



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: LL8R-40K

Luminaire:

Report No:

Voltage(V): 120.12

Test No:

Current(A): 0.3471

LampCAT:

Power (W): 39.8900

Lamp flux(lm): 4703.9

PF: 0.9567

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 4703.89

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 117.92

Central intensity(cd): 7129.251

Maximum intensity(cd): 7129.251

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=46.9

[C90/270]Total=46.3

Field angle(10%Imax): [C0/180]Total=74.3

[C90/270]Total=73.8

Maximum s/h(1/2): C0_180=0.78 C90_270=0.76

Maximum s/h(1/4): C0_180=1.12 C90_270=0.74

Up flux rate of lamp(%): 0.21%

Down flux rate of lamp(%): 99.79%

Up flux rate of LUM(%): 0.21%

Down flux rate of LUM(%): 99.79%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.535%

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	7065.681	.000	.000	.000%	.000%
5.0	6899.705	166.952	166.952	3.549%	3.549%
10.0	6394.175	475.564	642.516	10.110%	13.659%
15.0	5629.940	713.262	1355.779	15.163%	28.823%
20.0	4446.799	830.465	2186.243	17.655%	46.477%
25.0	3045.526	785.807	2972.050	16.705%	63.183%
30.0	1628.761	591.535	3563.585	12.575%	75.758%
35.0	846.518	364.502	3928.087	7.749%	83.507%
40.0	493.298	223.538	4151.625	4.752%	88.259%
45.0	315.188	149.698	4301.323	3.182%	91.442%
50.0	208.569	105.833	4407.156	2.250%	93.692%
55.0	142.938	76.429	4483.585	1.625%	95.317%
60.0	105.086	57.330	4540.915	1.219%	96.535%
65.0	83.541	45.855	4586.771	.975%	97.510%
70.0	67.814	38.324	4625.094	.815%	98.325%
75.0	50.733	30.986	4656.081	.659%	98.984%
80.0	31.260	21.939	4678.020	.466%	99.450%
85.0	13.447	12.148	4690.167	.258%	99.708%
90.0	1.285	4.034	4694.201	.086%	99.794%
95.0	.608	.518	4694.719	.011%	99.805%
100.0	.580	.323	4695.042	.007%	99.812%
105.0	.635	.325	4695.367	.007%	99.819%
110.0	.677	.343	4695.710	.007%	99.826%
115.0	.718	.353	4696.063	.008%	99.834%
120.0	.760	.359	4696.422	.008%	99.841%
125.0	.912	.386	4696.809	.008%	99.849%
130.0	1.147	.448	4697.256	.010%	99.859%
135.0	1.451	.525	4697.781	.011%	99.870%
140.0	1.935	.627	4698.408	.013%	99.883%
145.0	2.598	.756	4699.165	.016%	99.900%
150.0	3.303	.869	4700.034	.018%	99.918%
155.0	3.980	.922	4700.956	.020%	99.938%
160.0	4.685	.909	4701.864	.019%	99.957%
165.0	5.279	.821	4702.686	.017%	99.974%
170.0	5.583	.644	4703.330	.014%	99.988%
175.0	5.929	.412	4703.742	.009%	99.997%
180.0	6.246	.146	4703.887	.003%	100.000%

