



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

LumCAT: LD4S-27K-HO

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.10

LampCAT:

Current(A): 0.1460

Lamp flux(lm): -1.0

Power (W): 17.35

Number of Lamps: 1

PF: 0.9888

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1513.52, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 87.24

Central intensity(cd): 4843.421, Maximum intensity(cd): 4873.804

Angle of maximum intensity: C=90.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=32.1

[C90/270]Total=32.8

Field angle(10%Imax): [C0/180]Total=47.9

[C90/270]Total=49.0

Maximum s/h(1/2): C0_180=0.59 C90_270=0.62

Maximum s/h(1/4): C0_180=0.54 C90_270=0.56

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 : 98.506%

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

Date:
Humidity(%): 59%

Operator: jarvis

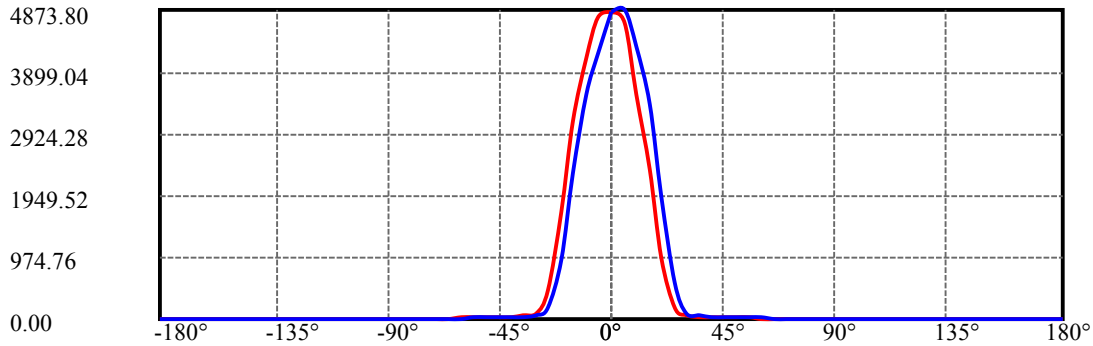
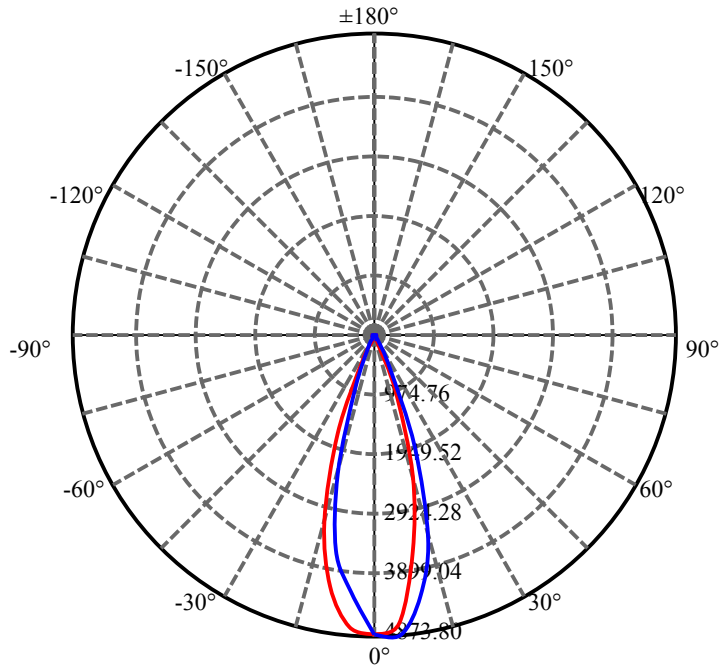
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4843.421	0.000	0	0.00%	0.00%
5.0	4554.769	112.353	112.353	0.00%	7.42%
10.0	3862.610	301.116	413.469	0.00%	27.32%
15.0	2790.750	394.673	808.142	0.00%	53.39%
20.0	1408.990	346.118	1154.259	0.00%	76.26%
25.0	416.928	191.505	1345.764	0.00%	88.92%
30.0	104.967	66.046	1411.811	0.00%	93.28%
35.0	54.537	23.488	1435.299	0.00%	94.83%
40.0	37.110	15.291	1450.589	0.00%	95.84%
45.0	28.830	12.209	1462.799	0.00%	96.65%
50.0	23.489	10.572	1473.371	0.00%	97.35%
55.0	19.566	9.362	1482.732	0.00%	97.97%
60.0	15.760	8.165	1490.898	0.00%	98.51%
65.0	12.191	6.795	1497.693	0.00%	98.95%
70.0	8.923	5.346	1503.039	0.00%	99.31%
75.0	6.128	3.934	1506.973	0.00%	99.57%
80.0	3.661	2.619	1509.592	0.00%	99.74%
85.0	1.418	1.380	1510.972	0.00%	99.83%
90.0	0.026	0.395	1511.368	0.00%	99.86%
95.0	0.053	0.022	1511.389	0.00%	99.86%
100.0	0.026	0.021	1511.411	0.00%	99.86%
105.0	0.026	0.014	1511.425	0.00%	99.86%
110.0	0.013	0.010	1511.435	0.00%	99.86%
115.0	0.039	0.013	1511.448	0.00%	99.86%
120.0	0.092	0.032	1511.48	0.00%	99.87%
125.0	0.013	0.024	1511.504	0.00%	99.87%
130.0	0.066	0.017	1511.521	0.00%	99.87%
135.0	0.131	0.040	1511.561	0.00%	99.87%
140.0	0.223	0.066	1511.627	0.00%	99.88%
145.0	0.512	0.123	1511.75	0.00%	99.88%
150.0	0.958	0.216	1511.966	0.00%	99.90%
155.0	1.444	0.304	1512.27	0.00%	99.92%
160.0	1.851	0.346	1512.615	0.00%	99.94%
165.0	2.362	0.347	1512.963	0.00%	99.96%
170.0	2.598	0.294	1513.257	0.00%	99.98%
175.0	2.742	0.191	1513.448	0.00%	100.00%
180.0	2.927	0.068	1513.516	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1411.81	N.A.	93.28%
0-40	1450.59	N.A.	95.84%
0-60	1490.90	N.A.	98.51%
0-90	1511.37	N.A.	99.86%
0-120	1511.48	N.A.	99.87%
0-180	1513.52	N.A.	100.00%
60-90	20.47	N.A.	1.35%
90-120	0.11	N.A.	0.01%
90-130	0.15	N.A.	0.01%
90-150	0.60	N.A.	0.04%
90-180	2.08	N.A.	0.14%
0-21.48	1210.81	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	413.47
10-20	740.79
20-30	257.55
30-40	38.78
40-50	22.78
50-60	17.53
60-70	12.14
70-80	6.55
80-90	1.78
90-100	0.04
100-110	0.02
110-120	0.05
120-130	0.04
130-140	0.11
140-150	0.34
150-160	0.65
160-170	0.64
170-180	0.19



