



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

LumCAT: LD4R-35K

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.07

LampCAT:

Current(A): 0.1240

Lamp flux(lm): -1.0

Power (W): 14.69

Number of Lamps: 1

PF: 0.9865

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

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Lumens(lm): 1251.75, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 85.21

Central intensity(cd): 3792.585, Maximum intensity(cd): 3803.904

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

Beam Angle(50%Imax): [C0/180]Total=33.6

[C90/270]Total=32.8

Field angle(10%Imax): [C0/180]Total=52.1

[C90/270]Total=50.9

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

Maximum s/h(1/4): C0\_180=0.58 C90\_270=0.58

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.13%

Down flux rate of LUM(%): 99.87%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.965%

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

Date:  
Humidity(%): 59%

Operator: jarvis

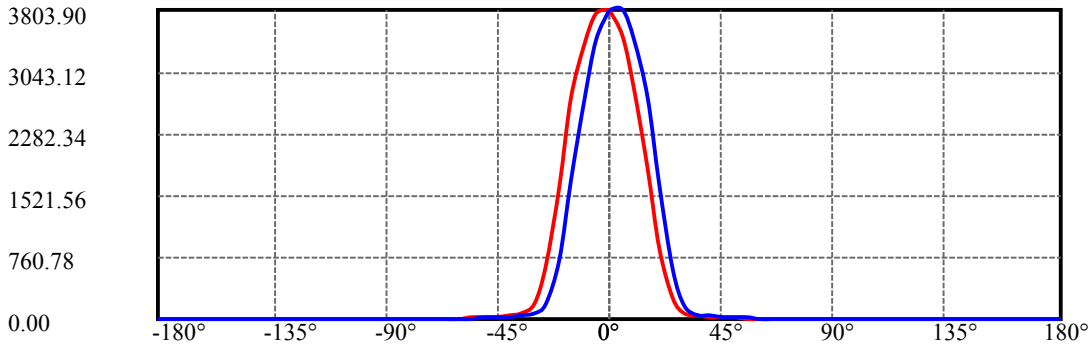
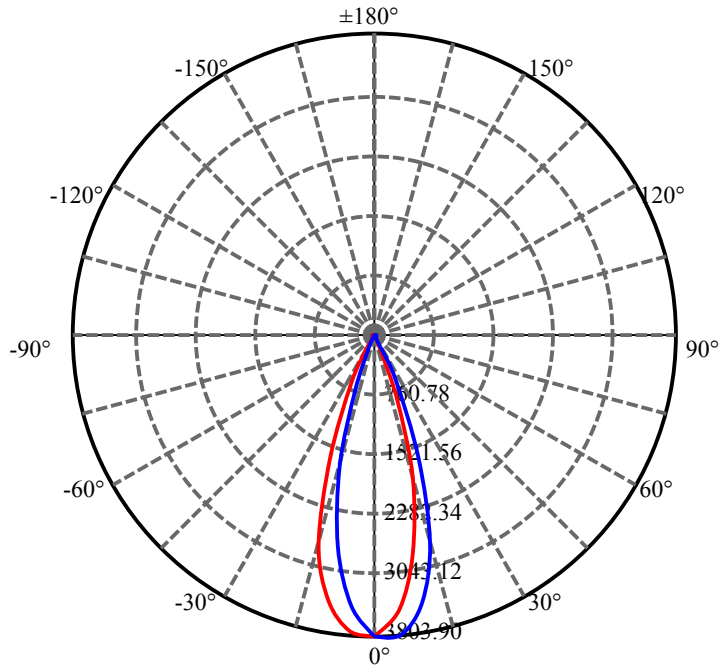
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3792.585	0.000	0	0.00%	0.00%
5.0	3607.082	88.461	88.461	0.00%	7.07%
10.0	3081.500	239.272	327.733	0.00%	26.18%
15.0	2257.854	316.727	644.459	0.00%	51.48%
20.0	1213.693	286.104	930.564	0.00%	74.34%
25.0	429.418	172.332	1102.896	0.00%	88.11%
30.0	121.901	69.770	1172.666	0.00%	93.68%
35.0	48.587	25.106	1197.771	0.00%	95.69%
40.0	30.099	13.128	1210.899	0.00%	96.74%
45.0	21.130	9.485	1220.385	0.00%	97.49%
50.0	15.544	7.410	1227.795	0.00%	98.09%
55.0	12.138	6.019	1233.814	0.00%	98.57%
60.0	9.419	4.983	1238.797	0.00%	98.97%
65.0	6.980	3.986	1242.784	0.00%	99.28%
70.0	4.934	3.017	1245.8	0.00%	99.52%
75.0	3.248	2.139	1247.939	0.00%	99.70%
80.0	1.753	1.338	1249.277	0.00%	99.80%
85.0	0.607	0.641	1249.919	0.00%	99.85%
90.0	0.000	0.166	1250.085	0.00%	99.87%
95.0	0.011	0.003	1250.088	0.00%	99.87%
100.0	0.023	0.009	1250.097	0.00%	99.87%
105.0	0.011	0.009	1250.106	0.00%	99.87%
110.0	0.011	0.006	1250.112	0.00%	99.87%
115.0	0.056	0.017	1250.129	0.00%	99.87%
120.0	0.023	0.019	1250.148	0.00%	99.87%
125.0	0.034	0.013	1250.161	0.00%	99.87%
130.0	0.034	0.015	1250.176	0.00%	99.87%
135.0	0.090	0.025	1250.201	0.00%	99.88%
140.0	0.191	0.052	1250.253	0.00%	99.88%
145.0	0.382	0.096	1250.348	0.00%	99.89%
150.0	0.719	0.162	1250.511	0.00%	99.90%
155.0	1.101	0.230	1250.741	0.00%	99.92%
160.0	1.573	0.281	1251.021	0.00%	99.94%
165.0	1.888	0.285	1251.307	0.00%	99.96%
170.0	2.113	0.237	1251.544	0.00%	99.98%
175.0	2.192	0.154	1251.698	0.00%	100.00%
180.0	2.370	0.055	1251.753	0.00%	100.00%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1172.67	N.A.	93.68%
0-40	1210.90	N.A.	96.74%
0-60	1238.80	N.A.	98.97%
0-90	1250.08	N.A.	99.87%
0-120	1250.15	N.A.	99.87%
0-180	1251.75	N.A.	100.00%
60-90	11.29	N.A.	0.90%
90-120	0.06	N.A.	0.01%
90-130	0.09	N.A.	0.01%
90-150	0.43	N.A.	0.03%
90-180	1.61	N.A.	0.13%
0-22.06	1001.40	N.A.	80.00%

