Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
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Client:
LumCAT: LL4G-35K-HO
Luminaire:
Report No:
Ballast type:

Test No:	Voltage(V): 120.10
LampCAT:	Current(A): 0.1230
Lamp flux(lm): -1.0	Power (W): 14.61
Number of Lamps: 1	PF: 0.9865
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1255.27, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 85.91
Central intensity(cd): 1911.936, Maximum intensity(cd): 2014.085
Angle of maximum intensity: C=247.5 γ=5.0
Beam Angle(50%Imax): [C0/180]Total=41.0
[C90/270]Total=40.3
Field angle(10%Imax): [C0/180]Total=75.7
[C90/270]Total=73.9
Maximum s/h(1/2): C0_180=0.70 C90_270=0.70
Maximum s/h(1/4): C0_180=0.74 C90_270=0.72
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 : 94.318%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1911.936	0.000	0	0.00%	0.00%
5.0	1892.847	45.485	45.485	0.00%	3.62%
10.0	1657.392	127.003	172.488	0.00%	13.74%
15.0	1323.085	176.800	349.288	0.00%	27.83%
20.0	1011.640	192.414	541.702	0.00%	43.15%
25.0	728.242	182.481	724.184	0.00%	57.69%
30.0	439.658	147.799	871.982	0.00%	69.47%
35.0	248.715	101.368	973.35	0.00%	77.54%
40.0	153.668	67.134	1040.485	0.00%	82.89%
45.0	111.568	49.110	1089.595	0.00%	86.80%
50.0	80.621	38.835	1128.43	0.00%	89.90%
55.0	60.930	30.778	1159.208	0.00%	92.35%
60.0	46.097	24.739	1183.947	0.00%	94.32%
65.0	37.016	20.205	1204.151	0.00%	95.93%
70.0	29.395	16.816	1220.967	0.00%	97.27%
75.0	22.227	13.493	1234.46	0.00%	98.34%
80.0	15.049	9.974	1244.434	0.00%	99.14%
85.0	8.560	6.415	1250.849	0.00%	99.65%
90.0	1.461	2.744	1253.593	0.00%	99.87%
95.0	0.011	0.403	1253.996	0.00%	99.90%
100.0	0.011	0.006	1254.002	0.00%	99.90%
105.0	0.023	0.009	1254.012	0.00%	99.90%
110.0	0.023	0.012	1254.023	0.00%	99.90%
115.0	0.045	0.017	1254.041	0.00%	99.90%
120.0	0.034	0.019	1254.06	0.00%	99.90%
125.0	0.034	0.016	1254.076	0.00%	99.90%
130.0	0.102	0.030	1254.105	0.00%	99.91%
135.0	0.158	0.053	1254.158	0.00%	99.91%
140.0	0.215	0.069	1254.227	0.00%	99.92%
145.0	0.396	0.102	1254.329	0.00%	99.92%
150.0	0.566	0.142	1254.471	0.00%	99.94%
155.0	0.804	0.173	1254.644	0.00%	99.95%
160.0	0.985	0.188	1254.832	0.00%	99.96%
165.0	1.155	0.176	1255.008	0.00%	99.98%
170.0	1.268	0.144	1255.152	0.00%	99.99%
175.0	1.291	0.092	1255.243	0.00%	100.00%
180.0	1.353	0.032	1255.275	0.00%	100.00%

