



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

Tel:0755-21038430

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

---

LumCAT: LRG3-27K-15D

Luminaire:

Report No:

Voltage(V): 120.16

Test No:

Current(A): 0.0613

LampCAT:

Power (W): 7.1760

Lamp flux(lm): 523.9

PF: 0.9748

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

---

### Photometric Results

Lumens(lm): 523.91

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 73.01

Central intensity(cd): 2249.012

Maximum intensity(cd): 2249.012

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

Beam Angle(50%Imax): [C0/180]Total=18.5

[C90/270]Total=19.7

Field angle(10%Imax): [C0/180]Total=39.2

[C90/270]Total=40.5

Maximum s/h(1/2): C0\_180=0.34 C90\_270=0.28

Maximum s/h(1/4): C0\_180=0.49 C90\_270=0.28

Up flux rate of lamp(%): 0.23%

Down flux rate of lamp(%): 99.77%

Up flux rate of LUM(%): 0.23%

Down flux rate of LUM(%): 99.77%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 92.463%

---

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

Date:  
Humidity(%): 58%

Operator: Zac

## Zonal flux distribution table

Page: 2 Total:7

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2233.717	.000	.000	.000%	.000%
5.0	1873.872	49.105	49.105	9.373%	9.373%
10.0	1026.160	103.743	152.848	19.802%	29.175%
15.0	419.458	85.753	238.601	16.368%	45.542%
20.0	218.094	52.543	291.145	10.029%	55.572%
25.0	149.059	38.508	329.652	7.350%	62.922%
30.0	110.039	32.789	362.441	6.259%	69.180%
35.0	82.425	28.342	390.783	5.410%	74.590%
40.0	63.607	24.364	415.147	4.650%	79.240%
45.0	50.269	21.085	436.232	4.025%	83.265%
50.0	40.403	18.322	454.554	3.497%	86.762%
55.0	33.017	15.964	470.518	3.047%	89.809%
60.0	27.144	13.906	484.424	2.654%	92.463%
65.0	22.029	11.954	496.378	2.282%	94.745%
70.0	17.409	9.986	506.364	1.906%	96.651%
75.0	12.372	7.784	514.148	1.486%	98.137%
80.0	7.230	5.245	519.393	1.001%	99.138%
85.0	2.375	2.610	522.003	.498%	99.636%
90.0	.157	.693	522.696	.132%	99.768%
95.0	.078	.064	522.760	.012%	99.781%
100.0	.078	.043	522.803	.008%	99.789%
105.0	.078	.042	522.845	.008%	99.797%
110.0	.105	.048	522.893	.009%	99.806%
115.0	.105	.053	522.946	.010%	99.816%
120.0	.131	.057	523.003	.011%	99.827%
125.0	.105	.054	523.057	.010%	99.837%
130.0	.131	.051	523.108	.010%	99.847%
135.0	.131	.053	523.161	.010%	99.857%
140.0	.209	.063	523.224	.012%	99.869%
145.0	.339	.091	523.315	.017%	99.887%
150.0	.365	.104	523.419	.020%	99.906%
155.0	.496	.109	523.528	.021%	99.927%
160.0	.653	.120	523.649	.023%	99.950%
165.0	.678	.110	523.758	.021%	99.971%
170.0	.757	.085	523.843	.016%	99.987%
175.0	.626	.049	523.893	.009%	99.997%
180.0	.783	.017	523.910	.003%	100.000%

