



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: LD4S-30K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 119.97

LampCAT:

Current(A): 0.1480

Lamp flux(lm): -1.0

Power (W): 17.54

Number of Lamps: 1

PF: 0.9880

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1576.33, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 89.86

Central intensity(cd): 4751.751, Maximum intensity(cd): 4846.774

Angle of maximum intensity: C=247.5 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=33.9

[C90/270]Total=33.9

Field angle(10%Imax): [C0/180]Total=49.2

[C90/270]Total=49.0

Maximum s/h(1/2): C0_180=0.60 C90_270=0.56

Maximum s/h(1/4): C0_180=0.54 C90_270=0.50

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.15%

Down flux rate of LUM(%): 99.85%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.460%

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

Date:
Humidity(%): 59%

Operator: jarvis

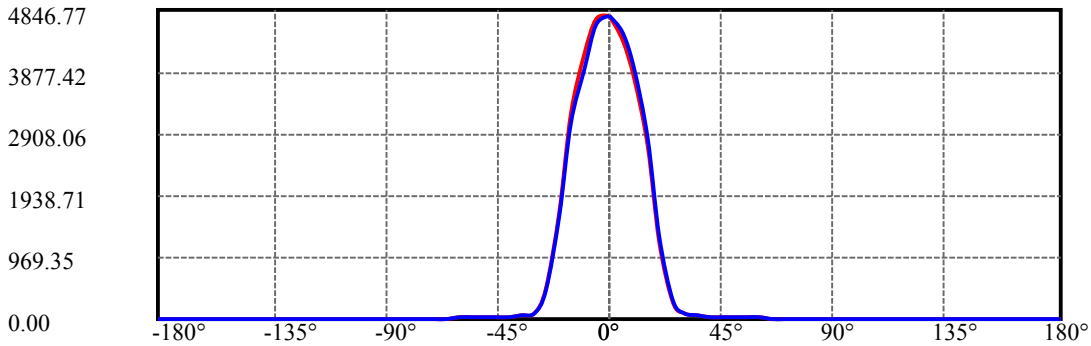
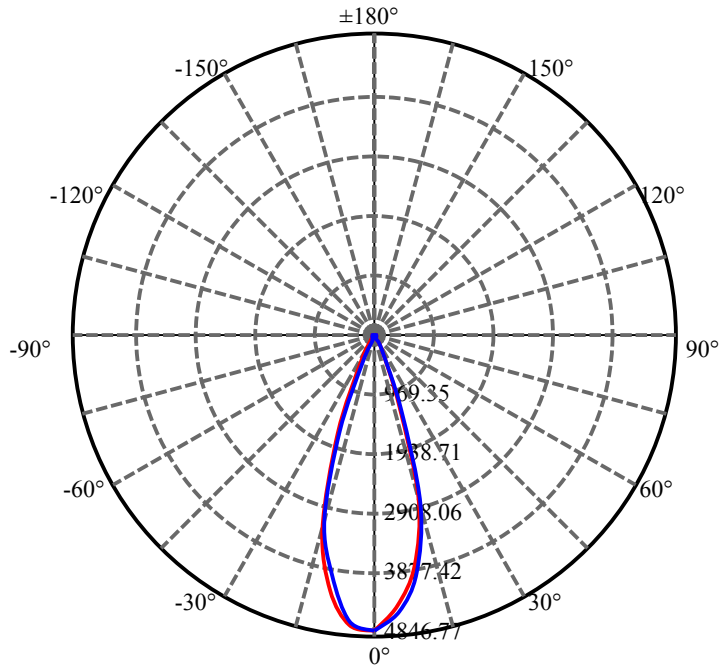
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4751.751	0.000	0	0.00%	0.00%
5.0	4533.990	111.008	111.008	0.00%	7.04%
10.0	3941.456	303.193	414.202	0.00%	26.28%
15.0	2949.924	408.792	822.994	0.00%	52.21%
20.0	1503.939	367.061	1190.055	0.00%	75.50%
25.0	464.958	206.501	1396.556	0.00%	88.60%
30.0	112.234	73.044	1469.6	0.00%	93.23%
35.0	56.977	24.917	1494.517	0.00%	94.81%
40.0	38.121	15.866	1510.383	0.00%	95.82%
45.0	29.732	12.563	1522.947	0.00%	96.61%
50.0	24.350	10.928	1533.875	0.00%	97.31%
55.0	20.266	9.701	1543.576	0.00%	97.92%
60.0	16.419	8.480	1552.056	0.00%	98.46%
65.0	12.769	7.096	1559.151	0.00%	98.91%
70.0	9.564	5.655	1564.806	0.00%	99.27%
75.0	6.756	4.266	1569.072	0.00%	99.54%
80.0	4.058	2.893	1571.965	0.00%	99.72%
85.0	1.733	1.573	1573.539	0.00%	99.82%
90.0	0.062	0.491	1574.03	0.00%	99.85%
95.0	0.012	0.020	1574.05	0.00%	99.86%
100.0	0.012	0.007	1574.057	0.00%	99.86%
105.0	0.025	0.010	1574.067	0.00%	99.86%
110.0	0.037	0.016	1574.083	0.00%	99.86%
115.0	0.074	0.028	1574.111	0.00%	99.86%
120.0	0.050	0.030	1574.141	0.00%	99.86%
125.0	0.050	0.023	1574.164	0.00%	99.86%
130.0	0.087	0.030	1574.194	0.00%	99.86%
135.0	0.161	0.050	1574.244	0.00%	99.87%
140.0	0.359	0.096	1574.34	0.00%	99.87%
145.0	0.557	0.153	1574.493	0.00%	99.88%
150.0	0.953	0.222	1574.715	0.00%	99.90%
155.0	1.460	0.305	1575.021	0.00%	99.92%
160.0	1.980	0.361	1575.381	0.00%	99.94%
165.0	2.475	0.367	1575.749	0.00%	99.96%
170.0	2.722	0.308	1576.057	0.00%	99.98%
175.0	2.932	0.202	1576.259	0.00%	100.00%
180.0	3.074	0.072	1576.331	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1469.60	N.A.	93.23%
0-40	1510.38	N.A.	95.82%
0-60	1552.06	N.A.	98.46%
0-90	1574.03	N.A.	99.85%
0-120	1574.14	N.A.	99.86%
0-180	1576.33	N.A.	100.00%
60-90	21.97	N.A.	1.39%
90-120	0.11	N.A.	0.01%
90-130	0.16	N.A.	0.01%
90-150	0.69	N.A.	0.04%
90-180	2.23	N.A.	0.14%
0-21.72	1261.07	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	414.20
10-20	775.85
20-30	279.55
30-40	40.78
40-50	23.49
50-60	18.18
60-70	12.75
70-80	7.16
80-90	2.06
90-100	0.03
100-110	0.03
110-120	0.06
120-130	0.05
130-140	0.15
140-150	0.38
150-160	0.67
160-170	0.68
170-180	0.20



