



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: LD4S-HO-3018K

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.10

LampCAT:

Current(A): 0.1500

Lamp flux(lm): -1.0

Power (W): 17.74

Number of Lamps: 1

PF: 0.9871

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1610.17, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 90.75

Central intensity(cd): 4635.226, Maximum intensity(cd): 4643.694

Angle of maximum intensity: C=315.0 $\gamma=5.0$

Beam Angle(50%Imax): [C0/180]Total=35.0

[C90/270]Total=33.5

Field angle(10%Imax): [C0/180]Total=50.3

[C90/270]Total=48.9

Maximum s/h(1/2): C0_180=0.61 C90_270=0.57

Maximum s/h(1/4): C0_180=0.56 C90_270=0.53

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.46%

Down flux rate of LUM(%): 99.54%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.382%

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

Date:
Humidity(%): 59%

Operator: Tester

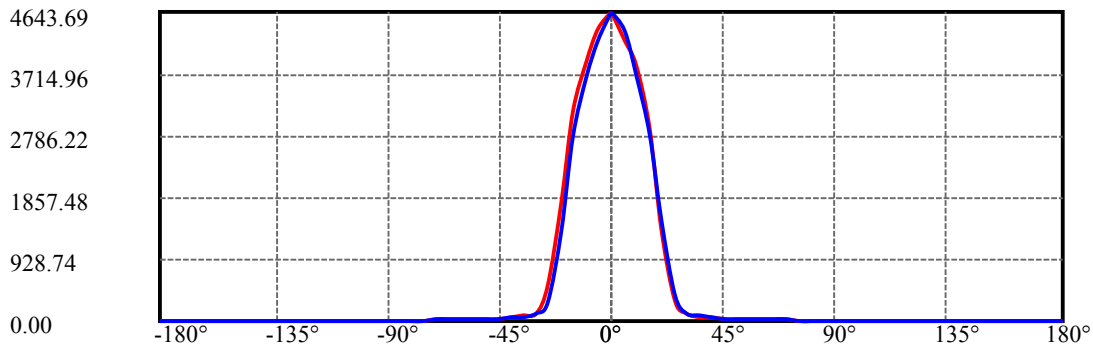
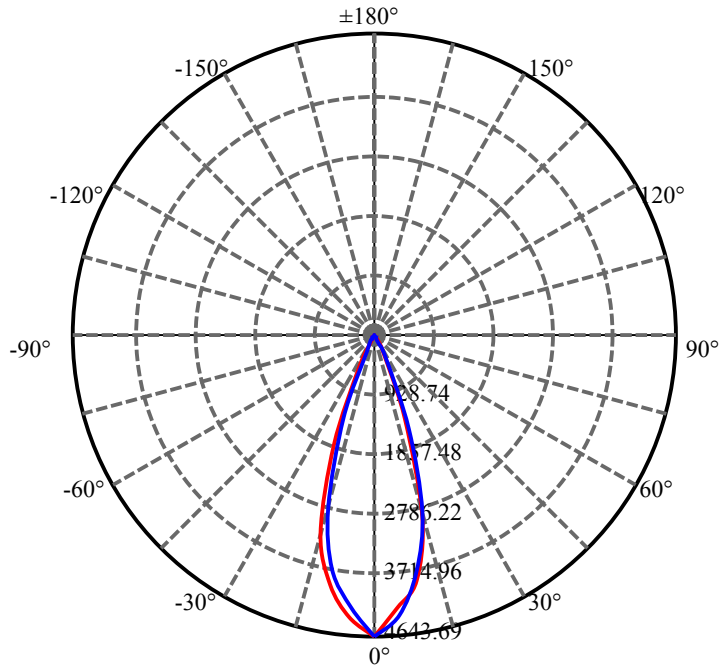
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4635.226	0.000	0	0.00%	0.00%
5.0	4345.961	107.368	107.368	0.00%	6.67%
10.0	3760.075	289.978	397.346	0.00%	24.68%
15.0	2897.308	394.911	792.257	0.00%	49.20%
20.0	1590.653	369.871	1162.128	0.00%	72.17%
25.0	458.892	214.959	1377.088	0.00%	85.52%
30.0	138.030	75.541	1452.629	0.00%	90.22%
35.0	78.303	31.857	1484.485	0.00%	92.19%
40.0	54.434	22.146	1506.632	0.00%	93.57%
45.0	42.949	18.031	1524.663	0.00%	94.69%
50.0	36.228	15.999	1540.662	0.00%	95.68%
55.0	30.565	14.523	1555.185	0.00%	96.58%
