.00%
5.0	2915.205	71.976	71.976	4.30%	4.30%
10.0	2486.355	193.231	265.207	11.54%	15.83%
15.0	2042.506	268.649	533.856	16.04%	31.87%
20.0	1632.368	302.861	836.717	18.08%	49.95%
25.0	1169.427	293.857	1130.574	17.54%	67.49%
30.0	695.063	235.953	1366.526	14.09%	81.58%
35.0	310.546	148.083	1514.609	8.84%	90.42%
40.0	98.682	68.277	1582.886	4.08%	94.49%
45.0	56.303	28.697	1611.583	1.71%	96.21%
50.0	41.212	19.704	1631.287	1.18%	97.38%
55.0	27.152	14.865	1646.152	0.89%	98.27%
60.0	17.773	10.384	1656.536	0.62%	98.89%
65.0	11.955	7.227	1663.763	0.43%	99.32%
70.0	7.758	4.991	1668.754	0.30%	99.62%
75.0	4.621	3.236	1671.99	0.19%	99.81%
80.0	2.152	1.812	1673.802	0.11%	99.92%
85.0	0.348	0.679	1674.481	0.04%	99.96%
90.0	0.000	0.095	1674.577	0.01%	99.97%
95.0	0.000	0.000	1674.577	0.00%	99.97%
100.0	0.000	0.000	1674.577	0.00%	99.97%
105.0	0.000	0.000	1674.577	0.00%	99.97%
110.0	0.000	0.000	1674.577	0.00%	99.97%
115.0	0.000	0.000	1674.577	0.00%	99.97%
120.0	0.000	0.000	1674.577	0.00%	99.97%
125.0	0.000	0.000	1674.577	0.00%	99.97%
130.0	0.000	0.000	1674.577	0.00%	99.97%
135.0	0.000	0.000	1674.577	0.00%	99.97%
140.0	0.000	0.000	1674.577	0.00%	99.97%
145.0	0.045	0.008	1674.584	0.00%	99.97%
150.0	0.136	0.027	1674.611	0.00%	99.97%
155.0	0.409	0.069	1674.68	0.00%	99.97%
160.0	0.758	0.122	1674.802	0.01%	99.98%
165.0	0.864	0.134	1674.936	0.01%	99.99%
170.0	0.985	0.110	1675.045	0.01%	99.99%
175.0	1.121	0.075	1675.121	0.00%	100.00%
180.0	1.298	0.029	1675.15	0.00%	100.00%

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

Date:
Humidity(%): 59%

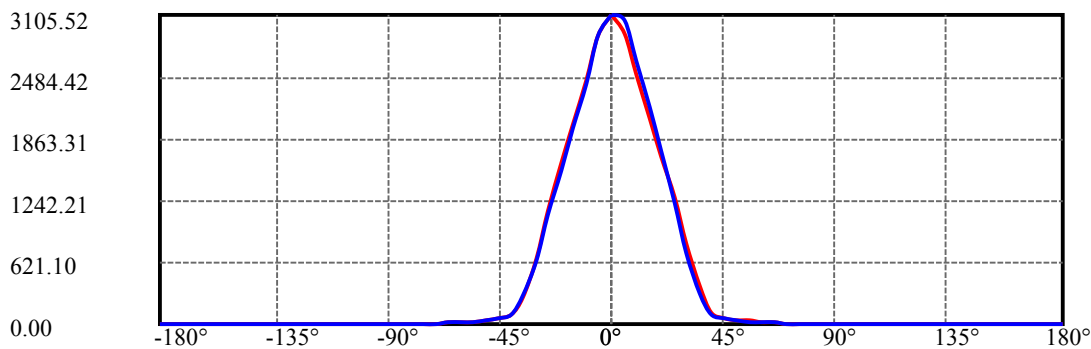
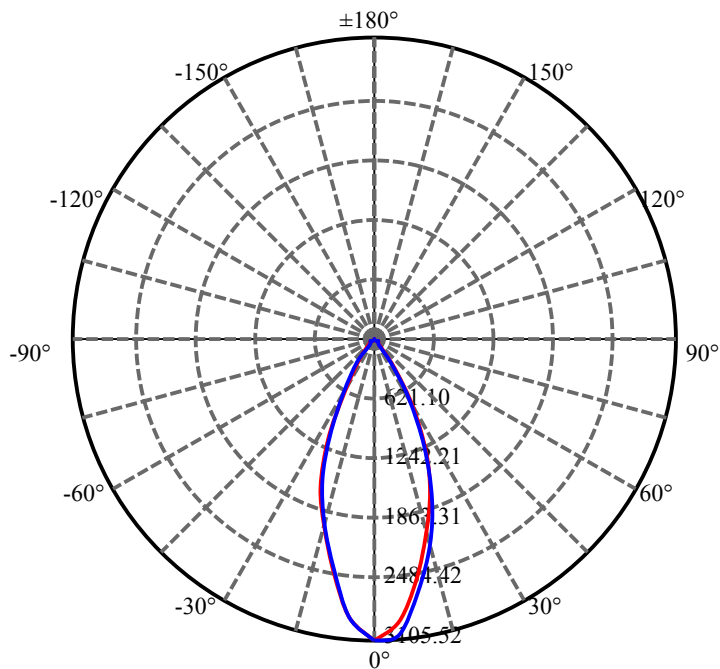
Operator: jarvis