## ZONAL LUMEN SUMMARY

0-10	327.73
10-20	602.83
20-30	242.10
30-40	38.23
40-50	16.90
50-60	11.00
60-70	7.00
70-80	3.48
80-90	0.81
90-100	0.01
100-110	0.01
110-120	0.04
120-130	0.03
130-140	0.08
140-150	0.26
150-160	0.51
160-170	0.52
170-180	0.15



C0/C180: —

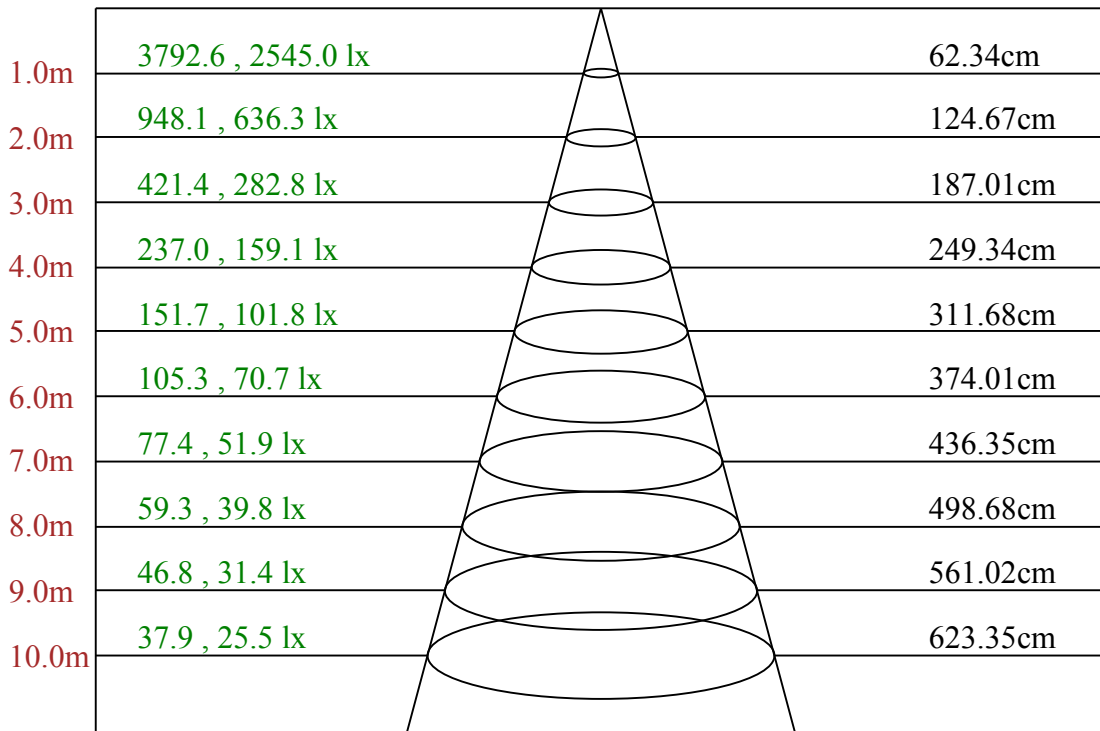
C90/C270: —

Field angle(10%Imax):C0/180Left:28.1 Right:24.0

:C90/270Left:23.3 Right:27.6

Beam Angle(50%Imax):C0/180Left:18.8 Right:14.8

:C90/270Left:14.0 Right:18.8



Max , Ave      Beam angle of C90 plane 34.62

## 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	3792.59	3478.06	2814.67	1854.39	866.59	256.44	68.87	40.46	25.36
22.5	3792.59	3491.54	2883.72	1960.85	969.27	316.14	83.80	45.68	25.72
45.0	3792.59	3494.78	2924.54	2048.24	996.43	337.54	87.40	45.14	26.62
67.5	3792.59	3512.58	2924.90	2089.24	1021.78	320.63	83.62	44.42	26.97
90.0	3792.59	3803.90	3422.67	2712.35	1653.16	614.47	166.16	57.55	37.22
112.5	3792.59	3803.90	3426.27	2733.93	1656.76	624.90	187.56	59.70	37.05
135.0	3792.59	3798.51	3417.27	2733.93	1681.93	651.88	186.84	58.26	36.69
157.5	3792.59	3767.94	3420.87	2753.71	1651.36	645.40	190.44	58.98	35.97
180.0	3792.59	3748.16	3384.90	2726.73	1640.57	670.94	200.51	60.42	36.33
202.5	3792.59	3721.18	3348.94	2678.18	1559.65	649.36	193.50	60.24	33.99
225.0	3792.59	3696.01	3286.00	2554.10	1444.56	530.67	143.86	51.61	31.65
247.5	3792.59	3663.64	3228.45	2417.43	1311.49	460.72	115.63	47.65	29.49
270.0	3792.59	3435.62	2697.06	1703.33	739.09	198.17	60.42	36.15	25.36
292.5	3792.59	3410.26	2682.14	1690.38	712.12	186.66	60.60	37.05	24.46
