



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
www.bellingeel.com

Tel:0755-21038430

Address:1 F.,No.1 building,Meibaoh industrial park,Dalang street,Longhua district,Shenzhen,China

LumCAT: LL4S-40K

Luminaire:

Report No:

Voltage(V): 120.05

Test No:

Current(A): 0.1132

LampCAT:

Power (W): 13.4210

Lamp flux(lm): 1000.5

PF: 0.9876

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1000.51

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 74.55

Central intensity(cd): 384.713

Maximum intensity(cd): 384.713

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=106.1

[C90/270]Total=106.2

Field angle(10%Imax): [C0/180]Total=158.1

[C90/270]Total=157.7

Maximum s/h(1/2): C0_180=1.26 C90_270=1.20

Maximum s/h(1/4): C0_180=1.80 C90_270=1.32

Up flux rate of lamp(%): 0.33%

Down flux rate of lamp(%): 99.67%

Up flux rate of LUM(%): 0.33%

Down flux rate of LUM(%): 99.67%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 80.167%

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

Date:
Humidity(%): 58%

Operator: Zac

Zonal flux distribution table

Page: 2 Total:8

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	375.584	.000	.000	.000%	.000%
5.0	373.514	8.955	8.955	.895%	.895%
10.0	367.515	26.509	35.464	2.650%	3.545%
15.0	357.262	42.993	78.457	4.297%	7.842%
20.0	343.617	57.762	136.220	5.773%	13.615%
25.0	326.501	70.283	206.503	7.025%	20.640%
30.0	306.711	80.133	286.636	8.009%	28.649%
35.0	283.905	86.972	373.609	8.693%	37.342%
40.0	259.013	90.582	464.191	9.054%	46.395%
45.0	232.589	91.024	555.215	9.098%	55.493%
50.0	205.153	88.452	643.667	8.841%	64.334%
55.0	177.229	83.143	726.809	8.310%	72.644%
60.0	148.392	75.266	802.075	7.523%	80.167%
65.0	118.854	64.968	867.043	6.493%	86.660%
70.0	88.892	52.602	919.646	5.258%	91.918%
75.0	59.467	38.779	958.424	3.876%	95.794%
80.0	31.788	24.417	982.842	2.440%	98.234%
85.0	10.286	11.433	994.274	1.143%	99.377%
90.0	.375	2.919	997.193	.292%	99.669%
95.0	.310	.187	997.381	.019%	99.687%
100.0	.294	.164	997.545	.016%	99.704%
105.0	.294	.157	997.702	.016%	99.719%
110.0	.294	.153	997.855	.015%	99.735%
115.0	.456	.190	998.045	.019%	99.754%
120.0	.522	.238	998.283	.024%	99.777%
125.0	.571	.252	998.536	.025%	99.803%
130.0	.636	.262	998.798	.026%	99.829%
135.0	.619	.254	999.051	.025%	99.854%
140.0	.734	.251	999.302	.025%	99.879%
145.0	.782	.253	999.555	.025%	99.905%
150.0	.831	.238	999.792	.024%	99.928%
155.0	.815	.208	1000.001	.021%	99.949%
160.0	.864	.176	1000.177	.018%	99.967%
165.0	.896	.145	1000.322	.014%	99.981%
170.0	.847	.103	1000.425	.010%	99.992%
175.0	.913	.063	1000.488	.006%	99.998%
180.0	.913	.022	1000.510	.002%	100.000%

