



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.  
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LumCAT: LRG4-27K

Luminaire:

Report No:

Voltage(V): 120.04

Test No:

Current(A): 0.0955

LampCAT:

Power (W): 11.2550

Lamp flux(lm): 961.3

PF: 0.9817

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

Lumens(lm): 961.32

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 85.41

Central intensity(cd): 1524.147

Maximum intensity(cd): 1524.147

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=42.3

[C90/270]Total=41.5

Field angle(10%Imax): [C0/180]Total=76.2

[C90/270]Total=75.5

Maximum s/h(1/2): C0\_180=0.72 C90\_270=0.60

Maximum s/h(1/4): C0\_180=1.03 C90\_270=0.65

Up flux rate of lamp(%): 0.68%

Down flux rate of lamp(%): 99.32%

Up flux rate of LUM(%): 0.68%

Down flux rate of LUM(%): 99.32%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 95.721%

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

Date:  
Humidity(%): 58%

Operator: Zac

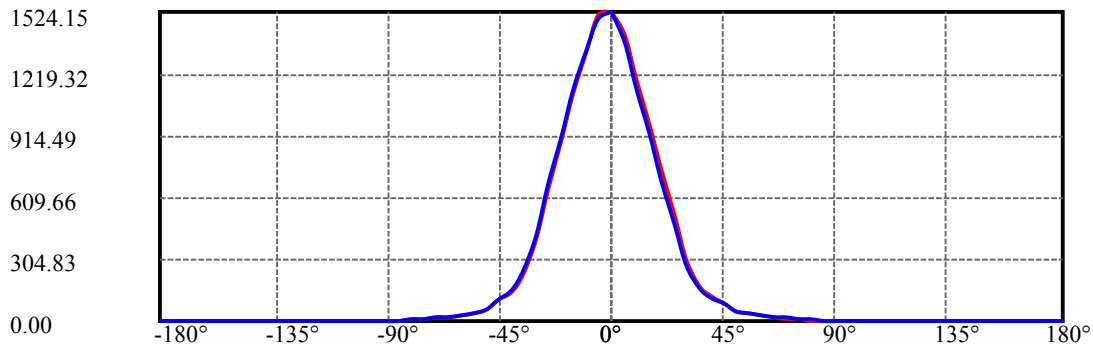
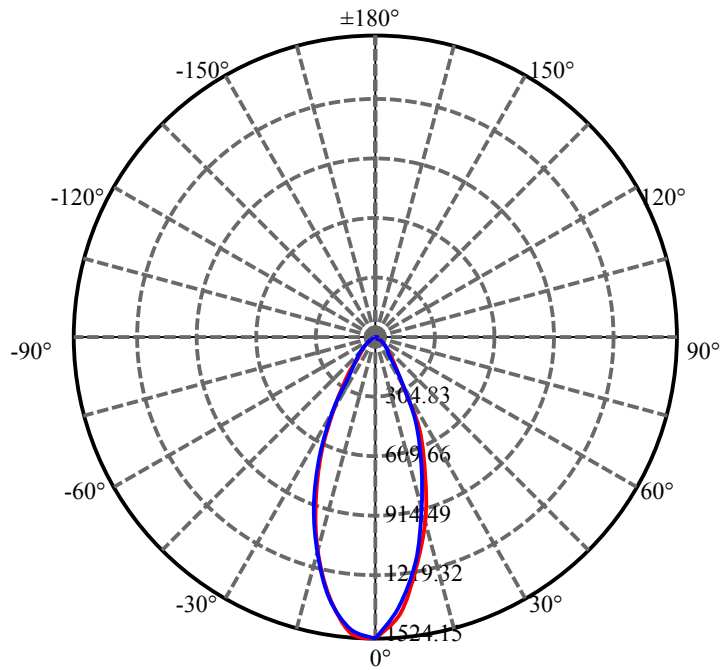
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1524.147	.000	.000	.000%	.000%
5.0	1432.085	35.341	35.341	3.676%	3.676%
10.0	1241.562	95.645	130.986	9.949%	13.626%
15.0	1023.496	134.362	265.347	13.977%	27.602%
20.0	803.990	150.611	415.958	15.667%	43.269%
25.0	570.749	144.185	560.143	14.999%	58.268%
30.0	351.172	116.670	676.812	12.136%	70.404%
35.0	201.283	81.353	758.165	8.463%	78.867%
