



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

Tel:0755-21038430

Address:1Floor, No.1 Building,Meibaohe Industrial Park,Dalang Street,Longhua District,Shenzhen,Guangdong Prov.518101 China

Client:

LumCAT: LD4R-30K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.01

LampCAT:

Current(A): 0.1450

Lamp flux(lm): -1.0

Power (W): 17.23

Number of Lamps: 1

PF: 0.9888

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1553.77, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 90.16

Central intensity(cd): 4569.061, Maximum intensity(cd): 4774.364

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=34.2

[C90/270]Total=33.5

Field angle(10%Imax): [C0/180]Total=51.3

[C90/270]Total=52.0

Maximum s/h(1/2): C0_180=0.60 C90_270=0.64

Maximum s/h(1/4): C0_180=0.55 C90_270=0.59

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.12%

Down flux rate of LUM(%): 99.88%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.975%

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

Date:
Humidity(%): 59%

Operator: jarvis

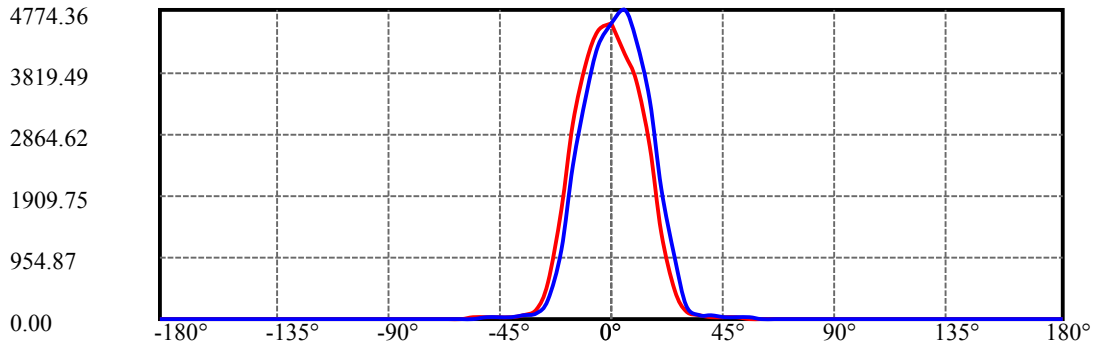
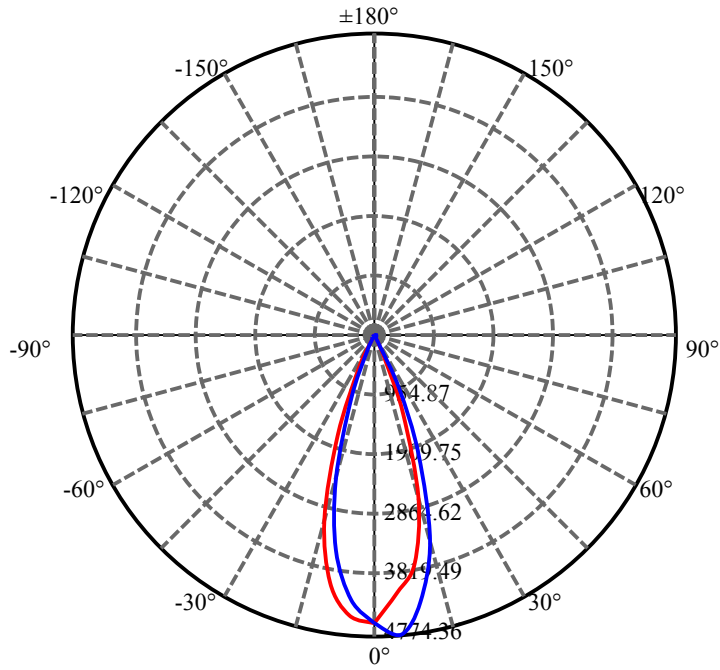
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4569.061	0.000	0	0.00%	0.00%
5.0	4333.348	106.426	106.426	0.00%	6.85%
10.0	3817.338	291.576	398.001	0.00%	25.62%
15.0	2841.585	395.003	793.004	0.00%	51.04%
20.0	1512.699	358.854	1151.858	0.00%	74.13%
25.0	552.765	216.629	1368.487	0.00%	88.08%
30.0	145.395	88.353	1456.84	0.00%	93.76%
35.0	60.788	30.362	1487.202	0.00%	95.72%
40.0	36.767	16.276	1503.478	0.00%	96.76%
45.0	26.110	11.642	1515.121	0.00%	97.51%
50.0	19.072	9.130	1524.25	0.00%	98.10%
