



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

LumCAT: LD4R-35K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.03

LampCAT:

Current(A): 0.1450

Lamp flux(lm): -1.0

Power (W): 17.15

Number of Lamps: 1

PF: 0.9886

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1602.50, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 93.47

Central intensity(cd): 4827.527, Maximum intensity(cd): 4997.976

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=33.7

[C90/270]Total=33.3

Field angle(10%Imax): [C0/180]Total=51.2

[C90/270]Total=51.4

Maximum s/h(1/2): C0_180=0.58 C90_270=0.63

Maximum s/h(1/4): C0_180=0.53 C90_270=0.57

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 π solid angle : 98.894%

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

Date:
Humidity(%): 59%

Operator: jarvis

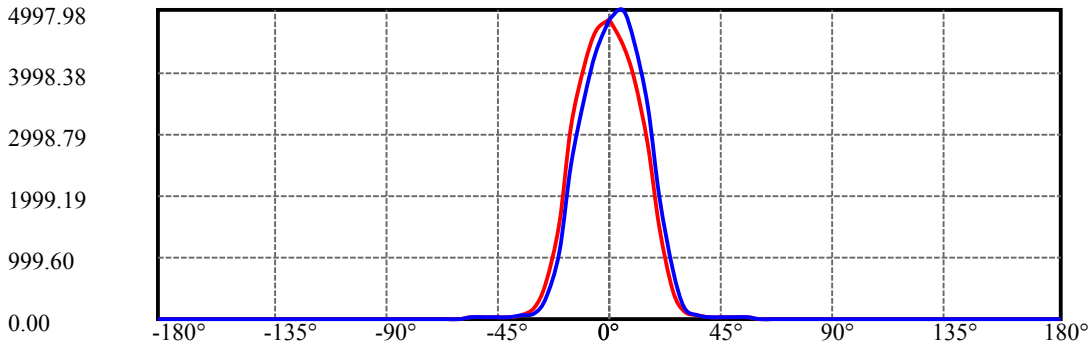
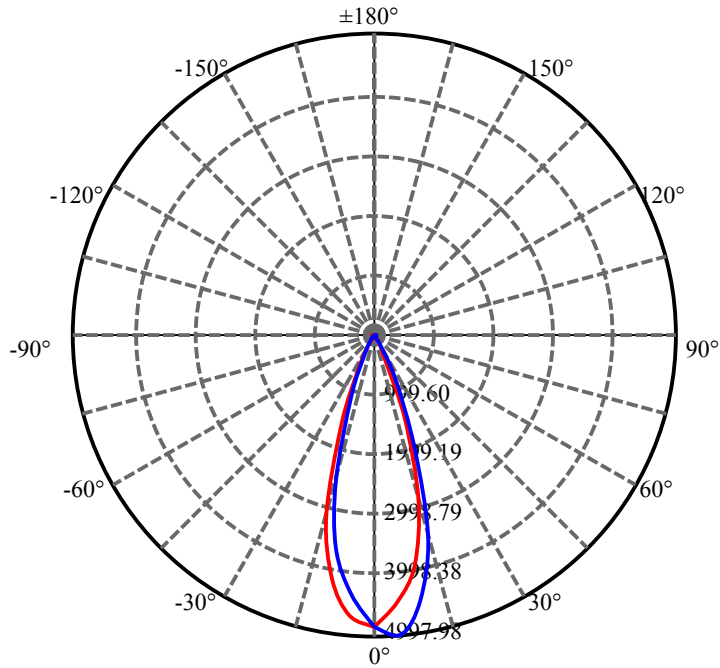
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4827.527	0.000	0	0.00%	0.00%
5.0	4572.891	112.379	112.379	0.00%	7.01%
10.0	3960.732	305.275	417.654	0.00%	26.06%
15.0	2946.926	409.758	827.412	0.00%	51.63%
20.0	1518.496	368.013	1195.425	0.00%	74.60%
25.0	538.794	215.772	1411.197	0.00%	88.06%
30.0	150.647	87.249	1498.446	0.00%	93.51%
35.0	65.192	31.784	1530.23	0.00%	95.49%
40.0	38.848	17.358	1547.588	0.00%	96.57%
45.0	28.363	12.445	1560.032	0.00%	97.35%
50.0	20.835	9.941	1569.974	0.00%	97.97%
55.0	16.407	8.098	1578.071	0.00%	98.48%
60.0	12.601	6.705	1584.776	0.00%	98.89%
65.0	9.499	5.372	1590.149	0.00%	99.23%
70.0	6.641	4.087	1594.235	0.00%	99.48%
75.0	4.427	2.893	1597.128	0.00%	99.66%
80.0	2.505	1.855	1598.983	0.00%	99.78%
85.0	0.985	0.948	1599.932	0.00%	99.84%
90.0	0.012	0.273	1600.205	0.00%	99.86%
95.0	0.012	0.007	1600.212	0.00%	99.86%
100.0	0.037	0.013	1600.225	0.00%	99.86%
105.0	0.037	0.020	1600.244	0.00%	99.86%
110.0	0.061	0.025	1600.27	0.00%	99.86%
115.0	0.024	0.022	1600.291	0.00%	99.86%
120.0	0.049	0.018	1600.309	0.00%	99.86%
125.0	0.061	0.025	1600.335	0.00%	99.86%
130.0	0.097	0.034	1600.369	0.00%	99.87%
135.0	0.158	0.052	1600.421	0.00%	99.87%
140.0	0.316	0.088	1600.509	0.00%	99.88%
145.0	0.620	0.156	1600.665	0.00%	99.89%
150.0	0.973	0.235	1600.899	0.00%	99.90%
155.0	1.472	0.309	1601.209	0.00%	99.92%
160.0	1.958	0.360	1601.568	0.00%	99.94%
165.0	2.457	0.364	1601.932	0.00%	99.96%
170.0	2.651	0.303	1602.235	0.00%	99.98%
175.0	2.870	0.198	1602.433	0.00%	100.00%
180.0	3.022	0.070	1602.503	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1498.45	N.A.	93.51%
0-40	1547.59	N.A.	96.57%
0-60	1584.78	N.A.	98.89%
0-90	1600.20	N.A.	99.86%
0-120	1600.31	N.A.	99.86%
0-180	1602.50	N.A.	100.00%
60-90	15.43	N.A.	0.96%
90-120	0.10	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%
0-22.01	1282.00	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	417.65
10-20	777.77
20-30	303.02
30-40	49.14
40-50	22.39
50-60	14.80
60-70	9.46
70-80	4.75
80-90	1.22
90-100	0.02
100-110	0.05
110-120	0.04
120-130	0.06
130-140	0.14
140-150	0.39
150-160	0.67
160-170	0.67
170-180	0.20