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

Date:  
Humidity(%): 58%

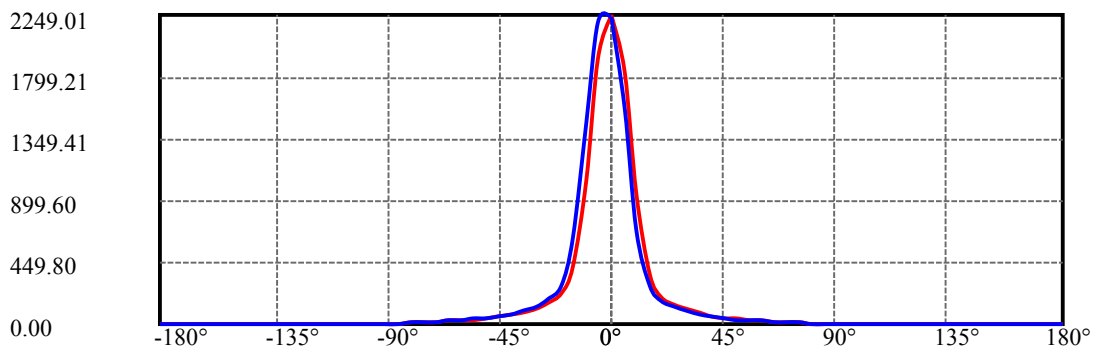
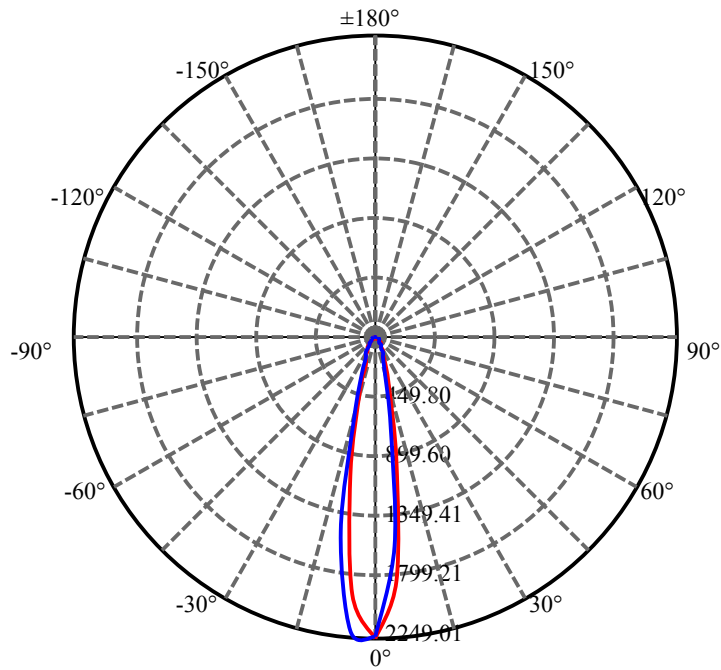
Operator: Zac

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	362.44	69.18%	69.18%
0-40	415.15	79.24%	79.24%
0-60	484.42	92.46%	92.46%
0-90	522.70	99.77%	99.77%
0-120	523.00	99.83%	99.83%
0-180	523.91	100.00%	100.00%
60-90	52.18	9.96%	9.96%
90-120	1.00	0.19%	0.19%
90-130	1.11	0.21%	0.21%
90-150	1.42	0.27%	0.27%
90-180	1.89	0.36%	0.36%
0-40.94	419.13	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	152.85
10-20	138.30
20-30	71.30
30-40	52.71
40-50	39.41
50-60	29.87
60-70	21.94
70-80	13.03
80-90	3.30
90-100	0.11
100-110	0.09
110-120	0.11
120-130	0.11
130-140	0.12
140-150	0.20
150-160	0.23
160-170	0.19
170-180	0.05