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

Date:
Humidity(%): 58%

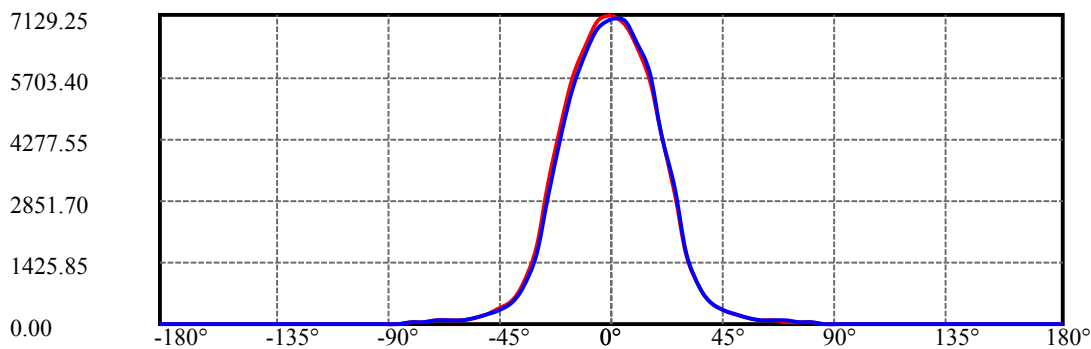
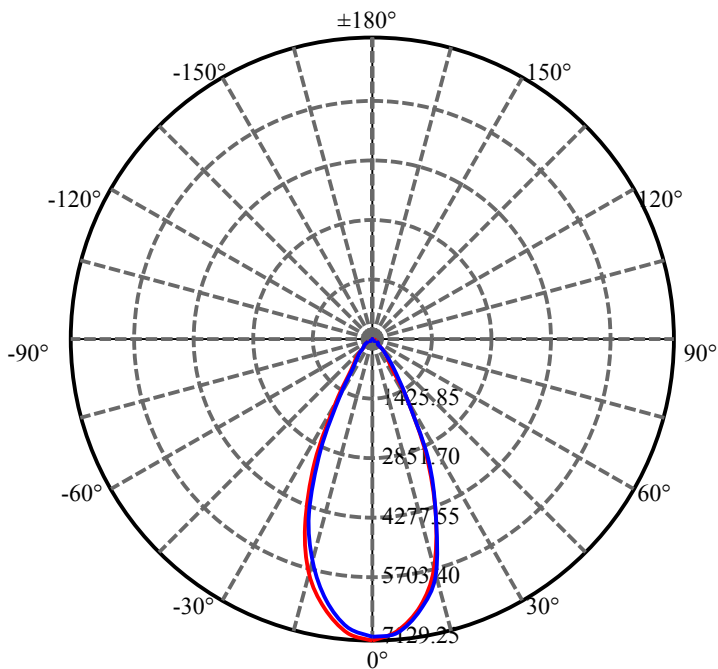
Operator: Zac

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3563.59	75.76%	75.76%
0-40	4151.63	88.26%	88.26%
0-60	4540.92	96.54%	96.54%
0-90	4694.20	99.79%	99.79%
0-120	4696.42	99.84%	99.84%
0-180	4703.89	100.00%	100.00%
60-90	210.62	4.48%	4.48%
90-120	6.26	0.13%	0.13%
90-130	7.09	0.15%	0.15%
90-150	9.87	0.21%	0.21%
90-180	13.57	0.29%	0.29%
0-32.74	3763.11	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	642.52
10-20	1543.73
20-30	1377.34
30-40	588.04
40-50	255.53
50-60	133.76
60-70	84.18
70-80	52.93
80-90	16.18
90-100	0.84
100-110	0.67
110-120	0.71
120-130	0.83
130-140	1.15
140-150	1.63
150-160	1.83
160-170	1.47
170-180	0.41