C0/C180: —

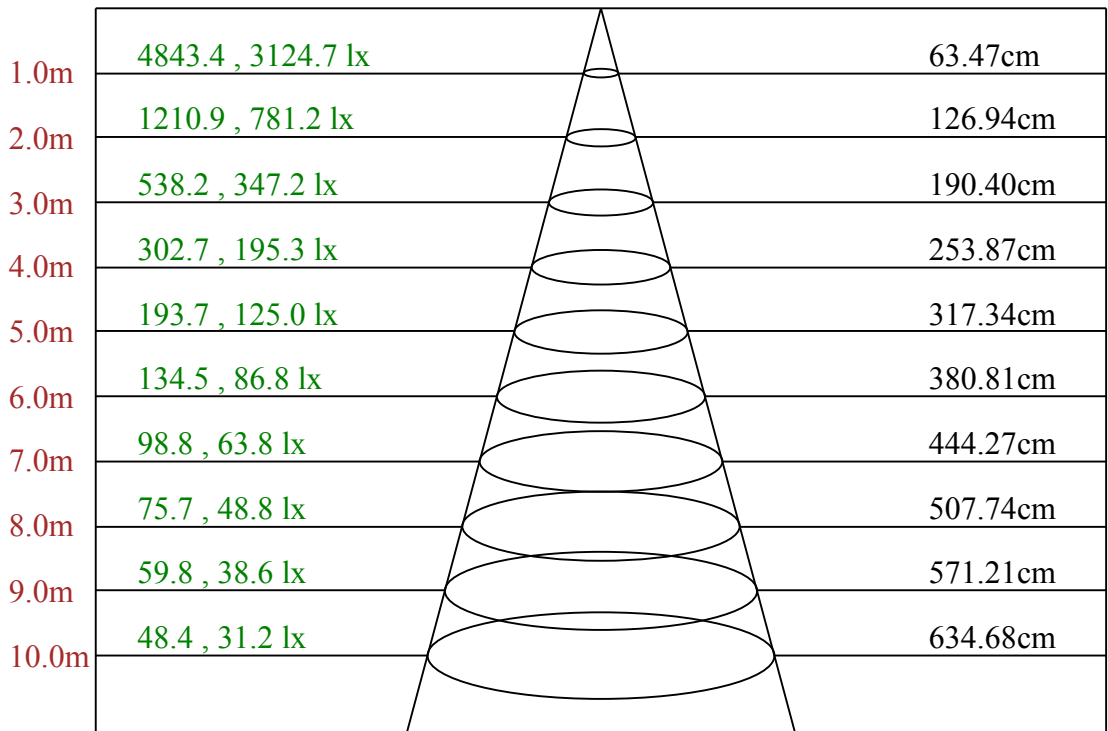
C90/C270: —

Field angle(10%Imax):C0/180Left:24.9 Right:23.0

:C90/270Left:23.0 Right:26.0

Beam Angle(50%Imax):C0/180Left:17.4 Right:14.7

:C90/270Left:14.5 Right:18.3



Max , Ave Beam angle of C90 plane 35.21

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	4843.42	4661.74	3550.01	2358.90	958.47	177.21	69.29	42.20	32.12
22.5	4843.42	4508.47	3567.43	2374.86	1003.19	228.44	72.23	43.88	34.01
45.0	4843.42	4487.48	3585.49	2431.55	1105.86	313.05	95.11	52.70	35.06
67.5	4843.42	4489.58	3617.40	2446.67	1037.83	269.80	83.56	47.66	34.43
90.0	4843.42	4873.80	4296.41	3399.88	1928.06	587.05	105.61	60.05	38.84
112.5	4843.42	4838.11	4288.02	3393.59	1953.26	666.41	129.13	64.04	40.10
135.0	4843.42	4812.92	4248.12	3345.29	1976.35	702.53	175.11	70.97	46.82
157.5	4843.42	4775.12	4193.53	3225.62	1835.68	585.16	130.39	62.36	40.52
180.0	4843.42	4741.53	4128.45	3108.04	1695.01	447.22	89.65	53.54	37.16
202.5	4843.42	4695.34	4084.35	3070.25	1644.62	502.43	98.89	55.01	38.00
225.0	4843.42	4649.15	4044.46	3047.15	1692.91	530.36	150.54	68.03	43.46
247.5	4843.42	4628.15	4021.37	3047.15	1705.51	540.44	141.72	59.42	38.63
270.0	4843.42	4186.81	3530.27	2306.83	928.44	188.54	69.71	41.99	32.12
292.5	4843.42	4176.11	3539.72	2334.13	1012.22	277.99	77.06	43.25	33.17
315.0	4843.42	4168.97	3565.54	2378.43	1070.80	373.31	110.02	60.68	34.85
337.5	4843.42	4183.04	3541.19	2383.68	995.63	280.93	81.47	46.82	34.43
360.0	4843.42	4661.74	3550.01	2358.90	958.47	177.21	69.29	42.20	32.12