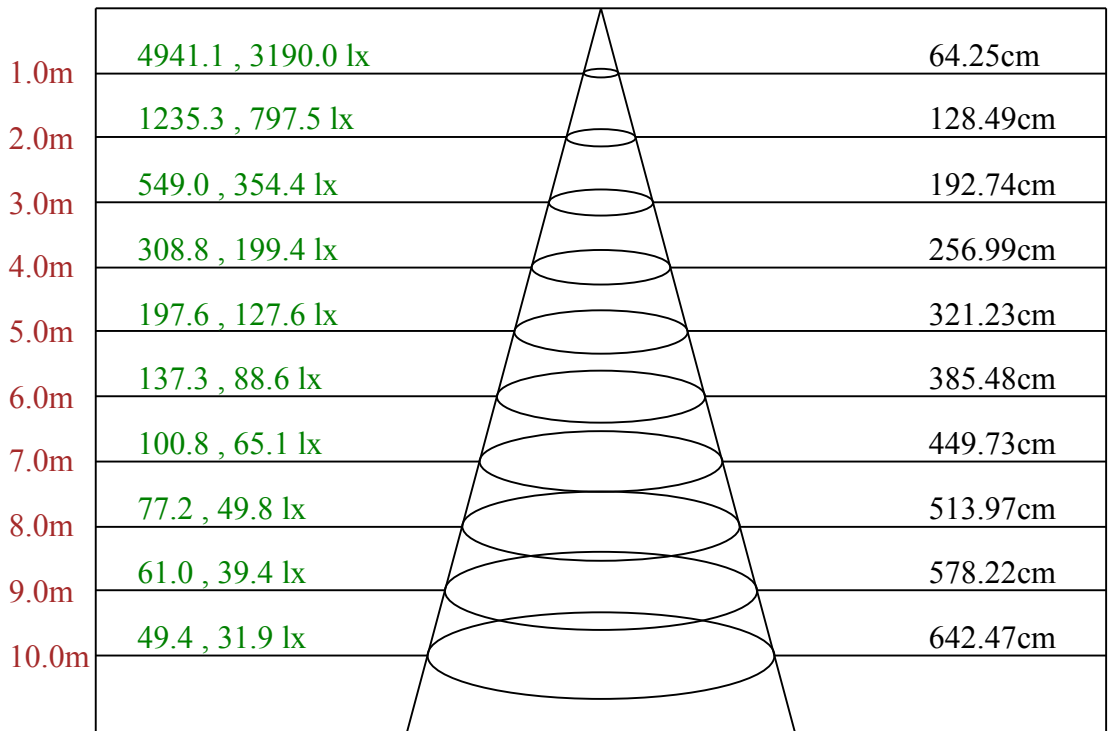


C0/C180: —

C90/C270: —

Field angle(10%Imax):C0/180Left:26.2 Right:25.0
:C90/270Left:23.9 Right:27.5

Beam Angle(50%Imax):C0/180Left:17.2 Right:16.5
:C90/270Left:15.0 Right:18.3



Max , Ave Beam angle of C90 plane 35.62

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Intensity data(cd)

C/ γ ($^{\circ}$)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	4827.53	4449.20	3871.23	2822.32	1481.90	476.00	123.38	59.16	36.78
22.5	4827.53	4511.47	3876.68	2886.34	1522.57	508.50	121.43	60.52	38.92
45.0	4827.53	4552.34	3877.84	2954.26	1582.70	518.03	131.94	61.49	39.12
67.5	4827.53	4552.34	3858.00	2960.49	1598.85	558.90	144.78	64.41	40.28
90.0	4827.53	4997.98	4468.66	3454.78	1989.42	815.00	195.38	73.37	46.51
112.5	4827.53	4922.08	4375.25	3404.18	1962.18	810.33	200.64	73.75	47.09
135.0	4827.53	4809.21	4309.08	3369.15	1862.93	712.63	235.08	77.45	44.76
157.5	4827.53	4739.16	4219.57	3248.50	1699.46	678.00	230.41	79.01	41.45
180.0	4827.53	4649.64	4091.13	3096.71	1541.84	579.72	184.68	71.61	38.34
202.5	4827.53	4550.39	3966.58	2898.22	1368.64	474.83	144.59	66.55	37.36
225.0	4827.53	4482.28	3879.01	2781.45	1343.34	435.13	122.60	60.91	36.39
247.5	4827.53	4449.20	3867.34	2742.53	1335.56	439.80	130.19	65.00	36.00
270.0	4827.53	4312.98	3579.32	2493.44	1074.79	344.25	100.61	56.05	34.25
292.5	4827.53	4369.41	3606.18	2519.13	1187.85	366.83	103.53	55.85	34.25
315.0	4827.53	4396.65	3712.24	2718.60	1310.26	423.84	118.71	58.97	34.25
337.5	4827.53	4421.95	3813.63	2800.72	1433.64	478.92	122.41	58.97	35.81
