Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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Client:
LumCAT: LD4S-35K-HO
Luminaire:
Report No:
Ballast type:

Test No:	Voltage(V): 119.99
LampCAT:	Current(A): 0.1460
Lamp flux(lm): -1.0	Power (W): 17.36
Number of Lamps: 1	PF: 0.9879
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1611.53, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 92.85
Central intensity(cd): 4965.206, Maximum intensity(cd): 4984.141
Angle of maximum intensity: C=90.0 γ=5.0
Beam Angle(50%Imax): [C0/180]Total=33.3
[C90/270]Total=33.9
Field angle(10%Imax): [C0/180]Total=48.4
[C90/270]Total=49.7
Maximum s/h(1/2): C0_180=0.57 C90_270=0.62
Maximum s/h(1/4): C0_180=0.51 C90_270=0.56
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 : 98.468%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4965.206	0.000	0	0.00%	0.00%
5.0	4697.081	115.510	115.51	0.00%	7.17%
10.0	4110.118	315.061	430.571	0.00%	26.72%
15.0	3042.108	424.265	854.836	0.00%	53.04%
20.0	1527.415	376.593	1231.429	0.00%	76.41%
25.0	424.161	204.684	1436.114	0.00%	89.11%
30.0	112.002	67.852	1503.966	0.00%	93.33%
35.0	56.835	24.863	1528.828	0.00%	94.87%
40.0	38.213	15.858	1544.686	0.00%	95.85%
45.0	30.031	12.636	1557.322	0.00%	96.64%
50.0	24.646	11.048	1568.37	0.00%	97.32%
55.0	20.634	9.845	1578.216	0.00%	97.93%
60.0	16.672	8.623	1586.839	0.00%	98.47%
65.0	12.991	7.211	1594.05	0.00%	98.92%
70.0	9.691	5.743	1599.793	0.00%	99.27%
75.0	6.821	4.316	1604.109	0.00%	99.54%
80.0	4.146	2.934	1607.044	0.00%	99.72%
85.0	1.853	1.630	1608.674	0.00%	99.82%
90.0	0.025	0.514	1609.188	0.00%	99.85%
95.0	0.012	0.010	1609.198	0.00%	99.86%
100.0	0.025	0.010	1609.208	0.00%	99.86%
105.0	0.061	0.023	1609.231	0.00%	99.86%
110.0	0.037	0.026	1609.256	0.00%	99.86%
115.0	0.025	0.016	1609.272	0.00%	99.86%
120.0	0.049	0.018	1609.29	0.00%	99.86%
125.0	0.074	0.028	1609.318	0.00%	99.86%
130.0	0.074	0.032	1609.35	0.00%	99.86%
135.0	0.147	0.045	1609.395	0.00%	99.87%
140.0	0.331	0.089	1609.483	0.00%	99.87%
145.0	0.614	0.158	1609.641	0.00%	99.88%
150.0	1.079	0.249	1609.89	0.00%	99.90%
155.0	1.484	0.324	1610.215	0.00%	99.92%
160.0	2.000	0.365	1610.58	0.00%	99.94%
165.0	2.490	0.370	1610.95	0.00%	99.96%
170.0	2.748	0.311	1611.261	0.00%	99.98%
175.0	2.871	0.201	1611.462	0.00%	100.00%
180.0	3.129	0.072	1611.534	0.00%	100.00%