C/ γ ($^{\circ}$)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	26.04	22.05	18.48	14.70	11.13	7.98	5.25	3.15	1.05
22.5	26.46	22.68	18.48	14.91	11.34	8.19	5.46	3.15	1.26
45.0	27.93	21.63	18.27	14.70	11.13	8.40	5.46	3.36	1.26
67.5	27.30	22.47	18.69	15.33	11.76	8.40	5.67	3.15	1.26
90.0	30.65	25.83	21.84	17.85	14.07	10.50	7.56	4.62	2.10
112.5	31.49	25.41	21.63	18.06	13.86	10.50	7.56	4.62	2.10
135.0	31.70	24.99	20.37	16.80	13.44	9.87	7.14	4.41	1.89
157.5	31.49	24.57	21.00	16.80	13.23	9.66	6.93	4.41	1.89
180.0	29.39	24.36	20.58	16.59	12.60	9.45	6.51	3.99	1.68
202.5	30.23	24.57	20.37	16.38	12.81	9.45	6.30	3.99	1.89
225.0	30.23	23.73	19.74	16.17	12.39	9.24	6.30	3.78	1.47
247.5	30.02	24.15	20.16	16.17	12.81	9.24	6.51	3.99	1.47
270.0	26.88	22.89	18.69	14.49	11.34	7.98	5.25	2.94	0.63
292.5	26.25	22.68	18.48	14.49	11.13	7.77	5.25	2.73	0.84
315.0	27.72	21.63	18.06	14.07	11.13	8.19	5.25	3.15	0.84
337.5	27.51	22.26	18.27	14.70	10.92	7.98	5.67	3.15	1.05
360.0	26.04	22.05	18.48	14.70	11.13	7.98	5.25	3.15	1.05
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	0.21	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.00
90.0	0.21	0.00	0.00	0.00	0.00	0.21	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	0.21	0.21	0.42	0.21	0.21	0.21	0.42	0.21	0.42
292.5	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
315.0	0.00	0.21	0.00	0.00	0.00	0.00	0.21	0.00	0.21
337.5	0.00	0.00	0.00	0.21	0.00	0.00	0.21	0.00	0.21
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00