C0/C180: —

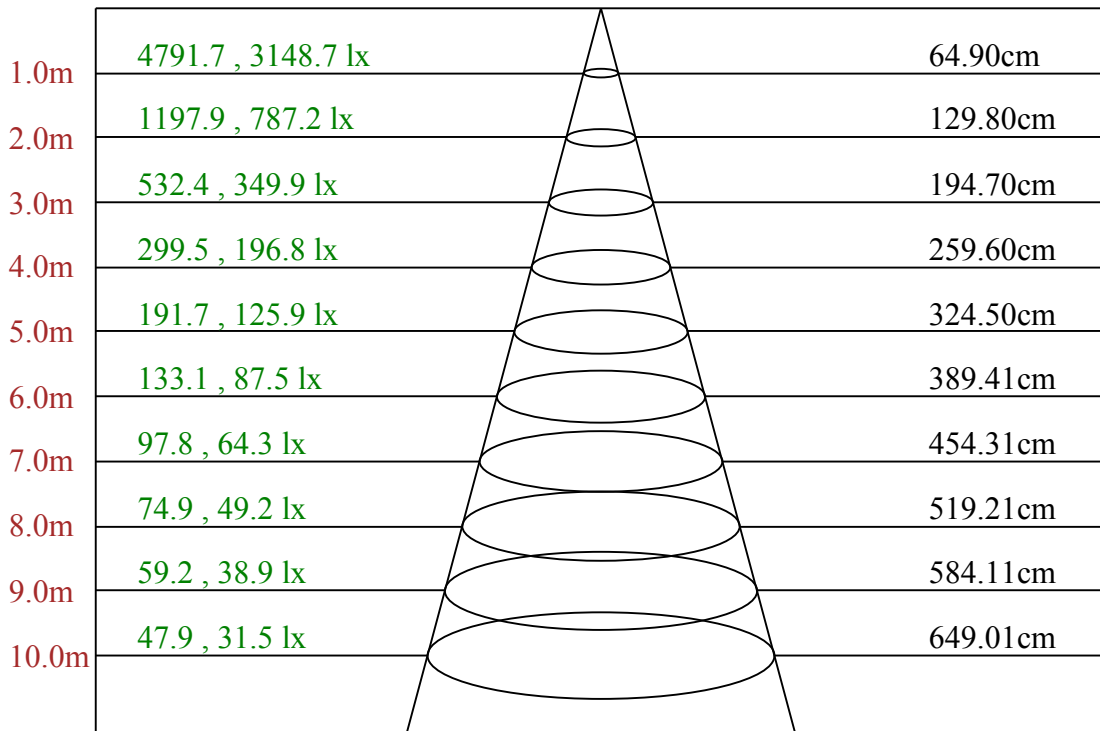
C90/C270: —

Field angle(10%Imax):C0/180Left:25.2 Right:24.0

:C90/270Left:24.9 Right:24.1

Beam Angle(50%Imax):C0/180Left:17.8 Right:16.1

:C90/270Left:17.4 Right:16.5



Max , Ave Beam angle of C247.5 plane 35.96

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	4751.75	4361.76	3762.13	2703.41	1206.79	284.28	78.39	48.90	36.03
22.5	4751.75	4294.45	3650.67	2618.09	1126.62	298.73	78.00	47.31	35.04
45.0	4751.75	4244.96	3552.08	2551.77	1177.30	365.25	101.16	57.21	36.43
67.5	4751.75	4262.78	3473.10	2432.59	1111.97	331.99	92.45	53.85	36.03
90.0	4751.75	4474.60	3898.52	2825.55	1295.28	289.43	83.15	49.29	37.42
112.5	4751.75	4492.42	3910.40	2793.88	1309.14	281.11	79.98	48.50	36.82
135.0	4751.75	4557.75	3961.87	2902.76	1451.68	406.03	127.29	61.77	38.41
157.5	4751.75	4619.12	4050.96	3063.11	1572.44	480.66	133.63	64.74	38.60
180.0	4751.75	4688.40	4167.76	3235.34	1675.38	492.14	97.40	53.65	37.22
202.5	4751.75	4765.61	4264.76	3373.92	1827.81	626.36	101.16	55.23	38.21
225.0	4751.75	4797.28	4326.13	3464.98	2023.80	854.22	219.54	71.47	41.38
247.5	4751.75	4846.77	4357.80	3449.14	2081.21	986.46	180.15	71.27	43.35
270.0	4751.75	4609.22	3924.46	3077.17	1627.07	461.46	92.25	56.62	39.00
292.5	4751.75	4571.60	3932.18	2986.50	1565.90	420.08	89.48	54.64	38.21
315.0	4751.75	4510.23	3943.66	2929.88	1562.93	456.51	126.70	60.18	39.20
337.5	4751.75	4446.89	3886.84	2790.71	1447.72	404.64	115.02	57.01	38.60
360.0	4751.75	4361.76	3762.13	2703.41	1206.79	284.28	78.39	48.90	36.03
