Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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Client:
LumCAT: LD4S-50K
Luminaire:
Report No:
Ballast type:
Test No:
LampCAT:
Lamp flux(lm): -1.0
Number of Lamps: 1
Length(mm): 0
Phm Type: C

Voltage(V): 120.11
Current(A): 0.1240
Power (W): 14.64
PF: 0.9866
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 1419.18, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 96.93
Central intensity(cd): 4266.271, Maximum intensity(cd): 4266.271
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=34.2
[C90/270]Total=33.6
Field angle(10%Imax): [C0/180]Total=49.4
[C90/270]Total=49.1
Maximum s/h(1/2): C0_180=0.59 C90_270=0.61
Maximum s/h(1/4): C0_180=0.53 C90_270=0.55
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 0.00%
Up flux rate of LUM(%): 0.13%
Down flux rate of LUM(%): 99.87%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.434%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4266.271	0.000	0	0.00%	0.00%
5.0	4025.255	99.123	99.123	0.00%	6.98%
10.0	3530.065	270.278	369.4	0.00%	26.03%
15.0	2650.826	366.646	736.047	0.00%	51.86%
20.0	1381.775	332.343	1068.39	0.00%	75.28%
25.0	413.786	188.321	1256.711	0.00%	88.55%
30.0	101.193	65.171	1321.882	0.00%	93.14%
35.0	51.071	22.422	1344.304	0.00%	94.72%
40.0	34.931	14.349	1358.653	0.00%	95.74%
45.0	26.989	11.465	1370.118	0.00%	96.54%
50.0	22.404	9.980	1380.098	0.00%	97.25%
55.0	18.828	8.965	1389.063	0.00%	97.88%
60.0	15.325	7.894	1396.958	0.00%	98.43%
65.0	11.932	6.626	1403.584	0.00%	98.90%
70.0	8.891	5.272	1408.856	0.00%	99.27%
75.0	6.203	3.945	1412.802	0.00%	99.55%
80.0	3.819	2.682	1415.483	0.00%	99.74%
85.0	1.557	1.461	1416.944	0.00%	99.84%
90.0	0.037	0.436	1417.38	0.00%	99.87%
95.0	0.012	0.013	1417.393	0.00%	99.87%
100.0	0.012	0.007	1417.4	0.00%	99.87%
105.0	0.012	0.007	1417.407	0.00%	99.88%
110.0	0.024	0.010	1417.416	0.00%	99.88%
115.0	0.000	0.006	1417.422	0.00%	99.88%
120.0	0.012	0.003	1417.425	0.00%	99.88%
125.0	0.024	0.008	1417.434	0.00%	99.88%
130.0	0.061	0.019	1417.452	0.00%	99.88%
135.0	0.073	0.027	1417.479	0.00%	99.88%
140.0	0.170	0.045	1417.524	0.00%	99.88%
145.0	0.462	0.106	1417.63	0.00%	99.89%
150.0	0.790	0.184	1417.814	0.00%	99.90%
155.0	1.216	0.254	1418.068	0.00%	99.92%
160.0	1.715	0.307	1418.376	0.00%	99.94%
165.0	2.007	0.307	1418.683	0.00%	99.97%
170.0	2.359	0.259	1418.942	0.00%	99.98%
175.0	2.518	0.174	1419.116	0.00%	100.00%
180.0	2.622	0.061	1419.177	0.00%	100.00%