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1366.53	81.58%	81.58%
0-40	1582.89	94.49%	94.49%
0-60	1656.54	98.89%	98.89%
0-90	1674.58	99.97%	99.97%
0-120	1674.58	99.97%	99.97%
0-180	1675.15	100.00%	100.00%
60-90	18.04	1.08%	1.08%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.03	0.00%	0.00%
90-180	0.54	0.03%	0.03%
0-29.44	1340.12	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	265.21
10-20	571.51
20-30	529.81
30-40	216.36
40-50	48.40
50-60	25.25
60-70	12.22
70-80	5.05
80-90	0.77
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.03
150-160	0.19
160-170	0.24
170-180	0.08

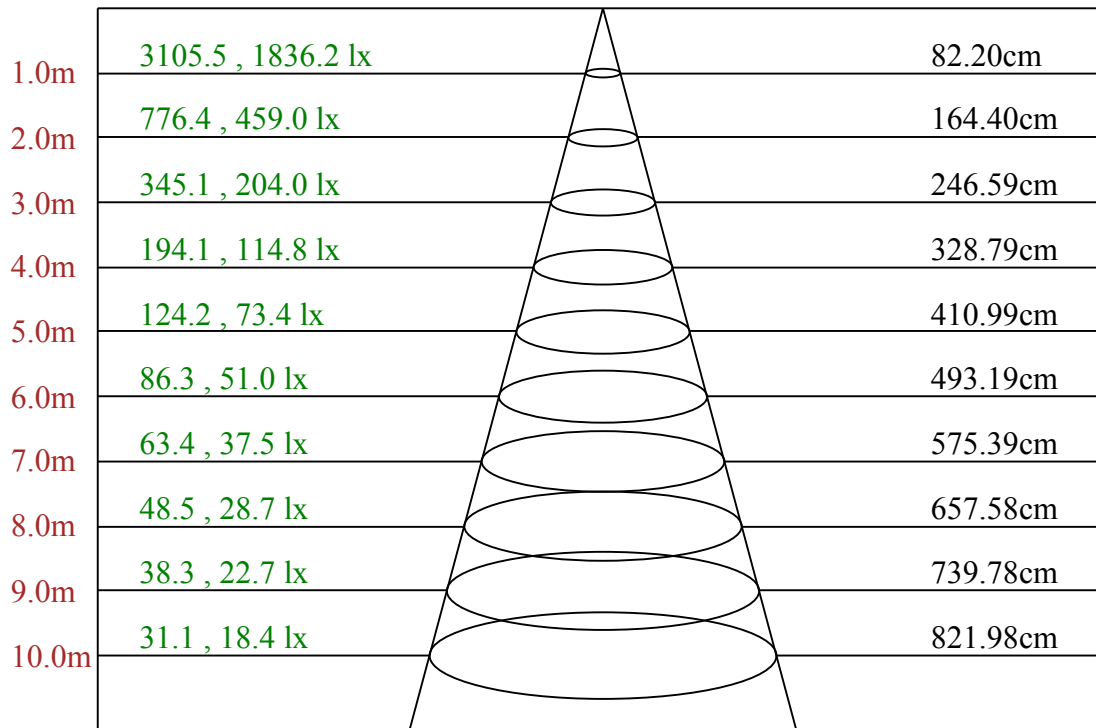


C0/C180: —

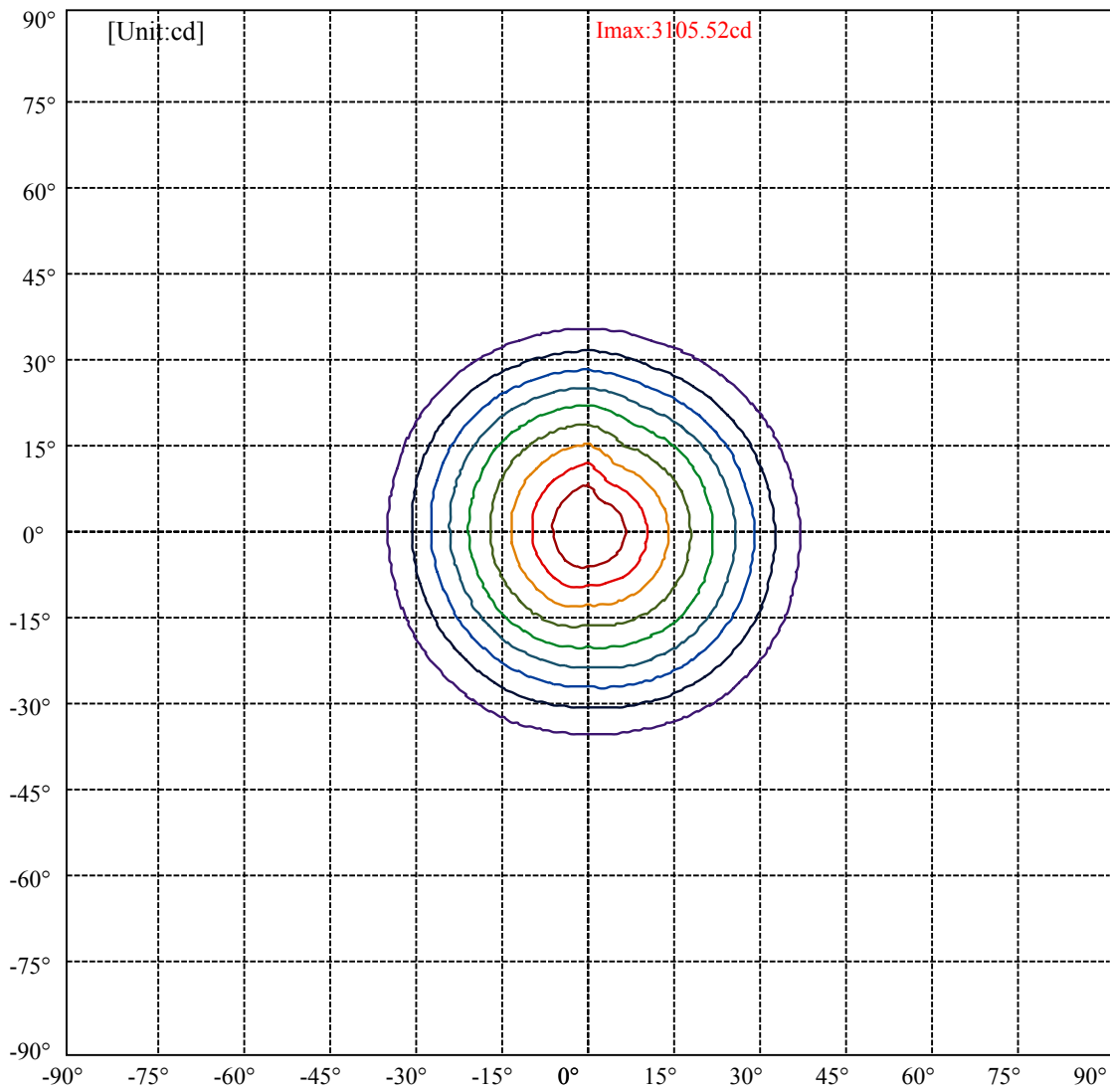
C90/C270: —

Field angle(10%Imax):C0/180Left:34.5 Right:36.5
 :C90/270Left:34.8 Right:35.0

Beam Angle(50%Imax):C0/180Left:20.6 Right:21.6
 :C90/270Left:19.9 Right:21.8



Max , Ave Beam angle of C0 plane 44.68



(10%Imax) 310.552	—
(20%Imax) 621.104	—
(30%Imax) 931.656	—
(40%Imax) 1242.21	—
(50%Imax) 1552.76	—
(60%Imax) 1863.31	—
(70%Imax) 2173.86	—
(80%Imax) 2484.42	—
(90%Imax) 2794.97	—