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

Date:
Humidity(%): 58%

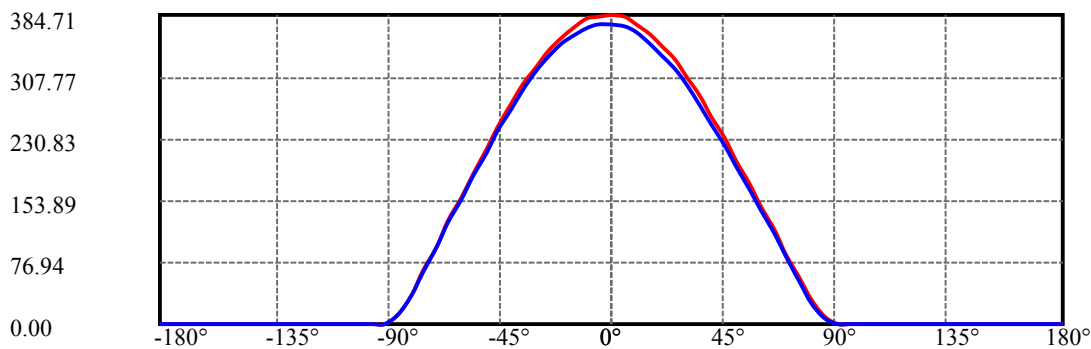
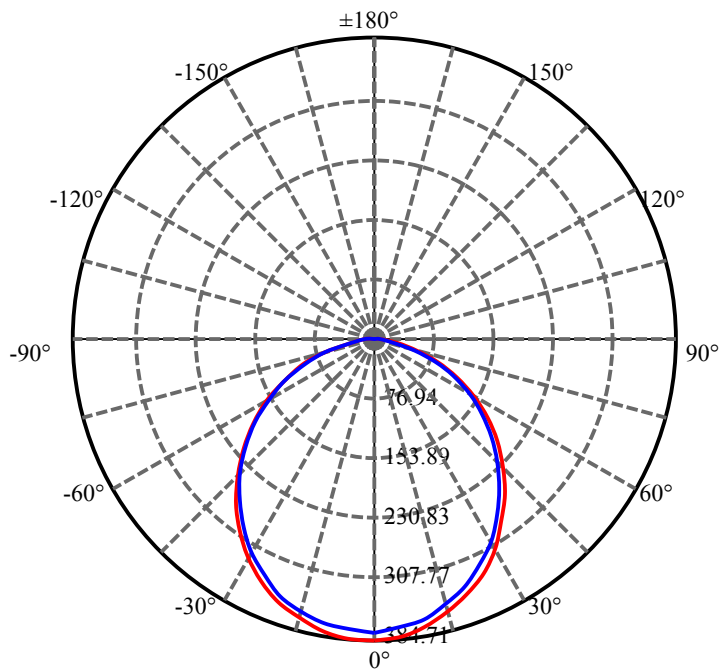
Operator: Zac

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	286.64	28.65%	28.65%
0-40	464.19	46.40%	46.40%
0-60	802.08	80.17%	80.17%
0-90	997.19	99.67%	99.67%
0-120	998.28	99.78%	99.78%
0-180	1000.51	100.00%	100.00%
60-90	270.38	27.02%	27.02%
90-120	4.01	0.40%	0.40%
90-130	4.52	0.45%	0.45%
90-150	5.52	0.55%	0.55%
90-180	6.21	0.62%	0.62%
0-59.89	800.41	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	35.46
10-20	100.76
20-30	150.42
30-40	177.55
40-50	179.48
50-60	158.41
60-70	117.57
70-80	63.20
80-90	14.35
90-100	0.35
100-110	0.31
110-120	0.43
120-130	0.51
130-140	0.50
140-150	0.49
150-160	0.38
160-170	0.25
170-180	0.06