Zonal flux distribution table

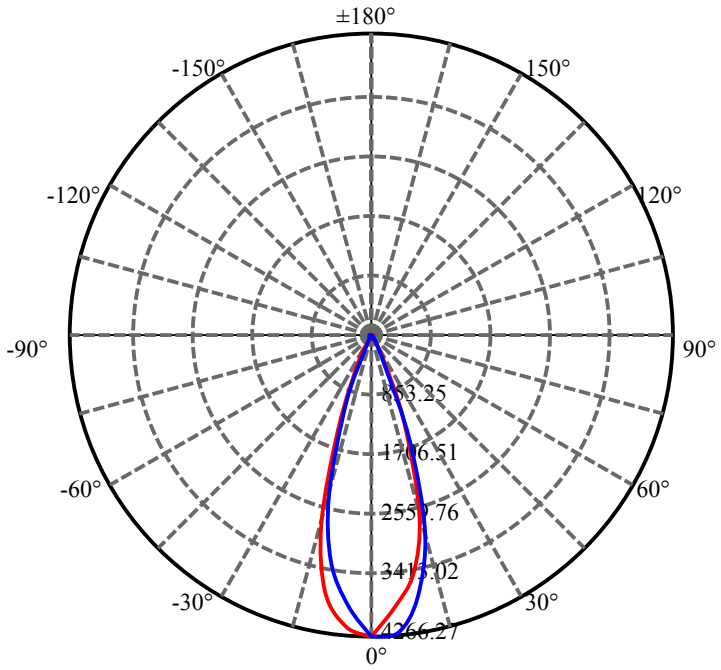
ZONAL LUMEN SUMMARY

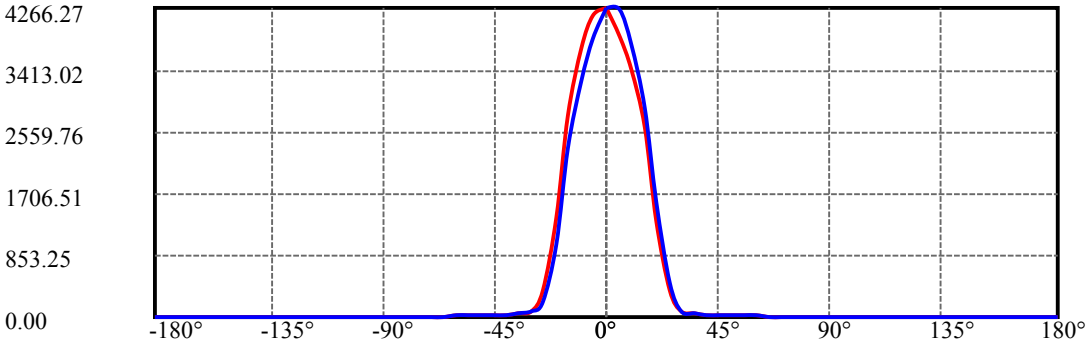
Zone	Lumens	%Lamp	%Fixt
0-30	1321.88	N.A.	93.14%
0-40	1358.65	N.A.	95.74%
0-60	1396.96	N.A.	98.43%
0-90	1417.38	N.A.	99.87%
0-120	1417.43	N.A.	99.88%
0-180	1419.18	N.A.	100.00%
60-90	20.42	N.A.	1.44%
90-120	0.05	N.A.	0.00%
90-130	0.07	N.A.	0.01%
90-150	0.43	N.A.	0.03%
90-180	1.74	N.A.	0.12%
0-21.78	1135.34	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	369.40
10-20	698.99
20-30	253.49
30-40	36.77
40-50	21.45
50-60	16.86
60-70	11.90
70-80	6.63
80-90	1.90
90-100	0.02
100-110	0.02
110-120	0.01
120-130	0.03
130-140	0.07
140-150	0.29
150-160	0.56
160-170	0.57
170-180	0.17

Light Distribution Curve [Unit:cd]





C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:24.7 Right:24.7

:C90/270Left:23.6 Right:25.5

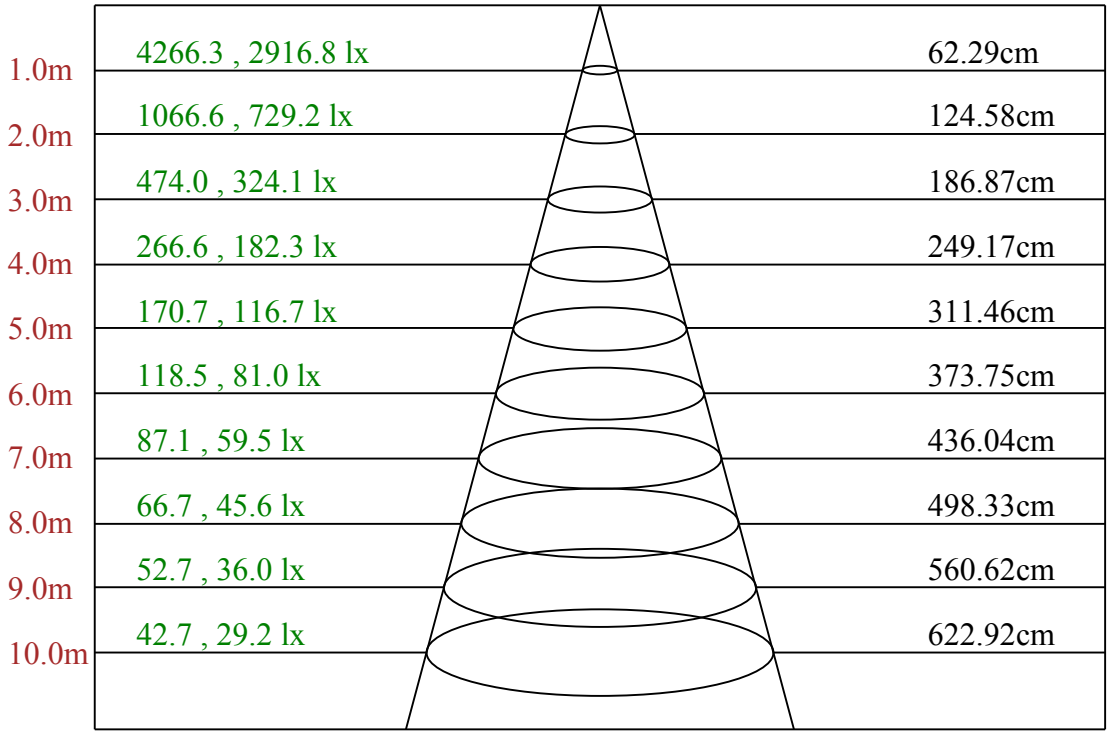
Beam Angle(50%Imax):C0/180Left:17.3 Right:16.9