315.0	3792.59	3437.59	2687.17	1696.86	744.31	200.87	59.34	36.33	24.64
337.5	3792.59	3449.64	2754.43	1772.03	770.02	205.90	61.86	37.76	24.10
360.0	3792.59	3478.06	2814.67	1854.39	866.59	256.44	68.87	40.46	25.36
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	19.06	14.21	11.33	8.81	6.47	4.50	2.70	1.62	0.54
22.5	19.42	14.39	11.33	8.81	6.47	4.50	3.06	1.62	0.54
45.0	19.96	14.39	11.33	8.81	6.65	4.50	2.88	1.44	0.54
67.5	19.96	14.57	11.51	8.99	6.47	4.68	2.70	1.44	0.54
90.0	24.46	18.16	13.67	10.61	7.91	5.75	3.96	2.52	0.90
112.5	23.92	17.98	13.31	10.25	7.73	5.40	3.78	2.16	0.90
135.0	23.38	17.26	13.13	10.25	7.55	5.58	3.78	2.34	0.72
157.5	23.02	16.90	13.13	10.07	7.55	5.40	3.60	2.16	0.72
180.0	23.20	16.72	12.95	10.07	7.55	5.40	3.78	2.16	0.72
202.5	22.84	16.54	12.95	9.89	7.55	5.40	3.60	1.80	0.72
225.0	22.30	16.01	12.59	9.89	7.19	5.04	3.60	1.62	0.54
247.5	21.76	15.83	12.59	9.71	7.37	5.22	3.24	1.62	0.36
270.0	19.06	14.21	11.33	8.81	6.29	4.50	2.88	1.44	0.54
292.5	18.70	13.85	11.15	8.45	6.29	4.32	2.88	1.44	0.36
315.0	18.52	13.85	10.97	8.63	6.29	4.32	2.70	1.44	0.54
337.5	18.52	13.85	10.97	8.63	6.29	4.50	2.88	1.26	0.54
360.0	19.06	14.21	11.33	8.81	6.47	4.50	2.70	1.62	0.54
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.18
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
67.5	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
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	0.00	0.18	0.18	0.18	0.18	0.36	0.18	0.36	0.18
292.5	0.00	0.00	0.18	0.00	0.00	0.18	0.18	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.18