40.0	131.189	55.471	813.636	5.770%	84.637%
45.0	93.042	41.518	855.154	4.319%	88.956%
50.0	53.799	29.671	884.825	3.087%	92.042%
55.0	37.612	19.876	904.701	2.068%	94.110%
60.0	29.387	15.487	920.188	1.611%	95.721%
65.0	21.484	12.367	932.555	1.286%	97.007%
70.0	15.307	9.316	941.871	.969%	97.976%
75.0	8.129	6.126	947.996	.637%	98.614%
80.0	5.118	3.545	951.541	.369%	98.982%
85.0	2.904	2.180	953.721	.227%	99.209%
90.0	.845	1.027	954.747	.107%	99.316%
95.0	.845	.463	955.210	.048%	99.364%
100.0	.881	.469	955.679	.049%	99.413%
105.0	.857	.465	956.144	.048%	99.461%
110.0	.905	.460	956.605	.048%	99.509%
115.0	.928	.464	957.069	.048%	99.557%
120.0	.893	.443	957.512	.046%	99.604%
125.0	.916	.418	957.930	.044%	99.647%
130.0	1.000	.417	958.346	.043%	99.690%
135.0	.988	.402	958.748	.042%	99.732%
140.0	1.131	.392	959.140	.041%	99.773%
145.0	1.298	.405	959.546	.042%	99.815%
150.0	1.441	.403	959.949	.042%	99.857%
155.0	1.548	.378	960.327	.039%	99.896%
160.0	1.655	.336	960.663	.035%	99.931%
165.0	1.750	.281	960.943	.029%	99.960%
170.0	1.738	.207	961.150	.022%	99.982%
175.0	1.845	.128	961.278	.013%	99.995%
180.0	1.904	.045	961.323	.005%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	676.81	70.40%	70.40%
0-40	813.64	84.64%	84.64%
0-60	920.19	95.72%	95.72%
0-90	954.75	99.32%	99.32%
0-120	957.51	99.60%	99.60%
0-180	961.32	100.00%	100.00%
60-90	50.05	5.21%	5.21%
90-120	3.79	0.39%	0.39%
90-130	4.63	0.48%	0.48%
90-150	6.23	0.65%	0.65%
90-180	7.56	0.79%	0.79%
0-35.98	769.06	80.00%	80.00%