:C90/270Left:15.7 Right:17.9

Equipment: GMS-3000 Date: Operator: jarvis

Temperature(°C): 25 Humidity(%): 59%

Lux distance Curve



Max , Ave

Beam angle of C0 plane 34.60

Equipment: GMS-3000 Date: Operator: jarvis
Temperature(°C): 25 Humidity(%): 59%

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	4266.27	3880.57	3428.12	2629.27	1314.93	362.74	73.37	41.45	31.14
22.5	4266.27	3877.26	3407.88	2565.64	1309.29	430.46	94.77	44.76	32.50
45.0	4266.27	3864.61	3307.08	2400.62	1244.68	356.51	108.59	54.29	33.47
67.5	4266.27	3794.17	3194.40	2234.43	944.21	220.49	69.67	41.45	31.33
90.0	4266.27	4239.03	3770.03	2898.22	1580.76	467.24	89.71	52.54	35.81
112.5	4266.27	4204.00	3696.09	2841.78	1555.46	459.85	104.50	56.05	36.00
135.0	4266.27	4170.92	3670.79	2723.07	1516.54	493.12	115.21	57.41	39.89
157.5	4266.27	4168.97	3659.11	2717.24	1415.34	403.02	92.63	52.35	35.42
180.0	4266.27	4157.29	3698.03	2769.78	1390.05	374.61	80.76	48.07	33.86
202.5	4266.27	4168.97	3733.06	2851.51	1545.73	493.71	101.97	54.10	36.20
225.0	4266.27	4196.21	3760.30	2966.33	1728.65	627.01	164.63	68.31	44.76
247.5	4266.27	4225.40	3785.60	3009.14	1783.14	617.47	153.93	59.35	36.97
270.0	4266.27	3836.78	3267.96	2324.53	1015.24	201.80	66.94	40.48	31.33
292.5	4266.27	3873.76	3322.25	2395.75	1144.07	309.61	77.84	42.03	32.89
315.0	4266.27	3875.12	3363.70	2512.71	1303.45	398.16	132.14	60.13	34.83
337.5	4266.27	3871.03	3416.64	2573.23	1316.88	404.77	92.44	44.37	32.50
360.0	4266.27	3880.57	3428.12	2629.27	1314.93	362.74	73.37	41.45	31.14

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	25.30	21.80	18.29	14.40	11.29	8.17	5.64	3.31	1.17
22.5	25.69	21.80	18.10	14.79	11.29	8.17	5.64	3.31	1.17
45.0	25.69	20.43	17.51	14.21	10.90	8.17	5.45	3.31	1.17
67.5	24.91	21.41	17.71	14.21	11.09	8.17	5.45	2.92	0.78
90.0	27.83	23.74	20.04	16.74	12.84	9.93	7.01	4.28	1.75
112.5	28.61	23.55	19.85	16.15	12.65	9.54	6.81	4.28	1.75
135.0	28.22	22.77	19.07	15.76	12.46	9.34	6.62	4.48	1.75
157.5	27.83	23.16	19.85	16.35	12.65	9.73	6.81	4.67	2.14
180.0	27.05	23.16	19.85	15.96	12.65	9.54	6.62	4.48	2.14
202.5	28.41	23.55	19.85	16.35	12.84	9.54	7.01	4.67	2.14
225.0	28.80	23.16	19.07	15.96	12.84	9.54	6.81	4.67	2.14
247.5	29.39	23.55	20.24	16.35	12.84	9.54	7.01	4.09	1.95
270.0	25.49	21.80	17.71	14.21	10.90	8.17	5.45	2.92	1.17
292.5	26.27	21.80	18.29	14.60	11.09	8.37	5.64	3.11	1.17
315.0	26.27	20.82	17.51	14.40	11.09	7.98	5.64	3.31	1.17
337.5	26.08	21.99	18.29	14.79	11.48	8.37	5.64	3.31	1.36
360.0	25.30	21.80	18.29	14.40	11.29	8.17	5.64	3.31	1.17

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	0.20
22.5	0.00	0.00	0.00	0.00	0.00	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	0.20
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00
90.0	0.20	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	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.20	0.20	0.20	0.20	0.20	0.00	0.20	0.20	0.39
292.5	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.20
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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

Intensity data(cd)

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

C/γ(°)	180.0
0.0	2.62
22.5	2.62
45.0	2.62
67.5	2.62
90.0	2.62
112.5	2.62
135.0	2.62
157.5	2.62
180.0	2.62
202.5	2.62
225.0	2.62
247.5	2.62
270.0	2.62
292.5	2.62
315.0	2.62
337.5	2.62
360.0	2.62