Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
www.bellingtest.com

Tel:0755-21038430
Address:1 F,No.1 building,Meibaohe industrial park,Dalang street,Longhua district,Shenzhen,China

LumCAT:
Luminaire:
Report No:
Test No:
LampCAT:
Lamp flux(lm): 2161.6
Number of Lamps: 1
Length(mm): 0
Phm Type: C

Voltage(V): 120.08
Current(A): 0.1328
Power (W): 15.7810
PF: 0.9898
Ballast type:
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 2161.64
Efficiency(%): 100.00%
Lumens(lm)/Power(W): 136.98
Central intensity(cd): 777.789
Maximum intensity(cd): 777.789
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=100.9
[C90/270]Total=116.9
Field angle(10%Imax): [C0/180]Total=157.0
[C90/270]Total=161.9
Maximum s/h(1/2): C0_180=1.30 C90_270=1.30
Maximum s/h(1/4): C0_180=1.85 C90_270=1.41
Up flux rate of lamp(%): 0.85%
Down flux rate of lamp(%): 99.15%
Up flux rate of LUM(%): 0.85%
Down flux rate of LUM(%): 99.15%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 79.859%

Zonal flux distribution table

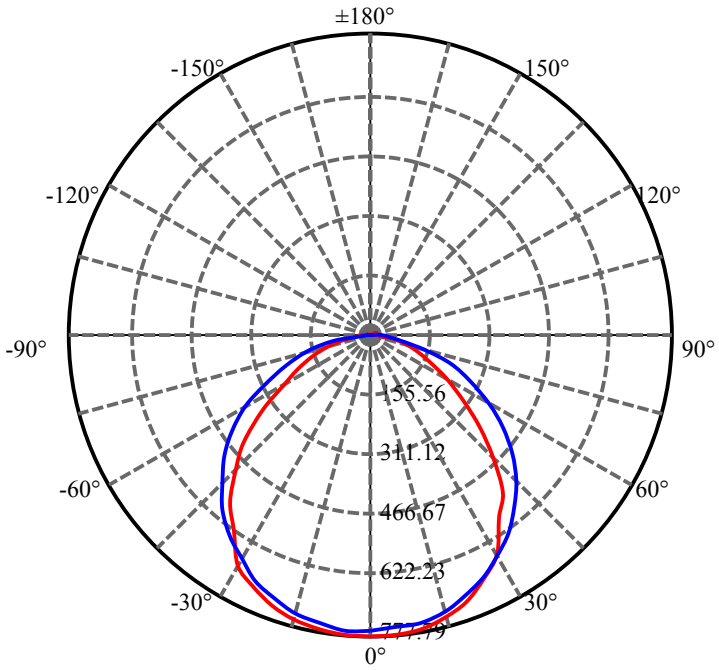
γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	771.786	.000	.000	.000%	.000%
5.0	769.529	18.426	18.426	.852%	.852%
10.0	762.429	54.803	73.229	2.535%	3.388%
15.0	748.792	89.645	162.874	4.147%	7.535%
20.0	728.551	121.754	284.627	5.632%	13.167%
25.0	702.007	150.039	434.667	6.941%	20.108%
30.0	668.481	173.436	608.103	8.023%	28.132%
35.0	619.191	189.619	797.722	8.772%	36.904%
40.0	570.449	198.482	996.204	9.182%	46.086%
45.0	509.804	200.018	1196.222	9.253%	55.339%
50.0	446.302	193.195	1389.417	8.937%	64.276%
55.0	377.241	179.066	1568.483	8.284%	72.560%
60.0	305.361	157.781	1726.264	7.299%	79.859%
65.0	240.867	132.789	1859.053	6.143%	86.002%
70.0	180.771	106.761	1965.814	4.939%	90.941%
75.0	126.182	80.233	2046.047	3.712%	94.653%
80.0	75.065	53.848	2099.895	2.491%	97.144%
85.0	34.518	29.776	2129.671	1.377%	98.521%
90.0	15.308	13.643	2143.314	.631%	99.152%
95.0	5.220	5.621	2148.935	.260%	99.412%
100.0	4.881	2.745	2151.679	.127%	99.539%
105.0	4.946	2.629	2154.309	.122%	99.661%
110.0	3.458	2.197	2156.505	.102%	99.762%
115.0	1.749	1.318	2157.824	.061%	99.823%
120.0	.861	.634	2158.458	.029%	99.853%
125.0	.770	.377	2158.835	.017%	99.870%
130.0	.848	.352	2159.187	.016%	99.887%
135.0	.926	.359	2159.546	.017%	99.903%
140.0	1.031	.362	2159.908	.017%	99.920%
145.0	1.070	.351	2160.259	.016%	99.936%
150.0	1.135	.325	2160.583	.015%	99.951%
155.0	1.279	.306	2160.889	.014%	99.965%
160.0	1.266	.267	2161.156	.012%	99.978%
165.0	1.253	.208	2161.363	.010%	99.987%
170.0	1.279	.150	2161.513	.007%	99.994%
175.0	1.292	.092	2161.605	.004%	99.998%
180.0	1.331	.031	2161.637	.001%	100.000%