Zonal flux distribution table

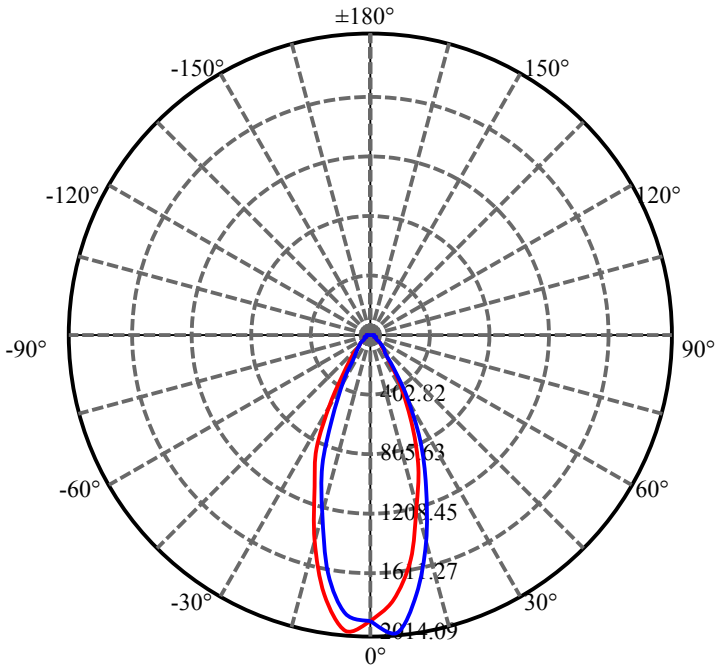
ZONAL LUMEN SUMMARY

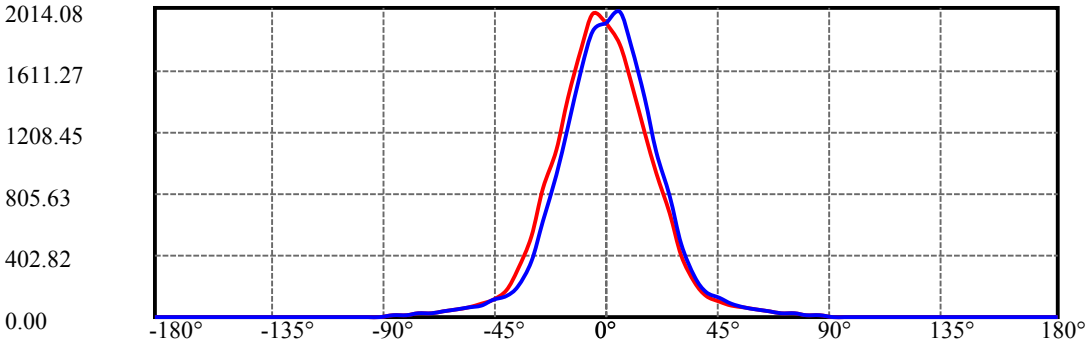
Zone	Lumens	%Lamp	%Fixt
0-30	871.98	N.A.	69.47%
0-40	1040.48	N.A.	82.89%
0-60	1183.95	N.A.	94.32%
0-90	1253.59	N.A.	99.87%
0-120	1254.06	N.A.	99.90%
0-180	1255.27	N.A.	100.00%
60-90	69.65	N.A.	5.55%
90-120	0.47	N.A.	0.04%
90-130	0.51	N.A.	0.04%
90-150	0.88	N.A.	0.07%
90-180	1.65	N.A.	0.13%
0-37.30	1004.22	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	172.49
10-20	369.21
20-30	330.28
30-40	168.50
40-50	87.95
50-60	55.52
60-70	37.02
70-80	23.47
80-90	9.16
90-100	0.41
100-110	0.02
110-120	0.04
120-130	0.05
130-140	0.12
140-150	0.24
150-160	0.36
160-170	0.32
170-180	0.09

Light Distribution Curve [Unit:cd]





