



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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LumCAT:

Luminaire:

Report No:

Test No:

LampCAT:

Lamp flux(lm): 960.7

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 120.04

Current(A): 0.0937

Power (W): 11.1040

PF: 0.9869

Ballast type:

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 960.67

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 86.52

Central intensity(cd): 1489.791

Maximum intensity(cd): 1493.225

Angle of maximum intensity: C=67.5 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=41.8

[C90/270]Total=42.0

Field angle(10%Imax): [C0/180]Total=75.5

[C90/270]Total=75.5

Maximum s/h(1/2): C0_180=0.70 C90_270=0.68

Maximum s/h(1/4): C0_180=1.00 C90_270=0.71

Up flux rate of lamp(%): 0.08%

Down flux rate of lamp(%): 99.92%

Up flux rate of LUM(%): 0.08%

Down flux rate of LUM(%): 99.92%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.367%

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

Date:
Humidity(%): 58%

Operator: Zac

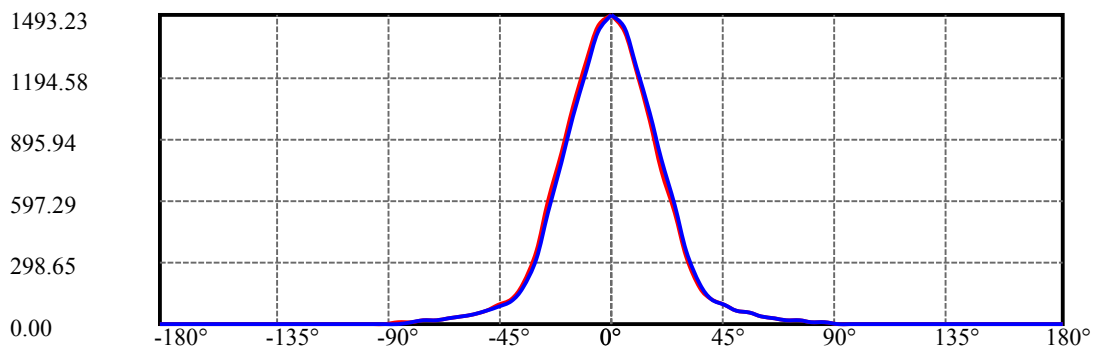
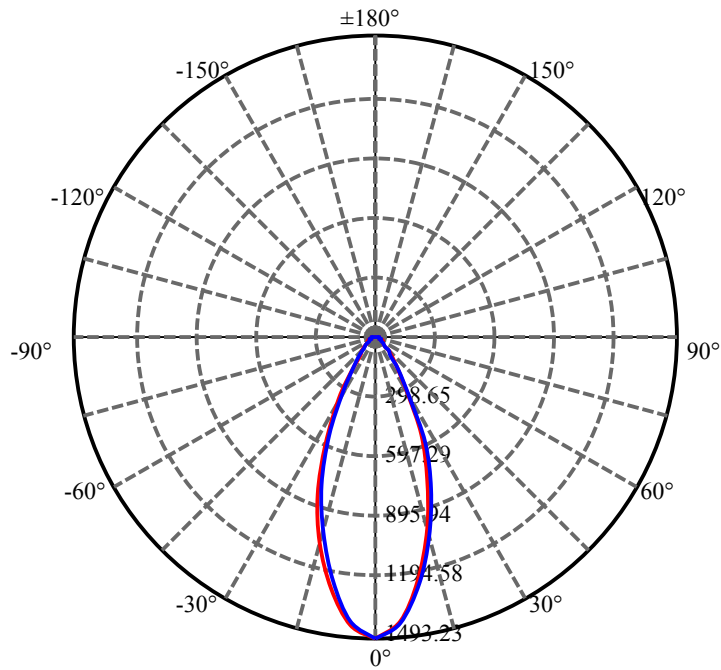
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1480.921	.000	.000	.000%	.000%
5.0	1410.958	34.572	34.572	3.599%	3.599%
10.0	1231.058	94.513	129.085	9.838%	13.437%
15.0	1007.292	132.777	261.862	13.821%	27.258%
20.0	781.594	147.429	409.292	15.347%	42.605%
25.0	555.138	140.199	549.490	14.594%	57.199%
30.0	337.753	112.996	662.486	11.762%	68.961%
35.0	187.884	77.404	739.890	8.057%	77.018%
40.0	118.837	51.174	791.064	5.327%	82.345%
45.0	88.148	38.325	829.388	3.989%	86.334%
50.0	66.701	31.289	860.678	3.257%	89.591%