C0/C180: —

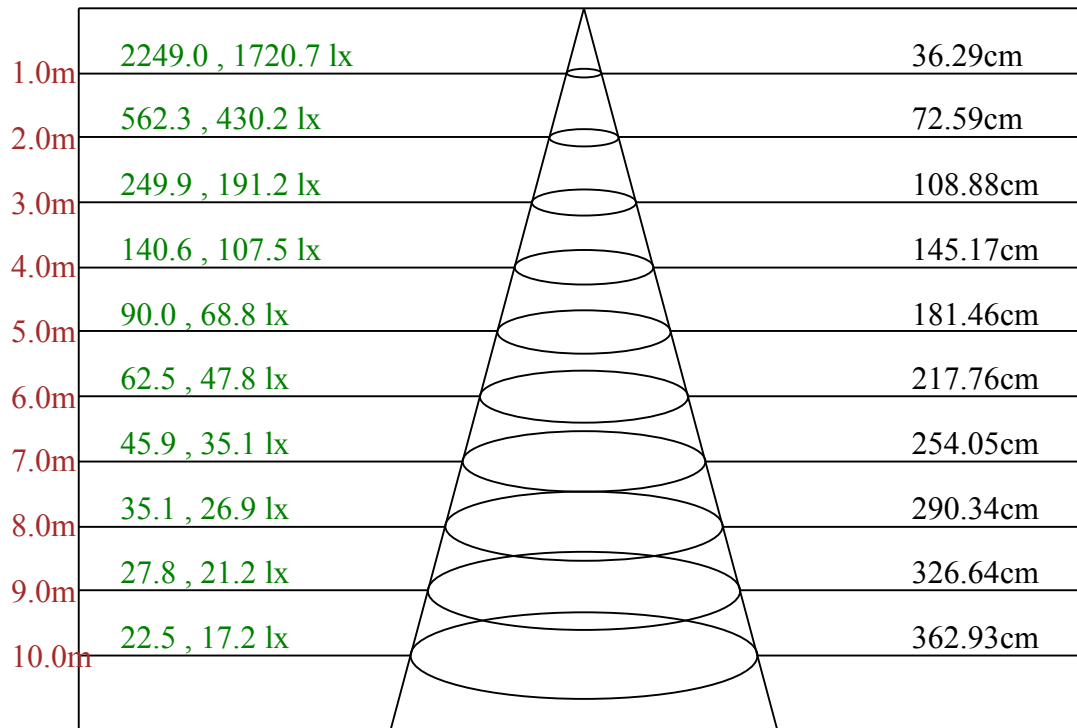
C90/C270: —

Field angle(10%Imax):C0/180Left:19.9 Right:19.3

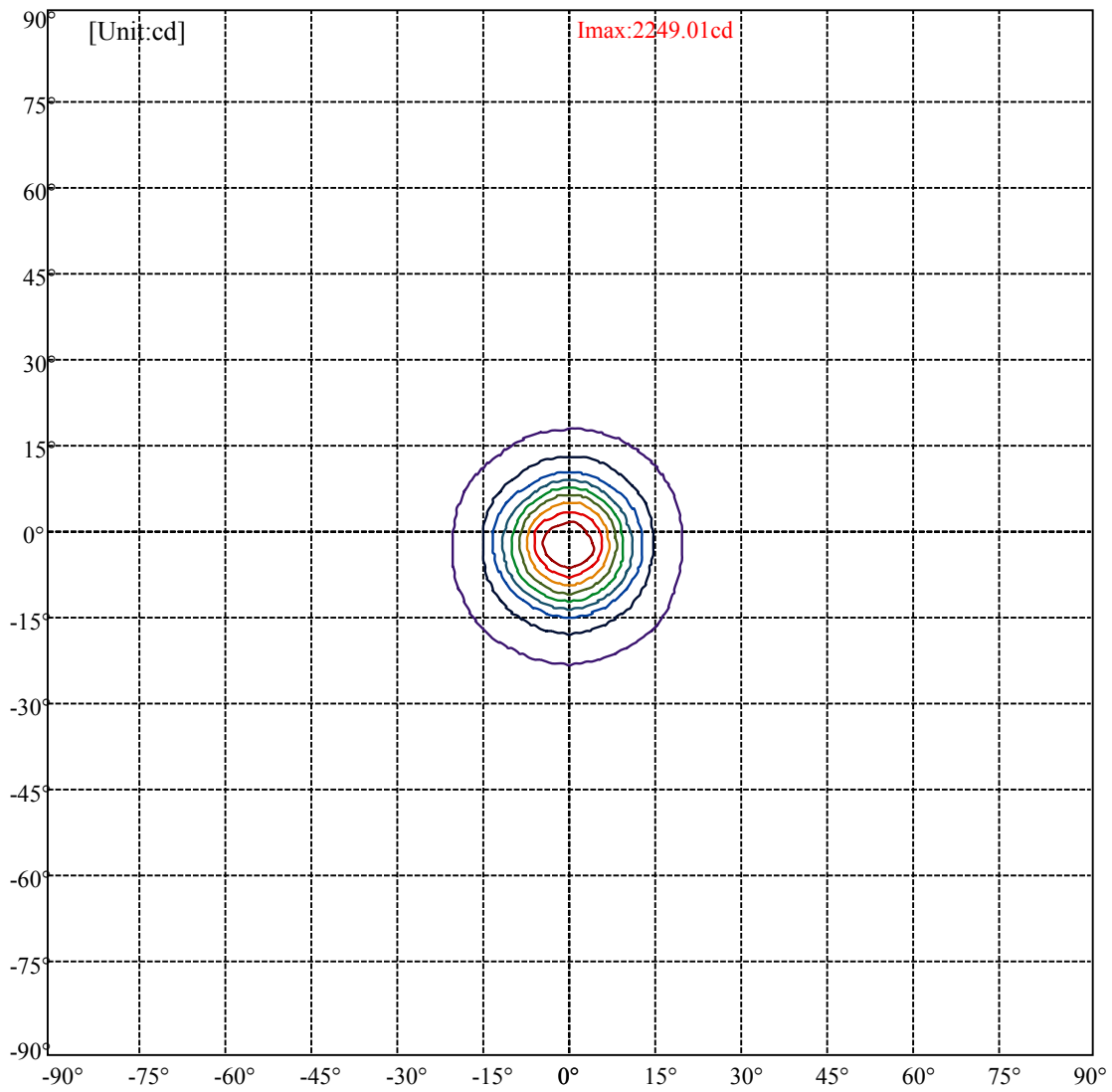
:C90/270Left:22.9 Right:17.6

Beam Angle(50%Imax):C0/180Left:9.6 Right:9.0

:C90/270Left:12.1 Right:7.6



Max , Ave      Beam angle of C0plane20.57



(10%Imax) 223.022	—
(20%Imax) 446.044	—
(30%Imax) 669.066	—
(40%Imax) 892.088	—
(50%Imax) 1115.11	—
(60%Imax) 1338.13	—
(70%Imax) 1561.15	—
(80%Imax) 1784.18	—
(90%Imax) 2007.2	—

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	2249.01	1824.73	943.16	368.95	201.08	145.95	108.37	80.81	61.81
45.0	2241.91	1642.86	713.27	304.43	179.99	126.74	93.54	70.58	55.33
90.0	2230.22	1568.94	684.25	277.50	173.31	125.28	91.66	68.91	54.29
135.0	2213.72	1618.22	724.75	289.40	171.22	120.27	90.20	68.91	55.75
180.0	2249.01	1924.74	1047.98	416.98	221.75	154.31	115.68	88.32	67.86
225.0	2241.91	2110.99	1337.80	551.87	260.38	173.10	126.53	92.71	69.74
270.0	2230.22	2196.39	1466.42	624.95	284.39	178.11	129.25	96.26	74.13
315.0	2213.72	2104.10	1291.65	521.59	252.65	168.71	125.07	92.92	69.95
360.0	2249.01	1824.73	943.16	368.95	201.08	145.95	108.37	80.81	61.81

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	48.44	38.42	31.11	25.27	20.88	17.12	11.90	6.68	2.09
45.0	44.06	35.71	29.23	23.80	19.00	14.83	10.44	5.85	1.04
90.0	43.01	34.87	29.02	24.43	19.42	14.62	10.02	5.22	1.04
