



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

Tel:0755-21038430

Address:Rm. 108, No.1 Building, Meibaohe industrial park, No.14 Shilongzi Road, Dalang street, Longhua district, Shenzhen, China

---

Client:

LumCAT: LD4R-32K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 119.99

LampCAT:

Current(A): 0.1550

Lamp flux(lm): -1.0

Power (W): 18.34

Number of Lamps: 1

PF: 0.9888

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

---

### Photometric Results

Lumens(lm): 1144.18, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 62.38

Central intensity(cd): 3503.050, Maximum intensity(cd): 3511.203

Angle of maximum intensity: C=90.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=33.3

[C90/270]Total=33.3

Field angle(10%Imax): [C0/180]Total=51.0

[C90/270]Total=51.8

Maximum s/h(1/2): C0\_180=0.60 C90\_270=0.63

Maximum s/h(1/4): C0\_180=0.56 C90\_270=0.59

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.14%

Down flux rate of LUM(%): 99.86%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.941%

---

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

Date:  
Humidity(%): 59%

Operator: jarvis

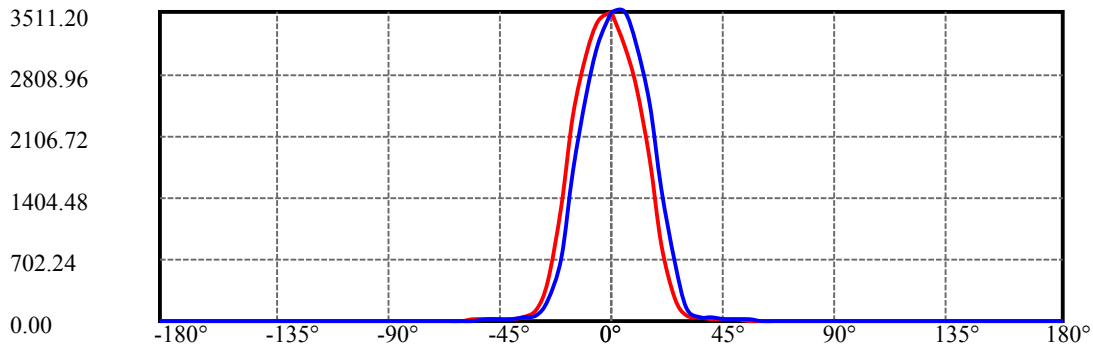
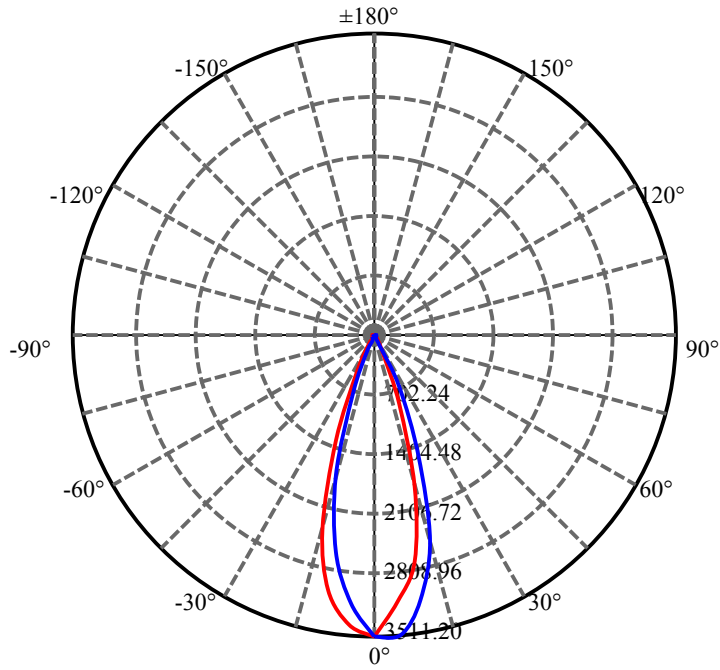
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3503.050	0.000	0	0.00%	0.00%
5.0	3279.744	81.086	81.086	0.00%	7.09%
10.0	2838.825	218.880	299.967	0.00%	26.22%
15.0	2076.454	291.571	591.538	0.00%	51.70%
20.0	1096.503	261.496	853.034	0.00%	74.55%
25.0	387.801	155.676	1008.71	0.00%	88.16%
30.0	105.891	62.477	1071.187	0.00%	93.62%
35.0	45.755	22.331	1093.518	0.00%	95.57%
40.0	27.848	12.280	1105.798	0.00%	96.65%
45.0	20.101	8.878	1114.676	0.00%	97.42%
50.0	14.727	7.037	1121.714	0.00%	98.04%
55.0	11.399	5.681	1127.395	0.00%	98.53%
60.0	8.801	4.669	1132.064	0.00%	98.94%
65.0	6.507	3.721	1135.785	0.00%	99.27%
70.0	4.607	2.814	1138.599	0.00%	99.51%
75.0	2.983	1.984	1140.583	0.00%	99.69%
80.0	1.605	1.228	1141.811	0.00%	99.79%
85.0	0.522	0.578	1142.388	0.00%	99.84%
90.0	0.010	0.146	1142.534	0.00%	99.86%
95.0	0.020	0.008	1142.542	0.00%	99.86%
100.0	0.020	0.011	1142.553	0.00%	99.86%
105.0	0.020	0.011	1142.563	0.00%	99.86%
110.0	0.020	0.010	1142.574	0.00%	99.86%
115.0	0.069	0.022	1142.596	0.00%	99.86%
120.0	0.049	0.029	1142.625	0.00%	99.86%
125.0	0.030	0.018	1142.643	0.00%	99.87%
130.0	0.069	0.021	1142.665	0.00%	99.87%
135.0	0.118	0.038	1142.702	0.00%	99.87%
140.0	0.197	0.058	1142.761	0.00%	99.88%
145.0	0.374	0.095	1142.856	0.00%	99.88%
150.0	0.719	0.161	1143.017	0.00%	99.90%
155.0	1.053	0.224	1143.241	0.00%	99.92%
160.0	1.437	0.261	1143.503	0.00%	99.94%
165.0	1.742	0.262	1143.765	0.00%	99.96%
170.0	1.949	0.219	1143.984	0.00%	99.98%
175.0	2.107	0.145	1144.129	0.00%	100.00%
180.0	2.270	0.052	1144.181	0.00%	100.00%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1071.19	N.A.	93.62%
0-40	1105.80	N.A.	96.65%
0-60	1132.06	N.A.	98.94%
0-90	1142.53	N.A.	99.86%
0-120	1142.62	N.A.	99.86%
0-180	1144.18	N.A.	100.00%
60-90	10.47	N.A.	0.92%
90-120	0.09	N.A.	0.01%
90-130	0.13	N.A.	0.01%
90-150	0.48	N.A.	0.04%
90-180	1.59	N.A.	0.14%
0-22.00	915.34	N.A.	80.00%