## LD4R-35K

## Intensity data(cd)

Appendix Page: 7 Total:7

C/ $\gamma$ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.18	0.36	0.54	1.08	1.26	1.80	1.98	2.34	2.52
22.5	0.18	0.36	0.54	0.90	1.26	1.80	1.98	1.98	2.16
45.0	0.18	0.36	0.36	0.72	1.08	1.80	1.80	1.98	2.34
67.5	0.18	0.36	0.54	0.72	1.08	1.62	1.80	2.16	2.16
90.0	0.00	0.00	0.18	0.54	0.72	1.62	1.80	1.98	2.34
112.5	0.00	0.00	0.18	0.54	0.90	1.44	1.62	2.16	1.98
135.0	0.00	0.00	0.00	0.54	0.90	1.26	1.62	1.80	2.16
157.5	0.00	0.00	0.36	0.36	0.90	1.26	1.80	1.98	1.98
180.0	0.00	0.00	0.18	0.54	0.90	1.26	1.80	1.98	1.98
202.5	0.00	0.00	0.18	0.54	0.90	1.44	1.62	1.80	1.98
225.0	0.00	0.18	0.18	0.54	1.08	1.44	1.80	1.98	1.98
247.5	0.00	0.00	0.18	0.54	0.90	1.44	1.98	2.16	1.98
270.0	0.36	0.72	0.90	1.08	1.62	2.16	2.52	2.70	2.70
292.5	0.18	0.18	0.72	0.90	1.44	1.62	2.16	2.34	2.52
315.0	0.18	0.36	0.54	0.90	1.44	1.62	1.98	2.34	2.16
337.5	0.00	0.18	0.54	1.08	1.26	1.62	1.98	2.16	2.16
360.0	0.18	0.36	0.54	1.08	1.26	1.80	1.98	2.34	2.52
C/ $\gamma$ (°)	180.0								
0.0	2.37								
22.5	2.37								
45.0	2.37								
67.5	2.37								
90.0	2.37								
112.5	2.37								
135.0	2.37								
157.5	2.37								
180.0	2.37								
202.5	2.37								
225.0	2.37								
247.5	2.37								
270.0	2.37								
292.5	2.37								
315.0	2.37								
337.5	2.37								
360.0	2.37								