60.0	24.981	12.839	1568.024	0.00%	97.38%
65.0	19.768	10.878	1578.902	0.00%	98.06%
70.0	14.952	8.791	1587.693	0.00%	98.60%
75.0	10.559	6.668	1594.361	0.00%	99.02%
80.0	6.748	4.631	1598.992	0.00%	99.31%
85.0	3.096	2.675	1601.667	0.00%	99.47%
90.0	0.741	1.051	1602.717	0.00%	99.54%
95.0	0.688	0.391	1603.109	0.00%	99.56%
100.0	0.662	0.367	1603.475	0.00%	99.58%
105.0	0.821	0.397	1603.872	0.00%	99.61%
110.0	0.847	0.436	1604.308	0.00%	99.64%
115.0	0.874	0.436	1604.743	0.00%	99.66%
120.0	0.794	0.405	1605.149	0.00%	99.69%
125.0	0.926	0.398	1605.546	0.00%	99.71%
130.0	0.953	0.409	1605.955	0.00%	99.74%
135.0	1.006	0.396	1606.351	0.00%	99.76%
140.0	1.218	0.412	1606.762	0.00%	99.79%
145.0	1.588	0.468	1607.231	0.00%	99.82%
150.0	1.932	0.518	1607.749	0.00%	99.85%
155.0	2.514	0.563	1608.311	0.00%	99.88%
160.0	2.938	0.572	1608.883	0.00%	99.92%
165.0	3.361	0.519	1609.402	0.00%	99.95%
170.0	3.625	0.414	1609.817	0.00%	99.98%
175.0	3.731	0.263	1610.08	0.00%	99.99%
180.0	4.116	0.094	1610.174	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1452.63	N.A.	90.22%
0-40	1506.63	N.A.	93.57%
0-60	1568.02	N.A.	97.38%
0-90	1602.72	N.A.	99.54%
0-120	1605.15	N.A.	99.69%
0-180	1610.17	N.A.	100.00%
60-90	34.69	N.A.	2.15%
90-120	2.43	N.A.	0.15%
90-130	3.24	N.A.	0.20%
90-150	5.03	N.A.	0.31%
90-180	7.36	N.A.	0.46%
0-22.93	1288.14	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	397.35
10-20	764.78
20-30	290.50
30-40	54.00
40-50	34.03
50-60	27.36
60-70	19.67
70-80	11.30
80-90	3.73
90-100	0.76
100-110	0.83
110-120	0.84
120-130	0.81
130-140	0.81
140-150	0.99
150-160	1.13
160-170	0.93
170-180	0.26