## ZONAL LUMEN SUMMARY

0-10	299.97
10-20	553.07
20-30	218.15
30-40	34.61
40-50	15.92
50-60	10.35
60-70	6.54
70-80	3.21
80-90	0.72
90-100	0.02
100-110	0.02
110-120	0.05
120-130	0.04
130-140	0.10
140-150	0.26
150-160	0.49
160-170	0.48
170-180	0.15



C0/C180: —

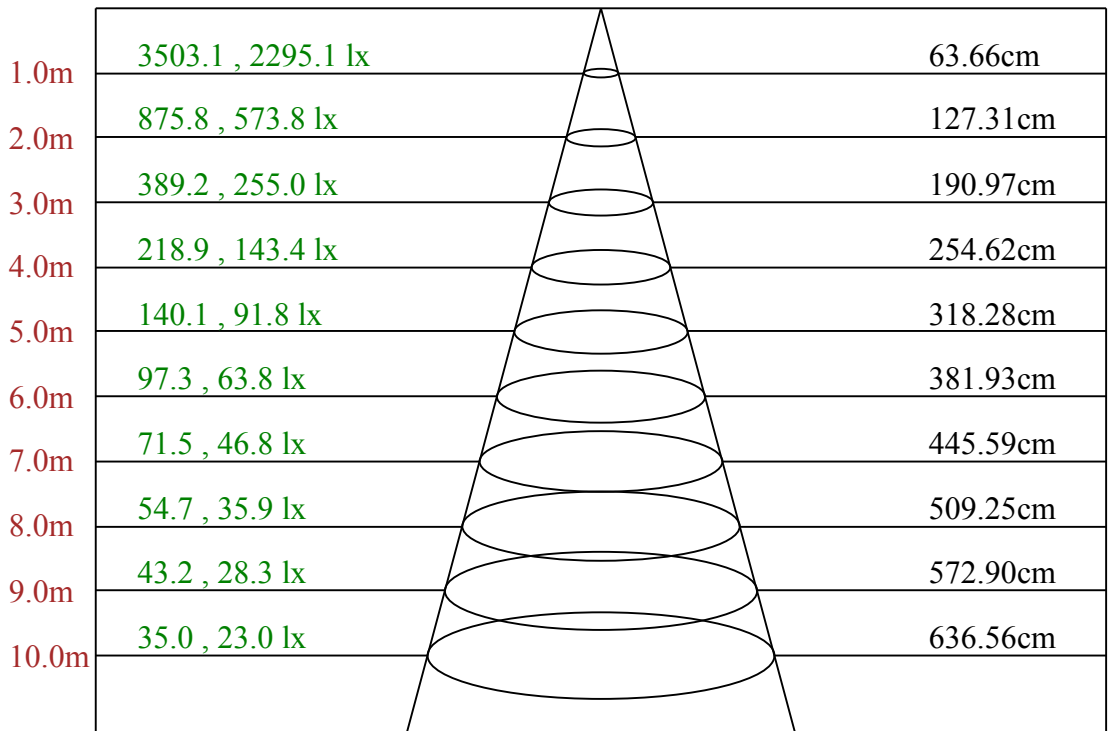
C90/C270: —

Field angle(10%Imax):C0/180Left:26.7 Right:24.3

:C90/270Left:23.8 Right:28.0

Beam Angle(50%Imax):C0/180Left:17.9 Right:15.4

:C90/270Left:14.6 Right:18.7



Max , Ave      Beam angle of C90 plane 35.31

## Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	3503.05	3127.69	2668.88	1838.84	861.54	266.34	74.03	40.16	24.57
22.5	3503.05	3139.34	2662.58	1821.52	853.03	261.45	69.93	38.75	24.89
45.0	3503.05	3141.23	2631.87	1804.35	852.88	263.03	69.62	38.12	25.20
67.5	3503.05	3136.82	2657.23	1828.76	881.86	283.50	74.18	39.06	25.04
90.0	3503.05	3511.20	3141.07	2473.26	1510.92	668.28	147.58	52.76	33.39
112.5	3503.05	3498.60	3115.87	2460.66	1514.07	571.58	148.37	53.08	33.71
135.0	3503.05	3459.23	3096.97	2471.69	1466.82	568.43	165.38	54.02	33.55
157.5	3503.05	3432.45	3057.60	2403.96	1416.42	541.65	149.94	52.92	32.29
180.0	3503.05	3400.95	3027.67	2336.24	1315.62	462.27	131.04	49.61	30.40
202.5	3503.05	3391.50	2975.70	2257.48	1265.22	418.80	115.45	47.41	29.77
225.0	3503.05	3352.13	2958.37	2225.98	1199.07	407.77	115.45	45.99	28.82
247.5	3503.05	3350.55	2941.04	2244.88	1240.02	420.53	130.57	50.09	28.35
270.0	3503.05	3140.29	2564.77	1690.47	716.95	229.64	65.68	40.32	23.78
292.5	3503.05	3129.73	2608.24	1731.74	744.20	255.15	71.51	41.27	23.94
315.0	3503.05	3133.04	2651.08	1806.87	829.09	288.39	84.74	45.20	23.78