360.0	4827.53	4449.20	3871.23	2822.32	1481.90	476.00	123.38	59.16	36.78
C/ γ ($^{\circ}$)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	27.63	20.04	15.96	12.65	9.54	6.42	4.48	2.72	1.17
22.5	28.02	20.43	16.35	12.65	9.73	7.01	4.67	2.92	1.17
45.0	28.41	20.82	16.35	12.84	9.73	6.81	4.67	2.72	1.36
67.5	28.80	21.02	16.54	12.84	9.73	6.81	4.67	2.72	1.17
90.0	31.53	23.74	17.90	13.82	10.90	7.59	5.06	2.92	1.17
112.5	30.75	22.77	17.71	13.62	10.31	7.20	4.67	2.72	0.78
135.0	30.36	22.57	17.51	13.62	10.12	7.20	4.67	2.53	0.97
157.5	29.97	21.80	16.93	12.65	9.54	6.81	4.48	2.53	0.97
180.0	29.19	21.21	16.54	12.46	9.15	6.81	4.28	2.34	0.97
202.5	28.22	20.63	16.15	12.07	9.15	6.42	4.48	2.34	0.97
225.0	27.24	19.85	15.96	12.07	8.95	6.23	4.28	2.14	0.97
247.5	27.05	19.85	15.76	12.07	8.95	6.23	4.09	2.14	0.58
270.0	26.27	19.66	15.57	11.87	8.76	6.03	3.89	2.14	0.97
292.5	26.27	19.46	15.57	11.87	8.95	5.84	3.70	2.14	0.78
315.0	26.47	19.66	15.76	12.26	9.15	6.42	4.28	2.34	0.78
337.5	27.63	19.85	15.96	12.26	9.34	6.42	4.48	2.72	0.97
360.0	27.63	20.04	15.96	12.65	9.54	6.42	4.48	2.72	1.17
C/ γ ($^{\circ}$)	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	0.20
22.5	0.00	0.00	0.20	0.00	0.20	0.00	0.20	0.00	0.20
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.20	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	0.00	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	0.20	0.20	0.20	0.39	0.39	0.20	0.20	0.39	0.39
292.5	0.00	0.00	0.00	0.20	0.20	0.20	0.20	0.20	0.20
315.0	0.00	0.00	0.20	0.00	0.20	0.00	0.00	0.20	0.20
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	0.20