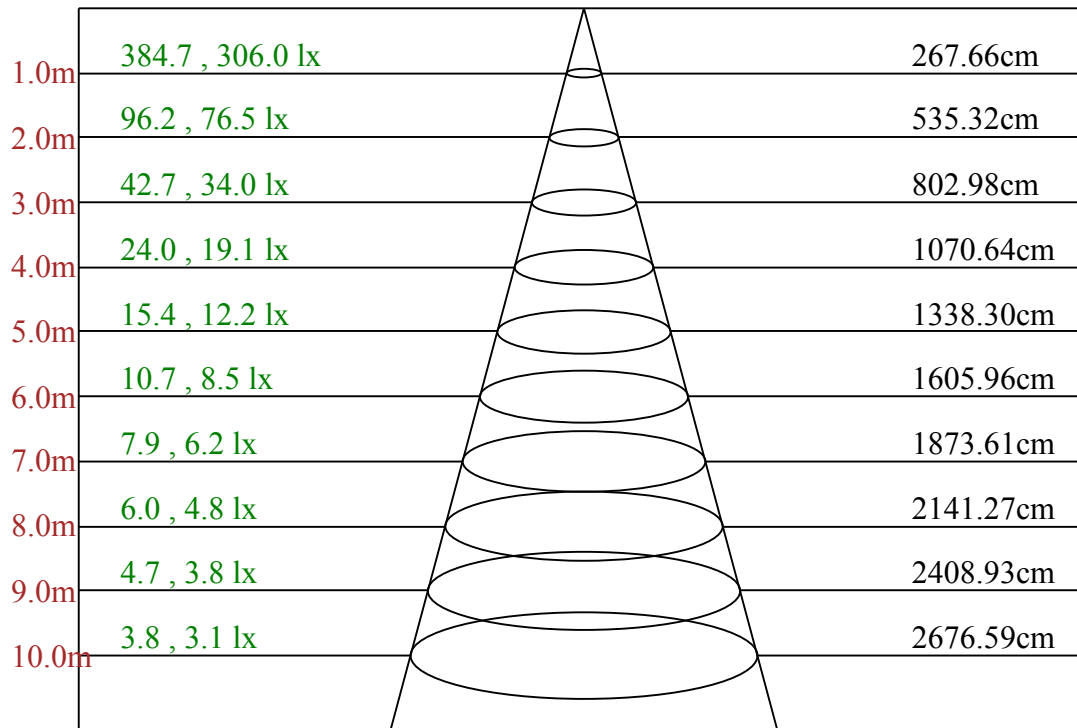


C0/C180: —

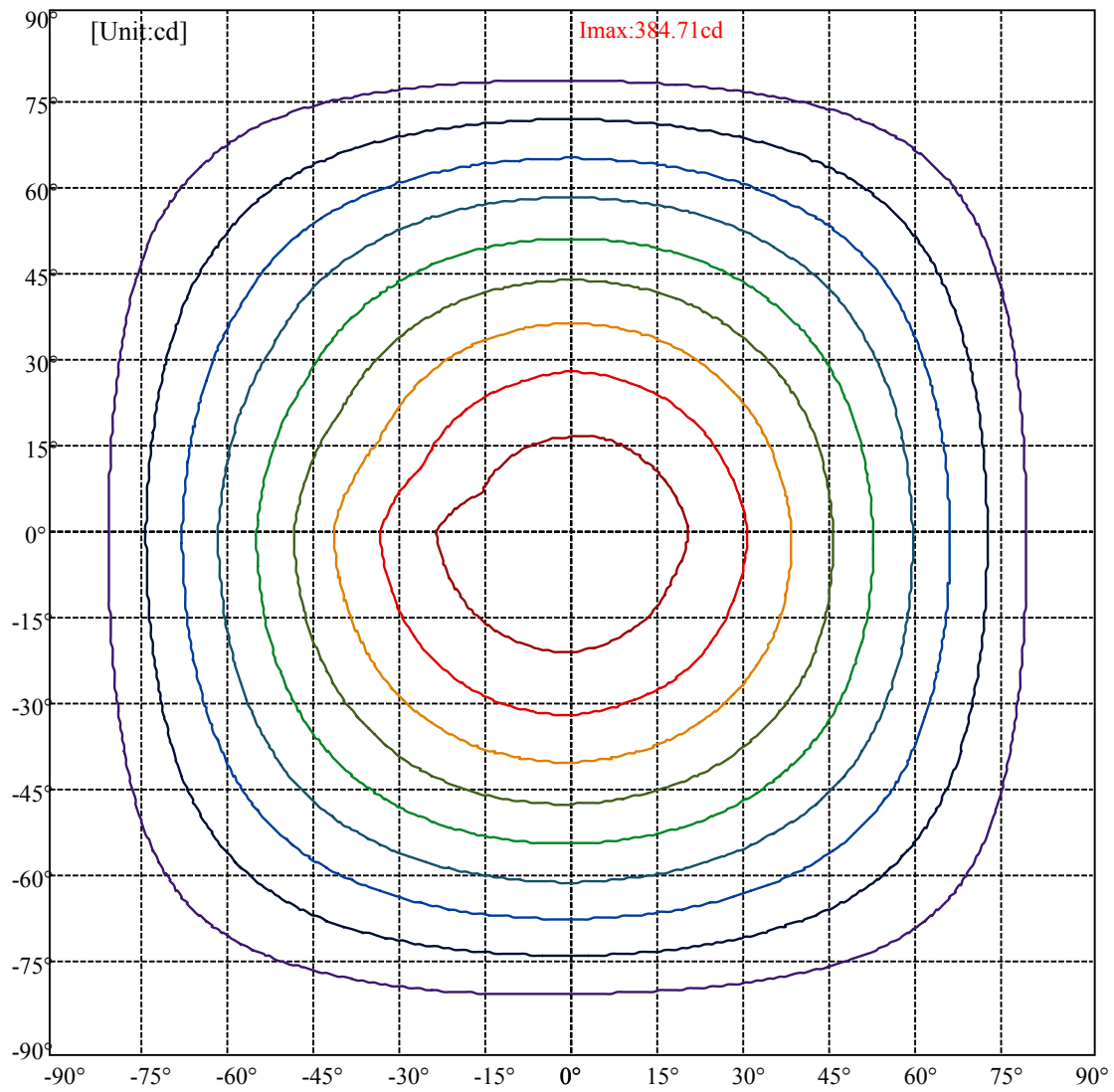
C90/C270: —

Field angle(10%Imax):C0/180Left:79.7 Right:78.4
 :C90/270Left:79.8 Right:77.9

Beam Angle(50%Imax):C0/180Left:54.2 Right:51.9
 :C90/270Left:54.7 Right:51.5



Max , Ave Beam angle of C0plane106.41



(10%Imax) 38.44	—
(20%Imax) 76.88	—
(30%Imax) 115.32	—
(40%Imax) 153.76	—
(50%Imax) 192.2	—
(60%Imax) 230.64	—
(70%Imax) 269.08	—
(80%Imax) 307.52	—
(90%Imax) 345.96	—

Intensity data(cd)

Page: 7 Total:8

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	384.71	381.84	373.50	360.72	346.63	329.94	309.08	284.04	258.48
22.5	379.24	375.32	368.80	357.33	341.42	323.42	302.29	278.04	252.22
45.0	376.37	373.50	364.89	353.42	338.29	318.99	298.64	274.39	249.09
67.5	374.54	370.63	363.07	351.85	337.50	317.94	296.56	273.86	247.78
90.0	373.76	369.85	362.80	349.76	335.16	317.68	297.60	273.34	248.30
112.5	372.98	368.28	361.50	350.02	334.64	316.64	295.77	273.60	247.52
135.0	371.93	369.06	361.50	350.55	335.42	317.94	296.82	274.12	248.83
157.5	371.15	369.06	362.28	351.33	336.20	319.51	298.12	274.91	250.39
180.0	384.71	383.15	378.98	369.06	356.54	340.37	321.07	298.12	274.12
202.5	379.24	379.24	374.02	365.41	353.68	336.46	317.68	295.77	270.21
225.0	376.37	376.11	372.72	363.07	350.55	334.11	315.33	293.69	269.43
247.5	374.54	374.28	369.59	361.76	348.98	333.07	314.81	292.90	268.65
270.0	373.76	371.93	367.76	359.15	348.20	332.03	314.55	292.12	267.87
292.5	372.98	371.41	366.72	358.63	346.11	330.20	310.90	290.30	265.26
315.0	371.93	371.41	367.76	357.85	344.55	328.12	309.86	287.17	263.69
337.5	371.15	371.15	364.37	356.28	344.03	327.59	308.29	286.12	262.39
360.0	384.71	381.84	373.50	360.72	346.63	329.94	309.08	284.04	258.48
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	230.83	203.18	175.27	146.84	116.33	86.85	56.60	30.00	8.61
22.5	226.66	198.75	171.10	142.67	113.46	83.72	54.25	27.39	8.35