C0/C180: —

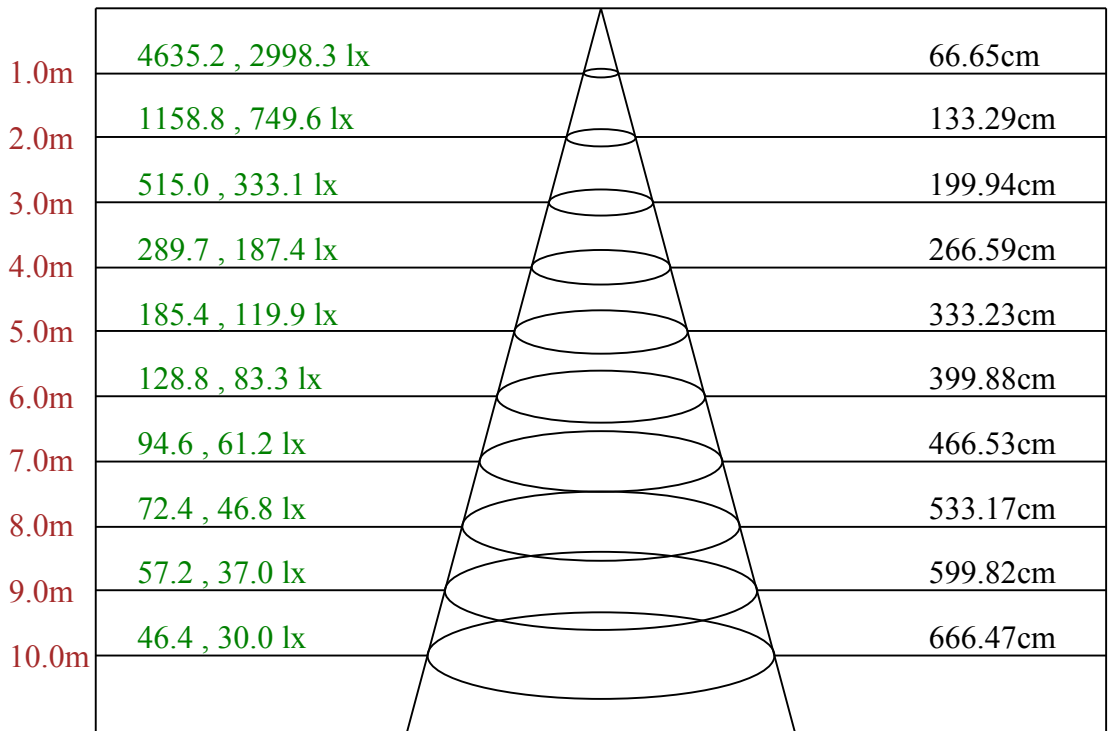
C90/C270: —

Field angle(10%Imax):C0/180Left:26.0 Right:24.3

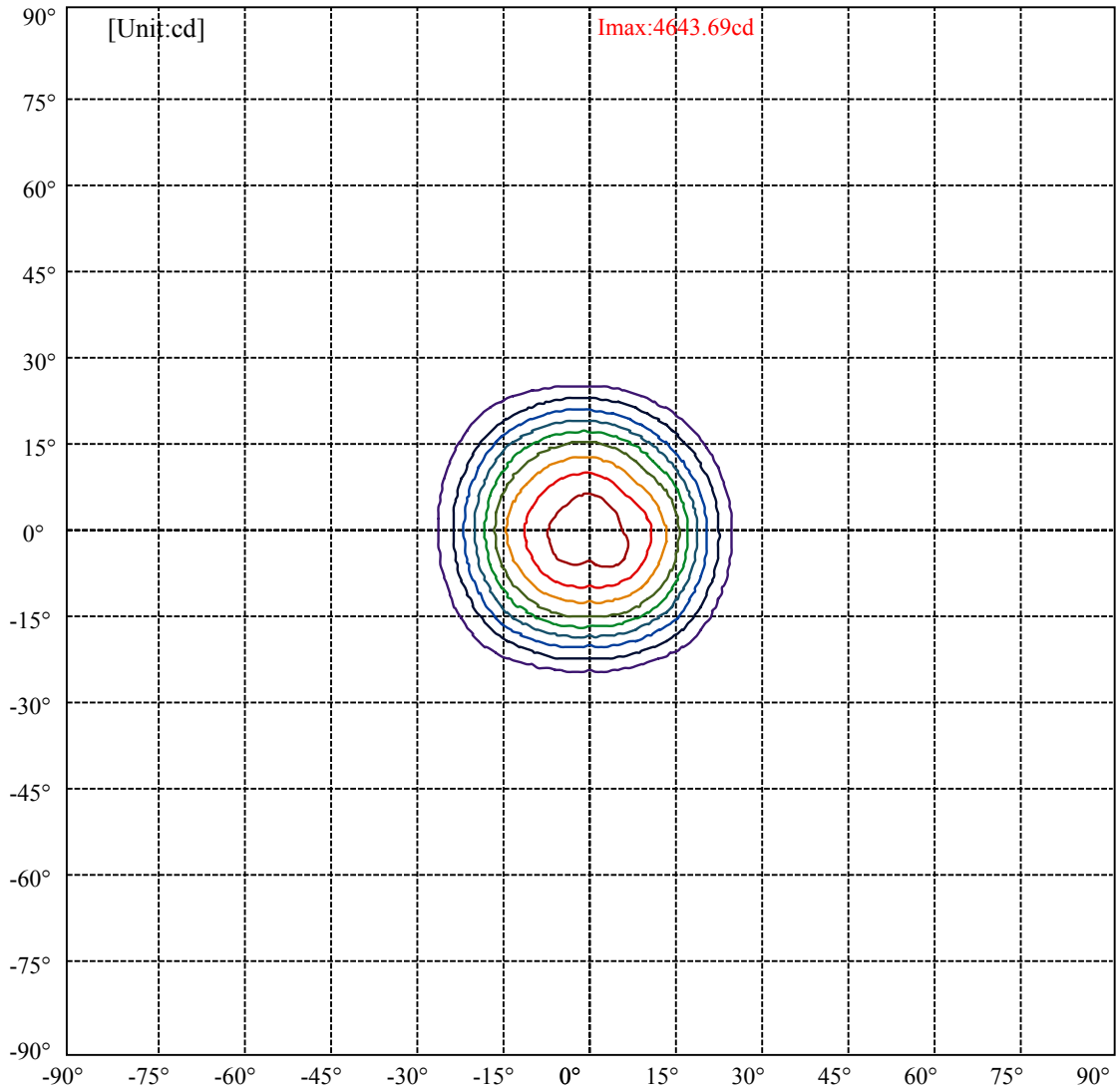
