



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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LumCAT:
Luminaire:
Report No: Voltage(V): 120.17
Test No: Current(A): 0.0442
LampCAT: Power (W): 4.9830
Lamp flux(lm): 400.5 PF: 0.9381
Number of Lamps: 1 Ballast type:
Length(mm): 0 Width(mm): 0
Phm Type: C Height(mm): 0

Photometric Results

Lumens(lm): 400.50
Efficiency(%): 100.00%
Lumens(lm)/Power(W): 80.37
Central intensity(cd): 1586.544
Maximum intensity(cd): 1586.544
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=22.4
[C90/270]Total=23.2
Field angle(10%Imax): [C0/180]Total=50.5
[C90/270]Total=51.2
Maximum s/h(1/2): C0_180=0.46 C90_270=0.34
Maximum s/h(1/4): C0_180=0.66 C90_270=0.38
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 100.00%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.684%

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

Date:
Humidity(%): 58%

Operator: Zac

Zonal flux distribution table

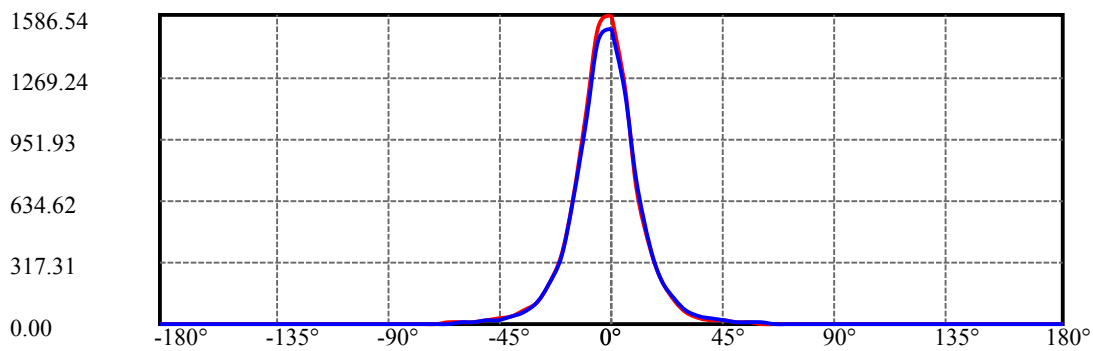
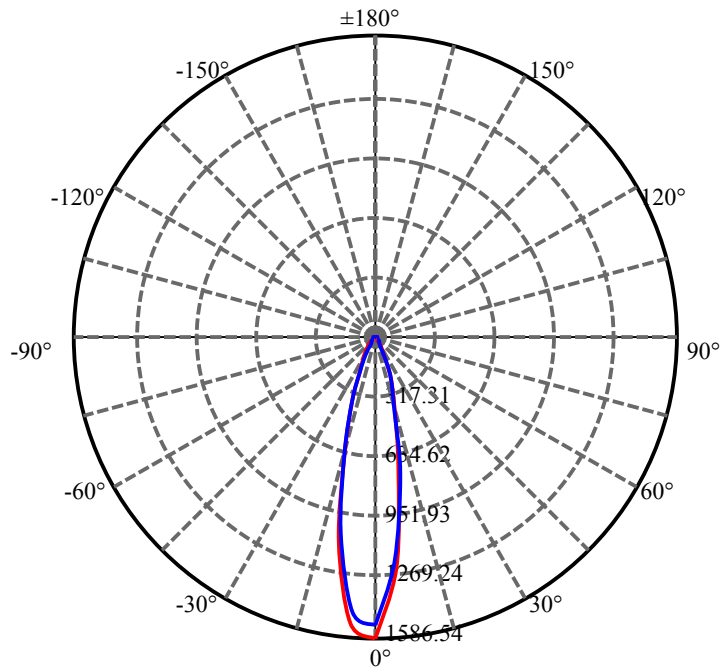
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1528.605	.000	.000	.000%	.000%
5.0	1322.577	34.085	34.085	8.511%	8.511%
10.0	881.914	78.862	112.947	19.691%	28.201%
15.0	504.094	82.217	195.164	20.529%	48.730%
20.0	284.829	65.018	260.182	16.234%	64.964%
25.0	158.779	46.526	306.708	11.617%	76.581%
30.0	85.090	30.862	337.570	7.706%	84.287%
35.0	48.479	19.669	357.239	4.911%	89.198%
40.0	30.442	13.167	370.407	3.288%	92.486%
45.0	20.289	9.393	379.800	2.345%	94.831%
50.0	13.722	6.873	386.673	1.716%	96.547%
55.0	9.252	4.995	391.668	1.247%	97.795%
60.0	6.168	3.564	395.232	.890%	98.685%
65.0	3.968	2.464	397.696	.615%	99.300%
70.0	2.339	1.597	399.293	.399%	99.698%
75.0	1.057	.888	400.181	.222%	99.920%
80.0	.069	.301	400.483	.075%	99.995%
85.0	.000	.019	400.501	.005%	100.000%
90.0	.000	.000	400.501	.000%	100.000%
95.0	.000	.000	400.501	.000%	100.000%
100.0	.000	.000	400.501	.000%	100.000%
105.0	.000	.000	400.501	.000%	100.000%
110.0	.000	.000	400.501	.000%	100.000%
115.0	.000	.000	400.501	.000%	100.000%
120.0	.000	.000	400.501	.000%	100.000%
125.0	.000	.000	400.501	.000%	100.000%
130.0	.000	.000	400.501	.000%	100.000%
135.0	.000	.000	400.501	.000%	100.000%
140.0	.000	.000	400.501	.000%	100.000%
145.0	.000	.000	400.501	.000%	100.000%
150.0	.000	.000	400.501	.000%	100.000%
155.0	.000	.000	400.501	.000%	100.000%
160.0	.000	.000	400.501	.000%	100.000%
165.0	.000	.000	400.501	.000%	100.000%
170.0	.000	.000	400.501	.000%	100.000%
175.0	.000	.000	400.501	.000%	100.000%
180.0	.000	.000	400.501	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	337.57	84.29%	84.29%
0-40	370.41	92.49%	92.49%
0-60	395.23	98.68%	98.68%
0-90	400.50	100.00%	100.00%
0-120	400.50	100.00%	100.00%
0-180	400.50	100.00%	100.00%
60-90	8.83	2.21%	2.21%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.22	320.40	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	112.95
10-20	147.24
20-30	77.39
30-40	32.84
40-50	16.27
50-60	8.56
60-70	4.06
70-80	1.19
80-90	0.02
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