Zonal flux distribution table

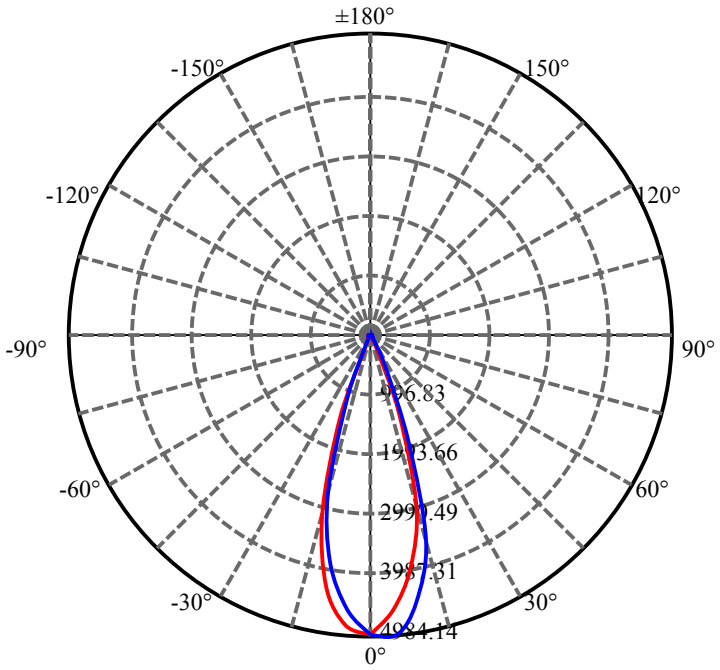
ZONAL LUMEN SUMMARY

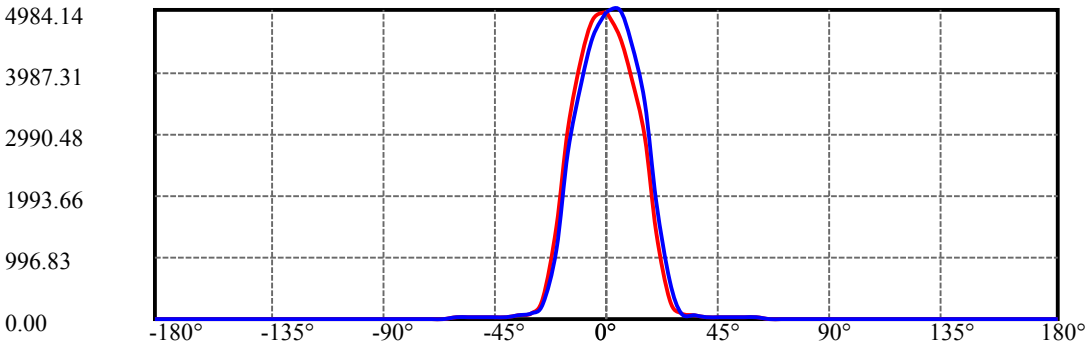
Zone	Lumens	%Lamp	%Fixt
0-30	1503.97	N.A.	93.33%
0-40	1544.69	N.A.	95.85%
0-60	1586.84	N.A.	98.47%
0-90	1609.19	N.A.	99.85%
0-120	1609.29	N.A.	99.86%
0-180	1611.53	N.A.	100.00%
60-90	22.35	N.A.	1.39%
90-120	0.10	N.A.	0.01%
90-130	0.16	N.A.	0.01%
90-150	0.70	N.A.	0.04%
90-180	2.27	N.A.	0.14%
0-21.41	1289.23	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	430.57
10-20	800.86
20-30	272.54
30-40	40.72
40-50	23.68
50-60	18.47
60-70	12.95
70-80	7.25
80-90	2.14
90-100	0.02
100-110	0.05
110-120	0.03
120-130	0.06
130-140	0.13
140-150	0.41
150-160	0.69
160-170	0.68
170-180	0.20

Light Distribution Curve [Unit:cd]