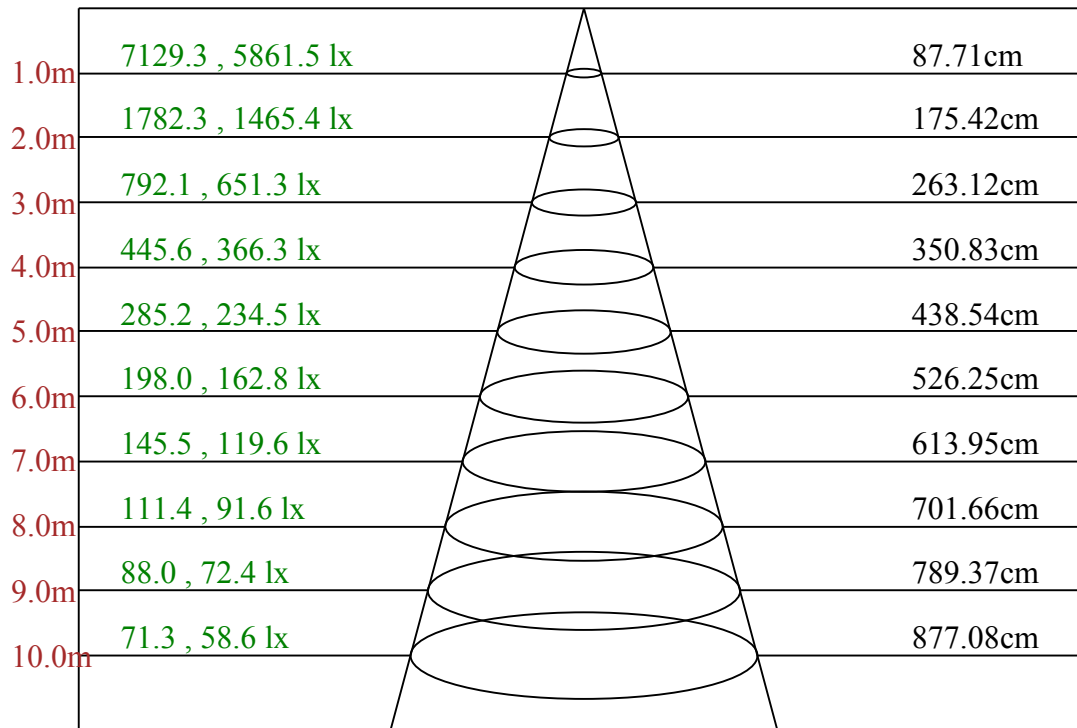


C0/C180: —

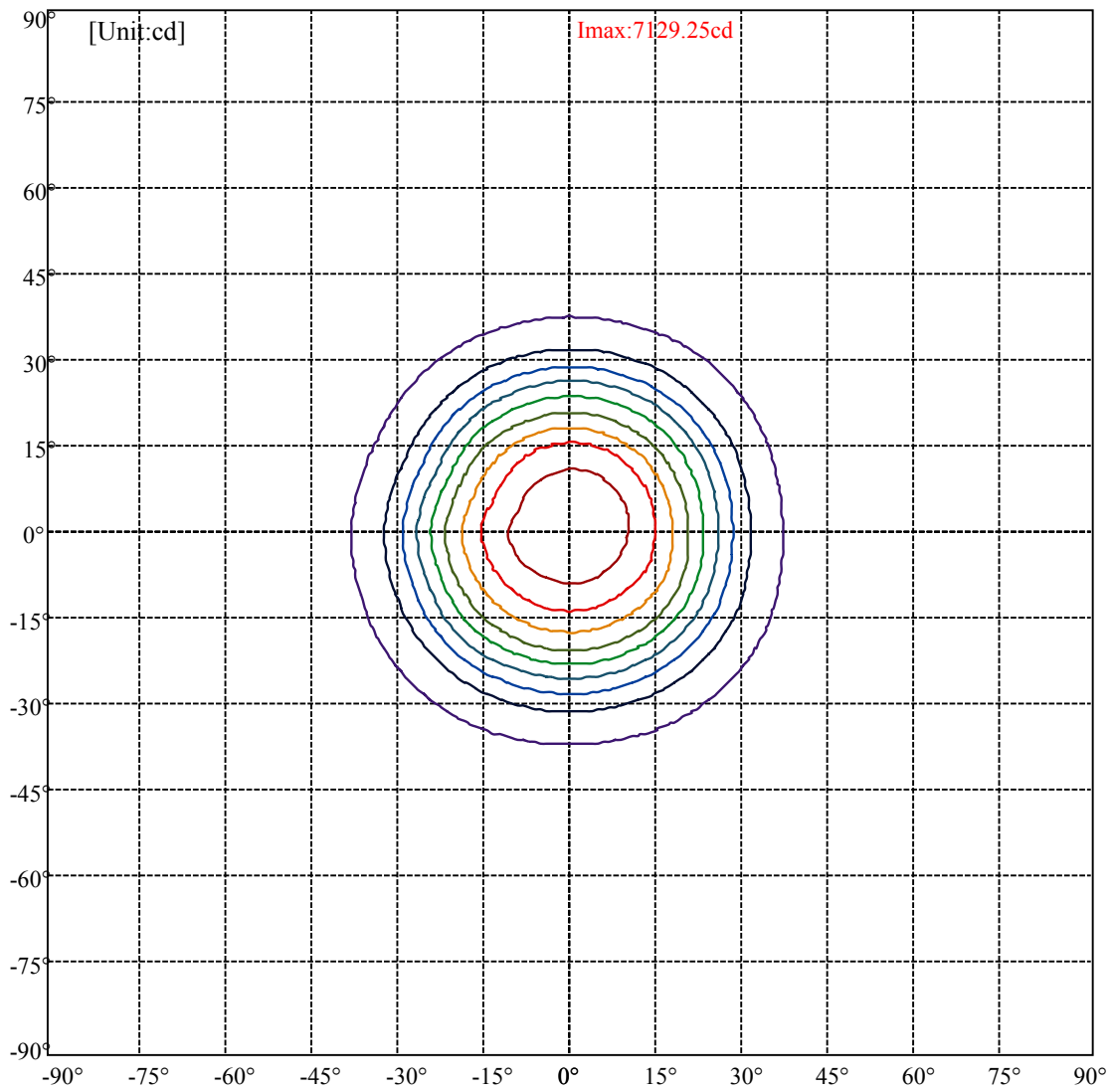
C90/C270: —

Field angle(10%Imax):C0/180Left:37.6 Right:36.7
 :C90/270Left:36.7 Right:37.1

Beam Angle(50%Imax):C0/180Left:23.8 Right:23.0
 :C90/270Left:22.9 Right:23.4



Max , Ave Beam angle of C0plane47.36



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	7129.25	6919.19	6415.04	5630.08	4402.66	3023.33	1602.66	826.31	487.78
22.5	7082.82	6947.94	6483.59	5714.10	4395.14	3125.71	1662.14	849.53	490.88
45.0	7093.87	6992.16	6496.86	5771.59	4408.85	3154.68	1664.35	863.68	497.29
67.5	7058.49	6950.15	6534.45	5800.34	4388.51	3168.16	1676.95	853.95	494.20
90.0	7047.44	6981.10	6494.65	5782.65	4392.49	3126.81	1644.89	856.61	495.30
112.5	7058.49	6919.19	6443.79	5729.58	4371.92	3047.43	1620.79	833.39	486.02
135.0	7029.75	6877.18	6408.41	5610.18	4398.68	2966.28	1553.79	808.18	480.05
157.5	7025.33	6826.32	6322.17	5539.42	4398.02	2829.41	1505.59	789.61	457.05
180.0	7129.25	6992.16	6474.75	5734.00	4666.01	3228.75	1751.69	907.91	533.33
202.5	7082.82	6914.77	6406.20	5610.18	4568.72	3071.76	1663.24	876.29	512.99
225.0	7093.87	6839.59	6326.60	5539.42	4438.26	3065.12	1612.38	843.12	493.31
247.5	7058.49	6857.28	6244.78	5479.72	4407.30	2932.45	1568.16	833.83	488.45
270.0	7047.44	6815.27	6275.74	5464.24	4387.40	2901.50	1585.85	821.45	483.58
292.5	7058.49	6815.27	6311.12	5475.30	4429.41	2963.41	1590.27	837.59	490.88
315.0	7029.75	6863.91	6304.49	5528.37	4515.65	3023.11	1654.40	851.96	495.08
337.5	7025.33	6883.81	6364.19	5669.88	4579.77	3100.50	1703.04	890.88	506.58
360.0	7129.25	6919.19	6415.04	5630.08	4402.66	3023.33	1602.66	826.31	487.78
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	308.90	204.98	142.62	103.70	81.59	65.89	49.09	27.86	11.94
22.5	313.99	206.74	140.63	102.60	81.59	65.67	48.65	28.75	11.50