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	28.71	24.75	20.39	16.63	13.07	9.70	6.93	4.36	1.98
22.5	28.31	24.55	19.99	16.23	12.87	9.50	6.53	4.16	1.78
45.0	28.90	23.16	19.40	15.64	12.08	9.30	6.34	3.76	1.58
67.5	28.51	22.96	19.20	15.44	11.88	8.71	5.74	3.37	1.39
90.0	29.10	24.94	20.59	16.43	12.87	9.50	6.53	3.56	1.39
112.5	28.51	24.35	20.19	16.23	12.27	9.11	6.53	3.37	1.19
135.0	30.09	23.76	19.80	15.84	12.27	9.11	6.34	3.56	1.19
157.5	30.09	23.56	19.99	15.84	12.27	9.30	6.53	3.96	1.39
180.0	29.10	24.94	20.79	16.23	12.67	9.50	6.73	4.16	1.78
202.5	29.89	24.94	20.98	17.03	12.87	9.50	6.93	4.16	1.78
225.0	31.87	24.94	20.59	16.83	13.26	9.90	6.93	4.36	2.18
247.5	32.27	24.94	20.59	17.03	13.46	10.10	7.33	4.55	1.98
270.0	30.49	25.14	20.98	17.42	13.46	10.29	7.33	4.55	2.18
292.5	29.89	24.75	20.59	17.03	13.26	9.90	7.13	4.36	1.78
315.0	30.29	23.95	20.19	16.43	12.87	9.90	7.13	4.16	2.18
337.5	29.70	23.95	19.99	16.43	12.87	9.70	7.13	4.55	1.98
360.0	28.71	24.75	20.39	16.63	13.07	9.70	6.93	4.36	1.98
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	0.00	0.00	0.00	0.20	0.20
45.0	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00
67.5	0.20	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.20
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	0.20	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	0.59	0.20	0.20	0.20	0.40	0.40	0.40	0.40	0.40
292.5	0.00	0.00	0.00	0.20	0.00	0.20	0.20	0.00	0.40
315.0	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.20	0.00
337.5	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.00	0.20
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