C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:39.0 Right:36.7

:C90/270Left:35.5 Right:38.4

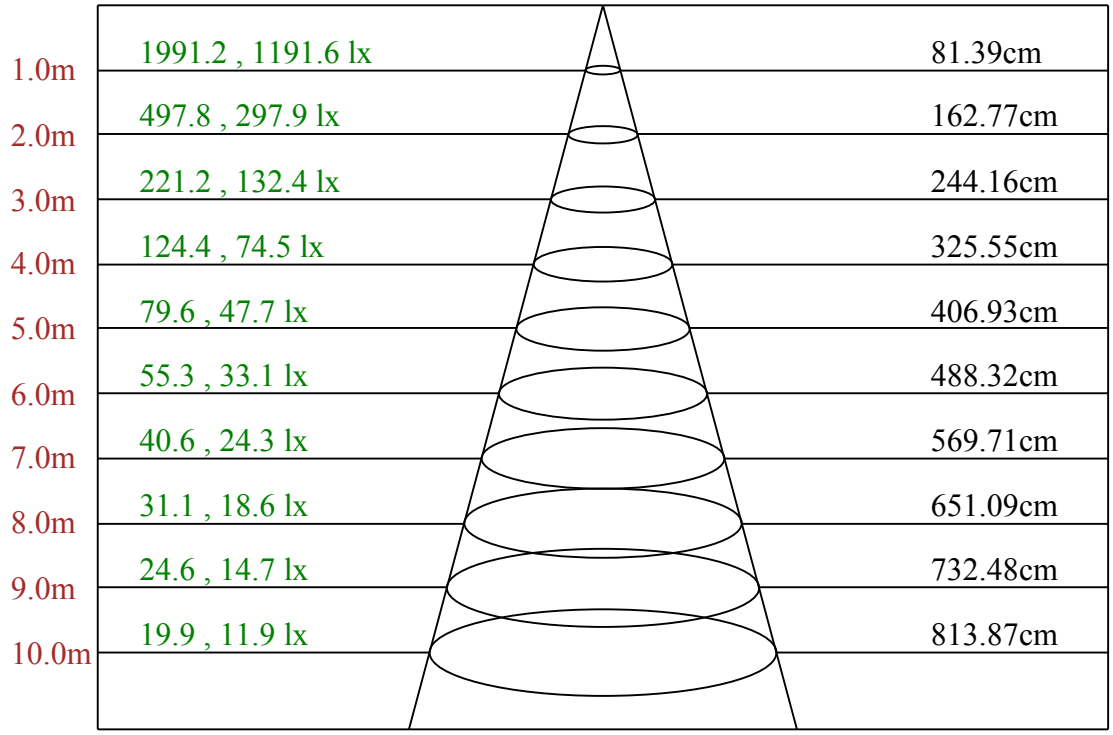
Beam Angle(50%Imax):C0/180Left:21.9 Right:19.1

:C90/270Left:19.0 Right:21.3

Equipment: GMS-3000 Date: Operator: jarvis

Temperature(°C): 25 Humidity(%): 59%

Lux distance Curve



Max , Ave

Beam angle of C247.5 plane 44.29

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	1911.94	1780.56	1526.55	1194.83	943.54	679.76	405.10	226.10	141.68
22.5	1911.94	1761.35	1504.45	1174.72	915.82	645.51	375.57	206.54	137.69
45.0	1911.94	1745.77	1476.01	1158.41	893.18	596.24	334.08	192.59	133.52
67.5	1911.94	1726.57	1455.71	1116.02	856.40	561.99	310.53	180.81	129.72
90.0	1911.94	1991.26	1761.17	1428.72	1072.54	782.66	475.76	268.50	166.68
112.5	1911.94	1977.85	1740.88	1418.03	1069.09	790.63	479.20	268.68	163.78
135.0	1911.94	1970.97	1735.99	1410.96	1089.93	814.00	500.03	280.82	162.87
157.5	1911.94	1967.16	1727.83	1428.72	1091.02	813.82	525.76	299.84	166.86
180.0	1911.94	1980.21	1756.10	1423.28	1084.49	835.38	531.38	308.54	169.76
202.5	1911.94	1996.69	1778.56	1451.55	1105.87	826.87	525.94	301.29	172.11
225.0	1911.94	2006.66	1821.68	1490.32	1120.37	827.23	516.52	292.05	172.29
247.5	1911.94	2014.09	1846.14	1508.25	1118.01	829.77	507.46	288.79	174.83
270.0	1911.94	1863.71	1616.78	1240.84	930.86	619.61	359.08	206.35	138.96
292.5	1911.94	1856.28	1611.70	1247.55	951.88	650.77	372.49	209.62	141.13
315.0	1911.94	1834.54	1593.04	1248.45	978.51	690.45	398.76	218.13	143.49
337.5	1911.94	1811.90	1565.69	1228.71	964.74	687.18	416.88	230.81	143.31
360.0	1911.94	1780.56	1526.55	1194.83	943.54	679.76	405.10	226.10	141.68