337.5	3503.05	3131.15	2662.27	1826.56	876.34	298.00	80.80	43.31	24.10
360.0	3503.05	3127.69	2668.88	1838.84	861.54	266.34	74.03	40.16	24.57
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	18.90	13.39	10.40	8.03	5.83	4.10	2.68	1.42	0.32
22.5	18.90	13.70	10.71	8.03	5.99	4.25	2.52	1.58	0.32
45.0	19.06	13.70	10.71	8.35	6.30	4.41	2.68	1.42	0.63
67.5	18.59	13.70	10.87	8.35	6.14	4.25	2.68	1.42	0.47
90.0	22.68	17.01	12.92	10.24	7.56	5.36	3.78	2.21	0.95
112.5	22.37	16.54	12.60	9.92	7.56	5.36	3.62	2.05	0.63
135.0	22.21	16.54	12.29	9.92	7.40	5.36	3.62	1.89	0.63
157.5	22.05	16.07	12.44	9.61	7.25	5.20	3.31	2.05	0.63
180.0	21.74	15.91	12.13	9.45	6.93	4.88	3.31	1.89	0.63
202.5	21.26	15.44	11.97	9.29	6.77	4.88	3.31	1.73	0.63
225.0	21.26	15.28	11.81	9.14	6.77	4.88	3.31	1.58	0.63
247.5	20.48	15.12	11.66	8.98	6.62	4.73	2.99	1.58	0.63
270.0	17.80	13.39	10.55	8.03	5.83	4.10	2.52	1.26	0.32
292.5	17.96	13.39	10.40	7.72	5.67	3.94	2.36	1.10	0.32
315.0	17.96	13.39	10.40	7.88	5.67	4.10	2.52	1.26	0.32
337.5	18.43	13.07	10.55	7.88	5.83	3.94	2.52	1.26	0.32
360.0	18.90	13.39	10.40	8.03	5.83	4.10	2.68	1.42	0.32
C/ $\gamma$ (°)	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	0.16	0.00	0.00	0.16
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	0.32	0.16	0.00	0.16
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
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	0.16	0.16	0.32	0.00	0.32	0.32	0.32	0.32	0.47
292.5	0.00	0.16	0.00	0.16	0.00	0.16	0.16	0.16	0.16
315.0	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	0.00
337.5	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.16