45.0	314.21	206.52	141.74	102.82	80.93	65.23	47.54	27.86	10.61
67.5	317.30	208.29	139.97	102.82	81.81	65.89	48.20	28.97	11.94
90.0	314.65	206.30	139.08	102.82	82.48	67.44	50.42	31.62	13.93
112.5	308.02	205.20	139.53	102.60	81.59	65.67	48.65	28.97	11.94
135.0	303.59	199.89	134.22	100.83	80.49	64.35	46.88	28.52	11.06
157.5	294.97	197.46	135.32	100.39	80.49	65.67	48.43	28.97	10.61
180.0	335.21	219.35	149.48	109.23	86.01	69.65	52.85	32.28	14.15
202.5	324.38	212.94	146.60	106.58	84.91	69.65	53.51	34.49	15.70
225.0	322.39	211.17	144.61	107.24	84.91	68.99	51.52	33.17	15.04
247.5	313.32	208.07	145.27	107.91	85.13	70.09	52.63	32.06	13.49
270.0	315.09	209.62	144.39	107.02	86.90	71.20	54.17	34.72	15.70
292.5	314.43	210.28	147.49	108.13	86.01	70.54	53.29	32.50	14.15
315.0	321.06	214.04	147.71	107.68	85.13	68.77	51.74	34.05	16.36
337.5	321.50	216.25	148.37	109.01	86.68	70.32	54.17	35.38	17.03
360.0	308.90	204.98	142.62	103.70	81.59	65.89	49.09	27.86	11.94
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.66	0.44	0.22	0.00	0.22	0.22	0.22	0.66	0.88
22.5	0.88	0.88	0.66	0.66	0.88	1.11	0.88	0.88	1.33
45.0	0.66	0.66	0.44	0.88	0.88	0.66	0.88	1.11	1.33
67.5	0.88	0.66	0.88	0.88	0.66	0.88	0.88	1.11	1.11
90.0	0.88	0.66	0.88	0.88	0.88	0.88	0.88	1.11	1.33
112.5	0.88	0.88	0.88	0.66	1.11	0.88	1.11	0.88	1.33
135.0	0.66	0.66	0.66	0.66	0.88	0.88	0.88	1.11	1.55
157.5	0.88	0.88	0.66	0.88	0.66	0.66	0.88	0.88	1.33
180.0	1.55	0.22	0.22	0.22	0.22	0.44	0.44	0.88	0.88
202.5	1.55	0.44	0.44	0.66	0.66	0.66	0.66	0.88	0.88
225.0	1.33	0.44	0.66	0.66	0.66	0.66	0.88	0.88	1.11
247.5	1.55	0.66	0.66	0.66	0.44	0.66	0.66	0.88	1.11
270.0	1.55	0.66	0.44	0.66	0.44	0.88	0.66	0.88	1.11
292.5	1.99	0.44	0.66	0.44	0.88	0.88	0.88	0.88	1.11
315.0	1.99	0.66	0.44	0.66	0.66	0.44	0.66	0.88	0.88
337.5	2.65	0.44	0.44	0.66	0.66	0.66	0.66	0.66	1.11
360.0	0.66	0.44	0.22	0.00	0.22	0.22	0.22	0.66	0.88