LD4S-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	0.20	0.59	0.59	1.19	1.78	1.98	2.77	2.97	2.97
22.5	0.20	0.59	0.59	1.39	1.58	2.38	2.57	2.77	2.77
45.0	0.40	0.40	0.79	1.19	1.78	1.98	2.38	2.77	2.97
67.5	0.40	0.40	0.99	0.99	1.58	2.18	2.77	2.77	2.77
90.0	0.00	0.59	0.40	0.99	1.39	1.98	2.57	2.57	2.77
112.5	0.00	0.20	0.59	0.79	1.58	2.18	2.57	2.77	2.77
135.0	0.00	0.20	0.40	0.99	1.39	1.78	2.38	2.77	2.97
157.5	0.00	0.20	0.20	0.59	1.39	2.18	2.38	2.57	2.97
180.0	0.00	0.20	0.40	0.79	1.39	1.78	2.18	2.57	2.77
202.5	0.20	0.20	0.20	0.79	1.39	1.58	2.38	2.77	2.77
225.0	0.00	0.20	0.40	0.79	0.99	1.58	2.18	2.38	2.77
247.5	0.00	0.20	0.40	0.79	0.79	1.78	2.18	2.38	2.77
270.0	0.59	0.40	0.99	0.99	1.78	2.38	2.77	3.17	3.56
292.5	0.20	0.40	0.59	0.99	1.58	1.98	2.38	2.77	3.17
315.0	0.20	0.40	0.59	0.99	1.58	1.98	2.57	2.77	2.97
337.5	0.20	0.59	0.79	0.99	1.39	1.98	2.57	2.77	3.17
360.0	0.20	0.59	0.59	1.19	1.78	1.98	2.77	2.97	2.97

C/γ(°)	180.0
0.0	3.07
22.5	3.07
45.0	3.07
67.5	3.07
90.0	3.07
112.5	3.07
135.0	3.07
157.5	3.07
180.0	3.07
202.5	3.07
225.0	3.07
247.5	3.07
270.0	3.07
292.5	3.07
315.0	3.07
337.5	3.07
360.0	3.07