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	105.99	77.54	58.70	45.29	37.32	29.53	22.28	14.68	8.33
22.5	103.63	75.01	56.89	43.66	36.23	28.26	21.38	13.95	7.61
45.0	99.28	72.29	55.08	42.21	34.60	27.18	20.29	13.04	6.89
67.5	95.84	69.93	53.26	41.67	33.52	26.09	18.66	12.50	5.62
90.0	119.21	84.79	63.95	48.74	38.59	30.80	23.37	15.94	9.42
112.5	117.58	82.98	62.50	47.29	37.50	29.89	22.65	15.22	8.70
135.0	115.59	81.71	62.14	46.56	36.78	29.17	21.92	14.68	8.70
157.5	114.86	82.43	61.96	46.20	36.78	29.35	21.92	14.49	8.70
180.0	117.22	82.98	62.69	47.11	36.96	29.53	22.28	15.04	8.70
202.5	118.67	84.79	64.68	47.83	37.14	29.71	22.83	15.58	9.24
225.0	120.30	86.96	65.95	48.37	38.05	30.62	23.55	16.49	9.96
247.5	124.10	88.59	66.85	50.00	39.13	31.71	24.46	17.76	10.69
270.0	106.89	79.35	59.42	45.47	36.96	29.17	22.28	15.22	8.52
292.5	108.34	80.08	60.15	45.29	37.32	29.35	22.47	15.22	8.70
315.0	109.43	80.62	60.33	46.02	37.50	29.89	22.65	15.58	8.70
337.5	108.16	79.90	60.33	45.84	37.87	30.07	22.65	15.40	8.52
360.0	105.99	77.54	58.70	45.29	37.32	29.53	22.28	14.68	8.33

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	0.18
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	3.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	4.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	5.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.36	0.18	0.18	0.36	0.36	0.54	0.36	0.54	0.54
292.5	0.54	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.36
315.0	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
337.5	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18

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	0.18	0.18	0.36	0.73	0.91	0.91	1.09	1.27	1.27
22.5	0.36	0.36	0.54	0.91	0.73	1.09	1.27	1.27	1.27
45.0	0.18	0.36	0.54	0.73	0.73	1.09	1.09	1.27	1.45
67.5	0.36	0.54	0.54	0.54	0.91	1.09	1.09	1.09	1.27
90.0	0.00	0.36	0.36	0.54	0.73	1.09	1.27	1.45	1.45
112.5	0.00	0.00	0.18	0.36	0.73	0.91	1.09	1.27	1.09
135.0	0.00	0.00	0.18	0.54	0.73	0.91	0.91	0.91	1.09
157.5	0.00	0.00	0.36	0.18	0.73	0.91	1.09	1.27	1.27
180.0	0.00	0.00	0.36	0.36	0.73	0.91	1.27	1.27	1.09
202.5	0.00	0.00	0.18	0.18	0.73	0.73	1.27	1.27	1.27
225.0	0.00	0.00	0.00	0.36	0.73	0.91	0.91	1.09	1.27
247.5	0.00	0.00	0.18	0.54	0.73	0.91	0.91	1.09	1.27
270.0	0.73	0.73	0.91	1.09	1.27	1.45	1.81	1.63	1.81
292.5	0.36	0.36	0.54	0.91	0.73	1.09	1.09	1.27	1.45
315.0	0.18	0.18	0.54	0.54	0.91	0.91	1.09	1.45	1.27
337.5	0.18	0.36	0.54	0.54	0.91	0.91	1.27	1.45	1.09
360.0	0.18	0.18	0.36	0.73	0.91	0.91	1.09	1.27	1.27

C/γ(°)	180.0
0.0	1.35
22.5	1.35
45.0	1.35
67.5	1.35
90.0	1.35
112.5	1.35
135.0	1.35
157.5	1.35
180.0	1.35
202.5	1.35
225.0	1.35
247.5	1.35
270.0	1.35
292.5	1.35
315.0	1.35
337.5	1.35
360.0	1.35