## ZONAL LUMEN SUMMARY

0-10	130.99
10-20	284.97
20-30	260.85
30-40	136.82
40-50	71.19
50-60	35.36
60-70	21.68
70-80	9.67
80-90	3.21
90-100	0.93
100-110	0.93
110-120	0.91
120-130	0.83
130-140	0.79
140-150	0.81
150-160	0.71
160-170	0.49
170-180	0.13

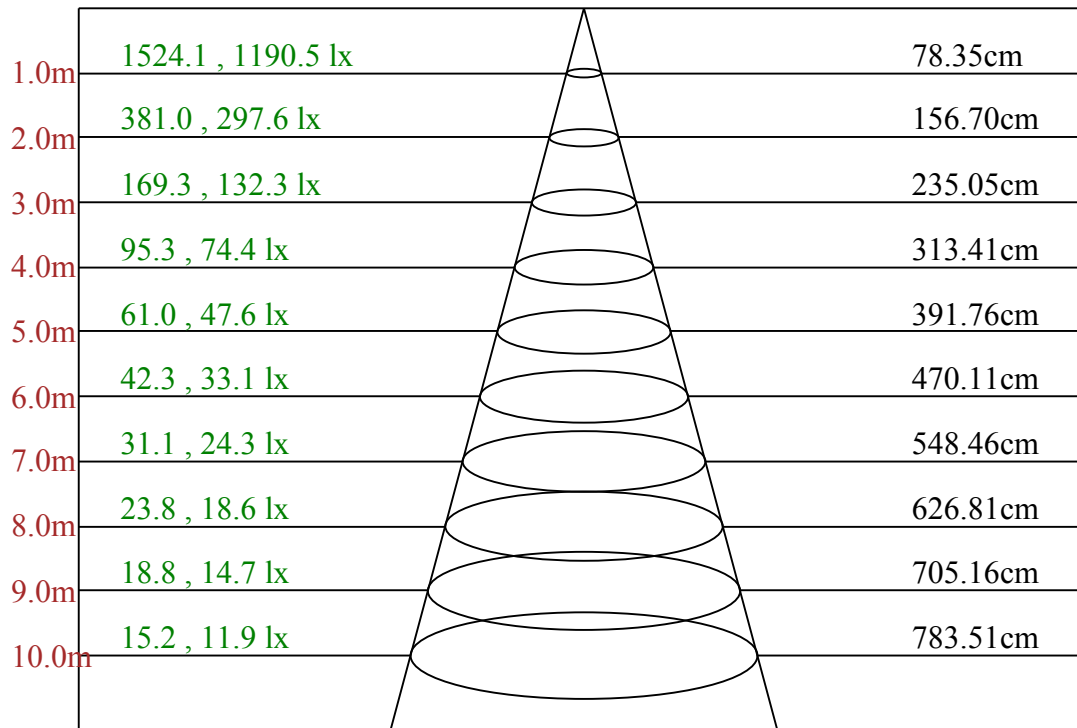


C0/C180: —

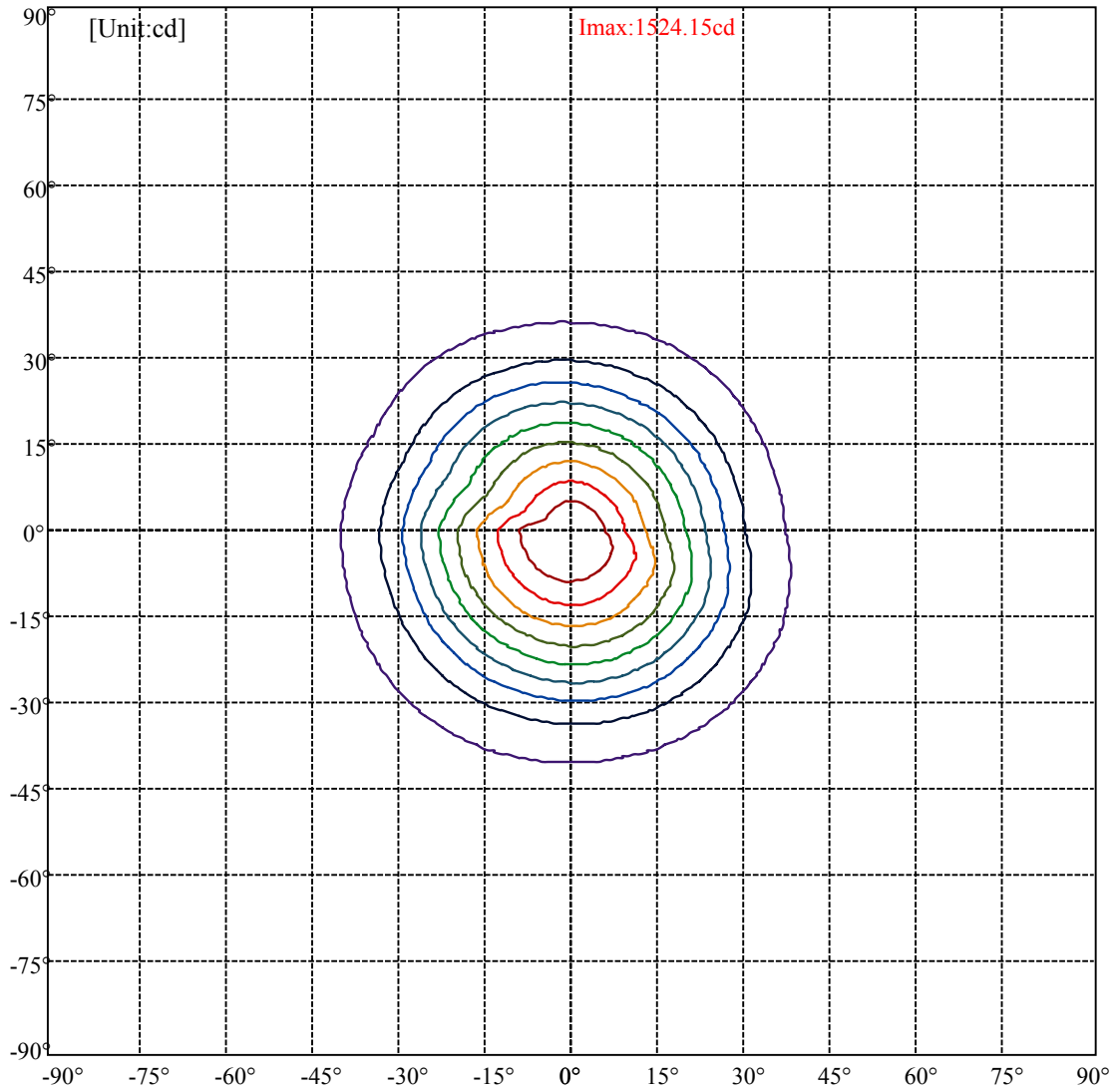
C90/C270: —

Field angle(10%Imax):C0/180Left:39.4 Right:36.8  
:C90/270Left:39.8 Right:35.7

Beam Angle(50%Imax):C0/180Left:22.6 Right:19.7  
:C90/270Left:23.1 Right:18.4



Max , Ave      Beam angle of C0plane42.76



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	1524.15	1407.54	1189.68	963.25	749.00	517.05	300.13	169.87	121.88
22.5	1524.15	1390.97	1167.59	933.73	707.68	477.24	267.95	159.97	116.55
45.0	1524.15	1374.03	1144.93	913.73	682.73	449.06	260.33	157.68	114.07
67.5	1524.15	1372.69	1143.59	903.26	679.49	448.30	259.00	157.49	113.69
90.0	1524.15	1373.83	1149.88	915.83	691.49	471.72	271.57	158.64	112.93
112.5	1524.15	1368.50	1149.12	928.40	714.53	496.48	291.37	164.16	114.45
135.0	1524.15	1360.69	1150.07	929.54	727.48	519.90	315.75	175.78	116.36
157.5	1524.15	1364.12	1153.50	933.16	730.34	528.85	328.70	180.54	117.31
180.0	1524.15	1503.14	1329.27	1112.74	887.45	646.35	406.21	228.91	142.45
202.5	1524.15	1495.91	1326.80	1115.03	895.26	637.40	393.64	223.58	143.78
225.0	1524.15	1493.05	1332.51	1120.17	889.36	633.98	402.02	230.24	146.64