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	3105.52	2915.16	2504.01	2070.79	1676.61	1277.58	804.12	393.70	123.15
22.5	3105.52	2909.34	2483.64	2048.01	1667.64	1225.22	733.09	344.00	105.94
45.0	3105.52	2898.67	2448.73	1997.82	1609.46	1145.22	674.91	297.21	94.30
67.5	3105.52	2858.19	2402.19	1942.79	1555.16	1099.88	640.73	273.70	86.30
90.0	3105.52	3054.80	2639.28	2181.10	1736.97	1217.70	718.31	308.36	97.45
112.5	3105.52	2993.22	2567.28	2131.64	1709.34	1210.43	699.40	292.85	90.91
135.0	3105.52	2931.89	2524.86	2095.28	1671.04	1187.64	707.15	282.67	87.51
157.5	3105.52	2913.71	2489.22	2044.85	1626.91	1172.37	689.70	275.64	86.30
180.0	3105.52	2885.83	2448.49	2008.25	1611.16	1132.12	652.12	270.30	87.27
202.5	3105.52	2887.28	2463.28	2016.73	1582.55	1086.06	628.61	262.79	88.49
225.0	3105.52	2901.34	2466.19	2009.46	1576.00	1075.88	624.73	274.18	96.24
247.5	3105.52	2922.67	2496.25	2044.61	1586.67	1092.12	653.58	306.43	98.18
270.0	3105.52	2888.74	2414.55	1958.07	1544.97	1091.40	634.67	296.49	95.76
292.5	3105.52	2887.77	2441.70	2006.79	1607.76	1182.55	696.73	326.06	100.36
315.0	3105.52	2890.92	2494.55	2051.88	1665.70	1238.31	755.88	369.70	114.43
337.5	3105.52	2903.77	2497.46	2072.01	1689.94	1276.37	807.28	394.67	126.30
360.0	3105.52	2915.16	2504.01	2070.79	1676.61	1277.58	804.12	393.70	123.15
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	58.67	42.67	29.33	18.67	12.85	8.24	5.09	2.67	0.73
22.5	57.21	40.97	28.36	17.94	12.36	8.24	4.85	2.42	0.73
45.0	54.79	40.00	26.18	17.70	11.88	8.00	4.61	2.18	0.73
67.5	53.09	39.52	24.97	16.97	11.39	7.27	4.61	1.94	0.24
90.0	56.49	41.70	27.15	17.46	11.64	7.52	4.36	1.94	0.00
112.5	54.79	40.49	25.46	16.97	11.15	7.27	4.12	1.70	0.00
135.0	53.82	40.24	24.73	16.49	10.91	7.03	3.88	1.70	0.00
157.5	54.06	40.24	24.49	16.24	10.91	6.79	3.88	1.46	0.00
180.0	54.30	40.24	24.97	16.49	11.15	6.54	3.88	1.70	0.00
202.5	54.30	40.49	25.21	16.97	11.39	6.79	4.12	1.46	0.00
225.0	56.00	40.73	26.67	17.70	11.64	7.76	4.36	1.94	0.00
247.5	56.97	41.21	28.12	17.94	11.88	7.76	4.61	1.94	0.00
270.0	57.94	42.67	28.61	19.15	13.09	8.73	5.09	2.91	0.73
292.5	59.15	42.91	29.33	19.15	12.85	8.97	5.58	2.91	0.73
315.0	59.39	42.67	30.30	19.39	13.09	8.73	5.33	2.67	0.97
337.5	59.88	42.67	30.55	19.15	13.09	8.49	5.58	2.91	0.73
360.0	58.67	42.67	29.33	18.67	12.85	8.24	5.09	2.67	0.73
C/ γ (°)	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	0.24	0.48	0.49	0.97	0.97	0.73
22.5	0.00	0.00	0.00	0.00	0.48	0.73	0.73	0.97	1.21
45.0	0.00	0.00	0.00	0.00	0.48	0.97	0.73	1.21	1.21
67.5	0.00	0.00	0.24	0.49	0.49	1.21	0.97	0.97	1.21
90.0	0.00	0.00	0.00	0.24	0.48	0.73	0.97	1.21	1.21
112.5	0.00	0.00	0.00	0.24	0.24	0.73	0.73	0.97	1.21
135.0	0.00	0.00	0.00	0.00	0.24	0.49	0.73	0.73	0.97
157.5	0.00	0.00	0.00	0.00	0.24	0.73	0.73	0.73	0.97
180.0	0.00	0.00	0.00	0.00	0.24	0.49	0.97	0.97	0.97
202.5	0.00	0.00	0.00	0.00	0.48	0.73	0.73	0.73	0.97
225.0	0.00	0.00	0.00	0.00	0.24	0.49	0.73	0.97	0.97
247.5	0.00	0.00	0.00	0.00	0.24	0.73	0.73	0.97	0.97
270.0	0.00	0.00	0.24	0.49	0.97	1.21	1.46	1.21	1.70
292.5	0.00	0.00	0.24	0.24	0.48	0.97	0.97	0.97	1.21
315.0	0.00	0.00	0.00	0.00	0.24	0.49	0.73	1.21	0.97
337.5	0.00	0.00	0.00	0.24	0.48	0.97	0.97	0.97	1.46
360.0	0.00	0.00	0.00	0.24	0.48	0.49	0.97	0.97	0.73

C/γ(°)	180.0
0.0	1.30
22.5	1.30
45.0	1.30
67.5	1.30
90.0	1.30
112.5	1.30
135.0	1.30
157.5	1.30
180.0	1.30
202.5	1.30
225.0	1.30
247.5	1.30
270.0	1.30
292.5	1.30
315.0	1.30
337.5	1.30
360.0	1.30