C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:24.3 Right:24.1

:C90/270Left:23.6 Right:26.1

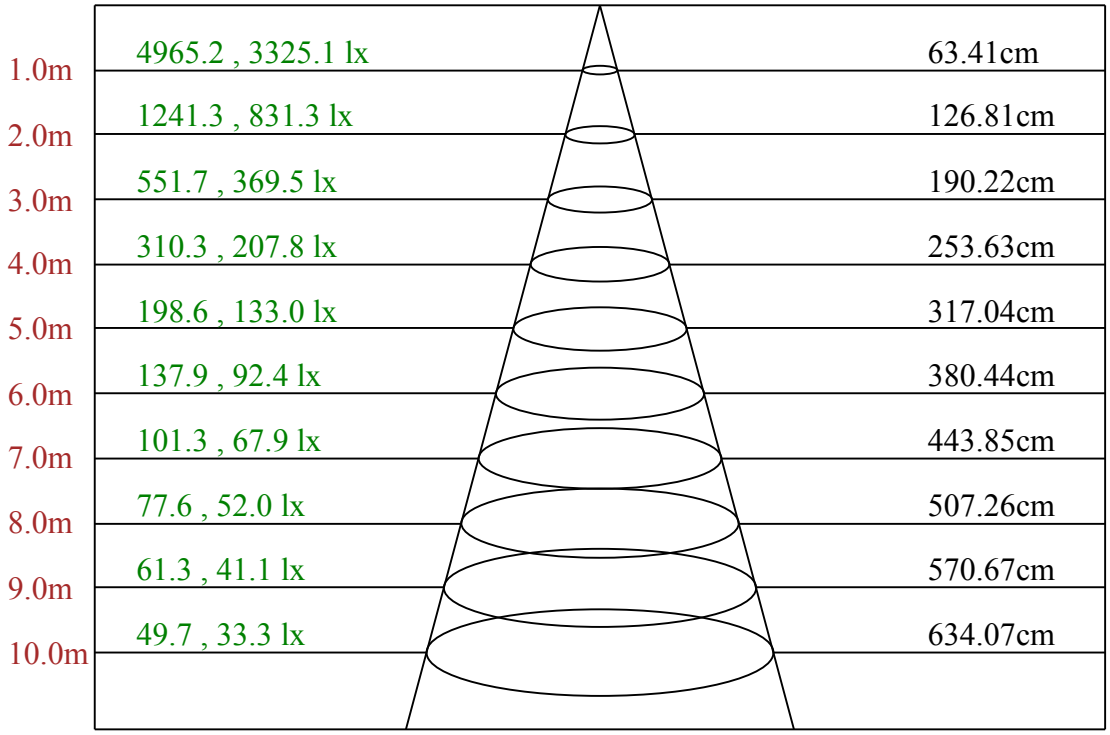
Beam Angle(50%Imax):C0/180Left:16.8 Right:16.5

:C90/270Left:15.7 Right:18.2

Equipment: GMS-3000 Date: Operator: jarvis

Temperature(°C): 25 Humidity(%): 59%

Lux distance Curve



Max , Ave

Beam angle of C90 plane 35.18

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	4965.21	4544.47	3906.37	2936.35	1390.65	309.93	81.26	48.87	35.72
22.5	4965.21	4560.18	3900.09	2974.43	1405.95	312.28	80.87	49.07	36.31
45.0	4965.21	4556.25	3890.47	2998.38	1576.33	462.63	130.33	61.83	38.47
67.5	4965.21	4560.18	4456.15	3074.34	1591.24	493.06	141.91	61.24	38.08
90.0	4965.21	4984.14	4471.85	3512.04	1894.69	605.92	104.62	56.14	39.06
112.5	4965.21	4939.00	4418.85	3508.11	1902.54	625.94	113.84	56.73	39.06
135.0	4965.21	4891.89	4377.64	3370.72	1847.59	657.74	206.68	72.62	41.02
157.5	4965.21	4864.41	4297.16	3186.22	1716.08	500.12	139.75	66.54	41.02
180.0	4965.21	4823.19	4208.83	3058.63	1482.50	334.46	86.56	53.39	38.47
202.5	4965.21	4783.94	4122.47	2936.94	1447.17	321.70	84.40	52.21	38.28
225.0	4965.21	4756.46	4093.03	2897.68	1511.95	402.57	121.89	60.06	39.45
247.5	4965.21	4752.53	4104.81	2958.53	1480.54	374.90	119.73	58.49	39.26
270.0	4965.21	4546.44	3808.03	2697.48	1127.63	245.94	78.71	48.68	36.12
292.5	4965.21	4528.77	3883.01	2776.19	1199.27	277.34	80.28	48.09	35.53
315.0	4965.21	4524.85	3907.74	2887.28	1416.75	416.31	109.33	58.69	37.49
337.5	4965.21	4536.62	3915.40	2900.43	1447.76	445.75	111.88	56.73	38.08
360.0	4965.21	4544.47	3906.37	2936.35	1390.65	309.93	81.26	48.87	35.72