135.0	45.10	37.38	30.69	25.47	20.25	15.66	10.44	5.64	1.25
180.0	53.04	41.97	34.45	27.98	22.76	18.17	12.95	7.73	1.88
225.0	55.12	44.27	36.33	29.86	24.43	19.63	14.20	8.56	3.76
270.0	58.47	46.35	37.38	30.69	25.27	20.05	14.83	9.40	4.18
315.0	54.92	44.27	35.91	29.65	24.22	19.21	14.20	8.77	3.76
360.0	48.44	38.42	31.11	25.27	20.88	17.12	11.90	6.68	2.09

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.21	0.00	0.00	0.42	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.21	0.00	0.42	0.21	0.21	0.21
90.0	0.00	0.21	0.21	0.21	0.21	0.42	0.42	0.21	0.42
135.0	0.21	0.21	0.42	0.21	0.21	0.00	0.21	0.21	0.42
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
270.0	0.63	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00
315.0	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.21	0.00	0.00	0.42	0.00	0.00	0.00	0.00

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.21	0.00	0.21	0.21	0.42	0.42	0.42	0.42	0.42
45.0	0.21	0.42	0.42	0.63	0.84	0.63	0.84	0.84	0.63
90.0	0.21	0.42	0.63	0.63	0.63	1.04	0.84	0.84	0.63
135.0	0.21	0.42	0.63	0.63	0.63	0.84	0.84	1.04	0.84
180.0	0.00	0.21	0.21	0.21	0.42	0.42	0.63	0.63	0.63
225.0	0.00	0.00	0.21	0.42	0.63	0.42	0.63	0.63	0.63
270.0	0.21	0.00	0.21	0.00	0.00	0.63	0.63	0.84	0.42
315.0	0.00	0.21	0.21	0.21	0.42	0.84	0.63	0.84	0.84
360.0	0.21	0.00	0.21	0.21	0.42	0.42	0.42	0.42	0.42

C/γ(°)	180.0
0.0	0.63
45.0	1.04
90.0	0.84
135.0	0.63
180.0	0.63
225.0	1.04
270.0	0.84
315.0	0.63
360.0	0.63