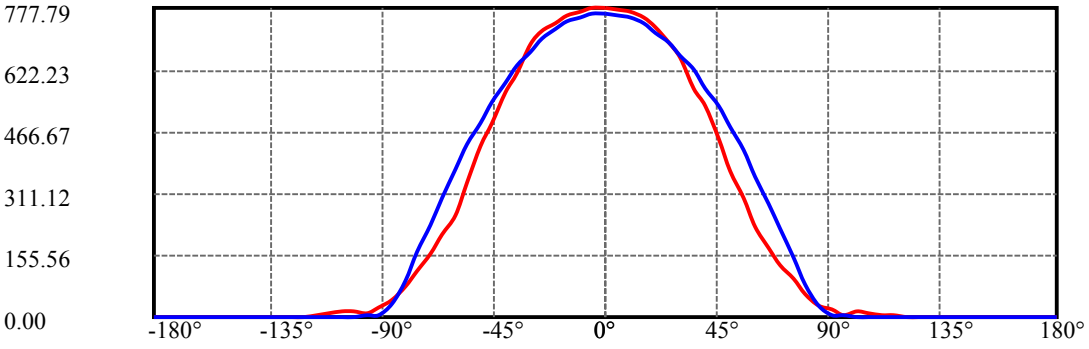
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	608.10	28.13%	28.13%
0-40	996.20	46.09%	46.09%
0-60	1726.26	79.86%	79.86%
0-90	2143.31	99.15%	99.15%
0-120	2158.46	99.85%	99.85%
0-180	2161.64	100.00%	100.00%
60-90	574.83	26.59%	26.59%
90-120	28.79	1.33%	1.33%
90-130	29.52	1.37%	1.37%
90-150	30.91	1.43%	1.43%
90-180	31.93	1.48%	1.48%
0-60.11	1729.31	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	73.23
10-20	211.40
20-30	323.48
30-40	388.10
40-50	393.21
50-60	336.85
60-70	239.55
70-80	134.08
80-90	43.42
90-100	8.37
100-110	4.83
110-120	1.95
120-130	0.73
130-140	0.72
140-150	0.68
150-160	0.57
160-170	0.36
170-180	0.09