:C90/270Left:24.2 Right:24.7

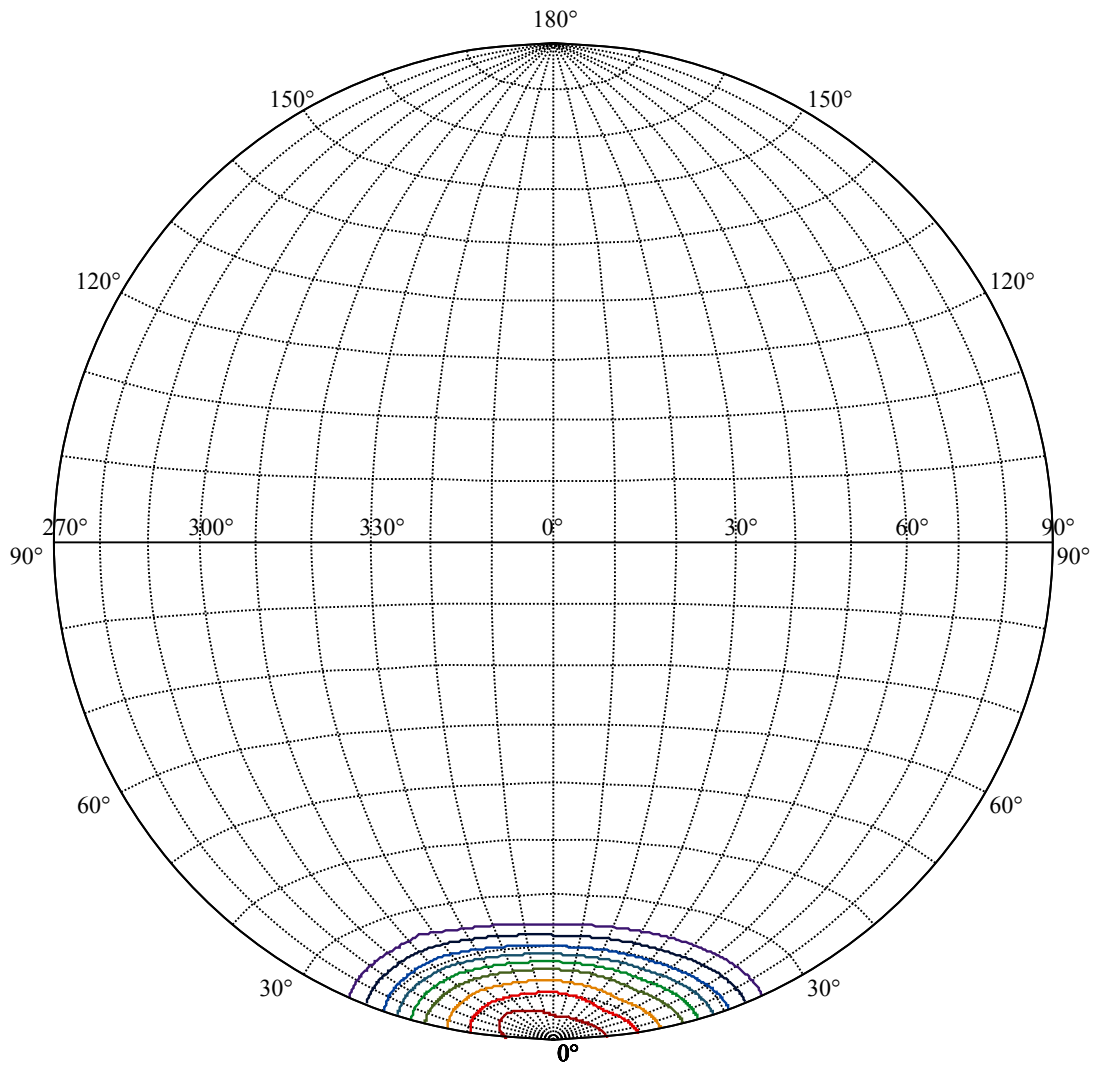
Beam Angle(50%Imax):C0/180Left:18.1 Right:16.9