55.0	50.333	25.447	886.125	2.649%	92.240%
60.0	38.043	20.428	906.553	2.126%	94.367%
65.0	29.516	16.424	922.976	1.710%	96.076%
70.0	22.692	13.219	936.196	1.376%	97.452%
75.0	16.783	10.318	946.513	1.074%	98.526%
80.0	10.831	7.389	953.902	.769%	99.295%
85.0	5.394	4.409	958.311	.459%	99.754%
90.0	.415	1.591	959.901	.166%	99.920%
95.0	.014	.118	960.019	.012%	99.932%
100.0	.014	.008	960.026	.001%	99.933%
105.0	.000	.004	960.030	.000%	99.933%
110.0	.029	.007	960.038	.001%	99.934%
115.0	.000	.007	960.045	.001%	99.935%
120.0	.029	.007	960.052	.001%	99.936%
125.0	.014	.010	960.062	.001%	99.937%
130.0	.014	.006	960.068	.001%	99.937%
135.0	.057	.014	960.083	.002%	99.939%
140.0	.043	.019	960.101	.002%	99.941%
145.0	.229	.045	960.146	.005%	99.946%
150.0	.344	.084	960.231	.009%	99.954%
155.0	.429	.098	960.329	.010%	99.964%
160.0	.544	.102	960.431	.011%	99.975%
165.0	.615	.096	960.526	.010%	99.985%
170.0	.687	.077	960.603	.008%	99.993%
175.0	.744	.051	960.655	.005%	99.998%
180.0	.687	.017	960.672	.002%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	662.49	68.96%	68.96%
0-40	791.06	82.34%	82.34%
0-60	906.55	94.37%	94.37%
0-90	959.90	99.92%	99.92%
0-120	960.05	99.94%	99.94%
0-180	960.67	100.00%	100.00%
60-90	73.78	7.68%	7.68%
90-120	1.74	0.18%	0.18%
90-130	1.76	0.18%	0.18%
90-150	1.92	0.20%	0.20%
90-180	2.34	0.24%	0.24%
0-37.80	768.54	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	129.08
10-20	280.21
20-30	253.19
30-40	128.58
40-50	69.61
50-60	45.87
60-70	29.64
70-80	17.71
80-90	6.00
90-100	0.13
100-110	0.01
110-120	0.01
120-130	0.02
130-140	0.03
140-150	0.13
150-160	0.20
160-170	0.17
170-180	0.05