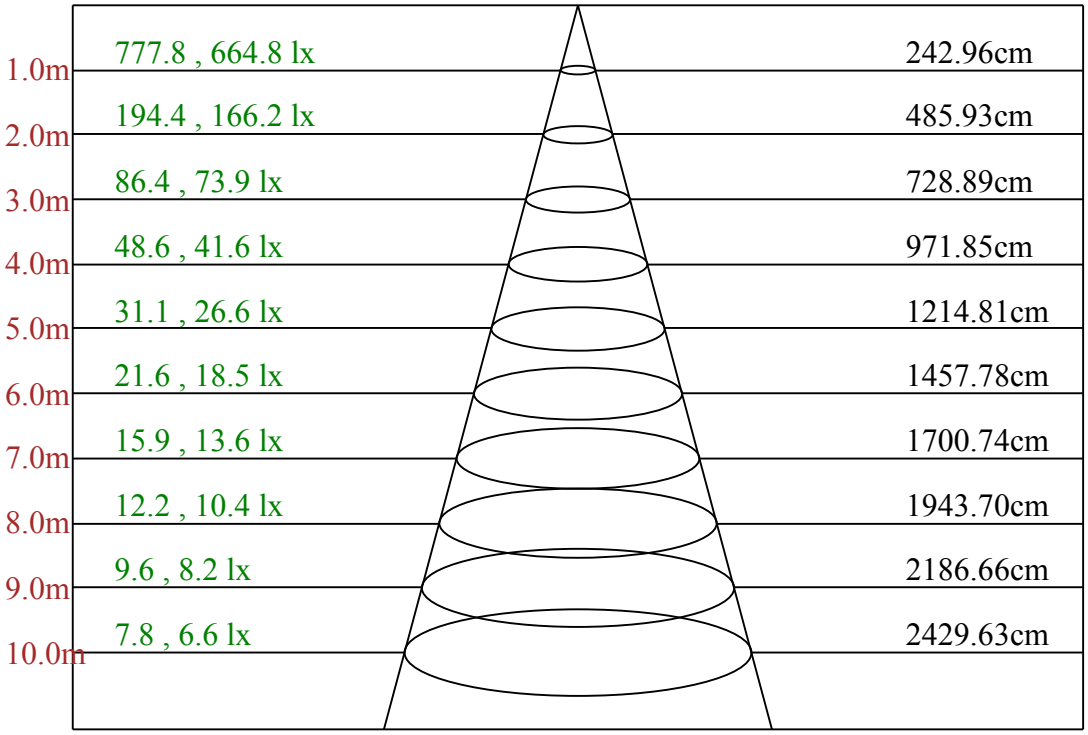


C0/C180:

C90/C270:

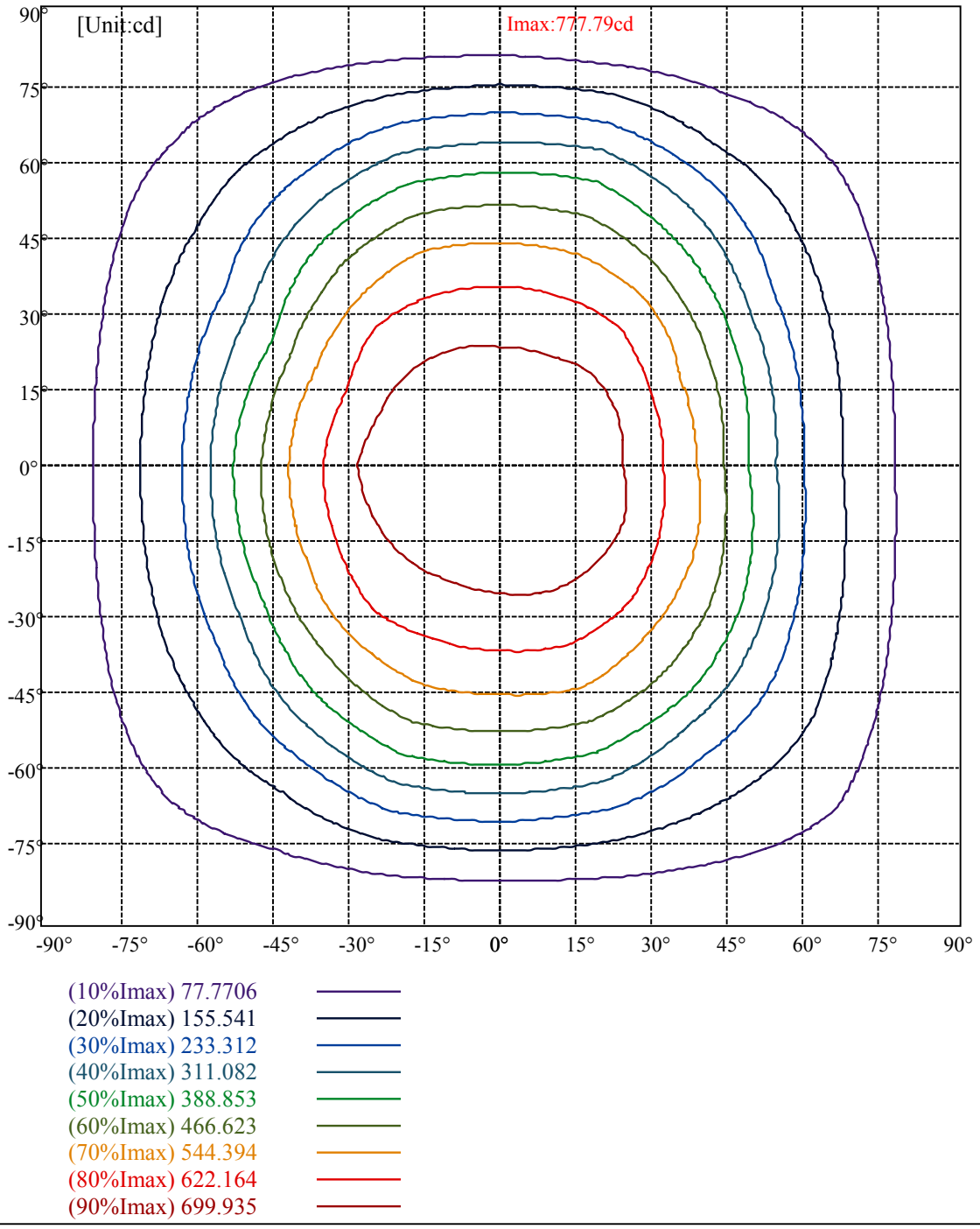
Field angle(10%Imax):C0/180Left:79.7 Right:77.3
:C90/270Left:76.5 Right:85.5