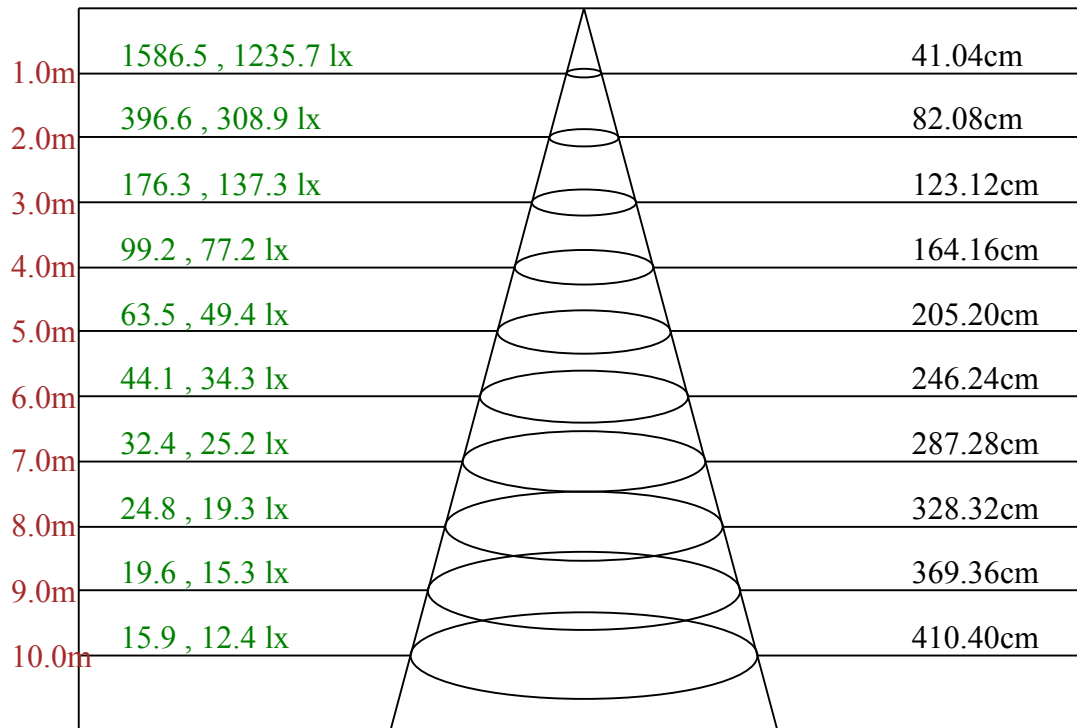


C0/C180: —

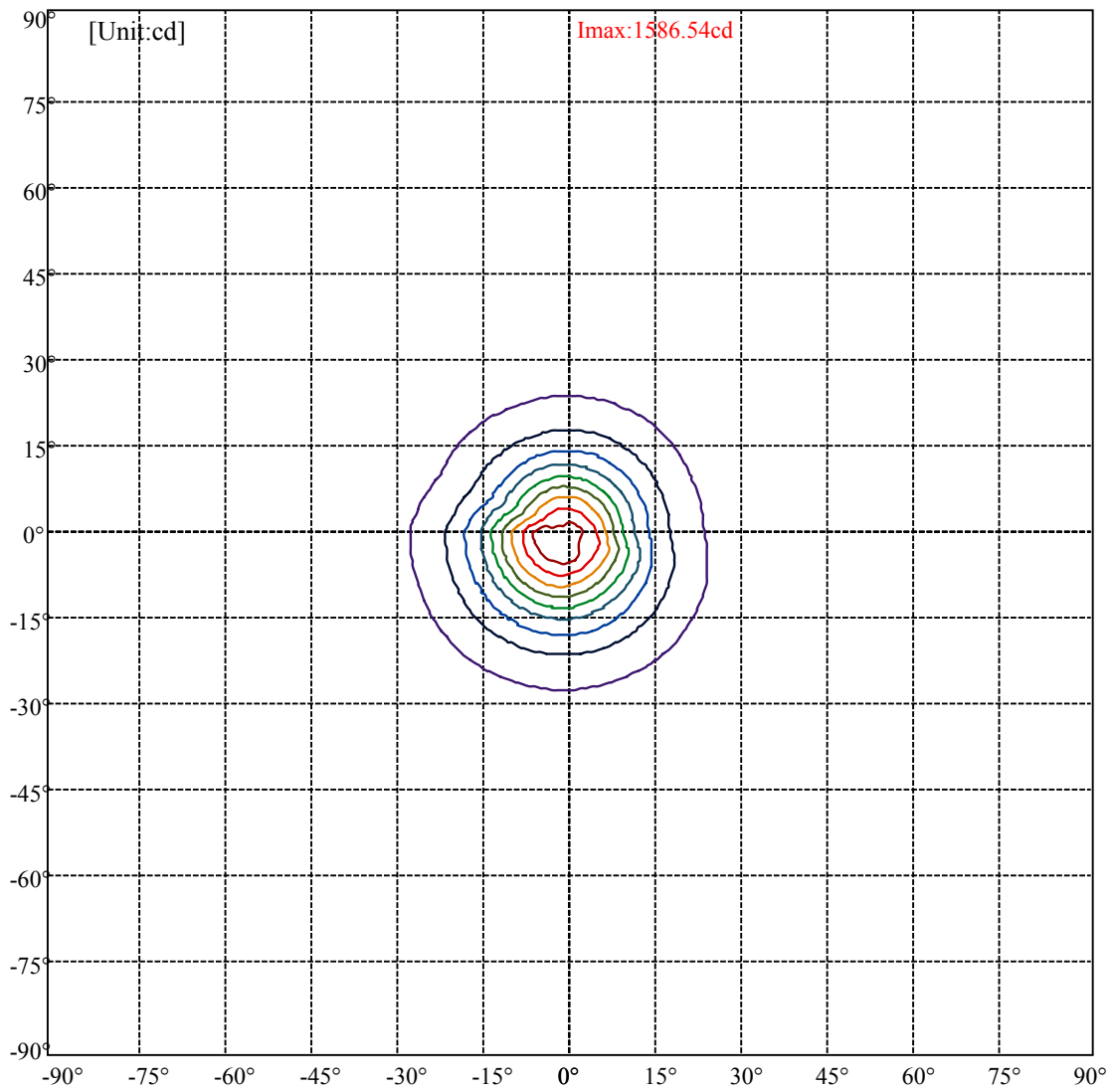
C90/C270: —

Field angle(10%Imax):C0/180Left:27.3 Right:23.2
 :C90/270Left:27.6 Right:23.7

Beam Angle(50%Imax):C0/180Left:13.3 Right:9.1
 :C90/270Left:13.4 Right:9.7



Max , Ave Beam angle of C0plane23.16



(10%Imax) 157.191	—
(20%Imax) 314.381	—
(30%Imax) 471.572	—
(40%Imax) 628.763	—
(50%Imax) 785.953	—
(60%Imax) 943.144	—
(70%Imax) 1100.33	—
(80%Imax) 1257.53	—
(90%Imax) 1414.72	—

Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1586.54	1219.50	699.16	390.33	225.11	119.76	59.88	33.27	22.46
22.5	1572.13	1189.28	706.92	388.39	214.57	116.16	59.05	33.54	22.46
45.0	1538.86	1162.39	708.30	391.72	220.67	118.65	61.54	34.93	23.01
67.5	1529.99	1170.71	711.91	403.64	222.33	122.81	64.04	37.70	24.12
90.0	1516.68	1190.39	734.64	403.64	227.05	124.75	66.81	39.37	24.95
112.5	1497.28	1225.32	762.36	414.17	225.38	125.86	71.25	41.31	27.45
135.0	1492.01	1235.30	781.77	418.33	236.19	134.45	74.85	46.57	29.94
157.5	1495.34	1269.40	803.67	436.63	246.73	140.55	79.29	50.18	30.49
180.0	1586.54	1513.36	1093.64	639.83	354.85	198.77	112.55	65.15	40.20
202.5	1572.13	1513.64	1112.77	653.14	365.93	202.65	111.17	64.87	40.47
225.0	1538.86	1501.71	1106.67	666.72	367.87	205.70	111.17	64.87	39.64
247.5	1529.99	1473.99	1092.81	650.92	365.10	202.65	112.55	62.10	38.53
270.0	1516.68	1449.04	1042.63	627.08	349.58	200.16	105.35	57.66	36.04
292.5	1497.28	1397.20	969.45	576.35	337.10	188.51	99.25	53.50	32.44
315.0	1492.01	1339.54	909.57	526.17	314.37	176.59	90.93	48.24	28.55
337.5	1495.34	1310.43	874.36	478.49	284.43	162.45	81.78	42.42	26.34
360.0	1586.54	1219.50	699.16	390.33	225.11	119.76	59.88	33.27	22.46
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	15.52	10.81	7.21	4.44	3.05	1.11	0.00	0.00	0.00
22.5	15.80	10.26	6.93	4.44	2.77	0.83	0.00	0.00	0.00
45.0	16.08	11.09	7.21	4.16	2.50	1.39	0.00	0.00	0.00
67.5	16.63	11.64	7.76	5.27	3.05	1.94	0.28	0.00	0.00
90.0	17.19	11.64	8.04	5.54	3.33	1.94	0.83	0.00	0.00
112.5	17.74	11.92	8.04	5.27	3.33	1.94	1.11	0.00	0.00
135.0	18.57	13.03	8.04	5.54	3.60	1.94	0.83	0.00	0.00
157.5	19.41	13.03	8.59	5.82	3.88	2.22	1.11	0.00	0.00
180.0	26.61	17.74	11.92	7.76	5.27	3.33	2.22	0.83	0.00
202.5	26.34	17.47	11.64	8.04	5.27	3.05	1.94	0.28	0.00
225.0	26.34	17.74	12.20	8.32	5.27	3.60	1.94	0.00	0.00
247.5	25.50	17.19	11.64	7.76	5.27	3.33	1.66	0.00	0.00
270.0	24.12	15.80	11.09	7.49	4.71	3.33	1.66	0.00	0.00
292.5	21.35	14.69	10.26	6.65	4.16	2.77	1.66	0.00	0.00
315.0	19.41	13.03	8.87	6.38	4.16	2.50	0.83	0.00	0.00
337.5	18.02	12.48	8.59	5.82	3.88	2.22	0.83	0.00	0.00
360.0	15.52	10.81	7.21	4.44	3.05	1.11	0.00	0.00	0.00
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	0.00	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

C/γ(°)	180.0
0.0	0.00
22.5	0.00
45.0	0.00
67.5	0.00
90.0	0.00
112.5	0.00
135.0	0.00
157.5	0.00
180.0	0.00
202.5	0.00
225.0	0.00
247.5	0.00
270.0	0.00
292.5	0.00
315.0	0.00
337.5	0.00
360.0	0.00