55.0	15.072	7.424	1531.674	0.00%	98.58%
60.0	11.595	6.164	1537.838	0.00%	98.97%
65.0	8.592	4.908	1542.746	0.00%	99.29%
70.0	6.136	3.729	1546.475	0.00%	99.53%
75.0	4.023	2.655	1549.131	0.00%	99.70%
80.0	2.208	1.667	1550.798	0.00%	99.81%
85.0	0.866	0.835	1551.633	0.00%	99.86%
90.0	0.000	0.237	1551.87	0.00%	99.88%
95.0	0.000	0.000	1551.87	0.00%	99.88%
100.0	0.000	0.000	1551.87	0.00%	99.88%
105.0	0.012	0.003	1551.873	0.00%	99.88%
110.0	0.012	0.006	1551.88	0.00%	99.88%
115.0	0.000	0.003	1551.883	0.00%	99.88%
120.0	0.000	0.000	1551.883	0.00%	99.88%
125.0	0.024	0.005	1551.888	0.00%	99.88%
130.0	0.012	0.008	1551.896	0.00%	99.88%
135.0	0.119	0.026	1551.922	0.00%	99.88%
140.0	0.261	0.070	1551.993	0.00%	99.89%
145.0	0.451	0.119	1552.112	0.00%	99.89%
150.0	0.914	0.201	1552.313	0.00%	99.91%
155.0	1.317	0.282	1552.595	0.00%	99.92%
160.0	1.768	0.324	1552.918	0.00%	99.95%
165.0	2.231	0.330	1553.248	0.00%	99.97%
170.0	2.481	0.280	1553.528	0.00%	99.98%
175.0	2.575	0.181	1553.709	0.00%	100.00%
180.0	2.736	0.063	1553.772	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1456.84	N.A.	93.76%
0-40	1503.48	N.A.	96.76%
0-60	1537.84	N.A.	98.97%
0-90	1551.87	N.A.	99.88%
0-120	1551.88	N.A.	99.88%
0-180	1553.77	N.A.	100.00%
60-90	14.03	N.A.	0.90%
90-120	0.01	N.A.	0.00%
90-130	0.03	N.A.	0.00%
90-150	0.44	N.A.	0.03%
90-180	1.84	N.A.	0.12%
0-22.10	1243.02	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	398.00
10-20	753.86
20-30	304.98
30-40	46.64
40-50	20.77
50-60	13.59
60-70	8.64
70-80	4.32
80-90	1.07
90-100	0.00
100-110	0.01
110-120	0.00
120-130	0.01
130-140	0.10
140-150	0.32
150-160	0.61
160-170	0.61
170-180	0.18