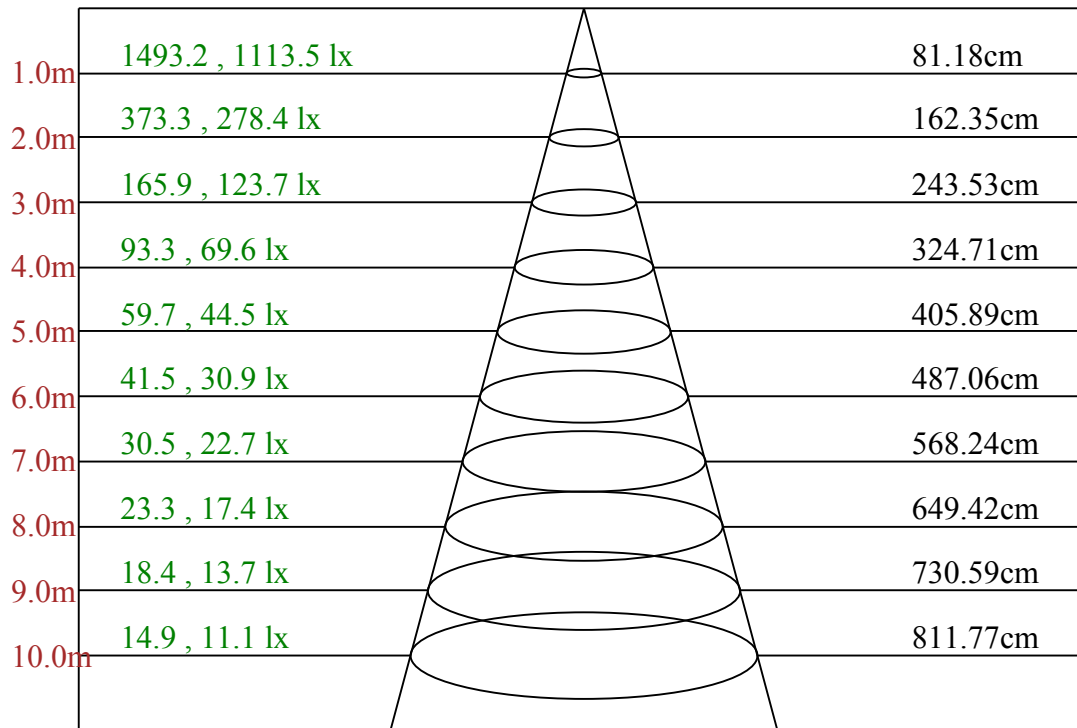


C0/C180: —

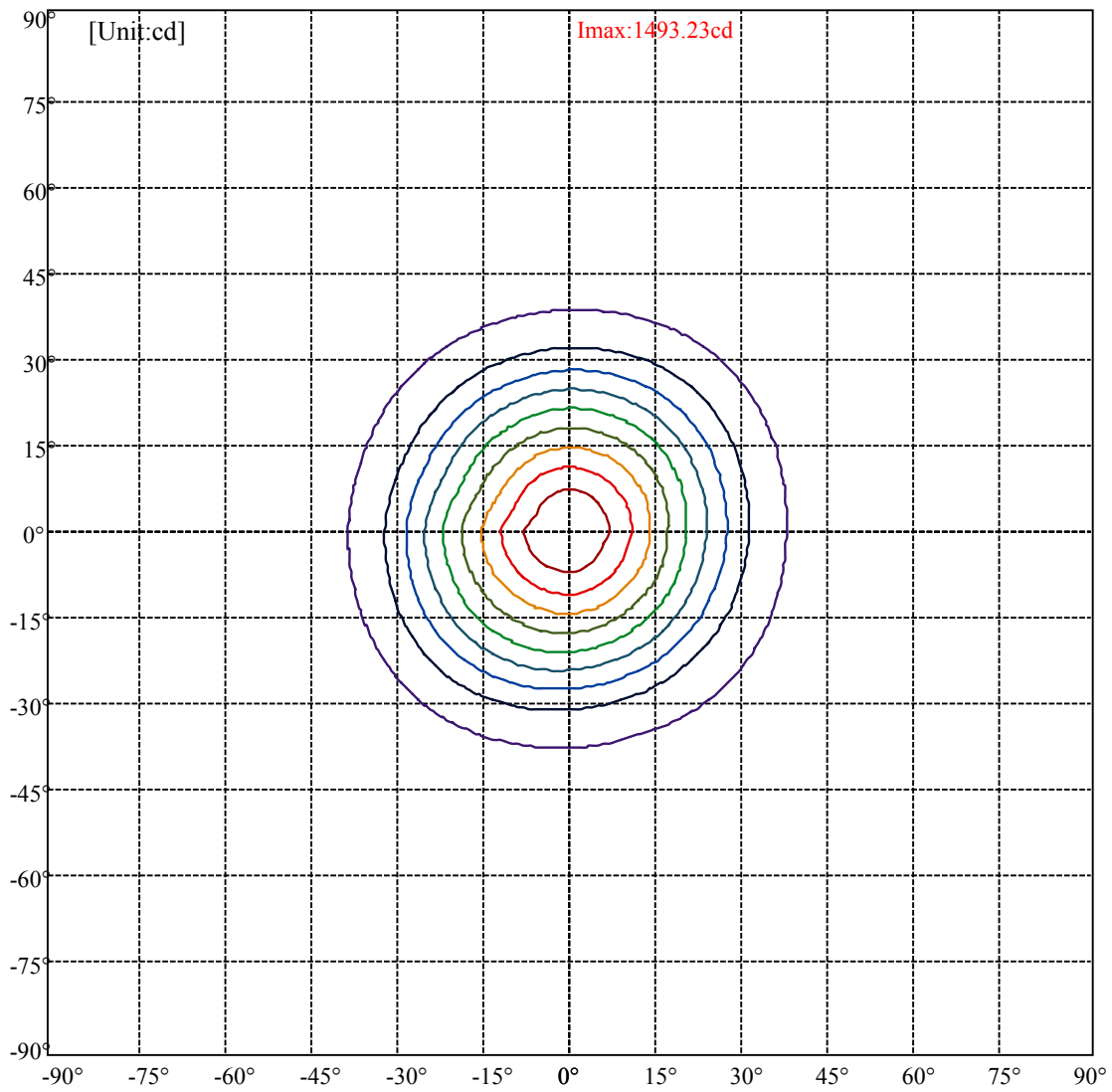
C90/C270: —

Field angle(10%Imax):C0/180Left:38.1 Right:37.4
:C90/270Left:37.2 Right:38.2

Beam Angle(50%Imax):C0/180Left:21.8 Right:20.0
:C90/270Left:20.8 Right:21.3



Max , Ave Beam angle of C67.5plane44.18



(10%Imax) 148.888	—
(20%Imax) 297.775	—
(30%Imax) 446.663	—
(40%Imax) 595.55	—
(50%Imax) 744.438	—
(60%Imax) 893.326	—
(70%Imax) 1042.21	—
(80%Imax) 1191.1	—
(90%Imax) 1339.99	—