LD4R-32K-HO

Intensity data(cd)

Appendix Page: 7 Total:7

C/\u03b3(\u00b0)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.16	0.32	0.47	0.79	1.26	1.58	1.89	2.05	2.21
22.5	0.16	0.32	0.47	0.95	1.10	1.42	1.73	1.89	2.05
45.0	0.16	0.32	0.47	0.79	1.10	1.58	1.89	2.05	2.21
67.5	0.16	0.32	0.47	0.79	0.95	1.58	1.73	1.89	2.21
90.0	0.00	0.16	0.32	0.63	0.95	1.26	1.73	1.89	2.05
112.5	0.16	0.00	0.16	0.63	0.95	1.10	1.58	1.89	2.05
135.0	0.00	0.00	0.32	0.63	0.95	1.26	1.58	1.89	1.89
157.5	0.00	0.00	0.16	0.63	0.95	1.42	1.58	1.58	1.89
180.0	0.00	0.16	0.32	0.47	0.95	1.26	1.58	1.89	2.05
202.5	0.00	0.00	0.32	0.63	0.95	1.26	1.58	1.89	2.05
225.0	0.00	0.00	0.16	0.47	0.79	1.26	1.58	1.89	2.05
247.5	0.00	0.00	0.16	0.47	0.95	1.26	1.58	1.73	2.05
270.0	0.63	0.63	0.63	1.10	1.58	1.89	2.21	2.36	2.68
292.5	0.32	0.32	0.63	0.95	1.26	1.73	1.89	2.05	2.21
315.0	0.16	0.32	0.63	0.79	1.10	1.58	1.89	2.21	2.05
337.5	0.00	0.32	0.32	0.79	1.10	1.58	1.89	2.05	2.05
360.0	0.16	0.32	0.47	0.79	1.26	1.58	1.89	2.05	2.21
C/\u03b3(\u00b0)	180.0								
0.0	2.27								
22.5	2.27								
45.0	2.27								
67.5	2.27								
90.0	2.27								
112.5	2.27								
135.0	2.27								
157.5	2.27								
180.0	2.27								
202.5	2.27								
225.0	2.27								
247.5	2.27								
270.0	2.27								
292.5	2.27								
315.0	2.27								
337.5	2.27								
360.0	2.27								