C0/C180: —

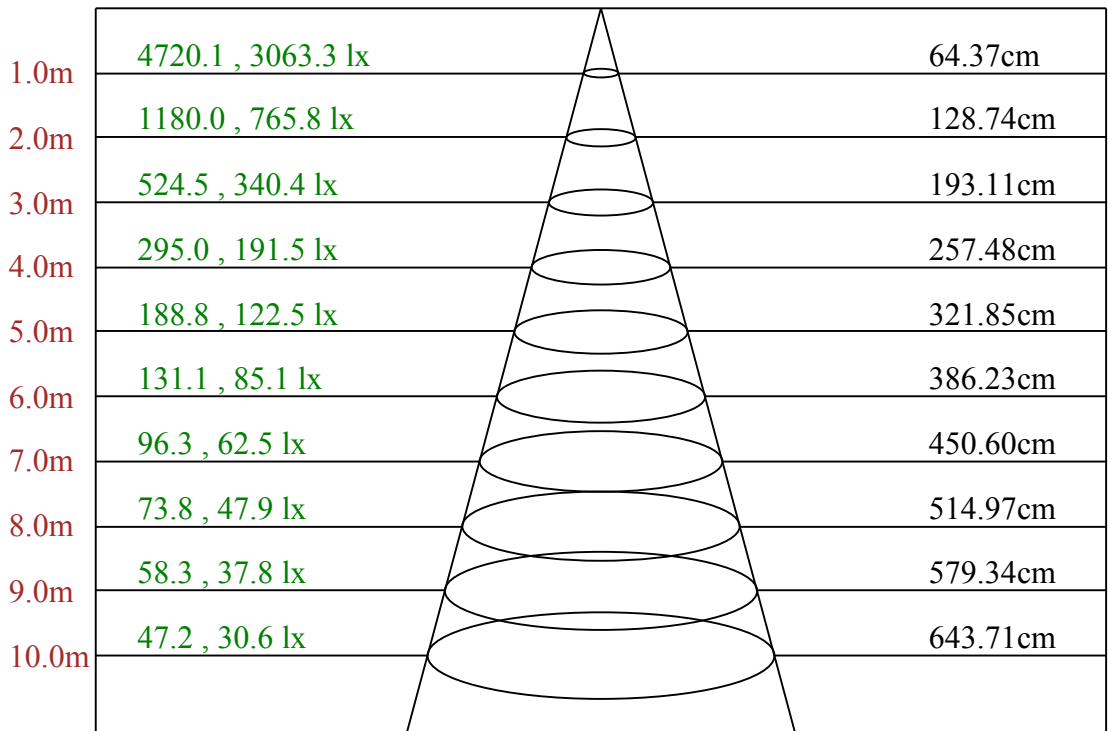
C90/C270: —

Field angle(10%Imax):C0/180Left:26.3 Right:25.0

:C90/270Left:23.8 Right:28.2

Beam Angle(50%Imax):C0/180Left:17.8 Right:16.4

:C90/270Left:14.9 Right:18.6



Max , Ave Beam angle of C90 plane 35.68

LD4R-30K-HO

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	4569.06	4098.36	3667.50	2664.51	1323.90	454.78	129.50	59.63	35.32
22.5	4569.06	4145.83	3656.49	2692.62	1358.84	454.40	130.26	59.06	35.32
45.0	4569.06	4170.52	3693.52	2719.01	1456.82	480.42	129.69	56.21	36.27
67.5	4569.06	4187.61	3741.94	2790.03	1515.50	536.06	149.44	60.76	35.89
90.0	4569.06	4774.36	4288.25	3378.68	2005.79	955.71	210.40	70.07	45.19
112.5	4569.06	4730.69	4259.77	3416.66	2038.07	955.71	214.19	70.83	44.24
135.0	4569.06	4641.44	4223.69	3372.99	1979.21	950.01	234.70	71.40	42.54
157.5	4569.06	4555.99	4132.54	3203.99	1884.26	704.68	205.84	67.22	39.31
180.0	4569.06	4459.15	3980.63	3023.59	1681.08	560.17	150.77	60.76	35.13
202.5	4569.06	4396.49	3851.51	2833.71	1525.37	466.56	117.73	55.83	34.94
225.0	4569.06	4335.72	3771.75	2721.67	1390.55	417.75	108.24	53.74	34.37
247.5	4569.06	4276.86	3729.98	2695.09	1377.26	406.36	112.22	56.21	34.56
270.0	4569.06	4204.70	3460.15	2372.47	1065.84	291.67	86.78	52.79	33.23
292.5	4569.06	4142.04	3479.90	2445.19	1084.64	340.66	94.56	54.50	33.04
315.0	4569.06	4111.65	3545.98	2530.83	1209.02	407.50	119.25	60.76	33.99
337.5	4569.06	4102.16	3593.83	2604.32	1307.00	461.81	132.73	62.85	34.94
360.0	4569.06	4098.36	3667.50	2664.51	1323.90	454.78	129.50	59.63	35.32
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	25.83	18.80	14.81	11.39	8.74	6.08	3.99	2.28	0.95
22.5	26.39	19.18	15.19	11.39	8.36	6.27	4.18	2.28	0.95
45.0	26.21	18.99	15.00	11.58	8.55	6.08	4.18	2.47	1.14
67.5	26.02	19.18	15.00	11.58	8.55	6.46	4.37	2.28	1.14
90.0	29.05	21.27	16.52	13.29	9.87	7.22	4.56	2.47	1.14
112.5	28.29	20.70	16.33	12.53	9.31	6.84	4.37	2.28	0.95
135.0	27.34	20.51	15.57	12.15	9.12	6.65	4.37	2.47	0.95
157.5	26.96	19.56	15.38	11.96	8.93	6.46	4.18	2.28	0.76
180.0	25.83	18.61	15.00	11.58	8.74	6.27	3.99	2.28	0.95
202.5	25.45	18.42	15.00	11.20	8.55	6.08	3.99	2.09	0.95
225.0	25.07	18.23	14.81	11.01	8.36	5.70	3.80	2.28	0.95
247.5	24.88	18.23	14.62	11.39	7.98	5.51	3.80	2.09	0.76
270.0	24.88	18.42	14.62	11.20	7.98	5.51	3.42	1.90	0.57
292.5	24.69	18.23	14.24	10.82	7.98	5.70	3.61	1.71	0.38
315.0	25.45	18.42	14.62	11.20	8.17	5.70	3.80	1.90	0.57
337.5	25.45	18.42	14.43	11.20	8.36	5.70	3.80	2.28	0.76
360.0	25.83	18.80	14.81	11.39	8.74	6.08	3.99	2.28	0.95
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	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.19	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	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00
292.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
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	0.00	0.00	0.00	0.00