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	1489.79	1411.96	1225.39	987.09	745.13	539.33	324.60	178.10	116.98
22.5	1487.50	1407.15	1231.57	1014.56	782.44	558.56	346.58	193.21	122.24
45.0	1491.85	1410.13	1229.06	1019.37	793.43	570.69	365.81	209.23	126.36
67.5	1493.23	1423.41	1237.75	1019.83	803.73	582.59	365.35	206.71	125.90
90.0	1488.88	1425.69	1240.27	1020.97	801.21	574.58	350.24	196.18	123.39
112.5	1479.72	1414.71	1236.61	1009.75	784.04	556.27	335.82	187.71	117.89
135.0	1465.76	1403.49	1223.10	989.61	762.98	534.98	323.46	182.22	117.21
157.5	1450.65	1391.82	1208.91	982.28	752.91	532.23	321.17	181.76	114.69
180.0	1489.79	1435.54	1267.51	1051.19	827.99	592.21	354.36	194.12	121.33
202.5	1487.50	1423.86	1256.53	1036.54	815.40	593.12	372.68	196.64	119.95
225.0	1491.85	1419.29	1243.93	1021.66	808.76	589.00	372.91	199.85	119.95
247.5	1493.23	1415.62	1231.34	1007.46	798.46	573.44	344.52	187.25	117.66
270.0	1488.88	1411.50	1226.31	1003.80	780.84	538.41	316.13	176.95	114.00
292.5	1479.72	1405.32	1219.44	988.23	760.23	518.96	301.26	167.34	113.54
315.0	1465.76	1396.62	1212.57	974.73	739.40	513.23	297.36	172.83	113.54
337.5	1450.65	1379.22	1206.62	989.61	748.56	514.61	311.79	176.04	116.75
360.0	1489.79	1411.96	1225.39	987.09	745.13	539.33	324.60	178.10	116.98
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	89.05	67.76	51.51	38.46	30.22	23.12	17.17	10.99	5.72
22.5	90.88	68.45	51.51	39.15	29.99	23.12	17.86	11.68	6.64
45.0	93.17	70.05	52.65	39.60	30.22	23.12	17.63	11.90	6.41
67.5	91.80	70.51	52.19	39.60	30.22	23.12	17.40	11.68	6.41
90.0	91.34	67.76	51.28	38.23	29.53	22.43	17.17	11.45	5.95
112.5	89.28	66.62	49.45	37.09	28.62	22.43	16.48	10.99	5.95
135.0	86.07	63.87	48.30	36.40	28.39	21.98	16.48	10.76	5.49
157.5	83.33	62.95	47.62	35.71	27.93	21.52	16.02	10.30	5.27
180.0	88.36	66.16	50.36	38.69	29.76	23.12	16.71	10.53	5.04
202.5	86.53	66.16	49.90	38.23	29.53	22.66	16.48	10.30	4.81
225.0	86.53	66.16	49.90	38.00	29.53	22.66	16.02	10.07	4.35
247.5	86.99	65.93	50.13	37.77	29.07	22.43	16.25	9.84	4.12
270.0	86.53	65.47	49.45	37.31	29.30	22.21	16.25	10.07	4.35
292.5	85.62	65.70	49.68	37.54	29.53	22.66	16.48	10.30	4.81
315.0	86.76	65.93	50.36	38.23	29.76	22.89	16.94	10.99	5.27
337.5	88.13	67.76	51.05	38.69	30.68	23.58	17.17	11.45	5.72
360.0	89.05	67.76	51.51	38.46	30.22	23.12	17.17	10.99	5.72
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	1.15	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00
22.5	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
112.5	0.69	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	0.23	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	0.23	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	0.23	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	0.23	0.00	0.00	0.00	0.23	0.00	0.00
360.0	1.15	0.00	0.00	0.00	0.46	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	0.23	0.00	0.23	0.23	0.46	0.46	0.69	0.69	0.46
22.5	0.00	0.00	0.23	0.23	0.46	0.46	0.69	0.69	0.69
45.0	0.00	0.00	0.23	0.46	0.46	0.46	0.69	0.69	0.92
67.5	0.00	0.00	0.23	0.46	0.23	0.46	0.69	0.69	0.69
90.0	0.00	0.00	0.23	0.23	0.46	0.46	0.46	0.69	0.92
112.5	0.00	0.00	0.23	0.23	0.23	0.46	0.69	0.69	0.69
135.0	0.00	0.23	0.23	0.23	0.23	0.69	0.69	0.69	0.69
157.5	0.00	0.00	0.23	0.46	0.46	0.46	0.46	0.69	0.92
180.0	0.00	0.00	0.46	0.23	0.46	0.69	0.46	0.46	0.69
202.5	0.23	0.00	0.00	0.46	0.46	0.46	0.46	0.69	0.69
225.0	0.00	0.00	0.23	0.46	0.46	0.46	0.46	0.69	0.92
247.5	0.00	0.00	0.23	0.46	0.46	0.69	0.69	0.69	0.69
270.0	0.23	0.23	0.23	0.23	0.46	0.46	0.69	0.69	0.69
292.5	0.00	0.00	0.23	0.46	0.46	0.69	0.69	0.92	0.69
315.0	0.23	0.23	0.23	0.46	0.46	0.69	0.69	0.69	0.92
337.5	0.00	0.00	0.23	0.23	0.69	0.69	0.69	0.69	0.69
360.0	0.23	0.00	0.23	0.23	0.46	0.46	0.69	0.69	0.46
C/γ(°)	180.0								
0.0	0.46								
22.5	0.69								
45.0	0.46								
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