45.0	222.48	194.83	168.23	139.28	110.33	81.90	52.95	26.60	7.56
67.5	221.44	194.57	167.97	139.54	110.33	81.64	53.21	25.30	7.30
90.0	221.96	194.83	168.23	140.06	111.63	82.94	53.73	25.56	7.30
112.5	221.70	194.83	168.49	140.58	111.37	82.42	54.51	26.87	7.83
135.0	223.00	195.88	168.23	141.11	112.15	83.20	55.56	28.69	9.13
157.5	225.09	198.23	171.36	142.93	114.76	85.81	56.60	30.00	10.17
180.0	247.00	217.53	187.53	158.84	128.06	96.50	66.25	36.78	13.04
202.5	243.61	215.44	187.53	157.54	127.02	95.72	65.47	37.30	13.30
225.0	242.30	216.22	186.23	156.23	126.24	95.72	65.73	36.78	14.35
247.5	243.09	214.92	185.97	155.97	126.50	95.20	65.21	38.34	12.26
270.0	241.52	213.35	184.92	156.23	126.24	94.94	65.47	36.25	11.48
292.5	238.13	211.27	183.62	154.15	123.89	94.16	63.38	35.21	10.96
315.0	236.57	210.22	180.75	151.28	122.33	91.55	61.55	34.43	11.74
337.5	236.04	208.40	180.23	151.02	121.02	89.98	61.03	33.12	11.22
360.0	230.83	203.18	175.27	146.84	116.33	86.85	56.60	30.00	8.61
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.26	0.52	0.26	0.26	0.26	0.26	0.52	0.78	0.52
22.5	0.52	0.26	0.52	0.26	0.52	0.78	0.52	0.78	0.78
45.0	0.52	0.78	0.52	0.26	0.52	0.78	0.78	0.52	1.04
67.5	0.52	0.78	0.52	0.52	0.52	0.78	1.04	0.78	0.78
90.0	0.78	0.78	0.52	0.52	0.78	0.52	0.78	0.78	0.78
112.5	0.52	0.52	0.52	0.52	0.52	0.52	1.04	0.78	1.04
135.0	0.26	0.78	0.26	0.52	0.52	0.78	0.78	0.78	0.78
157.5	0.78	0.52	0.78	0.78	0.52	0.78	1.04	0.78	0.78
180.0	0.26	0.00	0.00	0.00	0.00	0.26	0.00	0.52	0.26
202.5	0.26	0.00	0.00	0.00	0.26	0.26	0.26	0.26	0.26
225.0	0.52	0.00	0.26	0.26	0.00	0.26	0.52	0.52	0.52
247.5	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.26	0.78
270.0	0.00	0.00	0.26	0.00	0.00	0.52	0.00	0.52	0.52
292.5	0.00	0.00	0.00	0.26	0.00	0.26	0.26	0.52	0.52
315.0	0.26	0.00	0.00	0.26	0.00	0.00	0.26	0.26	0.52
337.5	0.26	0.00	0.00	0.00	0.26	0.26	0.26	0.26	0.26
360.0	0.26	0.52	0.26	0.26	0.26	0.26	0.52	0.78	0.52