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	27.87	23.95	19.43	15.51	11.97	8.64	6.09	3.73	1.77
22.5	27.87	23.75	19.43	15.51	11.97	8.83	6.09	3.73	1.57
45.0	29.84	23.16	19.43	15.90	12.17	9.03	6.28	4.12	1.77
67.5	29.64	23.55	19.63	15.90	12.37	9.23	6.48	3.93	1.57
90.0	30.42	26.11	21.98	17.47	13.35	10.21	7.26	4.32	1.77
112.5	30.62	25.71	21.59	17.27	13.35	10.21	7.26	4.12	1.77
135.0	32.19	25.32	21.20	17.47	13.74	10.60	7.26	4.32	2.16
157.5	32.39	25.12	21.40	17.67	13.94	10.40	7.26	4.51	2.16
180.0	30.42	25.71	21.59	17.27	13.74	10.21	7.26	4.71	2.16
202.5	30.03	25.52	21.59	17.27	13.74	10.01	7.46	4.51	1.96
225.0	31.21	24.93	21.00	17.27	13.54	10.01	7.07	4.32	1.96
247.5	30.42	24.73	21.00	17.08	13.35	10.01	7.26	4.51	1.96
270.0	29.25	25.12	21.00	17.08	13.15	9.81	6.67	4.12	1.77
292.5	28.66	24.93	20.61	16.49	12.76	9.42	6.67	3.73	1.77
315.0	29.84	23.55	19.82	16.10	12.56	9.23	6.48	3.93	1.77
337.5	29.84	23.16	19.43	15.51	12.17	9.23	6.28	3.73	1.77
360.0	27.87	23.95	19.43	15.51	11.97	8.64	6.09	3.73	1.77

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	0.20	0.00	0.00	0.00	0.20	0.00
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	0.20	0.00	0.00	0.20	0.20	0.20
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.00
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	0.20	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	0.39	0.39	0.20	0.39
292.5	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.20	0.20
315.0	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.20
337.5	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.20	0.20
360.0	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.20	0.00

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	0.00	0.39	0.79	0.98	1.37	2.16	2.36	2.55	2.75
22.5	0.39	0.20	0.79	1.18	1.57	1.96	2.75	2.75	2.75
45.0	0.00	0.20	0.59	1.18	1.37	1.96	2.55	2.75	2.94
67.5	0.39	0.39	0.59	1.18	1.37	2.16	2.55	2.94	2.94
90.0	0.00	0.39	0.39	0.98	1.37	1.96	2.36	2.94	2.94
112.5	0.00	0.20	0.39	0.98	1.37	1.77	2.36	2.36	2.75
135.0	0.00	0.20	0.59	0.79	1.57	1.57	2.36	2.55	2.75
157.5	0.00	0.20	0.59	0.98	1.37	1.77	2.36	2.55	2.75
180.0	0.00	0.20	0.39	0.79	1.37	1.96	2.36	2.55	2.75
202.5	0.20	0.20	0.39	0.98	1.37	2.16	2.55	2.75	2.75
225.0	0.00	0.20	0.39	0.98	1.37	1.96	2.36	2.75	2.75
247.5	0.00	0.39	0.39	0.98	1.37	1.96	2.36	2.94	2.75
270.0	0.59	0.79	1.18	1.57	1.96	2.55	3.14	3.34	3.34
292.5	0.39	0.39	0.98	1.18	1.57	2.16	2.55	2.75	3.14
315.0	0.20	0.39	0.79	1.18	1.77	1.96	2.55	2.75	2.94
337.5	0.20	0.59	0.59	1.37	1.57	1.96	2.36	2.75	2.94
360.0	0.00	0.39	0.79	0.98	1.37	2.16	2.36	2.55	2.75

C/γ(°)	180.0
0.0	3.13
22.5	3.13
45.0	3.13
67.5	3.13
90.0	3.13
112.5	3.13
135.0	3.13
157.5	3.13
180.0	3.13
202.5	3.13
225.0	3.13
247.5	3.13
270.0	3.13
292.5	3.13
315.0	3.13
337.5	3.13
360.0	3.13