:C90/270Left:16.6 Right:16.9



Max , Ave Beam angle of C315 plane 36.86





House

[Unit:cd]

Road

I_{max}:4643.69

(10%I _{max}) 464.369	—
(20%I _{max}) 928.739	—
(30%I _{max}) 1393.11	—
(40%I _{max}) 1857.48	—
(50%I _{max}) 2321.85	—
(60%I _{max}) 2786.22	—
(70%I _{max}) 3250.59	—
(80%I _{max}) 3714.96	—
(90%I _{max}) 4179.32	—

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	4635.23	4223.04	3830.55	2897.36	1398.30	322.21	108.39	67.32	51.23
45.0	4635.23	4224.31	3526.96	2601.40	1307.26	353.97	133.80	81.72	55.89
90.0	4635.23	4340.96	3686.80	2810.35	1529.55	400.12	123.85	74.73	52.29
135.0	4635.23	4275.33	3750.31	2994.53	1851.34	639.13	196.25	96.54	60.55
180.0	4635.23	4376.95	3898.50	3149.08	1792.06	546.62	125.96	73.25	50.17
225.0	4635.23	4465.86	3873.10	3005.12	1842.87	611.61	173.81	87.43	59.70
270.0	4635.23	4217.54	3662.88	2765.26	1362.31	283.26	105.64	66.69	50.39
315.0	4635.23	4643.69	3851.50	2955.37	1641.54	514.23	136.55	78.75	55.25
360.0	4635.23	4223.04	3830.55	2897.36	1398.30	322.21	108.39	67.32	51.23
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	42.98	37.68	31.54	25.40	20.11	15.24	10.80	6.77	2.75
45.0	43.40	34.93	29.85	24.56	19.27	14.61	9.95	6.35	2.75
90.0	42.98	36.84	30.91	25.19	19.90	15.03	10.59	6.77	3.39
135.0	42.76	35.14	30.06	24.98	19.48	14.82	10.37	6.56	3.18
180.0	41.92	36.63	30.49	24.56	19.69	14.82	10.37	6.56	2.75
225.0	43.82	35.35	29.64	24.56	19.69	15.03	10.80	6.77	3.18
270.0	42.76	37.47	31.12	25.40	19.90	15.03	10.80	6.99	3.39
315.0	42.98	35.78	30.91	25.19	20.11	15.03	10.80	7.20	3.39
360.0	42.98	37.68	31.54	25.40	20.11	15.24	10.80	6.77	2.75
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.85	0.64	0.64	0.85	1.06	0.85	1.06	1.06	1.06
45.0	0.85	0.85	0.64	0.85	1.06	1.06	0.85	1.06	1.27
90.0	0.64	0.64	0.64	0.85	0.85	0.85	0.64	0.64	0.85
135.0	0.64	0.64	0.42	0.64	0.64	0.85	0.64	0.85	0.85
180.0	0.64	0.42	0.64	0.64	0.85	0.85	0.64	0.64	0.85
225.0	0.64	0.42	0.42	0.64	0.42	0.64	0.42	0.85	0.64
270.0	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.27	1.27
315.0	0.64	0.85	0.85	1.06	0.85	0.85	1.06	1.06	0.85
360.0	0.85	0.64	0.64	0.85	1.06	0.85	1.06	1.06	1.06
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	1.06	1.27	1.91	2.12	2.75	3.18	3.39	3.60	3.81
45.0	1.27	1.27	1.69	2.12	2.54	2.96	3.60	3.81	4.02
90.0	0.85	1.06	1.48	1.91	2.54	2.75	3.18	3.60	3.81
135.0	0.64	1.06	1.27	1.69	2.33	2.75	3.18	3.39	3.39
180.0	0.85	0.85	1.48	1.69	2.33	2.75	3.18	3.60	3.39
225.0	0.85	1.06	1.27	1.69	2.33	2.75	3.39	3.39	3.60
270.0	1.48	1.69	1.91	2.33	2.75	3.18	3.81	4.02	4.02
315.0	1.06	1.48	1.69	1.91	2.54	3.18	3.18	3.60	3.81
360.0	1.06	1.27	1.91	2.12	2.75	3.18	3.39	3.60	3.81
C/ γ (°)	180.0								
0.0	4.12								
45.0	4.12								
90.0	4.12								
135.0	4.12								
180.0	4.12								
225.0	4.12								
270.0	4.12								
315.0	4.12								
360.0	4.12								