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	0.52	0.78	0.52	0.78	0.52	0.78	0.78	0.52	0.78
22.5	1.04	0.78	0.78	0.78	1.04	1.04	0.78	0.78	1.04
45.0	0.78	0.78	0.78	0.78	1.04	0.78	1.04	1.04	1.04
67.5	0.78	1.04	1.04	1.04	0.78	1.04	1.04	1.04	0.78
90.0	0.78	1.04	0.78	1.04	0.78	0.78	0.78	0.78	1.04
112.5	0.78	1.04	1.04	1.04	0.78	1.04	1.04	1.04	0.78
135.0	0.78	1.30	1.04	0.78	1.04	1.04	0.78	0.78	0.78
157.5	1.04	0.78	1.04	1.04	1.04	1.04	1.04	1.04	1.04
180.0	0.26	0.26	0.52	0.78	0.52	0.52	0.52	0.78	0.78
202.5	0.26	0.52	0.78	0.52	0.78	0.78	1.04	0.52	1.04
225.0	0.52	0.78	0.78	0.52	0.78	0.52	1.04	1.04	1.04
247.5	0.26	0.52	0.52	1.04	0.78	0.78	1.04	0.78	0.78
270.0	0.52	0.52	0.78	0.78	1.04	1.04	0.78	1.04	1.04
292.5	0.52	0.52	0.52	0.78	0.78	0.78	0.78	0.78	1.04
315.0	0.52	0.52	0.78	0.78	0.52	1.04	0.78	0.78	0.78
337.5	0.52	0.52	0.78	0.78	0.78	0.78	1.04	0.78	0.78
360.0	0.52	0.78	0.52	0.78	0.52	0.78	0.78	0.52	0.78

C/γ(°)	180.0
0.0	0.52
22.5	0.78
45.0	1.04
67.5	1.04
90.0	1.04
112.5	0.78
135.0	1.04
157.5	1.04
180.0	0.52
202.5	0.78
225.0	1.04
247.5	1.04
270.0	1.04
292.5	0.78
315.0	1.04
337.5	1.04
360.0	0.52