Beam Angle(50%Imax):C0/180Left:52.2 Right:48.7
:C90/270Left:54.1 Right:62.8



Max , Ave

Beam angle of C0plane100.95


[Unit:cd]
Imax:777.79cd
90°
75°
60°
45°
30°
15°
0°
-15°
-30°
-45°
-60°
-75°
-90°
-90° -75° -60° -45° -30° -15° 0° 15° 30° 45° 60° 75° 90°
(10%Imax) 77.7706
(20%Imax) 155.541
(30%Imax) 233.312
(40%Imax) 311.082
(50%Imax) 388.853
(60%Imax) 466.623
(70%Imax) 544.394
(80%Imax) 622.164
(90%Imax) 699.935

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	777.79	774.87	767.56	751.48	730.18	693.02	651.05	576.09	531.19
22.5	773.40	772.57	764.43	749.18	728.93	700.12	663.57	583.19	530.36
45.0	770.90	768.39	760.46	744.59	726.84	700.32	666.92	623.48	578.80
67.5	765.89	761.92	752.32	738.74	718.28	690.30	657.73	621.61	577.97
90.0	763.59	758.16	753.78	739.16	716.61	690.51	656.06	622.23	576.30
112.5	770.48	769.44	761.92	745.01	722.46	696.36	665.66	625.57	582.35
135.0	774.66	769.86	764.64	748.77	729.97	700.95	667.54	631.63	563.35
157.5	777.58	774.87	768.60	751.69	730.60	703.87	662.32	596.76	545.18
180.0	777.79	777.37	769.65	759.83	740.83	718.07	685.92	615.76	565.86
202.5	773.40	772.15	766.10	753.36	734.36	709.72	678.40	621.81	561.05
225.0	770.90	767.77	761.09	748.77	728.09	702.20	675.06	637.27	597.38
247.5	765.89	762.13	753.99	743.13	722.46	697.40	669.84	631.42	590.49
270.0	763.59	764.22	753.99	743.13	723.92	699.91	665.66	632.67	590.08
292.5	770.48	770.48	762.55	750.44	730.81	708.89	677.56	642.07	599.05
315.0	774.66	771.53	765.26	753.57	733.52	710.14	676.52	638.31	575.88
337.5	777.58	776.75	772.57	759.83	738.95	710.35	675.89	607.20	561.89
360.0	777.79	774.87	767.56	751.48	730.18	693.02	651.05	576.09	531.19

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	447.88	368.12	298.38	226.13	172.68	131.96	95.21	58.05	30.28
22.5	467.30	397.56	315.50	239.29	184.37	139.69	98.56	58.67	28.82
45.0	501.54	440.57	369.16	304.64	233.02	157.23	101.69	56.79	24.22
67.5	530.15	476.28	420.74	360.18	291.49	211.94	141.57	67.03	24.85
90.0	530.36	477.53	418.23	353.29	286.90	220.70	148.88	81.43	28.40
112.5	534.53	478.37	413.85	349.12	282.09	207.76	135.93	77.47	31.95
135.0	510.11	442.04	369.79	300.47	226.34	168.30	117.14	71.83	34.24
157.5	474.61	379.81	317.59	241.59	194.19	150.13	107.53	65.77	33.41
180.0	487.14	428.67	339.30	256.41	206.30	159.73	114.42	75.17	41.97
202.5	504.05	419.28	335.55	263.72	199.82	154.31	113.80	76.00	38.84
225.0	516.16	453.52	391.09	312.58	235.74	166.42	118.81	71.83	33.20
247.5	544.35	492.77	434.73	371.67	296.50	223.42	151.80	87.49	35.91
270.0	542.68	489.22	433.89	371.46	301.51	229.68	162.45	93.54	35.50
292.5	552.70	497.99	428.25	366.66	292.53	217.57	152.64	91.04	40.72
315.0	520.55	464.38	396.52	305.06	234.69	182.29	132.80	84.77	44.48
337.5	492.77	434.73	353.29	263.51	215.69	171.22	125.70	84.15	45.52
360.0	447.88	368.12	298.38	226.13	172.68	131.96	95.21	58.05	30.28