247.5	1524.15	1489.05	1335.94	1123.79	889.16	647.88	408.49	237.67	150.26
270.0	1524.15	1485.62	1336.32	1131.98	913.16	668.06	424.49	244.91	149.50
292.5	1524.15	1482.20	1331.94	1133.12	919.64	679.11	439.16	248.91	148.50
315.0	1524.15	1481.43	1318.80	1115.98	907.45	668.64	435.54	249.10	147.59
337.5	1524.15	1470.58	1305.09	1102.27	879.64	641.97	414.40	233.10	142.07
360.0	1524.15	1407.54	1189.68	963.25	749.00	517.05	300.13	169.87	121.88

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	86.08	49.71	35.80	28.00	20.38	14.09	6.67	4.57	2.10
22.5	84.56	49.13	35.80	28.00	20.57	14.28	6.86	4.95	2.67
45.0	82.65	47.61	35.61	28.00	20.57	14.66	7.43	4.95	2.67
67.5	82.27	47.80	35.42	28.00	20.57	14.09	7.05	4.95	2.48
90.0	81.89	47.99	35.23	27.61	20.38	14.28	6.86	4.76	2.29
112.5	82.84	47.61	35.04	27.42	20.00	13.90	6.67	4.95	2.29
135.0	83.03	48.18	34.47	26.66	19.81	13.71	6.48	4.76	2.48
157.5	82.08	48.56	34.47	26.85	19.62	13.71	6.29	4.57	2.48
180.0	100.93	57.70	39.42	31.04	22.66	16.19	9.33	5.14	3.24
202.5	101.51	57.51	39.23	30.66	22.47	16.19	9.52	5.14	3.24
225.0	102.27	58.85	39.23	30.85	22.47	16.19	9.33	5.33	3.43
247.5	104.36	59.61	39.61	30.85	22.47	16.38	9.14	5.33	3.24
270.0	104.17	59.99	40.56	31.42	22.66	16.38	9.52	5.33	3.24
292.5	103.98	60.94	40.75	31.61	23.04	16.57	9.52	5.52	3.62
315.0	104.36	60.56	40.75	31.80	23.04	16.95	9.52	5.71	3.43
337.5	101.70	59.04	40.37	31.42	23.04	17.33	9.90	5.90	3.62
360.0	86.08	49.71	35.80	28.00	20.38	14.09	6.67	4.57	2.10