Equipment: GMS-3000
Temperature(°C): 25Date:
Humidity(%): 58%

Operator: Zac

Intensity data(cd)

Page: 8 Total:8

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.88	1.77	2.21	3.10	3.76	3.98	4.87	5.09	5.53
22.5	1.55	1.99	2.43	3.32	3.76	4.87	5.31	5.53	5.97
45.0	1.55	2.21	2.88	3.32	3.98	4.64	5.31	5.75	5.97
67.5	1.77	1.77	2.88	3.32	3.98	4.64	5.31	5.75	6.19
90.0	1.55	2.21	2.65	3.10	3.98	4.64	5.09	5.53	5.97
112.5	1.77	2.21	2.65	3.32	4.20	4.87	5.53	5.75	5.97
135.0	1.77	2.21	2.65	3.54	4.20	4.87	5.31	5.97	6.19
157.5	1.77	1.99	2.65	3.54	4.20	4.64	5.75	5.75	6.19
180.0	1.11	1.55	2.43	2.88	3.54	4.64	5.09	5.31	5.75
202.5	1.33	1.77	2.43	3.32	3.98	4.64	5.53	5.31	5.97
225.0	1.33	1.77	2.43	3.32	3.98	4.64	5.31	5.75	5.75
247.5	1.33	1.77	2.65	3.54	4.20	4.64	5.31	5.75	5.97
270.0	1.33	1.99	2.43	3.54	3.98	4.87	5.31	5.53	5.75
292.5	1.55	1.77	3.10	3.10	3.98	4.87	5.31	5.53	5.97
315.0	1.33	1.99	2.65	3.32	3.98	4.64	5.31	5.53	5.75
337.5	1.33	1.99	2.43	3.32	3.98	4.87	4.87	5.53	5.97
360.0	0.88	1.77	2.21	3.10	3.76	3.98	4.87	5.09	5.53
C/γ(°)	180.0								
0.0	5.75								
22.5	6.19								
45.0	6.41								
67.5	6.41								
90.0	6.19								
112.5	6.19								
135.0	6.41								
157.5	6.41								
180.0	5.75								
202.5	6.19								
225.0	6.41								
247.5	6.41								
270.0	6.19								
292.5	6.19								
315.0	6.41								
337.5	6.41								
360.0	5.75								