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	20.88	2.51	14.83	11.28	6.89	2.92	0.42	0.63	0.63
22.5	19.21	2.30	6.47	2.71	2.30	0.84	1.04	0.84	1.04
45.0	14.83	6.26	2.51	5.22	3.13	1.25	1.04	1.25	1.04
67.5	7.52	5.43	0.63	1.67	1.46	0.84	1.04	0.63	1.04
90.0	4.59	3.13	0.63	0.84	1.04	0.84	0.84	1.04	1.25
112.5	12.11	7.10	0.63	4.18	2.51	1.25	0.84	1.04	0.84
135.0	17.33	2.30	7.93	3.34	1.46	0.84	0.84	0.84	1.04
157.5	20.05	1.25	6.06	8.77	6.68	3.55	1.04	1.04	1.25
180.0	21.92	7.31	12.32	12.32	8.77	4.59	1.04	0.63	0.84
202.5	19.21	4.80	11.48	6.06	2.51	0.84	0.42	0.21	0.63
225.0	14.83	10.02	0.63	5.85	4.39	2.92	1.46	0.84	0.42
247.5	7.73	5.85	1.46	0.84	2.30	1.25	0.63	0.63	0.63
270.0	5.43	2.51	0.63	0.00	0.84	0.63	0.42	0.63	0.84
292.5	14.83	8.77	0.63	3.55	3.34	1.67	0.84	0.63	0.63
315.0	21.09	8.77	5.64	6.89	3.34	1.67	1.25	0.84	0.63
337.5	23.39	5.22	5.64	5.64	4.39	2.09	0.63	0.63	0.84
360.0	20.88	2.51	14.83	11.28	6.89	2.92	0.42	0.63	0.63

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	0.84	0.84	1.04	1.04	1.04	1.04	1.04	1.04	1.04
22.5	1.04	1.25	1.25	1.25	1.46	1.46	1.25	1.46	1.25
45.0	1.04	1.04	1.25	1.25	1.46	1.46	1.46	1.25	1.46
67.5	1.25	1.25	1.04	1.25	1.46	1.46	1.46	1.46	1.25
90.0	1.46	1.25	1.25	1.25	1.46	1.25	1.25	1.25	1.46
112.5	1.04	1.25	1.25	1.25	1.46	1.46	1.46	1.25	1.25
135.0	1.25	1.25	1.25	1.46	1.25	1.46	1.46	1.46	1.46
157.5	1.04	1.25	1.25	1.46	1.46	1.25	1.25	1.46	1.46
180.0	0.63	0.84	1.04	1.04	1.04	1.25	1.04	1.25	1.25
202.5	0.63	0.84	1.04	1.04	1.04	1.25	1.25	1.04	1.25
225.0	0.84	0.84	0.84	1.04	1.25	1.04	1.25	1.25	1.04
247.5	0.84	0.84	1.04	1.04	1.25	1.04	1.25	1.25	1.25
270.0	0.84	0.84	0.84	0.84	1.25	1.04	1.25	1.25	1.25
292.5	0.63	1.04	0.84	1.04	1.04	1.25	1.04	1.25	1.25
315.0	0.63	0.84	0.84	1.04	1.25	1.25	1.25	1.25	1.25
337.5	0.84	1.04	1.04	0.84	1.25	1.25	1.04	1.25	1.46
360.0	0.84	0.84	1.04	1.04	1.04	1.04	1.04	1.04	1.04

C/γ(°)	180.0
0.0	1.04
22.5	1.04
45.0	1.46
67.5	1.46
90.0	1.46
112.5	1.25
135.0	1.46
157.5	1.46
180.0	1.04
202.5	1.04
225.0	1.46
247.5	1.46
270.0	1.46
292.5	1.25
315.0	1.46
337.5	1.46
360.0	1.04