LD4R-30K-HO

Intensity data(cd)

Appendix Page: 7 Total:7

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.38	0.19	0.57	1.14	1.33	1.71	2.47	2.47	2.66
22.5	0.38	0.38	0.57	1.33	1.52	1.90	2.28	2.66	2.66
45.0	0.38	0.38	0.57	0.95	1.52	1.71	2.28	2.66	2.66
67.5	0.19	0.19	0.38	1.14	1.33	1.90	2.47	2.66	2.66
90.0	0.00	0.00	0.19	0.38	0.76	1.33	2.09	2.28	2.47
112.5	0.00	0.00	0.19	0.38	0.95	1.52	1.90	2.28	2.47
135.0	0.00	0.00	0.00	0.57	0.76	1.52	1.90	2.09	2.47
157.5	0.00	0.00	0.38	0.76	1.14	1.33	2.09	2.28	2.28
180.0	0.00	0.19	0.38	0.95	1.33	1.71	2.28	2.47	2.47
202.5	0.00	0.19	0.38	0.76	1.33	1.52	2.28	2.66	2.66
225.0	0.00	0.19	0.38	0.95	1.33	1.90	2.09	2.47	2.47
247.5	0.00	0.38	0.38	0.76	1.33	1.90	2.09	2.47	2.66
270.0	0.38	0.57	0.76	1.14	1.90	2.28	2.66	2.85	3.04
292.5	0.00	0.57	0.57	1.14	1.52	2.28	2.28	2.47	2.47
315.0	0.00	0.38	0.76	1.33	1.52	1.90	2.47	2.47	2.66
337.5	0.19	0.57	0.76	0.95	1.52	1.90	2.09	2.47	2.47
360.0	0.38	0.19	0.57	1.14	1.33	1.71	2.47	2.47	2.66
C/γ(°)	180.0								
0.0	2.74								
22.5	2.74								
45.0	2.74								
67.5	2.74								
90.0	2.74								
112.5	2.74								
135.0	2.74								
157.5	2.74								
180.0	2.74								
202.5	2.74								
225.0	2.74								
247.5	2.74								
270.0	2.74								
292.5	2.74								
315.0	2.74								
337.5	2.74								
360.0	2.74								