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.19	0.38	0.19	0.19	0.38	0.00	0.38	0.19	0.38
22.5	0.57	0.57	0.76	0.57	0.76	0.95	0.76	0.76	0.95
45.0	0.76	0.76	0.76	0.76	0.76	0.95	0.76	0.76	0.95
67.5	0.76	0.76	0.95	0.76	0.76	0.95	0.95	0.95	0.95
90.0	0.76	0.76	0.95	0.76	0.76	1.14	0.76	0.95	0.95
112.5	0.57	0.76	0.76	0.76	0.95	0.95	0.76	0.95	0.95
135.0	0.76	0.76	0.76	0.95	0.76	0.76	0.95	0.95	1.14
157.5	0.95	0.95	0.76	0.76	0.95	0.76	0.76	0.95	1.14
180.0	0.76	0.76	0.76	0.95	0.95	0.76	0.95	0.76	0.76
202.5	0.95	0.95	1.14	0.95	0.95	0.95	0.95	1.14	1.14
225.0	0.95	1.14	0.95	0.95	0.95	1.14	1.14	0.95	0.95
247.5	1.14	0.95	0.95	1.14	1.14	1.14	1.14	0.95	1.14
270.0	0.95	1.14	1.14	1.14	0.95	0.95	0.95	1.14	1.14
292.5	1.14	0.95	1.14	1.14	1.33	1.14	0.95	0.95	1.14
315.0	1.14	1.14	1.14	0.95	1.14	1.14	1.14	1.14	1.14
337.5	1.14	0.76	0.95	0.95	0.95	1.14	0.95	1.14	1.14
360.0	0.19	0.38	0.19	0.19	0.38	0.00	0.38	0.19	0.38

## Intensity data(cd)

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C/\u03b3(\u00b0)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.38	0.38	0.57	0.57	0.57	1.14	1.14	1.14	0.95
22.5	0.76	0.95	1.14	1.52	1.52	1.71	1.90	1.71	1.71
45.0	0.76	1.14	1.33	1.52	1.52	1.71	2.10	1.71	1.90
67.5	1.14	0.95	1.14	1.52	1.71	1.71	1.71	1.90	2.10
90.0	1.14	1.33	1.14	1.52	1.52	1.71	1.71	1.71	1.71
112.5	0.95	1.14	1.33	1.71	1.71	1.71	1.71	1.52	1.90
135.0	1.14	1.14	1.52	1.52	1.52	1.71	1.90	1.90	1.90
157.5	0.95	1.33	1.14	1.33	1.71	1.52	1.71	1.90	1.90
180.0	0.95	1.14	1.14	1.52	1.52	1.71	1.71	1.90	1.90
202.5	1.14	1.14	1.33	1.52	1.71	1.90	1.71	1.71	2.10
225.0	1.14	1.33	1.71	1.52	1.90	1.71	1.90	1.90	1.90
247.5	1.33	1.14	1.33	1.33	1.33	1.52	1.71	1.90	2.10
270.0	0.95	1.33	1.33	1.52	1.71	1.52	1.71	1.71	1.90
292.5	0.95	1.33	1.52	1.52	1.52	1.71	1.90	1.71	1.90
315.0	1.14	1.14	1.52	1.33	1.71	1.71	1.71	1.71	1.71
337.5	0.95	1.14	1.52	1.52	1.52	1.71	1.71	1.71	1.90
360.0	0.38	0.38	0.57	0.57	0.57	1.14	1.14	1.14	0.95

C/\u03b3(\u00b0)	180.0
0.0	1.90
22.5	1.90
45.0	1.90
67.5	1.90
90.0	1.90
112.5	1.90
135.0	1.90
157.5	1.90
180.0	1.90
202.5	1.90
225.0	1.90
247.5	1.90
270.0	1.90
292.5	1.90
315.0	1.90
337.5	1.90
360.0	1.90