Equipment: GMS-3000
Temperature($^{\circ}$ C): 25Date:
Humidity(%): 59%

Operator: jarvis

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Intensity data(cd)

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C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.20	0.58	0.97	0.97	1.36	1.95	2.53	2.72	2.72
22.5	0.20	0.39	0.78	0.97	1.36	1.95	2.34	2.53	2.92
45.0	0.20	0.20	0.58	0.97	1.56	1.95	2.53	2.72	2.92
67.5	0.20	0.39	0.58	0.97	1.36	1.95	2.53	2.53	2.92
90.0	0.00	0.39	0.58	0.78	1.17	1.75	2.34	2.53	2.92
112.5	0.00	0.20	0.20	0.78	1.36	1.75	2.14	2.53	2.92
135.0	0.00	0.00	0.39	0.97	1.36	1.75	2.14	2.72	2.72
157.5	0.00	0.20	0.39	0.97	1.17	1.75	2.34	2.34	2.72
180.0	0.00	0.20	0.39	0.97	1.36	1.75	2.14	2.53	2.72
202.5	0.20	0.20	0.39	0.97	1.36	1.75	2.53	2.72	2.72
225.0	0.00	0.20	0.78	0.78	1.36	1.95	2.34	2.72	2.92
247.5	0.20	0.39	0.58	0.97	1.36	1.95	2.53	2.53	2.72
270.0	0.58	0.58	0.97	1.56	2.14	2.53	3.11	3.11	3.31
292.5	0.39	0.39	0.78	0.97	1.75	2.14	2.53	2.72	2.92
315.0	0.20	0.39	0.78	0.97	1.75	2.34	2.53	2.72	2.92
337.5	0.20	0.39	0.78	0.97	1.75	2.14	2.72	2.72	2.92
360.0	0.20	0.58	0.97	0.97	1.36	1.95	2.53	2.72	2.72

C/γ(°)	180.0
0.0	3.02
22.5	3.02
45.0	3.02
67.5	3.02
90.0	3.02
112.5	3.02
135.0	3.02
157.5	3.02
180.0	3.02
202.5	3.02
225.0	3.02
247.5	3.02
270.0	3.02
292.5	3.02
315.0	3.02
337.5	3.02
360.0	3.02