LD4S-27K-HO

Intensity data(cd)

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C/\u03b3(\u00b0)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.21	0.21	0.63	1.05	1.68	2.10	2.52	2.52	2.52
22.5	0.21	0.21	0.42	1.05	1.47	2.31	2.31	2.94	2.73
45.0	0.21	0.42	0.63	1.05	1.47	1.89	2.52	2.73	2.94
67.5	0.00	0.21	0.63	1.05	1.68	2.10	2.52	2.73	2.73
90.0	0.00	0.42	0.42	1.05	1.26	1.47	2.31	2.73	2.52
112.5	0.00	0.00	0.21	0.84	1.26	1.47	2.10	2.73	2.73
135.0	0.00	0.00	0.42	0.63	1.26	1.47	2.31	2.10	2.73
157.5	0.00	0.00	0.21	0.84	1.26	1.68	2.31	2.31	2.52
180.0	0.00	0.00	0.42	0.63	1.47	1.68	2.10	2.73	2.73
202.5	0.00	0.00	0.21	0.84	1.26	1.68	1.89	2.31	2.73
225.0	0.00	0.00	0.21	0.84	1.05	1.68	2.31	2.31	2.73
247.5	0.00	0.21	0.42	0.63	1.26	1.68	2.10	2.31	2.73
270.0	0.63	0.63	1.26	1.47	1.89	2.31	2.94	3.15	3.36
292.5	0.42	0.42	0.63	1.26	1.68	2.10	2.52	2.52	2.73
315.0	0.21	0.21	0.63	1.05	1.47	2.10	2.52	2.52	2.73
337.5	0.21	0.63	0.84	1.05	1.68	1.89	2.52	2.94	2.73
360.0	0.21	0.21	0.63	1.05	1.68	2.10	2.52	2.52	2.52

C/\u03b3(\u00b0)	180.0
0.0	2.93
22.5	2.93
45.0	2.93
67.5	2.93
90.0	2.93
112.5	2.93
135.0	2.93
157.5	2.93
180.0	2.93
202.5	2.93
225.0	2.93
247.5	2.93
270.0	2.93
292.5	2.93
315.0	2.93
337.5	2.93
360.0	2.93